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[Decisions of the Court of Customs and Patent Appeals are indicated by a star (*); of the Supreme Court of the District of Columbia by the letter (d).]

320252

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adrema Maschinenbauges, m. b. H., Berlin, Germany. Addressing machines, printing machines, impressing machines, and parts. Serial No. 318,498; May 3. Class 23.

Aero Supply Manufacturing Co., Inc., College Point, N. Y. Aeroplane supplies and equipment. Serial No. 314,135; May 3. Class 13.

American Slicing Machine Company, Chicago, Ill. Slicing machines. Serial No. 325,031; May 3. Class 23.

Antonucci, Angelo C., doing business as Trulastic Research Laboratories, Philadelphia, Pa. Dental impression wax compositions. Serial No. 325,451; May 3. Class 44.

Arteraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Women's hosiery. Serial No. 324,980; May 3. Class 39.

Atlantic Steel Company, Atlanta, Ga. Welding electrodes. Serial No. 324,028; May 3. Class 14.

Atlantic Steel Company, Atlanta, Ga. Welding rods. Serial No. 324,029; May 3. Class 14.

Aviator Spark Plug Co. (See Henley, James E.)

Baby's Own Soap Company. (See Curtis, William M.)

Baltimore Radio Corporation, New York, N. Y. Radio receiving sets and parts. Serial No. 321,794; May 3. Class 21.

Bananola South Seas Products Company, New York, N. Y. Plantane chips packed in paper bags. Serial No. 324,307; May 3. Class 46.

Bates Manufacturing Company, Lewiston and Augusta, Me. Bed spreads. Serial No. 313,224; May 3. Class 42.

Belluomini & Klein, Walnut Grove, Calif. Fresh vegetables. Serial No. 325,509; May 3. Class 46.

Bid-Rite Playing Card Corporation, New York, N. Y. Playing cards. Serial No. 325,613; May 3. Class 22.

Big Ben Beverage Corporation, St. Louis, Mo. Fruit flavored milk food beverage. Serial No. 321,943; May 3. Class 46.

Bigelow-Sandford Carpet Co., Inc., Thompsonville, Conn. Rugs and carpets. Serial No. 325,457; May 3. Class 42.

Binney & Smith Co., New York, N. Y. Crayons. Serial No. 324,425; May 3. Class 37.

Bisgyer, Maurice, Washington, D. C. Columns in periodicals. Serial No. 325,204; May 3. Class 38.

Bloom, Charles, Inc., New York, N. Y. Cretonne piece goods. Serial No. 324,149; May 3. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 325,418; May 3. Class 42.

Bordow Silk Co., New York, N. Y. Yarns, and particularly for Bemberg yarn. Serial No. 322,089; May 3. Class 43.

British American Razors Limited, Toronto, Ontario, Canada. Razors and razor blades. Serial No. 312,543; May 3. Class 23.

Brown, R. J., Company, The, St. Louis, Mo. Oils, greases, kerosene, and gasoline. Serial No. 325,058; May 3. Class 15.

Bruscia, Mario, Brooklyn, N. Y. Maltless beverages. Serial No. 325,679; May 3. Class 45.

Burge, Flippen, doing business as The National "Who-Handles" Building Products Directory Co., Atlanta, Ga. Directories. Serial No. 325,317; May 3. Class 38.

Burnham & Morrill Company, Portland, Oreg. Baked beans. Serial No. 321,838; May 3. Class 46.

Calafo Company, Los Angeles, Calif. Medicinal compound. Serial No. 324,818; May 3. Class 6.

Calamaras, Thomas, doing business as Lincoln Bakery & Grocery, Joliet, Ill. Canned fruits, salmon, vegetables, mustard for food purposes, bottled olives, etc. Serial No. 321,590; May 3. Class 46.

Campbell Soup Company, Camden, N. J. Canned tomato juice. Serial No. 318,438; May 3. Class 46.

Chamberlin Cartridge & Target Co., The, Cleveland, Ohio. Clay pigeons. Serial No. 324,955; May 3. Class 22.

Chappell, Paul, Inc., New York, N. Y. Shoes. Serial No. 321,089; May 3. Class 39.

Chemisch-Pharmazeutische A.-G. Bad-Homburg, Bad Homburg vor der Hohe, Germany. Cream for the skin. Serial No. 323,739; May 3. Class 6.

Chemisch-Pharmazeutische A.-G. Bad-Homburg Werk Frankfurt A. M., Frankfort-on-the-Main, Germany. Hair shampoo. Serial No. 323,740; May 3. Class 6.

Closure Lock Corporation, Chicago, Ill. Locks. Serial No. 325,161; May 3. Class 25.

Coast Envelope & Leather Products Co., Los Angeles, Calif. Writing paper. Serial No. 319,229; May 3. Class 37.

Compo, Alfred J., Edwards, N. Y. Insecticide. Serial No. 325,516; May 3. Class 6.

Consolidation Coal Company, New York, N. Y. Coal. Serial No. 325,283; May 3. Class 1.

Cook Paint and Varnish Company, North Kansas City, Mo. Dry paste for adhesive purposes. Serial No. 325,062; May 3. Class 5.

Cooper Products Corporation, New York, N. Y. Razor blades. Serial No. 324,780; May 3. Class 23.

Craddock-Terry Company, Lynchburg, Va. Women's leather shoes. Serial No. 317,889; May 3. Class 39.

Cromwell, Thos. B., Lexington, Ky. Weekly journal. Serial No. 323,555; May 3. Class 38.

Crown Cork & Seal Company, Inc., Baltimore, Md. Packing containers made from glass. Serial No. 324,990; May 3. Class 33.

Curtis, William M., doing business as Baby's Own Soap Company, Belmont, Mass. Toilet soap. Serial No. 325,397; May 3. Class 4.

Cyrex Manufacturing Co. (See Levy, Emanuel.)

D & S Gasaver Co., Pittsburgh, Pa. Gas pressure regulators. Serial No. 311,374; May 3. Class 13.

Dabrowski, Frank, doing business as Tip-Top Laboratories, Rochester, N. Y. Laxative medicine. Serial No. 324,839; May 3. Class 6.

Daily Graphic, Inc., New York, N. Y. Newspaper column. Serial No. 324,660; May 3. Class 38.

Defiance Spark Plugs, Inc., Toledo, Ohio. Cables for electrical systems. Serial No. 324,783; May 3. Class 21.

Dietz, R. E., Company, New York, N. Y. Portable fire extinguishers. Serial No. 325,425; May 3. Class 23.

Doerr, Robert C., Hoboken, N. J. Water repellent products. Serial No. 323,742; May 3. Class 4.

Draper-Maynard Company, The, Plymouth, N. H. Foot balls and basket balls. Serial No. 325,517; May 3. Class 22.

Drug Products Co., Inc., The, Long Island City, N. Y. Iodine mouth and throat lozenges. Serial No. 325,572; May 3. Class 6.

Dragkraft, Inc., New York, N. Y. Laxative. Serial No. 325,645; May 3. Class 6.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Coating compositions. Serial No. 325,463; May 3. Class 6.

Eagle Pencil Company, New York, N. Y. Compasses and dividers. Serial No. 325,089; May 3. Class 26.

Eagle Pencil Company, New York, N. Y. Pencils, penholders, combination pens and pencils, etc. Serial No. 325,090; May 3. Class 37.

Eastman Kodak Company, Rochester, N. Y. Photographic shutters. Serial No. 325,366; May 3. Class 26.

Elkton Drug Co. (See Fink, Samuel M., D. D. S.)

Fair, The, Chicago, Ill. Dolls. Serial No. 325,399; May 3. Class 22.

Fink, Samuel M., D. D. S., doing business as Elkton Drug Co., Elkton, Md. Antiseptic liquid, powder, and paste. Serial No. 323,991; May 3. Class 6.

Forsythe, Vic, Alhambra, Calif. Cartoon strip. Serial No. 316,673; May 3. Class 38.

Frozen Confections, Inc., New York, N. Y. Frozen confections. Serial No. 324,706; May 3. Class 46.

Gardiner Hall Jr. Company, The, South Willington, Conn., and New York, N. Y. Thread. Serial No. 325,467; May 3. Class 43.

Gittleman, Benjamin, doing business as The Lincoln Shoe Products Mfg. Co., Providence, R. I. Shoe polish. Serial No. 324,707; May 3. Class 4.

Gittleman, Benjamin, doing business as The Lincoln Shoe Products Mfg. Co., Providence, R. I. Cleaning and whitening fluid or powder for shoes. Serial No. 324,708; May 3. Class 4.

Glass, Henry, & Co., New York, N. Y. Shirts, blouses, and pajamas. Serial No. 315,399; May 3. Class 39.

Golden State Frocks, Los Angeles, Calif. Dresses, frocks, and blouses. Serial No. 324,253; May 3. Class 39.

Griffin Hosiery Mills, Griffin, Ga. Ladies' hosiery. Serial No. 324,918; May 3. Class 39.

Hahn Department Stores, Inc., Wilmington, Del. Men's and boys' clothing and accessories. Serial No. 325,144; May 3. Class 39.

Hahn Department Stores, Inc., Wilmington, Del. Silk and artificial silk yard goods. Serial No. 325,259; May 3. Class 42.

Halberstadt-Wolf Co. Inc., New York, N. Y. Ladies' pocketbooks, purses, and vanities. Serial No. 312,299; May 3. Class 3.

Halliwell-Shelton Electric Corporation, New York, N. Y. Hair-waving rods. Serial No. 325,169; May 3. Class 44.

Hanes Hosiery Mills Co., Winston Salem, N. C. Hosiery. Serial No. 325,401; May 3. Class 39.

Hartman-Leddon Co., Inc., Philadelphia, Pa. Dyes. Serial No. 324,286; May 3. Class 6.

Healey, James E., doing business as Aviator Spark Plug Co., Oakland, Calif. Spark plugs. Serial No. 324,254; May 3. Class 21.

Healey, James E., doing business as Aviator Spark Plug Co., Oakland, Calif. Spark plugs. Serial No. 324,256; May 3. Class 21.

Hofco Pump Ltd., Long Beach, Calif. Oil well pumps and parts therefor. Serial No. 325,145; May 3. Class 23.

Hormez Laboratories. (See Philippe, Louis, Inc.)

Hoy, F. P., Inc., New York, N. Y. Corsets, brassieres, and underwear. Serial No. 325,171; May 3. Class 39.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Inter-Constal Paint Corporation, East St. Louis, Ill. Ready mixed paint. Serial No. 324,743; May 3. Class 16.

International Devices Corporation, Chicago, Ill. Weighing machines. Serial No. 324,919; May 3. Class 26.

Irvington Varnish & Insulator Co., Irvington, N. J. Lining paper for bottle caps. Serial No. 325,292; May 3. Class 37.

Johnson & Johnson, New Brunswick, N. J. Adhesive denture powder. Serial No. 324,611; May 3. Class 6.

Kayser, Julius, & Co., New York, N. Y. Women's underwear. Serial No. 325,472; May 3. Class 39.

Ke-Lite Products Company, Detroit, Mich. Cases of leather for holding keys, etc. Serial No. 323,007; May 3. Class 3.

Kimball Dental Manufacturing Co., Chicago, Ill. Dental burs. Serial No. 324,565; May 3. Class 44.

Kotkes, W., & Son, New York, N. Y. Dresses, smocks, Hoover aprons, and pyjamas. Serial No. 324,891; May 3. Class 39.

Kress, S. H., & Co., New York, N. Y. Hair nets, towels, sheets, etc. Serial No. 323,340; May 3. Class 42.

Lachoy Food Products, Inc., Detroit, Mich. Canned corn mush and chicken a la King. Serial No. 312,525; May 3. Class 46.

Leonard Seed Co., Chicago, Ill. Sets of onion bulbs for planting. Serial No. 324,144; May 3. Class 1.

Les Corsets Sirene Paris, Societe Anonyme, Paris, France. Corsets, corset belts, and brassières. Serial No. 324,474; May 3. Class 39.

Letherby, John A., Midland, Ontario, Canada. Preparation for use in treatment of colds, bronchitis, and tubercular troubles. Serial No. 322,486; May 3. Class 6.

Levy, Emanuel, doing business as Cyrex Manufacturing Co., Brooklyn, N. Y. Cleaning compounds for metals, woodwork, marblework, etc. Serial No. 325,148; May 3. Class 4.

Lilly, Eli, and Company, Indianapolis, Ind. Powdered liver extract. Serial No. 325,231; May 3. Class 6.

Linco Products Corporation, Chicago, Ill. Javelle water. Serial No. 324,071; May 3. Class 6.

Lincoln Bakery & Grocery. (See Calamaras, Thomas.)

Lincoln Shoe Products Mfg. Co., The. (See Gittleman, Benjamin.)

Lorch Manufacturing Company, Dallas, Tex. Frocks. Serial Nos. 325,335–6; May 3. Class 39.

Louisiana Pine Products Company, Inc., Shreveport, La. Turpentine and pine oil. Serial No. 322,848; May 3. Class 16.

Lovett, Laura, Sunnyside, L. I., N. Y. Candied citrous fruit peel. Serial No. 325,369; May 3. Class 46.

Löwe, Joe, Corporation, Brooklyn, N. Y. Units for making solidified carbon dioxide, cabinets for preserving products with solidified carbon dioxide, and parts for said units and cabinets. Serial No. 324,894; May 3. Class 31.

Lucky Strike Manufacturing Company, Incorporated, The, Baltimore, Md. Game. Serial No. 324,044; May 3. Class 22.

Lurgan Weaving Company, Limited, The, Lurgan, Northern Ireland. Bedspreads, sheets, tablecloths, etc. Serial No. 320,595; May 3. Class 42.

McCormick, J. H., & Co., Williamsport, Pa. Fans and blowers, nozzles, etc. Serial No. 324,718; May 3. Class 34.

Mocco, Benedict, San Jose, Calif. Fresh vegetables. Serial No. 325,480; May 3. Class 46.

Morgan, Robt. E., New York, N. Y. Game. Serial No. 325,106; May 3. Class 22.

Moyer, Walter W., Ephrata, Pa. Underwear. Serial No. 324,849; May 3. Class 39.

Mulligan, George E., Albany, N. Y. Fabric bags. Serial No. 324,850; May 3. Class 2.

Naamlooze Vennootschap tot Voorzetting der Zaken Van Pieter Schoen & Zoon, Zaandam, Netherlands. Paints, paint enamels and varnishes. Serial No. 324,753; May 3. Class 16.

Nashua Baking Company, Inc., Nashua, N. H. Groceries. Serial No. 321,915; May 3. Class 46.

National Broom Manufacturing Company, Pueblo, Colo. Brooms. Serial No. 325,371; May 3. Class 29.

National Department Stores, Inc., New York, N. Y. Hosiery. Serial No. 325,072; May 3. Class 39.

National "Who-Handles" Building Products Directory Co., The. (See Burge, Flippen.)

Négyes Tobacco Shop. (See Schachter, Helen.)

Neustadter Bros., San Francisco, Calif. Beach and sport pants. Serial No. 325,341; May 3. Class 39.

New Health Foods Company, Tulsa, Okla. Frozen confections. Serial No. 324,229; May 3. Class 46.

Oneida Community, Limited, Oneida, N. Y. Silver plated knives and forks. Serial No. 310,944; May 3. Class 28.

Package Paper Company, Holyoke, Mass. Wrapping and covering material. Serial No. 318,744; published May 3. Class 37.

Pauly and Ramsey, Tulsa, Okla. Cereal breakfast foods. Serial No. 325,597; May 3. Class 46.

Peggy Kellogg Kottage Kandy Co. (See Sears, Roebuck and Co.)

Perrault, Joseph S., Nashua, N. H. Pie pan lifters and the like. Serial No. 316,569; May 3. Class 23.

Petroleum Engineering Corporation, Springfield, Mass. Oil range burners. Serial No. 324,851; May 3. Class 34.

Philippe, Louis, Inc., doing business as Hormez Laboratories, Chicago, Ill. Compound of glandular substances in combination with skin emollients used as a face cream. Serial No. 324,570; May 3. Class 6.

Pick-Barth, Albert, Company, Inc., New York, N. Y., and Chicago, Ill. Trays of fibrous composition. Serial No. 310,575; May 3. Class 2.

Pillsbury Flour Mills Company, Minneapolis, Minn. Flour. Serial No. 325,343; May 3. Class 46.

Pillsbury Flour Mills Company, Minneapolis, Minn. Flour. Serial No. 325,359; May 3. Class 46.

Playskool Institute, Inc., Milwaukee, Wis. Toys. Serial No. 325,075; May 3. Class 22.

Polk Miller Products Corp., Richmond, Va. Preparation used as an antiseptic, germicide, etc.; liniment, an expectorant medicine, etc. Serial No. 324,191; May 3; Class 6.

Polk Miller Products Corp., Richmond, Va. Preparation used as an antiseptic, germicide, etc.; liniment, an expectorant medicine, etc. Serial No. 324,231; May 3. Class 6.

Potter Press, The, Waltham, Mass. Order books, ledger sheets, statements, etc. Serial No. 324,829; May 3. Class 37.

Primo Polish Manufacturing Company. (See Shoe, Charles N.)

Productos Selectos Del Cerdo, S. A., Manlleu, Spain. Foods derived from pork. Serial No. 325,411; May 3. Class 46.

Protein Mineral Co., Inc., New York, N. Y. Concentrated preparation of protein calcium phosphate, lactose, etc. Serial No. 324,800; May 3. Class 6.

Prybrands, Inc., Long Island City, N. Y. Razors and razor blades. Serial No. 325,269; May 3. Class 23.

Reading Batteries, Inc., Reading, Pa. Storage batteries. Serial No. 324,830; May 3. Class 21.

Renfro, Rosine E., Greenville, Ill. Medicinal compound. Serial No. 324,831; May 3. Class 6.

Richel Company, Inc., Upper Darby, Pa. Astringent liquids and creams, eyelash growers, hand lotions, etc. Serial No. 322,522; May 3. Class 6.

Rollins Hosiery Mills, Inc., Des Moines, Iowa. Ladies' hosiery. Serial No. 322,232; May 3. Class 39.

Royal Saxon Company, Inc., Bound Brook, N. J. Polishing preparation. Serial No. 324,118; May 3. Class 16.

Ryan-Hampton Tobacco Company, Louisville, Ky. Smoking and chewing tobacco. Serial No. 325,346; May 3. Class 17.

Ryan-Hampton Tobacco Company, Louisville, Ky. Smoking and chewing tobacco. Serial No. 325,532; May 3. Class 17.

Sanex Co. (See Young, John M.)

Sea Gull Specialty Company, The, Baltimore, Md. Baking powder. Serial No. 324,832; May 3. Class 6.

Sears, Roebuck and Co., doing business as Peggy Kellogg Kottage Kandy Co., Chicago, Ill. Candy. Serial No. 322,603; May 3. Class 46.

Schachter, Helen, doing business as Négyes Tobacco Shop, New York, N. Y. Smoking tobacco. Serial Nos. 304,906–8; May 3. Class 17.

Schlosser, Abraham, doing business as Schlosser Manufacturing Co., New York, N. Y. Fountain pens and pencils. Serial No. 325,242; May 3. Class 37.

Scolding Locks Corporation, Appleton, Wis. Hair pins of the "Bobby" pin type. Serial No. 312,864; May 3. Class 40.

Scott, Henry L., Company, Providence, R. I. Machines for testing strength or stretch of material. Serial No. 325,376; May 3. Class 26.

Shoe, Charles N., doing business as Primo Polish Manufacturing Company, Westfield, Mass. Polishes for stoves, shoes, and metals. Serial No. 324,402; May 3. Class 4.

Simon, Moe, doing business as M. Simon & Co., New York, N. Y. Exercisers for babies. Serial No. 325,444; May 3. Class 22.

Smith, F. A., Manufacturing Company, The, Rochester, N. Y. Electric fans. Serial No. 325,078; May 3. Class 21.

Sperry, Portia, Nashville, Ind. Dolls. Serial No. 324,672; May 3. Class 22.

Sten-O-Aide, Inc., Grand Rapids, Mich. Set or outfit of tools and supplies for use with typewriting machines. Serial No. 324,234; May 3. Class 50.

Stewart-Warner Corporation, Chicago, Ill. Cameras, projectors, and motion picture apparatus. Serial No. 325,350; May 3. Class 26.

Tip-Top Laboratories. (See Dabrowski, Frank.)

Trimer, Joseph, Company, Chicago, Ill. Medicinal stimulant. Serial No. 325,123; May 3. Class 6.

Triplex Products Corporation, Clifton, N. J., and New York, N. Y. Clocks for operating electric switches. Serial No. 325,354; May 3. Class 27.

Trulastic Research Laboratories. (See Antonucci, Angelo C.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Underwood Elliott Fisher Company, New York, N. Y. Typewriter ink ribbons and coated transfer sheets. Serial No. 324,576; May 3. Class 11.

United Publishers Corporation, New York, N. Y. Publication. Serial No. 325,193; May 3. Class 38.

United States Rubber Company, New York, N. Y. Golf balls. Serial No. 325,536; May 3. Class 22.

United Telephone and Electric Company, The, Kansas City, Mo. Magazines. Serial No. 324,974; May 3. Class 38.

Utility Products, Inc., Rockford, Ill. Aluminum cooking utensils. Serial No. 323,073; May 3. Class 13.

Vanity Fair Silk Mills, Reading, Pa. Knitted and textile underwear and hosiery. Serial No. 322,868; May 3. Class 39.

Van Wagner, Leo M., Far Rockaway, N. Y. Painted and enameled signs, emblems, and nameplates. Serial No. 324,202; May 3. Class 50.

Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Raw and partly prepared iron. Serial No. 324,238; May 3. Class 14.

Victaulic Company of America, Jersey City, N. J. Pipe couplings. Serial No. 325,445; May 3. Class 13.

Vollrath, Otto, St. Paul, Minn. Ointment. Serial No. 324,810; May 3. Class 6.

Walgreen Co., Chicago, Ill. Tooth paste. Serial No. 322,719; May 3. Class 6.

Walker Hill Dairy, Inc., Washington, D. C. Milk, cream, buttermilk, cottage cheese, and chocolate milk. Serial No. 311,711; May 3. Class 46.

Ward, Samuel, Manufacturing Company, Boston, Mass. Record books. Serial No. 325,307; May 3. Class 37.

Washougal Woolen Mills, doing business as West Coast Woolen Mills, Ltd., Washougal, Wash. Woolen fabrics. Serial No. 316,461; May 3. Class 42.

Wasson, H. P., and Company, Indianapolis, Ind. Sheets, pillow cases, blankets, comforts, tablecloths, napkins, etc. Serial No. 324,975; May 3. Class 42.

Weiss, Richard, Berlin, Germany. Preparation for the treatment of diabetic conditions. Serial No. 325,628; May 3. Class 6.

West Coast Woolen Mills, Ltd. (See Washougal Woolen Mills.)

West Disinfecting Company, Long Island City, N. Y. Air purifying preparations, antiseptics, deodorants, disinfectants, etc. Serial No. 311,635; May 3. Class 6.

Willson Products, Inc., Reading, Pa. Ophthalmic and protection lenses. Serial No. 325,130; May 3. Class 26.

Young, John M., doing business as Sanex Co., Los Angeles, Calif. Water softening and bleaching preparation. Serial No. 325,611; May 3. Class 6.

Zitzman, Adolph W., Chicago, Ill. Hand operated toy. Serial No. 325,159; May 3. Class 22.

LIST OF REGISTRANTS OF TRADE-MARKS

A/S United Sardine Factories, Bergen, Norway. Fish, fish cakes and cod roe. 293,781; May 3; Serial No. 295,414; published Feb. 16, 1932. Class 46.

Abercrombie & Fitch Company, New York, N. Y. Golf, tennis, archery, etc., equipment. 293,683; May 3; Serial No. 321,715; published Feb. 23, 1932. Class 22.

Albee Publishing Company, Inc., New York, N. Y. Prints and publications. 293,698; May 3; Serial No. 322,303; published Feb. 16, 1932. Class 38.

Alhestos Corporation, Philadelphia, Pa. Brake linings. 293,748; May 3; Serial No. 316,241; published Aug. 4, 1931. Class 35.

Almada, Albert A., Vallejo, Calif. Board games. 293,722; May 3; Serial No. 320,223; published Feb. 16, 1932. Class 22.

American Air Filter Company, Inc., Louisville, Ky. Fan and filter type of ventilating apparatus. 293,770; May 3; Serial No. 309,054; published Feb. 23, 1932. Class 34.

American Character Doll Co. Inc., New York, N. Y. Dolls. 293,786; May 3; Serial No. 320,850; published Feb. 16, 1932. Class 22.

American Fruit Growers, Inc. of California, Los Angeles, Calif. Fresh deciduous fruits. 293,734; May 3; Serial No. 322,037; published Feb. 16, 1932. Class 46.

American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Materials and solutions which act as the solvent in removing ink, etc., from printing blankets and rollers. 293,735; May 3; Serial No. 322,077; published Feb. 23, 1932. Class 4.

American Raysol Corporation, Cincinnati, Ohio. Natural mineral water. 293,645; May 3; Serial No. 322,245; published Feb. 23, 1932. Class 45.

Amtorg Trading Corporation, New York, N. Y. Canned crab meat. 293,768; May 3; Serial No. 309,407; published Feb. 23, 1932. Class 46.

Anderson Box Company, Indianapolis, Ind. Chick boxes. 293,693; May 3; Serial No. 321,705; published Feb. 23, 1932. Class 2.

Antiquarian Publishing Co., Inc., The, New York, N. Y. Periodical or trade paper. 293,640; May 3; Serial No. 322,352; published Feb. 23, 1932. Class 38.

Arkansas Company, Inc., New York, N. Y. Compound used as a solvent. 293,602; May 3; Serial No. 322,083; published Feb. 16, 1932. Class 6.

Art-Cement Mfg. Co. (See Davis, Benjamin F.)

Asiatic Petroleum Company, Limited, The, London, England. Diluents for printing inks. 293,599; May 3; Serial No. 321,580; published Feb. 23, 1932. Class 11.

Ath-A-Lene Laboratories. (See Pellar, Sidney H.)

Atlas Supply Company, Wilmington, Del., and Newark, N. J. Rubber tires and tubes. 293,705; May 3; Serial No. 322,675; published Feb. 16, 1932. Class 35.

Atwell, George J., New York, N. Y. Automobile truck bodies. 293,652; May 3; Serial No. 321,981; published Feb. 23, 1932. Class 19.

Aunt Kate's Products Co. (See Conlon, Catherine.)

Bacon, Charles H., Company, Lenoir City, Tenn. Hosiery. 293,747; May 3; Serial No. 323,020; published Feb. 23, 1932. Class 39.

Balfour, Guthrie & Co., Limited, San Francisco, Calif. Concentrated white mineral oil emulsion. 293,619; May 3; Serial No. 321,411; published Feb. 16, 1932. Class 6.

Barbour, G. E., Company, Limited, St. John, New Brunswick, Canada. Tea. 85,898; renewed Mar. 26, 1932.

Barnard Co. The. (See Peoples Drug Stores, Inc.)

Baron, Alexander, Brooklyn, N. Y. Pistol holsters. 293,800; May 3; Serial No. 322,810; published Feb. 16, 1932. Class 9.

Barrymore Seamless Wiltons, Inc., The, Philadelphia, Pa. Textile rugs and carpets. 293,791; May 3; Serial No. 322,125; published Feb. 16, 1932.

Bekeart, Philip B., San Francisco, Calif. Fishing lines. 293,633; May 3; Serial No. 322,679; published Feb. 23, 1932. Class 22.

Bingo Novelty Manufacturing Company, Chicago, Ill. Games of skill and parts thereof. 293,785; May 3; Serial No. 320,804; published Feb. 16, 1932. Class 22.

Blumenkrantz & Zucker Sewing Machine Co., Inc., New York, N. Y. Sewing machine belts. 293,673; May 3; Serial No. 320,044; published Feb. 23, 1932. Class 35.

Blumenthal, Sidney, & Co., Inc., New York, N. Y. Pile fabrics. 293,720; May 3; Serial No. 319,686; published Feb. 23, 1932. Class 42.

Bombay National Incense Company. (See Grewal, Sarwan S.)

Borst Engineering, Inc., Buffalo, N. Y. Paper towels, toilet paper, and paper closet seat covers. 293,671; May 3; Serial No. 320,628; published Feb. 23, 1932. Class 37.

Bowers, Frederick M., doing business as The Fibre-Metal Products Co., Chester, Pa. Welding helmets, welding hand shields, and glass for same. 293,618; May 3; Serial No. 321,638; published Feb. 16, 1932. Class 26.

Brown Company, Portland, Me., and Berlin, N. H. Paper. 293,744; May 3; Serial No. 322,682; published Feb. 16, 1932. Class 37.

Brozep Bros. Watch Crystal Co. Inc., New York, N. Y. Watch crystals. 293,804; May 3; Serial No. 323,163; published Feb. 23, 1932. Class 33.

Bruning, Charles, Company, Inc., New York, N. Y. Tracing cloth. 293,676; May 3; Serial No. 318,389; published Feb. 23, 1932. Class 37.

Burgess Battery Company, Madison, Wis. Window ventilators. 293,644; May 3; Serial No. 322,248; published Feb. 23, 1932. Class 34.

Burgess Cellulose Company, Madison, Wis. Stereotype mats. 293,630; May 3; Serial No. 322,817; published Feb. 23, 1932. Class 37.

Burt, John U., Inc., New York, N. Y. Umbrellas and parasols. 293,746; May 3; Serial No. 322,765; published Feb. 23, 1932. Class 41.

Butler Paper Corporations, Chicago, Ill. Paper. 293,685; May 3; Serial No. 322,876; published Feb. 23, 1932. Class 37.

Byron Weston Company, Dalton, Mass. Paper. 293,696; May 3; Serial No. 322,011; published Feb. 16, 1932. Class 37.

Byron Weston Company, Dalton, Mass. Paper. 293,760; May 3; Serial No. 322,159; published Feb. 16, 1932. Class 37.

Carnation Company. (See Pacific Coast Condensed Milk Co., assignor.)

Carroll, Alvin T., New Iberia, La. Liniment. 293,623; May 3; Serial No. 320,888; published Feb. 16, 1932. Class 6.

Central Plumbing Supply Company, Philadelphia, Pa. Paints. 293,749; May 3; Serial No. 316,528; published Feb. 23, 1932. Class 16.

Central West Coal Company, Menominee, Mich. Stencil printing machine. 293,603; May 3; Serial No. 322,130; published Feb. 16, 1932. Class 23.

Chamber of Commerce of Kansas City, Missouri, The, Kansas City, Mo. Periodical. 293,704; May 3; Serial No. 323,026; published Feb. 23, 1932. Class 38.

Chein, J., & Company, Harrison, N. J. Toy sail boats. 293,719; May 3; Serial No. 317,389; published Feb. 16, 1932. Class 22.

Chesebrough Manufacturing Company, Consolidated, New York, N. Y. Hair tonic. 293,600; May 3; Serial No. 321,842; published Feb. 16, 1932. Class 6.

Chesterfield Dry Ginger Ale Co., Chicago, Ill. Ginger ale. 293,718; May 3; Serial No. 317,301; published Feb. 16, 1932. Class 45.

Colorado Fuel and Iron Company, The, Denver, Colo. Metal grinding balls. 293,594; May 3; Serial No. 321,421; published Feb. 23, 1932. Class 14.

Comello Bros. & Company, Cincinnati, Ohio. Suits, topcoats, trousers, and overcoats. 293,677; May 3; Serial No. 317,831; published Feb. 16, 1932. Class 39.

Conlon, Catherine, doing business as Aunt Kate's Products Co., Saugerties, N. Y. Soap. 293,515; May 3; Serial No. 321,460; published Feb. 16, 1932. Class 4.

Conn, C. G., Ltd., Elkhart, Ind. Pamphlets or magazines. 293,649; May 3; Serial No. 322,092; published Feb. 23, 1932. Class 37.

Consolidated Packing Company, San Francisco, Calif. Dried fruits and raisins. 293,661; May 3; Serial No. 322,358; published Feb. 16, 1932. Class 46.

Coors, H. F., Company, Inc., Inglewood, Calif. Porcelain. 293,730; May 3; Serial No. 314,048; published Feb. 23, 1932. Class 30.

Country Press, Inc., Minneapolis, Minn. Magazines. 293,700; May 3; Serial No. 322,574; published Feb. 16, 1932. Class 38.

Craddick, William F., Chicago, Ill. Electric blankets for therapeutic use. 293,750; May 3; Serial No. 316,554; published Feb. 23, 1932. Class 44.

Crawford McGregor and Canby Company, The, Dayton, Ohio. Golf clubs. 293,641–2; May 3; Serial Nos. 322,308–9; published Feb. 23, 1932. Class 22.

Creamaker Corp ration, Los Angeles, Calif. Machine for making cream. 293,662; May 3; Serial No. 322,209; published Feb. 23, 1932. Class 23.

Cruikshank, Dwight P., doing business as Sure-Rise Baking Powder Co., New York, N. Y. Baking powder. 293,591; May 3; Serial No. 321,949; published Feb. 16, 1932. Class 6.

Cuba Industrial Y Comercial, S. A., doing business as Villaplana Guerrero Y Cia., Habana, Cuba. Chocolate. 293,774; May 3; Serial No. 306,173; published Feb. 23, 1932. Class 46.

Cuba Industrial Y Comercial, S. A., doing business as Hijos de Bageur, Habana, Cuba. Chocolate. 293,775; May 3; Serial No. 306,172; published Feb. 23, 1932. Class 46.

Curtis Publishing Company, The, Philadelphia, Pa. Patterns for gardens. 293,595; May 3; Serial No. 322,093; published Feb. 16, 1932. Class 26.

Davis, Benjamin F., doing business as Art-Cement Mfg. Co., Miami, Fla. Paints. 293,736; May 3; Serial No. 322,094; published Feb. 23, 1932. Class 16.

Debis & Stein, Newark, N. J. Malt syrup. 293,694; May 3; Serial No. 321,750; published Feb. 16, 1932. Class 48.

De Land, C. M., New York, N. Y. Woolen piece goods. 293,803; May 3; Serial No. 323,127; published Feb. 23, 1932. Class 42.

Denulson Manufacturing Company, Framingham, Mass. Sanitary paper diapers. 293,710; May 3; Serial No. 322,629; published Feb. 23, 1932. Class 44.

Dooley Manufacturing Co., Inc., The, Philmont, N. Y. Paint. 293,751; May 3; Serial No. 316,811; published Feb. 23, 1932. Class 16.

Droste & Co., assignor to Naamlooze Vennootschap Droste's Cacao-En Chocoladefabrieken, Haarlem, Netherlands, Cocoa. 86,288; renewed Apr. 3, 1932.

Durkee Famous Foods, Inc., Cleveland, Ohio. Pure vegetable shortening. 293,716; May 3; Serial No. 322,953; published Feb. 23, 1932. Class 46.

Durst Manufacturing Company, Inc., The, New York, N. Y. Radiator siphon valves. 293,643; May 3; Serial No. 322,281; published Feb. 23, 1932. Class 13.

Duzz-It Chemical Works. (See Wexberg, William V.)

Eggeling, Arthur, New York, N. Y. Scrap book covers and filler sheets. 293,687; May 3; Serial No. 322,577; published Feb. 16, 1932. Class 37.

El Solvo Ranch. (See Meridian Ltd.)

Emerson Glass Corporation, Jamestown, N. Y. Mirrors. 293,660; May 3; Serial No. 322,456; published Feb. 23, 1932. Class 32.

Euclid Coffee Company, The, Cleveland, O. Coffee, tea, spices, food-flavoring extracts. 293,773; May 3; Serial No. 306,346; published Mar. 31, 1931. Class 46.

Fairy Silk Mills, Shillington, Pa. Underwear of glove silk, silk and rayon, and rayon. 293,637; May 3; Serial No. 322,578; published Feb. 16, 1932. Class 39.

Faith Mfg. Co., Chicago, Ill. Shower heads, trap covers, metal drains, etc. 293,692; May 3; Serial No. 321,422; published Feb. 23, 1932. Class 13.

Fawcett Publications, Inc., Minneapolis, Minn. Magazines. 293,628–9; May 3; Serial Nos. 322,948–9; published Feb. 23, 1932. Class 38.

Federal Cartridge Corp., Minneapolis, Minn. Rifle cartridges. 293,798; May 3; Serial No. 322,632; published Feb. 16, 1932. Class 9.

Fibre-Metal Products Co., The. (See Bowers, Frederick M.)

Floor Scrapers Co. Inc., Chicago, Ill. Liquid wax polish and a sealing liquid of penetrating China wood oil. 293,752; May 3; Serial No. 316,881; published Feb. 23, 1932. Class 16.

Foodtown Kitchens, Inc., Chicago, Ill. Cereal breakfast foods. 293,727; May 3; Serial No. 315,767; published Sept. 22, 1931. Class 46.

Forstmann & Huffmann Company, Passaic, N. J. Wooten piece goods. 293,787; May 3; Serial No. 321,862; published Feb. 16, 1932. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 293,788; May 3; Serial No. 321,851; published Feb. 16, 1932. Class 42.

Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels, napkins, etc. 293,701; May 3; Serial No. 322,580; published Feb. 16, 1932. Class 37.

Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels, table cloths, etc. 293,739–41; May 3; Serial Nos. 322,581–3; published Feb. 16, 1932. Class 37.

Fruit Shops, Inc., The, New York, N. Y. Fresh bananas. 293,811; May 3; Serial No. 320,891; published Feb. 23, 1932. Class 46.

Gane & Ingram, Incorporated, New York, N. Y. Medicinal preparation. 293,606; May 3; Serial No. 322,384; published Feb. 16, 1932. Class 6.

General-Direktion der Österr. Tabakregie, Vienna, Austria. Smoking tobaccos, cigars, and cigarettes. 293,610; May 3; Serial No. 322,692; published Feb. 16, 1932. Class 17.

General Motors Corporation, Detroit, Mich. Motor driven vehicles. 293,706; May 3; Serial No. 322,212; published Feb. 23, 1932. Class 19.

General Tire & Rubber Company, Akron, Ohio. Golf balls. 293,731; May 3; Serial No. 314,845; published Feb. 23, 1932. Class 22.

Gilmer, L. H. Co., Tacony, Philadelphia, Pa. Power belts. 293,598; May 3; Serial No. 322,670; published Feb. 16, 1932. Class 35.

Goldman's, Inc., Philadelphia, Pa. Electric heating pads. 293,737; May 3; Serial No. 322,100; published Feb. 23, 1932. Class 44.

Goldworm Sportwear Co. Inc., New York, N. Y. Ladies' suits and dresses. 293,646; May 3; Serial No. 322,170; published Feb. 16, 1932. Class 39.

Goodwin, Emma E., Inc. (See Vos, Calvin, assignor.)

Greeting Card Association, Inc., The, New York, N. Y. Magazine. 293,754; May 3; Serial No. 318,005; published Feb. 16, 1932. Class 38.

Grewal, Sarwan S., doing business as Bombay National Incense Company, Highland Park, Mich. Incense. 293,625; May 3; Serial No. 319,988; published Feb. 16, 1932. Class 6.

H. & H. Manufacturing Company, Inc., The, Quidnick, R. I. Piece goods. 293,799; May 3; Serial No. 322,792; published Feb. 16, 1932. Class 42.

Hansen, A. L. Mfg. Co., Chicago, Ill. Vehicle bodies, door handles, and window regulators. 293,680; May 3; Serial No. 321,069; published Feb. 23, 1932. Class 19.

Harding, Milo, Company, Ltd., Los Angeles, Calif. Stencils. 293,678; May 3; Serial No. 319,931; published Feb. 23, 1932. Class 37.

Heide, Henry, Incorporated, New York, N. Y. Candies. 293,766; May 3; Serial No. 312,604; published Feb. 16, 1932. Class 46.

Hijos de Bageur. (See Cuba Industrial y Comerical, S. A.)

Hodgman Rubber Company, Framingham, Mass. Pneumatic mattresses. 293,657; May 3; Serial No. 322,587; published Feb. 23, 1932. Class 32.

Hollins, William, & Company, Ltd., Nottingham, England. Yarns of wool, worsted, or hair. 293,794; May 3; Serial No. 322,309; published Feb. 16, 1932. Class 43.

Hollywood Candy Co. (See Martoccio, F. A., Company.)

Horowitz, Arthur, Zurich, Switzerland. Anodyne preparations. 293,620; May 3; Serial No. 319,863; published Feb. 9, 1932. Class 6.

Hubinger Co., The, Keokuk, Iowa. Corn starch. 293,688; May 3; Serial No. 320,678; published Dec. 15, 1931. Class 46.

Hyba, Bruno, Roslindale, Mass. Malt powder. 293,742; May 3; Serial No. 322,630; published Feb. 16, 1932. Class 48.

Industrial Relations Publications, Inc., Chicago, Ill. Publication. 293,689; May 3; Serial No. 320,727; published Feb. 16, 1932. Class 38.

Ingram-Richardson Manufacturing Company. (See Porcelitron Company, The, assignor.)

Inter-Collegiate Press, Kansas City, Mo. Duo-tone ink. 293,769; May 3; Serial No. 309,168; published Feb. 16, 1932. Class 11.

International Paint Corporation, East St. Louis, Ill. Liquid composition. 293,589; May 3; Serial No. 321,765; published Feb. 9, 1932. Class 6.

Jerkovitz, Anton, Chagrin Falls, Ohio. Blood producer tonic. 293,607; May 3; Serial No. 322,429; published Feb. 16, 1932. Class 6.

Johnson, Thomas K., doing business as Kendall Johnson, New Brunswick, N. J. Sanitary paper toilet seat. 293,755; May 3; Serial No. 318,712; published Feb. 16, 1932. Class 37.

Juilliard, A. D., & Company, Inc., New York, N. Y. Corduroys in the piece. 293,789; May 3; Serial No. 322,048; published Feb. 23, 1932. Class 42.

Kellermann, Annette, Inc., New York, N. Y. Pharmaceutical preparation. 293,590; May 3; Serial No. 321,912; published Feb. 9, 1932. Class 6.

Keystone Steel & Wire Company, Peoria, South Bartonville, Ill. Metallic fence posts. 293,634; May 3; Serial No. 322,695; published Feb. 23, 1932. Class 13.

Kidwell, William F., Versailles, Mo. Grave markers. 293,622; May 3; Serial No. 318,913; published Feb. 23, 1932. Class 50.

Klipstein, A., & Co., Inc., New York, N. Y. Bacterial culture. 293,608; May 3; Serial No. 322,511; published Feb. 9, 1932. Class 6.

Lanair Company, Chicago, Ill. Sanitary napkins. 293,707; May 3; Serial No. 322,392; published Feb. 23, 1932. Class 44.

Lee, Geo. H., Co., Omaha, Nebr. Preparation for pinworms in poultry. 293,616; May 3; Serial No. 322,825; published Feb. 16, 1932. Class 6.

Levy, Clifton R., Los Angeles, Calif. Photographs and pictorial illustrations and news items. 293,757; May 3; Serial No. 319,835; published Feb. 16, 1932. Class 38.

Liondale Shirt Co. Inc., New York, N. Y. Shirts, pajamas, and textile underwear. 293,651; May 3; Serial No. 322,001; published Feb. 16, 1932. Class 39.

Lovsted, C. M., & Co., Inc., Seattle, Wash. Nickel Babbitt metal. 293,617; May 3; Serial No. 322,849; published Feb. 23, 1932. Class 14.

Ludlow Manufacturing Associates, Boston, Mass. Jute webbing. 293,792–3; May 3; Serial Nos. 322,466–7; published Feb. 23, 1932. Class 42.

Ludlum Steel Co., Watervliet, N. Y. Hard metal composition for tools, dies, etc. 293,720; May 3; Serial No. 315,104; published Feb. 23, 1932. Class 14.

Mammi, Frank, Brooklyn, N. Y. Balls consisting of meat, rice, and eggs, and spices. 293,767; May 3; Serial No. 310,686; published June 2, 1931. Class 46.

Mandel & Cohen, New York, N. Y. Underwear. 293,728; May 3; Serial No. 315,641; published Feb. 9, 1932. Class 39.

Marinello Company, New York, N. Y. Binocular loupes. 293,659; May 3; Serial No. 322,468; published Feb. 23, 1932. Class 26.

Martoccio, F. A., Company, doing business as Hollywood Candy Co., Minneapolis, Minn. Candy bars. 293,817; May 3; Serial No. 321,602; published Feb. 16, 1932. Class 46.

Mayer, Oscar, & Co. Inc., doing business as Oscar Mayer's, Chicago, Ill. Bacon. 293,780; May 3; Serial No. 295,688; published Feb. 23, 1932. Class 46.

Maytlower Dress Company, Inc., New York, N. Y. Skirts, blouses, dresses, etc. 293,783; May 3; Serial No. 291,170; published Feb. 23, 1932. Class 39.

McCrory Stores Corporation, New York, N. Y. Safety razor blades. 293,667–8; May 3; Serial Nos. 321,810–11; published Feb. 16, 1932. Class 23.

Melburt Products, Inc., New York, N. Y. Sanitary, cotton, absorbent napkins. 293,813; May 3; Serial No. 321,352; published Feb. 23, 1932. Class 44.

Meridian Ltd., doing business as El Solyo Ranch, Vernalis, Calif. Fresh deciduous fruits and vegetables, fresh grapes, etc. 293,814; May 3; Serial No. 321,355; published Feb. 23, 1932. Class 46.

Metro Products Co., Detroit, Mich. Reducing lotion. 293,605; May 3; Serial No. 322,324; published Feb. 9, 1932. Class 6.

Miniature Mfg. Co. (See Stroud, Warren L.)

Minneapolis-Moline Power Implement Company, Hopkins, Minn. Hammer mills. 293,653; May 3; Serial No. 322,781; published Feb. 16 1932. Class 23.

Minneapolis-Moline Power Implement Company, Hopkins, Minn. Tractors. 293,638; May 3; Serial No. 322,470; published Feb. 23, 1932.

Montag Bros. Inc., Atlanta, Ga. Writing paper and envelopes. 293,776; May 3; Serial No. 305,284; published Feb. 16, 1932. Class 37.

Morley Manufacturing Company, Limited, The, Manchester, England. Tracing cloth. 293,763; May 3; Serial No. 322,518; published Feb. 16, 1932. Class 37.

Mueth, Eugene, doing business as Toil-Glen Products Co., St. Louis, Mo. Toilet bowl cleaner. 293,712; May 3; Serial No. 322,887; published Feb. 23, 1932. Class 4.

Naamlooze Vennootschap Droste's Cacao-En Chocoladefabrieken. (See Droste & Co., assignor.)

National Capital Republican Club, Washington, D. C. Magazine. 293,674; May 3; Serial No. 320,099; published Feb. 16, 1932. Class 38.

National Paper Products Company, San Francisco, Calif. Paper towels. 293,745; May 3; Serial No. 322,701; published Feb. 16, 1932. Class 37.

National Radiator Company Limited, Kingston-upon-Hull, England. Metals in bulk, ingots, rods, etc. 293,592; May 3; Serial No. 320,601; published Feb. 23, 1932. Class 14.

Nestle-Lemur Company, The, New York, N. Y. Hair waving pads. 293,714; May 3; Serial No. 322,939; published Feb. 23, 1932. Class 44.

Neustadter Bros., San Francisco, Calif. Beach and sport pants and trunks. 293,638; May 3; Serial No. 322,554; published Feb. 16, 1932. Class 39.

New England Fish Company, Seattle, Wash. Canned salmon. 293,715; May 3; Serial No. 322,594; published Feb. 16, 1932. Class 46.

Nosis, Steven, Massillon, Ohio. Preparation for use as a blood purifier, indigestion, etc. 293,603; May 3; Serial No. 322,109; published Feb. 16, 1932. Class 6.

O. B. Soap Co. Inc., Buffalo, N. Y. Soap powder. 293,709; May 3; Serial No. 322,432; published Feb. 16, 1932. Class 4.

Ohio Ferro-Alloys Corporation, Canton, Ohio. Ferro-alloys. 293,597; May 3; Serial No. 322,521; published Feb. 16, 1932. Class 14.

Ohio Match Company, The, Wadsworth, Ohio, and New York, N. Y. Paper bags. 293,778; May 3; Serial No. 304,159; published Feb. 16, 1932. Class 2.

Oppenheim, Paul, doing business as Vacumagic Brush Co., New York, N. Y. Brushes. 293,609; May 3; Serial No. 322,557; published Feb. 16, 1932. Class 29.

Oregon Pulp and Paper Co., Salem, Oreg. Mimeograph and bond paper. 293,631–2; May 3; Serial Nos. 322,749–50; published Feb. 23, 1932. Class 37.

Oregon Pulp and Paper Co., Salem and Portland, Oreg. Bond paper. 293,654; May 3; Serial No. 322,748; published Feb. 23, 1932. Class 37.

Oregon Pulp and Paper Co., Salem, Oreg. Ledger and mimeograph paper. 293,655; May 3; Serial No. 322,747; published Feb. 23, 1932. Class 37.

Oregon Pulp and Paper Co., Salem, Oreg. Bond paper. 293,656; May 3; Serial No. 322,746; published Feb. 23, 1932. Class 37.

Osetkowski, Andrew A., doing business as Union Products Company, Detroit, Mich. Hair pomades, talcum powders, herb teas, etc. 293,624; May 3; Serial No. 320,690; published Feb. 9, 1932. Class 6.

Otero y Perez, Juan J., Habana, Cuba. Metal polishing paste. 293,807; May 3; Serial No. 319,665; published Feb. 23, 1932. Class 4.

Oyster Bay Oyster Company, Oyster Bay, N. Y. Oysters. 293,593; May 3; Serial No. 320,868; published Feb. 23, 1932. Class 46.

Pacific Coast Condensed Milk Co., Seattle, Wash., assignor, by mesne assignments, to Carnation Company, Wilmington, Del.; Seattle, Wash.; and Milwaukee, Wis. Condensed cream and milk. 37,509; renewed Dec. 24, 1931.

Patermann, Myro, doing business as Firma Gebr. Patermann, Teltow, near Berlin, Germany. Malt. 293,758; May 3; Serial No. 320,368; published Feb. 16, 1932. Class 48.

Patterson-Sargent Company, The, Cleveland, Ohio. Paints, paint enamels, stains, etc. 293,717; May 3; Serial No. 323,013; published Feb. 23, 1932. Class 16.

Pellar, Sidney H., doing business as Ath-a-Lene Laboratories, Chicago, Ill. Medicinal powder and an ointment for the feet. 293,611; May 3; Serial No. 322,707; published Feb. 9, 1932. Class 6.

Penetrating Iodine Co., The, Emporia, Kans. Antiseptic, germicidal liquid medicament. 293,612; May 3; Serial No. 322,709; published Feb. 16, 1932. Class 6.

Pennsylvania Novelty Co., New Brighton, Pa. Coin-controlled ball-projecting amusement device. 293,636; May 3; Serial No. 322,597; published Feb. 23, 1932. Class 22.

Peoples Drug Stores, Inc., doing business as The Barnard Co., Washington, D. C. Antiseptic solution. 293,621; May 3; Serial No. 321,394; published Feb. 9, 1931. Class 6.

Pepperell Manufacturing Company, Boston, Mass. Cotton piece goods. 293,796; May 3; Serial No. 322,558; published Feb. 16, 1932. Class 42.

Petroleum Heat and Power Company, New York, N. Y. Gas burners, oil burners, and automatic boilers. 293,690; May 3; Serial No. 322,433; published Feb. 23, 1932. Class 34.

Petroleum Heat and Power Company, New York, N. Y. Gas and oil burners, and automatic boilers. 293,762; May 3; Serial No. 322,434; published Feb. 23, 1932. Class 34.

Petronio Shoe Products Corp., Newark, N. J. Dyes. 293,604; May 3; Serial No. 322,290; published Feb. 16, 1932. Class 6.

Phoenix Hosiery Company, Milwaukee, Wis. Hosiery. 293,650; May 3; Serial No. 322,065; published Feb. 16, 1932. Class 39.

Pittsburgh Plate Glass Company, Pittsburgh, Pa. Paints, primers, paint enamels, and lacquers. 293,713; May 3; Serial No. 322,924; published Feb. 23, 1932. Class 16.

Poirier, John A., Duluth, Minn. Chocolate coated fruit. 293,809; May 3; Serial No. 319,737; published Feb. 16, 1932. Class 46.

Pond's Extract Company, New York, N. Y. Tissue paper. 293,753; May 3; Serial No. 317,405; published Feb. 16, 1932. Class 37.

Porcelitron Company, The, assignor to Ingram-Richardson Manufacturing Company, Beaver Falls, Pa. Enameled metal stoves and ranges. 87,798; renewed Aug. 6, 1932.

Prasky, James W., Pittsburgh, Pa. Anti-glare caps for headlight bulbs. 293,639; May 3; Serial No. 322,437; published Feb. 23, 1932. Class 19.

Pressman, J., & Co., Inc., Brooklyn, N. Y. Table tennis game. 293,790; May 3; Serial No. 322,112; published Feb. 16, 1932. Class 22.

Radio Guide, Inc., New York, N. Y. Magazine. 293,691; May 3; Serial No. 320,871; published Feb. 16, 1932. Class 38.

Regal Shoe Company, Whitman and Boston, assignor to Regal Shoe Company, Whitman, Mass. Boots and shoes. 85,378; renewed Feb. 13, 1932.
Resetar, P. M., Watsonville, Calif. Fresh berries, deciduous fruits, vegetables, etc. 293,812; May 3; Serial No. 321,217; published Feb. 16, 1932. Class 46.
Roessler & Hasslacher Chemical Company, New York, N. Y. Zinc peroxide. 293,765; May 3; Serial No. 313,094; published Feb. 9, 1932. Class 6.
Rugg, E. T., Company, The, Newark, Ohio. Vegetable fiber rope. 293,697; May 3; Serial No. 322,070; published Feb. 16, 1932. Class 7.
Ruppert, Jacob, New York, N. Y. Cereal malt beverages. 293,682; May 3; Serial No. 321,694; published Feb. 23, 1932. Class 48.
Sanker, John O., doing business as Sanker Mfg. Co., St. Paul, Minn. Moistening rollers for lithographing presses. 293,772; May 3; Serial No. 307,995; published Feb. 16, 1932. Class 23.
Scharf, Leon M., New York, N. Y. Coats, suits, jackets, etc. 293,681; May 3; Serial No. 321,222; published Feb. 23, 1932. Class 39.
Schlosser Paper Corporation, New York, N. Y. Writing paper, cards, and envelopes. 293,684; May 3; Serial No. 322,832; published Feb. 23, 1932. Class 37.
Schofield Service, Inc., New York, N. Y. Filing cabinets. 293,670; May 3; Serial No. 321,669; published Feb. 23, 1932. Class 32.
Schoneberger & Noble, Inc., Brooklyn, N. Y. Maltless beverage. 293,635; May 3; Serial No. 322,602; published Feb. 23, 1932. Class 45.
Schuyler Products Corporation, Philadelphia, Pa. Skin cleansing and softening cream. 293,588; May 3; Serial No. 321,696; published Feb. 16, 1932. Class 6.
Seamless Rubber Company, Inc., The, New Haven, Conn. Rubber electric therapeutic heating pad. 293,711; May 3; Serial No. 322,657; published Feb. 23, 1932. Class 44.
Shapiro, Joseph M., doing business as Simplicity Pattern Company, New York, N. Y. Dress patterns. 293,627; May 3; Serial No. 318,568; published Feb. 16, 1932. Class 26.
Simplicity Pattern Company. (See Shapiro, Joseph M.)
Sizer, Richard, Limited, Wilmington, Hull, England. Machines for manufacturing cattle cake. 293,669; May 3; Serial No. 321,737; published Feb. 16, 1932. Class 23.
Smith, L C & Corona Typewriters Inc., New York, N. Y. Carbon paper. 293,784; May 3; Serial No. 322,975; published Feb. 23, 1932. Class 11.
Societe Anonyme du Chocolat F. Marquis, Paris, France. Candies, chocolates, and teas. 293,771; May 3; Serial No. 308,459; published Feb. 16, 1932. Class 46.
Southern Mineral Products Corporation, New York, N. Y. Trisodium phosphate. 293,805; May 3; Serial No. 318,177; published Feb. 23, 1932. Class 4.
Souza, Antone R., Santa Monica, Calif. Ice cream cake sandwiches. 293,806; May 3; Serial No. 318,604; published Feb. 16, 1932. Class 46.
Standard Brands Incorporated. (See Widlar, F., & Co.)
Standard Foundry Company, Racine, Wis. Metal castings. 293,601; May 3; Serial No. 322,066; published Feb. 23, 1932. Class 14.
Stegmaier Brewing Company, Wilkes-Barre, Pa. Malt beverage. 293,648; May 3; Serial No. 322,141; published Feb. 23, 1932. Class 48.
Stegmaier Brewing Company, Wilkes-Barre, Pa. Malt beverages. 293,686; May 3; Serial No. 321,972; published Feb. 23, 1932. Class 48.
Steubenville Pottery Company, The, Steubenville, Ohio. Earthenware. 293,723; May 3; Serial No. 320,477; published Feb. 23, 1932. Class 30.
Stevens Manufacturing Corporation, Fall River, Mass. Bedspreads. 293,801; May 3; Serial No. 323,067; published Feb. 23, 1932. Class 42.
Stroock, S. & Co. Inc., New York, N. Y. Llama and wool cloth in the piece. 293,724; May 3; Serial No. 320,706; published Feb. 23, 1932. Class 42.
Stroock, S. & Co. Inc., New York, N. Y. Camel hair and wool cloth in the piece. 293,725–6; May 3; Serial Nos. 320,708–9; published Feb. 23, 1932. Class 42.
Stroud, Warren L., doing business as Miniature Mfg. Co., Seattle, Wash. Volatile preparation. 293,626; May 3; Serial No. 318,878; published Feb. 9, 1932. Class 6.
Superior Petticoat Co., Inc., New York, N. Y. Women's underwear. 293,743; May 3; Serial No. 322,669; published Feb. 16, 1932. Class 39.
Sure-Rise Baking Powder Co. (See Cruikshank, Dwight P.)
Taylor Bros. (Sandiacre) Limited, Sandiacre, near Nottingham, England. Furniture. 293,675; May 3; Serial No. 319,223; published Feb. 23, 1932. Class 32.
Tennessee Enamel Manufacturing Company, Nashville, Tenn. Tables and chairs, kitchen cabinets, and enameled metal shelving. 293,703; May 3; Serial No. 317,416; published Feb. 23, 1932. Class 32.
Teufel, Wilhelm Julius, Offene Handelsgesellschaft, Stuttgart, Germany. Abdominal bands, belts, supporters, etc. 293,777; May 3; Serial No. 304,899; published Feb. 23, 1932. Class 39.
Thompson, Charles D., Lawrence, Mass. Shaving creams. 293,808; May 3; Serial No. 319,627; published Feb. 23, 1932. Class 4.
Thornton & Melchor, Minden, W. Va. Preparation for the treatment of diabetes. 293,615; May 3; Serial No. 322,755; published Feb. 9, 1932. Class 6.
Timme, E. F., & Son, New York, N. Y. Pile fabrics in the piece. 293,797; May 3; Serial No. 322,607; published Feb. 23, 1932. Class 42.
Toil-Glen Products Co. (See Mueth, Eugene.)
Troponwerke Dinklage & Co., Cologne-Mulheim, Germany. Dietetic foods. 293,756; May 3; Serial No. 318,888; published Feb. 16, 1932. Class 46.
Tyler Syrup Company, Inc., Tyler, Tex. Table syrup. 293,690; May 3; Serial No. 320,840; published Feb. 16, 1932. Class 46.
Union Products Company. (See Osetkowski, Andrew A.)
United Drug Company, Boston, Mass. Rubber electric heating pad. 293,733; May 3; Serial No. 321,789; published Feb. 16, 1932. Class 44.
United States Gypsum Company, Chicago, Ill. Lacquer, thinner, and oil colors. 293,810; May 3; Serial No. 320,479; published Feb. 23, 1932. Class 16.
Unsinger Cutlery Co., Inc., The, Newark, N. J. Safety razor blades. 293,664–6; May 3; Serial Nos. 321,923–5; published Feb. 16, 1932. Class 23.
Upland Citrus Ass'n., to Upland Citrus Association, Upland, Calif., successor. Oranges. 85,927; renewed Mar. 26, 1932.
Vacumagic Brush Co. (See Oppenheim, Paul.)
Vilaplana Guerrero y Cia. (See Cuba Industrial y Comercial, S. A.)
Vita-Vac Container Company, Inc., New York, N. Y. Vacuum case. 293,759; May 3; Serial No. 320,651; published Feb. 23, 1923. Class 24.
Vogel-Peterson Co., Inc., Chicago, Ill. Coat and hat racks, umbrella and parcel racks. 293,764; May 3; Serial No. 314,591; published Feb. 23, 1932. Class 32.
Vos, Calvin, doing business as Emma E. Goodwin, Inc., assignor to Emma E. Goodwin, Inc., New York, N. Y. Combination garment. 293,695; May 3; Serial No. 321,836; published Feb. 23, 1932. Class 39.
Walraven, A. T., Book Cover Company, Dallas, Tex. Book covers. 293,761; May 3; Serial No. 322,197; published Feb. 16, 1932. Class 37.
Walton, Charles, & Son, Inc., Needham Heights, Mass. Knitted elastic fabric. 293,795; May 3; Serial No. 322,475; published Feb. 16, 1932. Class 42.
Ward, Edwin W., sr., Los Angeles, Calif. Marmalade. 293,708; May 3; Serial No. 322,407; published Feb. 16, 1932. Class 46.
Waukegan Chemical Company, North Chicago, Ill. Varnishes, varnish removers, boiled linseed oil, etc. 293,782; May 3; Serial No. 293,017; published Feb. 23, 1932. Class 16.
Weaver Manufacturing Company, Springfield, Ill. Automobile testing appliances. 293,596; May 3; Serial No. 322,118; published Feb. 16, 1932. Class 26.
Webster Eisenlohr, Inc., New York, N. Y. Cigars. 293,614; May 3; Serial No. 322,733; published Feb. 16, 1932. Class 17.
Westcoast Sanitary Manufacturers, Los Angeles, Calif. Bathtubs, lavatories, water closets, etc. 293,721; May 3; Serial No. 319,917; published Feb. 23, 1932. Class 13.
Wexberg, William V., doing business as Duzz-It Chemical Works, Chicago, Ill. Hair restorer. 293,613; May 3; Serial No. 322,720; published Feb. 9, 1932. Class 6.
White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental base plate. 293,732; May 3; Serial No. 321,674; published Feb. 16, 1932. Class 44.
White & Wyckoff Mfg. Company, Holyoke and Riverside, Mass. Paper, mailing envelopes, papeteries, etc. 293,679; May 3; Serial No. 320,960; published Feb. 23, 1932. Class 37.
Widlar, F., & Co., Cleveland, Ohio, to Standard Brands Incorporated, New York, N. Y., successor. Foods. 85,931; renewed Mar. 26, 1932.
Wilson, George C., Tyrone, Pa. Candy. 293,779; May 3; Serial No. 296,094; published Feb. 16, 1932. Class 46.
World Thread Co., Inc., New York, N. Y. Mercerized spool thread and sewing cotton. 293,802; May 3; Serial No. 323,074; published Feb. 23, 1932. Class 43.
Wortendyke Manufacturing Co., Richmond, Va. Gummed and toilet papers, paper cloth. 293,672; May 3; Serial No. 320,175; published Feb. 23, 1932. Class 37.
Yale & Towne Manufacturing Co., The, Stamford, Conn. Locks. 293,647; May 3; Serial No. 322,152; published Feb. 23, 1932. Class 25.
Young, W. F., Inc., Springfield, Mass. Soap. 293,816; May 3; Serial No. 321,579; published Feb. 16, 1932. Class 4.
Yonngs Rubber Corporation, Inc., New York, N. Y. Prophylactic rubber articles. 293,738; May 3; Serial No. 322,299; published Feb. 23, 1932. Class 44.
Zeiss, Carl, Jena, Germany. Instruments for measuring work-pieces, screws, etc. 293,702; May 3; Serial No. 317,822; published Feb. 16, 1932. Class 26.

LIST OF REGISTRANTS OF LABELS

Expello Corporation, The, Dover, N. H. Expello. For Spot Remover and Dry Cleaner. 40,662; May 3.
Hammett, J. L., Company, Newark, N. J. Hammett's Art Utility Paste. For Paste. 40,663; May 3.
Midway Chemical Company, Chicago, Ill. Bugded. For Liquid Insecticide. 40,664; May 3.
Pitts, R. S., Manufacturing Co., Hanover, Pa. Have Fun—Make Money! For Amusement and Educational Kit. 40,665; May 3.
Proteo Foods, Incorporated, Chicago, Ill. Proteo Bread—Rich In Balanced Proteins. For Specially Prepared Baking Products—Namely, Bread, Cookies, and Crackers. 40,666; May 3.
Sacks-Sons Carton Co., Inc., Brooklyn, N. Y. Dixie Undies. For Children's Underwear. 40,667; May 3.
Superior Packing Corp., New York, N. Y. Tast-Mor. For Dessert. 40,668; May 3.
Superior Packing Corp., New York, N. Y. Manhattan Club. For Malt Syrup. 40,669; May 3.
Superior Packing Corp., New York, N. Y. Tast-Mor. For Chocolate Malt. 40,670; May 3.

LIST OF REGISTRANTS OF PRINTS

Arlington Time Laboratories, Inc., Chicago, Ill. Full Sounding Electro Dynamic Bell Alarm. For Electric Clocks. 13,697; May 3.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Lively Wool for Lively Rug Business. For Rugs. 13,698; May 3.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Identity a Rug of Lively Wool. For Rugs. 13,699; May 3.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Softer to Walk On. For Rugs. 13,700; May 3.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Keep Their Beauty Longer. For Rugs. 13,701; May 3.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. That's Why They Are Easier to Clean. For Rugs. 13,702; May 3.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. It Springs Back Underfoot. For Rugs. 13,703; May 3.
Cooper Products Corporation, New York, N. Y. Blades By Cooper. For Razor Blades. 13,704; May 3.
Dayton Paper Novelty Company, Dayton, Ohio. Circus Candy Pops. For Candy Pops. 13,705; May 3.
Holeproof Hosiery Co., Milwaukee, Wis. Bull's Eye! This Focal Spot in Fashion Has Been Struck Again and Again By Holeproof In The Hosiery Field. For Hosiery. 13,706; May 3.
Holeproof Hosiery Co., Milwaukee, Wis. Ariel—When An Exquisite Color Harmony Is Respected In Every Detail Of Your Costume . . . For Hosiery. 13,707; May 3.
Norcross Carrott Company, San Antonio, Tex. Ask Your Doctor About Carrot Juice. For Carrot Juice. 13,708; May 3.
Popsicle Corporation of the United States, The, New York, N. Y. Milk Popsicle—Nutritious—Easy To Eat. For Frozen Confections. 13,709–10; May 3.
Schurmann, W. A., Chicago, Ill. Bak-Wel Plates. For Paper Pie Plates. 13,711; May 3.
Security Shoe Supply Co. (See Weinstein, Leon.)
Weinstein, Leon, doing business as Security Shoe Supply Co., St. Louis, Mo. Ace Heel and Sole Protectors. For Shoe Heel and Sole Protectors or Plates. 13,712; May 3.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 2

Bags, Paper. Ohio Match Company. 293,778; May 3; Serial No. 304,159; published Feb. 16, 1932.
Boxes, Chick. Anderson Box Company. 293,693; May 3; Serial No. 321,705; published Feb. 23, 1932.
Case, Vacuum. Vita-Vac Container Company. 293,759; May 3; Serial No. 320,651; published Feb. 23, 1932.

CLASS 4

Cleaner, Toilet bowl. E. Mueth. 293,712; May 3; Serial No. 322,887; published Feb. 23, 1932.
Materials and solutions which act as the solvent in removing ink, etc., from printing blankets and rollers. American Multigraph Co. 293,735; May 3; Serial No. 322,077; published Feb. 23, 1932.
Metal polishing paste. J. J. Otero y Perez. 293,807; May 3; Serial No. 319,665; published Feb. 23, 1932.
Shaving creams. C. D. Thompson. 293,808; May 3; Serial No. 319,627; published Feb. 23, 1932.
Soap. W. F. Young, Inc. 293,816; May 3; Serial No. 321,579; published Feb. 16, 1932.
Soap, Granulated. C. Conlon. 293,815; May 3; Serial No. 321,460; published Feb. 16, 1932.
Soap powder. O. B. Soap Co. Inc., 293,709; May 3; Serial No. 322,432; published Feb. 16, 1932.
Trisodium phosphate. Southern Mineral Products Corporation. 293,805; May 3; Serial No. 318,177; published Feb. 23, 1932.

CLASS 6

Anodyne preparations. A. Harowitz. 293,620; May 3; Serial No. 319,883; published Feb. 9, 1932.
Antiseptic, germicidal liquid medicament. Penetrating Iodine Co. 293,612; May 3; Serial No. 322,709; published Feb. 16, 1932.
Antiseptic solution. Peoples Drug Stores, Inc. 293,621; May 3; Serial No. 321,394; published Feb. 9, 1932.
Bacterial culture. A. Kilpstein & Co. 293,608; May 3; Serial No. 322,511; published Feb. 9, 1932.
Baking powder. D. P. Cruikshank. 293,591; May 3; Serial No. 321,949; published Feb. 16, 1932.
Compound used as a solvent. Arkansas Company Inc. 293,602; May 3; Serial No. 322,083; published Feb. 16, 1932.
Cream skin cleansing and softening. Schuyler Products Corporation. 293,588; May 3; Serial No. 321,696; published Feb. 16, 1932.
Dyes. Petronio Shoe Products Corp. 293,604; May 3; Serial No. 322,290; published Feb. 16, 1932.
Hair restorer. W. V. Wexberg. 293,613; May 3; Serial No. 322,720; published Feb. 9, 1932.
Hair tonic. Chesebrough Manufacturing Company, Consolidated. 293,600; May 3; Serial No. 321,842; published Feb. 16, 1932.
Incense. S. S. Grewal. 293,625; May 3; Serial No. 319,988; published Feb. 16, 1932.
Liniment. A. T. Carroll. 293,623; May 3; Serial No. 320,888; published Feb. 16, 1932.
Liquid composition. International Paint Corporation. 293,589; May 3; Serial No. 321,765; published Feb. 9, 1932.
Lotion, Reducing. Metro Products Co. 293,605; May 3; Serial No. 322,324; published Feb. 9, 1932.
Medicinal powder and an ointment for the feet. S. H. Pellar. 293,611; May 3; Serial No. 322,707; published Feb. 9, 1932.
Medicinal preparation. Gane & Ingram, Incorporated. 293,606; May 3; Serial No. 322,384; published Feb. 16, 1932.
Mineral oil emulsion, Concentrated white. Balfour, Guthrie & Co. 293,619; May 3; Serial No. 321,411; published Feb. 16, 1932.
Peroxide, Zinc. Roessler & Hasslacher Chemical Company. 293,765; May 3; Serial No. 313,094; published Feb. 9, 1932.
Pharmaceutical preparation. Annette Kellermann, Inc. 293,590; May 3; Serial No. 321,912; published Feb. 9, 1932.
Pomades, talcum powders, herb teas, etc., Hair. A. A. Osetkowski. 293,624; May 3; Serial No. 320,690; published Feb. 9, 1932.
Preparation for pinworms in poultry. Geo. H. Lee Co. 293,616; May 3; Serial No. 322,825; published Feb. 16, 1932.
Preparation for the treatment of diabetes. Thornton & Melchor. 293,615; May 3; Serial No. 322,775; published Feb. 9, 1932.
Preparation for use as a blood purifier, indigestion, etc. S. Nosis. 293,603; May 3; Serial No. 322,109; published Feb. 16, 1932.
Tonic, Blood producer. A. Jerkovitz. 293,607; May 3; Serial No. 322,429; published Feb. 16, 1932.
Volatile preparation. W. L. Stroud. 293,626; May 3; Serial No. 318,878; published Feb. 9, 1932.

CLASS 7

Rope, Vegetable fiber. E. T. Rugg Company. 293,697; May 3; Serial No. 322,070; published Feb. 16, 1932.

CLASS 9

Cartridges, Rifle. Federal Cartridge Corp. 293,798; May 3; Serial No. 322,632; published Feb. 16, 1932.
Pistol holsters, Leather. A. Baron. 293,800; May 3; Serial No. 322,810; published Feb. 16, 1932.

CLASS 11

Carbon paper. L C Smith & Corona Typewriters Inc. 293,784; May 3; Serial No. 322,975; published Feb. 23, 1932.
Diluents for printing inks. Asiatic Petroleum Company. 293,599; May 3; Serial No. 321,580; published Feb. 23, 1932.
Ink, Duo-tone. Inter-Collegiate Press. 293,769; May 3; Serial No. 309,168; published Feb. 16, 1932.

CLASS 13

Bathtubs, lavatories, water closets, etc. Westcoast Sanitary Manufacturers. 293,721; May 3; Serial No. 319,917; published Feb. 23, 1932.
Fence posts, Metallic. Keystone Steel & Wire Company. 293,634; May 3; Serial No. 322,695; published Feb. 23, 1932.
Shower heads, trap covers, metal drains, etc. Faith Mfg. Co. 293,692; May 3; Serial No. 321,422; published Feb. 23, 1932.
Valves, Radiator siphon. Durst Manufacturing Company. 293,643; May 3; Serial No. 322,281; published Feb. 23, 1932.

CLASS 14

Ferro-alloys. Ohio Ferro-Alloys Corporation. 293,597; May 3; Serial No. 322,521; published Feb. 16, 1932.
Metal castings. Standard Foundry Company. 293,601; May 3; Serial No. 322,066; published Feb. 23, 1932.
Metal composition for tools, dies, etc., Hard. Ludlum Steel Co. 293,729; May 3; Serial No. 315,104; published Feb. 23, 1932.
Metal grinding balls. Colorado Fuel and Iron Company. 293,594; May 3; Serial No. 321,421; published Feb. 23, 1932.
Metal, Nickel Babbitt. C. M. Loysted & Co. 293,617; May 3; Serial No. 322,849; published Feb. 23, 1932.
Metals in bulk, ingots, rods, etc. National Radiator Company Limited. 293,592; May 3; Serial No. 320,601; published Feb. 23, 1932.

CLASS 16

Lacquer, thinner and oil colors. United States Gypsum Company. 293,810; May 3; Serial No. 320,479; published Feb. 23, 1932.
Paint, Gold and aluminum. Dooley Manufacturing Co. 293,751; May 3; Serial No. 316,811; published Feb. 23, 1932.
Paints. Central Plumbing Supply Company. 293,749; May 3; Serial No. 316,528; published Feb. 23, 1932.
Paints. B. F. Davis. 293,736; May 3; Serial No. 322,094; published Feb. 23, 1932.
Paints, paint enamels, stains, etc. Patterson-Sargent Company. 293,717; May 3; Serial No. 323,013; published Feb. 23, 1932.
Paints, primers, paint enamels, and lacquers. Pittsburgh Plate Glass Company. 293,713; May 3; Serial No. 322,924; published Feb. 23, 1932.
Polish and a sealing liquid of penetrating China wood oil, Liquid wax. Floor Scrapers Co. Inc. 293,752; May 3; Serial No. 316,881; published Feb. 23, 1932.
Varnishes, varnish removers, boiled linseed oil, etc. Waukegan Chemical Company. 293,782; May 3; Serial No. 293,017; published Feb. 23, 1932.

CLASS 17

Cigars. Webster Eisenlohr, Inc. 293,614; May 3; Serial No. 322,733; published Feb. 16, 1932.
Tobaccos, cigars, and cigarettes, Smoking. General-Direktion der Österr. Tabakregie. 293,610; May 3; Serial No. 322,692; published Feb. 16, 1932.

CLASS 19

Automobile truck bodies. G. J. Atwell. 293,652; May 3; Serial No. 321,981; published Feb. 23, 1932.
Caps for headlight bulbs, Anti-glare. J. W. Prasky. 293,639; May 3; Serial No. 322,437; published Feb. 23, 1932.
Vehicle bodies, door handles, and window regulators. A. L. Hansen Mfg. Co. 293,680; May 3; Serial No. 321,069; published Feb. 23, 1932.
Vehicles, Motor driven. General Motors Corporation. 293,706; May 3; Serial No. 322,212; published Feb. 23, 1932.

CLASS 22

Amusement device, Coin-controlled, ball-projecting. Pennsylvania Novelty Co. 293,630; May 3; Serial No. 322,597; published Feb. 23, 1932.
Dolls. American Character Doll Co. Inc. 293,786; May 3; Serial No. 320,850; published Feb. 16, 1932.
Fishing lines. P. B. Bekeart. 293,633; May 3; Serial No. 322,679; published Feb. 23, 1932.
Games, Board. A. A. Almada. 293,722; May 3; Serial No. 320,223; published Feb. 16, 1932.
Games of skill and parts thereof. Bingo Novelty Manufacturing Company. 293,785; May 3; Serial No. 320,804; published Feb. 16, 1932.
Golf balls. General Tire & Rubber Company. 293,731; May 3; Serial No. 314,845; published Feb. 23, 1932.
Golf clubs. Crawford McGregor and Canby Company. 293,641–2; May 3; Serial Nos. 322,308–9; published Feb. 23, 1932.
Golf, tennis, archery, etc., equipment. Abercrombie & Fitch Company. 293,683; May 3; Serial No. 321,715; published Feb. 23, 1932.
Tennis game, Table. J. Pressman & Co. 293,790; May 3; Serial No. 322,112; published Feb. 16, 1932.
Toy sail boats. J. Chein & Company. 293,719; May 3; Serial No. 317,389; published Feb. 16, 1932.

CLASS 23

Hammer mills. Minneapolis-Moline Power Implement Company. 293,653; May 3; Serial No. 322,781; published Feb. 16, 1932.
Machine for making cream. Creamaker Corporation. 293,662; May 3; Serial No. 322,209; published Feb. 23, 1932.
Machines for manufacturing cattle cake. Richard Sizer, Limited. 293,669; May 3; Serial No. 321,737; published Feb. 16, 1932.
Razor blades, Safety. McCrory Stores Corporation. 293,667–8; May 3; Serial Nos. 321,810–11; published Feb. 16, 1932.
Razor blades, Safety. Unsinger Cutlery Co. 293,664–6; May 3; Serial Nos. 321,923–5; published Feb. 16, 1932.
Rollers for lithographing presses, Moistening. J. O. Sanker. 293,772; May 3; Serial No. 307,995; published Feb. 16, 1932.
Stencil printing machine. Central West Coal Company. 293,663; May 3; Serial No. 322,130; published Feb. 16, 1932.
Tractors. Minneapolis-Moline Power Implement Company. 293,658; May 3; Serial No. 322,470; published Feb. 23, 1932.

CLASS 25

Locks. Yale & Towne Manufacturing Co. 293,647; May 3; Serial No. 322,152; published Feb. 23, 1932.

CLASS 26

Binocular loupes. Marinello Company. 293,659; May 3; Serial No. 322,468; published Feb. 23, 1932.
Instrument for measuring work-pieces, screws, etc. Carl Zeiss. 293,702; May 3; Serial No. 317,822; published Feb. 16, 1932.
Patterns, Dress. J. M. Shapiro. 293,627; May 3; Serial No. 318,568; published Feb. 16, 1932.
Patterns for gardens. Curtis Publishing Company. 293,595; May 3; Serial No. 322,093; published Feb. 16, 1932.
Testing appliances, Automobile. Weaver Manufacturing Company. 293,596; May 3; Serial No. 322,118; published Feb. 16, 1932.
Welding helmets, welding hand shields, and glass for same. F. M. Bowers. 293,618; May 3; Serial No. 321,638; published Feb. 16, 1932.

CLASS 29

Brushes. P. Oppenheim. 293,609; May 3; Serial No. 322,557; published Feb. 16, 1932.

CLASS 30

Earthenware. Steubenville Pottery Company. 293,723; May 3; Serial No. 320,477; published Feb. 23, 1932.
Porcelain. H. F. Coors Company. 293,730; May 3; Serial No. 314,948; published Feb. 23, 1932.

CLASS 32

Cabinets, Filing, Scholfield Service, Inc. 293,670; May 3; Serial No. 321,669; published Feb. 23, 1932.
Furniture, Taylor Bros. (Sandiacre) Limited. 293,675; May 3; Serial No. 319,223; published Feb. 23, 1932.
Mattresses, Pneumatic. Hodgman Rubber Company. 293,657; May 3; Serial No. 322,587; published Feb. 23, 1932.
Mirrors. Emerson Glass Corporation. 293,660; May 3; Serial No. 322,456; published Feb. 23, 1932.
Racks, umbrella and parcel racks, Coat and hat. Vogel-Peterson Co. 293,764; May 3; Serial No. 314,591; published Feb. 23, 1932.
Tables and chairs, kitchen cabinets, and enameled metal shelving. Tennessee Enamel Manufacturing Company. 293,703; May 3; Serial No. 317,416; published Feb. 23, 1932.

CLASS 33

Crystals, Watch. Brozen Bros. Watch Crystal Co. Inc. 293,804; May 3; Serial No. 323,163; published Feb. 23, 1932.

CLASS 34

Burners and automatic boilers, Gas and oil. Petroleum Heat and Power Company. 293,699; May 3; Serial No. 322,433; published Feb. 23, 1932.
Burners and boilers, Gas and oil. Petroleum Heat and Power Company. 293,762; May 3; Serial No. 322,434; published Feb. 23, 1932.
Stoves and ranges, Enameled metal. Porcelliron Company. 87,798; renewed Aug. 6, 1932.
Ventilating apparatus, Fan and filter type of. American Air Filter Company. 293,770; May 3; Serial No. 309,054; published Feb. 23, 1932.
Ventilators, Window. Burgess Battery Company. 293,644; May 3; Serial No. 322,248; published Feb. 23, 1932.

CLASS 35

Belts, Power. L. H. Gilmer Co. 293,598; May 3; Serial No. 322,670; published Feb. 16, 1932.
Linings, Brake. Allbestos Corporation. 293,748; May 3; Serial No. 316,241; published Aug. 4, 1931.
Sewing machine belts. Blumenkrantz & Zucker Sewing Machine Co. 293,673; May 3; Serial No. 320,044; published Feb. 23, 1932.
Tires and tubes, Rubber. Atlas Supply Company. 293,705; May 3; Serial No. 322,675; published Feb. 16, 1932.

CLASS 37

Book covers. A. T. Walraven Book Cover Company. 293,761; May 3; Serial No. 322,197; published Feb. 16, 1932.
Book covers and filler sheets, Scrap. A. Eggeling. 293,687; May 3; Serial No. 322,577; published Feb. 16, 1932.
Mats, Stereotype. Burgess Cellulose Company. 293,630; May 3; Serial No. 322,817; published Feb. 23, 1932.
Paper, Brown Company. 293,744; May 3; Serial No. 322,682; published Feb. 16, 1932.
Paper. Butler Paper Corporations. 293,685; May 3; Serial No. 322,876; published Feb. 23, 1932.
Paper. Byron Weston Company. 293,696; May 3; Serial No. 322,011; published Feb. 16, 1932.
Paper. Byron Weston Company. 293,760; May 3; Serial No. 322,159; published Feb. 16, 1932.
Paper and envelopes, Writing. Montag Bros. Inc. 293,776; May 3; Serial No. 305,284; published Feb. 16, 1932.
Paper, Bond. Oregon Pulp and Paper Co. 293,654; May 3; Serial No. 322,748; published Feb. 23, 1932.
Paper, Bond. Oregon Pulp and Paper Co. 293,656; May 3; Serial No. 322,746; published Feb. 23, 1932.
Paper, cards, and envelopes, Writing. Schlosser Paper Corporation. 293,684; May 3; Serial No. 322,832; published Feb. 23, 1932.
Paper, Ledger, and mimeograph. Oregon Pulp and Paper Co. 293,655; May 3; Serial No. 322,747; published Feb. 23, 1932.
Paper, mailing envelopes, papeteries, etc. White & Wyckoff Mfg. Company. 293,679; May 3; Serial No. 320,960; published Feb. 23, 1932.
Paper, Mimeograph and bond. Oregon Pulp and Paper Co. 293,631–2; May 3; Serial Nos. 322,749–50; published Feb. 23, 1932.
Paper, paper towels, napkins, etc., Toilet. Fort Howard Paper Company. 293,701; May 3; Serial No. 322,580; published Feb. 16, 1932.
Paper, paper towels, napkins, etc., Toilet. Fort Howard Paper Company. 293,739–41; May 3; Serial Nos. 322,581–3; published Feb. 16, 1932.
Paper, Tissue. Pond's Extract Company. 293,753; May 3; Serial No. 317,403; published Feb. 16, 1932.
Paper toilet seat, Sanitary. T. K. Johnson. 293,755; May 3; Serial No. 318,712; published Feb. 16, 1932.
Paper towels. National Paper Products Company. 293,745; May 3; Serial No. 322,701; published Feb. 16, 1932.
Paper towels, toilet paper, and paper closet seat covers. Borst Engineering, Inc. 293,671; May 3; Serial No. 320,628; published Feb. 23, 1932.
Papers, paper cloth, Gummed and toilet. Wortendyke Manufacturing Co. 293,672; May 3; Serial No. 320,175; published Feb. 23, 1932.
Stencils. Milo Harding Company. 293,678; May 3; Serial No. 319,931; published Feb. 23, 1932.
Tracing cloth. Charles Bruning Company. 293,676; May 3; Serial No. 318,389; published Feb. 23, 1932.
Tracing cloth. Morley Manufacturing Company. 293,763; May 3; Serial No. 322,518; published Feb. 16, 1932.

CLASS 38

Magazine. Greeting Card Association, Inc. 293,754; May 3; Serial No. 318,005; published Feb. 16, 1932.
Magazine. National Capital Republican Club. 293,674; May 3; Serial No. 320,099; published Feb. 16, 1932.
Magazine. Radio Guide, Inc. 293,691; May 3; Serial No. 320,871; published Feb. 16, 1932.
Magazines. Country Press, Inc. 293,700; May 3; Serial No. 322,574; published Feb. 16, 1932.
Magazines. Fawcett Publications, Inc. 293,628–9; May 3; Serial Nos. 322,948–9; published Feb. 23, 1932.
Pamphlets or magazines. C. G. Conn, Ltd. 293,649; May 3; Serial No. 322,092; published Feb. 23, 1932.
Periodical. Chamber of Commerce of Kansas City, Missouri. 293,704; May 3; Serial No. 323,026 published Feb. 23, 1932.
Periodical or trade paper. Antiquarian Publishing Co. 293,640; May 3; Serial No. 322,352; published Feb. 23, 1932.
Photographs and pictorial illustrations and news items. C. R. Levy. 293,757; May 3; Serial No. 319,835; published Feb. 16, 1932.
Prints and publications. Albee Publishing Company. 293,698; May 3; Serial No. 322,303; published Feb. 16, 1932.
Publication. Industrial Relations Publications, Inc. 293,689; May 3; Serial No. 320,727; published Feb. 16, 1932.

CLASS 39

Bands, belts, supporters, etc., Abdominal. Wilhelm Julius Teufel Offene Handelsgesellschaft. 293,777; May 3; Serial No. 304,899; published Feb. 23, 1932.
Boots and shoes. Regal Shoe Company. 85,378; renewed Feb. 13, 1932.
Coats, suits, jackets, etc. L. M. Scharf. 293,681; May 3; Serial No. 321,222; published Feb. 23, 1932.
Garment, Combination. C. Vos. 293,695; May 3; Serial No. 321,836; published Feb. 23, 1932.
Hosiery. Charles H. Bacon Company. 293,747; May 3; Serial No. 323,020; published Feb. 23, 1932.
Hosiery. Phoenix Hosiery Company. 293,650; May 3; Serial No. 322,065; published Feb. 16, 1932.
Pants and trunks, Beach and sport. Neustadter Bros. 293,638; May 3; Serial No. 322,554; published Feb. 16, 1932.
Shirts, pajamas, and textile underwear. Liondale Shirt Co. Inc. 293,651; May 3; Serial No. 322,001; published Feb. 16, 1932.
Skirts, blouses, dresses, etc. Mayflower Dress Company. 293,783; May 3; Serial No. 291,170; published Feb. 23, 1932.
Suits and dresses, Ladies'. Goldworm Sportwear Co. Inc. 293,646; May 3; Serial No. 322,170; published Feb. 16, 1932.
Suits, topcoats, trousers, and overcoats. Comello Bros. & Company. 293,677; May 3; Serial No. 317,831; published Feb. 16, 1932.
Underwear. Fairy Silk Mills. 293,637; May 3; Serial No. 322,578; published Feb. 16, 1932.
Underwear. Mandel & Cohen. 293,728; May 3; Serial No. 315,641; published Feb. 9, 1932.
Underwear, Women's. Superior Petticoat Co. 293,743; May 3; Serial No. 322,669; published Feb. 16, 1932.

CLASS 41

Umbrellas and parasols. John U. Burt, Inc. 293,746; May 3; Serial No. 322,765; published Feb. 23, 1932.

CLASS 42

Bedspreads. Stevens Manufacturing Corporation. 293,801; May 3; Serial No. 323,067; published Feb. 23, 1932.
Camel hair and wool cloth in the piece. S. Stroock & Co. Inc. 293,725–6; May 3; Serial Nos. 320,708–9; published Feb. 23, 1932.
Corduroys in the piece. A. D. Juilliard & Company. 293,789; May 3; Serial No. 322,048; published Feb. 23, 1932.
Cotton piece goods. Pepperell Manufacturing Company. 293,796; May 3; Serial No. 322,558; published Feb. 16, 1932.
Fabric, Knitted elastic. Charles Walton & Son, Inc. 293,795; May 3; Serial No. 322,475; published Feb. 16, 1932.
Jute webbing. Ludlow Manufacturing Associates. 293,792–3; May 3; Serial Nos. 322,466–7; published Feb. 23, 1932.
Llama and wool cloth in the piece. S. Stroock & Co. Inc. 293,724; May 3; Serial No. 320,706; published Feb. 23, 1932.
Piece goods. H. & H. Manufacturing Company. 293,799; May 3; Serial No. 322,792; published Feb. 16, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 293,720; May 3; Serial No. 319,686; published Feb. 23, 1932.
Pile fabrics. E. F. Timme & Son. 293,797; May 3; Serial No. 322,607; published Feb. 23, 1932.
Rugs and carpets, Textile. Barrymore Seamless Wiltons. Inc. 293,791; May 3; Serial No. 322,125; published Feb. 16, 1932.
Woolen piece goods. C. M. De Land. 293,803; May 3; Serial No. 323,127; published Feb. 23, 1932.
Woolen piece goods. Forstmann & Huffmann Company. 293,787; May 3; Serial No. 321,862; published Feb. 16, 1932.
Woolen piece goods. Forstmann & Huffmann Company. 293,788; May 3; Serial No. 321,851; published Feb. 16, 1932.

CLASS 43

Thread and sewing cotton, Mercerized spool. World Thread Co. 293,802; May 3; Serial No. 323,074; published Feb. 23, 1932.
Yarns of wool, worsted, or hair. William Hollins & Company. 293,794; May 3; Serial No. 322,509; published Feb. 16, 1932.

CLASS 44

Dental base plate. S. S. White Dental Manufacturing Company. 293,732; May 3; Serial No. 321,674; published Feb. 16, 1932.
Electric blankets for therapeutic use. W. F. Craddick. 293,750; May 3; Serial No. 316,554; published Feb. 23, 1932.
Electric heating pads. Goldman's, Inc. 293,737; May 3; Serial No. 322,100; published Feb. 23, 1932.
Hair waving pads. Nestle-Lemur Company. 293,714; May 3; Serial No. 322,939; published Feb. 23, 1932.
Rubber articles, Prophylactic. Youngs Rubber Corporation. 293,738; May 3; Serial No. 322,299; published Feb. 23, 1932.
Rubber, electric heating pad. United Drug Company. 293,733; May 3; Serial No. 321,789; published Feb. 16, 1932.

Rubber electric therapeutic heating pad. Seamless Rubber Company. 293,711; May 3; Serial No. 322,657; published Feb. 23, 1932.
Sanitary napkins. Lamair Company. 293,707; May 3; Serial No. 322,392; published Feb. 23, 1932.
Sanitary napkins. Melburt Products, Inc. 293,813; May 3; Serial No. 321,352; published Feb. 23, 1932.
Sanitary paper diapers. Dennison Manufacturing Company. 293,710; May 3; Serial No. 322,629; published Feb. 23, 1932.

CLASS 45

Beverage. Schoneberger & Noble, Inc. 293,635; May 3; Serial No. 322,602; published Feb. 23, 1932.
Ginger ale. Chesterfield Dry Ginger Ale Co. 293,718; May 3; Serial No. 317,301; published Feb. 16, 1932.
Water, Natural mineral. American Raysol Corporation. 293,645; May 3; Serial No. 322,245; published Feb. 23, 1932.

CLASS 46

Bacon. Oscar Mayer & Co. Inc. 293,780; May 3; Serial No. 295,683; published Feb. 23, 1932.
Balls consisting of meat, rice, eggs, and spices. F. Mammi. 293,767; May 3; Serial No. 310,686; published June 2, 1931.
Bananas, Fresh. Fruit Shops, Inc. 293,811; May 3; Serial No. 320,891; published Feb. 23, 1932.
Berries, deciduous fruits, vegetables, etc., Fresh. P. M. Resetar. 293,812; May 3; Serial No. 321,217; published Feb. 16, 1932.
Candies. Henry Heide, Incorporated. 293,766; May 3; Serial No. 312,604; published Feb. 16, 1932.
Candies, chocolates, and teas. Societe Anonyme du Chocolat F. Marquis. 293,771; May 3; Serial No. 308,459; published Feb. 16, 1932.
Candy. G. C. Wilson. 293,779; May 3; Serial No. 296,094; published Feb. 16, 1932.
Candy bars. F. A. Martoccio Company. 293,817; May 3; Serial No. 321,602; published Feb. 16, 1932.
Canned crab meat. Amtorg Trading Corporation. 293,768; May 3; Serial No. 309,407; published Feb. 23, 1932.
Canned salmon. New England Fish Company. 293,715; May 3; Serial No. 322,594; published Feb. 16, 1932.
Chocolate. Cuba Industrial y Comercial, S. A. 293,774–.5; May 3; Serial Nos. 306,172–3; published Feb. 23, 1932.
Cocoa. Droste & Co. 86,288; renewed Apr. 3, 1932.
Coffee, tea, spices, food-flavoring extracts. Euclid Coffee Company. 293,773; May 3; Serial No. 306,346; published Mar. 31, 1931.
Corn starch. Hubinger Co. 293,688; May 3; Serial No. 320,678; published Dec. 15, 1931.
Cream and milk, Condensed. Pacific Coast Condensed Milk Co. 37,509; renewed Dec. 24, 1932.
Fish, fish cakes, and cod roe. A/S United Sardine Factories. 293,781; May 3; Serial No. 295,414; published Feb. 16, 1932.
Foods. F. Widlar & Co. 85,931; renewed Mar. 26, 1932.
Foods, Cereal breakfast. Foodtown Kitchens, Inc. 293,727; May 3; Serial No. 315,767; published Sept. 22, 1931.
Foods, Dietetic. Troponwerke Dinklage & Co. 293,756; May 3; Serial No. 318,888; published Feb. 16, 1932.
Fruit, Chocolate coated. J. A. Poirier. 293,809; May 3; Serial No. 319,737; published Feb. 16, 1932.
Fruits and raisins, Dried. Consolidated Packing Company. 293,661; May 3; Serial No. 322,358; published Feb. 16, 1932.
Fruits and vegetables, fresh grapes, etc., Fresh deciduous. Meridian Ltd. 293,814; May 3; Serial No. 321,355; published Feb. 23, 1932.
Fruits, Fresh deciduous. American Fruit Growers, Inc. of California. 293,734; May 3; Serial No. 322,037; published Feb. 16, 1932.
Ice cream cake sandwiches. A. R. Souza. 293,806; May 3; Serial No. 318,604; published Feb. 16, 1932.
Marmalade. E. W. Ward, sr. 293,708; May 3; Serial No. 322,407; published Feb. 16, 1932.
Oranges. Upland Citrus Ass'n. 85,927; renewed Mar. 26, 1932.
Oysters. Oyster Bay Oyster Company. 293,593; May 3; Serial No. 320,868; published Feb. 23, 1932.
Shortening, Pure vegetable. Durkee Famous Foods, Inc. 293,716; May 3; Serial No. 322,953; published Feb. 23, 1932.
Syrup, Table. Tyler Syrup Company. 293,690; May 3; Serial No. 320,840; published Feb. 16, 1932.
Tea. G. E. Barbour Company. 85,898; renewed Mar. 26, 1932.

CLASS 48

Malt. M. Patermann. 293,758; May 3; Serial No. 320,368; published Feb. 16, 1932.
Malt beverage. Stegmaier Brewing Company. 293,648; May 3; Serial No. 322,141; published Feb. 23, 1932.
Malt beverages. Stegmaier Brewing Company. 293,686; May 3; Serial No. 321,972; published Feb. 23, 1932.
Malt beverages, Cereal. J. Ruppert. 293,682; May 3; Serial No. 321,694; published Feb. 23, 1932.
Malt powder. B. Hyba. 293,742; May 3; Serial No. 322,039; published Feb. 16, 1932.
Malt syrup. Dehls & Stein. 293,694; May 3; Serial No. 321,750; published Feb. 16, 1932.

CLASS 50

Markers, Grave. W. F. Kidwell. 293,622; May 3; Serial No. 318,913; published Feb. 23, 1932.

LIST OF LABELS

Bugded. For Liquid Insecticide. Midway Chemical Company. 40,664; May 3.
Dixie Undies. For Children's Underwear. Sacks-Sons Carton Co. 40,667; May 3.
Expello. For Spot Remover and Dry Cleaner. Expello Corporation. 40,662; May 3.
Hammett's Art Utility Paste. For Paste. J. L. Hammett Company. 40,663; May 3.
Have Fun—Make Money! For Amusement and Educational Kit. R. S. Pitts Manufacturing Co. 40,665; May 3.
Manhattan Club. For Malt Syrup. Superior Packing Corp. 40,669; May 3.
Proteo Bread—Rich In Balanced Proteins. For Specially Prepared Baking Products—Namely, Bread, Cookies and Crackers. Proteo Foods, Incorporated. 40,666; May 3.
Tast-Mor. For Dessert. Superior Packing Corp. 40,668; May 3.
Tast-Mor. For Chocolate Malt. Superior Packing Corp. 40,670; May 3.

LIST OF PRINTS

Ace Heel And Sole Protectors. For Shoe Heel and Sole Protectors or Plates. L. Weinstein. 13,712; May 3.
Ariel—When An Exquisite Color Harmony Is Reflected In Every Detail Of Your Costume. . . . For Hosiery. Holeproof Hosiery Co. 13,707; May 3.
Ask Your Doctor About Carrot Juice. For Carrot Juice. Norcross Carrot Company. 13,708; May 3.
Bak-Wel Plates. For Paper Pie Plates. W. A. Schurman. 13,711; May 3.
Blades By Cooper. For Razor Blades. Cooper Products Corporation. 13,704; May 3.
Bull's Eye! This Focal Spot In Fashion Has Been Struck Again and Again By Holeproof In The Hosiery Field. For Hosiery. Holeproof Hosiery Co. 13,706; May 3.
Circus Candy Pops. For Candy Pops. Dayton Paper Novelty Company. 13,705; May 3.
Full Sounding Electro Dynamic Bell Alarm. For Electric Clocks. Arlington Time Laboratories, Inc. 13,697; May 3.
Identify A Rug Of Lively Wool. For Rugs. Bigelow-Sanford Carpet Co. 13,699; May 3.
It Springs Back Underfoot. For Rugs. Bigelow-Sanford Carpet Co. 13,703; May 3.
Keep Their Beauty Longer. For Rugs. Bigelow-Sanford Carpet Co. 13,701; May 3.
Lively Wool For Lively Rug Business. For Rugs. Bigelow-Sanford Carpet Co. 13,698; May 3.
Milk Popsicle—Nutritious—Easy To Eat. For Frozen Confections. Popsicle Corporation of the United States. 13,709–10; May 3.
Softer To Walk On. For Rugs. Bigelow-Sanford Carpet Co. 13,700; May 3.
That's Why They Are Easier To Clean. For Rugs. Bigelow-Sanford Carpet Co. 13,702; May 3.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 3D DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Aaron, Solomon E., Boston, Mass. Bilge pump. 1,856,367; May 3.
Abbott, Charles C., assignor to Abbott Wilson Machine Company, Auburn, Me. Making trimmed heel seats. 1,856,800; May 3.
Abbott Wilson Machine Company. (See Abbott, Charles C., assignor.)
Abel, Max, Bronx, assignor to Frankart, Inc., New York, N. Y. Statuette or similar article. Des. 86,875; May 3.
Abercrombie, James S., et al. (See Martin, J. R., and King, assignors.)
Accounting & Tabulating Corporation of Gt. Britain Limited, The. (See Thomas, A., and Fitz Power, assignors.)
Ackermann, Hugo, Bonn-on-the-Rhine, Germany. Producing refractory, acid-proof and other ceramically bonded products. 1,856,613; May 3.
Adamson, Ernie, Rockville Center, N. Y. Internal combustion engine. 1,857,077; May 3.
Adcock, Marvin E., Coalinga, Calif. Metallic stretcher. 1,857,008; May 3.
Adduci, Joseph J., Boston, Mass. Direction indicating apparatus for motor vehicles. 1,856,614; May 3.
Adel, Emil, Chicago, Ill. Lubricating system. 1,856,063; May 3.
Aeolian Company, The. (See Scherr, Emilius W., jr., assignor.)
Aerocrete Corporation of America, The. (See Larkins, Carl J., assignor.)
Affel, Herman A., Ridgewood, and E. I. Green, East Orange, N. J., assignors to American Telephone and Telegraph Company. Coaxial conductor system. 1,856,204; May 3.
Ahlquist, Walter J. (See Nordfeldt, C. E., Ahlquist, and Emery.)
Air-Way Electric Appliance Corporation. (See Leonard, Joseph E., assignor.)
Alvaz, Boris, Budapest, Hungary. Production of supply spools of strip material. 1,856,823; May 3.
Ajax Metal Company, The. (See Neuhauss, Heinrich, assignor.)
Aktiebolaget Nordiska Armaturfabrikerna. (See Hysing, Erik G., assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Jonas, Julius, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Schiesser, M., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Sieber, Fritz, assignor.)
Alemite Corporation. (See Buchet, Conrad R., assignor.)
Alemite Corporation. (See Locke, S. D., and Dosch, assignors.)
Alemite Corporation. (See Wheeler, Leonard H., assignor.)
Alexander, Clarence G., Detroit, Mich. Trouser holder. 1,856,064; May 3.
Allen, Edward B., Newton, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Work-clamp mechanism for sewing machines. 1,856,900; May 3.
Allis-Chalmers Manufacturing Company. (See Sindeband, M. L., and Marti, assignors.)
Allison, Harvey M., assignor to J. Bath, Worcester, Mass. Truing mechanism for grinding machines. 1,856,180; May 3.
All-Steel Equip Company. (See Ogle, Elmer L., assignor.)
Alphonso, Peter R., Seminole, Okla. Valve. 1,856,825; May 3.
Alt, Cornelius A., and R. A. McLean, Newburgh, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Projection screen. 1,856,739; May 3.
Aluminum Company of America. (See Bungay, George W., assignor.)
Alvera, Josef, and K. Schofer, Pforzheim, Germany. Apparatus for the production of ornamental chains, so called snake chains. 1,856,940; May 3.
Alvey, Roy E., Bridgeport, Conn. Micrometric divider. 1,856,824; May 3.
Ambler Asbestos Shingle & Sheathing Company. (See Ledeboer, J. W., assignor.)
American Bosch Magneto Corporation. (See Mayer, Carl A., assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Chair Company. (See Butzen, John J., assignor.)
American Cigar Company. (See Maxwell, Charles G., assignor.)
American Cyanamid Company. (See Romieux, Charles J., assignor.)
American Engineering Corporation. (See Nixon, Jeddy D., assignor.)
American Fabrics Company, The. (See Paige, Samuel H., assignor.)
American Gasaccumulator Company. (See Persson, Anders, assignor.)
American Glanzstaff Corporation. (See Erlanger, Arthur L., and Wadewitz, assignors.)
American Laundry Machinery Company, The. (See Perry, Emanuel J., assignor.)
American Ore Reclamation Company. (See Shallock, E. W., assignor.)
American Ore Reclamation Company. (See Swinehart, George E., assignor.)
American Slicing Machine Company. (See Wolff, Wallace B., assignor.)
American Smelting and Refining Company. (See Greene, Gerald U., assignor.)
American Steel Foundries. (See Hedgcock, William C., assignor.)
American Telephone and Telegraph Company. (See Affel, H. A., and Green, assignors.)
American Telephone and Telegraph Company. (See Hamilton, B. P., and Ren, assignors.)
American Telephone and Telegraph Company. (See Perry, Donald B., assignor.)
American Telephone and Telegraph Company. (See Wilson, Leon T., assignor.)
Amor, Manuel A., Lisbon, Portugal. Educational appliance. 1,857,009; May 3.
Anchor Packing Company, The. (See Walton, Julian N., assignor.)
Anderau, Walter. (See Straub, F., Mayer, and Anderau.)
Anderson, Carl A., Chicago, Ill., assignor to General Can Company. Can. 1,856,941; May 3.
Anderson, Evald, Alhambra, assignor to International Precipitation Company, Los Angeles, Calif. Apparatus for separating solids from gases. 1,856,685; May 3.
Anderson, James N., jr. (See Dirkes, R. F., and Anderson.)
Anderson, Rexford O., Houston, Tex. Still. 1,856,860; May 3.
Anderson, Robert H., assignor of one-half to A. B. Bowman, San Diego, Calif. Jig saw. 1,856,740; May 3.
Anderson, Thomas, Elmhurst, assignor to Combustion Utilities Corporation, New York, N. Y. Oil burner. 1,856,901; May 3.
Anderson, Troy O., East Lake, and J. R. Earp, Chattanooga, Tenn. Tufting machine. 1,857,092; May 3.
Andrews, H. P., Paper Company. (See Sandfanander, Ernest, assignor.)
Andriessen, Jacobus C. (See Marchand, J. J. M. L., and Andriessen.)
Apex Electrical Manufacturing Company. (See McClatchie, Stanley, assignor.)
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Electric switch. 1,856,407; May 3.
Archer, Robert S., Lakewood, and L. W. Kempf, Cleveland, Ohio. Aluminum-magnesium alloys. 1,856,615; May 3.
Armstrong, Adam E., assignor to Armstrong Machine Works, Three Rivers, Mich. Valve mechanism. 1,856,451; May 3.
Armstrong, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,856,861; May 3.
Armstrong, John J., Crockett, Calif. Continuous filter. 1,856,452; May 3.
Armstrong Machine Works. (See Armstrong, Adam E., assignor.)
Armstrong, Sir W. G., Witworth & Company. (See Stuart, James C. S., assignor.)
Arrow-Hart & Hegeman Electric Company, The. (See Cook, John R., assignor.)
Arrowood, Milton W., Greenwich, Conn. Apparatus for burning powdered fuel. 1,856,902; May 3.
Arwell Products Company. (See Scott, Wellington W., assignor.)
Ashtabula Corrugated Box Company, The. (See Sherman, Elroy P., assignor.)
Asphalt Process Corporation. (See Schillo, Louis C., assignor.)
Associated Electrical Industries Limited. (See Hoseason, Donald B., assignor.)
Associated Oil Company. (See Stark, David D., assignor.)
Astrup Company, The. (See Heiser, Henry C., assignor.)
Atlas Bolt & Screw Company. (See Schellentrager, E. W., and Clarkson, assignors.)
Atlas Powder Company. (See Rolland, Guy F., assignor.)

Atlas Press Company. (See Collins, James G., assignor.)
Atwell, Harold V., assignor to Standard Oil Company, Whiting, Ind. Distilling petroleum residuum. 1,856,801; May 3.
Aubrey, William H. (See Buehler, L., jr., and Aubrey.)
Auld's Incorporated. (See Carsey, Harry E., assignor.)
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Air break switch. 1,856,121; May 3.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Electrostatic coupling. 1,856,122; May 3.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Heater for insulators. 1,856,123; May 3.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Heater for insulators. 1,856,124; May 3.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Heater for insulators. 1,856,125; May 3.
Austin, Bascum O., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Selector switch. 1,856,741; May 3.
Austin, Frederick, Bayside, N. Y. Agricultural implement. 1,856,065; May 3.
Avery, True M., Glens Falls, assignor to Union Bag & Paper Corporation, Hudson Falls, N. Y. Window bag. 1,857,010; May 3.
Babcock & Wilcox Company, The. (See Collins, Thomas, assignor.)
Bacchus, Thomas W., assignor to Hercules Powder Company, Wilmington, Del. Treating fibrous materials. 1,856,453; May 3.
Bacon, Frank M., North Adams, Mass. Machine for winding cloth, etc., on cloth boards. 1,857,037; May 3.
Bacon, Myrtle M. (See Bacon, William J., assignor.)
Bacon, William J., assignor to M. M. Bacon, Memphis, Tenn. Radiator cover. 1,856,454; May 3.
Badanes, Saul, Brooklyn, N. Y. Counting card. 1,857,038; May 3.
Baer & Wilde Company, The. (See Metcalf, Alpha H., assignor.)
Bailor, Silas E., Dill, Okla. Cultivator lifting gear. 1,856,368; May 3.
Baker, Herbert K., Detroit, Mich., assignor to Penn Metal Company, Parkersburg, W. Va. Metal lath expander. 1,856,686; May 3.
Baker, Hubert E., Cleveland, Ohio, assignor to The Brady Conveyors Corporation, Chicago, Ill. Electrical gate control. 1,856,942; May 3.
Baker Ice Machine Co. (See Hoffman, John F., assignor.)
Baker, J. M., Pattern Company. (See Corley, John T., assignor.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Baker, Sadie, Waynesburg, Pa. Toilet stool. 1,856,687; May 3.
Baldwin, Julian T., West Chester, assignor to Sandura Company, Inc., Philadelphia, Pa. Floor covering. 1,856,369; May 3.
Baldwin, Julian T., West Chester, assignor to Sandura Company, Inc., Philadelphia, Pa. Smooth surfaced floor covering. 1,856,370; May 3.
Baldwin, Julian T., West Chester, assignor to Sandura Company, Inc., Philadelphia, Pa. Smooth surfaced floor covering. 1,856,371; May 3.
Ball, Charles E., Chicago, Ill., assignor to Ball Wagon Grader Co. Combined grader and bulldozer. 1,856,148; May 3.
Ball, Howard, Long Beach, Calif. Collapsible scaffold. 1,856,149; May 3.
Ball Wagon Grader Co. (See Ball, Charles E., assignor.)
Ballou, John M. (See Ford, H. C., Ballou, and Balzer.)
Bally, Oscar, P. Grossmann, and F. Felix, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Dyestuffs of the anthraquinone series and making same. 1,856,802; May 3.
Balmer, J. H., Co. (See Jones, Daniel L., assignor.)
Balzer, Vernon W. (See Ford, H. C., Ballou, and Balzer.)
Bancroft, Joseph, & Sons Co. (See Macadam, John, jr., assignor.)
Banks, William E., and A. E. Stone, St. Louis, Mo. Connecter. 1,856,455; May 3.
Barényi, Árpád, Berlin-Lichterfelde, Germany. Photographic shutter. 1,856,308; May 3.
Barghausen, John F., Washington, D. C., dedicated by assignments to the Government and the people of the United States of America. Apparatus for branding the grade on cheese. 1,856,530; May 3.
Barrett, Eugene V. (See Peck, J. S., and Barrett.)
Barrett, George E., Laurel Springs, N. J. Windlass and capstan driving mechanism. 1,856,903; May 3.
Bartels, Henry, Chicago, Ill. Combined bed and mantle. 1,856,456; May 3.
Bastian-Morley Co. (See Lonergan, S. J., and Günther, assignors.)
Bastian-Morley Co. (See Morley, J. P., and Lonergan, assignors.)
Bath, John. (See Allison, Harvey M., assignor.)
Bathrick, Charles E., South Bend, Ind., assignor to Gernandt Motor Corporation, Chicago, Ill. Feeding fuel to an internal combustion engine. 1,856,066; May 3.
Baum, Isaac A., Chicago, Ill. Metal jamb for unplastered walls. 1,856,150; May 3.
Baumann, Fritz. (See Bruns, H., Baumann, and Kugel.)
Baumann, Fritz. (See Gassner, S., and Baumann.)
Baumann, Karl, Urmston, England, assignor to Westinghouse Electric & Manufacturing Company. Power plant. 1,856,616; May 3.
Bausch, Viktor, and K. Frenzel, Berlin, Germany. Transparent folls of paper, fabric, webs, and the like. 1,856,067; May 3.
Bebbington, William E., Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Plate valve. 1,856,617; May 3.
Bebel, Abraham, New York, N. Y. Safety removable fastener. 1,856,843; May 3.
Behrlenz, Joseph, Hamburg, assignor to the Firm of Neuerburgsche Verwaltungsgesellschaft G. m. b. H., Cologne-on-the-Rhine, Germany. Tobacco feeding apparatus for cigarette machines. 1,856,688; May 3.
Beisner, Lawrence F. (See Morton, W. B., and Beisner.)
Bell Telephone Laboratories, Incorporated. (See Burton, Everett T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Locke, George A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Nebel, Charles N., assignor.)
Bendix Aviation Corporation. (See Perrot, Henri, assignor.)
Bendix Brake Company. (See Apple, Vincent G., assignor.)
Bendix Brake Company. (See Dodge, Adiel Y., assignor.)
Bendix Brake Company. (See Frank, Frederick C., assignor.)
Bennett, Emmett L., Cincinnati, Ohio. Oil draining device for automotive engines. 1,856,826; May 3.
Bennett, Jess B., Rancocas, N. J. Clutch and transmission mechanism. 1,856,457; May 3.
Bentley, John F., Detroit, Mich. Faucet. 1,856,458; May 3.
Benzee, Karl A., Toledo, Ohio. Curtain roller. 1,856,742; May 3.
Berg, Morris F., Los Angeles, Calif. Latch for baling press doors. 1,856,531; May 3.
Bergwall, Ernst, Varnamo, Sweden. Lawn mower. 1,856,233; May 3.
Beringer, Roscoe, assignor to General Motors Corporation, Detroit, Mich. Change speed transmission mechanism for motor vehicles. 1,856,275; May 3.
Berkshire Knitting Mills. (See Hemmerich, Hugo, assignor.)
Bernier, George. (See St. Marie, U., and Bernier.)
Bertrand, Frederic E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Buffing machine. 1,856,126; May 3.
Bethlehem Shipbuilding Corporation. (See Towle, Howard C., assignor.)
Bethlehem Steel Company. (See Nieman, Henry W., assignor.)
Bethlehem Steel Company. (See Schulz, P. A., and Maxwell, assignors.)
Biddle, William C. (See Corbin, Elbert A., jr., assignor.)
Bieler, Oscar, Pittsburgh, Pa. Suspension means for oil well derricks. 1,856,844 May 3.
Bigelow, Joseph P., Lunenburg, Mass. Sign. 1,856,349; May 3.
Bihlman, Victor W. (See Williams, H. M., and Bihlman.)
Birch, Charles E. (See Johnson, S. N., and Birch.)
Birdsall, Wilfred T., Montclair, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. View changing apparatus. 1,856,234; May 3.
Bishop, William K., Binghamton, assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Adjustable vehicle seat. 1,857,106; May 3.
Bisznatz, Fred, Galion, assignor to Marion Vault Manufacturing Company, Marion, Ohio. Grave vault. 1,856,309; May 3.
Bittorf, Louis A., Sterling, assignor to National Manufacturing Company, Sterling, Ill. Sliding door structure. 1,856,235; May 3.
Blackman, Edward L., Brooklyn, N. Y. Fore and aft rigged vessel. 1,856,459; May 3.
Blackman, Edward L., Brooklyn, N. Y. Fore and aft rigged vessel. 1,856,803; May 3.
Blackman, Edward L., Brooklyn, N. Y. Fore and aft rigged vessel. 1,856,804; May 3.
Bladorn, Herbert W. (See Moore, Frank H., assignor.)
Blank, Charles E., Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Variable clearance pocket for compressors. 1,856,460; May 3.
Blatterman, Albert S., Asbury Park, N. J. Remote control system for radioreceivers. 1,856,310; May 3.
Blázquez, Augustin, Central Baguanos, Cuba. Vehicle tire. 1,856,083; May 3.
Blomstrom, Lowell C., assignor to Federal-Mogul Corporation, Detroit, Mich. Apparatus for verifying articles produced in quantity. 1,856,944; May 3.
Blondin, Joseph, Los Angeles, Calif. Outrigger frame, fore and aft control type airplane. 1,856,532; May 3.
Bloss, Richard R., and R. C. Pfeil, assignors to The International Derrick & Equipment, Columbus, Ohio. Method and apparatus for forming corrugated metal. 1,856,151; May 3.

Blum, Ferdinand, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Therapeutically valuable substances of the thyroid gland and preparing them. 1,856,533; May 3.
Boegehold, Alfred L. (See Williams, H. M., and Boegehold.)
Boeing Airplane Company. (See Monteith, Charles N., assignor.)
Boerner, Frederick W. (See Foerster, Walter F., assignor.)
Boery, Jean, Paris, France. Adjustable seat back. 1,856,534; May 3.
Bohnsack, John A. (See Hauserman, E. F., Mowery, and Bohnsack.)
Bolard, Alfred J. G. (See Rustin, L. D. A., and Bolard.)
Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,856,276; May 3.
Bonsieur, Le, assignor to The General Industries Company, Elyria, Ohio. Fishing reel. 1,856,943; May 3.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Securing wheel bodies to wheel hubs. 1,856,236; May 3.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Machine for riveting spokes of vehicle wire wheels. 1,856,237; May 3.
Borg, Henry L., Stamford, Conn., assignor to General Foods Corporation. Molding chocolate. 1,856,153; May 3.
Bortkewicz, Louie, Racoon, Pa. Bit-forging machine. 1,857,011; May 3.
Bowman, A. B. (See Anderson, Robert H., assignor.)
Boyle, Eldridge R., Boston, Mass. Furring bracket. 1,856,205; May 3.
Boyle, Norman T., an T. F. Slattery, assignors to Holley Safety Window Inc., New York, N. Y. Window. 1,856,311; May 3.
Bozorth, Harry S., jr., Philadelphia, Pa. Garment supporter. 1,856,152; May 3.
Bracke, Robert F., Chicago, assignor to C. B. Camp, trustee, Glencoe, Ill. Carburetor. 1,856,238; May 3.
Bradshaw Charles, and N. Taylor, Los Angeles, Calif. Island structure. 1,856,312; May 3.
Brady Conveyors Corporation, The. (See Baker, Hubert E., assignor.)
Brauer, Carl Fr., G. m. b. H., The Firm of. (See Birkholdt, Herbert, assignor.)
Brear, Owen W., East Newark, assignor to E. S. Hammond, Inc., Newark, N. J. Automatic stop valve for oil burners. 1,856,408; May 3.
Breckenridge, Albert, Chicago, Ill., assignor to Superior Felt and Bedding Co. Garnett or batting machine. 1,857,039; May 3.
Breneman, Paul E., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Door and latch construction. 1,856,689; May 3.
Brennan, William J., Los Angeles, Calif. Disconnect switch. 1,856,313; May 3.
Bretaud, Joseph V., assignor to Swedish Crucible Steel Company, Detroit, Mich. Rear axle assembly for motor trucks. 1,856,461; May 3.
Brewer-Titchener Corporation, The. (See Bishop, William K., assignor.)
Bridgman, Michael J., Jerome, Idaho. Making food compounds. 1,856,206; May 3.
British Cotton Industry Research Association, The. (See Nuttall, T., and Shorter, assignor.)
Brokaw, Edward A., and W. H. Noelting, assignors to Faultless Caster Company, Evansville, Ind. Caster stem and socket. 1,856,535; May 3.
Brooks, Ernest E., assignor to Dennison Manufacturing Company, Framingham, Mass. Powder box. 1,856,743; May 3.
Brooks, Richmond A. (See Enlows, E. M. A., Brooks, and Groomes.)
Brown, Albert C., Chicago, Ill. Valve. 1,856,088; May 3.
Brown Company. (See Richter, G. A., and Schur, assignor.)
Brown, James H., Tel-Aviv, Jaffa, Palestine. Liquid fuel injection valve for Diesel and like engines. 1,856,089; May 3.
Brown, Robert S. (See Klein, C. A., and Brown.)
Brown & Sharpe Mfg. Co. (See Parkhurst, Malcolm K., assignor.)
Brown, Stanley, Garden City, assignor to The Griscom-Russell Company, New York, N. Y. Heat exchanger. 1,855,618; May 3.
Brown, William A., Philadelphia, Pa. Tire. 1,856,314; May 3.
Browne, Cecil O. (See Whitaker, A., and Browne.)
Bruning, Charles, Company. (See Murck, Knud, assignor.)
Bruns, Hermann, F. Baumann, and M. Kugel, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Anthrimido-carbazoles. 1,856,207; May 3.
Brunswick-Balke-Collender Company, The. (See de Corevont, Howard P., assignor.)
Brush, Frederick F. (See Whitson, D. A., Physioc, and Brush.)
Bryce, James W., Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Weighing sealing device. 1,856,409; May 3.
Bryce, James W., Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Scale bearing. 1,856,410; May 3.
Bryner, Fred, assignor to The Dow Chemical Company, Midland, Mich. Preparation of aryl phosphates. 1,856,862; May 3.
Bubblestone Company, The. (See Rice, John A., assignor.)
Buchet, Conrad R., Long Beach, Calif., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Grease gun. 1,856,372; May 3.
Buckley, Matthew J., Milwaukee, Wis. Clothes assembling rack. 1,856,239; May 3.
Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Making piston rings. 1,856,240; May 3.
Buehler, Leon, jr., and W. H. Aubrey, assignors to Frick Company, Waynesboro, Pa. Refrigerating system. 1,857,078; May 3.
Bulen, George F., Los Angeles, Calif. Fire alarm mechanism. 1,857,040; May 3.
Bungay, George W., Plainfield, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa. Refrigerating system. 1,856,536; May 3.
Bürkholdt, Herbert, assignor to the Firm of Carl Fr. Brauer G. m. b. H., Stettin, Germany. Rotary printing cylinder. 1,856,181; May 3.
Burkle, Charles D., Geneva, Iowa. Planter attachment. 1,856,208; May 3.
Burks, Arthur W., Decatur, Ill. Pumping and system therefor. 1,856,537; May 3.
Burns, William A., Brondesbury, London, assignor to Solaflex Signs Amalgamated Limited, London, England. Sign. 1,856,462; May 3.
Burton, Everett T., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Power amplifier. 1,856,373; May 3.
Bussey, Allan C., Minneapolis, Minn. Pencil and pencil set. 1,856,463; May 3.
Butzen, John J., assignor to American Chair Company, Sheboygan, Wis. Knockdown woven furniture. 1,856,315; May 3.
C and C Developing Company. (See Cherry, Louis B., assignor.)
Cadieux, Joseph O., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Apartment house telephone. 1,857,107; May 3.
Call, Lester A., Clinton, Mass. Folding stool. 1,856,805; May 3.
Camp, Curtis B., trustee. (See Bracke, Robert F., assignor.)
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Air brake. 1,856,209; May 3.
Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window sash and muntin construction. 1,857,093; May 3.
Campbell Metal Window Corporation. (See Campbell, Harry E., assignor.)
Campbell, Parry J., assignor of one-half to F. W. Dilworth, Boyne City, Mich. Automatic bag holder and weigher. 1,856,964; May 3.
Capocefalo, Edward A., Syracuse, assignor to Sterilek Company, Inc., Brooklyn, N. Y. Cutting machine. 1,856,154 May 3.
Carey, Philip, Manufacturing Company, The. (See Dom, Dudley A., assignor.)
Carlton, Richard P., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Process and apparatus for coating. 1,856,744; May 3.
Carpenter, John B., jr. (See Wheeler, T. L., and Carpenter.)
Carroll, Fred M., Yonkers, N. Y., assignor to Dayton Scale Company, Dayton, Ohio. Computing scale. 1,856,411; May 3.
Carroll, Monroe W., Beaumont, assignor to J. D. Nixon, Harris County, Tex. Pipe holder. 1,856,905; May 3.
Carruthers, Eben H., Astoria, Oreg. Bottle capping machine. 1,856,827; May 3.
Carsey, Harry E., assignor to Auld's Incorporated, Columbus, Ohio. Memorial container. 1,856,619; May 3.
Carson, Abram, Philadelphia, Pa. Reenforced and runproof hosiery. 1,856,745; May 3.
Carswell, Thomas S., Kirkwood, assignor to Monsanto Chemical Works, St. Louis, Mo. Manufacture of polyhydroxy phenols. 1,856,690; May 3.
Carter, Lionel A., Webster Groves, assignor to Koken Companies, St. Louis, Mo. Barber chair. 1,856,691; May 3.
Carter, William C., Flint, Mich. Carburetor. 1,856,464; May 3.
Carter, William D., Caldwell, N. J. Method and apparatus for producing a spray mixture of liquid and gas. 1,856,316; May 3.
Carvel, Richard, New York, N. Y. Building construction. 1,856,906; May 3.
Case, Edward R., Lancaster, Pa., assignor, by mesne assignments, to The Kilgore Manufacturing Company, Westerville, Ohio. Toy and the like. 1,856,538; May 3.
Celastic Corporation, The. (See McCormick, F. H., and Schwartz, assignors.)
Chadbourne, Glenn A., Chadborn, Mont. Sickle bar control. 1,856,984; May 3.

Chaffee, Edmund L. (See Rosener, L. S., Smith, and Chaffee.)
Chagnlard, Edmond. (See Kastvelichvill, A., and Chagnlard.)
Chagnkart International Aviation Corporation. See Kartvelichvill, A., and Chagnlard, assignors.)
Chain Belt Company. (See Gary, Francis P., assignor.)
Chambers, Bering, Quinlan Company. (See Cooper, Earl E., assignor.)
Chapman, Paul, New York, N. Y. Derrick construction. 1,856,907; May 3.
Chase Companies, The. (See Surface, M. E., and Wellington, assignors.)
Chasselon, René L., Paris, France. Tagging laces, strings, and the like. 1,856,374; May 3.
Chemical Engineering Corporation. (See Jones, Louis C., assignor.)
Chemical Works formerly Sandoz, The Firm. (See Knecht, O., and Stocker, assignors.)
Cherry, Louis B., Louisville, Ky., assignor, by mesne assignments, to C and C Developing Company, Kansas City, Mo. Treating hydrocarbons. 1,856,828; May 3.
Chicago Faucet Company, The. (See Steen, Harry S., assignor.)
Christensen, Norman V., and W. M. Hanneman, assignors to Union Special Machine Company, Chicago, Ill. Sewing machine. 1,857,041; May 3.
Christiansen, Walter G., Bloomfield, N. J., assignor to E. R. Squibb & Sons, New York, N. Y. Molecular compounds of amido-pyrin with ethyl isopropyl barbituric acid. 1,856,620; May 3.
Christie, Walter, Avon, assignor to C. R. Lord and C. Farris, Newark, N. J. Convertible wheeled truck tractor. 1,856,068; May 3.
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Carburetor choke control. 1,856,740; May 3.
Ciboch, Lewis M., Brookfield, Ill. Dental burr cabinet. 1,856,807; May 3.
Clark, Stuart B., Riverton, assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J. Pipe annealing furnace. 1,856,863; May 3.
Clark, William T., Milwaukee, Wis. Fusible element for protecting electrical circuits. 1,856,317; May 3.
Clarke, Charles R., Cranston, R. I., assignor to Leonard-Rooke Company. Continuous flow tub. 1,856,318; May 3.
Clarkson, Bradley E. (See Schellentrager, E. W., and Clarkson.)
Claus, Ernst C., assignor, by mesne assignments, to E. Reich, Chicago, Ill. Cooking device. 1,856,864; May 3.
Clerk, Verdrie F. (See Hoke, F., and Clark.)
Cleveland Trust Company, The, et al., executors. (See Orr, William V.)
Clow, James B., & Sons. (See Kurtz, Ralph W., assignor.)
Coffey, Irven E., Playa del Rey, Calif. Battery cell hoist. 1,856,621; May 3.
Cogswell, Richard D., Millbourne, Pa. Burial vault. 1,856,908; May 3.
Cohen, Cecelia H., Brooklyn, N. Y. Sample display tab. 1,856,375; May 3.
Cole, Guy M. (See Phillips, W. M., and Cole.)
Coleman, James E. (See Weaver, Jerry M., assignor.)
Colley, Reuben N., Providence, R. I. Windshield wiper. 1,857,042; May 3.
Collins, James G., assignor to Atlas Press Company, Kalamazoo, Mich. Machine for running in and burning crank shaft bearings. 1,856,465; May 3.
Collins, Thomas, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Manufacturing return bends. 1,856,539; May 3.
Colombara, Hans, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacture of new isatines. 1,856,210; May 3.
Colson Company, The. (See Johnson, Wilfred G., assignor.)
Coltman, Bertram W. (See Miller, Myron, assignor.)
Colt's Patent Fire Arms Manufacturing Co. (See Conner, Benjamin F., assignor.)
Columbia Mixers Corporation, The. (See Goetz, Joseph F., assignor.)
Combustion Utilities Corporation. (See Anderson, Thomas, assignor.)
Comerford, Grace, Elmhurst, assignor to The Nestle-Lemur Company, New York, N. Y. Wrapper for use in hair waving processes. 1,856,692; May 3.
Companies Reunies des Glaces & Verres Speciaux du Nord de la France. (See Despret, Georges P., assignor.)
Condenser Corporation of America. (See Kevelson, Max, assignor.)
Connecticut Telephone & Electric Corporation. (See Cadieux, Joseph O., assignor.)
Conner, Benjamin F., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Bottle cap. Des. 86,876; May 3.
Conner Crouse Corporation. (See Crouse, George B., assignor.)
Conner, Somerville V., New Albany, Ind. Sheet metal roofing. 1,856,622; May 3.
Conover, Harry H., Dayton, Ohio. Fuel feed timing device. 1,856,466; May 3.
Consortium für Elektrochemische Industrie. (See Herrmann, W. O., and Deutsch, assignor.)
Container Corporation of America. (See Holy, Mitchel E., assignor.)
Conti, Eugene, Mount Vernon, assignor to A. Hertz, New Rochelle, N. Y. Machine for making envelopes. 1,857,113; May 3.
Continental Motors Corporation. (See Frederick, Walter A., assignor.)
Cook, John R., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Electric receptacle and housing therefor. 1,857,079; May 3.
Cooper, Earl E., assignor to Chambers, Bering, Quinlay Company, Decatur, Ill. Container wall and bushing fitting in combination therewith. 1,856,747; May 3.
Cooper, Edward, Newton, assignor to New England Mica Co., Waltham, Mass. Press for commutator rings and the like. 1,856,319; May 3.
Copp, Ralph, assignor to Pevely Dairy Company, St. Louis, Mo. Liquid cooler. 1,856,467; May 3.
Corbin, Elbert A., jr., Swarthmore, Pa. Hot water stove and storage tank. 1,856,693; May 3.
Corbin, Elbert A., jr., Swarthmore, assignor of one-half to W. C. Biddle, Lansdowne, Pa. Hot water stove. 1,856,623; May 3.
Corell, Martin. (See Kranzlein, G., Corell, and Vollmann.)
Corley, John T., assignor to J. M. Baker Pattern Company, Inc., Providence, R. I. Turret standpipe and manufacture thereof. 1,856,241; May 3.
Corley, Mark, H., assignor to Procunier Safety Chuck Company, Chicago, Ill. Tap holder. 1,857,012; May 3.
Corozone Company, The. (See Evans, Albert E., assignor.)
Cotes, William A., assignor to Reo Motor Car Company, Lansing, Mich. Wheel assembly machine. 1,859,277; May 3.
Coultas, Wilbur J., and C. J. Frederiksen, assignor to Deere & Company, Moline, Ill. Draft connection. 1,856,468; May 3.
Courser, Fred M., Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Skiving machine. 1,856,155; May 3.
Courtney, Nicholas P., Passaic, N. J. Receptacle opener. Re18,447; May 3.
Covey, John E. (See Lobner, C. L., and Covey.)
Cowlin, Eugene D., assignor to The Reliance Manufacturing Company, Massillon, Ohio. Forming nonentangling spring washers. 1,856,806; May 3.
Crafts, Curtis S., Oak Park, Ill., assignor to Goss Printing Press Company. Folding mechanism. 1,857,114; May 3.
Cragg, George L., Chicago, Ill., assignor to H. A. Douglas, Bronson, Mich. Circuit controller. 1,857,043; May 3.
Crane Co. (See Olson, Charles A., assignor.)
Crawford, William E., Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electrical welding apparatus. 1,857,044; May 3.
Crawford, William E., Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electrical welding apparatus. 1,857,115; May 3.
Critchfield, Walter O., Shelby, Ohio. Salesbook. 1,857,013; May 3.
Crompton & Knowles Loom Works. (See Holmes, Elbridge R., assignor.)
Crompton & Knowles Loom Works. (See Turner, Richard G., assignor.)
Crompton & Knowles Loom Works. (See Wattie, William M., assignor.)
Cross, Garrett P. S., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Separable last. 1,856,127; May 3.
Crouse, George B., Woodcliff, N. J., assignor to Conner Crouse Corporation, New York, N. Y. Electrical filter. 1,856,182; May 3.
Crouse-Hinds Company. (See Olley, Edwin A., assignor.)
Crowell, Erd V., Los Angeles, Calif. Tubing support. 1,856,469; May 3.
Crum, Emanuel L., Indianapolis, Ind. Hood latch. 1,856,540; May 3.
Cunningham, Harry G. (See Rudolph, W. F., Hunt, and Cunningham.)
Currie, Edwin H. (See Tagle, R. G., and Currie.)
Currier, John C., and C. W. Lipe, San Jose, Calif. Fruit processing means. 1,856,945; May 3.
Curtis, Clell, Plano, Iowa. Tractor wheel. 1,856,320; May 3.
Curtiss Aeroplane & Motor Company. (See Osborn, Robert R., assignor.)
Cutler-Hammer, Inc. (See Hodgson, Howard E., assignor.)
Cycloplane Company, The. (See Woodson, O. L., and Myhres, assignors.)
Daisy Manufacturing Company. (See Le Fever, Charles F., assignor.)
D'Alx, Fritz C. L., Chicago, Ill. Internal combustion engine. 1,856,242; May 3.
Dalhelmer, Walther, Eindhoven, Netherlands, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Wire bending mechanism. 1,857,119; May 3.
Darrah, William A., Chicago, Ill. Rectifier. 1,856,865; May 3.
Darrah, William A., Chicago, Ill. Fiber product and making same. 1,856,946; May 3.
D'Auvrain, Fernand, Brussels, Belgium. Rotary engine. 1,856,947; May 3.

David, Sara, West View, Pa. Securing device for clothing. 1,856,909; May 3.
Davis, Floyd E., Allentown, Pa., assignor to International Motor Company New York, N. Y. Driving mechanism for motor vehicles. 1,856,748; May 3.
Davis, Mansell A., Los Angeles, Calif. Camping cot. 1,856,624; May 3.
Day, A. F., Construction Company. (See Day, Andrew F., assignor.)
Day, Andrew F., assignor to A. F. Day Construction Company, Dallas, Tex. Removable chillering jig for pipe welding. 1,856,470; May 3.
Day, Charles M. (See McClellan, L. N., Kinzie, Savage, and Day.)
Dayton Scale Company. (See Bryce, James W., assignor.)
Dayton Scale Company. (See Carroll, Fred M., assignor.)
Deadman, Albert, et al. (See McMilland, John A., assignor.)
Dean, William T., assignor to Switzer Packing Company, Beaumont, Tex. Packing. 1,857,045; May 3.
De Blase, Guido, assignor to The Ives Corporation, Bridgeport, Conn. Speed governor for spring motors. 1,856,090; May 3.
De Brock, Francis B., Kew Gardens, N. Y. Shoe shining cabinet. Des. 86,877; May 3.
Decaux, René, assignor to Societe des Etablissements Gaumont, Paris, France. Moving picture machine. 1,856,541; May 3.
De Correvont, Howard P., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Apparatus for covering articles. 1,856,694; May 3.
Deere & Company. (See Coultas, W. J., and Frederiksen, assignors.)
Deere & Company. (See Hyland, William A., assignor.)
Deere & Company. (See Livesay, Robert C., assignor.)
De Florez, Luis, Pomfret, Conn. Shock absorber for pressure controlled indicating and recording devices. 1,856,695; May 3.
Delco-Light Company. (See Lee, Ralph L., assignor.)
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco Products Corporation. (See Elsey, George W., assignor.)
Delco Products Corporation. (See Teeter, Wilford H., assignor.)
Delco-Remy Corporation. (See Goad, Louis C., assignor.)
Delco-Remy Corporation. (See Johnson, S. N., and Birch, assignors.)
Delco-Remy Corporation. (See Phelps, Alva W., assignor.)
Delco-Remy Corporation. (See Poole, Lora E., assignor.)
Delpech, Gaston, Nemours, assignor to Société Quartz & Silicé, Paris, France. Manufacture of silica articles with glazed surfaces. 1,857,080; May 3.
Denig, Fred, Pittsburgh, Pa., assignor to The Koppers Company. Method of and apparatus for oil distillation. 1,856,471; May 3.
Dennison Manufacturing Company. (See Brooks, Ernest E., assignor.)
Dentler, Arnold E., assignor to W. H. Miner, Inc., Chicago, Ill. Meat rack for refrigerator cars. 1,856,472; May 3.
De Saivre, Maurice, Paris, France. Radio-communication system. 1,856,376; May 3.
Deshrière, Fernand L., Marseille, France. Vibrating film for acoustic devices. 1,856,749; May 3.
Despret, Georges P., Paris, assignor to Compagnies Reunies Des Glaces & Verres Speciaux Du Nord de la France, Boussois-Sur-Sambre, France. Process and plant for the casting of rough plate glass. 1,856,278; May 3.
Detroit Steel Products Company. (See Kelly, Clyde W., assignor.)
Dettelbach, Edward E., Los Angeles, Calif. Orthopedic device. 1,856,377; May 3.
Deutsch, Hans. (See Herrmann, W. O., and Deutsch.)
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,856,750; May 3.
Dexter Folder Company. (See Kast, Edward R., assignor.)
Dickson, Henry. (See Young, Richard G., assignor.)
Dieux, Jean, Paris, France. Process and device for transformation of electric currents. 1,856,910; May 3.
Dilworth, F. Wesley. (See Campbell, Parry J., assignor.)
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Locking mechanism. 1,856,069; May 3.
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Door lock. 1,856,091; May 3.
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Pad roller mounting for motion picture projection machines. 1,857,116; May 3.
Diot, Louis E., Neuilly-sur-Seine, assignor to Societe Anonyme Parfumerie Houbigant, Paris, France. Machine for placing bands on various articles. 1,857,117; May 3.
D'Ippolito, Angelo B., Vineland, N. J. Sidewalk edge router. 1,856,412; May 3.
Dirkes, Robert F., Jamaica, N. Y., and J. N. Anderson, jr., North Plainfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Regenerative repeater for start-stop systems of automatic telegraphy. 1,856,985; May 3.
Dixon, William, Incorporated. (See Owens, Thomas, assignor.)
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,856,070; May 3.
Doehler Die-Casting Co. (See Morin, Louis H., assignor.)
Doehler Vending Machines, Inc. (See Morin, Louis H., assignor.)
Doerfler, Alfred M., Mansfield, assignor to Everett E. Kent, Newton, Mass. Toy boat. 1,857,094; May 3.
Doermann, Albert J., assignor to Titan Abrasives Co., Chicago, Ill. Abrasive disk. 1,856,321; May 3.
Dohner, Donald R., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Refrigerator cabinet. Des. 86,878; May 3.
Dolamore, Earl W., assignor to H. A. Douglas, Bronson, Mich. Assembling device. 1,856,948; May 3.
Dom, Dudley A., Wyoming, Ohio, assignor to The Philip Carey Manufacturing Company. Brake band lining. 1,857,108; May 3.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,856,696; May 3.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,856,697; May 3.
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,856,698; May 3.
Donahue, Patrick F., assignor to Scovill Manufacturing Company, Waterville, Conn. Adjustable extension handle. 1,856,845; May 3.
Dosch, Charles R. (See Locke, S. D., and Dosch.)
Douglas, Harry A. (See Cragg, George L., assignor.)
Douglas, Harry A. (See Dolamore, Earl W., assignor.)
Dow Chemical Company, The. (See Bryner, Fred, assignor.)
Dow Chemical Company, The. (See Grebe, John J., and Poffenberger, assignors.)
Dow Chemical Company, The. (See Grether, Ernest F., assignor.)
Dow Chemical Company, The. (See Mills, L. E., and Goodwin, assignors.)
Drain, William H., jr., Youngstown, Ohio. Checkerwork. 1,856,473; May 3.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass cutting apparatus. 1,856,128; May 3.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for cleaning plate glass polishing runners. 1,856,129; May 3.
Draper Corporation. (See Smith, William L., assignor.)
Drefahl, Louis C., Lakewood, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Preparing metal sheets for annealing. 1,856,751; May 3.
Dresser, S. R., Manufacturing Company. (See Seaberg, Grover, assignor.)
Dressler, Samuel, Brooklyn, N. Y. Whistle. 1,856,625; May 3.
Drew, Richard G., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn. Adhesive sheeting. 1,856,986; May 3.
Ducoty, Frank A., Middletown, Pa. Parachute. 1,857,014; May 3.
Duer, Edward C., Los Angeles, Calif. Rotary steam engine. 1,856,542; May 3.
Duncan, B. Stiles, et al. (See Hollinger, William M., assignor.)
Duncan Electric Manufacturing Company. (See Harris, Jesse, assignor.)
Duncan, William M., Alton, Ill. Finishing machine for wheels, etc. 1,856,846; May 3.
Dunkel, Manfred. (See Hofmann, F., and Dunkel.)
Dunlop, Porter, Arlington, Mass. Folding stool with table extension. 1,856,378; May 3.
Du Pont, E. I., de Nemours & Company. (See Alt, C. A., and McLean, assignors.)
Du Pont, E. I., de Nemours & Company. (See Reid, Ebenezer E., assignor.)
Du Pont Film Manufacturing Corporation. (See Sease, Virgil B., assignor.)
Du Pont Rayon Company. (See Lecomte, Gustave, assignor.)
Du Pont Rayon Company. (See Prince, Edmond, assignor.)
Durowood Industries Incorporated of Detroit. (See Frost, Meyrl M., assignor.)
Duveneck, Carl J., et al. (See Lorentowicz, H. R., and Thompson, assignors.)
Dykeman, Harry E., assignor to Union Special Machine Company, Chicago, Ill. Sewing machine for inserting elastic bands in stitched articles. 1,857,046; May 3.
E. and T. Fairbanks and Company. (See Handley, Harlan A., assignor.)
Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuitous elevator. 1,857,118; May 3.
Earp, Jebue R. (See Anderson, T. O., and Earp.)

Easterday, Homer, assignor, by mesne assignments, to Point-O-Purchase Company, Kansas City, Mo. Chair. Des. 86,879; May 3.
Eastman, Fred C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Cutting machine. 1,856,130; May 3.
Ebelling, Charles W., assignor to General Talking Pictures Corporation, New York, N. Y. Switching apparatus. 1,856,092; May 3.
Eberhardt, Friedrich, Youngstown, Ohio. Cigarette roller. 1,856,949; May 3.
Ellen, Joseph, assignor to Elder Mfg. Company, St. Louis, Mo. Boy's suit. Des. 86,880. May 3.
Ekstedt, John W., Belleville, N. J., assignor to Westinghouse Lamp Company. Filament for incandescent electric lamps. 1,856,243; May 3.
Elder Mfg. Company. (See Ellen, Joseph, assignor.)
Electric Service Supplies Company. (See Graham, Herbert J., assignor.)
Electro Metallurgical Company. (See Read, William C., assignor.)
Elkin, Newton, Philadelphia, Pa. Shoe. Des. 86,881; May 3.
Ellinger, Flora, Milwaukee, Wis. Curtain support. 1,856,752; May 3.
Elliott, Alexander D., Chicago, Ill. Fabric holding device. 1,856,244; May 3.
Elsea, Albert E., East St. Louis, Ill. Traversing machine gun mounting. 1,856,987; May 3.
Elsey, George W., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Double acting shock absorber. 1,856,753; May 3.
Emerson Electric Manufacturing Co. (See Persons, Laurence M., assignor.)
Emery, Irwin M. (See Nordfeldt, C. E., Ahlquist, and Emery.)
Enger-Kress Company. (See Groom, George F., assignor.)
Engineering Products Corporation, The. (See Lufkin, John L., assignor.)
Enlows, Ellis M. A., R. A. Brooks, and R. R. Groomes, Washington, D. C. Sterilizing apparatus. 1,856,988; May 3.
Enochson, Guy, Austin, Minn. Grinding machine. 1,857,047; May 3.
Eriesson, Gustaf L., Stockholm, Sweden. Opening device for sheet-metal cans and boxes. 1,856,543; May 3.
Erlanger, Arthur L., New York, N. Y., and Martin Wadewitz, Elizabethton, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. Fabric from artificial threads. 1,856,322; May 3.
Ernsbarger, George H. (See McCarty, F. L., Ernsbarger, and MacDonald.)
Escher, Gustav. (See Haring, Ulysses G., assignor.)
Estorff, Walther, Berlin-Charlottenburg, and L. Heinemeyer, Berlin-Lichterfelde, Germany, assignors to Westinghouse Electric and Manufacturing Company. Multiple break oil switch for large currents. 1,856,626; May 3.
Ethridge, Albert S., assignor to Hummel & Downing Co., Milwaukee, Wis. Container. 1,856,474; May 3.
Evans, Albert E., Cleveland, Ohio, assignor, by mesne assignments, to The Corozone Company, Wilmington, Del. Ozonizer. 1856,544; May 3.
Evans, John M., Berkeley, Calif. Treating petroleum emulsions. 1,856,156; May 3.
Evans, Robert D., Wilkinsburg, C. F. Wagner, Pittsburgh, and S. B. Griscom, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Recording system. 1,856,699; May 3.
Falor, Charles W., Forest Hills, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,856,754; May 3.
Farles, Robert, St. Davids, and C. D. Young, Haverford, Pa. Rail and assembling the same. 1,856,911. May 3.
Farrell, L. D. (See Takavec, John, assignor.)
Farris, Clayton, et al. (See Christie, Walter, assignor.)
Faultless Caster Company. (See Brokaw, Edward A., and Noelting, assignors.)
Feaster, Edward B., West Newton, Mass. Window screen. 1,856,323; May 3.
Featheredge Rubber Company, Inc. (See Hood, Harry M., assignor.)
Federal-Mogul Corporation. (See Blomstrom, Lowell C., assignor.)
Felgelson, Alexander, Beaumont, Tex. Vehicle wheel attachment. 1,856,866; May 3.
Felix, Friedrich. (See Bally, O., Grossmann, and Felix.)
Fellmer, Ernst, and H. Hoyer, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New secondary trisazodyestuffs. 1,856,211; May 3.
Fensky, Charles, St. Louis, Mo. Ear sound reflector. 1,856,324; May 3.
Ferrand, Fred, Southport, England. Manufacture of artificial fibers. 1,856,071; May 3.
Fiat Societa Anonlina. (See Zerbi, T., assignor.)
Firing, Ludvig. (See Monk, R. H., and Firing.)
Fitz Power, Richard. (See Thomas, A., and Fitz Power.)
Flashtric Sign Works. (See Goddard, Arthur L., assignor.)
Flashtric Sign Works. (See Reitherman, Ralph W., assignor.)
Flentje, Ernst, Cambridge, Mass. Shock absorber. 1,856,325; May 3.
Fletcher, Harold W., assignor to Hughes Tool Company, Houston, Tex. Cutter for earth boring drills. 1,856,627; May 3.
Fletcher Works. (See Schaum, Fletcher, assignor.)
Flintermann, Gerhard, West Orange, N. J. Adjustable seat for vehicles. 1,856,950; May 3.
Foerster, Bernhard, Pforzheim, Germany. Device for feeding the guide sleeves for spring rings to the points for working. 1,856,951; May 3.
Foerster, Bernhard, Pforzheim, Germany. Working guide sleeves for spring rings. 1,856,952; May 3.
Foerster, Walter F., Evansville, Ind., assignor of one-half to F. W. Boerner, Posey County, Ind. Permutation lock. 1,856,989; May 3.
Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Feed mechanism for slicing machines. 1,856,326; May 3.
Fontaine, John C., Shreveport, La. Trailer. 1,857,081; May 3.
Ford, Hannibal C., Jamaica, J. M. Ballou and V. W. Balzer, Forest Hills, N. Y., assignors to Merrill Aircraft Company, Dover, Del. Airplane. 1,856,093; May 3.
Ford, Hannibal C., Jamaica, and J. M. Ballou and V. W. Balzer, Forest Hills, N. Y., assignors to Merrill Aircraft Company, Dover, Del. Airplane. 1,856,094 May 3.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Brake. 1,856,183; May 3.
Ford, James G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulating oil. 1,856,700; May 3.
Ford Motor Company. (See Ford, Henry, assignor.)
Ford Motor Company. (See Johnson, F., and Schubert, assignors.)
Ford Motor Company. (See Roeder, Dale, assignor.)
Ford Motor Company. (See Russell, Harry L., assignor.)
Förster, Bernhard, Pforzheim, Germany. Machine for the production of split rings. 1,856,953; May 3.
Foster, Joseph H., Georgetown, Tex. Subsurface irrigator. 1,856,379; May 3.
Foster, William E., New Bedford, Mass. Mixing valve. 1,856,380; May 3.
Fostoria, Inc. (See Hawe, William F. M., assignor.)
Foulk, Albert C., Dayton, Ohio. Safety buckle. 1,856,327; May 3.
Fragopulos, Aristides A. (See Winchester, J. J., and Fragopulos, assignors.)
Franck, Edwin G., assignor to Hutchins Car Roofing Company, Detroit, Mich. Car roof. 1,856,245; May 3.
Frank, Edith S., New York, N. Y. Ash receiver. 1,856,990; May 3.
Frank, Frederick C., assignor to Bendix Brake Company, South Bend, Ind. Wheel. 1,856,095; May 3.
Frankart, Inc. (See Abel, Max, assignor.)
Frankart, Inc. (See Underberg, Henry, assignor.)
Franklin, Albert W., New York, N. Y. Night lamp and switch therefor. 1,856,755; May 3.
Franklin, Albert W., New York, N. Y. Toy or amusement device. 1,856,991; May 3.
Franklin Process Company. (See Traver, William A., assignor.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Fred, Edwin M. (See Peterson, W. H., and Fred.)
Frederick, Roland E., and W. E. Hill, Philadelphia, Pa., assignors, by mesne assignments, to R. E. Ottenheimer, Baltimore, Md. Window. 1,856,867; May 3.
Frederick, Walter A., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve valve actuating mechanism. 1,856,246; May 3.
Frederiksen, Carl J. (See Coultas, W. J., and Frederiksen.)
French, Louis O., Milwaukee, Wis. Internal combustion engine. 1,856,328; May 3.
Frenzel, Kurt. (See Bausch, V., and Frenzel.)
Freyn Engineering Company. (See Whitcomb, Arthur J., assignor.)
Frick Company. (See Buehler, L., jr., and Aubrey, assignors.)
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigiola, Nicholas F., Fairview, N. J. Treating wood and wooden article produced thereby. 1,856,756; May 3.
Frisbey, Anna C., et al. (See McRae, David F., assignor.)
Froesch, Charles. (See Masury, A. F., and Froesch.)
Frost, Meyrl M., Capac, assignor to Durowood Industries Incorporated of Detroit, Detroit, Mich. Metal impregnated fiber article and making same. 1,856,475; May 3.
Fry, Francis H. (See Judge, E. E., and Frey.)
Fry, Walter L., Scarsdale, assignor, by mesne assignments, to Wil-Fry Corporation, New York, N. Y. Seat side arm cover. 1,856,868; May 3.
G & G Atlas Systems, Inc. (See Stoetzel, Joseph J., assignor.)
Gabill, Tanis, Berlin, N. H. Internal combustion engine. 1,856,994; May 3.
Gabor, Dionys. (See Reiter, T., and Gabor.)
Gaddess, Clarence W., New York, N. Y. Infant's bath tub. 1,856,992; May-3.
Gairing Tool Company. (See Wyrick, Clayton E., assignor.)
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,856,329; May 3.

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Gardner, Stonewall J., New Albany, Ind. Traveling ripsaw machine. 1,856,476; May 3.
Garfinkle, David, Alameda, Calif. Tag holder. 1,856,545; May 3.
Garner-Denver Company. (See Pearson, Gustav C., assignor.)
Gary, Francis P., assignor to Chain Belt Company, Milwaukee, Wis. Endless traveling water screen. 1,856,381; May 3.
Gassan, Arthur, Berlin-Frohnau, and P. Ruck, Berlin, Germany; said Ruck assignor to said Gassan. Casting mold for manufacturing zinc containers for galvanic elements, batteries, or the like. 1,856,382; May 3.
Gassen, Josef, assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany. Shear for use in rolling mills, etc. 1,856,546; May 3.
Gassmann, August, Cleveland, Ohio. Holding and adjusting a drill bit while the same is being sharpened. 1,856,829; May 3.
Gassner, Alfred A., assignor to General Aviation Corporation, New York, N. Y. Lateral control for airplanes. 1,856,157; May 3.
Gassner, Sebastian, and F. Baumann, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Preparing 1,4-diaminoanthraquinone. 1,856,212; May 3.
Gatensbury, Frederick G., Stoke-on-Trent, England. Drive for presses employed for shaping tiles and other articles. 1,856,096; May 3.
Gates, Nina C., Old Saybrook, Conn. Article holder. 1,856,847; May 3.
Gautier, Trevor R., and H. E. Nichols, assignors to Nashua Gummed & Coated Paper Company, Nashua, N. H. Strip gulding and moistening means particularly adapted for use with strip serving mechanism. 1,856,628; May 3.
Gebhart, Frederick. (See Wilkinson, P. H., and Gebhart.)
Geister, Albert G., Sanborn, Iowa. Scooping attachment for tractors. 1,856,629; May 3.
Geller, Leon W., Hamburg, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. 1-(3'.4-dichlor-6'-sulphophenyl)-5-pyrazolones and azo coloring matters derived therefrom. 1,856,413; May 3.
Gem Doughnut Machine Co. (See Schoel, F. L.)
General Aniline Works, Inc. (See Bruns, H., Baumann, and Kugel, assignors.)
General Aniline Works, Inc. (See Colombara, Hans, assignor.)
General Aniline Works, Inc. (See Fellmer, E., and Hoyer, assignors.)
General Aniline Works, Inc. (See Gassner, S., and Baumann, assignors.)
General Aniline Works, Incorporated. (See Herz, R., and Zerweck, assignors.)
General Aniline Works, Inc. (See Kalischer, G., Schuele, and Schindhelm, assignors.)
General Aniline Works, Inc. (See Kranzlein, G., Corell, and Vollmann, assignors.)
General Aniline Works, Inc. (See Kranzlein, G., Greune, and Langbein, assignors.)
General Aniline Works, Inc. (See Schmidt, Albrecht, assignor.)
General Aniline Works, Inc. (See Wolff, H., Kunz, and Koeberle, assignors.)
General Aviation Corporation. (See Gassner, Alfred A., assignor.)
General Aviation Corporation. (See Thaden, Herbert V., assignor.)
General Can Company. (See Anderson, Carl A., assignor.)
General Electric Company. (See Halvorson, Cromwell A. B., assignor.)
General Electric Company, The. (See Keeley, Frederick J., assignor.)
General Electric Company, The. (See Mellor, George A., assignor.)
General Electric Company. (See Rice, Chester W., assignor.)
General Electric Company. (See Robinson, Ernest L., assignor.)
General Foods Corporation. (See Borg, Henry L., assignor.)
General Heating Specialty Company. (See Hauser, Martin, assignor.)
General Industries Company, The. (See Bonsieur, Le., assignor.)
General Motors Corporation. (See Berinser, Roscoe, assignor.)
General Motors Corporation. (See Lavole, Alphonse J., assignor.)
General Motors Corporation. (See Phillips, W. M., and Cole, assignors.)
General Motors Corporation. (See Summers, Caleb E., assignor.)
General Motors Research Corporation. (See Williams, H. M., and Bihlman, assignors.)
General Motors Research Corporation. (See Williams, H. M., and Boegehold, assignors.)
General Norit Company. (See Lourens, Cornelis, assignor.)
General Steel Castings Corporation. (See Jackson, Edwin C., assignor.)
General Talking Pictures Corporation. (See Ebeling, Charles W., assignor.)
Gerdes, Adolf F., Berlin, Germany. Friction-wheel differential gear. 1,856,383; May 3.
Gerdlen, Hans, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company. Electrical fuse for high or low voltage. 1,856,701; May 3.
Gere, Clair M., Belfast, N. Y. Vented container and relief valve therefor. 1,857,015; May 3.
Gerline, Otto, Kalamazoo, Mich. Fishing rod holder. 1,856,477; May 3.
Gernandt Motor Corporation. (See Bathrick, Charles E., assignor.)
Gernandt Motor Corporation. (See Leonard, Howard M., assignor.)
Gibboney, Grace E., Seattle, Wash. Hose darning clamping ring. 1,856,830; May 3.
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Campaign pin. Des. 86,882; May 3.
Gibson, Carson C., assignor to Two Way Electric Grinder Company, Hamburg, Iowa. Grinding machine. 1,856,808; May 3.
Gibson, Ransom P. and H. W. Woody, Beverly, Kans., assignors of one-third to W. W. McCanles. Rodent and vermin poison device. 1,856,809; May 3.
Gilbert, John J., Doughston, assignor to Western Electric Company, Incorporated, New York, N. Y. Tapered loading of conductors. 1,856,702; May 3.
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillette Safety Razor Company. (See Witter, Lawrie L., assignor.)
Gilmer, L. H., Company. (See Haines, George E., assignor.)
Ginther, Howard E. (See Lonergan, S. J., and Ginther.)
Glidden Company, The. (See Mutersbaugh, G. H., Zucker, Heiser, and Shope, assignors.)
Glowacki, John B., Chicago, Ill. Physician's head mirror. 1,857,095; May 3.
Glowacki, John B., Chicago, Ill. Cartridge fuse. 1,857,096; May 3.
Glowacki, John B., Chicago, Ill. Replaceable fuse element. 1,857,097; May 3.
Glowacki, John B., Chicago, Ill. Renewable fuse element. 1,857,098; May 3.
Goad, Louis C., assignor to Delco-Remy Corporation, Muncie, Ind. Armature coating machine. 1,856,757; May 3.
Goddard, Arthur L., Chicago, Ill., assignor to Flashtric Sign Works. Electrode. 1,856,758; May 3.
Goetz, Joseph F., Dayton, assignor to The Columbia Mixers Corporation, Hamilton, Ohio. Air pressure dispenser. 1,857,084; May 3.
Gonder, Edward L., North Canton, Ohio. Window. 1,856,158; May 3.
Goodell, William S. (See Rasmussen, A., and Goodell.)
Goodman Manufacturing Company. (See McCarty, F. L., Ernsbarger, and Macdonald, assignors.)
Goodwin, Henry S. (See Mills, L. E., and Goodwin.)
Gordon, Charles W., Pleasantville, N. Y., assignor to The Superheater Company, New York, N. Y. Joint. 1,856,072; May 3.
Gorham, Edward W. (See Hassell, M. E., and Gorham.)
Goss Printing Press Company. (See Crafts, Curtis S., assignor.)
Gotthardt, Henry R., assignor to Logan Co. Inc., Louisville, Ky. Dustproof ball bearing. 1,856,547; May 3.
Götz, František, Pilzen, Czechoslovakia. Centrifugal force fluid pressure clutch. 1,857,016; May 3.
Götz, František, Pilzen, Czechoslovakia. Transmission mechanism. 1,857,017; May 3.
Government and the people of the United States of America. (See Barghausen, John F., assignor.)
Graham, Herbert J., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lamp. 1,856,073; May 3.
Grammes, L. F., & Sons, Inc. (See Price, Wilbur F., assignor.)
Grant, Frank L., Chicago, Ill. Milk bottle locking device. 1,856,097; May 3.
Grasselli Chemical Company, The. (See Drefahl, Louis C., assignor.)
Grebe, John J., and N. Poffenberger, assignors to The Dow Chemical Company, Midland, Mich. Improved method of shooting wells. 1,856,912; May 3.
Green, Estill I. (See Affel, H. A., and Green.)
Green, Say M. (See Greenberg, Max.)
Green, Stanley S., La Fayette, Ind. Novelty lamp. 1,856,098; May 3.
Greenberg, Max, by judicial change of name S. M. Green, assignor to Heat and Draft Control, Inc., Cleveland, Ohio. Heat and draft regulator for furnaces, stoves, water heaters, and the like. 1,856,478; May 3.
Greene, Albert E., Medina, Wash. Electrode holder for arc furnaces. 1,856,330; May 3.
Greene, Gerald U., Salt Lake City, Utah, assignor to American Smelting and Refining Company, New York, N. Y. Cover for sintering machines. 1,856,548; May 3.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Amino derivatives of 4-hydroxy diphenyl. 1,856,131; May 3.
Greune, Heinrich. (See Kranzlein, G., and Greune, and Langbein.)
Greve, Edgar E., Bellevue, assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa. Slip for rotary drilling machines. 1,856,479; May 3.

Griffin & Howe, Inc. (See Griffin, S., and Sparr, assignors.)
Griffin, Seymour, and R. Sparr, assignors to Griffin & Howe, Inc., New York, N. Y. Gun sight support. 1,856,540; May 3.
Grillo, Thomas, and P. Mongillo, New Haven, Conn. Water closet seat. 1,856,159; May 3.
Grimme, Jorge L., Buenos Aires, Argentina. Electric dental lathe. 1,856,869; May 3.
Griscom, Samuel B. (See Evans, R. D., Wagner, and Griscom.)
Griscom-Russell Company, The. (See Brown, Stanley, assignor.)
Groh, Andrew, New York, N. Y. Electric sealer. 1,856,414; May 3.
Grondin, George T., Collinsville, Conn. Collapsible chair. 1,856,759; May 3.
Groom, George F., assignor to Enger-Kress Company, West Bend, Wis. Bill fold. 1,856,703; May 3.
Groomes, Reister R. (See Enlows, E. M. A., Brooks, and Groomes.)
Grossman, Paul. (See Bally, O., Grossman, and Felix.)
Grummert, Ernest C., Plymouth, Nebr. Air inlet for tanks. 1,856,184; May 3.
Guenard, José L. M., Ponce, Porto Rico. Token receptacle for bottles and jars. 1,856,550; May 3.
Guild, Waldo J., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,856,185; May 3.
Gustin, Daniel S., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Incandescent electric lamp. 1,856,247; May 3.
Gutherlet, Charles J., Philadelphia, Pa. Pyraline desk pad. 1,856,160; May 3.
Gutmann, Paul F., assignor to Mississippi Glass Company, St. Louis, Mo. Apparatus for making wire glass. 1,856,630; May 3.
Guy, Sydney S., Wolverhampton, England. Front wheel drive system for motor vehicles. 1,856,831; May 3.
Haber, Eugen, Berlin-Charlottenburg, Germany. Apparatus for building iron-plate chimneys from several sections. 1,856,384; May 3.
Haberl, Paul A., Denver, Colo. Fishing rod tip. 1,856,551; May 3.
Hackenberg, Nafanaiel. (See Hackenberg, Stanislav, assignor.)
Hackenberg, Stanislav, assignor of one-half to N. Hackenberg, San Francisco, Calif. Turbine and attachment therefor. 1,856,631; May 3.
Hadamik, Frank, and N. Libertore, Union, N. Y. Carbide rocket. 1,856,552; May 3.
Hadley, Harlan A., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Weighing scale. 1,856,704; May 3.
Haglund, Hakon H., Flushing, assignor to The Western Union Telegraph Company, New York, N. Y. Corrector system for synchronous telegraph apparatus. 1,856,331; May 3.
Haines, George E., assignor to L. H. Gilmer Company, Philadelphia, Pa. Buoyant bathing belt. 1,856,632; May 3.
Hale Brothers Limited. (See Hale, Harry R., assignor.)
Hale, Harry R., assignor to Hale Brothers, Limited, Montreal, Quebec, Canada. Electrical socket. 1,856,248; May 3.
Hall, William E., Monroe, Mich., assignor to F. M. Longbecker, Delta, Ohio. Automatic carton packing machine. 1,857,082; May 3.
Halpenny, Richard R. (See Merkel, A., and Halpenny.)
Halperin, H., and K. W. Miller, Chicago, Ill. Sheath bonding system. 1,856,480; May 3.
Halperin, Herman, and A. P. Thoms, Chicago, Ill. Treating insulating sleeve. 1,856,415; May 3.
Halvorson, Cromwell A. B., Lynn, Mass., assignor to General Electric Company. Circuit controller. 1,856,832; May 3.
Hamilton, Baxter P., River Edge, N. J., and W. T. Rea, Flushing, N. Y., assignors to American Telephone and Telegraph Company. Radio receiving apparatus. 1,856,213; May 3.
Hammer, Forrester L., assignor to Malleable Iron Fittings Company, Branford, Conn. Housing for oil burners and the like. Des. 86,883; May 3.
Hammerson, Frank, Maywood, Calif. Derrick finger attachment. 1,856,833; May 3.
Hammond Clock Company, The. (See Stephens, George H., assignor.)
Hammond, E. S., Inc. (See Brear, O. W., assignor.)
Hancock, G. Allan. (See Kelley, William V. D., assignor.)
Handelan, Daniel. (See Jordan, Wayne D., assignor.)
Hanneman, Walter M. (See Christensen, N. V., and Hanneman.)
Hanson, Dorothy D., Coeur d'Alene, Idaho. Cooling receptacle. 1,857,018; May 3.
Haring, Ulysses G., assignor of one-fourth to G. Escher, Washington, D. C., and one-fifth to H. R. Kuehner, Laurel Springs, N. J. Water closet. 1,856,553; May 3.
Harney, Francis W., assignor to The Upson Company, Lockport, N. Y. Backing for plastic material. 1,856,633; May 3.
Harnischfeger Corporation. (See Standfuss, Ernest R., assignor.)
Harris, Jesse, assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Induction electricity meter. 1,856,554; May 3.
Harris, Jesse, assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Induction electricity meter. 1,856,555; May 3.
Harris, Joseph R., jr., Los Angeles, Calif. Color photography. 1,857,083; May 3.
Harrison, Alfred F. (See Peard, Oliver L. and S. M., and Harrison.)
Harrison, John S., Cleveland Heights, assignor to The Standard Oil Company, Cleveland, Ohio. Liquid heating and vaporizing. 1,856,074; May 3.
Hartig, Jeannette S., New York, N. Y. Confection container. 1,856,634; May 3.
Hassell, Marian E., and E. W. Gorham, Miami, Fla., assignors of three-fourths to said Hassell and one-fourth to said Gorham. Fuse indicator. 1,857,019; May 3.
Hatcher, Ernest C., Northwood, assignor to J. Stone & Company Limited, Deptford, England. Power transmission gearing. 1,857,020; May 3.
Hatfield, Clark W., Seattle, Wash. Tile and pipe form. 1,856,834; May 3.
Haubach, Ferdinand. (See Wietzel, G., and Haubach.)
Haupt, Hans, Berlin, Germany. Telescopically collapsible umbrella. 1,856,385; May 3.
Hauser, Fred. (See Sommer, K. W., and Hauser.)
Hauser, Martin, assignor to General Heating Specialty Company, Kansas City, Mo. Steam trap. 1,856,762; May 3.
Hauserman, E. F., Company, The. (See Hauserman, E. F., Mowery, and Bohnsack, assignors.)
Hauserman, Earl F., Cleveland Heights, L. D. Mowery, Cleveland, and J. A. Bohnsack, East Cleveland, assignors to The E. F. Hauserman Company, Cleveland, Ohio. Metallic wall structure. 1,856,995; May 3.
Hawe, William F. M., Crafton, Pa., assignor to Fostoria, Inc., New York, N. Y. Globe. Des. 86,884; May 3.
Haybeck, Robert, Philadelphia, Pa. Pick-up for air mail exchange. 1,856,848; May 3.
Hayes, Frank A., Middletown, N. J. Friction transmission. 1,856,249; May 3.
Hays, Donald S., Alhambra, Calif. Power-transferring mechanism. 1,856,835; May 3.
Hayward, George A., Watertown, Conn. Vegetable masher. 1,856,954; May 3.
Hazeltine Corporation. (See MacDonald, William A., assignor.)
Heald Machine Company, The. (See Guild, Waldo J., assignor.)
Heald Machine Company, The. (See Scaife, Joseph D., assignor.)
Heat and Draft Control, Inc. (See Green, M., assignor.)
Hedgcock, William C., assignor to American Steel Foundries, Chicago, Ill. Car truck. 1,856,250; May 3.
Heene, George W., Cleveland, Ohio. Embossing and vending apparatus. 1,856,760; May 3.
Heene, George W., Cleveland, Ohio. Embossing and vending apparatus. 1,856,761; May 3.
Hein, Hermann, Bremen, Germany. Landing device for aircraft. 1,856,332; May 3.
Heinemann, Otto C., Milwaukee, Wis. Ticket holder and punch. 1,856,705; May 3.
Heinemeyer, Ludwig. (See Estorff, W., and Heinemeyer.)
Heise, George W., Lakewood, Ohio, assignor to National Carbon Company, Inc. Primary battery. 1,856,386; May 3.
Heise, Roscoe S., Dayton, Ohio. Relief valve. 1,856,996; May 3.
Heiser, Henry C., assignor to The Astrup Company, Cleveland, Ohio. Awning arm construction. 1,856,161; May 3.
Heiser, Henry D. (See Mutersbaugh, G. H., Zucker, Heiser, and Shope.)
Hellman, Ernest R., Detroit, Mich. Making piston rings. 1,856,279; May 3.
Helms, Harry W., Detroit, Mich., assignor to Highway Trailer Company, Edgerton, Wis. Collapsible cover for dump body vehicles. 1,856,280; May 3.
Helms, Harry W., Detroit, Mich., assignor to Highway Trailer Company, Edgerton, Wis. Cover for dump body vehicles. 1,856,281; May 3.
Hemeon, Wesley C. L., assignor to Rockland & Rockport Lime Corporation, Rockland, Me. Producing lime product. 1,856,763; May 3.
Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Embroidering. 1,856,556; May 3.
Henley's, W. T., Telegraph Works Company Limited. (See Judge, E. E., and Fry, assignors.)
Henry, Gerald J., Boston, Mass., assignor to Pass & Seymour, Inc., Solvay, N. Y. Locking socket. 1,856,214; May 3.
Henshaw, Daniel M. (See Watson, S. G., and Henshaw.)
Hercules Powder Company. (See Bacchus, Thomas W., assignor.)
Hercules Powder Company. (See Lickle, Charles H., assignor.)
Herkert, Frederick, jr., St. Louis, Mo. Wardrobe trunk. 1,856,913; May 3.
Herren, Earl R., Lorain, Ohio. Mechanically operated brake. 1,856,635; May 3.
Herrington, William H. (See Jordan, T. M., and Herrington.)

Herrmann, Willy O., and H. Deutsch, assignors to Consortium für Elektrochemische Industrie, Munich, Germany. Manufacture of organic acid anhydrides. 1,856,251; May 3.
Hertel, Otto H., Chicago, Ill. Carbonizing coal. 1,856,252; May 3.
Hertsch, Bernhard A., Rockledge, Pa. Grease trap or interceptor. 1,856,099; May 3.
Herz, Alexander. (See Conti, Eugene, assignor.)
Herz, Richard, Frankfort-on-the-Main, and W. Zerweck, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Incorporated, New York, N. Y. Making vat dyestuffs of the anthanthrone series. 1,856,215; May 3.
Hickok, George F., Burlingame, Calif. Lubrication of pintle and hinge sections of pruning shears. 1,857,048; May 3.
Hicks, William P., Webster Groves, assignor to Sefton National Fibre Can Co., Maplewood, Mo. Container. 1,857,021; May 3.
Highway Trailer Company. (See Helms, Harry W., assignor.)
Hill, William E. (See Frederick, R. E., and Hill.)
Hills, Ernest E., Oshkosh, Wis. Frame for heated double glass windshields. 1,856,132; May 3.
Hingley, Thomas P., London, England. Tube coupling. 1,857,022; May 3.
Hitchcock, Guy F., Houston, assignor of one-third to T. H. Meeks and one-third to J. L. Tomlinson, Harris County, Tex. Air release valve. 1,856,914; May 3.
Hlavac, Anthony. (See Howsam, H. C., and Hlavac.)
Hodgman, Willis K., jr., Taunton, Mass. Dry pipe valve. 1,856,333; May 3.
Hodgson, Howard E., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electromagnetic clutch. 1,856,481; May 3.
Hoe, R., & Co. (See Zuckerman, Adolph M., assignor.)
Hoenshel, Paul M., Port Mayaca, assignor to Mayaca Company, Miami, Fla. Combined irrigation and drainage pump. 1,856,387; May 3.
Hoffman, John F., assignor to Baker Ice Machine Co. Inc., Omaha, Nebr. Temperature responsive regulating valve. 1,856,334; May 3.
Hoffoss, John E., assignor to W-K-M Company, Inc., Houston, Tex. Casing elevator. 1,856,636; May 3.
Hofmann, Fritz, Breslau, and M. Dunkel, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preservation of oils. 1,856,186; May 3.
Hoke, Frank, and Y. F. Clark, assignors to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind. Hopper gas eliminator. 1,856,557; May 3.
Holcomb & Hoke Manufacturing Company. (See Hoke, F., and Clark, assignors.)
Holcomb, Myron D., Hurley, Wis. Attaching tools to holders. 1,856,706; May 3.
Holley Safety Window Inc. (See Boyle, N. T., and Slattery, assignors.)
Hollinger, William M., Harrisburg, assignor to C. C. Nickel and B. S. Duncan, Duncannon, Pa. Casket-transferring device. 1,856,637; May 3.
Holmes, Elbridge R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tension for yarn winders. 1,856,188; May 3.
Holmes, Robert W. (See McMillan, John A., assignor.)
Holmes, W. C., and Company. (See Watson, S. G., and Henshaw, assignors.)
Holmquist, Ernst R. M., Lilla Edet, Sweden. Vehicle. 1,856,075; May 3.
Holy, Mitchel E., assignor, by mesne assignments, to Container Corporation of America Chicago, Ill. Box construction. 1,856,282; May 3.
Hood, Harry M., Chicago, Ill., assignor to Featheredge Rubber Company Inc. Molding sponge rubber articles. 1,857,085; May 3.
Hopkins, George W., Cleveland, Ohio. Automatic control apparatus. 1,856,638; May 3.
Hopkins, James D., Midway, Ky. Magnetic axle puller. 1,857,049; May 3.
Hopwood, Ernest P., Portland, Oreg. 1,856,810; May 3.
Horst, Horst-Dietrich v. d., Mannheim, and R. Wietzel, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of acetaldehyde. 1,856,639; May 3.
Horton, Erwin C. (See Hueber, H., and Horton.)
Horton, Joseph W., Millburn, N. J., assignor to Western Electric Company, Inc., New York, N. Y. Frequency measuring circuit. 1,856,707; May 3.
Hoseason, Donald B., Bowden, England, assignor to Associated Electrical Industries Limited. Dynamo electric machine. 1,857,023; May 3.
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Sealing ring and making it. 1,856,335; May 3.
Howard, Guy C., Wausau, Wis. Treating waste sulphite liquor. 1,856,558; May 3.
Howell, Sylvester, Fairbanks, Alaska. Method and apparatus for underground hydraulic mining. 1,856,836; May 3.
Howsam, Hilyard C., and A. Hlavac, assignors to Hubbard Spool Company, Chicago, Ill. Spool or reel. 1,856,253; May 3.
Hoyer, Heinrich. (See Fellmer, E., and Hoyer.)
Hubbard Spool Company. (See Howsam, H. C., and Hlavac, assignors.)
Hudson, Thomas K. (See Wells, Thomas P., assignor.)
Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Windshield wiper. 1,856,416; May 3.
Hug, Christian J., Highland, Ill. Spring construction. 1,856,764; May 3.
Hughes Tool Company. (See Fletcher, Harold W., assignor.)
Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,856,765; May 3.
Hulme, John G., Chisholm, Minn. Steam bath furnace. 1,857,024; May 3.
Hummel & Downing Co. (See Ethridge, Albert S., assignor.)
Hunt, John R. (See Rudolph, W. F., Hunt, and Cunningham.)
Hunt, John R., Los Angeles, Calif. Movement shift and focusing tube arrangement for motion picture cameras. 1,856,482; May 3.
Hunter, Harry H., Attica, Kans. Grain sampler. 1,856,766; May 3.
Hurxthal, Alpheus O., assignor to Proctor & Schwartz Electric Company, Philadelphia, Pa. Thermostatic element. 1,857,025; May 3.
Hutchings, LeRoi E., Buffalo, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Card index or record device. 1,856,388; May 3.
Hutchins Car Roofing Company. (See Franck, Edwin G., assignor.)
Hyland, William A., East Moline, assignor to Deere & Company, Moline, Ill. Fertilizer distributor. 1,856,417; May 3.
Hyman, Henry. (See Muldoon, Bernard F., assignor.)
Hysing, Erik G., assignor to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden. Striking tool. 1,856,336; May 3.
I. G. Farbenindustrie Aktiengesellschaft. (See Hofmann, F., and Dunkel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Horst, Horst-Dietrich v. d., and Wietzel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Wietzel, G., and Haubach, assignors.)
Ideal Roller & Manufacturing Company. (See Walters, Fred G., assignor.)
Impey, Francis L., assignor to Morland & Impey Limited, Birmingham, England. Loose leaf binder. 1,856,337; May 3.
Inaki, Toyojiro, assignor of one-half to H. Sumida, Fresno, Calif. Nasal irrigator. 1,856,811; May 3.
Industrial Patents Corporation. (See Lohner, C. L., and Covey, assignors.)
Ingersoll-Rand Company. (See Bebbington, William E., assignor.)
Ingersoll-Rand Company. (See Blank, Charles E., assignor.)
Ingersoll-Rand Company. (See Parkhill, Mortimer S., assignor.)
Ingraham, Dudley S., assignor to The E. Ingraham Co., Bristol, Conn. Wrist-watch case. 1,856,389; May 3.
Ingraham, E., Co., The. (See Ingraham, Dudley S., assignor.)
International Derrick & Equipment Company, The. (See Bloss, R. R., and Pfeil, assignors.)
International Motor Company. (See Davis, Floyd E., assignor.)
International Motor Company. (See Loeffler, Bruno, assignor.)
International Motor Company. (See Masury, Alfred F., assignor.)
International Motor Company. (See Masury, A. F., and Froesch, assignors.)
International Precipitation Company. (See Anderson, Evald, assignor.)
International Precipitation Company. (See Rüder, Heinrich B., assignor.)
International Projector Corporation. (See Dina, Augusto, assignor.)
International Projector Corporation. (See Porter, Everett M., assignor.)
International Silver Company. (See Morrison, George, assignor.)
Inventors' Patent Holding Company. (See Mahr, Julius A., assignor.)
Irvin, Richard, Knoxville, Pa. Skid preventing device. 1,856,915; May 3.
Irwin, Nellie A., Waterloo, Quebec, Canada. Pulley. 1,856,993; May 3.
Isbell, John A., Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Power plate lockup. 1,856,162; May 3.
Isom, Edward W., Scarsdale, assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,856,640; May 3.
Ives Corporation, The. (See De Biase, Guido, assignor.)
Jackson, Edwin C., St. Louis, Mo., assignor to General Steel Castings Corporation, Granite City, Ill. Railway vehicle underframe. 1,856,338; May 3.
Jackson, Frank P., San Antonio, Tex. Advertising attachment for weighing scales. 1,856,339; May 3.
Jacobs, Frank, Prairie, Idaho. Trailer control. 1,856,997; May 3.

Jaeger, Max, Wesselburen, Germany, assignor to H. O. S. Krüger, Washington, D. C. Machine for digging up ground. 1,856,216; May 3.
Jasper, Tobias G., Brooklyn, N. Y. Treadle for pressing machines and the like. 1,856,767; May 3.
Jay Manufacturing Company. (See Van Tuyl, Thomas, assignor.)
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Spiral mounted lens disk. Re18,452; May 3.
Jenkins Laboratories. (See Jenkins, Charles F., assignor.)
Jewett, Joseph E., Buffalo, assignor to National Aniline and Chemical Company, Inc., New York, N. Y. Electrical switch. 1,856,254; May 3.
Jirka, Raymond L., Western Springs, Ill. Brake head and shoe assembly. 1,856,812; May 3.
Joerissen, Carl A., Washington, D. C. Typewriting machine. 1,856,340; May 3.
Johnson, Bryan G., et al. (See Thomas, William M., assignor.)
John, Erling, assignor to Firm: Odda Smelteverk, A/S., Odda, Norway. Producing calcium nitrate and ammonium salts from phosphate rock and like phosphate material. 1,856,187; May 3.
Johnson, Frank, and E. G. Schubert, Detroit, assignors to Ford Motor Company, Dearborn, Mich. Clutch lubricating means. 1,856,189; May 3.
Johnson, George T., Denver, Colo. Fuel intake for internal combustion engines. 1,856,908; May 3.
Johnson, Leonard W., Batavia, Ill. Extension pilot for reamers. 1,856,708; May 3.
Johnson, Louis M., Concord, Calif. Toothpick holder. 1,856,559; May 3.
Johnson, Sigurd N., and C. E. Birch, assignors to Delco-Remy Corporation, Anderson, Ind. Assembling apparatus. 1,856,768; May 3.
Johnson, Verner A. (See Schofield, J. C., and Johnson.)
Johnson, Wilfred G., assignor to The Colson Company, Elyria, Ohio. Velocipede. 1,856,255; May 3.
Johnston, Arthur D., Pampa, Tex. Controlling the liquid level in containers. 1,857,051; May 3.
Jones, Alfred E., Spokane, Wash. Eyeglasses. 1,856,163; May 3.
Jones, Daniel L., Orange, assignor to J. H. Balmer Co., Newark, N. J. Fixture supporting wedge. 1,857,050; May 3.
Jones, Homer W., Williamsville, N. Y., assignor to The Linde Air Products Company. Torch head. 1,856,560; May 3.
Jonas, Julius, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Ground detecting electric circuits. 1,856,916; May 3.
Jones, Louis C., Greenwich, Conn., assignor to Chemical Engineering Corporation, New York, N. Y. Production of nitrogen-hydrogen gas mixtures free from oxygen. 1,856,955; May 3.
Jones, Walter L., Arlington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener stud member. 1,856,813; May 3.
Jones, Walter L., Arlington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener. 1,856,814; May 3.
Joos, Bernard. (See Tisza, E. T., and Joos.)
Jordan, Henry B., Staunton, Va. Projecting machine. 1,856,956; May 3.
Jordan, Thomas M., and W. H. Herrington, Kountze, Tex. Sucker rod coupling. 1,856,917; May 3.
Jordan, Wayne D., assignor, by mesne assignments, to Daniel Handelan, Minneapolis, Minn. Humidifier. 1,856,918; May 3.
Judge, Ernest E., and F. H. Fry, Gravesend, Kent, assignors to W. T. Henley's Telegraph Works Company Limited, London, England. Press for the extrusion of metals. 1,856,483; May 3.
Jumonville, Russell A., New Orleans, La. Variable lift wing. 1,856,957; May 3.
Kallscher, Georg, and R. Schuele, Frankfort-on-the-Main, and H. Schindhelm, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Wool azo dyestuffs and making same. 1,856,217; May 3.
Kalo, Albert, Columbus, Ohio. Safety valve for gas burners. 1,856,641; May 3.
Kalvin, Jacob. (See Lowenthal, M., and Kalvin.)
Kaplitzky, Myrtle M., Cleveland, Ohio. Hose supporter. 1,856,958; May 3.
Karollus, Edmund, Vienna, Austria. Fire-damp proof time fuse. 1,856,642; May 3.
Karolus, August, Leipzig, Germany, assignor to Radio Corporation of America. Synchronizing arrangement. 1,856,076; May 3.
Karplus, Eduard, Berlin-Tempelhof, Germany. Coupling arrangement for compensated high frequency amplifiers. 1,856,709; May 3.
Kartvelichvili, Alexandre, and E. Chagnlard, assignors to Chagnkart International Aviation Corporation, New York, N. Y. Coupling device. 1,856,870; May 3.
Kast, Edward R., Pearl River, assignor to Dexter Folder Company, New York, N. Y. Sheet feeding apparatus. 1,856,190; May 3.
Kay, Norman, Jobos, Porto Rico. Cane mill roll. 1,856,484; May 3.
Kayser Hosiery Motor-Ment Corporation. (See Walker, George T., assignor.)
Keeley, Frederick J., Streetly, assignor to The General Electric Company Limited, London, England. Electrical switch gear. 1,856,100; May 3.
Keesling, Hector. (See Peterson, O. W., Keesling, and Kurtz.)
Keil, Elmer W., Milwaukee, Wis. Ignition system. 1,856,561; May 3.
Keith, David F., Cleveland Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Preventing condensation in refrigerator walls. 1,857,086; May 3.
Keith, Irving L., Haverhill, Mass. Cementing parts of shoes. 1,856,562; May 3.
Keith, Percy C., jr., Bernardsville, N. J., assignor to The M. W. Kellogg Company, New York, N. Y. Rectifying petroleum oils. 1,856,283; May 3.
Kelley, William V. D., Hollywood, assignor of one-half to G. A. Hancock, Los Angeles, Calif. Film-treating apparatus. 1,856,390; May 3.
Kellogg, M. W., Company, The. (See Keith, Percy C., jr., assignor.)
Kelly, Clyde W., assignor to Detroit Steel Products Company, Detroit, Mich. Operator for windows. 1,856,256; May 3.
Kelly, John W., Long Beach, Calif. Musical novelty. 1,856,164; May 3.
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kempf, Louis W. (See Archer, R. S., and Kempf.)
Kent, Everett E. (See Doerfler, Alfred M., assignor.)
Kenworthy, Howard A., Woodbury, Conn. Annealing furnace. 1,856,563; May 3.
Keppler, Ernest K., Oakland, Calif. Locking device. 1,856,391; May 3.
Kevelson, Max., New York, N. Y., assignor to Condenser Corporation of America, Jersey City, N. J. Impregnated condenser unit. 1,856,892; May 3.
Kienzle Uhrenfabriken Aktiengesellschaft. (See Riegger, Paul, assignor.)
Kilgore Manufacturing Company, The. (See Case, Edward R., assignor.)
King, C. G., & Co. (See Gibbons, Winifred L., assignor.)
King, George B., Edgbaston, Birmingham, England. Box, case, or holder for gramophone needles. 1,857,052; May 3.
King, Walter E. (See Martin, J. R., and King.)
Kinzie, Phillip A. (See McClellan, L. N., Kinzie, Savage, and Day.)
Kip, Frederic E., Montclair, N. J. Golf bag. 1,856,837; May 3.
Kipper, Joseph. Meat mold. 1,856,564; May 3.
Kirkbride, Walter H., San Francisco, Calif. Boring-jig for railway crossties. 1,856,485; May 3.
Kiss, Joseph, River Forest, assignor of one-half to A. Schirmacher, Oak Park, Ill. Airplane safety device. 1,856,999; May 3.
Klein, Carl A., Brimsdown, and R. S. Brown, London, England. Titanium pigments and preparation thereof. 1,856,565; May 3.
Klein, Carl A., Brimsdown, and R. S. Brown, London, England. Titanium pigments and preparation thereof. 1,856,566; May 3.
Kleinert, Theodor, and K. Tuyenthal, Vienna, Austria. Decomposing vegetable fibrous matter for the purpose of simultaneous recovery both of the cellulose and of the incrusting ingredients. 1,856,567; May 3.
Kleschka, John J., Waterbury, Conn. Hydraulic transmission mechanism. 1,857,000; May 3.
Knecht, Oskar, Binningen, near Basel, and E. Stocker, assignors to the Firm: Chemical Works formerly Sandoz, Basel, Switzerland. Increasing the luster of effect threads. 1,856,815; May 3.
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,856,871; May 3.
Knowles, Albert E., Heswall, England. Electrolytic apparatus. 1,856,218; May 3.
Knowles, Albert E., Heswall, Cheshire, England. Electrolytic cell. 1,856,393; May 3.
Koch, Lawrence E., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Safety electric switch. 1,856,077; May 3.
Koeberle, Karl. (See Wolff, H., Kunz, and Koeberle.)
Kogan, Jacob J. (See Subkow, P., and Kogan.)
Kogan, Jacob J., assignor to Union Oil Company, of California, Los Angeles, Calif. Automatic pressure retainer for gas lift wells. 1,856,872; May 3.
Kohler, G. A. Edward. (See Kohler, John B., assignor.)
Kohler, John B., assignor to G. A. E. Kohler, Chicago, Ill. Paper delivering device. 1,856,341; May 3.
Koken Companies. (See Carter, Lionel A., assignor.)
Kookogey, Frederick F., New York, N. Y. Wing for aeroplanes. 1,856,643; May 3.
Koppers Company, The. (See Denig, Fred, assignor.)
Koppers Company, The. (See Totzek, Friedrich, assignor.)
Kopsky, Joseph G., Union City, N. J. Hub for crank hangers and wheels of bicycles. 1,856,959; May 3.
Kotzen, E. Louis. (See Pfueller, Bruno E., assignor.)
Kränzlein, Georg, M. Corell, and H. Vollmann, Frankfort-on-the-Main-Hoechst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Process of preparing vat dyestuffs. 1,856,710; May 3.

Kränzlein, Georg, and H. Greune, Frankfort-on-the-Main-Hochst, and G. Langbein, Hofheim-in-Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Benzanthrone-derivatives and preparing them. 1,856,711; May 3.
Kratz, Franz, Stuttgart, Germany, assignor to Servo-Frein Dewandre Societe Anonyme, Liege, Belgium. Brake control device. 1,856,342; May 3.
Kratz, Franz, Stuttgart, Germany, assignor to Servo-Frein Dewandre, Societe Anonyme, Liege, Belgium. Servo-mechanism for brakes. 1,857,053; May 3.
Krebs Pigment & Color Corporation. (See Seguine, William, jr., assignor.)
Krebs Pigment & Color Corporation. (See Taylor, Edward A., assignor.)
Kroef, Johan W., Rotterdam, Netherlands. Apparatus for trimming and spreading grain, ore, and the like. 1,856,343; May 3.
Krüger, Hedwig O. S. (See Jaeger, Max, assignor.)
Kuehner, Herman R. (See Haring, U. G., assignor.)
Kuert, Ira J., Los Angeles, Calif. Elevating conveyer. 1,856,873; May 3.
Kugel, Max. (See Bruns, H., Baumann, and Kugel.)
Kunz, Max A. (See Wolff, H., Kunz, and Koeberle.)
Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,856,712; May 3.
Kurtz, Plunkett I. (See Peterson, O. W., Keesling, and Kurtz.)
Kurtz, Ralph W., Coshocton, Ohio, assignor to James B. Clow & Sons, Chicago, Ill. Radiator. 1,856,101; May 3.
L. C. L. Corporation, The. (See Woodruff, Graham C., assignor.)
Lade, Otto M., Cleveland, Ohio. Tubular clamp. 1,857,121; May 3.
Ladevèze, Félix. (See Miquel, G., and Ladevèze.)
La Hache, Sam L., and F. B. Monar, Washington, D. C. Radio power installation. 1,856,568; May 3.
Lake, Clair D., Binghamton, assignor to The Tabulating Machine Company, Endicott, N. Y. Accounting machine. 1,856,418; May 3.
Lancaster Iron Works, Inc. (See Luce, Grafton E., assignor.)
Landen, Bernard, Oakland, Nebr. Iceless cooler. 1,856,919; May 3.
Langbein, Gerhard. (See Kranzlein, G., Greune, and Langbein.)
Lange, Everett H., Bridgeton, Mo. Aeroplane. 1,856,219; May 3.
Langenberg, Frederick C., Edgewater Park, N. J., assignor to United States Pipe & Foundry Company, Burlington, N. J. Manufacture of centrifugal pipe molds. 1,856,874; May 3.
Lapkin, Harry D., San Francisco, Calif. Sewing kit. 1,856,486; May 3.
Larkins, Carl J., assignor to The Aerocrete Corporation of America, New York, N. Y. Nailing aerocrete and producing the same. 1,856,644; May 3.
Larsen, Arthur T., Duluth, Minn. Storm sash fastener. 1,856,569; May 3.
Larson, La Verne E., Waukesha, Wis. Combined advertising and price display board. 1,856,960; May 3.
Latham Machinery Company. (See Metcalf, I. R., and Pelland, assignors.)
Latshaw, Charles E., Minneapolis, Minn. Culinary implement. 1,856,769; May 3.
Laur, Hermann, Kehl, Germany. Link for serial lamp supports. 1,857,109; May 3.
Lauter, Fred L., New York, N. Y. Bearing and shaft. 1,856,770; May 3.
Lava Crucible Company. (See White, Harold E., assignor.)
Lava Crucible Company of Pittsburgh. (See South, Richard P., assignor.)
Lavole, Alphonse J., assignor to General Motors Corporation, Detroit, Mich. Divided transversely mounted change speed for front wheel drives. 1,856,284; May 3.
Lawson, Lawrence E., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge and for operating same. 1,856,849; May 3.
Leahy, Frank E., assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio. Furnace. 1,856,645; May 3.
Lease, Art A., and J. F. Peters, jr., Lead, S. Dak. Bore hole surveying instrument. 1,856,220; May 3.
Lebeau, Yves G., assignor to Societe A Responsabilite Limitee Chambet & Cie, Paris, France. Protective stocking. 1,856,102; May 3.
Lechelt, Theodor. (See van Alphen, J. C., ter Haak, and Lechelt.)
Lecomte, Gustave, Roussillon, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Lubrication of textile fibers. 1,856,713; May 3.
Ledeboer, John W., assignor to Ambler Asbestos Shingle & Sheathing Company, Ambler, Pa. Cement product. 1,856,570; May 3.
Lederer, Ernest A., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Rectifier. 1,856,257; May 3.
Lederer, Ernest A., East Orange, N. J., assignor to Westinghouse Lamp Company. Electron discharge device with cæsiated cathode. 1,856,258; May 3.
Lee, Fred W., et al. (See Thomas, William M., assignor.)
Lee, Ralph L., assignor to Delco-Light Company, Dayton, Ohio. Domestic appliance. 1,856,487; May 3.
Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Oscillating joint. 1,856,646; May 3.
Le Fever, Charles F., assignor to Daisy Manufacturing Company, Plymouth, Mich. Gun. 1,856,285; May 3.
Leonard, Howard M., South Bend, Ind., assignor to Gernandt Motor Corporation, Chicago, Ill. Fuel feeding means. 1,856,078; May 3.
Leonard, Joseph E., Berkeley, Calif., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner floor tool. 1,856,875; May 3.
Leonard-Rooke Company. (See Clarke, Charles R., assignor.)
Leopold, Otto, Wernigerode, Harz, Germany. Sound recording and reproducing apparatus. 1,856,344; May 3.
Lettermann, Adolf, Berlin-Tempelhof, Germany. Device for taking foot-impressions. 1,856,394; May 3.
Le Vesconte, Harold J., Western Springs, assignor to Union Special Machine Company, Chicago, Ill. Thread controller for sewing machines. 1,856,221; May 3.
Lewis, Frank E., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Garage elevator. 1,856,876; May 3.
Libbey-Owens-Ford Glass Company. (See Drake, J. L., assignor.)
Libbey-Owens-Ford Glass Company. (See Stahle, Erik G., assignor.)
Liberatore, Nick. (See Hadamik, F., and Liberatore.)
Lickle, Charles H., assignor to Hercules Powder Company, Wilmington, Del. Blasting cap. 1,856,103; May 3.
Lieberknecht, Paul, assignor of one-half to Maschinenfabrik-Einsiedel, Gesellschaft mit beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Vibration free drive for shaft and cam actuated member of flat-full fashioned machines. 1,857,099; May 3.
Ligon, Robert A., Fort Stockton, Tex. Booster pump for windmills. 1,857,026; May 3.
Lilly, Eli, and Company. (See Shonle, Horace A., assignor.)
Linde Air Products Company, The. (See Jones, Homer W., assignor.)
Lindemann, Bruno, Berlin, Germany. Heat exchanging container. 1,857,087; May 3.
Lindgren, Bror J., assignor to Niagara Machine and Tool Works, Buffalo, N. Y. Brake. 1,856,345; May 3.
Lindsay Wire Weaving Company. (See Sutton, Walter C., assignor.)
Lipe, Charles W. (See Currier, John C., assignor.)
Little, Arthur D., Incorporated. (See Wheeler, T. L., and Carpenter, assignors.)
Liverance, Frank E., jr. (See Signor, Alfred J., assignor.)
Livesay, Robert C., assignor to Deere & Company, Moline, Ill. Cutter bar for harvesters. 1,856,488; May 3.
Lock Joint Pipe Company. (See Mitchell, John C., assignor.)
Locke, George A., Glenwood, assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Printing telegraph radial switching system. 1,856,714; May 3.
Locke, Sylvanus D., Bridgeport, and C. R. Doach, Stratford, Conn., assignors, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating apparatus. Re18,450; May 3.
Locomotive Firebox Company. (See Seley, Charles A., assignor.)
Loeber, Edgar O., Cleveland, Ohio. Receptacle. 1,856,877; May 3.
Loeffler, Bruno, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Combined oil cooler and cleaner. 1,856,771; May 3.
Logan Co. Inc. (See Gotthardt, Henry R., assignor.)
Lohner, Carl L., and J. E. Covey, assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Refrigerated food package. 1,856,920; May 3.
Lollo, Arthur, Brooklyn, N. Y. Shaker tray. Des. 86,885; May 3.
Lonergan, Simon J. (See Morley, J. P., and Lonergan.)
Lonergan, Simon J., and H. E. Ginther, assignors to Bastian-Morley Co., La Porte, Ind. Control mechanism. 1,856,489; May 3.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Cont. Des. 86,886; May 3.
Long, Lloyd A. (See Showers, E. A., and Long.)
Longnecker, Fred M. (See Hall, William E., assignor.)
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,856,395; May 3.
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Joining device. 1,856,396; May 3.
Lord, Charles R., et al. (See Christie, Walter, assignor.)
Lord, Hugh C., Erie, Pa. Joint mechanism. 1,856,647; May 3.
Lorentowicz, Henry R., Bloomfield, and H. E. Thompson, assignors of one-third to H. Waldman and C. J. Duveneck, trading as Waldman & Duveneck, Newark, N. J. Joint. 1,856,648; May 3.
Lourens, Cornelis, assignor to General Norit Company, Limited, Amsterdam, Netherlands. Treating liquids with active carbons. 1,856,571; May 3.
Lowenthal, Milton, and J. Kalvin, New York, N. Y. Hat form. 1,856,921; May 3.
Lower, Nathan M., Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company, Inc., New York, N. Y. Stoker. 1,856,573; May 3.

Lower, Nathan M., Baltimore, Md., and E. A. Turner, assignors, by mesne assignments, to The Standard Stoker Company, Inc., New York, N. Y. Stoker. 1,856,572; May 3.

Lucas, Harley, assignor of one-half to C. A. Vance, Elmwood, Ill. Tractor wheel. 1,856,838; May 3.

Luce, Grafton E., Chicago, Ill., assignor to Lancaster Iron Works, Inc., Lancaster, Pa. Aligning device. 1,856,574; May 3.

Luddy, James P., Broad Brook, Conn. Golf putting apparatus. 1,856,816; May 3.

Ludwig, Louis, Brooklyn, N. Y. Electric current interrupter. 1,856,878; May 3.

Lufkin, John L., assignor to The Engineering Products Corporation, Inc., New York, N. Y. Eye window. 1,856,879; May 3.

Lundgren, Ludvig L., Youngstown, Ohio. Air mail exchange device. 1,856,490; May 3.

Lundy, Henry M., Spokane, Wash. Grab device. 1,857,110; May 3.

Luppes, Peter, Brooklyn, N. Y. Drain stop valve. 1,857,054; May 3.

Lütolf, Otto, St. Gallen, Switzerland. Stitching of folded sheets into bound volumes. 1,856,346; May 3.

Lyndon, Edward, New York, N. Y. Heat responsive circuit closer. 1,856,715; May 3.

Lyon, Carlos, assignor to G. S. Lyon & Sons Lumber & Mfg. Co., Decatur, Ill. Window construction. 1,856,104; May 3.

Lyon, G. S., & Sons Lumber & Mfg. Co. (See Lyon, Carlos, assignor.)

Lyons, Richard J., Mundelein, Ill. Golf tee. 1,856,250; May 3.

Macadam, John, jr., Cragmere, assignor to Joseph Bancroft & Sons Co., Wilmington, Del. Dyeing machine. 1,857,111; May 3.

Macart, Frederick E., Los Angeles, Calif. Rotary internal combustion engine. 1,856,839; May 3.

MacDonald, James V. (See McCarty, F. L., Ernsbarger, and MacDonald.)

MacDonald, William A., Little Neck, N. Y., assignor to Haxeltine Corporation, Jersey City, N. J. Coupling system. 1,857,055; May 3.

MacPherson, James E., et al. See Merkel, A., and Halpenny, assignors.)

MacPherson, Ray G., et al. (See Merkel, A., and Halpenny, assignors.)

Madsen, Tage, Gottenborg, Sweden. Restricting means for composite piston-packing rings. 1,856,961; May 3.

Magic Way Gas Heating Appliances, Inc. (See Metcalf, John J., assignor.)

Mah, Frank, Vancouver, British Columbia, Canada. Fountain writing instrument. 1,857,027; May 3.

Mahr, Julius A., assignor to Inventors' Patent Holding Company, Minneapolis, Minn. Body for folding baby carriages. 1,856,491; May 3.

Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Trimming device for sewing machines. 1,857,056; May 3.

Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Sewing machine. 1,857,057; May 3.

Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Sewing machine for inserting elastic bands in stitched articles. 1,857,058; May 3.

Majors, Ergo A. (See Schueller, Casper E., assignor.)

Malaguti, Donaid, et al. (See Spadafora, Joseph, assignor.)

Malaguti, Lionel, et al. (See Spadafora, Joseph, assignor.)

Malleable Iron Fittings Company. (See Hammer, Forrester L., assignor.)

Manna, John, Youngstown, Ohio. Curtain support fixture. 1,856,962; May 3.

Mapel, George, Seattle, Wash. Trolling spoon. 1,856,649; May 3.

Marchand, Jean J. M. L., The Hague, and J. C. Andriessen, Rijswijk, Netherlands. Mail distributing apparatus. 1,856,165; May 3.

Marden, William L., Elmhurst, assignor to Neptune Meter Company, New York, N. Y. Air trap for liquid pressure lines. 1,856,105; May 3.

Marden, William L., Elmhurst, assignor to Neptune Meter Company, New York, N. Y. Fluid metering device. 1,856,850; May 3.

Marion Vault Manufacturing Company. (See Biszantz, Fred, assignor.)

Marshall, Helen M. (See Marshall, Matthew M., assignor.)

Marshall, Matthew M., assignor to H. M. Marshall, New York, N. Y. Vent relief valve. 1,856,492; May 3.

Marti, Othmar K. (See Sindeband, M. L., and Marti.)

Martin, Jean, St. Ouen, France. Fire extinguisher. 1,856,575; May 3.

Martin, John R., and W. E. King, assignors of one-half to said Martin and one-half to J. S. Abercrombie, Houston, Tex. Blowout preventer. 1,856,817; May 3.

Martin, Perry S., Harrisonburg, Va. Manifold. 1,856,963; May 3.

Martindell, Frank, Western Springs, Ill. Toy machine gun. Des. 86,887; May 3.

Maschinenfabrik-Einsiedel, Gesellschaft mit beschränkter Haftung. (See Lieberknecht, Paul, assignor.)

Maschmeyer, Hermann, Bad Ems, Germany. Elongated tilting hearth furnace. 1,856,716; May 3.

Massey, Hemsley B., assignor to Railway and Industrial Engineering Company, Greensburg, Pa. High tension electric switch. 1,856,840; May 3.

Massillon Steel Casting Company. (See Nordfeldt, C. E., Ahlquist, and Emery, assignors.)

Master Domestic Refrigerating Company. (See Winter, Joseph W., assignor.)

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Vehicle construction. 1,856,773; May 3.

Masury, Alfred F., New York, N. Y., and C. Froesch, Teaneck, N. J., assignors to International Motor Company, New York, N. Y. Cooling system. 1,856,772; May 3.

Matheson, Donald E. (See Matheson, James H. and D. E.)

Matheson, James H. and D. E., Edgewood, Pa. Device for miniature golf courses. 1,857,059; May 3.

Maxant, Frank, Ayer, Mass. Sheet feeding mechanism for plaiting machines. 1,857,028; May 3.

Maxwell, Charles G., Richmond, Va., assignor to American Cigar Company, New York, N. Y. Stamping or labeling machine. 1,856,576; May 3.

Maxwell, Harry K. (See Schulz, P. A., and Maxwell.)

May, Adam J., assignor, by mesne assignments, to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y. Extensible chair. 1,856,493; May 3.

May Oil Burner Corporation. (See Thomas, John N., assignor.)

Mayaca Company. (See Hoenshel, Paul M., assignor.)

Mayer, Carl A., assignor to American Bosch Magneto Corporation, Springfield, Mass. Loud speaker construction. 1,856,774; May 3.

Mayer, Emil, Vienna, Austria. Photographic film roll. 1,856,717; May 3.

Mayer, Hans. (See Straub, F., Mayer, and Anderau.)

McBerty, Fred P., Warren, Ohio. Electric welder. 1,857,060; May 3.

McCanles, W. W. (See Gibson, R. P., and Woody, assignors.)

McCarty, Frank L., Rock Springs, Wyo.; G. H. Ernsbarger, South Gate, Calif., and J. V. Macdonald, Rock Springs, Wyo., assignors, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill. Feeding mechanism for reciprocating conveyers. 1,856,191; May 3.

McClatchie, Stanley, Cleveland Heights, assignor to Apex Electrical Manufacturing Company, Cleveland, Ohio. Suction cleaner. 1,856,133; May 3.

McClellan, Leslie N., P. A. Kinzie, J. L. Savage, and C. M. Day, assignors to Universal Hydraulic Corporation, Denver, Colo. Combined flow control and check valve. 1,856,222; May 3.

McCormick, Frank H., and G. L. Schwartz, Wilmington, Del., assignors, by mesne assignments, to The Celastic Corporation, Arlington, N. J. Absorbent paper. 1,857,100; May 3.

McCormick, Harold V., Long Beach, N. Y., assignor, by mesne assignments, to Westinghouse Electric Elevator Company, Chicago, Ill. Elevator door operating mechanism. 1,856,718; May 3.

McDermott, Thomas A., and A. Meehan, New York, N. Y.; said McDermott assignor to said Meehan. Buckle for belts or straps. 1,856,776; May 3.

McDonald, Earl E., Kirklin, Ind. Fence protector. 1,856,841; May 3.

McDonnell, Edward J., Groveton, N. H. Fourdrinier machine. 1,856,347; May 3.

McElroy, Frank C., Columbus, Ohio. Lens for motor vehicle head lamps. 1,856,842; May 3.

McGinnis, Delia F., Big Piney, Wyo. Hair waving device. 1,856,494; May 3.

McGinnis, William J. (See Peterson, E. A., and McGinnis.)

McGlone, George M., Bloomington, Ill. Treating fuels. 1,856,495; May 3.

McGloughlin, Alfred I., New York, N. Y. Automobile body. 1,857,061; May 3.

McIntyre, Michael J., Eden, N. Y. Toy moving picture machine. 1,856,719; May 3.

McLaughlin, Herrold L. (See McLaughlin, Wilson L., and H. L.)

McLaughlin, John E., assignors to Owens-Illinois Glass Company, Toledo, Ohio. Mold. 1,856,577; May 3.

McLaughlin, Wilson L. and H. L., assignors of one-fourth to E. L. Twining, Des Moines, Iowa. Carbureting nozzle for burning powdered coal. 1,856,134; May 3.

McLean, Robert A. (See Alt, C. A., and McLean.)

McLintock, Addison W., and J. W. Rice, Champaign, Ill. Educational device. 1,856,650; May 3.

McMillan, John A., assignor of one-third to A. Deadman, and one-third to R. W. Holmes, Moncton, New Brunswick, Canada. Internal combustion engine. 1,856,348; May 3.

McMullen, John, Buffalo, N. Y. Shipping automobiles. 1,856,106; May 3.

McNally, Edward E., Chicago, Ill. Gelatin hand spindle. Re18,448; May 3.

McRae, David F., assignor of three-fourths to A. C. Frisbey, J. G. Petty, and V. Snyder, Salt Lake City, Utah. Safety combination fuse tip. 1,856,419; May 3.

Meaker Company, The. (See Miller, Constantine G., assignor.)

Meehan, Albert. (See McDermott, T. A., and Meehan.)

Meehan, Albert, New York, N. Y. Belt buckle. 1,856,775; May 3.

Meeks, Thomas H., et al. (See Hitchcock, Guy F., assignor.)

Meikle, George S., New York, N. Y. Apparatus for producing combustion. 1,856,720; May 3.

Mellor, George A., Welling, assignor of one-half to The General Electric Company, Limited, London, England. Piston for internal combustion engines. 1,856,107; May 3.

Mercier, Louis M., Neuilly Sur/Seine, France. Pressure indicating indiator. 1,857,062; May 3.

Merkel, Arno, New York, N. Y., and R. R. Halpenny, Bridgeport, Conn., assignors to R. G. MacPherson and J. E. MacPherson, New York, N. Y. Phonograph electrical reproducers. 1,856,922; May 3.

Merrill Aircraft Company. (See Ford, H. C., Ballou, and Balzer, assignors.)

Metcalf, Alpha H., assignor to The Baer & Wilde Company, Attleboro, Mass. Cuff button. Des. 86,888; May 3.

Metcalf, Irving R., Glen Ellyn, and R. L. Pelland, Chicago, Ill., assignor to Latham Machinery Company. Tie stitching machine. 1,856,420; May 3.

Metcalf, John J., assignor to Magic Way Gas Heating Appliances, Inc., National City, Calif. Valve control. 1,856,350; May 3.

Metropolitan Device Corporation. (See Murray, Thomas E., assignor.)

Metzner, Albert W. (See Sherman, J. Q., and Metzner.)

Meyer, John F., Pasadena, Calif. Amusement machine cabinet. Des. 86,889; May 3.

Miami Cabinet Company, The. (See Miller, Harley H., assignor.)

Miller, Adolph H., Minneapolis, Minn. Clock with ringing mechanism. 1,856,496; May 3.

Miller, Charles, New York, N. Y. Shoe. Des. 86,890; May 3.

Miller, Constantine G., Chicago, Ill., assignor to The Meaker Company. Automatic work shift for plating machines. 1,856,497; May 3.

Miller, Harley H., Middletown, Ohio, assignor to The Miami Cabinet Company. Device for mounting glass, mirrors, etc. 1,856,923; May 3.

Miller, Kenneth W. (See Halperin, H., and Miller.)

Miller, Myron, assignor of one-third to B. W. Coltman, Chicago, Ill. Cigar wrapping and banding machine. 1,856,421; May 3.

Miller, William J., Swissvale, Pa. Conveying mechanism. 1,856,498; May 3.

Mills, Lindley E., and H. S. Goodwin, assignors to The Dow Chemical Company, Midland, Mich. Esters of salicylic acid. 1,856,880; May 3.

Milwaukee Electric Railway & Light Company, The. (See Zass, Michael, assignor.)

Miner, Benjamin N., assignor to Miner Super-Safety Gate and Signal System, Inc., St. Louis, Mo. Railway-crossing safety device. 1,856,499; May 3.

Miner Super-Safety Gate and Signal System, Inc. (See Miner, Benjamin N., assignor.)

Miner, W. H., Inc. (See Dentler, Arnold E., assignor.)

Miner, W. H., Inc. (See O'Connor, John F., assignor.)

Minneapolis-Honeywell Regulator Company. (See Koch, Lawrence E., assignor.)

Minnesota Mining & Manufacturing Company. (See Carlton, Richard P., assignor.)

Minnesota Mining & Manufacturing Company. (See Drew, Richard G., assignor.)

Miquel, Gabriel, Reims, and F. Ladevèze, Paris, France. Aeroplane. 1,856,578; May 3.

Mirick, Carlos B., assignor to National Electrical Supply Company, Washington, D. C. Antenna reel. 1,856,223; May 3.

Mississippi Glass Company. (See Gutmann, Paul F., assignor.)

Mitchell, George W., Norwalk, G. O. Shisler, East San Gabriel, and E. E. Myers, Belvedere Gardens, Calif. Boring tool. 1,856,579; May 3.

Mitchell, John C., Bloomfield, assignor to Lock Joint Pipe Company, Ampere, N. J. Pipe joint. 1,856,580; May 3.

Mitchell, John C., Bloomfield, assignor to Lock Joint Pipe Company, Ampere, N. J. Pipe joint. 1,856,581; May 3.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Air conditioning apparatus. 1,856,500; May 3.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Air heating unit. 1,856,924; May 3.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Wall radiator. 1,856,925; May 3.

Modine Manufacturing Company. (See Modine, Arthur B., assignor.)

Mohr, Charles L., Wilmette, Ill. Slug profiling machine. 1,856,108; May 3.

Mollen, Martin J., assignor to Nekoosa-Edwards Paper Company, Port Edwards, Wis. Eccentric for shaking mechanism. 1,856,777; May 3.

Monar, Fred B. (See La Hache, S. L., and Monar.)

Mongillo, Peter. (See Grillo, T., and Mongillo.)

Monk, Reginald H., and L. Firing, Montreal, Quebec, Canada. Production of titanates. 1,856,351; May 3.

Monsanto Chemical Works. (See Carswell, Thomas S., assignor.)

Monteith, Charles N., assignor to Boeing Airplane Company, Seattle, Wash. Tail wheel for aircraft. 1,856,778; May 3.

Montellus, George A., Minneapolis, Minn. Measuring instrument. 1,856,779; May 3.

Moore, Frank H., assignor of one-fourth to H. W. Bladorn, Carlton, Oreg. Windshield warmer. 1,856,651; May 3.

Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,856,964; May 3.

Moraine Products Company, The. (See Sherwood, Charles F., assignor.)

Morgan, Philander D., Baton Rouge, La. Fish receptacle. 1,856,818; May 3.

Morin, Louis H., New York, N. Y., assignor to Doehler Vending Machines, Inc. Dispensing machine. 1,856,780; May 3.

Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Remote control for radio tuning devices. 1,856,781; May 3.

Morland & Impey Limited. (See Impey, Francis L., assignor.)

Morley, James P., Michigan City, and S. J. Lonergan, assignors to Bastian-Morley Co., La Porte, Ind. Control mechanism. 1,856,502; May 3.

Morris, Albert W., Drexel Hill, and S. P. Wetherill, jr., Haverford, assignors to Wetherill-Morris Engineering Company, Philadelphia, Pa. Automatic casting machine. 1,856,352; May 3.

Morrison, George, assignor to International Silver Company, Meriden, Conn. Holder for child's set comprising knife, fork, and spoon. Des. 86,891; May 3.

Morriss, H. F., Corporation. (See Waters, Gilbert C., assignor.)

Mortensen, Leo H. (See Omholdt, Knute, assignor.)

Morton, James, Cramond Bridge, West Lothian, Scotland. Mnnufacture of fabrics. 1,856,782; May 3.

Morton, James, Cramond Bridge, West Lothian, Scotland, and F. H. Oldroyd, Radcliffe, near Manchester, England; said Oldroyd assignor to said Morton. Loom for weaving tufted fabrics. 1,856,783; May 3.

Morton, William B., and L. F. Belsner, Beatrice, Nebr. Display equipment. Re18,453; May 3.

Moser, Wilhelm, Berlin, Germany, assignor, by mesne assignments, to Radio Corporation of America. Cooled radiofrequency apparatus. 1,857,029; May 3.

Moss, Victor J., Brooklyn, N. Y. Heat insulating structure. 1,856,881; May 3.

Motor Wheel Corporation. (See Wilson, Moses W. H., assignor.)

Mott, Chester, Denver, Colo., assignor, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc. Method of and apparatus for determining the fluid contents of cylinders. 1,856,079; May 3.

Motter, Elmer E., Pleasant Ridge, Mich. Parachute and installation thereof. 1,856,397; May 3.

Mowery, Leroy D. (See Hauserman, E. F., Mowery, and Bohnsack.)

Muldoon, Bernard F., Mountainview, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Electric plug with make and break device. 1,856,260; May 3.

Muller, George W., Vienna, Va., assignor to The Rail Joint Company, New York, N. Y. Spring plate holder for railroad road bed construction. 1,856,652; May 3.

Murck, Knud, Forest Hills, N. Y., assignor to Charles Bruning Company Inc. Machine for developing sensitized paper. 1,856,926; May 3.

Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)

Murray, John F., et al., executors. (See Murray, Thomas E.)

Murray, Joseph B., et al., executors. (See Murray, Thomas E.)

Murray, Perton F., Montebello, Calif. Automatic joint breaker. 1,856,503; May 3.

Murray, Thomas E., deceased, Brooklyn, N. Y.; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors, assignors to Metropolitan Device Corporation. Electric conductor. 1,856,109; May 3.

Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)

Muscarella, Samuel, Nunda, N. Y. Machine for cementing leather taps on shoes. 1,856,965; May 3.

Mutersbaugh, Gordon H., Rocky River, Milton Zucker, H. D. Heiser, Lakewood, and W. A. Shope, Cleveland, assignors to the Glidden Company, Cleveland, Ohio. Nitrocellulose lacquer. 1,856,653; May 3.

Myers, Edward E. (See Mitchell, G. W., Shisler, and Myers.)

Myers, Walter, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine thread lubricating device. 1,856,882; May 3.

Myhres, Harry S. (See Woodson, O. L., and Myhres.)

Nagelmann, Clemens B., Santa Barbara, Calif. Suturing and ligating instrument. 1,856,721; May 3.

Nashua Gummed & Coated Paper Company. (See Gautier, T. R., and Nichols, assignors.)

National Aniline & Chemical Co. (See Geller, L. W., assignor.)

National Aniline and Chemical Company. (See Jewett, Joseph E., assignor.)

National Aniline & Chemical Company. (See Stowell, Harold T., assignor.)

National Carbon Company. (See Heise, George W., assignor.)

National Electrical Supply Company. (See Mirick, Carlos B., assignor.)
National Gypsum Company. (See Shaw, Harris W., assignor.)
National Gypsum Company. (See Turner, John J., assignor.)
National Manufacturing Company. (See Bittorf, Louis A., assignor.)
National Paper Company, The. (See Plante, Gordon V., assignor.)
Nebel, Charles N., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Terminating circuit for two-way signaling systems. 1,856,654; May 3.
Neep, George H., assignor to Switchgear & Cowans, Limited, Manchester, England. Electric switch gear. 1,856,110; May 3.
Neff, Johannes, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Apparatus for inserting cigarettes or other goods in packets. 1,856,286; May 3.
Nekoosa-Edwards Paper Company. (See Mollen, Martin J., assignor.)
Nemeth, Paul, Flushing, N. Y. Spark indicating device for combustion motors. 1,856,883; May 3.
Neptune Meter Company. (See Marden, William L., assignor.)
Nestle-Lemur Company, The. (See Comerford, Grace, assignor.)
Nestor, Thomas J., Bergenfield, N. J., assignor to A. Reich and C. Reich, Brooklyn, N. Y. Handle for shopping bags and making. 1,856,353; May 3.
Neuerburgsche Verwaltungsgesellschaft. (See Behrlenz, Joseph, assignor.)
Neuhauss, Heinrich, Dusseldorf, Germany, assignor to The Ajax Metal Company, Philadelphia, Pa. Sintering refractories from molten magnesite or other materials. 1,856,851; May 3.
New England Mico Co. (Cee Cooper, Edward, assignor.)
New York Air Brake Company, The. (See Campbell, Charles A., assignor.)
Niagara Machine and Tool Works. (See Lindgren, Bror J., assignor.)
Nichols, Harold E. (See Gautier, T. R., and Nichols.)
Nickel, Casper C., et al. (See Hollinger, William M., assignor.)
Nieman, Henry W., Bethlehem, Pa., assignor to Bethlehem Steel Company. Friction clutch. 1,856,135; May 3.
Nixon, Jeddy D. (See Carroll, Monroe W., assignor.)
Nixon, Jeddy D., assignor to American Engineering Corporation, Houston, Tex. Casing head and blow out preventer. 1,857,101; May 3.
Noelting, William H. (See Brokaw, E. A., and Noelting.)
Nordberg Manufacturing Company. (See Talboys, Henry H., assignor.)
Nordt, Charles E., W. J. Ahlquist and I. M. Emery, assignors to The Massillon Steel Casting Company, Massillon, Ohio. Apparatus for molding helical castings. 1,856,166; May 3.
North, Clayton O., and W. Scott, Nitro, W. Va., assignors to The Rubber Service Laboratories Co., Akron, Ohio. Vulcanizing rubber. 1,856,819; May 3.
Northern Conveyor & Mfg. Co. (See Whitnall, George R., assignor.)
Nuttall, Tom, Farnsworth, near Bolton, and S. A. Shorter, Didsbury; said Shorter assignor to The British Cotton Industry Research Association, Manchester, England. Hopper bale opener, hopper feeder, and like apparatus for opening and cleaning cotton or like fibrous material. 1,856,287; May 3.
Nye, Ralph D., assignor to Wheeling Mold & Foundry Division of the Continental Roll & Steel Foundry Company, Wheeling, W. Va. Manipulator for rolling mills. 1,857,063; May 3.
Oakes Products Corporation. (See Smith, Frederick A., assignor.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,856,422; May 3.
Ogle, Elmer L., assignor to All-Steel-Equip Company, Aurora, Ill. Switch panel. 1,856,288; May 3.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Brass Company, The. (See Tomlinson, Charles H., assignor.)
Ohlson, Carl G., assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio. Apparatus for handling and shearing metal strip. 1,856,111; May 3.
Oil Well Supply Company. (See Greve, Edgar E., assignor.)
Older, Clifford, Wilmette, Ill. Expansion joint for pavements and the like. 1,856,722; May 3.
Oldroyd, Francis H. (See Morton, J. and Oldroyd.)
Olley, Edwin A., assignor to Crouse-Hinds Company, Syracuse, N. Y. Fuse plug panel and block. 1,856,423; May 3.
Olson, Charles A., Geneva, assignor to Crane Co., Chicago, Ill. Sectional boiler. 1,856,354; May 3.
Olson, Charles A., Geneva, assignor to Crane Co., Chicago, Ill. Boiler. 1,856,355; May 3.
Ombeldt, Knute, assignor of one-fourth to L. H. Mortensen, Iron Mountain, Mich. Vise. 1,857,001; May 3.
Orr, Adele M., et al., executors. (See Orr, William V.)
Orr, William V., deceased, Cleveland, Ohio; The Cleveland Trust Company and A. M. Orr, executors. Suction cleaner. 1,856,136; May 3.
Osborn, Robert R., Garden City, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Aeroplane wing structure. 1,856,080; May 3.
Osse, Johanes A. F., Sheldon, Iowa. Gravity and force stock pump. 1,856,582; May 3.
Oswego Falls Corporation. (See Wright, W. L., and Pierce, assignors.)
Ottenheimer, Reuben E. (See Frederick, R. E., and Hill, assignors.)
Overholtz, George D., Leetsdale, Pa., assignor to Riter-Conley Manufacturing Company, Pittsburgh, Pa. Sheet metal joint. 1,856,167; May 3.
Owen, William H., Saratoga Springs, N. Y. Adjustable outlet box header. 1,856,356; May 3.
Owens, Freeman H., New York, N. Y. Combined camera and projecting apparatus. 1,856,583; May 3.
Owens-Illinois Glass Company. (See McLaughlin, John E., assignor.)
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Owens, Thomas, Harrison, assignor to William Dixon, Incorporated, Newark, N. J. Combined brush and buffer device. 1,856,289; May 3.
Pacific Lumber Company, The. (See Rosener, L. S., Smith, and Chaffee, assignors.)
Pacific R. & H. Chemical Corporation, The. (See Walker, Mark, assignor.)
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 86,892; May 3.
Palisca, Matthew, Philadelphia, Pa. Liquid fuel valve for internal combustion engines. 1,856,852; May 3.
Panish, Erwin J., Bridgeport, Conn. Valve control. 1,856,927; May 3.
Pannier Brothers Stamp Company. (See Pannier, William J., jr., assignor.)
Pannier, William J., jr., assignor to Pannier Brothers Stamp Company, Pittsburgh, Pa. Embossing sheet metal. 1,856,928; May 3.
Paramount Publix Corporation. (See Rudolph, W. F., Hunt, and Cunningham, assignors.)
Parker, Hugh B., Jacksonville, Fla. Carburetor. 1,857,030; May 3.
Parker, James D., Kansas City, Kans. Suction and exhaust fan. 1,856,398; May 3.
Parkhill, Mortimer S., Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Safety device for internal combustion engines. 1,856,584; May 3.
Parkhurst, Malcolm K., New York, N. Y., assignor to Brown & Sharpe Mfg. Co., Providence, R. I. Measuring machine. 1,857,088; May 3.
Parkinson, John J., Chicago, Ill. Hot water supply device. 1,856,504; May 3.
Parson, Walter. (See Weimer, A. W., and Smith.)
Parsons, Edward T., Upper Montclair, N. J., assignor to Thomson Machine Company, Belleville, N. J. Flour duster. 1,856,585; May 3.
Pass & Seymour, Inc. (See Henry, Gerald J., assignor.)
Patterson, Harvey L., Grand Rapids, and H. J. Qualfe, Wyoming Township, Kent County, Mich. Pipe drawing and holding device. 1,856,966; May 3.
Peard, Oliver L., S. M. Peard, Croyden, and A. F. Harrison, Epsom, England. Electric heater for use with automobiles. Re18,454; May 3.
Peard, Stanley M. (See Peard, Oliver L. and S. M., and Harrison.)
Pearson, Gustav C., assignor to Gardner-Denver Company, Denver, Colo. Fluid operated tool. 1,856,784; May 3.
Pearson, Robert D. (See Schofield, J. C., and Johnson.)
Peck, John S., Scarsdale, and E. V. Barrett, White Plains, N. Y. Light weight building materials. 1,856,929; May 3.
Peetz, Frederick W., Webster Groves, Mo. Cap. 1,856,967; May 3.
Pelland, Raymond L. (See Metcalf, I. R., and Pelland.)
Penn Metal Company. (See Baker, Herbert K., assignor.)
Perfection Stove Company. (See Keith, D. F., assignor.)
Perrot, Henri, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake operating mechanism. 1,856,424; May 3.
Perry, Donald B., Maplewood, N. J., assignor to American Telephone and Telegraph Company, Telegraph communication system. 1,856,224; May 3.
Perry, Emanuel J., New Bedford, Mass., assignor, by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio. Washing machine. 1,856,168; May 3.
Perry, Ernest J. (See Tomkinson, G., and Perry.)
Persons, Laurence M., St. Louis, Mo. Vapor motor. 1,856,586; May 3.
Persons, Laurence M., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo. Fan. 1,856,587; May 3.
Persson, Anders, Lidingo, Sweden, assignor to American Gasaccumulator Company, Elizabeth, N. J. Valve. 1,856,505; May 3.
Peters, Joseph F., jr. (See Lease, A. A., and Peters.)
Peterson, Albert, Washburn, N. Dak. Traffic signal switch. 1,856,588; May 3.

Peterson, Emil A., and W. J. McGinnis, assignors to Valley Iron Works Company, Appleton, Wis. Cylinder paper machine. 1,856,081; May 3.
Peterson, Otto W., Oakland, H. Keesling, San Mateo, and P. I. Kurtz, Oakland, Calif. Concrete flume structure and building same. 1,856,589; May 3.
Peterson, William H., and E. B. Fred, Madison, Wis., assignors to Wisconsin Alumni Research Foundation. Production of lactic and acetic acids. 1,856,425; May 3.
Pettibone, Walter W., Birmingham, Ala. Feeder for pulverizers and the like. 1,856,426; May 3.
Petty, John G., et al. (See McRae, David F., assignor.)
Pevey Dairy Company. (See Copp, Ralph, assignor.)
Pfandler Company, The. (See Todd, Ulysess G., assignor.)
Pfeiffner, Richard O., Newark, N. J. Electric lighting fixture. 1,856,590; May 3.
Pfeil, Roy C. (See Bloss, R. R., and Pfeil.)
Pfueller, Bruno E., assignor of one-half to E. Louis Kotzenk, Reading, Pa. Full fashioned knitting machine. 1,857,102; May 3.
Phelps, Alva W., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Manufacture of brush rigging. 1,856,723; May 3.
Phelps, Alva W., assignor to Delco-Remy Corporation, Anderson, Ind. Apparatus for making apertured pieces from strips of material. 1,856,724; May 3.
Phillips, Everett, Leesburg, Va. Invalid bed. 1,856,785; May 3.
Phillips, Lonnie F., Township 51, Clay County, Mo. Truck tank mounting. 1,856,399; May 3.
Phillips, William M., Birmingham, and G. M. Cole, assignors to General Motors Corporation, Detroit, Mich. Coating surfaces of iron or steel. 1,856,261; May 3.
Physioc, Lewis W. (See Whitson, D. A., Physioc, and Brush.)
Pierce, Lee D. (See Wright, W. L., and Pierce.)
Pierson, Frank, Chicago, Ill. Massage machine. 1,856,591; May 3.
Pilcher, John A., Roanoke, Va., and W. E. Wine, Toledo, Ohio. Railway car. 1,856,400; May 3.
Placek, Adolph, New Orleans, La. Utilization of distillery slops jointly with wood sawdust or other vegetable waste or carbonaceous materials. 1,856,357; May 3.
Plante, Gordon V., assignor to The National Paper Company, Atlanta, Ga. Paper tube forming machine. 1,857,002; May 3.
Poeppelmeier, Frank H., assignor to The Set-O-Type Company, Dayton, Ohio. Type for automatic typesetting machines. 1,856,725; May 3.
Poffenberger, Noland. (See Grebe, J. J., and Poffenberger.)
Point-O-Purchase Company. (See Easterday, Homer, assignor.)
Poole, Lora E., assignor to Delco-Remy Corporation, Anderson, Ind. Apparatus for forming countersunk holes. 1,856,726; May 3.
Poore, Benjamin F. P., Greenville, Miss. Apparatus for molding hollow concrete blocks. 1,857,003; May 3.
Popov, Vladimir D., Pulsen, Czechoslovakia. Means for the automatic weighing of goods of different kinds. 1,856,884; May 3.
Porter, Everett M., Brooklyn, assignor to International Projector Corporation, New York, N. Y. Film reel to facilitate film threading. 1,856,112; May 3.
Pösentrup, Heinrich, Munster, Germany. Adjustable fish plates engaging the rail heads. 1,856,358; May 3.
Potdevin, Adolph, Garden City, assignor to Potdevin Machine Company, Brooklyn, N. Y. Paste fountain. 1,856,853; May 3.
Potdevin Machine Company. (See Potdevin, Adolph, assignor.)
Pratt, George W., Oakland, Calif. Handcuff. 1,856,427; May 3.
Pressgrove, Albert W., Tecumseh, Kans. Road grader. 1,856,968; May 3.
Preston, Cecil H., Chatsworth, Calif. Ground for radios and the like. 1,856,506; May 3.
Price, Wilbur F., Allentown, Pa., assignor to L. F. Grammes & Sons, Inc. Automobile emblem attachment. 1,856,508; May 3.
Priest, Harry R., Loudonville, Ohio. Dispensing and massage container. 1,856,507; May 3.
Prince, Edmond, Tassin-la-Demi-Lune, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Process and apparatus for the manufacture of artificial filaments. 1,856,401; May 3.
Proctor & Schwartz Electric Company. (See Hurxthal, Alphens O., assignor.)
Procunier Safety Chuck Company. (See Corley, Mark H., assignor.)
Prussing, Walter, assignor to Victor Metal Products Corporation, Brooklyn, N. Y. Extruding machine. 1,856,290; May 3.
Pym, Arthur F., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for relatively moving shoes and their lasts. 1,856,291; May 3.
Pym, Charles F., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping uppers over lasts. 1,856,292; May 3.
Pyridium Corporation, The. (See Tisza, E. T., and Joos, assignors.)
Qualfe, Howard J. (See Patterson, H. L., and Qualfe.)
Radio Corporation of America. (See Dalheimer, Walther, assignor.)
Radio Corporation of America. (See Karolus, August, assignor.)
Radio Corporation of America. (See Moser, Wilhelm, assignor.)
Radio Corporation of America. (See Whitaker, A., and Browne, assignors.)
Rail Joint Company, The. (See Muller, George W., assignor.)
Railway and Industrial Engineering Company. (See Massey, Hemsley B., assignor.)
Rapisardi, Alfio, Boston, Mass. Phonograph. 1,856,428; May 3.
Rapprich, Gustave, West New York, N. J. Hygienic couch. 1,856,113; May 3.
Rasmussen, Andrew, and W. S. Goodell, Racine, Wis. Automatic trip device. 1,856,402; May 3.
Rasmussen, Holden V., Portland, Oreg. Baling press for newspapers and the like. 1,856,885; May 3.
Ray, Eugene J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Trimming machine. 1,856,137; May 3.
Raymond Concrete Pile Company. (See Smith, Herman R., assignor.)
Raymond Concrete Pile Company. (See Upson, Maxwell M., assignor.)
Raymond Concrete Pile Company. (See Watt, Elihu D., assignor.)
Rea, Wilton T. (See Hamilton, B. P., and Rea.)
Read, William C., Scarsdale, N. Y., assignor to Electro Metallurgical Company. Silicothermic smelting process and charge therefor. 1,856,592; May 3.
Rebillet, Marcel J. A., Lyon, France. Apparatus for feeding liquid fuel to internal combustion engines. 1,857,004; May 3.
Rebstock, August J., assignor to The Rebstock Company, St. Louis, Mo. Conveyer. 1,856,262; May 3.
Rebstock Company, The. (See Rebstock, August J., assignor.)
Reich, Alexander, et al. (See Nestor, Thomas J., assignor.)
Reich, Charles, et al. (See Nestor, Thomas J., assignor.)
Reich, Ernest. (See Claus Ernest C., assignor.)
Reid, Ebenezer E., Baltimore, Md., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Producing alkali metal salts of organic acids. 1,856,263; May 3.
Reiter, Tiberius, and D. Gábor, Berlin-Charlottenberg, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Apparatus for treating living cells by means of rays of light. 1,856,969; May 3.
Reitherman, Ralph W., Oak Park, assignor to Flashric Sign Works, Chicago, Ill. Electrode. 1,856,727; May 3.
Reitmeister, Wilhelm, Kirchmoser Havelwerk, Germany. Melting and deoxidizing metals and alloys. 1,856,293; May 3.
Reliance Manufacturing Company, The. (See Cowlin, Eugene D., assignor.)
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,856,082; May 3.
Remington Arms Company, Inc. (See Loomis, C. C., assignor.)
Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)
Reo Motor Car Company. (See Cotes, William A., assignor.)
Rese, Otto, Wilmington, Del. Multicolor pen. 1,856,655; May 3.
Rheinische Metallwaaren-und Maschinenfabrik. (See Schuler, Hermann, assignor.)
Rice, Chester W., Schenectady, N. Y., assignor to General Electric Company. Bucket wheel and like rotating member. 1,856,786; May 3.
Rice, John A., Berkeley, Calif., assignor to The Bubblestone Company, Pittsburgh, Pa. Producing a foamy body adapted to be used in making cellular concrete. 1,856,294; May 3.
Rice, John W. (See McLintock, A. W., and Rice.)
Rice Products Inc. (See West, Frank R., assignor.)
Rich, Malcolm N., East Orange, N. J., assignor to Westinghouse Lamp Company. Separating zirconium, titanium, and hafnium. 1,856,264; May 3.
Richter, George A., and M. O. Schur, assignors to Brown Company, Berlin, N. H. Manufacture of fiber articles containing regenerated cellulose. 1,856,114; May 3.
Riegger, Paul, Villingen-Baden, assignor to Kienzle Uhrenfabriken Aktiengesellschaft, Schwenningen-on-the-Neckar, Germany. Fare indicator. 1,856,403; May 3.
Riter-Conley Manufacturing Company. (See Overholtz, George D., assignor.)
Ritter Dental Manufacturing Company. (See May, Adam J., assignor.)
Riverside Cement Company. (See Steinour, Harold H., assignor.)
Rivkin, Menahem, Philadelphia, Pa. Locomotive frame. 1,857,064; May 3.
Robb, John F., Cleveland Heights, Ohio. Transit mixer actuating means. 1,856,728; May 3.
Robin, Philip T., Erie, Pa., assignor, by mesne assignments, to The Wellman Engineering Company, Cleveland, Ohio. Dipper tooth structure. 1,856,930; May 3.

Robinson, Edward A., assignor to E. E. Workman, Montreal, Canada, and J. Robinson, New York, N. Y. Connecter for train pipes. 1,856,656; May 3.
Robinson, Ernest L., Schenectady, N. Y., assignor to General Electric Company. Elastic fluid turbine. 1,856,820; May 3.
Robinson, Joseph, et al. (See Robinson, Edward A., assignor.)
Robinson, Joseph F., assignor to Schmidt Lithograph Company, San Francisco, Calif. Fiber shipping case. 1,856,729; May 3.
Rockland & Rockport Lime Corporation. (See Hemeon, Wesley C. L., assignor.)
Rockwell, Edward A., New York, N. Y., assignor to Stewart-Warner Corporation, Chicago, Ill. Fuel feeding apparatus operated by pressure. 1,856,265; May 3.
Rodriguez, Herbert, Chicago, Ill. Foldable rocking chair. 1,856,429; May 3.
Roeder, Dale, assignor to Ford Motor Company, Dearborn, Mich. Vehicle engine accelerator. 1,856,192; May 3.
Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Mold filling limiting device. 1,856,430; May 3.
Rogers, Harrison W., New York, N. Y. Synchronized sound and photography. 1,856,886; May 3.
Rolland, Guy F., Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del. Electric ignition device. 1,856,431; May 3.
Romieux, Charles J., Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y. Fumigating composition. 1,856,657; May 3.
Rosener, Leland S., J. M. Smith, and E. L. Chaffe, assignors to The Pacific Lumber Company, San Francisco, Calif. Swing cut-off saw apparatus. 1,856,169; May 3.
Roux, Jacques, Isbergues, Pas-De-Calais, France. Rolling mill. 1,856,170; May 3.
Rubber Service Laboratories Co., The. (See North, C. O., and Scott, assignors.)
Ruck, Paul. (See Gassan, A., and Ruck.)
Rüder, Heinrich B., Frankfort-on-the-Main, Germany, assignor to International Precipitation Company, Los Angeles, Calif. High tension insulation. 1,856,225; May 3.
Rudolph, William F., Van Nuys, J. R. Hunt, Hollywood, and H. G. Cunningham, assignors to Paramount Publix Corporation, Los Angeles, Calif. Camera focusing system. 1,856,432; May 3.
Ruemelin, Richard, St. Paul, Minn. Sand blast stopper valve. 1,856,138; May 3.
Rummler, Adelaide H., Chicago, Ill. Tent. 1,856,658; May 3.
"Rusbol," Societe à Responsabilite Limitee. (See Rustin, L. D. A., and Bolard, assignors.)
Russell, Harry L., assignor to Ford Motor Company, Dearborn, Mich. Supercharger for airplane engines. 1,856,193; May 3.
Rustin, Louis D. A., Clichy-La-Garenne, and A. J. G. Bolard, Vernon, assignors to "Rusbol" Societe à Responsabilite Limitee, Clichy, France. Multiple-way valve. 1,856,226; May 3.
Safety Mining Company. (See Armstrong, Frank H., assignor.)
Safety Mining Company. (See Kneeland, Frank H., assignor.)
Safety Mining Company. (See Lawson, Lawrence E., assignor.)
St. Marie, Ulric, and G. Bernier, Putnam, Conn. Kneeling stool. 1,856,297; May 3.
Sakowicz, Boleslaw, assignor of one-half to F. Wasilewski, Chicago, Ill. Valve lock. 1,856,266; May 3.
Sale, Joseph J., Fayetteville, W. Va. Retainer valve. 1,856,821; May 3.
Saliop, Harry A., New York, N. Y. Adjustable automobile panel cover. 1,856,115; May 3.
Sandfanander, Ernest, Freeport, assignor to H. P. Andrews Paper Company, New York, N. Y. Envelope making machine. 1,856,659; May 3.
Sandham, Walter E., Los Angeles, Calif. Adjustable guide for molding flasks. 1,856,509; May 3.
Sandor, Nikolaus, London, England. Producing fine bubble foam. 1,856,510; May 3.
Sandura Company. (See Baldwin, Julian T., assignor.)
Sateren, Martin G., Haddonfield, N. J., assignor to Westinghouse Electric & Manufacturing Company. Thermionic amplifier. 1,856,116; May 3.
Sather, Edmund O., Oakland, Calif. Siphon device. 1,856,083; May 3.
Savage, John L. (See McClellan, L. N., Kinzie, Savage, and Day.)
Saxon, Herman R., Toledo, Ohio. Bumper construction. 1,857,065; May 3.
Scaife, Joseph D., Nottinghamshire, England, assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,856,227; May 3.
Scanlon, Henry P. (See Shirley, H. V., and Scanlon.)
Schaffer, Edward, Seattle, Wash. Combined hoist and conveyer. 1,857,031; May 3.
Schaum, Fletcher, assignor to Fletcher Works, Philadelphia, Pa. Automatic guard for hydro-extractors. 1,856,593; May 3.
Schellentrager, Eugene W., Shaker Heights, and B. E. Clarkson, assignors to Atlas Bolt & Screw Company, Cleveland, Ohio. Vehicle. 1,856,787; May 3.
Scheppy, William F., Elmhurst, N. Y. Meat block cleaner. 1,856,887; May 3.
Scher, Louis, assignor to The Ticket Issuing Machine Company, Cleveland, Ohio. Ticket delivery mechanism. 1,856,171; May 3.
Scherr, Emilius W., jr., New York, N. Y., assignor to The Aeolian Company. Piano loud speaker. 1,856,730; May 3.
Schettler, Gustav A., Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me. Machine for plating and embossing leather. 1,856,139; May 3.
Schiesser, Max, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rectifier. 1,856,404; May 3.
Schiller, John, Western Springs, Ill. Cord holding clip. 1,856,594; May 3.
Schillo, Louis C., Chicago, Ill., assignor, by mesne assignments, to Asphalt Process Corporation, New York, N. Y. One piece cutter. 1,856,433; May 3.
Schimpf, Robert, Berlin-Schlachtensee, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Ground detector. 1,856,172; May 3.
Schindhelm, Hans. (See Kalischer, G., Schuele, and Schindhelm.)
Schinkez, Albert. (See Smith, E. R., and Schinkez.)
Schirmacher, Arthur. (See Kiss, Joseph, assignor.)
Schloemann Aktiengesellschaft. (See Gassen, Josef, assignor.)
Schmidt, Albrecht, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Printing pastes from dyestuffs and preparing them. 1,856,434; May 3.
Schmidt Lithograph Company. (See Robinson, Joseph F., assignor.)
Schmiedeknecht, Victor E., Louisville, Ky. Washing machine. 1,856,268; May 3.
Schmiedel, Johannes, assignor to the firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Method of forming box parts. 1,856,267; May 3.
Schnurrbusch, Kurt, Berlin-Pankow, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Hem folder for sewing machines. 1,857,032; May 3.
Schoel, Fred L., assignor to Gem Doughnut Machine Co., Inc., Waterloo, Iowa. Adjustable dough dispensing machine. 1,856,511; May 3.
Schofer, Karl. (See Alvera, J., and Schofer.)
Schofield, John C., and V. A. Johnson, assignors of fifteen one hundredths to R. D. Pearson, Los Angeles, Calif. Check valve construction. 1,856,512; May 3.
Schotthoefer, Joseph G., Peoria, Ill. Valve mechanism for internal combustion engines. 1,857,005; May 3.
Schubert, Elmer G. (See Johnson, F., and Schubert.)
Schuele, Rudolf. (See Kalischer, G., Schuele, and Schindhelm.)
Schueller, Casper E., Berkeley, assignor to E. A. Majors, Piedmont, Calif. Bank, turn, and climb indicator for aircraft. 1,856,436; May 3.
Schuler, Hermann, Dusseldorf, assignor to Rheinische Mettallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Electrical time switch. 1,856,789; May 3.
Schultz, Paul I., assignor to The United States Air Compressor Company, Cleveland, Ohio. Vehicle lift. 1,856,660; May 3.
Schulz, Arthur P. (See Teller, J., and Schulz.)
Schulz, Paul A., and H. K. Maxwell, Bethlehem, Pa., assignors to Bethlehem Steel Company. Rolling channel sections. 1,856,269; May 3.
Schumer, Anton, Cleveland, Ohio. Cigarette container and dispenser. 1,856,790; May 3.
Schur, Milton O. (See Richter, G. A., and Schur.)
Schwänhausser, Waldemar, Nurenberg, Germany. Manicure device. 1,856,854; May 3.
Schwarber, Henry, Weehawken, N. J. Embroidered lace edging. Des. 86,893; May 3.
Schwarber, Henry, Weehawken, N. J. Embroidered lace edging. Des. 86,894; May 3.
Schwartz, George L. (See McCormick, F. H., and Schwartz.)
Schwartz, Nathan, New York, N. Y. Blade sharpener. 1,857,066; May 3.
Schwarz, Joseph A., Los Angeles, Calif. Lawn edger and groover. 1,856,435; May 3.
Schweiter, Hans, Horgen, near Zurich, Switzerland. Cross winding frame. 1,856,513; May 3.
Scintilla Magneto Company. (See Spengler, Walter J., assignor.)
Scott, Henry D., Wheeling, W. Va. Manufacturing decorated tubing. 1,856,888; May 3.
Scott, Wellington W., assignor to Arwell Products Company, Waukegan, Ill. Envelope and treating furniture. 1,856,931; May 3.
Scott, Winfield. (See North, C. O., and Scott.)
Scovill Manufacturing Company. (See Donahue, Patrick F., assignor.)
Seaberg, Grover, assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Repair clamp for bell and spigot pipe joints. 1,856,788; May 3.
Séailles, Jean C., Paris, France. Preparation of alumina. 1,856,194; May 3.

Sease, Virgil B., Parlin, N. J., assignor to Du Pont Film Manufacturing Corporation, New York, N. Y. Reversing photographic negatives. 1,857,089; May 3.
Sefton National Fibre Can Co. (See Hicks, William P., assignor.)
Seguine, William, jr., Newport, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Purification of zinc solutions. 1,856,731; May 3.
Selfert, William V., Denver, Colo. Drill bit. 1,856,437; May 3.
Seller, George P., New Orleans, La. Frame for making hooked rugs. 1,857,067; May 3.
Seley, Charles A., assignor to Locomotive Firebox Company, Chicago, Ill. Steam boiler. 1,856,732; May 3.
Seneca Falls Machine Company. (See Smith, E. R., and Schinkez, assignors.)
Seright, Warren A., Fruitland, Iowa. Vine cutter. 1,857,006; May 3.
Servo-Frein Dewandre, Societe Anonyme. (See Kratz, Franz, assignor.)
Set-O-Type Company, The. (See Poeppelmeier, Frank H., assignor.)
Shallock, Edward W., assignor to American Ore Reclamation Company, Chicago, Ill. Producing fine sinter returns. 1,856,270; May 3.
Sharp, John, Cleveland, Ohio. Aeroplane. 1,856,228; May 3.
Sharples, Arthur A., Stockdale, Kans. Hay maker. 1,856,438; May 3.
Shaw, Harris W., Williamsville, assignor to National Gypsum Company, Buffalo, N. Y. Method and apparatus for making plaster board. 1,856,932; May 3.
Sheldon Machinery Corporation. (See Sheldon, Waldo, assignor.)
Sheldon, Waldo, South Norwalk, Conn., assignor to Sheldon Machinery Corporation, New York, N. Y. Well drill. 1,856,299; May 3.
Sheneman, Florence. (See Sheneman, Loyd L., assignor.)
Sheneman, Loyd L., Michigan City, assignor to F. Sheneman, Bluffton, Ind. Electrical top. 1,856,514; May 3.
Shepherd, Winfred P., Pasadena, Calif. Packed box accumulator. 1,856,733; May 3.
Sherman, Alvin G., Grosse Pointe, Mich. Ice cube forming and dispensing device. 1,857,122; May 3.
Sherman, Elroy P., assignor to The Ashtabula Corrugated Box Company, Ashtabula, Ohio. Carton. 1,857,033; May 3.
Sherman, John Q., Dayton, Ohio. Drawer release mechanism. 1,856,971; May 3.
Sherman, John Q., and A. W. Metzner, Dayton, Ohio; said Metzner assignor to said Sherman. Paper folding machine. 1,856,972; May 3.
Sherwood, Charles F., Detroit, Mich., assignor to The Moraine Products Company, Dayton, Ohio. Making copper powder. 1,856,661; May 3.
Shida, Fumio, Kawanishi-Cho, Kawabe-Gun, Hyogo-Ken, Japan. Vibrator for loud speakers. 1,856,791; May 3.
Shields, Archibald. (See Shields, John W. and Archibald.)
Shields, John W., Bridgeport, Conn., and A. Shields, Brooklyn, N. Y. Typographical magazine. 1,856,515; May 3.
Shirley, Herman V., and H. P. Scanlon, Long Beach, Calif. Spooling device. 1,856,140; May 3.
Shisler, Garold O. (See Mitchell, G. W., Shisler, and Myers.)
Shoe Form Co. (See De Witt, William J., assignor.)
Shonle, Horace A., assignor to Eli Lilly and Company, Indianapolis, Ind. Anhydrous-alkali-metal salts of 5,5-di-aliphatic-substituted barbituric acids and producing them. 1,856,792; May 3.
Shorter, Sydney A. (See Nuttall, T., and Shorter.)
Showers, Edward A., and L. A. Long, Dallas, Tex. Oil separator. 1,856,662; May 3.
Shriver, Charles, Massillon, Ohio. Pickling tank. 1,856,734; May 3.
Sieber, Fritz, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Protective system for rectifiers. 1,856,857; May 3.
Siegrist, Fritz, Oftringen, Switzerland. Punching press, particularly for pattern cards as used in knitting machines and the like. 1,856,970; May 3.
Siemens & Halske Aktiengesellschaft. (See Reiter, T., and Gabor, assignors.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Schimpf, Robert, assignor.)
Signor, Alfred J., Elkhart, Ind., assignor to F. E. Liverance, jr., Grand Rapids, Mich. Dispensing machine. Re18,449; May 3.
Sikorovsky, Frank J., Jackson, Mich. Apparatus for finishing machine parts or elements. 1,856,405; May 3.
Silberstein, Abraham, New York, N. Y. Cap. 1,856,230; May 3.
Simplex Engineering Company. (See Sylvester, Julius, assignor.)
Simplex Piston Ring Company of America, The. (See Solenberger, Dean M., assignor.)
Sinclair Refining Company. (See Isom, Edward W., assignor.)
Sinclair Refining Company. (See Stafford, James G., assignor.)
Sindeband, Maurice L., New York, N. Y., and O. K. Martt, Haddonfield, N. J., assignors, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Electrical switch controlling system. 1,856,195; May 3.
Singer Manufacturing Company, The. (See Allen, Edward B., assignor.)
Singer Manufacturing Company, The. (See Myers, Walter, assignor.)
Skindel, Anthony, Wildwood Villas, N. J. Air rifle. 1,857,068; May 3.
Sklar, J., Manufacturing Co. (See Sovatkin, Edward J., assignor.)
Slattery, Thomas F. (See Boyle, N. T., and Slattery.)
Small, Alfred K., jr., Ocala, Fla. Game apparatus. 1,856,117; May 3.
Smeltverk, Odda A/S: the Firm. (See Johnson, Erling, assignor.)
Smith, A. O., Corporation. (See Crawford, William E., assignor.)
Smith, Carl D., Washington, Pa. Gas reversing valve. 1,856,516; May 3.
Smith, Edwin R., and A. Schinkez, assignors to Seneca Falls Machine Company, Seneca Falls, N. Y. Tool slide and actuating mechanism therefor. 1,856,196; May 3.
Smith, Franklin S., Brooklyn, N. Y. Method and apparatus for subjecting articles to X-rays. 1,856,084; May 3.
Smith, Fredrick A., Waukegan, assignor to Oakes Products Corporation, North Chicago, Ill. Spare wheel lock. 1,856,933; May 3.
Smith, Herman R., Douglaston, assignor to Raymond Concrete Pile Company, New York, N. Y. Forming composite piles. 1,856,517; May 3.
Smith, Jacob F. (See Weimer, A. W., and Smith.)
Smith, James N., Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Electrode for electrolytic apparatus. 1,856,663; May 3.
Smith, Jay M. (See Rosener, L. S., Chaffee, and Smith.)
Smith, John H., Detroit, Mich. Quick change chuck. 1,856,973; May 3.
Smith, S., & Sons (Motor Accessories) Limited. (See Watson, Ernest A., assignor.)
Smith, William L., Newberry, S. C., assignor to Draper Corporation, Hopedale, Mass. Shuttle feeler thread parter and clamp. 1,856,793; May 3.
Smolensky, Michael, Garfield Heights, Ohio. Self-grinding stop valve. 1,856,974; May 3.
Snyder, John Y., Shreveport, La. Apparatus for separating liquids from gases. 1,857,034; May 3.
Snyder, Vernon, et al. (See McRae, David F., assignor.)
Societe Anonyme Parfumerie Houbigant. (See Diot, Louis E., assignor.)
Societe A Responsabilite Limitee Chambet & Cie. (See Lebeau, Yves G., assignor.)
Societe des Etablissements Gaumont. (See Decaux, René, assignor.)
Société Quartz & Silicé. (See Delpech, Gaston, assignor.)
Society of Chemical Industry in Basle. (See Straub, F., Mayer, and Anderau, assignors.)
Society of Chemical Industry in Basle, the Firm of. (See Bally, O., Grossmann, and Felix, assignors.)
Solaflex Signs Amalgamated Limited. (See Burns, William A., assignor.)
Solem Machine Company. (See Sundstrand, Carl A., assignor.)
Solenberger, Dean M., Cleveland, Ohio, assignor to The Simplex Piston Ring Company of America, Inc. Piston ring. 1,856,271; May 3.
Sommer and Maca Glass Machinery Corporation. (See Sommer, K. W., and Hauser, assignors.)
Sommer, Kurt W., Cicero, and F. Hauser, assignors to Sommer and Maca Glass Machinery Corporation, Chicago, Ill. Conformator gauge. 1,856,439; May 3.
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Machine for forming hollow glassware. 1,856,518; May 3.
South, Richard P., Cleveland, Ohio, assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa. Lining for furnaces. 1,857,103; May 3.
Southgate, Louis W., Washington, D. C. Method of and apparatus for evacuating oil wells. 1,856,197; May 3.
Sovatkin, Edward J., Brooklyn, assignor to J. Sklar Manufacturing Co. Inc., New York, N. Y. Pelvimeter. 1,856,295; May 3.
Spadafora, Joseph, Medford, assignor of one-third to D. Malaguti and one-third to L. Malaguti, Boston, Mass. Counter stiffener molding machine. 1,856,296; May 3.
Sparr, Robert. (See Griffin, S., and Sparr.)
Spase, Charles B., Syracuse, N. Y. Multiple disk clutch. 1,856,735; May 3.
Spears, Arthur C., Cameron, N. Y. Identification name plate. 1,856,519; May 3.
Spengler, Walter J., assignor to Scintilla Magneto Company, Inc., Sidney, N. Y. Shaft coupling. 1,856,975; May 3.
Spire, William H., Cleveland Heights, assignor to Thompson Products, Inc., Cleveland, Ohio. Method of and apparatus for forging upset articles. 1,856,440; May 3.
Sprinkle, Sylvarius A., Martinsburg, W. Va. Rail joint. 1,857,007; May 3.
Squibb, E. R., & Sons. (See Christiansen, Walter G., assignor.)

Stadler, John, Montreal, Quebec, Canada. Conveying system and apparatus for pulp wood. 1,856,118; May 3.
Stafford, James G., Whiting, Ind., assignor to Sinclair Refining Company, New York, N. Y. Refining lubricating oil. 1,856,934; May 3.
Stahle, Erik G., Pittsburgh, Pa., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass surfacing apparatus. 1,856,173; May 3.
Staley, Ralph B., Denver, Colo. Ash tray. Des. 86,895; May 3.
Staley, Ralph B., Denver, Colo. Ash tray. Des. 86,896; May 3.
Stalzer, Rudolph, Brooklyn, N. Y. Window cleaner's sent. 1,856,794; May 3.
Standard Oil Company. (See Atwell, Harold V., assignor.)
Standard Oil Company, The. (See Harrison, John S., assignor.)
Standard Stoker Company Inc., The. (See Lower, Nathan M., assignor.)
Standard Stoker Company Inc., The. (See Lower, N. M., and Turner, assignors.)
Standard Stoker Company. (See Turner, Edwin A., assignor.)
Standard Textile Products Company, The. (See Tuttle, Leonard I., assignor.)
Standfuss, Ernest R., assignor to Harnischfeger Corporation, Milwaukee, Wis. Self-dumping crawler wagon. 1,856,441; May 3.
Stanton, Edward J., Brooklyn, N. Y. Single acting engine. 1,856,359; May 3.
Stark, David D., Berkeley, assignor to Associated Oil Company, San Francisco, Calif. Treating hydrocarbon oils. 1,856,141; May 3.
Steen, Harry S., assignor to The Chicago Faucet Company, Chicago, Ill. Faucet. 1,856,664; May 3.
Stein, Jacob, Brooklyn, N. Y. Decorative rubberized cloth and producing same. 1,856,595; May 3.
Steinour, Harold H., Riverside, assignor to Riverside Cement Company, Los Angeles, Calif. Making Portland cement. 1,856,442; May 3.
Stelling, William A., Providence, R. I., assignor to The Textile-Finishing Machinery Company. Tenter clip. 1,856,795; May 3.
Stephens, George H., Northbrook, assignor to The Hammond Clock Company, Chicago, Ill. Clock case. Des. 86,897; May 3.
Sterlek Company, Inc. (See Capocefalo, Edward A., assignor.)
Stevens, George H., Newark, N. J. Vulcanizing rubber. 1,856,596; May 3.
Stevenson, Robert A., Lancaster, Ohio. Auto jug. Des. 86,898; May 3.
Stewart-Warner Corporation. (See Rockwell, E. A., assignor.)
Stjarnstrom, Arthur E., Cleveland, Ohio. Flexible mandrel. 1,856,597; May 3.
Stocker, Ernst. (See Knecht, O., and Stocker.)
Stoecklcht, Wilhelm, Munich-Solln, Germany. Bevel-wheel gearing. 1,856,443; May 3.
Stoetzel, Joseph J., Queens Village, assignor to G & G Atlas Systems, Inc., New York, N. Y. Valve for pneumatic dispatch systems. 1,856,889; May 3.
Stokes, David B., Beverly, assignor to United States Pipe & Foundry Company, Burlington, N. J. Pipe joint packing. 1,856,890; May 3.
Stoller, Hugh M., Mountain Lakes, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Power supply system. 1,856,665; May 3.
Stoller, Hugh M., Mountain Lakes, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Filter circuits. 1,856,666; May 3.
Stoltzfus, Joseph B., Sadsburyville, Pa. Oil hole cleaner and spout retainer. 1,856,598; May 3.
Stone, Albert F. (See Banks, W. E., and Stone.)
Stone, J., & Company Limited. (See Hatcher, Ernest C., assignor.)
Stowell, Harold T., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Production of nitroanthraquinone. 1,856,231; May 3.
Straub, Fritz, H. Mayer, and W. Anderau, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Azo-dyestuffs containing chromium and making same. 1,856,796; May 3.
Strelow, Henry A., assignor to Twentieth Century Machinery Co., Milwaukee, Wis. Unloading machine. 1,856,976; May 3.
Stuart, James, C. S., Monkseaton, Northumberland, England, assignor to Sir W. G. Armstrong, Whitworth & Company, Limited, Newcastle-upon-Tyne, England. Cam gear. 1,856,667; May 3.
Studebaker Corporation, The. (See Breneman, Paul E., assignor.)
Stukart, Hendrik, assignor to U. S. Slicing Machine Company, La Porte, Ind. Feeding mechanism for slicing machines. 1,856,855; May 3.
Subkow, Phillip, Los Angeles, Calif. Method and apparatus for gas lift. 1,856,891; May 3.
Subkow, Philip, and J. J. Kogan, assignors to Union Oil Company of California, Los Angeles, Calif. Apparatus for gas lift control. 1,856,892; May 3.
Sumida, Hoolchi. (See Inaki, Toyojiro, assignor.)
Summers, Caleb E., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Plated piston. 1,856,272; May 3.
Sundstrand, Carl A., assignor, by mesne assignments, to Solem Machine Company, Rockford, Ill. Water-modifying apparatus. 1,856,599; May 3.
Superheater Company, The. (See Gordon, Charles W., assignor.)
Superior Felt and Bedding Co. (See Breckenridge, Albert, assignor.)
Surface, Morris E., and A. W. Wellington, assignors to The Chase Companies, Inc., Waterbury, Conn. Suspension-fixture for electric lights. 1,856,142; May 3.
Sutton, Walter C., Cleveland Heights, assignor to The Lindsay Wire Weaving Company, Cleveland, Ohio. Feeding a wire through a furnace. 1,856,444; May 3.
Swank, F. B. (See Teel, Earl, assignor.)
Swanson, Ernest R., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Thread-waxing device. 1,856,198; May 3.
Swedish Crucible Steel Company. (See Bretaud, Joseph V., assignor.)
Swensson, Swen M., Chicago, Ill. Folding desk and chair. 1,856,977; May 3.
Swinehart, George E., Buffalo, N. Y., assignor, by mesne assignments, to American Ore Reclamation Company, Chicago, Ill. Sintering machine. 1,856,273; May 3.
Switchgear & Cowans, Limited. (See Neep, George H., assignor.)
Switzer Packing Company. (See Dean, William T., assignor.)
Sylvester, Julius, assignor to Simplex Engineering Company, Washington, Pa. Annealing leer. 1,856,668; May 3.
Sylvester, Julius, assignor to Simplex Engineering Company, Washington, Pa. Electric control system for conveyers. 1,856,669; May 3.
Tabulating Machine Company, The. (See Lake, Clair D., assignor.)
Tabulating Machine Company, The. (See Tauschek, Gustav, assignor.)
Taddeo, Luigi, Cleveland, Ohio. Equalizing device for brakes. 1,856,670; May 3.
Tagle, Roscoe G., Brooklyn, N. Y., and E. H. Currie, East Orange, N. J., assignors, by mesne assignments, to G. J. Watson, Brooklyn, N. Y. Gauge. 1,856,199; May 3.
Talboys, Henry H., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Spike driver. 1,856,893; May 3.
Tauschek, Gustav, Vienna, Austria, assignor to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine for bookkeeping purposes. 1,856,445; May 3.
Tayenthal, Kurt. (See Kleinert, T., and Tayenthal.)
Taylor, Edward A., Cleveland, Ohio, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Making lithopone with high zinc sulphide content. 1,856,671; May 3.
Taylor, Nelson. (See Bradshaw, C., and Taylor.)
Teel, Earl, assignor of one-half to F. B. Swank, Norman, Okla. Static eliminator tube. 1,857,069; May 3.
Teeter, Wilford H., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,856,736; May 3.
Teknvec, John, assignor of one-half to L. D. Farrell, Cleveland, Ohio. Valve reseating tool. 1,857,090; May 3.
Teller, Jacob, and A. P. Schulz, New York, N. Y., assignors, by mesne assignments, to Teller Stove Designing Corporation. Gas or electric water heater. Des. 86,899; May 3.
Teller, Jacob and A. P. Schulz, New York, N. Y., assignors, by mesne assignments, to Teller Stove Designing Corporation. Gas or electric water heater. Des. 86,900; May 3.
Teller Stove Designing Corporation. (See Teller, J., and Schulz, assignors.)
Ter Haak, Pieter. (See van Alphen, J. C., ter Haak, and Lechelt.)
Terrey, Arthur, London, England. Delivery and packing apparatus for printing presses. 1,856,978; May 3.
Terry, Vincent G., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Seam finishing machine. 1,856,174; May 3.
Textile-Finishing Machinery Company, The. (See Stelling, William A., assignor.)
Thaden, Herbert V., Mount Lebanon, Pa., assignor, by mesne assignments, to General Aviation Corporation, New York, N. Y. Aeroplane wing. 1,856,143; May 3.
Thomas, Adolph A., New York, N. Y. Thermostat. 1,856,600; May 3.
Thomas, Arthur, Thornton Heath, and R. Fitz Power, Hampstead, London, assignors to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Punching or like machine. 1,856,737; May 3.
Thomas, John N., assignor to May Oil Burner Corporation, Baltimore, Md. Advertising device. 1,856,520; May 3.
Thomas, William M., assignor of one-fourth to F. W. Lee and one-fourth to B. G. Johnson, Albuquerque, N. Mex. Carburetor. 1,857,070; May 3.
Thompson, Henry E. (See Lorentowicz, H. R., and Thompson.)
Thompson Products, Inc. (See Spire, William H., assignor.)

Thompson, Reuben B., Stillwater, assignor to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Feeding mechanism for sewing machines. 1,856,360; May 3.
Thoms, Alexander P. (See Halperin, H., and Thoms.)
Thomson Machine Company. (See Parsons, Edward T., assignor.)
Thordarson, Chester H., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Controlling means for coil winding machines and the like. 1,856,672; May 3.
Thordarson Electric Manufacturing Company. (See Thordarson, Chester H., assignor.)
Thorne, Carl B., Hawkesbury, Ontario, Canada. Storage receptacle. 1,856,361; May 3.
Ticket Issuing Machine Company, The. (See Scher, Louis, assignor.)
Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)
Tippey, Jesse M., St. Petersburg, Fla. Insect trap. 1,856,200; May 3.
Tisza, Edmond T., New York, and B. Joos, Yonkers, assignors to The Pyridium Corporation, Nepers Park, N. Y. Replacing one amino group in phenyl-azo-alpha-alpha-diamino pyridine with a hydroxyl group. 1,856,601; May 3.
Tisza, Edmond T., and B. Joos, Yonkers, assignors to The Pyridium Corporation, Nepera Park, N. Y. Ethers of hydroxy-beta-phenyl-azo-alpha - alpha-diamino-pyridines. 1,856,602; May 3.
Titan Abrasives Co. (See Doermann, Albert J., assignor.)
Todd, Ulysess G., assignor to The Pfaudler Company, Rochester, N. Y. Extract and beverage and making the same. 1,856,979; May 3.
Tomkinson, Gerald, Heathfield, Wolverley, near Kidderminster, England, and E. J. Perry, Birmingham, England. Weft needle or carrier for shuttleless looms. 1,856,119; May 3.
Tomlinson, Charles H., assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Connecting cars. 1,856,362; May 3.
Tomlinson, Charles H., assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Coupler. 1,857,035; May 3.
Tomlinson, Joe L., et al. (See Hitchcock, Guy F., assignor.)
Totzek, Friedrich, Essen-Stoppenberg, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa. Coke oven. 1,856,501; May 3.
Towle, Howard C., Cohasset, Mass., assignor to Bethlehem Shipbuilding Corporation. Punching machine. 1,856,175; May 3.
Trans-Lux Daylight Picture Screen Corporation. (See Birdsall, Wilfred T., assignor.)
Transom, Frederick, Washington, D. C. Projector lamp. 1,857,120; May 3.
Traver, William A., assignor to Franklin Process Company, Providence, R. I. Spool, beam, or the like. 1,856,298; May 3.
Tribune Company, The. (See Van der Horst, Frederick, assignor.)
Trico Products Corporation. (See Hueber, H., and Horton, assignors.)
Trimbey, Edward J., Glens Falls, N. Y. Method of and apparatus for screening paper pulp. 1,856,176; May 3.
Tull, Montrose G., Wayne, Pa. Board-feet computer. 1,857,071; May 3.
Turbo-Mixer Corporation, The. (See Valentine, K. S., assignor.)
Turner, Edwin A. (See Lower, N. M., and Turner.)
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Stoker. 1,856,521; May 3.
Turner, Giles M., Milwaukee, Wis. Rack. 1,856,935; May 3.
Turner, John J., Williamsville, assignor to National Gypsum Company, Buffalo, N. Y. Plaster board apparatus. 1,856,936; May 3.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Auxiliary shuttle box for shuttle changing looms. 1,856,177; May 3.
Turner Tanning Machinery Company, The. (See Schettler, Gustav A., assignor.)
Tuttle, Leonard I., Buchanan, assignor to The Standard Textile Products Company, New York, N. Y. Pattern fitting gear for multicolor printing machines. 1,856,363; May 3.
Twentieth Century Machinery Co. (See Strelow, Henry A., assignor.)
Twining, E. L. (See McLaughlin, Wilson L. and H. L., assignors.)
Two Way Electric Grinder Company. (See Gibson, Carson C., assignor.)
Tyden, Emil, Hastings, Mich. Temperature responsive device. 1,856,274; May 3.
Ulrey, Dayton. (See Zworykin, V. K., and Ulrey.)
Underberg, Henry, Brooklyn, assignor to Frankart, Inc., New York, N. Y. Statuette or similar article. Des. 86,901; May 3.
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Ungerer, Karl F., Pforzheim, Germany. Straightening and rolling machine. 1,856,937; May 3.
Union Bag & Paper Corporation. (See Avery, True M., assignor.)
Union Carbide and Carbon Research Laboratories, Inc. (See Mott, Chester, assignor.)
Union Oil Company of California. (See Kogan, J. J., assignor.)
Union Oil Company of California. (See Subkow, P., and Kogan, assignors.)
Union Special Machine Company. (See Christensen, N. V., and Hanneman, assignors.)
Union Special Machine Company. (See Dykeman, Harry E., assignor.)
Union Special Machine Company. (See Le Vesconte, Harold J., assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, Karl, assignor.)
Union Special Maschinenfabrik G. m. b. H. (See Schnurrbusch, Kurt, assignor.)
Union Switch & Signal Company, The. (See Failor, Charles W., assignor.)
Union Switch & Signal Company, The. (See Wallace, Herbert A., assignor.)
Union Switch & Signal Company, The. (See Williamson, Arba G., assignor.)
United-Carr Fastener Corporation. (See Jones, Walter I., assignor.)
United Shoe Machinery Corporation. (See Bertrand, F. E., assignor.)
United Shoe Machinery Corporation. (See Courser, Fred M., assignor.)
United Shoe Machinery Corporation. (See Cross, G. P. S., assignor.)
United Shoe Machinery Corporation. (See Eastman, Fred C., assignor.)
United Shoe Machinery Corporation. (See Pym, Arthur F., assignor.)
United Shoe Machinery Corporation. (See Ray, Eugene J., assignor.)
United Shoe Machinery Corporation. (See Terry, Vincent G., assignor.)
United States Air Compressor Company. (See Schultz, Paul I., assignor.)
United States Cast Iron Pipe & Foundry Company. (See Clark, Stuart B., assignor.)
United States Pipe & Foundry Company. (See Langenberg, Frederick C., assignor.)
United States Pipe & Foundry Company. (See Stokes, David B., assignor.)
U. S. Slicing Machine Company. (See Folk, Joseph, assignor.)
U. S. Slicing Machine Company. (See Stukart, Hendrik, assignor.)
U. S. Slicing Machine Company. (See van Duyn, Adrianus, assignor.)
U. S. Slicing Machine Company. (See van Hoorn, Jetze, assignor.)
Universal Hydraulic Corporation. (See McClellan, L. N., Kinzie, Savage, and Day, assignors.)
Universal Winding Company. (See Swanson, Ernest R., assignor.)
"Universelle" Cigarettemaschinen-Fabrik, J. C. Müller & Co., The Firm. (See Neff, Johannes, assignor.)
"Universelle" Cifiarettenmaschinen Fabrik. J. C. Müller & Co., The Firm. (See Schmiedel, J., assignor.)
Upson, Charles A., assignor to The Upson Company, Lockport, N. Y. Plaster surfaced building board. 1,856,603; May 3.
Upson Company, The. (See Harney, Francis W., assignor.)
Upson Company, The. (See Upson, Charles A., assignor.)
Upson, Maxwell M., Englewood, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y. Method and apparatus for forming piles. 1,856,604; May 3.
Valdéz, Gilberto R., New York, N. Y. Oiler for engines. 1,856,673; May 3.
Valentine, Kenneth S., Hollis, N. Y., assignor to The Turbo-Mixer Corporation, New York, N. Y. Gas scrubbing apparatus. 1,856,120; May 3.
Valley Iron Works Company. (See Peterson, E. A., and McGinnis, assignors.)
Valley Iron Works Company. (See Xistris, Theodore E., assignor.)
Van Alphen, Johannes C., P. ter Haak and T. Lechelt, Amsterdam, Netherlands. Scaling device. 1,856,299; May 3.
Vance, Cornelius A. (See Lucas, Harley, assignor.)
Van Duyn, Adrianus, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Work support for slicing machine. 1,856,894; May 3.
Van Hoorn, Jetze, Voorburg, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Slicing machine. 1,856,856; May 3.
Van Tuyl, Thomas, Chicago, Ill., assignor to Jay Manufacturing Company. Lubricating device. 1,856,300; May 3.
Venzie, Frederick M., Philadelphia, Pa. Partition and ceiling construction. 1,856,674; May 3.
Victor Metal Products Corporation. (See Prussing, Walter, assignor.)
Vingheroets, Louis, Grand Rapids, Mich. Airplane loading station. 1,856,446; May 3.
Vollmann, Heinrich. (See Kranzlein, G., Corell, and Vollmann.)

Von Der Horst, Frederick, assignor to The Tribune Company, Chicago, Ill. Paper roll hoisting plug. 1,857,901; May 3.
Von Wilmowsky, Felix F., New York, N. Y. Apparatus for heating, cooling, and regulating the temperature of buildings. 1,856,797; May 3.
Voorwinde, Willem, Rotterdam, Netherlands. Grab. 1,856,232; May 3.
W-K-M Company. (See Hoffoss, John E., assignor.)
Wadewitz, Martin. (See Erlanger, A. L., and Wadewitz.)
Wadsworth Electric Manufacturing Company, The. (See Wadsworth, George B., assignor.)
Wadsworth, George B., Company, The. (See Wadsworth, George E., assignor.)
Wadsworth, George B., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky. Electric switch. 1,856,448; May 3.
Wadsworth, George E., Erlanger, Ky., assignor, by mesne assignments, to The George B. Wadsworth Company, Cincinnati, Ohio. Electrical device. 1,856,858; May 3.
Wagner, Charles F. (See Evans, R. D., Wagner, and Griscom.)
Wakefield, Silas N., Pawnee, Ill. Tourist camping kit. 1,856,675; May 3.
Waldman & Duveneck et al. (See Lorentowicz, H. R., and Thompson, assignors.)
Waldman, Herman, et al. (See Lorentowicz, H. R., and Thompson, assignors.)
Waldman, Herman C., St. Louis, Mo. Fire stop for elevator doors. 1,856,895; May 3.
Walker, Dallas E., assignor of one-half to D. E. Walker, Dover, Fla. Game apparatus. 1,856,798; May 3.
Walker, Donald E. (See Walker, Dallas E., assignor.)
Walker, George T., New York, N. Y., assignor, by mesne assignments, to Kayser Hosiery Motor-Mend Corporation, Wilmington, Del. Tool handle for machines for relooping the runs in stockings and other knitted fabrics. 1,856,605; May 3.
Walker, Mark, South Pasadena, assignor to The Pacific R. & H. Chemical Corporation, Los Angeles, Calif. Stabilization of liquid hydrocyanic acid. 1,856,606; May 3.
Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,857,112; May 3.
Walter, Richard R., Starnberg, Germany. Producing sintered alloys. 1,856,607; May 3.
Walters, Fred G., London, England, assignor, by mesne assignments, to Ideal Roller & Manufacturing Company, Chicago, Ill. Roller. 1,856,085; May 3.
Walton, Julian N., Brooklyn, N. Y., assignor to The Anchor Packing Company, Philadelphia, Pa. Process and apparatus for manufacturing packing. 1,856,086; May 3.
Wasilewski, Fillmon. (See Sakowicz, Boleslaw, assignor.)
Waters, Gilbert C., assignor to H. F. Morriss Corporation, Rochester, N. Y. Card table cover. 1,856,799; May 3.
Watson, Ernest A., Coventry, assignor to S. Smith & Sons (Motor Accessories) Limited, London, England. Electrical liquid level indicating instrument. 1,856,364; May 3.
Watson, George J. (See Tagle, R. G., and Currie, assignors.)
Watson, Sydney G., Surbiton, and D. M. Henshaw, assignors to W. C. Holmes and Company, Limited, Huddersfield, Yorkshire, England. Removal of sulphur from fuel gases. 1,856,301; May 3.
Watt, Elihu D., La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Joint for pile shells. 1,856,522; May 3.
Watt, Elihu D., La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Pile core. 1,856,608; May 3.
Watt, Elihu D., La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Pile driving apparatus. 1,856,609; May 3.
Wattle, William M., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Multicolor weft replenishing mechanism. 1,856,178; May 3.
Weaver, Jerry M., Hopkinsville, assignor of one-half to J. E. Coleman, Allensville, Ky. Rat or mouse trap. 1,856,980; May 3.
Weimer, Albert W., and J. F. Smith, assignors to Walter Parson, Geneseo, Ill. Battery terminal. Re18,451; May 3.
Wellington, Arthur W. (See Surface, M. E., and Wellington.)
Wellman Engineering Company, The. (See Robin, Philip T., assignor.)
Wells, Thomas P., assignor of one-half to T. K. Hudson, Denver, Colo. Flowerpot. 1,856,179; May 3.
West, Frank R., assignor to Rice Products Inc., Detroit, Mich. Method and apparatus for cooling drinking water. 1,856,982; May 3.
Western Electric Company. (See Gilbert, John J., assignor.)
Western Electric Company. (See Horton, Joseph W., assignor.)
Western Electric Company, Incorporated. (See Stoller, Hugh M., assignor.)
Western Electric Company, Incorporated. (See Weston, William K., assignor.)
Western Union Telegraph Company, The. (See Dirkes, R. F., and Anderson, assignors.)
Western Union Telegraph Company, The. (See Haglund, Hakon H., assignor.)
Westinghouse Electric Elevator Company. (See McCormick, Harold V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Austin, Bascum O., assignor.)
Westinghouse Electric & Manufacturing Company. (See Baumann, Karl, assignor.)
Westinghouse Electric and Manufacturing Company. (See Dohner, Donald R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Estorff, W., and Heinemeyer, assignors.)
Westinghouse Electric and Manufacturing Company. (See Evans, R. D., Wagner, and Griscom, assignors.)
Westinghouse Electric & Manufacturing Company. (See Ford, James G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Gerdien, Hans, assignor.)
Westinghouse Electric & Manufacturing Company. (See Lewis, Frank E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sateren, M. G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, James N., assignor.)
Westinghouse Electric & Manufacturing Company. (See Zworykin, V. K., and Ulrey, assignors.)
Westinghouse Lamp Company. (See Ekstedt, John W., assignor.)
Westinghouse Lamp Company. (See Gustin, Daniel S., assignor.)
Westinghouse Lamp Company. (See Lederer, Ernest A., assignor.)
Westinghouse Lamp Company. (See Rich, Malcolm N., assignor.)
Weston, William K., Sanderstead, Surrey, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone cable. 1,856,676; May 3.
Wetherill-Morris Engineering Company. (See Morris, A. W., and Wetherill, assignors.)
Wetherill, Samuel P., jr. (See Morris, A. W., and Wetherill.)
Wheatley, Francis, sr., Kansas City, Mo. Rotary engines. 1,856,523; May 3.
Wheeler, Harve M., Houston, Tex. Drill bit. 1,856,896; May 3.
Wheeler, Leonard H., assignor to Alemite Corporation, Chicago, Ill. Lubricant compressor. 1,856,365; May 3.
Wheeler, Thorne L., Chatham, N. Y., and J. B. Carpenter, jr., West Roxbury, assignors to A. D. Little, Incorporated, Cambridge, Mass. Making bone black. 1,856,302; May 3.
Wheeling Mold & Foundry Division of the Continental Roll Steel Foundry Company. (See Nye, Ralph D., assignor.)
Whitaker, Alfred, West Drayton, and C. O. Browne, Ealing Common, London, England, assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y. Photographic recording of light variation. 1,856,524; May 3.
Whitcomb, Arthur J., assignor to Freyn Engineering Company, Chicago, Ill. Stock line recorder. 1,856,897; May 3.
White, Gerald N., Eastcheap, London, England. Production of colored effects in cementitious and building materials. 1,856,366; May 3.
White, Harold E., Butler, assignor to Lava Crucible Company, Pittsburgh, Pa. Method and material employed in the manufacture of refractory articles. 1,856,303; May 3.
Whiteley, Robert H., trustee. (See Whiteley, Robert H., assignor.)
Whiteley, Robert H., Oak Park, Ill., assignor to R. H. Whiteley, trustee. Self-lubricating bearing. 1,856,304; May 3.
Whitnall, George R., assignor to Northern Conveyor & Mfg. Co., Janesville, Wis. Material handling machine. 1,856,677; May 3.
Whitson, Delmar A., L. W. Physioc, and F. F. Brush, Los Angeles, Calif. Automatic printer. 1,856,858; May 3.
Wiegand, Frederick B., Cleveland, Ohio. Light signal system for railroads. 1,856,525; May 3.
Wiese, Franz, Berlin-Wilmersdorf, Germany. Closure for containers. 1,856,201; May 3.
Wietzel, Gustav, Mannheim, and F. Haubach, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of phosphoric acid. 1,856,144; May 3.
Wietzel, Rudolf. (See Horst, Horst-Dietrich v. d., and Wietzel.)
Wilz, Edwin O., assignor to The Wisconsin Alumni Research Foundation, Madison, Wis. Leavening. 1,856,938; May 3.
Wil-Fry Corporation. (See Fry, Walter L., assignor.)
Wilkes, Traub, New York, N. Y. Coal distributor. 1,856,981; May 3.
Wilkinson, Paul H., and F. Gebhart, Los Angeles, Calif.; said Gebhart assignor to said Wilkinson. Brake. 1,857,104; May 3.
Willcox & Gibbs Sewing Machine Company. (See Thompson, Reuben B., assignor.)
Williams, Forrest L., assignor to Williams Manufacturing Company, Portsmouth, Ohio. Buckle. 1,856,447; May 3.

Williams, George K., Port Pirie, South Australia, Australia. Apparatus for use in the refining of lead bullion and similar operations. 1,856,678; May 3.
Williams, Harry M., and V. W. Bihlman, Dayton, Ohio, assignors to General Motors Research Corporation. Apparatus for comminuting metals. 1,856,679; May 3.
Williams, Harry M., Dayton, Ohio, and A. L. Boegehold, assignors to General Motors Research Corporation, Detroit, Mich. Dynamo brush. 1,856,680; May 3.
Williams Manufacturing Company. (See Williams, Forrest L., assignor.)
Williamson, Arba G., Carnegie, assignor to The Union Switch & Signal Company, Swissvale, Pa. Train control system. 1,856,822; May 3.
Wilson, Elmer E., Santa Clara, Calif. Bait container and cutting board. 1,857,072; May 3.
Wilson, Leon T., Chatham, N. J., assignor to American Telephone and Telegraph Company. Testing apparatus. 1,856,202; May 3.
Wilson, Moses W. H., East Lansing, assignor to Motor Wheel Corporation, Lansing, Mich. Tail stock. 1,856,145; May 3.
Winchester, John J., Winchester, and A. A. Fragopulos, Boston, Mass. Silica wash and making the same. 1,856,526; May 3.
Wine, William E. (See Pilcher, J. A., and Wine.)
Winslow, Charles A., Vallejo, Calif. Air cleaners, crankcase ventilating means, and the like. 1,856,527; May 3.
Winter, Joseph W., Penfield, assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa. Refrigerating apparatus. 1,857,105; May 3.
Winthrop Chemical Company. (See Blum, Ferdinand, assignor.)
Wintroath, John A., Los Angeles, assignor to Wintroath Pumps, Ltd., Alhambra, Calif. Pump having wire cable for driving same. 1,856,610; May 3.
Wintroath Pumps Ltd. (See Wintroath, John A., assignor.)
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wisconsin Alumni Research Foundation. (See Peterson, W. H., and Fred, assignors.)
Wisconsin Alumni Research Foundation, The. (See Wilz, Edwin O., assignor.)
Wisk, Walter, New Britain, Conn. Adjustable propeller. 1,857,036; May 3.
Witter, Lawrie L., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,856,305; May 3.
Wolcott, Robeson B., Elmhurst, Ill. Electrical connecter. 1,856,681; May 3.
Wolff, Hugo, M. A. Kunz, Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of vat dyestuffs. 1,856,203; May 3.
Wolff, Wallace B., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,856,939; May 3.
Wolkoff, John, Newark, N. J. Dynamo electric machine. 1,856,146; May 3.
Wolkoff, John, Newark, N. J. Electric motor. 1,856,147; May 3.
Wood, Alan D., Lower Merion Township, Montgomery County, Pa. Fabrication of embossed metallic plates. 1,856,898; May 3.
Wood Newspaper Machinery Corporation. (See Isbell, John A., assignor.)
Wood Newspaper Machinery Corporation. (See Roesen, Oscar C., assignor.)
Woodruff, Graham C., Bronxville, N. Y., assignor to The L. C. L. Corporation. Freight car. 1,856,611; May 3.
Woodson, Omer L., and H. S. Mybres, assignors to The Cycloplane Company, Ltd., Los Angeles, Calif. Aviation training apparatus. 1,856,306; May 3.
Woody, Harry W. (See Gibson, Ranson P., and Woody.)
Workman, Ellison E., et al. (See Robinson, Edward A., assignor.)
Wright, Wilbur L., and L. D. Pierce, assignors to Oswego Falls Corporation, Fulton, N. Y. Hood capping container. 1,857,073; May 3.
Wright, Wilbur L., and L. D. Pierce, assignors to Oswego Falls Corporation, Fulton, N. Y. Hood capping container. 1,857,074; May 3.
Wright, Wilbur L., and L. D. Pierce, assignors to Oswego Falls Corporation, Fulton, N. Y. Hood capping container. 1,857,075; May 3.
Wyrick, Clayton E., assignor to Gairing Tool Company, Detroit, Mich. Floating reamer. 1,856,406; May 3.
Xistris, Theodore E., assignor to Valley Iron Works Company, Appleton, Wis. Pulp strainer. 1,856,450; May 3.
York-Hoover Body Corporation. See Ziegler, Edwin S., assignor.)
Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,856,528; May 3.
Young, Charles D. (See Faries, R., and Young.)
Young, Richard G., assignor of one-half to H. Dickson, Toronto, Ontario, Canada. Bed couch. 1,856,449; May 3.
Youngstown Sheet and Tube Company, The. (See Leahy, Frank E., assignor.)
Youngstown Sheet and Tube Company, The. (See Ohlson, C. G., assignor.)
Zass, Michael, Wauwatosa, assignor to The Milwaukee Electric Railway & Light Company, Milwaukee, Wis. Trolley ear. 1,856,738; May 3.
Zeller, Myron E., Dearborn, Mich. Liquid level gauge. 1,856,899; May 3.
Zenker, Oscar E., Glendale, N. Y. Hollow metal door and the like. 1,857,076; May 3.
Zerbi, Tranquillo, assignor to Fiat Societa Anomina, Turin, Italy. Propeller hub for aircraft engines with a reducing gear of the sun and planet wheel type. 1,856,529; May 3.
Zerick, Howard E., Ford City, Pa. Typewriter line spacer. 1,856,612; May 3.
Zerweck, Werner. (See Herz, R., and Zerweck.)
Zidro, Matt, Jerome, Ariz. Mine timbering apparatus. 1,856,682; May 3.
Ziegler, Edwin S., assignor to York-Hoover Body Corporation, York, Pa. Truck body. 1,856,683; May 3.
Ziegner, Heinrich, Hagen, Germany. Porous body and manufacturing the same. 1,856,684; May 3.
Zucker, Milton. (See Mutersbaugh, G. H., Zucker, Heiser, and Shope.)
Zuckerman, Adolph M., assignor to R. Hoe & Co., Inc., New York, N. Y. Associating mechanism for web printing machines. 1,856,307; May 3.
Zworykin, Vladimir K., and D. Ulrey, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Mercury arc device with grid control. 1,856,087; May 3.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 3D DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accounting machine. C. D. Lake. 1,856,418; May 3.
Acetaldehyde, Production of. Horst, Horst-Dietrich v. d., and R. Wietzel. 1,856,639; May 3.
Acid anhydrides, Manufacture of organic. W. O. Herrmann and H. Deutsch. 1,856,251; May 3.
Acid, Production of lactic and acetic. W. H. Peterson and E. B. Fred. 1,856,425; May 3.
Acid, Production of phosphoric. G. Wietzel and F. Haubach. 1,856,144; May 3.
Acid, Stabilization of liquid hydrocyanic. M. Walker. 1,856,606; May 3.
Adhesive sheeting. R. G. Drew. 1,856,986; May 3.
Advertising and price display board, Combined. La V. E. Larson. 1,856,960; May 3.
Advertising attachment for weighing scales. F. P. Jackson. 1,856,339; May 3.
Advertising device. J. N. Thomas. 1,856,520; May 3.
Aerocrete and producing the same, Nailing. C. J. Larkins. 1,856,644; May 3.
Aeroplane. E. H. Lange. 1,856,219; May 3.
Aeroplane. G. Miquel and F. Ladeveze. 1,856,578; May 3.
Aeroplane. J. Sharp. 1,856,228; May 3.
Aeroplane wing. F. F. Kookogey. 1,856,643; May 3.
Aeroplane wing. H. V. Thaden. 1,856,143; May 3.
Aeroplane wing structure. R. R. Osborn. 1,856,080; May 3.
Agricultural implement. F. Austin. 1,856,065; May 3.
Air brake. C. A. Campbell. 1,856,209; May 3.
Air break switch. A. O. Austin. 1,856,121; May 3.
Air cleaner, crankcase ventilating means, and the like. C. A. Winslow. 1,856,627; May 3.
Air conditioning apparatus. A. B. Modine. 1,856,500; May 3.
Air inlet for tanks. E. C. Grummert. 1,856,184; May 3.
Airplane. H. C. Ford, J. M. Ballou, and V. W. Balzer. 1,856,093–4; May 3.
Airplane loading station. L. Vingheroets. 1,856,446; May 3.
Airplane, Outrigger frame, fore and aft control type. J. Blondin. 1,856,532; May 3.
Airplane safety device. J. Kiss. 1,856,999; May 3.
Airplanes, Lateral control for. A. A. Gassner. 1,856,157; May 3.
Alarm mechanism, Fire. G. F. Bulen. 1,857,040; May 3.
Aligning device. G. E. Luce. 1,856,574; May 3.
Alkali metal salts of organic acids, Producing. E. E. Reid. 1,856,263; May 3.
Alloys, Producing sintered. R. R. Walter. 1,856,607; May 3.
Alumina, Preparation of. J. C. Seailles. 1,856,194; May 3.
Aluminum magnesium alloys. R. S. Archer and L. W. Kempf. 1,856,615; May 3.
Amino derivatives of 4-hydroxy diphenyl. E. F. Grether. 1,856,131; May 3.
Amino group in phenyl-ago-alpha-alpha-diamino pyridine with a hydroxyl group, Replacing one. E. T. Tisza and B. Joos. 1,856,601; May 3.
Amplifier, Thermionic. M. G. Sateren. 1,856,116; May 3.
Anhydrous-alkali-metal salts of 5,5-di-aliphatic-substituted barbituric acids and producing them. H. A. Shonle. 1,856,792; May 3.
Annealing furnace. H. A. Kenworthy. 1,856,563; May 3.
Antenna reel. C. B. Mirick. 1,856,223; May 3.
Anthrimido carbazoles. H. Bruns, F. Baumann, and M. Kugel. 1,856,207; May 3.
Armature coating machine. L. C. Goad. 1,856,757; May 3.
Article and making same, Metal impregnated fibre. M. M. Frost. 1,856,475; May 3.
Articles, Apparatus for covering. H. P. de Correvont. 1,856,694; May 3.
Articles containing regenerated cellulose, Manufacture of fiber. G. A. Richter and M. O. Schur. 1,856,114; May 3.
Articles, Method and material employed in the manufacture of refractory. H. E. White. 1,856,303; May 3.
Articles, Method of and apparatus for forging upset. W. H. Spire. 1,856,440; May 3.
Articles produced in quantity, Apparatus for verifying. L. C. Blomstrom. 1,856,944; May 3.
Articles to X-rays, Method of and apparatus for subjecting. F. S. Smith. 1,856,084; May 3.
Ash receiver. E. S. Frank. 1,856,990; May 3.
Assembling apparatus. S. N. Johnson and C. E. Birch. 1,856,768; May 3.
Assembling device. E. W. Dolamore. 1,856,948; May 3.
Automobile body. A. I. McGloughlin. 1,857,061; May 3.
Automobile emblem attachment. W. F. Price. 1,856,508; May 3.
Automobiles, Shipping. J. McMullen. 1,856,106; May 3.
Aviation training apparatus. O. L. Woodson and H. S. Myhres. 1,856,306; May 3.
Awning arm construction. H. C. Heiser. 1,856,161; May 3.
Axle assembly for motor trucks, Rear. J. V. Bretaud. 1,856,461; May 3.
Azo-dyestuffs containing chromium and making same. F. Straub, H. Mayer, and W. Anderau. 1,856,796; May 3.
Backing for plastic material. F. W. Harney. 1,856,633; May 3.
Bag: *See*—
Golf bag. Window bag.
Barber chair. L. A. Carter. 1,856,691; May 3.
Battery: *See*—
Primary battery.
Battery cell hoist. I. E. Coffey. 1,856,621; May 3.
Battery terminal. A. W. Weimer and J. F. Smith. Re18,451; May 3.
Bearing and shaft. F. I. Lauter. 1,856,770; May 3.
Bearing, Dustproof ball. H. R. Gotthardt. 1,856,547; May 3.
Bearing, Scale. J. W. Bryce. 1,856,410; May 3.
Bearing, Self lubricating. R. H. Whiteley. 1,856,304; May 3.
Bed and mantle, Combined. H. Bartels. 1,856,456; May 3.
Bed couch. R. C. Young. 1,856,449; May 3.
Bed, Invalid. E. Phillips. 1,856,785; May 3.
Belt, Buoyant bathing. G. E. Haines. 1,856,632; May 3.
Benzanthrone derivatives and preparing them. G. Kranzlein, H. Greune, and G. Langbein. 1,856,711; May 3.
Bill fold. G. F. Groom. 1,856,703; May 3.
Binder, Loose leaf. F. L. Impey. 1,856,337; May 3.
Bit: *See*—
Drill bit.
Bit forging machine. L. Bortkewicz. 1,857,011; May 3.
Bit while the same is being sharpened, Holding and adjusting a drill. A. Gassmann. 1,856,829; May 3.
Blasting cap. C. H. Lickle. 1,856,103; May 3.
Blowout preventer. J. R. Martin and W. E. King. 1,856,817; May 3.
Board: *See*—
Advertising and price display board. Building board.
Body and manufacturing the same, Porous. H. Ziegner. 1,856,684; May 3.
Body for folding baby carriages. J. A. Mahr. 1,856,491; May 3.
Boiler: *See*—
Sectional boiler. Steam boiler.
Boiler. C. A. Olson. 1,856,355; May 3.
Bonded products, Producing refractory acid-proof and other ceramically. H. Ackermann. 1,856,613; May 3.
Bone black, Making. T. L. Wheeler and J. B. Carpenter, jr. 1,856,302; May 3.
Bottle cap. B. F. Conner. Des. 86,876; May 3.
Bottle capping machine. E. H. Carruthers. 1,856,827; May 3.
Box: *See*—
Powder box.
Box accumulator, Packed. W. P. Shepherd. 1,856,733; May 3.
Box, case, or holder for gramophone needles. G. B. King. 1,857,052; May 3.
Box construction. M. E. Holy. 1,856,282; May 3.
Box header, Adjustable outlet. W. H. Owen. 1,856,356; May 3.
Box parts, Forming. J. Schmiedel. 1,856,267; May 3.
Bracket: *See*—
Furring bracket.
Brake: *See*—
Air brake. Mechanically operated brake.
Brake. A. Y. Dodge. 1,856,070; May 3.
Brake. H. Ford. 1,856,183; May 3.
Brake. B. J. Lindgren. 1,856,345; May 3.
Brake. P. H. Wilkinson and F. Gebhart. 1,857,104; May 3.
Brake control device. F. Kratz. 1,856,342; May 3.
Brake head and shoe assembly. R. L. Jirka. 1,856,812; May 3.
Brake operating mechanism. H. Perrot. 1,856,424; May 3.
Brakes, Equalizing device for. L. Taddeo. 1,856,670; May 3.
Brakes, Servo-mechanism for. F. Kratz. 1,857,053; May 3.

Brush and buffer device, Combined. T. Owens. 1,856,289; May 3.
Brush, Dynamo. H. M. Williams and A. L. Boegehold. 1,856,680; May 3.
Brush rigging, Manufacture of. A. W. Phelps. 1,856,723; May 3.
Bubble, foam, Producing fine. N. Sandor. 1,856,510; May 3.
Bucket wheel and like rotating member. C. W. Rice. 1,856,786; May 3.
Buckle. F. L. Williams. 1,856,447; May 3.
Buckle, Belt. A. Meehan. 1,856,775; May 3.
Buckle for belts or straps. T. A. McDermott and A. Meehan. 1,856,776; May 3.
Buckle, Safety. A. C. Foulk. 1,856,327; May 3.
Buckle, Slide. J. H. Donkee. 1,856,696–8; May 3.
Buffing machine. F. E. Bertrand. 1,856,126; May 3.
Building board, Plaster sufraced. C. A. Upson. 1,856,603; May 3.
Building construction. R. Carvel. 1,856,906; May 3.
Building materials, Light weight. J. S. Peck and E. V. Barrett. 1,856,929; May 3.
Bumper construction. H. R. Saxon. 1,857,065; May 3.
Burner: *See*—
Oil burner.
Button, Cuff. A. H. Metcalf. Des. 86,888; May 3.
Cabinet, Amusement machine. J. F. Meyer. Des. 86,889; May 3.
Cabinet, Dental burr. L. M. Ciboch. 1,856,807; May 3.
Cabinet, Refrigerator. D. R. Dohner. Des. 86,878; May 3.
Cabinet, Shoe shining. F. B. De Brock. Des. 86,877; May 3.
Cable, Telephone. W. K. Weston. 1,856,676; May 3.
Calcium nitrate and ammonium salts from phosphate rock and like phosphate material, Producing. E. Johnson. 1,856,187; May 3.
Camera and projecting apparatus, Combined. F. H. Owens. 1,856,583; May 3.
Camera focusing system. W. F. Rudolph, J. R. Hunt, and H. G. Cunningham. 1,856,432; May 3.
Cameras, Movement shift and focusing tube arrangement for motion picture. J. R. Hunt. 1,856,482; May 3.
Campaign pin. W. L. Gibbons. Des. 86,882; May 3.
Can. C. A. Anderson. 1,856,941; May 3.
Cap. P. W. Peetz. 1,856,967; May 3.
Cap. A. Silberstein. 1,856,230; May 3.
Car, Freight. G. C. Woodruff. 1,856,611; May 3.
Car, Railway. J. A. Pilcher and W. E. Wine. 1,856,400; May 3.
Cars, Connecting. C. H. Tomlinson. 1,856,362; May 3.
Carburetor. R. F. Bracke. 1,856,238; May 3.
Carburetor. W. C. Carter. 1,856,464; May 3.
Carburetor. H. B. Parker. 1,857,030; May 3.
Carburetor. W. M. Thomas. 1,857,070; May 3.
Carburetor choke control. W. A. Chryst. 1,856,746; May 3.
Card, Counting. S. Badanes. 1,857,038; May 3.
Carton. E. P. Sherman. 1,857,033; May 3.
Carton packing machine, Automatic. W. E. Hall. 1,857,080; May 3.
Cartridge and operating same, Blasting. L. E. Lawson. 1,856,849; May 3.
Cartridge, Blasting. F. H. Armstrong. 1,856,861; May 3.
Cartridge, Blasting. F. H. Kneeland. 1,856,871; May 3.
Case: *See*—
Shipping case. Wrist watch case.
Casing elevator. J. E. Hoffoss. 1,856,636; May 3.
Casing head and blow out preventer. J. D. Nixon. 1,857,101; May 3.
Caster stem and socket. E. A. Brokaw and W. H. Noelting. 1,856,535; May 3.
Casting machine, Automatic. A. W. Morris and S. P. Wetherill, jr. 1,856,352; May 3.
Castings, Apparatus for molding helical. C. E. Nordfeldt, W. J. Ahlquist, and I. M. Emery. 1,856,166; May 3.
Cells by means of rays of light, Apparatus for treating living. T. Reiter and D. Gábor. 1,856,969; May 3.
Cement, Making Portland. H. H. Steinour. 1,856,442; May 3.
Cement product. J. W. Ledeboer. 1,856,570; May 3.
Chains, so called snake chains, Apparatus for the production of ornamental. J. Alvera and K. Schofer. 1,856,940; May 3.
Chair: *See*—
Barber chair. Extensible chair.
Collapsible chair. Rocking chair.
Chair. H. Easterday. Des. 86,879; May 3.
Channel sections, Rolling. P. A. Schulz and H. K. Maxwell. 1,856,269; May 3.
Charge forming device. W. H. Teeter. 1,856,736; May 3.
Checkerwork. W. H. Drain, jr. 1,856,478; May 3.
Cheese, Apparatus for branding the grade on. J. F. Barghausen. 1,856,530; May 3.
Chimneys from several sections, Apparatus for building iron-plate. E. Haber. 1,856,384; May 3.
Chocolate, Molding. H. L. Borg. 1,856,153; May 3.
Chuck, Quick change. J. H. Smith. 1,856,973; May 3.
Cigar wrapping and banding machine. M. Miller. 1,856,421; May 3.
Cigarette machines, Tobacco feeding apparatus for. J. Behrlenz. 1,856,688; May 3.
Cigarette roller. F. Eberhardt. 1,856,949; May 3.
Cigarettes or other goods in packets, Apparatus for inserting. J. Neff. 1,856,286; May 3.
Circuit closer, Heat responsive. E. Lyndon. 1,856,715; May 3.
Circuit controller. G. L. Cragg. 1,857,043; May 3.
Circuit controller. C. A. B. Halvorson. 1,856,832; May 3.
Circuit for two way signaling systems, Terminating. C. N. Nebel. 1,856,654; May 3.
Circuitous elevator. W. F. Eames. 1,857,118; May 3.
Circuits, Filter. H. M. Stoller. 1,856,666; May 3.
Circuits, Frequency measuring. J. W. Horton. 1,856,707; May 3.
Clamp for bell and spigot pipe joints, Repair. G. Seaberg. 1,856,788; May 3.
Clamping ring, Hose darning. G. E. Gibboney. 1,856,830; May 3.
Cleaner: *See*—
Meat block cleaner. Suction cleaner.
Cleaner and spout retainer, Oil hole. J. B. Stoltzfus. 1,856,598; May 3.
Clip: *See*—
Card holding clip. Tenter clip.
Clock case. G. H. Stevens. Des. 86,897; May 3.
Clock with ringing mechanism. A. H. Miller. 1,856,496; May 3.
Closet: *See*—
Water closet.
Closet seat, Water. T. Grillo and P. Mongillo. 1,856,159; May 3.
Closure for containers. F. Wiese. 1,856,201; May 3.
Cloth and producing same, Decorative rubberized. J. Stein. 1,856,595; May 3.
Clothes assembling rack. M. J. Buckley. 1,856,239; May 3.
Clutch and transmission mechanism. J. B. Bennett. 1,856,457; May 3.
Clutch, Centrifugal force fluid pressure. F. Götz. 1,857,016; May 3.
Clutch, Electromagnetic. H. E. Hodgson. 1,856,481; May 3.
Clutch, Friction. H. W. Nieman. 1,856,135; May 3.
Clutch, Multiple disk. C. B. Spase. 1,856,735; May 3.
Coal, Carbonizing. O. H. Hertel. 1,856,252; May 3.
Coal distributor. T. Wilkes. 1,856,981; May 3.
Coat. D. Long. Des. 86,886; May 3.
Coating, Process and apparatus for. R. P. Carlton. 1,856,744; May 3.
Collapsible chair. G. T. Grondin. 1,856,759; May 3.
Color photography. J. B. Harris, jr. 1,857,083; May 3.
Combustion, Apparatus for producing. G. S. Meikle. 1,856,720; May 3.
Compounds of amido-pyrin with ethyl isopropyl barbituric acid, Molecular. W. G. Christiansen. 1,856,620; May 3.
Compressor, Lubricant. L. H. Wheeler. 1,856,365; May 3.
Compressors, Variable clearance pocket for. C. E. Blank. 1,856,460; May 3.
Computer, Board feet. M. G. Tull. 1,857,071; May 3.
Concrete blocks, Apparatus for molding hollow. B. F. P. Poore. 1,857,003; May 3.
Condensation in refrigerator walls, Preventing. D. F. Keith. 1,857,086; May 3.
Condenser unit, Impregnated. M. Kevelson. 1,856,392; May 3.
Conductor, Electric. T. E. Murray. 1,856,109; May 3.
Conductor system, Coaxial. H. A. Affel and E. I. Green. 1,856,204; May 3.
Conductors, Tapered loading of. J. J. Gilbert. 1,856,702; May 3.
Conformator gauge. K. W. Sommer and F. Hauser. 1,856,439; May 3.
Connecter. W. E. Banks and A. F. Stone. 1,856,455; May 3.
Connecter for train pipes. E. A. Robinson. 1,856,656; May 3.
Connection, Draft. W. J. Coultas and C. J. Frederiksen. 1,856,468; May 3.
Container. A. S. Ethridge. 1,856,474; May 3.
Container. W. P. Hicks. 1,857,021; May 3.
Container and cutting board, Bait. E. E. Wilson. 1,857,072; May 3.
Container and dispenser, Cigarette. A. Schumer. 1,856,790; May 3.
Container and relief valve therefor, Vented. C. M. Gere. 1,857,015; May 3.
Container, Confection. J. S. Hartig. 1,856,634; May 3.
Container, Dispensing and massage. H. R. Priest. 1,856,507; May 3.
Container, Heat exchanging. B. Lindemann. 1,857,087; May 3.
Container, Hood capping. W. L. Wright and L. D. Pierce. 1,857,073–5; May 3.
Container, Memorial. H. E. Carsey. 1,856,619; May 3.
Container wall and bushing fitting in combination therewith. E. E. Cooper. 1,856,747; May 3.
Continuous flow tub. C. R. Clarke. 1,856,318; May 3.
Control apparatus, Automatic. G. W. Hopkins. 1,856,688; May 3.
Control mechanism. S. J. Lonergan and H. E. Ginther. 1,856,489; May 3.
Control mechanism. J. P. Morley and S. J. Lonergan. 1,856,502; May 3.

Controlling means for coil winding machines and the like. C. H. Thordarson. 1,856,672; May 3.
Conveyer. A. J. Rebstock. 1,856,262; May 3.
Conveyer, Elevating. I. J. Kuert. 1,856,873; May 3.
Conveyers, Feeding mechanism for reciprocating. F. L. McCarty, G. H. Ernsbarger, and J. V. MacDonald. 1,856,191; May 3.
Conveying mechanism. W. J. Miller. 1,856,498; May 3.
Conveying system and apparatus for pulp wood. J. Stadler. 1,856,118; May 3.
Cooking device. E. C. Claus. 1,856,864; May 3.
Cooler: *See*—
Iceless cooler. Liquid cooler.
Cooler and cleaner, Combined oil. B. Loeffler. 1,856,771; May 3.
Cooling system. A. F. Masury and C. Froesch. 1,856,772; May 3.
Copper powder, Making. C. F. Sherwood. 1,856,661; May 3.
Cord holding clip. J. Schiller. 1,856,594; May 3.
Corrector system for synchronous telegraph apparatus. H. H. Hagiund. 1,856,331; May 3.
Cot, Camping. M. A. Davis. 1,856,624; May 3.
Couch, Hygienic. G. Rapprich. 1,856,113; May 3.
Counter stiffener molding machine. J. Spadafora. 1,856,296; May 3.
Coupler. C. H. Tomlinson. 1,857,035; May 3.
Coupling: *See*—
Electrostatic coupling. Shaft coupling.
Rod coupling. Tube coupling.
Coupling arrangement for compensated high frequency amplifiers. E. Karplus. 1,856,709; May 3.
Coupling device. A. Kartvelichvili and E. Chagniard. 1,856,870; May 3.
Coupling system. W. A. MacDonald. 1,857,055; May 3.
Cover. Adjustable automobile panel. H. A. Sallop. 1,856,115; May 3.
Cover, Card table. G. C. Waters. 1,856,799; May 3.
Cover for dump body vehicles. H. W. Helms. 1,856,281; May 3.
Cover for dump body vehicles, Collapsible. H. W. Helms. 1,856,280; May 3.
Cover for sintering machines. G. U. Greene. 1,856,548; May 3.
Cover, Radiator. W. J. Bacon. 1,856,454; May 3.
Cover, Seat side arm. W. L. Fry. 1,856,868; May 3.
Cross winding frame. H. Schwelter. 1,856,513; May 3.
Culinary implement. C. E. Latshaw. 1,856,769; May 3.
Current interrupter, Electric. L. Ludwig. 1,856,878; May 3.
Currents, Process and device for transformation of electric. J. Dieux. 1,856,910; May 3.
Curtain roller. K. A. Benzee. 1,856,742; May 3.
Cutter: *See*—
One piece cutter. Vine cutter.
Cutter bar for harvesters. R. C. Livesay. 1,856,488; May 3.
Cutter for earth boring drills. H. W. Fletcher. 1,856,627; May 3.
Cutting apparatus, Glass. J. L. Drake. 1,856,128; May 3.
Cutting machine. E. A. Capocefalo. 1,856,154; May 3.
Cutting machine. F. C. Eastmen. 1,856,130; May 3.
Cylinder paper machine. E. A. Peterson and W. J. McGinnis. 1,856,081; May 3.
Cylinder, Rotary printing. H. Burkholdt. 1,856,181; May 3.
Delivery and packing apparatus for printing presses. A. Terrey. 1,856,978; May 3.
Derrick construction. P. Chapman. 1,856,907; May 3.
Derrick finger attachment. F. Hammerson. 1,856,833; May 3.
Desk and chair, Folding. S. M. Swensson. 1,856,977; May 3.
Desk pad, Pyraline. C. J. Gutberlet. 1,856,160; May 3.
Detector: *See*—
Ground detector.
Dipper tooth structure. P. T. Robin. 1,856,930; May 3.
Direction indicating apparatus for motor vehicles. J. J. Aducl. 1,856,614; May 3.
Disconnect switch. W. J. Brennan. 1,856,313; May 3.
Disk, Abrasive. A. J. Doermann. 1,856,321; May 3.
Dispenser, Air pressure. J. F. Goetz. 1,857,084; May 3.
Dispensing machine. L. H. Morin. 1,856,780; May 3.
Dispensing machine. A. J. Signor. Re18,449; May 3.
Display equipment. W. B. Morton and L. F. Beisner. Re18,453; May 3.
Distillery slops jointly with wood sawdust or other vegetable waste or carbonaceous materials, Utilization of. A. Placek. 1,856,357; May 3.
Domestic appliance. R. L. Lee. 1,856,487; May 3.
Door and latch construction. P. E. Breneman. 1,856,680; May 3.
Door and the like, Hollow metal. O. E. Zenker. 1,857,076; May 3.
Door lock. A. Dinn. 1,856,091; May 3.
Door operating mechanism, Elevator. H. V. McCormick. 1,856,718; May 3.
Door structure, Sliding. L. A. Bittorf. 1,856,235; May 3.
Dough dispensing machine, Adjustable. F. L. Schoel. 1,856,511; May 3.
Drawer release mecbanism. J. Q. Sherman. 1,856,971; May 3.
Drill: *See*—
Well drill.
Drill bit. W. V. Seifert. 1,856,437; May 3.
Drill bit. H. M. Wheeler. 1,856,896; May 3.
Drive for presses employed for shaping tiles and other articles. F. G. Gatensbury. 1,856,096; May 3.
Drive for shaft and cam actuated members of flat-full fashioned machines, Vibration free. P. Lieberknecht. 1,857,099; May 3.
Drive system for motor vehicles, Front wheel. S. S. Guy. 1,856,831; May 3.
Driving mechanism for motor vehicles. F. E. Davis. 1,856,748; May 3.
Driving mechanism, Windlass and capstan. G. E. Barrett. 1,856,903; May 3.
Duster, Flour. E. T. Parsons. 1,856,585; May 3.
Dyeing machine. J. Macadam, jr. 1,857,111; May 3.
Dyestuffs and making same, Wool azo. G. Kallscher, R. Schuele, and H. Schindhelm. 1,856,217; May 3.
Dyestuffs of the anthraquinone series and making same. O. Bally, P. Grossmann, and F. Felix. 1,856,802; May 3.
Dyestuffs of the anthanthrone series, Making vat. R. Herz and W. Zerweck. 1,856,215; May 3.
Dyestuffs, Preparing vat. G. Kranzlein, M. Corell, and H. Vollman. 1,856,710; May 3.
Dyestuffs, Production of vat. H. Wolff, M. A. Kunz, and K. Koeberle. 1,856,203; May 3.
Eccentric for shaking mechanism. M. J. Mollen. 1,856,777; May 3.
Edge router, Side walk. A. B. D'Ippolito. 1,856,412; May 3.
Edger and groover, Lawn. J. A. Schwarz. 1,856,435; May 3.
Educational appliance. M. A. Amor. 1,857,009; May 3.
Educational device. A. W. McLintock and J. W. Rice. 1,856,650; May 3.
Electric control system for conveyers. J. Sylvester. 1,856,669; May 3.
Electric machine, Dynamo. D. B. Hoseason. 1,857,023; May 3.
Electric machine, Dynamo. J. Wolkoff. 1,856,146; May 3.
Electric motor. J. Wolkoff. 1,856,147; May 3.
Electric switch. V. G. Apple. 1,856,407; May 3.
Electric switch. G. B. Wadsworth. 1,856,448; May 3.
Electric switch, High tension. H. B. Massey. 1,856,840; May 3.
Electric switch, Safety. L. E. Koch. 1,856,077; May 3.
Electric welder. F. P. McBerty. 1,857,060; May 3.
Electrical connecter. R. B. Wolcott. 1,856,681; May 3.
Electrical device. G. E. Wadsworth. 1,856,858; May 3.
Electrical gate control. H. E. Baker. 1,856,942; May 3.
Electrical switch. J. E. Jewett. 1,856,254; May 3.
Electrical welding apparatus. W. E. Crawford. 1,857,044; May 3.
Electrical welding apparatus. W. E. Crawford. 1,857,115; May 3.
Electricity meter, Induction. J. Harris. 1,856,554–5; May 3.
Electrode. A. L. Goddard. 1,856,758; May 3.
Electrode. R. W. Reitherman. 1,856,727; May 3.
Electrode for electrolytic apparatus. J. N. Smith. 1,856,663; May 3.
Electrolytic apparatus. A. E. Knowles. 1,856,218; May 3.
Electrolytic cell. A. E. Knowles. 1,856,393; May 3.
Electron discharge device with cesiated cathode. E. A. Lederer. 1,856,258; May 3.
Electrostatic coupling. A. O. Austin. 1,856,122; May 3.
Elevator: *See*—
Casing elevator. Garage elevator.
Circuitous elevator.
Embossing and vending apparatus. G. W. Heene. 1,856,760–1; May 3.
Embroidered lace edging. H. Schwarber. Des. 86,893–4; May 3.
Embroidering. H. Hemmerich. 1,856,556; May 3.
Engine: *See*—
Internal-combustion engine Single acting engine.
Rotary engine. Steam engine.
Engine accelerator, Vehicle. D. Roeder. 1,856,192; May 3.
Engines, Rotary. F. Wheatley, sr. 1,856,523; May 3.
Envelope and method of treating furniture. W. W. Scott. 1,856,931; May 3.
Envelope making machine. E. Sandfanander. 1,856,659; May 3.
Esters of salicylic acid. L. E. Mills and H. S. Goodwin. 1,856,880; May 3.
Ethers of pydroxy-beta-phenyl-azo-alpha-alpha-diamino pyridines. E. T. Tisza and B. Joos. 1,856,602; May 3.
Extensible chair. A. J. May. 1,856,493; May 3.
Extension handle, Adjustable. P. F. Donahue. 1,856,845; May 3.
Extract and beverage and making the same. U. G. Todd. 1,856,979; May 3.
Extruding machine. W. Prussing. 1,856,290; May 3.
Eyeglasses. A. E. Jones. 1,856,163; May 3.
Fabric from artificial threads. A. L. Erlanger and M. Wadewitz. 1,856,322; May 3.
Fabric holding device. A. D. Elliott. 1,856,244; May 3.
Fabrics, Manufacture of. J. Morton. 1,856,782; May 3.
Fan. L. M. Persons. 1,856,587; May 3.
Fan, Suction and exhaust. J. D. Parker. 1,856,398; May 3.
Fare indicator. P. Riegger. 1,856,403; May 3.

Fastener, Safety removable. A. Bebel. 1,856,843; May 3.
Fastener, Storm sash. A. T. Larsen. 1,856,569; May 3.
Faucet. J. F. Bentley. 1,856,458; May 3.
Faucet. H. S. Steen. 1,856,664; May 3.
Fertilizer distributor. W. A. Hyland. 1,856,417; May 3.
Fiber product and making same. W. A. Darrah. 1,856,946; May 3.
Fibers, Manufacture of artificial. F. Ferrand. 1,856,071; May 3.
Filament for incandescent electric lamps. J. W. Ekstedt. 1,856,243; May 3.
Filaments, Process and apparatus for the manufacture of artificial. E. Prince. 1,856,401; May 3.
Film for acoustic devices, Vibrating. F. L. Desbrière. 1,856,749; May 3.
Film reel to facilitate film threading. E. M. Porter. 1,856,112; May 3.
Film roll, Photographic. E. Mayer. 1,856,717; May 3.
Film treating apparatus. W. V. D. Kelley. 1,856,390; May 3.
Filter, Continuous. J. J. Armstrong. 1,856,452; May 3.
Filter, Electrical. G. B. Crouse. 1,856,182; May 3.
Finishing machine for wheels, etc. W. M. Duncan. 1,856,846; May 3.
Fire extinguisher. J. Martin. 1,856,575; May 3.
Firearm. C. C. Loomis. 1,856,395; May 3.
Fish plates engaging the rail heads, Adjustable. H. Pösentrup. 1,856,358; May 3.
Fishing reel. L. Bonsieur. 1,856,948; May 3.
Fishing rod tip. P. A. Haberl. 1,856,551; May 3.
Fixture, Curtain support. J. Manna. 1,856,962; May 3.
Fixture for electric lights, Suspension. M. E. Surface and A. W. Wellington. 1,856,142; May 3.
Floor covering. J. T. Baldwin. 1,856,369; May 3.
Floor covering, Smooth surfaced. J. T. Baldwin. 1,856,370–1; May 3.
Flowerpot. T. P. Wells. 1,856,179; May 3.
Fluid contents of cylinders, Method of and apparatus for determining the. C. Mott. 1,856,079; May 3.
Fluid metering device. W. L. Marden. 1,856,850; May 3.
Flume structure and building same, Concrete. O. W. Peterson, H. Keesling, and P. I. Kurtz. 1,856,589; May 3.
Foamy body adapted to be used in making cellular concrete, Producing a. J. A. Rice. 1,856,294; May 3.
Folding mechanism. C. S. Crafts. 1,857,114; May 3.
Food compounds, Making. M. J. Bridgman. 1,856,206; May 3.
Food package, Refrigerated. C. L. Lohner and J. E. Covey. 1,856,920; May 3.
Foot impressions, Device for taking. A. Lettermann. 1,856,394; May 3.
Form, Hat. M. Lowenthal and J. Kalvin. 1,856,921; May 3.
Form, Shoe. W. J. De Witt. 1,856,750; May 3.
Form, Tile and pipe. C. W. Hatfield. 1,856,834; May 3.
Fountain: *See*—
Paste fountain.
Fourdrinier machine. E. J. McDonnell. 1,856,347; May 3.
Frame: *See*—
Cross winding frame. Locomotive frame.
Frame for heated double glass windshields. E. E. Hills. 1,856,132; May 3.
Frame for making hooked rugs. G. P. Seiler. 1,857,067; May 3.
Fruit processing means. J. C. Currier and C. W. Lipe. 1,856,945; May 3.
Fuel, Apparatus for burning powdered. M. W. Arrowood. 1,856,902; May 3.
Fuel feeding apparatus operated by pressure. E. A. Rockwell. 1,856,265; May 3.
Fuel feeding means. H. M. Leonard. 1,856,078; May 3.
Fuel intake for internal combustion engines. G. T. Johnson. 1,856,998; May 3.
Fuel to an internal combustion engine, Feeding. C. E. Bathrick. 1,856,066; May 3.
Fuel to internal combustion engines, Apparatus for feeding liquid. M. J. A. Rebillet. 1,857,004; May 3.
Fuels, Treating. G. M. McGlone. 1,856,495; May 3.
Fumigating composition. C. J. Romieux. 1,856,657; May 3.
Furnace: *See*—
Annealing furnace. Steam bath furnace.
Pipe annealing furnace. Tilting hearth furnace.
Furnace. P. E. Leahy. 1,856,645; May 3.
Furniture, Knockdown woven. J. J. Butzen. 1,856,315; May 3.
Furring bracket. E. R. Boyle. 1,856,205; May 3.
Fuse, Cartridge. J. B. Glowacki. 1,857,096; May 3.
Fuse element, Renewable. J. B. Glowacki. 1,857,098; May 3.
Fuse element, Replaceable. J. B. Glowacki. 1,857,097; May 3.
Fuse, Fire-damp proof time. E. Karollus. 1,856,642; May 3.
Fuse for high or low voltage, Electrical. H. Gerdien. 1,856,701; May 3.
Fuse indicator. M. E. Hassell and E. W. Gorham. 1,857,019; May 3.
Fuse plug panel and block. E. A. Olley. 1,856,423; May 3.
Fuse tip, Safety combination. D. F. McRae. 1,856,419; May 3.
Fusible element for protecting electrical circuits. W. T. Clark. 1,856,317; May 3.
Game apparatus. A. K. Small, jr. 1,856,117; May 3.
Game apparatus. D. E. Walker. 1,856,798; May 3.
Garage elevator. F. E. Lewis. 1,856,876; May 3.
Garnett or batting machine. A. Breckenridge. 1,857,039; May 3.
Gas eliminator, Hopper. F. Hoke and V. F. Clark. 1,856,557; May 3.
Gas lift control, Apparatus for. P. Subkow and J. J. Kogan. 1,856,892; May 3.
Gas lift, Method and apparatus for. P. Subkow. 1,856,891; May 3.
Gas scrubbing apparatus. K. S. Valentine. 1,856,120; May 3.
Gauge: *See*—
Conformator gauge. Liquid level gauge.
Gauge. R. G. Tagle and E. H. Currie. 1,856,199; May 3.
Gear, Cam. J. C. S. Stuart. 1,856,667; May 3.
Gear, Cultivator lifting. S. E. Bailor. 1,856,368; May 3.
Gear for multicolor printing machines, Pattern fitting. L. I. Tuttle. 1,856,363; May 3.
Gear, Friction-wheel differential. A. F. Gerdes. 1,856,383; May 3.
Gearing, Bevel-wheel. W. Stoeckicht. 1,856,443; May 3.
Gearing, Power transmission. E. C. Hatcher. 1,857,020; May 3.
Glass, Apparatus for making wire. P. F. Gutmann. 1,856,630; May 3.
Glass, mirrors, etc., Device for mounting. H. H. Miller. 1,856,923; May 3.
Glass polishing runners, Apparatus for cleaning plate. J. L. Drake. 1,856,129; May 3.
Glass, Process and plant for the casting of rough plate. G. P. Despret. 1,856,278; May 3.
Glass surfacing apparatus, Sheet. E. G. Stahle. 1,856,173; May 3.
Globe. W. F. M. Hawe. Des. 86,884; May 3.
Golf bag. F. E. Kip. 1,856,837; May 3.
Golf courses, Device for miniature. J. H. and D. E. Matheson. 1,857,059; May 3.
Golf putting apparatus. J. P. Luddy. 1,856,816; May 3.
Golf tee. R. J. Lyons. 1,856,259; May 3.
Goods of different kinds, Automatic weighing of. V. D. Popov. 1,856,884; May 3.
Governor for spring motors, Speed. G. De Binse. 1,856,090; May 3.
Grab. W. Voorwinde. 1,856,232; May 3.
Grab device. H. M. Lundy. 1,857,110; May 3.
Grader and bulldozer, Combined. C. E. Ball. 1,856,148; May 3.
Grader, Road. A. W. Pressgrove. 1,856,968; May 3.
Grain, ore, and the like, Apparatus for trimming and spreading. J. W. Kroef. 1,856,343; May 3.
Grain sampler. H. H. Hunter. 1,856,766; May 3.
Grease gun. C. R. Buchet. 1,856,372; May 3.
Grinding machine. G. Enochson. 1,857,047; May 3.
Grinding machine. C. C. Gibson. 1,856,808; May 3.
Grinding machine. W. J. Guild. 1,856,185; May 3.
Grinding machine. J. D. Scaife. 1,856,227; May 3.
Grinding machines, Truing mechanism for. H. M. Allison. 1,856,180; May 3.
Ground detecting means for electric circuits. J. Jonas. 1,856,916; May 3.
Ground detector. R. Schimpf. 1,856,172; May 3.
Ground for radios and the like. C. H. Preston. 1,856,506; May 3.
Guard for hydro extractors, Automatic. F. Schaum. 1,856,593; May 3.
Guide for molding flasks, Adjustable. W. E. Sandham. 1,856,509; May 3.
Guide sleeves for spring rings to the points for working, Device for feeding the. B. Foerster. 1,856,951; May 3.
Guide sleeves for spring rings, Working. B. Foerster. 1,856,952; May 3.
Gun. C. F. Le Fever. 1,856,285; May 3.
Gun mounting, Traverse machine. A. E. Elsea. 1,856,987; May 3.
Gun sight support. S. Griffin and R. Sparr. 1,856,549; May 3.
Hair waving device. D. F. McGinnis. 1,856,494; May 3.
Handcuff. G. W. Pratt. 1,856,427; May 3.
Handle: *See*—
Extension handle.
Handle for machines for relooping the runs in stockings and other knitted fabrics, Tool. G. T. Walker. 1,856,605; May 3.
Handle for shopping bags and method of making. T. J. Nestor. 1,856,353; May 3.
Hay maker. A. A. Sharples. 1,856,438; May 3.
Heat exchanger. S. Brown. 1,855,618; May 3.
Heat insulating structure. V. J. Moss. 1,856,881; May 3.
Heater for insulators. A. O. Austin. 1,856,123–5; May 3.
Heater for use with automobiles, Electric. O. L. and S. M. Peard and A. F. Harrison. Re18,454; May 3.
Heating, cooling, and regulating the temperature of buildings, Apparatus for. F. F. von Wilmowsky. 1,856,797; May 3.
Heating unit, Air. A. B. Modine. 1,856,924; May 3.
Heel seats, Making trimmed. C. C. Abbott. 1,856,800; May 3.
Hoist and conveyer, Combined. E. Schaffer. 1,857,031; May 3.
Holder and punch, Ticket. O. C. Heinemann. 1,856,705; May 3.

Holder and weigher, Automatic bag. P. J. Campbell. 1,856,904; May 3.
Holder, Article. N. C. Gates. 1,856,847; May 3.
Holder, Fishing rod. O. Gerline. 1,856,477; May 3.
Holder for arc furnaces, Electrode. A. E. Greene. 1,856,330; May 3.
Holder for child's set comprising knife, fork, and spoon. G. Morrison. Des. 86,891; May 3.
Holder for railroad road bed construction, Spring plate. G. W. Muller. 1,856,652; May 3.
Holder, Pipe. M. W. Carroll. 1,856,905; May 3.
Holder, Tag. D. Garfinkle. 1,856,545; May 3.
Holder, Tap. M. H. Corley. 1,857,012; May 3.
Holder, Tooth pick. L. M. Johnson. 1,856,559; May 3.
Holder, Trouser. C. G. Alexander. 1,856,064; May 3.
Holes, Apparatus for forming countersunk. L. E. Poole. 1,856,726; May 3.
Hosiery, Reenforced and runproof. A. Carson. 1,856,745; May 3.
Housing for oil burners and the like. F. L. Hammer. Des. 86,883; May 3.
Hub for crank hangers and wheels of bicycles. J. G. Kopsky. 1,856,959; May 3.
Humidifier. W. D. Jordan. 1,856,918; May 3.
Hydrocarbons, Cracking. E. W. Isom. 1,856,640; May 3.
Hydrocarbons, Treating. L. B. Cherry. 1,856,828; May 3.
Ice cube forming and dispensing device. A. G. Sherman. 1,857,122; May 3.
Iceless cooler. B. Landen. 1,856,919; May 3.
Ignition device, Electric. G. F. Rolland. 1,856,431; May 3.
Ignition system. E. W. Kell. 1,856,561; May 3.
Index or record device, Card. Le R. E. Hutchings. 1,856,388; May 3.
Indicator: *See*—
Fare indicator. Fuse indicator.
Indicator for aircraft, Bank, turn, and climb. C. E. Schueller. 1,856,436; May 3.
Infant's bath tub. C. W. Gaddess. 1,856,992; May 3.
Inflator, Pressure indicating. L. M. Mercier. 1,857,062; May 3.
Insect trap. J. M. Tippey. 1,856,200; May 3.
Insulating, High tension. H. B. Rüder. 1,856,225; May 3.
Insulating sleeve, Treating. H. Halperin and A. P. Thoms. 1,856,415; May 3.
Internal combustion engine. E. Adamson. 1,857,077; May 3.
Internal combustion engine. F. C. L. d'Alx. 1,856,242; May 3.
Internal combustion engine. L. O. French. 1,856,328; May 3.
Internal combustion engine. T. Gabill. 1,856,994; May 3.
Internal combustion engine. J. A. McMillan. 1,856,348; May 3.
Internal combustion engine, Rotary. F. E. Macart. 1,856,839; May 3.
Iron or steel, Coating surfaces of. W. M. Phillips and G. M. Cole. 1,856,261; May 3.
Irrigator, Nasal. T. Inaki. 1,856,811; May 3.
Irrigator, Subsurface. J. H. Foster. 1,856,379; May 3.
Isatines, Manufacture of new. H. Colombara. 1,856,210; May 3.
Island structure. C. Bradshaw and N. Taylor. 1,856,312; May 3.
Jamb for unplastered walls, Metal. I. A. Baum. 1,856,150; May 3.
Jig for pipe welding, Removable chillering. A. F. Day. 1,856,470; May 3.
Jig for railway crossties, Boring. W. H. Kirkbride. 1,856,485; May 3.
Joining device. C. C. Loomis. 1,856,396; May 3.
Joint: *See*—
Metal joint. Pipe joint.
Oscillating joint. Rail joint.
Joint. C. W. Gordon. 1,856,072; May 3.
Joint. H. R. Lorentowicz and H. E. Thompson. 1,856,048; May 3.
Joint breaker, Automatic. P. F. Murray. 1,856,503; May 3.
Joint for pavements and the like, Expansion. C. Older. 1,856,722; May 3.
Joint for pile shells. E. D. Watt. 1,856,522; May 3.
Joint mechanism. H. C. Lord. 1,856,647; May 3.
Jug, Auto. R. A. Stevenson. Des. 86,898; May 3.
Kit, Sewing. H. D. Lapkin. 1,856,486; May 3.
Kit, Tourist camping. S. N. Wakefield. 1,856,675; May 3.
Knitting machine, Full fashioned. B. E. Pfueller. 1,857,102; May 3.
Lace. S. H. Page. Des. 86,892; May 3.
Laces, strings, and the like, Tagging. R. L. Chasselon. 1,856,374; May 3.
Lacquer, Nitrocellulose. G. H. Mutersbaugh, M. Zucker, H. D. Heiser, and W. A. Shope. 1,856,653; May 3.
Lamp. H. J. Graham. 1,856,073; May 3.
Lamp and switch therefor, Night. A. W. Franklin. 1,856,755; May 3.
Lamp, Incandescent electric. D. S. Gustin. 1,856,247; May 3.
Lamp, Novelty. S. S. Green. 1,856,098; May 3.
Lamp, Projector. F. Transom. 1,857,120; May 3.
Landing device for aircraft. H. Hein. 1,856,332; May 3.
Last, Separable. G. P. S. Cross. 1,856,127; May 3.
Latch for baling press doors. M. F. Berg. 1,856,531; May 3.
Latch, Hood. E. L. Crum. 1,856,540; May 3.
Lath expander, Metal. H. K. Baker. 1,856,686; May 3.
Lathe, Electric dental. J. L. Grimme. 1,856,869; May 3.
Lead bullion and similar operations, Apparatus for use in the refining of. G. K. Williams. 1,856,678; May 3.
Leavening. E. O. Wilg. 1,856,938; May 3.
Leer, Annealing. J. Sylvester. 1,856,668; May 3.
Lens disk, Spiral mounted. C. F. Jenkins. Re18,452; May 3.
Lens for motor vehicle headlamps. F. C. McElroy. 1,856,842; May 3.
Light signal system for railroads. F. B. Wiegand. 1,856,525; May 3.
Light variations, Photographic recording of. A. Whitaker and C. O. Browne. 1,856,524; May 3.
Lighting fixture, Electric. R. O. Pfeiffer. 1,856,590; May 3.
Lime product, Producing. W. C. L. Hemeon. 1,856,763; May 3.
Lining, Brake band. D. A. Dom. 1,857,108; May 3.
Lining for furnaces. R. P. South. 1,857,103; May 3.
Link for serial lamp supports. H. Laur. 1,857,109; May 3.
Liquid cooler. R. Copp. 1,856,467; May 3.
Liquid heating and vaporizing. J. S. Harrison. 1,856,074; May 3.
Liquid level gauge. M. E. Zelier. 1,856,899; May 3.
Liquid level in containers, Controlling the. A. D. Johnston. 1,857,051; May 3.
Liquid level indicating instrument, Electrical. E. A. Watson. 1,856,364; May 3.
Liquids from gases, Apparatus for separating. J. Y. Snyder. 1,857,034; May 3.
Liquids with active carbons, Treating. C. Lourens. 1,856,571; May 3.
Lithopone with high zinc sulphide content, Making. E. A. Taylor. 1,856,671; May 3.
Lock: *See*—
Door lock. Spare wheel lock.
Permutation lock. Valve lock.
Lockup, Power plate. J. A. Isbell. 1,856,162; May 3.
Locking device. E. K. Keppler. 1,856,391; May 3.
Locking device, Milk bottle. F. L. Grant. 1,856,097; May 3.
Locking mechanism. A. Dina. 1,856,069; May 3.
Locomotive frame. M. Rivkin. 1,857,064; May 3.
Loom for weaving tufted fabrics. J. Morton and F. H. Oldroyd. 1,856,783; May 3.
Looms, Auxiliary shuttle box for shuttle changing. R. G. Turner. 1,856,177; May 3.
Looms, Weft needle or carrier for shuttleless. G. Tomkinson and E. J. Perry. 1,856,119; May 3.
Loud speaker construction. C. A. Mayer. 1,856,774; May 3.
Lubricating apparatus. S. D. Locke and C. R. Dosch. Re18,450; May 3.
Lubricating device. T. Van Tuyl. 1,856,300; May 3.
Lubricating device, Sewing machine thread. W. Myers. 1,856,882; May 3.
Lubricating means, Clutch. F. Johnson and E. G. Schubert. 1,856,189; May 3.
Lubricating system. E. Adel. 1,856,063; May 3.
Lubrication of pintle and hinge sections of pruning shears. G. F. Hickok. 1,857,048; May 3.
Lubrication of textile fibers. G. Lecomte. 1,856,713; May 3.
Machine for cementing leather taps on shoes. S. Muscarella. 1,856,965; May 3.
Machine for developing sensitized paper. K. Murck. 1,856,926; May 3.
Machine for digging up ground. M. Jaeger. 1,856,216; May 3.
Machine for forming hollow glassware. L. D. Soubier. 1,856,518; May 3.
Machine for making envelopes. E. Conti. 1,857,113; May 3.
Machine for placing bands on various articles. L. E. Diot. 1,857,117; May 3.
Machine for plating and embossing leather. G. A. Schettler. 1,856,139; May 3.
Machine for relatively moving shoes and their lasts. A. F. Pym. 1,856,291; May 3.
Machine for riveting spokes of vehicle wire wheels. W. N. Booth. 1,856,237; May 3.
Machine for running in and burning crank shaft bearings. J. G. Collins. 1,856,465; May 3.
Machine for shaping uppers over lasts. C. F. Pym. 1,856,292; May 3.
Machine for the production of split rings. B. Forster. 1,856,953; May 3.
Machine for winding cloth, etc., on cloth boards. F. M. Bacon. 1,857,037; May 3.
Machine parts or elements, Apparatus for finishing. F. J. Sikorovsky. 1,856,405; May 3.
Magazine, Typographical. J. W. and A. Shields. 1,856,515; May 3.
Magnetic axle puller. J. D. Hopkins. 1,857,049; May 3.
Mail distributing apparatus. J. J. M. L. Marchand and J. C. Andriessen. 1,856,165; May 3.
Mail exchange device, Air. L. L. Lundgren. 1,856,490; May 3.
Mandrel, Flexible. A. E. Stjarnstrom. 1,856,597; May 3.
Manicure device. W. Schwänhausser. 1,856,854; May 3.

Manifold. P. S. Martin. 1,856,963; May 3.
Manipulator for rolling mills. R. D. Nye. 1,857,063; May 3.
Masher, Vegetable. G. A. Hayward. 1,856,954; May 3.
Massage machine. F. Pierson. 1,856,591; May 3.
Material handling machine. G. R. Whitnall. 1,856,677; May 3.
Materials, Production of colored effects in cementitious and building. G. N. White. 1,856,366; May 3.
Materials, Treating fibrous. T. W. Bacchus. 1,856,453; May 3.
Measuring apparatus. A. E. Young. 1,856,528; May 3.
Measuring instrument. G. A. Montelius. 1,856,779; May 3.
Measuring machine. M. K. Parkhurst. 1,857,088; May 3.
Meat block cleaner. W. F. Scheppy. 1,856,887; May 3.
Meat mold. J. Kipper. 1,856,564; May 3.
Mechanically operated brake. E. R. Herren. 1,856,635; May 3.
Mercury arc device with grid control. V. K. Zworykin and D. Ulrey. 1,856,087; May 3.
Metal, Embossing sheet. W. J. Pannier, jr. 1,856,928; May 3.
Metal joint, Sheet. G. D. Overholtz. 1,856,167; May 3.
Metal, Method and apparatus for forming corrugated. R. C. Pfeil and R. R. Bloss. 1,856,151; May 3.
Metal sheets for annealing, Preparing. L. D. Drefahl. 1,856,751; May 3.
Metal strip, Apparatus for handling and shearing. C. G. Ohlson. 1,856,111; May 3.
Metallic plates, Fabrication of embossed. A. D. Wood. 1,856,898; May 3.
Metals and alloys, Melting and deoxidizing. W. Reitmeister. 1,856,293; May 3.
Metals, Apparatus for comminuting. H. M. Williams and V. W. Bihlman. 1,856,679; May 3.
Meter: *See*—
Electricity meter.
Micrometric divider. R. E. Alvey. 1,856,824; May 3.
Mill: *See*—
Rolling mill.
Mill roll. Cane. N. Kay. 1,856,484; May 3.
Mine timbering apparatus. M. Zidro. 1,856,682; May 3.
Mining, Method and apparatus for underground hydraulic. S. Howell. 1,856,836; May 3.
Mirror, Physician's head. J. S. Glowacki. 1,857,095; May 3.
Mold: *See*—
Meat mold.
Mold. J. E. McLaughlin. 1,856,577; May 3.
Mold filling limiting device. O. C. Roesen. 1,856,430; May 3.
Mold for manufacturing zinc containers for galvanic elements, batteries, or the like, Casting. A. Gassan and P. Ruck. 1,856,382; May 3.
Molds, Manufacture of centrifugal pipe. F. C. Langenberg. 1,856,874; May 3.
Motor: *See*—
Electric motor. Vapor motor.
Mounting for motion picture projection machines, Pad roller. A. Dina. 1,857,116; May 3.
Mounting, Truck tank. L. F. Phillips. 1,856,399; May 3.
Mower, Lawn. E. Berkwall. 1,856,233; May 3.
Name plate, Identification. A. C. Spears. 1,856,519; May 3.
Nitroanthraquinone, Production of. H. T. Stowell. 1,856,231; May 3.
Nitrogen-hydrogen gas mixtures free from oxygen, Production of. L. C. Jones. 1,856,955; May 3.
Novelty, Musical. J. W. Kelly. 1,856,164; May 3.
Nozzle for burning powdered coal, Carbureting. W. L. and H. L. McLaughlin. 1,856,134; May 3.
Oil burner. T. Anderson. 1,856,901; May 3.
Oil distillation, Method of and apparatus for. F. Denig. 1,856,471; May 3.
Oil draining device for automotive engines. E. L. Bennett. 1,856,826; May 3.
Oil, Insulating. J. G. Ford. 1,856,700; May 3.
Oil, Refining lubricating. J. G. Stafford. 1,856,934; May 3.
Oil separator. E. A. Showers and L. A. Long. 1,856,662; May 3.
Oil wells, Method of and apparatus for evacuating. L. W. Southgate. 1,856,197; May 3.
Oiler for engines. G. R. Valdez. 1,856,673; May 3.
Oils, Preservation of. F. Hofmann and M. Dunkel. 1,856,186; May 3.
Oils Treating hydrocarbon. D. D. Stark. 1,856,141; May 3.
1,4-diaminoanthraquinone, Preparing. S. Gassner and F. Baumann. 1,856,212; May 3.
One piece cutter. L. C. Schillo. 1,856,433; May 3.
1-(3',4'-dichlor-6'-sulphophenyl)-5-pyrazolones and azo coloring matters derived therefrom. L. W. Geller. 1,856,413; May 3.
Opener, hopper feeder, and like apparatus for opening and cleaning cotton or like fibrous material, Hopper bale. T. Nuttall and S. A. Shorter. 1,856,287; May 3.
Opener, Receptacle. N. P. Courtney. Re18,447; May 3.
Opening device for sheet metal cans and boxes. G. L. Ericsson. 1,856,543; May 3.
Orthopedic device. E. E. Dettelbach. 1,856,377; May 3.
Oscillating joint. R. K. Lee. 1,856,646; May 3.
Oven, Coke. F. Totzek. 1,856,501; May 3.
Ozonizer. A. E. Evans. 1,856,544; May 3.
Packing. W. T. Dean. 1,857,045; May 3.
Packing, Pipe joint. D. B. Stokes. 1,856,890; May 3.
Packing, Process and apparatus for manufacturing. J. N. Walton. 1,856,086; May 3.
Pad: *See*—
Desk pad.
Paper, Absorbent. F. H. McCormick and G. L. Schwartz. 1,857,100; May 3.
Paper delivering device. J. B. Kohler. 1,856,341; May 3.
Paper, fabric webs, and the like, Transparent foils of. V. Bausch and K. Frenzel. 1,856,067; May 3.
Paper folding machine. J. Q. Sherman and A. W. Metzner. 1,856,972; May 3.
Paper pulp, Method of and apparatus for screening. E. J. Thimbey. 1,856,176; May 3.
Parachute. F. A. Ducoty. 1,857,014; May 3.
Parachute and installation thereof. E. E. Motter. 1,856,397; May 3.
Partition and ceiling construction. F. M. Venzie. 1,856,674; May 3.
Paste fountain. A. Potdevin. 1,856,853; May 3.
Pastes for dyestuffs and preparing them, Printing. A. Schmidt. 1,856,434; May 3.
Pelvimeter. E. J. Sovatkin. 1,856,295; May 3.
Pen, Multicolor. O. Rese. 1,856,655; May 3.
Pencil and pencil set. A. C. Bussey. 1,856,463; May 3.
Permutation lock. W. F. Foerster. 1,856,989; May 3.
Petroleum emulsions, Treating. J. M. Evans. 1,856,156; May 3.
Petroleum oils, Rectifying. P. C. Keith, jr. 1,856,283; May 3.
Petroleum residuum, Distilling. H. V. Atwell. 1,856,801; May 3.
Phenols, Manufacture of polyhydroxy. T. S. Carswell. 1,856,690; May 3.
Phonograph. A. Rapisardi. 1,856,428; May 3.
Phonograph electrical reproducer. A. Merkel and R. R. Halpenny. 1,856,922; May 3.
Phosphates, Preparation of aryl. F. Bryner. 1,856,862; May 3.
Photographic negatives, Reversing. V. B. Sease. 1,857,089; May 3.
Photographic shutter. Á. Barényi. 1,856,308; May 3.
Piano loud speaker. E. W. Scherr, jr. 1,856,730; May 3.
Pick-up for air mail exchange. R. Haybeck. 1,856,848; May 3.
Pickling tank. C. Shriver. 1,856,734; May 3.
Picture machine, Moving. R. Decaux. 1,856,541; May 3.
Pigments and preparation thereof, Titanium. C. A. Klein and R. S. Brown. 1,856,565-6; May 3.
Pile core. E. D. Watt. 1,856,608; May 3.
Pile driving apparatus. E. D. Watt. 1,856,609; May 3.
Piles, Forming composite. H. R. Smith. 1,856,517; May 3.
Piles, Method and apparatus for forming. M. M. Upson. 1,856,604; May 3.
Pilot for reamers, Extension. L. W. Johnson. 1,856,708; May 3.
Pipe annealing furnace. S. B. Clark. 1,856,863; May 3.
Pipe drawing and holding device. H. L. Patterson and H. J. Qualfe. 1,856,966; May 3.
Pipe joint. J. C. Mitchell. 1,856,580; May 3.
Pipe joint. J. C. Mitchell. 1,856,581; May 3.
Piston for internal combustion engines. G. A. Mellor. 1,856,107; May 3.
Piston packing rings, Restricting means for composite. T. Madsen. 1,856,961; May 3.
Piston, Plated. C. E. Summers. 1,856,272; May 3.
Piston ring. D. M. Solenberger. 1,856,271; May 3.
Piston rings, Making. T. V. Buckwalter. 1,856,240; May 3.
Piston rings, Making. E. R. Hellman. 1,856,279; May 3.
Plaiting machines, Sheet feeding mechanism for. F. Maxent. 1,857,028; May 3.
Planter attachment. C. D. Burkle. 1,856,208; May 3.
Plaster board apparatus. J. J. Turner. 1,856,936; May 3.
Plaster board, Method and apparatus for making. H. W. Shaw. 1,856,932; May 3.
Plating machines, Automatic work shift for. C. G. Miller. 1,856,497; May 3.
Plug, Paper roll hoisting. F. von der Horst. 1,857,091; May 3.
Plug with make and break device, Electric. B. F. Muldoon. 1,856,260; May 3.
Poison device, Rodent and vermin. R. P. Gibson and H. W. Woody. 1,856,809; May 3.
Powder box. E. E. Brooks. 1,856,743; May 3.
Power amplifier. E. T. Burton. 1,856,373; May 3.
Power plant. K. Baumann. 1,856,616; May 3.
Power supply system. H. M. Stoller. 1,856,665; May 3.
Power transferring mechanism. D. S. Hays. 1,856,835; May 3.
Press for commutator rings and the like. E. Cooper. 1,856,319; May 3.
Press for newspapers and the like, Baling. H. V. Rasmussen. 1,856,885; May 3.
Press for the extrusion of metals. E. E. Judge and F. H. Fry. 1,856,483; May 3.
Pressure retainer for gas lift wells, Automatic. J. J. Kogan. 1,856,872; May 3.
Primary battery. G. W. Heise. 1,856,386; May 3.
Printer, Automatic. D. A. Whitson, L. W. Physioc, and F. F. Brush. 1,856,859; May 3.

Printing telegraph radial switching system. G. A. Locke. 1,856,714; May 3.
Projecting machine. H. B. Jordan. 1,856,956; May 3.
Projection screen. C. A. Alt and R. A. McLean. 1,856,739; May 3.
Propeller, Adjustable. W. Wisk. 1,857,036; May 3.
Propeller hub for aircraft engines with a reducing gear of the sun and planet wheel type. T. Zerbi. 1,856,529; May 3.
Protective system for rectifiers. F. Sieber. 1,856,857; May 3.
Protector, Fence. E. E. McDonald. 1,856,841; May 3.
Puller: *See*—
Magnetic axle puller.
Pulley. N. A. Irwin. 1,856,993; May 3.
Pulverizers and the like, Feeder for. W. W. Pettibone. 1,856,426; May 3.
Pump, Bilge. S. E. Aaron. 1,856,367; May 3.
Pump, Combined irrigation and drainage. P. M. Hoenshel. 1,856,387; May 3.
Pump for windmills, Booster. R. A. Ligon. 1,857,026; May 3.
Pump, Gravity and force stock. J. A. F. Osse. 1,856,582; May 3.
Pump having wire cable for driving same. J. A. Wintroath. 1,856,610; May 3.
Pumping and system therefor. A. W. Burks. 1,856,537; May 3.
Punching machine. H. C. Towle. 1,856,175; May 3.
Punching or like machine. A. Thomas and R. Fitz Power. 1,856,737; May 3.
Punching press, particularly for pattern cards as used in knitting machines and the like. F. Siegrist. 1,856,970; May 3.
Rack: *See*—
Clothes assembling rack.
Rack. G. M. Turner. 1,856,935; May 3.
Rack for refrigerator cars, Meat. A. E. Dentler. 1,856,472; May 3.
Radiator. R. W. Kurtz. 1,856,101; May 3.
Radiator, Wall. A. B. Modine. 1,856,925; May 3.
Radio communication system. M. de Saivre. 1,856,376; May 3.
Radiofrequency apparatus, Cooled. W. Moser. 1,857,029; May 3.
Radio power installation. S. L. Le Hache and F. B. Monar. 1,856,568; May 3.
Radio receiving apparatus. B. P. Hamilton and W. T. Rea. 1,856,213; May 3.
Rail and assembling the same. R. Faries and C. D. Young. 1,856,911; May 3.
Rail joint. S. A. Sprinkle. 1,857,007; May 3.
Rat or mouse trap. J. M. Weaver. 1,856,980; May 3.
Razor, Safety. H. J. Galsman. 1,856,329; May 3.
Razor, Safety. L. L. Witter. 1,856,305; May 3.
Reamer, Floating. C. E. Wyrick. 1,856,406; May 3.
Receptacle. E. O. Loeber. 1,856,877; May 3.
Receptacle and housing therefor, Electric. J. R. Cook. 1,857,079; May 3.
Receptacle, Cooling. D. D. Hanson. 1,857,018; May 3.
Receptacle, Fish. P. D. Morgan. 1,856,818; May 3.
Receptacle for bottles and jars, Token. J. L. M. Guenard. 1,856,550; May 3.
Receptacle, Storage. C. B. Thorne. 1,856,361; May 3.
Recording system. R. D. Evans, C. F. Wagner, and S. B. Griscom. 1,856,699; May 3.
Rectifier. W. A. Darrah. 1,856,865; May 3.
Rectifier. E. A. Lederer. 1,856,257; May 3.
Rectifier. M. Schiesser. 1,856,404; May 3.
Reel: *See*—
Antenna reel. Fishing reel.
Refractories from molten magnesite or other materials, Sintering. H. Neuhauss. 1,856,851; May 3.
Refrigerating apparatus. H. R. Hull. 1,856,765; May 3.
Refrigerating apparatus. J. W. Winter. 1,857,105; May 3.
Refrigerating system. L. Buehler, jr., and W. H. Aubrey. 1,857,078; May 3.
Refrigerating system. G. W. Bungay. 1,856,536; May 3.
Regulator for furnaces, stoves, water heaters, and the like, Heat and draft. M. Greenberg. 1,856,478; May 3.
Remote control for radio tuning devices. L. H. Morin. 1,856,781; May 3.
Remote control system for radioreceivers. A. S. Blatterman. 1,856,310; May 3.
Return bends, Manufacturing. T. Collins. 1,856,530; May 3.
Rifle, Air. A. Skindel. 1,857,068; May 3.
Ring: *See*—
Clamping ring. Piston ring.
Ring and making it, Sealing. J. M. Hothersall. 1,856,335; May 3.
Rip saw machine, Traveling. S. Gardner, jr. 1,856,476; May 3.
Rocket, Carbide. F. Hadamik and N. Liberatore. 1,856,552; May 3.
Rocking chair, Foldable. H. Rodriguez. 1,856,429; May 3.
Rod coupling, Sucker. T. M. Jordan and W. H. Herrington. 1,856,917; May 3.
Roller: *See*—
Cigarette roller. Curtain roller.
Roller. F. G. Walters. 1,856,085; May 3.
Rolling mill. J. Roux. 1,856,170; May 3.
Roof, Car. C. D. Bonsall. 1,856,276; May 3.
Roof, Car. E. G. Franck. 1,856,245; May 3.
Roofing, Sheet metal. S. V. Conner. 1,856,622; May 3.
Rotary engine. F. D'Auvrain. 1,856,947; May 3.
Rubber, Vulcanizing. C. O. North and W. Scott. 1,856,819; May 3.
Rubber, Vulcanizing. G. H. Stevens. 1,856,596; May 3.
Safety device for internal combustion engines. M. S. Parkill. 1,856,584; May 3.
Safety device, Railway crossing. B. N. Miner. 1,856,499; May 3.
Salesbook. W. O. Critchfield. 1,857,013; May 3.
Sash and muntin construction, Window. H. E. Campbell. 1,857,093; May 3.
Saw apparatus, Swing cut-off. L. S. Rosener, J. M. Smith, and E. L. Chafee. 1,856,169; May 3.
Saw, Jig. R. H. Anderson. 1,856,740; May 3.
Scaffold, Collapsible. H. Ball. 1,856,140; May 3.
Scale, Computing. F. M. Carroll. 1,856,411; May 3.
Scale, Weighing. H. A. Hadley. 1,856,704; May 3.
Scaling device. J. C. van Alphen, P. Ter Haak, and T. Lechelt. 1,856,299; May 3.
Screen: *See*—
Projection screen. Window screen.
Water screen.
Sealer, Electric. A. Groh. 1,856,414; May 3.
Seam finishing machine. V. G. Terry. 1,856,174; May 3.
Seat: *See*—
Closet seat. Window cleaner's seat.
Vehicle seat.
Seat back, Adjustable. J. Boery. 1,856,534; May 3.
Seat for vehicles, Adjustable. G. Flintermann. 1,856,950; May 3.
Sectional boiler. C. A. Olson. 1,856,354; May 3.
Securing device for clothing. S. David. 1,856,909; May 3.
Selector switch. B. O. Austin. 1,856,741; May 3.
Separator: *See*—
Oil separator.
Sewing machine. N. V. Christensen and W. M. Hannemann. 1,857,041; May 3.
Sewing machine. K. Maier. 1,857,057; May 3.
Sewing machine for inserting elastic bands in stitched articles. H. E. Dykeman. 1,857,046; May 3.
Sewing machine for inserting elastic bands in stitched articles. K. Maier. 1,857,058; May 3.
Sewing machines, Feeding mechanism for. R. B. Thompson. 1,856,360; May 3.
Sewing machines, Hem folder for. K. Schnurrbusch. 1,857,032; May 3.
Sewing machines, Thread controller for. H. J. Le Vesconte. 1,856,221; May 3.
Sewing machines, Trimming device for. K. Maier. 1,857,056; May 3.
Sewing machines, Work-clamp mechanism for. E. B. Allen. 1,856,900; May 3.
Shaft coupling. W. J. Spengler. 1,856,975; May 3.
Sharpener, Blade. N. Schwartz. 1,857,066; May 3.
Shear for use in rolling mills, etc. J. Gassen. 1,856,546; May 3.
Sheath bonding system. H. Halperin and K. W. Miller. 1,856,480; May 3.
Sheet feeding apparatus. E. R. Kast. 1,856,190; May 3.
Sheets into bound volumes, Stitching of folded. O. Lutolf. 1,856,346; May 3.
Shipping case, Fiber. J. F. Robinson. 1,856,729; May 3.
Shock absorber. E. Flentje. 1,856,325; May 3.
Shock absorber, Double acting. G. W. Elsey. 1,856,753; May 3.
Shock absorber for pressure controlled indicating and recording devices. L. de Florez. 1,856,695; May 3.
Shock absorbing mechanism, Friction. J. F. O'Connor. 1,856,422; May 3.
Shoe. N. Elkin. Des. 86,881; May 3.
Shoe. C. Miller. Des. 86,890; May 3.
Shoes, Cementing parts of. I. L. Keith. 1,856,562; May 3.
Shuttle feeler thread parter and clamp. W. L. Smith. 1,856,793; May 3.
Sickle bar control. G. A. Chadbourne. 1,856,984; May 3.
Sign. J. P. Bigelow. 1,856,349; May 3.
Sign. W. A. Burns. 1,856,402; May 3.
Silica articles with glazed surface, Manufacture of. G. Delpech. 1,857,080; May 3.
Silica wash and making the same. J. J. Winchester and A. A. Fragopulos. 1,856,526; May 3.
Single acting engine. E. J. Stanton. 1,856,359; May 3.
Sinter returns, Producing fine. E. W. Shallock. 1,856,270; May 3.
Sintering machine. G. E. Swinehart. 1,856,273; May 3.
Siphon device. E. O. Sather. 1,856,083; May 3.
Skid preventing device. R. Irvin. 1,856,915; May 3.
Skiving machine. F. M. Courser. 1,856,155; May 3.
Slicing machine. J. Van Hoorn. 1,856,856; May 3.
Slicing machine. W. B. Wolff. 1,856,939; May 3.
Slicing machines. Feed mechanism for. J. Folk. 1,856,326; May 3.
Slicing machines, Feeding mechanism for. H. Stukart. 1,856,855; May 3.
Slicing machines, Work support for. A. Van Duyn. 1,856,894; May 3.
Slip for rotary drilling machines. E. E. Greve. 1,856,479; May 3.
Slug profiling machine. C. L. Mohr. 1,856,108; May 3.
Smelting process and charge therefor, Silicothermic. W. C. Read. 1,856,592; May 3.

Snap fastener. W. I. Jones. 1,856,814; May 3.
Snap fastener stud member. W. I. Jones. 1,856,813; May 3.
Socket, Electrical. H. R. Hale. 1,856,248; May 3.
Socket, Locking. G. J. Henry. 1,856,214; May 3.
Solids from gases, Apparatus for separating. E. Anderson. 1,856,685; May 3.
Sound and photography, Synchronized. H. W. Rogers. 1,856,886; May 3.
Sound recording and reproducing apparatus. O. Leopold. 1,856,344; May 3.
Sound reflector, Ear. C. Fensky. 1,856,324; May 3.
Spare wheel lock. F. A. Smith. 1,856,933; May 3.
Spark indicating device for combustion motors. P. Nemeth. 1,856,883; May 3.
Speed for front wheel drives, Divided transversely mounted change. A. J. Lavoie. 1,856,284; May 3.
Speed transmission mechanism for motor vehicles, Change. R. Beringer. 1,856,275; May 3.
Spike driver. H. H. Talboys. 1,856,893; May 3.
Spindle, Gelatin band. E. E. McNally. Re18,448; May 3.
Sponge rubber articles, Molding. H. M. Hood. 1,857,085; May 3.
Spool, beam, or the like. W. A. Traver. 1,856,298; May 3.
Spool or reel. H. C. Howsam and A. Hlavac. 1,856,253; May 3.
Spooling device. H. V. Shirley and H. P. Scanlon. 1,856,140; May 3.
Spools of strip material, Production of supply. B. Alvaz. 1,856,823; May 3.
Spoon, Trolling. G. Mapel. 1,856,649; May 3.
Spray mixture of liquid and gas, Method and apparatus for producing a. W. D. Carter. 1,856,316; May 3.
Spring construction. C. J. Hug. 1,856,764; May 3.
Stamping or labeling machine. C. G. Maxwell. 1,856,576; May 3.
Standpipe and manufacture thereof, Turret. J. T. Corley. 1,856,241; May 3.
Static eliminator tube. E. Teel. 1,857,069; May 3.
Statuette or similar article. M. Abel. Des. 86,875; May 3.
Statuette or similar article. H. Underberg. Des. 86,901; May 3.
Steam bath furnace. J. G. Hulme. 1,857,024; May 3.
Steam boiler. C. A. Seley. 1,856,732; May 3.
Steam engine, Rotary. E. C. Duer. 1,856,542; May 3.
Steam trap. M. Hauser. 1,856,762; May 3.
Sterilizing apparatus. E. M. A. Eulows, R. A. Brooks, and R. R. Groomes. 1,856,988; May 3.
Still. R. O. Anderson. 1,856,860; May 3.
Stock line recorder. A. J. Whitcomb. 1,856,897; May 3.
Stocking, Protective. Y. G. Lebeau. 1,856,102; May 3.
Stoker. N. M. Lower. 1,856,573; May 3.
Stoker. N. M. Lower and E. A. Turner. 1,856,572; May 3.
Stoker. E. A. Turner. 1,856,521; May 3.
Stool, Folding. L. A. Call. 1,856,805; May 3.
Stool, Kneeling. U. St. Marie and G. Bernier. 1,856,297; May 3.
Stool, Toilet. S. Baker. 1,856,687; May 3.
Stool with table extension, Folding. P. Dunlop. 1,856,378; May 3.
Stop for elevator doors, Fire. H. C. Waldman. 1,856,895; May 3.
Stove and storage tank, Hot water. E. A. Corbin, jr. 1,856,693; May 3.
Stove, Hot water. E. A. Corbin, jr. 1,856,623; May 3.
Straightening and rolling machine. K. F. Ungerer. 1,856,937; May 3.
Strainer, Pulp. T. E. Xistris. 1,856,450; May 3.
Stretcher, Metallic. M. E. Adcock. 1,857,008; May 3.
Strip guiding and moistening means particularly adapted for use with strip serving mechanism. T. R. Gautier and B. E. Nichols. 1,856,628; May 3.
Strips of material, Apparatus for making apertured pieces from a. A. W. Phelps. 1,856,724; May 3.
Substances of the thyroid gland and preparing them, Therapeutically valuable. F. Blum. 1,856,533; May 3.
Suction cleaner. S. McClatchie. 1,856,133; May 3.
Suction cleaner. W. V. Orr. 1,856,136; May 3.
Suit, Boy's. J. Ellen. Des. 86,880; May 3.
Sulphite liquor, Treating waste. G. C. Howard. 1,856,558; May 3.
Sulphur from fuel gases, Removal of. S. G. Watson and D. M. Henshaw. 1,856,301; May 3.
Supercharger for airplane engines. H. L. Russell. 1,856,193; May 3.
Support, Curtain. F. Ellinger. 1,856,752; May 3.
Support, Tubing. E. V. Crowell. 1,856,469; May 3.
Supporter, Garment. H. S. Bozorth, jr. 1,856,152; May 3.
Supporter, Hose. M. M. Kapitzky. 1,856,958; May 3.
Surveying instrument, Bore hole. A. A. Lease and J. F. Peters, jr. 1,856,220; May 3.
Suspension means for oil well derricks. O. Bieler. 1,856,844; May 3.
Suturing and ligating instrument. C. B. Nagelmann. 1,856,721; May 3.
Switch: *See*—
Air break switch. Selector switch.
Disconnect switch. Time switch.
Electric switch. Traffic signal switch.
Switch controlling system, Electrical. M. L. Sindeband and O. K. Marti. 1,856,195; May 3.
Switch for large currents, Multiple break oil. W. Estorff. 1,856,626; May 3.
Switch panel. E. L. Ogle. 1,856,288; May 3.
Switchgear, Electric. G. H. Neep. 1,856,110; May 3.
Switchgear, Electrical. F. J. Keeley. 1,856,100; May 3.
Switching apparatus. C. W. Ebeling. 1,856,092; May 3.
Synchronizing arrangement. A. Karolus. 1,856,076; May 3.
Tab, Sample display. C. H. Cohen. 1,856,375; May 3.
Tabulating machine for bookkeeping purposes. G. Tauschek. 1,856,445; May 3.
Tailstock. M. W. H. Wilson. 1,856,145; May 3.
Tank: *See*—
Pickling tank. Stove and storage tank.
Telegraph communication system. D. B. Perry. 1,856,224; May 3.
Telegraphy, Regenerative repeater for start-stop systems of automatic. R. F. Dirkes and J. N. Anderson, jr. 1,856,985; May 3.
Telephone, Apartment house. J. O. Cadieux. 1,857,107; May 3.
Temperature responsive device. E. Tyden. 1,856,274; May 3.
Tension for yarn winders. E. R. Holmes. 1,856,188; May 3.
Tent. A. H. Rummler. 1,856,658; May 3.
Tenter clip. W. A. Stelling. 1,856,795; May 3.
Testing apparatus. L. T. Wilson. 1,856,202; May 3.
Thermostat. A. A. Thomas. 1,856,600; May 3.
Thermostatic element. A. O. Hurxthal. 1,957,025; May 3.
Thread waxing device. E. R. Swanson. 1,856,198; May 3.
Threads, Increasing the luster of effect. O. Knecht and E. Stocker. 1,856,815; May 3.
Ticket delivery mechanism. L. Scher. 1,856,171; May 3.
Tie stitching machine. I. R. Metcalf and R. L. Pelland. 1,856,420; May 3.
Tilting hearth furnace, Elongated. H. Maschmeyer. 1,856,716; May 3.
Time switch, Electrical. H. Schuler. 1,856,789; May 3.
Timing device, Fuel feed. H. H. Conover. 1,856,466; May 3.
Tire. W. A. Brown. 1,856,314; May 3.
Tire, Vehicle. A. Blazquez. 1,856,983; May 3.
Titanates, Production of. R. H. Monk and L. Firing. 1,856,351; May 3.
Tool, Boring. G. W. Mitchell, G. O. Shisler, and E. E. Myers. 1,856,579; May 3.
Tool, Fluid operated. G. C. Pearson. 1,856,784; May 3.
Tool slide and actuating mechanism therefor. E. R. Smith and A. Schinkez. 1,856,196; May 3.
Tool, Striking. E. G. Hysing. 1,856,336; May 3.
Tool, Vacuum cleaner floor. J. E. Leonard. 1,856,875; May 3.
Tool, Valve reseating. J. Tekavec. 1,857,090; May 3.
Tools to holders, Attaching. M. D. Holcomb. 1,856,706; May 3.
Top, Electrical. L. L. Sheneman. 1,856,514; May 3.
Torch head. H. W. Jones. 1,856,560; May 3.
Toy and the like. E. R. Case. 1,856,538; May 3.
Toy boat. A. M. Doerfler. 1,857,094; May 3.
Toy machine gun. F. Martindell. Des. 86,887; May 3.
Toy moving picture machine. M. J. McIntyre. 1,856,719; May 3.
Toy or amusement device. A. W. Franklin. 1,856,991; May 3.
Tractor wheel. C. Curtis. 1,856,320; May 3.
Tractor wheel. H. Lucas. 1,856,838; May 3.
Tractors, Scooping attachment for. A. G. Geister. 1,856,629; May 3.
Traffic controlling apparatus, Railway. C. W. Fallor. 1,856,754; May 3.
Traffic controlling apparatus, Railway. H. A. Wallace. 1,857,112; May 3.
Traffic signal switch. A. Peterson. 1,856,588; May 3.
Trailer. J. C. Fontaine. 1,857,081; May 3.
Trailer control. F. Jacobs. 1,856,997; May 3.
Train control system. A. G. Williamson. 1,856,822; May 3.
Transferring device, Gasket. W. M. Hollinger. 1,856,637; May 3.
Transit mixer actuating means. J. F. Robb. 1,856,728; May 3.
Transmission, Friction. F. A. Hayes. 1,856,249; May 3.
Transmission mechanism. F. Götz. 1,857,017; May 3.
Transmission mechanism, Hydraulic. J. J. Kleschka. 1,857,000; May 3.
Trap: *See*—
Insect trap. Steam trap.
Rat or mouse trap.
Trap for liquid pressure lines, Air. W. L. Marden. 1,856,105; May 3.
Trap or intercepter, Grease. B. A. Hertsch. 1,856,099; May 3.
Tray, Ash. R. B. Staley. Des. 86,895–6; May 3.
Tray, Shaker. A. Lollo. Des. 86,885; May 3.
Treadles for pressing machines and the like. T. G. Jasper. 1,856,767; May 3.
Trimming machine. E. J. Ray. 1,856,137; May 3.
Trip device, Automatic. A. Rasmussen and W. S. Goodell. 1,856,402; May 3.
Trisazodyestuffs, New secondary. E. Fellmer and H. Hoyer. 1,856,211; May 3.
Trolley ear. M. Zass. 1,856,738; May 3.

Truck body. E. S. Ziegler. 1,856,683; May 3.
Truck, Car. W. C. Hedgcock. 1,856,250; May 3.
Truck, Industrial. E. H. Remde. 1,856,082; May 3.
Truck tractor, Convertible wheeled. W. Christie. 1,856,068; May 3.
Trunk, Wardrobe. F. Herkert, jr. 1,856,013; May 3.
Tub: *See*—
Continuous flow tub. Infant's bath tub.
Tube: *See*—
Static eliminator tube.
Tube coupling. T. P. Hingley. 1,857,022; May 3.
Tube forming machine, Paper. G. V. Plante. 1,857,002; May 3.
Tubing, Manufacturing decorated. H. D. Scott. 1,856,888; May 3.
Tubular clamp. O. M. Lade. 1,857,121; May 3.
Tufting machine. T. O. Anderson and J. R. Earp. 1,857,092; May 3.
Turbine and attachment therefor. S. Hackenberg. 1,856,631; May 3.
Turbine, Elastic fluid. E. L. Robinson. 1,856,820; May 3.
Type for automatic typesetting machines. F. H. Poeppelmeier. 1,856,725; May 3.
Typewriter line spacer. H. E. Zerick. 1,856,612; May 3.
Typewriting machine. C. A. Joerissen. 1,856,340; May 3.
Typewriting machine. A. G. F. Kurowski. 1,856,712; May 3.
Umbrella, Telescopically collapsible. H. Haupt. 1,856,385; May 3.
Unloading machine. H. A. Strelow. 1,856,976; May 3.
Valve. P. R. Alphonso. 1,856,825; May 3.
Valve. A. C. Brown. 1,856,088; May 3.
Valve. A. Persson. 1,856,505; May 3.
Valve actuating mechanism, Sleeve. W. A. Frederick. 1,856,246; May 3.
Valve, Air release. G. F. Hitchcock. 1,856,914; May 3.
Valve, Combined flow control and check. L. N. McClellan, P. A. Kinzie, J. L. Savage, and C. M. Day. 1,856,222; May 3.
Valve construction, Check. J. C. Schofield and V. A. Johnson. 1,856,512; May 3.
Valve control. J. J. Metcalf. 1,856,350; May 3.
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Valve, Drain stop. P. Luppes. 1,857,054; May 3.
Valve, Dry pipe. W. K. Hodgman, jr. 1,856,333; May 3.
Valve for Diesel engines and like engines, Liquid fuel injection. J. H. Brown. 1,856,089; May 3.
Valve for gas burners, Safety. A. Kalo. 1,856,641; May 3.
Valve for internal combustion engines, Liquid fuel. M. Palisca. 1,856,852; May 3.
Valve for oil burners, Automatic stop. O. W. Brear. 1,856,408; May 3.
Valve for pneumatic dispatch systems. J. J. Stoetzel. 1,856,889; May 3.
Valve, Gas reversing. C. D. Smith. 1,856,516; May 3.
Valve lock. B. Sakowicz. 1,856,266; May 3.
Valve mechanism. A. E. Armstrong. 1,856,451; May 3.
Valve mechanism for internal combustion engines. J. G. Schotthoefer. 1,857,005; May 3.
Valve, Mixing. W. E. Foster. 1,856,380; May 3.
Valve, Multiple-way. L. D. A. Rustin and A. J. G. Bolard. 1,856,226; May 3.
Valve, Plate. W. E. Bebbington. 1,856,617; May 3.
Valve, Relief. R. S. Heise. 1,856,996; May 3.
Valve, Retainer. J. J. Sale. 1,856,821; May 3.
Valve, Sand blast stopper. R. Ruemelin. 1,856,138; May 3.
Valve, Self grinding stop. M. Smolensky. 1,856,974; May 3.
Valve, Temperature responsive regulating. J. F. Hoffman. 1,856,334; May 3.
Valve, Vent relief. M. M. Marshall. 1,856,402; May 3.
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Vault, Grave. F. Biszantz. 1,856,309; May 3.
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Vehicle. E. R. M. Holmquist. 1,856,075; May 3.
Vehicle. E. W. Schellentrager and B. E. Clarkson. 1,856,787; May 3.
Vehicle construction. A. F. Masury. 1,856,773; May 3.
Vehicle lift. P. I. Schultz. 1,856,660; May 3.
Vehicle, Motor. A. Moorhouse. 1,856,064; May 3.
Vehicle seat, Adjustable. W. K. Bishop. 1,857,106; May 3.
Vehicle underframe, Railway. E. C. Jackson. 1,856,338; May 3.
Velocipede. W. G. Johnson. 1,856,255; May 3.
Ventilator. E. P. Hopwood. 1,856,810; May 3.
Vessel, Fore and aft rigged. E. L. Blackman. 1,856,459; May 3.
Vessel, Fore and aft rigged. E. L. Blackman. 1,856,803–4; May 3.
Vibrator for loud speakers. F. Shida. 1,856,791; May 3.
View changing apparatus. W. T. Birdsall. 1,856,234; May 3.
Vine cutter. W. A. Seright. 1,857,006; May 3.
Vise. K. Omholdt. 1,857,001; May 3.
Wagon, Self-dumping crawler. E. R. Standfuss. 1,856,441; May 3.
Wall structure, Metallic. E. F. Hauserman, L. D. Mowery, and J. A. Bohnsack. 1,856,995; May 3.
Warmer, Windshield. F. H. Moore. 1,856,651; May 3.
Washers, Forming non-entangling spring. E. D. Cowlin. 1,856,806; May 3.
Washing machine. E. J. Perry. 1,856,168; May 3.
Washing machine. V. E. Schmiedeknecht. 1,856,268; May 3.
Water closet. U. G. Haring. 1,856,553; May 3.
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Water modifying apparatus. C. A. Sundstrand. 1,856,599; May 3.
Water screen, Endless traveling. F. P. Gary. 1,856,381; May 3.
Water supply device, Hot. J. J. Parkinson. 1,856,504; May 3.
Web printing machines, Associating mechanism for. A. M. Zuckerman. 1,856,307; May 3.
Wedge, Fixture supporting. D. L. Jones. 1,857,050; May 3.
Weft replenishing mechanism, Multicolor. W. M. Wattie. 1,856,178; May 3.
Weighing sealing device. J. W. Bryce. 1,856,409; May 3.
Well drill. W. Sheldon. 1,856,229; May 3.
Wells, Improved method of shooting. J. J. Grebe and N. Poffenberger. 1,856,912; May 3.
Wheel: *See*—
Tractor wheel.
Wheel. F. C. Frank. 1,856,095; May 3.
Wheel assembly machine. W. A. Cotes. 1,856,277; May 3.
Wheel attachment, Vehicle. A. Feigelson. 1,856,806; May 3.
Wheel bodies to wheel hubs, Securing. W. N. Booth. 1,856,236; May 3.
Wheel for aircraft, Tail. C. N. Monteith. 1,856,778; May 3.
Whistle. S. Dressler. 1,856,625; May 3.
Window. N. T. Boyle and T. F. Slattery. 1,856,311; May 3.
Window. R. E. Frederick and W. E. Hill. 1,856,867; May 3.
Window. E. L. Gonder. 1,856,158; May 3.
Window bag. T. M. Avery. 1,857,010; May 3.
Window cleaner's seat. R. Stalzer. 1,856,794; May 3.
Window construction. C. Lyon. 1,856,104; May 3.
Window, Eye. J. L. Lufkin. 1,856,879; May 3.
Window operator. C. W. Kelly. 1,856,256; May 3.
Window screen. E. B. Feaster. 1,856,323; May 3.
Wing, Variable lift. R. A. Jumonville. 1,856,957; May 3.
Wiper, Windshield. R. N. Colley. 1,857,042; May 3.
Wiper, Windshield. H. Hueber and E. C. Horton. 1,856,416; May 3.
Wire bending mechanism. W. Dalheimer. 1,857,119; May 3.
Wire through a furnace, Feeding a. W. C. Sutton. 1,856,444; May 3.
Wood and wooden article produced thereby, Treating. N. F. Frigiola. 1,856,756; May 3.
Wrapper for use in hair waving processes. G. Comerford. 1,856,692; May 3.
Wrist-watch case. D. S. Ingraham. 1,856,389; May 3.
Writing instrument, Fountain. F. Mah. 1,856,027; May 3.
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CLASSIFICATION OF PATENTS

ISSUED MAY 3, 1932

NOTE.—First number = class, second number = subclass, third number = patent number

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U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Ace Art Company, Reading, Mass. Corner mounts. Serial No. 324,814; May 10. Class 37.

Acme Staple Company, Camden, N. J. Stapling, tagging, binding, etc., machines. Serial No. 325,548; May 10. Class 13.

Adams, Henry K., doing business as Nacalsun Company, Eugene, Oreg. Natural mineral waters. Serial No. 320,788; May 10. Class 45.

Albee Shoe Company Limited, Montreal, Quebec, Canada. Shoes. Serial No. 324,920; May 10. Class 39.

Allen, Mark W., & Co., Detroit, Mich. Soapless shampoo. Serial No. 312,681; May 10. Class 6.

Allen, Mark W., & Co., Detroit, Mich. Antiseptic bouquet for luxurious hair. Serial No. 312,682; May 10. Class 6.

Allison, J. H., doing business as Allison's Drug Store, Wichita Falls, Tex. Perfume, rouge, skin cream, etc. Serial No. 324,277; May 10. Class 6.

Amazon Knitting Company, Muskegon, Mich. Children's waists. Serial No. 325,632; May 10. Class 39.

American Business Publications, Inc., New York, N. Y. Magazine. Serial No. 325,462; May 10. Class 38.

American Institute of Banking, New York, N. Y. Booklets. Serial No. 325,551; May 10. Class 38.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Metal fence posts. Serial No. 325,506; May 10. Class 13.

Arrow-Hart & Hegeman Electric Company, The, Hartford, Conn. Sockets, plugs, receptacles, etc. Serial No. 324,502; May 10. Class 21.

Asta Aktiengesellschaft, Brackwede, Germany. Preparation for inflammation of the nerves, sciatica, neuralgia, etc. Serial No. 323,562; May 10. Class 6.

Asta Aktiengesellschaft, Brackwede, Germany. Preparations for sleeplessness, exhaustion, etc. Serial No. 323,736; May 10. Class 6.

Atlas Supply Company, Newark, N. J. Anti-freeze, cleaning, sealing compound and rust preventative. Serial No. 324,942; May 10. Class 6.

Atlas Supply Company, Newark, N. J. Spark plugs, flashlights, flashlight batteries, etc. Serial No. 324,944; May 10. Class 21.

Auto-Prime Pump Company, The, Cleveland, Ohio, assignor to Westco Pump Corporation, Davenport, Iowa. Pumps and parts thereof. Serial No. 313,025; May 10. Class 23.

B B Products Corporation, New York, N. Y. Crystal powder cleaning preparation. Serial No. 322,569; May 10. Class 4.

Bamberger, L., & Co., Newark, N. J. Dresses, coats, and sweater suits. Serial No. 309,956; May 10. Class 39.

Barok, George D., doing business as The Barok Company, Columbus, Ohio. Amusement device. Serial No. 325,508; May 10. Class 22.

Barron-Gray Packing Company, San Jose, Calif. Canned fruit cocktail. Serial No. 325,314; May 10. Class 46.

Bigelow, Doane, Mount Washington, Ohio. Electric lamp bulbs. Serial No. 322,479; May 10. Class 21.

Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Rugs and carpets. Serial No. 325,456; May 10. Class 42.

Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Rugs and carpets. Serial No. 325,458; May 10. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 324,059; May 10. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 325,420; May 10. Class 42.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Chemical substances. Serial No. 324,872; May 10. Class 6.

Buckingham & Hecht, San Francisco, Calif. Boots and shoes. Serial No. 324,816; May 10. Class 39.

Cairo Syrup Company, Atlanta, Ga. Cane syrup. Serial No. 324,954; May 10. Class 46.

Canada Last Company Limited, The, Preston, Ontario, Canada. Last and trees for boots and shoes. Serial No. 324,367; May 10. Class 50.

Cattaraugus Cutlery Company, Little Valley, N. Y. Pocket knife. Serial No. 322,927; May 10. Class 23.

Caulk, L. D., Company, The, Milford, Del. Preparation for use by dentists. Serial No. 324,658; May 10. Class 4.

Caulk, L. D. Company, The, Milford, Del. Modified cocoa butter. Serial No. 324,775; May 10. Class 44.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. Serial No. 325,744; May 10. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. Serial No. 325,746; May 10. Class 42.

Chicopee Manufacturing Corporation, New Brunswick, N. J. Absorbent piece goods. Serial No. 234,988; May 10. Class 42.

Chocolat Suchard Societe Anonyme, Neuchatel, Switzerland. Sweet chocolate and chocolate pastilles. Serial No. 318,391; May 10. Class 46.

Clayton Magazines, Inc., The, New York, N. Y. Periodical. Serial No. 324,030; May 10. Class 38.

Clifton Kraft Works. (See Wentz, Jere L.)

Climax Rubber Company. (See Stein, Jacob.)

Colorado Potato Flake & Manufacturing Company, The, Denver, Colo. Potato waffles. Serial No. 325,162; May 10. Class 46.

Continental Mills, Inc., Philadelphia, Pa. Woolen and worsted fabrics, jersey cloths, elderdowns, etc. Serial No. 325,681; May 10. Class 42.

Continental Mills, Inc., Philadelphia, Pa. Overcoats, topcoats, cloaks and capes, etc. Serial No. 325,682; May 10. Class 39.

Crown Laboratories, Ogdensburg, N. Y. Yeast. Serial No. 324,137; May 10. Class 46.

Dailey, W. O., Manufacturing Co., Portland, Oreg. Collar stiffening and retaining devices. Serial No. 323,111; May 10. Class 40.

Davies-Young Soap Company, The, Dayton, Ohio. Liquid dry cleaning soap. Serial No. 325,216; May 10. Class 4.

Davis, Fred W., New York, N. Y. Soaps and shaving creams. Serial No. 319,474; May 10. Class 4.

Dean-Lilly Coffee and Spice Company, The, doing business as Dean's, Memphis, Tenn. Coffee. Serial No. 321,199; May 10. Class 46.

Difco Laboratories, Detroit, Mich. New bacteriological peptone. Serial No. 325,035; May 10. Class 6.

Durafer (Inc.), Newark, N. J. Metal rings. Serial No. 324,734; May 10. Class 14.

Duro Test Corporation, New York, N. Y. Incandescent electric lamps. Serial No. 325,427; May 10. Class 21.

East Whittier Citrus Association, Whittier, Calif. Fresh citrus fruits. Serial No. 325,747; May 10. Class 46.

Electric Steam Heating Corporation. (See Landerman, John D.)

Evr-Klean Seat Pad Company, St. Louis, Mo. Tailored seat covers, seat pads, seat shields, etc. Serial No. 324,159; May 10. Class 32.

Evr-Klean Seat Pad Company, St. Louis, Mo. Tailored seat covers and pads. Serial No. 324,161; May 10. Class 32.

Ezoil Company. (See Wilson, Ray B.)

Faichney Instrument Corporation, Watertown, N. Y. Clinical thermometers, hypodermic syringes, and hypodermic needles. Serial No. 325,164; May 10. Class 44.

Fairfield Western Maryland Dairy. (See Western Maryland Dairy Corporation.)

Farmacia Garza. (See Longoria, Pedro.)

Fenwick-Reddaway Mfg. Co., Newark, N. J. Nozzles, nipples, strainers, etc. Serial No. 325,367; May 10. Class 13.

Fischbein Company, Inc., Minneapolis, Minn. Sewing machine fans, and air cut-off. Serial No. 324,312; May 10. Class 21.

Fischer's Surfa-Saver, Inc., Cincinnati, Ohio. Soap. Serial No. 313,338; May 10. Class 4.

French Coal Company, Bluefield, W. Va. Coal. Serial No. 325,684; May 10. Class 1.

Full Measure Gas Company. (See Markstein, Bernard M.)

Furedy, Frank, Penn-Wynne, assignor to George M. Hessdoefer, Philadelphia, Pa. Pencils and parts therefor. Serial No. 305,398; May 10. Class 37.

G. S. S. Publishing Company, Inc., The, New York, N. Y. Periodical. Serial No. 325,785; May 10. Class 38.

Galban & Co. Inc., New York, N. Y. Food products. Serial No. 325,685; May 10. Class 46.

Garat & Company, Whiterock, Nev. Cattle. Serial No. 323,814; May 10. Class 46.

Gardner, Alvin L., Pittsburgh, Pa. Section of a newspaper. Serial No. 322,350; May 10. Class 38.

Gemloid Corporation, New York, N. Y. Imitation precious stones. Serial No. 323,398; May 10. Class 28.

General Control Corporation, Wilmington, Del., and Minneapolis, Minn. Electric generator control apparatus. Serial No. 321,642; May 10. Class 21.

General Laboratories, Inc., Detroit, Mich. Reducing lotion. Serial No. 320,910; May 10. Class 6.

General Timber and Lumber Company, The, Cleveland, Ohio. Perforators and holders for cigars, cigarettes, etc. Serial No. 318,517; May 10. Class 8.

Gilmore, James A., Spokane, Wash. Preparation for the scalp and stimulating hair growth. Serial No. 325,141; May 10. Class 6.

Giraux, Jules, Rouen, France. Perfumery, face powder, rouges, etc. Serial No. 318,139; May 10. Class 6.

Goldfield & Newman, New York, N. Y. Suits, coats, dresses, etc. Serial No. 324,787; May 10. Class 39.

Goldschmidt, Th., A.-G., Essen-on-the-Ruhr, Germany. Cementing medium. Serial No. 324,665; May 10. Class 5.

Gold Star Fur Ranch Inc., Owatonna, Minn. Live foxes. Serial No. 325,468; May 10. Class 1.
Goodwin, Frederick P., doing business as Sun Mix Corporation, Strawn, Ill. Poultry feed. Serial No. 281,144; May 10. Class 46.
Gore, Joseph M., jr., doing business as Gore Products Co., New Orleans, La. Preparation for the relief of ringworm of the feet. Serial No. 324,344; May 10. Class 6.
Governor and Company of Adventurers of England Trading into Hudson's Bay, The, doing business as Hudson's Bay Company, Winnipeg, Canada. Tobacco. Serial No. 309,973; May 10. Class 17.
Grand Rapids Store Equipment Corporation, Grand Rapids, Mich. Ice cream making machinery. Serial No. 325,786; May 10. Class 31.
Grant, W. T., Company, Lynn, Mass., and New York, N. Y. Wash suits, blouses, knickers, etc. Serial No. 324,822; May 10. Class 39.
Great Western Electro-Chemical Co., San Francisco, Calif. Fertilizers. Serial No. 325,258; May 10. Class 10.
Green, Clarence A., doing business as The Indian Remedy Co., Paris, Tex. Medicinal product. Serial No. 317,868; May 10. Class 6.
Grenole Sales Corporation, New York, N. Y. Fly catcher. Serial No. 325,619; May 10. Class 50.
Grossman, Wallace G., New York, N. Y. Exercising machines. Serial No. 325,289; May 10. Class 22.
Hanes Hosiery Mills Co., Winston-Salem, N. C. Yarns. Serial No. 325,651; May 10. Class 43.
Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. Serial No. 325,402; May 10. Class 42.
Hart Oil Burner Corporation, Peoria, Ill. Fuel burning devices. Serial No. 312,429; May 10. Class 34.
Hartman, Hurvitz & Schanke, Inc., New York, N. Y. Dresses and frocks. Serial No. 323,940; May 10. Class 39.
Harvel Corporation, The, Newark, N. J. Paints, varnishes, primers, etc. Serial No. 286,936; May 10. Class 16.
Hassell, Bert R. J., Rockford, Ill. Ice cream confection bar and ice cream in brick and bulk form. Serial No. 316,644; May 10. Class 46.
Health Developing Apparatus Co., Inc., New York, N. Y. Athletic appliances. Serial No. 325,753; May 10. Class 22.
Henry & Close Co., Boston, Mass. Fresh fish fillets. Serial No. 325,653–4; May 10. Class 46.
Hessdoefer, George M. (See Furedy, Frank.)
Hudson's Bay Company. (See Governor and Company of Adventurers of England trading into Hudson's Bay, The.)
Ideal Novelty & Toy Co., Brooklyn, N. Y. Dolls. Serial No. 325,291; May 10. Class 22.
Independent Wholesale Dry Goods Ass'n, Inc., New York, N. Y. Cotton, rayon, linen and silk piece goods, cotton sheets, and pillow cases. Serial No. 322,017; May 10. Class 42.
Indian Remedy Co., The. (See Green, Clarence A.)
Iowa Manufacturing Company, Cedar Rapids, Iowa. Road material handling equipment. Serial No. 321,881; May 10. Class 23.
Jenkins Television Corporation, Jersey City, N. J. Unitary apparatus for the electrical transmission and reception of sound, images, etc. Serial No. 305,043; May 10. Class 21.
Johns-Manville Corporation, New York, N. Y. Electric insulating compounds and panels and plates made therefrom. Serial No. 314,054; May 10. Class 21.
Kasper, F. J., Sons Co., Chicago, Ill. Beverages, syrups, and compounds. Serial No. 325,827; May 10. Class 45.
Katolox Laboratories, Inc., East Orange, N. J. Compounds and/or solutions of organic iodine. Serial No. 324,890; May 10. Class 6.
Kaumagraph Company, New York, N. Y. Inks and ink solvents. Serial No. 323,334; May 10. Class 11.
Keegan, Mary E., doing business as The Lovelle Products Co., Minneapolis, Minn. Hand lotion. Serial No. 311,738; May 10. Class 6.
Keystone Malt Company. (See Stopper, L. J.)
Kotex Company, Chicago, Ill. Sanitary napkins. Serial No. 325,474; May 10. Class 44.
Krause, Chas., Milling Co., Milwaukee, Wis. Gelatinized wheat flour. Serial No. 325,660; May 10. Class 5.
Kress, S. H., & Co., New York, N. Y. Hair and sport nets, linen towels, sheets, etc. Serial No. 323,008; May 10. Class 42.
Kress, S. H., & Co., New York, N. Y. Soaps. Serial No. 324,383; May 10. Class 4.
Lamp Time Corporation, Milwaukee, Wis. Electric lamps. Serial No. 324,748; May 10. Class 21.
Landerman, John D., assignor to Electric Steam Heating Corporation, Brookline, Mass. Electric steam generators, portable electric house heaters, and parts thereof. Serial No. 314,060; May 10. Class 21.
Lapayne, Rex, and C. F. Blake, Glendale, Calif. Frankfurter, weinerwurst, hamburger, etc., sandwiches. Serial No. 324,713; May 10. Class 46.
Lawndale Garment Company, Chicago, Ill. House dresses and silk underwear. Serial No. 325,147; May 10. Class 39.
Longoria, Pedro, doing business as Farmacia Garza, Mercedes, Tex. Preparation for eye diseases. Serial No. 309,783; May 10. Class 6.
Los Angeles Soap Company, Los Angeles, Calif. Washing powder. Serial No. 325,105; May 10. Class 4.
Lovelle Products Co., The. (See Keegan, Mary E.)
Mac-Kee Drug Company. (See McLean, Samuel G.)
Maine Yacht Corporation, Dover-Foxcroft, Me. Toy boats. Serial No. 325,436; May 10. Class 22.
Marietta Paint & Color Co., The, Marietta, Ohio. Sanding sealers, a lacquer type product. Serial No. 324,442; May 10. Class 16.
Markstein, Bernard M., doing business as Full Measure Gas Company, Cincinnati, Ohio. Gasoline. Serial No. 324,476; May 10. Class 15.
Marshall, J. Wilmer, doing business as The Wil-Mar Antiseptic Works, Fowblesburg, Md. Preparation having bactericidal, germicidal, etc., properties. Serial No. 324,566; May 10. Class 6.
Martin Rocking Fifth Wheel and Trailer Company, Westfield, Mass. Fifth wheels and trailer wheels. Serial No. 322,054; May 10. Class 19.
McCune, Gladys V., New York, N. Y. Beauty creams, lotions, and powders. Serial No. 324,214; May 10. Class 6.
McLean, Samuel G., doing business as Mac-Kee Drug Company, Oakland, Calif. Alteratives, analgesics, anesthetics, etc. Serial No. 320,938; May 10. Class 6.
Miller, D. L., doing business as Millerine Company, Chicago, Ill. Treatment for baldness, consisting in a liquid chemical scalp-stimulating compound. Serial No. 324,390; May 10. Class 6.
Miller High Life Company, doing business as Milo Malt Co., Milwaukee, Wis. Concentrated malt syrup. Serial No. 324,538; May 10. Class 46.
Millerine Company. (See Miller, D. L.)
Milo Malt Co. (See Miller High Life Company.)
Munsingwear Corporation, The, Minneapolis, Minn. Underwear. Serial No. 325,593; May 10. Class 39.
Nacalsun Company. (See Adams, Henry K.)
National Battery Company, St. Paul, Minn. Storage batteries. Serial No. 325,339; May 10. Class 21.
National Catholic Welfare Conference, Washington, D. C. Magazine. Serial No. 323,271; May 10. Class 38.
New York State Commission for the Blind, New York, N. Y. Handwoven rugs. Serial No. 319,751; May 10. Class 42.
Oklahoma City Mill & Elevator Company, Oklahoma City, Okla. Wheat flour. Serial No. 319,150; May 10. Class 46.
Oneida Community Limited, Oneida, N. Y. Chests, cabinets, and rolls for silverware. Serial No. 325,373; May 10. Class 2.
Paristyle Novelty Co. Inc., New York, N. Y. Creams, lotions, rouges, etc. Serial No. 325,083; May 10. Class 6.
Paul, Richard, Inc., Los Angeles, Calif. Stocking feet. Serial No. 325,527; May 10. Class 39.
Pecano Manufacturing Company, Manheim, Pa. Meal. Serial No. 324,721; May 10. Class 46.
Pepperell Manufacturing Company, Boston, Mass. Blankets. Serial No. 325,529; May 10. Class 42.
Pillsbury Flour Mills Company, Minneapolis, Minn. Flour. Serial No. 325,298; May 10. Class 46.
Pohatcong Hosiery Mills, Inc., Washington, N. J. Hosiery. Serial No. 325,299; May 10. Class 39.
Polefsky, Jacob S., New York, N. Y. Beverages and extracts. Serial No. 322,971; May 10. Class 45.
Polk Miller Products Corp., Richmond, Va. Soap. Serial No. 324,189; May 10. Class 4.
Postage and The Mailbag, Inc., Brooklyn, N. Y. Magazine. Serial No. 325,621; May 10. Class 38.
Prince Lauten Corp., New York, N. Y. Rayon fabrics. Serial No. 325,724; May 10. Class 42.
Pure Oil Company, The, Chicago, Ill. Fuel oils, lubricating oils and greases, etc. Serial No. 324,972; May 10. Class 15.
Quaker City Wholesale Grocery Company, Inc., Philadelphia, Pa. Canned fruits, vegetables, fish, etc. Serial No. 321,614; May 10. Class 46.
Renofab Process, Inc., The, New York, N. Y. Dry cleaning fluid. Serial No. 325,240; May 10. Class 4.
Republican Publishing Company, The. (See Sheehan, Emmett L.)
Rice, Francis W., Syracuse, N. Y. Newspaper section or column. Serial No. 325,531; May 10. Class 38.
Rossie Velvet Company, Mystic, Conn. Velvets in the piece. Serial Nos. 325,803–5; May 10. Class 42.
Royal Battery Corporation, New Brunswick, N. J., and New York, N. Y. Electric storage batteries. Serial No. 325,413; May 10. Class 21.
Royce Chemical Company, Carlton Hill, N. J. Hydrosulphite. Serial No. 324,903; May 10. Class 6.
"Rub-Ene" Chemical Co. (See Sutter, Homer A.)
Sauter Brothers, New York, N. Y. Bluders, kimonos, gertrudes, etc. Serial No. 324,905; May 10. Class 39.
Schelter, Joseph J., & Co., Philadelphia, Pa. Haircloth piece goods. Serial No. 305,417; May 10. Class 42.
Schwartz, Arnold A., Dunellen, N. J. Paper. Serial No. 325,623; May 10. Class 37.

Sheehan, Emmett L., doing business as The Republican Publishing Company, Washington, D. C. Newspaper. Serial No. 325,441; May 10. Class 38.
Smith Power Transmission Company, The, Cleveland, Ohio. Composition flexible couplings. Serial No. 294,947; May 10. Class 23.
Society of Chemical Industry in Basle, Basel, Switzerland. Medicine. Serial No. 323,754; May 10. Class 6.
Spartan Refining Company, Inc., The, Shreveport, La. Gasoline, lubricating oil, kerosene, etc. Serial No. 324,016; May 10. Class 15.
Spa-Tab Company, Baltimore, Md. Bath tablets. Serial No. 325,808; May 10. Class 6.
Stahl, H. K., Company, St. Paul, Minn. Petroleum products. Serial No. 323,834; May 10. Class 15.
Stein, Jacob, doing business as Climax Rubber Company, New York and Brooklyn, N. Y. Medicated dress shields, sanitary baby pants, aprons, etc. Serial No. 320,704; May 10. Class 44.
Sterno Corporation, New York, N. Y. Stoves, heaters, burners, etc. Serial No. 324,541; May 10. Class 34.
Stopper, L. J., doing business as Keystone Malt Company, Williamsport, Pa. Malt syrup. Serial No. 309,010; May 10. Class 46.
Sun Mix Corporation. (See Goodwin, Frederick P.)
Superior Packing Corp., New York, N. Y. Malt syrup. Serial No. 325,624; May 10. Class 46.
Surface Combustion Corporation, Toledo, Ohio. Water heaters. Serial No. 324,573; May 10. Class 34.
Sutter, Homer A., doing business as "Rub-Ene" Chemical Co., Cincinnati, Ohio. Ointment. Serial No. 312,786; May 10. Class 6.
Tacoma Paint & Lacquer Manufacturing Company, Tacoma, Wash. Painters' sizing. Serial No. 325,300; May 10. Class 16.
Three Star Publishing Company, New York, N. Y. Periodical. Serial No. 325,833; May 10. Class 38.
Trebow Cigar Corporation, Philadelphia, Pa. Cigars. Serial No. 325,491; May 10. Class 17.
Truax-Traer Coal Company, Chicago, Ill. Coal. Serial No. 324,200; May 10. Class 1.
Trugas and Oil Company, Philadelphia, Pa., and Wilmington, Del. Gasoline, lubricating oil, kerosene, etc. Serial No. 324,812; May 10. Class 15.
Tulon Products Incorporated, New York, N. Y. Medicinal preparation. Serial No. 324,973; May 10. Class 6.
Uni-Flo Grille Corporation, Detroit, Mich. Grilles. Serial No. 325,310; May 10. Class 34.
United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. Serial No. 324,807; May 10. Class 22.
Vogt, F. G., & Sons, Incorporated, Philadelphia, Pa. Sausage and scrapple. Serial No. 322,718; May 10. Class 46.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Corsets. Serial No. 325,157; May 10. Class 39.
Washburn Company, The, Worcester, Mass. Kitchen and household tools or utensils. Serial No. 319,505; May 10. Class 23.
Wentz, Jere L., doing business as Clifton Kraft Works, Clifton, N. J. Pencil sharpeners. Serial No. 319,754; May 10. Class 37.
Westco Pump Corporation. (See Auto-Prime Pump Company, The, assignor.)
Western Maryland Dairy Corporation, doing business as Fairfield Western Maryland Dairy, Baltimore, Md. Poultry and stock feeding food. Serial No. 325,053; May 10. Class 46.
White & Wyckoff Mfg. Company, Holyoke and Riverside, Mass. Paper and papeteries. Serial No. 325,494; May 10. Class 37.
Williams, Claude W., Pawhuska, Okla. Antiseptic tablets. Serial No. 322,147; May 10. Class 6.
Wil-Mar Antiseptic Works, The. (See Marshall, J. Wilmer.)
Wilson, Ray B., doing business as Ezoil Company, Kansas City, Mo. Lubricating oils. Serial No. 324,089; May 10. Class 15.
Windsor Pharmacal Company, St. Louis, Mo. Tablets. Serial No. 324,863; May 10. Class 6.
Witko, John W., Wilkes-Barre, Pa. Table board game. Serial No. 324,329; May 10. Class 22.
Woolsey, Leon H., doing business as Leon Woolsey, Oakland, Calif. Suits and overcoats. Serial No. 322,530; May 10. Class 39.
Wright, Frederick H., New York, N. Y. Publication and/or magazine. Serial No. 319,277; May 10. Class 38.
Wright, Frederick H., New York, N. Y. Periodical and/or magazine. Serial No. 319,278; May 10. Class 38.
Youngstown-Pressed Steel Company, The, Warren, Ohio. Enameled drainboards. Serial No. 323,925; May 10. Class 13.
Zeiss Ikon Aktiengesellschaft, Dresden, Germany. Photographic apparatus. Serial No. 321,409; May 10. Class 26.
Zimmerman Brothers, Lock Haven, Pa. Malt syrup. Serial No. 325,736; May 10. Class 46.

LIST OF REGISTRANTS OF TRADE-MARKS

Acteen Chemical Service Company. (See Corson, E. O.)
Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Films, plates, and photographic papers. 38,950; renewed Sept. 30, 1932.
Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Coaltar-dyestuffs. 38,951; renewed Sept. 30, 1932.
Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Wound-healing remedies. 86,768; renewed June 4, 1932.
Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Pharmaceutical preparations containing fuller's earth. 87,135; renewed July 2, 1932.
Alaska Fish Co., assignor to Peril Straits Packing Co., Inc., Seattle, Wash. Canned salmon. 86,864; renewed June 11, 1932.
Alpha Omicron Pi, State College, Pa. Fraternity badges, lapel buttons, pins, etc. 293,869; May 10; Serial No. 315,665; published Feb. 16, 1932. Class 28.
American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Materials and solutions for altering the images on printing plates. 293,893; May 10; Serial No. 322,079; published Feb. 16, 1932. Class 6.
American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Photographic sensitizing materials and solutions. 293,894; May 10; Serial No. 322,081; published Feb. 16, 1932. Class 6.
Anticoman-Ges. m. b. H., Berlin-Halensee, Germany. Medicines for diabetes. 293,824; May 10; Serial No. 319,469; published Feb. 23, 1932. Class 6.
Astoria & Puget Sound Canning Co., Bellingham, Wash., to Astoria & Puget Sound Canning Co., South Bellingham, Wash. Canned salmon. 88,446–7; renewed Sept. 24, 1932.
Athfoe Company, The, San Francisco, Calif. Dusting powder. 293,900; May 10; Serial No. 322,154; published Feb. 16, 1932. Class 6.
Atlantic Refining Company, The, Philadelphia, Pa. Oils, greases, gasolenes, etc. 293,862; May 10; Serial No. 314,137; published Feb. 16, 1932. Class 15.
Atlas Petroleum Company, Chicago, Ill. Gasoline. 293,975; May 10; Serial No. 307,883; published Feb. 16, 1932. Class 15.
Auriema, Ad., Inc., New York, N. Y. Radio receiving sets and parts thereof, radio loud speakers, etc. 293,995; May 10; Serial No. 321,091; published Feb. 16, 1932. Class 21.
Auto Strop Safety Razor Co., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Razors, blades, knives, etc. 88,449; renewed Sept. 24, 1932.
Baker, Harold, Fort Atkinson, Wis. Frozen malted chocolate ice cream bars. 293,828; May 10; Serial No. 319,801; published Feb. 23, 1932. Class 46.
Bamberger, L., & Co., Newark, N. J. Silk underwear. 294,016; May 10. Class 39.
Bayer, Dr., és társa, Budapest, Austria-Hungary, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Salve for dermatological purposes. 88,454; renewed Sept. 24, 1932.
Beck, A. S., Shoe Corporation, New York, N. Y. Shoes and slippers. 293,991; May 10; Serial No. 320,577; published Feb. 23, 1932. Class 39.
Becker, Henry, & Son, Inc., Roseland, N. J. Milk, cream, butter, and eggs. 293,844; Mar. 10; Serial No. 321,630; published Feb. 23, 1932. Class 46.
Benjamin & Johnes, Incorporated, Newark, N. J. Foundation garments. 294,005; May 10; Serial No. 321,632; published Feb. 16, 1932. Class 39.
Bennett Mills, Incorporated, Philadelphia, Pa. Pile fabrics. 294,021; May 10; Class 42.
Berlin, David, Detroit, Mich. Golf clubs and balls, baseballs, hats, etc. 293,865; May 10; Serial No. 315,083; published Mar. 1, 1932. Class 22.
Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Woven textile rugs and carpets. 294,006; May 10; Serial No. 321,717; published Mar. 1, 1932. Class 42.
Bittle King Pharmacal Company, Anderson, Ind. Skin lotion. 293,992; May 10; Serial No. 320,578; published Feb. 23, 1932. Class 6.

Black Flag Company, The, Baltimore, Md. Insecticides. 293,982; May 10; Serial No. 317,145; published Oct. 6, 1931. Class 6.

Black Flag Company, The, Baltimore, Md. Insecticides. 293,983; May 10; Serial No. 317,269; published Sept. 29, 1931. Class 6.

Blake, Moffitt & Towne, San Francisco, Calif. Paper towels. 294,025; May 10. Class 37.

Blish Milling Company, The, Seymour, Ind. Flour. 87,596; renewed July 30, 1932.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 293,955–6; May 10; Serial Nos. 323,222–3; published Mar. 1, 1932. Class 42.

Boozer, Robert C., doing business as Boozer Products Co., Atlanta, Ga. Absorbent preparation. 293,993; May 10; Serial No. 320,971; published Feb. 23, 1932. Class 6.

Bray, Geo., & Co., Limited, Leeds, England. Gas-burners. 87,724–5; renewed Aug. 6, 1932.

Brown Shoe Company, Inc., St. Louis, Mo. Shoes. 294,017; May 10. Class 39.

Bryant, Lane, Inc., New York, N. Y. Hosiery, shoes, underwear, etc. 293,873; May 10; Serial No. 316,817; published Feb. 16, 1932. Class 39.

Burrough Brothers Manufacturing Company, doing business as Burrough Brothers Laboratories, Baltimore, Md., and Cleveland, Ohio. Preparation for use as a mouth wash and throat gargle. 293,858; May 10; Serial No. 311,509; published Apr. 14, 1931. Class 6.

California Crushed Fruit Corporation, Los Angeles, Calif., now by change of name, Mission Dry Corporation, Ltd. Maltless beverages and syrups, etc. 293,966; May 10; Serial No. 302,338; published Aug. 19, 1930. Class 45.

California Crushed Fruit Corporation, Los Angeles, Calif., now by change of name, Mission Dry Corporation, Ltd. Beverages and syrups, extracts, and concentrates. 293,968–9; May 10; Serial Nos. 304,233–4; published Nov. 18, 1930. Class 45.

California Crushed Fruit Corporation, Los Angeles, Calif., now by change of name, Mission Dry Corporation, Ltd. Beverages and syrups, extracts, etc. 293,976; May 10; Serial No. 308,058; published Dec. 30, 1930. Class 45.

Caligrapo Company, The. (See Fowler, Francis E., jr.)

Calumet Refining Co., Chicago, Ill. Fly spray for cattle. 293,847; May 10; Serial No. 321,903; published Feb. 9, 1932. Class 6.

Camfesol Products Co., Inc., Camden, N. J. Powder. 293,913; May 10; Serial No. 322,306; published Feb. 16, 1932. Class 6.

Campbell, John & Co., New York, N. Y. Dyes. 293,821; May 10; Serial No. 322,416; published Feb. 23, 1932. Class 6.

Chein, J., & Company, New York, N. Y., and Harrison, N. J. Toys representing figures in various attitudes of a prize fighter, etc. 293,930; May 10; Serial No. 322,572; published Mar. 1, 1932. Class 22.

Chemical Foundation, Incorporated, The. (See Actien-Gesellschaft für Anilin-Fabrikation, assignor.)

Chemical Foundation, Incorporated, The. (See Bayer, Dr., & förs., assignor.)

Chemical Foundation, Incorporated, The. (See Chemische Fabrik Bannewitz Orloff Hansen, assignor.)

Chemical Foundation, Incorporated, The. (See Deppe, Anton, Söhne, assignor.)

Chemical Foundation, Incorporated, The. (See Fabrik pharmaceutischer Präparate Karl Engelhard, assignor.)

Chemical Foundation, Incorporated, The. (See Farbwerke vorm. Meister Lucius & Brüning, assignor.)

Chemical Foundation, Incorporated, The. (See Grimme, Natalis & Co., Commanditgesellschaft auf Actien, assignor.)

Chemical Foundation, Incorporated, The. (See Hofmeier, Julius, assignor.)

Chemical Foundation, Incorporated, The. (See Norddeutsche Wollkämmerei & Kammgarnspinnerei, assignor.)

Chemical Foundation, Incorporated, The. (See Rath, Emil, assignor.)

Chemical Foundation, Incorporated, The. (See Rosenzweig & Baumann, assignor.)

Chemical Foundation, Incorporated, The. (See Thomasphosphatfabriken Gesellschaft mit beschränkter Haftung, assignor.)

Chemical Foundation, Incorporated, The. (See Utescher, E., assignor.)

Chemical Foundation, Incorporated, The. (See Vereinigte Chemische Werke Aktiengesellschaft, assignor.)

Chemical Foundation, Incorporated, The. (See Wedekind, R., & Co. G. m. b. H., assignor.)

Chemische Fabrik Bannewitz Orloff Hansen, Bannewitz, near Dresden, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Chemicals. 87,164; renewed July 2, 1932.

Chipman Chemical Engineering Co., Inc., by change of name to Chipman Chemical Company, Inc., Bound Brook, N. J. Insecticide. 293,920; May 10; Serial No. 322,379; published Feb. 23, 1932. Class 6.

Clark, Fred G., Inc., Cleveland, Ohio. Lubricating oils. 293,881; May 10; Serial No. 319,058; published Feb. 16, 1932. Class 15.

Clover Farm Stores. (See Grocers & Producers Co., The.)

Cohn & Rosenberger, Inc., New York, N. Y. Strings of pearls, necklaces, bracelets, etc. 293,935; May 10; Serial No. 322,789; published Feb. 23, 1932. Class 28.

Columbian Rope Company, Auburn, N. Y. Rope and cordage. 86,755; renewed May 28, 1932.

Comet Rice Company. (See Seaboard Rice Milling Co.)

Conradty, C., (Inhaber Pauline & Eugen Conradty) Fabrik elektrischer u. galvanischer Kohlen, to C. Conradty, Fabrik Elektrischer u. Galvanischer Kohlen, Nuremberg, Germany. Electric arc-light carbons. 85,079; renewed Jan. 30, 1932.

Conservation Corporation of America, Portland, Oreg. Lubricating oil. 293,837; May 10; Serial No. 321,133; published Feb. 16, 1932. Class 15.

Consolidated Sewing Machine & Supply Co., New York, N. Y. Needles. 293,981; May 10; Serial No. 317,109; published Feb. 16, 1932. Class 40.

Cooper Packing Company, National City, Calif. Imitation maple syrup, mole sauce, pickled figs, etc. 293,879; May 10; Serial No. 318,699; published Feb. 23, 1932. Class 46.

Cordry, Maurice E., Cincinnati, Ohio. Salve. 293,963; May 10; Serial No. 285,336; published Sept. 17, 1929. Class 6.

Corson, E. O., doing business as Acteen Chemical Service Company, Berkeley, Calif. Insecticides. 293,916; May 10; Serial No. 322,359; published Feb. 23, 1932. Class 6.

Couturier, Jean, Courbevoie, France. Stranded wire. 293,871; May 10; Serial No. 316,480; published Feb. 16, 1932. Class 28.

Crane Co., Chicago, Ill. Heating materials, boiler trimmings, engine trimmings, etc. 293,974; May 10; Serial No. 307,703; published Dec. 8, 1931. Class 13.

Crane Co., Chicago, Ill. Plumbing and steam fitting supplies. 294,003; May 10; Serial No. 321,591; published Jan. 26, 1932. Class 13.

Crowley, John A., Hyde Park, Mass., assignor to Edward T. Springer, Cimarron, N. Mex. Beverages. 37,954; renewed Mar. 18, 1932.

Cushman-Hollis Company, Auburn, Me. Shoes. 293,822–23; May 10; Serial Nos. 322,454–5; published Feb. 16, 1932. Class 39.

Davis, George R., Seattle, Wash., assignor to Thompson Bros. Shoe Co., Brockton, Mass. Shoes and boots. 86,131; renewed Apr. 16, 1932.

Deppe, Anton, Söhne, Hamburg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Limonenes. 87,050; renewed June 25, 1932.

Dorchan and Co. (See Hunt, Daniel.)

Dubuis & Rowsell, Limited, Croydon, England. Perfumes, vanishing cream, cold cream, etc. 293,872; May 10; Serial No. 316,686; published Feb. 23, 1932. Class 6.

Dupont, E. I. de Nemours and Company, Wilmington, Del. Synthetic methanol. 293,917; May 10; Serial No. 322,361; published Feb. 23, 1932. Class 6.

Eastman Kodak Company, Rochester, N. Y. Thin, transparent sheeting of cellulosic composition. 293,954; May 10; Serial No. 323,193; published Mar. 1, 1932. Class 50.

Economy Nursery Company, Little Silver, N. J. Rose bushes, shrubs, vines, etc. 293,842; May 10; Serial No. 321,534; published Feb. 16, 1932. Class 1.

Electric Boat Company. (See New London Ship & Engine Company, The, assignor.)

Electric Storage Battery Company, The, Philadelphia, Pa. Electric dry cell batteries. 293,925; May 10; Serial No. 322,502; published Feb. 23, 1932. Class 21.

Emulsified Asphalt and Application Company. (See Lehman, Louis J.)

Ephrata Shoe Company, Ephrata, Pa. Shoes. 293,868; May 10; Serial No. 315,514; published Feb. 9, 1932. Class 39.

Epstein, Augusta, San Francisco, Calif. Films. 293,988; May 10; Serial No. 320,339; published Dec. 29, 1931. Class 26.

Erbun Fabrics Corp., New York, N. Y. Upholstery and drapery fabrics. 293,945; May 10; Serial No. 323,001; published Mar. 1, 1932. Class 42.

Erie Sales Company, The, Cleveland, Ohio. Liquid malt. 293,989; May 10; Serial No. 320,358; published Feb. 23, 1932. Class 46.

Everett, Edward A., Long Island City, N. Y. Lightning arrestors. 293,914; May 10; Serial No. 322,313; published Feb. 23, 1932. Class 21.

Everitt & Graf, Inc., Milwaukee, Wis. Ladies' hats. 293,855; May 10; Serial No. 310,252; published Feb. 16, 1932. Class 39.

Fabrik pharmaceutischer Präparate Karl Engelhard, Frankfort-on-the-Main, Germany, assignor to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Wound-powder. 86,982; renewed June 18, 1932.

Fairform Brassiere Co. Inc., New York, N. Y. Brassières. 293,924; May 10; Serial No. 322,481; published Feb. 16, 1932. Class 39.

Farbwerke, vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Medical compounds. 38,800; renewed Aug. 19, 1932.

Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Carbohydrate for diabetes. 87,187; renewed July 2, 1932.

Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Internal antiseptic for the uropoietic system. 87,188; renewed July 2, 1932.

Farbwerke vorm. Meister Lucius Brüning, Höchst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Antiseptic, antineuralgic and sedative. 88,478; renewed Sept. 24, 1932.

Fasterfat Limited, Halifax, Nova Scotia, Canada. Fish meal. 293,870; May 10; Serial No. 315,835; published Feb. 23, 1932. Class 46.

Feedwaters, Inc., New York, N. Y. Chemicals. 293,827; May 10; Serial No. 319,770; published Feb. 16, 1932. Class 6.

Fenwick, Edward T., Washington, D. C. Canned fruits and vegetables, coffee, tea, cocoa, etc. 293,857; May 10; Serial No. 311,132; published Feb. 23, 1932. Class 46.

Fisher Brothers Company, The, Cleveland, Ohio. Butter. 293,921; May 10; Serial No. 322,383; published Feb. 23, 1932. Class 46.

Fleischer, I., & Sons, Cincinnati, Ohio. Brassières, hose supporters, and garters. 293,866; May 10; Serial No. 315,195; published Feb. 9, 1932. Class 39.

Flemm Lead Co., Inc., The, Long Island City, N. Y. Lead pipes, lead traps and bends, lead and iron ferrules, etc. 293,938; May 10; Serial No. 322,882; published Mar. 1, 1932. Class 13.

Flockhart Company, Inc., The, San Francisco, Calif. Nitro-cellulose lacquers and enamels, paint thinners, etc. 294,007; May 10; Serial No. 321,756; published Mar. 1, 1932. Class 16.

Foots & Jenks, Incorporated, Jackson, Mich. Maltless beverages, sirups and extracts. 293,911; May 10; Serial No. 322,283; published Mar. 1, 1932. Class 45.

Forstmann Woolen Company, Passaic, N. J. Woolen piece goods. 293,957; May 10; Serial No. 323,234; published Mar. 1, 1932. Class 42.

Forstmann Woolen Company, Passaic, N. J. Woolen piece goods. 293,958–9; May 10; Serial Nos. 323,236–7; published Mar. 1, 1932. Class 42.

Fowler, Francis E., jr., doing business as The Caligrapo Company, St. Louis, Mo. Flavoring extracts for foods. 293,843; May 10; Serial No. 321,626; published Feb. 23, 1932. Class 46.

Frederick City Packing Company, Inc., The, Frederick, Md. Canned fruits and vegetables. 85,653; renewed Mar. 5, 1932.

Friedman, Aaron J., Inc., New York, N. Y. Rubber shoe heels. 293,923; May 10; Serial No. 322,459; published Feb. 23, 1932. Class 39.

Friedman Bros. & Son Neckwear Co. Inc., New York, N. Y. Neckties. 87,872; renewed Aug. 13, 1932.

Gasoline Service Co., Inc., The, Minneapolis, Minn. Gasoline. 294,014; May 10. Class 15.

Geisman, Musliner & Brightman, Inc., New York, N. Y. Leather. 293,943; May 10; Serial No. 322,956; published Feb. 23, 1932. Class 1.

General Baking Company, New York, N. Y. Bread. 293,864; May 10; Serial No. 314,602; published Feb. 23, 1932. Class 46.

General Baking Company, New York, N. Y. Bread. 293,948–50; May 10; Serial Nos. 323,043–5; published Feb. 23, 1932. Class 46.

General Mills, Inc., Minneapolis, Minn. Wheat flour. 293,895–6; May 10; Serial Nos. 322,095–6; published Feb. 16, 1932. Class 46.

Gillette Safety Razor Company. (See Auto Strop Safety Razor Co., assignor.)

Glashow, Lewis, New York, N. Y. Water heaters. 294,024; May 10. Class 34.

Godfrey, Arthur R., doing business as Richard Gordon Chemical Co., Detroit, Mich. Ointment. 293,922; May 10; Serial No. 322,386; published Feb. 23, 1932. Class 6.

Goodrich and Gallagher, Incorporated, Waverly, Iowa. Eggs. 293,942; May 10; Serial No. 322,932; published Feb. 23, 1932. Class 46.

Gordon, Richard, Chemical Co. (See Godfrey, Arthur R.)

Grimme, Natalis & Co., Commanditgesellschaft auf Actien, Brunswick, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Calculating and adding machines. 87,990; renewed Aug. 20, 1932.

Grimme, Natalis & Co., Commanditgesellschaft auf Actien, Brunswick, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Calculating machines. 87,991; renewed Aug. 20, 1932.

Grocers & Producers Co., The, doing business as Clover Farm Stores, Cleveland, Ohio. Matches. 294,009; May 10; Serial No. 323,289; published Mar. 1, 1932. Class 9.

Hahn Department Stores, Inc., Wilmington, Del. Men's and boys' clothing and accessories. 293,918; May 10; Serial No. 322,366; published Feb. 16, 1932. Class 39.

Handsch, Arthur, St. Louis, Mo. Ointment. 289,888; May 10; Serial No. 322,015; published Feb. 16, 1932. Class 6.

Hansen's, Chr. Laboratory, Inc., Little Falls, N. Y. Food flavoring extracts. 293,848; May 10; Serial No. 321,910; published Feb. 23, 1932. Class 46.

Harris, P. E., & Co. (See Hawk Fish Company.)

Harzfeld's, Inc., Kansas City, Mo. Shoes. 293,984; May 10; Serial No. 317,938; published Feb. 16, 1932. Class 39.

Hawk Fish Company, by change of name to P. E. Harris & Co., Seattle, Wash. Canned salmon. 85,746; renewed Mar. 12, 1932.

Hazleton Baking Company, Hazleton, Pa. Doughnuts and cookies. 293,971; May 10; Serial No. 306,531; published Dec. 2, 1930. Class 46.

Heekin Spice Co., The, assignor to The Heekin Company, Cincinnati, Ohio. Baking powder. 88,282; renewed Sept. 10, 1932.

Hettrick Manufacturing Company, The, Toledo, Ohio. Cotton piece goods. 293,965; May 10; Serial No. 302,390; published Mar. 1, 1932. Class 42.

Heveatex Corporation, Malden, Mass. Rubber latex. 293,904; May 10; Serial No. 322,251; published Feb. 23, 1932. Class 1.

Hibbs, Ralph M., doing business as Rex and Company, Philadelphia, Pa. Medicine. 293,919; May 10; Serial No. 322,367; published Feb. 23, 1932. Class 6.

Hillyard Chemical Company, St. Joseph, Mo. Cement floor enamel. 294,010; May 10; Serial No. 323,293; published Mar. 1, 1932. Class 16.

Hillyard Chemical Company, St. Joseph, Mo. Metal paint. 294,011; May 10; Serial No. 323,295; published Mar. 1, 1932. Class 16.

Hodge, G. Howard, Inc., New York, N. Y. Hats. 293,845; May 10; Serial No. 321,727; published Feb. 9, 1932. Class 39.

Hoffmann-La Roche, Inc., Nutley, N. J. Preparation for stimulating or increasing intestinal peristalsis. 293,889; May 10; Serial No. 322,016; published Feb. 16, 1932. Class 6.

Hofmeier, Julius, Vienna, Austria-Hungary, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Medicinal compounds. 38,544; renewed July 1, 1932.

Hohner, M., assignor, by mesne assignments, to M. Hohner, Inc., New York, N. Y. Harmonicas. 88,292–3; renewed Sept. 10, 1932.

Holland, Nathan, doing business as Holland Laboratories, Brooklyn, N. Y. Hair wave lotion. 293,846; May 10; Serial No. 321,879; published Feb. 23, 1932. Class 6.

Horn, A. C., Company, Long Island City, N. Y. Waterproofing compound. 294,001; May 10; Serial No. 321,562; published Feb. 16, 1932. Class 12.

Horn, A. C., Company, Long Island City, N. Y. Metallic hardener for concrete floors. 294,002; May 10; Serial No. 321,564; published Feb. 16, 1932. Class 12.

Hunt, Daniel, doing business as Dorchan and Co., Long Beach, Calif. Skin cleaner, scalp stimulant. 293,897; May 10; Serial No. 322,106; published Feb. 16, 1932. Class 6.

I-T-E Circuit Breaker Company, Philadelphia, Pa. Electrical switching apparatus, etc. 293,839; May 10; Serial No. 321,339; published Feb. 16, 1932. Class 21.

Imperial Paper and Color Corporation, Glens Falls, N. Y. Paper or cloth, treated with oils, paint, etc. 293,854; May 10; Serial No. 321,995; published Mar. 1, 1932. Class 20.

Ischerland, Frederick E., Flint, Mich. Liquid oil hair dresser and pomade hair dresser. 293,905; May 10; Serial No. 322,256; published Feb. 16, 1932. Class 6.

Jaret Laboratories, Inc., Chicago, Ill. Hair dyes. 293,835; May 10; Serial No. 320,932; published Feb. 23, 1932. Class 6.

Kallejian, Robert M., Hollywood, Calif. Pharmaceutical preparations. 293,877; May 10; Serial No. 318,526; published Feb. 16, 1932. Class 6.

Kanef, Udin Shoe Co., Inc., Boston, Mass. Boots, shoes, and slippers. 293,985; May 10; Serial No. 320,176; published Feb. 23, 1932. Class 39.

Kinetic Chemicals, Inc., Wilmington, Del. Fluorinated hydrocarbons. 293,850; May 10; Serial No. 321,937; published Feb. 23, 1932. Class 6.

Kinetic Chemicals, Inc., Wilmington, Del. Fluorinated hydrocarbons. 293,851–2; May 10; Serial Nos. 321,938–9; published Feb. 9, 1932. Class 6.

Kleinert, I. B., Rubber Company, New York, N. Y. Brassières, girdles, and corsets. 293,972; May 10; Serial No. 306,534; published Feb. 16, 1932. Class 39.

Kops Brothers, Inc., New York, N. Y. Belts, girdles, brassières, etc. 293,875; May 10; Serial No. 318,368; published Feb. 23, 1932. Class 39.

Kress, S. H., & Co., New York, N. Y. Spoons, knives, forks, etc. 294,023; May 10. Class 28.

Künkler, Friedrich, Mannheim, Germany. Polish for leather and leather goods. 81,398; renewed Apr. 4, 1931.

Künkler, Friedrich, Mannheim, Germany. Polish for leather and leather goods. 82,156; renewed June 6, 1931.

Ladidus, Nathan, Philadelphia, Pa. Men's suits and overcoats, clothing. 293,962; May 10; Serial No. 273,342; published Apr. 23, 1929. Class 39.

Lamb, Thomas, New York, N. Y., to Thomas Lamb, Brooklyn, N. Y. Tonic and antipyretic in malarial affections. 86,413; renewed May 7, 1932.

Lambert Pharmacal Co., St. Louis, Mo., assignor to Lambert Pharmacal Company, Wilmington, Del. Toilet soap. 38,511; renewed June 24, 1932.

Lawrenceburg Roller Mills Co., Lawrenceburg, Ind. Middlings, bran, and mixed stock feed. 87,460; renewed July 16, 1932.

Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Hosiery. 293,878; May 10; Serial No. 318,562; published Feb. 23, 1932. Class 39.

Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Hosiery. 294,015; May 10. Class 39.

Lehman Bros., Incorporated, Jersey City, N. J. Paints, paint enamels, varnishes, etc. 293,934; May 10; Serial No. 322,778; published Mar. 1, 1932. Class 16.

Lehman, Louis J., doing business as Emulsified Asphalt and Application Company, North Hollywood, Calif. Emulsified asphalt. 293,973; May 10; Serial No. 306,818; published June 2, 1931. Class 12.

Lisner, D., & Co., Inc., New York, N. Y. Jewelry. 293,932; May 10; Serial No. 322,698; published Feb. 23, 1932. Class 28.

Loveland, Wm. H., Co., Binghamton, N. Y. Soaps and shaving creams. 294,022; May 10. Class 4.

Loxiton Mfg. Company, The. (See Silberman, Tanchum, assignor.)

MacBlade Works. (See MacNair, Hugh S.)

MacNair, Hugh S., doing business as MacBlade Works, Fremont, Ohio. Shaving cream. 293,977; May 10; Serial No. 308,550; published Mar. 10, 1931. Class 4.

Magnus, Mabee & Reynard, Inc., New York, N. Y. Oil peppermint and spearmint. 293,890; May 10; Serial No. 322,051; published Feb. 16, 1932. Class 6.

Mangels, Herold Co. Inc., Baltimore, Md. Compound of cane and corn syrup. 87,462; renewed July 16, 1932.

McClung, C. M., & Co., Knoxville, Tenn. Stoves, ranges, blowers, etc. 88,104; renewed Aug. 27, 1932.

McClung, C. M., & Co., Knoxville, Tenn. Hardware and plumbing supplies. 88,331; renewed Sept. 10, 1932.

McClung, C. M., & Co., Knoxville, Tenn. Sporting goods and toys. 88,508; renewed Sept. 24, 1932.

McEvoy, Thomas E., Wichita, Kans. Sandwiches. 293,831; May 10; Serial No. 320,620; published Feb. 16, 1932. Class 46.

McKee Refrigerator Co., Brooklyn and Cobleskill, N. Y. Refrigerators. 294,013; May 10. Class 31.

McKesson & Robbins, Incorporated, Bridgeport, Conn. Face lotion, talcum powder, and face cream. 293,906; May 10; Serial No. 322,261; published Feb. 16, 1932. Class 6.

Menley & James, Limited, New York, London, England, and New York, N. Y. Ointment. 87,784; renewed Aug. 6, 1932.

Meriano, Philip, Philadelphia, Pa. Olive oil. 293,912; May 10; Serial No. 322,288; published Feb. 23, 1932. Class 46.

Metcalfe, Earl F., doing business as Pedrex Laboratories, Chicago, Ill. Foot lotion. 294,004; May 10; Serial No. 321,605; published Feb. 23, 1932. Class 6.

Millbrook Products Co., Somerville, Mass. Rye and graham flour. 293,838; May 10; Serial No. 321,142; published Feb. 23, 1932. Class 46.

Mission Dry Corporation, Ltd. (See California Crushed Fruit Corporation.)

National Acme Co., The, Cleveland, Ohio. Screws. 293,936–7; May 10; Serial Nos. 322,800–1; published Mar. 1, 1932. Class 13.

National Bellas Hess Co. Inc., New York, N. Y. Shoes. 293,840; May 10; Serial No. 321,499; published Feb. 23, 1932. Class 39.

National Blank Book Company, Holyoke, Mass. Loose-leaf binders. 87,649; renewed July 30, 1932.

National Glove Company, The, Columbus, Ohio. Gloves. 294,018; May 10. Class 39.

New Jersey Paper Tube Corporation, Englewood, N. J. Drinking straws and tubes. 293,944; May 10; Serial No. 322,968; published Mar. 1, 1932. Class 50.

New London Ship & Engine Company, The, assignor to Electric Boat Company, Groton, Conn. Internal combustion engines. 86,344; renewed Sept. 10, 1932.

New York Mattress Company, Boston, Mass. Mattresses. 88,345; renewed Sept. 10, 1932.

New York Stamping Company, Brooklyn, N. Y. Frying pans, skillets, spiders, and griddles. 86,080; renewed Apr. 9, 1932.

Niehues & Dutting Company. (See Stuebe, William J., assignor.)

Nippon Shinyaku Kabushiki-Kaisha, Kyoto, Japan. Medicines. 294,000; May 10; Serial No. 321,548; published Feb. 23, 1932. Class 6.

Norddeutsche Wollkämmerei & Kammgarnspinnerei, Bremen and Delmenhorst, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Toilet soap. 87,097; renewed June 25, 1932.

Norddeutsche Wollkämmerei & Kammgarnspinnerei, Bremen and Delmenhorst, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Toilet soap. 88,517; renewed Sept. 24, 1932.

Oil City Refiners, Incorporated, Cleveland, Ohio. Lubricating oils and gasoline. 293,997; May 10; Serial No. 321,145; published Feb. 16, 1932. Class 15.

Oil Creek Refining Co., Titusville, Pa. Gasoline. 293,933; May 10; Serial No. 322,761; published Feb. 23, 1932. Class 15.

Omnia Pro Vita Laboratories Co., New York, N. Y. Medical compound. 293,996; May 10; Serial No. 321,119; published Feb. 23, 1932. Class 6.

Oxinol Laboratories, Inc., Yonkers, N. Y. Medicine. 293,859; May 10; Serial No. 311,640; published Feb. 9, 1932. Class 6.

Palmer Products, Inc., Waukesha, Wis. Dressing for floors. 293,931; May 10; Serial No. 322,596; published Mar. 1, 1932. Class 16.

Parke, Davis & Co., Detroit, Mich. Medicinal preparation. 293,986; May 10; Serial No. 320,205; published Feb. 9, 1932. Class 6.

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Table game. 293,818; May 10; Serial No. 322,398; published Mar. 1, 1932. Class 22.

Pedrex Laboratories. (See Metcalfe, Earl F.)

Pepsodent Co., The, Chicago, Ill. Dentifrices, antiseptics, and preparations. 293,898; May 10; Serial No. 322,110; published Feb. 16, 1932. Class 6.

Peril Straits Packing Co., Inc. (See Alaska Fish Co., assignor.)

Petrolane, Ltd., Long Beach, Calif. Liquid and gaseous fuels. 293,867; May 10; Serial No. 315,324; published Feb. 16, 1932. Class 6.

Phillips Petroleum Company, Bartlesville, Okla. Oils and greases. 293,939–40; May 10; Serial Nos. 322,889–90; published Feb. 23. Class 15.

Pittston Company, The, Dover, Del., and Dunmore, Pa. Coal. 293,951; May 10; Serial No. 323,039; published Feb. 23, 1932. Class 1.

Piver, L. T., Inc., Wilmington, Del., and New York, N. Y. Face powder, cream, liquid cleanser, etc. 293,885; May 10; Serial No. 322,006; published Feb. 23, 1932. Class 6.

Platinel, Inc., Albany, N. Y. Base metalware receptacles. 293,880; May 10; Serial No. 318,920; published Mar. 1, 1932. Class 13.

Poeter, E., & Co. Inc., Irvington, N. J. Hand bag frames and parts thereof. 293,952; May 10; Serial No. 323,096; published Feb. 23, 1932. Class 3.

Popular Brassiere Company, Inc., Astoria, N. Y. Girdles and corset brassières. 293,928; May 10; Serial No. 322,559; published Feb. 16, 1932. Class 39.

Poray Incorporated, Chicago, Ill. Empty vanity cases. 293,999; May 10; Serial No. 321,170; published Mar. 1, 1932. Class 2.

Priebe and Sons, Inc., Chicago, Ill. Dressed poultry. 293,860; May 10; Serial No. 312,015; published Feb. 23, 1932. Class 46.

Pure Carbonic Company of America, New York, N. Y. Liquid carbon dioxide. 293,891; May 10; Serial No. 322,063; published Feb. 16, 1932. Class 6.

Putterine Manufacturing Company, Inc., Miami, Fla. Therapeutic preparation. 293,874; May 10; Serial No. 318,291; published Feb. 23, 1932. Class 6.

RCA Victor Company, Inc., Camden, N. J. Electrical systems for collecting, amplifying and/or distributing electrical waves of super-audible frequency, and parts thereof. 293,882; May 10; Serial No. 319,076; published Feb. 16, 1932. Class 21.

RCA Victor Company, Inc., Camden, N. J. Antenna coupling units, extension coupling units, etc., for radio frequency currents. 293,883; May 10; Serial No. 319,077; published Feb. 16, 1932. Class 21.

Rath, Emil, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Remedy for diabetes. 86,831; renewed June 4, 1932. Class 6.

Reilly, Frank C., New York, N. Y. Astringents, creams, rouges, etc. 293,907; May 10; Serial No. 322,270; published Feb. 16, 1932. Class 6.

Reilly, Frank C., New York, N. Y. Astringents, creams, rouges, etc. 293,908–9; May 10; Serial Nos. 322,272–3; published Feb. 16, 1932. Class 6.

Rex and Company. (See Hibbs, Ralph M.)

Richard, Andre L., doing business as The Andre L. Richard Co., New York, N. Y. Powder puffs. 294,020; May 10. Class 29.

Richfield Oil Corporation of New York, New York, N. Y. Gasoline. 293,876; May 10; Serial No. 318,414; published Feb. 16, 1932. Class 15.

Riegel Textile Corporation, New York, N. Y. Gloves, sun suits, pajamas, etc. 293,910; May 10; Serial No. 322,274; published Feb. 16, 1932. Class 39.

Robinson, Wm. C., & Son, Co., Baltimore, Md., and Coraopolis, Pa., to Wm. C. Robinson & Son, Co., Baltimore, Md. Cylinder and engine oil. 85,997; renewed Apr. 2, 1932. Class 15.

Robinson, Wm. C., & Son. Co., Baltimore, Md., and Coraopolis, Pa., to Wm. C. Robinson & Son. Co., Baltimore, Md. Cylinder-oil. 85,998; renewed Apr. 2, 1932. Class 15.

Robinson, Wm. C., & Son. Co., Baltimore, Md., and Coraopolis, Pa., to Wm. C. Robinson & Son. Co., Baltimore, Md. Engine-oil. 85,999; renewed Apr. 2, 1932. Class 15.

Robinson, Wm. C., & Son. Co., Baltimore, Md., and Coraopolis, Pa., to Wm. C. Robinson & Son. Co., Baltimore, Md. Valve-oil. 86,000; renewed Apr. 2, 1932. Class 15.

Rocher Frères, to Societe A Responsabilite Limitee Rocher Freres, La Côte-Sain-André, France, successor. Liquors made with cherries. 87,369; renewed July 9, 1932. Class 49.

Romano, Jacques, New York, N. Y. Preparation used in the treatment of the nasal mucous membranes. 293,825; May 10; Serial No. 319,539; published Feb. 23, 1932. Class 6.

Rosenzweig & Baumann, Cassel, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Chemical compound. 38,552; renewed July 1, 1932. Class 6.

Rossie Velvet Company, Mystic, Conn. Hats, coats, and dresses. 293,926; May 10; Serial No. 322,523; published Feb. 16, 1932. Class 39.

Safety Refrigeration, Inc., New Haven, Conn., and New York, N. Y. Refrigerating apparatus. 293,964; May 10; Serial No. 292,371; published Mar. 1, 1932. Class 31.

Saks and Company, New York, N. Y. Corsets and brassières. 293,967; May 10; Serial No. 302,644; published Sept. 16, 1930. Class 39.

Saurer, Adolph, to Societe Anonyme Adolphe Saurer, Arbon, Switzerland, successor. Machines and parts thereof. 87,662; renewed July 30, 1932.

Schenck, Dr. J. H., & Son, to Joseph H. Schenck, Jr., Philadelphia, Pa., successor. Pills for bilious and liver complaints. 88,524; renewed Sept. 24, 1932.

Seaboard Rice Milling Co., Galveston, Tex., by change of name to Comet Rice Company, Beaumont, Tex., and New York, N. Y. Rice. 86,093; renewed Apr. 9, 1932.

Seco Leather Products Company, Inc., West New York, N. J. Tobacco pouch. 293,953; May 10; Serial No. 323,176; published Mar. 1, 1932. Class 8.

Shell Oil Company, San Francisco, Calif. Liquefied hydrocarbon gas. 293,915; May 10; Serial No. 322,334; published Feb. 16, 1932. Class 6.

Sherwood Shoe Company, Rochester, N. Y. Shoes. 293,886; May 10; Serial No. 322,007; published Feb. 23, 1932. Class 39.

Shirek, Rudy, Clothes Inc., New York, N. Y. Suits and overcoats. 293,861; May 10; Serial No. 313,806; published Feb. 16, 1932. Class 39.

Silberman, Tanchum, assignor, by mesne assignments, to The Loxiton Mfg. Company, Baltimore, Md. Undershirts and drawers. 86,168; renewed Apr. 16, 1932.

Silver Lake Company, Newton, Mass. Sash cord and clothes lines. 294,019; May 10. Class 7.

Silvertone Company, Inc., New York, N. Y. Bird and pet foods, gravel foods, etc. 293,856; May 10; Serial No. 310,264; published Feb. 2, 1932. Class 46.

Societe A Responsabilite Limitee Rocher Freres. (See Rocher Frères.)

Societe Anonyme Adolphe Saurer. (See Saurer, Adolph.)

Solomon, A., New Orleans, La. Men's and boys' suits and pants made of seersucker. 293,819; May 10; Serial No. 322,402; published Feb. 16, 1932. Class 39.

Sommer, Samuel, doing business as S. Sommer & Co., San Francisco, Calif. Artificial eyelashes. 293,820; May 10; Serial No. 322,403; published Feb. 23, 1932. Class 40.

Sophos, Emanuel G., assignor to E. G. Sophos Co., Inc., Lowell, Mass. Olive-oil. 88,528; renewed Sept. 24, 1932.

Soyex Company, Inc., New York, N. Y. Bread, cakes, and pies. 293,927; May 10; Serial No. 322,526; published Feb. 23, 1932. Class 46.

Springer, Edward T. (See Crowley, John A., assignor.)

Stanco Incorporated, Wilmington, Del., and New York, N. Y. Leak stopping compound, radiator cleaner, and an emulsion. 293,849; May 10; Serial No. 321,921; published Feb. 9, 1932. Class 6.

Standard Oil Company, Whiting, Ind., and Chicago, Ill. Insecticides, fungicides, etc. 293,987; May 10; Serial No. 320,284; published Feb. 23, 1932. Class 6.

Standard Oil Company of New Jersey, Wilmington, Del. Grease compound. 293,929; May 10; Serial No. 322,563; published Feb. 23, 1932. Class 15.

Starlight Bros. Inc., New York, N. Y. Cigars. 293,960; May 10; Serial No. 323,257; published Mar. 1, 1932. Class 17.

Stephens Silica Brick Co. Ltd., Kidwelly, England. Bricks. 293,994; May 10; Serial No. 320,992; published Feb. 16, 1932. Class 12.

Sterling Oil Company, Emlenton, Pa. Oils, greases, gasoline, etc. 293,980; May 10; Serial No. 308,793; published Feb. 23, 1932. Class 15.

Stetson, Leon W., Boston, Mass. Laxatives. 293,901; May 10; Serial No. 322,190; published Feb. 16, 1932. Class 6.

Stokes, Jos., Rubber Co., Trenton, N. J. Electrical hard rubber products. 293,884; May 10; Serial No. 319,156; published Feb. 16, 1932. Class 21.

Stuebe, William J., New York, N. Y., assignor to Niehues & Dutting, Nordhorn, Germany. Cotton piece goods. 294,012; May 10; Serial No. 323,315; published Mar. 1, 1932. Class 42.

Synthetic Chemicals, Inc., Jersey City, N. J. Accelerating and penetrating agent for use in the dehairing, tanning, and bating baths. 293,826; May 10; Serial No. 319,708; published Feb. 23, 1932. Class 6.

Tecumseh Petroleum Company Inc., Philadelphia, Pa. Petroleum lubricating oils. 293,863; May 10; Serial No. 314,471; published June 30, 1931. Class 15.

Terri Cosmetics Corporation, New York, N. Y. Astringents, bleach creams, rouges, etc. 293,899; May 10; Serial No. 322,144; published Feb. 16, 1932. Class 6.

Thomasphosphatfabriken Gesellschaft mit beschränkter Haftung, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Thomasphosphat. 88,387; renewed Sept. 10, 1932.

Thompson Bros. Shoe Co. (See Davis, George R., assignor.)

Tice, Claudius M., trading as C. M. Tice Company, Boston, Mass. Compound of maple-sugar and cane-syrup. 86,178; renewed Apr. 16, 1932.

Trans-America Baking Co., Chicago, Ill. Cheese cake. 293,832; May 10; Serial No. 320,648; published Feb 23, 1932. Class 46.

Traveler Manufacturing Corporation, St. Louis, Mo. Radio receiving sets and parts thereof, unitary transmitting and/or receiving apparatus, etc. 293,941; May 10; Serial No. 322,908; published Feb. 23, 1932. Class 21.

Uneeda Drug Co. Inc., New York, N. Y. Soluble alkaline antiseptic preparation. 293,887; May 10; Serial No. 322,008; published Feb. 9, 1932. Class 6.

Universal Steel Company, Bridgeville, Pa. Molybdenum metal and alloys and tool and cutting steels. 293,961; May 10; Serial No. 323,265; published Mar. 1, 1932. Class 14.

Utescher, E., Hamburg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Conserving compound. 38,682; renewed July 29, 1932.

Van Wert Overall Mfg. Co., The, Van Wert, Ohio. Coats, pants, shirts, etc. 294,008; May 10; Serial No. 321,834; published Feb. 23, 1932. Class 39.

Vereinigte Chemische Werke Aktiengesellschaft, Charlottenburg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Arsenic compounds. 38,879; renewed Sept. 9, 1932.

Viville (Paris), Inc., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 293,970; May 10; Serial No. 305,643; published Nov. 4, 1930. Class 6.

Walgreen Co., Chicago, Ill. Laxatives. 293,892; May 10; Serial No. 322,074; published Feb. 16, 1932. Class 6.

Ward Baking Company, New York, N. Y. Bread. 293,978; May 10; Serial No. 308,564; published Jan. 13, 1931. Class 46.

Ward Baking Company, New York, N. Y. Bread. 293,979; May 10; Serial No. 308,565; published Feb. 23, 1932. Class 46.

Ward-Love Pump Corporation, Rockford, Ill. Apparatus for connection in or to water supply lines or systems for purifying, filtering, and/or softening water. 293,833; May 10; Serial No. 320,772; published Mar. 1, 1932. Class 13.

Wedekind, R., & Co. G. m. b. H., Uerdingen-on-the-Rhine, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Dyes. 86,848; renewed June 4, 1932.

Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Hand operated electric switches for control circuits. 293,836; May 10; Serial No. 321,059; published Feb. 16, 1932. Class 21.

White-Stokes Company, Inc., Chicago, Ill. Sugar pectin preparation. 293,841; May 10; Serial No. 321,510; published Feb. 23, 1932. Class 46.

Whittenton Manufacturing Company, Boston, Mass. Cotton piece goods. 293,903; May 10; Serial No. 322,241; published Mar. 1, 1932. Class 42.

Wilkins-Roger Milling Co., Inc., Washington, D. C. Wheat flour. 293,853; May 10; Serial No. 321,975; published Feb. 16, 1932. Class 46.

Willow Cafeterias, Inc., New York, N. Y. Coffee, tea, milk, etc. 293,834; May 10; Serial No. 320,842; published Feb. 23, 1932. Class 46.

Willow Cafeterias, Inc., New York, N. Y. Milk, bread, pies, etc. 293,990; May 10; Serial No. 320,563; published Feb. 23 1932. Class 46.

Wisconsin Land & Lumber Co., Hermansville, Mich. Hard wood flooring, and hard wood and basswood ceilings, and shingles. 38,830; renewed Aug. 19, 1932.

Wohl Shoe Company, St. Louis, Mo. Shoes, boots, overshoes, etc. 293,902; May 10; Serial No. 322,199; published Feb. 23, 1932. Class 39.

York Safe and Lock Co., assignor to York Safe and Lock Company, York, Pa. Safes and vault doors. 87,302; renewed July 2, 1932.

Zilz, Ignaz, Vienna, Austria. Cosmetics. 293,829; May 10; Serial No. 320,145; published Feb. 9, 1932. Class 6.

Zinsmaster Bread Company, Duluth, Minn. Bread. 293,830; May 10; Serial No. 320,615; published Feb. 23, 1932. Class 46.

Zucca, Carlo, Milan, Italy. Non-alcoholic, maltless beverage. 293,998; May 10; Serial No. 321,152; published Mar. 1, 1932. Class 45.

LIST OF REGISTRANTS OF LABELS

Bradley, Milton, Company, Springfield, Mass. Spider and Fly Game. For Indoor Game. 40,671; May 10.

Campana Corporation, Batavia, Ill. Campana's Italian Balm. For Balm That Acts as a Skin Softener. 40,673; May 10.

Chicago Awning & Tent Manufacturers' Association, Chicago, Ill. Your Guarantee. For Awnings. 40,672; May 10.

Enright, Robert B., Brooklyn, N. Y. Kopy-Kit. For Drawing Sets. 40,674; May 10.

Georgia-Carolina Dairies, Augusta, Ga. Cremefrost. For Sherbets. 40,675; May 10.

Hoague-Sprague Corporation, Lynn, Mass. Lockner's. For Boxes. 40,676; May 10.

Hoague-Sprague Corporation, Lynn, Mass. Rolyat. For Boxes. 40,677; May 10.

Honey-Nut Products, Louisville, Ky. Honey-Nut Spread. For Food Product Used as a Spread. 40,678; May 10.

Koons, Frederick S., Boyertown, Pa. This Box is Made Entirely of Wood. For Wooden Boxes. 40,679; May 10.

Pac-Kups Incorporated, Easton, Pa. Chuckle With Reg'lar Fellers Water Ice. For Water Ice. 40,680; May 10.

Reliable Products Company, The, Cleveland, Ohio. Weather-Proof Bronze Strips. For Bronze Strips for Windows and Doors. 40,681; May 10.

Sleep Shade Co., San Francisco, Calif. Wear a Sleep-Shade. For Shades to be Worn Over the Eyes for Excluding Light. 40,682; May 10.

Spaulding Bakeries, Inc., Binghamton, N. Y. Sunshine Vitamin-D. For Bread. 40,683; May 10.

Standard Solophone Mfg. Co. Inc., New York, N. Y. The Little Sculptor Modeling Set. For Modeling Sets. 40,684; May 10.

Sutherland Paper Company, Kalamazoo, Mich. Texas Made. For Butter. 40,685; May 10.

Willard Company, Chicago, Ill. "I"-Last. For Non-flaking Eyelash Cosmetic. 40,686; May 10.

Wrigley, Wm. Jr., Company, Chicago, Ill. Wrigley's Double Mint. For Chewing Gum. 40,687; May 10.

LIST OF REGISTRANTS OF PRINTS

American Bottlers of Carbonated Beverages, Washington, D. C. A. B. C. B. Standard Accounting System. For Accounting Form Specimens. 13,713; May 10.

Cream of Wheat Corporation, The, Minneapolis, Minn. They Spent a Million Dollars for the Things Your Children Have. For Wheat Breakfast Food. 13,714; May 10.

Cream of Wheat Corporation, The, Minneapolis, Minn. Dangerous Years. For Wheat Breakfast Food. 13,715; May 10.

Hoyt & Worthen Tanning Corporation, Haverhill, Mass. Sunshine Chamois. For Chamois. 13,716; May 10.

La Salle Bottling Company, St. Louis, Mo. Thirsty Millions Can't Be Wrong. For Non-Alcoholic Beverages. 13,717; May 10.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Pittston Company. 293,951; May 10; Serial No. 323,059; published Feb. 23, 1932.

Leather. Geisman, Musliner & Brightman, Inc. 293,943; May 10; Serial No. 322,956; published Feb. 23, 1932.

Rose bushes, shrubs, vines, etc. Economy Nursery Company. 293,842; May 10; Serial No. 321,534; published Feb. 16, 1932.

Rubber latex. Heveatex Corporation. 293,904; May 10; Serial No. 322,251; published Feb. 23, 1932.

CLASS 2

Cases, Empty vanity. Poray Incorporated. 293,999; May 10; Serial No. 321,170; published Mar. 1, 1932.

CLASS 3

Bag frames and parts thereof, Hand. E. Poeter & Co. Inc. 293,952; May 10; Serial No. 323,096; published Feb. 23, 1932.

CLASS 4

Polish for leather and leather goods. F. Künkler. 81,398; renewed Apr. 4, 1931.

Polish for leather and leather goods. F. Künkler. 82,156; renewed June 6, 1931.

Shaving cream. H. S. MacNair. 293,977; May 10; Serial No. 308,550; published Mar. 10, 1931.

Soap, Toilet. Lambert Pharmacal Co. 38,511; renewed June 24, 1932.

Soap, Toilet. Norddeutsche Wollkämmerei & Kammgarnspinnerei. 87,097; renewed June 25, 1932.

Soap, Toilet. Norddeutsche Wollkämmerei & Kammgarnspinnerei. 88,517; renewed Sept. 24, 1932.

Soaps and shaving creams. Wm. H. Loveland Co. 294,022; May 10.

CLASS 6

Absorbent preparation. R. C. Boozer. 293,993; May 10; Serial No. 320,971; published Feb. 23, 1932.

Accelerating and penetrating agent for use in the dehairing, tanning, and bating baths. Synthetic Chemicals, Inc. 293,826; May 10; Serial No. 319,708; published Feb. 23, 1932.

Alkaline antiseptic preparation. Uneeda Drug Co. Inc. 293,887; May 10; Serial No. 322,008; published Feb. 9, 1932.

Antiseptic, antineuralgic, and sedative. Farbwerke vorm. Meister Lucius Brüning. 88,478; renewed Sept. 24, 1932.

Antiseptic for the uropoietic system, Internal. Farbwerke vorm. Meister Lucius & Brüning. 87,188; renewed July 2, 1932.

Arsenic compounds. Vereinigte Chemische Werke Aktiengesellschaft. 38,879; renewed Sept. 9, 1932.

Astringents, astringent cerates, bleach and beauty creams, etc. Viville (Paris), Inc. 293,970; May 10; Serial No. 305,643; published Nov. 4, 1930.

Astringents, bleach creams, rouges, etc. Terri Cosmetics Corporation. 293,899; May 10; Serial No. 322,144; published Feb. 16, 1932.

Astringents, creams, rouges, etc. F. C. Reilly. 293,907; May 10; Serial No. 322,270; published Feb. 16, 1932.

Astringents, creams, rouges, etc. F. C. Reilly. 293,908–9; May 10; Serial Nos. 322,272–3; published Feb. 16, 1932.

Baking powder. Heekin Spice Co. 88,282; renewed Sept. 10, 1932.

Carbohydrate for diabetes. Farbwerke vorm. Meister Lucius & Brüning. 87,187; renewed July 2, 1932.

Carbon dioxide, Liquid. Pure Carbonic Company of America. 293,891; May 10; Serial No. 322,063; published Feb. 16, 1932.

Chemical compound. Rosenzweig & Baumann. 38,552; renewed July 1, 1932.

Chemicals. Chemische Fabrik Bannewitz Orloff Hansen. 87,164; renewed July 2, 1932.

Chemicals. Feedwaters, Inc. 293,827; May 10; Serial No. 319,770; published Feb. 16, 1932.

Coaltar-dyestuffs. Actien-Gesellschaft für Anilin-Fabrikation. 38,951; renewed Sept. 30, 1932.

Compound, Conserving. E. Utescher. 38,682; renewed July 29, 1932.

Compound, radiator cleaner, and an emulsion, Leak stopping. Stanco Incorporated. 293,849; May 10; Serial No. 321,921; published Feb. 9, 1932.

Cosmetics. I. Zilz. 293,829; May 10; Serial No. 320,145; published Feb. 9, 1932.

Dentifrices, antiseptics, preparations. Pepsodent Co. 293,898; May 10; Serial No. 322,110; published Feb. 16, 1932.

Dyes. John Campbell & Co. 293,821; May 10; Serial No. 322,416; published Feb. 23, 1932.

Dyes. R. Wedekind & Co. G. m. b. H. 86,848; renewed June 4, 1932.

Fuels, Liquid and gaseous. Petrolane, Ltd. 293,867; May 10; Serial No. 315,324; published Feb. 16, 1932.

Hair dyes. Jaret Laboratories, Inc. 293,835; May 10; Serial No. 320,932; published Feb. 23, 1932.

Hydrocarbon gas, Liquefied. Shell Oil Company. 293,915; May 10; Serial No. 322,334; published Feb. 16, 1932.

Hydrocarbons, Fluorinated. Kinetic Chemicals, Inc. 293,850; May 10; Serial No. 321,937; published Feb. 23, 1932.

Hydrocarbons, Fluorinated. Kinetic Chemicals, Inc. 293,851–2; May 10; Serial Nos. 321,038–9; published Feb. 9, 1932.

Insecticide. Chipman Chemical Engineering Co. 293,920; May 10; Serial No. 322,379; published Feb. 23, 1932.

Insecticides. Black Flag Company. 293,982; May 10; Serial No. 317,145; published Oct. 6, 1931.

Insecticides. Black Flag Company. 293,983; May 10; Serial No. 317,269; published Sept. 29, 1931.

Insecticides. E. O. Corson. 293,916; May 10; Serial No. 322,359; published Feb. 23, 1932.

Insecticides, fungicides, etc. Standard Oil Company. 293,987; May 10; Serial No. 320,284; published Feb. 23, 1932.

Laxatives. L. W. Stetson. 293,901; May 10; Serial No. 322,190; published Feb. 16, 1932.

Laxatives. Walgreen Co. 293,892; May 10; Serial No. 322,074; published Feb. 16, 1932.

Limonenes. Anton Deppe Söhne. 87,050; renewed June 25, 1932.

Liquid oil and pomade hair dresser. F. E. Ischerland. 293,905; May 10; Serial No. 322,256; published Feb. 16, 1932.

Lotion, Foot. E. F. Metcalfe. 294,004; May 10; Serial No. 321,605; published Feb. 23, 1932.

Lotion, Hair wave. N. Holland. 293,846; May 10; Serial No. 321,879; published Feb. 23, 1932.

Lotion, talcum powder, and face cream, Face. McKesson & Robbins, Incorporated. 293,906; May 10; Serial No. 322,261; published Feb. 16, 1932.

Materials and solutions for altering the images on printing plates. American Multigraph Co. 293,893; May 10; Serial No. 322,079; published Feb. 16, 1932.

Medical compound. Omnia Pro Vita Laboratories Co. 293,996; May 10; Serial No. 321,119; published Feb. 23, 1932.

Medical compounds. Farbwerke, vorm. Meister, Lucius & Brüning. 38,800; renewed Aug. 19, 1932.

Medicinal compounds. J. Hofmeier. 38,544; renewed July 1, 1932.

Medicinal preparation. Parke, Davis & Co. 293,986; May 10; Serial No. 320,205; published Feb. 9, 1932.

Medicine. R. M. Hibbs. 293,910; May 10; Serial No. 322,367; published Feb. 23, 1932.

Medicine. Oxinol Laboratories, Inc. 293,859; May 10; Serial No. 311,640; published Feb. 9, 1932.

Medicines. Nippon Shinyaku Kabushiki-Kaisha. 294,000; May 10; Serial No. 321,548; published Feb. 23, 1932.

Medicines for diabetes. Anticoman-Ges. m. b. H. 293,824; May 10; Serial No. 319,469; published Feb. 23, 1932.

Methanol, Synthetic. E. I. du Pont de Nemours and Company. 293,917; May 10; Serial No. 322,361; published Feb. 23, 1932.

Oil peppermint and spearmint. Magnus, Mabee & Reynard, Inc. 293,890; May 10; Serial No. 322,051; published Feb. 16, 1932.

Ointment. A. R. Godfrey. 293,922; May 10; Serial No. 322,386; published Feb. 23, 1932.

Ointment. A. Handsch. 289,888; May 10; Serial No. 322,015; published Feb. 16, 1932.

Ointment. Menley & James, Limited, New York. 87,784; renewed Aug. 6, 1932.

Perfumes, vanishing cream, cold cream, etc. Dubuis & Rowsell, Limited. 293,872; May 10; Serial No. 316,686; published Feb. 23, 1932.

Pharmaceutical preparations. R. M. Kallejian. 293,877; May 10; Serial No. 318,526; published Feb. 16, 1932.

Pharmaceutical preparations containing fuller's earth. Actien-Gesellschaft für Anilin-Fabrikation. 87,135; renewed July 2, 1932.

Photographic sensitizing materials and solutions. American Multigraph Co. 293,894; May 10; Serial No. 322,081; published Feb. 16, 1932.

Pills for bilious and liver complaints. Dr. J. H. Schenck & Son. 88,524; renewed Sept. 24, 1932.

Powder. Camfesol Products Co. 293,913; May 10; Serial No. 322,306; published Feb. 16, 1932.

Powder, Cream, liquid cleanser, etc. L. T. Piver, Inc. 293,885; May 10; Serial No. 322,006; published Feb. 23, 1932.

Powder, Dusting. Athfoe Company. 293,900; May 10; Serial No. 322,154; published Feb. 16, 1932.

Powder, Wound. Fabrik Pharmaceutischer Präparate Karl Engelhard. 86,982; renewed June 18, 1932.

Preparation for stimulating or increasing intestinal peristalsis. Hoffmann-la Roche, Inc. 293,889; May 10; Serial No. 322,016; published Feb. 16, 1932.

Preparation for use as a mouth wash and throat gargle. Burrough Brothers Manufacturing Company. 293,858; May 10; Serial No. 311,509; published Apr. 14, 1931.

Preparation used in the treatment of the nasal mucous membranes. J. Romano. 293,825; May 10; Serial No. 319,539; published Feb. 23, 1932.

Remedies, Wound-healing. Actien-Gesellschaft für Anilin-Fabrikation. 86,768; renewed June 4, 1932.

Remedy for diabetes. E. Rath. 86,831; renewed June 4, 1932.

Salve. M. R. Cordry. 293,963; May 10; Serial No. 285,336; published Sept. 17, 1929.

Salve for dermatological purposes. Dr. Bayer és társa. 88,454; renewed Sept. 24, 1932.

Skin cleaner, scalp stimulant. D. Hunt. 293,897; May 10; Serial No. 322,106; published Feb. 16, 1932.

Skin lotion. Bittle King Pharmacal Company. 293,992; May 10; Serial No. 320,578; published Feb. 23, 1932.

Spray for cattle, Fly. Calumet Refining Co. 293,847; May 10; Serial No. 321,903; published Feb. 9, 1932

Therapeutic preparation. Putterine Manufacturing Company. 293,874; May 10; Serial No. 318,291; published Feb. 23, 1932.

Tonic and antipyretic in malarial affections. T. Lamb. 86,413; renewed May 7, 1932.

CLASS 7

Cord and clothes lines, Sash. Silver Lake Company. 294,019; May 10.

Rope and cordage. Columbian Rope Company. 86,755; renewed May 28, 1932.

CLASS 8

Tobacco pouch. Seco Leather Products Company. 293,953; May 10; Serial No. 323,176; published Mar. 1, 1932.

CLASS 9

Matches. Grocers & Producers Co. 294,009; May 10; Serial No. 323,289; published Mar. 1, 1932.

CLASS 10

Thomasphosphat. Thomasphosphatfabriken Gesellschaft mit beschränkter Haftung. 88,387; renewed Sept. 10, 1932.

CLASS 12

Asphalt, Emulsified. L. J. Lehman. 293,973; May 10; Serial No. 306,818; published June 2, 1931.

Bricks. Stephens Silica Brick Co. Ltd. 293,994; May 10; Serial No. 320,992; published Feb. 16, 1932.

Flooring and hard wood and basswood ceilings, and shingles, Hard wood. Wisconsin Land & Lumber Co. 38,830; renewed Aug. 19, 1932.

Metallic hardener for concrete floors. A. C. Horn Company. 294,002; May 10; Serial No. 321,564; published Feb. 16, 1932.

Waterproofing compound. A. C. Horn Company. 294,001; May 10; Serial No. 321,562; published Feb. 16, 1932.

CLASS 13

Connection in or to water supply lines or systems for purifying, filtering, and/or softening water, Apparatus for. Ward-Love Pump Corporation. 293,833; May 10; Serial No. 320,772; published Mar. 1, 1932.

Hardware and plumbing supplies. C. M. McClung & Co. 88,331; renewed Sept. 10, 1932.

Heating materials, boiler trimmings, engine trimmings, etc. Crane Co. 293,974; May 10; Serial No. 307,703; published Dec. 8, 1931.

Metalware receptacles, Base. Platinel, Inc. 293,880; May 10; Serial No. 318,920; published Mar. 1, 1932.

Pans, skillets, spiders, and griddles, Frying. New York Stamping Company. 86,080; renewed Apr. 9, 1932.

Pipes, lead traps and bends, lead and iron ferrules, etc., Lead. Flemm Lead Co. 293,938; May 10; Serial No. 322,882; published Mar. 1, 1932.

Plumbing and steam fitting supplies. Crane Co. 294,003; May 10; Serial No. 321,591; published Jan. 26, 1932.

Screws. National Acme Co. 293,936–7; May 10; Serial Nos. 322,800–1; published Mar. 1, 1932.

CLASS 14

Metal and alloys and tool and cutting steels, Molybdenum. Universal Steel Company. 293,961; May 10; Serial No. 323,265; published Mar. 1, 1932.

CLASS 15

Gasoline. Atlas Petroleum Company. 293,975; May 10; Serial No. 307,883; published Feb. 16, 1932.

Gasoline. Gasoline Service Co. 294,014; May 10.

Gasoline. Oil Creek Refining Co. 293,933; May 10; Serial No. 322,761; published Feb. 23, 1932.

Gasoline. Richfield Oil Corporation of New York. 293,876; May 10; Serial No. 318,414; published Feb. 16, 1932.

Grease compound. Standard Oil Company of New Jersey. 293,929; May 10; Serial No. 322,563; published Feb. 23, 1932.

Oil, Cylinder. Wm. C. Robinson & Son, Co. 85,998; renewed Apr. 2, 1932.

Oil, Cylinder and engine. Wm. C. Robinson & Son, Co. 85,997; renewed Apr. 2, 1932.

Oil, Engine. Wm. C. Robinson & Son, Co. 85,999; renewed Apr. 2, 1932.

Oil, Lubricating. Conservation Corporation of America. 293,837; May 10; Serial No. 321,133; published Feb. 16, 1932

Oil, Valve. Wm. C. Robinson & Son, Co. 86,000; renewed Apr. 2, 1932.

Oils and gasoline, Lubricating. Oil City Refiners, Incorporated. 293,997; May 10; Serial No. 321,145; published Feb. 16, 1932.

Oils and greases. Phillips Petroleum Company. 293,939–40; May 10; Serial Nos. 322,889–90; published Feb. 23, 1932.

Oils, greases, gasolenes, etc. Atlantic Refining Company. 293,862; May 10; Serial No. 314,137; published Feb. 16, 1932.

Oils, greases, gasoline, etc. Sterling Oil Company. 293,980; May 10; Serial No. 308,793; published Feb. 23, 1932.

Oils, Lubricating. Fred G. Clark, Inc. 293,881; May 10; Serial No. 319,058; published Feb. 16, 1932.

Petroleum lubricating oils. Tecumseh Petroleum Company. 293,863; May 10; Serial No. 314,471; published June 30, 1931.

CLASS 16

Dressing for floors. Palmer Products, Inc. 293,931; May 10; Serial No. 322,596; published Mar. 1, 1932.
Enamel, Cement floor. Hillyard Chemical Company. 294,010; May 10; Serial No. 323,293; published Mar. 1, 1932.
Lacquers and enamels, paint thinners, etc. Flockhart Company. 294,007; May 10; Serial No. 321,756; published Mar. 1, 1932.
Paint, Metal. Hillyard Chemical Company. 294,011; May 10; Serial No. 323,295; published Mar. 1, 1932.
Paints, paint enamels, varnishes, etc. Lehman Bros., Incorporated. 293,934; May 10; Serial No. 322,778; published Mar. 1, 1932.

CLASS 17

Cigars. Starlight Bros. Inc. 293,960; May 10; Serial No. 323,257; published Mar. 1, 1932.

CLASS 20

Paper or cloth treated with oils, paint, etc. Imperial Paper and Color Corporation. 293,854; May 10; Serial No. 321,995; published Mar. 1, 1932.

CLASS 21

Antenna coupling units, extension coupling units, etc., for radio frequency currents. RCA Victor Company. 293,883; May 10; Serial No. 319,077; published Feb. 16, 1932.
Electric arc-light carbons. C. Conradty (Inhaber Pauline & Eugen Conradty) Fubrik elektrischer u. galvanischer Kohlen. 85,079; renewed Jan. 30, 1932.
Electric dry cell batteries. Electric Storage Battery Company. 293,925; May 10; Serial No. 322,502; published Feb. 23, 1932.
Electric switches for control circuits, Hand operated. Westinghouse Electric and Manufacturing Company. 293,836; May 10; Serial No. 321,059; published Feb. 16, 1932.
Electrical hard rubber products. Jos. Stokes Rubber Co. 293,884; May 10; Serial No. 319,156; published Feb. 16, 1932.
Electrical switching apparatus, etc. I-T-E Circuit Breaker Company. 293,839; May 10; Serial No. 321,339; published Feb. 16, 1932.
Electrical systems for collecting, amplifying and/or distributing electrical waves of super-audible frequency, and parts thereof. RCA Victor Company. 293,882; May 10; Serial No. 319,076; published Feb. 16, 1932.
Lightning arrestors. E. A. Everett. 293,914; May 10; Serial No. 322,313; published Feb. 23, 1932.
Radio receiving sets and parts thereof, radio loud speakers, etc. Ad. Auriema, Inc. 293,995; May 10; Serial No. 321,091; published Feb. 16, 1932.
Radio receiving sets and parts thereof, unitary transmitting and/or receiving apparatus, etc. Trav-ler Manufacturing Corporation. 293,941; May 10; Serial No. 322,908; published Feb. 23, 1932.

CLASS 22

Game, Table. Parker Brothers, Inc. 293,818; May 10; Serial No. 322,398; published Mar. 1, 1932.
Golf clubs and balls, baseballs, bats, etc. D. Berlin. 293,865; May 10; Serial No. 315,083; published Mar. 1, 1932.
Sporting goods and toys. C. M. McClung & Co. 88,508; renewed Sept. 24, 1932.
Toys representing figures in various attitudes of a prize fighter, etc. J. Chein & Company. 293,930; May 10; Serial No. 322,572; published Mar. 1, 1932.

CLASS 23

Engines, Internal combustion. New London Ship & Engine Company. 88,344; renewed Sept. 10, 1932.
Machines and parts thereof. A. Saurer. 87,662; renewed July 30, 1932.
Razors, blades, knives, etc. Auto Strop Safety Razor Co. 88,449; renewed Sept. 24, 1932.

CLASS 25

Safes and vault doors. York Safe and Lock Co. 87,302; renewed July 2, 1932.

CLASS 26

Calculating and adding machines. Grimme, Natalis & Co., Commanditgesellschaft auf Actien. 87,990; renewed Aug. 20, 1932.
Calculating-machines. Grimme, Natalis & Co., Commanditgesellschaft auf Actien. 87,991; renewed Aug. 20, 1932.
Films. A. Epstein. 293,988; May 10; Serial No. 320,339; published Dec. 29, 1931.
Films, plates, and photographic papers. Actien-Gesellschaft für Anilin-Fabrikation. 38,950; renewed Sept. 30, 1932.

CLASS 28

Badges, lapel buttons, pins, etc., Fraternity. Alpha Omicron Pi. 293,869; May 10; Serial No. 315,665; published Feb. 16, 1932.
Jewelry. D. Lisner & Co. 293,932; May 10; Serial No. 322,698; published Feb. 23, 1932.
Pearls, necklaces, bracelets, etc., Strings of. Cohen & Rosenberger, Inc. 293,935; May 10; Serial No. 322,789; published Feb. 23, 1932.
Spoons, knives, forks, etc. S. H. Kress & Co. 294,023; May 10.
Wire for stringing beads and pearls, Stranded. J. Couturier. 293,871; May 10; Serial No. 316,480; published Feb. 16, 1932.

CLASS 29

Powder puffs. A. L. Richard. 294,020; May 10.

CLASS 31

Refrigerating apparatus. Safety Refrigeration, Inc. 293,964; May 10; Serial No. 292,371; published Mar. 1, 1932.
Refrigerators. McKee Refrigerator Co. 294,013; May 10.

CLASS 32

Mattresses. New York Mattress Company. 88,945; renewed Sept. 10, 1932.

CLASS 34

Burners, Gas. Geo. Bray & Co. 87,724–5; renewed Aug. 6, 1932.
Heaters, Water. L. Glashow. 294,024; May 10.
Stoves, ranges, blowers, etc. C. M. McClung & Co. 88,104; renewed Aug. 27, 1932.

CLASS 36

Harmonicas. M. Hohner. 88,292–3; renewed Sept. 10, 1932.

CLASS 37

Binders, Loose-leaf. National Blank Book Company. 87,649; renewed July 30, 1932.
Paper towels. Blake, Moffitt & Towne. 294,025; May 10.

CLASS 39

Belts, girdles, brassières, etc. Kops Brothers, Inc. 293,875; May 10; Serial No. 318,368; published Feb. 23, 1932.
Boots, shoes, and slippers. Kanef, Udin Shoe Co. 293,985; May 10; Serial No. 320,176; published Feb. 23, 1932.
Brassières. Fairform Brassiere Co. Inc. 293,924; May 10; Serial No. 322,481; published Feb. 16, 1932.
Brassières, girdles, and corsets. I. B. Kleinert Rubber Company. 293,972; May 10; Serial No. 306,534; published Feb. 16, 1932.
Brassières, hose supporters, and garters. I. Fleischer & Sons. 293,866; May 10; Serial No. 315,195; published Feb. 9, 1932.
Clothing and accessories, Men's and boys'. Hahn Department Stores, Inc. 293,918; May 10; Serial No. 322,366; published Feb. 16, 1932.
Coats, pants, shirts, etc. Van Wert Overall Mfg. Co. 294,008; May 10; Serial No. 321,834; published Feb. 23, 1932.
Corsets and brassières. Saks and Company. 293,967; May 10; Serial No. 302,644; published Sept. 16, 1930.
Garments, Foundation. Benjamin & Johnes, Incorporated. 294,005; May 10; Serial No. 321,632; published Feb. 16, 1932.
Girdles and corset brassières. Popular Brassiere Company. 293,928; May 10; Serial No. 322,559; published Feb. 16, 1932.
Gloves. National Glove Company. 294,018; May 10.
Gloves, sun suits, pajamas, etc. Riegel Textile Corporation. 293,910; May 10; Serial No. 322,274; published Feb. 16, 1932.
Hats. G. Howard Hodge, Inc. 293,845; May 10; Serial No. 321,727; published Feb. 9, 1932.
Hats, coats, and dresses. Rossie Velvet Company. 293,926; May 10; Serial No. 322,523; published Feb. 16, 1932.
Hats, Ladies'. Everitt & Graf, Inc. 293,855; May 10; Serial No. 310,252; published Feb. 16, 1932.
Hosiery. Lehigh Silk Hosiery Mills, Inc. 293,878; May 10; Serial No. 318,562; published Feb. 23, 1932.
Hosiery. Lehigh Silk Hosiery Mills, Inc. 294,015; May 10.
Hosiery, shoes, underwear, etc. Lane Bryant, Inc. 293,873; May 10; Serial No. 316,817; published Feb. 16, 1932.
Neckties. Friedman Bros. & Son Neckwear Co. Inc. 87,872; renewed Apr. 13, 1932.
Shoe heels, Rubber. Aaron J. Friedman, Inc. 293,923; May 10; Serial No. 322,459; published Feb. 23, 1932.
Shoes. Brown Shoe Company. 294,017; May 10.
Shoes. Cushman-Hollis Company. 293,822–3; May 10; Serial Nos. 322,454–5; published Feb. 16, 1932.
Shoes. Ephrata Shoe Company. 293,868; May 10; Serial No. 315,514; published Feb. 9, 1932.
Shoes. Harzfeld's, Inc. 293,984; May 10; Serial No. 317,938; published Feb. 16, 1932.
Shoes. National Bellas Hess Co. Inc. 293,840; May 10; Serial No. 321,499; published Feb. 23, 1932.
Shoes. Sherwood Shoe Company. 293,886; May 10; Serial No. 322,007; published Feb. 23, 1932.
Shoes and boots. G. R. Davis. 80,131; renewed Apr. 16, 1932.

Shoes and slippers. A. S. Beck Shoe Corporation. 293,991; May 10; Serial No. 320,577; published Feb. 23, 1932.
Shoes, boots, overshoes, etc. Wohl Shoe Company. 293,902; May 10; Serial No. 322,199; published Feb. 23, 1932.
Suits and overcoats. N. Lapidus. 293,962; May 10; Serial No. 273,342; published Apr. 23, 1929.
Suits and overcoats. Rudy Shirek Clothes Inc. 293,861; May 10; Serial No. 313,806; published Feb. 16, 1932.
Suits and pants made of seersucker, Men's and boys'. A. Solomon. 293,819; May 10; Serial No. 322,402; published Feb. 16, 1932.
Undershirts and drawers. T. Silberman. 86,168; renewed Apr. 16, 1932.
Underwear, Silk. L. Bamberger & Co. 294,016; May 10.

CLASS 40

Eyelashes, Artificial. S. Sommer. 293,820; May 10; Serial No. 322,403; published Feb. 23, 1932.
Needles. Consolidated Sewing Machine & Supply Co. 293,981; May 10; Serial No. 317,109; published Feb. 16, 1932.

CLASS 42

Cotton piece goods. Hettrick Manufacturing Company. 293,965; May 10; Serial No. 302,390; published Mar. 1, 1932.
Cotton piece goods. W. J. Stuebe. 294,012; May 10; Serial No. 323,315; published Mar. 1, 1932.
Cotton piece goods. Whittenton Manufacturing Company. 293,903; May 10; Serial No. 322,241; published Mar. 1, 1932.
Fabrics, Upholstery and drapery. Erbun Fabrics Corp. 293,945; May 10; Serial No. 323,001; published Mar. 1, 1932.
Pile fabrics. Bennett Mills, Incorporated. 294,021; May 10.
Pile fabrics. Sidney Blumenthal & Co. Inc. 293,955–6; May 10; Serial Nos. 323,222–3; published Mar. 1, 1932.
Rugs and carpets, Woven textile. Bigelow-Sanford Carpet Co. 294,006; May 10; Serial No. 321,717; published Mar. 1, 1932.
Woolen piece goods. Forstmann Woolen Company. 293,957; May 10; Serial No. 323,234; published Mar. 1, 1932.
Woolen piece goods. Forstmann Woolen Company. 293,958–9; May 10; Serial Nos. 323,236–7; published Mar. 1, 1932.

CLASS 45

Beverage, Maltless. C. Zucca. 293,998; May 10; Serial No. 321,152; published Mar. 1, 1932.
Beverages. J. A. Crowley. 37,954; renewed Mar. 18, 1932.
Beverages and syrups, etc. California Crushed Fruit Corporation. 293,966; May 10; Serial No. 302,338; published Aug. 19, 1930.
Beverages and syrups, extracts, and concentrates. California Crushed Fruit Corporation. 293,968–9; May 10; Serial Nos. 304,233–4; published Nov. 18, 1930.
Beverages and syrups, extracts, and concentrates. California Crushed Fruit Corporation. 293,976; May 10; Serial No. 308,058; published Dec. 30, 1930.
Beverages, sirups and extracts. Foote & Jenks, Incorporated. 293,911; May 10; Serial No. 322,283; published Mar. 1, 1932.

CLASS 46

Bread. General Baking Company. 293,864; May 10; Serial No. 314,602; published Feb. 23, 1932.
Bread. General Baking Company. 293,948–50; May 10; Serial Nos. 323,043–5; published Feb. 23, 1932.
Bread. Ward Baking Company. 293,978; May 10; Serial No. 308,564; published Jan. 13, 1931.
Bread. Ward Baking Company. 293,979; May 10; Serial No. 308,565; published Feb. 23, 1932.
Bread. Zinsmaster Bread Company. 293,830; May 10; Serial No. 320,615; published Feb. 23, 1932.
Bread, cakes, and pies. Soyex Company. 293,927; May 10; Serial No. 322,526; published Feb. 23, 1932.
Butter. Fisher Brothers Company. 293,921; May 10; Serial No. 322,383; published Feb. 23, 1932.
Canned fruits and vegetables. Frederick City Packing Company. 85,653; renewed Mar. 5, 1932.
Canned fruits and vegetables, coffee, tea, cocoa, etc. E. T. Fenwick. 293,857; May 10; Serial No. 311,132; published Feb. 23, 1932.
Canned salmon. Alaska Fish Co. 86,864; renewed June 11, 1932.
Canned salmon. Astoria & Puget Sound Canning Co. 88,446–7; renewed Sept. 24, 1932.
Canned salmon. Hawk Fish Company. 85,746; renewed Mar. 12, 1932.
Cheese cake. Trans-America Baking Co. 293,832; May 10; Serial No. 320,648; published Feb. 23, 1932.
Coffee, tea, milk, bread, etc. Willow Cafeterias, Inc. 293,834; May 10; Serial No. 320,842; published Feb. 23, 1932.
Compound of cane and corn syrup. Mangels, Herold Co. Inc. 87,462; renewed July 16, 1932.
Compound of maple-sugar and cane-syrup. C. M. Tice. 86,178; renewed Apr. 16, 1932.
Doughnuts and cookies. Hazleton Baking Company. 293,971; May 10; Serial No. 306,531; published Dec. 2, 1930.
Eggs. Goodrich and Gallagher, Incorporated. 293,942; May 10; Serial No. 322,932; published Feb. 23, 1932.
Extracts, Food flavoring. Chr. Hansen's Laboratory, Inc. 293,848; May 10; Serial No. 321,910; published Feb. 23, 1932.
Extracts for foods, Flavoring. F. E. Fowler, jr. 293,843; May 10; Serial No. 321,626; published Feb. 23, 1932.
Fish meal. Fasterfat Limited. 293,870; May 10; Serial No. 315,835; published Feb. 23, 1932.
Flour, Rye and Graham. Millbrook Products Co. 293,838; May 10; Serial No. 321,142; published Feb. 23, 1932.
Flour, Self rising. Blish Milling Company. 87,596; renewed July 30, 1932.
Flour, Wheat. General Mills, Inc. 293,895–6; May 10; Serial Nos. 322,095–6; published Feb. 16, 1932.
Flour, Wheat. Wilkins-Roger Milling Co. 293,853; May 10; Serial No. 321,975; published Feb. 16, 1932.
Foods, gravel foods, etc., Bird and pet. Silvertone Company. 293,856; May 10; Serial No. 310,264; published Feb. 2, 1932.
Ice cream bars, Frozen malted chocolate. H. Baker. 293,828; May 10; Serial No. 319,801; published Feb. 23, 1932.
Malt, Liquid. Erie Sales Company. 293,989; May 10; Serial No. 320,358; published Feb. 23, 1932.
Middlings, bran, and mixed stock feed. Lawrenceburg Roller Mills Co. 87,460; renewed July 16, 1932.
Milk, bread, pies, etc. Willow Cafeterias, Inc. 293,990; May 10; Serial No. 320,563; published Feb. 23, 1932.
Milk, cream, butter, and eggs. Henry Becker & Son, Inc. 293,844; May 10; Serial No. 321,630; published Feb. 23, 1932.
Olive oil. P. Meriano. 293,912; May 10; Serial No. 322,288; published Feb. 23, 1932.
Olive-oil. E. G. Sophos. 88,528; renewed Sept. 24, 1932.
Poultry, Dressed. Priebe and Sons, Inc. 293,860; May 10; Serial No. 312,015; published Feb. 23, 1932.
Rice. Seaboard Rice Milling Co. 86,093; renewed Apr. 9, 1932.
Sandwiches. T. E. McEvoy. 293,831; May 10; Serial No. 320,620; published Feb. 16, 1932.
Sugar Pectin Preparation. White-Stokes Company. 293,841; May 10; Serial No. 321,510; published Feb. 23, 1932.
Syrup, mole sauce, pickled figs, etc., Imitation maple. Cooper Packing Company. 293,879; May 10; Serial No. 318,699; published Feb. 23, 1932.

CLASS 49

Liquors made with cherries. Rocher Frères. 87,369; renewed July 9, 1932.

CLASS 50

Sheeting of cellulosic composition, Thin transparent. Eastman Kodak Company. 293,954; May 10; Serial No. 323,193; published Mar. 1, 1932.
Straws and tubes, Drinking. New Jersey Paper Tube Corporation. 293,944; May 10; Serial No. 322,968; published Mar. 1, 1932.

LIST OF LABELS

Campana's Italian Balm. For Balm That Acts as a Skin Softener. Campana Corporation. 40,673; May 10.
Chuckle With Reg'lar Fellers Water Ice. For Water Ice. Pac-Kups Incorporated. 40,680; May 10.
Cremefrost. For Sherbets. Georgia-Carolina Dairies. 40,675; May 10.
Honey-Nut Spread. For Food Product Used as a Spread. Honey-Nut Products. 40,678; May 10.
"I"-Last. For Non-Flaking Eyelash Cosmetic. Willard Company. 40,686; May 10.
Kopy-Kit. For Drawing Sets. R. B. Enright. 40,674; May 10.
Lockner's. For Boxes. Hoague-Sprague Corporation. 40,676; May 10.
Rolyat. For Boxes. Hoague-Sprague Corporation. 40,677; May 10.
Spider and Fly Game. For Indoor Game. Milton Bradley Company. 40,671; May 10.
Sunshine Vitamin-D. For Bread. Spaulding Bakeries, Inc. 40,683; May 10.
Texas Made. For Butter. Sutherland Paper Company. 40,685; May 10.

The Little Sculptor Modeling Set. For Modeling Sets. Standard Solophone Mfg. Co. Inc. 40,684; May 10.
This Box is Made Entirely of Wood. For Wooden Boxes. F. S., Koons. 40,679; May 10.
Wear a Sleep-Shade. For Shades to be Worn Over the Eyes for Excluding Light. Sleep Shade Co. 40,682; May 10.
Weather-Proof Bronze Strips. For Bronze Strips for Windows and Doors. Reliable Products Company. 40,681; May 10.
Wrigley's Double Mint. For Chewing Gum. Wm. Wrigley Jr. Company. 40,687; May 10.
Your Guarantee. For Awnings. Chicago Awning & Tent Manufacturers' Association. 40,672; May 10.

LIST OF PRINTS

A. B. C. B. Standard Accounting System. For Accounting Form Specimens. American Bottlers of Carbonated Beverages. 13,713; May 10.
Dangerous Years. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,715; May 10.
Sunshine Chamois. For Chamois. Hoyt & Worthen Tanning Corporation. 13,716; May 10.
They Spent a Million Dollars for the Things Your Children Have. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,714; May 10.
Thirsty Millions Can't Be Wrong. For Non-Alcoholic Beverages. La Salle Bottling Company. 13,717; May 10.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 10TH DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A C Spark Plug Company. (See Babitch, Abraham M., assignor.)
A C Spark Plug Company. (See McKinley, Charles W., assignor.)
A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
Abbink, Albert, assignor of one-fourth to R. Abbink, one-eighth to J. C. Ruigh, and one-eighth to J. Doeschot, Firth, Nebr. Gate for trap nests. 1,857,341; May 10.
Abbink, Richard, et al. (See Abbink, Albert, assignor.)
Accounting & Tabulating Corporation, The. (See Thomas, Arthur, assignor.)
Acheson, Marcus A., Schenectady, N. Y., assignor to General Electric Company. Electron discharge system. 1,857,128; May 10.
Ackerman-Blaesser-Fezzy, Inc. (See Ackerman, Edward L., assignor.)
Ackerman, Edward L., assignor to Ackerman-Blaesser-Fezzy, Inc., Detroit, Mich. Center lift window regulator. 1,858,070; May 10.
Acme Industrial Co. (See Gibson, William C., and Gabriel, assignors.)
Adams, George, et al. (See Pinckard, William P., assignor.)
Adams, Lytle S., Seattle, Wash., assignor to Airways Patent Corporation. Grapple for airplane package transfer apparatus. 1,858,127; May 10.
Adlake Company, The. (See Ehret, Yale W., assignor.)
Adlake Company, The. (See Larson, Carl H., assignor.)
Aero Syndicate Limited. (See Bramson, Mogens L., assignor.)
Aeschlimann, John A., Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J. Product for destroying animals. 1,858,177; May 10.
Agfa Ansco Corporation. (See Kaminski, Stefan, assignor.)
Ahern, Harry H., Newport News, Va. Heel and arch support. 1,858,178; May 10.
Ahlschlager, Walter W., et al. (See Clark, Malcolm S., assignor.)
Ahola, Harold, Stevenson, Wash. Bevel gauge. 1,857,129; May 10.
Airways Patent Corporation. (See Adams, Lytle S., assignor.)
Aktiebolaget Atmos. (See Blomquist, J. V., and Blomén, assignors.)
Aktiengesellschaft Brown Boveri & Cie. (See Güttinger, Heinrich, assignor.)
Albrecht, Charles A., East Chicago, Ind. Hedge cutter. 1,857,342; May 10.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alexander, William M., Monroe, N. C. Aeroplane. 1,858,128; May 10.
Alexanderson, Ernst F. W., Schenectndy, N. Y., assignor to General Electric Company. Picture transmission. 1,857,130; May 10.
Allen, George B., Atlanta, Ga. Display container. 1,857,231; May 10.
Allen, John M., Toronto, Ontario, Canada. Seamless hose and making. 1,857,775; May 10.
Alles, John H., and G. Kohl, St. Louis, Mo. Building wall construction. 1,857,995; May 10.
Altorfer, Alpheus W., Peoria, assignor to Altorfer Bros. Company, East Peoria, Ill. Combined casing for a washing machine and centrifugal drier. Des. 86,902; May 10.
Altorfer, Alpheus W., Peoria, assignor to Altorfer Bros. Company, East Peoria, Ill. Support for washing machines. 1,857,930; May 10.
Altorfer Bros. Company. (See Altorfer, Alpheus W., assignor.)
Amalgamated Roofing Company. (See Maclean, Robert, assignor.)
American Agricultural Chemical Company. (See Milligan, C. H., and Klosky, assignors.)
American Agricultural Chemical Company, The. (See Sebastian, Robert L., assignor.)
American Brake Materials Corporation. (See Brackett, Tracy F., assignor.)
American Can Company. (See Nicholls, Henry M., assignor.)
American Cyanamid Company. (See Falconer, S. A., and Christmann, assignors.)
American Flyer Manufacturing Company. (See Becker, Harry S., assignor.)
American Hair & Felt Company. (See Johnson, Reginald H., assignor.)
American Hair & Felt Company. (See Phillips, Robert S., assignor.)
American Hammered Piston Ring Company, The. (See Morton, Allen W., assignor.)
American Laundry Machinery Company, The. (See Pauly, Robert C., assignor.)
American Propeller Company, The. (See Havill, Clinton H., assignor.)
American Radiator Company. (See Eggleston, Lewis W., assignor.)
American Telephone and Telegraph Company. (See Cory, Samuel I., assignor.)
American Telephone and Telegraph Company. (See Rea, Wilton T., assignor.)
Amès, Lewis G., assignor to Richardson Corporation, Rochester, N. Y. Beverage dispenser. 1,858,029; May 10.
Anaconda Copper Mining Company. (See Wensley, A. G., and Jackson, assignors.)
Anderau, Walter. (See Straub, F., and Anderau.)
Andersen, Arne. (See Malm, C. J., and Andersen.)
Andrews, Champe S., North Cattanooga, Tenn. Folded box. 1,857,270; May 10.
Animated Displays, Incorporated. (See Ingersoll, Homer H., assignor.)
Anode Rubber Company. (See Twiss, D. F., and Murphy, assignors.)
Apple, Vincent G., Dayton, Ohio. Armature. 1,857,175; May 10.
Apple, Vincent G., Dayton, Ohio. Tool for making armatures. 1,857,176; May 10.
Appleman, Leon, Pittsburgh, Pa. Heat absorber for electric lamps. Des. 86,903; May 10.
Arcturns Radio Tube Company. (See Krahl, Walter L., assignor.)
Arkema, Harold P., Chicago, and S. McMullan, Downers Grove, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Strand slackening device. 1,857,801; May 10.
Armington, Arthur P., Willoughby, and F. R. Higley, Cleveland Heights, assignors to The Euclid Crane & Hoist Company, Euclid, Ohio. Land vehicle. 1,857,343; May 10.
Armstrong & White. (See Hunter, Samuel, assignor.)
Armstrong Cork Company. (See Blenko, Walter J., assignor.)
Armstrong Cork Company. (See George, Arthur M., assignor.)
Armstrong, Leonard J., Mariners Harbor, N. Y. Automobile transmission hoist. 1,857,579; May 10.
Arnold, John L., Beaver Falls, Pa. Price indicator. 1,857,580; May 10.
Arrow-Hart & Hegeman Electric Company, The. (See Nero, Arvid H.)
Art Metal Construction Company. (See Johnson, Carl A., assignor.)
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,857,776; May 10.
Ashworth, George B., Amsterdam, N. Y. Steam generator. 1,857,831; May 10.
Asociacion de Productores de Yodo Chili. (See Schlötter, Max.)
Associated Apparel Industries, Inc. (See Graves, Rose M., assignor.)
Athey, Robert T., Armona, Calif. Renewable fuse. 1,857,581; May 10.
Atlantic Refining Company, The. (See Funsten, S. R., and Perkins, assignors.)
Atlantic Refining Company, The. (See Schott, John E., assignor.)
Atwood Machine Company, The. (See Rowe, Irving R., assignor.)
Austin, Francis S., assignor to Carbo-Oxygen Company, Pittsburgh, Pa. Blowpipe. 1,857,344; May 10.
Autogiro Company of America. (See de la Cierva, Juan, assignor.)
Auto Truck Equipment Company. (See Styslinger, Leo J., assignor.)
Automotive Engineering Corporation. (See Marcum, Arthur I., assignor.)
Avery, Charles E. (See Hubbell, H., jr., and Avery.)
Axien, Johann H., Hamburg, assignor to H. Springer, Altona, Germany. Capsular pump. 1,857,931; May 10.
Baber, John L., jr., Lynchburg, Va. Accounting system and apparatus. 1,857,123; May 10.
Babitch, Abraham M., assignor to A C Spark Plug Company, Flint, Mich. Fuel and air pump. 1,857,675; May 10.
Babitch, Abraham M., assignor to A C Spark Plug Company, Flint, Mich. Pump drive. 1,857,676; May 10.
Backer, Christian B., Ottawa, Ontario, Canada. Tubular heater terminal. 1,857,614; May 10.

Backer, Christian B., Ottawa, Ontario, Canada. Tubular heater. 1,857,615; May 10.
Bailey, Edwin W. M., Amesbury, Mass. Automatic buffing machine. 1,857,332; May 10.
Bailey, William M. (See Proctor J. A., and Bailey.)
Bain, Clarence I. (See Fulkerson, W. A., and Bain.)
Baker, John H., assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio. Pipe welding mandrel. 1,857,802; May 10.
Baker, John H. E., and L. B. Haigh, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Automatic or semi-automatic telephone system. 1,857,833; May 10.
Baker Oil Tools, Inc. (See Baker, Reuben C., assignor.)
Baker Perkins Company. (See Engels, Eugene O., assignor.)
Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Hydraulic underreamer. 1,857,616; May 10.
Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Cementing plug. 1,858,215; May 10.
Balkema, Bert B., et al. (See Clark, Malcom S., assignor.)
Ballard, Harrie, A., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-seat fitting machine. 1,857,424; May 10.
Ballars, Arthur H. (See Stadler, George J.)
Bancroft, Walter H. (See Ford, B., and Bancroft.)
Baragwanath, William C., Lexington, Mass. Curtain control. 1,857,682; May 10.
Barber, Franklin L., and E. W. Webb, assignors to Standard Car Truck Company, Chicago, Ill. Lateral motion freight car truck. 1,857,345; May 10.
Barker, John S., Washington, D. C. Fuse for airplane flares. 1,857,131; May 10.
Barnard, Thomas H. (See Goodwin, A. C., and Barnard.)
Barnett, George M., Riverton, Ala. Train order delivery crane. 1,858,129; May 10.
Barrett, Herbert J. R., Los Angeles, Calif. Wall surface construction. 1,857,490; May 10.
Basman, Joseph. (See Szakacs, Joseph, assignor.)
Basquin, Olin H. (See Meyercord, G. R., and Basquin.)
Bassesches, Jacob T. (See Levin, Michael, assignor.)
Basso, Luigi, Harrison, N. Y. Trap. 1,857,932; May 10.
Bastian-Morley Company. (See Morley, J. P., and Lonergan, assignors.)
Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Device for use in covering heels. 1,857,177; May 10.
Batty, Bernard R., Indianapolis, Ind., assignor to E. M. Hicks, Lebanon, Ind. Speed boat construction. 1,858,030; May 10.
Bay, Albert M., De Soto, Mo. Adjustable delivery box. 1,858,179; May 10.
Beardsley & Wolcott Mfg. Co., The. (See Lucia, Louis V., assignor.)
Beardsley & Wolcott Manufacturing Company, The. (See Walder, Emil, assignor.)
Beardsley & Wolcott Mfg., Co., The. (See Wolcott, F. E., and Lucia, assignors.)
Beatty, Robert J., assignor to The Federal Glass Company, Columbus, Ohio. Method and apparatus for completing pressed blown ware or blown ware. 1,857,491; May 10.
Beatty, Robert J., assignor to The Federal Glass Company, Columbus, Ohio. Method and apparatus for completing pressed blown ware or blown ware. 1,857,492; May 10.
Beck, Christoph, Ludwigshafen-on-the-Rhine, and H. Weissback, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of nitric acid. 1,857,346; May 10.
Becker, Harry S., River Forest, assignor to American Flyer Manufacturing Company, Chicago, Ill. Semaphore and track for toy railways. 1,857,933; May 10.
Beckett, William A., Kingsville, Ontario, Canada. Gas burning apparatus. 1,857,525; May 10.
Beebe, William A., New Orleans, La. Hydroplane ship. 1,857,347; May 10.
Beemack Furnace Company. (See MacDougall, Robert, assignor.)
Begg, Russell S., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Combined disk wheel and hub cap. Des. 86,904; May 10.
Behm, Rudolf. (See Hanyzer, B., and Behm.)
Belden Manufacturing Company. (See Wermine, Hugo H., assignor.)
Bell, Ralph, Lamar, S. C. Cotton press. 1,857,707; May 10.
Bell Telephone Laboratories, Incorporated. (See Burton, Everett T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hinrichsen, Edward E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Lathrop, Hubbel, assignor.)
Bell Telephone Laboratories, Incorporated. (See Merriam, Francis F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Smythe, Edwin H., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stacy, Leland J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Wager, Harold N., assignor.)
Bell Telephone Laboratories, Incorporated. (See Whittle, Horace, assignor.)
Benander, George B., Yalesville, assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn. Electrical fitting and making the same. 1,857,178; May 10.
Bender, William, Downers Grove, Ill., assignors to Rampo Ajax Corporation, New York, N. Y. Making forged compromise bars. 1,857,582; May 10.
Benedetto, Giuseppe, Novara, Italy, assignor to Omes Holding Company Limited, London, England. Forging. 1,857,708; May 10.
Benjamin Electric Manufacturing Company. (See Phillips, Paul D., assignor.)
Bennet, William, A. Farrar, Christchurch, and P. MacKinnon, Sidney Quay, Kaiapoi, New Zealand. Edge trimming attachment for lawn mowers. 1,858,031; May 10.
Bennett, Frank. (See Hallowell, H. T., and Bennett.)
Bennett, Robert S., Glens Falls, N. Y. Holder. 1,858,130; May 10.
Benton, Henry O., Greenville, Tex. Beehive. 1,857,709; May 10.
Berdon, Albert E., East Orange, N. J. Clothes rack. 1,857,617; May 10.
Berliner, Robert, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New vat dyestuffs of the anthraquinone series. 1,857,232; May 10.
Bernardez, Manuel. (See Vasquez, J., and Bernardez.)
Berry Dental Laboratory Co. (See Schwartz, Jacob C., assignor.)
Berry, Guy H., assignor to L. H. Hamel Leather Co., Haverhill, Mass. Tack-removing device for skin drying holders. 1,857,834; May 10.
Bertandeau, Gaston, assignor to Societe Stac-Nord, Paris, France. Apparatus for the manufacture of objects consisting of agglomerated substances by centrifugal force. 1,857,253; May 10.
Berthon, Rodolphe, Neuilly, France, assignor, by mesne assignments, to Kisiyn Corporation, New York, N. Y. Diaphragm for optical systems. 1,857,132; May 10.
Better-Built Pumps, Inc. (See Brown, Ernest L., assignor.)
Bianchi, Luis, Olavarria, Argentina. Necktie. 1,857,271; May 10.
Bianchini, Ferier, Société en nom collectif. (See Férier, Albert, assignor.)
Bicking, George W., Washington, D. C. Apparatus for and method of making deckled edged paper. 1,858,131; May 10.
Bicknell, Arthur, et al., legal representative. (See Degenhardt, W. R., De Fraine, and Bicknell.)
Bicknell, Robert A. W. et al., legal representative. (See Degenhardt, W. R., De Fraine, and Bicknell.)
Bicknell, Robert H. (See Degenhardt, W. R., De Fraine, and Bicknell.)
Bidwell, Edgar M., Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for handling strand material. 1,857,835; May 10.
Bimber, Heinrich, Lauf, assignor to Steatit-Magnesia Aktiengesellschaft, Berlin-Pankow, Germany. Filling apparatus for powdered or granular material. 1,858,032; May 10.
Bingham, Frederick C., New York, assignor to Boorum & Pease Company, Brooklyn, N. Y. Loose leaf binder. 1,858,132; May 10.
Bizzarri, Anthony, New York, N. Y. Lubricating device and the like. 1,857,803; May 10.
Bjornstad, Milo L., Duluth, Minn. Cigarette ash and spark protector. 1,858,180; May 10.
Blackburn, Merrill M., Davenport, Iowa. Score card holder. 1,857,934; May 10.
Blackman, Laurence E., Hartsville, S. C. Float preventer for looms. 1,857,836; May 10.
Blackman, Laurence E., Hartsville, S. C. Combined stop motion and float preventer for looms. 1,857,837; May 10.
Blechdosen- und Plakatfabrik K. G. (See Eisenlohr, Friedrich, assignor.)
Blenko, Walter J., Pittsburgh, assignor to Armstrong Cork Company, Lancaster, Pa. Rotary inlaying machine. 1,857,619; May 10.
Blomén, Torsten A. (See Blomquist, J. V., and Blomén.)
Blomquist, Johan V., and T. A. Blomén, assignors to Aktiebolaget Atmos, Stockholm, Sweden. Rotating steam generator. 1,857,710; May 10.
Blum, Harry, and F. J. Farley, McKees Rocks, Pa. Automobile signal switch. 1,857,935; May 10.
Blumer, Alexis. (See Schelber, J., Sandig, and Blumer.)
Bodendieck, Henry W., assignor to Tip's Tool Company, Inc., Taylorville, Ill. Fuse and switch handling device. 1,858,133; May 10.
Boecking, Ewald. (See Frappier, L. S., and Boecking.)
Boehm, Arthur S., Baltimore, Md. Solenoid. 1,857,349; May 10.
Böhling, Rudolf H., assignor to Firm Rohrbogenwerk Gesellschaft mit beschränkter Haftung, Hamburg, Germany. Apparatus for straightening out the ends of bent pipes. 1,857,583; May 10.
Bokenkroger, William, Edgewater, N. J. Filter for gaseous substances. 1,857,348; May 10.
Bolacek, Frank, Foley, Minn. Receptacle cleaner. 1,857,584; May 10.

Bommer, Emil, Brooklyn, N. Y. Door check and closer. 1,857,133; May 10.
Bonnot Company, The. (See Lentz, George W., assignor.)
Boorum & Pease Company. (See Bingham, Frederick C., assignor.)
Booth, Herbert N., and O. L. Westgate, Rochester, N. Y. Combined cup and dental floss container. 1,858,134; May 10.
Borden, Stephen W. (See Roe, Ralph C., assignor.)
Bosch, Robert, Aktiengesellschaft. (See Sturm, Wilhelm, assignor.)
Bosler, Wilson T., assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Apparatus for cooling coke. 1,857,618; May 10.
Bossetta, Gaspar R., New Orleans, La. Aquarium. 1,858,181; May 10.
Bouffier, Charles A. (See Epstein, D., Fowler, and Bouffier.)
Bowman, Myrtle A., Rochester, Minn. Colostomy belt. 1,857,179; May 10.
Bowman, Oliver S., Colorado Springs, Colo. Coal carbonizing power plant and reducing coal. 1,858,135; May 10.
Boyd, Truman O., et al. (See Ross, Warren A., assignor.)
Boynton, Earl S., East Orange, N. J., assignor to Photomaten, Inc., New York, N. Y. Cooling means for photographic film tanks. 1,857,134; May 10.
Braasch, August D. (See Smith, H. W., Braasch, and Walton.)
Brackett, Fred M., and L. C. Williams, assignors to The Brackett Stripping Machine Co., Topeka, Kans. Trimming machine. 1,858,033; May 10.
Brackett, Fred M., L. C. Williams, and D. Daneke, assignors to The Brackett Stripping Machine Co., Topeka, Kans. End sheet folding apparatus. 1,858,034; May 10.
Brackett Stripping Machine Co., The. (See Brackett, F. M., and Williams, assignors.)
Brackett Stripping Machine Co., The. (See Brackett, F. M., Williams, and Daneke, assignors.)
Brackett, Tracy F., assignor to American Brake Materials Corporation, New York, N. Y. Friction brake. 1,857,124; May 10.
Brackett, Tracy F., assignor to American Brake Materials Corporation, New York, N. Y. Friction brake shoe. 1,857,125; May 10.
Bradley, Eric H., assignor to The National Pumps Corporation, Dayton, Ohio. Liquid dispensing apparatus. 1,858,035; May 10.
Brahy, Charles, Staten Island, assignor to C. E. Marion, New York, N. Y. Stop mechanism. 1,857,996; May 10.
Bramson, Mogens L., assignor of one-half to Aero Syndicate Limited, London, England. Engine or pump. 1,858,182; May 10.
Brenkert, Joseph W. (See Brenkert, K., and Brenkert.)
Brenkert, Karl, and J. W. Brenkert, Detroit, Mich. Combination projector. 1,857,135; May 10.
Brennan, Charles T., Waterbury, Conn. Cut-off mechanism for heading machines. 1,857,997; May 10.
Brenner, Alphonse, Company. (See Brenner, Charles M., assignor.)
Brenner, Charles M., assignor to Alphonse Brenner Company, Inc., Shreveport, La. Coupling. 1,858,136; May 10.
Brewer, Joseph, Bronx, N. Y. Screen. 1,857,425; May 10.
Bridges, William C., Benton, Ark. Stacking apparatus. 1,858,183; May 10.
Broche, Leon J., St. Cloud, France, assignor to Tropenas Company, New York, N. Y. Apparatus for use in the manufacture of glassware. 1,858,137; May 10.
Brock, Henry E., assignor to Woodsteel Box Corporation, Detroit, Mich. 1,857,350; May 10.
Brodie, Israel B., et al. (See Taube, Gustav, assignor.)
Brogan, James A., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Method of and apparatus for operating upon shoe-part blanks. 1,857,180; May 10.
Brooks, Frederick W., sr., Virginia, Minn. Ice auger. 1,857,585; May 10.
Brooks, Thomas R. (See Salinas, Gustavo A., assignor.)
Brown, Aaron, Chicago, Ill. Demountable rim. 1,857,426; May 10.
Brown, Albert C., Chicago, Ill. Sink fixture. 1,857,136; May 10.
Brown, Benjamin D., New York, N. Y. Automatic irregular contour shaping machine. 1,857,777; May 10.
Brown, Ernest L., Watertown, assignor to Better-Built Pumps, Inc., Cambridge, Mass. Pump. 1,858,036; May 10.
Brown, Harold M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for building tire flaps. 1,857,998; May 10.
Brown, Lee R. (See Chase, G. C., and Brown.)
Brown, McCleane, Sewickley, Pa. Manufacture of hollow metal bars. 1,857,620; May 10.
Brugmann, William, Philadelphia, Pa. Door worker. 1,857,936; May 10.
Bruning, Charles, Company. (See Murck, Knud, assignor.)
Bryan, Charles S. (See Fiske, A. H., and Bryan.)
Buchanan, Pearl, et al. (See Smith, Clarence W., assignor.)
Budd, Howard L., assignor to Friedman Silver Co., Inc., Brooklyn, N. Y. Back for picture frames. 1,857,937; May 10.
Budd Wheel Company. (See Begg, Russell S., assignor.)
Budd Wheel Company. (See Davenport, Talmon A., assignor.)
Buenger, Clarence O., assignor to Hills-McCanna Company, Chicago, Ill. Liquid pump. 1,858,184; May 10.
Buenger, Clarence O., assignor to Hills-McCanna Company, Chicago, Ill. Liquid pump. 1,858,185; May 10.
Buettell, Samuel E., assignor to Cross Parking Systems, Inc., Chicago, Ill. Door operator. 1,857,938; May 10.
Buquor, Adolph P., Los Angeles, Calif., assignor of one-half to C. R. Medley, Columbus, Ga. Compensating spring suspension system for motor vehicles. 1,857,234; May 10.
Burbank, Elizabeth W., executrix. (See Burbank, Luther.)
Burbank, Luther, deceased, E. W. Burbank, executrix, Santa Rosa, Calif., assignor to Stark Bro's. Nurseries & Orchards Company, Louisiana, Mo. Plum. Pl. Pt. 16; May 10.
Burgess Battery Company. (See Schulte, W. B., and Zook, assignors.)
Burhorn, Edwin, Hoboken, N. J. Cooling tower. 1,857,351; May 10.
Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric welding pressure vessels. 1,857,526; May 10.
Burnside, James H., assignor to General Talking Pictures Corporation, New York, N. Y. Sound-on-film reproducing apparatus. 1,857,427; May 10.
Burr, Karl. (See Hentrich, W., Burr, and Schwitzer.)
Burrell, Benjamin S., East Chicago, Ind. Lubricating connecters. 1,857,527; May 10.
Burroughs Adding Machine Company. (See Lafferty, Arthur R., assignor.)
Burroughs Adding Machine Company. (See Pasinski, Walter J., assignor.)
Burton, Everett T., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Zero correcting circuit. 1,858,037; May 10.
Burton, James A., Brooklyn, N. Y. Lubricant. 1,857,235; May 10.
Butters, Robert H., Atlanta, Ga. Milling cutter for forming gin or linter saw teeth. 1,857,428; May 10.
Byerly, Robert W. (See Van Ness, Henry E., assignor.)
Byrnes, Clarence P., trustee. (See James, Joseph H.)
Byrnes, Irving F., Schenectady, N. Y., assignor to General Electric Company. Transmitting system. 1,857,137; May 10.
Cameron, Frederick C., Lumberton, N. C. Artificial fish bait. 1,857,939; May 10.
Campaigne, William T. D., Spooner, Wis. Thread chaser. 1,857,493; May 10.
Campbell, James C., New York, N. Y., assignor to Portable Air Hammer Company, Inc. Vacuum power hammer. 1,857,138; May 10.
Canadian International Paper Company. (See Dosne, Rene, assignor.)
Canfield, Jesse J., Tallant, Okla., assignor, by mesne assignments, to Empire Oil and Refining Company, Dover, Del. Method of and reagent for treating wet oils. 1,858,186; May 10.
Cannon, Elmer E., Waukomis, Okla. Mechanical movement. 1,857,352; May 10.
Cantell, John F., San Francisco, Calif. Coupling. 1,857,528; May 10.
Cantzler, Alfred, Kenora, Ontario, Canada. Collapsible boat. 1,857,236; May 10.
Carbo-Oxygen Company. (See Austin, Francis S., assignor.)
Carborundum Company, The. (See Forse, E. B., and Geiger, assignors.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carlsen, Halfdan, New York, N. Y. Safety gas burner. 1,857,804; May 10.
Carlton, Henry D., Montclair, N. J., assignor, by mesne assignments, to Consolidated Ashcraft Hancock Company, New York, N. Y. Pressure gauge indicator. 1,857,139; May 10.
Carnegie, David, jr., Springfield, assignor to Duratex Corporation, Newark, N. J. Coated fabric and making the same. 1,857,805; May 10.
Carpenter, E. W., Manufacturing Company, The. (See Carpenter, Edward W., assignor.)
Carpenter, Edward W., Fairfield, assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn. Flower holder. 1,857,140; May 10.
Carpenter, Guy, New York, N. Y. Spark arrester. 1,857,353.
Carr, Edward G., Chicago, Ill., assignor to The Lakewood Engineering Company, Lakewood, Ohio. Concrete road finishing machine. Re18,455; May 10.
Carregari, Giuseppe, Suresnes, France. Music leaf turner. 1,858,187; May 10.
Carson, George C., Los Angeles, Calif., Treating sulphide ores and the production of sulphuric acid thereby. 1,857,494; May 10.
Carter, Donald M., et al. (See Ross, Warren A., assignor.)
Case, J. I., Company. (See Clausen, Leon R., assignor.)
Castleman, Vincent F., Oak Park, and O. J. Putting, Springfield, Ill. Vertical filing device. 1,857,838; May 10.

Caterpillar Tractor Company. (See Smith, H. W., Braasch, and Walton, assignors.)
Cayton, Albert. (See Lippe-Lipski, Elaine V. D., assignor.)
Cearley, Columbus W., assignor of two-fifths to S. Rutherford, Bedford, Ind. Parcel tie. 1,858,138; May 10.
Celanese Corporation of America. (See Moss, William H., assignor.)
Celanese Corporation of America. (See Platt, Herbert, assignor.)
Certain-teed Products Corporation. (See Codwise, Philip W., assignor.)
Chadbourne, Joseph H., Danielson, Conn., assignor to E. H. Jacobs Mfg. Co. Lug strap. 1,858,038; May 10.
Challenge Company. (See Lewis, Robert L., assignor.)
Chambers, Robert M., Finaghy, Belfast, assignor to G. and T. Martin, Belfast, Ireland. Depositing machine for dough, semifluid, pasty, or like materials. 1,857,621; May 10.
Chambers, Robert M., Finaghy, Belfast, assignor to G. and T. Martin, Belfast, Ireland. Depositing machine for dough, semifluid, pasty, or like materials. 1,857,622; May 10.
Chapman, Elmer B. (See Gramsa, Joseph G., assignor.)
Chapman, William B., Jackson Heights, N. Y. Underfeed mechanism for fuel beds. 1,857,354; May 10.
Chapman, William B., Jackson Heights, N. Y., assignor, by mesne assignments, to The Cooper-Bessemer Corporation, Mount Vernon, Ohio. Ash removing apparatus for gas producers and the like. 1,857,355; May 10.
Chapple, John C., St. Louis, Mo. Locomotive arch. 1,857,272; May 10.
Charen, Myer, assignor to Universal Dental Company, Philadelphia, Pa. Carding device for artificial teeth. 1,857,999; May 10.
Chase Companies, The. (See Gerth, Ruth, assignor.)
Chase, George C., South Orange, and L. R. Brown, East Orange, assignors to Monroe Calculating Machine Company, Orange, N. J. Calculating and listing machine. 1,857,356; May 10.
Chase, Stephen, jr. (See Chase, Stephen, assignor.)
Chase, Stephen, Dunedin, Fla., assignor to S. Chase, jr., Hamilton, Ohio. Distributor. 1,857,495; May 10.
Cherry, Oscar A., and F. Kurath, assignors to Economy Fuse & Manufacturing Company, Chicago, Ill. Potentially reactive phenolic condensation products and preparing same. 1,857,357; May 10.
Chester, Thomas, Pittsburgh, Pa. Centrifugal apparatus. 1,858,071; May 10.
Chicago Bridge & Iron Company. (See Day, Clayton L., assignor.)
Chiocchio, Ottavio, Port Chester, N. Y. Running mold. 1,857,237; May 10.
Chorlton, Frank O. L., Bury, and J. R. Haworth, Darwen, England. Safety device for speed governors of the Pickering or like type. 1,857,765; May 10.
Chouinard, Michel, Montreal, Quebec, and J. P. Paradis, Longueuil, Quebec, Canada. Valve cock. 1,857,940; May 10.
Christensen, Leo M., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Fermentation of cellulosic materials. 1,857,429; May 10.
Christie, John. (See Fuerst, C. C., and Christie.)
Christmann, Ludwig J. (See Falconer, S. A., and Christmann.)
Chyle, John J. (See Stresau, R., and Chyle.)
Cincinnati Ball Crank Company, The. (See Harris, Cleo, assignor.)
Cincinnati Ball Crank Company, The. (See May, Frederick, assignor.)
Cincinnati Milling Machine Company, The. (See Nenninger, Lester F., assignor.)
Citizens National Bank et al., executors. (See Graham, G. A., Evans, (deceased) and Friedman.)
City Auto Stamping Company, The. (See Ireland, George E., assignor.)
Clapp, Albert L., Danvers, Mass. Paper article and making the same. 1,857,496; May 10.
Clapp, Albert L., Danvers, Mass. Surface finishing paper or fiber board and product of same. 1,857,497; May 10.
Clapp, Albert L., Danvers, Mass. Treatment of pulp articles and material therefor. 1,857,498; May 10.
Clark, Harry R., Brooklyn, N. Y. Detachable panel mounting. 1,857,778; May 10.
Clark, Lee H., Haverford, Pa. Manufacture of chocolate. 1,857,430; May 10.
Clark, Malcolm S., Ferndale, Mich., assignor of one-fifth to Starrett Bldg. Co., one-fifth to Harnischfeger Corporation, one-fifth to W. W. Ahlschlags, Inc., one-fifth to A. B. Fridaker, Chicago, Ill., and one-tenth to B. B. Balkema, Detroit, Mich. Vehicle storage apparatus. 1,857,431; May 10.
Clark, Wycliffe L., Jamestown, N. Y. Balance support. 1,857,623; May 10.
Clausen, Leon R., assignor to J. I. Case Company, Racine, Wis. Combination harvester-thresher. 1,858,000; May 10.
Clayton Gin Compress Company. (See Mackenzie, Alexander S., assignor.)
Clemence, Elliott, New York, N. Y., assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn. Attachment plug receptacle. 1,858,072; May 10.
Cleveland Rock Drill Company, The. (See Renfer, John E., assignor.)
Cline, Allan J. (See McCleery, Harold L., assignor.)
Clymer Manufacturing Company, The. (See Walker, John E., assignor.)
Coale Muffler & Safety Valve Company, The. (See Morrison, Bartholomew J., assignor.)
Codwise, Philip W., Kenmore, N. Y., assignor, by mesne assignments, to Certain-teed Products Corporation. Felt. 1,857,432; May 10.
Codwise, Philip W., Kenmore, N. Y., assignor, by mesne assignments, to Certain-teed Products Corporation. Felt. 1,857,433; May 10.
Coffey, Joseph M., Schenectady, N. Y., assignor to Mica Insulator Company, New York, N. Y. Composite insulating material. 1,857,586; May 10.
Cohen, Louis, Washington, D. C. Radio signaling. 1,857,359; May 10.
Cohen, Sadie. (See Cohn, Eugene and H., assignors.)
Cohn, Eugene and H., assignors to Sadie Cohen, Chicago, Ill. Dry vapor spray. 1,857,358; May 10.
Cohn, Harold. (See Cohn, Eugene and H.)
Cold Metal Process Company, The. (See Steckel, Abram P.)
Coldwell, John S., assignor to Globe-Union Mfg. Co., Milwaukee, Wis. Roller skate. 1,857,360; May 10.
Cole, Elmer K., Winterset, Iowa. Guy wire anchor device. 1,857,434; May 10.
Cole, Elmer K., Winterset, Iowa. Highway fence. 1,857,435; May 10.
Cole, Elmer K., Winterset, Iowa. Cable splice. 1,857,436; May 10.
Cole, Elmer K., Winterset, Iowa. Cable clamp. 1,857,437; May 10.
Cole, Fred B., assignor to Rotary Printing Company, Norwalk, Ohio. Paper delivery mechanism. 1,858,073; May 10.
Collins, Lawrence A., Long Beach, Calif. Electric vaporizer. 1,857,181; May 10.
Colon, John, assignor to George P. Schinzel, jr., New York, N. Y. Paper transfer file. 1,858,216; May 10.
Colonial Tool Company. (See Lundell, Otto, assignor.)
Columbus Dental Manufacturing Company, The. (See Evans, David E., assignor.)
Commercial Solvents Corporation. (See Christensen, Leo M., assignor.)
Compagnie Internationale des Pieux Armes Frankignoul Societe Anonyme. (See Frankignoul, Edgard, assignor.)
Compagnie pour la Fabrication des Compteurs et Materiel d' Usines à Gaz. (See Rousselet, René, assignor.)
Cone, Carroll, assignor to Libbey-Owens Ford Glass Company, Toledo, Ohio. Glass forming apparatus and process. 1,857,806; May 10.
Confair, Zehnder H., assignor to Confairs Pure Fruits, Inc., Berwick, Pa. Bottle. Des. 86,906; May 10.
Confairs Pure Fruits, Inc. (See Confair, Zehnder H., assignor.)
Consolidated Ashcraft Hancock Company. (See Carlton, Henry D., assignor.)
Continental Diamond Fibre Company. (See Frederick, Louis T., assignor.)
Cooke, George T., South Norwalk, Conn. Lock for castellated nuts. 1,858,039; May 10.
Cooper-Bessemer Corporation, The. (See Chapman, William B., assignor.)
Cooper, George R., Upper Darby Township, Delaware County, Pa. Phonograph-dictaphone communication apparatus. 1,857,438; May 10.
Coppage, William R., Cherrydale, Va. Conveyer chain. 1,857,529; May 10.
Corley, Clifton, and E. A. Fleming, Greenville, S. C. Cloth guide. 1,857,941; May 10.
Corley, John T., Providence, R. I. Adjustable number plate frame. 1,857,141; May 10.
Corson, Chalon E., and W. A. Wright, Bridgeport, assignor to The Milford Rivet and Machine Company, Milford, Conn. Automatic riveter. 1,858,001; May 10.
Cory, Samuel I., Towaco, N. J., assignor to American Telephone and Telegraph Company. Transmission system. 1,857,238; May 10.
Cosgrove, John W. (See Sawyer, H. L., and Cosgrove.)
Coultas, Wilbur J., assignor to Deere & Company, Moline, Ill. Crank wheel shield for mowers. 1,857,273; May 10.
Crawford, William E., Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Control for electrical welding currents. 1,857,499; May 10.
Crocker-Wheeler Electric Manufacturing Company. (See Spencer, Millard C., assignor.)
Cromar Co., The. (See Dittmar, Irvin F., assignor.)
Cronan, William J., Wethersfield, Conn. Vehicle direction signaling light. Des. 86,907; May 10.
Crosley, Lewis M., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Refrigerating device. 1,857,439; May 10.
Crosley, Lewis M., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Refrigeration device. 1,857,440; May 10.
Crosley Radio Corporation, The. (See Crosley, Lewis M., assignor.)
Cross Parking Systems, Inc. (See Buettell, Samuel E., assignor.)
Cullison, Benjamin F., Sharon Hill, Pa., assignor to The Texas Company, New York, N. Y. Display stand. Des. 86,908; May 10.

Cummins, Thomas K., assignor to Northern Malleable Iron Company, St. Paul, Minn. Hand brake mechanism. 1,858,188; May 10.
Cunningham Company, M. E. (See Speicher, Frank S., assignor.)
Curcio, Ralph, Gardner, Mass. Chair seat. 1,857,942; May 10.
Curtis, Charles G., New York, and E. R. Newton, Jamaica, N. Y. Two cycle engine. 1,858,002; May 10.
Dailey, Frank L., assignor to Johnson & Johnson, New Brunswick, N. J. Sanitary cover or closure. 1,858,139; May 10.
Damerell, Mark H., Worcester, Mass. Overload release. 1,858,074; May 10.
Dandridge, George F. J., Bedford, and G. A. Mower, London, England. Fastening together of plates or sheets. 1,857,530; May 10.
Daneke, Dietrich. (See Brackett, F. M., Williams, and Daneke.)
Dante, Joseph J., Bantam, Conn., assignor to The Trumbull-Vanderpoel Electric Manufacturing Company. Safety switch. 1,857,711; May 10.
Darling, Frederick E., assignor to Eastman Kodak Company, Rochester, N. Y. Method for use in factory management. 1,857,587; May 10.
Davenport, Talmon A., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Disk wheel. Des. 86,909; May 10.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. Re18,459; May 10.
Davis, Louis H., Urbana, Ill. Dough mixing machine. 1,857,361; May 10.
Davis, William C. (See Rossiter, E. C., and Davis.)
Davison, Alexander, Valley Stream, assignor of three-tenths to The Inventions Exploitation Corporation, New York, N. Y. Weed puller. 1,857,500; May 10.
Dawicki, Joseph T., jr., Jersey City, N. J. Window fastener. 1,857,943; May 10.
Day, Clayton L., Chicago, Ill., assignor to Chicago Bridge & Iron Company. Drainage apparatus. 1,857,362; May 10.
De Boigne, Maurice, Paris, assignor to Societe Anonyme Des Anciens Etablissements Hotchkiss & Compagnie, St. Denis, France. Gun carriage. 1,857,945; May 10.
Deere & Company. (See Coultas, Wilbur J., assignor.)
Deere & Company. (See Johnson, Christian E., assignor.)
Deere & Company. (See Paradise, Louis A., assignor.)
Deere & Company. (See White, Charles H., assignor.)
De Fraine, Allan F. (See Degenhardt, W. R., De Fraine, and Bicknell.)
De Francisco, Marshall, New York, N. Y. Color projecting machine. 1,857,441; May 10.
De Galan, William V., Grosse Ile, Mich. Bridge scoring device. 1,858,075; May 10.
Degener, Gustave O. (See Hochman, J. C., and Degener.)
Degenhardt, William R., London, A. F. De Fraine, Wembley, and R. H. Bicknell, deceased, Westminster; R. A. W. Bicknell, London, and A. Bicknell, Birmingham, legal representatives of deceased, assignors to The Francois Cementation Co. Limited, Doncaster, England. Percussion tool for wave transmission apparatus. 1,857,624; May 10.
De Jarnette, Henry W., assignor of one-half to John C. Hoe, Des Moines, Iowa. Packing stabber. 1,858,040; May 10.
De La Cierva, Juan, Aldwych, London, England, assignor to Autogiro Company of America, Philadelphia, Pa. Aircraft with auto-rotative wings. 1,857,807; May 10.
Delco Products Corporation. (See Aseltine, Fred E., assignor.)
Delco Products Corporation. (See Sunday, James J., assignor.)
De Leeuw, Adolph L., Plainfield, N. J., assignor of one-half to A. F. Nathan, New York, N. Y. Dressing grinders. 1,857,142; May 10.
Delta Electric Company. (See Wiley, Lee M., assignor.)
De Martini, Paul, jr., San Francisco, Calif. Table accessory. 1,857,712; May 10.
De Maziroff, George, New York, N. Y., assignor to National Automatic Container Corporation, Baltimore, Md. Cigarette package container. 1,858,199; May 10.
De Maziroff, George, New York, N. Y., assignor to National Automatic Container Corporation, Baltimore, Md. Cigarette package container. 1,858,200; May 10.
Dember, Edward, and F. Weinder, Chicago, Ill. Sewing machine attachment. 1,857,944; May 10.
Denckiau, Charles F., Los Angeles, Calif. Automatic faucet. 1,857,363; May 10.
De Rachat, Nicholas G., assignor to Universal Oil Products Company, Chicago, Ill. Furnace. 1,857,364; May 10.
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. (See Gorhan, Adolf, assignor.)
Dewhirst, Cora G., Payson, Ill. Chart. 1,858,140; May 10.
De Witte, Charles, Brussels, Belgium. Apparatus for treating textile materials. 1,857,839; May 10.
Dicke, Oscar H., Rochester, N. Y., assignor to Pioneer Heat Regulator Corporation. Furnace regulator. 1,857,531; May 10.
Diederichs, Hugo N., St. Louis, Mo., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Brush holder. 1,857,808; May 10.
Dietrichs, Charles, Little Ferry, N. J., assignor to Walker Cement Products, Inc., Union City, N. J. Draining tile. 1,857,143; May 10.
Dinaro, Salvatore, Genoa, Italy. Elastic wheel. 1,857,239; May 10.
Dittmar, Irvin F., assignor to The Cromar Co., Williamsport, Pa. Buffer. 1,857,240; May 10.
Doble, Ralph N., Bayside, N. Y., assignor to Pneumatic Scale Corporation, Quincy, Mass. Packaging machine. 1,857,625; May 10.
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,857,946; May 10.
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,858,041; May 10.
Dodge, Adiel Y., South Bend, Ind. Variable speed transmission. 1,857,365; May 10.
Dodge, Clinton C., Charlestown, Ind., assignor to Louisville Frog, Switch & Signal Company, Louisville, Ky. Reflecting unit. 1,858,141; May 10.
Doeschot, John, et al. (See Abbink, Albert, assignor.)
Dohme, Alfred R. L., assignor to Sharp & Dohme, Inc., Baltimore, Md. Higher alkyl resorcinols. 1,858,042; May 10.
Dohrwardt, John F., assignor to Line Material Company, South Milwaukee, Wis. Fuse box structure. 1,857,442; May 10.
Doll, Walter, Granville, N. Y. Game apparatus. 1,857,588; May 10.
Donovan, John F., East Cleveland, and F. J. Malloy, Cleveland, Ohio, assignors to General Electric Company. Method of and apparatus for soldering. 1,857,182; May 10.
Doran, George F., Worcester, Mass. Refining and purification of metals. 1,857,947; May 10.
Döring, Fritz, Berlin-Frohnau, and P. Storch, Berlin-Charlottenburg, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Chemical picture telegraphy receiver. 1,857,126; May 10.
Dosne, Rene, Hawkesbury, Ontario, assignor to Canadian International Paper Company, Montreal, Canada. Preparing cellulose xanthate. 1,857,948; May 10.
Douglass Brothers Company. (See Douglass, Frank J., assignor.)
Douglass Brothers Company. (See Douglass, F. J., and McCawley, assignors.)
Douglass, Frank J., assignor to Douglass Brothers Company, Chicago, Ill. Apparatus for cutting pipe for angle bends. 1,858,076; May 10.
Douglass, Frank J., and A. S. McCawley, assignors to Douglass Brothers Company, Chicago, Ill. Pipe cutting and beveling apparatus. 1,858,077; May 10.
Douglass, Frank J., and A. S. McCawley, assignors to Douglass Brothers Company, Chicago, Ill. Apparatus for cutting and beveling pipes. 1,858,078; May 10.
Dow Chemical Company, The. (See Martin, L. F., and Elston, assignors.)
Dow, Harry E., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lip turning machine. 1,857,366; May 10.
Downey, Edward A., University City, Mo. Heater. 1,858,003; May 10.
Downing, Clifford J., North Finchley, London, assignor to The Union Cold Storage Company, Limited, London, England. Apparatus for wrapping articles. 1,858,189; May 10.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Car or table transfer means. 1,857,840; May 10.
Drake, John L., Toledo, and L. C. Mambourg, Lancaster, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,857,809; May 10.
Draper, Charles T., Cleveland Heights, Ohio, assignor to The Draper Manufacturing Company, Cleveland, Ohio. Removable head barrel. 1,857,443; May 10.
Draper Corporation. (See Leonard, Harry A., assignor.)
Draper Corporation. (See Pierce, Silas A., assignor.)
Draper Manufacturing Company, The. (See Draper, Charles T., assignor.)
Dravo Contracting Company. (See Leigh, Alfred C., assignor.)
Dreyfus, Henry, London, England. Treatment of cellulose preparatory to esterification. 1,857,183; May 10.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for treating hydrocarbons and the like. 1,857,532; May 10.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Treating hydrocarbons. 1,857,533; May 10.
Du Mont, Allen B., Montclair, and P. T. Weeks, Caldwell, N. J., assignors to Westinghouse Lamp Company. Multiple electrode radiotron. 1,857,589; May 10.
Du Pont, E. I., de Nemours & Company. (See Edmondson, William H., assignor.)
Du Pont, E. I., de Nemours & Company. (See Embardt, John C., assignor.)
Du Pont, E. I., de Nemours Company. (See Lazier, Wilbur A., assignor.)
Duratex Corporation. (See Carnegie, David, jr., assignor.)
Duro Metal Products Company. (See Odlum, W. H., and Peterson, assignors.)

Dwyer, Lawrence F. (See Rivard, Lionel I., assignor.)
Earl, David G., Long Beach, Calif. Porthole closure latch. 1,857,184; May 10.
Eason, Clarence M., assignor to Fawick Manufacturing Company, Waukesha, Wis. Friction clutch. 1,858,004; May 10.
Eastman Kodak Company. (See Darling, Frederick E., assignor.)
Eastman Kodak Company. (See Fuerst, C. C., and Christie, assignors.)
Eastman Kodak Company. (See Gray, H. I. B., Staub, and Webber, assignors.)
Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)
Eastman Kodak Company. (See Hickman, K. C. D., and Weyerts, assignors.)
Eastman Kodak Company. (See Littlefield, Laurence T., assignor.)
Eastman Kodak Company. (See Malm, C. J., and Andersen, assignors.)
Eastman Kodak Company. (See Muehler, Lowell E.)
Eastman Kodak Company. (See Stone, Herbert G., assignor.)
Eastman Kodak Company. (See Webber, C. S., Staud, and Gray, assignors.)
Eastman Kodak Company. (See Wittel, Otto, assignor.)
Eastman Kodak Company. (See Wood, Donald L., assignor.)
Eckstein, Reuben, New York, N. Y. Electric cap plug. Des. 86,910; May 10.
Economy Fuse & Manufacturing Company. (See Cherry, O. A., and Kurath, assignors.)
Edenharder, Eugene E., West Allis, Wis., assignor of one-third to H. E. Edenharder, and one-third to J. E. Edenharder. Machine for washing vegetables. 1,857,444; May 10.
Edenharder, Helen E., et al. (See Edenharder, Eugene E., assignor.)
Edenharder, Jacob E., et al. (See Edenharder, Eugene E., assignor.)
Edgar, Frank M., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Remote control lock structure for vehicle doors. 1,857,683; May 10.
Edmondson, William H., Newburg, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Equipment for vertical coating. 1,857,241; May 10.
Edmondson, William H., Newburgh, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Striping knife. 1,857,242; May 10.
Edmunds, Glenn F., Columbus, Ohio. Valve mechanism for internal combustion engines. 1,857,626; May 10.
Eger, Ernst, and S. P. Thacher, assignors to Morgan & Wright, Detroit, Mich. Tire. 1,857,144; May 10.
Eger, Georg. (See Engelhardt, V., Eger, and Hein.)
Eggert, Frederick O. E., Chicago, Ill. Gynecologic instrument. 1,857,127; May 10.
Eggleston, Lewis W., Detroit, Mich., assignor to American Radiator Company, New York, N. Y. Control means. 1,858,005; May 10.
Egloff, Gustav, Chicago, Ill., and W. R. Howard, Washington, D. C., assignors to The Universal Oil Products Company, Chicago, Ill. Process and apparatus for converting hydrocarbons. 1,857,445; May 10.
Egry Register Company, The. (See Rowe, Clement J., assignor.)
Ehret, Yale W., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash lock. 1,857,295; May 10.
Eisenlohr, Friedrich, assignor to Blechdosen-und Plakatfabrik K. G., Cannstatt, Germany. Box stamping and drawing tool. 1,857,628; May 10.
Elder, Donald, Berkeley, Calif. Hose timer. 1,857,627; May 10.
Elder, Parham M., and C. L. Orton, Portland, Oreg. Knife and knife holding means for veneer lathes. 1,857,446; May 10.
Eldridge, Jess G. (See Steiner, H. W., Eldridge, and Keys.)
Electric Arc Cutting & Welding Company. (See Holslag, Claude J., assignor.)
Elliott, Bert E., et al. (See Ferguson, Robert O., assignor.)
Elliott Company. (See McDermet, John R., assignor.)
Elliott-Fisher Company. (See Steele, Herbert H., assignor.)
Elliott, Frank M. (See Ferguson, Robert O., assignor.)
Elliott, Morgan W. (See Flynn, J. E., and Elliott.)
Ellis, George H., St. Paul, assignor to The Insulite Company, Minneapolis, Minn. Building material. 1,857,534; May 10.
Ellis, George H., St. Paul, assignor to The Insulite Company, Minneapolis, Minn. Building material. 1,858,217; May 10.
Ellison, Lewis M., Chicago, Ill. Pressure indicator. 1,857,367; May 10.
Elliston, Harold H., Independence, Kans. Evaporating apparatus. 1,857,535; May 10.
Ellzey, Esco F., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Colloidal mono-sodium tetraiodophenolphthalein 1,858,142; May 10.
Elston, Arthur A. (See Martin, L. F., and Elston.)
Emerson Apparatus Company. (See Emerson, Charles J., assignor.)
Emerson, Charles J., Winchester, assignor to Emerson Apparatus Company, Melrose, Mass. Safety razor. 1,858,223; May 10.
Emery, Frederick L. (See Van der Pyl, E., and Stimpson, assignors.)
Embardt, John C., Newburgh, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Pigmented oil composition and process of inhibiting oxidation thereof. 1,857,274; May 10.
Empire Oil and Refining Company. (See Canfield, Jesse J., assignor.)
Engel, William H., Milwaukee, Wis. Clinker tongs. 1,857,841; May 10.
Engelhardt, Victor, G. Eger, and H. Hein, Berlin-Charlottenburg, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Apparatus for electrolytically refining precious metals. 1,857,590; May 10.
Engels, Eugene O., assignor to Baker Perkins Company, Saginaw, Mich. Heating system for bake ovens. 1,857,447; May 10.
Englar, Benjamin F., Baltimore, Md. Ash riddler. 1,858,006; May 10.
Engler, Otto, Kassel-Wilhelmshohe, Germany, assignor, by mesne assignments, to The Superheater Company, New York, N. Y. Superheater installation. 1,858,143; May 10.
Epstein, David, J. H. Fowler, and C. A. Bouffler, New York, N. Y.; said Fowler and said Bouffler assignors to said Epstein. Amusement device. 1,857,629; May 10.
Erickson, Emery T., Chicago, Ill. Reducing dry gelatin to solution. 1,857,630; May 10.
Ericsson, John E. (See Lindgren, Waldemar L., assignor.)
Erie Malleable Iron Company. (See Vanderveer, Jewell W.)
Euclid Crane & Hoist Company, The. (See Armington, A. P., and Higley, assignors.)
Evans, Archibald D., assignor to The Wean Engineering Company, Warren, Ohio. Coating machine drive. 1,857,631; May 10.
Evans Case Company. (See Lagerholm, Carl J., assignor.)
Evans, David E., assignors to The Columbus Dental Manufacturing Company, Columbus, Ohio. Carding device for artificial teeth. 1,857,713; May 10.
Evans, David E., assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio. Carding device for artificial teeth. 1,857,714; May 10.
Evans, Louis M. (See Graham, G. A., Evans, and Friedman.)
Evans, Mary E., et al. (See Graham, G. A., Evans, and Friedman.)
Eyer, Carl, F. Frowein, and F. Korn, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing ballast-free solid fertilizers. 1,857,296; May 10.
Fabbrica Italiana Magneti Marelli Societa Anonima. (See Fossati, Giuseppe, assignor.)
Fagg, Mearl I. (See Ikerman, Wayne E., assignor.)
Falconer, Stuart A., Elizabeth, and L. J. Christmann, Jersey City, N. J., assignors to American Cyanamid Company, New York, N. Y. Method and agent for recovery of oxidized ores. 1,858,007; May 10.
Falkenstein, Louis F., et al. (See Hill, Edward E., assignor.)
Falvo, Pietro, Indio, Calif. Nursing bottle support. 1,857,715; May 10.
Fanselau, Werner, Berlin-Siemensstadt, assignor to Siemens & Halske Aktiengesellschaft Siemensstadt, near Berlin, Germany. Electrolytic production of tin from alkali stannate or alkali stannite lyes. 1,857,752; May 10.
Fariello, Andrew, Schenectady, N. Y. Jar holder. 1,858,144; May 10.
Farley, Francis J. (See Blum, H., and Farley.)
Farrar, Alec. (See Bennet, W., Farrar, and MacKinnon.)
Farrell, James H., Richmond, and C. T. Westmoreland, West Point, Va. Combined furniture and radio receiving apparatus. 1,857,716; May 10.
Faulkner, Charles W., Welland, Ontario, Canada. Pipe coupling. 1,857,297; May 10.
Fauntleroy, Robert R., St. Charles, Ill. Conveyer chain. 1,858,079; May 10.
Faus, Harold T. (See Kinnard, I. F., and Faus.)
Fawick Manufacturing Company. (See Eason, Clarence M., assignor.)
Federal Glass Company, The. (See Beatty, Robert J., assignor.)
Felardo, Alfred, New York, N. Y. Toy. 1,858,145; May 10.
Feldstein, Samuel. (See Scholz, A., and Frucht, assignor.)
Ferguson, Robert O., Bristol, Tenn., assignor of one-half to B. E. and F. M. Elliott, Detroit, Mich. Hygiene cabinet. 1,858,146; May 10.
Férier, Albert, assignor to Blanchini, Ferier Société en nom collectif, Lyon, France. Double twist flyer spinning machine. 1,858,205; May 10.
Fiala, Joseph F., Solon, Iowa. Combination grass and grain planter. 1,857,536; May 10.
Finley, Dozier, Berkeley, Calif., assignor, by mesne assignments, to Toledo Scale Manufacturing Co., Toledo, Ohio. Making paper. 1,857,275; May 10.
Firth-Smith Company. (See Smith, Joseph J., assignor.)

Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Roof covering. 1,858,224; May 10.
Fischer, Ernst. (See Meissner, T., Heyna, and Fischer.)
Fiske, Augustus H., Warren, and C. S. Bryan, East Providence, assignors to Rumford Chemical Works, Rumford, R. I. Purification of phosphoric acid. 1,858,203; May 10.
Flagstad, Oscar A., Minneapolis, and R. G. Lee, Hoffman, Minn. Dental crown remover. 1,858,080; May 10.
Flagstad, Oscar A., Minneapolis, and R. G. Lee, Hoffman, Minn. Dental crown remover. 1,858,081; May 10.
Flaherty, Harold J., Swampscott, Mass., assignor to General Electric Company. Vibration absorbing mounting. 1,857,185; May 10.
Fleming, Elmer A. (See Corley, C., and Fleming.)
Flodin, Henning G., and E. G. T. Gustafsson, Stockholm, Sweden. Producing iron or steel alloys. 1,857,779; May 10.
Flynn, John B., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Door latch. 1,857,684; May 10.
Flynn, John E., Detroit, Mich., and M. W. Elliott, Lexington, Ky. Curtain device. 1,857,368; May 10.
Focarucci, Ralph, Miami, Fla. Hinge for window screens. 1,857,717; May 10.
Fogal, Jay R., San Francisco, Calif. Fuse. 1,857,298; May 10.
Folker, Howard S., Mill Valley, Calif., assignor to National Safety Appliance Company, Reno, Nev. Train control system. 1,856,186; May 10.
Fonseca, Edward L., assignor to The Wilcolator Company, Newark, N. J. Thermostatic control mechanism. 1,857,187; May 10.
Food Machinery Corporation. (See Lewis, Frank H., assignor.)
Forbidussi, Ubaldo, Delcarbon, Colo. Fruit crusher. 1,858,147; May 10.
Ford, Bruce, Philadelphia, and W. H. Bancroft, Bryn Athyn, Pa. Storage battery. 1,857,591; May 10.
Forse, Edwin B., and C. F. Geiger, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y. Tunnel kiln. 1,858,008; May 10.
Fossati, Giuseppe, Monza, Italy, assignors to Fabbrica Italiana Magneti Marelli Societa Anonima. Ignition magneto. 1,857,718; May 10.
Foster, Thomas J., Ridgewood, N. J. Sound-proof building construction. 1,857,369; May 10.
Foucault, Edouard, Paris, France, assignor to General Electric Company. Time delay device. 1,858,082; May 10.
Foundation Oven Corporation. (See Schrader, L. F., and Wright, assignors.)
Fowler, James H. (See Epstein, D., Fowler, and Bouffier.)
Francois Cementation Company, Limited, The. (See Degenhardt, W. R., De Frahe, and Bicknell.)
Frank, Frederick J., Elizabeth, and F. J. Shock, Secaucus, N. J. Thieving tube. 1,857,537; May 10.
Frankignoul, Edgard, Brussels, assignor to Compagnie Internationale des Pieux Armes Frankignoul, Societe Anonyme, Liege, Belgium. Method and device for the production of piles of concrete and the like. 1,858,204; May 10.
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frappier, Louis S., and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Friction drive for motion picture machines. 1,857,780; May 10.
Frazier, Pearl G., Polk City, Iowa. Accelerator for internal combustion engines. 1,857,448; May 10.
Frederick, Louis T., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del. Machine for forming commutator rings. 1,858,225; May 10.
Freese, Selma M., Temperance, Mich. Artificial flowers and making them. 1,858,148; May 10.
Freydberg Bros. Inc. (See Freydberg, Eli, assignor.)
Freydberg, Eli, assignor to Freydberg Bros. Inc., New York, N. Y. Siftproof bag and making the same. 1,857,949; May 10.
Frick, Chester A., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Coin box. 1,858,190; May 10.
Fridaker, Albert B., et al. (See Clark, Malcolm S., assignor.)
Fried, Jerome A., and C. Schroder, assignor, by mesne assignments, to Morse Products, Inc., Ithaca, N. Y. Adding machine. 1,857,299; May 10.
Fried. Krupp Grusonwerke A. G. (See Holzapfel, Karl E. E., assignor.)
Friedman, Joseph B., Los Angeles, Calif. Dispensing device. 1,857,685; May 10.
Friedman Silver Co. (See Budd, Howard L., assignor.)
Friedman, William, New York, N. Y. Toilet accessory. 1,858,218; May 10.
Friedman, William F. (See Graham, G. A., Evans, and Friedman.)
"Friend" Manufacturing Company. (See Hull, John C., assignor.)
Frost, Robert J., Clayton, Victoria, Australia. Electrolytic production of white lead. 1,857,950; May 10.
Frowein, Friedrich. (See Eyer, C., Frowein, and Korn.)
Frucht, Henry. (See Scholz, A., and Frucht.)
Fuerst, Carl C., and J. Christie, assignors to Eastman Kodak Company, Rochester, N. Y. Body construction for cameras. 1,857,502; May 10.
Fulkerson, Wilmer A., and C. I. Bain, Brookfield, Mo. Curtainless sand blast nozzle control. 1,857,188; May 10.
Fuller, James W., Estate of. (See Kinyon, Alonzo G., assignor.)
Funk, Levi L., Chicago, Ill. Tongue and mouth cleaner. 1,857,145; May 10.
Funsten, Stanard R., Haverford, and I. M. Perkins, Penfield, assignors to The Atlantic Refining Company, Philadelphia, Pa. Removal of wax from oil. 1,857,370; May 10.
G-M Laboratories, Inc. (See McMaster, Archie J., assignor.)
G-M Laboratories, Inc. (See McMaster, A. J., and Parson, assignors.)
Gabriel, Adam. (See Gibson, W. C., and Gabriel.)
Gadd, William E., Glen Olden, Pa. Field template for rails and joints. 1,857,951; May 10.
Gadd, William E., Glen Olden, Pa., assignor to The Rail Joint Company, New York, N. Y. Shimmed rail joint. 1,857,952; May 10.
Gall, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Mechanism for sewing mattresses. 1,857,371; May 10.
Gallagher, George F., Albany, N. Y. Lubricant. 1,857,501; May 10.
Gardiner, Robert F. (See Walton, G. P., and Gardiner.)
Gardner, Cummings, Los Angeles, Calif. Combined cigarette case and lighter. 1,857,243; May 10.
Gardner, Prince A., jr., St. Louis, Mo. Key case. 1,857,146; May 10.
Gausche, Julius A., Racine, Wis. Land pulverizer and packer. 1,857,753; May 10.
Gee, William P., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Filtration. 1,857,810; May 10.
Geertz, Eric. (See Lambert, E. H., Skinner, Geertz, and Williams.)
Gehrke, Max. (See Schoeller, W., and Gehrke.)
Geiger, Charles F. (See Forse, E. B., and Geiger.)
General Aniline Works, Inc. (See Berliner, Robert, assignor.)
General Aniline Works, Inc. (See Heimann, H., and Virck, assignors.)
General Aniline Works, Inc. (See Hentrich, W., Burr, and Schweitzer, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)
General Aniline Works, Inc. (See Laska, L., and Haller, assignors.)
General Aniline Works, Inc. (See Meissner, T., Heyna, and Fischer, assignors.)
General Aniline Works, Inc. (See Steiger, Norbert, assignor.)
General Aniline Works, Inc. (See Zitscher, A., and Muris, assignors.)
General Chemical Company. (See Isenberg, Hans O. C., assignor.)
General Chemical Company. (See Kunkel, Richard C., assignor.)
General Electric Company. (See Acheson, Marcus A., assignor.)
General Electric Company. (See Alexanderson, Ernst F. W., assignor.)
General Electric Company. (See Byrnes, Irving F., assignor.)
General Electric Company. (See Donovan, J. F., and Malloy, assignors.)
General Electric Company. (See Flaherty, Harold J., assignor.)
General Electric Company. (See Foucault, Edouard, assignor.)
General Electric Company. (See Hopp, Wilhelm, assignor.)
General Electric Company. (See Hull, Albert W., assignor.)
General Electric Company. (See Johnston, Arthur J., assignor.)
General Electric Company. (See Kell, Ray D., assignor.)
General Electric Company. (See Kinnard, I. F., and Faus, assignors.)
General Electric Company. (See Knoderer, Homer G., assignor.)
General Electric Company. (See McEachron, Karl B., assignor.)
General Electric Company. (See Proctor, J. A., and Bailey, assignors.)
General Electric Company. (See Reimann, Erich, assignor.)
General Electric Company. (See Ruder, William E., assignor.)
General Electric Company. (See St. Clair, Byron W., assignor.)
General Electric Company. (See Seiz, Walter, assignor.)
General Electric Company. (See Severin, C. and Peters, assignors.)
General Electric Company. (See Smithells, Colin J., assignor.)
General Electric Company. (See Thumin, Carl, assignor.)
General Electric Company. (See van Llempt, Johannes A. M., assignor.)

General Electric Company. (See Warren, Glenn B., assignor.)
General Electric Company. (See Zucker, Myron, assignor.)
General Motors Corporation. (See Rubert, Harold H., assignor.)
General Talking Pictures Corporation. (See Burnside, James H., assignor.)
George, Arthur M., assignor to Armstrong Cork Company, Lancaster, Pa. Linoleum and similar hard surfaced floor covering. 1,857,811; May 10.
Gerling, Fred A., Boise, Idaho. Fluid pressure engine. 1,857,719; May 10.
Gerling, Fred A., Boise, Idaho. Rotary fluid compressor. 1,857,720; May 10.
Gerth, Ruth, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Receptacle for ashes and other material. Des. 86,911; May 10.
Gertsfeld, Esther, New York, N. Y. Necktie. 1,858,009; May 10.
Ghrist, David M., Glendale, Calif. Combined sinus and mastoid headrest. 1,857,503; May 10.
Gibson, William C., and A. Gabriel, Chicago, Ill., assignors of one-third to Acme Industrial Co. Compressor. 1,857,276; May 10.
Gifford-Wood Company. (See Stair, Daniel E., assignor.)
Gifford-Wood Company. (See Stair, D. E., and McDonald, assignors.)
Gifford Wood Company. (See Uline, Michiel J., assignor.)
Gillespie, Charles E., Seymour, Ind. Compartment building. 1,857,189; May 10.
Gillette Safety Razor Company. (See Smith, Theodore L., assignor.)
Girvin, Charles W., Long Beach, assignor of forty per cent to Levering Lawrason, Los Angeles, Calif. Purifying and drying crude iodine. 1,857,632; May 10.
Giszti, John, Corona, N. Y. Fountain brush. 1,857,300; May 10.
Glascock Brothers Manufacturing Company. (See Frick, Chester A., assignor.)
Glass, Richard J., Columbus, Ohio. Fluid motor. 1,858,043; May 10.
Gleason, Dora P., White Plains, N. Y. Utensil. 1,857,372; May 10.
Gleason Works. (See Head, Ernest C., assignor.)
Globe-Union Mfg. Co. (See Coldwell, John S., assignor.)
Glomstead, Edwin E., Menasha, Wis., assignor to International Cellucotton Products Company, Chicago, Ill. Sanitary napkin. 1,857,854; May 10.
Godfrey, William P., Brooklyn, N. Y. Window. 1,858,149; May 10.
Goerg, Bernhard, Mount Vernon, W. R. Zuhlke, Yonkers, N. Y., and W. E. Kugeman, jr., Paris, France, assignors, by mesne assignments, to National Automatic Container Corporation, Baltimore, Md. Package container. 1,858,198; May 10.
Goggins, Michael, Roswell, N. Mex. Hay baler and loader. 1,857,373; May 10.
Goldenbaum, Frederick C., Kearny, N. J., assignor to Herbert Photos, Inc., New York, N. Y. Producing printing plates. 1,857,842; May 10.
Goldsmith, George H., Toronto, Ontario, Canada. Compound for preparing molds for metal castings. 1,858,083; May 10.
Goldsmith, P., Sons Company, The. (See Sonnett, William A., assignor.)
Goodrich, B. F., Company, The. (See Graham, Thornton G., assignor.)
Goodwin, Arthur C., and T. H. Barnard, Toronto, Ontario, Canada. Suspension clamp for electric conductors. 1,857,277; May 10.
Goodyear, Lloyd E., Chicago, Ill. Loose leaf binder. 1,857,843; May 10.
Goodyear Tire & Rubber Company, The. (See Brown, Harold M., assignor.)
Goodyear Tire & Rubber Company, The. (See Sebrell, Lorin B., assignor.)
Goodyear Tire & Rubber Company, The. (See Williams, Dayton L., assignor.)
Goodyear's India Rubber Glove Mfg. Company, The. (See Hubbell, Clarence W., assignor.)
Gorban, Adolf, Liesing, near Vienna, Austria, assignor, by mesne assignments, to Firm Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Concentrating volatile aliphatic acids. 1,858,150; May 10.
Gordan, Adolf, Liesing, near Vienna, Austria, assignor, by mesne assignments, to Firm of Deutsche-Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Concentrating volatile aliphatic acids. 1,858,151; May 10.
Gose, Paul A., et al. (See Pinckard, William P., assignor.)
Gosse, William C., San Francisco, Calif. Dental bridge investment support. 1,857,538; May 10.
Gouge, Pierre, assignor to Societe Metallurgique de Normandie, Paris, France. Device for automatically advancing perforating hammers by sliding on a support. 1,857,686; May 10.
Gough, Arthur C., assignor to Shaw Crane-Putnam Machine Company, Inc., Fitchburg, Mass. Multiple spindle boring machine. 1,857,953; May 10.
Government and People of the United States of America. (See Parshall, Ralph L., assignor.)
Graham, George A., Washington, D. C., L. M. Evans, deceased, Alexandria, Va., and W. F. Friedman, Washington, D. C.; Citizens National Bank and M. E. Evans, executors. Cryptograph enciphering and deciphering device. 1,857,374; May 10.
Graham, Thornton G., Kent, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Pneumatic tire. Des. 86,912; May 10.
Gramsa, Joseph G., assignor of one-half to E. B. Chapman, Buffalo, N. Y. Motion picture film cleaner. 1,857,633; May 10.
Graves, Rose M., assignor, by mesne assignments, to Associated Apparel Industries, Inc., Chicago, Ill. Foundation garment. 1,857,147; May 10.
Graves, Rose M., assignor to Associated Apparel Industries, Inc., Chicago, Ill. Foundation garment. 1,857,148; May 10.
Gray, Harry L. (See Webber, C. S., Staud, and Gray.)
Gray, Harry L., C. J. Staud, Rochester, N. Y., and C. S. Webber, Springfield, Mass., assignors to Eastman Kodak Company, Rochester, N. Y. Hydrolysis of cellulose acetate. 1,857,190; May 10.
Gray Processes Corporation, The. (See Pease, Harry, assignor.)
Greve, Edgar E., Bellevue, assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa. Method of and apparatus for automatically raising liquids from wells. 1,857,634; May 10.
Grizey, George J., assignor to Hartford-Empire Company, Hartford, Conn. Ware stacking mechanism. 1,858,010; May 10.
Grob, Hugo, Berlin, Germany. Device for testing electric voltage regulators. 1,857,149; May 10.
Guardian Trust Company, The, et al., executors. (See Wilderson, Clinton G., assignor.)
Gueovjian, John G., New York, N. Y. Halftone screen. 1,858,011; May 10.
Gullett Gin Company. (See Wallace, Jeffrey J., assignor.)
Gullette, Willis. (See Herthel, E. C., and Gullette.)
Gunderson, Norris E., St. Louis, Mo. Pumping system. 1,857,954; May 10.
Gustafsson, Emil G. T. (See Flodin, H. G., and Gustafsson.)
Güttinger, Heinrich, Wettingen, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electric regulator. 1,857,449; May 10.
Hadley, Beryl L. (See Hadley, Clair H. and B. L.)
Hadley, Clair H. and B. L., Paonia, Colo. Automatic circuit breaker. 1,858,191; May 10.
Hadsel, Alvah D., San Francisco, Calif. Centrifugal rock crusher. 1,857,539; May 10.
Haggard, Howard W. (See Henderson, Y., and Haggard.)
Haglund, Ture R., Stockholm, Sweden. Production of aluminum oxide and other aluminum combinations. 1,857,844; May 10.
Haigh, Leslie B. (See Baker, J. H. E., and Haigh.)
Halbilter, Percy H., Los Angeles, Calif. Game board. Des. 86,913; May 10.
Hall, Benjamin J., London, England. Cooling apparatus. 1,857,721; May 10.
Hall, Charles W., Larchmont, N. Y. Riveted joint. 1857,754; May 10.
Hall, Harold A., Los Gatos, Calif. Adjustable pitch propeller. 1,857,755; May 10.
Haller, Oskar. (See Laska, L., and Haller.)
Hallowell, Howard T., and F. Bennett, assignors to Standard Pressed Steel Co., Jenkintown, Pa. Portable sign frame. 1,858,152; May 10.
Halterbeck, John J., Long Island City, N. Y. Aquarium. Des. 86,914; May 10.
Hamel, L. H., Leather Co. (See Berry, Guy H., assignor.)
Hamilton, Francis F., Indianapolis, Ind. Exhaust gas silencer. 1,857,845; May 10.
Hamilton, Samuel A. B., jr., Fort Worth, Tex. Differential for motor vehicles. 1,857,955; May 10.
Hammond, Emmett K., Newport News, Va. Number work dial. 1,858,153; May 10.
Hammond, John H., jr., Gloucester, Mass. Torpedo. 1,857,150; May 10.
Hammond, Milton B., assignor to Wolverine Bumper & Specialty Company, Grand Rapids, Mich. Automobile bumper. 1,857,635; May 10.
Hanks, George R., Clinton, N. J., assignor to The Linn Manufacturing Corporation, Morris, N. Y. Tractor. 1,858,154; May 10.
Hannon, Albert H., Springfield, Ohio. Electrolytic processing machine. 1,858,012; May 10.
Hansen, Edmund H., New York, N. Y. Electric system for recording and reproducing sound. 1,857,451; May 10.
Hansen, Oswald H., Cedarburg, Wis. Heat treating edible substances. 1,857,450; May 10.
Hanyzer, Bruno, Tempelhof, near Berlin, and R. Behm, Charlottenburg, near Berlin, assignors to the Firm Multiplex Gasfernzunder-Gesellschaft m. b. H., Berlin, Germany. Electrically heatable kitchen utensil. 1,857,781; May 10.
Hardcastle, Jasper A., Damon, assignor of one-fourth to J. H. Hardcastle, Houston, Tex., and one-fourth to R. L. Waxler. Apparatus and process for cementing wells. 1,857,201; May 10.
Hardcastle, Jesse H., et al. (See Hardcastle, Jasper A., assignor.)

Hardenberg, Jan J. C., Eindhoven, assignor to L. A. Nypels, The Hague, Netherlands. Device for manufacturing hollow glass bodies by means of pressing and blowing. 1,857,540; May 10.
Harder, Frank, Huntington Beach, J. B. Watson, Garden Grove, and C. W. Middleton, Long Beach, Calif.; said Middleton assignor to said Harder and said Watson. Beam counterbalance. 1,857,191; May 10.
Harnischfeger Corporation et al. (See Clark, Malcom S., assignor.)
Harris, Cleo, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio. Greasing apparatus. 1,858,155; May 10.
Hart & Hutchinson Company, The. (See Steele, Maurice G., assignor.)
Hartfield, August J., and M. Koehler, Huntington Park, Calif. Thermostatic control for burners. 1,857,504; May 10.
Hartford-Empire Company. (See Grizey, George J., assignor.)
Hartford-Empire Company. (See Lorenz, Edward H., assignor.)
Hartford-Empire Company. (See Peller, Karl E., assignor.)
Hartman, Jacob W., jr., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 86,915; May 10.
Haskelite Manufacturing Corporation. (See Meyercord, G. R., and Basquin, assignors.)
Hasler A.-G. vormals Telegraphenwerkstatte von G. Hasler. (See Kohler, Ulrich, assignor.)
Hathaway, Robert J., jr., Chicago, Ill. Wind instrument. 1,857,908; May 10.
Hauser, James J., New York, N. Y. Fuel injector nozzle for internal combustion engines. 1,857,192; May 10.
Hausman, Sidney, Arlington, N. J., and W. Velt, New York, N. Y. Ratio meter. 1,857,452; May 10.
Havill, Clinton H., Orange, N. J., assignor to The American Propeller Company, Baltimore, Md. Propeller. 1,857,909; May 10.
Hawkins, Percy O., Hammond, Ind., assignor of one-half to G. A. Rust, Worth, Ill. Excavating machine 1,857,302; May 10.
Hawkins, Roy A., Inspiration, Ariz., and H. W. Mossman, McGill, Nev. Furnace feeding apparatus. 1,857,592; May 10.
Haworth, John R. (See Chorlton, F. O. L., and Haworth.)
Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Method of and apparatus for burnishing gears. 1,858,044; May 10.
Headley, William R., Glendale, Calif. Vertically movable hinged panel door. 1,857,756; May 10.
Heat Treating Company. (See Laird, Wilbur G., assignor.)
Heldbrink, Jay A., Minneapolis, Minn. Pressure regulating device for gases. 1,858,084; May 10
Helde, Oscar S., Chicago, Ill. Outboard motor. 1,857,636; May 10.
Helman, Sidney J., St. Louis, Mo. Oil burner. 1,857,846; May 10.
Helmann, Heinrich. (See Pahl, A., and Helmann.)
Heimann, Heinrich, and P. Virck, Dessau in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Arylated aminonaphthalene derivatives. 1,857,541; May 10.
Heimann, Heinrich, and P. Virck, Dessau in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Amino arylated amino naphthalene derivatives. 1,857,542; May 10.
Hein, Herbert. (See Engelhardt, V., Eger, and Hein.)
Heineman, Warren F., Shorewood, assignor to A. O. Smith Corporation, Milwaukee, Wis. Butt welding by means of a flashing electric arc. 1,857,505; May 10.
Heinemann, Julius A., Chicago, Ill. Jointed bracket. 1,857,847; May 10.
Heins, Harry J., Jersey City, N. J., assignor to Knyp-Scheerer Corporation, New York, N. Y. Sterilizer door. 1,858,013; May 10.
Heitger, Frank H., Flint, Mich. Carburetor. 1,857,245; May 10.
Heitger, Frank H., Flint, Mich. Carburetor. 1,857,543; May 10.
Heller, Herbert J. (See Steindorff, U. F. L., Heller, and Ungar.)
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,857,151; May 10.
Hem, Halvor O., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,857,278; May 10.
Hendee, Lem E., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Wire support. 1,858,045; May 10.
Henderson, John, Cadillac, Mich. Brooder stove. 1,857,544; May 10.
Henderson, Yandell, New Haven, and H. W. Haggard, Woodbridge, Conn. Tent-head fixture for inhalational therapy. 1,857,453; May 10.
Hentrich, Winfrid, Erlangen, K. Burr, and H. Schweitzer, Leverkusen-Wiesdorf, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New monoazodyestuffs. 1,857,244; May 10.
Herbert Photos, Inc. (See Goldenbaum, Frederick C., assignor.)
Herman, John, Los Angeles, Calif. Gun sight. 1,857,782; May 10.
Hermsmeyer, William G., Fort Worth, Tex. Heat reducing structure for explosive engines. 1,857,303; May 10.
Herr, Charles A., Clayton, Mo. Folding envelope or similar article. Des. 86,916; May 10.
Herr, Herbert T., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Engine crank shaft. 1,858,014; May 10.
Hersey Manufacturing Company. (See Hersey, Walter A., assignor.)
Hersey, Walter A., Wellesley, assignor to Hersey Manufacturing Company, South Boston, Mass. Liquid dispensing apparatus. 1,858,206; May 10.
Herthel, Eugene C., Chicago, Ill., and W. S. Gullette, Highland, Ind., assignor to Sinclair Refining Company, New York, N. Y. Valve.. 1,857,279; May 10.
Heyna, Hans. (See Meissner, T., Heyna, and Fischer.)
Hiatt, John R., Indianapolis, and C. R. Wicker, Carmel, Ind. Process and apparatus for cleaning waste. 1,857,812; May 10.
Hice, Cornelius B., Humble, Tex. Protector. 1,857,304; May 10.
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Vacuum pump. 1,857,506; May 10.
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Evacuating. 1,857,508; May 10.
Hickman, Kenneth C. D., and W. J. Weyerts, assignors to Eastman Kodak Company, Rochester, N. Y. Separation of silver by electrolysis. 1,857,507; May 10.
Hickok, Noah A., Oakland, Calif. Automatic circuit breaker. 1,857,637; May 10.
Hicks, Earl M. (See Batty, Bernard R., assignor.)
High, Andrew, Detroit, Mich. Terminal connecter and support for line wires. 1,857,956; May 10.
Higley, Frank R. (See Armington, A. P., and Higley.)
Hill, C. V., & Co. (See Hill, Clement V., assignor.)
Hill, Clement V., assignor to C. V. Hill & Co., Inc., Trenton, N. J. Refrigerator show case. 1,857,545; May 10.
Hill, Edward E., Forest Hills, N. Y., assignor of thirty per cent to A. F. Lochendorfer, Hoboken, N. J., and thirty per cent to L. F. Falkenstein, Flushing, N. Y. Tester for watt hour meters and the like. 1,857,593; May 10.
Hill, Robert, Oakland, Calif. Rudder post attachment. 1,858,046; May 10.
Hill, Walter P. (See Koehler, G., jr., and Hill.)
Hillmer, Herman H., assignor to Jubilee Manufacturing Co., Omaha, Nebr. Strip paper sealer. 1,858,207; May 10.
Hills-McCanna Company. (See Buenger, Clarence O., assignor.)
Hinrichsen, Edward E., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Communication system. 1,857,848; May 10.
Hirschl, Marcus A., Chicago, Ill. Celestial globe. 1,857,546; May 10.
Hirschl, Marcus A., Chicago, Ill. Candle. 1,857,957; May 10.
Hirt, Andrew, New York, N. Y. Keyless switch. 1,857,638; May 10.
Hlavaty, Charles, New York, N. Y. Rotary radiator. 1,858,226; May 10.
Hobby, Harold E. (See Watkins, E. G., and Hobby.)
Hochman, Julius C., and G. O. Degener, New York, N. Y., assignors of three-fourths to said Hochman and one-fourth to M. Samburg. Computing machine. 1,857,454; May 10.
Hodgson, James F., Minersville, Pa. Power saw. 1,858,015; May 10.
Hoffman, Edward L., Dayton, Ohio. Combination parachute harness. 1,857,375; May 10.
Hoffmann-La Roche Inc. (See Aeschlimann, John A., assignor.)
Hojnowski, Jakob, Nekoosa, Wis. Helicopter. 1,857,849; May 10.
Hol, John C. (See De Jarnette, Henry W., assignor.)
Holcroft & Company. (See Ruckstahl, Alfred, assignor.)
Holland, Nathaniel G., assignor to Old Dominion Marine Railway Corporation, Norfolk, Va. Heating furnace. 1,858,156; May 10.
Holliday, Joseph W., Red Wing, Minn. Currency tray. 1,857,305; May 10.
Holman, Arthur J., Brighton, Mass. Combined focus and image placement adjustment means for moving picture projectors. 1,857,152; May 10.
Holmstrom, Axel, Monte Carlo, Monaco. Propeller or turbine for water, air, and gases. 1,857,509; May 10.
Holslag, Claude J., South Orange, assignor to Electric Arc Cutting & Welding Company, Newark, N. J. Arc welding system. 1,857,306; May 10.
Holzapfel, Karl E. E., Munster, assignor to Fried. Krupp Grusonwerk A. G. Magdeburg-Buckau, Germany. Rotary drum. 1,857,785; May 10.
Hookless Fastener Company. (See Sundback, Gideon.)
Höpp, Wilhelm, Heiligensee, A E G Siedlung, Germany, assignor to General Electric Company. Mercury arc rectifier support. 1,857,193; May 10.
Horn, William W., River Forest, Ill. Folding stand. 1,858,085; May 10.

House, Charlie E., Farmington, Iowa. Bakers' proofing cabinet. 1,858,086; May 10.
Howard, Christian C., Great Falls, Mont. Insect trap. 1,858,087; May 10.
Howard, Harry C., Rockwood, Tenn. Stove latch. 1,858,088; May 10.
Howard, William R. (See Egloff, G., and Howard.)
Howell, George A., Rock Hill, S. C. Support. 1,857,722; May 10.
Howey, Claude D., Newcastle, Wyo. Stacker. 1,858,089; May 10.
Hoy, Austin Y., London, England, assignor to Sullivan Machinery Company, Chicago, Ill. Mining machine. 1,857,376; May 10.
Hubbell, Clarence W., assignor to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn. Bathing shoe. 1,857,153; May 10.
Hubbell, Harvey, Inc. (See Hubbell, H., jr., and Avery, assignors.)
Hubbell, Harvey, jr., Bridgeport, Conn. Floor receptacle mount. 1,857,377; May 10.
Hubbell, Harvey, jr., Bridgeport, Conn. Baseboard wiring device. 1,857,378; May 10.
Hubbell, Harvey, jr., Bridgeport, Conn. Power steering gear. 1,857,380; May 10.
Hubbell, Harvey, jr., and C. E. Avery, assignors to Harvey Hubbell, Inc., Bridgeport, Conn. Switch handle. 1,857,379; May 10.
Hudson, William W., Salt Lake City, Utah. Stoker motor control. 1,857,307; May 10.
Huebner-Bleistein Patents Company. (See Huebner, William C., assignor.)
Huebner, William C., Chicago, Ill., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y. Negative holder for photographic printing machines. 1,857,381; May 10.
Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Oscillation generator. 1,857,194; May 10.
Hull, John C., assignor to "Friend" Manufacturing Company, Gasport, N. Y. Fruit and vegetable dusting apparatus. 1,858,090; May 10.
Humphries, Chad H., assignor to Metals Protection Corporation, Indianapolis, Ind. Chromium plating. 1,857,547; May 10.
Humphries, Chad H., assignor to Metals Protection Corporation, Indianapolis, Ind. Technically pure CrO_3. 1,857,548; May 10.
Humphris Frank, Parkstone, Dorset, England. Brick block, slab, and the like. 1,858,091; May 10.
Hunter, Samuel, Bellevue, assignor to Armstrong & White, Pittsburgh, Pa. Mortising machine. 1,858,783; May 10.
Hurt, Samuel N., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Height measuring device. 1,857,280; May 10.
Huss, Adolph E., Davenport, Iowa. Safety latch for windows. 1,857,958; May 10.
Hutchings, Le Roi E., Tonawanda, assignor to Remington Rand Inc., Buffalo, N. Y. Card holder. 1,858,219; May 10.
Hutchinson, Thomas S., Chicago, Ill. Ejector fork. 1,857,455; May 10.
Hybinette, Noak V., Wilmington, Del., assignor to The Nieralumin Company. Heat treatment of strong aluminum alloys. 1,858,092; May 10.
Hyde, Louis B., Detroit, Mich. Electric heater. 1,857,510; May 10.
Hyman, Henry. (See Muldoon, Bernard F., assignor.)
Hyman, Henry. (See Post, Albert H., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Beck, C., and Weissbach, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Eyer, C., Frowein, and Korn, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Laux, Julius, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Nicodemus, O., and Schmidt, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Rosenthal, Leo, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schlecht, L., Keunecke, and Schubardt, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schubardt, Walter, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Sponsel, Kurt, and Jochum, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Winkler, Fritz, assignor.)
Ikerman, Wayne E., assignor of forty per cent to M. L. Fagg, Butte, Mont. Airplane kite. 1,857,687; May 10.
Im Oberstag, Arthur G., Detroit, Mich. Airplane propeller. 1,857,473; May 10.
Impey, Robert R., San Francisco, and R. Whipple, Mill Valley, Calif. Dental matrix retainer. 1,857,910; May 10.
India Rubber Gutta Percha and Telegraph Company Limited. (See Phillips, Edward A., assignor.)
Infallible Car Selecting Company Limited. (See Taylor, Edgar W., assignor.)
Ingersoll, Homer H., assignor to Animated Displays, Incorporated, Chicago, Ill. Display apparatus. 1,858,208; May 10.
Ingersoll-Rand Company. (See Trumpler, William E., assignor.)
Ingram, Franklin W. (See Ingram, Walter L., assignor.)
Ingram, Walter L., assignor of one-half to F. W. Ingram, Chicago, Ill. Tire valve. 1,857,382; May 10.
Insulite Company, The. (See Ellis, George H., assignor.)
International Bitumenoil Corporation. (See Vandegrift, James N., assignor.)
International Cellucotton Products Company. (See Glomstead, Edwin E., assignor.)
International Combustion Engineering Corporation. (See Lundgren, Edwin, assignor.)
International Motor Company. (See Robbins, Azor D., assignor.)
International Precipitation Company. (See von Eberhard, Kurt, assignor.)
International Projector Corporation. (See Frappier, L. S., and Boecking, assignors.)
International Silica Corporation. (See McAdoo, Thomas O., assignor.)
International Standard Electric Corporation. (See Baker, J. H. E., and Haigh, assignors.)
International Standard Electric Corporation. (See Wright, Esmond P. G., assignor.)
Intertype Corporation. (See Sperry, Samuel E., assignor.)
Inventions Exploitation Corporation, The. (See Davison, Alexander, assignor.)
Ioannu, John P., assignor to Pennsylvania Salt Manufacturing Company, Philadelphia, Pa. Process and composition for improving cereal products. 1,858,093; May 10.
Iorio, Anthony, Corona, N. Y. Incense burner. Des. 86,917; May 10.
Ireland, George E., assignor, by mesne assignments, to The City Auto Stamping Company, Toledo, Ohio. Sheet metal die. 1,858,047; May 10.
Iruz, Angel R., Torreon, Mexico. Pneumatic tire. 1,858,094; May 10.
Irwin, Herbert G., Amarillo, Tex. Shield for carbide feeds in acetylene generators. 1,857,456; May 10.
Isenberg, Hans O. C., New Rochelle, assignor to General Chemical Company, New York, N. Y. Catalytic apparatus. 1,857,308; May 10.
Isler, Samuel, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Curve plotting system. 1,857,959; May 10.
Jackson, Walter S. (See Wensley, A. G., and Jackson.)
Jacobs, E. H., Mfg. Co. (See Chadbourne, Joseph H., assignor.)
Jacobs, Isidor, Union City, N. J. Fastener. 1,857,309; May 10.
James, Joseph H., Pittsburgh, assignor to C. P. Byrnes, trustee, Sewickley, Pa. Making partial oxidation products. 1,858,095; May 10.
Janeke, Benno, F., Brooklyn, assignor to Townsend Manufacturing Company, Inc., New York, N. Y. Heater element for permanent waving of hair. 1,857,639; May 10.
Jenkins, C. Francis, Inc. (See Jenkins, Charles F., assignor.)
Jenkins, Charles F., assignor to C. Francis Jenkins, Inc., Washington, D. C. Aeroplane engine exhaust. 1,858,048; May 10.
Jereczek, Viktor, Berlin-Steglitz, Germany. Grinding machine. 1,857,549; May 10.
Jochum, Kurt. (See Sponsel, K., and Jochum.)
Johansson, Johan W., Bankeryd, Sweden. Manufacture of strip matches. 1,857,723; May 10.
Johnson, Arthur F. (See Johnson, Fredolph, H. W., and A. F.)
Johnson, Carl A., Celoron, assignor to Art Metal Construction Company, Jamestown, N. Y. Metal filing cabinet. 1,857,640; May 10.
Johnson, Carl E., Coronado, Calif. Grass trimmer for sprinkling system nozzles. 1,857,383; May 10.
Johnson, Christian E., assignor to Deere & Company, Moline, Ill. Cultivating implement. 1,857,384; May 10.
Johnson, Earle F., New York, N. Y. Window ventilator. 1,857,911; May 10.
Johnson, Edward, New Rochelle, N. Y. Resistance eliminator for aircraft and water craft. 1,857,960; May 10.
Johnson, Fredolph, H. W., and A. F., Little Falls, Minn. Litter remover. 1,857,550; May 10.
Johnson, George, Los Angeles, Calif. Ash tray. Des. 86,918; May 10.
Johnson, Harry W. (See Johnson, Fredolph, H. W., and A. F.)
Johnson, John C., Glen Cove, N. Y. Acoustic device. 1,857,641; May 10.
Johnson & Johnson. (See Dailey, Frank L., assignor.)
Johnson Metal Products Co. (See Johnson, Theodore, assignor.)
Johnson, Nathan C., Englewood, N. J. Tap surface of concrete and the like and forming the same. 1,857,511; May 10.
Johnson, Reginald H., Maplewood, N. J., assignor to American Hair & Felt Company, Chicago, Ill. Gun wad material. 1,857,281; May 10.
Johnson, Theodore, assignor to Johnson Metal Products Co., Erie, Pa. Window screen. 1,858,227; May 10.
Johnston, Arthur J., Aldan, Pa., assignor to General Electric Company. Ticket issuing machine. 1,858,049; May 10.
Jones, Albert E., assignor to The Whitehead Torpedo Company Limited, Westminster, England. Calculating and similar machine. 1,857,642; May 10.

Jones, Noah M., Baltimore, Md. Anchorage and product thereof. 1,857,912; May 10.
Jones, Ralph R., Lake Forest, Ill. Football guard. 1,857,850; May 10.
Jones, Walter L., St. Louis, Mo. Tire deflation indicator. 1,857,551; May 10.
Jordan, Hans. (See Schwenk, E., and Jordan.)
Jordhoy, Hans C. (See Tornberg, I., and Jordhoy.)
Jubilee Manufacturing Co. (See Hillmer, Herman H., assignor.)
Judd, H. L., Company. (See Vroom, Robert D. W., assignor.)
Judelson, Julius, New York, N. Y. Booth construction. 1,857,913; May 10.
Kaiser, Karl. (See Schneider, B. R., and Kaiser.)
Kaminski, Stefan, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Holder for photographic image carriers. 1,857,724; May 10.
Karpen, S., & Bros. (See Schneider, B. R., and Kaiser, assignors.)
Karpf, Alfred H., Rochester, N. Y. Wrist watch protector. 1,857,195; May 10.
Keas, Harriet A., administratrix. (See Kellogg, William S.)
Keil, Ray D., Scotia, N. Y., assignor to General Electric Company. Television receiver. 1,857,154; May 10.
Kellog Manufacturing Company. (See Koehler, G., jr., and Hill, assignors.)
Kellogg, William S., deceased, Peoria, Ill.; Harriet A. Keas, administratrix. Variable condenser. 1,857,155; May 10.
Kemikal Inc. (See Mellanoff, Isadore S., assignor.)
Keunecke, Emil. (See Schlecht, L., Keunecke, and Schubardt.)
Keys, Walter C. (See Steiner, H. W., Eldridge, and Keys.)
Keyssner, Ernst, and H. Mengdehl, Ludwigshafen-on-the-Rhine, Germany. Mixed fertilizer. 1,857,914; May 10.
Kimmel, Charles P., Gary, Ind. Wheel tread refacer. 1,857,457; May 10.
Kimmel, Charles P., Gary, Ind. Railroad crossing. 1,857,458; May 10.
Kimmel, George P., Washington, D. C. Pajama trousers. 1,858,201; May 10.
King, William H., Weed, Calif. Panel door construction. 1,857,310; May 10.
Kings, Thomas W., Harvey, Ill., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Carburetor. Re18,456; May 10.
Kinnard, Isaac F., Lynnfield, and H. T. Faus, Lynn, Mass., assignors to General Electric Company. Temperature indicating instrument. 1,857,196; May 10.
Kintner, Samuel M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Duplex triode vacuum tube. 1,857,594; May 10.
Kinyon, Alonzo, G., Allentown, assignor, by mesne assignments, to the estate of James W. Fuller, deceased, Catasauqua, Pa. Conveying system. 1,857,643; May 10.
Kircher, Ralph N., assignor to West Bend Aluminum Company, West Bend, Wis. Valve for cookers. 1,857,459; May 10.
Kirkby, Clyde T., Chicago, Ill. Fly swatter. 1,857,757; May 10.
Kirshner, Abraham S., Philadelphia, Pa. Liquid filling machine. 1,857,915; May 10.
Kislyn Corporation. (See Berthon, Rodolphe, assignor.)
Kissock, Alan, Forest Hills, N. Y. Producing molybdenum-bearing iron. 1,857,595; May 10.
Kleckner, John L., South Bend, Ind. Door for rabbit hutches. 1,857,246; May 10.
Kline, Arthur L., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Painting instrument. 1,857,282; May 10.
Klosky, Simon. (See Milligan, C. H., and Klosky.)
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,857,813; May 10.
Knight, William T., McGill, Nev. Oil and/or reagent feeder. 1,857,385; May 10.
Knobloch, Carl, Akron, Ohio. Liquid level gauge. 1,857,644; May 10.
Knoderer, Homer G., Fairfield, Conn., assignor to General Electric Company. Insulated connecter for outlet boxes. 1,857,197; May 10.
Knorr-Bremse Aktiengesellschaft. (See Peters, Hans, assignor.)
Kny-Scheerer Corporation. (See Heins, Harry J., assignor.)
Koch, Louis A., jr., Louisville, Ky. Electric sign. 1,857,916; May 10.
Kochendorfer, August F., et al. (See Hill, Edward E., assignor.)
Koeberle, Karl. (See Kunz, M. A., and Koeberle.)
Koehler, George, jr., and W. P. Hill, Cincinnati, Ohio, assignors to Kellogg Manufacturing Company, Inc., Rochester, N. Y. Air pressure regulator. 1,857,917; May 10.
Kochler, Max. (See Hartfield, A. J., and Koehler.)
Koehring Company. (See Wagner, Charles H., assignor.)
Kohl, George. (See Alles, J. H., and Kohl.)
Kohler, Ulrich, assignor to Hasler A.-G. vormals Telegraphenwerkstatte von G. Hasler, Bern, Switzerland. Die printing machine. 1,857,918; May 10.
Kollsman, Paul, Woodhaven, N. Y. Indicator. 1,857,311; May 10.
Komorous, Joseph, Riverside, assignor to Parisian Novelty Company, Chicago, Ill. Placard display device. 1,857,552; May 10.
Konat, Stanley, Detroit, Mich. Combination lock. 1,857,198; May 10.
Konat, Stanley, Detroit, Mich. Combination lock. 1,857,199; May 10.
Korn, Friedrich. (See Eyer, C., Frowein, and Korn.)
Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Harrison, N. J. Vacuum tube construction. 1,857,645; May 10.
Krahl, Walter L., Montclair, assignor, by mesne assignments, to Arcturus Radio Tube Company, Newark, N. J. Thermionic tube connecting means. 1,857,646; May 10.
Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Unitary element structure for vacuum tubes. 1,857,647; May 10.
Krauch, Carl, Ludwigshafen-on-the-Rhine, and M. Pier, Heidelberg, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Supplying heat in high pressure reactions. 1,857,814; May 10.
Kroder, Reubel Company, The. (See Reubel, Henry, assignor.)
Krum, Howard L., Kenilworth, assignor to Teletype Corporation, Chicago, Ill. Telegraph printer and the like. 1,857,786; May 10.
Kuehn, Herman O., Detroit, Mich. Fish lure. 1,857,312; May 10.
Kuester, August F., Clintonville, Wis. Trailer. 1,857,758; May 10.
Kuester, August F., Clintonville, Wis. Trailer. 1,857,784; May 10.
Kugeman, William E., jr. (See Goerg, B., Zuhlke, and Kugeman.)
Kuhlewein, Heinrich. (See Neumann, Hans.)
Kühner, Otto, assignor to L. Schuler A.-G., Goppingen, Germany. Drawing press. 1,857,648; May 10.
Kunkel, Richard C., Pulaski, Va., assignor to General Chemical Company, New York, N. Y. Feeding mechanism for roasting furnaces. 1,857,919; May 10.
Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Anthraquinonyl-amino derivatives of benzanthrone-pyrazolanthrone. 1,857,553; May 10.
Kurath, Franz. (See Cherry, O. A., and Kurath.)
La Cellulose Rosen Societe Anonyme. (See Rosen, Gotthard, assignor.)
La Chance, Donald L., Chicago, Ill. Penholder. 1,857,460; May 10.
Lafferty, Arthur R., assignor to Burroughs Adding Machine Company, Detroit, Mich. Apparatus for automatically delivering articles in a uniform manner. 1,857,815; May 10.
Lagandro, John, Camden, N. J. Fuse. 1,858,157; May 10.
Lagerholm, Carl J., assignor to Evans Case Company, North Attleboro, Mass. Cigar lighter. 1,857,200; May 10.
Laird, Wilbur G., assignor to Heat Treating Company, New York, N. Y. Gas and liquid contact apparatus. 1,858,158; May 10.
Lakewood Engineering Company, The. (See Carr, Edward G., assignor.)
Lamb, Carl J., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bi-metal packing. 1,857,961; May 10.
Lamb, Harold T. (See Miller, William, and Lamb.)
Lamb, Joseph F., assignor to Landers, Frary & Clark, New Britain, Conn. Coffee percolator and the like. 1,857,554; May 10.
Lambert, Edmond H., Piedmont, Calif., and R. L. Skinner, E. Geertz, and P. Williams, assignors to Skinner Automotive Device Co., Inc., Detroit, Mich. Impure oil reclaimer. 1,857,461; May 10.
Landers, Frary & Clark. (See Lamb, J. F., assignor.)
Lang, Hermann, New York, N. Y. Eyeshield. 1,857,156; May 10.
Lang, James S., Boston, Mass., deceased; Old Colony Trust Company, executor. Vibratory massage apparatus. 1,858,209; May 10.
Lanquetin, Roger, Courbevoie, France. Relay device for automatic control by the use of a fluid under pressure. 1,857,386; May 10.
Lantz, Robert, Saint-Denis, France, assignor to Societe des Anciens Etablissements Salvatori Leperche; Frangialli & Cie., successeurs, Paris, France. Light sensitive papers and other bases and light sensitive layers therefor. 1,857,920; May 10.
Larson, Carl H., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash lock. 1,857,294; May 10.
La Rue, William D., Maple Shade, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Plural-member stylus or the like. 1,858,016; May 10.
Laska, Leopold and O. Haller, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Arylides of naphthalene dicarboxylic acids and making same. 1,857,555; May 10.
Lasley, Robert E., Libertyville, Ill. Power plant. 1,857,556; May 10.
Lassen, Hans K. A., Stavanger, Norway. Roasting apparatus. 1,857,725; May 10.

Lathrop, Hubbel, Greenwich, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Insulating magnetic bodies. 1,857,201; May 10.
Laurent, Torbern, assignor to Telefonaktiebolaget L. M. Eriesson, Stockholm, Sweden. Voltage measuring arrangement. 1,857,247; May 10.
Laux, Julius, Uerdingen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of iron oxide pigments. 1,857,557; May 10.
Lavelle, Thomas B., Hempstead, N. Y. Lateral control means for airplanes. 1,857,962; May 10.
Lawrason, Levering. (See Girvin, Charles W., assignor.)
Lazier, Wilbur A., assignor to E. I. du Pont de Nemours Company, Wilmington, Del. Catalytic production of esters. 1,857,921; May 10.
Laymon, Herman B., Spencer, Ind. Bag. 1,858,159; May 10.
Lee Engineering Research Corporation. (See Lee, Royal, assignor.)
Lee, Reuben G. (See Flagstad, O. A., and Lee.)
Lee, Royal, assignor to Lee Engineering Research Corporation, Milwaukee, Wis. Electric motor. 1,857,202; May 10.
Leek, Albert E., assignor to Wigan Coal and Iron Company, Limited, Wigan, England. Separating device for solids and liquids. 1,858,160; May 10.
Lehmann, Ernst A., assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Friedrichshafen, Bodensee, Germany. Airship. 1,857,963; May 10.
Leigh, Alfred C., Bellevue, Pa., assignor to Dravo Contracting Company. Roof structure. 1,857,462; May 10.
Lemaster, Howard M., Forest Glen, Md. Watering fountain. 1,857,558; May 10.
Lementy, Walter J., New York, N. Y. Animal trap. 1,858,096; May 10.
Lenning, Carroll K. (See Strebe, M. F., Lenning, and Zink.)
Lentz, George W., assignor to The Bonnot Company, Canton, Ohio. Chipping machine. 1,857,464; May 10.
Leon, Karl O., Lidkoping, Sweden. Moving picture apparatus. 1,857,559; May 10.
Leonard, Harry A., assignor to Draper Corporation, Hopedale, Mass. Warper treadle. 1,857,649; May 10.
Leonard, Henry M., Ridgewood, N. Y. Flying machine. 1,857,964; May 10.
Le Tourneau, Robert G., Stockton, Calif. Scraper. 1,857,157; May 10.
Levin, Michael, Brooklyn, assignor of one-fourth to J. T. Basseches, New York, N. Y. Protein composition. 1,857,596; May 10.
Lewis Differential Company. (See Tatter, John W., assignor.)
Lewis, Frank H., assignor to Food Machinery Corporation, San Jose, Calif. Pumping apparatus. 1,857,922; May 10.
Lewis Invisible Stitch Machine Company. (See Mueller, Charles W., assignor.)
Lewis, Isabel L. (See Myers, Howard C., assignor.)
Lewis, Robert L., assignor to Challenge Company, Batavia, Ill. Tie member for tanks. 1,857,560; May 10.
Libbey-Owens-Ford Glass Company. (See Cone, Carroll, assignor.)
Libbey Owens-Ford Glass Company. (See Diederichs, Hugo N., assignor.)
Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)
Libbey-Owens-Ford Glass Company. (See Drake, J. L., and Mambourg, assignors.)
Libbey-Owens-Ford Glass Company. (See McGoldrick, Joseph M., assignor.)
Lichtenthaeler, Frank E., Newton Highlands, Mass. Distillation apparatus and the like. 1,857,816; May 10.
Lidiak, Joseph P., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Pump. 1,857,965; May 10.
Lilienfeld, Leon, Vienna, Austria. Making alkali cellulose. 1,858,017; May 10.
Lilienfeld, Leon, Vienna, Austria. Process for the manufacture of ethers of carbohydrates. 1,858,018; May 10.
Lilienfeld, Leon, Vienna, Austria. Manufacture of aralkyl ethers of cellulose and plastics containing same. 1,858,019; May 10.
Lilienfeld, Leon, Vienna, Austria. Manufacture of artificial materials. 1,858,097; May 10.
Lilly, William, New York, N. Y. Nautical instrument. 1,857,597; May 10.
Linde, Charles W., Vineland, N. J. Tire tool. 1,858,098; May 10.
Linderman, Andrew L. and T. J. Maines, Pittsburgh, Pa. Bolt. 1,857,388; May 10.
Lindgren, Waldemar L., Waukegan, assignor of one-half to J. E. Ericsson, Chicago, Ill. Dishwashing machine. 1,857,726; May 10.
Lindgren, Waldemar L., Waukegan, assignor of one-half to J. E. Ericsson, Chicago, Ill. Soap holder for dishwashing machines. 1,857,727; May 10.
Lindgren, Waldemar L., Waukegan, assignor of one-half to J. E. Ericsson, Chicago, Ill. Dishwashing machine. 1,857,728; May 10.
Lindgren, Waldemar L., Waukegan, assignor of one-half to J. E. Ericsson, Chicago, Ill. Dishwashing machine. 1,857,729; May 10.
Lindgren, Waldemar L., Waukegan, assignor of one-half to J. E. Ericsson, Chicago, Ill. Conveying mechanism for dishwashing machines. 1,857,730; May 10.
Line Material Company. (See Dohrwardt, John F., assignor.)
Line Material Company. (See Hendee, Lem E., assignor.)
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Linke, Elvin, Denver, Colo. Electrical game. 1,858,020; May 10.
Linn Manufacturing Corporation, The. (See Hanks, George R., assignor.)
Lippe-Lipski, Elaine von der, assignor of one-fourth to A. Cayton, Washington, D. C. Changeable exhibitor. 1,857,387; May 10.
Littlefield, Laurence T., assignor to Eastman Kodak Company, Rochester, N. Y. Apparatus for use in factory management. 1,857,204; May 10.
Logie, Henry B., Roselle Park, N. J. Sorting and packaging machine. 1,858,161; May 10.
Lombard, Nathaniel, Worcester, Mass. Change speed gear set. 1,858,050; May 10.
Lombard, Nathaniel, Worcester, Mass. High speed gear shift. 1,858,051; May 10.
London, Jack I., New York, N. Y. Emblem stand. Des. 86,919; May 10.
Lonergan, Simon J. (See Morley, J. P., and Lonergan.)
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Coat. Des. 86,920; May 10.
Long, Felix, New City, N. Y. Picture frame. 1,857,966; May 10.
Longaker, Edgar L., Trappe, Pa. Detachable carrier. 1,857,598; May 10.
Loomis, Nathaniel E., Westfield, N. J., assignor to Standard Oil Development Company. Method and apparatus for cracking hydrocarbons. 1,857,759; May 10.
Lord, Hugh C., Erie, Pa. Vibration dampening mounting. Re18,457; May 10.
Lorenz, Edward H., West Hartford, assignor Hartford-Empire Company, Hartford, Conn. Leer stacker. 1,857,967; May 10.
Loughridge, Matthew H., Bogota, N. J. Electric railway system. 1,857,760; May 10.
Louisville Frog, Switch & Signal Company. (See Dodge, Clinton C., assignor.)
Lucia, Louis V. (See Wolcott, F. E., and Lucia.)
Lucia, Louis V., Hartford, Conn., assignor, by mesne assignments, to The Beardsley & Wolcott Mfg. Co. Thermostatic switch device. 1,857,923; May 10.
Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung. (See Lehmann, Ernst, A., assignor.)
Lund, Arne, Detroit, Mich. Wire stripping tool. 1,857,731; May 10.
Lundell, Otto, assignor to Colonial Tool Company, Detroit, Mich. Broach. Re18,458; May 10.
Lundgren, Edwin, Frederick, Md., assignor to International Combustion Engineering Corporation, New York, N. Y. Furnace wall structure. 1,857,561; May 10.
Lynn, George, Wadsworth, Ohio, assignor to Pittsburgh Plate Glass Company. Cement and making it. 1,857,205; May 10.
Lyon, George A., Allenhurst, N. J. Ornamenting rims. 1,858,228; May 10.
Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)
Macbeth, Alexander, Providence, R. I. Ash and fire proof cigar and cigarette holder. 1,857,283; May 10.
MacDougall, Robert, Downers Grove, assignor to Beemack Furnace Company, Cicero, Ill. Enameling furnace. 1,857,206; May 10.
Mack, Bernard F., Allentown, Pa. Bobbin protector. 1,857,599; May 10.
Mackenzie, Alexander S., assignor to Clayton Gin Compress Company, Houston, Tex. Torque dynamometer. 1,857,688; May 10.
Mackenzie, Lewis F., Newark, P. V. Wells, Princeton, and E. G Dewis, Asbury Park, N. J. Apparatus for testing the physical condition of human beings. 1,857,732; May 10.
MacKinnon, Peter. (See Bennet, W., Farrar, and MacKinnon.)
Maclean, Robert, assignor to Amalgamated Roofing Company, Chicago, Ill. Roofing. 1,857,463; May 10.
MacNamee, William H., Yonkers, assignor to Trio Specialty Company Inc., New York, N. Y. Stocking. 1,858,162; May 10.
Mahr, Wilbert S., Lynn, Mass. Pallet holder. 1,857,968; May 10.
Maine Steel Products Company. (See Soule, G. C., and Woodbury, assignors.)
Maines, Thomas J. (See Linderman, A. L., and Maines.)
Maker, John A., Duluth, Minn., and J. A. Medley, Superior, Wis. Holder. 1,857,465; May 10.
Maldari, Daniel, Brooklyn, N. Y. Macaroni die. 1,857,318; May 10.
Mallory, Marion, Toledo, Ohio. Carburetor. 1,857,466; May 10.
Malloy, Frank J. (See Donovan, J. F., and Malloy.)
Malm, Carl J., and A. Andersen, assignors to Eastman Kodak Company, Rochester, N. Y. Production of low viscosity cellulose esters. 1,857,562; May 10.
Maloney, William J., jr. (See Maloney, William J., assignor.)

Maloney, William J., assignor of one-tenth to W. J. Maloney, jr., Ansonia, Conn. Concealed thumbtack. 1,857,158; May 10.
Mambourg, Luke C. (See Drake, J. L., and Mambourg.)
Manzotti, Erminio and E., Piacenza, Italy. Apparatus for printing positive photographic pictures with continuous automatic action. 1,857,733; May 10.
Manzotti, Eugenio. (See Manzotti, Erminio and E.)
Marcum, Arthur I., Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Vehicle drive. 1,857,248; May 10.
Marcum, Arthur I., Oakland, Calif. Multiwheel road vehicle. 1,857,249; May 10.
Marden, William L., Elmhurst, assignor to Neptune Meter Company, New York, N. Y. Thrust roller plate construction for fluid meters. 1,857,851; May 10.
Mardick, John K., and L. J. White, assignors to Southern Prison Company, San Antonio, Tex. Master control cabinet for jail door operating systems. 1,857,924; May 10.
Marion, Charles E. (See Brahy, Charles, assignor.)
Markman, Milton K., Crystal Lake, Ill. Sign support. 1,857,314; May 10.
Marsh Stencil Machine Company. (See Marsh, Walton C., assignor.)
Marsh, Walton C., assignor to Marsh Stencil Machine Company, Belleville, Ill. Fountain marker. 1,857,467; May 10.
Marshall, Arnold C., assignor to The Steel Scaffolding Company Limited, London, England. Clip for guardboards of scaffolds and the like. 1,857,159; May 10.
Marshall, Arnold C., assignor to The Steel Scaffolding Company Limited, London, England. 1,858,021; May 10.
Martin, George, et al. (See Chambers, Robert M., assignor.)
Martin, Lawrence F., and A. A. Elston, assignors to The Dow Chemical Company, Midland, Mich. Preventing the decomposition of carbon tetrachloride and product thereof. 1,858,022; May 10.
Martin Schwartz, Inc. (See Nelson, David J., assignor.)
Martin, Teresa, et al. (See Chambers, Robert M., assignor.)
Martin, William F., Madison, Kans. Tongs. 1,857,925; May 10.
Masing, Georg, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Manufacture of metal covered copper wire. 1,857,600; May 10.
Mason, Edward J. and H. W., Detroit, Mich. Veneering construction. 1,857,926; May 10.
Mason, Henry W. (See Mason, Edward J. and H. W.)
Mason, Herbert T., assignor to Quabaug Rubber Company, North Brookfield, Mass. Shoe sole. Des. 86,921; May 10.
Mason, Herbert T., assignor to Quabaug Rubber Company, North Brookfield, Mass. Shoe sole. Des. 86,922; May 10.
Mason, Jack V., Cheadle Hulme, Cheshire, England. Variable dividing machine for dough. 1,857,927; May 10.
Massengale, James R., Eden, Miss. Rotary bin. 1,858,099; May 10.
Mathieu de Boissac, Henri M., St. Germain en Laye, assignor to the Society Pierre Remy & Cie., Clichy, France. Closure. 1,858,163; May 10.
Matteson, Ralph D., Boise, Idaho. Air cleaning and moistening device. 1,857,512; May 10.
Maxmoor Corporation. (See Kings, Thomas W., assignor.)
May, Frederick, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio. High-pressure valve. 1,858,164; May 10.
McAdoo, Thomas O., Salem, Va., assignor to International Silica Corporation. Treating silica-bearing materials. 1,858,100; May 10.
McAdoo, Thomas O., Edgewood, Va., assignor to International Silica Corporation. Obtaining aluminum hydrate. 1,858,165; May 10.
McAfee, Robert W., Atlanta, Ga. Sealing box, brace, and liner for underground pipes. 1,858,101; May 10.
McCabe, Charles J., Brooklyn, and I. Schoenholz, Cedarhurst, assignors to McCabe and Schoenholz, New York, N. Y. Pocketbook top. 1,857,928; May 10.
McCabe, John J., Cleveland, Ohio. Combined casing for a clothes washing and extracting machine. Des. 86,923; May 10.
McCabe and Schoenholz, Inc. (See McCabe, C. J., and Schoenholz, assignors.)
McCabe, Warren L., Ann Arbor, Mich., and B. Mead, Belmont, Mass., assignors to Standard Oil Development Company. Nonsludging oil and making the same. 1,857,761; May 10.
McCann, Paul S., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Winding and reeling device. 1,857,817; May 10.
McCawley, Albert S. (See Douglass, F. J., and McCawley.)
McCleery, Harold L., Downers Grove, assignor to A. J. Cline, Chicago, Ill. Inching mechanism for printing presses. 1,857,818; May 10.
McDermet, John R., assignor to Elliott Company, Jeannette, Pa. Method and apparatus for deaerating. 1,857,650; May 10.
McDermott, Harry H., Chicago, Ill., assignor to The Prosperity Company, Inc. Operative mechanism for steam presses. 1,857,601; May 10.
McDonald, Charles L. (See Stair, D. E., and McDonald.)
McEachron, Karl B., Pittsfield, Mass., assignor to General Electric Company. Rectification of alternating currents. 1,857,160; May 10.
McFarland, James C., Fort Thomas, Ky., assignor to The Wadsworth Watch Case Co., Dayton, Ky. Decorating and etching metals. 1,857,929; May 10.
McGinness, James F., Spring Valley, N. Y. Freight container. 1,857,468; May 10.
McGoldrick, Joseph M., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass surfacing apparatus. 1,857,852; May 10.
McKeown, Joseph B., Grand View, N. Y. Pressure fluid generator. 1,858,102; May 10.
McKinley, Charles W., assignor to A C Spark Plug Company, Flint, Mich. Oil filtering system. 1,857,651; May 10.
McKinley, Charles W., assignor to A C Spark Plug Company, Flint, Mich. Oil filter. 1,857,652; May 10.
McMann, Margaret H., New York, N. Y. Closure for containers. 1,857,853; May 10.
McMaster, Archie J., assignor to G-M Laboratories, Inc., Chicago, Ill. Sign. 1,858,052; May 10.
McMaster, Archie J., assignor to G-M Laborntories, Inc., Chicago, Ill. Support for luminescent tubes. 1,858,053; May 10.
McMaster, Archie J., and C. E. Parson, assignors to G-M Laboratories, Inc., Chicago, Ill. Electronic tube. 1,858,210; May 10.
McMullan, Samuel. (See Arkema, H. P., and McMullan.)
Medina, Emil, Oak Park, Ill. Manufacturing ornamental glass tile. 1,857,856; May 10.
McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)
McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Apparatus for molding cast iron pipes and the like. 1,857,855; May 10.
Mead, Brian. (See McCabe, W. L., and Mead.)
Meadows, Vaughn H., Los Angeles, Calif. Rotary ventilator. 1,857,762; May 10.
Mechanical Rubber Company, The. (See Steiner, H. W., Eldridge, and Keys, assignors.)
Medley, Clarence R. (See Buquor, Adolph P., assignor.)
Medley, Harlan E., Kansas City, Mo. Fountain lather brush. 1,857,857; May 10.
Medley, James A. (See Maker, J. A., and Medley.)
Meeks, George O. (See Meeks, Henry K. and G. O.)
Meeks, Henry K. and G. O., Spokane, Wash. Electric conduit sectional outlet box. 1,857,787; May 10.
Megley, Harley J., Chicago, Ill. Proofing type slugs. 1,857,315; May 10.
Meissner, Theodor, H. Heyna, and E. Fischer, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the thionaphthene-indolindigo series. 1,857,250; May 10.
Melkman, Saul E., Montreal, Quebec, Canada. Hair waving device. 1,857,689; May 10.
Mellanoff, Isadore S., Philadelphia, Pa., assignor to Kemikal, Inc. Molding, coating, filling, impregnating, and binding. 1,857,690; May 10.
Mellanoff, Isadore S., Philadelphia, assignor to Kemikal, Inc. Shellac substitute. 1,857,691; May 10.
Mengdehl, Helmut. (See Keyssner, E., and Mengdehl.)
Menkhaus, Ralph, Greensburg, Ind. Carburetor. 1,858,166; May 10.
Menon, Vadakkath R., Singapore, Straits Settlements. Adjustable desk and seat arrangement. 1,858,103; May 10.
Meosta, Marvin W., assignor to Murray Body Corporation, Detroit, Mich. Door latch. 1,857,513; May 10.
Mercantile-Commerce Bank and Trust Company, trustee. (See Schwartz, Jacob C.)
Merco Nordstrom Valve Company. (See Nordstrom, Sven J., assignor.)
Mergenthaler Linotype Company. (See Stouges, Anthony J., assignor.)
Merriam, Francis F., Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporatd, New York, N. Y. Radio telephone system. 1,857,819; May 10.
Mertes, August, Cleveland, Ohio, assignor, by mesne assignments, to The Pittsburgh Plate Glass Company, Pittsburgh, Pa. Automatically acting brush making machine. 1,857,207; May 10.
Metals Protection Corporation. (See Humphries, Chad H., assignor.)
Metz, Henry R., assignor to Williams Tool Corporation, Erie, Pa. Chamfering tool and holder. 1,857,208; May 10.
Meyercord, George R., and O. H. Basquin, Chicago, Ill., assignors to Haskelite Manufacturing Corporation. Shipping container or freight car body section. 1,857,653; May 10.
Mica Insulator Company. (See Coffey, Joseph M., assignor.)
Middleton, Charles W. (See Harder, F., Watson, and Middleton.)
Midland Steel Products Company, The. (See Sneed, John, assignor.)
Mikaelson, Erik W., Easton, Pa. Threading machine. 1,857,251; May 10.

Mikkelsen, Carl G., Hilliard, Fla. Poultry feeder. 1,857,858; May 10.
Miles, Jennings B., Johnson City, N. Y. Depilatory. 1,858,104; May 10.
Milford Rivet and Machine Company, The. (See Corson, C. E., and Wright, assignors.)
Miller, Carroll, assignor to Thermatomic Carbon Company, Pittsburgh, Pa. Manufacture of carbon black. 1,857,469; May 10.
Miller, Charles, New York, N. Y. Shoe. Des. 86,924; May 10.
Miller, Charles, New York, N. Y. Shoe. Des. 86,925; May 10.
Miller, Charles, New York, N. Y. Shoe. Des. 86,926; May 10.
Miller, Wilbur G., Los Angeles, Calif. Multiple-way by-pass valve. 1,858,054; May 10.
Miller, William, Dunston-on-Tyne, and H. T. Lamb, Newcastle-on-Tyne, England. Ball or roller clutch. 1,857,252; May 10.
Miller, William, Dunston-on-Tyne, and H. T. Lamb, Newcastle-on-Tyne, England. Sprag for motor vehicles and the like. 1,857,253; May 10.
Milligan, Charles B., and S. Klosky, Newark, N. J., assignors to The American Agricultural Chemical Company. Obtaining orthophosphoric acid and/or conversion products thereof. 1,857,470; May 10.
Millington, Arthur E., San Francisco, Calif., assignor to The United States National Bank of Portland, Oreg., trustee. Manufacture of wall-board and the like. 1,857,316; May 10.
Millington, Arthur E., Oakland, Calif., assignor to The United States National Bank of Portland, Oreg., as trustee. Fiber liberation. 1,857,317; May 10.
Mindeleff, Charles, New York, N. Y., assignor to L. G. Robinovitch, Golden, Colo. Hypochlorites. 1,857,318; May 10.
Minnesota Mining and Manufacturing Company. (See Wyatt, Ernest B., assignor.)
Moldovan, George, Meadow Lands, and S. Németh, Washington, Pa. Sugar dispensing container. 1,857,734; May 10.
Monforts, A. (See Monforts, J., and Wirtz, assignors.)
Monforts, Joseph, and F. Wirtz, assignors to A. Monforts, Munich-Gladbach, Germany. Fabric doubling machine. 1,857,735; May 10.
Monowatt, Electric Corporation, The. (See Benander, George B., assignor.)
Monowatt Electric Corporation, The. (See Clemence, Elliott, assignor.)
Monroe Calculating Machine Company. (See Chase, G. C., and Brown, assignors.)
Monroe, Charles H., Berkeley, Calif. Variable pitch propeller. 1,857,319; May 10.
Moore, Charles A., Edina, Minn. Air conditioning apparatus for storage rooms. 1,858,023; May 10.
Moore, Charles A., Edina, Minn. Ventilating and air circulating device. 1858,024; May 10.
Moore, George A., Boston, Mass. Toy electric motor. 1,857,209; May 10.
Moorhouse, Alfred. (See Vincent, J. G., and Moorhouse.)
Morgan, Henry B., Corbin, Ky. Device to facilitate the driving of rivets to position. 1,857,389; May 10.
Morgan & Wright. (See Eger, E., and Thacher, assignors.)
Morley, James P., Michigan City, and S. J. Lonergan, assignors to Bastian-Morley Company, La Porte, Ind. Boiler structure. 1,857,471; May 10.
Morris, James Y., High Point, N. C. Necktie. 1,857,472; May 10.
Morrison, Bartholomew J., assignor to The Coale Muffler & Safety Valve Company, Baltimore, Md. Locomotive safety valve. 1,857,514; May 10.
Morrison, Laurence H., Gravesend, England. Apparatus for use in combination or in conjunction with a sextant adapted for use as an artificial horizon and direction indicator. 1,857,736; May 10.
Morse Products, Inc. (See Fried, Jerome A., and Schroder, assignors.)
Morton, Allen W., assignor to The American Hammered Piston Ring Company, Baltimore, Md. Producing rings. 1,857,254; May 10.
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America. Coating and product thereof. 1,857,161; May 10.
Mossman, Howard W. (See Hawkins, R. A., and Mossman.)
Mower, George A. (See Dandridge, G. F. J., and Mower.)
Muehler, Lowell E., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic developer for use at high temperatures. 1,857,515; May 10.
Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Top feeding mechanism. 1,857,692; May 10.
Muhlfeld, John E., Scarsdale, N. Y. Baffle wall. 1,857,320; May 10.
Muldoon, Bernard F., Mountainview, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Flash light. 1,857,390; May 10.
Mulrey, John E., Trenton, N. J. Sewing chest. 1,858,105; May 10.
Multiplex Gasfernzunder-Gesellschaft m. b. H., The Firm. (See Hanyzer, B., and Behm, assignors.)
Murck, Knud, Forest Hills, N. Y., assignor to Charles Bruning Company. Black print on tracing cloth and making same. 1,857,763; May 10.
Muris, Franz. (See Zitscher, A., and Muris.)
Murphy, Edward A. (See Twiss, D. F., and Murphy.)
Murphy, John S., Monterey Park, Calif. Method and apparatus for extinguishing gas and oil well fires. 1,857,788; May 10.
Murray Body Corporation. (See Moesta, Marvin W., assignor.)
Musher, Sidney, et al. (See Taube, Gustav, assignor.)
Myers, Howard C., assignor of one-half to I. L. Lewis, Oneida, N. Y. Fountain washing device. 1,858,055; May 10.
Mylar, Wesley J., Oakland, Calif. Lock for containers. 1,857,654; May 10.
Nagy, Peter M., assignor to Transue & Williams Steel Forging Corporation, Alliance, Ohio. Pipe coupling. 1,858,106; May 10.
Napier Company, The. (See Schaefer, Otto C., assignor.)
Nathan, Albert F. (See De Leeuw, Adolph L., assignor.)
National Aniline & Chemical Company. (See Ellzey, Esco F., assignor.)
National Automatic Container Corporation. (See Boerg, B., Zuhlke, and Kugeman, assignors.)
National Automatic Container Corporation. (See de Maziroff, George, assignor.)
National Blank Book Company. (See Schade, John, assignor.)
National Brick Company. (See Therrien, Arthur J., assignor.)
National Pumps Corporation, The. (See Bradley, Eric H., assignor.)
National Safety Appliance Company. (See Folker, Howard S., assignor.)
Naylor, Joseph F., assignor of one-half to T. & T. Vicars Limited, Earlestown, England. Speed control gear for machinery. 1,858,167; May 10.
Neblich, Rudi, Chemnitz, Germany. Flat hosiery knitting machine. 1,857,737; May 10.
Nelessen, Anton. (See Nelessen, John and A.)
Nelessen, John and A., Wrightstown, Wis. Tandem subsoil plow. 1,857,859; May 10.
Nelson, David J., Hamburg, assignor to Martin & Schwartz, Inc., Buffalo, N. Y. Fluid dispenser. 1,857,969; May 10.
Nelson, Henry M. (See Nelson, Nels H., and H. M.)
Nelson, Horatio D., Jersey City, N. J. Antiglare shield. 1,857,284; May 10.
Nelson, Nels H. and H. M., Minneapolis, Minn. Automobile signaling device. 1,857,210; May 10.
Nemec, Fred A., Whittier, Calif. Fluid control device. 1,857,321; May 10.
Németh, Steve. (See Moldovan, George.)
Nenninger, Lester F., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machinery. 1,857,162; May 10.
Neptune Meter Company. (See Marden, William L., assignor.)
Nero, Arvid H., West Hartford, assignor to Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Faceplate. 1,858,107; May 10.
Neubert, Oskar, Elberfeld, near Cologne-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Medicinal bougie, ball, and the like and making same. 1,858,108; May 10.
Neumann, Hans, Berlin-Siemensstadt, and H. Kuhlewein, Berlin-Marienfelde, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Magnetic alloy of high permeability. 1,857,970; May 10.
Newcome, Edward F., Miami, Fla. Indicator. 1,857,255; May 10.
Newton, Earle R. (See Curtis, C. G., and Newton.)
New York Air Brake Company, The. (See Sudduth, Henry N., assignor.)
Nicholls, Henry M., Chicago, Ill., assignor to American Can Company, New York, N. Y. Container support. 1,857,391; May 10.
Nicholson, Albert H. and V., Columbus, Ohio. Plate or similar article of glassware. Des. 86,927; May 10.
Nicholson, Vernon. (See Nicholson, Albert H. and V.)
Nicodemus, Otto, and W. Schmidt, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing secondary and tertiary aliphatic amines from primary aliphatic bases. 1,857,655; May 10.
Nicralumin Company, The. (See Hybinette, Noak V., assignor.)
Nigro, Michel, assignor to Sleeper & Hartley, Inc., Worcester, Mass. Spring-winding machine. 1,857,860; May 10.
Nixon, Moses C., Chicago, Ill. Propeller apparatus. 1,857,392; May 10.
Noble, Olbert C., assignor to Tygart Valley Glass Company, Washington, Pa. Jar or similar article. Des. 86,928; May 10.
Nock, Harold E., assignor to Towle Manufacturing Company, Newburyport, Mass. Spoon or article of analogous nature. Des. 86,929; May 10.
Nordberg, Bruno V. E., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Diesel engine. 1,857,256; May 10.
Nordberg Manufacturing Company. (See Nordberg, Bruno V. E., assignor.)

Nordhem, Eric N., Chicago, Ill. High tension cut-out and the like. 1,857,322; May 10.
Nordstrom, Sven J., Piedmont, assignor to Merco Nordstrom Valve Company, San Francisco, Calif. Valve. 1,857,861; May 10.
North American Chemical Company. (See Thoma, Andrew, assignor.)
Northern Malleable Iron Company. (See Cummins, Thomas K., assignor.)
Northup, Amos E., Detroit, Mich., assignor to Reo Motor Car Company. Hood, radiator, and fender assemblage for automobiles. Des. 86,930; May 10.
Northup, Amos E., Pleasant Ridge, Mich., assignor to Reo Motor Car Company. Radiator. Des. 86,931; May 10.
Norton Company. (See Silven, Herbert A., assignor.)
Nyberg, Olaf J. (See Wilkoff, A. E., and Nyberg.)
Nygard, Charles I., Elmhurst, N. Y. Spring device. 1,857,764; May 10.
Nypels, L. A. (See Hardenberg, Jan J. C., assignor.)
Oakley, John, assignor to Perkins Machine and Gear Company, Springfield, Mass. Rotary broaching machine. 1,857,516; May 10.
O'Brien, William A., San Francisco, Calif. Combined game board and tray. Des. 86,932; May 10.
Obst, Bruno A., Milwaukee, Wis. Windshield frame. 1,857,602; May 10.
Odium, William H., and E. H. Peterson, assignors to Duro Metal Products Company, Chicago, Ill. Wheel puller. 1,857,211; May 10.
Oftedal, Sigmund A., Fargo, N. Dak. Sectional adjustable display sign. 1,857,789; May 10.
O'Hagan, Bernard E., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,857,323; May 10.
Oil Well Supply Company. (See Greve, Edgar E., assignor.)
Okomite Company, The. (See Stevens, Donald R., assignor.)
Okumura, Takeshi, Kamikyo Ku, Kyoto, Japan. Speed changing apparatus. 1,857,324; May 10.
Old Colony Trust Company, executor. (See Lang, James S.)
Old Dominion Marine Railway Corporation. (See Holland, Nathaniel G., assignor.)
Oldfield, Lee, Chicago, Ill. Two stroke cycle internal combustion engine. 1,857,656; May 10.
Oleschak, Julius, jr., Philadelphia, Pa. Safety device for vault or safe door locks. 1,857,971; May 10.
Oliphant, John, Chicago, Ill., assignor to Sullivan Machinery Company. Pumping mechanism. 1,857,393; May 10.
Oliver, Benjamin H., Oshoto, Wyo. Saw set. 1,857,563; May 10.
Olivieri, Giovanni, Maspeth, N. Y. Clothesline support. 1,857,738; May 10.
Olsen, Carl E. (See Peterson, J. A., and Olsen.)
Olsen, Neal S., Brooklyn, N. Y., assignor to Universal Oil Products Company, Chicago, Ill. Vapor condensation. 1,857,394; May 10.
Olson, Charles J., Muskegon, Mich. Floor surfacing machine. 1,857,564; May 10.
Omes Holding Company Limited. (See Benedetto, Giuseppe, assignor.)
Orton, Clarence L. (See Elder, Parham M., and Orton.)
Ostersetzer, Alfons, Klosterneuburg, and F. Riesenfeld, Vienna, Austria, assignors, by mesne assignments, to Pollopas Limited, Nottingham, England. Manufacture of phenol for maldehyde condensation products. 1,858,168; May 10.
Ottenstein, Friedrich, Nuremberg, Germany. Device for bending toy rails. 1,857,325; May 10.
Otto, Carl, Hellerup, Denmark. Regenerative coke oven. 1,858,229; May 10.
Packard Motor Car Company. (See Kline, Arthur L., assignor.)
Packard Motor Car Company. (See Vincent, J. G., and Moorhouse, assignors.)
Page, Eugene E., Gary, Ind. Burglar trap. 1,857,395; May 10.
Page, Schuyler C., Rochester, N. Y. Igniter. 1,857,862; May 10.
Pahl, August, and H. Heimann, Berlin, Germany. Surface carburetor. 1,857,565; May 10.
Palmer, Joseph V. (See Peterson, Walter E., assignor.)
Paradis, Joseph P. (See Chouinard, M., and Paradis.)
Paradise, Louise A., assignor to Deere & Company, Moline, Ill. Grease gun. 1,858,025; May 10.
Parent, Joseph A., East Grand Forks, Minn. Potato digger. 1,857,212; May 10.
Parisian Novelty Company. (See Komorous, Joseph, assignor.)
Parker, Arthur H. (See Sebell, Harry.)
Parkersburg Rig & Reel Company, The. (See Schwemlein, William, assignor.)
Parkhurst, Charles E. (See Pervier, William A., assignor.)
Parshall, Ralph L., Fort Collins, Colo., dedicated by assignment to the Government and people of the United States of America. Vortex sand trap and deflector riffle. 1,858,231; May 10.
Parson, Charles E. (See McMaster, A. J., and Parson.)
Pasco, Michael, Sacramento, Calif. Spark plug. 1,857,739; May 10.
Pasinski, Walter J., assignor to Burroughs Adding Machine Company, Detroit, Mich. Speed controlling mechanism. 1,857,790; May 10.
Pass & Seymour, Inc. (See Watkin, Bertram L., assignor.)
Patterson, Alfred B., assignor to Patterson Steel Company, Tulsa, Okla. Building construction. 1,857,326; May 10.
Patterson, Leonard, et al. (See Pinckard, William P., assignor.)
Patterson Steel Company. (See Patterson, Alfred B., assignor.)
Paull, Erwin J., Brooklyn, N. Y. Vehicle window. 1,858,109; May 10.
Pauly, Robert C., assignor to The American Laundry Machinery Company, Norwood Station, Cincinnati, Ohio. Press clamp. 1,857,657; May 10.
Pease, Harry, Barnsdall, Okla., assignor to The Gray Processes Corporation, Newark, N. J. Refining hydrocarbon distillates. 1,858,110; May 10.
Peck, Arthur E., Los Angeles, Calif. Dental wax cutting and adapting instrument. 1,857,396; May 10.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Method and machine for forming glass tubing from pressed glass blanks. 1,857,257; May 10.
Peiler, Karl E., West Hartford, assignor to Hartford Empire Company, Hartford, Conn. Method and apparatus for forming glass tubing from glass billets. 1,857,791; May 10.
Pennsylvania Salt Manufacturing Company. (See Ioannu, John P.)
Perkins, Ivan M. (See Funsten, S. R., and Perkins.)
Perkins Machine and Gear Company. (See Oakley, John, assignor.)
Perry, John W., Wheeling, W. Va. Sheet metal pack conveyer. 1,857,566; May 10.
Pervier, William A., Watertown, assignor to C. E. Parkhurst, Somerville, Mass. Mixing apparatus. 1,857,863; May 10.
Pesola, Nillo, Fitchburg, Mass. Electric fender tool. 1,858,169; May 10.
Peters, Hans, assignor to Knorr-Bremse Aktiengesellschaft Lichtenberg, Berlin, Germany. Duplex pump. 1,857,864; May 10.
Peters, John R., assignor of one-tenth to J. J. Planeta, New York, N. Y. Snow melting apparatus. 1,857,603; May 10.
Peters, Leo R. (See Severin, C., and Peters.)
Petersen, Axel C. G. (See Poulsen, A., and Petersen.)
Peterson, Edward H. (See Odlum, W. H., and Peterson.)
Peterson, Joseph A., and C. E. Olsen, Houston, Tex. Tongs. 1,857,397; May 10.
Peterson, Walter E., Inglewood, assignor of one-third to J. V. Palmer, Hermosa Beach, Calif. Tank cleaning device. 1,857,766; May 10.
Petroleum Heat and Power Company. (See Whaley, Ralph S., assignor.)
Pfretzschner, Adolf, Pasing, near Munich, Germany. Apparatus for stunning animals to be slaughtered. 1,857,658; May 10.
Phelps, Barton P., Topeka, Kans. Method and apparatus for utilizing heat from blown off boiler products. 1,857,865; May 10.
Phelps, Donald J., assignor to Phelps Radio Corporation, Chicago, Ill. Radio cabinet. Des. 86,933; May 10.
Phelps Radio Corporation. (See Phelps, Donald J., assignor.)
Philips', N. V., Gloeilampenfabrieken. (See Voorhoeve, Nicolaas A. J., assignor.)
Phillips, Edward A., assignor to The India Rubber Gutta Percha and Telegraph Company Limited, London, England. Manufacture of hollow articles of rubber. 1,857,972; May 10.
Phillips, Paul D., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Wiring terminal construction. 1,857,398; May 10.
Phillips, Robert S., assignor to American Hair & Felt Company, Chicago, Ill. Apparatus for engraving plates and other objects. 1,857,285; May 10.
Photomaton, Inc. (See Boynton, Earl S., assignor.)
Piagneri, Umberto, San Francisco, Calif. Permutation lock. 1,857,399; May 10.
Pickett, Glen V. (See Rentz, Frank B., assignor.)
Pidgeon, Harry W., Chicago, Ill. Jew's harp. 1,857,400; May 10.
Pieper, Alphonse F., Rochester, N. Y. Dental unit. Re18,460; May 10.
Pieper, Alphonse F., Rochester, N. Y. Dental apparatus. 1,858,056; May 10.
Pieper, Oscar H., Rochester, N. Y. Dental spray. 1,857,866; May 10.
Pier, Mathias. (See Krauch, C., and Pier.)
Pierce, Harold S., and R. T. Sweeney, Indianapolis, Ind., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,857,792; May 10.
Pierce, Silas A., Swansea, assignor to Draper Corporation, Hopedale, Mass. Shedding mechanism for looms. 1,857,474; May 10.
Pignanelli, Luigi, Tacoma, Wash. Shoe. Re18,461; May 10.
Pilet, John H., San Francisco, Calif. Propeller. 1,857,327; May 10.
Pilling, Frank E., Long Beach, Calif. Carburetor. 1,858,057; May 10.

Pinckard, William P., South Chicago, assignor of one-half to L. Patterson, G. Adams, and P. A. Gose, Chicago, Ill. Automatic trailer train steering mechanism. 1,857,740; May 10.
Piombo, Sebastino, San Francisco, Calif. Automobile hood bracket lamp. 1,858,232; May 10.
Pioneer Heat Regulator Corporation. (See Dicke, Oscar H., assignor.)
Piper, Frederick, Portland, Oreg. Toilet bowl. 1,857,328; May 10.
Pittsburgh Equitable Meter Company. (See Reid, James F., assignor.)
Pittsburgh Plate Glass Company. (See Lynn, George, assignor.)
Pittsburgh Plate Glass Company. (See Mertes, August, assignor.)
Pittsburgh Plate Glass Company. (See Poundstone, William W., assignor.)
Plantes, John J. (See Peters, John R., assignor.)
Platt, Herbert, Cumberland, Md., assignor to Celanese Corporation of America. Treating fabrics and product thereof. 1,857,163; May 10.
Plesch, Johann, Berlin, Germany. Blood pressure tourniquet. 1,857,567; May 10.
Pneumatic Scale Corporation. (See Rohrig, Paul, assignor.)
Pneumatic Scale Corporation, Limited. (See Doble, Ralph N., assignor.)
Polikoff, Emanuel, Minneapolis, Minn. Combination article of furniture. 1,857,401; May 10.
Pollack, Joseph O., Chicago, Ill. Press. 1,857,286; May 10.
Poliopas Limited. (See Ostersetzer, A., and Riesenfeld, assignors.)
Poole, Joseph E., Pretoria, South Africa. Cutting implement. 1,858,170; May 10.
Poppleton, Mae, Greenville, Ill. Incubator tray. 1,857,568; May 10.
Portable Air Hammer Company, Inc. (See Campbell, James C., assignor.)
Post, Albert H., Waterbury, Conn., assignor to Henry Hyman, Brooklyn, N. Y. Flash light plug. 1,857,604; May 10.
Poulsen, Arnold, Hellerup, and A. C. G. Petersen, Copenhagen, Denmark. Device for recording of sound. 1,857,569; May 10.
Poundstone, William W., Charleroi, Pa., assignor to Pittsburgh Plate Glass Company. Making optical disks. 1,857,213; May 10.
Proctor, John A., Lexington, and W. M. Bailey, Lynn, Mass., assignors, by mesne assignments, to General Electric Company. Electrical condenser. 1,857,867; May 10.
Proper, William H., Kansas City, Mo., assignor, by mesne assignments, to Dr. C. I. Trimble, Tulsa, Okla. Automatic crossing gate for railroads. 1,857,868; May 10.
Proper, William H., Kansas City, Mo., assignor, by mesne assignments, to Dr. C. I. Trimble, Tulsa, Okla. Railroad gate operating system. 1,857,869; May 10.
Prosperity Company, The. (See McDermott, Harry H., assignor.)
Providenti, Joseph, Charleston, W. Va. Banjo. 1,858,171; May 10.
Pucunas, John, Los Angeles, Calif. Headlight. Des. 86,934; May 10.
Putting, Oscar J. (See Castleman, Vincent F.)
Quabaug Rubber Company. (See Mason, Herbert T., assignor.)
Quintrell, Harry J., Southgate, Calif. Core barrel having core receptacle. 1,857,693; May 10.
Quirk, Justin P., assignor to United Wood Heel Company, St. Louis, Mo. Attaching heels to shoe. 1,857,475; May 10.
Raasche, Gerhard, assignor to Paul Raasche Söhne, Riga, Latvia. Indicating device for automatic balances. 1,857,870; May 10.
Raasche Söhne, Firm Paul. (See Raasche, Gerhard, assignor.)
Radio Corporation of America. (See La Rue, William D., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Rail Joint Company, The. (See Gadd, William E., assignor.)
Ramapo Ajax Corporation. (See Bender, William, assignor.)
Ramus, James A., Oakland, Calif. Noiseless type action for typewriters. 1,857,741; May 10.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Picture transmission. 1,857,329; May 10.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Picture transmission. 1,857,330; May 10.
Rapley, Harold H., Bedford, England. Newspaper conveyer. 1,857,605; May 10.
Rea, Wilton T., Flushing, N. Y., assignor to American Telephone and Telegraph Company. Transmission system. 1,857,258; May 10.
Rea, Wilton T., Flushing, N. Y., assignor to American Telephone and Telegraph Company. Transmission system. 1,857,259; May 10.
Reaney, Russell J., Ottawa, Ontario, Canada. Mechanical movement. 1,857,871; May 10.
Rees', Hans, Sons, Incorporated. (See Rees, Louis du B., assignor.)
Rees, Louis du B., assignor to Hans Rees' Sons, Incorporated, New York, N. Y. Impregnating apparatus. 1,858,111; May 10.
Reeves Manufacturing Company, The. (See Vogan, Frank M., assignor.)
Reflector Hardware Corporation. (See Zadek, Milton, assignor.)
Reid, James F., assignor, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Curb meter. 1,857,331; May 10.
Reid, James S., Shaker Heights, assignor to The Reid Products Company, Cleveland, Ohio. Hub cap. 1,857,659; May 10.
Reid Products Company, The. (See Reid, James S.)
Reimann, Erich, Charlottenburg, Germany, assignor to General Electric Company. Slip regulation of asynchronous machines. 1,858,058; May 10.
Reinhart, Irwin. (See Sackers, P., Reinhart, and Straub.)
Reiter, Daniel L., New York, N. Y. Self-adjusting fastener slide. 1,857,973; May 10.
Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)
Remington Rand Inc. (See Wood, Rodney J., assignor.)
Renault, Louis. (See Saives, Léon, assignor.)
Rendelman, Joseph, Philadelphia County, Pa. Radiator filter. 1,857,606; May 10.
Renfer, John E., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Fluid operated tool. 1,858,059; May 10.
Reno, Joseph, Jamaica, assignor of one-half to A. Seafidl, Astoria, N. Y. Ear protector. 1,857,974; May 10.
Rentz, Frank B., assignor to G. V. Pickett, Yankton, S. Dak. Heater for cooling liquids of internal combustion engines. 1,857,767; May 10.
Reo Motor Car Company. (See Northup, Amos E., assignor.)
Reubel, Henry, assignor to The Kroder Reubel Company, Inc., New York, N. Y. Drapery and curtain support and operating means therefor. 1,857,768; May 10.
Reynolds, Frederick D., St. Louis, Mo. Shoe plate. 1,857,975; May 10.
Reynolds, Richard S., Louisville, Ky. Condenser and condenser material. 1,857,476; May 10.
Rhodes Electric "Hat-Man" Inc. (See Rhodes, George V., assignor.)
Rhodes, George V., assignor to Rhodes Electric "Hat-Man" Inc., Seattle, Wash. Hat renovating machine. 1,858,172; May 10.
Ricci, Thomas A., Richmond, Va. Amusement device. 1,858,069; May 10.
Rice, Edgar U., Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Serving device. 1,857,820; May 10.
Richardson, Charles F., Brookline, Mass. Suspending a hammock. 1,857,607; May 10.
Richardson Corporation. (See Ames, Lewis G., assignor.)
Richardson, Frank C., Los Angeles, Calif. Flexible hose and connection. 1,857,821; May 10.
Richmond Fireproof Door Company. (See Winder, Joseph Z., assignor.)
Richmond Screw Anchor Co. (See Schenk, Tamis C., assignor.)
Richter, Walter E., assignor to A. O. Smith, Corporation, Milwaukee, Wis. Resistance welding automotive vehicle frames. 1,857,517; May 10.
Richtmyer, Floyd K., Ithaca, N. Y. Electron discharge device. 1,857,608; May 10.
Rider, Ernest G., assignor to Stokes and Smith Company, Philadelphia, Pa. Wrapper tabbing mechanism. 1,857,260; May 10.
Rieper, Gerhard, Leipzig, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Picture telegraphy circuit. 1,857,742; May 10.
Riesenfeld, Franz. (See Ostersetzer, A., and Riesenfeld.)
Riestenberg, George, Cincinnati, Ohio. Sediment retainer. 1,857,660; May 10.
Righton, Douglas H., Hoanga, Dargaville, New Zealand. Aeroplane. 1,857,694; May 10.
Rightway Corporation, The. (See Webb, Arthur B., assignor.)
Ritter, George F., assignor to The Tillotson Manufacturing Company, Toledo, Ohio. Valve construction. 1,857,477; May 10.
Rivard, Lionel I., New Haven, assignor of one-half to L. F. Dwyer, Torrington, Conn. Toy. 1,857,976; May 10.
Robbiano, Peter, Lakeport, Calif. Directional signal. 1,857,977; May 10.
Robbins, Azor D., New Brunswick, N. J., assignor to International Motor Company, New York, N. Y. Power apportioning means. 1,857,978; May 10.
Roberts, Albert J., assignor of seventeen per cent to I. R. Whan, Cleveland, Ohio. Brake for airplanes. 1,858,112; May 10.
Roberts, Dermont H., Long Beach, Calif. Indentification device. 1,857,822; May 10.
Roberts, Oliver G., San Benito, Tex. Plow. 1,858,114; May 10.
Robinovitch, Louise G. (See Mindeleff, Charles, assignor.)
Robinson, Henry, New York, N. Y. Oyster opener. 1,857,872; May 10.
Robinson, Thomas L., Valparaiso, Ind. Retainer for ball bearings. 1,857,823; May 10.

Roche, William J., Cochranton, Pa. Game apparatus. 1,858,113; May 10.
Rockwell, Paul O., Baltimore, Md. Caustic silicate. 1,857,402; May 10.
Rodanet, Charles H. H., Versailles, assignor to Société Anonyme etablissements Ed. Jaeger, Seine, France. Windscreen adjusting mechanism. 1,857,261; May 10.
Roe, Ralph C., Englewood, assignor of one-half to S. W. Borden, Summit, N. J. Power plant. 1,857,332; May 10.
Roemer, Julius, Lakewood, Ohio. Evaporator. 1,858,061; May 10.
Rohrbogenwerk Gesellschaft mit beschrankter Haftung, Firm. (See Bohling, Rudolf H., assignor.)
Rohrig, Paul, Bellaire, N. Y., assignor to Pneumatic Scale Corporation, Ltd., Norfolk Downs, Mass. String winding device for bagging machines. 1,857,661; May 10.
Rohrig, Paul, Bellaire, N. Y., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Tea Bagging machine. 1,857,662; May 10.
Roof Spring Scraper Company. (See Weeks, Ernest A., assignor.)
Rosén, Gotthard, Paris, France, assignor to La Cellulose Rosen, Societe Anonyme, Luxemburg, Luxemburg. Preparing resinous wood for digestion by the bisulphite process. 1,857,695; May 10.
Rosenthal Leo, Leverkusen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. New synthetic resins. 1,857,333; May 10.
Ross Gear & Tool Company. (See Strebe, M. F., Lenning, and Zink, assignors.)
Ross, Samuel B. (See Scott, B. H., and Ross.)
Ross, Warren A., assignor of one-fourth to D. M. Carter, Chicago, Ill., and five-eighths to T. O. Boyd, Long Beach, Calif. Cutting apparatus for stone, coal, and the like. 1,857,403; May 10.
Ross, William H., Allentown, Pa. Brake drum truing device. 1,857,873; May 10.
Rossiter, Edmund C., and W. C. Davis, London, England. Manufacture of artificial resins. 1,857,478; May 10.
Rotary Printing Company. (See Cole, Fred B., assignor.)
Rouse, H. B., and Company. (See Stuckeman, William F., assignor.)
Rousselet, René, Paris, assignor to Compagnie pour la Fabrication des Compteurs et Materiel d'Usines à Gaz, Montrouge-Seine, France. Apparatus for taking samples of liquids. 1,857,874; May 10.
Rowe, Clement J., assignor to The Egry Register Company, Dayton, Ohio. Web positioning mechanism. 1,857,214; May 10.
Rowe, Irving R., assignor to Atwood Machine Company, The, Stonington, Conn. Spinning and twisting machines. 1,857,743; May 10.
Royer, Jesse R., Janesville, Iowa. Adjustable gauge and stop for grader blades. 1,857,479; May 10.
Ruhert, Harold H., assignor, by mesne assignments, to General Motors Corporation, Detroit, Mich. Oil gauge. 1,857,334; May 10.
Rubin, Boris M., et al. (See Taube, Gustav, assignor.)
Ruckstahl, Alfred, assignor to Holcroft & Company, Detroit, Mich. Electric furnace. 1,858,062; May 10.
Ruder, William E., Schenectady, N. Y., assignor to General Electric Company. Electrical induction apparatus. 1,857,215; May 10.
Ruffin, Allen F., Waterbury, and A. L. Weckler, Thomaston, assignors to Scovill Manufacturing Company, Waterbury, Conn. Atomizer support. 1,857,609; May 10.
Ruigh, Jacob C., et al. (See Abbink, Albert, assignor.)
Rumford Chemical Works. (See Fiske, A. H., and Bryan, assignors.)
Runsvold, Martin S., San Diego, Calif. Electric connection plug. 1,857,663; May 10.
Russell, James G. (See Turner, J. L., and Russell.)
Rust, George A. (See Hawkins, Percy O., assignor.)
Rutherford, Sant. (See Cearley, Columbus W., assignor.)
Sackers, Peter, I. Reinhart, and T. G. Straub, Evansville, Ind. Engraving machine. 1,857,570; May 10.
Safety Mining Company. (See Kneeland, Frank H., assignor.)
Safety Mining Company. (See Pierce, H. S., and Sweeney, assignors.)
St. Clair, Byron W., Lynn, Mass., assignor to General Electric Company. Thermionic measuring instrument. 1,857,216; May 10.
St. Pierre, Henry, Worcester, Mass. Buckle. 1,857,217; May 10.
Saives, Léon, assignor to Louis Renauld of Brillancourt, Seine, France. Door of road vehicles. 1,857,696; May 10.
Sakier, George, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Bathtub. Des. 86,935; May 10.
Sakier, George, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Bathtub. Des. 86,936; May 10.
Sall, Enrique M. Y., Santiago de Cuba, Cuba. Bottle cap. 1,857,793; May 10.
Salinas, Gustavo A., New York, N. Y., assignor to T. R. Brooks, Scranton, Pa. Switch for electrical systems. 1,857,875; May 10.
Samburg, Maurice. (See Hochman, J. C., and Degener, assignors.)
Sändig, Kurt. (See Scheiber, J., Sändig, and Blumer.)
Sawyer, Harold L., Lynn, and J. W. Cosgrove, Medford, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for softening shoe stiffeners. 1,857,218; May 10.
Scalf, William D., Pineville, Ky. Drop-seat garment. 1,857,335; May 10.
Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Opening and locking means for loose leaf ring structures. 1,857,287; May 10.
Schaefer, Otto C., assignor to The Napier Company, Meriden, Conn. Tongs for table service. 1,857,979; May 10.
Schaer, Charles, Langenthal, Switzerland, assignor to the firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Cylinder head for internal combustion engine. 1,857,744; May 10.
Schaffer, John, Greensburgh, Pa. Safety guard for clothes wringers. 1,857,876; May 10.
Scheiber, Johannes, and K. Sändig, Leipzig, and A. Blumer, Zwickau, Germany. Treating Batavian dammar resin. 1,857,698; May 10.
Schemmel, Robert C., Union City, Ind. Finishing welt. 1,857,877; May 10.
Schenk, Tamis C., Brooklyn, N. Y., assignor to Richmond Screw Anchor Co., Inc. Form tie. 1,857,610; May 10.
Schering-Kahlbaum A. G. (See Schoeller, W., and Gehrke, assignors.)
Schering-Kahlbaum, A. G. (See Schwenk, E., and Jordan, assignors.)
Schinzel, George P., jr. (See Colon, John, assignor.)
Schipper, Friedrich, Wiesbaden, Germany. Apparatus for measuring the output of refrigerating machines. 1,857,262; May 10.
Schlecht, Leo, and E. Keunecke, Ludwigshafen-on-the-Rhine, and W. Schubardt, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of metal carbonyls. 1,858,220; May 10.
Schlötter, Max, Berlin, Germany, assignor to Asociacion De Productores De Yodo De Chili, Valparaiso, Chili. Treatment of gold and silver. 1,857,664; May 10.
Schmidt, Walter. (See Nicodemus, O., and Schmidt.)
Schmook, Rudolf, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Picture telegraph apparatus. 1,857,745; May 10.
Schneider, Bernard R., Lyndburst, and K. Kaiser, Ridgefield, N. J., assignors, by mesne assignments, to S. Karpen & Bros., Chicago, Ill. Spring turning mechanism. 1,858,211; May 10.
Schoeller, Walter, and M. Gehrke, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Recovery of a water soluble preparation of the hormone of the anterior lobe of the pituitary gland. 1,857,878; May 10.
Schoenholz, Irving. (See McCabe, C. J., and Schoenholz.)
Schlotz, Arthur, and H. Frucht; said Frucht assignor to S. Feldstein, Brooklyn, N. Y. Emergency kit for automobiles. 1,857,824; May 10.
Schonberger, Emil F., Cleveland, Ohio, assignor to The Smokeless Furnace & Boiler Co. Inc. Furnace. 1,857,480; May 10.
Schott, John E., Bayonne, N. J., assignor to The Atlantic Refining Company, Philadelphia, Pa. Removal of wax from oil. 1,857,404; May 10.
Schrader, Lloyd F., Richmond Hill, N. Y., and W. H. Wright, Mountain Lakes, N. J., assignors to Foundation Oven Corporation, New York, N. Y. Combination oven. 1,857,288; May 10.
Schroder, Charles. (See Fried, J. A., and Schroder.)
Schubardt, Walter. (See Schlecht, L., Keunecke, and Schubardt.)
Schubardt, Walter, Mannheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Metal powder. 1,857,879; May 10.
Schuler L., A.-G. (See Kühner, Otto, assignor.)
Schulse, Herman E., assignor to Uniclox Corporation, Wilmington, Del. Globe fixture. Des. 86,937; May 10.
Schulte, Walter B., and J. S. Zook, assignors to Burgess Battery Company, Madison, Wis. Battery. 1,858,026; May 10.
Schwartz, Jacob C., deceased, University City; Mercantile-Commerce Bank and Trust Company, trustee, assignor to Berry Dental Laboratory Co., St. Louis, Mo., Dental apparatus. 1,857,289; May 10.
Schwartz, William, New York, N. Y. Store front. Des. 86,938; May 10.
Schwartz, William, New York, N. Y. Store front. Des. 86,939; May 10.
Schweitzer, Hugo. (See Hentrich, W., Burr, and Schweitzer.)
Schwemlein, William, assignor to The Parkersburg Rig & Reel Company, Parkersburg, W. Va. Walking beam. 1,858,115; May 10.
Schwenk, Erwin, Berlin-Neu-Westend, and H. Jordan, Berlin-Steglitz, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Production of hydroaromatic-alcohols. 1,857,880; May 10.
Scott, Bernard H., Glendale, and S. E. Ross, Long Beach, assignors to Scott-Ross and Company, Los Angeles, Calif. Deep well fluid-motor pump. 1,857,405; May 10.
Scott, Herbert C., Wellington, New Zealand. Oil burning apparatus for steam boilers. 1,857,697; May 10.
Scott, Leslie E., and E. A. Smith, San Jose, Calif. Automatic vending machine. 1,857,881; May 10.

Scott-Ross and Company. (See Scott, B. H., and Ross, assignors.)
Scovill Manufacturing Company. (See Ruffin, A. F., and Weckler, assignors.)
Seafidl, Antone. (See Reno, Joseph, assignor.)
Seaman, William H., Hammond, Ind. Metal roll. 1,857,825; May 10.
Sebastian, Robert L., Montclair, N. J., assignors to The American Agricultural Chemical Company. Reacting acid phosphates with ammonia liquor. 1,857,571; May 10.
Sebell, Harry, Boston, assignor of one-half to A. H. Parker, Lexington, Mass. Sealed can and making the same. 1,857,665; May 10.
Sebrell, Lorin B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Antioxidant. 1,857,981; May 10.
Segal Founders Corporation. (See Segal, Hyman R., assignor.)
Segal, Hyman R., assignor to Segal Founders Corporation, New York, N. Y. Safety razor. 1,857,980; May 10.
Seguy, Jean D., assignor to Universal Oil Products Company, Chicago, Ill. Hydrocarbon oil conversion. 1,857,406; May 10.
Seiz, Walter, Baden, Switzerland, assignor to General Electric Company. Speed or load control system. 1,857,164; May 10.
Severin, Carl, Cleveland Heights, and L. R. Peters, Cleveland, Ohio, assignor to General Electric Company. Cut out for series lamp. 1,857,165; May 10.
Seyforth, Rome C., Hastings, Minn. Brush suspending device. 1,857,407; May 10.
Sharp & Dohme, Inc. (See Dohme, Alfred R. L., assignor.)
Shaw, Charles G., Huntsville, Ontario, Canada. Apparatus for pressing leather. 1,858,192; May 10.
Shaw, Charles G., Huntsville, Ontario, Canada. Manufacture of leather. 1,858,193; May 10.
Shaw Crane-Putnam Machine Company. (See Gough, Arthur C., assignor.)
Shelters, Hiram H., Detroit, Mich. Caliper or divider. 1,858,116; May 10.
Shelton, William G., St. Louis, Mo. Vibrator or like mechanism. 1,857,982; May 10.
Sherwood, Lester L., Los Angeles, Calif. Key container. 1,857,336; May 10.
Shinkle, Edward M., Higginsport, Ohio. Stop for rotating parts. 1,857,408; May 10.
Shipman, Frederic, Los Angeles, Calif. Changeable sign front. 1,857,882; May 10.
Shock, Frank J. (See Frank, F. J., and Shock.)
Sibley, Charles R., Lake Mary, Fla., assignor to Sibley-Pym Corporation, Lynn, Mass. Golf ball. 1,857,518; May 10.
Sibley-Pym Corporation. (See Sibley, Charles R., assignor.)
Siegfried, Joseph, Lafayette, Ind. Edge anchor for building sheets. 1,858,221; May 10.
Siemens-Halske Aktiengesellschaft. (See Doring, F., and Storch, assignors.)
Siemens & Halske, Aktiengesellschaft. (See Engelhardt, Y., Eger, and Hein, assignors.)
Siemens & Halske Aktiengesellschaft. (See Fanselau, Werner, assignor.)
Siemens & Halske Aktiengesellschaft. (See Masing, Georg, assignor.)
Siemens & Halske, Aktiengesellschaft. (See Rieper, Gerhard, assignor.)
Siemens & Halske, Aktiengesellschaft. (See Schmook, Rudolf, assignor.)
Siepp, Fred, Kimball, Nebr. Piston operated snap switch. 1,858,117; May 10.
Silberstein, Isidor, Berlin, Germany. Method of and apparatus for manufacturing high ohmic resistances. 1,857,769; May 10.
Silven, Herbert A., assignor to Norton Company, Worcester, Mass. Grinding machine. 1,858,222; May 10.
Simmons Company. (See Gail, John F., assignor.)
Simplex Time Recorder Company. (See Watkins, E. G., and Hobby, assignors.)
Simpson, Herbert S., Chicago, Ill. Mulling machine. 1,857,337; May 10.
Sinclair Refining Company. (See Herthel, E. C., and Gullette, assignors.)
Sjölander, Carl G. L., Dalsborg, Sweden. Machine for welding tubular objects. 1,857,338; May 10.
Sjolander, Henning R., Ishpeming, Mich. Removing ice from roofs. 1,857,883; May 10.
Skelly Oil Company. (See Watkins, Walter G., assignor.)
Skinner Automotive Device Co. (See Lambert, E. H., Skinner, Geertz, and Williams.)
Skinner, Ralph L. (See Lambert, E. H., Skinner, Geertz, and Williams.)
Skinner, Walter J., Bloomfield, N. Y., assignor to Van Wickland Products Co., Newark, N. J. Heater unit for cathodes of vacuum tubes and producing same. 1,858,063; May 10.
Skitt, James H., assignor to Smith, Drum & Company, Philadelphia, Pa. Flatwork ironer. 1,857,290; May 10.
Skogmark, John, New York, N. Y. Precipitating apparatus and process. 1,857,884; May 10.
Slamen, Albert C., Melbourne, Victoria, Australia. Fish landing net. 1,857,826; May 10.
Sleeper & Hartley. (See Nigro, Michel, assignor.)
Smallhouse, Albert A., Los Angeles, Calif. Combination check, pilot, and unloading valve for compressed air systems. 1,857,666; May 10.
Smith, A. O., Corporation. (See Burnish, Howard J., assignor.)
Smith, A. O. Corporation. (See Crawford, William E., assignor.)
Smith, A. O., Corporation. (See Heineman, Warren F., assignor.)
Smith, A. O., Corporation. (See Richter, W. E., assignor.)
Smith, A. O., Corporation. (See Stresau, R., and Chyle, assignors.)
Smith, Clarence W., Mexia, Tex., assignor of one-half to P. Buchanan and one-fourth to L. G. Vandersall. Automatic cut-off valve for storage tanks. 1,857,409; May 10.
Smith, Drum & Company. (See Skitt, James H., assignor.)
Smith, Ernest A. (See Scott, L. E., and Smith.)
Smith, Horatio W., A. D. Braasch, and N. Walton, assignors to Caterpillar Tractor Company, San Leandro, Calif. Harvester construction. 1,857,699; May 10.
Smith, Joseph J., deceased, Cambridge; W. J. Smith, executor, assignor to Firth-Smith Company, Boston, Mass. Apparatus for operating on spinning frames and other machines. 1,857,410; May 10.
Smith, Joseph J., deceased, Cambridge, by W. J. Smith, Brockton, executor, assignor to Firth-Smith Company, Boston, Mass. Track and trolley wire structure for electrically propelled carriages. 1,858,118; May 10.
Smith, Theodore L., Concord, Mass., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,857,339; May 10.
Smith, William J., executor. (See Smith, Joseph J.)
Smithells, Colin J., Bushey, England, assignor to General Electric Company. Manufacture of refractory metal bodies. 1,857,219; May 10.
Smittle, Walter R., St. Louis, Mo. Packing ring. 1,858,173; May 10.
Smokeless Furnace & Boiler Co. Inc., The. (See Schonberger, Emil F., assignor.)
Smythe, Edwin H., Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wave energy translating diaphragm and mounting it. 1,857,794; May 10.
Sneed, John, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio. Brake mechanism. 1,857,481; May 10.
Société Anonyme. (See Rodanet, Charles H. H., assignor.)
Societe Anonyme des Anciens Etablissements Hotchkiss & Compagnie. (See de Boigne, Maurice, assignor.)
Societe des Anciens Etablissements Salvatori Leperche Frangialli & Cie., successeurs. (See Lantz, Robert, assignor.)
Societe Metallurgique de Normandie. (See Gouge, Pierre, assignor.)
Societe Stac-Nord. (See Bertandeau, Gaston, assignor.)
Society of Chemical Industry in Basle, The Firm. (See Straub, F., and Andrau, assignors.)
Society Pierre Remy & Cie. (See Mathieu de Boissac, Henri M., assignor.)
Sonnett, William A., assignor to The P. Goldsmith Sons Company, Cincinnati, Ohio. Game ball laced opening. 1,857,482; May 10.
Soule, George C., and J. B. Woodbury, South Portland, assignors to Maine Steel Products Company, Portland, Me. Snowplow. 1,858,212; May 10.
Southern Prison Company. (See Mardick, J. K., and White, assignors.)
Speicher, Frank S., assignor to M. E. Cunningham Company, Pittsburgh, Pa. Marking device. 1,857,166; May 10.
Speidel, Edwin F. M., Edgewood, R. I. Bracelet chain. Des. 86,940; May 10.
Spencer, Millard C., East Orange, assignor to Crocker-Wheeler Electric Manufacturing Company. Ampere, N. J. Operating polyphase motors from a single-phase source. 1,857,411; May 10.
Sperry, Samuel E., Hollis, N. Y., assignor to Intertype Corporation, New York, N. Y. Assembler star wheel. 1,858,119; May 10.
Sponsel, Kurt, Frankfort-on-the-Main-Hochst, and K. Jochum, assignors to Farbenindustrie Aktiengesellschaft, I. G., Frankfort-on-the-Main, Germany. Strengthening cotton, artificial silk, artificial foils of cellulose, viscose, or the like and material prepared by this process. 1,857,263; May 10.
Springer, Hinrich. (See Axien, Johann H., assignor.)
Spry, Richard, Port Alfred, Quebec, Canada. Splicing paper cores, tubes, and the like. 1,857,519; May 10.
Stacy, Leland J., Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,857,827; May 10.
Stadler, George J., assignor to A. H. Ballard, Incorporated, Boston, Mass. Liquid fuel burner. 1,857,667; May 10.
Stair, Daniel E., assignor to Gifford-Wood Company, Hudson, N. Y. Cover installation for storage bins. 1,857,886; May 10.
Stair, Daniel E., Hudson, N. Y., and C. L. McDonald, Washington, D. C., assignors to Gifford-Wood Company, Hudson, N. Y. Cover installation for storage bins. 1,857,885; May 10.
Standard Car Truck Company. (See Barber, F. L., and Webb, assignors.)

Standard-I. G. Company. (See Krauch, C., and Pier, assignors.)
Standard Oil Development Company. (See Loomis, Nathaniel E., assignor.)
Standard Oil Development Company. (See McCabe, W. L., and Mead, assignors.)
Standard Pressed Steel Co. (See Hallowell, H. T., and Bennett, assignor.)
Standard Sanitary Manufacturing Company. (See Sakier, George, assignor.)
Stanley Works, The. (See Steindorff, U. F. L., Heller, and Ungar, assignors.)
Stark Bro's Nurseries & Orchards Company. (See Burbank, Luther, assignor.)
Starrett Building Co., et al. (See Clark, Malcom S., assignor.)
Staud, Cyril J. (See Gray, H. L. B., Staud, and Webber.)
Staud, Cyril J. (See Webber, C. S., Staud, and Gray.)
Steatit-Magnesia Aktiengesellschaft. (See Bimber, Heinrich, assignor.)
Steckel, Abram P., assignor to The Cold Metal Process Company, Youngstown, Ohio. Rolling metal strip. 1,857,670; May 10.
Steel Scaffolding Company Limited, The. (See Marshall, Arnold C., assignor.)
Steele, Herbert H., Lynbrook, assignors, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting, computing, and check-protecting machine. 1,858,027; May 10.
Steele, Maurice G., Rome, N. Y., assignor to The Hart & Hutchinson Company, New Britain, Conn. Humidifier. 1,857,770; May 10.
Steiger, Norbert, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New dyestuff of the thionaphthene-indigo series. 1,857,264; May 10.
Stein, František, Prague, Czechoslovakia. Water separator. 1,857,887; May 10.
Steindorff, Ulrich F. L., H. J. Heller, New York, and G. A. Ungar, Pelham Manor, N. Y.; said Ungar assignor to The Stanley Works, New Britain, Conn. Power driven shears for cutting sheet material such as metal, leather, cardboard, or the like. 1,857,167; May 10.
Steiner, Hubbard W., J. G. Eldridge, and W. C. Keys, Detroit, Mich., assignors to The Mechanical Rubber Company, Cleveland, Ohio. Cushioning connection. 1,857,168; May 10.
Steinmayer, Alwin G., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Tool. 1,857,483; May 10.
Stephens, Neal W., Caldwell, Kans. Automatic adjusting attachment for concaves. 1,857,295; May 10.
Stevens, Donald R., Ridgewood, assignor to The Okonite Company, Passaic, N. J. Shipping reel. 1,857,169; May 10.
Stevens, George S., Boston, Mass. Ski. 1,858,120; May 10.
Stimpson, Robert H. (See Van der Pyl E., and Stimpson.)
Stokes and Smith Company. (See Rider, Ernest G., assignor.)
Stone, Herbert G., Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y. Purification of sodium acetate. 1,857,520; May 10.
Storch, Paul. (See Doring, F., and Storch.)
Stouges, Anthony J., Queens Village, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. 1,858,121; May 10.
Stout, William B., Detroit, Mich. Airplane landing device. 1,857,888; May 10.
Strandt, Gustav E., Milwaukee, Wis. Wheel structure. 1,857,746; May 10.
Straub, Fritz, and W. Anderau, assignors to "Society of Chemical Industry in Basle", Basel, Switzerland. Metal compounds of azo-dyestuffs and making same. 1,857,572; May 10.
Straub, Theodore G. (See Sackers, P., Reinhart, and Straub.)
Strehe, Melville F., and C. K. Lenning, La Fayette, Ind., and F. W. Zink, Detroit, Mich., assignors to Ross Gear & Tool Co., La Fayette, Ind. Stamped sheet-metal lever. 1,857,573; May 10.
Stresau, Richard, Wauwatosa, and J. J. Chyle, assignors to A. O. Smith Corporation, Milwaukee, Wis. Metallic arc welding electrode. 1,857,521; May 10.
Stroburg, Clark E. and G. O., Blockton, Iowa. Corner plow. 1,857,484; May 10.
Stroburg, Glen O. (See Stroburg, Clark E. and G. O.)
Ströher, Karl G., Rothenkirchen in Vogtland, Germany. Hair curler. 1,857,677; May 10.
Struckman, Edmund F. (See Tyler, A. G., and Struckman.)
Stuart, Henry J., New Haven, Conn. Hose supporter button. 1,857,983; May 10.
Stuckeman, William F., assignor to H. B. Rouse & Company, Chicago, Ill. Cutting tool. 1,857,795; May 10.
Sturm, Wilhelm, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Carburetor. 1,857,889; May 10.
Styslinger, Leo J., assignor to Auto Truck Equipment Company, Pittsburgh, Pa. Truck body. 1,857,796; May 10.
Suddath, Henry N., Watertown, N. Y., assignor to The New York Air Brake Company. Valve actuator. 1,857,266; May 10.
Sukohl, Heinrich, Berlin-Waldmannslust, Germany. Screw propeller for use upon aircraft. 1,857,678; May 10.
Sullivan, Daniel J., Graniteville, Mass. Insect trap. 1,857,890; May 10.
Sullivan Machinery Company. (See Hoy, Austin Y., assignor.)
Sullivan Machinery Company. (See Oliphant, John, assignor.)
Sulzer Freres Societe Anonyme, The Firm of. (See Schaer, Charles, assignor.)
Sund, Alfred D., Santa Rosa, Calif. Bumper for dust mops and brooms. 1,857,668; May 10.
Sunday, James J., Chicago, Ill., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Automobile heater. 1,858,028; May 10.
Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Testing and flexing machine. 1,857,669; May 10.
Superheater Company, The. (See Engler, Otto, assignor.)
Sutton, John H., Los Angeles, Calif. Cattle stanchion. 1,857,412; May 10.
Sweeney, Russell T. (See Pierce, H. S., and Sweeney.)
Swift, George W., jr., assignor to G. W. Swift, Jr., Inc., Bordentown, N. J. Egg case filler. 1,857,984; May 10.
Swift, George W., Jr., Inc. (See Swift, George W., jr., assignor.)
Swift, Howard E., Westfield, Mass. Landing gear. 1,857,611; May 10.
Sykora, Mary G., Des Moines, Iowa. Wearing apparel. 1,857,574; May 10.
Synchrome Corporation. (See Wright, Walter L., assignor.)
Szakacs, Joseph, Lincoln, Nebr., assignor of one-half to J. Basman, South Milwaukee, Wis. Plow. 1,857,700; May 10.
T. & T. Vicars Limited. (See Naylor, Joseph F., assignor.)
T. & T. Vicars Limited. (See Tunstall, Harold H., assignor.)
Taber, Frederic H., New Bedford, Mass. Collar or like garment part. 1,857,170; May 10.
Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Fluid operated apparatus. 1,857,413; May 10.
Taube, Gustav, Riga, Latvia, assignor of twenty-six and two-thirds per cent to Israel B. Brodie, New York, N. Y., twenty-six and two-thirds per cent to Sidney Musher, Baltimore, Md., twenty-six and two-thirds per cent to Boris M. Rubin, Seagate, N. Y. Manufacturing various products from cornstalks, sugar cane, and similar vegetable material. 1,857,985; May 10.
Tauscher, Arno E., Chicago, Ill. Radio sound box. 86,941; May 10.
Taylor, Edgar W., assignor to Infallible Card Selecting Company Limited, Birmingham, England. Card and like indexing, sorting, tabulating, and like apparatus. 1,857,612; May 10.
Telefonaktiebolaget L. M. Ericsson. (See Laurent, Torbern, assignor.)
Teletype Corporation. (See Krum, Howard L., assignor.)
Ternstedt Manufacturing Company. (See Edgar, Frank M., assignor.)
Ternstedt Manufacturing Company. (See Flynn, John B., assignor.)
Tetlow, Lewis J., Holyoke, Mass. Airplane wing. 1,858,194; May 10.
Tetlow, Lewis J., Holyoke, Mass. Anti-tail spin device. 1,858,195; May 10.
Texas Company, The. (See Cullison, Benjamin F., assignor.)
Texas Company, The. (See Gee, William P., assignor.)
Texas Company, The. (See White, George D., assignor.)
Thacher Sheldon P. (See Eger, E., and Thacher.)
Thatcher, Gerald D., Syracuse, N. Y. Emergency brake. 1,858,122; May 10.
Thermatomic Carbon Company. (See Miller, Carroll, assignor.)
Therrien, Arthur J., Northbrook, assignor to National Brick Company, Chicago, Ill. Manufacturing bricks. 1,857,671; May 10.
Thoma, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Shoe filler piece. 1,857,672; May 10.
Thomas, Arthur, Thornton Heath, assignor to The Accounting & Tabulating Corporation of Great Britain, Limited, London, England. Card perforating machine or the like. 1,858,174; May 10.
Thomas, Cecil O., Montreal, Quebec, Canada. Flexible transmission unit. 1,857,679; May 10.
Thomsen, Alfred M., San Francisco, Calif. Economic recovery of sulphur from smelter smoke. 1,857,414; May 10.
Thropp, Joseph W., Trenton, N. J. Electrically controlled brake. 1,858,123; May 10.
Thumin, Carl, Philadelphia, Pa., assignor to General Electric Company. Switch operating mechanism. 1,857,220; May 10.
Tillotson Manufacturing Company, The. (See Ritter, George F., assignor.)
Tintore, Ignacio M., San Francisco, Calif. Parachute. 1,857,485; May 10.
Tip's Tool Company. (See Bodendieck, Henry W., assignor.)

Toce, Charles A., Houston, Tex. Game table. Des. 86,942; May 10.
Toledo Scale Manufacturing Co. (See Finley, Dozier, assignor.)
Toledo Scale Manufacturing Company. (See Hem, Halvor O., assignor.)
Toledo Scale Manufacturing Company. (See Hurt, Samuel N., assignor.)
Tornberg, Isidor, and H. C. Jordhoy, Plainfield, N. J., assignors to Wood Newspaper Machinery Corporation, New York, N. Y. Half speed deck and insetting device. 1,857,221; May 10.
Towle Manufacturing Company. (See Nock, Harold E., assignor.)
Townsend Manufacturing Company. (See Jancke, Benno F., assignor.)
Transue & Williams Steel Forging Corporation. (See Nagy, Peter M., assignor.)
Trego, Frank H., assignor to Varityper Incorporated, New York, N. Y. Variable feed mechanism for typewriter carriages. 1,857,771; May 10.
Trimble, C. I., Dr. (See Proper, William H., assignor.)
Trio Specialty Company. (See MacNamee, William H., assignor.)
Tropenas Company. (See Broche, Leon J., assignor.)
Trumbull-Vanderpoel Electric Manufacturing Company, The. (See Dante, Joseph J., assignor.)
Trumpler, William E., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Centrifugal blower. 1,857,486; May 10.
Trussell, Clarence D., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y. Loose-leaf binder. 1,857,291; May 10.
Trussell Manufacturing Company. (See Trussell, Clarence D., assignor.)
Tunstall, Harold H., Liverpool, assignor of one-half to T. & T. Vicars Limited, Earlestown, England. Machine for applying a layer of plastic material to articles, such as biscuits. 1,858,175; May 10.
Turcott, David, assignor to Yates-American Machine Company, Beloit, Wis. Automatic turning machine. 1,857,891; May 10.
Turcott, David, assignor to Yates-American Machine Company, Beloit, Wis. Automatic turning machine. 1,857,986; May 10.
Turner, Henry B., Lawton, Okla. Ice cube tray. 1,858,124; May 10.
Turner, Jacob L., and J. G. Russell, Milton, Mass. Heat exchanger. 1,857,892; May 10.
Twiss, Douglas F., and E. A. Murphy, Birmingham, England, assignors to The Anode Rubber Company Limited. Covering of wire, thread-like and filamentary material, and the like, with India rubber, gutta-percha, balata, or similar materials or compounds thereof and apparatus therefor. 1,857,987; May 10.
Tygart Valley Glass Company. (See Noble, Olbert C., assignor.)
Tyler, Alfred G., and E. F. Struckman, London, England. Apparatus for measuring the flight of a ball. 1,857,267; May 10.
U. G. I. Contracting Company, The. (See Bosler, Wilson T., assignor.)
Udet, Ernst, Berlin-Wilmersdorf, Germany. Displaying a sign in the air. 1,857,292; May 10.
Udet, Ernst, Berlin, Germany. Moving target for practice shooting. 1,857,893; May 10.
Udet, Ernst, assignor to the Firm: Udet-Schleppschrift Gesellschaft mit beschrankter Haftung, Berlin, Germany. Aerial advertising and apparatus. 1,857,415; May 10.
Udet-Schleppschrift Gesellschaft mit beschrankter Haftung. (See Udet, Ernst, assignor.)
Uline, Michiel J., Toledo, Ohio, assignor, by mesne assignments, to Gifford-Wood Company, Hudson, N. Y. Ice scoring machine. 1,857,894; May 10.
Underwood Elliott Fisher Company. (See Dobson, William A., assignor.)
Underwood Elliott Fisher Company. (See Helmond, William P., assignor.)
Ungar, Gustave A. (See Steindorff, U. F. L., Heller, and Ungar.)
Ungeheuer, Ernest W., Dallas, Tex. Container for tables. 1,857,522; May 10.
Unger, Paul O., assignor to Wilson-Jones Company, Chicago, Ill. Chain post and making the same. 1,857,988; May 10.
Uniclox Corporation. (See Schulse, Herman E., assignor.)
Union Cold Storage Company, The. (See Downing, Clifford J., assignor.)
Union Switch & Signal Company. (See O'Hagen, Bernard E., assignor.)
United Shoe Machinery Corporation. (See Ballard, Harrie A., assignor.)
United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)
United Shoe Machinery Corporation. (See Brogan, James A., assignor.)
United Shoe Machinery Corporation. (See Dow, Harry E., assignor.)
United Shoe Machinery Corporation. (See Sawyer, H. L., and Cosgrove, assignors.)
United States National Bank of Portland, Oreg., The, as trustee. (See Millington, Arthur E., assignor.)
U. S. Slicing Machine Company. (See Woodington, John N., assignor.)
United Wood Heel Company. (See Quirk, Justin P., assignor.)
Universal Dental Company. (See Charen, Myer, assignor.)
Universal Oil Products Company. (See de Rachat, Nicholas G., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company, The. (See Egloff, G., and Howard, assignors.)
Universal Oil Products Company. (See Olsen, Neal S., assignor.)
Universal Oil Products Company. (See Seguy, Jean D., assignor.)
Upton, Albert, Paterson, N. J., assignor to Van Raalte Company, New York, N. Y. Lace. Des. 86,943; May 10.
Urschel, Bertis H., Bowling Green, assignor to Urschel Engineering Company, Toledo, Ohio. Heat treating axles. 1,857,895; May 10.
Urschel Engineering Company. (See Urschel, Bertis H., assignor.)
Vallen, Earl J., Akron, Ohio. Stake or screen modifier. 1,857,673; May 10.
Vance, Walter N., North Aurora, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Rack. 1,858,064; May 10.
Vandegrift, James N., assignor to International Bitumenoil Corporation, New York, N. Y. Retort. 1,857,171; May 10.
Van der Pyl, Edward, Wilton, and R. H. Stimpson, Nashua, N. H., assignors, by mesne assignments, to F. L. Emery, Boston, Mass. Packaging machine. 1,857,680; May 10.
Vandersall, Lemuel G., et al. (See Smith, Clarence W., assignor.)
Venderveer, Jewell W., assignor Erie Malleable Iron Company, Erie, Pa. Metal wheel. 1,857,747; May 10.
Van Ilempt, Johannes A. M., Eindhoven, Netherlands, assignor to General Electric Company. Leading-in conductor. 1,857,203; May 10.
Van Ness, Henry E., Elmira, assignor to R. W. Byerly, New York, N. Y. Fire extinguisher. 1,857,797; May 10.
Van Raalte Company. (See Upton, Albert, assignor.)
Van Wickland Products Co. (See Skinner, Walter J., assignor.)
Varityper Incorporated. (See Trego, Frank H., assignor.)
Vasquez, Joaquin, and M. Bernardez, Pontevedra, Spain. Submarine lifeboat. 1,857,575; May 10.
Vedder, John W., Worcester, Mass. Paper drier. 1,857,222; May 10.
Velt, Walter. (See Hausman, S., and Velt.)
Veling, Jacob J., Milwaukee, Wis. Tie puller. 1,857,772; May 10.
Vellino, Carlos, Barcelona, Spain. Chain pump. 1,857,896; May 10.
Verderber, Joseph, Cleveland, Ohio. Locking mechanism. 1,858,065; May 10.
Verderber, Joseph, Cleveland, Ohio. Locking mechanism. 1,858,066; May 10.
Vincent, James A., Providence, R. I. Automatic safety control for motor vehicles. 1,857,897; May 10.
Vincent, Jesse G., and A. Moorhouse, assignors to Packard Motor Car Company, Detroit, Mich. Transmission synchronizing device. 1,857,223; May 10.
Virck, Paul. (See Heimann, H., and Virck.)
Virneburg, George, New York, N. Y. Washing implement. 1,857,989; May 10.
Vogan, Frank M., Canton, assignor to The Reeves Manufacturing Company, Dover, Ohio. Washboard. Des. 86,944; May 10.
Vogt, Richard C., West New York, N. J. Curtain support. 1,857,990; May 10.
Vogt, Richard C., West New York, N. J. Curtain rod. 1,857,991; May 10.
Von Devecis, Michael, Budapest, Hungary, assignor to Waldberg Societe Anonyme, Paris, France. Galvanizing or electroplating process. 1,858,125; May 10.
Von Eberhard, Kurt, Frankfort-on-the-Main, Germany, assignor to International Precipitation Company, Los Angeles, Calif. Electrode supporting means for electrical precipitators. 1,857,416; May 10.
Voorhoeve, Nicolaas A. J., assignor to N. V. Philips' Gloeilampenfabricken, Eindhoven, Netherlands. Device for regulating alternating currents. 1,857,576; May 10.
Voorhoeve, Nicolaas A. J., assignor to N. V. Philips' Gloeilampenfabricken, Eindhoven, Netherlands. Transformer. 1,857,577; May 10.
Vroom, Robert D. W., Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y. Curtain hook. 1,857,293; May 10.
Wadsworth Electric Manufacturing Company, The. (See Wadsworth, George B., assignor.)
Wadsworth, George B., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky. Switch blade device. 1,857,487; May 10.
Wadsworth Watch Case Co., The. (See McFarland, James C., assignor.)
Wagar, Harold N., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Circuit controlling device. 1,857,828; May 10.
Wagner, Charles H., Washington, D. C., assignor to Koehring Company, Milwaukee, Wis. Safety mechanism for material handling machines. 1,857,172; May 10.
Waldberg Societe Anonyme. (See von Devecis, Michael, assignor.)

Walder, Emil, Philadelphia, Pa. Thermostatic switch plug. 1,857,173; May 10.
Walder, Emil, Philadelphia, Pa., assignor to The Beardsley & Wolcott Mfg. Co. Thermostatically controlled electric circuit. 1,857,417; May 10.
Walder, Emil, Philadelphia, Pa., assignor to The Beardsley & Wolcott Manufacturing Company. Thermostatic switch plug. 1,857,899; May 10.
Walder, Emil, Philadelphia, Pa., assignor to The Beardsley & Wolcott Manufacturing Company. Thermostatic electrical plug. 1,857,900; May 10.
Walker Cement Products Inc. (See Dietrichs, Charles, assignor.)
Walker, John E., Atlanta, Ga., assignor, by mesne assignments, to The Clymer Manufacturing Company, Denver, Colo. Glass cutting machine. 1,857,748; May 10.
Wallace, Jeffrey J., assignor to Gullett Gin Company, Amite, La. Distributor conveyer. 1,857,898; May 10.
Walsh, Philip J., San Francisco, Calif. Constant current amplifier system. 1,857,901; May 10.
Walton, George P., and R. F. Gardiner, Washington, D. C. Fertilizer material and manufacturing the same. 1,858,230; May 10.
Walton, Norris. (See Smith, H. W., Braasch, and Walton.)
Warren, Glenn B., Schenectady, N. Y., assignor to General Electric Company. Elastic fluid turbine. 1,858,067; May 10.
Warren, Walter G., Chicago, Ill. Flying target. 1,857,701; May 10.
Watkin, Bertram L., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Ceiling lighting fixture. Des. 86,945; May 10.
Watkins, Edward G., and H. E. Hobby, assignors to Simplex Time Recorder Company, Gardner, Mass. Time card holder. 1,858,068; May 10.
Watkins, Walter G., Kansas City, Mo., assignor to Skelly Oil Company, El Dorado, Kans. Pressure relief valve. 1,858,202; May 10.
Watson, John B. (See Harder, F., Watson, and Middleton.)
Watts, Arthur S., Columbus, Ohio. Temperature controlling method for ceramic furnaces or kilns. 1,857,702; May 10.
Waxler, R. L., et al. (See Hardcastle, Jasper A., assignor.)
Wayne Company. (See Hartman, Jacob W., jr., assignor.)
Wenn Engineering Company, The. (See Evans, Archibald, D., assignor.)
Webb, Arthur B., Milwaukee, Wis., assignor to The Rightway Corporation. Mixing and drying machine. 1,857,798; May 10.
Webb, Edwin W. (See Barber, F. L., and Webb.)
Webb, Ervin F., Beaumont, Tex. Packing extractor. 1,858,176; May 10.
Webber, Charles S. (See Gray, H. L., Staud, and Webber.)
Webber, Charles S., Springeld, Mass., C. J. Staud, and H. L. Gray, assignors to Eastman Kodak Company, Rochester, N. Y. Electrolytic process for the purification of acetic acid solution. 1,857,224; May 10.
Weber, John, Chicago, Ill. Lock. 1,857,225; May 10.
Weber, John, Cleveland, Ohio. Game apparatus. 1,857,902; May 10.
Weckler, Arthur L. (See Ruffin, A. F., and Weckler.)
Wedler, Harry G., assignor to The Wedler-Shuford Co., St. Louis, Mo. Sent cover. 1,857,418; May 10.
Wedler Shuford Co., The. (See Wedler, Harry G., assignor.)
Weeks, Ernest A., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Road scraper. 1,858,213; May 10.
Weeks, Ernest A., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Road scraper. 1,858,214; May 10.
Weeks, Leo, Des Moines, Iowa. Bill clip. 1,857,488; May 10.
Weeks, Paul T. (See Du Mont, A. B., and Weeks.)
Weinder, Frank. (See Dember, E., and Weinder.)
Weisner, Harry, Philadelphia, Pa. Necktie pin. 1,857,226; May 10.
Weissbach, Helmut. (See Beck, C., and Weissbach.)
Weitz, Fred W., Des Moines, Iowa. Method of and apparatus for anchoring standards. 1,857,489; May 10.
Wells, Philip V. (See Mackenzie, L. F., and Dewis.)
Wensley, Albert G., and W. S. Jackson, assignors to Anaconda Copper Mining Company, Anaconda, Mont. Electrolytic apparatus. 1,857,903; May 10.
Wermine, Hugo H., Villa Park, assignor to Belden Manufacturing Company, Chicago, Ill. Electric plug connecter. 1,858,196; May 10.
Wermine, Hugo H., Villa Park, assignor to Belden Manufacturing Company, Chicago, Ill. Electric plug connecter. 1,858,197; May 10.
West Bend Aluminum Company. (See Kircher, Ralph N., assignor.)
West, Carl E., Watertown, Wis. Brake testing device. 1,857,773; May 10.
Western Electric Company. (See Arkema, H. P., and McMullan, assignors.)
Western Electric Company. (See Bidwell, Edgar M.)
Western Electric Company. (See McCann, Paul S., assignor.)
Western Electric Company. (See Rice, Edgar U., assignor.)
Westgate, Oscar L. (See Booth, H. N., and Westgate.)
Westinghouse Electric & Manufacturing Company. (See Herr, Herbert T., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kintner, Samuel M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lamb, Carl J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lidak, Joseph P., assignor.)
Westinghouse Lamp Company. (See Du Mont, A. B., and Weeks, assignors.)
Westmoreland, Crawford T. (See Farrell, J. H., and Westmoreland.)
Westphal, Henry C., El Paso, Tex. Puncture marker and tube deflater. 1,857,703; May 10.
Weyerts, Walter J. (See Hickman, K. C. D., and Weyerts.)
Whaley, Ralph S., Seattle, Wash., assignor to Petroleum Heat and Power Company, New York, N. Y. Oil burner. 1,857,613; May 10.
Whan, I. R. (See Roberts, Albert J., assignor.)
Wheeler, Seth, jr., Albany, N. Y. Shower pipe. 1,857,829; May 10.
Whipple, Ray. (See Impey, R. R., and Whipple.)
White, Charles H., assignor to Deere & Company, Moline, Ill. Planter. 1,857,749; May 10.
White, George D., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Scavenging tubular heaters of deposited material. 1,857,904; May 10.
White, Lloyd J. (See Mardick, J. K., and White.)
Whitehead Torpedo Company Limited, The. (See Jones, Albert E., assignor.)
Whittle, Horace, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission circuit. 1,857,830; May 10.
Wicker, Charles R. (See Hiatt, J. R., and Wicker.)
Wickman, Arthur, Minneapolis, Minn. Flag holder for automobiles. 1,857,774; May 10.
Wigan Coal and Iron Company. (See Leek, Albert E., assignor.)
Wilbur, Lawrence S., Evanston, Ill. Shock absorber. 1,857,750; May 10.
Wilcolator Company, The. (See Fonseca, Edward L., assignor.)
Wilderson, Clinton G., deceased, Leetonia, The Guardian Trust Company, Cleveland, Ohio, and M. Wilderson, executors. Control mechanism. 1,857,905; May 10.
Wilderson, Myrna, et al., executors. (See Wilderson, Clinton G., assignor.)
Wiley, Lee M., assignor to Delta Electric Company, Marion, Ind. Electric lantern. 1,857,993; May 10.
Wilkes, Frederic, Wilkinsburg, Pa. Lubricating apparatus. 1,857,992; May 10.
Wilkoff, Arthur E., and O. J. Nyberg, Niles, Ohio, assignors to Youngstown Steel Car Company. Special metal channel section. 1,857,704; May 10.
Williams, Clarence B., Santa Barbara, Calif. Windshield wiper. 1,857,419; May 10.
Williams, Dayton L., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for and method of building pneumatic tire flaps. 1,857,994; May 10.
Williams, Leo C. (See Brackett, F. M., and Williams.)
Williams, Leo C. (See Brackett, F. M., Williams, and Daneke.)
Williams, Paul. (See Lambert, E. H., Skinner, Geertz, and Williams.)
Williams Tool Corporation. (See Metz, Henry R., assignor.)
Wilson-Jones Company. (See Unger, Paul O., assignor.)
Winder, Joseph Z., assignor to Richmond Fireproof Door Company, Richmond, Ind. Electromechanical interlock mechanism. 1,857,227; May 10.
Wine, William E., Toledo, Ohio. Ventilator for cars. 1,857,681; May 10.
Winkler, Fritz, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of water gas. 1,857,799; May 10.
Winthrop Chemical Company. (See Neubert, Oskar, assignor.)
Wired Radio, Inc. (See Isler, Samuel, assignor.)
Wirtschafter, Hugo, Vienna, Austria. Apparatus for projecting diapositives. 1,857,268; May 10.
Wirtz, Franz. (See Monforts, Joseph, and Wirtz.)
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Film holding strap. 1,857,523; May 10.
Wolber, Ernest H., Clifton, N. J. Tile cutting machine. 1,857,269; May 10.
Wolcott, Frank E., West Hartford, and L. V. Lucia, Hartford, Conn., assignors, by mesne assignments, to The Beardsley & Wolcott Mfg. Co. Thermostatic switch. 1,857,906; May 10.
Wolff, Bruno G. W. and W. C. F., Dearborn, Mich. Ventilating arrangement for automobile hoods. 1,857,705; May 10.
Wolff, Wilhelm C. F. (See Wolff, Bruno G. W. and W. C. F.)
Wolford, Edgar W., San Jose, Calif. Coupling device. 1,857,420; May 10.
Wollmer, Robert, Milwaukee, Wis. Shoe sole. 1,857,751; May 10.
Wolverine Bumper & Specialty Company. (See Hammond, Milton B., assignor.)
Wood, Chester A., Columbia, Ill. Internal combustion engine. 1,858,126; May 10.

Wood, Donald L., assignor to Eastman Kodak Company, Rochester, N. Y. Film pack. 1,857,524; May 10.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Late news plate casting machine. 1,857,228; May 10.
Wood Newspaper Machinery Corporation. (See Tornberg, I., and Jordhov, assignors.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, Rodney J., Dayton, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Card index file. 1,857,229; May 10.
Woodbury, John B. (See Soule, G. C., and Woodbury.)
Woodington, John N., assignor to U. S. Slicing Machine Company, La Porte, Ind. Sharpener for slicing machines. 1,857,421; May 10.
Woodsteel Box Corporation. (See Brock, Henry E., assignor.)
Woolley, William J., Chicago, Ill. Water closet. 1,857,800; May 10.
Worrall, Robert H., Washington, D. C. Stroboscope. 1,857,422; May 10.
Wright, Esmond P. G., Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Automatic telephone exchange system. 1,858,069; May 10.
Wright, Walter L., Santa Monica, assignor to Synchrome Corporation, Los Angeles, Calif. Motion picture film. 1,857,578; May 10.
Wright, William A. (See Corson, C. E., and Wright.)
Wright, William H. (See Schrader, L. F., and Wright.)
Wyatt, Ernest B., Haddonfield, N. J., assignor, by mesne assignments, to Minnesota Mining and Manufacturing Company, St. Paul, Minn. Abrasive article. 1,857,340; May 10.
Yates-American Machine Company. (See Turcott, David, assignor.)
York, Henry F., Haxtum, Colo. Corn picking and husking machine. 1,857,907; May 10.
Youngstown Sheet and Tube Company, The. (See Baker, John H., assignor.)
Youngstown Steel Car Company. (See Wilkoff, A. E., and Nyberg, assignors.)
Zabrocki, Tony, Winona, Minn. Camera back. 1,857,706; May 10.
Zadek, Milton, assignor to Reflector Hardware Corporation, Chicago, Ill. Sign holder. 1,857,423; May 10.
Zink, Fred W. (See Strebe, M. F., Lenning, and Zink.)
Zitscher, Arthur, and F. Muris, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Producing fast printings. 1,857,230; May 10.
Zook, John S. (See Schulte, W. B., and Zook.)
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Speedometer with rotating magnets. 1,857,674; May 10.
Zucker, Myron, Royal Oak, Mich., assignor to General Electric Company. Electric regulating system. 1,857,174; May 10.
Zuhlke, William R. (See Boerg, B., Zuhlke, and Kugeman.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 10TH DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abrasive article. E. B. Wyatt. 1,857,340; May 10.
Accelerator for internal combustion engines. P. G. Frazier. 1,857,448; May 10.
Accounting system and apparatus. J. L. Baber, jr. 1,857,123; May 10.
Acid and/or conversion products thereof, Obtaining orthophosphoric. C. H. Milligan and S. Klosky. 1,857,470; May 10.
Acid phosphates with ammonia liquor, Reacting. R. L. Sebastian. 1,857,571; May 10.
Acid, Purification of phosphoric. A. H. Fiske and C. S. Bryan. 1,858,203; May 10.
Acid, Recovery of nitric. C. Beck and H. Weissback. 1,857,346; May 10.
Acids, Concentrating volatile aliphatic. A. Gorhan. 1,858,150; May 10.
Acids, Concentrating volatile aliphatic. A. Gorhan. 1,858,151; May 10.
Acoustic device. J. C. Johnson. 1,857,641; May 10.
Adding machine. J. A. Fried and C. Schroder. 1,857,299; May 10.
Advertising and apparatus, Aerial. E. Udet. 1,857,415; May 10.
Aeroplane. W. M. Alexander. 1,858,128; May 10.
Aeroplane. D. H. Righton. 1,857,694; May 10.
Air cleaning and moistening device. R. D. Matteson. 1,857,512; May 10.
Air conditioning apparatus for storage rooms. C. A. Moore. 1,858,023; May 10.
Aircraft with auto-rotative wings. J. de la Cierva. 1,857,807; May 10.
Airplane landing device. W. B. Stout. 1,857,888; May 10.
Airplane propeller. A. G. Im Oberstag. 1,857,473; May 10.
Airplane wing. L. J. Tetlow. 1,858,194; May 10.
Air pressure regulator. G. Koehler, jr. and W. P. Hill. 1,857,917; May 10.
Airship. E. A. Lehmann. 1,857,963; May 10.
Alcohols, Production of hydroaromatic. E. Schwenk and H. Jordan. 1,857,880; May 10.
Aliphatic amines from primary aliphatic bases, Preparing secondary and tertiary. O. Nicodemus and W. Schmidt. 1,857,655; May 10.
Alkyl resorcinols, Higher. A. R. L. Dohme. 1,858,042; May 10.
Alloy of high permeability, Magnetic. H. Neumann and H. Kuhleweln. 1,857,970; May 10.
Aluminum hydrate, Obtaining. T. O. McAdoo. 1,858,165; May 10.
Aluminum oxide and other aluminum combinations, Production of. T. R. Haglund. 1,857,844; May 10.
Amino naphthalene derivatives, Amino arylated. H. Heimann and P. Virck. 1,857,542; May 10.
Aminonaphthalene derivatives, Arylated. H. Heimann and P. Virck. 1,857,541; May 10.
Amusement device. D. Epstein, J. H. Fowler and C. A. Bouffier. 1,857,629; May 10.
Amusement device. T. A. Ricco. 1,858,060; May 10.
Anchor for building sheets, Edge. J. Siegfried. 1,858,221; May 10.
Anchorage and product thereof. N. M. Jones. 1,857,912; May 10.
Animal trap. W. J. Lementy. 1,858,095; May 10.
Animals to be slaughtered, Apparatus for stunning. A. Pfretzschner. 1,857,658; May 10.
Anthraguinonyl-amino derivatives of benzanthrone-pyrazolanthrone. M. A. Kunz and K. Koeberle. 1,857,553; May 10.
Antioxidant. L. B. Sebrell. 1,857,981; May 10.
Antitail spin device. L. J. Tetlow. 1,858,195; May 10.
Apparatus for straightening out the ends of bent pipes. R. H. Bohling. 1,857,583; May 10.
Apparatus for testing the physical condition of human beings. L. F. Mackenzie, P. V. Wells and E. G. Dewis. 1,857,732; May 10.
Apparatus for use in combination or in conjunction with a sextant adapted for use as an artificial horizon and direction indicator. L. H. Morrison. 1,857,736; May 10.
Apparel, Wearing. M. G. Sykora. 1,857,574; May 10.
Aquarium. G. R. Rossetta. 1,858,181; May 10.
Aquarium. J. J. Halterbeck. Des. 86,914; May 10.
Arc welding system. C. J. Holslag. 1,857,306; May 10.
Armature. V. G. Apple. 1,857,175; May 10.
Articles, Apparatus for wrapping. C. J. Downing. 1,858,189; May 10.
Articles in a uniform manner, Apparatus for automatically delivering. A. R. Lafferty. 1,857,815; May 10.
Articles of rubber, Manufacture of hollow. E. A. Phillips. 1,857,972; May 10.
Arylides of naphthalene dicarbonylic acids and making same. L. Laska and O. Haller. 1,857,555; May 10.
Ash removing apparatus for gas producers and the like. W. B. Chapman. 1,857,355; May 10.
Ash riddler. B. F. Englar. 1,858,006; May 10.
Assembler star wheel. S. E. Sperry. 1,858,119; May 10.
Atomizer support. A. F. Ruffin and A. L. Weckler. 1,857,609; May 10.
Auger, Ice. F. W. Brooks, sr. 1,857,585; May 10.
Automobile heater. J. J. Sunday. 1,858,028; May 10.
Axles, Heat treating. B. H. Urschel. 1,857,895; May 10.
Back for a picture frame. H. L. Budd. 1,857,937; May 10.
Baffle wall. J. E. Muhlfeld. 1,857,320; May 10.
Bag. H. B. Laymon. 1,858,159; May 10.
Bag and making the same, Siftproof. E. Freydberg. 1,857,949; May 10.
Bagging machines, String winding device for. P. Rohrig. 1,857,661; May 10.
Baler and loader, Hay. M. Goggins. 1,857,373; May 10.
Ball: *See*—
Golf ball.
Ball laced openings, Game. W. A. Sonnett. 1,857,482; May 10.
Banjo. J. Providenti. 1,858,171; May 10.
Barrel, Removable head. C. T. Draper. 1,857,443; May 10.
Bars, Making forged compromise. W. Bender. 1,857,582; May 10.
Bathtub. G. Sakler. Des. 86,935–6; May 10.
Battery: *See*—
Storage battery.
Battery. W. B. Schulte and J. S. Zook. 1,858,026; May 10.
Beam counterbalance. F. Harder, J. B. Watson, and C. W. Middleton. 1,857,191; May 10.
Beam, Walking. W. Schwemlein. 1,858,115; May 10.
Beehive. H. O. Benton. 1,857,709; May 10.
Belt, Colostomy. M. A. Bowman. 1,857,179; May 10.
Bevel gauge. H. Ahola. 1,857,129; May 10.
Bill clip. L. Weeks. 1,857,488; May 10.
Bin: *See*—
Rotary bin.
Binder, Loose leaf. F. C. Bingham. 1,858,132; May 10.
Binder, Loose leaf. L. E. Goodyear. 1,857,843; May 10.
Binder, Loose-leaf. C. D. Trussell. 1,857,291; May 10.
Black print of tracing cloth and making same. K. Murck. 1,857,763; May 10.
Blowpipe. F. S. Austin. 1,857,344; May 10.
Blower, Centrifugal. W. E. Trumpler. 1,857,486; May 10.
Blown ware or blown ware, Method and apparatus for completing pressed. R. J. Beatty. 1,857,491–2; May 10.
Boat, Collapsible. A. Cantzler. 1,857,236; May 10.
Boat construction, Speed. B. R. Batty. 1,858,030; May 10.
Bobbin protector. B. F. Mack. 1,857,599; May 10.
Boiler structure. J. P. Morley and S. J. Lonergan. 1,857,471; May 10.
Bolt. A. L. Linderman and T. J. Maines. 1,857,388; May 10.
Booth construction. J. Judelson. 1,857,913; May 10.
Bottle. Z. H. Confair. Des. 86,906; May 10.
Bottle cap. E. M. Y. Sall. 1,857,793; May 10.
Bougie, ball, and the like and making same, Medicinal. O. Neubert. 1,858,108; May 10.
Bowl, Toilet. F. Piper. 1,857,328; May 10.
Box: *See*—
Coin box.
Delivery box.
Folded box.
Outlet box.
Box. H. E. Brock. 1,857,350; May 10.
Box, brace, and liner for underground pipes, Sealing. R. W. McAfee. 1,858,101; May 10.
Bracelet chain. E. F. M. Speidel. Des. 86,940; May 10.
Bracket: *See*—
Jointed bracket.
Brake: *See*—
Electrically controlled brake.
Emergency brake.
Friction brake.
Brake drum truing device. W. H. Ross. 1,857,873; May 10.
Brake for airplanes. A. J. Roberts. 1,858,112; May 10.
Brake mechanism. J. Sneed. 1,857,481; May 10.
Brake mechanism, Hand. T. K. Cummins. 1,858,188; May 10.
Brake shoe, Friction. T. F. Brackett. 1,857,125; May 10.
Brake testing device. C. E. West. 1,857,773; May 10.
Brick, block, slab, and the like. F. Humphris. 1,858,091; May 10.

Bricks, Manufacturing. A. J. Therrien. 1,857,671; May 10.
Bridge scoring device. W. V. Degalan. 1,858,075; May 10.
Broach. O. Lundell. Re18,458; May 10.
Broaching machine, Rotary. J. Oakley. 1,857,516; May 10.
Brush, Fountain. J. Gisztl. 1,857,300; May 10.
Brush, Fountain lather. H. E. Medley. 1,857,857; May 10.
Brush making machine, Automatically acting. A. Mertes. 1,857,207; May 10.
Brush suspending device. R. C. Seyforth. 1,857,407; May 10.
Buckle. H. St. Pierre. 1,857,217; May 10.
Buffer. I. F. Dittmar. 1,857,240; May 10.
Buffing machine, Automatic. E. W. M. Bailey. 1,857,832; May 10.
Building, Compartment. C. E. Gillespie. 1,857,189; May 10.
Building construction. A. B. Patterson. 1,857,320; May 10.
Building construction, Soundproof. T. J. Foster. 1,857,369; May 10.
Building material. G. H. Ellis. 1,857,534; May 10.
Building material. G. H. Ellis. 1,858,217; May 10.
Building wall construction. J. H. Alles and G. Kohl. 1,857,995; May 10.
Bumper, Automobile. M. B. Hammond. 1,857,635; May 10.
Bumper for dust mops and brooms. A. D. Sund. 1,857,668; May 10.
Burglar trap. E. E. Page. 1,857,395; May 10.
Burner: *See*—
Fuel burner. Oil burner.
Gas burner.
Button, Hose supporter. H. J. Stuart. 1,857,983; May 10.
Cabinet, Baker's proofing. C. E. House. 1,858,086; May 10.
Cabinet, Hygienic. R. O. Ferguson. 1,858,146; May 10.
Cabinet, Metal filing. C. A. Johnson. 1,857,640; May 10.
Cable clamp. E. K. Cole. 1,857,437; May 10.
Cable splice. E. K. Cole. 1,857,436; May 10.
Calculating and listing machine. G. C. Chase and L. R. Brown. 1,857,356; May 10.
Calculating and similar machine. A. E. Jones. 1,857,642; May 10.
Caliper or divider. H. H. Sheltera. 1,858,116; May 10.
Camera back. T. Zabrocki. 1,857,706; May 10.
Cameras, Body construction for. C. C. Fuerst and J. Christie. 1,857,502; May 10.
Can and making the same, Sealed. H. Sebell. 1,857,665; May 10.
Candle. M. A. Hirschl. 1,857,957; May 10.
Car or table transfer means. J. L. Drake. 1,857,840; May 10.
Carbon black, Manufacture of. C. Miller. 1,857,469; May 10.
Carbon tetrachloride and product thereof, Preventing the decomposition of. L. F. Martin and A. A. Elston. 1,858,022; May 10.
Carburetor. F. H. Heitger. 1,857,245; May 10.
Carburetor. F. H. Heitger. 1,857,543; May 10.
Carburetor. T. W. Kings. Re18,456; May 10.
Carburetor. M. Mallory. 1,857,466; May 10.
Carburetor. R. Menkhaus. 1,858,166; May 10.
Carburetor. F. E. Pilling. 1,858,057; May 10.
Carburetor. W. Sturm. 1,857,889; May 10.
Carburetor, Surface. A. Pahl and H. Heimann. 1,857,565; May 10.
Card and like indexing, sorting, tabulating, and like apparatus. E. W. Taylor. 1,857,612; May 10.
Carding device for artificial teeth. M. Charen. 1,857,999; May 10.
Carding device for artificial teeth. D. E. Evans. 1,857,713–14; May 10.
Carrier: *See*—
Dotachable carrier.
Cartridge, Blasting. F. H. Kneeland. 1,857,813; May 10.
Cartridge, Blasting. H. S. Pierce and R. T. Sweeney. 1,857,792; May 10.
Case: *See*—
Key case. Show case.
Case and lighter, Combined cigarette. C. Gardner. 1,857,243; May 10.
Casing for a clothes washing and extracting machine, Combined. J. J. McCabe. Des. 86,923; May 10.
Casing for a washing machine and centrifugal drier. A. W. Altorfer. Des. 86,902; May 10.
Catalytic apparatus. H. O. C. Isenberg. 1,857,308; May 10.
Caustic silicate. P. O. Rockwell. 1,857,402; May 10.
Cellulose acetate, Hydrolysis of. H. L. Gray, C. J. Staud, and C. S. Webber. 1,857,100; May 10.
Cellulose esters, Production of low viscosity. C. J. Malm and A. Andersen. 1,857,562; May 10.
Cellulose, Making alkali. L. Lilienfeld. 1,858,017; May 10.
Cellulose preparatory to esterification, Treatment of. H. Dreyfus. 1,857,183; May 10.
Cellulose xanthate, Preparing. R. Dosne. 1,857,948; May 10.
Cement and making it. G. Lynn. 1,857,205; May 10.
Centrifugal apparatus. T. Chester. 1,858,071; May 10.
Cereal products, Process and composition for improving. J. P. Ioannu. 1,858,093; May 10.
Chain, Conveyer. W. R. Coppage. 1,857,529; May 10.
Chain, Conveyer. R. R. Fauntleroy. 1,858,079; May 10.
Chain post and making the same. P. O. Unger. 1,857,988; May 10.
Chair seat. R. Curcio. 1,857,942; May 10.
Charge forming device. F. E. Aseltine. 1,857,776; May 10.
Chart. C. G. Dewhirst. 1,858,140; May 10.
Chest: *See*—
Sewing chest.
Chipping machine. G. W. Lentz. 1,857,464; May 10.
Chocolate, Manufacture of. L. H. Clark. 1,857,430; May 10.
Chromium plating. C. H. Humphries. 1,857,547; May 10.
Circuit breaker, Automatic. C. H. and B. L. Hadley. 1,858,191; May 10.
Circuit breaker, Automatic. N. A. Hickok. 1,857,637; May 10.
Circuit controlling device. H. N. Wagar. 1,857,828; May 10.
Circuit, Picture telegraphy. G. Rieper. 1,857,742; May 10.
Circuit, Thermostatically controlled electric. E. Walder. 1,857,417; May 10.
Circuit, Transmission. H. Whittle. 1,857,830; May 10.
Circuit, Zero correcting. E. T. Burton. 1,858,037; May 10.
Clamp: *See*—
Cable clamp. Press clamp.
Clamp for electric conductors, Suspension. A. C. Goodwin and T. H. Barnard. 1,857,277; May 10.
Cleaner: *See*—
Pipe cleaner. Tongue and mouth cleaner.
Receptacle cleaner.
Clip: *See*—
Bill clip.
Clip for guard-boards of scaffolds and the like. A. C. Marshall. 1,857,159; May 10.
Closet: *See*—
Water closet.
Closure. H. M. Mathieu de Boissac. 1,858,163; May 10.
Closure for containers. M. H. McMann. 1,857,853; May 10.
Clothes rack. A. E. Berdon. 1,857,617; May 10.
Clutch, Ball or roller. W. Miller and H. T. Lamb. 1,857,252; May 10.
Clutch, Friction. C. M. Eason. 1,858,004; May 10.
Coal carbonizing power plant and method of reducing coal. O. S. Bowman. 1,858,135; May 10.
Coat. D. Long. Des. 86,920; May 10.
Coating and product thereof. W. H. Moss. 1,857,161; May 10.
Coating, Equipment for vertical. W. H. Edmondson. 1,857,241; May 10.
Cock, Valve. M. Chouinard and J. P. Paradis. 1,857,940; May 10.
Coin box. C. A. Frick. 1,858,190; May 10.
Coke, Apparatus for cooling. W. T. Bosler. 1,857,618; May 10.
Collar or like garment part. F. H. Taber. 1,857,170; May 10.
Colloidal mono-sodium tetraiodophenolphthalein. E. F. Ellzey. 1,858,142; May 10.
Color projecting machine. M. De Francisco. 1,857,441; May 10.
Combination lock. S. Konat. 1,857,198–9; May 10.
Communication system. E. E. Hinrichsen. 1,857,848; May 10.
Compound for preparing molds for metal castings. G. H. Goldsmith. 1,858,083; May 10.
Compressor. W. C. Gibson and A. Gabriel. 1,857,276; May 10.
Compressor, Rotary fluid. F. A. Gerling. 1,857,720; May 10.
Computing machine. J. C. Hoebman and G. O. Degener. 1,857,454; May 10.
Concaves, Automatic adjusting attachment for. N. W. Stephens. 1,857,265; May 10.
Concrete road finishing machine. E. G. Carr. Re18,455; May 10.
Condensation products and preparing same, Potentially reactive phenolic. O. A. Cherry and F. Kurath. 1,857,357; May 10.
Condenser and condenser material. R. S. Reynolds. 1,857,476; May 10.
Condenser, Electrical. J. A. Proctor and W. M. Bailey. 1,857,867; May 10.
Condenser, Variable. W. S. Kellogg. 1,857,155; May 10.
Conductor, Leading-in. J. A. M. Van Liempt. 1,857,203; May 10.
Connecters, Lubricating. B. S. Burrell. 1,857,527; May 10.
Connection, Cushioning. H. W. Steiner, J. G. Eldridge, and W. C. Keys. 1,857,168; May 10.
Connector, Electric plug. H. H. Wermine. 1,858,196–7; May 10.
Container, Cigarette package. G. de Maziroff. 1,858,199–200; May 10.
Container, Combined cap and dental floss. H. N. Booth and O. L. Westgate. 1,858,134; May 10.
Container, Display. G. B. Allen. 1,857,231; May 10.
Container for tables. E. W. Ungehener. 1,857,522; May 10.
Container, Freight. J. F. McGinness. 1,857,468; May 10.
Container, Key. L. L. Sherwood. 1,857,336; May 10.
Container or freight car body section, Shipping. G. R. Meyercord and O. H. Basquin. 1,857,653; May 10.
Container, package. B. Boerg, W. R. Zuhlke, and W. E. Kugeman, jr. 1,858,198; May 10.
Container, Sugar dispensing. G. Moldovan and S. Németh. 1,857,734; May 10.
Contour shaping machine, Automatic irregular. B. D. Brown. 1,857,777; May 10.
Control for electrical welding currents. W. E. Crawford. 1,857,499; May 10.
Control means. L. W. Eggleston. 1,858,005; May 10.
Control means for airplanes, Lateral. T. B. Lavelle. 1,857,962; May 10.
Control mechanism. C. G. Wilderson. 1,857,905; May 10.
Control mechanism, Thermostatic. E. L. Fonseca. 1,857,187; May 10.
Conveyer, Distributor. J. J. Wallace. 1,857,898; May 10.
Conveyer, Newspaper. H. H. Rapley. 1,857,605; May 10.
Conveyer, Sheet metal track. J. W. Perry. 1,857,566; May 10.
Conveying mechanism for dishwashing machines. W. L. Lindgren. 1,857,730; May 10.
Conveying system. A. G. Kinyon. 1,857,643; May 10.
Cooling apparatus. B. J. Hall. 1,857,721; May 10.
Cooling means for photographic film tanks. E. S. Boynton. 1,857,134; May 10.
Core barrel having core receptacle. H. J. Quintrell. 1,857,693; May 10.
Corn picking and husking machine. H. F. York. 1,857,907; May 10.
Cotton, artificial silk, artificial foils of cellulose, viscose, or the like, and material prepared by this process, Strengthening. K. Sponsel and K. Jochum. 1,857,263; May 10.
Cotton press. R. Bell. 1,857,707; May 10.
Coupling: *See*—
Pipe coupling.
Coupling. C. M. Brenner. 1,858,136; May 10.
Coupling. J. F. Cantell. 1,857,528; May 10.
Coupling device. E. W. Wolford. 1,857,420; May 10.
Cover installation for storage bins. D. E. Stair and C. L. McDonald. 1,857,885; May 10.
Cover installation for storage bins. D. E. Stair. 1,857,886; May 10.
Cover or closure, Sanitary. F. L. Dailey. 1,858,139; May 10.
Cover, Seat. H. G. Wedler. 1,857,418; May 10.
Covering of wire, thread-like and filamentary material, and the like, with india rubber, guttapercha, balata, or similar materials or compounds thereof and apparatus therefor. D. F. Twiss and E. A. Murphy. 1,857,987; May 10.
Crane, Train order delivery. G. M. Barnett. 1,858,129; May 10.
CrO_3, Technically pure. C. H. Humphries. 1,857,548; May 10.
Crusher: *See*—
Fruit crusher. Rock crusher.
Cryptograph enciphering and deciphering device. G. A. Graham, L. M. Evans, and W. F. Friedman. 1,857,374; May 10.
Cultivating implement. C. E. Johnson. 1,857,384; May 10.
Curb meter. J. F. Reid. 1,857,331; May 10.
Current amplifier system, Constant. P. J. Walsh. 1,857,901; May 10.
Currents, Device for regulating alternating. N. A. J. Voorhoeve. 1,857,576; May 10.
Currents, Rectification of alternating. K. B. McEachron. 1,857,160; May 10.
Curtain control. W. C. Baragwanath. 1,857,682; May 10.
Curtain device. J. E. Flynn. 1,857,868; May 10.
Curtain hook. R. D. W. Vroom. 1,857,293; May 10.
Curtain rod. R. C. Vogt. 1,857,991; May 10.
Curve plotting system. S. Isler. 1,857,959; May 10.
Cut-off mechanism for heading machines. C. T. Brennan. 1,857,997; May 10.
Cut-out for series lamp. C. Severin and L. R. Peters. 1,857,165; May 10.
Cutter: *See*—
Hedge cutter.
Cutter for forming gin or linter saw teeth, Milling. R. H. Butters. 1,857,428; May 10.
Cutting apparatus for stone, coal, and the like. W. A. Ross. 1,857,403; May 10.
Cutting implement. J. E. Poole. 1,858,170; May 10.
Cylinder head for internal combustion engines. C. Schaer. 1,857,744; May 10.
Deaerating, Method of and apparatus for. J. R. McDermet. 1,857,650; May 10.
Deck and insetting device, Half speed. I. Tornberg and H. C. Jordhoy. 1,857,221; May 10.
Delivery box, Adjustable. A. M. Bay. 1,858,179; May 10.
Dental apparatus. A. F. Pieper. 1,858,056; May 10.
Dental apparatus. J. C. Schwartz. 1,857,289; May 10.
Dental bridge investment support. W. C. Gosse. 1,857,538; May 10.
Dental crown remover. O. A. Fladstad and R. G. Lee. 1,858,080–1; May 10.
Dental matrix retainer. R. R. Impey and R. Whipple. 1,857,910; May 10.
Dental spray. O. H. Piefer. 1,857,866; May 10.
Dental unit. A. F. Pieper. Re18,460; May 10.
Dental wax cutting and adapting instrument. A. E. Peck. 1,857,396; May 10.
Depilatory. J. B. Miles. 1,858,104; May 10.
Depositing machine for dough, semifluid, pasty, or like materials. R. M. Chambers. 1,857,621–2; May 10.
Desk and seat arrangement, Adjustable. V. R. Menon. 1,858,103; May 10.
Detachable carrier. E. L. Longaker. 1,857,598; May 10.
Dial, Number work. E. K. Hammond. 1,858,153; May 10.
Diaphragm for optical systems. R. Berthon. 1,857,132; May 10.
Diapositives, Apparatus for projecting. H. Wirtschafter. 1,857,268; May 10.
Die: *See*—
Macaroni die. Sheet metal die.
Die printing machine. U. Kohler. 1,857,918; May 10.
Diesel engine. B. V. E. Nordberg. 1,857,256; May 10.
Differential for motor vehicles. S. A. B. Hamilton, jr. 1,857,955; May 10.
Digger: *See*—
Potato digger.
Directional signal. P. Robbiano. 1,857,977; May 10.
Dishwashing machine. W. L. Lindgren. 1,857,726; May 10.
Dishwashing machine. W. L. Lindgren. 1,857,728–9; May 10.
Disk wheel. T. A. Davenport. Des. 86,909; May 10.
Disk wheel and hub cap, Combined. R. S. Begg. Des. 86,904; May 10.
Disks, Making optical. W. W. Poundstone. 1,857,213; May 10.
Dispenser, Beverage. L. G. Ames. 1,858,029; May 10.
Dispenser, Fluid. D. J. Nelson. 1,857,969; May 10.
Dispensing device. J. B. Friedman. 1,857,685; May 10.
Display apparatus. H. H. Ingersoll. 1,858,208; May 10.
Display stand. B. F. Cullison. Des. 86,908; May 10.
Distillation apparatus and the like. F. E. Lichtenthaeler. 1,857,816; May 10.
Distributor. S. Chase. 1,857,495; May 10.
Dividing machine for dough, Variable. J. V. Mason. 1,857,927; May 10.
Door check and closer. E. Bommer. 1,857,133; May 10.
Door construction, Panel. W. H. King. 1,857,310; May 10.
Door for rabbit hutches. J. L. Kleckner. 1,857,246; May 10.
Door of road vehicles. L. Saives. 1,857,696; May 10.
Door operator. S. E. Buettell. 1,857,938; May 10.
Door, Sterilizer. H. J. Heins. 1,858,013; May 10.
Door, Vertically movable hinged panel. W. R. Headley. 1,857,756; May 10.
Door worker. W. Brugmann. 1,857,936; May 10.
Dough mixing machine. L. H. Davis. 1,857,361; May 10.
Drainage apparatus. C. L. Day. 1,857,362; May 10.
Drawing press. O. Kübner. 1,857,648; May 10.
Drier: *See*—
Paper drier.
Drive, Coating machine. A. D. Evans. 1,857,631; May 10.
Drive for motion picture machines, Friction. L. S. Frappier and E. Boecking. 1,857,780; May 10.
Drive, Pump. A. M. Babitch. 1,857,676; May 10.
Drive, Vehicle. A. L. Marcum. 1,857,248; May 10.
Drum, Rotary. K. E. E. Holzapfel. 1,857,785; May 10.
Dyestuff of the anthraquinone series, New vat. R. Berliner. 1,857,232; May 10.
Dyestuff of the thionaphthene-indigo series, New. N. Steiger. 1,857,264; May 10.
Dyestuffs of the thionaphthene-indolindigo series, Vat. T. Meissner, H. Heyna, and E. Fischer. 1,857,250; May 10.
Egg case filler. G. W. Swift, jr. 1,857,984; May 10.
Ejector fork. T. S. Hutchison. 1,857,455; May 10.
Elastic wheel. S. Dinaro. 1,857,239; May 10.
Electric furnace. A. Ruckstahl. 1,858,062; May 10.
Electric heater. L. B. Hyde. 1,857,510; May 10.
Electric motor. R. Lee. 1,857,202; May 10.
Electric regulating system. M. Zucker. 1,857,174; May 10.
Electric regulator. H. Güttinger. 1,857,449; May 10.
Electric system for recording and reproducing sound. E. H. Hansen. 1,857,451; May 10.
Electric welding pressure vessels. H. J. Burnish. 1,857,526; May 10.
Electrical induction apparatus. W. E. Ruder. 1,857,215; May 10.
Electrically controlled brake. J. W. Thropp. 1,858,123; May 10.
Electrode, Metallic arc welding. R. Stresau and J. J. Chyle. 1,857,521; May 10.
Electrode radiotrons, Multiple. A. B. Du Mont and P. T. Weeks. 1,857,589; May 10.
Electrode supporting means for electrical precipitators. K. Von Eberhard. 1,857,416; May 10.
Electrolytic apparatus. A. G. Wensley and W. S. Jackson. 1,857,903; May 10.
Electrolytic process for the purification of acetic acid solution. C. S. Webber, C. J. Staud, and H. L. Gray. 1,857,224; May 10.

Electrolytic processing machine. A. H. Hannon. 1,858,012; May 10.
Electrolytic production of white lead. R. J. Frost. 1,857,950; May 10.
Electron discharge device. F. K. Richtmyer. 1,857,608; May 10.
Electron discharge system. M. A. Acheson. 1,857,128; May 10.
Electronic tube. A. J. McMaster and C. E. Parson. 1,858,210; May 10.
Emblem stand. J. I. London. Des. 86,919; May 10.
Emergency brake. G. D. Thatcher. 1,858,122; May 10.
Enameling furnace. R. MacDougall. 1,857,206; May 10.
Engine: *See*—
Diesel engine. Internal combustion engine.
Fluid pressure engine. Two-cycle engine.
Engine crank shaft. H. T. Herr. 1,858,014; May 10.
Engine exhaust, Aeroplane. C. F. Jenkins. 1,858,048; May 10.
Engine or pump. M. L. Bramson. 1,858,182; May 10.
Engraving machine. P. Sackers and T. G. Straub. 1,857,570; May 10.
Envelope or similar article, Folding. C. A. Herr. Des. 86,916; May 10.
Esters, Catalytic production of. W. A. Lazier. 1,857,921; May 10.
Ethers of carbohydrates, Manufacture of. L. Lilienfeld. 1,858,018; May 10.
Ethers of cellulose and plastics containing same, Manufacture of aralkyl. L. Lilienfeld. 1,858,019; May 10.
Evacuating. K. C. D. Hickman. 1,857,508; May 10.
Evaporating apparatus. H. H. Elliston. 1,857,535; May 10.
Evaporator. J. Roemer. 1,858,061; May 10.
Excavating machine. P. O. Hawkins. 1,857,302; May 10.
Exhaust gas silencer. F. F. Hamilton. 1,857,845; May 10.
Exhibitor, Changeable. E. von der Lippe-Lipski. 1,857,387; May 10.
Extractor: *See*—
Packing extractor.
Eye shield. H. Lang. 1,857,156; May 10.
Fabric and making the same, Coated. D. Carnegie, jr. 1,857,805; May 10.
Fabric and product thereof, Treating. H. Platt. 1,857,163; May 10.
Fabric doubling machine. J. Monforts and F. Wirtz. 1,857,735; May 10.
Face plate. A. H. Nero. 1,858,107; May 10.
Factory management, Apparatus for use in. L. T. Littlefield. 1,857,204; May 10.
Factory management, Method for use in. F. E. Darling. 1,857,587; May 10.
Fastener. I. Jacobs. 1,857,309; May 10.
Fastener slide, Self adjusting. D. I. Reiter. 1,857,973; May 10.
Fastener, Window. J. T. Dawicki, jr. 1,857,943; May 10.
Faucet, Automatic. C. F. Dencklau. 1,857,303; May 10.
Feeder, Poultry. C. G. Mikkelsen. 1,857,858; May 10.
Felt. P. W. Codwise. 1,857,432-3; May 10.
Fence, Highway. E. K. Cole. 1,857,435; May 10.
Fermentation of cellulosic material. L. M. Christensen. 1,857,429; May 10.
Fertilizer material and manufacturing the same. G. P. Walton and R. F. Gardiner. 1,858,230; May 10.
Fertilizer, Mixed. E. Keyssner and H. Mengdehl. 1,857,914; May 10.
Fertilizers, Producing ballast-free solid. C. Eyer, F. Frowein, and F. Korn. 1,857,296; May 10.
Fiber liberation. A. E. Millington. 1,857,317; May 10.
File, Card index. R. J. Wood. 1,857,229; May 10.
File, Paper transfer. J. Colon. 1,858,216; May 10.
Filling device, Vertical. V. F. Castleman and O. J. Putting. 1,857,838; May 10.
Filling apparatus for powdered or granular material. H. Bimber. 1,858,032; May 10.
Film cleaner, Motion picture. J. G. Gramsa. 1,857,633; May 10.
Film holding strap. O. Wittel. 1,857,523; May 10.
Film, Motion picture. W. L. Wright. 1,857,578; May 10.
Film pack. D. L. Wood. 1,857,524; May 10.
Filter for gaseous substances. W. Bokenkroger. 1,857,348; May 10.
Filter, Oil. C. W. McKinley. 1,857,652; May 10.
Filter, Radiator. J. Rendelman. 1,857,606; May 10.
Filtration. W. P. Gee. 1,857,810; May 10.
Fire extinguisher. H. E. Van Ness. 1,857,797; May 10.
Fires, Extinguishing gas and oil well. J. S. Murphy. 1,857,788; May 10.
Fish bait, Artificial. F. C. Cameron. 1,857,939; May 10.
Fish lure. H. O. Kuehn. 1,857,312; May 10.
Fitting and making the same, Electrical. G. B. Benander. 1,857,178; May 10.
Flash light. B. F. Muldoon. 1,857,390; May 10.
Floor surfacing machine. C. J. Olson. 1,857,564; May 10.
Flowers and making them, Artificial. S. M. Freese. 1,858,148; May 10.
Fluid control device. F. A. Nemec. 1,857,321; May 10.
Fluid dispensing apparatus. J. W. Hartman, jr. Des. 86,915; May 10.
Fluid generator, Pressure. J. B. McKeown. 1,858,102; May 10.
Fluid motor. R. J. Glass. 1,858,043; May 10.
Fluid operated apparatus. J. W. Tatter. 1,857,413; May 10.
Fluid pressure engine. F. A. Gerling. 1,857,719; May 10.
Flying machine. H. M. Leonard. 1,857,964; May 10.
Folded box. C. S. Andrews. 1,857,270; May 10.
Folding stand. W. W. Horn. 1,858,085; May 10.
Forging. G. Benedetto. 1,857,708; May 10.
Fork: *See*—
Ejector fork.
Form tie. T. C. Schenk. 1,857,610; May 10.
Fountain: *See*—
Watering fountain.
Fountain washing device. H. C. Myers. 1,858,055; May 10.
Frame: *See*—
Number plate frame. Spinning frame.
Picture frame. Windshield frame.
Sign frame.
Friction brake. T. F. Brackett. 1,857,124; May 10.
Fruit and vegetable dusting apparatus. J. C. Hull. 1,858,090; May 10.
Fruit crusher. U. Forbidussi. 1,858,147; May 10.
Fuel beds, Underfeed mechanism for. W. B. Chapman. 1,857,354; May 10.
Fuel burner, Liquid. G. J. Stadler. 1,857,667; May 10.
Furnace: *See*—
Electric furnace. Heating furnace.
Enameling furnace.
Furnace. N. G. de Rachat. 1,857,364; May 10.
Furnace. E. F. Schonberger. 1,857,480; May 10.
Furnace feeding apparatus. R. A. Hawkins and H. W. Mossman. 1,857,592; May 10.
Furnace regulator. O. H. Dicke. 1,857,531; May 10.
Furnace wall structure. E. Lundgren. 1,857,561; May 10.
Furnaces, Feeding mechanism for roasting. R. C. Kunkel. 1,857,919; May 10.
Furniture and radio receiving apparatus, Combined. J. H. Farrell and C. T. Westmoreland. 1,857,716; May 10.
Furniture, Combination article of. E. Pollkoff. 1,857,401; May 10.
Fuse. J. R. Fogal. 1,857,298; May 10.
Fuse. J. Lagandro. 1,858,157; May 10.
Fuse and switch handling device. H. W. Bodendieck. 1,858,133; May 10.
Fuse box structure. J. F. Dohrwardt. 1,857,442; May 10.
Fuse for airplane flares. J. S. Barker. 1,857,131; May 10.
Fuse, Renewable. R. Athey. 1,857,581; May 10.
Galvanizing or electroplating process. M. von Devecis. 1,858,125; May 10.
Game apparatus. W. Doll. 1,857,588; May 10.
Game apparatus. W. J. Roche. 1,858,113; May 10.
Game apparatus. J. Weber. 1,857,902; May 10.
Game board. P. H. Halbritter. Des. 86,913; May 10.
Game board and tray, Combined. W. A. O'Brien. Des. 86,932; May 10.
Game, Electrical. E. Linke. 1,858,020; May 10.
Game table. C. A. Toce. Des. 86,942; May 10.
Garment, Drop-seat. W. D. Scalf. 1,857,335; May 10.
Garment, Foundation. R. M. Graves. 1,857,147-8; May 10.
Gas and liquid contact apparatus. W. G. Laird. 1,858,158; May 10.
Gas burner, Safety. H. Carlsen. 1,857,804; May 10.
Gas burning apparatus. W. A. Beckett. 1,857,525; May 10.
Gas, Production of water. F. Winkler. 1,857,799; May 10.
Gate for railroads, Automatic crossing. W. H. Proper. 1,857,868; May 10.
Gate for trap nest. A. Abbink. 1,857,341; May 10.
Gate operating system, Railroad. W. H. Proper. 1,857,869; May 10.
Gauge: *See*—
Bevel gauge. Oil gauge.
Liquid level gauge.
Gauge and stop for grader blades, Adjustable. J. R. Royer. 1,857,479; May 10.
Gear for machinery, Speed control. J. F. Naylor. 1,858,167; May 10.
Gear, Landing. H. E. Swift. 1,857,611; May 10.
Gear, Power steering. H. Hubbell, jr. 1,857,380; May 10.
Gear set, Change speed. N. Lombard. 1,858,050; May 10.
Gear shift, High speed. N. Lombard. 1,858,051; May 10.
Gears, Method of and apparatus for burnishing. E. C. Head. 1,858,044; May 10.
Gelatin to solution, Reducing dry. E. T. Erickson. 1,857,630; May 10.
Generator: *See*—
Fluid generator. Steam generator.
Oscillation generator.
Glass bodies by means of pressing and blowing, Device for manufacturing hollow. J. J. C. Hardenberg. 1,857,540; May 10.
Glass cutting machine. J. E. Walker. 1,857,748; May 10.
Glass forming apparatus and process. C. Cone. 1,857,806; May 10.
Glass, Process and apparatus for producing sheet. J. L. Drake and L. C. Mambourg. 1,857,809; May 10.
Glass surfacing apparatus. J. M. McGoldrick. 1,857,852; May 10.
Glass tubing from glass billets, Method and apparatus for forming. K. E. Peller. 1,857,791; May 10.
Glass tubing from pressed glass blank, Method and machine for forming. K. E. Peller. 1,857,257; May 10.

Glassware, Apparatus for use in the manufacture of. L. J. Broche. 1,858,137; May 10.
Globe, Celestial. M. A. Hirschl. 1,857,546; May 10.
Globe fixture. H. E. Schulse. Des. 86,937; May 10.
Gold and silver, Treatment of. M. Schlötter. 1,857,664; May 10.
Golf ball. C. R. Sibley. 1,857,518; May 10.
Grapple for air plane package transfer apparatus. L. S. Adams. 1,858,127; May 10.
Grease gun. L. A. Paradise. 1,858,025; May 10.
Greasing apparatus. C. Harris. 1,858,155; May 10.
Grinders, Dressing. A. L. De Leeuw. 1,857,142; May 10.
Grinding machine. V. Jereczek. 1,857,549; May 10.
Grinding machine. H. A. Silven. 1,858,222; May 10.
Guard, Football. R. R. Jones. 1,857,850; May 10.
Guide, Cloth. C. Corley and E. A. Fleming. 1,857,941; May 10.
Gun carriage. M. de Boigne. 1,857,945; May 10.
Gun sight. J. Herman. 1,857,782; May 10.
Gynecologic instrument. F. O. E. Eggert. 1,857,127; May 10.
Hair curler. K. G. Ströher. 1,857,677; May 10.
Hair waving device. S. E. Melkman. 1,857,689; May 10.
Halftone screen. J. G. Gueovjian. 1,858,011; May 10.
Hammer, Vacuum power. J. C. Campbell. 1,857,138; May 10.
Hammers by sliding on a support, Device for automatically advancing perforating. P. Gouge. 1,857,686; May 10.
Hammock, Suspending a. C. F. Richardson. 1,857,607; May 10.
Handle: *See*—
Switch handle.
Harp, Jew's. H. W. Pidgeon. 1,857,400; May 10.
Harvester construction. H. W. Smith, A. D. Braasch, and N. Walton. 1,857,699; May 10.
Harvester-thresher, Combination. L. R. Clausen. 1,858,000; May 10.
Hat renovating machine. G. V. Rhodes. 1,858,172; May 10.
Headlight. J. Pucunas. Des. 86,934; May 10.
Headrest, Combined sinus and mastoid. D. M. Ghrist. 1,857,503; May 10.
Heat absorber for electric lamps. L. Appleman. Des. 86,903; May 10.
Heat exchanger. J. L. Turner and J. G. Russell. 1,857,892; May 10.
Heat from blown off boiler products, Method of and apparatus for utilizing. B. F. Phelps. 1,857,865; May 10.
Heat in high pressure reactions, Supplying. C. Krauch and M. Pier. 1,857,814; May 10.
Heat reducing structure for explosive engines. W. G. Hermsmeyer. 1,857,303; May 10.
Heat treating edible substances. O. H. Hansen. 1,857,450; May 10.
Heat treatment of strong aluminum alloys. N. V. Hybinette. 1,858,092; May 10.
Heater: *See*—
Automobile heater. Tubular heater.
Electric heater.
Heater. E. A. Downey. 1,858,003; May 10.
Heater element for permanent waving of hair. B. F. Jancke. 1,857,639; May 10.
Heater for cooling liquids of internal combustion engines. F. B. Rentz. 1,857,767; May 10.
Heater terminal, Tubular. C. B. Backer. 1,857,614; May 10.
Heater unit for cathodes of vacuum tubes and producing same. W. J. Skinner. 1,858,063; May 10.
Heaters of deposited material, Scavenging tubular. G. D. White. 1,857,904; May 10.
Heating furnace. N. G. Holland. 1,858,156; May 10.
Heating system for bake ovens. E. O. Engels. 1,857,447; May 10.
Hedge cutter. C. A. Albrecht. 1,857,342; May 10.
Heel seat fitting machine. H. A. Ballard. 1,857,424; May 10.
Heels, Device for use in covering. A. Bates. 1,857,177; May 10.
Heels to shoes, Attaching. J. P. Quirk. 1,857,475; May 10.
Helicopter. J. Hojnowski. 1,857,849; May 10.
Hinge for window screens. R. Focaracci. 1,857,717; May 10.
Hoist, Automobile transmission. L. J. Armstrong. 1,857,579; May 10.
Holder. R. S. Bennett. 1,858,130; May 10.
Holder. J. A. Maker and J. A. Medley. 1,857,465; May 10.
Holder, Ash and fire proof cigar and cigarette. A. MacBeth. 1,857,283; May 10.
Holder, Brush. H. N. Diederichs. 1,857,808; May 10.
Holder, Card. L. E. Hutchings. 1,858,219; May 10.
Holder, Flower. E. W. Carpenter. 1,857,140; May 10.
Holder for automobiles, Flag. A. Wickman. 1,857,774; May 10.
Holder for dishwashing machines, Soap. W. L. Lindgren. 1,857,727; May 10.
Holder for photographic image carriers. S. Kaminski. 1,857,724; May 10.
Holder for photographic printing machines, Negative. W. C. Huebner. 1,857,381; May 10.
Holder, Jar. A. Fariello. 1,858,144; May 10.
Holder, Pallet. W. S. Mahr. 1,857,968; May 10.
Holder, Score card. M. M. Blackburn. 1,857,934; May 10.
Holder, Sign. M. Zadek. 1,857,423; May 10.
Holder, Time card. E. G. Watkins and H. E. Hobby. 1,858,068; May 10.
Hood, radiator, and fender assemblage for automobiles. A. E. Northup. Des. 86,930; May 10.
Hook: *See*—
Curtain hook.
Hose and connection, Flexible. F. C. Richardson. 1,857,821; May 10.
Hose and making, Seamless. J. M. Allen. 1,857,775; May 10.
Hose timer. D. Elder. 1,857,627; May 10.
Hosiery knitting machine, Flat. R. Nebich. 1,857,737; May 10.
Hub cap. J. S. Reid. 1,857,659; May 10.
Humidifier. M. G. Steele. 1,857,770; May 10.
Hydrocarbon distillates, Refining. H. Pease. 1,858,110; May 10.
Hydrocarbons and the like, Apparatus for treating. C. P. Dubbs. 1,857,532; May 10.
Hydrocarbons, Method and apparatus for cracking. N. E. Loomis. 1,857,759; May 10.
Hydrocarbons, Process and apparatus for converting. G. Egloff and W. A. Howard. 1,857,445; May 10.
Hydrocarbons, Treating. C. P. Dubbs. 1,857,533; May 10.
Hydroplane ship. W. A. Beebe. 1,857,347; May 10.
Hypochlorites. C. Mindeleff. 1,857,318; May 10.
Ice from roofs, Removing. H. R. Sjolander. 1,857,883; May 10.
Ice scoring machine. M. J. Uline. 1,857,894; May 10.
Identification device. D. H. Roberts. 1,857,822; May 10.
Igniter. S. C. Page. 1,857,862; May 10.
Ignition magneto. G. Fossati. 1,857,718; May 10.
Impregnating apparatus. L. du B. Rees. 1,858,111; May 10.
Incense burner. A. Iorio. Des. 86,917; May 10.
Indicating device for automatic balances. G. Raasche. 1,857,870; May 10.
Indicator: *See*—
Pressure gauge indicator. Price indicator.
Pressure indicator. Tire deflation indicator.
Indicator. P. Kollsman. 1,857,311; May 10.
Indicator. E. F. Newcome. 1,857,255; May 10.
Inhalational therapy, Tent-head fixture for. Y. Henderson and H. W. Haggard. 1,857,453; May 10.
Inlaying machine, Rotary. W. J. Blenko. 1,857,619; May 10.
Insect trap. C. C. Howard. 1,858,087; May 10.
Insect trap. D. J. Sullivan. 1,857,890; May 10.
Insulated connecter for outlet boxes. H. G. Knoderer. 1,857,197; May 10.
Insulating material, Composite. J. M. Coffey. 1,857,586; May 10.
Interlock mechanism, Electromechanical. J. Z. Winder. 1,857,227; May 10.
Internal combustion engine. C. A. Wood. 1,858,126; May 10.
Internal combustion engine, Two stroke cycle. L. Oldfield. 1,857,656; May 10.
Iodine, Purifying and drying crude. C. W. Girvin. 1,857,632; May 10.
Iron or steel alloys, Producing. H. G. Flodin and E. G. T. Gustafsson. 1,857,779; May 10.
Iron, Producing molybdenum bearing. A. Kissock. 1,857,595; May 10.
Ironer, Flatwork. J. H. Skitt. 1,857,290; May 10.
Jar or similar article. O. C. Noble. Des. 86,928; May 10.
Joint: *See*—
Rail joint. Riveted joint.
Jointed bracket. J. A. Heinemann. 1,857,847; May 10.
Key case. P. A. Gardner, jr. 1,857,146; May 10.
Keyless switch. A. Hirt. 1,857,638; May 10.
Kiln, Tunnel. E. B. Forse and C. F. Geiger. 1,858,008; May 10.
Kit for automobiles, Emergency. A. Scholz and H. Frucht. 1,857,824; May 10.
Kitchen utensil, Electrically heatable. B. Hanyzer and R. Behm. 1,857,781; May 10.
Kite, Airplane. W. E. Ikerman. 1,857,687; May 10.
Knife and knife holding means for veneer lathes. P. M. Elder and C. L. Orton. 1,857,446; May 10.
Knife, Stripping. W. H. Edmondson. 1,857,242; May 10.
Lace. A. Upton. Des. 86,943; May 10.
Lamp, Automobile hood bracket. S. Piombo. 1,858,232; May 10.
Lantern, Electric. L. M. Willey. 1,857,993; May 10.
Latch, Door. J. B. Flynn. 1,857,684; May 10.
Latch, Door. M. W. Meosta. 1,857,513; May 10.
Latch for windows, Safety. A. E. Huss. 1,857,958; May 10.
Latch, Port hole closure. D. G. Earl. 1,857,184; May 10.
Latch, Stove. H. C. Howard. 1,858,088; May 10.
Leaf turner, Music. G. Carregari. 1,858,187; May 10.
Leather, Apparatus for pressing. C. G. Shaw. 1,858,192; May 10.
Leather, Manufacture of. C. G. Shaw. 1,858,193; May 10.
Leer stacker. E. H. Lorenz. 1,857,967; May 10.
Light: *See*—
Flash light.
Lighter, Cigar. C. J. Lagerholm. 1,857,200; May 10.
Lighting fixture, Ceiling. B. L. Watkin. Des. 86,945; May 10.
Linoleum and similar hard surfaced floor covering. A. M. George. 1,857,811; May 10.

Lip turning machine. H. E. Dow. 1,857,366; May 10.
Liquid dispensing apparatus. E. H. Bradley. 1,858,035; May 10.
Liquid dispensing apparatus. W. A. Hersey. 1,858,206; May 10.
Liquid filling machine. A. S. Kirshner. 1,857,915; May 10.
Liquid level gauge. C. Knobloch. 1,857,644; May 10.
Liquids, from wells, Method of and apparatus for automatically raising. E. E. Greve. 1,857,634; May 10.
Litter remover. F., H. W., and A. F. Johnson. 1,857,550; May 10.
Lock: *See*—
Combination lock. Sash lock.
Permutation lock.
Lock. J. Weber. 1,857,225; May 10.
Lock for castellated nuts. G. T. Cooke. 1,858,039; May 10.
Lock for containers. W. J. Mylar. 1,857,654; May 10.
Lock structure for vehicle doors, Remote control. F. M. Edgar. 1,857,683; May 10.
Locking mechanism. J. Verderber. 1,858,065–6; May 10.
Locomotive arch. J. C. Chapple. 1,857,272; May 10.
Looms, Combined stop motion and float preventer for. L. E. Blackman. 1,857,837; May 10.
Looms, Float preventer for. L. E. Blackman. 1,857,836; May 10.
Looms, Shedding mechanism for. S. A. Pierce. 1,857,474; May 10.
Lubricant. J. A. Burton. 1,857,235; May 10.
Lubricant. G. F. Gallagher. 1,857,501; May 10.
Lubricating apparatus. F. Wilkes. 1,857,992; May 10.
Lubricating device and the like. A. Bizzarri. 1,857,803; May 10.
Lubricating system. E. W. Davis. Re18,459; May 10.
Lug strap. J. H. Chadbourne. 1,858,038; May 10.
Macaroni die. D. Maldari. 1,857,313; May 10.
Machine for and method of building pneumatic tire flaps. D. L. Williams. 1,857,994; May 10.
Machine for applying a layer of plastic material to articles, such as biscuits. H. H. Tunstall. 1,858,175; May 10.
Machine for building tire flaps. H. M. Brown. 1,857,998; May 10.
Machine for forming commutator rings. L. T. Frederick. 1,858,225; May 10.
Machine for washing vegetables. E. E. Edenharder. 1,857,444; May 10.
Machine for welding tubular objects. C. G. L. Sjölander. 1,857,338; May 10.
Magnetic bodies, Insulating. H. Lathrop. 1,857,201; May 10.
Mandrel, Pipe welding. J. H. Baker. 1,857,802; May 10.
Marker and tube deflator, Puncture. H. C. Westphal. 1,857,703; May 10.
Marker Fountain. W. C. Marsh. 1,857,467; May 10.
Marking device. F. S. Speicher. 1,857,166; May 10.
Massage apparatus, Vibratory. J. S. Lang. 1,858,209; May 10.
Master control cabinet for jail door operating systems. J. K. Mardick and L. J. White. 1,857,924; May 10.
Matches, Manufacture of strip. J. W. Johansson. 1,857,723; May 10.
Material, Gun wad. R. H. Johnson. 1,857,281; May 10.
Materials, Manufacture of artificial. L. Lilienfeld. 1,858,097; May 10.
Materials, Treating silica-bearing. T. O. McAdoo. 1,858,100; May 10.
Mattresses, Mechanism for sewing. J. F. Gail. 1,857,371; May 10.
Measuring device, Height. S. N. Hurt. 1,857,280; May 10.
Measuring instrument, Thermionic. B. W. St. Clair. 1,857,216; May 10.
Measuring the flight of a ball, Apparatus for. A. G. Tyler and E. F. Struckman. 1,857,267; May 10.
Measuring the output of refrigerating machines, Apparatus for. F. Schipper. 1,857,262; May 10.
Mechanical movement. E. E. Cannon. 1,857,352; May 10.
Mechanical movement. R. J. Reaney. 1,857,871; May 10.
Mercury arc rectifier support. W. Höpp. 1,857,193; May 10.
Metal bars, Manufacture of hollow. M. Brown. 1,857,620; May 10.
Metal bodies, Manufacture of refractory. C. J. Smithells. 1,857,219; May 10.
Metal carbonyls, Production of. L. Schlecht, E. Keunecke, and W. Schubardt. 1,858,220; May 10.
Metal channel section, Special. A. E. Wilkoff and O. J. Nyberg. 1,857,704; May 10.
Metal compounds of azo-dyestuffs and making same. F. Straub and W. Anderau. 1,857,572; May 10.
Metal lever, Stamped sheet. M. F. Strebe, C. K. Lenning, and F. W. Zink. 1,857,573; May 10.
Metal powder. W. Schubardt. 1,857,879; May 10.
Metal roll. W. H. Seaman. 1,857,825; May 10.
Metal strip, Rolling. A. P. Steckel. 1,857,670; May 10.
Metal wheel. J. W. Vanderveer. 1,857,747; May 10.
Metals, Apparatus for electrolytically refining precious. V. Engelhardt, G. Eger, and H. Heln. 1,857,590; May 10.
Metals, Decorating and etching. J. C. McFarland. 1,857,929; May 10.
Metals, Refining and purification of. G. F. Doran. 1,857,947; May 10.
Meter: *See*—
Curb meter. Ratio meter.
Milling machinery. L. F. Nenninger. 1,857,162; May 10.
Mining machine. A. Y. Hoy. 1,857,376; May 10.
Mixing and drying machine. A. B. Webb. 1,857,798; May 10.
Mixing apparatus. W. A. Pervier. 1,857,863; May 10.
Mold: *See*—
Running mold.
Molding, coating, filling, impregnating, and binding. I. S. Mellanoff. 1,857,690; May 10.
Monoazodyestuffs, New. W. Hentrich, K. Burr, and H. Schweitzer. 1,857,244; May 10.
Mortising machine. S. Hunter. 1,857,783; May 10.
Motor: *See*—
Electric motor. Outboard motor.
Fluid motor. Toy electric motor.
Motor control, Stoker. W. W. Hudson. 1,857,307; May 10.
Motors from a single phase source, Operating polyphase. M. C. Spencer. 1,857,411; May 10.
Mount, Floor receptacle. H. Hubbell, jr. 1,857,377; May 10.
Mounting, Detachable panel. H. R. Clark. 1,857,778; May 10.
Mounting, Vibration absorbing. H. J. Flaherty. 1,857,185; May 10.
Mounting, Vibration dampening. H. C. Lord. Re18,457; May 10.
Mowers, Edge trimming attachment for lawn. W. Bennet, A. Farrar, and P. Mackinnon. 1,858,031; May 10.
Mulling machine. H. S. Simpson. 1,857,337; May 10.
Nautical instrument. W. Lilly. 1,857,597; May 10.
Necktie. L. Bianchi. 1,857,271; May 10.
Necktie. E. Gertsfeld. 1,858,009; May 10.
Necktie. J. Y. Morris. 1,857,472; May 10.
Necktie pin. H. Welsner. 1,857,226; May 10.
Net, Fish landing. A. C. Siamen. 1,857,826; May 10.
News plate casting machine, Late. H. A. W. Wood. 1,857,228; May 10.
Nozzle control, Curtainless sand blast. W. A. Fulkerson and C. I. Bain. 1,857,188; May 10.
Nozzle for internal combustion engines, Fuel injector. J. J. Hauser. 1,857,192; May 10.
Number plate frame, Adjustable. J. T. Corley. 1,857,141; May 10.
Objects consisting of agglomerated substances by centrifugal force, Apparatus for the manufacture of. G. Bertaudeau. 1,857,233; May 10.
Ohmic resistances, Method of and apparatus for manufacturing high. I. Silberstein. 1,857,769; May 10.
Oil and making the same, Nonsludging. W. L. McCabe and B. Mead. 1,857,761; May 10.
Oil and/or reagent feeder. W. T. Knight. 1,857,385; May 10.
Oil burner. S. J. Helman. 1,857,846; May 10.
Oil burner. R. S. Whaley. 1,857,613; May 10.
Oil burning apparatus for steam boilers. H. C. Scott. 1,857,697; May 10.
Oil composition and inhibiting oxidation thereof, Pigmented. J. C. Embardt. 1,857,274; May 10.
Oil conversion, Hydrocarbon. J. D. Seguy. 1,857,406; May 10.
Oil filtering system. C. W. McKinley. 1,857,651; May 10.
Oil gauge. H. H. Rubert. 1,857,334; May 10.
Oil reclaimer, Impure. E. H. Lambert, R. L. Skinner, and P. Williams. 1,857,461; May 10.
Oils, method of and reagent for treating wet. J. J. Canfield. 1,858,186; May 10.
Opener, Oyster. H. Robinson. 1,857,872; May 10.
Opening and locking means for loose leaf ring structures. J. Schade. 1,857,287; May 10.
Ores, Method and agent for recovery of oxidized. S. A. Falconer and L. J. Christmann. 1,858,007; May 10.
Oscillation generator. A. W. Hull. 1,857,194; May 10.
Outboard motor. O. S. Heide. 1,857,636; May 10.
Outlet box, Electric conduit sectional. H. K. and G. O. Meeks. 1,857,787; May 10.
Oven, Combination. L. F. Schrader and W. H. Wright. 1,857,288; May 10.
Oven, Regenerative coke. C. Otto. 1,858,229; May 10.
Oxidation products, Making partial. J. H. James. 1,858,095; May 10.
Packaging machine. R. N. Doble. 1,857,625; May 10.
Packaging machine. E. Van der Pyl, W. and R. H. Stimpson. 1,857,680; May 10.
Packing, Bi-metal. C. J. Lamb. 1,857,961; May 10.
Packing extractor. E. F. Webb. 1,858,176; May 10.
Packing ring. W. R. Smittle. 1,858,173; May 10.
Packing stabber. H. W. De Jarnette. 1,858,040; May 10.
Painting instrument. A. L. Kline. 1,857,282; May 10.
Pajama trousers. G. P. Kimmel. 1,858,201; May 10.
Paper, Apparatus for and method of making deckle edged. G. W. Bicking. 1,858,131; May 10.
Paper article and making the same. A. L. Clapp. 1,857,496; May 10.
Paper cores, tubes, and the like, Splicing. R. Spry. 1,857,519; May 10.
Paper delivery mechanism. F. B. Cole. 1,858,073; May 10.
Paper drier. J. W. Vedder. 1,857,222; May 10.
Paper, Making. D. Finley. 1,857,275; May 10.

Paper or fibre board and product of same, Surface finishing. A. L. Clapp. 1,857,497; May 10.
Papers and other bases and light sensitive layers therefore, Light sensitive. R. Lantz. 1,857,920; May 10.
Parachute. I. M. Tintore. 1,857,485; May 10.
Parachute harness, Combination. E. L. Hoffman. 1,857,375; May 10.
Parcel tie. C. W. Cearley. 1,858,138; May 10.
Penholder. D. L. La Chance. 1,857,460; May 10.
Percolator and the like, Coffee. J. F. Lamb. 1,857,554; May 10.
Perforating machine or the like, Card. A. Thomas. 1,858,174; May 10.
Permutation lock. U. Piagneri. 1,857,399; May 10.
Phenol formaldehyde condensation products, Manufacture of. A. Ostersetzer and F. Riesenfeld. 1,858,168; May 10.
Phonograph-dictaphone communication apparatus. G. R. Cooper. 1,857,438; May 10.
Photographic developer for use at high temperatures. L. E. Muehler. 1,857,515; May 10.
Picture apparatus, Moving. K. O. Leon. 1,857,559; May 10.
Picture frame. F. Long. 1,857,866; May 10.
Picture projectors, Combined focus and image placement adjustment means for moving. A. J. Holman. 1,857,152; May 10.
Picture telegraph apparatus. R. Schmook. 1,857,745; May 10.
Picture telegraphy receiver, Chemical. F. Doring and P. Storch. 1,857,126; May 10.
Picture transmission. E. F. W. Alexanderson. 1,857,130; May 10.
Picture transmission. R. H. Ranger. 1,857,329–30; May 10.
Pictures with continuous automatic action, Apparatus for printing positive photographic. E. and E. Manzotti. 1,857,733; May 10.
Pigments, Production of iron oxide. J. Laux. 1,857,557; May 10.
Piles of concrete and the like, Method and device for the production of. E. Frankignoul. 1,858,204; May 10.
Pin: *See*—
Necktie pin.
Pipe: *See*—
Shower pipe.
Pipe coupling. C. W. Faulkner. 1,857,297; May 10.
Pipe coupling. P. M. Nagy. 1,858,106; May 10.
Pipe cutting and beveling apparatus. F. J. Douglass and A. S. McCawley. 1,858,077; May 10.
Pipe for angle bends, Apparatus for cutting. F. J. Douglass. 1,858,076; May 10.
Pipes and the like, Apparatus for molding cast iron. J. R. McWane. 1,857,855; May 10.
Pipes, Apparatus for cutting and beveling. F. J. Douglass and A. S. McCawley. 1,858,078; May 10.
Pitch propeller, Adjustable. H. A. Hall. 1,857,755; May 10.
Pitch propeller, Variable. C. H. Monroe. 1,857,319; May 10.
Placard display device. J. Komorous. 1,857,552; May 10.
Planter. C. H. White. 1,857,749; May 10.
Planter, Combination grass and grain. J. F. Fiala. 1,857,536; May 10.
Plate or similar article of glassware. A. H. and V. Nicholson. Des. 86,927; May 10.
Plates and other objects, Apparatus for engraving. R. S. Phillips. 1,857,285; May 10.
Plates or sheets, Fastening together of. G. F. J. Dandridge and G. A. Mower. 1,857,530; May 10.
Plow. O. G. Roberts. 1,858,114; May 10.
Plow. J. Szakacs. 1,857,700; May 10.
Plow, Corner. C. E. and G. O. Stroburg. 1,857,484; May 10.
Plow, Tandem subsoil. J. and A. Nelessen. 1,857,859; May 10.
Plug, Cementing. R. C. Baker. 1,858,215; May 10.
Plug, Electric cap. R. Eckstein. Des. 86,910; May 10.
Plug, Electric connection. M. S. Runsvold. 1,857,663; May 10.
Plug, Flash light. A. H. Post. 1,857,604; May 10.
Plug, Spark. M. Pasco. 1,857,739; May 10.
Plug, Thermostatic electrical. E. Walder. 1,857,900; May 10.
Plug, Thermostatic switch. E. Walder. 1,857,173; May 10.
Plug, Thermostatic switch. E. Walder. 1,857,899; May 10.
Plum, L. Burbank. Pl. Pt. 16; May 10.
Pocketbook top. C. J. McCabe and I. Schoenholz. 1,857,928; May 10.
Potato digger. J. A. Parent. 1,857,212; May 10.
Power apportioning means. A. D. Robbins. 1,857,978; May 10.
Power plant. R. E. Lasley. 1,857,556; May 10.
Power plant. R. C. Roe. 1,857,332; May 10.
Precipitating apparatus and process. J. Skogmark. 1,857,884; May 10.
Preparation of the hormone of the anterior lobe of the pituitary gland, Recovery of a water soluble. W. Schoeller and M. Gehrke. 1,857,878; May 10.
Press: *See*—
Cotton press. Drawing press.
Press. J. O. Pollack. 1,857,286; May 10.
Press clamp. R. C. Pauly. 1,857,657; May 10.
Pressure gauge indicator. H. D. Carlton. 1,857,139; May 10.
Pressure indicator. L. M. Ellison. 1,857,367; May 10.
Pressure regulating device for gases. J. A. Heidbrink. 1,858,084; May 10.
Price indicator. J. L. Arnold. 1,857,580; May 10.
Printing plates, Producing. F. C. Goldenbaum. 1,857,842; May 10.
Printing presses, Inching mechanism for. H. L. McCleery. 1,857,818; May 10.
Printings, Producing fast. A. Zitscher and F. Muris. 1,857,230; May 10.
Product for destroying animals. J. A. Aeschlimann. 1,858,177; May 10.
Products from cornstalks, sugar cane, and similar vegetable material, Manufacturing various. G. Taube. 1,857,985; May 10.
Projector, Combination. K. and J. W. Brenkert. 1,857,135; May 10.
Propeller. C. H. Havill. 1,857,909; May 10.
Propeller. J. H. Pilet. 1,857,327; May 10.
Propeller apparatus. M. C. Nixon. 1,857,392; May 10.
Propeller or turbine for water, air and gases. 1,857,509; May 10.
Protector. C. B. Hice. 1,857,304; May 10.
Protector, Cigarette ash and spark. M. L. Bjornstad. 1,858,180; May 10.
Protector, Ear. J. Reno. 1,857,974; May 10.
Protector, Wrist watch. A. H. Karpf. 1,857,195; May 10.
Protein composition. M. Levin. 1,857,596; May 10.
Puller: *See*—
Tie puller. Wheel puller.
Weed puller.
Pulp articles and materials therefor, Treatment of. A. L. Clapp. 1,857,498; May 10.
Pulverizer and packer, Land. J. A. Gausche. 1,857,753; May 10.
Pump. E. L. Brown. 1,858,036; May 10.
Pump. J. P. Lidiak. 1,857,965; May 10.
Pump, Capsular. J. H. Axlen. 1,857,931; May 10.
Pump, Chain. C. Vellino. 1,857,896; May 10.
Pump, Deep well fluid motor. B. H. Scott and S. E. Ross. 1,857,405; May 10.
Pump, Duplex. H. Peters. 1,857,864; May 10.
Pump, Fuel and air. A. M. Babitch. 1,857,675; May 10.
Pump, Liquid. C. O. Buenger. 1,858,184–5; May 10.
Pump, Vacuum. K. C. D. Hickman. 1,857,506; May 10.
Pumping apparatus. F. H. Lewis. 1,857,922; May 10.
Pumping mechanism. J. Oliphant. 1,857,393; May 10.
Pumping system. N. E. Gunderson. 1,857,954; May 10.
Rack: *See*—
Clothes rack.
Rack. W. N. Vance. 1,858,064; May 10.
Radiator. A. E. Northup. Des. 86,931; May 10.
Radiator, Rotary. C. Hlavaty. 1,858,226; May 10.
Radio cabinet. D. J. Phelps. Des. 86,933; May 10.
Radio signaling. L. Cohen. 1,857,359; May 10.
Radio sound box. A. E. Tauscher. Des. 86,941; May 10.
Radio telephone system. F. F. Merriam. 1,857,819; May 10.
Rail joint, Shimmed. W. E. Gadd. 1,857,952; May 10.
Railroad crossing. C. P. Kimmel. 1,857,458; May 10.
Railway system, Electric. M. H. Loughridge. 1,857,760; May 10.
Ratio meter. S. Hausman and W. Veit. 1,857,452; May 10.
Razor, Safety. C. J. Emerson. 1,858,223; May 10.
Razor, Safety. H. R. Segal. 1,857,980; May 10.
Razor, Safety. T. L. Smith. 1,857,339; May 10.
Receptacle, Attachment plug. E. Clemence. 1,858,072; May 10.
Receptacle cleaner. F. Bolagek. 1,857,584; May 10.
Receptacle for ashes and other material. R. Gerth. Des. 86,911; May 10.
Reel: *See*—
Shipping reel.
Reflecting unit. C. C. Dodge. 1,858,141; May 10.
Refrigerating device. L. M. Crosley. 1,857,439; May 10.
Refrigeration device. L. M. Crosley. 1,857,440; May 10.
Relay device for automatic control by the use of a fluid under pressure. R. Lanquetin. 1,857,386; May 10.
Release, Overload. M. H. Damerell. 1,858,074; May 10.
Resin, Treating Batavian dammar. J. Scheiber, K. Sändig, and A. B. Blumer. 1,857,698; May 10.
Resins, Manufacture of artificial. E. C. Rossiter and W. C. Davis. 1,857,478; May 10.
Resins, New synthetic. L. Rosenthal. 1,857,333; May 10.
Resistance eliminator for aircraft and water craft. E. Johnson. 1,857,960; May 10.
Regulator: *See*—
Air pressure regulator. Furnace regulator.
Electric regulator. Window regulator.
Retainer for ball bearings. T. L. Robinson. 1,857,823; May 10.
Retort. J. N. Vandegrift. 1,857,171; May 10.
Rim, Demountable. A. Brown. 1,857,426; May 10.
Rims, Ornamenting. G. A. Lyon. 1,858,228; May 10.
Ring: *See*—
Packing ring.
Rings, Producing. A. W. Morton. 1,857,254; May 10.
Riveted joint. C. W. Hall. 1,857,754; May 10.
Riveter, Automatic. C. E. Corson and W. A. Wright. 1,858,001; May 10.

Rivets to position, Device to facilitate the driving of. H. B. Morgan. 1,857,389; May 10.
Roasting apparatus. H. K. A. Lassen. 1,857,725; May 10.
Rock crusher, Centrifugal. A. D. Hadsel. 1,857,539; May 10.
Rod: *See*—
Curtain rod.
Roller plate construction for fluid meters, Thrust. W. L. Marden. 1,857,851; May 10.
Roof covering. A. C. Fischer. 1,858,224; May 10.
Roof structure. A. C. Leigh. 1,857,462; May 10.
Roofing. R. Maclean. 1,857,463; May 10.
Rotary bin. J. R. Massengale. 1,858,099; May 10.
Rotary ventilator. V. H. Meadows. 1,857,762; May 10.
Rudder post attachment. R. Hill. 1,858,046; May 10.
Running mold. O. Chiocchio. 1,857,237; May 10.
Safety control for motor vehicles, Automatic. J. A. Vincent. 1,857,897; May 10.
Safety device for speed governors of the pickering or like type. F. O. Chorlton and J. R. Haworth. 1,857,765; May 10.
Safety device for vault or safe door locks. J. Oleschack, jr. 1,857,971; May 10.
Safety guard for clothes wringers. J. Schaffer. 1,857,876; May 10.
Safety mechanism for material handling machines. C. H. Wagner. 1,857,172; May 10.
Safety switch. J. J. Dante. 1,857,711; May 10.
Samples of liquids, Apparatus for taking. R. Rousselet. 1,857,874; May 10.
Sand trap and deflector riffle, Vortex. R. L. Parshall. 1,858,231; May 10.
Sanitary napkin. E. E. Glomstead. 1,857,854; May 10.
Sash lock. Y. W. Ehret. 1,857,295; May 10.
Sash lock. C. H. Larson. 1,857,294; May 10.
Saw, Power. J. F. Hodgson. 1,858,015; May 10
Saw set. B. H. Oliver. 1,857,563; May 10.
Scale, Weighing. H. O. Hem. 1,857,278; May 10.
Scraper. R. G. Le Tourneau. 1,857,157; May 10.
Scraper, Road. E. A. Weeks. 1,858,213–4; May 10.
Screen: *See*—
Halftone screen. Window screen.
Screen. J. Brewer. 1,857,425; May 10.
Screen adjusting mechanism, Wind. C. H. H. Rodanet. 1,857,261; May 10.
Screw propeller for use upon aircraft. H. Sukohl. 1,857,678; May 10.
Sealer, Strip paper. H. H. Hillmer. 1,858,207; May 10.
Seat: *See*—
Chair seat.
Sediment retainer. G. Riestenberg. 1,857,660; May 10.
Semaphore and track for toy railways. H. S. Becker. 1,857,933; May 10.
Separating device for solids and liquids. A. E. Leek. 1,858,160; May 10.
Separator: *See*—
Water separator.
Serving device. E. U. Rice. 1,857,820; May 10.
Sewing chest. J. E. Mulrey. 1,858,105; May 10.
Sewing machine attachment. E. Dember and F. Weinder. 1,857,944; May 10.
Sharpener for slicing machines. J. N. Woodington. 1,857,421; May 10.
Shears for cutting sheet-material such as metal, leather, cardboard, or the like, Power driven. U. F. L. Steindorff, H. J. Heller, and G. A. Ungar. 1,857,167; May 10.
Sheet folding apparatus, End. F. M. Brackett, L. C. Williams, and D. Daneke. 1,858,034; May 10.
Sheet metal die. G. E. Ireland. 1,858,047; May 10.
Shellac substitute. I. S. Mellanoff. 1,857,691; May 10.
Shield, Antiglare. H. D. Nelson. 1,857,284; May 10.
Shield for carbide feeds in acetylene generators. H. G. Irwin. 1,857,456; May 10.
Shield for mowers, Crank wheel. W. J. Coultas. 1,857,273; May 10.
Shipping reel. D. R. Stevens. 1,857,169; May 10.
Shock absorber. L. S. Wilbur. 1,857,750; May 10.
Shoe. C. Miller. 86,924–6; May 10.
Shoe. L. Pignanelli. Re18,461; May 10.
Shoe, Bathing. C. W. Hubbell. 1,857,153; May 10.
Shoe filler piece. A. Thoma. 1,857,672; May 10.
Shoe-part blanks, Method of and apparatus for operating upon. J. A. Brogan. 1,857,180; May 10.
Shoe plate. F. D. Reynolds. 1,857,975; May 10.
Shoe sole. H. T. Mason. 86,921–2; May 10.
Shoe sole. R. Wollmer. 1,857,751; May 10.
Shoe stiffeners, Apparatus for softening. H. L. Sawyer and J. W. Cosgrove. 1,857,218; May 10.
Shore. A. C. Marshall. 1,858,021; May 10.
Show case, Refrigerator. C. V. Hill. 1,857,545; May 10.
Shower pipe. S. Wheeler, jr. 1,857,829; May 10.
Sign. A. J. McMaster. 1,858,052; May 10.
Sign, Electric. L. A. Koch, jr. 1,857,916; May 10
Sign frame, Portable. H. T. Hallowell and F. Bennett. 1,858,152; May 10.
Sign front, Changeable. F. Shipman. 1,857,882; May 10.
Sign in the air, Displaying a. E. Udet. 1,857,292; May 10.
Sign, Sectional adjustable display. S. A. Oftedal. 1,857,789; May 10.
Signal: *See*—
Directional signal.
Signal switch, Automobile. H. Blum and F. J. Farley. 1,857,935; May 10.
Signaling device, Automobile. N. H. and H. M. Nelson. 1,857,210; May 10.
Signaling light, Vehicle direction. W. J. Cronan. Des. 86,907; May 10.
Silver by electrolysis, Separation of. K. C. D. Hickman and W. J. Weyerts. 1,857,507; May 10.
Sink fixture. A. C. Brown. 1,857,136; May 10.
Skate, Roller. J. S. Coldwell. 1,857,360; May 10.
Ski. G. S. Stevens. 1,858,120; May 10.
Slip regulation of asynchronous machines. E. Reimann. 1,858,058; May 10.
Snap switch, Piston operated. F. Siepp. 1,858,117; May 10.
Snow melting apparatus. J. R. Peters. 1,857,603; May 10.
Snowplow. G. C. Soule and J. B. Woodbury. 1,858,212; May 10.
Sodium acetate, Purification of. H. G. Stone. 1,857,520; May 10.
Soldering, Method of and apparatus for. J. F. Donovan and F. J. Malloy. 1,857,182; May 10.
Solenoid. A. S. Boehm. 1,857,349; May 10.
Sorting and packaging machine. H. B. Logie. 1,858,161; May 10.
Sound, Device for recording of. A. Poulsen and A. C. G. Petersen. 1,857,569; May 10.
Sound-on-film reproducing apparatus. J. H. Burnside. 1,857,427; May 10.
Spark arrester. G. Carpenter. 1,857,353; May 10.
Speed changing apparatus. T. Okumura. 1,857,324; May 10.
Speed controlling mechanism. W. J. Pasinski. 1,857,790; May 10.
Speed or load control system. W. Seiz. 1,857,164; May 10.
Speed transmission, Variable. A. Y. Dodge. 1,857,365; May 10.
Speedometer with rotating magnet. J. Zubaty. 1,857,674; May 10.
Spindle boring machine, Multiple. A. C. Gough. 1,857,953; May 10.
Spinning and twisting machine. I. R. Rowe. 1,857,743; May 10.
Spinning frames and other machines, Apparatus for operating on. J. J. Smith. 1,857,410; May 10.
Spinning machine, Double twist flyer. A. Férier. 1,858,205; May 10.
Spoon or article of analogous nature. H. E. Nock. Des. 86,929; May 10.
Sprag for motor vehicles and the like. W. Miller and H. T. Lamb. 1,857,253; May 10.
Spring device. C. I. Nygar. 1,857,764; May 10.
Spring suspension for motor vehicles, Compensating. A. P. Buquor. 1,857,234; May 10.
Spring turning mechanism. B. R. Schneider and K. Kaiser. 1,858,211; May 10.
Spring winding machine. M. Nigro. 1,857,860; May 10.
Stacker. C. D. Howey. 1,858,089; May 10.
Stacking apparatus. W. C. Bridges. 1,858,183; May 10.
Stage or screen modifier. E. J. Vallen. 1,857,673; May 10.
Stanchion, Cattle. J. H. Sutton. 1,857,412; May 10.
Stand: *See*—
Folding stand.
Standards, Method of and apparatus for anchoring. F. W. Weitz. 1,857,489; May 10.
Steam generator. G. B. Ashworth. 1,857,831; May 10.
Steam generator, Rotating. J. V. Blomquist and T. A. Blomen. 1,857,710; May 10.
Steam presses, Operative mechanism for. H. H. McDermott. 1,857,601; May 10.
Stocking. W. H. MacNamee. 1,858,162; May 10.
Stop for rotating parts. E. M. Shinkle. 1,857,408; May 10.
Stop mechanism. C. Brahy. 1,857,996; May 10.
Storage apparatus, Vehicle. M. S. Clark. 1,857,431; May 10.
Storage battery. B. Ford and W. H. Bancroft. 1,857,591; May 10.
Store front. W. Schwartz. Des. 86,938–9; May 10.
Stove, Brooder. J. Henderson. 1,857,544; May 10.
Strand material, Apparatus for handling. E. M. Bidwell. 1,857,835; May 10.
Strand slackening device. H. P. Arkema and S. McMullan. 1,857,801; May 10.
Strap: *See*—
Film holding strap. Lug strap.
Stroboscope. R. H. Worrall. 1,857,422; May 10.
Stylus or the like, Plural member. W. D. La Rue. 1,858,016; May 10.
Submarine life boat. J. Vasquez and M. Bernardez. 1,857,575; May 10.
Sulphide ores and production of sulphuric acid thereby, Treating. G. C. Carson. 1,857,494; May 10.
Sulphur from smelter smoke, Economic recovery of. A. M. Thomsen. 1,857,414; May 10.
Superheater installation. O. Engler. 1,858,143; May 10
Support. G. A. Howell. 1,857,722; May 10.
Support and operating means therefor, Drapery and curtain. H. Reubel. 1,857,768; May 10.
Support, Balance. W. L. Clark. 1,857,623; May 10.

Support, Clothesline. G. Olivieri. 1,857,738; May 10.
Support, Container. H. M. Nicholls. 1,857,391; May 10.
Support, Curtain. R. C. Vogt. 1,857,990; May 10.
Support for luminescent tubes. A. J. McMaster. 1,858,053; May 10.
Support for washing machines. A. W. Altorfer. 1,857,930; May 10.
Support, Heel and arch. H. H. Abern. 1,858,178; May 10.
Support, Nursing bottle. P. Falvo. 1,857,715; May 10.
Support, Sign. M. K. Markman. 1,857,314; May 10.
Swatter, Fly. C. T. Kirkby. 1,857,757; May 10.
Switch: *See*—
Keyless switch. Snap switch.
Safety switch. Thermostatic switch.
Signal switch.
Switch blade device. G. B. Wadsworth. 1,857,487; May 10.
Switch device, Thermostatic. L. V. Lucia. 1,857,923; May 10.
Switch for electrical systems. G. A. Salinas. 1,857,875; May 10.
Switch handle. H. Hubbell, jr., and C. E. Avery. 1,857,379; May 10.
Switch operating mechanism. C. Thumim. 1,857,220; May 10.
Table accessory. P. De Martini, jr. 1,857,712; May 10.
Tack removing device for skin drying holders. G. H. Berry. 1,857,834; May 10.
Tank cleaning device. W. E. Peterson. 1,857,766; May 10.
Target, Flying. W. G. Warren. 1,857,791; May 10.
Target for practice shooting, Moving. E. Udet. 1,857,893; May 10.
Tea bagging machine. P. Rohrig. 1,857,662; May 10.
Telegraph printer and the like. H. L. Krum. 1,857,786; May 10.
Telephone exchange system, Automatic. E. P. G. Wright. 1,858,069; May 10.
Telephone system. L. J. Stacy. 1,857,827; May 10.
Telephone system, Automatic or semiautomatic. J. H. E. Baker and L. B. Haigh. 1,857,833; May 10.
Television receiver. R. D. Kell. 1,857,154; May 10.
Temperature controlling method for ceramic furnaces or kilns. A. S. Watts. 1,857,702; May 10.
Temperature indicating instrument. I. F. Kinnard and H. T. Faus. 1,857,196; May 10.
Template for rails and joints. Field. W. E. Gadd. 1,857,951; May 10.
Tension cut-out and the like, High. E. N. Nordhem. 1,857,322; May 10.
Terminal connecter and support for line wires. A. High. 1,857,956; May 10.
Tester for watt hour meters and the like. E. E. Hill. 1,857,593; May 10.
Testing and flexing machine. G. Sundback. 1,857,669; May 10.
Textile materials, Apparatus for treating. C. De Witte. 1,857,839; May 10.
Thermionic tube connecting means. W. L. Krahl. 1,857,646; May 10.
Thermostatic control for burners. A. J. Hartfield and M. Koehler. 1,857,504; May 10.
Thermostatic switch. F. E. Wolcott and L. V. Lucia. 1,857,906; May 10.
Thieving tube. F. J. Frank and F. J. Shock. 1,857,537; May 10.
Thread chaser. W. T. D. Campaigne. 1,857,493; May 10.
Threading machine. E. W. Mikaelson. 1,857,251; May 10.
Thumb tack, Concealed. W. J. Maloney. 1,857,158; May 10.
Ticket issuing machine. A. J. Johnston. 1,858,049; May 10.
Tie: *See*—
Form tie. Parcel tie.
Tie member for tanks. R. L. Lewis. 1,857,560; May 10.
Tie puller. J. J. Veling. 1,857,772; May 10.
Tile cutting machine. E. H. Wolber. 1,857,269; May 10.
Tile, Draining. C. Dietrichs. 1,857,143; May 10.
Tile, Manufacturing ornamental glass. E. Medina. 1,857,856; May 10.
Time delay device. E. Foucault. 1,858,082; May 10.
Tin from alkali stannate or alkali stannite lyes, Electrolytic production of. W. Fanselau. 1,857,752; May 10.
Tire. E. Eger and S. P. Thacher. 1,857,144; May 10.
Tire deflation indicator. W. L. Jones. 1,857,551; May 10.
Tire, Pneumatic. T. G. Graham. Des. 86,912; May 10.
Tire, Pneumatic. A. R. Iruz. 1,858,094; May 10.
Toilet accessories. W. Friedman. 1,858,218; May 10.
Tongue and mouth cleaner. L. L. Funk. 1,857,145; May 10.
Tongs. W. F. Martin. 1,857,925; May 10.
Tongs. J. A. Peterson and C. E. Olsen. 1,857,397; May 10.
Tongs, Clinker. W. H. Engel. 1,857,841; May 10.
Tongs for table service. O. C. Schaefer. 1,857,979; May 10.
Tool. A. G. Steinmayer. 1,857,483; May 10.
Tool and holder, Chamfering. H. R. Metz. 1,857,208; May 10.
Tool, Box stamping and drawing. F. Eisenlohr. 1,857,628; May 10.
Tool, Cutting. W. F. Stuckeman. 1,857,795; May 10.
Tool, Electric fender. N. Pesola. 1,858,169; May 10.
Tool, Fluid operated. J. E. Renfer. 1,858,059; May 10.
Tool for making armatures. V. G. Apple. 1,857,176; May 10.
Tool for wave transmission apparatus, Percussion. W. R. Degenhardt, A. F. De Fraine, and R. H. Bicknell. 1,857,624; May 10.
Tool, Tire. C. W. Linde. 1,858,098; May 10.
Tool, Wire stripping. A. Lund. 1,857,731; May 10.
Top feeding mechanism. C. W. Mueller. 1,857,692; May 10.
Top surface of concrete and the like and forming the same. N. C. Johnson. 1,857,511; May 10.
Torpedo. J. H. Hammond, jr. 1,857,150; May 10.
Torque dynamometer. A. S. Mackenzie. 1,857,688; May 10.
Tourniquet, Blood pressure. J. Plesch. 1,857,567; May 10.
Tower, Cooling. E. Burhorn. 1,857,351; May 10.
Toy. A. Felardo. 1,858,145; May 10.
Toy. L. I. Rivard. 1,857,976; May 10.
Toy electric motor. G. A. Moore. 1,857,209; May 10.
Toy rails, Device for bending. F. Ottenstein. 1,857,325; May 10.
Tractor. G. R. Hanks. 1,858,154; May 10.
Traffic controlling apparatus, Railway. B. E. O'Hagan. 1,857,323; May 10.
Trailer. A. F. Kuester. 1,857,758; May 10.
Trailer. A. F. Kuester. 1,857,784; May 10.
Trailer train steering mechanism, Automotic. W. P. Pinckard. 1,857,740; May 10.
Train control system. H. S. Folker. 1,857,186; May 10.
Transformer. N. A. J. Voorhoeve. 1,857,577; May 10.
Transmission synchronizing device. J. G. Vincent and A. Moorhouse. 1,857,223; May 10.
Transmission system. E. F. Byrnes. 1,857,137; May 10.
Transmission system. S. I. Cory. 1,857,238; May 10.
Transmission system. W. T. Rea. 1,857,258–9; May 10.
Transmission unit, Flexible. C. O. Thomas. 1,857,679; May 10.
Trap: *See*—
Animal trap. Insect trap.
Burglar trap.
Trap. L. Basso. 1,857,932; May 10.
Tray, Ash. G. Johnson. Des. 86,918; May 10.
Tray, Currency. J. W. Holliday. 1,857,305; May 10.
Tray, Ice cube. H. B. Turner. 1,858,124; May 10.
Tray, Incubator. M. Poppleton. 1,857,568; May 10.
Treadle, Warper. H. A. Leonard. 1,857,649; May 10.
Trimmer for sprinkling system nozzles, Grass. C. E. Johnson. 1,857,383; May 10.
Trimming machine. F. N. Brackett and L. C. Williams. 1,858,033; May 10.
Truck body. L. J. Styslinger. 1,857,796; May 10.
Truck, Lateral motion freight car. F. L. Barber and E. W. Webb. 1,857,345; May 10.
Tube: *See*—
Electronic tube. Vacuum tube.
Thieving tube.
Tubular heater. C. B. Backer. 1,857,615; May 10.
Turbine, Elastic fluid. G. B. Warren. 1,858,067; May 10.
Turning machine, Automatic. D. Turcott. 1,857,891; May 10.
Turning machine, Automatic. D. Turcott. 1,857,986; May 10.
Two cycle engine. C. G. Curtis and E. R. Newton. 1,858,002; May 10.
Type slugs, Proofing. H. J. Megley. 1,857,315; May 10.
Typewriter carriages, Variable feed mechanism for. F. H. Trego. 1,857,771; May 10.
Typewriters, Noiseless type action for. J. A. Ramus. 1,857,741; May 10.
Typewriting, computing, and check protecting machine, Combined. H. H. Steele. 1,858,027; May 10.
Typewriting machine. W. A. Dobson. 1,857,946; May 10.
Typewriting machine. W. A. Dobson. 1,858,041; May 10.
Typewriting machine. W. F. Helmond. 1,857,151; May 10.
Typographical machine. A. J. Stouges. 1,858,121; May 10.
Underreamer, Hydraulic. R. C. Baker. 1,857,616; May 10.
Utensil. D. P. Gleason. 1,857,372; May 10.
Vacuum tube construction. W. L. Krahl. 1,857,645; May 10.
Vacuum tube, Duplex triode. S. M. Kintner. 1,857,594; May 10.
Vacuum tubes, Unitary element structure for. W. L. Krahl. 1,857,647; May 10.
Valve. E. C. Herthel and W. S. Gullette. 1,857,279; May 10.
Valve. S. J. Nordstrom. 1,857,861; May 10.
Valve actuatbr. H. N. Sudduth. 1,857,266; May 10.
Valve construction. G. F. Ritter. 1,857,477; May 10.
Valve for compressed air systems, Combination check, pilot, and unloading. A. A. Smallhouse. 1,857,666; May 10.
Valve for cookers. R. N. Kircher. 1,857,459; May 10.
Valve for storage tanks, Automatic cut-off. C. W. Smith. 1,857,409; May 10.
Valve, High-pressure. F. May. 1,858,164; May 10.
Valve, Locomotive safety. B. J. Morrison. 1,857,514; May 10.

Valve mechanism for internal combustion engines. G. F. Edmunds. 1,857,626; May 10.
Valve, Multiple-way by-pass. W. G. Miller. 1,858,054; May 10.
Valve, Pressure relief. W. G. Watkins. 1,858,202; May 10.
Valve, Tire. W. L. Ingram. 1,857,382; May 10.
Vapor condensation. N. S. Olsen. 1,857,394; May 10.
Vapor spray, Dry. E. and H. Cohn. 1,857,358; May 10.
Vaporizer, Electric. L. A. Collins. 1,857,181; May 10.
Vehicle frames, Resistance welding automotive. W. E. Richter. 1,857,517; May 10.
Vehicle, Land. A. P. Armington and F. R. Higley. 1,857,343; May 10.
Vehicle, Multiwheel road. A. I. Marcum. 1,857,219; May 10.
Vending machine, Automatic. L. E. Scott and E. A. Smith. 1,857,881; May 10.
Veneering construction. E. J. and H. W. Mason. 1,857,926; May 10.
Ventilating and air circulating device. C. A. Moore. 1,858,024; May 10.
Ventilating arrangement for automobile hoods. B. G. W. and W. C. F. Wolff. 1,857,705; May 10.
Ventilator: *See*—
Rotary ventilator. Window ventilator.
Ventilators for cars. W. E. Wine. 1,857,681; May 10.
Vibrator or like mechanism. W. G. Shelton. 1,857,982; May 10.
Voltage measuring arrangement. T. Laurent. 1,857,247; May 10.
Voltage regulators, Device for testing electric. H. Grob. 1,857,149; May 10.
Wall board and the like, Manufacture of. A. E. Millington. 1,857,316; May 10.
Wall surface construction. H. J. R. Barrett. 1,857,490; May 10.
Ware stacking mechanism. G. J. Grizey. 1,858,010; May 10.
Washboard. (F. M. Vogan. Des. 86,944; May 10.
Washing implement. G. Virneburg. 1,857,989; May 10.
Waste, Process and apparatus for cleaning. J. R. Hiatt and C. R. Wicker. 1,857,812; May 10.
Water closet. W. J. Woolley. 1,857,800; May 10.
Water separator. F. Stein. 1,857,887; May 10.
Watering fountain. H. M. Lemaster. 1,857,558; May 10.
Wave energy translating diaphragm and mounting it. E. H. Smythe. 1,857,794; May 10.
Wax from oil, Removal of. S. R. Funsten and I. M. Perkins. 1,857,370; May 10.
Wax from oil, Removal of. J. E. Schott. 1,857,404; May 10.
Web positioning mechanism. C. J. Rowe. 1,857,214; May 10.
Weed puller. A. Davison. 1,857,500; May 10.
Welding by means of a flashing electric arc, Butt. W. F. Helneman. 1,857,505; May 10.
Wells, Apparatus and process for cementing. J. A. Hardcastle. 1,857,301; May 10.
Welt, Finishing. R. C. Schemmel. 1,857,877; May 10.
Wheel: *See*—
Assembler star wheel. Metal wheel.
Elastic wheel.
Wheel puller. W. H. Odlum. 1,857,211; May 10.
Wheel puller. W. H. Odlum and E. H. Peterson. 1,857,211; May 10.
Wheel structure. G. E. Strandt. 1,857,746; May 10.
Wheel tread refacer. C. P. Kimmel. 1,857,457; May 10.
Wind instrument. R. J. Hathaway, jr. 1,857,908; May 10.
Winding and reeling device. P. S. McCann. 1,857,817; May 10.
Window. W. P. Godfrey. 1,858,149; May 10.
Window regulator, Center lift. E. L. Ackerman. 1,858,070; May 10.
Window screen. T. Johnson. 1,858,227; May 10.
Window, Vehicle. E. J. Paull. 1,858,109; May 10.
Window ventilator. E. F. Johnson. 1,857,911; May 10.
Windshield frame. B. A. Obst. 1,857,602; May 10.
Wiper, Windshield. C. B. Williams. 1,857,419; May 10.
Wire anchor device, Guy. E. K. Cole. 1,857,434; May 10.
Wire structure for electrically propelled carriages, Track and trolley. J. J. Smith and W. J. Smith. 1,858,118; May 10.
Wire support. L. E. Hendee. 1,858,045; May 10.
Wires, Manufacture of metal covered copper. G. Masing. 1,857,600; May 10.
Wiring device, Baseboard. H. Hubbell, jr. 1,857,378; May 10.
Wiring terminal construction. P. D. Phillips. 1,857,398; May 10.
Wood for digestion by the bisulphite process, Preparing resinous. G. Rosen. 1,857,695; May 10.
Wrapper tabbing mechanism. E. G. Rider. 1,857,260; May 10.

CLASSIFICATION OF PATENTS

ISSUED MAY 10, 1932

NOTE.—First number=class, second number=subclass, third number=patent number

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PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

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Adams, S. W. & Co., Philadelphia, Pa. Japan drier and varnish. Serial No. 324,418; May 17. Class 16.

Aiken and Mascho, Dallas, Tex. Preparation for increasing the efficiency of gasoline, etc. Serial No. 324,334; May 17. Class 6.

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Bastian-Blessing Company, The, Chicago, Ill. Welding metals. Serial No. 325,396; May 17. Class 14.

Beaton, Daniel P., doing business as Parachute Confection Company, Winnipeg, Manitoba, Canada. Candy. Serial No. 317,823; May 17. Class 46.

Bemberg, I. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany. Thrend and yarn. Serial No. 325,055; May 17. Class 43.

Best Electric Corporation, New York, N. Y. Electric batteries. Serial No. 319,856; May 17. Class 21.

Blumenthal, Sidney, & Co., Inc., New York, N. Y. Pile fabrics. Serial No. 326,047; May 17. Class 42.

Booth, John S., Dallas, Tex. Refrigeration units. Serial No. 320,568; May 17. Class 31.

Bremencel und Pressbefe-Fabrik Tornesch Gesellschaft mit beschrankter Haftung, Tornesch, Germany. Varnishes, shellac and lacquers, etc. Serial No. 321,746; May 17. Class 16.

British Columbia Lumber and Shingle Manufacturers Limited, The, Vancouver, British Columbia, Canada. Wooden beams, doors, laths, planks, etc. Serial No. 325,207; May 17. Class 12.

Browne, E. T., Drug Co. Inc., New York, N. Y. Soap. Serial No. 325,868; May 17. Class 4.

Brundage Bros. Co., The, Toledo, Ohio. Insecticide. Serial No. 325,086; May 17. Class 6.

Bullen, Joseph W., doing business as The Bullen Chemical Company, Polcroft, Pa. Cleanser. Serial No. 325,560; May 17. Class 4.

Burkhardt, George F., doing business as The Pylo Co., Hazleton, Pa. Ointment. Serial No. 323,388; May 17. Class 6.

Cedar Island Oyster Company, Greenport, N. Y. Oysters. Serial No. 324,506; May 17. Class 46.

Celanese Corporation of America, New York, N. Y. Fabrics. Serial No. 325,745; May 17. Class 42.

Clover Farm Stores. (See Grocers & Producers Co.)

Compagnie Francaise des Marques et Produits Charles Henry, Paris, France. Pharmaceutical, antiseptic, cicatrizant, non-toxical product. Serial No. 316,694; May 17. Class 6.

Compagnie Francaise des Marques et Produits Charles Henry, Paris, France. Pharmaceutical product. Serial No. 316,695; May 17. Class 6.

Compagnie Francaise des Marques et Produits Charles Henry, Paris, France. Pharmaceutical antiseptic product. Serial No. 316,696; May 17. Class 6.

Compo Shoe Machinery Corporation, Boston, Mass. Shoe machinery. Serial No. 324,461; May 17. Class 23.

Continental Oil Company, Ponca City, Okla. Lubricating oil. Serial Nos. 310,165–6; May 17. Class 15.

Costa, Vito, & Sons, Chicago, Ill. Macaroni. Serial No. 325,321; May 17. Class 46.

Country Gentleman Products Co. (See Stoneman, William H.)

Daroff, H., & Sons, Inc., Philadelphia, Pa. Outer suits. Serial No. 325,780; May 17. Class 39.

Davis Welding & Manufacturing Company, The, Cincinnati, Ohio. Truck tank, trailer tanks, etc. Serial No. 324,593; May 17. Class 19.

Deland, C. M., New York, N. Y. Cotton, rayon, etc. piece goods. Serial No. 324,820; May 17. Class 42.

Draper-Maynard Company, The, Plymouth, N. H. Foot, basket, volley, and soccer balls. Serial No. 325,903; May 17. Class 22.

Du Pont Viscoloid Company, New York, N. Y. Cellulosic plastic in sheets. Serial No. 325,616; May 17. Class 50.

Dyaline, Inc., Collinsville, Ill. Antiseptic socket dressing, pyorrhea treatment, etc. Serial No. 325,137; May 17. Class 6.

Emery, Erle E., doing business as Erle E. Emery Co., Los Angeles, Calif. Fresh vegetables and cantaloupes. Serial No. 310,332; May 17. Class 46.

Engineers Publishing Company. (See Shirk, Wesley H.)

Essex Rubber Company, Trenton, N. J. Toy building blocks. Serial No. 325,398; May 17. Class 22.

Ethyl Gasoline Corporation, Wilmington, Del., and New York, N. Y. Compression pressure gauges. Serial No. 325,904; May 17. Class 26.

Farastan Company, The, Philadelphia, Pa. Antiseptic. Serial No. 325,165; May 17. Class 6.

Fisher Flouring Mills Company, West Waterway, Harbor Island, Seattle, Wash. Wheat flour. Serial No. 325,782; May 17. Class 46.

Fisher Scientific Company, Pittsburgh, Pa. Burette clamps and clamp holders and parts thereof. Serial No. 325,948; May 17. Class 26.

Fred, Walter, Hosiery Mills, Inc., Nashville, Tenn. Hosiery. Serial No. 325,324; May 17. Class 39.

Frigivend Corporation, Dayton, Ohio. Ice cream. Serial No. 323,894; May 17. Class 46.

Fucini, E., & Co. Inc., New York, N. Y. Tonic. Serial No. 324,958; May 17. Class 6.

Gaseteria Incorporated, Indianapolis, Ind. Lubricating oils. Serial No. 317,713; May 17. Class 15.

Goldstein, Harry W., assignor to Southland Importing Company, Inc., Houston, Tex. Laxative tonic. Serial No. 314,028; May 17. Class 6.

Great Falls Orange Crush Bottling Company. (See Newman, H. E.)

Grimm, A. P., Foundry Company, Inc., Bound Brook, N. J. Aluminum alloys. Serial No. 324,961; May 17. Class 14.

Grocers & Producers Co., The, doing business as Clover Farm Stores, Cleveland, Ohio. Jar rubbers. Serial No. 323,291; May 17. Class 35.

Grotta, Joseph E., New York, N. Y. Blouses. Serial No. 324,939; May 17. Class 39.

Hansa Chemical Co. (See Levine, Leo.)

Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. Serial No. 323,600; May 17. Class 39.

Ho-Mo-Lo Corporation, Detroit, Mich. Medicinal compounds. Serial No. 324,741; May 17. Class 6.

Howards & Sons Limited, Ilford, England. Perfumery. Serial No. 322,774; May 17. Class 6.

Hupman Herbalist Company, Binghamton, N. Y. Medicinal compound. Serial No. 309,047; May 17. Class 6.

Imperial Hosiery Co., Pittsburgh, Pa. Hosiery. Serial No. 325,852; May 17. Class 39.

International Silver Company, Meriden, Conn. Prize cups, symbolic figures, and trophies. Serial No. 325,328; May 17. Class 28.

International Stamping & Enameling Corporation, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Bed pans, irrigators, nasal douche, etc. Serial No. 318,361; May 17. Class 44.

International Stamping & Enameling Corporation, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Bed pans and douche pans. Serial No 318,362; May 17. Class 44.

International Stamping & Enameling Corporation, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Bed pans. Serial Nos. 318,363–4; May 17. Class 44.

Joseph & Feiss Company, The, Cleveland, Ohio. Suits. Serial No. 319,144; May 17. Class 39.

Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Desizing agent. Serial No. 325,261; May 17. Class 6.

Kanouse, Peter A., Los Angeles, Calif. Hydrous cement and impression material. Serial No. 284,945; May 17. Class 44.

Kaufherr & Co., Newark, N. J. Calfskins, hides, and skins. Serial No. 325,828; May 17. Class 1.

Kayalco Products Inc., Nitro, W. Va. Tricresyl phosphate. Serial No. 325,523; May 17. Class 6.

Kellogg Company, Battle Creek, Mich. Grape juice. Serial No. 323,439; May 17. Class 45.

Killian Manufacturing Co., The, Akron, Ohio. Prophylactic rubber articles. Serial No. 326,043; May 17. Class 44.

Koppers Company of Delaware, The, Pittsburgh, Pa. Coal. Serial No. 325,913; May 17. Class 1.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Kroma Color Company, Sandusky, Ohio. Paste. Serial No. 325,333; May 17. Class 5.
Langdale, Charles W., Ottumwa, Iowa. Cleaner and a preparation for cleaning. Serial No. 320,785; May 17. Class 4.
Levine, Leo, doing business as Hansa Chemical Co., Boston, Mass. Antiseptic lotion for the hair and scalp and a pomade and hair dressing. Serial No. 325,475; May 17. Class 6.
Lucullus Bakery, Inc., Brooklyn, N. Y. Cake, muffins, pies, etc. Serial No. 290,370; May 17. Class 46.
Ludlam, James E., Belleville, N. J. Shoes. Serial No. 325,370; May 17. Class 39.
Mackenzie's, Duncan, Sons Co., Inc., Fieldsboro and Trenton, N. J. Electric laboratory and industrial furnaces. Serial No. 312,702; May 17. Class 21.
Magnum Products, Inc., New York, N. Y. Fabric pads. Serial No. 325,042; May 17. Class 29.
Mallinson, H. R., & Co., Inc., New York, N. Y. Silk piece goods. Serial No. 326,057; May 17. Class 42.
Master Oil Burner, Inc, Worcester, Mass. Oil burners. Serial No. 318,244; May 17; Class 34.
McIntire, William C., Charlotte, N. C. Liniment. Serial No. 299,615; May 17. Class 6.
Meyrowitz, E. B., Inc., New York, N. Y. Goggles and eye-protectors. Serial No. 325,264; May 17. Class 26.
Midway Chemical Company, Chicago, Ill. Seeds. Serial No. 324,846; May 17. Class 6.
Myers Paper Company, Memphis, Tenn. Toilet paper, bathroom tissue, and skin cleansing tissue. Serial No. 325,829; May 17. Class 37.
National Sales Service, Salt Lake City, Utah. Savings certificates. Serial No. 324,443; May 17. Class 38.
Naugatuck Chemical Company, The, New York, N. Y. Chemicals. Serial Nos. 325,265–6; May 17. Class 6.
Neuss, Hesslein & Co., Inc., New York, N. Y. Grey cotton piece goods. Serial No. 323,869; May 17. Class 42.
Newark Paraffine & Parchment Paper Co., Newark, N. J. Wax paper. Serial No. 325,916; May 17. Class 37.
Newman, H. E., doing business as Great Falls Orange Crush Bottling Company, Great Falls, Mont. Mineral water, beverages, syrups, etc. Serial No. 325,993; May 17. Class 45.
Northern Limeshell Products, Seattle, Wash. Poultry food. Serial No. 319,434; May 17. Class 46.
Northern Paper Mills, Green Bay, Wis. Paper towels. Serial No. 325,385; May 17. Class 37.
Nurre Companies, Incorporated, The, Bloomington, Ind. Slabs and tiles of glass. Serial No. 324,827; May 17. Class 12.
Oak Rubber Company, The, Ravenna, Ohio. Toy rubber balloons. Serial Nos. 326,020–3; May 17. Class 22.
Oil Creek Refining Co., Titusville, Pa. Gasoline, naphtha, oil and paraffine wax. Serial No. 322,725; May 17. Class 15.
Okonite Company, The, Passaic, N. J. Insulated wires and cables. Serial No. 325,372; May 17. Class 21.
Omnium de Specialites & Produits Chimiques, Societe Anonyme, Paris, France. Laxative and treatment for intestinal affections. Serial No. 325,296; May 17. Class 6.
Ontario Knife Company, Franklinville, N. Y. Knives, forks, spoons, etc. Serial No. 324,755; May 17. Class 23.
Otco's Pure Food Products Company, Atlanta, Ga. Fruit cereal. Serial No. 310,877; May 17. Class 46.
Pacific Products, Inc., San Francisco, Calif. Carbonated beverages of lime flavor. Serial No. 322,223; May 17. Class 45.
Parachute Confection Company. (See Beaton, Daniel P.)
Paraffine Companies, Inc., The, San Francisco, Calif. Type cleaner. Serial No. 297,771; May 17. Class 4.
Pass, Victor E., doing business as Stadium Pharmacies, Baltimore, Md. Cough medicines, cold capsules, salicylate compound, etc. Serial No. 320,912; May 17. Class 6.
Pennzoil Company, The, Los Angeles, Calif. Lubricating oils and greases. Serial No. 324,937; May 17. Class 15.
Pennzoil Company, The, Los Angeles, Calif. Lubricating oils and greases. Serial No. 325,297; May 17. Class 15.
Pepperell Manufacturing Company, Boston, Mass. Blankets. Serial No. 325,528; May 17. Class 42.
Peroxide Chemical Co., The, St. Louis, Mo. Hydrogen peroxide. Serial No. 323,354; May 17. Class 6.
Phoenix Oil Company, The, Cleveland, Ohio. Cleaning compound. Serial No. 325,439; May 17. Class 4.
Plastergon Wall Board Company, Buffalo, N. Y. Thermal and sound insulating wall board. Serial No. 325,047; May 17. Class 12.
Plastergon Wall Board Company, Buffalo, N. Y. Thermal and sound insulating wall board. Serial No. 325,149; May 17. Class 12.
Plowright, Claribel A., Manchester, England. Lipstick. Serial No. 325,374; May 17. Class 6.
Potter & Moore Limited, London, England. Soap. Serial No. 325,756; May 17. Class 4.
"Pride of Ridgeway" Growers Association, The, Route 2, Norlina, N. C. Fresh cantaloupes. Serial No. 324,114; May 17. Class 46.
Pylo Co., The. (See Burkhardt, George F.)
RCA Photophone, Inc., New York, N. Y. Sound recording mechanism, sound reproducing mechanism, etc. Serial No. 310,658; May 17. Class 36.
RCA Victor Company, Inc., Camden, N. J. Cathode ray and thermionic tubes. Serial No. 310,817; May 17. Class 21.
Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Parchment paper. Serial No. 323,919; May 17. Class 37.
Rinshed-Mason Company, Detroit, Mich. Paint, paint enamel, lacquers, etc. Serial Nos. 325,113–16; May 17. Class 16.
Rossie Velvet Company, Mystic, Conn. Pile fabrics. Serial No. 325,151; May 17. Class 42.
Rostone, Incorporated, Lafayette, Ind. Composite structural materials. Serial No. 325,412; May 17. Class 12.
Schlitz Brewing Company, Milwaukee, Wis. Hops. Serial No. 323,422; May 17. Class 1.
Schneider Brothers Incorporated, Chicago, Ill. Manicure implements, sets, and kits. Serial No. 325,533; May 17. Class 44.
Scott & Gilbert Co., San Francisco, Calif. Sheep dip, cathartic pills, tablets, etc. Serial No. 322,714; May 17. Class 6.
Sherwin-Williams Company, The, Cleveland, Ohio. Insecticides and fungicides. Serial No. 325,243; May 17. Class 6.
Shirk, Wesley H., doing business as Engineers Publishing Company, Philadelphia, Pa. Books, charts, magazines, etc. Serial No. 324,331; May 17. Class 38.
Siekmeier, Edward L., Oak Park, Ill. Publication. Serial No. 322,115; May 17. Class 38.
Simpson, Orville, Company, The, Cincinnati, Ohio. Lawns, sizers, screens, etc. Serial No. 312,350; May 17. Class 23.
Sisters of St. Benedict of Crookston, Mount St. Benedict, Crookston, Minn. Honey cream, cream honey butter, meringue, etc. Serial No. 322,659; May 17. Class 46.
Skinner, William, & Sons, New York, N. Y. Silk crepes. Serial No. 326,030; May 17. Class 42.
"Société Anonyme Solex", The, Neuilly-sur-Seine, France. Measuring tools. Serial No. 324,269; May 17. Class 26.
Socony-Vacuum Corporation, New York, N. Y. Petroleum and products of petroleum, mineral wax, candles, etc. Serial No. 318,692; May 17. Class 15.
Soden, G. A. & Co., Chicago, Ill. Diamonds and jewelry. Serial No. 324,762; May 17. Class 28.
Southland Importing Company, Inc. (See Goldstein, Harry W., assignor.)
Squibb, E. R., & Sons, New York, N. Y. Local anesthetics. Serial No. 325,271; May 17. Class 6.
Stadium Pharmacies. (See Pass, Victor E.)
Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread and yarn. Serial No. 316,139; May 17. Class 43.
Standard Trading Mills, New York, N. Y. Cotton pillow cases, sheets, bed spreads, cotton and silk curtains, and cotton and wool blankets. Serial No. 324,233; May 17. Class 42.
Steiner, Ernest, & Co., Inc., New York, N. Y. Bracelets, necklaces, etc. Serial No. 325,022; May 17. Class 28.
Stoneman, William H., doing business as Country Gentleman Products Co., Albany, N. Y. Paints, paint enamels, and varnishes. Serial No. 324,673; May 17. Class 16.
Sunspray Beverages, Inc., Brooklyn, N. Y. Beverages and cocoa drinks. Serial No. 325,606; May 17. Class 45.
Tennessee Coal, Iron & Railroad Company, Birmingham, Ala. Ground open hearth basic slag used as a fertilizer. Serial No. 325,191; May 17. Class 10.
Things Shoe Stores, Inc., Boston, Mass. Shoes. Serial No. 325,024; May 17. Class 39.
Tissue Company, The, Saugerties, N. Y. Paper napkins and handkerchiefs. Serial No. 325,730; May 17. Class 37.
Tobin & Edelman, Philadelphia, Pa. Children's dresses. Serial No. 325,666; May 17. Class 39.
Triangle Mechanical Laboratories Corp., Brooklyn, N. Y. Razor blades. Serial Nos. 325,885–6; May 17. Class 23.
United American Bosch Corporation, Springfield, Mass. Generators. Serial No. 325,492; May 17. Class 21.
United Elastic Corporation, East Hampton, Mass. Electric conductors. Serial No. 324,767; May 17. Class 21.
Utility Blade Corporation, Irvington, N. J. Safety razors and safety razor blades. Serial No. 322,977; May 17. Class 23.
Van Raalte Company, New York, N. Y. Hosiery. Serial No. 325,537; May 17. Class 39.
Virginia Craftsmen Inc., Harrisonburg, Va., New York, N. Y., and Chicago, Ill. Reproductions of antique furniture. Serial No. 322,010; May 17. Class 32.
Vitascope Corporation, The, Providence, R. I. Photographic supplies. Serial No. 316,513; May 17. Class 26.
Waterman, Arthur, Boston, Mass. Skillets or frying pans. Serial No. 317,652; May 17. Class 13.
Western Brick Company, Danville, Ill. Bricks. Serial No. 325,609; May 17. Class 12.

LIST OF REGISTRANTS OF TRADE-MARKS

Abbott, Charles B., Lowell, Mass. Brooms. 294,119; May 17. Class 29.
Alimenta Société Coopérative, Cureghem, near Brussels, Belgium. Chocolates and chocolate candy. 294,075; May 17; Serial No. 322,304; published Mar. 1, 1932. Class 46.
All-American Trainer, The. (See Smith, Verly.)
Allmänna Svenska Elektriska Aktiebolaget, Vesteras, Sweden, Electrical machines and supplies. 85,935; renewed Apr. 2, 1932.
American Floor Surfacing Machine Company, Toledo, Ohio. Abrasives. 294,172; May 17. Class 4.
American Optical Company, Southbridge, Mass. Instrument for exercising and treating the eyes. 294,123; May 17; Serial No. 317,266; published Mar. 1, 1932. Class 44.
Ansehl, Benjamin, doing business as The Benjamin Ansehl Company, University City, Mo. Toilet articles, preparations, and products. 294,061; May 17; Serial No. 315,235; published Feb. 23, 1932. Class 6.
Araban Coffee Co., Inc., Boston, Mass. Coffee. 294,059; May 17; Serial No. 312,744; published Mar. 1, 1932. Class 46.
Arden, Elizabeth, Inc., New York, N. Y. Antishine preparation for the skin. 294,176; May 17. Class 6.
Arnold Bros., Chicago, Ill. Sausage, frankfurters, pork sausage, etc. 294,051; May 17; Serial No. 301,779; published Apr. 21, 1931. Class 46.
Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Hosiery. 294,071; May 17; Serial No. 322,728; published Mar. 1, 1932. Class 39.
Ascher, Leopold, Company, New York, N. Y. Brushes. 38,462; renewed June 17, 1932.
Arkin, William, Co., Inc., New York, N. Y. Shirts and pajamas. 294,100; May 17; Serial No. 322,444; published Mar. 1, 1932. Class 39.
Autocar Company, The, Ardmore, Pa. Internal combustion engines and spare parts of same. 293,109; May 17; Serial No. 323,117; published Mar. 1, 1932. Class 23.
B. V. D. Company, Inc., The, Baltimore, Md. Underwear, athletic outer clothing, etc. 294,098; May 17; Serial No. 322,983; published Mar. 8, 1932. Class 39.
Beachcroft Shirt Company, The. (See Spaide, Rolland L.)
Bedford Knitting Company, Malden, Mass. Manufactured knitted wear. 294,111; May 17; Serial No. 323,221; published Mar. 8, 1932. Class 39.
Beech-Nut Packing Company, Canajoharie, N. Y. Tomato juice and tomato juice cocktail. 294,030; May 17; Serial No. 320,298; published Mar. 1, 1932. Class 46.
Beirnes, Percival W., doing business as R. Burns Company, Los Angeles, Calif. Stomach powder. 294,040; May 17; Serial No. 322,088; published Mar. 1, 1932. Class 6.
Benedict Stone Product Company, Chicago, Ill. Building stone. 294,073; May 17; Serial No. 322,156; published Feb. 16, 1932. Class 12.
Best & Co., Inc., New York, N. Y. Hat and shoes. 294,045; May 17; Serial No. 322,493; published Mar. 1, 1932. Class 39.
Bias Binding Company, New York, N. Y. Bias binding tapes and cloths. 294,026; May 17; Serial No. 317,297; published Mar. 1, 1932. Class 40.
Bishop & Babcock Mfg. Company, The. (See Cleveland Faucet Co., The.)
Bishop & Company, Los Angeles, Calif., assignor to National Biscuit Company, New York, N. Y. Crackers. 87,594; renewed July 30, 1932.
Blanchard, Kirk S., Holley, N. Y. Fan and duct toilet ventilators. 294,167; May 17; Serial No. 321,405; published Mar. 1, 1932. Class 34.
Bohr, Marcia C., San Francisco, Calif. Combination trouser skirts. 294,090; May 17; Serial No. 320,715; published Mar. 8, 1932. Class 39.
Botany Worsted Mills, Passaic, N. J. Neckties. 294,105; May 17; Serial No. 322,990; published Mar 1, 1932. Class 39.
Bourjois, Inc., New York, N. Y. Soap. 294,144; May 17; Serial No. 323,321; published Mar. 1, 1932. Class 4.
Brevolite Lacquer Company, North Chicago, Ill. Impervious film coatings. 294,120; May 17; Serial No. 298,137; published Mar. 8, 1932. Class 16.
Brevolite Lacquer Company, North Chicago, Ill. Impervious film coating. 294,121–2; May 17; Serial Nos. 298,140–1; published Mar. 8, 1932. Class 16.
Bricker & Andes, Brooklyn, N. Y. Paints, lacquers, paint enamels, etc. 294,135; May 17; Serial No. 322,497; published Mar. 8, 1932. Class 16.
Bristow, Frederick H., Los Angeles, Calif. Medicine. 294,053; May 17; Serial No. 306,727; published Jan. 13, 1931. Class 6.
Burns, R., Company. (See Beirnes, Percival W.)
C. M. S. Wholesale Chain Corporation, New York, N. Y. Bias fold tape. 294,047; May 17; Serial No. 322,163; published Mar. 1, 1932. Class 40.
Cady, M. R., & Co., Inc., Grand Rapids, Mich. Insecticide cakes. 294,171; May 17. Class 6.
California Packing Corporation, San Francisco, Calif. Canned fruit, vegetables, olives, etc. 294,170; May 17. Class 46.
California Soap Company, Los Angeles, Calif. Lye. 294,043; May 17; Serial No. 322,354; published Feb. 23, 1932. Class 6.
Cannarella Bro. & Sons, Thunderbelt, Ga. Shrimp. 294,085; May 17; Serial No. 323,391; published Mar. 1, 1932. Class 46.
Carter-Waters Corporation, The, Kansas City, Mo. Rock asphalt. 294,082; May 17; Serial No. 323,278; published Mar. 1, 1932. Class 12.
Chattanooga Medicine Company, The, Chattanooga, Tenn. Dusting antiseptic powder, and a laxative medicine for live stock. 294,028; May 17; Serial No. 317,790; published Feb. 23, 1932. Class 6.
Chattanooga Medicine Company, The, Chattanooga, Tenn. Liver cathartic and laxative medicine. 294,029; May 17; Serial No. 320,184; published Feb. 23, 1932. Class 6.
Chemical Foundation, Incorporated, The. (See Ica Actien-Gesellschaft, assignor.)
Chicopee Manufacturing Corporation, New Brunswick, N. J. Dusting cloths. 294,140; May 17; Serial No. 323,010; published Mar. 8, 1932. Class 29.
Clark, Paul F., Kansas City, Mo. Chewing gum having antiseptic and deodorant properties. 294,034; May 17; Serial No. 321,160; published Feb. 23, 1932. Class 6.
Cleveland Faucet Co., The, to The Bishop & Babcock Mfg. Company, Cleveland, Ohio, successor. Hydraulic air-pumps. 38,829; renewed Aug. 19, 1932.
Coffman, Harry S., doing business as Coffman & Bloch, Portland, Oreg. Combined liniment and ointment. 294,155; May 17; Serial No. 322,686; published Feb. 23, 1932. Class 6.
Columbus Foods Corporation, Columbus, Wis. Canned vegetables. 294,086; May 17; Serial No. 322,453; published Mar. 1, 1932. Class 46.
Consumo Laboratories. (See Faller, Edward J.)
Corral, Wodiska Y Ca., Tampa, Fla. Cigars. 294,142; May 17; Serial No. 323,225; published Mar. 8, 1932. Class 17.
Creger, Matilda, doing business as The Efas Laboratories, San Francisco, Calif. Chemicals, medicines, toilet preparations, etc. 294,118; May 17; Serial No. 294,150; published Mar. 1, 1932. Class 6.
Decker, Alfred, & Cohn, Inc., Chicago, Ill. Men's suits and knickerbockers, etc. 294,106; May 17; Serial No. 322,998; published Mar. 1, 1932. Class 39.
Denaco Agency, The, San Francisco, Calif. Cleaning powder and stain remover for artificial plates and teeth. 294,133; May 17; Serial No. 321,908; published Mar. 1, 1932. Class 4.
Device Manufacturers, Inc., Youngstown, Ohio. Ball projecting games. 294,141; May 17; Serial No. 323,166; published Mar. 8, 1932. Class 22.
Dick Bros., Inc., Reading, Pa. Metal novelties. 294,163; May 17; Serial No. 319,060; published Mar. 1, 1932. Class 32.
Doischman, Isadore, Alton, Ill. Dresses. 294,150; May 17; Serial No. 322,210; published Mar. 1, 1932. Class 39.
Donahoe's, Inc., Pittsburgh, Pa. Canned vegetables, fruits, etc. 294,173; May 17. Class 46.
Downey, Clara M., doing business as Olney Inn., Olney, Md. Canned fruits and vegetables, jellies and jams. 294,062; May 17; Serial No. 315,793; published Mar. 1, 1932. Class 46.
Dunlevy, James F., Boston, Mass. Folders, guides, cards, etc. 294,119; May 17; Serial No. 295,938; published May 20, 1930. Class 37.
Efas Laboratories, The. (See Creger, Matilda.)
Elite Glove Co. Inc., Gloversville, N. Y. Gloves. 294,156; May 17; Serial No. 322,760; published Mar. 1, 1932. Class 39.
Emporia Machine Co. Inc., Emporia, Va. Plows. 294,151; May 17; Serial No. 322,381; published Mar. 1, 1932. Class 23.
Endicott Johnson Corporation, Endicott, N. Y. Boots and shoes. 294,152; May 17; Serial No. 322,503; published Mar. 1, 1932. Class 39.
Etablissements Ed. Jaeger, Levallois-Perret, France. Watches, clocks, etc. 294,132; May 17; Serial No. 321,489; published Mar. 8, 1932. Class 27.
Fairy Silk Mills, Shillington, Pa. Hosiery and underwear. 294,101; May 17; Serial No. 322,579; published Mar. 1, 1932. Class 39.
Faller, Edward J., doing business as Consumo Laboratories, Chicago, Ill. Semi-fluid preparation for the relief of piles and hemorrhoids. 294,160; May 17; Serial No. 323,395; published Mar. 1, 1932. Class 6.
Fleer, Frank H., Corporation, Philadelphia, Pa. Chewing gum. 294,052; May 17; Serial No. 304,046; published Mar. 1, 1932. Class 46.
Foster, Claud H., doing business as Foster Mfg. Co., Cleveland, Ohio. Massaging machines or devices. 294,129; May 17; Serial No. 319,564; published Mar. 1, 1932. Class 44.
Friedman, Max J., Corporation, New York, N. Y. Underwear. 294,114; May 17; Serial No. 323,578; published Mar. 8, 1932. Class 39.

Fruit Brochette Co., The, New York, N. Y. Fruit candies. 294,074; May 17; Serial No. 322,201; published Mar. 1, 1932. Class 46.

Gilbert, H. Stanley, New York, N. Y. Hosiery. 294,107; May 17; Serial No. 323,003; published Mar. 8, 1932. Class 39.

Gilbert, S. L., & Co. Inc., New York, N. Y. Hosiery. 294,070; May 17; Serial No. 322,772; published Mar. 1, 1932. Class 39.

Glasser, Jerome F., Cicero, Ill. Ice cream and frozen confections. 294,067; May 17; Serial No. 309,340; published June 16, 1931. Class 46.

Gold Medal Folding Furniture Co., Racine, Wis. Beach and lawn umbrellas. 294,063; May 17; Serial No. 316,201; published Mar. 1, 1932. Class 41.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Inner tubes. 294,180; May 17. Class 35.

Greenspan Brothers Company, Perth Amboy, N. J. Canned vegetables, fruit, fish, etc. 294,046; May 17; Serial No. 322,171; published Mar. 1, 1932. Class 46.

Grocers & Producers Co., The, doing business as Clover Farm Stores, Cleveland, Ohio. Toothpicks. 294,143; May 17; Serial No. 323,288; published Mar. 1, 1932. Class 44.

Hahn Department Stores, Inc., Wilmington, Del. Coats, dresses, suits, blouses, etc. 294,039; May 17; Serial No. 322,102; published Mar. 1. 1932. Class 39.

Hannon Clothes Maker. (See Nash, A., Company, The.)

Harris, J. E., Company, The, Wooster, Ohio. Composition for application to surfaces, walls, etc. 294,094; May 17; Serial No. 317,037; published Feb. 23, 1932. Class 12.

Harrower Laboratory, Inc., The, Glendale, Calif. Endocrin preparation. 294,161; May 17; Serial No. 323,404; published Mar. 1. 1932. Class 6.

Hawaiian Cane Products, Limited, Honolulu, Hawaii. Insulating board, insulating lath, etc. 294,076; May 17; Serial No. 322,173; published Mar. 1. 1932. Class 12.

Haws, George A., assignor, by mesne assignments, to Panhard Oil Corporation, New York, N. Y. Lubricating oils and greases. 87,627; renewed July 30, 1932.

Hillerich & Bradsby Co., Louisville, Ky. Golf clubs. 294,145; May 17; Serial No. 323,662; published Mar. 8, 1932. Class 22.

Hirschman, Albert B., doing business as Hirschman Laboratories, San Pedro, Calif. Preparation for the relief of salt water itch, ringworm, etc. 294,042; May 17; Serial No. 322,346; published Mar. 1. 1932. Class 6.

Hobbs-Western Company, St. Louis, Mo. Railroad ties. 294,081; May 17; Serial No. 323,130; published Mar. 1. 1932. Class 12.

Hollinger, Joseph, New York, N. Y. Optical goods. 294,068; May 17; Serial No. 322,824; published Mar. 1. 1932. Class 26.

Hollywood Candy Co. (See Martoccio, F. A., Company.)

Holt, E. M., Plaid Mills, Inc., Burlington, N. C. Hosiery. 294,104; May 17; Serial No. 322,933; published Mar. 8, 1932. Class 39.

Ica Actien-Gesellschaft, Dresden, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Measuring and scientific appliances. 87,075; renewed June 23, 1932.

Juliet Packing Co. (See Romeo, F., & Co., Inc.)

Junto Game and Novelty Company, The, St. Paul, Minn. Table board game. 294,125; May 17; Serial No. 318,560; published Mar. 8, 1932. Class 22.

Kay Brothers, Inc., St. Louis, Mo. Outer wearing apparel for women and girls. 294,057; May 17; Serial No. 311,278; published Mar. 8, 1932. Class 39.

Keystone Mfg. Co., Boston, Mass. Vehicular toys. 294,146; May 17; Serial No. 323,665; published Mar. 8, 1932. Class 22.

Kim Chemical Products Company. (See Kimble, Harry E.)

Kimble, Harry E., doing business as Kim Chemical Products Company, Albuquerque, N. Mex. Toothpowder and hair removing preparation. 294,027; May 17; Serial No. 317,471; published Mar 1. 1932. Class 6.

Kowalewski, Victor A., doing business as Vialco Laboratories, West Haven, Conn. Medicinal preparations. 294,159; May 17; Serial No. 323,290; published Mar. 1, 1932. Class 6.

Kresge Department Store Corporation, Newark, N. J. Beads, bias bindings, buttons, etc. 294,035; May 17; Serial No. 321,600; published Mar. 1. 1932. Class 40.

Lachman, Charles, Co., Inc., Philadelphia, Pa. Thermal and sound insulating building products. 294,077; May 17; Serial No. 322,775; published Mar. 1, 1932. Class 12.

Lachman, Charles, Co., Inc., Philadelphia, Pa. Thermal and sound insulating building products. 294,079; May 17; Serial No. 322,776; published Mar. 1, 1932. Class 12.

Lawrence, A. C., Leather Co., Boston, to A. C. Lawrence Leather Company, Peabody, Mass. Calfskin and cowhide. 87,776; renewed Aug. 6, 1932.

Lawson, Henry T., Atlanta, Ga. Soap. 294,134; May 17; Serial No. 322,020; published Mar. 1, 1932. Class 4.

Leath and Company, Rockford, Ill. Mattresses. 294,066; May 17; Serial No. 316,653; published Mar. 1, 1932. Class 32.

Lee, Cleve, Santa Maria, Calif. Vegetables. 294,087; May 17; Serial No. 322,259; published Mar. 1, 1932. Class 46.

Leggett, Frank S., Albany, Ga. Table sauce. 294,091; May 17; Serial No. 321,061; published Mar. 8, 1932. Class 46.

Leschen, A., & Sons Rope Company, St. Louis, Mo. Wire rope. 87,779; renewed Aug. 6, 1932.

Lob-Hubbart, Inc., Philadelphia, Pa. Men's clothing. 294,054; May 17; Serial No. 307,723; published Mar. 1, 1932. Class 39.

M. J. B. Co., San Francisco, Calif. Coffee. 294,147; May 17; Serial No. 321,029; published Mar. 1, 1932. Class 46.

Martoccio, F. A., Company, doing business as Hollywood Candy Co., Minneapolis, Minn. Candy bars. 294,083; May 17; Serial No. 323,346; published Mar. 1, 1932. Class 46.

McCalder, John W., Pullman, Wash. Candy. 294,175; May 17. Class 46.

Miller-Bryant-Pierce Company, The, Aurora, Ill. Typewriter ribbons. 38,820; renewed Aug. 19, 1932.

Mock, Judson, Voehringer Co., Inc., Long Island City, N. Y. Hosiery. 294,096; May 17; Serial No. 318,248; published Mar. 8, 1932. Class 39.

Nash, A., Company, The, doing business as Hannon Clothes Maker, Cincinnati, Ohio. Men's suits and overcoats. 294,089; May 17; Serial No. 320,130; published Mar. 8, 1932. Class 39.

National Biscuit Company. (See Bishop & Company, assignor.)

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 86,926–7; renewed June 11, 1932.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 86,929; renewed June 11, 1932.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 87,242; renewed July 2, 1932.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 87,356; renewed July 9, 1932.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 87,468–9; renewed July 16, 1932.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit and sugar-wafers. 88,333; renewed Sept. 10, 1932.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 88,334–8; renewed Sept. 10, 1932.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 88,413–14; renewed Sept. 17, 1932.

Naylor, H. W., doing business as H. W. Naylor Co., Morris, N. Y. Veterinary medicine. 294,036–7; May 17; Serial Nos. 321,885–6; published Feb. 23, 1932. Class 6.

Neisner Brothers, Inc., Rochester, N. Y. Hosiery. 294,112; May 17; Serial No. 323,303; published Mar. 8, 1932. Class 39.

Nestle-Lemur Company, The, New York, N. Y. Preparation for the hair. 294,157; May 17; Serial No. 322,938; published Feb. 23, 1932. Class 6.

New-Broad Publishing Co., Inc., New York, N. Y. Periodical. 294,097; May 17; Serial No. 318,488; published Dec. 15, 1931. Class 38.

Nofade Cocoon Corporation, New York, N. Y. Shirts, Overgarments, undergarments, etc. 294,116; May 17; Serial No. 290,375; published Mar. 1, 1932. Class 39.

No-Ring Corporation, New York, N. Y. Dry-cleaning powder. 294,055; May 17; Serial No. 307,825; published Mar. 31, 1931. Class 4.

Ohlandt, D. W., & Sons, Charleston, S. C. Coffee. 294,084; May 17; Serial No. 323,352; published Mar. 1. 1932. Class 46.

Olney Inn. (See Downey, Clara M.)

Oppenheim, Collins & Co. Inc., Wilmington, Del.; New York, Brooklyn, and Buffalo, N. Y.; Philadelphia and Pittsburgh, Pa.; and Cleveland, Ohio. Hosiery. 294,072; May 17; Serial No. 322,348; published Mar. 1, 1932. Class 39.

Oreon Shampoo Co., Chicago, Ill. Shampoo soap. 294,138; May 17; Serial No. 322,859; published Mar. 1. 1932. Class 4.

Oxford Confectionery Company, Oxford, Pa. Candy confections. 294,048; May 17; Serial No. 300,805; published Sept. 9, 1930. Class 46.

Paint Products Company. (See Paraffine Companies, Inc., The.)

Panhard Oil Corporation. (See Haws, George A., assignor.)

Paraffine Companies, Inc., The, doing business as Paint Products Company, San Francisco, Calif. Roofing, shingles, building papers. 294,065; May 17; Serial No. 316,499; published Aug. 18, 1931. Class 12.

Paxton and Gallagher Co., Omaha, Nebr. Coffee. 294,080; May 17; Serial No. 323,057; published Mar. 1. 1932. Class 46.

Philippe, Louis, New York, N. Y., assignor, by mesne assignments, to Louis Philippe, Inc., Chicago, Ill. Face creams, powders, and rouge. 87,479; renewed July 16, 1932.

Pioneer Suspender Company, Philadelphia, Pa. Apparel belts, suspenders, braces, and garters. 294,153; May 17; Serial No. 322,600; published Mar. 1, 1932. Class 39.

Planters Nut and Chocolate Company, Wilkes-Barre, Pa., and Suffolk, Va. Peanuts or almonds and other nuts for bakers' and confectioners' use. 294,088; May 17; Serial No. 323,358; published Mar. 1, 1932. Class 46.

Porter, Mrs. John R., Orange, Calif. Dates. 294,078; May 17; Serial No. 322,806; published Mar. 1, 1932. Class 46.

Pulver Company, Inc., Rochester, N. Y. Chewing gum. 294,056; May 17; Serial No. 310,072; published May 19, 1931. Class 46.

Ralston, W., & Co., Inc., Niagara Falls, N. Y. Sheet building paper. 294,049; May 17; Serial No. 318,292; published Oct. 20, 1931. Class 12.

Raybestos-Manhattan, Incorporated, Passaic, N. J., and Bridgeport, Conn. Asbestos metallic sheet packing and brake lining. 294,148; May 17; Serial No. 322,123; published Mar. 1, 1932. Class 35.

Realistic Permanent Wave Machine Company, The, Cleveland, Ohio. Electrical permanent waving heaters; electrical hair waving apparatus. 294,060; May 17; Serial No. 314,460; published Mar. 1, 1932. Class 44.

Renaud et Cie of America, Boston, Mass. Perfumery. 294,031; May 17; Serial No. 320,315; published Mar. 1, 1932. Class 6.

Renaud Optical Company, Inc., Petersburg, Va. Ophthalmic lenses. 294,149; May 17; Serial No. 322,138; published Mar. 1. 1932. Class 26.

Reynolds, Eleanor S., doing business as James E. Reynolds and Co., New York, N. Y. Twine, lines, etc. 294,131; May 17; Serial No. 321,311; published Mar. 8, 1932. Class 7.

Romeo, F., & Co., Inc., doing business as Juliet Packing Co., New York, N. Y. Concentrated tomato juice cocktail. 294,038; May 17; Serial No. 322,071; published Mar. 1. 1932. Class 46.

Ronson Products, Inc., Newark, N. J. Combined safety razors and sharpening devices and parts thereof. 294,164; May 17; Serial No. 319,369; published Mar. 1. 1932. Class 23.

Ruzzo Bros., Philadelphia, Pa. Preparation for the treatment of coughs. 294,158; May 17; Serial No. 323,097; published Mar. 1, 1932. Class 6.

Sanderson, W. S., and Bro., Denver, Colo. Coffee. 86,091; renewed Apr. 9, 1932.

San-Nap-Pak Mfg. Co., Inc., New York, N. Y. Absorbent cotton and gauze, and sanitary napkins. 294,177; May 17. Class 44.

Scruggs-Vandervoort-Barney Dry Goods Company, St. Louis, Mo. Dresses. 294,069; May 17; Serial No. 322,833; published Mar. 1. 1932. Class 39.

Sears, Roebuck and Co., Chicago, Ill. Automobile tires. 294,058; May 17; Serial No. 311,792; published Mar. 1. 1932. Class 35.

Sedgwick Machine Works, New York, N. Y. Dumbwaiters, freight and passenger elevators, etc. 294,093; May 17; Serial No. 323,177; published Mar. 1. 1932. Class 23.

Shapiro, Joseph M., doing business as Simplicity Pattern Company, New York, N. Y. Dress patterns. 294,162; May 17; Serial No. 318,569; published Mar. 1, 1932. Class 26.

Shellabarger, Robert M., Denver, Colo. Lotion for chapped and rough skin. 294,174; May 17. Class 6.

Simplicity Pattern Company. (See Shapiro, Joseph M.)

Smith, Kenneth, Kansas City, Mo. Golf clubs and parts. 294,136; May 17; Serial No. 322,715; published Mar. 8, 1932. Class 22.

Smith, L C & Corona Typewriters Inc., New York, N. Y. Carbon paper and typewriter ribbons. 294,139; May 17; Serial No. 322,973; published Mar. 8, 1932. Class 11.

Smith, Verly, doing business as The All-American Trainer, South Bend, Ind. Liniment. 294,033; May 17; Serial No. 320,948; published Mar. 1, 1932. Class 6.

Societe des Ocres de France, Auxerre, France. Ocres. 294,130; May 17; Serial No. 320,701; published Mar. 8, 1932. Class 16.

Society of Chemical Industry in Basle, Basel, Switzerland. Coal-tar colors. 87,014; renewed June 18, 1932.

Society of Chemical Industry in Basle, Basel, Switzerland. Pharmaceutical preparation. 87,015–16; renewed June 18, 1932.

Southern Fruit Distributors, Inc., Orlando, Fla. Fresh citrus fruits and fresh tomatoes. 294,117; May 17; Serial No. 291,743; published Feb. 24, 1931. Class 46.

Spaide, Roland L., doing business as The Beachcroft Shirt Company, Butler, Pa. Dress shirts. 294,108; May 17; Serial No. 323,065; published Mar. 8, 1932. Class 39.

Standard Brands Incorporated, New York, N. Y. Invertase preparation. 294,032; May 17; Serial No. 320,880; published Mar. 1, 1932. Class 46.

Standard Romper Co. Inc., New York, N. Y. Boys' suits, rompers, overalls, etc. 294,103; May 17; Serial No. 322,864; published Mar. 8, 1932. Class 39.

Star Skirt Co. Inc., doing business as Star Maid Dresses, Inc., New York, N. Y. Skirts, dresses, jackets, etc. 294,102; May 17; Serial No. 322,754; published Mar. 8, 1932. Class 39.

Stetson, John B., Company, Philadelphia, Pa. Hats and caps. 294,115; May 17; Serial No. 287,210; published Mar. 1, 1932. Class 39.

Stockwell, Barbour, Company, Cambridge, Mass. Power and trip hammers. 294,165–6; May 17; Serial Nos. 320,851–2; published Mar. 1, 1932. Class 23.

Ströher, Franz, Rothenkirchen, Germany. Electrical hair drying apparatus. 294,126; May 17; Serial No. 318,729; published Feb. 2, 1932. Class 44.

Superior Machine Tool Company, Kokomo, Ind. Metal working machine tools. 294,178; May 17. Class 23.

Tanners Trading Company, Boston, Mass. Quebracho extract. 294,044; May 17; Serial No. 322,375; published Feb. 23, 1932. Class 6.

Taylor Provision Company, The, Trenton, N. J. Pork meat. 87,944; renewed Aug. 13, 1932.

Tobler, Ernst & Traber, Inc., New York, N. Y. Bolting cloth of silk used in flour sifting. 294,154; May 17; Serial No. 322,061; published Mar. 1, 1932. Class 42.

Toch Brothers, Inc., New York, N. Y. Compositions for water-proofing wood, metal, etc. 294,050; May 17; Serial No. 301,731; published Sept. 1, 1931. Class 12.

Trussbilt Steel Doors, Inc., Minneapolis, Minn. Hollow sheet metal units for doors, frames, etc. 294,095; May 17; Serial No. 320,286; published Mar. 1, 1932. Class 12.

United Dental Corporation, New York, N. Y. Base plates used in the manufacture of artificial dentures. 294,127; May 17; Serial No. 319,555; published Mar. 1, 1932. Class 44.

United Dental Corporation, New York, N. Y. Filling materials; operative, surgical, and mechanical instruments; etc. 294,128; May 17; Serial No. 319,554; published Mar. 1, 1932. Class 44.

Van Raalte Company, New York, N. Y. Underwear. 294,110; May 17; Serial No. 323,213; published Mar. 8, 1932. Class 39.

Vialco Laboratories. (See Kowalewski, Victor A.)

Viloco Railway Equipment Co., Chicago, Ill. Pressure operated bell ringers, bell ringers of the vacuum type, portable cranes, grease lubricators, etc. 294,064; May 17; Serial No. 316,389; published Mar. 1, 1932. Class 23.

Warner Chemical Company, The, New York, N. Y. Cleansing compound for automobiles and other vehicles. 294,137; May 17; Serial No. 322,756; published Mar. 1, 1932. Class 44.

Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Electrically illuminated airport markers. 294,092; May 17; Serial No. 321,057; published Feb. 16, 1932. Class 21.

Whelite Distributors, Los Angeles, Calif. Special mineral powder used as a toughener for steel, a non-poisonous mineral composition used as a local hardener, etc. 294,041; May 17; Serial No. 322,146; published Mar. 1, 1932. Class 6.

Wiesen, Max, & Sons Co. Inc., New York, N. Y. Ladies' dresses. 294,168; May 17; Serial No. 321,927; published Mar. 8, 1932. Class 39.

Wilsdorf, Hans, Geneva, Switzerland. Watches and parts thereof. 294,124; May 17; Serial No. 317,865; published Mar. 8, 1932. Class 27.

Wodack Electric Tool Corporation, Chicago, Ill. Electric hand drills. 294,169; May 17; Serial No. 322,034; published Mar. 1, 1932. Class 23.

Wye, Tom, Inc., Winchendon, Mass. Sweater coats and swim suits. 294,099; May 17; Serial No. 322,476; published Mar. 1, 1932. Class 39.

Zipkin, Herman, & Co., Inc., New York, N. Y. Hosiery. 294,113; May 17; Serial No. 323,433; published Mar. 8, 1932. Class 39.

LIST OF REGISTRANTS OF LABELS

Akex Laboratories, Cleveland, Ohio. "Akex Stops Aches Heals Wounds". For Preparation for Treating Post Operative Pains and Wounds in the Oral Cavity. 40,688; May 17.

Badger Tissue Mills, Kaukauna, Wis. Bathroom Tissue—Three Rolls. For Bathroom Tissue. 40,689; May 17.

Badt, Percy L., San Francisco, Calif. Tower Cleanser. For a Preparation Used as a Water Softener, Detergent, and Cleanser. 40,690; May 17.

Duncan, Donald F., Inc., Chicago, Ill. Duncan's Gold Seal Genuine Yo-Yo. For Bandelore Toys. 40,691; May 17.

E. M. E. Manufacturing Co. (See Emick, B. W., McCoy, and Edes.)

Edes, Harry. (See Emick, B. W., McCoy, and Edes.)

Elred, George S., doing business as George S. Elred Company, Chicago, Ill. The New Life Tooth Powder. For Tooth Powder. 40,692; May 17.

Emick, Bascom W., Harry H. McCoy, and Harry Edes, trading as E. M. E. Manufacturing Co., Pikesville, Md. E M E Medicine for Mange. For Preparation for Treatment of Mange and Skin Diseases of Dogs. 40,693; May 17.

General Mills, Inc., Minneapolis, Minn. Wheaties. For Whole Wheat Flakes. 40,694; May 17.

Kroger Grocery & Baking Company, The, Cincinnati, Ohio. Country Club Corn Flakes. For Cereal—Namely, Corn Flakes. 40,695; May 17.

Liberty Chemical Mfg. Co., Detroit, Mich. Liberty Quick Washing Fluid Cleanser. For Fluid Cleanser for all Laundry Purposes. 40,696; May 17.
Liondale Shirt Co. Inc., New York, N. Y. The Bookman Shirt. For Shirts. 40,697; May 17.
Magidson Cigar Co., Milwaukee, Wis. Aintree. For Cigars. 40,698; May 17.
Marine Chemicals Company, Ltd., San Francisco, Calif. M-C-Milk of Magnesia. For Pharmaceutical Preparation Used as an Antacid, a Laxative, or a Mouth Wash. 40,699; May 17.
Marine Chemicals Company, Ltd., San Francisco, Calif. M-C-Milk of Magnesia. For Pharmaceutical Preparation Used as an Antacid, a Laxative or a Mouth Wash. 40,700; May 17.
Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Mason's Peaks. For Candy. 40,701; May 17.
McCoy, Harry H. (See Emick, B. W., McCoy, and Edes.)
Mid-West Wax Paper Company, Fort Madison, Iowa. Golden Crust Bread. For Bread. 40,702; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Betty Anne Bread. For Bread. 40,703; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Rye Bread. For Bread. 40,704; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Quality Bread. For Bread. 40,705; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. White Flour and Whole Wheat. For Bread. 40,706; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Blue Ribbon Bread. For Bread. 40,707; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Butter Top Bread. For Bread. 40,708; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Nickel Loaf Bread. For Bread. 40,709; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. American Beauty Bread. For Bread. 40,710; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Home Town Bread. For Bread. 40,711; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Ready Sliced Bread. For Bread. 40,712; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Pullman Loaf. For Bread. 40,713; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Home Made Bread. For Bread. 40,714; May 17.
Mid-West Wax Paper Company, Fort Madison, Iowa. Family Loaf Bread. For Bread. 40,715; May 17.
Montero, Eloy R., Philadelphia, Pa. Charmleaf. For Cigars. 40,716; May 17.
National Poultry Research Laboratories, Ltd., San Francisco, Calif. Protection. For Eggs. 40,717; May 17.
Noodles Products Corporation, New York, N. Y. Blue Seal. For Egg Noodles. 40,718; May 17.
Noodles Products Corporation, New York, N. Y. Blue Seal. For Egg Drops. 40,719; May 17.
Ravarino & Freschi Importing & Manufacturing Company, St. Louis, Mo. R-F. For Macaroni. 40,720; May 17.
Roberts and Oake, Inc., Chicago, Ill. Roberts Sweetmeat. For Sugar Cured Pork Products. 40,721; May 17.
S. C. S. Box Co., Inc., Palmer, Mass. Selected Eggs. For Eggs. 40,722; May 17.
Simmons, T. N., Inc., Stamford, Conn. Simmons Arrowroot Dessert. For Preparation for Making Desserts and Sauces. 40,723; May 17.
Union Oil Company of California, Los Angeles, Calif. Blf Spray. For Spray for Flies, Moths, Mosquitoes, Gnats. 40,724; May 17.

LIST OF REGISTRANTS OF PRINTS

Arcturus Radio Tube Company, Newark, N. J. The Wunderlich Tube. For Vacuum Tubes. 13,718; May 17.
Clements Mfg. Co., Chicago, Ill. New! Balloon Cushion Cleaning. For Vacuum Cleaners. 13,719; May 17.
Fort Massac Chair Company, The, Metropolis, Ill. Fort Massac Table Sets. For Folding Table Sets, Bridge Sets, Folding Chairs, and Tables. 13,720; May 17.
Holeproof Hosiery Co., Milwaukee, Wis. Both the Holeproof Half-Sock and Autogart are Styled with this in mind. For Self-Supporting Socks—That is, Socks Worn without the Conventional Garter. 13,721; May 17.
Long, W. E., Co., The, Chicago, Ill. Freshest Bread in the World's Finest Wrapper. For Bread. 13,722; May 17.
Long, W. E., Co., The, Chicago, Ill. Now Cellophane Wrapped. For Bread. 13,723; May 17.
Long, W. E., Co., The, Chicago, Ill. See What You are Getting Before You Buy. For Bread. 13,724; May 17.
Long, W. E., Co., The, Chicago, Ill. Now See That You Get Fresh Bread! Perfect Bread! Bread That Has Nothing to Hide! For Bread. 13,725; May 17.
Long, W. E., Co., The, Chicago, Ill. A Showcase of Glass. For Bread. 13,726; May 17.
Popsicle Corporation of the United States, The, New York, N. Y. Nutritious Milk Popsicle Easy to Eat. For Frozen Confections. 13,727; May 17.
Postagraph Company, The, Baltimore, Md. Printed Blanks. For Printed Blanks. 13,728; May 17.
Savitt, Anne P., doing business as Anne P. Savitt Co., New Haven, Conn. Luckee Monkee. For Hand-Carved Stones. 13,729; May 17.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Calfskin and cowhide. A. C. Lawrence Leather Co. 87,776; renewed Aug. 6, 1932.

CLASS 4

Abrasives. American Floor Surfacing Machine Company. 294,172; May 17.
Cleaning powder and stain remover for artificial plates and teeth. Denaco Agency. 294,133; May 17; Serial No. 321,908; published Mar. 1, 1932.
Cleaning powder, Dry. No-Ring Corporation. 294,055; May 17; Serial No. 307,825; published Mar. 31, 1931.
Cleansing compound for automobiles and other vehicles. Warner Chemical Company. 294,137; May 17; Serial No. 322,756; published Mar. 1, 1932.
Soap. Bourjois, Inc. 294,144; May 17; Serial No. 323,321; published Mar. 1, 1932.
Soap. H. T. Lawson. 294,134; May 17; Serial No. 322,020; published Mar. 1, 1932.
Soap, Shampoo. Oreon Shampoo Co. 294,138; May 17; Serial No. 322,859; published Mar. 1, 1932.

CLASS 6

Antiseptic powder and a laxative medicine for live stock, Dusting. Chattanooga Medicine Company. 294,028; May 17; Serial No. 317,790; published Feb. 23, 1932.
Cathartic and laxative medicine, Liver. Chattanooga Medicine Company. 294,029; May 17; Serial No. 320,184; published Feb. 23, 1932.
Chemicals, medicines, toilet preparations, etc. M. Creger. 294,118; May 17; Serial No. 294,150; published Mar. 1, 1932.
Colors, Coal-tar. Society of Chemical Industry in Basle. 87,014; renewed June 18, 1932.
Creams, powders, and rouge, Face. L. Philippe. 87,479; renewed July 16, 1932.
Endocrin preparation. Harrower Laboratory, Inc. 294,161; May 17; Serial No. 323,404; published Mar. 1, 1932.
Gum, Chewing. P. F. Clark. 294,034; May 17; Serial No. 321,160; published Feb. 23, 1932.
Insecticide cakes. M. R. Cady & Co. 294,171; May 17.
Liniment. V. Smith. 294,033; May 17; Serial No. 320,948; published Mar. 1, 1932.
Liniment and ointment, Combined. H. S. Coffman. 294,155; May 17; Serial No. 322,686; published Feb. 23, 1932.
Lotion for chapped and rough skin. R. M. Shellabarger. 294,174; May 17.
Lye. California Soap Company. 294,043; May 17; Serial No. 322,354; published Feb. 23, 1932.
Medicinal preparations. V. A. Kowalewski. 294,159; May 17; Serial No. 323,299; published Mar. 1, 1932.
Medicine. F. H. Bristow. 294,053; May 17; Serial No. 306,727; published Jan. 13, 1931.
Medicine, Veterinary. H. W. Naylor. 294,036–7; May 17; Serial Nos. 321,885–6; published Feb. 23, 1932.
Mineral powder used as a toughener for steel, a non-poisonous mineral composition used as a local hardener, etc., Special. Whelite Distributors. 294,041; May 17. Serial No. 322,146; published Mar. 1, 1932.
Perfumery. Renaud et Cie of America. 294,031; May 17; Serial No. 320,315; published Mar. 1, 1932.
Pharmaceutical preparation. Society of Chemical Industry in Basle. 87,015–16; renewed June 18, 1932.
Powder, Stomach. P. W. Beirnes. 294,040; May 17; Serial No. 322,088; published Mar. 1, 1932.
Preparation for relief of salt water itch, ringworm, etc. A. B. Hirschman. 294,042; May 17; Serial No. 322,346; published Mar. 1, 1932.
Preparation for the hair. Nestle-Lemur Company. 294,157; May 17; Serial No. 322,938; published Feb. 23, 1932.
Preparation for the relief of piles and hemorrhoids, Semi-fluid. E. J. Faller. 294,160; May 17; Serial No. 323,395; published Mar. 1, 1932.
Preparation for the skin, Antishine. Elizabeth Arden, Inc. 294,176; May 17.
Preparation for the treatment of coughs. Ruzzo Bros. 294,158; May 17; Serial No. 323,097; published Mar. 1, 1932.

Quebracho extract. Tanners Trading Company. 294,044; May 17; Serial No. 322,375; published Feb. 23, 1932.
Toilet articles, preparations, and products. B. Ansehl. 294,061; May 17; Serial No. 315,235; published Feb. 23, 1932.
Toothpowder and hair removing preparation. H. E. Kimble. 294,027; May 17; Serial No. 317,471; published Mar. 1, 1932.

CLASS 7

Rope, Wire. A. Leschen & Sons Rope Company. 87,779; renewed Aug. 6, 1932.
Twine, lines, string, etc. E. S. Reynolds. 294,131; May 17; Serial No. 321,311; published Mar. 8, 1932.

CLASS 11

Carbon paper and typewriter ribbons. L C Smith & Corona Typewriters Inc. 294,139; May 17; Serial No. 322,973; published Mar. 8, 1932.
Typewriter ribbons. Miller-Bryant-Pierce Company. 38,820; renewed Aug. 19, 1932.

CLASS 12

Board, lath, etc., Insulating. Hawaiian Cane Products, Limited. 294,076; May 17; Serial No. 322,173; published Mar. 1, 1932.
Building paper, Sheet. W. Ralston & Co. 294,049; May 17; Serial No. 318,292; published Oct. 20, 1931.
Building products, Thermal and sound insulating. Charles Lachman Co. 294,077; May 17; Serial No. 322,775; published Mar. 1, 1932.
Building products, Thermal and sound insulating. Charles Lachman Co. 294,079; May 17; Serial No. 322,776; published Mar. 1, 1932.
Composition for application to surfaces, walls, etc. J. E. Harris Company. 294,094; May 17; Serial No. 317,937; published Feb. 23, 1932.
Compositions other than paints for water-proofing wood, metal, etc. Toch Brothers. 294,050; May 17; Serial No. 301,731; published Sept. 1, 1931.
Metal units for doors, frames, etc., Hollow sheet. Truss-bilt Steel Doors, Inc. 294,095; May 17; Serial No. 320,286; published Mar. 1, 1932.
Rock asphalt. Carter-Waters Corporation. 294,082; May 17; Serial No. 323,278; published Mar. 1, 1932.
Roofing, shingles, building papers. Paraffine Companies. 294,065; May 17; Serial No. 316,499; published Aug. 18, 1931.
Stone, Building. Benedict Stone Product Company. 294,073; May 17; Serial No. 322,156; published Feb. 16, 1932.
Ties, Railroad. Hobbs-Western Company. 294,081; May 17; Serial No. 323,130; published Mar. 1, 1932.

CLASS 15

Oils and greases, Lubricating. G. A. Haws. 87,627; renewed July 30, 1932.

CLASS 16

Coatings, Impervious film. Brevolite Lacquer Company. 294,120; May 17; Serial No. 298,137; published Mar. 8, 1932.
Coatings, Impervious film. Brevolite Lacquer Company. 294,121–2; May 17; Serial Nos. 298,140–1; published Mar. 8, 1932.
Ocres. Societe des Ocres de France. 294,130; May 17; Serial No. 320,701; published Mar. 8, 1932.
Paints, lacquers, paint enamels, etc. Bricker & Andes. 294,135; May 17; Serial No. 322,497; published Mar. 8, 1932.

CLASS 17

Cigars. Corral, Wodiska Y Ca. 294,142; May 17; Serial No. 323,225; published Mar. 8, 1932.

CLASS 21

Electrical machines and supplies. Allmänna Svenska Elektriska Aktiebolaget. 85,935; renewed Apr. 2, 1932.
Electrically illuminated airport markers. Westinghouse Electric and Manufacturing Company. 294,092; May 17; Serial No. 321,057; published Feb. 16, 1932.

CLASS 22

Game, Table board. Junto Game and Novelty Company. 294,125; May 17; Serial No. 318,560; published Mar. 8, 1932.
Games, Ball projecting. Device Manufacturers, Inc. 294,141; May 17; Serial No. 323,166; published Mar. 8, 1932.
Golf clubs. Hillerich & Bradsby Co. 294,145; May 17; Serial No. 323,662; published Mar. 8, 1932.
Golf clubs and parts. K. Smith. 294,136; May 17; Serial No. 322,715; published Mar. 8, 1932.
Toys, Vehicular. Keystone Mfg. Co. 294,146; May 17; Serial No. 323,665; published Mar. 8, 1932.

CLASS 23

Bell ringers, portable cranes, grease lubricators, etc. Vilico Railway Equipment Co. 294,064; May 17; Serial No. 316,389; published Mar. 1, 1932.
Drills, Electric hand. Wodack Electric Tool Corporation. 294,169; May 17; Serial No. 322,034; published Mar. 1, 1932.
Dumbwaiters, freight and passenger elevators, etc. Sedgwick Machine Works. 294,093; May 17; Serial No. 323,177; published Mar. 1, 1932.
Engines, etc., Internal combustion. Autocar Company. 293,169; May 17; Serial No. 323,117; published Mar. 1, 1932.
Hammers. Barbour Stockwell Company. 294,165–6; May 17; Serial Nos. 320,851–2; published Mar. 1, 1932.
Plows. Emporia Machine Co. Inc. 294,151; May 17; Serial No. 322,381; published Mar. 1, 1932.
Pumps, hydraulic, Air. Cleveland Faucet Co. 38,829; renewed Aug. 19, 1932.
Razors and sharpening devices and parts thereof, Combined safety. Ronson Products, Inc. 294,164; May 17; Serial No. 319,369; published Mar. 1, 1932.
Tools, Metal working machine. Superior Machine Tool Company. 294,178; May 17.

CLASS 26

Lenses, Ophthalmic. Renaud Optical Company. 294,149; May 17; Serial No. 322,138; published Mar. 1, 1932.
Measuring and scientific appliances. Ica Actien-Gesellschaft. 87,075; renewed June 25, 1932.
Optical goods. J. Hollinger. 294,068; May 17; Serial No. 322,824; published Mar. 1, 1932.
Patterns, Dress. J. M. Shapiro. 294,162; May 17; Serial No. 318,569; published Mar. 1, 1932.

CLASS 27

Watches and parts thereof. H. Wilsdorf. 294,124; May 17; Serial No. 317,865; published Mar. 8, 1932.
Watches, clocks, etc. Etablissements Ed. Jaeger. 294,132; May 17; Serial No. 321,489; published Mar. 8, 1932.
Brooms. C. B. Abbott. 294,179; May 17.
Brushes. Leopold Ascher Company. 38,462; renewed June 17, 1932.
Cloths, Dusting. Chicopee Manufacturing Corporation. 294,140; May 17; Serial No. 323,010; published Mar. 8, 1932.

CLASS 32

Mattresses. Leath and Company. 294,066; May 17; Serial No. 316,653; published Mar. 1, 1932.
Novelties, Metal. Dick Bros. 294,163; May 17; Serial No. 319,060; published Mar. 1, 1932.

CLASS 34

Ventilators, Fan and duct toilet. K. S. Blanchard. 294,167; May 17; Serial No. 321,405; published Mar. 1, 1932.

CLASS 35

Inner tubes. Goodyear Tire & Rubber Company. 294,180; May 17.
Packing and brake lining. Raybestos-Manhattan, Incorporated. 294,148; May 17; Serial No. 322,123; published Mar. 1, 1932.
Tires, Automobile. Sears, Roebuck and Co. 294,058; May 17; Serial No. 311,792; published Mar. 1, 1932.

CLASS 37

Folders, guides, cards, etc. J. F. Dunleavy. 294,119; May 17; Serial No. 295,938; published May 20, 1930.

CLASS 38

Periodical. New-Broad Publishing Co. 294,097; May 17; Serial No. 318,488; published Dec. 15, 1931.

CLASS 39

Apparel, Outer wearing. Kay Brothers. 294,057; May 17; Serial No. 311,278; published Mar. 8, 1932.
Belts, suspenders, braces, and garters, Apparel. Pioneer Suspender Company. 294,153; May 17; Serial No. 322,600; published Mar. 1, 1932.
Boots and shoes. Endicott Johnson Corporation. 294,152; May 17; Serial No. 322,503; published Mar. 1, 1932.
Clothing, Men's. Lob-Hubbart, Inc. 294,054; May 17; Serial No. 307,723; published Mar. 1, 1932.
Coats, dresses, suits, blouses, etc. Hahn Department Stores, Inc. 294,039; May 17; Serial No. 322,102; published Mar. 1, 1932.
Dresses. I. Doischman. 294,150; May 17; Serial No. 322,210; published Mar. 1, 1932.
Dresses. Scruggs-Vandervoort-Barney Dry Goods Company. 294,069; May 17; Serial No. 322,833; published Mar. 1, 1932.
Dresses, Ladies'. Max Wiesen & Sons Co. 294,168; May 17; Serial No. 321,927; published Mar. 8, 1932.
Gloves. Elite Glove Co. Inc. 294,156; May 17; Serial No. 322,760; published Mar. 1, 1932.
Hats and caps. John B. Stetson Company. 294,115; May 17; Serial No. 287,210; published Mar. 1, 1932.
Hats and shoes. Best & Co. 294,045; May 17; Serial No. 322,493; published Mar. 1, 1932.
Hosiery. Artcraft Silk Hosiery Mills, Inc. 294,071; May 17; Serial No. 322,728; published Mar. 1, 1932.
Hosiery. H. S. Gilbert. 294,107; May 17; Serial No. 323,003; published Mar. 8, 1932.
Hosiery. S. L. Gilbert & Co. Inc. 294,070; May 17; Serial No. 322,772; published Mar. 1, 1932.
Hosiery. E. M. Holt Plaid Mills, Inc. 294,104; May 17; Serial No. 322,933; published Mar. 8, 1932.
Hosiery. Mock, Judson, Voehringer Co. 294,096; May 17; Serial No. 318,248; published Mar. 8, 1932.

Hosiery. Neisner Brothers, Inc. 294,112; May 17; Serial No. 323,303; published Mar. 8, 1932.
Hosiery. Oppenheim, Collins & Co. Inc. 294,072; May 17; Serial No. 322,348; published Mar. 1, 1932.
Hosiery. Herman Zipkin & Co. 294,113; May 17; Serial No. 323,433; published Mar. 8, 1932.
Hosiery and underwear. Fairy Silk Mills. 294,101; May 17; Serial No. 322,579; published Mar. 1, 1932.
Neckties. Botany Worsted Mills. 294,105; May 17; Serial No. 322,990; published Mar. 1, 1932.
Shirts and pajamas. William Atkin Co. 294,100; May 17; Serial No. 322,444; published Mar. 1, 1932.
Shirts, Dress. R. L. Spalde. 294,108; May 17; Serial No. 323,065; published Mar. 8, 1932.
Shirts, overgarments, undergarments, etc. Nofade Cocoon Corporation. 294,116; May 17; Serial No. 290,375; published Mar. 1, 1932.
Skirts, dresses, jackets, etc. Star Skirt Co. Inc. 294,102; May 17; Serial No. 322,754; published Mar. 8, 1932.
Suits, and knickerbockers for women and children, Men's. Alfred Decker & Cohn, Inc. 294,106; May 17; Serial No. 322,998; published Mar. 1, 1932.
Suits and overcoats, Men's. A. Nash Company. 294,089; May 17; Serial No. 320,130; published Mar. 8, 1932.
Suits, rompers, overalls, etc., Boys'. Standard Romper Co. Inc. 294,103; May 17; Serial No. 322,864; published Mar. 8, 1932.
Sweater coats and swim suits. Tom Wye Inc. 294,099; May 17; Serial No. 322,476; published Mar. 1, 1932.
Trouser skirts, Combination. M. C. Bohr. 294,090; May 17; Serial No. 320,715; published Mar. 8, 1932.
Underwear. Max J. Friedman Corporation. 294,114; May 17; Serial No. 323,578; published Mar. 8, 1932.
Underwear. Van Raalte Company. 294,110; May 17; Serial No. 323,213; published Mar. 8, 1932.
Underwear, athletic outer clothing, etc. B. V. D. Company. 294,098; May 17; Serial No. 322,983; published Mar. 8, 1932.
Wear. Manufactured knitted. Bedford Knitting Company. 294,111; May 17; Serial No. 323,221; published Mar. 8, 1932.

CLASS 40

Beads, bias bindings, buttons, etc. Kresge Department Store Corporation. 294,035; May 17; Serial No. 321,600; published Mar. 1, 1932.
Tape bias fold. C. M. S. Wholesale Chain Corporation. 294,047; May 17; Serial No. 322,163; published Mar. 1, 1932.
Tapes and cloths, Bias binding. Bias Binding Company. 294,026; May 17; Serial No. 317,297; published Mar. 1, 1932.

CLASS 41

Umbrellas, Beach and lawn. Gold medal folding furniture Co. 294,063; May 17; Serial No. 316,201; published Mar. 1, 1932.

CLASS 42

Cloth of silk, Bolting. Tobler, Ernst & Traber. 294,154; May 17; Serial No. 322,661; published Mar. 1, 1932.

CLASS 44

Absorbent cotton and gauze, and sanitary napkins. San-Nap-Pak Mfg. Co. 294,177; May 17.
Filling materials; operative, surgical, and mechanical instruments; etc. United Dental Corporation. 294,128; May 17; Serial No. 319,554; published Mar. 1, 1932.
Hair drying apparatus, Electrical. F. Ströher. 294,126; May 17; Serial No. 318,729; published Feb. 2, 1932.
Instrument for exercising and treating the eyes. American Optical Company. 294,123; May 17; Serial No. 317,266; published Mar. 1, 1932.
Massaging machines or devices. C. H. Foster. 294,129; May 17; Serial No. 319,564; published Mar. 1, 1932.
Permanent waving heaters, hair waving apparatus, Electrical. Realistic Permanent Wave Machine Company. 294,060; May 17; Serial No. 314,460; published Mar. 1, 1932.
Plates, Base. United Dental Corporation. 294,127; May 17; Serial No. 319,555; published Mar. 1, 1932.
Toothpicks. Grocers & Producers Co. 294,143; May 17; Serial No. 323,288; published Mar. 1, 1932.

CLASS 46

Biscuit. National Biscuit Company. 86,926–7; renewed June 11, 1932.
Biscuit. National Biscuit Company. 86,929; renewed June 11, 1932.
Biscuit. National Biscuit Company. 87,242; renewed July 2, 1932.
Biscuit. National Biscuit Company. 87,356; renewed July 9, 1932.
Biscuit. National Biscuit Company. 88,413–14; renewed Sept. 17, 1932.
Biscuit. National Biscuit Company. 88,334–8; renewed Sept. 10, 1932.
Biscuit. National Biscuit Company. 87,468–9; renewed July 16, 1932.
Biscuit and sugar wafers. National Biscuit Company. 88,333; renewed Sept. 10, 1932
Candies, fruit. Fruit Brochette Co. 294,074; May 17; Serial No. 322,201; published Mar. 1, 1932.
Candy. J. W. McCalder. 294,175; May 17.
Candy bars. F. A. Martoccio Company. 294,083; May 17; Serial No. 323,346; published Mar. 1, 1932.
Candy confections. Oxford Confectionery Company. 294,048; May 17; Serial No. 300,805; published Sept. 9, 1930.
Canned fruit, vegetables, olives, etc. California Packing Corporation; 294,170; May 17.
Canned fruits and vegetables, jellies and jams. C. M. Downey. 294,062; May 17; Serial No. 315,793; published Mar. 1, 1932.
Canned vegetables. Columbus Foods Corporation. 294,086; May 17; Serial No. 322,453; published Mar 1. 1932.
Canned vegetables, fruit, fish, etc. Greenspan Brothers Company. 294,046; May 17; Serial No. 322,171; published Mar. 1, 1932.
Canned vegetables, fruits, etc. Donahoe's, Inc. 294,173; May 17.
Chocolates and chocolate candy. Alimenta Société Coopérative. 294,075; May 17; Serial No. 322,304; published Mar. 1, 1932.
Coffee. Araban Coffee Co. 294,059; May 17; Serial No. 312,744; published Mar. 1, 1932.
Coffee. M. J. B. Co. 294,147; May 17; Serial No. 321,029; published Mar. 1, 1932.
Coffee. D. W. Ohlandt & Sons. 294,084; May 17; Serial No. 323,352; published Mar. 1, 1932.
Coffee. Paxton and Gallagher Co. 294,080; May 17; Serial No. 323,037; published Mar. 1, 1932.
Coffee. W. S. Sanderson and Bro. 86,091; renewed Apr. 9, 1932.
Crackers. Bishop & Company. 87,594; renewed July 30, 1932.
Dates. Mrs. J. R. Porter. 294,078; May 17; Serial No. 322,806; published Mar. 1, 1932.
Fruits and fresh tomatoes, Fresh citrus. Southern Fruit Distributors, Inc. 294,117; May 17; Serial No. 291,743; published Feb. 24, 1931.
Gum, Chewing. Frank H. Fleer Corporation. 294,052; May 17; Serial No. 304,046; published Mar. 1, 1932.
Gum, Chewing. Pulver Company. 294,056; May 17; Serial No. 310,072; published May 19, 1931.
Ice cream and frozen confections. J. F. Glasser. 294,067; May 17; Serial No. 309,340; published June 16, 1931.
Invertase preparation. Standard Brands Incorporated. 294,032; May 17; Serial No. 320,880; published Mar. 1, 1932.
Peanuts or almonds and other nuts for bakers' and confectioners' use. Planters Nut and Chocolate Company. 294,088; May 17; Serial No. 323,358; published Mar. 1, 1932.
Pork meat. Taylor Provision Company. 87,944; renewed Aug. 13, 1932.
Sauce, Table. F. S. Leggett. 294,091; May 17; Serial No. 321,061; published Mar. 8, 1932.
Sausage, frankfurters, etc. Arnold Bros. 294,051; May 17; Serial No. 301,779; published Apr. 21, 1931.
Shrimp. Cannarella Bro. & Sons. 294,085; May 17; Serial No. 323,391; published Mar. 1, 1932.
Tomato juice and tomato juice cocktail. Beech-Nut Packing Company. 294,030; May 17; Serial No. 320,298; published May 1, 1932.
Tomato juice cocktail, Concentrated. F. Romeo & Co. 294,038; May 17; Serial No. 322,071; published Mar. 1, 1932.
Vegetables. C. Lee. 294,087; May 17; Serial No. 322,259; published Mar. 1, 1932.

LIST OF LABELS

Aintree. For Cigars. Magidson Cigar Co. 40,698; May 17.
"Akex Stops Aches Heals Wounds". For Preparation for Treating Post Operative Pains and Wounds in the Oral Cavity. Akex Laboratories. 40,688; May 17.
American Beauty Bread. For Bread. Mid-West Wax Paper Company. 40,710; May 17.
Bathroom Tissue—Three Rolls. For Bathroom Tissue. Badger Tissue Mills. 40,689; May 17.
Betty Anne Bread. For Bread. Mid-West Wax Paper Company. 40,703; May 17.
Bif Spray. For Spray for Flies, Moths, Mosquitoes, Gnats. Union Oil Company of California. 40,724; May 17.
Blue Ribbon Bread. For Bread. Mid-West Wax Paper Company. 40,707; May 17.
Blue Seal. For Egg Noodles. Noodles Products Corporation. 40,718; May 17.
Blue Seal. For Egg Drops. Noodles Products Corporation. 40,719; May 17.
Butter Top Bread. For Bread. Mid-West Wax Paper Company. 40,708; May 17.
Charmleaf. For Cigars. E. R. Montero. 40,716; May 17.
Country Club Corn Flakes. For Cereal—Namely, Corn Flakes. Kroger Grocery & Baking Company. 40,695; May 17.

Duncan's Gold Seal Genuine Yo-Yo. For Bandelore Toys. Donald F. Duncan Inc. 40,691; May 17.
E M E Medicine for Mange. For Preparation for Treatment of Mange and Skin Diseases of Dogs. B. W. Emick, H. H. McCoy, and H. Edes. 40,693; May 17.
Family Loaf Bread. For Bread. Mid-West Wax Paper Company. 40,715; May 17.
Golden Crust Bread. For Bread. Mid-West Wax Paper Company. 40,702; May 17.
Home Made Bread. For Bread. Mid-West Wax Paper Company. 40,714; May 17.
Home Town Bread. For Bread. Mid-West Wax Paper Company. 40,711; May 17.
Liberty Quick Washing Fluid Cleanser. For Fluid Cleanser for All Laundry Purposes. Liberty Chemical Mfg. Co. 40,696; May 17.
M-C-Milk of Magnesia. For Pharmaceutical Preparation Used as an Antacid, a Laxative or a Mouth Wash. Marine Chemicals Company, Ltd. 40,699; May 17.
M-C-Milk of Magnesia. For Pharmaceutical Preparation Used as an Antacid, a Laxative or a Mouth Wash. Marine Chemicals Company, Ltd. 40,700; May 17.
Mason's Peaks. For Candy. Mason, Au & Magenheimer Confectionery Manufacturing Company. 40,701; May 17.
Nickel Loaf Bread. For Bread. Mid-West Wax Paper Company. 40,709; May 17.
Protection. For Eggs. National Poultry Research Laboratories, Ltd. 40,717; May 17.
Pullman Loaf. For Bread. Mid-West Wax Paper Company. 40,713; May 17.
Quality Bread. For Bread. Mid-West Wax Paper Company. 40,705; May 17.
R-F. For Macaroni. Ravarino & Freschi Importing & Manufacturing Company. 40,720; May 17.
Ready Sliced Bread. For Bread. Mid-West Wax Paper Company. 40,712; May 17.
Roberts Sweetmeat. For Sugar Cured Pork Products. Roberts and Oake, Inc. 40,721; May 17.
Rye Bread. For Bread. Mid-West Wax Paper Company. 40,704; May 17.
Selected Eggs. For Eggs. S. C. S. Box Co. 40,722; May 17.
Simmons Arrowroot Dessert. Preparation for Making Desserts and Sauces. T. N. Simmons, Inc. 40,723; May 17.
The Bookman Shirt. For Shirts. Llondale Shirt Co. Inc. 40,697; May 17.
The New Life Tooth Powder. For Tooth Powder. G. S. Elred. 40,692; May 17.
Tower Cleanser. For a Preparation Used as a Water Softener, Detergent, and Cleanser. P. L. Badt. 40,690; May 17.
Wheaties. For Whole Wheat Flakes. General Mills, Inc. 40,694; May 17.
White Flour and Whole Wheat. For Bread. Mid-West Wax Paper Company. 40,706; May 17.

LIST OF PRINTS

A Showcase of Glass. For Bread. W. E. Long Co. 13,726; May 17.
Both the Holeproof Half-Sock and Autogart are Styles with this in mind. For Self-Supporting Socks—That is, Socks Worn without the Conventional Garter. Holeproof Hosiery Co. 13,721; May 17.
Fort Massac Table Sets. For Folding Table Sets, Bridge Sets, Folding Chairs, and Tables. Fort Massac Chair Company. 13,720; May 17.
Freshest Bread in the World's Finest Wrapper. For Bread. W. E. Long Co. 13,722; May 17.
Luckee Monkee. For Hand-Carved Stones. P. Savitt. 13,729; May 17.
New! Balloon Cushion Cleaning. For Vacuum Cleaners. Clements Mfg. Co. 13,719; May 17.
Now Cellophane Wrapped. For Bread. W. E. Long Co. 13,723; May 17.
Now See That You Get Fresh Bread! Perfect Bread! Bread That Has Nothing to Hide! For Bread. W. E. Long Co. 13,725; May 17.
Nutritious Milk Popsicle Easy to Eat. For Frozen Confections. Popsicle Corporation of the United States. 13,727; May 17.
Printed Blanks. For Printed Blanks. Postagraph Company. 13,728; May 17.
See What You are Getting Before You Buy. For Bread. W. E. Long Co. 13,724; May 17.
The Wunderlich Tube. For Vacuum Tubes. Arcturus Radio Tube Company. 13,718; May 17.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 17TH DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A-B Stove Company. (See Reedy, Alfred J., assignor.)
Acme Knitting Machine & Needle Company. (See Stewart, Albert E., assignor.)
Acme Rayon Corporation. (See Huttinger, Charles A., assignor.)
Adams, Soren S., Asbury Park, N. J. Aerial toy. 1,858,535; May 17.
African Tin Recovery Company, The. (See Hinchley, John W., assignor.)
Agfa Ansco Corporation. (See Bornmann, Carl A., assignor.)
Agfa Ansco Corporation. (See Gantnier, Frank J., assignor.)
Aitken, Andrew W., assignor to The Buffalo-Springfield Roller Co., Springfield, Ohio. Clutch collar. 1,858,947; May 17.
Akervick, Christian M. and H., Seattle, Wash. Trolling and the like winch. 1,858,760; May 17.
Akervick, Henry. (See Akervick, Christian M. and H.)
Aktiebolaget Ljungstroms Augturbin. (See Kignell, E. P. and E. H., assignors.)
Aktiengesellschaft Brown, Boveri & Cie. (See Couwenhoven, Abraham, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Kobel, Ernst, assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Seitz, Oskar, assignor.)
Albrecht, Otto. (See Felix, F., and Albrecht.)
Albright, Alan R., Pittsburgh, Pa., assignor to The Koppers Company. Treatment of hydrocarbon oil produced in gas manufacture. 1,859,015; May 17.
Aldeborgh, Erik H., assignor to Standard Gage Company, Inc., Poughkeepsie, N. Y. Adjustable plug gauge. 1,859,063; May 17.
Alderfer, John M., Sharon Center, Ohio. Sign. 1,858,258; May 17.
Aldis, Arthur C. W., Sparkhill, Birmingham, England. Apparatus for use in connection with photographic aerial surveys. 1,858,353; May 17.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alfaro, Heraclio, East Cleveland, Ohio. Airplane. 1,858,259; May 17.
Allen, Charles E., Arvada, Colo. Electric door opening and closing device. 1,859,064; May 17.
Allis-Chalmers Manufacturing Company. (See Becker, George D., assignor.)
Allison, John T. (See Cleveland, C. H., Heine, and Allison.)
Almquist, Gus, Perris, Calif. Pipe form stripper. 1,859,191; May 17.
Alstad, George. (See Doering, C., Doering, Alstad, and Skoglund.)
American Bosch Magneto Corporation. (See Martin, John F., assignor.)
American Character Doll Co. (See Schaeffer, Edward G., assignor.)
American Face Brick Research Corporation. (See Hathaway, W., and Slidell, assignors.)
American Hard Rubber Company. (See Weida, Harry, assignor.)
American Hardware Corporation, The. (See Teich, Ernest L., assignor.)
American Metal Company. (See Burkey, H. M., and Cole, assignors.)
American Model Form Co. (See Stevenson, Fred, assignor.)
American Moistening Company. (See Armstrong, Joseph, assignor.)
American Multigraph Co. (See Chisholm, Clifton, assignor.)
American Multigraph Co. (See Chisholm, C., and Colquhoun, assignors.)
American Sales Book Company. (See Hagemann, Louis F., assignor.)
American Steel and Wire Company of New Jersey, The. (See Hoeftmann, A. O., McNamee, and Morrison, assignors.)
American Steel and Wire Company of New Jersey, The. (See Howe, James F., assignor.)
American Steel and Wire Company of New Jersey, The. (See Thomas, Edward, assignor.)
American Steel Chase Co. (See Keenan, J. D., and Figge, assignors.)
American Telephone and Telegraph Company. (See Koenig, Walter, jr., assignor.)
American Telephone and Telegraph Company. (See Nyquist, Harry, assignor.)
American Telephone and Telegraph Company. (See Ohl, Russell S., assignor.)
American Telephone and Telegraph Company. (See Weaver, Allan, assignor.)
American Tractor Equipment Company. (See Maloon, Earl B., assignor.)
Ames, Caroline F. (See Ames, E. U., and Horrocks.)
Ames, Elmer U., deceased, Collingswood, N. J., Camden Safe Deposit and Trust Co., executor, Camden, N. J., and H. S. Horrocks, Philadelphia, Pa.; Camden Safe Deposit and Trust Co., assignor to C. F. Ames. Rib-knitted fabric and making the same. 1,858,814; May 17.
Anaconda Copper Mining Co. (See Gardiner, Henry C., assignor.)
Anchor Cap & Closure Corporation. (See Holland, Norman N., assignor.)
Anchor Cap & Closure Corporation. (See Podel, Abraham, assignor.)
Anderson, David M., assignor to English Steel Corporation Limited, Sheffield, England. Joint for pipes or vessels for containing fluid under pressure. 1,859,065; May 17.
Anderson, Edward B. (See Collins, Edward, assignor.)
Anderson, James F., St. Petersburg, Fla. Battery terminal protector. 1,858,383; May 17.
Anderson, Maurice, Edgewood, R. I., assignor to Levy, Anderson Co., Inc. Jewelled bracelet chain. Des. 86,946; May 17.
Anderson, Walter C. (See Paradis, H. A., and Anderson.)
Andre, Josef, Rochester, N. Y. Pendulum apparatus. 1,858,384; May 17.
Andres, William J., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,858,354; May 17.
Andrews, Mona C., San Antonio, Tex. Catamenial bandage. 1,859,192; May 17.
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine field element. 1,858,870; May 17.
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine with improved cooling means. 1,858,871; May 17.
Ardee Patents Corporation. (See Orear, Vincent M., assignor.)
Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Combined superheater and boiler. 1,858,872; May 17.
Armstrong Cork Company. (See Boettcher, Henry, assignor.)
Armstrong, Joseph, Allston, Mass., assignor to American Moistening Company, Providence, R. I. Humidifier. 1,858,724; May 17.
Armstrong, Joseph, Conimicut, assignor to American Moistening Company, Providence, R. I. Humidifying system. 1,858,725; May 17.
Arndt, Frank J., Ventnor, N. J. Awning fixture. 1,858,912; May 17.
Artcraft Iron Works, Inc. (See Korn, Harry, assignor.)
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,858,848; May 17.
Ashworth Advertising Company. (See Ashworth, John W., assignor.)
Ashworth, John W., assignor to Ashworth Advertising Company, Incorporated, New York, N. Y. Safety razor. 1,858,260; May 17.
Asp, Enoch, Manistique, Mich. Wire support for insulators. 1,858,873; May 17.
Associated Electric Laboratories. (See Lomax, C. E., and Levy, assignors.)
Associated Electric Laboratories, Inc. (See Ostline, John E., assignor.)
Atwood Machine Company, The. (See Rowe, Irving R., assignor.)
Auble, Robert N., Indianapolis, Ind. Circuit for radio communication. 1,859,016; May 17.
Aurig, Max, and G. Brücklmayr, assignors to L. and F. H. Theisen, Munich, Germany. Apparatus for centrifugally treating gases, vapors, and the like. 1,858,570; May 17.
Austin Machinery Corporation. (See Bentson, Hans J., assignor.)
Austral Window Company. (See Ellison, Edward H., assignor.)
Autographic Register Company. (See Brenn, Carl W., assignor.)
Automatic Nut-Thread Corporation. (See Safford, Lewis A., assignor.)
Auto Radiator Manufacturing Company. (See Pardee, H. S., and Kirsch, assignors.)
Aviation Patent and Research Corporation, The. (See Depew, Richard H., jr., assignor.)
Axe, Roy T. (See Edwards, O. M., and Axe.)

B-L Electric Manufacturing Company, The. (See Hambuechen, Carl, assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)
Babcock & Wilcox Company, The. (See Wilcoxson, Leslie S., assignor.)
Backes, Peter. (See Hentrich, W., Tietze, Ossenbeck, and Backes.)
Baggett, Henry T. (See Scott, F. L., and Baggett.)
Bailey, Lloyd F., La Porte City, Iowa. Smoker's appliance. 1,858,428; May 17.
Bain, Robert D., and J. Nelson, assignors to Lamson Paragon Supply Company, Limited, London, England. Mold and the production of printing plates from rubber. 1,858,978; May 17.
Baker, George R. (See Guggenheim, M. M., and Baker.)
Baker Perkins Company. (See Guggenheim, M. M., and Baker, assignors.)
Baker Perkins Company Incorporated. (See Pointon, John E., assignor.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Baker, Robert N. S. (See Rossell, H. E., and Baker.)
Baker, Walter R. G., Schenectady, N. Y., assignor to General Electric Company. Signaling system. 1,859,066; May 17.
Baldwin, Julian T., West Chester, assignor to Sandura Company, Inc., Philadelphia, Pa. Floor covering. 1,858,655; May 17.
Ballert, Gertrude F., Scotia, N. Y. Bottle holder. 1,859,123; May 17.
Banning, Thomas A., jr., Wilmette, Ill., assignor to Dryice Equipment Corporation New York, N. Y. Refrigeration and storage and carriage of gasoline and other volatile materials. 1,858,610; May 17.
Barbarou, Marius J. B., Paris, France. Connecting rod of engines with radially arranged cylinders. 1,858,798; May 17.
Barce, John O., Chicago, Ill. Shower bath cabinet. 1,859,017; May 17.
Barfoed, Svend, San Francisco, Calif. High tension insulator. 1,858,611; May 17.
Barks, Frank S., St. Louis, Mo. Pump. 1,858,979; May 17.
Barnack, Oskar, assignor to Ernst Leitz Optische Werke, Wetzlar, Germany. Photographic camera. 1,858,385; May 17.
Barnholdt, Harold L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Inclosed fan-cooled motor. 1,858,261; May 17.
Barone, Antonio, Brooklyn, N. Y. Toy sand pail. Des. 86,947; May 17.
Barrett Company. (See Kratoville, John C., assignor.)
Barrett Company, The. (See Ragan, Louis A., assignor.)
Barrett, Edward L., assignor to Utah Radio Products Co., Chicago, Ill. Alternating current motor. 1,858,571; May 17.
Bartholomew, William F. (See McVey, E. E., and Bartholomew.)
Batherman, Samuel, Bronx, N. Y. Support for blowtorches. 1,858,656; May 17.
Baumgartner, Godfrey, Astoria, N. Y., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway switch controlling apparatus. 1,858,874; May 17.
Bayley, William D., Springfield, Ohio. Farrowing house. 1,858,699; May 17.
Beach, Chester H., Racine, Wis., assignor to The Dumore Company. Electric grinder. 1,859,068; May 17.
Beall, Isaac N., assignor to John C. W. Beall, Washington, D. C. Oil and natural gas conversion process. 1,859,193; May 17.
Beall, John C. W. (See Beall, Isaac N., assignor.)
Beardsley, Bruce, Brooklyn, and W. C. Chadbourne, Elmhurst, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y. Transfer mechanism for strap conveyers. 1,858,320; May 17.
Beath, Charles P., La Grange, and H. M. E. Heinicke, Elgin, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Producing magnetic materials. 1,859,067; May 17.
Beattey, Earle J. R., Edgewood, assignor to Universal Optical Corporation, Providence, R. I. Ophthalmic mounting. 1,858,233; May 17.
Becker, George D., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Packing. 1,858,815; May 17.
Beckett, Ernest G. (See Loveluck, R. J., Beckett, and Thomas.)
Bedford, Charles M., Brooklyn, N. Y. Necktie and tying same. 1,858,429; May 17.
Bedford, Clayton O., New York, N. Y. Coupling. 1,859,018; May 17.
Beechlyn, John T., Worcester, Mass. Package picker. 1,858,572; May 17.
Beekman, Royce A., Schenectady, N. Y., assignor to General Electric Company. System of electric distribution. 1,859,069; May 17.
Behnke, Guy E., assignor to Reed Roller Bit Company, Houston, Tex. Roller bit. 1,858,980; May 17.
Beidler, George C., Rochester, N. Y. Photographing apparatus. 1,859,258; May 17
Bell, Antoinette, New Hartford, N. Y. Bed. 1,858,657; May 17.
Bell, Fred C., Alameda, assignor to Thyle Machinery Company, San Francisco, Calif. Pressure regulating valve. 1,858,612; May 17.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell, James H. (See Bonine, Charles E., assignor.)
Bell, James H. (See Remington, Joseph P., assignor.)
Bell Telephone Laboratories, Incorporated. (See Björnson, Björn G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Burton, Everett T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Dudley, Homer W., assignor.)
Bellanca, Giuseppe M., New Castle, Del. Airplane engine arrangement. 1,858,726; May 17.
Bellanca, Guiseppe M., New Castle, Del. Airplane engine arrangement. 1,858,761; May 17.
Bellanca, Giuseppe M., New Castle, Del. Airplane engine arrangement. 1,858,762; May 17.
Bender, Jacob A., Union City, N. J. Dispensing device. 1,858,613; May 17.
Bendix Aviation Corporation. (See Bendix, Vincent, assignor.)
Bendix Brake Company. (See Andres, William J., assignor.)
Bendix Brake Company. (See Frank, Frederick C., assignor.)
Bendix Brake Company. (See Goepfrich, Rudolph A., assignor.)
Bendix Brake Company. (See Lyman, Kenneth E., assignor.)
Bendix Brake Company. (See Taylor, Cecil H., assignor.)
Bendix Stromberg Carbureter Company. (See Mabee, A. C., and Whitsett, assignors.)
Bendix, Vincent, Chicago, Ill., assignor to Bendix Aviation Corporation, South Bend, Ind. Propeller. 1,858,913; May 17.
Benitz, Leo C., Philadelphia, Pa. Headrest holder. 1,858,234; May 17.
Benjamin, Bert R., Oak Park, Ill., assignor to International Harvester Company. Bundle carrier for harvesters. 1,859,124; May 17.
Bennett, Charles E., Decatur, Ga. Combined fuse and disconnecting switch. 1,859,194; May 17.
Bensberg, Isabel. (See Hoover, Thomas A., assignor.)
Benton-Olson Company. See Olson, Elmer T., assignor.)
Bentson, Hans J., Los Angeles, Calif., assignor to Austin Machinery Corporation, Muskegon, Mich. Trench widener. 1,858,727; May 17.
Berger, Emil J., Hatfield, assignor to Dexdale Hosiery Mills, Lansdale, Pa. Form for drying hosiery and the like. 1,858,658; May 17.
Berkeley, Laurence J., Cleveland, Ohio. Carburetor. 1,858,573; May 17.
Bernitz Furnace Appliance Company. (See Nygaard, O., and Smith, assignors.)
Bernitz Furnace Appliance Company. (See Smith, Arthur E., and Snow, assignors.)
Berry, Bert C., Moline, Ill. Corn serving dish. 86,948; May 17.
Berry, Herbert C., assignor, by mesne assignments, to National Supply Company, Minneapolis, Minn. Tackle box. 1,859,228; May 17.
Bertaut, Paul A., Eau Gallie, Fla. Gasoline tank protector. 1,858,799; May 17.
Bertel, Rudolf, Vienna, Austria. Manufacture of dry yeast. 1,859,250; May 17.
Berwind-White Coal Mining Company, The. (See Newbaker, Edward J., assignor.)
Besonson, Walter, Raymond, Wash. Power take-off. 1,858,700; May 17.
Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing stairway. 1,858,981; May 17.
Bessler Disappearing Stairway Company, The. (See Bessler, Frank E., assignor.)
Bethenod, Joseph, Paris, France. Protection of electrical apparatus. 1,859,125; May 17.
Better-Built Pumps, Inc. (See Brown, Ernest L., assignor.)
Bicknell, George M., assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,858,614; May 17.
Bicknell, George M., assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,858,615; May 17.
Bird, Lee, Rock Spring, Ga. Combined ground working and pulverizing machine. 1,858,948; May 17.
Birkebak, Christian A., assignor to Ex-Cell-O Aircraft and Tool Corporation, Detroit, Mich. Tool retainer. 1,858,476; May 17.
Bissell, T. E., Company. (See Wardley, Timothy C., assignor.)
Björnson, Björn G., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Voice operated relay circuits. 1,859,019; May 17.
Black & Decker Manufacturing Company, The. (See Ramey, Blaine B., assignor.)
Blake, Fred, Indianapolis, Ind. Bicycle and motorcycle seat. 1,858,477; May 17.
Blumenthal, Maurice, Brooklyn, N. Y. Picture hook. 1,858,875; May 17.

Boatman, Charles A., Waterloo, Iowa. Golf tee. 1,858,800; May 17.
Bodmer, Albert. (See Heberlein, G., and Bodmer.)
Boe Manufacturing Company. (See Henion, Walter R., assignor.)
Boehme, H. O., Inc. (See Knopp, E., and Kunc., assignors.)
Boehme, H. O., Inc. (See Kunc., F., and Knopp, assignors.)
Boettcher, Henry, assignor to Armstrong Cork Company, Lancaster, Pa. Building construction. 1,858,701; May 17.
Boeuf, Pierre E., Ermont, France. Cock. 1,859,126; May 17.
Bohraus, Werner, Montreal, Quebec, Canada. Back-fire trap for rectifiers or converters. 1,858,616; May 17.
Bokovoy, Samuel A. (See Harness, L. R., and Bokovoy.)
Bolard, Edmond, Paris, France. Extensible shutter. 1,858,801; May 17.
Bolton, Edgar A. (See Gray, T. F., and Bolton.)
Bonine, Charles E., Melrose Park, Cheltenham Township, Montgomery County, assignor to James H. Bell, Philadelphia, Pa. Liquid cooling apparatus. 1,859,229; May 17.
Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Refrigerator car. 1,858,802; May 17.
Bonslakos, Michael N., San Francisco, Calif. Centrifugal separator. 1,858,574; May 17.
Borden, Bradford T., Lakewood, Cleveland, assignor of one-fourth to W. A. Neracher and one-half to The Borden Company, Warren, Ohio. Workholder for diestocks and the like. 1,858,849; May 17.
Borden, Bradford T., Lakewood, assignor of one-half to The Borden Company and one-half to W. A. Neracher, Warren, Ohio. Pipe guide for diestocks. 1,858,850; May 17.
Borden Company, The. (See Borden, Bradford, T., assignor.)
Bornmann, Carl, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Film and plate hanger. 1,858,576; May 17.
Bornmann, Carl A., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Camera body. 1,858,575; May 17.
Borson, Sophus P. C., Loveland, Colo. Garter. 1,859,070; May 17.
Bossart, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Coding apparatus. 1,858,876; May 17.
Bowman, Henry V. (See Woolsey, C. A., and Bowman.)
Boye Needle Company, The. (See Carlson, Gustaf A., assignor.)
Brace, Porter H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Preparing and purifying alloys. 1,858,386; May 17.
Bracke, Robert F. (See Bradbury, C. C., and Bracke.)
Bradbury, Clifford C., assignor to C. B. Camp, trustee, Glencoe, Ill. Fuel feed system for carburetors. 1,858,388; May 17.
Bradbury, Clifford C., Glencoe, and R. F. Bracke, Chicago, assignors to C. B. Camp, trustee, Glencoe, Ill. Carburetor. 1,858,387; May 17.
Braddock, William J., and C. W. Haller, Wheeling, W. Va., assignors to Wheeling Bronze Casting Company. Pickling crate. 1,858,430; May 17.
Braddock, William J., and C. W. Haller, Wheeling, W. Va., assignors to Wheeling Bronze Casting Company. Pickling apparatus. 1,858,431; May 17.
Bradley, Harry, assignor to The British Boot, Shoe and Allied Trades Research Association, London, England. Apparatus for the measurement of feet, lasts, and the like. 1,858,914; May 17.
Bradley, Milton, Company. (See Ingersoll, Robert N., assignor.)
Bragg, R. E., Washington, D. C. Souvenir emblem or similar article. Des. 86,949; May 17.
Brandle, T. C. (See McDonald, Harry H., assignor.)
Brassert, H. A., & Company. (See Ives, Edward L., assignor.)
Breitling, Ernst. (See Lehmann, K. A., and Breitling.)
Brenn, Carl W., Montclair, assignor to Autographic Register Company, Hoboken, N. J. Printing press punching attachment. 1,858,982; May 17.
Bridgeport City Trust Company, The. (See Carlson, Philip, assignor.)
Briney, Ottis R., Pontiac, Mich. Chuckless and centerless machining device. 1,858,235; May 17.
British Boot, Shoe and Allied Trades Research Association, The. (See Bradley, Harry, assignor.)
Brittain, Richard J., jr., Bloomfield, and O. W. Young, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich. Car frame support and journal box. 1,859,265; May 17.
Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Tri-diphenyl phosphate. 1,858,659; May 17.
Brooks, Claude J. (See Gerry, M. H., 3d, and Brooks.)
Brown, Clinton W., Morrisville, and J. A. Solasa, Philadelphia, Pa., assignors, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y. Control device. 1,858,389; May 17.
Brown Company. (See Richter, G. A., and Schur, assignors.)
Brown, Ernest L., Watertown, assignor to Better-Built Pumps, Inc., Cambridge, Mass. Coupling. 1,859,251; May 17.
Brown, Ernest N., Johnston City, Ill. Refractometer. 1,858,949; May 17.
Brown, Franklin, White House, N. J., assignor to General Health Corporation, Philadelphia, Pa. Nipple. 1,858,356; May 17.
Brown, George R., and G. F. Naab, assignors to The North American Manufacturing Company, Cleveland, Ohio. Valve. 1,858,877; May 17.
Brown, Laurel H., Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for measuring materials. 1,859,020; May 17.
Brown, Roy W., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Thermostatically controlled heating device. 1,858,660; May 17.
Brownlee, Dalmar T., Indianapolis, Ind. Starter device. 1,858,617; May 17.
Brucklmayr, Georg. (See Aurig, M., and Brucklmayr.)
Brunswick-Kroeschell Company. (See Marshall, Henry H., assignor.)
Brunswick-Kroeschell Company. (See Smith, Romeyn L., assignor.)
Bryan, James S., et al. (See Glies, Dean R., assignor.)
Buchanan, Charles A., Plain City, Ohio, assignor, by mesne assignments, to The Griswold Manufacturing Company, Erie, Pa. Hair waver. 1,858,851; May 17.
Buffalo-Springfield Roller Co., The. (See Aitken, Andrew W., assignor.)
Bufmyer, Edward D., and O. Helstrom, Willapa, Wash. Toilet. 1,859,127; May 17.
Burdett, John B., assignor to Burdett Manufacturing Company, Chicago, Ill. Valve. 1,858,291; May 17.
Burdett Manufacturing Company. (See Burdett, John B., assignor.)
Burger, Walter D., Forest Park, Ill. Grease metering device. 1,859,071; May 17.
Burkey, Harvey M., Plainfield, and L. E. Cole, Rahway, N. J., assignors to American Metal Company, Ltd., New York, N. Y. Recovering copper. 1,858,236; May 17.
Burkhardt, Chandos, Canton, Ohio, assignor to The Hoover Company. Conductor cord attachment. 1,858,816; May 17.
Burkhardt, Jakob, Detroit, Mich., assignor to Third Dimension Pictures, Inc., New York, N. Y. Producing motion pictures. 1,859,021; May 17.
Burkhardt, Jakob, Detroit, Mich., assignor to Third Dimension Pictures, Inc., New York, N. Y. Projection printing machine. 1,859,022; May 17.
Burkhardt, Jakob, Detroit, Mich., assignor to Third Dimension Pictures, Inc., New York, N. Y. Projection apparatus for motion pictures. 1,859,023; May 17.
Burks, John E., assignor to Charles Hartmann Company, Brooklyn, N. Y. Cover for underfloor piping. 1,858,803; May 17.
Burroughs Adding Machine Company. (See Horton, Allen A., assignor.)
Burton, Carroll, Johnstown, Pa. Car coupler. 1,858,915; May 17.
Burton, Everett T., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Submarine cable telegraph system. 1,858,237; May 17.
Buschbeck, Werner, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Grid modulation. 1,859,024; May 17.
Bynum, Pink T., Calliham, Tex. Automobile rack. 1,858,355; May 17.
Byrne, John A. (See O'Brien, R. H., and Byrne.)
Byron, Kenneth M., assignor to S. A. Griggs, Detroit, Mich. Trailer. 1,858,878; May 17.
Bysshe, Ernest T., and R. R. Finn, assignors to Jones & Lamson Machine Company, Springfield, Vt. Torsion released die. 1,858,390; May 17.
C & C Engineering Co. (See Carrey, John O., assignor.)
California Consolidated Water Co. (See Wolfe, Richard C., assignor.)
California Corrugated Culvert Company. (See Wyman, Laurence W., assignor.)
Callite Products Company. (See Laise, Clemens A., assignor.)
Cambron, Adrien, Montreal, Quebec, Canada, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Accelerator for the vulcanization of rubber. 1,858,577; May 17.
Camden Safe Deposit and Trust Co., executor. (See Ames, E. U., and Horrocks.)
Camel Company. (See Wasberg, Axel, assignor.)
Camp, Curtis B., trustee. (See Bradbury, Clifford C., assignor.)
Camp, Curtis B., trustee. (See Bradbury, C. C., and Bracke, assignors.)
Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Window frame and sash. 1,858,983; May 17.
Campbell Metal Window Corporation. (See Campbell, Harry E., assignor.)
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Manufacture of hollow glassware. 1,859,230; May 17.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glassware making apparatus. 1,859,231; May 17.

Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glass forming apparatus. 1,859,232; May 17.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Continuously operating glassware forming machine. 1,859,233; May 17.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Continuous two-table glassware forming machine. 1,859,234; May 17.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Method of and apparatus for forming glassware. 1,859,235; May 17.
Cannon, Albert P. (See Parker, W. H., and Cannon.)
Carlson, Elof L., assignor to The E. Ingraham Co., Bristol, Conn. Sheet-metal bezel for unbreakable clock-crystals. 1,858,262; May 17.
Carlson, Evold H., Chicago, Ill. Door securing mechanism. 1,858,804; May 17.
Carlson, Gustaf A., assignor to The Boye Needle Company, Chicago, Ill. Curtain rod. 1,858,950; May 17.
Carlson, John A. E., assignor to Jacobsen Manufacturing Co., Racine, Wis. Power driven mower. 1,858,618; May 17.
Carlson, Oscar, assignor to Reel-Mop Corporation, Minneapolis, Minn. Combined mop head and wringer. 1,858,879; May 17.
Carlson, Philip Trumbull, assignor, by mesne assignments, to The Bridgeport City Trust Company, Bridgeport, Conn. Windshield hinge. 1,858,880; May 17.
Carr, Moses F., Lexington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,859,252; May 17.
Carrey, John O., assignor to C & C Engineering Co., Inc., St. Louis, Mo. Compressor. 1,858,817; May 17.
Carrington, Frank G., Anniston, Ala., assignor to Ferric Engineering Company. Pouring trough. 1,858,292; May 17.
Carrington, Frank G., assignor to Ferric Engineering Company, Anniston, Ala. Casting metal centrifugally. 1,858,478; May 17.
Carrom Company, The. (See Wilkinson, J. J. and M. A., assignors.)
Carter Carburetor Corporation. (See Bicknell, George M., assignor.)
Carter, Everett M., Indianapolis, Ind. Oil burner. 1,858,336; May 17.
Carnana, Louis, Astoria, N. Y. Multicolor pencil. 1,858,881; May 17.
Castorina, Alfio, et al. (See Foti, Charles, assignor.)
Chace, Norman B., assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio. Tilting table. 1,859,025; May 17.
Chadbourne, William C. (See Beardsley, B., and Chadbourne.)
Chamberlain, George L., and G. H. Gneiss, Chicago, Ill.; said Gneiss assignor to said Chamberlain. Electrical wiring conduit. 1,859,259; May 17.
Chambers, Karl D., Montgomery, Ala. Apparatus for and method of lighting automotive vehicles. 1,858,702; May 17.
Charley, Walter G., Punta San Juan, Cuba. Cigarette and similar article. 1,858,951; May 17.
Charlton, James, Houston, Tex. Rotary expansion drilling tool. 1,858,263; May 17.
Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Mechanical movement. 1,858,763; May 17.
Chase, George C., South Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Variable speed transmission for registers. 1,859,195; May 17.
Chase, George C., South Orange, and C. F. Schweitzer, Bloomfield, assignors to Monroe Calculating Machine Company, Orange, N. J. Calculating machine 1,858,321; May 17.
Chency Brothers. (See Stiegler, Harold W., assignor.)
Chevre, Charles J., Fairfield, Conn. Automobile signal. 1,858,818; May 17.
Chewning, William W., Chester, Pa. Work handling device. 1,858,432; May 17.
Chicago Printed String Co. (See Vogl, Otto, assignor.)
Chisholm, Clifton, Cleveland, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del. Printing device. 1,858,479; May 17.
Chisholm, Clifton, Cleveland, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del. Printing member. 1,858,480; May 17.
Chisholm, Clifton, Cleveland, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del. Holder for printing members. 1,858,537; May 17.
Chisholm, Clifton, Cleveland, and P. M. Colquhoun, Lakewood, Ohio, assignors, by mesne assignments, to American Multigraph Co., Wilmington, Del. Flexible galley. 1,858,481; May 17.
Christians, George W., Chattanooga, Tenn. Method and apparatus for sealing crevices in rock formations or the like. 1,858,952; May 17.
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Striping instrument. 1,859,072; May 17.
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Striping instrument. 1,858,984; May 17.
Chrysler Corporation. (See Henderson, Herbert V., assignor.)
Churchill, David C., Berea, Ky. Weaving mechanism. 1,858,482; May 17.
Cimino, Antonio, et al. (See Foti, Charles, assignor.)
Cincinnati Bickford Tool Company, The. (See Klausmeyer, David C., assignor.)
Cincinnati Galvanizing Company, The. (See Schott, Louis, assignor.)
Cincinnati Milling Machine Company, The. (See Nenninger, Lester F., assignor.)
Clark, Edward M., Davenport, Iowa, assignor to Lustrolite, Inc., Wilmington, Del. Sheet metal working machine. 1,858,578; May 17.
Clauberg, Herman P., Jersey City, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Chuck mechanism for web rolls. 1,858,391; May 17.
Claude Neon Federal Company. (See Hall, Lee, assignor.)
Clausen, Harold C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway car retarder. 1,859,073; May 17.
Clausing, George, assignor to The Vulcan Corporation, Portsmouth, Ohio. Wood heel. 1,858,805; May 17.
Cleveland, Charles H., C. A. Heinle, and J. A. Allison, Minneapolis, Minn. Tool for cutting grooves. 1,858,852; May 17.
Cleveland Planer Company, The. (See Mesker, Louis H., assignor.)
Cleveland Tractor Company, The. (See White, Rollin H., assignor.)
Clevelnnd Twist Drill Company, The. (See Emmons, Joseph V., assignor.)
Clinkscales, John W., jr., Braman, and F. C. Cutting, Tulsa, Okla., assignors to Shell Petroleum Corporation. Gauging device. 1,858,579; May 17.
Coe, Harrison S., Palo Alto, Calif. Filter method and apparatus. 1,858,357; May 17.
Coil, Grover C. (See Wheelbarger, Albert S., and Coil.)
Colby, Ora A., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Slot closure. 1,858,433; May 17.
Colby, Ora A., Mansfield, Ohio, assignor to Westinghouse Electric & Mannfacturing Company. Slot closure. 1,858,434; May 17.
Cole, Guerney H. (See Frey, A. A., and Cole.)
Cole, James R., Tulsa County, Okla. Stuffing box and packing therefor. 1,858,882; May 17.
Cole, Lawrence E. (See Burkey, H. M., and Cole.)
Coleman, Gerald H. (See Grether, E. F., and Coleman.)
Coleman Lamp and Stove Company, The. (See Coleman, William C., assignor.)
Coleman Lamp & Stove Company, The. (See Olds, Ambrose D., assignor.)
Coleman, William C., assignor to The Coleman Lamp and Stove Company, Wichita, Kans. Device for burning liquid fuels. 1,858,264; May 17.
Collins, Edward, San Mateo, assignor, by mesne assignments, of one-eighth to F. F. Russell, Oakland, Calif., and seven-eights to E. B. Anderson, Portland, Oreg. Therapeutic dispenser for volatile substances. 1,858,580; May 17.
Colmerauer, Andrew J. (See Grau, H. E., and Colmerauer.)
Colon, Charles S., Tulsa, Okla. Combination citrus fruit squeezer and food holder. 1,858,435; May 17.
Colquhoun, Peter M. (See Chisholm, C., and Colquhoun.)
Columbus Coated Fabrics Corporation. (See Willcox, Roderick H., assignor.)
Columbus Sucker Rod Company, The. (See Thorpe, Forest H., assignor.)
Conlon, Thomas A. (See Goebert, E. C., and Conlon.)
Connecticut Hard Rubber Company, The. (See Walsh, William E., assignor.)
Conner Crouse Corporation. (See Crouse, George B., assignor.)
Conrad, Nicholas J., Wilmette, assignor, by mesne assignments, to Schwietzer & Conrad, Inc., Chicago, Ill. Resistance unit. 1,858,483; May 17.
Contner, J. Burgi, Lakeland, Fla. Moving picture projector. 1,859,128; May 17.
Cook, Herbert E., Cuyahoga Falls, and D. J. Richards, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Making laminated structures. 1,858,883; May 17.
Cooke, Allen B., assignor to United Autographic Register Company, Chicago, Ill. Autographic register. 1,858,953; May 17.
Cooke, Thomas S. (See Diggs, S. H., McGee, and Cooke.)
Cookson, Frank, Newcastle-on-Tyne, England. Roof support for use in mines. 1,858,954; May 17.
Cooley, William B., assignor to Hevi Duty Electric Company, Milwaukee, Wis. Conveyer. 1,858,484; May 17.
Cooley, William B., assignor to Hevi Duty Electric Company, Milwaukee, Wis. Belt conveyer. 1,858,764; May 17.
Coolick, Thomas J., Detroit, Mich. Trouble light for automobiles. 1,858,538; May 17.
Cooper, Charlotte G., Columbus, Ohio. Decorating mirrors and the like. 1,858,358; May 17.
Cooper, Martin, Thomasville, N. C. Rotary combustion engine. 1,858,322; May 17.
Coppus, Frans H. C., assignor to A. M. C. Wechsberg, V. L. Wood, and F. H. C. Coppus, trustees, Worcester, Mass. Blower. 1,858,581; May 17.
Coppus, Frans H. C., et al., trustees. (See Coppus, Frans H. C., assignor.)

Corbett, Alfred, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switchboard lamp. 1,858,819; May 17.
Corcoran, Laurence M., Caldwell, N. J., assignor to O. R. Flatter and H. Frankel, North Vernon, Ind. Picture projecting and sound reproducing machine. 1,858,485; May 17.
Cornwell, Arthur L., Wellsville, N. Y. Wheel puller. 1,858,238; May 17.
Costenbader, John H., Norfolk, Va. Toothbrush. 1,859,129; May 17.
Coutant, Jay G., New York, N. Y., assignor, by mesne assignments, to Drake Non-Clinkering Furnace Block Company, Inc. Pulverized fuel combustion. 1,858,450; May 17.
Coutant, Jay G., assignor to Furnace Engineering Company, New York, N. Y. Pulverized fuel combustion. 1,858,451; May 17.
Couwenhoven, Abraham, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Scissors shape collector for electric vehicles. 1,858,359; May 17.
Covell Corporation, The. (See Covell, Earl D., assignor.)
Covell, Earl D., Philadelphia, Pa., assignor to The Covell Corporation, Wilmington, Del. Wall construction and building unit therefor. 1,859,236; May 17.
Crabtree, George W., Cleveland Heights, Ohio. Controlling device for laminated vehicle springs. 1,858,916; May 17.
Cramer, Albert N., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming apparatus. 1,859,074; May 17.
Cramer, Otto P., San Francisco, Calif. Ironing board cabinet. 1,858,765; May 17.
Creedy, Frederick, Ealing, London, England. Dynamo electric machine. 1,859,196; May 17.
Creighton, John M., assignor to Fostoria Glass Company, Moundsville, W. Va. Cocktail service. 1,858,728; May 17.
Crosby, Earle M., Birmingham, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Fastener setting machine. 1,859,026; May 17.
Cross Development Corporation. (See Cross, Roy, assignor.)
Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del. Treating petroleum hydrocarbons. 1,859,027; May 17.
Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del. Treating petroleum hydrocarbons in the vapor phase. 1,859,028; May 17.
Cross, Roy, assignor to Silica Products Company, Kansas City, Mo. Concrete curing agent. 1,859,253; May 17.
Cressley, William H., assignor of one-half to J. R. Elliff, Klamath Falls, Oreg. Automobile tire appliance. 1,859,197; May 17.
Crouse, George B., Woodcliff, N. J., assignor to Conner Crouse Corporation, New York, N. Y. Apparatus for energizing an audion circuit. 1,858,323; May 17.
Crown Cork & Seal Company. (See Parker, Cecil J., assignor.)
Crown Stove Works. (See Rogers, Walter F., assignor.)
Crucible Steel Company. (See Wise, Clarence E., assignor.)
Cruse, Howard E., San Francisco, Calif. Excavator. 1,858,360; May 17.
Culbertson, Albert L., deceased, Mount Lebanon, Pa.; L. M. Culbertson and The Union Trust Company of Pittsburgh, Executors. Heating furnace. Re18,471; May 17.
Culbertson, Laverna M., et al., executors. (See Culbertson, Albert L.)
Cunningham, Katherine E., assignor to The H. W. Gossard Co., Chicago, Ill. Combination garment. 1,859,198; May 17.
Currie, Robert A., Syracuse, assignor to R. E. Dietz Company, New York, N. Y. Oil fount. 1,858,884; May 17.
Currie, Robert A., and F. M. Thiel, Syracuse, assignors to R. E. Dietz Company, New York, N. Y. Lantern. 1,858,885; May 17.
Cutler-Hammer, Inc. (See Hodgson, Howard E., assignor.)
Cutler-Hammer, Inc. (See Rapley, Harold H., assignor.)
Cutler, Samuel R., administrator. (See Furber, Frederick M.)
Cutting, Frank C. (See Clinkscales, J. W., jr., and Cutting.)
Dabroski, Stanley, Springfield, Mass. Filling station valve operating device. 1,858,766; May 17.
Dahlstrom, John A., Bay Village, assignor to Perfection Stove Company, Cleveland, Ohio. Burner control system. 1,858,265; May 17.
D'Alfonso, William R., New York, N. Y. General tone control apparatus. 1,858,486; May 17.
Dant, John E., Louisville, Ky. Vehicle wheel lock. 1,859,130; May 17.
Darlington, Homer T., West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America. Method of and device for detecting temperature changes in heating or cooling tubes, coils, etc. 1,858,293; May 17.
Davidge, Ebenezer A., London, England, assignor to Royal Typewriter Company, Inc., New York, N. Y. Condensed billing device. 1,858,729; May 17.
Davies, Leonard J., Rugby, England, assignor to General Electric Company. Thermionic valve. 1,859,075; May 17.
Davis, Archibald H., jr., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Automatic cut-off for gas burners. 1,858,986; May 17.
Davis, Clara J., executrix. (See Davis, Thomas J.)
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Decarbonizing apparatus. 1,858,392; May 17.
Davis, Thomas J., by C. J. Davis, executrix, Duquesne, Pa. Screen. 1,858,917; May 17.
Davison, Dorsett A. and G. E., assignors to The Davison Engineering Corporation, Richmond, Va. Internal combustion engine. 1,859,199; May 17.
Davison Engineering Corporation, The. (See Davison, Dorsett A. and G. E., assignors.)
Davison, George E. (See Davison, Dorsett A., and G. E.)
Davey, Peter, assignor to Vibroscope Inc., New York, N. Y. Stroboscopic apparatus and method. 1,858,985; May 17.
Dawicki, Joseph T., jr., Jersey City, N. J. Locking device for window screens. 1,858,987; May 17.
Dawson, Elma N. (See Dawson, James C., assignor.)
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder. 1,859,237; May 17.
Day, Luther A., assignor to Day Manufacturing Company, Sherman, and The Justin Leather Goods Company, Nocona, Tex. Display box. 1,859,200; May 17.
Day Manufacturing Company, et al. (See Day, Luther A., assignor.)
Dayton Malleable Iron Company, The. (See Runyan, William B., assignor.)
Dearborn Company, The. (See Wood, Joseph E., assignor.)
De Bardeleben, William S. (See Wheeler, William, assignor.)
De Bataafsche Petroleum Maatschappij. (See Waterman, Hein L., assignor.)
De Boer, Jan H., and K. M. van Gessel, Eindhoven, Netherlands, assignors to Radio Corporation of America. Electric discharge tube. 1,859,029; May 17.
Decker, Delania E., Jeffersonville, Ind. Camera. 1,858,661; May 17.
Decker, Harry R., Houston, Tex. Pipe holding slip. 1,858,324; May 17.
Defrance, Abel, and P. Versillé, Paris, France. Combined mixing and vaporizing device. 1,858,853; May 17.
De Gueuther, Edward J., Milwaukee, Wis. Door buffer. 1,858,886; May 17.
Deisler, Harry W., Bucyrus, assignor to The Wellington Machine Company, Wellington, Ohio. Spring caster. Re18,467; May 17.
Delamere, Rudolf D., assignor to Delamere and Williams, Limited, Toronto, Ontario, Canada. Tray carrying conveyer. 1,858,619; May 17.
Delamere and Williams, Limited. (See Delamere, Rudolf D., assignor.)
Delco Products Corporation. (See Aseltine, Fred E., assignor.)
Depperman, Frederick A., Rivervale, N. J. Film hanger. 1,859,131; May 17.
Depew, Richard H., jr., Forest Hills, N. Y., assignor, by mesne assignments, to The Aviation Patent and Research Corporation. Airplane wheel brake operating means. 1,858,393; May 17.
Desirello, Narciso, Genoa-Rivarolo, Italy. Optical device for resolving and combining light rays. 1,858,361; May 17.
Detrick, M. H., Company. (See Foltz, Raymond D., assignor.)
Detrick, M. H., Company. (See Hosbein, Louis H., assignor.)
Detroit Michigan Stove Company. (See Maul, Henry C., assignor.)
Detroit Trust Company, et al., executors. (See Horton, Allen A.)
Detroit Vapor Stove Company, The. (See Sherman, Alvin G., assignor.)
Deutsch, Hans, assignor to Alex. Friedmann, Vienna, Austria. Arrangement for starting and stopping exhaust steam injectors. 1,858,325; May 17.
Devine, James H., Champaign, Ill. Lunch box. 1,858,294; May 17.
De Von, James L., Pittsburgh, Pa. Piling construction. 1,858,918; May 17.
Dewey, Clarence L., Elkhart, Ind., assignor to Outing Manufacturing Company. Tackle box. 1,858,539; May 17.
Dewey, Franklin H. (See Wood, P. S., and Dewey.)
Dexdale Hosiery Mills. (See Berger, Emil J., assignor.)
Diapex Corporation. (See Schwartz, Charles M., assignor.)
Dickhaut, Charles A., assignor to John Waldron Corporation, New Brunswick, N. J. Automatic side control for rolls. 1,858,436; May 17.
Dietrich, William S., Greenville, Pa. Method and apparatus for handling freight. 1,859,076; May 17.
Dietz, R. E., Company. (See Currie, Robert A., assignor.)
Dietz, R. E., Company. (See Currie, R. A., and Thiel, assignors.)
Diggs, Sterling H., and J. M. McGee, Casper, Wyo., and Thomas S. Cooke, New York, N. Y., assignors to Standard Oil Company, Whiting, Ind. Treating hydrocarbon oils. 1,858,394; May 17.

Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Double shutter and driving mechanism therefor. 1,858,239; May 17.

Dinesen, Laurits, Minneapolis, Minn. Milking apparatus. 1,858,266; May 17.

D'Leny, Walter C., and J. R. Park, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, London, England. Purification of gases containing hydrogen sulphide. 1,858,919; May 17.

Dodson, J. R. (See George, George C., assignor.)

Doering, Charles and H. H., G. Alstad, and B. Skoglund, Chicago, Ill., assignors to said Charles Doering and said Henry H. Doering. Wrapping machine. 1,858,540; May 17.

Doering, Henry H. (See Doering, Charles and H. H., Alstad, and Skoglund.)

Doherty Research Company. (See Merley, S. R., and Spring, assignors.)

Dole Valve Company. (See Lund, James K., assignor.)

Donovan, Faye E., Modesto, Calif. Smoker's stand. Des. 86,950; May 17.

Dorr, Oscar S., Fond du Lac, Wis., assignor to Goodbar Manufacturing Corporation, New York, N. Y. Garment. 1,859,266; May 17.

Douglas, Harry A., Bronson, Mich. Igniter. 1,859,201; May 17.

Douglas, Robert, Rochester, assignor to General Foods Corporation, New York, N. Y. Preparing pectin. 1,858,820; May 17.

Dow Chemical Company, The. (See Britton, Edgar C., assignor.)

Dow Chemical Company, The. (See Grether, E. F., and Coleman, assignors.)

Dow Chemical Company, The. (See Putnam, Mark E., assignor.)

Drake Non-Clinkering Furnace Block Company. (See Coutant, Jay G., assignor.)

Dremel, Albert J., Racine, Wis. Electric hair clipper. 1,858,887; May 17.

Driggs, Louis L., jr., New Rochelle, N. Y. Cannon. 1,858,487; May 17.

Drylce Equipment Corporation. (See Banning, Thomas A., jr., assignor.)

Duda, Oswald, South Houston, assignor to Reed Roller Bit Company, Houston, Tex. Drill bit. 1,858,988; May 17.

Dudley, Homer W., Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Distortion correction in transmission. 1,859,030; May 17.

Dufford, John R., Paterson, assignor to The Paterson Parchment Paper Co., Passaic, N. J. Reclaiming used vegetable parchment tympans. 1,858,437; May 17.

Duffy, Thomas I., assignor, by mesne assignments, to William J. McIntyre, Detroit, Mich. Automobile bumper. 1,858,541; May 17.

Dumore, Company, The. (See Beach, Chester H., assignor.)

Duncan Electric Manufacturing Company. (See Emens, Albert L., assignor.)

Duncan, William M., Alton, Ill. Cast wheel. 1,859,077; May 17.

Duncan, William M., Alton, Ill. Molded metallic core. 1,859,078; May 17.

Duncan, William M., Alton, Ill. Casting wheels and other articles. 1,859,079; May 17.

Dunn, Jerry I., Ellwood City, assignor to National Tube Company, Pittsburgh, Pa. Making seamless tubes. 1,858,920; May 17.

Dunn, Joseph A., Los Angeles, Calif. Service station. 1,858,438; May 17.

Dunning, Carroll H., Los Angeles, Calif., assignor to Dunning Process Company. Producing composite photographs with sound accompaniment. 1,858,767; May 17.

Dunning Process Company. (See Dunning, Carroll H., assignor.)

Du Pont de Nemours, E. I., & Company. (See Greenewalt, Crawford H., assignor.)

Duro Metal Products Company. (See McNaught, N. F., and Peterson, assignors.)

Duross, John, assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass. Paging system. Re18,466; May 17.

Duryea, O. C., Corporation. (See Duryea, Otho C., assignor.)

Duryea, Otho C., Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del. Car construction. 1,858,730; May 17.

Duvall, William J., assignor to Smith & Davis Manufacturing Company, St. Louis, Mo. Folding davenport or bed. 1,858,542; May 17.

Duvall, William J., assignor to Smith and Davis Mfg. Co., St. Louis, Mo. Folding davenport bed. 1,858,543; May 17.

Dye, Glen M., Minneapolis, Minn. Method and apparatus for developing prints. 1,858,888; May 17.

Dyer, Horace T. (See Lensk, J. P., and Dyer.)

Eagan, John S., Providence, R. I. Oil burner lighter. 1,858,395; May 17.

Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Amplifying system. 1,858,267; May 17.

Eastman Kodak Company. (See Smith, Henry B., assignor.)

Edison, Karl, Roscoe, N. Y. Illuminating device. 1,858,806; May 17.

Edwards, E. H., Co. (See Gerry, M. H., 3d, and Brooks, assignors.)

Edwards, O. M., Company, The. (See Edwards, Oliver M., assignor.)

Edwards, O. M., Company, The. (See Edwards, O. M., and Axe, assignors.)

Edwards, Oliver M., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y. Ventilating side window for motor vehicles. 1,859,031; May 17.

Edwards, Oliver M., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y. Ventilating window for automobiles. 1,859,080; May 17.

Edwards, Oliver M., and R. T. Axe, assignors to The O. M. Edwards Company, Inc., Syracuse, N. Y. Window construction with demountable stop. 1,859,032; May 17.

Edwards, William W., Los Angeles, Calif. Change speed mechanism. 1,858,889; May 17.

Egry Register Company, The. (See Stern, M. C., and Pfeiffer, assignors.)

Eichenauer, Konrad, Neu-Rossen, near Merseburg, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Calculating machine controlling one or more secondary machines. 1,858,807; May 17.

Electric Tamper & Equipment Company. (See Haas, Joseph F., assignor.)

Electrolux Servel Corporation. (See Pierce, Harry C., assignor.)

Elektrizitatsgesellschaft "Sanitas" m. b. H. (See Kunze, Werner, assignor.)

Elliff, James R. (See Crossley, William H., assignor.)

Ellison, Edward H., Jamestown, N. Y., assignor, by mesne assignments, to Austral Window Company, New York, N. Y. Making sash sustainers. 1,858,821; May 17.

Ellstrom, George O., University City, Mo., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Charging transfer table. 1,858,768; May 17.

Elsner, Heinrich, Dresden, Germany. Riveting machine. 1,859,081; May 17.

Emens, Albert L., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Electricity meter. 1,858,703; May 17.

Emmons, Joseph V., Shaker Heights, assignor to The Cleveland Twist Drill Company, Cleveland, Ohio. Drill. 1,859,202; May 17.

Enders, Hugo E., Belleville, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,858,295; May 17.

English Steel Corporation Limited. (See Anderson, David M., assignor.)

Epstein, Albert K., Chicago, Ill. Growing yeast. 1,858,488; May 17.

Erdmann, Hans M., assignor to Ne-Arga Corporation, New York, N. Y. Lamp starting device. 1,858,854; May 17.

Erickson, Carl G., Evanston, Ill. Caliper. 1,858,544; May 17.

Ericson, Philip E. G., St. Charles, assignor to The W. H. Howell Company, Geneva, Ill. Glider. 1,858,989; May 17.

Ericson, Richard W., Chicago, Ill. Desk or analogous article of furniture. Des. 86,951; May 17.

Ernst, Otto, and K. Sponsel, Hochst-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing ethers of carbohydrates. 1,858,731; May 17.

Erskine, Clyde, St. Louis, Mo., assignor to International Motor Company, New York, N. Y. Semitrailer motor train. 1,858,769; May 17.

Etheridge, Herbert, Rodelheim, near Frankfort-on-the-Main, Germany. Typewriter. 1,858,770; May 17.

Euclid Crane & Hoist Company, The. (See Juergens, Winfred H., assignor.)

Eule, Martin, Spandau, near Berlin, assignor to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Berlin-Siemensstadt, Germany. Tubular steam generator. 1,858,890; May 17.

Evans, William C., Casey, Iowa. Grave concealing device. 1,858,439; May 17.

Ewald, Warren. (See Werft, E. L., Ewald, and Henshal.)

Ex-Cell-O Aircraft and Tool Corporation. (See Birkebak, Christian A., assignor.)

Eyston, George E. T., assignor to Powerplus (1927) Limited, London, England. Elastic fluid compressor. 1,858,921; May 17.

F. & C. Manufacturing Co. (See Sokolow, S., and Preston, assignor.)

Fahrney, Emery H., Chicago, Ill. Protecting the propeller and rudder of boats. 1,858,582; May 17.

Fahrney, Emery H., Chicago, Ill. Starting device for engines. 1,858,583; May 17.

Fairbanks, E. and T., and Company. (See Hadley, Harlan A., assignor.)

Fanner Manufacturing Company, The. (See Gibson, Samuel H., assignor.)

Farnham, Ralph A., Herkimer, assignor, by mesne assignments, to Holed-Tite Packing Corporation, New York, N. Y. Mechanism for removing articles from their carrying trays. 1,858,732; May 17.

Farnsworth, Hiland R., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Suction box lever for suction rolls. 1,858,545; May 17.

Farnsworth, Hiland R., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Yankee Fourdrinier machine. 1,858,546; May 17.

Fechtenburg, Jörgen F. H., Cheltenham Township, Montgomery County, Pa. Suction comb. 1,859,132; May 17.

Felk, Harrison, Emporia, Kans. Hay baler. 1,859,272; May 17.

Felix, Friedrich, and O. Albrecht, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Sulphonation products and making same. 1,858,662; May 17.

Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Floating snap fastener socket. 1,858,440; May 17.

Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Separable fastener. 1,858,441; May 17.

Ferric Engineering Company. (See Carrington, Frank G., assignor.)

Ferris, Walter, assignor to Oilgear Company, Milwaukee, Wis. Pressure pad. 1,858,296; May 17.

Fey, Edmund, San Francisco, Calif. Sound recording and record vending machine. 1,858,396; May 17.

Fiat Societa Anonima. (See Zerbi, Tranquillo, assignor.)

Figge, Emil. (See Keenan, J. D., and Figge.)

Finn, Anna M., administratrix. (See Finn, Hugh J.)

Finn, Hugh J., deceased, by A. M. Finn, administratrix, Brooklyn, N. Y. Submergible apparatus. Re18,472; May 17.

Finn, Robert R. (See Bysshe, E. T., and Finn.)

Finnegan, John F. (See Milliron, C. E., and Finnegan.)

Firestone Tire and Rubber Company, The. (See Brown, Roy W., assignor.)

Fischer, Charles A., Fort Worth, Tex. Gauge cock. 1,858,240; May 17.

Fischer, Hellmut, Berlin-Siemensstadt, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Production of beryllium oxide or beryllium hydroxide from technical alkali-beryllium double halides, in particular fluorides. 1,858,771; May 17.

Fischer, Martin, Zurich, Switzerland. Pneumatic clock system. 1,858,955; May 17.

Fisher Hosiery Co. Inc. (See Katzenmoyer, Harry E., assignor.)

FitzGerald, Alan S., Schenectady, and H. L. Palmer, Scotia, N. Y., assignors to General Electric Company. Circuit interrupter. 1,859,082; May 17.

Fitzgerald Manufacturing Company, The. (See Fitzgerald, Patrick J., assignor.)

Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Massaging apparatus. 1,858,922; May 17.

Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Handle and motor assembly for electric utility devices. 1,859,133; May 17.

Flachbart, Julius, Kent, Ohio. Tap forming machine. 1,858,733; May 17.

Fleming, Wells S., Portland, Oreg. Drain fixture. 1,858,268; May 17.

Flexible Truck Corporation. (See Taylor, Howard D., assignor.)

Florisson, Charles L. (See Langevin, P., and Florisson.)

Fluid Heat, Incorporated. (See Marshall, Albert E., assignor.)

Foltz, Raymond D., South Orange, N. J., assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,858,489; May 17.

Foren, Pehr A., assignor to Globe Steel Tubes Co., Milwaukee, Wis. Rolling seamless tubing. 1,858,990; May 17.

Fosdick Machine Tool Company, The. (See Chace, Norman B., assignor.)

Fostoria Glass Company. (See Creighton, John M., assignor.)

Fotakis, John, Detroit, Mich. Combination rear-view mirror set for automobiles. 1,858,734; May 17.

Foti, Charles, assignor of one-eleventh each to A. Saulle, M. Gindice, P. Scanga, F. Gatto, A. Castorina, Arnold, F. Nicolazzo, S. Runco, M. Nicolazzo, New Kensington, Pa., A. Chirino, and G. Fratongeli. License and card holder. 1,859,134; May 17.

Frandsen, Lars, Los Angeles, Calif. Hollow brick and tile molding machine. 1,858,620; May 17.

Frank, Frederick C., assignor to Bendix Brake Company, South Bend, Ind. Wheel. 1,858,663; May 17.

Frankel, Howard, et al. (See Corcoran, Laurence M., assignor.)

Fratongeli, Giuseppe, et al. (See Foti, Charles, assignor.)

Frederickson, Otto A., Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y. Park cable. 1,858,772; May 17.

Freedman, Benjamin H., assignor to Hudson Holding Corporation, New York, N. Y. Match package. 1,858,704; May 17.

French Oil Mill Machinery Co., The. (See Stacy, Thomas F., assignor.)

Frey, Albert A., Forest Hills, Pa., and G. H. Cole, Middletown, Ohio, assignor to Westinghouse Electric and Manufacturing Company. Magnetic alloy. 1,858,442; May 17.

Frey, Charles N. (See Gore, H. C., Józsa, and Frey.)

Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,858,397; May 17.

Fried. Krupp. Aktiengesellschaft. (See Jacob, Max, assignor.)

Fried. Krupp Aktiengesellschaft. (See Lehmann, K. A., and Breitling, assignors.)

Friedel, Georg, Aschaffenburg, Germany. Emergency closure or lock for weirs, sluice gates, and the like. 1,858,664; May 17.

Friedmann, Alex. (See Deutsch, Hans, assignor.)

Frigidaire Corporation. (See Reeves, Donald H., assignor.)

Frolich, Per K., Cambridge, Mass., assignor to Standard Oil Development Company. Treating of hydrocarbon materials. 1,858,822; May 17.

Fromm, Willy, Frankfort-on-the-Main, Germany, assignor to United Shoe Machinery Corporation, Paterson, N. J. Abrading machine. 1,858,297; May 17.

Frost, Carl A., Chicago, Ill. Decorative balloon. 1,858,991; May 17.

Frost, William M., Spokane, Wash. Insect electrocutor. 1,858,923; May 17.

Fuchs, Henry, assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,858,490; May 17.

Fuchs, Rudolf, Eggenberg, near Graz, Austria. Shoe nail for mountain shoes. 1,859,135; May 17.

Fulk, George L., Mentor, assignor to The Overfold Company, Chardon, Ohio. Feed mechanism for sheet material. 1,858,443; May 17.

Furber, Frederick M., deceased, by S. R. Cutler, administrator, Revere, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe machine. 1,858,584; May 17.

Furnace Engineering Company. (See Coutant, Jay G., assignor.)

G & W Electric Specialty Co. (See Williams, Pearson F., assignor.)

Gaisman, Henry J., assignor, by mesne assignments, to Gillette Safety Razor Company, New York, N. Y. Safety razor. 1,859,083; May 17.

Gallimore, Keith F., assignor to Giddings & Lewis Machine Tool Co., Fond du Lac, Wis. Boring machine. 1,858,491; May 17.

Gantnier, Frank J., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Photographic film cartridge. 1,858,585; May 17.

Gardiner, Henry C., assignor to Anaconda Copper Mining Co., Anaconda, Mont. Method and product for preserving timber. 1,859,203; May 17.

Garfield, Lewis E. (See Scott, F. L., and Garfield.)

Garrett, Richard M., Yonkers, N. Y. Canning milk and other products. 1,858,547; May 17.

Garrison, Forrest C., assignor to Oscar C. Rixon Co., Chicago, Ill. Threshold. Des. 86,952; May 17.

Gatto, Ferdinando, et al. (See Foti, Charles, assignor.)

Gebhard, Louis A., and C. F. Rudolph, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Inductance system. 1,858,492; May 17.

Geddes, George, Detroit, Mich. Washing apparatus. 1,858,444; May 17.

General Aniline Works, Inc. (See Hentrich, W., Tietze, Ossenbeck, and Backes, assignors.)

General Aniline Works, Inc. (See Hoffa, Erwin, assignor.)

General Aniline Works, Inc. (See Immerheiser, C., and Zschimmer, assignor.)

General Aniline Works, Inc. (See Laska, L., and Zitscher, assignors.)

General Aniline Works, Inc. (See Maennchen, K. F., and Hummerich, assignors.)

General Cable Corporation. (See Strait, Wilber E., assignor.)

General Electric Company. (See Baker, Walter R. G., assignor.)

General Electric Company. (See Beekman, Royce A., assignor.)

General Electric Company. (See Davies, Leonard J., assignor.)

General Electric Company. (See Fitzgerald A. S., and Palmer, assignors.)

General Electric Company. (See Hill, Charles H., assignor.)

General Electric Company. (See Hoxie, Charles A., assignor.)

General Electric Company. (See Hurwitz, Eugen, assignor.)

General Electric Company. (See Summers, Claude M., assignor.)

General Foods Corporation. (See Douglas, Robert, assignor.)

General Health Corporation. (See Brown, Franklin, assignor.)

General Motors Corporation. (See Brittain, R. J., jr., and Young, assignors.)

George, George C., Seattle, Wash., assignor to J. R. Dodson, Portland, Oreg. Fluid pressure brake retainer valve mechanism. 1,858,493; May 17.

Gerin, Jacques, Levallois-Perret, France. Wing surface with automatically variable curvature. 1,858,924; May 17.

German, Howard M., Crafton, assignor to Universal Steel Company, Bridgeville, Pa. Hack saw blade. 1,858,705; May 17.

Gerretsen, Frederik C., Groningen, Netherlands. Biological production of butyl alcohol and acetone. 1,858,808; May 17.

Gerry, Martin H., 3d, San Francisco, and C. J. Brooks, Redwood City, assignors to E. H. Edwards Co., San Francisco, Calif. Apparatus for heat treating wire. 1,858,398; May 17.

Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.)

Gibson, George M., assignor to Woodrow Washing Machine Company, Pella, Iowa. Agitator for washing machines. 1,859,033; May 17.

Gibson, John L., Brooklyn, N. Y. Fluid circulating device for boiler tubes. 1,858,665; May 17.

Gibson, Samuel H., Lakewood, assignor to The Fanner Manufacturing Company, Cleveland, Ohio. Chaplet. 1,858,494; May 17.

Giddings & Lewis Machine Tool Co. (See Gallimore, Keith F., assignor.)

Gilbert, Charles E., New York, N. Y. Method of and apparatus for displaying rugs and other articles. 1,858,269; May 17.

Giles, Dean R., Kansas City, Mo., assignor of twenty-four and one-half per cent to J. S. Bryan and twenty-four and one-half per cent to F. Heenan, Oklahoma City, Okla. Velocity retarding device for fluid conveying pipe lines. 1,858,241; May 17.

Giles, Julian A., Derby, Conn. Box machine. 1,858,706; May 17.

Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)

Gillette Safety Razor Company. (See Muros, Joseph, assignor.)

Gillette Safety Razor Company. (See Thompson, R. E., and Smith, assignors.)

Gilmer, John H., North Vernon, Ind. Self-contained impulse actuated internally propelled power unit. 1,858,666; May 17.

Giudice, Mendotti, et al. (See Foti, Charles, assignor.)

Gleason Works. (See White, Herbert J., assignor.)

Glemming, Henry. (See Sondersen, H., and Glemming.)

Globe Steel Tubes Co. (See Foren, Pehr A., assignor.)

Glover, James A., Wichita, Kans. Deep well pump. 1,858,270; May 17.

Gneiss, Guss H. (See Chamberlain, G. L., and Gneiss.)

Godsey, Claude E. (See Thompson, James H., assignor.)

Goebert, Elmer C., U. S. Army, Philadelphia, Pa., and T. A. Conlon, Silver Spring, Md. Gun carriage. 1,858,495; May 17.

Goepfrich, Rudolph A., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,858,667; May 17.

Goldberg, Jacob M. (See Goldberg, Louis B., N., W., and J. M.)

Goldberg, Louis B., N., W., and J. M., Denver, Colo. Moving picture reel. 1,858,586; May 17.

Goldberg, Nathan. (See Goldberg, Louis B., N., W., and J. M.)

Goldberg, William. (See Goldberg, Louis B., N., W., and J. M.)

Goodbar Manufacturing Corporation. (See Dorr, Oscar S., assignor.)

Goodman Manufacturing Company. (See Roozee, Peter, assignor.)

Goodman Manufacturing Company. (See Sloane, William W., assignor.)

Goodrich, B. F., Company, The. (See Cook, H. E., and Richards, assignors.)

Goodrich, B. F., Company, The. (See Merrill, Allan B., assignor.)

Goodrich, B. F., Company, The. (See Semon, Waldo L., assignor.)

Goodrich, Chauncey M., Windsor, Ontario, Canada. Short leg tower extension. 1,858,925; May 17.

Goodrich, Chauncey M., Windsor, Ontario, Canada. Truss. 1,859,136; May 17.

Goodsell, Elwin M. (See Goodsell, James A., assignor.)

Goodsell, James A., assignor of one-half to E. M. Goodsell, Hudson, Mich. Dispenser for tobacco or granular material. 1,858,735; May 17.

Gore, Herbert C., Scarsdale, S. Józsa, and C. N. Frey, New York, N. Y., assignors to Standard Brands Incorporated, Dover, Del. Textile treating process and composition. 1,859,084; May 17.

Goss, Harold J., assignor to The International Paper Box Machine Company, Nashua, N. H. Envelope machine. Re18,463; May 17.

Gossard, H. W., Co., The. (See Cunningham, Katherine E., assignor.)

Graef, John M., Neenah, assignor to Valley Iron Works Company, Appleton, Wis. Automatic take-up motion for looms. 1,859,034; May 17.

Grant, John. (See Hazlett, Walter H., assignor.)

Grant, William F., Newport News, Va., assignor to Newport News Shipbuilding and Dry Dock Company. Valve seal. 1,858,587; May 17.

Grau, Herbert E., Los Angeles, and A. J. Colmerauer, Redondo Beach, Calif. Oil tool device. 1,858,926; May 17.

Gray, Elmer E., Saugus, Mass. Belt. 1,859,204; May 17.

Gray, Leonard G., Decatur, Ill. Tile counter. Des. 86,953; May 17.

Gray, Tom F., and E. A. Bolton, assignors to Victory Valves Limited, Adswood, Stockport, England. Making valves. 1,858,927; May 17.

Great Western Fuse Company. (See La Mar, Frank C., assignor.)

Greenewalt, Crawford H., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Dehydrogenation process for making esters. 1,858,823; May 17.

Greenough, Henry B., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Punching apparatus. 1,858,496; May 17.

Grether, Ernest F., and G. H. Coleman, assignor to The Dow Chemical Company, Midland, Mich. Azo dyestuffs derived from amino-ethers of hydroxydiaryls. 1,858,928; May 17.

Griffin, William M., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 86,954; May 17.

Griffin, William M., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 86,955; May 17.

Griggs, Stephen A. (See Byron, Kenneth M., assignor.)

Griswold Manufacturing Company, The. (See Buchanan, Charles A., assignor.)

Grothey, Ivan W., Laconia, N. H., assignor to Scott & Williams, Incorporated, New York, N. Y. Gap closing device for latch rings of knitting machines. 1,859,137; May 17.

Gruetter, John R., Cleveland, Ohio, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Bottle-charging mechanism. 1,859,238; May 17.

Guggenheim, Max M., Saginaw, Mich., and G. R. Baker, Willesden, London, England, assignors to Baker Perkins Company, Inc., Saginaw, Mich. Confectionery. 1,859,205; May 17.

Gulf Production Company. (See Rogers, Walter F., assignor.)

Gunn, Charles H., Burlingame, Calif. Paper folding machine. 1,858,621; May 17.

Gurney, Erving R., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Multiple transmission shaft drive for motor vehicles. 1,858,773; May 17.

Gysin, Sebastian, Milwaukee, Wis. Motor control system. 1,858,622; May 17.

Haage, Konrad, and A. Pflüger, Esslingen-on-the-Neckar, Germany. Mechanical percussive tool. 1,858,707; May 17.

Hass, Henry B., and J. R. Marshall, La Fayette, Ind. Manufacture of alkyl cyanides. 1,859,140; May 17.

Haas, Joseph F., Forest Park, Ill., assignor, by mesne assignments, to Electric Tamper & Equipment Company, Ludington, Mich. Vibrating device. 1,858,855; May 17.

Habe, Frank J., Caldwell, Kans. Cylinder and concave for threshing machines. 1,859,138; May 17.

Hadley, Egbert C., Southport, Conn., assignor to Remington Arms Company. Article spacer for packing boxes. 1,858,856; May 17.

Hadley, Harlan A., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Scale bearing. 1,858,588; May 17.

Hagemann, Louis F., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Antipilfer record machine. 1,858,589; May 17.

Hakim, Nicholas R., New York, N. Y. Shoe covering with cross-lace ornamentation. Des. 86,956; May 17.

Hakim, Nicholas R., New York, N. Y. Shoe covering with zigzag-lace ornamentation. Des. 86,957; May 17.

Hakim, Nicholas R., New York, N. Y. Shoe covering with single-lace ornamentation. Des. 86,958; May 17.

Hale & Kilburn Co. (See Hansen, Conrad T., assignor.)

Hall, Arthur J., Appleton, Wis. Comparator. 1,859,035; May 17.

Hall, Everett J., New York, N. Y., assignor to Metals Disintegrating Company, Inc., Elizabeth, N. J. Method and material for cleaning drain pipes and for other uses. 1,859,036; May 17.

Hall, Lee, assignor to Claude Neon Federal Company, Chicago, Ill. Refracting luminous tubes. 1,858,497; May 17.

Haller, Charles W. (See Braddock, W. J., and Haller.)

Haller, Charles W., assignor to Wheeling Bronze Casting Company, Wheeling, W. Va. Pickling apparatus for rods, tubes and bars. 1,859,085; May 17.

Hambuechen, Carl, Belleville, Ill., assignor to The B-L Electric Manufacturing Company, St. Louis, Mo. Rectifier. 1,858,445; May 17.

Hamm, Fred, Martin's Ferry, Ohio, assignor to Wheeling Bronze Casting Company. Pickling apparatus. 1,859,086; May 17.

Hanlon, Michael J., Weehawken, N. J. Bow construction for ships. 1,859,139; May 17.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Feeding device for rock drills. 1,858,774; May 17.

Hansen, Charles C., Easton, assignor to Ingersoll-Rand Company, Jersey City, N. J. Hose coupling. 1,858,992; May 17.

Hansen, Conrad T., Brywood, assignor to Hale & Kilburn Co., Philadelphia, Pa. Refrigeration cabinet. 1,859,239; May 17.

Harness, Leroy R., and S. A. Bokovoy, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company: Regulator. 1,858,271; May 17.

Harris, Russell S., St. Mary's, Ontario, Canada. Pencil sharpener. 1,858,891; May 17.

Harry, Robert J., Homestead, Pa. Track wheel. 1,858,929; May 17.

Harsem, Peter A., Oslo, Norway, assignor to Imperator Hestesko A/S, Tonsberg, Norway. Arrangement for securing elastic articles to rigid supports. 1,858,326; May 17.

Hart, Frank R., Pacific Grove, Calif. Combination instrument-holder, waste-vessel and adapter. 1,858,668; May 17.

Hartford-Empire Company. (See Canfield, Robert W., assignor.)

Hartford-Empire Company. (See Willetts, Paul G., assignor.)

Hartmann, Charles, Company. (See Burks, John E., assignor.)

Hartmann Trunk Company. (See Ritter, Julius, jr., assignor.)

Hathaway, Warner, and K. Slidell, Madison, Wis., assignors, by mesne assignments, to American Face Brick Research Corporation. Kiln for producing cellular blocks. 1,858,499; May 17.

Hatcher, James L., U. S. Army, Winchester, Va. Bolt operating mechanism for machine guns. 1,858,498; May 17.

Haug, Charles F., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Candy bar. Des. 86,959; May 17.

Haugh, Charles J., Alma, Nebr. Attachment for dirt moving machines. 1,858,736; May 17.

Haupt, William E., Philadelphia, Pa. Testing device. 1,858,446; May 17.

Hays, Joseph I., Jackson, Tenn. Channeling machine. 1,858,327; May 17.

Hazel-Atlas Glass Co. (See Ross, James W., assignor.)

Hazlett, Walter H., assignor to J. Grant, Los Angeles, Calif. Underreamer. Re18,473; May 17.

Heberlein & Co., A. G. (See Heberlein, G., and Bodmer, assignors.)

Heberlein, Georges, and A. Bodmer, assignors to Heberlein & Co., A. G., Wattwil, Switzerland. Producing cellulose esters. 1,858,993; May 17.

Heenan, Frank, et al. (See Giles, Dean R., assignor.)

Heidelberg, Victor, Bensberg, near Cologne, assignor to Motorenfabrik Deutz, Aktiengesellschaft, Cologne-Deutz, Germany. Method and high compression internal combustion engine for working with gas and liquid fuel. 1,858,824; May 17.

Hein, Frank J. (See Ream, H. S., jr., and Hein.)

Heine, Charles A. (See Cleveland, C. H., Heine, and Allison.)

Heineman, Oscar, Corporation. (See Morey, Frank E., assignor.)

Heinicke, Herbert M. E. (See Beath, C. P., and Heinicke.)

Heinicke, Herbert M. E., Elgin, Ill., assignor to Western Electric Company, Inc., New York, N. Y. Producing magnetic materials. 1,859,087; May 17.

Heisler, Mabel K., Orwigsburg, Pa. Food confection. 1,859,206; May 17.

Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,858,447; May 17.

Helstrom, Olaf. (See Bufmyer, E. D., and Helstrom.)

Hemphill Company. (See Lawson, John and R. H., assignors.)

Henderson, Herbert V., assignor to Chrysler Corporation, Detroit, Mich. Radiator shell. Des. 86,960; May 17.

Henderson, William, Mineola, N. Y. Came and protected stay bar. 1,858,775; May 17.

Hendry, William F., Ossining, N. Y., assignor, by mesne assignments, to Manhattan Electrical Supply Company, Inc., Jersey City, N. J. Electric discharge device. 1,858,737; May 17.

Henion, Walter R., assignor to Boe Manufacturing Company, Minneapolis, Minn. Oil fountain faucet. 1,858,590; May 17.

Henney Motor Company. (See Van Deest, Henry, assignor.)

Henshall, Percival P. (See Werft, E. L., Ewald, and Henshall.)

Hentrich, Winfrid, Wiesdorf-on-the-Rhine, E. Tietze, Cologne-on-the-Rhine, A. Ossenbeck, Cologne-Mulheim, and P. Backes, Cologne-on-the-Rhine, assignors to General Aniline Works Inc., New York, N. Y. Diazo-amino compounds. 1,858,623; May 17.

Hepperle, Heinrich, Mulheim, Ruhr, Germany. Molding machine. 1,858,956; May 17.

Hermanns, Margaret, Merrick, N. Y. Fastener for shoulder straps. 1,858,776; May 17.

Hernis, Guy E., Stevens Point, Wis. Cigar container. 1,858,738; May 17.

Hescock, Ethan N., Westfield, N. J., assignor to Henry B. Newhall Corporation, Garwood, N. J. Cable reel and metal lagging. 1,858,825; May 17.

Hess, Arnold and E., Solothurn, Switzerland. Mechanism for operating folding motor car tops. 1,858,624; May 17.

Hess, Emil. (See Hess, Arnold and E.)

Hetherington, Edwin, Cedar Rapids, Iowa. Child's teeter board. 1,858,892; May 17.

Hettrick Manufacturing Company, The. (See Smith, Isidore P., assignor.)

Hevi Duty Electric Company. (See Cooley, William B., assignor.)

Heyer, Don. (See Kendall, D., and Heyer.)

Heyer, Frederic K., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Lock. 1,858,893; May 17.

Heylandt, Christian W. P., Berlin-Britz, Germany. Method and device for the regasification of liquefied gases. Re18,476; May 17.

Heymann, Hans, and E. Lehr, assignor to the Firm: Carl Schenck, Eisengiesserei und Maschinenfabrik, G. m. b. H., Darmstadt, Germany. Conveying of material. 1,858,328; May 17.

Hill, Charles H., Schenectady, N. Y., assignor to General Electric Company. Electric switching apparatus. 1,859,088; May 17.

Hill, Charles H., Drexel Hill, Pa., assignor to General Electric Company. Electrical apparatus. 1,859,260; May 17.

Hilscher, Curt, Chemnitz, Germany. Jacquard-design-mechanism for flat knitting machines. 1,858,777; May 17.

Hinchley, John W., London, England, assignor to The African Tin Recovery Company, Limited, Port Elizabeth, South Africa. Recovery of tin from scrap tinned plate and like tin-carrying material. 1,858,669; May 17.

Hinderliter, Frank J., Tulsa, Okla. Method of and rotary socket for fishing objects from wells. 1,858,500; May 17.

Hinderliter, Frank J., Tulsa, Okla. Apparatus for cementing well casings. 1,858,501; May 17.

Hinnekens, Florent, Prospect Park, N. J. Tentering frame clip. 1,858,502; May 17.

Hinson, George W. (See Woodward, Orville E., assignor.)

Hodgson, Howard E., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Snap operating mechanism. 1,858,242; May 17.

Hoe, R., & Co. (See Clauberg, Herman P., assignor.)

Hoeftmann, Alexander O., O. A. McNamee, and J. J. Morrison, Worcester, Mass., assignors to The American Steel and Wire Company of New Jersey. Shipping cable. 1,859,141; May 17.

Hoersting, Frank J., Dayton, Ohio. Humidifier. 1,858,329; May 17.

Hoffa, Erwin, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. 3.5-dihalogen-1-methyl-benzene-2-carboxylic acids and preparing the same. 1,858,625; May 17.

Hoffmeister, Herman, Klein-Qunestedt, near Halberstadt, Germany. Potato gathering machine. 1,858,708; May 17.

Hofrichter, Charles, Bronsdorf, Germany. Wagon tilt. 1,858,739; May 17.

Holed-Tite Packing Corporation. (See Farnham, Ralph A., assignor.)

Holland, Norman N., New York, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Friction closure cap. 1,858,826; May 17.

Hollman, Peter I., assignor to Geo. D. Roper Corporation, Rockford, Ill. Broiler oven. 1,858,503; May 17.

Holmes, Franklin T., Springfield, assignor to Tryco Products, Inc., Westfield, Mass. Valve. 1,859,089; May 17.

Holte, Harold O., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Signaling apparatus. 1,859,090; May 17.

Holtzer-Cabot Electric Company, The. (See Duross, John, assignor.)

Hookless Fastener Company. (See Whitney, Ernest M., assignor.)

Hoover, Augustus L. (See Hoover, Thomas A., assignor.)

Hoover Company, The. (See Burkhardt, Chandos, assignor.)

Hoover Company, The. (See Lucke, Charles E., assignor.)

Hoover, Thomas A., Oakland, assignor of one-third to A. L. Hoover, Los Angeles, one-third to I. Bensberg, Los Gatos, and one-third to E. Putnam, Oakland, Calif. Vehicle suspension. 1,858,930; May 17.

Horne, Andrew, Uniontown, Pa. Singletree. 1,859,142; May 17.

Horni, Paul P., and R. M. Sutphen, Newark, N. J.; said Sutphen assignor to said Horni. Light reflecting unit. 1,858,298; May 17.

Hörning, Franz, Steinheim, Germany. Installation for heating the ground. 1,858,330; May 17.

Horrocks, Harry S. (See Ames, E. W., and Horrocks.)

Horton, Allen A., Detroit; K. H. Horton, Plymouth, and Detroit Trust Company, successor to Detroit & Security Trust Company, executors, assignors to Burroughs Adding Machine Company, Detroit, Mich. Support and housing for calculating machines. 1,858,778; May 17.

Horton, Kathleen H., et al., executors. (See Horton, Allen A.)

Hosbein, Louis H., Winnetka, Ill., assignor to M. H. Detrick Company, Chicago, Ill. Furnace closure. 1,858,504; May 17.

Hovey, Rex. W., St. John, New Brunswick, Canada. Apparatus for making pulp. 1,858,591; May 17.

Howe, James F., Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey. Wire rope thimble. 1,859,143; May 17.

Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Photographic camera. 1,859,207; May 17.

Howell, W. H., Company, The. (See Ericson, Philip E. G., assignor.)

Hoxie, Charles A., Alplaus, N. Y., assignor to General Electric Company. Film marking apparatus. 1,859,091; May 17.
Hudson Holding Corporation. (See Freedman, Benjamin H., assignor.)
Hudson Motor Car Company. (See Mottashed, J. C., and Payne, assignors.)
Hughes, Ruth C., Topeka, Kans. Shield. 1,858,331; May 17.
Hughes Tool Company. (See Scott, Floyd L., assignor.)
Hughes Tool Company. (See Scott, F. L., and Baggett, assignors.)
Hughes Tool Company. (See Scott, F. L., and Garfield, assignors.)
Hummerich, Franz. (See Maennchen, K. F., and Hummerich.)
Humphner, Ferdinand W., Oak Park, assignor to Mid-States Gummed Paper Co., Chicago, Ill. Veneer panel and forming. 1,858,957; May 17.
Hunt, J. Harold, assignor to Motor Wheel Corporation, Lansing, Mich. Wire wheel hub assembly. 1,858,827; May 17.
Huntley, Reginald C., assignor to Sturgis Posture Chair Company, Sturgis, Mich. Stand or table. 1,858,857; May 17.
Hurwitz, Eugen, Berlin, Germany, assignor to General Electric Company. Bases for incandescent lamps and similar devices. 1,859,092; May 17.
Hurwitz, Hermann, & Co. (See Weide, Rudolph, assignor.)
Huttinger, Charles A., Lakewood, assignor to Acme Rayon Corporation, Cleveland, Ohio. Treating fine filamentous thread in package form. 1,859,037; May 17.
Hyde, Ralph C. (See van Wyck, C., and Hyde.)
I. G. Farbenindustrie Aktiengesellschaft. (See Ernst, O., and Sponsel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Korten, Ernst, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Noack, E., and Schubert, assignors.)
Illinois Tool Works. (See Olson, Carl G., assignor.)
Immerheiser, Carl, and B. Zschimmer, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Manufacture of pigment colors. 1,858,828; May 17.
Imperator Hestesko A/S. (See Harsem, Peter A., assignor.)
Imperial Chemical Industries. (See d'Leny, W. C., and Park, assignors.)
Industrial Patents Corporation. (See Kellerman, Johan A., assignor.)
Industrial Patents Corporation. (See McKee, H. H., and Walter, assignors.)
Industrial Wire Cloth Company. (See Zech, Alfred, assignor.)
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Ingersoll, Robert N., Longmeadow, assignor to Milton Bradley Company, Springfield, Mass. Crayon label. Des. 86,961; May 17.
Ingraham, E. Co., The. (See Carlson, Elof L., assignor.)
Intermetal Corporation. (See Jenness, Leslie G., assignor.)
International Harvester Company. (See Benjamin, Bert R., assignor.)
International Harvester Company. (See Johnston, Edward A., assignor.)
International Harvester Company. (See Kane, Paul, assignor.)
International Harvester Company. (See Pearson, Charles, assignor.)
International Harvester Company. (See Raney, Clemma R., assignor.)
International Harvester Company. (See Raney, C. R., and Millard, assignors.)
International Harvester Company. (See Smith, Daniel W., assignor.)
International Motor Company. (See Erskine, Clyde, assignor.)
International Motor Company. (See Gurney, Erving R., assignor.)
International Motor Company. (See Masury, Alfred F., assignor.)
International Motor Company. (See Miller, Ferdinand, assignor.)
International Paper Box Machine Company, The. (See Goss, Harold J., assignor.)
International Projector Corporation. (See Dina, Augusta, assignor.)
International Silver Company. (See Leech, John, assignor.)
Ireland, Thomas H., Rockville Center, N. Y. Dual electric circuit control device. 1,858,779; May 17.
Irgens, Finn T., Wauwatosa, assignor to Outboard Motors Corporation, Milwaukee, Wis. Handle mounting. 1,859,038; May 17.
Iron Firearm Manufacturing Company. (See Parker, Cyrus J., assignor.)
Ives Corporation, The. (See Johnson, C. R., and Thorn, assignors.)
Ives, Edward L., assignor to H. A. Brassert & Company, Chicago, Ill. Making malleable iron. 1,858,548; May 17.
Jacob, Max, Essen, assignor to Fried. Krupp, Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Cash register. 1,858,626; May 17.
Jacobi, Edward N., trustee. (See Jacobi, Edward N., assignor.)
Jacobi, Edward N., trustee. (See Mantz, Harold A., assignor.)
Jacobi, Edward N., assignor to E. N. Jacobi, trustee, Milwaukee, Wis. Automatic lighter for burners. 1,858,505; May 17.
Jacobs, Reed E., Oakland, Calif. Electric machine. 1,858,506; May 17.
Jacobsen Manufacturing Co. (See Carlson John A. E., assignor.)
Jacquard Knitting Machine Co. (See Sirmay, Julius, assignor.)
Janas, Milo, Elyria, Ohio. Toy wagon. 1,858,858; May 17.
Jeffrey Manufacturing Company, The. (See Ellestrom, George O., assignor.)
Jenner, Ralph L., Le Roy, N. Y., assignor to Lapp Insulator Company. Dead end clamp. 1,858,549; May 17.
Jenness, Leslie G., assignor to Intermetal Corporation, New York, N. Y. Treatment of bauxite, clay, and intermediate aluminum bearing ores. 1,858,272; May 17.
Jenney, Sherman, New York, N. Y. Ravioli machine. 1,858,507; May 17.
Johanning, Carlos F., Denison, Tex. Auxiliary base and switch attachment for telephones. Re18,462; May 17.
John, Wesley E., Johannesburg, Transvaal, Union of South Africa. Manufacture of means for producing a straight line motion of lenses in cinematograph apparatus or of other objects. 1,858,670; May 17.
Johnson, Charles R., Fairfield, and W. E. Thorn, assignors to The Ives Corporation, Bridgeport, Conn. Removable headlight for toy locomotives. 1,858,448; May 17.
Johnson, Edward E., assignor to Edward E. Johnson, Incorporated, St. Paul, Minn. Well screen. 1,858,592; May 17.
Johnson, Edward E., Incorporated. (See Johnson, Edward E., assignor.)
Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Pin fastener. 1,859,254; May 17.
Johnson, Lawrence E., Melrose, and E. C. Leach, West Peabody, Mass., assignors to Lynn Products Co., Lynn, Mass. Fuel oil burner. Re18,464; May 17.
Johnson, Robert H., Washington, D. C. Nut lock. 1,858,709; May 17.
Johnston, Edward A., Chicago, Ill., assignor to International Harvester Company. Cotton picker spindle. 1,859,144; May 17.
Johnston, Joseph H., Port Angeles, Wash. Washer. 1,858,894; May 17.
Jones, Barton, Los Angeles, Calif. Flow-meter construction. 1,858,399; May 17.
Jones & Lamson Machine Company. (See Bysshe, E. T., and Finn, assignors.)
Jordan, Stroud, Brooklyn, assignor to Ross and Rowe, Inc., New York, N. Y. Food product and producing the same. 1,859,240; May 17.
Jost, Fritz, Herne-Bornig, Germany, assignor to Patentverwertungs A. G. "Alpina", S. A. pour l'Exploitation de Brevets "Alpina", Patents Exploitation Cy. "Alpina" Ltd., Basel, Switzerland. Oxidation of ammonia. 1,858,740; May 17.
Jost, Fritz, Herne-Bornig, Germany, assignor to Patentverwertungs A. G. "Alpina", S. A. pour l'Exploitation de Brevets "Alpina", Patents Exploitation Cy. "Alpina", Ltd., Basel, Switzerland. Catalyzer. 1,858,741; May 17.
Joyce, Bryan P., Dover, N. J. Counterpoise mechanism. 1,858,829; May 17.
Joyce, Bryan P., Davenport, Iowa. Packing. 1,859,039; May 17.
Józsa, Stephen. (See Gore, H. C., Józsa, and Frey.)
Juergens, Winfred H., Cleveland, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Trolley frame. 1,858,895; May 17.
Jungers, John J., Attica, N. Y. Bean sorter. 1,859,093; May 17.
Justin Leather Goods Company, The, et al. (See Day, Luther A., assignor.)
Justrite Manufacturing Company. (See Raster, Walther, assignor.)
Kahle, Belle J., administratrix. (See Kahle, Clay O.)
Kahle, Clay O., deceased, Seattle, Wash.; B. J. Kahle, administratrix. Fishing gear. 1,858,550; May 17.
Kahn, Maurice, Paris, France. Manufacture and extraction of nitrogenous products from products of animal origin. 1,858,362; May 17.
Kalamazoo Paper Box Company. (See Poppe, Edward W., assignor.)
Kane, Paul, Neuss, Germany, assignor to International Harvester Company. Harvester. 1,859,208; May 17.
Katz, Ernst, Vienna, Austria. Producing leather imitation, particularly an imitation of the so-called antique leather. 1,858,859; May 17.
Katzenmoyer, Harry E., Rosedale, assignor to Fisher Hosiery Co. Inc., Reading, Pa. Method and apparatus for cutting off float threads. 1,859,094; May 17.
Katzenmoyer, Harry E., Rosedale, assignor to Fisher Hosiery Co. Inc., Reading, Pa. Package box. 1,859,095; May 17.

Katzenmoyer, Harry E., Rosedale, assignor to Fisher Hosiery Co. Inc., Reading, Pa. Hosiery drying form. 1,859,096; May 17.
Kaufman, Abraham, Bronx, N. Y. Window guard. 1,858,671; May 17.
Kaufmann, Antoine A., Geneva, Switzerland. Manufacture of glycidic acids. 1,858,551; May 17.
Kaumagraph Company. (See Winthrop, Stanley L., assignor.)
Kayser, Otto B., Lynnville, Iowa. Shirt and sock support. 1,859,097; May 17.
Keenan, John D., and E. Figge, assignors to American Steel Chase Co., Inc., New York, N. Y. Power cutting machine for printers' borders. 1,858,552; May 17.
Keene, Guy L., Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Marking machine. 1,858,273; May 17.
Kellermann, Johan A., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Metal smoke stick for frankfurts. 1,859,040; May 17.
Kelley, Charles J., Anselmo, Nebr. Poultry brooding house. 1,858,710; May 17.
Kelly, Edward A., Indianapolis, Ind. Deposit book. 1,859,041; May 17.
Kelly, Patrick J. (See Martin, A. R., Kelly, and Repath.)
Kendall, Douglas, and D. Heyer, Hollywood, Calif. Exercising machine. 1,858,593; May 17.
Kerkhoff, Frank A. (See Terrell, H. C., and Kerkhoff.)
Kern, Fernando C. (See Kern, Ludwig, F. C., and F. E.)
Kern, Frederick E. (See Kern, Ludwig, F. C., and F. E.)
Kern, Ludwig, F. C., and F. E., Webster Groves, Mo. Reducing oxide ores. 1,858,274; May 17.
Kern, Ernest N., Bloomington, Ill. Chain propeller. 1,859,145; May 17.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler and superheater. 1,858,363; May 17.
Kharasch, Morris S., College Park, Md. Organic seleno compound. 1,858,958; May 17.
Kignell, Erik H. (See Kignell, Erik P. and E. H.)
Kignell, Erik P., Stockholm, Sweden, and E. H. Kignell, Faymoureau, France, assignors to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden. Regenerative heating device. 1,858,508; May 17.
Kirkland, Harold R., New York, N. Y. Signal lamp. 1,858,994; May 17.
Kirsch, Benjamin. (See Pardee, H. S., and Kirsch.)
Kjerulff, Anton P., Lake Charles, La. Pipe and sewer rod. 1,858,509; May 17.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Detachable spindle drive and feed unit. 1,858,995; May 17.
Knight, George D., Redwood City, assignor to Emory Winship, San Francisco, Calif. Intaglio ink composition. 1,858,449; May 17.
Knopp, Ernest. (See Kunc., F., and Knopp.)
Knopp, Ernest, Bronx, and F. Kunc., New Rochelle, assignors to H. O. Boehme, Inc., New York, N. Y. Telegraphic recorder. 1,858,510; May 17.
Kobel, Ernst, Ennetbaden, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rectifier. 1,858,275; May 17.
Koch, Frederick H. (See Schroeder, H. D., and Koch.)
Koch, Leonhard, Oelsnitz in Vogtland, Germany. Weft pile carpet. 1,858,959; May 17.
Koehler, Frederick W., Wilkinsburg, Pa. Oxygen therapy apparatus. 1,858,400; May 17.
Koenig, Walter, jr., Hackensack, N. J., assignor to American Telephone and Telegraph Company. Multiple slide wire potentiometer. 1,858,364; May 17.
Kohlsaat, Ernst, Philadelphia, Pa. Permanent window screen. 1,859,209; May 17.
Kolar, John J., West Bend, Wis. Chuck. 1,859,042; May 17.
Koppers Company, The. (See Albright, Alan R., assignor.)
Korn, Harry, Brooklyn, N. Y., assignor to Artcraft Iron Works, Inc. Beverage set. 1,858,299; May 17.
Korten, Ernst, Fechenheim, near Frankfort-on-the-Main, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacturing ar-tetrahydronaphthols and their esters. 1,858,627; May 17.
Kratoville, John C., Ironton, Ohio, assignor to The Barrett Company, New York, N. Y. Waterproofing composition and preparing. 1,858,830; May 17.
Krauer, Karl. (See Mayer, B., Siebenbürger, and Krauer.)
Krauer, Karl, Basel, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Halogen containing dyestuffs of the dibenzanthrone series and making same. 1,859,146; May 17.
Kremmling, Otto, Hamersleben, near Oschersleben, Germany. Automatic dough dividing and working machine. 1,858,831; May 17.
Kriger, Paul, Berlin, Germany. Parasol or umbrella. 1,858,960; May 17.
Kruse, Albert J., Fredericksburg, Tex. Baling press. 1,858,742; May 17.
Kuczynski, Frank B., Leavenworth, Kans. Apparatus for preserving natural foodstuffs. 1,859,147; May 17.
Kunc, Frank. (See Knopp, E., and Kunc.)
Kunc, Frank, New Rochelle, and E. Knopp, Bronx, assignors to H. O. Boehme, Inc., New York, N. Y. Automatic telegraph keying head. 1,858,511; May 17.
Kunze, Werner, Waldmannslust, near Berlin, assignor to Firm Elektrizitatsgesellschaft "Sanitas" m. b. H., Berlin, Germany. Method of and apparatus for recording the frequency of impulses. 1,858,332; May 17.
Kurz, Guenther P. V., Seattle, Wash. Water amusement device. 1,859,267; May 17.
Kurz, Heinrich, Duisburg-Ruhrort, Germany. Apparatus for the manufacture of rails with hardened heads. 1,858,860; May 17.
Kusche, Walter, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin Germany. Circuit arrangement for stepping switches. 1,858,832; May 17.
Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Spring support for bed bottoms and the like. 1,858,780; May 17.
Kuzmeth, Andrew, South Bend, Ind. Electric switch. 1,858,243; May 17.
Laise, Clemens A., Tenafly, assignor to Callite Products Company, Incorporated, Union City, N. J. Refractory composition. 1,858,244; May 17.
Laise, Clemens A., Tenafly, assignor to Callite Products Company, Incorporated, Union City, N. J. Refractory composition. 1,858,300; May 17.
La Mar, Frank C., New York, N. Y., assignor to Great Western Fuse Company, Pittsburgh, Pa. Renewable fuse. 1,858,245; May 17.
Lamson Paragon Supply Company Limited. (See Bain, R. D., and Nelson, assignors.)
Lancellotti, Anthony, New York, N. Y. Magazine shaving brush. 1,858,452; May 17.
Landis, Paul, Zurich, Switzerland. Internal combustion engine. 1,858,365; May 17.
Lane, Roy W., Canton, Ohio. Doorstop. 1,858,711; May 17.
Langenberg, Frederick C., Watertown, Mass., and G. A. Reinhardt, Youngstown, Ohio. Reenforced column. 1,858,512; May 17.
Langevin, Paul, and C. L. Florisson, assignors to Societe de Condensation et d'Applications Mecaniques, Paris, France. Method and apparatus for sounding and for locating submarine obstacles by means of ultra-audible waves. 1,858,931; May 17.
Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Shearing continuous bars. 1,858,401; May 17.
Langstreth, James, San Francisco, Calif. Monocar. 1,858,743; May 17.
Lapp Insulator Company. (See Jenner, Ralph L., assignor.)
Larson, John, Philadelphia, Pa. Musical toy. 1,859,268; May 17.
Larson, Nels H., Pepin, Wis. Gate operating mechanism. 1,858,896; May 17.
Larsson, Ernst A., assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley pole device. 1,858,402; May 17.
Laska, Leopold, and A. Zitscher, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Water insoluble azodyestuffs and making same. 1,858,628; May 17.
Laska, Leopold, and A. Zitscher, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, New York, N. Y. Water insoluble azodyestuffs. 1,858,629; May 17.
Laurent, Adrien. (See Oser, A., and Laurent.)
Lawe, Alfred H., Biddeford, Me., assignor to Saco-Lowell Shops, Newton Upper Falls, Mass. Device for holding spinning rings. 1,858,672; May 17.
Lawrence, Winthrop S., Brooklyn, assignor to Kaumagraph Company, New York, N. Y. Transfer. 1,858,673; May 17.
Lawson, John and R. H., Pawtucket, R. I., assignors to Hemphill Company, Central Falls, Mass. Mechanism for patterning control of knitting machines. 1,858,301; May 17.
Lawson, Robert H. (See Lawson, John and R. H.)
Leach, Ernest C. (See Johnson, L. E., and Leach.)
Leach, Guy M., Detroit, Mich. Spring shoe attachment. 1,858,833; May 17.
Leask, John P., Stamford, and H. T. Dyer, Greenwich, Conn., assignors to Peabody Engineering Corporation, New York, N. Y. Method of and apparatus for burning finely divided fuel. 1,858,674; May 17.
Leech, John, Bridgeport, assignor to International Silver Company, Meriden, Conn. Spoon, knife, fork, or other article of flatware. Des. 86,962; May 17.
Le Grand, Arthur, Indio, Calif. Date protector or shield. 1,858,513; May 17.
Lehmann, Ernst P., Patentwerke, the Firm. (See Richter, Johannes, assignor.)
Lehmann, Karl A., and E. Breitling, Essen, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Transfer mechanism. 1,858,630; May 17.
Lehmann, Paul H., and P. P. Simpson, Dallas, Tex. Cigarette holder and manufacture. 1,858,366; May 17.
Lehr, Ernst. (See Heymann, H., and Lehr.)
Leiser, Heinrich, Berlin-Friedenau, Germany. Producing a coating of chromium on objects of iron and steel or aluminum and particularly on knives, forks, and spoons. 1,858,631; May 17.
Leitz, Ernest, Optische Werke. (See Barnack, Oskar, assignor.)

Lell, Jacob, assignor to J. M. Voith, Heidenheim-on-the-Brenz, Germany. Coupling device. 1,858,514; May 17.
Leonard Automatic Sure Kno Trapnest Co. (See Leonard, Thomas, assignor.)
Leonard, Thomas, Compton, assignor to Leonard Automatic Sure Kno Trapnest Co., Ltd., Los Angeles, Calif. Trap nest. 1,858,367; May 17.
Lerma, Stephen, Brooklyn, N. Y. Fabric covered buckle. 1,859,098; May 17.
Lesage, Alfred, Schweinfurt, Germany. Change speed gear. 1,858,996; May 17.
Lester, William M., Shaker Heights, Ohio. Casting mold ejector. 1,858,453; May 17.
Levin, Harris, Freeport assignor to The Lion Safety Pin Clutch Co., Inc., New York, N. Y. Finger ring guard. 1,858,861; May 17.
Leviton Manufacturing Company (See Slady, Frank, assignor.)
Levy, Anderson Co. (See Anderson, Maurice, assignor.)
Levy, Oscar C. (See Lomax, C. E., and Levy.)
Lewin, Jacob W., Oak Park, Ill. Spiral fish cable. 1,858,997; May 17.
Lewis, George P., Forest Hills, and R. E. Sabin, Flushing, N. Y. Thermoelectric motor. 1,859,099; May 17.
Lewis, Thomas S., Memphis, Tenn. Explosive toy. 1,859,100; May 17.
Lewis, Warren K., Newton, Mass., assignor to Standard Oil Development Company. Protective coating. 1,858,368; May 17.
Lewis, Wilbur S., Lakewood, Ohio, assignor to The Nestle-Le Mur Company, Cleveland, Ohio. Hair inclosure. 1,858,333; May 17.
Liguori, Giovanni, Munich, Germany. Recording and reproducing sounds. 1,858,553; May 17.
Linzell, Harry K., La Grange, and H. A. Scholz, Oak Park, assignors to United States Gypsum Company, Chicago, Ill. Plastic paint. 1,858,369; May 17.
Lion Safety Pin Clutch Co., The. (See Levin, Harris, assignor.)
Liquid Carbonic Corporation, The. (See Gruetter, John R., assignor.)
Littell, F. J., Machine Company. (See Littell, Frederick J., assignor.)
Littell, Frederick J., assignor to F. J. Littell Machine Company, Chicago, Ill. Jump feed mechanism. 1,858,403; May 17.
Lomax, Clarence E., Oak Park, and O. C. Levy, assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Watchman's supervisory system. 1,858,554; May 17.
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company. Firearm. 1,858,862; May 17.
Lorber, Charles, Louisville, Ky. Channel key plate. 1,858,932; May 17.
Louis, Terrence G., assignor to Wico Electric Company, West Springfield, Mass. Magneto. 1,858,404; May 17.
Louttit, Charles H., Portland, Oreg. Incandescent lamp. 1,858,712; May 17.
Loveluck, Rhys J., E. G. Beckett, and J. Thomas, assignors to Scottish Dyes Limited, Grangemouth, Scotland. Production of ortho-amino-halogen-anthraquinones. 1,858,334; May 17.
Lucas, Samuel M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway switch controlling apparatus. 1,858,897; May 17.
Lucke, Charles E., New York, N. Y., assignor to The Hoover Company. Suction cleaner. 1,858,370; May 17.
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Pulverized coal carbonization process. 1,858,834; May 17.
Lund, James K., assignor to Dole Valve Company, Chicago, Ill. Mixing valve. 1,858,454; May 17.
Lunsford, James C., Pampa, Tex. Bit for deep well drilling. 1,858,744; May 17.
Lustrolite, Inc. (See Clark, Edward M., assignor.)
Lutton, William H., Company. (See Pratt, Henry W.)
Lutz, William S., Merchantville, N. J. Gold leaf laying device. 1,858,371; May 17.
Lyman, Kenneth E., Rockford, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,858,335; May 17.
Lynn Products Co. (See Johnson, L. E., and Leach, assignors.)
Lyon, George A., Allenhurst, N. J., assignor to Lyon Incorporated, Asbury Park, N. J. Combination mirror and tire cover. 1,858,515; May 17.
Lyon Incorporated. (See Lyon, George A., assignor.)
Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)
Lyons, Michael M., Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Fastener plate feeding mechanism. 1,859,101; May 17.
Lyster, Herman S., Indianapolis, Ind. Parcel remover for mail boxes. 1,859,269; May 17.
Maartens, Johannes H. J., Eindhoven, Netherlands, assignor to Radio Corporation of America. Electric discharge tube. 1,859,043; May 17.
Mabee, Alexander C., Villa Park, and C. A. Whitsett, Chicago, Ill.; said Whitsett assignor to Bendix Stromberg Carburetor Company, South Bend, Ind., and said Mabee assignor to Marvel Carbureter Company, Flint, Mich. Carbureter. 1,858,835; May 17.
Mackert, Anton, Frankfort-on-the-Main, Germany. Reactivation of powdered or fine grained adsorptive carbon. 1,858,745; May 17.
Mackie, James, and Sons. (See Tierfelder, Werner, assignor.)
MacLaurin, John, Ware, Mass. Photographic mount. 1,858,405; May 17.
MacLear, Joseph R., administrator. (See MacLear, Walter.)
MacLear, Walter, deceased, Hillside, N. J.; J. R. MacLear, administrator. Boiler tube scraper. 1,859,148; May 17.
MacMillan, Frank, Fort Lee, N. J. Ice skate. 1,858,303; May 17.
Madsen, Nels W., Reno, Nev. Ladder jack. 1,859,210; May 17.
Madsen, Tage, Gottenborg, Sweden. Packing ring. 1,859,211; May 17.
Maennchen, Karl F., and F. Hümmerich, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Stable preparations of vat dyestuffs and making same. 1,858,632; May 17.
Mahan, Joseph R., assignor to The National Supply Company, Toledo, Ohio. Pump manifold. 1,858,246; May 17.
Mailaender, Wilhelm, Stuttgart-Cannstatt, Germany. Rotary deep impressing printing machine. 1,858,633; May 17.
Malmedie & Co. Maschinenfabrik Aktiengesellschaft. (See Nöllenburg, Wilhelm, assignor.)
Maloon, Earl B., assignor to American Tractor Equipment Company, Oakland, Calif. Scraper. 1,858,634; May 17.
Manhattan Electrical Supply Company. (See Hendry, William F., assignor.)
Mantz, Harold A., assignor to E. N. Jacobi, trustee, Milwaukee, Wis. Automatic burner lighter. 1,858,516; May 17.
Marchant Calculating Machine Company. (See Friden, Carl M. F., assignor.)
Marcy, Frank E., San Diego, Calif. Mill. 1,858,594; May 17.
Marshall, Albert E., Baltimore, Md., assignor to Fluid Heat, Incorporated. Oil burning apparatus. 1,858,302; May 17.
Marshall, Henry H., Highland Park, assignor to Brunswick-Kroeschell Company, New Brunswick, N. J. Refrigerating system. 1,858,517; May 17.
Marshall, Jerry R. (See Hass, H. B., and Marshall.)
Martell, Forrest H., assignor to S. M. Siesel Co., Milwaukee, Wis. Structural steel wrapping spacer. 1,858,836; May 17.
Martin, Arthur R., Destrehan, La., P. J. Kelly and K. H. Repath, Tampico, Mexico, assignors to Pan American Petroleum & Transport Company, Wilmington, Del. Sweetening hydrocarbon oils. 1,858,635; May 17.
Martin Brothers Electric Company. (See Martin, Wendell L., assignor.)
Martin, John F., assignor to American Bosch Magneto Corporation, Springfield, Mass. Interrupter gear housing. 1,858,675; May 17.
Martin, John W., Amorita, Okla. Trap set. 1,858,713; May 17.
Martin, La Velle A. (See West, F. L., and Martin.)
Martin, Wendell L., assignor to The Martin Brothers Electric Company, Cleveland, Ohio. Apparatus for therapeutic and other purposes. 1,858,714; May 17.
Marvel Carbureter Company. (See Mabee, A. C., assignor, and Whitsett.)
Marx, George. (See Porter, J. F., and Marx.)
Mason, Au & Magenheimer Confectionery Manufacturing Company. (See Haug, Charles F., assignor.)
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Triangular drive for motor vehicles. 1,858,781; May 17.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Individual wheel mounting and drive. 1,858,782; May 17.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Spring mounting for stub axles. 1,858,783; May 17.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Individual wheel mounting. 1,858,784; May 17.
Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Section insulator. 1,858,406; May 17.
Maul, Henry C., assignor to Detroit Michigan Stove Company, Detroit, Mich. Stove leg. 1,858,998; May 17.
Maves, Stanley E., assignor to Western Newell Manufacturing Company, Freeport, Ill. Curtain rod bracket. Des. 86,963; May 17.
Mayer, Bertram, H. Siebenbürger, and K. Krauer, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Vat-dyestuff of the dibenzanthrone series and making same. 1,859,212; May 17.
Maywood Chemical Works. (See Weber, Friedrich W., assignor.)
Mazurie, James V., and O. F. Olson, Gary, Ind., assignors to National Tube Company. Tube expanding machine. 1,858,961; May 17.
Mazurie, James V., and O. F. Olson, Gary, Ind., assignors to National Tube Company. Tube expanding mill. 1,858,962; May 17.
McCain, Frederick E., Detroit, Mich. Loading station and platform. 1,858,407; May 17.

McCauley, William A., assignor of one-third to J. L. Raleigh, Tulsa, Okla. Cooking apparatus. 1,858,636; May 17.
McCollum, Henry J. D. and J. H. K., Long Branch, N. J. Vacuum power clutch. 1,858,999; May 17.
McCollum, James H. K. (See McCollum, H. J. D. and J. H. K.)
McCormack, Herbert, Glen Ridge, N. J. Apparatus for milking. 1,859,213; May 17.
McCormack, Herbert, Glen Ridge, N. J. Milking machine. 1,859,214; May 17.
McCullough, Frederick S., Edgewood, Pa. Cathode. 1,858,676; May 17.
McDonald, Harry H., assignor of one-third to T. C. Brandle, St. Louis, Mo. Exhaust gas burning attachment for all internal combustion engines. 1,858,637; May 17.
McEniry, John T., Bessemer, Ala. Freight car. 1,858,408; May 17.
McGee, John M. (See Diggs, S. H., McGee, and Cooke.)
McGill Manufacturing Company. (See Popp, Rudolf, assignor.)
McIntyre, William J. (See Duffy, Thomas I., assignor.)
McKay, Stewart R., Shaker Heights, Ohio. Building construction. 1,858,715; May 17.
McKee, Harry H., and C. T. Walter, assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Display and vending method and device. 1,859,270; May 17.
McKenna Process Company of Illinois. (See Langford, George, assignor.)
McKnight, Elliott J., Gardner, Mass. Multiple-spindle boring machine. 1,858,677; May 17.
McKown, Harry L., Wheeling, W. Va. Heating stove. 1,859,009; May 17.
McLaughlin, George E., Peabody, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me. Measuring machine. 1,858,304; May 17.
McNamee, Owen A. (See Hoeftmann, A. O., McNamee, and Morrison.)
McNaught, Norris F., and E. H. Peterson, assignors to Duro Metal Products Company, Chicago, Ill. Valve spring compressor. 1,858,372; May 17.
McNutt, Joseph D., New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company. Propellant explosive. 1,858,373; May 17.
McQuay Radiator Corporation. (See Seelert, Edward H., assignor.)
McVey, Elmer E., Youngstown, and W. F. Bartholomew, Warren, Ohio. Sheet metal normalizing furnace. 1,858,678; May 17.
Mead Corporation, The. (See Wright, Harry, jr., assignor.)
Meek, Earl, Bonetraill, N. Dak. Tractor hitch. 1,859,001; May 17.
Meggs, William L., Jacksonville, Fla. Combination ball bearing steering knuckle. 1,859,149; May 17.
Meisel, Charles A., Milton, and J. P. E. Neilson, Quincy, assignors to Meisel Press Manufacturing Company, Boston, Mass. Press cylinder. 1,858,305; May 17.
Meisel Press Manufacturing Company. (See Meisel, C. A., and Neilson, assignors.)
Meissner, Alexander, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Arrangement for transmitting and receiving short waves. 1,858,679; May 17.
Mensman, Charles J., Washington, D. C. Key case. 1,858,963; May 17.
Meredith, Russell L., Washington, D. C. Dual lubricating system for airplane engines. 1,858,638; May 17.
Merle, André N., Vincennes, assignor to Pathé Cinéma, Anciens Etablissements Pathé Freres, Paris, France. Film-counter for cinematographic view-taking apparatus. 1,858,792; May 17.
Merley, Sylvan R., Dover, N. J., and O. Spring, Okmulgee, Okla., assignors to Doherty Research Company, New York, N. Y. Formation and recovery of alcohols. 1,859,241; May 17.
Merrill, Allan B., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Waterproofed heat insulating material. 1,858,680; May 17.
Mesker, Louis H., Shaker Heights, assignor to The Cleveland Planer Company, Cleveland, Ohio. Head clamp. 1,858,898; May 17.
Messer, George H., Newark, N. J. Oil burner system. 1,858,837; May 17.
Metals Disintegrating Company. (See Hall, Everett J., assignor.)
Meyer, August, Berlin-Schoneberg, Germany. Car retarding apparatus. 1,859,102; May 17.
Midland Steel Products Company, The. (See Sneed, John, assignor.)
Mid-States Gummed Paper Co. (See Humphner, Ferdinand W., assignor.)
Miguet, Paul L. J., and M. P. Perron, St. Julien De Maurienne, France. Electric furnace. 1,858,455; May 17.
Millard, Lee P. (See Raney, C. R., and Millard.)
Miller, Charles, New York, N. Y. Shoe. Des. 86,964; May 17.
Miller, Charles A., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Time lock mechanism. 1,858,964; May 17.
Miller, David B., Greenfield, assignor to Millers Falls Company, Millers Falls, Mass. Hand tool. 1,858,276; May 17.
Miller, Ferdinand, Elizabeth, N. J., assignor to International Motor Company, New York, N. Y. Trailer coupling. 1,858,785; May 17.
Miller, Frederick B., Scottdale, Pa. Mining machinery. 1,858,933; May 17.
Miller, John W. C., Roanoke, Va. Combined lighting and signal switch for automobiles. 1,858,746; May 17.
Miller, Kenneth W., and D. W. Roper, Chicago, Ill. Cable sheath bonding. 1,858,838; May 17.
Millers Falls Company. (See Miller, Davis B., assignor.)
Milliron Cameron E., Forest Hills, N. Y., and J. F. Finnegan, Chicago, Ill. Butter chip. 1,858,247; May 17.
Mills, James E., Edgewood, Md. Phosphorus container. 1,858,456; May 17.
Miner, W. H., Inc. (See Fuchs, Henry, assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minnium, Byron B., Chicago, Ill., assignor to Stewart-Warner Corporation, Richmond, Va. Transmission system. 1,859,103; May 17.
Mirick, Carlos B., assignor to National Electrical Supply Company, Washington, D. C. Antenna lead-out insulator. 1,858,336; May 17.
Mittelsteiner, Erich, Welzow, Germany. Measuring water contents. 1,858,409; May 17.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating unit. 1,858,839; May 17.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Moe, Edward E., Omaha, Nebr. Air vehicle. 1,859,044; May 17.
Monckmeier, Gustav C., Chicago, Ill. Wear compensating bolt. 1,859,045; May 17.
Mong, George L. W. (See Walker, Ed. H., and Mong.)
Monroe Calculating Machine Company. (See Chase, George C., assignor.)
Monroe Calculating Machine Company. (See Chase, G. C., and Schweitzer, assignors.)
Monroe Calculating Machine Company. (See Enders, Hugo E., assignor.)
Monroe Calculating Machine Company. (See Walter, Edward C., assignor.)
Montbriand, Richard, assignor to P. A. Ziomke, Milwaukee, Wis. Sandpaper holder. 1,858,899; May 17.
Moody, Lewis F., Philadelphia, Pa. Draft tube. 1,859,215; May 17.
Moore, Charles W., Barberton, Ohio, assignor to Oliver United Filters Inc., San Francisco, Calif. Filter. 1,858,900; May 17.
Morales, Chester D., Raymond, Wash. Heel protector for hose. 1,858,747; May 17.
Moran, Joseph V., Brooklyn, N. Y. Baby chair. 1,859,150; May 17.
Moreschini, Ronald, Pittsburg, Calif. Swaging bulbs on wire. 1,858,306; May 17.
Morey, Frank E., assignor to Oscar Heineman Corporation, Chicago, Ill. Winding cone. 1,858,410; May 17.
Morrison, James J. (See Hoeftmann, A. O., McNamee, and Morrison.)
Moser, Wilhelm, Riehen, near Basel, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of a dyestuff of the anthraquinone series. 1,859,151; May 17.
Moser, Wilhelm, Riehen, near Basel, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of a dyestuff, of the anthraquinone series. 1,859,255; May 17.
Motor Wheel Corporation. (See Hunt, J. Harold, assignor.)
Motor Wheel Corporation. (See Platt, Howard I., assignor.)
Motorenfabrik Deutz, Aktiengesellschaft. (See Heidelberg, Victor, assignor.)
Mottashed, John C. and A. W. Payne, assignors to Hudson Motor Car Company, Detroit, Mich. Time study recorder. 1,858,457; May 17.
Mundo Products, Inc. (See Stamer, Frank R., assignor.)
Munro, Thomas, Philadelphia, Pa. Spring suspension of vehicles. 1,859,104; May 17.
Munro, Thomas, Philadelphia, Pa. Spring suspension of vehicles. 1,859,105; May 17.
Muros, Joseph, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,859,106; May 17.
Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)
Murray, John J., Yonkers, N. Y. Display device. 1,858,337; May 17.
Muss, Wilhelm, Hanover, Germany. Heavier-than-air aircraft. 1,859,107; May 17.
Mussey, William H., Chicago, and J. R. Rudulph, Homewood, Ill., assignors, by mesne assignments, to Pullman Car & Manufacturing Corporation. Welded hopper car. 1,859,261; May 17.
Muzzy, William H., Evanston, assignor to Stewart-Warner Corporation, Chicago, Ill. Automobile liquid level indicator. 1,858,411; May 17.
Myers, Eugene V., East Orange, N. J. Picture. 1,858,786; May 17.
N. V. Philips' Gloeilampenfabrieken. (See Schouwstra, Pieter, assignor.)
Naab, George F. (See Brown, G. R., and Naab.)

Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van Andere Werktingen. (See Van Duyn, Adrinaus, assignor.)
Nadoolman, Fred, Brooklyn, N. Y. Dispenser. 1,859,108; May 17.
Nagamine, Tokijiro, Tokiirimachi, Uyeda, Japan. Covering for motorcar tires. 1,858,965; May 17.
National Aniline & Chemical Company. (See Davis, Archibald H., jr., assignor.)
National Electric Products Corporation. (See Frederickson, Otto A., assignor.)
National Electrical Supply Company. (See Mirick, Carlos B., assignor.)
National Supply Company. (See Berry, Herbert C., assignor.)
National Supply Company, The. (See Mahan, Joseph R., assignor.)
National Tool Company, The. (See Simmons, Oliver G., assignor.)
National Tube Company. (See Dunn, Jerry J., assignor.)
National Tube Company. (See Mazurie, J. V., and Olson, assignors.)
Ne-Arga Corporation. (See Erdmann, Hans M., assignor.)
Neilson, John P. E. (See Meisel, C. A., and Neilson.)
Nelson, James. (See Bain, R. D., and Nelson.)
Nelson, Nels H., Minneapolis, Minn. Vehicle signal. Des. 86,965; May 17.
Nenninger, Lester F., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Transmission and control mechanism. 1,859,242; May 17.
Neon, Claude, Electrical Products Corporation. (See van Wyck, C. and Hdye, assignors.)
Neracher, William A., et al. (See Borden, Bradford T., assignor.)
Nesbitt, John J., Inc. (See Werft, E. L., Ewald, and Henshall, assignors.)
Nestle-Le Mur Company, The. (See Lewis, Wilbur S., assignor.)
Nettleton, Lewis L., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,858,901; May 17.
Neumann, Paul A., Chicago, Ill. Traction promoting accessory for automobiles. 1,858,412; May 17.
Neurath, Werner, Vienna, Austria. Transmission gear. 1,858,034; May 17.
Newbaker, Edward J., assignor to The Berwind-White Coal Mining Company, Windber, Pa. Miner's tool for punching and shearing coal. 1,858,518; May 17.
Newhall, Henry B., Corporation. (See Hescock, Ethan, assignor.)
Newport News Shipbuilding and Dry Dock Company. (See Grant, William F., assignor.)
Newport News Shipbuilding and Dry Dock Company. (See Terry, Roger V., assignor.)
Nicolazzo, Marco, et al. (See Foti, Charles, assignor.)
Nicolazzo, Paolino, et al. (See Foti, Charles, assignor.)
Noak, Erich, Leverkusen-Wiesdorf-on-the-Rhine, and Friedrich Schubert, Cologne-Deutz-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Calcium boride. 1,858,413; May 17.
Noble, Harry R. (See Osborne, Guy E., assignor.)
Nöllenburg, Wilhelm, assignor of Malmedie & Co. Maschinenfabrik Aktien-gesellschaft, Dusseldorf, Germany. Machine for making indented taper pins. 1,858,414; May 17.
Norbury, Arthur S., Windsor, Ontario, Canada. Toy gun. 1,858,716; May 17.
North American Chemical Company. (See Thoma, Andrew, assignor.)
North American Manufacturing Company, The. (See Brown, G. R., and Naab, asignors.)
Nygaard, Oscar. (See Smith, A. E., and Nygaard.)
Nyquist, Harry, Millburn, N. J., assignor to American Telephone and Telegraph Company. Compensating for nonlinear distortion in transmission circuits. 1,858,307; May 17.
Nyquist, Harry, Millburn, N. J., assignor to American Telephone and Telegraph Company. Compensating for nonlinear distortion in transmission circuits. 1,858,338; May 17.
Obbard, Norman B., Sewickley, Pa. Tower. 1,859,152; May 17.
Oberndorfer, Ira H., Brooklyn, N. Y. Pajamas. Des. 86,966; May 17.
O'Brien, Richard H., Watertown, and J. A. Byrne, Allston, Mass. Curtain and blanket stretcher. 1,859,216; May 17.
O'Connon, Frances M., executrix. (See O'Connor, William A.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,858,519; May 17.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,858,520; May 17.
O'Connor, William A., deceased, New York, N. Y.; F. M. O'Connor, executrix. Liquid atomizing device. 1,859,273; May 17.
O'Hagan, Bernard E., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,858,966; May 17.
Ohio Brass Company, The. (See Larsson, Ernst A., assignor.)
Ohio Brass Company, The. (See Matthes, Samuel S., assignor.)
Ohio Parts Company, The. (See Terrell, H. C., and Kerkhoff, assignors.)
Ohl, Russell S., New York, N. Y., assignor to American Telephone and Telegraph Company. Piezo electric oscillator. 1,858,339; May 17.
Ohmer Fare Register Company. (See Wheelbarger, A. S. and Coll, assignors.)
Oil Corporation of America. (See Darlington, Homer T., assignor.)
Oilzear Company. (See Ferris, Walter, assignor.)
Olds, Ambrose D., assignor to The Coleman Lamp & Stove Company, Wichita, Kans. Coffee maker. Des. 86,967; May 17.
O'Leary, John S., Philadelphia, Pa. Needle guide for records. 1,859,153; May 17.
Oliver United Filters Inc. (See Moore, Charles W., assignor.)
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Hob tester. 1,858,840; May 17.
Olson, Elmer T., assignor to Benton-Olson Company, Minneapolis, Minn. Grease gun apparatus. 1,858,717; May 17.
Olson, John A., Portland, Oreg. Rotary pump. 1,858,681; May 17.
Olson, Olof F. (See Mazurie, J. V., and Olson.)
Olson, William E., Waterloo, Iowa. Door knocker. Des. 86,968; May 17.
Olsson, Bengt, Eltingville, assignor to C. J. O'Neill, New York, N. Y. Oil pumping apparatus. 1,858,682; May 17.
O'Neill, Charles J. (See Olsson, Bengt, assignor.)
Opitz, Fred M., Milwaukee, Wis. Air conditioning device. Des. 86,969; May 17.
Oram, Edwin, Dallas, Tex. Top. 1,858,639; May 17.
Orear, Vincent M., assignor, by mesne assignments, to Ardee Patents Corporation Evansville, Ind. Forming ice cream cones. 1,859,046; May 17.
Ormondroyd, Jesse. (See Short, I., and Ormondroyd.)
Osborne Guy E., Chauncey, assignor of one-tenth to H. B. Noble, Athens, Ohio. Photographic exposure meter. 1,858,340; May 17.
Oser, Adam, and A. Laurent, Lyon, assignor to Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Process for the manufacture of 1-phenyl-2,3-dimethyl-5-pyrazolone. 1,859,002; May 17.
Osius, Frederick J., Miami, Fla. Combination cooking and serving dish. Des. 86,970; May 17.
Ossenbeck, Anton. (See Hestrich, W., Tietze, Ossenbeck, and Backes.)
Ostline, John E., Berwyn, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Measured service telephone system. 1,858,863; May 17.
Oswell, Benjamin M., Los Angeles, Calif. Measuring and dispensing container. 1,859,109; May 17.
Ottenheimer, Helen L., Chicago, Ill. Device for holding baby in bed. 1,858,787; May 17.
Otto, Edward H., Detroit, Mich. Bake oven. 1,859,217; May 17.
Outboard Motors Corporation. (See Irgens, Finn T., assignor.)
Outing Manufacturing Company. (See Dewey, Clarence L., assignor.)
Overfold Company, The. (See Fulk, George L., assignor.)
Overly, Elmer G., Greensburg, Pa. Envelope. 1,858,277; May 17.
Owen, Pinkney, Frankewing, Tenn. Automatic trap nest. 1,859,154; May 17.
Owens, Frank R., Beaver Crossing, Nebr. Parachute. 1,859,155; May 17.
Owens, Freeman H., New York, N. Y. Motion picture and sound reproducing apparatus. 1,858,555; May 17.
Owens, Freeman H., New York, N. Y. Recording photographic sound records. 1,859,243; May 17.
Owens-Illinois Glass Company. (See Cramer, Albert N., assignor.)
Owens-Illinois Glass Company. (See Rohrich, Harold A., assignor.)
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Packard, Jesse R. (See Packard, S. M. and J. R., and Shuck.)
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Packard, Stanley M. and J. R., Southgate, and W. L. Shuck, Los Angeles, Calif. Internal combustion motor. 1,858,278; May 17.
Palmer, Harry L. (See FitzGerald, A. S., and Palmer.)
Pan American Petroleum & Transport Company. (See Martin, A. R., Kelly, and Repath, assignors.)
Pantone Corporation. (See Trist, Arthur R., assignor.)
Papendick, Inc. (See Schneider, Edward J., assignor.)
Paper & Textile Machinery Company, The. (See Farnsworth, Hilland R., assignor.)
Paradis, Henry A., and W. C. Anderson, Chicopee Falls, Mass. Protective device for the terminals of storage batteries. 1,858,748; May 17.
Pardee, Harvey S., Ravinia, and B. Kirsch, Chicago, Ill., assignors to Auto Radiator Manufacturing Company, Chicago, Ill. Combined radiator shell and deflector. Des. 86,971; May 17.
Park, James R. (See d'Leny, W. C., and Park.)

Parker, Cecil J., Govans, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Making bottle caps. 1,858,279; May 17.
Parker, Cyrus J., deceased; Mary E. Parker, executrix, assignor to Iron Firearm Manufacturing Company, Portland, Oreg. Round tuyère for furnaces. 1,858,683; May 17.
Parker, Mary E., executrix. (See Parker, Cyrus J.)
Parker, Willard H., Fairfield, Iowa, and A. P. Cannon, Keithsburg, Ill. Adjustable garment support. 1,858,595; May 17.
Patart, Georges, Paris, France. Synthesizing and separating higher alcohols. 1,859,244; May 17.
Patentverwertungs A. G. "Alpina", S. A. Pour l'Exploitation de Brevets "Alpina" Patents Exploitation Cy. "Alpina" Ltd. (See Jost, Fritz, assignor.)
Paterson, May H. (See Paterson, William and M. H.)
Paterson Parchment Paper Co., The. (See Dufford, John R., assignor.)
Paterson, William and M. H., Oakland, Calif. Motor traction plow. 1,858,749; May 17.
Pathé Cinema Anciens Etablissements Pathé Freres. (See Merle, André N., assignor.)
Paulson, Christian, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for determining indications of measuring instruments and controlling apparatus thereby. 1,859,047; May 17.
Paxton, Hale, Sanger, Calif. Box lidding machine. 1,858,556; May 17.
Payne, Arthur W. (See Mottashed, J. C., and Payne.)
Peabody Engineering Corporation. (See Leask, J. P., and Dyer, assignors.)
Pearson, Charles, Cicero, Ill., assignor to International Harvester Company. Sweep rake. 1,859,156; May 17.
Pearson, Charles, Cicero, Ill., assignor to International Harvester Company. Mowing machine. 1,859,157; May 17.
Perfection Stove Company. (See Dahlstrom, John A., assignor.)
Perfection Stove Company. (See Resek, Marc, assignor.)
Perkins, George H., Wellesley, Mass., assignor to Powdrell & Alexander, Inc., Danielson, Conn. Textile fabric. Des. 86,972; May 17.
Pernek, Thomas, sr., Hartford, Conn. Safety pocket knife. 1,859,158; May 17.
Perrett, Albert, Pittsburgh, Pa. Coiler for hot rod mills. 1,859,159; May 17.
Perron, Marcel P. (See Miguet, P. L. J., and Perron.)
Peters, Henry, Clifton, assignor to Universal Patents Holding Co., Weehawken, N. J. Stocking. 1,858,596; May 17.
Peterson, Edward H. (See McNaught, N. F., and Peterson.)
Peterson, Levander, assignor to James H. Rhodes & Company, Chicago, Ill. Machine for making metal wool. 1,859,048; May 17.
Pettiegrew, Earnest S., Gadsen, Ala. Fireplace fixture. 1,858,967; May 17.
Peyinghaus, Walter, Egge, near Volmarstein, Germany. Axle bearing. 1,858,935; May 17.
Pfeiffer, William C. (See Stern, M. C., and Pfeiffer.)
Pfluger, Albert. (See Haage, K., and Pfluger.)
Phelps, Arthur F., assignor to West Virginia Armature Co., Bluefield, W. Va. Locomotive journal box. 1,859,160; May 17.
Phelps, Arthur F., assignor to West Virginia Armature Co., Bluefield, W. Va. Locomotive journal box. 1,859,161; May 17.
Phelps, Arthur F., assignor to West Virginia Armature Co., Bluefield, W. Va. Locomotive journal box. 1,859,162; May 17.
Phelps, Edwin S., Montclair, N. J. Protector-guard for stylus of recording mechanisms. 1,859,163; May 17.
Philipsen, Michael, Vedbaek, Denmark. Medical thermometer. 1,858,718; May 17.
Phillips, John E., and A. G. Thackeray, Worcester, England. Mold for casting printers' furniture. 1,859,110; May 17.
Platt, Howard I., assignor to Motor Wheel Corporation, Lansing, Mich. Emergency float control for oil heaters. 1,858,557; May 17.
Pierce, Harry C., Rutherford, N. J., assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,858,841; May 17.
Pilling, Norman B., Plainfield, N. J., assignor to Westinghouse Electric & Manufacturing Company. Alloy. 1,858,415; May 17.
Ploch, Walter, Dresden, Germany. Means for hanging up hats. 1,858,968; May 17.
Platter, Orval R., et al. (See Corcoran, Laurence M., assignor.)
Plebański, Józef, Warsaw, Poland. Process and apparatus for undisturbed radio communication. 1,858,936; May 17.
Podel, Abraham, New York, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Sealed package. 1,858,864; May 17.
Pointon, John E., Peterborough, England, assignor to Baker Perkins Company Incorporated, New York, N. Y. Baking oven. 1,858,937; May 17.
Polk, William J., Madison, Wis. Cigarette server. 1,859,164; May 17.
Popp, Rudolf, assignor to McGill Manufacturing Company, Valparaiso, Ind. Multiple circuit controlling switch. 1,858,597; May 17.
Popp, Rudolf, assignor to McGill Manufacturing Company, Valparaiso, Ind. Rotary snap switch. 1,858,598; May 17.
Poppe, Edward W., Kalamszoo, Mich. Display box or package. 1,859,050; May 17.
Poppe, Edward W., assignor to Kalamazoo Paper Box Company, Kalamazoo, Mich. Display box. 1,859,049; May 17.
Poret, Edouard, Calais, France. Lace. Des. 86,973; May 17.
Poret, Edouard, Calais, France. Lace. Des. 86,974; May 17.
Poret, Edouard, Calais, France. Lace. Des. 86,975; May 17.
Porter, James F., Yonkers, and G. Marx, assignors to The Western Union Telegraph Company, New York, N. Y. Automatic tape cut-off. 1,859,165; May 17.
Powdrell & Alexander, Inc. (See Perkins, George H., assignor.)
Powerplus (1927) Limited. (See Eyston, George E. T., assignor.)
Prantl, Louis, Rochester, N. Y. Flower box. 1,858,902; May 17.
Pratt, Henry W., Jersey City, N. J., assignor to William H. Lutton Company. Hanger for slat shades. 1,858,684; May 17.
Premro, Anton, St. Michael, Pa. Chimney cleaning apparatus. 1,859,166; May 17.
Prenzel, Adam H., Halifax, Pa. Laundry iron. 1,859,167; May 17.
Preston, John E. (See Sokolow, S., and Preston.)
Progressive Corrugated Paper Machinery Co., Inc. (See Schroeder, L. H., and Wagner, assignors.)
Pullman Car & Manufacturing Corporation. (See Mussey, W. H., and Rudulph, assignors.)
Putnam, Elma. (See Hoover, Thomas A., assignor.)
Putnam, Ernest A., Iowa City, Iowa. Engine exhaust. 1,858,458; May 17.
Putnam, Mark E., assignor to The Dow Chemical Company, Midland, Mich. Making halogenated hydrocarbons. 1,858,521; May 17.
Putnam, Mark E., assignor to The Dow Chemical Company, Midland, Mich. Manufacture of amine hydrohalides. 1,858,640; May 17.
Queens, Hugo, Gladbeck, Germany. Prop construction for mines. 1,858,719; May 17.
Raasche, Gerhard, assignor to the Firm Paul Raasche Söhne, Riga, Latvia. Automatic balance. 1,859,059; May 17.
Raasche, Paul, Söhne. (See Raasche, Gerhard, assignor.)
Radio Corporation of America. (See de Boer, J. H., and van Gessel, assignors.)
Radio Corporation of America. (See Maartens, Johannes H. J., assignor.)
Radio Corporation of America. (See Roberts, Walter van B., assignor.)
Raftey, William J., Ulster Park, N. Y. Smoker's appliance. 1,858,938; May 17.
Ragan, Louis A., St. Louis, Mo., assignor to The Barrett Company, New York, N. Y. Container and coacting and self-fastening cap therefor. 1,859,003; May 17.
Rajah Company, The. (See Rowley, Charles A., assignor.)
Raleigh, John L. (See McCauley, William A., assignor.)
Ramey, Blaine B., Stoneleigh, assignor to The Black & Decker Manufacturing Company, Towsen, Md. Portable cutting tool. 1,858,459; May 17.
Ramsey, Joseph D., Dorchester, Mass. Valve. 1,859,218; May 17.
Raney, Clemma R., Riverside, Ill., assignor to International Harvester Company. Windrow harvester. 1,859,168; May 17.
Raney, Clemma R., Riverside, and L. P. Millard, Chicago, Ill., assignors to International Harvester Company. Harvester thresher. 1,859,219; May 17.
Ranney, Alfred G., San Antonio, Tex. Golf game. 1,858,750; May 17.
Ranseen, Mauritz C., Minneapolis, Minn. Aerial toy. 1,858,460; May 17.
Rapley, Harold H., Bedford, England, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Conveyer. 1,858,416; May 17.
Rapsch, Gustav, Great Neck, N. Y. Lawn rake. 1,858,641; May 17.
Raster, Walther, assignor to Justrite Manufacturing Company, Chicago, Ill. Display card. 1,858,461; May 17.
Ray, Joshua R. (See Ray, Thomas, and J. R.)
Ray, Thomas and J. R., Manistee, Mich. Separator. 1,858,842; May 17.
Raymond, Stanford, Stockton, Calif. Leather jacket. Des. 86,976; May 17.
Ream, Harry S., jr., and F. J. Hein, Dover, Ohio, assignors to Shenango-Penn Mold Company, Pittsburgh, Pa. Alloy. 1,859,169; May 17.
Reed Roller Bit Company. (See Behnke, Guy E., assignor.)
Reedy, Alfred J., assignor to A-B Stove Company, Battle Creek, Mich. Electric range. Des. 86,977; May 17.
Reed Roller Bit Company. (See Duda, Oswald, assignor.)
Reedy, Alfred J., assignor to A-B Stove Company, Battle Creek, Mich. Stove. Des. 86,978; May 17.
Reel-Mop Corporation. (See Carlson, Oscar, assignor.)

Reeves, Donald H., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,858,558; May 17.
Reeves Manufacturing Company, The. (See Vogan, Frank M., assignor.)
Reich, Ernest, Chicago, Ill. Heating device. 1,859,004; May 17.
Reid, Charles R., Shawinigan Falls, Quebec, Canada. Process of and apparatus for governing the speed of prime movers. 1,858,939; May 17.
Reid, Fred B., Hollywood, Fla. Container filling machine. 1,858,417; May 17.
Reilly, Frank C., New York, N. Y. Bottle or similar container. Des. 86,979; May 17.
Reinhardt, Gustav A. (See Langenberg, F. C., and Reinhardt.)
Relsz, Eugen, Berlin-Dahlem, Germany. Electrostatic telephone and microphone. 1,859,170; May 17.
Reiter, Daniel I., New York, N. Y. Slide fastener. 1,859,271; May 17.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,858,903; May 17.
Remington Arms Company. (See Hadley, Egbert C., assignor.)
Remington Arms Company. (See Loomis, Crawford C., assignor.)
Remington Arms Company. (See von Herz, Edmund, assignor.)
Remington, Joseph P., assignor to J. H. Bell, Philadelphia, Pa. Differential mechanism. 1,859,245; May 17.
Renaud, Collis P., Tulare, Calif. Automatic control scraper. 1,858,599; May 17.
Repath, Kenneth H. (See Martin, A. R., Kelly, and Repath.)
Resek, Marc, Cleveland Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Safety blow-off device. 1,858,280; May 17.
Reynolds, Archibald, Colts Neck, N. J. Bag holder. 1,858,793; May 17.
Rheinische Metallwaaren- und Maschinenfabrik. (See Eichenauer, Konrad, assignor.)
Rheinische Metallwaaren und Maschinenfabrik. (See Rühlemann, Herbert, assignor.)
Rhodes, James H., & Company. (See Peterson, Levander, assignor.)
Richard, Louis M., Shelton, Conn. Article support. 1,859,221; May 17.
Richards, David J. (See Cook, H. E., and Richards.)
Richards, Frank R., Grand Junction, Colo. Game. 1,859,220; May 17.
Richart, Charles L., Whittier, Calif. Screw holding device. 1,858,559; May 17.
Richart, Rolland T., Santa Barbara, Calif. Aircraft wing. 1,858,341; May 17.
Richter, Alfred, Chicago, Ill. Curtain wrapping machine. 1,859,051; May 17.
Richter, George A., and M. O. Schur, assignors to Brown Company, Berlin, N. H. Chemically treating and bleaching cellulose pulp. 1,858,522; May 17.
Richter, George A., and M. O. Schur, assignors to Brown Company, Berlin, N. H. Chemically treating and bleaching cellulose pulp. 1,858,523; May 17.
Richter, Johannes, assignor to the Firm Ernst Paul Lehmann Patentwerk, Brandenburg-on-the-Havel, Germany. Locking device in children's wheeled toys. 1,858,940; May 17.
Ricker, Norman H., assignor to J. P. Scranton, trustee, Houston, Tex. Observing and measuring electromagnetic fields. 1,859,005; May 17.
Rightway Corporation, The. (See Webb, Arthur B., assignor.)
Riley, Percy, Hill Wootton, Warwick, England. Change-speed gear. 1,859,171; May 17.
Rip Van Winkle Wall Bed Company. (See Sinclair, Neil, assignor.)
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Wardrobe case. 1,859,052; May 17.
Rixon, Oscar C., Co. (See Garrison, Forrest C., assignor.)
Roberts, Aaron W., Dallas, Tex. Sepulcher compass or analogous article. Des. 86,980; May 17.
Roberts, Walter van B., Princeton, N. J., assignor to Radio Corporation of America. Signaling method and means therefor. 1,858,810; May 17.
Roberts, William T. B., Leicester, England, assignor to United Machinery Corporation, Paterson, N. J. Tape applying machine. 1,858,811; May 17.
Roche, Cyril. (See Zipser, A., and Roche.)
Rock, George L., Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Indexing apparatus. 1,859,113; May 17.
Roebel, Ludwig, Mannheim, Germany. Compressor without glands for use especially in refrigerating machines. 1,858,904; May 17.
Roessler & Hassinchcr Chemical Company, The. (See Cambron, Adrien, assignor.)
Rogers, Walter F., Oak Park, assignor to Crown Stove Works, Cicero, Ill. Stove. Re18,465; May 17.
Rogers, Walter F., assignor to Gulf Production Company, Houston, Tex. Apparatus for determining the vertical deviation of bore holes. 1,859,222; May 17.
Rohn, Wilhelm J. P., Hanau-on-the-Main, Germany. Rolling mill. 1,858,788; May 17.
Rohrich, Harold A., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,859,053; May 17.
Rokosz, Stanley, Hazleton, Pa. Wing operating mechanism for aircraft. 1,859,172; May 17.
Rollman, Michael A., Mount Joy, Pa. Jar cover. 1,858,342; May 17.
Rooker, William A., and V. E. Speas, assignors to Speas Mfg. Co., Kansas City, Mo. Making jams, jellies, and kindred products. 1,858,374; May 17.
Rooze, Peter, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,858,865; May 17.
Roper, Denney W. (See Miller, K. W., and Roper.)
Roper, Geo. D., Corporation. (See Hollman, Peter I., assignor.)
Rosberg, John E., assignor of one-half to Tiedemann & Harris, Inc., San Francisco, Calif. Apparatus for curing meats. 1,858,600; May 17.
Rosenstiel, Ralph B., Freeport, Ill. Shotgun. 1,858,560; May 17.
Ross, James W., Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Take-out mechanism for glass forming machines. 1,858,642; May 17.
Ross and Rowe, Inc. (See Jordan, Stroud, assignor.)
Rossell, Henry E., and R. N. S. Baker, U. S. Navy. Anti-oil-pollution system. 1,859,246; May 17.
Rowe, Irving R., assignor to The Atwood Machine Company, Stonington, Conn. Spinning and twisting machine. 1,858,789; May 17.
Rowley, Charles A., assignor to The Rajah Company, Bloomfield, N. J. Tool. 1,858,418; May 17.
Royal Typewriter Company. (See Davidge, Ebenezer A., assignor.)
Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)
Rudd, Frank E., Louisville, Ky. Bedspread. Des. 86,981; May 17.
Rudolph, Corrie F. (See Gebbard, L. A., and Rudolph.)
Rudulph, Julian R. (See Mussey, W. H., and Rudulph.)
Ruemelin, Richard, Minneapolis, Minn. Sand blast machine. 1,858,561; May 17.
Ruggles, Harold E., Roxbury, Mass. Stitch picker. 1,859,173; May 17.
Rühlemann, Herbert, Sommerda, assignor to Rheinische Metallwaaren und Maschinenfabrik, Dusseldorf-Derendorff, Germany. Electric fuse for projectiles. 1,858,969; May 17.
Rumanoff, Nicholas A., New York, N. Y. Composition for treating arterio sclerosis and preparing same. 1,858,905; May 17.
Runco, Salvatore, et al. (See Foti, Charles, assignor.)
Runyan, William B., assignor to The Dayton Malleable Iron Company, Dayton, Ohio. Jack. 1,859,054; May 17.
Russell, Fred F., et al. (See Collins, Edward, assignor.)
Russell, Samuel G., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel frame. Des. 86,982; May 17.
Rutherford, Edward, assignor of one-third to J. W. Rutherford, and one-third to J. Rutherford, Cameron, La. Jaw trap. 1,858,751; May 17.
Rutherford, Joe, et al. (See Rutherford, Edward, assignor.)
Rutherford, John W., et al. (See Rutherford, Edward, assignor.)
Ryan, George F., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Copying lathe. 1,858,462; May 17.
Sabin, Raymond E. (See Lewis, G. P., and Sabin.)
Saco-Lowell Shops. (See Lawe, Alfred H., assignor.)
Safford, Lewis A., Philadelphia, Pa., assignor to Automatic Nut-Tbread Corporation, Buffalo, N. Y. Nut threading machine. 1,858,281; May 17.
Saks, Ira. (See Spase, Charles B., assignor.)
Salmon, James P., Philadelphia, Pa. Grapnel. 1,858,941; May 17.
Saltnass, Arle M., Minneapolis, Minn. Drafting instrument. 1,858,343; May 17.
Salzgeber, Gustave A., East Milton, Mass. Magnetic compass. Re18,474; May 17.
Sandura Company. (See Baldwin, Julian T., assignor.)
Sassano, Pasquale J., East Orange, N. J. Collapsible tube holder and flattening device. 1,859,174; May 17.
Saulle, Antonio, et al. (See Foti, Charles, assignor.)
Scanga, Pasquale. (See Foti, Charles, assignor.)
Schaad, Theodore A., Detroit, Mich. File cutting lathe. 1,859,006; May 17.
Schaefer, Ferdinand A., Baltimore, Md. Gravity actuated tension regulator for drawing presses. 1,858,463; May 17.
Schaeffer, Edward G., Brooklyn, assignor to American Character Doll Co., Inc., New York, N. Y. Doll construction. 1,859,175; May 17.
Schaerer, Emil, Goodach, Switzerland. Tentering frame for the wet treatment of fabrics. 1,858,970; May 17.
Schaumberger, Rudolf, Munich, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Switch key. 1,858,464; May 17.
Schedlbauer, Hugo, Vienna, Austria, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Electromagnetic relay. 1,858,562; May 17.

Schenck, Carl, Eisengiesserei und Maschinenfabrik Darmstadt G. m. b. H. (See Heymann, H., and Lehr, assignors.)
Schiller, Walter, Vienna, Austria. Apparatus for the preparation of films of blood. 1,858,308; May 17.
Schlenker, Max, La Salle, assignor to Western Clock Company, Peru, Ill. Alarm clock. 1,858,563; May 17.
Schlesinger, Herbert E., Ypsilanti, Mich. Adjustable hanger for beams and joists. 1,859,055; May 17.
Schmitt, Theodore, Cleveland, Ohio. Supporting device and forming the same. 1,858,465; May 17.
Schneider, Cale J., Toledo, Ohio. Food breaker. 1,858,790; May 17.
Schneider, Edward J., assignor to Papendick, Inc., St. Louis, Mo. Slicing machine. 1,858,791; May 17.
Scholl, William M., Chicago, Ill. Arch support and protector therefor. 1,858,524; May 17.
Scholz, Herman A. (See Linzell, H. K., and Scholz.)
Schon, Lester. (See Shoenberg, M. H., and Schon.)
Schott, Louis, assignor to The Cincinnati Galvanizing Company, Cincinnati, Ohio. Painting device. 1,858,466; May 17.
Schouwstra, Pieter, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Advertising installation. 1,858,643; May 17.
Schroeder, Herman D., and F. H. Koch, Los Angeles, Calif. Door latch or lock. 1,858,525; May 17.
Schroeder, Louis H., Woodhaven, and J. Wagner, assignors to Progressive Corrugated Paper Machinery Co. Inc., Brooklyn, N. Y. Machine for making double-faced corrugated paper board. 1,858,375; May 17.
Schubert, Friedrich. (See Noack, E., and Schubert.)
Schur, Milton O. (See Richter, G. A., and Schur.)
Schwartz, Charles M., Philadelphia, Pa., assignor, by mesne assignments, to Diapex Corporation, New York, N. Y. Diaper. Re18,468; May 17.
Schwartz, Morris, Chicago, Ill. Electric current conducting bond. 1,858,284; May 17.
Schwarz, Philipp, Wuppertal, Germany. Necktie stretcher. 1,858,309; May 17.
Schwarzkopf, Markus M., St. Louis, Mo. Torch. 1,858,526; May 17.
Schweitzer, Charles F. (See Chase, G. C., and Schweitzer.)
Schweitzer & Conrad, Inc. (See Conrad, Nicholas J., assignor.)
Schwitzer-Cummins Company. (See Winkler, Carl J., assignor.)
Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Well drill. 1,858,282; May 17.
Scott, Floyd L., and H. T. Baggett, assignors to Hughes Tool Company, Houston, Tex. Core catching device. 1,858,248; May 17.
Scott, Floyd L., and L. E. Garfield, assignors to Hughes Tool Company, Houston, Tex. Fast rotating well drill. 1,858,249; May 17.
Scott & Williams, Incorporated. (See Grothey, Ivan W., assignor.)
Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Manufacture of mercapto-aryl-thiazoles. 1,858,344; May 17.
Scottish Dyes Limited. (See Loveluck, R. J., Beckett, and Thomas, assignors.)
Scovill Manufacturing Company. (See Fenton, Paul E., assignor.)
Scranton, J. P., trustee. (See Ricker, Norman H., assignor.)
Seamans & Cobb Company. (See Whalen, John E., assignor.)
Security Trust Company, et al., executors. (See Horton, Allen A.)
Sedgley, Reginald F., Philadelphia, Pa. Combined club and firearm. 1,858,601; May 17.
See, Edward E., Omaha, Nebr. Lightning device for sewing machines. 1,858,564; May 17.
Seeger Refrigerator Company. (See Seeger, Walter G., assignor.)
Seeger, Walter G., assignor to Seeger Refrigerator Company, St. Paul, Minn. Refrigerator door. 1,858,906; May 17.
Seelert, Edward H., assignor to McQuay Radiator Corporation, Minneapolis, Minn. Concealed heat exchange unit. 1,859,056; May 17.
Seelig, Sigbert, Berlin-Charlottenburg, Germany. Apparatus for distilling oil. 1,858,467; May 17.
Sefton, Walter. (See Ta'Bois, Percival L., assignor.)
Seisel, S. M., Co. (See Martell, Forrest H., assignor.)
Seltz, Oskar, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Electric current rectifier. 1,858,907; May 17.
Seltz, Xaver, Constance, Germany. Shock absorbing device for motor cars. 1,858,971; May 17.
Semon, Waldo L., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Binding books. 1,858,685; May 17.
Sensow, Anton C., assignor to U. S. Slicing Machine Company, La Porte, Ind. Feed mechanism for slicing machines. 1,858,376; May 17.
Sentney, Charles R., Hollywood, Calif. Attachment for stands and the like. 1,858,752; May 17.
Servilla, Emiliano, Antilla, Cuba. Key Holder. 1,859,176; May 17.
Sether, Alvin F., Eugene, Oreg. Cap for paste tubes. 1,858,419; May 17.
Shakespeare Company. (See Russell, Samuel G., assignor.)
Sharples, George E., Cranston, R. I., assignor to D. M. Watkins Company, Hutton. 1,858,686; May 17.
Shaw, Joseph A., Pittsburgh, Pa. Treatment of hydrocarbon oil. 1,859,262; May 17.
Shell Petroleum Corporation. (See Clinkscales, J. W., jr., and Cutting, assignors.)
Shenango-Penn Mold Company. (See Ream, H. S., and Heln, assignors.)
Sherman, Alvin G., assignor to The Detroit Vapor Stove Company, Detroit, Mich. Stove structure. 1,858,310; May 17.
Shoenberg, Milton H., and L. Schon, San Francisco, Calif.; said Schon assignor to said Shoenberg. Circuit interrupter. 1,858,687; May 17.
Short, Ira, Essington, and J. Ormondroyd, Swarthmore, Pa., assignors to Westinghouse Electric and Manufacturing Company. Reduction gearing. 1,859,007; May 17.
Shrauger, Darius E., Atlantic, Iowa. Friction supporting means for screens and storm sashes. 1,858,602; May 17.
Shuck, Wayne L. (See Packard, S. M. and J. R., and Shuck.)
Siebenbürger, Hugo. (See Mayer, B., Seibenbürger, and Krauer.)
Siemens & Halske Aktiengesellschaft. (See Fischer, Hellmut, assignor.)
Siemens & Halske Aktiengesellschaft. (See Kusche, Walter, assignor.)
Siemens & Halske Aktiengesellschaft. (See Schaumberger, Rudolf, assignor.)
Siemens & Halske Aktiengesellschaft. (See Schedlbauer, Hugo, assignor.)
Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung. (See Eule, Martin, assignor.)
Silberstein, Isidor, Berlin, Germany. Manufacturing electrical resistances. 1,859,112; May 17.
Silfies, David M., Dundon, W. Va. Grass and weed cutter. 1,859,183; May 17.
Silica Products Company. (See Cross, Roy, assignor.)
Simmons Company. (See Kusterle, Frank, assignor.)
Simmons, Oliver G., Lakewood, Ohio. Method of and apparatus for generating the teeth of gears and gear shaper cutters. 1,858,468; May 17.
Simmons, Oliver G., Lakewood, assignor to The National Tool Company, Cleveland, Ohio. Knife for hullers. 1,858,527; May 17.
Simpson, Park P. (See Lehmann, P. H., and Simpson.)
Sinclair, Neil, assignor to Rip Van Winkle Wall Bed Company, Inc., Oakland, Calif. Folding bed. Re18,469; May 17.
Sirmay, Julius, Philadelphia, Pa., assignor to Jacquard Knitting Machine Co., Inc. Circular knitting machine. 1,858,469; May 17.
Six, Walter J., Indianapolis, Ind. Making piston rings. 1,850,057; May 17.
Skoglund, Bertel. (See Doering, C., Doering, Alstad, and Skoglund.)
Slady, Frank, assignor to Leviton Manufacturing Company, Brooklyn, N. Y. Shell and cap for electric light sockets. 1,858,377; May 17.
Slidell, Kemper. (See Hathaway, W., and Slidell.)
Sloan, William E., Chicago, Ill. Flush valve. 1,858,470; May 17.
Sloane-Blabon Corporation. (See Brown, C. W., and Soissa, assignors.)
Sloane, William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Power shovel. 1,859,263; May 17.
Smith, Alva T., Milwaukee, Wis. Electric flatiron attachment. 1,858,250; May 17.
Smith, Arthur E., Cambridge, and O. Nygaard, Saugus, assignors to Bernitz Furnace Appliance Company, Boston, Mass. Pulverized fuel furnace. 1,858,688; May 17.
Smith, Arthur E., Newton, and B. H. Snow, Melrose, assignor to Bernitz Furnace Appliance Company, Boston, Mass. Furnace wall. 1,858,812; May 17.
Smith, Carl A., Defiance, Ohio. Concrete form. 1,858,644; May 17.
Smith, Daniel W., Oak Park, Ill., assignor to International Harvester Company. Harvester. 1,859,177; May 17.
Smith & Davis Manufacturing Company. (See Duva II, William J., assignor.)
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition of matter containing guaiacol acetate. 1,858,285; May 17.
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition of matter containing salicyl aldehyde. 1,858,286; May 17.
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition of matter containing ethyl acetyl glycollate. 1,858,287; May 17.
Smith, Isidore P., Ottawa Hills, assignor to The Hettrick Manufacturing Company, Toledo, Ohio. Canvas play tent. Des. 86,983; May 17.
Smith, Isidore P., Ottawa Hills, assignor to The Hettrick Manufacturing Company, Toledo, Ohio. Canvas play tent. Des. 86,984; May 17.
Smith, Romeyn L., assignor to Brunswick-Kroeschell Company, New Brunswick, N. J. Expansion valve. 1,858,471; May 17.
Smith, Theodore L. (See Thompson, R. E., and Smith.)

Smoot, Charles H., Maplewood, N. J. Mechanism for controlling a plurality of fluid flows. 1,858,089; May 17.
Smoot, Lewis E., Washington, D. C. Apparatus for handling bulk materials. 1,858,645; May 17.
Sneed, John, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio. Braking device. 1,858,311; May 17.
Snodgrass, Benjamin W., Denver, Colo. Expanding bar. 1,858,378; May 17.
Snow, Benjamin H. (See Smith, Arthur E., and Snow.)
Snyder, Frederick T., New Canaan, Conn. Evaporative carbonization of organic materials. 1,858,972; May 17.
Societe de Condensation et d'Applications Mecaniques. (See Langevin, P., and Florisson, assignors.)
Societe des Usines Chimiques Rhone-Poulenc. (See Oser, A., and Laurent, assignors.)
Society of Chemical Industry in Basle. (See Felix, F., and Albrecht, assignors.)
Society of Chemical Industry in Basle. (See Krauer, Karl, assignor.)
Society of Chemical Industry in Basle. (See Mayer, B., Siebenbürger, and Krauer, assignors.)
Society of Chemical Industry in Basle. (See Moser, Wilhelm, assignor.)
Soissa, John A. (See Brown, C. W., and Soissa.)
Sokolow, Samuel, North Bergen, and J. E. Preston, Newark, N. J., assignors to F. & C. Manufacturing Co. Folding machine and method. 1,858,565; May 17.
Somervell, Howard, Evanston, Ill., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 86,985; May 17.
Somerville, William E., Coal City, Ill. Twister or strander. 1,858,528; May 17.
Sondersen, Henry, and H. Glemming, Brooklyn, N. Y. Trousers stretcher. 1,858,420; May 17.
Soubler, Leonard D., Woonsocket, R. I., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass blowing machine. 1,859,113; May 17.
Soubler, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Making blown glass articles. 1,859,114; May 17.
Soubler, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Apparatus for producing hollow glassware. 1,859,247; May 17.
Spase, Charles B., Syracuse, N. Y., assignor to I. Saks, Cleveland, Ohio. Clutch plate. 1,858,312; May 17.
Speas Mfg. Co. (See Rooker, W. A., and Speas, assignors.)
Speas, Victor E. (See Rooker, W. A., and Speas.)
Spence, Le Roy U., Boscobel, Wis., assignor to Westinghouse Electric & Manufacturing Company. Drying oil varnishes. 1,858,843; May 17.
Sperry Gyroscope Company. (See Wittkuhns, Bruno A., assignor.)
Spicer, Delphin H., Lakewood, Ohio. Coupling. 1,858,251; May 17.
Spicklemire, Chester T., Whitehall, and I. Taylor, Muskegon, Mich. Grip. 1,858,529; May 17.
Spindler, William M., New Orleans, La. Automatic window fastener. 1,858,345; May 17.
Sponable, Earl I., New York, N. Y. Apparatus for printing from a negative sound record to a positive. 1,858,603; May 17.
Sponsel, Kurt. (See Ernst, O., and Sponsel.)
Spring, Otto. (See Merley, S. R., and Spring.)
Sprinkle, Stanley A., Kalamazoo, Mich. Folding skate sail. 1,859,178; May 17.
Stacy, Thomas F., assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Press system. 1,859,058; May 17.
Stauer, Frank R., Floral Park, assignor to Mundo Products, Inc., New York, N. Y. Detachable spout for containers. 1,859,008; May 17.
Standard Brands Incorporated. (See Gore, H. C., Józsa, and Frey, assignors.)
Standard Gage Company. (See Aldeborgh, Erik H., assignor.)
Standard Oil Company. (See Diggs, S. H., McGee, and Cooke, assignors.)
Standard Oil Development Company. (See Frolich, Per K., assignor.)
Standard Oil Development Company. (See Lewis, Warren K., assignor.)
Standard Oil Development Company. (See Young, Philip L., assignor.)
Steele, John G., Latrobe, Pa. Vehicle brake. 1,858,973; May 17.
Steinkamp, Albert E., Cincinnati, Ohio. Hair cutting gauge. 1,858,252; May 17.
Stern, Milton C., and W. C. Pfeiffer, assignors to The Egry Register Company, Dayton, Ohio. Manifolding machine. 1,858,313; May 17.
Stetson, George W., Hingham, Mass. Water column for steam boilers. 1,859,009; May 17.
Stevenson, Fred, North Wales, Pa., assignor to American Model Form Co., Inc., New York, N. Y. Supporting stand. 1,859,223; May 17.
Stewart, Albert E., assignor to Acme Knitting Machine & Needle Company, Franklin, N. H. Knitting machine. 1,859,256; May 17.
Stewart-Warner Corporation. (See Minnium, Byron B., assignor.)
Stewart-Warner Corporation. (See Muzzy, William H., assignor.)
Stiegler, Harold W., assignor to Cheney Brothers, South Manchester, Conn. Weighting textile material. 1,858,379; May 17.
Stoddard, Vida L., Frankfort, Ind. File handle. 1,858,380; May 17.
Stokes, John B., Houston, Tex. Lawn mower. 1,858,690; May 17.
Strahm, Adolphe, Lowell, Mich. Rake cleaning device. 1,859,179; May 17.
Strait, Wilber E., Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y. Coil and method of assembly. 1,859,248; May 17.
Stratford, Charles W., Oakland, Calif. Vane valve. 1,859,010; May 17.
Straughan, George L., Chesapeake, W. Va. Magnetic fluid level gauge. 1,858,346; May 17.
Strochalen, Alexander, San Diego, Calif. Garage door opening and closing apparatus. 1,858,942; May 17.
Stroecker, Monroe D. B., Detroit, Mich. Flash light device. 1,858,691; May 17.
Stuart, Frank J., St. Louis, Mo. Pad mounting. 1,858,943; May 17.
Stull, Philip. (See Yost, E., and Stull.)
Sturgis Posture Chair Company. (See Huntley, Reginald C., assignor.)
Sullivan, Josiah, Dallas, Tex. Hose coupler. 1,858,646; May 17.
Summerlot, Clyde W., Terre Haute, Ind. Power utilizing appliance for motor vehicles. 1,858,314; May 17.
Summers, Claude M., Fort Wayne, Ind., assignor to General Electric Company. Magnetic core. 1,859,115; May 17.
Sundstrom, Herman T., Houston, Tex. Slug lever attachment for typographical machines. 1,859,116; May 17.
Superheater Company, The. (See Armacost, Wilbur H., assignor.)
Sutphen, Robert M. (See Horni, P. P., and Sutphen.)
Swain, James A., London, England. Attachment for artificial legs. 1,858,974; May 17.
Swan, Peter, Portland, Oreg. Making rice straw pulp and apparatus therefor. 1,859,224; May 17.
Swift, Edward B., Seattle, Wash. Anchor. 1,858,347; May 17.
Swift, Hiram H., Evans Mills, N. Y. Strainer. 1,859,184; May 17.
Switlik Parachute and Equipment Company. (See Switlik, Stanley, assignor.)
Switlik, Stanley, assignor to Switlik Parachute and Equipment Company, Trenton, N. J. Parachute pack. 1,859,185; May 17.
Symington, Thomas H., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Railway car truck. 1,858,720; May 17.
Symington, T. H., & Son, Inc. (See Symington, Thomas H., assignor.)
Symonds, Cleon W., Pasadena, Calif. Railway crossing. 1,858,472; May 17.
Ta'Bois, Percival L., assignor of seven-twentieths to W. Sefton, London, England. Advertising sign. 1,858,975; May 17.
Tacke, Albert, Rheine in Westfalia, Germany. Driving gear for drums. 1,858,692; May 17.
Talnton, Urlyn C., Johannesburg, Transvaal, Union of South Africa. Hydrometallurgical treatment of ores. 1,858,944; May 17.
Taylor, Cecil H., Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,858,348; May 17.
Taylor, Howard D., New York, N. Y., assignor to Flexible Truck Corporation, Philadelphia, Pa. Car truck. 1,858,473; May 17.
Taylor, Irma. (See Spicklemire, C. T., and Taylor.)
Taylor, James A., assignor to N. B. Taylor, Portland, Me. Expansible bushing for winding cores. 1,858,753; May 17.
Taylor, Nellie B. (See Taylor, James A., assignor.)
Teich, Ernest L., assignor to The American Hardware Corporation, New Britain, Conn. Escutcheon. 1,858,604; May 17.
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Buschbeck, Werner, assignor.)
Terman, Frederick E., Stanford University, Calif. Signaling system. 1,858,349; May 17.
Terrell, Harold C., and F. A. Kerkhoff, assignors to The Ohio Parts Company, Cincinnati, Ohio. Battery terminal connection. 1,858,288; May 17.
Terry, Roger V., Hilton Village, Va., assignor to Newport News Shipbuilding and Dry Dock Co. Hydraulic machine. 1,858,566; May 17.
Tessky, Karl, Esslingen-on-the-Neckar, Germany. Lathe. 1,858,754; May 17.
Thackeray, Albert G. (See Phillips, J. E., and Thackeray.)
Thatcher, Ralph H., Springfield, Ohio. Lubricated bearing. 1,858,315; May 17.
Thelsen, Fred H., et al. (See Aurig, Max, and Brucklmayr, assignors.)
Thelsen, Luise, et al. (See Aurig, M., and Brucklmayr, assignors.)
Thiel, Frank M. (See Currie, R. A., and Thiel.)
Thiel, Henry A., Charleston, S. C. Trolley for bathing beaches. 1,859,180; May 17.

Thierfelder, Werner, Leipzig, Germany, assignor to James Mackie and Sons, Limited, Belfast, Ireland. Device for packing sliver into cans. 1,858,945; May 17.
Third Dimension Pictures, Inc. (See Burkhardt, Jakob, assignor.)
Thoma, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Filling shoes. 1,859,257; May 17.
Thomas, Edward, Cleveland, Ohio, assignor to The American Steel and Wire Company of New Jersey. Take-up block. 1,859,117; May 17.
Thomas, John. (See Loveluck, R. J., Beckett, and Thomas.)
Thompson, Allison J., Cleveland, Ohio. Lamp hanger structure. 1,858,908; May 17.
Thompson, Ernest H., Evanston, Ill. Aligning and positioning device for piston valves. 1,859,181; May 17.
Thompson, James H., assignor to C. E. Godsey, Bluefield, W. Va. Figure toy. 1,859,118; May 17.
Thompson, Ralph E., Brookline, and T. L. Smith, Concord, assignors to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,858,316; May 17.
Thorn, William E. (See Johnson, C. R., and Thorn.)
Thornley, Joseph H., Evanston, Ill. Dike. 1,858,976; May 17.
Thorpe, Forest H., assignor to The Columbus Sucker Rod Company, Columbus, Ohio. Auxiliary lift. 1,858,866; May 17.
Thyle Machinery Company. (See Bell, Fred C., assignor.)
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,859,182; May 17.
Tiedemann & Harris, Inc. (See Rosberg, John E., assignor.)
Tietze, Ernst. (See Hentrich, W., Tietze, Ossenbeck, and Backes.)
Timmons, Elizabeth. (See Timmons, Samuel E., assignor.)
Timmons, Samuel E., assignor to E. Timmons, Oklahoma City, Okla. Folding wall table. Re18,475; May 17.
Tracy, Michael J., St. Louis County, Mo. Window. 1,858,289; May 17.
Trist, Arthur R., London, England, assignor, by mesne assignments, to Pantone Corporation, New York, N. Y. Printing method and apparatus. 1,858,909; May 17.
Tryco Products Inc. (See Holmes, Franklin T., assignor.)
Turner, Cecil and R., Petersburg, Ill. Frozen custard stand. Des. 86,986; May 17.
Turner, Ray. (See Turner, Cecil and R.)
Turner Tanning Machinery Company, The. (See McLaughlin, George E., assignor.)
Uher, Edmond, jr., Budapest, Hungary, assignor to Uhertype Aktiengesellschaft, Glarus, Switzerland. Justifier for photographical or other typesetting machines. 1,858,910; May 17.
Uhertype Aktiengesellschaft. (See Uher, Edmond, jr., assignor.)
Uline, Walter C., Nappanee, Ind. Folding table. 1,858,253; May 17.
Uline, Walter C., Nappanee, Ind. Foldable settee. 1,858,254; May 17.
Ulrich, Charles A., Hartford, Conn. Curtain operating mechanism. 1,858,867; May 17.
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)
Union Switch & Signal Company, The. (See Baumgartner, Godfrey, assignor.)
Union Switch & Signal Company, The. (See Bossart, Paul N., assignor.)
Union Switch & Signal Company, The. (See Clausen, Harold C., assignor.)
Union Switch & Signal Company, The. (See Holte, Harold O., assignor.)
Union Switch & Signal Company, The. (See Lucas, Samuel M., assignor.)
Union Switch & Signal Company, The. (See Nettleton, Lewis L., assignor.)
Union Switch & Signal Company, The. (See O'Hagan, Bernard E., assignor.)
Union Trust Company of Pittsburgh, The, et al., executors. (See Culbertson, Albert L.)
United Autographic Register Company. (See Cooke, Allen B., assignor.)
United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)
United-Carr Fastener Corporation. (See Crosby, Earle M., assignor.)
United-Carr Fastener Corpoation. (See Johnson, Gustav, assignor.)
United-Carr Fastener Corporation. (See Lyons, Michael M., assignor.)
United Milk Crate Corporation. (See Woolsey, C. A., and Bowman, assignors.)
United Shoe Machinery Corporation. (See Fromm, Willy, assignor.)
United Shoe Machinery Corporation. (See Furber, Frederick M., assignor.)
United Shoe Machinery Corporation. (See Greenough, Henry B., assignor.)
United Shoe Machinery Corporation. (See Keene, Guy L., assignor.)
United Shoe Machinery Corporation. (See Roberts, William T. B., assignor.)
United Shoe Machinery Corporation. (See Ryan, George F., assignor.)
United States Gypsum Company. (See Linzell, H. K., and Scholz, assignors.)
U. S. Slicing Machine Company. (See Sensow, Anton C., assignor.)
Universal Optical Corporation. (See Beattey, Earle J. R., assignor.)
Universal Patents Holding Co. (See Peters, Henry, assignor.)
Universal Steel Company. (See German, Howard M., assignor.)
Urbach, Alfred, Los Angeles, Calif. Safety fender. 1,859,186; May 17.
Urso, Frank, Buffalo, N. Y. Electric time switch. 1,859,060; May 17.
Utah Radio Products Co. (See Barrett, Edward L., assignor.)
Utley, Thomas, Truebrook, Liverpool, England. Ship's light. 1,858,946; May 17.
Vallecchi, Enrico, Florence, Italy. Device for the mechanical obtainment of a changeable paper or similar covering for the seats of water closet basins. 1,858,794; May 17.
Valley Iron Works Company. (See Graef, John M., assignor.)
Vance, Walter N., Chicago Heights, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Leg construction. 1,858,381; May 17.
Van Deest, Henry, assignor to Henney Motor Company, Freeport, Ill. Cot fasteners for ambulances. 1,858,530; May 17.
Vanderwall, Wilbur F., West Concord, Minn. Thermobox. 1,859,119; May 17.
Van Duyn, Adrianus, Hillegersberg, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van Andre Werktuigen, Rotterdam, Netherlands. Weighing apparatus. 1,858,795; May 17.
Van Gessel, Karel M. (See de Boer, J. H., and van Gessel.)
Van Norman, Charles E., assignor to Van Norman Machine Tool Company, Springfield, Mass. Chuck. 1,858,693; May 17.
Van Norman Machine Tool Company. (See Van Norman, Charles E., assignor.)
Van Wyck, Cecil, and R. C. Hyde, Los Angeles, Calif., assignors to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del. Illuminated sign. 1,858,755; May 17.
Vékony, Charles, Miskolcz, Hungary. Motor vehicle. 1,858,721; May 17.
Versillé, Pierre. (See Defrance, A., and Versillé.)
Vibroscope, Inc. (See Davey, Peter, assignor.)
Victorsohn, Morris, assignor to Victorson Manufacturing Corporation, New York, N. Y. Hanger support. 1,858,531; May 17.
Victorson Manufacturing Corporation. (See Victorsohn, Morris, assignor.)
Victory Valves Limited. (See Gray, T. F., and Bolton, assignors.)
Virga, John B., Washington, D. C. Sash window. 1,859,187; May 17.
Vogan, Frank M., Canton, assignor to The Reeves Manufacturing Company, Dover, Ohio. Feed trough. Des. 86,987; May 17.
Vogl, Otto, assignor to Chicago Printed String Co., Chicago, Ill. Spool holder or similar article. Des. 86,988; May 17.
Volth, J. M. (See Lell, Jacob, assignor.)
Von Alvensleben, George B., Eureka, Calif. Lesson marker and means of holding in book. 1,858,605; May 17.
Von Herz, Edmund, Cologne-Dellbruck, Germany, assignor to Remington Arms Company, Inc. Priming mixture. 1,859,225; May 17.
Von Hilvety, George C. S., Buenos Aires, Argentina. System for transmitting motion to the driving wheels of motor cars. 1,858,647; May 17.
Vosbiklan, Peter S. and T. S., Philadelphia, Pa. Wood scraper. 1,859,226; May 17.
Vosbiklan, Thomas S. (See Vosbiklan, P. S., and T. S.)
Vulcan Corporation, The. (See Clausing, George, assignor.)
Wagner Electric Corporation. (See Welchsel, Hans, assignor.)
Wagner, Joshua. (See Schroeder, L. H., and Wagner.)
Wahnsiedler, Charles G., Evansville, Ind. Hanger for lavatories, sinks, and the like. 1,858,648; May 17.
Wald, John R., Huntingdon, Pa. Reflector button and holding means therefor. 1,858,382; May 17.
Waldron, John, Corporation. (See Dickhaut, Charles A., assignor.)
Wales, Charles, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for making glass articles. 1,859,011; May 17.
Walinsky, Ossip J., New York, N. Y. Hand-bag. 1,859,061; May 17.
Walker, Edward H., and G. L. W. Mong, Somerset, Pa. Mausoleum. 1,858,722; May 17.
Walsh, William E., assignor to The Connecticut Hard Rubber Company, New Haven, Conn. Throat applicator. 1,858,694; May 17.
Walter, Charles T. (See McKee, H. H., and Walter.)

Walter, Edward C., assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,858,290; May 17.

Wardley, Timothy C., assignor to T. E. Bissell Company, Elora, Ontario, Canada. Disk harrow. 1,858,756; May 17.

Wasberg, Axel, assignor to Camel Company, Chicago, Ill. Door elevating mechanism. 1,858,844; May 17.

Waterman, Hein L., Delft, assignor to De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Manufacture of liquid hydrocarbons. 1,859,062; May 17.

Watkins, D. M., Company. (See Sharples, George E., assignor.)

Wayne Company. (See Griffin, William M., assignor.)

Wayne Company. (See Somervell, Howard, assignor.)

Weakley, Lloyd L., Quincy, Fla. Sack holder. 1,858,649; May 17.

Weaver, Allan, Port Washington, N. Y., assignor to American Telephone and Telegraph Company. Printing telegraph system. 1,858,350; May 17.

Weaver, Walter E., Houston, Tex. Resilient wheel. 1,858,723; May 17.

Webb, Arthur B., Milwaukee, Wis., assignor to The Rightway Corporation. Grouter for wheels. 1,858,567; May 17.

Weber, Friedrich W., Hackensack, assignor to Maywood Chemical Works, Maywood, N. J. Silk improved in weight, durability, and appearance and obtaining the same. 1,858,474; May 17.

Weber, Friedrich W., Hackensack, assignor to Maywood Chemical Works, Maywood, N. J. Silk improved in weight and appearance and obtaining the same. 1,859,188; May 17.

Wechsberg, Anna M. C., et al., trustees. (See Coppus, Frans H. C., assignor.)

Weichelt, Carl L., assignor to Wirt Company, Philadelphia, Pa. Rheostat-lamp socket. 1,858,422; May 17.

Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Alternating current motor. 1,858,253; May 17.

Welda, Harry, Plainfield, N. J., assignor to American Hard Rubber Company New York, N. Y. Steering wheel. 1,858,650; May 17.

Welde, Rudolph, assignor to Hermann Hurwitz & Co., Berlin, Germany. Apparatus for displacing the counter pressure roller on the missing of a sheet in multiple reproduction apparatus. 1,858,651; May 17.

Weisenburg, Andrew, Philadelphia, Pa. Bottle cap assembling machine. 1,858,695; May 17.

Weisker, Ellis, New York, N. Y. Photographic apparatus. 1,858,423; May 17.

Weiss, Carl W., Brooklyn, N. Y. Transmission. 1,858,696; May 17.

Wellington Machine Company, The. (See Deisler, Harry W., assignor.)

Welton, John A., Dover, Ohio. Tie plate and rail brace. 1,858,868; May 17.

Werft, Ellis L., Philadelphia, W. Ewald, Ardsley, and P. P. Henshall, Philadelphia, assignor to J. J. Nesbitt, Inc., Holmesburg, Pa. Multiple temperature control for heating and ventilating units. 1,858,606; May 17.

West, Frank L., and L. A. Martin, Bradenton, Fla. Cigarette package opener. 1,859,120; May 17.

Western Clock Company. (See Schlenker, Max, assignor.)

Western Electric Company. (See Beath, C. P., and Heinicke, assignors.)

Western Electric Company. (See Brown, Laurel H., assignor.)

Western Electric Company. (See Heinicke, Herbert M. E., assignor.)

Western Electric Company. (See Paulson, Christian, assignor.)

Western Electric Company. (See Rock, George L., assignor.)

Western Electric Company. (See Wales, Charles, assignor.)

Western Newell Manufacturing Company. (See Maves, Stanley E., assignor.)

Western Union Telegraph Company, The. (See Beardsley, B., and Chadbourne, assignors.)

Western Union Telegraph Company, The. (See Porter, J. F., and Marx, assignors.)

Westinghouse Electric & Manufacturing Company. (See Barnholdt, Harold L., assignor.)

Westinghouse Electric & Manufacturing Company. (See Brace, Porter H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Colby, Ora A., assignor.)

Westinghouse Electric & Manufacturing Company. (See Corbett, Alfred, assignor.)

Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)

Westinghouse Electric & Manufacturing Company. (See Frey, A. A., and Cole, assignors.)

Westinghouse Electric & Manufacturing Company. (See Harness, L. R., and Bokovoy, assignors.)

Westinghouse Electric & Manufacturing Company. (See Pilling, Norman B., assignor.)

Westinghouse Electric & Manufacturing Company. (See Short, I., and Ormondroyd, assignors.)

Westinghouse Electric & Manufacturing Company. (See Spence, Le Roy U., assignor.)

Westinghouse Electric & Manufacturing Company. (See Williams, Harold W., assignor.)

Westinghouse Electric & Manufacturing Company. (See Wolfert, Edward R., assignor.)

West Virginia Armature Co. (See Phelps, Arthur F., assignor.)

Whalen, John E., assignor to Seamans & Cobb Company, Hopkinton, Mass. Spindle. 1,858,607; May 17.

Wheelbarger, Albert S., and G. C. Coil, assignors to Ohmer Fare Register Company, Dayton, Ohio. Ticket printing, issuing, and recording machine. 1,858,813; May 17.

Wheeler, John E., Chicago, Ill. Electric horological savings device. 1,858,532; May 17.

Wheeler, William, assignor of one-half to W. S. De Bardeleben, Richmond, Ky. Ring. 1,859,189; May 17.

Wheeling Bronze Casting Company. (See Braddock, W. J., and Haller, assignors.)

Wheeling Bronze Casting Company. (See Haller, Charles W., assignor.)

Wheeling Bronze Casting Company. See Hamm, Fred, assignor.)

White, Herbert J., assignor to Gleason Works, Rochester, N. Y. Cutter sharpener. 1,858,860; May 17.

White, Rollin H., Cleveland Heights, assignor to The Cleveland Tractor Company, Cleveland, Ohio. Lubricating system. 1,858,533; May 17.

Whitney, Ernest M., Providence, R. I., assignor to Hookless Fastener Company. Lock slider for slide fasteners. 1,858,351; May 17.

Whitsett, Cameron A. (See Mabee, A. C., and Whitsett.)

Wico Electric Company. (See Louis, Terrence G., assignor.)

Wigle, Everett, Kingsville, in Gosfield South Township, Essex County, Ontario, Canada. Hoeing attachment for cultivators. 1,858,652; May 17.

Wilcoxson, Leslie S., Ridgewood, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Apparatus for fluidizing and carbonizing pulverized coal. 1,858,796; May 17.

Wildhaber, Ernest, Rochester, N. Y. Grinding gears. 1,858,568; May 17.

Wilkinson, John J., and M. A. Wilkinson, Owego, N. Y., assignors to The Carrom Company, Ludington, Mich. Automatic folding table. 1,859,121; May 17.

Wilkinson, Michael A. (See Wilkinson, John J. and M. A.)

Willcox, Roderick H., assignor to Columbus Coated Fabrics Corporation, Columbus, Ohio. Display rack. 1,858,653; May 17.

Willetts, Paul G., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Refractory for contact with molten glass. 1,858,317; May 17.

Willetts, Paul G., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Making glass tank blocks and like refractories, and article made thereby. 1,859,227; May 17.

Williams, Harold W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system for elevators. 1,858,283; May 17.

Williams, Pearson F., assignor to G & W Electric Specialty Co., Chicago, Ill. Pothead device. 1,859,249; May 17.

Wilson, Ellis L., San Anselmo, Calif. Door latch. 1,858,608; May 17.

Wilson, Evan G., Waterloo, near Liverpool, England. Machine for rolling and finishing leather. 1,858,424; May 17.

Winchester Repeating Arms Company. (See McNutt, Joseph D., assignor.)

Winkler, Carl J., assignor to Schwitzer-Cummins Company, Indianapolis, Ind. Packing for rotating shafts. 1,859,012; May 17.

Winkley, Erastus E., Lynn, Mass. Speed control mechanism. 1,858,654; May 17.

Winship, Emory. (See Knight, George D., assignor.)

Wired Radio, Inc. (See Gebhard, L. A., and Rudolph, assignors.)

Wirt Company. (See Weichelt, Carl L., assignor.)

Wise, Clarence E., Pittsburgh, Pa., assignor to Crucible Steel Company of America. Plowshare. 1,858,697; May 17.

Wise, Julius H., St. Louis County, Mo. Speaking aperture fixture. 1,859,013; May 17.

Witter, Lawrie L., Jamaica Plain, Mass. Dirigible road light. Re18,470; May 17.

Wittkuhns, Bruno A., Chatham, N. J., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Positioning remote objects. 1,858,425; May 17.

Wolever, Franklin H., Chicago, Ill. Sand blasting machine. 1,858,475; May 17.

Wolfe, Loren A., Baltimore, Md. Life saving device. 1,858,256; May 17.

Wolfe, Richard, assignor to California Consolidated Water Co., Los Angeles, Calif. Olla. 1,858,757; May 17.

Wolfe, Richard C., assignor to California Consolidated Water Co., Los Angeles, Calif. Combination drinking cup and water vending machine. 1,858,758; May 17.

Wolfert, Edward R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Voltage compensator. 1,858,845; May 17.

Woller, Oliver C. R., Chicago, Ill. Brake and clutch pedal pad. 1,858,809; May 17.

Wood Hydraulic Hoist & Body Co. (See Wood, P. S., and Dewey, assignors.)

Wood, Joseph E., assignor to The Dearborn Company, Chicago, Ill. Table. 1,858,534; May 17.

Wood, Philip S., and F. H. Dewey, assignors to Wood Hydraulic Hoist & Body Co., Detroit, Mich. Manual hydraulic hoist. 1,858,797; May 17.

Wood, Vera L., et al., trustee. (See Coppus, Frans H. C., assignor.)

Woodrow Washing Machine Company. (See Gibson, George M., assignor.)

Woodward, Orville E., assignor of one-half to G. W. Hinson, Germantown, Ky. Tobacco plant transplanter. 1,858,318; May 17.

Woodworth, Charles B., Port Dickinson, N. Y. Protective covering for automobile bumpers. 1,858,569; May 17.

Woolsey, Charles A., and H. V. Bowman, assignors to United Milk Crate Corporation, Minneapolis, Minn. Crate. 1,858,846; May 17.

Woolworth, Harry G., Washington, D. C. Jumping frog. 1,858,426; May 17.

Wright, Harry, jr., Chillicothe, assignor, by mesne assignments, to The Mead Corporation, Dayton, Ohio. Paper machinery. 1,859,014; May 17.

Wyman, Laurence W., Oakland, assignor to California Corrugated Culvert Company, Berkeley, Calif. Flume joint support. 1,858,427; May 17.

Yale & Towne Manufacturing Company, The. (See Heyer, Frederic K., assignor.)

Yale & Towne Manufacturing Company, The. (See Miller, Charles A., assignor.)

Yost, Edd, and P. Stull, Danville, Ohio. Feeder. 1,858,421; May 17.

Young, John, Los Angeles, Calif. Combination drilling valve and blow-out preventer. 1,858,352; May 17.

Young, John W., Pittsburgh, Pa. Safe protective apparatus. 1,859,122; May 17.

Young, Otto W. (See Brittain, R. J., jr., and Young.)

Young, Philip L., Elizabeth, N. J., assignor to Standard Oil Development Company. Obtaining hydrocarbons from wells. 1,858,847; May 17.

Young, William, Carluke, Scotland. Device for controlling windows of the vertically sliding type. 1,858,319; May 17.

Yseboodt, Gustave, Schaerbeek-Brussels, Belgium. Rail joint connection. 1,858,759; May 17.

Zancan, Ottavio, New York, N. Y. Motor car axle and brake. 1,858,257; May 17.

Zane, Lewis H., Mauch Chunk, Pa. Smoke and spark eliminator. 1,859,190; May 17.

Zech, Alfred, Detroit, Mich., assignor to Industrial Wire Cloth Company, Wayne, Mich. Cowl ventilator. 1,858,977; May 17.

Zerbi, Tranquillo, assignor to Fiat Società Anonima, Turin, Italy. Device for coupling two aircraft engines with pulling or tractive screw propellers rotating in opposite directions. 1,858,911; May 17.

Zipser, Abraham V., and C. Roche, Alameda, Calif. Rip cord pulling device. 1,858,609; May 17.

Zitscher, Arthur. (See Laska, L., and Zitscher.)

Zlomke, Paul A. (See Montbriand, Richard, assignor.)

Zoller, Arnold, Suresnes, France. Engine provided with a rotary compressor. 1,859,264; May 17.

Zons, Frederick W., New York, N. Y. Neon lamp for television. 1,858,698; May 17.

Zschimmer, Bodo. (See Immerheiser, C., and Zschimmer.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 17TH DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abrading machine. W. Fromm. 1,858,297; May 17.
Accelerator for the vulcanization of rubber. A. Cambron. 1,858,577; May 17.
Acids and preparing the same, 3.5-dihalogen-1-methylbenzene-2-carboxylic. E. Hoffa. 1,858,625; May 17.
Acids, Manufacture of glycidic. A. A. Kaufmann. 1,858,551; May 17.
Advertising installation. P. Schouwstra. 1,858,643; May 17.
Agitator for washing machines. G. M. Gibson. 1,859,033; May 17.
Air conditioning device. F. M. Opitz. Des. 86,969; May 17.
Aircraft, Heavier-than-air. W. Muss. 1,859,107; May 17.
Aircraft wing. R. T. Richart. 1,858,341; May 17.
Airplane. H. Alfaro. 1,858,259; May 17.
Alcohol and acetone, Biological production of butyl. F. C. Gerretsen. 1,858,808; May 17.
Alcohols, Formation and recovery of. S. R. Merley and O. Spring. 1,859,241; May 17.
Alcohols, Synthesizing and separating higher. G. Patart. 1,859,244; May 17.
Aligning and positioning device for piston valves. E. H. Thompson. 1,859,181; May 17.
Alkyl cyanides, Manufacture of. H. B. Hass and J. R. Marshall. 1,859,140; May 17.
Alloy. N. B. Pilling. 1,858,415; May 17.
Alloy. H. S. Ream, jr., and F. J. Hein. 1,859,169; May 17.
Alloy, Magnetic. A. A. Frey and G. H. Cole. 1,858,442; May 17.
Alloys, Preparing and purifying. P. H. Brace. 1,858,386; May 17.
Amine hydrohalides, Manufacture of. M. E. Putnam. 1,858,640; May 17.
Ammonia, Oxidation of. F. Jost. 1,858,740; May 17.
Amplifying system. W. F. Eames. 1,858,267; May 17.
Anchor. E. B. Swift. 1,858,347; May 17.
Antenna lead-out insulator. C. B. Mirick. 1,858,330; May 17.
Anti-oil-pollution system. H. E. Rossell and R. N. S. Baker. 1,859,246; May 17.
Antipilfer record machine. L. F. Hagemann. 1,858,589; May 17.
Applicator, Throat. W. E. Walsh. 1,858,694; May 17.
Arch support and protector therefor. W. M. Scholl. 1,858,524; May 17.
Ar-tetrahydronaphthols and their esters, Manufacturing. E. Korten. 1,858,627; May 17.
Article spacer for packing boxes. E. C. Hadley. 1,858,856; May 17.
Articles from their carrying trays, Mechanism for removing. R. A. Farnham. 1,858,732; May 17.
Articles to rigid supports, Arrangement for securing elastic. P. A. Harsem. 1,858,326; May 17.
Autographic register. A. B. Cooke. 1,858,953; May 17.
Automobile rack. P. T. Bynum. 1,858,355; May 17.
Automobile signal. C. J. Chevre. 1,858,818; May 17.
Awning fixture. F. J. Arndt. 1,858,912; May 17.
Axle and brake, Motor car. O. Zancan. 1,858,257; May 17.

Azodyestuffs and making same, Water insoluble. L. Laska and A. Zitscher. 1,858,628; May 17.
Azodyestuffs, Water insoluble. L. Laska and A. Zitscher. 1,858,629; May 17.
Baby chair. J. V. Moran. 1,859,150; May 17.
Bag: *See*—
Hand bag.
Balance, Automatic. G. Raasche. 1,859,059; May 17.
Baler. Hay. H. Felk. 1,859,272; May 17.
Baling press. A. J. Kruse. 1,858,742; May 17.
Balloon, Decorative. C. A. Frost. 1,858,991; May 17.
Bar: *See*—
Expanding bar.
Bars, Shearing continuous. G. Langford. 1,858,401; May 17.
Base for incandescent lamps and similar devices. E. Hurwitz. 1,859,092; May 17.
Bauxite, clay, and intermediate aluminum bearing ores, Treatment of. L. G. Jenness. 1,858,272; May 17.
Bearing, Axle. W. Peyinghaus. 1,858,935; May 17.
Bearing, Lubricated. R. H. Thatcher. 1,858,315; May 17.
Bearing, Scale. H. A. Hadley. 1,858,588; May 17.
Bed. A. Bell. 1,858,657; May 17.
Bed, Folding. N. Sinclair. Re18,469; May 17.
Bed, Folding davenport. W. J. Duvall. 1,858,543; May 17.
Bedspread. F. E. Rudd. Des. 86,981; May 17.
Belt. E. E. Gray. 1,859,204; May 17.
Belt conveyer. W. B. Cooley. 1,858,764; May 17.
Beryllium oxide or beryllium hydroxide from technical alkali-beryllium double halides in particular fluorides, Production of. H. Fischer. 1,858,771; May 17.
Beverage set. H. Korn. 1,858,299; May 17.
Bezel for unbreakable clock crystals, Sheet metal. E. L. Carlson. 1,858,262; May 17.
Bicycle and motor-cycle seat. F. Blake. 1,858,477; May 17.
Billing device, Condensed. E. A. Davidge. 1,858,729; May 17.
Binder, Loose leaf. J. C. Dawson. 1,859,237; May 17.
Bit: *See*—
Drill bit. Roller bit.
Bit for deep well drilling. J. C. Lunsford. 1,858,744; May 17.
Block: *See*—
Take-up block.
Blower. F. H. C. Coppus. 1,858,581; May 17.
Board: *See*—
Teeter board.
Boiler and superheater, Steam. H. J. Kerr. 1,858,363; May 17.
Bolt: *See*—
Wear compensating bolt.
Book, Deposit. E. A. Kelly. 1,859,041; May 17.
Books, Binding. W. L. Semon. 1,858,685; May 17.
Bore holes, Apparatus for determining the vertical deviation of. W. F. Rogers. 1,859,222; May 17.
Boring machine. K. F. Gallimore. 1,858,491; May 17.
Bottle cap assembling machine. A. Weisenburg. 1,858,695; May 17.
Bottle-charging mechanism. J. R. Gruetter. 1,859,238; May 17.
Bottle or similar container. F. C. Reilly. Des. 86,979; May 17.
Box: *See*—
Display box. Lunch box.
Flower box. Package box.
Journal box. Tackle box.
Box and packing therefor, Stuffing. J. R. Cole. 1,858,882; May 17.
Box lidding machine. H. Paxton. 1,858,556; May 17.
Box machine. J. A. Giles. 1,858,706; May 17.
Box or package, Display. E. W. Poppe. 1,859,050; May 17.
Brace: *See*—
Tie plate and rail brace.
Bracelet chain, Jewelled. M. Anderson. Des. 86,946; May 17.
Brake: *See*—
Hand brake. Vehicle brake.
Brake. W. J. Andres. 1,858,354; May 17.
Brake. R. A. Goepfrich. 1,858,667; May 17.
Brake. K. E. Lyman. 1,858,335; May 17.
Brake and clutch pedal pad. O. C. R. Woller. 1,858,809; May 17.
Brake mechanism. C. H. Taylor. 1,858,348; May 17.
Brake operating means, Airplane wheel. R. H. Depew, jr. 1,858,393; May 17.
Brake retainer valve mechanism, Fluid pressure. G. C. George. 1,858,493; May 17.
Braking device. J. Sneed. 1,858,311; May 17.
Brick and tile molding machine, Hollow. L. Frandsen. 1,858,620; May 17.
Brush, Magazine shaving. A. Lancellotti. 1,858,452; May 17.
Buckle, Fabric covered. S. Lerma. 1,859,098; May 17.
Buffer, Door. E. J. De Guenther. 1,858,886; May 17.
Building construction. H. Boettcher. 1,858,701; May 17.
Building construction. S. R. McKay. 1,858,715; May 17.
Bulbs on wire, Swaging. R. Moreschini. 1,858,306; May 17.
Bumper, Automobile. T. I. Duffy. 1,858,541; May 17.
Burner: *See*—
Oil burner.
Burner control system. J. A. Dahlstrom. 1,858,265; May 17.
Burner system, Oil. G. H. Messer. 1,858,837; May 17.
Bushing for winding cores, Expansible. J. A. Taylor. 1,857,753; May 17.
Butter chip. C. E. Milliron and J. F. Finnegan. 1,858,247; May 17.
Button. G. E. Sharples. 1,858,686; May 17.
Cabinet, Ironing board. O. P. Cramer. 1,858,765; May 17.
Cabinet, Refrigeration. C. T. Hansen. 1,859,239; May 17.
Cabinet, Shower bath. J. O. Barce. 1,859,017; May 17.
Cable, Park. O. A. Frederickson. 1,858,772; May 17.

Cable reel and metal lagging. E. N. Hescock. 1,858,825; May 17.
Cable sheath bonding. K. W. Miller and D. W. Roper. 1,858,838; May 17.
Cable, Shipping. A. O. Hoeftmann, O. A. McNamee, and J. J. Morrison. 1,859,141; May 17.
Calcium boride. E. Noak and F. Schubert. 1,858,413; May 17.
Calculating machine. G. C. Chase and C. F. Schweitzer. 1,858,321; May 17.
Calculating machine. H. E. Enders. 1,858,295; May 17.
Calculating machine. C. M. F. Friden. 1,858,397; May 17.
Calculating machine. E. C. Walter. 1,858,290; May 17.
Calculating machine controlling one or more secondary macaines. K. Eichenauer. 1,858,807; May 17.
Caliper. C. G. Erickson. 1,858,544; May 17.
Came and protected stay bar. W. Henderson. 1,858,775; May 17.
Camera. D. E. Decker. 1,858,661; May 17.
Camera body. C. A. Bornmann. 1,858,575; May 17.
Camera, Photographic. O. Barnack. 1,858,385; May 17.
Camera, Photographic. A. S. Howell. 1,859,207; May 17.
Candy bar. C. F. Haug. Des. 86,959; May 17.
Cannon. L. L. Driggs, jr. 1,858,487; May 17.
Cap for paste tubes. A. F. Sether. 1,858,419; May 17.
Caps, Making bottle. C. J. Parker. 1,858,279; May 17.
Car construction. O. C. Duryea. 1,858,730; May 17.
Car frame support and journal box. R. J. Brittain, jr., and O. W. Young. 1,859,265; May 17.
Car, Freight. J. T. McEniry. 1,858,408; May 17.
Car, Refrigerator. C. D. Bonsall. 1,858,802; May 17.
Car retarder, Railway. H. C. Clausen. 1,859,073; May 17.
Car retarding apparatus. A. Meyer. 1,859,102; May 17.
Car tops, Mechanism for operating folding motor. A. and E. Hess. 1,858,624; May 17.
Car, Welded hopper. W. H. Mussey and J. R. Rudulph. 1,859,261; May 17.
Carbon, Reactivation of powdered or fine-grained adsorptive. A. Mackert. 1,858,745; May 17.
Carburetor. L. J. Berkeley. 1,858,573; May 17.
Carburetor. G. M. Bicknell. 1,858,614–15; May 17.
Carburetor. C. C. Bradbury and R. F. Bracke. 1,858,387; May 17.
Carburetor. A. C. Mabee and C. A. Whitsett. 1,858,885; May 17.
Card, Display. W. Raster. 1,858,461; May 17.
Carpet, Weft pile. L. Koch. 1,858,959; May 17.
Cartridge, Photographic film. F. J. Gantnier. 1,858,585; May 17.
Case: *See*—
Key case. Wardrobe case.
Caslngs, Apparatus for cementing well. F. J. Hinderliter. 1,858,501; May 17.
Cash register. M. Jacob. 1,858,626; May 17.
Cast wheel. W. M. Duncan. 1,859,077; May 17.
Caster, Spring. H. W. Deisler. Re18,467; May 17.
Catalyzer. F. Jost. 1,858,741; May 17.
Catamenial bandage. M. C. Andrews. 1,859,192; May 17.
Cathode. F. S. McCullough. 1,858,676; May 17.
Cellulose acetate composition of matter containing ethyl acetyl glycollate. H. B. Smith. 1,858,287; May 17.
Cellulose acetate composition of matter containing guaiacol acetate. H. B. Smith. 1,858,285; May 17.
Cellulose acetate composition of matter containing salicyl aldehyde. H. B. Smith. 1,858,286; May 17.
Cellulose esters, Producing. G. Heberlein and A. Bodmer. 1,858,993; May 17.
Cellulose pulp, Chemically treating and bleaching. G. A. Richter and M. O. Schur. 1,858,522–3; May 17.
Centrifugal separator. M. N. Bonsiakos. 1,858,574; May 17.
Chain propeller. E. N. Kerr. 1,859,145; May 17.
Chair: *See*—
Baby chair.
Channel key plate. C. Lorber. 1,858,932; May 17.
Channeling machine. J. I. Hays. 1,858,327; May 17.
Chaplet. S. H. Gibson. 1,858,494; May 17.
Charge forming device. F. E. Aseltine. 1,858,848; May 17.
Chimney cleaning apparatus. A. Premro. 1,859,166; May 17.
Chuck. J. J. Kolar. 1,859,042; May 17.
Chuck. C. E. Van Norman. 1,858,693; May 17.
Chuck mechanism for web rolls. H. P. Clauberg. 1,858,391; May 17.
Cigarette and similar article. W. G. Charley. 1,858,951; May 17.
Cigarette server. W. J. Polk. 1,859,164; May 17.
Circuit, Apparatus for energizing an audion. G. B. Crouse. 1,858,323; May 17.
Circuit arrangement for stepping switches. W. Kusche. 1,858,832; May 17.
Circuit controlling switch, Multiple. R. Popp. 1,858,597; May 17.
Circuit for radio communication. R. N. Auble. 1,859,016; May 17.
Circuit interrupter. A. S. Fitzgerald and H. L. Palmer. 1,859,082; May 17.
Circuit interrupter. M. H. Shoenberg and L. Schon. 1,858,687; May 17.
Circuits, Compensating for nonlinear distortion in transmission. H. Nyquist. 1,858,307; May 17.
Circuits, Compensating for nonlinear distortion in transmission. H. Nyquist. 1,858,338; May 17.
Circuits, Voice operated relay. B. G. Björuson. 1,859,019; May 17.
Clamp: *See*—
Dead end clamp. Head clamp.
Cleaner: *See*—
Suction cleaner.
Clip: *See*—
Frame clip.
Clipper, Electric hair. A. J. Dremel. 1,858,887; May 17.
Clock, Alarm. M. Schlenker. 1,858,563; May 17.
Clock system, Pneumatic. M. Fischer. 1,858,955; May 17.
Closure cap, Friction. N. N. Holland. 1,858,826; May 17.
Closure or lock for weirs, sluice gates, and the like, Emergency. G. Friedel. 1,858,064; May 17.
Club and firearm, Combined. R. F. Sedgley. 1,858,601; May 17.
Clutch collar. A. W. Aitken. 1,858,947; May 17.
Clutch plate. C. B. Spase. 1,858,312; May 17.
Clutch, Vacuum power. H. J. D. and H. K. McCollum. 1,858,999; May 17.
Coal, Apparatus for fluidizing and carbonizing pulverized. I. S. Wilcoxson. 1,858,796; May 17.
Coal carbonization process, Pulverized. C. E. Lucke. 1,858,834; May 17.
Coating of chromium on objects of iron and steel or aluminum, and particularly on knives, forks, and spoons, Producing a. H. Leiser. 1,858,631; May 17.
Coating, Protective. W. K. Lewis. 1,858,368; May 17.
Cock. P. E. Boeuf. 1,859,126; May 17.
Cock, Gauge. C. A. Fischer. 1,858,240; May 17.
Cocktail service. J. M. Creighton. 1,858,728; May 17.
Coding apparatus. P. N. Bossart. 1,858,876; May 17.
Coffee maker. A. D. Olds. Des. 86,967; May 17.
Coil and assembly. W. E. Strait. 1,859,248; May 17.
Coller for hot rod mills. A. Perrett. 1,859,159; May 17.
Column, Reinforced. F. C. Langenberg and G. A. Reinhardt. 1,858,512; May 17.
Comb: *See*—
Suction comb.
Combustion engine, Rotary. M. Cooper. 1,858,322; May 17.
Comparator. A. J. Hall. 1,859,035; May 17.
Compass, Magnetic. G. A. Salzgeber. Re18,474; May 17.
Compass or analogous article, Sepulcher. A. W. Roberts. Des. 86,980; May 17.
Composition and method of preparing, Waterproofing. J. C. Kratoville. 1,858,830; May 17.
Composition for treating arteriosclerosis and preparing same. N. A. Rumanceff. 1,858,905; May 17.
Compressor. J. O. Carrey. 1,858,817; May 17.
Compressor, Elastic fluid. G. E. T. Eyston. 1,858,921; May 17.
Compressor, Valve spring. N. F. McNaught and E. H. Peterson. 1,858,372; May 17.
Compressor without glands for use especially in refrigerating machines. L. Roebel. 1,858,904; May 17.
Concrete curing agent. R. Cross. 1,859,253; May 17.
Conductor cord attachment. C. Burkhardt. 1,858,816; May 17.
Conduit, Electrical wiring. G. L. Chamberlain and G. H. Gneiss. 1,859,259; May 17.
Cone, Winding. F. E. Morey. 1,858,410; May 17.
Confectionery. M. M. Guggenheim and G. R. Baker. 1,859,205; May 17.
Connecting rod of engines with radially arranged cylinders. M. J. B. Barbarou. 1,858,798; May 17.
Connection, Battery terminal. H. C. Terrell and F. A. Kerkhoff. 1,858,288; May 17.
Container and coacting and self-fastening cap therefor. L. A. Ragan. 1,859,003; May 17.
Container, Cigar. G. E. Hernis. 1,858,738; May 17.
Container filling machine. F. B. Reid. 1,858,417; May 17.
Container, Measuring and dispensing. B. M. Oswell. 1,859,109; May 17.
Container, Phosphorus. J. E. Mills. 1,858,456; May 17.
Control device. C. W. Brown and J. A. Soissa. 1,858,389; May 17.
Control device, Dual electric circuit. T. H. Ireland. 1,858,779; May 17.
Control for rolls, Automatic side. C. A. Dickhaut. 1,858,436; May 17.
Control system for elevators. H. W. Williams. 1,858,283; May 17.
Controlling device for laminated vehicle springs. G. W. Crabtree. 1,858,916; May 17.
Conveyer. W. B. Cooley. 1,858,484; May 17.
Conveyer. H. H. Rapley. 1,858,416; May 17.
Conveyer, Tray carrying. R. D. Delamere. 1,858,619; May 17.
Cooking apparatus. W. A. McCauley. 1,858,636; May 17.
Copper, Recovering. H. M. Burkey and L. E. Cole. 1,858,236; May 17.
Cord pulling device, Rip. A. V. Zipser and C. Roche. 1,858,609; May 17.
Core catching device. F. L. Scott and H. T. Baggett. 1,858,248; May 17.
Core, Magnetic. C. M. Summers. 1,859,115; May 17.
Core, Molded metallic. W. M. Duncan. 1,859,078; May 17.
Counter, Tile. L. G. Gray. Des. 86,953; May 17.

Counterpoise mechanism. B. P. Joyce. 1,858,829; May 17.
Coupler, Car. C. Burton. 1,858,915; May 17.
Coupler, Hose. J. Sullivan. 1,858,646; May 17.
Coupling: *See*—
Hose coupling. Trailer coupling.
Coupling. C. O. Bedford. 1,859,018; May 17.
Coupling. E. L. Brown. 1,859,251; May 17.
Coupling. D. H. Spicer. 1,858,251; May 10.
Coupling device. J. Lell. 1,858,514; May 17.
Cover. Combination mirror and tire. G. A. Lyon. 1,858,515; May 17.
Cover for underfloor piping. J. E. Burks. 1,858,803; May 17.
Cover, Jar. M. A. Rollman. 1,858,342; May 17.
Covering for automobile bumpers, Protective. C. B. Woodworth. 1,858,569; May 17.
Covering for motorcar tires. T. Nagamine. 1,858,965; May 17.
Cowl ventilator. A. Zech. 1,858,977; May 17.
Crate. C. A. Woolsey and H. V. Bowman. 1,858,846; May 17.
Crate, Pickling. W. J. Braddock and C. W. Haller. 1,858,430; May 17.
Crevices in rock formations or the like, Method and apparatus for sealing. G. W. Christians. 1,858,952; May 17.
Crossing, Railway. C. W. Symonds. 1,858,472; May 17.
Cup and water vending machine, Combination drinking. R. C. Wolfe. 1,858,758; May 17.
Current conducting bond, Electric. M. Schwartz. 1,858,284; May 17.
Current motor, Alternating. E. L. Barrett. 1,858,571; May 17.
Current motor, Alternating. H. Welchsel. 1,858,255; May 17.
Current rectifier, Electric. O. Seitz. 1,858,907; May 17.
Curtain operating mechanism. C. A. Ulrich. 1,858,867; May 17.
Curtain rod. G. A. Carlson. 1,858,950; May 17.
Curtain wrapping machine. A. Richter. 1,859,051; May 17.
Custard stand, Frozen. C. and R. Turner. Des. 86,986; May 17.
Cut-off for gas burners, Automatic. A. H. Davis, jr. 1,858,986; May 17.
Cutter: *See*—
Grass and weed cutter.
Cylinder, Press. C. A. Meisel and J. P. E. Neilson. 1,858,305; May 17.
Davenport or bed, Folding. W. J. Duvall. 1,858,542; May 17.
Dead end clamp. R. L. Jenner. 1,858,549; May 17.
Decarbonizing apparatus. E. W. Davis. 1,858,392; May 17.
Dehydrogenation process for making esters. C. H. Greenewalt. 1,858,823; May 17.
Desk or analogous article of furniture. R. W. Ericson. Des. 86,951; May 17.
Diaper. C. M. Schwartz. Re18,468; May 17.
Diazo-amino compounds. W. Hentrich, E. Tietze, A. Ossenbeck, and P. Backes. 1,858,623; May 17.
Die: *See*—
Torsion released die.
Differential mechanism. J. P. Remington. 1,859,245; May 17.
Dike. J. H. Thornley. 1,858,976; May 17.
Dirigible road light. L. L. Witter. Re18,470; May 17.
Dirt moving machine, Attachment for. C. J. Haugh. 1,858,736; May 17.
Discharge tube, Electric. J. H. de Boer and K. M. van Gessel. 1,859,029; May 17.
Discharge tube, Electric. J. H. J. Maartens. 1,859,043; May 17.
Dish, Combination cooking and serving. F. J. Osius. Des. 86,970; May 17.
Dish, Corn serving. B. C. Berry. Des. 86,948; May 17.
Disk harrow. T. C. Wardley. 1,858,756; May 17.
Dispenser. F. Nadoolman. 1,859,108; May 17.
Dispenser for tobacco or granular material. J. A. Goodsell. 1,858,735; May 17.
Dispenser for volatile substances, Therapeutic. E. Collins. 1,858,580; May 17.
Dispensing apparatus, Fluid. W. M. Griffin. Des. 86,954–5; May 17.
Dispensing apparatus, Fluid. H. Somervell. Des. 86,985; May 17.
Dispensing device. J. A. Bender. 1,858,613; May 17.
Display and vending method and device. H. H. McKee and C. T. Walter. 1,859,270; May 17.
Display box. L. A. Day. 1,859,200; May 17.
Display box. E. W. Poppe. 1,859,049; May 17.
Display device. J. J. Murray. 1,858,337; May 17.
Display rack. R. H. Willcox. 1,858,653; May 17.
Distortion correction in transmission systems. H. W. Dudley. 1,859,030; May 17.
Doll construction. E. G. Schaeffer. 1,859,175; May 17.
Door elevating mechanism. A. Wasberg. 1,858,844; May 17.
Door knocker. W. E. Olson. Des. 86,968; May 17.
Door opening and closing apparatus, Garage. A. Strochalen. 1,858,942; May 17.
Door, Refrigerator. W. G. Seege. 1,858,906; May 17.
Door securing mechanism. E. H. Carlson. 1,858,804; May 17.
Doorstop. R. W. Lane. 1,858,711; May 17.
Dough dividing and working machine, Automatic. O. Kremmling. 1,858,831; May 17.
Draft rigging, Railway. J. F. O'Connor. 1,858,519; May 17.
Draft tube. L. F. Moody. 1,859,215; May 17.
Drafting instrument. A. M. Saltnass. 1,858,343; May 17.
Drain fixture. W. S. Fleming. 1,858,268; May 17.
Drill: *See*—
Well drill.
Drill. J. V. Emmons. 1,859,202; May 17.
Drill bit. O. Duda. 1,858,988; May 17.
Drive for motor vehicles, Triangular. A. F. Masury. 1,858,781; May 17.
Dyestuff of the anthraquinone series, Manufacture of a. W. Moser. 1,859,151; May 17.
Dyestuff of the anthraquinone series, Manufacture of a. W. Moser. 1,859,255; May 17.
Dyestuffs and making same, Stable preparations of vat. K. F. Maennchen and F. Hümmerich. 1,858,632; May 17.
Dyestuffs derived from amino-ethers of hydroxydiaryls, Azo. E. F. Grether and G. H. Coleman. 1,858,928; May 17.
Dyestuffs of the dibenzanthrone series and making same, halogen containing. K. Krauer. 1,859,146; May 17.
Ejector, Casting mold. W. M. Lester. 1,858,453; May 17.
Electric discharge device. W. F. Hendry. 1,858,737; May 17.
Electric distribution, System of. R. A. Beekman. 1,859,069; May 17.
Electric door opening and closing device. C. E. Allen. 1,859,064; May 17.
Electric furnace. P. L. J. Miguet and M. P. Perron. 1,858,455; May 17.
Electric machine. R. E. Jacobs. 1,858,506; May 17.
Electric machine, Dynamo. F. Creedy. 1,859,196; May 17.
Electric machine field element, Dynamo. V. G. Apple. 1,858,870; May 17.
Electric machine with improved cooling means, Dynamo. V. G. Apple. 1,858,871; May 17.
Electric oscillator, Piezo. R. S. Ohl. 1,858,339; May 17.
Electric switch. A. Kuzmeth. 1,858,243; May 17.
Electrical apparatus. C. H. Hill. 1,859,200; May 17.
Electrical apparatus, Protection of. J. Bethenod. 1,859,125; May 17.
Electrical resistances, Manufacturing. I. Silberstein. 1,859,112; May 17.
Electricity meter. A. L. Emens. 1,858,703; May 17.
Electromagnetic fields, Observing and measuring. N. H. Ricker. 1,859,005; May 17.
Engine: *See*—
Combustion engine. Internal combustion engine.
Engine arrangement, Airplane. G. M. Bellanca. 1,858,726; May 17.
Engine arrangement, Airplane. G. M. Bellanca. 1,858,761–2; May 17.
Engine exhaust. E. A. Putman. 1,858,458; May 17.
Engine for working with gas and liquid fuel, Method and high compression internal combustion. V. Heidelberg. 1,858,824; May 17.
Engine provided with a rotary compressor. A. Zoller. 1,859,264; May 17.
Engines, Exhaust gas burning attachment for all internal combustion. H. H. McDonald. 1,858,637; May 17.
Engines with pulling or tractive screw propellers rotating in opposite directions, Device for coupling two aircraft T. Zerbi. 1,858,911; May 17.
Envelope. E. G. Overly. 1,858,277; May 17.
Envelope machine. H. J. Goss. Re18,463; May 17.
Escutcheon. E. L. Teich. 1,858,604; May 17.
Ethers of carbohydrates, Preparing. O. Ernst and K. Sponsel. 1,858,731; May 17.
Excavator. H. E. Cruse. 1,858,360; May 17.
Exercising machine. D. Kendall and D. Heyer. 1,858,593; May 17.
Expanding bar. B. W. Snodgrass. 1,858,378; May 17.
Explosive, Propellant. J. D. McNutt. 1,858,373; May 17.
Fabric and making the same, Rib-knitted. E. U. Ames and H. S. Horrocks. 1,858,814; May 17.
Fan-cooled motor, Inclosed. H. L. Barnholdt. 1,858,261; May 17.
Farrowing house. W. D. Bayley. 1,858,699; May 17.
Fastener, Automatic window. W. M. Spindler. 1,858,345; May 17.
Fastener for shoulder straps. M. Hermanns. 1,858,776; May 17.
Fastener, Pin. G. Johnson. 1,859,254; May 17.
Fastener plate feeding mechanism. M. M. Lyons. 1,859,101; May 17.
Fastener, Separable. M. F. Carr. 1,859,252; May 17.
Fastener, Separable. P. E. Fenton. 1,858,441; May 17.
Fastener setting machine. E. M. Crosby. 1,859,026; May 17.
Fastener, Slide. D. I. Reiter. 1,859,271; May 17.
Fasteners for ambulances, Cot. H. Van Deest. 1,858,530; May 17.
Faucet, Oil fountain. W. R. Henion. 1,858,590; May 17.
Feed mechanism, Jump. F. J. Littell. 1,858,403; May 17.
Feeder. E. Yost and P. Stull. 1,858,421; May 17.

Feeding device for rock drills. C. C. Hansen. 1,858,774; May 17.
Fender, Safety. A. Urbach. 1,859,186; May 17.
File handle. V. L. Stoddard. 1,858,880; May 17.
Film and plate hanger. C. Bornmann. 1,858,576; May 17.
Film counter for cinematographic view taking apparatus. A. N. Merle. 1,858,792; May 17.
Film hanger. F. A. Depperman. 1,859,131; May 17.
Film marking apparatus. C. A. Hoxie. 1,859,091; May 17.
Films of blood, Apparatus for the preparation of. W. Schiller. 1,858,308; May 17.
Filter. C. W. Moore. 1,858,900; May 17.
Filter method and apparatus. H. S. Coe. 1,858,357; May 17.
Firearm. C. C. Loomis. 1,858,862; May 17.
Fireplace fixture. E. S. Pettiegrew. 1,858,967; May 17.
Fish cable, Spiral. J. W. Lewin. 1,858,997; May 17.
Fixture, Speaking aperture. J. H. Wise. 1,859,013; May 17.
Flash light device. M. D. B. Stroecker. 1,858,691; May 17.
Flatiron attachment, Electric. A. T. Smith. 1,858,250; May 17.
Floor covering. J. T. Baldwin. 1,858,655; May 17.
Flower box. L. Pranti. 1,858,902; May 17.
Fluid circulating device for boiler tubes. J. L. Gibson. 1,858,665; May 17.
Fluid flows, Mechanism for controlling a plurality of. C. H. Smoot. 1,858,689; May 17.
Fluid level gauge, Magnetic. G. L. Straughan. 1,858,346; May 17.
Folding machine and method. S. Sokolow and J. Preston. 1,858,565; May 17.
Folding table. W. C. Uline. 1,858,253; May 17.
Folding table, Automatic. J. J. and M. A. Wilkinson. 1,859,121; May 17.
Food breaker. C. J. Schneider. 1,858,790; May 17.
Food confection. M. K. Heisler. 1,859,206; May 17.
Food product and producing the same. S. Jordan. 1,859,240; May 17.
Foodstuffs, Apparatus for preserving natural. F. B. Kuczynski. 1,859,147; May 17.
Form, Concrete. C. A. Smith. 1,858,644; May 17.
Form for drying hosiery and the like. E. J. Berger. 1,858,658; May 17.
Form, Hosiery drying. H. E. Katzenmoyer. 1,859,096; May 17.
Fount, Oil. R. A. Currie. 1,858,884; May 17.
Fourdrinier machine, Yankee. H. R. Farnsworth. 1,858,546; May 17.
Frame: *See*—
Trolley frame.
Frame and sash, Window. H. E. Campbell. 1,858,983; May 17.
Frame clip, Tentering. F. Hinnekens. 1,858,502; May 17.
Frame for the wet treatment of fabrics, Tentering. E. Schaerer. 1,858,970; May 17.
Freight, Method and apparatus for handling. W. S. Dietrich. 1,859,076; May 17.
Frog, Jumping. H. G. Woolworth. 1,858,426; May 17.
Fuel combustion, Pulverized. J. G. Coutant. 1,858,450–1; May 17.
Fuel feed system for carburetors. C. C. Bradbury. 1,858,388; May 17.
Fuel furnace, Pulverized. A. E. Smith and O. Nygaard. 1,858,688; May 17.
Fuel, Method of and apparatus for burning finely divided. J. P. Leask and H. T. Dyer. 1,858,674; May 17.
Fuels, Device for burning liquid. W. C. Coleman. 1,858,264; May 17.
Furnace: *See*—
Electric furnace. Heating furnace.
Fuel furnace. Metal normalizing furnace.
Furnace closure. L. H. Hosbein. 1,858,504; May 17.
Furnace construction. R. D. Foltz. 1,858,489; May 17.
Furnace wall. A. E. Smith and B. F. Snow. 1,858,812; May 17.
Fuse and disconnecting switch, Combined. C. E. Bennett. 1,859,194; May 17.
Fuse for projectiles, Electric. H. Rühlemann. 1,858,969; May 17.
Fuse, Renewable. F. C. La Mar. 1,858,245; May 17.
Galley, Flexible. C. Chisholm and P. M. Colquhoun. 1,858,481; May 17.
Game. F. R. Richards. 1,859,220; May 17.
Garment. O. S. Dorr. 1,859,266; May 17.
Garment, Combination. K. E. Cunningham. 1,859,198; May 17.
Garter. S. P. C. Borson. 1,859,070; May 17.
Gases containing hydrogen sulphide, Purification of. W. C. d'Leny and J. R. Park. 1,858,919; May 17.
Gases, Method and device for the regasification of liquefied. C. W. P. Heylandt. Re18,476; May 17.
Gases, vapors, and the like, Apparatus for centrifugally treating. M. Aurig and G. Brücklmayr. 1,858,570; May 17.
Gasoline and other volatile materials, Refrigeration and storage and carriage of. T. A. Banning, jr. 1,858,610; May 17.
Gate operating mechanism. N. H. Larson. 1,858,896; May 17.
Gauge: *See*—
Fluid level gauge. Plug gauge.
Hair cutting gauge.
Gauging device. J. W. Clinkscales, jr., and F. C. Cutting. 1,858,579; May 17.
Gear, Change speed. L. Alfred. 1,858,996; May 17.
Gear, Change-speed. P. Riley. 1,859,171; May 17.
Gear, Fishing. C. O. Kahle. 1,858,550; May 17.
Gear for drums, Driving. A. Tacke. 1,858,692; May 17.
Gear, Transmission. W. Neurath. 1,858,934; May 17.
Gearing, Reduction. I. Short and J. Ormondroyd. 1,859,007; May 17.
Gears and gear shaper cutters, Method of and apparatus for generating the teeth of. O. C. Simmons. 1,858,468; May 17.
Gears, Grinding. E. Wildhaber. 1,858,568; May 17.
Generator: *See*—
Steam generator.
Glass articles, Making blown. L. D. Soubier. 1,859,114; May 17.
Glass articles, Method of and apparatus for making. C. Wales. 1,859,011; May 17.
Glass blowing machine. L. D. Soubier. 1,859,113; May 17.
Glass forming apparatus. R. W. Canfield. 1,859,232; May 17.
Glass forming machines, Take-out mechanism for. J. W. Ross. 1,858,642; May 17.
Glassware, Apparatus for producing hollow. L. D. Soubier. 1,859,247; May 17.
Glassware forming apparatus. A. N. Cramer. 1,859,074; May 17.
Glassware forming machine. H. A. Rohrich. 1,859,053; May 17.
Glassware forming machine, Continuous two-table. R. W. Canfield. 1,859,234; May 17.
Glassware forming machine, Continuously operating. R. W. Canfield. 1,859,233; May 17.
Glassware making apparatus. R. W. Canfield. 1,859,231; May 17.
Glassware, Manufacture of hollow. R. W. Canfield. 1,859,230; May 17.
Glassware, Method of and apparatus for forming. R. W. Canfield. 1,859,235; May 17.
Glider. P. E. G. Ericson. 1,858,989; May 17.
Gold leaf laying device. W. S. Lutz. 1,858,371; May 17.
Golf game. A. G. Ranney. 1,858,750; May 17.
Golf tee. C. A. Boatman. 1,858,800; May 17.
Grapnel. J. P. Salmon. 1,858,941; May 17.
Grass and weed cutter. D. M. Silfies. 1,859,183; May 17.
Grave concealing device. W. C. Evans. 1,858,439; May 17.
Grease gun apparatus. E. T. Olson. 1,858,717; May 17.
Grease metering device. W. D. Burger. 1,859,071; May 17.
Grid modulation. W. Buschbeck. 1,859,024; May 17.
Grinder, Electric. C. H. Beach. 1,859,068; May 17.
Grip. C. T. Spicklemire and I. Taylor. 1,858,529; May 17.
Ground working and pulverizing machine, Combined. L. Bird. 1,858,948; May 17.
Grouter for wheels. A. B. Webb. 1,858,567; May 17.
Guard, Finger ring. H. Levin. 1,858,861; May 17.
Guard, Window. A. Kaufman. 1,858,671; May 17.
Guide for records, Needle. J. S. O'Leary. 1,859,153; May 17.
Gun carriage. E. C. Goebert and T. A. Conlon. 1,858,495; May 17.
Gun, Shot. R. B. Rosenstiel. 1,858,560; May 17.
Guns, Bolt operating mechanism for machine. J. L. Hatcher. 1,858,498; May 17.
Hair cutting gauge. A. E. Steinkamp. 1,858,252; May 17.
Hair inclosure. W. S. Lewis. 1,858,333; May 17.
Hair waver. C. A. Buchanan. 1,858,851; May 17.
Hand-bag. O. J. Walinsky. 1,859,061; May 17.
Hand brake. H. Fuchs. 1,858,490; May 17.
Hand brake. J. F. O'Connor. 1,858,520; May 17.
Handle: *See*—
File handle.
Handle and motor assembly for electric utility devices. P. J. Fitzgerald. 1,859,133; May 17.
Hanger: *See*—
Film and plate hanger. Film hanger.
Hanger for beams and joints, Adjustable. H. E. Schlesinger. 1,859,055; May 17.
Hanger for lavatories, sinks, and the like. C. G. Wahnsiedler. 1,858,648; May 17.
Hanger for slat shades. H. W. Pratt. 1,858,684; May 17.
Harvester. P. Kane. 1,859,208; May 17.
Harvester. D. W. Smith. 1,859,177; May 17.
Harvester, Windrow. C. R. Raney. 1,859,168; May 17.
Harvesters, Bundle carrier for. B. R. Benjamin. 1,859,124; May 17.
Hats, Means for hanging up. W. Ploch. 1,858,968; May 17.
Head clamp. L. H. Mesker. 1,858,898; May 17.
Heat exchange unit, Concealed. E. H. Seelert. 1,859,056; May 17.
Heat insulating material, Waterproofed. A. B. Merrill. 1,858,630; May 17.
Heaters, Emergency float control for oil. H. I. Platt. 1,858,557; May 17.
Heating device. E. Reich. 1,859,004; May 17.

Heating device, Regenerative. E. P. and E. H. Kignell. 1,858,508; May 17.
Heating furnace. A. L. Culbertson. Re18,471; May 17.
Heating unit. A. B. Modine. 1,858,839; May 17.
Heel, Wood. G. Clausing. 1,858,805; May 17.
Hinge, Windshield. P. Carlson. 1,858,880; May 17.
Hob tester. C. G. Olson. 1,858,840; May 17.
Hoeing attachment for cultivators. E. Wigle. 1,858,652; May 17.
Hoist, Manual hydraulic. P. S. Wood and F. H. Dewey. 1,858,797; May 17.
Holder and flattening device, Collapsible tube. P. J. Sassano. 1,859,174; May 17.
Holder and manufacture, Cigarette. P. H. Lehmann and P. P. Simpson. 1,858,366; May 17.
Holder, Bag. A. Reynolds. 1,858,793; May 17.
Holder, Bottle. G. F. Ballert. 1,859,123; May 17.
Holder for diestocks and the like, Work. B. T. Borden. 1,858,849; May 17.
Holder for printing members. C. Chisholm. 1,858,537; May 17.
Holder, Headrest. L. C. Benitz. 1,858,234; May 17.
Holder, Key. E. Servilla. 1,859,176; May 17.
Holder, License and card. C. Foti. 1,859,134; May 17.
Holder or similar article, Spool. O. Vogl. Des. 86,988; May 17.
Holder, Sack. L. L. Weakley. 1,858,640; May 17.
Holder, Sandpaper. R. Montbriand. 1,858,899; May 17.
Holder, waste vessel and adapter, Combination instrument. F. R. Hart. 1,858,668; May 17.
Holding baby in bed, Device for. H. L. Ottenheimer. 1,858,787; May 17.
Hook: *See*—
Picture hook.
Horological savings device, Electric. J. E. Wheeler. 1,858,532; May 17.
Hose coupling. C. C. Hansen. 1,858,992; May 17.
House: *See*—
Farrowing house. Poultry brooding house.
Housing, Interrupter gear. J. F. Martin. 1,858,675; May 17.
Humidifier. J. Armstrong. 1,858,724; May 17.
Humidifier. F. J. Hoersting. 1,858,329; May 17.
Humidifying system. J. Armstrong. 1,858,725; May 17.
Hydraulic machine. R. V. Terry. 1,858,566; May 17.
Hydrocarbons from wells, Obtaining. P. L. Young. 1,858,847; May 17.
Hydrocarbons, Making halogenated. M. E. Putnam. 1,858,521; May 17.
Hydrocarbons, Manufacture of liquid. H. I. Waterman. 1,859,062; May 17.
Hydrometallurgical treatment of ores. U. C. Tainton. 1,858,944; May 17.
Ice cream cones, Forming. V. M. Orear. 1,859,046; May 17.
Igniter. H. A. Douglas. 1,859,201; May 17.
Illuminating device. K. Edison. 1,858,806; May 17.
Indexing apparatus. G. L. Rock. 1,869,111; May 17.
Indicator: *See*—
Liquid level indicator.
Inductance system. L. A. Gebhard and C. F. Rudolph. 1,858,402; May 17.
Injectors, Arrangement for starting and stopping exhaust steam. H. Deutsch. 1,858,325; May 17.
Ink composition, Intaglio. G. D. Knight. 1,858,449; May 17.
Insect electrocutor. W. M. Frost. 1,858,923; May 17.
Installation for heating the ground. F. Horning. 1,858,330; May 17.
Insulator, High tension. S. Barfoed. 1,858,611; May 17.
Insulator, Section. S. S. Matthes. 1,858,406; May 17.
Internal combustion engine. P. Landis. 1,858,365; May 17.
Internal combustion engine. D. A. and G. E. Davison. 1,859,199; May 17.
Internal combustion motor. S. M. and J. R. Packard, and W. L. Shuck. 1,858,278; May 17.
Iron: *See*—
Laundry iron.
Iron, Making malleable. E. L. Ives. 1,858,548; May 17.
Jack: *See*—
Ladder jack.
Jack. W. B. Runyan. 1,859,054; May 17.
Jacket, Leather. S. Raymond. Des. 86,976; May 17.
Jacquard-design-mechanism for flat knitting machines. C. Hilscher. 1,858,777; May 17.
Jams, jellies, and kindred products, Making. W. A. Rooker and V. E. Speas. 1,858,374; May 17.
Jaw trap. E. Rutherford. 1,858,751; May 17.
Joint for pipes or vessels for containing fluid under pressure. D. M. Anderson. 1,859,065; May 17.
Journal box, Locomotive. A. F. Phelps. 1,859,160–2; May 17.
Justifier for photographical or other typesetting machines. E. Uher, jr. 1,858,910; May 17.
Key: *See*—
Switch key.
Key case. C. J. Mensman. 1,858,963; May 17.
Kiln for producing cellular blocks. W. Hathaway and K. Slidell. 1,858,499; May 17.
Knife for hullers. O. G. Simmons. 1,858,527; May 17.
Knife, Safety pocket. T. Pernek, sr. 1,859,158; May 17.
Knitting machine. A. E. Stewart. 1,859,256; May 17.
Knitting machine, Circular. J. Sirmay. 1,858,469; May 17.
Knitting machines, Gap closing device for latch rings of. I. W. Grothey. 1,859,137; May 17.
Label, Crayon. R. N. Ingersoll. Des. 86,961; May 17.
Lace. E. Poret. Des. 86,973–5; May 17.
Ladder jack. N. W. Madsen. 1,859,210; May 17.
Laminated structures, Making. H. E. Cook and D. J. Richards. 1,858,883; May 17.
Lamp for television, Neon. F. W. Zons. 1,858,698; May 17.
Lamp hanger structure. A. J. Thompson. 1,858,908; May 17.
Lamp, Incandescent. C. H. Louttit. 1,858,712; May 17.
Lamp, Signal. H. R. Kirkland. 1,858,994; May 17.
Lamp starting device. H. M. Erdmann. 1,859,854; May 17.
Lamp, Switchboard. A. Corbett. 1,858,819; May 17.
Lantern. R. A. Currie and F. M. Thiel. 1,858,885; May 17.
Latch, Door. E. L. Wilson. 1,858,608; May 17.
Latch or lock, Door. H. D. Schroeder and F. H. Koch. 1,858,525; May 17.
Lathe. K. Tessky. 1,858,754; May 17.
Lathe, Copying. G. F. Ryan. 1,858,462; May 17.
Lathe, File cutting. T. A. Schaad. 1,859,006; May 17.
Laundry iron. A. H. Prenzel. 1,859,167; May 17.
Lawn rake. G. Rapsch. 1,858,461; May 17.
Leather imitation, particularly an imitation of the so-called antique leather, Producing. E. Katz. 1,858,859; May 17.
Leg construction. W. N. Vance. 1,58,381; May 17.
Legs, Attachment for artificial. J. A. Swain. 1,858,974; May 17.
Lenses in cinematograph apparatus or of other objects, Manufacture of means for producing a straight line motion of. W. E. John. 1,858,670; May 17.
Lever for suction rolls, Suction box. H. R. Farnsworth. 1,858,545; May 17.
Life saving device. L. A. Wolfe. 1,858,256; May 17.
Lift, Auxiliary. F. H. Thorpe. 1,858,866; May 17.
Light: *See*—
Dirigible road light. Ship's light.
Light reflecting unit. P. P. Horni and R. M. Sutphen. 1,858,208; May 17.
Lighter, Automatic burner. H. A. Mantz. 1,858,516; May 17.
Lighter for burners, Automatic. E. N. Jacobi. 1,858,505; May 17.
Lighter, Oil burner. J. S. Eagan. 1,858,395; May 17.
Lighting device for sewing machines. E. E. See. 1,858,564; May 17.
Liquid atomizing device. W. A. O'Connor. 1,859,273; May 17.
Liquid cooling apparatus. C. E. Bonine. 1,859,229; May 17.
Liquid level indicator, Automobile. W. H. Muzzy. 1,858,411; May 17.
Lock: *See*—
Nut lock. Wheel lock.
Lock. F. K. Heyer. 1,858,593; May 17.
Lock mechanism, Time. C. A. Miller. 1,858,064; May 17.
Lock slider for slide fasteners. E. M. Whitney. 1,858,351; May 17.
Locking device for window screens. J. T. Dawicki, jr. 1,858,987; May 17.
Locking device in children's wheeled toys. J. Richter. 1,858,940; May 17.
Looms, Automatic take-up motion for. J. M. Graef. 1,859,034; May 17.
Lubricating system. R. H. White. 1,858,533; May 17.
Lubricating system for airplane engines, Dual. R. L. Meredith. 1,858,038; May 17.
Luminous tube, Refractory. L. Hall. 1,858,497; May 17.
Lunch box. J. H. Devine. 1,858,294; May 17.
Machine for making double-faced corrugated paper board. L. H. Schroeder and J. Wagner. 1,858,375; May 17.
Machine for making indented taper pins. W. Nöllenburg. 1,858,414; May 17.
Machine for making metal wool. L. Peterson. 1,859,048; May 17.
Machine for rolling and finishing leather. E. G. Wilson. 1,858,424; May 17.
Machining device, Chuckless and centerless. O. R. Briney. 1,858,235; May 17.
Magnetic materials, Producing. C. P. Beath and H. M. E. Heinicke. 1,859,067; May 17.
Magnetic materials, Producing. H. M. E. Heinicke. 1,859,087; May 17.
Magneto. T. G. Louis. 1,858,404; May 17.
Manifold, Pump. J. R. Maban. 1,858,246; May 17.
Manifolding machine. M. C. Stern and W. C. Pfeiffer. 1,858,313; May 17.
Marker and means of holding in book, Lesson. G. B. Von Alvensleben. 1,858,605; May 17.
Marking machine. G. L. Keene. 1,858,273; May 17.
Massaging apparatus. P. J. Fitzgerald. 1,858,922; May 17.
Match package. B. H. Freedman. 1,858,704; May 17.
Material. Conveying of. H. Heymann and E. Lehr. 1,858,328; May 17.
Material, Feed mechanism for sheet. G. L. Fulk. 1,858,443; May 17.
Materials, Apparatus for handling bulk. L. E. Smott. 1,858,645; May 17.

Materials, Evaporative carbonization of organic. F. T. Snyder. 1,858,972; May 17.
Materials, Method of and apparatus for measuring. L. H. Brown. 1,859,020; May 17.
Materials, Treating of hydrocarbon. P. K. Frolich. 1,858,822; May 17.
Mausoleum. E. H. Walker and G. L. W. Mong. 1,858,722; May 17.
Measurement of feet, lasts, and the like, Apparatus for the. H. Bradley. 1,858,914; May 17.
Measuring instruments and controlling apparatus thereby, Apparatus for determing indications of. C. Paulson. 1,859,047; May 17.
Measuring machine. G. E. McLaughlin. 1,858,304; May 17.
Meats, Apparatus for curing. J. E. Rosberg. 1,858,600; May 17.
Mechanical movement. G. C. Chase. 1,858,763; May 17.
Mechanism for patterning control of knitting machines. J. and R. H. Lawson. 1,858,301; May 17.
Mercapto-aryl-thiazoles, Manufacture of. W. Scott. 1,858,344; May 17.
Metal, centrifugally, Casting. F. G. Carrington. 1,858,478; May 17.
Metal normalizing furnace, Sheet. E. E. McVey and W. F. Bartholomew. 1,858,678; May 17.
Metal working machine, Sheet. E. M. Clark. 1,858,578; May 17.
Meter: *See*—
Electricity meter. Photographic exposure meter.
Meter construction, Flow. B. Jones. 1,858,399; May 17.
Milk and other products, Canning. R. M. Garrett. 1,858,547; May 17.
Milking apparatus. L. Dinesen. 1,858,266; May 17.
Milking, Apparatus for. H. McCornack. 1,859,213; May 17.
Milking machine. H. McCornack. 1,859,214; May 17.
Mill: *See*—
Rolling mill. Tube expanding mill.
Mill. F. E. Marcy. 1,858,594; May 17.
Mining machine. P. Roozee. 1,858,865; May 17.
Mining machinery. F. B. Miller. 1,858,933; May 17.
Mirror set for automobiles, Combination rear-view. J. Fotakis. 1,858,734; May 17.
Mirrors and the like, Decorating. C. G. Cooper. 1,858,358; May 17.
Mixing and vaporizing device, Combined. A. Defrance and P. Versille. 1,858,853; May 17.
Mold and process for the production of printing plates from rubber. R. D. Bain and J. Nelson. 1,858,978; May 17.
Mold for casting printers' furniture. J. E. Phillips and A. G. Thackeray. 1,859,110; May 17.
Molding machine. H. Hepperle. 1,858,956; May 17.
Monocar. J. Langstreth. 1,858,743; May 17.
Mop head and wringer, Combined. O. Carlson. 1,858,879; May 17.
Motion to the driving wheels of motor cars, System for transmitting. G. C. S. von Hilvety. 1,858,647; May 17.
Motor: *See*—
Alternating current motor. Internal combustion motor.
Current motor. Thermoelectric motor.
Fan cooled motor.
Motor control system. S. Gysin. 1,858,622; May 17.
Mounting and drive, Individual wheel. A. F. Masury. 1,858,782; May 17.
Mounting for stub axles, Spring. A. F. Masury. 1,858,783; May 17.
Mounting, Handle. F. T. Irgens. 1,859,038; May 17.
Mounting, Individual wheel. A. F. Masury. 1,858,784; May 17.
Mounting, Pad. F. J. Stuart. 1,858,943; May 17.
Mower, Lawn. J. B. Stokes. 1,858,690; May 17.
Mower, Power driven. J. A. E. Carlson. 1,858,618; May 17.
Mowing machine. C. C. Pearson. 1,859,157; May 17.
Nail for mountain shoes, Shoe. R. Fuchs. 1,859,135; May 17.
Necktie and tying same. C. M. Bedford. 1,858,429; May 17.
Nest, Automatic trap. P. Owen. 1,859,154; May 17.
Nest, Trap. T. C. Leonard. 1,858,867; May 17.
Nipple. F. Brown. 1,858,356; May 17.
Nitrogenous products from products of animal origin, Manufacture and extraction of. M. Kahn. 1,858,362; May 17.
Nut lock. R. H. Johnson. 1,858,709; May 17.
Nut threading machine. L. A. Safford. 1,858,281; May 17.
Objects, Positioning remote. B. A. Wittkuhns. 1,858,425; May 17.
Oil and natural gas conversion process. I. N. Beall. 1,859,193; May 17.
Oil, Apparatus for distilling. S. Seelig. 1,858,467; May 17.
Oil burner. E. M. Carter. 1,858,536; May 17.
Oil burner, Fuel. L. E. Johnson and E. C. Lench. Re18,464; May 17.
Oil burning apparatus. A. E. Marshall. 1,858,302; May 17.
Oil produced in gas manufacture, Treatment of hydrocarbon. A. R. Albright. 1,859,015; May 17.
Oil pumping apparatus. B. E. Olsson. 1,858,682; May 17.
Oil, Treatment of hydrocarbon. J. A. Shaw. 1,859,262; May 17.
Oils, Sweetening hydrocarbon. A. R. Martin, P. J. Kelly, and K. H. Repath. 1,858,635; May 17.
Oils, Treating hydrocarbon. S. H. Diggs, J. M. McGee, and T. S. Cooke. 1,858,394; May 17.
Olla. R. Wolfe. 1,858,757; May 17.
1-phenyl-2, 3-dimethyl-5-pyrazolone, Manufacture of. A. Oser and A. Laurent. 1,859,002; May 17.
Opener, Cigarette package. F. L. West and La V. A. Martin. 1,859,120; May 17.
Ophthalmic mounting. E. J. R. Beattey. 1,858,233; May 17.
Optical device for resolving and combining light rays. N. Desirello. 1,858,361; May 17.
Ores, Reducing oxide. L., F. C., and F. E. Kern. 1,858,274; May 17.
Ortho-amino-halogen-anthraquinones, Production of. R. J. Loveluck, E. G. Beckett, and J. Thomas. 1,858,334; May 17.
Oven, Bake. E. H. Otto. 1,859,217; May 17.
Oven, Baking. J. E. Pointon. 1,858,937; May 17.
Oven, Broiler. P. I. Hollman. 1,858,503; May 17.
Oxygen therapy apparatus. F. W. Koehler. 1,858,400; May 17.
Package box. H. E. Katzenmoyer. 1,859,095; May 17.
Package picker. J. T. Beechlyn. 1,858,572; May 17.
Package, Sealed. A. Podel. 1,858,864; May 17.
Packing. G. D. Becker. 1,858,815; May 17.
Packing. B. P. Joyce. 1,859,039; May 17.
Packing for rotating shafts. C. J. Winkler. 1,859,012; May 17.
Packing ring. T. Madsen. 1,859,211; May 17.
Pad: *See*—
Brake and clutch pedal pad. Pressure pad.
Paging system. J. Duross. Re18,466; May 17.
Paint, Plastic. H. K. Linzell and H. A. Scholz. 1,858,369; May 17.
Painting device. L. Schott. 1,858,466; May 17.
Pajamas. I. H. Oberndorfer. Des. 86,966; May 17.
Paper folding machine. C. H. Gunn. 1,858,621; May 17.
Paper machinery. H. Wright, jr. 1,859,014; May 17.
Paper or similar covering for the seats of water closet basins, Device for the mechanical obtainment of a changeable. E. Vallecchi. 1,858,794; May 17.
Parachute. F. R. Owens. 1,859,155; May 17.
Parachute pack. S. Switlik. 1,859,185; May 17.
Parasol or umbrella. P. Kriger. 1,858,960; May 17.
Parcel remover for mail boxes. H. S. Lyster. 1,859,269; May 17.
Pectin, Preparing. R. Douglas. 1,858,820; May 17.
Pencil, Multicolor. L. Caruana. 1,858,881; May 17.
Pendulum apparatus. J. Andre. 1,858,384; May 17.
Petroleum hydrocarbons in the vapor phase, Treating. R. Cross. 1,859,028; May 17.
Petroleum hydrocarbons, Treating. R. Cross. 1,859,027; May 17.
Phosphate, Tri-diphenyl. E. C. Britton. 1,858,659; May 17.
Photographic aerial surveys, Apparatus for use in connection with. A. C. W. Aldis. 1,858,353; May 17.
Photographic apparatus. E. Weisker. 1,858,423; May 17.
Photographic exposure meter. G. E. Osborne. 1,858,340; May 17.
Photographic mount. J. MacLaurin. 1,858,405; May 17.
Photographing apparatus. G. C. Beidler. 1,859,258; May 17.
Photographs with sound accompaniment, Producing composite. C. H. Dunning. 1,858,767; May 17.
Picker: *See*—
Package picker. Stitch picker.
Pickling apparatus. W. J. Braddock and C. W. Haller. 1,858,431; May 17.
Pickling apparatus. F. Hamm. 1,859,086; May 17.
Pickling apparatus for rods, tubes, and bars. C. W. Haller. 1,859,085; May 17.
Picture. E. V. Myers. 1,858,786; May 17.
Picture and sound reproducing apparatus, Motion. F. H. Owens. 1,858,555; May 17.
Picture book. M. Blumenthal. 1,858,875; May 17.
Picture projecting and sound reproducing machine. L. M. Corcoran. 1,858,485; May 17.
Picture reel, Moving. L. B., N., W., and J. M. Goldberg. 1,858,586; May 17.
Pictures, Producing motion. J. Burkhardt. 1,859,021; May 17.
Pigment colors, Manufacture of. C. Immerheiser and B. Zschimmer. 1,858,828; May 17.
Piling construction. J. L. de Vou. 1,858,918; May 17.
Pipe and sewer rod. A. P. Kjerulff. 1,858,509; May 17.
Pipe guide for diestocks. B. T. Borden. 1,858,850; May 17.
Pipes and for other uses, Method and material for cleaning drain. E. J. Hall. 1,859,036; May 17.
Piston rings, Making. W. J. Stx. 1,859,057; May 17.
Plow, Motor traction. W. and M. H. Paterson. 1,858,749; May 17.
Plowshare. C. E. Wise. 1,858,697; May 17.
Plug gauge, Adjustable. E. H. Aldeborgh. 1,859,063; May 17.
Pole device, Trolley. E. A. Larsson. 1,858,402; May 17.

Potato gathering machine. H. Hoffmeister. 1,858,708; May 17.
Pothead device. P. F. Williams. 1,859,249; May 17.
Potentiometer. Multiple slide wire. W. Koenig, jr. 1,858,364; May 17.
Poultry brooding house. C. J. Kelley. 1,858,710; May 17.
Power cutting machine for printers' borders. J. D. Keenan and E. Figge. 1,858,552; May 17.
Power shovel. W. W. Sloane. 1,859,263; May 17.
Power take-off. W. Besonson. 1,858,700; May 17.
Power unit, Self-contained impulse actuated internally propelled. J. H. Gilmer. 1,858,666; May 17.
Power utilizing appliance for motor vehicles. C. W. Summerlot. 1,858,314; May 17.
Press: *See*—
Baling press.
Press punching attachment, Printing. C. W. Brenn. 1,858,982; May 17.
Press system. T. F. Stacy. 1,859,058; May 17.
Pressure pad. W. Ferris. 1,858,296; May 17.
Priming mixture. E. von Herz. 1,859,225; May 17.
Printing device. C. Chisholm. 1,858,479; May 17.
Printing from a negative sound record to a positive, Apparatus for. E. I. Sponable. 1,858,603; May 17.
Printing machine, Rotary deep impressing. W. Mallaender. 1,858,633; May 17.
Printing member. C. Chisholm. 1,858,480; May 17.
Printing method and apparatus. A. R. Trist. 1,858,909. May 17.
Prints, Method and apparatus for developing. G. M. Dye. 1,858,888; May 17.
Projection apparatus for motion pictures. J. Burkhardt. 1,859,023; May 17.
Projection printing machine. J. Burkhardt. 1,859,022; May 17.
Projector, Moving picture. J. Contner. 1,859,128; May 17.
Prop construction for mines. H. Queens. 1,858,719; May 17.
Propeller. V. Bendix. 1,858,913; May 17.
Propeller and rudder of boats, Protecting the. E. H. Fahrney. 1,858,582; May 17.
Protective device for the terminals of storage batteries. H. A. Paradis and W. C. Anderson. 1,858,748; May 17.
Protector, Battery terminal. J. F. Anderson. 1,858,383; May 17.
Protector for hose, Heel. C. D. Morales. 1,858,747; May 17.
Protector, Gasoline tank. P. A. Bertaut. 1,858,799; May 17.
Protector-guard for stylus of recording mechanism. E. S. Phelps. 1,859,163; May 17.
Protector or shield, Date. A. Le Grand. 1,858,513; May 17.
Puller: *See*—
Wheel puller.
Pulp and apparatus therefor, Making rice straw. P. Swan. 1,859,224; May 17.
Pulp, Apparatus for making. R. W. Hovey. 1,858,591; May 17.
Pump. F. S. Barks. 1,858,979; May 17.
Pump, Deep well. J. A. Glover. 1,858,270; May 17.
Pump, Rotary. J. A. Olson. 1,858,681; May 17.
Punching apparatus. H. B. Greenough. 1,858,496; May 17.
Rack: *See*—
Automobile rack. Display rack.
Radiator shell. H. V. Henderson. Des. 86,960; May 17.
Radiator shell and deflector, Combined. H. S. Pardee and B. Kirsch. Des. 86,971; May 17.
Radiocommunication, Process and apparatus for undisturbed. J. Plebański. 1,858,936; May 17.
Rail joint connection. G. Yseboodt. 1,858,759; May 17.
Rails with hardened heads, Apparatus for the manufacture of. H. Kurz. 1,858,860; May 17.
Rake: *See*—
Lawn rake. Sweep rake.
Rake cleaning device. A. Strahm. 1,859,179; May 17.
Range, Electric. A. J. Reedy. Des. 86,977; May 17.
Ravioli machine. S. Jenney. 1,858,507; May 17.
Razor, Safety. J. W. Ashworth. 1,858,260; May 17.
Razor, Safety. H. J. Gaisman. 1,859,083; May 17.
Razor, Safety. J. Muros. 1,859,106; May 17.
Razor, Safety. R. E. Thompson and T. L. Smith. 1,858,316; May 17.
Recorder: *See*—
Time study recorder.
Recorder, Time study. J. C. Mottashed and A. W. Payne. 1,858,457; May 17.
Recording the frequency of impulses, Method of and apparatus for. W. Kunze. 1,858,332; May 17.
Records, Recording photographic sound. F. H. Owens. 1,859,243; May 17.
Rectifier. C. Hambuechen. 1,858,445; May 17.
Rectifier. E. Kobel. 1,858,275; May 17.
Reel: *See*—
Picture reel.
Reel frame, Fishing. S. G. Russell. Des. 86,982; May 17.
Reflector button and holding means therefor. J. R. Wald. 1,858,382; May 17.
Refractometer. E. N. Brown. 1,858,949; May 17.
Refractory composition. C. A. Laise. 1,858,244; May 17.
Refractory composition. C. A. Laise. 1,858,300; May 17.
Refractory for contact with molten glass. P. G. Willetts. 1,858,317; May 17.
Refrigerating apparatus. D. H. Reeves. 1,858,558; May 17.
Refrigerating system. H. H. Marshall. 1,858,517; May 17.
Refrigeration. H. C. Pierce. 1,858,841; May 17.
Register: *See*—
Autographic register. Cash register.
Regulator. L. R. Harness and S. A. Bokovoy. 1,858,271; May 17.
Regulator for drawing presses, Gravity actuated tension. F. A. Schaefer. 1,858,463; May 17.
Relay, Electrical. B. E. O'Hagan. 1,858,066; May 17.
Relay, Electromagnetic. H. Schedlbauer. 1,858,562; May 17.
Resilient wheel. W. E. Weaver. 1,858,723; May 17.
Resistance unit. N. J. Conrad. 1,858,483; May 17.
Ring: *See*—
Packing ring.
Ring. W. Wheeler. 1,859,189; May 17.
Riveting machine. H. Elsner. 1,859,081; May 17.
Rod: *See*—
Curtain rod. Pipe and sewer rod.
Rod bracket, Curtain. S. E. Maves. Des. 86,963; May 17.
Roller bit. G. E. Behnke. 1,858,980; May 17.
Roller on the missing of a sheet in multiple reproduction apparatus, Apparatus for displacing the counter pressure. R. Weide. 1,858,651; May 17.
Rolling mill. W. J. P. Rohn. 1,858,788; May 17.
Rugs and other articles, Method of and apparatus for displaying. C. E. Gilbert. 1,858,269; May 17.
Safe protective apparatus. J. W. Young. 1,859,122; May 17.
Safety blow-off device. M. Resek. 1,858,280; May 17.
Sand blast machine. R. Ruemelin. 1,858,561; May 17.
Sand blasting machine. F. H. Wolever. 1,858,475; May 17.
Sash sustainers, Making. E. H. Ellison. 1,858,821; May 17.
Saw blade, Hack. H. M. German. 1,858,705; May 17.
Scissors shape collector for electric vehicles. A. Couwenhoven. 1,858,359; May 17.
Scraper. E. B. Maloon. 1,858,634; May 17.
Scraper, Automatic control. C. P. Renaud. 1,858,599; May 17.
Scraper, Boiler tube. W. Mac Lear. 1,859,148; May 17.
Scraper, Wood. P. S. and T. S. Voshikian. 1,859,226; May 17.
Screen: *See*—
Window screen.
Screen. T. J. Davis. 1,858,917; May 17.
Screen, Well. E. E. Johnson. 1,858,592; May 17.
Screw holding device. C. I. Richnrt. 1,858,559; May 17.
Seal, Valve. W. F. Grant. 1,858,587; May 17.
Seat: *See*—
Bicycle and motor-cycle seat.
Separator: *See*—
Centrifugal separator.
Separator. T. and J. R. Ray. 1,858,842; May 17.
Service station. J. A. Dunn. 1,858,438; May 17.
Settee, Foldable. W. C. Uline. 1,858,254; May 17.
Shaft drive for motor vehicles, Multiple transmission. E. R. Gurney. 1,858,773; May 17.
Sharpener, Cutter. H. J. White. 1,858,869; May 17.
Sharpener, Pencil. R. S. Harris. 1,858,891; May 17.
Shell and cap for electric light sockets. F. Slady. 1,858,377; May 17.
Shield. R. C. Hughes. 1,858,331; May 17.
Ships, Bow construction for. M. J. Hanlon. 1,859,139; May 17.
Ship's light. T. Utley. 1,858,946; May 17.
Shock absorbing device for motor cars. X. Seitz. 1,858,971; May 17.
Shoe. C. Miller. Des. 86,964; May 17.
Shoe attachment, Spring. G. M. Leach. 1,858,833; May 17.
Shoe covering with cross-lace ornamentation. N. R. Hakim. Des. 86,956; May 17.
Shoe covering with single-lace ornamentation. N. R. Hakim. Des. 86,958; May 17.
Shoe covering with zigzag-lace ornamentation. N. R. Hakim. Des. 86,957; May 17.
Shoe machine. F. M. Furber. 1,858,584; May 17.
Shoes, Filling. A. Thoma. 1,859,257; May 17.
Shovel: *See*—
Power shovel.
Shutter and driving mechanism therefor, Double. A. Dina. 1,858,239; May 17.
Shutter, Extensible. E. Bolard. 1,858,801; May 17.
Sign. J. M. Alderfer. 1,858,258; May 17.
Sign, Advertising. P. L. Tn'Bois. 1,858,975; May 17.
Sign, Illuminated. C. van Wyck and R. C. Hyde. 1,858,755; May 17.
Signaling apparatus. H. O. Holte. 1,859,090; May 17.
Signaling method and means therefor. W. van B. Roberts. 1,858,810; May 17.
Signaling system. W. R. G. Baker. 1,859,066; May 17.
Signaling system. F. E. Terman. 1,858,349; May 17.
Silk improved in weight and appearance and obtaining the same. F. W. Weber. 1,859,188; May 17.
Silk improved in weight, durability, and appearance and obtaining the same. F. W. Weber. 1,858,474; May 17.
Singletree. A. Horne. 1,859,142; May 17.

Skate, Ice. F. MacMillan. 1,858,303; May 17.
Skate sail, Folding. S. A. Sprinkle. 1,859,178; May 17.
Slicing machine. E. J. Schneider. 1,858,791; May 17.
Slicing machines, Feed mechanism for. A. C. Sensow. 1,858,376; May 17.
Slip, Pipe holding. H. R. Decker. 1,858,324; May 17.
Sliver into cans, Device for packing. W. Thierfelder. 1,858,945; May 17.
Slot closure. O. A. Colby. 1,858,433–4; May 17.
Smoke and spark eliminator. L. R. Zane. 1,859,190; May 17.
Smoker's appliance. L. F. Bailey. 1,858,428; May 17.
Smoker's appliance. W. J. Raftey. 1,858,938; May 17.
Smoker's stand. F. E. Donovan. Des. 86,950; May 17.
Snap operating mechanism. H. E. Hodgson. 1,858,242; May 17.
Snap switch, Rotary. R. Popp. 1,858,598; May 17.
Socket, Floating snap fastener. P. E. Fenton. 1,858,440; May 17.
Socket for fishing objects from wells, Method of and rotary. F. J. Hinderliter. 1,858,500; May 17.
Socket, Rheostat lamp. C. L. Weichelt. 1,858,422; May 17.
Soleno compound, Organic. M. S. Kharasch. 1,858,958; May 17.
Sorter, Bean. J. J. Jungers. 1,859,093; May 17.
Sound recording and record vending machine. E. Fey. 1,858,396; May 17.
Sounds, Recording and reproducing. G. Liguori. 1,858,553; May 17.
Souvenir emblem or similar article. R. E. Bragg. Des. 86,949; May 17.
Speed control mechanism. E. E. Winkley. 1,858,654; May 17.
Speed mechanism, Change. W. W. Edwards. 1,858,880; May 17.
Speed of prime movers, Process of and apparatus for governing the. C. R. Reid. 1,858,939; May 17.
Speed transmission for registers, Variable. G. C. Chase. 1,859,195; May 17.
Spindle. J. E. Whalen. 1,858,607; May 17.
Spindle boring machine, Multiple. E. J. McKnight. 1,858,677; May 17.
Spindle, Cotton picker. E. A. Johnston. 1,859,144; May 17.
Spindle drive and feed unit, Detachable. D. C. Klausmeyer. 1,858,995; May 17.
Spinning and twisting machines. I. R. Rowe. 1,858,789; May 17.
Spinning rings, Device for holding. A. H. Lawe. 1,858,672; May 17.
Spoon, knife, fork, or other article of flatware. J. Leech. Des. 86,962; May 17.
Spout for containers, Detachable. F. R. Stamer. 1,859,008; May 17.
Spring suspension of vehicles. T. Munro. 1,859,104–5; May 17.
Squeezer and food holder, Combination citrus fruit. C. S. Conlon. 1,858,435; May 17.
Stairway, Disappearing. F. E. Bessler. 1,858,981; May 17.
Stand: *See*—
Supporting stand.
Stand or table. R. C. Huntley. 1,858,857; May 17.
Stands and the like, Attachment for. C. R. Sentney. 1,858,752; May 17.
Starter device. D. T. Brownlee. 1,858,617; May 17.
Starting device for engines. E. H. Fahrney. 1,858,583; May 17.
Station and platform, Loading. F. E. McCain. 1,858,407; May 17.
Steam generator, Tubular. M. Eule. 1,858,890; May 17.
Steel wrapping spacers, structural. F. H. Martell. 1,858,836; May 17.
Steering knuckle, Combination ball bearing. W. L. Meges. 1,859,149; May 17.
Steering wheel. H. Welda. 1,858,650; May 17.
Stick for frankfurts, Metal smoke. J. A. Kellermann. 1,859,040; May 17.
Stitch picker. H. E. Ruggles. 1,859,173; May 17.
Stocking. H. Peters. 1,858,596; May 17.
Stove. A. J. Reedy. Des. 86,978; May 17.
Stove. W. F. Rogers. Re18,465; May 17.
Stove, Heating. H. L. McKown. 1,859,000; May 17.
Stove leg. H. C. Maul. 1,858,998; May 17.
Stove structure. A. G. Sherman. 1,858,310; May 17.
Strainer. H. H. Swift. 1,859,184; May 17.
Stretcher, Curtain and blanket. R. H. O'Brien and J. A. Byrne. 1,859,216; May 17.
Stretcher, Necktie. P. Schwarz. 1,858,309; May 17.
Stretcher, Trousers. H. Sondersen and H. Glemming. 1,858,420; May 17.
Striping instrument. J. M. Christman. 1,858,984; May 17.
Striping instrument. J. M. Christman. 1,859,072; May 17.
Stripper, Pipe form. G. Almquist. 1,859,191; May 17.
Stroboscopic apparatus and method. P. Davey. 1,858,985; May 17.
Submarine obstacles by means of ultra-audible waves, Method and apparatus for sounding and for locating. P. Langevin and C. L. Florison. 1,858,931; May 17.
Submergible apparatus. H. J. Finn. Re18,472; May 17.
Suction cleaner. C. E. Lucke. 1,858,370; May 17.
Suction comb. J. F. H. Fechtenburg. 1,859,132; May 17.
Sulphonation products and making same. F. Felix and O. Albrecht. 1,858,662; May 17.
Superheater and boiler, Combined. W. H. Armacost. 1,858,872; May 17.
Supervisory system, Watchman's. C. E. Lomax and O. C. Levy. 1,858,554; May 17.
Support, Adjustable garment. W. H. Parker and A. P. Cannon. 1,858,595; May 17.
Support and housing for calculating machines. A. A. Horton. 1,858,778; May 17.
Support, Article. L. M. Richard. 1,859,221; May 17.
Support, Flume joint. L. W. Wyman. 1,858,427; May 17.
Support for bed bottoms and the like, Spring. F. Kusterle. 1,858,780; May 17.
Support for blowtorches. S. Batherman. 1,858,656; May 17.
Support for use in mines, Roof. F. Cookson. 1,858,954; May 17.
Support, Hanger. M. Victorsohn. 1,858,531; May 17.
Support, Shirt and sock. O. B. Kayser. 1,859,097; May 17.
Supporting device and forming the same. T. Schmitt. 1,858,465; May 17.
Supporting means for screens and storm sashes, Friction. D. E. Shrauger. 1,858,602; May 17.
Supporting stand. F. Stevenson. 1,859,223; May 17.
Sweep rake. C. Pearson. 1,859,156; May 17.
Switch: *See*—
Circuit controlling switch. Snap switch.
Electric switch. Time switch.
Switch controlling apparatus, Railway. G. Baumgartner. 1,858,874; May 17.
Switch controlling apparatus, Railway. S. M. Lucas. 1,858,897; May 17.
Switch for automobiles, Combined lighting and signal. J. W. C. Miller. 1,858,746; May 17.
Switch key. R. Schaumberger. 1,858,464; May 17.
Switching apparatus, Electric. C. H. Hill. 1,859,088; May 17.
Table: *See*—
Folding table. Transfer table.
Tilting table. Wall table.
Table. J. E. Wood. 1,858,534; May 17.
Tackle box. H. C. Berry. 1,859,228; May 17.
Tackle box. C. L. Dewey. 1,858,539; May 17.
Take-up block. E. Thomas. 1,859,117; May 17.
Tank blocks and like refractories and article made thereby, Making glass. P. G. Willetts. 1,859,227; May 17.
Tap forming machine. J. Flachbart. 1,858,733; May 17.
Tape applying machine. W. T. B. Roberts. 1,858,811; May 17.
Tape cut-off, Automatic. J. F. Porter. 1,859,165; May 17.
Teeter board, Child's. E. Hetherington. 1,858,892; May 17.
Telegraph keying head, Automatic. F. Kunc and E. Knopp. 1,858,511; May 17.
Telegraph system, Printing. A. Weaver. 1,858,350; May 17.
Telegraph system, Submarine cable. E. T. Burton. 1,858,237; May 17.
Telegraphic recorder. E. Knopp and F. Kunc. 1,858,510; May 17.
Telephone and microphone, Electrostatic. E. Reisz. 1,859,170; May 17.
Telephone system Measured service. J. E. Ostline. 1,858,863; May 17.
Telephones, Auxiliary base and switch attachment for. C. F. Johanning. Re18,462; May 17.
Temperature control for heating and ventilating units, Multiple. E. L. Werft, W. Ewald, and P. P. Henshall. 1,858,606; May 17.
Tent, Canvas play. I. P. Smith. Des. 86,983–4; May 17.
Testing device. W. E. Haupt. 1,858,446; May 17.
Textile fabric. G. H. Perkins. Des. 86,972; May 17.
Textile material, Weighting. H. W. Stiegler. 1,858,379; May 17.
Textile treating process and composition. H. C. Gore, S. Józsa, and C. N. Frey. 1,859,084; May 17.
Therapeutic and other purposes, Apparatus for. W. L. Martin. 1,858,714; May 17.
Thermobox. W. F. Vanderwall. 1,859,119; May 17.
Thermoelectric motor. G. P. Lewis and R. E. Sabin. 1,859,099; May 17.
Thermometer, Medical. M. Philipsen. 1,858,718; May 17.
Thermostatically controlled heating device. R. W. Brown. 1,858,660; May 17.
Thimble, Wire rope. J. F. Howe. 1,859,143; May 17.
Thread in package form, Treating fine filamentous. C. A. Huttinger. 1,859,037; May 17.
Threads, Method and apparatus for cutting off float. H. E. Katzenmoyer. 1,859,094. May 17.
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Trap: *See*—
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Trap set. J. W. Martin. 1,858,713; May 17.
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Valve operating device, Filling station. S. Dabroski. 1,858,766; May 17.
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Vibrating device. J. F. Haas. 1,858,855; May 17.
Voltage compensator. E. R. Wolfert. 1,858,845; May 17.
Wagon tilt. C. Hofrichter. 1,858,739; May 17.
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Wall table, Folding. S. E. Timmons. Re18,475; May 17.
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CLASSIFICATION OF PATENTS

ISSUED MAY 17, 1932

NOTE.—First number = class, second number = subclass, third number = patent number

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U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abilene Flour Mills Company, The, Abilene, Kans. Flour. Serial No. 323,647; May 24. Class 46.

Alaska Livestock & Packing Company, Seattle, Wash. Dog food. Serial No. 326,006; May 24. Class 46.

Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Preparations for treating fluids for use in boilers. Serial No. 325,933; May 24. Class 6.

Ambrosia Chocolate Company, Milwaukee, Wis. Candy. Serial No. 314,482; May 24. Class 46.

American Bemberg Corporation. (See Bemberg, I. P., Aktiengesellschaft, assignor.)

American Stores Company, Philadelphia, Pa. Salad dressing. Serial No. 326,045; May 24. Class 46.

American Woolen Company, Boston, Mass., and New York, N. Y. Woolen fabrics in the piece. Serial No. 326,173; May 24. Class 42.

Apex Manufacturing Co. Inc., Syracuse, N. Y. Rock, sand, etc., screens. Serial No. 301,776; May 24. Class 23.

Appleton Produce Company. (See Tuge, Fred F.)

Barnett, I. H. & Bro., New York, N. Y. Shirts. Serial No. 321,196; May 24. Class 39.

Bemberg, I. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. Serial No. 325,054; May 24. Class 43.

Bemberg, I. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. Serial No. 325,056; May 24. Class 43.

Bendix Aviation Corporation, Chicago, Ill., and South Bend, Ind. Shock struts. Serial No. 325,705; May 24. Class 19.

Berkwits & Bloomfield, Inc., New York, N. Y. Woolen cloth in the piece. Serial No. 321,798; May 24. Class 42.

Betty Jean Laboratories, Fort Wayne, Ind. Cold cream, powder, shampoo, etc. Serial No. 324,871; May 24. Class 6.

Billings & Spencer Company, The, Hartford, Conn. Golf clubs. Serial No. 312,596; May 24. Class 22.

Birbeck, F. V., Watsonville, Calif. Fresh vegetables. Serial No. 326,007; May 24. Class 46.

Block, Gaston J., Brooklyn, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 325,637; May 24. Class 6.

Blum Bros. & Weinstein, Jersey City, N. J. Olive oil. Serial No. 325,639; May 24. Class 46.

Bon Ami Company, The, New York, N. Y. Tooth paste. Serial No. 325,559; May 24. Class 6.

Bradley Lumber Company of Arkansas, Warren, Ark. Flooring material. Serial No. 306,127; May 24. Class 12.

Brauer Bros., Inc., St. Louis, Mo. Toy cowboy accessories. Serial No. 321,718; May 24. Class 22.

Bullard, E. D., Company, San Francisco, Calif. First aid and protective equipment. Serial No. 306,084; May 24. Class 44.

C-R-C Law List Company, The, New York, N. Y. Attorney's directory. Serial No. 325,816; May 24. Class 38.

Celanese Corporation of America, New York, N. Y. Fabrics. Serial No. 326,176; May 24. Class 42.

Cellized Oak Flooring, Inc., Memphis, Tenn. Wood blocks for floors and the like. Serial No. 325,892; May 24. Class 12.

Cerro de Pasco Copper Corporation, New York, N. Y. Copper bullion, lead bullion, zinc concentrates, etc. Serial No. 313,420; May 24. Class 14.

Cerro de Pasco Copper Corporation, New York, N. Y. Fusible alloys. Serial Nos. 325,209–10; May 24. Class 14.

Chemung Foundry Corporation, Elmira, N. Y. Curb, valve, etc., boxes, manhole frames and covers, and valve vaults. Serial No. 325,779; May 24. Class 13.

Chicopee Manufacturing Corporation, New Brunswick, N. J. Cleaning and polishing fabrics of the hand-receiving or mitt type. Serial No. 326,078; May 24. Class 29.

Clemenson Bros., Inc., Middletown, N. Y. Saws and saw blades. Serial No. 325,514; May 24. Class 23.

Compañía Cervecera Internacional, S. A., Habana, Cuba. Malt beverages and extracts. Serial No. 325,423; May 24. Class 48.

Cornish Mining Co., Cornish, Me. Preparation for cleaning and polishing. Serial No. 325,424; May 24. Class 4.

Cosmetic Research Laboratories, The, Wilkes-Barre, Pa. Line of toilet preparations. Serial No. 325,461; May 24. Class 6.

Cowles, George P., Waterbury, Conn. Electric clocks. Serial No. 324,221; May 24. Class 27.

Crawford, McGregor and Canby Company, The, Dayton, Ohio. Golf clubs. Serial No. 318,052; May 24. Class 22.

D. A. W. Laboratories. (See Wuster, Doris A.)

Daroff, H., & Sons, Inc., Philadelphia, Pa. Outer suits. Serial No. 325,781; May 24. Class 39.

Deane Plaster Co., The, Yonkers, N. Y. Medicated adhesive bandage dressing. Serial No. 325,569; May 24. Class 6.

Dennison & Sons, Inc., Long Island City, N. Y. Banknotes, checks, drafts, etc. Serial No. 324,785; May 24. Class 37.

Detroit Sulphite Pulp & Paper Co., Detroit, Mich. Wrapping paper. Serial No. 326,082; May 24. Class 37.

Dominion Fabrics Corporation, Boston, Mass. Sleeping bags. Serial No. 325,818; May 24. Class 39.

Doshi Trading Co. Ltd., New York, N. Y. Textile fabrics. Serial No. 326,131; May 24. Class 42.

Dryer, Clark & Dryer Oil Co., Oklahoma City, Okla. Motor lubricating oil. Serial No. 324,064; May 24. Class 15.

Dunn, Richard T., doing business as J. S. Merrell Drug Company, St. Louis, Mo. Liniment. Serial No. 324,065; May 24. Class 6.

Dunn, Richard T., doing business as J. S. Merrell Drug Company, St. Louis, Mo. Cough balsam. Serial No. 325,426; May 24. Class 6.

Economy Silo & Mfg. Co., The, Frederick, Md. Silos. Serial No. 322,576; May 24. Class 2.

Eday Fabrics, Incorporated, West New York, N. J. Knitted fabrics. Serial No. 326,083; May 24. Class 42.

Edwards, Bob, Publishing Company, Minneapolis, Minn. Magazine. Serial No. 326,084; May 24. Class 38.

Electro-Magnetic Belt Company. (See Markwood, Jacob D.)

El Rey Products Co., Los Angeles, Calif. Composition shingles. Serial No. 313,497; May 24. Class 12.

Empire Gum Company, New York, N. Y. Candy. Serial No. 324,821; May 24. Class 46.

English, John, doing business as United Wholesale Grocery, Schenectady, N. Y. Coffee and evaporated milk. Serial No. 307,932; May 24. Class 46.

Examiner Printing Company, San Francisco, Calif. Articles or writings. Serial Nos. 324,684–7; May 24. Class 38.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, etc. Serial No. 320,497; May 24. Class 39.

Federal Mill, Inc., Lockport, N. Y. Flour. Serial No. 326,207; May 24. Class 46.

Feldman, Nathan, doing business as Felko Supply Company, New Brunswick, N. J. Malt syrup. Serial No. 326,180; May 24. Class 46.

Felko Supply Company. (See Feldman, Nathan.)

Foltz, Edith, Portland, Oreg. Wearing apparel. Serial No. 325,618; May 24. Class 39.

Foret, Norbert J., doing business as Foret Laboratories, Raceland, La. Foot lotion. Serial No. 325,257; May 24. Class 6.

Freeman Shoe Corporation, Beloit, Wis. Shoes. Serial No. 325,094; May 24. Class 39.

Gehe & Co., Aktiengesellschaft, Dresden, Germany. Calcium compound with saponin. Serial No. 319,878; May 24. Class 6.

Godman, H. C. Company, The, Columbus, Ohio. Shoes. Serial No. 323,400; May 24. Class 39.

Golf Ball Inc., Chicago, Ill. Golf balls. Serial Nos. 326,088–91; May 24. Class 22.

Golf Ball Inc., Chicago, Ill. Golf balls. Serial No. 326,093; May 24. Class 22.

Golf Ball Inc., Chicago, Ill. Golf balls. Serial Nos. 326,095–9; May 24. Class 22.

Grigsby-Grunow Company, Chicago, Ill. Electric refrigerators and parts thereof. Serial No. 325,787; May 24. Class 31.

Gudebrod Brothers Silk Company, Philadelphia, Pa. Threads. Serial No. 321,317; May 24. Class 43.

Harlan-Wallins Coal Corporation, Verda, Ky. Coal. Serial No. 326,143; May 24. Class 1.

Harris Clothing Company, Baltimore, Md. Suits, overcoats, etc. Serial No. 323,661; May 24. Class 39.

Hat Trade Publishing Company, The, New York, N. Y. Publication. Serial No. 325,170; May 24. Class 38.

Herbavita Laboratory. (See Spaeth, Charles E.)

Hitt Fireworks Company, doing business as Hitt Manufacturing Company, Seattle, Wash. Photographic flashes. Serial No. 326,102; May 24. Class 9.

Hockett, Ruetta, doing business as Mae Day Personality Permanent Wave Beauty Salon, Long Beach, Calif. Creams, lotions, brilliantine, etc. Serial No. 323,089; May 24. Class 6.

Hoffmann, John, & Sons Co., Milwaukee, Wis. Coffee. Serial No. 325,655; May 24. Class 46.

Hopp Press, Inc., The, New York, N. Y. Price ticket holders. Serial No. 325,713; May 24. Class 13.

Houbigant, Inc., New York, N. Y. Perfume, toilet water, bath salts, etc. Serial Nos. 325,656–7; May 24. Class 6.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial resins and plastic masses. Serial No. 324,737; May 24. Class 1.
I. T. S. Company, The, Elyria, Ohio. Rubber heels and taps. Serial No. 319,408; May 24. Class 39.
Ideal Novelty & Toy Co., Brooklyn, N. Y. Dolls. Serial No. 326,287; May 24. Class 22.
International Business Machines Corporation, New York, N. Y. Publications. Serial No. 312,051; May 24. Class 38.
Jacob & Schey, New York, N. Y. Hosiery. Serial No. 325,984; May 24. Class 39.
Jaques Manufacturing Company, Chicago, Ill. Baking powder. Serial No. 325,449; May 24. Class 6.
Kaletsch, Paul, Monaca, Pa. Razor blades. Serial No. 324,563; May 24. Class 23.
Kansas City Southern Railway Company, The, Kansas City, Mo. Periodicals and descriptive bulletins. Serial No. 312,523; May 23. Class 38.
Kaumagraph Company, New York, N. Y. Transfers and roll holders for transfers. Serial No. 322,391; May 24. Class 40
Kemkit Chemical Corporation, Brooklyn, N. Y. Chemical outfit for educational purposes. Serial No. 320,437; May 24. Class 22.
Keyes Fibre Company, Inc., Waterville, Me. Jackets and fillers. Serial No. 325,403; May 24. Class 2.
Kimble Glass Company, Vineland, N. J. Chemical, scientific, and laboratory glassware. Serial No. 325,583; May 24. Class 26.
Krementz & Company, Newark, N. J. Metal alloy. Serial No. 326,140; May 24. Class 14.
Kremo-Ko Company, Chicago, Ill. Chocolate milk food beverage. Serial No. 317,561; May 24. Class 46.
Kull, William T., doing business a Rheumatox Company, Cleveland, Ohio. Preparation for lumbago, etc. Serial No. 321,770; May 24. Class 6.
Lamne Process Company, Erie, Pa. Adhesive cement. Serial No. 325,794; May 24. Class 5.
Libby, McNeill & Libby, Chicago, Ill. Canned fruits, vegetables, tomato juice, etc. Serial No. 325,294; May 24. Class 46.
Mac-Col Manufacturing Company, Inc., St. Louis, Mo. Rowing machine body builder and reducing exerciser. Serial No. 325,433; May 24. Class 22.
MacDonald & Muir, Leith, Scotland. Whisky. Serial No. 326,111; May 24. Class 49.
Mae Day Personality Permanent Wave. (See Beauty Salon, Hockett, Ruetta.)
Markwood, Jacob D., doing business as Electro-Magnetic Belt Company, Minneapolis, Minn. Electro-magnetic belt. Serial No. 325,178; May 24. Class 44.
Maxwell Chemical Company. (See Weintraub, Maxwell.)
McCarthy, James E., Notre Dame, Ind. Pharmaceutical preparation. Serial No. 308,897; May 24. Class 6.
McNamara, John C., New Orleans, La. Ointment. Serial No. 317,611; May 24. Class 6.
Medart, Fred, Manufacturing Co., St. Louis, Mo. Lockers. Serial No. 324,478; May 24. Class 32.
Medlock, Landrum L., Roscoe, Tex. Liniment. Serial No. 312,400; May 24. Class 6.
Merion Sporting Goods Mfg., Corpn., Philadelphia, Pa. Golf tees. Serial No. 325,056; May 24. Class 22.
Merkin, M. J., Paint Co. Inc., New York, N. Y. Inside paint. Serial No. 326,224; May 24. Class 16.
Merrell, J. S., Drug Company. (See Dunn, Richard T.)
Midvale Company, The, Nicetown, Philadelphia, Pa. High speed steel. Serial No. 297,315; May 24. Class 14.
Mo-An-Mo Products Co. (See Virginia Sweet Foods Inc.)
Modica, Frank M., New York, N. Y. Food products. Serial No. 316,161; May 24. Class 46.
Monument Bottling Company, Indianapolis, Ind. Beverages. Serial No. 325,691; May 24. Class 45.
Morning Star Nurseries, Onarga, Ill. Shrubs, trees, roses, etc. Serial No. 325,692; May 24. Class 1.
Mossler, Leo, New York, N. Y. Hosiery. Serial No. 323,112; May 24. Class 39.
Mother Brown's Pure Orange Juice Company, North Arlington, N. J. Beverages. Serial No. 312,660; May 24. Class 45.
National Aluminate Corporation, Chicago, Ill. Water treatment compound for the prevention of incrustation in the feed water of boilers, etc. Serial No. 325,295; May 24. Class 6.
Nebo Drug Co. (See Smolen, Leon A.)
Neuss, Hesslein & Co., Inc., New York, N. Y. Cotton piece goods. Serial No. 323,763; May 24. Class 42.
Newport Company, The, Carrollville, Wis. Pine-oil and borneol. Serial Nos. 312,855–6; May 24. Class 6.
No-Burn-No Products Co. (See Outon, William M.)
O'Connor, Jas. J., doing business as Jas. J. O'Connor Coffee Co., St. Louis, Mo. Coffee. Serial No. 323,418; May 24. Class 46.
Onlibest Hosiery Mills, Inc., Berlin, N. J. Hosiery. Serial No. 326,158; May 24. Class 39.
Outon, William M., doing business as No-Burn-No Products Co., Chicago, Ill. Cleaning fluid. Serial No. 323,558; May 24. Class 4.
Oxygen Therapy Service, Inc., New York, N. Y. Hospital and sick room apparatus. Serial No. 326,159; May 24. Class 44.
Pacific Egg Producers Cooperative, Inc., New York, N. Y. Eggs. Serial No. 326,228. May 24. Class 46.
Paraffine Companies, Inc., The, San Francisco, Calif. Mulch paper. Serial No. 297,765; May 24. Class 37.
Paraffine Companies, Inc., San Francisco, Calif. Roofing nails. Serial No. 297,773; May 24. Class 13.
Patterson-Sargent Company, The, Cleveland, Ohio. Paints, paint enamels, stains, ets. Serial No. 325,855; May 24. Class 16.
Peerless Steel Equipment Company, Philadelphia, Pa. Steel office furniture. Serial No. 312,265; May 24. Class 32.
Philipp Brothers, Inc., New York, N. Y. Monomethyl paramidophenol. Serial No. 324,730; May 24. Class 6.
Pickard, Incorporated, Chicago, Ill. Chinaware and pottery. Serial No. 325,279; May 24. Class 30.
Piggly Wiggly Corporation, Cincinnati, Ohio. Food products. Serial No. 285,882; May 24. Class 46.
Plough, Inc., doing business as The St. Joseph's Laboratories, Memphis, Tenn. Medicinal preparation. Serial No. 324,132; May 24. Class 6.
Priess, Louis A., Minneapolis, Minn. Combination leather or fibre key cases and flashlights. Serial No. 322,831; May 24. Class 21.
Proracform Company, The, Chicago, Ill. Periodical. Serial No. 326,115; May 24. Class 38.
Protein Foods, Incorporated, Chicago, Ill. Bread. Serial No. 325,918; May 24. Class 46.
Pure Orange Juice Company of America, The, Chicago, Ill. Orange juice. Serial No. 300,142; May 24. Class 45.
Quaker State Oil Refining Company, Oil City, Pa. Mechanical device on which to record oil servicing for vehicles. Serial No. 325,959; May 24. Class 19.
Railway Locomotor Company, Chicago, Ill. Oil burner. Serial No. 325,998; May 24. Class 34.
Ranlville, F., Company, Grand Rapids, Mich. Belting. Serial No. 325,999; May 24. Class 35.
Rauh, S., & Company, New York, N. Y. Shoes. Serial No. 325,530; May 24. Class 39.
Reeves Pulley Company, Columbus, Ind. Board game. Serial No. 324,083; May 24. Class 22.
Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Antiseptics, hemostatics, styptics, etc. Serial No. 309,142; May 24. Class 6.
Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Medicines. Serial No. 309,145; May 24. Class 6.
Remington Rand Inc., Buffalo, N. Y. Chairs. Serial No. 325,830; May 24. Class 32.
Reynolds, Maebelle S., doing business as Cille Reynolds, New Orleans, La. Skin tonic, cleansing powder, etc. Serial No. 321,918; May 24. Class 6.
Rheumatox Company. (See Kull, William T.)
Ridgewood Fruit Growers, Inc., doing business as The Ridgewood Orchards, Ridgewood Orchards, Winchester, Va. Candy. Serial No. 307,507; May 24. Class 46.
Robinson Manufacturing Company, Everett, Wash. Sheets of wood veneer. Serial No. 318,567; May 24. Class 12.
Röhm & Haas Company, Philadelphia, Pa. Chemical for use in the textile industry. Serial No. 325,622; May 24. Class 6.
Rosen, A. W. & Co., New York, N. Y. Glass mirrors. Serial No. 324,009; May 24. Class 32.
Rubinger Sportswear Corp., New York, N. Y., and West New York, N. J. Dresses and suits. Serial No. 324,487; May 24. Class 39.
St. Joseph's Laboratories, The. (See Plough, Inc.)
Schering Corporation, New York, N. Y. Laxative preparation. Serial No. 326,163; May 24. Class 6.
Scherman, E. H. & Co., New York, N. Y. Hats. Serial No. 325,188; May 24. Class 39.
Scott-Sherry, Boston, Mass. Evacuant for infants and children. Serial No. 325,349; May 24. Class 6.
Shell Oil Company, San Francisco, Calif. Furniture and automobile polish. Serial No. 309,444; May 24. Class 16.
Simmons, Henry H., Casper, Wyo. Antifreeze compound. Serial No. 325,189; May 24. Class 6.
Simon, Jacob, doing business as Sun Bleach Products Company, Chicago, Ill. Washing fluid. Serial No. 319,039; May 24. Class 6.
Smith, Joseph, Sloan, N. Y. Prophylactic rubber articles. Serial No. 325,601; May 24. Class 44.
Smolen, Leon A., doing business as Nebo Drug Co., New York, N. Y. Tooth ache drops, wart remover and corn remover preparation, etc. Serial No. 325,387; May 24. Class 6.
Snug-Fit Brassiere Co., New York, N. Y. Corsets, brassières, and combinations thereof. Serial No. 325,049; May 24. Class 39.
Société Anonyme pour la Décoration Intérieure Moderne, Paris, France. Bed-frames, beds, cupboards, etc. Serial No. 307,745; May 24. Class 32.
Societe Genevoise d'Instruments de Physique, Geneva, Switzerland. Drawing, astronomical instruments, micrometers, etc. Serial No. 318,999; May 24. Class 26.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Sonneborn, L., Sons, Inc., New York, N. Y. Petrolatum for medicinal purposes. Serial No. 325,603; May 24. Class 6.
Spaeth, Charles E., doing business as Herbavita Laboratory, New York, N. Y. Tonic. Serial No. 320,109; May 24. Class 6.
Spielman, Hermann, & Sohn, Vienna, Austria. Neckties. Serial Nos. 312,962–3; May 24. Class 39.
Spring Mountain Vineyard Co. Inc., New York, N. Y. Grape juice. Serial No. 325,884; May 24. Class 45.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Top dressing. Serial No. 322,405; May 24. Class 4.
Standard Pulp Products Co., Inc., New York, N. Y. Plates. Serial No. 325,859; May 24. Class 2.
Stedman Manufacturing Company, Asheboro, N. C. Handkerchiefs. Serial No. 326,040; May 24. Class 42.
Stoller, Joseph, New York, N. Y. Eggs. Serial No. 325,696; May 24. Class 46.
Sun Bleach Products Company. (See Simon, Jacob.)
Superior Machine Tool Company Kokomo, Ind. Machine tools. Serial No. 318,083; May 24. Class 23.
Superior Machine Tool Company, Kokomo, Ind. Machine tools. Serial No. 318,325; May 24. Class 23.
Thompson, Eleanor G., Kansas City, Mo. Scotch short bread. Serial No. 325,377; May 24. Class 46.
Thompson's Spa Inc., Boston, Mass. Candy. Serial No. 326,310; May 24. Class 46.
Tidy Products, Inc., New York, N. Y. Containers or holders and paper liners for same. Serial No. 321,224; May 24. Class 2.
Tone Bros., Des Moines, Iowa. Coffee. Serial No. 326,044; May 24. Class 46.
Tugel, Fred F., doing business as Appleton Produce Company, Watsonville, Calif. Fresh deciduous fruits, dried fruits, fresh vegetables. Serial No. 326,034; May 24. Class 46.
U. S. Duplicator Co., Chicago, Ill. Gelatine duplicating machines and parts. Serial No. 324,727; May 24. Class 23.
U. S. Oil Company, East Providence, R. I. Hydrosulphite products or compounds. Serial No. 325,731; May 24. Class 6.
United Wholesale Grocery. (See English, John.)
Uptown Card and Paper Company, New York, N. Y. Bond paper. Serial No. 324,678; May 24. Class 37.
Vine-Glo Corporation of New York, New York, N. Y. Grape juice. Serial No. 322,194; May 24. Class 45.
Virginia Sweet Foods Inc., doing business as Mo-An-Mo Products Co., Indianapolis, Ind. Flour. Serial No. 311,942; May 24. Class 46.
Voelk, Ottomar, Berlin, Germany. Unfilled cream-pots. Serial No. 322,608; May 24. Class 2.
Wallingford Laboratories, Inc., The, Wallingford, Conn. Cream, lipsticks, rouge, etc. Serial No. 326,035; May 24. Class 6.
Walman Optical Co., The, Minneapolis, Minn. Optical frames, mountings, and lenses. Serial No. 313,570; May 24. Class 26.
Ward, Samuel, Manufacturing Company, Boston, Mass. Record books and diaries. Serial No. 325,767; May 24. Class 37.
Weintraub, Maxwell, doing business as Maxwell Chemical Company, Brooklyn, N. Y. Liquid carbon remover. Serial No. 324,450; May 24. Class 6.
Wilkins, John H., Company, Washington, D. C. Coffee. Serial No. 325,670; May 24. Class 46.
Winter Haven Citrus Growers Association, Winter Haven, Fla. Fresh citrus fruits. Serial No. 325,771; May 24. Class 46.
Wohl Shoe Company, St. Louis, Mo. Polishing and cleaning preparations and dressings. Serial No. 326,122; May 24. Class 4.
Wrigley, Wm. Jr., Company, Chicago, Ill. Chewing gum. Serial No. 325,416; May 24. Class 46.
Wuster, Doris A., doing business as D. A. W. Laboratories, Baltimore, Md. Drawing and healing salve. Serial No. 325,785; May 24. Class 6.
Yanni, A. & Son, McKeesport, Pa. Washing fluid. Serial No. 325,861; May 24. Class 6.
Yocum Brothers, Reading, Pa. Cigars. Serial No. 325,888; May 24. Class 17.

LIST OF REGISTRANTS OF TRADE-MARKS

Abrasive Products, Inc., Boston, Mass. Abrasive papers and cloths coated with silicon carbide. 294,333; May 24; Serial No. 322,619; published Mar. 8, 1932. Class 4.
Abrasive Products, Inc., Boston, Mass. Abrasive papers and cloths coated with aluminum oxide. 294,335; May 24; Serial No. 322,620; published Mar. 8, 1932. Class 4.
Ace Food Co. (See Holmes, Donald E.)
Acme Utility Co. (See Duffy, Walter F.)
Aktien-Gesellschaft Vereinigte Berner & Zürcher Chocolade-Fabriken Lindt & Sprüngli, Klichberg, near Zurich and Berne, Switzerland, assignor to Lindt & Sprungli, Inc., New York, N. Y. Chocolate candies. 87,306; renewed July 9, 1932.
Alexander Marketing Company, San Benito, Tex. Fresh vegetables. 294,235; May 24; Serial No. 323,931; published Mar. 15, 1932. Class 46.
American Manufacturing Company, Boston, Mass., and New York, N. Y., to American Manufacturing Company, Brooklyn, N. Y. Bagging for baling cotton. 87,027; renewed June 25, 1932.
American Manufacturing Company, Boston, Mass., and New York, N. Y., to American Manufacturing Company, Brooklyn, N. Y. Bagging for baling cotton. 87,031; renewed June 25, 1932.
American Optical Company, Southbridge, Mass. Ophthalmic lenses and blanks. 294,455; May 24. Class 26.
American Safety Razor Corporation, Brooklyn, N. Y. Razor blades. 294,193–4; May 24; Serial Nos. 323,475–6; published Mar. 8, 1932. Class 23.
American Thermos Bottle Company, The, Norwich, Conn. Vacuum bottles. 294,369; May 24; Serial No. 323,082; published Mar. 8, 1932. Class 2.
American Tractor Equipment Company, Oakland, Calif. Earth moving equipment. 294,213; May 24; Serial No. 317,102; published Mar. 15, 1932. Class 23.
American Water Heater Company, St. Louis, Mo. Water heaters. 294,288; May 24; Serial No. 315,517; published Mar. 15, 1932. Class 34.
Amorskin Corporation, Wilmington, Del., and New York, N. Y. Perfumery, face creams, etc. 294,283; May 24; Serial No. 303,620; published Mar. 8, 1932. Class 6.
Apothecaries Hall Company, Waterbury, Conn. Preparation used for cannibalism in poultry. 294,361; May 24; Serial No. 322,205; published Mar. 8, 1932. Class 6.
Arabol Manufacturing Company, The, New York, N. Y. Adhesives and for powder for making an adhesive paste. 294,342; May 24; Serial No. 323,185; published Mar. 1, 1932. Class 5.
Armour and Company, Chicago, Ill. Cleaning preparation. 88,547; renewed Oct. 1, 1932.
Arrow-Hart & Hegeman Electric Company, The, Hartford, Conn. Switches, plates, receptacles, and connecting devices for electrical wiring devices. 294,317; May 24; Serial No. 323,386; published Mar. 15, 1932. Class 21.
Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Hosiery. 294,336; May 24; Serial No. 322,729; published Mar. 1, 1932. Class 39.
Asiatic Petroleum Company Limited, The, London, England. Oil and spirit stoves and lamps. 294,279; May 24; Serial No. 321,519; published Mar. 8, 1932. Class 34.
Associated Press, The, New York, N. Y. Newspaper articles. 294,398–401; May 24; Serial Nos. 280,092–5; published Mar. 1, 1932. Class 38.
Associated Press, The, New York, N. Y. Newspaper articles. 294,402; May 24; Serial No. 280,097; published Mar. 1, 1932. Class 38.
Associated Press, The, New York, N. Y. Newspaper articles. 294,403; May 24; Serial No. 286,412; published Mar. 1, 1932. Class 38.
Atkins, E. C., & Company, Indianapolis, Ind. Saws, corn-knives, cane-knives, hay-knives, and machetes. 86,120; renewed Apr. 16, 1932.
Atlantic Sales Co., The. (See Kahn, Jacob.)
Atlas Imperial Diesel Engine Co., Oakland, Calif. Internal combustion engines of the Diesel type. 294,189; May 24; Serial No. 323,277; published Mar. 8, 1932. Class 23.
Atlas Supply Company, Wilmington, Del., and Newark, N. J. Razor blades. 294,192; May 24; Serial No. 323,442; published Mar. 8, 1932. Class 23.
Austral Window Company, Augusta, Me., and New York, N. Y. Balance arms, door holders, handles, etc. 294,268; May 24; Serial No. 322,124; published Mar. 15, 1932. Class 13.
Austral Window Company, New York, N. Y., and Augusta, Me. Door, window, wardrobe and partition locks and latches. 294,378; May 24; Serial No. 323,443; published Mar. 8, 1932. Class 25.
Auto Replacement Parts Co., Chicago, Ill. Storage batteries. 294,204; May 24; Serial No. 320,914; published Mar. 1, 1932. Class 21.
Ballard & Ballard Co., Louisville, Ky. Dough formations. 294,449; May 24. Class 46.
Barco Manufacturing Co., Chicago, Ill. Low water alarms. 294,265; May 24. Serial No. 322,984; published Mar. 15, 1932. Class 13.
Barnhart Brothers & Spindler, to Barnhart Brothers & Spindler, Chicago, Ill., successor. Steel for chases for printing presses. 38,174; renewed Apr. 22, 1932.
Bemis and Call Company. (See Coes Wrench Company, assignor.)

Bennington Wax Paper Company, Bennington, Vt. Paper impregnated with oil and cleaning and polishing composition. 294,320; May 24; Serial No. 317,699; published Sept. 29, 1931. Class 4.
Benson Fish Company, Chicago, Ill. Canned salmon and shrimp. 294,427; May 24; Serial No. 323,022; published Mar. 15, 1932. Class 46.
Bentz, Frank J., doing business as Fixzit System, Miami, Fla. Wash basins, sinks, bath tubs, etc. 294,434; May 24; Serial No. 312,084; published Mar. 15, 193.. Class 13.
Bernstein & Fine, New York, N. Y. Hosiery and underwear. 294,450; May 24. Class 39.
Bes-Tone Laboratories, Ltd., New York, N. Y. Permanent wave pads. 294,341; May 24; Serial No. 323,159; published Mar. 8, 1932. Class 44.
Blanchini, Férier, Lyon, France. Piece goods. 294,239; May 24; Serial No. 322,680; published Mar. 8, 1932. Class 42.
Biltmore Conservation Corporation, The, Los Angeles, Calif. Poultry, hog, and cattle food. 294,446; May 24. Class 46.
Blaine, Samuel A., New York, N. Y. Handkerchief. 294,248; May 24; Serial No. 323,445; published Mar. 15, 1932. Class 42.
Blatt, William, doing business as Supreme Vending Co., Brooklyn, N. Y. Vending machines. 294,200; May 24; Serial No. 323,606; published Mar. 15, 1932. Class 23.
Boardman, Ronald P., doing business as The Midwest Book and Game Company, Lake Forest, Ill. Game. 294,383; May 24; Serial No. 323,856; published Mar. 15, 1932. Class 22.
Boeing Airplane Company, Seattle, Wash. Airplanes and structural parts thereof. 294,272; May 24; Serial No. 322,625; published Mar. 8, 1932. Class 19.
Bond Electric Corporation, Jersey City, N. J. Electric lanterns. 294,318; May 24; Serial No. 323,516; published Mar. 15, 1932. Class 21.
Boss Manufacturing Company, The, Kewanee, Ill. Gloves and mittens. 87,151; renewed July 2, 1932.
Bourjois, Inc. (See Wertheimer, E., & Cie., assignor.)
Breeze Corporations, Inc., Newark, N. J. Casings for the electrical equipment of motors and similar power apparatus. 294,293; May 24; Serial No. 314,268; published Mar. 1, 1932. Class 21.
Bristow, T. F., & Co. Limited, London, England. Creams and soaps and perfumed soap. 294,346; May 24; Serial No. 322,543; published Mar. 8, 1932. Class 4.
Brown Company, Portland, Me., and Berlin, N. H. Paper. 294,422; May 24; Serial No. 322,353; published Mar. 8, 1932. Class 37.
Brown, R. J. Company, The, St. Louis, Mo. Lubricating oils and greases and kerosene and gasoline. 294,290; May 24; Serial No. 315,131; published Mar. 15, 1932. Class 15.
Bryn & Halden Tændstikfabrikker Aktieselskab. (See Haldens Tændstikfabrik, assignor.)
Burger, Philipp, Berlin, Germany. Electromotors, dynamos, transformers, etc. 294,444; May 24; Serial No. 301,567; published Mar. 1, 1932. Class 21.
Burrell, D. H., & Company, Little Falls, N. Y., assignor, by mesne assignments, to Cherry-Burrell Corporation, Little Falls, N. Y., Wilmington, Del., and Chicago, Ill. Bottle washers, milk pumps, cream-ripeners, and cream-separators. 87,158; renewed July 2, 1932.
Burton Brothers & Co. Inc., New York, N. Y. Cotton piece goods, etc. 294,463; May 24. Class 42.
Cable Radio Tube Corporation, Brooklyn, N. Y. Vacuum tubes. 294,302; May 24; Serial No. 322,377; published Mar. 1, 1932. Class 21.
Cable Radio Tube Corporation, Brooklyn, N. Y. Electron tubes. 294,319; May 24; Serial No. 322,544; published Mar. 8, 1932. Class 21.
California Wine Association, San Francisco, Calif. Wine. 86,032; renewed Apr. 9, 1932.
Caswell, Geo. W., Co., San Francisco, Calif. Coffee. 294,420; May 24; Serial No. 322,207; published Mar. 8, 1932. Class 46.
Catskill Metal Works, Inc., Catskill, N. Y. Automatic coal stoker. 294,276; May 24; Serial No. 318,439; published Mar. 15, 1932. Class 34.
Central Stamping Company, The, Newark, N. J. Base metal table and cooking hollow ware. 294,269; May 24; Serial No. 322,162; published Mar. 8, 1932. Class 13.
Chemical Foundation, Incorporated, The. (See Henkel & Cie., assignors.)
Cherry-Burrell Corporation. (See Burrell, D. H., & Company, assignor.)
Chicago Roller Skate Company, Chicago, Ill. Roller skates. 294,438–9; May 24; Serial Nos. 312,604–5; published Mar. 15, 1932. Class 22.
Chrysler Corporation, Highland Park, Mich. Bearings for machinery. 294,227; May 24; Serial No. 323,810; published Mar. 15, 1932. Class 23.
Cincinnati Tool Co., The, Norwood, Ohio. Clamps. 294,181; May 24; Serial No. 317,454; published Mar. 8, 1932. Class 23.
Cinderella Cosmetics. (See Sinykin, Jack L.)
Club Managers Service Corporation, The, Chicago, Ill. Periodical. 294,391; May 24; Serial No. 323,224; published Mar. 8, 1932. Class 38.
Clymer, Harry B., doing business as Josephine Le Fevre Co., Philadelphia, Pa. Depilatory. 294,223; May 24; Serial No. 323,610; published Mar. 8, 1932. Class 6.
Coes Wrench Company, Worcester, Mass., assignor to Henis and Call Company, Springfield, Mass. Wrenches. 88,616; renewed Oct. 8, 1932.
Columbia-Ideal Quilting Co. Inc., Long Island City, N. Y. Mattress and tabletop protectors. 294,238; May 24; Serial No. 322,420; published Mar. 15, 1932. Class 42.
Consumers Sand Company, Topeka, Kans. Aggregate for concrete. 294,292; May 24; Serial No. 314,749; published Mar. 1, 1932. Class 1.
Couri Brothers, New York, N. Y. Textile rugs. 294,252–3; May 24; Serial Nos. 323,567–8; published Mar. 8, 1932. Class 42.
Couri Brothers, New York, N. Y. Textile rugs. 294,254; May 24; Serial No. 323,569; published Mar. 15, 1932. Class 42.
Couri Brothers, New York, N. Y. Textile rugs. 294,255–6; May 24; Serial Nos. 323,570–1; published Mar. 8, 1932. Class 42.
Crane Medicine Co., to Helen C. Foley, Chicago, Ill., successor. Remedy for coughs and colds. 85,083; renewed Jan. 30, 1932.
Crofut & Knapp Company, The, South Norwalk, Conn. Caps and hats, overcoats, etc. 294,328; May 24; Serial No 322,042; published Mar. 8, 1932. Class 39.
Cross, W. W., & Company, Incorporated, Portland, Me. Nails. 294,379; May 24; Serial No. 323,483; published Mar. 8, 1932. Class 13.
Dearborn Chemical Company, Chicago, Ill. Solvents for cleaning drain pipes and plumbing fixtures. 294,218; May 24; Serial No. 323,084; published Mar. 8, 1932. Class 6.
Delta Electric Company, Marion, Ind. Electric flashlights, portable electric lanterns, and electric lamps. 294,209; May 24; Serial No. 321,751; published Mar. 1, 1932. Class 21.
Derris, Inc., New York, N. Y. Insecticides, fungicides, etc. 294,362; May 24; Serial No. 322,311; published Mar. 15, 1932. Class 6.
"Diamco" Akt.-Ges. für Glühlicht, Berlin, Germany. Incandescent mantles. 294,437; May 24; Serial No. 314,557; published Mar. 8, 1932. Class 34.
Dick, A. B., Company, Chicago, Ill. Paper. 294,363; May 24; Serial No. 317,075; published Mar. 1, 1932. Class 37.
Doak, J., Company, Inc., Cleveland, Ohio. Preparation for inunction in treatment of syphilis. 294,225; May 24; Serial No. 323,780; published Mar. 15, 1932. Class 6.
Dolphin, Byron J., Seattle, Wash. Peanut butter. 86,040; renewed Apr. 9, 1932. Class 46.
Dominion Electrical Mfg. Company, doing business as Justrite Electrical Mfg. Company, Minneapolis, Minn. Electrical waffle irons. 294,424; May 24; Serial No. 322,631; published Mar. 8, 1932. Class 21.
Dover, Pearl F., San Antonio, Tex. Face coloring preparations. 294,229; May 24; Serial No. 323,862; published Mar. 15, 1932. Class 6.
Dow Chemical Company, The, Midland, Mich. Ingredients of foods. 294,405; May 24; Serial No. 294,043; published Mar. 8 1932. Class 46.
Driver-Harris Company, Harrison, N. J. Metallic wire and strips. 294,306; May 24; Serial No. 322,881; published Mar. 8, 1932. Class 21.
Duffy, Walter F., doing business as Acme Utility Co., Franklin, N. H. Meat tendering machines. 294,184; May 24; Serial No. 322,952; published Mar. 8, 1932. Class 23.
Eaton, Marson M., jr., Kellogg, Idaho. Daily mimeographed newspaper. 294,387; May 24; Serial No. 322,928; published Mar. 8, 1932. Class 38.
Edwards and Company, Inc., New York, N. Y. Electrical goods and apparatus. 294,309–13; May 24; Serial Nos. 323,033–7; published Mar. 8, 1932. Class 21.
Electric Vacuum Cleaner Company, Inc. (See Rosenfield Manufacturing Company, assignor.)
Elgin Giant Watch Case Co., Elgin, Ill. Watchcases. 88,475; renewed Sept. 24, 1932.
Empire Gum Company, New York, N. Y. Chewing gum. 294,257; May 24; Serial No. 323,812; published Mar. 15, 1932. Class 46.
Emporium-World Millinery Co., Chicago, Ill. Publication. 294,366; May 24; Serial No. 322,423; published Mar. 1, 1932. Class 38.
Eureka Fire Hose Manufacturing Company, New York, N. Y. Hose. 294,281; May 24; Serial No. 305,990; published Mar. 15, 1932. Class 35.
Eureka Tea Co., Chicago, Ill. Coffee, teas, chocolate, etc. 294,412; May 24; Serial No. 308,619; published Mar. 8, 1932. Class 46.
Faber, A. W., Inc., Newark, N. J. Elastic or rubber bands. 294,386; May 24; Serial No. 322,506; published Mar. 1, 1932. Class 37.
Fervo Products Co. (See Quartetti, Leonard.)
Fixzit System. (See Bentz, Frank J.)
Fleischer Studios, Incorporated, New York, N. Y. Motion picture cartoons. 294,195; May 24; Serial No. 323,489; published Mar. 8, 1932. Class 26.
Fogg & Hires Company, Salem, N. J. Canned vegetables. 86,660; renewed May 21, 1932.
Foley, Helen C. (See Crane Medicine Co.)
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 294,242; May 24; Serial No. 321,858; published Jan. 12, 1932. Class 42.

Forstmann Woolen Company, Passaic, N. J. Woolen piece goods. 294,240; May 24; Serial No. 322,845; published Mar. 1, 1932. Class 42.
Forstmann Woolen Company, Passaic, N. J. Woolen piece goods. 294,244–7; May 24; Serial Nos. 323,229–32; published Mar. 8, 1932. Class 42.
Fraser, Allan, Philadelphia, Pa. Trays for papers and the like. 294,271; May 24; Serial No. 322,285; published Mar. 15, 1932. Class 2.
Gamble Stores, Incorporated, Minneapolis, Minn. Incandescent electric lamps. 294,305; May 24; Serial No. 322,736; published Mar. 8, 1932. Class 21.
Gamewell Company, The, Newton, Mass. Electrical fire alarm systems and parts thereof. 294,417; May 24; Serial No. 320,780; published Mar. 1, 1932. Class 21.
Garrett, Osborne & Co., to Osborne, Garrett & Co., Limited, London, England, successor. Razors. 88,019; renewed Aug. 20, 1932.
Garst, Estate of Julius, doing business as Shredwood Curtain Co., Worcester, Mass. Wood fabric curtains. 294,220; May 24; Serial No. 323,195; published Mar. 15, 1932. Class 32.
General Baking Company, New York N. Y. Bread. 294,340; May 24; Serial No. 323,042; published Mar. 8, 1932. Class 46.
General Electric Company, Schenectady, N. Y. Brushes for dynamo-electric machines. 86,705; renewed May 28, 1932.
General Electric Company, Schenectady, N. Y. Composite dielectric or resistance material. 294,289; May 24; Serial No. 315,291; published Mar. 8, 1932. Class 21.
General Electric Company, Schenectady, N. Y. Electric motor actuated hydraulic operating mechanism. 294,315; May 24; Serial No. 322,316; published Mar. 1, 1932. Class 21.
Gibson, Francis W., Boston, Mass. Screw drivers and wrenches. 294,187; May 24; Serial No. 323,170; published Mar. 8, 1932. Class 23.
Gilby Wire Company, Newark, N. J. Electrical nickel-chrome wire and ribbon, ballast wire, etc. 294,207; May 24; Serial No. 321,335; published Mar. 1, 1932. Class 21.
Gilby Wire Company, Newark, N. J. Wire, sheet, and ribbon for grids, plates, and support wires for radio tube parts. 294,303; May 24; Serial No. 322,461; published Mar. 1, 1932. Class 21.
Gilby Wire Company, Newark, N. J. Electrical resistance and treating wires, radio tube parts, fuse wires, etc. 294,423; May 24; Serial No. 322,462; published Mar. 1, 1932. Class 21.
Gillette Safety Razor Company, Boston, Mass. Safety razor blades. 294,217; May 24; Serial No. 322,930; published Mar. 15, 1932. Class 23.
Governor and Company of Adventurers of England trading into Hudson's Bay, The, Winnipeg, Manitoba, Canada. Smoking tobacco. 85,962; renewed Apr. 2, 1932.
Gowdy, Ryan W., Greensburg, Ind. Mange ointment. 294,357; May 24; Serial No. 321,725; published Mar. 8, 1932. Class 6.
Greif Bros. Co., The, assignor to The Greif Bros. Cooperage Company, Cleveland, Ohio. Casks and barrels. 86,528; renewed May 14, 1932.
Greist Manufacturing Company, The, New Haven, Conn. Attachments for sewing machines. 87,623; renewed July 30, 1932.
Griggs, Cooper & Co., doing business as Sanitary Food Mfg. Co., St. Paul, Minn. Coffee. 294,233; May 24; Serial No. 323,579; published Mar. 15, 1932. Class 46.
Grip-Rite Manufacturing Co. (See Lamont, Charles T.)
Grover, Herman, New York, N. Y. Writing paper. 294,395; May 24; Serial No. 323,329; published Mar. 8, 1932. Class 37.
Gutfreund, Gustav, doing business as Lamona Extract & Mfg. Co., Des Moines, Iowa. Beverages. 294,381; May 24; Serial No. 323,781; published Mar. 15, 1932. Class 45.
Haldens Tændstikfabrik, Fredrikshald, assignor to Bryn & Halden Tændstikfabrikker Aktieselskab, Bryn, Norway. Matches. 86,218; renewed Apr. 23, 1932.
Halligan Corporation, The, Davenport, Iowa. Coffee. 294,232; May 24; Serial No. 323,403; published Mar. 15, 1932. Class 46.
Harris, Arthur O., Buffalo, N. Y. Publications. 294,388; May 24; Serial No. 322,958; published Mar. 8, 1932. Class 38.
Harrison Refining Co., Inc., New York, N. Y. Hand lotions. 294,356; May 24; Serial No. 321,381; published Mar. 15, 1932. Class 6.
Hartung Brothers, New York, N. Y. Flavorings for icings and fillings. 294,373; May 24; Serial No. 323,243; published Mar. 8, 1932. Class 46.
Hassell, Cecil S., Miami, Fla. Egg testers. 294,359; May 24; Serial No. 322,104; published Mar. 15, 1932. Class 26.
Hawley & Hoops, New York, N. Y. Candy. 294,419; May 24; Serial No. 322,318; published Feb. 16, 1932. Class 46.
Healy-Davidson Corporation, Chicago, Ill. Electric arc switches. 294,307; May 24; Serial No. 322,105; published Mar. 1, 1932. Class 21.
Henkel & Cie., Düsseldorf, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Bleaching preparations. 87,337; renewed July 9, 1932.
Henkel & Cie., Dusseldorf, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Preparation for removing printer's ink. 88,489; renewed Sept. 24, 1932.
Heymann Mercantile Co., Inc., New York, N. Y. Cotton and rayon piece goods. 294,251; May 24; Serial No. 323,534; published Mar. 8, 1932. Class 42.
Hickmott, R., Canning Company, San Francisco, Calif. Vegetable compound for flavoring soups and sauces. 294,428; May 24; Serial No. 323,047; published Mar. 8, 1932. Class 46.
Hico Products Company, Inc., St. Louis, Mo. Powder used in the preparation of soft drinks. 294,267; May 24; Serial No. 323,005; published Mar. 15, 1932. Class 45.
Hillcrest Farm. (See Moss, J. Sam.)
Hoag, Homer L., to The Kinox Company, Inc., Rutland, Vt., successor. Antiseptic and deodorant. 88,572; renewed Oct. 1, 1932.
Holliday, W. J. & Company, Indianapolis, Ind. Alloy steel. 294,447; May 24. Class 14.
Holmes, Donald E., doing business as Ace Food Co., Atlanta, Ga. Potato chips. 294,433; May 24; Serial No. 311,837; published Mar. 15, 1932. Class 46.
Hover Battery Products Co., Kansas City, Mo. Plate separators for storage batteries. 294,314; May 24; Serial No. 323,296; published Mar. 15, 1932. Class 21.
Hospo, Inc., Chicago, Ill. Electric light fixture units. 294,301; May 24; Serial No. 309,563; published Mar. 1, 1932. Class 21.
Hoyt, R. B., doing business as Hoyt Bros., Seattle, Wash. Candy. 294,425; May 24; Serial No. 323,131; published Mar. 15, 1932. Class 46.
Hudson, H. D., Manufacturing Company, Chicago, Ill., and Hastings, Minn. Sprayers. 294,185; May 24; Serial No. 323,006; published Mar. 8, 1932. Class 23.
Hull & Dillon Packing Company, The, Pittsburgh, Kans. Bacon. 294,236; May 24; Serial No. 323,999; published Mar. 15, 1932. Class 46.
Huntington Laboratories, Inc., Huntington, Ind. Roach powder. 294,224; May 24; Serial No. 323,617; published Mar. 15, 1932. Class 6.
Huntley, Sturtevant L., Chicago, Ill. Cartoon and comic strip. 294,384; May 24; Serial No. 322,895; published Mar. 8, 1932. Class 38.
I-T-E Circuit Breaker Company, Philadelphia, Pa. Sectional enclosed switchboards, automatic circuit breakers, etc. 294,206; May 24; Serial No. 321,338; published Mar. 8, 1932. Class 21.
I-T-E Circuit Breaker Company, Philadelphia, Pa. Component parts of enclosed switchboards, switches, or automatic circuit breakers. 294,208; May 24; Serial No. 321,340; published Mar. 1, 1932. Class 21.
Import Centre, Inc., New York, N. Y. Figurines, mannikins, models, etc. 294,448; May 24. Class 50.
Independent Druggists' Alliance Distributing Co., Chicago, Ill. Antiseptic mouth wash. 294,350; May 24; Serial No. 317,468; published Mar. 15, 1932. Class 6.
Independent Druggists' Alliance Distributing Co., Chicago, Ill. Cosmetics. 294,358; May 24; Serial No. 322,018; published Mar. 8, 1932. Class 6.
Ingersoll-Rand Company, New York, N. Y. Motor pumps. 294,183; May 24; Serial No. 322,812; published Mar. 15, 1932. Class 23.
Ingraham, E., Company, The, Bristol, Conn. Clocks. 87,455; renewed July 16, 1932.
Interior Architecture & Decoration Publishing Company, Inc., New York, N. Y. Periodical. 294,367; May 24; Serial No. 322,428; published Mar. 8, 1932. Class 38.
International Equipment Company, Boston, Mass. Centrifuges, centrifugal separators, accessories, etc. 294,216; May 24; Serial No. 322,640; published Mar. 15, 1932. Class 26.
Janvier, Walter, Inc., New York, N. Y. Tooth paste. 294,354; May 24; Serial No. 319,327; published Mar. 8, 1932. Class 6.
Johnson & Johnson, New Brunswick, N. J. Soaps. 88,088; renewed Aug. 27, 1932.
Journeymen Barbers International Union of America, Indianapolis, Ind. Periodical. 294,394; May 24; Serial No. 323,115; published Mar. 8, 1932. Class 38.
Justrite Electrical Mfg. Company. (See Dominion Electrical Mfg. Company.)
Kahn, Jacob, doing business as Kahn Chemical Co., and as The Atlantic Sales Co., New York, N. Y. Soaps and cleaning compounds. 294,291; May 24; Serial No. 314,995; published Mar. 8, 1932. Class 4.
Kalamazoo Sled Company, Kalamazoo, Mich. Hand sleds. 294,372; May 24; Serial No. 323,137; published Mar. 15, 1932. Class 22.
Kennedy Manufacturing Company, Van Wert, Ohio. Sheet metal boxes. 294,426; May 24; Serial No. 323,138; published Mar. 15, 1932. Class 2.
Keystone Steel & Wire Company, Peoria, Ill., to Keystone Steel & Wire Company, South Bartonville, Peoria, Ill. Wire, barb-wire, and wire-fence stretchers. 86,598; renewed May 21, 1932.
Keystone Steel & Wire Company, Peoria, to Keystone Steel & Wire Company, South Bartonville, Peoria, Ill. Metal gates. 86,714–15; renewed May 28, 1932.
Kinox Company, Inc., The. (See Hoag, Homer L.)

Kiwi Polish Company Proprietary Limited, The, Richmond, near Melbourne, Australia. Polishing preparations. 294,323; May 24; Serial No. 320,308; published Mar. 8, 1932. Class 4.

Kiwi Polish Company Proprietary Limited, The, Richmond, near Melbourne, Australia. Polishing and cleaning preparations and dressings. 294,324; May 24; Serial No 320,309; published Mar. 8, 1932. Class 4.

Klein, Emanuel, doing business as Plant-Oil-Fat Products Co., New York, N. Y. Vegetable fat. 294,277; May 24; Serial No. 318,690; published Mar. 8, 1932. Class 46.

Kloramene Company, The, Denver, Colo. Applicators for antiseptics. 294,321; May 24; Serial No. 320,146; published Mar. 8, 1932. Class 44.

Knox Chemical Company. (See Webb, James E.)

Kockums Jernverks Aktiebolag, Malmo, Sweden. Enameled steelware. 85,452; renewed Feb. 20, 1932.

Koenig, Harry D., doing business as Harry D. Koenig & Co., New York, N. Y. Face powder, face rouge, creams, astringent lotion, etc. 294,355; May 24; Serial No. 321,107; published Mar. 8, 1932. Class 6.

Kresge Department Store Corporation, Newark, N. J. Dress shields, combs, and hair pins, etc. 294,294; May 24; Serial No. 314,162; published Mar. 8, 1932. Class 40.

Kress, S. H., & Co., New York, N. Y. Padlocks. 294,280; May 24; Serial No. 321,913; published Mar. 8, 1932. Class 25.

Kronish, B., & Bro. Inc., New York, N. Y. Cosmetics. 294,215; May 24; Serial No. 322,513; published Mar. 8, 1932. Class 6.

Lamm, Berthold, Baltimore, Md. Cotton twill fabrics. 294,237; May 24; Serial No. 321,961; published Feb. 23, 1932. Class 42.

Lamona Extract & Mfg. Co. (See Gutfreund, Gustav.)

La Mont, Charles T., doing business as Grip-Rite Manufacturing Co., Milwaukee, Wis. Footer bars. 294,298; May 24; Serial No. 310,130; published Mar. 8, 1932. Class 23.

La Salle Bottling Company, St. Louis, Mo. Beverage. 294,376; May 24; Serial No. 323,245; published Mar. 15, 1932. Class 45.

Le Fevre, Josephine, Co. (See Clymer, Harry B.)

Leschen, A., & Sons Rope Company, St. Louis, Mo. Wire rope. 87,778; renewed Aug. 6, 1932. Class 7.

Liberty Lace and Netting Works, New York, N. Y. Lace in the piece. 294,260; May 24; Serial No. 323,750; published Mar. 15, 1932. Class 42.

Lindt & Sprungli, Inc. (See Aktien-Gesellschaft Vereinigte Berner & Zürcher Chocolade-Fabriken Lindt & Sprüngli, assignor.)

Liquid Veneer Corp., Buffalo, N. Y. Insecticide. 294,353; May 24; Serial No. 318,667; published Mar. 8, 1932. Class 6.

Londy Card Corporation, Muncie, Ind. Cardboard shirtboards. 294,451; May 24. Class 37.

Lunkenheimer Company, The, Cincinnati, Ohio. Gate valves. 294,266; May 24; Serial No. 322,021; published Mar. 8, 1932. Class 13.

Lynch, Thos. H., near Fresno City, assignor, by mesne assignments, to United Packing Co., Fresno, Calif. Fresh grapes. 86,418; renewed May 7, 1932. Class 46.

Mackie, John B., Far Rockaway, N. Y. Golf clubs, bags, balls, and tees. 294,348; May 24; Serial No. 323,952; published Mar. 15, 1932. Class 22.

Magazine Pencil Company, Inc., assignor to Hendrick J. Van Spanje, New York, N. Y. Pencils. 294,347; May 24; Serial No. 322,936; published Mar. 1, 1932. Class 37.

Magid, A. L., Company, New York, N. Y. Hand bags. 294,332; May 24; Serial No. 322,516; published Mar. 1, 1932. Class 3.

Mahler, Julius H., New York, N. Y. Head nets. 294,445; May 24. Class 22.

Maine Steel Products Co., South Portland, Me. Snow plows and parts thereof. 294,228; May 24; Serial No. 323,823; published Mar. 15, 1932. Class 23.

Marros, Arthur, doing business as Mirrokel Pet Products, New York, N. Y. Bird seeds. 294,329; May 24; Serial No. 322,108; published Mar. 8, 1932. Class 46.

Matthews, W. N., Corporation, St. Louis, Mo. Connectors for electrical conductors. 294,211; May 24; Serial No. 322,219; published Mar. 8, 1932. Class 21.

Mayer Coating Machines Co. Inc., Rochester, N. Y. Heating and cooling cylinders. 294,299; May 24; Serial No. 310,021; published Mar. 15, 1932. Class 23.

McCloskey, Arthur J., Philadelphia, Pa. Combined comb and brush. 294,334; May 24; Serial No. 322,552; published Mar. 8, 1931. Class 40.

McCrory Stores Corporation, New York, N. Y. Absorbent cotton, gauze, and sanitary napkins. 294,338; May 24; Serial No. 322,850; published Mar. 8, 1932. Class 44.

McKay, W. E., & Co., Inc., New York, N. Y. Fabrics. 294,241; May 24; Serial No. 322,851; published Mar. 8, 1932. Class 42.

Mead-Suydam Company, Orange, N. J. Burial vault. 294,273; May 24; Serial No. 322,644; published Mar. 8, 1932. Class 2.

Meinecke & Co., New York, N. Y. Hospital and sick-room appliances. 38,878; renewed Sept. 9, 1932.

Midwest Book and Game Company, The. (See Boardman, Ronald P.)

Mineral-Kur Institute. (See von Lange, Adolf W.)

Miniere, S. A., Scisti Bituminosi di Meride e Besano, Meride, Switzerland. Ichthyol-surrogate and mineral oils. 87,108; renewed June 25, 1932.

Mirrokel Pet Products. (See Marros, Arthur.)

Montgomery Ward & Co., Incorporated, Chicago, Ill. Fountain pens and pencils. 294,407; May 24; Serial No. 294,538; published Nov. 24, 1931. Class 37.

More, Samuel I., Chicago, Ill., and Pasadena, Calif., assignor to Sam The Shoe Doctor, Inc., Chicago, Ill. Soles and half soles. 294,385; May 24; Serial No. 322,263; published Mar. 8, 1932. Class 39.

Moss, J. Sam, doing business as Hillcrest Farm, Columbia, Mo. Corn meal. 294,458; May 24. Class 46.

Moulded Pulp Corporation. (See White, Ronald D., assignor.)

Mueller, August F., Grant Park, Ill. Fluid fuel burners and parts thereof. 294,234; May 24; Serial No. 323,670; published Mar. 15, 1932. Class 34.

Muralo Company, The, New York, assignor to The Muralo Company, Inc., New Brighton, N. Y. Calcimine. 86,725; renewed May 28, 1932.

Myers, E., Lye Company, St. Louis, Mo. Lye. 86,148; renewed Apr. 16, 1932.

Nashua Manufacturing Company, Nashua, N. H. Cotton piece goods, draperies, and blankets. 294,249; May 24; Serial No. 323,496; published Mar. 15, 1932. Class 42.

Nashua Manufacturing Company, Nashua, N. H. Piece goods. 294,250; May 24; Serial No. 323,497; published Mar. 15, 1932. Class 42.

National Acme Co., The, Cleveland, Ohio. Metal-working machines. 294,191; May 24; Serial No. 323,462; published Mar. 15, 1932. Class 23.

National Carbon Company, Inc., New York, N. Y. Chemical preparations. 294,295; May 24; Serial No. 314,066; published July 24, 1931. Class 6.

National Fuel Company, Denver, Colo. Coal. 294,339; May 24; Serial No. 322,888; published Mar. 1, 1932. Class 1.

National Health Plan, Inc. (See Professional Service Corporation, assignor.)

National Radiator Company Limited, Kingston-upon-Hull, England. Radiators or pipe coils and boilers. 294,415; May 24; Serial No. 320,602; published Mar. 15, 1932. Class 34.

National Union Radio Corporation, Newark, N. J. Radio electron tubes. 294,418; May 24; Serial No. 321,435; published Mar. 1, 1932. Class 21.

Neptune Meter Company, Jersey City, N. J., and New York, N. Y., to Neptune Meter Company, New York, N. Y. Water and other fluid meters and parts thereof. 88,512; renewed Sept. 24, 1932.

News Syndicate Co. Inc., New York, N. Y. Newspaper section. 294,393; May 24; Serial No. 323,305; published Mar. 8, 1932. Class 38.

Noma Electric Corporation, New York, N. Y. Electric lamp sockets and Christmas tree lighting outfits. 294,411; May 24; Serial No. 308,634; published Feb. 16, 1932. Class 21.

Northwestern Buyers & Jobbers, Inc., St. Paul, Minn. Men's and boys' outer clothing. 294,404; May 24; Serial No. 291,017; published Mar. 8, 1932. Class 39.

Noto, Louis M., doing business as The Roll-A-Bob Co., Chicago, Ill. Band for dressing the hair. 294,326; May 24; Serial No. 321,127; published Mar. 8, 1932. Class 40.

Olson, Paul H., St. Paul, Minn. Combination key container and memo pad. 294,296; May 24; Serial No. 310,773; published Mar. 8, 1932. Class 3.

Orange-Crush Company, Chicago, Ill. Beverages, syrups, compounds, etc. 294,261; May 24; Serial No. 322,647; published Mar. 15, 1932. Class 45.

Orange-Crush Company, Chicago, Ill. Beverages, syrups, compounds, etc. 294,262; May 24; Serial No. 322,650; published Mar. 15, 1932. Class 45.

Orange-Crush Company, Chicago, Ill. Tomato, orange, lemon, lime, and clam juice. 294,278; May 24; Serial No. 320,367; published Mar. 8, 1932. Class 46.

Owens-Illinois Glass Company, Toledo, Ohio. Air filters. 294,370; May 24; Serial No. 323,143; published Mar. 15, 1932. Class 34.

Oxford Paper Company, New York, N. Y. Coated paper for printing. 294,414; May 24; Serial No. 319,293; published Dec. 15, 1931. Class 37.

Paint Trade Publications, Inc., Chicago, Ill. Periodical. 294,392; May 24; Serial No. 323,249; published Mar. 18, 1932. Class 38.

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Game. 294,382; May 24; Serial No. 323,828; published Mar. 15, 1932. Class 22.

Parker Brothers, Inc., Salem, Mass. Table and parts thereof especially constructed for a game. 294,408; May 24; Serial No. 295,229; published Mar. 15, 1932. Class 22.

Parker Pen Company, The, Janesville, Wis. Desk sets. 294,284; May 24; Serial No. 302,184; published Mar. 8, 1932. Class 37.

Parker-Young Company, The, Portland, Me., and Boston, Mass. Bond paper. 294,368; May 24; Serial No. 322,705; published Mar. 8, 1932. Class 37.

Pass & Seymour, Incorporated, Solvay, N. Y. Electric switch plates and wall plates. 294,212; May 24; Serial No. 322,231; published Mar. 1, 1932. Class 21.

Patterson, E. Lee, Fort Worth, Tex. Newspaper syndicate strip or print. 294,440; May 24; Serial No. 317,271; published Mar. 1, 1932. Class 38.

Payne Coal Company, Inc., Wilkes-Barre, Pa. Publication. 294,396; May 24; Serial No. 323,465; published Mar. 8, 1932. Class 38.

Pepperell Manufacturing Company, Boston, Mass. Blankets. 294,259; May 24; Serial No. 323,586; published Mar. 8, 1932. Class 42.

Plant-Oil-Fat Products Co. (See Klein, Emanuel.)

Plantabbs Corporation, Baltimore, Md. Insecticides. 294,221; May 24; Serial No. 323,253; published Mar. 8, 1932. Class 6.

Planters Nut and Chocolate Company, Wilkes-Barre, Pa., and Suffolk, Va. Nut flours for bakers' and confectioners' use. 294,343; May 24; Serial No. 323,855; published Mar. 1, 1932. Class 46.

Planters Nut and Chocolate Company, Wilkes-Barre, Pa., and Suffolk, Va. Prepared and flavored nut flours. 294,344; May 24; Serial No. 323,357; published Mar. 1, 1932. Class 46.

Planters Nut and Chocolate Company, Wilkes-Barre, Pa., and Suffolk, Va. Granulated nuts. 294,430; May 24; Serial No. 323,356; published Mar. 15, 1932. Class 46.

Portland Concrete Machines Co., The, Cleveland, Ohio. Concrete mixing, concrete preparing, concrete molding, etc., machines. 294,300; May 24; Serial No. 309,594; published Mar. 8, 1932. Class 23.

Professional Service Corporation, assignor to National Health Plan, Inc., Providence, R. I. Placards, posters, pamphlets, and booklets. 294,441; May 24; Serial No. 317,738; published Mar. 1, 1932. Class 38.

Psyllium Company, The, Towson, Md. Laxative cookies and biscuits. 294,222; May 24; Serial No. 323,588; published Mar. 8, 1932. Class 6.

Pure-Test Food Products Company, Chicago, Ill. Malt syrup. 294,274; May 24; Serial No. 317,333; published Mar. 8, 1932. Class 46.

Pyramid Products Company, Chicago, Ill. Devices for stripping insulated coatings from metallic wires. 294,186; May 24; Serial No. 323,061; published Mar. 15, 1932. Class 23.

Quartetti, Leonard, doing business as Fervo Products Co., Chicago, Ill. Medical preparation. 294,230; May 24; Serial No. 323,905; published Mar. 15, 1932. Class 6.

RCA Victor Company, Inc., Camden, N. J. Publications. 294,364; May 24; Serial No. 321,215; published Mar. 1, 1932. Class 38.

Radio Television Industries Corporation, Waltham and Boston, Mass. Microphones. 294,308; May 24; Serial No. 322,892; published Mar. 8, 1932. Class 21.

Reading-Pratt & Cady Company, Inc., Bridgeport, Conn. Metal valves. 294,371; May 24; Serial No. 323,175; published Mar. 15, 1932. Class 13.

Reece Button Hole Machine Co., The, Boston, Mass. Sewing machines. 294,196–9; May 24; Serial Nos. 323,543–6; published Mar. 8, 1932. Class 23.

Reese, Issachar P., doing business as Reese Padlock Company, Lancaster, Pa. Padlocks. 294,375; May 24; Serial No. 323,264; published Mar. 8, 1932. Class 25.

Reeves Manufacturing Company, The, Dover, Ohio. Formed sheet metal roofing. 294,454; May 24. Class 12.

Replitura Corporation, The, Stamford, Conn. Radio receiving sets and tuning apparatus therefor. 294,282; May 24; Serial No. 308,958; published Mar. 1, 1932. Class 21.

Rhinelander Paper Company, Rhinelander, Wis. Wrapping paper. 294,389; May 24; Serial No. 323,062; published Mar. 1, 1932. Class 37.

Ritz Extract Mfg. Co., The, Tampa, Fla. Beverages, fruit juices, and extracts. 294,275; May 24; Serial No. 318,116; published Mar. 15, 1932. Class 45.

Roll-A-Bob Co., The. (See Noto, Louis M.)

Rosenfield Manufacturing Company, New York, N. Y., assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Suction cleaners and attachments therefor. 88,119; renewed Aug. 27, 1932.

Rothberg-Goldman, Inc., New York, N. Y. Suits. 294,462; May 24. Class 39.

Rudge, William E., The executors of the estate of, doing business as William Edwin Rudge, Publisher, New York, N. Y. Magazines. 294,421; May 24; Serial No. 322,293; published Mar. 1, 1932. Class 38.

Ryerson, Joseph T., & Son, to Joseph Ryerson & Son, Inc., Chicago, Ill., successor. Steel plates. 87,660; renewed July 30, 1932.

Saegertown Mineral Water Company, The, Saegertown, Pa. Beverage. 294,453; May 24. Class 45.

Safeturn Signal Corporation, New York, N. Y. Direction signals. 294,203; May 24; Serial No. 320,388; published Mar. 15, 1932. Class 21.

Sam The Shoe Doctor, Inc. (See More, Samuel I., assignor.)

Sanitary Food Mfg. Co. (See Griggs, Cooper & Co.)

Santacruz, Carmen, San Antonio, Tex. Chile paste. 294,452; May 24. Class 46.

Schwartz Sales Company, St. Paul, Minn. Towel service and dispensing cabinets. 294,263; May 24; Serial No. 322,834; published Mar. 15, 1932. Class 2.

Schwarzenbach Huber Co., The, New York, N. Y. Broad silks and silk mixtures. 294,258; May 24; Serial No. 323,873; published Mar. 15, 1932. Class 42.

Scovill Manufacturing Company, Waterbury, Conn. Lamp-burners. 88,121; renewed Aug. 27, 1932.

Sears, Roebuck and Co., Chicago, Ill. Shoes. 294,286; May 24; Serial No. 316,105; published Mar. 8, 1932. Class 39.

Sears, Roebuck and Co., Chicago, Ill. Handbags. 294,327; May 24; Serial No. 322,030; published Mar. 1, 1932. Class 3.

Security Coupon Corporation, New York, N. Y. Trading stamps and trading stamp books. 294,397; May 24; Serial No. 323,547; published Mar. 8, 1932. Class 38.

Sedgwick Machine Works, New York, N. Y. Dumbwaiters, freight and passenger elevators, etc. 294,188; May 24; Serial No. 323,178; published Mar. 8, 1932. Class 23.

Shredwood Curtain Co. (See Garst, Estate of Julius.)

Siegel, A. L., Co., Inc., New York, N. Y. Handkerchief cases and pajama cases. 294,429; May 24; Serial No. 323,255; published Mar. 15, 1932. Class 2.

Signal Oil & Gas Company, Los Angeles, Calif. Gasoline. 294,435; May 24; Serial No. 313,392; published Mar. 8, 1932. Class 15.

Simmons Hardware Company, St. Louis, Mo. Sadirons, toasters, percolators, etc. 294,210; May 24; Serial No. 322,140; published Mar. 1, 1932. Class 21.

Simplex Equipment Company, Inc., New Haven, Conn., and New York, N. Y. Railroad vehicle electric lighting apparatus. 294,406; May 24; Serial No. 294,090; published Mar. 1, 1932. Class 21.

Sinykin, Jack L., doing business as Cinderella Cosmetics, St. Paul, Minn. Hair tonics, hand cream, face powder, etc. 294,287; May 24; Serial No. 316,055; published Mar. 8, 1932. Class 6.

Skinner Manufacturing Company, Omaha, Nebr. Fruit-flavored powder. 294,436; May 24; Serial No. 314,080; published Mar. 15, 1932. Class 45.

Southwestern Creamery Company, Joplin, Mo. Novelty ice cream confection. 294,264; May 24; Serial No. 322,945; published Mar. 8, 1932. Class 46.

Spalding, A. G., & Bros. (See Victor Sporting Goods Company, assignor.)

Spratt's Patent Limited, London, England. Dog-biscuits. 87,941; renewed Aug. 13, 1932.

Standard Beauty Parlor Supply Co., New York, N. Y. Permanent waving pads. 294,459; May 24. Class 44.

Standard Varnish Works, New York and Port Richmond, N. Y., to Standard Varnish Works, New York, N. Y. Enamels, paints, varnishes, and varnish removers. 88,709; renewed Oct. 15, 1932.

Starrett, L. S., Co., The, assignor to The L. S. Starrett Company, Athol, Mass. Measuring and scientific appliances. 88,215; renewed Sept. 3, 1932.

State Bottling Works, New York, N. Y. Beverages, syrups, extracts, etc. 294,461; May 24. Class 45.

Stickney, Wm. A., Cigar Co., St. Louis, Mo. Cigars. 86,630; renewed May 21, 1932.

Stowe Hardware & Supply Company, Kansas City, Mo. Plow shares, lister shares, middle burster shares, metal shapes, etc. 294,190; May 24; Serial No. 323,370; published Mar. 8, 1932. Class 23.

Sturtevant, B. F., Company, Hyde Park, Boston, Mass. Machinery. 86,744; renewed May 28, 1932.

Supreme Vending Co. (See Blatt, William.)

Sym, E. A., doing business as E. A. Sym Co., Not Inc., Milwaukee, Wis. Metal polish. 294,457; May 24. Class 4.

Temmler, Theodor H., doing business as Temmler-Werke Vereinigte Chemische Fabriken Hermann Temmler, Berlin-Johannisthal, Germany. Sedatives. 294,219; May 24; Serial No. 323,149; published Mar. 1, 1932. Class 6.

Temmler, Theodor H., doing business as Temmler-Werke Vereinigte Chemische Fabriken Hermann Temmler, Berlin-Johannisthal, Germany. Preparation for quieting nerves. 294,352; May 24; Serial No. 317,961; published Mar. 15, 1932. Class 6.

Textile Dyeing & Printing Co. of America, Inc., New York, N. Y. Piece goods. 294,243; May 24; Serial No. 322,946; published Mar. 8, 1932. Class 42.

Thermasseur Laboratories, Inc., Minneapolis, Minn. Massage devices. 294,345; May 24; Serial No. 323,424; published Mar. 8, 1932. Class 44.

Thomaston Laboratories, Inc., New York, N. Y. Microphones, transformers, loud speakers, etc. 294,304; May 24; Serial No. 322,566; published Mar. 15, 1932. Class 21.

Thompson, Albert, Los Angeles, Calif. Table board game. 294,270; May 24; Serial No. 322,191; published Mar. 15, 1932. Class 22.

Tru-Form Shoes, Inc., New York, N. Y. Footwear, all kinds. 294,322; May 24; Serial No. 320,244; published Mar. 8, 1932. Class 39.

Todd Company, Inc., The, Rochester, N. Y. Business forms. 294,297; May 24; Serial No. 310,582; published Mar. 1, 1932. Class 37.

Trumbull Electric Manufacturing Company, The, Plainville, Conn. Metallic conduits or housings. 294,316; May 24; Serial No. 323,374; published Mar. 15, 1932. Class 21.

Try Me Beverage and Compound Company, Birmingham, Ala. Beverages. 294,380; May 24; Serial No. 323,730; published Mar. 15, 1932. Class 45.

Tuttle & Bailey Manufacturing Company, New York, N. Y. Heating-system devices. 294,409; May 24; Serial No. 296,372; published Mar. 15, 1932. Class 34.

Tuttle & Bailey Manufacturing Company, New York, and Brooklyn, N. Y. Heating-system devices. 294,431–2; May 24; Serial Nos. 311,801–2; published Mar. 15, 1932. Class 34.
United Packing Co. (See Lynch, Thos. H., assignor.)
Utility Blade Corporation, Irvington, N. J. Safety razors and blades. 294,182; May 24; Serial No. 322,528; published Mar. 8, 1932. Class 23.
Van Camp Packing Company, Inc., The, Indianapolis, Ind. Canned fruits and vegetables. 294,442; May 24; Serial No. 317,862; published Mar. 1, 1932. Class 46.
Van Houten, C. J., & Zoon, Weesp, Netherlands. Cocoa, chocolate, and cocoa butter. 294,443; May 24; Serial No. 318,119; published Mar. 15, 1932. Class 46.
Van Spauje, Hendrick J. (See Magazine Pencil Company, Inc., assignor.)
Veldown Company, Inc., New York, N. Y. Catamenial bandages. 294,337; May 24; Serial No. 322,839; published Mar. 8, 1932. Class 44.
Victor Sporting Goods Company, Springfield, Mass., assignor to A. G. Spalding & Bros., Jersey City, N. J., and New York, N. Y. Sporting goods. 85,779; renewed Mar. 12, 1932.
Volcano Burner Corporation, New York, N. Y. Oil burners for use in boiler furnaces. 294,410; May 24; Serial No. 306,075; published Mar. 3, 1931. Class 34.
Von Lange, Adolf W., doing business as Mineral-Kur Institute, Los Angeles, Calif. Therapeutic minerals. 294,351; May 24; Serial No. 317,651; published Mar. 15, 1932. Class 6.
Wampole, Henry K., and Company, Incorporated, Philadelphia, Pa. Cod-liver-extract preparations. 88,648; renewed Oct. 8, 1932.
Wayne County Celery Growers' Association, Sodus, N. Y. Fresh celery. 294,416; May 24; Serial No. 320,743; published Mar. 8, 1932. Class 46.
Webb, James E., doing business as Knox Chemical Company, St. Petersburg, Fla., and Knoxville, Tenn. Insecticide and germicide. 294,285; May 24; Serial No. 316,756; published Mar. 8, 1932. Class 6.
Wella Waving Corporation, New York N. Y. Hair goods. 294,330; May 24; Serial No. 322,121; published Mar. 8, 1932. Class 40.
Wella Waving Corporation, New York, N. Y. Preparations for use in the treatment of hair. 294,360; May 24; Serial No. 322,119; published Mar. 15, 1932. Class 6.
Wells-Lamont Manufacturing Company, Minneapolis, Minn. Work gloves. 294,331; May 24; Serial No. 322,409; published Mar. 8, 1932. Class 29.
Wertheimer, E., & Cie., Paris France, assignor, by mesne assignments, to Bourjois, Inc., New York, N. Y. Toilet perfumes, face powder, and remedy for chapped skin. 88,540; renewed Sept. 24, 1932.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Electric heating elements. 294,201; May 24; Serial No. 318,471; published Mar. 1, 1932. Class 21.
Westinghouse Electric and Manufacturing Company, East Pittsburgh Pa. Incandescent electric lamps. 294,205; May 24; Serial No. 321,058; published Mar. 1, 1932. Class 21.
Weston Electrical Instrument Corporation, Newark, N. J. Light sensitive cells. 294,202; May 24; Serial No. 319,629; published Mar. 15, 1932. Class 21.
White, George S., Nashville, Tenn. Glass coffins. 294,413; May 24; Serial No. 308,664; published Mar. 15, 1932. Class 2.
White River Packing Co., Inc., Kent, Wash. Fresh vegetables. 294,231; May 24; Serial No. 323,378; published Mar. 15, 1932. Class 46.
White, Ronald D., London, Ontario, Canada, assignor to Moulded Pulp Corporation, Chicago, Ill. Boxes, cartons, etc. 294,460; May 24. Class 2.
Will & Baumer Candle Co., Inc., Syracuse, N. Y. Altar and church lamps. 294,374; May 24; Serial No. 323,154; published Mar. 8 1932. Class 34.
Williams, Dr., Medicine Co., The, Schenectady, N. Y. Laxative medicine. 39,018; renewed Oct. 14, 1932.
Williams, J. B., Company, The, Glastonbury, Conn. Soaps. 87,832–3; renewed Aug. 6, 1932.
Willson Products, Inc., Reading Pa. Goggles. 294,226; May 24; Serial No. 323,797; published Mar. 15, 1932. Class 26.
Wortendyke Manufacturing Company, Richmond, Va. Gummed sealing tape. 294,365; May 24; Serial No. 321,675; published Mar. 8, 1932. Class 37.
Wortendyke Manufacturing Co., Richmond, Va. Toilet paper, paper towels, paper napkins. 294,390; May 24; Serial No. 323,180; published Mar. 8, 1932. Class 37.
Wright, E. T. & Company, Inc., Rockland, Mass. Men's shoes. 294,325; May 24; Serial No. 320,566; published Mar. 8, 1932. Class 39.
Wright, James A., doing business as Wright Beauty Supply Company, Roanoke, Va. Creams, muscle oil, face powder, etc. 294,214; May 24; Serial No. 322,408; published Mar. 15, 1932. Class 6.
Yale & Towne Manufacturing Co., The, Stamford, Conn. Safes and currency drawers. 294,377; May 24; Serial No. 323,434; published Mar. 8, 1932. Class 25.
York Cone Company, York, Pa. Ice cream cone, cream wafers, sugar wafers, etc. 294,456; May 24. Class 46.
Young, L. A., Company, The, Detroit, Mich. Golf clubs. 294,349; May 24; Serial No. 323,971; published Mar. 15, 1932. Class 22.

LIST OF REGISTRANTS OF LABELS

Clayton, A. C., Printing Co., St. Louis, Mo. The May Co. Exclusive Foot Wear. For Footwear. 40,725; May 24.
Clayton, A. C., Printing Co., St. Louis, Mo. Stix, Baer & Fuller Saint Louis Footwear. For Footwear. 40,726; May 24.
Creger, Henry N., Los Angeles, Calif. Rajput. For Phonograph Records (Electrical Transcriptions). 40,727; May 24.
Dow, F. H., Company, doing business as Old Colony Chocolate Co., Cambridge, Mass. Old Colony. For Chocolates. 40,728; May 24.
Hand-Spun Chocolates, Inc., Cambridge, Mass. Hand-Spun. For Chocolates. 40,729; May 24.
Independent Soap Co., Los Angeles, Calif. Laundry Queen Granulated Soap. For Soap. 40,730; May 24.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB 400. For Cakes. 40,731; May 24.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB 401. For Cakes. 40,732; May 24.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB 403. For Cakes. 40,733; May 24.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB 404. For Cakes. 40,734; May 24.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB 405. For Cakes. 40,735; May 24.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB 406. For Cakes. 40,736; May 24.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB 407. For Cakes. 40,737; May 24.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB 408. For Cakes. 40,738; May 24.
Marquise Chocolate Co. (See Page & Shaw, Inc.)
Old Colony Chocolate Co. (See Dow, F. H. Company.)
Orange Heights Fruit Association, Corona, Calif. Integrity. For Lemons. 40,739; May 24.
Orange Heights Fruit Association, Corona, Calif. Homer. For Oranges. 40,740; May 24.
Orange Heights Fruit Association, Corona, Calif. Sincerity. For Lemons. 40,741; May 24.
Page & Shaw, Inc., doing business as Marquise Chocolate Co., Cambridge, Mass. Alice Blue. For Chocolates. 40,742; May 24.
Page & Shaw, Inc., doing business as Marquise Chocolate Co., Cambridge, Mass. Alice Blue. For Peppermint Patties. 40,743; May 24.
Schulze Baking Company, Kansas City, Mo. Blue-and-White Bread. For Bread. 40,744; May 24.
Schulze Baking Company, Kansas City, Mo. Sliced Blue-and-White Bread. For Bread. 40,745; May 24.
Stradivari String Co., New York, N. Y. Superior Strings for Violin, Viola and Cello. For Strings for Violin, Viola, and Cello. 40,746; May 24.
Ward Baking Company, New York, N. Y. Ready to Bake Pie Crusts. For Pie Crusts. 40,747; May 24.
Ward Baking Company, New York, N. Y. Hetty Harper's Homelike Cake. For Cake. 40,748; May 24.

LIST OF REGISTRANTS OF PRINTS

B. V. D. Company, Inc., The, New York, N. Y. The B. V. D. Sports Model. For Athletic Underwear. 13,730; May 24.
Pangburn Company, Fort Worth, Tex. Almond Toffee Ice Cream. For Ice Cream. 13,731; May 24.
Pangburn Company, Fort Worth, Tex. Peppermint Stick Ice Cream. For Ice Cream. 13,732; May 24.
Pangburn Company, Fort Worth, Tex. Pecan Krunch Ice Cream. For Ice Cream. 13,733; May 24.
Pangburn Company, Fort Worth, Tex. Black Walnut-Ron Ice Cream. For Ice Cream. 13,734; May 24.
Traiser, H., & Co. Inc., Boston, Mass. Going Big Pippins Cigars. For Cigars. 13,735; May 24.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Aggregate for concrete. Consumers Sand Company. 294,292; May 24; Serial No. 314,749; published Mar. 1, 1932.
Coal. National Fuel Company. 294,339; May 24; Serial No. 322,888; published Mar. 1, 1932.

CLASS 2

Bottles, Vacuum. American Thermos Bottle Company. 294,369; May 24; Serial No. 323,082; published Mar. 8, 1932.
Boxes, cartons, etc. R. D. White. 294,460; May 24.
Boxes, Sheet metal. Kennedy Manufacturing Company. 294,426; May 24; Serial No. 323,138; published Mar. 15, 1932.
Cabinet, Towel service and dispensing. Schwartz Sales Company. 294,263; May 24; Serial No. 322,834; published Mar. 15, 1932.
Cases and pajama cases, Handkerchief. A. L. Siegel Co. 294,429; May 24; Serial No. 323,255; published Mar. 15, 1932.
Casks and barrels. Greif Bros. Co. 86,528; renewed May 14, 1932.
Coffins, Glass. G. S. White. 294,413; May 24; Serial No. 308,664; published Mar. 15, 1932.
Trays for papers and the like. A. Fraser. 294,271; May 24; Serial No. 322,285; published Mar. 15, 1932.
Vault, Burial. Mead-Snydam Company. 294,273; May 24; Serial No. 322,644; published Mar. 8, 1932.

CLASS 3

Handbags. Sears, Roebuck and Co. 294,327; May 24; Serial No. 322,630; published Mar. 1, 1932.
Bags, Hand. A. I. Magid Company. 294,332; May 24; Serial No. 322,516; published Mar. 1, 1932.
Container and memo pad, Combination key. P. H. Olson. 294,296; May 24; Serial No. 310,773; published Mar. 8, 1932.

CLASS 4

Abrasive papers and cloths coated with aluminum oxide. Abrasive Products, Inc. 294,335; May 24; Serial No. 322,620; published Mar. 8, 1932.
Abrasive papers and cloths coated with silicon carbide. Abrasive Products, Inc. 294,333; May 24; Serial No. 322,619; published Mar. 8, 1932.
Cleaning preparation. Armour and Company. 88,547; renewed Oct. 1, 1932.
Creams and soaps and perfumed soaps. T. F. Bristow & Co. Limited. 294,346; May 24; Serial No. 322,543; published Mar. 8, 1932.
Paper impregnated with oil and cleaning and polishing composition. Bennington Wax Paper Company. 294,320; May 24; Serial No. 317,699; published Sept. 29, 1931.
Polish, Metal. E. A. Sym. 294,457; May 24.
Polishing and cleaning preparations, and dressings. Kiwi Polish Company Proprietary Limited. 294,324; May 24; Serial No. 320,309; published Mar. 8, 1932.
Polishing preparations for boots, shoes, etc. Kiwi Polish Company Proprietary Limited. 294,323; May 24; Serial No. 320,308; published Mar. 8, 1932.
Preparation for removing printers' ink. Henkel & Cie. 88,489; renewed Sept. 24, 1932.
Soaps. Johnson & Johnson. 88,088; renewed Aug. 27, 1932.
Soaps. J. B. Williams Company. 87,832–3; renewed Aug. 6, 1932.
Soaps and cleaning compounds. J. Kahn. 294,291; May 24; Serial No. 314,995; published Mar. 8, 1932.

CLASS 5

Adhesives and for powder for making an adhesive paste. Arabol Manufacturing Company. 294,342; May 24; Serial No. 323,185; published Mar. 1, 1932.

CLASS 6

Antiseptic and deodorant. H. L. Hoag. 88,572; renewed Oct. 1, 1932.
Antiseptic mouth wash. Independent Druggists' Alliance Distributing Co. 294,350; May 24; Serial No. 317,468; published Mar. 15, 1932.
Bleaching preparations. Henkel & Cie. 87,337; renewed July 9, 1932.
Chemical preparations. National Carbon Company, Inc. 294,295; May 24; Serial No. 314,066; published July 21, 1931.
Cod-liver-extract preparations. Henry K. Wampole and Company. 88,648; renewed Oct. 8, 1932.
Cosmetics. Independent Druggists' Alliance Distributing Co. 294,358; May 24; Serial No. 322,018; published Mar. 8, 1932.
Cosmetics. B. Kronish & Bro. Inc. 294,215; May 24; Serial No. 322,513; published Mar. 8, 1932.
Creams, muscle oil, face powder, etc. J. A. Wright. 294,214; May 24; Serial No. 322,408; published Mar. 15, 1932.
Depilatory. H. B. Clymer. 294,223; May 24; Serial No. 323,610; published Mar. 8, 1932.
Hair tonics, hand cream, face powder, etc. J. L. Sinykin. 294,287; May 24; Serial No. 316,055; published Mar. 8, 1932.
Ichthyol-surrogate and mineral oils. S. A. Miniere Sciati Bituminosi di Meride e Besano. 87,108; renewed June 25, 1932.
Insecticide. Liquid Veneer Corp. 294,353; May 24; Serial No. 318,667; published Mar. 8, 1932.
Insecticide and germicide. J. E. Webb. 294,285; May 24; Serial No. 316,756; published Mar. 8, 1932.
Insecticides. Plantabbs Corporation. 294,221; May 24; Serial No. 323,253; published Mar. 8, 1932.
Insecticides, fungicides, disinfectants, etc. Derris, Inc. 294,362; May 24; Serial No. 322,311; published Mar. 15, 1932.
Laxative cookies and biscuits. Psyllium Company. 294,222; May 24; Serial No. 323,588; published Mar. 8, 1932.
Lotions, Hand. Harrison Refining Co. 294,356; May 24; Serial No. 321,381; published Mar. 15, 1932.
Lye. E. Myers Lye Company. 86,148; renewed Apr. 16, 1932.
Medical preparation. L. Quartetti. 294,230; May 24; Serial No. 323,905; published Mar. 15, 1932.
Medicine, Laxative. Dr. Williams Medicine Co. 39,018; renewed Oct. 14, 1932.
Ointment, Mange. R. W. Gowdy. 294,357; May 24; Serial No. 321,725; published Mar. 8, 1932.
Perfumery, face creams, etc. Amorskin Corporation. 294,283; May 24; Serial No. 303,620; published Mar. 8, 1932.
Perfumes, face powder, and remedy for chapped skin, Toilet. E. Wertheimer & Cie. 88,540; renewed Sept. 24, 1932.
Powder, Roach. Huntington Laboratories, Inc. 294,224; May 24; Serial No. 323,617; published Mar. 15, 1932.
Powder, rouge, astringent lotion, etc., Face. H. D. Koenig. 294,355; May 24; Serial No. 321,107; published Mar. 8, 1932.
Preparation for inunction in treatment of syphilis. J. Doak Company. 294,225; May 24; Serial No. 323,780; published Mar. 15, 1932.
Preparation for quieting nerves. T. H. Temmler. 294,352; May 24; Serial No. 317,961; published Mar. 15, 1932.
Preparation used for cannabilism in poultry. Apothecaries Hall Company. 294,361; May 24; Serial No. 322,205; published Mar. 8, 1932.
Preparations, Face coloring. P. F. Dover. 294,229; May 24; Serial No. 323,862; published Mar. 15, 1932.
Preparations for use in the treatment of hair. Wella Waving Corporation. 294,360; May 24; Serial No. 322,119; published Mar. 15, 1932.
Remedy for coughs and colds. Crane Medicine Co. 85,083; renewed Jan. 30, 1932.
Sedatives. T. H. Temmler. 294,219; May 24; Serial No. 323,149; published Mar. 1, 1932.
Solvents for cleaning drain pipes, etc. Dearborn Chemical Company. 294,218; May 24; Serial No. 323,084; published Mar. 8, 1932.
Therapeutic minerals. A. W. von Lange. 294,351; May 24; Serial No. 317,651; published Mar. 15, 1932.
Tooth paste. Walter Janvier, Inc. 294,354; May 24; Serial No. 319,327; published Mar. 8, 1932.

CLASS 7

Rope, Wire. A. Leschen & Sons Rope Company. 87,778; renewed Aug. 6, 1932.

CLASS 9

Matches. Haldens Tændstikfabrik. 86,218; renewed Apr. 23, 1932.

CLASS 12

Roofing, Formed sheet metal. Reeves Manufacturing Company. 294,454; May 24.

CLASS 13

Alarms, Low water. Barco Manufacturing Co. 294,265; May 24; Serial No. 322,984; published Mar. 15, 1932.
Balance arms, door holders, handles, etc. Austral Window Company. 294,268; May 24; Serial No. 322,124; published Mar. 15, 1932.
Basins, sinks, bath tubs, etc., Wash. F. J. Bentz. 294,434; May 24; Serial No. 312,084; published Mar. 15, 1932.
Metal gates. Keystone Steel & Wire Company. 86,714–15; renewed May 28, 1932.
Metal table and cooking hollow ware, Base. Central Stamping Company. 294,269; May 24; Serial No. 322,162; published Mar. 8, 1932.
Nails. W. W. Cross & Company. 294,379; May 24; Serial No. 323,483; published Mar. 8, 1932.
Steelware, Enameled. Kockums Jernverks Aktiebolag. 85,452; renewed Feb. 20, 1932.
Valves, Gate. Lunkenheimer Company. 294,266; May 24; Serial No. 322,021; published Mar. 8, 1932.

Valves, Metal. Reading-Pratt & Cady Company. 294,371; May 24; Serial No. 323,175; published Mar. 15, 1932.

CLASS 14

Steel, Alloy. W. J. Holliday & Company. 294,447; May 24.
Steel for chases for printing presses. Barnhart Brothers & Spindler. 88,174; renewed Apr. 22, 1932.
Steel plates. Joseph T. Ryerson & Son. 87,660; renewed July 30, 1932.

CLASS 15

Gasoline. Signal Oil & Gas Company. 294,435; May 24; Serial No. 313,392; published Mar. 8, 1932.
Oils and greases and kerosene and gasoline, Lubricating. R. J. Brown Company. 294,290; May 24; Serial No. 315,131; published Mar. 15, 1932.

CLASS 16

Calcimine. Muralo Company. 86,725; renewed May 28, 1932.
Enamels, paints, varnishes and varnish removers. Standard Varnish Works. 88,709; renewed Oct. 15, 1932.

CLASS 17

Cigars. Wm. A. Stickney Cigar Co. 86,630; renewed May 21, 1932.
Tobacco, Smoking. Governor and Company of Adventurers of England trading into Hudson's Bay. 85,962; renewed Apr. 2, 1932.

CLASS 19

Airplanes and structural parts thereof. Boeing Airplane Company. 294,272; May 24; Serial No. 322,625; published Mar. 8, 1932.

CLASS 21

Batteries, Storage. Auto Replacement Parts Co. 294,204; May 24; Serial No. 320,914; published Mar. 1, 1932.
Brushes for dynamo-electric machines. General Electric Company. 86,705; renewed May 28, 1932.
Casings for the electrical equipment of motors and similar power apparatus. Breeze Corporations, Inc. 294,293; May 24; Serial No. 314,268; published Mar. 1, 1932.
Conduits or housings, Metallic. Trumbull Electric Manufacturing Company. 294,316; May 24; Serial No. 323,374; published Mar. 15, 1932.
Connectors for electrical conductors. W. N. Matthews Corporation. 294,211; May 24; Serial No. 322,219; published Mar. 8, 1932.
Dielectric or resistance material, Composite. General Electric Company. 294,289; May 24; Serial No. 315,201; published Mar. 8, 1932.
Electric arc switches. Healy-Davidson Corporation. 294,307; May 24; Serial No. 322,105; published Mar. 1, 1932.
Electric heating elements. Westinghouse Electric and Manufacturing Company. 294,201; May 24; Serial No. 318,471; published Mar. 1, 1932.
Electric lamps, Incandescent. Gamble Stores, Incorporated. 294,305; May 24; Serial No. 322,736; published Mar. 8, 1932.
Electric lamps, Incandescent. Westinghouse Electric and Manufacturing Company. 294,205; May 24; Serial No. 321,058; published Mar. 1, 1932.
Electric lanterns. Bond Electric Corporation. 294,318; May 24; Serial No. 323,516; published Mar. 15, 1932.
Electric light fixture units. Hospo, Inc. 294,301; May 24; Serial No. 309,563; published Mar. 1, 1932.
Electric lighting apparatus, Railroad vehicle. Simplex Equipment Company. 294,406; May 24; Serial No. 294,090; published Mar. 1, 1932.
Electric switch plates and wall plates. Pass & Seymour, Incorporated. 294,212; May 24; Serial No. 322,231; published Mar. 1, 1932.
Electrical fire alarm systems and parts thereof. Gamewell Company. 294,417; May 24; Serial No. 320,780; published Mar. 1, 1932.
Electrical goods and apparatus. Edwards and Company. 294,309–13; May 24; Serial Nos. 323,033–7; published Mar. 8, 1932.
Electrical nickel-chrome wire and ribbon, ballast wire, etc. Gilby Wire Company. 294,207; May 24; Serial No. 321,335; published Mar. 1, 1932.
Electrical resistance and treating wires, radio tube parts, fuse wires, etc. Gilby Wire Company. 294,423; May 24; Serial No. 322,462; published Mar. 1, 1932.
Electrical waffle irons. Dominion Electrical Mfg. Company. 294,424; May 24; Serial No. 322,631; published Mar. 8, 1932.
Electromotors, dynamos, transformers, etc. P. Burger. 294,444; May 24; Serial No. 301,567; published Mar. 1, 1932.
Electron tubes. Cable Radio Tube Corporation. 294,319; May 24; Serial No. 322,544; published Mar. 8, 1932.
Flashlights, portable electric lanterns, and electric lamps, Electric. Delta Electric Company. 294,209; May 24; Serial No. 321,751; published Mar. 1, 1932.
Hydraulic operating mechanism. General Electric Company. 294,315; May 24; Serial No. 322,316; published Mar. 1, 1932.
Light sensitive cells. Weston Electrical Instrument Corporation. 294,202; May 24; Serial No. 319,629; published Mar. 15, 1932.
Microphones. Radio Television Industries Corporation. 294,308; May 24; Serial No. 322,892; published Mar. 8, 1932.
Microphones, transformers, loud speakers, etc. Thomaston Laboratories, Inc. 294,304; May 24; Serial No. 322,566; published Mar. 15, 1932.
Plate separators for storage batteries. Hoover Battery Products Co. 294,314; May 24; Serial No. 323,296; published Mar. 15, 1932.
Radio electron tubes. National Union Radio Corporation. 294,418; May 24; Serial No. 321,435; published Mar. 1, 1932.
Radio receiving sets and tuning apparatus therefor. Reptitura Corporation. 294,282; May 24; Serial No. 308,958; published Mar. 1, 1932.
Sadirons, toasters, percolators, etc. Simmons Hardware Company. 294,210; May 10; Serial No. 322,140; published Mar. 1, 1932.
Signals, Direction. Safeturn Signal Corporation. 294,203; May 24; Serial No. 320,388; published Mar. 15, 1932.
Sockets and Christmas tree lighting outfits, Electric lamp. Noma Electric Corporation. 294,411; May 24; Serial No. 308,634; published Feb. 16, 1932.
Switchboards, automatic circuit breakers, etc., Sectional enclosed. I-T-E Circuit Breaker Company. 294,206; May 24; Serial No. 321,338; published Mar. 8, 1932.
Switch-boards, switches, or automatic circuit breakers, Component parts of enclosed. I-T-E Circuit Breaker Company. 294,208; May 24; Serial No. 321,340; published Mar. 1, 1932.
Switches, plates, receptacles, and connecting devices for electrical wiring devices. Arrow-Hart & Hegeman Electric Company. 294,317; May 24; Serial No. 323,386; published Mar. 15, 1932.
Vacuum tubes. Cable Radio Tube Corporation. 294,302; May 24; Serial No. 322,377; published Mar. 1, 1932.
Wire and strips for parts of radio tubes, Metallic. Driver-Harris Company. 294,306; May 24; Serial No. 322,881; published Mar. 8, 1932.
Wire, sheet, and ribbon for grids, plates, and support wires for radio tube parts. Gilby Wire Company. 294,303; May 24; Serial No. 322,461; published Mar. 1, 1932.

CLASS 22

Game. R. P. Boardman. 294,383; May 24; Serial No. 323,856; published Mar. 15, 1932.
Game. Parker Brothers, Inc. 294,382; May 24; Serial No. 323,828; published Mar. 15, 1932.
Game, Table board. A. Thompson. 294,270; May 24; Serial No. 322,191; published Mar. 15, 1932.
Golf clubs. L. A. Young Company. 294,349; May 24; Serial No. 323,971; published Mar. 15, 1932.
Golf clubs, bags, balls, and tees. J. B. Mackie. 294,348; May 24; Serial No. 323,952; published Mar. 15, 1932.
Nets, Head. J. H. Mahler. 294,445; May 24.
Skates, Roller. Chicago Roller Skate Company. 294,438–9; May 24; Serial Nos. 312,694–5; published Mar. 15, 1932.
Sleds, Hand. Kalamazoo Sled Company. 294,372; May 24; Serial No. 323,137; published Mar. 15, 1932.
Sporting goods. Victor Sporting Goods Company. 85,779; renewed Mar. 12, 1932.
Table and parts thereof especially constructed for a game. Parker Brothers, Inc. 294,408; May 24; Serial No. 295,229; published Mar. 15, 1932.

CLASS 23

Bearings for machinery. Chrysler Corporation. 294,227; May 24; Serial No. 323,810; published Mar. 15, 1932.
Bottle washers, milk-pumps, cream ripeners, and cream separators. D. H. Burrell & Company. 87,158; renewed July 2, 1932.
Clamps. Cincinnati Tool Co. 294,181; May 24; Serial No. 317,454; published Mar. 8, 1932.
Concrete mixing, preparing, molding, etc., machines. Portland Concrete Machines Co. 294,300; May 24; Serial No. 309,594; published Mar. 8, 1932.
Cylinders, Heating and cooling. Mayer Coating Machines Co. Inc. 294,299; May 24; Serial No. 310,021; published Mar. 15, 1932.
Devices for stripping insulated coatings from metallic wires. Pyramid Products Company. 294,186; May 24; Serial No. 323,061; published Mar. 15, 1932.
Dumbwaiters, freight and passenger elevators, etc. Sedgwick Machine Works. 294,188; May 24; Serial No. 323,178; published Mar. 8, 1932.
Earth moving equipment. American Tractor Equipment Company. 294,213; May 24; Serial No. 317,102; published Mar. 15, 1932.
Engines of the Diesel type, Internal combustion. Atlas Imperial Diesel Engine Co. 294,189; May 24; Serial No. 323,277; published Mar. 8, 1932.
Footer bars for use in connection with knitting machines. C. T. La Mont. 294,298; May 24; Serial No. 310,130; published Mar. 8, 1932.
Machinery. B. F. Sturtevant Company. 86,744; renewed May 28, 1932.
Meat tendering machines. W. F. Duffy. 294,184; May 24; Serial No. 322,952; published Mar. 8, 1932.
Metal-working machines. National Acme Co. 294,191; May 24; Serial No. 323,462; published Mar. 15, 1932.

Plow shares, lister shares, middle burster shares, metal shapes, etc. Stowe Hardware & Supply Company. 294,190; May 24; Serial No. 323,370; published Mar. 8, 1932.
Plows and parts thereof, Snow. Maine Steel Products Co. 294,228; May 24; Serial No. 323,823; published Mar. 15, 1932.
Pumps, Motor. Ingersoll-Rand Company. 294,183; May 24; Serial No. 322,812; published Mar. 15, 1932.
Razor blades. American Safety Razor Corporation. 294,193–4; May 24; Serial Nos. 323,475–6; published Mar. 8, 1932.
Razor blades. Atlas Supply Company. 294,192; May 24; Serial No. 323,442; published Mar. 8, 1932.
Razor blades, Safety. Gillette Safety Razor Company. 294,217; May 24; Serial No. 322,930; published Mar. 15, 1932.
Razors. Osborne Garrett & Co. 88,019; renewed Aug. 20, 1932.
Razors and blades, Safety. Utility Blade Corporation. 294,182; May 24; Serial No. 322,528; published Mar. 8, 1932.
Saws, corn-knives, cane-knives, hay-knives, and machetes. E. C. Atkins & Company. 86,120; renewed Apr. 16. 1932.
Screw drivers and wrenches. F. W. Gibson. 294,187; May 24; Serial No. 323,170; published Mar. 8, 1932.
Sewing machines. Reece Button Hole Machine Co. 294,196–9; May 24; Serial Nos. 323,543–6; published Mar. 8, 1932.
Sewing machines, Attachments for. Greist Manufacturing Company. 87,623; renewed July 30, 1932.
Sprayers. H. D. Hudson Manufacturing Company. 294,185; May 24; Serial No. 323,006; published Mar. 8, 1932.
Suction cleaners and attachments therefor. Rosenfield Manufacturing Company. 88,119; renewed Aug. 27, 1932.
Vending machines. W. Blatt. 294,200; May 24; Serial No. 323,606; published Mar. 15, 1932.
Wire, barb-wire, and wire-fence stretchers. Keystone Steel & Wire Company. 86,598; renewed May 21, 1932.
Wrenches. Coes Wrench Company. 88,616; renewed Oct. 8, 1932.

CLASS 25

Locks and latches, Door, window, wardrobe, and partition. Austral Window Company. 294,378; May 24; Serial No. 323,443; published Mar. 8, 1932.
Padlocks. S. H. Kress & Co. 294,280; May 24; Serial No. 321,913; published Mar. 8, 1932.
Padlocks. I. P. Reese. 294,375; May 24; Serial No. 323,264; published Mar. 8, 1932.
Safes and currency drawers. Yale & Towne Manufacturing Co. 294,377; May 24; Serial No. 323,434; published Mar. 8, 1932.

CLASS 26

Cartoons, Motion picture. Fleischer Studios, Incorporated. 294,195; May 24; Serial No. 323,489; published Mar. 8, 1932.
Centrifuges, centrifugal separators, accessories, etc. International Equipment Company. 294,216; May 24; Serial No. 322,640; published Mar. 15, 1932.
Egg testers. C. S. Hassell. 294,359; May 24; Serial No. 322,104; published Mar. 15, 1932.
Goggles. Willson Products, Inc. 294,226; May 24; Serial No. 323,797; published Mar. 15, 1932.
Lenses and blanks, Ophthalmic. American Optical Company. 294,455; May 24.
Measuring and scientific appliances. L. S. Starrett Co. 88,215; renewed Sept. 3, 1932.
Meters and parts thereof, Water and other fluid. Neptune Meter Company. 88,512; renewed Sept. 24, 1932.

CLASS 27

Clocks. E. Ingraham Company. 87,455; renewed July 16, 1932.
Watchcases. Elgin Giant Watch Case Co. 88,475; renewed Sept. 24, 1932.

CLASS 32

Curtains, Wood fabric. Estate of Julius Garst. 294,220; May 24; Serial No. 323,195; published Mar. 15, 1932.

CLASS 34

Burners and parts thereof, Fluid fuel. A. F. Mueller. 294,234; May 24; Serial No. 323,670; published Mar. 15, 1932.
Burners for use in boiler furnaces, Oil. Volcano Burner Corporation. 294,410; May 24; Serial No. 306,075; published Mar. 3, 1931.
Filters, Air. Owens-Illinois Glass Company. 294,370; May 24; Serial No. 323,143; published Mar. 15, 1932.
Heaters, Water. American Water Heater Company. 294,288; May 24; Serial No. 315,517; published Mar. 15, 1932.
Heating system devices. Tuttle & Bailey Manufacturing Company. 294,409; May 24; Serial No. 296,372; published Mar. 15, 1932.
Heating-system devices. Tuttle & Bailey Manufacturing Company. 294,431–2; May 24; Serial Nos. 311,801–2; published Mar. 15, 1932.
Lamp-burners. Scovill Manufacturing Company. 88,121; renewed Aug. 27, 1932.
Lamps, Altar and church. Will & Baumer Candle Co. 294,374; May 24; Serial No. 323,154; published Mar. 8, 1932.
Mantles, Incandescent. "Diamco" Akt.-Ges. fur Gluhlicht. 294,437; May 24; Serial No. 314,557; published Mar. 8, 1932.
Radiators or pipe coils and boilers. National Radiator Company. 294,415; May 24; Serial No. 320,602; published Mar. 15, 1932.
Stoker, Automatic coal. Catskill Metal Works, Inc. 294,276; May 24; Serial No. 318,439; published Mar. 15, 1932.
Stoves and lamps, Oil and spirit. Asiatic Petroleum Company. 294,279; May 24; Serial No. 321,519; published Mar. 8, 1932.

CLASS 35

Hose. Eureka Fire Hose Manufacturing Company. 294,281; May 24; Serial No. 305,990; published Mar. 15, 1932.

CLASS 37

Cardboard shirtboards. Londy Card Corporation. 294,451; May 24.
Desk sets. Parker Pen Company. 294,284; May 24; Serial No. 302,184; published Mar. 8, 1932.
Elastic or rubber bands. A. W. Faber, Inc. 294,386; May 24; Serial No. 322,506; published Mar. 1, 1932.
Forms, Business. Todd Company. 294,297; May 24; Serial No. 310,582; published Mar. 1, 1932.
Paper. Brown Company. 294,422; May 24; Serial No. 322,353; published Mar. 8, 1932.
Paper. A. B. Dick Company. 294,363; May 24; Serial No. 317,075; published Mar. 1, 1932.
Paper. H. Grover. 294,395; May 24; Serial No. 323,329; published Mar. 8, 1932.
Paper, Bond. Parker-Young Company. 294,368; May 24; Serial No. 322,705; published Mar. 8, 1932.
Paper for printing, Coated. Oxford Paper Company. 294,414; May 24; Serial No. 319,293; published Dec. 15, 1931.
Paper, paper towels, paper napkins, Toilet. Wortendyke Manufacturing Co. 294,390; May 24; Serial No. 323,180; published Mar. 8, 1932.
Paper, Wrapping. Rhinelander Paper Company. 294,389; May 24; Serial No. 323,062; published Mar. 1, 1932.
Pencils. Magazine Pencil Company. 294,347; May 24; Serial No. 322,936; published Mar. 1, 1932.
Pens and pencils, Fountain. Montgomery Ward & Co. 294,407; May 24; Serial No. 294,538; published Nov. 24, 1931.
Tape, Gummed sealing. Wortendyke Manufacturing Company. 294,365; May 24; Serial No. 321,675; published Mar. 8, 1932.

CLASS 38

Cartoon and comic strip. S. L. Huntley. 294,384; May 24; Serial No. 322,895; published Mar. 8, 1932.
Magazines. Executors of the Estate of William E. Rudge. 294,421; May 24; Serial No. 322,293; published Mar. 1, 1932.
Newspaper articles. Associated Press. 294,398–401; May 24; Serial Nos. 280,092–5; published Mar. 1, 1932.
Newspaper articles. Associated Press. 294,402; May 24; Serial No. 280,097; published Mar. 1, 1932.
Newspaper articles. Associated Press. 294,403; May 24; Serial No. 286,412; published Mar. 1, 1932.
Newspaper, Daily mimeographed. M. M. Eaton, jr. 294,387; May 24; Serial No. 322,928; published Mar. 8, 1932.
Newspaper section. News Syndicate Co. 294,393; May 24; Serial No. 323,305; published Mar. 8, 1932.
Newspaper syndicate strip or print. E. L. Patterson. 294,440; May 24; Serial No. 317,271; published Mar. 1, 1932.
Periodical. Club Managers Service Corporation. 294,391; May 24; Serial No. 323,224; published Mar. 8, 1932.
Periodical. Interior Architecture & Decoration Publishing Company. 294,367; May 24; Serial No. 322,428; published Mar. 8, 1932.
Periodical. Journeymen Barbers International Union of America. 294,394; May 24; Serial No. 323,115; published Mar. 8, 1932.
Periodical. Paint Trade Publications, Inc. 294,392; May 24; Serial No. 323,249; published Mar. 8, 1932.
Placards, posters, pamphlets, and booklets. Professional Service Corporation. 294,441; May 24; Serial No. 317,738; published Mar. 1, 1932.
Publication. Emporium-World Millinery Co. 294,366; May 24; Serial No. 322,423; published Mar. 1, 1932.
Publication. Payne Coal Company. 294,396; May 24; Serial No. 323,465; published Mar. 8, 1932.
Publications. A. O. Harris. 294,388; May 24; Serial No. 322,958; published Mar. 8, 1932.
Publications. RCA Victor Company. 294,364; May 24; Serial No. 321,215; published Mar. 1, 1932.
Stamps and trading stamp books, Trading. Security Coupon Corporation. 294,397; May 24; Serial No. 323,547; published Mar. 8, 1932.

CLASS 39

Caps and hats, overcoats, etc. Crofut & Knapp Company. 294,328; May 24; Serial No. 322,042; published Mar. 8, 1932.

Clothing, Men's and boys'. Northwestern Buyers & Jobbers. 294,404; May 24; Serial No. 291,017; published Mar. 8, 1932.
Footwear. Tru-Form Shoes, Inc. 294,322; May 24; Serial No. 320,244; published Mar. 8, 1932.
Gloves and mittens. Boss Manufacturing Company. 87,151; renewed July 2, 1932.
Gloves, Work. Wells-Lamont Manufacturing Company. 294,331; May 24; Serial No. 322,409; published Mar. 8, 1932.
Hosiery. Artcraft Hosiery Mills, Inc. 294,336; May 24; Serial No. 322,729; published Mar. 7, 1932.
Hosiery and underwear. Bernstein & Fine. 294,450; May 24.
Shoes. Sears, Roebuck and Co. 294,286; May 24; Serial No. 316,105; published Mar. 8, 1932.
Shoes, Men's. E. T. Wright & Company. 294,325; May 24; Serial No. 320,566; published Mar. 8, 1932.
Soles and half soles. S. I. More. 294,385; May 24; Serial No. 322,263; published Mar. 8, 1932.
Suits. Rothberg-Goldman, Inc. 294,462; May 24.

CLASS 40

Band for dressing the hair. L. M. Noto. 294,326; May 24; Serial No. 321,127; published Mar. 8, 1932.
Comb and brush, Combined. A. J. McCloskey. 294,334; May 24; Serial No. 322,552; published Mar. 8, 1932.
Hair goods. Wella Waving Corporation. 294,330; May 24; Serial No. 322,121; published Mar. 8, 1932.
Shields, combs, and hair pins, etc., Dress. Kresge Department Store Corporation. 294,294; May 24; Serial No. 314,162; published Mar. 8, 1932.

CLASS 42

Bagging for baling cotton. American Manufacturing Company. 87,027; renewed June 25, 1932.
Bagging for baling cotton. American Manufacturing Company. 87,031; renewed June 25, 1932.
Blankets. Pepperell Manufacturing Company. 294,259; May 24; Serial No. 323,586; published Mar. 8, 1932.
Cotton and rayon piece goods. Heymann Mercantile Co. 294,251; May 24; Serial No. 323,534; published Mar. 8, 1932.
Cotton piece goods, draperies, and blankets. Nashua Manufacturing Company. 294 249; May 24; Serial No. 323,496; published Mar. 15, 1932.
Cotton piece goods, etc. Burton Brothers & Co. Inc. 294,463; May 24.
Cotton twill fabrics. B. Lamm. 294,237; May 24; Serial No. 321,961; published Feb. 23, 1932.
Fabrics. W. E. McKay & Co. 294,241; May 24; Serial No. 322,851; published Mar. 8, 1932.
Handkerchief. S. A. Blaine. 294,248; May 24; Serial No. 323,445; published Mar. 15, 1932.
Lace in the piece. Liberty Lace and Netting Works. 294,260; May 24; Serial No. 323,750; published Mar. 15, 1932.
Mattress and tabletop protectors. Columbia-Ideal Quilting Co. Inc. 294,238; May 24; Serial No. 322 420; published Mar. 15, 1932.
Piece goods. Bianchini, Férier. 294,239; May 24; Serial No. 322,680; published Mar. 8, 1932.
Piece goods. Nashua Manufacturing Company. 294,250; May 24; Serial No. 323,497; published Mar. 15, 1932.
Piece goods. Textile Dyeing & Printing Co. of America, Inc. 294,243; May 24; Serial No. 322,946; published Mar. 8, 1932.
Rugs, Textile. Couri Brothers. 294,252–3; May 24; Serial Nos. 323,567–8; published Mar. 8, 1932.
Rugs Textile. Couri Brothers. 294,254; May 24; Serial No. 323,569; published Mar. 15, 1932.
Rugs, Textile. Couri Brothers. 294,255–6; May 24; Serial Nos. 323,570–1; published Mar. 8, 1932.
Silks and silk mixtures, Broad. Schwarzenbach Huber Co. 294,258; May 24; Serial No. 323 873; published Mar. 15, 1932.
Woolen piece goods. Forstmann & Huffmann Company. 294,242; May 24; Serial No. 321,858; published Jan. 12, 1932.
Woolen piece goods. Forstmann Woolen Company. 294,240; May 24; Serial No. 322,845; published Mar. 1, 1932.
Woolen piece goods. Forstmann Woolen Company. 294,244–7; May 24; Serial Nos. 323,229–32; published Mar. 8, 1932.

CLASS 44

Absorbent cotton, gauze, and sanitary napkins. McCrory Stores Corporation. 294,338; May 24; Serial No. 322,850; published Mar. 8, 1932.
Applicators for antiseptics. Kloramene Company. 294,321; May 24; Serial No. 320,146; published Mar. 8, 1932.
Catamenial bandages. Veldown Company. 294,337; May 24; Serial No. 322,839; published Mar. 8, 1932.
Hospital and sick-room appliances. Meinecke & Co. 38,878; renewed Sept. 9, 1932.
Massage devices. Thermasseur Laboratories, Inc. 294,345; May 24; Serial No. 323 424; published Mar. 8, 1932.
Permanent wave pads. Bes-tone Laboratories, Ltd. 294,341; May 24; Serial No. 323,159; published Mar. 8, 1932.
Permanent waving pads. Standard Beauty Parlor Supply Co. 294,450; May 24.

CLASS 45

Beverage. La Salle Bottling Company. 294,376; May 24; Serial No. 323,245; published Mar. 15, 1932.
Beverage. Saegertown Mineral Water Company. 294,453; May 24.
Beverages. G. Gutfreund. 294,381; May 24; Serial No. 323,781; published Mar. 15, 1932.
Beverages. Try Me Beverage and Compound Company. 294,380; May 24; Serial No. 323,730; published Mar. 15, 1932.
Beverages, fruit juices, and extracts. Ritz Extract Mfg. Co. 294,275; May 24; Serial No. 318,116; published Mar. 15, 1932.
Beverages, syrups, compounds, etc. Orange-Crush Company. 294,261; May 24; Serial No. 322,647; published Mar. 15, 1932.
Beverages, syrups, compounds, etc. Orange-Crush Company. 294,262; May 24; Serial No. 322,650; published Mar. 15, 1932.
Beverages, syrups, extracts, etc. State Bottling Works. 294,461; May 24.
Fruit-flavored powder. Skinner Manufacturing Company. 294,436; May 24; Serial No. 314,080; published Mar. 15, 1932.
Powder. Hico Products Company. 294,267; May 24; Serial No. 323,005; published Mar. 15, 1932.

CLASS 46

Bacon. Hull & Dillon Packing Company. 294,236; May 24; Serial No. 323,999; published Mar. 15, 1932.
Biscuits, Dog. Spratt's Patent Limited. 87,041; renewed Aug. 13, 1932.
Bread. General Baking Company. 294,340; May 24; Serial No. 323,042; published Mar. 8, 1932.
Candies, Chocolate. Aktien-Gesellschaft Vereinigte Berner & Zürcher Chocolade-Fabriken Lindt & Sprüngli. 87,306; renewed July 9, 1932.
Candy. Hawley & Hoops. 294,419; May 24; Serial No. 322,318; published Feb. 16, 1932.
Candy. R. B. Iloyt. 294,425; May 24; Serial No. 323,131; published Mar. 15, 1932.
Canned fruits and vegetables. Van Camp Packing Company. 294,442; May 24; Serial No. 317,802; published Mar. 1, 1932.
Canned salmon and shrimp. Benson Fish Company. 294,427; May 24; Serial No. 323,022; published Mar. 15, 1932.
Canned vegetables. Fogg & Hires Company. 86,660; renewed May 21, 1932.
Celery, Fresh. Wayne County Celery Growers' Association. 294,416; May 24; Serial No. 320,743; published Mar. 8, 1932.
Chile paste. C. Santacruz. 294,452; May 24.
Cocoa, chocolate, and cocoa butter. C. J. Van Houten & Zoon. 294,443; May 24; Serial No. 318,119; published Mar. 15, 1932.
Coffee. Geo. W. Caswell Co. 294,420; May 24; Serial No. 322,207; published Mar. 8, 1932.
Coffee. Griggs, Cooper & Co. 294,233; May 24; Serial No. 323,579; published Mar. 15, 1932.
Coffee. Hilligan Corporation. 294,232; May 24; Serial No. 323,403; published Mar. 15, 1932.
Coffee, teas, chocolate, etc. Eureka Tea Co. 294,412; May 24; Serial No. 308,619; published Mar. 8, 1932.
Corn meal. J. S. Moss. 294,458; May 24.
Dough formations. Ballard & Ballard Co. 294,449; May 24.
Flavorings for icings and fillings. Hartung Brothers. 294,373; May 24; Serial No. 323,243; published Mar. 8, 1932.
Flours for bakers' and confectioners' use, Nut. Planters Nut and Chocolate Company. 294,343; May 24; Serial No. 323,355; published Mar. 1, 1932.
Flours, Prepared and flavored nut. Planters Nut and Chocolate Company. 294,344; May 24; Serial No. 323,357; published Mar. 1, 1932.
Food, Poultry, hog, and cattle. Biltmore Conservation Corporation. 294,440; May 24.
Foods, Ingredients of. Dow Chemical Company. 294,405; May 24; Serial No. 294,043; published Mar. 8, 1932.
Grapes, Fresh. T. H. Lynch. 86,418; renewed May 7, 1932.
Gum, Chewing. Empire Gum Company. 294,257; May 24; Serial No. 323,812; published Mar. 15, 1932.
Ice cream cones, cream and sugar wafers, etc. York Cone Company. 294,456; May 24.
Ice cream confection, Novelty. Southwestern Creamery Company. 294,264; May 24; Serial No. 322,945; published Mar. 8, 1932.
Nuts, Granulated. Planters Nut and Chocolate Company. 294,430; May 24; Serial No. 323,356; published Mar. 15, 1932.
Peanut butter. B. J. Dolphin. 86,040; renewed Apr. 9, 1932.
Potato chips. D. E. Holmes. 294,433; May 24; Serial No. 311,837; published Mar. 15, 1932.
Seeds, Bird. A. Marros. 294,329; May 24; Serial No. 322,108; published Mar. 8, 1932.
Syrup, Malt. Pure-Test Food Products Company. 294,274; May 24; Serial No. 317,333; published Mar. 8, 1932.
Tomato, orange, lemon, etc., juice. Orange-Crush Company. 294,278; May 24; Serial No. 320,367; published Mar. 8, 1932.

Vegetable compound for flavoring soups and sauces. R. Hickmott Canning Company. 294,428; May 24; Serial No. 323,047; published Mar. 8, 1932.
Vegetable fat. E. Klein. 294,277; May 24; Serial No. 318,690; published Mar. 8, 1932.
Vegetables, Fresh. Alexander Marketing Company. 294,235; May 24; Serial No. 323,931; published Mar. 15, 1932.
Vegetables, Fresh. White River Packing Co. 294,231; May 24; Serial No. 323,378; published Mar. 15, 1932.

CLASS 47

Wine. California Wine Association. 86,032; renewed Apr. 9, 1932.

CLASS 50

Figurines, mannikins, models, etc. Import Centre, Inc. 294,448; May 24.

LIST OF LABELS

Alice Blue. For Chocolates. Page & Shaw, Inc. 40,742; May 24.
Alice Blue. For Peppermint Patties. Page & Shaw, Inc. 40,743; May 24.
Blue-and-White Bread. For Bread. Schulze Baking Company. 40,744; May 24.
CB 400. For Cakes. Lambooy Label and Wrapper Co. 40,731; May 24.
CB 401. For Cakes. Lambooy Label and Wrapper Co. 40,732; May 24.
CB 403. For Cakes. Lambooy Label and Wrapper Co. 40,733; May 24.
CB 404. For Cakes. Lambooy Label and Wrapper Co. 40,734; May 24.
CB 405. For Cakes. Lambooy Label and Wrapper Co. 40,735; May 24.
CB 406. For Cakes. Lambooy Label and Wrapper Co. 40,736; May 24.
CB 407. For Cakes. Lambooy Label and Wrapper Co. 40,737; May 24.
CB 408. For Cakes. Lambooy Label and Wrapper Co. 40,738; May 24.
Hand-Spun. For Chocolates. Hand-Spun Chocolates, Inc. 40,729; May 24.
Hetty Harper's Homelike Cake. For Cake. Ward Baking Company. 40,748; May 24.
Homer. For Oranges. Orange Heights Fruit Association. 40,740; May 24.
Integrity. For Lemons. Orange Heights Fruit Association. 40,739; May 24.
Laundry Queen Granulated Soap. For Soap. Independent Soap Co. 40,730; May 24.
Old Colony. For Chocolates. F. H. Dow Company. 40,728; May 24.
Rajput. For Phonograph Records (Electrical Transcriptions). H. N. Creger. 40,727; May 24.
Ready to Bake Pie Crusts. For Pie Crusts. Ward Baking Company. 40,747; May 24.
Sincerity. For Lemons. Orange Heights Fruit Association. 40,741; May 24.
Sliced Blue-and-White Bread. For Bread. Schulze Baking Company. 40,745; May 24.
Stix, Baer & Fuller Saint Louis Footwear. For Footwear. A. C. Clayton Printing Co. 40,726; May 24.
Superior Strings for Violin, Viola, and Cello. For Strings for Violin, Viola, and Cello. Stradivari String Co. 40,746; May 24.
The May Co. Exclusive Foot Wear. For Footwear. A. C. Clayton Printing Co. 40,725; May 24.

LIST OF PRINTS

Almond Toffee Ice Cream. For Ice Cream. Pangburn Company. 13,731; May 24.
Black Walnut-Ron Ice Cream. For Ice Cream. Pangburn Company. 13,734; May 24.
Going Big Pippins Cigars. For Cigars. H. Traiser & Co. Inc. 13,735; May 24.
Pecan Krunch Ice Cream. For Ice Cream. Pangburn Company. 13,733; May 24.
Peppermint Stick Ice Cream. For Ice Cream. Pangburn Company. 13,732; May 24.
The B. V. D. Sports Model. For Athletic Underwear. B. V. D. Company, Inc. 13,730; May 24.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 24TH DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Aberle, H. C., Company. (See Aberle, Harry C., assignor.)
Aberle, Harry C., Jenkintown, assignor to H. C. Aberle Company, Philadelphia, Pa. Elastic welt for stockings. 1,860,272; May 24.
Acme Steel Company. (See Fork, William C., assignor.)
Acme Steel Company. (See MacChesney, C. M., and Norton, assignors.)
Adams, Daniel, Ann Arbor, Mich., assignor to Libbey-Owens-Ford Glass Co., Toledo, Ohio. Apparatus for producing laminated glass. 1,860,067; May 24.
Adams, James C., Willsbire, Ohio. Extension ladder support. 1,860,005; May 24.
Aero Service Corporation. (See Smith, John W., assignor.)
Aeschbach, Friedrich, Aarau, Switzerland. Kneading and mixing machine, particularly for producing confectionery. 1,859,690; May 24.
African Tin Recovery Company Limited, The. (See Gilbert, Mason G., assignor.)
Ahrens, Edwin J., assignor to The C. Schmidt Company, Cincinnati, Ohio. Refrigerator apparatus. 1,860,273; May 24.
Aimes, Francis M., assignor to Gifford-Wood Company, Hudson, N. Y. Ice up-ending machine. 1,859,486; May 24.
Aimes, Francis M., assignor to Gifford-Wood Company, Hudson, N. Y. Portable ice up-ending machine. 1,859,487; May 24.
Ainsworth, George, New Hyde Park, N. Y. Lighting fixture. Des. 86,989; May 24.
Air Preheater Corporation, The. (See Riley, Robert S., assignor.)
Ajax Metal Company, The. (See Neubauss, Heinrich, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Gaudenzi, Arthur, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Kern, Erwin, assignor.)
Albee, Fred H., Winchester, Mass. Rotary plant support. 1,859,352; May 24.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Allan, Hugh L., Burmah, British India, assignor to The Burmah Oil Company Limited, Glasgow, Scotland. Wax sweating plant. 1,859,376; May 24.
Allen, George E. and J. G., assignors to A. W. Allen's Sons, Philadelphia, Pa. Winding mechanism. 1,859,281; May 24.
Allen, John G. (See Allen, George E. and J. G.)
Allen's, A. W., Sons. (See Allen, George E. and J. G., assignors.)
Allgrunn, Carl G. (See Knapp, E., and Allgrunn.)
Alliance Manufacturing Company, The. (See Clark, Harold W., assignor.)
Allis-Chalmers Manufacturing Company. (See Nye, Henry V., assignor.)
All-Metal Products Company. (See Decker, Arnold J., assignor.)
Altgelt, Herman E., South Bend, Ind., assignor to Oliver Farm Equipment Company. Air cleaner. 1,859,644; May 24.
Altheimer, Ben, assignor to M. Altheimer, University City, Mo. Making radiator shields. 1,859,612; May 24.
Altheimer, Myrtle. (See Altheimer, Ben, assignor.)
Ambrecht, Raimund, Stapleton, N. Y. Attachment for printing presses. 1,859,577; May 24.
Ambruso, Alberto, Brooklyn, N. Y. Air balanced aircraft. 1,859,422; May 24.
American Bemberg Corporation. (See Hartmann, August, assignor.)
American Dairy Supply Company, The. (See Compton, Harry L., assignor.)
American Electrical Heater Company. (See Lockwood, Erwin A., assignor.)
American Engineering Company. (See Preston, Herbert E., assignor.)
American Face Brick Research Corporation. (See Slidell, Kemper, assignor.)
American Hair & Felt Company. (See Simpson, Tracy W., assignor.)
American La France and Foamite Corporation. (See Rollo, Walter R., assignor.)
American Machine & Foundry Company. (See Gwinn, George W., assignor.)
American Manganese Steel Company. (See Fahrenwald, Frank A., assignor.)
American Optical Company. (See Tillyer, Edgar D., assignor.)
American Optical Company. (See Tully, George L., assignor.)
American Pulley Company, The. (See Watson, D. M., and Munoz, assignors.)
American Radiator Company. (See Douglas, Malcolm K., assignor.)
American Smelting and Refining Company. (See Gonser, Bruce W., assignor.)
American Steam Pump Company. (See Barton, Ben D., assignor.)
American Telephone and Telegraph Company. (See Bascom, Henry M., assignor.)
American Telephone and Telegraph Company. (See Carpe, Allen, assignor.)
American Telephone and Telegraph Company. (See Edwards, William H., assignor.)
American Telephone and Telegraph Company. (See Green, Estill I., assignor.)
American Telephone and Telegraph Company. (See McDavitt, Marcellus B., assignor.)
American Tobacco Company, The. (See Chesley, Almond L., assignor.)
American Tubular Elevator Company. (See Schiller, Morgan B., assignor.)
American Window Shade Machine Company. (See Colpitts, Calvin N., assignor.)
Anderson, Clarence A., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Resistance measuring apparatus. 1,859,860; May 24.
Anderson, Roland G., assignor, by mesne assignments, to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn. Embossing plastic material. 1,859,907; May 24.
Anderson, Roy D., assignor, by mesne assignments, to The Lawrence Paper Company, Lawrence, Kans. Cover fastener. 1,859,645; May 24.
Anderson, William. (See Linstow, F. N., and Anderson.)
Andrews, Champe S. (See Wellman, Charles P., assignor.)
Angel, William L., Portland, Oreg. Gauge for printing presses. 1,859,548; May 24.
Apco Mossberg Corporation. (See Jackson, Alfred F., assignor.)
Apex Hosiery Company. (See Struve, Frederick E., assignor.)
Apfelbaum, Frederick A., Woodmere, N. Y. Display device. 1,859,646; May 24.
Apman, Alvin J., near Stillwater, assignor of one-half to M. V. Apman, Stillwater, Minn. Hitch. 1,859,488; May 24.
Apman, Mable V. (See Apman, Alvin J., assignor.)
Applehaum, Isaac, assignor to Hangerette Folding Box, Ltd., New York, N. Y. Folding container. Re18,477; May 24.
Appleyard, John, Fall River, Mass. Curtain rod attachment. 1,859,489; May 24.
Armstrong Appliance Corporation. (See Atkinson, George E., assignor.)
Arnold, Craig R., Atlanta, Ga. Mixing aggregates with asphalt and cooling. 1,859,324; May 24.
Arnold, Harold D., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound recording. 1,859,423; May 24.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Lighter. 1,859,908; May 24.
Arsem, William C., Schenectady, N. Y., assignor to General Electric Company. Synthetic resins. 1,860,164; May 24.
Art Metal Works, Inc. (See Aronson, Louis V., assignor.)
Artcote Papers, Inc. (See Dornbusch, Josef, assignor.)
Asbury, Charles T., et al. (See Bowers, Ernest F., assignor.)
Ash, Charles S., Royal Oak, assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Balanced motor vehicle wheel. 1,860,216; May 24.
Associated Electric Laboratories, Inc. (See Anderson, Clarence A., assignor.)
Associated Electric Laboratories, Inc. (See Wicks, John, assignor.)
Atkinson, Albert E., Upper Burma, British India. Drilling of oil wells and the like. 1,859,490; May 24.
Atkinson, George E., Proctorville, Ohio, assignor, by mesne assignments, to Armstrong Appliance Corporation. Cooking range. 1,860,006; May 24.
Atwater Kent Manufacturing Company. (See Kingsford, Russell T., assignor.)
Atwood Machine Company, The. (See Bowe, Irving R., assignor.)
Autogiro Company of America. (See de la Cierva, Juan, assignor.)
Automatic Coinwrapping Machine Corporation. (See Seemel, Bruno E., assignor.)

Automatic Freezer Corporation. (See Loranger, Hubert R., assignor.)
Auto-Meter Company. (See Huggins, Merion J., assignor.)
Auto-Ordnance Corporation. (See Payne, Oscar V., assignor.)
Ayerst, Harry C., Seattle, Wash. Process and mechanism for forming hollow ware articles. 1,859,325; May 24.
Azopardi, Emanuel, Detroit, Mich. Road clearance device. 1,860,217; May 24.
Babcock and Wilcox Company, The. (See Jacobus, D. S., and Jones, assignor.)
Babcock & Wilcox Company, The. (See Whittam, Benjamin B., assignor.)
Bacher, Mary. (See Konikow, Israel G., assignor.)
Bacon, Robert. (See Horne, Frederick E., assignor.)
Baer, Ellen K. (See Baer, Samuel I., assignor.)
Baer, Samuel I., assignor to E. K. Baer, Youngstown, Ohio. Tilting window device. 1,859,491; May 24.
Baiier, Warren A., Atlanta, Ga. Fruit picker's bag. 1,859,274; May 24.
Bailey, Addison S., Houston, Tex., assignor to The Texas Company, New York, N. Y. Continuous filter apparatus. 1,859,282; May 24.
Bailey, Clyde H., St. Paul, assignor to General Mills, Inc., Minneapolis, Minn. Fermentation cabinet. 1,859,613; May 24.
Bailey, David C., Amesbury, Mass. Apparatus for applying material to rotary operating devices. 1,859,275; May 24.
Bailey, Henry H., and J. L. Thomas, assignors to Mechanical Royalties Corporation, Oklahoma City, Okla. Apparatus for controlling steam engines. 1,859,647; May 24.
Bailey, Percy S., Beach Bluff, Mass., assignor to General Electric Company. Light projector. 1,860,165; May 24.
Bally, Robert W., Philadelphia, Pa. Traffic sign. 1,859,578; May 24.
Baker Manufacturing Company, The. (See Buffington, Harry C., assignor.)
Baker Oil Tools, Inc. (See Baker, Reuben C., assignor.)
Baker Oil Tools, Inc. (See Mellin, Oscar A., assignor.)
Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Well cementing device. 1,859,648; May 24.
Baker, Thomas T., Hatch End, assignor to Harold Wade, London, England. Color photography. 1,860,218; May 24.
Balestra, Joseph, New York, N. Y. Soap holder. 1,859,492; May 24.
Bailiet, A. H., Corporation. (See Neely, Frank R., assignor.)
Ballou, Harry R., Canton, Ohio, assignor to The Hoover Company. Dust separator. 1,859,861; May 24.
Baltzley, Oren F., Hagerstown, Md. Soap holder. Des. 86,990; May 24.
Bany, Herman, Yeadon, Pa., assignor to General Electric Company. Automatic control equipment. 1,860,166; May 24.
Bany, Herman, and Harold T. Seeley, Yeadon, Pa., assignors to General Electric Company. Automatic switching arrangement. 1,860,167; May 24.
Barco Manufacturing Company. (See Bertram, Clarence C., assignor.)
Barlen, Earl M., assignor to Packard Motor Car Company, Detroit, Mich. Stencil. 1,860,219; May 24.
Barham, Frank F. (See McDevitt, Edward L., assignor.)
Barker, Eros V., assignor to J. F. Martin, Bellevue, Ohio. Vehicle accessory rear bracket. 1,859,424; May 24.
Barlow, Thomas M. (See Lyon, G., Fairey, and Barlow.)
Bartlett Hayward Company, The. (See Santos, John R. L., assignor.)
Barton, Ben D., assignor to American Steam Pump Company, Battle Creek, Mich. Primer for pumps. 1,859,283; May 24.
Bascom, Henry M., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Telephone office alarm circuit. 1,860,007; May 24.
Baseman, Ernest, assignor to Massey-Harris Company, Limited, Toronto, Ontario, Canada. Dustproof bearing. 1,860,305; May 24.
Bassler, Edwin M., assignor to D. J. Murray Manufacturing Company, Wausau, Wis. Ventilating apparatus. 1,860,068; May 24.
Bassler, Edwin M., Chicago, Ill., assignor to D. J. Murray Manufacturing Company, Wausau, Wis. Heat transfer apparatus. 1,860,125; May 24.
Bastian-Blessing Company, The. (See Buttner, William C., assignor.)
Bastian-Morley Company. (See Morley, James P., assignor.)
Bates, Lawrence G., Cleveland, Ohio. Key holder. 1,859,276; May 24.
Bauer, Walter, assignor to Libby, McNeil & Libby, Chicago, Ill. Meat stuffing machine. 1,860,220; May 24.
Beans, John F., Massillon, Ohio. Heating furnace. 1,859,760; May 24.
Beauchamp, George, Alhambra, Calif. Ornamental portable fence. Des. 86,991; May 24.
Bedard, Ludger J., Minneapolis, Minn. Floor treating machine. 1,860,168; May 24.
Bee, May P., Chicago, Ill. Handkerchief or similar article. Des. 86,992; May 24.
Beeman, Edwin R. (See Futscher, Leroy T., assignor.)
Belding Heminway Company. (See Radford, George S., assignor.)
Bell, Harry D., New York, N. Y. Toothbrush. 1,859,425; May 24.
Bell Telephone Laboratories, Incorporated. (See Arnold, Harold D., assignor.)
Bell Telephone Laboratories, Incorporated. (See Bowne, Langford J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Johnson, L. H., and Gibson, assignors.)
Bell Telephone Laboratories, Incorporated. (See Keith, Clyde R., assignor.)
Bell Telephone Laboratories, Incorporated. (See McKim, James B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Miller, Ohmer R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Paine, Robert C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Road, R. A., and Redmond, assignors.)
Bell Telephone Laboratories, Incorporated. (See Stokely, Ray L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Trebes, Bruno M. A., assignor.)
Bell, William I., Chelsea, London, England. System of storing motor road vehicles. 1,860,008; May 24.
Bellanca, Giuseppe M., New Castle, Del. Fuselage construction. 1,859,277; May 24.
Belt, Joseph S., Amarillo, Tex. Bath apparatus. 1,860,009; May 24
Belt, Thomas A. E., Schenectady, N. Y., assignor to General Electric Company. Light-sensitive apparatus. 1,860,169; May 24.
Benner, Harry P. (See Egloff, G., and Benner.)
Benson, Willis J., and L. M. Desamais, Douglas, Ariz. Copper treating furnace. 1,859,727; May 24.
Bentley & Jackson Limited. (See Nuttall, Thomas D., assignor.)
Beremand, Preston G., Lakewood, Ohio. Universal joint. 1,859,426; May 24.
Bernady, Raoul, assignor to Societe d'Etudes et de Construction d'Appareils de Telemecanique, Neuilly, France. Electromagnetically controlled reversing gear. 1,859,403; May 24.
Bernert, George, Milwaukee, Wis. Pneumatic conveying apparatus. 1,860,127; May 24.
Bernhard, Eugen, Frankfort-on-the-Main, and V. Hilcken, Gersthofen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Distillation of crude turpentine. 1,860,126; May 24.
Bernhard, Joseph, assignor to Consolidated Trimming Corporation, New York, N. Y. Display card. Des. 86,993; May 24.
Bertram, Clarence C., assignor to Barco Manufacturing Company, Chicago, Ill. Reversing gear mechanism. 1,859,909; May 24.
Beryllium Development Corporation. (See Smith, Joseph K., assignor.)
Besten, Gerrit D., Holland, Mich. Cushion safety hitch. 1,859,640; May 24.
Bethenod, Joseph, Paris, France. Antenna construction. 1,860,128; May 24.
Betts, William B., Binghamton, N. Y. Coin controlled mechanism. 1,860,221; May 24.
Bidaud, Florentin, Roussillon, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Making cellulose acetate. 1,859,579; May 24.
Biener, Alfred B., Schenectady, N. Y. Clothesline cleaner. 1,860,306; May 24.
Bigelow, Frank B., assignor to Bigelow-Liptak Corporation, Detroit, Mich. Furnace wall. 1,859,650; May 24.
Bigelow-Liptak Corporation. (See Bigelow, Frank B., assignor.)
Biggert, Florence C., jr., Crafton, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Apparatus for feeding metal to shearing devices. 1,860,340; May 24.
Billings, Glen, Cody, Wyo. Haystacker. 1,860,222; May 24.
Bingham, Arthur, Deptford, London, England. Delivery apparatus for stacking cards or the like in counted batches. 1,860,223; May 24.
Binks Manufacturing Company. (See Binks, M. J., and Hersleb, assignors.)
Binks Manufacturing Co. (See Wyzenbeek, Andrew, assignor.)
Binks, Melvin J., Oak Park, and W. Hersleb, assignors to Binks Manufacturing Company, Chicago, Ill. Spray gun head. 1,860,129; May 24.
Bird, Lester F., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J. Mounting for rectifier plates. 1,860,069; May 24.
Birkigt, Marc, Bois Colombes, France. Resilient packing. 1,860,274; May 24.
Bishop & Babcock Mfg. Company, The. (See Lippitt, George R., assignor.)
Black, Harold S., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Circuits for electric discharge devices. 1,859,494; May 24.
Black, John C., Destrehan, La., and E. W. Gard, Long Beach, Calif. Heating and cracking oil. 1,859,691; May 24.

Black, John C., Los Angeles, W. D. Rial, Los Angeles County, and J. R. McConnell, Whittier, assignors, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif. Treating lubricating oil stocks. 1,859,692; May 24.
Black Rock Manufacturing Company, The. (See Messinger, Lester H., jr., assignor.)
Blanchard, Maybelle J. (See Blanchard, Owen W. and M. J.)
Blanchard, Owen W. and M. J., Chicago, Ill. Bowling alley. 1,859,284; May 24.
Blevney, John C., New Rochelle, N. Y. Stapling machine. 1,859,951; May 24.
Blohm, August H., Orange, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Opaque projection system. 1,859,761; May 24.
Blount, Harry, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Strand working apparatus. 1,860,070; May 24.
Blount, Harry, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Strand working machine. 1,860,130; May 24.
Blum, Peter, Halle-on-the-Saale, Germany. Dough dividing machine. 1,859,762; May 24.
Blumenthal, Sidney, & Co. Inc. (See Holland, Arthur G., assignor.)
Bock, Walter. (See Tschunkur, E., and Bock.)
Bode, John, Chicago, Ill. Laundry receptacle and the like. 1,860,224; May 24.
Bodkin, Harold T., Chicago, Ill. Combined workbench, cabinet and tool support. 1,860,071; May 24.
Boehringer, C. F., & Soehne G. m. b. H. (See Muller, R., and Voeller, assignors.)
Boever, Anne M., Hartford, Conn., assignor to The Silex Company. Handle for coffee makers and the like. 1,859,614; May 24.
Bogdanffy, George W., Clifton, assignor of one-fourth to B. Eastwood, Paterson, N. J. Loom and method of weaving. 1,859,952; May 24.
Boley, Roy A., Kenmore, N. Y., assignor to Oxweld Acetylene Company. Acetylene generating device. 1,860,225; May 24.
Bommer, Emil, Brooklyn, N. Y. Door check and closer. 1,859,763; May 24.
Bonney-Floyd Company, The. (See Gregg, Alfred W., assignor.)
Boone, Douglas, Los Angeles, Calif. Garment hanger. 1,859,353; May 24.
Booth, Raymond, City Island, N. Y. Collapsible tube and cover. 1,860,131; May 24.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Vehicle wheel. 1,860,226; May 24
Borden Company, The. (See Nonneman, Ira W., assignor.)
Bostwick Steel Lath Company, The. (See Purser, William J., assignor.)
Boucher, Morris, March Field, Calif. Lubricating system. 1,859,549; May 24.
Boudin, Louis, St. Gobain, assignor to Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Process and apparatus for making sheet glass. 1,859,862; May 24.
Boudion, William M., New York, N. Y. Circuit breaker. 1,859,377; May 24.
Bougon, Georges H., San Francisco, Calif. Magnetic device. 1,859,764; May 24.
Bourquin, Edgard, Bry-sur-Marne, France. Automatic change speed mechanism. 1,860,010; May 24.
Bowerman, James B., Baltimore, Md. System for recording. 1,860,227; May 24.
Bowers, Dana W., et al. (See Bowers, Ernest F., assignor.)
Bowers, Ernest F., Lansdale, assignor of one-third to D. W. Bowers and one-third to C. T. Asbury, Philadelphia, Pa. Antifermentive soldering flux. 1,859,651; May 24.
Bowman, John C. (See Bunch, Jacob W., assignor.)
Bowne, Langford J., Howard Beach, assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Telephone system. 1,859,910; May 24.
Boyar, Harry, assignor to Boyar Schultz Corporation, Chicago, Ill. Display stand or similar article. Des. 86,994; May 24.
Boyar Schultz Corporation. (See Boyar, Harry, assignor.)
Boyce, James, Laketon, Mich., assignor to Chicago Glass Novelty Corporation, Marion, Ind. Sign and sign character. 1,859,911; May 24.
Boyer, Edwin W., Thorntown, Ind. Chicken feeder. 1,859,728; May 24.
Boyer, Otto F., Los Angeles, Calif. Apparatus for cooling liquids. 1,859,953; May 24.
Bracken, William A., Eldorado, assignor of one-half to W. B. Jones, Augusta, Kans. Combined supporting and ratchet bracket. 1,860,228; May 24.
Brady, Hugh S., and J. J. Williams, assignors to Hazel-Atlas Glass Co., Wheeling, W. Va. Closure for containers. 1,859,495; May 24.
Brain, George, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Unitary water closet bowl and tank. Des. 86,995; May 24.
Braudes, Clarence A., Brooklyn, N. Y. Tensioning device. 1,860,072; May 24.
Brauks, Leslie D., St. Louis, Mo. Internal expanding brake. 1,860,011; May 24.
Braumuller, George C., Newark, N. J. Bone-holder. 1,859,954; May 24.
Brayton Morton, trustee. (See Crane, Newton, assignor.)
Brennan, Rose M. (See Ferris, W. C., and Brennan.)
Brewster, Charles H., Middletown, Conn. Windshield warmer. 1,860,073; May 24.
Brice, Arthur T., jr., Washington, D. C. Colorimeter. 1,859,278; May 24.
Brierley, Joseph L., and R. H. Lankton, Los Angeles, Calif. Inverted dancing apparatus. 1,859,615; May 24.
Briggs, Southwick W., Glenmont, Md. Pressure filter. 1,860,229; May 24.
Brinck, Harry O., Los Angeles, assignor, by mesne assignments, to R. Rosenburg, Los Angeles County, Calif. Golf tee. 1,860,307; May 24.
British Dyestuffs Corporation Limited. (See Silvester, William A., assignor.)
Brizzolara, Robert T., New Dorp, N. Y. Ice cube forming device. 1,859,285; May 24.
Broadston, Andrew E., assignor to The United States Playing Card Company, Norwood, Ohio. Cleaning and drying machine. 1,860,132; May 24.
Brock, Maynor D., Kansas City, Mo. Automatic continuous refrigerator. 1,860,133; May 24.
Bronander, Wilhelm B., Montclair, N. J. Fire extinguishing apparatus. 1,860,074; May 24.
Bronson, Walter T., assignor to Waterbury Buckle Company, Waterbury, Conn. 1,860,170; May 24.
Brooker, Annie L., assignor to B. D. Brooker, Richmond, Va. Bed wardrobe. 1,859,912; May 24.
Brooker, Boyce D. (See Brooker, Annie L., assignor.)
Brotherton, Edward B., Milford, Conn. Rumble seat protector. 1,859,286; May 24.
Brown Company. (See Richter, George A., assignor.)
Brown Company. (See Richter, G. A., and Schur, assignors.)
Brown Company. (See Richter, G. A., Schur, and Rasch, assignors.)
Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)
Brown, John P., New Malden, England. Deflection or deviation indicator. 1,860,230; May 24.
Brown-Lipe Gear Company. (See Fawick, Thomas L., assignor.)
Brown, Roger B., Trenton, N. J., assignor to D. M. Sutherland, jr., Morrisville, Pa. Fireproof fiber product. 1,860,134; May 24.
Brownell Company, The. (See Haag, Walter J., assignor.)
Brownell, James L., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Taximeter control mechanism. 1,859,616; May 24.
Bruner, S., Inc. (See Duerr, Charles, assignor.)
Brunner, John, Chicago, Ill. Rail joint. 1,859,729; May 24.
Buchanan, Vita, New York, N. Y. Corset. 1,859,550; May 24.
Büchi, Alfred, Winterthur, Switzerland. Internal combustion engine. 1,859,693; May 24.
Buckeye Incubator Manufacturing Company, The. (See Schnefer, Carl A., assignor.)
Buerger, Charles B., assignor to Gulf Refining Company, Pittsburgh, Pa. Liquid cooled stuffing box. 1,859,378; May 24.
Buffington, Harry C., assignor to The Baker Manufacturing Company, Springfield, Ill. Scraper or grader. 1,859,496; May 24.
Bugbee & Niles Company. (See King, Rufus, assignor.)
Bulkeley, Claude A., Kenmore, assignor to Niagara Blower Company, Buffalo, N. Y. Refrigerating apparatus. 1,859,427; May 24.
Bull, Arthur W. (See Ramsey, E. R., and Bull.)
Bullerjahn, Adolph D., Minneapolis, Minn. Sealing cartons, packages, and other objects. 1,859,652; May 24.
Bunch, Jacob W., assignor of one-half to J. C. Bowman, Los Angeles, Calif. Liquid spreading apparatus. 1,860,136; May 24.
Burke, Charles E. (See Erlandson, Emil M., assignor.)
Burke, Charles E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Pentaerythrite ethers. 1,859,913; May 24.
Burleigh, Arthur C., Wellesley, Mass. Thermostatically controlled electric circuit. 1,859,765; May 24.
Burmah Oil Company Limited, The. (See Allan, Hugh L., assignor.)
Burmeister, Hans, Berlin, Germany, assignor to Pyrene-Minimax Corporation. Method and apparatus for producing fire extinguishing foam. 1,859,326; May 24.
Burnham, George A., Saugus, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switching and distribution system. 1,859,955; May 24.
Buron, Harry A. (See Stevenson, E. P., and Buron.)
Burson Knitting Company. (See Hinchliff, Edward C., assignor.)
Burt, Charles W., Sydney, Nova Scotia, Canada. Rail joint chair. 1,859,428; May 24.
Bush, Vannevar, Belmont, assignor to Spencer Thermostat Company, Cambridge, Mass. Valve. 1,859,580; May 24.
Buss Aktiengesellschaft. (See Buss, Walter, assignor.)
Buss, Walter, assignor to Buss Aktiengesellschaft, Basel, Switzerland. Extractor. 1,859,497; May 24.

Butt, Frederic W., Brooklyn, and A. McGary, New York, N. Y. Ventilator. 1,860,135; May 24.
Buttner, William C., Winnetka, assignor to The Bastian-Blessing Company, Chicago, Ill. Regulator valve. 1,859,914; May 24.
Buttress, George A., assignor to F. and B. Holding Company, Los Angeles, Calif. Forming facing sheets for fabricated laths. 1,859,354; May 24.
Byerlein, Erle J., and F. Graf, jr., Wauwatosa, assignors to Milwaukee Foundry Equipment Co., Milwaukee, Wis. Briquetting machine. 1,860,075; May 24.
Bynum, Pink T., Callihan, Tex. Bending and straightening device. 1,860,171; May 24.
Byrnes, Clarence P., trustee. (See James, Joseph H., assignor.)
Caesar, Orville S., Chicago, Ill., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Automobile heater. 1,859,429; May 24.
Calbeck, John H., Joplin, Mo. Making storage battery plates. 1,859,581; May 24.
Callison, Abner F., New York, N. Y. Aeroplane construction. 1,860,076; May 24.
Calwiss Industries, Ltd. (See Orkin, Samuel, assignor.)
Camel Company. (See Wasberg, Axel, assignor.)
Campbell, James G. (See Merryweather, James, assignor.)
Campbell, Sterling H., assignor to Western Railway Equipment Company, St. Louis, Mo. Journal bearing for railway cars. 1,860,077; May 24.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Elevating take-out. 1,859,956; May 24.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Rolling process for glassware. 1,859,957; May 24.
Carlstrom, David A., Seattle, Wash. Vehicle toy. 1,859,617; May 24.
Carney, James J., assignor to The United Tool & Die Company, Inc., Hartford, Conn. Caliper. 1,859,327; May 24.
Carpe, Allen, New York, N. Y., assignor to American Telephone and Telegraph Company. Vacuum tube control system. 1,859,498; May 24.
Carpenter, Elliott R., Cotuit, Mass. Method of and device for excluding moths or other insects from closets. 1,860,231; May 24.
Carpenter, Leslie T., Lynwood, Calif. Wrench. 1,860,012; May 24.
Carpenter, Ose F., Brightwood, Va. Assembling poultry coops. 1,860,232; May 24.
Carr, Richard H., assignor to The Pure Oil Company, Chicago, Ill. Method and apparatus for operating wells. 1,860,137; May 24.
Carter, Russell, Washington, D. C. Resistance element for hydrocarbon cracking processes. 1,860,322; May 24.
Caruso, Mario, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y. Toy locomotive. 1,859,430; May 24.
Cassell, Joseph L., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Combination radio receiver and phonograph. 1,860,078; May 24.
Castiglia, Biagis, Bronx, N. Y. Dirigible headlight for motor vehicles. 1,860,233; May 24.
Caswell, Harold E. (See Caswell, Myron J. and H. E.)
Caswell, Myron J. and H. E., Sandusky, Ohio. Dispensing pump. 1,859,287; May 24.
Cavanaugh, Andrew F., Dayton, Ohio. Protecting device for banks. 1,860,013; May 24.
Cederberg, Ivar W., Dahlem, near Berlin, Germany, assignor to Oxyammon Aktiengesellschaft, Zurich, Switzerland. Preparation of concentrated nitric acid by the catalytic combustion of ammonia with oxygen or gases rich in oxygen. 1,859,863; May 24.
Central Scientific Company. (See Sachse, Herman P., assignor.)
Cessna, John T., jr., Ames, Iowa. Mixing tool. 1,859,958; May 24.
Chamberlain, Alfred L., Port Huron, assignor of one-eighth to G. B. Willcox, Saginaw, Mich. Manufacture of precooked legume food products. 1,859,279; May 24.
Chapin, William R., Indianapolis, Ind. Cementing tungsten carbide to other metals. 1,860,275; May 24.
Chapman, Charles M., et al. (See Nankivell, Frank J., assignor.)
Chapman, Verni J., Schenectady, N. Y., assignor to General Electric Company. Welding apparatus. 1,860,172; May 24.
Chase, Francis F., Melrose, Mass. Vaporizer. 1,859,431; May 24.
Cheape, John A., Charlottesville, Va. Lifting jack. 1,860,014; May 24.
Checker Cab Manufacturing Corporation. (See Brownell, James L., assignor.)
Chemical Holding Corporation. (See Richter, William E., assignor.)
Cheney Company, The. (See Friedrich, Edmund H., assignor.)
Chenu, Charles L. E., Bruges, Belgium. Stove. 1,859,432; May 24.
Cherry-Burrell Corporation. (See Fielder, Harold S., assignor.)
Chesler, Isidor, West Orange, N. J., assignor to Eagle Pencil Company, New York, N. Y. Eraser holder. 1,859,433; May 24.
Chesley, Almond L., Richmond, Va., assignor to The American Tobacco Company, New York, N. Y. Treating tobacco. 1,859,379; May 24.
Chicago Glass Novelty Corporation. (See Boyce, James, assignor.)
Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chicago Pump Company. (See Durdin, Augustus C., jr., assignor.)
Chicago Railway Equipment Company. (See Told, Arnold H., assignor.)
Christin, George, Detroit, Mich. Vehicle wheel. 1,860,015; May 24.
Christian, David A., assignor to Siemens Brothers & Company Limited, London, England. Telephone system. 1,860,213; May 24.
Christiansen, Walter G., Bloomfield, N. J., and W. M. Lauter, Akron, Ohio, assignors to E. R. Squibb & Sons, New York, N. Y. Bismuth alkaline-earth-metal thioglycolates and making same. 1,859,288; May 24.
Christie, Llewellyn M., Pittsburgh, Pa., assignor to National Fireproofing Corporation, Pittsburgh, Pa. Conduit. 1,859,804; May 24.
Chromy, Ben J., Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y. Sound reproducing apparatus. 1,859,551; May 24.
Chromy, Ben J., Washington D. C., assignor to Wired Radio, Inc., New York, N. Y. Sound recording apparatus. 1,859,552; May 24.
Chrysler Corporation. (See Martin, John A., assignor.)
Chulanovski, Theodore, Detroit, Mich. Hair clipping machine. 1,860,234; May 24.
Churchill, David C., Berea, Ky. Sign. Des. 86,996; May 24.
Cincinnati Bickford Tool Company, The. (See Klausmeyer, David C., assignor.)
Clark, Arthur B. (See Young, C. D., and Clark.)
Clark, Harold W., assignor to The Alliance Manufacturing Company, Alliance, Ohio. Shears. 1,860,316; May 24.
Clark, Harold W., assignor to The Alliance Manufacturing Company, Alliance, Ohio. Shears. 1,860,317; May 24.
Clarke, Samuel H., Baltimore, Md. Timing assembly for automobiles. 1,860,235; May 24.
Claude Neon Lights, Inc. (See Spaeth, Charles, assignor.)
Clay Reduction Company. (See Svendsen, Svend S., assignor.)
Clearfield Machine Company. (See McMurray, Walter E., assignor.)
Cleaver, William H. (See Langston, S. M., and Cleaver.)
Cleland, Ward W., Fort Wayne, Ind. Rotary internal combustion engine. 1,859,618; May 24.
Cleveland, Roland L. (See Tark, M. B., and Cleveland.)
Cleveland Tractor Company, The. (See Heaslet, James G., assignor.)
Clouse, Bruno J., Bakersfield, Calif. Overshot. 1,860,016; May 24.
Cobb, Perez N., sr., Hermosa Beach, Calif. Emergency brake and ignition and starter control. 1,859,328; May 24.
Cole, George H., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Street lighting fixture. 1,859,694; May 24.
Colpitts, Calvin N., Malden, assignor to American Window Shade Machine Company, Boston, Mass. Machine for inserting eyelets in window shades and the like. 1,859,959; May 24.
Colstad, Charles N., Attleboro, Mass. Combined steering and engine control device. 1,860,173; May 24.
Colt's Patent Fire Arms Manufacturing Co. (See Moore, Frederick T., assignor.)
Columbian Carbon Company. (See Marshall, Albert E., assignor.)
Columbian Rope Company. (See Jackson, Alexander F., assignor.)
Combustion Utilities Corporation. (See Klees, Albert L., assignor.)
Compagnie des Forges et Acieries de la Marine et d'Homecourt. (See Granat, Elie, assignor.)
Compton, Harry L., Washington, D. C., assignor to The American Dairy Supply Company, Augusta, Me. Inker for printing faces. 1,859,380; May 24.
Condit Electrical Manufacturing Corporation. (See Burnham, George A., assignor.)
Condit Electrical Manufacturing Corporation. (See Jansson, Gustav E., assignor.)
Condit, Frank J., Milwaukee, and E. L. Smalley, Whitefish Bay, assignors to Hevi Duty Electric Company, Milwaukee, Wis. Rotary retort furnace. 1,859,381; May 24.
Consolidated Trimming Corporation. (See Bernhard, Joseph, assignor.)
Container Corporation of America. (See Walter, Harrison B., assignor.)
Conti, Adam, Akron, Ohio. Wheel rim. 1,860,308; May 24.
Continental Can Company. (See Punte, William F., assignor.)
Cook, George H., Santa Barbara, Calif. Gear transmission. 1,860,017; May 24.
Cooling & Air Conditioning Coporation, The. (See Fleisher, Walter L., assignor.)

Corbin, Elbert A., jr., Swarthmore, Pa. Braking and cooling mechanism for vehicle wheels. 1,859,280; May 24.
Cordier, Georges, Calais, France. Lace. Des. 86,997; May 24.
Coryell, Charles N., Mamaroneck, N. Y. Vanity case. 1,860,079; May 24.
Cottar, Robert. (See King, W. H., and Cottar.)
Cowan, Glen P. (See May, Edward M., assignor.)
Crabtree, David L., Millard, Nebr. Poultry feeding device. 1,859,582; May 24.
Crago, Paul H., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,859,960; May 24.
Crane, Newton, Boston, assignor to B. Morton, trustee, Fall River, Mass. Modifying vibrations of strings. 1,859,553; May 24.
Craver, Augustus E., Mount Vernon, assignor to Weiss and Downs, Inc., New York, N. Y. Chemical combination of boric acid and potassium acid tartrate, and preparing same. 1,859,653; May 24.
Crippen, Frederick N., Los Angeles, Calif., assignor to The Guiberson Corporation, Dallas, Tex. Tubing catcher. 1,859,654. May 24.
Cronk, Wesley M., Stratford, Conn., assignor to Wright and Corson Company, Milford, Conn. Rivet gauge. 1,860,174; May 24.
Cross, Walter M., Kansas City, Mo. Making water gas. 1,860,138; May 24.
Crouse-Hinds Company. (See Pearson, John T., assignor.)
Crowell, Joyce H., Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Producing dinitroanthrarufinedisulphonic acid. 1,859,583; May 24.
Crowther, Walter M., Beaver, Pa. Ingot mold insert. 1,859,355; May 24.
Cruze, George R., Danville, Pa. Stopper and retracting device for collapsible tubes. 1,859,382; May 24.
Cruze, George R. (See Johnson, E. F., and Cruze.)
Cunnington, George R., assignor, by mesne assignments, to The General Tire & Rubber Company, Akron, Ohio. Nonskid cross link for tire chains. 1,859,656; May 24.
Cunningham, George R., assignor, by mesne assignments, to The General Tire & Rubber Company, Akron, Ohio. Nonskid link and manufacture thereof. 1,859,657; May 24.
Curle, George L., Minneapolis, Minn. Matrix anvil. Des. 87,036; May 24.
Cutler, Clifford A. Buffalo, N. Y. Desk. Des. 86,998; May 24.
Cutler-Hammer, Inc. (See Le Van, James D., assignor.)
Cutler, Wallace M., Annisquam, Mass. Variable speed mechanism. 1,859,815. May 24.
Czapar, Frank jr., San Diego, Calif. Device for feeding granular material. 1,859,655; May 24.
Czemba, Frank, Duluth, Minn. Fence post. 1,859,095; May 24.
Daimler-Benz Aktiengesellschaft. (See Fritzsche, Paul E., assignor.)
Dalton Foundries Inc., The. (See Swihart, Frank, assignor.)
Dalton, Hubert K., Stamford, Conn. Tripod or similar support. 1,859,289; May 24.
Danciger, Joseph. (See McIntyre, W. D., and Danciger.)
Davenport, Elliott L., and G. C. Jackson, Wink, Tex., assignors to Shell Petroleum Corporation. Adjustable bottom hole flow bean. 1,860,080; May 24.
Davenport, Herman A., Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe-pressing machine. 1,859,434; May 24.
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Filtering apparatus for refrigerating systems. 1,859,766; May 24.
Davidson, Bruce J., Kew Gardens, assignor to National Biscuit Company, New York, N. Y. 1,860,309; May 24.
Davis, Arthur E, East Orange, N. J. Delivery and collecting system. 1,859,865; May 24.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine. 1,860,236; May 24.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Grease dispensing apparatus. 1,859,290; May 24.
Davis, Richard M., West Pittston, Pa. Renewable fuse plug. 1,860,237; May 24.
Day, J. H., Company, The. (See Kirchoff, William G., assignor.)
Dayton Pump and Mfg. Co., The. (See Eickmeyer, Earl E., assignor.)
Deake, George C., Bronx, N. Y., assignor, by mesne assignments, to Metropolitan Device Corporation. Dust shield. 1,860,139; May 24.
De Blieux, Earl V., Pittsfield, Mass., assignor to General Electric Company. Two-phase circuit connection for vapor electric devices. 1,860,175; May 24.
Dechery, Emile, Paris, France, assignor to "Jerry Dress Co. Inc.," New York, N. Y. Textile fabric or similar article. Des. 87,039; May 24.
Dechery, Emile, Paris, France, assignor to "Jerry Dress Co. Inc.," New York, N. Y. Textile fabric or similar article. Des. 87,040; May 24.
Dechery, Emile, Paris, France, assignor to "Jerry Dress Co. Inc.," New York, N. Y. Textile fabric or similar article. Des. 87,041; May 24.
Decker, Arnold J., assignor to All-Metal Products Company, Wyandotte, Mich. Air gun. 1,859,816; May 24.
Deere & Company. (See Peterson, Julius, assignor.)
Deere & Company. (See Strandlund, Carl G., assignor.)
De Forest, Lee, Hollywood, Calif., assignor to General Talking Pictures Corporation, New York, N. Y. Sound-on-film phonograph. 1,859,435; May 24.
De Haven, Hugh, assignor, by mesne assignments, to De Haven Razor Corporation, New York, N. Y. Combined razor and blade sharpener. 1,859,554; May 24.
De Haven, Hugh, assignor, by mesne assignments, to De Haven Razor Corporation, New York, N. Y. Razor. 1,859,555; May 24.
De Haven, Hugh, assignor, by mesne assignments, to De Haven Razor Corporation, New York, N. Y. Razor blade sharpening instrument and razor blade. 1,859,556; May 24.
De Haven Razor Corporation. (See De Haven, Hugh, assignor.)
De La Cierva, Juan, Madrid, Spain, assignor, by mesne assignments, to Autogiro Company of America, Philadelphia, Pa. Aircraft with rotative wings. 1,859,584; May 24.
De Lautour, Francis, London, England. Gas passage of the cylinders of internal combustion engines. 1,859,329; May 24.
Delco Products Corporation. (See Riedel, Walter W., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
De Luce, Guglielmo, and F. Guerra, assignors to Societa Italiana Miglioramento Armi, Naples, Italy. Firearm. 1,860,276; May 24.
Delvicar, Inc. (See Genaille, Georges, assignor.)
Deming, Robert, Cincinnati, Ohio. Spiral gas and oil separator. 1,860,238; May 24.
De Moss, Leonard, Des Moines, Iowa, assignor to Swift and Company, Chicago, Ill. Casing measuring machine. 1,859,291; May 24.
Dennis, William, Shoreham, Vt. Brush. 1,860,277; May 24.
De Roode, Trimble, New York, N. Y. Sleeping car. 1,859,730; May 24.
Desamais, Louis M. (See Benson, W. J., and Desamais.)
Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Gum strip applier for tire building machines. 1,859,330; May 24.
Deschamps, Jules J., Paris, assignor to Societe Francaise de Constructions Mecaniques, Anciens Etablissements Cail, Denain, Nord, France. Ball mill. 1,859,499; May 24.
Detachable Bit Corporation of America. (See Rea, Walter C., assignor.)
De Tar, Donald R., Schenectady, N. Y., assignor to General Electric Company. Inductance coil. 1,860,176; May 24.
Detroit Harvester Company. (See Horste, Joseph E., assignor.)
Diesen, Laurits, Minneapolis, Minn. Milking apparatus. 1,859,500; May 24.
Dishner, William A. (See Nickels, William W., assignor.)
Diver, Theron M., Edwardsville, Ill. Booking mechanism for radiator core making machines. 1,859,383; May 24.
Dixon, Harry H., Princeton, W. Va. Filing device. 1,859,696; May 24.
Dodd, Jessie A., Tulsa, Okla. Device for pairing hosiery. 1,859,817; May 24.
Dodd, Roy S., and L. J. Evans, Tulsa, Okla.; said Evans assignor to said Dodd. Gas burner. 1,859,961; May 24.
Doering, Ulrich. (See Spanner, H. J., and Doering.)
Dolan, David J., Cleveland Heights, Ohio. Throttle control. 1,860,081; May 24.
Dolan, Lee A., et al. (See Elliott, James A., assignor.)
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,859,356; May 24.
Doneff, Tom, Burnham, Pa. Safety stop for elevators. 1,860,018; May 24.
Doolittle, Jacob M., Pittsburgh, Pa. Arch support. 1,859,818; May 24.
Dornbusch, Josef, Crefeld, Germany, assignor to The Artcote Papers, Inc., Irvington, N. J. Wallpaper or similar article. Des. 86,999; May 24.
Dornbusch, Josef, Crefeld, Germany, assignor to The Artcote Papers, Inc., Irvington, N. J. Wallpaper or similar article. Des. 87,000; May 24.
Dorr Company, Inc., The. (See Ramsey, E. R. and Bull., assignors.)
Dougherty, Ralph P., Portland, Oreg. Sousaphone. Des. 87,001; May 24.
Douglas, Malcolm K., assignor to American Radiator Company, New York, N. Y. Molding apparatus. 1,859,658; May 24.
Dowick, Benjamin, Jersey City, N. J. Fuse puller. 1,859,767; May 24.
Dowman, William R., Sharon, Mass. Stocking protector and making the same. 1,859,915; May 24.
Downs, Robert W. (See Owen, A. G. B., and Downs.)
Drager, Otto H. (See Stelzner, Hermann, assignor.)
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for producing sheet glass. 1,860,082; May 24.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. System for surfacing glass sheets. 1,860,083; May 24.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Car window construction. 1,860,084; May 24.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,860,085; May 24.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,860,140; May 24.

Dravo Contracting Company, The. (See Dravo, Francis R., assignor.)

Dravo Contracting Company, The. (See Dravo, F. R., and Edwards, assignors.)

Dravo, Francis R., Edgeworth, Pa., assignor to The Dravo Contracting Company. Boiler structure. 1,859,619; May 24.

Dravo, Francis R., Edgeworth, and V. B. Edwards, Moon Township, Allegheny County, Pa., assignor to The Dravo Contracting Company. Marine railway. 1,860,177; May 24.

Duart Manufacturing Co. Ltd. (See Keele, Ralph M., assignor.)

Dubois, Werner A., assignor to Fabrique Solvil des Montres Paul Ditisheim Societe Anonyme, La Chaux-de-Fonds, Switzerland. Regulating device for clockworks. 1,859,866; May 24.

Ducommun, Jesse C., Whiting, Ind., assignor to Standard Oil Company, Chicago, Ill. Skeleton piston head. 1,860,141; May 24.

Dudley Research Corporation. (See Levy, Dudley D., assignor.)

Duerr, Charles, Brooklyn, assignor, by mesne assignments, to S. Bruner, Inc., New York, N. Y. Strap for wrist watches. 1,859,819; May 24.

Duff Patents Company. (See Trent, Francis H., assignor.)

Dumas, Maxwell G., Pittsburgh, Pa. Molding hollow clay bodies. 1,859,768; May 24.

Dunbar, Thomas L., Watertown, N. Y. Process and apparatus for digesting fibrous materials. 1,859,384; May 24.

Duncan, William A., Statesville, N. C. Equalizing table slide. 1,860,019; May 24.

Dunlap, Charles K., assignor to Sonoco Products Company, Hartsville, S. C. Thread core. 1,860,020; May 24.

Dunn, Edward L., East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Closure operating mechanism. 1,860,333; May 24.

Du Pont, E. I., de Nemours and Company. (See Bidaud, Florentin, assignor.)

Du Pont, E. I., de Nemours & Company. (See Burke, Charles E., assignor.)

Du Pont, E. I., de Nemours & Company. (See Graves, George D., assignor.)

Durbin, Stanley H., assignor to Gifford-Wood Company, Hudson, N. Y. Ice handling machine. 1,859,501; May 24.

Durdin, Augustus C., jr., assignor to Chicago Pump Company, Chicago, Ill. Seal for shafts. 1,859,436; May 24.

Dyer, Joseph, Atlantic Beach, N. Y. Making printing surfaces. 1,859,620; May 24.

E. & L. Company. (See Erickson, David, assignor.)

Eagle Pencil Company. (See Chesler, Isidor, assignor.)

Eagle Pencil Company. (See Hanle, Benjamin W., assignor.)

Eaker, Mae G., Buffalo, N. Y. Sleeping robe or blanket. 1,859,820; May 24.

Eakins, Isaiah A., Pleasanton, Tex., assignor to General American Tank Car Corporation, Chicago, Ill. Reversible display device. 1,860,021; May 24.

Eastwood, Benjamin. (See Bogdanffy, George W., assignor.)

Eaton, Harrison H., assignor to The Electric Auto-Lite Company, Toledo, Ohio. Machine for removing armature insulation. 1,860,310; May 24.

Ebeling, Charles W., assignor to General Talking Pictures Corporation, New York, N. Y. Motion picture screen. 1,860,323; May 24.

Ebinger, D. A., Sanitary Mfg. Company, The. (See Ebinger, David H., assignor.)

Ebinger, David H., assignor to The D. A. Ebinger Sanitary Mfg. Company, Columbus, Ohio. Waste pipe fitting. 1,859,821; May 24.

Eckels Engineering Corporation. (See Eckels, Parl O., assignor.)

Eckels, Parl O., assignor, to Eckels Engineering Corporation, Cleveland, Ohio. Pump or compressor. 1,860,278; May 24.

Eckland, Emil O. (See Young, W. H., and Eckland.)

Edgar, Robert, Los Angeles, Calif. Remote control apparatus for miniature sail boats. 1,859,557; May 24.

Edgewater Steel Company. (See Wikander, Oscar R., assignor.)

Edmands, William H., et al. (See Sleeper, Ned M., assignor.)

Edwards, Vere B. (See Dravo, F. R., and Edwards.)

Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Telephone system. 1,859,385; May 24.

Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Telephone system. 1,859,386; May 24.

Eggert, Lewis, Toledo, Ohio. Control system and apparatus. 1,860,022; May 24.

Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Distilling wood. 1,859,292; May 24.

Elckmeyer, Earl E., assignor to The Dayton Pump and Mfg. Co., Dayton, Ohio. Valve. 1,859,916; May 24.

Elnson-Freeman Co. (See Elnson, Morris M., assignor.)

Elnson, Morris M., Yonkers, assignor to Elnson-Freeman Co., Inc., Long Island City, N. Y. Display and dispensing carton. 1,860,324; May 24.

Elnson, Morris M., Yonkers, assignor to Elnson-Freeman Co., Inc., Long Island City, N. Y. Display and dispensing carton. 1,860,334; May 24.

Elder, Donald, Berkeley, Calif. Water regulator. 1,859,357; May 24.

Elder and Elder Nurseries. (See Elder, William R., assignor.)

Elder, William R., assignor to Elder and Elder Nurseries, Indianapolis, Ind. Freesia. Pl. Pt. No. 17; May 24.

Eldridge, Jess G. (See Keys, W. C., Steiner, and Eldridge.)

Electric Auto-Lite Company, The. (See Enton, Harrison H., assignor.)

Electric Welding Company of America, The. (See Schenker, Abraram W., assignor.)

Electro Metallurgical Company. (See George, Harry S., assignor.)

Elliott, Edna L., Columbus, N. Mex. Cigarette mentholator. 1,859,731; May 24.

Elliott, James A., assignor of one-third to F. T. Hillman and one-third to L. A. Dolan, Seattle, Wash. Swinging bucket line excavator. 1,859,659; May 24.

Elliott, Seth L., Marine, Ill. Wrench. 1,859,387; May 24.

Ellison, Harry C., Lakewood, Ohio, assignor, by mesne assignments, to Republic Steel Corporation. Handling and transporting wire for bolt making machines. 1,859,585; May 24.

Embossing Company, The. (See Thompson, Andrew, assignor.)

Elusco Derrick & Equipment Company, et al. (See Goeser, Edwin W., assignor.)

Engbrecht, Herman J., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Receptacle-evacuating apparatus. 1,859,293; May 24.

Engholm, Bernard A., Lakewood, and J. J. Swent, Cleveland, Ohio, assignors to The Roln Company, Oakland, Calif. Making magnetic coil casings. 1,859,917; May 24.

Engl, Josef, Berlin-Grunewald, Germany, assignor to Engl Products Corporation, New York, N. Y. Photoelectric cell circuit. 1,859,822; May 24.

Engl Products Corporation. (See Engl, Josef, assignor.)

Erban, Richard, Vienna, Austria. Speed change gear. 1,859,502; May 24.

Erickson, David, assignor to E. & L. Company, Wichita Falls, Tex. Fuel burner. 1,860,086; May 24.

Erie Malleable Iron Company. (See Vanderveer, Jewell W., assignor.)

Erlandson, Emil M., Compton, Calif., assignor to C. E. Burke, Oklahoma City, Okla. Drilling bit. 1,859,660; May 24.

Etablissements Aera. (See Mercier, René, assignor.)

Evans, Lawrence J. (See Dodd, R. S., and Evans, assignors.)

Evans, Martin E., Pittsburgh, Pa. Attenuation of materials. Re18,478; May 24.

Evard, Alfred, Fort Wayne, Ind. Burial vault. 1,860,023; May 24.

F. and B. Holding Company. (See Buttress, George A., assignor.)

Fabrique Solvil des Montres Paul Ditishein Societe Anonyme. (See Dubois, Werner A., assignor.)

Fahe ty, Michael W., Van Nuys, Calif. Humidity control for cooking heaters. 1,859,732; May 24.

Fahrenwald, Frank A., Chicago, assignor to American Manganese Steel Company, Chicago Heights, Ill. Improving the quality of link pins. 1,859,503; May 24.

Fairey, Charles R. (See Lyon, G., Fairey, and Barlow.)

Fairfield Engineering Company, The. (See Prettyman, Jacob H., assignor.)

Falge, Robert N., assignor to General Motors Research Corporation, Detroit, Mich. Three filament bulb. 1,859,661; May 24.

Fantz, Fred C. (See Stewart, Roy L., assignor.)

Fantz, Fred C. (See Stockham, Herbert C., assignor.)

Faulk, Sebastian C., Burleson, Tex. Peanut harvester. 1,859,358; May 24.

Fawcett, Arthur L., Pumpville, Tex. Pump. 1,860,279; May 24.

Fawick, Thomas L., Akron, Ohio, assignor to Brown-Pipe Gear Company, Syracuse, N. Y. Transmission. 1,860,142; May 24.

Fehrenbach, Anton, New York, N. Y. Superlight plane. 1,860,087; May 24.

Fehrle, Alfred. (See Streitwolf, K., Fehrle, Hermann, and Fritsche.)

Ferencl, Lester, Brooklyn, N. Y., assignor to International Cigar Machinery Company. Strip registering device. 1,859,962; May 24.

Ferris, Wheaton C., University City, and R. M. Brennan, St. Louis, Mo. Game indicator. 1,860,088; May 24.

Ferris, William S., Elkhart, Ind. Chair. 1,860,089; May 24.

Fessenden, Reginald A., Chestnut Hill, Mass. Apparatus for setting to best photographic exposure. 1,859,621; May 24.

Fielder, Harold S., assignor, by mesne assignments, to Cherry-Burrell Corporation, Chicago, Ill. Pasteurizing apparatus. 1,859,504; May 24.

Firestone Tire and Rubber Company, The. (See Stevens, H. D., and Myers, assignors.)

Fisher, Walter S., assignor to The Willys-Overland Company, Toledo, Ohio. Tire carrier. 1,859,662; May 24.

Fisk, Gustaf L., assignor to Mesta Machine Company, Pittsburgh, Pa. Apparatus for conveying and spraying material. 1,859,359; May 24.

Fisk Rubber Company, The. (See Desautels, Charles H., assignor.)

Fisk Rubber Company, The. (See Littlefield, Lloyd M., assignor.)

Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)

Fitch, William H., Fort Worth, Tex. Operating mechanism for automatic telephones. 1,859,622; May 24.

Fitter, Charles F., Coscob, Conn. Dishwashing device. 1,859,769; May 24.

Fitz, George W., Peconic, N. Y. Micromanipulator. 1,859,823; May 24.

Flanders, Warren B., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Governing mechanism for marine power plants. 1,859,437; May 24.

Flanigan, John J., Oak Park, Ill. Stand for a duplicating machine or the like. Des. 87,002; May 24.

Fleck, Albert H., assignor of two-fifths to M. B. Koelliker, Cleveland, Ohio. Bath, basin, and receptacle fitting. 1,859,697; May 24.

Fleisher, Walter L., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y. Vaporizer. 1,859,770; May 24.

Fletcher, George J., Chicago, Ill. Spring suspension. 1,860,280; May 24.

Flintkote Corporation, The. (See Kirschbraun, Lester, assignor.)

Foresman, Robert A., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Powdered fuel furnace. 1,860,239; May 24.

Fork, William C., Homewood, assignor to Acme Steel Company, Chicago, Ill. Winding reel for metal strips. 1,859,294; May 24.

Fort, Lynn, Atlanta, Ga. Nursing bottle. 1,859,733; May 24.

Forthaller, Frank, et al. (See Neubauer, Ferdinand, assignor.)

Fowler, Del Roy F., Melrose Park, Pa. Padding rug. 1,860,090; May 24.

Freer, Phelps M., Detroit, Mich. Wrist pin construction. 1,859,360; May 24.

Freeth, Lancelot G. (See Skillman, T. S., and Freeth.)

French, August, Hammond, assignor to Standard Oil Company, Whiting, Ind. Precoating device. 1,859,295; May 24.

Friedrich, Edmund H., Holyoke, assignor to The Cheney Company, Winchester, Mass. Flashing. 1,860,240; May 24.

Frigidaire Corporation. (See Beyer, Bertram B., assignor.)

Frigidaire Corporation. (See Rauen, John T., assignor.)

Friis, Harald T., and A. G. Jensen, Red Bank, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y. Wave transmission circuit. 1,859,867; May 24.

Fritzsche, Paul. (See Streitwolf, K., Fehrle, Herrmann, and Fritzsche.)

Fritzsche, Paul E., assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany. Diesel engine. 1,859,663; May 24.

Fulda, Edward, New York, N. Y. Interlocking section strip. 1,859,664; May 24.

Fuller, Claud E., New York, N. Y., and W. W. Wallace, Chicago, Ill.; said Fuller assignor to New York Brick Handling Corporation, New York, N. Y. Hacking machine. 1,860,143; May 24.

Futscher, Leroy T., assignor to E. R. Beeman, Minneapolis, Minn. Clutch. 1,859,963; May 24.

Gabriel Karl-Keen Company, The. (See Myers, Cecil H., assignor.)

Gaisman, Henry J., New York, and C. Schumacher, Lynnbrook, N. Y., assignors, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Strip feeding machine. 1,860,144; May 24.

Galko, Paul, Detroit, Mich. Elevated electric railway. 1,860,241; May 24.

Galt, Perce R., Marchantville, N. J. Dispensing device. 1,859,964; May 24.

Garand, John C., Springfield, Mass. Follower. 1,859,558; May 24.

Gard, Earle W. (See Black, J. C., and Gard.)

Gat Gun Lubricating Corporation. (See MacKenzie, Philip, assignor.)

Gaudenzi, Arthur, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Arc guide for metallic vapor rectifiers. 1,859,918; May 24.

Gaynor, E. S., Lumber Company. (See Judd, Frank, assignor.)

Genaille, Georges, Ridgefield Park, N. J., assignor to Delvicar, Inc., New York, N. Y. Clock face. Des. 87,003; May 24.

Genaille, Georges, Ridgefield Park, N. J., assignor to Delvicar, Inc., New York, N. Y. Clock face. Des. 87,004; May 24.

General American Tank Car Corporation. (See Eakins, Isaiah A., assignor.)

General Aniline Works, Inc. (See Gerbel, Karl, assignor.)

General Aniline Works, Inc. (See Kränzlein, G., Hartmann, and Hardt, assignors.)

General Aniline Works, Inc. (See Kunz, M. A., and Koberle, assignors.)

General Aniline Works, Inc. (See Lange, Werner, assignor.)

General Electric Company. (See Arsem, William C., assignor.)

General Electric Company. (See Bailey, Percy S., assignor.)

General Electric Company. (See Bany, Herman, assignor.)

General Electric Company. (See Bany, H., and Seeley, assignors.)

General Electric Company. (See Belt, Thomas A. E., assignor.)

General Electric Company. (See Chapman, Verni J., assignor.)

General Electric Company. (See De Blieux, Earl V., assignor.)

General Electric Company. (See De Tar, Donald R., assignor.)

General Electric Company. (See Gunther, Clarence A., assignor.)

General Electric Company. (See Howard, Alan, assignor.)

General Electric Company. (See Hull, John I., assignor.)

General Electric Company. (See Koller, Lewis R., assignor.)

General Electric Company. (See Mapelsden, Harold H., assignor.)

General Electric Company. (See McArthur, Elmer D., assignor.)

General Electric Company. (See Nordlander, Birger W., assignor.)

General Electric Company. (See Okabe, Kinjiro, assignor.)

General Electric Company. (See Pailin, George, assignor.)

General Electric Company. (See Peterson, Charles F., assignor.)

General Electric Company. (See Porter, Willard E., assignor.)

General Electric Company. (See Prince, D. C., and Turnpenny, assignors.)

General Mills, Inc. (See Bailey, Clyde H., assignor.)

General Motors Corporation. (See Gilbert, Henry H., assignor.)

General Motors Research Corporation. (See Falge, Robert N., assignor.)

General Refractories Company. (See Heur, Russell P., assignor.)

General Steel Castings Corporation. (See Sheehan, William M., assignor.)

General Talking Pictures Corporation. (See De Forest, Lee, assignor.)

General Talking Pictures Corporation. (See Ebeling, Charles W., assignor.)

General Tire & Rubber Company, The. (See Cunnington, George R., assignor.)

Gentil, Alphonse C., Richmond, Va. Combined windshield wiper and heater. 1,860,281; May 24.

Gentry, Jefferson F., Nashville, Tenn. Perforating device. 1,859,559; May 24.

George, Harry S., Massapequa, N. Y., assignor to Electro Metallurgical Company. Making ductile iron-chromium alloys having a cold-rolled finish. 1,859,698; May 24.

George, Harry S., Massapequa, N. Y., assignor to Electro Metallurgical Company. Removing oxide coatings from metals. 1,859,734; May 24.

George, Harry S., Massapequa, N. Y., assignor to Electro Metallurgical Company. Finished iron-chromium alloy article and making the same. 1,859,735; May 24.

George, Harry S., Massapequa, N. Y., assignor to Electro Metallurgical Company. Cleaning metal articles. 1,859,736; May 24.

Gerbel, Karl, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Preparing pigments fast to light. 1,859,868; May 24.

Geyer, Bertram B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,860,325; May 24.

Gibson, Earl S. (See Johnson, L. H., and Gibson.)

Giebe, Erich, and A. Scheibe, Charlottenburg, near Berlin, Germany, assignors to Radio Corporation of America. Piezo-electric indicator. 1,860,145; May 24.

Gifford-Wood Company. (See Aimes, Francis M., assignor.)

Gifford-Wood Company. (See Durbin, Stanley H., assignor.)

Gilbanks, John P., Little Neck, N. Y. Flower holder. Des. 87,005; May 24.

Gilbert, Henry H., assignor to General Motors Corporation, Detroit, Mich. Lubrication. 1,859,438; May 24.

Gilbert, Mason G., assignor to The African Tin Recovery Company Limited, Port Elizabeth, South Africa. Recovery of tin from scrap tin plate and like tin bearing materials. 1,859,919; May 24.

Gillette Safety Razor Company. (See Gaisman, H. J., and Schumacher, assignors.)
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Hopper door for railway cars. 1,859,296; May 24.
Glaus, Grover J., Charleston, S. C. Weather stop for cab windows. 1,859,388; May 24.
Glenner Combine Harvester Corporation, The. (See Gottschall, C. R., and Pike, assignors.)
Glidden, Harvey L., Lexington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Tag holder. 1,859,439; May 24.
Godefroy, Alexandre F., Los Angeles, Calif. Television apparatus. 1,859,824; May 24.
Godfrey, Alfred A., assignor to Linoleum Manufacturing Company Limited, London, England. Manufacture of linoleum. 1,860,242; May 24.
Goeser, Edwin W., assignor, by mesne assignments, of one-half to Emsco Derrick & Equipment Company, Los Angeles, Calif., and one-half to The National Supply Company, Toledo, Ohio. Rotary machine. Re18,480; May 24.
Goldberg, Frank, Augusta, Ga. Shield attachment for garment hangers. 1,860,024; May 24.
Golden, Harry H., and I. Nachumsohn, Chicago, Ill. Combining pictures with sound. 1,859,665; May 24.
Golo Slipper Company. (See Meyer, Minnie, assignor.)
Gomes, Earl S., Cincinnati, Ohio. Shipping carton support. 1,859,595; May 24.
Gonser, Bruce W., Amarillo, Tex., assignor to American Smelting and Refining Company, New York, N. Y. Apparatus for recovering furnace ventilator fume. 1,860,091; May 24.
Good, Francis R., U. S. Navy. Piston ring. 1,860,025; May 24.
Goodbody, Edmund M.; Bellerose, assignor to Intertype Corporation, Brooklyn, N. Y. Galley for line casting machines. 1,860,243; May 24.
Goodyear Tire & Rubber Company, The. (See White, Clarence L., assignor.)
Goodyear's India Rubber Glove Manufacturing Company, The. (See Anderson, Roland G., assignor.)
Gorin, Charlotte P., Seattle, Wash. Hair curling device. 1,859,440; May 24.
Gothman, Louis, and I. E. Smalley, Rapid City, S. Dak. Ironing board. 1,859,361; May 24.
Gottschall, Clarence R., and H. H. Pike, Independence, assignors to The Gleaner Combine Harvester Corporation, Kansas City, Mo. Conveyor for combines or like machines. 1,859,586; May 24.
Graf, Fred, jr. (See Byerlein, E. J., and Graf.)
Graham, Robert F., London, England. Apparatus for pasteurizing beer or other liquids. 1,859,389; May 24.
Granat, Elie, assignor of one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France. Equilibrated turret for machine guns on board aeroplanes. 1,860,282; May 24.
Grant, Herbert A., Newark, N. J., assignor to Miller Tompkins & Company, New York, N. Y. Paper bag. 1,860,244; May 24.
Grauman, Arthur H. (See Grauman, Frank A. and A. H.)
Grauman, Frank A. and A. H., Seattle, Wash. Sediment collector. 1,859,362; May 24.
Graves, George D., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Ester conversion. 1,860,092; May 24.
Gray, Emmet P., Detroit, Mich. Muffler. 1,860,146; May 24.
Great Western Fuse Company. (See La Mar, Frank C., assignor.)
Gredell, Otto N., Kansas City, assignor to Standard Steel Works, North Kansas City, Mo. Dump body. 1,859,666; May 24.
Green, Edward A., assignor to Humber Limited, Coventry, England. Window. 1,860,245; May 24.
Green, Estill I., East Orange, N. J., assignor to American Telephone and Telegraph Company. Concentric conductor system. 1,859,390; May 24.
Gregg, Alfred W., assignor to The Bonney-Floyd Company, Columbus, Ohio. Cast steel body and hardening same. 1,859,623; May 24.
Grojean, Fer Lee B., assignor of one-half to C. W. Oakes, Columbus, Ohio. Sanitary milk cabinet. 1,859,391; May 24.
Grumman, Leroy R., Port Washington, N. Y. Retractable landing gear for airplanes. 1,859,624; May 24.
Gruner, J. K., Lumber Company. (See Gruner, Jay K., assignor.)
Gruner, Jay K., assignor to J. K. Gruner Lumber Company, St. Louis, Mo. Jointed lumber. 1,859,667; May 24.
Guerin, Norba. (See Pflum, C., and Guerin.)
Guerra, Ferruccio (See de Luce, G., and Guerra.)
Gulberson Corporation, The. (See Crippen, Frederick N., assignor.)
Gulberson Diesel Engine Company. (See Thaheld, Ferl A., assignor.)
Guide Lamp Corporation. (See Michel, Clarence A., assignor.)
Guild, Waldo J., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,859,737; May 24.
Gulf Production Company. (See Wyckoff, Ralph D., assignor.)
Gulf Refining Company. (See Buerger, Charles B., assignor.)
Gulf Refining Company. (See Henderson, Herbert, assignor.)
Gulick, Seeley C., Champaign, Ill. Fuel feeding device. 1,860,283; May 24.
Gunn, Fred W., Boston, Mass. Tool for applying wire hose clamp. 1,860,284; May 24.
Gunn, Ross, Washington, D. C. Control apparatus. 1,860,285; May 24.
Gunther, Clarence A., Schenectady, N. Y., assignor to General Electric Company. Nonmicrophonic support for vacuum tubes. 1,860,178; May 24.
Gurnee, Isaac Q., Butler, N. J. Collector ring for magnetoes. 1,860,026; May 24.
Guthrie, James M., et al. (See Lee, Leffman H., assignor.)
Guyot, Walter E., assignor to The Parker Pen Company, Janesville, Wis. Writing instrument receiving receptacle. 1,860,093; May 24.
Gwinn, George W., Hewlett, N. Y., assignor to American Machine & Foundry Company. Tamper for cigarette machine feeds. 1,859,965; May 24.
Gypsum, Lime and Alabastine, Canada, Limited. (See Thomson, George M., assignor.)
Haag, Walter J., assignor to The Brownell Company, Dayton, Ohio. Stoker. 1,859,297; May 24.
Hackett, William F., New York, N. Y. Food working tool. 1,859,298; May 24.
Haddy, Charles W., New York, N. Y. Pressure regulator. 1,859,506; May 24.
Hadley, Walter B., Chicago, Ill., assignor to Kellogg-Hadley Corporation. Combination box board machine. 1,859,869; May 24.
Hadley, William S., Chicago, Ill. Clutch or brake lining. 1,860,147; May 24.
Haines, Stacey A., assignor of one-half to H. F. Spencer, Kansas City, Mo. Fluid transmitting means for cooking and brewing utensils. 1,860,094; May 24.
Hall, C. M., Lamp Company. (See Martinek, Alois L., assignor.)
Halpern, Max, New York, and W. Mayer, Brooklyn, N. Y. Necktie. Re18,481; May 24.
Hamilton, Beauchamp & Woodworth. (See Woodworth, Sellm E., assignor.)
Hamilton, Vance D., Ferndale, Mich. Plating machine. 1,859,668; May 24.
Hammond, John H., jr. (See Purington, Ellison S., assignor.)
Hammond, John H., jr., Gloucester, Mass. Electrical transmission of light by phase control. 1,860,341; May 24.
Hangerette Folding Box, Ltd. (See Appelbaum, Isaac, assignor.)
Hanle, Benjamin W., Elizabeth, N. J., assignor to Eagle Pencil Company, New York, N. Y. Desk set. 1,859,870; May 24.
Hanley, William L., jr., Bradford, Pa. Twin tunnel kiln. 1,859,507; May 24.
Hanovia Chemical and Manufacturing Company. (See Bird, Lester F., assignor.)
Harb, John C. (See Pangratz, G. L., and Harb.)
Hardinge Company. (See Hardinge, Harlowe, assignor.)
Hardinge, Harlowe, assignor to Hardinge Company, Incorporated, York, Pa. Joint seal. 1,859,771; May 24.
Hardt, Albin. (See Kränzlein, G., Hartmann, and Hardt.)
Harlan, Marion E., assignor to A. Schilling & Co., San Francisco, Calif. Display rack. 1,859,871; May 24.
Harms, Richard, Lubeck, Germany. Holder for necktles. 1,859,669; May 24.
Harper, John, Pontiac, Mich. Protector for the outside baseboard of a window. 1,859,392; May 24.
Harriman, Charles E., West Bridgewater, Mass. Shock absorber. 1,859,441; May 24.
Harris, Henry, London, England. Lead alloy. 1,860,095; May 24.
Harris, John L., Thomson, N. Y. Hydraulic felt conditioner or the like. 1,850,508; May 24.
Harrison, Thomas R., Wyncote, assignor to The Brown Instrument Company, Philadelphia, Pa. Instrument case. 1,859,872; May 24.
Hart, Connie H., Bellingham, Wash. Saw setting machine. 1,859,363; May 24.
Hart Glass Manufacturing Company. (See McDonald, Harry R., assignor.)
Hartford-Empire Company. (See Canfield, Robert W., assignor.)
Hartford-Empire Company. (See Mulholland, Vergil, assignor.)
Hartmann, August, Barmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Centrifugal spinning machine. 1,859,825; May 24.
Hartmann, Christoph. (See Kränzlein, G., Hartmann, and Hardt.)
Hartmann, Max, and H. Isler, Riehen, near Basel, assignors to firm of Society of Chemical Industry in Basle, Basel, Switzerland. Basic ethers of aryl-quinolines. 1,860,286; May 24.
Hartshorn, Stanley D., St. Davids, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y. Apparatus for preparing coal. 1,859,560; May 24.
Harvey, Herman E., Bellefontaine, Ohio. Portable building.
Harwood, George S., & Son. (See Howe, Joseph B., assignor.) Des. 87,006; May 24.
Harwood, John H. (See Howe, Joseph B., assignor.)

CARNEGIE LIBRARY OF ATLANTA

Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,859,699; May 24.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Coupler and yoke connection. 1,859,700; May 24.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,859,701; May 24.
Haskell, James B., Longville, Minn. Door operator. 1,859,364; May 24.
Haskins, Butler J., assignor to J. Weidenhoff, Inc., Chicago, Ill. Vise for centering generators and the like. 1,859,920; May 24.
Häussler, Ernst P., Riehen, near Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J. Sexual hormones and the manufacture of same. 1,860,287; May 24.
Haverstick, John M., Ventnor City, N. J. Ornamental fence. 1,859,509; May 24.
Hawie, Michael, Bridgeport, Conn. Buckle for garment supporters. 1,859,702; May 24.
Haworth, Jehu F., deceased, Edgeworth, by the Union Trust Company of Pittsburgh, administrator, Pittsburgh, assignor to S. K. Haworth, Edgeworth, Pa. Cable or wire clamp. 1,859,561; May 24.
Haworth, Sara K. (See Haworth, Jehu F., assignor.)
Haymond, Paul, Fairmont, W. Va. Water cooler. 1,860,027; May. 24.
Haynes Stellite Company. See Metzger, Claude W., assignor.)
Hazel-Atlas Glass Co. (See Brady H. S., and Williams, assignor.)
Head, Bonnie, et al. (See Head, Herman E., assignor.)
Head, David, et al. (See Head, Herman E., assignor.)
Head, Donald, et al. (See Head, Herman E., assignor.)
Head, Herman E., assignor of two-thirds to A. J. Richardson, Arvin, Calif., one thirty-sixth to M. J. Head, one thirty-sixth to J. Head, one thirty-sixth to D. Head, one thirty-sixth to B. Head, one thirty-sixth to D. Head, and seven thirty-sixths to W. Head. Dispensing machine for bottled goods. 1,860,028; May 24.
Head, James, et al. (See Head, Herman E., assignor.)
Head, Mary J., et al. (See Head, Herman E., assignor.)
Head, Wilma, et al. (See Head, Herman E., assignor.)
Headley, Annie B., executrix. (See Headley, Frederick H.)
Headley, Frederick H., deceased, Northfield, Birmingham; Annie B. Headley, executrix, assignor to The Tan Sad Chair Company (1931) Limited, Birmingham, England. Chair, seat and the like. 1,860,096; May 24.
Heald Machine Company, The. (See Guild, Waldo J., assignor.)
Heaslet, James G., assignor to The Cleveland Tractor Company, Cleveland, Ohio. Container. 1,859,331; May 24.
Heat-O-Matic Electrical Device Corporation Ltd. (See McCall, William H., assignor.)
Heil Co., The. (See Thwaits, Frederick G., assignor.)
Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Acoustic device. 1,859,921; May 24.
Heiger, Frank H., assignor to Marvel Carburetor Company, Flint, Mich. Fuel feeding system for motor vehicles. 1,859,393; May 24.
Held, Ben, Wayzata, Minn. Container for flash lights and the like. 1,860,029; May 24.
Henderson, Benjamin B. (See Taylor, R. B., Henderson, and Olsen.)
Henderson, Clark T., Burlingame, Calif. Apparatus for controlling gas flow. 1,859,442; May 24.
Henderson, Herbert, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Safety blow off device. 1,859,670; May 24.
Henney Motor Company. (See Van Deest, Henry, assignor.)
Henney Motor Company. (See Wintercorn, Andrew F., assignor.)
Herrmann, Walter. (See Streitwolf, K., Fehrle, Herrmann, and Fritzsche.)
Hersleb, William. (See Binks, M. J., and Hersleb.)
Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,859,966; May 24.
Herthel, Eugene C., Flossmoor, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,859,967; May 24.
Herthel, Eugene C., and T. D. Tifft, Chicago, Ill., assignors to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbon oils. 1,859,510; May 24.
Herzogenrath, Heinrich, Berlin-Charlottenburg, and H. Tiaden, Berlin-Zehlendorf, Germany. Picture and like frame. 1,859,511; May 24.
Heston, Allen L., Columbiana, assignor to The National Rubber Machinery Company, Akron, Ohio. Telescopic tire building drum. 1,860,342; May 24.
Heuer, Russell P., Philadelphia, Pa., assignor to General Refractories Company. Refractory and making it. 1,859,512; May 24.
Hevi Duty Electric Company. (See Condit, F. J., and Smalley, assignors.)
Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Cigarette case. 1,859,772; May 24.
Hiering, William C., assignor to J. E. Mergott Co., Newark, N. J. Collapsible bag frame. 1,859,773; May 24.
Hike, William M., Omaha, and W. J. B. Kast, Bellevue, Nebr. Direction indicator for automobiles. 1,860,179; May 24.
Hilcken, Valentin. (See Bernhard, E., and Hilcken.)
Hill, Clement V., assignor to C. V. Hill & Co., Inc., Trenton, N. J. Refrigerator show case. 1,859,826; May 24.
Hill, C. V., & Co. (See Hill, Clement V., assignor.)
Hillman, Francis T. (See Elliott, James A., assignor.)
Hinchliff, Edward C., assignor to Burson Knitting Company, Rockford, Ill. Elastic yarn and making. 1,860,030; May 24.
Hirtreiter, John, Milwaukee, Wis. Internal combustion engine. 1,859,299; May 24.
Hoe, R., & Co. (See Lamatsch, Frederick, assignor.)
Hoeg, Henry J., St. Clare Shores, Mich. Centerless grinder. 1,859,443; May 24.
Hoffmann-La Roche Inc. (See Häussler, Ernst P., assignor.)
Hoggatt, Wilford B., New London, Conn. Waterproof and fireproof fibrous product and making the same. 1,860,097; May 24.
Holladay, James W., Plainview, Tex. Hydraulic ram or pump. 1,859,394; May 24.
Holland, Arthur G., Bridgeport, Conn., assignor to Sidney Blumenthal & Co. Inc., New York, N. Y. Floor covering or rug. 1,859,922; May 24.
Holland, Cyrus J., Chicago, Ill. Friction draft gear. 1,859,703; May 24.
Hollingsworth, W. T. P. (See Lederer, Anton, assignor.)
Holmgreen, Eugene A., San Antonio, Tex. Cotton tramper and the like machine. 1,860,031; May 24.
Holtzer-Cabot Electric Company, The. (See Kennedy, Carlton L., assignor.)
Hookless Fastener Company. (See Poux, Noel J., assignor.)
Hookless Fastener Company. (See Sundback, Gideon, assignor.)
Hoover Company, The. (See Ballou, Harry R., assignor.)
Hope, Ernest, and A. E. Richards, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Work locating and guiding device. 1,859,513; May 24.
Hopwood, John M. (See Peebles, Thomas A., assignor.)
Horne, Frederick E., Malden, assignor of one-half to R. Bacon, Winchester, Mass. Well and unit for use therein. 1,860,180; May 24.
Horne, Frederick E., Malden, assignor of one-half to R. Bacon, Winchester, Mass. Imitation masonry wall and units used therein. 1,860,181; May 24.
Horste, Joseph E., assignor to Detroit Harvester Company, Detroit, Mich. Power take off for Ford trucks. 1,860,246; May 24.
Horste, Joseph E., assignor to Detroit Harvester Company, Detroit, Mich. Mower attachment for tractors. 1,860,247; May 24.
Hough, Otto V., assignor to Woods Brothers Construction Company, Lincoln, Nebr. Method and apparatus for anchorage of mattresses to screen poles. 1,859,923; May 24.
Howard, Alan, Schenectady, N. Y., assignor to General Electric Company. Transmission of power. 1,860,182; May 24.
Howard, Styles T., Jeffersonville, Ind. Article support. 1,860,032; May 24.
Howe, Joseph B., Worcester, assignor to J. H. Harwood, Brookline, doing business as George S. Harwood & Son, Boston, Mass. Latch mechanism. 1,859,444; May 24.
Howle, Ernest O. (See Howle, Gladys R., assignor.)
Howle, Gladys R., assignor to E. O. Howle, Chicago, Ill. Garbage burner. 1,859,445; May 24.
Huber, Hans, assignor to Firm P. F. A. G. Patentverwertungs- & Finanbierungs-Aktiengesellschaft, Zurich, Switzerland. Feed device. 1,860,033; May 24.
Huggins, Merion J., Upper Saddle River, N. J., assignor to Auto-Meter Company, Inc., New York, N. Y. Electric indicating means. 1,859,332; May 24.
Hughes, James F., New York, N. Y. Mouthpiece for cigarettes. 1,859,395; May 24.
Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Motor speed control apparatus. 1,860,183; May 24.
Humber Limited. (See Green, Edward A., assignor.)
Hunt, Harry D., Miami, Ariz. Apparatus for feeding liquids. 1,859,774; May 24.
Huston, Tom, Columbus, Ga., assignor to Tom Huston Peanut Company. Bag filling apparatus. 1,859,562; May 24.
Huston, Tom, Peanut Company. (See Huston, Tom, assignor.)
Hyams, Lester J., New York, N. Y. Attachment for pencils and like instruments. 1,859,775; May 24.
Hyde, Arthur M., Secretary of Agriculture of the United States. (See Rue, J. C., Wells, and Rawling, assignors.)
Hydraulik Gesellschaft mit beschrankter Haftung. (See Schlenstedt, Oswig, assignor.)
Hydro Electric Manufacturing Company. (See Lederman, John E., assignor.)
Hyman, Julius, and A. F. Schlandt, assignors to The Pure Oil Company, Chicago, Ill. Treating petroleum emulsions. 1,860,248; May 24.
Hyndman, Ross W., Des Moines, Iowa. Oil tank faucet bar lock. 1,860,288; May 24.
Hynson, Westcott and Dunning Inc. (See White, Edwin C., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Bernhard, E., and Hilcken, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Kaufmann, Hans P., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Tschunkur, E., and Bock, assignors.)
Imperial Chemical Industries Limited. (See Payman, J. B., and Piggott, assignors.)
Indestructible Alloy Company. (See Nicodemo, Felix, assignor.)
Industrial Patents Corporation. (See Long, Perry J., assignor.)
Ingersoll-Rand Company. (See Koplin, Peter F., assignor.)
Ingersoll-Rand Company. (See Longacre, Frederick V. D., assignor.)
Ingman, Thomas M. (See Twining, S., and Ingman.)
International Cigar Machinery Company. (See Ferencl, Lester, assignor.)
International Motor Company. (See Josephs, Lyman C., jr., assignor.)
International Motor Company. (See Loeffler, Bruno, assignor.)
International Standard Electric Corporation. (See Wright, Esmond P. G., assignor.)
Intertype Corporation. (See Goodbody, Edmund M., assignor.)
Iowa Fiber Box Company. (See Shoffer, Marc, R., assignor.)
Ischie, William V., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Refining hydrocarbons. 1,859,968; May 24.
Isler, Hans. (See Hartmann, M., and Isler.)
Isom, Edward W., Scarsdale, assignor to Sinclair Refining Company, New York, N. Y. Manufacturing of lubricating oil. 1,859,514; May 24.
Jackson, Alexander F., Mount Vernon, assignor to Columbian Rope Company, Auburn, N. Y. Rope and twine reel. 1,860,249; May 24.
Jackson, Alfred F., Attleboro, Mass., assignor to Lewis R. Smith, receiver for The Apco Mossberg Corporation. Engine hood antirattling device. 1,860,326; May 24.
Jackson, George C. (See Davenport, E. L., and Jackson.)
Jacobs, Aaron J., assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y. Registering device. 1,860,184; May 24.
Jacobs Bros. Co., The. (See Jacobs, Aaron J., assignor.)
Jacobs, Harry M., assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y. Computing mechanism. 1,860,185; May 24.
Jacobsen, Jens N., assignor to The Pfaudler Co., Rochester, N. Y. Foam reducing apparatus. 1,859,827; May 24.
Jacobus, David S., Montclair, N. J., and W. A. Jones, West New Brighton, N. Y., assignors to The Babcock and Wilcox Company, Bayonne, N. J. Soot pocket for boilers. 1,859,873; May 24.
Jaeger, Alphons O., Mount Lebanon, assignor to The Selden Company, Pittsburgh, Pa. Synthetic resin. 1,860,098; May 24.
Jäger, Carl, Mannheim-Waldhof, Germany. Phonographic record. 1,859,390; May 24.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automobile storage elevator. 1,859,874; May 24.
James, Henry D., Edgewood, Pa., assignor to Westinghouse & Electric Manufacturing Company. Power supply system. 1,860,099; May 24.
James, Joseph H., Pittsburgh, assignor to C. P. Byrnes, trustee, Sewickley, Pa. Making partial oxidation products. 1,859,587; May 24.
Janiszewski, Kasimeir, assignor to Superior Tool and Die Company, Wilwaukee, Wis. Device for assembling and dismantling die sets. 1,859,446; May 24.
Jansson, Gustav E., Atlantic, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electrical distribution protective system. 1,859,447; May 24.
Jansson, Gustav E., Atlantic, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Unitary transforming and circuit interrupting apparatus. 1,859,969; May 24.
Jenkins Bros. (See Yardley, Farnham, assignor.)
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Electrooptical system and method of scanning. 1,859,828; May 24.
Jenkins Laboratories. (See Jenkins, Charles F., assignor.)
Jenkins Petroleum Process Company. (See Ranstead, Norman H., assignor.)
Jenkins Television Corporation. (See Nason, Charles H. W., assignor.)
Jensen, Axel G. (See Friis, H. T., and Jensen.)
Jermyn, Charles D., North Vancouver, British Columbia, Canada. Nonreturn device. 1,859,704; May 24.
Jerry Dress Co. Inc. (See Dechery, Emile, assignor.)
Jiffy Battery Terminal Corporation. (See Wallenberg, F. J., and McQuinn, assignors.)
Jipp, August, Berlin-Spandau, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telegraph plant or type-printing telegraph. 1,859,776; May 24.
Joekel, Hobert, Sterling, Nebr. Brace bar folding device. 1,859,563; May 24.
Johns-Manville Corporation. (See Saunders, Arthur B., assignor.)
Johnson, Charles, Cleveland, Ohio. Valve. 1,860,289; May 24.
Johnson, Edward F., and G. R. Cruze, Danville, Pa. Method and device for stopping and regulating flow from collapsible tubes. 1,859,397; May 24.
Johnson, Erling, assignor to the Firm Odda Smelteverk A/S, Odda, Norway. Manufacturing fertilizers. 1,859,738; May 24.
Johnson, Frank E., assignor to J. I. Paulding, Inc., New Bedford, Mass. Flush snap switch. 1,859,671; May 24.
Johnson, Glen A., assignor to Stant Manufacturing Co., Connersville, Ind. Radiator cap. Des. 87007; May 24.
Johnson & Johnson. (See L'Hommedieu, Paige B., assignor.)
Johnson, Joseph B. (See Pemberton, U. C., and Johnson.)
Johnson, Lewis H., Madison, and E. S. Gibson, Ridgewood, N. J., assignors to Bell Telephone Laboratories Incorporated, New York, N. Y. Call charging telephone exchange system. 1,859,924; May 24.
Johnson Service Company. (See Otto, Arthur J., assignor.)
Johnson-Stephens & Shingle Shoe Company. (See Mattler, Peter, assignor.)
Johnson, Sylvester A., North Providence, assignor to A. E. R. Speidel, Edgewood, R. I. Clasp for bracelet straps. 1,859,365; May 24.
Jones, David, assignor to Scovill Manufacturing Company, Waterbury, Conn. Effecting a reverse movement of clutch-controlled shaft. 1,860,148; May 24.
Jones, William A. (See Jacobus, D. S., and Jones.)
Jones, William B. (See Bracken, William A., assignor.)
Josephs, Lyman C., jr., Allentown, Pa., assignor to International Motor Company, New York, N. Y. Hydraulic steering gear for motor vehicles. 1,859,333; May 24.
Judd, Frank, Sac City, assignor to E. S. Gaynor Lumber Company, Sioux City, Iowa. Post driver. 1,859,398; May 24.
Kageyama, Hosaku, Los Angeles, Calif. Signal device for automobiles. 1,859,515; May 24.
Kaier, Richard. (See Willard, C. T., and Kaier.)
Kane, Thomas A., McMinnville, Oreg. Direction signal for automobiles. 1,860,034; May 24.
Karle, John D., Roselle Park, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Centrifugal clutch. 1,859,334; May 24.
Karnes, James C., Buffalo, N. Y. Independent line of sights for guns. 1,859,564; May 24.
Kast, Wilber J. B. (See Hike, W. M., and Kast.)
Kaufmann, Ary, South Orange, N. J., assignor to K. Kaufmann & Co., Inc. Traveling bag. 1,859,970; May 24.
Kaufmann, Hans P., Jena, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Introducing sulphocyanic groups in aliphatic compounds. 1,859,399; May 24.
Kaufmann, K., & Co. (See Kaufmann, Ary, assignor.)
Keating, James P., assignor to Neenah Foundry Company, Neenah, Wis. Manhole closure. 1,859,739; May 24.
Keck, Harry E., Pittsburgh, Pa. Apparatus for icing layer cakes. 1,859,971; May 24.
Keebler, Henry C., Secaucus, N. J. Collapsible tube closure. 1,860,318; May 24.
Keele, Ralph M., assignor, by mesne assignments, to Duart Manufacturing Co. Ltd., San Francisco, Calif. Hair waving device. 1,859,366; May 24.
Keele, Ralph M., assignor, by mesne assignments, to Duart Manufacturing Co. Ltd., San Francisco, Calif. Hair waving apparatus. 1,859,367; May 24.
Kehrer, Joseph A., Columbus, Ohio. Folding table. 1,859,588; May 24.
Keith, Clyde R., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Apparatus for reducing crosstalk currents. 1,859,565; May 24.
Keith, Geo. E., Company. (See Packard, Frank E., assignor.)
Kelley, Isaiah S., New York, N. Y. Toilet device for vehicles. 1,859,925; May 24.
Kelley, William V. and W. W., Los Angeles, Calif. Producing composite photographs. 1,859,589; May 24.
Kelley, William W. (See Kelley, W. V. and W. W.)
Kellogg-Hadley Corporation. (See Hadley, Walter B., assignor.)
Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Garnish molding. 1,860,250; May 24.
Kelsey-Hayes Wheel Corporation. (See Ash, Charles S., assignor.)
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kennedy, Carlton L., Braintree, assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass. Condenser induction motor. 1,859,368; May 24.
Kennedy, Carlton L., Braintree, assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass. Induction motor. 1,859,369; May 24.
Kennedy, Daniel J., Vancouver, British Columbia, Canada. Treatment of coffee. 1,859,740; May 24.
Kern, Erwin, Wettingen, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Mercury vapor rectifier. 1,859,875; May 24.
Kersey, Francis E., Lebanon, Ind. Muffler. 1,859,400; May 24.
Kersten, Jacob, Kalamazoo, Mich. Baby jumper. Des. 87,008; May 24.

Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)
Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Flexible band, chain, or linkage. 1,860,186; May 24.
Key Boiler Equipment Company. (See Key, Frederick E., assignor.)
Key, Frederick E., St. Louis, Mo., assignor to Key Boiler Equipment Company, East St. Louis, Ill. Safety pipe fitting. 1,859,972; May 24.
Keyes, Henry C., Kingman, Ariz. Illuminated display device. 1,859,516; May 24.
Keys, Walter C., H. W. Steiner, and J. G. Eldridge, Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio. Cushioning connection. 1,859,777; May 24.
Kincaid, Frank J., Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,860,100; May 24.
King, Rufus, Plainville, assignor to Bugbee & Niles Company, North Attleboro, Mass. Bracelet connection. 1,860,312; May 24.
King, William H., and Robert Cottar, Weed, Calif. Variable stroke feeder. 1,859,370; May 24.
Kingham, Mark H., Lake Charles, La. Rice drier. 1,860,101; May 24.
Kingsbury, Harry T., Keene, N. H. Lighting system for toy automobiles. 1,860,251; May 24.
Kingsford, Russell T., Wyncote, assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Electrodynamic speaker. 1,859,518; May 24.
Kirchoff, William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Dough working device. 1,860,252; May 24.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Aqueous dispersion and making same. 1,859,517; May 24.
Klapperatück, Friedrich, Berlin-Friedenau, Germany. Pouring and closing lid for milk tins. 1,859,741; May 24.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Feed slide for interchangeable drill heads. 1,859,778; May 24.
Klees, Albert L., assignor to Combustion Utilities Corporation, New York, N. Y. Oil burning machine utilizing air blast. 1,860,311; May 24.
Klimek, Gustav A., East Rutherford, N. J., assignor to Turbine Patents Corporation, New York, N. Y. Hydraulic power transmitter. 1,859,448; May 24.
Klitsche & Co. (See Klitsche, Leo H., assignor.)
Klitsche, Leo H., assignor to Klitsche & Co., Los Angeles, Calif. Vacuum contact frame. 1,859,829; May 24.
Knapp, Edgar, and C. G. Allgrunn, assignors to Niagara Sprayer Company, Middleport, N. Y. Dusting machine. 1,859,567; May 24.
Köberle, Karl. (See Kunz, M. A., and Koberle.)
Kochs, Theo. A., Company. (See Schwarzkopf, Arthur R., assignor.)
Koelliker, Michael B. (See Fleck, Albert H., assignor.)
Koller, Lewis R., Schenectady, N. Y., assignor to General Electric Company. Temperature controlling and measuring apparatus. 1,860,187; May 24.
Kollstede, George, Providence, R. I. Atomizer. 1,859,973; May 24.
Konikow, Israel G., assignor to Mary Bacher, Detroit, Mich. Beverage dispensing apparatus. 1,859,506; May 24.
Koplin, Peter F., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for fluid actuated hammers. 1,859,876; May 24.
Koppl, Ernest, et al. (See Koppl, Ernest, assignor.)
Koppl, Ernest, Long Beach, assignor of one-half to K. A. Wright, Los Angeles, and one-half to E. Koppl, Long Beach, Calif. Valve. 1,859,590; May 24.
Kouyoumjian, Haroutium K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,860,102; May 24.
Kowvallis, Theodore, Reading, Pa. Incandescent lamp. 1,860,035; May 24.
Kranzlein, Georg, C. Hartmann, and A. Hardt, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Pigment dyes. 1,860,036; May 24.
Krebs, Carlos, Boston, Mass. Reproducing machine. 1,860,037; May 24.
Krenz, Reinhold W., Toledo, Ohio. Industrial incinerator. 1,859,300; May 24.
Kreutzer, Karl, assignor to Firm J. S. Staedtler, Nuremberg, Germany. Drawing pencil. Des. 87,009; May 24.
Kreutzer, Karl, assignor to Firm J. S. Staedtler, Nuremberg, Germany. Drawing pencil. Des. 87,010; May 24.
Krick, Vincent, Los Angeles, Calif. Right and left full-fashioned-foot hosiery. 1,859,335; May 24.
Kroenke, Adolph G., Faribault, Minn. Combined glazed and screen door. 1,859,974; May 24.
Kuhn, Phillip A., Galveston, Tex. Aeroplane float signal. 1,860,327; May 24.
Kümmel, Reinhold, assignor to E. Rahm, Zurich, Switzerland. Hydraulic lifting jack. 1,859,830; May 24.
Kunz, Max A., Mannheim, and K. Köberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of nitrogenous dyestuffs. 1,859,742; May 24.
Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Extensible leg for furniture. 1,860,103; May 24.
Lacy, Joseph W., Chester, Calif. Braking system and valve. 1,860,188; May 24.
Laing, Edward M., Highland Park, Ill. Top dressing machine. 1,859,625; May 24.
Laing, Edward M., Highland Park, Ill. Golf ball washer. 1,859,626; May 24.
La Mar, Frank C., assignor to Great Western Fuse Company, New York, N. Y. Fuse. 1,860,313; May 24.
Lamatsch, Frederick, Grantwood, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Webb roll support. 1,859,301; May 24.
Land, Arthur A. G., Chicago, Ill. Mesh-sectioned wire fabric. 1,859,831; May 24.
Lange, Harald, Portland, Oreg. Heavy duty hose coupling. 1,860,038; May 24.
Lange, Werner, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Compounds having an affinity for cotton. 1,859,705; May 24.
Lange, Werner, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacture of azo-dyes. 1,859,706; May 24.
Langston, Samuel M., Wenonah, and W. H. Cleaver, Audubon, assignors to Samuel M. Langston Co., Camden, N. J. Slotting and scoring mechanism. 1,859,877; May 24.
Langston, Samuel M., Co. (See Langston, S. M., and Cleaver, assignors.)
Lankton, Roy H. (See Brierley, J. L., and Lankton.)
Lanspa, William M., David City, Nebr. Windmill and pump rod coupling. 1,860,253; May 24.
Larmour, Harry M., and S. C. Pierce, jr., assignors to Yosemite Portland Cement Corporation, Merced, Calif. Cement clinker treatment. 1,859,926; May 24.
Larsen, Louis G., Jersey City, N. J., assignor, by mesne assignments, to Presto Machine Products Company, Inc., and Presto Corporation of America. Phonograph attachment. 1,860,104; May 24.
Latécoère, Pierre, Paris, France. Airplane. 1,860,254; May 24.
Lattimer-Stevens Company, The. (See Noonan, Thomas F., assignor.)
Laukhuff, Alfred, Milwaukee, Wis. Gauge for use with cutters. 1,859,371; May 24.
Lauter, Werner M. (See Christiansen, W. G., and Lauter.)
Laux, Paul J., Shavertown, Pa. Guard for spinning machines. 1,860,039; May 24.
Lawler, James J., Mount Vernon, N. Y. Thermostatic control valve. 1,860,189; May 24.
Lawrence Paper Company, The. (See Anderson, Roy D., assignor.)
Lawson, Paul C., and C. B. Schafer, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Adjustable template. 1,860,319; May 24.
Lebherz, John C., Nenana, Alaska. Pliers. 1,860,290; May 24.
Lederer, Anton, Vienna, Austria, assignor to W. T. P. Hollingsworth, New York, N. Y. Discharge tube. 1,860,149; May 24.
Lederman, John E., assignor to Hydro Electric Manufacturing Company, Milwaukee, Wis. Dishwashing machine casing. 1,859,302; May 24.
Lee, Leffman H., Bellevue, assignor of one-sixth to W. B. Wharton and one-sixth to J. M. Guthrie, Pittsburgh, Pa. Wall board fastener. 1,859,779; May 24.
Lehon Company, The. (See Moone, Albert E. F., assignor.)
Leighton, John W., Port Huron, Mich. Extruding metal tubes. 1,859,707; May 24.
Lemire, Joseph, St. Joseph De Grantham, Quebec, Canada. Rail joint. 1,860,105; May 24.
Lengsfield Brothers. (See Lensfield, Byron H., assignor.)
Lengsfield, Byron H., assignor to Lengsfield Brothers, New Orleans, La. Display box. 1,859,401; May 24.
Lenhart, William F., Marshall, Mich., assignor to Sherer-Gillett Company, Chicago, Ill. Paper carrier. 1,859,303; May 24.
Lesh, Laurence J., Chicago, Ill. Airplane. 1,859,568; May 24.
Lesher, Whitman & Co. (See Odin, John K., assignor.)
Le Van, James D., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Method of and apparatus for manufacture of vacuum tubes. 1,860,106; May 24.
Le Vesconte, Harold J., assignor to Union Special Machine Company, Chicago, Ill. Bag. 1,860,190; May 24.
Le Vesconte, Harold J., assignor to Union Special Machine Company, Chicago, Ill. Bag and closure therefor. 1,860,339; May 24.
Levy, Dudley D., assignor to Dudley Research Corporation, New York, N. Y. Latch for dump-waiter doors. 1,859,780; May 24.
Lewis, Bennett. (See Moore, P. B., and Lewis.)
Lewis, Florence N., New York, N. Y. Talcum powder box. Des. 87,011; May 24.
L'Hommedieu, Paige B., assignor to Johnson & Johnson, New Brunswick, N. J. Budding and grafting tape. 1,860,255; May 24.
Libbey-Owens-Ford Glass Company. (See Adams, Daniel, assignor.)
Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)
Libbey-Owens-Ford Glass Company. (See Kincaid, Frank J., assignor.)

Libbey-Owens-Ford Glass Company. (See Lawson, P. C., and Schafer, assignors.)
Libbey-Owens-Ford Glass Company. (See Mambourg, Luke C., assignor.)
Libbey-Owens-Ford Glass Company. (See Mambourg, Nestor, assignor.)
Libbey-Owens-Ford Glass Company. (See Pedersen, I. O., and Stuble, assignors.)
Libby, McNeill & Libby. (See Bauer, Walter, assignor.)
Liebergeld, Paul, Bad Thal, Germany. Mechanically operated time fuse for projectiles. 1,860,256; May 24.
Lien, Jonas, Port Washington, N. Y. Automatic sampler. 1,860,107; May 24.
Light, George G., Kerr Gardens, assignor to The Western Union Telegraph Company, New York, N. Y. Multiple turret simplex printer concentration circuit. 1,860,343; May 24.
Line Material Company. (See Cole, George H., assignor.)
Link-Belt Company. (See Tark, M. B., and Cleveland, assignors.)
Linoleum Manufacturing Company. (See Godfrey, Arthur A., assignor.)
Linstow, Frederik N., Benton, and W. Anderson, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. Selective indicating mechanism. 1,860,191; May 24.
Lionel Corporation, The. (See Caruso, Mario, assignor.)
Lippitt, George R., assignor to The Bishop & Babcock Mfg. Company, Cleveland, Ohio. Soda fountain. Des. 87,012; May 24.
Lipsius, Samuel, New York, N. Y. Powdering apparatus. 1,859,304; May 24.
Litke, Edward E., Wichita, Kans. Fuel economizer. 1,859,519; May 24.
Littlefield, Lloyd M., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Pneumatic tire casing repairing device. 1,859,305; May 24.
Lockwood, Ernest H., Pasadena, Calif. Method of and apparatus for manufacturing concrete products. 1,859,878; May 24.
Lockwood, Erwin A., Royal Oak, assignor to American Electrical Heater Company, Detroit, Mich. Electric soldering iron. 1,860,192; May 24.
Loebel, Zanvil C., New York, N. Y., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Surfacing material and preparing same. 1,860,040; May 24.
Loeffler, Bruno, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Oil cooling system. 1,860,150; May 24.
Loening, Grover, New York, N. Y., assignor to Grover Loening Aircraft Company, Inc., Garden City, N. Y. Airplane. 1,859,306; May 24.
Loening, Grover, Aircraft Company. (See Loening, Grover, assignor.)
Logan, Henry H., Chicago, Ill. Shock absorber. 1,860,108; May 24.
Long, Perry J., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Curing casings. 1,860,335; May 24.
Longacre, Frederick V. D., Yonkers, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve mechanism. 1,859,879; May 24.
Lonnquest, Theodore C., U. S. Navy, and C. L. Seward, jr., Washington, D. C. Apparatus for determination of drift by aircraft. 1,859,569; May 24.
Loranger, Hubert R., Hillsdale, assignor to Automatic Freezer Corporation, Detroit, Mich. Acid eliminator for refrigerating apparatus. 1,860,193; May 24.
Lormüller, Bernhard, Zurich, Switzerland. Control of braking appliances of motor driven vehicles. 1,859,708; May 24.
Louchet, Edmond, Roubaix, assignor of one-half to Société Ateliers St. Eloi, Tourcoing, France. Gearing arrangement of mangling or wringing machines. 1,860,041; May 24.
Loughridge, Matthew H., Bogota, N. J. Composite system of train control. 1,859,591; May 24.
Lovell Manufacturing Company. (See Schuda, Ernest J., assignor.)
Loven, Carl, Philadelphia, Pa. Hosiery drying form. 1,860,042; May 24.
Ludwigson, Matthias, Stockholm, Sweden. Printer's ink and in the process of manufacturing same. 1,860,043; May 24.
Lukens, Randolph E., Syracuse, N. Y., assignor to Mayer China Company, Beaver Falls, Pa. Plate or similar article. Des. 87,037; May 24.
Lundgren, Jacob, assignor to Tinius Olsen Testing Company, Philadelphia, Pa. Method of and apparatus for balancing rotatable bodies. 1,860,257; May 24.
Lyford, Frederic E. (See Simpson, Isaac, assignor.)
Lynch, Edward M. (See Sievern, F., and Lynch.)
Lynch, Joseph H., Asbury Park, N. J. Laundry assorting apparatus. 1,859,307; May 24.
Lyon, Gerald, Harlington, Hounslow, C. R. Fairey, Iver, and T. M. Barlow, Wraydene Burnham, England; said Lyon and said Barlow assignors to said Fairey. Cooling system of internal combustion engines. 1,860,258; May 24.
M S Co. (See Nittel, Frederick W., assignor.)
MacChesney, Chester M., and R. H. Norton, assignors to Acme Steel Company, Chicago, Ill. Rotary shearing machine. 1,859,336; May 24.
MacCollum, William H., Buffalo, N. Y. Windshield thermometer. 1,859,928; May 24.
Macht, Karl, Ober-Salzbrunn, assignor to Schlesische Spiegelglas Manufactur Carl Tielsch, G. m. b. H., Waldenburg-Altwasser, Germany. Apparatus for forming reenforced glass. 1,859,880; May 24.
MacKenzie, Philip, San Francisco, assignor, by mesne assignments, to Gat Gun Lubricating Corporation, Oakland, Calif. Flexible metal hose. 1,859,449; May 24.
MacKenzie, Roy R., Huntington Park, Calif. Convertible wheel. 1,859,832; May 24.
Maclennan, Frank W., Miami, Ariz. Apparatus for treating liquid with a gas. 1,859,781; May 24.
Magdeburger Werkzeugmaschinenfabrik Aktiengesellschaft. (See Ritter, Malte, assignor.)
Maher, Charles, Portland, Oreg. Reservoir brush. 1,859,402; May 24.
Maisel, Robert, Munich, assignor of one-third to Maschinenfabrik Hörselgau Aktiengesellschaft, Waltershausen and one-third to Dr. Wilhelm Schwarzwälder, Munich, Germany. Piston sealing means. 1,859,520; May 24.
Majacher, Gust, McKees Rocks, Pa. Combination table and chair. 1,860,291; May 24.
Malkin, Bernard A., Lachine, Quebec, Canada. Steam fitting for journals of rotating cylinders and the like. 1,859,975; May 24.
Mallory, Marion, Toledo, Ohio. Engine ignition timer. 1,859,308; May 24.
Mallory, Marion, Toledo, Ohio. Control device for ignition timers. 1,859,309; May 24.
Maloney, Peter J., North Bend, Wash. Roundabout or merry-go-round. 1,860,194; May 24.
Mambourg, Luke C., Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,860,044; May 24.
Mambourg, Nestor, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Furnace. 1,860,045; May 24.
Manley, Job R., East Liverpool, Ohio. Dispensing apparatus. 1,859,833; May 24.
Mapelsden, Harold H., Schenectady, N. Y., assignor to General Electric Company. Indicating control means for instruments. 1,860,151; May 24.
Marchand, Adolph, Jackson Heights, N. Y. Disappearing mirror light. 1,859,592; May 24.
Marcin, Helen, New York, N. Y. Automatic electric hand signal. 1,860,109; May 24.
Margon Corporation. (See Wilhelm, John H., assignor.)
Marsack, Max, Sheboygan, Wis. Mattress. 1,859,340; May 24.
Marsack, Max, Sheboygan, Wis. Mattress. 1,859,341; May 24.
Marsh, Mabel, Morristown, N. J. Umbrella for carrying overshoes. 1,859,627; May 24.
Marshall, Albert E., Scarsdale, assignor to Columbian Carbon Company, New York, N. Y. Activating carbon. 1,859,450; May 24.
Marshall, James E., Amarillo, Tex. Combined inclinometer and compass. 1,860,259; May 24.
Martens, Ernest J., St. Louis, Mo. Plait heading. 1,860,110; May 24.
Marti, Fritz, la Chaux-de-Fonds, Switzerland. Drive control system for clockworks, meters, and the like. 1,860,260; May 24.
Martin, Elmer R., Springfield, assignor to The Williams Company, London, Ohio. Pad making machine. 1,859,310; May 24.
Martin, Jacob F. (See Barker, Eros V., assignor.)
Martin, John A., Detroit, Mich., assignor, by mesne assignments, to Chrysler Corporation. Gear shifting mechanism. 1,860,196; May 24.
Martin, Mark H., Baltimore, Md., assignor to The Symington Company, New York, N. Y. Side frame. 1,859,403; May 24.
Martin-Parry Corporation. (See Moore, P. B., and Lewis, assignors.)
Martinek, Alois L., assignor to C. M. Hall Lamp Company, Detroit, Mich. Lamp. 1,860,195; May 24.
Martocello, Joseph A., Philadelphia, Pa. Series drop tube. 1,859,451; May 24.
Marvel Carbureter Company. (See Heitger, Frank H., assignor.)
Maschinenfabrik Horselgau Aktiengesellschaft. (See Maisel, Robert, assignor.)
Mason & Parker Manufacturing Company. (See Young, Franklin W., assignor.)
Massey-Harris Company. (See Baseman, Ernest, assignor.)
Masters, Bert L., and J. Sinadin, Midwest, Wyo. Pump. 1,859,672; May 24.
Mattler, Peter, assignor to Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo. Preparing leather for weaving. 1,859,570; May 24.
Mattler, Peter, assignor to Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo. Process and apparatus for weaving fabrics. 1,859,571; May 24.
Maxmoor Corporation. (See Moore, Arlington, assignor.)
May, Edward M., assignor to G. P. Cowan, Detroit, Mich. Shut-off valve. 1,859,834; May 24.
May, Russell P., New York, N. Y., assignor to Radio Corporation of America. Acoustic diaphragm. 1,859,782; May 24.

Mayer China Company. (See Lukens, Randolph E., assignor.)
Mayer China Company. (See Mayer, Walter S., assignor.)
Mayer, Walter S., Beaver, Pa., assignor to Mayer China Company, Beaver Falls, Pa. Plate or similar article. Des. 87,038; May 24.
Mayer, William. (See Halpern, M., and Mayer.)
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Vulcanizing apparatus. 1,859,337; May 24.
McAllaster, George R., Rochester, N. Y. Combined ash tray and incense burner. Des. 87,013; May 24.
McArdle, Michael W., Chicago, Ill. Health exerciser. 1,859,976; May 24.
McArthur, Elmer D., Schenectady, N. Y., assignor to General Electric Company. High frequency magnetron apparatus. 1,860,152; May 24.
McBirney, Stanley W., Toledo, Ohio, dedicated, by mesne assignments, to the People of the United States of America. Stalk cutting apparatus. 1,859,783; May 24.
McCall, William H., Glendale, assignor to Heat-O-Matic Electrical Device Corporation Ltd., Los Angeles, Calif. Electric heat control. 1,859,927; May 24.
McConnell, John R. (See Black, J. C., Rial, and McConnell.)
McCutcheon, James D., Pittsburgh, Pa. Cutting torch. 1,860,046; May 24.
McDavitt, Marcellus B., New York, N. Y., assignor to American Telephone and Telegraph Company. Telephone exchange system. 1,859,404; May 24.
McDevitt, Edward L., assignor to F. F. Barham, Los Angeles, Calif. Protecting means for rolls of paper. 1,859,521; May 24.
McDonald, Harry R., assignor to Hart Glass Manufacturing Company, Dunkirk, Ind. Cruet or similar container. Des. 87,014; May 24.
McEvoy, Joseph H., jr., Houston, Tex. Pipe joint. 1,859,311; May 24.
McFayden, John C., et al. (See Sleeper, Ned M., assignor.)
McGary, Alexander. (See Butt, F. W., and McGary.)
McIntyre, William D., and J. Danciger, Amarillo, Tex. Brake cooling means. 1,859,709; May 24.
McKim, James B., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,859,929; May 24.
McMullen, Allen, Number Four, N. Y. Trap. 1,859,405; May 24.
McMurray, Walter E., assignor to Clearfield Machine Company, Clearfield, Pa. Making screen plates. 1,859,784; May 24.
McQuinn, Arthur. (See Wallenberg, F. J., and McQuinn.)
McShane, William H., Kansas City, Mo. Peanut warmer. Des. 87,015; May 24.
Mechanical Royalties Corporation. (See Bailey, H. H., and Thomas, assignor.)
Mechanical Rubber Company, The. (See Keys, W. C., Steiner, and Eldridge, assignors.)
Meighan, George W., North Bergen, N. J. Pipe and conduit bender. 1,859,406; May 24.
Mellerio, Lucien P., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe stiffener and shoe. 1,859,452; May 24.
Mellin, Oscar A., Alameda, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Well cementing device. 1,859,593; May 24.
Mendel, William, Beverly, assignor to Neidich Viscose Corporation, Burlington, N. J. Textile fabric. 1,860,314; May 24.
Mercier, René, assignor to Etablissements Aera, Paris, France. Device for electrically lighting signals. 1,860,328; May 24.
Merdan, Alexander, New York, N. Y., assignor to C. Osad, Jersey City, N. J. Heat control emergency plug. 1,859,977; May 24.
Mergott, J. E., Company. (See Hiering, William C., assignor.)
Merk, August, Radeberg, assignor to Porzellanfabrik C. M. Hutschenreuther A. G., Dresden, Germany. Artificial tooth. 1,859,453; May 24.
Merryweather, James, assignor of forty per cent to J. G. Campbell, Greencastle, Ind. Furnace construction. 1,859,743; May 24.
Mershon, W. B., Co. (See Rhinevault, Glenn G., assignor.)
Messinger, Lester H., jr., assignor to The Black Rock Manufacturing Company, Bridgeport, Conn. Rubber tire tread cutting machine. 1,859,785; May 24.
Mesta Machine Company. (See Fisk, Gustaf L., assignor.)
Metlox Corporation, Ltd. (See Prouty, Willis O., assignor.)
Metropolitan Device Corporation. (See Deake, George C., assignor.)
Metropolitan Engineering Company. (See Phelps, George H., assignor.)
Metzger, Claude W., Los Angeles, Calif., assignor to Haynes Stellite Company. Rotary drill. 1,859,978; May 24.
Meyer, Dick C., and J. B. Olsen, Milwaukee, Wis. Drying rack. 1,859,594; May 24.
Meyer, Gerhard, Los Angeles, Calif. Packer for oil wells. 1,859,744; May 24.
Meyer, Minnie, assignor to Golo Slipper Company, Inc., New York, N. Y. Sandal. Des. 87,016; May 24.
Michel, Clarence A., Cleveland, Ohio, assignor to Guide Lamp Corporation, Anderson, Ind. Headlamp construction. 1,859,673; May 24.
Michel, Clarence A., Cleveland, Ohio, assignor to Guide Lamp Corporation, Anderson, Ind. Socket retainer. 1,859,674; May 24.
Miessner, Benjamin F., assignor to Miessner Inventions Inc., Short Hills, N. J. Electron tube. 1,859,454; May 24.
Miessner, Benjamin F., assignor to Miessner Inventions Inc,. Short Hills, N. J. Electron tube. 1,859,522; May 24.
Miessner Inventions Inc. (See Miessner, Benjamin F., assignor.)
Mignet, Paul L. J., assignor to Société Electro Metallurgique de Montricher, St. Julien-de-Maurienne, France. Electric furnace electrode. 1,859,979; May 24.
Miller, Arthur W., Milwaukee, Wis. Air cleaner. 1,860,111; May 24.
Miller, Ohmer R., Floral Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Recording and reproduction of intelligence. 1,859,930; May 24.
Miller Tompkins & Company. (See Grant, Herbert A., assignor.)
Mills, Dudley M., assignor to Musto-Keenan Company, Los Angeles, Calif. Column turning, honing, and polishing machine. 1,859,595; May 24.
Milwaukee Foundry Equipment Co. (See Byerlein, E. J., and Graf, assignors.)
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minneapolis-Honeywell Regulator Company. (See Phelan, Louis A. M., assignor.)
Mirmann, Salomon R., St.-Leu-La-Foret, France. Manicure set for ladies' hand bags. 1,860,261; May 24.
Mitteau, Ferdinand, Villemomble, France, assignor to Société d' Etudes Scientifiques et d' Entreprises Industrielles, Ougree, Belgium. Manufacture of microcosmic salt and other fertilizing material. 1,859,835; May 24.
Moen, George E., Kelso, Wash. Pilot support for reamers. 1,859,836; May 24.
Moen, George E., Kelso, Wash. Reamer shaft holder and feeder. 1,859,837; May 24.
Molins, Walter E., Deptford, London, England. Cigarette making machinery. 1,860,197; May 24.
Mon, Joseph F. (See Pannier, William J., jr., and O. M., and Mon.)
Monarch Oil Well Air Drill Co. Ltd. (See Yungling, Paul, assignor.)
Montague, Harley H., Denver, Colo. Clay-working machine. 1,859,675; May 24.
Moone, Albert E. F., assignor to The Lehon Company, Chicago, Ill. Printing and slitting roller. 1,860,047; May 24.
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Carburetor. 1,860,329; May 24.
Moore, Frederick T., East Hartford, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Revolver. 1,860,112; May 24.
Moore, Paul B., and B. Lewis, Indianapolis, Ind., assignors to Martin-Parry Corporation, York, Pa. Automobile windshield hinge. 1,860,198; May 24.
Moore & White Company, The. (See White, Joseph A., assignor.)
Morand, Armand C., San Francisco, Calif. Child's play suit. Des. 87,017; May 24.
Morgan, Edmund C., deceased, New York, by O. E. Morgan, executrix, New York, N. Y. Rail clamp for loading machines. 1,859,596; May 24.
Morgan, Olive E., executrix. (See Morgan, Edmund C.)
Morley, James P., Michigan City, assignor to Bastian-Morley Company, La Porte, Ind. Flue structure for heating apparatus. 1,859,745; May 24.
Motor Products Corporation. (See Kellogg, Homer G., assignor.)
Mueller, Albert, Columbus, Nebr. Loose ear corn and vegetable harvesting device. 1,859,980; May 24.
Mulholland, Vergil, West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Leer. 1,859,931; May 24.
Muller, Richard, Mannheim, and F. Voeller, Heidelberg, assignors to C. F. Boehringer & Soehne G. m. b. H., Mannheim-Waldhof, Germany. Production of anhydrides of the lower fatty acid series. 1,859,786; May 24.
Munoz, Gonzalo C. (See Watson, D. M., and Munoz.)
Munters, Carl G., assignor to Platen-Munters Refrigerating System Aktiebolag, Stockholm, Sweden. Refrigeration. 1,859,455; May 24.
Murphy, Walter P., assignor to Union Metal Products Company, Chicago, Ill. Railway car construction. 1,859,312; May 24.
Murphy, Walter P., assignor to Union Metal Products Company, Chicago, Ill. Tank for railway cars. 1,859,338; May 24.
Murphy, Walter P., assignor to Union Metal Products Company, Chicago, Ill. Railway car construction. 1,859,339; May 24.
Murray, D. J., Manufacturing Company. (See Bassler, Edwin M., assignor.)
Musto-Keenan Company. (See Mills, Dudley M., assignor.)

Mutschler, Albert, assignor to A & H G Mutschler Inc., Rochester, N. Y. Feeding apparatus. 1,859,372; May 24.

Mutschler Inc., A & H G. (See Mutschler, Albert, assignor.)

Myers, Cecil H., assignor to The Gabriel Karl-Keen Company, Sioux City, Iowa. Combination trunk and luggage carrier. 1,859,746; May 24.

Myers, John W., Quincy, Ill. Machine for soldering wafer thermostats. 1,860,048; May 24.

Myers, Nelson H. (See Stevens, H. D., and Myers.)

Myers, Robert L., San Diego, Calif. Float valve housing for refrigerating plants. 1,859,932; May 24.

N. V. Nederlandsche Instrumenten Compagnie. (See Steinle, Adolf, assignor.)

N. V. Nederlandsche Instrumenten-Compagnie. (See van den Bergh, Samuel J., assignor.)

Nachumsohn, Irving. (See Golden, H. H., and Nachumsohn.)

Nachumsohn, Irving, Chicago, Ill. Signal. 1,859,676; May 24.

Nachumsohn, Irving, Chicago, Ill. Electron discharge device. 1,859,677; May 24.

Nachumsohn, Irving, Chicago, Ill. Electron discharge device. 1,859,678; May 24.

Nachumsohn, Irving, Chicago, Ill. Vacuum tube and treating thereof. 1,859,679; May 24.

Nahrwold, William, Fort Wayne, Ind. Folding chair. 1,859,628; May 24.

Nankivell, Frank J., Worcester, Mass., assignor to Clark W. Parker and C. M. Chapman, New York, N. Y. Combined cigarette case and lighter. 1,859,881; May 24.

Nason, Charles H. W., New York, N. Y., assignor to Jenkins Television Corporation, Jersey City, N. J. Electro-optical apparatus and method. 1,859,597; May 24.

National Aniline & Chemical Co. (See Crowell, Joyce H., assignor.)

National Bearing Metals Corporation. (See Vigne, Albert, assignor.)

National Biscuit Company. (See Davidson, Bruce J., assignor.)

National Carbon Company. (See Voorhees, Lee J., assignor.)

National Fireproofing Corporation. (See Christie, Llewellyn M., assignor.)

National Malleable and Steel Castings Company. (See Schmidt, E. H., and Spence, assignors.)

National Rubber Machinery Company, The. (See Heston, Allen L., assignor.)

National Rubber Machinery Company. (See Shook, Florain J., assignor.)

National Supply Company, The. (See Goeser, Edwin W., assignor.)

National Supply Company, The. (See Timbs, Edward, assignor.)

Neale, Herbert S., Pittsburgh, Pa. Wall paper cleaner. 1,859,747; May 24.

Neely, Frank R., assignor to A. H. Ballilet Corporation, Allentown, Pa. Inside label and corner flap. 1,859,523; May 24.

Neenah Foundry Company. (See Keating, James P., assignor.)

Neerup, Einar, Oak Park, Ill. Signal system. 1,860,049; May 24.

Neidich Viscose Corporation. (See Mendel, William, assignor.)

Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Rock drill mounting. 1,859,748; May 24.

Ness, John, Niagara Falls, N. Y. Ash sifter. 1,859,373; May 24.

Nestler, Richard, Lahr, Germany. Drawing table. 1,859,456; May 24.

Neubauer, Ferdinand, Brooklyn, assignor to twenty-four and one-half per cent to F. Forthaller and twenty-four and one-half per cent to J. Fazourek, Cleveland, Ohio. Bottle or jar cap. 1,859,710; May 24.

Neuhaus, Fritz, Berlin-Tegel, Germany. Steel vessel and producing the same. 1,860,292; May 24.

Neuhauss, Heinrich, Dusseldorf, Germany, assignor to The Ajax Metal Company, Philadelphia, Pa. Induction electric furnace. 1,859,680; May 24.

Neuman, Joseph, Elizabeth, N. J. Mattress. 1,860,293; May 24.

Neureuther, Andrew H., assignor to Western Clock Company, Peru, Ill. Micrometer adjusting device for clocks and similar mechanisms. 1,860,153; May 24.

Neusils, William, Yorkville, Ill. Fire escape. 1,860,294; May 24.

Newhouse, Walter F., Benton Harbor, Mich. Eccentric cam drive. 1,859,457; May 24.

New York Brick Handling Corporation. (See Fuller, C. E. assignor, and Wallace.)

Niagara Blower Company. (See Bulkeley, Claude A., assignor.)

Niagara Sprayer Company. (See Knapp, E., and Allgrunn, assignors.)

Nichols, George E., assignor, by direct and mesne assignments, to The Wonder Skidder Company, Inc., Abbeville, Ala. Hauling device. 1,859,711; May 24.

Nicholson, George E., assignor to Vending Machine Corporation of America, Tulsa, Okla. Coin controlled locking means. 1,860,295; May 24.

Nickels, William W., assignor of one-half to W. A. Dishner, Bristol, Va. Automobile attachment. 1,859,787; May 24.

Nicodemo, Felix, assignor to Indestructible Alloy Company, Inc., New York, N. Y. Noncorrosive metal and article made therefrom. 1,859,749; May 24.

Nicolet, Nicholas E., New York, N. Y. Scoring device. 1,859,524; May 24.

Niemann, Jesse L., Columbus, Ohio. Electrode electric welding device. 1,860,262; May 24.

Nikinow, John P., New York, N. Y. Liquid level indicator. 1,859,933; May 24.

Nilson, Everett C., Worcester, Mass., assignor of forty per cent to R. G. Nilson, San Francisco, Calif., and twenty per cent to N. Nilson, Worcester, Mass. Acoustic diaphragm. 1,859,629; May 24.

Nilson, Nils. (See Nilson, Everett C., assignor.)

Nilson, Ralph G. (See Nilson, Everett C., assignor.)

Nisbet, George B. (See Shanafelt, D. M., Nisbet, and Shonkwiler.)

Nittel, Frederick W., assignor to M S Co., Attleboro, Mass. Connecter for bracelets. 1,860,315; May 24.

Nonneman, Ira W., assignor to The Borden Company, Warren, Ohio. Pipe threading machine. 1,859,882; May 24.

Noonan, Thomas F., Chicago, Ill., assignor to The Lattimer-Stevens Company, Columbus, Ohio. Bar meter connection. 1,860,263; May 24.

Nordlander, Birger W., Schenectady, N. Y., assignor to General Electric Company. Stable selenium sulphide and its preparation. 1,860,154; May 24.

Nordlander, Birger W., Schenectady, N. Y., assignor to General Electric Company. Chemical product. 1,860,320; May 24.

Nordlander, Birger W., Schenectady, N. Y., assignor to General Electric Company. Stable selenium sulphide and its preparation. 1,860,336; May 24.

Nordmarken, Alfred G., Minneapolis, Minn. Window screen. 1,859,883; May 24.

North, Charles H., San Francisco, Calif. Vacuum switch. 1,859,598; May 24.

Northern Equipment Company. (See Veenschoten, Vincent V., assignor.)

Northrop, James H., Santa Ana, Calif. Machine for shredding date fruit. 1,859,458; May 24.

Norton Laboratories, Inc. (See Rathbun, Merrill, assignor.)

Norton, Ralph H. (See MacChesney, C. M., and Norton.)

Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Switch. 1,859,981; May 24.

Nuttall, Thomas D., assignor to Bentley & Jackson Limited, Bury, England. Paper making machine. 1,859,838; May 24.

Nye, Henry V., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. System of distribution. 1,859,839; May 24.

Oakes, Charles W. (See Grojean, Per Lee B., assignor.)

Oberhuber, William F., Lansdowne, Pa. Disk for pipe joints. 1,859,525; May 24.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Car door construction. 1,859,712; May 24.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,860,113; May 24.

Odda, Smelteverk, A/S. (See Johnson, Erling, assignor.)

Odin, John K., assignor to Lesher, Whitman & Co., Inc., New York, N. Y. Curtain fixture for use in connection with shade brackets. 1,859,884; May 24.

Okabe, Kinjiro, Sendai, Japan, assignor to General Electric Company. Oscillation generator. 1,860,114; May 24.

Olans, Rose, New York, N. Y. Clip. Des. 87,018; May 24.

Oldham, John M., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Spring structure. 1,859,630; May 24.

Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)

Olsen, James B. (See Meyer, D. C., and Olsen.)

Olsen, Olaf R. (See Taylor, R. B., Henderson, and Olsen.)

Olsen, Tinius, Testing Machine Company. (See Lundgren, Jacob, assignor.)

Orkin, Samuel, assignor to Calwiss Industries, Ltd., Beverly Hills, Calif. Prow construction for boats. 1,859,374; May 24.

Orthwine, Rudolf, New York, N. Y. Paper fastener. 1,860,155; May 24.

Osad, Charles. (See Merdan, Alexander, assignor.)

Osborn, Arthur E., Marion, Ind. Stationery portfolio. 1,859,631; May 24.

Osbrink, Raymond H., Los Angeles, Calif. Traffic marker. Des. 87,019; May 24.

Osnos, Mendel, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Oscillation generator. 1,860,050; May 24.

Osterstrom, Rudolph C., assignor to The Pure Oil Company, Chicago, Ill. Cracking hydrocarbon oils. 1,860,199; May 24.

Otis Elevator Company. (See Dunn, Edward L., assignor.)

Otis Steel Company, The. (See Shanafelt, D. M., Nisbet, and Shonkwiler, assignors.)

Otto, Arthur J., assignor to Johnson Service Company, Milwaukee, Wis. Temperature regulation. 1,859,407; May 24.

Otto, Henry J., Moberly, Mo. Signaling whistle. 1,859,408; May 24.

Owen, Alfred G. B., Sutton-Coldfield, and R. W. Downs, Rushall, Walsall, England. Vehicle wheel. 1,860,264; May 24.

Oxweld Acetylene Company. (See Boley, Roy A., assignor.)

Oxyammon Aktiengesellschaft. (See Cederberg, Ivar W., assignor.)

P. F. A. G. Patentverwertungs- & Finanzierungs-Aktiengesellschaft. (See Huber, Hans, assignor.)

Packard, Frank E., Brockton, assignor to Geo. E. Keith Company, Campello, Mass. Shoe. Des. 87,020; May 24.

Packard Motor Car Company. (See Barden, Earl M., assignor.)

Padgett, Joseph E., and C. D. Peterson, assignors to Spicer Manufacturing Corporation, Toledo, Ohio. Extension transmission gearing. 1,859,788; May 24.

Page, Albert E., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Yarn cutter and clamp for knitting machines and operating same. 1,860,265; May 24.

Pallin, George, Manchester, England, assignor to General Electric Company. Electric switchgear. 1,860,156; May 24.

Paine, Robert C., Boonton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,859,885; May 24.

Pangratz, George L., and J. C. Harb, Akron, Ohio. Combined advertising medium and score card. 1,859,982; May 24.

Pannier Brothers Stamp Company. (See Pannier, William J., jr., and O. M., and Mon, assignors.)

Pannier, Oscar M. (See Pannier, William J., jr., and O. M., and Mon.)

Pannier, William J., jr., Pittsburgh, to O. M. Pannier, Kilbuck Township, Allegheny County, and J. F. Mon, Elliott Borough, Pittsburgh, assignors to Pannier Brothers Stamp Company, Pittsburgh, Pa. Stamping machine. 1,860,115; May 24.

Paramount Publix Corporation. (See Twining, S., and Ingman, assignors.)

Parker, Clark W., et al. (See Nankivell, Frank J., assignor.)

Parker Pen Company, The. (See Guyot, Walter E., assignor.)

Pascoe, William, Norway, Mich. Wrench. 1,860,526; May 24.

Passelfume, Giovanni, Portland, Oreg. Shoe sole channeling machine. 1,859,459; May 24.

Patent and Licensing Corporation, The. (See Loebel, Zanvil C., assignor.)

Paulding, John L., Inc. (See Johnson, Frank E., assignor.)

Paulus, William, Buffalo, N. Y. Windshield cleaner motor. Des. 87,021; May 24.

Payman, Joseph B., and H. A. Piggott, Blackley, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Manufacture of compounds of the morpholine series and the products. 1,859,527; May 24.

Payne, Oscar V., Worcester, Mass., assignor to Auto-Ordnance Corporation, New York, N. Y. Gun. 1,860,157; May 24.

Payson, Aurin E., and M. P. Wetmore, Norwich, Conn. Dispensing device. 1,859,886; May 24.

Payson, Aurin E., and M. P. Wetmore, Norwich, Conn. Refrigerating apparatus. 1,859,887; May 24.

Pazourek, Joseph, et al. (See Neubauer, Ferdinand, assignor.)

Pearson, John T., assignor to Crouse-Hinds Company, Syracuse, N. Y. Grounding device or connecter. 1,860,116; May 24.

Pedersen, Ingvald O., and E. G. Stahle, Pittsburgh, Pa., assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Surfacing machine. 1,860,117; May 24.

Peebles, Thomas A., Mount Lebanon, assignor to J. M. Hopwood, Dormont, Pa. Combustion control. Re18,479; May 24.

Pelican Well Tool and Supply Company. (See Stewart, Mark G., assignor.)

Peloquin, Paul, Brooklyn, N. Y. Combined door lock and opener. 1,859,460; May 24.

Pemberton, Uz C., and J. B. Johnson, Tampa, Fla. Artificial bait. 1,859,681; May 24.

Pemberton, Uz C., and J. B. Johnson, Tampa, Fla. Artificial bait. 1,869,713; May 24.

Pennsylvania Crusher Company. (See Hartshorn, Stanley D., assignor.)

People of the United States of America, The. (See McBirney, Stanley W.)

Pepper, David, Philadelphia, Pa. Forming battery plates. 1,860,051; May 24.

Pereles, Alvin A., assignor to Pereles Bros. Inc., Milwaukee, Wis. Headgear. 1,859,313; May 24.

Pereles Bros. Inc. (See Pereles, Alvin A., assignor.)

Perkins, Julian L., West Springfield, Mass. Speed reduction mechanism. 1,859,462; May 24.

Peterson, Adolphe C., Minneapolis, Minn. Manually selective variable transmission means. 1,859,461; May 24.

Peterson, Carl D. (See Padgett, J. E., and Peterson.)

Peterson, Charles F., Scotia, N. Y., assignor to General Electric Company. Making laminated insulation explosion chamber members. 1,860,158; May 24.

Peterson, Harold O., Riverhead, N. Y., assignor to Radio Corporation of America. Transmission line. 1,860,052; May 24.

Peterson, Julius, assignor to Deere & Company, Moline, Ill. Frog for lister plows. 1,869,463; May 24.

Pfandler Co., The. (See Jacobsen, Jens N., assignor.)

Pfandler Co., The. (See Pheteplace, Walter D., assignor.)

Pflum, Carl, and N. Guerin, Connersville, Ind. Fender adjusting means. 1,860,200; May 24.

Phelan, Louis A. M., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Electric flasher. 1,859,934; May 24.

Phelps, George H., Warehouse Point, Conn., assignor, by mesne assignments, to Metropolitan Engineering Company. Refrigerating machine. 1,859,840; May 24.

Pheteplace, Walter D., assignor to The Pfandler Co., Rochester, N. Y. Thin metal tank and making the same. 1,859,632; May 24.

Pier, Mathias, Heidelberg, and K. Winkler and K. Wissel, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Destructive hydrogenation of carbonaceous materials. 1,859,314; May 24.

Pierce, Stephen C., jr. (See Larmour, H. M., and Pierce.)

Piggott, Henry A. (See Payman, J. B., and Piggott.)

Pike, Harry H. (See Gottschall, C. R., and Pike.)

Pittsburgh Screw & Bolt Corporation. (See Smith, George S., assignor.)

Platen-Munters Refrigerating System Aktiebolag. (See Munters, Carl G., assignor.)

Poeter, E. & Co. (See Poeter, Edward, assignor.)

Poeter, Edward, assignor to E. Poeter & Co., Irvington, N. J. Latch device for hand bags. 1,859,789; May 24.

Poole, Charles R. (See Schechter, J., and Poole.)

Porter, Willard E., Swampscott, Mass., assignor to General Electric Company. Time switch. 1,860,159; May 24.

Porzellanfabrik C. M. Hutschenreuther A. G. (See Merk, August, assignor.)

Potts, James, London, England. Gear or gearing. 1,859,528; May 24.

Potts, Loys C., and O. P. Romine, Oklahoma City, Okla. Portable apparatus for spraying vegetables. 1,859,935; May 24.

Potts, Morton E. (See Potts, Winnie L. and M. E.)

Potts, Winnie L. and M. E., Parsons, Kans. Burial vault. 1,860,266; May 24.

Poux, Noel J., assignor to Hookless Fastener Company, Meadville, Pa. Separable fastener. 1,859,572; May 24.

Powers, George H., Gloucester, Mass. Communication cartridge for undersea vessels. 1,859,791; May 24.

Powers, George S., assignor of one-half to E. Ventre, Opelousas, La. Protective system for motion picture machines. 1,859,790; May 24.

Pratt, Frank M., New York, N. Y. Indicating device. 1,859,750; May 24.

Prescott, Sidney I., New York, N. Y. Tire rim and mount. 1,859,936; May 24.

Presto Corporation of America, et al. (See Larsen, Louis G., assignor.)

Presto Machine Products Company, et al. (See Larsen, Louis G., assignor.)

Preston, Herbert E., assignor to American Engineering Company, Philadelphia, Pa. Furnace tuyère. 1,860,296; May 24.

Prettyman, Jacob H., assignor to The Fairfield Engineering Company, Marion, Ohio. Friction clutch mechanism. 1,859,600; May 24.

Prillaman, James M. (See Prillaman, J. M., and Shipwash, assignors.)

Prillaman, James M., and A. W. Shipwash, assignors to said James M. Prillaman, Martinsville, Va. Varnish salvaging workholder. 1,859,983; May 24.

Prince, David C., Schenectady, and W. Turnpenny, Albany, N. Y., assignors to General Electric Company. High tension circuit interrupter. 1,860,337; May 24.

Prince, Frank, East Gary, Ind. Fixture for rebabbitting locomotive crossheads. 1,859,464; May 24.

Prins, Hendrik J., Hilversum, Netherlands. Apparatus for the impregnation of hollow articles. 1,859,841; May 24.

Prosperity Company Inc., The. (See Davis, Ernest, assignor.)

Prouty, Willis O., Hermosa Beach, assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif. Ceramic character or symbol. 1,859,792; May 24.

Pschorr, Karl, Arzberg, Germany, assignor to Schumann China Corporation, New York, N. Y. Plate or similar article. Des. 87,022; May 24.

Pschorr, Karl, Arzberg, Germany, assignor to Schumann China Corporation, New York, N. Y. Plate or similar article. Des. 87,023; May 24.

Publicker, Inc. (See Stein, Jacob, assignor.)

Punte, William F., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Easy opening container. 1,860,201; May 24.

Pure Oil Company, The. (See Carr, Richard H., assignor.)

Pure Oil Company, The. (See Hymen, J., and Schlandt, assignors.)

Pure Oil Company, The. (See Osterstrom, Rudolph C., assignor.)

Purington, Ellison S., Gloucester, Mass., assignor to John H. Hammond, jr. System of broadcasting. 1,859,465; May 24.

Purser, William J., Mineral Ridge, assignor to The Bostwick Steel Lath Company, Niles, Ohio. Reenforced metal lath. 1,859,409; May 24.
Pyrene-Minimax Corporation. (See Burmeister, Hans, assignor.)
Quinby, Edwin J., Yonkers, N. Y., assignor to Radio Corporation of America. Railway electric signal system. 1,859,466; May 24.
Quinn, Philip J., Lincoln, Nebr. Highway protective flag. 1,859,599; May 24.
Rader, Elisha L., Otis Orchards, Wash. Sign. Des. 87,024; May 24.
Radford, George S., New Canaan, Conn., assignor to Belding Heminway Company, New York, N. Y. Spool for thread. 1,859,842; May 24.
Radio Corporation of America. (See Glebe, E., and Scheibe, assignors.)
Radio Corporation of America. (See May, Russell P., assignor.)
Radio Corporation of America. (See Peterson, Harold O., assignor.)
Radio Corporation of America. (See Quinby, Edwin J., assignor.)
Radio Corporation of America, The. (See Vermeulen, Roelof, assignor.)
Radio Corporation of America. (See Yagi, Hidetsugu, assignor.)
Rahm, Eugen. (See Kümmel, Reinhold, assignor.)
Ramsey, Elmer R., Larchmont, N. Y., and A. W. Bull, Naugatuck, Conn., assignors, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Manufacture of sugar. 1,860,321; May 24.
Ranstead, Norman H., assignor to Jenkins Petroleum Process Company, Chicago, Ill. Effecting visuality by reflected light. 1,859,682; May 24.
Rapids, Felix R., Chicago, Ill. Hair cleaning device. 1,859,714; May 24.
Rasch, Royal H., et al. (See Richter, G. A., Schur, and Rasch.)
Rasmussen, Chester A., Long Beach, Calif. Casing head. 1,859,793; May 24.
Rath, John W., Waterloo, Iowa. Identifying products of a particular origin. 1,859,467; May 24.
Rathbun, Merrill, assignor to Norton Laboratories, Inc., Lockport, N. Y. Connecting knobs to shafts. 1,859,794; May 24.
Rathsburg, Hans, Furth, near Nuremberg, Germany. Manufacture of tetrazene explosives. 1,859,529; May 24.
Rauch, John T., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,859,795; May 24.
Rawling, Francis G. (See Rue, J. D., Wells, and Rawling.)
Ray, Joshua R. (See Ray, Thomas and J. R.)
Ray, Thomas and J. R., Manistee, Mich. Crystal building pan. 1,860,118; May 24.
Raybestos-Manhattan, Inc. (See Repony, Daniel, assignor.)
Rea, Walter C., assignor to Detachable Bit Corporation of America, New York, N. Y. Drill. 1,859,342; May 24.
Ready, William A., Brookline, Mass. Electric circuit tuning device. 1,859,796; May 24.
Ready, William A., Brookline, Mass. Spraying apparatus. 1,859,797; May 24.
Redmond, Frederic J. (See Road, R. A., and Redmond.)
Red Spot Electric Co. (See Staley, Miles E., assignor.)
Reese, John, Goodhue, Minn. Folding fire escape ladder. 1,859,984; May 24.
Reinhold, Oscar A., Chicago, Ill. Table lamp. Des. 87,025; May 24.
Reisman, Adolph B., New York, N. Y. Belt. 1,860,202; May 24.
Rekar, Jay J., Los Angeles, Calif. Portable wall transformer for orificial applicators. Des. 87,026; May 24.
Rekar, Jay J., Los Angeles, Calif. Portable combination body raying reflector and orificial applicator stand. Des. 87,027; May 24.
Repony, Daniel, Clifton, assignor to Raybestos-Manhattan, Inc., Passaic, N. J. Splice and splicing belts and the like. 1,859,468; May 24.
Republic Steel Corporation. (See Ellison, Harry C., assignor.)
Reyrolle, A., & Company Limited. (See Linstow, F. N., and Anderson, assignors.)
Rheinische Metallwaaren- und Maschinenfabrik. (See Stanze, Louis, assignor.)
Rhinevault, Glenn G., assignor to W. B. Mershon Co., Saginaw, Mich. Machine for making parquetry blocks. 1,859,633; May 24.
Rial, Wirt D. (See Black, J. C., Rial, and McConnell.)
Rice, George D., Chicago, Ill. Therapeutic lamp. 1,859,601; May 24.
Richards, Alfred E. (See Hope, E., and Richards.)
Richardson, A. J., et al. (See Head, Herman E., assignor.)
Richardson Company, The. (See Stevenson, E. P., and Buron, assignors.)
Richardson, Donald E., Chicago, Ill. Current measuring device for high frequency circuits. 1,859,469; May 24.
Richfield Oil Company of California. (See Black, J. C., Rial, and McConnell, assignors.)
Richter, George A., assignor to Brown Company, Berlin, N. H. Regenerating spent alkaline liquor to fresh acid cooking liquor. 1,859,888; May 24.
Richter, George A., assignor to Brown Company, Berlin, N. H. Effecting refining reactions on cellulosic pulps. 1,859,891; May 24.
Richter, George A., and M. O. Schur, assignors to Brown Company, Berlin, N. H. Beating process and apparatus for practising same. 1,859,890; May 24.
Richter, George A., M. O. Schur, and R. H. Rasch, assignors to Brown Company, Berlin, N. H. Conditioning a tissue of cellulose fiber for conversion into cellulose derivatives and product of same. 1,859,889; May 24.
Richter, William F., assignor to Chemical Holding Corporation, Apollo, Pa. Treating cellulose material. 1,860,053; May 24.
Ricker, Norman H., assignor to Western Electric Company, Incorporated, New York, N. Y. Acoustic device. 1,859,892; May 24.
Riedel, Walter W., assignor to Delco Products Corporation, Dayton, Ohio. Thermostatic switch. 1,859,985; May 24.
Ries, Edward F., Evanston, Ill. Vapor condensing apparatus. 1,859,602; May 24.
Riggert, Christ H. (See Schrage, Henry C., assignor.)
Riley, Robert S., Worcester, Mass., assignor, by mesne assignments, to The Air Preheater Corporation, New York, N. Y. Heat exchange apparatus. 1,859,573; May 24.
Rishel, Lewis M., Detroit, Mich. Pipe covering. 1,860,203; May 24.
Rissi, Henry J., Collinsville, Ill. Transplanting tool. 1,859,603; May 24.
Ritter, Malte, assignor to Magdeburger Werkzeugmaschinenfabrik Aktiengesellschaft, Magdeburg, Germany. Arrangement on lathes and other machine tools with drive by hydraulic stepless gearings. 1,859,715; May 24.
Ritz Woller, Oliver C., Chicago, Ill. Protection plate for automobiles. 1,859,634; May 24.
Ritz-Woller, Oliver C., Chicago, Ill. Suction cup. 1,859,893; May 24.
Rix, William R., assignor to A. N. Russell & Sons Company, Ilion, N. Y. Cabinet construction. 1,859,798; May 24.
Rix, William R., assignor to A. N. Russell & Sons Company, Ilion, N. Y. Corner joint for cabinets or the like. 1,859,799; May 24.
Road, Richard A., New York, N. Y., and F. J. Redmond, Arlington, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Selector brush. 1,859,470; May 24.
Roberts, James H., Blytheville, Ark. Nut lock. 1,860,297; May 24.
Roberts, Samuel H., Lexington, Ky. Luggage carrier. 1,860,204; May 24.
Robinson, Charles A., Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping uppers over lasts. 1,859,471; May 24.
Rockwell, Edward A., Long Island City, N. Y. Vehicle brake. 1,859,530; May 24.
Rogers, Harrison W., assignor to M. A. Schlesinger, New York, N. Y. Film control and guiding device for motion picture projectors. 1,860,330; May 24.
Rola Company, The. (See Engholm, B. A., and Swent, assignors.)
Roller, Frank W., East Orange, N. J., assignor to Roller-Smith Company. Wall switch. 1,860,054; May 24.
Roller, Frank W., East Orange, N. J., assignor to Roller-Smith Company. Electrical measuring instrument. 1,860,055; May 24.
Roller, Frank W., East Orange, N. J., assignor to Roller-Smith Company. Electrical measuring instrument. 1,860,056; May 24.
Roller-Smith Company. (See Roller, Frank W., assignor.)
Rollo, Walter R., Utica, N. Y., assignor, by mesne assignments, to American La France and Foamite Corporation. Fire extinguisher. 1,859,843; May 24.
Rolshoven, Eduard, Uetersen, Germany. Rail joint. 1,859,472; May 24.
Romine, Oliver P. (See Potts, L. C., and Romine.)
Rose, Joseph, Victoria, British Columbia, Canada. Vending machine. 1,859,635; May 24.
Rosenburg, Robert. (See Brinck, Harry O., assignor.)
Ross, Lorenzo R., Butler, Pa. Mechanical connection. 1,859,531; May 24.
Rotolo, George, Glendale, N. Y. Adjustable goggles. 1,859,532; May 24.
Rougé, Raymond, Paris, France. Electric traction system. 1,859,343; May 24.
Rowe, Irving R., assignor to The Atwood Machine Company, Stonington, Conn. Winding machine. 1,859,844; May 24.
Rowe, Merton, Salisbury, Mass. Counter for turn shoes. 1,859,533; May 24.
Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)
Ruben Patents Company. (See Ruben, Samuel, assignor.)
Ruben, Samuel, assignor to Ruben Patents Company, New Rochelle, N. Y. Resistance device. 1,859,344; May 24.
Rue, John D., Madison, Wis., S. D. Wells, Quincy, Ill., and F. G. Rawling, Madison, Wis., assignors to A. M. Hyde, Secretary of Agriculture of the United States. Treatment of wood for the production of pulp. 1,859,845; May 24.

Rue, John D., Madison, Wis., S. D. Wells, Quincy, Ill., and F. G. Rawling, Madison, Wis., assignors to A. M. Hyde, Secretary of Agriculture of the United States. Wood pulp and making the same. 1,859,846; May 24.
Rue, John D., Madison, Wis., S. D. Wells, Quincy, Ill., and F. G. Rawling, Madison, Wis., assignors to A. M. Hyde, Secretary of Agriculture of the United States. Pulped material and preparing the same. 1,859,847; May 24.
Rue, John D., Madison, Wis., S. D. Wells, Quincy, Ill., and F. G. Rawling, Madison, Wis.; said Rue and said Rawling assignors to A. M. Hyde, Secretary of Agriculture of the United States. Production of fibrous pulp from vegetable material. 1,859,848; May 24.
Russell, A. N., & Sons Company. (See Rix, William R., assignor.)
Rutrle, Frank, Shelby, Mont. Airplane. 1,859,716; May 24.
Rutrle, Frank, Shelby, Mont. Drilling auger. 1,859,717; May 24.
Sabatino, Gaetano J., Baltimore, Md. Stitch remover. 1,860,057; May 24.
Sachse, Herman P., assignor to Central Scientific Company, Chicago, Ill. Trip scale. 1,859,604; May 24.
Sandquist, Oscar A., Coral Gables, Fla. Seaplane runway. 1,859,987; May 24.
Sangers, John C., Cleveland, Ohio. Mattress stand. 1,859,636; May 24.
Santos, John R. L., assignor to The Bartlett Hayward Company, Baltimore, Md. Gas holder. 1,859,718; May 24.
Saunders, Arthur B., Nashua, N. H., assignor to Johns-Manville Corporation, New York, N. Y. Cardboard machine. 1,859,986; May 24.
Schaefer, Carl A., Springfield, assignor, by mesne assignments, to The Buckeye Incubator Manufacturing Company, Beachwood, Ohio. Electric switch. 1,859,605; May 24.
Schafer, Conrad B. (See Lawson, P. C., and Schafer.)
Schantz, Arnold A., Detroit, Mich. Mechanical burglar alarm for home or transient use. 1,859,345; May 24.
Schechter, Joseph, Brooklyn, assignor to Segal Lock & Hardware Co. Inc., New York, N. Y. Key cutting machine. 1,860,160; May 24.
Schechter, Joseph, Brooklyn, and C. R. Poole, assignors to Segal Lock & Hardware Co. Inc., New York, N. Y. Lock. 1,860,161; May 24.
Scheibe, Adolf. (See Glebe, E., and Scheibe.)
Schellin, Bruno, Lubars, near Berlin, Germany. Rail joint. 1,859,410; May 24.
Schemmel, Robert C., Union City, Ind. Electric wire conduit. 1,859,988; May 24.
Schenker, Abraham W., Forest Hills, assignor to The Electric Welding Company of America, Brooklyn, N. Y. Beam protector. 1,860,205; May 24.
Schiess-Defries Aktiengesellschaft. (See Schlegelmilch, August, assignor.)
Schiller, Morgan B., assignor to American Tubular Elevator Company, Pittsburgh, Pa. Knockdown structural elevator tower. 1,859,894; May 24.
Schilling, A., & Co. (See Harlan, Marion E., assignor.)
Schlagenhauf, Johann, Oerlikon, near Zurich, Switzerland. Coupling for trailers. 1,859,534; May 24.
Schlandt, Arthur F. (See Hyman, J., and Schlandt.)
Schlegelmilch, August, assignor to Schiess-Defries Aktiengesellschaft, Dusseldorf, Germany. Turning ring-bearing for machine tools. 1,859,989; May 24.
Schlenstedt, Oswig, Mulheim-Ruhr-Speldorf, Germany. Metal-extrusion press. 1,859,473; May 24.
Schlenstedt, Oswig, Mulheim-Ruhr-Speldorf, assignor of one-half to Hydraulik Gesellschaft mit beschrankter Haftung, Duisburg, Germany. Metal extrusion press. 1,859,990; May 24.
Schlesinger, Max A. (See Rogers, Harrison W., assignor.)
Schlesische Spiegelglas Manufactur Carl Tielsch, G. m. b. H. (See Macht, Karl, assignor.)
Schletter, Richard E., assignor to Schletter & Zander, Inc., Philadelphia, Pa. Yarn feeding means for straight knitting machines. 1,859,411; May 24.
Schletter & Zander, Inc. (See Schletter, Richard E., assignor.)
Schmidt, C., Company, The. (See Ahrens, Edwin J., assignor.)
Schmidt, Ernest H., Cleveland Heights, and H. L. Spence, assignors to National Malleable and Steel Castings Company, Cleveland, Ohio. Draft attachment. 1,859,535; May 24.
Schrage, Henry C., West Point Township, Butler County, assignor of one-half to C. H. Riggert, Allison, Iowa. Swinging table and ironing board. 1,859,719; May 24.
Schuda, Ernest J., assignor to Lovell Manufacturing Company, Erie, Pa. Wringer. 1,859,637; May 24.
Schulse, H. E., Inc. (See Schulse, Herman E., assignor.)
Schulse, Herman E., Bayonne, N. J., assignor to H. E. Schulse, Inc. Shoe shining last. 1,859,536; May 24.
Schulz, Arthur P. (See Teller, J., and Schulz.)
Schumacher, Conrad. (See Gaisman, H. J., and Schumacher.)
Schumann China Corporation. (See Pschorr, Karl, assignor.)
Schur, Milton O. (See Richter, G. A., and Schur.)
Schur, Milton O., et al. (See Richter, G. A., Schur, and Rasch.)
Schwartz, Louis R., Lodgepole, Nebr. Snapper roller pad. 1,859,800; May 24.
Schwartz, Samuel A., St. Paul, Minn. Towel service apparatus. 1,859,937; May 24.
Schwartz, Samuel A., St. Paul, Minn. Towel service apparatus. 1,860,206; May 24.
Schwartz, Samuel A., St. Paul, Minn. Towel cabinet. 1,860,207; May 24.
Schwartz, Samuel A., St. Paul, Minn. Cabinet for towels. 1,860,208; May 24.
Schwarzkopf, Arthur R., assignor to Theo. A. Kochs Company, Chicago, Ill. Adjustable headrest. 1,860,058; May 24.
Schwarzwalder, Dr. Wilhelm, et al. (See Maisel, Robert, assignor.)
Scott & Williams, Incorporated. (See Page, Albert E., assignor.)
Scott & Williams, Inc. (See Sutphen, John L., assignor.)
Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Age resisting vulcanized rubber compound. 1,859,801; May 24.
Scovill Manufacturing Company. (See Jones, David, assignor.)
Seeley, Harold T. (See Bany, H., and Seeley.)
Seemel, Bruno E., Brooklyn, assignor to Automatic Coin-wrapping Machine Corporation, New York, N. Y. Coin feeder. 1,859,315; May 24.
Seemel, Bruno E., Brooklyn, assignor to Automatic Coin-wrapping Machine Corporation, New York, N. Y. Coin stacker. 1,859,574; May 24.
Segal Lock & Hardware Co. Inc. (See Schechter, Joseph, assignor.)
Segal Lock & Hardware Co. Inc. (See Schechter, J., and Poole, assignors.)
Segal, Meyer, Chicago, Ill. Heat pad for molding compounds. 1,859,991; May 24.
Sell, Gilbert E., Newark, N. J. Method of and apparatus for subdividing material. 1,859,992; May 24.
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Sessions, Donald W., Finchley, London, England. Lifting jack. 1,859,993; May 24.
Sessions, Donald W., Finchley, London, England. Lifting jack. 1,859,994; May 24.
Seward, Clarence L., jr. (See Lonnquest, T. C., and Seward.)
Shanafelt, Donald M., Lakewood, G. B. Nisbet, Cleveland, and A. H. Shonkwiler, Lakewood, assignors to The Otis Steel Company, Cleveland, Ohio. Apparatus for continuous treatment of sheet steel. 1,859,802; May 24.
Shanafelt, Donald M., Lakewood, G. B. Nisbet, Cleveland, and A. H. Shonkwiler, Lakewood, assignors to The Otis Steel Company, Cleveland, Ohio. Apparatus for continuous treatment of sheet steel. 1,859,803; May 24.
Shawver, Roy E., Dallas, Tex. Wood turning lathe. 1,859,474; May 24.
Sheehan, William M., Marion, Pa., assignor to General Steel Castings Corporation, Granite City, Ill. Railway vehicle underframe. 1,859,895; May 24.
Sheehan, William M., Marion, Pa., assignor to General Steel Castings Corporation, Granite City, Ill. Railway underframe. 1,859,938; May 24.
Shell, Gustave A., Wayne, Mich. Shock absorber. 1,859,995; May 24.
Shell Petroleum Corporation. (See Davenport, E. L., and Jackson, assignors.)
Sherer-Gillett Company. (See Lenhart, William F., assignor.)
Shields, Andrew G., Attleboro, Mass. Toilet accessories container. Des. 87,028; May 24.
Shipwash, Arthur W. (See Prillaman, J. M., and Shipwash.)
Shofer, Marc R., Minneapolis, Minn., assignor to Iowa Fiber Box Company, Keokuk, Iowa. Can separator for shipping containers. 1,858,537; May 24.
Shonkwiler, Albert H. (See Shanafelt, D. M., Nisbet, and Shonkwiler.)
Shook, Florain J., assignor to National Rubber Machinery Company, Akron, Ohio. Tire building machine. 1,859,538; May 24.
Siemens Brothers & Company Limited. (See Christian, David A., assignor.)
Siemens & Halske, Aktiengesellschaft. (See Jipp, August, assignor.)
Siers, John A. H., Jersey City, N. J. Slidable fastening device. 1,859,751; May 24.
Sievern, Frederick, and E. M. Lynch, McKeesport, Pa. Oil saving dome. 1,859,606; May 24.
Silex Company, The. (See Boever, Anne M., assignor.)
Silvester, William A., Blackley, Manchester, assignor to British Dyestuffs Corporation Limited, Manchester, England. Dyestuffs of the urea-azine series and preparing the same. 1,859,477; May 24.
Simmons Company. (See Kusterle, Frank, assignor.)
Simpson, Isaac, Wilmerding, assignor of one-half to F. E. Lyford, Waverly, Pa. Spark arrester. 1,859,804; May 24.
Simpson, Tracy W., Glencoe, Ill., assignor to American Hair & Felt Company. Insulating blanket and controlling the distortion thereof. 1,859,996; May 24.
Sinadin, John. (See Masters, B. L., and Sinadin.)
Sinclair, Harold, Surbiton Hill, England. Hydraulic transmission gear and brake. 1,859,607; May 24.

Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Sinclair Refining Company. (See Herthel, E. C., and Tifft, assignors.)
Sinclair Refining Company. (See Ischle, William V., assignor.)
Sinclair Refining Company. (See Isom, Edward W., assignor.)
Singer Manufacturing Company, The. (See Karle, John D., assignor.)
Singer Manufacturing Company, The. (See Willard, C. T., and Kaier, assignors.)
Skillman, Thomas S., Aldwych, London, England, assignor to Western Electric Company, Incorporated. Semiautomatic telephone system. 1,859,476; May 24.
Skillman, Thomas S., and L. G. Freeth, Aldwych, London, England, assignors to Western Electric Company, Inc., New York, N. Y. Call indicator system. 1,859,475; May 24.
Sleeper, Ned M., Upper Lake, Calif., assignor of one-third to W. H. Edmands and one-third to J. C. McFadyen. Toy airplane. 1,859,805; May 24.
Slidell, Kemper, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Cellular building material. 1,859,539; May 24.
Slough, Frank M., Lakewood, Ohio. Liquid level indicator. 1,860,209; May 24.
Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Grab iron for railway cars. 1,859,346; May 24.
Smalley, Edwin L. (See Condit, F. J., and Smalley.)
Smalley, Ira E. (See Gothman, L., and Smalley.)
Smith, George S., assignor to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa. Cable support for highway barriers. 1,859,575; May 24.
Smith, John W., assignor to Aero Service Corporation, Philadelphia, Pa. Apparatus for developing films. 1,860,059; May 24.
Smith, Joseph K., Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y. Alloy. 1,859,413; May 24.
Smith, Lewis R., receiver. (See Jackson, Alfred F.)
Smith, Lowell J., assignor to Stant Manufacturing Co., Connersville, Ind. Radiator cap. Des. 87,029; May 24.
Smith, Ulysses S., Hannibal, Mo. Tonsillectome. 1,859,412; May 24.
Smittle, Walter R., St. Louis, Mo. Packing ring. 1,860,267; May 24.
Societa Italiana Miglioramento Armi. (See de Luce, G., and Guerra, assignors.)
Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey. (See Boudin, Louis, assignor.)
Société Ateliers St. Eloi. (See Louchet, Edmond, assignor.)
Societe d'Etudes et de Construction d'Apparils de Telemecanique. (See Bernady, Raoul, assignor.)
Société d'Etudes Scientifiques et d'Entreprises Industrielles. (See Mitteau, Ferdinand, assignor.)
Société Electro Metallurgique de Montricher. (See Miguet, Paul L. J., assignor.)
Societe Francaise de Constructions Mecaniques Anciens Etablissements Cail. (See Deschamps, Jules, J., assignor.)
Society of Chemical Industry in Basle. (See Hartmann, M., and Isler, assignors.)
Sonoco Products Company. (See Dunlap, Charles K., assignor.)
Spaeth, Charles, Flushing, assignor to Claude Neon Lights, Inc., New York, N. Y. Rotary interrupter. 1,859,940; May 24.
Spanner, Hans J. (See Spanner, H. J., and Doering, assignors.)
Spanner, Hans J., Berlin, Germany, and U. Doering, New York, N. Y., assignors, by mesne assignments, to said Spanner. Gas filled electric discharge device. 1,860,210; May 24.
Speidel, Albert E. R. (See Johnson, Sylvester A., assignor.)
Spence, Hubert L. (See Schmidt, E. H., and Spence.)
Spence, John A., Indianapolis, Ind. Lawn edge trimmer. 1,859,806; May 24.
Spencer, Harold F. (See Haines, Stacey A., assignor.)
Spencer Thermostat Company. (See Bush, Vannevar, assignor.)
Sperry, Elmer A., jr., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., Automatic control of aircraft. 1859,752; May 24.
Sperry Gyroscope Company. (See Sperry, Elmer A., jr., assignor.)
Sperry-Sun Well Surveying Company. (See Winn, William E., assignor.)
Spicer Manufacturing Corporation. (See Padgett, J. E., and Peterson, assignors.)
Spitalny, Fred, assignor to Superior Products Corporation, Elizabeth, N. J. Vanity case. Des. 87,030; **May 24.**
Sponsel, Charles, Mancos, Colo. Hypodermic kit. 1,859,316; May 24.
Sponsel, Charles, Mancos, Colo. Branding iron. 1,859,317; May 24.
Squibb, E. R., & Sons. (See Christiansen, W. G., and Lauter, assignors.)
Stability Meter Corporation. (See Wilson, John L., assignor.)
Staedtler, J. S., Firm. (See Kreutzer, Karl, assignor.)
Stahle, Erik G. (See Pedersen, I. O., and Stahle.)
Staley, Miles E., assignor to Red Spot Electric Co., Inc., Tacoma, Wash. Electric fluid heater. 1,859,939; **May 24.**
Standard-I. G. Company. (See Pier, M., Winkler, and Wissel, assignors.)
Standard Oil Company. (See Ducommun, Jesse C., assignor.)
Standard Oil Company. (See Engbrecht, Herman J., assignor.)
Standard Oil Company. (See French, August, assignor.)
Standard Oil Company. (See Wilson, Robert E., assignor.)
Standard Sanitary Manufacturing Company. (See Brain, George, assignor.)
Standard Steel Works. (See Gredell, Otto N., assignor.)
Standish, Myles, Council Bluffs, Iowa. Truck body. 1,860,119; May 24.
Stange, Louis, Sommerda, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Safety device for firearms having a longitudinally movable closure element. 1,859,720; May 24.
Stanley, Enos, Hackensack, Minn. Hydraulic pump. 1,859,721; May 24.
Stant Manufacturing Co. (See Johnson, Glen A., assignor.)
Stant Manufacturing Co. (See Smith, Lowell J., assignor.)
Steckmann, August K. L., Peoria, Ill. Can opener. 1,859,478; May 24.
Steel and Tubes, Inc. (See Sussman, Maxwell H., assignor.)
Stein, Jacob, assignor to Publicker, Inc., Philadelphia, Pa. Distilling aliphatic esters. 1,859,997; May 24.
Steiner, Hubbard W. (See Keys, W. C., Steiner, and Eldridge.)
Steinle, Adolf, Jena, Germany, assignor to N. V. Nederlandsche Instrumenten Compagnie, The Hague, Netherlands. Fire control apparatus. 1,859,722; May 24.
Stelzner, Hermann, assignor to O. H. Drager, Lubeck, Germany. Regenerating the breathing air in closed rooms. 1,860,298; May 24.
Stern, Lewis J., New York, N. Y. Electric clock. 1,860,120; May 24.
Stevens, Horace D. and N. H. Meyers, assignors to The Firestone Tire and Rubber Company, Akron, Ohio. Mold handling device. 1,859,849; May 24.
Stevenson, Earl P., Newton, and H. A. Buron, Boston, Mass., assignors to The Richardson Company, Lockland, Ohio. Forming pulps. 1,859,414; May 24.
Stewart, Mark G., assignor to Pelican Well Tool and Supply Company, Shreveport, La. Casing seal for wells. 1,860,268; May 24.
Stewart, Roy L., Birmingham, Ala., assignor to F. C. Fantz, Webster Groves, Mo. Return bend fitting. 1,859,850; May 24.
Stiefel, Ralph C., Ellwood City, Pa. Straightening machine. 1,859,851; May 24.
Stimpson, Walter F., Louisville, Ky. Tool grinder. 1,860,211; May 24.
Stockham, Herbert C., Birmingham, Ala., assignor to Fred C. Fantz, Webster Groves, Mo. Return bend fitting. 1,859,852; May 24.
Stokely, Ray L., Floral Park, assignor to Bell Telephone Laborartories, Incorporated, New York, N. Y. Telephone exchange system. 1,859,941; May 24.
Stokes, Robert J., Princeton Township, Mercer County, assignor to Thermoid Rubber Company, Trenton, N. J. Power belt. 1,860,269; May 24.
Stout, William B., Detroit, Mich. Airplane. 1,859,807; **May 24.**
Straight, Merton T., Des Moines, Iowa. Manufacturing building brick. 1,859,723; May 24.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Cultivator. 1,859,415; May 24.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Plow. 1,859,896; May 24.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Plow. 1,859,942; **May 24.**
Strandwitz, William J., Camden, N. J. Sun car. 1,860,299; May 24.
Streitwolf, Karl, Frankfort-on-the-Main, A. Fehrle, Bad Soden-on-Taunus, and W. Herrmann and P. Fritzsche, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Stable aqueous solutions of hydroxy-ethyl-amino salts of 3-acetylamino-4-hydroxybenzenearsonic acid. 1,859,683; May 24.
Streitwolf, Karl, Frankfort-on-the-Main, A. Fehrle, Bad-Soden-on-the-Taunus, W. Herrmann and P. Fritzsche, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Hydroxy-ethylamino salts of 3-acetylamino-4-hydroxy-benzenearsonic acid. 1,859,684; May 24.
Struve, Frederick E., assignor to Apex Hosiery Company, Philadelphia, Pa. Full fashioned clocked hosiery and production. 1,859,318; May 24.
Stryker, George B., jr., assignor to The Weatherford Products Company, Memphis, Tenn. Making shingles. 1,860,060; May 24.
Stulik, Ernest, Buffalo, N. Y. Display stand. Des. 87,031; **May 24.**
Sullivan, Harry H., Rochester, N. Y. Variable speed driving mechanism for automatic printers and finishers for sensitized material. 1,860,212; May 24.

Sullivan, Michael F., New York, N. Y. Gearless shift and freewheel construction for vehicles. 1,859,347; May 24.
Sulzer Freres Societe Anonyme. (See Tobler, Werner, assignor.)
Summey, David L., Waterbury, Conn. Metal extruding apparatus. 1,859,753; May 24.
Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Fastening device. 1,859,540; May 24.
Sundblad, Folke W., Steubenville, Ohio. Open-hearth furnace and apparatus for charging the same. 1,859,754; May 24.
Sundstrand Corporation. (See Sundstrand, Oscar J., assignor.)
Sundstrand, Oscar J. Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del. Subtraction key latch. 1,859,897; May 24.
Superior Products Corporation. (See Spitalny, Fred, assignor.)
Superior Tool and Die Company. (See Janiszewski, Kasimer, assignor.)
Sussmann, Maxwell H., New York, N. Y., assignor, by mesne assignments, to Steel and Tubes, Inc. Machine for cutting bars, pipes, etc. 1,859,319; May 24.
Sutherland, Daniel M., jr. (See Brown, Roger B., assignor.)
Sutphen, John L., Philadelphia, Pa., assignor to Scott & Williams, Inc., New York, N. Y. Automatic split foot stocking knitting machine. 1,860,162; May 24.
Svendsen, Svend S., assignor to Clay Reduction Company, Chicago, Ill. Hydrated silica. 1,859,998; May 24.
Swan Research, Inc. (See White, Harold E., assignor.)
Swent, John J. (See Engholm, B. A., and Swent.)
Swift and Company. (See De Moss, Leonard, assignor.)
Swihart, Frank, assignor to The Dalton Foundries Inc., Warsaw, Ind. Device for removing hub assemblies from axles. 1,859,348; May 24.
Symington Company, The. (See Martin, Mark H., assignor.)
T & S Corporation. (See Taylor, Steadman O., assignor.)
Tan Sad Chair Company, The (1931) Limited. (See Headley, Frederick H.)
Tanzi, Guido, Brooklyn, N. Y., assignor to Mario Tanzi & Bros., Inc., Boston, Mass. Manufacturing macaroni. 1,859,416; May 24.
Tanzi, Mario & Bros., Inc. (See Tanzi, Guido, assignor.)
Tappert, Emil A., Chicago, Ill. Ventilator. 1,860,061; May 24.
Tark, Marcus B., and R. L. Cleveland, Philadelphia, Pa., assignors to Link-Belt Company, Chicago, Ill. Sludge bed cleaning apparatus. 1,860,300; **May 24.**
Tatum, John J., Baltimore, Md. Vehicle spring. 1,859,808; May 24.
Taylor, Jacob C., and M. A., Pleasantville, Iowa. Bank protection device. 1,859,638; May 24.
Taylor, James S., Tulsa, Okla. Hydraulic synchronized lifting means for slips. 1,860,062; **May 24.**
Taylor, John C., jr., Easton, Pa., assignor to Taylor Wharton Iron and Steel Company, High Bridge, N. J. Self-sharpening dipper tooth. 1,860,338; May 24.
Taylor, Maurice A. (See Taylor, Jacob C. and M. A.)
Taylor, Robert B., Kapaa, B. B. Henderson, and O. R. Olsen, Lihue, Hawaii. Juice distributor. 1,859,724; May 24.
Taylor, Steadman O., St. Louis, Mo., assignor to T & S Corporation, Chicago, Ill. Fastening device. 1,859,898; May 24.
Taylor Wharton Iron and Steel Company. (See Taylor, John C., jr., assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie, m. b. H. (See Osnos, Mendel, assignor.)
Teller, Jacob, New Rochelle, and A. P. Schulz, New York, assignors to Teller Stove Designing Corporation, New York, N. Y. Range. Des. 87,032; May 24.
Teller Stove Designing Corporation. (See Teller, J., and Schulz, assignors.)
Tenuta, Vincent, Seattle, Wash. Package handling and binding apparatus. 1,859,375; May 24.
Texas Company, The. (See Bailey, Addison S., assignor.)
Thaheld, Ferl A., Dallas, Tex., assignor, by mesne assignments, to Guiberson Diesel Engine Company, Dover, Del. Internal combustion engine. 1,859,541; May 24.
Thellmod, Johan E., and B. Zettergren, assignors to H. G. Torulf, Stockholm, Sweden. Automatically working continuous gearing device. 1,859,899; May 24.
Thermoid Rubber Company. (See Stokes, Robert J., assignor.)
Thibodeaux, William E., Cleveland, Ohio. Lighting system for automobile lifts. 1,859,349; May 24.
Thomas, Jack L. (See Bailey, H. H., and Thomas.)
Thomas, Minifred D., Chicago, Ill. Nether garment. 1,859,900; May 24.
Thomas, Noble B., Logansport, Ind. Electrically heated iron. 1,860,301; May 24.
Thomas, Raymond M., Wayne, Pa. Baby's thermochest. 1,860,302; May 24.
Thompson, Andrew, Niagara Falls, assignor to The Embossing Company, Albany, N. Y. Signboard outfit. 1,859,755; May 24.
Thomson, George M., Caledonia, Ontario, assignor to Gypsum, Lime and Alabastine, Canada, Limited, Paris, Ontario, Canada. Manufacture of wall board. 1,859,853; **May 24.**
Thornton, Hiram A., Vincennes, Ind. Safety apparatus for aeroplanes. 1,859,685; May 24.
Thubron, Ernest B., Napier, New Zealand. Bottling of liquids. 1,860,270; May 24.
Thwaits, Frederick G., Wauwatosa, assignor to The Heil Co., Milwaukee, Wis. Sanitary vent for gravity milk-tanks. 1,859,479; May 24.
Tiaden, Herbert. (See Herzogenrath, H., and Tiaden.)
Tifft, Thomas D. (See Herthel, E. C., and Tifft.)
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Eye examining instrument. 1,859,756; May 24.
Timbs, Edward, Los Angeles, Calif., assignor to The National Supply Company, Toledo, Ohio. Weld lock rotary tool joint with lock ring sub. 1,859,809; May 24.
Tobler, Werner, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Fuel injection device for internal combustion engines. 1,860,063; May 24.
Told, Arnold H., assignor to Chicago Railway Equipment Company, Chicago, Ill. Rail brace. 1,860,064; May 24.
Tompkins, James G., Los Angeles, Calif. Hose supporter. 1,859,810; May 24.
Torulf, Helge G. (See Thellmod, J. E., and Zettergren, assignors.)
Trans-Lux Daylight Picture Screen Corporation. (See Blohm, August H., assignor.)
Treat, Francis H., Bellevue, Ohio, assignor to Duff Patents Company, Inc., Pittsburgh, Pa. Mechanical gas producer. 1,859,576; May 24.
Trebes, Bruno M. A., Berwyn, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Extruding apparatus. 1,859,901; May 24.
Tropic-Aire, Incorporated. (See Caesar, Orville S., assignor.)
Tropic-Aire, Incorporated. (See Will, Carl H., assignor.)
Tropic-Aire, Incorporated. (See Wines, Fred B., assignor.)
Trout, Walter C., Lufkin, Tex. Weighted rod line swivel. 1,860,121; May 24.
Trummer, John, Omaha, Nebr. Signal. 1,859,948; May 24.
Trusty, Harry P., Los Angeles, Calif. Life preserving mechanism for airships. 1,859,542; May 24.
Tschunkur, Eduard, and W. Bock, Cologne-Mulheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. New rubber like masses and preparing the same. 1,859,686; May 24.
Tully, George L., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,859,757; May 24.
Turbine Patents Corporation. (See Klimek, Gustav A., assignor.)
Turnpenny, William. (See Prince, D. C., and Turnpenny.)
Twining, Sidney, and T. M. Ingman, assignors to Paramount Publix Corporation, Los Angeles, Calif. Sound record printing. 1,859,999; May 24.
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Metal Products Company. (See Murphy, Walter P., assignor.)
Union Metal Products Company. (See Small, Arthur E., assignor.)
Union Special Machine Company. (See Le Vesconte, Harold J., assignor.)
Union Switch & Signal Company, The. (See Crago, Paul H., assignor.)
Union Trust Company of Pittsburgh, The, administrator. (See Haworth, Jehu F.)
United Engineering & Foundry Company. (See Biggert, Florence C., jr., assignor.)
United Shoe Machinery Corporation. (See Davenport, Herman A., assignor.)
United Shoe Machinery Corporation. (See Glidden, Harvey L., assignor.)
United Shoe Machinery Corporation. (See Hope, E., and Richards, assignors.)
United Shoe Machinery Corporation. (See Mellerio, Lucien P., assignor.)
United Shoe Machinery Corporation. (See Robinson, Charles A., assignor.)
United Shoe Machinery Corporation. (See Woodcock, Reginald B., assignor.)
United States Playing Card Company, The. (See Broadston, Andrew E., assignor.)
United Tool & Die Company, The. (See Carney, James J., assignor.)
Universal Draft Gear Attachment Co. (See Wilson, Jack, assignor.)
Universal Engineering Company. (See Zublin, John A., assignor.)
Universal Oil Products Company. (See Egloff, G., and Benner, assignors.)
Urbain, Edouard, Paris, France. Preparation of chlorids of phosphorus. 1,859,543; May 24.
Van Arnam, Howard L., Fort Wayne, Ind., assignor to Van Arnam Manufacturing Company. Covering for articles of wood and similar materials. 1,860,000; **May 24.**
Van Arnam Manufacturing Company. (See Van Arnam, Howard L., assignor.)
Van Arsdall, Charles R., Pacific Palisades, Calif. Lawn mower reel. 1,860,002; May 24.
Van Deest, Henry, assignor to Henney Motor Company, Freeport, Ill. Cot fastener for ambulances. 1,859,480; **May 24.**

Van den Bergh, Samuel J., assignor to the Firm N. V. Nederlandsche Instrumenten-Compagnie, The Hague, Netherlands. Fire control apparatus. 1,859,725; May 24.
Vanderveer, Jewell W., assignor to Erie Malleable Iron Company, Erie, Pa. Wheel structure. 1,860,001; May 24.
Veenschoten, Vincent V., assignor to Northern Equipment Company, Erie, Pa. Feed water regulator. 1,859,544; May 24.
Velton, Stephen J., Houston, Tex. Internal combustion engine. 1,859,687; May 24.
Vending Machine Corporation. (See Nicholson, George E., assignor.)
Ventre, Eugene. (See Powers, George S., assignor.)
Vermeulen, Roelof, Eindhoven, Netherlands, assignor to The Radio Corporation of America, New York, N. Y. Loud speaker. 1,859,758; May 24.
Vigne, Albert, assignor to National Bearing Metals Corporation, St. Louis, Mo. Bearing. 1,859,608; May 24.
Voeller, Fritz. (See Muller, R., and Voeller.)
Von Dosky, Alfred, Plauen, Germany. Apparatus for the manufacture of brake linings and the like. 1,859,726; May 24.
Voorhees, Lee J., Long Island City, N. Y., assignor to National Carbon Company, Inc. Flash light. 1,859,481; May 24.
Voss, Carl H., Sheridan, Wyo. Slide valve and spring therefor. 1,859,811; May 24.
Wade, Harold. (See Baker, Thomas T., assignor.)
Waitt, George L., Wildwood Crest, N. J. Fishing tackle. 1,859,944; May 24.
Wallace, William W. (See Fuller, C. E., and Wallace.)
Wallenberg, Frank J. and A. McQuinn, Tonawanda, assignors, by mesne assignments, to Jiffy Battery Terminal Corporation, Buffalo, N. Y. Battery terminal. 1,859,545; May 24.
Waller, John A., Beverly Hills, assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif. Lighting device for orchard heaters. 1,859,609; May 24.
Waller Manufacturing Corporation. (See Waller, John A., assignor.)
Wallstab, Goswin, Berlin, Germany. Headlight for motor vehicles. 1,859,854; May 24.
Walstrom, Axel M., Minneapolis, Minn. Butter tub cover. 1,859,639; May 24.
Walter, Harrison B., assignor to Container Corporation of America, Chicago, Ill. Method of and apparatus for assembling plural blank boxes. 1,859,640; May 24.
Walters, Ralph S., Grant, Nebr. Combine. 1,859,759; May 24.
Ward, Ashley F., and P. S. Ward, assignor to Ashley F. Ward, Inc., Cincinnati, Ohio. Set of baking pans. 1,859,855; May 24.
Ward, Ashley F., Inc. (See Ward, Ashley F. and P. S., assignors.)
Ward Leonard Electric Company. (See Kouyoumjian, Harotiun K., assignor.)
Ward, Paul S. (See Ward, Ashley F. and P. S.)
Wasberg, Axel, assignor to Camel Company, Chicago, Ill. Door lock operating mechanism. 1,859,610; May 24.
Waterbury Buckle Company. (See Bronson, Walter T., assignor.)
Watson, David M., Ardsley, and G. C. Munoz, assignors to The American Pulley Company, Philadelphia, Pa. Hand truck. 1,860,331; May 24.
Wayrn, Frank, Woodriver, Ill. Making leather. 1,859,417; May 24.
Weatherproof Products Company, The. (See Stryker, George B., jr., assignor.)
Weaver, Gordon S., Toronto, Ontario, Canada. Windshield cleaner. 1,859,641; May 24.
Webb, Herbert C., Baltimore County, Md. Stop-go indicator. 1,859,902; May 24.
Weidenhoff, Joseph, Inc. (See Haskins, Butler J., assignor.)
Weiler, Sigmond G., Milwaukee, Wis. Wall stove. Des. 87,033; May 24.
Weiss and Downs, Inc. (See Craver, Augustus E., assignor.)
Wellman, Charles P., West Medford, Mass., assignor of one-half to C. S. Andrews, Chattanooga, Tenn. Folded box. 1,859,903; May 24.
Wells, Sidney D. (See Rue, J. D., Wells, and Rawling.)
Wenning, Clarence O., Indianapolis, Ind. Marking machine. 1,860,271; May 24.
Western Clock Company. (See Neureuther, Andrew H., assignor.)
Western Electric Company. (See Black, Harold S., assignor.)
Western Electric Company. (See Blount, Harry, assignor.)
Western Electric Company. (See Friis, H. T., and Jensen, assignors.)
Western Electric Company. (See Heising, Raymond A., assignor.)
Western Electric Company. (See Ricker, Norman H., assignor.)
Western Electric Company. (See Skillman, Thomas S., assignor.)
Western Electric Company. (See Skillman, T. S., and Freeth, assignors.)
Western Railway Equipment Company. (See Campbell, Sterling H., assignor.)
Western Union Telegraph Company, The. (See Light, George G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Flanders, Warren B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Foresman, Robert A., assignor.)
Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)
Wetmore, Miner P. (See Payson, A. E. and Wetmore.)
Wetmore, Willard C., Saybrook, Conn. One-legged table. 1,859,320; May 24.
Wharton, William B., et al. (See Lee, Leffman H., assignor.)
White, Clarence L., Cuyahoga Falls, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Shoe sole. Des. 87,034; May 24.
White, Edwin C., Baltimore, Md., assignor to Hynson, Westcott and Dunning Inc. Mercury derivative of halogenated fluoresceins. 1,860,003; May 24.
White, Harold E., Butler, Pa., assignor, by mesne assignments, to Swann Research, Inc., Birmingham, Ala. Production of silicon carbide and calcium carbide. 1,859,856; May 24.
White, Joseph A., Melrose Park, assignor to The Moore & White Company, Philadelphia, Pa. Wire applying mechanism for Fourdrinier paper making machines. 1,860,303; May 24.
Whitmanis Manufacturing Company. (See Whitney, Karl H., assignor.)
Whitney, Karl H., assignor to Whitmanis Manufacturing Company, Inc., Kirksville, Mo. Towel rack. 1,859,945; May 24.
Whittam, Benjamin B., Elizabeth, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Water tube boiler. 1,859,857; May 24.
Wichmann, John C., Los Angeles, Calif. Radium filter emanator. 1,859,904; May 24.
Wicks, John, Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Testing apparatus. 1,859,905; May 24.
Wikander, Oscar R., assignor to Edgewater Steel Company, Pittsburgh, Pa. Spring. 1,860,122; May 24.
Wiley, James T., West Hamlin, W. Va. Wire clamp. 1,859,812; May 24.
Wilhelm, John H., Rockaway Beach, assignor, by mesne assignments, to Margon Corporation, New York, N. Y. Mounting movable eyes. 1,859,321; May 24.
Wilhelm, Karl M., Bochum, Germany. Illuminated advertising device. 1,859,813; May 24.
Will, Carl H., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Automobile heater and deflector therefor. 1,859,418; May 24.
Willard, Charles T., Roselle, and R. Kaier, Cranford, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Metal treating furnace. 1,860,065; May 24.
Willcox, Dudley, Lawrenceville, N. J. Electric induction furnace. 1,859,419; May 24.
Willcox, George B. (See Chamberlain, Alfred L., assignor.)
Willet, William C., Glendale, Calif. Iceless cooler. Des. 87,035; May 24.
Williams Company, The. (See Martin, Elmer R., assignor.)
Williams, John J. (See Brady, H. S., and Williams.)
Willys-Overland Company, The. (See Fisher, Walter S., assignor.)
Wilson, Arthur B., Perryburg, Ohio. Scarifying tooth. 1,859,350; May 24.
Wilson, Henry W., Duluth, Minn. Fence post. 1,859,688; May 24.
Wilson, Jack, assignor to Universal Draft Gear Attachment Co., Chicago, Ill. Brake mechanism. 1,859,906; May 24.
Wilson, John L., Brooklyn, N. Y. Stability meter for ships and other movable bodies. 1,860,344; May 24.
Wilson, John L., Brooklyn, assignor to Stability Meter Corporation, New York, N. Y. Indicating metacentric height. 1,859,546; May 24.
Wilson, John L., Brooklyn, assignor to Stability Meter Corporation, New York, N. Y. Apparatus for determining metacentric height. 1,860,345; May 24.
Wilson, Robert E., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Storage of hydrocarbon oils. 1,859,322; May 24.
Wilson, William H., Los Angeles, Calif. Clip. 1,859,946; May 24.
Wines, Fred B., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Heating apparatus for automative vehicles. 1,859,482; May 24.
Winkler, Karl. (See Pier, M., Winkler, and Wissel.)
Winn, William E., Dallas, Tex., assignor, by mesne assignments, to Sperry-Sun Well Surveying Company, Philadelphia, Pa. Well surveying device. 1,859,420; May 24.
Winslow, Lenna R., Miami, Fla. Elevator. 1,859,483; May 24.
Wintercorn, Andrew F., Rockford, assignor to Henney Motor Company, Freeport, Ill. Cot fastener for ambulances. 1,859,484; May 24.
Winthrop Chemical Company. (See Streitwolf, K., Fehrle, Herrmann, and Fritzsche, assignors.)
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wired Radio, Inc. (See Cassell, Joseph L., assignor.)

Wired Radio, Inc. (See Chromy, Ben J., assignor.)
Wissel, Kurt. (See Pier, M., Winkler, and Wissel.)
Wittmann, Marie, New York, N. Y. Toy nursing bottle. 1,859,485; May 24.
Wolf, Frank, New York, N. Y. Supporting stand for collapsible tubes. 1,859,323; May 24.
Wolf, Walter F., New York, N. Y. Loose leaf binder. 1,859,689; May 24.
Wonder Skidder Company, The. (See Nichols, George E., assignor.)
Woodcock, Reginald B., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening inserting and trimming machine. 1,859,421; May 24.
Woods Brothers Construction Company. (See Hough, Otto V., assignor.)
Woodworth, Selim E., assignor to Hamilton, Beauchamp & Woodworth, San Francisco, Calif. Rotary vacuum filter. 1,859,642; May 24.
Worthington, Harry L., San Francisco, Calif. Magnetic motor. 1,859,643; May 24.
Wright and Corson Company. (See Cronk, Wesley M., assignor.)
Wright, Esmond P. G., Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Telephone system. 1,860,066; May 24.
Wright, Kenneth A., et al. (See Koppl, Ernest, assignor.)
Wright, Paul, Birmingham, Ala. Boiler. 1,859,858; May 24.
Wyckoff, Ralph D., Pittsburgh, Pa., assignor to Gulf Production Company, Houston, Tex. Automatic drilling control. 1,859,814; May 24.
Wyzenbeek, Andrew, assignor to Binks Manufacturing Co., Chicago, Ill. Valve assembly for air-compressing cylinders. 1,860,163; May 24.
Yagi, Hidetsugu, Sendai, Japan, assignor to Radio Corporation of America, New York, N. Y. Variable directional electric wave generating device. 1,860,123; May 24.
Yardley, Farnham, West Orange, N. J., assignor to Jenkins Bros., New York, N. Y. Check valve. 1,860,004; May 24.
Yeaman, Morris C., Ponca City, Okla. Hydraulic rotary drilling bit. 1,860,214; May 24.
Yosemite Portland Cement Corporation. (See Larmour, H. M., and Pierce, assignors.)
Young, Charles D., Haverford, Pa., and A. B. Clark, Trenton, N. J. Rail and support for the same. 1,860,332; May 24.
Young, Franklin W., assignor to Mason & Parker Manufacturing Company, Winchendon, Mass. Leveling device for pool and billiard tables. 1,860,215; May 24.
Young, L. A., Spring & Wire Corporation. (See Oldham, John M., assignor.)
Young, Walter H., and E. O. Eckland, Chicago, Ill. Inking device. 1,860,124; May 24.
Young, Walter H., Detroit, Mich. Plug cutting tool. 1,859,547; May 24.
Yuhas, Stephen, Helena, Mont. Poultry nest. 1,860,304; May 24.
Yungling, Paul, Los Angeles, Calif., assignor to Monarch Oil Well Air Drill Co., Ltd., Reno, Nev. Drill seal. 1,859,611; May 24.
Zancan, Ottavio, New York, N. Y. Front drive mechanism for motor vehicles. 1,859,351; May 24.
Zettergren, Birger. (See Thellmod, J. E., and Zettergren.)
Zook, David F., Evanston, Ill. In-a-door bathroom. 1,859,859; May 24.
Zublin, John A., Los Angeles, Calif. Bit with cutters having scraping and rolling motions. 1,859,948; May 24.
Zublin, John A., Los Angeles, Calif. Apparatus for core orientation. 1,859,949; May 24.
Zublin, John A., Los Angeles, Calif. Core catcher. 1,859,950; May 24.
Zublin, John A., assignor to Universal Engineering Company, Los Angeles, Calif. Rotary bit. 1,859,947; May 24.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 24TH DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acetylene generating device. R. A. Boley. 1,860,225; May 24.
Acid by the catalytic combustion of ammonia with oxygen or gases rich in oxygen, Preparation of concentrated nitric. I. W. Cederberg. 1,859,863; May 24.
Acid eliminator for refrigerating apparatus. H. R. Loranger. 1,860,193; May 24.
Acid, Producing dinitroanthrarufinedisulphonic. J. H. Crowell. 1,859,583; May 24.
Acoustic device. R. A. Heising. 1,859,921; May 24.
Acoustic device. N. H. Ricker. 1,859,892; May 24.
Acoustic diaphragm. R. P. May. 1,859,782; May 24.
Acoustic diaphragm. E. C. Nilson. 1,859,829; May 24.
Advertising device, Illuminated. K. M. Wilhelm. 1,859,813; May 24.
Advertising medium and score card, Combined. G. L. Pangratz and J. C. Harb. 1,859,982; May 24.
Aeroplane construction. A. F. Caillson. 1,860,076; May 24.
Aeroplane float signal. P. A. Kuhn. 1,860,327; May 24.
Aggregates with asphalt and cooling, Mixing. C. R. Arnold. 1,859,324; May 24.
Air cleaner. H. E. Altgelt. 1,859,644; May 24.
Air cleaner. A. W. Miller. 1,860,111; May 24.
Aircraft, Air balanced. A. Ambruso. 1,859,422; May 24.
Aircraft with rotative wings. J. de la Cierva. 1,859,584; May 24.
Air gun. A. J. Decker. 1,859,816; May 24.
Air in closed rooms, Regenerating the breathing. H. Stelzner. 1,860,298; May 24.
Airplane. P. Latécoère. 1,860,254; May 24.
Airplane. L. J. Lesn. 1,859,568; May 24.
Airplane. G. Loening. 1,859,306; May 24.
Airplane. F. Rutrle. 1,859,716; May 24.
Airplane. W. B. Stout. 1,859,807; May 24.
Alarm for home or transient use, Mechanical burglar. A. A. Schantz. 1,859,345; May 24.
Alloy. J. K. Smith. 1,859,413; May 24.
Anchorage of mattresses to screen poles, Method and apparatus for. O. V. Hough. 1,859,923; May 24.
Anhydrides of the lower fatty acid series, Production of. R. Muller and F. Voeller. 1,859,786; May 24.
Antenna construction. J. Bethenod. 1,860,128; May 24.
Antirattling device, Engine hood. A. F. Jackson. 1,860,326; May 24.
Anvil, Matrix. G. L. Curle. Des. 87,036; May 24.
Apparatus for spraying vegetables, Portable. L. C. Potts and O. P. Romine. 1,859,935; May 24.
Aqueous dispersion and making same. L. Kirschbraun. 1,859,517; May 24.
Aqueous solutions of hydroxy-ethyl-amino salts of 3-acetylamino-4-hydroxybenzenearsonic acid, Stable. K. Streitwolf, A. Fehrle, W. Herrmann, and P. Fritzsche. 1,859,683; May 24.
Arc guide for metallic vapor rectifiers. A. Gaudenzi. 1,859,918; May 24.
Arch support. J. M. Doolittle. 1,859,818; May 24.
Aron-chromium alloy article and making the same, Finished. H. S. George. 1,859,735; May 24.
Articles, Apparatus for the impregnation of hollow. H. J. Prins. 1,859,841; May 24.
Atomizer. C. Kollstede. 1,859,973; May 24.
Auger, Drilling. F. Rutrle. 1,859,717; May 24.
Automobile attachment W. W. Nickels. 1,859,787; May 24.
Automobile heater. O. S. Cæsar. 1,859,420; May 24.
Automobiles, Protection plate for. O. C. Ritz Woller. 1,859,634; May 24.
Azo-dyes, Manufacture of. W. Lange. 1,859,706; May 24.
Baby jumper. J. Kersten. Des. 87,008; May 24.
Bag: *See*—
Fruit picker's bag. Traveling bag.
Paper bag.
Bag. H. J. Le Vesconte. 1,860,190; May 24.
Bag and closure therefor. H. J. Le Vesconte. 1,860,339; May 24.
Bag filling apparatus. T. Huston. 1,859,562; May 24.
Bag frame, Collapsible. W. C. Hiering. 1,859,773; May 24.
Bait, Artificial. U. C. Pemberton and J. B. Johnson. 1,859,681; May 24.
Bait, Artificial. U. C. Pemberton and J. B. Johnson. 1,859,713; May 24.
Ball mill. J. J. Deschamps. 1,859,499; May 24.
Band, chain, or linkage, Flexible. C. H. Kestenman. 1,860,186; May 24.
Bank protection device. J. C. and M. A. Taylor. 1,859,638; May 24.
Bath apparatus. J. S. Belt. 1,860,009; May 24.
Bath, basin, and receptacle fitting. A. H. Fleck. 1,859,697; May 24.
Bathroom, In-a-door. D. F. Zook. 1,859,859; May 24.
Battery plates, Forming. D. Pepper. 1,860,051; May 24.
Battery plates, Making storage. J. H. Calbeck. 1,859,581; May 24.
Battery terminal. F. J. Wallenberg and A. McQuinn. 1,859,545; May 24.
Bearing. A. Vigne. 1,859,608; May 24.
Bearing, Dustproof. E. Baseman. 1,860,305; May 24.
Bearing for machine tools, Turning ring. A. Schlegelmilch. 1,859,989; May 24.
Bearing for railway cars, Journal. S. H. Campbell. 1,860,077; May 24.
Benting process and apparatus for practising same. G. A. Richter and M. O. Schur. 1,859,890; May 24.
Bed wardrobe. A. L. Brooker. 1,859,912; May 24.
Beer or other liquids, Apparatus for pasteurizing. R. F. Graham. 1,859,389; May 24.
Belt. A. B. Reisman. 1,860,202; May 24.
Bending and straightening device. P. T. Bynum. 1,860,171; May 24.
Binder, Loose leaf. W. F. Wolf. 1,859,689; May 24.
Bismuth alkaline-earth-metal thio glycolates and making same. W. G. Christiansen and W. M. Lauter. 1,859,288; May 24.
Bit: *See*—
Drill bit. Rotary bit.
Drilling bit.
Bit with cutters having scraping and rolling motions. J. A. Zublin. 1,859,948; May 24.
Board: *See*—
Ironing board.
Bodies, Method of and apparatus for balancing rotatable. J. Lundgren. 1,860,257; May 24.
Boiler: *See*—
Water tube boiler.
Boiler. P. Wright. 1,859,858; May 24.
Boiler structure. F. R. Dravo. 1,859,619; May 24.
Booking mechanism for radiator core making machines. T. M. Diver. 1,859,383; May 24.
Bottle, Nursing. L. Fort. 1,859,733; May 24.
Bottle or jar cap. F. Neubauer. 1,859,710; May 24.
Bottom hole flow bean, Adjustable. E. L. Davenport and G. C. Jackson. 1,860,080; May 24.
Bowl and tank, Unitary water closet. G. Brain. Des. 86,995; May 24.
Bowling alley. O. W. and M. J. Blanchard. 1,859,284; May 24.
Box: *See*—
Display box. Stuffing box.
Folded box.
Box board machine, Combination. W. B. Hadley. 1,859,869; May 24.
Boxes, Method of and apparatus for assembling plural blank. H. B. Walter. 1,859,640; May 24.
Brace: *See*—
Rail brace.
Brace bar folding device. H. Jockel. 1,859,563; May 24.
Bracelet connection. R. King. 1,860,312; May 24.
Bracket: *See*—
Rear bracket. Supporting and ratchet bracket.
Brake: *See*—
Expanding brake. Vehicle brake.
Hand brake.
Brake and ignition and starter control, Emergency. F. N. Cobb, sr. 1,859,328; May 24.
Brake cooling means. W. D. McIntyre and J. Danciger. 1,859,709; May 24.
Brake linings and the like, Apparatus for the manufacture of. A. Von Dosky. 1,859,726; May 24.
Brake mechanism. J. Wilson. 1,859,906; May 24.
Braking and cooling mechanism for vehicle wheels. E. A. Corbin, jr. 1,859,280; May 24.
Braking system and valve. J. W. Lacy. 1,860,188; May 24.
Branding iron. C. Sponsel. 1,859,317; May 24.
Brick, Manufacturing building. M. T. Straight. 1,859,723; May 24.
Briquetting machine. E. J. Byerlein and F. Graf, jr. 1,860,075; May 24.
Broadcasting system. E. S. Purington. 1,859,465; May 24.
Brush. W. Dennis. 1,860,277; May 24.
Brush, Reservoir. C. Maher. 1,859,402; May 24.
Brush, Selector. R. A. Road and F. J. Redmond. 1,859,470; May 24.
Buckle. W. T. Bronson. 1,860,170; May 24.
Buckle for garment supporters. M. Hawie. 1,859,702; May 24.
Buckle, Slide. J. H. Domkee. 1,859,356; May 24.

Building material, Cellular. K. Slidell. 1,859,539; May 24.
Building pan, Crystal. T. and J. R. Ray. 1,860,118; May 24.
Building, Portable. H. E. Harvey. Des. 87,006; May 24.
Bulb, Three filament. R. N. Falge. 1,859,661; May 24.
Burner: *See*—
Fuel burner. Gas burner.
Garbage burner.
Cabinet construction. W. R. Rix. 1,859,798; May 24.
Cabinet, Fermentation. C. H. Bailey. 1,859,613; May 24.
Cabinet, Sanitary milk. P. B. Grojean. 1,859,391; May 24.
Cabinet, Towel. S. A. Schwartz. 1,860,207–8; May 24.
Cable or wire clamp. J. F. Haworth. 1,859,561; May 24.
Cable support for highway barriers. G. S. Smith. 1,859,575; May 24.
Caliper. J. J. Carney. 1,859,327; May 24.
Call indicator system. T. S. Skillman and L. G. Freeth. 1,859,475; May 24.
Cap, Radiator. G. A. Johnson. Des. 87,007; May 24.
Cap, Radiator. L. J. Smith. Des. 87,029; May 24.
Car construction, Railway. W. P. Murphy. 1,859,312; May 24.
Car construction, Railway. W. P. Murphy. 1,859,339; May 24.
Car, Sleeping. T. de Roode. 1,859,730; May 24.
Car, Sun. W. J. Strandwitz. 1,860,299; May 24.
Carbon, Activating. A. E. Marshall. 1,859,450; May 24.
Carburetor. A. Moore. 1,860,329; May 24.
Card, Display. J. Bernhard. Des. 86,993; May 24.
Cardboard machine. A. B. Saunders. 1,859,986; May 24.
Carrier: *See*—
Luggage carrier. Tire carrier.
Paper carrier. Trunk and luggage carrier.
Carton. B. J. Davidson. 1,860,309; May 24.
Carton. Display and dispensing. M. M. Einson. 1,860,324; May 24.
Carton. Display and dispensing. M. M. Einson. 1,860,334; May 24.
Carton support, Shipping. E. S. Gomes. 1,859,505; May 24.
Cartons, packages, and other objects, Sealing. A. D. Bullerjahn. 1,859,652; May 24.
Case: *See*—
Cigarette case. Show case.
Instrument case. Vanity case.
Case and lighter, Combined cigarette. F. J. Nankivell. 1,859,881; May 24.
Casing, Dashwashing machine. J. E. Lederman. 1,859,302; May 24.
Casing head. C. A. Rasmussen. 1,859,793; May 24.
Casing measuring machine. L. De Moss. 1,859,291; May 24.
Casings, Curing. P. J. Long. 1,860,335; May 24.
Cellulose acetate, Making. F. Bidsud. 1,859,579; May 24.
Cellulose material, Treating. W. F. Richter. 1,860,053; May 24.
Cellulosic pulps, Effecting refining reactions on. G. A. Richter. 1,859,891; May 24.
Cement clinker treatment. H. M. Larmour and S. C. Pierce, jr. 1,859,926; May 24.
Ceramic character or symbol. W. O. Prouty. 1,859,792; May 24.
Chair: *See*—
Folding chair. Rail joint chair.
Chair. W. S. Ferris. 1,860,089; May 24.
Chair, seat, and the like. F. H. Headley. 1,860,096; May 24.
Chemical combination of boric acid and potassium acid tartrate and preparing same. A. E. Craver. 1,859,653; May 24.
Chemical products. B. W. Nordlander. 1,860,320; May 24.
Chlorids of phosphorus, Preparation of. E. Urbain. 1,859,543; May 24.
Cigarette case. W. C. Hiering. 1,859,772; May 24.
Cigarette making machinery. W. E. Molins. 1,860,197; May 24.
Cigarette mentholator. E. L. Elliott. 1,859,731; May 24.
Circuit breaker. W. M. Boudion. 1,859,377; May 24.
Circuit connection for vapor electric device, Two-phase E. V. De Bileux. 1,860,175; May 24.
Circuit interrupter, High tension. D. C. Prince and W. Turnpenny. 1,860,337; May 24.
Circuit, Multiple turret simplex printer concentration. G. G. Light. 1,860,343; May 24.
Circuit, Photo-electric cell. J. Engl. 1,859,822; May 24.
Circuit, Telephone office alarm. H. M. Bascom. 1,860,007; May 24.
Circuit, Thermostatically controlled electric. A. C. Burleigh. 1,859,765; May 24.
Circuit tuning device, Electric. W. A. Ready. 1,859,796; May 24.
Circuit, Wave transmission. H. T. Friis and A. G. Jensen. 1,859,867; May 24.
Circuits for electric discharge devices. H. S. Black. 1,859,494; May 24.
Clamp: *See*—
Cable or wire clamp. Wire clamp.
Clamp for loading machines, Rail. E. C. Morgan. 1,859,596; May 24.
Clasp for bracelet strap. S. A. Johnson. 1,859,365; May 24.
Clay bodies, Molding hollow. M. G. Dumas. 1,859,768; May 24.
Clay working machine. H. H. Montague. 1,859,675; May 24.
Cleaner: *See*—
Air cleaner. Paper cleaner.
Clothesline cleaner. Windshield cleaner.
Cleaning and drying machine. A. E. Broadston. 1,860,132; May 24.
Clip. R. Olans. Des. 87,018; May 24.
Clip. W. H. Wilson. 1,859,946; May 24.
Clock, Electric. L. J. Stern. 1,860,120; May 24.
Clock face. G. Genaille. Des. 87,003–4; May 24.
Clockworks, Regulating device for. W. A. Dubois. 1,859,866; May 24.
Closure, Collapsible tube. H. C. Keebler. 1,860,318; May 24.
Closure for containers. H. S. Brady and J. J. Williams. 1,859,495; May 24.
Closure, Manhole. J. P. Keating. 1,859,739; May 24.
Closure operating mechanism. E. L. Dunn. 1,860,333; May 24.
Clothesline cleaner. A. B. Biener. 1,860,306; May 24.
Clutch. L. T. Futscher. 1,859,963; May 24.
Clutch, Centrifugal. J. D. Karle. 1,859,334; May 24.
Clutch mechanism, Friction. J. H. Prettyman. 1,859,600; May 24.
Clutch or brake lining. W. S. Hadley. 1,860,147; May 24.
Coal, Apparatus for preparing. S. D. Hartshorn. 1,859,560; May 24.
Coffee, Treatment of. D. J. Kennedy. 1,859,740; May 24.
Coil casing, Making magnetic. B. A. Engholm and J. J. Swent. 1,859,917; May 24.
Coil, Inductance. D. R. De Tar. 1,860,176; May 24.
Coin controlled mechanism. W. B. Betts. 1,860,221; May 24.
Coin feeder. B. E. Seemel. 1,859,315; May 24.
Coin stacker. B. E. Seemel. 1,859,574; May 24.
Colorimeter. A. T. Brice, jr. 1,859,278; May 24.
Column turning, honing, and polishing machine. D. M. Mills. 1,859,595; May 24.
Combine. R. S. Walters. 1,859,759; May 24.
Combustion control. T. A. Peebles. Re18,479; May 24.
Communication cartridge for undersea vessels. G. H. Powers. 1,859,791; May 24.
Compound having an affinity for cotton. W. Lange. 1,859,705; May 24.
Compounds of the morpholine series and the products, Manufacture of. J. B. Payman and H. A. Piggott. 1,859,527; May 24.
Computing mechanism. H. M. Jacobs. 1,860,185; May 24.
Concrete products, Method of and apparatus for manufacturing. E. H. Lockwood. 1,859,878; May 24.
Conductor system, Concentric. E. I. Green. 1,859,390; May 24.
Conduit. L. M. Christie. 1,859,864; May 24.
Conduit, Electric wire. R. C. Schemmel. 1,859,988; May 24.
Connecter for bracelets. F. W. Nittel. 1,860,315; May 24.
Connection, Bar meter. T. F. Noonan. 1,860,263; May 24.
Connection, Coupler and yoke. S. B. Haseltine. 1,859,700; May 24.
Connection, Cushioning. W. C. Keys, H. W. Steiner, and J. G. Eldridge. 1,859,777; May 24.
Connection, Mechanical. L. R. Ross. 1,859,531; May 24.
Container. J. G. Heaslet. 1,859,331; May 24.
Container, Easy opening. W. F. Punte. 1,860,201; May 24.
Container, Folding. I. Appelbaum. Re18,477; May 24.
Container for flashlights and the like. B. Held. 1,860,029; May 24.
Container, Toilet accessories. A. G. Shields. Des. 87,028; May 24.
Containers, Can separator for shipping. M. R. Shofer. 1,859,537; May 24.
Control apparatus. R. Gunn. 1,860,285; May 24.
Control apparatus for miniature sailboats, Remote. R. Edgar. 1,859,557; May 24.
Control device for ignition timers. M. Mallory. 1,859,309; May 24.
Control equipment, Automatic. H. Bany. 1,860,166; May 24.
Control of aircraft, Automatic. E. A. Sperry. 1,859,752; May 24.
Control of braking appliances of motor driven vehicles. B. Lormüller. 1,859,708; May 24.
Control system and apparatus. L. Eggert. 1,860,022; May 24.
Control system, Vacuum tube. A. Carpe. 1,859,498; May 24.
Convertible wheel. R. R. MacKenzie. 1,859,832; May 24.
Conveyer for combines or like machines. C. R. Gottschall and H. H. Pike. 1,859,586; May 24.
Conveying apparatus, Pneumatic. G. Bernert. 1,860,127; May 24.
Cooler: *See*—
Water cooler.
Cooling system of internal combustion engines. G. Lyon, C. R. Fairey, and T. M. Barlow. 1,860,258; May 24.
Coops, Assembling poultry. O. F. Carpenter. 1,860,232; May 24.

Copper treating furnace. W. J. Benson and L. M. Desamais. 1,859,727; May 24.
Core catcher. J. A. Zublin. 1,859,950; May 24.
Core orientation, Apparatus for. J. A. Zublin. 1,859,949; May 24.
Corset. V. Buchanan. 1,859,550; May 24.
Cotton tramper and the like machine. E. A. Holmgreen. 1,860,031; May 24.
Counter for turn shoes. M. Rowe. 1,859,533; May 24.
Coupling: *See*—
Hose coupling. Windmill and pump rod coupling.
Coupling for trailers. J. Schlagenhauf. 1,859,534; May 24.
Cover, Butter tub. A. M. Walstrom. 1,859,639; May 24.
Covering for articles of wood and similar materials. H. L. Van Arnam. 1,860,000; May 24.
Covering or rug, Floor. A. G. Holland. 1,859,922; May 24.
Covering, Pipe. L. M. Risbel. 1,860,203; May 24.
Cruet or similar container. H. R. McDonald. Des. 87,014; May 24.
Cultivator. C. G. Strandlund. 1,859,415; May 24.
Cup: *See*—
Suction cup.
Current measuring device for high frequency circuits. D. B. Richardson. 1,859,469; May 24.
Currents, Apparatus for reducing crosstalk. C. R. Keith. 1,859,563; May 24.
Curtain fixture for use in connection with shade brackets. J. K. Odin. 1,859,884; May 24.
Cutter and clamp for knitting machines and operating same, Yarn. A. E. Page. 1,860,265; May 24.
Dancing apparatus, Inverted. J. L. Brierley and R. H. Lankton. 1,859,615; May 24.
Deflection or deviation indicator. J. P. Brown. 1,860,230; May 24.
Delivery and collecting system. A. E. Davis. 1,859,865; May 24.
Delivery apparatus for stacking cards or the like in counted batches. A. Bingham. 1,860,223; May 24.
Desk. C. A. Cutler. Des. 86,998; May 24.
Desk set. B. W. Hanle. 1,859,870; May 24.
Die sets, Device for assembling and dismantling. K. Janiszewski. 1,859,446; May 24.
Diesel engine. P. E. Fritzsche. 1,859,663; May 24.
Dipper tooth, Self-sharpening. J. C. Taylor, jr. 1,860,338; May 24.
Direction indicator for automobiles. W. M. Hike and W. J. B. Kast. 1,860,179; May 24.
Discharge tube. A. Lederer. 1,860,149; May 24.
Dishwashing device. C. F. Fitter. 1,859,769; May 24.
Disk for pipe joints. W. F. Oberhuber. 1,859,525; May 24.
Dispensing apparatus. J. R. Manley. 1,859,883; May 24.
Dispensing apparatus, Beverage. I. G. Konikow. 1,859,566; May 24.
Dispensing apparatus, Grease. E. W. Davis. 1,859,290; May 24.
Dispensing device. P. R. Galt. 1,859,964; May 24.
Dispensing device. A. E. Payson and M. P. Wetmore. 1,859,886; May 24.
Dispensing machine for bottled goods. H. E. Head. 1,860,028; May 24.
Display box. B. H. Lengsfield. 1,859,401; May 24.
Display device. F. A. Apfelbaum. 1,859,646; May 24.
Display device, Illuminated. H. C. Keyes. 1,859,516; May 24.
Display device, Reversible. I. A. Eakins. 1,860,021; May 24.
Display rack. M. E. Harlan. 1,859,871; May 24.
Display stand. E. Stulik. Des. 87,031; May 24.
Distribution system. H. V. Nye. 1,859,839; May 24.
Dome, Oil saving. F. Sievern and E. M. Lynch. 1,859,606; May 24.
Door check and closer. E. Bommer. 1,859,763; May 24.
Door, Combined glazed and screen. A. G. Kroenke. 1,859,974; May 24.
Door construction, Car. J. F. O'Connor. 1,859,712; May 24.
Door for railway cars, Hopper. G. G. Gilpin. 1,859,296; May 24.
Door operator. J. B. Haskell. 1,859,364; May 24.
Dough dividing machine. P. Blum. 1,859,762; May 24.
Dough working device. W. G. Kirschoff. 1,860,252; May 24.
Draft attachment. E. H. Schmidt and L. Spence. 1,859,535; May 24.
Draft rigging, Railway. S. B. Haseltine. 1,859,699; May 24.
Draft rigging, Railway. J. F. O'Connor. 1,860,113; May 24.
Drawing table. R. Nestler. 1,859,456; May 24.
Drier: *See*—
Rice drier.
Drift by aircraft, Apparatus for determination of. T. C. Lonnquest and C. L. Seward, jr. 1,859,569; May 24.
Drill: *See*—
Rotary drill.
Drill. W. C. Rea. 1,859,342; May 24.
Drill heads, Feed slide for interchangeable. D. C. Klausmeyer. 1,859,778; May 24.
Drill seal. P. Yungling. 1,859,611; May 24.
Drilling bit. E. M. Erlandson. 1,859,660; May 24.
Drilling bit, Hydraulic rotary. M. C. Yeaman. 1,860,214; May 24.
Drilling control, Automatic. R. D. Wyckoff. 1,859,814; May 24.
Drive control system for clockworks, meters, and the like. F. Marti. 1,860,260; May 24.
Drive, Eccentric cam. W. F. Newhouse. 1,859,457; May 24.
Drive mechanism for motor vehicles, Front. O. Zancan. 1,859,351; May 24.
Driver, Post. F. Judd. 1,859,398; May 24.
Driving mechanism for automatic printers and finishers for sensitized material, Variable. H. H. Sullivan. 1,860,212; May 24.
Drying rack. D. C. Meyer and J. B. Olsen. 1,859,594; May 24.
Duct shield. G. C. Deake. 1,860,139; May 24.
Dump body. O. N. Gredell. 1,859,666; May 24.
Dust separator. H. R. Ballou. 1,859,861; May 24.
Dusting machine. E. Knapp and C. G. Allgrunn. 1,859,567; May 24.
Dyestuffs of the urea-azine series and preparing the same. W. A. Silvester. 1,859,477; May 24.
Dyestuffs, Production of nitrogenous. M. A. Kunz and K. Köberle. 1,859,742; May 24.
Edge trimmer, Lawn. J. A. Spence. 1,859,806; May 24.
Elastic welt for stockings. H. C. Aberle. 1,860,272; May 24.
Electric controlling apparatus. H. K. Koupoumjian. 1,860,102; May 24.
Electric discharge device, Gas filled. H. J. Spanner and U. Doering. 1,860,210; May 24.
Electric flasher. L. A. M. Phelan. 1,859,934; May 24.
Electric furnace, Induction. H. Neuhauss. 1,859,680; May 24.
Electric indicating means. M. J. Huggins. 1,859,332; May 24.
Electric induction furnace. D. Willcox. 1,859,419; May 24.
Electric switch. C. A. Schaefer. 1,859,605; May 24.
Electric traction system. R. Rougé. 1,859,343; May 24.
Electric wave generating device, Variable directional. H. Yagi. 1,860,123; May 24.
Electrical distribution protective system. G. E. Jansson. 1,859,447; May 24.
Electrical transmission of light by phase control. J. H. Hammond, jr. 1,860,341; May 24.
Electrically heated iron. N. B. Thomas. 1,860,301; May 24.
Electrode, Electric furnace. P. L. J. Miguet. 1,859,979; May 24.
Electrode electric welding device. J. L. Niemann. 1,860,262; May 24.
Electron discharge device. I. Nachumsohn. 1,859,677–8; May 24.
Electron tube. B. F. Miessner. 1,859,454; May 24.
Electron tube. B. F. Miessner. 1,859,522; May 24.
Electrooptical apparatus and method. C. H. W. Nason. 1,859,597; May 24
Electrooptical system and method of scanning. C. F. Jenkins. 1,859,828; May 24.
Elevating take-out. R. W. Canfield. 1,859,956; May 24.
Elevator: *See*—
Storage elevator.
Elevator. L. R. Winslow. 1,859,483; May 24.
Engine: *See*—
Diesel engine. Internal-combustion engine.
Engines, Apparatus for controlling steam. H. H. Bailey and J. L. Thomas. 1,859,647; May 24.
Ester conversion. G. D. Graves. 1,860,092; May 24.
Esters, Distilling aliphatic. J. Stein. 1,859,997; May 24.
Ethers of aryl-quinolines, Basic. M. Hartmann and H. Isler. 1,860,286; May 24.
Ethers, Pentaerythrite. C. E. Burke. 1,859,913; May 24.
Excavator, Swinging bucket line. J. A. Elliott. 1,859,659; May 24.
Exerciser, Health. M. W. McArdle. 1,859,976; May 24.
Expanding brake, Internal. L. D. Brauks. 1,860,011; May 24.
Explosives, Manufacture of tetrazene. H. Rathsburg. 1,859,529; May 24.
Extractor. W. Buss. 1,859,497; May 24.
Extruding apparatus. B. M. A. Trebes. 1,859,001; May 24.
Eye examining instrument. E. D. Tillyer. 1,859,756; May 24.
Eyes, Mounting movable. J. H. Wilhelm. 1,859,321; May 24.
Fabric: *See*—
Textile fabric. Wire fabric.
Fabrics, Process and apparatus for weaving. P. Mattler. 1,859,571; May 24.
Fastener, Cover. R. D. Anderson. 1,859,645; May 24.
Fastener for ambulances, Cot. H. Van Deest. 1,859,480; May 24.
Fastener for ambulances, Cot. A. F. Wintercorn. 1,859,484; May 24.
Fastener, Paper. R. Orthwine. 1,860,155; May 24.
Fastener, Separable. N. J. Poux. 1,859,572; May 24.
Fastener, Wall board. L. H. Lee. 1,859,779; May 24.
Fastening device. G. Sundback. 1,859,540; May 24.
Fastening device. S. O. Taylor. 1,859,898; May 24.

Fastening device, Slidable. J. A. H. Siers. 1,859,751; May 24.
Fastening inserting and trimming machine. R. B. Woodcock. 1,859,421; May 24.
Faucet bar lock, Oil tank. R. W. Hyndman. 1,860,288; May 24.
Feed device. H. Huber. 1,860,033; May 24.
Feed water regulator. V. V. Veenschoten. 1,859,544; May 24.
Feeder, Chicken. E. W. Boyer. 1,859,728; May 24.
Feeding apparatus. A. Mutschler. 1,859,372; May 24.
Feeding device, Poultry. D. L. Crabtree. 1,859,582; May 24.
Felt conditioner or the like, Hydraulic. J. L. Harris. 1,859,508; May 24.
Fence, Ornamental. J. M. Haverstick. 1,859,509; May 24.
Fence, Ornamental portable. G. Beauchamp. Des. 86,991; May 24.
Fence post. F. Czemba. 1,859,695; May 24.
Fence post. H. W. Wilson. 1,859,688; May 24.
Fender adjusting means. C. Pflum and N. Guerin. 1,860,200; May 24.
Fertilizers, Manufacturing. E. Johnson. 1,859,738; May 24.
Fiber product, Fireproof. R. B. Brown. 1,860,134; May 24.
Fibrous materials, Process and apparatus for digesting. T. L. Dunbar. 1,859,884; May 24.
Fibrous product and making the same, Waterproof and fireproof. W. B. Hoggatt. 1,860,097; May 24.
Filing device. H. H. Dixon. 1,859,696; May 24.
Film control and guiding device for motion picture projectors. H. W. Rogers. 1,860,330; May 24.
Films, Apparatus for developing. J. W. Smith. 1,860,059; May 24.
Filter apparatus, Continuous. A. S. Bailey. 1,859,282; May 24.
Filter, Pressure. S. W. Briggs. 1,860,229; May 24.
Filter, Rotary vacuum. S. E. Woodworth. 1,859,642; May 24.
Filtering apparatus for refrigerating systems. R. W. Davenport. 1,859,766; May 24.
Firearm. G. de Luce and F. Guerra. 1,860,276; May 24.
Fire control apparatus. A. Steinle. 1,859,722; May 24.
Fire control apparatus. S. J. van den Bergh. 1,859,725; May 24.
Fire escape. W. Neusüs. 1,860,294; May 24.
Fire extinguisher. W. R. Rollo. 1,859,843; May 24.
Fire extinguishing apparatus. W. B. Bronander. 1,860,074; May 24.
Fire extinguishing foam, Method and apparatus for producing. H. Burmeister. 1,859,326; May 24.
Fishing tackle. G. L. Waitt. 1,859,944; May 24.
Fitting, Return bend. R. L. Stewart. 1,859,850; May 24.
Fitting, Return bend. H. C. Stockham. 1,859,852; May 24.
Fixture for rebabbiting locomotive crossheads. F. Prince. 1,859,464; May 24.
Flag, Highway protective. P. J. Quinn. 1,859,599; May 24.
Flashing. E. H. Friedrich. 1,860,240; May 24.
Flashlight. L. J. Voorhees. 1,859,481; May 24.
Floor treating machine. L. J. Bedard. 1,860,168; May 24.
Flow from collapsible tubes, Method and device for stopping and regulating. E. F. Johnson and G. R. Cruze. 1,859,397; May 24.
Flue structure for heating apparatus. J. P. Morley. 1,859,745; May 24.
Fluid heater, Electric. M. E. Staley. 1,859,939; May 24.
Fluid transmitting means for cooking and brewing utensils. S. A. Haines. 1,860,094; May 24.
Foam reducing apparatus. J. N. Jacobsen. 1,859,827; May 24.
Folded box. C. P. Wellman. 1,859,903; May 24.
Folding chair. W. Nahrwold. 1,859,628; May 24.
Folding table. J. A. Kehrer. 1,859,588; May 24.
Follower. J. C. Garand. 1,859,558; May 24.
Form, Hosiery drying. C. Loven. 1,860,042; May 24.
Frame: *See*—
Bag frame. Side frame.
Picture and like frame. Vacuum contact frame.
Freesia. W. R. Elder. Pl. Pt. No. 17; May 24.
Frog for lister plows. J. Peterson. 1,859,463; May 24.
Fruit picker's bag. W. A. Baller. 1,859,274; May 24.
Fuel burner. D. Erickson. 1,860,086; May 24.
Fuel economizer. E. E. Litke. 1,859,519; May 24.
Fuel feeding device. S. C. Gulick. 1,860,283; May 24.
Fuel feeding system for motor vehicles. F. H. Heitger. 1,859,393; May 24.
Fuel injection device for internal combustion engines. W. Tobler. 1,860,063; May 24.
Furnace: *See*—
Copper treating furnace. Metal treating furnace.
Electric furnace. Powdered fuel furnace.
Electric induction furnace Retort furnace.
Heating furnace.
Furnace. N. Mambourg. 1,860,045; May 24.
Furnace and apparatus for charging the same, Open hearth. F. W. Sundblad. 1,859,754; May 24.
Furnace construction. J. Merryweather. 1,859,743; May 24.
Furnace wall. F. B. Bigelow. 1,859,650; May 24.
Fuse. F. C. La Mar. 1,860,313; May 24.
Fuse for projectiles, Mechanically operated. P. Liebergeld. 1,860,256; May 24.
Fuse puller. B. Dowick. 1,859,767; May 24.
Fuselage construction. G. M. Bellanca. 1,859,277; May 24.
Galley for line casting machines. E. M. Goodbody. 1,860,243; May 24.
Game indicator. W. C. Ferris and R. M. Brennan. 1,860,088; May 24.
Garbage burner. G. R. Howle. 1,859,445; May 24.
Garment hanger. D. Boone. 1,859,353; May 24.
Garment, Nether. M. D. Thomas. 1,859,900; May 24.
Gas and oil separator, Spiral. R. Deming. 1,860,238; May 24.
Gas burner. R. S. Dodd and L. J. Evans. 1,859,961; May 24.
Gas flow, Apparatus for controlling. C. T. Henderson. 1,859,442; May 24.
Gas, Making water. W. M. Cross. 1,860,138; May 24.
Gas passage of the cylinders of internal combustion engines. F. de Lautour. 1,859,329; May 24.
Gas producer, Mechanical. F. H. Treat. 1,859,576; May 24.
Gauge: *See*—
Rivet gauge.
Gauge for printing presses. W. L. Angel. 1,859,548; May 24.
Gauge for use with cutters. A. Laukhuff. 1,859,371; May 24.
Gear and brake, Hydraulic transmission. H. Sinclair. 1,859,607; May 24.
Gear, Electromagnetically controlled reversing. R. Bernady. 1,859,403; May 24.
Gear for airplanes, Retractable landing. L. R. Grumman. 1,859,624; May 24.
Gear for motor vehicles, Hydraulic steering. L. C. Josephs, jr. 1,859,333; May 24.
Gear, Friction draft. C. J. Holland. 1,859,703; May 24.
Gear mechanism, Reversing. C. C. Bertram. 1,859,900; May 24.
Gear or gearing. J. Potts. 1,859,528; May 24.
Gear shifting mechanism. J. A. Martin. 1,860,196; May 24.
Gear, Speed change. R. Erban. 1,859,502; May 24.
Gear transmission. G. H. Cook 1,860,017; May 24
Gearing arrangement of mangling or wringing machines. E. Louchet. 1,860,041; May 24.
Gearing device, Automatically working continuous. J. E. Thellmod and B. Zettergren. 1,859,899; May 24.
Gearing, Extension transmission. J. E. Padgett and C. D. Peterson. 1,859,788; May 24.
Generator: *See*—
Oscillation generator.
Glass, Apparatus for forming reenforced. K. Macht. 1,859,880; May 24.
Glass, Apparatus for producing laminated. D. Adams. 1,860,067; May 24.
Glass apparatus, Sheet. F. J. Kincaid. 1,860,100; May 24.
Glass apparatus, Sheet. L. C. Mambourg. 1,860,044; May 24.
Glass, Method and apparatus for producing sheet. J. L. Drake. 1,860,082; May 24.
Glass, Process and apparatus for making sheet. L. Boudin. 1,859,862; May 24.
Glass, Process and apparatus for producing sheet. J. L. Drake. 1,860,085; May 24.
Glass, Process and apparatus for producing sheet. J. L. Drake. 1,860,140; May 24.
Glass sheets, System for surfacing. J. L. Drake. 1,860,083; May 24.
Glassware, Rolling process for. R. W. Canfield. 1,859,957; May 24.
Goggles, Adjustable. G. Rotolo. 1,859,532; May 24.
Golf ball washer. E. M. Laing. 1,859,626; May 24.
Golf tee. H. O. Brinck. 1,860,307. May 24.
Governing mechanism for marine power plants. W. B. Flanders. 1,859,437; May 24.
Granular material, Device for feeding. F. Czapar, jr. 1,859,655; May 24.
Grinder, Centerless. H. J. Hoeg. 1,859,443; May 24.
Grinder, Tool. W. F. Stimpson. 1,860,211; May 24.
Grinding machine. W. J. Guild. 1,859,737; May 24.
Grounding device or connecter. J. T. Pearson. 1,860,116; May 24.
Guard for spinning machines. P. J. Laux. 1,860,039; May 24.
Gum strip applier for tire building machines. C. H. Desautels. 1,859,330; May 24.
Gun. O. V. Payne. 1,860,157; May 24.
Guns, Independent line of sights for. J. C. Karnes. 1,859,564; May 24.
Hacking machine. C. E. Fuller and W. W. Wallace. 1,860,143; May 24.
Hair cleaning device. F. R. Rapids. 1,859,714; May 24.
Hair clipping machine. T. Chulanovski. 1,860,234; May 24.
Hair curling device. C. P. Gorin. 1,859,440; May 24.
Hair waving apparatus. R. M. Keele. 1,859,367; May 24.
Hair waving device. R. M. Keele. 1,859,366; May 24.
Hand brake. S. B. Haseltine. 1,859,701; May 24.
Hand signal, Automatic electric. H. Marcin. 1,860,109; May 24.
Handkerchief or similar article. M. P. Bee. Des. 86,992; May 24.

Handle for coffee makers and the like. A. M. Boever. 1,859,614; May 24.
Hanger: *See*—
Garment hanger.
Harvester, Peanut. S. C. Faulk. 1,859,358; May 24.
Harvesting device, Loose ear corn and vegetable. A. Mueller. 1,859,980; May 24.
Hauling device. G. E. Nichols. 1,859,711; May 24.
Haystacker. G. Billings. 1,860,222; May 24.
Headgear. A. A. Pereles. 1,859,313; May 24.
Headlamp construction. C. A. Michel. 1,859,673; May 24.
Headlight for motor vehicles. G. Wallstab. 1,859,854; May 24.
Headlight for motor vehicles, Dirigible. B. Castiglia. 1,860,233; May 24.
Headrest, Adjustable. A. R. Schwarzkopf. 1,860,058; May 24.
Heat control, Electric. W. H. McCall. 1,859,927; May 24.
Heat exchange apparatus. R. S. Riley. 1,859,573; May 24.
Heat pad for molding compounds. M. Segal. 1,859,991; May 24.
Heat transfer apparatus. E. M. Bassler. 1,860,125; May 24.
Heater: *See*—
Automobile heater. Fluid heater.
Heater and deflector therefor, Automobile. C. H. Will. 1,859,418; May 24.
Heating apparatus for automotive vehicles. F. B. Wines. 1,859,482; May 24.
Heating furnace. J. Beans. 1,859,760; May 24.
Height, Apparatus for determining metacentric. J. L. Wilson. 1,860,345; May 24.
Height, Indicating metacentric. J. L. Wilson. 1,859,546; May 24.
Hinge, Automobile windshield. P. B. Moore and B. Lewis. 1,860,198; May 24.
Hitch. A. J. Apamn. 1,859,488; May 24.
Hitch, Cushion safety. G. D. Besten. 1,859,649; May 24.
Holder, Bone. G. C. Braumuller. 1,859,954; May 24.
Holder, Eraser. I. Chesler. 1,859,433; May 24.
Holder, Flower. J. P. Gilbanks. Des. 87,005; May 24.
Holder for neckties. R. Harms. 1,859,669; May 24.
Holder, Gas. J. R. L. Santos. 1,859,718; May 24.
Holder, Key. L. G. Bates. 1,859,276; May 24.
Holder, Soap. J. Balestra. 1,859,492; May 24.
Holder, Soap. O. F. Baltzley. Des. 86,990; May 24.
Holder, Tag. H. L. Glidden. 1,859,439; May 24.
Hormones and manufacture of same, Sexual. E. P. Häussler. 1,860,287; May 24.
Hose coupling, Heavy duty. H. Lange. 1,860,038; May 24.
Hose, Flexible metal. P. MacKenzie. 1,859,449; May 24.
Hosiery and production, Full fashioned clocked. F. E. Struve. 1,859,318; May 24.
Hosiery, Device for pairing. J. A. Dodd. 1,859,817; May 24.
Hosiery, Right and left full-fashioned-foot. V. Krick. 1,859,335; May 24.
Housing for refrigerating plants, Float valve. R. L. Myers. 1,859,932; May 24.
Hub assemblies from axles, Device for removing. F. Swihart. 1,859,348; May 24.
Humidity control for cooking heaters. M. W. Faherty. 1,859,732; May 24.
Hydrocarbons, Cracking. E. C. Herthel. 1,859,966–7; May 24.
Hydrocarbons, Refining. W. V. Ischie. 1,859,968; May 24.
Hydroxy-ethylamino salts of 3-acetylamino-4-hydroxy-benzene-arsonic acid. K. Streitwolf, A. Fehrle, W. Herrmann and P. Fritzsche. 1,859,684; May 24.
Ice cube forming device. R. T. Brizzolara. 1,859,285; May 24.
Ice handling machine. S. H. Durbin. 1,859,501; May 24.
Ice up-ending machine. F. M. Aimes. 1,859,486; May 24.
Ice up-ending machine, Portable. F. M. Aimes. 1,859,487; May 24.
Iceless cooler. W. C. Willets. Des. 87,035; May 24.
Icing layer cakes, Apparatus for. H. E. Keck. 1,859,971; May 24.
Ignition timer, Engine. M. Mallory. 1,859,308; May 24.
Incinerator, Industrial. R. W. Krenz. 1,859,300; May 24.
Inclinometer and compass, Combined. J. E. Marshall. 1,860,259; May 24.
Indicating control means for instruments. H. H. Mapelsden. 1,860,151; May 24.
Indicating device. F. M. Pratt. 1,859,750; May 24.
Indicating mechanism, Selective. F. N. Linstow and W. Anderson. 1,860,191; May 24.
Indicator: *See*—
Game indicator. Piezo-electric indicator.
Liquid level indicator. Stop-go indicator.
Induction motor. C. L. Kennedy. 1,859,369; May 24.
Induction motor, Condenser. C. L. Kennedy. 1,859,368; May 24.
Ingot mold insert. W. M. Crowther. 1,859,355; May 24.
Ink and in the process of manufacturing same, Printer's. M. Ludwigsen. 1,860,043; May 24.
Inker for printing faces. H. L. Compton. 1,859,380; May 24.
Inking device. W. H. Young and E. O. Eckland. 1,860,124; May 24.
Instrument case. T. R. Harrison. 1,859,872; May 24.
Insulating blanket and controlling the distortion thereof. T. W. Simpson. 1,859,996; May 24.
Insulation explosion chamber members, Making laminated. C. F. Peterson. 1,860,158; May 24.
Intelligence, Recording and reproduction of. O. R. Miller. 1,859,930; May 24.
Internal combustion engine. A. Büchi. 1,859,693; May 24.
Internal combustion engine. J. Hirtreiter. 1,859,299; May 24.
Internal combustion engine. F. A. Thaheld. 1,859,541; May 24.
Internal combustion engine. S. J. Velton. 1,859,687; May 24.
Internal combustion engine, Rotary. W. W. Cleland. 1,859,618; May 24.
Interrupter, Rotary. C. Spaeth. 1,859,940; May 24.
Iron: *See*—
Branding iron. Soldering iron.
Electrically heated iron.
Iron-chromium alloys having a cold-rolled finish, Making ductile. H. S. George. 1,859,698; May 24.
Iron for railway cars, Grab. A. E. Small. 1,859,346; May 24.
Ironing board. L. Gothman and I. E. Smalley. 1,859,361; May 24.
Jack: *See*—
Lifting jack.
Joint: *See*—
Pipe joint. Universal joint.
Rail joint.
Joint for cabinets or the like, Corner. W. R. Rix. 1,859,799; May 24.
Journals of rotating cylinders and the like, Steam fitting for. B. A. Malkin. 1,859,975; May 24.
Juice distributor. R. B. Taylor, B. B. Henderson, and O. R. Olsen. 1,859,724; May 24.
Key cutting machine. J. Schechter. 1,860,160; May 24.
Kiln, Twin tunnel. W. L. Hanley, jr. 1,859,507; May 24.
Kit, Hypodermic. C. Sponsel. 1,859,316; May 24.
Kneading and mixing machine, particularly for producing confectionery. F. Aeschbach. 1,859,690; May 24.
Knitting machine, Automatic split foot stocking. J. L. Sutphen. 1,860,162; May 24.
Knitting machines, Yarn feeding means for straight. R. E. Schletter. 1,859,411; May 24.
Knobs to shafts, Connecting. M. Rathbun. 1,859,794; May 24.
Label and corner flap, Inside. F. R. Neely. 1,859,523; May 24.
Lace. G. Cordier. Des. 86,997; May 24.
Ladder, Folding fire escape. J. Reese. 1,859,984; May 24.
Ladder support, Extension. J. C. Adams. 1,860,005; May 24.
Lamp. A. L. Martinek. 1,860,195; May 24.
Lamp, Incandescent. T. Kowvallis. 1,860,035; May 24.
Lamp, Table. O. A. Reinhold. Des. 87,025; May 24.
Lamp, Therapeutic. G. D. Rice. 1,859,601; May 24.
Last, Shoe shining. H. E. Schulse. 1,859,536; May 24.
Latch device for hand bags. E. Poeter. 1,859,789; May 24.
Latch for dumb waiter doors. D. D. Levy. 1,859,780; May 24.
Latch mechanism. J. B. Howe. 1,859,444; May 24.
Latch, Subtraction key. O. Sundstrand. 1,859,897; May 24.
Lath, Reenforced metal. W. J. Purser. 1,859,409; May 24.
Lathe, Wood turning. R. E. Shawver. 1,859,474; May 24.
Lathes and other machine tools with drive by hydraulic stepless gearings, Arrangement on. M. Ritter. 1,859,715; May 24.
Laths, Forming facing sheets for fabricated. G. A. Buttress. 1,859,354; May 24.
Laundry assorting apparatus. J. H. Lynch. 1,859,307; May 24.
Lawn mower reel. C. R. Van Arsdall. 1,860,002; May 24.
Lead alloy. H. Harris. 1,860,095; May 24.
Leather for weaving, Preparing. P. Mattler. 1,859,570; May 24.
Leather, Making. F. Wavra. 1,859,417; May 24.
Leer. V. Mulholland. 1,859,931; May 24.
Leg for furniture, Extensible. F. Kusterle. 1,860,103; May 24.
Legume food products, Manufacture of precooked. A. L. Chamberlain. 1,859,279; May 24.
Leveling device for pool and billiard tables. F. W. Young. 1,860,215; May 24.
Lid for milk tins, Pouring and closing. F. Klapperstück. 1,859,741; May 24.
Life preserving mechanism for airships. H. P. Trusty. 1,859,542; May 24.
Lifting jack. J. A. Cheape. 1,860,014; May 24.
Lifting jack. D. W. Sessions. 1,859,993–4; May 24.
Lifting jack, Hydraulic. R. Kümmel. 1,859,830; May 24.
Lifting means for slips, Hydraulic synchronized. J. S. Taylor. 1,860,062; May 24.
Light: *See*—
Mirror light.
Light projector. P. S. Bailey. 1,860,165; May 24.

Light-sensitive apparatus. T. A. E. Belt. 1,860,169; May 24.
Lighter. L. V. Aronson. 1,859,908; May 24.
Lighting device for orchard heaters. J. A. Waller. 1,859,609; May 24.
Lighting fixture. G. Ainsworth. Des. 86,989; May 24.
Lighting fixture, Street. G. H. Cole. 1,859,694; May 24.
Lighting system for automobile lifts. W. E. Thibodeaux. 1,859,349; May 24.
Link and manufacture thereof, Non-skid. G. R. Cunnington. 1,859,657; May 24.
Link for tire chains, Non-skid cross. G. R. Cunnington. 1,859,656; May 24.
Link pins, Improving the quality of. F. A. Fahrenwald. 1,859,503; May 24.
Linoleum, Manufacture of. A. A. Godfrey. 1,860,242; May 24.
Liquid level indicator. J. P. Nikonow. 1,859,933; May 24.
Liquid level indicator. F. M. Slough. 1,860,209; May 24.
Liquid spreading apparatus. J. W. Bunch. 1,860,136; May 24.
Liquid with a gas, Apparatus for treating. F. W. Maclennan. 1,859,781; May 24.
Liquids, Apparatus for cooling. O. F. Boyer. 1,859,953; May 24.
Liquids, Apparatus for feeding. H. D. Hunt. 1,859,774; May 24.
Liquids, Bottling of. E. B. Thubron. 1,860,270; May 24.
Liquor to fresh acid cooking liquor, Regenerating spent alkaline. G. A. Richter. 1,859,888; May 24.
Lock: *See*—
Faucet bar lock. Nut lock.
Lock. J. Schlecnter and C. R. Poole. 1,860,161; May 24.
Lock and opener, Combined door. P. Peloquin. 1,859,460; May 24.
Lock operating mechanism, Door. A. Wasberg. 1,859,610; May 24.
Locking means, Coin controlled. G. E. Nicholson. 1,860,295; May 24.
Loom and method of weaving. G. W. Bogdanffy. 1,859,952; May 24.
Loud speaker. R. Vermeulen. 1,859,758; May 24.
Lubricating system. M. Boncher. 1,859,549; May 24.
Lubrication. H. H. Gilbert. 1,859,438; May 24.
Luggage carrier. S. H. Roberts. 1,860,204; May 24.
Lumber, Jointed. J. K. Gruner. 1,859,667; May 24.
Macaroni, Manufacturing. G. Tanzi. 1,859,416; May 24.
Machine for cutting bars, pipes, etc. M. H. Sussman. 1,859,319; May 24.
Machine for inserting eyelets in window shades and the like. C. N. Colpitts. 1,859,959; May 24.
Machine for making parquetry blocks. G. G. Rhinevault. 1,859,633; May 24.
Machine for removing armature insulation. H. H. Eaton. 1,860,310; May 24.
Machine for shaping uppers over lasts. C. A. Robinson. 1,859,471; May 24.
Machine for shredding date fruit. J. H. Northrop. 1,859,458; May 24.
Machine for soldering wafer thermostats. J. W. Myers. 1,860,048; May 24.
Magnetic device. G. H. Bougon. 1,859,764; May 24.
Magnetic motor. H. L. Worthington. 1,859,643; May 24
Magnetos, Collector ring for. I. Q. Gurnee. 1,860,026; May 24.
Magnetron apparatus, High frequency. E. D. McArthur. 1,860,152; May 24.
Manicure set for ladies' hand bags. S. R. Mirmann. 1,860,261; May 24.
Marker, Traffic. R. H. Oshrink. Des. 87,019; May 24.
Marking machine. C. O. Wenning. 1,860,271; May 24.
Material and preparing same, Surfacing. Z. C. Loebel. 1,860,040; May 24.
Material, Apparatus for conveying and spraying. G. L. Fisk. 1,859,359; May 24.
Material, Embossing plastic. R. G. Anderson. 1,859,907; May 24.
Material, Method of and apparatus for subdividing. G. E. Sell. 1,859,992; May 24.
Material to rotary operating devices, Apparatus for applying. D. C. Bailey. 1,859,275; May 24.
Materials, Attenuation of. M. E. Evans. Re18,478; May 24.
Materials, Destructive hydrogenation of carbonaceous. M. Pier, K. Winkler, and K. Wissel. 1,859,314; May 24.
Mattress. M. Marsack. 1,859,340–1; May 24.
Mattress. J. Neuman. 1,860,293; May 24.
Mattress stand. J. C. Sangers. 1,859,636; May 24.
Measuring apparatus, Resistance. C. A. Anderson. 1,859,860; May 24.
Measuring instrument, Electrical. F. W. Roller. 1,860,055–6; May 24.
Meat stuffing machine. W. Bauer. 1,860,220; May 24.
Mercury derivative of halogenated fluoresceins. E. C. White. 1,860,003; May 24.
Mercury vapor rectifier. E. Kern. 1,859,875; May 24.
Metal and article made therefrom, Noncorrosive. F. Nicodemo. 1,859,749; May 24.
Metal articles, Cleaning. H. S. George. 1,859,736; May 24.
Metal extruding apparatus. D. L. Summey. 1,859,753; May 24.
Metal extrusion press. O. Schlenstedt. 1,859,473; May 24.
Metal extrusion press. O. Schlenstedt. 1,859,990; May 24.
Metal to shearing devices, Apparatus for feeding. F. C. Biggert, jr. 1,860,340; May 24.
Metal treating furnace. C. T. Willard and R. Kaier. 1,860,065; May 24.
Meter for ships and other movable bodies, Stability. J. L. Wilson. 1,860,344; May 24.
Micromanipulator. G. W. Fitz. 1,859,823; May 24.
Micrometer adjusting device for clocks and similar mechanisms. A. H. Neureuther. 1,860,153; May 24.
Milking apparatus. L. Dinesen. 1,859,500; May 24.
Mill: *See*—
Ball mill.
Mirror light, Disappearing. A. Marchand. 1,859,592; May 24.
Mold handling device. H. D. Stevens and N. H. Myers. 1,859,849; May 24.
Molding apparatus. M. K. Douglas. 1,859,658; May 24.
Molding, Garnish. H. G. Kellogg. 1,860,250; May 24.
Moths or other insects from closets, Method of and device for excluding. E. R. Carpenter. 1,860,231; May 24.
Motor: *See*—
Induction motor. Magnetic motor.
Mounting for rectifier plates. L. F. Bird. 1,860,069; May 24.
Mounting, Rock drill. G. M. Nell. 1,859,748; May 24.
Mouthpiece for cigarettes. J. F. Hughes. 1,859,395; May 24.
Mower attachment for tractors. J. E. Hoste. 1,860,247; May 24.
Muffler. E. P. Gray. 1,860,146; May 24.
Muffler. F. E. Kersey. 1,859,400; May 24.
Necktie. M. Halpern. Re18,481; May 24.
Nest, Poultry. S. Yuhas. 1,860,304; May 24.
Nonreturn device. C. D. Jermyn. 1,859,704; May 24.
Nut lock. J. H. Roberts. 1,860,297; May 24.
Oil burning machine utilizing air blast. A. L. Klees. 1,860,311; May 24.
Oil cooling system. B. Loeffler. 1,860,150; May 24.
Oil, Heating and cracking. J. C. Black and E. W. Gard. 1,859,691; May 24.
Oil, Manufacturing of lubricating. E. W. Isom. 1,859,514; May 24.
Oil stocks, Treating lubricating. J. C. Black, W. D. Rial, and J. R. McConnell. 1,859,692; May 24.
Oils, Cracking hydrocarbon. E. C. Herthel and T. De C. Tifft. 1,859,510; May 24.
Oils, Cracking hydrocarbon. R. C. Osterstrom. 1,860,199; May 24.
Oils, Storage of hydrocarbon. R. E. Wilson. 1,859,322; May 24.
One-legged table. W. C. Wetmore. 1,859,320; May 24.
Opener, Can. A. K. L. Steckmann. 1,859,478; May 24.
Ophthalmic mounting. G. L. Tully. 1,859,757; May 24.
Oscillation generator. K. Okabe. 1,860,114; May 24.
Oscillation generator. M. Osnos. 1,860,050; May 24.
Overshot. B. J. Clouse. 1,860,016; May 24.
Oxidation products, Making partial. J. H. James. 1,859,587; May 24.
Oxide coatings from metals, Removing. H. S. George. 1,859,734; May 24.
Package handling and binding apparatus. V. Tenuta. 1,859,375; May 24.
Packer for oil wells. G. Meyer. 1,859,744; May 24.
Packing, Resilient. M. Birkigt. 1,860,274; May 24.
Packing ring. W. R. Smittle. 1,860,267; May 24.
Pad: *See*—
Roller pad.
Pad making machine. E. R. Martin. 1,859,310; May 24.
Pan: *See*—
Building pan.
Pans, Set of baking. A. F. and P. S. Ward. 1,859,855; May 24.
Paper bag. H. A. Grant. 1,860,244; May 24.
Paper carrier. W. F. Lenhart. 1,859,303; May 24.
Paper cleaner, Wall. H. S. Neale. 1,859,747; May 24.
Paper making machine. T. D. Nuttall. 1,859,838; May 24.
Pasteurizing apparatus. H. S. Fielder. 1,859,504; May 24.
Peanut warmer. W. H. McShane. Des. 87,015; May 24.
Pencil, Drawing. K. Kreutzer. Des. 87,009–10; May 24.
Pencils and like instruments, Attachment for. L. J. Hyams. 1,859,775; May 24.
Perforating device. J. F. Gentry. 1,859,559; May 24.
Petroleum emulsions, Treating. J. Hyman and A. F. Schlandt. 1,860,248; May 24.
Phonograph attachment. L. G. Larsen. 1,860,104; May 24.
Phonograph, Sound-on-film. L. De Forest. 1,859,435; May 24.
Phonographic record. C. Jäger. 1,859,396; May 24.
Photographs, Producing composite. W. V. and W. W. Kelley. 1,859,589; May 24.
Photography, Color. T. T. Baker. 1,860,218; May 24.
Picture and like frame. H. Herzogenrath and H. Tladen. 1,859,511; May 24.
Picture screen, Motion. C. W. Ebeling. 1,860,323; May 24.
Pictures with sound, Combining. H. H. Golden and I. Nachumsohn. 1,859,665; May 24.
Piezo-electric indicator. E. Glebe and A. Scheibe. 1,860,145; May 24.

Pigment dyes. G. Kränzlein, C. Hartmann, and A. Hardt. 1,860,036; May 24.
Pigments fast to light, Preparing. K. Gerbel. 1,859,808; May 24.
Pilot support for reamers. G. E. Moen. 1,859,836; May 24.
Pin construction, Wrist. P. M. Freer. 1,859,360; May 24.
Pipe and conduit bender. G. W. Meighan. 1,859,406; May 24.
Pipe fitting, Safety. F. E. Key. 1,859,972; May 24.
Pipe fitting, Waste. D. H. Ebinger. 1,859,821; May 24.
Pipe joint. J. H. McEvoy, jr. 1,859,311; May 24.
Pipe threading machine. I. W. Nonneman. 1,859,882; May 24.
Piston head, Skeleton. J. C. Ducommun. 1,860,141; May 24.
Piston ring. F. R. Good. 1,860,025; May 24.
Piston sealing means. R. Maisel. 1,859,520; May 24.
Plait heading. E. J. Martens. 1,860,110; May 24.
Plane, Superlight. A. Fehrenbach. 1,860,087; May 24.
Plate or similar article. R. E. Lukens. Des. 87,037; May 24.
Plate or similar article. W. S. Mayer. Des. 87,038; May 24.
Plate or similar article. K. Pschorr. Des. 87,022–3; May 24.
Plating machine. V. D. Hamilton. 1,859,668; May 24.
Pliers. J. C. Lebherz. 1,860,290; May 24.
Plow. C. G. Strandlund. 1,859,896; May 24.
Plow. C. G. Strandlund. 1,859,942; May 24.
Plug, Heat control emergency. A. Merdan. 1,859,977; May 24.
Plug, Renewable fuse. R. M. Davis. 1,860,237; May 24.
Portfolio, Stationery. A. E. Osborn. 1,859,631; May 24.
Post: *See*—
  Fence post.
Powder box, Talcum. F. N. Lewis. Des. 87,011; May 24.
Powdered fuel furnace. R. A. Foresman. 1,860,239; May 24.
Powdering apparatus. S. Lipsius. 1,859,804; May 24.
Power belt. R. J. Stokes. 1,860,269; May 24.
Power supply system. H. D. James. 1,860,099; May 24.
Power take off for Ford trucks. J. E. Horste. 1,860,246; May 24.
Power transmission. A. Howard. 1,860,182; May 24.
Power transmitter, Hydraulic. G. A. Klimek. 1,859,448; May 24.
Precoating device. A. French. 1,859,295; May 24.
Press: *See*—
  Metal extrusion press.
Pressing machine. E. Davis. 1,860,236; May 24.
Pressure regulator. C. W. Haddy. 1,859,506; May 24.
Primer for pumps. B. D. Barton. 1,859,283; May 24.
Printing and slitting roller. A. E. F. Moone. 1,860,047; May 24.
Printing presses, Attachment for. R. Ambrecht. 1,859,577; May 24.
Printing surfaces, Making. J. Dyer. 1,859,620; May 24.
Products of a particular origin, Intensifying. J. W. Rath. 1,859,467; May 24.
Projection system, Opaque. A. H. Blohm. 1,859,761; May 24.
Protecting device for banks. A. F. Cavanaugh. 1,860,013; May 24.
Protecting means for rolls of paper. E. L. McDevitt. 1,859,521; May 24.
Protective system for motion picture machines, G. S. Powers. 1,859,790; May 24.
Protector and making the same, Stocking. W. R. Dowman. 1,859,915; May 24.
Protector, Beam. A. W. Schenker. 1,860,205; May 24.
Protector for the outside baseboard of a window. J. Harper. 1,859,392; May 24.
Protector, Rumble seat. E. B. Brotherton. 1,859,286; May 24.
Prow construction for boats. S. Orking. 1,859,374; May 24.
Puller: *See*—
  Fuse puller.
Pulp from vegetable material, Production of fibrous. J. D. Rue, S. D. Wells, and F. G. Rawling. 1,859,848; May 24.
Pulped material and preparing the same. J. D. Rue, S. D. Wells, and F. G. Rawling. 1,859,847; May 24.
Pulps, Forming. E. P. Stevenson and H. A. Buron. 1,859,414; May 24.
Pump. A. L. Fawcett. 1,860,279; May 24.
Pump. B. L. Masters and J. Sinadin. 1,859,672; May 24.
Pump, Dispensing. M. J. and H. E. Caswell. 1,859,287; May 24.
Pump, Hydraulic. E. Stanley. 1,859,721; May 24.
Pump or compressor. P. O. Eckels. 1,860,278; May 24.
Rack: *See*—
  Display rack. Towel rack.
  Drying rack.
Radioreceiver and phonograph, Combination. J. L. Cassell. 1,860,078; May 24.
Radium filter emanator. J. C. Wichmann. 1,859,904; May 24.
Rail and support for the same. C. D. Young and A. B. Clark. 1,860,332; May 24.
Rail brace. A. H. Told. 1,860,064; May 24.
Rail joint. J. Brunner. 1,859,729; May 24.
Rail joint. J. Lemire. 1,860,105; May 24.
Rail joint. E. Rolshoven. 1,859,472; May 24.
Rail joint. B. Schellin. 1,859,410; May 24.
Rail joint chair. C. W. Burt. 1,859,428; May 24.
Railway, Elevated electric. P. Galko. 1,860,241; May 24.
Railway, Marine. F. R. Dravo and V. B. Edwards. 1,860,177; May 24.
Railway signaling. P. H. Crago. 1,859,960; May 24.
Railway underframe. W. M. Sheehan. 1,859,938; May 24.
Ram or pump, Hydraulic. J. W. Holladay. 1,859,394; May 24.
Range. J. Teller and A. P. Schulz. Des. 87,032; May 24.
Range, Cooking. G. E. Atkinson. 1,860,006; May 24.
Razor. H. De Haven. 1,859,555; May 24.
Razor and blade sharpener and process of sharpening, Combined. H. De Haven. 1,859,554; May 24.
Reamer shaft holder and feeder. G. E. Moen. 1,859,837; May 24.
Rear bracket, Vehicle accessory. E. V. Barker. 1,859,424; May 24.
Receptacle and the like, Laundry. J. Bode. 1,860,224; May 24.
Receptacle-evacuating apparatus. H. J. Engbrecht. 1,859,293; May 24.
Receptacle, Writing instrument receiving. W. E. Guyot. 1,860,093; May 24.
Recording system. J. B. Bowerman. 1,860,227; May 24.
Reel: *See*—
  Lawn mower reel. Rope and twine reel.
Reel for metal strips, Winding. W. C. Fork. 1,859,294; May 24.
Reflector and orificial applicator stand, Portable combination body raying. J. J. Rekar. Des. 87,027; May 24.
Refractory and making it. R. P. Heuer. 1,859,512; May 24.
Refrigerating apparatus. C. A. Bulkeley. 1,859,427; May 24.
Refrigerating apparatus. B. B. Geyer. 1,860,325; May 24.
Refrigerating apparatus. A. E. Payson and M. P. Wetmore. 1,859,887; May 24.
Refrigerating apparatus. J. T. Rauen. 1,859,795; May 24.
Refrigerating machine. G. H. Phelps. 1,859,840; May 24.
Refrigeration. C. G. Munters. 1,859,455; May 24.
Refrigerator apparatus. E. J. Abrens. 1,860,273; May 24.
Refrigerator, Automatic continuous. M. D. Brock. 1,860,133; May 24.
Registering device. A. J. Jacobs. 1,860,184; May 24.
Regulator: *See*—
  Feed water regulator. Water regulator.
  Pressure regulator.
Reproducing machine. C. Krebs. 1,860,037; May 24.
Resin, Synthetic. A. O. Jaeger. 1,860,098; May 24.
Resins, Synthetic. W. C. Arsem. 1,860,164; May 24.
Resistance device. S. Ruben. 1,859,344; May 24.
Resistance element for hydrocarbon cracking processes. R. Carter. 1,860,322; May 24.
Retort furnace, Rotary. F. J. Condit and E. L. Smalley. 1,859,381; May 24.
Reverse movement of a clutch-controlled shaft, Effecting a. D. Jones. 1,860,148; May 24.
Revolver. F. T. Moore. 1,860,112; May 24.
Rice drier. M. H. Kingham. 1,860,101; May 24.
Rim and mount, Tire. S. I. Prescott. 1,859,936; May 24.
Rim, Wheel. A. Conti. 1,860,308; May 24.
Ring: *See*—
  Packing ring. Piston ring.
Rivet gauge. W. M. Cronk. 1,860,174; May 24.
Road clearance device. E. Azopardi. 1,860,217; May 24.
Robe or blanket, Sleeping. M. G. Baker. 1,859,820; May 24.
Rod attachment, Curtain. J. Appleyard. 1,859,489; May 24.
Rod line swivel, Weighted. W. C. Trout. 1,860,121; May 24.
Roller: *See*—
  Printing and slitting roller.
Roller pad, Snapper. L. R. Schwartz. 1,859,800; May 24.
Rope and twine reel. A. F. Jackson. 1,860,249; May 24.
Rotary bit. J. A. Zublin. 1,859,947; May 24.
Rotary drill. C. W. Metzger. 1,859,978; May 24.
Rotary machine. E. W. Goeser. Re18,480; May 24.
Roundabout or merry-go-round. P. J. Maloney. 1,860,194; May 24.
Rubber compound, Age resisting vulcanized. W. Scott. 1,859,801; May 24.
Rubber like masses and preparing the same, New. E. Tschunkur and W. Bock. 1,859,686; May 24.
Rug, Padding. D. F. Fowler. 1,860,090; May 24.
Safety apparatus for aeroplanes. H. A. Thornton. 1,859,685; May 24.
Safety blow off device. H. Henderson. 1,859,670; May 24.
Safety device for firearms having a longitudinally movable closure element. L. Stange. 1,859,720; May 24.
Salt and other fertilizing materials, Manufacture of microcosmic. F. Mitteau. 1,859,835; May 24.
Sampler, Automatic. J. Llen. 1,860,107; May 24.
Sandal. M. Meyer. Des. 87,016; May 24.
Saw setting machine. C. H. Hart. 1,859,363; May 24.
Scale, Trip. H. P. Sachse. 1,859,604; May 24.
Scoring device. N. E. Nicolet. 1,859,524; May 24.

Scraper or grader. H. C. Buffington. 1,859,496; May 24.
Screen: *See*—
  Picture screen. Window screen.
Screen plates, Making. W. E. McMurray. 1,859,784; May 24.
Seal for shafts. A. C. Durdin, jr. 1,859,436; May 24.
Seal for wells, Casing. M. G. Stewart. 1,860,268; May 24.
Seal, Joint. H. Hardinge. 1,859,771; May 24.
Seaplane runway. O. A. Sandquist. 1,859,987; May 24.
Section strip, Interlocking. E. Fulda. 1,859,664; May 24.
Sediment collector. F. A. and A. H. Graumen. 1,859,362; May 24.
Separator: *See*—
  Dust separator. Gas and oil separator.
Series drop tube. J. A. Martocello. 1,859,451; May 24.
Setting to best photographic exposure, Apparatus for. R. A. Fessenden. 1,859,621; May 24.
Sharpening instrument and razor blade, Razor blade. H. De Haven. 1,859,556; May 24.
Shearing machine, Rotary. C. M. MacChesney and R. H. Norton. 1,859,336; May 24.
Shears. H. W. Clark. 1,860,316–17; May 24.
Shield attachment for garment hangers. F. Goldberg. 1,860,024; May 24.
Shields, Making radiator. B. Altheimer. 1,859,612; May 24.
Shift and freewheel construction for vehicles, Gearless. M. F. Sullivan. 1,859,347; May 24.
Shingles, Making. G. B. Stryker, jr. 1,860,060; May 24.
Shock absorber. C. E. Harriman. 1,859,441; May 24.
Shock absorber. H. H. Logan. 1,860,108; May 24.
Shock absorber. G. A. Shell. 1,859,995; May 24.
Shoe. F. E. Packard. Des. 87,020; May 24.
Shoe-pressing machine. H. A. Davenport. 1,859,434; May 24.
Shoe sole. C. L. White. Des. 87,034; May 24.
Shoe sole channeling machine. G. Passefiume. 1,859,459; May 24.
Shoe stiffener and shoe. L. P. Mellerio. 1,859,452; May 24.
Show case, Refrigerator. C. V. Hill. 1,859,826; May 24.
Side frame. M. H. Martin. 1,859,403; May 24.
Sifter, Ash. J. Nese. 1,859,373; May 24.
Sign. D. C. Churchill. Des. 86,996; May 24.
Sign. E. L. Rader. Des. 87,024; May 24.
Sign and sign character. J. Boyce. 1,859,911; May 24.
Sign, Traffic. R. W. Baily. 1,859,578; May 24.
Signal: *See*—
  Aeroplane float signal. Hand signal.
Signal. I. Nachumsohn. 1,859,676; May 24.
Signal. J. Trummer. 1,859,943; May 24.
Signal device for automobiles. H. Kageyama. 1,859,515; May 24.
Signal for automobiles, Direction. T. A. Kane. 1,860,034; May 24.
Signal system. E. Neerup. 1,860,049; May 24.
Signal system, Railway electric. E. J. Quinby. 1,859,466; May 24.
Signals, Device for electrically lighting. R. Mercier. 1,860,328; May 24.
Signboard outfit. A. Thompson. 1,859,755; May 24.
Silica, Hydrated. S. S. Svendsen. 1,859,998; May 24.
Silicon carbide and calcium carbide, Production of. H. E. White. 1,859,856; May 24.
Slotting and scoring mechanism. S. M. Langston and W. H. Cleaver. 1,859,877; May 24.
Sludge bed cleaning apparatus. M. B. Tark and R. L. Cleveland. 1,860,300; May 24.
Snap switch, Flush. F. E. Johnson. 1,859,671; May 24.
Socket retainer. C. A. Michel. 1,859,674; May 24.
Soda fountain. G. R. Lipplit. Des. 87,012; May 24.
Soldering fluxes, Anti-fermentive. E. F. Bowers. 1,859,651; May 24.
Soldering iron, Electric. E. A. Lockwood. 1,860,192; May 24.
Soot pocket for boilers. D. S. Jacobus and W. A. Jones. 1,859,873; May 24.
Sound record printing. S. Twining and T. M. Ingman. 1,859,999; May 24.
Sound recording. H. D. Arnold. 1,859,423; May 24.
Sound recording apparatus. B. J. Chromy. 1,859,552; May 24.
Sound reproducing apparatus. B. J. Chromy. 1,859,551; May 24.
Sousaphone. R. P. Dougherty. Des. 87,001; May 24.
Spark arrester. I. Simpson. 1,859,804; May 24.
Speaker, Electro-dynamic. R. T. Kingsford. 1,859,518; May 24.
Speed control apparatus, Motor. J. I. Hull. 1,860,183; May 24.
Speed mechanism, Automatic change. E. Bourquin. 1,860,010; May 24.
Speed mechanism, Variable. W. M. Cutler. 1,859,815; May 24.
Speed reduction mechanism. J. L. Perkins. 1,859,462; May 24.
Spinning machine, Centrifugal. A. Hartmann. 1,859,825; May 24.
Splice and method of splicing belts and the like. D. Repony. 1,859,468; May 24.
Spool for thread. G. S. Radford. 1,859,842; May 24.
Spray gun head. M. J. Binks and W. H. Hersleb. 1,860,129; May 24.
Spraying apparatus. W. A. Ready. 1,859,797; May 24.
Spring: *See*—
  Vehicle spring.
Spring. O. R. Wikander. 1,860,122; May 24.
Spring structure. J. M. Oldham. 1,859,630; May 24.
Spring suspension. G. J. Fletcher. 1,860,280; May 24.
Stalk cutting apparatus. S. W. McBirney. 1,859,783; May 24.
Stamping machine. W. Pannier, jr., O. M. Pannier, and J. F. Mon. 1,860,115; May 24.
Stand: *See*—
  Mattress stand.
Stand for a duplicating machine or the like J. J. Flanigan. Des. 87,002; May 24.
Stand for collapsible tubes, Supporting. F. Wolf. 1,859,323; May 24.
Stand or similar article, Display. H. Boyar. Des. 86,994; May 24.
Stapling machine. J. C. Blevney. 1,859,951; May 24.
Steel, Apparatus for continuous treatment of sheet. D. M. Shanafelt, G. B. Nisbet, and A. H. Shonkwiler. 1,859,803; May 24.
Steel body and hardening same, Cast. A. W. Gregg. 1,859,623; May 24.
Steel, Process and apparatus for annealing sheet. D. M. Shanafelt, G. B. Nisbet, and A. H. Shonkwiler. 1,859,802; May 24.
Steering and engine control device, Combined. C. N. Colstad. 1,860,173; May 24.
Stencil. E. M. Barden. 1,860,219; May 24.
Stoker. W. J. Haag. 1,859,297; May 24.
Stop for cab windows, Weather. G. J. Glaus. 1,859,388; May 24.
Stop for elevators, Safety. T. Donelt. 1,860,018; May 24.
Stop-go indicator. H. C. Webb. 1,859,902; May 24.
Stopper and retracting device for collapsible tubes. G. R. Cruze. 1,859,382; May 24.
Storage elevator, Automobile. H. D. James. 1,859,874; May 24.
Stove. C. L. E. Chenu. 1,859,432; May 24.
Stove, Wall. S. G. Weller. Des. 87,033; May 24.
Straightening machine. R. C. Stiefel. 1,859,851; May 24.
Strand working apparatus. H. Blount. 1,860,070; May 24.
Strand working machine. H. Blount. 1,860,130; May 24.
Strap for wrist watches. C. Duerr. 1,859,819; May 24.
Strip feeding machine. H. J. Gaisman and C. Schumacher. 1,860,144; May 24.
Strip registering device. L. Ferencl. 1,859,962; May 24.
Stuffing box, Liquid cooled. C. B. Buerger. 1,859,378; May 24.
Suction cup. O. C. Ritz-Woller. 1,859,893; May 24.
Sugar, Manufacture of. E. R. Ramsey and A. W. Bull. 1,860,321; May 24.
Suit, Child's play. A. C. Morand. Des. 87,017; May 24.
Sulphide and its preparation, Stable selenium. B. W. Nordlander. 1,860,154; May 24.
Sulphide and its preparation, Stable selenium. B. W. Nordlander. 1,860,336; May 24.
Sulphocyanic groups in aliphatic compounds, New process for. H. P. Kaufmann. 1,859,399; May 24.
Support, Article. S. T. Howard. 1,860,032; May 24.
Support, Combined workbench, cabinet, and tool. H. T. Bodkin. 1,860,071; May 24.
Support for vacuum tubes, Nonmicrophonic. C. A. Gunther. 1,860,178; May 24.
Support, Rotary plant. F. H. Albee. 1,859,352; May 24.
Support, Web roll. F. Lamatsch. 1,859,301; May 24.
Supporter, Hose. J. G. Tompkins. 1,859,810; May 24.
Supporting and ratchet bracket, Combined. W. A. Bracken. 1,860,228; May 24.
Surfacing machine. I. O. Pedersen and E. G. Stahle. 1,860,117; May 24.
Switch: *See*—
  Electric switch. Time switch.
  Snap switch. Vacuum switch.
  Thermostatic switch. Wall switch.
Switch. H. E. Norviel. 1,859,981; May 24.
Switchgear, Electric. G. Pailin. 1,860,156; May 24.
Switch remover. G. J. Sabatino. 1,860,057; May 24.
Switching and distribution system, Electric. G. A. Burnham. 1,859,955; May 24.
Switching arrangement, Automatic. H. Bany and H. T. Seeley. 1,860,167; May 24.
Table: *See*—
  Drawing table. One-legged table.
  Folding table.
Table and chair, Combination. G. Mejcher. 1,860,291; May 24.
Table and ironing board, Swinging. H. C. Schrage. 1,859,719; May 24.
Table slide, Equalizing. W. A. Duncan. 1,860,019; May 24.
Tamper for cigarette machine feeds. G. W. Gwinn. 1,859,965; May 24.
Tank and making the same, Thin metal. W. D. Phetteplace. 1,859,632; May 24.
Tank for railway cars. W. P. Murphy. 1,859,338; May 24.
Tape, Budding and grafting. P. B. L'Hommedieu. 1,860,255; May 24.

Taximeter control mechanism. J. L. Brownell. 1,859,616; May 24.
Telegraph plant or type printing telegraph. A. Jipp. 1,859,776; May 24.
Telephone exchange system. M. B. McDavitt. 1,859,404; May 24.
Telephone exchange system. R. L. Stokely. 1,859,941; May 24.
Telephone exchange system, Call charging. L. H. Johnson and E. S. Gibson. 1,859,924; May 24.
Telephone system. L. J. Bowne. 1,859,910; May 24.
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Telephone system. E. P. G. Wright. 1,860,066; May 24.
Telephone system, Semiautomatic. T. S. Skillman. 1,859,476; May 24.
Telephones, Operating mechanism for automatic. W. H. Fitch. 1,859,622; May 24.
Television apparatus. A. F. Godefroy. 1,859,824; May 24.
Temperature controlling and measuring apparatus. L. R. Koller. 1,860,187; May 24.
Temperature regulation. A. J. Otto. 1,859,407; May 24.
Template, Adjustable. P. C. Lawson and C. B. Schafer. 1,860,319; May 24.
Tensioning device. C. A. Braudes. 1,860,072; May 24.
Testing apparatus. J. Wicks. 1,859,905; May 24.
Textile fabric. W. Mendel. 1,860,314; May 24.
Textile fabric or similar article. E. Déchery. Des. 87,059–41; May 24.
Thermometer, Baby's. R. M. Thomas. 1,860,302; May 24.
Thermometer, Windshield. W. H. MacCollum. 1,859,928; May 24.
Thermostatic switch. W. W. Riedel. 1,859,985; May 24.
Thread core. C. K. Dunlap. 1,860,020; May 24.
Throttle control. D. J. Dolan. 1,860,081; May 24.
Time switch. W. E. Porter. 1,860,159; May 24.
Timing assembly for automobiles. S. H. Clarke. 1,860,235; May 24.
Tin from scrap tin plate and like tin bearing materials, Recovery of. M. G. Gilbert. 1,859,919; May 24.
Tire building drum, Telescopic. A. L. Heston. 1,860,342; May 24.
Tire building machine. F. J. Shook. 1,859,538; May 24.
Tire carrier. W. S. Fisher. 1,859,662; May 24.
Tire casing repairing device, Pneumatic. L. M. Littlefield. 1,859,305; May 24.
Tire tread cutting machine, Rubber. L. H. Messinger, jr. 1,859,785; May 24.
Tissue of cellulose fiber for conversion into cellulose derivatives and product of same, Conditioning a. G. A. Richter, M. O. Schur, and R. H. Rasch. 1,859,889; May 24
Tobacco, Treating. A. L. Chesley. 1,859,379; May 24.
Toilet device for vehicles. I. S. Kelley. 1,859,925; May 24.
Tonsillectome. U. S. Smith. 1,859,412; May 24.
Tool, Food working. W. F. Hackett. 1,859,298; May 24.
Tool for applying wire hose clamps. F. W. Gunn. 1,860,284; May 24.
Tool joint with lock ring sub, Weld lock rotary. E. Timbs. 1,859,809; May 24.
Tool, Mixing. J. T. Cessna, jr. 1,859,958; May 24.
Tool, Plug cutting. W. H. Young. 1,859,547; May 24.
Tool, Transplanting. H. J. Rissi. 1,859,603; May 24.
Tooth, Artificial. A. Merk. 1,859,453; May 24.
Toothbrush. H. D. Bell. 1,859,425; May 24.
Tooth, Scarifying. A. B. Wilson. 1,859,350; May 24.
Top dressing machine. E. M. Laing. 1,859,625; May 24.
Torch, Cutting. J. D. McCutcheon. 1,860,046; May 24.
Towel rack. K. H. Whitney. 1,859,945; May 24.
Towel service apparatus. S. A. Schwartz. 1,859,937; May 24.
Towel service apparatus. S. A. Schwartz. 1,860,206; May 24.
Tower, Knockdown structural elevator. M. B. Schiller. 1,859,894; May 24.
Toy airplane. N. M. Sleeper. 1,859,805; May 24.
Toy automobiles, Lighting system for. H. T. Kingsbury. 1,860,251; May 24.
Toy locomotive. M. Caruso. 1,859,430; May 24.
Toy nursing bottle. M. Wittmann. 1,859,485; May 24.
Toy, Vehicle. D. A. Carlstrom. 1,859,617; May 24.
Train control, Composite system of. M. H. Loughridge. 1,859,591; May 24.
Transformer for orificial applicators, Portable wall. J. J. Rekar. Des. 87,026; May 24.
Transforming and circuit interrupting apparatus, Unitary. G. E. Jansson. 1,859,969; May 24.
Transmission. T. L. Fawick. 1,860,142; May 24.
Transmission line. H. O. Peterson. 1,860,052; May 24.
Transmission means, Manually selective variable. A. C. Peterson. 1,859,461; May 24.
Trap. A. McMullen. 1,859,405; May 24.
Traveling bag. A. Kaufmann. 1,859,970; May 24.
Tray and incense burner, Combined ash. G. R. McAllaster. Des. 87,013; May 24.
Trimmer: *See*—
  Edge trimmer.
Tripod or similar support. H. K. Dalton. 1,859,289; May 24.
Truck body. M. Standish. 1,860,119; May 24.
Truck, Hand. D. M. Watson and G. C. Munoz. 1,860,331; May 24.
Trunk and luggage carrier, Combination. C. H. Myers. 1,859,746; May 24.
Tube: *See*—
  Discharge tube. Series drop tube.
  Electron tube.
Tube and cover, Collapsible. R. Booth. 1,860,131; May 24.
Tubes, Extruding metal. J. W. Leighton. 1,859,707; May 24.
Tubing catcher. F. N. Crippen. 1,859,654; May 24.
Tungsten carbide to other metals, Cementing. W. R. Chapin. 1,860,275; May 24.
Turpentine, Distillation of crude. E. Bernhard and V. Hilcken. 1,860,126; May 24.
Turrett for machine guns on board aeroplanes, Equilibrated. E. Granat. 1,860,282; May 24.
Tuyère, Furnace. H. E. Preston. 1,860,296; May 24.
Umbrella for carrying overshoes. M. Marsh. 1,859,627; May 24.
Universal joint. P. G. Beremand. 1,859,426; May 24.
Vacuum contact frame. L. H. Klitsche. 1,859,829; May 24.
Vacuum switch. C. H. North. 1,859,598; May 24.
Vacuum tube and method of treating thereof. I. Nachumsohn. 1,859,679; May 24.
Vacuum tubes, Method and apparatus for manufacture of. J. D. Le Van. 1,860,106; May 24.
Valve. V. Bush. 1,859,580; May 24.
Valve. E. E. Eickmeyer. 1,859,916; May 24.
Valve. C. Johnson. 1,860,239; May 24.
Valve. E. Koppl. 1,859,590; May 24.
Valve and spring therefor, Slide. C. H. Voss. 1,859,811; May 24.
Valve assembly for air compressing cylinders. A. Wyzenbeek. 1,860,163; May 24.
Valve, Check. F. Yardley. 1,860,004; May 24.
Valve for fluid actuated hammers. P. F. Koplin. 1,859,876; May 24.
Valve mechanism. F. V. D. Longacre. 1,859,879; May 24.
Valve, Regulator. W. C. Buttner. 1,859,914; May 24.
Valve, Shut-off. E. M. May. 1,859,834; May 24.
Valve, Thermostatic control. J. J. Lawler. 1,860,189; May 24.
Vanity case. C. N. Coryell. 1,860,079; May 24.
Vanity case. F. Spitalny. Des. 87,030; May 24.
Vapor condensing apparatus. E. F. Ries. 1,859,602; May 24.
Vaporizer. F. F. Chase. 1,859,431; May 24.
Vaporizer. W. L. Fleisher. 1,859,770; May 24.
Variable stroke feeder. W. H. King and R. Cottar. 1,859,370; May 24.
Vault, Burial. A. Evard. 1,860,023; May 24.
Vault, Burial. W. L. and M. E. Potts. 1,860,266; May 24.
Vehicle brake. E. A. Rockwell. 1,859,520; May 24.
Vehicle spring. J. J. Tatum. 1,859,808; May 24.
Vehicle underframe, Railway. W. M. Sheehan. 1,859,895; May 24.
Vehicle wheel. W. N. Booth. 1,860,226; May 24.
Vehicle wheel. G. Christla. 1,860,015; May 24.
Vehicle wheel. A. G. B. Owen and R. W. Downs. 1,860,264; May 24.
Vehicle wheel, Balanced motor. C. S. Ash. 1,860,216; May 24.
Vehicles, System of storing motor road. W. I. Bell. 1,860,008; May 24.
Vending machine. J. Rose. 1,859,635; May 24.
Vent for gravity milk tanks, Sanitary. F. G. Thwaits. 1,859,479; May 24.
Ventilating apparatus. E. M. Bassler. 1,860,068; May 24
Ventilator. F. W. Butt and A. McGary. 1,860,135; May 24.
Ventilator. E. A. Tappert. 1,860,061; May 24.
Ventilator fume, Apparatus for recovering furnace. B. W. Gonser. 1,860,091; May 24.
Vessel and producing the same, Steel. F. Neuhaus. 1,860,292; May 24.
Vibrations of strings, Modifying. N. Crane. 1,859,553; May 24.
Vise for centering generators and the like. B. J. Haskins. 1,859,920; May 24.
Visuality by reflected light, Effecting. N. H. Ranstead. 1,859,682; May 24.
Vulcanizing apparatus. C. E. Maynard. 1,859,337; May 24.
Wall and units used therein, Imitation masonry. F. E. Horne. 1,860,181; May 24.
Wall board, Manufacture of. G. M. Thomson. 1,859,853; May 24.
Wallpaper or similar article. J. Dornbusch. Des. 86,999–87,000; May 24.
Wall switch. F. W. Roller. 1,860,054; May 24.
Ware articles, Process and mechanism for forming hollow. H. C. Ayerst. 1,859,325; May 24.
Warmer, Windshield. C. H. Brewster. 1,860,073; May 24.
Washer: *See*—
  Golf ball washer
Water cooler. P. Haymond. 1,860,027; May 24.
Water regulator. D. Elder. 1,859,357; May 24.
Water tube boiler. B. B. Whittam. 1,859,857; May 24.
Wax sweating plant. H. L. Allan. 1,859,376; May 24.
Welding apparatus. V. J. Chapman. 1,860,172; May 24.

Well and units for use therein. F. E. Horne. 1,860,180; May 24.
Well cementing device. R. C. Baker. 1,859,648; May 24.
Well cementing device. O. A. Mellin. 1,859,593; May 24.
Well surveying device. W. E. Winn. 1,859,420; May 24.
Wells and the like, Drilling of oil. A. E. Atkinson. 1,859,490; May 24.
Wells, Method and apparatus for operating. R. H. Carr. 1,860,137; May 24.
Wheel: *See*—
  Convertible wheel. Vehicle wheel.
Wheel structure. J. W. Vandervoer. 1,860,001; May 24.
Whistle, Signaling. H. J. Otto. 1,859,408; May 24.
Winding machine. I. R. Rowe. 1,859,844; May 24.
Winding mechanism. G. E. and J. G. Allen. 1,859,281; May 24.
Windmill and pump rod coupling. W. M. Lanspa. 1,860,253; May 24.
Window. E. A. Green. 1,860,245; May 24.
Window construction, Car. J. L. Drake. 1,860,084; May 24.
Window device, Tilting. S. I. Baer. 1,859,491; May 24
Window screen. A. G. Nordmarken. 1,859,883; May 24.
Windshield cleaner. G. S. Weaver. 1,859,641; May 24.
Windshield cleaner motor. W. Paulus. Des. 87,021; May 24.
Wiper and heater, Combined windshield. A. C. Gentil. 1,860,281; May 24.
Wire applying mechanism for Fourdrinier paper making machines. J. A. White. 1,860,303; May 24.
Wire clamp. J. T. Wiley. 1,859,812; May 24.
Wire fabric, Mesh-sectioned. A. A. G. Land. 1,859,831; May 24.
Wire for bolt making machines, Handling and transporting. H. C. Ellison. 1,859,585; May 24.
Wood, Distilling. G. Egloff and H. P. Benner. 1,859,292; May 24.
Wood for the production of pulp, Treatment of. J. D. Rue, S. D. Wells, and F. G. Rawling. 1,859,845; May 24.
Wood pulp and making the same. J. D. Rue, S. D. Wells, and F. G. Rawling. 1,859,846; May 24.
Work locating and guiding device. E. Hope and A. E. Richards. 1,859,513; May 24.
Workholder, Varnish salvaging. J. M. Prillaman and A. W. Shipwash. 1,859,983; May 24.
Wrench. L. T. Carpenter. 1,860,012; May 24.
Wrench. S. N. Elliott. 1,859,387; May 24.
Wrench. W. Pascoe. 1,859,526; May 24.
Wringer. E. J. Schuda. 1,859,637; May 24.
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CLASSIFICATION OF PATENTS

ISSUED MAY 24, 1932

NOTE.—First number = class, second number = subclass, third number = patent number

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LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Actona Research Laboratories, Inc., Philadelphia, Pa. Laxatives. Serial No. 325,863; May 31. Class 6.

Aerofin Corporation. (See Carrier Manufacturing Corporation, assignor.)

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Atlantic Refining Company, The, Philadelphia, Pa. Coke. Serial Nos. 323,648–50; May 31. Class 1.

Badger Paper Mills, Inc., Peshtigo, Wis. Waxed paper lunch rolls. Serial No. 300,258; May 31. Class 37.

Ball Chemical Company, Pittsburgh, Pa. Paint oils, baking varnishes, lacquers, etc. Serial No. 324,950; May 31. Class 16.

Baumann, C. Ludwig, & Company, Brooklyn, N. Y. Mattresses and box springs. Serial No. 325,677; May 31. Class 32.

Berkwits & Bloomfield, Inc., New York, N. Y. Ladies' hats. Serial No. 321,197; May 31. Class 39.

Blackman & Blackman, Inc., doing business as Premo Laboratories, Inc., New York, N. Y. Chemical preventatives for the prevention of venereal diseases. Serial No. 312,751; May 31. Class 6.

Block, David J., doing business as Refrigerator Accessories Company, Chicago, Ill. Deodorizer composition. Serial No. 325,028; May 31. Class 6.

Blum, Irving Wm., New York, N. Y. Shoes. Serial No. 325,459; May 31. Class 39.

Bob, H. D., Company Inc., New York, N. Y. Collars, shirts, pajamas, etc. Serial No. 325,899; May 31. Class 39.

Borgfeldt, Geo., & Co., New York, N. Y. Toy figures. Serial No. 326,411; May 31. Class 22.

British Bewoid Company Limited, London, England. Sizes, etc. Serial No. 320,753; May 31. Class 6.

Browning, Hiram B., doing business as The Elimino Company, West Toledo, Ohio. Radio aerial eliminator. Serial No. 325,615; May 31. Class 21.

Buckner, Neptune, doing business as New Life Battery Company, Asheville, N. C. Solvent compound. Serial No. 322,202; May 31. Class 6.

Buston, Jameson G., North Tazewell, Va. Beverage, sirup and extract. Serial No. 326,412; May 31. Class 45.

Buzzy. (See Appleton, Louis B.)

Byrnes, Eugene, New York, N. Y. Series of cartoons or comic strips. Serial No. 326,413; May 31. Class 38.

Carrier Manufacturing Corporation, assignor to Aerofin Corporation, Newark, N. J. Heating, cooling, and air conditioning units. Serial No. 323,607; May 31. Class 34.

Cement Marketing Company, Limited, The, London, England. Preparation for mixing with cement, lime, and plaster, etc. Serial No. 325,707; May 31. Class 12.

Cerruti, E., Inc., New York, N. Y. Olive oil. Serial No. 315,670; May 31. Class 46.

Chicago Rotoprint Company, Chicago, Ill. Publication. Serial No. 326,362; May 31. Class 38.

Chinman Chemical Company, Inc., Bound Brook, N. J. Chemical preparation. Serial No. 324,881; May 31. Class 6.

Clover Farm Stores Company, The. (See Grocers & Producers Co., The.)

Cohen, Goldman & Co. Inc., New York, N. Y. Coats, trousers, overcoats, etc. Serial No. 325,939; May 31. Class 39.

Collins, Warren E., Inc., Boston, Mass. Artificial respirators. Serial No. 326,080; May 31. Class 44.

Commander-Larabee Corporation, Minneapolis, Minn. Bread, macaroni, spaghetti, etc. Serial No. 325,940; May 31. Class 46.

Cone Export and Commission Company, New York, N. Y. Broadcloth in the piece. Serial No. 324,220; May 31. Class 42.

Consolidated Displays, Inc., Chicago, Ill. Plant of the cactus family. Serial No. 320,633; May 31. Class 1.

Continental Oil Company, Ponca City, Okla. Lubricating oil. Serial No. 321,007; May 31. Class 15.

Co-Operative Grange League Federation Exchange, Inc., Ithaca, N. Y. Flour. Serial No. 325,567; May 31. Class 46.

Curtiss Candy Company, The, Chicago, Ill. Chewing gum. Serial No. 308,859; May 31. Class 46.

Dannemiller Grocery Company, The, Canton, Ohio. Coffee. Serial No. 305,779; May 31. Class 46.

Domzalski, Casimir A., Detroit, Mich. Tire patches. Serial No. 325,817; May 31. Class 35.

D'Orsay Perfumeries Corporation, New York, N. Y. Perfumes, toilet waters, rouge, etc. Serial No. 316,771; May 31. Class 6.

Dosch-Kircher Organization, The, Chicago, Ill. Publication. Serial No. 323,394; May 31. Class 38.

Ducharne, F. Silk Co. Inc., New York, N. Y. Piece goods. Serial Nos. 326,519–20; May 31. Class 42.

Durham Bros. & Co., Inc., Roanoke, Va. Coffee. Serial No. 313,235; May 31. Class 46.

Eastern Fruit Distributors, Inc., Los Angeles, and Fresno, Calif. Fresh vegetables, deciduous fruits, grapes, etc. Serial No. 313,336; May 31. Class 46.

Electric Knitting Co. Inc., Cohoes, N. Y. Textile dish cloths. Serial No. 326,284; May 31. Class 42.

Elimino Company, The. (See Browning, Hiram B.)

Ellis, A. D., Mills Incorporated, Monson, Mass. Woolen piece goods. Serial No. 324,157; May 31. Class 42.

Ellis Silver Company Inc., New York, N. Y. Silver plated hollow ware and flatware. Serial No. 325,683; May 31. Class 28.

El Sol Products Company. (See Jenkins, George H.)

Elsworth, J. & J. W., Co., New York, N. Y. Oysters. Serial No. 325,573; May 31. Class 46.

Evans, Edwin M., Bloomington, Ill. Coupons. Serial No. 325,905; May 31. Class 38.

Filecraft, Inc., Cleveland, Ohio. Files. Serial No. 326,418; May 31. Class 23.

Forbriger, Paul R., doing business as German American Import Co., New York, N. Y. Cheese. Serial No. 314,528–31; May 31. Class 46.

Frank and Company, Milwaukee, Wis. Smoked meats. Serial No. 325,577; May 31. Class 46.

Freilich, Joseph, doing business as Martin Laboratories, New York, N. Y. Preparation for muscular aches and pains, etc. Serial No. 325,139; May 31. Class 6.

Gamewell Company, The, Newton Upper Falls, Newton, Mass. Fire alarm boxes and switch-boards. Serial No. 325,650; May 31. Class 21.

German American Import Co. (See Forbriger, Paul R.)

Glebeas Importation Co. Inc., doing business as Glebeas Importing Co., New York, N. Y. Cosmetics and facial preparations. Serial No. 324,556; May 31. Class 6.

Godchaux Sugars, Inc., New Orleans, La. Sugar. Serial No. 323,453; May 31. Class 46.

Golo Slipper Company, Inc., New York, N. Y. Sandals. Serial No. 323,745; May 31. Class 39.

Grady-Travers Company, Incorporated, The, New York, N. Y. Polishing and dusting cloths. Serial No. 326,013; May 31. Class 29.

Gray, Richard B., doing business as The Montauk Laboratories, Bay Shore, N. Y. Medicinal preparation. Serial No. 325,752; May 31. Class 6.

Grigsby-Grunow Company, Chicago, Ill. Electric ironing machines and parts thereof. Serial No. 317,600; May 31. Class 24.

Grocers & Producers Co., The, doing business as The Clover Farm Stores Company, Cleveland, Ohio. Coffee. Serial No. 326,422; May 31. Class 46.

Grocers & Producers Co., The, doing business as The Clover Farm Stores Company, Cleveland, Ohio. Coffee. Serial Nos. 326,470–1; May 31. Class 46.

Grossman, Alex., & Co., Inc., New York, N. Y. Eggs and butter. Serial No. 326,256; May 31. Class 46.

Gulf States Steel Company, Birmingham, Ala. Nails. Serial No. 326,245; May 31. Class 13.

Hahn Department Stores, Inc., Wilmington, Del. Coffee, tea, and cocoa. Serial No. 325,143; May 31. Class 46.

Hamilton, Janet, doing business as Hamilton Laboratories, Glendale, Calif. Corrective formula for stomach troubles. Serial No. 325,290; May 31. Class 6.

Harris, John D., Co. Inc., New York, N. Y. Felt rugs. Serial No. 325,634; May 31. Class 50.

Hart, Edward E., New York, N. Y. Malt beverages. Serial No. 326,473; May 31. Class 48.

Harvel Corporation, The, Newark, N. J. Electrical insulation compounds and fabrics, etc. Serial No. 287,071; May 31. Class 21.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Hawaiian Pineapple Company, Ltd., Honolulu, Territory of Hawaii, and San Francisco, Calif. Canned pineapple. Serial No. 321,106; May 31. Class 46.
Heister, Louis, Company, The, Cincinnati, Ohio. Russian oil for medicinal use. Serial No. 315,199; May 31. Class 6.
Hercules Powder Company, Wilmington, Del. Synthetic resin. Serial No. 325,824; May 31. Class 6.
Hickey-Freeman Company, Rochester, N. Y. Men's apparel. Serial No. 326,258; May 31. Class 39.
Hoard, W. D., & Sons Company, Fort Atkinson, Wis. Periodical. Serial No. 326,354; May 31. Class 38.
Holtite Manufacturing Company, Baltimore, Md. Wear plates. Serial No. 325,851; May 31. Class 13.
Horton Manufacturing Company, Fort Wayne, Ind. Laundry washing machines. Serial No. 323,865; May 31. Class 24.
Houbigant, Inc., New York, N. Y. Perfumes. Serial No. 325,658; May 31. Class 6.
Hy-Flash Gas & Oil Co., Inc., Toledo, Ohio. Petroleum products. Serial No. 326,039; May 31. Class 15.
Hyre, Charles G., doing business as The Pepsotalis Company, Morgantown, W. Va. Medicinal preparation. Serial No. 325,688; May 31. Class 6.
Independence Plan Company, The. (See Mayers Company, Inc., The.)
Ischerland, Frederick E., Flint, Mich. Liquid shampoo preparation. Serial No. 323,604; May 31. Class 6.
Jenkins, George H., doing business as El Sol Products Company, Camden, N. J. Polish. Serial No. 326,147; May 31. Class 10.
Kellogg Company, Battle Creek, Mich. Cough drops. Serial No. 322,216; May 31. Class 6.
Kellogg, M. W., Co., The, Jersey City, N. J., and New York, N. Y. Plastic heat insulation material. Serial No. 326,188; May 31. Class 12.
Keyston Bros., San Francisco, Calif. Juvenile play apparel. Serial No. 325,503; May 31. Class 39.
Kinney & Levan Company, The, Cleveland, Ohio. Silverware. Serial No. 326,041; May 31. Class 28.
Kittess, Jason J., Los Angeles, Calif. Bleaching fluid. Serial No. 325,792; May 31. Class 6.
Krementz & Company, Newark, N. J. Buttons, brooches, buckles, etc. Serial No. 325,793; May 31. Class 28.
Kress, S. H., & Co., New York, N. Y. Rubber crib sheets. Serial No. 326,261; May 31. Class 50.
Kueter, Marie B., Oakland, Calif. Pastries. Serial No. 326,262; May 31. Class 46.
Kurta, Harry, Jamaica, N. Y. Syrup for making soft drinks. Serial No. 324,175; May 31. Class 45.
La Compagnie Pharmaceutique Desbergers, Montreal, Quebec, Canada. Soporific medicine. Serial No. 325,005; May 31. Class 6.
La Jerome Laboratories, Inc., Chicago, Ill. Waving lotion and tonic for hair. Serial No. 325,040; May 31. Class 6.
Lane Company, Inc., The, Altavista, Va. Cedar chest. Serial No. 317,719; May 31. Class 32.
Lauger, Carl, Inc., Detroit, Mich. Lubricating oil. Serial No. 324,290; May 31. Class 15.
Levinson, Maxwell, Philadelphia, Pa. Periodicals. Serial No. 326,150; May 31. Class 38.
Lewis, Edgar P., & Sons, Inc., Boston, Mass. Candy. Serial No. 320,467; May 31. Class 46.
Libby, McNeill & Libby, Chicago, Ill. Canned salmon. Serial No. 326,378–80; May 31. Class 46.
Ludlum Steel Co., Watervliet, N. Y. Ferrous alloys. Serial No. 326,290; May 31. Class 14.
Madden, Johanna H., doing business as Skinit Co., Minneapolis, Minn. Salve. Serial No. 326,382; May 31. Class 6.
Mars, Incorporated, Chicago, Ill. Whole eggs. Serial No. 324,350; May 31. Class 46.
Mars, Incorporated, Chicago, Ill. Egg whites. Serial No. 324,351; May 31. Class 46.
Mars, Incorporated, Chicago, Ill. Egg yolks. Serial No. 324,352; May 31. Class 46.
Martin Laboratories. (See Freilich, Joseph.)
Martocello, Joseph A., sr., doing business as Jos. A. Martocello & Co., Philadelphia, Pa. Rust and corrosion preventive liquid in the nature of a paint or varnish. Serial No. 320,571; May 31. Class 16.
Mayers Company, Inc., The, doing business as The Independence Plan Company, Los Angeles, Calif. Passbooks, check-book covers. Serial No. 325,476; May 31. Class 37.
McGilvray, J. Bain, Detroit, Mich. Medicinal preparation. Serial No. 323,899; May 31. Class 6.
Mezőgazdasági Termény És Termékforgalmi Intézet, Budapest, Hungary. Flour, onions, garlic, etc. Serial No. 306,739; May 31. Class 46.
Midway Chemical Company, Chicago, Ill. Liquid material for the destruction of weeds. Serial No. 325,620; May 31. Class 6.
Miller, Fred W., Jackson, Mich. Furniture. Serial No. 310,653; May 31. Class 32.
Mission Dry Corporation, Ltd., Los Angeles, Calif. Beverages, concentrates, and extracts. Serial No. 325,479; May 31. Class 45.
Modern Supply Company, Chicago, Ill. Semi-liquid adhesive. Serial No. 326,227; May 31. Class 5.
Monark Battery Company, Inc., Chicago, Ill. Storage batteries. Serial No. 322,799; May 31. Class 21.
Montauk Laboratories, The. (See Gray, Richard B.)
Mueth, Eugene, doing business as Toil-Glen Products Co., St. Louis, Mo. Toilet bowl cleaner. Serial No. 324,796; May 31. Class 4.
National Aluminate Corporation, Chicago, Ill. Chemicals. Serial No. 325,719; May 31. Class 6.
National Consumers Paper Corporation, New York, N. Y. Designer's marking paper in the roll. Serial No. 326,337; May 31. Class 37.
National Enameling & Stamping Company, Milwaukee, Wis. Refrigerator pans. Serial No. 325,992; May 31. Class 13.
National Home Library Foundation, Washington, D. C. Books, magazines, and pamphlets. Serial No. 325,179; May 31. Class 38.
New Life Battery Company. (See Buckner, Neptune.)
Old Ben Coal Corporation, Chicago, Ill. Coal. Serial No. 326,429; May 31. Class 1.
Owensboro Wagon Company, Owensboro, Ky. Trailers, vehicle bodies and chassis, and structural parts thereof. Serial No. 323,672; May 31. Class 19.
Par-Amount Shirt Shops Inc., assignor to Morton Schneider, Inc., New York, N. Y. Men's clothing. Serial No. 297,324; May 31. Class 39.
Park & Tilford, New York, N. Y. Creams, hand lotion, and a skin tonic. Serial No. 325,406; May 31. Class 6.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Board game. Serial No. 325,917; May 31. Class 22.
Pep Mnufacturing Company, New York, N. Y. Sealing compounds. Serial No. 324,722; May 31. Class 5.
Pepsotalis Company, The. (See Hyre, Charles G.)
Pheoli Manufacturing Company, Chicago, Ill. Hardware supplies. Serial No. 305,725; May 31. Class 13.
Piña, Martina A., East Chicago, Ind. Hair restorer. Serial No. 323,838; May 31. Class 6.
Pitts, Reginald S., doing business as R. S. Pitts Mfg. Co., Hanover, Pa. Amusement and educational kit. Serial No. 325,184; May 31. Class 50.
Powell, John, & Co., Inc., New York, N. Y. Insecticide. Serial No. 325,440; May 31. Class 6.
Practical Mechanics Publishing Co., Chicago, Ill. Publication. Serial No. 324,759; May 31. Class 38.
Prejean, Felix, Port Arthur, Tex. Compound used as an inhalant, asthma, etc. Serial No. 325,757; May 31. Class 6.
Premo Laboratories. (See Blackman & Blackman, Inc.)
Primrose House, Inc., Dover, Del. Skin and toilet preparations. Serial No. 318,565; May 31. Class 6.
Prodermatect Company, The, Scottdale, Pa. Cosmetics preparations. Serial No. 322,267; May 31. Class 6.
Puffer-Hubbard Mfg. Co., Minneapolis, Minn. Humidifying units. Serial No. 325,077; May 31. Class 34.
Pugh, William T., jr., Dallas, Tex. Barbecued peanuts. Serial No. 325,800; May 31. Class 46.
Quaker State Oil Refining Co., Oil City, Pa. Mechanical device upon which to record oil servicing. Serial No. 326,301; May 31. Class 19
Refrigerator Accessories Company. (See Block, David J.)
Reilly, Frank C., New York N. Y. Astringents, creams, rouges, etc. Serial No. 325,726; May 31. Class 6.
Rockne Motors Corporation, Detroit, Mich. Hub caps. Serial Nos. 324,485–6; May 31. Class 19.
Sauter Brothers, New York, N. Y. Textiles. Serial No. 325,882; May 31. Class 42.
Scharkopf, Frederick J., Richmond Hill, N. Y. Topical preparation. Serial No. 326,194; May 31. Class 6.
Schattner, Herman, New York, N. Y. Shoes. Serial No. 325,486; May 31. Class 39.
Schneider, Morton, Inc. (See Par-Amount Shirt Shops Inc.)
Skinit Co. (See Madden, Johanna H.)
Speidel Corporation, Providence, R. I. Jewelry. Serial No. 325,761; May 31. Class 28.
Squibb, E. R., & Sons, New York, N. Y. Therapeutically activated mineral oils and the like. Serial No. 325,272; May 31. Class 6.
Standard Brands Incorporated, New York, N. Y. Salad dressing. Serial No. 324,854; May 31. Class 46.
Stark & Waddell Packing Corporation, Strathmore, Calif. Fresh citrus fruits. Serial Nos. 325,534–5; May 31. Class 46.
Stone, Louis C., New York, N. Y. Title for a column in a magazine. Serial No. 325,544; May 31. Class 38.
Storkline Furniture Corporation, Chicago, Ill. Juvenile furniture. Serial No. 320,141; May 31. Class 32.
Stroock, S. & Co. Inc., New York, N. Y. Cloth. Serial No. 326,448; May 31. Class 42.
Summerville Cotton Mills, Summerville, Ga. Cotton cloth in the piece. Serial No. 326,398; May 31. Class 42.
Superior Packing Corp., New York, N. Y. Powdered desserts and malted milk. Serial No. 325,625; May 31. Class 46.
Texas Company, The, New York, N. Y. Lubricating greases. Serial No. 325,607; May 31. Class 15.
Thoma, Leo, jr., doing business as Leo Thoma Bottling Co., Kansas City, Mo. Beverages and syrups and extracts. Serial Nos. 326,435–6; May 31. Class 45.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Toil-Glen Products Co. (See Mueth, Eugene.)
Triner, Joseph, Company, Chicago, Ill. Wine tonic. Serial No. 325,124; May 31. Class 6.
Triple "XXX" Company, Galveston, Tex. Non-alcoholic soft drink, syrup, and concentrates. Serial No. 323,070; May 31. Class 45.
Turchin, Ben, & Bro. Inc., New York, N. Y. Hats. Serial No. 325,050; May 31. Class 39.
United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. Serial No. 325,155; May 31. Class 22.
United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. Serial No. 326,438; May 31. Class 22.
Upjohn Company, The, Kalamazoo, Mich. Medicinal preparation. Serial No. 325,128; May 31. Class 6.
Utica Cutlery Company, Utica, N. Y. Knives and table cutlery. Serial No. 325,766; May 31. Class 23.
Veldown Company, Inc., New York, N. Y. Catamenial napkins. Serial No. 281,066; May 31. Class 44.
Vita-Lax Corporation, New York and Long Beach, N. Y. Laxatives. Serial No. 321,835; May 31. Class 6.
Warwick Chemical Company, West Warwick, R. I. Substances or chemicals. Serial No. 325,769; May 31. Class 6.
Waterlox, Inc., Detroit, Mich. Chemical waterproofing compound. Serial No. 323,266; May 31. Class 6.
Waterman & Company, New York, N. Y. Food products. Serial No. 312,076; May 31. Class 46.
Wedler-Shuford Co., The, St. Louis, Mo. Vehicle seat covers and pads. Serial No. 325,357; May 31. Class 32.
Wolff Bros. Milling Co. Inc., Paterson, N. J. Cereal foods and buckwheat flour. Serial No. 313,520; May 31. Class 46.
Yorkman Candies, Inc., New Orleans, La. Candy. Serial No. 324,865; May 31. Class 46.

LIST OF REGISTRANTS OF TRADE-MARKS

Abeles-Lewit Co. Inc., New York, N. Y. Liquid polish and rubbing compound. 294,515; May 31; Serial No. 322,490; published Mar. 22, 1932. Class 16.
Ace Dental Manufacturing Co., Weyauwega, Wis. Dental tools. 294,491; May 31; Serial No. 318,496; published Mar. 15, 1932. Class 44.
Addressograph-Multigraph Corporation, Cleveland, Ohio. Inking ribbons. 294,526; May 31; Serial No. 322,874; published Mar. 15, 1932. Class 11.
Aktiengesellschaft für Chemische Produkte vormals H. Schneidemandel, Berlin, Germany. Adhesives. 87,139; renewed July 2, 1932.
Alden Mills, The, New Orleans, La. Hosiery. 294,543; May 31; Serial No. 323,515; published Mar. 15, 1932. Class 39.
Aluminum Industries, Inc., Cincinnati, Ohio. Paint coatings. 294,522; May 31; Serial No. 322,726; published Mar. 22, 1932. Class 16.
American Druggists Syndicate, Inc., New York and Long Island City, N. Y. Manicure sets, nail files, buffers, etc. 294,488; May 31; Serial No. 319,635; published Mar. 15, 1932. Class 44.
American Hardware Corporation, The, New Britain, Conn. Mechanically operated door-bells, knobs, knockers, etc. 294,574; May 31. Class 13.
American Lady Corset Co., Detroit, Mich. Corsets, brassières, bandeaux, etc. 294,495; May 31; Serial No. 323,081; published Mar. 15, 1932. Class 39.
American Torso Company, Inc., Brooklyn, N. Y. Panels, sheets, and the like, of wood, etc. 294,540; May 31; Serial No. 323,441; published Mar. 15, 1932. Class 12.
Ames Shovel and Tool Company, Jersey City, N. J., and Boston, Mass., assignor to Ames Baldwin Wyoming Shovel Co., Parkersburg, W. Va. Shovels, spades, and scoops. 86,365; renewed May 7, 1932.
Angle, Gregg C., Spokane, Wash. Salve. 294,591; May 31. Class 6.
Arkansas Company Inc., New York, N. Y. Vegetable oil. 294,594; May 31. Class 6.
Armstrong Grocery Company, Sharon, Pa. Canned fruits, vegetables, etc. 294,567; May 31; Serial No. 322,376; published Mar. 15, 1932. Class 46.
Ashland Refining Company, Ashland, Ky. Lubricating oils. 294,517; May 31; Serial No. 322,541; published Mar. 1, 1932. Class 15.
Atlas Supply Company, Wilmington, Del., and Newark, N. J. Rubber tires and tubes. 294,521; May 31; Serial No. 322,677; published Mar. 1, 1932. Class 35.
Bailey, William J., executor of the estate of Alfred Fennings, deceased, to William J. Bailey, Herbert B. Wallen, and Francis B. Pelly, trustees of Alfred Fennings, deceased, doing business as the Firm of Alfred Fennings, Cowes, England, successor. Medicine. 38,920; renewed Sept. 23, 1932.
Bayuk Cigars Incorporated, Philadelphia, Pa. Cigars. 294,478; May 31; Serial No. 310,086; published Mar. 15, 1932. Class 17.
Beatrice Creamery Company, Chicago, Ill. Butter, eggs, cheese, etc. 294,480; May 31; Serial No. 312,134; published Mar. 15, 1932. Class 46.
Beaver Chemical Works, Beaver Dam, Wis. Soap and a general cleaning compound. 294,475; May 31; Serial No. 295,996; published Mar. 15, 1932. Class 4.
Berray, Pauline M., doing business as Di-Lash Company, New York, N. Y. Eye lash and eye brows dye. 294,576; May 31. Class 6.
Big Store Company, The, Cincinnati, Ohio. Clothing. 294,464; May 31; Serial No. 321,324; published Mar. 1, 1932. Class 39.
Blackinton, R., & Co., North Attleboro, Mass. Jewelry and precious metal ware. 87,408; renewed July 16, 1932.
Blue Bird Diamond Syndicate, Inc., Chicago, Ill. Diamonds and diamond rings. 294,484; May 31; Serial No. 315,342; published Mar. 1, 1932. Class 28.
Bob, H D, Company Inc., New York, N. Y. Shirts, jackets, underwear, etc. 294,500; May 31; Serial No. 323,160; published Mar. 15, 1932. Class 39.
Brant, J. W., Company, Limited, The, to The J. W. Brant Co., Albion, Mich., successor. Remedies for nervous diseases. 85,321; renewed Feb. 13, 1932.
Brevolite Lacquer Company, North Chicago, Ill. Film coatings. 294,476; May 31; Serial No. 298,142; published Mar. 15, 1932. Class 16.
Brody-Lewis Mfg. Company, Omaha, Nebr. Trousers. 294,501; May 31; Serial No. 323,162; published Mar. 15, 1932. Class 39.
Bromund, E. A., Company, New York, N. Y. Laundry starch polish. 87,419; renewed July 16, 1932.
Bromund, E. A., Company, New York, N. Y. Beeswax. 87,520; renewed July 23, 1932.
Brown's Beach Jacket Company, Worcester, Mass. Knitted sweaters, coats, vests, and jackets. 294,578; May 31. Class 39.
Burch Corporation, The, Crestline, Ohio. Snow plows. 294,597; May 31. Class 23.
California Crushed Fruit Corporation, Los Angeles, Calif., now by change of name Mission Dry Corporation, Ltd. Maltless beverages, and syrups and extracts for making the same. 294,472; May 31; Serial No. 288,466; published Sept. 9, 1930. Class 45.
California Spray-Chemical Corporation, Wilmington, Del., and Berkeley, Calif. Insecticides, germicides, and fungicides. 294,593; May 31. Class 6.
Charlestein, Julius, doing business as Premier Dental Products Co., Philadelphia, Pa. Artificial teeth. 294,524; May 31; Serial No. 322,811; published Mar. 22, 1932. Class 44.
Clover Farm Stores. (See Grocers & Producers Co., The.)
Copy-Craft, Inc., New York, N. Y. Carbon papers and strip carbon. 294,497; May 31; Serial No. 323,126; published Mar. 15, 1932. Class 11.
Cottee's Passiona Limited, Sydney, Australia. Passion fruit juice essence, pulp, jam, jelly, and syrup. 294,486; May 31; Serial No. 316,531; published Mar. 15, 1932. Class 46.
Crane, Z. & W. M., Inc., Dalton, Mass. Writing paper and envelopes, and particularly papeteries. 294,572; May 31. Class 37.
Crippen Manufacturing Company, Alma, Mich. Bean and seed pickers, cleaners, polishers, etc. 294,582; May 31. Class 28.
Deaver Dry Goods Company, Knoxville, Tenn. Hosiery. 294,549; May 31; Serial No. 323,889; published Mar. 15, 1932. Class 39.
Decker, Alfred, & Cohn, Inc., Chicago, Ill. Suits, coats, vests, etc. 294,531; May 31; Serial No. 322,999; published Mar. 15, 1932. Class 39.
Deep Rock Oil Corporation, Chicago, Ill. Gasoline. 294,483; May 31; Serial No. 313,109; published Mar. 1, 1932. Class 15.
Diana Manufacturing Company, Green Bay, Wis. Sanitary pads. 294,545; May 31; Serial No. 323,613; published Mar. 22, 1932. Class 44.
Di-Lash Company. (See Berray, Pauline M.)
Eastman Kodak Company, Rochester, N. Y. Motion picture film. 294,598; May 31. Class 26.
El Camino Oil Company, Ltd., Los Angeles, Calif. Petroleum and hydrocarbon products. 294,482; May 31; Serial No. 312,879; published Mar. 1, 1932. Class 15.
Electric Clock Corporation of America, Chicago, Ill. Electric clocks. 294,505; May 31; Serial No. 323,283; published Mar. 15, 1932. Class 27.
Electromatic Record Changer Corp., Chicago, Ill. Phonograph-record feeder and changer. 294,479; May 31; Serial No. 310,861; published Apr. 21, 1931. Class 36.
Endicott Johnson Corporation, Endicott, N. Y. Rubber heels and soles. 294,494; May 31; Serial No. 323,039; published Mar. 15, 1932. Class 39.
Evr-Klean Seat Pad Company, St. Louis, Mo. Seat covers and pads. 294,595; May 31. Class 32.

Fennings, Estate of Alfred. (See Bailey, William J.)
Fennings, Firm Alfred. (See Bailey, William J.)
Field & Flint Co., Brockton, Mass. Shoes. 294,493; May 31; Serial No. 320,760; published Mar. 15, 1932. Class 39.
Gamma Pharmacal Corporation, New York, N. Y. Special sugar. 294,566; May 31; Serial No. 322,363; published Mar. 15, 1932. Class 46.
General Food Products Company, Vernon, Calif. Marshmallows. 294,586; May 31. Class 46.
Gold Dust Corporation, New York, N. Y. Soap. 294,556–7; May 31; Serial Nos. 322,168–9; published Mar. 15, 1932. Class 4.
Grocers & Producers Co., The, doing business as Clover Farm Stores, Cleveland, Ohio. Cigars. 294,506; May 31; Serial No. 323,290; published Mar. 15, 1932. Class 17.
Gross, Benjamin & Edward J., Co., Inc., New York, N. Y. Finger rings and mountings therefor. 294,474; May 31; Serial No. 295,358; published Apr. 15, 1930. Class 28.
Haire Publishing Company, The, New York, N. Y. Publication. 294,538–9; May 31; Serial Nos. 321,287–8; published Mar. 15, 1932. Class 38.
Harmer, Joseph P., doing business as The Harmer Laboratories Company, Philadelphia, Pa. Snow melting compound. 294,573; May 31. Class 6.
Harrower, Norman, doing business as Linton Brothers & Company, Fitchburg, Mass. Bristolboard. 294,553; May 31; Serial No. 323,996; published Mar. 15, 1932. Class 37.
Hillyard Chemical Company, St. Joseph, Mo. Cleaning compound. 294,507; May 31; Serial No. 323,294; published Mar. 15, 1932. Class 4.
Hodshon-Berg, Incorporated, Norwalk, Conn., and New York, N. Y. Caps and hats. 294,496; May 31; Serial No. 323,090; published Mar. 15, 1932. Class 39.
Hoe, R. & Co., Inc., New York, N. Y. Rotary printing machines. 294,599; May 31. Class 23.
Hollander, Dolores, Newark, N. J. Powder puffs. 294,589; May 31. Class 29.
Holly Chemical Co. (See Smith, Blackstone.)
Holman Soap Company, doing business as Loret Laboratories, Chicago, Ill. Soaps. 294,590; May 31. Class 4.
Home Life Insurance Company, New York, N. Y. Bulletins and pamphlets. 294,560; May 31; Serial No. 322,252; published Mar. 15, 1932. Class 38.
Household Helps, Inc. (See Sowers, Ray V.)
Hubbs & Corning Company, Baltimore, Md. Papers. 294,487; May 31; Serial No. 316,888; published Mar. 15, 1932. Class 37.
Icart, Louis, Society, Inc., New York, N. Y. Prints, publications. 294,523; May 23; Serial No. 322,795; published Mar. 15, 1932. Class 38.
Idico Corporation, New York, N. Y. Liquid insecticides. 294,473; May 31; Serial No. 292,402; published Mar. 1, 1932. Class 6.
Instant Sales Company, Ltd., Philadelphia, Pa. Powdered compound. 294,527; May 31; Serial No. 322,883; published Mar. 15, 1932. Class 4.
International Projector Corporation, New York, N. Y. Magazines or receptacles and/or parts, etc., for film, etc. 294,580; May 31. Class 26.
International Projector Corporation, New York, N. Y. Motion picture projection machines, cameras, magazines, etc. 294,581; May 31. Class 26.
Jacobs' Pharmacy Co., doing business as Dr. Fred Palmer's Laboratory, Atlanta, Ga. Skin bleach preparation. 294,596; May 31. Class 6.
Jacobson, Bertha S., New York, N. Y. Polishing cloths. 294,518; May 31; Serial No. 322,547; published Mar. 22, 1932. Class 4.
Jinny Ricky Laboratories, Inc., Springfield, Mass. Maltlose beverages. 294,481; May 31; Serial No. 312,849; published June 2, 1931. Class 45.
Juvenile Shoe Corporation of America, The, Aurora, Mo. Shoes and slippers. 294,485; May 31; Serial No. 316,269; published Mar. 15, 1932. Class 39.
Kolynos Company, The, New Haven, Conn. Tooth brushes. 294,513; May 31; Serial No. 323,409; published Mar. 15, 1932. Class 29.
Kress, S. H., & Co., New York, N. Y. Soaps, soap jelly, metal polishes, etc. 294,546; May 31; Serial No. 323,622; published Mar. 15, 1932. Class 4.
Latorraca, Nicola, doing business as Latorraca Bros., New York, N. Y. Olive oil. 294,532; May 31; Serial No. 320,001; published Mar. 15, 1932. Class 46.
Lebish, Irving, doing business as Lee Products Co., New York, N. Y. Expectorant medicines and shampoo preparations for dogs and other domesticated animals. 294,585; May 31. Class 6.
Lee Products Co. (See Lebish, Irving.)
Les Industries Reunies, Societe Anonyme, Puteaux, France. Soaps. 294,502; May 31; Serial No. 323,202; published Mar. 15, 1932. Class 4.
Lightfoot Schultz Company, Hoboken, N. J., and New York, N. Y. Soap. 294,509; May 31; Serial No. 323,344; published Mar. 15, 1932. Class 4.
Linton Brothers & Company. (See Harrower, Norman.)
Loret Laboratories. (See Holman Soap Company.)
Lowe Brothers Company, The, Dayton, Ohio. Paints, varnishes, enamels, etc. 294,550; May 31; Serial No. 323,897; published Mar. 22, 1932. Class 16.
Maiden Form Brassiere Co., Inc., New York, N. Y. Brassières, bandeaux, corsets, etc. 294,555; May 31; Serial No. 322,107; published Mar. 15, 1932. Class 39.
Marcus & Wiesen Inc., New York, N. Y. Sanitary belts, aprons, pads, etc. 294,548; May 31; Serial No. 323,752; published Mar. 15, 1932. Class 44.
Massachusetts Knitting Mills, Jamaica Plain, Mass. Hosiery. 294,547; May 31; Serial No. 323,667; published Mar. 15, 1932. Class 39.
Master Barbers Products, Limited. (See Young, Andrew W.)
Meyer, Firm Arnold O., Hamburg, Germany. Threads. 85,874; renewed Mar. 26, 1932.
Meyer, Firm Arnold O., Hamburg, Germany. Letter paper, envelops, and printing paper. 86,075; renewed Apr. 9, 1932.
Mayer-Weismann, Alfred, Boston, Mass. Designs or patterns. 294,569; May 31; Serial No. 322,430; published Mar. 15, 1932. Class 40.
Miller, Graeff, New York, N. Y. Facial creams and cream rouge. 294,577; May 31. Class 6.
Mission Dry Corporation, Ltd. (See California Crushed Fruit Corporation.)
Montgomery Ward & Co., Incorporated, Chicago, Ill. Boots, rubbers, shoes, etc. 294,568; May 31; Serial No. 322,395; published Mar. 15, 1932. Class 39.
Mufti Company, Cincinnati, Ohio. Specially treated paper towel. 294,467; May 31; Serial No. 321,574; published Mar. 15, 1932. Class 4.
NEA Service, Inc., Cleveland, Ohio. Comic strip. 294,492; May 31; Serial No. 319,661; published Mar. 15, 1932. Class 38.
N. R. Manufacturing Co. (See Pollock, Jacob L.)
National Hat Co., Inc., New York, N. Y. Hats. 294,516; May 31; Serial No. 322,520; published Mar. 15, 1932. Class 39.
National Pharmacy Co., Oakland, Calif., assignor to The National Pharmacy Company, San Francisco, Calif. Tooth-paste. 87,909; renewed Aug. 13, 1932.
National Washboard Company, Chicago, Ill. Washboards. 294,554; May 31; Serial No. 316,977; published Aug. 25, 1931. Class 24.
Neustadter Bros., San Francisco, Calif. Sweaters, coats, pajamas, etc. 294,519; May 31; Serial No. 322,555; published Mar. 15, 1932. Class 39.
New Era Shirt Company, St. Louis, Mo. Shirts. 294,592; May 31. Class 39.
Newport Company, The, Carrollville, Wis. Pine-oil and borneol. 294,579; May 31. Class 6.
Nomend Hosiery Mills M. B. Laubach Co. Inc., Philadelphia, Pa. Hosiery. 294,503; May 31; Serial No. 323,205; published Mar 15, 1932. Class 39.
Northwest Lead Co., Seattle, Wash. Metal skylight bars. 294,536; May 31; Serial No. 321,144; published Mar. 15, 1932. Class 12.
Old Dominion Drug Co. Inc., Dover, Del., and Washington, D. C. Hard rubber applicator. 294,469; May 31; Serial No. 321,749; published Mar. 15, 1932. Class 44.
Oxford Varnish Corporation, Detroit, Mich. Paints, varnishes, lacquers, and japans. 294,552; May 31; Serial No. 323,961; published Mar. 22, 1932. Class 16.
Palmer's, Dr. Fred, Laboratory. (See Jacobs' Pharmacy Co.)
Parker Pen Company, The, Janesville, Wis. Desk sets. 294,544; May 31; Serial No. 323,585; published Mar. 15, 1932. Class 37.
Pelly, Francis P., et al., trustees. (See Bailey, William J.)
Perkins Products Co., Chicago, Ill. Preparation for stopping runs and tears in hosiery. 294,587; May 31. Class 6.
Pettitt, Harry, Toronto, Ontario, Canada. Supports for the feet. 294,470; May 31; Serial No. 321,819; published Mar. 15, 1932. Class 44.
Phillips Company, Bartlesville, Okla. Liquefied natural gas. 294,498; May 31; Serial No. 323,144; published Mar. 8, 1932. Class 6.
Pollock, Jacob L., doing business as N. R. Manufacturing Co., New York, N. Y. Dry cleaning preparation. 294,510; May 31; Serial No. 323,359; published Mar. 22, 1932. Class 4.
Premier Dental Products Co. (See Charlestein, Julius.)
Prentice, G. E., Manufacturing Company, Berlin, Conn. Slide operated fasteners. 294,601; May 31. Class 13.
Radanovits, Sandor, Chicago, Ill. Mustard. 294,508; May 31; Serial No. 323,308; published Mar. 15, 1932. Class 46.
Ramet Corporation of America, North Chicago, Ill. Grinding and abrasive wheels. 294,564; May 31; Serial No. 322,329; published Mar. 15, 1932. Class 4.
Reciprocal Advertising, Inc., New York, N. Y. Prints or labels. 299,525; May 31; Serial No. 322,862; published Mar. 15, 1932. Class 37.
Remsen Corporation, New York, N. Y. Phonograph records. 294,565; May 31; Serial No. 322,330; published Mar. 8, 1932. Class 36.
Rhodes, James H., & Company, Chicago, Ill., and New York, N. Y., to James H. Rhodes & Company, Chicago, Ill. Chamois-skins. 88,589–90; renewed Oct. 1, 1932.
Robart, Sophia, Boston, Mass. Face creams, tissue creams, muscle oils, etc. 294,584; May 31. Class 6.
Roessler & Hasslacher Chemical Company, Inc., The, New York, N. Y. Dry cleaning fluid. 294,535; May 31; Serial No. 321,122; published Mar. 22, 1932. Class 4.

Rudge, executors of the estate of William E., doing business as William Edwin Rudge, publisher, New York, N. Y. Magazines. 294,562; May 31; Serial No. 322,292; published Mar. 15, 1932. Class 38.
Sayre Wholesale Grocery Company, doing business as Twin "AA" Syrup Company, Sayre, Okla. Syrup. 294,533; May 31; Serial No. 320,068; published Mar. 15, 1932. Class 46.
Sayre Wholesale Grocery Company, doing business as Twin "AA" Syrup Company, Sayre, Okla. Table syrup. 294,534; May 31; Serial No. 320,069; published Mar. 15, 1932. Class 46.
Schafer, George, H C. Pfaff Cigar Company, The, Baltimore, Md. Cigars. 294,541–2; May 31; Serial Nos. 323,513–14; published Mar. 15, 1932. Class 17.
Sharples Specialty Company, The, Philadelphia, Pa. Centrifugal machines for dewaxing of petroleum oil and fractions thereof, etc. 294,570; May 31. Class 23.
Silver Suds Manufacturing Company, Philadelphia, Pa. Cleaning and polishing compound. 294,499; May 31; Serial No. 323,148; published Mar. 15, 1932. Class 4.
Smith, Blackstone, doing business as Holly Chemical Co., Los Angeles, Calif. Cleaning preparation in powdered form. 294,466; May 31; Serial No. 321,444; published Mar. 22, 1932. Class 4.
Smith, L C, & Corona Typewriters Inc., New York, N. Y. Carbon paper and typewriter ribbons. 294,529; May 31; Serial No. 322,974; published Mar. 15, 1932. Class 11.
Southern Lubricating Company, Ponca City, Okla. Lubricating oil. 294,537; May 31; Serial No. 321,038; published Mar. 1, 1932. Class 15.
Sowers, Ray V., doing business as Household Helps, Inc., Muncie, Ind. Egg beaters. 294,588; May 31. Class 23.
Sprague, Fred'k. H., Co., Inc., Fitchburg, Mass. Clothing. 294,600; May 31. Class 39.
Stafford, S. S., Inc., to S. S. Stafford, Inc., New York, N. Y., successor. Writing inks. 86,171; renewed Apr. 16, 1932.
Standard Oil Company of New Jersey, Wilmington, Del. Oils and lubricating greases. 294,520; May 31; Serial No. 322,606; published Mar. 1, 1932. Class 15.
Stern, Rutland & Lissauer, Inc., New York, N. Y. Neckwear. 294,504; May 31; Serial No. 323,258; published Mar. 15, 1932. Class 39.
Stewart-Warner Corporation, Chicago, Ill. Neon signs. 294,583; May 31. Class 21.
Stulz-Sickles Co., Newark, N. J. Metals. 294,468; May 31; Serial No. 321,738; published Mar. 15, 1932. Class 14.
Swansales Corporation, New York, N. Y. Dry cleaning powder. 294,551; May 31; Serial No. 323,918; published Mar. 22, 1932. Class 4.
Tosse, E., & Co. Inc., Brooklyn, N. Y. Internal antigonorrheic. 294,575; May 31. Class 6.
Town Affairs Committee, Montclair, N. J. Periodical. 294,563; May 31; Serial No. 322,295; published Mar. 15, 1932. Class 38.
Twin "AA" Syrup Company. (See Sayre Wholesale Grocery Company.)
United Chemical Company, Kansas City, Mo. Liquid wax. 294,514; May 31; Serial No. 322,488; published Mar. 22, 1932. Class 16.
U. S. Manufacturing Corporation, Decatur, Ill. Fly swatters. 294,571; May 31. Class 50.
Vadsco Sales Corporation, New York and Long Island City, N. Y. Perfume atomizers, bandages, absorbent cotton, etc. 294,489; May 31; Serial No. 319,677; published Mar. 15, 1932. Class 44.
Vagabond Pie Products Co. (See Wells, Eva M.)
Van Raalte Company, New York, N. Y. Sweaters. 294,511; May 31; Serial No. 323,375; published Mar. 15, 1932. Class 39.
Vestal Chemical Co., St. Louis, Mo. Floor preparations. 294,471; May 31; Serial No. 307,566; published Mar. 8, 1932. Class 16.
Wadhams Oil Company, Milwaukee, Wis. Gasoline. 294,558; May 31; Serial No. 322,195; published Mar. 1, 1932. Class 15.
Wadhams Oil Company, Milwaukee, Wis. Petroleum products. 294,559; May 31; Serial No. 322,196; published Mar. 1, 1932. Class 15.
Wallen, Herbert B., et al., trustees. (See Bailey, William J.)
Watson-Standard Company, The, Pittsburgh, Pa. Paint. 294,512; May 31; Serial No. 323,376; published Mar. 15, 1932. Class 16.
Wells, Eva M., doing business as Vagabond Pie Products Co., Bakersfield, Calif. Food of the pie or sandwich nature. 294,561; May 31; Serial No. 322,278; published Mar. 15, 1932. Class 46.
White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental handpieces. 294,530; May 31; Serial No. 322,979; published Mar. 15, 1932. Class 44.
Wilckes, Martin, Wilckes Company, New York, N. Y. Lamp black and carbon gas black. 294,490; May 31; Serial No. 319,755; published Mar. 15, 1932. Class 16.
Wilkinson, Gaddis & Co., Newark, N. J. Washing powder, soap powder, and soap chips. 294,477; May 31; Serial No. 309,491; published Mar. 22, 1932. Class 4.
Winkelmann, Friedrich W., Hamburg, Germany. Bitters. 83,878; renewed Oct. 17, 1931.
Woodward & Lothrop, Washington, D. C. Window screens and screen doors. 294,528; May 31; Serial No. 322,947; published Mar. 15, 1932. Class 12.
Young, Andrew W., doing business as Master Barbers Products, Limited, Toronto, Ontario, Canada. Shaving cream and soap. 294,465; May 31; Serial No. 321,368; published Mar. 15, 1932. Class 4.

LIST OF REGISTRANTS OF LABELS

Champion Coated Paper Company, The, Hamilton, Ohio. Champion. For Paper. 40,749; May 31.
Duff, P., & Sons, Inc., Pittsburgh, Pa. Duff's Bran Muffin Mix. For Bran Muffin Mixture. 40,750; May 31.
Duff, P., & Sons, Inc., Pittsburgh, Pa. Duff's Ginger Bread Mix. For Ginger Bread Mixture. 40,751; May 31.
Gibson Canning Company, Gibson City, Ill. Miss Illinois. For Canned Corn. 40,752; May 31.
Godoy, Francis J., New York, N. Y. Ultramarine sheet bluing. For Bluing. 11,120; renewed May 31, 1932.
Hess, Dr., & Clark, Inc., Ashland, Ohio. Dairy Rinse. For Calcium Hypochlorite Used as a Germicidal and Sterilizing Agent. 40,753; May 31.
Kerns, J., Inc., Milwaukee, Wis. Fresh Every Day The Dated Cigar. For Cigars. 40,754; May 31.
Lambooy Label and Wrapper Co., Kalamazoo, Mich. CB—402. For Cakes. 40,755; May 31.
Levin, H. M., Philadelphia, Pa. Zion Kosher Mayonnaise. For Mayonnaise. 40,756; May 31.
McCormick Electric Roaster Sales Corporation, Baltimore, Md. McCormick's Elek-Trik Roast Coffee. For Electrically Roasted Coffee. 40,757; May 31.
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Punch Your Weight. For Punch Testing Machines. 40,758; May 31.
Morel, Adele, Inc., New York, N. Y. Reduce Without Dieting. For Tea Used for Reducing Purposes. 40,759; May 31.
National Biscuit Company, New York and Niagara Falls, N. Y., and Oakland, Calif. Shredded Wheat. For Shredded Wheat Biscuits. 40,760; May 31.
Pensky, Sam, doing business as The Plaza Cigar Co., Brooklyn, N. Y. Morning Star. For Cigars. 40,761; May 31.
Pollock Paper & Box Company, Dallas, Tex. Wheat Bread. For Bread. 40,762; May 31.
Porto Rican American Tobacco Co., Newark, N. J. El Toro Perfecto The Imported Cigar For 5¢. For Cigars. 40,763; May 31.
Porto Rican American Tobacco Co., Newark, N. J. Portina The Imported Cigar For 5¢. For Cigars. 40,764; May 31.
Profant, Otto H., Chicago, Ill. Red Kaps. A Hot Shot For Rheumatism. For Rheumatism Capsules. 40,765; May 31.
Samson Products Co., New York, N. Y. Samson. For Paint Products. 40,766; May 31.
Sun Oil Company, Philadelphia, Pa. Sunoco Radiator Rust Preventive. For Emulsion for Preventing the Rusting of the Cooling Chambers of Internal Combustion Engines. 40,767; May 31.
Sylvester, Arthur, Revere, Mass. Dove Brand Fertilizer. For Fertilizer. 40,768; May 31.
The Exhibit Supply Company. (See Meyer, John F.)
Tobacco By-Products & Chemicals Corporation, Louisville, Ky. "Black Leaf 40" Nicotine Sulphate. For Nicotine Sulphate. 40,769; May 31.
Trebow Cigar Corporation, Philadelphia, Pa. New Pleasure. For Cigars. 40,770; May 31.
Vita-Minn Company, Minneapolis, Minn. Vita Salt. For Medicinal Compound or Salt. 40,771; May 31.
Ward Baking Company, New York, N. Y. Ward's Ready-To-Bake Biscuits. For Unbaked Biscuit Dough. 40,772; May 31.
Warshaw, Chas. S., New York, N. Y. Cha-War Moccasin. For Moccasins. 40,773; May 31.
Webster, Harry G., Melrose, Mass. Webster's Unsweetened Chocolate. For Chocolate for Cooking, Baking, and Beverage Purposes. 40,774; May 31.
Wedeman's Bakery, Baltimore, Md. Oriole Bread. For Bread. 40,775; May 31.
Williamson Candy Company, Chicago, Ill. Oh Henry Sunshine Peanut Butter. For Peanut Butter. 40,776; May 31.

LIST OF REGISTRANTS OF PRINTS

Holeproof Hosiery Co., Milwaukee, Wis. Vendome Clocks A Holeproof Style In Clocked Effects Inspired by the Grace of the Famous Vendome Column. For Hosiery. 13,736; May 31.

Minnehaha Water Co., The, Cleveland, Ohio. Silver Fizz. For Beverage. 13,737; May 31.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Chamois-skins. James H. Rhodes & Company. 88,589–90; renewed Oct. 1, 1932.

CLASS 4

Cleaning fluid, Dry. Roessler & Hasslacher Chemical Company. 294,535; May 31; Serial No. 321,122; published Mar. 22, 1932.
Cleaning powder, Dry. Swansales Corporation. 294,551; May 31; Serial No. 323,918; published Mar. 22, 1932.
Cleaning preparation, Dry. J. L. Pollock. 294,510; May 31; Serial No. 323,359; published Mar. 22, 1932.
Cleaning preparation in powdered form. B. Smith. 294,466; May 31; Serial No. 321,444; published Mar. 22, 1932.
Cloths, Polishing. B. S. Jacobson. 294,518; May 31; Serial No. 322,547; published Mar. 22, 1932.
Compound, Cleaning. Hillyard Chemical Company. 294,507; May 31; Serial No. 323,294; published Mar. 15 1932.
Compound, Cleaning and polishing. Silver Suds Manufacturing Company. 294,449; May 31; Serial No. 323,148; published Mar. 15, 1932.
Compound, Powdered, Instant Sales Company. 290,527; May 31; Serial No. 322,883; published Mar. 15, 1932.
Cream and soap, Shaving. A. W. Young. 294,465; May 31; Serial No. 321,368; published Mar. 15, 1932.
Grinding and abrasive wheels. Ramet Corporation of America. 294,564; May 31; Serial No. 322,329; published Mar. 15, 1932.
Powder, soap powder, and soap chips, Washing. Wilkinson, Gaddis & Co. 294,477; May 31; Serial No. 309,491; published Mar. 22, 1932.
Soap. Gold Dust Corporation. 294,556–7; May 31; Serial Nos. 322,168–9; published Mar. 15, 1932.
Soap. Lightfoot Schultz Company. 294,509; May 31; Serial No. 323,344; published Mar. 15, 1932.
Soap and a general cleaning compound. Beaver Chemical Works. 294,475; May 31 Serial No. 295,996; published Mar. 15, 1932.
Soaps. Holman Soap Company. 294,590; May 31.
Soaps. Les Industries Reunies, Societe, Anonyme. 294,502; May 31; Serial No. 323,202; published Mar. 15, 1932.
Soaps, soap jelly, metal polishes, etc. S. H. Kress & Co. 294,546; May 31; Serial No. 323,622; published Mar. 15, 1932.
Towel, Specially treated paper. Mufti Company. 294,467; May 31; Serial No. 321,574; published Mar. 15, 1932.

CLASS 5

Adhesives. Aktiengesellschaft fiir Chemische Produkte vormals H. Scheidemandel. 87,139; renewed July 2, 1932.

CLASS 6

Antigonorrheic, Internal. E. Tosse & Co. Inc. 294,575; May 31.
Beeswax. E. A. Bromund Company. 87,520; renewed July 23, 1932.
Bitters. F. W. Winkelmann. 83,878; renewed Oct. 17, 1931.
Creams and cream rouge, Facial. G. Miller. 294,577; May 31.
Creams, tissue creams, muscle oils, etc., Face. S. Robart. 294,584; May 31
Eye lash and eye brows dye. P. M. Berray. 294,576; May 31.
Insecticide, Liquid. Idico Corporation. 294,473; May 31; Serial No. 292,402; published Mar. 1, 1932.
Insecticides, germicides, and fungicides. California Spray-Chemical Corporation. 294,593; May 31.
Liquefied natural gas. Philgas Company. 294,408; May 31; Serial No. 323,144; published Mar. 8, 1932.
Medicine. W. J. Bailey. 58,920; renewed Sept. 23, 1932.
Medicines and shampoo preparations for dogs and other domesticated animals, Expectorant. I. Lebish. 294,585; May 31.
Pine-oil and borneol. Newport Company. 294,579; May 31.
Preparation for stopping runs and tears in hosiery. Perkins Products Co. 294,587; May 31.
Remedies for nervous diseases. J. W. Brant Company. 85,321; renewed Feb. 13, 1932.
Salve. G. C. Angle. 294,591; May 31.
Skin bleach preparation. Jacob's Pharmacy Co. 294,596; May 31.
Snow melting compound. J. P. Harmer. 294,573; May 31.
Starch polish, Laundry. E. A. Bromund Company. 87,419; renewed July 16, 1932.
Tooth-paste. National Pharmacy Co. 87,909; renewed Aug. 13, 1932.
Vegetable oil. Arkansas Company Inc. 294,594; May 31.

CLASS 11

Carbon paper and typewriter ribbons. L C Smith & Corona Typewriters Inc. 294,529; May 31; Serial No. 322,974; published Mar. 15, 1932.
Carbon papers and strip carbon. Copy-Craft, Inc. 294,497; May 31; Serial No. 323,126; published Mar. 15, 1932.
Inking ribbons. Addressograph-Multigraph Corpo ation. 294,526; May 31; Serial No. 322,874; published Mar. 15, 1932.
Inks, Writing. S. S. Stafford Inc. 86,171; renewed Apr. 16, 1932.

CLASS 12

Metal skylight bars. Northwest Lead Co. 294,536; May 31; Serial No. 321,144; published Mar. 15, 1932.
Panels, sheets, and the like of wood, etc. American Tarso Company. 294,540; May 31; Serial No. 323,441; published Mar. 15, 1932.
Screens and screen doors, Window. Woodward & Lothrop. 294,528; May 31; Serial No. 322,947; published Mar. 15, 1932.

CLASS 13

Door-bells, knobs, knockers, etc., Mechanically operated. American Hardware Corporation. 294,574; May 31.
Fasteners, Slide operated. G. E. Prentice Manufacturing Company. 294,601; May 31.

CLASS 14

Metals, Stulz-Sickles Co. 294,468; May 31; Serial No. 321,738; published Mar. 15, 1932.

CLASS 15

Gasoline. Deep Rock Oil Corporation. 294,483; May 31; Serial No. 313,109; published Mar. 1, 1932.
Gasoline. Wadhams Oil Company. 294,558; May 31; Serial No. 322,195; published Mar. 1, 1932.
Oil, Lubricating. Southern Lubricating Company. 294,537; May 31; Serial No. 321,038; published Mar. 1, 1932.
Oils and lubricating greases. Standard Oil Company of New Jersey. 294,520; May 31; Serial No. 322,606; published Mar. 1, 1932.
Oils, Lubricating. Ashland Refining Company. 294,517; May 31; Serial No. 322,541; published Mar. 1, 1932.
Petroleum and hydrocarbon products. El Camino Oil Company. 294,482; May 31; Serial No. 312,879; published Mar. 1, 1932.
Petroleum products. Wadhams Oil Company. 294,559; May 31; Serial No. 322,196; published Mar. 1, 1932.

CLASS 16

Coatings, Film. Brevolite Lacquer Company. 294,476; May 31; Serial No. 298,142; published Mar. 15, 1932.
Floor preparations. Vestal Chemical Co. 294,471; May 31; Serial No. 307,566; published Mar. 8, 1932.
Lamp black and carbon gas black. Wilckes, Martin, Wilckes Company. 294,490; May 31; Serial No. 319,755; published Mar. 15, 1932.
Paint. Watson-Standard Company. 294,512; May 31; Serial No. 323,376; published Mar. 15, 1932.
Paint coatings. Aluminum Industries, Inc. 294,522; May 31; Serial No. 322,726; published Mar. 22, 1932.
Paints, varnishes, enamels, etc. Lowe Brothers Company. 294,550; May 31; Serial No. 323,897; published Mar. 22, 1932.
Paints, varnishes, lacquers, and japans. Oxford Varnish Corporation. 294,552; May 31; Serial No. 323,961; published Mar. 22, 1932.
Polish and rubbing compound, Liquid. Abeles-Lewit Co. Inc. 294,515; May 31; Serial No. 322,490; published Mar. 22, 1932.
Wax, Liquid. United Chemical Company. 294,514; May 31; Serial No. 322,488; published Mar. 22, 1932.

CLASS 17

Cigars. Bayuk Cigars Incorporated. 294,478; May 31; Serial No. 310,086; published Mar. 15, 1932.
Cigars. George Schafer-H. C. Pfaff Cigar Company. 294,541–2; May 31; Serial Nos. 322,513–14; published Mar. 15, 1932.
Cigars. Grocers & Producers Co. 294,506; May 31; Serial No. 323,290; published Mar. 15, 1932.

CLASS 21

Neon signs. Stewart-Warner Corporation. 294,583; May 31.

CLASS 23

Bean and seed pickers, cleaners, polishers, etc. Crippen Manufacturing Company. 294,582; May 31.
Beaters, Egg. R. V. Sowers. 294,588; May 31.
Centrifugal machines for dewaxing of petroleum oil and fractions thereof, etc. Sharples Specialty Company. 294,570; May 31.
Printing machines, Rotary. R. Hoe & Co. 294,599; May 31.
Shovels, spades, and scoops. Ames Shovel and Tool Company. 86,365; renewed May 7, 1932.
Snow plows. Burch Corporation. 294,597; May 31.

CLASS 24

Washboards. National Washboard Company. 294,554; May 31; Serial No. 316,977; published Aug. 25, 1931.

CLASS 26

Film, Motion picture. Eastman Kodak Company. 294,598 May 31.
Magazines or receptacles and/or parts thereof for film. International Projector Corporation. 294,580; May 31.
Picture projection machines, cameras, magazines, etc., Motion. International Projector Corporation. 294,581; May 31.

CLASS 27

Clocks, Electric. Electric Clock Corporation of America. 294,505; May 31; Serial No. 323,283; published Mar. 15, 1932.

CLASS 28

Diamonds and diamond rings. Blue Bird Diamond Syndicate. 294,484; May 31; Serial No. 315,342; published Mar. 1, 1932.
Jewelry and precious metal ware. R. Blackinton & Co. 87,408; renewed July 16, 1932.
Rings and mountings therefor, Finger. Benjamin & Edward J. Gross Co. 294,474; May 31; Serial No. 295,358; published Apr. 15, 1930.

CLASS 29

Brushes, Tooth. Kolynos Company. 294,513; May 31; Serial No. 323,409; published Mar. 15, 1932.
Powder puffs. D. Hollander. 294,589; May 31.

CLASS 32

Seat covers and pads. Evr-Klean Seat Pad Company. 294,595; May 31.

CLASS 35

Tires and tubes, Rubber. Atlas Supply Company. 294,521; May 31; Serial No. 322,677; published Mar. 1, 1932.

CLASS 36

Phonograph record feeder and changer. Electromatic Record Changer Corp. 294,479; May 31; Serial No. 310,861; published Apr. 21, 1931.
Phonograph records. Remsen Corporation. 294,565; May 31; Serial No. 322,330; published Mar. 8, 1932.

CLASS 37

Bristolboard. N. Harrower. 294,553; May 31; Serial No. 323,996; published Mar. 15, 1932.
Desk sets. Parker Pen Company. 294,544; May 31; Serial No. 323,585; published Mar. 15, 1932.
Paper and envelopes, and particularly papeteries, Writing. Z. & W. M. Crane, Inc. 294,572; May 31.
Paper, envelops, and printing paper, Letter. A. O. Meyer. 86,075; renewed Apr. 9, 1932.
Papers. Hubs & Corning Company. 294,487; May 31; Serial No. 316,888; published Mar. 15, 1932.
Prints or labels. Reciprocal Advertising, Inc. 299,525; May 31; Serial No. 322,862; published Mar. 15, 1932.

CLASS 38

Bulletins and pamphlets. Home Life Insurance Company. 294,560; May 31; Serial No. 322,252; published Mar. 15, 1932.
Comic strip. NEA Service, Inc. 294,492; May 31; Serial No. 319,661; published Mar. 15, 1932.
Magazines. Executors of the estate of William E. Rudge. 294,562; May 31; Serial No. 322,292; published Mar. 15, 1932.
Periodical. Town Affairs Committee. 294,563; May 31; Serial No. 322,295; published Mar. 15, 1932.
Prints, publications. Louis Icart Society, Inc. 294,523; May 31; Serial No. 322,795; published Mar. 15, 1932.
Publication. Haire Publishing Company. 294,538–9; May 31; Serial Nos. 321,287–8; published Mar. 15, 1932.

CLASS 39

Boots, rubbers, shoes, etc. Montgomery Ward & Co. 294,568; May 31; Serial No. 322,395; published Mar. 15, 1932.
Brassières, bandeaux, corsets, etc. Maiden Form Brassiere Co. 294,555; May 31; Serial No. 322,107; published Mar. 15, 1932.
Caps and hats. Hodshon-Berg, Incorporated. 294,496; May 31; Serial No. 323,090; published Mar. 15, 1932.
Clothing. Big Store Company. 294,464; May 31; Serial No. 321,324; published Mar. 1, 1932.
Clothing, Boys' and girls'. Fred'k. H. Sprague Co. 294,600; May 31.
Corsets, brassières, bandeaux, etc. American Lady Corset Co. 294,495; May 31; Serial No. 323,081; published Mar. 15, 1932.
Hats. National Hat Co. 294,516; May 31; Serial No. 322,520; published Mar. 15, 1932.
Heels and soles, Rubber. Endicott Johnson Corporation. 294,494; May 31; Serial No. 323,039; published Mar. 15, 1932.
Hosiery. Alden Mills. 294,543; May 31; Serial No. 323,515; published Mar. 15, 1932.
Hosiery. Deaver Dry Goods Company. 294,549; May 31; Serial No. 323,889; published Mar. 15, 1932.
Hosiery. Massachusetts Knitting Mills. 294,547; May 31; Serial No. 323,667; published Mar. 15, 1932.
Hosiery. Nomend Hosiery Mills M. B. Laubach Co. Inc. 294,503; May 31; Serial No. 323,205; published Mar. 15, 1932.
Neckwear. Stern, Rutland & Lissauer. 294,504; May 31; Serial No. 323,258; published Mar. 15, 1932.
Shirts. New Era Shirt Company. 294,592; May 31.
Shirts, jackets, underwear, etc. H D Bob Company Inc. 294,500; May 31; Serial No. 323,160; published Mar. 15, 1932.
Shoes. Field & Flint Co. 294,493; May 31; Serial No. 320,760; published Mar. 15, 1932.
Shoes and slippers. Juvenile Shoe Corporation of America. 294,485; May 31; Serial No. 316,269; published Mar. 15, 1932.
Suits, coats, vests, etc. Alfred Decker & Cohn, Inc. 294,531; May 31; Serial No. 322,999; published Mar. 15, 1932.
Sweaters. Van Raalte Company. 294,511; May 31; Serial No. 323,375; published Mar. 15, 1932.
Sweaters, coats, pajamas, etc. Neustadter Bros. 294,519; May 31; Serial No. 322,555; published Mar. 15, 1932.
Sweaters, coats, vests, and jackets, Knitted. Brown's Beach Jacket Company. 294,578; May 31.
Trousers. Brody-Lewis Mfg. Company. 294,501; May 31; Serial No. 323,162; published Mar. 15, 1932.

CLASS 40

Designs or patterns. Alfred Mayer-Weismann. 294,569; May 31; Serial No. 322,430; published Mar. 15, 1932.

CLASS 43

Threads. A. O. Meyer. 85,874; renewed Mar. 26, 1932.

CLASS 44

Applicator, Hard rubber. Old Dominion Drug Co. Inc. 294,469; May 31; Serial No. 321,749; published Mar. 15, 1932.
Atomizers, bandages, absorbent cotton, etc., Perfume. Vadsco Sales Corporation. 294,489; May 31; Serial No. 319,677; published Mar. 15, 1932.
Belts, aprons, pads, etc., Sanitary. Marcus & Wiesen Inc. 294,548; May 31; Serial No. 323,752; published Mar. 15, 1932.
Dental handpieces. S. S. White Dental Manufacturing Company. 294,530; May 31; Serial No. 322,979; published Mar. 15, 1932.
Dental tools. Ace Dental Manufacturing Co. 294,491; May 31; Serial No. 318,496; published Mar. 15, 1932.
Manicure sets, nail files, buffers, etc. American Druggists Syndicate, Inc. 294,488; May 31; Serial No. 319,635; published Mar. 15, 1932.
Sanitary pads. Diana Manufacturing Company. 294,545; May 31; Serial No. 323,613; published Mar. 22, 1932.
Supports for the feet. H. Pettitt. 294,470; May 31; Serial No. 321,819; published Mar. 15, 1932.
Teeth, Artificial. J. Charlestein. 294,524; May 31; Serial No. 322,811; published Mar. 22, 1932.

CLASS 45

Beverages, and syrups and extracts for making the same, Maltless. California Crushed Fruit Corporation. 294,472; May 31; Serial No. 288,466; published Sept. 9, 1930.
Beverages, Maltless. Jinny Ricky Laboratories, Inc. 294,481; May 31; Serial No. 312,849; published June 2, 1931.

CLASS 46

Butter, eggs, cheese, etc. Beatrice Creamery Company. 294,480; May 31; Serial No. 312,134; published Mar. 15, 1932.
Canned fruits, vegetables, etc. Armstrong Grocery Company. 294,567; May 31; Serial No. 322,376; published Mar. 15, 1932.
Food of the pie or sandwich nature. E. M. Wells. 294,561; May 31; Serial No. 322,278; published Mar. 15, 1932.
Fruit juice essence, pulp, jam, jelly, and syrup, Passion. Cottee's Passiona Limited. 294,486; May 31; Serial No. 316,531; published Mar. 15, 1932.
Marshmallows. General Food Products Company. 294,586; May 31.

Mustard. S. Radanovits. 294,508; May 31; Serial No. 323,308; published Mar. 15, 1932.
Olive oil. N. Latorraca. 294,532; May 31; Serial No. 320,001; published Mar. 15, 1932.
Sugar, Special. Gamma Pharmacal Corporation. 294,566; May 31; Serial No. 322,363; published Mar. 15, 1932.
Syrup. Sayre Wholesale Grocery Company. 294,533; May 31; Serial No. 320,068; published Mar. 15, 1932.
Syrup, Table. Sayre Wholesale Grocery Company. 294,534; May 31; Serial No. 320,069; published Mar. 15, 1932.

CLASS 50

Fly swatters. U. S. Manufacturing Corporation. 294,571; May 31.

LIST OF LABELS

"Black Leaf 40" Nicotine Sulphate. For Nicotine Sulphate. Tobacco By-Products & Chemical Corporation. 40,769; May 31.
CB—402. For Cakes. Lambooy Label and Wrapper Co. 40,755; May 31.
Champion. For Paper. Champion Coated Paper Company. 40,749; May 31.
Cha-War Moccasin. For Moccasins. C. S. Warshaw. 40,773; May 31.
Dairy Rinse. For Calcium Hypochlorite Used as a Germicidal and Sterilizing Agent. Dr. Hess & Clark, Inc. 40,753; May 31.
Dove Brand Fertilizer. For Fertilizer. A. Sylvester. 40,768; May 31.
Duff's Bran Muffin Mix. For Bran Muffin Mixture. P. Duff & Sons, Inc. 40,750; May 31.
Duff's Ginger Bread Mix. For Ginger Bread Mixture. P. Duff & Sons, Inc. 40,751; May 31.
El Toro Perfecto The Imported Cigar For 5¢. For Cigars. Porto Rican American Tobacco Co. 40,763; May 31.
Fresh Every Day. The Dated Cigar. For Cigars. J. Kerns, Inc. 40,754; May 31.
McCormick's Elek-Trik Roast Coffee. For Electrically Roasted Coffee. McCormick Electric Roaster Sales Corporation. 40,757; May 31.
Miss Illinois. For Canned Corn. Gibson Canning Company. 40,752; May 31.
Morning Star. For Cigars. S. Pensky. 40,761; May 31.
New Pleasure. For Cigars. Trebow Cigar Corporation. 40,770; May 31.
Oh Henry Sunshine Peanut Butter. For Peanut Butter. Williamson Candy Company. 40,776; May 31.
Oriole Bread. For Bread. Wedeman's Bakery. 40,775; May 31.
Portina The Imported Cigar For 5¢. For Cigars. Porto Rican American Tobacco Co. 40,764; May 31.
Punch Your Weight. For Punch Testing Machines. J. F. Meyer. 40,758; May 31.
Red Kaps, A Hot Shot For Rheumatism. For Rheumatism Capsules. O. H. Profant. 40,765; May 31.
Reduce Without Dieting. For Tea Used for Reducing Purposes. Adele Morel, Inc. 40,759; May 31.
Samson. For Paint Products. Samson Products Co. 40,766; May 31.
Shredded Wheat. For Shredded Wheat Biscuits. National Biscuit Company. 40,760; May 31.
Sunoco Radiator Rust Preventive. For Emulsion For Preventing the Rusting of the Cooling Chambers of Internal Combustion Engines. Sun Oil Company. 40,767; May 31.
Ultramarine Sheet Bluing. For Bluing. F. J. Godoy. 11,120; renewed May 31, 1932.
Vita Salt. For Medicinal Compound or Salt. Vita-Minn Company. 40,771; May 31.
Ward's Ready-To-Bake Biscuits. For Unbaked Biscuit Dough. Ward Baking Company. 40,772; May 31.
Webster's Unsweetened Chocolate. For Chocolate for Cooking, Baking, and Beverage Purposes. H. G. Webster. 40,774; May 31.
Wheat Bread. For Bread. Pollock Paper & Box Company. 40,762; May 31.
Zion Kosher Mayonnaise. For Mayonnaise. H. M. Levin 40,756; May 31.

LIST OF PRINTS

Silver Fizz. For Beverage. Minnehaha Water Co. 13,737; May 31.
Vendome Clocks A Holeproof Style In Clocked Effects Inspired by the Simple Grace of the Famous Vendome Column. For Hosiery. Holeproof Hosiery Co. 13,736; May 31.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 31ST DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A T Oil Burner Co. (See Hansen, Sinius M., assignor.)
Abbott, Charles W., Rome, assignor to General Cable Corporation, New York, N. Y. Electrical connecter. 1,860,829; May 31.
Abel, Harry B., assignor to Nye Odorless Incinerator Corporation, Macon, Ga. Furnace door. 1,861,334; May 31.
Abrams, Frank W., Elizabeth, N. J., assignor to Standard Oil Development Company. Making soap-oil compositions. 1,860,798; May 31.
Abramson, John H., assignor to Greenlee Bros. & Co., Rockford, Ill. Portable mortising device. 1,861,289; May 31.
Acme Motion Picture Projector Company. (See Moulton, Forest R., assignor.)
Acme Road Machinery Company. (See Cook, David B., assignor.)
Adamiecki, Karol, Warsaw, Poland. Device for making orthogonal diagrams. 1,860,763; May 31.
Adams, Ira J. (See Barker, Charles D., assignor.)
Adams, Royal C. (See McGraw, W., and Adams.)
Adamson, Allan A., Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio. Wrapping and lining means for boxes. 1,860,830; May 31.
Adell, John A., Orange, Mass. Junction box. 1,861,074; May 31.
Agasote Millboard Company, The. (See Landt, G., and Becher, assignors.)
Agfa Ansco Corporation. (See Gehrke, Friedrich W., assignor.)
Agfa Ansco Corporation. (See Schmidt, M., and Hanke, assignors.)
Agnew, Will J., Walker, Iowa. Battery terminal connecter. 1,861,290; May 31.
Ahnberg, Johan T., Gottenborg, Sweden. Pressure reducing valve. 1,861,375; May 31.
Aircraft Development Corporation. (See Schlosser, Arthur G., assignor.)
Air Reduction Company. (See Anderson, James L., assignor.)
Air Reduction Company. (See Crowe, John J., assignor.)
Air Reduction Company. (See Lawrence, Frank S., assignor.)
Aktiebolaget Ljungströms Angturbin. (See Lysholm, Alf, assignor.)
Albany Hardware Specialty Mfg. Co. (See Whitcomb, Harris M., assignor.)
Albrecht, Christian A., Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Assembling mechanism for typographical linecasting machines. 1,860,880; May 31.
Aldeborgh, Erik H., assignor to Standard Gage Company, Inc., Poughkeepsie, N. Y. Plug gauge. 1,861,172; May 31.
Alexander of New York, Inc. (See Buehl, Alexander J., assignor.)
Allan, Archibald, Tynemouth, and J. Christie, Sunderland, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. Electric switch gear. 1,860,918; May 31.
Allen, Frank B., Lower Merion Township, Montgomery County, Pa., assignor to The Allen-Sherman-Hoff Company. Control means for centrifugal pumps. 1,860,603; May 31.
Allen-Sherman-Hoff Company, The. (See Allen, Frank B., assignor.)
Allgemeine Elecktrizitats Gesellschaft. (See Anders, Guido, assignor.)
Allis-Chalmers Manufacturing Company. (See Andersson, Pelle, assignor.)
Allis-Chalmers Manufacturing Company. (See Furnas, William C., assignor.)
Allis-Chalmers Manufacturing Company. (See Furnas, W. C., and Cooper, assignors.)
Allis-Chalmers Manufacturing Company. (See Grob, Benjamin, assignor.)
Allis-Chalmers Manufacturing Company. (See Hill, Leland H., assignor.)
Allis-Chalmers Manufacturing Company. (See Nagler, Forrest, assignor.)
Allis-Chalmers Manufacturing Company. (See Newhouse, Ray C., assignor.)
Allis-Chalmers Manufacturing Company. (See Nichols, Louis C., assignor.)
Allis-Chalmers Manufacturing Company. (See Pfau, Arnold, assignor.)
Allis-Chalmers Manufacturing Company. (See Williamson, Robert B., assignor.)
Allyne, Edmund E., Cleveland Heights, and A. C. Schickler, Cleveland, Ohio, assignors to The Allyne Refrigeration Corporation, Cleveland, Ohio. Intermittent absorption refrigerating apparatus. 1,861,075; May 31.
Allyne Refrigerator Corporation, The. (See Allyne, E. E., and Schickler, assignors.)
Alonso, Fernando, Luchana-Baracaldo, Spain, assignor to The Weaving Machines Company Limited, London, England. Rotary loom for the manufacture of textiles of all kinds in the form of a tube. 1,860,975; May 31.
Alpha Chemical Company. (See Sunstrom, Mark T., assignor.)
Alsop, Samuel, New York, N. Y. Liquid mixer. 1,860,976; May 31.
Altenkirch, Edmund, Neuenhagen, near Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Absorption apparatus. 1,861,173; May 31.
Aluminum Company of America. (See Pacz, Aladar, assignor.)
American Cement Paint Company. (See Moross, William P. D., assignor.)
American Face Brick Research Corporation. (See Hathaway, W., and Wyatt, assignors.)
American Lace Mfg. Co., The. (See Hucknall, Hage W., assignor.)
American La France and Foamite Corporation. (See Walker, Hubert, assignor.)
American Laundry Machinery Company, The. (See Samuels, Russell R., assignor.)
American Lithographic Company. (See Burgess, Joseph E., assignor.)
American Lurgi Corporation. (See Klencke, Hans, assignor.)
American Slicing Machine Company. (See Campbell, William J., assignor.)
American Smelting and Refining Company. (See Betterton, Jesse O., assignor.)
American Telephone and Telegraph Company. (See Bailey, R. S., Newby, and Moody, assignors.)
American Telephone and Telegraph Company. (See Dietze, Eginhard, assignor.)
American Telephone and Telegraph Company. (See Edwards, William H., assignor.)
American Tool Works Company, The. (See Schellenbach, William L., assignor.)
American Voith Contact Company. (See Lang, Richard T., assignor.)
American Well Works, The. (See Sperry, John B., assignor.)
Ames, Alton J., Woodstock, Me. Turning tool for wood turning lathes. 1,860,376; May 31.
Anaconda Wire and Cable Company. (See Kennedy, Joseph A., assignor.)
Anciens Etablissements R. Cornley & Co., Société Anonyme. (See Ollendorff, Jacques, assignor.)
Anders, Guido, Berlin-Steglitz, assignor to Allgemeine Elektrizitats Gesellschaft, Berlin, N. W., Germany. Radioreceiver. 1,861,203; May 31.
Anderson, Albert & J. M., Manufacturing Company. (See Sundberg, Carl E., assignor.)
Anderson Co., The. (See Smulski, Theodore J., assignor.)
Anderson, Gustav. (See Roberts, F. S., and Anderson.)
Anderson, Herbert O., assignor to Rockbestos Products Corporation, New Haven, Conn. Insulated electrical conductor. 1,861,404; May 31.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Welded pipe joint and making the same. 1,860,346; May 31.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Pipe joint and making it. 1,860,521; May 31.
Anderson, Samuel M., Sharon, assignor to B. F. Sturtevant Company, Boston, Mass. Air conditioning control. 1,860,377; May 31.
Andersson, Pelle, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Compressor valve. 1,860,445; May 31.
Andersson, Rupert, Skarblacka, Sweden. Dressing tool. 1,860,764; May 31.
Andis, Mathew, Racine, Wis. Comb plate and manufacturing the same. 1,860,643; May 31.
Andis, Mathew, Racine, Wis. Hair clipper. 1,861,043; May 31.
Andres, Paul G., La Grange, Ill., assignor to Temple Corporation, Chicago, Ill. Loud speaker. 1,861,105; May 31.

Animal Trap Company of America. (See Zahm, Joseph D., assignor.)

Anketell, Edward N. (See Gilbert, A. C., and Anketell.)

Ansel, Harry R., Columbus, Ohio. Sign structure. 1,860,919; May 31.

Ansley, Charlotte E., Minneapolis, Minn. Garment supporter. 1,860,727; May 31.

Apple, Adrian R., Glendale, assignor to Wallace China Company, Ltd., Huntington Park, Calif. Plate or similar article. Des. 87,042; May 31.

Apple, Vincent G., Dayton, Ohio. Making armature coils. 1,860,977; May 31.

Apple, Vincent G., Dayton, Ohio. Armature. 1,860,978; May 31.

Applegate, Addison, Liberty, N. Y. Mason's and plasterer's tool. 1,861,174; May 31.

Archer, Thomas P., and J. B. Flynn, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Latch. 1,861,291; May 31.

Arens, Albert C., Milwaukee, Wis. Weed or vermin-killing device. 1,861,254; May 31.

Arey, Ralph G., Swampscott, Mass., assignor to General Electric Company. Instrument balancing device. 1,861,255; May 31.

Armstrong, Stanley E., New Haven, Conn. Appliance for the treatment of colds, influenza and similar ailments. 1,860,847; May 31.

Arndt, Frank J., Ventnor, N. J. Awning fixture. 1,860,881; May 31.

Arnold, Edwin E., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Propeller. 1,860,522; May 31.

Associated Electric Laboratories, Inc. (See Nelr, E. R., and Witt, assignors.)

Associated Electric Laboratories, Inc. (See Shull, William G., assignor.)

Atlas Bolt & Screw Company. (See Schellentrager, E. W., and Clarkson, assignors.)

Atwood Machine Company, The. (See Rowe, Irving R., assignor.)

Austin, Arthur O., near Barberton, assignor, by mesne assignments to The Ohio Brass Company, Mansfield, Ohio. Current transformer. 1,861,076; May 31.

Austin, Bascum O., and N. H. Willby, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Automatic series-parallel control for self-propelled vehicles. 1,860,523; May 31.

Autokraft Box Corporation. (See Adamson, Allan A., assignor.)

Automat Molding & Folding Company, The. (See Morris, Howard A., assignor.)

Automotive Engineering Corporation. (See Marcum, Arthur L., assignor.)

Avery, Harold T., Oakland, Calif. Altitude control. 1,860,402; May 31.

Aynge, William E., London, England, assignor, by mesne assignments, to Mergenthaler Linotype Company, Brooklyn, N. Y. Magazine of typographical line composing machines. 1,860,882; May 31.

B. & B. Shoe Company. (See Bernstein, Julius, assignor.)

B. O. T. Manufacturing Company. (See Tilden, Bert O., assignor.)

Badger, E. B., & Sons Company. (See Leslie, Eugent H., assignor.)

Bailey, Rand S., Montclair, and N. D. Newby, Woodridge, N. J., and D. L. Moody, Hempstead, N. Y., assignors to American Telephone and Telegraph Company. Signaling system. 1,860,446; May 31.

Bailey, Samuel W. (See Cleveland, A. B., and Bailey.)

Bailey, Vernon, Washington, D. C. Trap. 1,860,378; May 31.

Baldwin, George T., Thornton Heath, assignor to Rembrandt Intaglio Printing Company Limited, London, England. Printing and other cylinder and means for securing sheets thereto. 1,860,765; May 31.

Baldwin, John D., jr., assignor to A. J. Weatherhead, jr., Cleveland, Ohio. Making pipe couplings or fittings. 1,860,604; May 31.

Baldwin, John D., jr., assignor to A. J. Weatherhead, jr., Cleveland, Ohio. Producing tube fittings for hydraulic brake systems. 1,860,605; May 31.

Bales, James E., and C. T. Christensen, assignors to Lyon Metal Products, Incorporated, Aurora, Ill. Folding table and making the same. 1,860,644; May 31.

Ballard, Joseph W., Greenfield, assignor to Griswoldville Manufacturing Company, Griswoldville, Mass. Making composite fabrics. 1,861,044; May 31.

Balthis, Ben D. (See Thomas, J. V., and Balthis.)

Barényi, Árpád, Berlin-Lichterfelde, Germany. Photographic shutter. 1,861,256; May 31.

Barényi, Árpád. (Berlin-Lichterfelde, Germany. Photographic shutter. 1,861,257; May 31.

Barkelj, Jean A. H., Los Angeles, Calif. Internal combustion engine. 1,861,106; May 31.

Barker, Charles D., Jackson, Mich., assignor to I. J. Adams, New York, N. Y. Electrical display device. 1,860,979; May 31.

Barker, Eros V., assignor to J. F. Martin, Bellevue, Ohio. Reserve wheel element mounting. 1,860,920; May 31.

Barker, Harry. (See Douglas, Edwin R., assignor.)

Barnard, Edgar A., Washington, D. C. Lamp. Des. 87,043; May 31.

Barrett Company, The. (See Hamlin, Marston L., assignor.)

Barrett, Walter A., Fort Wayne, Ind. Liquid temperature changing device. 1,861,292; May 31.

Bartlett, Oscar L., Mound City, Ill. Setting up form for staved containers. 1,861,293; May 31.

Bartlett, Oscar L., Mound City, Ill. Closure plug for rolls. 1,861,294; May 31.

Bastian Brothers Company. (See Mitchel, Charles F., assignor.)

Bates, Walter A., assignor to Gary Structural Steel Company, Gary, Ind. Grating turning machine. 1,860,980; May 31.

Bauch, William H., Shelbyville, assignor to Indiana Foundry, Machine & Supply Company, Brazil, Ind. Machine tool. 1,860,700; May 31.

Bauer, Frank, Ewing, Nebr. Cattle guard. 1,860,571; May 31.

Bauer, G., and W. Brose, Hamburg, Germany. Hydraulic power transmitter. 1,860,701; May 31.

Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Controlling trains. 1,861,077; May 31.

Baumberger, William J. (See York, H. H., and Baumberger.)

Bausch & Lomb Optical Company. (See Poser, Max, assignor.)

Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel cover tucking machine. 1,860,645; May 31.

Beall, William W., Muncie, Ind. Automobile transmission. 1,861,376; May 31.

Beaujean, Camille, Brussels, assignor to Société Anonyme d'Ougree Marihaye, Ougree, Belgium. Sheet piling. 1,860,766; May 31.

Becher, Hubert L. (See Landt, G., and Becher.)

Beckett, William F., Belleville, Ill. Casket lowering device safety attachment. 1,860,767; May 31.

Bedford, Frederick G. H., et al., legal representatives. (See Parsons, Charles A.)

Beilgard, Harvey A., Hollywood, Calif. Ice cream cutting device. 1,860,646; May 31.

Bell, Harvey W., Ardsley-on-Hudson, assignor to The Beloyt Corporation, New York, N. Y. Spring suspension. 1,860,831; May 31.

Bell Telephone Laboratories, Incorporated. (See Berrian, John A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Gilbert, John J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Goff, Harold W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Holland, Newman H., assignor.)

Bell Telephone Laboratories Incorporated. (See Marrison, W. A., and Horton, assignors.)

Bell Telephone Laboratories, Incorporated. (See Martin, H. T., and Hoyt, assignors.)

Bell Telephone Laboratories, Incorporated. (See Sole, John H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Stokely, Ray L., assignor.)

Bell, William E. H., Glenside, assignor to H. W. Butterworth & Sons Company, Philadelphia, Pa. Dyeing machine. 1,860,351; May 31.

Beloyt Corporation, The. (See Bell, Harvey W., assignor.)

Bemis Bro. Bag Co. (See Morrill, P. E., and Brady, assignors.)

Bennett, John L., assignor to U. S. Manufacturing Corporation, Decatur, Ill. Utensil for popping corn and the like. 1,860,799; May 31.

Bennett, William G., Epsom, and A. M. Peake, London, England, assignors, by mesne assignments, to Standard Brands Incorporated, Dover, Del. Treatment of molasses for yeast growth. 1,860,832; May 31.

Bergdoll, John G., assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,860,447; May 31.

Berger, Aloysius N., and P. Seel, Altoona, Pa. Securing device for vehicles. 1,860,565; May 31.

Berkshire Knitting Mills. (See Hemmerich, Hugo, assignor.)

Berliner, Robert. (See Mieg, W., and Berliner.)

Bernstein, Julius, assignor to B. & B. Shoe Company, Chicago, Ill. Carton or similar container. Des. 87,044; May 31.

Berrian, John A., Dade City, Fla., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical controller system. 1,861,204; May 31.

Berry, Otto Carter, Flint, assignor to General Motors Company, Detroit, Mich. Combustion chamber for internal combustion engines. 1,861,045; May 31.

Berteis, William R., Wilkes-Barre, Pa. Cover for containers. 1,861,377; May 31.

Bertram, Frank, Roslindale, Mass. Fireplace screen. 1,860,566; May 31.

Berwind Fuel Company of Delaware. (See Komarek, Gustav, assignor.)

Bethlehem Steel Company. (See Dougherty, R. S. A., and Greenwell, assignors.)

Bethlehem Steel Company. (See Froelich, Clarence H., assignor.)

Bethlehem Steel Company. (See Keller, Albert T., assignor.)

Bethlehem Steel Company. (See Little, J. E., Kichline, and Ehrgott, assignors.)

Bethune, John, Rochester, N. Y., assignor to Reo Motor Car Company, Lansing, Mich. Gearing. 1,861,258; May 31.

Betterton, Jesse O., Omaha, Nebr., assignor to American Smelting and Refining Company, New York, N. Y. Manufacture of lead and zinc alloys. 1,860,524; May 31.

Bevier, Abram M., Duluth, Minn. Weight indicating support. 1,860,647; May 31.

Biguet, Jacques, Lyon, France, assignor to Radio Corporation of America, New York, N. Y. Three electrode vacuum tubes. 1,861,107; May 31.

Bihl, William E., and A. Ramclaw, Chicago, Ill. Shaft seal. 1,860,981; May 31.

Bilde, Erik. (See Engberg, A. O., and Bilde.)

Bilde, Tord E. D., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation. Vacuum cleaner. 1,860,883; May 31.

Bilde, Tord E. D., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation. Vacuum cleaner. 1,860,884; May 31.

Bilde, Tord E. D., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation. Vacuum cleaner. 1,860,885; May 31.

Bilstein, Hans. (See Hoeing, Julius H., assignor.)

Bindschedler, Theodore S., assignor to Burroughs Adding Machine Company, Detroit, Mich. Universal motor. 1,860,728; May 31.

Binnie, John A., Philadelphia, Pa. Aerial device. 1,860,982; May 31.

Bishop, George E., Cleveland Heights, Ohio. Automobile door curtain. 1,860,983; May 31.

Bishop, Harvey L. (See Edgecumbe, J. A., and Bishop.)

Black & Decker Manufacturing Company, The. (See Tschudi, Erwin W., assignor.)

Blair, Emil. (See Ellis, Herbert L., assignor.)

Blake, Clifton F. (See La Payne, Rex.)

Blau, Ludwig W., Houston, Tex., assignor to Standard Oil Development Company. Torsion balance. 1,861,229; May 31.

Blood, Howard E., assignor to Norge Corporation, Detroit, Mich. Water cooler. 1,860,379; May 31.

Bloodgood, John Van S., Setauket, N. Y. Fly paper support. 1,861,378; May 31.

Blum, Hermann. (See Wacker, Fritz, Greissinger, and Dietrich.)

Bodge, William, Nutley, N. J., assignor to L. Stone, Brockton, Mass. Envelope machine. 1,860,984; May 31.

Boeye, Paul F., assignor to Waldorf Paper Products Company, St. Paul, Minn. Separator. 1,860,567; May 31.

Bohnenblust, Arnold, Riley, Kans. Pump. 1,860,768; May 31.

Bokan, Frank, St. Louis, Mo. Convertible closure. 1,860,648; May 31.

Bonat & Bro., Samuel. (See Lippert, Walter E., assignor.)

Bond Electric Corporation. (See Pratt, Goodrich B., assignor.)

Borden, Stephen W., Summit, N. J. Electrical bonding device. 1,860,800; May 31.

Borden, Stephen W., Summit, N. J. Bonding bushing. 1,860,801; May 31.

Borden, Stephen W., Summit, N. J. Conduit bonding fitting. 1,860,802; May 31.

Borgeräfe, Friedrich, Weidenau-on-the-Sieg, Germany. Manufacturing shear-resisting iron such as iron for die-casting nuts, iron for screws, and the like. 1,860,568; May 31.

Bornhoft, Eugene M., Chicago, Ill. Directory board. 1,860,985; May 31.

Borregard, Ernst, Great Neck, assignor to Leo H. Fuller, Inc., Long Island City, N. Y. Advertising device. 1,860,380; May 31.

Bortone, Frank, assignor to The Dorin Corporation, Jersey City, N. J. Packing and making same. 1,860,649; May 31.

Bosch, Robert, Aktiengesellschaft. (See Klaiber, Erich, assignor.)

Bouer, Bernard L. (See Kaplan, H. E., and Bouer.)

Bourne, Roland B., assignor to The Maxim Silencer Company, Hartford, Conn. Engine oscillation controller. 1,860,569; May 31.

Bousel, Morris, et al. (See Gliowitz, Benjamin, assignor.)

Bower, George D., Columbia Heights, assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Switch for magnetically operable devices. 1,861,046; May 31.

Bowes, Laurence C., Chicago, Ill., assignor by mesne assignments to U. S. Oil and Service Corporation, New York, N. Y. Pulverized fuel supplying means for internal combustion engines. 1,861,379; May 31.

Box Crane & Hoist Corporation. (See Winterer, F. J., and Hogrebe, assignors.)

Boyce, Harrison H., Jericho, N. Y. Thermometer. 1,860,986; May 31.

Brace, Eugene O., Mayville, N. Y. Integral clutch and transmission control. 1,861,108; May 31.

Brace, Harry, Detroit, Mich. Metallic corner or joint. 1,860,650; May 31.

Bracken, William A., Eldorado, assignor of one-half to W. B. Jones, Augusta, Kans. Combined supporting and ratchet bracket. 1,860,921; May 31.

Bradley, Charles E., and C. E. Mason, assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Waterproofed leather and composition for treating same. 1,860,651; May 31.

Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburg, assignors to Bradley-McKeefe Corporation, New York, N. Y. Manufacture of pulp, etc. 1,860,570; May 31.

Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburg, assignors to Bradley-McKeefe Corporation, New York, N. Y. Production of pulp, etc. 1,860,803; May 31.

Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburg, assignors to Bradley-McKeefe Corporation, New York, N. Y. Manufacture of pulp, etc. 1,860,848; May 31.

Bradley-McKeefe Corporation. (See Bradley, L., and McKeefe, assignors.)

Bradshaw, Robert. (See Wilkinson, M. L., and Bradshaw.)

Brady, Charles V. (See Morrill, P. E., and Brady.)

Braine, Daniel L., Brooklyn, and D. J. Irish, Richmond, assignors to Foster Wheeler Corporation, New York, N. Y. Method and apparatus for burning powdered fuel. 1,860,987; May 31.

Braly, Norman B., Redwood City, Calif. Hose coupling. 1,861,296; May 31.

Bramwell, Balfour, Belfast, Ireland. Filter. 1,861,295; May 31.

Brantferger, Ernest F., Denver, Colo. Novelty lunch stand. 1,861,405; May 31.

Brassert, H. A., & Company. (See Seaver, Jay J., assignor.)

Brasseur, Ernest J., assignor to A. B. Dick Company, Chicago, Ill. Sheet manipulator. 1,861,259; May 31.

Brasseur, Ernest J., assignor to A. B. Dick Company, Chicago, Ill. Stenciling material. 1,861,260; May 31.

Braund, John J., Washington, D. C. Embossing machine. 1,860,729; May 31.

Breitwieser, Heinrich, Griesheim, near Darmstadt, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany. Lifting device. 1,861,078; May 31.

Brennan, Arthur T., Detroit, Mich. Window structure. 1,860,988; May 31.

Brewer, Robert W. A., Jenkintown, Pa. Internal combustion engine. 1,861,380; May 31.

Brewster, Percy D., East Orange, N. J. Color photography. 1,860,525; May 31.

Brinkman, Louis H., Glen Ridge, N. J. Dies for corrugated tubes. 1,860,989; May 31.

Bristow, Claude S., Long Beach, Calif. Combustion promoting device. 1,861,297; May 31.

British Dyestuffs Corporation. (See Simmons, Thomas A., assignor.)

Britten, Edwin F., jr., Maplewood, assignor to Monroe Calculating Machine Company, Orange, N. J. Attachment for calculating machines. 1,860,490; May 31.

Broadwin, Sampson, Brooklyn, N. Y. Pattern mechanism for crochet knitting machines. 1,860,526; May 31.

Bronson, Budd, assignor to The Obio Rubber Company, Cleveland, Ohio. Running board. 1,861,430; May 31.

Brooks, Benjamin T., Greenwich, Conn., and E. J. Cardarelli, Newark, N. J. Organic acid-polyhydric alcohol resins. 1,860,730; May 31.

Brose, Walter. (See Bauer, G., and Brose.)

Brown Brothers Welding Company. (See Brown, Hugh F., assignor.)

Brown Company. (See Richter, George A., assignor.)

Brown, Edgar S., Worcester, Mass. Radio aerial. 1,860,652; May 31.

Brown, Hugh F., assignor to Brown Brothers Welding Company, San Francisco, Calif. Pipe cutting machine. 1,860,653; May 31.

Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)

Brown Instrument Company, The. (See Winton, Lewis B., assignor.)

Brown & Sharpe Manufacturing Company. (See Mathewson, Maxwell L., assignor.)

Brownstein, Benjamin, Ellwood City, Pa. Pipe thread protector. 1,860,886; May 31.

Brunk, Harold J., Chicago, Ill., assignor to The C. F. Pease Company. Blue print and making the same. 1,861,298; May 31.

Bryan, Charles S., assignor to Rumford Chemical Works, Rumford, R. I. Processing of sludges and the like. 1,860,527; May 31.

Bryant, Ozro N., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Valve operating mechanism. 1,861,093; May 31.

Büchi, Alfred, Winterthur, Switzerland. Double acting internal combustion engine with exhaust turbines and charging air compressors. 1,860,449; May 31.

Büchi, Alfred, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland. Packing cylinder liners. 1,860,769; May 31.

Buehl, Alexander J., Crestwood, N. Y., assignor to Alexander of New York, Inc., Hot Springs, Va. Mechanism for waving hair. 1,860,352; May 31.

Buckeye Portable Tool Company, The. (See Price, W. W., and Ripsch, assignors.)

Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Axle housing. 1,860,702; May 31.

Budd, Edward G., Manufacturing Company. (See Meinel, William J., assignor.)

Budd Wheel Company. (See Eksergian, Carolus L., assignor.)

Buesser, Frederick, Guttenberg, N. J. Embroidery thread cutting machine. 1,860,528; May 31.
Bugatti, Ettore, Molsheim, France. Brake. 1,860,770; May 31.
Bugatti, Ettore, Molsheim, France. Vibration damper. 1,860,771; May 31.
Bukolt, Roman B., Stevens Point, Wis. Roller bearing unit for wheels. 1,861,205; May 31.
Bulldog Electric Products Company. (See Frank, William H., assignor.)
Bullock, Percy W., County of Middlesex, England. Shoe, slipper, boot, and the like. 1,861,299; May 31.
Burch, Harold E., Oakland, Calif. Portable water softener. 1,860,840; May 31.
Burg, Michael, Baltimore, Md. Extension table. 1,860,990; May 31.
Burgess, Joseph E., assignor to American Lithographic Company, Inc., New York, N. Y. Combined carton and lamp shade. 1,861,206; May 31.
Burnham, Laurence H., Lexington, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Molded rubber boot with flexible top. 1,860,403; May 31.
Burns, Fred J., assignor to Columbia Mills, Incorporated, Saginaw, Mich. Roller wrench. 1,861,207; May 31.
Burrick, Theodore. (See Smith, H. G., and Burrick.)
Burroughs Adding Machine Company. (See Bindschedler, Theodore S., assignor.)
Burtchaell, Arthur E., San Francisco, Calif. Facing and stacking machine. 1,860,491; May 31.
Burton-Dixie Corporation. (See Zimmerman, Fred R., assignor.)
Buschman, Abraham L., New York, N. Y. Lamp socket clip. 1,861,151; May 31.
Busser, Frank J., et al., trustees. (See Cassidy, Thomas A., assignor.)
Butler, Clyde G., assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio. Portable grease dispensing pump. 1,861,230; May 31.
Butler, Edgar M., Brooklyn, assignor of twenty-five per cent to A. Jordahl, New York, N. Y. Motor. 1,860,402; May 31.
Butler, William H., New York, N. Y. Three wheel pleasure automobile. Des. 87,045; May 31.
Butler, William H., New York, N. Y. Automobile coupé. Des. 87,046; May 31.
Butler, William L. (See Walsh, N. J., and Butler.)
Butterworth, H. W., & Sons Company. (See Bell, William, E. H., assignor.)
Buysse, Charles E., Detroit, Mich. Furnace. 1,860,887; May 31.
Bynum, Pink T., Callihan, Tex. Pin and bushing removing tool. 1,861,079; May 31.
Cable, Julius L., Boston, Mass. Upholstered chair. 1,860,381; May 31.
Cady, Walter G., Middletown, Conn., assigno to Radio Corporation of America. Electromechanical system. 1,860,529; May 31.
Cain, William E., Jeffersonville, Ind., and A. E. Crady, assignors to Logan Co., Inc., Louisville, Ky. Remote control conveyor switch. 1,861,335; May 31.
California Packing Co poration. (See Goranson, Hjalmar and D., assignors.)
California Packing Corporation. (See Norgaard, Hal W., assignor.)
Callaway, Archibald B., Readstown, Wis. Road shoulder maintainer. 1,860,922; May 31.
Cameo (Machinery) Limited. (See Cook, Thomas, assignor.)
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Door locking mechanism for railway cars. 1,861,152; May 31.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Diaphragm actuated valve. 1,860,450; May 31.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Air brake. 1,860,451; May 31.
Campbell, Harry E., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Grid resistance. 1,860,493; May 31.
Campbell, John D., New Rochelle, N. Y. Hairpin. 1,861,109; May 31.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,860,382; May 31.
Campbell, William M., Saginaw, Mich. Artificial fishbait. 1,861,110; May 31.
Cannon Mills Company. (See Fisher, C. A., and Ketner, assignors.)
Carborundum Company, The. (See Forse, E. B., and Geiger, assignors.)
Cardarelli, Eugene J. (See Brooks, B. T., and Cardarelli.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carlson, Eliof L., and J. O. Simpson, assignor to The E. Ingraham Co., Bristol, Conn. Nickel clock. 1,860,353; May 31.
Carmichael, Eugene L., assignor of one-half to E. I. Gersh, New York, N. Y. Check protector. 1,861,208; May 31.
Carrier Research Corporation. (See Gant, Harris P., assignor.)
Carroll, Charles, East Chicago, and J. S. Hogue, Hammond, Ind. Safety device for shearing or punching machines or the like. 1,860,991; May 31.
Carroll, Irene E., Kansas City, Mo. Luminous dial cover. 1,860,606; May 31.
Carson, Jesse F., assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Hand vacuum cleaner. 1,861,261; May 31.
Carter, John W., Omaha, Nebr. Shear-blade sharpener. 1,860,404; May 31.
Cason, Paul E., assignor to The Cason Six Wheel Attachment Company, New Haven, Conn. Auxiliary axle attachment for motor vehicles. 1,861,111; May 31.
Cason Six Wheel Attachment Company, The. (See Cason, Paul E., assignor.)
Cassidy, Thomas A., Brooklyn, N. Y., assignor, by mesne assignments, to F. J. Busser, Philadelphia, Pa., and H. T. Hornidge, New York, N. Y., trustees. Heterocyclic nitrogen compounds soluble in aliphatic and aromatic hydrocarbons and to the process of producing the same. 1,860,850; May 31.
Caterpillar Tractor Co. (See Eberhard, Harmon S., assignor.)
Caterpillar Tractor Co. (See Wickersham, Elmer E., assignor.)
Causer, Edward T., assignor to Union Drawn Steel Company, Beaver Falls, Pa. Making crank shafts. 1,860,607; May 31.
Cavanagh, Gerald F., assignor to The Ohio Rubber Company, Cleveland, Ohio. Running board. 1,860,654; May 31.
Celanese Corporation of America. (See Moss, William H., assignor.)
Celanese Corporation of America. (See Platt, Herbert, assignor.)
Chalmers, Henry B., New York, N. Y. Oscillatory and unidirectional torque mechanism. 1,860,383; May 31.
Champion Company, The. (See Seely, John M., assignor.)
Chapal-Donner Corporation, The. (See Plass, Robert H., assignor.)
Charlton, Harold, Chicago, Ill. Bird cage. 1,860,992; May 31.
Charnaux Patent Corset Company Limited, The. (See Greig, Jeanne F., assignor.)
Cheesewright, Edgar J., Pasadena, Calif. Flower holder. 1,860,405; May 31.
Chemical Works formerly Sandoz. (See Peyer, Julius, assignor.)
Chemical Works formerly Sandoz, the Firm. (See Rheiner, Alfred, assignor.)
Chemipulp Process Inc. (See Stevens, J. W., and Kenety, assignors.)
Chesney, Carl E., Overland Park, Kans., assignor to Roy Thorp, Kansas City, Mo., as trustee. Vehicle broadcasting receiver unit and generator therefor. 1,861,262; May 31.
Chevillot, Alfred, G. Livry, and G. Daux, Sevran, France, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,860,406; May 31.
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chicago Pneumatic Tool Company. (See Reed, Clarence E., assignor.)
Chicago Pneumatic Tool Company. (See Stevens, Edward W., assignor.)
Chilton, Roland, Ridgewood, N. J., assignor to Wright Aeronautical Corporation. Yielding clutch. 1,860,851; May 31.
Chismadia, Steve, Highland Park, Mich. Mop lifting device. 1,860,655; May 31.
Chmielewski, Anton, Iron River, Mich. Aeroplane parachute. 1,861,300; May 31.
Chorlton, Frank O. L., Bury, England. Frictional-plate clutch. 1,861,080; May 31.
Christensen, Carl T. (See Bales, J. E., and Christensen.)
Christian, Charles M., Fonda, Iowa. Sanitary sleeve for ice cream and other containers. 1,861,112; May 31.
Christian, Joseph D., San Francisco, Calif. Electric power unit and construction for the same. 1,860,703; May 31.
Christie, John. (See Allan, A., and Christie.)
Church, Lewis H., Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding fitting. 1,860,994; May 31.
Cibbs, Anthony F., assignor to Emil Linderme, sr., Cleveland Heights, Ohio. Making tubing. 1,861,421; May 31.
Cincinnati Ball Crank Company, The. (See Butler, Clyde G., assignor.)
Claremont Waste Manufacturing Company. (See Parent, Louis E., assignor.)
Clark, Ralph O., Memphis, Tenn. Table leg hinge and latch. 1,860,494; May 31.
Clark, Thomas B., Hasbrouck Heights, N. J., assignor to Remington Rand Inc., New York, N. Y. Signal holder for indexes. 1,860,804; May 31.
Clark Tructractor Company. (See Yeakel, Walter C., assignor.)
Clarke, John D., West Haven, Conn. Air boat. 1,860,609; May 31.
Clarkson, Bradley E. (See Schellentrager, E. W., and Clarkson.)
Clarkson, Claude B., Bridgeport, Conn. Test indicator. 1,860,993; May 31.
Claude Neon Electrical Products Corporation. (See Hyde, Ralph C., assignor.)

Claude Neon Lights, Inc. (See Morris, Melvin G., assignor.)
Clayton, Martin M., Baden, Pa., assignor to National Electric Products Corporation, New York, N. Y. Knockdown box. 1,860,833; May 31.
Cleaves, George C., Wollaston, assignor to Industrial Brush Company, Quincy, Mass. Brush. 1,860,572; May 31.
Clerke, Augustus B. H. (See Haddeld, R. A., and Clerke.)
Cleveland, Albert B., and S. W. Bailey, Hackleburg, Ala. Harrow. 1,860,923; May 31.
Cluett, Sanford L., Troy, N. Y. Shrinking fabrics. 1,861,422; May 31.
Cluett, Sandford L., Troy, N. Y. Cloth-finishing. 1,861,423; May 31.
Cluett, Sanford L., Troy, N. Y. Cloth-finishing. 1,861,424; May 31.
Coberly, Clarence J., Los Angeles, assignor to Kobe, Inc., Huntington Park, Calif. Apparatus for handling pipe. 1,861,113; May 31.
Cocks, Harry J., assignor to Metal Products Company, Des Moines, Iowa. Hanger for hats, garments, and the like. 1,860,384; May 31.
Coe Manufacturing Company, The. (See Lockhart, J., and Moore, assignors.)
Coe Manufacturing Company, The. (See Moore, Richard C., assignor.)
Cole, Arthur M., assignor to General Findings & Supply Co., a Firm composed of E. F. Leach and S. H. Garner, Attleboro, Mass. Clasp. 1,861,263; May 31.
Cole, Clarence H., Washington, D. C. Lubricating system. 1,860,731; May 31.
Coles, Henry L., assignor to Guardian Metals Company, Hamilton, Ohio. Ferrous alloys. 1,860,852; May 31.
Collender, Kelsey G. F., Johannesburg, Transvaal, Union of South Africa. Surgical splint for the arm. 1,860,995; May 31.
Collier, William H., assignor to Pines Winterfront Company, Chicago, Ill. Circuit control device for automobiles. 1,861,175; May 31.
Colman, Howard D. (See Stewart, Duncan J., assignor.)
Colton, Arthur, assignor, by mesne assignments, to Parke, Davis & Co., Detroit, Mich. Sealed capsules. 1,861,047; May 31.
Columbia Mills, Incorporated. (See Burns, Fred J., assignor.)
Columbus-McKinnon Chain Corporation, The. (See Stahl, F. E., and Dudley, assignors.)
Congleton, John A., and O. Kelly, Dallas, Tex. Freezer. 1,861,301; May 31.
Conover, Warren M., assignor to Johnson Brothers Engineering Corporation, Waukegan, Ill. Outboard motor boat. 1,861,048; May 31.
Constable, Charles E., assignor to The National Marking Machine Company, Cincinnati, Ohio. Garment conveyer. 1,860,704; May 31.
Continental Paper & Bag Corporation. (See Gustin, Antone, assignor.)
Cook, Bernard C., De Kalb, Ill., assignor to De Kalb Wagon Company. Brake and clutch control for motor vehicles. 1,861,049; May 31.
Cook, David B., assignor to Acme Road Machinery Company, Frankfort, N. Y. Scarifier. 1,860,805; May 31.
Cook, George C., Millington, N. J. Underfeed stoker apparatus. 1,860,354; May 31.
Cook, Thomas, Stalybridge, assignor, by mesne assignments, to Cameo (Machinery) Limited, London, England. Gathering and/or collating sheets of paper, book signatures, or the like. 1,861,406; May 31.
Cooke, Rupert G., St. Petersburg, Fla. Toothbrush. 1,860,924; May 31.
Cooley, Ralph C., Houston, Tex. Artificial tooth mounting. 1,860,806; May 31.
Cooper, George E. (See Furnas, W. C., and Cooper.)
Cornell Bag Corporation. (See Currier, Andrew E., assignor.)
Costigan, Charles A., Los Angeles, Calif. Pie crust forming machine. 1,860,705; May 31.
Cotton, John A., Calgary, Alberta, Canada. Valve lead control for valve gear mechanism. 1,860,355; May 31.
Coulson, Bevis P., jr., Schenectady, N. Y., assignor to General Electric Company. Mercury boiler. 1,861,264; May 31.
Coulson, Bevis P., jr., Schenectady, N. Y., assignor to General Electric Company. Mercury boiler. 1,861,265; May 31.
Cox, Patrick, Lake Worth, Fla. Airplane. 1,861,336; May 31.
Cox, Thomas K., and H. L. Gassett, Columbus, Ga. Spinning frame saddle. 1,860,452; May 31.
Coyle, Paul L., Cornopolis, Pa., assignor to Republic Steel Corporation, Youngstown, Ohio. Die rolling. 1,860,608; May 31.
Crabtree, George W., Cleveland, Ohio. Laminated vehicle spring. 1,860,656; May 31.
Crabtree, George W., Cleveland Heights, Ohio. Controlling device for leaf springs. 1,860,657; May 31.
Crabtree, George W., Cleveland Heights, Ohio. Vehicle spring. 1,860,658; May 31.
Cram, Hervey G., assignor to Maine Seaboard Paper Company, Bucksport, Me. Sealpit stock saver. 1,860,610; May 31.
Crane Co. (See Zinkil, Roy H., assignor.)
Craushaw, Harold B., West Newton, assignor to Cutter Manufacturing Company, Everett, Mass. Fireset. 1,860,925; May 31.
Crapo, Charles E., Cleveland, Ohio. Locomotor. 1,860,385; May 31.
Crawford, Wilbur F., Waco, Tex. Carrier for ice. 1,861,431; May 31.
Criley, Carrie. (See Criley, Wallace K., assignor.)
Criley, Wallace K., assignor, by mesne assignments, of one-half to Carrie Criley, Los Angeles, Calif. Rotary well drill guide and centering device. 1,860,659; May 31.
Crocker, Bigelow, Fitchburg, Mass. Collecting and classifying different kinds of solids suspended in a liquid. 1,861,381; May 31.
Crosley Radio Corporation, The. (See Langley, Ralph H., assignor.)
Cross, Frank W. (See St. George, F., and Cross.)
Crowe, John J., Westfield, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Torch device. 1,860,347; May 31.
Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Air gauge extension. 1,860,888; May 31.
Crum, Roland R. (See Foster, Walter L., assignor.)
Cumming, Howard T., assignor to Curtice Brothers Co., Rochester, N. Y. Bottle. Des. 87,048; May 31.
Cunning, Harry F., Roanoke, Va. Lubricating device. 1,861,114; May 31.
Currier, Andrew E., Leominster, Mass., assignor to Cornell Bag Corporation, New York, N. Y. Method and apparatus for bottoming bags. 1,860,386; May 31.
Currier, Hiram D., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Receiving circuit. 1,860,996; May 31.
Currier, Hiram D., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Receiving circuit. 1,860,997; May 31.
Curtice Brothers Co. (See Cumming, Howard T., assignor.)
Curtiss Aeroplane & Motor Co. (See Nutt, Arthur, assignor.)
Curtiss Aeroplane & Motor Company. (See Nutt, A., and Leak, assignors.)
Cuthbert, William R., assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa. Fountain pen desk set. 1,860,853; May 31.
Cutler, Frank W., Portland, Oreg., assignor to Food Machinery Corporation, San Jose, Calif. Grading machine. 1,860,732; May 31.
Cutler-Hammer, Inc. (See Campbell, Harry E., assignor.)
Cutler-Hammer, Inc. (See Harwood, P. B., and Newman, assignors.)
Cutler-Hammer, Inc. (See Seeger, Edwin W., assignor.)
Cutter Manufacturing Company. (See Cranshaw, Harold B., assignor.)
Daly, Francis L., Naugatuck, Conn. Auto sander. 1,861,302; May 31.
Dapron, Joseph M., St. Louis, Mo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,860,407; May 31.
Dart, Charles B., Grand Rapids, Mich. Dovetailing attachment. 1,860,660; May 31.
Dandelin, Jean B., Fall River, Mass. Shuttle. 1,861,115; May 31.
Daux, Gaston. (See Chevillot, A., and Daux.)
Davidson, Alfred, A. J. Hailwood, F. Henesey, and A. Shepherdson, Manchester, assignors to Imperial Chemical Industrie Limited, Westminster, England. Production and manufacture of stable leuco-indigo preparations. 1,861,382; May 31.
Davis, Alex Brooking, Cincinnati, Ohio, assignor to A. B. Dick Company, Chicago, Ill. Acetylated carbohydrate gum and making it. 1,861,209; May 31.
Davis, Mansell A., Westchester, and J. Kunst, New York, N. Y.; said Kunst assignor to said Davis. Fruit juice extracting implement. 1,861,426; May 31.
De Cesare, Matteo, Newark, N. J. Doll. 1,861,050; May 31.
De Cesare, Matteo, Newark, N. J. Rolling eye set for dolls. 1,861,051; May 31.
De Groote, Melvin, St. Louis, assignor, by mesne assignments, to Tretolite Company, Webster Groves, Mo. Preventing accumulation of solid matter in oil wells, pipe lines, and flow lines. 1,861,176; May 31.
De Groote, Melvin, St. Louis, assignor, by mesne assignments, to Tretolite Company, Webster Groves, Mo. Preventing accumulation of solid matter from oil wells, pipe lines, and flow lines. 1,861,177; May 31.
De Hymel, Leo, and J. H. Dreyer, Monrovia, Calif. Plaque. Des. 87,093; May 31.
Dejur-Amsco Corporation. (See Hardy, Charles, assignor.)
De Kolb Wagon Company. (See Cook, Bernard C., assignor.)
De Laval Steam Turbine Company. (See Kennedy, Frank W., assignor.)
De Laval Steam Turbine Company. (See Peterson, Arvid, assignor.)
Delaware, Melville A., West Scarboro, Me. Amusement device. 1,860,453; May 31.
De Minno, Anthony M., and J. M. Parrella, New York, N. Y. Toy rapid-fire gun. 1,860,611; May 31.
Dengler, Charles F. (See Ricketts, J. L., and Dengler.)
De Pree, Lee. (See Hunter, R. M., Stewart, Houser, and De Pree.)
Dessell, Hermann L., Philadelphia, Pa. Razor blade holder. 1,860,454; May 31.

Detroit Cord Manufacturing Company. (See Tannewitz, Edward F., assignor.)
Deutsch, Siegfried, assignor to I. Mautner, Vienna, Austria. Radiator. 1,860,573; May 31.
DeYarman, Grower R., Olds, Iowa. Friction drive for feed grinder drags. 1,861,303; May 31.
Dick, A. B., Company. (See Brasseur, Ernest J., assignor.)
Dick, A. B., Company. (See Davis, Alex B., assignor.)
Dickey, Richard J., Cleveland Heights, assignor to The Gabriel Company, Cleveland, Ohio. Shock absorber. 1,861,427; May 31.
Dietrich, Frederich R. (See Wacker, F., Blumm, and Greissinger.)
Dietze, Eginhard, Westfield, N. J., assignor to American Telephone and Telegraph Company. Lineman's test set. 1,860,455; May 31.
Dill Manufacturing Company, The. (See Crowley, John C., assignor.)
Ditto, Incorporated. (See Moll, Wilhelm K., assignor.)
Dixon, Howell N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Remote control apparatus. 1,860,661; May 31.
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Table lamp. Des. 87,049; May 31.
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Electric heater. 1,860,530; May 31.
Doane, Leroy C., and H. H. Wolter, assignors to The Miller Company, Meriden, Conn. Lighting fixture wall bracket. Re18,482; May 31.
Doehler Die-Casting Co. (See Morin, Louis H., assignor.)
Doerner, Max, Astoria, N. Y. Boiler. 1,860,495; May 31.
Doherty Research Company. (See Morgan, John D., assignor.)
Dominion Truck Equipment Co. (See Gurton, W. S., Pilat, and Nyberg, assignors.)
Dorey, George B., Evanston, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Dump car construction. 1,861,153; May 31.
Dorin Corporation, The. (See Bortone, Frank, assignor.)
Dorion, Michael, Rumford, Me. Price indicator. 1,860,772; May 31.
Dorman, Neal W., assignor to The Toledo Machine & Tool Company, Toledo, Ohio. Fluid pressure accumulator. 1,861,154; May 31.
Doser, Arnold. (See Thauss, A., Mauthe, and Doser.)
Dougherty, Robert S. A., and N. Greenwell, Bethlehem, Pa., assignors to Bethlehem Steel Company. Engine. 1,860,834; May 31.
Douglas, Edwin R., Baltimore, Md., assignor of one-half to H. Barker, Montclair, N. J. Screw pump. 1,861,155; May 31.
Dow Chemical Company, The. (See Hunter, R. M., Stewart, Houser, and De Pree, assignors.)
Dow, Warren R. (See Glidden, A. A., Knowland, and Dow.)
Down, Sidney G., Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Coupling interlock. 1,860,408; May 31.
Drake, A. W., Manufacturing Company. (See Ravert, William L., assignor.)
Drazick, John, Detroit, Mich. Tool holder. 1,860,998; May 31.
Dreyer, John H. (See De Hymel, Leo.)
Dreyfus, Camille, New York, N. Y. Controlling the luster of fabrics. 1,860,456; May 31.
Droitcour, Michael A., Providence, R. I., assignor to Harris-Seybold-Potter Company, Cleveland, Ohio. Inking mechanism. 1,860,496; May 31.
Drying Systems, Inc. (See Russell, Buford B., assignor.)
Dubilier Condenser Corporation. (See Dubilier, William, assignor.)
Dubilier Condenser Corporation. (See Goodman, William H., assignor.)
Dubilier Condenser Corporation. (See Nyman, Alexander, assignor.)
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Variometer. 1,861,052; May 31.
Dudley, Harvey. (See Stahl, F. E., and Dudley.)
Dunell, Bernard Vancouver, British Columbia, Canada. Collapsible tube holder. 1,860,662; May 31.
Dunkelberger, Milton S., Dayton, Ohio. Fish bait. Des. 87,050; May 31.
Dunlop Rubber Company Limited. (See Twiss, D. F., and Murphy, assignors.)
Dunzweiler, Carl J., Cleveland, and H. W. Lormor, Cleveland Heights, assignors to Willard Storage Battery Company, Cleveland, Ohio. Battery cell. 1,860,663; May 31.
Duplex Electric Company. (See Ellithorpe, Clarence D., assignor.)
Du Pont, E. I., de Nemours, & Company. (See Ensminger, George R., assignor.)
Duro Company, The. (See Eisenhauser, Charles P., assignor.)
Dykstra, James, Lansing, assignor to General Motors Corporation, Detroit, Mich. Cushion shackle. 1,861,051; May 31.
Dyment, Albert E., et al., trustees. (See Jackson, Maunsell B., assignor.)
Eastman Kodak Company. (See Webber, C. and Staud, assignors.)
Eaton Axle & Spring Company, The. (See Reid, James S., assignor.)
Eberhard, Harmon S., assignor to Caterpillar Tractor Co., San Leandro, Calif. Tank support on motor vehicles. 1,860,531; May 31.
Eble, Grover S., Whitestone, N. Y. Valve. 1,860,497; May 31.
Edgecumbe, John A., and H. L. Bishop, Minneapolis, assignors to The Edham Co, Inc., St. Paul, Minn. Method of and apparatus for treating liquid impregnated materials and products resultant therefrom. 1,860,664; May 31.
Edham Co, Inc., The. (See Edgecumbe, J. A., and Bishop, assignor.)
Edison General Electric Appliance Company. (See Patten, Raymond E., assignor.)
Edwards and Company. (See Miller, Christian, assignor.)
Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Signaling system for party telephone lines. 1,860,457; May 31.
Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Telephone signalling system. 1,860,458; May 31.
Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Signaling arrangement for two party telephone lines. 1,860,459; May 31.
Egouvillon, Robert F., and J. R. Lafon, Paris, France. Case for inclosing an object such as a watch, a lighter, or otherwise. 1,860,773; May 31.
Ehrgott, August. (See Little, J. E., Kichline, and Ehrgott.)
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Water softening apparatus. 1,860,926; May 31.
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Water softener. 1,860,927; May 31.
Ekserdjian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Vehicle wheel. 1,860,665; May 31.
Electric Vacuum Cleaner Company. (See Carson, Jesse F., assignor.)
Electrolux Corporation. (See Bilde, Tord E. D., assignor.)
Electrolux Corporation. (See Engberg, A. O., and Bilde, assignors.)
Elliott Core Drilling Company. (See Grainger, Reid B., assignor.)
Elliott-Fisher Company. (See Foothorap, Harry A., assignor.)
Ellis, Herbert L., assignor to E. Blair, New York, N. Y. Thermostat switch and plug construction. 1,860,999; May 31.
Ellithorpe, Clarence D., Springfield Gardens, assignor to Duplex Electric Company, New York, N. Y. Vault ventilator mechanism. 1,861,000; May 31.
Elwell, George H., assignor to The Greist Manufacturing Company, New Haven, Conn. Electric switch. 1,861,178; May 31.
Emond, William H., assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y. Adjustable seat. 1,860,612; May 31.
Endacott, Paul S., and A. H. Riney, Bartlesville, Okla. Automatic liquid extractor for vacuum lines and tanks. 1,860,889; May 31.
Engberg, Axel O., Stockholm, Sweden, and E. Bilde, Berlin-Tempelhof, Germany, assignors, by mesne assignments, to Electrolux Corporation. Suction cleaner nozzle. 1,860,854; May 31.
Engelbrecht, Robert T., Los Angeles, Calif. Oil well strainer. 1,860,706; May 31.
Engelhard, Charles, Inc. (See Hebler, William O., assignor.)
Engelhard, Charles, Inc. (See Krueger, R. H., and Oetjen, assignors.)
Ensminger, George R., New Brunswick, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Nonchalking coating composition. 1,860,532; May 31.
Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)
Enterprise Railway Equipment Company. (See Dorey, George B., assignor.)
Equipment Specialties Company. (See O'Connor, Arthur F., assignor.)
Erickson, Martin, Vermillion, S. Dak. Geared hoist for use with farm tractors. 1,860,774; May 31.
Ernst, Walter, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Control mechanism for pumps. 1,861,116; May 31.
Ernst, Walter, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Hydraulic metal drawing press. 1,861,337; May 31.
Estate Stove Company, The. (See Kahn, Bertrand B., assignor.)
Etheridge, Girard G., Atlanta, Ga. Apparatus for pressing replacement sleeves into cylinder blocks. 1,861,304; May 31.
Evans, Edwin R., Detroit, Mich. Motor vehicle brake. 1,860,666; May 31.
Exact Weight Scale Company, The. (See Hallead, Mervil, and Flanagan, assignors.)
Excel Magneto Co. (See Reis, Curt F., assignor.)
Extension Garment Hanger Company. (See Hood, Thomas H., assignor.)

Ezbelent, Georges E., Paris, France. Rotary internal combustion engine. 1,860,707; May 31.
Fageol, William B., assignor to Twin Coach Company, Kent, Ohio. Motor coach. 1,861,001; May 31.
Fageol, William B., assignor to Twin Coach Company, Kent, Ohio. Passenger carrying motor vehicle. 1,861,002; May 31.
Fahr, Rudolf, and R. Keinke, Neurocssen, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for the separation of finely divided substances. 1,861,156; May 31.
Falk, Morris, Fitchburg, Mass. Master key disk lock. 1,860,708; May 31.
Fasching, Ernst A., San Francisco, Calif. Table. 1,861,305; May 31.
Faust, John G., Washington, D. C. Marine vessel. 1,861,338; May 31.
Fay, Nahum and Norvin A., Sacramento, Calif. Elevator structure for boats. 1,860,574; May 31.
Fay, Norvin A. (See Fay, N. and N. A.)
Fenton, Paul E., Thomaston, assignor to Scoville Manufacturing Company, Waterbury, Conn. Self locking floating trim studs. 1,861,117; May 31.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Overhead garage door. 1,860,387; May 31.
Feustel, Ernest A., Carlstadt, assignor to Alfred Hofmann, Incorporated, West New York, N. J. Knitting machine. 1,861,413; May 31.
Ficcio, Marla, Tampa, Fla. Trousers. 1,861,383; May 31.
Firth, David, assignor to Marvel Carbureter Company, Flint, Mich. Starting system. 1,860,356; May 31.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Bituminous mixture. 1,861,407; May 31.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Constructional material. 1,861,408; May 31.
Fisher, Charles A., and C. J. Ketner, assignors to Cannon Mills Company, Kannapolis, N. C. Jacquard head. 1,861,339; May 31.
Fitch, Benjamin P., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Traveling crane. 1,860,733; May 31.
Flaker, Carl, Florissant, Mo. Internal combustion engine. 1,860,667; May 31.
Flanagan, Thomas B. (See Hallead, Mervil.)
Flanigan, Samuel H., Fresno, Calif. Adjustable ceiling mirror. 1,860,928; May 31.
Fleck, Roy E., Oil City, Pa. Automobile signal. 1,861,306; May 31.
Fleischer, Charles, Brooklyn, N. Y., assignor to J. F. Meyer, Chicago, Ill. Coin controlled switch. 1,861,384; May 31.
Flink, John H., Watertown, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Shears. 1,860,409; May 31.
Flowers, John B., Brooklawn, N. J. Production of sound. 1,860,807; May 31.
Flynn, Frank E., Warren, Ohio, assignor to Republic Steel Corporation, Pittsburgh, Pa. Rolling metal sheets 1,860,613; May 31.
Flynn, John R. (See Archer, T. P., and Flynn.)
Follmer, Clogg & Co. (See Maxwell, John A., jr., assignor.)
Food Machinery Corporation. (See Cutler, Frank W., assignor.)
Foothorap, Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company, New York, N. Y. Line space mechanism for typewriting machines. 1,861,210; May 31.
Forbes Lithograph Manufacturing Company. (See Larkin, James L., assignor.)
Ford, Leroy S., River Forest, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical cable. 1,860,498; May 31.
Ford Motor Company. (See Hicks, Harold A., assignor.)
Foresman, Robert A., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Ash disposal apparatus. 1,861,081; May 31.
Formica Insulation Company, The. (See Lytle, Robert W., assignor.)
Forse, Edwin B., and C. F. Geiger, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y. Tunnel kiln. 1,861,266; May 31.
Forson, Alfred E., sr., assignor of 49 per cent to C. L. Richards, Reno, Nev. Floor sander. 1,860,775; May 31.
Foster, Hallet J., Woodmere, assignor to Velveray Corporation of America, New York, N. Y. Ornamented fabric and making the same. 1,861,003; May 31.
Foster Machine Company. (See McKean, John O., assignor.)
Foster, Robert, Chicago, Ill., assignor to Metal Traffic Marker Corporation, New York, N. Y. Traffic and industrial marker. 1,861,425; May 31.
Foster, Walter L., assignor of one-fourth to R. R. Crum, Whittier, Calif. Automatic cathead. 1,860,709; May 31.
Foster Wheeler Corporation. (See Braine, D. L., and Irish, assignors.)
Fowler, Fred D., Newton, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Expanding pulley. 1,860,410; May 31.
Fox, Merritt L., Cedar Rapids, Iowa. Humidifier. 1,861,340; May 31.
Frank, William H., assignor to Bulldog Electric Products Company, Detroit, Mich. Switching device. 1,861,267; May 31.
Franklin Baker Company. (See MacDougall, Hugh C., assignor.)
Franklin, H. H., Manufacturing Company. (See Emond, William H., assignor.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frantz Manufacturing Co. (See Ferris, William D., assignor.)
Frazier, Rex D. (See Guedry, Hale, assignor.)
Fredenhagen, Victor B., Belleville, Kans. Culvert. 1,860,533; May 31.
Frediana, A., et al. (See Martin, Charles H., assignor.)
Freer, Phelps M., Detroit, Mich. Piston. 1,860,734; May 31.
Freer, Phelps M., Detroit, Mich. Piston. 1,860,735; May 31.
Freysinger, John B., New Britain, Conn., assignor, by mesne assignments, to Hookless Fastener Company, Meadville, Pa. Flexible closure. 1,860,808; May 31.
Frick Company. (See Small, Norman M., assignor.)
Frigidaire Corporation. (See Heidemann, Frederick J., assignor.)
Frigidaire Corporation. (See King, Jessie G., assignor.)
Froelich, Clarence H., Bethlehem, Pa., assignor to Bethlehem Steel Company. Controlling mechanism for engines. 1,860,929; May 31.
Fuller Lehigh Company. (See Lucke, Charles E., assignor.)
Fuller, Leo H., Inc. (See Borregard, Ernst, assignor.)
Furnas, William C., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic cleaning plant. 1,861,428; May 31.
Furnas, William C., and G. E. Cooper, West Allis, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Motor control system. 1,860,499; May 31.
Gabriel Company, The. (See Dickey, Richard J., assignor.)
Gairing Tool Company. (See Wyrick, Clayton E., assignor.)
Gallsworthy, Benjamin, Bayonne, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Distilling material in contact with porous substances. 1,860,990; May 31.
Gammeter, John R., Akron, Ohio. Pipe coupling. 1,861,211; May 31.
Gant, Harris P., Philadelphia, Pa., assignor, by mesne assignments, to Carrier Research Corporation, Newark, N. J. Apparatus for cooling air. 1,860,357; May 31.
Gardner Freezer Corporation. (See Gardner, J. H., and C. Sawtelle, assignors.)
Gardner, John H., and C. A. Sawtelle, Detroit, Mich., assignors to Gardner Freezer Corporation, Lancaster, Ohio. Ice-cream freezer. 1,861,082; May 31.
Gardner, Willis W., Meriden, Conn. Pneumatic stopper for gas mains. 1,860,855; May 31.
Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Pressure fluid motor. 1,860,736; May 31.
Garvey, Wallace E., assignor to Salem Glass Works, Salem, N. J. Jar or similar container. Des. 87,051; May 31.
Gary Structural Steel Company. (See Bates, Walter A., assignor.)
Gassett, Henry L. (See Cox, T. K., and Gassett.)
Gehrke, Friedrich W., Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Photographic objective. 1,860,575; May 31.
Geiger, Paul H., Wilkinsburg, and C. K. Strobel, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvale, Pa. Electrical rectifier. 1,861,083; May 31.
Gemex Company. (See Sand, John, assignor.)
General Aniline Works Inc. (See Mieg, W., and Berliner, assignors.)
General Aniline Works, Inc. (See Romig, E., and Holzach, assignors.)
General Aniline Works Inc. (See Thauss, A., Mauthe, and Doser, assignors.)
General Cable Corporation. (See Abbott, Charles W., assignor.)
General Electric Company. (See Arey, Ralph G., assignor.)
General Electric Company. (See Coulson, Bevis P., jr., assignor.)
General Electric Company. (See Herre, Peter, assignor.)
General Electric Company. (See Kjolseth, Ole K., assignor.)
General Electric Company. (See Kleinow, Walter, assignor.)
General Electric Company. (See Smith, Edward B., assignor.)
General Findings & Supply Co. (See Cole, Arthur M., assignor.)
General Motors Corporation. (See Berry, Otto C., assignor.)
General Motors Corporation. (See Dykstra, James, assignor.)
General Motors Corporation. (See Haeger, Frank W., assignor.)
General Motors Corporation. (See Main, Frank L., assignor.)

General Motors Corporation. (See Prentis, Joseph N., assignor.)
General Motors Research Corporation. (See Martin, Edward J., assignor.)
General Zeolite Company. (See Kenn, Robert H., assignor.)
Gentil, Ignaz J., Berlin, Germany. Device for facilitating the putting on and taking off of stockings. 1,861,385; May 31.
Gernhardt, Berthold, Berlin, Germany. Apparatus for the automatic production of inspissated sugar-fruits. 1,861,307; May 31.
Gero, Victor, Glenside, assignor to Pennsylvania Carpet Corporation, Philadelphia, Pa. Pile fabric loom. 1,861,004; May 31.
Gersh, Edward I. (See Carmichael, Eugene L., assignor.)
Gibb, William H., Bay City, Mich., assignor to Thomson-Gibb Electric Welding Company, Lynn, Mass. Electric welding apparatus. 1,861,005; May 31.
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe lace tassel. Des. 87,052; May 31.
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe ornament or similar article. Des. 87,053; May 31.
Gilbert, A. C., Company, The. (See Gilbert, A. C., and Anketell, assignors.)
Gilbert, Alfred C., Hamden, and E. N. Anketell, assignors, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Hoisting apparatus. 1,860,835; May 31.
Gilbert, Clyde L., Terre Haute, Ind. Novelty package. 1,860,710; May 31.
Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Conductor. 1,860,500; May 31.
Giles, Harvey, Brooklyn, N. Y., assignor to Artemus Ward Inc. Vending machine. 1,861,212; May 31.
Gill, Donald W., Cincinnati, assignor to The Frank F. Taylor Company, Norwood, Ohio. Vehicle. Des. 87,054; May 31.
Gill, Ernest W. B., Oxford, England, assignor to Radio Corporation of America. Producing magnification with a four electrode valve and circuits therefor. 1,861,231; May 31.
Gill, Ernest W. B., Oxford, England, assignor to Radio Corporation of America. Four electrode valve and the operation thereof. 1,861,232; May 31.
Gillet, Alexis F., assignor to Jubilee Manufacturing Company, Omaha, Nebr. Paper strip distributing, cutting, and moistening machine. 1,860,668; May 31.
Gilowitz, Benjamin, assignor of one-eighth to S. Kravitz, and one-fourth to M. Bousel, New York, N. Y. Heel lift and attaching means therefor. 1,861,118; May 31.
Glasier, Harold H., Los Angeles, Calif. Power actuated furrow slicer. 1,860,534; May 31.
Glenn, Clyde, Verona, Ill. Card holder. 1,861,309; May 31.
Glidden, Alfred A., T. M. Knowland, and W. R. Dow, Watertown, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Apparatus and process for vulcanizing rubber coated fabric. 1,860,411; May 31.
Glidden, Alfred A., and T. M. Knowland, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Mold for manufacturing footwear. 1,860,412; May 31.
Globe Wernicke Company, The. (See Thies, Urban C., assignor.)
Goddard, Robert H., Worcester, Mass. Apparatus for pumping low temperature liquids. 1,860,891; May 31.
Gott, Harold W., Great Neck, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Impulse transmitter. 1,860,535; May 31.
Goldbeck, Eugene O., San Antonio, Tex. Control mechanism for panoramic cameras. 1,861,386; May 31.
Goldenstar, Arthur L., Duluth, Minn. Wire tying tool. 1,861,308; May 31.
Gollmar, Herbert A., East Orange, N. J., assignor to The Koppers Company. Gas dehydrating process. 1,861,068; May 31.
Good, William E., et al. (See Wellman, Henry J., assignor.)
Goodman Manufacturing Company. (See Sloane, William W., assignor.)
Goodman Manufacturing Company. (See Wood, Claude O., assignor.)
Goodman, William H., London, England, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,861,006; May 31.
Goodrich, B. F., Company, The. (See Semon, Waldo L., assignor.)
Goranson, David. (See Goranson, Hjalmar and D.)
Goranson, Hjalmar and D., San Jose, assignors to California Packing Corporation, San Francisco, Calif. Fruit peeling machine. 1,861,084; May 31.
Goss Printing Press Co., The. (See Smith, Ernest J., assignor.)
Gott, Gene, Kansas City, Mo. Novelty toy. Des. 87,055; May 31.
Government and the People of the United States of America. (See Steadman, Royal C.)
Graber, John N., Mineral Point, Wis. Hay fork. 1,861,085; May 31.
Grace, Richard W., assignor to The Superior Switchboard & Devices Company, Canton, Ohio. Handle for electric switch blades. 1,861,269; May 31.
Grady, J. H., Manufacturing Company. (See Grady, John H., assignor.)
Grady, John H., assignor to J. H. Grady Manufacturing Company, St. Louis, Mo. Bail. 1,861,157; May 31.
Grainger, Reid B., Redondo Beach, Calif., assignor to Elliott Core Drilling Company. Core drill. 1,861,007; May 31.
Grame, Benjamin F., Naperville, Ill. Hat hanger. 1,861,341; May 31.
Graupner, Fritz, Hanover, Germany. Fluid gear. 1,860,576; May 31.
Gray, Emmet P., Detroit, Mich. Muffler. 1,860,892; May 31.
Gray, Mabel W., Birmingham, Ala. Window screen cleaning device. 1,861,179; May 31.
Gray, William S., et al., trustees. (See Jackson, Maunsell B., assignor.)
Greene, Albert E., Medina, Wash. Electric furnace with cooling means. 1,861,213; May 31.
Greenlee Bros. & Co. (See Abramson, John H., assignor.)
Greenlee Bros. & Co. (See Mansfield, Judson H., assignor.)
Greenwald, Julius. (See Lucks-Osten, E., Greenwald, and Ostern.)
Greenwell, Nevil. (See Dougherty, R. S. A., and Greenwell.)
Greig, Jeanne F., assignor to The Charnaux Patent Corset Company Limited, London, England. Corset. Des. 87,056; May 31.
Greissinger, Hans. (See Wacker, F., Blum, Greissinger, and Dietrich.)
Greist Manufacturing Company, The. (See Elwell, George H., assignor.)
Greve, Carl H., Altona-on-Elbe, and W. C. D. Schwarz, assignor to the Firm of Rolfs Kohlen-Oxyd-Verbrenner Gesellschaft mit beschrankter Haftung, Hamburg, Germany. Fire bridge. 1,861,388; May 31.
Greve, Herman L., Hollis, assignor to International Mailing Tube and Wrapper Company, Brooklyn, N. Y. Carton. 1,860,536; May 31.
Grigsby, Bertram J., Park Ridge, assignor to Grigsby-Grunow Company, Chicago, Ill. Radioreceiver. 1,860,348; May 31.
Grigsby-Grunow Company. (See Grigsby, Bertram J., assignor.)
Grinham, Edward G., assignor to Humber Limited, Coventry, England. Change speed gear mechanism. 1,861,387; May 31.
Griswoldville Manufacturing Company. (See Ballard, Joseph W., assignor.)
Grob, Benjamin, West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Switch gear. 1,860,501; May 31.
Grob, Hugo, Berlin, Germany. Regulating circumferential velocity. 1,861,180; May 31.
Grosjean, James E., Lima, Ohio. Nonslip bath mat. 1,861,389; May 31.
Guardian Metals Company. (See Coles, Henry L., assignor.)
Guedry, Hale, South Houston, Tex., assignor of one-eighth to R. D. Frazier. Well capper. 1,860,711; May 31.
Guest, Alfred W. F., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical distributing machine. 1,860,893; May 31.
Guinot, Henri M. (See Ricard, E., and Guinot.)
Guinot, Henri M. (See Ricard, E., Savarit, and Guinot.)
Guinot, Henry M. E. (See Ricard, E., and Guinot.)
Gumina, Angelo J., and G. T. Overing, jr., New Orleans, La. Mechanical game. 1,860,460; May 31.
Gumpert, Augustus. (See Meade, Francis J., assignor.)
Gunn, Earl G., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Vibration dampener for crank shafts. 1,861,390; May 31.
Gurton, William S., J. Plint, and H. Nyberg, assignors to Dominion Truck Equipment Co., Kitchener, Ontario, Canada. Brake for truck trailers. 1,860,537; May 31.
Gustin, Antone, Oconto Falls, Wis., assignor to Continental Paper & Bag Corporation, New York, N. Y. Diffuser. 1,860,836; May 31.
Gutman, Louis C., assignor to Independent Lock Company, Fitchburg, Mass. Antipick pin tumbler lock. 1,860,712; May 31.
Gutmann, John jr., St. Albans, assignor, by mesne assignments, to Motor Jack Corporation, New York, N. Y. Lock. 1,861,086; May 31.
Guy, Harry L., assignor of one-half to Homer J. Luce, Chicago, Ill. Roofing unit. Des. 87,057; May 31.
Haas, Norman. (See Naber, Claude H., assignor.)
Hadfield, Robert A., Westminster, and A. B. H. Clerke, Sheffield, England. Armour piercing projectile. 1,861,054; May 31.
Haeger, Frank W., Saginaw, assignor to General Motors Corporation, Detroit, Mich. Horizontal drilling machine. 1,861,055; May 31.
Haerry, Paul A., Scotia, N. Y. Smoke automaton. 1,860,776; May 31.
Hallwood, Anthony J., et al. (See Davidson, A., Hallwood, Henesey, and Shepherdson.)
Hall, Iphus H., Winnipeg, Manitoba, Canada. Liquid egg grading machine. 1,860,358; May 31.
Hall, James S., assignor to L. E. Smith Glass Company, Mount Pleasant, Pa. Vase. Des. 87,058; May 31.

Hall, Roy B., Hammond, Ind. Press construction. 1,861,391; May 31.
Hallead, Mervil, and T. B. Flanagan, assignors to The Exact Weight Scale Company, Columbus, Ohio. Dashpot for weighing scales. 1,861,270; May 31.
Halliburton, Erle P., Los Angeles, Calif. Method and apparatus for cementing wells. 1,860,669; May 31.
Hallwood Nathan A., Columbus, Ohio. Scale. 1,861,087; May 31.
Hamel, Hermann, Dresden, Germany. Coupling device. 1,861,088; May 31.
Hamilton, Charles E., sr., Hollywood, Calif., assignor to E. Lane, P. Mendelson, and C. Mendelson, New York, N. Y. Stripper finger for flatwork ironers. 1,860,538; May 31.
Hamlin, Marston L., Lynbrook, assignor to The Barrett Company, New York, N. Y. Cupola furnace and operating same. 1,861,214; May 31.
Hammond, John H., jr., Gloucester, Mass. System of automatic control of vessels. 1,861,215; May 31.
Hancock, Milton L., East McKeesport, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,860,413; May 31.
Hancock, Milton L., East McKeesport, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Duplex control of reservoir pressure. 1,860,414; May 31.
Handley Page Limited. (See Page, Frederick H., assignor.)
Handschiegl, Bessie. (See Handschiegl, Max, assignor.)
Handschiegl, Max, assignor to B. Handschiegl, Los Angeles, Calif. Double exposure process. 1,860,737; May 31.
Hanke, Paul. (See Schmidt, M., and Hanke.)
Hanlon, John H., Lynn, Mass. Detachable loading machine. 1,860,415; May 31.
Hanlon-Waters, Inc. (See Waters, Millard F., assignor.)
Hansen, Edmund H., New York, N. Y. Electric system for recording and reproducing sound. 1,860,502; May 31.
Hansen, Sinius M., assignor, by mesne assignments, to A T Oil Burner Co., Lynn, Mass. Oil burner. 1,861,216; May 31.
Hardy, Charles, assignor, by mesne assignments, to Dejur-Amsco Corporation, New York, N. Y. Air condenser. 1,860,670; May 31.
Hardy, Peter S., Stratford, Conn., assignor to Health Developing Apparatus Company, Inc., New York, N. Y. Front frame member for rowing machines. Des. 87,059; May 31.
Harris-Seybold-Potter Company. (See Droitcour, Michael A., assignor.)
Harrison Radiator Corporation. (See Muir, Welling W., assignor.)
Harrison, Thomas R., Wyncote, assignor to The Brown Instrument Company, Philadelphia, Pa. Marine flow meter. 1,860,777; May 31.
Hart, William A., Buffalo, N. Y., and F. W. Moore, Thorold, Ontario, Canada, assignors, by mesne assignments, to The W. S. Tyler Company, Cleveland, Ohio. Rotary drier. 1,860,738; May 31.
Hartford Faience Company, The. (See Thomas, Noah T., assignor.)
Harwood, Paisley B., and J. M. Newman, assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Controller for electric motors. 1,860,671; May 31.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,860,539; May 31.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,860,540; May 31.
Hatch, Meredith R., and A. H. Schloz, assignors to The Toledo Machine & Tool Company, Toledo, Ohio. Power press. 1,861,181; May 31.
Hathaway, Warner, Madison, Wis., and E. M. Wyatt, Cleveland Ohio, assignors, by mesne assignments, to American Face Brick Research Corporation. Kiln for the production of cellular building material. 1,860,737; May 31.
Haughton Elevator & Machine Company, The. (See Ohler, Frank L., assignor.)
Hausner, Ben Z., New York, N. Y. Curtain hanger. 1,861,342; May 31.
Haverbeck, George W. (See Magee, F., and Haverbeck.)
Haybeck, Robert, Philadelphia, Pa. Air mail exchange. 1,860,359; May 31.
Hayes, Frank A., Middletown, N. J. Friction transmission control device. 1,861,008; May 31.
Hayes, Harvey C., Washington, D. C. Oscillograph. 1,860,740; May 31.
Haynes Stellite Company. (See Metzger, Claude W., assignor.)
Hazel, Fred C., Binghamton, N. Y. Automobile and motor cycle signal light. 1,860,416; May 31.
Health Developing Apparatus Company. (See Hardy, Peter S., assignor.)
Hebig Henry C., Brooklyn, N. Y. Toy vehicle. Des. 87,060; May 31.
Hebler, William O., assignor to Charles Engelhard, Inc., Newark, N. J. Gas analysis apparatus. 1,860,541; May 31.
Hedge, Roy, Pleasant Ridge, Mich. Spit. 1,860,577; May 31.
Heideman, Frederick J., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,861,089; May 31.
Heinitz, Woldemar, assignor to Schubert & Salzer Maschinenfabrik, Aktiengesellschaft, Chemnitz, Germany. Row counter for flat knitting machines. 1,860,578; May 31.
Héliot, Maurice, Troyes, France. Apparatus for tailoring garments. 1,860,579; May 31.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,861,009; May 31.
Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Knitted fabric. Des. 87,061; May 31.
Henderson, Ray M., Giddings, Tex. Display counter. 1,861,392; May 31.
Hendey, Fred, and J. P. Millwood, assignors to The Okonite Company, Passaic, N. J. Electric conductor. 1,861,182; May 31.
Henesey, Fred. (See Davidson, A., Hallwood, Henesey, and Shepherdson.)
Henke, Harry, Millburn, N. J. Rating board. 1,860,856; May 31.
Henrietta, George H., Torrington, Conn. Liquid dispensing system. 1,861,393; May 31.
Herre, Peter, Fichtenau, Kreis Niederbarnim, Germany, assignor to General Electric Company. Stem making machine. 1,861,271; May 31.
Herstein, Bernard, Brooklyn, assignor to U. S. Industrial Alcohol Co., New York, N. Y. Manufacture of acetic anhydride. 1,860,542; May 31.
Heuck, Claus, (See Luther, M., and Heuck.)
Heusler, Otto. (See Rohre, Kurt, and Heusler.)
Hicks, Harold A., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Airplane. Des. 87,062; May 31.
Hildorf, Walter G., and H. G. McIntosh, assignors to Reo Motor Car Company, Lansing, Mich. Chromium plating crank shafts. 1,861,272; May 31.
Hilger, George, Chicago, Ill. Air conditioning system. 1,861,158; May 31.
Hill, Leland H., Collingswood, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Tap-changing system and apparatus for transformers. 1,861,217; May 31.
Hirshfeld, Jerome, assignor to Televator Corporation, New York, N. Y. Communication system. 1,860,360; May 31.
Hodges, Harry R., New York, N. Y. Shade and window bracket. 1,861,090; May 31.
Hoeing, Julius H., Cologne-on-the-Rhine, assignor to Hans Bilstein, Altenvoerde, Westfalen, Germany. Hand stamping apparatus. 1,860,580; May 31.
Hoffstetter, Carl H., assignor to Odin Stove Manufacturing Company, Erie, Pa. Door structure. 1,861,010; May 31.
Hofmann, Alfred, Incorporated. (See Feustel, Ernest A., assignor.)
Hogrebe, Arthur E. (See Winterer, F. J., and Hogrebe.)
Hogue, Jessie S. (See Carroll, C., and Hogue.)
Hohnhorst, Ferdinand J., and F. J. Kroeger, Covington, Ky. Mechanism for truing and dressing grinding wheels of centerless grinders. 1,860,614; May 31.
Holderer, George B. (See Perrott, G. S., and Holderer.)
Holland, Newman H., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic diaphragm. 1,860,503; May 31.
Holmes, Henry S., Rockville Center, assignor, by mesne assignments, to Metropolitan Engineering Company, Brooklyn, N. Y. Apparatus for electric welding. 1,861,011; May 31.
Holzach, Karl. (See Romig, E., and Holzach.)
Hood Rubber Company. (See Burnham, Laurence H., assignor.)
Hood Rubber Company. (See Flink, John H., assignor.)
Hood Rubber Company. (See Fowler, Fred D., assignor.)
Hood Rubber Company. (See Glidden, A. A., and Knowland, assignors.)
Hood Rubber Company. (See Glidden, A. A., Knowland, and Dow, assignors.)
Hood Rubber Company. (See Perrault, Joseph E., assignor.)
Hood, Thomas H., assignor to Extension Garment Hanger Company, Inc., Dallas, Tex. Extension garment hanger. 1,861,273; May 31.
Hookless Fastener Company. (See Freysinger, John B., assignor.)
Hoover, Howard L., Battle Creek, Mich. Gear shifting lever. 1,861,394; May 31.
Hoover, Ray, and E. R. Wheeler, North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Quotation board printing unit. 1,861,414; May 31.
Hopkins, Alfred T., Detroit, Mich. Packing holder for coats and other garments. 1,861,274; May 31.
Hopkins, Robert C., Alliance, Ohio. Shaft packing. 1,861,275; May 31.
Hornbeck, Harold L. (See Hornbeck, Henry S. and H. L.)
Hornbeck, Henry S. and H. L., Hampton Bays, L. I., N. Y. Strength testing machine. 1,861,012; May 31.
Hornbrook, Philip R., New York, N. Y. Extracting oil. 1,860,388; May 31.
Hornidge, Henry T., et al., trustees. (See Cassidy, Thomas A., assignor.)
Horton, Joseph W. (See Marrison, W. A., and Horton.)
Hough, Clinton W., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Radio reception system. 1,861,183; May 31.
Houser, Howard E. (See Hunter, R. M., Stewart, Houser, and De Pree.)

Houtz, Alfred B., Elizabeth City, N. C. Barrel and apparatus for and method of forming the same. 1,861,343; May 31.

Howard, Frank A., Elizabeth, N. J., assignor to Standard Oil Development Company. Apparatus for controlling temperature of fluid. 1,860,837; May 31.

Howard, Frank A., Elizabeth, N. J., assignor to Standard Oil Development Company. Recovering petroleum and apparatus therefor. 1,861,013; May 31.

Howard, Frank A., Elizabeth, N. J., assignor to Standard Oil Development Company. Apparatus for burning liquid fuels. 1,861,014; May 31.

Howard, Harold E., Bridgman, Mich. Air filter. 1,860,778; May 31.

Howard Hosiery Company. (See Schindler, Robert B., assignor.)

Hoyt, Frederick A. (See Martin, H. T., and Hoyt.)

Hubert, Emil, Elberfeld, A. Röst-Grande, Dormagen, and K. Welsbrod, Elberfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing stable cellulose ester solutions. 1,860,461; May 31.

Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 87,094; May 31.

Hueber, Henry, assignor to Trico Products Corporation, Buffalo, N. Y. Fuel pump. 1,860,581; May 31.

Huebner-Bleistein Patents Company. (See Huebner, William C., assignor.)

Huebner, William C., Chicago, Ill. Film holder. 1,860,389; May 31.

Huebner, William C., Chicago, Ill., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y. Preregistering means for photocomposer printing plates. 1,860,361; May 31.

Huether, Jacob. (See Stern, I., and Huether.)

Huff, Floyd A., Mansfield, Ohio. Hydraulic shock absorber. 1,861,056; May 31.

Huffman, Alva. (See King, W. H., and Huffman.)

Huffman, Horace M., assignor to The Huffman Manufacturing Company, Dayton, Ohio. Measuring receptacle. 1,861,409; May 31.

Huffman Manufacturing Company, The. (See Huffman, Horace M., assignor.)

Hulfish, David S., assignor to Teletype Corporation, Chicago, Ill. Printing telegraph system. 1,861,344; May 31.

Humber Limited. (See Grinham, Edward G., assignor.)

Hume, John, Houston, Tex., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid controlling device. 1,860,417; May 31.

Hummert, Robert H., assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio. Underscreen window operator. 1,860,418; May 31.

Hunter, Frank R., Kansas City, Mo., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill. Fuel feeding system. 1,860,672; May 31.

Hunter, Morris, Richmond, Va. Electrically heated brooder. 1,861,119; May 31.

Hunter, Ralph M., L. C. Stewart, H. E. Houser, and Lee De Pree assignors to The Dow Chemical Company, Midland, Mich. Treatment of electrodes. 1,861,415; May 31.

Hurewitz, Alexander, Bronx, N. Y. Fastening device for pins. 1,860,857; May 31.

Hurxthal, Alpheus O., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Ball bearing housing. Re18,486; May 31.

Hutchinson, Walter L., assignor to The Skaref Ball Bearing Company, Hartford, Conn. Sizing device. 1,861,233; May 31.

Huther Brothers Saw Manufacturing Company. (See Huther, Warren B., assignor.)

Huther, Warren B., assignor to Huther Brothers Saw Manufacturing Company, Rochester, N. Y. Circular saw. 1,861,218; May 31.

Hyde, Ralph C., Los Angeles, Calif., assignor, by mesne assignments, to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del. Electrode for neon type of luminous tubes. 1,860,419; May 31.

Hydraulic Press Manufacturing Company. (See Ernst, Walter, assignor.)

Hynson, Westcott and Dunning, Inc. (See White, Edwin C., assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Fahr, R., and Keinke, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Hubert, E., Röst-Grande, and Weisbröd, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Jaenecke, E., and Klippel, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Heuck, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Möhring, A., Schultze, and Schlack, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Röhre, K., and Heusler, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Rosenthal, Leo, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Sauerwein, Karl, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Voss, Arthur, assignor.)

Iceberg Manufacturing Company. (See Sundeen, C., and Fuller, assignors.)

Illingworth Carbonization Company, The. (See Illingworth, Stewart R., assignor.)

Illingworth, Stewart R., Brynfedwen, assignor to The Illingworth Carbonization Company, Limited, Manchester, England. Apparatus for the manufacture of carbonized fuel. 1,861,345; May 31.

Imperial Chemical Industrie Limited. (See Davidson, A., Halliwood, Henesey, and Shepherdson, assignors.)

Imperial Chemical Industries Limited. (See Rood, E. H., and Sharp, assignors.)

Imperial Oil & Gas Products Company. (See Rumbarger, Bradley W., assignor.)

Independent Lock Company. (See Gutman, Louis C., assignor.)

Indiana Condensed Milk Company. (See Mott, Samuel B., assignor.)

Indiana Foundry, Machine & Supply Company. (See Rauch, William H., assignor.)

Indianapolis Glove Company. (See McKinley, Melvin, assignor.)

Industrial Brush Company. (See Cleaves, George C., assignor.)

Ingersoll-Rand Company. (See Slater, Fred M., assignor.)

Ingraham, E., Co., The. (See Carlson, E. L., and Simpson, assignors.)

International Mailing Tube and Wrapper Company. (See Greve, Herman L., assignor.)

Irish, David J. (See Bralce, D. L., and Irish.)

Isbell, George W., Baltimore, Md. Fill cap for gasoline tanks. 1,861,395; May 31.

Isbell, George W., Baltimore, Md. Extracting check valve mechanism. 1,861,396; May 31.

Isenhour, Rufus, New London, N. C. Sanding machine. 1,861,346; May 31.

Jackson, Harry D., Fargo, N. Dak. Stand. Des. 87,063; May 31.

Jackson, Maunsell B., assignor to A. E. Dyment, J. H. Lumbers, and W. S. Gray, trustees, Toronto, Ontario, Canada. Internal combustion engine. 1,860,673; May 31.

Jaeger, Gebhard, assignor to The Jaeger Machine Company, Columbus, Ohio. Truck concrete mixer. 1,861,416; May 31.

Jaeger Machine Company, The. (See Jaeger, Gebhard, assignor.)

Jaenecke, Ernst, Heidelberg, and H. Klippel, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of sulphides. 1,861,058; May 31.

James, Henry D., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Dynamic brake for automobiles. 1,860,504; May 31.

Jencick, Stephen, Chagrin Falls, Ohio. Transmission. 1,860,674; May 31.

Jennings, Irving C., South Norwalk, Conn. Heating apparatus. 1,860,930; May 3.

Jensen, Louis, assignor to United Autographic Register Co., Chicago, Ill. Duplicating machine. 1,861,120; May 31.

Jeremiassen, Finn, Oslo, Norway. Crystallization apparatus. 1,860,741; May 31.

Johnson, Andrew, Edgewater, Colo. Grab hook. 1,860,462; May 31.

Johnson Automatic Sealer Co. (See Richard, Charles F., assignor.)

Johnson Brothers Engineering Corporation. (See Conover, Warren M., assignor.)

Johnson, Carl E., Pasadena, Calif. Rotor for silent motors. 1,861,059; May 31.

Johnson, Ellis W., Jamestown, N. Y. Electric foot warmer. 1,860,420; May 31.

Johnson, Ernest G., Chicago, Ill. Toothbrush. 1,861,347; May 31.

Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener socket. 1,860,858; May 31.

Johnson, John F., Blaine, assignor of one-half to C. K. McMillin, Bellingham, Wash. Device for cutting off the end portions of vegetables. 1,860,779; May 31.

Johnson, Sigurd W. L., et al. (See Robertson, Henry M., assignor.)

Jones, Elmer M., assignor to Parker Rust-Proof Company, Detroit, Mich. Preparation of surfaces for coating. 1,860,505; May 31.

Jones, Frank S., Lynn, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me. Leather working machinery. 1,860,713; May 31.

Jones, Lester L., Oradel, N. J. Pneumatic tire. 1,860,362; May 31.

Jones, William B. (See Bracken, William A., assignor.)

Jordahl, Anders. (See Butler, Edgar M., assignor.)

Jorgenson, Bernardt, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping uppers over lasts. 1,860,742; May 31.

Joseph, Mabel T., et al. (See Wellman, Henry J., assignor.)

Joseph, Mae, Brooklyn, assignor to Park & Tilford, New York, N. Y. Bottle. Des. 87,064; May 31.

Jubilee Manufacturing Company. (See Gillet, Alexis F., assignor.)

Kahn, Bertrand B., Cincinnati, assignor to The Estate Stove Company, Hamilton, Ohio. Cooking stove. Des. 87,065; May 31.

Kahn, Julius, assignor to Truscon Steel Company, Youngstown, Ohio. Highway guard. 1,860,615; May 31.

Kahn, Julius, assignor to Truscon Steel Company, Youngstown, Ohio. Ceiling and floor structure. 1,860,616; May 31.

Kaiser, Karl. (See Schneider, B. R., and Kaiser.)

Kalle & Co. Aktiengesellschaft. (See Uhlrich, C. R., and von Stern, assignors.)

Kammerdiner, James A., Los Angeles, Calif. Rotary jar. 1,860,675; May 31.

Kane, Louis M., et al. (See Martin, Charles H., assignor.)

Kaplan, Harry E., and B. L. Bouer, Chicago, Ill. Automobile top. 1,860,463; May 31.

Kapsenberg, Gerardus, Groningen, Netherlands. Closing device for organism culture vessels. 1,861,121; May 31.

Kean, Robert H., assignor to General Zeolite Company, Chicago, Ill. Liquid purification. 1,860,676; May 31.

Kees, Daniel, assignor to F. D. Kees Manufacturing Co. Inc., Beatrice, Nebr. Door guard. 1,860,780; May 31.

Kees, F. D., Manufacturing Co. Inc. (See Kees, Daniel, assignor.)

Keinath, Georg, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Process for assembling current transformers. 1,860,859; May 31.

Keinke, Rudolf. (See Fahr, R., and Keinke.)

Keller, Albert T., Bethlehem, Pa., assignor to Bethlehem Steel Company. Rolling mill. 1,860,931; May 31.

Kellogg, Harry F., Chicago, Ill. Screw. 1,860,715; May 31.

Kellogg Switchboard & Supply Company. (See Currier, Hiram D., assignor.)

Kelly, Oscar. (See Congleton, J. A., and Kelly.)

Kendall Company, The. (See Marshall, Harold T., assignor.)

Kenety, William H. (See Stevens, J. W., and Kenety.)

Kennedy, Frank W., assignor to De Laval Steam Turbine Company, Trenton, N. J. Packing device. 1,860,860; May 31.

Kennedy, Joseph A., Pawtucket, R. I., assignor, by mesne assignments, to Anaconda Wire and Cable Company. Nonsticky - flame-proofed electrical conduit, etc. 1,860,506; May 31.

Kessler, Merrill. (See Stevenson, H. J., and Kessler.)

Ketchum, Henry G., Luzerne, N. Y. Animal marker. 1,860,421; May 31.

Keyser, Johann J., Aarau, Switzerland. Lubrication of spindle beams of spinning and twisting machines. 1,860,714; May 31.

Khun, Albert M., Elizabeth, N. J. Superservice flood valve. 1,861,397; May 31.

Kichline, Frank O. (See Little, J. E., Kichline, and Ehrgott.)

Kilborn, Karl B., Fairlawn, assignor to Seiberling Rubber Company, Barberton, Ohio. Pneumatic tire. 1,861,276; May 31.

King, C. G. & Co. (See Gibbons, Winifred L., assignor.)

King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,861,091; May 31.

King, William H., and A. Huffman, Weed, Calif. Munting machine. 1,860,809; May 31.

Kinley, Myron M., Tulsa, Okla. Method of and apparatus for determining inclination of well holes. 1,861,057; May 31.

Kirchner, Carl, assignor to Leggett and Platt Spring Bed and Manufacturing Company, Carthage, Mo. Hook and knot forming machine. 1,860,582; May 31.

Kirkriet, Edward O. (See Morgan, B. G., and Kirkriet.)

Kjolseth, Ole K., Erie, Pa., assignor to General Electric Company. Door counterbalancing structure. 1,861,277; May 31.

Klaiber, Erich, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Ignition control apparatus for internal combustion engines. 1,861,417; May 31.

Klein, Frederick, College Point, N. Y., assignor to Sipp-Eastwood Corporation, Paterson, N. J. Condenser. 1,860,677; May 31.

Kleinow, Walter, Hennigsdorf, near Berlin, Germany, assignor to General Electric Company. Distributor for pulverulent fuel burners and making same. 1,861,410; May 31.

Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Selective system and apparatus therefor. 1,860,464; May 31.

Klemme, Maurice G., Belleville, Ill. Cooking stove. Des. 87,066; May 31.

Klencke, Hans, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y. Roasting and sintering pulverulent ores having a high sulphur content. 1,861,122; May 31.

Klippel, Hermann. (See Jaenecke, E., and Klippel.)

Knight, William W., assignor to Roth Rubber Company, Cicero, Ill. Recoil pad for gunstocks. 1,861,234; May 31.

Knipe, Arthur C., assignor to Modern Concrete Development Company Limited, London, England. Sealing of containers under negative or positive pressure. 1,860,583; May 31.

Knowland, Thomas M. (See Glidden, A. A., and Knowland.)

Knowland, Thomas M. (See Glidden, A. A., Knowland, and Dow.)

Knowlton, Daniel E. (See Lance, Henry G., assignor.)

Knutson, Carl L., Maywood, Ill., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener secured conduit-holding member. 1,860,861; May 31.

Kobe, Inc. (See Coberly, Clarence, assignor.)

Koepsell, August J., Mayville, Wis. Shaking grate for furnaces. 1,861,015; May 31.

Koerber, John C., South Orange, N. J. Toy railway. 1,860,864; May 31.

Koidl, Thomas, Wels, Austria. Closing the ends of the channels of molded hollow channel bricks and building blocks. 1,860,584; May 31.

Kolber, Aaron, Brooklyn, assignor to New Diamond Point Pen Co., Inc., New York, N. Y. Fountain pen. Des. 87,067; May 31.

Komarek, Gustav, assignor to Berwind Fuel Company of Delaware, Chicago, Ill. Briquette and making the same. 1,860,465; May 31.

Komarek, Gustav, assignor to Berwind Fuel Company, of Delaware, Chicago, Ill. Briquet and making same. 1,860,743; May 31.

Koontz, Adam C. (See Vermillion, P. B., and Koontz.)

Koppers Company, The. (See Gollmar, Herbert A., assignor.)

Kottman, Arthur A. (See Yerk, H. H., and Kottman.)

Kouyoumjian, Haroutiun K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus.) 1,860,543; May 31.

Krause, Louise R., St. Louis, Mo. Dish drying cabinet. 1,860,617; May 31.

Krause, Richard F., Massillon, Ohio. Drip coffeepot. Des. 87,068; May 31.

Kravitz, Samuel, et al. (See Gilowitz, Benjamin, assignor.)

Krider, George E., assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa. Stone crusher. 1,861,348; May 31.

Kroeger, Ferdinand J. (See Hohnhorst, F. J., and Kroeger.)

Krotee, Walter E., Philadelphia, Pa. Insulated driving connection. 1,860,744; May 31.

Krueger, Richard H., and J. H. Oetjen, assignors to Charles Engelhard Inc., Newark, N. J. Gas analysis apparatus. 1,860,544; May 31.

Kruger, Charles M., Litchfield, Ill. Bottle and cap therefor. 1,860,016; May 31.

Kuckel, Herbert, New Orleans, La. Refrigerator construction. 1,861,123; May 31.

Kuna, Frank J., et al. (See Ryan, Edward J., assignor.)

Kuniholm Manufacturing Company. (See Kuniholm, Martin, assignor.)

Kuniholm, Martin, assignor to Kuniholm Manufacturing Company, Gardner, Mass. Hub cap for vehicle wheels. 1,861,278; May 31.

Kunst, John. (See Davis, M. A., and Kunst.)

Kupferman, Oscar. (See Slady, F. W., and Kupferman.)

Lafon, Jean R. (See Egouvillon, R. F., and Lafon.)

Lake, Harry E., assignor to Preferred Utilities Manufacturing Corporation, New York, N. Y. Antisiphon valve. 1,860,017; May 31.

Lamb, Charles, Los Angeles, Calif. Plumbing tool for oil-wells. 1,860,932; May 31.

La Mont Corporation. (See La Mont, Walter D., assignor.)

La Mont, Walter D., Larchmont, N. Y., assignor to La Mont Corporation. Steam generator. 1,860,363; May 31.

La Mont, Walter D., Larchmont, N. Y., assignor to La Mont Corporation. Multiple steam generator with common water circulation. 1,860,364; May 31.

Lance, Henry G., assignor to D. E. Knowlton, Buffalo, N. Y. Hand truck. 1,860,810; May 31.

Landis Machine Company. (See Shearer, H. T., and Reimschissel, assignors.)

Landt, Gustave, and H. L. Becher, Trenton, assignors to The Agasote Millboard Company, Fanwood Road, N. J. Pulp board. 1,860,466; May 31.

Lane, Edwin, et al. (See Hamilton, Charles E., sr., assignor.)

Lang, Andrew, Mobridge, S. Dak. Animal trap. 1,860,507; May 31.

Lang, Richard T., Heidenheim-on-the-Brenz, Germany, assignor to American Volth Contact Company, Incorporated, New York, N. Y. Converting liquid paper pulp into a consistent mass suitable for storage, etc., or into bales for shipment. 1,861,184; May 31.

Lange, Edward H., Baltimore, Md. Automatic power control mechanism for automobiles. 1,861,018; May 31.

Langley, Ralph H., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Indicating device for radio sets. 1,860,678; May 31.

Lant, Richard, Vienna, Austria. Aqueous emulsion of hydrocarbon oils and manufacturing the same. 1,861,398; May 31.

La Payne, Rex, and C. F. Blake, Glendale, Calif.; said Blake assignor to said La Payne. Restaurant building. Des. 87,080; May 31.

Larkin, James L., Lynn, assignor to Forbes Lithograph Manufacturing Company, Boston, Mass. Collapsible container. 1,860,349; May 31.

La Rock, John, Chicago, Ill. Adjustable plant stand. 1,860,390; May 31.

Lautenschläger, Carl L., Frankfort-on-the-Main, W. Ludwig, Frankfort-on-the-Main-Hochst, and O. Schaumann, Wiesbaden, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Obtaining active substances from hypophysis glands. 1,860,469; May 31.
Lawrence, Frank S., Dunellen, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Pressure regulator. 1,860,350; May 31.
Leak, Arthur H. (See Nutt, A., and Leak.)
Leamon Process Company, The. (See Leamon, William G., assignor.)
Leamon, William G., Newark, Ohio, assignor, by mesne assignments, to The Leamon Process Company. Oil conversion. 1,861,399; May 31.
Leander Development Corporation. (See Myers, Willard G., assignor.)
Leclanche, S. A., et al. (See Schlaepfer, Arnold, assignor.)
Ledbetter, James C., New York, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Press. 1,860,508; May 31.
Leggett and Platt Spring Bed and Manufacturing Company. (See Kirchner, Carl, assignor.)
Lenander, Nils E., Lokken Verk, assignor to Patentaktiebolaget Grondal-Ramen, Stockholm, Sweden. Treatment of sulphide ores. 1,860,585; May 31.
Le Pul, Henry, Hempstead, N. Y. Combination fuel pump and fuel injector for Diesel engines. 1,860,862; May 31.
Le Pul, Henry, Hempstead, N. Y. Combination fuel pump and fuel injector for Diesel engines. 1,860,865; May 31.
Leslie, Eugene H., Ann Arbor, Mich., assignor to E. R. Badger & Sons Company, Boston, Mass. Preparing lubricants. 1,860,838; May 31.
Leviton Manufacturing Company. (See Slady, F. W., and Kupferman, assignors.)
Lewis, Harold M., Douglaston, assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Communication system. 1,861,185; May 31.
Lewis Invisible Stitch Machine Company. (See Mueller, Charles W., assignor.)
Lichter, Malvin, New York, N. Y., assignor to The Stickless Corporation. Telephone index. 1,860,863; May 31.
Liebendorfer, Harvey L., Beaver Falls, Pa. Coin wrapper and bill strap container. 1,861,310; May 31.
Liebknecht, Otto, Berlin-Grunewald, Germany, assignor to The Permutit Company, New York, N. Y. Removing silica from water. 1,860,781; May 31.
Lieux, Clement B., Lafayette, La. Electric toothbrush. 1,860,894; May 31.
Linderme, Emil, sr. (See Cibs, Anthony F., assignor.)
Lindsey, Willlam, assignor to Wm. Wrigley, jr. Company, Chicago, Ill. Wrapping machine. 1,860,365; May 31.
Lippert, Walter E., Hewlett, assignor to Samuel Bonat & Bro., New York, N. Y. Pedestal dome for hair permanent waving machines. Des. 87,069; May 31.
Littell, F. J., Machine Co. (See Littell, F. M., and Miller, assignors.)
Littell, Frederick M., and E. R. Miller, assignors to F. J. Littell Machine Co., Chicago, Ill. Turning device for flat sided rivets. 1,861,186; May 31.
Little, James E., Bethlehem, F. O. Richline, and A. Ehrgott, Lebanon, Pa., assignors to Bethlehem Steel Company. Treatment of ores. 1,860,811; May 31.
Ljungström, Fredrik, Lidingo, Sweden, assignor, by mesne assignments, to Ped, Incorporated. Power transmission. 1,861,418; May 31.
Lock Patents Holding Corporation. (See Samburg, Maurice, assignor.)
Lockett, A. M., & Company. (See Lockett, Andrew M., assignor.)
Lockett, Andrew M., assignor to A. M. Lockett Co., Ltd., New Orleans, La. Dredge. 1,861,349; May 31.
Lockhart, James, and R. C. Moore, assignors to The Coe Manufacturing Company, Painsville, Ohio. Conveyer. 1,860,679; May 31.
Lockwood, Douglas J., Onawa, Iowa. Grease gun. 1,860,716; May 31.
Loening, Grover, New York, assignor to Grover Loening Aircraft Company, Inc., Garden City, Long Island, N. Y. Airplane. 1,860,545; May 31.
Loening, Grover, Aircraft Company. (See Loening, Grover, assignor.)
Loland, Alfred M., Lebanon, assignor of one-half to L. C. Willis, Indianapolis, Ind. Dual wheel for demountable rims. 1,861,187; May 31.
Logan Co. (See Cain, W. E. and Crady, assignors.)
Logan, Frank H., Los Angeles, Calif. Socket for artificial limbs. 1,861,311; May 31.
Loiseau, Raoul T., Livry-Gargan, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Metallic pipe coupling. 1,860,422; May 31.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble dress. Des. 87,070; May 31.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Coat. Des. 87,071; May 31.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Coat. Des. 87,072; May 31.
Longren, Albin K., Topeka, Kans. Airplane construction. 1,861,219; May 31.
Lorang, Henry J., et al. (See Ryan, Edward J., assignor.)
Lorber, Charles, Louisville, Ky. Biscuit package. 1,861,124; May 31.
Lormor, Henry W. (See Dunzweller, C. J., and Lormor.)
Low Temperature Carbonisation Limited. (See Parker, Charles H., assignor.)
Lozen, Jules L., New York, N. Y. Pair of oxford eyeglasses. Des. 87,073; May 31.
Luce, Homer J. (See Guy, Harry L., assignor.)
Lucke, Charles E., New York, N. Y., assignor, by mesne assignments, to Fuller Lehigh Company. Furnace and operating the same. 1,860,366; May 31.
Lucke, Henry J., East Orange, N. J. Safety razor. 1,860,680; May 31.
Lucks-Osten, Eugene, J. Greenwald, and D. Ostern, Weehawken, N. J. Paper-dispensing machine. 1,860,815; May 31.
Ludwig, Louis, Brooklyn, N. Y. Electric sign-socket flasher. 1,861,159; May 31.
Ludwig, Willy. (See Lautenschläger, C. L., Ludwig, and Schaumann.)
Lufkin Rule Company. (See Thompson, Robert G., assignor.)
Lufkin Rule Co. (See Witchger, Eugene J., assignor.)
Lumbers, James H., et al., trustee. (See Jackson, Maunsell B., assignor.)
Luther, Martin, Mannheim, and C. Heuck, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerization products of diolefines. 1,860,681; May 31.
Lynn, Ewing K., East McKeesport, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake valve device. 1,860,423; May 31.
Lyon Metal Products, Incorporated. (See Bales, J. E., and Christensen, assignors.)
Lysholm, Alf, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden. Blade system for turbines. Re18,485; May 31.
Lytle, Robert W., assignor to The Formica Insulation Company, Cincinnati, Ohio. Manufacturing silent gears. 1,861,125; May 31.
Maass, Louis, Hartford, Conn. Vending machine. 1,860,509; May 31.
MacDougall, Hugh C., West New York, assignor to Franklin Baker Company, Hoboken, N. J. Shelling coconuts. 1,860,745; May 31.
MacDougall, Hugh C., West New York, assignor to Franklin Baker Company, New York, N. Y. Nut shelling machine. 1,860,746; May 31.
Mack, Patrick H., Bradford, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa. Pressure flood packer. 1,860,467; May 31.
Mackie, Charles H., assignor of one-half to A. L. Merolle, Brooklyn, N. Y. Detachable shirt collar. 1,861,419; May 31.
MacLean, Allen D., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Regulating valve. 1,860,468; May 31.
Magee, Frank, and G. W. Haverbeck, Tarrytown, N. Y. Animal trap. 1,861,312; May 31.
Maguire, Charles L., assignor of one-half to E. G. Schneider, Yreka, Calif. Wrench. 1,861,060; May 31.
Mahan, Joseph R., assignor to The National Supply Company, Toledo, Ohio. Valve. 1,861,420; May 31.
Mahatho, Boodhun R., Overport, Durban, Union of South Africa. Tellurian. 1,860,933; May 31.
Main, Frank L., Jackson, assignor to General Motors Corporation, Detroit, Mich. Adjustable spring clip. 1,861,019; May 31.
Main Seaboard Paper Company. (See Cram, Hervey G., assignor.)
Mallory, P. R., & Co. (See Welger, Joseph A., assignor.)
Malone, Jullan Y., Eau Claire, Wis. Electric heater. 1,860,934; May 31.
Mansfield, Judson H., assignor to Greenlee Bros. & Co., Rockford, Ill. Tapping machine. 1,861,350; May 31.
Manson, Leon B., Corona, assignor to Noma Electric Corporation, New York, N. Y. Electric fitting. 1,860,546; May 31.
Manson, Thomas M., Toronto, Ontario, Canada, assignor to Service Station Equipment Company, Bryan, Ohio. Air service equipment. Re18,483; May 31.
Manufacture Metallurgique De Tournus. (See Reinold, Louis, assignor.)
Marable, George B., Norwood, Ohio. Rerailing device. 1,861,313; May 31.
Marchant, Guy O., et al. (See Walker, Jay P., assignor.)
Marcum, Arthur L., Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Road vehicle spring suspension. 1,860,470; May 31.
Marcum, Arthur L., Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Road vehicle. 1,860,471; May 31.
Marquis, Edgar F., Oakland, Calif. Bracket. 1,861,220; May 31.
Marrion, Nicholas, New York, N. Y. Change carrier. 1,861,020; May 31.
Marrison, Warren A., Orange, and J. W. Horton, Millburn, N. J., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Speed and position control for television apparatus. 1,860,935; May 31.
Marrison, Warren A., Orange, N. J., and J. W. Horton, Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical control system. 1,860,936; May 31.
Marsh, Claude E., assignor of one-tenth to E. A. Pledger, Atlanta, Ga. Card or sign display mechanism. 1,861,235; May 31.

Marsh, Harry V., Chicago, Ill. Placard. 1,860,547; May 31.
Marshall, Arnold C., assignor to The Steel Scaffolding Company Limited, London, England. Clamp for scaffolding for building and other purposes. 1,860,839; May 31.
Marshall, Arnold C., assignor to Messrs. Steel Scaffolding Company, Limited, London, England. Joint or connection for tubular bodies. 1,860,866; May 31.
Marshall, Harold T., assignor to The Kendall Company, Walpole, Mass. Cloth package and producing the same. 1,860,812; May 31.
Marsilius, Newman M., and O. A. Olsen, assignors, by mesne assignments, to The Producto Machine Company, Bridgeport, Conn. Milling machine. 1,860,840; May 31.
Martin, Charles H., assignor of one-third to L. M. Kane and one-third to A. Frediana, Los Angeles, Calif. Printing press attachment. 1,861,411; May 31.
Martin, Edward J., assignor to General Motors Research Corporation, Detroit, Mich. Engine indicator and spark plug. 1,861,021; May 31.
Martin, Harold T., East Orange, and F. A. Hoyt, Bloomfield, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Reeling device. 1,861,221; May 31.
Martin, Jacob F. (See Barker, Eros V., assignor.)
Marvel Carbureter Company. (See Flath, David, assignor.)
Marx, Louis, New York, N. Y. Educational apparatus. 1,860,895; May 31.
Maschinenfabrik, Augsburg-Nurnberg A. G. (See Breitwieser, Heinrich, assignor.)
Maschinenfabrik Augsburg-Nurnberg A. G. (See Richm, Wilhelm, assignor.)
Mason, Claude D. (See Bradley, C. E., and Mason.)
Mathewson, Maxwell I., Providence, R. I., assignor to Brown & Sharpe Manufacturing Company. Grinding machine. 1,861,279; May 31.
Matthews, John D., Newquay, Cornwall, assignor to Taylor Bros. (Sandiacre) Limited, Sandiacre, England. Folding chair and the like. 1,860,867; May 31.
Mauthe, Gustav. (See Thauss, A., Mauthe, and Doser.)
Mautner, Isidor. (See Deutsch, Siegfried, assignor.)
Maxim Silencer Company, The. (See Bourne, Roland B., assignor.)
Maxwell, John A., jr., Lancaster, Pa., assignor to Follmer, Clegg & Co., New York, N. Y. Container for umbrellas. 1,861,061; May 31.
Mayer, William H., jr., New York, N. Y. Textile fabric or similar article. Des. 87,074; May 31.
McAndrew, Robert, Coventry, England. Main ferrule for connecting branch pipes. 1,861,314; May 31.
McBee Binder Company, The. (See Rutkoskie, George A., assignor.)
McCaine, Harry B., Atlantic City, N. J. Automobile direction indicator. 1,861,126; May 31.
McCaskell, Jasper A., Salt Lake City, Utah. Continuous filter. 1,860,937; May 31.
McCauley, Ernest G., Dayton, Ohio. Fluid pressure control system. 1,860,510; May 31.
McCullough, Gearold P., San Francisco, Calif. Strop-handle. 1,860,717; May 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety brake device. 1,860,424; May 31.
McCune, Joseph C., Edgewood, and J. B. Wright, Pittsburgh, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Dirt collector. 1,860,425; May 31.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake and power controller. 1,860,426; May 31.
McElroy, Frank C., Columbus, Ohio. Switch for motor vehicle direction signals. 1,860,682; May 31.
McEver, William L., Albany, Ga. Incinerator. 1,860,841; May 31.
McFaddan, Robert D., Chicago, Ill. Receptacle for razor blades. 1,861,351; May 31.
McGraw, William, Los Angeles, and R. C. Adams, San Gabriel, Calif., assignors to Trumble Gas Trap Company. Process and apparatus for separating crude petroleum and natural gas. 1,860,896; May 31.
McIlhenney, Louis L., Wynnewood, assignor to Stephen F. Whitman & Son, Inc., Philadelphia, Pa. Display package. 1,850,586; May 31.
McIntosh, Hampson G. (See Hildorf, W. G., and McIntosh.)
McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Cop holder for knitting machines. 1,860,938; May 31.
McKeefe, Edward F. (See Bradley, L., and McKeefe.)
McKinley, Melvin, Coshocton, Ohio, assignor to Indianapolis Glove Company, Indianapolis, Ind. Combination glove manufacture. 1,861,280; May 31.
McKinley, Melvin, Coshocton, Ohio, assignor to Indianapolis Glove Company, Indianapolis, Ind. Fabric hand covering. 1,861,281; May 31.
McLanahan & Stone Corporation. (See Krider, George E., assignor.)
McLane, Forrest B., Rivera, Calif. Insecticide and larvacide. 1,861,127; May 31.
McLaughlin, Thomas L., Guadalupe, Calif. Transportation device. 1,860,747; May 31.
McMillin, Clifford E. (See Johnson, John F., assignor.)
Mead, Richard R., Queens Village, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. 1,860,868; May 31.
Meade, Francis J., Knoxville, Tenn., assignor of one-half to Augustus Gumpert, Washington, D. C. Modulated oscillator. 1,860,897; May 31.
Meinel, William J., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Making metal stampings. 1,860,683; May 31.
Mendelson, Charles, et al. (See Hamilton, Charles E., sr., assignor.)
Mendelson, Percy, et al. (See Hamilton, Charles E., sr., assignor.)
Mergenthaler Linotype Company. (See Albrecht, Christian A., assignor.)
Mergenthaler Linotype Company. (See Aynge, William E., assignor.)
Mergenthaler Linotype Company. (See Guest, Alfred W. F., assignor.)
Mergenthaler Linotype Company. (See Mead, Richard R., assignor.)
Mergenthaler Linotype Company. (See Morrison, Luther E., assignor.)
Merolle, Augustus L. (See Muckle, Charles H., assignor.)
Merriam, Lynn W. (See Pence, Ira W., assignor.)
Merrill, Thomas B. (See Tyler, D., and Merrill.)
Messrs. Steel Scaffolding Company, Limited. (See Marshall, Arnold C., assignor.)
Metal Hose & Tubing Co. (See Wallace, Archibald L., assignor.)
Metal Product Company. (See Cocks, Harry J., assignor.)
Metal Traffic Marker Corporation. (See Foster, Robert, assignor.)
Metallgesellschaft Aktiengesellschaft. (See Pacz, Aladar, assignor.)
Metropolitan Engineering Company. (See Holmes, Henry S., assignor.)
Metzger, Claude W., Houston, Tex., assignor to Haynes Stellite Company. Cutter for rotary drills. 1,860,587; May 31.
Meyer, Emanuel, New York, N. Y. Birth-charm. Des. 87,075; May 31.
Meyer, Felix, Aachen, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Injection ampul. 1,860,898; May 31.
Meyer, Georg, Berlin-Charlottenburg, Germany. Accidents preventing coupling device. 1,860,391; May 31.
Meyer, J. Frank. (See Fleischer, Charles, assignor.)
Meyer, W. H., & Son, Inc. (See Torrence, Walter S., assignor.)
Micro Machine Company. (See York, H. H., and Baumberger, assignors.)
Micro Machine Company. (See York, H. H., and Kottman, assignors.)
Micro Machine Company. (See York, H. H., and Kottman, assignors.)
Mieg, Walter, Opladen, and R. Berliner, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y. Vat dyestuffs of the anthraquinone-acridone-series. 1,860,472; May 31.
Miller, Albert D., Sulphur Wells, Ky. Fly swatter. 1,860,939; May 31.
Miller, Christian, New York, N. Y., assignor to Edwards and Company, Inc. Push button switch construction. 1,861,400; May 31.
Miller Company, The. (See Doane, Leroy C., assignor.)
Miller Company, The. (See Doane, L. C., and Wolter, assignors.)
Miller, Edgar R. (See Littell, F. M., and Miller.)
Miller, George W., Sapulpa, Okla. Sand pump. 1,861,022; May 31.
Miller, James M., Kiowa, Kans. Highway marker. 1,860,719; May 31.
Miller, Peter J. O., assignor of one-half to E. E. Nystrom, Peoria, Ill. Signaling device. 1,860,427; May 31.
Miller, Thomas D., Clarksville, Md. Shingle. 1,860,899; May 31.
Milliken, Humphreys, Montreal, Quebec, Canada. High-power circuit-breaker. 1,861,128; May 31.
Milliken, Humphreys, Montreal, Quebec, Canada. Circuit breaker. 1,861,129; May 31.
Millwood, James P. (See Hendey, F., and Millwood.)
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minneapolis-Honeywell Regulator Company. (See Bower, George D., assignor.)
Minton, John P., White Plains, N. Y., assignor to Radio Corporation of America. Loud speaker. 1,861,222; May 31.
Miquelon, Pantaleon E., Chicago, Ill. Carburetor. 1,860,869; May 31.
Miquelon, Pantaleon E., Chicago, Ill. Carburetor. 1,861,352; May 31.
Mishawaka Rubber and Woolen Manufacturing Company. (See Bradley, C. E., and Mason, assignors.)
Mishawaka Rubber and Woolen Manufacturing Company. (See Van Dinter, George L., assignor.)
Mitchel, Charles F., assignor to Bastian Brothers Company, Rochester, N. Y. Name plate attachment. 1,861,130; May 31.
Mitchell, James M., Flushing, N. Y. Apparatus for reducing rock and other mineral substances. 1,861,315; May 31.
Modern Concrete Development Company. (See Knipe, Arthur C., assignor.)

Möbring, Albert, and G. Schultze, Elberfeld, and P. Schlack, Berlin-Karlshorst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Compositions consisting of woolen fibers and artificial threads. 1,860,473; May 31.
Moll, Wilhelm K., assignor to Ditto, Incorporated, Chicago, Ill. Hectograph machine. 1,861,188; May 31.
Monroe Calculating Machine Company. (See Britten, Edwin F., jr., assignor.)
Montandon, Arthur, assignor of one-half to Societe Generale d'Entreprises au Maroc, Paris, France. Insulator. 1,861,316; May 31.
Moody, Dwight L. (See Bailey, R. S., Newby, and Moody.)
Moore, Charles A., Edina, Minn. Insulated building. 1,860,782; May 31.
Moore, Frank W. (See Harty, W. A., and Moore.)
Moore, Richard C. (See Lockhart, J., and Moore.)
Moore, Richard C., assignor to The Coe Manufacturing Company, Painesville, Ohio. Lathe. 1,860,684; May 31.
Morgan, Burton G., and E. O. Kirkriet, Tacoma, Wash. Fishhook sinker. 1,861,237; May 31.
Morgan, John D., Maplewood, N. J., assignor to Doherty Research Company, New York, N. Y. Reduction of phosphate rock. 1,861,236; May 31.
Morgan & Wright. (See Reuter-Lorenzen, Paul, assignor.)
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Radiocabinet. 1,860,940; May 31.
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Armchair. 1,860,941; May 31.
Moross, William P. D., Chattanooga, Tenn., assignor to American Cement Paint Company, Rossville, Ga. Cement size. 1,861,317; May 31.
Morrill, Philip E., Webster Groves, and C. V. Brady, assignors to Bemis Bro. Bag Co., St. Louis, Mo. Tubing cloth for bags and the like. 1,860,392; May 31.
Morris, Howard A., assignor to The Automat Molding & Folding Company, Toledo, Ohio. Machine for handling butter prints. 1,861,160; May 31.
Morris, Melvin G., Tampa, Fla., assignor, by mesne assignments, to Claude Neon Lights, Inc., New York, N. Y. Lighting means for landing fields at airports. 1,860,685; May 31.
Morrison, Luther E., New York, N. Y., assignor to Mergenthaler Linotype Company. Typographical composing and casting machine. 1,860,900; May 31.
Morrison, William K., Chula Vista, Calif. Fence. 1,860,686; May 31.
Morse, Albert W., Forest Hills, N. Y. Combination gas and oil burner. 1,860,942; May 31.
Morse, Lulan S., Ocean Park, Calif. Tire pressure measuring tool. 1,860,588; May 31.
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y. Coated article and preparing the same. 1,860,687; May 31.
Motor Jack Corporation. (See Gutmann, John, jr., assignor.)
Motor Terminals Company. (See Fitch, Benjamin F., assignor.)
Mott, Samuel B., Noblesville, assignor to Indiana Condensed Milk Company, Indianapolis, Ind. Package conveying apparatus. 1,860,718; May 31.
Moulton, Forest R., assignor, by mesne assignments, to Acme Motion Picture Projector Company, Chicago, Ill. Method of and apparatus for motion picture projection. 1,860,943; May 31.
Mueller, Charles E., Cedar Rapids, Iowa. Device for destroying mites on fowls. 1,861,353; May 31.
Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Blind stitch sewing machine. 1,860,901; May 31.
Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Blind stitch sewing machine. 1,860,902; May 31.
Muellerweiss, Adolph, Sebewaing, Mich. Attachment plug receptacle. 1,861,223; May 31.
Muir, Wellington W., assignor to Harrison Radiator Corporation, Lockport, N. Y. Radiator support. 1,860,783; May 31.
Munro, John E. (See Oliver, Vincent, assignor.)
Murphy, Edward A. (See Twiss, D. F., and Murphy.)
Mutton Hollow Fire Brick Company. (See Ryan, J. F., and Stegmayer, assignors.)
Muzzy, William H., Evanston, assignor to Stewart-Warner Corporation, Chicago, Ill. Combined vacuum tank and pressure pump. 1,860,688; May 31.
Myers, Willard G., Bronxville, assignor to Leander Development Corporation, New York, N. Y. Heat indicator for automobiles. Des. 87,076; May 31.
N. V. Chemische Fabriek L. van der Grinten. (See van der Grinten, Lodewijk P. F. and K. J. J., assignors.)
Naber, Claude H., assignor of one-half to N. Haas, Hamburg, N. Y. Brake pedal holding device. 1,861,023; May 31.
Nagler, Forrest, Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic turbine. 1,860,618; May 31.
National Fireproofing Corporation. (See Shipley, Roy A., assignor.)
National Electric Products Corporation. (See Clayton, Martin M., assignor.)
National Kellastone Company, The. (See Wires, John A., assignor.)
National Malleable and Steel Castings Company. (See Shafer, James A., assignor.)
National Manicuring Machine Co. (See Stevenson, H. J., and Kessler, assignors.)
National Marking Machine Company, The. (See Constable, Charles E., assignor.)
National Supply Company, The. (See Mahan, Joseph R., assignor.)
Naugle, John J., Brooklyn, N. Y. Treating liquids. 1,860,944; May 31.
Neate, Reginald W., Kingston-on-Thames, England. Brake for trailer vehicles. 1,861,131; May 31.
Nehr, Earl R., Wilmette, and S. E. Witt, Geneva, Ill., assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,861,224; May 31.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Stoping drill. 1,860,945; May 31.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Stoping machine. 1,860,946; May 31.
Nelson, Christine, San Francisco, Calif. Clothes hanging device. 1,861,282; May 31.
Nelson, Emil A., Detroit, Mich. Tire rim. 1,861,238; May 31.
Nelson, Hans A., Ajo, Ariz. Ore bin structure. 1,860,903; May 31.
Nelson, Hans A., Exira, Iowa. Bearing member assembly. 1,861,239; May 31.
Nelson, Robert E., Pasadena, Calif. Fuel injection device. 1,860,784; May 31.
Nelson, Steven C., Finley, N. Dak. Grain tank. 1,861,283; May 31.
Newby, Neal D. (See Bailey, R. S., Newby, and Moody.)
New Castle Refractories Company. (See Vincent, Laurence A., assignor.)
New Diamond Point Pen Co. (See Kolber, Aaron, assignor.)
Newhouse, Ray C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Comminuting body. 1,860,393; May 31.
New Idea Spreader Company, The. (See Synck, Henry, assignor.)
Newman, John M. (See Harwood, P. B., and Newman.)
New York Air Brake Company, The. (See Campbell, Charles A., assignor.)
News Projection Corporation. (See Proctor, Barton A., assignor.)
Nichols, Louis C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Transformer or the like. 1,860,511; May 31.
Nissen, Peter N., Hoddesdon, England. Roof for portable buildings. 1,861,062; May 31.
Noble, James G., New York, N. Y. Fastening device. 1,861,354; May 31.
Noburn Products Inc. (See Williams, Jacques E. B., assignor.)
Noetzli, Fred A., Los Angeles, Calif. Dam construction. 1,860,589; May 31.
Noetzli, Fred A., Los Angeles, Calif. Constructing dams. 1,860,590; May 31.
Noma Electric Corporation. (See Manson, Leon B., assignor.)
Norgaard, Hal W., Oakland, assignor to California Packing Corporation, San Francisco, Calif. Apparatus for filling containers with fruit and vegetables. 1,860,720; May 31.
Norge Corporation. (See Blood, Howard E., assignor.)
Nutt, Arthur, Kenmore, N. Y., assignor to Curtiss Aeroplane & Motor Co., Inc. Lubrication system for inverted motors. 1,860,813; May 31.
Nutt, Arthur, Kenmore, and A. H. Leak, Hamburg, N. Y., assignors to Curtiss Aeroplane & Motor Company, Inc. Internal combustion engine. 1,860,814; May 31.
Nyberg, Herman. (See Gurton, W. S., Plint, and Nyberg.)
Nye Odorless Incinerator Corporation. (See Abel, Harry B., assignor.)
Nyman, Alexander, assignor to Dubilier Condenser Corporation, New York, N. Y. Clamp for condensers. 1,861,024; May 31.
Nyman, Alexander, Dobbs Ferry, assignor to Dubilier Condenser Corporation, New York, N. Y. Vacuum tube. 1,861,401; May 31.
Nystrom, Elmer E. (See Miller, Peter J. O., assignor.)
O'Connor, Arthur F., assignor to Equipment Specialties Company, Chicago, Ill. Tank hand hole and cover. 1,861,225; May 31.
O'Connor, Arthur F., assignor to Equipment Specialties Company, Chicago, Ill. Handwheel and guard attachment. 1,861,226; May 31.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,860,548; May 31.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,860,549; May 31.
Odin Stove Manufacturing Company. (See Hoffstetter, Carl H., assignor.)
O'Donnell, Edward C. (See Templeton, Herbert J., assignor.)
Oetjen, John H. (See Krueger, R. H., and Oetjen.)
Ohio Brass Company, The. (See Auston, Arthur O., assignor.)
Ohio Brass Company, The. (See Pipes, Pliny P., assignor.)
Ohio Rubber Company, The. (See Bronson, Budd, assignor.)

Ohio Rubber Company, The. (See Cavanagh, Gerald F., assignor.)
Ohler, Frank L., assignor to The Haughton Elevator & Machine Company, Toledo, Ohio. Adjustable brake stand. 1,860,394; May 31.
Oil Well Supply Company. (See Mack, Patrick H., assignor.)
Okonite Company, The. (See Hendey, F., and Millwood, assignors.)
Oliver, Vincent, Philadelphia, assignor to J. E. Munro, Carlisle, Pa. Method of and apparatus for cleaning band saws. 1,861,412; May 31.
Ollendorff, Jacques, assignor to Anciens Etablissements R. Cornely & Co., Société Anonyme, Paris, France. Sewing machine. 1,860,870; May 31.
Olsen, Oswald A. (See Marsillius, N. M., and Olsen.)
Olson, Bengt, Brooklyn, assignor to C. J. O'Neill, New York, N. Y. Oil pumping apparatus. 1,860,428; May 31.
O'Neill, Charles J. (See Olsson, Bengt, assignor.)
Osborn Manufacturing Company, The. (See Spikerman, Frank T., assignor.)
Ostern, David. (See Lucks-Osten, E., Greenwald, and Ostern.)
Otis Elevator Company. (See Palm, Blake, assignor.)
Overing, George T., jr. (See Gumina, A. J., and Overing.)
Owens, Charles, Chattanooga, Tenn. Coal fractionating and oil refining process. 1,861,355; May 31.
Owens-Illinois Glass Company. (See Wade, Henry S., assignor.)
Packard Motor Car Company. (See Gunn, Earl G., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Pacz, Aladar, Cleveland, Ohio, assignor of one-half to Aluminum Company of America, Pittsburgh, Pa., and one-half to Metallgesellschaft Aktiengesellschaft, Frankfort-on-the-Main, Germany. Aluminum alloy casting and making the same. 1,860,947; May 31.
Page, Frederick H., assignor to Handley Page Limited, London, England. Controlling aeroplanes. 1,861,318; May 31.
Palm, Blake, Washington, D. C., assignor to Otis Elevator Company, New York, N. Y. Elevator construction. 1,861,063; May 31.
Palmer, Vance C., Sioux City, Iowa. Child's dressing chair. Des. 87,077; May 31.
Parent, Louis E., Claremont, N. H., assignor to Claremont Waste Manufacturing Company. Rotary cutter. 1,861,064; May 31.
Park & Tilford. (See Joseph, Mae, assignor.)
Parke, Davis & Co. (See Colton, Arthur, assignor.)
Parker, Charles H., Codsall, assignor to Low Temperature Carbonization, Limited, London, England. Retort for the distillation of coal and other solid carbonaceous substances. 1,860,591; May 31.
Parker Rust-Proof Company. (See Jones, Elmer M., assignor.)
Parrella, Joseph M. (See De Minno, A. M., and Parrella.)
Parsons, Charles A., deceased, Newcastle-on-the-Tyne, by K. Parsons, Kirkwhelpington, V. Thompson, Newcastle-on-Tyne, and F. G. H. Bedford, Wylam-on-Tyne, England, legal representatives. Gland suitable for turbine shafts. 1,861,132; May 31.
Parsons, Katherine, et al., legal representatives. (See Parsons, Charles A.)
Pasternack, Richard, assignor to Charles Pfizer & Company, Brooklyn, N. Y. Dentifrice. 1,861,189; May 31.
Patent and Licensing Corporation, The. (See Wood, Henry R., assignor.)
Patentaktiebolaget Grondal-Ramen. (See Lenander, Nils E., assignor.)
Paternayan, Harry M., New York, N. Y. Loom. 1,860,474; May 31.
Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc. Coffee maker or similar article. Des. 87,078; May 31.
Patterson, Thomas S., Malaga, N. J., and P. G. Pritz, Germantown, assignors of one-third to J. J. Pritz, Philadelphia, Pa. Beverage mixer and dispenser. 1,861,227; May 31.
Pavlecka, Jan, Wyandotte, Mich. Manufacture of fans. 1,861,025; May 31.
Pavlecka, John, and V. H. Pavlecka, Detroit, Mich. Airplane. Des. 87,079; May 31.
Pavlecka, V. H. (See Pavlecka, John.)
Payne, Daniel R., New York, N. Y. Pull match packet. 1,861,356; May 31.
Peake, Arthur M. (See Bennett, W. G., and Peake.)
Pease, C. F., Company, The. (See Brunk, Harold J., assignor.)
Ped, Incorporated. (See Ljungström, Fredrik, assignor.)
Pence, Ira W., Cleveland, assignor to L. W. Merriam, Parma, Ohio. Sewer pipe cleaning tool. 1,860,395; May 31.
Pennsylvania Carpet Corporation. (See Gero, Victor, assignor.)
People of the United States of America. (See Perrott, G. S., and Holderer, assignors.)
Perilhou, Etienne, assignor to Societe Huiles, Goudrons & Derives, Lens, France. Extracting phenols from phenolic tar oils. 1,861,357; May 31.
Permutit Company, The. (See Liebknecht, Otto, assignor.)
Perrault, Joseph E., Watertown, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Mold. 1,860,429; May 31.
Perret, Gaston, Paris, France. Device for tensioning crimped lace in the course of weaving. 1,860,592; May 31.
Perrott, George S., Pittsburgh, Pa., and G. B. Holderer, Scarsdale, N. Y., assignors, by mesne assignments, to the People of the United States of America. Explosive. 1,860,816; May 31.
Peterson, Arvid, assignor to De Laval Steam Turbine Company, Trenton, N. J. Rotary pump. 1,860,817; May 31.
Peterson, Axel A., Benson, Minn. Manure loader. 1,860,593; May 31.
Petrin, Dominique, Montague City, Mass. Locking plate for fish rods. 1,860,948; May 31.
Pettit, George A., New Orleans, La. Moss gatherer. 1,860,594; May 31.
Peverley, Ralph S., Chester, England, assignor to H. H. Robertson Company, Pittsburgh, Pa. Ventilator. 1,860,367; May 31.
Peyer, Julius, assignor to Chemical Works formerly Sandoz, Basel, Switzerland. Preparation of gall acids. 1,861,319; May 31.
Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Valve. 1,860,619; May 31.
Pfeiffer, Gustavus A., New York, N. Y. Duplex face powder box. 1,860,590; May 31.
Pfizer, Charles, & Company. (See Pasternack, Richard, assignor.)
Pickering, James W., Rutherford, N. J. Deck of playing cards. Des. 87,095; May 31.
Picollo, Mario, Turin, Italy. Security device against robbery of motor cars. 1,860,785; May 31.
Pike, Frederick J., Buffalo, N. Y. Automobile. Des. 87,081; May 31.
Pine, William B., Okmulgee, Okla. Process and apparatus for treating argillaceous material. 1,860,475; May 31.
Pines Winterfront Company. (See Collier, William H., assignor.)
Pipes, Pliny P., assignor to The Ohio Brass Company, Mansfield, Ohio. Rail bond. 1,860,786; May 31.
Pipes, Pliny P., assignor to The Ohio Brass Company, Mansfield, Ohio. Rail bond. 1,860,787; May 31.
Pittman, Reinhart W., New York, N. Y. Motion picture apparatus. 1,860,949; May 31.
Pittoni, Louis E., Jamaica, N. Y., assignor to The Rome Company, Inc. Connection between springs and frames. 1,861,240; May 31.
Pittsburgh Equitable Meter Company. (See MacLean, Allen D., assignor.)
Plass, Robert H., Upper Montclair, assignor to The Chapal-Donner Corporation, Newark, N. J. Fur cutting machine. 1,860,551; May 31.
Platt, Herbert, Cumberland, Md., assignor to Celanese Corporation of America. Textile material and making same. 1,861,026; May 31.
Platt, Newell C., Springfield, Mass., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,860,950; May 31.
Pledger, Ernest A. (See Marsh, Claude E., assignor.)
Plint, Joseph. (See Gurton, W. S., Plint, and Nyberg.)
Poole, Arthur F., assignor to Poole Manufacturing Co., Inc., Ithaca, N. Y. Electric re-winder clock. 1,861,228; May 31.
Poole Manufacturing Co. (See Poole, Arthur F., assignor.)
Poot, Philippe, Saventhem, Belgium. Screw-propeller for flying machines and other aerodynamic apparatus. 1,861,065; May 31.
Poser, Max, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Microscope illuminating means. 1,860,430; May 31.
Potdevin, Adolph, Garden City, Long Island, assignor to Potdevin Machine Company, Brooklyn, N. Y. Bag making machine. 1,860,748; May 31.
Potdevin Machine Company. (See Potdevin, Adolph, assignor.)
Potter, Fred J., Company. (See Potter, Frederick J., assignor.)
Potter, Frederick J., assignor to Fred J. Potter Company, New Brunswick, N. J. Knitting needle. 1,860,788; May 31.
Potter, Frederick J., assignor to Fred J. Potter Company, New Brunswick, N. J. Knitting needle. 1,861,358; May 31.
Potts, Clarice J., Winfield, Kans. Automatic windmill control. 1,861,027; May 31.
Pouliot, Wilfred A., Lowell, Mass. Safety wrench. 1,860,871; May 31.
Powers, Frank T., Douglaston, N. Y. Etcher slide. 1,861,161; May 31.
Pratt, Goodrich B., assignor to Bond Electric Corporation, Jersey City, N. J. Flashlight safety switch. 1,860,842; May 31.
Preferred Utilities Manufacturing Corporation. (See Lake, Harry E., assignor.)
Prentis, Joseph N., assignor to General Motors Corporation, Detroit, Mich. Emergency brake hook-up. 1,861,028; May 31.

Price, William W., and C. W. Ripsch, assignors to The Buckeye Portable Tool Company, Dayton, Ohio. Pneumatic tool. 1,860,872; May 31.
Pritz, James J. (See Patterson, T. S., and Pritz, assignors.)
Pritz, Peter E. (See Patterson, T. S., and Pritz.)
Proctor, Barton A., Pelham, assignor to News Projection Corporation, New York, N. Y. Multiple projecting device. 1,860,951; May 31.
Proctor & Schwartz, Incorporated. (See Hurxthal, Alpheus O., assignor.)
Producto Machine Company, The. (See Marsilius, N. M., and Olsen, assignors.)
Prosperity Company, The. (See Ledbetter, James C., assignor.)
Protectahood Corporation, The. (See Sawyer, Leicester B., assignor.)
Putnam, Frank O., Dallas, Tex. Writing instrument. 1,861,241; May 31.
Pyron, Frank, West New York, N. J. Metal lath for brick veneers. 1,861,359; May 31.
Quist, Henry, Brooklyn, N. Y. Portable link sawing machine. 1,861,162; May 31.
Radio Corporation of America. (See Biguet, Jacques, assignor.)
Radio Corporation of America. (See Cady, Walter G., assignor.)
Radio Corporation of America. (See Gill, Ernest W. B., assignor.)
Radio Corporation of America. (See Minton, John P., assignor.)
Ramelaw, Axel. (See Bihl, William E.)
Randall, Henry C. P., Northampton, England. Boot and shoe. 1,860,689; May 31.
Randolph, Carl A., Rock Island, Ill. Frost and moisture absorber for windows. 1,861,242; May 31.
Rateau, Henri, Weirton, W. Va. Helmet. 1,860,690; May 31.
Ravert, William I., assignor to A. W. Drake Manufacturing Company, Hazelton, Pa. Walking toy. 1,860,476; May 31.
Ray, Joshua R. (See Ray, Thomas and J. R.)
Ray, Thomas and J. R., Manistee, Mich. Separator. 1,861,163; May 31.
Raymond Concrete Pile Company. (See Upson, Maxwell M., assignor.)
Raymond Concrete Pile Company. (See Watt, Elihu D., assignor.)
Raytheon Inc. (See Smith, Charles G., assignor.)
Rebl, Carl, Brooklyn, N. Y. Lamp. 1,861,360; May 31.
Redler, Arnold, Flour Mills, Sharpness Dock, England, assignor to Redler Conveyor Company, Quincy, Mass. Conveyer. 1,860,952; May 31.
Redler Conveyor Company. (See Redler, Arnold, assignor.)
Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Roller cutter boring drill. 1,860,953; May 31.
Reed, David A., Berkeley, Calif. Arch support and callous relieving pad. 1,860,595; May 31.
Rees, Silas, London, England. Spring motor for gramophones and other purposes. 1,861,066; May 31.
Reid, James S., assignor to The Eaton Axle & Spring Company, Cleveland, Ohio. Closure. 1,860,721; May 31.
Reid, John, Oil City, Pa. Belt tightener and guide. 1,861,133; May 31.
Reimschissel, Charles A. (See Shearer, H. T., and Reimschissel.)
Reinold, Louis, assignor to Manufacturing Metallurgique De Tournus, Tournus, France. Handgrip. 1,860,596; May 31.
Reis, Curt F., assignor to Excel Magneto Co., Chicago, Ill. Vertical magneto. 1,860,749; May 31.
Rembrandt Intaglio Printing Company Limited. (See Baldwin, George T., assignor.)
Remington, Joseph P., Philadelphia, Pa. Pressure gauge. 1,860,904; May 31.
Remington Rand Inc. (See Clark, Thomas B., assignor.)
Renold, Charles G., Didsbury, Manchester, assignor to Hans Renold Limited, Manchester, England. Conveyer chain and the like. 1,860,597; May 31.
Renold, Hans, Limited. (See Renold, Charles G., assignor.)
Reo Motor Car Company. (See Bethune, John, assignor.)
Reo Motor Car Company. (See Hildorf, W. G., and McIntosh, assignors.)
Republic Steel Corporation. (See Coyle, Paul L., assignor.)
Republic Steel Corporation. (See Flynn, Frank E., assignor.)
Reuter-Lorenzen, Paul, Detroit, Mich., assignor to Morgan & Wright, Tire. Des. 87,082; May 31.
Reyrolle, A., & Company Limited. (See Allan A., and Christie, assignors.)
Rheiner, Alfred, assignor to the Firm Chemical Works formerly Sandoz, Basel, Switzerland. Preparation of effect threads. 1,861,320; May 31.
Rheinische Metallwaaren- und Maschinenfabrik. (See Waninger, Carl, assignor.)
Ricard, Eloi, and H. M. Guinot, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y. Manufacture of anhydrous acetic acid. 1,860,512; May 31.
Ricard, Eloi, and H. M. E. Guinot, Melle, France, assignors by mesne assignments, to U. S. Industrial Alcohol Co., New York, N. Y. Extraction in the anhydrous state of fatty acids contained in dilute aqueous solutions. 1,860,553; May 31.
Ricard, Eloi, P. Savarit, and H. M. Guinot, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y. Manufacture of absolute alcohol. 1,860,554; May 31.
Rice, John S., Biglerville, Pa. Apparatus for packing fruit and the like. 1,860,873; May 31.
Rich, Calvin E., and T. F. Rich, El Campo, Tex. Tractor implement attachment. 1,861,134; May 31.
Rich, Edward L., jr., Catonsville, Md. Combined match and cigarette package. 1,861,361; May 31.
Rich, Tyra F. (See Rich, Calvin E. and T. F.)
Richard, Charles F., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Paper feeding and cutting mechanism. 1,860,691; May 31.
Richards, Charles L. (See Forson, Alfred E., sr., assignor.)
Richter, Carl F., assignor to Stebbins Engineering and Manufacturing Company, Watertown, N. Y. Digester. 1,860,477; May 31.
Richter, George A., assignor to Brown Company, Berlin, N. H. Producing low-viscosity cellulose fiber. 1,760,341; May 31.
Richter, George A., assignor to Brown Company, Berlin, N. H. Lowering the solution viscosity of cellulose fiber. 1,860,432; May 31.
Ricketts, John L., and C. F. Dengler, Philadelphia, Pa. Oil burner. 1,861,284; May 31.
Riehm, Wilhelm, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany. Injection combustion engine having an air granary. 1,861,302; May 31.
Riggs, Hervey M., Emporia, Kans. Propeller release. 1,860,750; May 31.
Riley, Harry R., Bend, Oreg. Furnace construction. 1,861,135; May 31.
Riney, Arthur H. (See Endacott, P. S., and Riney.)
Ripsch, Charles W. (See Price, W. W., and Ripsch.)
Risser, Arthur L., assignor to U. S. Bottlers Machinery Company, Chicago, Ill. Machine for applying threaded bottle caps. 1,860,954; May 31.
Ristow, Carl, and M. Lesheim, Berlin, Germany, assignors to Robinson & Golluber, New York, N. Y. Combined gift holder and greeting card. 1,861,136; May 31.
Rittenhouse, Neilson, Lambertville, N. J. Wireless receiving system. 1,860,692; May 31.
Ritzel, Willis J., Pasadena, Calif. Elongated tablet package and wrapping. 1,861,285; May 31.
Roberts, Frank S., Detroit, and G. Anderson, Lansing, Mich. Compartment car. 1,860,620; May 31.
Robertson, H. H. Company. (See Peverley, Ralph S., assignor.)
Robertson, Henry M., St. Paul, assignor of one-sixth to S. W. L. Johnson, Minneapolis, and one-sixth to C. Zaremsky, St. Paul, Minn. Oil gun. 1,861,190; May 31.
Robertson, John H., London, England. Variable friction gearing. 1,860,621; May 31.
Robison & Golluber. (See Ristow, C., and M. Lesheim, assignor.)
Rockbestos Products Corporation. (See Anderson, Herbert O., assignor.)
Rodd, Ernest H., and F. L. Sharp, Blackley, Manchester, assignor to Imperial Chemical Industries, Limited, London, England. New triarylmethane dyestuffs. 1,860,751; May 31.
Rodriguez, Rafael V., New York, N. Y. Advertising device. 1,861,067; May 31.
Röhre, Kurt, and O. Hensler, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of alkali metal phosphates. 1,869,818; May 31.
Rolfs Kohlen-Oxyd-Verbrenner Gesellschaft mit beschrankter Haftung. (See Greve, C. H., and Schwarz, assignors.)
Rome Company, The. (See Pittoni, Louis E., assignors.)
Romig, Eugen, and K. Holzach, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyestuffs of the tartrazine series. 1,860,478; May 31.
Rosen, Hyman A., Baltimore, Md. Indicator and reminder. 1,861,137; May 31.
Rosenbaum, Lester F., assignor to Sam Rosenbaum Sons & Company, Kalamazoo, Mich. Trousers. 1,860,433; May 31.
Rosenbaum, Rudolph R., Chicago, Ill. Lubricant. 1,860,622; May 31.
Rosenbaum, Sam, Sons & Company. (See Rosenbaum, Lester F., assignor.)
Rosenthal, Leo, Vohwinkel, near Elberfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Synthetic resins. 1,860,479; May 31.
Röst-Grande, Alex. (See Hubert, E., Röst-Grande, and Weisbrod.)
Roth Rubber Company. (See Knight, William W., assignor.)
Rothman, Estelle T. (See Rothman, M. and E. T.)
Rothman, Morris and E. T., Bayonne, N. J. Fire alarm and photographic device. 1,861,243; May 31.
Routtenberg, Zacharia, Los Angeles, Calif. Sewing machine cutting-attachment. 1,861,068; May 31.
Rowe, Irving R., assignor to The Atwood Machine Company, Stonington, Conn. Spinning and twisting machine. 1,860,955; May 31.
Royal Worcester Corset Company, The. (See Wittenberg, Margaret H., assignor.)

Royer Foundry & Machine Company. (See Royer, George F., assignor.)
Royer, George F., assignor to Royer Foundry & Machine Company, Wilkes-Barre, Pa. Screening apparatus. 1,860,480; May 31.
Royer, George F., assignor to Royer Foundry and Machine Company, Wilkes-Barre, Pa. Apparatus for handling molders' sand. 1,860,481; May 31.
Royle, Edwin B., Eureka, Utah. Automobile ventilator. 1,861,286; May 31.
Ruckstuhl, Charles S., St. Louis, Mo. Thermometer. 1,861,164; May 31.
Rudolph, Corrie F., Washington, D. C., and C. O. Vermillion, East Orange, N. J. Variable inductance coil. 1,860,722; May 31.
Rumbarger, Bradley W., Monroe, La., assignor to Imperial Oil & Gas Products Company, Pittsburgh, Pa. Apparatus for treating hydrocarbons. 1,860,598; May 31.
Rumford Chemical Works. (See Bryan, Charles S., assignor.)
Runciman, Truman B., Exeter, Calif. Truck. 1,861,321; May 31.
Rusby, Hermann, Stocksbridge, near Sheffield, England, assignor to Westinghouse Electric & Manufacturing Company. Coupling for shafts. 1,860,552; May 31.
Russell, Buford B., assignor to Drying Systems, Inc., Chicago, Ill. Service truck for refrigerators. 1,861,191; May 31.
Russell, Edward A., assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Flexible pipe structure. 1,860,956; May 31.
Rutkoskie, George A., assignor to The McBee Binder Company, Athens, Ohio. Apparatus for producing wax carbon spots on sheets of paper by impression. 1,860,957; May 31.
Ryan, Edward J., assignor of two-fifths to F. J. Kuna, and one-fifth to H. J. Lorang, St. Louis, Mo. Masking cream. 1,861,165; May 31.
Ryan, George F., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Pattern copying machine. 1,860,723; May 31.
Ryan, John F., Woodbridge, and C. Stegmayer, Sewaren, assignors to The Mutton Hollow Fire Brick Company, Woodbridge, N. J. Fritting furnace. 1,861,138; May 31.
S. & S. Corrugated Paper Machinery Co. (See Stern, I., and Huether, assignors.)
St. George, Frank, and F. W. Cross, Boston, Mass. Automobile theft preventing signal. 1,861,101; May 31.
Salem Glass Works. (See Garvey, Wallace E., assignor.)
Sallee, Webster I., Cleveland, Ohio. Method and apparatus for burning liquid fuels. 1,860,958; May 31.
Samburg, Maurice, Brooklyn, assignor to Lock Patents Holding Corporation, New York, N. Y. Lock. 1,861,139; May 31.
Samburg, Maurice, Brooklyn, assignor to Lock Patents Holding Corporation, New York, N. Y. Lock. 1,861,140; May 31.
Samburg, Maurice, Brooklyn, assignor to Lock Patents Holding Corporation, New York, N. Y. Lock. 1,861,141; May 31.
Samuels, Russell R., Chicago, Ill., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Apron tension device. 1,860,623; May 31.
Sand, John, Newark, N. J., assignor to Gemex Company. Foldable extension device for a bracelet strap. 1,861,029; May 31.
Sander, Willy, assignor to the Firm of C. Zeiss, Jena, Germany. Coordinate transformer. 1,861,192; May 31.
Sanite Corporation. (See Whitehouse, John N., assignor.)
Sanson, Stanton D., Philadelphia, Pa. Stocking. Des. 87,083; May 31.
Sauerwein, Karl, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of ethylene from acetylene. 1,860,624; May 31.
Savarit, Paul. (See Ricard, E., Savarit, and Guinot.)
Sawtelle, Charles A. (See Gardner, J. H., and Sawtelle.)
Sawyer, Leicester B., assignor to The Protectahood Corporation, Auburn, N. Y. Automobile sent heat insulator. 1,860,752; May 31.
Sawyer, Willard N., Winchendon, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Wood heel grooving machine. 1,860,789; May 31.
Schacht, Clifford A., Huntington, Ind. Sliding caster. 1,861,094; May 31.
Schacht, Clifford A., Huntington, Ind. Sliding caster cup. 1,861,095; May 31.
Schaeffer, Herbert J., Reading Pa. Deck of playing cards. Des. 87,084; May 31.
Schamberger, Julius, Elizabeth, N. J. Apparatus for separating oil from water. 1,860,819; May 31.
Schaumann, Otto. (See Lautenschläger, C. L., Ludwig, and Schaumann.)
Schellenbach, William L., Wyoming, assignor to The American Tool Works Company, Cincinnati, Ohio. Radial drill. 1,861,030; May 31.
Schellentrager, Eugene W., Shaker Heights, and B. E. Clarkson, assignors to Atlas Bolt & Screw Company, Cleveland, Ohio. Vehicle. 1,860,396; May 31.
Schemmel, Robert C., Union City, Ind. Blind nail concealed stitch welt. 1,861,322; May 31.
Scherrer, Peter, Brooklyn, N. Y. Apparatus for applying reducing agents to printing fountains. 1,861,142; May 31.
Schettler, Gustav A., Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me. Leather working machine. 1,860,625; May 31.
Scheuner, Charles, Chicago, Ill. Quick detachable handle for tools. 1,861,363; May 31.
Schickler, Albert C. (See Allyne, E. E., and Schickler.)
Schiltz, John M., Wichita, Kans. Animal trap. 1,860,599; May 31.
Schindler, Robert B., assignor of one-half to Schuylkill Valley Mills, Inc., Spring City, and one-half to Howard Hosiery Company, Philadelphia, Pa. Stocking. Des. 87,085; May 31.
Schipper, George A., Aurora, Ind. Sanding machine. 1,860,905; May 31.
Schlack, Paul. (See Möhring, A., Schultze, and Schlack.)
Schlaepfer, Arnold, assignor to Schweizerische Industrie-Gesellschaft, Neuhausen, near Schaffhausen, and Leclanché S. A., Yverdon, Switzerland. Machine for wrapping and tying cylindrical bodies. 1,861,096; May 31.
Schlosser, Arthur G., assignor to Aircraft Development Corporation, Detroit, Mich. Airship. 1,860,555; May 31.
Schloz, Arthur H. (See Hatch, M. R., and Schloz.)
Schmid, Max, Riehen, near Basel, assignor to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Stilbene dyestuffs and making same. 1,861,323; May 31.
Schmid, Max, Riehen, near Basel, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Dyestuffs of the stilbene series and making same. 1,861,324; May 31.
Schmidt, Jakob, Newark, N. J. Combination radio and clock cabinet with fountain. Des. 87,086; May 31.
Schmidt, Max, Dessau-in-Anhalt, and P. Hanke, Wolfen Kreis Bitterfeld, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Photographic film-pack casing. 1,860,482; May 31.
Schmidt, William C., Oak Park, Ill., assignor, by mesne assignments, to T. W. & C. B. Sheriden Company, New York, N. Y. Bookbinding machine. 1,861,325; May 31.
Schmiedel, Johannes, assignor to the Firm Universelle Cigarettenmaschinen-Fabrik, J. C. Müller & Co., Dresden, Germany. Machine for applying edging strips to cartons and the like. 1,861,143; May 31.
Schmiedel, Johannes, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik, J. C. Müller, Dresden, Germany. Method of and apparatus for applying sealing strips. 1,861,144; May 31.
Schmitt, Roy, Fairview, Kans. Ditch check. 1,861,031; May 31.
Schneider, Bernard R., Lyndhurst, and K. Kaiser, Ridgefield, N. J. Machine for inclosing metallic coiled springs. 1,161,429; May 31.
Schneider, Earl G. (See Maguire, Charles L., assignor.)
Schnell, Steve, assignor to Wagner Electric Corporation, St. Louis, Mo. Brake mechanism. 1,860,959; May 31.
Schreck, Hans L., assignor to Treadwell Engineering Company, Easton, Pa. Universal joint. 1,861,364; May 31.
Schreck, Hans L., assignor to Treadwell Engineering Company, Easton, Pa. Flexible coupling. 1,861,365; May 31.
Schubert & Salzer Maschinenfabrik, Aktiengesellscaft. See Heinitz, Woldermar, assignor.)
Schultheiss, Hans, Baltimore, Md. Applicator. 1,860,790; May 31.
Schultze, Guido. (See Möhring, A., Schultze, and Schlack.)
Schumacher, Franz A., Evanston, assignor, by mesne assignments, to trustees of the Security Grinding Wheel Co., Chicago, Ill. Polishing and grinding material and making same. 1,860,724; May 31.
Schuylkill Valley Mills, Inc. (See Schindler, Robert B., assignor.)
Schwarz, Gustav, G. m. b. H. (See Sokohl, Heinrich, assignor.)
Schwarz, Walter C. D. (See Greve, C. H., and Schwarz.)
Schweizerische Industrie-Gesellschaft. (See Schlaepfer, Arnold, assignor.)
Schwendner, Anthony F., Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company. Valve operating mechanism. 1,861,092; May 31.
Schwieterman, August G., Dayton, Ohio. Washing machine. 1,861,244; May 31.
Scott, Kenneth L., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing magnetic cores. 1,860,820; May 31.
Scott, Kenneth L., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for producing magnetic cores. 1,860,843; May 31.
Scovill Manufacturing Company. (See Fenton, Paul E., assignor.)
Scovill Manufacturing Company. (See Simons, Ernest D., assignor.)
Seaver, Jay J., Evanston, assignor to H. A. Brassert & Company, Chicago, Ill. Checkerwork supporting and holding means for blast stoves. 1,860,368; May 31.
Security Grinding Wheel Co., Trustees of. (See Schumacher, Franz A., assignor.)
Seeger, Edwin W., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. System of electrical distribution. 1,860,626; May 31.
Seeger Refrigerator Company. (See Spreen, Charles C., assignor.)
Seel, Paul. (See Berger, A. N., and Seel.)

Seely, John M., near New Carlisle, assignor to The Champion Company, Springfield, Ohio. Metal burial vault. Des. 87,087; May 31.
Selberling Rubber Company. (See Kilborn, Karl B., assignor.)
Semon, Waldo L., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,860,484; May 31.
Senisch, Charles, Omaha, Nebr. Protective turret. 1,861,193; May 31.
Service Station Equipment Company. (See Manson, Thomas M., assignor.)
Sessions, Donald W., London, England. Device for operating lifting jacks. 1,861,326; May 31.
Sewall, Frank J., Columbiana, Ohio. Educational device. 1,860,483; May 31.
Shafer, James A., East Cleveland, assignor to National Malleable & Steel Castings Company, Cleveland, Ohio. Lock. 1,860,369; May 31.
Shafer, James A., East Cleveland, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Lock. 1,861,032; May 31.
Sharp, Frederick L. (See Rood, E. H., and Sharp.)
Sharp, John, Cleveland, Ohio. Electromagnetic massager. 1,860,906; May 31.
Sheaffer Pen Company, W. A. (See Cuthbert, William R., assignor.)
Shearer, Harry T., and C. A. Reimschissel, assignors to Landis Machine Company, Waynesboro, Pa. Die head. 1,861,327; May 31.
Sheedy, Frank T., and L. Traung, assignors, by direct and mesne assignments, to The Traung Company, San Francisco, Calif. Lithographic transfer press. 1,860,693; May 31.
Shepherdson, Arnold, et al. (See Davidson, A., Hallwood, Hennesey, and Shepherdson.)
Sheridan, T. W. & C. B., Company. (See Schmidt, William C., assignor.)
Sherman, John Q., Dayton, Ohio. Toy. 1,860,627; May 31.
Sherwood, Philip H., Norwalk, Conn. Funeral marker for automobiles. 1,861,366; May 31.
Shields, Andrew G., Attleboro, Mass. Cosmetic container. 1,860,694; May 31.
Shimer, John M., Wilkinsburg, assignor to Wilson-Snyder Manufacturing Corporation, Braddock, Pa. Pump liner holding device. 1,860,484; May 31.
Shipley, Roy A., Canton, Ohio, assignor, by mesne assignments, to National Fireproofing Corporation, Pittsburgh, Pa. Conveyer. 1,860,485; May 31.
Shull, William G., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone receiver. 1,860,960; May 31.
Sieber, Fritz, Baden, Switzerland. System and apparatus for synchronizing polyphase lines. 1,861,166; May 31.
Siemens & Halske Aktiengesellschaft. (See Keinath, Georg, assignor.)
Siemens Schuckertwerke Aktiengesellschaft. (See Altenkirch, Edmund, assignor.)
Simmen, Paul J., Eden, N. Y. Automatic train control. Re18,484; May 31.
Simmons, Thomas A., Huddersfield, assignor to British Dyestuffs Corporation Limited, Manchester, England. Manufacture of trirylmethane dyes. 1,860,753; May 31.
Simons, Ernest D., Cheshire, assignor to Scovill Manufacturing Company, Waterbury, Conn. Self engaging socket for resilient studs. 1,861,097; May 31.
Simpson, Emory G., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Smoking case. 1,861,287; May 31.
Simpson, John O. (See Carlson, E. L., and Simpson.)
Sipp-Eastwood Corporation. (See Klein, Frederick, assignor.)
Sirch, Charles W., Los Angeles, Calif. Radiating marine apparatus. 1,860,435; May 31.
Skayef Ball Bearing Company, The. (See Hutchinson, Walter L., assignor.)
Slady, Frank W., and O. Kupferman, assignors to Leviton Manufacturing Company, Inc., Brooklyn, N. Y. Electric switch. 1,860,961; May 31.
Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Pneumatic tool. 1,860,628; May 31.
Slawinski, Alexander, Poznan, Poland. Method and apparatus for the determination of the concentration of blood, milk, and other suspensions by means of electric current. 1,860,397; May 31.
Slaymaker Electric Welding Company. (See Slaymaker, Robert K., assignor.)
Slaymaker, Robert K., assignor to Slaymaker Electric Welding Company, Detroit, Mich. Display rack for fruits, vegetables, and the like. 1,860,600; May 31.
Sloane, William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Power shovel. 1,861,194; May 31.
Small, Norman M., assignor to Frick Company, Waynesboro, Pa. Carbon dioxide snow machine. 1,861,328; May 31.
Smallwood, Albert A., Martinsburg, W. Va. Freight car hand brake attachment. 1,860,907; May 31.
Smith, Charles G., Medford, assignor to Raytheon Inc., Cambridge, Mass. Electric discharge apparatus. 1,861,098; May 31.
Smith, Edward B., Cleveland, Ohio, assignor to General Electric Company. System of motor control. 1,861,245; May 31.
Smith, Ernest J., London, England, assignor to The Goss Printing Press Company. Web controlling apparatus. 1,860,962; May 31.
Smith Glass Company, L. E. (See Hall, James S., assignor.)
Smith, Grover C., Ogden, Utah. Corner and division bar. 1,860,754; May 31.
Smith, Herbert G., Rochester, N. Y., and T. Burrick, Detroit, Mich. Fingerprint apparatus. 1,860,486; May 31.
Smith, Herbert G., Rochester, N. Y., and T. Burrick, Detroit, Mich. Identification apparatus. 1,861,367; May 31.
Smith, John H., Detroit, Mich. Adjustable tool holder. 1,861,246; May 31.
Smith, Thomas G., Lake Worth, Fla. Weeding and transplanting implement. 1,860,963; May 31.
Smith, Wallace W., Chicago, Ill. Multiple drilling mechanism. 1,861,099; May 31.
Smith, William H., San Diego, Calif. Dirigible airship hangar. 1,861,069; May 31.
Smoot, Charles H., Maywood, N. J. Regulator. 1,860,821; May 31.
Smulski, Theodore J., Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind. Motor brush holder. 1,860,370; May 31.
Société Anonyme d'Ougree Marihaye. (See Beaujean, Camille, assignor.)
Societe Generale d'Entreprises au Maroc. (See Montandon, Arthur, assignor.)
Societe Huiles, Goudrous & Derives. (See Perilhou, Etienne, assignor.)
Society of Chemical Industry in Basle. (See Schmid, Max, assignor.)
Sole, John H., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulator. 1,860,556; May 31.
Sommer, William H., Peoria, Ill. Truck. 1,861,145; May 31.
Sommer, William H., Peoria, Ill. Lubricating device. 1,861,146; May 31.
Sorensen, Earl H., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Assembling apparatus. 1,860,844; May 31.
Sorrentino, Charles, Cleveland, Ohio. Milk bottle carrier. 1,861,368; May 31.
Sperry, John B., assignor to The American Well Works, Aurora, Ill. Pumping apparatus. 1,860,513; May 31.
Spikerman, Frank T., Akron, assignor to The Osborn Manufacturing Company, Cleveland, Ohio. Slice bar. 1,861,105; May 31.
Sprague, Frank J., assignor to Sprague Safety Control & Signal Corporation, New York, N. Y. Apparatus for controlling the movement of vehicles on railroads. 1,860,908; May 31.
Sprague Safety Control & Signal Corporation. (See Sprague, Frank J., assignor.)
Spreen, Charles C., Detroit, Mich., assignor, by mesne assignments, to Seeger Refrigerator Company, St. Paul, Minn. Mechanical refrigeration. 1,860,436; May 31.
Stahl, Frank E., Tonawanda, N. Y., and H. Dudley, St. Catherines, Ontario, Canada, assignors to The Columbus-McKinnon Chain Corporation, Tonawanda, N. Y. Tire chain fastener. 1,860,695; May 31.
Standard Brands Incorporated. (See Bennett, W. G., and Peake, assignors.)
Standard Gage Company. (See Aldeborgh, Erik H., assignor.)
Standard Oil Development Company. (See Abrams, Frank W., assignor.)
Standard Oil Development Company. (See Blau, Ludwig W., assignor.)
Standard Oil Development Company. (See Howard, Frank A., assignor.)
Standard Oil Development Company. (See Stratford, Reginald K., assignor.)
Standard Oil Development Company. (See Sydnor, Harold, assignor.)
Standard Oil Development Company. (See Thiede, William F., assignor.)
Stanitz, Jacques, assignor to The Youngstown Pressed Steel Company, Warren, Ohio. Support. 1,861,100; May 31.
Stanley Works, The. (See Warner, Emerson R., assignor.)
Steadman, Royal C., Washington, D. C., dedicated, by assignment to the Government and the People of the United States of America. Reenforcing models of fruit or other objects made of wax or similar fusible material. 1,860,601; May 31.
Stebbins, Albert H., Los Angeles, Calif. Air classifier. 1,861,247; May 31.
Stebbins, Albert H., Los Angeles, Calif. Air classifier. 1,861,248; May 31.
Stebbins Engineering and Manufacturing Company. (See Richter, Carl F., assignor.)
Steel Scaffolding Company, The. (See Marshall, Arnold C., assignor.)
Stegmayer, Charles. (See Ryan, J. F., and Stegmayer.)
Stelmel, Peter, Hennef-Sieg, Germany. Automatic sacking balance with a conveying and a packing mechanism. 1,861,147; May 31.

Stern, Isaac, New York, and J. Huether, assignors to S. & S. Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y. Paper machine. 1,860,845; May 31.
Stevens, Arthur, Buffalo, assignor to U. S. Industrial Alcohol Co., New York, N. Y. Solvents and their applications. 1,860,822; May 31.
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid pressure tool. 1,860,964; May 31.
Stevens, Jerry W., and W. H. Kenety, Cloquet, Minn., assignors to Chemipulp Process Inc., Watertown, N. Y. Apparatus and process for production of pulp. 1,860,755; May 31.
Stevenson, Harvey J., and M. Kessler, assignors to National Manicuring Machine Co., Los Angeles, Calif. Manicuring disk abrader. 1,860,629; May 31.
Stevenson, Harvey J., and M. Kessler, assignors to National Manicuring Machine Co., Los Angeles, Calif. Manicuring buffer. 1,860,630; May 31.
Stewart, Duncan J., assignor to H. D. Colman, Rockford, Ill. Motor control mechanism. 1,860,631; May 31.
Stewart, Leroy C. (See Hunter, R. M., Stewart, Houser, and De Pree.)
Stewart-Warner Corporation. (See Muzzy, William H., assignor.)
Stiansen, Anton P., Brooklyn, N. Y. Chain. 1,860,514; May 31.
Stickless Corporation, The. (See Lichter, Malvin, assignor.)
Stokely, Ray L., Floral Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,860,515; May 31.
Stokely, Ray L., Floral Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,861,196; May 31.
Stone, Leo. (See Bodge, William, assignor.)
Stone, Leo, Brockton, Mass. Making open ended envelopes. 1,860,965; May 31.
Stone, Nathan M., Chicago, Ill. Mileage record holder for automobiles. 1,860,632; May 31.
Stoner, Frederick B., Riverside, Calif. Dual rotary valve. 1,860,725; May 31.
Stratford, Reginald K., Sarnia, Ontario, Canada, assignor to Standard Oil Development Company. Treating lubricating oils with phenol. 1,860,823; May 31.
Strauss, Joseph B., Chicago, Ill. Direction road sign. Des. 87,088; May 31.
Stuart, Henry B., assignor to Whitin Machine Works, Whitinsville, Mass. Spinning ring and shield. 1,861,249; May 31.
Sturtevant, B. F., Company. (See Anderson, Samuel M., assignor.)
Sukohl, Heinrich, assignor to the Firm Gustav Schwarz G. m. b. H., Berlin-Waidmannslust, Germany. Propeller for aircraft. 1,860,557; May 31.
Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)
Sundberg, Carl E., Quincy, assignor to Albert & J. M. Anderson Manufacturing Company, South Boston, Mass. Time switch. 1,860,371; May 31.
Sundeen, Caleb, and J. G. Fuller, Gardner, Mass., assignors to Iceberg Manufacturing Company. Water cooler. 1,861,033; May 31.
Sundt, Edward V., Chicago, Ill. Low capacity fuse and making the same. 1,861,369; May 31.
Sunstrom, Mark T., assignor to Alpha Chemical Company, Inc., Baltimore, Md. Floor oil. 1,860,372; May 31.
Superheater Company, The. (See True, Charles H., assignor.)
Superior Switchboard & Devices Company, The. (See Grace, Richard W., assignor.)
Swiss Locomotive and Machine Works. (See Büchi, Alfred, assignor.)
Sydnor, Harold, Elizabeth, N. J., assignor to Standard Oil Development Company. Process and apparatus for cracking hydrocarbons. 1,860,966; May 31.
Synck, Henry, assignor to The New Idea Spreader Company, Coldwater, Ohio. Corn lifter. 1,860,633; May 31.
Synck, Henry, assignor to The New Idea Spreader Company, Coldwater, Ohio. Corn picking machine. 1,860,634; May 31.
Tada, Renzo, Toyotama Gun, Tokyo Fu, assignor to Toyo Compressol Kabushiki Kaisa (The Oriental Compressol Co. Ltd.), Tokyo, Japan. Molding device for concrete piles. 1,860,558; May 31.
Tait, William, West Reading, Pa. Stocking. Des. 87,089; May 31.
Tannewitz, Edward F., assignor to Detroit Cord Manufacturing Company, Detroit, Mich. Window mounting. 1,861,034; May 31.
Tarn, Thomas R., Pittsburgh, Pa. Propulsion of vessels. 1,861,035; May 31.
Tate, Alfred O., Toronto, Ontario, Canada. Apparatus for treating light and similar rays. 1,860,824; May 31.
Tate, Alfred O., Toronto, Ontario, Canada. Apparatus for treating light and similar rays. 1,860,967; May 31.
Taylor, Albert H., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Multiple channel transmission system. 1,861,370; May 31.
Taylor Bros. (Sandiacre) Limited. (See Matthews, John D., assignor.)
Taylor, Frank F., Company, The. (See Gill, Donald W., assignor.)
Taylor, George D., Monticello, Ky. Marking test sheets. 1,860,909; May 31.
Taylor, William H., Howard, S. Dak. Door latch. 1,860,910; May 31.
Taylor, William T., East Finchley, England. Polyphase transformer system. 1,860,602; May 31.
Technicolor Motion Picture Corporation. (See Troland, Leonard T., assignor.)
Teer, William F., Bucklin, Kans. Valve stem patch for inner tubes. 1,861,102; May 31.
Teletype Corporation. (See Hulfish, David E., assignor.)
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Televator Corporation. (See Hirshfeld, Jerome, assignor.)
Temple Corporation. (See Andres, Paul G., assignor.)
Templeton, Herbert J., Brooklyn, assignor of one-tenth to E. C. O'Donnell, New York, N. Y. Moving picture projector. 1,861,197; May 31.
Ternstedt Manufacturing Company. (See Archer, T. P., and Flynn, assignors.)
Ternstedt Manufacturing Company. (See Simpson, Emory G., assignor.)
Texas Company, The. (See Gallsworthy, Benjamin, assignor.)
Thauss, Alfred, Cologne-Deutz, G. Mauthe, Cologne-Holweide, and A. Doser, Cologne-Mulheim, Germany, assignors, by mesne assignments, to General Aniline Works Inc., New York, N. Y. Water soluble condensation products of sulphonated aromatic hydrocarbons or hydroxy derivatives thereof with aralkyl halides. 1,860,487; May 31.
Thelen, Otto H. L., Lynn, Mass. Shoe and shank stiffener therefor. 1,860,437; May 31.
Thiede, William F., Westfield, N. J., assignor to Standard Oil Development Company. Apparatus for extinguishing fires in tanks. 1,860,825; May 31.
Thies, Urban C., Dayton, assignor to The Globe Wernicke Company, Cincinnati, Ohio. Hinged structure. 1,860,438; May 31.
Thies, Urban C., Dayton, Ohio, assignor to The Globe-Wernicke Company, Cincinnati, Ohio. Hinged structure. 1,860,439; May 31.
Thomas & Betts Co., The. (See Church, Lewis H., assignor.)
Thomas, John V., Pasadena, and B. D. Balthis, Los Angeles, Calif. Fluid flow control system. 1,860,516; May 31.
Thomas, Noah T., West Hartford, assignor to The Hartford Faience Company, Hartford, Conn. Lighting fixture. 1,860,791 May 31.
Thompson, Robert G., Montclair, N. J., assignor to Lufkin Rule Company, Saginaw, Mich. Tape measure hook. 1,860,635; May 31.
Thompson, Vincent, et al., legal representatives. (See Parsons, Charles A.)
Thomson-Gibb Electric Welding Company. (See Gibb, William H., assignor.)
Thomson, S. H., Manufacturing Company, The. (See Hummert, Robert H., assignor.)
Thordarson, Chester A., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Electrical motor and generator. 1,861,036; May 31.
Thordarson, Chester H., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Mechanism for slitting and winding paper and metal ribbons into coils. 1,861,037; May 31.
Thordarson Electric Manufacturing Company. (See Thordarson, Chester H., assignor.)
Thornley, Joseph H., Evanston, Ill. Mechanical digging apparatus. 1,861,038; May 31.
Thorpe, Roy. (See Chesney, Carl E., assignor.)
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Clutch operating mechanism. 1,860,636; May 31.
Tilden, Bert O., assignor to B. O. T. Manufacturing Company, Trenton, N. J. Flush valve. 1,861,250; May 31.
Tillbrook, Edgar R., Erie, Pa. Alarm clock stand. Des. 87,090; May 31.
Timian, Harold H., assignor to Wheeler-Schebler Carburetor Co., Indianapolis, Ind. Manifold for down draft carburetors. 1,860,373; May 1[illegible].
Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)
Toledo Machine & Tool Company, The. (See Dorman, Neal W., assignor.)
Toledo Machine & Tool Company. (See Hatch, M. R., and Schloz, assignors.)
Topham, Laurence E., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon lasts. 1,860,696; May 31.
Torrence, Walter S., New York, assignor to W. H. Meyer & Son, Inc., Brooklyn, N. Y. Snelling machine. 1,861,198; May 31.
Toyo Compressol Kubushiki Kaisha (The Oriental Compressol Co. Ltd. (See Tada, Renzo, assignor.)
Tracy, Michael J., St. Louis County, Mo. Shower bath construction. 1,860,968; May 31.
Traung Company, The. (See Sheedy, F. T., and Traung, assignors.)
Traung, Louis. (See Sheedy, F. T., and Traung.)
Travias, Norman W., Des Moines, Iowa. Radiator screen structure. 1,860,697; May 31.
Treadwell Engineering Company. (See Schreck, Hans L., assignor.)

Tretolite Company. (See De Groote, Melvin, assignor.)
Trico Products Corporation. (See Hueber, Henry, assignor.)
Trimble, Hollie L., Tucson, Ariz. Toothbrush. 1,860,911; May 31.
Triplett, Louis B., Pasadena, Calif. Patient holder. 1,860,874; May 31.
Trogner, Arthur M., East Orange, N. J., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Rotary variable condenser. 1,860,440; May 31.
Trogner, Arthur M., Takoma Park, Md., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Frequency changing system. 1,861,371; May 31.
Troland, Leonard T., Cambridge, assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass. Two-stage dyeing films and resulting product. 1,860,912; May 31.
True, Charles H., Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Pipe and header joint. 1,860,969; May 31.
Trumble Gas Trap Company. (See McGraw, W., and Adams, assignors.)
Truscon Steel Company. (See Kahn, Julius, assignor.)
Tschudi, Erwin W., Baltimore, assignor to The Black & Decker Manufacturing Company, Towson, Md. Hammer rectilinear reciprocation. 1,860,826; May 31.
Turnbull, Wallace R., Rothesay, New Brunswick, Canada. Angle indicator for variable pitch propellers. 1,860,827; May 31.
Turner Tanning Machinery Company, The. (See Jones, Frank S., assignor.)
Turner Tanning Machinery Company, The. (See Schettler, Gustav A., assignor.)
Twin Coach Company. (See Fageol, William B., assignor.)
Twiss, Douglas F., and E. A. Murphy, Birmingham, England, assignor to Dunlop Rubber Company Limited. Manufacture of hollow rubber articles from rubber or similar materials. 1,860,970; May 31.
Tyler, Dola, and T. B. Merrill, Tulsa, Okla. Table construction. 1,860,875; May 31.
Tyler, W. S., Company, The. (See Harty, William A., and Moore, assignors.)
Uhlich, Carl R., and Hans O. H. von Stern, Leipzig, assignors of one-half to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Apparatus for developing light-sensitive material. 1,861,329; May 31.
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)
Underwood Elliott Fisher Company. (See Platt, Newell C., assignor.)
Union Drawn Steel Company. (See Causer, Edward T., assignor.)
Union Switch & Signal Company. (See Baughman, George W., assignor.)
Union Switch & Signal Company, The. (See Dixon, Howell N., assignor.)
Union Switch & Signal Company, The. (See Geiger, Paul H., and Strobel, assignors.)
United Autographic Register Co. (See Jensen, Louis, assignor.)
United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)
United-Carr Fastener Corporation. (See Knutson, Carl L., assignor.)
United Shoe Machinery Corporation. (See Bazzoni, Lewis J., assignor.)
United Shoe Machinery Corporation. (See Jorgensen, Bernhardt, assignor.)
United Shoe Machinery Corporation. (See Ryan, George F., assignor.)
United Shoe Machinery Corporation. (See Sawyer, Willard N., assignor.)
United Shoe Machinery Corporation. (See Topham, Laurence E., assignor.)
U. S. Bottlers Machinery Company. (See Risser, Arthur I., assignor.)
U. S. Industrial Alcohol Co. (See Herstein, Bernard, assignor.)
U. S. Industrial Alcohol Co. (See Ricard, E., and Guinot, assignors.)
U. S. Industrial Alcohol Co. (See Ricard E., Savarit, and Guinot, assignors.)
U. S. Industrial Alcohol Co. (See Stevens, Arthur, assignor.)
U. S. Manufacturing Corporation. (See Bennett, John L., assignor.)
U. S. Oil and Service Corporation. (See Bowes, Laurence C., assignor.)
Universelle Cigarettenmaschinen-Fabrik. (See Schmiedel, Johannes, assignor.)
"Universelle" Cigarettenmaschinen-Fabrik, J. C. Müller. (See Schmiedel, Johannes, assignor.)
Upson, Maxwell M., Englewood, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y. Composite pile. 1,860,792; May 31.
Van der Grinten, Karelx J. J. (See van der Grinten, Lodewijk P. F. and K. J. J.)
Van der Grinten, Lodewijk P. F. and Karel J. J., assignors to N. V. Chemische Fabriek L. van der Grinten, Venlo, Netherlands. Manufacture of sensitive diazotype layers. 1,861,330; May 31.
Van Dinter, George L., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Rubber boot. Des. 87,096; May 31.
Van Riper, Lewis C., Brooklyn, N. Y. Bag clamp for suction cleaners. 1,861,402; May 31.
Vapor Car Heating Company. (See Russell, Edward A., assignor.)
Varney, Frank M., Roanoke, Va. Signal. 1,860,559; May 31.
Veit, Hermann. (See Young, Karl G., and Veit.)
Vello, Leopoldo S., Paris, France. Bulb, tube, or other hermetically closed receptacle for incandescent electric lamps and similar devices and manufacture of same. 1,861,167; May 31.
Velveray Corporation of America. (See Foster, Hallet J., assignor.)
Venditti, Larry, Philadelphia, Pa. Aquarium. 1,860,698; May 31.
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,860,398; May 31.
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,860,399; May 31.
Vermillion, Charles O. (See Rudolph, C. F., and Vermillion.)
Vermillion, Paul B., and A. C. Koontz, Kansas City, Mo. Car moving device. 1,861,070; May 31.
Vincent, Laurence A., Pleasantville, assignor, by mesne assignments, to New Castle Refractories Company, New Castle, Pa. Device for supporting tableware in a kiln. 1,860,374; May 31.
Vogel, John T., Richmond Hill, N. Y. Table cover. Des. 87,091; May 31.
Vogel, John T., Richmond Hill, N. Y. Napkin. Des. 87,092; May 31.
Von Elmpt, Theodore, Chicago, Ill. Chair. 1,861,331; May 31.
Von Meister, Fredrick W., New York, N. Y. Container for cigarette packages. 1,860,637; May 31.
Von Stern, Hans O. H. (See Uhlich, C. R., and von Stern.)
Vorbies, Roy L., assignor of fifty per cent to E. J. Warner, Long Beach, Calif. Milk bottle vending machine. 1,861,071; May 31.
Voss, Arthur, Frankfort-on-the-Main-Hochst, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hardened artificial materials and preparing them. 1,860,441; May 31.
Wacker, Fritz, H. Blum, H. Greissinger, Nuremberg, Germany, and F. R. Dietrich, Pasing, near Munich, Germany. Headlights for vehicles. 1,861,199; May 31.
Wade, Henry S., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Jar. Des. 87,047; May 31.
Wade, William J., Fort Madison, Iowa. Heater for automobiles. 1,860,517; May 31.
Wagenhorst, James H., Detroit, Mich. Cabinet for arc lamps. 1,860,913; May 31.
Wagner Electric Corporation. (See Schnell, Steve, assignor.)
Waitz, Charles A., Erie, Pa. Apparatus for applying pressure to oil sands. 1,861,332; May 31.
Waldorf Paper Products Company. (See Boeye, Paul F., assignor.)
Walker, Hubert, Elmira, N. Y., assignor to American La France and Foamite Corporation. Fire engine. 1,860,638; May 31.
Walker, Jay P., assignor of forty per cent to G. O. Marchant and six per cent to C. G. Wells, Tulsa, Okla. Conservation separator system. 1,860,726; May 31.
Wallace, Archibald L., assignor to Metal Hose & Tubing Co., Inc., Brooklyn, N. Y. Hose coupling. 1,861,403; May 31.
Wallace China Company, Ltd. (See Apple, Adrian R., assignor.)
Walsh, Nicholas J., assignor to Weber Electric Company, Schenectady, N. Y. Electrical switch. 1,860,877; May 31.
Walsh, Nicholas J., and W. L. Butler, assignors to Weber Electric Company, Schenectady, N. Y. Electrical switch. 1,860,876; May 31.
Waninger, Carl, Dusseldorf, assignor to the Firm Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Hydraulic brake. 1,860,756; May 31.
Warburton, Thomas, Manchester, England. Production of the acid sulphate and the normal sulphate of alphanaphthylamine. 1,860,560; May 31.
Ward, Artemas Inc. (See Giles, Harvey, assignor.)
Ward Leonard Electric Company. (See Kouyoumjian, Haroutiun K., assignor.)
Wares, Florence, Seattle, Wash. Furnace. 1,860,442; May 31.
Wares, Florence, Seattle, Wash. Furnace front. 1,860,443; May 31.
Warmer, E. J. (See Vorbies, Roy L., assignor.)
Warner, Emerson R., Meriden, Conn., assignor to The Stanley Works, New Britain, Conn. Handgrip. 1,860,561; May 31.
Warren, Edward C., J. H. A., and W., Annapolis, Md., assignors, by mesne assignments, to Warren Engine Company, Wilmington, Del. Rotary engine. 1,861,168; May 31.
Warren Engine Company. (See Warren, Edward C., J. H. A., and W., assignors.)
Warren, Joseph H. A. (See Warren, Edward C., J. H. A., and W.)
Warren, Marlin, Detroit, Mich. Heating apparatus 1,860,639; May 31
Warren, Woodruff. (See Warren, Edward C., J. H. A., and W.)

Waters, Millard F., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Pipe coupling. 1,861,372; May 31.
Watson, Thomas F., Seminole, Okla. Beam hanger. 1,860,757; May 31.
Watt, Elihu D., La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Pile tenon turning machine. 1,860,846; May 31.
Wayne, Truman B., Houston, Tex. Breaking petroleum emulsions. 1,860,562; May 31.
Wayne, Truman B., Houston, Tex. Revolving petroleum emulsions. 1,860,563; May 31.
Weatherhead, Albert J. (See Baldwin, John D., jr., assignor.)
Weaving Machines Company Limited, The. (See Alonso, Fernando, assignor.)
Webb, Harry N. (See Webb, Harry R. and H. N.)
Webb, Harry R. and H. N., Grantham, England. Device for balancing bodies capable of a rising and falling movement. 1,860,878; May 31.
Webber, Charles S. and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Manufacture of mixed esters of cellulose and the product thereof. 1,861,200; May 31.
Weber Electric Company. (See Walsh, Nicholas J., assignor.)
Weber Electric Company. (See Walsh, N. J., and Butler, assignors.)
Weidlich, Max, Georgenthal, near Klingenthal, Germany. Machine for fastening reeds without rivets on the sound plates of reed instruments. 1,860,758; May 31.
Weiger, Joseph A., Union City, N. J., assignor by mesne assignments, to P. R. Mallory & Co., Incorporated, Indianapolis, Ind. Electrical contacting element. 1,860,793; May 31.
Weill, Léon D., Paris, France. Thermostatic control. 1,861,288; May 31.
Weisbrod, Karl. (See Hubert, E., Röst-Grande, and Weisbrod.)
Wellman, Henry J., Nolan, assignor of one-half to M. T. Joseph and one-fourth to W. E. Good, Williamson, W. Va. Ratchet wrench. 1,860,914; May 31.
Wells, C. G., et al. (See Walker, Jay P., assignor.)
Wells, Chandler, Buffalo, N. Y. Apparatus for transporting automobiles. 1,860,518; May 31.
Wemp, Ernest E., Detroit, Mich. Clutch. 1,861,251; May 31.
Wemp, Ernest E., Detroit, Mich. Clutch construction for automotive vehicles. 1,861,253; May 31.
Western Electric Company. (See Ford, Leroy S., assignor.)
Western Electric Company. (See Scott, Kenneth L., assignor.)
Western Electric Company. (See Sorensen, Earl H., assignor.)
Western Electric Company. (See Whiting, Donald F., assignor.)
Western Stamping & Manufacturing Company. (See Willwerscheid, Theodor R., assignor.)
Western Union Telegraph Company, The. (See Hoover, R., and Wheeler, assignors.)
Westinghouse Air Brake Company, The. (See Chevillot, A., and Daux, assignors.)
Westinghouse Air Brake Company, The. (See Dapron, Joseph M., assignor.)
Westinghouse Air Brake Company, The. (See Down, Sidney G., assignor.)
Westinghouse Air Brake Company, The. (See Hancock, Milton L., assignor.)
Westinghouse Air Brake Company, The. (See Hume, John, assignor.)
Westinghouse Air Brake Company, The. (See Loiseau, Raoul T., assignor.)
Westinghouse Air Brake Company, The. (See Lynn, Ewing K., assignor.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See McCune, J. C., and Wright, assignors.)
Westinghouse Air Brake Company, The. (See Williams, Samuel L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Arnold, Edwin E., assignor.)
Westinghouse Electric and Manufacturing Company. (See Austin, B. O., and Willby, assignors.)
Westinghouse Electric & Manufacturing Company. (See Bryant, Ozro N., assignor.)
Westinghouse Electric & Manufacturing Company. (See Foreman, Robert A., assignor.)
Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rusby, Hermann, assignor.)
Westinghouse Electric & Manufacturing Company. (See Schwendner, Anthony F., assignor.)
Weston, Edward B., assignor to The Weston Paper and Manufacturing Company, Dayton, Ohio. Display stand. 1,860,879; May 31.
Weston Paper and Manufacturing Company, The. (See Weston, Edward B., assignor.)
Wheeler, Evan R. (See Hoover, R., and Wheeler.)
Wheeler-Schebler Carburetor Co. (See Timian, Harold H., assignor.)
Whitcomb, Harris M., assignor to Albany Hardware Specialty Mfg. Co., Albany, Wis. Door latch. 1,861,252; May 31.
White, Edwin C., Baltimore, Md., assignor to Hynson, Westcott and Dunning, Inc. Mercury derivatives of di-halogenated resorcin-sacchareins. 1,861,373; May 31.
Whitehouse, John N., New York, N. Y., assignor to Sanite Corporation, Burlington, N. J. Attaching sheets of celluloid and the like to mandrels. 1,860,488; May 31.
Whitin Machine Works. (See Stuart, Henry B., assignor.)
Whiting, Donald F., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Electron tube circuits. 1,861,201; May 31.
Whitlock, William M., Scarsdale, N. Y. Camera attachment for titling pictures. 1,861,169; May 3.
Whitman, Riley H., Vincennes, Ind. Grave marker. 1,860,915; May 31.
Whitman, Stephen F., & Son, Inc. (See McIlhenney, Louis L., assignor.)
Whitson, Delmar A., assignor to Whitson Photophone Corporation, Los Angeles, Calif. Sound recording apparatus. 1,861,039; May 31.
Whitson Photophone Corporation. (See Whitson, Delmar A., assignor.)
Wickersham, Elmer E., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif. Harvester. 1,860,519; May 31.
Wikschtröm, Jakob, Dusseldorf, Germany. Tool for manufacturing wire-tacks and nails. 1,860,564; May 31.
Wilcke, Paul F. C., Seattle, Wash. Mechanical tray loader. 1,860,400; May 31.
Wild, Melchior, Lomazzo, Italy. Spinning machine. 1,861,103; May 31.
Wilkinson, Matthias L., and R. Bradshaw, Preston, England. Locking of stereo-plates or printing surfaces to the cylinders of rotary printing machines. 1,860,916; May 31.
Willard Storage Battery Company. (See Dunzweiler, C. J., and Lormor, assignors.)
Willby, Norman H. (See Austin, B. O., and Willby.)
Williams, Jacques E. B., assignor to Noburn Products Inc., New York, N. Y. Hair straightening device. 1,861,040; May 31.
Williams, Samuel L., New York, N. Y., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Inertia brake device. 1,860,401; May 31.
Williamson, Robert B., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Induction-synchronous motor system. 1,860,489; May 31.
Willis, Lewis C. (See Lofland, Alfred M., assignor.)
Willwerscheid, Theodor R., Lakewood, assignor to Western Stamping and Manufacturing Company, Cleveland, Ohio. Highway sign. 1,861,072; May 31.
Wilson-Jones Company. (See Hunter, Frank R., assignor.)
Wilson-Snyder Manufacturing Corporation. (See Shimer, John M., assignor.)
Winter, Charles, Chicago, Ill. Windshield wiper. 1,860,971; May 31.
Winterer, Frank J., and A. E. Hogrebe, assignors to Box Crane & Hoist Corporation, Philadelphia, Pa. Safety lowering device. 1,860,375; May 31.
Winthrop Chemical Company. (See Lautenschläger, C. L., Ludwig, and Schaumann, assignors.)
Winthrop Chemical Company. (See Mayer, Felix, assignor.)
Winton, Lewis B., Greenwich, Conn., assignor to The Brown Instrument Company, Philadelphia, Pa. Manometer. 1,860,759; May 31.
Wired Radio, Inc. (See Hough, Clinton W., assignor.)
Wired Radio, Inc. (See Lewis, Harold M., assignor.)
Wired Radio, Inc. (See Taylor, Albert H., assignor.)
Wired Radio, Inc. (See Tragner, Arthur M., assignor.)
Wires, John A., assignor to The National Kellastone Company, Chicago, Ill. Plastic nailing composition. 1,860,917; May 31.
Witchger, Eugene J., assignor to Lufkin Rule Co., Saginaw, Mich. Telescoping gauge. 1,860,640; May 31.
Withrow, Floyd G., Grand Rapids, Mich. Mirror bracket. 1,861,148; May 31.
Witt, Samuel E. (See Neir, E. R., and Witt.)
Wittemann, John, Los Angeles, Calif. Hanger for draperies. 1,860,760; May 31.
Wittenberg, Margaret H., assignor to The Royal Worcester Corset Company, Worcester, Mass. Corselet. 1,860,761; May 31.
Wolf, Ernest H., Elgin, Ill. Lawn edge trimmer. 1,861,104; May 31.
Wolter, Herman H. (See Doane, L. C., and Wölter.)
Wood, Claude O., assignor to Goodman Manufacturing Company, Chicago, Ill. Motor control system. 1,861,149; May 31.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Inking mechanism for printing presses. 1,861,073; May 31.
Wood, Henry R., Sierra Madre, Calif., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Winding machine for rolling roofing paper. 1,861,374; May 31.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woolson, Emma F., executrix. (See Woolson, Lionel M.)

Woolson, Lionel M., deceased, Detroit, E. F. Woolson, executrix, Bloomfield Village, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,860,444; May 31.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,860,641; May 31.
Wright Aeronautical Corporation. (See Chilton, Roland, assignor.)
Wright, John B. (See McCune, J. C., and Wright.)
Wrigley, Wm., Jr., Company. (See Lindsey, William, assignor.)
Wulfhorst, William E., Cincinnati, Ohio. Automatic signal switch. 1,860,972; May 31.
Wyatt, Edwin M. (See Hathaway, W., and Wyatt.)
Wyrick, Clayton E., assignor to Gairing Tool Company, Detroit, Mich. Universal joint drive connection. 1,860,762; May 31.
Yates Machine Company. (See Yates, Thomas J., assignor.)
Yates, Thomas J., assignor to Yates Machine Company, Salem, Mass. Valve tripping mechanism. 1,861,170; May 31.
Yeakel, Walter C., Battle Creek, assignor to Clark Tructractor Company, Buchanan, Mich. Coupler. 1,860,973; May 31.
Yerk, Henry H., and W. J. Baumberger, Davenport, assignors to Micro Machine Company, Bettendorf, Iowa. Axle grinder. 1,860,794; May 31.
Yerk, Henry H., and W. J. Baumberger, Davenport, assignor to Micro Machine Company, Betterdorf, Iowa. Grinding machine. 1,860,795; May 31.
Yerk, Henry H., and A. A. Kottman, Davenport, assignors to Micro Machine Company, Bettendorf, Iowa. Grinding machine. 1,860,796; May 31.
York Ice Machinery Corporation. (See Bergdoll, John G., assignor.)
Young, Karl G., and H. Veit, Philadelphia, Pa. Lock nut. 1,861,202; May 31.
Youngstown Pressed Steel Company, The. (See Stanitz, Jacques, assignor.)
Zahm, Joseph D., assignor to Animal Trap Company of America, Lititz, Pa. Apparatus for blanking and forming jaws for steel traps. 1,860,828; May 31.
Zalger, Louis. (See Zalger, Max and L.)
Zalger, Max, Swampscott, and L. Zalger, Lynn, Mass. Electric windshield heater. 1,861,041; May 31.
Zarembinsky, Clement, et al. (See Robertson, Henry M., assignor.)
Zeiss, Carl, the Firm of. (See Sander, Willy, assignor.)
Zimmerman, Fred R., assignor, by mesne assignments, to Burton-Dixie Corporation, Chicago, Ill. Spring mattress assembly. 1,860,642; May 31.
Zimmerman, Fred R., assignor, by mesne assignments, to Burton-Dixie Corporation, Chicago, Ill. Spring assembly. 1,860,699; May 31.
Zimmerman, Thomas M., Dawson, Pa. Motor vehicle cabinet. 1,860,797; May 31.
Zimmermann, Otto, Hanau, Germany. Penholder. 1,861,171; May 31.
Zink, Howard E., Fremont, Ohio. Automobile upholstery cover set. 1,860,520; May 31.
Zinkil, Roy H., Oak Park, assignor to Crane Co., Chicago, Ill. Flush valve. 1,860,974; May 31.
Zipay, John R., Pittsburgh, Pa. Variable pitch propeller mechanism. 1,861,150; May 31.
Zublin, John A., Los Angeles, Calif. Rotary bit with hammering device. 1,861,042; May 31.
Zuhlke, Xander Y. (See Jordan, R. B., and Zuhlke.)
Zuhlke, Xander Y., and R. B. Jordan, Bancroft, Nebr. Window heater for automobiles. 1,861,333; May 31.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 31ST DAY OF MAY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Absorption apparatus. E. Altenkirch. 1,861,175; May 31.
Accumulator, Fluid pressure. N. W. Dorman. 1,861,154; May 31.
Acid, Manufacture of anhydrous acetic. E. Ricard and H. M. Guinot. 1,860,512; May 31.
Acid sulphate and the normal sulphate of alpha-naphthylamine, Production of the. T. Warburton. 1,860,560; May 31.
Acids contained in dilute aqueous solutions, Extraction in the anhydrous state of fatty. E. Ricard and H. M. E. Guinot. 1,860,553; May 31.
Acids, Preparation of gall. J. Peyer. 1,861,319; May 31.
Acoustic diaphragm. N. H. Holland. 1,860,503; May 31.
Adjustable seat. W. H. Emond. 1,860,612; May 31.
Advertising device. E. Borregard. 1,860,380; May 31.
Advertising device. R. V. Rodrigues. 1,861,067; May 31.
Aerial device. J. A. Binnie. 1,860,982; May 31.
Aeroplanes, Controlling. F. H. Page. 1,861,318; May 31.
Air, Apparatus for cooling. H. P. Gant. 1,860,357; May 31.
Air brake. C. A. Campbell. 1,860,451; May 31.
Air classifier. A. H. Stebbins. 1,861,247–8; May 31.
Air condenser. C. Hardy. 1,860,670; May 31.
Air conditioning control. S. M. Anderson. 1,860,377; May 31.
Air conditioning system. G. Hilger. 1,861,158; May 31.
Airplane. P. Cox. 1,861,336; May 31.
Airplane. H. A. Hicks. Des. 87,062; May 31.
Airplane. G. Loening. 1,860,545; May 31.
Airplane. J. and V. H. Pavlecka. Des. 87,079; May 31.
Airplane construction. A. K. Longren. 1,861,219; May 31.
Air service equipment. T. M. Manson. Re18,483; May 31.
Airship. A. G. Schlosser. 1,860,555; May 31.
Airship hangar, Dirigible. W. H. Smith. 1,861,069; May 31.
Alarm and photographic device. Fire. M. and E. T. Rothman. 1,861,243; May 31.
Alcohol, Manufacture of absolute. E. Ricard, P. Savarit, and H. M. Guinot. 1,860,554; May 31.
Alcohol resin, Organic acid-polyhydric. B. T. Brooks and E. J. Cardarelli. 1,860,730; May 31.
Alkali metal phosphates, Production of. K. Röhre and O. Heusler. 1,860,818; May 31.
Alloy, Ferrous. H. L. Coles. 1,860,852; May 31.
Aluminum alloy casting and making the same. A. Pacz. 1,860,947; May 31.
Ampul, Injection. F. Meyer. 1,860,898; May 31.
Amusement device. M. A. Delaware. 1,860,453; May 31.
Angle indicator for variable pitch propellers. W. R. Turnbull. 1,860,827; May 31.
Anhydride, Manufacture of acetic. B. Herstein. 1,860,542; May 31.
Animal trap. A. Lang. 1,860,507; May 31.
Animal trap. F. Magee and G. W. Haverbeck. 1,861,312; May 31.
Animal trap. J. M. Schiltz. 1,860,599; May 31.
Applicator. H. Schultheiss. 1,860,790; May 31.
Apron tension device. R. R. Samuels. 1,860,623; May 31.
Aquarium. L. Venditti. 1,860,698; May 31.
Arch support and callous relieving pad. D. A. Reed. 1,860,595; May 31.
Armchair. L. H. Morin. 1,860,941; May 31.
Armature. V. G. Apple. 1,860,978; May 31.
Ash disposal apparatus. R. A. Foresman. 1,861,081; May 31.
Assembling apparatus. E. H. Sorensen. 1,860,844; May 31.
Assembling mechanism for typographical line-casting machines. C. A. Albrecht. 1,860,880; May 31.
Auto sander. F. L. Daly. 1,861,302; May 31.
Automobile. F. J. Pike. Des. 87,081; May 31.
Automobile coupé. W. H. Butler. Des. 87,046; May 31.
Automobile signal. R. E. Fleek. 1,861,306; May 31.
Automobile, Three wheel pleasure. W. H. Butler. Des. 87,045; May 31.
Automobile transmission. W. W. Beall. 1,861,376; May 31.
Automobile ventilator. E. B. Boyle. 1,861,286; May 31.
Automobiles, Apparatus for transporting. C. Wells. 1,860,518; May 31.
Awning fixture. F. J. Arndt. 1,860,881; May 31.
Bag making machine. A. Potdevin. 1,860,748; May 31.
Bags, Method and apparatus for bottoming. A. E. Currier. 1,860,386; May 31.
Bait, Fish. M. S. Dunkelberger. Des. 87,050; May 31.
Balance with a conveyor and a packing mechanism, Automatic sacking. P. Steimel. 1,861,147; May 31.
Ball. J. H. Grady. 1,861,157; May 31.
Bar: *See*—
Corner and division bar. Slice bar.
Barrel and apparatus for and forming the same. A. B. Houtz. 1,861,343; May 31.
Bath construction, Shower. M. J. Tracy. 1,860,968; May 31.
Bath mat, Nonslip. J. E. Grosjean. 1,861,389; May 31.
Battery cell. C. J. Dunzweiler and H. W. Lormor. 1,860,663; May 31.
Beam hanger. T. F. Watson. 1,860,757; May 31.
Bearing member assembly. H. A. Nelson. 1,861,239; May 31.
Bearing unit for wheels, Roller. R. B. Bukolt. 1,861,205; May 31.
Belt tightener and guide. J. Reid. 1,861,133; May 31.
Bin structure, Ore. H. A. Nelson. 1,860,903; May 31.
Birth-charm. E. Meyer. Des. 87,075; May 31.
Biscuit package. C. Lorber. 1,861,124; May 31.
Bit with hammering device, Rotary. J. A. Zublin. 1,861,042; May 31.
Bituminous mixture. A. C. Fischer. 1,861,407; May 31.
Blade system for turbines. A. Lysholm. Re18,485; May 31.
Blood, milk, and other suspensions by means of electric current, Method and apparatus for the determination of the concentration of. A. Slawinski. 1,860,397; May 31.
Blue print and making the same. H. J. Brunk. 1,861,298; May 31.
Board: *See*—
Directory board. Rating board.
Pulp board. Running board.
Boat, Air. J. D. Clarke. 1,860,609; May 31.
Boat, Outboard motor. W. M. Conover. 1,861,048; May 31.
Bodies capable of a rising and falling movement, Device for balancing. H. R. and H. N. Webb. 1,860,878; May 31.
Boiler: *See*—
Mercury boiler.
Boiler. M. Doerner. 1,860,495; May 31.
Bookbinding machine. W. C. Schmidt. 1,861,325; May 31.
Boot and shoe. H. C. P. Randall. 1,860,689; May 31.
Boot, Rubber. G. L. Van Dinter. Des. 87,096; May 31.
Boot with flexible top, Molded rubber. L. H. Burnham. 1,860,403; May 31.
Boring drill, Roller cutter. C. E. Reed. 1,860,953; May 31.
Bottle. H. T. Cumming. Des. 87,048; May 31.
Bottle. M. Joseph. Des. 87,064; May 31.
Bottle and cap therefor. C. M. Kruger. 1,861,016; May 31.
Box: *See*—
Junction box. Powder box.
Knockdown box.
Boxes, Wrapping and lining means for. A. A. Adamson. 1,860,830; May 31.
Bracelet strap, Foldable extension device for a. J. Sand. 1,861,029; May 31.
Bracket: *See*—
Mirror bracket. Supporting and ratchet bracket.
Shade and window bracket. Wall bracket.
Bracket. E. F. Marquis. 1,861,220; May 31.
Brake: *See*—
Air brake. Vehicle brake.
Hand brake.
Brake. E. Bugatti. 1,860,770; May 31.
Brake and clutch control for motor vehicles. B. Cook. 1,861,049; May 31.
Brake and power controller. J. C. McCune. 1,860,426; May 31.
Brake attachment, Freight car hand. A. A. Smallwood. 1,860,907; May 31.
Brake device, Inertia. S. L. Williams. 1,860,401; May 31.
Brake device, Safety. J. C. McCune. 1,860,424; May 31.
Brake for automobiles, Dynamic. H. D. James. 1,860,504; May 31.
Brake for trailer vehicles. R. W. Neate. 1,861,131; May 31.
Brake for truck trailers. W. S. Gurton, J. Plint, and H. Nyberg. 1,860,537; May 31.
Brake hook-up, Emergency. J. N. Prentis. 1,861,028; May 31.
Brake mechanism. S. Schnell. 1,860,959; May 31.
Brake pedal holding device. C. H. Naber. 1,861,023; May 31.
Brake stand, Adjustable. F. L. Ohler. 1,860,394; May 31.
Brake valve device. E. K. Lynn. 1,860,423; May 31.
Bricks and building blocks, Closing the ends of the channels of molded hollow channel. T. Koldl. 1,860,584; May 31.

Bridge, Fire. C. H. Greve and W. C. D. Schwarz. 1,861,388; May 31.
Briquette and making same. G. Komarek. 1,860,743; May 31.
Briquette and making the same. G. Komarek. 1,860,465; May 31.
Broadcasting receiver unit and generator therefor, Vehicle. C. E. Chesney. 1,861,262; May 31.
Brooder, Electrically heated. M. Hunter. 1,861,110; May 31.
Brush. G. C. Cleaves. 1,860,572; May 31.
Buffer, Manicuring. H. J. Stevenson and M. Kessler. 1,860,630; May 31.
Building, Insulated. C. A. Moore. 1,860,782; May 31.
Building, Restaurant. R. La Payne and C. F. Blake. Des. 87,080; May 31.
Building structure. F. M. Venzie. 1,860,398–9; May 31.
Bulb, tube, or other hermetically closed receptacle for incandescent electric lamps and similar devices and process of manufacture of the same. L. S. Vello. 1,861,167; May 31.
Burner: *See*—
Gas and oil burner. Oil burner.
Bushing, Bonding. S. W. Borden. 1,860,801; May 31.
Cabinet, Dish drying. L. R. Krause. 1,860,617; May 31.
Cabinet for arc lamps. J. H. Wagenhorst. 1,860,913; May 31.
Cabinet, Motor vehicle. T. M. Zimmerman. 1,860,797; May 31.
Cabinet with fountain, Combination radio and clock. J. Schmidt. Des. 87,086; May 31.
Cable, Electrical. L. S. Ford. 1,860,498; May 31.
Cage, Bird. H. Charlton. 1,860,992; May 31.
Calculating machines, Attachment for. E. F. Britten, jr. 1,860,490; May 31.
Camera attachment for tilting pictures. W. M. Whitlock. 1,861,169; May 31.
Cap for gasoline tanks, Fill. G. W. Isbell. 1,861,395; May 31.
Capsule, Sealed. A. Colton. 1,861,047; May 31.
Car, Compartment. F. S. Roberts. 1,860,620; May 31.
Car construction. S. B. Haseltine. 1,860,539; May 31.
Car construction. J. F. O'Connor. 1,860,548; May 31.
Car construction, Dump. G. B. Dorey. 1,861,153; May 31.
Car equipment, Safety. J. M. Dapron. 1,860,407; May 31.
Car moving device. P. B. Vermillion and A. C. Koontz. 1,861,070; May 31.
Carbohydrate gum and making it, Acetylated. A. B. Davis. 1,861,209; May 31.
Carburetor. P. E. Miquelon. 1,860,860; May 31.
Carburetor. P. E. Miquelon. 1,861,352; May 31.
Card or sign display mechanism. C. E. Marsh. 1,861,235; May 31.
Cards, Deck of playing. J. W. Pickering. Des. 87,095; May 31.
Cards, Deck of playing. H. J. Schaeffer. Des. 87,084; May 31.
Carrier: *See*—
Change carrier. Milk bottle carrier.
Carrier for ice. W. F. Crawford. 1,861,431; May 31.
Carton. H. L. Greve. 1,860,536; May 31.
Carton and lamp shade, Combined. J. F. Burgess. 1,861,206; May 31.
Carton or similar container. J. Bernstein. Des. 87,044; May 31.
Case: *See*—
Smoking case.
Case for inclosing an object such as a watch, a lighter, or otherwise. R. F. Egouvilion, and J. R. Lafon. 1,860,773; May 31.
Casket lowering device safety attachment. W. F. Beckett. 1,860,767; May 31.
Caster cup, Sliding. C. A. Schacht. 1,861,095; May 31.
Castor, Sliding. C. A. Schacht. 1,861,094; May 31.
Cathead, Automatic. W. L. Foster. 1,860,709; May 31.
Ceiling and floor structure. J. Kahn. 1,860,616; May 31.
Celluloid and the like to mandrels, Attaching sheets of. J. N. Whitehouse. 1,860,488; May 31.
Cellulose fiber, Lowering the solution viscosity of. G. A. Richter. 1,860,432; May 31.
Cellulose fiber, Producing low-viscosity. G. A. Richter. 1,860,431; May 31.
Cement size. W. P. D. Moross. 1,861,317; May 31.
Chain. A. P. Stiansen. 1,860,514; May 31.
Chain and the like, Conveyer. C. G. Renold. 1,860,597; May 31.
Chair. T. Von Elmpt. 1,861,331; May 31.
Chair and the like, Folding. J. D. Matthews. 1,860,867; May 31.
Change carrier. N. Marrion. 1,861,020; May 31.
Check protector. B. L. Carmichael. 1,861,208; May 31.
Checkerwork supporting and holding means for blast stoves. J. J. Seaver. 1,860,368; May 31.
Chromium plating crank shafts. W. G. Hildorf and H. G. McIntosh. 1,861,272; May 31.
Circuit breaker. H. Milliken. 1,861,129; May 31.
Circuit breaker, High power. H. Mulliken. 1,861,128; May 31.
Circuit control device for automobiles. W. H. Collier. 1,861,175; May 31.
Circuit, Receiving. H. D. Currier. 1,860,996–7; May 31.
Circuits, Electron tube. D. F. Whiting. 1,861,201; May 31.
Clamp for condensers. A. Nyman. 1,861,024; May 31.
Clamp for scaffolding for building and other purposes. A. C. Marshall. 1,860,839; May 31.
Clamp for suction cleaners, Bag. L. C. Van Riper. 1,861,402; May 31.
Clasp. A. M. Cole. 1,861,263; May 31.
Cleaner: *See*—
Vacuum cleaner.
Cleaning plant, Hydraulic. W. C. Furnas. 1,861,428; May 31.
Clip: *See*—
Socket clip. Spring clip.
Clippers, Hair. M. Andis. 1,861,043; May 31.
Clock, Electric re-winder. A. F. Poole. 1,861,228; May 31.
Clock, Nickel. E. L. Carlson and J. O. Simpson. 1,860,353; May 31.
Clock stand, Alarm. E. R. Tillbrook. Des. 87,090; May 31.
Closing device for organism culture vessels. G. Kapsenberg. 1,861,121; May 31.
Closure. J. S. Reid. 1,860,721; May 31.
Closure, Convertible. F. Bokan. 1,860,648; May 31.
Closure, Flexible. J. B. Freysinger. 1,860,808; May 31.
Cloth-finishing. S. L. Cluett. 1,861,423–4; May 31.
Cloth for bags and the like, Tubing. P. E. Morrill and C. V. Brady. 1,860,392; May 31.
Cloth package and producing the same. H. T. Marshall. 1,860,812; May 31.
Clothes hanging device. C. Nelson. 1,861,282; May 31.
Clutch. E. E. Wemp. 1,861,251; May 31.
Clutch and transmission control, Integral. E. O. Brace. 1,861,108; May 31.
Clutch construction for automotive vehicles. E. E. Wemp. 1,861,253; May 31.
Clutch, Frictional plate. F. O. L. Charlton. 1,861,080; May 31.
Clutch operating mechanism. M. Tibbetts. 1,860,636; May 31.
Clutch, Yielding. R. Chilton. 1,860,851; May 31.
Coach, Motor. W. B. Fageol. 1,861,001; May 31.
Coal fractionating and oil refining. C. Owens. 1,861,355; May 31.
Coat. D. Long. Des. 87,071–2; May 31.
Coated article and preparing the same. W. H. Moss. 1,860,687; May 31.
Coating composition, Nonchalking. G. R. Ensminger. 1,860,532; May 31.
Coconuts, Shelling. H. C. MacDougall. 1,860,745; May 31.
Coffee maker or similar article. R. E. Patten. Des. 87,078; May 31.
Coffeepot, Drip. R. F. Krause. Des. 87,068; May 31.
Coil, Variable inductance. C. F. Rudolph and C. O. Vermillion. 1,860,722; May 31.
Coils, Making armature. V. G. Apple. 1,860,977; May 31.
Coin controlled switch. C. Fleischer. 1,861,384; May 31.
Coin wrapper and bill strap container. H. L. Liebendorfer. 1,861,310; May 31.
Colds, Influenza, and similar ailments, Appliance for the treatment of. S. E. Armstrong. 1,860,847; May 31.
Collar, Detachable shirt. C. H. Mackie. 1,861,419; May 31.
Combustion chamber for internal combustion engines. O. C. Berry. 1,861,045; May 31.
Combustion promoting device. C. S. Bristow. 1,861,297; May 31.
Comminuting body. R. C. Newhouse. 1,860,393; May 31.
Communication system. J. Hirshfeld. 1,860,360; May 31.
Communication system. H. M. Lewis. 1,861,185; May 31.
Composition consisting of woolen fibers and artificial threads. A. Möhring, G. Schultze, and P. Schlack. 1,860,473; May 31.
Concrete mixer, Truck. G. Jaeger. 1,861,416; May 31.
Condensation products of sulphonated aromatic hydrocarbons or hydroxy derivatives thereof with aralkyl halides, Water soluble. A. Thauss, G. Mauthe, and A. Doser. 1,860,487; May 31.
Condenser. F. Klein. 1,860,677; May 31.
Condenser, Electrical. W. H. Goodman. 1,861,006; May 31.
Condenser, Rotary variable. A. M. Trogner. 1,860,440; May 31.
Conductor. J. J. Gilbert. 1,860,500; May 31.
Conductor, Electric. F. Hendey and J. P. Millwood. 1,861,182; May 31.
Conductor, Insulated electrical. H. O. Anderson. 1,861,404; May 31.
Conduit bonding fitting. S. W. Borden. 1,860,802; May 31.
Conduit, etc., Non-sticky flame-proofed electrical. J. A. Kennedy. 1,860,506; May 31.
Conduit-holding member, Snap fastener secured. C. L. Knutson. 1,860,861; May 31.
Connecter, Battery terminal. W. J. Agnew. 1,861,290; May 31.
Connecter, Electrical. C. W. Abbott. 1,860,829; May 31.
Connection between springs and frames. L. E. Pittoni. 1,861,240; May 31.
Connection, Insulated driving. W. E. Krotee. 1,860,744; May 31.

Connection, Universal joint drive. C. E. Wyrick. 1,860,762; May 31.
Conservation separator system. J. P. Walker. 1,860,726; May 31.
Container, Collapsible. J. L. Larkin. 1,860,349; May 31.
Container, Cosmetic. A. G. Shields. 1,860,694; May 31.
Container for cigarette packages. F. W. von Meister. 1,860,637; May 31.
Container for umbrellas. J. A. Maxwell, jr. 1,861,061; May 31.
Containers under negative or positive pressure, Sealing of. A. C. Knipe. 1,860,583; May 31.
Containers with fruit and vegetables, Apparatus for filling. H. W. Norgaard. 1,860,720; May 31.
Control, Altitude. H. T. Avery. 1,860,402; May 31.
Control apparatus, Remote. H. N. Dixon. 1,860,661; May 31.
Control for self-propelled vehicles, Automatic series-parallel. B. O. Austin and N. H. Willby. 1,860,523; May 31.
Control for valve gear mechanism, Valve lead. J. A. Cotton. 1,860,355; May 31.
Control mechanism for panoramic cameras. E. O. Goldbeck. 1,861,386; May 31.
Control mechanism for pumps. W. Ernst. 1,861,116; May 31.
Control of reservoir pressure, Duplex. M. L. Hancock. 1,860,414; May 31.
Control of vessels, System of automatic. J. H. Hammond, jr. 1,861,215; May 31.
Controller for electric motors. P. B. Harwood and J. M. Newman. 1,860,671; May 31.
Controlling device for leaf springs. G. W. Crabtree. 1,860,657; May 31.
Controlling mechanism for engines. C. H. Froelich. 1,860,929; May 31.
Controlling the movement of vehicles on railroads, Apparatus for. F. J. Sprague. 1,860,908; May 31.
Conveyer. J. Lockhart and R. C. Moore. 1,860,679; May 31.
Conveyer. A. Redler. 1,860,952; May 31.
Conveyer. R. A. Shipley. 1,860,485; May 31.
Conveyer, Garment. C. E. Constable. 1,860,704; May 31.
Conveyer switch, Remote control. W. E. Cain and A. E. Crady. 1,861,335; May 31.
Cooler: *See*—
Water cooler.
Core drill. R. B. Grainger. 1,861,007; May 31.
Cores, Apparatus for producing magnetic. K. L. Scott. 1,860,843; May 31.
Cores, Producing magnetic. K. L. Scott. 1,860,820; May 31.
Corn lifter. H. Synck. 1,860,633; May 31.
Corn picking machine. H. Synck. 1,860,634; May 31.
Corner and division bar. G. C. Smith. 1,860,754; May 31.
Corner or joint, Metallic. H. Brace. 1,860,650; May 31.
Corselet. M. H. Wittenberg. 1,860,761; May 31.
Corset. J. F. Greig. Des. 87,056; May 31.
Counter, Display. R. M. Henderson. 1,861,392; May 31.
Coupler. W. C. Yeakel. 1,860,973; May 31.
Coupling: *See*—
Flexible coupling. Pipe coupling.
Hose coupling.
Coupling device. H. Hamel. 1,861,088; May 31.
Coupling device, Accidents preventing. G. Meyer. 1,860,391; May 31.
Coupling for shafts. H. Rusby. 1,860,552; May 31.
Coupling interlock. S. G. Down. 1,860,408; May 31.
Couplings or fittings, Making pipe. J. D. Baldwin, jr. 1,860,604; May 31.
Cover for containers. W. R. Bertels. 1,861,377; May 31.
Cover, Luminous dial. I. E. Carroll. 1,860,606; May 31.
Cover, Table. J. T. Vogel. Des. 87,091; May 31.
Crane, Traveling. B. F. Fitch. 1,860,733; May 31.
Crank shafts, Making. E. T. Causer. 1,860,607; May 31.
Cream, Masking. E. J. Ryan. 1,861,165; May 31.
Crusher: *See*—
Stone crusher.
Crystallization apparatus. F. Jeremiassen. 1,860,741; May 31.
Culvert. V. B. Fredenhagen. 1,860,533; May 31.
Cup: *See*—
Caster cup.
Current transformer. A. O. Austin. 1,861,076; May 31.
Curtain, Automobile door. G. E. Bishop. 1,860,983; May 31.
Curtain hanger. B. Z. Hausner. 1,861,342; May 31.
Cutter: *See*—
Rotary cutter.
Cutter for rotary drills. C. W. Metzger. 1,860,587; May 31.
Cutting device, Ice cream. H. A. Beilgard. 1,860,646; May 31.
Cylinder and securing sheets thereto, Printing and other. G. T. Baldwin. 1,860,765; May 31.
Cylinder liners, Packing. A. Büchi. 1,860,769; May 31.
Dam construction. F. A. Noetzli. 1,860,589; May 31.
Dams, Constructing. F. A. Noetzli. 1,860,590; May 31.
Damper, Vibration. E. Bugatti. 1,860,771; May 31.
Dashpot for weighing scales. M. Hallend and T. B. Flanagan. 1,861,270; May 31.
Dentifrice. R. Pasternack. 1,861,189; May 31.
Desk set, Fountain pen. W. R. Cuthbert. 1,860,853; May 31.
Diagrams, Device for making orthogonal. K. Adamieckl. 1,860,763; May 31.
Die head. H. T. Shearer and C. A. Reimschissel. 1,861,327; May 31.
Die rolling. P. L. Coyle. 1,860,608; May 31.
Dies for corrugated tubes. L. H. Brinkman. 1,860,989; May 31.
Diffuser. A. Gustin. 1,860,836; May 31.
Digester. C. F. Richter. 1,860,477; May 31.
Digging apparatus, Mechanical. J. H. Thornley. 1,861,038; May 31.
Direction indicator, Automobile. H. B. McCaine. 1,861,126; May 31.
Directory board. E. M. Bornhoft. 1,860,985; May 31.
Dirt collector. J. C. McCune and J. B. Wright. 1,860,425; May 31.
Disk abrader, Manicuring. H. J. Stevenson and M. Kessler. 1,860,629; May 31.
Display device, Electrical. C. D. Barker. 1,860,979; May 31.
Display package. L. L. McIlhenney. 1,860,586; May 31.
Display stand. E. B. Weston. 1,860,879; May 31.
Distilling materials in contact with porous substance. B. Gallsworthy. 1,860,890; May 31.
Distributor for pulverulent fuel burners and making same. W. Kleinow. 1,861,410; May 31.
Ditch check. R. Schmitt. 1,861,031; May 31.
Doll. M. De Cesare. 1,861,050; May 31.
Dolls, Rolling eye set for. M. De Cesare. 1,861,051; May 31.
Door counter balancing structure. O. K. Kjolseth. 1,861,277; May 31.
Door, Furnace. H. B. Abel. 1,861,334; May 31.
Door, Overhead garage. W. D. Ferris. 1,860,387; May 31.
Door structure. C. H. Hoffstetter. 1,861,010; May 31.
Double exposure process. M. Handschiegl. 1,860,737; May 31.
Dovetailing attachment. C. B. Dart. 1,860,660; May 31.
Dredge. A. M. Lockett. 1,861,349; May 31.
Dress, Ensemble. D. Long. Des. 87,070; May 31.
Dressing chair, Child's. V. C. Palmer. Des. 87,077; May 31.
Drier: *See*—
Rotary drier.
Drill: *See*—
Boring drill. Radial drill.
Core drill. Stoping drill.
Drilling machine, Horizontal. F. W. Haeger. 1,861,055; May 31.
Drilling mechanism, Multiple. W. W. Smith. 1,861,099; May 31.
Drive for feed grinder drags, Friction. G. R. De Yarman. 1,861,303; May 31.
Duplicating machine. L. Jensen. 1,861,120; May 31.
Dyeing machine. W. E. H. Bell. 1,860,351; May 31.
Dyes, Manufacture of triarylmethane. T. A. Simmons. 1,860,753; May 31.
Dyestuffs and making same, Stilbene. M. Schmid. 1,861,323; May 31.
Dyestuffs, New triarylmethane. E. H. Rood and F. L. Sharp. 1,860,751; May 31.
Dyestuffs of the anthraquinone-acridone-series, Vat. W. Mieg and R. Berliner. 1,860,472; May 31.
Dyestuffs of the stilbene series and making same. M. Schmid. 1,861,324; May 31.
Dyestuffs of the tartrazine series. E. Romig and K. Holzach. 1,860,478; May 31.
Educational apparatus. L. Marx. 1,860,895; May 31.
Educational device. F. J. Sewall. 1,860,483; May 31.
Egg grading machine, Liquid. I. H. Hall. 1,860,358; May 31.
Electric controlling apparatus. H. K. Kouyoumjian. 1,860,543; May 31.
Electric discharge apparatus. C. G. Smith. 1,861,098; May 31.
Electric heater. L. C. Doane. 1,860,530; May 31.
Electric heater. J. Y. Malone. 1,860,934; May 31.
Electric power unit and construction for the same. J. D. Christian. 1,860,703; May 31.
Electric sign-socket flasher. L. Ludwig. 1,861,159; May 31.
Electric switch. G. H. Elwell. 1,861,178; May 31.
Electric switch. F. W. Slady and O. Kupferman. 1,860,961; May 31.
Electric system for recording and reproducing sound. E. H. Hansen. 1,860,502; May 31.
Electrical bonding device. S. W. Borden. 1,860,800; May 31.
Electrical contacting element. J. A. Welger. 1,860,793; May 31.
Electrical controller system. J. A. Berrian. 1,861,204; May 31.
Electrical distribution, System of. E. W. Seeger. 1,860,626; May 31.
Electrical rectifier. P. H. Geiger and C. K. Strobel. 1,861,083; May 31.
Electrical switch. N. J. Walsh. 1,860,877; May 31.
Electrical switch. N. J. Walsh and W. L. Butler. 1,860,876; May 31.
Electrode for Neon type of luminous tubes. R. C. Hyde. 1,860,419; May 31.
Electrodes, Treatment of. R. M. Hunter, L. C. Stewart, H. E. Houser, and L. De Pree. 1,861,415; May 31.
Electromechanical system. W. G. Cady. 1,860,529; May 31.
Elevator construction. B. Palm. 1,861,063; May 31.

Elevator structure for boats. N. and N. A. Fay. 1,860,574; May 31.
Embossing machine. J. J. Braund. 1,860,729; May 31.
Emulsion of hydrocarbon oils and manufacturing the same, Aqueous. R. Lant. 1,861,398; May 31.
Engine: *See*—
Fire engine. Rotary engine.
Internal combustion engine.
Engine. R. S. A. Dougherty and N. Greenwell. 1,860,834; May 31.
Engine having an air granary, Injection combustion. W. Rehm. 1,861,362; May 31.
Engine indicator and spark plug. E. J. Martin. 1,861,021; May 31.
Engine oscillation controller. R. B. Bourne. 1,860,569; May 31.
Engines with exhaust turbines and charging air compressors, Double acting internal. A. Büchi. 1,860,449; May 31.
Envelope machine. W. Bodge. 1,860,984; May 31.
Envelopes, Making open ended. L. Stone. 1,860,965; May 31.
Ester solutions, Preparing stable cellulose. E. Hubert, A. Röst-Grande, and K. Welsbrod. 1,860,461; May 31.
Esters of cellulose and the product thereof, Manufacture of mixed. C. S. Webber and C. J. Staud. 1,861,200; May 31.
Etcher slide. F. T. Powers. 1,861,161; May 31.
Ethylene from acetylene, Production of. K. Sauerwein. 1,860,624; May 31.
Explosive. G. S. Perrott and G. B. Holderer. 1,860,816; May 31.
Extension table. M. Burg. 1,860,990; May 31.
Extractor for vacuum lines and tanks, Automatic liquid. P. S. Endacott and A. H. Riney. 1,860,889; May 31.
Eyeglasses, Pair of Oxford. J. L. Lozea. Des. 87,073; May 31.
Fabric and making the same, Ornamented. H. J. Foster. 1,861,003; May 31.
Fabric hand covering. M. McKinley. 1,861,281; May 31.
Fabric or similar article, Textile. W. H. Mayer, jr. Des. 87,074; May 31.
Fabrics, Controlling the lustre of. C. Dreyfus. 1,860,456; May 31.
Fabrics, Making composite. J. W. Ballard. 1,861,044; May 31.
Fabrics, Shrinking. S. L. Cluett. 1,861,422; May 31.
Facing and stacking machine. A. E. Burtchaell. 1,860,491; May 31.
Fan manufacture. J. Pavlecka. 1,861,025; May 31.
Fastener, Tire chain. F. E. Stahl and H. Dudley. 1,860,695; May 31.
Fastening device. J. G. Noble. 1,861,354; May 31.
Fastening device for pins. A. Hurewitz. 1,860,857; May 31.
Fence. W. K. Morrison. 1,860,686; May 31.
Ferrule for connecting branch pipe, Main. R. McAndrew. 1,861,314; May 31.
Film pack casing, Photographic. M. Schmidt and P. Hanke. 1,860,482; May 31.
Films and resulting product, Two-stage method of dyeing. L. T. Troland. 1,860,912; May 31.
Filter. B. Bramwell. 1,861,295; May 31.
Filter, Air. H. E. Howard. 1,860,778; May 31.
Filter, Continuous. J. A. McCaskell. 1,860,937; May 31.
Fingerprint apparatus. H. G. Smith and T. Burrick. 1,860,486; May 31.
Fire engine. H. Walker. 1,860,638; May 31.
Fireplace screen. F. Bertram. 1,860,566; May 31.
Fireset. H. B. Cranshaw. 1,860,925; May 31.
Fires in tanks, Apparatus for extinguishing. W. F. Thiede. 1,860,825; May 31.
Fish bait, Artificial. W. M. Campbell. 1,861,110; May 31.
Fishhook sinker. B. G. Morgan and E. O. Kirkriet. 1,861,237; May 31.
Fitting, Electric. L. B. Manson. 1,860,546; May 31.
Flexible coupling. H. L. Schreck. 1,861,365; May 31.
Flow meter, Marine. T. R. Harrison. 1,860,777; May 31.
Fluid controlling device. J. Hume. 1,860,417; May 31.
Fluid flow control system. J. V. Thomas and B. D. Balthis. 1,860,516; May 31.
Fluid pressure brake. M. L. Hancock. 1,860,413; May 31.
Fluid pressure control system. E. G. McCauley. 1,860,510; May 31.
Fork: *See*—
Hay fork.
Form for stayed containers, Setting up. O. L. Bartlett. 1,861,293; May 31.
Fountains, Apparatus for applying reducing agents to printing. P. Scherrer. 1,861,142; May 31.
Frame member for rowing machines, Front. P. S. Hardy. Des. 87,059; May 31.
Freezer. J. A. Congleton and O. Kelly. 1,861,301; May 31.
Freezer, Ice cream. J. H. Gardner and C. A. Sawtelle. 1,861,082; May 31.
Frequency changing system. A. M. Trogner. 1,861,371; May 31.
Fritting furnace. J. F. Ryan and C. Stegmayer. 1,861,138; May 31.
Frost and moisture absorber for windows. C. A. Randolph. 1,861,242; May 31.
Fruit and the like, Apparatus for packing. J. S. Rice. 1,860,873; May 31.
Fruit peeling machine. H. and D. Goranson. 1,861,084; May 31.
Fuel, Apparatus for the manufacture of carbonized. S. R. Illingworth. 1,861,345; May 31.
Fuel feeding system. F. R. Hunter. 1,860,672; May 31.
Fuel injection device. R. E. Nelson. 1,860,784; May 31.
Fuel, Method and apparatus for burning powdered. D. L. Braine and D. J. Irish. 1,860,987; May 31.
Fuel supplying means for internal combustion engines, Pulverized. L. C. Bowes. 1,081,379; May 31.
Fuels, Apparatus for burning liquid. F. A. Howard. 1,861,014; May 31.
Fuels, Method and apparatus for burning liquid. W. I. Sallee. 1,860,958; May 31.
Fur cutting machine. R. H. Plass. 1,860,551; May 31.
Furnace: *See*—
Fritting furnace.
Furnace. C. E. Buysse. 1,860,887; May 31.
Furnace. F. Wares. 1,860,442; May 31.
Furnace and operating same, Cupola. M. L. Hamlin. 1,861,214; May 31.
Furnace and operating the same. C. E. Lucke. 1,860,366; May 31.
Furnace construction. H. R. Riley. 1,861,135; May 31.
Furnace front. F. Wares. 1,860,443; May 31.
Furnace with cooling means, Electric. A. E. Greene. 1,861,213; May 31.
Furrow slicer, Power actuated. H. H. Glasier. 1,860,534; May 31.
Fuse and making the same, Low capacity. E. V. Sundt. 1,861,369; May 31.
Game, Mechanical. A. J. Gumina and G. T. Overing, jr. 1,860,460; May 31.
Garment hanger, Extension. T. H. Hood. 1,861,273; May 31.
Garments, Apparatus for tailoring. M. Héliot. 1,860,579; May 31.
Gas analysis apparatus. W. O. Hebler. 1,860,541; May 31.
Gas analysis apparatus. R. H. Krueger and J. H. Oetjen. 1,860,544; May 31.
Gas and oil burner, Combination. A. W. Morse. 1,860,942; May 31.
Gas dehydrating process. H. A. Gollmar. 1,861,268; May 31.
Gauge: *See*—
Plug gauge. Telescoping gauge.
Pressure gauge.
Gauge extension, Air. J. C. Crowley. 1,860,888; May 31.
Gear, Fluid. F. Graupner. 1,860,576; May 31.
Gear mechanism, Change speed. E. G. Grinham. 1,861,387; May 31.
Gearing. J. Bethune. 1,861,258; May 31.
Gearing, Variable friction. J. H. Robertson. 1,860,621; May 31.
Gears, Manufacturing silent. R. W. Lytle. 1,861,125; May 31.
Generator: *See*—
Steam generator.
Generator with common water circulation, Multiple steam. W. D. La Mont. 1,860,364; May 31.
Gland suitable for turbine shafts. C. A. Parsons. 1,861,132; May 31.
Glove manufacture, Combination. M. McKinley. 1,861,280; May 31.
Grab hook. A. Johnson. 1,860,462; May 31.
Grading machine. F. W. Cutler. 1,860,732; May 31.
Grain tank. S. C. Nelson. 1,861,283; May 31.
Grate for furnaces, Shaking. A. J. Koepsell. 1,861,015; May 31.
Grating turning machine. W. A. Bates. 1,860,980; May 31.
Grease gun. D. J. Lockwood. 1,860,716; May 31.
Grid resistance. H. E. Campbell. 1,860,493; May 31.
Grinder, Axle. H. H. Yerk and W. J. Baumberger. 1,860,794; May 31.
Grinders, Mechanism for truing and dressing grinding wheels of centerless. F. J. Hohnhorst and F. J. Kroeger. 1,860,614; May 31.
Grinding machine. M. I. Mathewson. 1,861,279; May 31.
Grinding machine. H. H. Yerk and W. J. Baumberger. 1,860,795; May 31.
Grinding machine. H. H. Yerk and A. A. Kottman. 1,860,796; May 31.
Grip, Hand. E. R. Warner. 1,860,561; May 31.
Grounding fitting. L. H. Church. 1,860,904; May 31.
Guard, Cattle. F. Bauer. 1,860,571; May 31.
Guard, Door. D. Kees. 1,860,780; May 31.
Guard, Highway. J. Kahn. 1,860,615; May 31.
Guide and centering device, Rotary well drill. W. K. Criley. 1,860,639; May 31.
Hair, Mechanism for waving. A. J. Buchl. 1,860,352; May 31.
Hairpin. J. D. Campbell. 1,861,109; May 31.
Hair straightening device. J. E. B. Williams. 1,861,040; May 31.
Hammer rectilinear reciprocation. E. W. Tschudi. 1,860,826; May 31.
Hand brake. J. F. O'Connor. 1,860,549; May 31.
Hand grip. L. Reinold. 1,860,596; May 31.
Handle: *See*—
Strop handle.
Handle for electric switch blades. R. W. Grace. 1,861,269; May 31.

Handle for tools, Quick detachable. C. Scheuner. 1,861,363; May 31.
Hangar: *See*—
Airship hangar.
Hanger: *See*—
Beam hanger. Garment hanger.
Curtain hanger. Hat hanger.
Hanger for draperies. J. Wittemann. 1,860,760; May 31.
Hanger for hats, garments, and the like. H. J. Cocks. 1,860,384; May 31.
Harrow. A. B. Cleveland and S. W. Bailey. 1,860,923; May 31.
Harvester. E. E. Wickersham. 1,860,519; May 31.
Hat hanger. B. F. Grame. 1,861,341; May 31.
Hay fork. J. N. Graber. 1,861,085; May 31.
Headlights for vehicles. F. Wacker, H. Blum, H. Greissinger, and F. R. Dietrich. 1,861,199; May 31.
Heat insulator, Automobile seat. L. B. Sawyer. 1,860,752; May 31.
Heater: *See*—
Electric heater. Windshield heater.
Heater for automobiles. W. J. Wade. 1,860,517; May 31.
Heater for automobiles, Window. X. Y. Zuhlke and R. B. Jordan. 1,861,333; May 31.
Heating apparatus. I. C. Jennings. 1,860,930; May 31.
Heating apparatus. M. Warren. 1,860,639; May 31.
Hectograph machine. W. K. Moll. 1,861,188; May 31.
Heel cover tucking machine. L. J. Bazzoni. 1,860,645; May 31.
Heel grooving machine, Wood. W. N. Sawyer. 1,860,789; May 31.
Heel lift and attaching means therefor. B. Gilowitz. 1,861,118; May 31.
Helmet. H. Rateau. 1,860,690; May 31.
Hinge and latch, Table leg. R. O. Clark. 1,860,494; May 31.
Hinged structure. U. C. Thies. 1,860,438–9; May 31.
Hoist for use with farm tractors, Geared. M. Erickson. 1,860,774; May 31.
Hoisting apparatus. A. C. Gilbert and E. N. Anketell. 1,860,835; May 31.
Holder, Adjustable tool. J. H. Smith. 1,861,246; May 31.
Holder and greeting card, Combined gift. C. Ristow and M. Lesheim. 1,861,136; May 31.
Holder, Card. C. Glenn. 1,861,309; May 31.
Holder, Collapsible tube. B. Dunell. 1,860,662; May 31.
Holder, Film. W. C. Huebner. 1,860,389; May 31.
Holder, Flower. E. J. Cheesewright. 1,860,405; May 31.
Holder for automobiles, Mileage record. N. M. Stone. 1,860,632; May 31.
Holder for coats and other garments. A. T. Hopkins. 1,861,274; May 31.
Holder for indexes, Signal. T. B. Clark. 1,860,804; May 31.
Holder, Motor brush. T. J. Smulski 1,860,370; May 31.
Holder, Patient. L. B. Triplett. 1,860,874; May 31.
Holder, Razor blade. H. L. Dessell. 1,860,454; May 31.
Holder, Tool. J. Drazick. 1,860,998; May 31.
Hook: *See*—
Grab hook. Tape hook.
Hook and knot forming machine. C. Kirchner. 1,860,582; May 31.
Hose coupling. N. B. Braly. 1,861,206; May 31.
Hose coupling. A. L. Wallace. 1,861,403; May 31.
Housing, Axle. T. V. Buckwalter. 1,860,702; May 31.
Housing, Ball bearing. A. O. Hurxthal. Re18,486; May 31.
Hub cap for vehicle wheels. M. Kuniholm. 1,861,278; May 31.
Humidifier. M. L. Fox. 1,861,340; May 31.
Hydraulic brake. C. Waninger. 1,860,756; May 31.
Hydrocarbons, Apparatus for treating. B. W. Rumbarger. 1,860,598; May 31.
Hydrocarbons, Process and apparatus for cracking. H. Sydnor. 1,860,966; May 31.
Identification apparatus. H. G. Smith and T. Burrick. 1,861,367; May 31.
Ignition control apparatus for internal combustion engines. E. Klaiber. 1,861,417; May 31.
Implement, Weeding and transplanting. T. G. Smith. 1,860,963; May 31.
Incinerator. W. L. McEver. 1,860,841; May 31.
Indicator: *See*—
Direction indicator. Test indicator.
Price indicator.
Indicator and reminder. H. A. Rosen. 1,861,137; May 31.
Indicator for automobile, Heat. W. G. Myers. Des. 87,076; May 31.
Inking mechanism. M. A. Droiteour. 1,860,496; May 31.
Inking mechanism for printing presses. H. A. W. Wood. 1,861,073; May 31.
Insecticide and larvacide. F. B. McLane. 1,861,127; May 31.
Instrument balancing device. R. G. Arey. 1,861,255; May 31.
Insulator. A. Montandon. 1,861,316; May 31.
Internal combustion engine. J. A. H. Barkeij. 1,861,106; May 31.
Internal combustion engine. R. W. A. Brewer. 1,861,380; May 31.
Internal combustion engine. C. Flaker. 1,860,667; May 31.
Internal combustion engine. M. B. Jackson. 1,860,673; May 31.
Internal combustion engine. A. Nutt and A. H. Leak. 1,860,814; May 31.
Internal combustion engine. L. M. Woolson. 1,860,444; May 31.
Internal combustion engine. L. M. Woolson. 1,860,641; May 31.
Internal combustion engine, Rotary. G. E. Ezbelent. 1,860,707; May 31.
Iron such as iron for die-casting nuts, iron for screws, and the like, Manufacturing shear-resistance. F. Borggrafe. 1,860,568; May 31.
Ironers, Stripper finger for flatwork. C. E. Hamilton, sr. 1,860,538; May 31.
Jacks, Device for operating lifting. D. W. Sessions. 1,861,326; May 31.
Jacquard head. C. A. Fisher and C. J. Ketner. 1,861,339; May 31.
Jar: *See*—
Rotary jar.
Jar. H. S. Wade. Des. 87,047; May 31.
Jar or similar container. W. E. Garvey. Des. 87,051; May 31.
Joint: *See*—
Pipe and header joint. Universal joint.
Joint or connection for tubular bodies. A. C. Marshall. 1,860,866; May 31.
Juice extracting implement, Fruit. M. A. Davis and J. Kunst. 1,861,426; May 31.
Junction box. J. A. Adell. 1,861,074; May 31.
Key disk lock, Master. M. Falk. 1,860,708; May 31.
Kiln for the production of cellular building material. W. Hathaway and E. M. Wyatt. 1,860,739; May 31.
Kiln, Tunnel. E. B. Forse and C. F. Geiger. 1,861,266; May 31.
Knitted fabric. H. Hemmerich. Des. 87,061; May 31.
Knitting machine. E. A. Feustel. 1,861,413; May 31.
Knitting machines, Cop holder for. J. O. McKean. 1,860,938; May 31.
Knitting machines, Row counter for flat. W. Heinitz. 1,860,578; May 31.
Knockdown box. M. M. Clayton. 1,860,833; May 31.
Lace. H. W. Hucknall. Des. 87,094; May 31.
Lace in the course of weaving, Device for tensioning crimped. G. Perret. 1,860,592; May 31.
Lamp. E. A. Bernard. Des. 87,043; May 31.
Lamp. C. Rebl. 1,861,360; May 31.
Lamp, Table. L. C. Doane. Des. 87,049; May 31.
Latch. T. P. Archer and J. B. Flynn. 1,861,291; May 31.
Latch, Door. W. H. Taylor. 1,860,910; May 31.
Latch, Door. H. M. Whitcomb. 1,861,252; May 31.
Lath for brick veneers, Metal. F. Pyron. 1,861,359; May 31.
Lathe. R. C. Moore. 1,860,684; May 31.
Lawn edge trimmer. E. H. Wolf. 1,861,104; May 31.
Lead and zinc alloys, Manufacture of. J. O. Betterton. 1,860,524; May 31.
Leather and composition for treating same, Waterproofed. C. E. Bradley and C. D. Mason. 1,860,651; May 31.
Leather working machine. G. A. Schettler. 1,860,625; May 31.
Leather working machinery. F. S. Jones. 1,860,713; May 31.
Leuco-indigo preparations, Production and manufacture of stable. A. Davidson, A. J. Hallwood, F. Henesey, and A. Shepherdson. 1,861,382; May 31.
Lever, Gear shifting. H. L. Hoover. 1,861,394; May 31.
Lifter: *See*—
Corn lifter.
Lifting device. H. Breitweiser. 1,861,078; May 31.
Light and similar rays, Apparatus for treating. A. O. Tate. 1,860,824; May 31.
Light and similar rays, Apparatus for treating. A. O. Tate. 1,860,967; May 31.
Lighting fixture. N. T. Thomas. 1,860,791; May 31.
Lighting means for landing fields at airports. M. G. Morris. 1,860,685; May 31.
Liquid dispensing system. G. H. Henrietta. 1,861,393; May 31.
Liquid mixer. S. Alsop. 1,860,976; May 31.
Liquid purification. R. H. Kean. 1,860,676; May 31.
Liquids, Apparatus for pumping low temperature. R. H. Goddard. 1,860,891; May 31.
Liquids, Treating. J. J. Naugle. 1,860,944; May 31.
Loader, Manure. A. A. Peterson. 1,860,593; May 31.
Loader, Mechanical tray. P. F. C. Wilcke. 1,860,400; May 31.
Loading machine, Detachable. J. H. Hanlon. 1,860,415; May 31.
Lock: *See*—
Key disk lock. Pin tumbler lock.
Lock. J. Gutmann, jr. 1,861,086; May 31.
Lock. M. Samburg. 1,861,139–41; May 31.
Lock. J. A. Shafer. 1,860,369; May 31.
Lock. J. A. Shafer. 1,861,032; May 31.
Locking mechanism for railway cars, Door. A. Campbell. 1,861,152; May 31.
Locking plate for fish rods. D. Petrin. 1,860,948; May 31.
Locomotor. C. E. Crapo. 1,860,385; May 31.
Loom. H. M. Paternayan. 1,860,474; May 31.
Loom for the manufacture of textiles of all kinds in the form of a tube, Rotary. F. Alonso. 1,860,975; May 31.

Loom, Pile fabric. V. Gero. 1,861,004; May 31.
Loud speaker. P. G. Andres. 1,861,105; May 31.
Loud speaker. J. P. Minton. 1,861,222; May 31.
Lubricant. R. R. Rosenbaum. 1,860,622; May 31.
Lubricants, Preparing. E. H. Leslie. 1,860,838; May 31.
Lubricating device. H. F. Cunning. 1,861,114; May 31.
Lubricating device. W. H. Sommer. 1,861,146; May 31.
Lubricating system. C. H. Cole. 1,860,731; May 31.
Lubrication of spindle beams of spinning and twisting machines. J. J. Keyser. 1,860,714; May 31.
Lubrication system for inverted motors. A. Nutt. 1,860,813; May 31.
Lunch stand, Novelty. E. F. Brantferger. 1,861,405; May 31.
Machine for applying edging strips to cartons and the like. J. Schmiedel. 1,861,143; May 31.
Machine for applying threaded bottle caps. A. I. Risser. 1,860,954; May 31.
Machine for fastening reeds without rivets on the sound plates of reed instruments. M. Weidlich. 1,860,758; May 31.
Machine for handling butter prints. H. A. Morris. 1,861,160; May 31.
Machine for inclosing metallic coiled springs. B. R. Schneider and K. Kaiser. 1,861,429; May 31.
Machine for operating upon lasts. L. E. Topham. 1,860,690; May 31.
Machine for shaping uppers over lasts. B. Jorgensen. 1,860,742; May 31.
Machine for wrapping and tying cylindrical bodies. A. Schlaepfer. 1,861,096; May 31.
Magazine of typographical line composing machines. W. E. Aynge. 1,860,882; May 31.
Magneto, Vertical. C. F. Reis. 1,860,749; May 31.
Magnification with a four electrode valve and circuits therefor, Producing. E. W. B. Gill. 1,861,231; May 31.
Mail exchange, Air. R. Haybeck. 1,860,359; May 31.
Manifold for downdraft carburetors. H. H. Timian. 1,860,373; May 31.
Manometer. L. B. Winton. 1,860,759; May 31.
Marine apparatus, Radiating. C. W. Birch. 1,860,435; May 31.
Marine vessel. J. G. Faust. 1,861,338; May 31.
Marker, Animal. H. G. Ketchum. 1,860,421; May 31.
Marker for automobiles, Funeral. P. H. Sherwood. 1,861,366; May 31.
Marker, Grave. R. H. Whitman. 1,860,915; May 31.
Marker, Highway. J. M. Miller. 1,860,719; May 31.
Marker, Traffic and industrial. R. Foster. 1,861,425; May 31.
Massager, Electromagnetic. J. Sharp. 1,860,906; May 31.
Mat: *See*—
Bath mat.
Match and cigarette package, Combined. E. L. Rich, jr. 1,861,361; May 31.
Match packet, Pull. D. R. Payne. 1,861,356; May 31.
Material, Apparatus for developing light-sensitive. C. R. Uhlich and H. O. H. von Stern. 1,861,329; May 31.
Material, Constructional. A. C. Fischer. 1,861,408; May 31.
Material, Process and apparatus for treating argillaceous. W. B. Pine. 1,860,475; May 31.
Materials and preparing them, Hardened artificial. A. Voss. 1,860,441; May 31.
Materials and products resultant therefrom, Method of and apparatus for treating liquid impregnated. J. A. Edgecombe and H. L. Bishop. 1,860,664; May 31.
Mercury boiler. B. P. Coulson, jr. 1,861,264–5; May 31.
Mercury derivatives of di-halogenated resorcin sacchareins. E. C. White. 1,861,373; May 31.
Metal drawing press, Hydraulic. W. Ernst. 1,861,337; May 31.
Metal sheets, Rolling. F. E. Flynn. 1,860,613; May 31.
Metal scrapings, Making. W. J. Meinel. 1,860,683; May 31.
Meter: *See*—
Flow meter.
Microscope illuminating means. M. Poser. 1,860,430; May 31.
Milk bottle carrier. C. Sor entino. 1,861,368; May 31.
Milling machine. N. M. Marsillius and O. A. Olsen. 1,860,840; May 31.
Mirror, Adjustable ceiling. S. H. Flanigan. 1,860,928; May 31.
Mirror bracket. F. G. Withrow. 1,861,148; May 31.
Mites on fowls, Device for destroying. C. E. Mueller. 1,861,353; May 31.
Mixer: *See*—
Concrete mixer. Liquid mixer.
Mixer and dispenser, Beverage. T. S. Patterson and P. G. Pritz. 1,861,227; May 31.
Models of fruit or other objects made of wax or similar fusible material, Reenforcing. R. C. Steadman. 1,860,601; May 31.
Molasses for yeast growth, Treatment of. W. G. Bennett and A. M. Peake. 1,860,832; May 31.
Mold. J. E. Perrault. 1,860,429; May 31.
Mold for manufacturing footwear. A. A. Glidden and T. M. Knowland. 1,860,412; May 31.
Molding device for concrete piles. R. Tada. 1,860,558; May 31.
Mop lifting device. S. Chisnadia. 1,860,655; May 31.
Mortising device, Portable. J. H. Abramson. 1,861,289; May 31.
Moss gatherer. G. A. Pettit. 1,860,594; May 31.
Motor: *See*—
Pressure fluid motor. Universal motor.
Motor. E. M. Butler. 1,860,492; May 31.
Motor and generator, Electrical. C. A. Thordarson. 1,861,036; May 31.
Motor control mechanism. D. J. Stewart. 1,860,631; May 31.
Motor control system. W. C. Furnas and G. E. Cooper. 1,860,499; May 31.
Motor control system. C. O. Wood. 1,861,149; May 31.
Motor control, System of. E. B. Smith. 1,861,245; May 31.
Motor for gramophones and other purposes, Spring. S. Rees. 1,861,066; May 31.
Motor system, Induction-synchronous. R. B. Williamson. 1,860,489; May 31.
Mounting, Artificial tooth. R. C. Cooley. 1,860,806; May 31.
Mounting, Reserve wheel element. E. V. Barker. 1,860,920; May 31.
Mounting, Window. E. F. Tannewitz. 1,861,034; May 31.
Muffler. E. P. Gray. 1,860,892; May 31.
Munting machine. W. H. King and A. Huffman. 1,860,809; May 31.
Name plate attachment. C. F. Mitchel. 1,861,130; May 31.
Napkin. J. T. Vogel. Des. 87,092; May 31.
Needle, Knitting. F. J. Potter. 1,860,788; May 31.
Needle, Knitting. F. J. Potter. 1,861,358; May 31.
Nitrogen compounds soluble in aliphatic and aromatic hydrocarbons and to the process of producing the same, Heterocyclic. T. A. Cassidy, F. J. Busser, and H. T. Hornridge. 1,860,850; May 31.
Nozzle, Suction cleaner. A. O. Engberg and E. Bilde. 1,860,854; May 31.
Nut, Lock. K. G. Young and H. Veit. 1,861,202; May 31.
Nut shelling machine. H. C. MacDougall. 1,860,746; May 31.
Oil burner. S. M. Hansen. 1,861,216; May 31.
Oil burner. J. L. Ricketts and C. F. Dengler. 1,861,284; May 31.
Oil conversion. W. G. Leamon. 1,861,399; May 31.
Oil, Extracting. P. R. Hornbrook. 1,860,388; May 31.
Oil, Floor. M. T. Sundstrom. 1,860,372; May 31.
Oil from water, Apparatus for separating. J. Schamberger. 1,860,819; May 31.
Oil gun. H. M. Robertson. 1,861,190; May 31.
Oil pumping apparatus. B. Olsson. 1,860,428; May 31.
Oil wells, pipe lines, and flow lines, Preventing accumulation of solid matter from. M. De Groote. 1,861,177; May 31.
Oil wells, pipe lines, and flow lines, Preventing accumulation of solid matter in. M. De Groote. 1,861,176; May 31.
Oils with phenol, Treating lubricating. R. K. Stratford. 1,860,823; May 31.
Ores having a high sulphur content, Roasting and sintering pulverulent. H. Kliencke. 1,861,122; May 31.
Ores, Treatment of. J. E. Little, F. O. Kichline, and A. Ehrgott. 1,860,811; May 31.
Ores, Treatment of sulphide. N. E. Lenander. 1,860,585; May 31.
Ornament or similar article, Shoe. W. L. Gibbons. Des. 87,053; May 31.
Oscillator, Modulated. F. J. Meade. 1,860,897; May 31.
Oscillograph. H. C. Hayes. 1,860,740; May 31.
Package conveying apparatus. S. B. Mott. 1,860,718; May 31.
Package, Novelty. C. L. Gilbert. 1,860,710; May 31.
Packer, Pressure flood. P. H. Mack. 1,860,467; May 31.
Packing and making same. F. Bortone. 1,860,649; May 31.
Packing device. F. W. Kennedy. 1,860,860; May 31.
Packing, Shaft. R. C. Hopkins. 1,861,275; May 31.
Paper and metal ribbons into coils, Mechanism for slitting and winding. C. H. Thordarson. 1,861,037; May 31.
Paper, hook signatures, or the like, Gathering and/or collating sheets of. T. Cook. 1,861,406; May 31.
Paper dispensing machine. E. Lucks-Osten. J. Greenwald, and D. Ostern. 1,860,815; May 31.
Paper feeding and cutting mechanism. C. F. Richard. 1,860,691; May 31.
Paper machine. I. Stern and J. Huether. 1,860,845; May 31.
Paper pulp into a consistent mass suitable for storage, etc., or into bales for shipment, Converting liquid. R. T. Lang. 1,861,184; May 31.
Paper strip distributing, cutting, and moistening machine. A. F. Gillet. 1,860,608; May 31.
Parachute, Aeroplane. A. Chmielewski. 1,861,300; May 31.
Patch for inner tubes, Valve stem. W. F. Teer. 1,861,102; May 31.
Pattern copying machine. G. F. Ryan. 1,860,723; May 31.
Pattern mechanism for crochet knitting machine. S. Broadwin. 1,860,526; May 31.
Pedestal dome for hair permanent waving machines. W. E. Lippert. Des. 87,069; May 31.
Pen, Fountain. A. Kolber. Des. 87,067; May 31.
Penholder. O. Zimmermann. 1,861,171; May 31.
Petroleum and apparatus therefor, Recovering. F. A. Howard. 1,861,013; May 31.

Petroleum and natural gas, Process and apparatus for separating crude. W. McGraw and R. C. Adams. 1,860,896; May 31.
Petroleum emulsions, Breaking. T. B. Wayne. 1,860,562; May 31.
Petroleum emulsions, Resolving. T. B. Wayne. 1,860,563; May 31.
Phenols from phenolic tar oils, New process for extracting. E. Perlhou. 1,861,357; May 31.
Photographic objective. F. W. Gehrke. 1,860,575; May 31.
Photographic shutter. Á. Barényi. 1,861,256–7; May 31.
Photography, Color. P. D. Brewster. 1,860,525; May 31.
Picture apparatus, Motion. R. W. Pittman. 1,860,949; May 31.
Picture projection, Method of and apparatus for motion. F. R. Moulton. 1,860,943; May 31.
Picture projector, Moving. H. J. Templeton. 1,861,197; May 31.
Pie crust forming machine. C. A. Costigan. 1,860,705; May 31.
Pile, Composite. M. M. Upson. 1,860,792; May 31.
Pile tenon turning machine. E. D. Watt. 1,860,846; May 31.
Piling, Sheet. C. Beaujean. 1,860,766; May 31.
Pin tumbler lock, Antipick. L. C. Gutman. 1,860,712; May 31.
Pipe and header joint. C. H. True. 1,860,969; May 31.
Pipe, Apparatus for handling. C. J. Coberly. 1,861,113; May 31.
Pipe coupling. J. R. Gammeter. 1,861,211; May 31.
Pipe coupling. M. F. Waters. 1,861,372; May 31.
Pipe coupling, Metallic. R. T. Loiseau. 1,860,422; May 31.
Pipe cutting machine. H. F. Brown. 1,860,653; May 31.
Pipe joint and making it. J. L. Anderson. 1,860,521; May 31.
Pipe joint and making the same, Welded. J. L. Anderson. 1,860,346; May 31.
Pipe structure, Flexible. E. A. Russell. 1,860,956; May 31.
Piston. P. M. Freer. 1,860,734–5; May 31.
Pitch propeller mechanism, Variable. J. R. Zipay. 1,861,150; May 31.
Placard. H. V. Marsh. 1,860,547; May 31.
Plant stand, Adjustable. J. La Rock. 1,860,390; May 31.
Plaque. L. De Hymel and J. H. Dreyer. Des. 87,093; May 31.
Plastic nailing composition. J. A. Wires. 1,860,917; May 31.
Plate and manufacturing the same, Comb. M. Audis. 1,860,643; May 31.
Plate or similar article. A. R. Apple. Des. 87,042; May 31.
Plug for rolls, Closure. O. L. Bartlett. 1,861,294; May 31.
Plug gauge. E. H. Aldeborgh. 1,861,172; May 31.
Polishing and grinding material and making same. F. A. Schumacher. 1,860,724; May 31.
Polymerization products of diolefines. M. Luther and C. Heuck. 1,860,681; May 31.
Polyphase lines, System and apparatus for synchronizing. F. Sieber. 1,861,166; May 31.
Powder box, Duplex face. G. A. Pfeiffer. 1,860,550; May 31.
Power control mechanism for automobiles, Automatic. E. H. Lange. 1,861,018; May 31.
Power press. M. R. Hatch and A. H. Schloz. 1,861,181; May 31.
Power shovel. W. W. Sloane. 1,861,194; May 31.
Power transmission. F. Ljungström. 1,861,418; May 31.
Power transmitter, Hydraulic. G. Bauer and W. Brose. 1,860,701; May 31.
Preregistering means for photocomposer printing plates. W. C. Huebner. 1,860,361; May 31.
Press: *See*—
Metal drawing press. Transfer press.
Power press.
Press. J. C. Ledbetter. 1,860,508; May 31.
Press attachment, Printing. C. H. Martin. 1,861,411; May 31.
Press construction. R. B. Hall. 1,861,391; May 31.
Pressure brake, Fluid. A. Chevillot, G. Livry and G. Daux. 1,860,406; May 31.
Pressure fluid motor. E. G. Gartin. 1,860,736; May 31.
Pressure gauge. J. P. Remington. 1,860,904; May 31.
Pressure regulator. F. S. Lawrence. 1,860,350; May 31.
Pressure to oil sands, Apparatus for applying. C. A. Waitz. 1,861,332; May 31.
Price indicator. M. Dorion. 1,860,772; May 31.
Printing unit, Quotation board. R. Hoover and E. R. Wheeler. 1,861,414; May 31.
Projectile, Armor piercing. R. A. Hadfield and A. B. H. Clerke. 1,861,054; May 31.
Projecting device, Multiple. B. A. Proctor. 1,860,951; May 31.
Propeller. E. E. Arnold. 1,860,522; May 31.
Propeller for aircraft. H. Sukohl. 1,860,557; May 31.
Propeller release. H. M. Riggs. 1,860,750; May 31.
Protector, Pipe thread. B. Brownstein. 1,860,886; May 31.
Pulley, Expanding. F. D. Fowler. 1,860,410; May 31.
Pulp, Apparatus and process for production of. J. W. Stevens and W. H. Kenety. 1,860,755; May 31.
Pulp board. G. Landt and H. L. Becher. 1,860,466; May 31.
Pulp, etc., Manufacture of. L. Bradley and E. P. McKeefe. 1,860,570; May 31.
Pulp, etc., Manufacture of. L. Bradley and E. P. McKeefe. 1,860,848; May 31.
Pulp, etc., Production of. L. Bradley and E. P. McKeefe. 1,860,803; May 31.
Pump. A. Bohenblust. 1,860,768; May 31.
Pump and fuel injector for Diesel engines, Combination fuel. H. Le Pul. 1,860,862; May 31.
Pump and fuel injector for Diesel engines, Combination fuel. H. Le Pul. 1,860,865; May 31.
Pump, Fuel. H. Hueber. 1,860,581; May 31.
Pump liner holding device. J. M. Shimer. 1,860,484; May 31.
Pump, Portable grease dispensing. C. G. Butler. 1,861,230; May 31.
Pump, Rotary. A. Peterson. 1,860,817; May 31.
Pump, Sand. G. W. Miller. 1,861,022; May 31.
Pump, Screw. E. R. Douglas. 1,861,155; May 31.
Pumping apparatus. J. B. Sperry. 1,860,513; May 31.
Pumps, Control means for centrifugal. F. B. Allen. 1,860,603; May 31.
Rack for fruits, vegetables, and the like, Display. R. K. Slaymaker. 1,860,600; May 31.
Radial drill. W. L. Schellenbach. 1,861,030; May 31.
Radiator. S. Deutsch. 1,860,573; May 31.
Radiator support. W. W. Muir. 1,860,783; May 31.
Radio aerial. E. S. Brown. 1,860,652; May 31.
Radiocabinet. L. H. Morin. 1,860,940; May 31.
Radioreceiver. G. Anders. 1,861,203; May 31.
Radioreceiver. B. J. Grigsby. 1,860,348; May 31.
Radio reception system. C. W. Hough. 1,861,183; May 31.
Radio sets, Indicating device for. R. H. Langley. 1,860,678; May 31.
Rail bond. P. P. Pipes. 1,860,786–7; May 31.
Ratchet wrench. H. J. Wellman. 1,860,914; May 31.
Rating board. H. Henke. 1,860,856; May 31.
Razor, Safety. H. J. Lucke. 1,860,680; May 31.
Receptacle, Attachment plug. A. Muellerweiss. 1,861,223; May 31.
Receptacle for razor blades. R. D. McFaddan. 1,861,351; May 31.
Receptacle, Measuring. H. M. Huffman. 1,861,409; May 31.
Recoil pad for gunstocks. W. W. Knight. 1,861,234; May 31.
Reeling device. H. T. Martin and F. A. Hoyt. 1,861,221; May 31.
Refrigerating apparatus. F. J. Heideman. 1,861,089; May 31.
Refrigerating apparatus. J. G. King. 1,861,091; May 31.
Refrigerating apparatus, Intermittent absorption. E. E. Allyne and A. C. Schickler. 1,861,075; May 31.
Refrigeration. J. G. Bergdoll. 1,860,447; May 31.
Refrigeration, Mechanical. C. C. Spreen. 1,860,426; May 31.
Refrigerator construction. H. Kuckel. 1,861,123; May 31.
Regulator: *See*—
Pressure regulator.
Regulator. C. H. Smoot. 1,860,821; May 31.
Regulator. J. H. Sole. 1,860,556; May 31.
Re-railing device. G. B. Marable. 1,861,313; May 31.
Resins, Synthetic. L. Rosenthal. 1,860,479; May 31.
Retort for the distillation of coal and other solid carbonaceous substances. C. H. Parker. 1,860,591; May 31.
Rim, Tire. E. A. Nelson. 1,861,238; May 31.
Road shoulder maintainer. A. B. Callaway. 1,860,922; May 31.
Rock and other mineral substances, Apparatus for reducing. J. M. Mitchell. 1,861,315; May 31.
Rock, Reduction of phosphate. J. D. Morgan. 1,861,236; May 31.
Roller wrench. F. J. Burns. 1,861,207; May 31.
Rolling mill. A. T. Keller. 1,860,931; May 31.
Roof for portable buildings. P. N. Nissen. 1,861,062; May 31.
Roofing unit. H. L. Guy. Des. 87,057; May 31.
Rotary cutter. L. E. Parent. 1,861,064; May 31.
Rotary drier. W. A. Harty and F. W. Moore. 1,860,738; May 31.
Rotary engine. E. C., J. H. A., and W. Warren. 1,861,168; May 31.
Rotary jar. J. A. Kammerdiner. 1,860,675; May 31.
Rotor for silent motors. C. E. Johnson. 1,861,059; May 31.
Rubber articles from rubber or similar materials, Manufacture of hollow. D. F. Twiss and E. A. Murphy. 1,860,970; May 31.
Rubber coated fabric, Apparatus and process for vulcanizing. A. A. Glidden, T. M. Knowland, and W. R. Dow. 1,860,411; May 31.
Rubber composition and preserving rubber. W. L. Semon. 1,860,434; May 31.
Running board. B. Bronson. 1,861,430; May 31.
Running board. G. F. Cavanagh. 1,860,654; May 31.
Saddle, Spinning frame. T. K. Cox and H. L. Gassett. 1,860,452; May 31.
Safety device for shearing or punching machines or the like. C. Carroll and J. S. Hogue. 1,860,991; May 31.

Safety lowering device. F. J. Winterer and A. E. Hogrebe. 1,860,375; May 31.
Safety switch, Flashlight. G. B. Pratt. 1,860,842; May 31.
Safety wrench. W. A. Pouliot. 1,860,871; May 31.
Sand, Apparatus for handling molders'. G. F. Royer. 1,860,481; May 31.
Sander, Floor. A. E. Forson, sr. 1,860,775; May 31.
Sanding machine. R. Isenhour. 1,861,346; May 31.
Sanding machine. G. A. Schipper. 1,860,905; May 31.
Sanitary sleeve for ice cream and other containers. C. M. Christian. 1,861,112; May 31.
Saw, Circular. W. B. Huther. 1,861,218; May 31.
Sawing machine, Portable link. H. Quist. 1,861,162; May 31.
Saws, Method of and apparatus for cleaning band. V. Oliver. 1,861,412; May 31.
Scale. N. A. Hallwood. 1,861,087; May 31.
Scarifier. D. B. Cook. 1,860,805; May 31.
Screen: *See*—
Fireplace screen.
Screen cleaning device, Window. M. W. Gray. 1,861,179; May 31.
Screen structure, Radiator. N. W. Traviss. 1,860,697; May 31.
Screening apparatus. G. F. Royer. 1,860,480; May 31.
Screw. H. F. Kellogg. 1,860,715; May 31.
Screw propeller for flying machines and other aerodynamics apparatus. P. Poot. 1,861,065; May 31.
Sealpit stock saver. H. G. Cram. 1,860,610; May 31.
Seal, Shaft. W. E. Bibl and A. Ramclaw. 1,860,981; May 31.
Seat: *See*—
Adjustable seat.
Securing device for vehicles. A. N. Berger and P. Seel. 1,860,565; May 31.
Security device against robbery of motor cars. M. Picollo. 1,860,785; May 31.
Selective system and apparatus therefor. E. E. Kleinschmidt. 1,860,464; May 31.
Sensitive diazo-type layers, Manufacture of. L. P. F., and K. J. J. van der Grinten. 1,861,330; May 31.
Separator. P. F. Boeye. 1,860,567; May 31.
Separator. T. and J. R. Ray. 1,861,163; May 31.
Sewing machine. J. Ollendorff. 1,860,870; May 31.
Sewing machine, Blind stitch. C. W. Mueller. 1,860,901–2; May 31.
Sewing machine cutting attachment. Z. Routtenberg. 1,861,008; May 31.
Shackle, Cushion. J. Dykstra. 1,861,053; May 31.
Shade and window bracket. H. R. Hodges. 1,861,090; May 31.
Sharpener, Shear-blade. J. W. Carter. 1,860,404; May 31.
Shears. J. H. Flink. 1,860,409; May 31.
Sheet manipulator. E. J. Brasseur. 1,861,259; May 31.
Shingle. T. D. Miller. 1,860,899; May 31.
Shock absorber. R. J. Dickey. 1,861,427; May 31.
Shock absorber, Hydraulic. F. A. Huff. 1,861,056; May 31.
Shock absorbing mechanism, Friction. S. B. Haseltine. 1,860,540; May 31.
Shoe and shank stiffener therefor. O. H. L. Thelen. 1,860,437; May 31.
Shoe, slipper, boot, and the like. P. W. Bullock. 1,861,299; May 31.
Shovel: *See*—
Power shovel.
Shuttle. J. B. Daudelin. 1,861,115; May 31.
Sign, Direction road. J. B. Strauss. Des. 87,088; May 31.
Sign, Highway. T. R. Willwerscheid. 1,861,072; May 31.
Sign structure. H. R. Ansel. 1,860,919; May 31.
Signal: *See*—
Automobile signal. Theft preventing signal.
Signal. F. M. Varney. 1,860,559; May 31.
Signal light, Automobile and motor cycle. F. C. Hazel. 1,860,416; May 31.
Signal switch, Automatic. W. E. Wulfhorst. 1,860,972; May 31.
Signaling arrangement for two party telephone lines. W. H. Edwards. 1,860,459; May 31.
Signaling device. P. J. O. Miller. 1,860,427; May 31.
Signaling system. R. S. Bailey, N. D. Newby, and D. L. Moody. 1,860,446; May 31.
Signaling system for party telephone lines. W. H. Edwards. 1,860,457; May 31.
Silica from water, Removing. O. Liebknecht. 1,860,781; May 31.
Sizing device. W. L. Hutchinson. 1,861,233; May 31.
Sleeves into cylinder blocks, Apparatus for pressing replacement. G. G. Etheridge. 1,861,304; May 31.
Slice bar. F. T. Spikerman. 1,861,195; May 31.
Slicing machine. W. J. Campbell. 1,860,382; May 31.
Sludges and the like, Processing of. C. S. Bryan. 1,860,527; May 31.
Smoke automaton. P. A. Haerry. 1,860,776; May 31.
Smoking case. E. G. Simpson. 1,861,287; May 31.
Snelling machine. W. S. Torrence. 1,861,198; May 31.
Snow machine, Carbon dioxide. N. M. Small. 1,861,328; May 31.
Soap oil compositions, Making. F. W. Abrams. 1,860,798; May 31.
Socket clip, Lamp. A. L. Buschman. 1,861,151; May 31.
Socket for artificial limbs. F. H. Logan. 1,861,311; May 31.
Socket for resilient studs, Self engaging. E. D. Simons. 1,861,097; May 31.
Socket, Snap fastener. G. Johnson. 1,860,858; May 31.
Solids suspended in a liquid, Collecting and classifying different kinds of. B. Crocker. 1,861,381; May 31.
Solvents and their applications. A. Stevens. 1,860,822; May 31.
Sound, Production of. J. B. Flowers. 1,860,807; May 31.
Sound recording apparatus. D. A. Whitson. 1,861,039; May 31.
Spinning and twisting machine. I. R. Rowe. 1,860,955; May 31.
Spinning machine. M. Wild. 1,861,103; May 31.
Spinning ring and shield. H. B. Stuart. 1,861,240; May 31.
Spit. R. Hedge. 1,860,577; May 31.
Splint for the arm, Surgical. K. G. F. Collender 1,860,995; May 31.
Spring: *See*—
Vehicle spring.
Spring assembly. F. R. Zimmerman. 1,860,690; May 31.
Spring clip, Adjustable. F. L. Main. 1,861,019; May 31.
Spring mattress assembly. F. R. Zimmerman. 1,860,642; May 31.
Spring suspension. H. W. Bell. 1,860,831; May 31.
Spring suspension, Road vehicle. A. I. Marcum. 1,860,470; May 31.
Stamping apparatus, Hand. J. H. Hoeing. 1,860,580; May 31.
Stand: *See*—
Display stand. Lunch stand.
Stand. H. D. Jackson. Des. 87,063; May 31.
Starting system. D. Firth. 1,860,356; May 31.
Steam generator. W. D. La Mont. 1,860,363; May 31.
Steam making machine. P. Herre. 1,861,271; May 31.
Stenciling material. E. J. Brasseur. 1,861,260; May 31.
Stereo-plates or printing surfaces to the cylinders of rotary printing machines, Locking of. M. L. Wilkinson and R. Bradshaw. 1,860,916; May 31.
Stitch for magnetically operable devices. G. D. Bower. 1,861,046; May 31.
Stocking. S. D. Sanson. Des. 87,083; May 31.
Stocking. R. B. Schindler. Des. 87,085; May 31.
Stocking. W. Tait. Des. 87,089; May 31.
Stockings, Device for facilitating the putting on and taking off of. I. J. Gentil. 1,861,385; May 31.
Stoker apparatus, Underfeed. G. C. Cook. 1,860,354; May 31.
Stone crusher. G. E. Krider. 1,861,348; May 31.
Stoping drill. G. M. Nell. 1,860,945; May 31.
Stoping machine. G. M. Nell. 1,860,946; May 31.
Stopper for gas mains, Pneumatic. W. W. Gardner. 1,860,855; May 31.
Stove, Cooking. B. B. Kahn. Des. 87,065; May 31.
Stove, Cooking. M. G. Klemme. Des. 87,066; May 31.
Strainer, Oil well. R. T. Engelbrecht. 1,860,706; May 31.
Strength testing machine. H. S. and H. L. Hornbeck. 1,861,012; May 31.
Strips, Method of and apparatus for applying sealing. J. Schmiedel. 1,861,144; May 31.
Strop handle. G. P. McCullough. 1,860,717; May 31.
Substance, Apparatus for the separation of finely divided. R. Fahr and R. Keinke. 1,861,156; May 31.
Substances from hypophysis glands, Obtaining active. C. L. Lautenschlager, W. Ludwig, and O. Schaumann. 1,860,469; May 31.
Sugar-fruits, Apparatus for the automatic production of inspissated. B. Gernhardt. 1,861,307; May 31.
Sulphides, Recovery of. E. Jaenecke and H. Klippel. 1,861,058; May 31.
Support. J. Stanitz. 1,861,100; May 31.
Support, Fly paper. J. V. S. Bloodgood. 1,861,378; May 31.
Support, Weight indicating. A. M. Bevier. 1,860,647; May 31.
Supporter, Garment. C. E. Ansley. 1,860,727; May 31.
Supporting and ratchet bracket, Combined. W. A. Bracken. 1,860,921; May 31.
Supporting table ware in a kiln, Device for. L. A. Vincent. 1,860,374; May 31.
Surfaces for coating, Preparation of. E. M. Jones. 1,860,505; May 31.
Swatter, Fly. A. D. Miller. 1,860,939; May 31.
Switch: *See*—
Coin controlled switch. Electrical switch.
Conveyor switch. Safety switch.
Electric switch. Signal switch.
Switch construction, Push button. C. Miller. 1,861,400; May 31.
Switch for motor vehicle direction signals. F. C. McElroy. 1,860,682; May 31.
Switch gear. B. Groh. 1,860,501; May 31.
Switch gear, Electric. A. Allan and J. Christie. 1,860,918; May 31.
Switching device. W. H. Frank. 1,861,267; May 31.
Table: *See*—
Extension table.
Table. E. A. Fasching. 1,861,305; May 31.
Table and making the same, Folding. J. E. Bales and C. T. Christensen. 1,860,644; May 31.
Table construction. D. Tyler and T. B. Merrill. 1,860,875; May 31.

Tablet package and wrapping, Elongated. W. J. Ritzel. 1,861,285; May 31.
Tank: *See*—
Grain tank.
Tank hand hole and cover. A. F. O'Connor. 1,861,225; May 31.
Tank support on motor vehicles. H. S. Eberhard. 1,860,531; May 31.
Tap-changing system and apparatus for transformers. L. H. Hill. 1,861,217; May 31.
Tapping machine. J. H. Mansfield. 1,861,350; May 31.
Tape measure hook. R. G. Thompson. 1,860,635; May 31.
Tassel, Shoe lace. W. L. Gibbons. Des. 87,052; May 31.
Telegraph system, Printing. D. S. Hulfish. 1,861,344; May 31.
Telephone exchange system. R. L. Stokely. 1,860,515; May 31.
Telephone exchange system. R. L. Stokely. 1,861,196; May 31.
Telephone index. M. Lichter. 1,860,863; May 31.
Telephone receiver. W. G. Shull. 1,860,960; May 31.
Telephone signaling system. W. H. Edwards. 1,860,458; May 31.
Telephone system. E. R. Neir and S. E. Witt. 1,861,224; May 31.
Telescoping gauge. E. J. Witchger. 1,860,640; May 31.
Television apparatus, Speed and position control for. W. J. Marrison and J. W. Horton. 1,860,935; May 31.
Tellurian. B. B. Mahatho. 1,860,933; May 31.
Temperature changing device, Liquid. W. A. Barrett. 1,861,292; May 31.
Temperature of fluid, Apparatus for controlling. F. A. Howard. 1,860,837; May 31.
Test indicator. C. B. Clarkson. 1,860,993; May 31.
Test set, Lineman's. E. Dietze. 1,860,455; May 31.
Test sheets, Marking. G. D. Taylor. 1,860,909; May 31.
Textile material and making same. H. Platt. 1,861,026; May 31.
Theft preventing signal, Automobile. F. St. George and F. W. Cross. 1,861,101; May 31.
Thermometer. H. H. Boyce. 1,860,986; May 31.
Thermometer. C. S. Ruckstuhl. 1,861,164; May 31.
Thermostat switch and plug construction. H. L. Ellis. 1,860,999; May 31.
Thermostatic control. L. D. Weill. 1,861,285; May 31.
Thread cutting machine, Embroidery. F. Buesser. 1,860,528; May 31.
Threads, Preparation of effect. A. Rheiner. 1,861,320; May 31.
Time switch. C. E. Sundberg. 1,860,371; May 31.
Tire. P. Reuter-Lorenzen. Des. 87,082; May 31.
Tire, Pneumatic. L. L. Jones. 1,860,362; May 31.
Tire, Pneumatic. K. B. Kilborn. 1,861,276; May 31.
Tool, Dressing. R. Andersson. 1,860,704; May 31.
Tool, Fluid pressure. E. W. Stevens. 1,860,964; May 31.
Tool for manufacturing wire-tacks and nails. J. Wikschtröm. 1,860,564; May 31.
Tool for oil-wells, Plumbing. C. Lamb. 1,860,932; May 31.
Tool for wood turning lathes, Turning. A. J. Ames. 1,860,376; May 31.
Tool, Machine. W. H. Rauch. 1,860,700; May 31.
Tool, Mason's and plasterer's. A. Applegate. 1,861,174; May 31.
Tool, Pin and bushing removing. P. T. Bynum. 1,861,079; May 31.
Tool, Pneumatic. W. W. Price and C. W. Ripsch. 1,860,872; May 31.
Tool, Pneumatic. F. M. Slater. 1,860,628; May 31.
Tool, Sewer pipe cleaning. I. W. Pence. 1,860,395; May 31.
Tool, Tire pressure measuring. L. S. Morse. 1,860,588; May 31.
Tool, Wire tying. A. L. Goldenstar. 1,861,308; May 31.
Toothbrush. R. G. Cooke. 1,860,924; May 31.
Toothbrush. E. G. Johnson. 1,861,347; May 31.
Toothbrush. H. L. Trimble. 1,860,911; May 31.
Toothbrush, Electric. C. B. Lieux. 1,860,894; May 31.
Top, Automobile. H. E. Kaplan and B. L. Bouer. 1,860,463; May 31.
Torch device. J. J. Crowe. 1,860,347; May 31.
Torque mechanism, Oscillatory and unidirectional. H. B. Chalmers. 1,860,383; May 31.
Torsion balance. L. W. Blau. 1,861,229; May 31.
Toy. J. Q. Sherman. 1,860,627; May 31.
Toy, Novelty. G. Gott. Des. 87,055; May 31.
Toy railway. J. C. Koerber. 1,860,864; May 31.
Toy rapid-fire gun. A. M. De Minno and J. M. Parrella. 1,860,611; May 31.
Toy vehicle. H. C. Hebig. Des. 87,060; May 31.
Toy, Walking. W. I. Ravert. 1,860,476; May 31.
Tractor implement attachment. C. E. and T. F. Rich. 1,861,184; May 31.
Train control, Automatic. P. J. Simmen. Re18,484; May 31.
Trains, Controlling. G. W. Baughman. 1,861,077; May 31.
Transfer press, Lithographic. F. T. Sheedy and L. Traung. 1,860,693; May 31.
Transformer, Coordinate. W. Sander. 1,861,192; May 31.
Transformer or the like. L. C. Nichols. 1,860,511; May 31.
Transformer system, Polyphase. W. T. Taylor. 1,860,602; May 31.
Transformers, Assembling current. G. Keinath. 1,860,859; May 31.
Transmission. S. Jenclck. 1,860,674; May 31.
Transmission control device, Friction. F. A. Hayes. 1,861,008; May 31.
Transmission system, Multiple channel. A. H. Taylor. 1,861,370; May 31.
Transmitter, Impulse. H. W. Goff. 1,860,535; May 31.
Transportation device. T. L. McLaughlin. 1,860,747; May 31.
Trap: *See*—
Animal trap.
Trap. V. Bailey. 1,860,378; May 31.
Traps, Apparatus for blanking and forming jaws for steel. J. D. Zahm. 1,860,828; May 31.
Trim stud, Self locking floating. P. E. Fenton. 1,861,117; May 31.
Trimmer: *See*—
Lawn edge trimmer.
Trousers. M. Ficcio. 1,861,383; May 31.
Trousers. L. F. Rosenbaum. 1,860,433; May 31.
Truck. T. B. Runciman. 1,861,321; May 31.
Truck. W. H. Sommer. 1,861,145; May 31.
Truck for refrigerators, Service. B. B. Russell. 1,861,191; May 31.
Truck, Hand. H. G. Lance. 1,860,810; May 31.
Tube: *See*—
Vacuum tube.
Tube fittings for hydraulic brake systems, Producing. J. D. Baldwin, jr. 1,860,605; May 31.
Tubing, Making. A. F. Cibs. 1,861,421; May 31.
Turbine, Hydraulic. F. Nagler. 1,860,618; May 31.
Turning device for flat sided rivets. F. M. Littell and E. R. Miller. 1,861,186; May 31.
Turret, Protective. C. Senisch. 1,861,193; May 31.
Typewriting machine. W. F. Helmond. 1,861,009; May 31.
Typewriting machine. N. C. Platt. 1,860,950; May 31.
Typewriting machines, Line space mechanism for. H. A. Foothorap. 1,861,210; May 31.
Typographical composing and casting machine. L. E. Morrison. 1,860,900; May 31.
Typographical distributing machine. A. W. F. Guest. 1,860,893; May 31.
Typographical machine. R. R. Mead. 1,860,868; May 31.
Universal joint. H. L. Schreck. 1,861,364; May 31.
Universal motor. T. S. Bindschedler. 1,860,728; May 31.
Upholstered chair. J. L. Cable. 1,860,381; May 31.
Upholstery cover set, Automobile. H. E. Zink. 1,860,520; May 31.
Utensil for popping corn and the like. J. L. Bennett. 1,860,799; May 31.
Vacuum cleaner. T. E. D. Bilde. 1,860,883–5; May 31.
Vacuum cleaner, Hand. J. F. Carson. 1,861,261; May 31.
Vacuum tank and pressure pump, Combined. W. H. Muzzy. 1,860,688; May 31.
Vacuum tube. A. Nyman. 1,861,401; May 31.
Vacuum tube, Three electrode. J. Biguet. 1,861,107; May 31.
Valve. G. S. Eble. 1,860,497; May 31.
Valve. J. R. Mahan. 1,861,420; May 31.
Valve. A. Pfau. 1,860,619; May 31.
Valve and the operation thereof, Four electrode. E. W. B. Gill. 1,861,232; May 31.
Valve, Antisiphon. H. E. Lake. 1,861,017; May 31.
Valve, Compressor. P. Andersson. 1,860,445; May 31.
Valve, Diaphragm actuated. C. A. Campbell. 1,860,450; May 31.
Valve, Dual rotary. F. B. Stoner. 1,860,725; May 31.
Valve, Flush. B. O. Tilden. 1,861,250; May 31.
Valve, Flush. R. H. Zinkil. 1,860,974; May 31.
Valve mechanism, Extracting check. G. W. Isbell. 1,861,396; May 31.
Valve operating mechanism. O. N. Bryant. 1,861,093; May 31.
Valve operating mechanism. A. F. Schwendner. 1,861,092; May 31.
Valve, Pressure reducing. J. T. Ahnberg. 1,861,375; May 31.
Valve, Regulating. A. D. MacLean. 1,860,468; May 31.
Valve, Superservice flood. A. N. Khun. 1,861,397; May 31.
Valve tripping mechanism. T. J. Yates. 1,861,170; May 31.
Variometer. W. Dubiller. 1,861,052; May 31.
Vase. J. S. Hall. Des. 87,058; May 31.
Vault, Metal burial. J. M. Seely. Des. 87,087; May 31.
Vegetables, Device for cutting off the end portions of. J. F. Johnson. 1,860,779; May 31.
Vehicle. D. W. Gill. Des. 87,054; May 31.
Vehicle. E. W. Schellentrager and B. E. Clarkson. 1,860,396; May 31.
Vehicle brake, Motor. E. R. Evans. 1,860,666; May 31.
Vehicle, Passenger carrying motor. W. B. Fageol. 1,861,002; May 31.
Vehicle, Road. A. I. Marcum. 1,860,471; May 31.
Vehicle spring. G. W. Crabtree. 1,860,658; May 31.
Vehicle spring, Laminated. G. W. Crabtree. 1,860,656; May 31.
Vehicle wheel. C. L. Eksergian. 1,860,665; May 31.

Vehicles, Auxiliary axle attachment for motor. P. B. Cason. 1,861,111; May 31.
Velocity, Regulating circumferential. H. Grob. 1,861,180; May 31.
Vending machine. H. Giles. 1,861,212; May 31.
Vending machine. L. Maass. 1,860,509; May 31.
Vending machine, Milk bottle. R. L. Vorhies. 1,861,071; May 31.
Ventilator: *See*—
Automobile ventilator.
Ventilator. R. S. Peverley. 1,860,367; May 31.
Ventilator mechanism, Vault. C. D. Ellithorpe. 1,861,000; May 31.
Vessels, Propulsion of. T. R. Tarn. 1,861,035; May 31.
Vibration dampener for crank shafts. E. G. Gunn. 1,861,390; May 31.
Wall bracket, Lighting fixture. L. C. Doane and H. H. Wolter. Re18,482; May 31.
Warmer, Electric foot. E. W. Johnson. 1,860,420; May 31.
Washing machine. A. G. Schwieterman. 1,861,244; May 31.
Water cooler. H. E. Blood. 1,860,379; May 31.
Water cooler. C. Sundeen and J. G. Fuller. 1,861,033; May 31.
Water softener. C. P. Elsenhauer. 1,860,927; May 31.
Water softener, Portable. H. E. Burch. 1,860,849; May 31.
Water softening apparatus. C. P. Elsenhauer. 1,860,926; May 31.
Wax carbon spots on sheets of paper by impression, Apparatus for producing. G. A. Rutkoskie. 1,860,957; May 31.
Web controlling apparatus. E. J. Smith. 1,860,962; May 31.
Weed or vermin killing device. A. C. Arens. 1,861,254; May 31.
Welding apparatus, Electric. W. H. Gibb. 1,861,005; May 31.
Welding, Apparatus for electric. H. S. Holmes. 1,861,011; May 31.
Well capper. H. Guedry. 1,860,711; May 31.
Well holes, Method of and apparatus for determining inclination of. M. M. Kinley. 1,861,057; May 31.
Wells, Method and apparatus for cementing. E. P. Halliburton. 1,860,669; May 31.
Welt, Blindnail, concealed stitch. R. C. Schemmel. 1,861,322; May 31.
Wheel: *See*—
Vehicle wheel.
Wheel and guard attachment, Hand. A. F. O'Connor. 1,861,226; May 31.
Wheel for demountable rims, Dual. A. M. Lofland. 1,861,187; May 31.
Windmill control, Automatic. C. J. Potts. 1,861,027; May 31.
Windshield heater, Electric. M. and L. Zalger. 1,861,041; May 31.
Winding machine for rolling roofing paper. H. R. Wood. 1,861,374; May 31.
Window operator, Underscreen. R. H. Hummert. 1,860,418; May 31.
Window structure. A. T. Brennan. 1,860,988; May 31.
Wiper, Windshield. C. Winter. 1,860,971; May 31.
Wireless receiving system. N. Rittenhouse. 1,860,692; May 31.
Wrapping machine. W. Lindsey. 1,860,365; May 31.
Wrench: *See*—
Ratchet wrench. Safety wrench.
Roller wrench.
Wrench. C. L. Maguire. 1,861,060; May 31.
Writing instrument. F. O. Putnam. 1,861,241; May 31.

CLASSIFICATION OF PATENTS

ISSUED MAY 31, 1932

NOTE.—First number=class, second number=subclass, third number=patent number

2— 30: 1,860,761
139: 1,861,419
169: 1,861,280
1,861,281
205: 1,860,690
227: 1,860,433
1,861,383
3— 9: 1,861,311
4— 58: 1,861,250
148: 1,860,968
185: 1,861,389
5— 248: 1,860,642
260: 1,861,240
274: 1,860,609
8— 18: 1,860,351
20: 1,861,320
9— 11: 1,860,609
10— 49: 1,860,564
100: 1,861,327
130: 1,861,350
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15.1: 1,860,696
42: 1,860,645
47.1: 1,860,789
142: 1,860,689
15— 7: 1,861,261
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23: 1,860,894
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137: 1,860,911
155: 1,860,854
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182: 1,860,572
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16— 1: 1,861,277
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43: 1,860,429
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50: 1,860,434
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59: 1,860,970
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Trade-Marks	230—No.	293,588 to No.	293,817, inclusive.
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Prints	16—No.	13,697 to No.	13,712, inclusive.
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Designs	27—No.	86,875 to No.	86,901, inclusive.
Patents	1,060—No.	1,856,063 to No.	1,857,122, inclusive.
Total	1,357		

Trade-Marks Canceled

46,225. A preparation of magnesia. The Chas. H. Phillips Chemical Co., New York, N. Y. Registered September 12, 1905. Canceled April 16, 1932.

75,501. A preparation of magnesia. The Chas. H. Phillips Chemical Co., New York, N. Y. Registered October 12, 1909. Canceled April 16, 1932.

155,886. Certain named hardware, plumbing, and steamfitting supplies. Crane Company, Chicago, Ill. Registered June 6, 1922. Canceled March 26, 1932.

165,800. Candy. U. R. S. Candy Stores, Inc., also doing business as United Happiness Candy Stores, Long Island City, N. Y. Registered March 20, 1923. Canceled April 11, 1932.

231,546. Gift mottoes. The Buzza Company, Minneapolis, Minn. Registered August 23, 1927. Canceled March 26, 1932.

237,139. Rice. Lake Charles Rice Milling Company, Lake Charles, La. Registered January 3, 1928. Canceled April 11, 1932.

283,285. Malt syrup. Pabst Corporation, Milwaukee, Wis. Registered May 19, 1931. Canceled March 26, 1932.

284,116. Nonalcoholic malt beverages containing less than ½ of 1% alcohol by volume. J. Z. Schonhoff, doing business as Lord Baltimore Bottling Co., Baltimore, Md. Registered June 16, 1931. Canceled March 26, 1932.

288,506. Plant stimulant tablets in the nature of a fertilizer. The Rhodey Corporation, Baltimore, Md. Registered October 27, 1931. Canceled March 26, 1932.

Adjudicated Patents

(C. C. A. N. Y.) Ganz patent, No. 1,428,226, for display device, claims 1–3, *Held* not infringed. *Enison-Freeman Co.* v. *Levy*, 55 F.(2d) 1057.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,734,657, R. H. Van Schaack, jr., Pyroxylin composition, decided March 12, 1932, claims 1, 2, 3, and 9.

Pat. 1,760,239, C. F. Lauenstein and N. M. Waterbury, Process of treating malleablized cast iron, decided April 5, 1932, claims 1 and 2.

Pat. 1,760,241, C. F. Lauenstein, Metal, decided April 5, 1932, claim 1.

Pat. 1,805,828 G. A. Lowrey and W. F. Hall, Spear, decided April 4, 1932, claims 1, 2 and 3.

Applicant's Address

The requirement of Rule 33, that the post-office address of the applicant must be stated in the petition, means that the applicant must give the post-office address at which he customarily receives his mail.

The rule was made in order that the Office in necessary cases might correspond directly with the applicant and not through his attorney. The address of the attorney with instructions to send communications to the applicant in his care will not be accepted as a compliance with this rule.

Access to Pending Applications

No person except the applicant, the assignee whose assignment is of record, or the attorney of record, will be permitted to have access to the file of any application, except as provided for under the interference rules, unless written authority from the applicant, assignee, or attorney, identifying the application to be inspected, is filed in the case to become a part of the record thereof, or upon the written order of the Commissioner, which will also become a part of the record of the case.

Condition of Applications Under Examination at Close of Business April 16, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 79,087; Trade-Mark Division, 916. Oldest new case, Sept. 16, 1931; oldest amended, Sept. 18, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting action	Oldest amended application awaiting action	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Dec. 18	Dec. 26	550
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Nov. 19	Nov. 23	1,163
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Dec. 18	Dec. 21	783
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Jan. 7	†Jan. 6	585
3828	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Nov. 18	Nov. 30	495
4808 C	6. LEWERS, A. M., Carbon Chemistry	Sept. 23	Sept. 21	2,017
5725	7. JARBOE, C. G., Optics; Photography	Oct. 30	Oct. 30	1,658
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Oct. 15	Nov. 16	1,282
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 2	†Jan. 6	880
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 10	Nov. 12	1,015
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 27	Dec. 5	614
7701	12. HENRY, C. C., Machine Elements	Dec. 18	Dec. 26	686
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Nov. 21	Nov. 21	1,157
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Dec. 8	Dec. 16	806
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Oct. 29	Oct. 30	2,059
5612	16. SPENCER, C. J., Telegraphy; Telephony	Dec. 22	Dec. 20	872
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 16	Oct. 19	1,435
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Nov. 18	Nov. 17	884
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Sept. 21	Sept. 23	1,858
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Dec. 21	Dec. 23	729
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 27	Dec. 4	948
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 8	†Jan. 7	676
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 18	Sept. 18	1,002
5083	24. DUKAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 24	Nov. 25	756
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Oct. 24	Oct. 27	1,606
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Oct. 30	Oct. 19	953
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Nov. 18	Nov. 19	951
4628	28. BENSON, A. R., Internal-Combustion Engines	Oct. 14	Oct. 14	1,515
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Sept. 21	Sept. 21	1,039
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Dec. 18	Dec. 18	896
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Oct. 6	Oct. 6	1,589
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 18	Dec. 7	1,030
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 22	Oct. 22	2,456
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Nov. 11	Nov. 12	924
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Feb. 17	†Feb. 27	484
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Oct. 8	Oct. 1	1,906
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 16	Oct. 21	1,443
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Jan. 18	†Jan. 19	382
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Oct. 16	Oct. 17	1,486
7880	40. OBERLIN, J. J., Receptacles	Oct. 24	Oct. 26	2,065
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Dec. 16	Dec. 16	825
5882	42. CUTTING, H. O., Electric Signaling	Sept. 28	Oct. 5	1,506
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Nov. 17	Nov. 17	1,501
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 16	Sept. 25	1,898
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Nov. 16	Nov. 16	1,350
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Nov. 30	Dec. 5	816
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Nov. 16	Nov. 16	2,076
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Oct. 20	Oct. 20	1,009
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Sept. 30	Sept. 30	1,543
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Sept. 29	Sept. 30	2,136
5628	51. BACKUS, C. D., Radiant Energy	Oct. 31	Oct. 31	1,310
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Dec. 23	†Jan. 1	913
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 12	†Jan. 15	591
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Oct. 1	Oct. 1	1,199
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Mar. 5	†Mar. 5	168
	55. BOWEN, S. T.—Designs	†Mar. 24	†Mar. 17	197
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Oct. 27	Oct 27	1,503
3829	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Nov. 17	Nov. 19	720
5605	58. DOWELL, E. F., Abrading; Typewriting	Oct. 1	Oct. 7	1,405
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Oct. 16	Oct. 17	1,614
5890	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Sept. 24	Sept. 26	1,581
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Sept. 19	Sept. 29	1,505
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Oct. 16	Oct. 16	1,784
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 3	Oct. 3	1,541
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Oct. 28	Oct. 28	789
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Sept. 19	Sept. 19	1,873
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	†Mar. 24	†Apr. 5	758
	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Labels and Prints	†Mar. 16	†Apr. 3	158

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

HARRIS *v.* PLOUGH CHEMICAL COMPANY

No. 2,841. Decided February 1, 1932

TRADE-MARKS—SIMILARITY—"BLACK AND WHITE" AND "BLACK AND TAN".

The words "Black and Tan" used upon facial creams and hair dressings *Held* confusingly similar to a mark consisting of the words "Black and White" used in connection with a design, parts of which are colored one-half black and one-half white.

APPEAL from the Patent Office. Affirmed.

Mr. William G. Henderson for Harris.

Mr. E. W. Bradford for Plough Chemical Company.

GRAHAM, *P. J.*:

Appellant applied to the United States Patent Office for the registration of a trade-mark used by it upon facial cream, hair dressing, and similar goods since on or about May 1, 1927. This trade-mark was composed of the words "Black and Tan."

The appellee opposed this registration, alleging probable confusion in trade. The record discloses that appellee has been manufacturing and selling goods admitted to be of the same descriptive properties since 1917, under the trade name of Black and White, said words being used in connection with a design, sometimes circular, sometimes square, said circle or square being colored one-half black and one-half white. Various registrations of these marks were shown, the first being November 13, 1917, and the last May 30, 1922. Among these, one, Serial No. 148,723, of November 22, 1921, includes only the words "Black and White."

Both tribunals in the Patent Office found the marks to be confusingly similar and sustained the opposition.

We find ourselves in agreement with that conclusion. Appellee has spent millions in advertising its trade-mark, and has built up a valuable business and good-will around this trade-mark. The appellant has sold appellee's goods in its store at Athens, Ga., for many years. The only apparent reason why it should adopt a mark so likely to be confused with appellee's mark is that it desires to profit from the reputation of appellant's goods.

The only question is one of probable confusion. Similar cases where the opposition has been sustained by this court are: "Calcyanide" and "Calcium Cyanide," *California Cyanide Co.* v. *American Cyanamid Co.*, 17 C. C. P. A. (Patents) 1198, 40 F.(2d) 1003, 399 O. G. 212; "Hexol" and "Hexcide", *MacEachan* v. *Tar Products Co.*, 17 C. C. P. A. (Patents) 1264, 41 F.(2d) 295, 398 O. G. 542; "Zip-On" and "Zipper," *Goodrich Co.* v. *Hockmeyer*, 17 C. C. P. A. (Patents) 1068, 40 F.(2d) 99, 394 O. G. 795; "Mail-O-Meter" and "Seal-O-Meter," *Int. Postal Sup. Co.* v. *Pitney-Bowes, Etc.*, 17 C. C. P. A. (Patents) 911, 38 F.(2d) 692, 396 O. G. 5; "Coal-O-Matic" and "Oil-O-Matic," *Cross* v. *Williams, Etc.*, 18 C. C. P. A. (Patents) 1192, 48 F.(2d) 659, 410 O. G. 540; "Lemon Frost" and "Jack Frost," *In re Coca-Cola Bottling Co.*, 18 C. C. P. A. (Patents) 1384, 49 F.(2d) 838, 412 O. G. 559; "Breast O'Chicken" and "Chicken of the Sea," *Van Camp Sea Food Co.* v. *The Alexander B. Stewart Organizations*, 18 C. C. P. A. (Patents) 1415, 50 F.(2d) 976, 412 O. G. 274; "Lusk's Luscious" and "Lush'us," *Cal. Can. Co.* v. *Lush'us Prod. Co.*, 18 C. C. P. A. (Patents) 1480, 49 F.(2d) 1044, 413 O. G. 3.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

A. LESCHEN & SONS ROPE COMPANY *v.* THE AMERICAN STEEL AND WIRE CO.

No. 2,788. Decided January 25, 1932

1. TRADE-MARKS—OPPOSITION—RES ADJUDICATA.

A decision of the Court of Appeals of the District of Columbia that a trade-mark consisting of a yellow strand in a wire rope is confusingly similar to a blue strand in such a rope is not res adjudicata of the issue in an opposition brought by the user of the red strand to the registration of a silver strand as a trade-mark for such rope.

2. SAME—RIGHT TO REGISTER.

"The right to use a trade-mark does not necessarily carry with it the right to register the same. Because of the acts of the parties, one might acquire the right to use a mark and could not be prevented from using it even though confustion in the trade resulted from such use. The second proviso of section 5 of the Trade-Mark Act of February 20, 1905, as amended, was designed to prevent confustion and not to promote or add to it."

3. SAME—SIMILARITY—SILVER STRAND AND RED STRAND IN WIRE ROPES.

A mark consisting of a silver strand incorporated in a wire rope *Held* confusingly similar to a red strand in such a rope.

GRAHAM, *P. J.*, and LENROOT, *J.*, specially concurring.

APPEAL from Patent Office. Reversed.

Mr. H. G. Cook and *Mr. Melville Church* for A. Leschen & Sons Rope Company.

Mr. D. Anthony Usina and *Messrs. Usina & Rauber* for The American Steel and Wire Co.

BLAND, *J.*:

This is an appeal from the decision of the Commissioner of Patents of the United States Patent Office in a trade-mark opposition proceeding in which the Commissioner reversed the decision of the Examiner of Interferences and held that he erred in sustaining the opposition and in adjudging that the applicant was not entitled to register.

The applicant's mark is for use on wire rope and consists of a silver strand which is incorporated in the rope during its manufacture, and applicant alleges use of the same since March 14, 1922. In its application it states that "No claim is made

herein to the registration of the representation of the wire rope."

Upon this record there is some little confusion as to what kind of mark opposer relies upon. In its "grounds of opposition" it seems to rely upon a mark consisting of "a helical band of distinctive color applied thereto, such mark being usually applied by painting one of the strands of said rope." It does not definitely set up its registered trade-mark which is described in one of the decisions, hereinafter referred to, in the following language:

> Trade-mark consisting of a red or other distinctively colored streak applied to or woven in a wire rope. The color of the streak may be varied at will, so long as it is distinctive from the color and body of the rope. The essential feature of the trade-mark is the streak of distinctive color produced in or applied to a wire rope. This mark is usually applied by painting one strand of the wire rope a distinctive color, usually red.

The third ground of appellant's opposition is to the effect that by reason of its marking its wire rope as aforesaid, its product has become widely known as "colored strand" wire rope, and it is presumed that the appellant implied that its mark had acquired a secondary meaning. It is unnecessary for us to consider this phase of the case since the record is barren of any evidence tending to establish such fact, and the allegation was denied in the answer to the opposition.

In its answer, appellee makes the following statement:

> Applicant denies that opposer is the owner of a trade-mark as described in paragraph 2 of its notice of opposition broadly as a helical band of distinctive color, but admits that opposer has applied to its wire rope continuously for many years a mark distinguished by painting red one of the strands of said rope.

In the agreed statement of facts it is said:

> It is agreed * * * that the said A. Leschen & Sons Rope Company has marked wire ropes or cables of its manufacture with a helical stripe of uniform width and distinctive color produced by painting one of the strands of the rope red and has done this continuously for a period long antedating the use by said The American Steel and Wire Company of New Jersey of the mark claimed in its present application for registration; and has used this mark as its trade-mark.

The Commissioner of Patents treated the opposer's mark as one which "consists of the use of a red strand in a rope of like construction" to that of appellee. The Examiner of Interferences evidently did the same inasmuch as he remarks:

> The goods of the parties are the same, namely wire rope, and the difference in the marks used by the parties is merely one of color.

The Examiner of Interferences said that the same qestion had been considered in *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Company*, 36 App. D. C. 451, 164 O. G. 977, and *A. Leschen & Sons Rope Company* v. *American Steel & Wire Co. of New Jersey*, 36 App. D. C. 456, 164 O. G. 978, and concluded that these cases decided the issue and that he was bound thereby, and sustained the opposition.

The Commissioner of Patents regarded the cases of *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Company*, 201 U. S. 166, *Samson Cordage Works* v. *Puritan Cordage Mills*, 211 Fed. 603, and *A. Leschen & Sons Rope Company* v. *Fuller et al.*, 218 Fed. 786, as controlling, and said:

> Now, if the opposer's mark, by being limited to a red stripe or strand, permits the use by others of wire ropes with strands of other colors, then it would seem to follow that the applicant has the right to use its silver strand as a trade-mark, notwithstanding the opposer's red strand trade-mark; and, if the applicant possesses the right to use its silver strand, no good reason is apparent why said mark should not be registered.

In addition to the above quoted statement by the Commissioner, his decision contains the following:

> If it were assumed, however, that a yellow strand so nearly resembles a red strand, when they are used to identify wire cables as to their origin or ownership, as to be likely to cause confusion or mistake in the mind of the public, still it is believed that such resemblance does not exist as between the applicant's silver strand and the opposer's red strand.

We do not agree with the correctness of the statement—

> if the applicant possessed the right to use its silver strand, no good reason is apparent why said mark should not be registered,

nor can we concur in the finding that there is such a difference between a yellow strand and a silver strand as to justify the conclusion reached by the Commissioner.

In *A. Leschen & Sons Rope Co.* v. *Broderick & Bascom Rope Co.*, 201 U. S. 166, the court had before it the sole question as to whether or not appellant's registered mark, which in that instance consisted of any "distinctively colored streak applied to or woven in a wire rope" was a valid mark. It held that appellant's registered trade-mark covered all colors and was too broad to be valid and intimated that it might have been held valid if the trade-mark had been limited to painting one strand red, and said:

> It is true that the drawing annexed to the registration, a copy of which is here given, as well as the exhibits furnished, shows one of the strands colored red; and if the trade-mark were restricted to a strand thus colored, perhaps it might be sustained; but the description of a colored streak, which would be answered by a streak of any color painted spirally *with* the strand, longitudinally *across* the strands, or by a circular streak around the rope, was held by both courts, and we think properly, too indefinite to be the subject of a valid trade-mark. Certainly a trade-mark could not be claimed of a rope, the entire surface of which was colored; and if color be made the essential feature, it should be so defined, or connected with some symbol or design, that other manufacturers may know what they may safely do. Upon the plaintiff's theory, a wire rope containing a streak of any description or of any color would be an infringement, and a manufacturer honestly desiring to distinguish his wire rope from that of the plaintiff's by difference in color might, by adopting a white streak running along the length of the rope across the strands, find himself an infringer, when his real object may have been to obtain a mark which would distinguish his manufacture from that of the plaintiff's. Even if it were conceded that a person might claim a wire rope colored red or white, or any other color, it would clearly be too broad to embrace all colors. So, although it might be possible to claim the imprint of a colored figure on a wire rope, the figures should be so described that other manufacturers would know how to avoid it. If the trade-mark be a colored streak, it should be, at least, described and a statement of the mode in which the same is applied and affixed to the rope; and a trade-mark which may be infringed by a streak of any color, however applied, is manifestly too broad. [Italics quoted.]

It will be noticed that a red strand trade-mark was not before the Supreme Court and necessarily its conclusions on that subject, intimating that a certain, definite, colored strand might be the subject matter of a valid trade-mark, and that any other color which distinguished the goods of another might be the basis of a valid trade-mark, is not regarded as binding or controlling of our action in this case. It was not regarded as controlling, in an almost identical case between the same parties at bar, by the Court of Appeals of the District of Columbia, our predecessor in our present patent and trade-mark jurisdiction, in *A. Leschen & Sons Rope Company* v. *American Steel & Wire Co. of New Jersey*, supra., and also in *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Co.*, supra.

In *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Co.*, supra, the court of appeals had before it the red strand trade-mark of appellant and the yellow strand trade-mark of the Broderick & Bascom Rope Company. It held, in an opinion by Mr. Justice Robb, that the Supreme Court's decision holding invalid a registered trade-mark "does not deprive such owners of any property right which they may have acquired by the *actual use* of a good trade-mark" [italics ours], and said:

> The opinion of the Supreme Court went no further than to deprive the present application of the presumption of ownership which a good registration would have afforded it.

Further along in the opinion we find the following clear and forceful language:

> We come now to the consideration of the question whether the two marks here involved are sufficiently alike as "to be likely to cause confusion or mistake in the mind of the public, or to deceive purchasers." 33 Stat. at L. 724, chap. 592, U. S. Comp. Stat. Supp. 1909, p. 1275. The only difference in the marks is that of color. They are both used upon wire rope, and are both applied in substantially the same manner. It is admitted that appellant has used its mark for more than twenty years, and if this were a case of unfair competition there would be little doubt as to appellant's right to relief, for while color, generally speaking, is not a proper subject of a trade-mark, a rival dealer may not appropriate another's mark by merely changing its color. It is manifest that if appellee is entitled to use precisely the same mark as that used by appellant, but colored yellow instead of red, every color of the rainbow may be appropriated by other wire rope manufacturers, and may be similarly applied. Such a result, in our opinion, would lead to no end of confusion, the value of appellant's mark would be destroyed, and the purchasing public would be liable to imposition. The Patent Office has held that there is no conflict between the two marks, and the appellee insists that the evidence falls to show such a conflict; but both marks are before us, and in the language of the Circuit Court of Appeals for the Eighth Circuit, "the evidence of the eyes is more persuasive and satisfactory than any other." *Layton Pure Food Co.* v. *Church & D. Co.*, 104 C. C. A. 464, 182 Fed. 24.

On the same date the Court of Appeals of the District of Columbia handed down the Broderick case, supra, it decided *A. Leschen & Sons Rope Co.* v. *American Steel & Wire Co. of New Jersey*, supra, the parties to which latter suit are the same as in the case at bar. In this case the Leschen mark was the same red strand mark as in the case at bar. The American Steel & Wire Company sought to register a trade-mark which consisted of a strand of rope colored blue. The Commissioner of Patents had awarded registration to the appellee, and, following its decision in the Broderick case, supra, the court of appeals reversed the decision of the Commissioner.

[1] It is contended here by appellant that the decision of the Court of Appeals of the District of Columbia ("this court being the legal successor of such court") in the case of *A. Leschen & Sons Rope Co.* v. *American Steel & Wire Co.* is res adjudicata of the issues before us. The parties are the same, but the trade-marks are different, and we would not be justified in applying the doctrine of res adjudicata, but we do feel that the reasoning and conclusions in the two decisions of the District of Columbia Court of Appeals are sound and in entire harmony with the decisions of this court in other cases, and should be followed in the decision of this case.

We have said that in determining the right of an applicant to register a trade-mark it is not necessary for us to pass on the validity of the opposer's mark (*California Canneries Co.* v. *Lush'us Products Co.*, 18 C. C. P. A. (Patents) 1480, 1483, 413 O. G. 3, 49 F.(2d) 1044), and that under the same circumstances the validity of the registration of the opposer's mark was not before us. *Revere Sugar Refinery* v. *J. Salvato*, 18 C. C. P. A. (Patents) 1121, 409 O. G. 562, 1123, 48 F.(2d) 400; *Lufkin Rule Co.* v. *Master Rule Mfg. Co.*, 17 C. C. P. A. (Patents) 1227, 1230, 399 O. G. 4, 40 F.(2d) 991. In a number of cases we have held in substance that in urging the registrability of an applicant's mark, it was not helpful to point out that others had used the same mark as that of opposer as a trade-mark. *Sharp & Dohme* v. *Parke, Davis & Co.*, 17 C. C. P. A. (Patents) 842, 394 O. G. 545, 37 F.(2d) 960; *American Fruit Growers, Inc.*, v. *Michigan Fruit Growers, Inc.*, 17 C. C. P. A. (Patents) 906, 393 O. G. 789, 38 F.(2d) 696; *National Biscuit Co.* v. *Sheridan*, 18 C. C. P. A. (Patents) 72, 402 O. G. 4, 44 F. (2d) 987; *California Packing Corp.* v. *Tillman & Bendel, Inc.*, 17 C. C. P. A. (Patents) 1048, 1057, 394 O. G. 789, 40 F.(2d) 108.

As we view it, in the light of the foregoing authorities, it is not necessary in deciding the issue at bar to pass upon the validity or the registrability of appellant's mark or the rights of others to use the same or similar marks, and we confine ourselves to the sole question of the applicant's right to register.

The right to oppose the registration of a trade-mark is by statute given to "Any person who believes he would be damaged by the registration of a mark." We have been required, on at least one occasion, to decide who may oppose the registration of a mark, and held in *Bookman* v. *Oakland Chemical Co.*, 17 C. C. P. A. (Patents) 1213, 399 O. G. 628, 40 F.(2d) 1006, that the "right to oppose the registration of a trade-mark is not limited to those who possess exclusive ownership of a similar mark * * *."

[2] The right to use a trade-mark does not necessarily carry with it the right to register the same. In *National Biscuit Co.* v. *Sheridan*, supra, this court said:

> True enough, we have said, in substance, that a trade-mark which can not be defended in the common law is not entitled to registration, but this is not saying that all trade-marks which can be defended in the common law, in view of the wording of the statute, are entitled to registration.

Because of the acts of the parties, one might acquire the right to use a mark and could not be prevented from using it even though confusion in the trade resulted from such use. The second proviso of section 5 of the Trade-Mark Act of February 20, 1905, as amended, was designed to prevent confusion and not to promote or add to it. *In re S. C. Herbst Importing Co.*, 30 App. D. C. 297, 298, 134 O. G. 1565; *Goodrich Co.* v. *Hockmeyer*, 17 C. C. P. A. (Patents) 1068, 394 O. G. 795, 40 F.(2d) 99; *Cellotex Co.* v. *Bronson Bros. & Co.*, 18 C. C. P. A. (Patents) 1490, 413 O. G. 280, 49 F.(2d) 1048.

Since Congress has been given no power to legislate on the substantive law of trade-marks (*American Steel Foundries* v. *Robertson*, 269 U. S. 372, 342

herein to the registration of the representation of the wire rope."

Upon this record there is some little confusion as to what kind of mark opposer relies upon. In its "grounds of opposition" it seems to rely upon a mark consisting of "a helical band of distinctive color applied thereto, such mark being usually applied by painting one of the strands of said rope." It does not definitely set up its registered trade-mark which is described in one of the decisions, hereinafter referred to, in the following language:

> Trade-mark consisting of a red or other distinctively colored streak applied to or woven in a wire rope. The color of the streak may be varied at will, so long as it is distinctive from the color and body of the rope. The essential feature of the trade-mark is the streak of distinctive color produced in or applied to a wire rope. This mark is usually applied by painting one strand of the wire rope a distinctive color, usually red.

The third ground of appellant's opposition is to the effect that by reason of its marking its wire rope as aforesaid, its product has become widely known as "colored strand" wire rope, and it is presumed that the appellant implied that its mark had acquired a secondary meaning. It is unnecessary for us to consider this phase of the case since the record is barren of any evidence tending to establish such fact, and the allegation was denied in the answer to the opposition.

In its answer, appellee makes the following statement:

> Applicant denies that opposer is the owner of a trade-mark as described in paragraph 2 of its notice of opposition broadly as a helical band of distinctive color, but admits that opposer has applied to its wire rope continuously for many years a mark distinguished by painting red one of the strands of said rope.

In the agreed statement of facts it is said:

> It is agreed * * * that the said A. Leschen & Sons Rope Company has marked wire ropes or cables of its manufacture with a helical stripe of uniform width and distinctive color produced by painting one of the strands of the rope red and has done this continuously for a period long antedating the use by said The American Steel and Wire Company of New Jersey of the mark claimed in its present application for registration; and has used this mark as its trade-mark.

The Commissioner of Patents treated the opposer's mark as one which "consists of the use of a red strand in a rope of like construction" to that of appellee. The Examiner of Interferences evidently did the same inasmuch as he remarks:

> The goods of the parties are the same, namely wire rope, and the difference in the marks used by the parties is merely one of color.

The Examiner of Interferences said that the same qestion had been considered in *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Company*, 36 App. D. C. 451, 164 O. G. 977, and *A. Leschen & Sons Rope Company* v. *American Steel & Wire Co. of New Jersey*, 36 App. D. C. 456, 164 O. G. 978, and concluded that these cases decided the issue and that he was bound thereby, and sustained the opposition.

The Commissioner of Patents regarded the cases of *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Company*, 201 U. S. 166, *Samson Cordage Works* v. *Puritan Cordage Mills*, 211 Fed. 603, and *A. Leschen & Sons Rope Company* v. *Fuller et al.*, 218 Fed. 786, as controlling, and said:

> Now, if the opposer's mark, by being limited to a red stripe or strand, permits the use by others of wire ropes with strands of other colors, then it would seem to follow that the applicant has the right to use its silver strand as a trade-mark, notwithstanding the opposer's red strand trade-mark; and, if the applicant possesses the right to use its silver strand, no good reason is apparent why said mark should not be registered.

In addition to the above quoted statement by the Commissioner, his decision contains the following:

> If it were assumed, however, that a yellow strand so nearly resembles a red strand, when they are used to identify wire cables as to their origin or ownership, as to be likely to cause confusion or mistake in the mind of the public, still it is believed that such resemblance does not exist as between the applicant's silver strand and the opposer's red strand.

We do not agree with the correctness of the statement—

> if the applicant possessed the right to use its silver strand, no good reason is apparent why said mark should not be registered,

nor can we concur in the finding that there is such a difference between a yellow strand and a silver strand as to justify the conclusion reached by the Commissioner.

In *A. Leschen & Sons Rope Co.* v. *Broderick & Bascom Rope Co.*, 201 U. S. 166, the court had before it the sole question as to whether or not appellant's registered mark, which in that instance consisted of any "distinctively colored streak applied to or woven in a wire rope" was a valid mark. It held that appellant's registered trade-mark covered all colors and was too broad to be valid and intimated that it might have been held valid if the trade-mark had been limited to painting one strand red, and said:

> It is true that the drawing annexed to the registration, a copy of which is here given, as well as the exhibits furnished, shows one of the strands colored red; and if the trade-mark were restricted to a strand thus colored, perhaps it might be sustained; but the description of a colored streak, which would be answered by a streak of any color painted spirally *with* the strand, longitudinally *across* the strands, or by a circular streak around the rope, was held by both courts, and we think properly, too indefinite to be the subject of a valid trade-mark. Certainly a trade-mark could not be claimed of a rope, the entire surface of which was colored; and if color be made the essential feature, it should be so defined, or connected with some symbol or design, that other manufacturers may know what they may safely do. Upon the plaintiff's theory, a wire rope containing a streak of any description or of any color would be an infringement, and a manufacturer honestly desiring to distinguish his wire rope from that of the plaintiff's by difference in color might, by adopting a white streak running along the length of the rope across the strands, find himself an infringer, when his real object may have been to obtain a mark which would distinguish his manufacture from that of the plaintiff's. Even if it were conceded that a person might claim a wire rope colored red or white, or any other color, it would clearly be too broad to embrace all colors. So, although it might be possible to claim the imprint of a colored figure on a wire rope, the figures should be so described that other manufacturers would know how to avoid it. If the trade-mark be a colored streak, it should be, at least, described and a statement of the mode in which the same is applied and affixed to the rope; and a trade-mark which may be infringed by a streak of any color, however applied, is manifestly too broad. [Italics quoted.]

It will be noticed that a red strand trade-mark was not before the Supreme Court and necessarily its conclusions on that subject, intimating that a certain, definite, colored strand might be the subject matter of a valid trade-mark, and that any other color which distinguished the goods of another might be the basis of a valid trade-mark, is not regarded as binding or controlling of our action in this case. It was not regarded as controlling, in an almost identical case between the same parties at bar, by the Court of Appeals of the District of Columbia, our predecessor in our present patent and trade-mark jurisdiction, in *A. Leschen & Sons Rope Company* v. *American Steel & Wire Co. of New Jersey*, supra., and also in *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Co.*, supra.

In *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Co.*, supra, the court of appeals had before it the red strand trade-mark of appellant and the yellow strand trade-mark of the Broderick & Bascom Rope Company. It held, in an opinion by Mr. Justice Robb, that the Supreme Court's decision holding invalid a registered trade-mark "does not deprive such owners of any property right which they may have acquired by the *actual use* of a good trade-mark" [italics ours], and said:

> The opinion of the Supreme Court went no further than to deprive the present application of the presumption of ownership which a good registration would have afforded it.

Further along in the opinion we find the following clear and forceful langunge:

> We come now to the consideration of the question whether the two marks here involved are sufficiently alike as "to be likely to cause confusion or mistake in the mind of the public, or to deceive purchasers." 33 Stat. at L. 724, chap. 592, U. S. Comp. Stat. Supp. 1909, p. 1275. The only difference in the marks is that of color. They are both used upon wire rope, and are both applied in substantially the same manner. It is admitted that appellant has used its mark for more than twenty years, and if this were a case of unfair competition there would be little doubt as to appellant's right to relief, for while color, generally speaking, is not a proper subject of a trade-mark, a rival dealer may not appropriate another's mark by merely changing its color. It is manifest that if appellee is entitled to use precisely the same mark as that used by appellant, but colored yellow instead of red, every color of the rainbow may be appropriated by other wire rope manufacturers, and may be similarly applied. Such a result, in our opinion, would lead to no end of confusion, the value of appellant's mark would be destroyed, and the purchasing public would be liable to imposition. The Patent Office has held that there is no conflict between the two marks, and the appellee insists that the evidence fails to show such a conflict; but both marks are before us, and in the language of the Circuit Court of Appeals for the Eighth Circuit, "the evidence of the eyes is more persuasive and satisfactory than any other." *Layton Pure Food Co.* v. *Church & D. Co.*, 104 C. C. A. 464, 182 Fed. 24.

On the same date the Court of Appeals of the District of Columbia handed down the Broderick case, supra, it decided *A. Leschen & Sons Rope Co.* v. *American Steel & Wire Co. of New Jersey*, supra, the parties to which latter suit are the same as in the case at bar. In this case the Leschen mark was the same red strand mark as in the case at bar. The American Steel & Wire Company sought to register a trade-mark which consisted of a strand of rope colored blue. The Commissioner of Patents had awarded registration to the appellee, and, following its decision in the Broderick case, supra, the court of appeals reversed the decision of the Commissioner.

[1] It is contended here by appellant that the decision of the Court of Appeals of the District of Columbia ("this court being the legal successor of such court") in the case of *A. Leschen & Sons Rope Co.* v. *American Steel & Wire Co.* is res adjudicata of the issues before us. The parties are the same, but the trade-marks are different, and we would not be justified in applying the doctrine of res adjudicata, but we do feel that the reasoning and conclusions in the two decisions of the District of Columbia Court of Appeals are sound and in entire harmony with the decisions of this court in other cases, and should be followed in the decision of this case.

We have said that in determining the right of an applicant to register a trade-mark it is not necessary for us to pass on the validity of the opposer's mark (*California Canneries Co.* v. *Lush'us Products Co.*, 18 C. C. P. A. (Patents) 1480, 1483, 413 O. G. 3, 49 F.(2d) 1044), and that under the same circumstances the validity of the registration of the opposer's mark was not before us. *Revere Sugar Refinery* v. *J. Salvato*, 18 C. C. P. A. (Patents) 1121, 409 O. G. 562, 1123, 48 F.(2d) 400; *Lufkin Rule Co.* v. *Master Rule Mfg. Co.*, 17 C. C. P. A. (Patents) 1227, 1230, 399 O. G. 4, 40 F.(2d) 991. In a number of cases we have held in substance that in urging the registrability of an applicant's mark, it was not helpful to point out that others had used the same mark as that of opposer as a trade-mark. *Sharp & Dohme* v. *Parke, Davis & Co.*, 17 C. C. P. A. (Patents) 842, 394 O. G. 545, 37 F.(2d) 960; *American Fruit Growers, Inc.*, v. *Michigan Fruit Growers, Inc.*, 17 C. C. P. A. (Patents) 906, 393 O. G. 789, 38 F.(2d) 696; *National Biscuit Co.* v. *Sheridan*, 18 C. C. P. A. (Patents) 72, 402 O. G. 4, 44 F. (2d) 987; *California Packing Corp.* v. *Tillman & Bendel, Inc.*, 17 C. C. P. A. (Patents) 1048, 1057, 394 O. G. 789, 40 F.(2d) 108.

As we view it, in the light of the foregoing authorities, it is not necessary in deciding the issue at bar to pass upon the validity or the registrability of appellant's mark or the rights of others to use the same or similar marks, and we confine ourselves to the sole question of the applicant's right to register.

The right to oppose the registration of a trade-mark is by statute given to "Any person who believes he would be damaged by the registration of a mark." We have been required, on at least one occasion, to decide who may oppose the registration of a mark, and held in *Bookman* v. *Oakland Chemical Co.*, 17 C. C. P. A. (Patents) 1213, 399 O. G. 628, 40 F.(2d) 1006, that the "right to oppose the registration of a trade-mark is not limited to those who possess exclusive ownership of a similar mark * * *."

[2] The right to use a trade-mark does not necessarily carry with it the right to register the same. In *National Biscuit Co.* v. *Sheridan*, supra, this court said:

> True enough, we have said, in substance, that a trade-mark which can not be defended in the common law is not entitled to registration, but this is not saying that all trade-marks which can be defended in the common law, in view of the wording of the statute, are entitled to registration.

Because of the acts of the parties, one might acquire the right to use a mark and could not be prevented from using it even though confusion in the trade resulted from such use. The second proviso of section 5 of the Trade-Mark Act of February 20, 1905, as amended, was designed to prevent confusion and not to promote or add to it. *In re S. C. Herbst Importing Co.*, 30 App. D. C. 297, 298, 134 O. G. 1565; *Goodrich Co.* v. *Hockmeyer*, 17 C. C. P. A. (Patents) 1068, 394 O. G. 795, 40 F.(2d) 99; *Cellotex Co.* v. *Bronson Bros. & Co.*, 18 C. C. P. A. (Patents) 1490, 413 O. G. 280, 49 F.(2d) 1048.

Since Congress has been given no power to legislate on the substantive law of trade-marks (*American Steel Foundries* v. *Robertson*, 269 U. S. 372, 342

O. G. 711), it would seem to follow that it did not have the right to enact legislation which, in every instance, would prevent confusion in the trade in the use of trade-marks. But, it cannot be doubted that it had the constitutional right to provide a federally controlled place of registration and to deny registration therein, where confusion would likely result to the trade from the trade-mark use of such registered marks. *National Biscuit Co.* v. *Sheridan*, supra; see also *California Packing Corp.* v. *Tillman and Bendel*, supra, *California Canneries Co.* v. *Lush'us Products Co.*, supra, and *Sun-Maid Raisin Growers of Calif.* v. *American Grocer Co.*, 17 C. C. P. A. (Patents) 1034, 395 O. G. 3, 40 F.(2d) 116.

The Commissioner concluded that a silver strand trade-mark would distinguish the goods of one from the goods of another using a red strand trade-mark where the only difference in the marks was color, and that the first part of section 5 of the Trade-Mark Act, supra, providing that—

> no mark by which the goods of the owner of the mark may be distinguished from other goods of the same class shall be refused registration [etc.],

required a registration under such circumstances. The quoted provision from the first part of section 5 must be read in connection with the second proviso, *I. E. Palmer Co.* v. *Nashua Mfg. Co.*, 17 C. C. P. A. (Patents) 583, 389 O. G. 533, 34 F.(2d) 1002; *California Packing Corp.* v. *Tillman & Bendel, Inc.*, supra; *Goodrich Co.* v. *Hockmeyer*, supra; *Sun-Maid Raisin Growers of California* v. *American Grocer Co.*, supa. By construing the two provisions together, registration is required only when the mark sought to be registered so distinguishes the goods of the owner from the goods of the other that confusion is unlikely.

[3] We do not think there is much less likelihood of confusion between a silver strand and a red strand than was held to exist between a red strand and a blue or yellow strand. Since color alone in the mark is the only distinguishing feature, we think that the probability of confusion is great.

The weight of authority is to the effect that a mark is not registrable if color alone is its distinguishing characteristic. *In re General Petroleum Corp. of California*, 18 C. C. P. A. (Patents) 1444, 412 O. G. 831, 49 F.(2d) 966, and authorities cited; *In re Sun Oil Co.*, 18 C. C. P. A. (Patents) 1421, 412 O. G. 277, 49 F.(2d) 965; *In re Walker-Gordon Laboratory Co.*, 19 C. C. P. A. (Patents) ——, 414 O. G. 826, 53 F.(2d) 548 (Patent appeal No. 2813, decided December 7, 1931). It seems clear that before one trade-mark can be registered over the opposition of the owner of another for use on goods of the same descriptive properties, the applicant's mark must show dissimilarity other than color.

It may be pointed out that the trade-marks of both appellant and appellee are not such as are only distinguishable by color, that is to say, that the color is arranged in a particular way. As far as the question of confusion is concerned, this fact is immaterial, since both parties seek to apply their color in the same manner, and both marks present the same appearance except as to color.

The decision of the Commissioner of Patents is reversed.

Reversed.

GRAHAM, *P. J.*, and LENROOT, *J.*, specially concurring:

We concur in the conclusion that the applicant is not entitled to registration of its mark which it describes as "a silver strand which is incorporated in the rope during the laying-in operation." We do so, however, upon different grounds than those stated in the opinion of the majority. As we understand the majority opinion, it proceeds upon the theory that confusion would result with opposer's mark if registration were allowed. In our opinion the decision should rest upon the ground that the applicant's mark is not registrable, per se.

There has been much litigation concerning the mark of the opposer here, which is described in the agreed statement of facts herein to be "a helical stripe of uniform width and distinctive color produced by painting one of the strands of the rope red." These cases are referred to in the majority opinion. *Leschen & Sons* v. *Broderick*, 201 U. S. 166; *Leschen & Sons* v. *Broderick*, 36 App. D. C. 451; *Leschen & Sons* v. *Fuller*, 218 Fed. 786.

In none of these cases was the validity of the alleged trade-mark of the opposer upheld. In the case first above cited, the Supreme Court was passing upon the registered mark of Leschen & Sons. This mark was described as a—

> streak of distinctive color produced in or applied to a wire rope. This mark is usually applied by painting one strand of the wire rope a distinctive color, usually red.

The Court held the mark invalid, saying in part:

> Whether mere color can constitute a valid trade-mark may admit of doubt. Doubtless it may, if it be impressed in a particular design, as a circle, square, triangle, a cross, or a star. But the authorities do not go farther than this.
> • • • • • • • •
> It is unnecessary to express an opinion whether, if the trade-mark had been restricted to a strand of rope distinctively colored, it would have been valid. • • •

In the case secondly above cited, the Court of Appeals of the District of Columbia stated, in addition to what is quoted in the majority opinion herein:

> We have assumed, for the purposes of this opinion, that the Patent Office was right in holding that a mark consisting of a stripe, of uniform width, spirally disposed around the surface of wire rope, may constitute a valid trade-mark. We have not deemed it necessary to consider the question, since neither party is in a position to raise it here.

In the case last above cited, the circuit court of appeals of the eighth circuit, in refusing to enjoin the use of a yellow strand rope by one of opposer's competitors, said, in part:

> • • • A colored strand, not restricted to any color, is not a valid trade-mark. *A. Leschen & Sons Rope Co.* v. *Broderick & Bascom Rope Co.*, 134 Fed. 571, 573, 67 C. C. A. 418, 420; *Samson Cordage Works* v. *Puritan Cordage Mills*, 211 Fed. 603, 604, 607, 128 C. C. A. 203. If it was the latter, and if that is a valid trade-mark, it is so because, and only because, it is limited to a red stripe or strand, and that limitation permits the use by others of wire ropes with strands of other colors, and the defendants do not infringe that trade-mark because they use a yellow strand.

Comparing the language just quoted with the reasoning of the majority opinion, conflict is observed. If the language of the Supreme Court and of the Circuit Court of the Eighth Circuit above quoted are to be construed as any intimation that the Leschen red strand mark is a valid trade-mark, it must be so because the Leschen mark is restricted to one color, namely, red. Hence, logically, that being true, the applicant here might legally claim the right to use a silver strand, because no rights of the opposer would be violated thereby.

But we believe that both reason and the weight of legal authority justify the view that neither a silver strand nor a red strand in a wire rope, by itself, constitutes a valid trade-mark. Such a mark consists of coloring a certain part of a manufactured article in a certain way, and nothing more. It would certainly not be held to be a valid trade-mark to color the entire rope in a certain way. As was said by the Supreme Court in *Leschen Rope Co.* v. *Broderick*, supra:

> Certainly a trade-mark could not be claimed of a rope, the entire surface of which is colored.

It is well settled that a valid trade-mark cannot be acquired in the use of a color not connected with some symbol or design. *Scriven Co.* v. *Morris*, 154 Fed. 914; *Newcomer* v. *Scriven*, 168 Fed. 621; *In re Waterman*, 34 App. D. C. 185, 152 O. G. 232; *Taylor* v. *Bostick*, 299 Fed. 232; *In re American C. L. Co.*, 28 App. D. C. 446, 127 O. G. 393.

What is the distinctive design which the registrant here claims? It says that it colors one strand of its rope silver. What sorts of ropes it manufactures, or how the strands are arranged, is not clearly defined. Whether its ropes consist of two, three, or ten strands is not stated. If the occasional view of a colored strand is to be the mark, such view may vary as the ropes vary in manufacture. Such a coloring of a rope strand does not, to our minds, indicate a design, but is rather a fortuitous matter, depending upon circumstances. It would be equally appealing to the reason if the manufacturer of tables would paint the tops of his tables red and the legs blue, and claim this for his trade-mark, irrespective of the kind of table manufactured. The same simile might be carried into every avenue of trade and commerce. Assume that a maker of automobiles paints the bodies of his cars yellow and the wheels black. This may constitute a design, for which he might possibly have a design patent, but may he register the same as a trade-mark composed of said color design alone?

If he may, then it is because his color mark may be said to be associated with some distinctive symbol or design, for such is the law as laid down by the authorities. Then, if he is entitled to register such trade-mark under the laws of the United States, no one else may be permitted to use his trade-mark, by simply changing the colors, as, for instance, painting the bodies black and the wheels yellow. The majority opinion holds, and it is well settled law, that one may not appropriate the trade-mark of another, by simply changing the colors in which it is displayed. In this connection, reference is had to the authorities cited, in connection with other suggestions made herein.

This being true, to grant registration to such a color combination in such a case is to grant to the applicant a practical monopoly on all color combinations. Either such a registration must be restricted to the particular colors described in the application, or, in legal effect, it is as broad as the solar spectrum itself. Certainly, the latter was never intended by the law.

The more reasonable view of the matter, we think, is that one may not register a trade-mark which consists only of coloring one part of his article of manufacture in a certain way, unaccompanied by any other design or symbol. If the part of his manufactured article is of a particular form, so that it may be distinctive when colored, the design patent laws give ample protection for the shape and design of said parts. This, in itself, however, should give him no right to register the said combination of form and color as a trade-mark for his goods.

We believe the weight of better authority inclines to the view that such distinctive coloring of a part of a device, as a strand of a rope, does not constitute a valid, registrable trade-mark.

In re Waterman, supra, dealt with a mark proposed to be registered, which consisted in coloring the feed bar of a fountain pen red, and the portion of the fountain pen reservoir or handle adjacent thereto, black. In its application the applicant said, "The trade-mark is applied to the goods during the manufacture by coloring the feed bar red." The court of appeals, citing the decision of the Supreme Court in *Leschen & Sons* v. *Broderick*, supra, refused to permit the registration, stating,

> It is well settled that a trade-mark cannot be acquired in the use of color not connected with some symbol or design.

In *In re American Circular Loom Co.* supra, a trade-mark was sought to be used on insulating tubes or coverings for electric wires which consisted in flakes of mica impressed on the external surface of the same. The court of appeals denied the registration, stating that this was nothing more than an ingenious attempt to obtain a trade-mark of which color, unconnected with some symbol or design, was the essential feature.

In *Sawyer* v. *Horn*, 1 Fed. 24, a party was claiming as a trade-mark in part, a package consisting of a cylinder with a metal perforated top, sealed with red sealing wax. Such claim was held to be without legal right.

In *Scriven Co.* v. *Morris*, supra, it was sought to sustain a trade-mark which consisted of a piece of buff colored insertion used in drawers, which themselves were made of white jean. The court held that no valid trade-mark could be acquired therein, because it was the use of a color not connected with some symbol or design. This case was approved in *Newcomer* v. *Scriven*, supra.

In *Davis* v. *Davis*, 27 Fed. 490, an arrangement of soap in a box by which a certain pattern of colors was presented to the eye was held not to be such a trade-mark as could be legally registered.

In *Dodge Mfg. Co.* v. *Sewall et al.*, 142 Fed. 288, a manufacturer of rope secured a registration as a

trade-mark of a colored thread twisted into the rope. The court held that if this manufacturer had any trade-mark at all, it must be confined to a blue thread, which was the only one it had ever used, but added that no trade-mark could be held to be valid which did not involve a figure or design.

Diamond Match Co. v. *Saginaw Match Co.*, 142 Fed. 727, involved an alleged trade-mark which consisted of coloring the head of a match red, with a blue tip thereon. The court held that such a mark did not constitute a valid trade-mark, stating among other things,

> Sometimes a color, taken in connection with other characteristics, may serve to distinguish one's goods, and thus be protected by the courts (*Fairbank Co.* v. *Bell Mfg. Co.*, 77 Fed. 869, 23 C. C. A. 554; *Ohio Baking Co.* v. *National Biscuit Co.*, 127 Fed. 116, 62 C. C. A. 116); but, as a rule, a color cannot be monopolized to distinguish a product (*Fleischmann* v. *Starkey* [C. C.] 25 Fed. 127; *Mumm* v. *Kirk* [C. C.] 40 Fed. 589).

In *Parker Pen Co.* v. *Finstone*, 7 F.(2d) 753, a registered trade-mark was involved which consisted of the drawing of a fountain pen with a red body portion and two black end portions, no claim being made for the representation of the fountain pen apart from the color. It was said that the trade-mark was applied by producing the same directly upon the pen body. The owner of this mark sought to enjoin the use by others of a similar mark, likewise used on fountain pens, with some slight difference. The court held that the use of red and black in the manufacture of fountain pens was not such a matter as could be the subject of monopoly, and held that the registered trade-mark was invalid.

In *Sampson Cordage Works* v. *Puritan Cordage Mills*, 211 Fed. 603, a manufacturer of sash cord, by braiding into his cord a colored strand, gave to the finished cord the appearance of having a series of spots arranged spirally about the circumference of the same. This had been registered as a trade-mark. The court said:

> • • • How, apart from its color, can the exposed, though broken, surface of a braided strand be said to be a distinctive design, when the product of all manufacturers normally presents precisely the same feature and the same design; for (to apply the expressions of Mr. Justice Lurton in *Newcomer & Lewis* v. *Scriven Co.*, which we have quoted above) the color thus is not impressed upon an "arbitrary design," nor is it employed in association with "characteristics which serve to distinguish the article as made and sold by" complainant. In the absence of controlling authority to the contrary, we are constrained to agree with the views expressed by the circuit court of appeals of the eighth circuit. This, we think, results in a denial of the validity of complainant's trade-mark.
> • • • Complainant's alleged mark, if infringed by that of defendant, occupies the field as against all colored marks effected by the use not only of one braided strand, but even of two in a twelve strand cord, and whether so arranged as that the segments appear upon the surface two together or twice as close to each other. We think this result would give complainant an unwarranted monopoly, and that the district court rightly dismissed the bill in the trade-mark case.

We had a somewhat similar matter before us in *Lufkin Rule Co.* v. *Master Rule Mfg. Co.*, 17 C. C. P. A. (Patents) 1227, 399 O. G. 4, 40 F.(2d) 991. In that case it was sought to register as a trade-mark the words "Blue End", together with coloring blue the ends of rules which were manufactured by the applicant. The case was a close one and went off, not so much upon the question of color, as upon the fact that the words, "Blue End" were used as a part of the combination trade-mark. We did, however, in that case, state that if the matter depended upon the coloring alone of the ends of the rules, it did not constitute a valid trade-mark, because, by permitting the registration of such a mark, the applicant would secure a monopoly on all colors for ends of rules. That case went as far as we would be willing, in our present views of the matter, to go, in permitting registration of such marks.

In conclusion, we are of opinion the applicant is not entitled to registration of its mark. We do not believe it is such a mark as is entitled to registration under the Trade-Mark Act of February, 1905, as amended, and registration should be denied upon that ground.

U. S. Court of Customs and Patent Appeals

IN RE BREER

No. 2,889. Decided February 1, 1932

PATENTABILITY—PISTONS.

Claims for a piston in which a dovetailed or interlocking joint is provided between a structure having a low coefficient of expansion and the skirt having a high coefficient of expansion *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Mr. Charles M. Thomas, Mr. J. K. Harness, and *Mr. F. D. Thomas* for Breer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, rejecting all of the claims of appellant's application, filed on December 1, 1926, said claims being numbered 1 to 5, inclusive, 7, and 9 to 13, inclusive.

Claim 1 is illustrative and reads as follows:

> 1. In a piston of the class described comprising, a head portion, a pair of downwardly extending bosses carried by said head portion, a pair of wrist pin bearings carried by said bosses, a skirt portion having a high coefficient of expansion comprising a cylindrical lower portion and a pair of upwardly extending faces spaced from said head portion and bosses, a plate having a low coefficient of expansion bridging the space between the upwardly extending faces, connected thereto by an interlocking joint, and secured to said wrist pin bearings.

The claims were rejected as not involving invention, in view of a co-pending application of appellant and the following references: Vogel, 1,303,829, May 13, 1919; Horat, 1,095,866, May 5, 1914; Pondelick, 1,563,923, December 1, 1925; French to Givaudan et al., 455,539, December 13, 1913; British to Napier, 105,101, March 29, 1916; British to Kilburn, 6,311, March 13, 1911.

The construction involved in the application relates to a strut for use in a bi-metallic piston.

It is stated by the Board of Appeals in its decision that:

> The claims are drawn to a piston structure similar to that disclosed and claimed in appellant's co-pending application Serial No. 61,680 which is involved in several interferences, but they differ therefrom by reciting interlocking joints between the plate formed of a metal having a low coefficient of expansion and the other parts of the piston which are formed of a metal having a high coefficient of expansion.

While said co-pending application is not found in the record, the correctness of the statement above quoted is not challenged by appellant.

It does appear from the record that the subject matter of said co-pending application is involved in five interferences involving 19 counts, which counts are printed in the record.

As heretofore indicated, the alleged invention here in issue lies in providing a dovetailed or interlocking joint between a strut having a low coefficient of expansion and the skirt of the piston having a high coefficient of expansion, the joint being formed by dovetailed projections upon the strut so that, when the metal of the piston is cast around them, an interlocking joint is formed, enabling the strut to control the expansion of the skirt and preventing the head and skirt from pulling away under an expansive strain. Preferably the piston head and skirt are made of aluminum alloy, while the strut is made of ordinary nickel steel.

That appellant's combination is novel the Solicitor for the Patent Office concedes. That appellant's interlocking joint provides a piston structure which is more durable in use is admitted by the Board of Appeals.

The Examiner stated that:

> • • • While it is recognized that the method of forming interlocking joints between the piston and strut *may be a practical solution of the problem encountered in this connection*, the Examiner still holds that such a structure as defined in the claims is unpatentable. (Italics ours.)

Thus the Examiner recognized the presence of a problem in connection with the utility of bi-metallic pistons, and that appellant has solved it. The novelty and utility of appellant's combination being conceded by the Patent Office tribunals, the only question is whether such combination involved the exercise of the inventive faculty.

While the references show, and appellant concedes, that an interlocking dovetail joint, per se, is old, and has been used for uniting certain piston elements together, none of them discloses the combination claimed, including a comparatively non-expansible strut having an interlocking connection with the expansible piston skirt sections.

Whether the combination with said last named element required the exercise of the inventive faculty is largely a matter of opinion. We are not unmindful of the fact that both of the Patent Office tribunals have held that it did not, nor of the well established rule that in such cases we will not reverse their findings unless they are manifestly wrong. However, in the case at bar, there are some considerations which lead us to the conclusion that there is at least sufficient doubt as to lack of patentability of the claims in issue as to require the application of the rule that, where well-founded doubt of lack of patentability exists, such doubt should be resolved in favor of the inventor.

Among these considerations are the fact that the Examiner found that a problem existed as to how to make pistons of the character here involved of practical utility, and his frank recognition that appellant had solved the problem.

Furthermore, it appears that the general combination involved in the claims in issue, other than the interlocking joint element here in issue, is involved in appellant's co-pending application. It is conceded that said element is not included in such application, and it would seem that if the desirability of the interlocking joint in the character of pistons here involved was obvious to one skilled in the art, it would have been so included, because, unquestionably, such a joint, if disclosed in the earlier application, could have been included in a claim therein as a specific limitation of the combination. The fact that the element here being considered was not included in appellant's prior application does not, in itself, establish that the use of dovetailed or interlocking joints was not obvious to one skilled in the art, but it is a circumstance which may be considered together with the other facts in the case.

Moreover, we think that the problem of uniting metallic elements having widely different degrees of expansion at a given temperature, so as to limit expansion of the skirt of the piston, is a different problem than one where a dovetail joint is used in the prior art simply to hold the parts in close relation to each other. Appellant solved the problem of substantially preventing such expansion by the use of the dovetail or interlocking joint. This never had been done before, and it has admittedly produced a novel and useful result.

Viewing the case as a whole, we are of the opinion that there is at least sufficient doubt as to lack of patentability of appellant's claims as to require their allowance.

As all of the claims in issue contain the element of the dovetailed or interlocking joint, they should all be allowed.

The decision of the Board of Appeals is reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,212,840, F. J. Straub, Building block and method of making same, filed Oct. 10, 1931, D. C., N. D. N. Y., Doc. 2347, *C. Straub, Inc., et al.* v. *W. L. Hill et al.* (*Hill & Warner*).

1,239,428, L. Courtot, Radiator, filed Dec. 8, 1931, D. C., N. D. N. Y., Doc. 2384, *American Radiator Co.* v. *Utica Radiator Corp.*

1,277,750, J. A. Pearce, Flotation process and apparatus, appeal filed Mar. 4, 1932, C. C. A., 10th Cir., Doc. 647, *The Stearns-Roger Mfg. Co.* v. *J. P. Ruth, jr.*

1,364,851, L. Mastrangel, Starting device; 1,364,852, Hartford and Mastrangel, System for generating, storing, distributing, and utilizing electric energy; 1,364,853, same, Engine starter, filed Mar 9, 1932, D. C., E. D. N. Y., Doc. E 6106, *P. A. Rose* v. *Ford Motor Co.*

1,364,852. (See 1,364,851.) 1,364,853. (See 1,364,851.)

1,423,608, R. Grossmann, Candle making machine, filed Feb. 12, 1932, D. C., N. D. N. Y., Doc. 2439, *Will & Baumer Candle Co., Inc.*, v. *Muench-Kreuzer Candle Co., Inc.*

1,478,786. C. W. Hazelett, Method of assembling storage battery elements; 1,659,654, same, Method of making storage battery plates; 1,611,911, same, Apparatus for casting sheet metal, appeal filed Feb. 25, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9447, *The Western Battery & Supply Co.* v. *The Hazelett Storage Battery Co.*

1,531,747. (See 1,600,668.) 1,531,784. (See 1,600,668.)

1,540,569, H. Respess, Ventilator, D. C., S. D. N. Y., Doc. E 51/109, *Allweather Ventilator Co.* v. *R. H. Macy & Co., Inc.* Dismissed (notice Mar. 7, 1932).

1,545,051. (See 1,600,668.)

1,551,515, W. K. Howe, Automatic train control system, C. C. A., 8th Cir. (St. Louis), Doc. 9247, *Great Northern Rwy. Co.* v. *General Rwy. Signal Co.* Decree affirmed Mar. 1, 1932.

1,552,326, P. J. Lunati, Lifting device for motor vehicles, filed Mar. 7, 1932, D. C., S. D. Iowa (Davenport), Doc. E 4119, *Rotary Lift Co. et al.* v. *Davenport Machine & Foundry Co.*

1,600,668, C. W. Hazelett, Process and apparatus for casting sheet metal; 1,645,424, same, Process of making storage battery; 1,545,051, same, Battery bridge terminal lug casting machine; 1,531,747, same, Sheet casting machine; 1,611,910, same, Method of making and shipping storage battery elements; 1,531,784, same, Sheet metal, appeal filed Feb. 25, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9448, *The Western Battery & Supply Co.* v. *G. A. Webster.*

1,611,910. (See 1,600,668.) 1,611,911. (See 1,478,786.)

1,638,396, Hall and Lloyd, Fuel stoking device; Re. 17,925, M. J. Wightman, Mechanical stoker; Re. 18,006; C. H. Hall, Ash removing device, filed Mar. 8, 1932, D. C., W. D. N. Y., Doc. 1172, *Domestic Stoker Co.* v. *Empire Development Corp.*

1,639,294, H. D. Hudson, Sprayer, appeal filed Feb. 29, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9455, *H. D. Hudson Mfg. Co.* v. *Standard Oil Co.*

1,645,424. (See 1,600,668.) 1,659,654. (See 1,478,786.)

1,680,268, G. Weiss, Absorbent pad machine; 1,794,358, W. Bauer, Pad-making machine, filed Oct. 10, 1931, D. C., N. D. N. Y., Doc. 2348, *International Cellucotton Products Co.* v. *E. L. O'Neil.*

1,700,535, H. L. Kaufman, Protector for mattress, D. C., S. D. N. Y., Doc. E 49/233, *H. L. Kaufman* v. *P. Tames (Melrose Hospital Uniform Co.).* Dismissed (notice Mar. 5, 1932).

1,725,787, G. H. Ellis, Building construction, appeal filed Feb. 29, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9454, *The Insulite Co.* v. *Reserve Supply Co.*

1,770,368, E. G. Fahlman, Mold, filed Mar. 8, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4187, *The Permold Co.* v. *National Bronze & Aluminum Foundry Co.*

1,782,108, J. C. Wahl, Desk stand and holder for fountain pens, filed Mar. 7, 1932, D. C., E. D. N. Y., Doc. E 6092, *Pen Desk Set Co.* v. *F. Loeser & Co., Inc.*

1,794,358. (See 1,680,268.)

1,840,681, Seidman and Cohan, Link device, filed Mar. 8, 1932, D. C., E. D. N. Y., Doc. E 6105, *Seidman & Cohan, Inc.*, v. *Findlay Strauss Jewelry Co., Inc.*

Re. 15,293, L. E. La Bombard, Blank feeder, D. C. Minn. (St. Paul), Doc. E 2181, *Specialty Automatic Machine Co. et al.* v. *E. G. Staude Mfg. Co.* Dismissed without prejudice Mar. 7, 1932.

Re. 16,826, C. Stein, Recuperative furnace, C. C. A., 3d Cir., Doc. 4528, *Rust Engineering Co. et al.* v. *Chapman-Stein Co.* Decree affirmed Mar. 8, 1932.

Re. 17,131, O. S. Caesar, Heating apparatus for automotive vehicles, C. C. A., 8th Cir. (St. Louis), Doc. 9228, *United Motors Service, Inc.*, v. *Tropic-Aire, Inc.* Decree affirmed Mar. 1, 1932.

Re. 17,925. (See 1,638,396.) Re. 18,006. (See 1,638,396.)

Disclaimers

1,365,091.—*Alvah W. Clement*, East Cleveland, Ohio. ALLOY. Patent dated January 11, 1921. Disclaimer filed April 8, 1932, by the assignee, *Electro Metallurgical Company.*

Enter this disclaimer of so much of the subject-matter of claims 10 and 11 of the said Letters Patent as may cover or include a product otherwise conforming to the terms thereof and having a content of carbon over about one tenth of one per cent.

Re. 16,565.—*Hubert A. Myers*, Toledo, Ohio. CLUTCH DEVICE. Patent dated March 1, 1927. Disclaimer filed April 6, 1932, by the assignee, *Myers Regulator Company.*

Hereby enters this disclaimer, disclaiming those parts of the said claims 2 and 4 so as to limit said claims 2 and 4 as here below set forth:

As to claim 2, line 3, before "spring" insert the word *helical*; same line, after "spring" insert *having inturned ends and a plurality of coils and.* Line 5, after "engaging" insert *the inner surface of the outer.*

And so that the said claim 2, when limited by this disclaimer, will read as follows:

"2. In a clutch device, a pair of members, one contained within the other and one rotative relative to the other, a helical spring having inturned ends and a plurality of coils and located between the members for normally frictionally engaging the inner surface of the outer one of the members, one of the members having a recess and the spring having its ends located in the recess for positively engaging the last named member, a second rotative member located within the inner of the said members and having a part for rotatively connecting the rotative members together and for engaging the ends of the spring, the spring frictionally released by rotation of one of the members, and frictionally locked by the rotation of other of the rotative members."

As to claim 4, line 2, before "spring" insert *helical*; same line, after "spring" insert *having inturned ends and a plurality of coils and*; same line, after "for" insert *normally.* Line 3, before "wall" insert *inner surface of the.* Line 5, after "and" insert *one within the other, the outer of the said members having a recess, the edges of the recess.* Line 6, cancel "one" and insert in lieu thereof *the outer.* Line 7, after "housing" insert *upon actuation of the said member.* Line 8, cancel "other" and insert in lieu thereof *inner*; same line, after "members" insert *being rotative relative to the spring and having parts for engaging the inturned ends of the spring.* At the end of the claim insert *and rotatively locking the members together.*

And so that the said claim 4, when limited by this disclaimer, will read as follows:

"4. In a clutch device, a fixed housing, a helical spring having inturned ends and a plurality of coils and located within the housing for normally frictionally engaging the inner surface of the wall of the housing, a pair of rotative members located within the housing and one within the other, the outer of said members having a recess, the edges of the recess adapted to engage the ends of the spring, the outer of the rotative members for releasing the spring from the housing upon actuation of said member and the inner of the rotative members being rotative relative to the spring and having parts for engaging the inturned ends of the spring for locking the spring to the wall of the housing and for rotatively locking the members together."

TRADE-MARKS

OFFICIAL GAZETTE, MAY 3, 1932

[VOL. 418. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 324,144. LEONARD SEED CO., Chicago, Ill. Filed Feb. 13, 1932.



For Sets of Onion Bulbs for Planting.
Claims use since Jan. 14, 1932.

Ser. No. 325,283. THE CONSOLIDATION COAL COMPANY, New York, N. Y. Filed Mar. 19, 1932.



The exclusive use of the words "The Genuine Millers Creek Coal" is disclaimed apart from the mark as shown on the drawing.

For Coal.
Claims use since Feb. 8, 1932.

CLASS 2

Receptacles

Ser. No. 310,575. ALBERT PICK-BARTH COMPANY, INC., New York, N. Y., and Chicago, Ill. Filed Jan. 30, 1931.



For Trays of Fibrous Composition.
Claims use since Jan. 2, 1931.

Ser. No. 324,850. GEORGE E. MULLIGAN, Albany, N. Y. Filed Mar. 7, 1932.



The portrait disclosed in the drawing is of fanciful nature.

For Fabric Bags.
Claims use since Feb. 9, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 312,299. HALBERSTADT-WOLF CO. INC., New York, N. Y. Filed Mar. 19, 1931.

Jiffy-Tite

For Ladies' Pocketbooks, Purses, and Vanities in the Nature of Pocketbooks of Leather and Textile Fabric and Combinations Thereof.
Claims use since Aug. 1, 1925.

Ser. No. 323,007. KE-LITE PRODUCTS COMPANY, Detroit, Mich. Filed Jan. 14, 1932.

Ke-Lite

For Pocket Cases of Leather for Holding Keys and a Flashlight.
Claims use since July 1, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 323,742. ROBERT C. DOERR, Hoboken, N. J. Filed Feb. 2, 1932.



"Goose Oil Product" and "Rain and Snow Repellent" being disclaimed apart from the mark shown in the drawing.
For Water Repellent Products—Namely, a Product Which Will Prevent the Accumulation of Moisture and Snow on Wind-Shields and Glass.
Claims use since Jan. 11, 1932.

Ser. No. 324,402. CHARLES N. SHOE, doing business as Primo Polish Manufacturing Company, Westfield, Mass. Filed Feb. 23, 1932.

"PRIMO"

PRIMO

For Polishes for Stoves, Shoes, and Metals.
Claims use since Aug. 10, 1931.

Ser. No. 324,707. BENJAMIN GITTLEMAN, doing business as The Lincoln Shoe Products Mfg. Co., Providence, R. I. Filed Mar. 2, 1932.

TREAT

For Shoe Polish.
Claims use since Feb. 24, 1932.

Ser. No. 324,708. BENJAMIN GITTLEMAN, doing business as The Lincoln Shoe Products Mfg. Co., Providence, R. I. Filed Mar. 2, 1932.

SNO-KIST

For Cleaning and Whitening Fluid or Powder for Shoes.
Claims use since Feb. 24, 1932.

Ser. No. 325,148. EMANUEL LEVY, doing business as Cyrex Manufacturing Co., Brooklyn, N. Y. Filed Mar. 15, 1932.

CYREX

For Cleaning Compounds for Metals, Woodwork, Marblework, Glassware, and the Like.
Claims use since Sept. 1, 1931.

Ser. No. 325,397. WILLIAM M. CURTIS, doing business as Baby's Own Soap Company, Belmont, Mass. Filed Mar. 23, 1932.

BABY'S OWN

For Toilet Soap.
Claims use since Aug. 22, 1899.

CLASS 5

Adhesives

Ser. No. 325,062. COOK PAINT AND VARNISH COMPANY, North Kansas City, Mo. Filed Mar. 12, 1932.

BONDO
DRY
PASTE

All of the wording upon the drawing accompanying this application except "Bondo" is hereby disclaimed apart from the mark as shown.
For Dry Paste for Adhesive Purposes.
Claims use since Dec. 15, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 311,635. WEST DISINFECTING COMPANY, Long Island City, N. Y. Filed Mar. 2, 1931.

CN

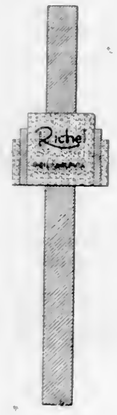
For Air-Purifying Preparations, Antiseptics, Antiseptic Preparations, Animal Dips, Deodorants, Deodorizing Preparations, Disinfectants, Liquid Disinfectants, Disinfecting Preparations, Germicides; Insecticides in Liquid, Powder, and Solid Form; Chemical Preparations for Use in Disinfecting and Cleaning Bowls, Pipes, Etc.; Chemical Preparations for Air-Purifying Purposes.
Claims use since July 15, 1899.

Ser. No. 322,486. JOHN AMOS LETHERBY, Midland, Ontario, Canada. Filed Dec. 28, 1931.



Photo is that of applicant.
For Preparation for Use in the Treatment of Colds, Bronchitis, and Tubercular Troubles.
Claims use since Oct. 1, 1930.

Ser. No. 322,522. RICHEL COMPANY, INC., Upper Darby, Pa. Filed Dec. 29, 1931.



The word "Philadelphia" is disclaimed as a part of the trade-mark. The drawing is lined for purple and yellow for gold.
For Cosmetics—Namely, Astringent Liquids and Creams, Cleansing Creams, Antiseptic Creams, Deodorant Liquids and Creams, Deodorant Powders, Eyelash Growers, Eye Lotions, Finishing Creams, Hand Lotions, Hair Whiteners, Hair Tonics, Hair Wavers and Brilliantines, Hair Cleansing Powders, Liquid-Powders, Luster Removers, Medicated Oils, Muscle Oils, Massage Powders, Nail Bleaches and Lustres, Pore Creams, Perfumes, Rose Tints, Perfume Extracts, Shampoos, Scalp Tonics, Skin Tonics, Skin Lotions, Scalp Ointments, Tissue Creams, Toilet Waters, Talcum Powders.
Claims use since Nov. 15, 1931.

Ser. No. 322,719. WALGREEN CO., Chicago, Ill. Filed Jan. 4, 1932.

ANIDON

For Tooth Paste.
Claims use since Oct. 12 1931.

Ser. No. 323,739. CHEMISCH-PHARMAZEUTISCHE A.-G. BAD-HOMBURG, Bad Homburg vor der Hohe, Germany. Filed Feb. 2, 1932.

Kamillocream

For Cream for the Skin, Including as Ingredients the Effective Components of Camomile, Known as Kamillosan
Claims use since June, 1927.

Ser. No. 323,740. CHEMISCH-PHARMAZEUTISCHE A.-G. BAD-HOMBURG WERK FRANKFURT A. M., Frankfort-on-the-Main, Germany. Filed Feb. 2, 1932.

KAMILLOFLOR

For Hair Shampoo Containing the Effective Components of Camomile, Known as Kamillosan.
Claims use since February, 1929.

Ser. No. 323,991. SAMUEL M. FINK, D. D. S., doing business as Elkton Drug Co., Elkton, Md. Filed Feb. 9, 1932.

DEN-O-LYNE

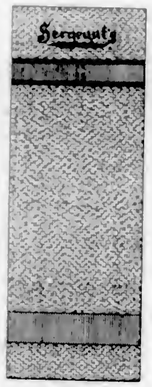
For Antiseptic Liquid, Powder, and Paste.
Claims use since Jan. 2, 1932.

Ser. No. 324,071. LINCO PRODUCTS CORPORATION, Chicago, Ill. Filed Feb. 11, 1932.

LINCO WASH

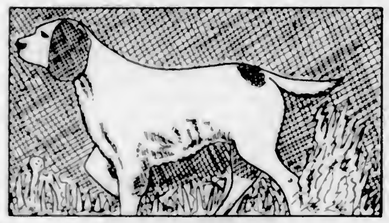
The word "Wash" is disclaimed apart from the mark shown in the drawing.
For Javal Water.
Claims use since December, 1928.

Ser. No. 324,191. POLK MILLER PRODUCTS CORP., Richmond, Va. Filed Feb. 15, 1932.



The drawing is lined for red and yellow.
For a Preparation Used as an Antiseptic, Germicide, Disinfectant, Insecticide, Deodorant, and Cleaner; Liniment for Treating Dogs, Horses, and for Human Use for Sprains, Strains, Sore Muscles, and for Treating Coughs and Fevers; a Preparation for Treating the Hair and Scalp; a Liquid Preparation for Treating Worms in Dogs and Pups; an Expectorant Medicine for Coughs; Eyewash, Canker Wash, Mouthwash, Capsules for Treating Round and Hook Worms in Dogs; Powder for Fleas, Lice and Ticks for Use on Dogs, Cats, Foxes, Birds, and Poultry; Intestinal Astringent for Dogs, Laxative Capsules, Diuretic Pills for Dogs, Arsenic and Iron Pills for Treating Scaly Skin Condition and Used as a General Tonic and Appetizer for Dogs, Tape Worm Medicine; Pepsin Tablets for Treating Vomiting, Indigestion, and Cramps; Condition Pills for Dogs, Nerve Sedative Medicine for Dogs, and Special Medicine for Treating Distemper in Dogs, Mange Medicine.
Claims use since 1919.

Ser. No. 324,231. POLK MILLER PRODUCTS CORP., Richmond, Va. Filed Feb. 16, 1932.



For a Preparation Used as an Antiseptic, Germicide, Disinfectant, Insecticide, Deodorant, and Cleaner; Liniment for Treating Dogs, Horses, and for Human Use for Sprains, Strains, Sore Muscles, and for Treating Coughs and Fevers; a Preparation for Treating the Hair and Scalp, a Liquid Preparation for Treating Worms in Dogs and Pups, an Expectorant Medicine for Coughs, Eyewash, Canker Wash, Mouthwash, Capsules for Treating Round and Hook Worms in Dogs; Powder for Fleas, Lice, and Ticks for Use on Dogs, Cats, Foxes, Birds, and Poultry; Intestinal Astringent for Dogs, Laxative Capsules, Diuretic Pills for Dogs, Arsenic and Iron Pills for Treating Scaly Skin Condition and Used as a General Tonic and Appetizer for Dogs, Tape Worm Medicine; Pepsin Tablets for Treating Vomiting, Indigestion, and Cramps; Condition Pills for Dogs, Nerve Sedative Medicine for Dogs, and Special Medicine for Treating Distemper in Dogs, Mange Medicine.
Claims use since 1919.

Ser. No. 324,286. HARTMAN-LEDDON CO., INC., Philadelphia, Pa. Filed Feb. 18, 1932.

PARSTAINS

For Dyes Used as Biological Stains.
Claims use since Feb. 1, 1932.

Ser. No. 324,570. LOUIS PHILIPPE, INC., doing business as Hormez Laboratories, Chicago, Ill. Filed Feb. 27, 1932.

HORMEZ

For Compound of Glandular Substances in Combination with Skin Emollients Used as a Face Cream for the Purposes of Beautifying and Stimulating the Skin.
Claims use since Feb. 3, 1932.

Ser. No. 324,611. JOHNSON & JOHNSON, New Brunswick, N. J. Filed Feb. 29, 1932.

VANIDENT

For Adhesive Denture Powder.
Claims use since Feb. 19, 1932.

Ser. No. 324,800. PROTEIN MINERAL CO., INC., New York, N. Y. Filed Mar. 4, 1932.

MIRATIN

For Concentrated Preparation of Protein-Calcium Phosphate, Lactose, and the Various Mineral Salts of Milk Used as a Tonic and Body Builder.
Claims use since July 10, 1931.

Ser. No. 324,810. OTTO VOLLRATH, St. Paul, Minn. Filed Mar. 4, 1932.

OLD HERO

For Ointment Used in the Treatment of Cancer, Blood Poisoning, Snake Bites, Blood Clots, and Varicose Veins and Minor Skin Irritations.
Claims use since 1928.

Ser. No. 324,818. CALAFO COMPANY, Los Angeles, Calif. Filed Mar. 5, 1932.

CALAFO

For Medicinal Compound for Use in the Treatment of Asthma, Hay Fever, and Similar Ailments.
Claims use since Nov. 15, 1931.

Ser. No. 324,831. ROSINE E. RENFRO, Greenville, Ill. Filed Mar. 5, 1932.



T-B-C

The portrait is that of myself.
For Medicinal Compound for the Treatment of Weak Lungs and a Run-Down System.
Claims use since Feb. 1, 1932.

Ser. No. 324,832. THE SEA GULL SPECIALTY COMPANY, Baltimore, Md. Filed Mar. 5, 1932.

BAKE-RITE

For Baking Powder.
Claims use since Feb. 25, 1932.

Ser. No. 324,839. FRANK DABROWSKI, doing business as Tip-Top Laboratories, Rochester, N. Y. Filed Mar. 7, 1932.

Tip-Top

For Laxative Medicine.
Claims use since Jan. 1, 1931.

Ser. No. 325,123. JOSEPH TRINER COMPANY, Chicago, Ill. Filed Mar. 14, 1932.

MAT·E·OLA

For Medicinal Stimulant, a Tonic for Nervousness, General Debility, Sleeplessness, Neurasthenia, and Fatigue.
Claims use since Jan. 9, 1932.

Ser. No. 325,231. ELI LILLY AND COMPANY, Indianapolis, Ind. Filed Mar. 17, 1932.

EXTRALIN

For Powdered Liver Extracts to be Taken Orally in Capsules in the Treatment of Anemia.
Claims use since Mar. 7, 1932.

Ser. No. 325,463. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed Mar. 25, 1932.

S-D-O

For Coating Compositions Consisting of Polymerized Divinylacetylene Mixed with Suitable Solvents, Such Compositions Acting as Acid, Alkali, and Corrosion Resistants.
Claims use since Feb. 25, 1932.

Ser. No. 325,516. ALFRED J. COMPO, Edwards, N. Y. Filed Mar. 26, 1932.

KEDA

For Insecticide.
Claims use since Mar. 1, 1932.

Ser. No. 325,572. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Filed Mar. 28, 1932.

Iothesin

For Iodine Mouth and Throat Lozenges.
Claims use since December, 1920.

Ser. No. 325,611. JOHN M. YOUNG, doing business as Sanex Co., Los Angeles, Calif. Filed Mar. 28, 1932.

SANEX

For Water Softening and Bleaching Preparation Having Disinfectant and Germicidial Properties.
Claims use since Mar. 1, 1932.

Ser. No. 325,628. RICHARD WEISS, Berlin, Germany. Filed Mar. 29, 1932.

PANCRESAL

For Preparation for the Treatment of Diabetic Conditions.
Claims use since Apr. 11, 1931.

Ser. No. 325,645. DRUGKRAFT, INC., New York, N. Y. Filed Mar. 30, 1932.

VAL-O-GAR

For Laxative.
Claims use since Nov. 1, 1931.

CLASS 11

Inks and Inking Materials

Ser. No. 324,576. UNDERWOOD ELLIOTT FISHER COMPANY, New York, N. Y. Filed Feb. 27, 1932.

DERWOOD

The word "Derwood" which appears on the drawing is disclaimed apart from the mark shown. The representation of the label which appears on the drawing is disclaimed apart from the mark shown.
For Typewriter Ink-Ribbons and Coated Transfer-Sheets for Typewriter Manifolding.
Claims use since Feb. 5, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 311,374. D & S GASAVER CO., Pittsburgh, Pa. Filed Feb. 24, 1931.

D & S GASAVER

Applicant hereby disclaims the word "Gasaver" separate and apart from the mark as shown.
For Gas Pressure Regulators.
Claims use since Oct. 1, 1930.

Ser. No. 314,135. AERO SUPPLY MANUFACTURING CO., INC., College Point, N. Y. Filed May 4, 1931.

OUR CREED



The phrase "Make It Safe for the Flyers" so far as it has descriptive significance being disclaimed apart from the mark shown.
For Aeroplane Supplies and Equipment—Namely, Cocks, Clevis Rod Ends, Bolts, Nuts, Pins, Rivets, Washers, Screws, Cable Fittings, Steel Tubing, Turn Buckles, Tie Rods, Nails, Hinges, Hose Fittings, Cork Seated Valves for Controlling the Distribution of Fuel in Airplanes; Pipe Fittings—Namely, a Brass Hose Liner Used with Hose, a Union Cone, a Union Nut, a Union Brazing Coupling Used with Nut and Union Cone, a Union Nipple, a Brass Hose Nipple, a Brass Hose L, a 45° Brass Hose L, a Union L, a Union T, an Oil Drain L.
Claims use since August, 1925.

Ser. No. 323,073. UTILITY PRODUCTS, INC., Rockford, Ill. Filed Jan. 15, 1932.

INTERNATIONAL CAST WARE

The words "Cast Ware" are disclaimed apart from the mark as shown.
For Aluminum Cooking Utensils, Coffee Urns, Roasters, Triplicate Kettle Sets, Griddles, Broilers, Casseroles, Omelet Pans, Kettles, Fry Pans, Tea Kettles, Sauce Pans, and Dutch Ovens.
Claims use since Nov. 13, 1931.

Ser. No. 325,445. VICTAULIC COMPANY OF AMERICA, Jersey City, N. J. Filed Mar. 24, 1932.

VICTALLOY

For Pipe Couplings.
Claims use since Mar. 11, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 324,028. ATLANTIC STEEL COMPANY, Atlanta, Ga. Filed Feb. 10, 1932.

DIXI-ARC

The word "Arc" which appears on the drawing is disclaimed apart from the mark shown.
For Welding Electrodes.
Claims use since Jan. 6, 1932.

Ser. No. 324,029. ATLANTIC STEEL COMPANY, Atlanta, Ga. Filed Feb. 10, 1932.

DIXI-GAS

The word "Gas" which appears on the drawing is disclaimed apart from the mark shown.
For Welding Rods.
Claims use since Jan. 15, 1932.

Ser. No. 324,238. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed Feb. 10, 1932.

Migra-Eisen

Exclusive use of the word "Eisen" is disclaimed apart from the other features of the mark.
For Raw and Partly Prepared Iron.
Claims use since Aug. 18, 1931.

CLASS 15

Oils and Greases

Ser. No. 325,058. THE R. J. BROWN COMPANY, St. Louis, Mo. Filed Mar. 12, 1932.

Multi-Miles

For Lubricating Oils and Greases and Kerosene and Gasoline.
Claims use since May 15, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 322,848. LOUISIANA PINE PRODUCTS COMPANY, INC., Shreveport, La. Filed Jan. 9, 1932.

TRIPLE DISTILLED

No claim is made to the words "Triple Distilled" except in the association shown. The lining of the drawing is for shade purposes only and not for color.
For Turpentine and Pine Oil.
Claims use since Nov. 6, 1931.

Ser. No. 324,118. ROYAL SAXON COMPANY, INC., Bound Brook, N. J. Filed Feb. 12, 1932.

SAXON-GLAZE

The word "Glaze" is disclaimed apart from the mark as shown on the drawing.
For Polishing Preparation—Namely, Automobile Body Polish.
Claims use since July 15, 1931.

Ser. No. 324,743. INTER-COASTAL PAINT CORPORATION, East St. Louis, Ill. Filed Mar. 3, 1932.

INSULITE

For Ready Mixed Paint.
Claims use since Feb. 18, 1920.

Ser. No. 324,753. NAAMLOOZE VENNOOTSCHAP TOT VOORTZETTING DER ZAKEN VAN PIETER SCHOEN & ZOON, Zaandam, Netherlands. Filed Mar. 3, 1932.

SIGMARINE

For Paints in Dry, Paste, and Ready Mixed Form, Paint Enamels, and Varnishes.
Claims use since Mar. 26, 1925.

CLASS 17

Tobacco Products

Ser. No. 324,906. HELEN SCHACHTER, doing business as Négyes Tobacco Shop, New York, N. Y. Filed Mar. 8, 1932.

KASSAI

For Smoking Tobacco.
Claims use since 1907.

Ser. No. 324,907. HELEN SCHACHTER, doing business as Négyes Tobacco Shop, New York, N. Y. Filed Mar. 8, 1932.

NÉGYES

For Smoking Tobacco.
Claims use since 1907.

Ser. No. 324,908. HELEN SCHACHTER, doing business as Négyes Tobacco Shop, New York, N. Y. Filed Mar. 8, 1932.

U-HU

For Smoking Tobacco.
Claims use since 1907.

Ser. No. 325,346. RYAN-HAMPTON TOBACCO COMPANY, Louisville, Ky. Filed Mar. 21, 1932.

HALF PINT

For Smoking and Chewing Tobacco.
Claims use since Mar. 2, 1932.

Ser. No. 325,532. RYAN-HAMPTON TOBACCO COMPANY, Louisville, Ky. Filed Mar. 26, 1932.

AIR MAIL TWIST

The word "Twist" is hereby disclaimed apart from the mark as shown.
For Smoking and Chewing Tobacco.
Claims use since Mar. 2, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 321,794. BALTIMORE RADIO CORPORATION, New York, N. Y. Filed Dec. 4, 1931.

METERTEST A PRODUCT

No claim is made to the wording, apart from the combination and arrangement shown in the drawing.
For Radio Receiving Sets and Parts—Namely, Radio and Audio Transformers, Resistances, Condensers, Induction Coils, Radio Vacuum Tubes, Electric Pick-Ups, Loud Speakers, Loud Speaker Units, Dry and Storage Batteries, and the Like.
Claims use since March, 1930.

Ser. No. 324,254. JAMES EDWARD HEALEY, doing business as Aviator Spark Plug Co., Oakland, Calif. Filed Feb. 17, 1932.

MAIL FLYER

For Spark Plugs.
Claims use since June 5, 1931.

Ser. No. 324,256. JAMES EDWARD HEALEY, doing business as Aviator Spark Plug Co., Oakland, Calif. Filed Feb. 17, 1932.

AVIATOR

For Spark Plugs.
Claims use since June 5, 1931.

Ser. No. 324,783. DEFIANCE SPARK PLUGS, INC., Toledo, Ohio. Filed Mar. 4, 1932.

Defiance

For Cables for Electrical Systems.
Claims use since Jan. 23, 1932.

Ser. No. 324,830. READING BATTERIES, INC., Reading, Pa. Filed Mar. 5, 1932.

GOLD
READING
STANDARD

No claim is made to the word "Reading" apart from the mark as shown.
For Storage Batteries.
Claims use since December, 1931.

Ser. No. 325,078. THE F. A. SMITH MANUFACTURING COMPANY, Rochester, N. Y. Filed Mar. 12, 1932.

ArcticAire

For Electric Fans.
Claims use since Mar. 9, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 324,044. THE LUCKY STRIKE MANUFACTURING COMPANY, INCORPORATED, Baltimore, Md. Filed Feb. 10, 1932.

Lucky Strike

For Coin-Controlled Ball-Projecting Amusement Game.
Claims use since Nov. 10, 1931.

Ser. No. 324,672. PORTIA SPERRY, Nashville, Ind. Filed Mar. 1, 1932.

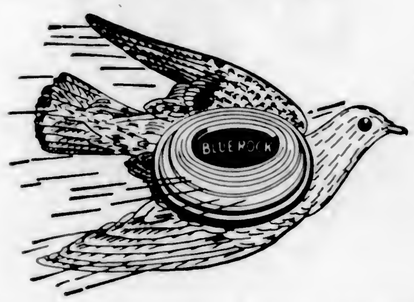
ABiGAiL

THE LOG CABIN

Doll

No claim is made herein to the word "Doll" apart from the mark shown in the drawing.
For Dolls.
Claims use since Feb. 1, 1932.

Ser. No. 324,955. THE CHAMBERLIN CARTRIDGE & TARGET CO., Cleveland, Ohio. Filed Mar. 9, 1932.



No claim is made to the representation of the goods.
For Clay Pigeons.
Claims use since November, 1931.

Ser. No. 325,075. PLAYSKOOL INSTITUTE, INC., Milwaukee, Wis. Filed Mar. 12, 1932.

PLAYSKOOL

For Toys—Namely, Building Blocks, Peg Boards, Wooden Beads, Black Boards, Construction Outfits, and Miniature Lumber.
Claims use since December, 1929.

Ser. No. 325,106. ROBT. EDWARD MORGAN, New York, N. Y. Filed Mar. 14, 1932.

BASKILL

For Game, Particularly a Game of Skill Where a Ball is Thrown into One of a Plurality of Holes in the Bottom of a Basket or the Like.
Claims use since Feb. 8, 1932.

Ser. No. 325,159. ADOLPH W. ZITZMAN, Chicago, Ill. Filed Mar. 15, 1932.

YICKLE YACKLE

For Hand Operated Toy Consisting of a Notched Support Having a Spinner Mounted on an End Thereof.
Claims use since Dec. 1, 1931.

Ser. No. 325,399. THE FAIR, Chicago, Ill. Filed Mar. 23, 1932.

Baby Carol

For Dolls.
Claims use since Nov. 2, 1931.

Ser. No. 325,444. MOE SIMON, doing business as M. Simon & Co., New York, N. Y. Filed Mar. 24, 1932.

STRONGBA

For Exercisers for Babies.
Claims use since Feb. 15, 1932.

Ser. No. 325,517. THE DRAPER-MAYNARD COMPANY, Plymouth, N. H. Filed Mar. 26, 1932.

RHINOTEX

For Foot Balls and Basket Balls.
Claims use since June 18, 1931.

Ser. No. 325,536. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Mar. 26, 1932.

PRO ROYAL

For Golf Balls.
Claims use since Jan. 25, 1932.

Ser. No. 325,613. BID-RITE PLAYING CARD CORPORATION, New York, N. Y. Filed Mar. 29, 1932.

BID-RITE

For Playing Cards.
Claims use since Mar. 23, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 312,543. BRITISH AMERICAN RAZORS LIMITED, Toronto, Ontario, Canada. Filed Mar. 26, 1931.



For Razors and Razor Blades.
Claims use since Nov. 1, 1930.

Ser. No. 316,569. JOSEPH S. PERRAULT, Nashua, N. H. Filed July 2, 1931.

HANDY

For Pie Pan Lifters and the Like.
Claims use since Mar. 14, 1931.

Ser. No. 318,498. ADREMA MASCHINENBAUGES, M. B. H., Berlin, Germany. Filed Aug. 28, 1931.

ADREMA

For Addressing Machines and Parts Thereof, Printing Machines and Parts, and Impressing Machines for Address Printing Plates and Parts.
Claims use since Mar. 1, 1923.

Ser. No. 324,780. COOPER PRODUCTS CORPORATION, New York, N. Y. Filed Mar. 4, 1932.

blades by COOPER

The lining in the drawing indicates brown color and the stippling gold color. No claim is made to the words "Blades By" apart from the mark shown on the drawing.
For Razor Blades.
Claims use since Feb. 26, 1932.

Ser. No. 325,031. AMERICAN SLICING MACHINE COMPANY, Chicago, Ill. Filed Mar. 11, 1932.

AMERICAN PROFIT MAKER BETTER SERVICE GREATER SALES

The words "Better Service" and "Greater Sales" are disclaimed except in connection with the mark as herein shown.
For Slicing Machines.
Claims use since Feb. 23, 1932.

Ser. No. 325,145. HOFCO PUMP LTD., Long Beach, Calif. Filed Mar. 15, 1932.

HOFCO

For Oil Well Pumps and Parts Therefor.
Claims use since February, 1929.

Ser. No. 325,269. PAYBRANDS, INC., Long Island City, N. Y. Filed Mar. 18, 1932.

CADET

For Razors and Razor Blades.
Claims use since Mar. 7, 1932.

Ser. No. 325,425. R. E. DIETZ COMPANY, New York, N. Y. Filed Mar. 24, 1932.

VOLUNTEER

For Portable Fire Extinguishers.
Claims use since Mar. 17, 1932.

CLASS 25

Locks and Safes

Ser. No. 325,161. CLOSURE LOCK CORPORATION, Chicago, Ill. Filed Mar. 16, 1932.

L C C

For Locks.
Claims use since Feb. 5, 1932.

CLASS 26

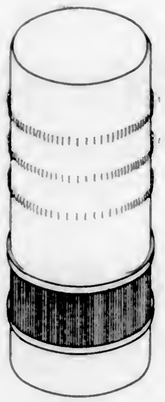
Measuring and Scientific Appliances

Ser. No. 324,919. INTERNATIONAL DEVICES CORPORATION, Chicago, Ill. Filed Mar. 2, 1932.

ARISTOCRAT

For Weighing Machines.
Claims use since Nov. 16, 1931.

Ser. No. 325,089. EAGLE PENCIL COMPANY, New York, N. Y. Filed Mar. 14, 1932.



The trade-mark consists of a red circumferential band applied to the pivot of the compasses or dividers as shown upon the drawing lined for red. The partial representation of the goods is merely to define the position of the trade-mark and is disclaimed per se.
For Compasses and Dividers.
Claims use since Jan. 11, 1932.

Ser. No. 325,130. WILLSON PRODUCTS, INC., Reading, Pa. Filed Mar. 14, 1932.

Wh

For Ophthalmic and Protection Lenses.
Claims use since January, 1931.

Ser. No. 325,350. STEWART-WARNER CORPORATION, Chicago, Ill. Filed Mar. 21, 1932.

Stewart-Warner

The trade mark includes the word "Stewart" in the form of a fac-simile of the signature of John K. Stewart, founder and first president of this corporation, and the name "Warner" is displayed in a style consistent with said fac-simile signature.
For Cameras, Projectors, and Motion Picture Apparatus.
Claims use since Apr. 14, 1931.

Ser. No. 325,366. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Mar. 22, 1932.

DIODAK

For Photographic Shutters.
Claims use since Nov. 20, 1931.

Ser. No. 325,376. HENRY L. SCOTT COMPANY, Providence, R. I. Filed Mar. 22, 1932.

Tensilgraph

For Machines for Testing the Strength or Stretch of Material.
Claims use since Jan. 30, 1932.

CLASS 27

Horological Instruments

Ser. No. 325,354. TRIPLEX PRODUCTS CORPORATION, Clifton, N. J., and New York, N. Y. Filed Apr. 7, 1932.

TRIPLEX

For Clocks for Operating Electric Switches.
Claims use since Sept. 1, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 310,944. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Filed Feb. 11, 1931.

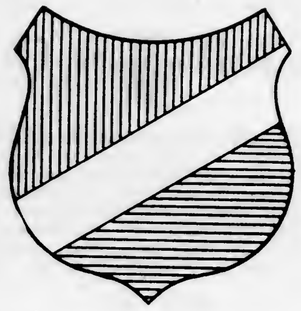
GRILLE

For Silver-Plated Knives and Forks.
Claims use since Oct. 27, 1930.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 325,371. NATIONAL BROOM MANUFACTURING COMPANY, Pueblo, Colo. Filed Mar. 22, 1932.

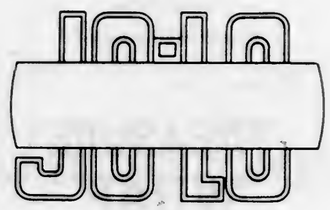


The drawing is lined for red and blue.
For Brooms.
Claims use since September, 1915.

CLASS 31

Filters and Refrigerators

Ser. No. 324,894. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed Mar. 8, 1932.



For Units for Making Solidified Carbon Dioxide, Cabinets for Preserving Products with Solidified Carbon Dioxide, and Parts for Said Units and Cabinets.
Claims use since 1925.

CLASS 33

Glassware

Ser. No. 324,990. Crown Cork & Seal Company, Inc., Baltimore, Md. Filed Mar. 10, 1932.

Dacro

For Packing Containers Made from Glass Such as Jars, Bottles, and Cans.
Claims use since Feb. 25, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 324,718. J. H. McCormick & Co., Williamsport, Pa. Filed Mar. 2, 1932.

AIRTROL

The representation of a rifled discharge nozzle is disclaimed apart from the mark as shown in the drawing.
For Fans and Blowers for Humidifiers, for Air Conditioning Cabinets Comprising a Fan, Humidifier, Heat Coil and Distributing Nozzles, for Unit Heaters Comprising a Fan, Heat Coil, and Distributing Nozzles, for Room Conditioning Units Comprising a Fan, Humidifier, and Distributing Nozzles, for Extended Surface Heat Coils and Radiators.
Claims use since Dec. 14, 1931.

Ser. No. 324,851. Petroleum Engineering Corporation, Springfield, Mass. Filed Mar. 7, 1932.

EVUR-READY

The words "Evur-Ready" are disclaimed apart from the other features of the mark shown on the drawing.
For Domestic Oil Range Burners.
Claims use since 1929.

CLASS 37

Paper and Stationery

Ser. No. 318,744. Package Paper Company, Holyoke, Mass. Filed Sept. 4, 1931.

TREASURE WRAP

No claim is made to the word "Wrap" apart from the mark as shown.
For Wrapping and Covering Material in Sheet Form Made of Paper, Glassine, Gelatin, Cellophane, or the Like.
Claims use since Aug. 24, 1931.

Ser. No. 319,229. Coast Envelope & Leather Products Co., Los Angeles, Calif. Filed Sept. 15, 1931.

PACIFIC MAIL BOND

The descriptive word "Bond" appearing on the drawing is disclaimed apart from the mark shown.
For Writing Paper.
Claims use since June 5, 1931.

Ser. No. 324,425. Binney & Smith Co., New York, N. Y. Filed Feb. 24, 1932.

DURATEX

For Crayons.
Claims use since May 22, 1929.

Ser. No. 324,829. The Potter Press, Waltham, Mass. Filed Mar. 5, 1932.



For Salesbooks, Order Books, Ledger Sheets, Bill Heads, Statements, Letter Heads, Envelopes, Purchase and Inventory Sheets, and Requisition Sheets.
Claims use since Mar. 17, 1930.

Ser. No. 325,090. Eagle Pencil Company, New York, N. Y. Filed Mar. 14, 1932.

MIGNON

For Lead Pencils, Mechanical Pencils, Penholders, Pencil Holders, Pencil Lengtheners, Pencil Point Protectors, Combination Pens and Pencils, Fountain Pens, Metallic Pens, Desk Sets, Boxes of Leads, and Rubber Erasers.
Claims use since 1885.

Ser. No. 325,242. Abraham Schlosser, doing business as Schlosser Manufacturing Co., New York, N. Y. Filed Mar. 17, 1932.

The SCHLOSSER Multi-Suction Pen Multiplies the Ink Capacity

The words "Multi-Suction Pen" and "Multiplies the Ink Capacity" are disclaimed apart from the mark shown.
For Fountain Pens and Pencils.
Claims use since Jan. 2, 1931.

Ser. No. 325,292. Irvington Varnish & Insulator Co., Irvington, N. J. Filed Mar. 19, 1932.



No claim is made to the words "Kap-Seal" or to the pictorial representation of a container cap apart from the mark as shown.
For Lining Paper for Bottle Caps.
Claims use since May 1, 1931.

Ser. No. 325,307. Samuel Ward Manufacturing Company, Boston, Mass. Filed Mar. 19, 1932.

GOLF-O-LOG

For Record Books.
Claims use since Dec. 9, 1931.

CLASS 38

Prints and Publications

Ser. No. 316,673. Vic Forsythe, Alhambra, Calif. Filed July 6, 1931.

JOE AND DYNAMITE

For Cartoon Strip.
Claims use since Apr. 1, 1931.

Ser. No. 323,555. Thos. B. Cromwell, Lexington, Ky. Filed Jan. 28, 1932.

The BLOOD-HORSE
Thos. B. Cromwell, Editor and Publisher

For Weekly Journal Devoted Exclusively to the Turf.
Claims use since September, 1928.

Ser. No. 324,660. Daily Graphic, Inc., New York, N. Y. Filed Mar. 1, 1932.

IF I'M WRONG, SUE ME!

For Newspaper Column in Daily Newspaper.
Claims use since Feb. 15, 1932.

Ser. No. 324,974. The United Telephone and Electric Company, Kansas City, Mo. Filed Mar. 9, 1932.

U

For Periodical Magazines.
Claims use since November, 1924.

Ser. No. 325,193. United Publishers Corporation, New York, N. Y. Filed Mar. 16, 1932.

DRY GOODS ECONOMIST

For Monthly Publication.
Claims use since Oct. 5, 1889.

Ser. No. 325,204. Maurice Bisgyer, Washington, D. C. Filed Mar. 16, 1932.

The Washington Jewish Mirror

By Hillel, the Observer

For Columns in Periodicals.
Claims use since June 1, 1928.

Ser. No. 325,317. Flippen Burge, doing business as The National "Who-Handles" Building Products Directory Co., Atlanta, Ga. Filed Mar. 21, 1932.

"Who-Handles"

For Directories Published Annually.
Claims use since Feb. 10, 1932.

CLASS 39

Clothing

Ser. No. 315,399. Henry Glass & Co., New York, N. Y. Filed June 4, 1931.

Uncle Don

For Men's, Women's, and Children's Outer Negligee Shirts and Blouses and Pajamas; and for Infants' and Children's Garments—Namely, Boys' Shirts, Pajamas, Wash Suits, and Flat Underwear; and Girls' Dresses, Pajamas, and Flat Underwear.
Claims use since May 19, 1931.

Ser. No. 317,889. CRADDOCK-TERRY COMPANY, Lynchburg, Va. Filed Aug. 12, 1931.

Poise Modelle

For Women's Leather Shoes.
Claims use since 1927.

Ser. No. 321,089. PAUL CHAPPELL, INC., New York, N. Y. Filed Nov. 11, 1931.



Applicant disclaims the right to the exclusive use of the pictorial representation of a shoe and of an arrowhead, as well as the right to the exclusive use of the initials "N D T" and the expression "Custom Made."

For Shoes Made of Leather, Fabrics, and/or Combinations of Both Fabrics and Leather.
Claims use since September, 1926.

Ser. No. 322,232. ROLLINS HOSIERY MILLS, INC., Des Moines, Iowa. Filed Dec. 17, 1931.

Miss Gossip

For Ladies' Hosiery.
Claims use since Nov. 30, 1931.

Ser. No. 322,868. VANITY FAIR SILK MILLS, Reading, Pa. Filed Jan. 9, 1932.

SILKENIQUE

For Knitted and Textile Underwear and Hosiery, Made of Silk and Synthetic Yarn, for Women and Children—Namely, Vests, Bloomers, Knickerbockers, Union Suits, Combination Underwear, Step-Ins, Chemises, Corset Covers, Night Gowns, Pajamas, Petticoats, Princess Slips, Bandeaux, Bandeaux Chemises; and Knitted and Textile Underwear for Men—Namely Union Suits, Shirts, and Drawers.
Claims use since Dec. 31, 1931.

Ser. No. 324,253. GOLDEN STATE FROCKS, Los Angeles, Calif. Filed Feb. 17, 1932.



The horizontally disposed lines in the panel forming the lower portion of the mark for shading purposes only and not for the purpose of indicating color. No claim is made to the words "Golden State Frocks" apart from the mark as shown.

For Women's, Misses', and Children's Dresses, Frocks, and Blouses.
Claims use since May 22, 1931.

Ser. No. 324,474. LES CORSETS SIRENE PARIS, SOCIETE ANONYME, Paris, France. Filed Feb. 25, 1932.



No claim being made to the word "Paris" apart from the mark shown.

For Corsets, Corset Belts; Abdominal Belts in the Nature of Corset Belts, Bust Supporters, and Brassières.
Claims use since 1912.

Ser. No. 324,849. WALTER W. MOYER, Ephrata, Pa. Filed Mar. 7, 1932.

PARTOGS

No claim being made to the exclusive right to the use of the word "Togs" apart from the mark as shown in the drawing.

For Men's, Women's, and Children's Underwear.
Claims use since Feb. 15, 1932.

Ser. No. 324,891. W. KOTKES & SON, New York, N. Y. Filed Mar. 8, 1932.

WIL-KO

For Women's and Misses' Dresses, Smocks, and Hoover Aprons and Women's and Children's Pyjamas.
Claims use since January, 1931.

Ser. No. 324,918. GRIFFIN HOSIERY MILLS, Griffin, Ga. Filed Feb. 29, 1932.

"The Ghost"

You are reading through it's invisible sheerness



No claim is made to the words "Invisible Sheerness" apart from the mark as shown in the drawing.

For Ladies' Hosiery.
Claims use since Feb. 9, 1932.

Ser. No. 324,980. ARTCRAFT SILK HOSIERY MILLS, INC., Philadelphia, Pa. Filed Mar. 10, 1932.

SCREEN
CHIFFON

No claim is made to the word "Chiffon" apart from the trade-mark shown in the drawing.

For Women's Hosiery.
Claims use since Mar. 8, 1932.

Ser. No. 325,072. NATIONAL DEPARTMENT STORES, INC., New York, N. Y. Filed Mar. 12, 1932.

Ventura

For Hosiery.
Claims use since Sept. 12, 1931.

Ser. No. 325,144. HAHN DEPARTMENT STORES, INC., Wilmington, Del. Filed Mar. 15, 1932.

Wear King

For Men's and Boys' Clothing and Accessories—Namely, Men's and Boys' Suits, Golf Suits, Knickers, Overcoats, Topcoats, Leather Coats, Sport Coats, Cardigans, Raincoats and Rain Capes, Ponchos, Sweaters and Sweater Coats, Caps, Berets; Hats of Felt, Straw, or Silk; Socks, Stockings, Leggings, Garters; Shoes of Leather, Rubber, Fabric, or a Combination of these Materials; Swimming Suits, Boys' Sun Suits, Bathing Suits, Beach Robes, Dressing Gowns, Lounge Suits, Bath Robes, Smoking Jackets, Pajamas, Night Shirts, Dress Shirts, Negligee Shirts, Golf Shirts, Under Shirts, Union Suits, Drawers, Athletic Shirts and Shorts, Apparel Belts, Spats, Neckties, Collars, Scarfs, and Gloves and Mittens of Leather, Wool, Cotton, or Silk Construction.
Claims use since Feb. 1, 1931.

Ser. No. 325,171. F. P. HOY, INC., New York, N. Y. Filed Mar. 16, 1932.



NU-SKIN

For Corsets, Brassières, and Underwear for Women.
Claims use since Feb. 1, 1932.

Ser. No. 325,335. LORCH MANUFACTURING COMPANY, Dallas, Tex. Filed Mar. 21, 1932.

LORMA LASS

For Women's and Misses' Wash Frocks.
Claims use since July 1, 1930.

Ser. No. 325,336. LORCH MANUFACTURING COMPANY, Dallas, Tex. Filed Mar. 21, 1932.

Prissy Missy

For Women's and Misses' Wash Frocks.
Claims use since Dec. 1, 1931.

Ser. No. 325,341. NEUSTADTER BROS., San Francisco, Calif. Filed Mar. 21, 1932.

E N B E E
SNUGGERS

For Beach and Sport Pants (Laced and Corsetted Waistband) for Men, Women, Boys, and Girls.
Claims use since Dec. 1, 1931.

Ser. No. 325,401. HANES HOSIERY MILLS CO., Winston Salem, N. C. Filed Mar. 23, 1932.

LAZEEN

For Hosiery.
Claims use since Mar. 17, 1932.

Ser. No. 325,472. JULIUS KAYSER & CO., New York, N. Y. Filed Mar. 25, 1932.

Nobbies

For Women's Underwear.
Claims use since Mar. 15, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 312,864. SCOLDING LOCKS CORPORATION, Appleton, Wis. Filed Apr. 2, 1931.

BOBBY LOX.

For Hair Pins of the "Bobby" Pin Type.
Claims use since Nov. 12, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 313,224. BATES MANUFACTURING COMPANY, Lewiston and Augusta, Me. Filed Apr. 11, 1931.

Bates

Applicant is owner of registration Nos. 86,025 and 125,958 effected on the ground of exclusive use by applicant for ten years next preceding Feb. 20, 1905, for the word "Bates."
For Bed Spreads.
Claims use since Mar. 27, 1931.

Ser. No. 316,461. WASHOUGAL WOOLEN MILLS, doing business as West Coast Woolen Mills, Ltd., Washougal, Wash. Filed June 29, 1931.

West Coast Woolen Mills, Ltd.

For Woolen Fabrics.
Claims use since April, 1930.

Ser. No. 320,595. THE LURGAN WEAVING COMPANY, LIMITED, Lurgan, Northern Ireland. Filed Oct. 29, 1931.



For Bedspreads, Sheets, Pillow Cases, Bolster Cases, Curtains, Tablecloths, Napkins, Tray Cloths, Mats, Towels, Valencing, Quilts, Tea and Supper Cloths, Toilet Covers, and Handkerchiefs, All Made of Textile Fabrics.
Claims use since Feb. 9, 1914.

Ser. No. 323,340. S. H. KRESS & CO., New York, N. Y. Filed Jan. 23, 1932.

Siren

For Hair Nets, Sport Nets, Water Wave Nets, Handkerchiefs, Linen Towels and Toweling, Turkish Towels, Textile Bath Towels, Textile Face Cloths, Sheets, Pillow Cases, Tablecloths, Textile Napkins, Textile Blankets, Seamless Textile Rugs, Mattress Ticking, Textile Bedspreads, and Textile Counterpanes.
Claims use since Jan. 2, 1932.

Ser. No. 324,149. CHARLES BLOOM, INC., New York, N. Y. Filed Feb. 15, 1932.

saison

For Cretonne Piece Goods.
Claims use since Jan. 19, 1932.

Ser. No. 324,975. H. P. WASSON AND COMPANY, Indianapolis, Ind. Filed Mar. 9, 1932.

WASSON'S
"Lady Fair"

For Cotton and Linen Sheets and Pillow Cases, Blankets Made of Cotton and Wool and Combinations Thereof: Cotton, and Silk and Wool Comforts; Tablecloths and Table Napkins of Cotton and Linen; and Bedspreads of Cotton, Rayon, and Silk, and Combinations Thereof.
Claims use since Jan. 2, 1931.

Ser. No. 325,259. HAHN DEPARTMENT STORES, INC., Wilmington, Del. Filed Mar. 18, 1932.

LU-SAN CREPE

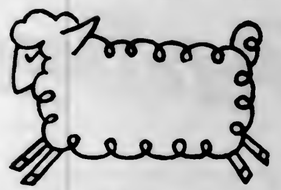
The descriptive term "Crepe" is disclaimed apart from the mark as shown in the drawing.
For Silk and Artificial Silk Yarn Goods.
Claims use since Mar. 5, 1932.

Ser. No. 325,418. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Mar. 24, 1932.

Nugera

For Pile Fabrics in the Piece.
Claims use since Mar. 15, 1932.

Ser. No. 325,457. BIGELOW-SANFORD CARPET CO., INC., Thompsonville, Conn. Filed Mar. 25, 1932.



For Woven Textile Rugs and Carpets.
Claims use since Mar. 3, 1932.

CLASS 43

Thread and Yarn

Ser. No. 322,089. BORDOW SILK CO., New York, N. Y. Filed Dec. 14, 1931.

KORDELETTE

No claim is made to the words "Made of Bemberg" except in the association shown.
For Yarns, and Particularly for Bemberg Yarn, Converted, Thrown, or Twisted Into Other Forms of Thread.
Claims use since March, 1929.

Ser. No. 325,467. THE GARDINER HALL JR. COMPANY, South Willington, Conn., and New York, N. Y. Filed Mar. 25, 1932.

H&M

For Thread.
Claims use since Dec. 1, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 324,565. KIMBALL DENTAL MANUFACTURING CO., Chicago, Ill. Filed Feb. 27, 1932.

I'OTA

For Dental Burs.
Claims use since Aug. 5, 1931.

Ser. No. 325,169. HALLIWELL-SHELTON ELECTRIC CORPORATION, New York, N. Y. Filed Mar. 16, 1932.

RED HED

For Hair-Waving Rods.
Claims use since Feb. 27, 1932.

Ser. No. 325,451. ANGELO C. ANTONUCCI, doing business as Trulastic Research Laboratories, Philadelphia, Pa. Filed Mar. 25, 1932.

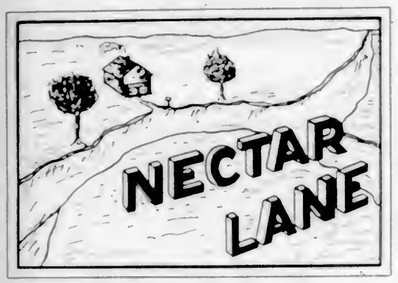
TRULASTIC

For Dental Impression Wax Compositions.
Claims use since Feb. 15, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 325,679. MARIO BRUSCIA, Brooklyn, N. Y. Filed Mar. 31, 1932.



For Non-Alcoholic, Maltless Beverages, Sold as Soft Drinks.
Claims use since Mar. 14, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 311,711. WALKER HILL DAIRY, INC., Washington, D. C. Filed Mar. 3, 1931.

WALKER HILL

Applicant is the owner of registration 198,137.
For Milk, Cream, Buttermilk, Cottage Cheese, and Chocolate Milk.
Claims use since 1889.

Ser. No. 312,525. LACHOY FOOD PRODUCTS, INC., Detroit, Mich. Filed Mar. 25, 1931.

TABLE CRAFT

For Canned Corn Mush and Chicken a la King.
Claims use since Feb. 26, 1931.

Ser. No. 318,488. CAMPBELL SOUP COMPANY, Camden, N. J. Filed Aug. 26, 1931.



The lining of the drawing indicates red and the unlined portion is white. The words "Vitamin Rich" and "Tomato Juice" are disclaimed apart from the mark as shown on the drawing.
For Canned Tomato Juice.
Claims use since Aug. 15 ,1931.

Ser. No. 321,590. THOMAS CALAMARAS, doing business as Lincoln Bakery & Grocery, Joliet, Ill. Filed Nov. 30, 1931.

Lincoln's Best

No claim is made to the word "Best" apart from the mark as shown. The drawing is lined for gold and shading to indicate wood.
For Canned Fruits, Canned Salmon, Canned Vegetables, Mustard for Food Purposes, Bottled Olives, Fruit Preserves, Pickles, Catsup, and Peanut Butter.
Claims use since May 12, 1924, on salmon; since May 12, 1924, on canned fruits; since Apr. 19, 1924, on canned vegetables; since Nov. 18, 1926, on mustard for food purposes; since May, 1927, on bottled olives; since Aug. 8, 1927, on preserves; since Dec. 4, 1929, on pickles; since Jan. 2, 1930, on catsup; since Apr. 6, 1930, on peanut butter.

Ser. No. 321,838. BURNHAM & MORRILL COMPANY, Portland, Oreg. Filed Dec. 7, 1931.

Pot o Beans

The words "Pot" and "Beans" are claimed only in the association shown.
For Baked Beans.
Claims use since Oct. 8, 1931.

Ser. No. 321,915. NASHUA BAKING COMPANY, INC., Nashua, N. H. Filed Dec. 8, 1931.

RoLa Club

For Groceries—Namely, Peaches (Preserved Either in Tin or Glass), Tomatoes (Preserved Either in Tin or Glass), Catsup, Candy, Chicken (Preserved Either in Tin or Glass), Cheese, Cod Fish (Preserved Either in Tin or Glass), Cocoa, Wheat Flour, Pepper, Vinegar, Baked Beans (Preserved Either in Tin or Glass), Crab Meat (Preserved Either in Tin or Glass), Gelatin, Honey, Jam, Jelly, Mayonnaise, Macaroni, Marmalade, Marshmallow Cream, Molasses, Mustard, Oatmeal, Olives, Peanut Butter, Pickles, Pop Corn (in Its Natural State), Rice; Relishes—Namely, Assorted Vegetables in Vinegar and Seasoning—Salad Dressing, Spaghetti, Tea, and Coffee; and Bakery Products—Namely, Biscuits, Cakes, Crackers, Doughnuts, Pies, Rolls, Bread.
Claims use since Nov. 24, 1931.

Ser. No. 321,943. BIO BEN BEVERAGE CORPORATION, St. Louis, Mo. Filed Dec. 9, 1931.

IT

For Fruit Flavored Milk Food Beverage.
Claims use since Apr. 15, 1931.

Ser. No. 322,603. SEARS, ROEBUCK AND CO., doing business as Peggy Kellogg Kottage Kandy Co., Chicago, Ill. Filed Dec. 31, 1931.



No exclusive rights to the words "Kandies" and "Kitchen Kooked" are claimed apart from the mark shown in the drawing.
For Candy.
Claims use since Oct. 15, 1930.

Ser. No. 324,229. NEW HEALTH FOODS COMPANY, Tulsa, Okla. Filed Feb. 16, 1932.



No claim is made to the exclusive use of the words "Yeast", "Bran", and "Bar" other than in the form and association of the mark as shown.
For Frozen Confections.
Claims use since Dec. 20, 1931.

Ser. No. 324,307. BANANOLA SOUTH SEAS PRODUCTS COMPANY, New York, N. Y. Filed Feb. 19, 1932.

BANANOLA

For Platane Chips Packed in Paper Bags.
Claims use since Oct. 1, 1930.

Ser. No. 324,706. FROZEN CONFECTIONS, INC., New York, N. Y. Filed Mar. 2, 1932.

NIKL-STIKL

No claim is made to the exclusive use of the word "Nikl" other than in the form and association of the mark as shown.
For Frozen Confections.
Claims use since Jan. 15, 1932.

Ser. No. 325,343. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed Mar. 21, 1932.

XXXX
PATENT

For Flour Made from Wheat.
Claims use since Jan. 1, 1870.

Ser. No. 325,359. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed Mar. 21, 1932.

KORSAK

For Flour Made from Wheat.
Claims use since Jan. 28, 1932.

Ser. No. 325,369. LAURA LOVETT, Sunnyside, L. I., N. Y. Filed Mar. 22, 1932.



The signature appearing on the drawing is a facsimile signature of Betsy Barney, now deceased, an ancestor of the applicant.
For Candied Citrous Fruit Peel.
Claims use since Feb. 15, 1932.

Ser. No. 325,411. PRODUCTOS SELECTOS DEL CERDO, S. A., Manlleu, Spain. Filed Mar. 23, 1932.

La Piara

For Foods Derived from Pork—Namely, Sausages, Ham, Mortadelas, Lard, Bacon.
Claims use since Sept. 3, 1928.

Ser. No. 325,480. BENEDICT MOCEO, San Jose, Calif. Filed Mar. 25, 1932.

TRADITION

For Fresh Vegetables.
Claims use since Dec. 7, 1931.

Ser. No. 325,509. BELLUOMINI & KLEIN, Walnut Grove, Calif. Filed Mar. 26, 1932.

NEW HOPE

For Fresh Vegetables.
Claims use since Feb. 15, 1932.

Ser. No. 325,597. PAULY AND RAMSEY, Tulsa, Okla. Filed Mar. 28, 1932.

Crunchies

For Cereal Breakfast Foods.
Claims use since Feb. 27, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 324,202. LEO. M. VAN WAGNER, Far Rockaway, N. Y. Filed Feb. 15, 1932.

NABA

For Painted and Enameled Signs Used for Mechanical and Business Advertising Purposes, Emblems, and Nameplates.
Claims use since Apr. 1, 1929.

Ser. No. 324,234. STEN-O-AIDE, INC., Grand Rapids, Mich. Filed Feb. 16, 1932.

STEN AIDE

For a Set or Outfit of Tools and Supplies for Use with Typewriting Machines by Typists and Stenographers, Said Outfit Consisting of Ribbon Renewer, Platen Renewer, Platen Grinder, Type Cleaner, Typewriter Oil, and Typewriter Brushes.
Claims use since Dec. 27, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 3, 1932

293,588. SKIN CLEANSING AND SOFTENING CREAM. SCHUYLER PRODUCTS CORPORATION, Philadelphia, Pa.
Filed December 2, 1931. Serial No. 321,696. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,589. LIQUID COMPOSITION FOR REGULATING ACID ("PICKLE") BATHS USED IN TREATMENT OF METAL SURFACES. INTERNATIONAL PAINT CORPORATION, East St. Louis, Ill.
Filed December 4, 1931. Serial No. 321,765. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,590. PHARMACEUTICAL PREPARATION CONSISTING OF AN ASSOCIATION OF GLAND SUBSTANCES FOR THE TREATMENT OF ERRORS OF METABOLISM. ANNETTE KELLERMANN, INC., New York, N. Y.
Filed December 8, 1931. Serial No. 321,912. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,591. BAKING POWDER. DWIGHT P. CRUIKSHANK, doing business as Sure-Rise Baking Powder Co., New York, N. Y.
Filed December 9, 1931. Serial No. 321,949. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,592. METALS IN BULK, INGOTS, RODS, SHEETS, PLATES, WIRES, AND SCRAP; AND ANTI-CORROSIVE METAL MADE UP OF IRON, STEEL, BRASS, COPPER, ZINC, LEAD, BRONZE, OR COMBINATIONS THEREOF, AND OTHER METAL ALLOYS. NATIONAL RADIATOR COMPANY LIMITED, Kingston-upon-Hull, England.
Filed October 29, 1931. Serial No. 320,601. PUBLISHED FEBRUARY 23, 1932. Class 14.

293,593. OYSTERS IN THEIR NATURAL STATE. OYSTER BAY OYSTER COMPANY, Oyster Bay, N. Y.
Filed November 6, 1931. Serial No. 320,868. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,594. METAL GRINDING BALLS. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo.
Filed November 23, 1931. Serial No. 321,421. PUBLISHED FEBRUARY 23, 1932. Class 14.

293,595. PATTERNS FOR GARDENS. THE CURTIS PUBLISHING COMPANY, Philadelphia, Pa.
Filed December 14, 1931. Serial No. 322,093. PUBLISHED FEBRUARY 16, 1932. Class 26.

293,596. AUTOMOBILE TESTING APPLIANCES—NAMELY, BRAKE TESTERS, WHEEL-ALIGNMENT INDICATORS, AND HEADLIGHT TESTERS. WEAVER MANUFACTURING COMPANY, Springfield, Ill.
Filed December 14, 1931. Serial No. 322,118. PUBLISHED FEBRUARY 16, 1932. Class 26.

293,597. FERRO-ALLOYS—NAMELY, FERROSILICON, ALL GRADES, FERROCHROME, FERROMANGANESE, AND SILICOMANGANESE. OHIO FERRO-ALLOYS CORPORATION, Canton, Ohio.
Filed December 29, 1931. Serial No. 322,521. PUBLISHED FEBRUARY 16, 1932. Class 14.

293,598. POWER BELTS. L. H. GILMER CO., Tacony, Philadelphia, Pa.
Filed January 2, 1932. Serial No. 322,670. PUBLISHED FEBRUARY 16, 1932. Class 35.

293,599. DILUENTS FOR PRINTING INK. THE ASIATIC PETROLEUM COMPANY, LIMITED, London, England.
Filed November 30, 1931. Serial No. 321,580. PUBLISHED FEBRUARY 23, 1932. Class 11.

293,600. HAIR TONIC. CHESEBROUGH MANUFACTURING COMPANY, CONSOLIDATED, New York, N. Y.
Filed December 7, 1931. Serial No. 321,842. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,601. METAL CASTINGS IN THE ROUGH COMPOSED OF STEEL ONLY. STANDARD FOUNDRY COMPANY, Racine, Wis.
Filed December 12, 1931. Serial No. 322,066. PUBLISHED FEBRUARY 23, 1932. Class 14.

293,602. COMPOUND USED AS A SOLVENT FOR STARCH, WAXES, AND CERISIN, AND ALSO FOR EMULSIFYING ALL UNSAPONIFIABLE MATTER. ARKANSAS COMPANY INC., New York, N. Y.
Filed December 14, 1931. Serial No. 322,083. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,603. PREPARATION FOR USE AS A BLOOD PURIFIER AND FOR USE IN THE TREATMENT OF INDIGESTION, GENERAL WEAKNESS, AND DISORDERS OF THE STOMACH, LIVER, AND KIDNEYS. STEVEN NOSIS, Massillon, Ohio.
Filed December 14, 1931. Serial No. 322,109. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,604. DYES FOR LEATHERS. PETRONIO SHOE PRODUCTS CORP., Newark, N. J.
Filed December 19, 1931. Serial No. 322,290. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,605. REDUCING LOTION APPLIED EXTERNALLY. METRO PRODUCTS CO., Detroit, Mich.
Filed December 21, 1931. Serial No. 322,324. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,606. MEDICINAL PREPARATION FOR THE TREATMENT OF DYSMENORRHEA. GANE & INGRAM, INCORPORATED, New York, N. Y.
Filed December 23, 1931. Serial No. 322,384. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,607. BLOOD PRODUCER TONIC. ANTON JERKOVITZ, Chagrin Falls, Ohio.
Filed December 24, 1931. Serial No. 322,429. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,608. BACTERIAL CULTURE USED IN LEATHER BATING PREPARATIONS. A. KLIPSTEIN & CO., INC., New York, N. Y.
Filed December 29, 1931. Serial No. 322,511. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,609. BRUSHES FOR APPAREL AND FABRICS. PAUL OPPENHEIM, doing business as Vacumagic Brush Co., New York, N. Y.
Filed December 30, 1931. Serial No. 322,557. PUBLISHED FEBRUARY 16, 1932. Class 29.

293,610. SMOKING TOBACCOS, CIGARS, AND CIGARETTES. GENERAL-DIREKTION DER ÖSTERR. TABAKREGIE, Vienna, Austria.
Filed January 4, 1932. Serial No. 322,692. PUBLISHED FEBRUARY 16, 1932. Class 17.

293,611. MEDICINAL POWDER AND AN OINTMENT FOR THE ALLEVIATION OF ATHLETE'S FOOT OR RINGWORM OF THE FEET AND OTHER FOOT AILMENTS. SIDNEY H. PELLAR, doing business as Ath-a-Lene Laboratories, Chicago, Ill.
Filed January 4, 1932. Serial No. 322,707. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,612. ANTISEPTIC, GERMICIDAL LIQUID MEDICAMENT FOR EXTERNAL AND INTERNAL USE. THE PENETRATING IODINE CO., Emporia, Kans.
Filed January 4, 1932. Serial No. 322,709. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,613. HAIR RESTORER. WILLIAM V. WEXBERG, doing business as Duzz-It Chemical Works, Chicago, Ill.
Filed January 4, 1932. Serial No. 322,720. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,614. CIGARS. WEBSTER EISENLOHR, INC., New York, N. Y.
Filed January 5, 1932. Serial No. 322,733. PUBLISHED FEBRUARY 16, 1932. Class 17.

293,615. PREPARATION FOR THE TREATMENT OF DIABETES. THORNTON & MELCHOR, Minden, W. Va.
Filed January 5, 1932. Serial No. 322,735. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,616. PREPARATION FOR THE TREATMENT OF PINWORMS IN POULTRY. GEO. H. LEE CO., Omaha, Nebr.
Filed January 8, 1932. Serial No. 322,825. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,617. NICKEL BABBITT METAL. C. M. LOVSTED & CO., INC., Seattle, Wash.
Filed January 9, 1932. Serial No. 322,849. PUBLISHED FEBRUARY 23, 1932. Class 14.

293,618. WELDING HELMETS, WELDING HAND SHIELDS, AND GLASS FOR SAME. FREDERICK M. BOWERS, doing business as The Fibre-Metal Products Co., Chester, Pa.
Filed December 1, 1931. Serial No. 321,638. PUBLISHED FEBRUARY 16, 1932. Class 26.

293,619. CONCENTRATED WHITE MINERAL OIL EMULSION CONTAINING OIL SOLUBLE ORGANIC POISONS AND DETERRENTS FOR CONTROL OF INSECT PESTS ON TREES, SHRUBS, PLANTS, AND OTHER VEGETATION. BALFOUR, GUTHRIE & CO., LIMITED, San Francisco, Calif.
Filed November 23, 1931. Serial No. 321,411. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,620. ANODYNE PREPARATIONS. ARTHUR HOROWITZ, Zurich, Switzerland.
Filed October 8, 1931. Serial No. 319,863. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,621. ANTISEPTIC SOLUTION. PEOPLES DRUG STORES, INC., doing business as The Barnard Co., Washington, D. C.
Filed November 21, 1931. Serial No. 321,394. PUBLISHED FEBRUARY 9, 1932. Class 6.

292,622. GRAVE MARKERS. WILLIAM F. KIDWELL, Versailles, Mo.
Filed September 10, 1931. Serial No. 318,913. PUBLISHED FEBRUARY 23, 1932. Class 50.

293,623. LINIMENT FOR SPRAINS, BRUISES, RHEUMATISM, CUTS, AND INFLAMMATIONS. ALVIN THOMAS CARROLL, New Iberia, La.
Filed November 7, 1931. Serial No. 320,888. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,624. HAIR POMADES, TALCUM POWDERS, HERB TEAS, ETC. ANDREW A. OSETKOWSKI, doing business as Union Products Company, Detroit, Mich.
Filed October 31, 1931. Serial No. 320,690. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,625. INCENSE. SARWAN SINGH GREWAL, doing business as Bombay National Incense Company, Highland Park, Mich.
Filed October 12, 1931. Serial No. 319,988. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,626. VOLATILE PREPARATION FOR TREATMENT OF HEAD COLDS. WARREN L. STROUD, doing business as Miniature Mfg. Co., Seattle, Wash.
Filed September 9, 1931. Serial No. 318,878. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,627. DRESS PATTERNS. JOSEPH M. SHAPIRO, doing business as Simplicity Pattern Company, New York, N. Y.
Filed August 29, 1931. Serial No. 318,568. PUBLISHED FEBRUARY 16, 1932. Class 26.

293,628. MAGAZINES PUBLISHED EVERY MONTH. FAWCETT PUBLICATIONS, INC., Minneapolis, Minn.
Filed January 11, 1932. Serial No. 322,949. PUBLISHED FEBRUARY 23, 1932. Class 38.

293,629. MAGAZINES PUBLISHED EVERY MONTH. FAWCETT PUBLICATIONS, INC., Minneapolis, Minn.
Filed January 11, 1932. Serial No. 322,948. PUBLISHED FEBRUARY 23, 1932. Class 38.

293,630. STEREOTYPE MATS. BURGESS CELLULOSE COMPANY, Madison, Wis.
Filed January 8, 1932. Serial No. 322,817. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,631. MIMEOGRAPH AND BOND PAPER. OREGON PULP AND PAPER CO., Salem, Oreg.
Filed January 5, 1932. Serial No. 322,750. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,632. MIMEOGRAPH AND BOND PAPER. OREGON PULP AND PAPER CO., Salem, Oreg.
Filed January 5, 1932. Serial No. 322,749. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,633. FISHING LINES. PHILIP BALDWIN BEKEART, San Francisco, Calif.
Filed January 4, 1932. Serial No. 322,679. PUBLISHED FEBRUARY 23, 1932. Class 22.

293,634. METALLIC FENCE POSTS. KEYSTONE STEEL & WIRE COMPANY, Peoria, South Bartonville, Ill.
Filed January 4, 1932. Serial No. 322,695. PUBLISHED FEBRUARY 23, 1932. Class 13.

293,635. NONALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK. SCHONEBERGER & NOBLE, INC., Brooklyn, N. Y.
Filed December 31, 1931. Serial No. 322,602. PUBLISHED FEBRUARY 23, 1932. Class 45.

293,636. COIN-CONTROLLED, BALL-PROJECTING AMUSEMENT DEVICE. PENNSYLVANIA NOVELTY CO., New Brighton, Pa.
Filed December 31, 1931. Serial No. 322,597. PUBLISHED FEBRUARY 23, 1932. Class 22.

293,637. WOMEN'S AND MISSES' UNDERWEAR MADE OF GLOVE SILK, SILK AND RAYON, AND RAYON. FAIRY SILK MILLS, Shillington, Pa.
Filed December 31, 1931. Serial No. 322,578. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,638. BEACH AND SPORT PANTS AND TRUNKS FOR MEN, WOMEN, GIRLS, BOYS, AND CHILDREN. NEUSTADTER BROS., San Francisco, Calif.
Filed December 30, 1931. Serial No. 322,554. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,639. ANTI-GLARE CAPS FOR HEADLIGHT BULBS. JAMES W. PRASKY, Pittsburgh, Pa.
Filed December 24, 1931. Serial No. 322,437. PUBLISHED FEBRUARY 23, 1932. Class 19.

293,640. MONTHLY PRINTED PERIODICAL OR TRADE PAPER. THE ANTIQUARIAN PUBLISHING CO., INC., New York, N. Y.
Filed December 22, 1931. Serial No. 322,352. PUBLISHED FEBRUARY 23, 1932. Class 38.

293,641. GOLF CLUBS. THE CRAWFORD MCGREGOR AND CANBY COMPANY, Dayton, Ohio.
Filed December 21, 1931. Serial No. 322,309. PUBLISHED FEBRUARY 23, 1932. Class 22.

293,642. GOLF CLUBS. THE CRAWFORD MCGREGOR AND CANBY COMPANY, Dayton, Ohio.
Filed December 21, 1931. Serial No. 322,308. PUBLISHED FEBRUARY 23, 1932. Class 22.

293,643. RADIATOR SIPHON VALVES. THE DURST MANUFACTURING COMPANY, INC., New York, N. Y.
Filed December 19, 1931. Serial No. 322,281. PUBLISHED FEBRUARY 23, 1932. Class 13.

293,644. VENTILATORS OF THE MUFFLED BLOWER TYPE. BURGESS BATTERY COMPANY, Madison, Wis.
Filed December 18, 1931. Serial No. 322,248. PUBLISHED FEBRUARY 23, 1932. Class 34.

293,645. NATURAL MINERAL WATER. AMERICAN RAYSOL CORPORATION, Cincinnati, Ohio.
Filed December 18, 1931. Serial No. 322,245. PUBLISHED FEBRUARY 23, 1932. Class 45.

293,646. LADIES' SUITS AND DRESSES OF KNITTED FABRIC. GOLDWORM SPORTWEAR CO. INC., New York, N. Y.
Filed December 16, 1931. Serial No. 322,170. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,647. LOCKS. THE YALE & TOWNE MANUFACTURING CO., Stamford, Conn.
Filed December 15, 1931. Serial No. 322,152. PUBLISHED FEBRUARY 23, 1932. Class 25.

293,648. MALT BEVERAGE CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. STEGMAIER BREWING COMPANY, Wilkes-Barre, Pa.
Filed December 15, 1931. Serial No. 322,141. PUBLISHED FEBRUARY 23, 1932. Class 48.

293,649. PAMPHLETS OR MAGAZINES. C. G. CONN, LTD., Elkhart, Ind.
Filed December 14, 1931. Serial No. 322,092. PUBLISHED FEBRUARY 23, 1932. Class 38.

293,650. HOSIERY. PHOENIX HOSIERY COMPANY, Milwaukee, Wis.
Filed December 12, 1931. Serial No. 322,065. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,651. MEN'S AND BOYS' DRESS AND NEGLIGEE SHIRTS, PAJAMAS, AND TEXTILE UNDERWEAR. LIONDALE SHIRT CO. INC., New York, N. Y.
Filed December 10, 1931. Serial No. 322,001. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,652. AUTOMOBILE TRUCK BODIES. GEORGE J. ATWELL, New York, N. Y.
Filed December 10, 1931. Serial No. 321,981. PUBLISHED FEBRUARY 23, 1932. Class 19.

293,653. HAMMER MILLS. MINNEAPOLIS-MOLINE POWER IMPLEMENT COMPANY, Hopkins, Minn.
Filed January 6, 1932. Serial No. 322,781. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,654. BOND PAPER. OREGON PULP AND PAPER CO., Salem and Portland, Oreg.
Filed January 5, 1932. Serial No. 322,748. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,655. LEDGER AND MIMEOGRAPH PAPER. OREGON PULP AND PAPER CO., Salem, Oreg.
Filed January 5, 1932. Serial No. 322,747. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,656. BOND PAPER. OREGON PULP AND PAPER CO., Salem, Oreg.
Filed January 5, 1932. Serial No. 322,746. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,657. PNEUMATIC MATTRESSES. HODGMAN RUBBER COMPANY, Framingham, Mass.
Filed December 31, 1931. Serial No. 322,587. PUBLISHED FEBRUARY 23, 1932. Class 32.

293,658. TRACTORS. MINNEAPOLIS-MOLINE POWER IMPLEMENT COMPANY, Hopkins, Minn.
Filed December 26, 1931. Serial No. 322,470. PUBLISHED FEBRUARY 23, 1932. Class 28.

293,659. BINOCULAR LOUPES. MARINELLO COMPANY, New York, N. Y.
Filed December 26, 1931. Serial No. 322,468. PUBLISHED FEBRUARY 23, 1932. Class 26.

293,660. MIRRORS. EMERSON GLASS CORPORATION, Jamestown, N. Y.
Filed December 26, 1931. Serial No. 322,456. PUBLISHED FEBRUARY 23, 1932. Class 32.

293,661. DRIED FRUITS AND DRIED RAISINS. CONSOLIDATED PACKING COMPANY, San Francisco, Calif.
Filed December 22, 1931. Serial No. 322,358. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,662. MACHINE FOR MAKING CREAM BY HOMOGENIZING A MIXTURE OF WATER, MILK POWDER, AND BUTTER. CREAMAKER CORPORATION, Los Angeles, Calif.
Filed December 17, 1931. Serial No. 322,209. PUBLISHED FEBRUARY 23, 1932. Class 23.

293,663. STENCIL PRINTING MACHINE. CENTRAL WEST COAL COMPANY, Menominee, Mich.
Filed December 15, 1931. Serial No. 322,130. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,664. SAFETY RAZOR BLADES. THE UNSINGER CUTLERY CO., INC., Newark, N. J.
Filed December 8, 1931. Serial No. 321,925. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,665. SAFETY RAZOR BLADES. THE UNSINGER CUTLERY CO., INC., Newark, N. J.
Filed December 8, 1931. Serial No. 321,924. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,666. SAFETY RAZOR BLADES. THE UNSINGER CUTLERY CO., INC., Newark, N. J.
Filed December 8, 1931. Serial No. 321,923. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,667. SAFETY RAZOR BLADES. MCCRORY STORES CORPORATION, New York, N. Y.
Filed December 5, 1931. Serial No. 321,811. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,668. SAFETY RAZOR BLADES. MCCRORY STORES CORPORATION, New York, N. Y.
Filed December 5, 1931. Serial No. 321,810. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,669. MACHINES FOR MANUFACTURING CATTLE CAKE. RICHARD SIZER, LIMITED, Wilmington, Hull, England.
Filed December 3, 1931. Serial No. 321,737. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,670. FILING CABINETS. SCHOLFIELD SERVICE, INC., New York, N. Y.
Filed December 1, 1931. Serial No. 321,669. PUBLISHED FEBRUARY 23, 1932. Class 32.

293,671. PAPER TOWELS, TOILET PAPER, AND PAPER CLOSET SEAT COVERS. BORST ENGINEERING, INC., Buffalo, N. Y.
Filed October 30, 1931. Serial No. 320,628. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,672. GUMMED PAPERS, TOILET PAPERS, PAPER CLOTH. WORTENDYKE MANUFACTURING CO., Richmond, Va.
Filed October 17, 1931. Serial No. 320,175. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,673. SEWING MACHINE BELTS. BLUMENKRANTZ & ZUCKER SEWING MACHINE CO., INC., New York, N. Y.
Filed October 14, 1931. Serial No. 320,044. PUBLISHED FEBRUARY 23, 1932. Class 35.

293,674. MAGAZINE. NATIONAL CAPITAL REPUBLICAN CLUB, Washington, D. C.
Filed October 15, 1931. Serial No. 320,099. PUBLISHED FEBRUARY 16, 1932. Class 38.

293,675. FURNITURE—NAMELY, FOLDING AND DECK CHAIRS. TAYLOR BROS. (SANDIACRE) LIMITED, Sandiacre, near Nottingham, England.
Filed September 19, 1931. Serial No. 319,223. PUBLISHED FEBRUARY 23, 1932. Class 32.

293,676. TRACING CLOTH. CHARLES BRUNING COMPANY, INC., New York, N. Y.
Filed August 25, 1931. Serial No. 318,389. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,677. MEN'S SUITS, TOPCOATS, TROUSERS, AND OVERCOATS. COMELLO BROS. & COMPANY, Cincinnati, Ohio.
Filed August 6, 1931. Serial No. 317,831. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,678. STENCILS. MILO HARDING COMPANY, LTD., Los Angeles, Calif.
Filed October 10, 1931. Serial No. 319,931. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,679. WRITING AND PRINTING PAPER, MAILING ENVELOPES, PAPETERIES, WRITING TABLETS, POUND PAPERS, PACKAGE PAPERS, COMPOSITION BOOKS AND CUT CARDS. WHITE & WYCKOFF MFG. COMPANY, Holyoke and Riverside, Mass.
Filed November 9, 1931. Serial No. 320,960. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,680. HARDWARE FOR VEHICLE BODIES, DOOR HANDLES, AND WINDOW REGULATORS. A. L. HANSON MFG. CO., Chicago, Ill.
Filed November 12, 1931. Serial No. 321,069. PUBLISHED FEBRUARY 23, 1932. Class 19.

293,681. LADIES' COATS, SUITS, JACKETS, SKIRTS; ENSEMBLES CONSISTING OF SKIRT AND BLOUSE, OF SKIRT, VEST, AND COAT, OR OF SKIRT, BLOUSE, AND COAT; AND DRESSES. LEON M. SCHARF, New York, N. Y.
Filed November 17, 1931. Serial No. 321,222. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,682. NON-ALCOHOLIC, CEREAL, MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PERCENT (1%) ALCOHOL BY VOLUME. JACOB RUPPERT, New York, N. Y.
Filed December 2, 1931. Serial No. 321,694. PUBLISHED FEBRUARY 23, 1932. Class 48.

293,683. GOLF, TENNIS, ARCHERY, ETC., EQUIPMENT. ABERCROMBIE & FITCH COMPANY, New York, N. Y.
Filed December 3, 1931. Serial No. 321,715. PUBLISHED FEBRUARY 23, 1932. Class 22.

293,684. WRITING PAPER, CORRESPONDENCE CARDS, AND ENVELOPES. SCHLOSSER PAPER CORPORATION, New York, N. Y.
Filed January 8, 1932. Serial No. 322,832. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,685. BOOK PAPER, COVER PAPER, WRITING PAPER, BOND PAPER, BRISTOL PAPER, AND PAPER USED IN MAKING ENVELOPES. BUTLER PAPER CORPORATIONS, Chicago, Ill.
Filed January 11, 1932. Serial No. 322,876. PUBLISHED FEBRUARY 23, 1932. Class 37.

293,686. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. STEGMAIER BREWING COMPANY, Wilkes-Barre, Pa.
Filed December 9, 1931. Serial No. 321,972. PUBLISHED FEBRUARY 23, 1932. Class 48.

293,687. SCRAP BOOK COVERS AND FILLER SHEETS. ARTHUR EGGELING, New York, N. Y.
Filed December 31, 1931. Serial No. 322,577. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,688. CORN STARCH FOR FOOD PURPOSES. THE HUBINGER CO., Keokuk, Iowa.
Filed October 31, 1931. Serial No. 320,678. PUBLISHED DECEMBER 15, 1931. Class 46.

293,689. PUBLICATION ISSUING EVERY FOUR WEEKS. INDUSTRIAL RELATIONS PUBLICATIONS, INC., Chicago, Ill.
Filed November 2, 1931. Serial No. 320,727. PUBLISHED FEBRUARY 16, 1932. Class 38.

293,690. TABLE SYRUP. TYLER SYRUP COMPANY, INC., Tyler, Tex.
Filed November 5, 1931. Serial No. 320,840. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,691. WEEKLY MAGAZINE. RADIO GUIDE, INC., New York, N. Y.
Filed November 6, 1931. Serial No. 320,871. PUBLISHED FEBRUARY 16, 1932. Class 38.

293,692. SHOWER HEADS, TRAP COVERS, METAL DRAINS, PLUMBING VALVES, CURTAIN RAIL FITTINGS. FAITH MFG. CO., Chicago, Ill.
Filed November 23, 1931. Serial No. 321,422. PUBLISHED FEBRUARY 23, 1932. Class 13.

293,693. CHICK BOXES USED FOR THE PURPOSE OF SHIPPING AND/OR BROODING. ANDERSON BOX COMPANY, Indianapolis, Ind.
Filed November 27, 1931. Serial No. 321,705. PUBLISHED FEBRUARY 23, 1932. Class 2.

293,694. SYRUP USED IN THE PREPARATION OF MALT BEVERAGES. DEHLS & STEIN, Newark, N. J.
Filed December 4, 1931. Serial No. 321,750. PUBLISHED FEBRUARY 16, 1932. Class 48.

293,695. COMBINATION GARMENT FOR THE USE OF WOMEN FORMED OF A SINGLE PIECE COMPRISING A CORSET AND BRASSIÈRE. CALVIN VOS, doing business as Emma E. Goodwin, Inc., New York, N. Y., assignor to Emma E. Goodwin, Inc., New York, N. Y.
Filed December 5, 1931. Serial No. 321,836. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,696. LEDGER AND BOND PAPER. BYRON WESTON COMPANY, Dalton, Mass.
Filed December 11, 1931. Serial No. 322,011. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,697. VEGETABLE FIBER ROPE. THE E. T. RUGG COMPANY, Newark, Ohio.
Filed December 12, 1931. Serial No. 322,070. PUBLISHED FEBRUARY 16, 1932. Class 7.

293,698. PRINTS AND PUBLICATIONS. ALBEE PUBLISHING COMPANY, INC., New York, N. Y.
Filed December 21, 1931. Serial No. 322,303. PUBLISHED FEBRUARY 16, 1932. Class 38.

293,699. GAS BURNERS, OIL BURNERS, AUTOMATIC BOILERS FOR GAS, AND AUTOMATIC BOILERS FOR OIL. PETROLEUM HEAT AND POWER COMPANY, New York, N. Y.
Filed December 24, 1931. Serial No. 322,433. PUBLISHED FEBRUARY 23, 1932. Class 34.

293,700. MAGAZINES PUBLISHED EVERY MONTH. COUNTRY PRESS, INC., Minneapolis, Minn.
Filed December 31, 1931. Serial No. 322,574. PUBLISHED FEBRUARY 16, 1932. Class 38.

293,701. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, PAPER DOILIES, PAPER TABLE CLOTHS, TISSUE PAPER, AND CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed December 31, 1931. Serial No. 322,580. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,702. INSTRUMENTS FOR MEASURING WORK-PIECES, SCREWS, SHEET-METALS, WIRES, AND THE LIKE. CARL ZEISS, Jena, Germany.
Filed August 8, 1931. Serial No. 317,822. PUBLISHED FEBRUARY 16, 1932. Class 20.

293,703. TABLES AND CHAIRS USED IN HOUSEHOLDS, RESTAURANTS, AND DRUG STORES: KITCHEN CABINETS, AND ENAMELED METAL SHELVING. TENNESSEE ENAMEL MANUFACTURING COMPANY, Nashville, Tenn.
Filed July 28, 1931. Serial No. 317,416. PUBLISHED FEBRUARY 23, 1932. Class 32.

293,704. PERIODICAL. THE CHAMBER OF COMMERCE OF KANSAS CITY, MISSOURI, Kansas City, Mo.
Filed January 15, 1932. Serial No. 323,026. PUBLISHED FEBRUARY 23, 1932. Class 38.

293,705. RUBBER TIRES AND TUBES. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J.
Filed January 4, 1932. Serial No. 322,675. PUBLISHED FEBRUARY 16, 1932. Class 35.

293,706. MOTOR DRIVEN VEHICLES—NAMELY, AUTOMOBILES, TRUCKS, AND COMMERCIAL VEHICLES—AND STRUCTURAL PARTS THEREOF. GENERAL MOTORS CORPORATION, Detroit, Mich.
Filed December 17, 1931. Serial No. 322,212. PUBLISHED FEBRUARY 23, 1932. Class 19.

293,707. SANITARY NAPKINS. LANAIR COMPANY, Chicago, Ill.
Filed December 23, 1931. Serial No. 322,392. PUBLISHED FEBRUARY 23, 1932. Class 44.

293,708. MARMALADE. EDWIN WALDO WARD, Sr., Los Angeles, Calif.
Filed December 23, 1931. Serial No. 322,407. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,709. SOAP POWDER. O. B. SOAP CO. INC., Buffalo, N. Y.
Filed December 24, 1931. Serial No. 322,432. PUBLISHED FEBRUARY 16, 1932. Class 4.

293,710. SANITARY PAPER DIAPERS. DENNISON MANUFACTURING COMPANY, Framingham, Mass.
Filed January 2, 1932. Serial No. 322,629. PUBLISHED FEBRUARY 23, 1932. Class 44.

293,711. RUBBER ELECTRIC THERAPEUTIC HEATING PAD. THE SEAMLESS RUBBER COMPANY, INC., New Haven, Conn.
Filed January 2, 1932. Serial No. 322,657. PUBLISHED FEBRUARY 23, 1932. Class 44.

293,712. TOILET BOWL CLEANER. EUGENE MUETH, doing business as Toil-Glen Products Co., St. Louis, Mo.
Filed January 11, 1932. Serial No. 322,887. PUBLISHED FEBRUARY 23, 1932. Class 4.

293,713. CERTAIN NAMED PAINT PRODUCTS. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa.
Filed January 11, 1932. Serial No. 322,924. PUBLISHED FEBRUARY 23, 1932. Class 16.

293,714. HAIR WAVING PADS. THE NESTLE-LEMUR COMPANY, New York, N. Y.
Filed January 12, 1932. Serial No. 322,939. PUBLISHED FEBRUARY 23, 1932. Class 44.

293,715. CANNED SALMON. NEW ENGLAND FISH COMPANY, Seattle, Wash.
Filed December 31, 1931. Serial No. 322,594. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,716. PURE VEGETABLE SHORTENING. DURKEE FAMOUS FOODS, INC., Cleveland, Ohio.
Filed January 13, 1932. Serial No. 322,953. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,717. CERTAIN NAMED PAINT PRODUCTS. THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio.
Filed January 14, 1932. Serial No. 323,013. PUBLISHED FEBRUARY 23, 1932. Class 16.

293,718. GINGER ALE. CHESTERFIELD DRY GINGER ALE CO., Chicago, Ill.
Filed July 25, 1931. Serial No. 317,301. PUBLISHED FEBRUARY 16, 1932. Class 45.

293,719. TOY SAIL BOATS. J. CHEIN & COMPANY, Harrison, N. J.
Filed July 28, 1931. Serial No. 317,389. PUBLISHED FEBRUARY 16, 1932. Class 22.

293,720. PILE FABRICS, IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed October 3, 1931. Serial No. 319,686. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,721. BATHTUBS, LAVATORIES, WATER CLOSETS, ETC. WESTCOAST SANITARY MANUFACTURERS, Los Angeles, Calif.
Filed October 9, 1931. Serial No. 319,917. PUBLISHED FEBRUARY 23, 1932. Class 13.

293,722. BOARD GAMES PLAYED WITH PIECES. ALBERT A. ALMADA, Vallejo, Calif.
Filed October 20, 1931. Serial No. 320,223. PUBLISHED FEBRUARY 16, 1932. Class 22.

293,723. EARTHENWARE. THE STEUBENVILLE POTTERY COMPANY, Steubenville, Ohio.
Filed October 26, 1931. Serial No. 320,477. PUBLISHED FEBRUARY 23, 1932. Class 30.

293,724. LLAMA AND WOOL CLOTH IN THE PIECE. S. STROOCK & CO. INC., New York, N. Y.
Filed October 31, 1931. Serial No. 320,706. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,725. CAMEL HAIR AND WOOL CLOTH IN THE PIECE. S. STROOCK & CO. INC., New York, N. Y.
Filed October 31, 1931. Serial No. 320,708. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,726. CAMEL HAIR AND WOOL CLOTH IN THE PIECE. S. STROOCK & CO. INC., New York, N. Y.
Filed October 31, 1931. Serial No. 320,709. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,727. CEREAL BREAKFAST FOODS. FOODTOWN KITCHENS, INC., Chicago, Ill.
Filed June 11, 1931. Serial No. 315,767. PUBLISHED SEPTEMBER 22, 1931. Class 46.

293,728. UNDERWEAR FOR USE BY MEN, WOMEN, AND CHILDREN. MANDEL & COHEN, New York, N. Y.
Filed June 10, 1931. Serial No. 315,641. PUBLISHED FEBRUARY 9, 1932. Class 39.

293,729. HARD METAL COMPOSITION FOR USE IN TOOLS, DIES, AND PARTS THEREOF. LUDLUM STEEL CO., Watervliet, N. Y.
Filed May 27, 1931. Serial No. 315,104. PUBLISHED FEBRUARY 23, 1932. Class 14.

293,730. HARD GLAZE PORCELAIN. H. F. COORS COMPANY, INC., Inglewood, Calif.
Filed May 23, 1931. Serial No. 314,948. PUBLISHED FEBRUARY 23, 1932. Class 30.

293,731. GOLF BALLS. GENERAL TIRE & RUBBER COMPANY, Akron, Ohio.
Filed May 21, 1931. Serial No. 314,845. PUBLISHED FEBRUARY 23, 1932. Class 22.

293,732. DENTAL BASE PLATE. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed December 1, 1931. Serial No. 321,674. PUBLISHED FEBRUARY 16, 1932. Class 44.

293,733. RUBBER ELECTRIC HEATING PAD. UNITED DRUG COMPANY, Boston, Mass.
Filed December 4, 1931. Serial No. 321,789. PUBLISHED FEBRUARY 16, 1932. Class 44.

293,734. FRESH DECIDUOUS FRUITS. AMERICAN FRUIT GROWERS, INC. OF CALIFORNIA, Los Angeles, Calif.
Filed December 12, 1931. Serial No. 322,037. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,735. COMPOUND FOR CLEANING PRINTING BLANKETS AND ROLLERS. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio.
Filed December 14, 1931. Serial No. 322,077. PUBLISHED FEBRUARY 23, 1932. Class 4.

293,736. PAINTS. BENJAMIN FRANKLIN DAVIS, doing business as Art-Cement Mfg. Co., Miami, Fla.
Filed December 14, 1931. Serial No. 322,094. PUBLISHED FEBRUARY 23, 1932. Class 16.

293,737. ELECTRIC HEATING PADS FOR FACIAL TREATMENTS. GOLDMAN'S, INC., Philadelphia, Pa.
Filed December 14, 1931. Serial No. 322,100. PUBLISHED FEBRUARY 23, 1932. Class 44.

293,738. PROPHYLACTIC RUBBER ARTICLES. YOUNGS RUBBER CORPORATION, INC., New York, N. Y.
Filed December 17, 1931. Serial No. 322,299. PUBLISHED FEBRUARY 23, 1932. Class 44.

293,739. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, PAPER DOILIES, PAPER TABLE CLOTHS, TISSUE PAPER, AND CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed December 31, 1931. Serial No. 322,581. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,740. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, PAPER DOILIES, PAPER TABLE CLOTHS, TISSUE PAPER, AND CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed December 31, 1931. Serial No. 322,582. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,741. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, PAPER DOILIES, PAPER TABLE CLOTHS, TISSUE PAPER, AND CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed December 31, 1931. Serial No. 322,583. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,742. MALT POWDER USED IN THE MANUFACTURE OF MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. BRUNO HYBA, Roslindale, Mass.
Filed January 2, 1932. Serial No. 322,639. PUBLISHED FEBRUARY 16, 1932. Class 48.

293,743. WOMEN'S UNDERWEAR. SUPERIOR PETTICOAT CO., INC., New York, N. Y.
Filed January 2, 1932. Serial No. 322,669. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,744. PAPER. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed January 4, 1932. Serial No. 322,682. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,745. PAPER TOWELS. NATIONAL PAPER PRODUCTS COMPANY, San Francisco, Calif.
Filed January 4, 1932. Serial No. 322,701. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,746. UMBRELLAS AND PARASOLS. JOHN U. BURT, INC., New York, N. Y.
Filed January 6, 1932. Serial No. 322,765. PUBLISHED FEBRUARY 23, 1932. Class 41.

293,747. HOSIERY. CHARLES H. BACON COMPANY, Lenoir City, Tenn.
Filed January 15, 1932. Serial No. 323,020. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,748. BRAKE LININGS. ALLBESTOS CORPORATION, Philadelphia, Pa.
Filed June 25, 1931. Serial No. 316,241. PUBLISHED AUGUST 4, 1931. Class 35.

293,749. READY-MIXED PAINTS. CENTRAL PLUMBING SUPPLY COMPANY, Philadelphia, Pa.
Filed July 1, 1931. Serial No. 316,528. PUBLISHED FEBRUARY 23, 1932. Class 16.

293,750. ELECTRIC BLANKETS FOR THERAPEUTIC USE. WILLIAM F. CRADDICK, Chicago, Ill.
Filed July 2, 1931. Serial No. 316,554. PUBLISHED FEBRUARY 23, 1932. Class 44.

293,751. GOLD AND ALUMINUM PAINT. THE DOOLEY MANUFACTURING CO., INC., Philmont, N. Y.
Filed July 10, 1931. Serial No. 316,811. PUBLISHED FEBRUARY 23, 1932. Class 16.

293,752. CERTAIN NAMED PAINT PRODUCTS. FLOOR SCRAPERS CO. INC., Chicago, Ill.
Filed July 13, 1931. Serial No. 316,881. PUBLISHED FEBRUARY 23, 1932. Class 16.

293,753. TISSUE PAPER (ADAPTED FOR REMOVING COLD CREAM, FOR HANDKERCHIEFS, AND FOR SIMILAR PURPOSES). POND'S EXTRACT COMPANY, New York, N. Y.
Filed July 28, 1931. Serial No. 317,403. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,754. MONTHLY MAGAZINE. THE GREETING CARD ASSOCIATION, INC., New York, N. Y.
Filed August 15, 1931. Serial No. 318,005. PUBLISHED FEBRUARY 16, 1932. Class 38.

293,755. SANITARY PAPER TOILET SEAT. THOMAS KENDALL JOHNSON, doing business as Kendall Johnson, New Brunswick, N. J.
Filed September 3, 1931. Serial No. 318,712. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,756. DIETETIC FOODS FOR CONVALESCENT PERSONS SUFFERING FROM MALNUTRITION. TROPONWERKE DINKLAGE & CO., Cologne-Mulheim, Germany.
Filed September 9, 1931. Serial No. 318,888. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,757. PHOTOGRAPHS AND PICTORIAL ILLUSTRATIONS AND NEWS ITEMS. CLIFTON RALPH LEVY, Los Angeles, Calif.
Filed October 10, 1931. Serial No. 319,935. PUBLISHED FEBRUARY 16, 1932. Class 38.

293,758. MALT USED IN THE PREPARATION OF MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PERCENT ALCOHOL BY VOLUME. MYRO PATERMANN, doing business as Firma Gebr. Patermann, Teltow, near Berlin, Germany.
Filed October 23, 1931. Serial No. 320,368. PUBLISHED FEBRUARY 16, 1932. Class 48.

293,759. VACUUM CASE FOR RECEIVING BOTTLES AND FOR RETAINING THE TEMPERATURE OF THE CONTENTS THEREOF. VITA-VAC CONTAINER COMPANY, INC., New York, N. Y.
Filed October 30, 1931. Serial No. 320,651. PUBLISHED FEBRUARY 23, 1932. Class 2.

293,760. LEDGER AND BOND PAPER. BYRON WESTON COMPANY, Dalton, Mass.
Filed December 16, 1931. Serial No. 322,159. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,761. BOOK COVERS. A. T. WALRAVEN BOOK COVER COMPANY, Dallas, Tex.
Filed December 16, 1931. Serial No. 322,197. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,762. GAS BURNERS, OIL BURNERS, AUTOMATIC BOILERS FOR GAS, AND AUTOMATIC BOILERS FOR OIL. PETROLEUM HEAT AND POWER COMPANY, New York, N. Y.
Filed December 24, 1931. Serial No. 322,434. PUBLISHED FEBRUARY 23, 1932. Class 34.

293,763. TRACING CLOTH. THE MORLEY MANUFACTURING COMPANY, LIMITED, Manchester, England.
Filed December 29, 1931. Serial No. 322,518. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,764. CHECK ROOM EQUIPMENT, INCLUDING COAT AND HAT RACKS, UMBRELLA RACKS, AND PARCEL RACKS. VOGEL-PETERSON CO., INC., Chicago, Ill.
Filed May 14, 1931. Serial No. 314,591. PUBLISHED FEBRUARY 23, 1932. Class 32.

293,765. ZINC PEROXIDE. THE ROESSLER & HASSLACHER CHEMICAL COMPANY, New York, N. Y.
Filed April 8, 1931. Serial No. 313,094. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,766. CANDIES OF ALL KINDS; CANDIED NUT PRODUCTS — NAMELY, CHOCOLATE-COVERED NUTS, CHOCOLATE ROASTED ALMONDS, CHOCOLATE, AND ICING. HENRY HEIDE, INCORPORATED, New York, N. Y.
Filed March 27, 1931. Serial No. 312,604. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,767. BALLS CONSISTING OF MEAT, RICE, EGGS, AND SPICES. FRANK MAMMI, Brooklyn, N. Y.
Filed February 3, 1931. Serial No. 310,686. PUBLISHED JUNE 2, 1931. Class 46.

293,768. CANNED CRAB MEAT. AMTORG TRADING CORPORATION, New York, N. Y.
Filed December 29, 1930. Serial No. 309,407. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,769. DUO-TONE INK USED IN OFFSET PRINTING PROCESSES. INTER-COLLEGIATE PRESS, Kansas City, Mo.
Filed December 19, 1930. Serial No. 309,168. PUBLISHED FEBRUARY 16, 1932. Class 11.

293,770. FAN AND FILTER TYPE OF VENTILATING APPARATUS, WHICH IS PARTICULARLY INTENDED FOR SUPPLYING AIR AND FILTERING THE AIR SUPPLIED TO A ROOM. AMERICAN AIR FILTER COMPANY, INC., Louisville, Ky.
Filed December 17, 1930. Serial No. 309,054. PUBLISHED FEBRUARY 23, 1932. Class 34.

293,771. CANDIES, CHOCOLATES, AND TEAS. SOCIETE ANONYME DU CHOCOLAT F. MARQUIS, Paris, France.
Filed November 29, 1930. Serial No. 308,459. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,772. MOISTENING ROLLERS FOR LITHOGRAPHING PRESSES. JOHN O. SANKER, doing business as Sanker Mfg. Co., St. Paul, Minn.
Filed November 17, 1930. Serial No. 307,995. PUBLISHED FEBRUARY 16, 1932. Class 23.

293,773. COFFEE, TEA, SPICES, FOOD-FLAVORING EXTRACTS. THE EUCLID COFFEE COMPANY, Cleveland, Ohio.
Filed October 3, 1930. Serial No. 306,346. PUBLISHED MARCH 31, 1931. Class 46.

293,774. CHOCOLATE. CUBA INDUSTRIAL Y COMERCIAL, S. A., doing business as Vilaplana Guerrero Y Cia, Habana, Cuba.
Filed September 29, 1930. Serial No. 306,173. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,775. CHOCOLATE. CUBA INDUSTRIAL Y COMERCIAL, S. A., doing business as Hijos de Baguer, Habana, Cuba.
Filed September 29, 1930. Serial No. 306,172. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,776. WRITING PAPER AND ENVELOPES. MONTAG BROS. INC., Atlanta, Ga.
Filed September 3, 1930. Serial No. 305,284. PUBLISHED FEBRUARY 16, 1932. Class 37.

293,777. ABDOMINAL BANDS, BELTS, SUPPORTERS, ETC. WILHELM JULIUS TEUFEL OFFENE HANDELSGESELLSCHAFT, Stuttgart, Germany.
Filed August 21, 1930. Serial No. 304,899. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,778. EMPTY PAPER BAGS. THE OHIO MATCH COMPANY, Wadsworth, Ohio, and New York, N. Y.
Filed August 2, 1930. Serial No. 304,159. PUBLISHED FEBRUARY 16, 1932. Class 2.

293,779. CANDY. GEORGE C. WILSON, Tyrone, Pa.
Filed February 15, 1930. Serial No. 296,094. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,780. BACON. OSCAR MAYER & CO. INC., doing business as Oscar Mayer's, Chicago, Ill.
Filed February 6, 1930. Serial No. 295,683. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,781. HERMETICALLY PRESERVED FISH, SUCH AS SARDINES, BRISLINGS, HERRING, MACKEREL, KIPPER SNACKS, FISH BALLS, FISH CAKES, AND COD ROE. A/S UNITED SARDINE FACTORIES, Bergen, Norway.
Filed January 31, 1930. Serial No. 295,414. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,782. CERTAIN NAMED PAINT PRODUCTS. WAUKEGAN CHEMICAL COMPANY, North Chicago, Ill.
Filed November 27, 1929. Serial No. 293,017. PUBLISHED FEBRUARY 23, 1932. Class 16.

293,783. LADIES', MISSES', AND JUNIORS' SKIRTS, BLOUSES, DRESSES, SUITS, AND FROCKS. MAYFLOWER DRESS COMPANY, INC., New York, N. Y.
Filed October 17, 1929. Serial No. 291,170. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,784. CARBON PAPER. L C SMITH & CORONA TYPEWRITERS INC., New York, N. Y.
Filed January 13, 1932. Serial No. 322,975. PUBLISHED FEBRUARY 23, 1932. Class 11.

293,785. GAMES OF SKILL AND PARTS THEREOF CHARACTERIZED BY THE INCLUSION OF A BOARD OVER WHICH SPHERICAL OBJECTS MAY BE PROJECTED; THE BOARD BEING PROVIDED WITH PENS OR COURTS HAVING CERTAIN SCORING DESIGNATIONS. BINGO NOVELTY MANUFACTURING COMPANY, Chicago, Ill.
Filed November 2, 1931. Serial No. 320,804. PUBLISHED FEBRUARY 16, 1932. Class 22.

293,786. DOLLS. AMERICAN CHARACTER DOLL CO. INC., New York, N. Y.
Filed November 6, 1931. Serial No. 320,850. PUBLISHED FEBRUARY 16, 1932. Class 22.

293,787. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed December 7, 1931. Serial No. 321,862. PUBLISHED FEBRUARY 16, 1932. Class 42.

293,788. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed December 7, 1931. Serial No. 321,851. PUBLISHED FEBRUARY 16, 1932. Class 42.

293,789. CORDUROYS IN THE PIECE. A. D. JUILLIARD & COMPANY, INC., New York, N. Y.
Filed December 12, 1931. Serial No. 322,048. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,790. TABLE TENNIS GAME. J. PRESSMAN & CO. INC., Brooklyn, N. Y.
Filed December 14, 1931. Serial No. 322,112. PUBLISHED FEBRUARY 16, 1932. Class 22.

293,791. TEXTILE RUGS AND CARPETS. THE BARRYMORE SEAMLESS WILTONS, INC., Philadelphia, Pa.
Filed December 15, 1931. Serial No. 322,125. PUBLISHED FEBRUARY 16, 1932. Class 42.

293,792. JUTE WEBBING. LUDLOW MANUFACTURING ASSOCIATES, Boston, Mass.
Filed December 26, 1931. Serial No. 322,466. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,793. JUTE WEBBING. LUDLOW MANUFACTURING ASSOCIATES, Boston, Mass.
Filed December 26, 1931. Serial No. 322,467. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,794. YARNS OF WOOL, WORSTED, OR HAIR. WILLIAM HOLLINS & COMPANY, LTD., Nottingham, England.
Filed December 29, 1931. Serial No. 322,509. PUBLISHED FEBRUARY 16, 1932. Class 43.

293,795. KNITTED ELASTIC FABRIC. CHARLES WALTON & SON, INC., Needham Heights, Mass.
Filed December 26, 1931. Serial No. 322,475. PUBLISHED FEBRUARY 16, 1932. Class 42.

293,796. COTTON PIECE GOODS. PEPPERELL MANUFACTURING COMPANY, Boston, Mass.
Filed December 30, 1931. Serial No. 322,558. PUBLISHED FEBRUARY 16, 1932. Class 42.

293,797. PILE FABRICS IN THE PIECE. E. F. TIMME & SON, New York, N. Y.
Filed December 31, 1931. Serial No. 322,607. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,798. RIFLE CARTRIDGES. FEDERAL CARTRIDGE CORP., Minneapolis, Minn.
Filed January 2, 1932. Serial No. 322,632. PUBLISHED FEBRUARY 16, 1932. Class 9.

293,799. PIECE GOODS MADE OF WOOL, COTTON, SILK, ARTIFICIAL SILK, OR COMBINATIONS OF ANY SUCH FIBRES. THE H. & H. MANUFACTURING COMPANY, INC., Quidnick, R. I.
Filed January 7, 1932. Serial No. 322,792. PUBLISHED FEBRUARY 16, 1932. Class 42.

293,800. LEATHER PISTOL HOLSTERS. ALEXANDER BARON, Brooklyn, N. Y.
Filed January 6, 1932. Serial No. 322,810. PUBLISHED FEBRUARY 16, 1932. Class 9.

293,801. BEDSPREADS. STEVENS MANUFACTURING CORPORATION, Fall River, Mass.
Filed January 15, 1932. Serial No. 323,067. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,802. MERCERIZED SPOOL THREAD AND SEWING COTTON. WORLD THREAD CO., INC., New York, N. Y.
Filed January 15, 1932. Serial No. 323,074. PUBLISHED FEBRUARY 23, 1932. Class 43.

293,803. WOOLEN PIECE GOODS. C. M. DE LAND, New York, N. Y.
Filed January 18, 1932. Serial No. 323,127. PUBLISHED FEBRUARY 23, 1932. Class 42.

293,804. WATCH CRYSTALS. BROZEN BROS. WATCH CRYSTAL CO. INC., New York, N. Y.
Filed January 19, 1932. Serial No. 323,163. PUBLISHED FEBRUARY 23, 1932. Class 33.

293,805. TRISODIUM PHOSPHATE SOLD FOR USE AS A DETERGENT AND FOR CLEANSING PURPOSES. SOUTHERN MINERAL PRODUCTS CORPORATION, New York, N. Y.
Filed August 19, 1931. Serial No. 318,177. PUBLISHED FEBRUARY 23, 1932. Class 4.

293,806. ICE CREAM CAKE SANDWICHES. ANTONE R. SOUZA, Santa Monica, Calif.
Filed August 31, 1931. Serial No. 318,604. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,807. METAL POLISHING PASTE. JUAN JOAQUIN OTERO Y PEREZ, Habana, Cuba.
Filed October 2, 1931. Serial No. 319,665. PUBLISHED FEBRUARY 23, 1932. Class 4.

293,808. SHAVING CREAMS. CHARLES D. THOMPSON, Lawrence, Mass.
Filed October 1, 1931. Serial No. 319,627. PUBLISHED FEBRUARY 23, 1932. Class 4.

293,809. CHOCOLATE COATED FRUIT. JOHN A. POIRIER, Duluth, Minn.
Filed October 5, 1931. Serial No. 319,737. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,810. CERTAIN NAMED PAINT PRODUCTS. UNITED STATES GYPSUM COMPANY, Chicago, Ill.
Filed October 26, 1931. Serial No. 320,479. PUBLISHED FEBRUARY 23, 1932. Class 16.

293,811. FRESH BANANAS. THE FRUIT SHOPS, INC., New York, N. Y.
Filed November 7, 1931. Serial No. 320,891. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,812. FRESH BERRIES, FRESH DECIDUOUS FRUITS, FRESH VEGETABLES, AND DRIED FRUITS. P. M. RESETAR, Watsonville, Calif.
Filed November 17, 1931. Serial No. 321,217. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,813. SANITARY NAPKINS. MELBURT PRODUCTS, INC., New York, N. Y.
Filed November 20, 1931. Serial No. 321,352. PUBLISHED FEBRUARY 23, 1932. Class 44.

293,814. FRESH DECIDUOUS FRUITS AND VEGETABLES, FRESH GRAPES, DRIED FRUITS, CANNED FRUITS AND VEGETABLES. MERIDIAN LTD., doing business as El Solyo Ranch, Vernalis, Calif.
Filed November 20, 1931. Serial No. 321,355. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,815. GRANULATED SOAP. CATHERINE CONLON, doing business as Aunt Kate's Products Co., Saugerties, N. Y.
Filed November 24, 1931. Serial No. 321,460. PUBLISHED FEBRUARY 16, 1932. Class 4.

293,816. SOAP. W. F. YOUNG, INC., Springfield, Mass.
Filed November 28, 1931. Serial No. 321,579. PUBLISHED FEBRUARY 16, 1932. Class 4.

293,817. CANDY BARS. F. A. MARTOCCIO COMPANY, doing business as Hollywood Candy Co., Minneapolis, Minn.
Filed November 30, 1931. Serial No. 321,602. PUBLISHED FEBRUARY 16, 1932. Class 46.

TRADE-MARK REGISTRATIONS RENEWED

37,509. CONDENSED CREAM AND MILK. Registered December 24, 1901. PACIFIC COAST CONDENSED MILK CO., Seattle, Wash. Renewed December 24, 1931, to Carnation Company, Wilmington, Del., Seattle, Wash., and Milwaukee, Wis., a Corporation of Delaware, assignee by mesne assignment.

85,378. LEATHER BOOTS AND SHOES. Registered February 13, 1912. REGAL SHOE COMPANY, Whitman and Boston, Mass. Renewed February 13, 1932, to Regal Shoe Company, Whitman, Mass., a Corporation of Massachusetts, assignee.

85,898. TEA. Registered March 26, 1912. G. E. BARBOUR COMPANY, LIMITED, St. John, New Brunswick, Canada, a Corporation of New Brunswick, Canada. Renewed March, 26, 1932.

85,927. ORANGES. Registered March 26, 1912. UPLAND CITRUS ASS'N. Renewed March 26, 1932, to Upland Citrus Association, Upland, Calif., a Corporation of California, successor.

85,931. CERTAIN FOODS. Registered March 26, 1912. F. WIDLAR & CO., Cleveland, Ohio. Renewed March 26, 1932, to Standard Brands Incorporated, New York, N. Y., a Corporation of Delaware, successor.

86,288. COCOA. Registered April 3, 1912. DROSTE & CO. Renewed April 3, 1932, to Naamlooze Vennootschap Droste's Cacao-En Chocoladefabrieken, Haarlem, Netherlands, a Corporation of the Netherlands, assignee.

87,798. ENAMELED METAL STOVES AND RANGES. Registered August 6, 1912. THE PORCELIRON COMPANY. Renewed August 6, 1932, to Ingram-Richardson Manufacturing Company, Beaver Falls, Pa., a Corporation of Pennsylvania, assignee.

LABELS

REGISTERED MAY 3, 1932

40,662.—*Title:* EXPELLO. For Spot Remover and Dry Cleaner. THE EXPELLO CORPORATION, Dover, N. H. Published February 26, 1932.

40,663.—*Title:* HAMMETT'S ART UTILITY PASTE. For Paste. J. L. HAMMETT COMPANY, Newark, N. J. Published March 18, 1932.

40,664.—*Title:* BUGDED. For Liquid Insecticide. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Published January 15, 1931.

40,665.—*Title:* HAVE FUN—MAKE MONEY! For Amusement and Educational Kit. R. S. PITTS MANUFACTURING CO., Hanover, Pa. Published February 24, 1932.

40,666.—*Title:* PROTEO BREAD—RICH IN BALANCED PROTEINS. For Specially Prepared Baking Products—Namely, Bread, Cookies, and Crackers. PROTEO FOODS, INCORPORATED, Chicago, Ill. Published March 2, 1932.

40,667.—*Title:* DIXIE UNDIES. For Children's Underwear. SACKS-SONS CARTON CO., INC., Brooklyn, N. Y. Published February 1, 1932.

40,668.—*Title:* TAST-MOR. For Dessert. SUPERIOR PACKING CORP., New York, N. Y. Published February 26, 1932.

40,669.—*Title:* MANHATTAN CLUB. For Malt Syrup. SUPERIOR PACKING CORP., New York, N. Y. Published February 26, 1932.

40,670.—*Title:* TAST-MOR. For Chocolate Malt. SUPERIOR PACKING CORP., New York, N. Y. Published February 26, 1932.

PRINTS

REGISTERED MAY 3, 1932

13,697.—*Title:* FULL SOUNDING ELECTRO DYNAMIC BELL ALARM. For Electric Clocks. ARLINGTON TIME LABORATORIES, INC., Chicago, Ill. Published March 15, 1932.

13,698.—*Title:* LIVELY WOOL FOR LIVELY RUG BUSINESS. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published December 5, 1931.

13,699.—*Title:* IDENTIFY A RUG OF LIVELY WOOL. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published December 5, 1931.

13,700.—*Title:* SOFTER TO WALK ON. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published December 5, 1931.

13,701.—*Title:* KEEP THEIR BEAUTY LONGER. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published December 5, 1931.

13,702.—*Title:* THAT'S WHY THEY ARE EASIER TO CLEAN. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published December 5, 1931.

13,703.—*Title:* IT SPRINGS BACK UNDERFOOT. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published December 5, 1931.

13,704.—*Title:* BLADES BY COOPER. For Razor Blades. COOPER PRODUCTS CORPORATION, New York, N. Y. Published March 24, 1932.

13,705.—*Title:* CIRCUS CANDY POPS. For Candy Pops. THE DAYTON PAPER NOVELTY COMPANY, Dayton, Ohio. Published April 5, 1932.

13,706.—*Title:* BULL'S EYE! THIS FOCAL SPOT IN FASHION HAS BEEN STRUCK AGAIN AND AGAIN BY HOLEPROOF IN THE HOSIERY FIELD. For Hosiery. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Published January 15, 1932.

13,707.—*Title:* ARIEL—WHEN AN EXQUISITE COLOR HARMONY IS REFLECTED IN EVERY DETAIL OF YOUR COSTUME. For Hosiery. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Published January 15, 1932.

13,708.—*Title:* ASK YOUR DOCTOR ABOUT CARROT JUICE. For Carrot Juice. NORCROSS CARROT COMPANY, San Antonio, Tex. Published February 3, 1932.

13,709.—*Title:* MILK POPSICLE—NUTRITIOUS—EASY TO EAT. For Frozen Confections. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Published March 3, 1932.

13,710.—*Title:* MILK POPSICLE—NUTRITIOUS—EASY TO EAT. For Frozen Confections. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Published March 3, 1932.

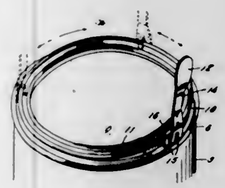
13,711.—*Title:* BAK-WEL PLATES. For Paper Pie Plates. W. A. SCHURMANN, Chicago, Ill. Published January 27, 1932.

13,712.—*Title:* ACE HEEL AND SOLE PROTECTORS. For Shoe Heel and Sole Protectors or Plates. LEON WEINSTEIN, doing business as Security Shoe Supply Co., St. Louis, Mo. Published March 12, 1932.

REISSUES

MAY 3, 1932

18,447. RECEPTACLE OPENER. NICHOLAS P. COURTNEY, Passaic, N. J. Original No. 1,826,740, dated Oct. 13, 1931, Serial No. 464,290, filed June 27, 1930. Application for reissue filed Dec. 26, 1931. Serial No. 583,411. 5 Claims. (Cl. 220—43.)



1. As a new article of manufacture, a receptacle opener, wherein the receptacle includes a lid having a peripheral annular bead, comprising an elongated prying implement formed in one piece having a handle with a convexly cured heel end extension constituting a bearing terminating under the bead, said extension having a longitudinal intermediate portion struck therefrom and forming a tongue curved to be disposed on the other side of said bead to prevent detachment of the implement from the bead but permitting the implement to be slid around the bead for prying action at different points.

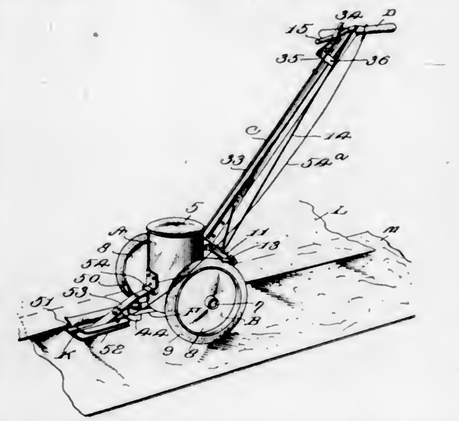
18,448. GELATIN BAND SPINDLE. EDWARD E. MCNALLY, Chicago, Ill. Original No. 1,742,270, dated Jan. 7, 1930, Serial No. 270,875, filed Apr. 18, 1928. Application for reissue filed Jan. 2, 1932. Serial No. 584,538. 18 Claims. (Cl. 242—68.)



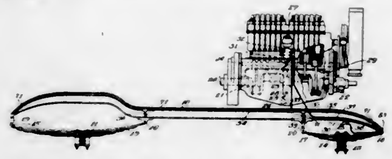
12. In a spindle for a gelatin band roll, a body, an end member rigidly mounted at one end of the body and having a centrally disposed journal projecting axially therefrom, and a peripheral lug projecting parallel to the journal and radially spaced therefrom.

18,449. DISPENSING MACHINE. ALFRED J. SIGNOR, Elkhart, Ind., assignor to Frank E. Livernance, jr., Grand Rapids, Mich. Original No. 1,602,314, dated Oct. 5, 1926, Serial No. 726,530, filed July 17, 1924. Application for reissue filed Sept. 27, 1928. Serial No. 308,837. 18 Claims. (Cl. 91—43.)

15. A portable dispensing and distributing device for applying liquid material to a surface comprising a wheel having tractive engagement with the surface for movement in an unrestricted path thereover, a container for the liquid material supported by the wheel, a nozzle out of alignment with said wheel communicating with the container, extending into proximity to the surface and having an opening constricted to deliver the material in a line upon the surface as it is moved along the same, a pump located between the container and the nozzle opening, and operated by the wheel at a rate proportional to the rate of travel of the device along the work to assure uniform application of fluid thereto, and means whereby the container may be propelled and guided by hand over the surface.



18,450. LUBRICATING APPARATUS. SYLVANUS D. LOCKE, Bridgeport, and CHARLES R. DOSCH, Stratford, Conn., assignors, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Original No. 1,542,311, dated June 16, 1925, Serial No. 540,000, filed Feb. 28, 1922. Application for reissue filed June 10, 1927. Serial No. 197,948. 18 Claims. (Cl. 184—7.)

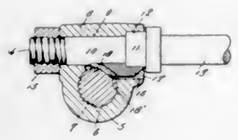


1. A lubricating system for machine bearings, comprising a lubricant reservoir, connections, including a conduit, from the reservoir to a bearing to be lubricated, mechanism for intermittently producing and relieving pressure on the lubricant in the conduit and a valve mechanism in said conduit comprising a valve body having an inlet and an outlet port, a valve for each port, connected so that when one valve is open the other is closed, and a spring arranged to hold the inlet valve normally closed and the outlet valve open, said inlet valve and its seat being arranged to provide an increase in the valve area subjected to pressure when the inlet valve is moved from its seat.

18,451. BATTERY TERMINAL. ALBERT W. WEIMER and JACOB F. SMITH, Geneseo, Ill., assignors to Walter Parson, Geneseo, Ill. Original No. 1,665,048, dated Apr. 3, 1928, Serial No. 158,718, filed Jan. 3, 1927. Application for reissue filed Apr. 2, 1930. Serial No. 441,158. 5 Claims. (Cl. 173—259.)

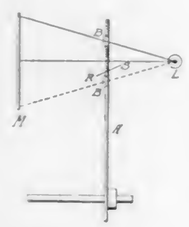
1. A battery terminal of the class described including a body having a pair of bores disposed at right angles to

each other, and communicating at one side, one of said bores having a battery post inserted therein, an elongated member movable longitudinally in the other bore and a



lateral projection on said member having an arcuate concaved biting edge eccentric to the axis of the post for penetrating the wall of the post upon predetermined movement of the member.

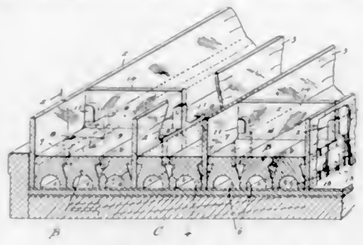
18,452. SPIRAL MOUNTED LENS DISK. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Original No. 1,679,086, dated July 31, 1928, Serial No. 222, filed Jan. 2, 1925. Application for reissue filed June 24, 1930. Serial No. 463,555. 9 Claims. (Cl. 178—6.)



7. In a television reproducing system, the combination of a spot light source, a spiral lens disk and a screen upon which said spot light source is directly imaged by the lenses in said disk.

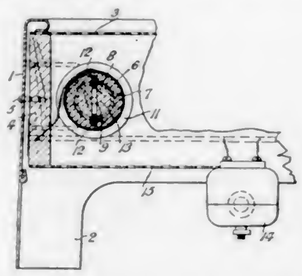
18,453. DISPLAY EQUIPMENT. WILLIAM B. MORTON and LAWRENCE F. BEISNER, Beatrice, Nebr. Original No. 1,765,935, dated June 24, 1930, Serial No. 386,029, filed Aug. 15, 1929. Application for reissue filed Jan. 11, 1932. Serial No. 586,047. 12 Claims. (Cl. 312—140.)

8. In a display equipment for counters comprising a series of elongated blocks arranged side by side between vertically disposed members, thereby supporting said members in vertical position, each of said blocks having reg-



istering longitudinal grooves in opposite faces thereof, whereby to register with corresponding grooves in other blocks of the series at either side thereof.

18,454. ELECTRIC HEATER FOR USE WITH AUTOMOBILES. OLIVER LEOPOLD PEARD and STANLEY MCCLOUD PEARD, Croydon, and ALFRED FRANK HARRISON, Epsom, England. Original No. 1,832,578, dated Nov. 17, 1931, Serial No. 416,168, filed Dec. 23, 1929. Application for reissue filed Mar. 17, 1932. Serial No. 599,556. 8 Claims. (Cl. 219—38.)



1. An electric air warming apparatus for producing a large volume of slowly moving air at comparatively low temperature for maintaining warm the cooling system and other engine parts of the internal combustion engine of an automobile and adapted for use below the engine of an automobile, comprising in combination a shallow rectangular metal chamber having feet and having its upper and lower faces covered by grille plates having narrow slotted holes of large area to pass a large vertical air stream, an inner framework of nonconducting heat insulating material supported within said metal case and separating said case from the heating elements proper and supporting the ends of said heating elements, and a plurality of heating elements supported within said insulating framework, said elements having airways therebetween and being constructed of closely wound low resistance material wound on long narrow heat resisting tubes, the resistance values of said elements relative to their energy consumption and heating area being so chosen that maximum temperature reached in working is only of the order of 180° F.

DESIGNS

MAY 3, 1932

86,875. STATUETTE OR SIMILAR ARTICLE. MAX ABEL, Bronx, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 3, 1931. Serial No. 41,009. Term of patent 3½ years.



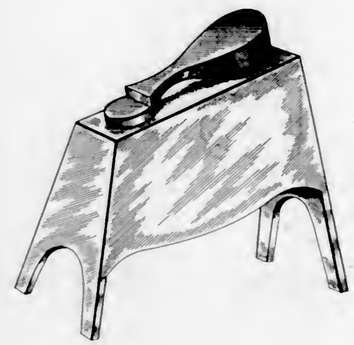
The ornamental design for a statuette or similar article, substantially as shown and described.

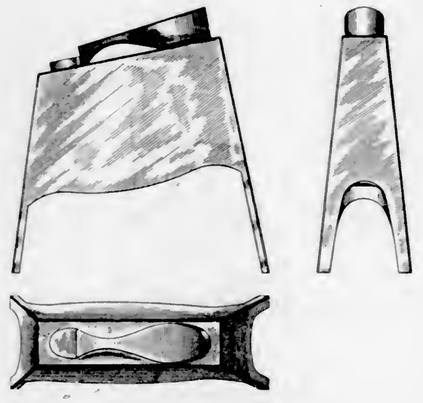
86,876. BOTTLE CAP. BENJAMIN F. CONNER, Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Mar. 4, 1932. Serial No. 43,076. Term of patent 14 years.



The ornamental design for a bottle cap as shown.

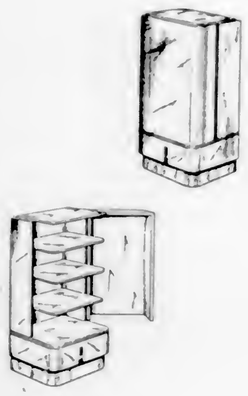
86,877. SHOE SHINING CABINET. FRANCIS B. DE BROCK, Kew Gardens, N. Y. Filed Feb. 24, 1932. Serial No. 42,974. Term of patent 7 years.





The ornamental design for a shoe shining cabinet, substantially as shown.

86,878. REFRIGERATOR CABINET. DONALD R. DOHNER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 16, 1932. Serial No. 42,890. Term of patent 7 years.



The ornamental design for a refrigerator cabinet substantially as shown.

86,879. CHAIR. HOMER EASTERDAY, Kansas City, Mo., assignor, by mesne assignments, to Point-O-Purchase Company, Kansas City, Mo., a Corporation of Missouri. Filed Feb. 15, 1932. Serial No. 42,858. Term of patent 7 years.



The ornamental design for a chair as shown.

86,880. BOY'S SUIT. JOSEPH EILEN, St. Louis, Mo., assignor to Elder Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 23, 1932. Serial No. 42,967. Term of patent 3½ years.



The ornamental design for a boy's suit substantially as shown.

86,881. SHOE. NEWTON ELKIN, Philadelphia, Pa. Filed Feb. 12, 1932. Serial No. 42,821. Term of patent 3½ years.



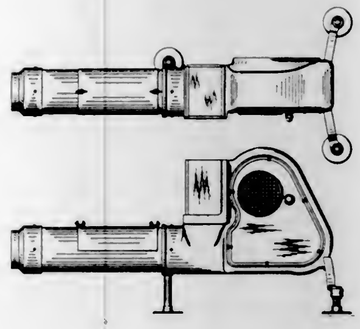
The ornamental design for a shoe, as shown.

86,882. CAMPAIGN PIN. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Feb. 23, 1932. Serial No. 42,969. Term of patent 7 years.



The ornamental design for a campaign pin as shown.

86,883. HOUSING FOR OIL BURNERS AND THE LIKE. FORRESTER L. HAMMER, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Feb. 24, 1932. Serial No. 42,973. Term of patent 14 years.



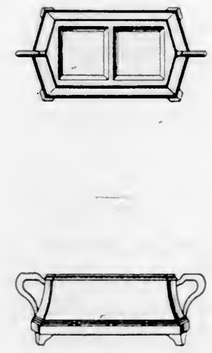
The ornamental design for a housing for oil burners and the like substantially as shown.

86,884. GLOBE. WILLIAM FRANK M. HAWE, Crafton, Pa., assignor to Fostoria, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 22, 1931. Serial No. 41,243. Term of patent 3½ years.



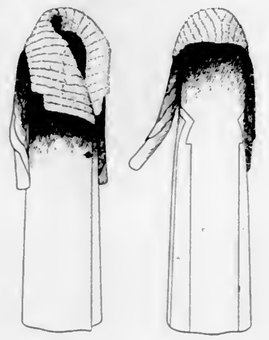
The ornamental design for a globe substantially as shown and described.

86,885. SHAKER TRAY. ARTHUR LOLLO, Brooklyn, N. Y. Filed Mar. 15, 1932. Serial No. 43,204. Term of patent 3½ years.



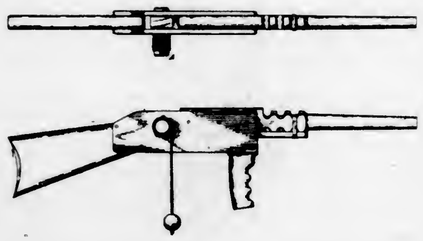
The ornamental design for a shaker tray, as shown.

86,886. COAT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 29, 1932. Serial No. 42,665. Term of patent 3½ years.



The ornamental design for a coat substantially as shown.

86,887. TOY MACHINE GUN. FRANK MARTINDELL, Western Springs, Ill. Filed Feb. 12, 1932. Serial No. 42,820. Term of patent 7 years.



The ornamental design for a toy machine gun as shown.

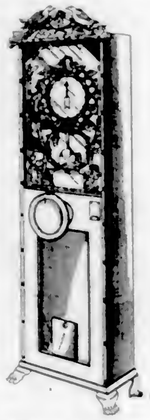
86,888. CUFF BUTTON. ALPHA H. METCALF, Attleboro, Mass., assignor to The Baer & Wilde Company, Attleboro, Mass. Filed Feb. 18, 1932. Serial No. 42,917. Term of patent 14 years.





The ornamental design for a cuff button, as shown.

86,889. AMUSEMENT MACHINE CABINET. JOHN F. MEYER, Pasadena, Calif. Filed Feb. 29, 1932. Serial No. 43,042. Term of patent 14 years.



The ornamental design for an amusement machine cabinet as shown.

86,890. SHOE. CHARLES MILLER, New York, N. Y. Filed Feb. 5, 1932. Serial No. 42,747. Term of patent 3½ years.

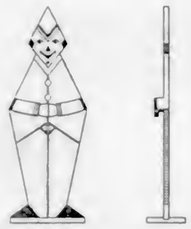




The ornamental design for a shoe, as shown.

86,891. HOLDER FOR A CHILD'S SET COMPRISING KNIFE, FORK, AND SPOON. GEORGE MORRISON, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Feb. 19, 1932. Serial No. 42,939. Term of patent 7 years.





The ornamental design for a holder for a child's set comprising knife, fork, and spoon, substantially as shown.

86,892. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 4, 1932. Serial No. 43,071. Term of patent 7 years.



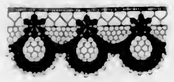
The ornamental design for a lace substantially as shown.

86,893. EMBROIDERED LACE EDGING. HENRY SCHWARBER, Weehawken, N. J. Filed Feb. 24, 1932. Serial No. 42,983. Term of patent 3½ years.



The ornamental design for embroidered lace edging, as shown.

86,894. EMBROIDERED LACE EDGING. HENRY SCHWARBER, Weehawken, N. J. Filed Feb. 24, 1932. Serial No. 42,984. Term of patent 3½ years.



The ornamental design for embroidered lace edging, as shown.

86,895. ASH TRAY. RALPH B. STALEY, Denver, Colo. Filed Jan. 5, 1932. Serial No. 42,370. Term of patent 3½ years.



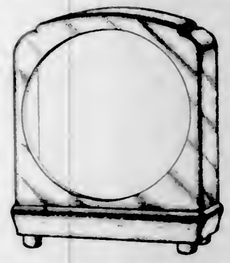
The ornamental design for an ash tray or similar article substantially as shown.

86,896. ASH TRAY. RALPH B. STALEY, Denver, Colo. Filed Jan. 5, 1932. Serial No. 42,371. Term of patent 3½ years.



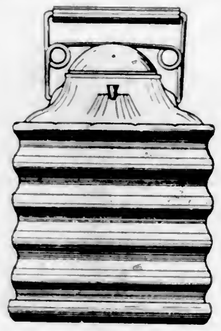
The ornamental design for an ash tray or similar article substantially as shown.

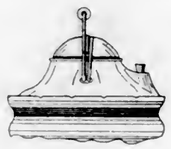
86,897. CLOCK CASE. GEORGE H. STEPHENS, Northbrook, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 5, 1932. Serial No. 43,096. Term of patent 14 years.

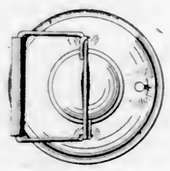


The ornamental design for a clock case, as shown.

86,898. AUTO JUG. ROBERT A. STEVENSON, Lancaster, Ohio. Filed Aug. 12, 1931. Serial No. 40,832. Term of patent 14 years.







The ornamental design for an auto jug, as shown.

86,899. GAS OR ELECTRIC WATER HEATER. JACOB TELLER and ARTHUR P. SCHULZ, New York, N. Y., assignors, by mesne assignments, to Teller Stove Designing Corporation, a Corporation of New York. Filed Sept. 3, 1931. Serial No. 41,016. Term of patent 7 years.





The ornamental design for a gas or electric water heater, as shown and described.

86,900. GAS OR ELECTRIC WATER HEATER. JACOB TELLER and ARTHUR P. SCHULZ, New York, N. Y., assignors, by mesne assignments, to Teller Stove Designing Corporation, a Corporation of New York. Filed Sept. 4, 1931. Serial No. 41,024. Term of patent 7 years.



The ornamental design for a gas or electric water heater, as shown and described.

86,901. STATUETTE OR SIMILAR ARTICLE. HENRY UNDERBERG, Brooklyn, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 3, 1931. Serial No. 41,006. Term of patent 3½ years.

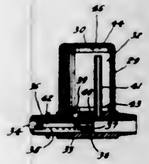


The ornamental design for a statuette or similar article, substantially as shown and described.

PATENTS

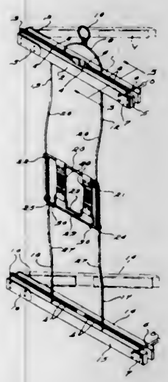
GRANTED MAY 3, 1932

1,856,063. LUBRICATING SYSTEM. EMIL ADEL, Chicago, Ill. Filed June 12, 1929. Serial No. 370,403. 3 Claims. (Cl. 184—105.)



1. In a lubricating system, a perforated fitting, a block in said fitting formed with a passageway, means movably arranged in said fitting to one side of said block for opening and closing said block passageway and one end perforation in said fitting one at a time, a cup carried by said fitting and communicating therewith through a fitting perforation, an air pipe carried by said fitting and extending into said cup, said air pipe opening into said fitting upon the opposite side of said block with respect to a perforation in said fitting, and an air filter for said cup.

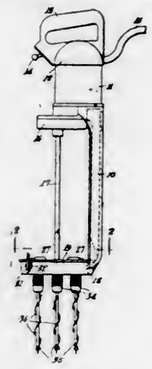
1,856,064. TROUSERS HOLDER. CLARENCE G. ALEXANDER, Detroit, Mich. Filed Aug. 15, 1930. Serial No. 475,521. 3 Claims. (Cl. 223—19.)



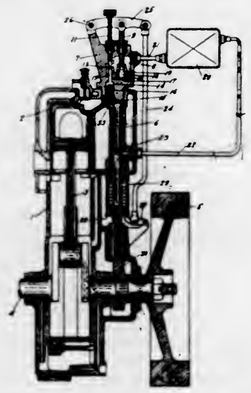
1. In a trousers holder, a pair of substantially U shaped wire frame members telescopically connected together, a trousers clamping member detachably supported on the ends of each frame member, the frame members spacing the clamping members apart, yieldable members secured to the cross portion of one U shaped frame member and a hook member carried by the yieldable members and adapted to be hooked over the cross portion of the other U shaped frame member to force the ends of the frame members apart.

1,856,065. AGRICULTURAL IMPLEMENT. FREDERICK AUSTIN, Bayside, N. Y. Filed Aug. 26, 1931. Serial No. 559,377. 8 Claims. (Cl. 111—94.)

1. An implement for producing seed-receiving orifices, comprising a frame having a motor mounted at its upper end, a casing at the lower end, a plurality of drill carrying spindles journalled in said casing, a shaft diven by said motor to extend centrally through said casing, said shaft having a drill at its end in a plane coincident with the other drills, and geared connections between said shaft and said spindles.



1,856,066. MEANS FOR FEEDING FUEL TO AN INTERNAL COMBUSTION ENGINE. CHARLES E. BATHRICK, South Bend, Ind., assignor to Gernandt Motor Corporation, Chicago, Ill. Filed June 16, 1923. Serial No. 645,778. 10 Claims. (Cl. 123—33.)

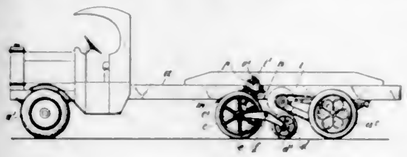


1. Means for feeding fuel to an internal combustion engine, comprising: a plug having a valve chamber with one end opening in the direction of the engine cylinder with a valve normally closing the cylinder end of said chamber; a fuel chamber, a passage extending from the valve chamber and having an orifice opening into the fuel chamber, a bore having a plunger positioned therein, said bore having a duct communicating with the passage, a port leading from said fuel chamber to said bore at a point ahead of said plunger when in its retracted positon, means for controlling the size of said orifice and means for actuating said plunger for applying pressure to the fuel in the valve chamber for the purpose described.

1,856,067. TRANSPARENT FOILS OF PAPER, FABRIC, WEBS, AND THE LIKE. VIKTOR BAUSCH and KURT FRENZEL, Berlin, Germany. Filed Apr. 3, 1928, Serial No. 267,126, and in Germany Apr. 6, 1927. 6 Claims. (Cl. 91—68.)

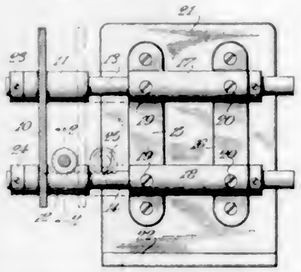
2. The herein described method of producing flexible transparent or translucent foils, which consists in impregnating paper, fabric or the like with a 30 to 50% solution of gelatin containing an agent adapted to reduce viscosity maintaining an excess of such hydrosol on the sides of the material being treated so as to keep the same in a state of complete impregnation, and drying the same.

1,856,068. CONVERTIBLE WHEELED TRUCK TRACTOR. WALTER CHRISTIE, Avon, N. J., assignor to Charles R. Lord and Clayton Farris, Newark, N. J. Filed Apr. 30, 1928, Serial No. 274,097. Renewed Sept. 19, 1931. 9 Claims. (Cl. 180—9.1.)



1. In a convertible road vehicle having steering wheels, in combination, a load wheel on each side of the vehicle, two additional load wheels on each side of the vehicle and mounted independently of the first load wheels, a rigid frame in which the two last named wheels at each side of the vehicle are journaled, means to connect said frame pivotally with the frame of the vehicle, and springs operatively interposed between the two frames to resist yieldingly relative displacement therebetween.

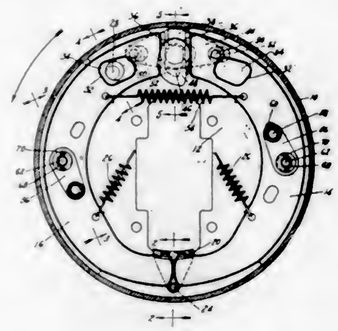
1,856,069. LOCKING MECHANISM. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 31, 1929. Serial No. 389,839. 12 Claims. (Cl. 74—27.)



1. A driving and locking device which comprises a driven member, a member for driving said driven member between predetermined limits, means for automatically locking said members together in predetermined positions of the driven member, and means whereby the locking and unlocking of said members and the movement of the driven member by the driving member is effected by a continuous movement of the driving member in either direction.

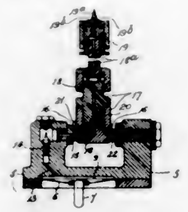
1,856,070. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 30, 1926. Serial No. 145,189. 18 Claims. (Cl. 188—78.)

1. A brake comprising, in combination, a drum, a pair of unconnected floating shoes engageable with the drum and the first of which thrusts the second against the drum when the drum is turning in one direction and the second



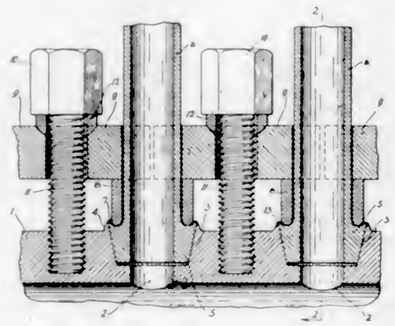
of which thrusts the first against the drum when the drum is turning in the other direction, and means for taking braking torque from said shoes.

1,856,071. MANUFACTURE OF ARTIFICIAL FIBERS. FRED FERRAND, Southport, England. Filed Nov. 22, 1928, Serial No. 321,139, and in Great Britain Dec. 24, 1927. 4 Claims. (Cl. 18—8.)



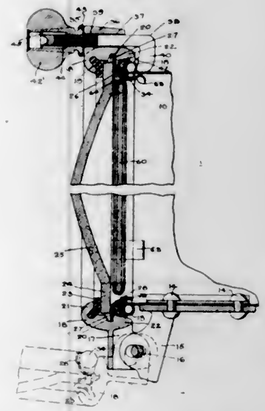
1. The process for the production of staple artificial fibers of predetermined length which consists in forming a column of solution, forcing the column of solution along a passage to an extrusion nozzle, and subdividing the column at regular intervals during its passage to the extrusion nozzle.

1,856,072. JOINT. CHARLES W. GORDON, Pleasantville, N. Y., assignor to The Superheater Company, New York, N. Y. Filed July 10, 1929. Serial No. 377,210. 4 Claims. (Cl. 285—29.)



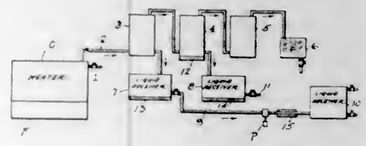
1. In apparatus of the class described, the combination of a metallic perforated wall, a pipe held in fixed relation against the wall and in communication with said perforation, and means making a seal between the pipe and the wall comprising two circular concentric lips, one on the pipe and one on the wall, said lips being on the same side of the wall as the pipe and being fused together along their outer edges.

1,856,073. LAMP. HERBERT J. GRAHAM, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 26, 1929. Serial No. 349,921. 11 Claims. (Cl. 240—41.5.)



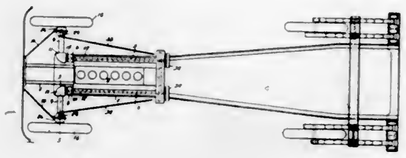
1. In a lamp of the character described, a front door closure therefor comprising a substantially annular frame having a pair of axially spaced grooves formed in the inner surface thereof, the outer of said grooves being inclined with respect to the axis of said frame, a compressible gasket received within said outer groove and having a portion projecting exteriorly thereof, a ring received within the inner of said grooves, and a lense arranged with its perimetral edge interposed between said ring and the projecting portion of said gasket, said inner groove being of a width sufficient to permit axial movement of said ring toward said lens and the latter into intimate contact with said gasket upon the application of an external force against said ring.

1,856,074. LIQUID HEATING AND VAPORIZING. JOHN STEWART HARRISON, Cleveland Heights, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 22, 1928. Serial No. 263,779. 6 Claims. (Cl. 196—5.)



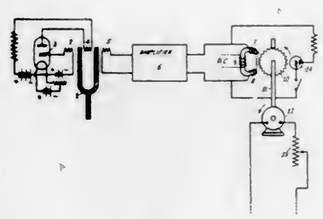
3. In a process of the character described, subjecting hydrocarbons to distillation, and inhibiting disruptive vaporization of water pocketed under the liquid hydrocarbons of higher boiling point beyond the distilling zone by selectively applying vaporizing heat to the location of such pocketed water without vaporizing the pocketing hydrocarbons.

1,856,075. VEHICLE. ERNST RUDOLF MAGNUS HOLMQUIST, Lilla Edet, Sweden. Filed May 4, 1929, Serial No. 360,512, and in Sweden Mar. 11, 1929. 4 Claims. (Cl. 180—43.)



1. In a motor driven vehicle, an arrangement for transmitting power from the motor to the driving wheels, including the combination, with a pair of substantially parallel drive shafts driven by the motor and disposed in the longitudinal direction of the vehicle and a transversely directed shaft arranged for each driving wheel, of a bearing member provided for each of said transversely directed shafts and pivoted upon said vehicle so as to be individually swingable upon respective axes coinciding with the axes of said parallel drive shafts, there being means including gearing respectively interposed between each of said transversely directed shafts and the corresponding drive shafts for individually driving said first shafts.

1,856,076. SYNCHRONIZING ARRANGEMENT. AUGUST KAROLUS, Leipzig, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 28, 1927, Serial No. 236,063, and in Germany Dec. 14, 1926. 3 Claims. (Cl. 250—1.)

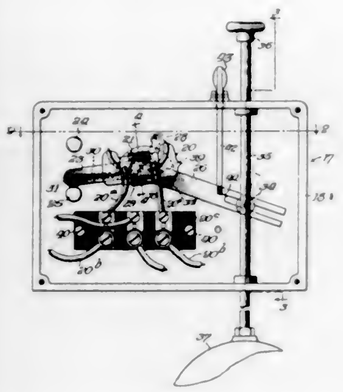


1. A system for supplying energy to a work circuit or the like which includes a mechanical vibrator of constant frequency, a regeneratively coupled thermionic means for driving said mechanical vibrator, an amplifying means, a separate means for inducing energy only of a frequency corresponding to the actual motion of said vibrator into said amplifier for amplifying the same, and means for supplying the output energy of said amplifier to the work circuit.

1,856,077. SAFETY ELECTRIC SWITCH. LAWRENCE E. KOCH, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 28, 1927. Serial No. 164,186. 3 Claims. (Cl. 200—84.)

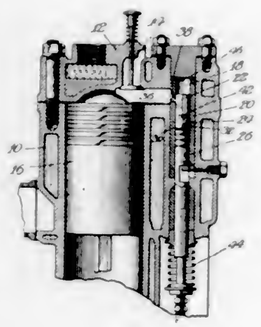
1. In a device of the character described, switching means, operating mechanism therefor, a float actuated by a quantity of liquid in a container and for actuating said operating mechanism, said operating mechanism having two normally operative positions for effecting an open and a closed circuit through said switching means and a third operative position for effecting an open circuit therethrough

upon obtaining an abnormal fluctuation of the quantity of liquid in said container, means for manually restoring said switching means to one of said normally operative positions,



and means for holding said switching means in one of said normally operative positions until said abnormal fluctuation is overcome.

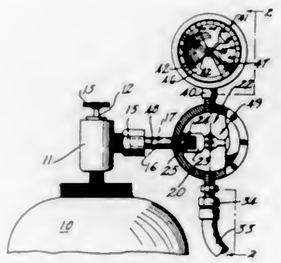
1,856,078. FUEL FEEDING MEANS. HOWARD M. LEONARD, South Bend, Ind., assignor to Gernandt Motor Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1927, Serial No. 180,503. Renewed Oct. 2, 1930. 9 Claims. (Cl. 103—154.)



1. A fuel-feeding plunger for an engine, comprising, in combination, sections separated lengthwise of the plunger having a fuel passageway therebetween and formed with registering keyways on their adjacent sides, and a key in said keyways connecting the sections and also serving to check leakage between said sections.

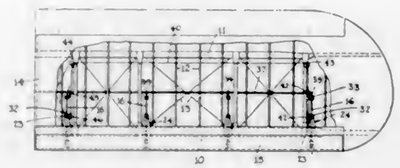
1,856,079. METHOD OF AND APPARATUS FOR DETERMINING THE FLUID CONTENTS OF CYLINDERS. CHESTER MOTT, Denver, Colo., assignor, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc., a Corporation of New York. Filed Dec. 5, 1927. Serial No. 237,713. 12 Claims. (Cl. 73—151.)

1. A method of determining the gas content of a container, comprising: filling a primary chamber of known capacity with gas at container pressure; allowing the gas in said primary chamber to expand into a secondary chamber of a greater known capacity; and determining the pressure of said gas in said secondary chamber to determine the amount of gas in said container.



8. In a gage adapted to directly indicate the amount of gas under pressure in a container, the combination of: indicating means operable by gas from said container; and means having a plurality of segmentally divided indicia of different effective lengths forming a single scale adjacent which said indicating means operates.

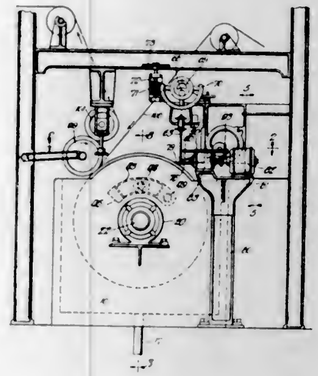
1,856,080. AEROPLANE WING STRUCTURE. ROBERT R. OSBORN, Garden City, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Mar. 26, 1929. Serial No. 349,927. 11 Claims. (Cl. 244—12.)



1. In an aeroplane wing structure, a wing section main wing including as a structural element thereof a wing beam, a longitudinally adjustable wing section auxiliary wing mounted in advance of the leading edge of said main wing, a support arm pivotally fastened at its forward end to said auxiliary wing, said support arm being carried thru said wing beam at its opposite end, a fitting wrapped around and extending rearwardly beyond said wing beam, non-adjustable rollers carried by the rearwardly extending portion of said fitting, and adjustable rollers carried by that portion of said fitting extending forwardly of said wing beam, said rollers, in each instance, being directly engageable with said support arm to guide and hold it, and hence the auxiliary wing, both during and in all positions of adjustment, and said adjustable rollers being vertically adjustable to vary the angular position of said support arm, and hence the verticle position of said auxiliary wing in its relation to said main wing.

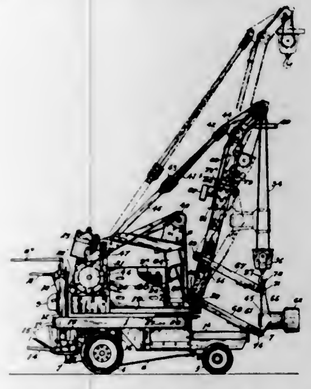
1,856,081. CYLINDER PAPER MACHINE. EMIL A. PETERSON and WILLIAM JAMES MCGINNIS, Appleton, Wis., assignors to Valley Iron Works Company, Appleton, Wis., a Corporation of Wisconsin. Filed Apr. 18, 1927. Serial No. 184,474. 8 Claims. (Cl. 92—43.)

1. In a cylinder paper machine, the combination of a cylindrical forming screen, flow means for directing upon an upper portion of the screen a defined flow of paper stock in a stream substantially tangential to the periphery of the cylinder, web removing means, and means for rotating



the cylinder in a direction to carry the flow of stock upwardly on the cylinder and towards the web removing means.

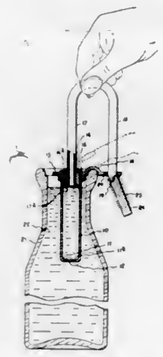
1,856,082. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 24, 1929. Serial No. 380,662. 9 Claims. (Cl. 214—65.)



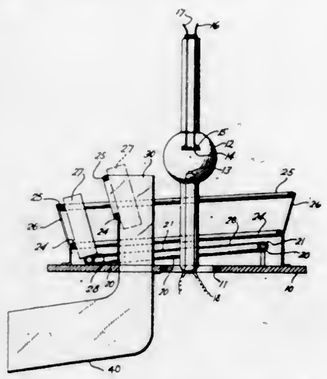
1. In apparatus of the class described, the combination of a wheel mounted frame, a pair of parallel links pivotally mounted at their inner ends on said frame, a support to which the outer ends of said links are connected, a load engaging member carried by said support, means for moving one of said links endwise to adjust said load engaging member at an inclination to the plane of said frame, and means for swinging said links upwardly or downwardly.

1,856,083. SIPHON DEVICE. EDMUND O. SATHER, Oakland, Calif. Filed Mar. 8, 1930. Serial No. 434,311. 2 Claims. (Cl. 137—20.)

1. In a siphon device, a tube suitably bent to provide an intake tube and an outlet tube, a piston-like portion surrounding and communicable therethrough with said intake tube, a casing, said casing provided with a restricted fluid passageway on its lower portion adapted for communication with said intake tube, and said casing adapted in its upper portion to slidably receive said piston-like portion, means for siphonic seal between said piston-like portion and inner wall of said casing, and said casing provided with supporting means on its upper portion adapted for resting upon the top edge of a receptacle, said supporting means adapted on its opposite portion for slidably receiving said outlet tube, and said outlet tube adapted to allow both limitable and detachable movement in said supporting means.



1,856,084. METHOD AND APPARATUS FOR SUBJECTING ARTICLES TO X-RAYS. FRANKLIN S. SMITH, Brooklyn, N. Y. Filed Aug. 2, 1928. Serial No. 296,980. 17 Claims. (Cl. 250—34.)

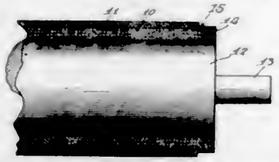


1. In apparatus of the character described, in combination, an X-ray tube mounted with its axis substantially vertical and having an anode whose active face extends substantially transversely to said axis, means forming a substantially spiral and helical guideway about the substantially vertical axis of said tube and adapted to guide a plurality of articles simultaneously into the beam of X-rays emanating from said anode and to distribute said articles throughout varying focal distances from said anode, and means for predetermining the rate of movement of the articles along said guideway.

1,856,085. ROLLER. FRED G. WALTERS, London, England, assignor, by mesne assignments, to Ideal Roller & Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 24, 1928. Serial No. 301,925. 3 Claims. (Cl. 91—67.8.)

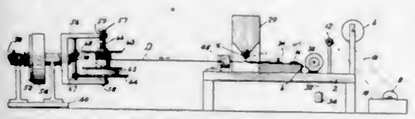
1. A roller for the purpose set forth comprising a central core of high resilience having a face layer of tough

exterior formed thereon, and a collar of tough flexible material adjacent to and uniting with the ends of said face layer and said core to anchor the ends of said face



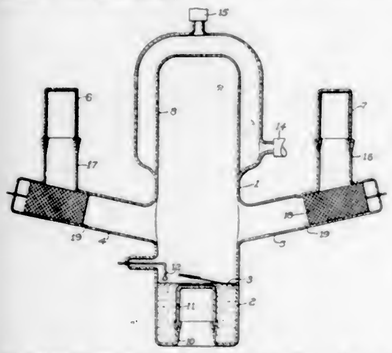
layer and to protect the ends of said central core, said collar being of a reduced diameter relative to the outside diameter of said face layer.

1,856,086. PROCESS AND APPARATUS FOR MANUFACTURING PACKING. JULIAN N. WALTON, Brooklyn, N. Y., assignor to The Anchor Packing Company, Philadelphia, Pa., a Corporation of New Jersey. Filed June 29, 1929. Serial No. 374,926. 12 Claims. (Cl. 117—2.)



1. The method of making packing material including assembling a strip of metallic foil and a flexible cord, feeding upon the foil solid lubricating material, and twisting the metallic foil about the cord and lubricating material.

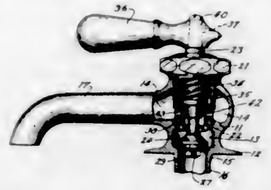
1,856,087. MERCURY ARC DEVICE WITH GRID CONTROL. VLADIMIR K. ZWORYKIN and DAYTON ULREY, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 28, 1923. Serial No. 665,487. 7 Claims. (Cl. 250—27.5.)



1. In a space current device comprising a vessel of insulating material, a tubular wire fabric portion engaging the inner walls of said vessel, means for providing, in effect, a grid spanning the entire passageway through said vessel within said tubular fabric portion, and an external electrical connection for said grid.

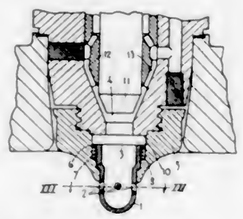
1,856,088. VALVE. ALBERT C. BROWN, Chicago, Ill. Filed June 22, 1925. Serial No. 38,640. 6 Claims. (Cl. 251—156.)

1. In a valve assembly, the combination of a valve housing, a removable valve seat, a valve stem having an enlarged threaded portion adjacent the handle end and spaced apart from the valve seat, and a bushing loosely mounted in the housing and having threaded engagement with the valve stem said bushing having an internal annular flanged portion adapted for engaging the enlarged



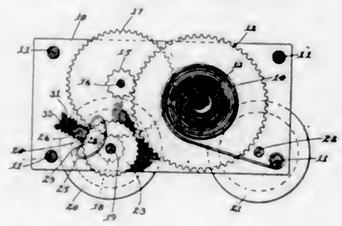
threaded portion of the valve stem to limit its longitudinal motion, said bushing also securing the valve seat in position.

1,856,089. LIQUID FUEL INJECTION VALVE FOR DIESEL AND LIKE ENGINES. JAMES HENRY BROWN, Tel-Aviv, Jaffa, Palestine. Filed Mar. 4, 1931, Serial No. 519,934, and in Great Britain Apr. 11, 1930. 5 Claims. (Cl. 299—107.7.)



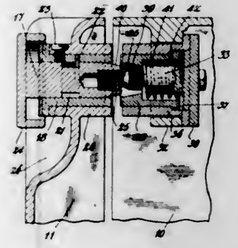
1. A fuel valve of the air injection type for an internal combustion compression ignition engine comprising a part formed with a valve opening, a valve closing member for closing the opening, a nozzle formed with at least one hole through which the fuel after passing through the valve opening is forced under pressure direct into the cylinder, a shield and means for withdrawing the nozzle within the shield to cover the hole when fuel is not being forced into the cylinder.

1,856,090. SPEED GOVERNOR FOR SPRING MOTORS. GUIDO DE BIASE, Bridgeport, Conn., assignor to The Ives Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed July 23, 1930, Serial No. 469,950. Renewed Jan. 26, 1932. 9 Claims. (Cl. 188—180.)



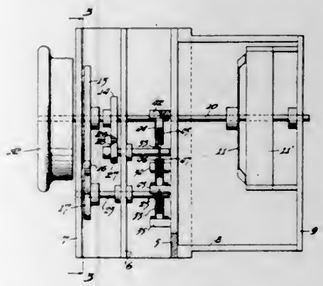
1. A centrifugal speed governor for spring motors, including a rotatable member having transversely slotted side portions, a shoe carried thereon for bodily rotation therewith, said shoe being secured to guides having sliding engagement with said member whereby the shoe may move outwardly under centrifugal action, resilient means interposed between said rotatable member and the ends of said guides adapted to resist outward movement of the shoe, and fixed stop means for slidable engagement by the shoe.

1,856,091. DOOR LOCK. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed July 22, 1930. Serial No. 469,668. 8 Claims. (Cl. 292—251.)



1. A closure fastener comprising a rotatable member carried by one element of said closure and movable longitudinally with respect thereto, said member being provided with an internal screw thread, a stationary stud carried by another element of said closure and being threaded to cooperate with said internal threads, said stud having a tapered end adapted to engage said internal threads for directing said members into axial alignment.

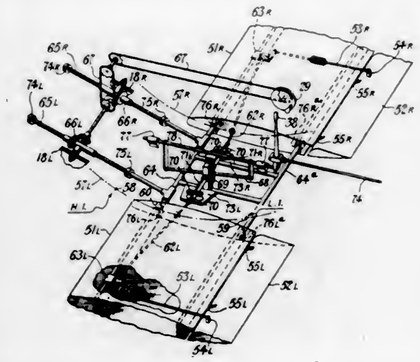
1,856,092. SWITCHING APPARATUS. CHARLES W. EBELING, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1930. Serial No. 445,451. 4 Claims. (Cl. 200—7.)



1. A switching apparatus including a supporting structure, a main shaft journalled therein, a shunting switch mechanism mounted therein, a selective switch also mounted therein, a pair of oppositely disposed cooperating switch contacts associated with the latter and adapted to be contacted thereby, one at a time, means for selectively operating the main shaft, two cooperating Geneva movements attached to the main shaft and mounted in the supporting structure whereby the shunting switch is in neutral position and the other switch is in closed position, or vice versa.

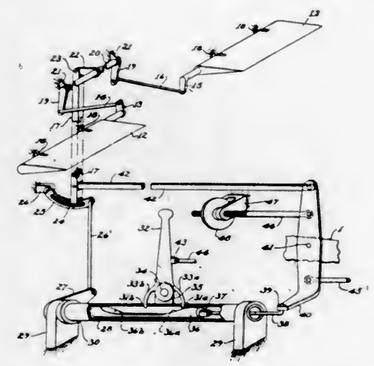
1,856,093. AIRPLANE. HANNIBAL C. FORD, Jamaica, and JOHN MCK. BALLOU and VERNON W. BALZER, Forest Hills, N. Y., assignors to Merrill Aircraft Company, Dover, Del., a Corporation of Delaware. Filed Mar. 17, 1931. Serial No. 523,226. 8 Claims. (Cl. 244—29.)

1. An airplane comprising a fuselage, right and left wing structures rotatable on said fuselage to vary their angles of attack, and a control system including a mechanism for synchronously adjusting the rotated positions of said wings, a linkage train for differentially adjusting



the rotated positions of said wings and a variable ratio device in said train whose ratio is adjusted by the adjustment of said mechanism.

1,856,094. AIRPLANE. HANNIBAL C. FORD, Jamaica, and JOHN MCK. BALLOU and VERNON W. BALZER, Forest Hills, N. Y., assignors to Merrill Aircraft Company, Dover, Del., a Corporation of Delaware. Filed May 26, 1931. Serial No. 540,018. 9 Claims. (Cl. 244—29.)

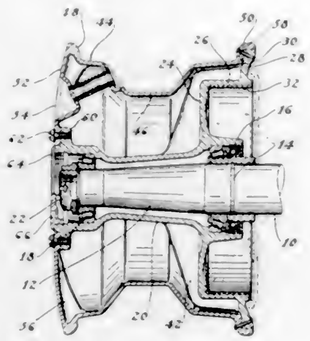


1. In an airplane, wings whose chords have a fixed angle to the thrust axis, a stabilizer whose chord has an adjustably variable angle to the thrust axis, elevators, variable stops for the elevators, ailerons, operating means for the ailerons including a variable ratio device, and means for simultaneously adjusting said stabilizer, varying said stops, and setting the ratio of said variable ratio device.

1,856,095. WHEEL. FREDERICK C. FRANK, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 16, 1930. Serial No. 461,342. 2 Claims. (Cl. 301—6.)

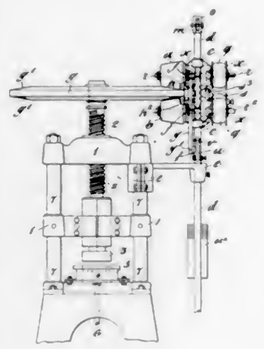
1. A wheel comprising two cast parts, one part including a hub, a brake drum thereon, a flange on the drum, said flange provided with a shoulder adjacent its outer edge, and spaced radial ribs connecting the hub, the drum and the flange and another part including a rim

having a rim channel, tire retaining flanges, one of said flanges fitting over said drum flange and seated on said shoulder, said second mentioned cast part also including



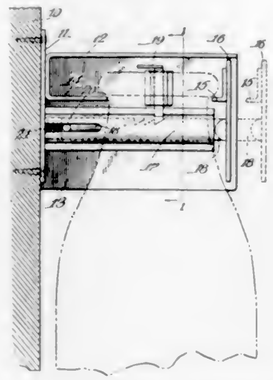
a disk and spaced radial ribs connecting the disk with the rim, the second part being slipped over the first part and secured thereto.

1,856,096. DRIVE FOR PRESSES EMPLOYED FOR SHAPING TILES AND OTHER ARTICLES. FREDERICK GEORGE GATENSBURY, Stoke-on-Trent, England. Filed Mar. 31, 1930, Serial No. 440,244, and in Great Britain Apr. 18, 1929. 2 Claims. (Cl. 192—141.)



1. In mechanism of the character described, a support, a shaft threaded in said support whereby the same is adapted by rotation in one direction to be moved longitudinally in one direction and by rotation in the opposite direction to be moved longitudinally in the opposite direction, a friction disk fixed to said shaft, a carriage mounted for sliding movement in the direction of the axis of said shaft, a pair of drive rollers mounted on said carriage for cooperation with opposite faces of said disk to rotate the same in opposite directions, respectively, a rod slidably mounted on said carriage, a connection between said rod and said disk whereby the rod is movable longitudinally with the disk, a lever pivoted at spaced points to said rod and said carriage, respectively, whereby the same is swingable to shift the carriage to selectively engage either of said rollers with said disk, and a stop device disposed in the path of movement of said lever to be engaged by the latter during movement thereof with the carriage, thereby to swing said lever to shift the carriage thus to automatically effect disconnection of the effective drive roller from the disk.

1,856,097. MILK BOTTLE LOCKING DEVICE. FRANK L. GRANT, Chicago, Ill. Filed Feb. 2, 1931. Serial No. 512,885. 3 Claims. (Cl. 232—42.)



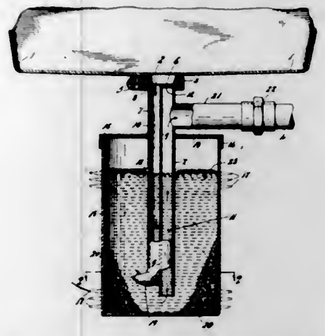
1. In an article of the class described, a body comprising a stationary top, side, end and a movable end, secured to the frame of a door in abutting relation to the door which forms the other side; flanges carried by said ends to engage the neck of a bottle below the bottle flange, and adjustable locking means carried by said body enclosure whereby bottles of various neck diameters may be locked therein after being inserted into the enclosure, said locking means comprising a bolt secured to said movable end sliding in a housing carried by said stationary side and means for holding said bolt in different locking positions to form an end closure, the bottle being removable when the door is opened.

1,856,098. NOVELTY LAMP. STANLEY S. GREEN, La Fayette, Ind. Filed May 29, 1930. Serial No. 456,844. 9 Claims. (Cl. 240—10.)



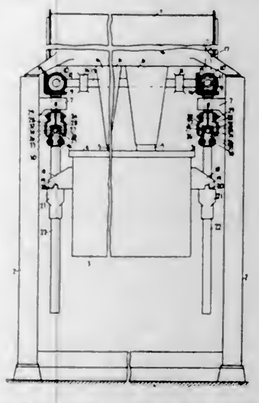
1. A novelty lamp, comprising a source of heat and light, a closed vessel having light-transmitting wall portions and in proximity to said source arranged to receive heat and to intercept at least part of the light emanating therefrom, and a supply of liquid within said vessel, said vessel being at least partially exhausted to reduce the gas pressure therein to a point such that the heat received by the liquid from said source will cause ebullition of the liquid.

1,856,099. GREASE TRAP OR INTERCEPTOR. BERNHARD A. HERTSCH, Rockledge, Pa. Filed July 23, 1931. Serial No. 552,644. 5 Claims. (Cl. 182—9.)



1. A grease trap or interceptor comprising a conduit divided longitudinally into flow and return passages, means at the outlet end of the flow-passage to set-up a whorling discharge, means supporting a receiver wholly exterior of said conduit, and a grease escape from the flow-passage into said receiver.

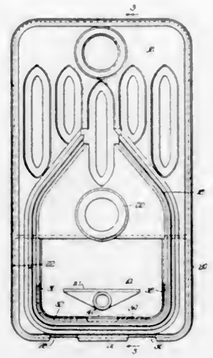
1,856,100. ELECTRICAL SWITCH GEAR. FREDERICK JOSEPH KEELEY, Streetly, England, assignor to The General Electric Company Limited, London, England. Filed Sept. 4, 1930, Serial No. 479,596, and in Great Britain Sept. 12, 1929. 2 Claims. (Cl. 175—298.)



1. Electrical switchgear comprising a supporting frame, a withdrawable switch and tank member, complementary electrical coupling devices on the supporting frame and said withdrawable member, a plurality of screws for raising and lowering said withdrawable member, said screws being suspended from the supporting frame by universal joints and separable engaging means between the withdrawable member and said screws adapted with the cooperation of said universal joint for the automatic alignment of said tank and the switch coupling devices during operation of the screws in restoring these parts to normal operative position.

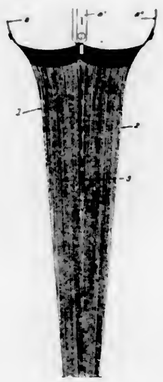
1,856,101. RADIATOR. RALPH W. KURTZ, Coshocton, Ohio, assignor to James B. Clow & Sons, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1931. Serial No. 506,073. 7 Claims. (Cl. 126—91.)

1. A radiator section having a walled combustion chamber formed in the bottom thereof for receiving a burner, said chamber comprising a bottom wall, a front wall, and a rear wall, the bottom wall having an air inlet opening, and a baffle located above the opening, said baffle being



constructed and arranged to divide the incoming air and to deliver the same to the burner in a primary air stream and a secondary air stream.

1,856,102. PROTECTIVE STOCKING. YVES GABRIELLE LEBEAU, Paris, France, assignor to Societe a Responsabilite Limitee Chambet & Cie., Paris, France. Filed May 11, 1929, Serial No. 362,290, and in France May 15, 1928. 3 Claims. (Cl. 66—178.)

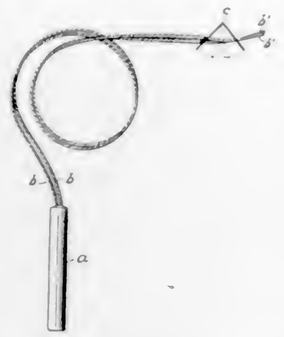


1. A stocking for the protection and confinement of varicose veins having practically invisible fashioning generatrices arranged along four equidistant longitudinal lines located respectively on both sides of the stocking and in the front and rear thereof.

1,856,103. BLASTING CAP. CHARLES H. LICKLE, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 29, 1930. Serial No. 505,333. 4 Claims. (Cl. 102—10.)

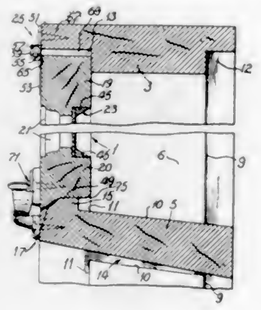
1. In combination with an electric blasting cap provided with lead wires having uninsulated end portions,

a conductive shunt member bent upon itself and having apertures adjacent its free ends through which the end



portions of the lead wires pass, the shunt member being maintained on the lead wires through non-registration of the said apertures.

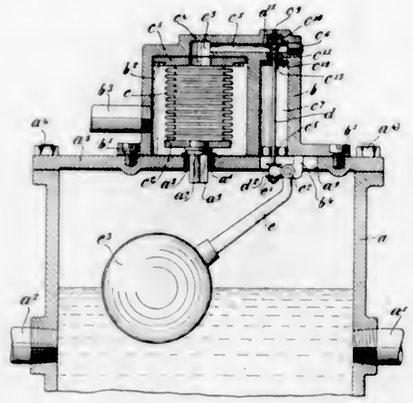
1,856,104. WINDOW CONSTRUCTION. CARLOS LYON, Decatur, Ill., assignor to G. S. Lyon & Sons Lumber & Mfg. Co., Decatur, Ill., a Corporation of Illinois. Filed Jan. 23, 1931. Serial No. 510,604. 3 Claims. (Cl. 20—53.)



1. In combination, a frame having a recess, at least one hinge adjacent the recess and having a pintle receiving portion, and a sash, a pintle supporting portion fastened to said sash, said pintle receiving portions being of thicker material than said pintle supporting portion, said receiving portion being open so as to permit application and removal of said pintle and to permit movement of the pintle therein laterally of its own center line, the difference in thickness of said pintle receiving portion and said pintle supporting portion functioning to prevent said sash from jamming in said frame.

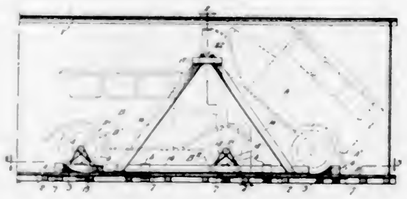
1,856,105. AIR TRAP FOR LIQUID PRESSURE LINES. WILLIAM L. MARDEN, Elmhurst, N. Y., assignor to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 6, 1930. Serial No. 480,267. 3 Claims. (Cl. 137—69.)

1. A collecting chamber, a gas vent therein communicating with an outlet, means to direct a flow of a liquid through the chamber, a valve for the vent, pressure responsive means to operate the valve, means to subject the pressure responsive means to the pressure of the outlet,



means to subject the said means to the pressure within the chamber, and means responsive to the liquid level to control the two last named means.

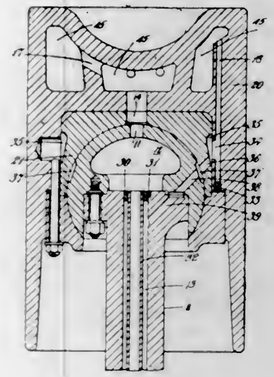
1,856,106. SHIPPING AUTOMOBILES. JOHN MCMULLEN, Buffalo, N. Y. Filed Nov. 8, 1929. Serial No. 405,654. 6 Claims. (Cl. 105—368.)



1. The hereindescribed means for shipping automobiles without injury to the shipping car, which consists in the combination with a car floor, of a plurality of slotted plates set therein flush with the surface of the floor, and a movable member passing loosely through each of said plates and adapted to be lifted from a concealed flush position in the plate to an upright active position, and supports for the automobiles to which the aforesaid movable members when upright are spiked to hold the automobiles from lateral and endwise jarring out of place, each movable member being flanged at the top and perforated on top and side for spikes or nails.

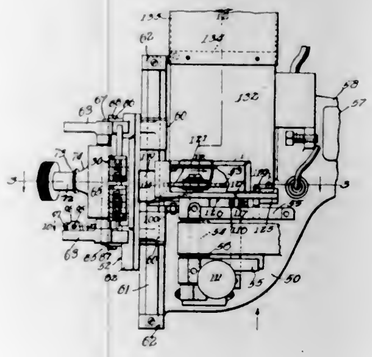
1,856,107. PISTON FOR INTERNAL COMBUSTION ENGINES. GEORGE ARTHUR MELLOR, Welling, England, assignor of one-half to The General Electric Company, Limited, London, England. Original application filed Apr. 10, 1928, Serial No. 268,936. Patent No. 1,763,625, dated June 10, 1930, and in Great Britain Apr. 21, 1927. Divided and this application filed Apr. 15, 1930. Serial No. 444,366. 3 Claims. (Cl. 123—176.)

1. A piston for an internal combustion engine adapted to be cooled by circulating oil therethrough, comprising a member provided with a spherically shaped recess, a connecting rod with a spherical head engaging in said recess, a cooling chamber within the piston head, a duct for conducting oil into said spherical head, said spherical head being provided with an outlet communicating with a port connecting said recess to said cooling chamber, an outlet passage from said cooling chamber to provide free circulation of the oil having its inlet located at a point re-



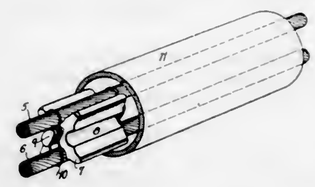
mote from the axis of the piston and having its outlet located in the surface of said recess and an oil discharge duct through said spherical head for the free discharge of oil from said passage outlet located in the surface of said recess.

1,856,108. SLUG PROFILING MACHINE. CHARLES L. MOHR, Wilmette, Ill. Filed Oct. 13, 1930. Serial No. 488,389. 8 Claims. (Cl. 90—18.)



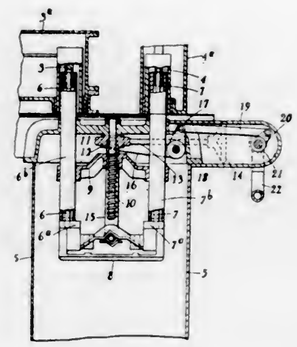
1. In a machine of the kind described, a rotary cutter, a vise mechanism for holding a printing slug for presentation to the cutter, the vise movable from and toward the cutter and the vise mechanism movable longitudinally of the vise at right angles to the plane of the cutter, means for setting the vise in a plurality of relations in reference to the cutter for operation upon a type slug held in the vise to produce a like plurality of results, a cutter guard adapted to drop in front of the cutter at times when the vise is swung away from the cutter and means for automatically raising the guard when the vise is moved toward the cutter for cutting a slug held therein.

1,856,109. ELECTRIC CONDUCTOR. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Device Corporation, a Corporation of New York. Filed Feb. 6, 1924. Serial No. 690,893. 1 Claim. (Cl. 173—311.)



A device for holding electric cables which comprises an insulating spacer block having opposed longitudinal grooves for said cables, wings projecting radially from said block between said grooves and longitudinally projecting posts at the ends of said block, and means for securing said cables to said posts.

1,856,110. ELECTRIC SWITCH GEAR. GEORGE HENRY NEEP, Manchester, England, assignor to Switch Gear & Cowans, Limited, Manchester, England. Filed Jan. 3, 1930, Serial No. 418,176, and in Great Britain Jan. 15, 1929. 6 Claims. (Cl. 200—150.)

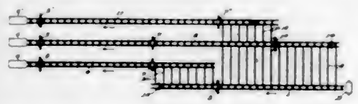


1. A circuit breaker comprising a pair of stationary terminals, a pair of movable terminals adapted to be moved into and out of contact with said stationary terminals, and a movable contactor adapted to be moved into and out of engagement with said movable terminals.

1,856,111. APPARATUS FOR HANDLING AND SHEARING METAL STRIP. CARL G. OHLSON, Youngstown, Ohio, assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio, a Corporation of Ohio. Filed Aug. 13, 1930. Serial No. 474,931. 7 Claims. (Cl. 164—49.)

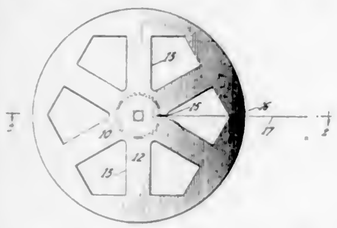
1. Apparatus for handling elongated metal strips comprising a run-out table adapted to consecutively receive the strips, a plurality of conveyor tables disposed parallel to and respectively at different distances from the run-out table, a shear associated with the run-out table adapted to sever a strip disposed thereon, a transfer table adapted to transfer the severed portion of the strip to one of said conveyor tables, a transfer table adapted to transfer the

unsevered portion of the strip to another of said tables, a shear associated with the last mentioned table adapted to sever said unsevered portion while disposed thereon, and



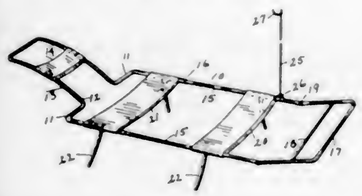
a transfer table operative to transfer onto another of said conveyor tables one portion of said unsevered portion after the said shear has acted thereon.

1,856,112. FILM REEL TO FACILITATE FILM THREADING. EVERETT M. PORTER, Brooklyn, N. Y., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 6, 1931. Serial No. 513,913. 1 Claim. (Cl. 242—74.)



A film reel which comprises a central hub having a radial slot therein parallel to the axis of the hub, a lateral plate fixed to one face of said hub, said plate comprising a central portion, an annular ring portion and connected spokes, said plate having a radial slot extending from near the center radially to an opening between the spokes, the plate also having a radial slot in the annular ring portion in line with the first mentioned radial slot permitting lateral insertion of a film through said plate for quick connection to the hub, the edges of said slot in the annular ring portion being doubly curved at both faces to prevent ready insertion of the film and to prevent the film from having any tendency to pass out laterally as it is being wound or unwound from the reel.

1,856,113. HYGIENIC COUCH. GUSTAVE RAPPRICH, West New York, N. J. Filed Sept. 25, 1920. Serial No. 394,939. 1 Claim. (Cl. 5—111.)

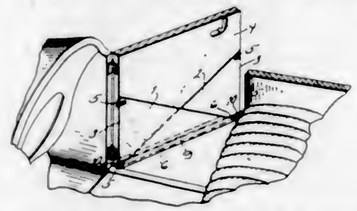


A foldable and telescopic couch comprising tubular forward side frame portions having angularly bent elements extending toward each other, and rear frame portions which have tubular side elements of smaller diameter than those of the other and are slidable telescopically therein, a foot end element mounted on the rear frame portion and foldable thereon, a head end element foldably mounted on the forward frame portion and hinged to the inner ends of the angularly bent elements and the said head end element of narrower width than that of the telescopic frame portions.

1,856,114. MANUFACTURE OF FIBER ARTICLES CONTAINING REGENERATED CELLULOSE. GEORGE A. RICHTER and MILTON O. SCHUR, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 7, 1930. Serial No. 494,185. 9 Claims. (Cl. 92—40.)

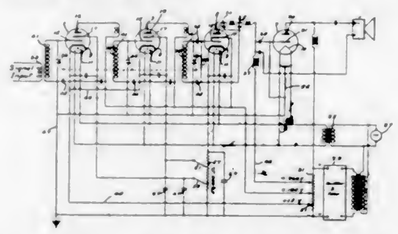
1. In the manufacture of fiber articles containing regenerated cellulose, those steps which comprise first imparting a cellulose-regenerating agent to the article and then treating the article with viscose.

1,856,115. ADJUSTABLE AUTOMOBILE PANEL COVER. HARRY A. SALLOP, New York, N. Y. Filed May 28, 1930. Serial No. 456,357. 3 Claims. (Cl. 45—138.)



1. An automobile panel cover comprising a plurality of cover sections adjustably related, means independent to each cover section for attaching the same to a panel and a second means engaging both sections for clamping the same and attaching the sections to a panel.

1,856,116. THERMIONIC AMPLIFIER. MARTIN G. SATEREN, Haddonfield, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,267. 2 Claims. (Cl. 250—20.)



1. In an amplifying system, a power detector of the grid-rectification type, a plurality of thermionic amplifiers of the screen-grid type, a common source of plate potential for said detector and said amplifiers, a connection including a resistor between the cathode of said detector and the negative terminal of said common source, and a connection from the screen-grid of one of said amplifiers to an intermediate point on said resistor, whereby an increase or a decrease in the amplitude of a signal applied to said system gives rise to a decrease or an increase, respectively in the sensitivity of said amplifier.

1,856,117. GAME APPARATUS. ALFRED K. SMALL, Jr., Ocala, Fla. Filed Feb. 27, 1930. Serial No. 431,822. 3 Claims. (Cl. 273—118.)



1. In a game court, a substantially rectangular frame made up of channel-shaped members, a semi-circular in

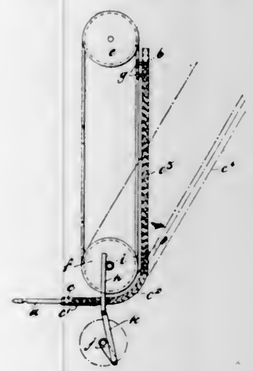
cross section shoulder projecting laterally from the inner face of each of the walls and against which spherical game pieces are adapted to strike, and a rectangular in cross section balancing member filling each of the channel-shaped members whereby to hold the frame stationary to resist the impact of a ball striking any side thereof.

1,856,118. CONVEYING SYSTEM AND APPARATUS FOR PULP WOOD. JOHN STADLER, Montreal, Quebec, Canada. Filed Jan. 2, 1930. Serial No. 418,049. 8 Claims. (Cl. 214—10.)



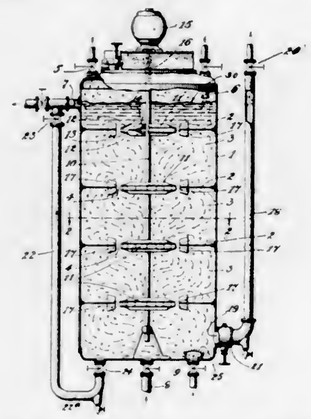
1. A pulpwood stacking and reclaiming system comprising an endless power operated "stacking" conveyor capable of being divided to provide separated ends, means for supporting and bodily moving said "stacking" conveyor in a circular path about a fixed vertical axis located adjacent one end of said conveyor, and a plurality of normally idle auxiliary conveying elements arranged in predetermined positions around the axis about which the "stacking" conveyor is movable, said system being characterized by the fact that the stacking operation is performed by piling the pulp wood upon the auxiliary conveying elements solely through the agency of the "stacking" conveyor while the reclaiming operation is performed by attaching each auxiliary conveying element in turn to the separated ends formed by dividing the "stacking" conveyor so that the connected stacking and auxiliary conveyors are thereby combined into a single reclaiming conveyor.

1,856,119. WEFT NEEDLE OR CARRIER FOR SHUTTLELESS LOOMS. GERALD TOMKINSON, Heathfield, Wolverley, near Kidderminster, and ERNEST JOSEPH PERRY, Birmingham, England. Filed Apr. 5, 1930. Serial No. 441,754, and in Great Britain Dec. 18, 1929. 2 Claims. (Cl. 139—123.)



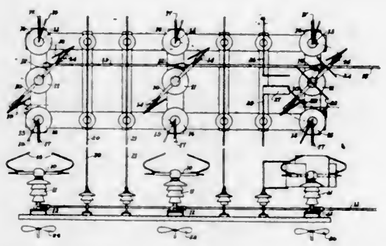
1. A weft inserting mechanism for shuttleless looms comprising a needle element inclusive of a stiff needle portion proper and a flexible blade extension thereof, an elongated continuous guide member within which the flexible blade portion of the needle is longitudinally slidable, said guide member embracing the flexible blade portion of the needle and all parts of said guide member being stationarily mounted whereby the blade portion of the needle within the guide member is held against all deflection except such deflection as may be due to the shape of the guide member, a portion of said guide member being disposed in the plane of the normal line of traverse of the needle portion proper, another portion of said guide member being disalined with respect to said first mentioned portion and being connected therewith by a curved portion, and means entirely separate from the guide member connected with the flexible blade portion of the needle for reciprocating the same thereby to reciprocate the needle portion proper, the curved portion of the guide member serving during reciprocation of the needle to deflect the flexible blade extension thereof into and out of the normal line of traverse of the needle.

1,856,120. GAS SCRUBBING APPARATUS. KENNETH S. VALENTINE, Hollis, N. Y., assignor to The Turbo-Mixer Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 24, 1929. Serial No. 402,001. 13 Claims. (Cl. 261—83.)



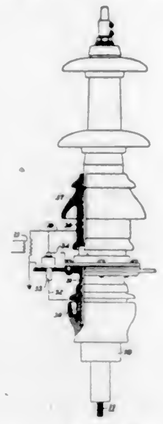
1. Apparatus of the class described, comprising a tank normally filled with liquid from the bottom to a point near the top and having a plurality of communicating compartments, a plurality of impellers adjacent the respective compartments, means for driving the impellers, and means for supplying and discharging liquid and gas, and a stand pipe communicating with the lower compartment and extending above the tank liquid level.

1,856,121. AIR BREAK SWITCH. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Feb. 19, 1929. Serial No. 341,180. 11 Claims. (Cl. 200—48.)



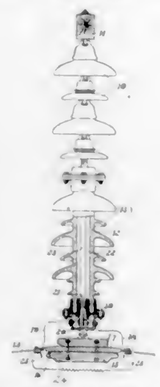
1. The combination with a polyphase circuit of switch members for the different phase conductors of said circuit, and a pair of spaced baffles interposed between switch members of adjacent conductors.

1,856,122. ELECTROSTATIC COUPLING. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Feb. 19, 1929. Serial No. 341,181. 10 Claims. (Cl. 175—41.)



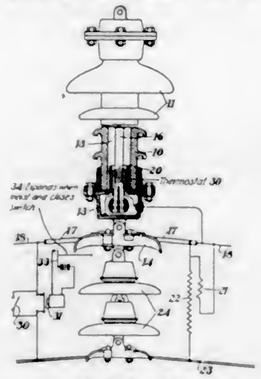
1. The combination with a grounded support, of a bushing insulator extending through said support, a conductor extending through said insulator and a cover of conducting material disposed about the outer surface of said bushing insulator and spaced from said support, said cover having the extremity thereof farthest from said support enclosed in insulation which extends outwardly beyond the outer surface of that portion of the bushing insulator in longitudinal registration with said cover, and a conductor lead connected with said cover to enable said cover to be used as an electrostatic coupling with said conductor while said cover serves also as a flux control member for said insulator and the enclosing insulation for the extremity of said cover serves to maintain the flashover value of said bushing insulator, notwithstanding the presence of the conductor cover between the terminal of said bushing insulator and its grounded support.

1,856,123. HEATER FOR INSULATORS. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Dec. 11, 1929. Serial No. 413,378. 14 Claims. (Cl. 175—358.)



1. The combination with a transmission line, of an insulator for supporting said line, an impedance interposed in said line, a heating element for said insulator, taps connected with said line at opposite sides of said impedance for supplying current to said heating element.

1,856,124. HEATER FOR INSULATORS. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Dec. 11, 1929. Serial No. 413,379. 11 Claims. (Cl. 219—20.)



7. The combination with a transmission line, of an insulator for supporting said line, a supplemental conductor extending along said line and insulated therefrom, a condenser electrically connected between said supplemental conductor and ground, a step-down transformer having its primary winding electrically connected in series in the connection between said supplemental conductor and ground, the secondary of said transformer having its terminals connected respectively with said transmission line and supplemental conductor, and a heating element for said insulator, said heating element having its terminals connected respectively with said transmission line and supplemental conductor.

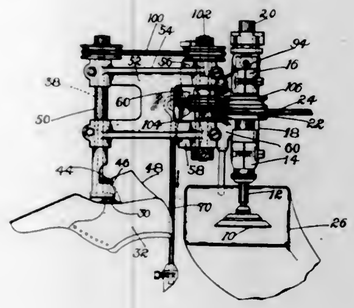
11. The combination with a transmission line, of an insulator for supporting said line, a heater for said insulator, means for diverting energy from said line for energizing said heater, and means controlled by humidity of the atmosphere for controlling the supply of energy from said line to said heater.

1,856,125. HEATER FOR INSULATORS. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Dec. 16, 1929. Serial No. 414,349. 18 Claims. (Cl. 219—39.)



1. The combination with an insulator, of a circulating medium disposed in contact with a portion of said insulator, and means for heating said medium.

1,856,126. BUFFING MACHINE. FREDERIC E. BERTRAND, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 24, 1927. Serial No. 201,243. 3 Claims. (Cl. 51—109.)



2. In a shoe buffing machine, a main buffing tool mounted upon a spindle, a high speed auxiliary buffing tool mounted upon another spindle for independently supplementing the work done by the main tool, movable means normally supporting said last-named spindle in a position out of the way of the operator as he presents shoes to the main tool, operator-controlled means for moving the auxiliary tool to a convenient operating position adjacent to and axially offset from the main tool, and means for driving said auxiliary tool including a friction clutch constructed and arranged to be rendered ineffective by the movement of the auxiliary tool out of operating position.

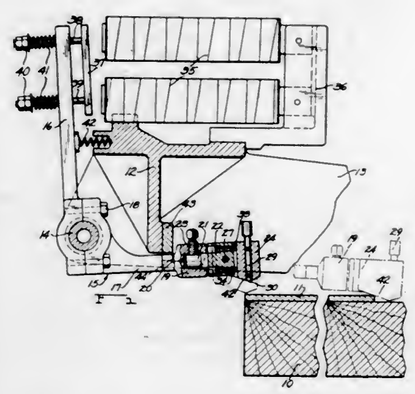
1,856,127. SEPARABLE LAST. GARRETT P. S. CROSS, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 15, 1929. Serial No. 386,034. 27 Claims. (Cl. 12—135.)



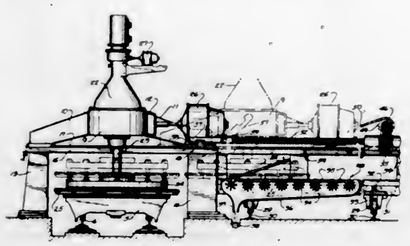
1. A separable last comprising a heel part and a forepart, and interengaging bonding members located one in the upper portion of each of said last parts, said bonding members being disengaged by a relative rectilinear sliding movement of the last parts, said last parts having also second interengaging means arranged to prevent said sliding movement, the second means being disengaged by relative movement of the last parts.

1,856,128. GLASS CUTTING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Original application filed Apr. 13, 1927, Serial No. 183,428. Divided and this application filed Feb. 11, 1928. Serial No. 253,670. 6 Claims. (Cl. 49—48.)

5. In sheet glass cutting apparatus, a pivotally mounted substantially horizontal supporting arm having a socket in its forward end, a member having a stud rotatably received within the socket, means for securing the stud in fixed position within said socket, a tool holder pivotally mounted to said member to swing about a substantially horizontal axis, said tool holder having a vertical opening therethrough, a cutting tool received within the vertical opening, adjusting screws passing through said holder and engaging said tool at diametrically opposite points for adjusting the angle thereof transversely with respect to the holder and for also adjusting the tool bodily with respect to said holder, and adjusting screws passing horizontally through said member and engaging said holder above and beneath the pivot point thereof for rocking the same and the cutter upwardly or downwardly through a vertically arcuate path.



1,856,129. APPARATUS FOR CLEANING PLATE GLASS POLISHING RUNNERS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 28, 1929. Serial No. 374,402. 15 Claims. (Cl. 15—21.)

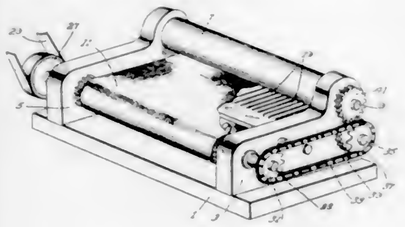


1. Apparatus for use in cleaning the polishing runners of a series of plate glass polishing machines mounted above means for carrying the glass therebeneath, comprising cleaning means positioned outwardly and to one side of the machine to be cleaned, and means for moving the machine bodily and laterally with respect to the remaining machines to bring the polishing runners thereof into operative engagement with said cleaning means.

1,856,130. CUTTING MACHINE. FRED C. EASTMAN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 30, 1928. Serial No. 250,492. 11 Claims. (Cl. 69—11.)

1. A machine of the class described having, in combination, a splitting knife and a pair of feed members for

gripping the work and feeding it to said knife, one of said members being adapted to travel in a closed path

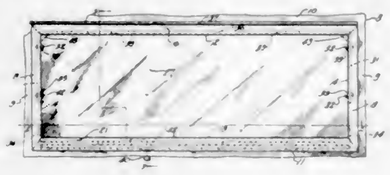


extending to a point adjacent to the edge of said knife, and then extending away from said knife without overlapping the blade thereof.

1,856,131. AMINO DERIVATIVE OF 4-HYDROXY DIPHENYL. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Original application filed Oct. 11, 1928, Serial No. 311,976. Divided and this application filed Dec. 6, 1929. Serial No. 412,293. 14 Claims. (Cl. 260—130.5.)

1. The method of making an amino-4-alkoxy-diphenyl which comprises reacting 4-hydroxy-diphenyl with a halogenating agent, alkylating the hydroxy group, and reacting the so formed halogenated 4-alkoxy-diphenyl with ammonia.

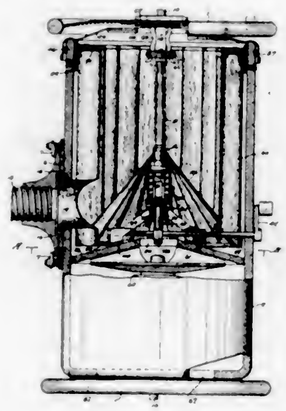
1,856,132. FRAME FOR HEATED DOUBLE GLASS WINDSHIELDS. ERNEST E. HILLS, Oshkosh, Wis. Filed May 18, 1928. Serial No. 278,809. 1 Claim. (Cl. 296—84.)



A metal, double glazed windshield frame, comprising a pair of side frame members, upper and lower frame members, each of said frame members having front, rear, and channeled intermediate portions, the lower frame member being secured to the side frame members and the latter being detachably secured to the upper frame member, and an elongated hollow enclosure depending from and underlying all of the lower frame member and integral therewith, said enclosure having a restricted outlet neck opening through said lower frame member between the channels thereof.

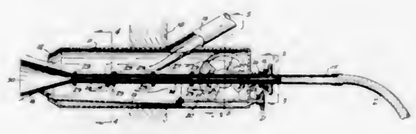
1,856,133. SUCTION CLEANER. STANLEY MCCLATCHIE, Cleveland Heights, Ohio, assignor to Apex Electrical Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 24, 1927, Serial No. 178,074, and in Germany May 7, 1925. 1 Claim. (Cl. 15—16.)

In a cleaner, a casing, carrying wheels for said casing, handle means operatively connected to said casing, a collecting nozzle carried by and projecting from said casing and having an inlet mouth operatively presented to the surface on which said wheels rest, suction producing and dust separating apparatus inside said casing and operatively associated with said collecting nozzle, said dust separating apparatus comprising a strainer of porous material, and means carried by said casing for removing the dust and litter from said strainer with-



out removing said strainer from said casing, said casing having a removable closure to permit the discharge of such dust and litter.

1,856,134. CARBURETING NOZZLE FOR BURNING POWDERED COAL. WILSON L. MCLAUGHLIN and HERROLD L. MCLAUGHLIN, Des Moines, Iowa, assignors of one-fourth to E. L. Twining, Des Moines, Iowa. Filed July 9, 1927. Serial No. 204,554. 2 Claims. (Cl. 110—104.)

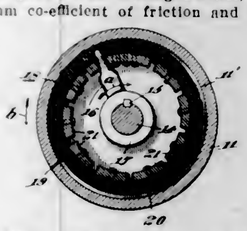


2. In a device of the class described, an elongated horizontal housing open at one end and having a bottom portion and a top portion, an air and powdered fuel inlet pipe terminating inside said housing, an adjustable cone-shaped member arranged coaxially in said housing and having its flared end extending in the same direction as the open end of said housing, an upwardly extending adjustable guide pan member slidably mounted in the bottom of said housing for directing the air and powdered fuel upwardly around the said cone member, and a handle member extending through said housing wall for manually actuating the said pan member.

1,856,135. FRICTION CLUTCH. HENRY W. NIEMAN, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Dec. 27, 1928. Serial No. 328,751. 13 Claims. (Cl. 192—105.)

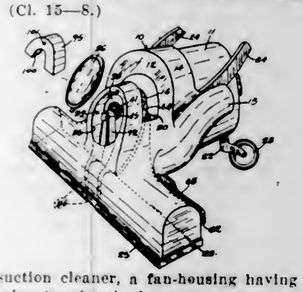
1. In a clutch, a driving member, a driven member, one of said members having a curved bearing surface, a flexible friction element tractively connected at an end to one of said members and adapted to wrappingly engage said curved bearing surface of the other of said members, and means substantially uniformly distributed along the friction element effective as a result of the rotation of one of said members to force said friction ele-

ment radially against said bearing surface, the product of the minimum co-efficient of friction and the angle of



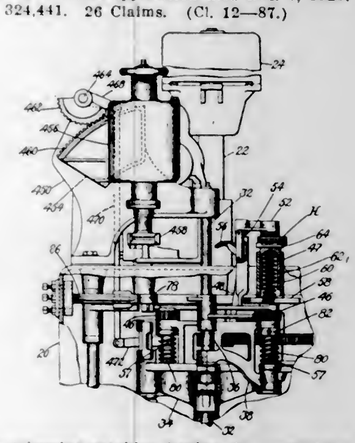
wrap of the flexible friction element being sufficiently great so that the torque transmitted is practically independent of variations of the co-efficient of friction.

1,856,136. SUCTION CLEANER. WILLIAM V. ORR, Cleveland, Ohio; The Cleveland Trust Company and Adele Mary Orr executors of said William V. Orr, deceased. Filed Nov. 12, 1927. Serial No. 232,767. 12 Claims. (Cl. 15—8.)



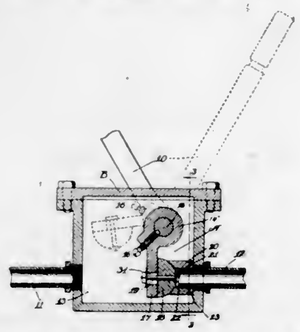
2. In a suction cleaner, a fan-housing having an inlet, a nozzle having two brush chambers arranged end to end and separated from each other, a vertical brush-drive housing having its lower end located between said brush chambers and its upper end located in front of and spaced from said inlet, and passageways leading from said brush-chambers to said inlet and located one at each side of said brush-drive housing and inclined relatively to said brush-drive housing.

1,856,137. TRIMMING MACHINE. EUGENE J. RAY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Feb. 23, 1922, Serial No. 538,622. Patent No. 1,733,200, dated Oct. 29, 1929. Divided and this application filed Dec. 7, 1928. Serial No. 324,441. 26 Claims. (Cl. 12—87.)



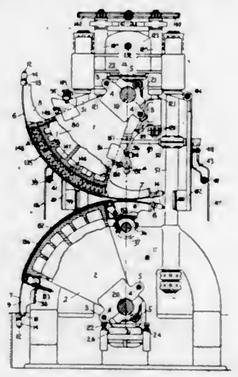
1. A trimming machine having, in combination, a rotary trimming tool and a conveyor arranged to transfer shoe parts to and from said trimming tool, the conveyor being provided with jig pins arranged to enter corresponding jig holes in the shoe parts to position the shoe parts as they are presented to the rotary trimming tool.

1,856,138. SAND BLAST STOPPER VALVE. RICHARD RUEMELIN, St. Paul, Minn. Filed Jan. 16, 1929. Serial No. 333,011. 6 Claims. (Cl. 251—10.)



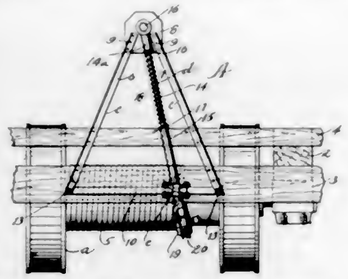
3. A stopper valve for a sand blast including, a casing, inlet and outlet passageways in said casing extending in line to permit a sand blast to pass through said casing, a tubular pure gum rubber valve seat positioned on the outlet passageway within said casing, a rocker arm pivotally supported within said casing, a gum rubber semi-spherical valve supported by said rocker arm in a manner to close against said valve seat to shut off the sand blast through said casing, and a lever for operating said rocker arm.

1,856,139. MACHINE FOR PLATING AND EMBOSSING LEATHER. GUTAV ADOLF SCHETTLER, Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Jan. 19, 1928, Serial No. 247,875, and in Great Britain Jan. 27, 1927. 55 Claims. (Cl. 149—23.)



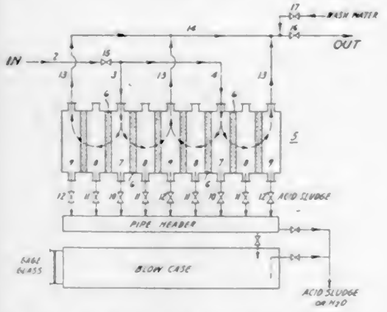
1. In a press, a pair of co-operating segmental presser members having arcuate pressure applying surfaces, said segmental members being mounted to turn about spaced parallel axes and having arcuate grooves, means for causing the segmental members to operate upon a piece of work, and means connecting the presser members to each other to cause them to move in unison during a pressure applying operation, said connecting means being receivable in said grooves and directly connected to the segmental presser members at remotely opposite ends of the members.

1,856,140. SPOOLING DEVICE. HERMAN V. SHIRLEY and HENRY P. SCANLON, Long Beach, Calif. Filed Oct. 6, 1927. Serial No. 224,306. 4 Claims. (Cl. 242—157.)



1. In a line spooler, a swingingly mounted arm, means on said arm for guiding movement of a line to be spooled, and means associated with the arm and adjacent the first named means for retarding the swinging movement of the arm during a spooling of the line; said second means including a guide head formed with a bore through which the arm is passed; the side walls bounding the bore being curved, said arm being formed with a part for engagement with a curved side wall.

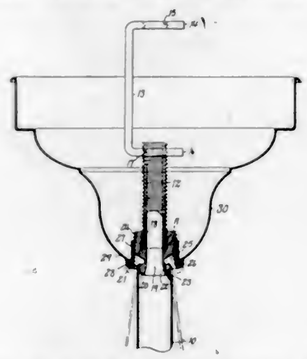
1,856,141. METHOD OF TREATING HYDROCARBON OILS. DAVID DEWEY STARK, Berkeley, Calif., assignor to Associated Oil Company, San Francisco, Calif., a Corporation of California. Filed Sept. 22, 1928. Serial No. 307,754. 1 Claim. (Cl. 196—147.)



A method of filtering sludge from hydrocarbon oils which comprises: forcing a mixture of oil and acid reaction products through an aluminous abrasive filter plate, whereby acid reaction products separate on the filter plate from the oil and are removed therefrom by gravity, forcing a washing medium through the plate in a reverse direction to remove said reaction products within the filter, thus leaving the filter wet, and forcing further oil and acid reaction products through the plate in the first direction; the major portion of the sludge separating from the oil on the face of the filter opposed to the passage of said mixture.

1,856,142. SUSPENSION-FIXTURE FOR ELECTRIC LIGHTS. MORRIS E. SURFACE and ARTHUR W. WELLINGTON, Waterbury, Conn., assignors to The Chase Companies, Inc., Waterbury, Conn., a Corporation. Filed Dec. 11, 1930. Serial No. 501,552. 1 Claim. (Cl. 240—85.)

In a suspension-fixture for electric lights, the combination with a suspension-head having an externally-threaded portion, a bulbous portion and an annular groove therebetween; of a rigid suspension-stem articulately connected to the said suspension-head by means of a portion embracing the bulbous portion of the latter, and projecting inwardly into the said annular groove therein; a canopy for concealing the upper portion of the fixture; and a canopy-supporting sleeve provided with an external upwardly-facing ledge for supporting the said



canopy and having internal threads adapted to engage with the externally-threaded portion of the said suspension-head, and of sufficient length to extend downwardly therefrom over the annular groove in the said suspension-head to substantially conceal the articulated connection without losing ample threaded engagement with the threaded portion of the suspension-head located above the articulated connection.

1,856,143. AEROPLANE WING. HERBERT V. THADEN, Mount Lebanon, Pa., assignor, by mesne assignments, to General Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1929. Serial No. 413,255. 8 Claims. (Cl. 244—31.)

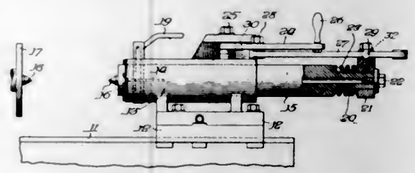


1. A body for an aeroplane wing consisting of a shell of sheet metal with upper and lower faces corrugated in the direction of the length of the wing, the lower face being discontinuous in its transverse extent, the said faces being borne upon an interior support.

1,856,144. PRODUCTION OF PHOSPHORIC ACID. GUSTAV WIETZEL, Mannheim, and FERDINAND HAUBACH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 13, 1931, Serial No. 529,809, and in Germany Apr. 25, 1930. 3 Claims. (Cl. 23—165.)

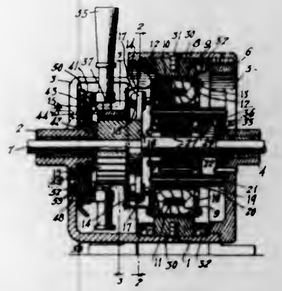
1. In the production of phosphoric acid by oxidizing oxygen compounds of phosphorus still capable of being further oxidized by means of nitric acid, the step which comprises carrying out the oxidation with the amount of nitric acid theoretically required at a temperature above 80° C. and in a confined reaction space.

1,856,145. TAILSTOCK. MOSES W. H. WILSON, East Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Apr. 8, 1929. Serial No. 353,294. 1 Claim. (Cl. 82—31.)



In a tail stock for lathes, a fixed tubular guide member, a centering spindle, a follower slidable on said spindle, a spring interposed between the follower and an abutment on the spindle, a hand lever pivoted at one end to the guiding member, a link connection pivoted at one end on the follower and at the other end to the hand lever intermediate the ends of the lever, whereby the end of the link connection pivoted to the lever may be swung from a point between the pivot of the lever and the follower to a point on the opposite side of the lever pivot and past dead center to advance the centering spindle and to lock the same in advanced position.

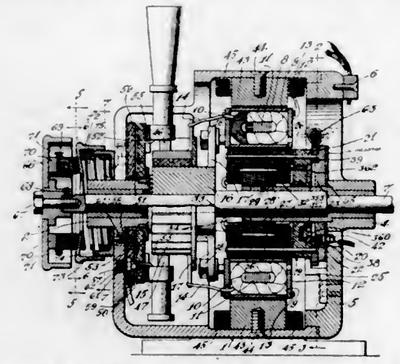
1,856,146. DYNAMO ELECTRIC MACHINE. JOHN WOLKOFF, Newark, N. J. Filed Apr. 10, 1930. Serial No. 443,036. 7 Claims. (Cl. 172—36.)



1. An electric motor comprising a frame, a shaft journaled therein, an annular armature including windings mounted on said shaft, and a field member comprising a body mounted on said frame and having field poles coaxially arranged within said armature, said field poles comprising a central section loosely surrounding said shaft and having radial arms one for each pole, and each pole having a shoe secured to said body and frictionally engaging one of the arms of the central section so that said central section is removably supported by said shoes, and a winding surrounding each of said arms.

1,856,147. ELECTRIC MOTOR. JOHN WOLKOFF, Newark, N. J. Filed Dec. 2, 1930. Serial No. 499,482. 5 Claims. (Cl. 172—36.)

1. A dynamo-electric machine comprising a frame, a shaft journaled therein, an annular armature including windings mounted on said shaft, opposed field poles and windings each comprising two juxtaposed sections, one section disposed within the armature and the other section arranged outside the armature, means mounting the inner or outer sections of both of said field poles for rotation relative to the other sections concentrically with said armature, a commutator connected to said armature winding, a pair of brushes concentric with and engaging said armature, and means for connecting said field windings and said brushes in circuit and for reversing the flow of



electricity through the windings of one section of each pole and through said armature as the second-mentioned sections approach the other sections of the other poles.

1,856,148. COMBINED GRADER AND BULLDOZER. CHARLES E. BALL, Chicago, Ill., assignor to Ball Wagon Grader Co., a Corporation. Filed June 27, 1931. Serial No. 547,307. 8 Claims. (Cl. 37—180.)

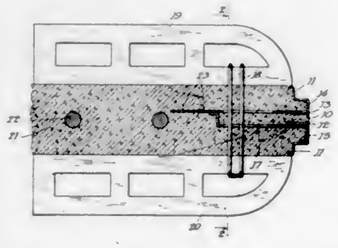
1. A grader including a frame to move along the ground, arms mounted on and projecting rearwardly from the frame, a member connecting the arms at their rear ends, means to raise and lower the arms, and blades mounted on the opposite sides of said member, the forward blade having a downward and forward slope and the rear blade having a downward and rearward slope.

1,856,149. COLLAPSIBLE SCAFFOLD. HOWARD BALL, Long Beach, Calif. Filed Aug. 2, 1930. Serial No. 472,554. 5 Claims. (Cl. 304—4.)

1. A collapsible scaffold comprising three legs, two of said legs being formed of a single strip of metal, a

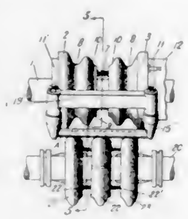
spider to which each of the legs is pivotally secured, a vertical post, said spider encircling the post, the upper ends of said legs engaging the post, and means clamping said legs to the post whereby the legs are held in extended position and the post is prevented from moving.

1,856,150. METAL JAMB FOR UNPLASTERED WALLS. ISAAC A. BAUM, Chicago, Ill. Filed Apr. 14, 1930. Serial No. 444,247. 7 Claims. (Cl. 72—98.)



1. In a device of the class described, the combination of oppositely disposed tiles forming a wall, means for preventing the lateral separation of said tiles, and a channel shaped metal jamb, a portion of said jamb being disposed within said wall.

1,856,151. METHOD AND APPAPATUS FOR FORMING CORRUGATED METAL. RICHARD R. BLOSS and ROY C. PFEIL, Columbus, Ohio, assignors to The International Derrick & Equipment Company, Columbus, Ohio, a Corporation of Ohio. Filed July 2, 1930. Serial No. 465,393. 12 Claims. (Cl. 153—73.)



1. The method of producing corrugated tubular members which comprises passing a band of metal through opposing pressing rolls formed of sections held in fixed spaced relation to produce an initial groove of incomplete depth, and then releasing sections to permit them to move toward each other during continued passage of the initially grooved band to complete the formation of the corrugations therein.

4. In an apparatus for corrugating metal, an upper section, rotatable members splined on said upper sections and held in spaced relation by resilient means, a lower section, a shaft, roll sections mounted on said shaft, one of said roll sections being fixed against axial movement thereon, and the remaining roll sections being free to travel longitudinally with respect thereto.

1,856,152. GARMENT SUPPORTER. HARRY S. BOZORTH, Jr., Philadelphia, Pa. Filed June 24, 1930. Serial No. 463,441. 11 Claims. (Cl. 24—248.)

3. A hose supporter comprising in combination a stirrup having a garment engaging bar transversely convex, a clamping member embodying a saddle transversely concaved proportioned to fit over the stirrup bar to clamp material therebetween, means connecting the stirrup and



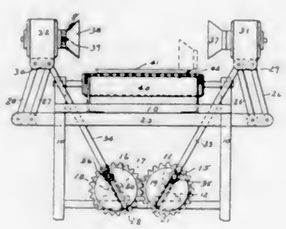
clamping member together, said clamping member and stirrup being so proportioned that one will be resiliently retained by the other.

1,856,153. PROCESS OF MOLDING CHOCOLATE. HENRY L. BORG, Stamford, Conn., assignor to General Foods Corporation, a Corporation of Delaware. Filed Feb. 15, 1927. Serial No. 168,475. 4 Claims. (Cl. 107—54.)



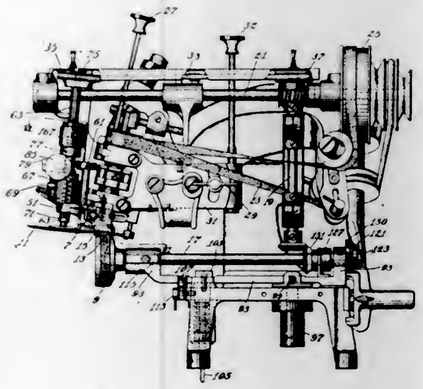
1. The process of molding chocolate into blocks or plates whereby the same may be removed from their molds without breakage, consisting in rapidly cooling at a uniform rate a mass of chocolate while in plastic or flowable state and while in contact with a mold support to a temperature below the solidifying point of said plastic mass and while in said solid state continuing the reduction of temperature for a period of time sufficient to permit contraction of the solidified mass relatively to said support and then separating said mass from its support.

1,856,154. CUTTING MACHINE. EDWARD A. CAPOCEFALO, Syracuse, N. Y., assignor to Sterilek Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 16, 1931. Serial No. 515,908. 4 Claims. (Cl. 164—61.)



1. In a cutting machine of the class described; a cutting table; one or more cupped, conical, knife-edged cutters mounted horizontally above said table; means for rotating said cutters; and means for moving the cutters downwardly and axially while maintaining them in horizontal position.

1,856,155. SKIVING MACHINE. FRED M. COURSER, Haverhill, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 4, 1931. Serial No. 534,813. 37 Claims. (Cl. 69—16.)



2. A machine of the class described having, in combination, a rotary disk knife, a feed roll, a co-operating feed disk, a shaft by which the feed disk is carried, a bearing for the shaft, and a presser supported by the bearing extending over the roll and mounted for movement toward and from the knife.

1,856,156. TREATING PETROLEUM EMULSIONS. JOHN MANDERSON EVANS, Berkeley, Calif. Filed Apr. 19, 1924, Serial No. 707,779. Renewed Aug. 24, 1931. 6 Claims. (Cl. 196—4.)

1. A process for treating petroleum emulsions, characterized by subjecting the emulsion to the action of a treating agent consisting of an ester of a naphthenic acid.

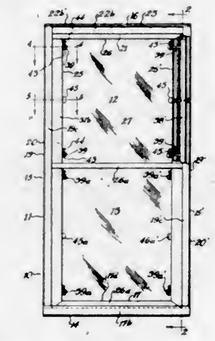
1,856,157. LATERAL CONTROL FOR AIRPLANES. ALFRED A. GASSNER, New York, N. Y., assignor to General Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1931. Serial No. 566,682. 9 Claims. (Cl. 244—29.)



1. In an airplane, a wing, an aileron secured to said wing in spaced relation thereto, and means movably mounted on said wing and adapted to vary the space between the wing and the aileron.

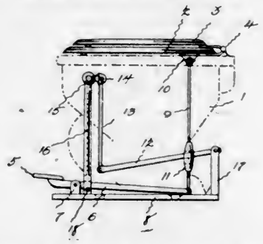
1,856,158. WINDOW. EDWARD L. GONDER, North Canton, Ohio. Filed May 1, 1930. Serial No. 448,903. 2 Claims. (Cl. 189—66.)

1. A metal window including a frame, a sash slidable in the frame, guiding means upon the sash normally engaging the frame, means mounted upon the sash for moving the guiding means into and out of engagement with the frame, and releasable spring pressed means upon the sash at the central portion vertically thereof for pivotally



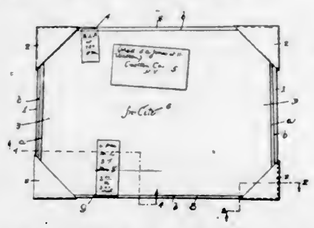
mounting the sash upon the frame whereby the sash may be rotated when the guiding means are moved out of engagement with the frame.

1,856,159. WATER CLOSET SEAT. THOMAS GRILLO and PETER MONGILLO, New Haven, Conn. Filed Nov. 28, 1930. Serial No. 498,665. 2 Claims. (Cl. 4—251.)



1. In a device of the class described, a closet, a hinged cover therefor, mechanism for operating said cover connected therewith, said mechanism comprising an operating lever having a fulcrum mounted on a separate base, a rigid adjustable rod between said lever and said cover, said cover being arranged to close by gravity, a dash pot provided to retard the closing movement of the said cover, said dash pot being operatively connected with said connecting rod by a compound leverage comprising a floating link pivotally connected to an individual support on said base and said floating link being loosely connected with said connecting rod so as to permit floating movement of said link.

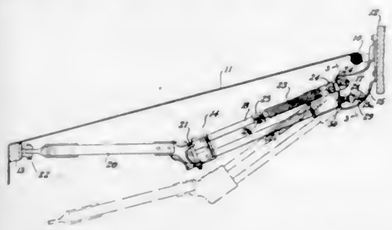
1,856,160. PYRALINE DESK PAD. CHARLES J. GUTBERLET, Philadelphia, Pa. Filed Jan. 22, 1930. Serial No. 422,642. 1 Claim. (Cl. 45—69.)



A desk pad comprising in combination, a foundation, formed of a stiff piece of pasteboard, a transparent face,

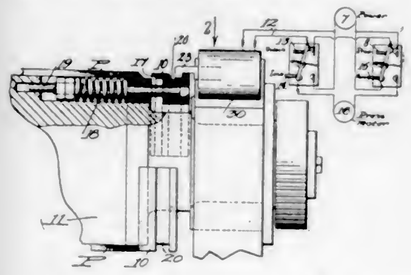
spacers, formed of flexible material positioned between the face and the foundation and glued to the latter, at the sides of the desk pad, and forming spacing strips extending along the sides only of the desk pad and between the said face and said foundation, whereby a permanent separation is maintained between the face and the foundation at the bottom of the desk pad, and clamps, of textile material, enclosing the corners of the desk pad and binding the foundation to the face at the corners of the desk pad.

1,856,161. AWNING ARM CONSTRUCTION. HENRY C. HEISER, Cleveland, Ohio, assignor to The Astrup Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 13, 1931. Serial No. 574,685. 4 Claims. (Cl. 156—44.)



1. Awning arm construction including a wall bracket, an arm mounting bracket on the wall bracket, a pivotal connection between the brackets, a pair of folding arms pivotally mounted at one end on the arm mounting bracket, means for moving the arm mounting bracket to different positions relative to the wall bracket and for maintaining the arm mounting bracket in adjusted position, a spring connected at one end to the adjacent arm, and means providing a swivel connection between the other end of the spring and the pivotal connection between the brackets.

1,856,162. POWER PLATE LOCKUP. JOHN A. ISBELL, Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Feb. 24, 1927, Serial No. 170,458. Renewed Mar. 8, 1930. 8 Claims. (Cl. 101—378.)



1. In a printing press, the combination with a clamp for a printing plate and means for forcing it into clamping position, of means located beyond the plate cylinder for pulling the clamping device back to free the plate independently of the rotation of the plate cylinder.

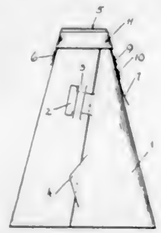
1,856,163. EYEGLASSES. ALFRED E. JONES, Spokane, Wash. Filed Feb. 23, 1927. Serial No. 170,249. 3 Claims. (Cl. 88—54.)

3. Eyeglasses comprising lenses each fashioned with a socket in one of its faces, said sockets being of uniform depth throughout their extent, colored crystals of uniform thickness, having the same index of refraction as the main lenses, and having a shape corresponding to the shape of said sockets, said crystals being fitted and fused



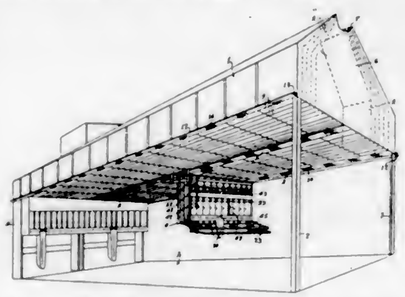
into the sockets, whereby the portions of the lenses containing the inserts will have the same focus as the clear portions.

1,856,164. MUSICAL NOVELTY. JOHN WILLIAM KELLY, Long Beach, Calif. Filed Dec. 23, 1930. Serial No. 504,234. 3 Claims. (Cl. 46—46.)



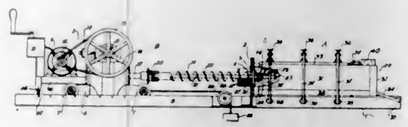
1. A musical novelty comprising a cone, a rubber mouth-piece stretched across one end of the cone, means fixedly securing one end of said mouthpiece to the cone, strips on the other end of the mouthpiece, stay-flaps formed on the cone, said strips extending under the stay-flaps whereby the tension of the mouthpiece across the cone is adjusted.

1,856,165. MAIL DISTRIBUTING APPARATUS. JEAN JOSEPH MARTIN LAMBERT MARCHAND, The Hague, and JACOBUS CORNELIS ANDRIESSEN, Rijswijk, Netherlands. Filed Aug. 30, 1930, Serial No. 479,061, and in Germany May 12, 1930. 5 Claims. (Cl. 214—11.)



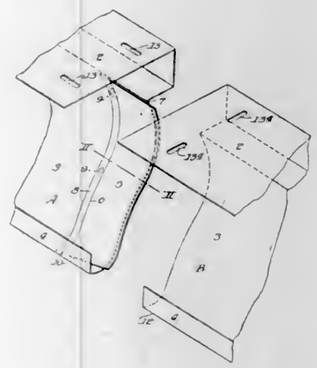
1. Apparatus for sorting and distributing mail matter, comprising a trough, a plurality of chutes radiating from the bottom side thereof, a drop-bin communicating with each chute and having its inlet vertically over its outlet, the drop-bins being elevated off the floor of the mail room and extending vertically in side-by-side parallel relation to form the ceiling of the mail room, the lower ends of the bins being closed by releasable closures, a multi-compartment collector suspended from said ceiling for displacement under the lower ends of said bins, whereby the mail is handled on the ceiling of the mail room leaving the floor thereof unoccupied.

1,856,166. APPARATUS FOR MOLDING HELICAL CASTINGS. CHARLES E. NORDFELDT, WALTER J. AHLQUIST, and IRWIN M. EMERY, Massillon, Ohio, assignors to The Massillon Steel Casting Company, Massillon, Ohio, a Corporation of Ohio. Filed Nov. 2, 1931. Serial No. 572,472. 10 Claims. (Cl. 22—14.)



1. Apparatus for making molds for helical articles including a table, a five-sided flask provided with a bottom wall resting on the table adapted to contain rammed sand, said flask being removable and being provided with an open end, a plate mounted on the table forming a wall for said open end of the flask, means for clamping the flask to said plate, a helical pattern, nut means for the pattern, and longitudinally movable means for rotatably moving the pattern through the nut and plate into and out of rammed sand in the flask.

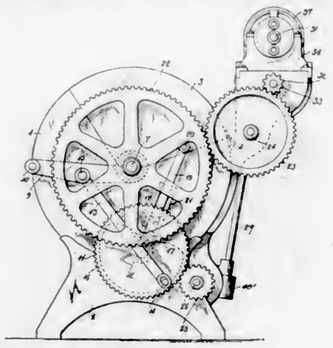
1,856,167. SHEET METAL JOINT. GEORGE D. OVERHOLTZ, Leetsdale, Pa., assignor to Riter-Conley Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 11, 1930. Serial No. 420,187. 3 Claims. (Cl. 189—87.)



1. In a sheet metal joint of the character specified, the combination with a molding section, of a plate secured to the inner surface and adjacent one end of the section and having an off-set portion to provide a recess between the plate and the section to receive an end of an adjoining molding section, an inclined edge on said plate for binding engagement with a portion of the adjoining section, said plate having a portion projecting beyond the section, each section having aligned openings and bolts entered in the openings.

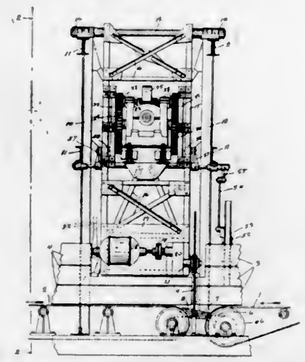
1,856,168. WASHING MACHINE. EMANUEL J. PERRY, New Bedford, Mass., assignor, by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Nov. 18, 1927. Serial No. 234,106. 12 Claims. (Cl. 68—18.)

1. In a laundry machine, the combination with a casing and a washing cylinder therein, of means for moving said cylinder out of and into said casing, said means comprising a prime mover and a lost motion connection



between said prime mover and cylinder moving means to cause said prime mover to develop a substantial torque before assuming any of the load.

1,856,169. SWING CUT-OFF SAW APPARATUS. LELAND S. ROSENER, JAY M. SMITH, and EDMUND L. CHAFFEE, San Francisco, Calif., assignors to The Pacific Lumber Company, San Francisco, Calif., a Corporation of Maine. Filed July 7, 1930. Serial No. 465,998. 9 Claims. (Cl. 143—46.)

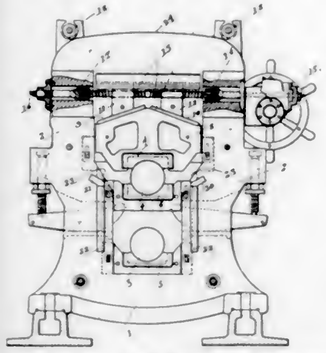


1. In apparatus of the character described, a pair of belt conveyors arranged in tandem with a gap between their adjacent ends, a swing saw mounted to pass between said ends and means for alternately moving and stopping said conveyors and swinging the saw and a pair of fixed supports extending transversely of the conveyor in the gap between the ends of the conveyors, free of the conveyors, the upper surfaces of said supports being substantially flush with the upper surfaces of the conveyors, said conveyors spaced from each other a distance to pass the saw.

1,856,170. ROLLING MILL. JACQUES ROUX, Isbergues, Pas-de-Calais, France. Filed June 10, 1929, Serial No. 369,644, and in Belgium June 25, 1928. 2 Claims. (Cl. 80—56.)

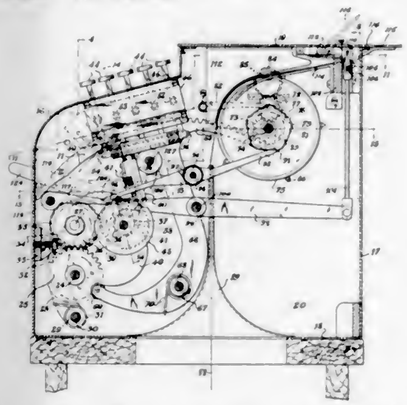
2. A rolling mill housing having two enclosed columns with uprights, rollers, two wedges for adjusting each end of one roller, one right- and left-handed screw at each end of said roller for adjusting the wedges at the ends of said roller, said wedges being symmetrical relatively to a plane as defined by the axis of said roller and a point of the axis of another roller and being interconnected in

such a manner that their symmetry is maintained for each adjustment of the ends of the roller, the latter roller being positioned between the said wedges and another roller, a block, the said block bearing upon the adjustable roller and bearing sideways upon the uprights of the columns,



the distance between these uprights being increased by an amount at least sufficient to permit the rollers to be mounted and dismounted by passing them in a deviated position relatively to their working position between the two enclosed columns forming the housing, as set forth.

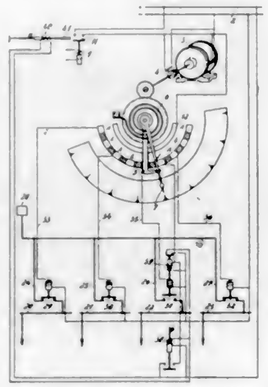
1,856,171. TICKET DELIVERY MECHANISM. LOUIS SCHER, Cleveland, Ohio, assignor to The Ticket Issuing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 20, 1930. Serial No. 496,938. 10 Claims. (Cl. 164—42.)



1. In a ticket delivery machine, ticket issuing and severing mechanism, actuating means for said mechanism, manually-operable movement limiting means for said actuating means, an associated master key controlled by said limiting means adapted to start and stop said actuating means, means for driving said actuating means, and means for operating said driving means continuously or for operating said driving means by operation of the movement limiting means.

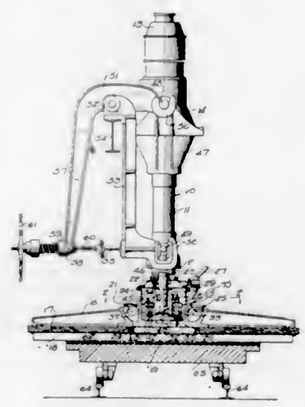
1,856,172. GROUND DETECTOR. ROBERT SCHIMPF, Berlin-Schlachtensee, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Aug. 23, 1930, Serial No. 477,455, and in Germany Aug. 26, 1929. 8 Claims. (Cl. 175—294.)

1. In a ground detecting device for ground compensated sectionalized electric power distribution systems in combination, a ground supervising relay responsive to a ground in the system, a ground testing device having means for successively disconnecting and reconnecting the line sections, and being controlled by said ground relay to operate so long as the latter responds to a ground, means for each section independent of said testing device



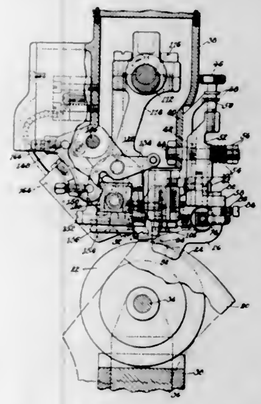
and responsive when the section is open, for reconnecting a disconnected grounded section after a desired time period, and means cooperative with said independent means for blocking the ground relay control of said testing device if the ground of the reconnected section persists.

1,856,173. SHEET GLASS SURFACING APPARATUS. ERIK G. STAHLE, Pittsburgh, Pa., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 25, 1926. Serial No. 143,904. 5 Claims. (Cl. 51—109.)



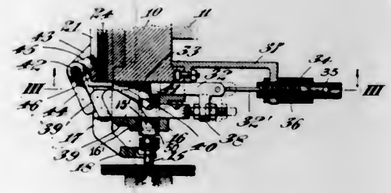
4. In combination in apparatus for surfacing glass, a vertical runner spindle, a grinder head including a housing for receiving the lower end of said spindle therein, a plurality of spaced vertical posts carried by the head within said housing, a plurality of horizontal driving arms carried by said spindle and received between adjacent posts, means for driving said spindle and arms to effect rotation of the grinder head, said grinder head having both vertical bodily movement and also rocking movement with respect to the spindle, and adjustable means engaging the driving arms for varying the bodily vertical movement and also the rocking movement of said head with respect to said spindle.

1,856,174. SEAM FINISHING MACHINE. VINCENT G. TERRY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 12, 1929. Serial No. 377,805. 36 Claims. (Cl. 69—7.)



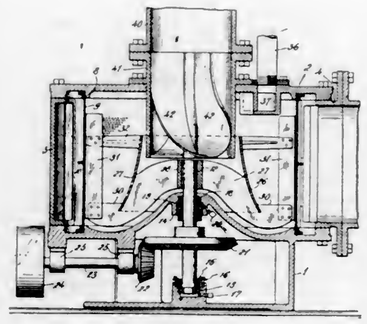
1. In a seam pressing machine, a seam spreading tool formed and arranged to enter between the upstanding portions of a seam in a piece of work fed thereto, and means for straightening the work and for guiding the upstanding portions of the seam in alinement with the spreading tool, said means comprising cooperating fingers having work engaging faces arranged to contact with only the portion of the seam which is in proximity to the line of stitching to straighten it and along a narrow width heightwise of the seam to guide it in alinement with the spreading tool.

1,856,175. PUNCHING MACHINE. HOWARD C. TOWLE, Cohasset, Mass., assignor to Bethlehem Shipbuilding Corporation. Filed Oct. 24, 1927. Serial No. 228,183. 4 Claims. (Cl. 164—104.)



1. In a punching mechanism, a reciprocating head, a plurality of punches, means for locking each punch to the reciprocatory head, means normally tending to render such locking means inoperative, means releasable by the operator acting counter to said last mentioned means tending to bring the locking means into effective operating position, and restraining means for preventing the locking means moving into full locking position releasable by the downward movement of the reciprocatory head.

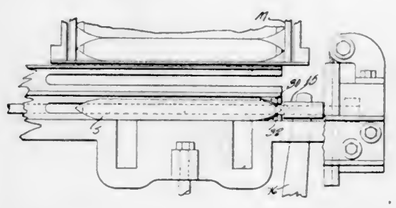
1,856,176. METHOD OF AND APPARATUS FOR SCREENING PAPER PULP. EDWARD J. TRIMBEY, Glens Falls, N. Y. Filed Sept. 6, 1928. Serial No. 304,207. 17 Claims. (Cl. 92—34.)



1. A pulp screen comprising the combination of a cylindrical screen chamber, an inlet for the pulp and means in the inlet for transforming the rectilinear motion of the incoming pulp into rotary motion.

10. The method of screening paper pulp which comprises introducing the pulp at the center of a rotating mass of pulp at substantially the same speed and in substantially the same direction as the mass whereby agitation and foaming are avoided.

1,856,177. AUXILIARY SHUTTLE BOX FOR SHUTTLE CHANGING LOOMS. RICHARD GREENLEAF TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 14, 1930. Serial No. 475,247. 2 Claims. (Cl. 139—239.)

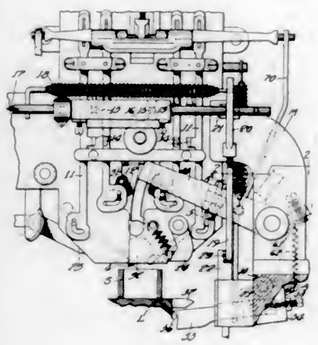


1. In a shuttle changing loom, an auxiliary shuttle box, means fixed relative to said box in position to engage a shuttle at each side of the shuttle point and to positively limit entering movement of said shuttle into said box, said shuttle-engaging means and said shuttle box having cooperating serrated surfaces by which longitudinal displacement of the engaging means is prevented.

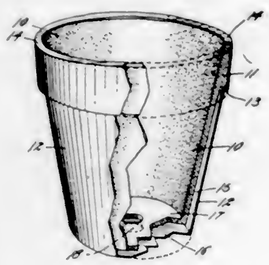
1,856,178. MULTICOLOR WEFT REPLENISHING MECHANISM. WILLIAM M. WATTIE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 10, 1931. Serial No. 507,881. 5 Claims. (Cl. 139—232.)

1. In a weft replenishing mechanism having a pair of supports to hold a reserve bobbin in transfer position, a plate adjacent the supports having an opening therein extending above said supports, a transferrer arm extending through the opening and having a portion disposed nor-

mally above the supports, and said plate having a continuous guide surface for a bobbin extending from one of said supports to the other and located under the transferrer arm and sufficiently high to prevent the bobbin butt from engaging the periphery of the opening as the bobbin moves along either support toward the other.



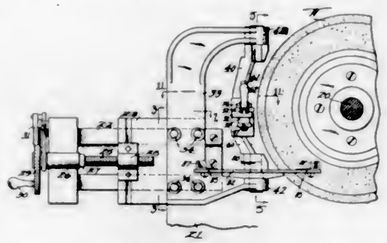
1,856,179. FLOWERPOT. THOMAS P. WELLS, Denver, Colo., assignor of one-half to Thomas K. Hudson, Denver, Colo. Filed Nov. 30, 1929. Serial No. 410,710. 3 Claims. (Cl. 41—10.)



1. An ornamental cover for flower pots of the type having a rim band about their upper edges comprising: a metallic bowl surrounding said pot; a shoulder formed in said bowl in contact with the lower edge of said rim band; and an inwardly extending flange adapted to engage the upper edge of said rim band so as to maintain said pot in place, said shoulder and said flange being formed of the material of said bowl.

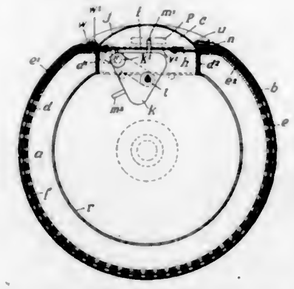
1,856,180. TRUING MECHANISM FOR GRINDING MACHINES. HARVEY M. ALLISON, Worcester, Mass., assignor to John Bath, Worcester, Mass. Filed May 21, 1930. Serial No. 454,461. 4 Claims. (Cl. 125—11.)

1. Truing mechanism for a grinding machine having a rotatably mounted grinding wheel comprising a slide, a supporting frame having an open center and mounted thereon to swing about a substantially vertical axis transverse to the axis of the grinding wheel, said frame having supporting bearings substantially above and below the axis of the grinding wheel and having the portion between the bearings offset away from the grinding wheel and beyond the vertical axis of said frame, a wheel dressing tool slidably mounted in said frame and supported in front of the vertical axis of said frame, means to swing



said frame to dress the segmental cutting edge of said wheel, and means to reciprocate said tool in said frame to dress the sides of the edge portion of said wheel.

1,856,181. ROTARY PRINTING CYLINDER. HERBERT BÜRKHOLDT, Stettin, Germany, assignor to the Firm of Carl Fr. Brauer, G. m. b. H., Stettin, Germany, a Joint-Stock Company of Germany. Filed Mar. 27, 1931, Serial No. 525,808, and in Germany Apr. 9, 1930. 8 Claims. (Cl. 101—119.)

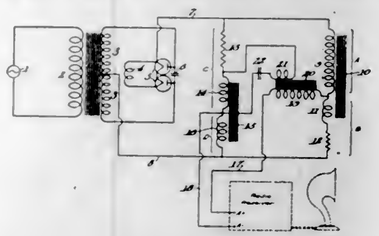


7. A printing cylinder having a permeable wall and formed with a longitudinal cutout portion, means for mounting a stencil on said wall, an inking chamber within said cylinder comprising a concentric cylinder formed with perforations and having a cutout portion corresponding in position to said cut-out portion of the outer wall, a slide between said permeable wall and said concentric cylinder and formed with perforations corresponding in position to the perforations of said concentric cylinder, said slide having a cut-out portion corresponding to the cut-out portions of said permeable wall and said concentric cylinder, bands connecting the open ends of said slide and each formed with slots separated from each other by a bridge, a shaft disposed longitudinally of said cylinder, disks secured to said shaft one for each of said bands, pairs of pins fixed to said disks in positions for engaging said slots and bridges, lugs secured to said disks and located in position for engaging the inner faces of said bands and for putting the same under tension, the lengths of said slots being such that the lugs engage the bands while the slots are out of contact with said bridges, and means for turning said shaft from without.

1,856,182. ELECTRICAL FILTER. GEORGE B. CROUSE, Woodcliff, N. J., assignor to Conner Crouse Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 29, 1927. Serial No. 243,409. 7 Claims. (Cl. 178—44.)

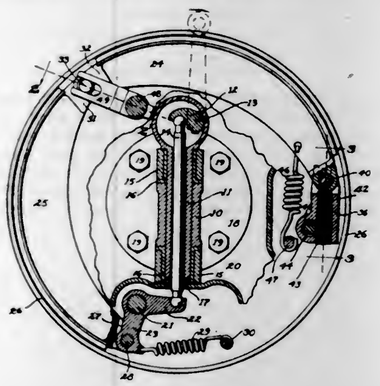
2. In apparatus for energizing an audion circuit from a source of rectified current, a pair of alternating current

paths adapted to be connected in parallel across said source, each of said paths including a pair of inductances



having reverse mutual inductance when traversed by current from said source, and the junctions of the inductances of each path serving as terminals for said audion circuit.

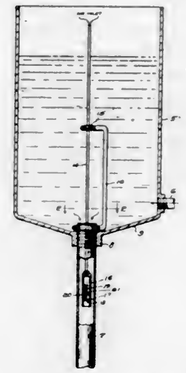
1,856,183. BRAKE. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 13, 1927. Serial No. 198,515. 7 Claims. (Cl. 188—194.)



1. In a brake, a brake anchor plate, a pair of brake shoes, means for pivotally and adjustably mounting one end of one of said shoes on the brake anchor plate, means for mounting one end of the second shoe on the brake anchor plate to swing same to render the brake shoes operative, means for pivotally connecting together the second ends of said brake shoes, and means for adjustably supporting the pivotal connection of said brake shoes, whereby they will automatically travel a predetermined distance from operative to inoperative position.

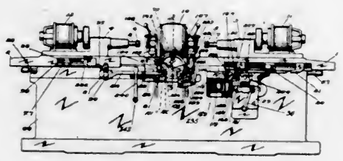
1,856,184. AIR INLET FOR TANKS. ERNEST C. GRUMMERT, Plymouth, Nebr. Filed May 7, 1930. Serial No. 450,553. 2 Claims. (Cl. 137—21.)

1. In apparatus of the character described, the combination with a tank, of a discharge pipe leading into the bottom of the tank, a substantially straight air supply pipe extending through the tank and having its upper end leading into the top of the tank, and its lower end leading into the upper open end of the discharge pipe and means for supporting the air supply pipe and holding the same in position, a valve casing connected with the lower end of the air supply pipe and having its lower end open and provided with an inner valve seat, and an upwardly seating spring-pressed check valve arranged within the valve casing to engage the valve seat, said valve casing having a closed chamber above the valve seat when the valve is seated, the arrangement being such that the valve is seated when the tank is being filled so that water cannot rise into the closed chamber of the valve casing,



and the valve is unseated by suction due to the downward travel of the water within the discharge pipe so that air from the chamber may discharge into said pipe.

1,856,185. GRINDING MACHINE. WALDO J. GUILD, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 9, 1928. Serial No. 276,381. 14 Claims. (Cl. 51—50.)



2. In a grinding machine, the combination with a pair of grinding wheels and means to rotate them, of a pair of tables or carriages upon which said grinding wheels are mounted, means to reciprocate said carriages, and separate means to synchronize their reciprocations that their simultaneous strokes occur always in opposite directions.

1,856,186. PRESERVATION OF OILS. FRITZ HOFMANN, Breslau, and MANFRED DUNKEL, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 14, 1928, Serial No. 285,499, and in Germany Nov. 24, 1925. 6 Claims. (Cl. 87—9.)

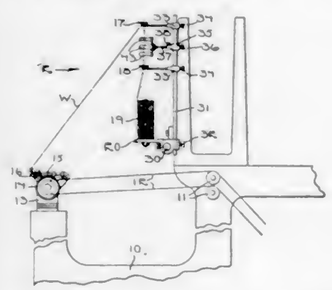
1. A composition of matter comprising a lubricating oil and 0.1 per cent by weight of tuluo-nitrile.

1,856,187. PROCESS OF PRODUCING CALCIUM NITRATE AND AMMONIUM SALTS FROM PHOSPHATE ROCK AND LIKE PHOSPHATE MATERIAL. ERLING JOHNSON, Odda, Norway, assignor to Firm: Odda Smelteverk A/S., Odda, Norway. Filed May 27, 1930, Serial No. 456,302, and in Norway May 30, 1929. 10 Claims. (Cl. 71—7.)

1. The process of producing calcium nitrate and ammonium salts from phosphate rock and like phosphate material, comprising treating the phosphate material with nitric acid to form a solution containing calcium nitrate and free phosphoric acid, crystallizing from said solution by cooling a greater part of the lime content of the

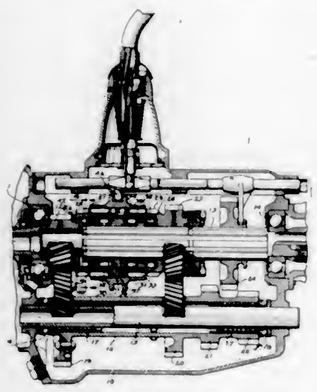
phosphate material as calcium nitrate, treating the mother liquor so obtained with an ammoniacal precipitant to precipitate calcium phosphates and to form a solution of ammonium salts, separating said solution from the precipitate, returning the latter to the process for fresh treatment with nitric acid and evaporating the solution of ammonium salts to dryness.

1,856,188. TENSION FOR YARN WINDERS. ELDRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1930. Serial No. 502,177. 4 Claims. (Cl. 242—153.)



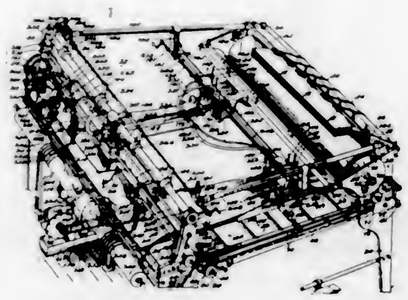
1. In a winder, an upright rod, a pair of spaced yarn guides mounted on the rod, a tension unit located between the guides and comprising a plurality of spaced elements fixed relatively to each other, and means to support the unit on the rod so as to assume a plurality of angular positions about the rod and with respect to a line joining the guides.

1,856,189. CLUTCH LUBRICATING MEANS. FRANK JOHNSON and ELMER GOULD SCHUBERT, Detroit, Mich., assignors to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Apr. 17, 1931. Serial No. 530,908. 6 Claims. (Cl. 192—113.)



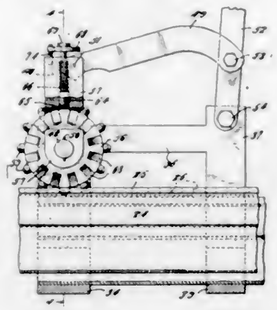
1. In a transmission, a pair of helical gears in mesh with each other, a clutch member extending axially from one of said gears, an overrunning clutch unit rotatably mounted in position aligned with said clutch member, and a plurality of conduits extending through said clutch member aligned with the teeth on said adjacent gear, whereby rotation of said helical gears will force lubricant axially through said openings into contact with the overrunning clutch mechanism.

1,856,190. SHEET FEEDING APPARATUS. EDWARD R. KAST, Pearl River, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed Mar. 8, 1928. Serial No. 260,123. 44 Claims. (Cl. 271—38.)



1. In a sheet feeder, the combination of a feed board, means for fanning out and feeding a bank of sheets along said board, floating means for preliminarily separating successive sheets, a device to be fed, suction means for forwarding said preliminarily separated sheets, and means for alining the sheets as they are presented to said device.

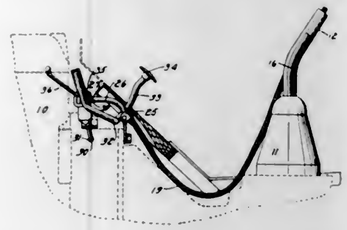
1,856,191. FEEDING MECHANISM FOR RECIPROCATING CONVEYERS. FRANK L. MCCARTY, Rock Springs, Wyo., GEORGE H. ERNSBARGER, Southgate, Calif., and JAMES V. MACDONALD, Rock Springs, Wyo., assignors, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 25, 1928. Serial No. 256,885. 13 Claims. (Cl. 198—220.)



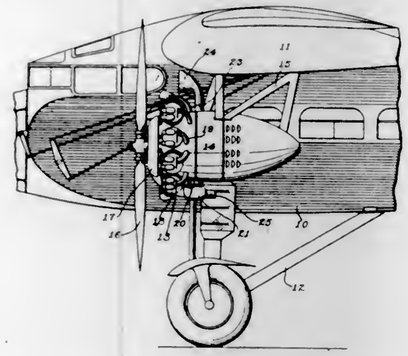
1. A loading and discharging attachment for a reciprocating conveyer comprising a trough slidable with respect to the conveyer, a combination sprocket wheel and ratchet adapted to extend or retract the trough and means to operate the wheel.

1,856,192. VEHICLE ENGINE ACCELERATOR. DALE ROEDER, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Apr. 1, 1931. Serial No. 526,829. 1 Claim. (Cl. 74—107.)

In a motor vehicle having a transmission gear shift lever, a shifter bail secured to the upper end of said lever, a handle pivotally secured to said lever just beneath the shifter bail, an accelerator rod rotatably mounted in position across the rear face of the engine, one end of said rod having an arm formed thereon operatively connected with the engine carburetor and the other end of said rod having a second arm formed thereon said arm extending through the vehicle floorboards in position to act as a foot accelerator pedal, a bail-crank lever pivotally mounted in position to manually actuate said foot accelerator arm, a second lever pivotally mounted in position to actuate said foot accelerator arm, a flexible housing secured to the upper end of the gear shift lever, said housing extending downwardly along the shift lever through the floorboards of the car and forwardly to position adjacent to the second mentioned lever, and a flexible shaft reciprocally mounted in said housing having its respective ends operatively connected to said handle and second mentioned lever, whereby gripping the shifter bail and handle simultaneously will actuate said accelerator rod to increase the speed of the engine.

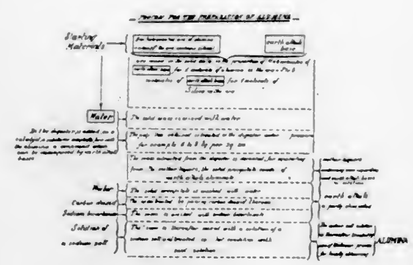


1,856,193. SUPERCHARGER FOR AIRPLANE ENGINES. HARRY L. RUSSELL, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed July 13, 1929. Serial No. 377,992. 1 Claim. (Cl. 244—30.)



In an airplane engine supercharger, an airplane having a pair of wings, an engine nacelle suspended beneath the under side of each of said wings, a radial type airplane engine secured to the forward end of each nacelle, an airplane propeller driven by each of said engines, an engine carburetor disposed entirely beneath the under side of each of said nacelles so as to be readily accessible for adjustment from the ground, an air scoop disposed in the slip stream of each propeller directly above the adjacent engine nacelle, and a vertical air intake pipe extending through each of said nacelles so as to connect each of said air scoops with the adjacent carburetor so that dust free air will be drawn into said carburetors even though they are disposed beneath the engine nacelles and in the occasionally dust enclosed lower portions of the propeller slip streams.

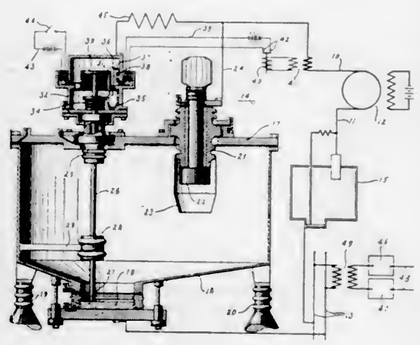
1,856,194. PROCESS FOR THE PREPARATION OF ALUMINA. JEAN CHARLES SEAILLES, Paris, France. Filed Sept. 12, 1927, Serial No. 219,168, and in France Sept. 18, 1926. 8 Claims. (Cl. 23—52.)



1. A process for the manufacture of alumina, comprising a first step of the treatment consisting in treating non-halogenated ores of alumina by alkali earth bases in the presence of water, in order to produce a hydrated alkali earth aluminate, a second step which consists in causing the said hydrated alkali earth aluminate to react with a sodium salt, the alkali earth salt corresponding to which is less soluble than the alkali earth aluminate, and a third step consisting in extracting the alumina from the sodium aluminate formed during the second stage.

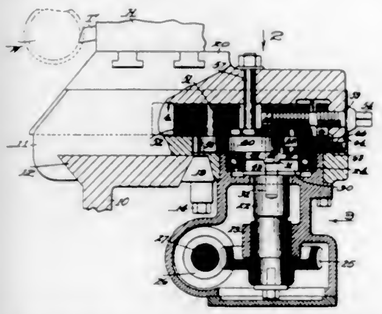
6. In a process for the manufacture of alumina by the wet treatment of non-halogenated ores of alumina by alkali earth bases, the simultaneous use of a plurality of alkali earth bases some of which afford the insoluble aluminates and the others soluble aluminates.

1,856,195. ELECTRICAL SWITCH CONTROLLING SYSTEM. MAURICE L. SINDEBAND, New York, N. Y., and OTHMAR K. MARTI, Haddonfield, N. J., assignors, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 14, 1929. Serial No. 332,283. 18 Claims. (Cl. 175—294.)



1. In an electrical system, an electrical transmission line, and means disposed in said line and operable to open and close the same; said means including a casing, an anode disposed within said casing, a cathode associated with said casing, and switch means disposed within said casing, said switch means being electrically connected to said anode and being supported for movement into and out of contacting engagement with said cathode.

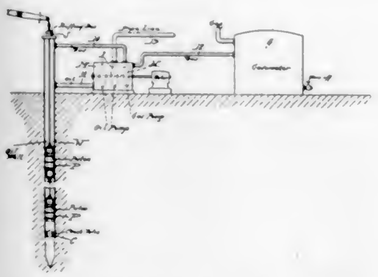
1,856,196. TOOL SLIDE AND ACTUATING MECHANISM THEREFOR. EDWIN R. SMITH and ALBERT SCHINKEZ, Seneca Falls, N. Y., assignors to Seneca Falls Machine Company, Seneca Falls, N. Y., a Corporation of Massachusetts. Filed Oct. 22, 1929. Serial No. 401,555. 16 Claims. (Cl. 82—24.)



1. In a machine tool, a stand, a tool slide mounted in guideways in said stand, an actuating cam for said slide, a cam follower positively positioned on said slide in front of said cam, and a second cam follower mounted on said slide and engaging the rear side of said cam, said second cam follower having a limited yielding movement on said slide.

6. In a machine tool, a stand, a tool slide mounted in guideways on said stand, a driven shaft vertically mounted in said stand, said shaft having a transverse slot and an axial opening at its upper end, a cam for moving said tool slide, said cam being mounted at the upper end of said shaft and having portions fitting said transverse slot and said axial opening and thereby locating said cam on said shaft, and devices on said slide engaged by said cam to move said slide toward and from the work.

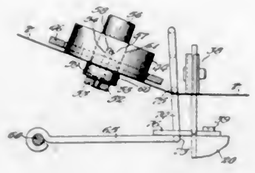
1,856,197. METHOD OF AND APPARATUS FOR EVACUATING OIL WELLS. LOUIS W. SOUTHGATE, Washington, D. C. Filed Nov. 17, 1928. Serial No. 320,203. 14 Claims. (Cl. 103—5.)



1. The method of evacuating an oil well which consists in first lifting fluids comprising oil and gas therein by pumping, then separating the gas from the oil, and assisting the lift of fluids by the application of suction applied to the fluids at a point beyond the point of separation.

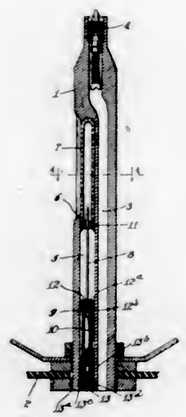
1,856,198. THREAD-WAXING DEVICE. ERNEST R. SWANSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 24, 1930. Serial No. 438,573. 13 Claims. (Cl. 91—36.)

1. A device for waxing thread comprising a holder for rotatively mounting a wax-cake, means for drawing the thread across a surface of the wax-cake, and means for constantly traversing the thread to give it a lateral movement radially of the axis of the wax-cake during its lineal



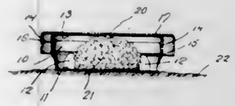
travel over the flat surface thereof whereby to rotate the wax cake and constantly present new surface to the thread.

1,856,199. GAUGE. ROSCOE G. TAGLE, Brooklyn, N. Y., and EDWIN H. CURRIE, East Orange, N. J., assignors, by mesne assignments, to George J. Watson, Brooklyn, N. Y. Filed Feb. 24, 1922. Serial No. 538,868. 7 Claims. (Cl. 73—111.)



6. A gauge, comprising a casing formed with a longitudinal recess and an elongated side opening located at one end thereof, a transparent element covering said opening, a movable indicator rod located within the longitudinal recess in position to show through the side opening, a washer fitted in the longitudinal recess below the side opening and formed with a guiding aperture through which the indicator rod passes, a stepped base member carrying the indicator rod and presenting at its lower side two cylindrical portions of different diameters, a stepped closing plug fitted air-tight in the lower end of the longitudinal recess and presenting at its upper side two cylindrical portions corresponding to those of the stepped base member, an extensible pressure tube attached at its opposite ends in an air-tight manner to the smaller cylindrical portions of the base member and closing plug, and a helical spring surrounding the pressure tube and attached at its opposite ends to the larger cylindrical portions of said base member and closing plug, the said closing plug being formed with an air passage extending therethrough.

1,856,200. INSECT TRAP. JESSE MERRITT TIPPEY, St. Petersburg, Fla. Filed July 1, 1931. Serial No. 548,188. 4 Claims. (Cl. 43—1.31.)



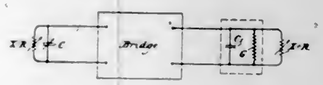
1. An insect trap of the character described including a receptacle to receive an absorbent element saturated with poison, a cover for the receptacle, said receptacle having openings adjacent the lower edge thereof, and a protecting hood carried by said cover and including a depending flange in spaced concentric relation about the body of the receptacle.

1,856,201. CLOSURE FOR CONTAINERS. FRANZ WIESE, Berlin-Wilmersdorf, Germany. Filed July 20, 1929, Serial No. 379,845, and in Germany May 6, 1929. 2 Claims. (Cl. 221—60.)



1. In combination with a container having a head of collapsible material, a neck portion consisting of a base piece and an offset smooth-walled discharge piece, a closure member consisting of an eye piece adapted to be mounted upon said offset piece of said neck portion to be pressed against said base piece of said neck portion and a U-shaped spring clamp having straight arms attached to a base rim of said eye piece and prevented from slipping sideways by the turned down flanges of the base rim, carrying a pivoted closure cap, said eye portion being rigidly connected to said neck portion by pressing it downwards by means of an accurately adjusted tool, patrix and matrix, against the base piece of the neck, simultaneously upsetting and compressing inseparably the material of said eye portion and the neck portion, whereby at the same time the edge of the neck discharge piece is expanded outwards and bent or beaded over the edge of the eye piece.

1,856,202. TESTING APPARATUS. LEON T. WILSON, Chatham, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 10, 1931. Serial No. 543,445. 19 Claims. (Cl. 175—183.)

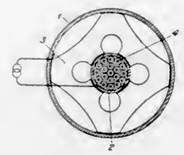


1. The method of measuring the conductance of an unknown element which consists in connecting the unknown in one arm of a bridge having a balancing arm, connecting normally equal resistances in shunt with the unknown and in the balancing arm respectively, and increasing the one resistance and decreasing the other by equal amounts until a balance is obtained, whereupon the conductance to be measured will be approximately a direct function of the change in resistance necessary to produce a balance.

1,856,203. PRODUCTION OF VAT DYESTUFFS. HUGO WOLFF and MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 8, 1928, Serial No. 298,394, and in Germany Aug. 18, 1927. 8 Claims. (Cl. 260—61.)

1. A process of producing new vat dyestuffs which consists in condensing a tetrahalogen-2.2'-dibenzanthronyl with an amino-anthraquinone.

1,856,204. COAXIAL CONDUCTOR SYSTEM. HERMAN A. AFFEL, Ridgewood, and ESTILL I. GREEN, East Orange, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed May 24, 1930. Serial No. 455,328. 6 Claims. (Cl. 178—44.)



4. A cable comprising a plurality of coaxial conductors forming means for high frequency transmission, and a plurality of pairs of insulated wires occupying certain portions of the cable not occupied by the coaxial conductors and substantially free from induction from said coaxial conductors.

1,856,205. FURRING BRACKET. ELDRIDGE ROGER BOYLE, Boston, Mass. Filed Mar. 9, 1929. Serial No. 345,790. 8 Claims. (Cl. 72—118.)



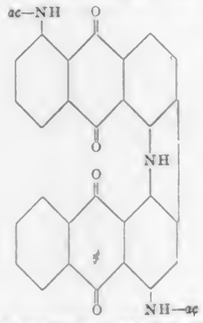
1. A furring bracket including a hollow body portion having an open front wall, a nail-holding member in said body portion, a flexible tongue extending transversely of the opening in said front wall and means integral with said body portion and extending rearwardly therefrom for anchoring the bracket and its load to a building wall or the like.

1,856,206. METHOD OF MAKING FOOD COMPOUNDS. MICHAEL J. BRIDGMAN, Jerome, Idaho. Filed Apr. 9, 1929. Serial No. 353,900. 1 Claim. (Cl. 99—4.)

A process of homogenizing honey and butter to form a free flowing syrup, which consists in heating a mixture of approximately 92% of pure liquid honey and 8% creamery butter to a temperature of approximately 150° Fahrenheit and then passing the mixture through a mixer at approximately three thousand pounds pressure.

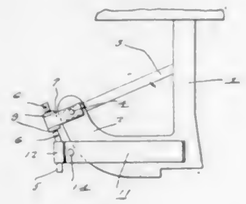
1,856,207. ANTHRIMIDO-CARBAZOLES. HERMANN BRUNS, FRITZ BAUMANN, and MAX KUGEL, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1929, Serial No. 343,846, and in Germany Mar. 3, 1928. 5 Claims. (Cl. 260—46.)

1. The process which comprises heating a 5.4'-diacidyldiamino-1.1'-anthrimido-carbazole of the general formula:



wherein the *ac*'s stand for organic acidyl residues and wherein the anthraquinone nuclei may be substituted, in strong sulfuric acid solution to a temperature not exceeding about 60° C. for some time.

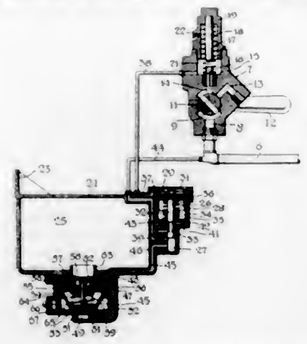
1,856,208. PLANTER ATTACHMENT. CHARLES D. BURKLE, Geneva, Iowa. Filed July 25, 1931. Serial No. 553,148. 2 Claims. (Cl. 97—225.)



1. An attachment for planters of the type having a seed depositing spout and a shoe on the lower portion of the spout and extending forwardly and upwardly therefrom, comprising an angular rod having a substantially vertically disposed lower portion and a forwardly inclined upper portion having a series of openings therein, a bracket for mounting the rod in position on the shoe forwardly of said shoe, said bracket including a strip of metal bent upon itself to provide a loop encircling the rod, means securing the bracket to the shoe, collars on the rod above and below the bracket, cotter pins selectively insertable through the openings in the rod for securing said rod in position on the bracket, and a pair of integral diverging ground leveling wings mounted on the substantially vertical lower portion of the rod and extending rearwardly therefrom on opposite sides of the shoe.

1,856,209. AIR BRAKE. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Dec. 28, 1929. Serial No. 417,143. 10 Claims. (Cl. 303—72.)

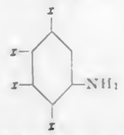
1. The combination with a retainer valve operable to open and bleed brake cylinder pressure down to a definite value and then close, of a delayed action exhaust means put into action by the closing of the retainer valve and



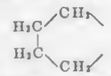
serving to hold and then vent the remaining brake cylinder pressure.

1,856,210. MANUFACTURE OF NEW ISATINES. HANS COLOMBARA, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 22, 1929, Serial No. 349,273, and in Germany Mar. 27, 1928. 11 Claims. (Cl. 260—47.)

1. Process which comprises reacting upon a salt of a compound of the probable formula:



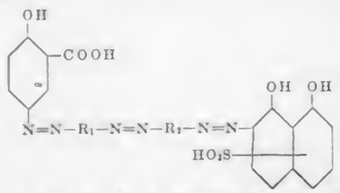
wherein at least one *x* stands for a monovalent substituent of the group consisting of halogen atoms, alkayl-, nitro- and alkoxy groups and the remaining *x*'s stand for hydrogen, or two vicinal *x*'s stand for the grouping—



the other *x*'s meaning hydrogen or a monovalent substituent of the group consisting of halogen atoms, alkyl-, nitro- and alkoxy groups, with an oxalylhalogenide in an inert organic solvent and causing ring formation of the oxaminic acid halogenide formed, by means of an aluminium halogenide in the presence of an inert organic solvent.

1,856,211. NEW SECONDARY TRISAZODYESTUFFS. ERNST FELLMER and HEINRICH HOYER, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 4, 1930, Serial No. 479,792, and in Germany Sept. 11, 1929. 3 Claims. (Cl. 260—72.)

1. As new products azodyestuffs of the probable general formula:



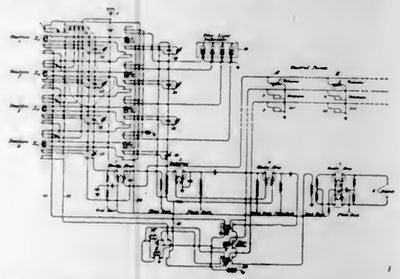
wherein R_1 and R_2 stand for naphthalene nuclei and wherein all nuclei may be further substituted by alkyl, alkoxy or a sulfonic acid group, being in the form of their

alkali metal salts watersoluble dark powders, dyeing cotton, viscose and mixed fabrics containing viscose grey shades of good fastness to light which shades are unaffected by brightening and are not boiled off.

1,856,212. PROCESS OF PREPARING 1.4-DIAMINOANTHRAQUINONE. SEBASTIAN GASSNER and FRITZ BAUMANN, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 13, 1931, Serial No. 522,515, and in Germany Feb. 8, 1927. 3 Claims. (Cl. 260—60.)

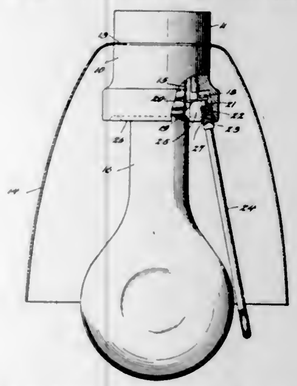
1. Process which comprises heating leuco-1.4-diaminoanthraquinone in nitrobenzene-solution in the presence of a small amount of piperidine.

1,856,213. RADIO RECEIVING APPARATUS. BAXTER P. HAMILTON, River Edge, N. J., and WILTON T. REA, Flushing N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed July 2, 1929. Serial No. 375,380. 3 Claims. (Cl. 250—20.)



1. Apparatus for translating a plurality of different carrier channels, an input circuit connected to said translating apparatus, a plurality of selective circuits for tuning said input circuit for a desired one of said carrier channels, a series of progressively operated relays for progressively connecting said selective circuits to said input circuit, different volume adjusting means adapted to be connected to said input circuit by said series of relays, and switching means for starting the progressive operation of said series of relays, for stopping said operation and for restoring said relays to normal.

1,856,214. LOCKING SOCKET. GERALD J. HENRY, Boston, Mass., assignor to Pass & Seymour, Inc., Solvay, N. Y., a Corporation of New York. Filed Aug. 20, 1928. Serial No. 300,777. 2 Claims. (Cl. 173—356.)

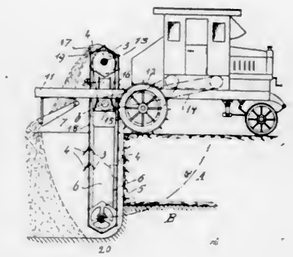


1. In a lamp socket, in combination, an outer shell, a screw shell therein, a flat annular peripheral face on said outer shell adjacent the open end of said screw shell, a lamp locking mechanism for said socket having an operator engageable through an opening in said face, said face having a grooved track thereon including said opening concentric with said screw shell to guide a key to said operator.

1,856,215. PROCESS OF MAKING VAT DYESTUFFS OF THE ANTHANTHRONE SERIES. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Dec. 4, 1929, Serial No. 411,674, and in Germany Dec. 10, 1928. 5 Claims. (Cl. 260—61.)

1. The process which comprises halogenating anthanthrone in an aqueous suspension.

1,856,216. MACHINE FOR DIGGING UP GROUND. MAX JAEGER, Wesselburen, Germany, assignor to Hedwig Olga Susette Krüger, Washington, D. C. Filed Mar. 4, 1930, Serial No. 433,100, and in Germany Mar. 8, 1927. 6 Claims. (Cl. 37—87.)



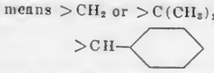
1. A machine for digging up ground from below the surface comprising an excavator, a chain operatively connected with said excavator, a row of buckets on the outer side of said chain, a row of buckets on the inner side of said chain, means at the lower end of said excavator for breaking up the material encountered by said lower end and for conveying it to the buckets of said inner row, and means on said chain for keeping separate the contents of the buckets in each row.

1,856,217. WOOL AZO DYESTUFFS AND PROCESS OF MAKING SAME. GEORG KALISCHER and RUDOLF SCHUELE, Frankfort-on-the-Main, and HANS SCHINDHELM, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 11, 1930, Serial No. 481,346, and in Germany Sept. 17, 1929. 8 Claims. (Cl. 260—77.)

1. Process which comprises tetrazotizing a diamine of the general formula—

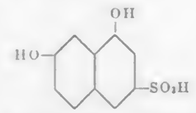


(wherein X means $>CH_2$ or $>C(CH_3)_2$ or



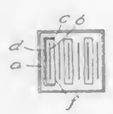
and all benzene nuclei may be substituted by alkyl or alkoxy groups), comprising the tetrazo compound thus pro-

duced with 2 molecules of combining components, at least one of which is 2.8-dihydroxy-naphthalene-6-sulfonic acid of the formula—



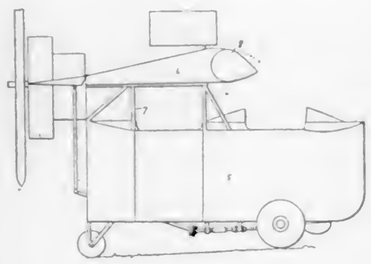
and causing an arylsulfochloride of the benzene series to react on the alkaline solution of the formed dyestuffs.

1,856,218. ELECTROLYTIC APPARATUS. ALBERT EDGAR KNOWLES, Heswall, England. Filed Mar. 30, 1931, Serial No. 526,210, and in Great Britain May 5, 1930. 4 Claims. (Cl. 204—5.)



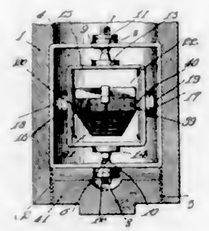
2. Electrolyte apparatus for the production of gases by the decomposition of an electrolyte comprising a cell containing electrolyte, electrodes of opposite polarity therein, gas collecting means above the electrodes, enclosures of material permeable by the electrolyte for, at least, alternate electrodes and an enclosure with sides of unequal thickness for the electrode which will be adjacent to a wall of the container that side which is toward the wall as well as each end of this enclosure being of durable thickness of material.

1,856,219. AEROPLANE. EVERETT H. LANGE, Bridgeton, Mo. Filed June 5, 1931. Serial No. 542,420. 2 Claims. (Cl. 244—12.)



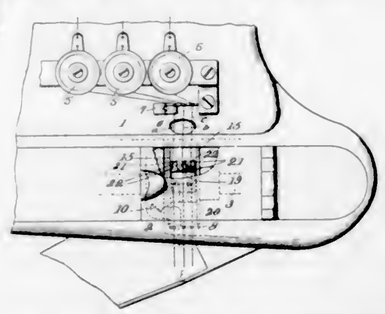
1. In an aeroplane, a wing having a leading edge member rockable therein, stabilizers rockable on the trailing edge of the wing, and means for operating the leading edge member and the stabilizers in unison for adjusting the effectiveness of the lifting capacity of the wing, said means comprising a crank on the leading edge member, a link connected thereto, cross links connected to the stabilizers, a rod, means for slidably and rockably mounting the rod, a stick for sliding and rocking the rod, means operatively connecting the rod with the first mentioned link to pull and push on the link when the rod is slid back and forth respectively, a second rod, universal connection between the rod, a cross head on the second rod to which the cross links are engaged.

1,856,220. BORE HOLE SURVEYING INSTRUMENT. ART A. LEASE and JOSEPH F. PETERS, Jr., Lead, S. Dak. Filed July 3, 1930. Serial No. 465,694. 4 Claims. (Cl. 234—1.)



1. A bore hole surveying instrument comprising means for measuring the depression angle of the bore hole and means for measuring the direction angle of the bore hole, said means for measuring the direction angle being contained within said depression angle measuring means, and sealably separated therefrom.

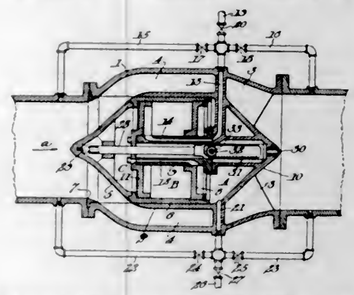
1,856,221. THREAD CONTROLLER FOR SEWING MACHINES. HAROLD J. LE VESCONTE, Western Springs, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 19, 1930. Serial No. 453,783. 7 Claims. (Cl. 112—248.)



1. A thread controlling mechanism for sewing machines including a rotatable thread controlling element, thread guides associated therewith for directing a thread into engagement with said element in a direction at right angles to its axis of rotation, said thread controlling element having a radially projecting portion adapted to engage and take up said thread, a recess or groove at one side of the thread engaging portion, and stationary stripping means disposed relative to said thread engaging element so that the thread will be caused to engage with the stripping means and be stripped from the thread engaging portion of the controlling element during the rotation of the same.

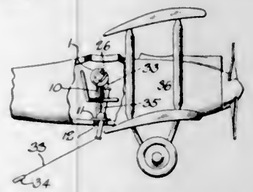
1,856,222. COMBINED FLOW CONTROL AND CHECK VALVE. LESLIE N. MCCLELLAN, PHILLIP A. KINZIE, JOHN L. SAVAGE, and CHARLES M. DAY, Denver, Colo., assignors to Universal Hydraulic Corporation, Denver, Colo., a Corporation of Colorado. Filed Jan. 18, 1929, Serial No. 333,459. 8 Claims. (Cl. 137—139.)

1. A combined flow control and check valve, having a valve body, a bearing member arranged therein and providing a fluid flow passage therethrough, a flow control member carried by said bearing member and slidable relatively thereto and to said body for controlling the flow of fluid through said passage, a diaphragm carried by said bearing member and a piston carried by said control member and providing a plurality of pressure chambers within said members, means for supplying fluid from the body of fluid controlled to said chambers, and valve-controlled means for equalizing the pressure in the sev-



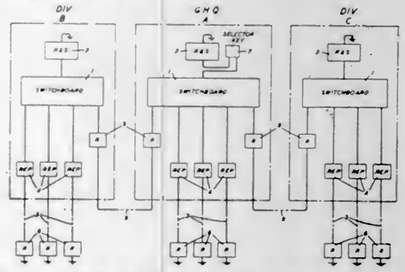
eral chambers and operable in response to differencies in pressure therein as reflected by movement of said control member.

1,856,223. ANTENNA REEL. CARLOS B. MIRICK, Washington, D. C., assignor to National Electrical Supply Company, Washington, D. C., a Corporation of Virginia. Filed July 30, 1929. Serial No. 382,234. 5 Claims. (Cl. 173—367.)



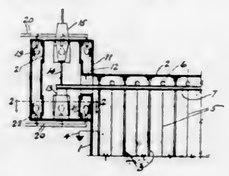
1. An antenna reel for aircraft radio communication systems comprising in combination with an antenna wire, a reel of insulation material for receiving said antenna wire in coiled form thereon, a support for rotatably mounting said reel, a braking device carried by said support and positioned adjacent said reel, said braking device having a plurality of stop positions, means carried by said reel for engaging said braking device at a selected stop position, and an electrical connection between the antenna wire on said reel and said means, said connection being completed through said braking device when said means on said reel is engaged with said braking device for fixing the position of said reel with respect to said braking device.

1,856,224. TELEGRAPH COMMUNICATION SYSTEM. DONALD B. PERRY, Maplewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 21, 1930. Serial No. 462,890. 9 Claims. (Cl. 178—2.)



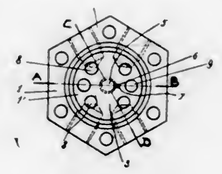
1. A printing telegraph system of the type used for broadcasting messages from a central station to a plurality of remote stations, said remote stations in turn rebroadcasting the messages to a plurality of branch stations local to each remote station characterized in this, that the remote stations are normally not in condition to rebroadcast messages received by them and that a special circuit arrangement is utilized at the remote stations for conditioning apparatus at said stations for automatically rebroadcasting, said circuit arrangement being responsive to code signals from said central station.

1,856,225. MEANS FOR HIGH TENSION INSULATION. HEINRICH BERNHARD RÜDER, Frankfort-on-the-Main, Germany, assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed June 17, 1930, Serial No. 461,831, and in Germany July 17, 1929. 2 Claims. (Cl. 183—7.)



1. In combination with a high tension insulator, a casing surrounding and spaced from said insulator and having a portion formed of material adapted to transmit radiant heat, and heat radiating means positioned at the opposite side of said casing from said insulator and adapted to cause radiation of heat through said heat transmitting portion of the casing onto the surface of said insulator.

1,856,226. MULTIPLE-WAY VALVE. LOUIS DÉSIRÉ AUGUSTE RUSTIN, Clichy-La-Garenne, and ALFRED JEAN GUSTAVE BOLARD, Vernon, France, assignors to "Rusbol," Societe à Responsabilite Limitee, Clichy, France, a Corporation of France. Filed June 25, 1929, Serial No. 373,591, and in France July 12, 1928. 5 Claims. (Cl. 251—90.)

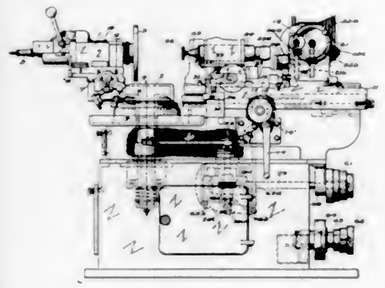


1. A multiple-way valve comprising a casing formed with inlet and outlet openings and a valve seat adjacent the latter, a rotatable disc constructed for cooperation with said valve seat to form a valve proper, said disc including a series of holes positioned on a circle the center of which coincides with the axis of said disc which coincide with certain of said openings when said disc is rotatably adjusted to the proper position and means for pressing said disc against said valve seat and simultaneously securing the same in its adjusted position, said means including a spring-pressed ball mounted within said casing in position to engage within one of said holes.

1,856,227. GRINDING MACHINE. JOSEPH DYSON SCAIFE, Nottinghamshire, England, assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 16, 1929, Serial No. 332,859, and in Great Britain Dec. 19, 1928. 12 Claims. (Cl. 51—97.)

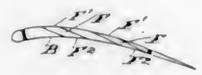
1. A grinding machine of the kind described comprising a headstock for a workpiece, a rotatable shaft for a

grinding wheel, means for moving said shaft endwise, to dispose said wheel in grinding position and a crank mo-



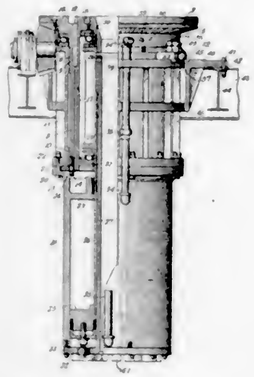
tion for moving said shaft transversely to said endwise movement to bring said grinding wheel into and out of grinding engagement with said workpiece.

1,856,228. AEROPLANE. JOHN SHARP, Cleveland, Ohio. Filed July 20, 1927. Serial No. 207,049. 2 Claims. (Cl. 244—12.)



1. An aeroplane wing having a series of angular perforations parallel and adjacent to its retreating edge, the perforations being inclined forwardly from the lower to the upper side of the wing.

1,856,229. WELL DRILL. WALDO SHELDON, South Norwalk, Conn., assignor to Sheldon Machinery Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 11, 1928. Serial No. 298,949. 23 Claims. (Cl. 255—22.)



1. A well drill, comprising a bed plate having a large diameter deep seat, a long bearing sleeve detachably mounted in relatively fixed relation in said deep seat, a rotary table journalled in said long bearing sleeve, an annular power cylinder of larger external diameter than the bore of said rotary table but less than the diameter of said deep seat and disposed beneath said bearing sleeve, a drive sleeve slidingly keyed in the table and an annular piston operating in the annular power cylinder and having a power applying connection with the drive sleeve.

1,856,230. CAP. ABRAHAM SILBERSTEIN, New York, N. Y. Filed Mar. 10, 1932. Serial No. 597,924. 1 Claim. (Cl. 2—201.)

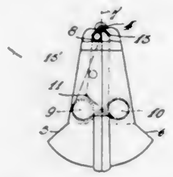


A cap comprising a circular knitted body portion closed at one end and open at its other end, said body portion comprising upper and lower sections, each of said sections having an intermediate bulge and united by a constricted portion, the free edge of the lower section being reinforced and folded outwardly over into position about said constricted portion, the fold line being at the bulge of said lower section.

1,856,231. PRODUCTION OF NITROANTHRAQUINONE. HAROLD T. STOWELL, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 4, 1927. Serial No. 196,632. 11 Claims. (Cl. 260—57.)

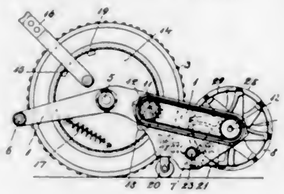
1. In the nitration of anthraquinone, the process which comprises reacting a nitrating agent with the reaction-mixture obtained by condensing o-benzoyl-benzoic acid to anthraquinone in the presence of sulfuric acid.

1,856,232. GRAB. WILLEM VOORWINDE, Rotterdam, Netherlands. Filed Mar. 4, 1931, Serial No. 520,014, and in the Netherlands Mar. 12, 1930. 2 Claims. (Cl. 37—184.)



1. In an automatic grab, the combination of two jaws, a hinge-like joint connecting together said jaws, at least one cable carrying said grab, at least one pulley on each jaw, one portion of the cable running over said pulleys and fixed to a fixed point of one jaw, and a support on the grab for supporting that portion of the cable between the last pulley and said fixed point, for the purpose set forth.

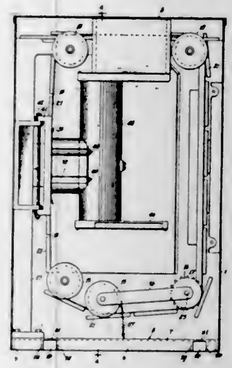
1,856,233. LAWN MOWER. ERNST BERGWALL, Varnamo, Sweden. Filed Nov. 27, 1929, Serial No. 410,122, and in Sweden July 7, 1927. 2 Claims. (Cl. 56—252.)



1. A lawn-mower having rotating knives arranged in front of driving wheels in the direction of travel for mowing purposes, comprising a handle for moving the machine forwards which is articulated to a part rotatably arranged on the machine frame, which part is caused to abut against said frame, at a position limited by said frame, by means of one or more springs arranged between

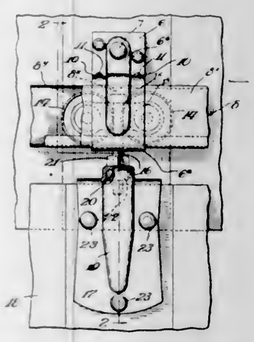
the frame and said part, said springs being adapted, when moving down the handle, to act upon the front end of the frame to swing said end up about the axle of the driving wheels, so that said handle subjects said part to a rotary motion against the action of said springs by means of an abutment on said part.

1,856,234. VIEW CHANGING APPARATUS. WILFRED T. BIRDSALL, Montclair, N. J., assignor to Trans Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Original application filed June 8, 1926, Serial No. 114,404. Divided and this application filed Dec. 15, 1926. Serial No. 154,872. 4 Claims. (Cl. 88—28.)



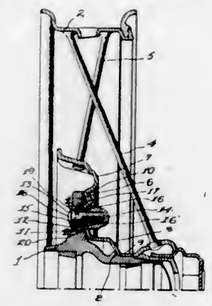
1. In a projector, a conveyor formed of an endless band of sheet material having a plurality of apertures therein, a slide holder for each one of said apertures, each holder being secured to said conveyor at points substantially intermediate the length of the apertures in the direction of its movement.

1,856,235. SLIDING DOOR STRUCTURE. LOUIS A. BITTORF, Sterling, Ill., assignor to National Manufacturing Company, Sterling, Ill., a Corporation of Illinois. Filed July 17, 1930. Serial No. 468,477. 1 Claim. (Cl. 16—105.)



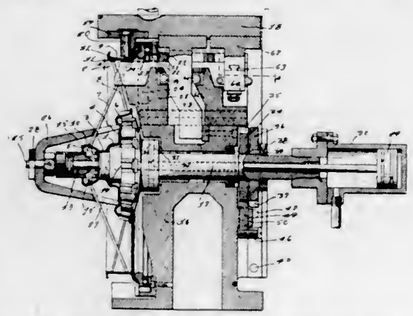
An apparatus of the character described, comprising a track, a carriage supported by and movable along said track, a depending connector freely rotatably connected to the carriage, said connector having a threaded end portion and an exposed unthreaded intermediate portion adapted to be engaged for adjusting the connector, a bracket member adapted to be attached to the door, said bracket having a horizontally disposed inwardly projecting portion substantially overhanging the upper edge of the door and a hollow rectangular rib open at one end formed in the horizontally disposed portion of the bracket and adapted to receive the threaded portion of the connector, an adjusting nut positioned within the rib through its open end and engaging a wall of the rib so as to be held against rotation for cooperating with the threads of the connector to adjust said door vertically as the connector is rotated relative to the nut, without disturbing the assembly relation between the carriage and the connector, and a lock nut carried by the connector and engaging the adjacent side of the rib for maintaining the connector and door in their adjusted positions.

1,856,236. MEANS FOR SECURING WHEEL BODIES TO WHEEL HUBS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Jan. 24, 1927. Serial No. 163,288. 6 Claims. (Cl. 301—9.)



6. In a vehicle wheel, the combination of a hub member having a radially outwardly extending flange, a plurality of angularly movable bolts loosely mounted in said flange to permit said angular movement relative thereto and secured against axial displacement, a wheel body member adapted to be secured to said flange, inter-engaging means upon said wheel body member and hub member to positively center said wheel body member on said hub member, said wheel body member being provided with a plurality of holes to freely receive said bolts, and nuts threaded upon said bolts and securing said wheel body member to said hub member.

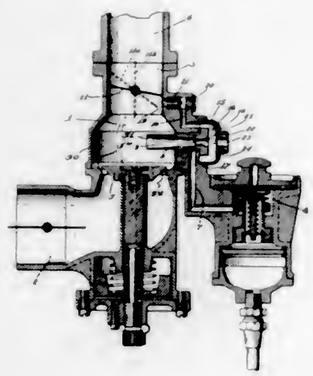
1,856,237. MACHINE FOR RIVETING SPOKES OF VEHICLE WIRE WHEELS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed July 11, 1927, Serial No. 204,980. Renewed Oct. 9, 1930. 6 Claims. (Cl. 78—49.)



4. In a riveting machine for wire wheels having a hub shell and a rim member, the combination with a base, of a rotatable shaft journaled upon said base, an annular

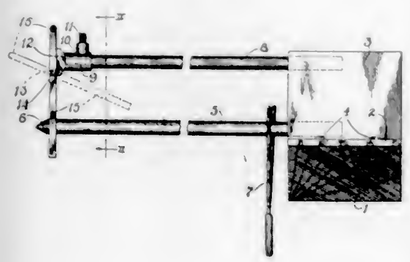
abutment mounted upon and rotatable with said shaft and provided with a recess in its front face, a chuck carrying a wheel assembly and having a driving projection engageable in the recess aforesaid, an automatically actuated clamp operable to hold the hub shell upon the chuck and to also hold the latter with its projection engaging in the recess of said abutment, and means for riveting the spokes of the wheel assembly to the rim member thereof.

1,856,238. CARBURETOR. Robert F. Bracke, Chicago, Ill., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed July 5, 1927. Serial No. 203,294. 7 Claims. (Cl. 261—55.)



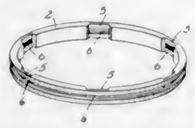
1. An economizer for carburetors having an induction passage and a fuel delivery Venturi tube, one end of which extends into said induction passage and the other end of which extends exteriorly of the carburetor, and dependent in its operation upon pressure at the atmospheric end of said tube, comprising means, including an air passage communicating with said induction passage at one end and with the atmospheric end of said Venturi tube, for reducing the pressure at the atmopheric end of the Venturi tube whereby the amount of fuel delivered into the induction passage is reduced.

1,856,239. CLOTHES ASSEMBLING RACK. Matthew J. Buckley, Milwaukee, Wis. Filed Apr. 11, 1929. Serial No. 354,206. 4 Claims. (Cl. 211—4.)



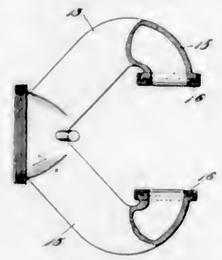
3. An assembling rack comprising an article support, a member thereabove, a removable sleeve thereon, removable means for securing said sleeve on said member, a stop on said sleeve, and a latch pivoted on said stop for coaction therewith and with said article support.

1,856,240. PROCESS OF MAKING PISTON RINGS. Tracy V. Buckwalter, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Original application filed Oct. 17, 1930, Serial No. 489,413. Divided and this application filed May 1, 1931. Serial No. 534,165. 4 Claims. (Cl. 29—156.63.)



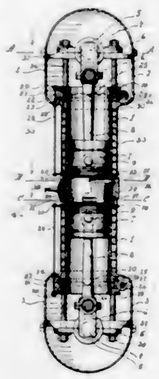
1. The improvement in the process of making piston rings which consists in forming longitudinal grooves in the inner surface of a circumferentially grooved ring, the longitudinal grooves being of sufficient depth to communicate with the circumferential groove.

1,856,241. TURRET STANDPIPE AND MANUFACTURE THEREOF. John T. Corley, Providence, R. I., assignor to J. M. Baker Pattern Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Nov. 15, 1929, Serial No. 407,348. Renewed Sept. 22, 1931. 3 Claims. (Cl. 299—73.)



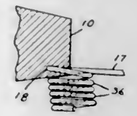
1. A tubular Y-shaped head member for a turret standpipe, comprising a pair of end plates each having a finished working face in aligned parallel relationship, the back of each plate having projections, and a Y-shaped body member having inturned ends molded in alignment with said plates and in engagement with said back and projections.

1,856,242. INTERNAL COMBUSTION ENGINE. Faitz C. L. d'Aix, Chicago, Ill. Filed Sept. 30, 1927. Serial No. 223,120. 12 Claims. (Cl. 123—51.)



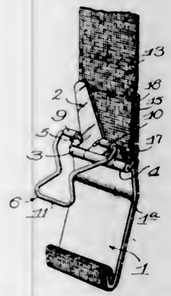
2. An internal combustion engine, including a cylinder open at both ends, pistons in said cylinder, casings having each an open end communicating with and surrounding an end of said cylinder, crank shafts having each a bearing in one of said casings and driven by one of said pistons, equalizing rods connecting said bearings, valves and a shaft carrying worm gears for actuating said valves.

1,856,243. FILAMENT FOR INCANDESCENT ELECTRIC LAMPS. John William Ekstedt, Belleville, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed July 8, 1926, Serial No. 121,156. Divided and this application filed Dec. 21, 1926. Serial No. 156,089. 3 Claims. (Cl. 176—40.)



1. A filamentary body composed of a wire free from tensional stress having a diametrical dimension of between ½ to 5 mils coiled to helical form by a pushing operation.

1,856,244. FABRIC HOLDING DEVICE. Alexander D. Elliott, Chicago, Ill. Filed Dec. 1, 1930. Serial No. 499,189. 3 Claims. (Cl. 24—248.)



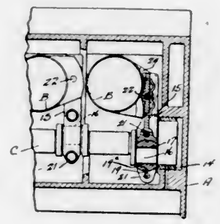
1. A fabric holding device comprising a member adapted ao be positioned beneath a piece of fabric, a jaw hinged to said member, said jaw comprising a movable part and a fabric engaging part adapted to engage an end of the fabric and grip the same between said engaging part and member, said movable part being provided with a projecting tongue overlying said fabric engaging part and adapted to clamp or release the fabric upon movement thereof, a pintle member for said hings, said pintle member having its ends bent rearwardly and substantially parallel to said hinge, and a supporting fabric for holding said device in position and for covering the rear portion thereof, said fabric having an end secured to said member and having an intermediate portion folded upon itself and adapted to engage with the ends of said pintle member.

1,856,245. CAR ROOF. Edwin G. Franck, Detroit, Mich., assignor to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed May 25, 1931. Serial No. 539,942. 3 Claims. (Cl. 105—377.)



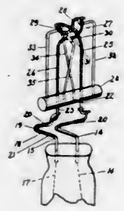
1. A roof for gondola type open cars comprising a series of rigidly connected roofing sheets extending from eaves to eaves and pitched from ridge to eaves, depending flanges from the eaves ends of said sheets and across the end of the car, flanges extending laterally inward from said depending flanges arranged in he same plane at eaves and at the car end to rest upon the upper edge of the gondola body, and means for clamping said flanges to said body.

1,856,246. SLEEVE VALVE ACTUATING MECHANISM. Walter A. Frederick, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Original application filed Mar. 14, 1927, Serial No. 175,333. Divided and this application filed Dec. 6, 1928. Serial No. 324,205. 3 Claims. (Cl. 287—87.)



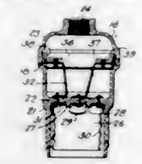
1. In a device of the character described for operating sleeve valve means and having a driving shaft provided with a crank and a driven link associated therewith; driving connections between said link and driving shaft including complementary spherical bearing members surrounding the crank and immovable axially thereof, said link having a spherical socket segment adapted to receive a portion of the spherical bearing, a complementary segmental bearing cap adapted to receive a second portion of the spherical bearing, means securing the cap to the link so as to form with the said spherical socket segment a spherical socket substantially enclosing the spherical bearing and permitting universal movement of the link relative to said crank, said spherical bearing members being provided with a groove, and means releasably engaging said groove for holding said bearing members together.

1,856,247. INCANDESCENT ELECTRIC LAMP. Daniel Snyder Gustin, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 23, 1928. Serial No. 287,726. 7 Claims. (Cl. 176—39.)



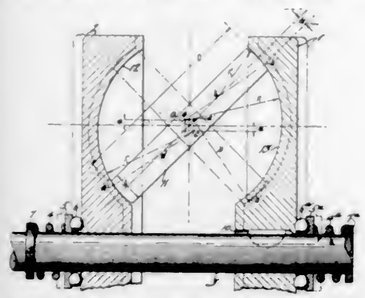
1. An electrical device comprising a press, a bulb, a filament supporting structure including a non-conductive cross-bar, a plurality of support members having ends embedded in said cross-bar and with hooked portions on their free ends, said free ends being disposed in adjacent relation, a hooked filament disposed in said hooked portions, additional support members extending through said cross-bar, and having their upper ends connected with the terminal of said filament, and resilient means connecting the lower end of said last mentioned support members with said press.

1,856,248. ELECTRICAL SOCKET. HARRY RANNEY HALE, Montreal, Quebec, Canada, assignor to Hale Brothers Limited, Montreal, Canada. Filed Sept. 9, 1929. Serial No. 391,431. 1 Claim. (Cl. 173—358.)



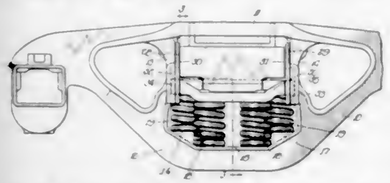
An electrical socket comprising a casing of insulating pressed material constituting the screw cap and connection chamber and the reduced socket proper divided from the connection chamber by a ribbed partition of the same material as the casing and pressed and moulded therewith and having threaded holes therethrough, metal connecting members in said socket chamber connected by screws in said threaded holes to terminals in said connection chamber, and a spaced insulating disk slotted and secured to said terminals.

1,856,249. FRICTION TRANSMISSION. FRANK A. HAYES, Middletown, N. J. Filed July 18, 1930. Serial No. 468,764. 6 Claims. (Cl. 74—26.)



1. In a variable speed friction transmission mechanism, in combination, a pair of coaxial axially separated disks adapted for relative axial movement and provided with inwardly facing annular grooves, a friction roller cooperating frictionally with the groove surfaces and adjustable angularly to vary the speed ratio of the mechanism, and yielding pressure means tending to produce relative movement of approach of the disks; the profile centers of the grooves being at different radial distances from the disk axis whereby as the roller is adjusted to different angular positions the axial separation is varied with consequent change in the pressure exerted by the yielding means.

1,856,250. CAR TRUCK. WILLIAM C. HEDGCOCK, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 15, 1927. Serial No. 212,914. Renewed June 10, 1930. 3 Claims. (Cl. 105—106.)

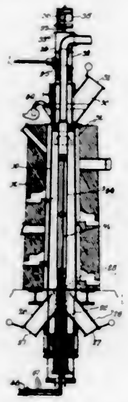


1. An integral side frame casing comprising, a compression member, a tension member and columns connecting said members, each column extending upwardly and inwardly from said tension member and thence vertically upwardly, the vertical portions of each of said columns having a groove in their opposed faces providing stepped guiding surfaces adapted to cooperate with a spring cap and a flat uninterrupted bearing face adapted to cooperate with a bolster.

1,856,251. PROCESS OF MANUFACTURE OF ORGANIC ACID ANHYDRIDES. WILLY O. HERBMANN and HANS DEUTSCH, Munich, Germany, assignors to Consortium für Electrochemische Industrie, Munich, Germany. Filed Apr. 9, 1928, Serial No. 268,794, and in Germany Apr. 11, 1927. 5 Claims. (Cl. 260—123.)

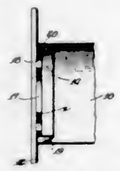
1. In the manufacture of organic acid anhydrides by boiling a mixture of a vinyl ester of an aliphatic monocarboxylic acid and an aliphatic monocarboxylic acid in the presence of a catalyst which, when hydrolyzed under the conditions of the reaction, produces a mineral acid, the step of immediately distilling off the resulting aldehyde continuously with its formation as soon as the ester-acid mixture begins to boil.

1,856,252. PROCESS OF CARBONIZING COAL. OTTO H. HERTEL, Chicago, Ill. Filed Dec. 4, 1925. Serial No. 73,171. 5 Claims. (Cl. 202—26.)



1. A process of carbonizing coal that will go through an exothermic reaction accompanied with plasticity upon being heated to a predetermined temperature which consists in heating a definite batch of coal just sufficiently to initiate such exothermic reaction in the batch, and maintaining the batch under mechanical pressure while the batch is plastic and while setting, while allowing gas and vapors to escape, the material being at rest while setting.

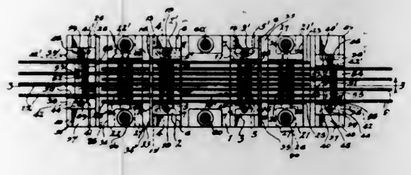
1,856,253. SPOOL OR REEL. HILYARD C. HOWSAM and ANTHONY HLAVAC, Chicago, Ill., assignors to Hubbard Spool Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 14, 1931. Serial No. 508,703. 7 Claims. (Cl. 242—123.)



1. In a structure of the class described, the combination of a cylindrical barrel formed of sheet metal, heads for said barrel formed of sheet metal, a sheet metal hub

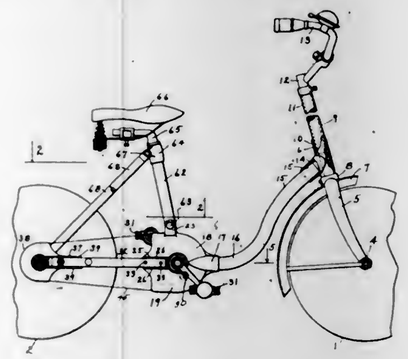
extending inwardly from each head concentric therewith and having its inner end bent outwardly and back to form an annular seating and retaining flange, the ends of said barrel being adapted to fit and receive said hub flanges, abutments deflected from said barrel for springing into interlocking engagement with the edges of said flanges when said heads are applied by pressure to said barrel ends, said abutments and flanges forming an interlocking connection between the barrel and heads to prevent relative axial displacement, said hub flanges having notches, and tongues deflected from said barrel to engage in said notches for locking said barrel and heads against relative rotational displacement.

1,856,254. ELECTRICAL SWITCH. JOSEPH E. JEWETT, Buffalo, N. Y., assignor to National Aniline and Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 424,912. 9 Claims. (Cl. 200—16.)



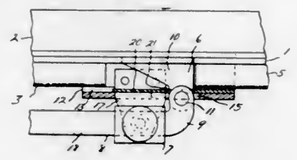
1. An electric switch comprising a base plate, main bus bars of opposite polarity secured to the base plate in insulated contact therewith and electrically insulated from each other, and a lineally movable contactor member movable into and out of contact with the bus bars to electrically connect or disconnect bus bars of opposite polarity.

1,856,255. VELOCIPEDE. WILFRED G. JOHNSON, Elyria, Ohio, assignor to The Colson Company, Elyria, Ohio, a Corporation of Ohio. Filed Aug. 21, 1930. Serial No. 476,737. 16 Claims. (Cl. 208—106.)



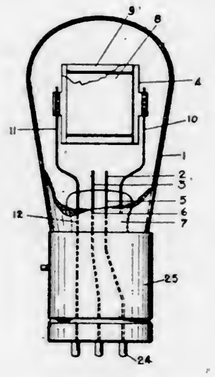
1. In a velocipede or the like, a crank housing comprising enclosing upper, lower, front and side walls, a crank shaft having rotational bearing in the side walls, pedal cranks on the ends of the shaft exteriorly of the side walls, a driving sprocket wheel on the shaft within the housing between the side walls, a rear axle housing comprising enclosing upper, lower, rear and side walls, a pair of opposite laterally disposed tubular extensions on the side walls thereof, a rear axle extending through the tubular extensions and axle housing, rotary bearing supports for the axle in the tubular extensions, a driven sprocket wheel on the axle within the axle housing coplanular with the said driving sprocket, and a sprocket chain on said sprocket wheels.

1,856,256. OPERATOR FOR WINDOWS. CLYDE W. KELLY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 31, 1928. Serial No. 329,533. 8 Claims. (Cl. 268—118.)



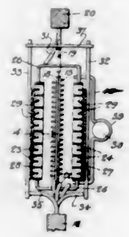
1. An operator for the movable ventilator of a window having a screen located at the inner side of the window frame and provided with an opening, comprising a member connected to the ventilator and extending through the opening in the screen, mounting means for said operator including a support upon which the operator is movable and a bracket secured to the inner side of the window frame and pivotally carrying said support, and a closure carried by said bracket and movable relative thereto upon annular movement of said support for closing the screen opening.

1,856,257. RECTIFIER. ERNEST ANTON LEDERER, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 29, 1924. Serial No. 728,988. 1 Claim. (Cl. 250—27.5.)



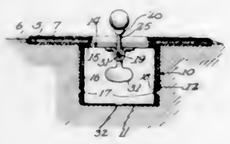
A gaseous discharge device comprising an envelope having a press and containing a monatomic gas at a reduced pressure, a pair of anodes therein in substantially unshielded close spaced relationship, said anodes being of relatively small area to permit a discharge to pass therebetween sufficient to ionize said gas at normal operating voltages and a cathode operating in the absence of thermionic emission, said cathode being of a large size relative to the anodes, whereby when an alternating current is applied between each of the anodes and the cathode, the discharge in one direction is substantially suppressed, said cathode being supported by the press and having a coating of a low voltage drop material thereon, the space intervening between both anodes and the cathode being unobstructed.

1,856,258. ELECTRON DISCHARGE DEVICE WITH CÆSIATED CATHODE. ERNEST A. LEDERER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 1, 1927. Serial No. 236,977. 5 Claims. (Cl. 250—27.5.)



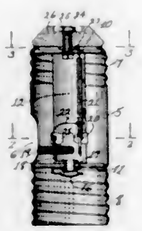
1. A cathode for an electron discharge device comprising a number of turns of fine wire having a cæsiated surface and provided with a heating element having a surface substantially free of cæsium electrically insulated therefrom.

1,856,259. GOLF TEE. RICHARD J. LYONS, Mundelein, Ill. Filed Jan. 5, 1928. Serial No. 244,635. 3 Claims. (Cl. 273—33.)



1. A tee device comprising a plate having an opening formed therein, a supporting element disposed beneath the plate, a member movably mounted on said element and having means projecting upwardly through the opening for holding a golf ball, and a receptacle for holding said element and member comprising a cover secured to the plate and provided with depending side walls and a body member detachably connected to the cover and having walls engaging slidably the sidewalls of said cover.

1,856,260. ELECTRIC PLUG WITH MAKE AND BREAK DEVICE. BERNARD F. MULDOON, Mountainview, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Filed Mar. 22, 1927. Serial No. 177,248. 15 Claims. (Cl. 200—115.5.)

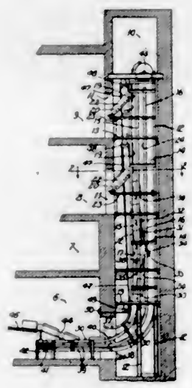


1. In an electric light plug containing a make and break device, a shell having screw threads at the ends thereof, discs of insulating material spaced apart and enclosed in said shell near opposite ends thereof, one of the members of said make and break device being supported by one of said discs and the other by the other one of said discs.

1,856,261. COATING SURFACES OF IRON OR STEEL. WILLIAM M. PHILLIPS, Birmingham, and GUY M. COLE, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 26, 1929. Serial No. 335,384. 6 Claims. (Cl. 204—1.)

1. The process of treating articles having surfaces of iron or steel comprising exposing such surfaces in a bath containing a solution of zinc phosphate, and passing current through the bath and the article as cathode to effect an electrolytic deposition of zinc upon such surfaces.

1,856,262. CONVEYER. AUGUST J. REBSTOCK, St. Louis, Mo., assignor to The Rebstock Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 28, 1930. Serial No. 447,868. 4 Claims. (Cl. 198—169.)



2. A conveyer comprising a frame having its major portion extending substantially vertically and its lower portion extending at an angle thereto; a traveling conveyer movable in said frame; operating means for said conveyer; means for selectively discharging said articles at predetermined vertically spaced elevations; and a single means fixedly below said lowermost discharge point for tilting said articles prior to their discharge at any point.

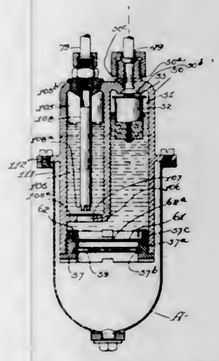
1,856,263. METHOD OF PRODUCING ALKALI METAL SALTS OF ORGANIC ACIDS. EBENEZER EMMET REID, Baltimore Md. assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 343,550. 19 (Cl. 260—116.)

1. The process of producing an alkali metal salt of an organic acid, which comprises dehydrogenating a saturated aliphatic alcohol with a caustic alkali at a temperature of greater than 300° C. and a pressure of greater than 100 atmospheres.

1,856,264. METHOD OF SEPARATING ZIRCONIUM, TITANIUM, AND HAFNIUM. MALCOLM N. RICH, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 28, 1927. Serial No. 236,382. 18 Claims. (Cl. 23—23.)

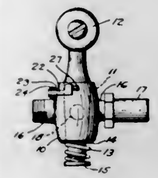
3. The method of separating titanium, zirconium and hafnium which comprises forming substantially pure admixed double alkali metal sulfate compounds of these elements, and separating these compounds according to their relative solubilities in sulfuric acid solutions.

1,856,265. FUEL FEEDING APPARATUS OPERATED BY PRESSURE. EDWARD A. ROCKWELL, New York, N. Y., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Original application filed Aug. 2, 1923, Serial No. 655,236. Divided and this application filed Mar. 3, 1926, Serial No. 92,027. Renewed Dec. 8, 1928. 14 Claims. (Cl. 103—164.)



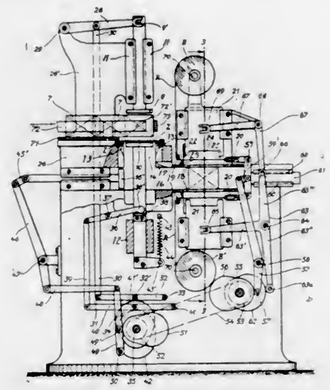
1. In a construction for the purpose indicated, a main source of liquid, a liquid container connected for receiving liquid by flow from the main source; a check valve preventing return flow; means for effecting changes of pressure on the liquid in said container; an air trapping chamber connected for receiving liquid from said container; a check valve preventing return flow toward the container; a liquid discharge conduit having intake at the lower part of the air trapping chamber and leading upwardly for liquid discharge, and a removable jacket extending below and around the container enclosing the same from the lower end thereof, upwardly to a level a substantial distance above the said first mentioned check valve, the connection for liquid supply from the main source to the container being made by connection with said jacket at a level above said check valve.

1,856,266. VALVE LOCK. BOLESLAW SAKOWICZ, Chicago, Ill., assignor of one-half to Fillmon Wasilewski, Chicago, Ill. Filed May 23, 1931. Serial No. 539,452. 3 Claims. (Cl. 251—164.)



1. In a valve including a casing and a valve plug positioned and adapted for rotary movement therewithin for opening or closing of the valve, a lever arm hingedly mounted upon said casing, said casing being provided with an opening, said valve plug being provided with a pair of spaced and radially extending bores, said opening and said bores being upon the same horizontal plane, a pin mounted upon one end of said lever arm, said pin being adapted to extend through said opening, a bushing positioned within each of said bores, said pin being adapted to enter one of said bushings when said valve plug is rotated into one or the other direction, and a strip connecting said bushings, said strip being receivable within a recess made at the intermediate peripheral portion of said valve plug and between said bushings.

1,856,267. METHOD OF FORMING BOX PARTS. JOHANNES SCHMIEDEL, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Filed Feb. 8, 1930, Serial No. 426,886, and in Germany Feb. 11, 1929. 7 Claims. (Cl. 93—56.)



1. A method of forming box parts from blanks by means of a forming block and forming corner joints by means of binding strips consisting in shaping by means of a single forming block of suitable width two box parts in a single working operation and laying the binding strips around the two box parts resting on the forming block in the same working operation.

1,856,268. WASHING MACHINE. VICTOR E. SCHMIEDEKNECHT, Louisville, Ky. Filed July 5, 1928. Serial No. 290,540. 4 Claims. (Cl. 74—38.)



1. In a mechanical movement, an oscillatable element and means to oscillate said element including a crank wheel, a driven shaft carrying said crank wheel, an eccentric associated with said wheel and having its axis of rotation concentric with the axis of the shaft, means to support said eccentric for adjustment about its axis independently of the wheel, an eccentric strap surrounding the eccentric, a crank pin on the strap, means carried by the wheel to rotate the strap on the eccentric, and an operative connection between the pin and oscillatable element.

1,856,269. METHOD AND MEANS FOR ROLLING CHANNEL SECTIONS. PAUL A. SCHULZ and HARRY K. MAXWELL, Bethlehem, Pa., assignors to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Sept. 25, 1930. Serial No. 484,354. 5 Claims. (Cl. 80—60.)

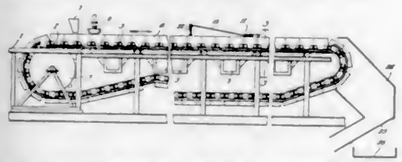
1. In a process for rolling channel sections, the steps of forming a blank having spaced flanges on one side

thereof, and spaced heels on the other side disposed approximately opposite to the flanges, rolling the blank



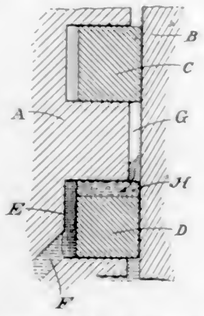
alternately in a main stand of a universal mill to reduce the web and flanges by means of flange and web engaging rolls and in a supplemental mill to reduce the heel portions.

1,856,270. MEANS FOR PRODUCING FINE SINTER RETURNS. EDWARD W. SHALLOCK, Chicago, Ill., assignor to American Ore Reclamation Company, Chicago, Ill., a Corporation of New York. Filed Apr. 27, 1931. Serial No. 533,150. 12 Claims. (Cl. 266—21.)



2. In combination, in a sintering machine comprising a traveling grate structure, means for depositing upon the grate material to be sintered, means for igniting the upper surface of the bed of material, and a plurality of finger-like members disposed to penetrate the upper portion of the bed to a predetermined depth and held against movement in the direction of travel of the grate structure.

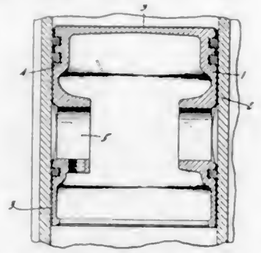
1,856,271. PISTON RING. DEAN M. SOLENBERGER, Cleveland, Ohio, assignor to The Simplex Piston Ring Company of America, Inc., a Corporation of Ohio. Filed Oct. 31, 1930. Serial No. 492,550. 4 Claims. (Cl. 74—109.)



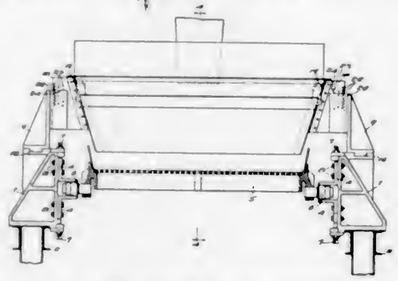
1. A piston ring having its peripheral face initially transversely tapered at an angle to the axis of the cylinder of not over 3°, and an aperture through the ring between the upper and lower edges thereof whereby said tapered face will eventually wear into parallelism with the cylinder wall, thereby sealing said aperture.

1,856,272. PLATED PISTON. CALEB E. SUMMERS, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 13, 1930. Serial No. 474,935. 7 Claims. (Cl. 74—108.)

1. The combination with a cylinder and piston having cooperating surfaces of ferrous metal of a coating integrally united with one of said surfaces consisting of a thin layer of a metal of high anti-friction bearing qualities and sufficiently plastic to yield at the areas of greater pressure during the operation of the parts to thereby prevent seizing of the piston.

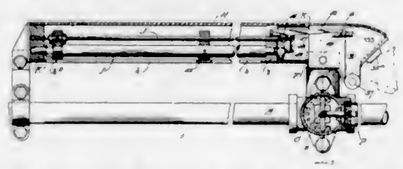


1,856,273. SINTERING MACHINE. GEORGE E. SWINEHART, Buffalo, N. Y., assignor, by mesne assignments, to American Ore Reclamation Company, Chicago, Ill., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 436,925. 11 Claims. (Cl. 214—35.)



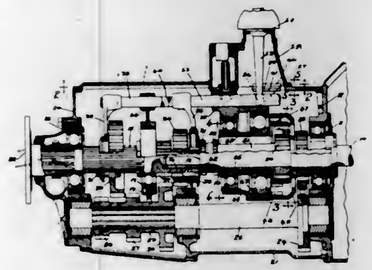
10. In a sintering machine, a traveling grate structure, a plate above the grate structure, and means for delivering material against the rearward face of the plate in a freely flowing stream, said delivering means and the plate being so related as to cause the material to collect upon the grate structure at the rear of the plate and in a pile the rearward surface of which is inclined downward and rearwardly at a predetermined angle such that the heavier particles of the material will be delivered upon the grate by gravity prior to delivery of the lighter particles of material whereby the material is caused to be deposited upon the grate in a bed comprising a lower layer of coarse particles and an upper layer of fine particles.

1,856,274. TEMPERATURE RESPONSIVE DEVICE. EMIL TYDEN, Hastings, Mich. Filed June 30, 1930. Serial No. 464,946. 7 Claims. (Cl. 297—12.)



1. A temperature-responsive device comprising a pair of bars of substantial length, a supporting structure in which said bars are mounted extending longitudinally in the same general direction, one of said bars being several times greater in cross section than the other, the supporting structure comprising a fixed head at each end, the two bars being mounted fixedly with respect to each other at their end portions which extend toward one of said fixed heads, the greater bar being mounted fixedly at the other end in the other fixed head and the lesser bar being mounted movable longitudinally with respect to said other fixed head, and means for controlling the operation of an associated apparatus, said means being carried by said supporting structure and operatively associated with the lesser bar for longitudinal movement thereby in the movement of the longitudinally movable end portion of the latter due to its elongation in excess of that of the greater bar.

1,856,275. CHANGE SPEED TRANSMISSION MECHANISM FOR MOTOR VEHICLES. ROSCOE BERINGER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 30, 1925. Serial No. 72,334. 4 Claims. (Cl. 74—58.)



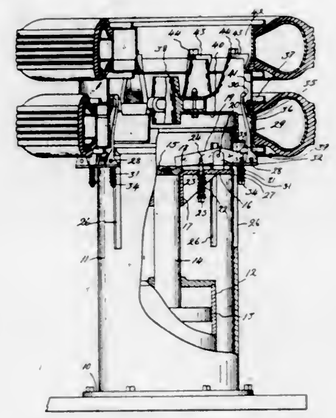
1. In change speed transmission gearing for motor driven vehicles, and in combination, a main driving shaft; a transmission shaft arranged in alignment with said driving shaft; a counter shaft arranged to one side of said main driving and transmission shafts; gearing whereby said counter shaft is driven by said main driving shaft; a plurality of cooperating pairs of gears carried by said counter and transmission shafts and whereby the latter may be driven at a plurality of speeds by said counter shaft; a clutch member carried by said main driving shaft; a second clutch member arranged adjacent said first mentioned clutch member; gearing whereby said second mentioned clutch member is driven by and at a higher speed than that of said main driving shaft; and a combined gear and clutch member slidable upon and nonrotatably connected with said transmission shaft and adapted when in one position to mesh with one of the gears upon said counter shaft, and when in another position to interlock with the first mentioned clutch member aforesaid, and when in the third position to interlock with the second mentioned clutch member aforesaid, to thereby secure the driving of said transmission shaft through one or the other of said clutch members.

1,856,276. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1930. Serial No. 484,511. 12 Claims. (Cl. 108—5.4.)



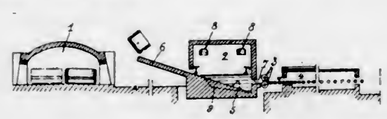
1. A car roof comprising roof sheets adapted, arranged and joined together to form two series of panels, the panels of one series being disposed at one level and the panels of the second series being disposed at a higher level and alternating with the panels of the first series, the seam construction comprising an upstanding flange along the side of a lower panel and a depending flange along the side of the adjacent upper panel that covers said first mentioned flange and extends below the top of said first mentioned flange far enough for driving rivets through them; and a seam reinforcing member, said flanges and reinforcing member being riveted together by rivets which extend through both of said flanges and said reinforcing member.

1,856,277. WHEEL ASSEMBLY MACHINE. WILLIAM A. COTES, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Feb. 3, 1930. Serial No. 425,654. 14 Claims. (Cl. 157—5.)



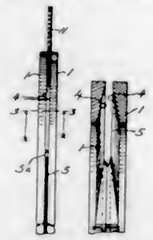
11. In a device of the character described, a support for a wheel and a rim loosely associated with said wheel, a rim engaging member, an actuating member, and means operable upon continuous movement of said actuating member in one direction to first move said rim engaging member from a position without the rim to a position within said rim and to then move said rim engaging member to force said rim into firm engagement with said wheel.

1,856,278. PROCESS AND PLANT FOR THE CASTING OF ROUGH PLATE GLASS. GEORGES PAUL DESPRET, Paris, France, assignor to Compagnies Reunies des Glaces & Verres Speciaux du Nord de la France, Boussois-sur-Sambre, France. Filed July 13, 1929, Serial No. 377,955, and in France Aug. 23, 1928. 1 Claim. (Cl. 49—87.)



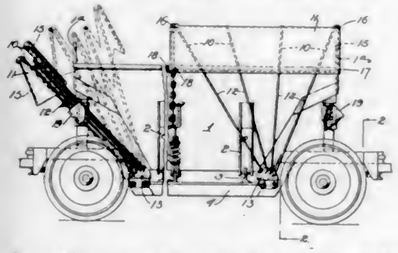
In a process for the continuous casting of relatively thin rough plate glass by starting from glass melted and fully refined in crucibles, the steps consisting in pouring separately and successively the contents of crucibles into a small container, the capacity of which somewhat exceeds the capacity of one crucible but is less than its double, each crucible being poured before the whole contents of the crucible previously poured into said container has been rolled in heating said container for maintaining the glass contained therein at the casting temperature, and in directly rolling said glass into a plate as it is flowing out of said container so as to form an uninterrupted thin ribbon of rolled glass with the contents of said crucibles.

1,856,279. METHOD OF MAKING PISTON RINGS. ERNEST R. HELLMAN, Detroit, Mich. Original application filed July 11, 1930, Serial No. 467,275. Divided and this application filed Jan. 15, 1931. Serial No. 508,986. 3 Claims. (Cl. 29—156.63.)



2. A method of forming piston rings consisting in initially producing a pair of substantially identical annular castings each having cored in one of its side faces a plurality of similar circumferentially spaced bevels, such as to progressively reduce the thickness of said castings toward their inner peripheries, establishing said members in coaxial juxtaposition with their beveled sides contiguous, and cutting a circumferential groove, intersecting said bevels, jointly in the outer peripheries of said members.

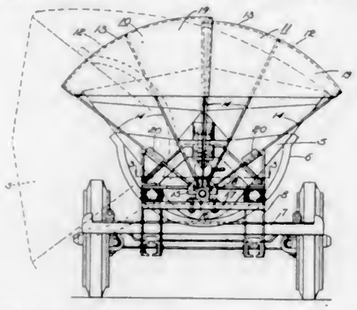
1,856,280. COLLAPSIBLE COVER FOR DUMP BODY VEHICLES. HARRY W. HELMS, Detroit, Mich., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed May 9, 1931. Serial No. 536,105. 11 Claims. (Cl. 296—100.)



1. In a vehicle having a main frame and an upwardly open laterally tiltable dump body mounted thereon, a cover for enclosing the load-carrying space of the body, and means for supporting the cover independently of the body including a plurality of supporting members pivotally connected to the frame and adapted to swing said cover longitudinally clear of the body to afford unobstructed access to the load-carrying space thereof, and to permit said body to be tilted laterally for discharging its load.

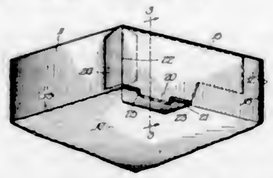
1,856,281. COVER FOR DUMP BODY VEHICLES. HARRY W. HELMS, Detroit, Mich., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed May 9, 1931. Serial No. 536,106. 1 Claim. (Cl. 296—100.)

In combination with a vehicle having a main frame, an upwardly open laterally tiltable dump body mounted thereon, the main frame having transversely extending track rails for supporting the dump body and the dump body having supporting rockers by which it is mounted on said track rails for rocking transversely in lateral dumping; a cover for the body comprising two arcuate sections adapted to be telescoped with each other in the direction of their arcuate extent, and for that purpose having radial supports by which they are pivotally mounted on the main frame for swinging over the pivot axis substantially in the path of their arcuate form, the radius and length of said radial supports exceeding the dimension of the dumping body from the upper edge of either side thereof to the point on the circumference of the rocker at the opposite side which is rocked into contact with the track rail at the extreme dumping position of



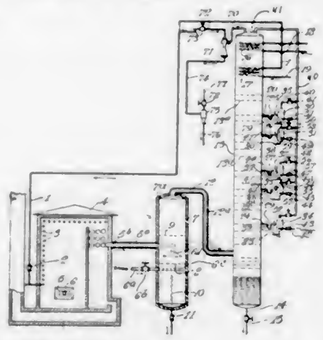
the dump body, whereby when one of said arcuate sections is telescoped with the other at the normal position of the latter for uncovering the dump body at one side, the dump body rocked for dumping at that side, swings clear of the two telescoped cover members.

1,856,282. BOX CONSTRUCTION. MITCHEL E. HOLT, Chicago, Ill., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed Apr. 7, 1930. Serial No. 442,059. 6 Claims. (Cl. 229—34.)



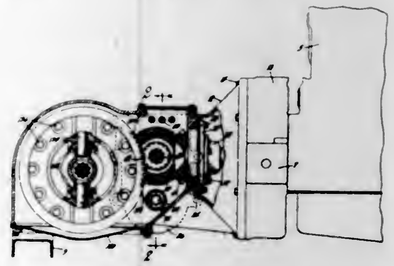
1. A box of the character described formed from a blank having a center panel and side and end walls and flaps extending from the ends of the side walls, and other flaps carried by said first named flaps, cut from material within the confines of said end walls, and adapted to lie against said center panel when the box is in set-up position.

1,856,283. METHOD FOR RECTIFYING PETROLEUM OILS. PERCY C. KEITH, Jr., Bernardsville, N. J., assignor to The M. W. Kellogg Company, New York, N. Y., a Corporation of Delaware. Filed July 10, 1928. Serial No. 291,609. 5 Claims. (Cl. 196—77.)



1. In the fractionation of petroleum oil in a rectifying column operating under vacuum having a plurality of rectifying zones under low absolute pressures in communication, the method of stripping fractional condensates withdrawn from a plurality of said zones which comprises discharging such fractional condensates separately into auxiliary rectifying zones in free and unrestricted communication with the upper part of said rectifying column.

1,856,284. DIVIDED TRANSVERSELY MOUNTED CHANGE SPEED FOR FRONT WHEEL DRIVES. ALPHONSE JOSEPH LAVOIE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 15, 1930. Serial No. 481,931. 14 Claims. (Cl. 74—57.)



1. In power transmission mechanism, a drive shaft, a propeller shaft, said shafts positioned in a substantially right angular relation, other aligned shafts parallel with said propeller shaft and one adjacent each end thereof, a coupling between the adjacent ends of said other shafts, driving means between said driving shaft and said other shafts, selective change speed gearing between each of said other shafts and said propeller shaft, a pinion carried by said propeller shaft, axles, and a differential connecting said pinion and said axles.

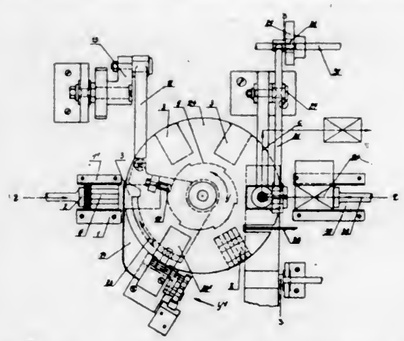
1,856,285. GUN. CHARLES F. LE FEVER, Plymouth, Mich., assignor to Daisy Manufacturing Company, Plymouth, Mich., a Corporation of Michigan. Filed Oct. 14, 1929. Serial No. 399,635. 6 Claims. (Cl. 124—10.)



1. In a gun, the combination with a barrel, of a spring actuated plunger within said barrel, a tubular guide arranged beneath and parallel to said barrel, a handle sleeved upon said guide and adapted to compress said spring during its rearward movement, a hollow frame for receiving the rear end portion of said barrel and guide, a sear and trigger mounted in said frame in cooperative relation to said plunger and means for securing said barrel and guide in said frame permitting attachment and detachment thereof without disturbance of said sear and trigger.

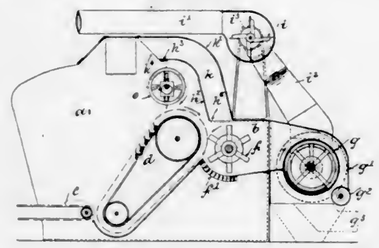
1,856,286. APPARATUS FOR INSERTING CIGARETTES OR OTHER GOODS IN PACKETS. JOHANNES NEFF, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Filed Nov. 23, 1929, Serial No. 409,292, and in Germany Aug. 19, 1929. 8 Claims. (Cl. 93—7.)

1. Apparatus for inserting cigarettes or other goods in containers and for wrapping the cigarettes comprising a turntable adapted for intermittent rotation, said turntable formed with peripheral pockets, a cover plate and a bottom plate for said turntable, a wrapper feeding device adapted to place a wrapper in front of a pocket, a plunger adapted to push the goods into said pocket and to entrain the wrapper, means for folding inwards the end of the wrapper, means for presenting a second wrapper



transversely of the first wrapper opposite the filled pocket and means for ejecting the goods from said pocket and into a container and effecting entrainment of the second wrapper.

1,856,287. HOPPER BALE OPENER, HOPPER FEEDER, AND LIKE APPARATUS FOR OPENING AND CLEANING COTTON OR LIKE FIBROUS MATERIAL. TOM NUTTALL, Farnworth, near Bolton, and SYDNEY ALFRED SHORTER, Didsbury, Manchester, England; said Shorter assignor to The British Cotton Industry Research Association, Manchester, England, a British Association. Filed Sept. 29, 1930, Serial No. 485,190, and in Great Britain Oct. 10, 1929. 2 Claims. (Cl. 19—79.)

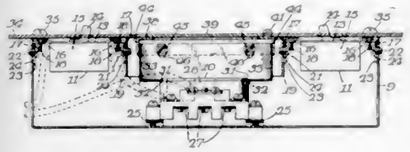


1. A hopper bale opener, hopper feeder or like apparatus for opening and cleaning cotton and having front compartment and substantially closed rear compartment to said hopper and cotton lifting and regulating contrivances and a beater in the rear of the lifting contrivance, a revolvable dust cage device combined with the substantially closed rear compartment, and air suction means, and with suction-affected conduit provision leading from the front compartment of the hopper to the beater in the rear compartment, and with dirt outlet below the revolvable beater, the rear compartment being enclosed between revolving beater and the revolvable dust cage and with dust trunk connection between the revolvable dust cage and the suction means, and whereby the operative treatment is partly pneumatic and partly mechanical as set forth.

1,856,288. SWITCH PANEL. ELMER L. OGLE, Aurora, Ill., assignor to All-Steel-Equip Company, Aurora, Ill., a Corporation of Illinois. Filed Sept. 10, 1927. Serial No. 218,794. 14 Claims. (Cl. 247—10.)

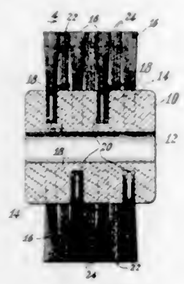
1. In a panel board, a tub, a partition within said tub, supporting bars, means for adjustably mounting said bars

on said partition and tub, said means comprising fastening elements for engaging slots in said bars whereby said bars may be adjusted inwardly and outwardly within



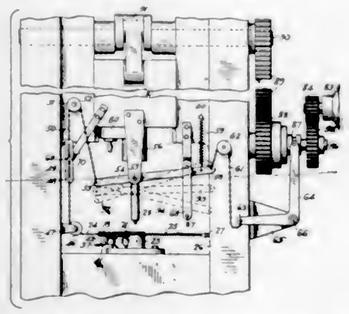
said tub, and a plurality of switch elements mounted on said bars, said elements having operating levers, and a finishing plate mounted on said tub and having openings through which said levers extend.

1,856,289. COMBINED BRUSH AND BUFFER DEVICE. THOMAS OWENS, Harrison, N. J., assignor to William Dixon, Incorporated, Newark, N. J., a Corporation of New York. Filed July 15, 1931. Serial No. 550,850. 3 Claims. (Cl. 15—181.)



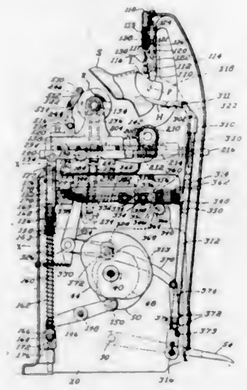
2. In a combined brushing and buffing device having a rotary hub with series of holes arranged at spaced intervals along its periphery, and bristle bundles inserted within each of said holes, the improvement consisting of pads of buffing material interposed between successive rows of bristle bundles, and a cord attached to the pad and retained within a bristle bundle, for retaining said pads in relatively stationary position on the hub.

1,856,290. EXTRUDING MACHINE. WALTER PAUSSING, Brooklyn, N. Y., assignor to Victor Metal Products Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 31, 1929. Serial No. 336,368. 20 Claims. (Cl. 192—125.)



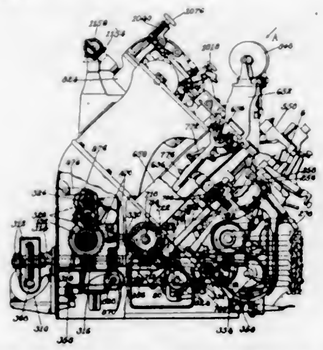
4. In a machine of the character described, means for extruding slugs fed to the machine, means for delivering a blast of air to said extruding means for discharging an extruded slug, and means controlled by said blast for halting the machine when the extruded slug is not discharged.

1,856,291. MACHINE FOR RELATIVELY MOVING SHOES AND THEIR LASTS. ARTHUR F. PYM, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 24, 1926, Serial No. 124,664. Renewed July 30, 1930. 71 Claims. (Cl. 12—15.)



1. In a machine for relatively moving a shoe and its last, means for effecting said relative movement, and power driven mechanism for operating said means constructed and arranged to become inoperative when excessive resistance between the shoe and the last is offered to said relative movement.

1,856,292. MACHINE FOR SHAPING UPPERS OVER LASTS. CHARLES F. PYM, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 31, 1927, Serial No. 179,969. Renewed June 24, 1930. 177 Claims. (Cl. 12—4.)



1. A machine of the class described having, in combination, means for pulling an upper over a last, upwiping means and overwiping means both movable together lengthwise of the shoe into operative relation to the toe, mechanism for operating said upwiping means and overwiping means to wipe the upper heightwise of the toe and inwardly over the bottom of the last after the upper-pulling operation, and means for applying a binder about the toe after the overwiping operation to hold the upper in lasted position.

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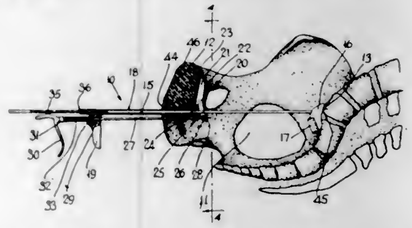
1,856,293. PROCESS OF MELTING AND DEOXIDIZING METALS AND ALLOYS. WILHELM REITMEISTER, Kirchmoser (Havel) Werk, Germany. Filed May 10, 1929, Serial No. 362,142, and in Germany June 16, 1928. 1 Claim. (Cl. 75—17.)

A process for melting and deoxidizing metals and metal alloys selected from a group comprising iron, copper alloys, and iron alloys, which process consists in adding oxygen compounds and carbon to the melting bath, in such proportions that the oxygen content of the oxygen compounds bears substantially the correct ratio to the carbon to produce carbon monoxide gas.

1,856,294. PROCESS FOR PRODUCING A FOAMY BODY ADAPTED TO BE USED IN MAKING CELLULAR CONCRETE. JOHN A. RICE, Berkeley, Calif., assignor to The Bubblestone Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 24, 1923. Serial No. 634,370. 8 Claims. (Cl. 252—6.)

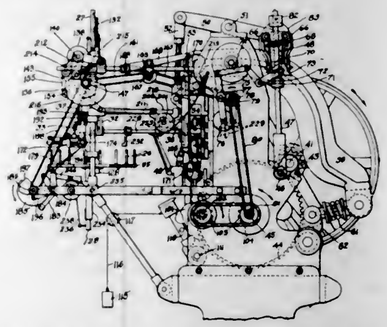
4. The process of producing a lather for forming a permanent foam which comprises dispersing a resinous substance in alcohol in the presence of formalin, adding the resultant dispersion to a solution, and mixing the solution with an inert gas to produce a lather.

1,856,295. PELVIMETER. EDWARD J. SOVATKIN, Brooklyn, N. Y., assignor to J. Sklar Manufacturing Co. Inc., New York, N. Y., a Corporation of New York. Filed Oct. 2, 1928. Serial No. 309,784. 16 Claims. (Cl. 33—143.)



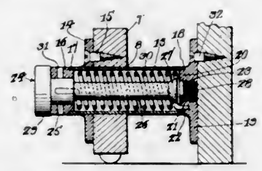
1. A pelvimeter comprising a member insertable into the vagina, a sleeve slidably mounted on said member, said member having calibrations thereon readable at varying positions of said sleeve to measure the true obstetrical conjugate.

1,856,296. COUNTER STIFFENER MOLDING MACHINE. JOSEPH SPADAFORA, Medford, Mass., assignor of one-third to Donald Malaguti and one-third to Lionel Malaguti, Boston, Mass. Filed May 28, 1929. Serial No. 366,728. 13 Claims. (Cl. 12—66.)



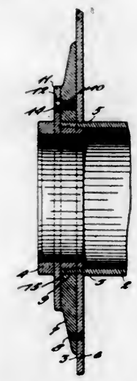
1. In a machine of the character described, the combination with counter stiffener-blank molding mechanism, of means for holding a supply of blanks in stacked relationship; a vertically movable picker member above said blank-holding means provided at its lower end with a spike; means for operating said picker member to cause it to impale the topmost blank of said stack upon said spike and to lift said blank into an elevated position; automatically operated wiper mechanism engaging the opposite end portions of each blank while it is held elevated by said picker member to bend said blank into a sharply bowed flexed condition, and means for automatically transferring each blank from said picker member to said molding mechanism while maintaining said blank in its bent condition.

1,856,297. KNEELING STOOL. ULRIC ST. MARIE and GEORGE BERNIER, Putnam, Conn. Filed June 27, 1930. Serial No. 464,300. 2 Claims. (Cl. 155—166.)



1. A kneeling stool for connection to a church pew comprising a pair of oppositely disposed spaced bearing elements, means for connecting said elements to the inner faces of the ends of the pew below the seat of the latter, a pair of combined supporting and bearing members, each secured at one end to a bearing element axially thereof and having its other end provided with a hub terminating in a head of greater diameter than said hub, short sleeves revolubly mounted on said hubs and abutting said heads, controlling springs surrounding a part of said members and each having one end fixed to one of said elements and its other fixed to a short sleeve, elongated sleeves connected to and extending from said short sleeves to and revolving on said elements, a kneeling board, arms extending from said board, and means for securing said arms to said elongated sleeves.

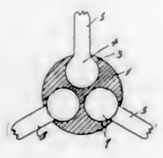
1,856,298. SPOOL, BEAM, OR THE LIKE. WILLIAM A. TRAVER, Providence, R. I., assignor to Franklin Process Company, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 15, 1929. Serial No. 340,202. 2 Claims. (Cl. 242—124.)



1. A spool or beam comprising a tubular barrel, relatively thin disks having axial openings fitted to the ends of the barrel, annular flanges of greater thickness than the disks overlying the outer faces of the latter and having tapered bores for receiving the ends of the barrel,

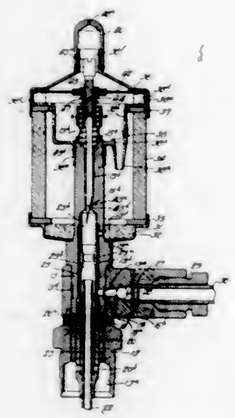
hub-members having annular tapered portions inserted into the ends of the barrel to wedge the terminal portions thereof outwardly into binding engagement with the tapered bores in the flanges, said hub-members having peripheral flanges abutting the faces of the annular flanges, and means for fastening the flanges together and to the disks to fixedly secure all the parts in permanent relationship.

1,856,299. SCALING DEVICE. JOHANNES CORNELIS VAN ALPHEN, PIETER TER HAAK, and THEODOR LECHELT, Amsterdam, Netherlands. Filed Feb. 5, 1931, Serial No. 513,556, and in the Netherlands Oct. 16, 1930. 3 Claims. (Cl. 15—104.09.)



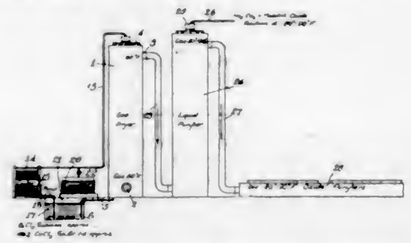
1. A scaling device wherein a toolholder is provided with axially directed chambers, in which the ends of tools, similar in form to the chambers, are axially arranged alternately with intermediate discs, said ends, movable in a circumferential direction, being secured in the toolholder.

1,856,300. LUBRICATING DEVICE. THOMAS VAN TUYL, Chicago, Ill., assignor to Jay Manufacturing Company, a Corporation of Illinois. Filed Aug. 20, 1928. Serial No. 300,937. 16 Claims. (Cl. 261—121.)



1. In a device of the class described, in combination a lubricant container, an air duct, an oil duct in communication with said container and said air duct, said air duct being extended to form a common duct for air and oil passing through said air and oil ducts, and means to vary the effective area of said common duct to vary the flow of air and oil therethrough, said last named means comprising a reciprocable member and a diaphragm actuatable under various of pressure, said reciprocable member being carried by said diaphragm and projecting into said common duct.

1,856,301. REMOVAL OF SULPHUR FROM FUEL GASES. SYDNEY GRANGE WATSON, Surbiton, and DANIEL MAYON HENSHAW, Huddersfield, England, assignors to W. C. Holmes and Company, Limited, Huddersfield, Yorkshire, England. Filed Feb. 6, 1930, Serial No. 426,436, and in Great Britain Oct. 15, 1929. 1 Claim. (Cl. 23—3.)



The process of treating fuel gases which comprises subjecting the same to the action of water-absorbing bodies in the liquid state at a temperature not materially below 35° to 40° C. whereby the humidity of the gas at such temperature will be reduced below 100 per cent saturation and thereafter treating such gases with known aqueous reagents adapted to effect removal of sulphur from the gas.

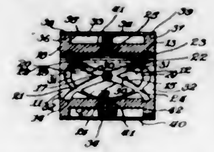
1,856,302. METHOD OF MAKING BONE BLACK. THORNE L. WHEELER, Chatham, N. Y., and JOHN B. CARPENTER, Jr., West Roxbury, Mass., assignors to Arthur D. Little, Incorporated, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1929. Serial No. 354,330. 7 Claims. (Cl. 252—3.)

1. The method of making bone black from bones which comprises heating the bones at a temperature of from 900° to 1300° Fahr. for a period of from one to two hours and thereafter heating the resulting material at a substantially higher temperature for a relatively short time.

1,856,303. METHOD AND MATERIAL EMPLOYED IN THE MANUFACTURE OF REFRACTORY ARTICLES. HAROLD E. WHITE, Butler, Pa., assignor to Lava Crucible Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1929. Serial No. 337,725. 14 Claims. (Cl. 25—156.)

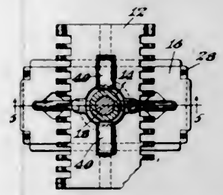
1. A refractory article containing mullite having finely divided metal incorporated therein, said metal having reaction characteristics substantially similar to that of the aluminum-magnesium group.

1,856,304. SELF-LUBRICATING BEARING. ROBERT H. WHITELEY, Oak Park, Ill., assignor to Robert H. Whiteley, trustee. Filed Jan. 14, 1929. Serial No. 332,391. 9 Claims. (Cl. 308—240.)



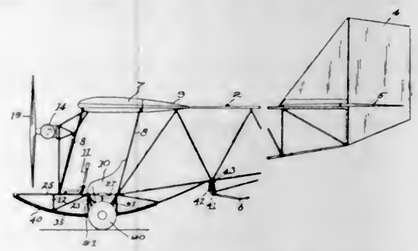
2. In a self-lubricating bearing, the combination of a supporting body with a meshwork of lubricant dispensing material embedded in the bearing surface of said body, said body having conduits extending through the same and portions of said lubricant dispensing material extending through said conduits and formed with anchoring formations upon the side of said body opposite from said meshwork.

1,856,305. SAFETY RAZOR. LAWRIE L. WITTER, Boston, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Oct. 27, 1930. Serial No. 491,387. 20 Claims. (Cl. 30—12.)



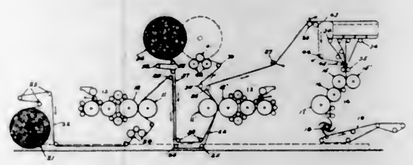
1. A safety razor comprising a cap, a guard, means including a rotary screw threaded stem for connecting the cap and guard and clamping them together with a blade therebetween, and means providing a frictional connection between the stem and guard for automatically rotating the guard to a predetermined position transversely of the cap when the guard and cap are separated a predetermined amount.

1,856,306. AVIATION TRAINING APPARATUS. OMER L. WOODSON and HARRY S. MYHRES, Los Angeles, Calif., assignors to The Cycloplane Company, Ltd., Los Angeles, Calif., a Corporation of California. Filed July 7, 1930. Serial No. 465,874. 16 Claims. (Cl. 35—12.)



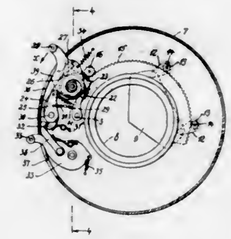
1. A training apparatus simulating an airplane and comprising laterally spaced ground contacting means adapted for movement along the ground, a longitudinal spine supported at its forward end by the ground contacting means, means for mounting the spine laterally tiltable with relation to the ground contacting means, wings projecting laterally from the spine at its forward end, and means for adjusting the wings while the ground contacting means move along the ground so as to laterally stabilize the spine and wings with relation to the ground contacting means.

1,856,307. ASSOCIATING MECHANISM FOR WEB PRINTING MACHINES. ADOLPH M. ZUCKERMAN, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 17, 1931. Serial No. 509,286. 5 Claims. (Cl. 270—6.)



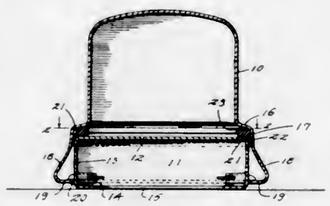
1. In a mechanism for slitting a web into several ribbons, associating the ribbons and then severing them to form a cut product; a multiple slitting mechanism, a web cutting mechanism, and associating means between the slitting mechanism and the cutting mechanism; said associating means including guide rollers, and only one turner bar in the path of each ribbon.

1,856,308. PHOTOGRAPHIC SHUTTER. ÁRPÁD BARÉNYI, Berlin-Lichterfelde, Germany. Filed Jan. 9, 1931, Serial No. 507,601, and in Germany Jan. 27, 1930. 3 Claims. (Cl. 95—63.)



1. The combination with the shutter operating mechanism and its master member, of two latches adapted for successive locking engagement with said master member for preventing transmission of the power thereof to the shutter mechanism, and members adapted to be separately operated for throwing said latches out of locking engagement with said master member, the member operating the latch which first engages said master member being constructed for releasing its latch after throwing the same out of locking engagement with said master member.

1,856,309. GRAVE VAULT. FRED BISZANTZ, Galion, Ohio, assignor to Marion Vault Manufacturing Company, Marion, Ohio, a Corporation of Ohio. Filed Mar. 12, 1931. Serial No. 522,067. 7 Claims. (Cl. 27—35.)

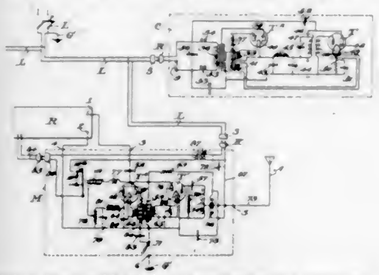


1. In a grave vault, a base having upstanding side walls and an upper horizontal wall, a cover for the base, the upper portion of the cover being smaller in cross sectional area than the area of the base, the cover adjacent its lower end being outwardly extended, then downwardly extended to fit over the top of the base, and a gasket mounted below the outwardly extended portion of the cover and against the downwardly extended portion, and strips attached to the cover and embracing the gasket and holding it in place.

1,856,310. REMOTE CONTROL SYSTEM FOR RADIO-RECEIVERS. ALBERT S. BLATTERMAN, Asbury Park, N. J. Filed Mar. 31, 1930. Serial No. 440,594. 17 Claims. (Cl. 250—20.)

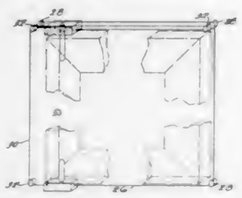
1. The method of controlling the entire operation of a radio receiver over the electric light lines from a remote control point along said lines, which includes selectively receiving various desired signals, regulating the strength of said signals, and turning the receiver on or off, which consists in transmitting high frequency currents over the

said light lines from said remote control point to the point where the receiver is located, mixing said high frequency currents with said desired signals, rectifying the currents



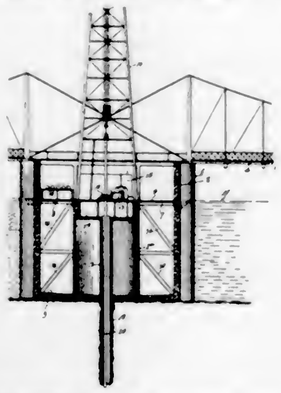
resulting from said mixing, regulating the strength of said high frequency currents and rendering the receiver inoperative by cutting off said high frequency currents.

1,856,311. WINDOW. NORMAN T. BOYLE and THOMAS F. SLATTERY, New York, N. Y., assignors to Holley Safety Window Inc., New York, N. Y., a Corporation of New York. Filed Jan. 16, 1930. Serial No. 421,129. 5 Claims. (Cl. 189—67.)



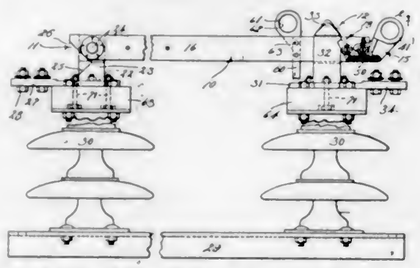
1. A window having, in combination, a window case, an outer sash mounted to slide vertically in the case, an inner sash, means for mounting the inner sash in the outer sash whereby it may be moved about a vertical axis and moved transversely of the outer sash comprising pins extending vertically in axial alinement in pivotal engagement with one vertical edge of the inner sash, supports for the outer ends of said pins mounted to slide in the outer sash, and means interconnecting said supports for causing them to move in unison whereby to maintain the pivot pins in vertical alinement during movement of the inner sash.

1,856,312. ISLAND STRUCTURE. CHARLES BRADSHAW and NELSON TAYLOR, Los Angeles, Calif. Filed May 20, 1930. Serial No. 453,931. 8 Claims. (Cl. 61—48.)



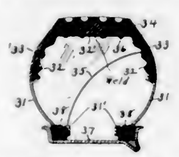
1. An island construction of reinforced concrete providing a foundation for drilling oil wells in the ocean, including a shell of concrete adapted to be floated into position and scuttled to rest upon the ocean bottom, the shell having side walls extending above the tide line, and the bottom having a hole from which a tube formed integral with the shell extends upwardly and through which tube the oil well is drilled.

1,856,313. DISCONNECT SWITCH. WILLIAM J. BRENNAN, Los Angeles, Calif. Filed Oct. 31, 1928. Serial No. 316,128. 7 Claims. (Cl. 200—169.)



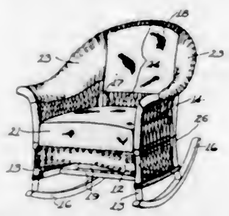
1. A switch of the character described including, a movable blade, a rigid stationary contact to receive the blade, and means for locking the blade in cooperative engagement with the stationary contact including two independently operable latch members directly carried by the blade to directly cooperatively engage the stationary contact.

1,856,314. TIRE. WILLIAM A. BROWN, Philadelphia, Pa. Filed Jan. 2, 1931. Serial No. 506,144. 13 Claims. (Cl. 152—8.)



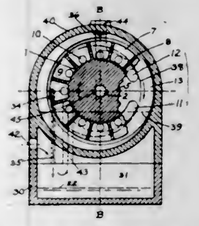
1. A tire comprising annular metal bands contributing to form the side walls of the tire and connected at their outer peripheries to form a tread support, a resilient tread member mounted on said support, the inner peripheries of said bands forming side pockets, and annular cushioning members in said pockets.

1,856,315. KNOCKDOWN WOVEN FURNITURE. JOHN J. BUTZEN, Sheboygan, Wis., assignor to American Chair Company, Sheboygan, Wis., a Corporation of Wisconsin. Filed Dec. 7, 1929. Serial No. 412,339. 3 Claims. (Cl. 155—191.)



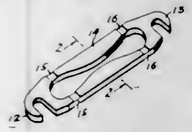
2. A knock-down chair comprising a seat frame, a pair of side frames removably secured to said seat frame, a back frame removably secured to said side frames, said side frames and back frame having laterally abutting upright frame bars at their separable edges and having complementary curvilinear upper frame bars arranged in endwise alignment and overlying and secured to the upper ends of the frame bars of said side frames and back frame, and woven facings for said frames secured to said upper frame bars and at their upper edge portions presenting a smooth continuous curve extending across the junctions of said endwise aligned frame members.

1,856,316. METHOD AND APPARATUS FOR PRODUCING A SPRAY MIXTURE OF LIQUID AND GAS. WILLIAM DOUGLAS CARTER, Caldwell, N. J. Filed Apr. 17, 1928. Serial No. 270,707. 21 Claims. (Cl. 261—28.)



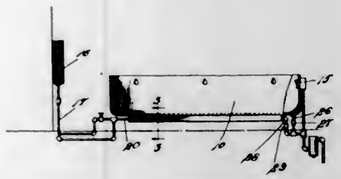
1. In a rotary pump, the combination of a casing, having a liquid inlet port formed therein, an air-pumping impeller rotatably mounted in the casing by rotation of which a ring of liquid is made to rotate about the periphery of the impeller, the casing having independent air-ports formed in one side thereof cooperating with the impeller to convey air to and from one impeller, the impeller having liquid suction means formed therein communicating with said liquid inlet ports to entrain liquid to the impeller, said ring of liquid preventing the leakage of air from the air-ports to the liquid suction means.

1,856,317. FUSIBLE ELEMENT FOR PROTECTING ELECTRICAL CIRCUITS. WILLIAM T. CLARK, Milwaukee, Wis. Filed May 22, 1930. Serial No. 454,537. 3 Claims. (Cl. 200—135.)



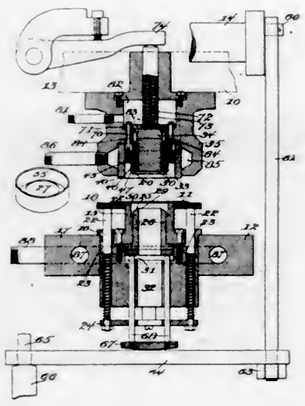
1. A fusible link comprising a flat strip of low melting point characteristic and narrowed between its ends, and having upon its sides, except at the narrowed portion, a coating of copper to provide high electrical conductivity and afford a copper-to-copper contact with the terminals of the circuit in which the link is disposed.

1,856,318. CONTINUOUS FLOW TUB. CHARLES R. CLARKE, Cranston, R. I., assignor to Leonard-Rooke Company, a Corporation of Rhode Island. Filed July 7, 1930. Serial No. 466,122. 12 Claims. (Cl. 4—196.)



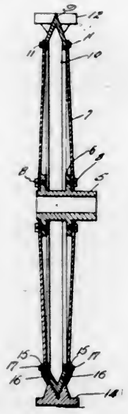
1. In combination, a tub suitable for continuous flow treatment, a thermostatic water valve, piping for leading water from said valve to the tub, said piping including flow branches in parallel, and a control valve in each of said flow branches.

1,856,319. PRESS FOR COMMUTATOR RINGS AND THE LIKE. EDWARD COOPER, Newton, Mass., assignor to New England Mica Co., Waltham, Mass., a Corporation of Massachusetts. Filed Apr. 17, 1924. Serial No. 707,303. 20 Claims. (Cl. 18—19.)



1. In a machine of the character described, in combination, means for forming an annular shaped portion in a moldable sheet, comprising a hollow mold having a bottom slidable on the internal wall thereof and having a portion tapering toward the center and mouth of the mold, forming an internal shoulder spaced from the said internal wall and a complementary shaped molding element adapted to fit into the mold, and cooperate with the internal shoulder, and means for relatively moving the mold and molding element.

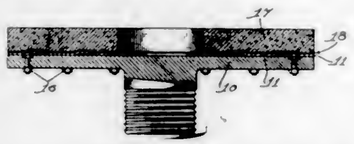
1,856,320. TRACTOR WHEEL. CLELL CURTIS, Plano, Iowa. Filed Apr. 5, 1930, Serial No. 442,014. Renewed Mar. 21, 1932. 1 Claim. (Cl. 301—41.)



In a tractor wheel of the class described, a hub, a pair of spaced discs secured to the hub, a rim of V-shaped construction in cross section with its tapered end disposed outermost and with its inner edges disposed in overlapping relation against the inner surfaces of the discs and secured thereto, and a plurality of calks removably mounted on the V-shaped portion of the rim each having portions including legs conforming to the V-shape of the rim and to the sides of the discs to straddle the rim, said

calks having their legs disposed in overlapping relation with the outer surfaces of the discs and secured thereto, said rim and said calks cooperating to maintain the discs in uniform spaced relation.

1,856,321. ABRASIVE DISK. ALBERT J. DOERMANN, Chicago, Ill., assignor to Titan Abrasives Co., Inc., Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,479. 4 Claims. (Cl. 51—209.)

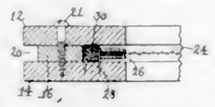


3. An abrasive disk, including; a relatively thin metal back with a raised ring on the face thereof concentric with its center, said back being provided with a plurality of holes adjacent said ring; fastening devices extending through said holes, said fastening devices having heads adjacent the face of said back, said heads not projecting substantially above the top of said raised ring; and a layer of abrasive on the face of said metal back.

1,856,322. FABRIC FROM ARTIFICIAL THREADS. ARTHUR L. ERLANGER, New York, N. Y., and MARTIN WADEWITZ, Elizabethton, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1931. Serial No. 525,596. 6 Claims. (Cl. 28—1.)

1. A method for producing a fabric of artificial cellulosic material, comprising precipitating the filaments with a binder of sulphur only, forming the precipitated filaments into a fabric without twisting, and thereafter removing the binder from the filaments.

1,856,323. WINDOW SCREEN. EDWARD B. FEASTER, West Newton, Mass. Filed Jan. 15, 1931. Serial No. 508,879. 10 Claims. (Cl. 156—14.)



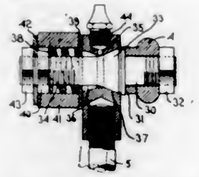
4. A window screen comprising an outer frame, and a frame unit secured within the outer frame comprising a sheet of screening having a rubber strip extended along each edge of the screening and folded over the same, and fastening devices co-operating with the rubber strips for securing the screen unit within the outer frame beyond the edges of said screening to permit the latter when pressed upon to stretch the rubber strips and to enable the latter to return the screening to its normal flat condition when said pressure is removed.

1,856,324. EAR SOUND REFLECTOR. CHARLES FENSKY, St. Louis, Mo. Filed June 10, 1931. Serial No. 543,460. 11 Claims. (Cl. 181—23.)



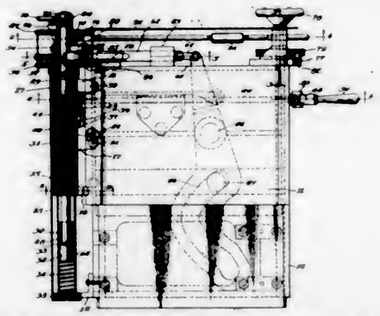
1. In a device of the class described, a spherical member, a nipple projecting therefrom, a horn-like member projecting from the spherical member, and means in the horn-like member to prevent escape of rebounding sound waves.

1,856,325. SHOCK ABSORBER. ERNST FLENTJE, Cambridge, Mass. Filed Sept. 13, 1930. Serial No. 481,763. 2 Claims. (Cl. 287—93.)



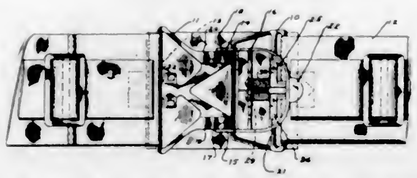
1. In a pivotal connection between two members, the combination with said members, one of which has an opening therethrough, of a stud secured to the other member and projecting through said opening, the portion of the stud occupying said opening being conical, a cover fast on the projecting end of the stud, a spring encircling the stud and confined between said cover and said member with the opening, said spring yieldingly holding said member in engagement with the conical portion of the stud, and a sleeve encircling and enclosing the spring.

1,856,326. FEED MECHANISM FOR SLICING MACHINES. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Nov. 16, 1927. Serial No. 233,538. 21 Claims. (Cl. 146—102.)



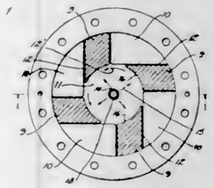
2. In a slicing machine, a reciprocating table, a work support mounted on said table, a tubular guide mounted on said table, a screw spindle journaled within said guide, means connecting said screw spindle with said work support to feed said work support when said spindle is rotated, and a guard cover for said tubular guide.

1,856,327. SAFETY BUCKLE. ALBERT C. FOULK, Dayton, Ohio. Filed May 8, 1929. Serial No. 361,427. 14 Claims. (Cl. 24—163.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



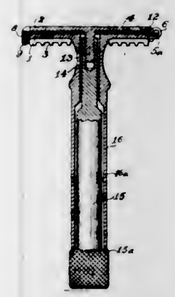
1. A buckle for belts, comprising a base member adapted to accommodate one end of said belt, a link fitting connected to the other end of said belt, a readily releasable clamping member having means co-operating with means on said base member and with said link fitting for interlocking said link fitting with said base member, said clamping member being provided with a permanently attached latch movable therewith and relative thereto and said base member being provided with cooperating holding means to engage said latch for releasably and positively locking said clamping member to said base member.

1,856,328. INTERNAL COMBUSTION ENGINE. LOUIS O. FRENCH, Milwaukee, Wis. Filed Nov. 24, 1926. Serial No. 150,517. 8 Claims. (Cl. 123—32.)



1. In an internal combustion engine, the combination of a cylinder head, cylinder, and a piston working in the cylinder, the piston and the head having interspaced, outer side wall projections cooperating together when the piston approaches the end of its compression stroke to provide a centrally disposed combustion chamber surrounded on all sides by said projections and to produce a tangential flow of the working medium into said chamber, inwardly of the cylinder, between the adjacent walls of said projections, the piston and the cylinder head.

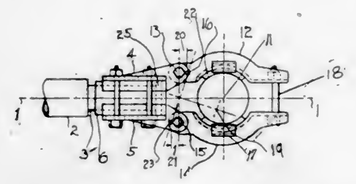
1,856,329. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Feb. 9, 1928. Serial No. 252,996. 10 Claims. (Cl. 30—12.)



1. A safety razor comprising a pair of blade clamping members, means pivotally connecting said members at adjacent ends, one of the members having guard teeth, means to detachably clamp the members upon a blade, and means pivotally attaching the blade to one of said members at its end opposite the first named pivotal connection.

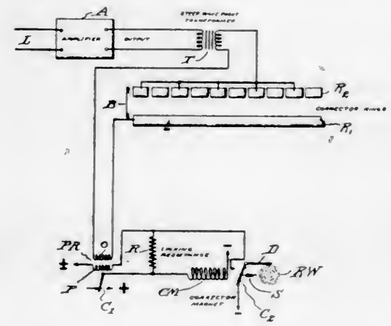
1,856,330. ELECTRODE HOLDER FOR ARC FURNACES. ALBERT E. GREENE, Medina, Wash. Filed Apr. 2, 1931. Serial No. 527,102. 6 Claims. (Cl. 13—16.)

1. In an electric furnace, an electrode holder comprising a horizontal arm for supporting an electrode at one end thereof, two hingeably mounted electrode clamping members, a hinge bracket for holding each clamping



member, means for holding said brackets against the arm in longitudinally adjusted position and means for insulating the clamping members from the furnace proper.

1,856,331. CORRECTOR SYSTEM FOR SYNCHRONOUS TELEGRAPH APPARATUS. HAKON H. HAGLUND, Flushing, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 28, 1929. Serial No. 389,032. 8 Claims. (Cl. 178—53.)



1. A corrector system comprising the combination of a telegraph line, a rotary distributor, corrector means associated with said distributor, a pick-up relay for controlling said corrector means, and a saturated transformer connecting said pick-up relay and said distributor to said line.

1,856,332. LANDING DEVICE FOR AIRCRAFT. HERMANN HEIN, Bremen, Germany. Filed Nov. 17, 1931, Serial No. 575,662, and in Germany Nov. 20, 1930. 6 Claims. (Cl. 244—2.)

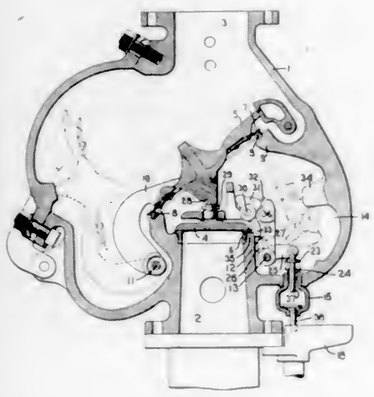


3. A sail-like landing device for aircraft having guide surfaces under its end carrying the aircraft, said guide surfaces being formed by downwardly directed fins, the lower edges of which are connected together over a certain range of length by a fin approximately parallel with the device.

1,856,333. DRY PIPE VALVE. WILLIS K. HODGMAN, Jr., Taunton, Mass. Filed Mar. 13, 1931. Serial No. 522,372. 2 Claims. (Cl. 169—22.)

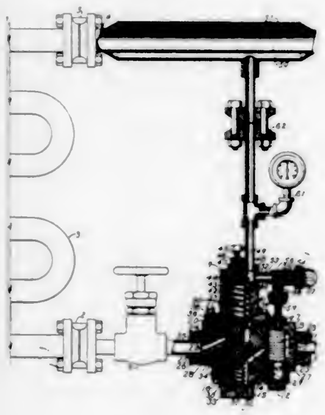
1. In a dry pipe valve, a casing having a waterway, a water valve adapted to close said waterway, a pivoted

arm by which the water valve is carried, an air valve adapted to close said waterway above the water valve, means for carrying the air valve and for positioning it when seated so that it will hold the water valve seated,



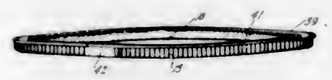
a shoulder on the casing adjacent the water valve seat, and a latch pivoted on the water valve carrying arm acting automatically to swing into engagement with said shoulder when the water valve opens slightly and thus prevent the water valve from thereafter closing.

1,856,334. TEMPERATURE RESPONSIVE REGULATING VALVE. JOHN F. HOFFMAN, Omaha, Nebr., assignor to Baker Ice Machine Co. Inc., Omaha, Nebr., a Corporation of Nebraska. Filed Apr. 21, 1928. Serial No. 271,754. 1 Claim. (Cl. 62—8.)



In a device of the character described including a valve housing having aligned pressure and fluid supply chambers, a diaphragm dividing said chambers, and a valve controlling flow through the supply chamber, means including a perforate cup slidable in the pressure chamber and engaging said diaphragm for operating said valve.

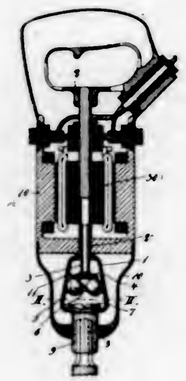
1,856,335. SEALING RING AND METHOD OF MAKING IT. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 22, 1928. Serial No. 263,679. 13 Claims. (Cl. 113—121.)



1. A sealing ring comprising a strip of sheet metal, said strip having a corrugated portion and having overlapping ends, the corrugations on the overlapped end portion being flattened out.

6. The method of forming sealing rings, which comprises overlapping the ends of a partially corrugated strip of sheet metal, and then compressing the overlapped portions to iron out the corrugations.

1,856,336. STRIKING TOOL. ERIK GUSTAF HYSING, Stockholm, Sweden, assignor to Aktiebolaget Nordiska Armaturfabrikerna, Stockholm, Sweden, a Limited Company. Filed Jan. 7, 1929, Serial No. 330,841, and in Sweden Jan. 7, 1928. 9 Claims. (Cl. 125—33.)

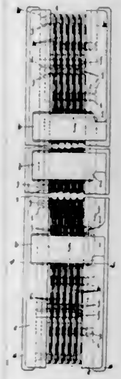


1. A striking tool including an anvil having at least one oblique impact surface, a striking member rotatably and reciprocably mounted with respect to the anvil and provided with at least one striking face in the form of a ball for coacting with the impact surface in the anvil for effecting a recoil movement of the member, the axis of rotation of said striking member substantially coinciding with the axis of the anvil, and a guiding and rotating device cooperating with the ball to cause the latter to deliver blows upon the anvil.

1,856,337. LOOSE LEAF BINDER. FRANCIS LEVITT IMPEY, Birmingham, England, assignor to Morland & Impey Limited, Birmingham, England. Filed Aug. 18, 1931, Serial No. 557,853, and in Great Britain Aug. 27, 1930. 2 Claims. (Cl. 129—8.)

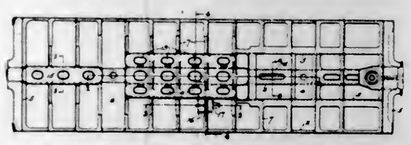
1. In loose leaf binders, the combination of a pair of covers, clamping bars associated with the rear edges of the covers, posts on the clamping bars engaging holes in the leaves, supporting sheets between which the leaves are placed and provided with projections and perfora-

tions whereby the supporting sheets are engaged with each other and with the leaves and the clamping bars, and binding thongs interconnecting the covers, the por-



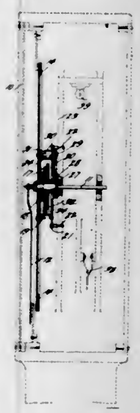
tions of the thongs which lie between the covers being arranged to pass across and outside of the rear edges of the leaves, substantially as described.

1,856,338. RAILWAY VEHICLE UNDERFRAME. EDWIN C. JACKSON, St. Louis, Mo., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed June 27, 1930. Serial No. 464,295. 15 Claims. (Cl. 105—236.)



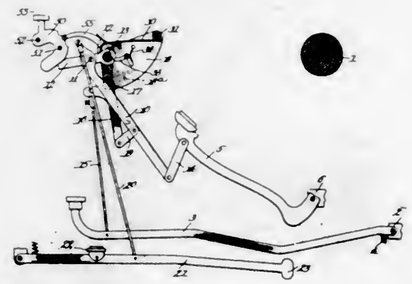
1. A railway tank vehicle underframe having a portion forming part of the wall of the vehicle tank and also forming a part of the wall of a fluid chamber or reservoir separate from the vehicle tank.

1,856,339. ADVERTISING ATTACHMENT FOR WEIGHING SCALES. FRANK P. JACKSON, San Antonio, Tex. Filed Mar. 20, 1930. Serial No. 437,415. 9 Claims. (Cl. 40—28.)



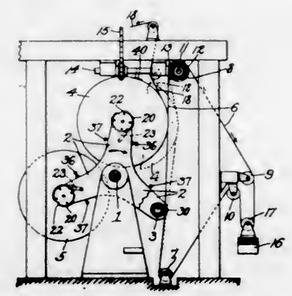
1. In combination with a rotative shaft of weighing scales, a sign carrier rotatively mounted on the shaft, means for imparting the rotary motion of the shaft to the sign carrier whereby it is moved with the shaft in one direction, and means for intermittently arresting and releasing the said sign carrier.

1,856,340. TYPEWRITING MACHINE. CARL A. JOERISSEN, Washington, D. C. Filed Feb. 12, 1927. Serial No. 167,734. 22 Claims. (Cl. 197—25.)



22. In a typewriter, a type bar pivoted for an upward and rearward operative stroke, a toggle comprising two pivotally connected members of which one has a pivotal connection with the type bar, a swingable link portion having a pivotal connection with the other of said toggle members, said link portion being swingable downwardly from its normal position of rest and rearwardly, a key bar having a connection with said toggle and operable to move the toggle members from a normally collapsed downwardly extending position to a relatively straightened position and to impart to the type bar through the toggle members a terminally checked throw to a position slightly in advance of striking position, and means external of said connection thereupon effective to swing said link portion to complete the stroke of the type bar through said toggle.

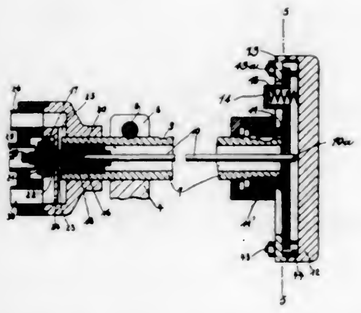
1,856,341. PAPER DELIVERING DEVICE. JOHN B. KOHLER, Chicago, Ill., assignor to G. A. Edward Kohler, Chicago, Ill. Filed Mar. 7, 1929. Serial No. 345,172. 7 Claims. (Cl. 242—58.)



1. A paper delivering device comprising a roll supporting device for a plurality of rolls of paper, a roll engaging member for engaging the roll from which paper is being delivered, means for moving said roll supporting device so that a second roll having adhesive on its face, will be moved against the web running from the first mentioned roll and pressing said web against said roll engaging device to secure an increasing pressure between the web of the expiring roll and the new roll, a holding device for holding said new roll against rotation and means for releasing said new roll when the pressure

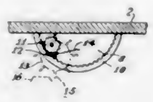
thereon reaches a predetermined amount so that said roll will be quickly speeded up and the part thereof containing adhesive, attached to the web of the expiring roll.

1,856,342. BRAKE CONTROL DEVICE. FRANZ KRATZ, Stuttgart, Germany, assignor to Servo-Frein Dewandre, Societe Anonyme, Liege, Belgium. Filed Aug. 29, 1929, Serial No. 389,229, and in Germany Sept. 7, 1928. 4 Claims. (Cl. 188—152.)



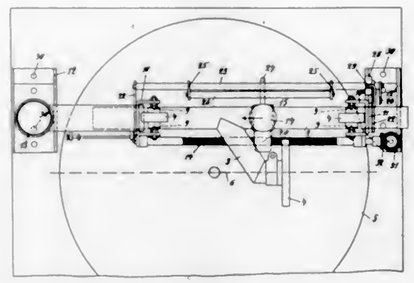
1. A brake control device comprising in combination a brake lever, a brake cylinder, a piston in said cylinder, a connection between said piston and said brake lever, a valve chamber communicating with said cylinder, a connection between said valve chamber and the atmosphere, a connection between said valve chamber and a source of pressure different from atmosphere, a valve controlling the openings of said connections, a spring loaded pedal plate, a base plate for supporting and guiding said pedal plate, a spring loaded spindle between said valve and said pedal plate, the spindle operating the valve according to the movement of the pedal plate, means to rigidly connect the valve chamber and the base plate to the top of the brake lever, and means to adjust the distance of the valve openings connecting the valve chamber to the atmosphere and to the source of pressure different from atmosphere.

1,856,343. APPARATUS FOR TRIMMING AND SPREADING GRAIN, ORE, AND THE LIKE. JOHAN WILLEM KROEF, Rotterdam, Netherlands. Filed Mar. 7, 1929, Serial No. 345,135, and in Belgium Mar. 20, 1928. 1 Claim. (Cl. 198—109.)



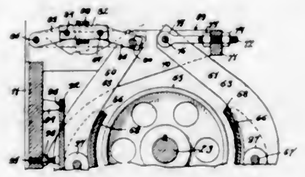
In a trimming and spreading device comprising a frame, a movable adjustable framework formed with separate rectangular elements, hinge bolt connections between the successive elements arranged transversely to the direction of movement of the framework, an endless conveyor structure supported by the adjustable framework, means for guiding said framework, and means for steadying the relative position of the rectangular elements comprising a toothed sector coaxial with the hinge bolt connecting two adjacent elements, a pinion supported by one of the adjacent elements and engaging said toothed sector, a pawl engaging said pinion and a disc with peripheral spokes engaging a fixed surface, so as to disengage the pawl from the pinion, substantially as described.

1,856,344. SOUND RECORDING AND REPRODUCING APPARATUS. OTTO LEOPOLD, Wernigerode, Harz, Germany. Filed Apr. 4, 1931, Serial No. 527,716, and in Germany Apr. 8, 1930. 2 Claims. (Cl. 274—13.)



2. A sound recording apparatus, comprising in combination a tone guide, a movable tone arm of said guide, a shaft behind and above said movable tone arm, a ring-shaped sleeve carried by said arm, a sleeve on said movable tone arm, a rearwardly projecting arm of said ring-shaped sleeve adapted to support said sleeve on said shaft, a hand lever on said shaft adapted to rotate said sleeve for lifting the stylus off the record, a screw spindle, a half nut resiliently connected to said ring-shaped sleeve adapted to engage said screw spindle and to be disengaged by said lever, when a record has to be played portion wise, carriage guides, a bracket carrying said tone guide shiftable in one of said carriage guides, and a bracket carrying said movable tone arm, said shaft and said screw spindle adapted to be shifted back and fixed in the second of said carriage guides for reproducing records.

1,856,345. BRAKE. BROR J. LINDGREN, Buffalo, N. Y., assignor to Niagara Machine and Tool Works, Buffalo, N. Y., a Corporation of New York. Filed Aug. 14, 1930. Serial No. 475,159. 9 Claims. (Cl. 188—75.)

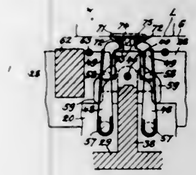


1. In combination with a brake drum and a support, a pair of arcuate floating brake arms pivoted together at their lower ends and adapted to embrace said brake drum, brake shoes carried by said arms, means for pivotally supporting one of said brake arms from said support, comprising a horizontal bolt extending through said support in line with said brake arms and movable longitudinally therein, said bolt having an eye and a pivot pin extending through said eye and brake arm and also slidingly supported in a slot in said support, and means for moving the other brake arm toward and from said first arm to apply and release said brake shoes.

1,856,346. STITCHING OF FOLDED SHEETS INTO BOUND VOLUMES. OTTO LUTOLF, St. Gallen, Switzerland. Filed Nov. 12, 1930, Serial No. 495,272, and in Switzerland Nov. 20, 1929. 2 Claims. (Cl. 1—8.)

1. A stitching head for bending down the shanks of all the hookended staples projecting from a pinched book in a single operation, comprising two parallel sets of oscillating guiding laminæ, means in all the spaces between

the shanks of the staples for positively swinging the said guiding laminæ to and from another, press laminæ vertically movable between the two parallel sets of guiding laminæ, and adapted to make parallel the said shanks, means to carry a binding strip under each row of folded



sheets, and means to press upwards the press laminæ to press the shanks of the staples down to the binding strips carried under the rows of folded sheets and the hooked ends of the staples into the said strips and through the folds of the sheets.

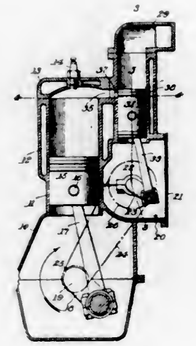
1,856,347. FOURDRINIER MACHINE. EDWARD J. MCDONNELL, Groveton, N. H. Filed Dec. 20, 1930. Serial No. 503,722. 4 Claims. (Cl. 92—44.)



1. In a Fourdrinier machine having a paper-making wire, the combination therewith of a series of members arranged to form an extended table beneath the wire and over which the wire passes, said members forming the table being adjustable with relation to one another to either close or leave a determinate opening between adjacent ones of said members forming the table whereby the discharge of water from the stock after its entry onto the wire will be controlled, and means for adjustably positioning said members.

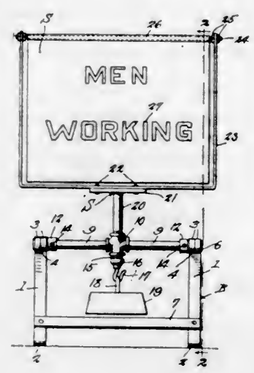
1,856,348. INTERNAL COMBUSTION ENGINE. JOHN ALEXANDER MCMILLAN, Moncton, New Brunswick, Canada, assignor of one-third to Albert Deadman and one-third to Robert William Holmes, Moncton, New Brunswick, Canada. Filed Aug. 13, 1927. Serial No. 212,763. 1 Claim. (Cl. 123—188.)

An internal combustion engine comprising a cylinder having inlet and exhaust ports of the same transverse sectional area and communicating with the cylinder at the same level, a piston slidable in said cylinder, a crank shaft journaled beyond the end of the cylinder, a rod connecting said piston with the crank shaft, a second crank shaft journaled at the side of the first mentioned crank shaft and having crank arms disposed approximately ninety degrees apart, means operatively connecting the first mentioned crank shaft with the second mentioned crank shaft and ratioed to effect one revolution of the second mentioned crank shaft incident to two revolutions of the first mentioned crank shaft, a pair of cylinders connected with said ports respectively, a piston slidable in each of the last mentioned cylinders, said pistons having at their upper flat ends surfaces lying in planes at right angles to the vertical axes of the pistons, a rod connecting each of the last mentioned pistons at its center with one of the arms of the second mentioned crank shaft, said arms being of such length as to draw the said flat surfaces of the pistons to the level of the surfaces of the lower walls of the ports as the arms pass under



the shaft, whereby said cylinders and pistons act as suction and compression pumps at the intake and exhaust ports respectively.

1,856,349. SIGN. JOSEPH PRESCOTT BIGELOW, Lunenburg, Mass. Filed Jan. 11, 1932. Serial No. 585,978. 3 Claims. (Cl. 40—138.)

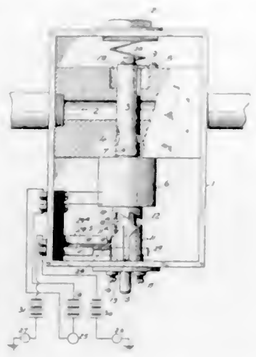


1. In a sign board construction, a base, a support mounted to swing on the base with respect to a horizontal axis, means for yieldably limiting the swinging movement of the support, a sign, and means for hingedly connecting the upper portion of the sign to the support, above said axis, for swinging movement about another horizontal axis.

1,856,350. VALVE CONTROL. JOHN J. METCALF, National City, Calif., assignor to Magic Way Gas Heating Appliances, Inc., National City, Calif., a Corporation of Delaware. Filed July 14, 1930. Serial No. 467,719. 10 Claims. (Cl. 137—139.)

1. In a valve control, a casing having a transversely extending passage, a valve stem vertically extending through said passage, said valve stem being made with a

transverse port for registration with said passage, a magnet for elevating said stem, mechanical means for stopping the stem on its return stroke at predetermined points

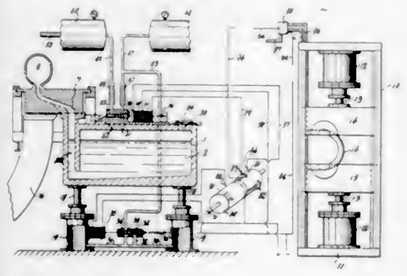


for the purpose of controlling the opening of the valve, and signals actuated by said mechanical means to indicate the position of the valve.

1,856,351. PRODUCTION OF TITANATES. REGINALD HILL MONK and LUDVIG FIRING, Montreal, Quebec, Canada. Filed Aug. 10, 1928. Serial No. 298,876. 4 Claims. (Cl. 134—58.)

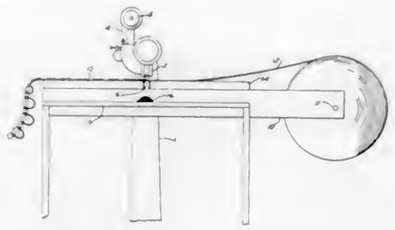
1. A process for the production of a barium titanate from crystalline titanium hydrate which comprises mixing with vigorous stirring barium chloride with said crystalline hydrate to disperse the same, mixing with the dispersed hydrate barium carbonate to coagulate the same and calcining the coagulated precipitate at a temperature of substantially 840° C. to produce a porous mass of barium titanate without colloidal or crystalline characteristics.

1,856,352. AUTOMATIC CASTING MACHINE. ALBERT WOOD MORRIS, Drexel Hill, and SAMUEL PRICE WETHERILL, Jr., Haverford, Pa., assignors to Wetherill-Morris Engineering Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,658. 4 Claims. (Cl. 22—69.)



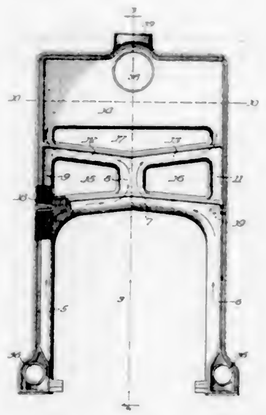
3. An automatic casting machine comprising a sectional mold, power means to open and close the mold in predetermined timed relation, a mold charging ladle, power means operable in predetermined timed relation to place the ladle and mold in feeding communication, pressure means to feed molten metal from ladle to mold, and timing mechanism to apply and release the pressure means, all constructed and arranged for the mold when closed to be filled with molten metal under pressure until a shell has set and then to empty the interior of the shell of its molten metal.

1,856,353. HANDLE FOR SHOPPING BAGS AND METHOD OF MAKING. THOMAS J. NESTOR, Bergenfield, N. J., assignor to Alexander Reich and Charles Reich, Brooklyn, N. Y. Filed Apr. 7, 1924. Serial No. 704,700. 3 Claims. (Cl. 93—1.)



1. The method of forming handle portions for bags which consists in securing a plurality of handles to a continuous strip by feeding said strip through a stapling machine and interposing a handle portion in proper position as to be impinged by a staple entering the strip and then severing the strip to separate the handles.

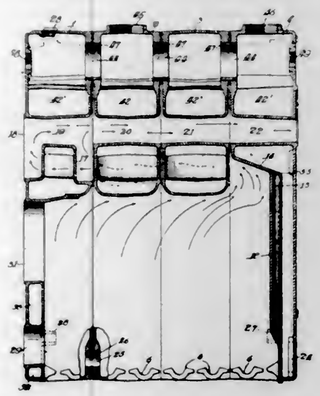
1,856,354. SECTIONAL BOILER. CHARLES A. OLSON, Geneva, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 25, 1928. Serial No. 314,972. 9 Claims. (Cl. 122—225.)



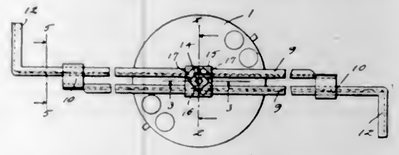
8. A sectional boiler comprising a plurality of sections adapted when assembled to provide a combustion chamber, a plurality of horizontal return flues, a common delivery flue, a water chamber extending from end to end of the boiler above the delivery flue, water legs at the sides of the combustion chamber, and passages for conducting water from the upper ends of said legs over the combustion chamber, thence upwardly between the return flues, and thence transversely around the delivery flue to said chamber, and means establishing communication between the lower portions of said water legs.

1,856,355. BOILER. CHARLES A. OLSON, Geneva, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed May 3, 1929. Serial No. 360,055. 4 Claims. (Cl. 122—225.)

2. In a boiler having a flue communicating with the fire box and extending generally horizontally, a water chamber having a depending water leg disposed at a margin of the boiler fire box and an inwardly projecting water passage extending inwardly over the fire box from the upper end of said water leg and in communication therewith, the bottom of said passage being substantially inclined and having a depressed middle portion connected to the inner wall of said water leg by a curved fillet, the portions of said water passage on either side of its depressed middle portion being upwardly inclined at a substantial angle, the whole being arranged to permit a heat-induced rapid circulation of water from the middle of the water leg through the middle of the projecting portion of said water passage.



1,856,356. ADJUSTABLE OUTLET BOX HEADER. WILLIAM H. OWEN, Saratoga Springs, N. Y. Filed May 27, 1930. Serial No. 456,244. 5 Claims. (Cl. 247—21.)

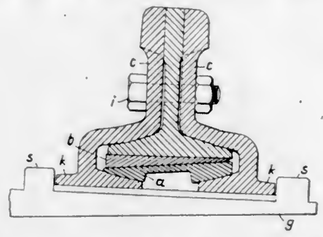


1. A support for an electric outlet box having an aperture through the top thereof, comprising a pair of channel bars disposed in back to back parallel relation, a pair of ears projecting laterally from one end of each of said bars and extending across and slidably engaging over the flange of the adjacent bar, means carried by each bar adjacent said ears for engaging the back of the adjacent bar to maintain the bars in spaced parallel relation, each of said bars having its other end turned to provide a supporting foot, a stud extensible through said outlet box aperture from the exterior thereof and having a head adapted to engage the edge of said aperture and provided with a broad kerf designed to receive said bars when the same are disposed on edge transversely of the box, a saddle extending across the edges of the bars opposite the box and having sliding engagement with the bars, a bolt extending through said stud and passing between said bars to extend through said saddle, and a securing nut mounted upon the saddle and engaging the bolt.

1,856,357. UTILIZATION OF DISTILLERY SLOPS JOINTLY WITH WOOD SAWDUST OR OTHER VEGETABLE WASTE OR CARBONACEOUS MATERIALS. ADOLPH PLACEK, New Orleans, La. Original application filed Dec. 28, 1928, Serial No. 329,079. Divided and this application filed Jan 27, 1931. Serial No. 511,654. 1 Claim. (Cl. 44—10.)

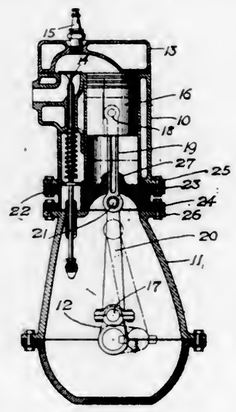
The method of producing high grade charcoal fuel, consisting in preparing a mixture of the concentrated distillery slops with wood saw-dust, ground vegetable waste and other carbonaceous materials, drying, carbonizing and grinding residue into a powder, leaching from said powder water soluble constituents, mixing leached residue with a suitable combustible binder, compressing into briquets, and drying.

1,856,358. ADJUSTABLE FISH PLATES ENGAGING THE RAIL HEADS. HEINRICH PÖSENTRUP, Munster, Germany. Filed July 9, 1930, Serial No. 466,771, and in Germany July 19, 1929. 3 Claims. (Cl. 238—190.)



1. A rail joint, comprising in combination with the fish-plates, bearing plates recessed at one end, wedge plates recessed at one projecting end, a bolt extending transversely under said bearing plate and said wedge plate projecting laterally from said fish-plate, a locking washer on said bolt, a hook-shaped head of said bolt engaging with the recess of said bearing plate, and an angle plate shiftable on said bolt one arm of said angle plate adapted to engage with the recess of said wedge plate.

1,856,359. SINGLE ACTING ENGINE. EDWARD J. STANTON, Brooklyn, N. Y. Filed Sept. 1, 1928. Serial No. 303,521. 13 Claims. (Cl. 308—3.)

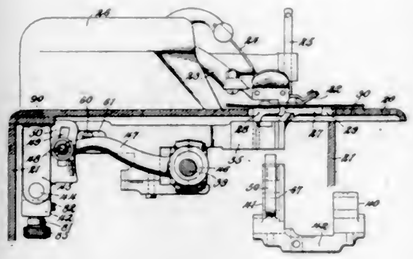


1. A single-acting reciprocating engine comprising a piston, a connecting-rod, a piston-rod jointed at one of its ends to the connecting-rod, and two separate guide members extenting into the cylinder for guiding the piston-rod in a substantially straight line.

1,856,360. FEEDING MECHANISM FOR SEWING MACHINES. REUBEN BALL THOMPSON, Stillwater, N. Y., assignor to Willcox & Gibbs Sewing Machine Company, New York, N. Y., a Corporation of New York. Filed Aug. 6, 1928. Serial No. 297,767. 3 Claims. (Cl. 112—209.)

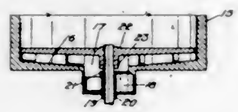
1. The combination of a feed rocker having two arms, two feed bars positioned at one end between said arms and

pivotally connected at said end to said arms respectively to be actuated thereby, and an adjusting screw for



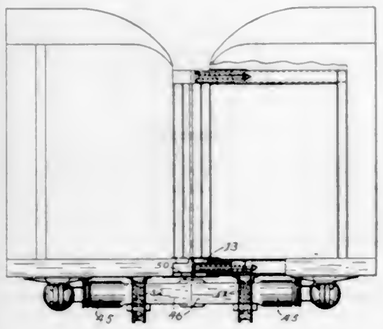
changing the position of the pivotal connection between one of said arms and its corresponding feed bar relative to the axis of oscillation of said feed rocker.

1,856,361. STORAGE RECEPTACLE. CARL BUSCH THORNE, Hawkesbury, Ontario, Canada. Filed Nov. 18, 1929. Serial No. 408,091. 6 Claims. (Cl. 226—120.)



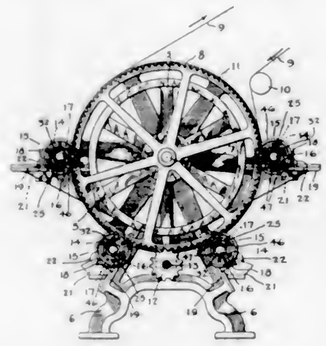
1. A storage receptacle comprising a tower having an inclined bottom surrounding a discharge opening and a levelling member mounted for rotation and having its arms cutting the contents in a horizontal path and its blades extending downwardly into proximity with the bottom in gradually reducing depths towards the tower walls for the purpose of reducing the height of the contents in the center in relation to the height at the wall.

1,856,362. MEANS FOR CONNECTING CARS. CHARLES H. TOMLINSON, Mansfield, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Sept. 10, 1926. Serial No. 134,617. 4 Claims. (Cl. 213—222.)



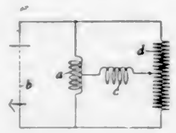
1. In combination, a pair of cars having buffing contact members, coupling means for said cars forming a substantially rigid draw bar connecting said cars when coupled and having means thereon for preventing relative vertical displacement of said coupling means when coupled, and means for limiting the vertical movement of said draw bar relative to said cars to hold said cars against excessive vertical displacement, the maximum relative vertical movement of said cars permitted by said draw-bar being less than sufficient to displace said contact members out of abutting relation with each other.

1,856,363. PATTERN FITTING GEAR FOR MULTI-COLOR PRINTING MACHINES. LEONARD I. TUTTLE, Buchanan, N. Y., assignor to The Standard Textile Products Company, New York, N. Y., a Corporation of Ohio. Filed Aug. 9, 1929. Serial No. 384,620. Renewed Oct. 2, 1931. 11 Claims. (Cl. 101—248.)



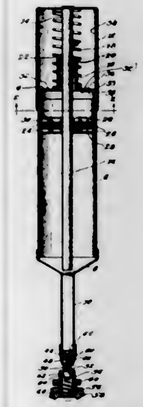
1. A multicolor printing machine having, in combination, a master roll; a plurality of printing rolls; a master gear; and means whereby said printing rolls may be advanced or retarded to fit the pattern being printed, said means comprising pinions engaging said master gear, and sleeves engaging said pinions, said sleeves being rotatably mounted and having means for moving said pinions longitudinally when rotated so as to impart a rotary movement to said printing rolls.

1,856,364. ELECTRICAL LIQUID LEVEL INDICATING INSTRUMENT. ERNEST ANSLEY WATSON, Coventry, England, assignor to S. Smith & Sons (Motor Accessories) Limited, London, England. Filed Mar. 31, 1930, Serial No. 440,458, and in Great Britain Apr. 30, 1929. 8 Claims. (Cl. 177—351.)



5. In combination, a system comprising a pair of field windings adapted to produce two magnetic fields situated at an angle to each other, an armature movable in said fields, an index attached to the armature, a potentiometer, a contact movable along the potentiometer, movable means carrying the contact, and a source of electromotive force, the ends of one of the field windings and of the potentiometer being connected to the source of electromotive force, and the ends of the other field winding being connected respectively to the potentiometer contact and to a point in the system which is at a potential intermediate to that of the ends of the first mentioned winding, substantially as described.

1,856,365. LUBRICANT COMPRESSOR. LEONARD H. WHEELER, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 31, 1929. Serial No. 336,409. 9 Claims. (Cl. 221—47.4.)

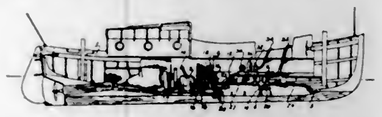


1. A high pressure lubricant compressor comprising a barrel, a high pressure cylinder secured at the end of said barrel, a follower in said barrel, a plunger passing through said follower adapted to operate in said high pressure cylinder, and means attached to said plunger for manually applying a pneumatic pressure behind said follower.

1,856,366. PRODUCTION OF COLORED EFFECTS IN CEMENTITIOUS AND BUILDING MATERIALS. GERALD NOEL WHITE, Eastcheap, London, England. Filed Feb. 9, 1927, Serial No. 167,074, and in Great Britain Mar. 8, 1926. 3 Claims. (Cl. 106—24.)

1. A method for the production of colored effects in building materials, which comprises the incorporation with the building material of an anthraquinone vat dyestuff.

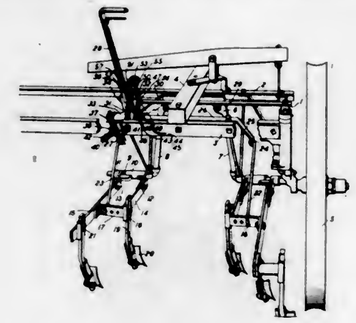
1,856,367. BILGE PUMP. SOLOMON EDWARD AARON, Boston, Mass. Filed July 11, 1929. Serial No. 377,579. 1 Claim. (Cl. 114—184.)



The combination with a marine vessel having an engine and a gasoline tank, of an ejector, a conduit leading directly from under the water outside the vessel to the nozzle of the ejector, two inwardly opening check valves in said conduit, a cylinder communicating with the conduit between the valves, an imperforate plunger in the cylinder, a conduit leading from the interior of the vessel to the suction chamber of said ejector, flexible branch conduits leading from the said interior conduit to the vicinity of said engine and tank, respectively, independently operable cut-off valves in the interior and branch conduits, and another conduit leading from the discharge end of said ejector to the exterior of the vessel.

1,856,368. CULTIVATOR LIFTING GEAR. SILAS E. BAILOR, Dill, Okla. Filed June 23, 1930. Serial No. 463,257. 7 Claims. (Cl. 97—157.)

1. In combination with a cultivator including a frame and a pair of shovel-supporting beams pivotally mounted on the frame, a rotatable shaft mounted on the frame and connected to one of said beams, a lever rotatively mounted on the shaft connected with the other of said beams for pivotally moving the same, and a crank keyed to said



shaft and having adjustable resilient connection with said lever for enabling the lever to rock the shaft for pivotally moving the first named beam.

1,856,369. FLOOR COVERING. JULIAN T. BALDWIN, West Chester, Pa., assignor to Sandura Company, Inc., Philadelphia, Pa., a Corporation of New Jersey. Filed Oct. 1, 1926. Serial No. 138,897. 12 Claims. (Cl. 91—68.)



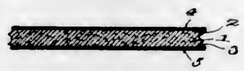
1. A floor covering consisting of a thin fibrous sheet, and a coating on said sheet, comprising ester gum, dibutyl phthalate, and linseed oil.

1,856,370. SMOOTH SURFACED FLOOR COVERING. JULIAN T. BALDWIN, West Chester, Pa., assignor to Sandura Company, Inc., Philadelphia, Pa., a Corporation of New Jersey. Filed Oct. 29, 1926. Serial No. 145,002. 5 Claims. (Cl. 91—68.)



1. A floor covering consisting of a supporting base; a decorative coat on one side of said base, the said coat including ester gum, dibutyl phthalate and pigments; and a coating on the other side of said base including acroides gum, diamyl-phthalate, and pigments.

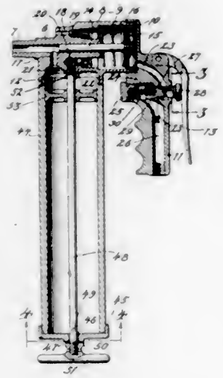
1,856,371. SMOOTH SURFACED FLOOR COVERING. JULIAN T. BALDWIN, West Chester, Pa., assignor to Sandura Company, Inc., Philadelphia, Pa., a Corporation of New Jersey. Filed Oct. 29, 1926. Serial No. 145,003. 4 Claims. (Cl. 91—68.)



2. A floor covering comprising a supporting base having a display surface, an outer transparent coat on the upper side of said base and through which said display surface is visible, and a transparent coat on the lower side of said base, the transparent coat on the lower side

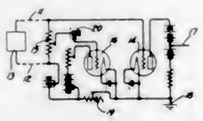
of said base consisting of substances which are substantially similar to those of which said transparent coat on the upper side are composed, each of said transparent coatings being free from tackiness and having as its two major ingredients a resin and a substantially chemically stable plasticizer for the resin.

1,856,372. GREASE GUN. CONRAD ROBERT BUCHET, Long Beach, Calif., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,925. 3 Claims. (Cl. 221—47.3.)



2. The combination in a grease gun of a cylindrical housing having an enlarged chamber therein open at one end, a closure member therefor comprising a combined handle and valve housing, a cup leather piston in said chamber, a plunger projecting therefrom and extending into a bore in said housing a grease reservoir attached to said housing, a pair of spring-pressed ball valves mounted in said housing closing air passageways, one of said passageways extending to atmosphere and the other communicating with the rear end of the grease reservoir, a passageway in the housing connecting the grease reservoir and the bore in said housing, a source of air under pressure connected with said valve housing, a normally closed valve in said valve housing and means for opening said valve to allow air to enter the housing chamber to force the plunger forward ejecting lubricant and simultaneously forcing air from the housing chamber to the rear of the lubricant reservoir.

1,856,373. POWER AMPLIFIER. EVERETT T. BURTON, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 19, 1928. Serial No. 293,815. 8 Claims. (Cl. 179—171.)



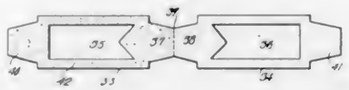
2. In a signaling system comprising a space discharge amplifier having an input and an output circuit for utilization of signals, signal producing means connected to the input circuit of said amplifier, means for utilizing a part of the input voltage from said signal producing means to effect compensation in the output of said amplifier to produce a symmetrical signal wave of positive and negative amplitudes in said output circuit.

1,856,374. METHOD OF TAGGING LACES, STRINGS, AND THE LIKE. RENÉ LOUIS CHASSELON, Paris, France. Filed Oct. 29, 1929, Serial No. 403,345, and in Germany Nov. 3, 1928. 2 Claims. (Cl. 24—143.)



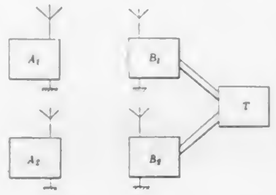
1. Process for tagging laces which essentially consists in twining on itself a portion of the lace and in holding this twined portion together by a thin sheath rolled over and glued on to itself several times.

1,856,375. SAMPLE DISPLAY TAB. CECELIA H. COHEN, Brooklyn, N. Y. Filed Jan. 9, 1930. Serial No. 419,629. 1 Claim. (Cl. 206—82.)



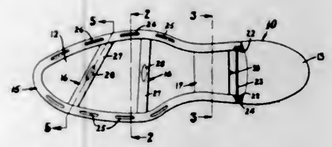
A sample display card comprising a pair of identical sections joined together at one end, said section having window openings therein and being folded at the joined end one over the other for bringing the window openings in registration, a piece of sample fabric interposed between the folded sections, and means for securing said folded sections together with the sample fabric secured therebetween.

1,856,376. RADIO-COMMUNICATION SYSTEM. MAURICE DE SAIVRE, Paris, France. Filed Mar. 28, 1929, Serial No. 350,593, and in France Apr. 3, 1928. 4 Claims. (Cl. 250—8.)



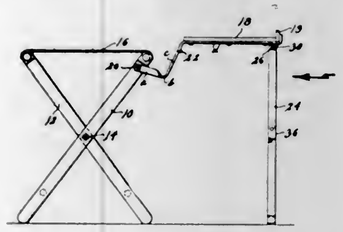
1. In radiotelegraphy, the method of eliminating deformation of signals due to parasites and fading, which consists in transmitting a message several times by the normal method of sending the signals as impulses separated by spaces, receiving the same, and making a corrected record thereof by removing all positive indications which appear on less than all of the received messages; transmitting the same message, in inverted form, several times, by transmitting the spaces between the signals as impulses, receiving the same, and making a corrected record of the message, in re-inverted form, by removing all indications which appear on less than all of the received messages, which would be blanks on the messages received in inverted form, or positive indications on the same messages if again inverted so that the signals will appear as positive indications; and making a final corrected record from the two corrected records thus made, by inserting in the final record all positive indications which appear on either of said two corrected records.

1,856,377. ORTHOPEDIC DEVICE. EDWARD E. DETTELBACH, Los Angeles, Calif. Filed July 7, 1930. Serial No. 465,813. 7 Claims. (Cl. 36—71.)



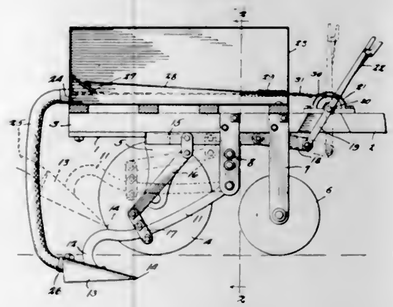
1. In combination with a shoe including a sole, a pressure applying device, said device being made of a material of a greater hardness than said sole and engaging the outer surface of said sole, a depression intermediate the length of said device, said depression causing said sole to bulge inwardly and means to retain said device in position on said sole.

1,856,378. FOLDING STOOL WITH TABLE EXTENSION. PORTER DUNLOP, Arlington, Mass. Filed Nov. 17, 1928. Serial No. 320,167. 5 Claims. (Cl. 155—123.)



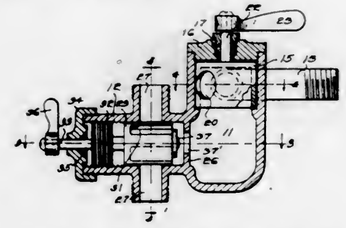
2. The combination, with a folding stool having a cross rod between its legs, of a leaf hinged at each side at points high up on the legs of the chair, and adapted to fold substantially flat against said legs in their folded position; a leg for the leaf pivoted forward on the under side of the leaf and foldable flat against the leaf; the whole being foldable into a compact bundle wherein said chair constitutes an obstruction preventing said leaf leg from falling to a projecting position.

1,856,379. SUBSURFACE IRRIGATOR. JOSEPH H. FOSTER, Georgetown, Tex. Filed June 26, 1930. Serial No. 463,994. 1 Claim. (Cl. 111—7.)



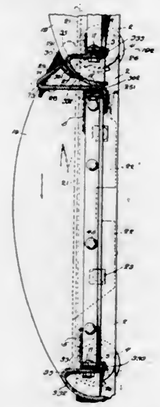
A sub-soil irrigator including a wheel-supported frame, a water container thereon having an outlet, a beam movably supported beneath the container, a point carried thereby, a nozzle connected to and extending under the point, a flexible tubular connection between the nozzle and the container, a slide beneath the container, a link connection between the slide and beam, a lever for actuating the slide and link to raise or lower the beam, and means controlled by the movement of the lever for shutting off the supply of water to the nozzle when the beam begins its upward movement and for releasing water to the nozzle when the beam approaches the lower limit of its movement, said means including a water valve in the tank, a spring for holding the valve normally closed across the outlet of the container, and a lost-motion connection between the valve and lever.

1,856,380. MIXING VALVE. WILLIAM E. FOSTER, New Bedford, Mass. Filed May 31, 1930. Serial No. 458,479. 1 Claim. (Cl. 277—62.)



In a mixing and distributing valve for the purposes described, a case having a mixing and distributing chamber, a port forming communication therebetween, said mixing chamber having hot and cold water inlets, a valve therein cooperative with the inlets to modulate the temperature of the mixture admitted from the inlets, a screw-mounted distributing valve in said distributing chamber coaxial with the communicating port, a compression valve on the distributing valve arranged to seat in the communicating port at initial position, said distributing chamber having a safety outlet and a second outlet, said distributing valve constructed to uncover the safety outlet only, after predetermined initial opening movement; and being constructed to close the last named outlet on further opening movement and to open the second outlet solely thereafter on further opening movement.

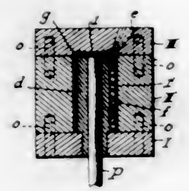
1,856,381. ENDLESS TRAVELING WATER SCREEN. FRANCIS P. GARY, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 17, 1929. Serial No. 414,696. 10 Claims. (Cl. 210—175.)



1. In a basket for endless traveling water screens, a frame including a transversely extending member, and a forwardly extending plate one end of which overlies the

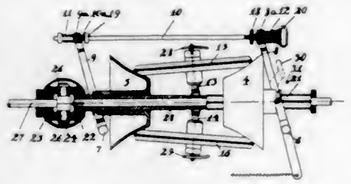
center of articulation between adjacent baskets, the other end of said plate being offset outwardly to overlap the complementary end of the plate of the next adjacent basket to provide a face to face trash seal adjacent the center of articulation, said offset end also coacting with said transversely extending member to provide an additional edge seal adjacent said center.

1,856,382. CASTING MOLD FOR MANUFACTURING ZINC CONTAINERS FOR GALVANIC ELEMENTS, BATTERIES, OR THE LIKE. ARTHUR GASSAN, Berlin-Frohnau, and PAUL RUCK, Berlin, Germany; said Ruck assignor to said Gassan. Filed June 5, 1929, Serial No. 368,571, and in Germany July 18, 1928. 3 Claims. (Cl. 22—116.)



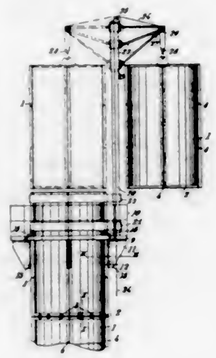
1. A mold for the purpose specified comprising a middle portion having a molding cavity therein, said portion having a longitudinal channel formed therein and opening into the cavity, a core insertible in the cavity adapted to have fitted thereon a metal container, said container having longitudinal flanged edges which extend into said channel, a head fitted on the middle portion, and means for conducting a sealing medium through the head into the channel for uniting said edges.

1,856,383. FRICTION-WHEEL DIFFERENTIAL GEAR. ADOLF FRIEDRICH GERDES, Berlin, Germany. Filed Dec. 20, 1928, Serial No. 327,274, and in Germany Dec. 23, 1927. 6 Claims. (Cl. 74—34.)



1. A friction wheel differential gear including a driving friction wheel, a driven friction wheel, means for communicating motion from one to the other with a system of articulated levers communicating with the driving friction wheel, a system of articulated levers communicating with the driven friction wheel, both friction wheels being axially shiftable, bearings in the free ends of two main lever arms of said two systems of articulated levers, a connecting rod under spring control carried in said bearings connecting both systems of articulated levers in such manner that the rod is prevented from rotating but is allowed to displace itself in longitudinal direction, abutment rings on said connecting rod within the interval between the two lever arms carrying the connecting rod and in proximity to said arms, a screw thread on the free end of said connecting rod, and a screw cap, under spring control, screwed onto said screw thread of the connecting rod, said screw cap extending into the bearing of the connecting rod, producing by axial displacement of said connecting rod the simultaneous axial displacement of the two axially shiftable friction wheels for positive directional and speed variations.

1,856,384. APPARATUS FOR BUILDING IRON-PLATE CHIMNEYS FROM SEVERAL SECTIONS. EUGEN HABER, Berlin-Charlottenburg, Germany. Original application filed Dec. 27, 1927, Serial No. 242,849, and in Germany Jan. 5, 1927. Divided and this application filed Dec. 14, 1929. Serial No. 414,193. 1 Claim. (Cl. 304—13.)



An apparatus for building iron-plate chimneys from separate superposed sections with external longitudinal bars, comprising in combination a ring-shaped platform surrounding the chimney, rollers on said ring-shaped platform adapted to guide said platform on the longitudinal bars of the chimney sections, means adapted to be clamped on the uppermost section of the chimney for raising said platform to the next working position, a tubular mast on said platform, means for securing said mast to the upper section of the chimney in the lifting position, a jib slewable on the upper end of said mast, pulleys on said jib, and a load rope extending through said tubular mast and over said pulleys, said load rope with the load describing a circle around the mast when said jib is slewed.

1,856,385. TELESCOPICALLY COLLAPSIBLE UMBRELLA. HANS HAUPT, Berlin, Germany. Filed Dec. 26, 1928, Serial No. 328,410, and in Germany Jan. 3, 1928. 4 Claims. (Cl. 135—29.)



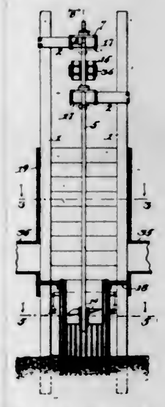
1. In an umbrella of the class described having a handle and a covering therefor, an upper U-section frame arm pivoted to the said handle, a lower U-section frame arm slidably mounted in the upper frame arm, a bracing rod pivoted to the handle, a pivot pin connecting the bracing rod and the lower frame arm together, a locking pawl revolubly mounted on the pivot pin, a nose portion on the pawl for locking the frame arms in extended position, of sufficient length to remain within the interior cross-sectional area of the frame arms, for preventing the tearing of the umbrella covering, while the frame arms are reciprocating upon each other, automatic means for normally pressing the pawl into locked engagement, and means for releasing the automatic pressing means by the action of the lower frame and bracing rod when the umbrella is placed in a closed position.

1,856,386. PRIMARY BATTERY. GEORGE W. HEISE, Lakewood, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed Dec. 28, 1926. Serial No. 157,594. 3 Claims. (Cl. 136—127.)



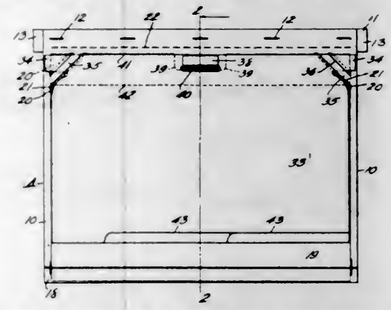
1. In a dry cell for heavy duty service, a cathode, and a zinc anode having a layer of copper completely covering its operative face.

1,856,387. COMBINED IRRIGATION AND DRAINAGE PUMP. PAUL M. HOENSHEL, Port Mayaca, Fla., assignor to Mayaca Company, Miami, Fla., a Corporation of Florida. Filed July 21, 1930. Serial No. 469,441. 4 Claims. (Cl. 103—89.)



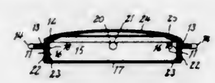
2. In a pump of the class described, the combination of an expansion casing provided with a bottom, said bottom provided with vertical holes extending therethrough, bodily movable screen rods passed through said holes and normally extending into the bottom of a canal, and propelling means in communication with said expansion casing and within the screen formed by said screen rods.

1,856,388. CARD INDEX OR RECORD DEVICE. LE ROI E. HUTCHINGS, Buffalo, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1925. Serial No. 74,842. 17 Claims. (Cl. 129—16.7.)



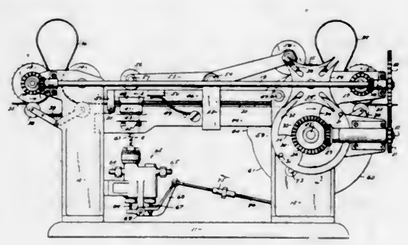
17. A record device, a plurality of card holder members arranged in overlapping relation substantially flatwise on a support, a main index card member detachably secured on each holder member, a sub-card superimposed on each main card member, and means for detachably connecting the upper edge of said sub-card to one of said members, said sub-card being hinged whereby it may be swung from said holder and main card members and expose its rear face.

1,856,389. WRIST-WATCH CASE. DUDLEY S. INGRAHAM, Bristol, Conn., assignor to The E. Ingraham Co., Bristol, Conn., a Corporation. Filed June 5, 1929. Serial No. 368,460. 1 Claim. (Cl. 58—88.)



In a wrist-watch case, the combination with a cup-shaped one-piece outer case-member of which the side- and end-flanges merge at their outer edges into an integral inwardly-extending bezel; of a cup-shaped one-piece inner case-member of which the side- and end-flanges merge at their outer edges into a bottom integral with them, and the said end-flanges being formed with clearance-cuts, and the said members being adapted in form and dimensions to permit the inner case-member to be telescoped into the outer case-member, a crystal corresponding in shape to the said members and set within the outer case-member in position to have its ends clamped directly between the inner faces of the ends of the said bezel of the said outer case-member and the inner edges of the end-flanges of the said inner case-member; and outwardly-projecting strap-loops riveted in the end-flanges of the said outer case-member and also projecting inwardly therethrough and entering the said clearance-cuts in the said inner case-member.

1,856,390. FILM-TREATING APPARATUS. WILLIAM V. D. KELLEY, Hollywood, Calif., assignor of one-half to G. Allan Hancock, Los Angeles, Calif. Filed Dec. 3, 1930. Serial No. 499,688. 5 Claims. (Cl. 101—126.)

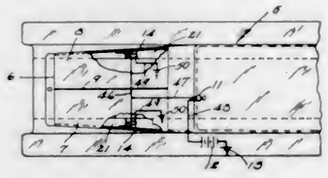


1. A device of the character described, comprising; means for imparting a uniformly intermittent longitudinal movement to a portion of a film strip therein; a stationary perforate stencil having its face parallel and closely adjacent to the path of said film portion; means for pressing said film portion, during its periods of rest, against said stencil; means for treating the film exposed through the stencil, while it is being thus pressed; and positive means for spacing the film from said stencil after said treatment, and before it can again be moved longitudinally.

1,856,391. LOCKING DEVICE. ERNEST KARL KEPPLER, Oakland, Calif. Filed Aug. 24, 1929, Serial No. 388,051. Renewed Oct. 6, 1931. 4 Claims. (Cl. 180—821.)

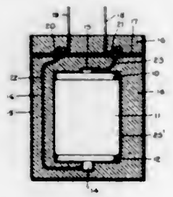
1. A locking device for automobile hoods comprising a right angle bracket extending inwardly from said hood and

affixed thereto, a cooperating right angle bracket affixed to the frame, registrable apertures in said brackets and a



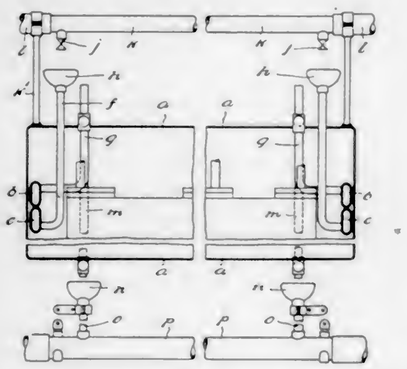
plunger operated by electrical energy adapted to cooperate with said apertures, and resilient means for withdrawing said plunger on interruption of the electric circuit.

1,856,392. IMPREGNATED CONDENSER UNIT. MAX KEVELSON, New York, N. Y., assignor to Condenser Corporation of America, Jersey City, N. J., a Corporation of New York. Filed June 14, 1928. Serial No. 285,242. 6 Claims. (Cl. 175—41.)



1. In an electrical condenser unit, the combination with a container and a hardened sealing substance therein, of a condenser body within said substance and impregnated with a material having coactivity toward said substance, and a protective coating insheathing said body and comprising a material unreactive toward either the impregnating material or the sealing substance.

1,856,393. ELECTROLYTIC CELL. ALBERT EDGAR KNOWLES, Heswall, Cheshire, England. Filed Aug. 7, 1926, Serial No. 127,918, and in Great Britain Aug. 11, 1925. 4 Claims. (Cl. 204—5.)



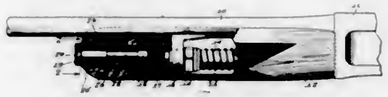
1. A temperature controlling system for the electrolyte in electrolytic cells, comprising two superimposed flattened tubes arranged across the ends of the electrodes within the cell, means connecting the end of one tube to the adjacent end of the other tube, a fluid inlet to the opposite end of one tube, and a fluid outlet from the adjacent end of the other tube.

1,856,394. DEVICE FOR TAKING FOOT-IMPRESSIONS. ADOLF LETTERMANN, Berlin-Tempelhof, Germany. Filed Dec. 7, 1929, Serial No. 412,502, and in Germany Dec. 11, 1928. 3 Claims. (Cl. 18—5.)



3. The method of taking impressions from a flat, splay or stretched foot of a person, comprising filling a plastic mass which solidifies in a short time into a flexible chamber having substantially the outline of the foot, putting this chamber into a boot or shoe, and shaping the said chamber by making the person walk upon the said chamber.

1,856,395. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Sept. 11, 1930. Serial No. 481,277. 9 Claims. (Cl. 42—75.)



2. In a firearm comprising a barrel, a receiver and a fore-end; a magazine tube secured to said receiver extending into and terminating within said fore-end, and means for securing said fore-end to said magazine tube while permitting relative movement of the barrel and fore-end.

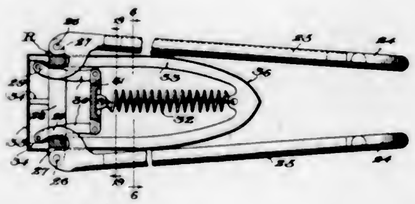
1,856,396. JOINING DEVICE. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Sept. 11, 1930. Serial No. 481,278. 7 Claims. (Cl. 42—75.)



3. A dowel pin comprising a body of one material and a cap of another material partially enclosing said body.

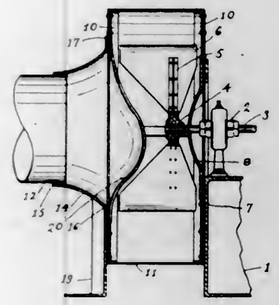
6. A fore-end for a firearm having glued therein a wood pin provided with a projecting metallic head.

1,856,397. PARACHUTE AND INSTALLATION THEREOF. ELMER EIDEMILLER MOTTER, Pleasant Ridge, Mich. Filed Aug. 11, 1930. Serial No. 474,560. 7 Claims. (Cl. 244—21.)



2. A parachute-opener comprising a central member, arms swingable thereon from and to folded position and connectable with parachute-envelope elements, a yoke on said central member, a draw member, links connecting said arms and draw member, and a spring connected with said yoke and draw member.

1,856,398. SUCTION AND EXHAUST FAN. JAMES D. PARKER, Kansas City, Kans. Filed May 15, 1930. Serial No. 452,607. 2 Claims. (Cl. 302—37.)



1. In a suction and exhaust fan, a fan housing, a fan within said housing and mounted on a shaft protruding through one side of said housing, a suction pipe connected to and opening into the opposite side of said housing, an exhaust pipe connected to and leading from the periphery of said housing, a segmental spherical shaped deflecting plate spread across the opening of said suction pipe with the concaved side of said plate facing the suction pipe and the apex of the spherical shape of said plate extending a considerable distance into said housing and disposed in close proximity to said fan shaft.

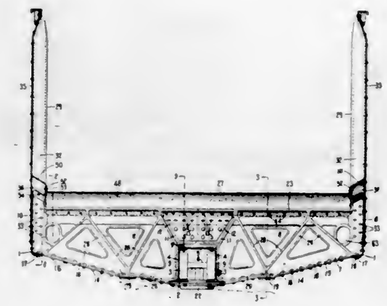
1,856,399. TRUCK TANK MOUNTING. LONNIE F. PHILLIPS, Township Fifty-One, Clay County, Mo. Filed Jan. 27, 1930. Serial No. 423,651. 1 Claim. (Cl. 280—5.)



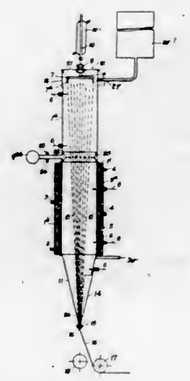
In a torsion eliminating truck tank mounting, a tank, a tank frame rigid with and supporting said tank, a truck frame, downwardly bearing tie blocks above and disposed transversely of said truck frame, upwardly bearing tie plates below and disposed transversely of said truck frame, bolts passing through said tie blocks and said tie plates and rigidly binding all of said blocks and said plates to said truck frame, a spring retaining bolt passing upwardly through each of said tie blocks and through said tank frame, each spring retaining bolt held downwardly by the companion tie block, a spring surrounding each of said spring retaining bolts, and means on each of said spring retaining bolts to retain the corresponding spring in tension downwardly on said tank frame so that either corner and diagonal corners of said frames can separate and prevent the torsional movements of said truck frame from bending and breaking said tank.

1,856,400. RAILWAY CAR. JOHN A. PILCHER, Roanoke, Va., and WILLIAM E. WINE, Toledo, Ohio. Filed Mar. 24, 1928. Serial No. 264,466. 45 Claims. (Cl. 105—228.)

1. In a railway car having a center sill, a body bolster formed of a plurality of cast steel sections, each of said sections having an integral upstanding plate-like extension overlying the top of the center sill and each having an upwardly extending flange terminating adjacent the top of the extension, the lower portion of said flanges affording means for respectively securing the bolster sections to opposite sides of the center sill and the integral extensions of the bolster sections affording means for securing the sections together.



1,856,401. PROCESS AND APPARATUS FOR THE MANUFACTURE OF ARTIFICIAL FILAMENTS. EDMOND PRINCE, Tassin-la-Demi-Lune, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed June 14, 1924, Serial No. 720,106, and in France Dec. 21, 1923. 22 Claims. (Cl. 18—54.)

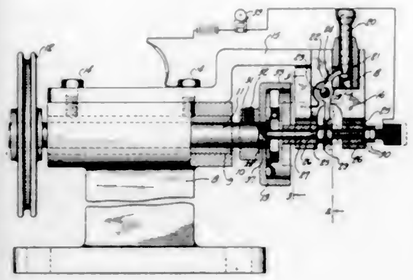


1. The process of manufacturing filaments or threads by dry spinning, which comprises causing a viscous fluid to be extruded from a spinning die directly into an evaporative atmosphere, and lowering the temperature of the fluid to be spun.

1,856,402. AUTOMATIC TRIP DEVICE. ANDREW RASMUSSEN and WILLIAM S. GOODELL, Racine, Wis. Filed Feb. 20, 1928. Serial No. 255,666. 3 Claims. (Cl. 74—94.)

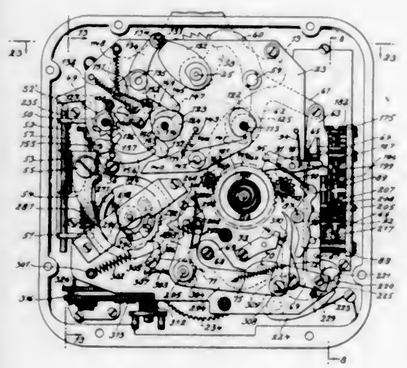
1. The combination with a releasable member, of a trip device therefor, comprising a frame, means on said frame normally engaging said releasable member, actunt-

ing mechanism engaging said means, a rotatable member in connection with said frame, a governor on said rotatable member having an opening therein, and a centrifugal-



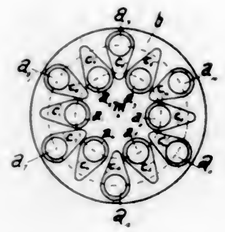
ly operated arm on the governor regulating the admission of a portion of the actuating mechanism to the opening in the governor.

1,856,403. FARE INDICATOR. PAUL RIEGGER, Villingen, Baden, Germany, assignor to Kienzle Uhrenfabriken Aktiengesellschaft Schwenningen-on-the-Neckar, Germany, a Corporation of Germany. Filed Nov. 5, 1926, Serial No. 146,361, and in Germany Sept. 22, 1926. 9 Claims. (Cl. 235—30.)



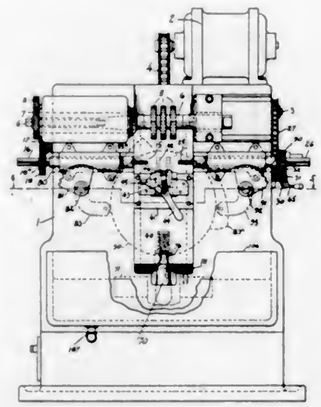
1. In a fare indicator, the combination, with the fare indicating members, resetting means therefor, and mechanism for registering the total fare, of a rotary driving shaft adapted to be connected with a rotary part of the vehicle and connected with said fare indicating members, motion transmitting mechanism intermediate said registering mechanism and said rotary driving shaft and including a driven shaft in the plane of said driving shaft, a crown wheel carried by said driven shaft, and a spur gear mounted on said driving shaft in mesh with said crown wheel for operatively connecting said shafts, said spur gear having an extended axial length whereby the location of said shafts relatively to each other in the direction of the axis of said driving shaft may be varied within the axial length of said spur gear without disconnecting the latter from said crown wheel.

1,856,404. RECTIFIER. MAX SCHIESSER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Oct. 21, 1927, Serial No. 227,654, and in Germany Nov. 1, 1926. 3 Claims. (Cl. 250—27.5.)



3. The combination with a metal vapour rectifier having anodes, of cooling jackets wedge-shape in cross section disposed about said anodes and mounted with their respective adjacent surfaces in relatively close proximity to form ventilating chimneys between the adjacent jackets.

1,856,405. APPARATUS FOR FINISHING MACHINE PARTS OR ELEMENTS. FRANK J. SIKOROVSKY, Jackson, Mich. Filed June 20, 1928. Serial No. 286,843. 6 Claims. (Cl. 29—26.)



1. An apparatus of the kind described, comprising a supporting frame structure, a plurality of work-performing instruments carried by the frame structure including milling cutters and rotating cutting tools, means for holding work and positioning the work for operation thereon of the said instruments, and driving means for the instruments carried at the sides of the frame structure and in exposed positions, said driving means including speed changing devices, whereby the speed of movement of the said devices may be readily varied.

6. An apparatus of the kind described, comprising in combination, milling cutters, oppositely disposed rotating cutting tools, means for rotating the cutting tools and milling cutters, a work-holding device for holding the work between the cutting tools, a controlling cam wheel, means for driving the same, cam devices on the wheel for variously positioning the work as regards the milling

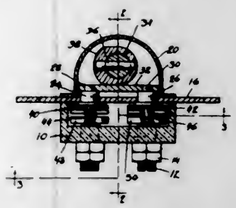
cutters and cutting tools and for advancing the cutting tools all in timed relation, a manually controlled clutch device for effecting rotation of the cam wheel and automatic means for disengaging the clutch device upon the completion of one cycle of operation.

1,856,406. FLOATING REAMER. CLAYTON E. WYRICK, Detroit, Mich., assignor to Gairing Tool Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 2, 1928. Serial No. 316,719. 4 Claims. (Cl. 77—72.)



4. In a tool of the character described, a reamer body portion having a central longitudinal bore with a polygonal shaped socket at its forward end; means for closing the end of said socket; a tool holder provided with a polygonal socket; a driving connection comprising a relatively short shaft extending through the bore in the reamer body, having an arc-shaped polygonal head at each end respectively fitted to the sockets in the holder and body of the reamer, thereby permitting the body of the reamer to float under torsional load; a set screw supported in said tool holder having a projecting end extending into a peripheral groove in the shaft of the driving connection; and an adjustable forked member located at the end of the tool holder for supporting the driving connection upon the withdrawal of the reamer body from the work, said reamer body including cutter blades located back of the polygonal shaped driving socket in the body, whereby the cutting blades are adapted to follow the driving force applied to the reamer body through the driving connection.

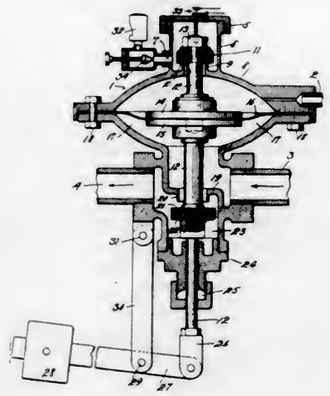
1,856,407. ELECTRIC SWITCH. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 27, 1930. Serial No. 423,641. 10 Claims. (Cl. 200—16.)



1. An electric switch comprising a housing, a plurality of pairs of contacts and independently operable means for bridging each pair supported therein, rigid means coupled therewith and operable to actuate either one or both of said bridging means, and a rotatable member operable from outside the housing contacting said rigid means and adapted upon rotation to successively bridge said pairs of contacts.

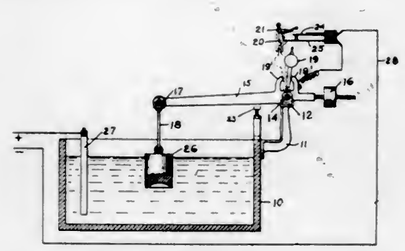
1,856,408. AUTOMATIC STOP VALVE FOR OIL BURNERS. OWEN WESLEY BREAR, East Newark, N. J., assignor to E. S. Hammond, Inc., Newark, N. J., a Corporation of New Jersey. Filed May 3, 1928. Serial No. 274,725. 4 Claims. (Cl. 137—139.)

1. In a valve of the class described, an air chamber, an inflow oil chamber, an outflow oil chamber, a valve stem, a valve head on the stem connecting the two oil chambers so as to shut off or open communication between them, a diaphragm between the inflow oil chamber and the air chamber, means for admitting air pressure to the air chamber, and larger means for venting the air chamber, a second valve head connected to said valve stem



for closing the connection between the air supply of the air chamber and the venting means when the valve head between the oil chambers is open, and opening the connection between the air admission and the venting means when the valve head between the oil chambers is closed.

1,856,409. WEIGHING SEALING DEVICE. JAMES W. BRYCE, Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Nov. 4, 1927. Serial No. 230,993. 8 Claims. (Cl. 204—5.)

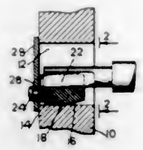


1. A device for sealing counter weights in an electroplating bath, comprising a pivoted lever having a weight on one arm and means for suspending a counter weight immersed in said bath from the other arm of said lever, an electroplating circuit including a circuit closer controlled by said lever to open the circuit when the suspended counter weight counterbalances said weight on the opposite arm of the pivot and mechanical means pivotally attached to said lever for accelerating the movement of said lever on the counterbalancing operation to insure quick opening of said circuit.

1,856,410. SCALE BEARING. JAMES W. BRYCE, Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Feb. 16, 1928. Serial No. 254,797. 13 Claims. (Cl. 308—2.)

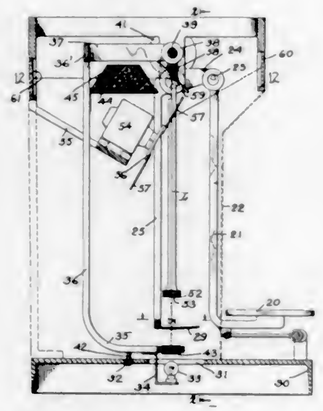
1. In a device of the class described, a self aligning bearing for a scale comprising a bearing member having

a V-shaped groove for supporting a knife edge and provided with a convex surface, a member having a concave



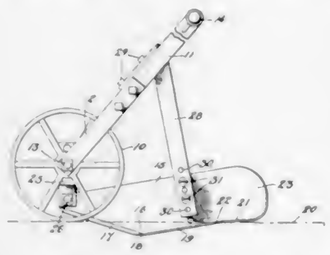
laterally sloping surface on the top of which the aforesaid convex surface is pivotally supported, and means for limiting lateral movement of the bearing member.

1,856,411. COMPUTING SCALE. FRED M. CARROLL, Yonkers, N. Y., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Oct. 22, 1927. Serial No. 227,087. 14 Claims. (Cl. 88—24.)



1. In a computing scale, in combination, a load support, a transparent chart connected to said support to be movable in response to a load carried by said support, said chart bearing a series of graduations, means on one side of the chart for projecting a graduation therefrom corresponding to the load on the support, and a plurality of means on the other side of the chart for alternately intercepting and reflecting the image of said projected graduation.

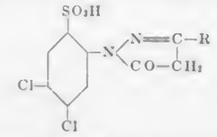
1,856,412. SIDEWALK EDGE ROUTER. ANGELO B. D'IPPOLITO, Vineland, N. J. Filed Apr. 20, 1931. Serial No. 531,474. 1 Claim. (Cl. 97—227.)



A side walk edge router comprising a wheeled vehicle, a routing implement carried by the vehicle, means forward of the routing edge to adjust the depth of cut, means inherent in said router to form a guide to travel along in engagement with the vertical edge of the walk, a spooned rear end formed upon said router adapted to move the removed material to a position spaced from the edge of the walk, and a cutter moving along the top surface of the walk in the rear of the routing edge.

1,856,413. 1-(3′.4′-DICHLOR-6′-SULPHOPHENYL)-5-PYRAZOLONES AND AZO COLORING MATTERS DERIVED THEREFROM. LEON W. GELLER, Hamburg, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 23, 1925. Serial No. 77,374. 21 Claims. (Cl. 260—45.)

1. As new products, the 1-(3′,4′-dichlor-6′-sulphophenyl)-5-pyrazolones which correspond with the probable formula:



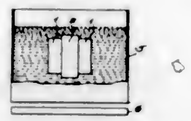
wherein R signifies a methyl or a carboxyl group.

1,856,414. ELECTRIC SEALER. ANDREW GROH, New York, N. Y. Filed Mar. 11, 1931. Serial No. 521,766. 4 Claims. (Cl. 219—21.)



1. An electric sealer comprising a housing, a plunger endwise engaged therein, a sealing wax seat, a spring between said seat and said plunger, a means for electrically melting the wax, and means for gradually feeding the wax in proportion to its use to said melting means.

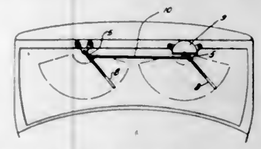
1,856,415. METHOD OF TREATING INSULATING SLEEVES. HERMAN HALPERIN and ALEXANDER P. THOMS, Chicago, Ill. Filed Feb. 25, 1928. Serial No. 257,090. 7 Claims. (Cl. 18—48.)



7. The method of forming an insulating sleeve of molded insulation and metal and rendering the joint between the insulation and metal fluid tight during use which consists in molding the insulating material inseparably upon the metal and thereafter immersing the sleeve of metal with the insulating material inseparably molded thereon in a bath of oil heated to a temperature below the softening temperature of the molded insulation and causing said oil to enter and be deposited in spaces existing between the insulation and metal, and then cooling the sleeve of insulation and metal.

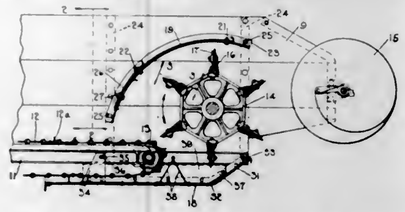
1,856,416. WINDSHIELD WIPER. HENRY HUEBER, Buffalo, and ERWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Mar. 20, 1930. Serial No. 437,574. 4 Claims. (Cl. 15—235.)

3. An auxiliary windshield cleaner comprising a pliable mounting bracket having spaced ears, an angularly extending support, the outer marginal portion of the support being downturned to provide a bearing support, and the portion between said ears being downturned, said downturned portions being opposed and formed with journal bearings, a shaft having its opposite ends journaled in the bearings, one end of the shaft being per-



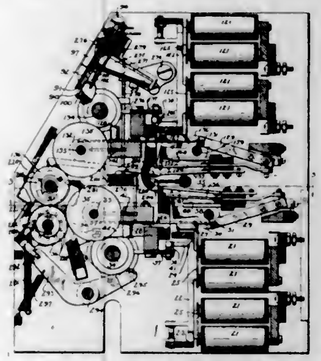
manently secured in its bearing for rotation and the opposite end being detachably engaged in the companion bearing upon relative separation of said opposed downturned portions, and a wiper arm connected to the shaft between the bracket bearings.

1,856,417. FERTILIZER DISTRIBUTOR. WILLIAM A. HYLAND, East Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 22, 1928. Serial No. 287,467. 14 Claims. (Cl. 275—5.)



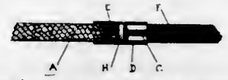
1. The combination with a manure spreader, comprising a rotating beater cylinder, of attachment means for converting said manure spreader into a lime spreader, comprising deflecting means positioned above and in front of said beater cylinder and cooperating therewith for directing the lime rearwardly.

1,856,418. ACCOUNTING MACHINE. CLAIR D. LAKE, Binghamton, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed July 18, 1925. Serial No. 44,452. 47 Claims. (Cl. 235—58.)



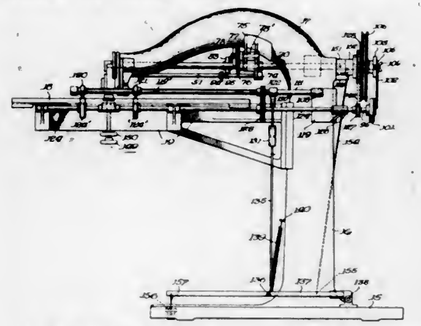
1. In a record controlled accounting apparatus, a record reading means, means for automatically presenting records thereto, means controlled by the reading means for adding promiscuous positive and negative amounts regardless of their relative values derived from the automatically presented records, and means controlled by the adding means for disclosing the algebraic totals of such additions.

1,856,419. SAFETY COMBINATION FUSE TIP. DAVID F. MCRAE, Salt Lake City, Utah, assignor of three-fourths to Anna Catherine Frisbey, John G. Petty, and Vernon Snyder, Salt Lake City, Utah. Filed June 18, 1927. Serial No. 199,720. 2 Claims. (Cl. 102—8.)



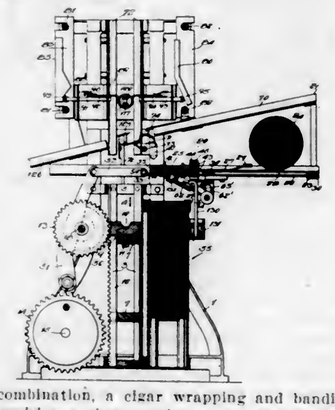
2. In combination, a slow burning member, a clip attached to said member, and a deflagrating member in said clip, said clip being longitudinally slit, and said deflagrating member being spaced from an end of said clip to leave a space between said member and a fuse inserted into said end of said clip.

1,856,420. TIE STITCHING MACHINE. IRVING R. METCALF, Glen Ellyn, and RAYMOND L. PELLAND, Chicago, Ill., assignors to Latham Machinery Company, a Corporation of Illinois. Filed Aug. 18, 1927. Serial No. 213,746. 19 Claims. (Cl. 1—11.)



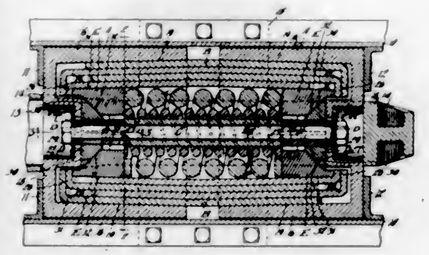
1. A tie stitching machine comprising a frame, staple forming and driving mechanism mounted on said frame, and continuously rotating wire feeding mechanism mounted on said frame for feeding a plurality of wires to said staple forming and driving mechanism, said continuously rotating wire feeding mechanism being constructed and arranged to interrupt the feeding of one of said wires at certain predetermined intervals and the feeding of another of said wires at different intervals.

1,856,421. CIGAR WRAPPING AND BANDING MACHINE. MYRON MILLER, Chicago, Ill., assignor of one-third to Bertram Wm. Coltman, Chicago, Ill. Filed Apr. 11, 1921, Serial No. 460,368. Renewed July 31, 1925. 19 Claims. (Cl. 93—1.)



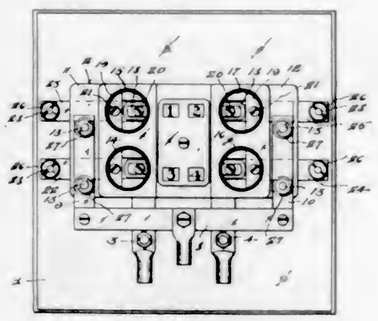
1. In combination, a cigar wrapping and banding machine comprising a cigar carrier, and means for applying a wrapper and a band to successive cigars.

1,856,422. FRICTION SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 14, 1928. Serial No. 269,932. 8 Claims. (Cl. 213—33.)



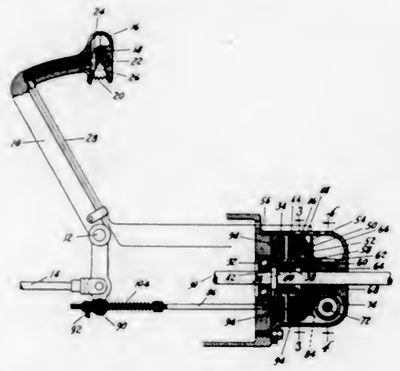
1. In a friction shock absorbing mechanism, the combination with front and rear friction casings relatively movable toward and away from each other; of two groups of relatively movable intercalated friction plates, disposed at opposite sides of the mechanism and having frictional engagement with the casings, said plates being moved relatively to each other by said casings; a central friction post having friction surfaces at opposite ends thereof; friction wedge members at opposite ends of the mechanism slidable on the friction surfaces of the post; friction shoes interposed between the wedge member and the groups of plates, said shoes having sliding contact with said groups of plates and wedging engagement with the friction wedge members; and a spring resistance between the post and groups of plates surrounding and enclosing said post and yieldingly opposing relative movement of the friction shoes.

1,856,423. FUSE PLUG PANEL AND BLOCK. EDWIN A. OLLEY, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Mar. 7, 1928. Serial No. 259,627. 3 Claims. (Cl. 175—369.)



1. In a fuse plug panel and block, the combination of a base, a block mountable on the base, a pair of substantially parallel outside bus bars mounted on the lower side of the block, the block also having a ledge on opposite sides thereof and a neutral bus bar having branches on said ledge, load circuit bars mounted on the lower side of the block at an angle to the outside bus bars, fuse plug terminals mounted on the block and means for electrically and mechanically connecting the members of each pair of terminals to one of the outside bus bars and to one of the load circuit bars.

1,856,424. BRAKE OPERATING MECHANISM. HENRI PERROT, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Oct. 31, 1927, Serial No. 230,091. Divided and this application filed Nov. 19, 1928. Serial No. 320,266. 24 Claims. (Cl. 188—140.)



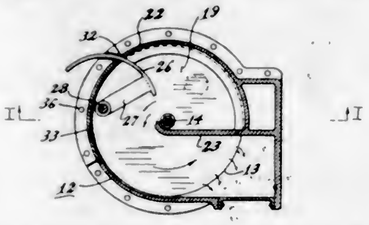
13. Brake-applying mechanism for a vehicle having a rotatable element and comprising, in combination therewith, a brake-applying connection, a reversibly rotatable brake shaft connected therewith to apply said connection in a given direction upon a part turn rotation of the shaft in either direction, an electrically controlled clutch operable to couple said rotatable element with the brake shaft to rotate the brake shaft to actuate the brake applying connection.

16. Vehicle braking mechanism comprising, a shaft rotated by the movement of the vehicle, a manual brake operating member, an electromagnetic clutch on said shaft and linkage operable by engagement of said electromagnetic clutch to operate said manual member to apply the brakes.

1,856,425. PRODUCTION OF LACTIC AND ACETIC ACIDS. WILLIAM H. PETERSON and EDWIN B. FRED, Madison, Wis., assignors to Wisconsin Alumni Research Foundation, a Corporation. Original application filed Aug. 17, 1927, Serial No. 213,702. Divided and this application filed May 23, 1929. Serial No. 365,557. 3 Claims. (Cl. 260—120.)

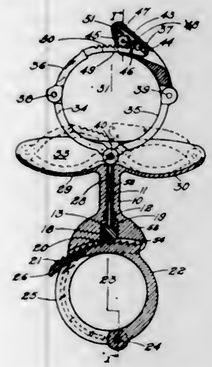
3. The process which comprises subjecting pentoses to the action of the herein-described bacteria and allowing the fermentation to proceed until substantially all of the pentoses have been converted into acetic and lactic acids.

1,856,426. FEEDER FOR PULVERIZERS AND THE LIKE. WALTER W. PETTIBONE, Birmingham, Ala. Filed Sept. 29, 1930. Serial No. 485,187. 5 Claims. (Cl. 83—44.)



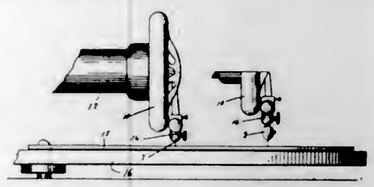
1. In a feeder mechanism, a circular, rotary, horizontally disposed feed table, a housing for the table, a radial wall in the housing forming with the outer wall a segmental feed chamber and a segmental discharge chamber extending downwardly to the table on one side thereof, one side of said feed chamber being open for the discharge of material therethrough to the discharge chamber, and a gate pivoted to one side of the housing and adapted to swing across the opening in the segmental feed chamber to limit said opening.

1,856,427. HANDCUFF. GEORGE W. PRATT, Oakland, Calif. Filed Nov. 11, 1929. Serial No. 406,337. 7 Claims. (Cl. 70—24.)



1. A pair of handcuffs comprising a centrally bored stock having a cuff secured to each of its respective ends, one cuff comprising a quadral element, two of the sections thereof being pivotally related to each other by an overlapped joint and to the stock, the inner face of the respective overlaps having radial grooves therein for registration with the bore, a spring actuated rod within the bore for entering the grooves when in registration with the bore, a toothed dog carried by the opposite end of the rod, the other of the cuffs being composed of a bifurcated arcuate section and a complementary arcuate section pivotally related to the first named section, the last named section being provided with teeth on the outer peripheral face thereof for engagement with the dog.

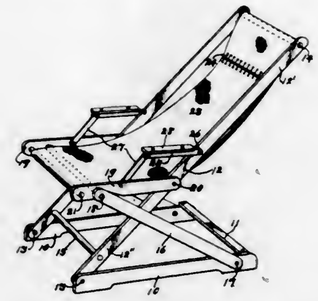
1,856,428. PHONOGRAPH. ALFIO RAPISARDI, Boston, Mass. Filed May 7, 1926. Serial No. 107,361. 6 Claims. (Cl. 274—38.)



1. A stylus for phonographs, comprising a relatively massive body of approximately globular form and devoid of prominent projecting angular parts, said body having a socket to receive a needle and serving to support the needle, and means for releasably securing a needle in said body.

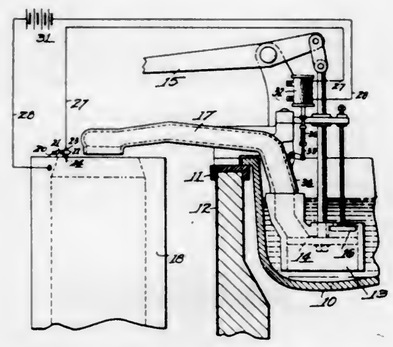
1,856,429. FOLDABLE ROCKING CHAIR. HERBERT RODRIGUEZ, Chicago, Ill. Filed Jan. 6, 1930. Serial No. 418,723. 2 Claims. (Cl. 155—56.)

1. A foldable rocking chair consisting of base frame means, frame members pivotally mounted at the front thereof and providing the front legs and the back frame, there being an upper cross-rod on the back frame part of said members, seat members pivoted to said frame members to swing forwardly thereof and being notched at the lower sides, rear legs pivoted to the rear part of said base frame means and carrying a cross-rod at the upper ends for engaging in said notches to retain said seat members supported thereon, a cross-rod at the front ends of



said seat members, a strip of fabric having its ends connected for ready detachment and being looped around the cross-rods provided on said frame members and on said seat members to serve as the seat and the back-rest of the chair, and arm-rest means pivotally mounted on said frame members and including a pair of links pivoted to said seat members to swing therewith and to be folded with the chair.

1,856,430. MOLD FILLING LIMITING DEVICE. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Dec. 11, 1929. Serial No. 413,288. Renewed Sept. 17, 1931. 5 Claims. (Cl. 22—2.)



1. The combination with a mold and pump for supplying it with molten metal, of an electric contact finger located in the mold and means whereby when the metal rises to said contact finger an electric current will be established and the flow of metal to the mold will be stopped.

1,856,431. ELECTRIC IGNITION DEVICE. GUY F. ROLLAND, Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed May 29, 1930. Serial No. 457,022. 5 Claims. (Cl. 102—9.)

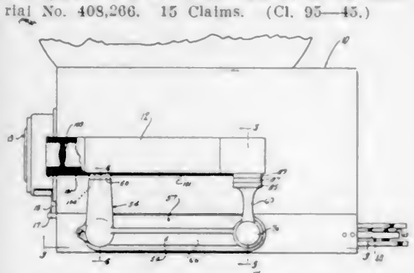
1. A device of the character described, comprising a closed metallic shell, an electric ignition means therein,

a firing composition ignited by said ignition means, an auxiliary deflagrating flash composition in the inner end of the shell adapted to ignite a charge of low explosive by



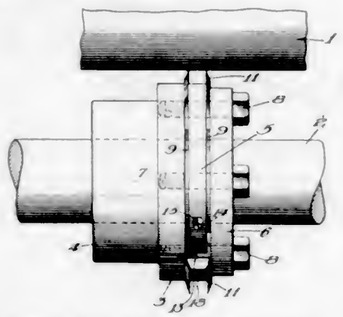
the flame produced thereby, and means for weakening the lower portion of the shell to insure its rupture upon the ignition of the contents thereof.

1,856,432. CAMERA FOCUSING SYSTEM. WILLIAM F. RUDOLPH, Van Nuys, JOHN ROY HUNT, Hollywood, and HARRY G. CUNNINGHAM, Los Angeles, Calif., assignors to Paramount Publix Corporation, Los Angeles, Calif., a Corporation of New York. Filed Nov. 19, 1929. Serial No. 408,266. 15 Claims. (Cl. 95—45.)



1. In a camera, the combination of an objective lens removably mounted in the camera, means for moving the objective lens along its axis, said means including a focus setting lever linked to said lens for movement thereof, and an adjustable lever-constraining link pivoted to the lever for support thereof, and adapted by adjustment to vary the amount of movement imparted by said lever to said lens.

1,856,433. ONE PIECE CUTTER. LOUIS C. SCHILLO, Chicago, Ill., assignor, by mesne assignments, to Asphalt Process Corporation, New York, N. Y., a Corporation of New Jersey. Filed Nov. 20, 1929. Serial No. 408,460. 6 Claims. (Cl. 164—68.)



1. A cutting head including in combination, a filler plate, a substantially U shaped one-piece cutter blade removably mounted on the filler plate, means for uniting the filler plate and cutter blade in a unitary structure, said filler plate comprising an annular disc and an arcuate shoulder formed on a face of said disc, the edge of the disc being provided with a transverse slot for the reception of the bight of the cutter blade.

1,856,434. PRINTING PASTES FROM DYESTUFFS AND PROCESS OF PREPARING THEM. ALBRECHT SCHMIDT, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 19, 1928, Serial No. 307,053, and in Germany Aug. 29, 1928. 8 Claims. (Cl. 8—6.)

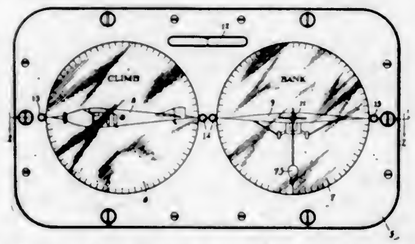
1. As new products, dyestuff pastes from dyestuffs, containing condensation products obtained by heating a urea with an excess of a compound of the following general formula: R—X, wherein R signifies an organic residue and X signifies the alcoholic OH-group or the CO—R-group.

1,856,435. LAWN EDGER AND GROOVER. JOSEPH A. SCHWARZ, Los Angeles, Calif. Filed Nov. 29, 1929. Serial No. 410,389. 1 Claim. (Cl. 97—227.)



In an edger and groover, a supporting frame having two sides, one side of which has a heel portion extended rearwardly, two axially spaced cutter discs rotatably mounted between the said sides of said supporting frame, one cutter being positioned rearwardly of the other, whereby the overlapping portions of the cutter discs turn in opposite directions, a bearing roller at the side of said supporting frame to run upon the edge of a walk, and a lifter member supported by the said heel portion and turned to run under and cut the strip of soil between the cuts made by the discs.

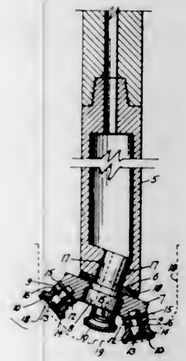
1,856,436. BANK, TURN, AND CLIMB INDICATOR FOR AIRCRAFT. CASPER E. SCHUELLER, Berkeley, Calif., assignor to Ergo A. Majors, Piedmont, Calif. Filed May 21, 1928. Serial No. 279,488. 1 Claim. (Cl. 33—204.)



A bank, turn and climb indicator for air-craft comprising a casing securable to the aircraft and having a pair

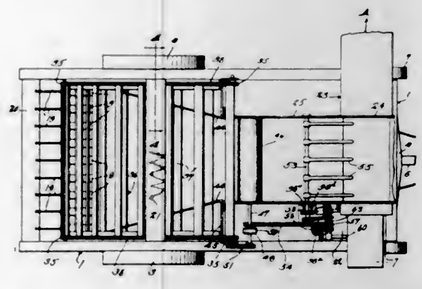
of dials disposed close to each other and in substantially the same plane, a pointer for each dial, one of the pointers being in the shape of a side view of an airplane and the other pointer being in the shape of a rear view of the same airplane, and means disposed within said housing for automatically swinging said pointers with respect to said housing for continuously indicating respectively the longitudinal and lateral attitude of the craft.

1,856,437. DRILL BIT. WILLIAM V. SEIFERT, Denver, Colo. Filed Jan. 28, 1929. Serial No. 335,461. 5 Claims. (Cl. 255—71.)



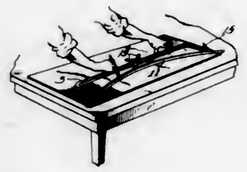
1. A drill-tool comprising a rotary stem, a head mounted on the stem to rotate about an axis oblique to the axis of rotation of the stem, and a cutter mounted on the head to rotate about an axis oblique to the axis of rotation of the head.

1,856,438. HAYMAKER. ARTHUR A. SHARPLES, Stockdale, Kans. Filed Jan. 14, 1929. Serial No. 332,487. 5 Claims. (Cl. 56—354.)



1. In a device of the class described, a vehicle, a feeder thereon, a movably mounted stop in the feeder, a conveyor on the vehicle and extended upwardly and forwardly to the feeder, a rake on the vehicle and extended upwardly and rearwardly to the lower rear end of the conveyor, a driving device for the conveyor, an engine on the vehicle and operatively connected to the driving device, clutch mechanism for coupling the stop to the driving device, and means for operating the clutch mechanism automatically at intervals from the driving device, through power derived from the engine and independently of an operator to withdraw the stop from the feeder and then return the stop into the feeder.

1,856,439. CONFORMATOR GAUGE. KURT W. SOMMER, Cicero, and FRED HAUSER, Chicago, Ill., assignors to Sommer and Maca Glass Machinery Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 4, 1929. Serial No. 330,324. 3 Claims. (Cl. 33—177.)

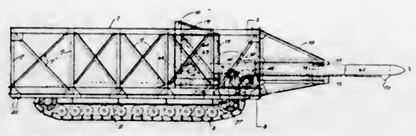


1. In combination, a unitary rigid frame comprising an elongated strip having turned down ends, a flexible strip pivotally mounted upon said rigid frame at the turned down ends, and adjustable means at each end and also intermediate the elongated portion of the rigid frame for locking the flexible strip in any position of adjustment, said intermediate adjustable means being pivotally connected with said flexible strip.

1,856,440. METHOD OF AND APPARATUS FOR FORGING UPSET ARTICLES. WILLIAM HENRY SPIRE, Cleveland Heights, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 25, 1929. Serial No. 358,032. 5 Claims. (Cl. 78—17.)

1. In an apparatus of the character described, the combination of a reciprocating die head, an ejector member adapted to eject work pressed into a cavity formed in the die head, shiftable means for laterally supporting the ejector member when said member is subjected to working strains, and means for repositioning said shiftable means.

1,856,441. SELF-DUMPING CRAWLER WAGON. ERNEST R. STANDFUSS, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 9, 1930. Serial No. 450,911. 11 Claims. (Cl. 214—82.)

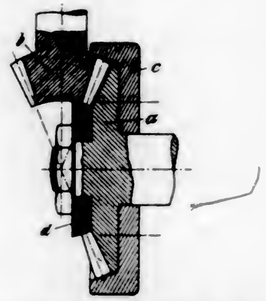


1. A crawler wagon having a body and free running flexible endless treads supporting said body, said body having one end open, a gate for the other end of the body slidable longitudinally thereof and operable to close one end of the wagon and to travel longitudinally along the body to discharge the contents of the wagon through the open end of the latter, a pair of drums rotatably supported on the body, haul-back and haul-in lines connected to said drums, reduction gearing connected to and rotated by the drums when the latter are rotated and rack and pinion mechanism between the gearing and the slidable gate.

1,856,442. METHOD OF MAKING PORTLAND CEMENT. HAROLD H. STEINOUR, Riverside, Calif., assignor to Riverside Cement Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 30, 1929. Serial No. 396,394. 6 Claims. (Cl. 106—25.)

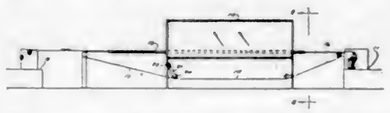
1. The method of making Portland cement which comprises first burning material containing lime, silica, alumina and iron oxide, in which the proportion of lime is in excess of that which will combine, even on repeated burning, with the silica, alumina and iron oxide contained therein, permitting the resultant product to cool, grinding said product and mixing therewith material containing sufficient silica, alumina and iron oxide to combine with the excess lime, and reburning the mixture.

1,856,443. BEVEL-WHEEL GEARING. WILHELM STOECKICHT, Munich-Solln, Germany. Filed June 10, 1927, Serial No. 197,900, and in Germany June 19, 1926. 2 Claims. (Cl. 74—7.)



1. A bevel-wheel gearing, comprising, in combination with one of the wheels of the gearings, a collar located at the outer surface of the same and another collar located at the inner surface of the same, both collars engaging the other wheel in such a manner that axial shifting of both wheels is prevented.

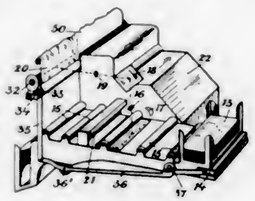
1,856,444. MEANS FOR FEEDING A WIRE THROUGH A FURNACE. WALTER C. SUTTON, Cleveland Heights, Ohio, assignor to The Lindsay Wire Weaving Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 11, 1929. Serial No. 398,865. 4 Claims. (Cl. 263—3.)



1. In combination, a wire annealing furnace, means for moving the work to be annealed relatively fast through the furnace, an endless feed wire extending through the furnace, part of the feed wire being inside the furnace and part being outside thereof, and the feed wire being adapted to remain stationary while the work wire is moving through the furnace during the annealing operation, and means on the feed wire for attaching the work wire thereto, whereby the work wire may be threaded through the furnace.

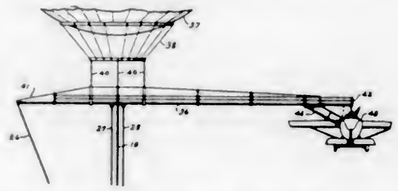
1,856,445. TABULATING MACHINE FOR BOOKKEEPING PURPOSES. GUSTAV TAUSCHEK, Vienna, Austria, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Feb. 10, 1930, Serial No. 427,101, and in Austria Feb. 17, 1928. 7 Claims. (Cl. 88—24.)

1. In a tabulating machine for bookkeeping purposes, in combination an oscillating knife for taking off cards from a pile, feeding mechanisms for advancing said cards successively through the machine, an automatically advanced paper web carried by a platen arranged in a paper carriage provided at the end of the said tabulating machine opposite to that carrying the said pile of cards, an objective arranged above the path of movement of said cards, a light source cooperating with said objective, a mirror



behind said objective and a second objective behind said mirror and arranged opposite a portion of said paper web which has been made light sensitive, said light sensitive portion of the paper being, before development, permanently enclosed in a light tight casing and passed after exposure through receptacles containing suitable solutions and through drying rollers.

1,856,446. AIRPLANE LOADING STATION. LOUIS VINGHEROETS, Grand Rapids, Mich. Filed Mar. 8, 1929. Serial No. 345,427. 6 Claims. (Cl. 244—2.)



2. An airplane loading station comprising a turntable platform, a balloon, flexible cables anchoring said balloon to said platform, an arm supported by said balloon having one end thereof adapted to be connected to an airplane, and means for rotating the said arm at substantially airplane speed.

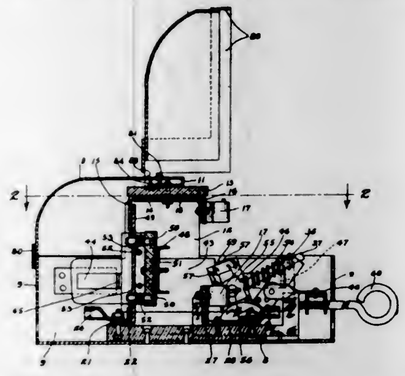
1,856,447. BUCKLE. FORREST L. WILLIAMS, Portsmouth, Ohio, assignor to Williams Manufacturing Company, Portsmouth, Ohio, a Corporation of Ohio. Filed Mar. 29, 1930. Serial No. 439,915. 2 Claims. (Cl. 24—75.)



1. In a buckle, an outside rim, a hook shaft on said rim having tongues thereon, and a bar between the tongues and spaced from the shaft associated with the shaft for keeping a belt on the hooks within the rim from engaging the shaft and in spaced relation thereto.

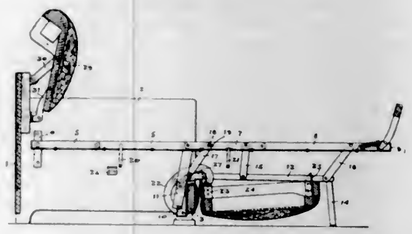
1,856,448. ELECTRIC SWITCH. GEORGE B. WADSWORTH, Covington, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Oct. 17, 1928. Serial No. 313,150. 10 Claims. (Cl. 200—76.)

9. In combination a cabinet having a base, a transverse member spaced from the base, contact members extending from the base and said transverse member, a carriage reciprocable between the base and transverse member, electrical bridge members on the carriage and each arranged to have one end abut a contact on the transverse



member and the other end abut a contact on the base when the carriage is moved to one limit of reciprocation and to break abutting contact when the carriage is moved away from said limit of reciprocation and means to initiate uncontrolled quick reciprocation of the carriage.

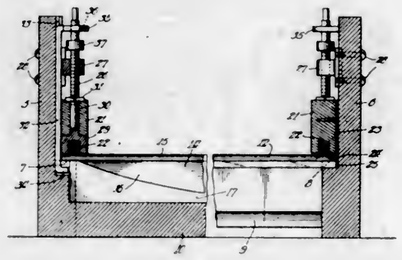
1,856,449. BED COUCH. RICHARD G. YOUNG, Toronto, Ontario, Canada, assignor of one-half to Henry Dickson, Toronto, Ontario, Canada. Filed Jan. 12, 1931. Serial No. 508,274. 16 Claims. (Cl. 5—13.)



2. In a bed couch, the combination with a rigid couch-frame and a folding bed-frame formed of inner and outer sections pivotally connected respectively to inner and outer intermediate pivoted sections and having the inner sections pivotally connected with the couch-frame and means for supporting the outer and outer intermediate sections in their extended position, of supporting link members pivotally connected with the couch frame and with the outer of said intermediate bed-frame sections, and struts pivotally connecting the bed and couch frames and co-operating with said link members to effect the breaking of the pivotal joints between the inner and adjacent intermediate frame sections prior to the breaking of the joint between the respective pivoted intermediate frame sections on the folding of said bed frame.

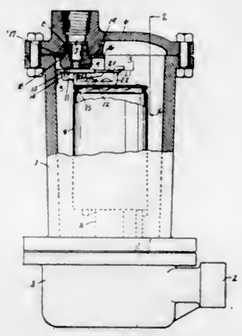
1,856,450. PULP STRAINER. THEODORE E. XISTRIS, Appleton, Wis., assignor to Valley Iron Works Company, Appleton, Wis., a Corporation of Wisconsin. Filed May 31, 1930. Serial No. 458,132. 3 Claims. (Cl. 92—30.)

1. In a strainer of the class described, the combination of a main supporting structure including a cross member, a strainer plate having a marginal side portion overlying said cross member, a retaining member removably associated with said cross member and having engagement with said marginal plate portion for holding the plate in operative position, clamp means overlying an end portion of said retaining member, actuating means mounted on said supporting structure for forcing said clamp means into clamping engagement with said retaining member to hold



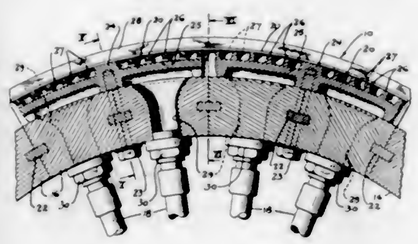
the latter in operative position, means vertically adjustably mounted on said supporting structure, having a toe portion underlying said end of the retaining member and an operating connection with said actuating means, the latter being thereby operative to displace said retaining member through the agency of said vertically adjustably mounted means.

1,856,451. VALVE MECHANISM. ADAM E. ARMSTRONG, Three Rivers, Mich., assignor to Armstrong Machine Works, Three Rivers, Mich. Filed Dec. 3, 1928. Serial No. 323,235. 17 Claims. (Cl. 137—103.)



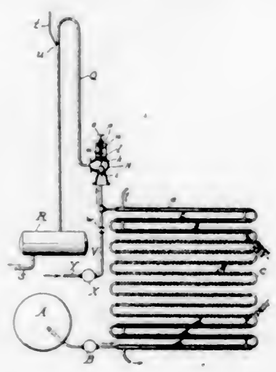
1. The combination with a float chamber provided with an inlet at the bottom and a discharge passage at the top, of a shouldered valve seat member threaded into said discharge passage and having an annular downwardly facing valve set, said valve seat member being inclined upwardly from the outer edge of the valve seat, an angled valve support provided with an attaching plate engaged with said shoulder of said valve seat member and having a lug engaging a coacting recess in the float chamber wall, said support being provided with a pair of spaced arms disposed at the side of the valve seat and having vertical slots therein, a disk valve provided with laterally projecting pins loosely engaging said slots and with an arm having an opening at its outer end, said pins being positioned to permit the tilting of the valve on one edge of the valve seat, and an inverted float disposed over said inlet and having an upwardly projecting centrally disposed hooked arm loosely engaging said opening in said arm on said valve.

1,856,452. CONTINUOUS FILTER. JOHN J. ARMSTRONG, Crockett, Calif. Filed Apr. 28, 1930. Serial No. 447,916. 10 Claims. (Cl. 210—202.)



1. A continuous filter of the rotary type comprising, a cylindrical drum, a plurality of arcuate filter supporting elements arranged axially in spaced relation around said drum and forming filter sections thereupon, said filter supporting element being formed as a single unit with a central and axially extending bridge which forms a partition in the filter surface and holds the arcuate filter supporting portions in spaced relation with the cylindrical drum, a pressure and suction connection for each of the filter sections formed by said filter supporting elements, and a continuous wire wound about said supports forming a substantially cylindrical filtering surface.

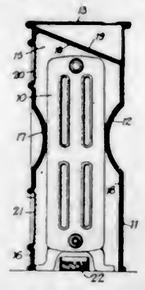
1,856,453. METHOD OF TREATING FIBROUS MATERIALS. THOMAS W. BACCHUS, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 23, 1930. Serial No. 483,835. 2 Claims. (Cl. 92—7.)



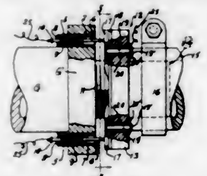
1. The method of treating fibrous material which includes forcing a mixture of fibrous material and a treating solution under pressure through a passage, heating the mixture adjacent the inlet end of said passage, cooling the mixture adjacent the discharge end of said passage and controlling the discharge from said passage.

1,856,454. RADIATOR COVER. WILLIAM J. BACON, Memphis, Tenn., assignor to Myrtle M. Bacon, Memphis, Tenn. Filed June 4, 1928. Serial No. 282,852. 2 Claims. (Cl. 237—136.)

1. In combination with a radiator, a casing completely covering the radiator and having an upper and a lower opening in its front wall, the upper opening being smaller than the lower and the openings being respectively adjacent the upper and lower ends of the radiator, and horizontal inward curves on the front and rear walls between said openings providing a throat for the cover.

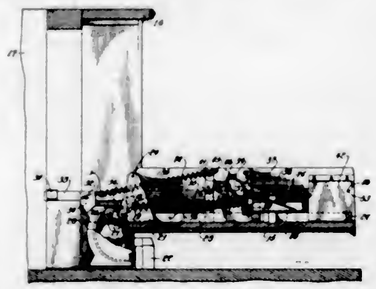


1,856,455. CONNECTER. WILLIAM E. BANKS and ALBERT F. STONE, St. Louis, Mo. Filed June 21, 1928. Serial No. 287,227. 4 Claims. (Cl. 173—333.)



1. In combination with a railroad vehicle having a compressed air pipe mounted thereon, an air hose having a coupling element attached to an end thereof, a member at the opposite end of said air hose, means for attaching said air hose to said compressed air pipe, an electrical contact plate fixed to said member, an electrical contact member associated with said compressed air pipe, and electrical conductors connected to said contact plate and said contact member, said contact plate being arranged to contact with said contact member when said hose is attached to said compressed air pipe, whereby electrical current will pass from the electrical conductors associated with one of said contact elements to the electrical conductors associated with the other of said contact elements.

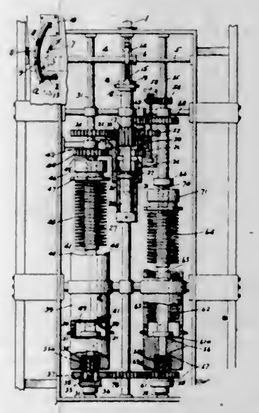
1,856,456. COMBINED BED AND MANTLE. HENRY BARTELS, Chicago, Ill. Filed Apr. 21, 1930. Serial No. 445,893. 5 Claims. (Cl. 5—141.)



1. A combined mantle and folding bed embodying a mantle adapted to swing upward and downward, links pivotally connected with the mantle and a fixed support and

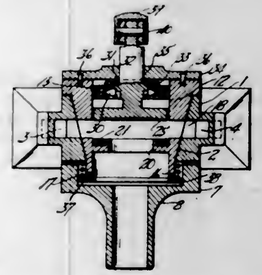
constituting pivots about which the mantle swings, arms connected with the mantle and projection beyond the lower end of the mantle, anti-friction rollers at the ends of said arms, stationary guide tracks against which said rollers move, levers pivotally supported intermediate their ends upon fixed fulcrums, guides connected to the mantle and movable therewith and through which guides one end of said levers pass, fixed stops to be engaged by the other end of said levers whereby the weight of said mantle and bed structure will be supported by said levers when the mantle is unfolded, and a bed frame supported by the mantle and foldable with and with respect thereto.

1,856,457. CLUTCH AND TRANSMISSION MECHANISM. JESS B. BENNETT, Rancocas, N. J. Filed Dec. 24, 1928. Serial No. 328,071. 7 Claims. (Cl. 74—58.)



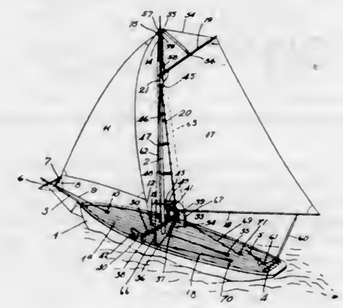
1. A power transmitting mechanism comprising in combination a driving shaft, a driven shaft, and interposed therebetween a driven member and a screw threaded driving member, means for driving the driving member from the driving shaft so as to go into screw threaded engagement with said driven member, said driven member having an opening therein which is screw threaded to receive said driving member and having ports leading therefrom which are adapted to permit the escape of an incompressible fluid trapped in said opening by said driving member, and means for driving said driven shaft from said driven member.

1,856,458. FAUCET. JOHN F. BENTLEY, Detroit, Mich. Filed Aug. 12, 1929. Serial No. 385,402. 2 Claims. (Cl. 277—25.)



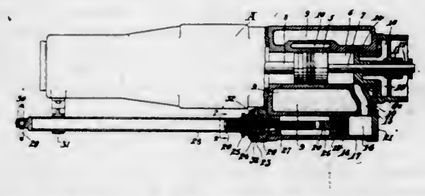
2. In a device of the kind described, a casing having two spaced inlet ports and a nozzle opening at its lower side, the said casing having its inner wall face tapered from the intended top end to the intended bottom end, a complemental hollow core rotatably seated within the casing and having a water channel cut away at one side for partially spanning the said inlet ports, a valve seated within the said core for controlling the flow of water therethrough to the said nozzle opening, resilient means in the lower part of the casing for holding the said hollow core to its seat within the casing, and resilient means for holding the said valve to its seat within the said hollow core.

1,856,459. FORE AND AFT RIGGED VESSEL. EDWARD L. BLACKMAN, Brooklyn, N. Y. Filed July 18, 1931. Serial No. 551,603. 20 Claims. (Cl. 114—105.)



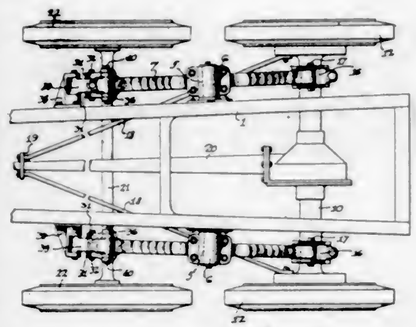
1. A fore and aft rigged vessel having a mast and flexible connector connected at its upper end to the upper portion of the mast to be spaced to the leeward or windward from the lower portion of the mast and to be held taut in such positions, a gaff positioned substantially at the upper end of the taut connector, a boom connected to said connector substantially at its lower end, and a sail connected to the gaff, connector and boom.

1,856,460. VARIABLE CLEARANCE POCKET FOR COMPRESSORS. CHARLES E. BLANK, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 10, 1930. Serial No. 480,905. 4 Claims. (Cl. 230—21.)



1. In combination with a cylinder having a reciprocating piston, a cylinder head having a recess therein, a cylindrical clearance chamber, a passage in the cylinder connecting the clearance chamber to the recess in the cylinder head, a piston in the clearance chamber, a threaded piston rod affixed to the clearance chamber piston, said piston rod having a longitudinal slot, closures for both ends of the clearance chamber, the closure for one end having a hole to permit the threaded piston rod to pass therethrough, said hole having a slot to receive a key to engage the slot in the threaded piston rod, and a tubular member closed at one end in threaded engagement with the piston rod at its other end, said tubular member being rotatable to cause longitudinal movement of the threaded piston rod and the piston in the clearance chamber.

1,856,461. REAR AXLE ASSEMBLY FOR MOTOR TRUCKS. JOSEPH V. BRETAUD, Detroit, Mich., assignor to Swedish Crucible Steel Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 9, 1930. Serial No. 480,746. 4 Claims. (Cl. 280—124.)



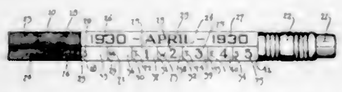
1. In a rear axle assembly, a body member, a semi-elliptic spring attached at its center to said body, a rear axle and an auxiliary axle having each a ball mounted thereon, spring seats mounted for universal movement on said balls and supporting the ends of said springs, a shackle extending from one of said spring seats, and another shackle having a pivotal connection to the first shackle and pivotally connected to said body.

1,856,462. SIGN. WILLIAM ALBERT BURNS, Brondesbury, London, England, assignor to Solafex Signs Amalgamated Limited, London, England. Filed Apr. 6, 1929, Serial No. 353,118, and in Great Britain Apr. 17, 1928. 6 Claims. (Cl. 40—130.)



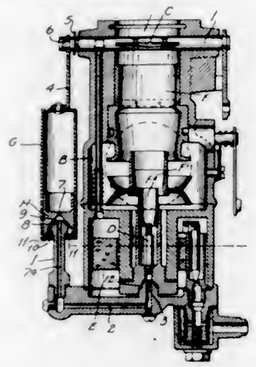
11. In a daylight sign, means to define display matter, and means to illuminate the sign comprising a light-deviating member having parallel ribs inclined relatively to the horizontal, said ribs having a short face and a long face, the long faces of said ribs having a normal directed upwardly and laterally of the sign, said member being arranged behind the display matter.

1,856,463. PENCIL AND PENCIL SET. ALLAN C. BUSSEY, Minneapolis, Minn. Filed Mar. 17, 1930. Serial No. 436,283. 1 Claim. (Cl. 40—108.)



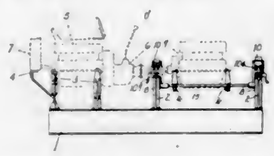
In combination with a pencil having six sides, a monthly calendar provided on a perimetrical section thereof and including notations on one side of the pencil indicating the month and year of the calendar and including one each of the remaining sides a row of numerals indicating the consecutive monthly dates in a week, the dates for the corresponding days of the different weeks being arranged in columns perimetrically of the pencil, perimetrical columns of letters disposed alternately with respect to the columns of numerals, the letters in each column being alike, there being one letter for each numeral, such letter being relatively closely disposed with respect to such numeral and being the first letter of the day of the week represented thereby, the numerals in adjacent rows being visibly segregated by the corners of the pencil and in the same rows by the letters between said numerals.

1,856,464. CARBURETOR. WILLIAM C. CARTER, Flint, Mich. Filed Apr. 29, 1929. Serial No. 359,096. 3 Claims. (Cl. 261—34.)



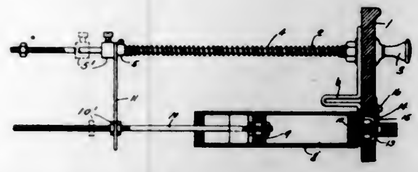
1. A carburetor provided with a main passageway, a throttle valve for said passageway, a pump arranged at one side of the body of the carburetor and provided with a reciprocating cylinder, a connection between said cylinder and the throttle valve shaft, a piston in said cylinder, a stationary support on which said piston is rockably mounted, an air orifice arranged so as to discharge towards the main passageway of the carburetor, a fuel passageway arranged adjacent said air orifice, and an air passageway through which air under pressure is discharged from said pump cylinder to said orifice when the throttle valve is moved towards its open position.

1,856,465. MACHINE FOR RUNNING IN AND BURNING CRANK SHAFT BEARINGS. JAMES G. COLLINS, Kalamazoo, Mich., assignor to Atlas Press Company, Kalamazoo, Mich. Filed Oct. 8, 1928. Serial No. 310,970. 2 Claims. (Cl. 29—80.5.)



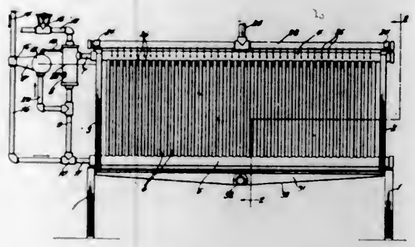
1. In a running in machine, the combination of a suitable base, frame brackets thereon adapted to receive and support an automobile engine in axial alinement as the power plant, frame brackets for supporting the engine block to be worked upon, trunnion bearings at the upper ends of such frame brackets with clamp caps therefor, an engine cradle comprising ends with suitable hollow trunnions supported in said trunnion bearings, side bars between said ends and beneath the said trunnions, double supporting cross bars forming slots with clamps to secure the same adjustably to the said side bars, upright post brackets adjustably secured to the said slot cross bars by screw clamps in the bottom thereof and having laterally projecting perforated lugs for attachment to an engine block, as specified.

1,856,466. FUEL FEED TIMING DEVICE. HARRY H. CONOVER, Dayton, Ohio. Filed Apr. 29, 1929. Serial No. 358,965. 3 Claims. (Cl. 74—39.)



1. In a fuel feed timing apparatus, the combination with a dash or cowl board, of a reciprocatory manually operable actuating rod for a fuel regulator extending therethrough and behind the dash or cowl board in a substantially horizontal direction, a retracting spring therefor, a cylinder behind the dash, the end of the cylinder being secured to the dash so that the cylinder will extend in a substantially horizontal position parallel with the actuating rod, a piston within the cylinder operatively connected with the actuating rod for movement in unison therewith, an adjustable valve mounted on the dash opposite said cylinder for controlling a fluid passage communicating with the cylinder, a graduated dial plate on the dash, an indicator operatively connected with the valve and coacting with the dial to indicate the relative adjustment of the valve and thereby the time period required for the return to normal of the operated parts.

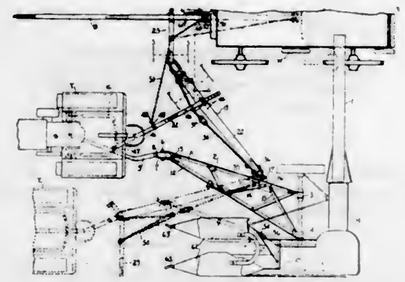
1,856,467. LIQUID COOLER. RALPH COPP, St. Louis, Mo., assignor to Pevely Dairy Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 9, 1929. Serial No. 391,233. 8 Claims. (Cl. 62—141.)



1. A cooler of the character described comprising a longitudinal series of vertical pipes, horizontal pipes opening into the upper and lower ends of the vertical pipes respectively, a pipe system for maintaining a liquid refrigerant filling said horizontal pipe that opens into the lower ends of said vertical pipes and filling said vertical pipes to a constant level below said horizontal pipe that opens into the upper ends of said vertical pipes, means for discharging the liquid to be cooled upon the upper side of said upper horizontal pipe, a device for regulating the supply of liquid to said discharging means, and means for preventing the liquid from dripping from said upper horizontal pipe and for causing the liquid to flow down said vertical pipes.

1,856,468. DRAFT CONNECTION. WILBUR J. COULTAS and CARL J. FREDERIKSEN, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 8, 1929. Serial No. 376,561. 21 Claims. (Cl. 280—33.44.)

1. In a draft connection between a tractor and an agricultural implement and a wagon disposed to one side thereof, a draft member connecting the tractor and the implement, a diagonal structure connecting said implement and the wagon, a link connecting said structure to the tractor, and means for establishing a draft connection between the wagon, and the link or said structure, optionally, to accommodate variation in the fore and aft position of the wagon.



1,856,469. TUBING SUPPORT. ERD V. CROWELL, Los Angeles, Calif. Filed Nov. 9, 1929. Serial No. 405,940. 7 Claims. (Cl. 103—219.)

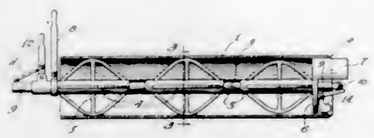


1. In combination, tubing adapted for suspension in a well, an anchor adapted for anchoring in the well, and means between the tubing and the anchor for yieldably supporting the tubing with relation to the anchor, the yieldable supporting means being adapted to maintain a yieldable support for the tubing even upon appreciable longitudinal movement of the tubing with relation to the anchor.

1,856,470. REMOVABLE CHILLERING JIG FOR PIPE WELDING. ANDREW F. DAY, Dallas, Tex., assignor to A. F. Day Construction Company, Dallas, Tex., a Corporation of Texas. Filed May 5, 1931. Serial No. 535,217. 6 Claims. (Cl. 113—102.)

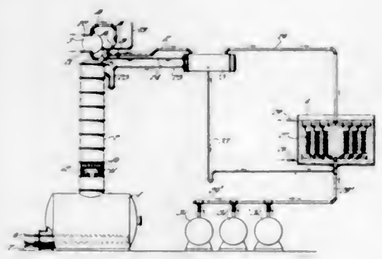
1. A removable chillering jig for use in welding pipe and comprising a main hollow rod having a disk secured to one end thereof, an arc-shaped flange formed integrally with the disk, the said flange adapted to be pressed against the inside of the pipe at the joints; a support pivotally connected to the disk, to permit the support and disk to ride around the inner periphery of the pipe in

shifting the flange to progressive welding positions on the pipe; handles on the opposite end of the main rod for shifting the rod and said flange; and a second hollow



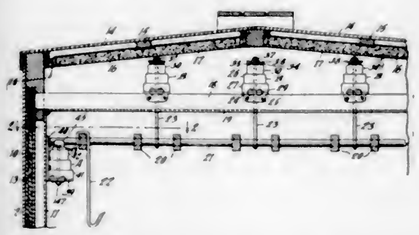
rod slidably arranged with and cooperating with the main hollow rod for moving the flange to engagement with and release from said pipe.

1,856,471. METHOD OF AND APPARATUS FOR OIL DISTILLATION. FRED DENIG, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Mar. 3, 1931. Serial No. 519,745. 3 Claims. (Cl. 196—140.)



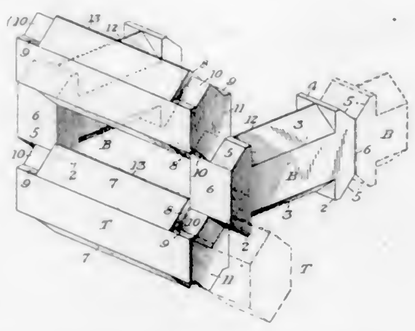
1. In a method of distilling hydrocarbon oil of the class described, the improvement which comprises charging a batch of the oil into a vessel, applying heat thereto to maintain the oil at its boiling point, conducting vapors thereby evolved through a rectifying column, withdrawing rectified vapors from said column, cooling a portion thereof to condense the same, subjecting the condensate thereby obtained to heat exchange with another portion of said vapors, and then returning the thereby heated condensate to said rectifying column as reflux.

1,856,472. MEAT RACK FOR REFRIGERATOR CARS. ARNOLD E. DENTLER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 1, 1931. Serial No. 541,398. 12 Claims. (Cl. 105—367.)



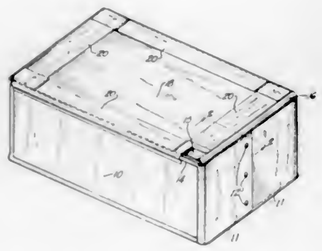
1. In a meat rack for refrigerator cars, the combination with connected bars forming a gridlike rack structure for suspending meat supporting hooks; of shock absorbing means for suspending said connected bars.

1,856,473. CHECKERWORK. WILLIAM H. DRAIN, Jr., Youngstown, Ohio. Filed Feb. 20, 1930. Serial No. 429,914. 14 Claims. (Cl. 263—51.)



1. In a checker work, superimposed courses of bricks arranged in longitudinal and transverse rows, all of said bricks having inclined upper edges, the bricks in one of said rows having enlarged heads with inclined seats cooperating with similarily inclined seats on the bricks in the other of said rows.

1,856,474. CONTAINER. ALBERT S. ETHRIDGE, Milwaukee, Wis., assignor to Hummel & Downing Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 17, 1930. Serial No. 482,391. 7 Claims. (Cl. 229—15.)

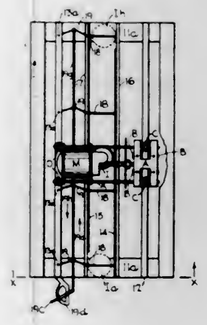


1. A fiberboard container comprising a body portion having side and end members, side and end flaps foldably connected to said side and end members respectively, there being relatively deep lines of scoring for the folding of said end flaps to define grooves, and a cover member, said cover member fitting over the side flaps and under the end flaps, and the ends of the cover and side flaps being positionable within the grooves of the end flaps to brace the container.

1,856,475. METAL IMPREGNATED FIBER ARTICLE AND PROCESS OF MAKING SAME. MEYRL M. FROST, Capac, Mich., assignor to Durowood Industries Incorporated of Detroit, Detroit, Mich., a Corporation of Michigan. Filed Mar. 16, 1931. Serial No. 523,199. 6 Claims. (Cl. 92—21.)

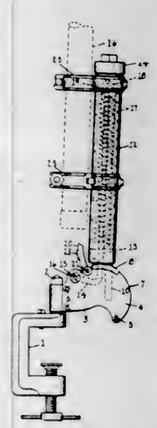
1. The method of producing an article in predetermined shape or form and having exposure resistant characteristics which comprises shaping or forming the said article under pressure from a pulp of fibrous material, drying the shaped article, and then superficially impregnating said article with a metal-like material.

1,856,476. TRAVELING RIPSAW MACHINE. STONEWALL J. GARDNER, New Albany, Ind. Filed Dec. 5, 1931. Serial No. 579,148. 14 Claims. (Cl. 143—47.)



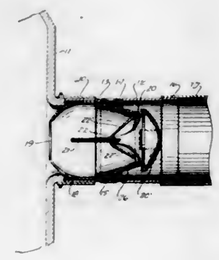
1. An apparatus for reciprocating a carriage consisting of a rotating element carried by said carriage and disposed to alternately engage the surface of one of two movable yielding normally stationary parallel members and propel said carriage through said engagements.

1,856,477. FISHING ROD HOLDER. OTTO GERLINE, Kalamazoo, Mich. Filed Oct. 3, 1931. Serial No. 566,618. 10 Claims. (Cl. 248—37.)



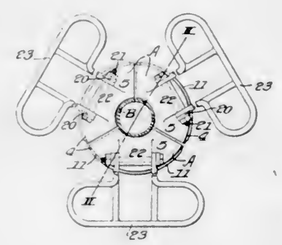
5. In a device of the character described, the combination of a support, a holder pivotally mounted on said support, spring means acting to urge said holder to an upright position, a manually engageable dog for holding said holder in a forwardly inclined position, and a spring acting to automatically release and urge said dog out of the path of said holder upon the forward movement of the holder from its locked position.

1,856,478. HEAT AND DRAFT REGULATOR FOR FURNACES, STOVES, WATER HEATERS, AND THE LIKE. MAX GREENBERG, now by judicial change of name Say M. Green, Cleveland, Ohio, assignor, by direct and mesne assignments, to Heat and Draft Control, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 15, 1931. Serial No. 530,233. 2 Claims. (Cl. 126—307.)



1. The combination with a smoke pipe having holes in the wall thereof, of a baffle device in the pipe, in advance of the holes, and a tapered deflector shell in the pipe and adjacent the baffle and opposite said holes, the small end of said shell being directed toward the outlet from the pipe.

1,856,479. SLIP FOR ROTARY DRILLING MACHINES. EDGAR E. GREVE, Bellevue, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 19, 1929. Serial No. 415,248. 9 Claims. (Cl. 24—263.)

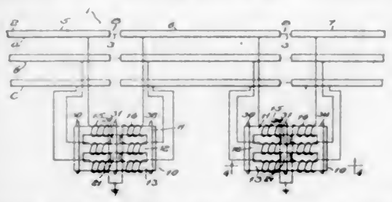


1. In a slip of the character described, a body including a cage element and a filler element, and a replaceable liner positioned between and maintained in position between the cage and the filler element, said cage element comprising an open frame-like structure having top, bottom and side portions.

1,856,480. SHEATH BONDING SYSTEM. HERMAN HALPERIN and KENNETH W. MILLER, Chicago, Ill. Filed Mar. 14, 1931. Serial No. 522,546. 10 Claims. (Cl. 171—97.)

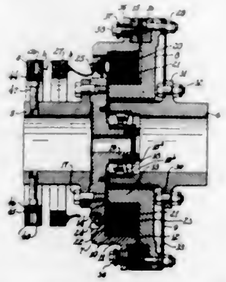
1. A polyphase line including a plurality of sheathed cables, the cable sheaths of said line being divided into

lengths separated from one another by insulation, each length having, at each end thereof, reactance means interconnecting the respective sheaths and connecting them



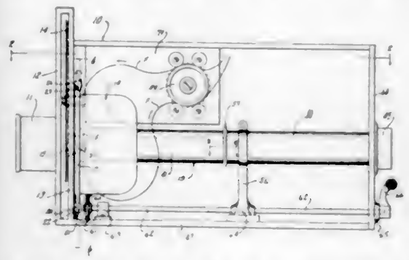
to ground, the reactance means connected to adjacent cable lengths at an insulating section being electromagnetically independent of one another.

1,856,481. ELECTROMAGNETIC CLUTCH. HOWARD E. HODGSON, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis, a Corporation of Delaware. Filed Aug. 2, 1929. Serial No. 383,056. 6 Claims. (Cl. 192—84.)



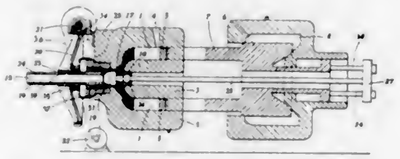
1. In an electromagnetic clutch, the combination with cooperating field and armature members and supporting means for one of said members including a spring plate formed of sheet metal and adapted to be deflected to permit movement of its associated member into engaging position, portions of said plate being of reduced sectional area to reduce stresses in certain portions of said plate upon deflection thereof.

1,856,482. MOVEMENT SHIFT AND FOCUSING TUBE ARRANGEMENT FOR MOTION PICTURE CAMERAS. JOHN ROY HUNT, Los Angeles, Calif. Filed Nov. 19, 1929. Serial No. 408,249. 18 Claims. (Cl. 88—16.)



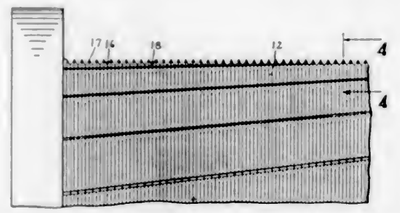
1. In a camera having a body, a photographic lens mounted therein, and means for supporting a film in alinement with said lens, the combination of a split focusing tube comprising a rear portion stationarily mounted within the body of the camera in optical alinement with the photographic lens, and a forward portion laterally movable in the camera with respect to said rear portion, means for moving the film out of alinement with the lens and for moving the forward portion of the focusing tube into optical alinement with the lens and the rear portion of the focusing tube.

1,856,483. PRESS FOR THE EXTRUSION OF METALS. ERNEST EDWARD JUDGE and FRANCIS HENRY FRY, Gravesend, Kent, England, assignors to W. T. Henley's Telegraph Works Company Limited, London, England, a British Company. Filed Aug. 21, 1931, Serial No. 558,528, and in Great Britain Sept. 24, 1930. 4 Claims. (Cl. 207—2.)



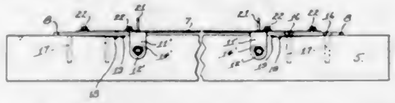
1. In an extrusion press in which tubular lengths of metal are extruded through an annular space between an outer die and an inner die, an arrangement for the removal of the inner die, said arrangement comprising means adapted to be inserted in the annular space made available by the removal of the outer die for cutting a circular groove in the metal in front of the inner die, in combination with means for pushing forward the inner die to break the thin ring of metal left by said cutting means.

1,856,484. CANE MILL ROLL. NORMAN KAY, Jobos, Porto Rico. Filed Sept. 10, 1927. Serial No. 218,689. 13 Claims. (Cl. 100—47.)



1. A roll for cane mills or the like, having circumferential grooves and ridges and longitudinal cane trapping grooves intersecting said ridges, said longitudinal grooves being relatively shallow and narrow as compared to the circumferential grooves and adapted to receive and retain particles of bagasse to roughen the roll surface.

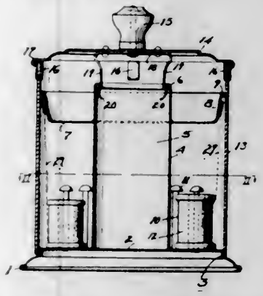
1,856,485. BORING JIG FOR RAILWAY CROSSTIES. WALTER H. KIRKBRIDE, San Francisco, Calif. Filed Aug. 4, 1930. Serial No. 472,898. 2 Claims. (Cl. 77—62.)



1. A jig for boring transverse holes in railway cross-ties comprising a pair of plate members adapted to rest upon the upper surface of the tie, a longitudinally disposed bar connecting said plate members in adjustabue spaced relation, a pair of spaced arms extending downwardly from each plate member embracing and lying adjacent to the sides of the tie, each pair of arms having aligned apertures therein, and substantially semicylindrical guides

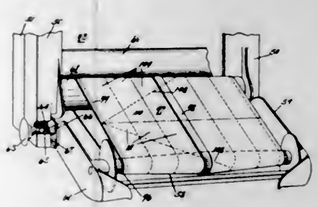
extending outwardly from said arms, the guides upon one side of the tie being positioned above said apertures, and the guides upon the other side being positioned below said apertures.

1,856,486. SEWING KIT. HARRY D. LAPKIN, San Francisco, Calif. Filed Oct. 5, 1929. Serial No. 397,528. 3 Claims. (Cl. 223—53.)



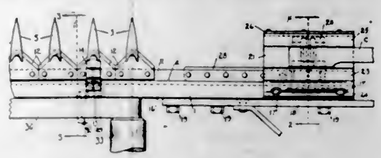
1. A sewing kit comprising a base, a compartment column fixed to said base, a tray fixed to said column, a casing adapted to enclose said column and engage said base, a latch on said casing adapted to engage said column.

1,856,487. DOMESTIC APPLIANCE. RALPH L. LEE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Original application filed Mar. 31, 1923, Serial No. 629,202. Divided and this application filed Apr. 30, 1924. Serial No. 710,165. 2 Claims. (Cl. 68—32.)



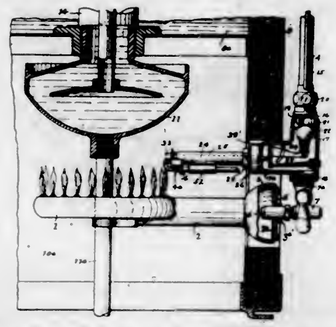
1. A wringer including a plurality of rollers, a conveyor belt having a plurality of plies and adapted for conveying articles between said rollers, means associated with said conveyor belt and cooperating with said rollers for progressively and gradually removing liquid from between the plies of said belt.

1,856,488. CUTTER BAR FOR HARVESTERS. ROBERT C. LIVESAY, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 31, 1929. Serial No. 389,704. 8 Claims. (Cl. 56—298.)



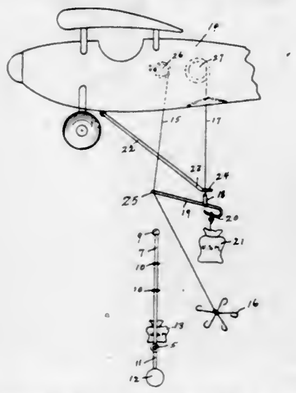
1. The combination with a harvester frame bar, of an angle steel finger bar mounted on the frame bar and positioned to present one leg extending downwardly and rearwardly and the adjoining leg extending upwardly and rearwardly, guard fingers mounted on the downwardly extending leg, and means attaching the finger bar to the frame bar.

1,856,489. CONTROL MECHANISM. SIMON J. LONERGAN and HOWARD E. GINTHER, La Porte, Ind., assignors to Bastian-Morley Co., La Porte, Ind., a Corporation of Indiana. Filed May 28, 1927. Serial No. 194,987. 7 Claims. (Cl. 158—117.1.)



1. In apparatus of the class described, the combination of a burner, a supply pipe for a combustible medium connected to said burner, means for providing a pilot flame for said burner, a thermostat mechanism interposed in said supply pipe and having thermo-elements disposed in the heat zone of the pilot flame, operating means operatively connected with one of said elements, and a valve actuated by said operating means for controlling the flow of the combustible medium through said pipe, said valve having a downwardly facing seat and the valve element therefor being disposed between the seat and said operating means, whereby the latter forces the valve element against its seat when operated in a direction opposite to both gravity and the flow of the combustible medium.

1,856,490. AIR MAIL EXCHANGE DEVICE. LUDVIG L. LUNDGREN, Youngstown, Ohio. Filed Aug. 6, 1929. Serial No. 383,842. 2 Claims. (Cl. 258—1.)



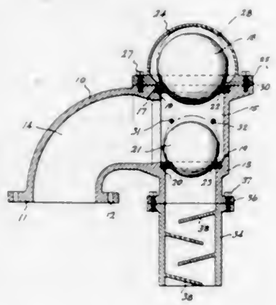
1. In a device of the class described, a pivoted discharge arm suspended from an airplane, a discharge hook formed on said pivoted discharge arm for the purpose of supporting a mail bag in a dischargeable manner, means for preventing unnecessary swaying of said pivoted discharge arm, means for automatically discharging a mail bag held on said discharge hook, and means for picking up and taking on the airplane a mail bag, substantially as described.

1,856,491. BODY FOR FOLDING BABY CARRIAGES. JULIUS A. MAHR, Minneapolis, Minn., assignor to Inventors' Patent Holding Company, Minneapolis, Minn., a Corporation of South Dakota. Original application filed Dec. 12, 1928, Serial No. 325,411. Divided and this application filed Nov. 6, 1929. Serial No. 405,116. 9 Claims. (Cl. 296—1.)



6. A collapsible body of the class described having a continuous tubular frame member provided with a continuous longitudinal slot, and a core in said member, the sides and ends of the body being continuous and attached at their upper edge portions through said slot to the core.

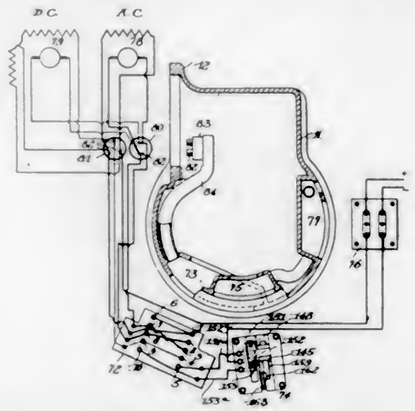
1,856,492. VENT RELIEF VALVE. MATTHEW M. MARSHALL, New York, N. Y., assignor to Helen M. Marshall, New York, N. Y. Filed July 14, 1930. Serial No. 467,883. 3 Claims. (Cl. 277—61.)



1. A vent relief valve for tanks and the like, including a hollow casing having means for attachment to the vent pipe of the tank and the like, a right angular extension integral with the upper terminus of said casing, said extension including a valve chamber having an upwardly directed outlet and a downwardly directed inlet, annular valve seats in said valve chamber, spherical outlet and inlet ball valve members mounted on said seats, a dome secured to said casing extension above said outlet valve, said dome having outlet apertures at its upper part and drain apertures adjacent to said outlet valve seat, stop means to limit and guide the movement of said inlet valve and means to prevent operation of said inlet valve from the exterior.

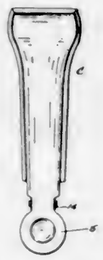
1,856,493. EXTENSIBLE CHAIR. ADAM J. MAY, Rochester, N. Y., assignor, by mesne assignments, to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y., a Corporation of Delaware. Filed Nov. 20, 1925. Serial No. 70,241. 9 Claims. (Cl. 172—239.)

1. In combination, a base, a standard adapted for reciprocation upon the base, operating means for the standard including a reversible electric motor having circuit connections leading thereto, a reversing switch interposed in said connections, manually controlled actuating means for the switch arranged to hold it in closed position during movement of the standard, a brake for the operating means, actuating means for releasing the brake engaged by and responsive to movement of said manually con-



trolled means and including a part movable to free the brake for return to braking position, means for returning the brake to said position when released by said part, and release means for said part actuated by the standard in a predetermined position thereof when the switch is in circuit closing position.

1,856,494. HAIR WAVING DEVICE. DELIA F. MCGINNIS, Big Piney, Wyo. Filed Oct. 15, 1930. Serial No. 488,882. 3 Claims. (Cl. 132—36.)

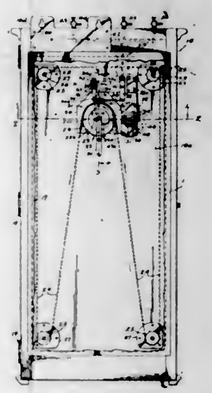


1. In a device of the class described the combination of a T-shaped pin on which the hair is wound having the leg adapted to be rotated in the cross bar; means to allow said leg to rotate in one direction and prevent rotation in the opposite direction; means to rotate said leg; a guard to protect the head of the person using the device; hingedly connected heaters adapted to engage the hair and pin to transmit sufficient heat to the hair for steaming a curl therein.

1,856,495. METHOD OF TREATING FUELS. GEORGE M. MCGLONE, Bloomington, Ill. Filed Oct. 9, 1929. Serial No. 398,569. 1 Claim. (Cl. 44—5.)

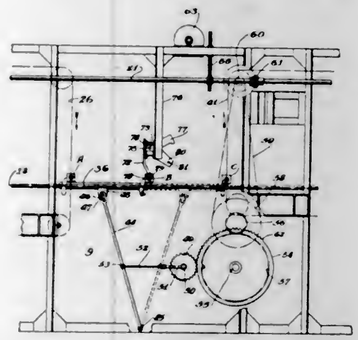
1. A process of treating fuel, whereby combustion is made more complete, which is characterized by sprinkling or spraying coal, while travelling in a conveyor, with a mixture of comminuted limestone and zinc in the proportion of approximately ninety-five to ninety-nine parts limestone to approximately five to one parts of zinc, said substances being held in suspension and solution in water, said limestone, said zinc and said water being of such consistency as to cause the limestone and zinc to adhere to the surface of the coal and in the cracks and crevices thereof when the water has evaporated.

1,856,496. CLOCK WITH RINGING MECHANISM. ADOLPH H. MILLER, Minneapolis, Minn. Filed May 23, 1929. Serial No. 365,382. 6 Claims. (Cl. 161—2.)



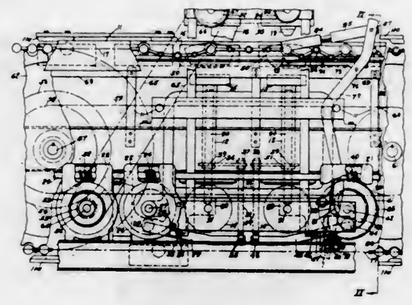
1. The combination with a clock including an hour hand and a minute hand, of a program clock structure including a rotatable means fixed upon the spindle of the minute hand of said clock, a flexible member passing over said rotatable means and driven thereby, two sets of contact members carried by said flexible member and projecting at the sides thereof respectively, and a contact arm carrying two contact members positioned to be engaged respectively by said contact members of said sets for controlling two programs.

1,856,497. AUTOMATIC WORK SHIFT FOR PLATING MACHINES. CONSTANTINE G. MILLER, Chicago, Ill., assignor to The Meaker Company, a Corporation of Illinois. Filed June 30, 1928, Serial No. 289,590. Renewed Jan. 14, 1931. 2 Claims. (Cl. 74—14.)



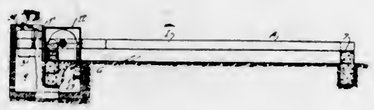
1. An automatic work shift comprising a slide, means for intermittently moving the same through a complete cycle, means on the slide for engaging a work support in one direction of movement and for avoiding the support in the opposite direction of movement, means for moving said slide comprising a rocking lever, a gear connected to said lever, and a continuously moving mutilated gear for imparting intermittent rotation to said first gear.

1,856,498. CONVEYING MECHANISM. WILLIAM J. MILLER, Swissvale, Pa. Filed June 30, 1927. Serial No. 202,629. 18 Claims. (Cl. 198—19.)



1. A conveyor comprising spaced rotatable elements, normally taut endless flexible members positively engaged by said rotatable elements, carriers mounted in series in said endless flexible members, said members being initially provided with slack sections between said elements and the latter located in synchronism to confine the slack to said sections while the remaining portion of said flexible members remains taut, and a supplemental intermittent drive means for advancing the carriers in the slack sections of said flexible members at a speed in excess of the remaining carriers.

1,856,499. RAILWAY-CROSSING SAFETY DEVICE. BENJAMIN N. MINER, St. Louis, Mo., assignor to Miner Super-Safety Gate and Signal System, Inc., St. Louis, Mo., a Corporation of Missouri. Filed May 9, 1930. Serial No. 450,899. 3 Claims. (Cl. 246—128.)

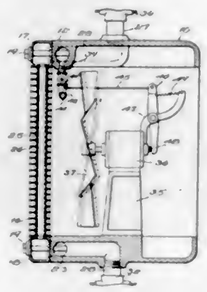


1. In combination with a railroad track and a highway crossing the track, a barrier movable to close the highway, means including an electric motor for operating said barrier, and electro-magnetic means responsive to the presence and absence of a vehicle on the track for correspondingly actuating said motor, said electro-magnetic means including a motor circuit, a barrier opening circuit, a barrier closing circuit, a reversing switch controlling said motor circuit responsively to said opening and closing circuits, a limit switch in said opening circuit to open when the barrier is open, a limit switch in said closing circuit to open when the barrier is closed, a relay circuit, a relay responsive thereto for controlling said opening and closing circuits, a track circuit, and a relay responsive thereto for controlling said first mentioned relay circuit for energizing the closing circuit when a vehicle is on said track and for energizing the opening circuit when the track is clear, said motor circuit being correspondingly energized responsively to said reversing switch.

1,856,500. AIR CONDITIONING APPARATUS. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed May 28, 1926. Serial No. 112,374. 9 Claims. (Cl. 261—30.)

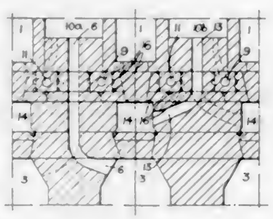
1. In a device as described, a radiator provided with passages for a heating fluid, means including a valve connected to one of said passages for delivering a part of said

fluid to the atmosphere, a fan including fan blades and a motor for advancing a column of air through said radiator, a shaft for said motor, said fan blades connected to said motor shaft, means for operating said valve, said valve operating means engaging said motor shaft, said motor



shaft being capable of longitudinal movement, means urging said shaft in the direction of the advancing column of air to close said valve, said shaft being moved in the opposite direction and opening said valve when the fan is in motion.

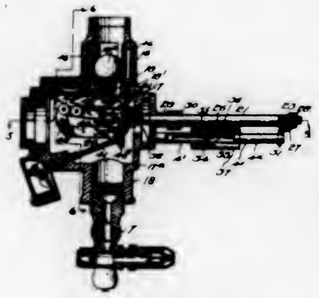
1,856,501. COKE OVEN. FRIEDRICH TOTZEK, Essen-Stoppenberg, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Jan. 16, 1931, Serial No. 509,084, and in Germany Jan. 25, 1929. 3 Claims. (Cl. 202—242.)



1. A coke oven comprising: a series of alternate coking chambers and heating walls therefor arranged laterally of each other in a row, each of said heating walls comprising combustion flues; regenerators below said series and communicating with the combustion flues; a rich gas duct located between said regenerators and the flues in one of said heating walls for conveying rich gas thereto; and a plurality of vent ducts open to the atmosphere and situated between said series and said regenerators and parallel to and distributed around and adjacent the rich gas duct.

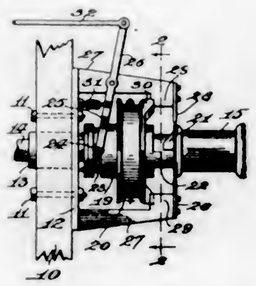
1,856,502. CONTROL MECHANISM. JAMES P. MORLEY, Michigan City, and SIMON J. LONERGAN, La Porte, Ind., assignors to Bastian-Morley Co., La Porte, Ind., a Corporation of Indiana. Filed Sept. 10, 1927. Serial No. 218,724. 1 Claim. (Cl. 158—117.1.)

In apparatus of the class described, the combination with a burner, of a pipe for supplying a combustible medium thereto, a casing interposed in said pipe having a valve to control the flow of the medium to said burner, a pair of thermostat elements having a relatively low coefficient of expansion, said elements being disposed in spaced relation and supported at their inner ends by said casing, a cross head fixedly connected to the outer ends of said elements, a separate thermostat element disposed between said first mentioned elements and fixedly connected at its outer end to said cross head and extending at its inner end into said casing, an operating mechanism in said casing arranged to be controlled by said separate element to



operate the valve element of said valve and a pilot jet below said separate element and extending to a point near its outer end and supported by said cross head so that the flame from said jet will ignite said burner and affect said thermostat elements.

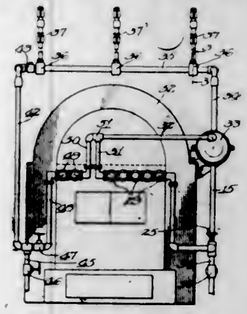
1,856,503. AUTOMATIC JOINT BREAKER. PEXTON F. MURRAY, Montebello, Calif. Filed May 15, 1929. Serial No. 363,308. 6 Claims. (Cl. 254—187.)



1. The combination with a constantly rotating member having a clutch face, of a chain carrying sheave loosely mounted on said constantly rotating member and provided with a clutch face that is adapted to engage the clutch face on said constantly rotating member, a manually operable member for moving the sheave toward the clutch face on the constantly rotating member so as to effect a driving engagement between said member and sheave, a spring associated with said manually operable member for normally holding the sheave out of engagement with the constantly rotating member, fixed stops located adjacent to the outer portion of the sheave and combined cam and stop lugs on said sheave and adapted to engage said fixed stops for limiting the movement of the sheave in one direction and for automatically moving said sheave so as to disengage the clutch face thereon from the clutch face on the constantly rotating member.

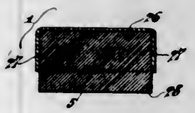
1,856,504. HOT WATER SUPPLY DEVICE. JOHN J. PARKINSON, Chicago, Ill. Filed Mar. 29, 1926. Serial No. 98,163. 4 Claims. (Cl. 126—362.)

1. In a hot water heating system comprising a boiler, a preheater chamber, a preheater coil in said chamber, heating coils in said boiler, said preheater coil being connected to a water supply and in series with a heating coil



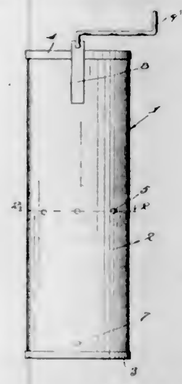
in said boiler, said chamber, a tap-off pipe, another of said heating coils and a connection between said heating coils and said chamber.

1,856,505. VALVE. ANDERS PERSSON, Lidingo, Sweden, assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Feb. 1, 1930, Serial No. 425,110, and in Sweden Feb. 16, 1929. 3 Claims. (Cl. 251—159.)



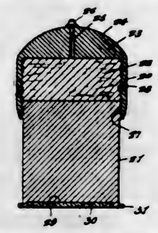
3. A valve member consisting of a valve body of elastic material and a metal coating covering the seating end of the said valve member and also covering portions of the sides thereof, the portion of said coating covering the seating end of said valve member facing the seat with which the said valve member co-operates.

1,856,506. GROUND FOR RADIOS AND THE LIKE. CECIL H. PRESTON, Chatsworth, Calif. Filed Mar. 16, 1927. Serial No. 175,755. 12 Claims. (Cl. 173—31.)



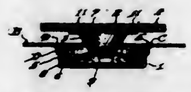
10. A ground connection for radios, comprising in combination a metal container with a series of apertures for passage of water and expelled materials having an electric lead connected thereto, a composition of matter in the container including particles of a metal different from that of the container, the ingredients of the composition in the presence of water reacting and causing an expulsion of some of the resulting product, through the apertures, the particles of metal and the metal of the container with the composition in the presence of water being adapted to cause a local action, the expelled materials having hydroscopic and electrolytic properties.

1,856,507. DISPENSING AND MASSAGE CONTAINER. HARRY R. PRIEST, Loudonville, Ohio. Filed Aug. 28, 1930. Serial No. 478,518. 2 Claims. (Cl. 128—65.)



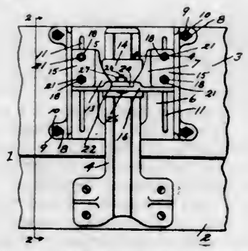
2. A dispensing and massage container comprising relatively movable interfitting cylindrical sections one of which is solid and is adapted to form a grip and plunger and the other of which is hollow, said solid section terminating in a semi-spherical massage surface, said sections being adapted to house and compress a mass of plastic material therebetween, there being an axial duct formed in the solid section opening through said massage surface at substantially the center thereof whereby the compressed mass may be excluded at the center of said surface, and a stop flange projecting exteriorly of the cylindrical wall of the solid section adapted to engage the edge of the hollow section for limiting compressing movement of the sections.

1,856,508. AUTOMOBILE EMBLEM ATTACHMENT. WILBUR F. PRICE, Allentown, Pa., assignor to L. F. Grammes & Sons, Inc., a Corporation of Maryland. Filed Mar. 8, 1929. Serial No. 345,552. 12 Claims. (Cl. 40—20.)



1. A device of the character described, comprising a member having an opening and an internal abutment, a separate toggle element adapted to be inserted within and across said opening and seated against said abutment, a plate to be attached to said member, and a spacer connecting the toggle element and said plate, whereby upon the pressing of the plate against said member the toggle element is operated past its dead center and secured within said member.

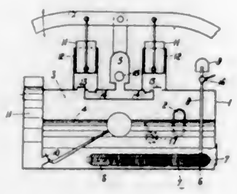
1,856,509. ADJUSTABLE GUIDE FOR MOLDING FLASKS. WALTER E. SANDHAM, Los Angeles, Calif. Filed Aug. 2, 1930. Serial No. 472,712. 2 Claims. (Cl. 22—110.)



1. In a molding flask, a pin secured to the drag, a guide for said pin secured to the cope, means for ad-

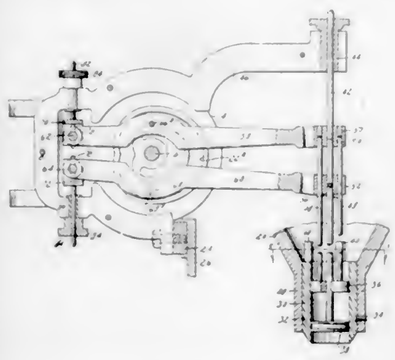
justing the position of said guide to vary the distance necessary to lift the guide off the pin and the cope off the drag, and means for adjusting the guide into alignment with said pin.

1,856,510. METHOD OF PRODUCING FINE BUBBLE FOAM. NIKOLAUS SANDOR, London, England. Filed Nov. 7, 1930, Serial No. 494,007, and in Germany Mar. 22, 1928. 3 Claims. (Cl. 261—121.)



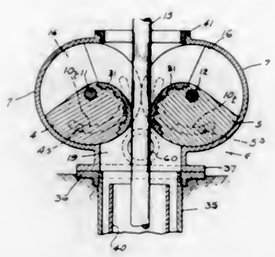
1. The method of forming foam which comprises maintaining a foam-forming liquid under sub-atmospheric pressure, inducing an aeroform fluid to flow therethrough by means of said sub-atmospheric pressure, and then projecting said foam into the atmosphere whereby the increased pressure of the atmosphere causes the individual bubbles of the foam to decrease in size and the walls thereof to increase in thickness.

1,856,511. ADJUSTABLE DOUGH DISPENSING MACHINE. FRED L. SCHOEL, Waterloo, Iowa, assignor to Gem Doughnut Machine Co., Inc., Waterloo, Iowa, a Corporation. Filed June 15, 1931. Serial No. 544,525. 7 Claims. (Cl. 107—14.)



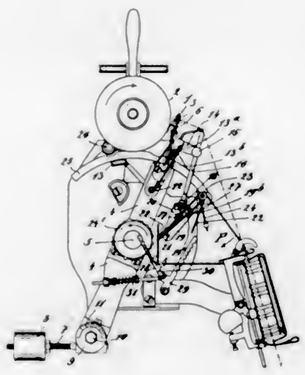
1. In a dough dispensing machine having a dough hopper and a reciprocable member for dispensing dough therefrom, a shaft, a cam thereon, an arm pivotally connected with said reciprocable member and arranged at substantially right angles thereto, the cam surface of said cam coacting with said arm intermediate the ends thereof to move the same upon rotation of the shaft, a bearing member, one end of said arm being pivoted thereto, said bearing member being movable in a direction substantially parallel with the direction of movement of the reciprocable member to vary the pivot point of said arm relative to said cam and to thereby vary the stroke of said reciprocable member substantially without varying the distances between the pivot point, the cam and the reciprocable member.

1,856,512. CHECK VALVE CONSTRUCTION. JOHN C. SCHOFIELD and VERNER A. JOHNSON, Los Angeles, Calif., assignors of fifteen one-hundredths to Robert D. Pearson, Los Angeles, Calif. Filed Jan. 12, 1929. Serial No. 332,035. 1 Claim. (Cl. 166—15.)



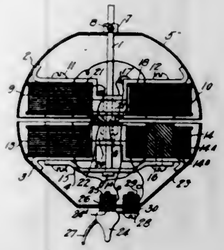
In combination, a well casing, a housing secured to the upper end of said casing and forming an upward continuation of the passage afforded by said casing, a plurality of cooperating rotatable valve bodies, each of said valve bodies having a groove extending a portion only of the distance therearound, each of said grooves increasing in depth and being positioned to engage the polish rod to act as a cam thereupon, means for rotating said valve bodies to grip between them the polish rod, there being a facing of relatively soft metal provided for said grooves to engage the polish rod during the gripping action of said valve bodies thereupon, said soft metal facing having upon its inner side projections which project into recesses formed in said valve bodies.

1,856,513. CROSS WINDING FRAME. HANS SCHWEITER, Horgen, near Zurich, Switzerland. Filed Feb. 25, 1930, Serial No. 431,200, and in Switzerland Mar. 2, 1929. 2 Claims. (Cl. 242—36.)



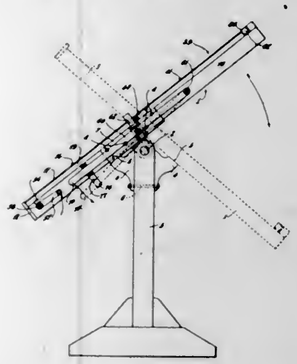
1. In the combination of a cross winding frame, driving means therefor, a regulating and stop mechanism comprising a pivoted thread guide frame, adjustable loading means therefor upon the side of the pivot opposite to the thread guide, a swing bar shiftably connected to said thread guide frame, a pivoted segment adjustably connected to said swing bar, a pin mounted upon said segment, and means actuated by said pin, when said guide frame reaches a predetermined position, for arresting said driving means.

1,856,514. ELECTRICAL TOP. LOYD L. SHENEMAN, Michigan City, Ind., assignor to Florence Sheneman, Bluffton, Ind. Filed Feb. 17, 1930. Serial No. 429,121. 4 Claims. (Cl. 45—32.)



1. An electrical top having in combination a shaft member, two rotor members supported by said shaft member, electro-magnetic devices for causing opposite rotation of said rotor members, current collector members attached to one of said rotor members and adapted to supply current to said electro-magnetic devices and means for supplying current to said collector members while said electrical top is in operation.

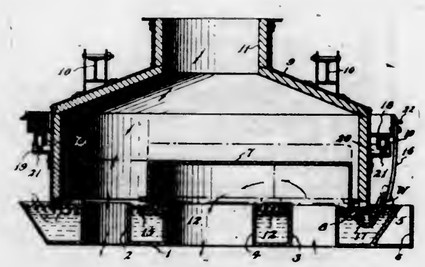
1,856,515. TYPOGRAPHICAL MAGAZINE. JOHN W. SHIELDS, Bridgeport, Conn., and ARCHIBALD SHIELDS, Brooklyn, N. Y. Filed July 19, 1930. Serial No. 469,008. 4 Claims. (Cl. 276—44.)



1. In an apparatus for the purpose described, in combination, a main frame member, a support therefor, means for pivotally supporting the main frame member on the support to permit it to tilt in opposite directions, means for limiting the tilting movement, the frame member being designed to receive two matrix receiving frames having grooves to receive the matrices in an aligned relation to each other, the matrices being normally retained against movement in one matrix frame by a latch device, an eccentrically mounted shaft for actuating the latch device, for releasing the matrices, when the main frame is tilted, a second latch or cover device located at the opposite end of a matrix frame, means for operating the second latch, whereby the matrices will be transferred from one aligned frame to the other.

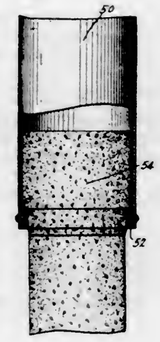
1,856,516. GAS REVERSING VALVE. CARL D. SMITH, Washington, Pa. Filed May 23, 1930. Serial No. 455,047. 10 Claims. (Cl. 137—148.)

1. A reversing valve for regenerative furnaces comprising a base sealing pan adapted to contain a sealing fluid, said pan having a centrally disposed stack port and diametrically opposite gas ports, a stationary housing adapted to enter said pan and extend into said sealing fluid, said housing having a gas port, a turtle valve adapted to enter said pan and extend into said sealing



fluid, means rotatably suspending the valve at the bottom edge from the exterior of the wall of the housing, and means disposed exteriorly of the housing and the pan for rotating said valve to selectively connect either of said gas ports with said stack port.

1,856,517. METHOD OF FORMING COMPOSITE PILES. HERMAN R. SMITH, Douglaston, N. Y., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 16, 1928. Serial No. 312,753. 2 Claims. (Cl. 61—57.)

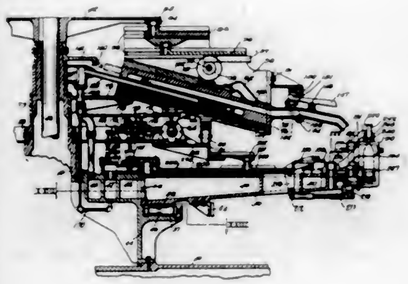


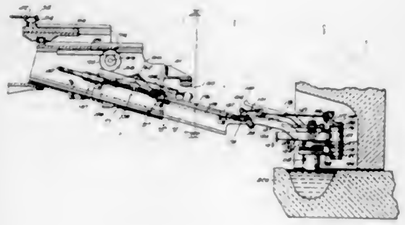
1. A method of forming a composite pile which comprises driving the lower section until its upper end approaches ground level, attaching an upwardly extending shell to said upper end, inserting a follower through said shell into contact with said upper end, driving said lower section below ground level by means of said follower, whereby said shell is drawn into the ground by virtue of its attachment to said lower section, and filling said shell with concrete to form the upper pile section.

1,856,518. MACHINE FOR FORMING HOLLOW GLASSWARE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 28, 1928. Serial No. 273,483. 13 Claims. (Cl. 49—5.)

1. In a machine for forming hollow glassware, the combination of an annular series of finishing molds rotatable about a vertical axis, a single parison mold com-

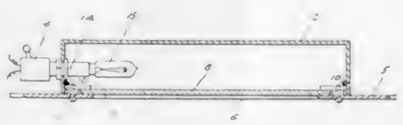
mon to all of the finishing molds, means to move the parison mold radially of the machine from a charge gathering position and then circumferentially of the machine with





a finishing mold to a parison transfer position, and means to completely form a parison in the parison mold prior to arrival of said mold at the transfer position.

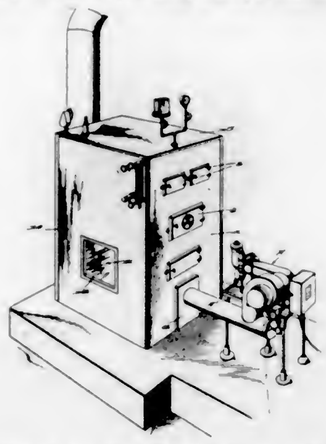
1,856,519. IDENTIFICATION NAME PLATE. ARTHUR CLYDE SPEARS, Cameron, N. Y. Filed Sept. 25, 1931. Serial No. 565,164. 1 Claim. (Cl. 40—132.)



In a sign of the character described, an elongated plate provided with suction cup receiving openings in the ends thereof, said plate having an opening at the intermediate portion thereof, means detachably securing a pane over the said opening, a box-like structure provided with illuminating means therein, said box being disposed against the plate with its open side registering with the opening in the plate.

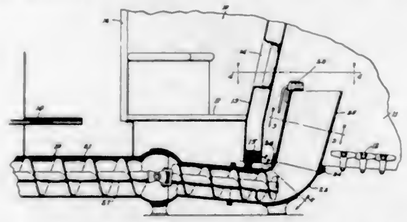
1,856,520. ADVERTISING DEVICE. JOHN N. THOMAS, Baltimore, Md., assignor to May Oil Burner Corporation, Baltimore, Md., a Corporation of Maryland. Filed Nov. 11, 1930. Serial No. 494,929. 14 Claims. (Cl. 40—126.)

1. In an advertising device, the combination of a housing simulating the appearance of the fire box portion of a heating furnace and provided with an aperture through which the interior thereof may be perceived and having in a vertical wall an aperture adapted to receive an air blast conduit, said housing having also an air outlet, a translucent closure for said perception aperture, a non-rigid screen within the housing having a relatively taut



edge exposed to air supplied through the blast conduit aperture, whereby the screen will be undulated by said air blasts, and means for illuminating the screen.

1,856,521. STOKER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Continuation of application Serial No. 194,490, filed May 26, 1927. This application filed Nov. 2, 1929. Serial No. 404,266. 5 Claims. (Cl. 110—101.)

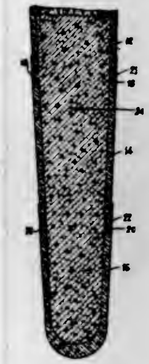


1. In combination, a locomotive provided with a firebox having grates therein, a tender for said locomotive, a fuel conduit having its rear portion extending beneath the floor of said tender and having its forward portion curved upwardly and extending through said grates to a point above the plane thereof, the upwardly extending portion of said conduit being substantially circular in cross-section and gradually increasing in cross-sectional area and merging into a substantially equilateral configuration at its upper end, the front side of said rectangular portion extending transversely of said firebox, a helical screw in said conduit for conducting fuel from said tender and delivering it into said firebox in a single, continuous stream, and means including a steam nozzle located at the rear of the rectangular portion of said conduit for projecting fuel emerging from said conduit in aerial paths over the grates in said firebox.

1,856,522. JOINT FOR PILE SHELLS. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,257. 10 Claims. (Cl. 61—57.)

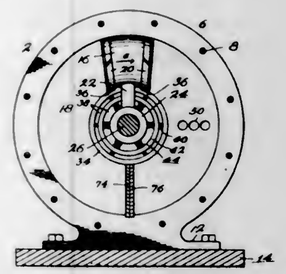
1. A pile shell comprising a plurality of hollow tapered concrete sections adapted to enclose a core by

which the shell is driven each of said concrete sections being provided at one end only with a fitted ferrule flush with the outside surface of said section and conforming



to the taper thereof, said ferrule enclosing and tightly fitting the smooth end of an adjoining section for the purpose set forth.

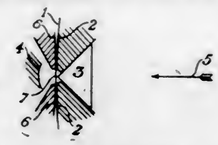
1,856,523. ROTARY ENGINES. FRANCIS WHEATLEY, Sr., Kansas City, Mo. Filed Mar. 27, 1930. Serial No. 439,345. 3 Claims. (Cl. 121—73.)



1. In an engine of the character described, a cylinder having an annular chamber and an annular slot which latter extends through the inner periphery of said chamber, annular shoulders within said cylinder and arranged at opposite sides of said annular slot, a split packing ring bridging said slot and mounted upon said annular shoulders, means for regulating the pressure of said packing ring upon the annular shoulders, a piston head arranged to traverse the annular chamber, packing rings mounted upon said piston head and projecting into notches in the first-mentioned packing ring, a member carrying the piston head and extending through the annular slot and between the ends of the packing ring, and a shaft extending transversely through the axis of the annular chamber and upon which said member is mounted.

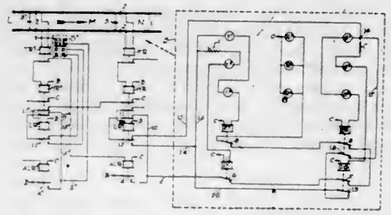
1,856,524. PHOTOGRAPHIC RECORDING OF LIGHT VARIATIONS. ALFRED WHITAKER, West Drayton, and CECIL OSWALD BROWNE, Ealing Common, London, England, assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed May 21, 1929, Serial No. 364,900, and in Great Britain July 3, 1928. 7 Claims. (Cl. 179—100.31.)

1. In apparatus of the class described, the combination of means constituting an effective slit device through which light passes, means for supporting and guiding a moving sensitive film in its movement past said device, and a light-reflecting member in the path of light passing



through said device, said film passing between said device and member and said member reflecting back to said film substantially all the light which penetrates the film.

1,856,525. LIGHT SIGNAL SYSTEM FOR RAILROADS. FREDERICK B. WIEGAND, Cleveland, Ohio. Filed Sept. 21, 1929. Serial No. 394,222. 4 Claims. (Cl. 246—41.)

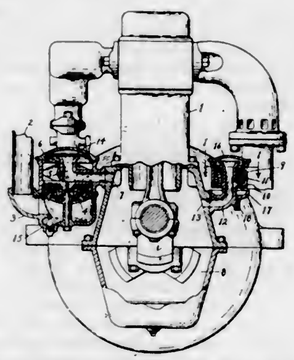


1. A railway light signal, comprising, a plurality of proceed, caution, and stop lamps, the proceed and caution lamps being energized, in each case, through multiple circuits, whereby the failure of one proceed or one caution lamp leaves other lamps of its kind energized, and means controlled in accordance with traffic for selectively energizing all of the lamps of a like restrictiveness.

1,856,526. SILICA WASH AND PROCESS OF MAKING THE SAME. JOHN J. WINCHESTER, Winchester, and ARISTIDES A. FRAGOPULOS, Boston, Mass. Filed Feb. 11, 1930. Serial No. 427,644. 12 Claims. (Cl. 22—189.)

1. A silica wash comprising silica, oil and gum emulsifying said oil.

1,856,527. AIR CLEANER, CRANKCASE VENTILATING MEANS AND THE LIKE. CHARLES A. WINSLOW, Vallejo, Calif. Filed Oct. 29, 1927. Serial No. 229,651. 16 Claims. (Cl. 123—119.)



1. In combination, an internal combustion engine, an air cleaner therefor, said cleaner comprising a casing,

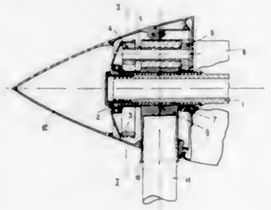
a filtering element within the casing, a liquid reservoir above the filtering element, and means for continuously supplying oil to said reservoir during the operation of said cleaner.

1,856,528. MEASURING APPARATUS. ARCHER E. YOUNG, Pittsburgh, Pa. Filed Oct. 4, 1929. Serial No. 397,262. 1 Claim. (Cl. 234—36.5.)



Recording apparatus including a control for periodic printing, such control including an electric circuit, a rotatable clock-driven member, a contact-piece borne by said rotatable member, and a second resilient contact-piece arranged adjacent said rotatable member and adapted to be engaged periodically by the said rotatable member as the said member rotates and to be drawn aside and released again, the two said contact-pieces being so arranged that the resilient contact-piece on release as aforesaid and in its return to normal position passes the companion contact-piece and makes and breaks an instantaneous contact therewith, the said contact-pieces being arranged in the said circuit.

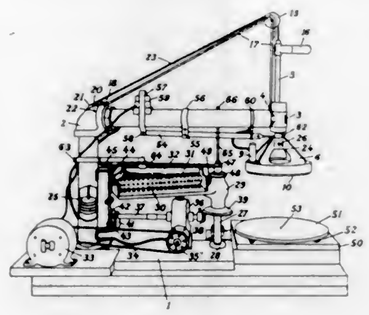
1,856,529. PROPELLER HUB FOR AIRCRAFT ENGINES WITH A REDUCING GEAR OF THE SUN AND PLANET WHEEL TYPE. TRANQUILLO ZERBI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed May 28, 1930, Serial No. 456,465, and in Italy Aug. 31, 1929. 2 Claims. (Cl. 244—25.)



1. Propeller hub for aircraft comprising, in combination with a propeller shaft on which said hub is directly and loosely mounted, a support for said shaft, spindles rotatably mounted in longitudinal holes in the hub and projecting from said hub at both ends, toothed wheels keyed at one end of said shafts and meshing with a toothed rim keyed on said propeller shaft, and toothed wheels on the other ends of said spindles adapted to mesh with a fixed toothed wheel carried by the support of said propeller shaft.

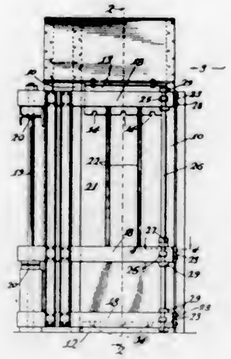
1,856,530. APPARATUS FOR BRANDING THE GRADE ON CHEESE. JOHN F. BARGHAUSEN, Washington, D. C., dedicated by assignment to the Government and the People of the United States of America. Filed Feb. 20, 1930. Serial No. 430,004. 1 Claim. (Cl. 101—9.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

A machine of the character described comprising a base, an upright hollow shaft supported by said base, a horizontal hollow arm attached to said hollow shaft, a branding device having metal letters supported by said hollow arm, means for heating the branding device, said branding device being adapted to embedding legends in paraffin surfaces, a stationary vertical shaft attached to said base, a carriage so positioned as to revolve around said stationary vertical shaft, means to revolve said carriage, a rotatable brush attached to said carriage, means



to positively rotate said brush and means whereby said branding device will adjust itself to any irregular surfaces when brought in contact therewith.

1,856,531. LATCH FOR BALING PRESS DOORS. MORRIS F. BERG, Los Angeles, Calif. Filed Oct. 30, 1929. Serial No. 403,503. 2 Claims. (Cl. 292—40.)

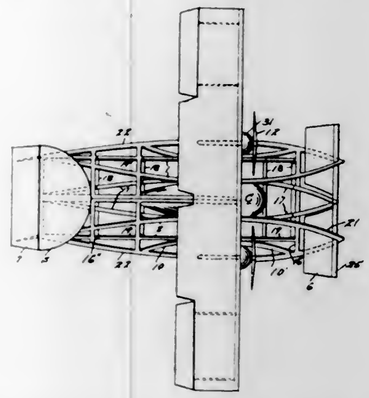


1. In a safety door for paper baling presses, a latch comprising a plurality of horizontally disposed tubular members arranged on the outer face of the door, a pair of latching bolts arranged for sliding movement in the end of each tubular member, a vertically disposed shaft journaled in bearings on said tubular members, a handle for actuating said shaft, arms projecting inwardly from said shaft above and below said tubular members, pins seated in the latching bolts and projecting through longitudinally disposed slots in the tubular members and said arms provided with slots for the reception of the ends of said pins.

1,856,532. OUTRIGGER FRAME, FORE AND AFT CONTROL TYPE AIRPLANE. JOSEPH BLONDIN, Los Angeles, Calif. Filed July 22, 1929. Serial No. 380,126. 16 Claims. (Cl. 244—12.)

1. In an airplane, upwardly converged and ridge joined plural outrigger frame of unit construction forming a

chassis and designed to support on its fore end a front elevator surface, at its median portion carrying the main



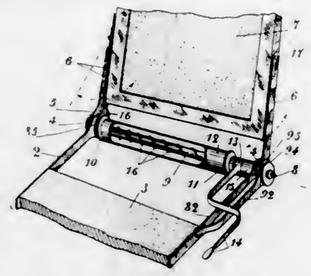
lifting wings and a car between the wings, and at its rear end having a stabilizer surface, a rear elevator surface and fin and rudder surfaces for directional control.

1,856,533. THERAPEUTICALLY VALUABLE SUBSTANCES OF THE THYROID GLAND AND A PROCESS OF PREPARING THEM. FERDINAND BLUM, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 20, 1930, Serial No. 430,119, and in Germany Feb. 28, 1929. 6 Claims. (Cl. 167—76.)

2. In the process of preparing therapeutically active substances from the thyroid gland, the steps which comprise subjecting an aqueous thyroid solution to a fractional precipitation by means of a concentrated aqueous solution of an easily water-soluble salt, capable of salting out albumins, selected from the group consisting of ammonium-sulfate, zinc-sulfate, dimethyl-amino-hydrochloride and diethylamino-hydrochloride, the whole amount by volume of which solution does not exceed the quantity by volume of the thyroid solution, and said fractional precipitation carried out by adding first to the aqueous thyroid solution an amount of 45% by volume of said concentrated salt solution, filtering the precipitate thus obtained which is thrown away, and subjecting the filtrate at least once more to the treatment causing precipitation by adding each time about 15% by volume of the same salt solution, filtering off the product precipitated by each addition and working up the precipitates in equal manner by dialysation and evaporation of the dialysate in vacuo.

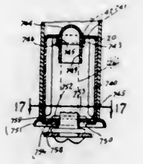
1,856,534. ADJUSTABLE SEAT-BACK. JEAN BOERY, Paris, France. Filed July 11, 1928, Serial No. 291,834, and in France July 20, 1927. 2 Claims. (Cl. 155—160.)

1. An article of furniture comprising a seat; a spindle secured at the rear thereto; a tube mounted on said spindle; a crank detachably engaged with said tube; a manipulating handle on said crank; an inclinable back pivotally supported at its lower end on said spindle; a friction brake member fixed to said back; a movable friction brake member fixed to said seat co-operating with said first-named brake member; a spring member attached at one end to said tube and at the other end to said back, and means on said crank and operating to shift said tube whereby said brake members are brought in and out of contact and said back is clamped or unclamped to said seat upon operation of said crank, and the braking effect of the brake members is obtained in proportion to the force exerted rearwardly on the back, said spring mem-



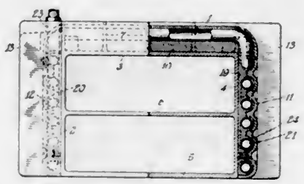
ber tending to urge said back into a vertical position and said movable friction brake member into contact with the other friction brake member.

1,856,535. CASTER STEM AND SOCKET. EDWARD A. BROKAW and WILLIAM H. NOELTING, Evansville, Ind., assignors to Faultless Caster Company, Evansville, Ind., a Corporation. Filed Nov. 15, 1929. Serial No. 407,312. 2 Claims. (Cl. 16—31.)



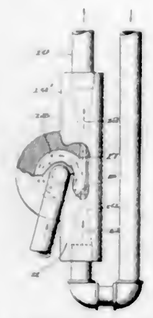
1. In a caster construction, a supporting frame including a horizontally disposed plate having an aperture, a collar integral with and projecting beyond said plate and surrounding said aperture, a tubular cap having a closed end, said cap having its lower open end extending through said aperture and adapted to receive and snugly embrace the upper portion of a caster pintle, and an outwardly directed portion on said cap disposed an appreciable distance from the ends thereof interengaging with said collar to limit the movement of said cap in said aperture.

1,856,536. REFRIGERATING SYSTEM. GEORGE W. BUNGAY, Plainfield, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 10, 1929. Serial No. 412,953. 5 Claims. (Cl. 62—95.)



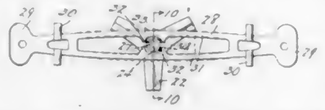
3. A refrigerator expander unit of the class described comprising a casing having a hollow wall with one side thereof corrugated, a filling of metal in said wall, and an expansion coil embedded in said metal filling.

1,856,537. METHOD OF PUMPING AND SYSTEM THEREFOR. ARTHUR W. BURKS, Decatur, Ill. Filed Aug. 23, 1929. Serial No. 387,990. 20 Claims. (Cl. 103—260.)



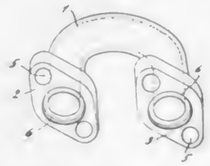
1. The method of pumping, which consists in forming a stream of liquid, maintaining a whirling body of liquid by said stream, utilizing the whirling body to lift from a lower elevation thereinto fluid to be pumped, and taking off the pumped fluid from above said body as the body increases in volume.

1,856,538. TOY AND THE LIKE. EDWARD RALPH CASE, Lancaster, Pa., assignor, by mesne assignments, to The Kilgore Manufacturing Company, Westerville Ohio. Filed Feb. 26, 1929. Serial No. 342,724. 2 Claims. (Cl. 287—100.)



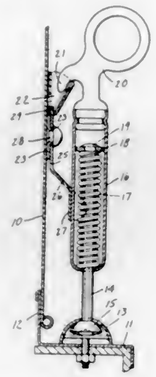
1. A toy comprising a pair of elements formed of cast iron and pivotally connected to one another through cooperating bearing portions the bearing portion of one of said elements being a post having an annular bearing groove, the bearing portion of the other element including a socket adapted to fit said post at said annular groove, said other element having a slot extending away from said socket but at its junction therewith having a width slightly less than the diameter of said socket, said slot extending a substantial distance away from said socket to provide a pair of arms sufficiently yieldable to enable engagement and disengagement of said socket and said post.

1,856,539. METHOD OF MANUFACTURING RETURN BENDS. THOMAS COLLINS, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 27, 1928, Serial No. 322,123. Renewed Sept. 18, 1931. 4 Claims. (Cl. 29—157.6.)



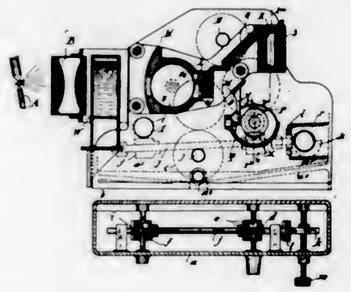
1. The method of forming a curved tube connection which comprises forging the end of a substantially straight solid bar to form a flange thereon, forming a hole extending longitudinally from end to end of the bar, and bending the bar to bring the forged flange to the desired position.

1,856,540. HOOD LATCH. EMANUEL L. CRUM, Indianapolis, Ind. Filed May 17, 1930. Serial No. 453,117. 3 Claims. (Cl. 292—114.)



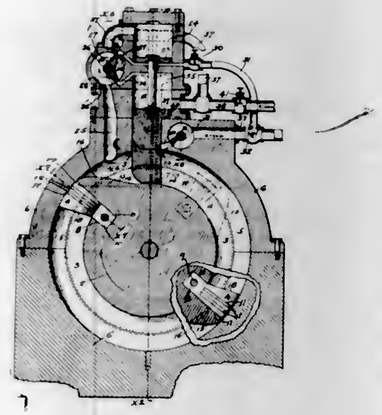
1. The combination with a vehicle hood and chassis member, of a hood latch therefor having one end anchored to said chassis and the other end yieldingly connected therewith, a keeper fixedly secured to the side of said hood in a position to be engaged by the free end of said latch for yieldingly holding the hood in lowered position, and a spring arm adjustably mounted on said keeper so as to extend downwardly and outwardly from said hood in position to be engaged by said latch under spring tension when in operative position for holding said hood under tension against lateral movement with respect to said chassis.

1,856,541. MOVING PICTURE MACHINE. RENÉ DECAUX, Paris, France, assignor to Societe des Etablissements Gaumont, Paris, France, a Corporation of France. Filed May 10, 1929, Serial No. 361,923, and in France May 21, 1928. 6 Claims. (Cl. 88—16.8.)



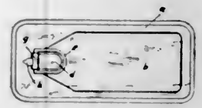
1. In a moving picture projecting apparatus of the type described, the combination of film lighting and guiding means, a window for said film, a rotary shutter adapted to be displaced before said window, an objective placed at the focal distance thereof from said film, an oscillating mirror, optical means for reflecting the beams of light reflected by said oscillating mirror on a projection screen, a toothed film advancing roller, a helicoidal pinion for controlling said roller, a second helicoidal pinion for operating said oscillating mirror, a transverse arbor disposed perpendicularly to the axes of said helicoidal pinions, two pinions carried by said transverse arbor meshing respectively with said first mentioned helicoidal pinions, the teeth on said two sets of pinions being of different pitch whereby displacement of said transverse arbor produces angular displacement of said toothed film advancing roller and said oscillating mirror with respect to each other.

1,856,542. ROTARY STEAM ENGINE. EDWARD CHRISTIAN DUER, Los Angeles, Calif. Filed Oct. 20, 1928. Serial No. 313,743. 2 Claims. (Cl. 121—75.)



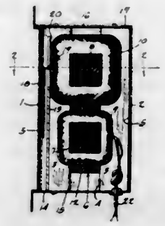
1. A rotary steam engine comprising a combination with a rotor and a stator grooved to conjointly form a steam way, and provided with an abutment way open to the steam way and also provided with a steam inlet into the steam way and with an exhaust passage from the steam way; a piston fixed to the rotor and fitting the steam way; an abutment reciprocating in the abutment way and provided at one end with a piston head; said stator being provided with an exhaust valve chamber open to the exhaust passage, an exhaust outlet open from the exhaust valve chamber to the abutment way above the piston; an exhaust way open from the exhaust valve chamber to the exhaust cylinder to supply exhaust steam to operate the piston head to lift the abutment; a valve in the exhaust valve chamber; and means timed with the rotor to position the valve to open and close the exhaust ways to direct exhaust steam to alternately move the abutment into and out of the abutment way, of the rotor at different positions of the piston and to position the valve to close both of said exhaust ways at another position of the piston.

1,856,543. OPENING DEVICE FOR SHEET-METAL CANS AND BOXES. GUSTAF LAMBERT ERICSSON, Stockholm, Sweden. Filed May 5, 1930, Serial No. 449,832, and in Germany Oct. 28, 1929. 1 Claim. (Cl. 220—48.)



In a can or box having a tearing strip bordered by weakened lines, the combination of a bearing fastened to the tearing strip, a handle permanently fastened to the bearing of the tearing strip adapted for catching hold of and ripping off the tearing strip, turning in said bearing and having a sharp edged tongue adapted to produce an incision across the tearing strip when the handle is raised.

1,856,544. OZONIZER. ALBERT E. EVANS, Cleveland, Ohio, assignor, by mesne assignments, to The Corozone Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,604. 13 Claims. (Cl. 204—32.)



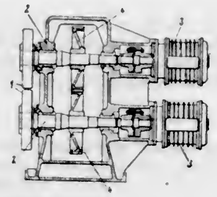
3. An ozone machine comprising: a casing, acting as an electrode; a transformer located in said casing; an electrode disposed within said casing; insulating material interposed between said electrode and said casing; and connections connecting said casing and said electrode to the secondary terminals of said transformer.

1,856,545. TAG HOLDER. DAVID GARFINKLE, Alameda, Calif. Filed Apr. 18, 1930. Serial No. 445,438. 6 Claims. (Cl. 40—5.)



1. A tag holder comprising a single piece of material having a frame portion, a rest for supporting the frame in an inclined position, and a bracing member extending between the rest and the frame and being adapted to be supported by a bottle top, said rest having an opening formed therein below the bracing member for receiving a portion of the bottle.

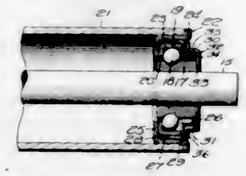
1,856,546. SHEAR FOR USE IN ROLLING MILLS, ETC. JOSEF GASSEN, Dusseldorf, Germany, assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany, a Corporation of Germany. Filed June 27, 1930, Serial No. 464,221, and in Germany Aug. 10, 1929. 4 Claims. (Cl. 164—68.)



1. Means for severing a moving bar comprising a pair of electric motors, a pair of cooperating shear elements operatively connected with said motors for operation by

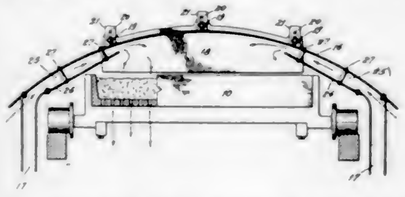
the same, a switch controlling the flow of operating current to said motors, means whereby movement of the bar effects actuation of said switch to start the motors, means whereby operation of the motors cuts off the flow of operating current to the motors following the cutting operation, and means whereby operation of the motors also effects a braking current flow through the stator coils of the motors following the cutting operation.

1,856,547. DUSTPROOF BALL BEARING. HENRY R. GOTTHARDT, Louisville, Ky., assignor to Logan Co. Inc., Louisville, Ky., a Corporation of Kentucky. Filed Sept. 5, 1931. Serial No. 561,434. 10 Claims. (Cl. 308—20.)



1. A ball bearing mounting for inner and outer coaxial relatively rotatable members comprising an inner race fixed to the inner member, an outer race surrounding said inner race, anti-friction elements arranged between said races, a cup arranged in the end of the outer member, said cup and said outer race having spaced concentric portions, a shell having a portion arranged between said concentric portions and frictionally engaging such portions to secure said cup and said outer race against movement with respect to each other, said shell having an annular flange portion arranged outwardly of said outer race and a reduced cylindrical flange extending outwardly from the last named portion, and a dust plate fixed to said inner race and having a radial annular flange portion lying adjacent the cylindrical flange of said shell and a cylindrical portion surrounding said cylindrical flange in slightly spaced relation thereto and concentric therewith.

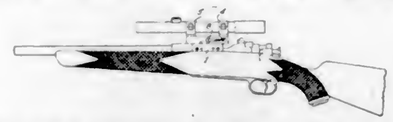
1,856,548. COVER FOR SINTERING MACHINES. GERALD U. GREENE, Salt Lake City, Utah, assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 3, 1929, Serial No. 383,187. Renewed June 17, 1931. 7 Claims. (Cl. 266—21.)



1. In combination with a sintering machine having a muffle, a low hood covering the pallets adjacent said muffle, said hood being provided with air ducts at the sides thereof, the air passing through said ducts being preheated by contact with said hood before being applied to the surface of the charge.

1,856,549. GUN SIGHT SUPPORT. SEYMOUR GRIFFIN and ROBERT SPARR, New York, N. Y., assignors to Griffin & Howe, Inc., New York, N. Y., a Corporation of New York. Refiled for abandoned application Serial No. 224,044, filed Oct. 5, 1927. This application filed Nov. 4, 1927. Serial No. 231,055. 4 Claims. (Cl. 33—50.)

1. A mounting for telescope sights for rifles and the like, having a grooved mounting plate adapted to be secured to the rifle breech, a support for the telescope longitudinally slit for a portion thereof to form a tongue fitting the groove in said plate, said plate having a depression at its upper side, a lever carried by the telescope support and having



screw threaded engagement with said tongue and also having a portion adapted to enter the depression in said plate when the lever is moved to clamp the tongue and plate together.

1,856,550. TOKEN RECEPTACLE FOR BOTTLES AND JARS. JOSÉ LEANDRO MONTALVO GUENARD, Ponce, Porto Rico. Filed Dec. 11, 1928. Serial No. 325,232. 2 Claims. (Cl. 215—100.)



1. In a device of the character described, a receptacle adapted to receive a prize token, said receptacle including a base and a chambered member adapted for association with said base, said chambered member and base being apertured to receive therethrough a securing means, said securing means being operable to retain said base and chambered member in closed position and for retaining said receptacle in association with a second receptacle.

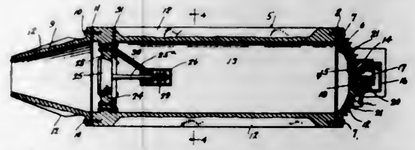
1,856,551. FISHING ROD TIP. PAUL A. HABERL, Denver, Colo. Filed Apr. 17, 1931. Serial No. 530,820. 2 Claims. (Cl. 43—24.)



1. As a new article of manufacture, a tip for fishing rods comprising a ferrule, arms projecting outwardly from the ferrule, tines projecting outwardly from each arm, and eyes between the tines disposed at an angle to the axis of the tip.

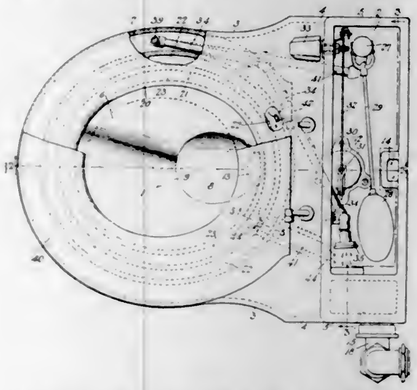
1,856,552. CARBIDE ROCKET. FRANK HADAMIK and NICK LIBERATORE, Union, N. Y. Filed June 26, 1931. Serial No. 547,166. 1 Claim. (Cl. 244—18.)

A power rocket comprising in combination a cylinder provided with a combustion chamber and an inlet and outlet for said chamber, an inwardly opening valve controlling said inlet, a rocker arm engaging the stem of said valve, a cam shaft, means for transmitting movement of said cam shaft to said rocker arm, and means for driving said cam shaft, a spring pressed valve controlling said ex-



haust and opening outwardly of the combustion chamber, and spark plugs supported in operative relation to said combustion chamber for igniting the fuel, and a commutator having electrical connections with spark plugs and having operative association with said cam shaft.

1,856,553. WATER CLOSET. ULYSSES G. HARING, Washington, D. C., assignor of one-fourth to Gustav Escher, Washington, D. C., and one fifth to Herman R. Kuehner, Laurel Springs, N. J. Filed Nov. 6, 1930. Serial No. 493,867. 7 Claims. (Cl. 4—13.)

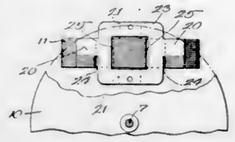


1. A water closet comprising a bowl and an integral tank formed at the rear thereof and slightly wider than said bowl and communicating with a water chamber completely surrounding the well of the bowl, a hinged seat over the bowl, a trap beneath said well and water chamber provided with an outlet, an overflow communicating passageway between said trap and the upper portion of the tank below the upper edge of the bowl, a flush valve in the bottom of the tank communicating with said passageway to the trap, a peripheral rim about the well of the bowl provided with two non-communicating passageways, said passageways provided with small outlets to the well of the bowl, one of said passageways adapted to liberate water around the well of the bowl to wash the same, the other of said passageways adapted to withdraw the air from within the bowl, and a seat-operated valve adapted to liberate water to said water passageway and simultaneously effect a suction on the other passageway for withdrawing air from the bowl therethrough.

1,856,554. INDUCTION ELECTRICITY METER. JESSE HARRIS, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed Apr. 19, 1929, Serial No. 356,485. Renewed Sept. 23, 1931. 9 Claims. (Cl. 171—264.)

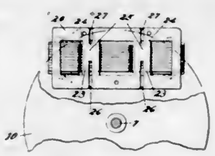
1. A rotating induction electricity meter including a driving torque producing magnet system having a current core including two portions in parallel in the magnetic

circuit of the core, a magnetic shunt bridging unlike poles of the core, and formations embodied in said shunt effective upon sufficient overload to cause progressive saturation of the shunt into the region of one of said core por-



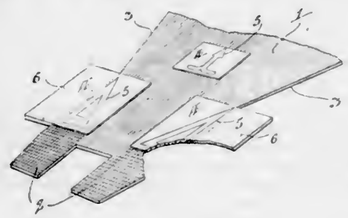
tions, the core portion into the region of which the shunt is progressively saturated being nearer the axis of the rotating element of the meter than the other core portion.

1,856,555. INDUCTION ELECTRICITY METER. JESSE HARRIS, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed Feb. 13, 1930, Serial No. 428,046. Renewed Sept. 23, 1931. 19 Claims. (Cl. 171—264.)



16. In an induction watt-hour meter, a current electromagnet having a plurality of pole pieces, and a shunt device extending between the pole pieces and spaced from more than one face of each of said pieces to provide air gaps.

1,856,556. METHOD OF EMBROIDERING. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Dec. 9, 1929. Serial No. 412,689. 2 Claims. (Cl. 2—278.)

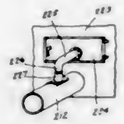


1. The method of embroidering flat-knitted stocking webs which consists in attaching a piece of ornamentally marked dissoluble material to the web by temporarily softening said material so as to effect adherence thereof to the fabric, embroidering along the marks through the material and web, and thereafter removing the material with a dissolving liquid.

1,856,557. HOPPER GAS ELIMINATOR. FRANK HOKE and VERDRIE F. CLARK, Indianapolis, Ind., assignors to Holcomb & Hoke Manufacturing Company, Indianapolis, Ind., a Corporation. Filed Dec. 18, 1930. Serial No. 503,125. 2 Claims. (Cl. 110—45.)

2. In combination with a furnace having a fire bed and a combustion space above said fire bed, a conduit through which fuel is mechanically supplied to said fire bed, means

for supplying air under pressure beneath said fire bed, and a conduit connecting said fuel conduit to said combustion space for withdrawal of gases from said fuel conduit, said gas withdrawal conduit being arranged to permit entrance of air thereto to prevent undesired combustion therein.



1,856,558. PROCESS OF TREATING WASTE SULPHITE LIQUOR. GUY C. HOWARD, Wausau, Wis. Filed Mar. 12, 1930. Serial No. 435,107. 18 Claims. (Cl. 252—7.)

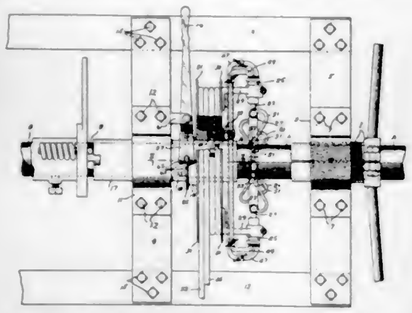
1. The process of treating waste sulphite liquor, which comprises adding thereto caustic lime to precipitate crystals of $CaSO_3$, subjecting said crystals to treatment conducive to crystal growth, and recovering said crystals.

1,856,559. TOOTHPICK HOLDER. LOUIS M. JOHNSON, Concord, Calif. Filed Mar. 11, 1930. Serial No. 434,889. 2 Claims. (Cl. 132—89.)



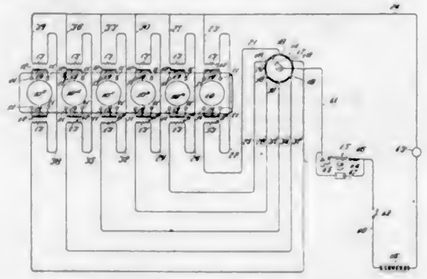
2. A toothpick holder of the character described comprising a base having a plurality of toothpicks projecting therefrom and made of resilient material, a cover having one end thereof anchored to one face of the base and adapted to be bent back upon itself intermediate of the cover ends so as to enclose the picks, and a projection rising from the base and pointing away from the bend in the cover and arranged for passing through an aperture in the free flap of the cover, whereby the cover can be disengaged from the projection by applying endwise pressure to one of the base ends and the bent section of the cover in a direction toward the central portion of the folded holder.

1,856,560. TORCH HEAD. HOMER W. JONES, Williamsville, N. Y., assignor to The Linde Air Products Company, a Corporation of Ohio. Filed Nov. 20, 1930. Serial No. 496,967. 11 Claims. (Cl. 266—23.)



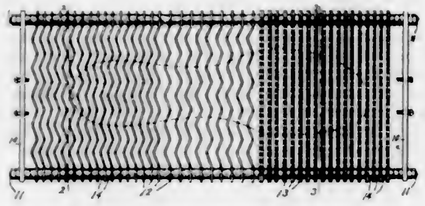
1. A head for supporting and operating torches comprising a bearing member adapted for rotatable and longitudinal movement, a support for said bearing, a conduit-reel on the bearing member, means on the bearing member for supporting said torches, and means engaging the bearing member to longitudinally actuate the bearing in either direction while the bearing is rotated.

1,856,561. IGNITION SYSTEM. ELMER W. KEIL, Milwaukee, Wis. Filed Sept. 10, 1930. Serial No. 480,977. 1 Claim. (Cl. 123—148.)



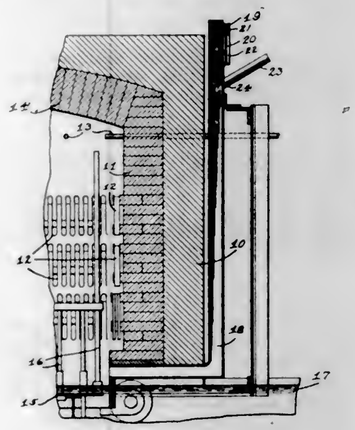
An ignition system comprising, in combination with a source of electric energy and a multi-cylinder internal combustion engine provided with four spark plugs to each cylinder, a pair of high tension coils for each cylinder with the secondaries of each coil connected to a pair of spark plugs of the same cylinder while the primaries of said pair of coils are arranged in series, distributing mechanism provided with contact points arranged at predetermined distances apart and corresponding in number with the number of cylinders and a traveling brush adapted to successively engage with the contact points, an electrical connection between the primaries of said pair of coils and a contact point of the distributing mechanism and between said primaries and the source of electric energy, and interrupter mechanism electrically connected between the source of electric energy and the brush, said interrupter mechanism involving a rotatable elongated cam operatively connected with said brush, with the distance between the contact points of the distributor mechanism and the speed of rotation of the cam so correlated that the cam will open the circuit in advance of movement of the brush out of contact with a contact point and the circuit held open until the brush comes into contact with the next succeeding contact point of the distributor mechanism.

1,856,562. METHOD OF CEMENTING PARTS OF SHOES. IRVING L. KEITH, Haverhill, Mass. Filed May 31, 1929. Serial No. 367,309. 3 Claims. (Cl. 12—142.)



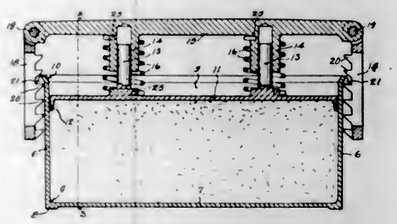
1. The method of cementing sock linings and inner soles to the bottom of shoes, which consists in simultaneously applying cement throughout the surface of the heel and shank parts to a relatively large proportion of the area thereof, and throughout the ball and adjacent fore part portions to a relatively small proportion of the area of such portions, and then placing the part thus cemented in position in the shoe.

1,856,563. ANNEALING FURNACE. HOWARD A. KENWORTHY, Woodbury, Conn. Filed Apr. 25, 1930. Serial No. 447,329. 3 Claims. (Cl. 263—10.)



1. In an annealing apparatus, an inverted heating chamber closed at the top and open at the bottom, a sealing tank below said chamber containing water for quenching the hot metal after annealing, and an exhaust stack opening into the bottom of said heating chamber for conducting away the steam generated by said quenching without loss of efficiency by the cooling of said heating chamber, said stack having an automatic relief valve including a freely swinging vane adapted to be opened outwardly by the pressure of the escaping steam and to swing inwardly to prevent formation of vacuum in said apparatus.

1,856,564. MEAT MOLD. JOSEPH KIPPER, Seattle, Wash. Filed Nov. 20, 1929. Serial No. 408,624. 1 Claim. (Cl. 100—57.)



A meat mold of the class described, embodying a mold receptacle, a presser plate movably disposed within the upper portion of said mold receptacle, a retainer member disposed lengthwise of said presser plate in spaced relation therefrom, readily releasable means adjustably connecting the ends of said mold receptacle, studs extending upwardly from said presser plate, said studs having base portions of larger diameter provided with holes in the sides thereof, tubular bosses extending downwardly from said retainer bar and fitting snugly over said studs whereby said presser plate and said retainer bar are guided for relative movement toward and away from each other and are securely held against relative sidewise movement, the bases of said bosses having holes in the sides thereof, and helical compression springs fitted over said studs and said bosses and interposed between said presser plate and said retainer bar, the respective ends of said springs engaging within the holes at the bases of said studs and said tubular bosses respectively whereby said presser plate and said retainer bar are mechanically connected together by said springs.

1,856,565. TITANIUM PIGMENTS AND PROCESS OF PREPARATION THEREOF. CARL ADOLPHE KLEIN, Brimsdown, and ROBERT SKIRVING BROWN, London, England. Filed Aug. 15, 1925, Serial No. 50,484, and in Great Britain Aug. 25, 1924. 5 Claims. (Cl. 134—58.)

1. The process of manufacture of a titanium pigment, consisting in heating in the presence of a reducing agent with titanium ore containing iron a barium compound of a character to yield upon fusion with the titaniferous material a slag containing titanium oxide and barium oxide and metallic iron, separating the bulk of the metallic iron produced, mixing the slag of barium and titanium oxides with sulphuric acid and heating the mixture to form barium sulphate and titanium sulphate, forming this into a paste with water and running it into boiling water in the presence of organic materials of a character adapted to prevent the precipitation of iron compounds which may be present due to the presence of any chemically combined iron or any remaining traces of metallic iron which may have been left in the slag, to cause the precipitation of meta-titanic acid in the presence of barium sulphate, and washing and drying and heating this compound material.

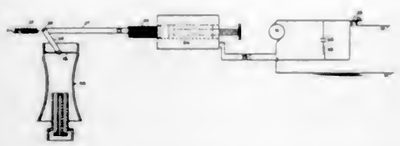
1,856,566. TITANIUM PIGMENTS AND PROCESS OF PREPARATION THEREOF. CARL ADOLPHE KLEIN, Brimsdown, and ROBERT SKIRVING BROWN, London, England. Original application filed Aug. 15, 1925, Serial No. 50,484, and in Great Britain Aug. 25, 1924. Divided and this application filed Sept. 9, 1927. Serial No. 218,572. 3 Claims. (Cl. 134—58.)

1. A process of manufacturing a titanium pigment from titanium ore and barium sulfate which consists in heating a mixture of titanium ore containing iron with barium sulphate to produce sulphuric acid fumes and a mixture of barium oxide, titanium oxide and iron oxide, such mixture being then fused with a reducing agent to obtain a slag containing barium oxide and titanium oxide and metallic iron, separating the bulk of the iron, mixing the slag of barium and titanium oxides with sulphuric acid and heating the mixture to form barium sulphates and titanium sulphates, forming this mixture of barium sulphates and titanium sulphates into a paste with water and running the paste into boiling water in the presence of organic materials such as aldehydes, sugar, starch and the like which are adapted to prevent the precipitation of iron compounds which may be present due to the presence of any chemically combined iron or of any remaining traces of metallic iron which may have been left in the slag, to cause the precipitation of meta-titanic acid in the presence of barium sulphate, and washing and drying and heating this compound material.

1,856,567. PROCESS OF DECOMPOSING VEGETABLE FIBROUS MATTER FOR THE PURPOSE OF THE SIMULTANEOUS RECOVERY BOTH OF THE CELLULOSE AND OF THE INCRUSTING INGREDIENTS. THEODOR KLEINERT and KURT TAYENTHAL, Vienna, Austria. Filed Oct. 29, 1930, Serial No. 492,082, and in Austria Nov. 2, 1929. 8 Claims. (Cl. 92—9.)

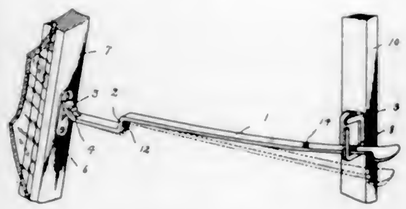
1. A process for the decomposition of fiber-containing plants, portions of plants, woods, and other similar matter, for the purpose of obtaining simultaneously therefrom both the cellulose and the incrusting ingredients contained therein, which consists in submitting the said matter to the action of a mixture of alcohol and water having a water content amounting to between 20% and 75% of the said mixture, under pressure, and at a temperature in excess of 150 degrees centigrade.

1,856,568. RADIO POWER INSTALLATION. SAM L. LA HACHE and FRED B. MONAR, Washington, D. C. Filed Feb. 11, 1928. Serial No. 253,777. 4 Claims. (Cl. 250—17.)



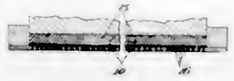
1. In combination, an aircraft, a radio installation having a transmitter, a controller for the transmitter, means for generating power for said installation comprising a generator, a prime mover for driving said generator, a carburetor on said prime mover, and means actuated by said controller for automatically regulating the carburetor of said prime mover to maintain the speed of said generator substantially constant irrespective of the electrical load placed on the generator.

1,856,569. STORM SASH FASTENER. ARTHUR T. LARSEN, Duluth, Minn. Filed Nov. 28, 1930. Serial No. 498,725. 2 Claims. (Cl. 292—262.)



1. A storm sash fastener for windows including in combination an element attachable to the storm sash having an upwardly inclined holding tongue protruding therefrom, an arm one end of which is arcuate in form and having a hole therethrough for engagement about said tongue, a bracket attachable to the window stop for selective engagement with the opposite end of the arm, substantially as described.

1,856,570. CEMENT PRODUCT. JOHN W. LEDEBOER, Ambler, Pa., assignor to Ambler Asbestos Shingle & Sheathing Company, Ambler, Pa., a Corporation of Pennsylvania. Filed Aug. 29, 1930. Serial No. 478,772. 2 Claims. (Cl. 92—67.)

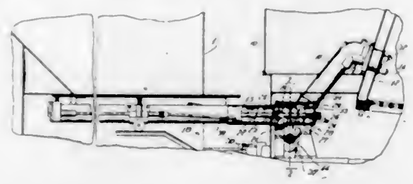


1. The process of producing a slab or sheet comprising mixing fibre-cement composition in the form of a slurry and picking up a wet adhering film of fibre-cement from said slurry, accumulating a plurality of said films in face to face contact in a slab or sheet and with the enmeshed fibres extending in a direction parallel to said slab or sheet, subjecting said slab or sheet in plastic condition to pressure of an impervious surface on one face in a direction at right angles to the plane of said films, while retaining the fibre-cement and permitting escape of contained water on the opposite face, and then permitting said sheet or slab to set while supporting it against distortion.

1,856,571. PROCESS FOR TREATING LIQUIDS WITH ACTIVE CARBONS. CORNELIS LOURENS, Amsterdam, Netherlands, assignor to General Norit Company, Limited, Amsterdam, Netherlands, a Corporation of the Netherlands. Filed Dec. 26, 1923, Serial No. 682,830, and in the Netherlands May 9, 1923. 8 Claims. (Cl. 87—12.)

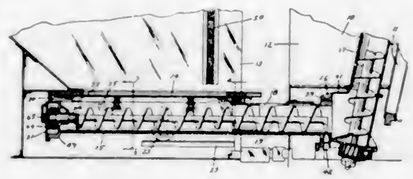
1. The process which comprises treating a non-aqueous liquid with active decolorizing carbon containing an appreciable amount of free acid greater than traces.

1,856,572. STOKER. NATHAN M. LOWER, Baltimore, Md., and EDWIN ARCHER TURNER, New York, N. Y., assignors, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 10, 1926, Serial No. 87,220. Renewed Mar. 21, 1931. 4 Claims. (Cl. 198—15.)



2. In a locomotive stoker, in combination, a transfer conduit, a pair of elevator conduits each having communication with the transfer conduit through a lateral opening, a transfer screw in the transfer conduit, a screw in each of the elevator conduits, such screws extending respectively across the lateral openings, and means forming a part of the transfer screw for urging fuel laterally into the elevator conduits.

1,856,573. STOKER. NATHAN M. LOWER, Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed July 19, 1927. Serial No. 206,887. 3 Claims. (Cl. 198—15.)

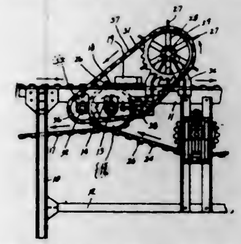


1. A cast steel fuel conveying conduit comprising a V-section formed with an arcuate bottom, a tubular section, a round forward end, a slide support, a gear housing, spring pockets on the upper edge of the section, and a reenforcing rib inside of the conduit adjacent the arcuate bottom on each side thereof extending lengthwise the conduit cast integral to form a rigid casting.

1,856,574. ALIGNING DEVICE. GRAFTON E. LUCE, Chicago, Ill., assignor to Lancaster Iron Works, Inc., Lancaster, Pa., a Corporation. Original application filed Oct. 19, 1929, Serial No. 400,835. Divided and this application filed Apr. 13, 1931. Serial No. 529,756. 3 Claims. (Cl. 198—30.)

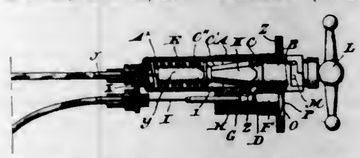
1. The combination of a conveyor adapted to transport a plurality of pallets each having a plurality of brick thereon, a movable member movable through a portion of its travel in the path of travel of said brick, said movement being at a slower rate of speed than the movement

of said conveyor whereby engagement of said brick with said movable member repositions said brick relatively of



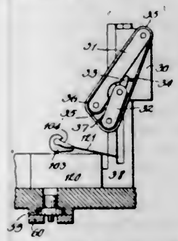
said pallet, and means on said conveyor for preventing relative movement between said pallets and conveyor during said engagement.

1,856,575. FIRE EXTINGUISHER. JEAN MARTIN, St. Ouen, France. Filed Dec. 13, 1928. Serial No. 325,873, and in France Dec. 16, 1927. 3 Claims. (Cl. 169—2.)



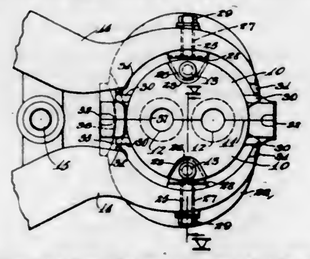
1. A device for controlling the operation of fire extinguishers or other objects to be operated, comprising a housing embodying juxtaposed main and auxiliary compartments having an opening connecting them; a ball movable in either direction through said opening; a member slidable in the main compartment and formed with a circumferential groove to normally receive the ball and be locked thereby against endwise movement, said member adapted to be operatively connected to the object to be operated; an operating spring acting axially on one end of said member to operate said object; a member slidable in the auxiliary compartment and formed with a depression to receive the ball when the latter moves thereinto through said opening; a spring tending to move said member into a position whereby the depression receives the ball; a fuse; a flexible connection between the fuse and the second-named sliding member to hold that member against the action of its spring, said second-named member being released by the melting of the fuse and the consequent movement of the ball into said depression, thereby to release the first-named member and operate the object connected to the same; and means for indicating the melting of the fuse.

1,856,576. STAMPING OR LABELING MACHINE. CHARLES G. MAXWELL, Richmond, Va., assignor to American Cigar Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 18, 1930. Serial No. 503,307. 21 Claims. (Cl. 216—54.)



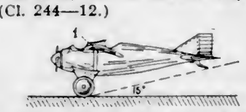
1. A label affixing machine embodying therein a presser head comprising a fitting, a long and a short arm pivotally mounted upon said fitting to have movement about parallel axes, a flat expansible and contractible member extending between the free ends of said arms, and a stop member operative upon one of said arms for establishing a normal inoperative relative position of both of said arms.

1,856,577. MOLD. JOHN E. MCLAUGHLIN, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 29, 1929. Serial No. 358,878. 25 Claims. (Cl. 49—42.)



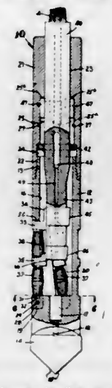
1. The combination of a mold comprising separable sections formed with mold cavities in their meeting faces and recesses in their opposite faces, pivot pins extending thru said recesses, mold operating arms, and bearings carried by said arms and extending into said recesses and provided with openings thru which said pivot pins extend, said mold sections being mounted for pivotal movement about the axes of said pivot pins.

1,856,578. AEROPLANE. GABRIEL MIQUEL, Rheims, and FÉLIX LADEVÈZE, Paris, France. Filed May 5, 1930, Serial No. 450,018, and in France May 15, 1929. 11 Claims. (Cl. 244—12.)



1. In an aeroplane, the combination of a fuselage, wings having means controlled by the pilot for varying the longitudinal curvature and for retaining said curvature; stabilizers having means controlled by the pilot for varying the longitudinal curvature and for retaining said curvature; and a steering rudder having means controlled by the pilot for varying the longitudinal curvature and for retaining said curvature.

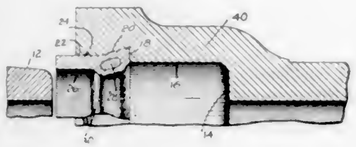
1,856,579. BORING TOOL. GEORGE W. MITCHELL, Norwalk, GAROLD O. SHISLER, East San Gabriel, and EDWARD E. MYERS, Belvedere Gardens, Calif. Filed May 27, 1930. Serial No. 456,002. 5 Claims. (Cl. 255—74.)



4. In a boring tool, a body portion, a plurality of blocks pivoted on said body portion, said blocks each

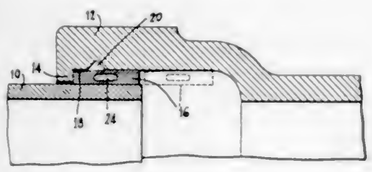
having a recess therein, a plurality of shafts, the lower ends of said shafts being positioned in said recesses of said blocks, a plurality of upper blocks, the upper ends of said shafts being positioned in said upper blocks, a chamber in said body, said upper blocks being positioned in said body and including cams positioned in said body chamber, a reamer roller rotatably mounted on each of said shafts, a stem, said stem being positioned in said body portion and means on said stem to engage said cams to move said reamer rollers.

1,856,580. PIPE JOINT. JOHN C. MITCHELL, Bloomfield, N. J., assignor to Lock Joint Pipe Company, Ampere, N. J., a Corporation of New Jersey. Filed Mar. 18, 1926. Serial No. 95,535. 2 Claims. (Cl. 285—115.)



1. A gasket for the purpose described, comprising in combination, a ring of ductile material, and a ring of resilient material imbedded therein, the thickness of the ductile material radially adjacent said resilient material being substantially less than the thickness of the ductile material elsewhere in the gasket.

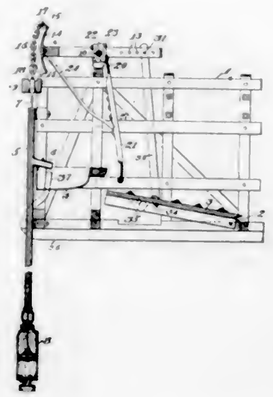
1,856,581. PIPE JOINT. JOHN C. MITCHELL, Bloomfield, N. J., assignor to Lock Joint Pipe Company, Ampere, N. J., a Corporation of New Jersey. Filed Feb. 27, 1930. Serial No. 431,699. 2 Claims. (Cl. 285—115.)



1. A gasket for bell and spigot pipe joints comprising a ring of malleable material substantially rectangular in cross section and having a pocket located substantially centrally between its lateral edges to produce weakened side walls of uniform thickness and an excess of caulking material at each lateral edge, and a core of resilient material filling said pocket whereby when caulked from either lateral edge the weakened side walls will be distorted and pressed into engagement with the walls of the bell and spigot pipe and whereby the resilient material will tend to hold said walls in the distorted position.

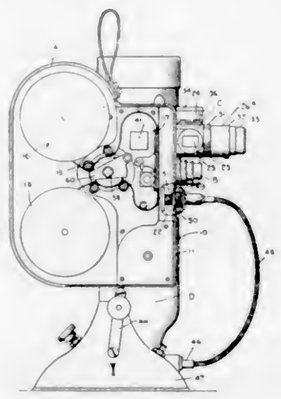
1,856,582. GRAVITY AND FORCE STOCK PUMP. JOHANES A. F. OSSE, Sheldon, Iowa. Filed July 31, 1931. Serial No. 554,314. 4 Claims. (Cl. 103—208.)

1. In an apparatus of the class described, the combination with a fence, of a movable platform therein, a movable breast plate carried by said fence, a pump unit, and means connecting said pump unit, platform and



breast plate, whereby when weight is placed upon said platform and pressure is exerted against said breast plate, said pump unit will be actuated.

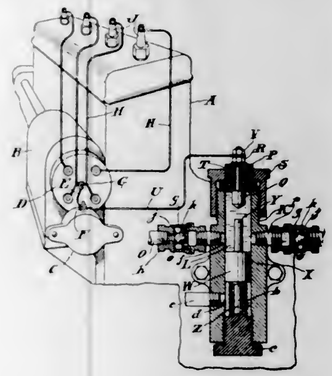
1,856,583. COMBINED CAMERA AND PROJECTING APPARATUS. FREEMAN H. OWENS, New York, N. Y. Filed Apr. 4, 1928. Serial No. 267,158. 14 Claims. (Cl. 88—17.)



1. In a combined camera and projecting apparatus, a camera lens system, a lens mount associated with said camera lens system, means for moving film past said camera lens system and said lens mount, a projecting lens system utilizable when said apparatus is used as a projector, and a view-finding lens system utilizable when said apparatus is used as a camera, said lens mount being adapted to interchangeably receive either the projecting or the view-finding lens system.

9. In a combined camera and projecting apparatus, a casing, a camera lens system mounted on said casing, film moving mechanism in said casing, a projecting lens system associated therewith, an opening in said casing adapted to receive light from a light source when using the apparatus as a projector, a light closure for said opening when using the apparatus as a camera, a second opening in said casing adapted to receive a removable driving element for externally driving said film moving mechanism when using the apparatus as a projector, and a light closure for said second opening when using the apparatus as a camera.

1,856,584. SAFETY DEVICE FOR INTERNAL COMBUSTION ENGINES. MORTIMER S. PARKHILL, Corning, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 19, 1929. Serial No. 387,056. 1 Claim. (Cl. 123—196.)



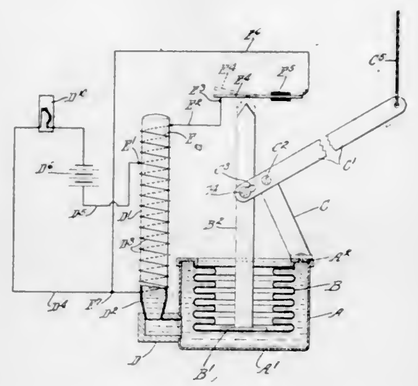
The combination with an internal combustion engine having a pressure lubricating system and an ignition system, of a casing having a chamber, a fixed contact extending into the chamber, a movable contact in the chamber, a spring for actuating the movable contact against the fixed contact to short circuit the ignition system, means for admitting pressure fluid into the chamber to actuate the movable contact out of engagement from the fixed contact, and means for admitting lubricant under pressure into the chamber to hold the movable contact out of engagement from the fixed contact.

1,856,585. FLOUR DUSTER. EDWARD T. PARSONS, Upper Montclair, N. J., assignor to Thomson Machine Company, Belleville, N. J., a Corporation of New Jersey. Filed Nov. 21, 1931. Serial No. 576,471. 14 Claims. (Cl. 107—7.)



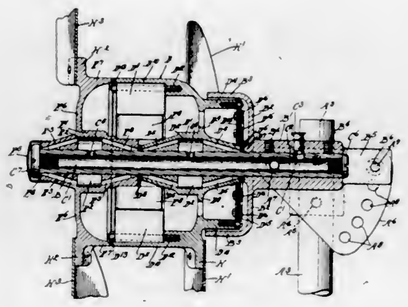
1. The combination with a dough molding machine having a molding surface to be dusted with flour, of a flour duster comprising a hopper having an opening at its bottom, a perforate plate on the exterior of said bottom to cover said opening, vertical standards at opposite ends of said hopper for supporting said hopper on said machine with said bottom horizontally disposed, bars one at each of opposite sides of the exterior of said plate having rabbets facing each other and said perforate plate, fastening members passing through said bars and said plate into said hopper for securing both the plate and said bars to the hopper, and a pair of shutters formed of strips of resilient sheet metal mounted in said rabbets one at each end of said bottom to slide over said perforate plate toward and from each other to cover and uncover the perforations in said plate, said shutters having their outer ends flexed and frictionally contacting with the respective standards.

1,856,586. VAPOR MOTOR. LAURENCE M. PERSONS, St. Louis, Mo. Filed Apr. 13, 1929. Serial No. 354,727. 9 Claims. (Cl. 60—25.)



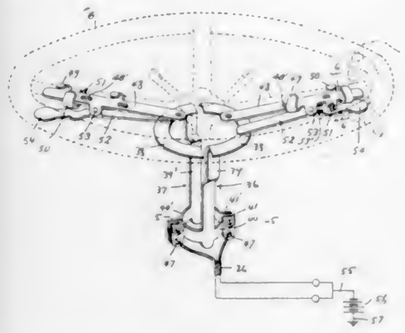
1. In a vapor motor, a closed, liquid system including intercommunicating heating and working chambers, a working liquid in said system, a sectional electrical resistance heater associated with the heating chamber and adapted to heat the liquid therein, a source of electric energy in circuit with said heater, one portion of the heating resistance being in constant circuit with said source of energy, and means for intermittently cutting the other portion off and on, in response to the heating and cooling of said liquid.

1,856,587. FAN. LAURENCE M. PERSONS, St. Louis, Mo., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed June 8, 1929. Serial No. 369,333. 9 Claims. (Cl. 730—259.)



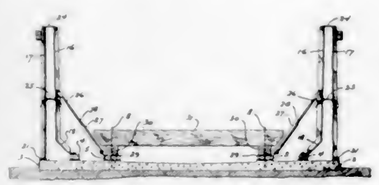
1. A motor driven fan structure which includes a motor armature and a motor field adapted for simultaneous rotation in opposite directions, and fan elements at opposite ends of the motor structure carried on and simultaneously rotated with both armature and field.

1,856,588. TRAFFIC SIGNAL SWITCH. ALBERT PETERSON, Washburn, N. Dak. Filed Aug. 5, 1929. Serial No. 383,560. 1 Claim. (Cl. 200—59.)



In a signalling system for motor vehicles, a sectional clamp for engaging the steering column of the vehicle, means for insulating the sections of the clamp from each other and from the column, an upright on each section, a flat semi-circular contact member connected to the upper end of each upright, a pair of elongated plates each having tongues thereon for engaging a spoke of the steering wheel, depending ears on each plate, a finger lever having uwardly extending ears thereon, means for pivotally connecting the ears of each lever to the ears of each plate, the outer end of each lever having a finger engaging part thereon, spring means for normally holding each lever in a position with its inner end out of engagement with the semi-circular contact member but said inner end engaging the contact member when the outer end of the lever is pushed upwardly.

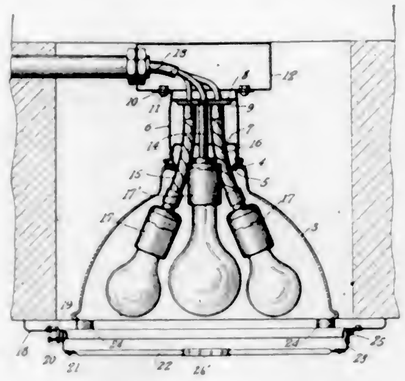
1,856,589. CONCRETE FLUME STRUCTURE AND METHOD OF BUILDING SAME. OTTO W. PETERSON, Oakland, HECTOR KEESLING, San Mateo, and PLUNKETT I. KURTZ, Oakland, Calif. Filed May 18, 1931. Serial No. 538,072. 9 Claims. (Cl. 61—14.)



1. A method of constructing concrete flumes which consists in pre-casting and placing a plurality of concrete ties on a foundation, placing and supporting reinforcing steel on said ties, placing and securing pairs of interspaced side forms at opposite ends of the ties, pouring concrete into the forms to form the side walls of the flume, pouring concrete into the space between the ties to form a bottom section integral with the ties and the side walls, and removing the side forms when the concrete is set.

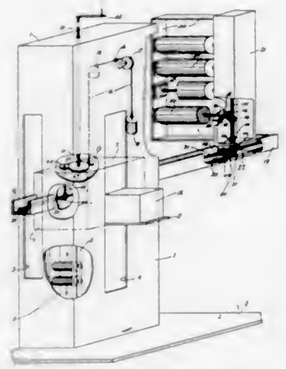
1,856,590. ELECTRIC LIGHTING FIXTURE. RICHARD O. PFEIFFER, Newark, N. J. Filed June 25, 1930. Serial No. 463,590. 4 Claims. (Cl. 240—78.)

1. In a ceiling fixture, a reflector provided with a small neck portion having a rounded edge, an apertured cap having a grooved portion removably receiving the rounded edge of said reflector, a neck in threaded engagement with the cap, an inwardly projecting flange on said neck, a plate secured to the underside of said flange, a rigid pipe and a pair of flexible tubes attached to the plate, and



an outwardly extending flange on the neck by means of which the fixture may be attached to a standard outlet box.

1,856,591. MASSAGE MACHINE. FRANK PIERSON, Chicago, Ill. Filed Aug. 13, 1930. Serial No. 474,930. 7 Claims. (Cl. 128—57.)

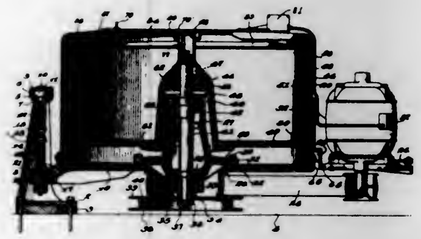


5. In a massage machine, a housing, a frame adjustably supported therewithin, platforms carried by said frame and extending outwardly from said housing, standards adjustably carried by said platforms, roller frames carried by said standards, rollers in said frames, a motor, power transmission mechanism connecting said motor and rollers for actuating the latter, and means connecting the shafts of said rollers for imparting thereto a vibratory motion as they rotate.

1,856,592. SILICOTHERMIC SMELTING PROCESS AND CHARGE THEREFOR. WILLIAM C. READ, Scarsdale, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Sept. 2, 1930. Serial No. 479,420. 4 Claims. (Cl. 75—17.)

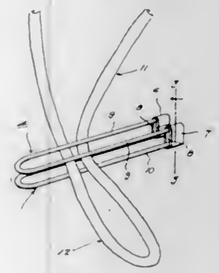
1. A silico-thermic smelting charge comprising as essential components an oxygen-containing compound of a tungsten-group metal, manganese oxide material containing loosely bound oxygen, iron oxide material, and silicon; the quantity of manganese oxide material being sufficient to promote a vigorous self-propagating reaction, and the quantity of silicon being so proportioned with respect to the reducible oxides present that such reaction will produce a low-manganese ferro alloy of the tungsten-group metal.

1,856,593. AUTOMATIC GUARD FOR HYDRO-EXTRACTORS. FLETCHER SCHAUM, Philadelphia, Pa., assignor to Fletcher Works, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Mar. 29, 1928, Serial No. 265,761. Divided and this application filed Nov. 10, 1928. Serial No. 318,409. 3 Claims. (Cl. 192—136.)



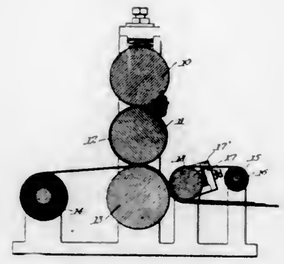
1. A hydro extractor having a shaft for supporting a basket, a manually operated brake on said shaft provided with a handle, an electric motor for driving said shaft, a secondary electrical circuit including a solenoid operatively connected with said motor and said handle whereby when the brake is applied the current to the motor is cut off; when the brake is released the current to the electric motor is on; a cover for the hydro extractor, and means connected to the cover and secondary circuit whereby the solenoid is deenergized and the motor is cut off when the cover is open.

1,856,594. CORD HOLDING CLIP. JOHN SCHILLER, Western Springs, Ill. Filed Apr. 28, 1931. Serial No. 533,552. 3 Claims. (Cl. 24—115.)



3. As a new article of manufacture, an electrical cord clip of the class described comprising a pair of companion resilient gripping jaws, each jaw being formed from a single length of wire bent upon itself into U-shaped configuration, a pair of opposed grooved blocks interposed between the free end portions of the corresponding arms of said jaws, and ferrules embracing the blocks and end portions to maintain said jaws in assembled spaced parallelism.

1,856,595. DECORATIVE RUBBERIZED CLOTH AND METHOD OF PRODUCING SAME. JACOB STEIN, Brooklyn, N. Y. Filed Jan. 2, 1930. Serial No. 418,110. 3 Claims. (Cl. 154—2.)

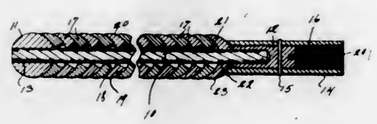


1. The method of producing multi-striped sheet rubber including calendering sheet rubber in plastic condition onto a surface of cloth or other textile fabric; applying to the rubber surface of said laminæ, while in hot plastic condition, a lamina of multi-colored striped rubber; and subjecting the resultant laminæ to pressure.

1,856,596. VULCANIZING RUBBER. GEORGE H. STEVENS, Newark, N. J. Filed Sept. 30, 1925. Serial No. 59,726. 7 Claims. (Cl. 18—53.)

5. A vulcanized compound derived from rubber or similar material, a vulcanizing agent, and a member of the group consisting of carbodi-tolylimide, homologues of carbodi-tolylimide, and their polymeric modification.

1,856,597. FLEXIBLE MANDREL. ARTHUR E. STJARNSTROM, Cleveland, Ohio. Filed June 9, 1931. Serial No. 543,185. 2 Claims. (Cl. 153—63.)



1. A mandrel of the character described comprising an elongated flexible member adapted to be disposed in a pipe, a round end member secured to one end of said flexible member, intermediate concavo-convex joint members disposed intermediate the ends of said flexible member, one of said joint members engaging said round member, a threaded plug secured to the opposite end of said flexible member, a nut disposed about said plug and having a threaded bore within which said plug is disposed, one end of said nut engaging one of said joint members whereby to force said one joint member inwardly of the adjacent end of the flexible member, and means for holding said nut against rotation with respect to said plug.

1,856,598. OIL HOLE CLEANER AND SPOUT RETAINER. JOSEPH B. STOLTZFUS, Sadsburyville, Pa. Filed Jan. 13, 1931. Serial No. 508,546. 3 Claims. (Cl. 221—33.)

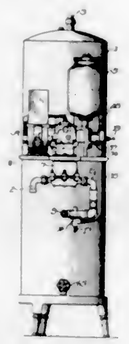
1. A device of the character described comprising a hook member adapted to engage about the spout of an oil can, an elongated body portion shaped to conform to the

configuration of the outer surface of the oil can, and an intermediate portion connecting the body and the hook



and engaging the neck of the oil can whereby to frictionally hold the spout from rotation or axial movement on the neck of the oil can.

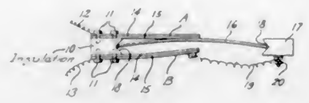
1,856,599. WATER-MODIFYING APPARATUS. CARL ADOLPH SUNDSTRAND, Rockford, Ill., assignor, by mesne assignments, to Solem Machine Company, Rockford, Ill., a Corporation of Illinois. Filed Oct. 12, 1929. Serial No. 399,145. 9 Claims. (Cl. 210—40.)



1. The combination of a water system, a pump for positively forcing solution into the system, a shaft for driving the pump, a motor for driving the shaft, a switch in the circuit of the motor, said switch being arranged to swing on two axes, a meter in the water system, a rotary cam driven by the meter, a plunger reciprocated by the cam, said plunger being arranged to swing the switch on one axis to close the circuit, and a cam on the shaft for swinging the switch on the other axis to withdraw the switch from the plunger at the end of each revolution of the shaft.

1,856,600. THERMOSTAT. ADOLPH A. THOMAS, New York, N. Y. Filed Mar. 26, 1927. Serial No. 178,638. 9 Claims. (Cl. 297—12.)

2. A thermostat comprising a bowed spring member held under tension and adapted to change its shape abruptly by external pressure, thermostatic means for snapping said member into a position of reverse curvature when said means reaches a predetermined high temperature, and separate thermostatic means for snapping said member back to initial position when said last named means



reaches a predetermined low temperature, said two thermostatic means being adapted to move in the same direction when the temperature changes.

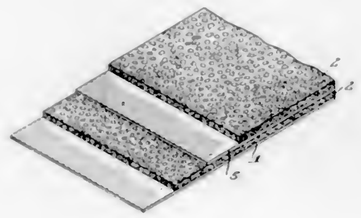
1,856,601. METHOD OF REPLACING ONE AMINO GROUP IN PHENYL-AZO-ALPHA-ALPHA-DIAMINO PYRIDINE WITH A HYDROXYL GROUP. EDMOND T. TISZA, New York, and BERNARD JOOS, Yonkers, N. Y., assignors to The Pyridium Corporation, Nepera Park, N. Y., a Corporation of New York. Filed July 11, 1929. Serial No. 377,600. 13 Claims. (Cl. 260—42.)

1. The method of preparing beta-phenyl-azo-alpha-hydroxy-alpha-amino-pyridine, which consists in boiling beta-phenyl-azo-alpha-alpha-diamino-pyridines with a dilute highly ionized mineral acid.

1,856,602. ETHERS OF HYDROXY-BETA-PHENYL-AZO-ALPHA-ALPHA-DIAMINO-PYRIDINES. EDMOND T. TISZA and BERNARD JOOS, Yonkers, N. Y., assignors to The Pyridium Corporation, Nepera Park, N. Y., a Corporation of New York. Filed June 16, 1930. Serial No. 461,626. 13 Claims. (Cl. 260—42.)

1. The method of obtaining alkylated hydroxy-beta-phenyl-azo-alpha-alpha-diamino-pyridine hydrochlorides, which consists in diazotizing alkoxyaminophenols and coupling with alpha-alpha-diamino-pyridine in hydrochloric acid solution.

1,856,603. PLASTER SURFACED BUILDING BOARD. CHARLES A. UPSON, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed July 17, 1929. Serial No. 379,053. 2 Claims. (Cl. 154—45.9.)



1. A plaster wall support embodying a backing liner, a hardened, intumescent cellular body adhering thereto on one side, and a thin tissue liner covering the surface of the cellular body on the other side and adapted to be disrupted and destroyed as a liner by the application of wet plaster and permit the latter to permeate the open cells of the intumescent body beneath it.

1,856,604. METHOD AND APPARATUS FOR FORMING PILES. MAXWELL M. UPSON, Englewood, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed May 28, 1931. Serial No. 540,681. 8 Claims. (Cl. 61—57.)



1. A method of forming a pile in which two casings are employed one within the other, which includes filling the inner casing with concrete and delivering grout under pressure directly to the space being vacated by the outer casing, while withdrawing said outer casing from around said inner casing.

1,856,605. TOOL HANDLE FOR MACHINES FOR RELOOPING THE RUNS IN STOCKINGS AND OTHER KNITTED FABRICS. GEORGE T. WALKER, New York, N. Y., assignor, by mesne assignments, to Kayser Hosiery Motor-Mend Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 30, 1929. Serial No. 359,408. 9 Claims. (Cl. 66—1.5.)



1. A relooping tool comprising a sleeve constituting a handle provided with a pair of transversely aligned apertures, a needle carrier mounted for reciprocatory movement in the handle, a sleeve secured at one end to the handle and having its opposite ends bifurcated and forming a pair of resilient members, each of said members provided with a lug, said lugs projecting through said apertures and adopted when the members are pressed towards each other to clutch the needle carrier therebetween to hold it from reciprocating.

1,856,606. STABILIZATION OF LIQUID HYDROCYANIC ACID. MARK WALKER, South Pasadena, Calif., assignor to The Pacific R. & H. Chemical Corporation, Los Angeles, Calif., a Corporation of California. Filed Mar. 30, 1929. Serial No. 351,466. 9 Claims. (Cl. 23—230.)

1. The process of stabilizing H_2S-free hydrocyanic acid by mixing and maintaining said acid in contact with sulfur dioxide.

1,856,607. PROCESS FOR PRODUCING SINTERED ALLOYS. RICHARD R. WALTER, Starnberg, Germany. Filed Dec. 4, 1930, Serial No. 499,980, and in Germany Jan. 4, 1930. 2 Claims. (Cl. 75—1.)

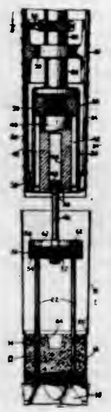
1. The process for producing sintered bodies of powdered metals, comprising, uniformly impregnating a slightly moistened powdered metallic aggregate with a vegetable oil containing unsatiated fatty acids, forming the aggregate by pressing while at atmospheric temperature, allowing it to stiffen by atmospheric exposure whereby to increase the cohesiveness of the formed body and then sintering.

1,856,608. PILE CORE. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 30, 1930. Serial No. 492,143. 20 Claims. (Cl. 61—79.)



1. A pile core comprising in combination, an upper portion including radially movable leaves, a lower solid portion, and means for supporting said solid portion from said leaves.

1,856,609. PILE DRIVING APPARATUS. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 26, 1930. Serial No. 498,248. 9 Claims. (Cl. 61—53.)

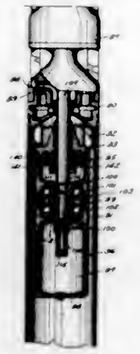


1. In apparatus of the class described, in combination, a driving core, a cushion, and means for loosely and rotatably supporting said cushion from the lower end of said core whereby said cushion may be rotated relatively to said core.

1,856,610. PUMP HAVING WIRE CABLE FOR DRIVING SAME. JOHN A. WINTROATH, Los Angeles, Calif., assignor to Wintroath Pumps, Ltd., Alhambra, Calif., a Corporation of California. Filed June 18, 1928. Serial No. 286,111. 2 Claims. (Cl. 103—102.)

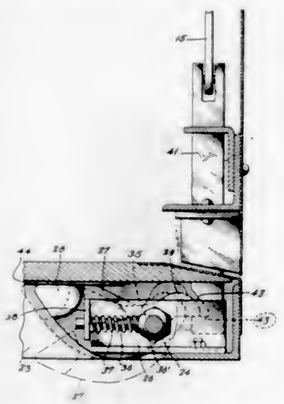
1. In a deep-well turbine pump, the combination of: a pump head at the surface of the ground; a drive means in said pump head; a pump section supported in a well; an impeller in said pump section adapted to force well-fluid

upward in said well; connecting means operatively connecting said drive means and said impeller; and a thrust bearing slidably mounted in said pump section to move between



extreme upper and lower positions, said thrust bearing taking a thrust imposed thereon when at either extreme position.

1,856,611. FREIGHT CAR. GRAHAM C. WOODRUFF, Bronxville, N. Y., assignor to The L. C. L. Corporation, a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 343,353. 14 Claims. (Cl. 105—366.)

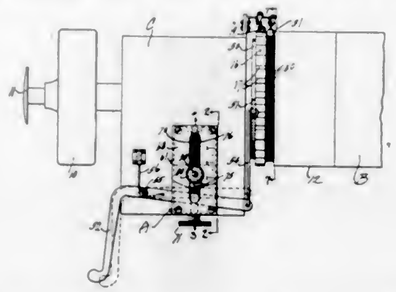


1. In combination, a flat support, a plurality of containers on said support, a door for each of said containers and means carried by each container operated on contact with the container supporting face of said support for holding the door thereof locked so long as the container remains on said support.

2. In combination, a support, a container removably mounted on the support, a door for the container, a lock for said door, and means carried by the container operated by contact with the container supporting face of said support to hold the door lock against operation so long as the container remains on the support.

1,856,612. TYPEWRITER LINE SPACER. HOWARD E. ZERICK, Ford City, Pa. Filed July 17, 1930. Serial No. 468,620. 3 Claims. (Cl. 197—114A.)

3. In a device of the class described the combination of a frame, a revoluble platen for the frame, operating means for moving the platen minute distances without lost motion, including a spacing lever operatively connected to said platen, and stop means mounted upon said frame, including a housing having a transverse slot in a side thereof and recesses in the interior wall of one side thereof, an adjusting screw axially rotatable longitudinally thru the housing, a stop block longitudinally slidable in the housing mounted upon said screw and movable therealong upon rotation of said screw, and a spring

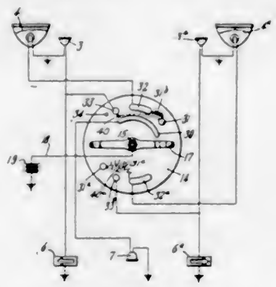


and detent carried by said stop block, the detent urged by the spring to seat in any one of said recesses to insure conventional single, double or triple spacing of said platen, said lever extending thru said slot into said housing and limited in movement in one direction by said slot and in the opposite direction by said block.

1,856,613. PROCESS OF PRODUCING REFRACTORY, ACID-PROOF AND OTHER CERAMICALLY BONDED PRODUCTS. HUGO ACKERMANN, Bonn-on-the-Rhine, Germany. Filed Dec. 14, 1926, Serial No. 154,854, and in Germany Dec. 19, 1925. 29 Claims. (Cl. 25—156.)

1. A process of making refractory, acid-proof and other ceramically bonded products, comprising mixing aluminous binding material of less plasticity than clay with water to render the mixture to castable consistency with an electrolyte, adding to the mixture ground non-plastic material to form a non-castable mass capable of being shaped, shaping under pressure, drying and firing the mass.

1,856,614. DIRECTION INDICATING APPARATUS FOR MOTOR VEHICLES. JOSEPH JAMES ADDUCI, Boston, Mass. Filed Mar. 26, 1930. Serial No. 439,023. 1 Claim. (Cl. 177—339.)



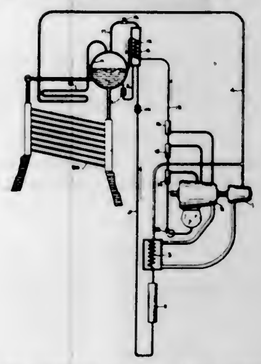
In a motor vehicle having the usual left and right head lamps, a direction-signaling apparatus comprising front left and right announcing lamps, rear left and right announcing lamps, and means controlling said lamps comprising a switch having a plurality of contact members connected respectively with said head lamps and said announcing lamps, a manually operable wiper blade movable to different "on" positions and to an "off" position relative to the contact members for said announcing lamps, the arrangement being such that the left front and rear announcing lamps and the right head lamp are lighted and the left lamp is dimmed when the wiper blade

is in one "on" position, and the right front and rear announcing lamps and the left head lamp are lighted and the right head lamp is dimmed when the wiper blade is in another "on" position.

1,856,615. ALUMINUM-MAGNESIUM ALLOYS. ROBERT S. ARCHER, Lakewood, and LOUIS W. KEMPF, Cleveland, Ohio. Filed May 21, 1930. Serial No. 454,510. 2 Claims. (Cl. 75—1.)

1. An aluminum-magnesium working alloy consisting of from 10 to 16 per cent magnesium, approximately, manganese from about 0.2 to 1.5 per cent, and the rest aluminum; the alloy having in extruded condition a tensile strength of at least about 50,000 pounds per square inch and a Brinell hardness of at least about 80.

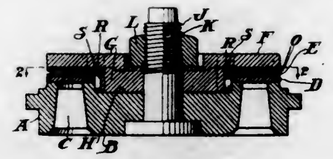
1,856,616. POWER PLANT. KARL BAUMANN, Urmston, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 18, 1930, Serial No. 468,915, and in Great Britain Aug. 16, 1929. 2 Claims. (Cl. 103—253.)



1. In a high pressure elastic fluid power system arranged for returning the condensate from a motive fluid reheater to the boiler without a mechanical pump, the combination of a boiler, a turbine comprising a high pressure portion and a low pressure portion, means for conveying elastic fluid from the boiler to the high pressure turbine portion, a reheater for the motive fluid flowing from the high pressure portion to the low pressure portion, means for conveying elastic fluid from the boiler to the reheater as heating medium and condensing the same therein, a closed receptacle, a conduit for conveying condensate from the heater to the receptacle and including a check valve permitting flow toward the closed receptacle only, a drainage connection between the bottom of the receptacle and the boiler and containing a check valve permitting flow toward the boiler only, a pipe between the elastic fluid space of the boiler and the closed vessel, a valve in said pipe, a cooling pipe in the closed vessel, a condenser for the low pressure turbine portion, means for conveying the condensate from said condenser through said cooling pipe and then to the boiler, whereby when the last-mentioned valve is closed, the last-mentioned condensate condenses the steam in the closed vessel, causing the latter to draw in condensate from the reheater, and absorbs the heat of condensation from said steam and returns it to the boiler.

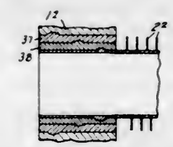
1,856,617. PLATE VALVE. WILLIAM E. BEBBINGTON, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 6, 1929. Serial No. 376,336. 2 Claims. (Cl. 251—119.)

1. A plate valve comprising a valve seat having ports therein, a stop plate, means for holding the stop plate in spaced relation with the valve seat, a valve plate reciprocable between the valve seat and the stop plate to control the ports, a spiral spring encircling the said means and interposed between the stop plate and the valve plate



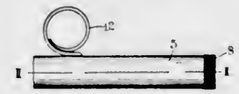
to close the valve plate, and means on the first said means and on the spring adapted to loosely engage each other to hold the spring against rotation, said means on the spring being movable therewith upon longitudinal movement of said spring.

1,856,618. HEAT EXCHANGER. STANLEY BROWN, Garden City, N. Y., assignor to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed May 23, 1930. Serial No. 455,035. 12 Claims. (Cl. 257—236.)



1. In a heat exchanger, a tube having outwardly projecting fins on its central portion for increasing the heat transmitting surface of the tube, a tube sheet for supporting one end of said tube and having a tube aperture slightly larger than the outside dimension of the fins so that the said finned tube can be removed from the exchanger through said aperture, a sleeve within said aperture surrounding the end of the tube, a coacting rib and groove on the sleeve and tube sheet respectively, and a similar coacting rib and groove on the tube and sleeve displaced out of the plane of said first-mentioned rib and groove, the surfaces of the sleeve opposite the rib and groove therein being smooth.

1,856,619. MEMORIAL CONTAINER. HARRY EDWARD CARSEY, Columbus, Ohio, assignor to Auld's Incorporated, Columbus, Ohio, a Corporation of Ohio. Filed June 13, 1930. Serial No. 460,924. 6 Claims. (Cl. 40—19.)

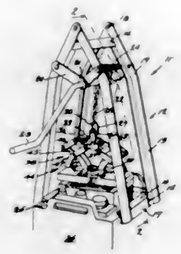


1. In a device of the kind described, a case having an internal sealing ring and a threaded end, a closure for the case threaded to engage the thread of the case and provided with a reduced end to engage the sealing ring.

1,856,620. MOLECULAR COMPOUNDS OF AMIDO-PYRIN WITH ETHYL ISOPROPYL BARBITURIC ACID. WALTER G. CHRISTIANSEN, Bloomfield, N. J., assignor to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed May 19, 1928. Serial No. 279,218. 3 Claims. (Cl. 260—33.)

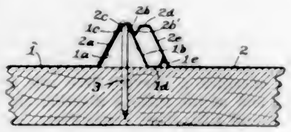
1 As new products, yellow molecular compounds of amidopyrin and ethylisopropyl-barbituric acid, in the proportion of one or two molecules of the former to one of the latter.

1,856,621. BATTERY CELL HOIST. IRVEN E. COFFEY, Playa Del Rey, Calif. Filed Aug. 6, 1931. Serial No. 555,543. 9 Claims. (Cl. 20—84.)



1. A battery cell hoist comprising, in combination, a hoist frame having means for support on a battery, a tension means connected thereto, a balance lever connected to the tension means, a plurality of grapples, each having a pivot connected to the balance lever, and each having a plurality of links extending from the pivot with levers connected to the links, such levers having jaws, said pivots having insulation, and said links being provided with insulating plates insulating each grapple from the balance lever.

1,856,622. SHEET METAL ROOFING. SOMERVILLE VAUGHN CONNER, New Albany, Ind. Filed Apr. 11, 1930. Serial No. 443,508. 1 Claim. (Cl. 108—18.)



A sheet metal roofing comprising an underlying member of general inverted truncated V shape, having a flat top portion, and having also a trough portion at the lower end of one of its downwardly diverging sides, said trough being formed of a substantially horizontal lateral extension, and an upwardly extending terminal flange, and an overlying section also of general inverted truncated V shape, having at its central upper portion a V shaped groove, one wall of which bears against the same side wall of the underlying member to which the said trough portion is connected, the other wall of said V shaped trough spacing the inclined wall of the overlying member away from the wall of the underlying member, said inclined wall of the overlying member also covering the trough at the lower end of the underlying member, said overlying member having also a flat portion to rest on the flat portion of the underlying member to receive a nail which passes through both members, said overlying member also having its other inclined wall fitting against the remaining inclined wall of the underlying member, substantially as described.

1,856,623. HOT WATER STOVE. ELBERT A. CORBIN, Jr., Swarthmore, Pa., assignor of one-half to William C. Biddle, Lansdowne, Pa. Filed June 19, 1928. Serial No. 286,631. 2 Claims. (Cl. 122—157.)

1. In a hot water stove, a casing having a double wall forming a water jacket and provided with a combustion chamber, the inner wall of said water jacket at its upper end being looped laterally inwardly to form a restricted circuitous throat for the passage of products of combustion with the water jacket extending over and around such throat, an inclined grate at the bottom of such combustion chamber, a coal magazine opening through the

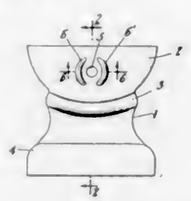


top of the stove and extending over the combustion chamber and over the water jacket of said throat, and means to support said grate for rectilinear shaking movement.

1,856,624. CAMPING COT. MANSELL A. DAVIS, Los Angeles, Calif. Filed Dec. 17, 1925, Serial No. 75,995. Renewed Dec. 14, 1931. 8 Claims. (Cl. 5—114.)

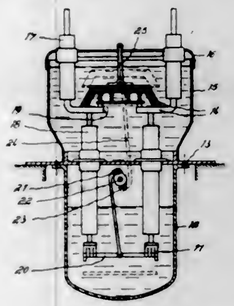
8. In a folding cot, a pair of side rails, each rail comprising a relatively long central bar and end bars, the latter composed of channel bars pivotally connected to the central bar adjacent the ends thereof, said end bars adapted to fit around the back and sides of the central bar when the cot is folded and to extend beyond the end of the central bar with their open sides upward when the cot is set up, legs pivoted to the central bar, and means for fastening the end bars to the legs.

1,856,625. WHISTLE. SAMUEL DRESSLER, Brooklyn, N. Y. Filed Sept. 11, 1931. Serial No. 562,367. 4 Claims. (Cl. 46—46.)



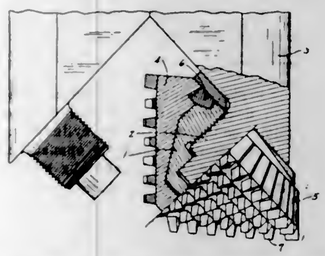
1. A mouth piece formed of two separate plates with registering openings in said plates and means partially surrounding said openings to prevent the tongue of the user from contacting with the surface of the plates adjacent the holes.

1,856,626. MULTIPLE BREAK OIL SWITCH FOR LARGE CURRENTS. WALTHER ESTORFF, Berlin-Charlottenburg, and LUDWIG HEINEMEYER, Berlin-Lichterfelde, Germany, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 11, 1928, Serial No. 291,929, and in Germany July 12, 1927. Renewed Apr. 21, 1930. 7 Claims. (Cl. 200—150.)



1. In a multiple-break oil switch for large currents, in combination, a high capacity oil tank containing a pair of rupturing contacts and means for making a connection therebetween, an air cushion above the level of the oil in said tank, a separate oil tank for the main contacts of said switch disposed external of said high capacity oil tank, and an operating shaft adapted to open and close said rupturing contacts and said main contacts.

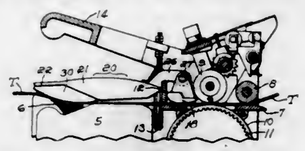
1,856,627. CUTTER FOR EARTH BORING DRILLS. HAROLD W. FLETCHER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed May 24, 1927. Serial No. 193,800. 4 Claims. (Cl. 255—71.)



1. In a roller earth boring drill including a head having an inverted V-shaped recess in its forward end, cutter pins integral with said head in said recess, bushings on said pins, and conical-shaped cutters rotatable on said bushings; the combination of cutting teeth arranged in circumferential rows around said cutters, said teeth being formed all of approximately equal size, integral with said cutter, and out of alignment longitudinally of the cutter, so that the teeth will be prevented from tracking uniformly on the bottom of the hole.

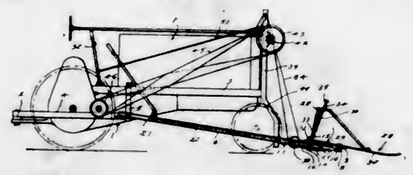
1,856,628. STRIP GUIDING AND MOISTENING MEANS PARTICULARLY ADAPTED FOR USE WITH STRIP SERVING MECHANISM. TREVOR R. GAUTIER and HAROLD E. NICHOLS, Nashua, N. H., assignors to Nashua Gummed & Coated Paper Company, Nashua, N. H., a Corporation of Massachusetts. Filed Aug. 13, 1929. Serial No. 385,533. 14 Claims. (Cl. 91—14.5.)

1. In a strip serving machine having a strip severing device and a moistener in advance of the latter, the combination therewith of a removable guide member adapted to rest upon the strip to the rear of the severing device, a non-rotary presser to rest upon the strip as it crosses



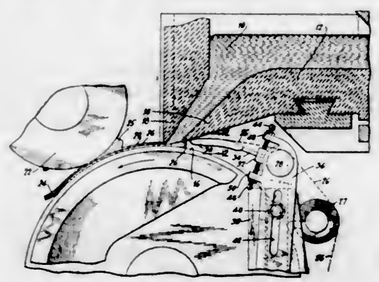
the moistener, and means extending across the severing device and operatively pivotally connecting the presser and said guide-member.

1,856,629. SCOOPING ATTACHMENT FOR TRACTORS. ALBERT G. GEISTER, Sanborn, Iowa. Filed Aug. 12, 1930. Serial No. 474,866. 4 Claims. (Cl. 214—140.)



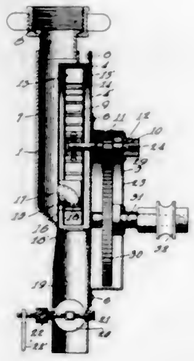
1. In an attachment of the character described for tractors, a frame designed to enclose the forward end of a tractor and project forwardly thereof, means for pivotally attaching the rear of the frame to the tractor, a scoop oscillatably mounted upon the forward end of the frame, latch elements carried by the frame for engaging the rear of the scoop to hold the same against tipping forwardly, means for effecting the release of said latches, means for lifting the forward end of the frame, and strain relieving elements for said latches carried by the frame and opposing any movement of the scoop rearwardly against, and when the scoop is engaged by, the latches.

1,856,630. APPARATUS FOR MAKING WIRE GLASS. PAUL F. GUTMANN, St. Louis, Mo., assignor to Mississippi Glass Company, St. Louis, Mo., a Corporation of New York. Filed Oct. 9 1930. Serial No. 487,408. 6 Claims. (Cl. 49—32.)



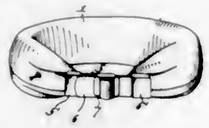
3. In apparatus for forming reinforced wire glass, in combination, a rotatable roll, a lip over which molten metal is fed onto said roll, a gate spaced from said roll to form a pass whereby a metal sheet of predetermined thickness is formed between said gate and said roll, means between said lip and said roll for guiding wire mesh into said sheet as said sheet is being formed, whereby a sheet of wire glass is formed supported by said roll, and a second roll adjacent said first roll whereby a roll pass is formed between said rolls, to receive the sheet from the pass between the gate and roll.

1,856,631. TURBINE AND ATTACHMENT THEREFOR. STANISLAV HACKENBERG, San Francisco, Calif., assignor of one-half to Nafanaiel Hackenberg, San Francisco, Calif. Filed June 21, 1930. Serial No. 462,850. 2 Claims. (Cl. 253—2.)



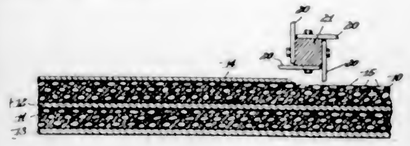
1. A turbine comprising a supporting member fashioned from a sheet of material and made to serve as a partition wall, a pair of housings also formed of sheet material secured to the opposite sides of the member, a rotor disposed in one of the housings, a gear reduction mounted in the other adapted to be bathed in a lubricant confined within the gear housing, an operating shaft connected to the gear reduction and extending from the gear housing, means operatively connecting the rotor to the gear reduction, means for discharging a medium against the rotor for causing the latter to revolve, and an outlet for the fluid housing.

1,856,632. BUOYANT BATHING BELT. GEORGE E. HAINES, Philadelphia, Pa., assignor to L. H. Gilmer Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Feb. 16, 1928. Serial No. 254,661. 3 Claims. (Cl. 9—17.)



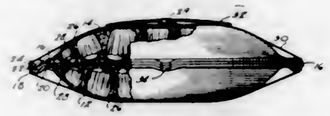
1. A buoyant bathing belt having a hollow section with exposed pleats extending longitudinally of the length thereof, means comprising blocks of hardened plastic tending to retain said pleats in folded relation, and means whereby said hollow section may be inflated to expand said pleats.

1,856,633. BACKING FOR PLASTIC MATERIAL. FRANCIS W. HARNEY, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Jan. 25, 1930. Serial No. 423,525. 12 Claims. (Cl. 154—2.)



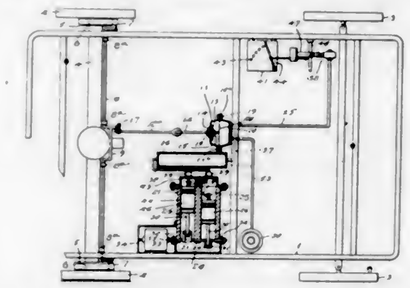
1. The method of preparing a receiving surface for plastic material which comprises forming a cellular body with a liner on one face thereof, and removing said liner to expose cells of said cellular body so that plastic material applied to said body may enter such exposed cells to form a bond with said body.

1,856,634. CONFECTION CONTAINER. JEANNETTE S. HARTIG, New York, N. Y. Filed Mar. 13, 1930. Serial No. 435,446. 1 Claim. (Cl. 206—46.)



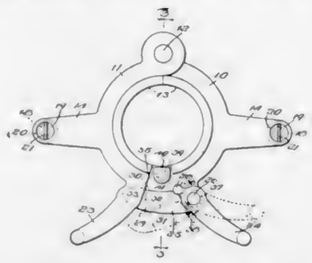
As a new article of manufacture, a vendible candy package comprising a member of substantially dish form with candy in place therein, a second member of substantially dish form with candy packed therein and inverted, a separator sheet between the first and second named members, and means passing about said members for securing same together.

1,856,635. MECHANICALLY OPERATED BRAKE. EARL R. HERREN, Lorain, Ohio. Filed June 19, 1930. Serial No. 462,337. 6 Claims. (Cl. 303—12.)



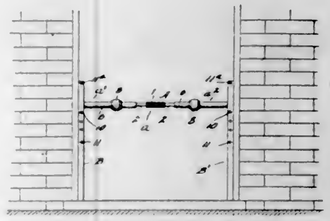
1. A vehicle brake, comprising breaking elements, a cylinder having a flexible head connected to said elements, a vacuum pump connected to the cylinder, a normally idle motor for the pump, a normally opened release valve connected to the cylinder, and means by which the motor may be operated and the valve closed.

1,856,636. CASING ELEVATOR. JOHN E. HOFFOSS, Houston, Tex., assignor to W-K-M Company, Inc., Houston, Tex., a Corporation of Texas. Filed Dec. 5, 1930. Serial No. 500,203. 10 Claims. (Cl. 294—90.)



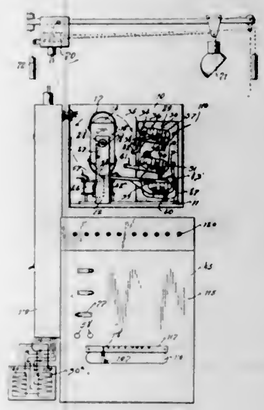
1. In a device of the class described, the combination of a plurality of members pivotally connected, one of the members being provided with a keeper and the other member being provided with a latch adapted to engage the keeper when closed, and a handle associated with the latch, the latch and handle being both pivotally mounted and operating in unison on the opening movement of the latch, and the latch having independent movement in closing and engaging the keeper.

1,856,637. CASKET-TRANSFERRING DEVICE. WILLIAM M. HOLLINGER, Harrisburg, Pa., assignor to Casper C. Nickel and B. Stiles Duncan, Duncannon, Pa. Filed May 28, 1930. Serial No. 456,589. 6 Claims. (Cl. 193—42.)



1. A casket transferring device comprising an extensible sectional bar having heads at its ends, rollers journaled on the bar, and channeled legs, said heads fitting within the channels of the legs and pivotally connected to the side walls thereof, and said legs adapted to stand at right angles to the bar and to fold substantially parallel with the bar.

1,856,638. AUTOMATIC CONTROL APPARATUS. GEORGE W. HOPKINS, Cleveland, Ohio. Filed Dec. 5, 1928. Serial No. 323,884. 15 Claims. (Cl. 174—177.)

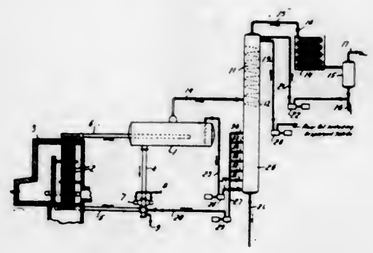


1. In an apparatus of the character described, means for controlling the voltage supply to a lamp which comprises a resistance element having one side connected to said lamp, a plurality of normally open switches connected in parallel and having other connections with different points on said resistance to obtain the desired voltages and means for automatically actuating said switches in sequence to thereby supply said lamp with increasing voltages.

1,856,639. PRODUCTION OF ACETALDEHYDE. HORST-DIETRICH V. D. HORST, Mannheim, and RUDOLF WIETZEL, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 17, 1930, Serial No. 421,592, and in Germany Jan. 25, 1929. 6 Claims. (Cl. 260—139.)

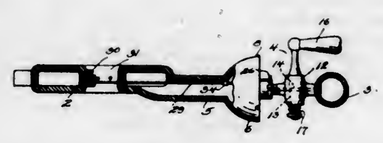
1. In the catalytic production of acetaldehyde from a mixture containing acetylene and steam, at an elevated temperature, the step which comprises contacting the said mixture with a catalytic substance which is free from iron and its compounds and comprises an oxidic compound of tungsten.

1,856,640. ART OF CRACKING HYDROCARBONS. EDWARD W. ISOM, Scarsdale, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Apr. 12, 1929. Serial No. 354,449. 3 Claims. (Cl. 196—59.)



1. In cracking higher boiling hydrocarbon oils to produce lower boiling hydrocarbon oils therefrom, the improvement which comprises heating a charge of high boiling oil to a cracking temperature by cyclic circulation over externally fired heating surfaces while taking off vapors therefrom under superatmospheric pressure, subjecting such vapors to a refluxing operation and introducing raw oil directly into the vapors in the refluxing operation, withdrawing high boiling oil from the cyclically circulating charge and passing the oil so withdrawn through an externally unheated settling zone and thence back to the said cyclically circulating charge and supplying admixed reflux condensate and unvaporized raw oil from the refluxing operation to this settling zone, and periodically discharging residue concentrated in the settling zone therefrom.

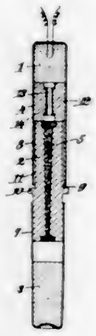
1,856,641. SAFETY VALVE FOR GAS BURNERS. ALBERT KALO, Columbus, Ohio. Filed Jan. 7, 1930. Serial No. 419,174. 3 Claims. (Cl. 158—117.1.)



1. In a gas burner, a gas and air inlet conduit having an air mixer casing at one end thereof, a valve in said casing for controlling gas flow therethrough, said valve including a rotatable port controlling member having a head at one end, manually operating means connecting said head and leading to the exterior of said air mixer casing, a thermostatic rod within said conduit having one end thereof seated within the heating zone of said burner

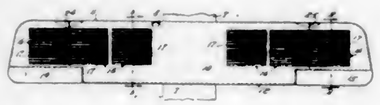
and its other end in close proximity to said head and operative when expanded by the heat from the burner to impinge upon said head to hold the valve in an open position, said head and thermostatic rod being positioned to one side of the outlet of said gas valve so as not to interfere with the free gas flow issuing from said outlet.

1,856,642. FIRE-DAMP PROOF TIME FUSE. EDMUND KAROLLUS, Vienna, Austria. Filed Sept. 29, 1930, Serial No. 485,221, and in Austria Sept. 30, 1929. 1 Claim. (Cl. 102—10.)



Fire-damp proof time-fuse with a filter layer preventing the formation of a pointed flame characterized in that the filter-plug made of non-inflammable fibrin in the known manner is arranged between the electrically ignitable composition and the retarder and is provided with an axial bore, into which a tube is inserted but which does not extend to the ends of the bore in order to lead the pointed flame from the glow-fuse to the retarder.

1,856,643. WING FOR AEROPLANES. FREDERIC F. KOOKOGEY, New York, N. Y. Filed Mar. 1, 1930. Serial No. 432,380. 3 Claims. (Cl. 244—29.)

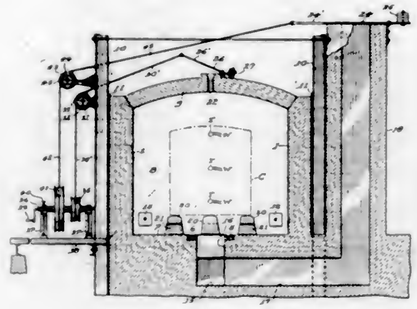


1. In an aeroplane having a hollow wing provided at each end of its rear edge with an aileron, the upper surface of the wing being provided throughout its length with a series of openings, the two end openings being substantially opposite the ailerons, a series of rearwardly slanting, overlapping spaced-apart vanes located in each opening transversely of the direction of flight of the aeroplane, the vanes in the inner openings being fixed and the vanes in the end openings being movably mounted, and means controlled by the ailerons for moving the movable vanes to close them together or separate them according to the positions of the ailerons.

1,856,644. NAILING AEROCRETE AND METHOD OF PRODUCING THE SAME. CARL J. LARKINS, New York, N. Y., assignor to The Aerocrete Corporation of America, New York, N. Y., a Corporation of Delaware. Filed June 28, 1930. Serial No. 464,708. 2 Claims. (Cl. 25—155.)

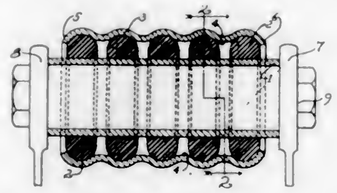
2. The process of making nailable porous cement or concrete products which consists in introducing a mixture of hydraulic cement, wood shavings, and an aerating agent in a form or mold, permitting the mixture to expand above the mold or form so as to result in the production of pores or cells therein and finally compressing the expanded mixture to form a hard integral substantially non-porous top layer in which the wood shavings predominate to such an extent as to permit nailing.

1,856,645. FURNACE. FRANK E. LEAHY, Youngstown, Ohio, assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio, a Corporation of Ohio. Filed June 9, 1930. Serial No. 459,971. 4 Claims. (Cl. 263—43.)



1. A furnace of the class described comprising a heating chamber and a hearth disposed therebeneath, a flue extending from the hearth adapted to conduct waste gases from the lower part of said chamber, means for introducing heating gases into said chamber, means adapted to conduct waste gases from another part of said chamber, and interconnecting means for simultaneously and selectively controlling the flow of gases through both of said conducting means.

1,856,646. OSCILLATING JOINT. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 17, 1930. Serial No. 429,007. 7 Claims. (Cl. 267—54.)

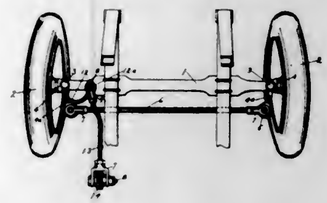


1. An oscillating joint comprising an inner sleeve, a plurality of yieldable rings on said sleeve, and an outer sleeve surrounding said rings having peripheral grooves therein, each of said rings being seated in one of said grooves.

1,856,647. JOINT MECHANISM. HUGH C. LORD, Erie, Pa. Original application filed Jan. 21, 1927, Serial No. 162,666. Divided and this application filed Dec. 10, 1929. Serial No. 413,035. 6 Claims. (Cl. 287—85.)

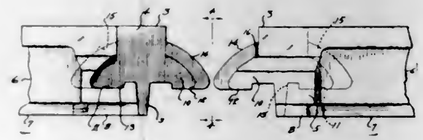
1. A joint comprising an outer annular joint member, an inner joint member within the outer member, said members being subjected to forces compelling a relative movement thereof producing a limited orbital motion of the axis of one of the members at each side of the axial center of the joint about the axis of the other member;

joint-connecting means adapted to provide for such orbital motion comprising a resilient rubber filler in the space between the members, said rubber filler having a



surface union with the joint members locking the surfaces of the rubber with the surfaces of the members throughout the movement of the joint.

1,856,648. JOINT. HENRY R. LORENTOWICZ, Bloomfield, and HENRY E. THOMPSON, Newark, N. J., assignors of one-third to Herman Waldman and Carl J. Duveneck, partners trading as Waldman & Duveneck, Newark, N. J. Filed Nov. 10, 1930. Serial No. 494,528. 7 Claims. (Cl. 238—233.)



1. A joint comprising a pair of opposed, similar sections, said sections having mutually overlapping end portions and conforming recesses provided in said sections for interlocking with said end portions, said end portions having nose projections with forwardly and downwardly curved upper surfaces, rounded forward ends, and flat under surfaces for cooperating with similar surfaces in said recesses, said nose projections serving to divide the weight of a load passing over said joint between the two sections.

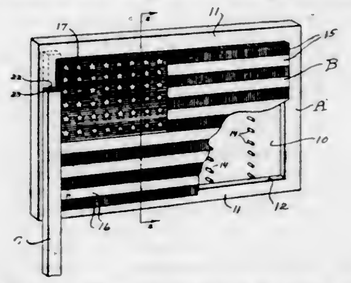
1,856,649. TROLLING SPOON. GEORGE MAPEL, Seattle, Wash. Filed Mar. 14, 1931. Serial No. 522,569. 6 Claims. (Cl. 43—45.)



1. In a trolling spoon, a thin metal body member having two spoon like elements positioned side by side near the forward end of the spoon and dished in the same direction and another spoon like element positioned toward the rear end of the spoon dished in the opposite direction.

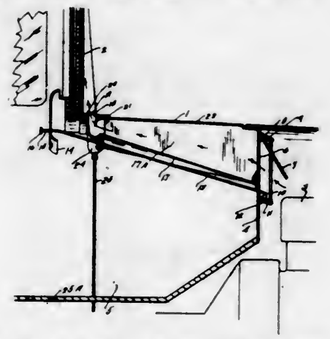
1,856,650. EDUCATIONAL DEVICE. ADDISON W. MCLINTOCK and JOHN W. RICE, Champaign, Ill. Filed July 5, 1929. Serial No. 376,147. 4 Claims. (Cl. 35—12.)

1. An educational device comprising a substantially flat mounting board having a shallow rectangular recess provided in its face side providing a marginal flange about the recess, a set of flag-forming pieces adapted to be assembled in abutting relation upon the bottom surface of the recess and having a height greater than the depth of the recess, a staff member and means for releasably



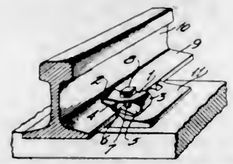
retaining the staff member in overlying relation upon the marginal flange at one end of the recess and in engagement with the said pieces.

1,856,651. WINDSHIELD WARMER. FRANK H. MOORE, Carlton, Oreg., assignor of one-fourth to Herbert W. Bladorn, Carlton, Oreg. Filed Nov. 20, 1929. Serial No. 408,646. 2 Claims. (Cl. 20—405.)



1. In a device of the class described the combination of a windshield, said warmer comprising a chamber having deflector plates disposed therein, one side of said chamber consisting of a diaphragm, an opening disposed within the diaphragm, slots disposed through the chamber adjacent the windshield, a groove laterally disposed within the chamber and in registerable alignment with the slots, a plurality of drains disposed through the groove, a damper hingedly disposed over the diaphragm opening, a hand operated lever adjustably positionable within the automobile, and links connecting the lever to the damper.

1,856,652. SPRING PLATE HOLDER FOR RAILROAD ROADBED CONSTRUCTION. GEORGE W. MULLER, Vienna, Va., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Apr. 15, 1931. Serial No. 530,378. 7 Claims. (Cl. 238—304.)



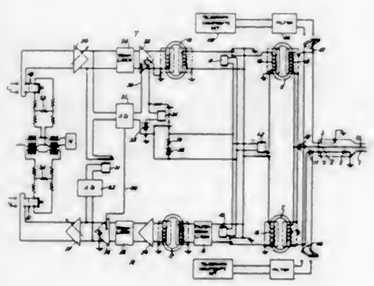
1. In combination with the rail, tie plate and tie, a spring plate, and a fastener passing through the spring plate and through the tie plate, and having a head ar-

ranged above the base of the rail, the spring plate having a yielding rail base bearing, tie plate bearing and tie bearing members and being in bearing contact with the underside of the head of the fastener, the tie plate bearing member consisting of an extension parallel with the rail beyond the side edge of the tie plate, bent transverse to the rail with its extreme end portion extended vertically to contact with the side edge of the rail base, whereby to form a lock to prevent turning of the spring plate.

1,856,653. NITROCELLULOSE LACQUER. GORDON H. MUTERSBAUGH, Rocky River, MILTON ZUCKER and HENRY D. HEISER, Lakewood, and WILBUR A. SHOPE, Cleveland, Ohio, assignors to The Glidden Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 8, 1931. Serial No. 507,430. 2 Claims. (Cl. 134—79.)

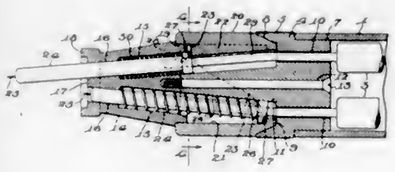
1. A flat nitrocellulose lacquer composed of a clear nitrocellulose lacquer and a neutral metallic tungate.

1,856,654. TERMINATING CIRCUIT FOR TWO-WAY SIGNALING SYSTEMS. CHARLES N. NEBEL, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1931. Serial No. 517,705. 8 Claims. (Cl. 178—44.)



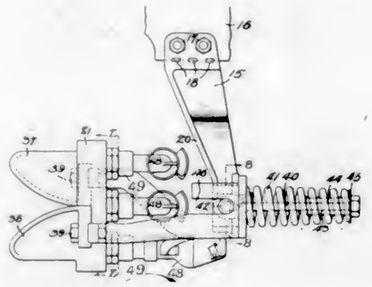
8. In a deep sea telephone cable system, a cable having a core and a receiving sea earth conductor, a speech transformer having a winding connected between said core and conductor, and large series capacity in the circuit of said winding.

1,856,655. MULTICOLOR PEN. OTTO RESE, Wilmington, Del. Filed June 16, 1931. Serial No. 544,725. 10 Claims. (Cl. 120—42.)



1. A fountain pen, comprising a holder, three or more pen supports, a single rotary means to project said supports selectively, when one support is being projected the other supports being stationary in withdrawn position and independent reservoirs in operative communication with the respective pen supports.

1,856,656. CONNECTER FOR TRAIN PIPES. EDWARD A. ROBINSON, Montreal, Canada, assignor to Ellison Edward Workman, Montreal, Canada, and Joseph Robinson, New York, N. Y. Filed Sept. 25, 1920, Serial No. 412,647. Renewed Sept. 22, 1931. 35 Claims. (Cl. 285—24.)

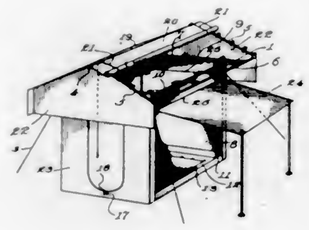


1. In a connecter for train pipes, a connecter head, a train pipe connected thereto, a carrier supporting the head and forked at the rear, a bracket connected with a fixed part of the car enclosed near its lower end by the forked rear end of the carrier and positioning it when it is forwardly projected, laterally projecting pins upon the bracket engaged by the forked end, a buffer spring secured to engage the rear of the carrier and a tie rod holding the buffer spring in position.

1,856,657. FUMIGATING COMPOSITION. CHARLES J. ROMIEUX, Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Dec. 12, 1928. Serial No. 325,666. 9 Claims. (Cl. 167—35.)

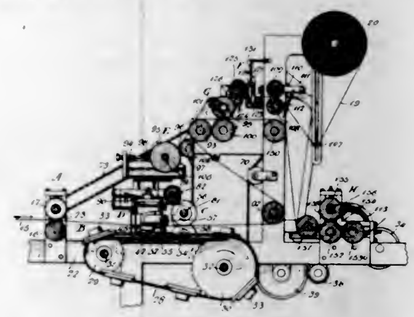
1. A fumigant comprising particles of calcined brick and liquid hydrocyanic acid absorbed in the particles.

1,856,658. TENT. ADELAIDE HARDING RUMMLER, Chicago, Ill. Filed Dec. 30, 1931. Serial No. 583,923. 2 Claims. (Cl. 135—1.)



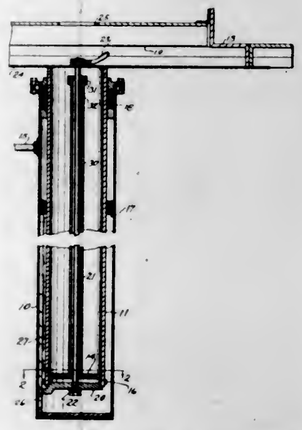
1. A tent comprising a frame structure from which is suspended a complete rectangular mosquito net enclosure comprising side walls and a ceiling, said frame structure also supporting a canvas tent surrounding said mosquito net enclosure and comprising side walls and an overhanging roof, the side walls being spaced from the roof to allow a ventilating space between the roof and the upper edge of the side walls, and means for drawing the roof upwardly toward the ridge of the tent.

1,856,659. ENVELOPE MAKING MACHINE. ERNEST SANDFANANDER, Freeport, N. Y., assignor to H. P. Andrews Paper Company, New York, N. Y., a Corporation of New York. Filed May 28, 1928. Serial No. 281,210. 2 Claims. (Cl. 164—28.)



1. In an envelope-making machine, means to feed a web of paper through the machine, a mechanism to cut a window opening in said web including a die engageable with the web and a roller arranged diagonally relative to the web and cooperating with said die to shear the material of said web to form said opening.

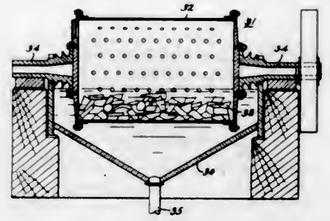
1,856,660. VEHICLE LIFT. PAUL I. SCHULTZ, Cleveland, Ohio, assignor to The United States Air Compressor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 11, 1930. Serial No. 501,555. 8 Claims. (Cl. 254—93.)



1. A vehicle lift comprising in combination, a casing adapted to be embedded within the ground, a plunger mounted for reciprocation therein, means inside the casing and outside the plunger for permitting reciprocation, but preventing rotation of the plunger with reference to the casing, and a member extending through the center of the plunger and operable from a point outside the plunger for selectively controlling said means.

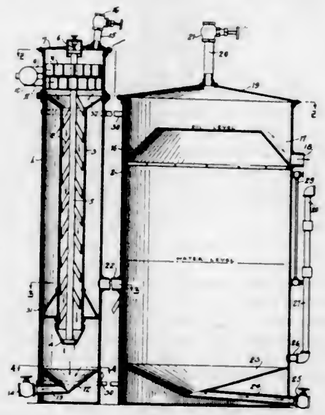
1,856,661. METHOD OF MAKING COPPER POWDER. CHARLES FREDERIC SHERWOOD, Detroit, Mich., assignor to The Moraine Products Company, Dayton, Ohio, a Corporation of Ohio. Filed June 2, 1927. Serial No. 195,968. 1 Claim. (Cl. 75—18.)

The method of making a mixture of ingredients for the manufacture of porous metal bodies which consists in precipitating, with the use of iron, copper particles from a solution of copper sulphate, in washing and drying the copper particles, in compacting the copper particles to



increase their specific gravity and in mixing them with other ingredients such as a finely divided metal alloyable with copper, and a void forming substance.

1,856,662. OIL SEPARATOR. EDWARD A. SHOWERS and LLOYD A. LONG, Dallas, Tex. Filed Dec. 12, 1929. Serial No. 413,559. 2 Claims. (Cl. 210—51.)

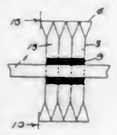


1. Apparatus for continuously separating liquids of different specific gravities from a mixture of such liquids, comprising a settling tank in which liquids from said mixture settle in superposed layers and in accordance with their specific gravities, a frusto-conical cutting ring secured in said tank near the upper end thereof, a valve control sediment removing hopper at the bottom of said tank, means for feeding said mixture into said tank between the ends thereof, means for discharging the upper layer of liquid overflowing from the top of said cutting ring, a pipe connected to said tank to discharge liquids from the lower of said layers, said pipe being adjustable to control the level of separation between said layers and to control thereby the rate of discharge of the upper layer of liquids through said discharging means.

1,856,663. ELECTRODE FOR ELECTROLYTIC APPARATUS. JAMES NORMAN SMITH, Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 21, 1928. Serial No. 301,147. 12 Claims. (Cl. 204—6.)

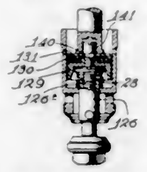
12. The combination with an electrolytic cell, of electrodes, each comprising a horizontal conducting stud carrying a plurality of spaced vertically positioned electrolyzing elements having flat central portions and upwardly inclined corrugations along their electrolyzing sides forming inwardly extending passages communicating with vertical passages between adjacent elements, the electrodes

being mounted alternately on opposite walls of the cell with the corrugated edges of each electrode adjacent opposed sides of electrodes of opposite polarity, and a pervious diaphragm extending around said electrodes in a



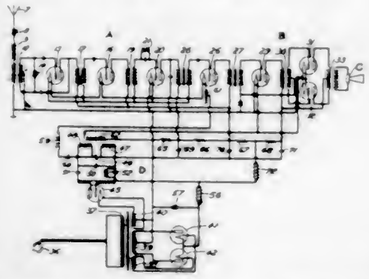
sinusoidal course between said adjacent sides of alternate electrodes and around the ends thereof near the walls of said cell, the opposite walls of said cell and the alternate electrodes being of opposite polarity.

1,856,664. FAUCET. HARRY S. STEEN, Chicago, Ill., assignor to The Chicago Faucet Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 516,181. 5 Claims. (Cl. 251—138.)



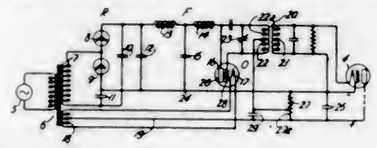
2. A faucet of the character described, including; a casing with an inlet opening and a discharge opening; a removable cylinder in said casing carrying a seat held against the rim of the inlet opening, the lower end of said cylinder being provided with an inlet opening registering with the inlet opening in the casing, and a discharge opening communicating with the discharge opening in the casing; a rod slidably mounted in said cylinder carrying a valve on its lower end below said seat; means for yieldingly urging said rod upwardly to cause said valve to rest on said seat to close the faucet; manually operable means for pressing the rod downwardly to open the faucet; means for retarding the upward movement of said rod, said means including a disc in the cylinder adapted to be moved with the rod, said disc adapted to trap water in the cylinder above the disc when depressed, water so trapped being permitted to escape slowly to permit upward movement of the disc at a retarded speed; and means for adjusting the frictional resistance of said disc in said cylinder.

1,856,665. POWER SUPPLY SYSTEM. HUGH M. STOLLER, Mountain Lakes, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 12, 1923. Serial No. 680,172. 9 Claims. (Cl. 250—27.)



1. In combination, a plurality of thermionic discharge devices certain of which operate at low anode potentials, a source of alternating current energy, a thermionic discharge tube oscillation generator for producing ultra-audio oscillations, means for heating the cathode of said oscillator tube from said source of alternating current energy, said oscillation generator operating at a high anode potential whereby the low frequency fluctuations in the cathode heating current have but slight effect on the amplitude of the generated oscillations and means for employing said generated oscillations to heat the cathodes of said plurality of thermionic discharge devices.

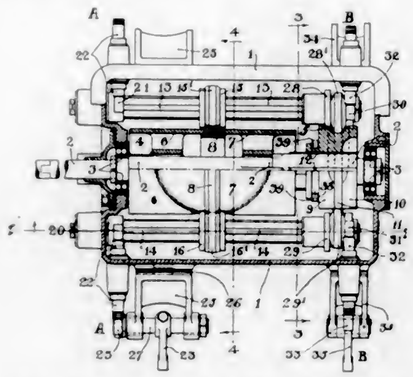
1,856,666. FILTER CIRCUITS. HUGH M. STOLLER, Mountain Lakes, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed May 6, 1925. Serial No. 28,304. 8 Claims. (Cl. 178—44.)



1. In combination, a rectifier having output terminals, a filtering means connected to said output terminals, a high frequency generator having input and output terminals, a space discharge device having a thermionic cathode, circuit connections from the output terminals of said generator to the cathode of said space discharge device for supplying heating current thereto, and circuit arrangements for supplying space current to said space discharge device and current to the input terminals of said generator in series.

8. The method of operating translating devices from a source of electric current subjected to variations and fluctuations, consisting of passing such current through a current stabilizing device and shunting by a glow discharge device a portion of said current from said translating device to smooth out said variations.

1,856,667. CAM GEAR. JAMES CHARLES STOPANI STUART, Monkseaton, Northumberland, England, assignor to Sir W. G. Armstrong, Whitworth & Company, Limited, Newcastle-upon-Tyne, England. Filed Apr. 13, 1929, Serial No. 354,889, and in Great Britain Apr. 14, 1928. 20 Claims. (Cl. 121—127.)



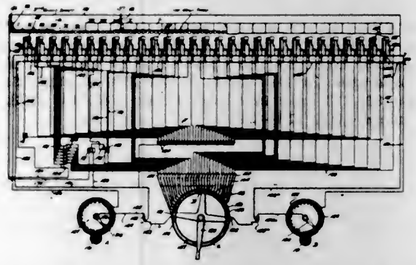
1. In a cam controlled valve operating gear for a reversible double acting engine, the combination of a cam shaft, an inlet cam of predetermined shape to give varying cut offs for both forward and reverse running and fast on said shaft, a constant phase exhaust cam for forward and reverse running slidably mounted on said shaft, slidably mounted levers for transmitting movement from the inlet cam to the inlet valves, stationary levers for transmitting movement from the exhaust cam to the exhaust valves, a control shaft having a screwed and plain portion, arms on the screwed portion for transmitting movement to the inlet valve levers and an arm on the plain portion for transmitting movement to the exhaust cam.

1,856,668. ANNEALING LEER. JULIUS SYLVESTER, Washington, Pa., assignor to Simplex Engineering Company, Washington, Pa., a Corporation of Delaware. Original application filed Jan. 21, 1929, Serial No. 333,887. Divided and this application filed Jan. 4, 1930. Serial No. 418,575. 31 Claims. (Cl. 198—127.)



1. In a ware conveyor, conveyor means operating at a predetermined surface speed for conveying the ware along a course, conveyor means operating at a surface speed at least as great as the first-named conveyor means for continuing the movement of the ware along the course, and means for periodically reversing the direction of travel of at least a part of the second-named conveyor means.

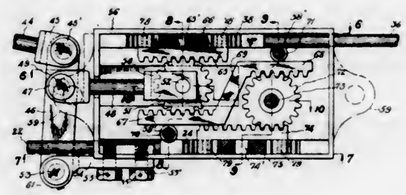
1,856,669. ELECTRIC CONTROL SYSTEM FOR CONVEYERS. JULIUS SYLVESTER, Washington, Pa., assignor to Simplex Engineering Company, Washington, Pa., a Corporation of Delaware. Original application filed Jan. 21, 1929, Serial No. 333,887. Divided and this application filed Jan. 4, 1930. Serial No. 418,576. 39 Claims. (Cl. 198—127.)



1. In an electric control system for conveyers, a roller conveyer, driving means for the rolls of the conveyer, and automatic electrically controlled means governing the driving means for causing the same to periodically and differentially rotate the rolls alternately forward and backward.

1,856,670. EQUALIZING DEVICE FOR BRAKES. LUIGI TADDEO, Cleveland, Ohio. Filed July 30, 1929. Serial No. 382,180. 4 Claims. (Cl. 188—204.)

1. An equalizing brake device for four-wheel brakes comprising, means for applying braking action; a plurality of independent braking members, one for each of two front wheels and one for each of two rear wheels; a housing adaptable for support upon a chassis; and means contained within said housing for equalizing the differential between the reactive stresses of said braking members including independently movable racks secured to said members respectively, a pair of floating transmission members, one of which engages the pair of racks secured to the front braking members and the other of which engages the pair of racks secured to the rear braking members, said transmission members being adapted to ride upon said racks, an idler gear fixed in the direction of movement of said transmission members, said gear engaging one of said floating transmission members, a pinion mounted upon said brake-applying means, and other floating transmission

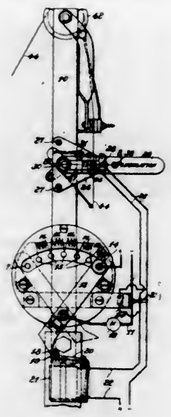


means connected to and intermediate of said pinion and said idler gear, the arrangement being such as to cause said pinion and said idler to travel in opposite directions when said brake-applying means are operated.

1,856,671. PROCESS OF MAKING LITHOPONE WITH HIGH ZINC SULPHIDE CONTENT. EDWARD A. TAYLOR, Cleveland, Ohio, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Jan. 23, 1928. Serial No. 248,974. 3 Claims. (Cl. 134—78.)

1. In a process of making a super-lithopone the step comprising co-precipitating zinc sulphide and barium sulphate by reacting upon an aqueous zinc sulphate solution with an aqueous solution of a barium sulphide compound in which the amount of available S-ions is substantially greater than the amount of available Ba++ ions, the amounts of the reacting ingredients being so chosen that the amount of available Zn++ ions is substantially greater than the said amount of Ba++ ions.

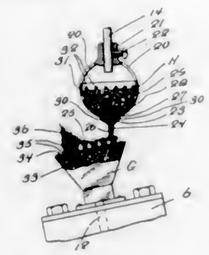
1,856,672. CONTROLLING MEANS FOR COIL WINDING MACHINES AND THE LIKE. CHESTER H. THORDARSON, Chicago, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 25, 1929. Serial No. 357,941. 4 Claims. (Cl. 192—125.)



1. A machine of the class described comprising a motor circuit for operating the machine; a supporting bracket; a plurality of grooved guide pulleys mounted on said bracket; a corresponding plurality of flexible strands passing over said guide pulleys and into said machine along definite paths; a supporting rod in said bracket adjacent the paths of said strands and electrically insulated from the bracket; a plurality of weighted switch levers arranged

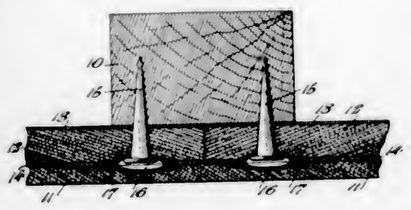
to oscillate freely on said rod and each carrying a contact member of insulation material resting against one of said strands and held from oscillation thereby; a contact bar set to be engaged by swinging of any one of said switch levers upon release by breakage of its associated strand; a control circuit connected with said rod and bar to be closed by contact of said levers with said bar; and means operable by closing of said controlling circuit for breaking said motor circuit.

1,856,673. OILER FOR ENGINES. GILBERTO R. VALDÉZ, New York, N. Y. Filed Mar. 24, 1927. Serial No. 177,903. 11 Claims. (Cl. 184—10.)



1. An oiler for engines, said oiler comprising a wick member, means for feeding oil thereto, an oil cup arranged to move with respect to said wick member and having communication with a part to be lubricated, a perforated partition comprised in said oil cup, a quantity of wick material carried by said oil cup at one side of said partition, and a second quantity of wick material carried by said oil cup at the opposite side of said partition communicating through the perforations of said partition with said first wick material and constituting a brush for engaging said first mentioned wick member to receive oil therefrom.

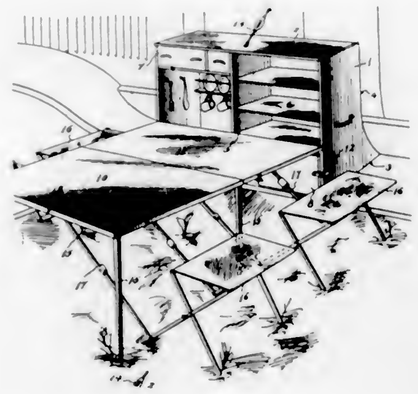
1,856,674. PARTITION AND CEILING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Feb. 12, 1930. Serial No. 427,772. 1 Claim. (Cl. 72—16.)



A building structure comprising in combination studding, a plaster board of equal thickness throughout its extent nailed thereto so that individual pockets remain between the heads of the nails and the outer face of the plaster boards, a plurality of dished discs adhesively secured at their inner peripheries to said plaster boards to cover the heads of said nails and said pockets, there being a space between the head of each nail and the inner face of each disc to accommodate nail displacement, and a coating of plaster covering said plaster board including said discs.

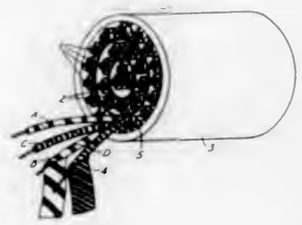
1,856,675. TOURIST CAMPING KIT. SILAS N. WAKEFIELD, Pawnee, Ill. Filed May 1, 1930. Serial No. 448,964. 2 Claims. (Cl. 190—12.)

1. A tourist kit comprising a cabinet having the lower portion of its front provided with a fixed section having a horizontally extending ledge along its upper edge, a leaf hinged to said fixed section at the upper edge thereof and when closed extending between the fixed section and the top of the cabinet with its lower end resting upon said ledge, a second leaf adapted to cover the front of the cabinet for the full depth thereof when closed and having its upper edge hinged to the upper end of the first-



mentioned leaf, said leaves having marginal flanges facing each other and contacting when the leaves are closed and defining an enclosed space, and folding legs hinged to the leaves between the flanges thereof for movement into and out of a folded position and adapted to be enclosed in the space between the two leaves when the leaves are closed.

1,856,676. TELEPHONE CABLE. WILLIAM KIRBY WESTON, Sanderstead, Surrey, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 9, 1929, Serial No. 338,709, and in Great Britain Feb. 14, 1928. 6 Claims. (Cl. 173—264.)



1. A telephone cable having a plurality of conductors, paper insulation on said conductors, a coloring substance applied to said paper insulation in such an amount as to equalize the capacities between conductors and in such formation as to serve as distinguishing marks on said conductors.

1,856,677. MATERIAL HANDLING MACHINE. GEORGE R. WHITNALL, Janesville, Wis., assignor to Northern Conveyor & Mfg. Co., Janesville, Wis., a Corporation of Wisconsin. Filed Aug. 8, 1928. Serial No. 298,285. 2 Claims. (Cl. 198—233.)

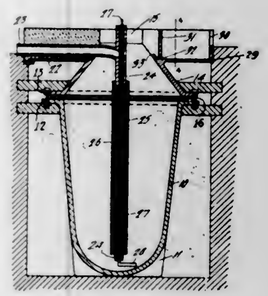
1. A material handling machine, comprising an inclined conveyor frame having a lower material receiv-

ing end and an upper discharge end; means for moving material upwardly on said conveyor frame; supporting means pivotally connected to the conveyor frame intermediate its ends; a drum rotatably mounted on the conveyor frame; an arm extending from said conveyor frame; a pulley rotatably mounted on the lower end of said arm; a pulley block pivoted to a portion of the supporting means; a pulley rotatably carried by said pulley block; a



cable having one end secured to said supporting means, said cable passing around the pulley mounted on the lower end of said arm, around the pulley connected to the supporting means, and to said drum, the conveyor frame being adjustably tiltable on the supporting means to vary the height of the discharge end of the conveyor frame by the rotation of said drum; and means for maintaining said conveyor frame in any adjusted position.

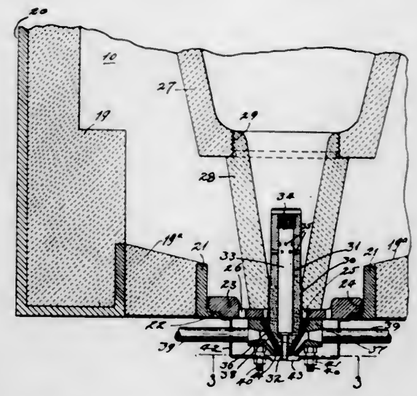
1,856,678. APPARATUS FOR USE IN THE REFINING OF LEAD BULLION AND SIMILAR OPERATIONS. GEORGE KENNETH WILLIAMS, Port Pirie, South Australia, Australia. Filed Sept. 9, 1930, Serial No. 480,736, and in Australia Nov. 7, 1929. 19 Claims. (Cl. 266—37.)



1. A kettle for the purposes set forth comprising a plurality of sections, a ring of channel cross section connecting adjacent sections, and having the flanges thereof directed inwardly, the inner ends of said flanges being secured to the adjacent portions of the said sections of the kettle.

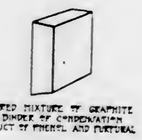
1,856,679. APPARATUS FOR COMMINUTING METALS. HARRY M. WILLIAMS and VICTOR W. BIHLMAN, Dayton, Ohio, assignors to General Motors Research Corporation, a Corporation of Delaware. Filed July 22, 1925. Serial No. 45,284. 7 Claims. (Cl. 83—91.)

1. Apparatus for producing metallic powders of relatively high-melting-point metals comprising, in combination, a furnace, a crucible in which the metal is melted, a nozzle connected with the crucible and extending outside the furnace, means for directing the gaseous products of combustion from said furnace around the discharge end of the nozzle to maintain the nozzle at a relatively high temperature and means for subjecting the metal issuing from



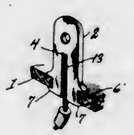
the nozzle to a whirling stream of aeriform fluid under pressure and causing the products of combustion to flow around the part of said nozzle outside the furnace.

1,856,680. DYNAMO BRUSH. HARRY M. WILLIAMS, Dayton, Ohio, and ALFRED L. BORGEHOLD, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 2, 1925. Serial No. 72,807. 1 Claim. (Cl. 171—325.)



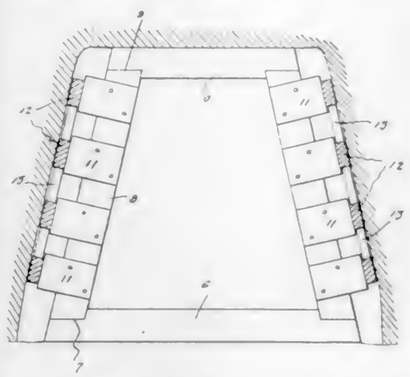
The process of manufacturing electrical brushes, which consists in molding under heat and pressure finely divided artificial graphite and a binder consisting of a condensation product of phenol and furfural until said binder has been rendered insoluble and infusible, then packing the molded article in charcoal in sealed boxes and sintering at such temperature as to coke substantially all of said binder.

1,856,681. ELECTRICAL CONNECTER. ROBESON B. WOLCOTT, Elmhurst, Ill. Filed July 23, 1930. Serial No. 469,972. 6 Claims. (Cl. 173—361.)



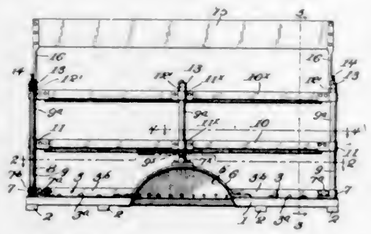
1. A connecter cap comprising an insulating disc, a bifurcated blade extending through said disc and riveted thereto and a conductor wire extending through said disc and between the bifurcations of said blade, and means for securing said wires between said bifurcations and within the cross sectional contour of said blade.

1,856,682. MINE TIMBERING APPARATUS. MATT ZIDRO, Jerome, Ariz. Filed June 24, 1931. Serial No. 546,620. 1 Claim. (Cl. 61—45.)



In an apparatus of the class described, a plurality of relatively spaced cross members having notches in their upper end corners, posts having their lower ends seated in said notches and rising from the cross members, upper cross members having notches in their lower end corners to receive the upper ends of the posts, spaced cleats secured to the post and extending outwardly therefrom, and laggings having the inner surfaces thereof flatly contacting the outer ends of the cleats, and spacer blocks arranged between vertically alined laggings for retaining the same in relatively spaced relation.

1,856,683. TRUCK BODY. EDWIN S. ZIEGLER, York, Pa., assignor to York-Hoover Body Corporation, York, Pa., a Corporation of Pennsylvania. Filed May 27, 1930. Serial No. 456,163. 2 Claims. (Cl. 296—3.)

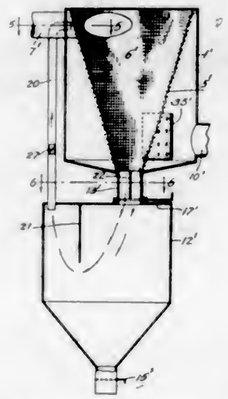


1. A truck body of the character described comprising a bed frame, brackets secured to the corners and sides of said bed frame, corner and side posts removably secured at their lower ends to said brackets, lower and upper deck frames having corner and side brackets provided with vertical openings receiving said posts to removably connect the deck frames to said posts, sleeves removably positioned on said posts between the bed frame and lower deck frame brackets and between the lower and upper deck frame brackets in contact with said brackets, and means removably engaged with the upper ends of said posts and contacting with the upper deck frame brackets to hold both deck frames and the sleeves against accidental upward movement on the posts.

1,856,684. POROUS BODY AND PROCESS OF MANUFACTURING THE SAME. HEINRICH ZIEGNER, Hagen, Germany. Filed Nov. 17, 1927, Serial No. 234,028, and in Germany Jan. 14, 1927. 19 Claims. (Cl. 18—53.)

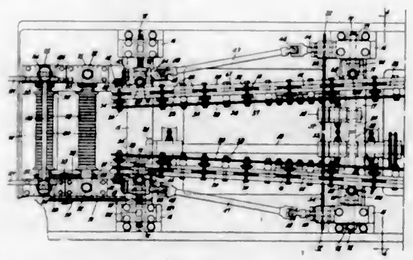
1. The herein described process of manufacturing porous bodies, which consists in imbuing porous particles with a medium adapted to swell matter of the character of rubber, intermingling the said porous particles with matter of the character of rubber, and causing contraction of the matter of the character of rubber surrounding the said porous particles by vaporization of the medium passed into the same from said particles.

1,856,685. APPARATUS FOR SEPARATING SOLIDS FROM GASES. EVALD ANDERSON, Alhambra, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed May 19, 1928. Serial No. 279,101. 3 Claims. (Cl. 183—84.)



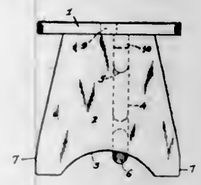
2. An apparatus for separating solids from gases comprising a substantially cylindrical housing, a filter member disposed substantially centrally within said housing and having substantially the shape of an inverted frustum of a cone, means for delivering gas containing suspended solids substantially tangentially into the larger upper end of said filter, gas outlet means communicating with the lower portion of said housing exteriorly of said filter member, and a collecting chamber positioned below the smaller lower end of said filter member and communicating therewith to receive solid material falling by gravity from the interior of said filter member.

1,856,686. METAL LATH EXPANDER. HERBERT K. BAKER, Detroit, Mich., assignor to Penn Metal Company, Parkersburg, W. Va., a Corporation of Massachusetts. Filed Aug. 24, 1928. Serial No. 301,897. 31 Claims. (Cl. 164—6.6.)



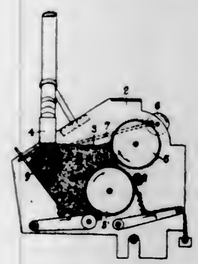
1. In apparatus of the character described the combination of a plurality of pairs of expanding rollers and pairs of cooperating guide members between each pair of rollers, one roller of each pair and one guide member of each pair being yieldingly mounted with respect to the other roller and member of their respective pairs.

1,856,687. TOILET STOOL. SADIE BAKER, Waynesburg, Pa. Filed Apr. 10, 1930. Serial No. 443,077. 5 Claims. (Cl. 155—31.)



1. A toilet stool of the character described comprising a top member, supporting elements for said top member, and a seat member provided with a circular seat opening and depending from said top member at right angles relatively to the latter, a portion of the side edges of each of said supporting elements being aligned with the respective side edges of said top member for positioning said seat member on a horizontal plane when the latter and said supporting elements are positioned to rest on said respective side edges thereof.

1,856,688. TOBACCO FEEDING APPARATUS FOR CIGARETTE MACHINES. JOSEPH BEHRLENZ, Hamburg, Germany, assignor to the Firm of Neuerburg'sche Verwaltungsgesellschaft G. m. b. H., Cologne-on-the-Rhine, Germany. Filed Nov. 4, 1930, Serial No. 493,364, and in Germany Nov. 16, 1929. 4 Claims. (Cl. 131—39.)



1. An automatic tobacco feeding apparatus for cigarette machines, comprising in combination, a tobacco hopper, feeding means including a feed roll for delivering tobacco from such hopper to a cigarette machine, an agitator device for agitating the tobacco in said hopper and a tobacco feed tube for said hopper, terminating between said feed roll and said agitator device, substantially on the level of the tobacco body in said hopper.

1,856,689. DOOR AND LATCH CONSTRUCTION. PAUL E. BRENEMAN, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Jan. 26, 1926. Serial No. 83,908. 6 Claims. (Cl. 292—164.)

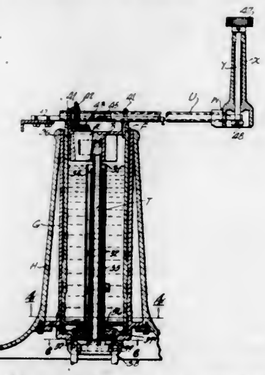


1. A latch comprising a plate provided with a bolt receiving and guiding flange at the forward edge thereof, a latch bolt slidably received by said flange, means operable from one side of said latch for retracting said bolt, means operable from the other side of said latch for retracting said bolt, said last named means comprising a roll-back independently supported by an extension of said plate projecting forwardly of said flange, and a roll-back operating means positioned forwardly of said flange.

1,856,690. MANUFACTURE OF POLYHYDROXY PHENOLS. THOMAS S. CARSWELL, Kirkwood, Mo., assignor to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed May 6, 1931. Serial No. 535,575. 2 Claims. (Cl. 260—154.)

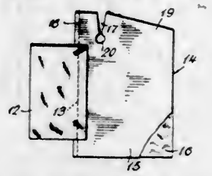
1. The method of separating a polyhydroxy phenol from an aqueous solution thereof which comprises causing isopropyl ether to contact with the aqueous solution and subsequently separating the ether from the aqueous solution.

1,856,691. BARBER CHAIR. LIONEL A. CARTER, Webster Groves, Mo., assignor to Koken Companies St. Louis, Mo., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,157. 8 Claims. (Cl. 155—25.)



4. A chair provided with a vertically-adjustable seat, a back that can be moved relatively to said seat, a locking device for holding the seat against rotary movement, a cylinder and piston associated with each of said elements for effecting the movement of same, a valve mechanism for controlling the admission and discharge of an hydraulic operating medium under pressure to and from said cylinders, and an operating means for said valve mechanism comprising one member that is adapted to be moved in opposite directions to raise and lower the seat and control said locking device, and a different member that is adapted to be moved in opposite directions to shift the back into and out of its reclining position.

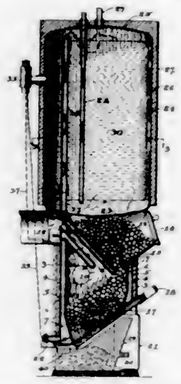
1,856,692. WRAPPER FOR USE IN HAIR WAVING PROCESSES. GRACE COMBEFORD, Elmhurst, N. Y., assignor to The Nestle-Lemur Company, New York, N. Y., a Corporation of Ohio. Filed Oct. 7, 1931. Serial No. 567,380. 8 Claims. (Cl. 132—36.2.)



1. A wrapper for enclosing a wound strand of hair during the application of heat thereto in a hair-waving process, said wrapper comprising a covering in which the

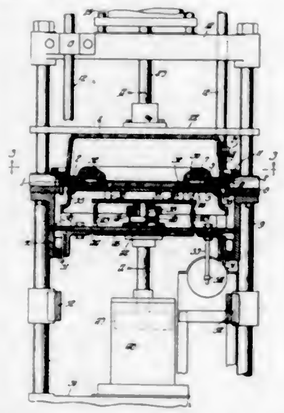
strand is adapted to be wrapped with a part of the strand projecting therefrom, said covering being of a pliable non-absorbent material inherently capable of maintaining a deformed condition about said strand when wrapped therearound, and being provided with means for sealing the end of the strand adjacent the protecting portion thereof so as to completely enclose said end and prevent the escape of vapor from the covering at all points except that at which the strand projects from the wrapper.

1,856,693. HOT WATER STOVE AND STORAGE TANK. ELBERT A. CORBIN, Jr., Swarthmore, Pa. Filed Sept. 10, 1930. Serial No. 480,906. 3 Claims. (Cl. 122—15.)



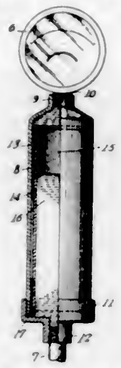
1. A domestic hot water heater having in combination a water jacketed coal heater and a storage tank, arranged one above the other and forming a unit of structure, said heater jacket having at its upper end downwardly inclined water legs in direct communication with said jacket and forming the exit for the products of combustion, and a connection from one of said legs leading through the bottom of the storage tank and discharging near the top of the latter.

1,856,694. APPARATUS FOR COVERING ARTICLES. HOWARD P. DE CORREVONT, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 1, 1929. Serial No. 404,036. 3 Claims. (Cl. 18—3.)



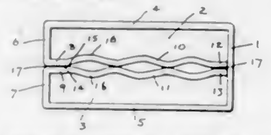
3. In a device for coating a core with a sheet of pyroxylin, the combination of means for gripping a substantially flat sheet of pyroxylin along its periphery, means for heating said sheet, means for forcing a core against said sheet as thus gripped and thereby stretching it and producing a partial wrapping of said sheet about said core, and means for producing a condition of lesser air pressure on the side of said sheet which said core engages and of greater pressure on the other side to thereby further wrap said sheet about said core.

1,856,695. SHOCK ABSORBER FOR PRESSURE CONTROLLED INDICATING AND RECORDING DEVICES. LUIS DE FLOREZ, Pomfret, Conn. Filed July 20, 1928. Serial No. 294,095. 1 Claim. (Cl. 137—111.)



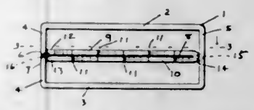
A device for eliminating the fluctuation of pressure gages in oil lines subjected to surges caused by pumps and the like, said device comprising a tubular column of considerably greater cross-sectional dimensions than an oil line with which the device is adapted to be used and provided at the top with a reduced neck for mounting a gage in communication with the interior of the column and at the bottom with a reduced neck for connection with the pipe line, whereby the fluid from the oil line or the like is directly entered into the bottom of the enlarged chamber formed by the column, and an air cushioning chamber removably secured in fixed relation within the column, said air cushioning chamber being closed at the top but open at the bottom and positioned with the open lower end of the same over the lower pipe connection, so as to directly receive the liquid from the oil line and said air chamber occupying the portions of greater cross-sectional dimensions of the column to form an expansion chamber for the liquid and giving to the latter a wide cross-sectional area for operating on a cushion of air trapped in the upper closed end of the air chamber and said air chamber so nearly completely filling the interior of the column as to provide restricted liquid passages about the same to the gage connecting outlet in the top of the column, whereby the surges of the liquid are absorbed over a wide area by a cushion of air directly exposed to an expanded body of the liquid and communication of fluctuation to a gage or the like instrument is further controlled by close restriction of the liquid between the cushioned body of liquid and the connection for the gage at the top of the column.

1,856,696. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed July 16, 1931. Serial No. 551,116. 4 Claims. (Cl. 24—260.)



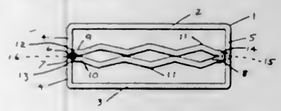
1. A slide buckle comprising a pair of loops in a common plane, the loops being connected at one side and free at their opposite sides, the loops including intermediate bar portions, each extending in undulating form across the buckle and which provide spaced projections extending into both loops and confined to said plane.

1,856,697. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Aug. 1, 1931. Serial No. 554,438. 3 Claims. (Cl. 24—163.)



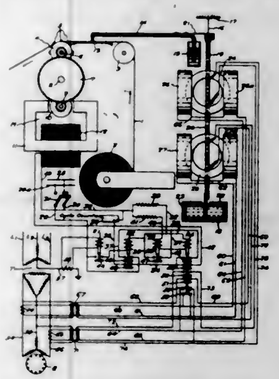
1. A slide buckle comprising a substantially rectangular frame having upper, lower and side structures, and a separate intermediate bar structure having extremities each permanently secured in intimate union, within the plane of the frame, to an inner surface of said side structures, the intermediate bar structure having spaced projections extending in opposite directions out of said plane.

1,856,698. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Aug. 1, 1931. Serial No. 554,439. 3 Claims. (Cl. 24—163.)



1. A slide buckle comprising a substantially rectangular frame having upper, lower and side structures, and a separate intermediate bar structure having extremities each secured in permanent intimate union, within the plane of the frame, to an inner surface of a side structure, the intermediate bar structure lying wholly within said plane.

1,856,699. RECORDING SYSTEM. ROBERT D. EVANS, Wilkinsburg, CHARLES F. WAGNER, Pittsburgh, and SAMUEL B. GRISCOM, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 31, 1927. Serial No. 216,532. 5 Claims. (Cl. 234—5.5.)



1. In an electrical instrument for recording transient variations in the average value of a quantity traversing an electrical circuit, an armature having a marking device mounted thereon, said armature having a natural period of vibration of a fraction of a second and means for actuating said armature only on the occurrence of transient conditions.

1,856,700. INSULATING OIL. JAMES G. FORD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1928. Serial No. 269,616. 5 Claims. (Cl. 196—149.)

1. The method of preparing an oil for transformers or other oil-filled electrical apparatus which comprises treating an insulating oil with from 15% to 50%, by volume, of 95% to 98% concentrated sulphuric acid and agitating the mixture for a sufficient length of time to remove substantially all unsaturated aliphatic compounds and all aromatic compounds that may be readily removed by acid of such concentration.

4. An insulating oil for transformers or other oil-filled electrical apparatus comprising saturated hydrocarbons and a sufficient quantity of polymerized hydrocarbons of the terpene group to prevent development of acidity, said oil being substantially free from unsaturated aliphatic hydrocarbon compounds and aromatic compounds which have the tendency to develop sludge in service.

1,856,701. ELECTRICAL FUSE FOR HIGH OR LOW VOLTAGE. HANS GERDIEN, Berlin-Grunewald, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 16, 1926, Serial No. 141,995, and in Germany Oct. 16, 1925. 11 Claims. (Cl. 200—135.)

4. In an electric fuse, in combination, a tubular fusible conducting element, a mixture of nitrate of barium, aluminium and magnesium powder within the element and a mixture of potassium chlorate, sugar and aluminium powder located at a place of said element of reduced cross-section.

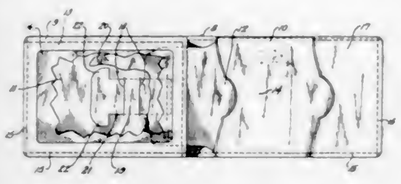
1,856,702. TAPERED LOADING OF CONDUCTORS. JOHN J. GILBERT, Douglaston, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,226. 3 Claims. (Cl. 178—45.)

1. A signaling conductor having the inductance increased by the application of magnetic material, characterized in this, that the inductance, impedance, hysteresis loss, eddy current loss, or other characteristic of the conductor is changed from point to point along the conductor by applying the strand of magnetic loading material with an angle of lay different in different parts of the conductor.

1,856,703. BILL FOLD. GEORGE F. GROOM, West Bend, Wis., assignor to Enger-Kress Company, West Bend, Wis., a Corporation of Wisconsin. Filed Feb. 12, 1930. Serial No. 427,826. 2 Claims. (Cl. 150—38.)

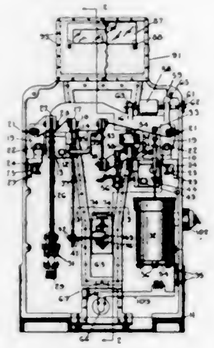
1. A bill fold comprising an outer wall and a divided inner wall, a flap projecting laterally from one of said inner wall sections, a tongue secured to the lower side of said flap, said tongue having a stop projection, guiding means in connection with said other inner wall section within which said tongue is slidable, an additional section of material superimposed upon and in connection with said

last mentioned inner wall section to form a pocket having an opening for slidably receiving the flap and tongue of the first mentioned inner wall section, said flap entirely



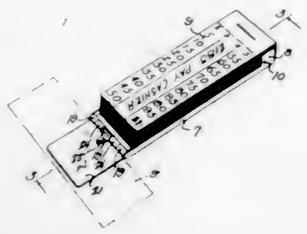
covering the tongue and guiding means so that said tongue and guiding means will not interfere with the insertion of material into the pocket.

1,856,704. WEIGHING SCALE. HARLAN A. HADLEY, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Dec. 3, 1928. Serial No. 323,418. 20 Claims. (Cl. 265—62.)



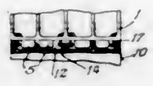
1. In a scale of the class described, the combination with indicating mechanism including magnetic, pendulated means for actuating the said indicating mechanism in accordance with the load on the scale.

1,856,705. TICKET HOLDER AND PUNCH. OTTO C. HEINEMANN, Milwaukee, Wis. Filed Mar. 19, 1930. Serial No. 437,085. 3 Claims. (Cl. 206—40.6.)



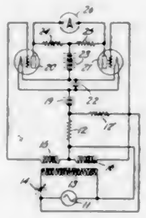
1. In a combined ticket holder and punch, the combination with the body of the holder, of a member hingedly connected to an edge of said body and provided with a punching recess, said member adapted to receive a ticket thereon and a punch extending from the edge of said body and cooperating with said member to cut out a portion of the ticket as said member is turned on its hinge.

1,856,706. MEANS FOR ATTACHING TOOLS TO HOLDERS. MYRON D. HOLCOMB, Hurley, Wis. Filed June 23, 1931. Serial No. 546,318. 10 Claims. (Cl. 27—143.)



1. In a coupling between a tool and carrier therefor, a tongue integral with the carrier, the tool having a recess in one edge to receive said tongue, the carrier having a passage adjacent the tongue to receive a headed bolt, and a lug in the recess formed to receive the headed end of the bolt to facilitate the drawing of the tool onto the tongue.

1,856,707. FREQUENCY MEASURING CIRCUITS. JOSEPH W. HORTON, Millburn, N. J., assignor to Western Electric Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 28, 1928. Serial No. 265,244. 8 Claims. (Cl. 250—39.)



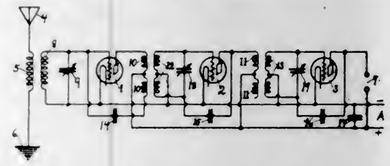
1. A frequency measuring device comprising a resistance element, a tuned circuit including a reactance element, means for supplying the wave to be measured to said elements, and means for obtaining and comparing voltages corresponding respectively to the sum and difference of a voltage substantially equal to the voltage across said resistance element and a voltage dependent in value upon the current through said reactance element.

1,856,708. EXTENSION PILOT FOR REAMERS. LEONARD W. JOHNSON, Batavia, Ill. Filed Feb. 9, 1928. Serial No. 252,991. 11 Claims. (Cl. 77—72.)



1. Pilot means for reamers comprising in combination, a pilot bushing in engagement with the reamer shaft, the said bushing having a threaded portion intermediate its ends and an angular bearing surface adjacent said threaded portion, and a cylindrical extension pilot member having threaded portions and a bearing surface adapted to coact with the threaded portions and bearing surface of the said pilot member.

1,856,709. COUPLING ARRANGEMENT FOR COMPENSATED HIGH FREQUENCY AMPLIFIERS. EDUARD KARPLUS, Berlin-Tempelhof, Germany. Filed Jan. 9, 1928, Serial No. 245,616, and in Germany Jan. 11, 1927. 3 Claims. (Cl. 179—171.)



1. In combination with a neutralized high frequency amplifying system, a vacuum tube having anode, cathode and control electrodes, a primary inductance coil for receiving oscillating currents to be amplied by said tube, said inductance having its mid point tapped and connected to the zero reference point of said system, whereby equal high frequency potential occurs at the ends of said inductance, a secondary inductance arranged symmetrically within said first inducance coil and also having its mid point tapped and connected with the zero potential reference point of said system for producing controlling potential and compensating potential for said vacuum tube, and the capacitative couplings of said inductances varying uniformly with changes in frequency and degree of coupling.

1,856,710. PROCESS OF PREPARING VAT DYESTUFFS. GEORG KRÄNZLEIN, MARTIN CORELL, and HEINRICH VOLLMANN, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 3, 1929, Serial No. 360,327, and in Germany May 2, 1928. 9 Claims. (Cl. 260—61.)

1. The process which comprises heating a halogenated 3.4.8.9-dibenzpyrene-5.10-quinone with an alkaline sodium hypochlorite solution at between about 90 and 100° C.

1,856,711. BENZANTHRONE-DERIVATIVES AND PROCESS OF PREPARING THEM. GEORG KRÄNZLEIN and HEINRICH GREUNE, Frankfort-on-the-Main-Hochst, and GERHARD LANGBEIN, Hofheim-in-Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1930, Serial No. 504,420, and in Germany Feb. 11, 1929. 22 Claims. (Cl. 260—61.)

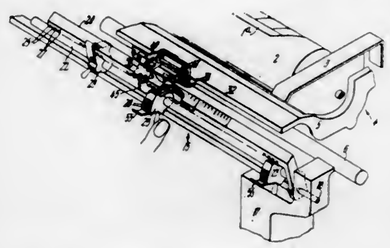
15. As new products the compounds of the probable general formula:



wherein R_1 stands for a radicle of an aromatic amine attached to the N-atom in a position ortho to the NH_2 group and wherein R_2 is a radicle of a peri-benzanthronyl type, being yellow to brown products, having no dyestuff character, which are insoluble in alkali and capable of being reduced to a vat at low temperature by means of hydrosulfite and alkali without being transformed into a dyestuff, and which are converted, by heating either alone or in the presence of an indifferent solvent to a temperature exceeding 80° C. with splitting off of water, into a vat dyestuff.

1,856,712. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 23, 1929. Serial No. 365,276. 11 Claims. (Cl. 197—179.)

1. In a typewriting machine, the combination with a movable carriage and a non-traveling rack, of a column-stop adjustable upon the rack, and a tooth on the carriage, movable into mesh with the rack to detain the carriage,



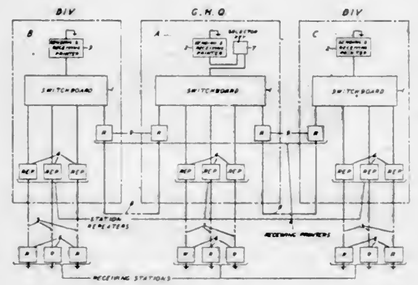
said tooth being normally out of the path of said column-stop, but serving as a position-finder to arrest and locate said stop when the tooth is in mesh with the rack.

1,856,713. LUBRICATION OF TEXTILE FIBERS. GUSTAVE LECOMTE, Roussillon, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 27, 1928, Serial No. 273,439, and in France Dec. 24, 1927. 13 Claims. (Cl. 91—68.)

1. Textile fibers or threads coated with a composition comprising an oxidized semi-drying vegetable oil.

12. Artificial textile fibers or threads formed of a cellulose derivative coated with a composition comprising oxidized rapeseed oil.

1,856,714. PRINTING TELEGRAPH RADIAL SWITCHING SYSTEM. GEORGE A. LOCKE, Glenwood, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 13, 1930. Serial No. 474,994. 4 Claims. (Cl. 178—2.)

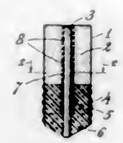


1. A printing telegraph exchange system of the type used for broadcasting messages from a central switchboard to a plurality of remote switchboards, said remote switchboards in turn rebroadcasting said messages to a plurality of branch stations local to each board, characterized in this that selector mechanism is utilized at the remote switchboards for conditioning apparatus at said boards for rebroadcasting, said selector mechanism being responsive to code signals from said central switchboard.

1,856,715. HEAT RESPONSIVE CIRCUIT CLOSER. EDWARD LYNDON, New York, N. Y. Filed May 18, 1927. Serial No. 192,235. 14 Claims. (Cl. 200—142.)

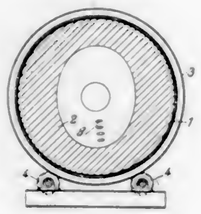
1. In a circuit closer, an inverted cup of a metal having a comparatively high fusing point, an easily fusible metal

confined within said cup and in contact therewith, a plug fitted to said cup at the open end thereof and adapted to be a terminal of said circuit, a second terminal of said



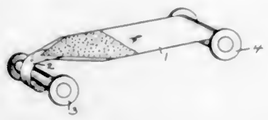
circuit within said plug and an electrical insulation between said terminals provided with a duct from said easily fusible metal to said second terminal.

1,856,716. ELONGATED TILTING HEARTH FURNACE. HERMANN MASCHMEYER, Bad Ems, Germany. Filed Oct. 24, 1930, Serial No. 490,989, and in Germany Nov. 7, 1929. 3 Claims. (Cl. 263—33.)



1. Elongated tilting or rotary hearth furnace having the form of a horizontal truncated cone, in which the furnace is of elliptical or oval cross section, at least in that portion which is nearest the fire.

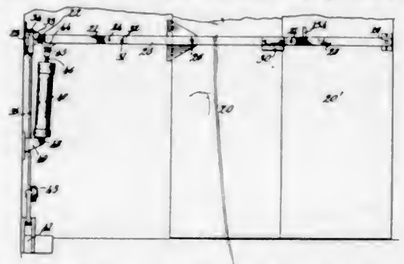
1,856,717. PHOTOGRAPHIC FILM ROLL. EMIL MAYER, Vienna, Austria. Filed May 7, 1930, Serial No. 450,458, and in Germany Jan. 20, 1930. 6 Claims. (Cl. 206—59.)



6. A photographic film roll, having a protective strip at the rear end thereof, said strip being free from adhesive, said strip being sufficiently flexible to be wound upon the take-up roller, said strip having also sufficient rigidity to maintain it upon the take-up roller in wound up condition, so that said strip is then effective to maintain the film in wound up condition upon the take-up roller.

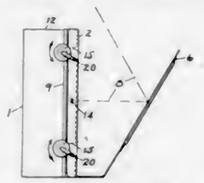
1,856,718. ELEVATOR DOOR OPERATING MECHANISM. HAROLD V. MCCORMICK, Long Beach, N. Y., assignor, by mesne assignments, to Westinghouse Electric Elevator Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1927. Serial No. 218,290. 7 Claims. (Cl. 187—52.)

1. The combination, with the doors at various landings of an elevator shaft and an elevator car, of door opening and closing mechanisms at said landings including means tending to closed said doors when open, a motor on said car having parts so positioned as to be brought successively into an immediate cooperative relation with each of the respective mechanisms on movement of said car to the various landings, and a motor controlling means whereby said motor, when thus brought into such cooperative relation with the mechanism at any landing, may be caused to effect a door opening operation thereof against the opposing effort of said closing means, and



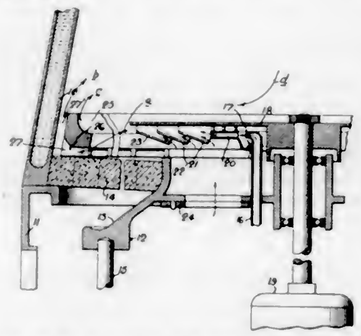
means operably responsive to the door closing operation of the door closing means for causing the motor connected parts to move to their normal position out of engagement with said door opening and closing mechanism.

1,856,719. TOY MOVING PICTURE MACHINE. MICHAEL J. MCINTYRE, Eden, N. Y. Filed June 13, 1931. Serial No. 544,153. 4 Claims. (Cl. 40—86.)



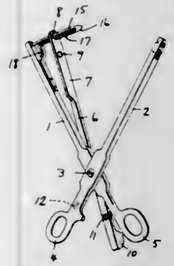
1. A toy picture machine including a rectangular casing open on the front, an upper and a lower tapered roller journalled in said casing by means of holes in one side of said casing and slots in the opposite side of said casing, a film strip fastened at its ends to said tapered rollers, tapered clips to fasten said strip to said tapered rollers, a cover for the front opening of said casing to hold said rollers in said slots and having a sight opening for said film strip, a transparency for covering said sight opening and a mirror external to and in front of said casing, said mirror mounted in a portion of said cover extending away from the bottom of said cover.

1,856,720. APPARATUS FOR PRODUCING COMBUSTION. GEORGE STANLEY MEIKLE, New York, N. Y. Filed Apr. 26, 1927. Serial No. 186,625. 13 Claims. (Cl. 158—4.)



1. In a burner structure, the combination with a rotatable head having means for ejecting jets of liquid fuel, of impacting means for atomizing said jets, means for admixing air to form a combustible mixture, said head being provided with an opening through which said mixture is projected at a relatively high velocity, refractory heat storage means disposed co-operatively adjacent said head over which said projected mixture passes, and means disposed at some distance from said head for reducing the velocity of said mixture whereby a blue flame combustion of said mixture is effected substantially at said means.

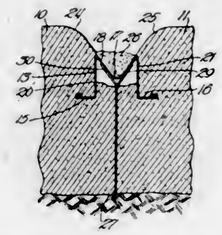
1,856,721. SUTURING AND LIGATING INSTRUMENT. CLEMENS B. NAGELMANN, Santa Barbara, Calif. Filed Feb. 7, 1931. Serial No. 514,233. 7 Claims. (Cl. 128—334.)



5. A suturing and ligating instrument comprising a pair of crossed, pivotally connected levers for swinging movement toward and away from each other, a tissue penetrating needle on the free end portion of one of the levers for supporting a ligature, said ligature being looped around the needle in a manner to provide a preformed knot, a hook on the pointed end portion of the needle, the free end portion of the other lever having an opening for the reception of the needle after said needle has penetrated the tissue, the free end portion of said other lever being further provided with a groove in the side thereof which is opposed to said one lever for the reception of one end portion of the ligature for releasably supporting said one end portion of the ligature on said other lever across the opening therein for engagement by the hook when the needle enters the opening for securing said one end portion of the ligature to the needle, said needle drawing the ligature through the tissue and the knot when the levers are swung away from each other, a pulley journaled on said other lever, the other end portion of the ligature being trained over the pulley and anchored to said one lever in a manner to tighten the knot on said one end portion of the ligature when the levers are swung away from each other, actuating handles on the pivoted end portions of the levers, a resilient latch mounted on said one lever and engageable with the hook on the needle, and means for disengaging the latch from the hook when the needle is passing into the opening in said other lever, said means comprising a pivoted bar having an end portion disposed for swinging movement between the levers, said end portions being provided with an opening, the needle and the latch extending slidably through the opening, said bar engageable with the latch in a manner to disengage said latch from the hook, means for securing the bar to said other lever for swinging movement in unison therewith for stripping the knot and the tissue from the needle when the levers are swung away from each other.

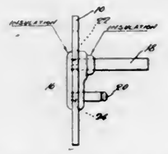
1,856,722. EXPANSION JOINT FOR PAVEMENTS AND THE LIKE. CLIFFORD OLDER, Wilmette, Ill. Filed May 24, 1929. Serial No. 365,661. 7 Claims. (Cl. 94—18.)

1. A pavement or the like comprising a pair of sections having adjacent edges, and means for connecting said sections and preventing filling of a crack between said edges, comprising a flexible sheet metal member having a substantially V-shaped bend extending longitudinally of said crack, and integral anchoring flanges extending into



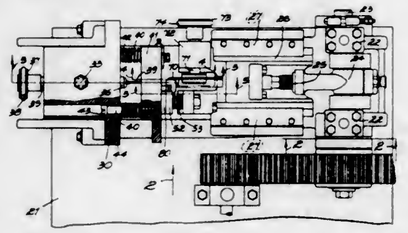
said pavement sections and formed on each side of said V-shaped bend, said pavement sections having their adjacent upper corners formed with surfaces substantially flush with the upper surface of said metal member.

1,856,723. MANUFACTURE OF BRUSH RIGGING. ALVA W. PHELPS, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 17, 1928. Serial No. 326,693. 2 Claims. (Cl. 171—324.)



1. A brush carrying rigging for a third brush generator, comprising in combination, a brush carrying bracket having two apertures, anchoring means anchored in one of said apertures, a pin with an annular recess embedded in the anchor, a stud having an annular recess embedded into the anchor, whereby the bracket, the pin and the stud are held in a relatively rigid position.

1,856,724. APPARATUS FOR MAKING APERTURED PIECES FROM STRIPS OF MATERIAL. ALVA W. PHELPS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 16, 1930. Serial No. 452,935. 6 Claims. (Cl. 29—33.)

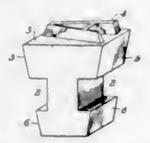


1. Apparatus for making apertured pieces from a strip of material comprising in combination, a strip holder, a hole making means located on one side of the strip holder, a rotary saw located on the other side of the strip holder, and means for causing relative movements to take place between the strip holder and saw and between the strip holder and hole making means in order that the saw and hole making means may operate upon the strip.

6. Apparatus for making apertured pieces from a strip of material comprising in combination, a strip holder,

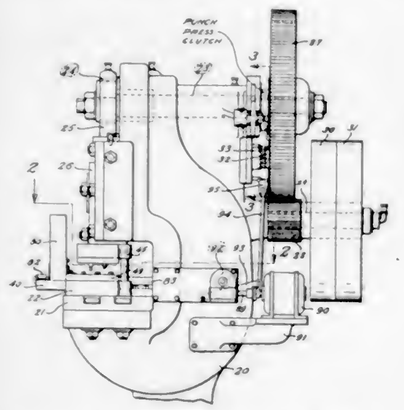
hole making means located on one side of said strip holder, strip cutting means located on the opposite side of a strip holder, and means for causing relative movement to take place between the strip holder and strip cutting means, and thence concurrent movement of the strip holder means and strip cutting means relative to the hole making means.

1,856,725. TYPE FOR AUTOMATIC TYPESETTING MACHINES. FRANK H. POEPPELMEIER, Dayton, Ohio, assignor to The Set-O-Type Company, Dayton, Ohio, a Corporation of Ohio. Filed May 26, 1930. Serial No. 455,551. 3 Claims. (Cl. 101—398.)



1. A type for automatic type-setting machines, comprising a key-stone shaped casting formed with oppositely disposed grooves in its two edge portions, the outer faces of said edge portions tapering inwardly, on each side, at the same angle, from top to bottom, for the purpose specified.

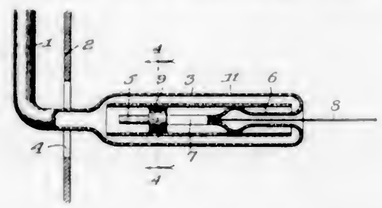
1,856,726. APPARATUS FOR FORMING COUNTERSUNK HOLES. LORA E. POOLE, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,614. 4 Claims. (Cl. 29—33.)



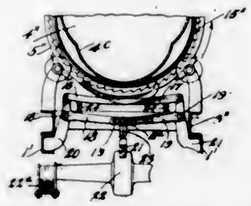
1. Apparatus for forming countersunk holes in pole pieces comprising, in combination, cooperating punch and die members for piercing holes in the work piece, cooperating countersinking blocks having conical portions adapted to enter opposite ends of the hole in the work piece and to be forced against the material surrounding the hole, means for reciprocating the punch and one of the countersinking blocks, and means for feeding the work pieces successively through the apparatus.

1,856,727. ELECTRODE. RALPH W. REITHERMAN, Oak Park, Ill., assignor to Flashtric Sign Works, a Copartnership composed of Fred Parker and Harry S. Parker, Chicago, Ill. Filed Apr. 5, 1929. Serial No. 352,706. 9 Claims. (Cl. 176—122.)

1. An electrode unit for luminescent gas discharge tubes, comprising a seal tube having its inner end closed to form a seal, an electrode element at the inner end of said seal tube, a lead-in wire sealed in said seal and supporting the element out of contact therewith, and a packing of non-conducting material wrapped about and completely enclosing the portion of the wire between the element and the seal.

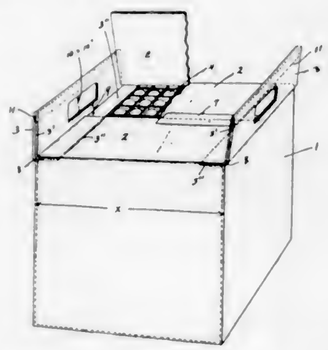


1,856,728. TRANSIT MIXER ACTUATING MEANS. JOHN F. ROBB, Cleveland Heights, Ohio. Filed May 2, 1930. Serial No. 449,802. 10 Claims. (Cl. 83—73.)



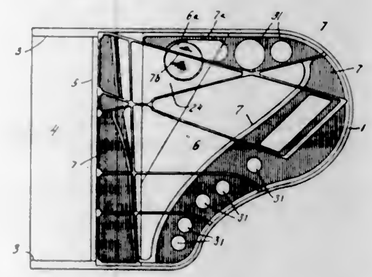
1. In a transit mixer, a supporting truck, a stirring barrel, guide members for supporting said barrel on said truck, certain of said guide members being yieldably carried by the truck to permit relative movement between the barrel and truck, and cooperating means on said truck and barrel for rotating the barrel upon vertical movement of the truck with respect to the barrel due to the unevenness of a road-bed over which the truck may be operated.

1,856,729. FIBER SHIPPING CASE. JOSEPH F. ROBINSON, San Francisco, Calif., assignor to Schmidt Lithograph Company, San Francisco, Calif., a Corporation of California. Filed Oct. 6, 1930. Serial No. 486,564. 7 Claims. (Cl. 229—52.)



1. A fiber box having a rectangular body with flaps extending from the upper edges of its side walls, two of said flaps arranged to fold toward one another over the top of the box, and the other two projecting above the box substantially in the planes of the side walls respectively from which they extend and being doubled downward upon themselves and provided with hand grip openings, the two projecting flaps spaced to permit nesting of a similar size box therebetween when the boxes are piled.

1,856,730. PIANO LOUD SPEAKER. EMILIUS W. SCHERR, Jr., New York, N. Y., assignor to The Aeolian Company, a Corporation of Connecticut. Filed May 31, 1929. Serial No. 367,235. 3 Claims. (Cl. 181—27.)

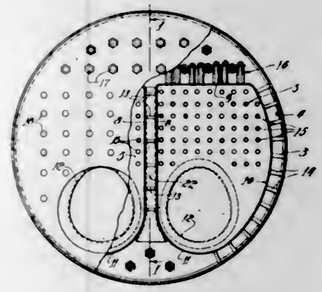


1. In combination, a horizontal piano with its case and lid; a construction within said case including the piano sound board which partitions the interior of said case into an upper space and a lower space, said spaces being connected by an opening located at the bass front corner of the sound board; and a hornless vibratable diaphragm loud speaker supported with the margin of its diaphragm at the margin of said opening with the diaphragm closing said opening.

1,856,731. PURIFICATION OF ZINC SOLUTIONS. WILLIAM SEQUINE, Jr., Newport, Del., assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 20, 1929. Serial No. 387,271. 2 Claims. (Cl. 23—125.)

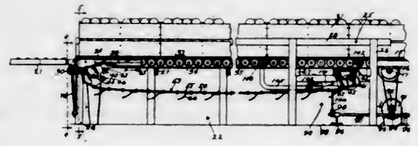
1. Process for the purification of solutions of zinc sulphate from nickel, which comprises heating the solution in the presence of zinc dust and stannous chloride.

1,856,732. STEAM BOILER. CHARLES A. SELEY, Chicago, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed July 25, 1929. Serial No. 380,780. 1 Claim. (Cl. 122—410.)



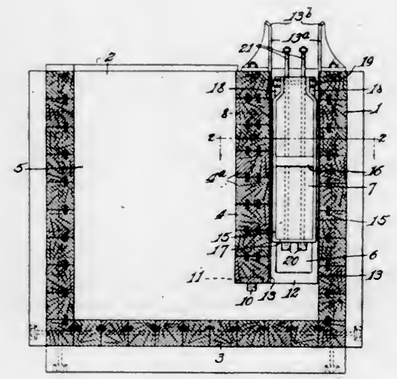
A steam boiler embodying therein a shell, a plurality of laterally spaced combustion chambers therein, a furnace opening into each combustion chamber, and means arranged between said combustion chambers and cooperating with the sides thereof to provide an unrestricted duct open at its top and bottom, said duct being substantially coextensive with the sides of the combustion chambers, with its upper end terminating substantially at the level of the tops of said combustion chambers and operating to draw water from the bottom of the boiler and to discharge the same adjacent the top ends of the combustion chambers.

1,856,733. PACKED BOX ACCUMULATOR. WINFRED P. SHEPHERD, Pasadena, Calif. Filed Oct. 1, 1929. Serial No. 396,434. 4 Claims. (Cl. 198—198.)



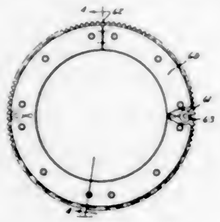
1. In a power conveyor for boxes, the combination of: a track upon which a series of boxes to be conveyed are adapted to travel; an endless member, a flight of which passes adjacent said boxes; yieldable friction means carried by said endless member and engaging said boxes; and power transmitting means actuating said endless member to cause said friction means to engage and move said boxes along said track.

1,856,734. PICKLING TANK. CHARLES SHRIVER, Massillon, Ohio. Filed Sept. 23, 1931. Serial No. 564,531. 8 Claims. (Cl. 266—7.)



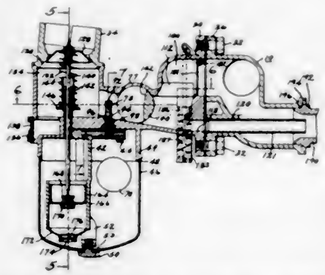
1. In a pickling apparatus, the combination with a tank, of a wood partition wall located in parallel spaced relation to a side wall of the tank and dividing the interior of the latter to form separate pickling and fluid displacement chambers, said wall having a passage thereunder through which fluid may course back and forth between said chambers, a metallic guide frame rigidly mounted on said tank within each of the opposite ends of said displacement chamber and forming a runway, a plunger for vertical reciprocation in said displacement chamber, said plunger having its ends at least partially encased and slidable within said runways.

1,856,735. MULTIPLE DISK CLUTCH. CHARLES BEERS SPASE, Syracuse, N. Y. Filed May 15, 1930. Serial No. 452,704. 2 Claims. (Cl. 192—69.)



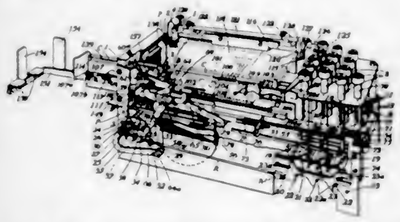
1. In a friction clutch of the multiple disk type, a driving disk provided with slots cut part way through the ring and adapted to receive expansion rings within the slots.

1,856,736. CHARGE FORMING DEVICE. WILFORD H. TEETER, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,243. 17 Claims. (Cl. 123—52.)



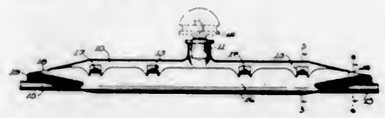
1. A charge forming device for internal combustion engines comprising a mixing chamber, means for supplying fuel and air thereto, means effective under certain operating conditions for separating said mixture into its heavier and lighter constituents, separate means for conveying the heavier and lighter constituents of the mixture to a point adjacent an engine intake port, means for remixing said heavier and lighter constituents of the mixture, and means for preventing the separation of the mixture as described under certain operating conditions.

1,856,737. PUNCHING OR LIKE MACHINE. ARTHUR THOMAS, Thornton Heath, and RICHARD FITZ POWER, Hampstead, London, England, assignors to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed Aug. 9, 1929, Serial No. 384,601, and in Great Britain Aug. 20, 1928. 19 Claims. (Cl. 164—112.)



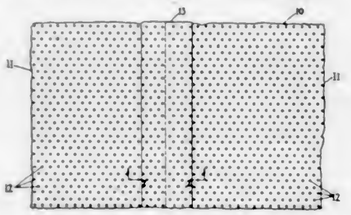
1. In a key operated perforating machine the combination of a reciprocable member, operative connections between the keys and said reciprocable member, a plurality of punches, a striker for operating said punches, a positive operative connection between the striker and the punches and means connecting the striker to the reciprocable member to convert the linear movement in one direction of the reciprocable member into a reciprocating movement of the striker, whereby on depression of a key the striker causes the punches both to punch and withdraw during one movement in one direction only of the reciprocable member.

1,856,738. TROLLEY EAR. MICHAEL ZASS, Wauwatosa, Wis., assignor to The Milwaukee Electric Railway & Light Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 30, 1930. Serial No. 424,607. 5 Claims. (Cl. 191—43.)



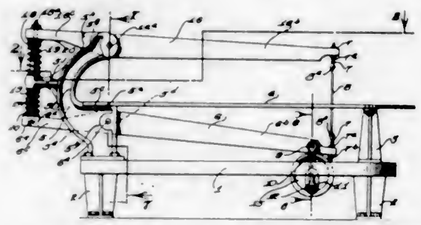
1. A trolley car comprising a body member adapted to be suspended from a support and having a lower edge adapted to receive a trolley wire thereagainst, there being openings in the side walls of said body member, and a metal channel member embracing said body member and said trolley wire and having bendable clinching ears entering the side openings of said body member for firmly retaining said trolley wire on the car.

1,856,739. PROJECTION SCREEN. CORNELIUS A. ALT and ROBERT A. MCLEAN, Newburgh, N. Y., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 6, 1929. Serial No. 412,019. 8 Claims. (Cl. 88—24.)



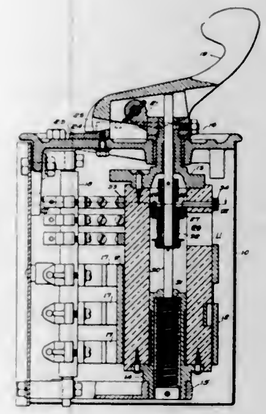
1. A method of making motion picture projection screens, which comprises placing strips of coated fabric, suitable for the projection of images thereon, side by side with their adjacent edges butted, softening the coating adjacent the edge portions of these strips, and applying a softened strip of flexible transparent plastic sheet material thereto.

1,856,740. JIG SAW. ROBERT H. ANDERSON, San Diego, Calif., assignor of one-half to A. B. Bowman, San Diego, Calif. Filed Mar. 6, 1929. Serial No. 344,684. 2 Claims. (Cl. 143—73.)



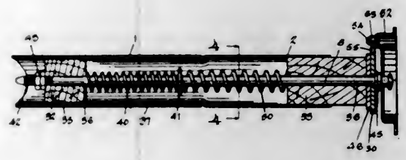
1. In a jig saw, a pair of spaced apart saw blade levers, a common support therefor for supporting the pivotal points of said levers in vertical relation, said support having an arm portion extending intermediate said levers a saw blade connected between corresponding extended ends of said levers, and dampening means extending between said saw blade levers and said arm portion for dampening the shock upon said saw blade levers.

1,856,741. SELECTOR SWITCH. BASCUM O. AUSTIN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan 20, 1930. Serial No. 421,931. 12 Claims. (Cl. 200—4.)



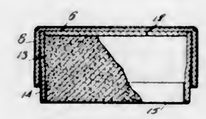
1. In a controller, in combination, a hollow drum, a control switch mounted inside of the hollow drum, and a handle disposed for movement in a plurality of planes to operate the drum and the control switch independently.

1,856,742. CURTAIN ROLLER. KARL A. BENZEE, Toledo, Ohio. Filed Jan. 5, 1931. Serial No. 506,599. 2 Claims. (Cl. 156—36.)



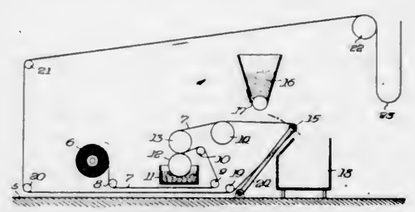
1. In a curtain roller, a pair of interconnected shell units, one of the pair of shell units having a shaft, a counter-balancing spring connected to the shaft and to the shell for moving the roller, the other of the pair of shell units having a spindle, an elastic element located within the last named shell unit connected to the spindle for moving the spindle endwise with respect to the shell, a frictional washer, a second elastic element located in the last named shell for causing engagement of the curtain roller with the frictional washer for controlling the rotative movements of the curtain roller produced by the counter-balancing spring.

1,856,743. POWDER BOX. ERNEST E. BROOKS, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1929. Serial No. 353,998. 4 Claims. (Cl. 93—55.)



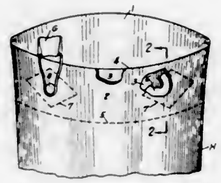
1. A method of making boxes for containing powder or the like, comprising forming a normally non-tacky, adhesive coating upon the interior bottom margins of a box shell, heating said coating to render it sticky, and pressing the open end of a powder containing drum into said shell and against the sticky coating.

1,856,744. PROCESS AND APPARATUS FOR COATING. RICHARD P. CARLTON, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a Corporation of Minnesota. Filed Nov. 10, 1928. Serial No. 318,429. 8 Claims. (Cl. 91—68.)



2. In the method of making an abrasive article, the steps which comprise applying an adhesive upon one side of a backing material and while the adhesive is plastic, depositing a grit or layer of abrasive particles upon the adhesive coated side of said backing, and diverting the abrasive from the adhesive coated side in a direction away from the adhesive for removing the excess of said particles while the adhesive is still plastic, and continuously feeding the backing so prepared without external pressure upon the abrasive coated surface from the point of deposition of grit until the adhesive is set.

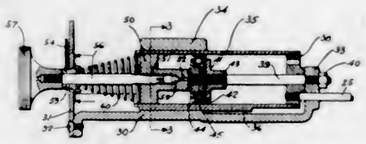
1,856,745. REENFORCED AND RUN-PROOF HOSIERY. ABRAM CAHSON, Philadelphia, Pa. Filed Sept. 11, 1931. Serial No. 562,294. 1 Claim. (Cl. 2—240.)



In a double welt stocking, means for broadening out the line of strain produced by the pull of a garter on said stocking into an area down the length of the stocking

of sufficient width to reduce the strain along said line to a point below that necessary to cause a run, said means consisting of a piece of fabric sewed in between the two thickness of the welt by a line of stitching extending around the said piece of fabric and which passes through both thicknesses of the welt, the area within said line of stitching providing a space for the direct attachment of a garter to said stocking.

1,856,746. CARBURETOR CHOKE CONTROL. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 20, 1929. Serial No. 387,216. 4 Claims. (Cl. 188—94.)



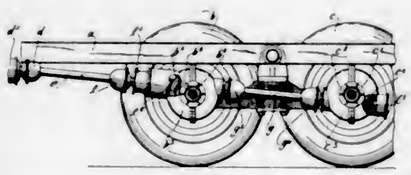
1. A dash pot control device comprising in combination; a cylinder; a piston; an actuator adapted to be operated to cause relative movement between the piston and cylinder; a valve for controlling the operation of the device, said valve being adjustable by the rotation of the actuator to vary the operation of said device.

1,856,747. CONTAINER WALL AND BUSHING FITTING IN COMBINATION THEREWITH. EARL E. COOPER, Decatur, Ill., assignor to Chambers, Bering, Quinlan Company, Decatur, Ill., a Corporation. Filed Feb. 27, 1931. Serial No. 518,772. 5 Claims. (Cl. 285—49.)



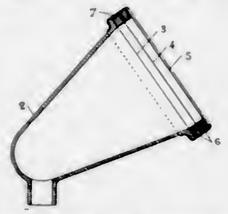
1. A bushing having a flange provided with a recess on its under side and having an outer wall whose inner side is non-circular defining a non-circular outer limit to said recess, in combination with a sheet metal container wall having an opening through which the bushing extends and which is formed with a raised boss portion whose outside wall is non-circular and encompassed and engaged by said non-circular inner side of said outer wall about the recess to hold said bushing from rotation; and an integral annular flange clinched about the wall defining said opening for securing said bushing in place on said container wall.

1,856,748. DRIVING MECHANISM FOR MOTOR VEHICLES. FLOYD E. DAVIS, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,631. 6 Claims. (Cl. 180—22.)



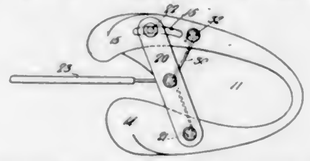
5. A vehicle having a plurality of parallel driving axles, differential mechanisms associated with each axle, a power apportioning means for apportioning power between the differentials, a propeller shaft driving the apportioning means, a shaft section above and forward of the driving axles and driven by the apportioning means for driving the forward axle, a shaft section between the axles, passing under the rear axle and aligned with the propeller shaft and driven by the apportioning means, and means between the last named shaft section and the rear axle and rearwardly of the said axle for driving the rear differential.

1,856,749. VIBRATING FILM FOR ACOUSTIC DEVICES. FERNAND LESIEURE DESBRIÈRE, Marseille, France. Filed Apr. 23, 1930, Serial No. 446,603, and in Germany May 15, 1929. 4 Claims. (Cl. 181—27.)



1. In an acoustic device, the combination of: a sound reproducing device; a sound emitting member co-operating with said sound reproducing device; a plurality of thin flexible flat air-tight easily vibrating films made of non-sonorous material which are arranged parallel to one another at the extreme sound emitting end of said sound emitting member and the outermost one of which is in contact with the atmosphere; a plurality of non-vibrating rings on which said films are mounted and by which said films are spaced so as to form closed spaces between them; whereby the innermost one of said films is caused to vibrate by variations of the pressure of the air contained in the sound emitting member and the remaining films are caused to vibrate by variations of the air pressure in the closed spaces, said films being final producers of sounds.

1,856,750. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Apr. 16, 1931. Serial No. 530,514. 6 Claims. (Cl. 12—128.5.)

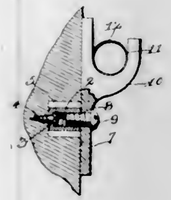


1. An expansible toe form comprising a body portion including a cone having spaced side walls, a cross brace connecting said side walls and being pivotally secured at one end to one side wall and slidably secured at the other end to the other side wall so that the cross brace is pivotally movable between a position in which the side walls are expanded and a position in which the side walls are contracted, and a resilient wire secured at one end to the pivotal connection of the cross brace and side wall, at the other end to the other side wall and intermediate its ends to the cross brace, said wire normally holding the cross brace in the first of said positions while permitting its movement into the second of said positions.

1,856,751. PROCESS OF PREPARING METAL SHEETS FOR ANNEALING. LOUIS C. DREFAHL, Lakewood, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 17, 1930. Serial No. 436,643. 2 Claims. (Cl. 148—4.)

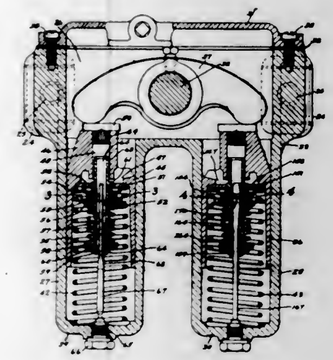
2. In a process of manufacturing sheets of ferrous metals which comprises operations of rolling, pickling and annealing, the step of coating the pickled sheets with a dilute solution of sodium compound selected from the group of sodium salts consisting of sodium sulfate, sodium chloride, sodium carbonate, sodium phosphate and sodium borate, and annealing said coated sheets.

1,856,752. CURTAIN SUPPORT. FLORA ELLINGER, Milwaukee, Wis. Filed July 11, 1930. Serial No. 467,274. 2 Claims. (Cl. 156—22.)



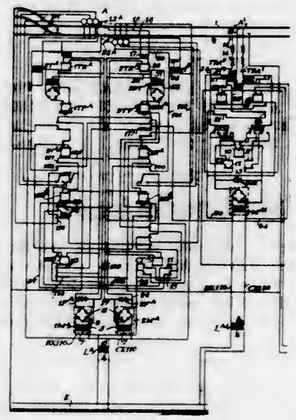
1. A device of the class described including a socket, lateral wings upon opposite sides thereof, and internal screw threads within said socket.

1,856,753. DOUBLE ACTING SHOCK ABSORBER. GEORGE W. ELSEY, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 15, 1928. Serial No. 312,461. 10 Claims. (Cl. 267—8.)



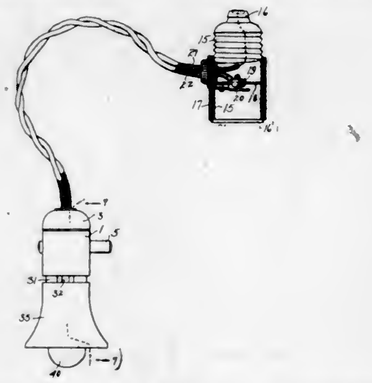
1. A shock absorber comprising in combination, a casing presenting a fluid reservoir and two cylinders, a piston in each cylinder, means for moving the piston in either direction, valves in each piston, one set of valves providing for the free flow of fluid from the fluid reservoir into the spaces beneath said pistons in response to the movement of said pistons in one direction, the other set of valves each having parallel passages one continually open, the other normally closed, both providing for the return flow of fluid from the cylinders to the reservoir at a restricted rate when the pistons are moved in the other direction; and metering means adapted to cooperate with the second mentioned set of valves of each piston, said metering means maintaining the restriction to the return flow of fluid from the one cylinder substantially constant and causing the valve of the other cylinder to gradually, decreasingly restrict the return flow of fluid from said other cylinder.

1,856,754. RAILWAY TRAFFIC CONTROLLING APPARATUS. CHARLES W. FAILOR, Forest Hills, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 17, 1930, Serial No. 496,109. Renewed Oct. 2, 1931. 17 Claims. (Cl. 246—33.)



1. In combination, a track section, a track circuit including the traffic rails of the section, a source of current to normally supply the track circuit with current of a given character periodically interrupted, a second source of current to supply the track circuit with train-governing current of a different character periodically interrupted, a track relay connected to the track circuit responsive to the periodically interrupted current of said given character and not responsive to the periodically interrupted current of said different character, a wayside signal, and means controlled by the track relay to govern the operation of the wayside signal and to control the supply of periodically interrupted train-governing current of said different character to the track circuit of another track section.

1,856,755. NIGHT LAMP AND SWITCH THEREFOR. ALBERT W. FRANKLIN, New York, N. Y. Filed Jan. 29, 1929. Serial No. 335,949. 1 Claim. (Cl. 176—10.)



A night lamp unit of the type described, comprising a standard plug for insertion in a standard socket, a tubular extension affixed to said plug, an outlet in said extension, a transverse wall of insulating material in said extension forming the head of a standard lamp socket, an electrical connection between one contact of said socket and one contact of said plug, an electrical connection between the other contact of said ping and one contact finger

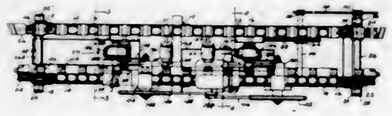
of a switch, an electrical connection between the other contact of said socket and the other contact finger of said switch a socket mounted on said switch the respective contacts thereof being connected to the respective switch fingers of the switch, means for short-circuiting the switch fingers and the socket supported by the switch, the switch and socket thereon being physically separated from the plug and socket unit.

1,856,756. METHOD OF TREATING WOOD AND WOODEN ARTICLE PRODUCED THEREBY. NICHOLAS F. FRIGIOLA, Fairview, N. J. Filed Dec. 6, 1928. Serial No. 324,125. 11 Claims. (Cl. 99—12.)



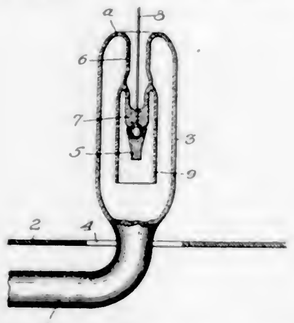
5. The herein described method of treating wood to render it non-inflammable, which comprises the step or steps of impregnating the wood first with a sugar and then with a dilute non-volatile acid capable of slowly carbonizing both the wood and the sugar by dehydration of the latter.

1,856,757. ARMATURE COATING MACHINE. LOUIS C. GOAD, Muncie, Ind., assignor to Delco-Remy Corporation, Muncie, Ind., a Corporation of Delaware. Filed Mar. 8, 1929. Serial No. 345,435. 11 Claims. (Cl. 113—95.)



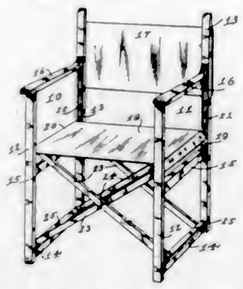
1. A machine for preparing the leads of armature conductors which are located in slots provided by the riser bars of the commutator for soldering the leads to the lead receiving portions of the riser bars, comprising, in combination, a device to coat the end of the armature shaft adjacent to the commutator with a liquid to prevent solder from adhering thereto; a device for spraying the flux only on the portions to be soldered; and means for conveying the armature to said devices.

1,856,758. ELECTRODE. ARTHUR L. GODDARD, Chicago, Ill., assignor to Flashtric Sign Works, a Copartnership composed of Fred Parker and Harry S. Parker, Chicago, Ill. Filed Apr. 5, 1929. Serial No. 352,648. 1 Claim. (Cl. 176—126.)



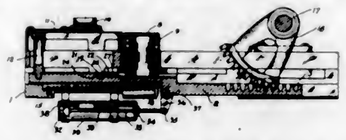
An electrode unit for luminescent gas discharge lamps, comprising a reentrant seal tube closed at its inner end to privide a seal, an electrode element at said seal, a lead-in wire sealed in said seal and connected to said element, and an open ended tubular glass shield surrounding the element and the seal and joined to the tube beyond said seal, said tube having a bulb blown therein beyond the seal so that the shield may be joined thereto with its wall maintained substantially uniform in thickness at its junction with the tube.

1,856,759. COLLAPSIBLE CHAIR. GEORGE T. GRONDIN, Collinsville, Conn. Filed Sept. 27, 1930. Serial No. 484,819. 2 Claims. (Cl. 155—140.)



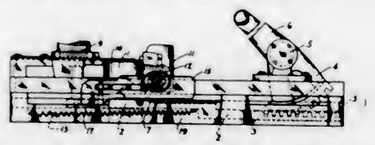
1. In a portable collapsible chair, a pair of upright side frames having horizontal arm rests, a flexible back connecting the upper rear ends of said side frames, a pair of inclined cross-frames pivoted together intermediate their ends, said cross-frames being pivotally secured to the bottoms of said side frames, rectangular slidable bars at the upper ends of said cross frames and connected together by a flexible seat, said slidable bars having oppositely extending pin members below the centers of said bars, and said side frames being provided with slots below said arm rests to slidably receive said pin members, the upper surfaces of said slidable bars being inclined when the chair is open to elevate said seat and being horizontal when the chair is closed so as to fit snugly under said arm rests.

1,856,760. EMBOSSING AND VENDING APPARATUS. GEORGE W. HEENE, Cleveland, Ohio. Filed Oct. 6, 1930. Serial No. 486,587. 2 Claims. (Cl. 197—6.7.)



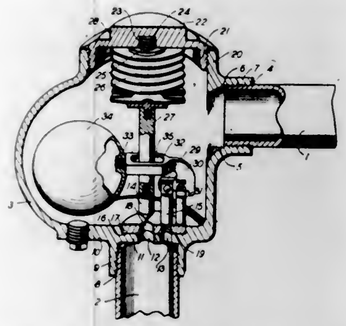
1. In an embossing and vending apparatus, a chuck, a blank supporting and ejecting core in the chuck, a slide supporting the core and the chuck, means for operating said slide, said slide having chuck and core engaging tracks, and bearing rollers carried by the slide and arranged so that the chuck and core bearing surfaces of said tracks lie substantially tangent to the bearing surfaces of the rollers.

1,856,761. EMBOSSING AND VENDING APPARATUS. GEORGE W. HEENE, Cleveind, Ohio. Filed Oct. 6, 1930. Serial No. 486,588. 2 Claims. (Cl. 197—6.7.)



1. In an embossing and vending apparatus, the combination with a blank feeding mechanism, and releasable means for holding the blank during the embossing operation, and a slide for releasing said releasable means, of a discharge chute to receive a finished blank, and a slidable gate operating to close the mouth of the chute and delay the delivery of the blank therefrom, said gate being supported on said slide and movable therewith and across the mouth of the chute.

1,856,762. STEAM TRAP. MARTIN HAUSER, Kansas City, Mo., assignor to General Heating Specialty Company, Kansas City, Mo., a Corporation of Missouri. Filed Jan. 27, 1930. Serial No. 423,727. 6 Claims. (Cl. 236—53.)

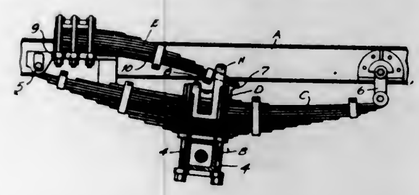


1. In a steam trap, a hollow body having an inlet and a plurality of outlet ports, a thermostatically controlled valve including a stem and a bellows mounted on the inner wall of the body controlling one of said ports, a float having an arm provided with a slot of permit said stem to pass therethrough pivotally mounted in the body and a valve operable by said float controlling another of said ports, the slotted arm and stem co-acting to keep the valves aligned with their respective ports.

1,856,763. PROCESS OF PRODUCING LIME PRODUCT. WESLEY C. L. HEMEON, Rockland, Me., assignor to Rockland & Rockport Lime Corporation, Rockland, Me., a Corporation of Maine. Filed Feb. 15, 1930. Serial No. 428,830. 5 Claims. (Cl. 106—24.)

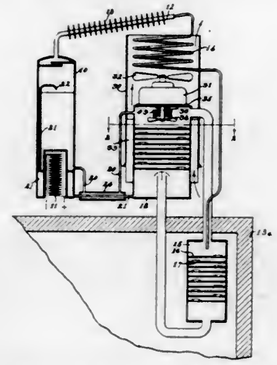
1. The process of producing a lime for plaster product which consist in slaking calcined limestone, in freeing the product from imperfectly slaked portions, in adding an ingredient of ultimate retardant tendency, and in re-calcining.

1,856,764. SPRING CONSTRUCTION. CHRISTIAN J. HUG, Highland, Ill. Filed June 6, 1929. Serial No. 368,761. 1 Claim. (Cl. 267—45.)



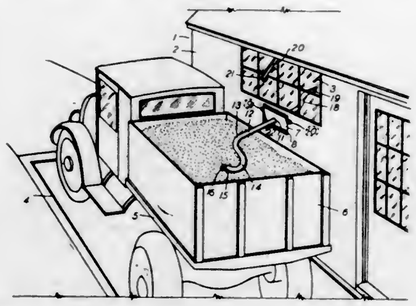
A vehicle spring mechanism comprising a chassis side-sill; a semi-elliptic spring having one terminal suspended from said sill by a link and the opposite end mounted on said sill by a pivot; a bracket secured to said sill in proximity to said pivot; a quarter-elliptic spring having its butt end mounted on said bracket; a buffer member centrally mounted upon said semi-elliptic spring, said buffer member having a loop encircling the free end of said quarter-elliptic spring and a series of upwardly projecting shoulders arranged to successively contact with and support the bottom leaf of said quarter-elliptic spring as the load of the vehicle is increased.

1,856,765. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,496. 7 Claims. (Cl. 62—119.5.)



1. In refrigerating apparatus of the partial pressure type a closed circuit including an absorber and an evaporator, means in the circuit for circulating inert gas, means outside the circuit for circulating air to cool the absorber, and a common driving means for operating both the circulating means.

1,856,766. GRAIN SAMPLER. HARRY H. HUNTER, Attica, Kans. Filed Apr. 11, 1930. Serial No. 443,359. 9 Claims. (Cl. 83—15.)

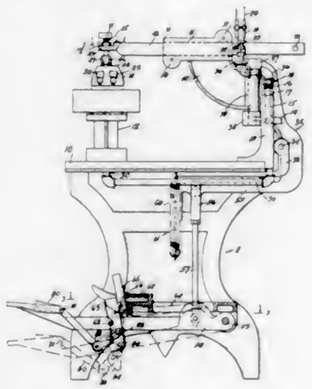


1. A grain sampler including a support, and an imperforate tubular member having one end bent at an angle to the remainder of said member rotatably mounted on the support and adapted to conduct a sample of grain therethrough.

1,856,767. TREADLES FOR PRESSING MACHINES AND THE LIKE. TOBIAS G. JASPER, Brooklyn, N. Y. Original application filed June 4, 1931, Serial No. 542,052. Divided and this application filed Oct. 30, 1931. Serial No. 572,022. 3 Claims. (Cl. 74—39.)

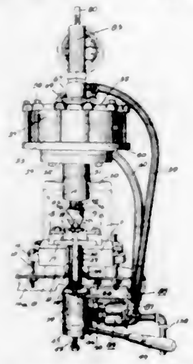
1. In a pressing machine having a depressible iron, a foot lever in operative engagement therewith for depressing same, a toothed rack pivotally mounted on the foot

lever, a pivotally mounted pawl for locking engagement with the said rack when the foot lever is depressed a predetermined distance, a second depressible foot lever, a



slotted link operatively connecting the said second foot lever to the rack, a cam face on the said rack, and a roller on the second foot lever adapted to engage the said cam face to disengage the said rack from the said pawl.

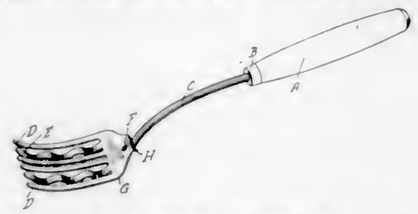
1,856,768. ASSEMBLING APPARATUS. SIGURD N. JOHNSON and CHARLES E. BIRCH, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed June 15, 1931. Serial No. 544,638. 18 Claims. (Cl. 29—86.)



1. A machine for assembling a rod with a plate and for testing the tightness of fit between the assembled members, comprising in combination, a work holder for supporting both members to be assembled and having means for firmly holding one of the assembled members while applying a force to the other member tending to disassemble the members, an assembling device effecting relative movement between both members, a testing device which applies a force to one of the assembled members tending to disassemble them, and a control means which renders the testing device inoperative when the assembling device is operative and vice versa.

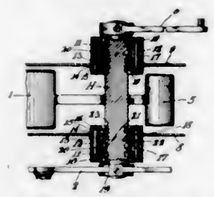
1,856,769. CULINARY IMPLEMENT. CHARLES EDWARD LATSHAW, Minneapolis, Minn. Filed Nov. 3, 1930. Serial No. 493,156. 1 Claim. (Cl. 259—144.)

In a utensil of the class described, a flat base having a hand attached thereto, flat tines inclined with respect to the flat base, said tines being in substantial parallel relation and substantially in line, certain tines being straight and certain tines formed with wave portions therein, said waved tines being positioned intermediate of the straight tines, the top edges of the waved tines being



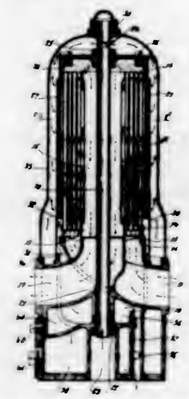
positioned in a plane below the plane of the top edges of the straight tines, and the bottom edges of the waved tines being positioned in a plane below the plane of the bottom edges of the straight tines.

1,856,770. BEARING AND SHAFT. FRED I. LAUTER, New York, N. Y. Original application filed Jan. 18, 1929, Serial No. 333,346. Divided and this application filed Aug. 7, 1930. Serial No. 473,622. 4 Claims. (Cl. 308—189.)



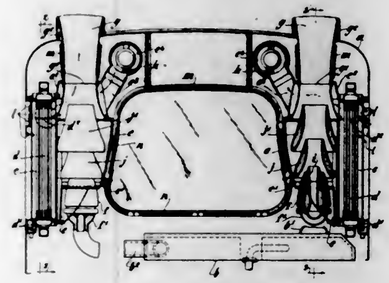
1. A journal for shafts, said journal comprising a pair of metallic rings constituting ball races surrounding the shaft adjacent opposite ends of the shaft, the shaft having a pair of annular grooves therein constituting ball races mating with the first mentioned ball races, balls within said races, the shaft having other annular grooves therein at opposite sides of the first grooves respectively, and a plurality of felt washers fixed to said metallic rings and engaging within the last mentioned grooves to protect said ball races.

1,856,771. COMBINED OIL COOLER AND CLEANER. BRUNO LOEFFLER, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed July 22, 1931. Serial No. 552,359. 5 Claims. (Cl. 257—226.)



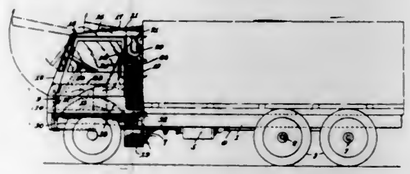
1. A heat interchange device comprising a chambered base member formed with independent ducts, heat interchange elements disposed upon the base and communicating with certain of the ducts therein, means to provide a duct for conducting fluid from other of the ducts around the heat interchange elements, and a strainer mounted about the heat interchange elements.

1,856,772. COOLING SYSTEM. ALFRED F. MASURY, New York, N. Y., and CHARLES FROESCH, Teaneck, N. J., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Original application filed Mar. 27, 1928, Serial No. 265,136. Divided and this application filed July 29, 1930. Serial No. 471,526. 2 Claims. (Cl. 180—1.)



1. A vehicle construction comprising a compartment formed at the rear of the vehicle, side radiators in the compartment, housings communicating with the radiators, exhaust stacks passing through the housings, and means to cause the exhaust gases to draw cooling air through the radiators and into the stacks, the walls of the compartment and housings being curved to prevent drumming.

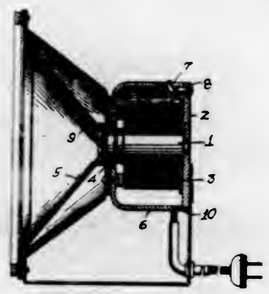
1,856,773. VEHICLE CONSTRUCTION. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 18, 1930. Serial No. 496,388. 7 Claims. (Cl. 180—54.)



1. A vehicle construction including a chassis, an engine mounted thereon at the forward end, an operator's seat mounted at one side of the engine, a radiator mounted rearwardly of the seat and engine, and a cab enclosing the radiator, seat and engine.

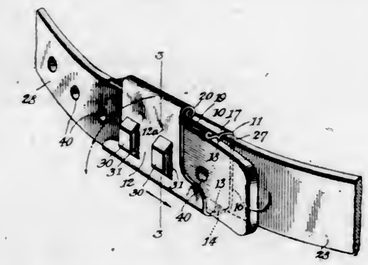
1,856,774. LOUD SPEAKER CONSTRUCTION. CARL A. MAYER, Springfield, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Nov. 15, 1930. Serial No. 495,841. 3 Claims. (Cl. 179—115.5.)

1. In a dynamic speaker, a base plate, a field core rigidly mounted thereon, a housing having one end open and an aperture in the opposite end into which said core projects when the closure plate is attached to the open end of the housing, means for connecting the closure plate to the rim of the housing while permitting a slight degree of adjustment of the closure plate to center the core in said aperture, and means engaging the closure plate and the rim of the housing to affix said plate in position to maintain the core in exact central position with respect to the aperture, said means and their points of engagement with



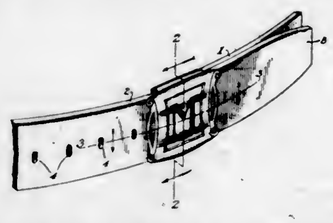
the housing indicating the true position to be assumed by the plate to center the core when the plate and core are replaced after removal.

1,856,775. BELT BUCKLE. ALBERT MEEHAN, New York, N. Y. Filed Nov. 14, 1930. Serial No. 495,625. 8 Claims. (Cl. 24—180.)



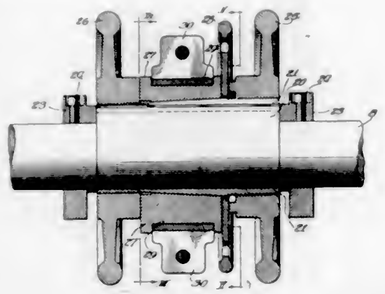
1. In a belt buckle, an inner part and an outer part hinged together, and having respective interlocking spring portions, means extending through the inner end and outer end of a belt at two points for locking the belt to the buckle, said points being spaced and in the axis of pull of the belt, and means for distributing the belt stresses equally to the inner and outer parts of the buckle.

1,856,776. BUCKLE FOR BELTS OR STRAPS. THOMAS A. MCDERMOTT and ALBERT MEEHAN, New York, N. Y.; said McDermott assignor to said Meehan. Filed Feb. 10, 1931. Serial No. 514,733. 9 Claims. (Cl. 24—180.)



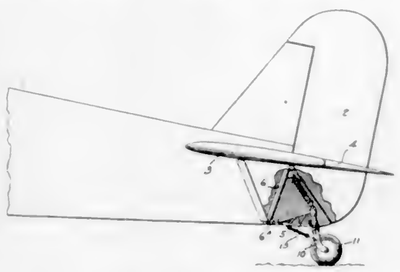
1. A belt buckle comprising, in combination with a belt member, a back plate, a latch plate interlocking with said back plate, and a front plate, all of said plates being hingedly connected together, means on said front plate for latching with said interlocked back and latch plates and means on said latch plate for holding the ends of said belt.

1,856,777. ECCENTRIC FOR SHAKING MECHANISM. MARTIN J. MOLLEN, Port Edwards, Wis., assignor to Nekoosa-Edwards Paper Company, Port Edwards, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1931. Serial No. 528,559. 10 Claims. (Cl. 92—45.)



1. An eccentric device for shaking machines comprising an eccentric drive shaft, a split tapered sleeve secured to said drive shaft, an eccentric bushing on said sleeve having a bearing surface, straps positioned around said bearing surface, said bushing being adjustable on said tapered sleeve to vary the eccentric throw of the straps from zero to the maximum throw of the eccentric drive shaft and eccentric bushing.

1,856,778. TAIL WHEEL FOR AIRCRAFT. CHARLES NORTON MONTEITH, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed Jan. 6, 1930. Serial No. 418,957. 7 Claims. (Cl. 244—2.)



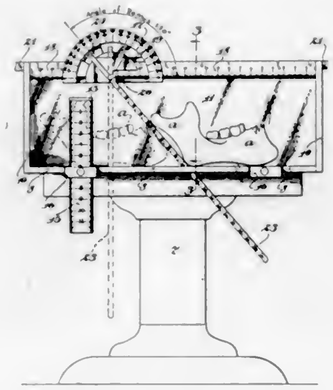
1. A device of the class described comprising a wheel pivotally mounted to a double wedge shape member, said member being swingably and yieldingly mounted to the fuselage of an airplane, a bridle attached to the double wedge shape member and another bridle attached to the supporting fork for the wheel, a resilient means interconnecting both bridles for keeping said wheel in alignment with said double wedge shape member.

1,856,779. MEASURING INSTRUMENT. GEORGE A. MONTELIUS, Minneapolis, Minn. Filed Nov. 12, 1928. Serial No. 318,937. 15 Claims. (Cl. 33—174.)

1. An instrument of the class described comprising a base member having a passageway, and a protractor the zero point of which is on a radial line that is parallel to the base member, said protractor having a swingable arm extending through said passageway and arranged for cooperation with the base member and the protractor for measuring the angle of an object on the base member.

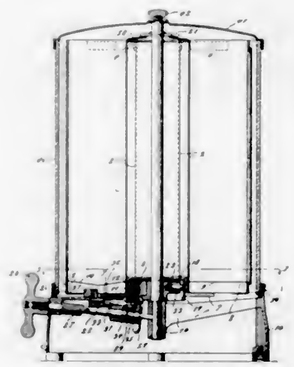
5. An instrument of the class described comprising a horizontal base member, a vertical back member, two vertical end members, a scale on the base member reading from one of the end members, and a square arranged to be positioned with one of its legs on the back member and its other leg intersecting the scale on the base member.

9. An instrument of the class described comprising a horizontal base member, a vertical end member having a scale passageway, and a scale insertable through said passageway for contact with an object on the base member and engaging the end member, said scale being readable at the end member.



15. An instrument of the class described, comprising a base member, a flat back member perpendicular to the base member and having on its inner face a reflecting surface, and an adjustable angle measuring device in front of the reflecting surface for measuring the angle of an object on the base member.

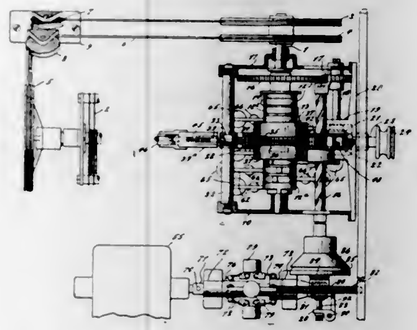
1,856,780. DISPENSING MACHINE. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Vending Machines, Inc., a Corporation of New York. Filed Nov. 19, 1929. Serial No. 408,180. 7 Claims. (Cl. 312—97.1.)



1. In a dispenser having a dispensing mechanism including a rotatable part to be driven and also having a rotatable driving member provided with an operating handle, the combination of step-by-step operating mechanism forming an operating connection between the said rotatable handle member and rotatable part comprising a rocking driving member positively connected to the rotatable handle member and having a one-way pawl-and-ratchet driving connection to the said rotatable part of the dispensing mechanism, a positively acting releasable locking device engageable with the said rotatable part of the dispensing mechanism for stopping the latter at the termination of each step of its rotative movement, and operating means for the said locking device connected to the said rotatable handle member, the said locking device comprising an automatically engaging slidable spring-pressed latch bolt mounted for transverse movement at its engaging end in a plane parallel with the axis of the said rotatable member of the dispensing mechanism, and the said operating means for the locking device comprising a double-faced cam mounted to rock to and fro past the said latch bolt so that one face of this cam will push back the latch bolt to its disengaged position and the other face of this cam will push the latch bolt aside and pass it in the return movement of the cam.

7. In an article dispenser, the combination of an upright delivery magazine rotatable on a vertical axis comprising a circular series of equidistantly spaced hollow columns provided with a bottom closure, the lower end of each such column being cut away laterally along circumferential lines to provide open spaces above the bottom closure and the said bottom closure being divided along circumferential lines into inner and outer radially separated parts so as to leave a slot between such bottom parts, a base frame upon which the magazine is mounted for rotative movement, and a stationary upwardly projecting ejector lug rigidly carried by the base frame to project above the said magazine bottom in line with the said open spaces and slots so that thereby upon rotation of the magazine packages will be successively pushed out into the open spaces between the said columns.

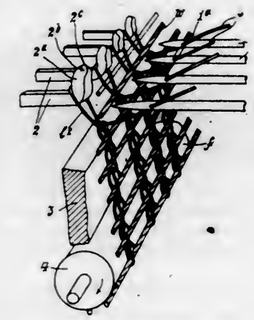
1,856,781. REMOTE CONTROL FOR RADIO TUNING DEVICES. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed Nov. 15, 1929. Serial No. 407,381. 21 Claims. (Cl. 250—40.)



1. In a radio receiving set, a movable member operatively connected to a tuning element of the set, a plurality of actuating members for the movable member having adjustable connection therewith, a single operating member for the several actuating members shiftable selectively into engagement therewith, a motor, and means operatively connecting the motor to the operating means including means for shifting the operating member.

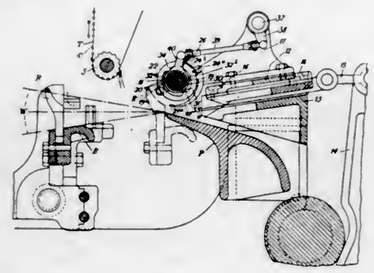
1,856,782. MANUFACTURE OF FABRICS. JAMES MORTON, Cramond Bridge, West Lothian, Scotland. Filed Oct. 21, 1930, Serial No. 490,281, and in Great Britain Nov. 2, 1929. 16 Claims. (Cl. 66—85.)

1. Mechanism for producing fabrics comprising an assembly of reciprocatory thread-guiding needles, loop-forming members cooperating with the respective needles to alternately engage and release the threads guided by said needles and thereby produce chains of stitches in said



threads and means for introducing connections between said chains of stitches to bind said chains together and thus produce a fabric.

1,856,783. LOOM FOR WEAVING TUFTED FABRICS. JAMES MORTON, Cramond Bridge, West Lothian, Scotland, and FRANCIS HERBERT OLDROYD, Radcliffe, near Manchester, England; said Oldroyd assignor to said Morton. Filed Oct. 28, 1930, Serial No. 491,746, and in Great Britain Nov. 21, 1929. 15 Claims. (Cl. 139—4.)

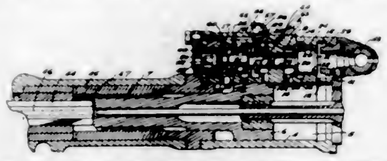


1. In or for a gripper loom for weaving fabrics and including means for feeding pile tufts in succession, a device for introducing said tufts to the fell of a fabric being woven and binding them therein, said device comprising a pair of side-by-side oscillatory arms with gripper fingers, a primary slide indirectly supporting the device, mechanism for moving said primary slide backwards and forwards so that said fingers are carried to-and-fro past the fell of the fabric, a secondary slide directly supporting the device and movably mounted on the primary slide, means for moving said secondary slide transversely of the primary slide, mechanism for opening and closing the fingers, mechanism for oscillating the arms between positions wherein the fingers close and open respectively to seize and release successive tufts, and means for independently shogging the arms during the operation of moving the device towards a tuft, seizing the tuft, withdrawing it and introducing it to the fell of the fabric, so that the tuft is effectively bound therein.

1,856,784. FLUID OPERATED TOOL. GUSTAV C. PEARSON, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,794. 13 Claims. (Cl. 121—10.)

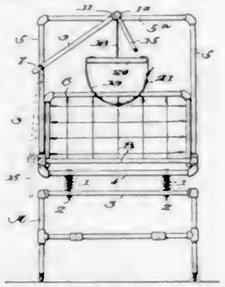
1. In a tool of the character set forth, the combination with a cylinder member and a piston operating therein,

of means for supplying motive fluid to the tool, an automatic valve for distributing the motive fluid to the piston to actuate it, means for permitting the exhaust to atmosphere of the fluid from the piston, fluid actuated means in addition to the automatic distributing valve for



cutting off the supply of motive fluid from the distributing valve to one end of the piston, and means for closing the exhaust to atmosphere and directing said exhaust to said fluid actuated means to move it to its operative position.

1,856,785. INVALID BED. EVERETT PHILLIPS, Leesburg, Va. Filed Aug. 20, 1931. Serial No. 558,384. 4 Claims. (Cl. 5—83.)



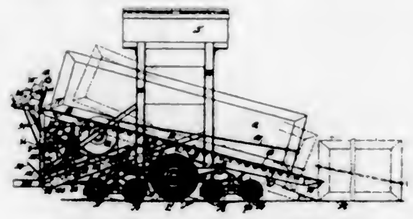
2. The combination with a bed having the usual vertical head and foot board frames, of a hoisting device comprising a shaft extending between said head and foot board frames and arranged to be supported thereon, a crank secured to said shaft for rotating the same, slings suspended from said shaft and constructed to be hoisted when the shaft is rotated, and connections between said shaft and bed whereby the former, when not in use, may be shifted laterally and downwardly into inoperative position at one side of the bed and supported from the latter in such position.

1,856,786. BUCKET WHEEL AND LIKE ROTATING MEMBER. CHESTER W. RICE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 16, 1931. Serial No. 569,286. 5 Claims. (Cl. 253—77.)



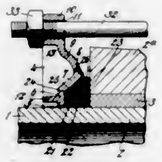
1. A rotating member having a groove extending about the axis of rotation as a center, and means in the groove for causing impact against the walls forming the groove, said means being freely movable in axial direction of the member whereby vibratory energy of the member may be abstracted.

1,856,787. VEHICLE. EUGENE W. SCHELLENTRAGER, Shaker Heights, and BRADLEY E. CLARKSON, Cleveland, Ohio, assignors to Atlas Bolt & Screw Company, Cleveland, Ohio. Filed Jan. 30, 1929. Serial No. 336,037. 4 Claims. (Cl. 180—22.)



1. A vehicle including an axle and driving wheels thereon, a truck forwardly of said axle, a truck rearwardly of said axle, a frame connecting said trucks, a platform pivoted onto said frame, the axis of the pivot located substantially vertically of said axle, and the outer end of one of said trucks and of said frame sloping downwardly to clear said platform when the same is pivoted so that one end thereof contacts a floor.

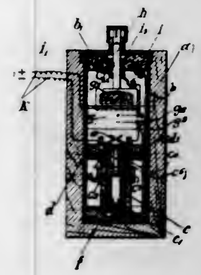
1,856,788. REPAIR CLAMP FOR BELL AND SPIGOT PIPE JOINTS. GROVER SEABERG, Bradford, Pa., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed July 31, 1930. Serial No. 472,011. 3 Claims. (Cl. 285—119.)



1. In a repair clamp for bell and spigot pipe joints, a clamping ring provided with an annular packing engaging flange, disposed substantially perpendicularly to the axis of the ring and located at a considerable distance from the inner face of the ring, the inner edge of said flange forming the pipe aperture of the ring, a substantially conical packing engaging flange integral with the outer edge of said perpendicular flange and extending therefrom substantially to the plane of the inner face of the ring, and an annular bracing flange integral with the outer edge of said substantially conical flange and extending outwardly therefrom, and in a direction away from the plane of the inner face of said ring, and provided at its outer edge with bolt engaging portions, said bracing flange being held at all times out of contact with the face of the bell.

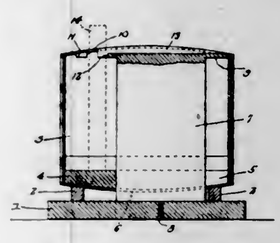
1,856,789. ELECTRICAL TIME SWITCH. HERMANN SCHULER, Dusseldorf, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Nov. 19, 1929, Serial No. 408,374, and in Germany Nov. 29, 1928. 4 Claims. (Cl. 200—33.)

1. In combination in an electric time switch, a source of current; means for controlling the strength of the current delivered from said source of current; a cell for producing gas electrolytically; conducting means completing a circuit which includes the source, the cell and the control means in series; and a circuit closing means constituting a movable closure of the cell, and being movable by virtue



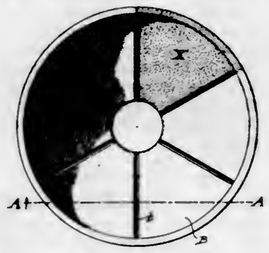
of the gas pressure produced in said cell, when said pressure exceeds a definite value, said circuit closing means being adapted to control any desired circuit.

1,856,790. CIGARETTE CONTAINER AND DISPENSER. ANTON SCHUMM, Cleveland, Ohio. Filed Nov. 26, 1930. Serial No. 498,449. 1 Claim. (Cl. 312—77.)



A cigarette dispensing device comprising a base, brackets adjacent each end of the base having a substantially semi-circular recess in its upper portion, a barrel shaped container normally resting in the recesses in the bracket and disposed in a horizontal plane, a bottom member in the container, said bottom member and the lower part of the container having longitudinal extending slots therein, a slot in the container located intermediate the ends thereof and the slot in the bottom part extending from one end thereof to an intermediate part which is in alinement with the adjacent end of the slot in the container, with the surface of the bottom part sloping inwardly and downwardly to the slot, a standard attached to the base and passing through the slot and having its ends and side walls guided by the walls of the slot in the container, the upper part of the container having a longitudinally extending slot therein extending from one end thereof to a point an appreciable distance from the other end, the last mentioned end of the slot having a semi-cylindrical end wall, a head formed on the upper end of the standard and of greater length than the width of the standard, one end of the head contacting an end of the container and the other end of the head being spaced from the semi-circular end walls of the slot in the upper part of the container and this end of the head having a vertically arranged notch therein of substantially semi-circular form which forms with the semi-circular end of the slot in the container, a circular opening, the upper edge of the head having a longitudinal groove therein extending from end to end of the head and a depending projection on the inner face of the top part of the container having its inner end in alinement with part of the cylindrical end wall of the slot in top of the container.

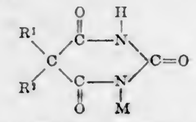
1,856,791. VIBRATOR FOR LOUD SPEAKERS. FUMIO SHIDA, Kawanishi-Cho, Kawabe-Gun, Hyogo-Ken, Japan. Filed Apr. 8, 1931. Serial No. 528,695, and in Japan Jan. 27, 1931. 4 Claims. (Cl. 181—32.)



1. A vibrator for a loud speaker provided with reinforced radial ridges.

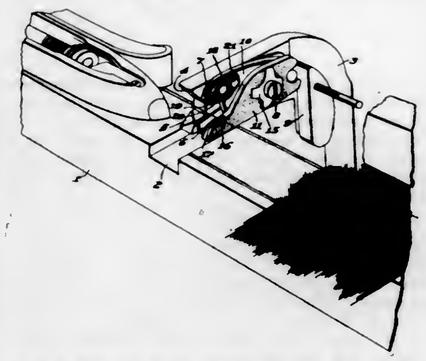
1,856,792. ANHYDROUS-ALKALI-METAL SALTS OF 5,5 - DI - ALIPHATIC - SUBSTITUTED BARBITURIC ACIDS AND PROCESSES OF PRODUCING THEM. HORACE A. SHONLE, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Filed June 22, 1929. Serial No. 373,051. 28 Claims. (Cl. 260—33.)

1. A practically anhydrous alkali-metal salt of a 5,5-di-aliphatic-substituted barbituric acid, represented by the following formula:



in which M is an alkali metal, R^1 is an aliphatic group containing five (5) hydrogen atoms, and R^2 is an aliphatic group containing not less than three (3) and not more than eight (8) carbon atoms, and R^1 and R^2 have no triple-bonded carbon atoms; which salt contains less than one percent (1%) of water and which dissolves in water to produce a clear solution.

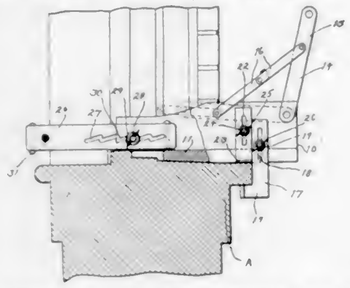
1,856,793. SHUTTLE FEELER THREAD PARTER AND CLAMP. WILLIAM L. SMITH, Newberry, S. C., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 2, 1931. Serial No. 534,476. 2 Claims. (Cl. 139—264.)



1. In a shuttle feeler thread parter and clamp, the combination of the shuttle feeler, relatively movable thread parting members mounted on the shuttle feeler, a fixed

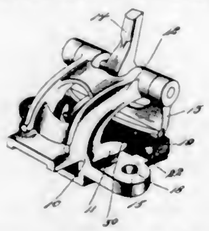
clamping member having thread supporting portion provided with a longitudinally extending groove, a movable clamping member secured in face to face relation with the movable parting member and having a pad of yielding material secured directly to the exposed face of the movable clamping member and extending from the side face thereof in overhanging relation with the longitudinal groove of the fixed clamping member with the lower edge thereof above the lower edge of the movable clamping member so that the thread to be clamped may be depressed by the lower edge of the movable clamping member and thereafter clamped into the groove by the pad of yielding material and held therein.

1,856,794. WINDOW CLEANER'S SEAT. RUDOLPH STALZER, Brooklyn, N. Y. Filed June 16, 1931. Serial No. 544,836. 2 Claims. (Cl. 304—24.)



1. A window cleaner's seat comprising a seat member having end walls, a pair of coacting clamping members slidably mounted on each end wall, one of said clamping members being provided with a jaw underlying the lower end of the other clamping member, and means for securing said clamping members in an adjusted position.

1,856,795. TENTER CLIP. WILLIAM A. STELLING, Providence, R. I., assignor to The Textile-Finishing Machinery Company, a Corporation of Rhode Island. Filed Sept. 8, 1930. Serial No. 480,409. 9 Claims. (Cl. 26—62.)

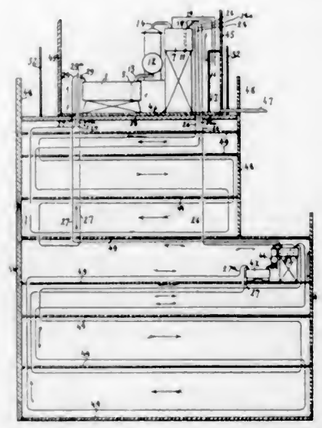


1. A tenter chain link comprising a body with recesses therein and having a portion providing a fixed jaw, a hingedly mounted gate thereon providing a movable jaw, and a plate having an opening therein on said fixed jaw frictionally received in said recesses and a portion of said body extending into said opening for holding said plate in position.

1,856,796. AZO-DYESTUFFS CONTAINING CHROMIUM AND PROCESS OF MAKING SAME. FRITZ STRAUB, HANS MAYER, and WALTER ANDERAU, Basel, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Aug. 21, 1928, Serial No. 301,164, and in Switzerland Sept. 3, 1927. 12 Claims. (Cl. 260—12.)

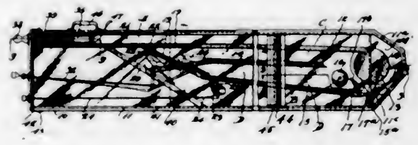
1. A process for the manufacture of azo-dyestuffs containing chromium by baking the dyestuffs capable of being chromed, with agents yielding chromium.

1,856,797. APPARATUS FOR HEATING, COOLING, AND REGULATING THE TEMPERATURE OF BUILDINGS. FELIX F. VON WILMOWSKY, New York, N. Y. Filed June 28, 1924. Serial No. 723,060. 6 Claims. (Cl. 257—8.)



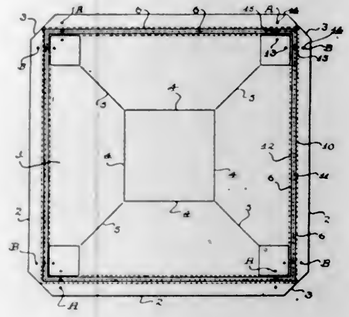
2. In a plant for heating or cooling or regulating the temperature of the interior of houses and other enclosed spaces and containers, the combination of two containers for a liquid, which are located above the level of such interior; and of temperature-imparting apparatus likewise located above the level of the said interior and by means of which a temperature suitable for the exchange of heat with the said interior can be imparted to such liquid; and of a line of piping which runs below the containers and through which the containers communicate and the liquid, while at a temperature as aforesaid, can flow from one container down to the said interior, exchange heat with the interior and then rise up into the other container; and of a pressure-producing device by means of which the liquid can be made to pass, while above the level of the interior, from the second container back into the first-said container.

1,856,798. GAME APPARATUS. DALLAS E. WALKER, Dover, Fla., assignor of one-half to Donald E. Walker, Dover, Fla. Filed June 8, 1929. Serial No. 369,281. 6 Claims. (Cl. 273—121.)



6. Game apparatus comprising a base, an enclosing wall extending about the margin of said base, said wall having a slot in its inner face adjacent to the upper edge thereof, partition members dividing the surface of the base into a plurality of channels, a sound producing member associated with certain of said channels, a projector device disposed at the end of one of said channels, a translucent covering adapted to slide in the slot formed in the enclosing wall, said covering being formed in sections, certain of which are in spaced relation and provided with a deflecting member for directing sounds from said sound producing member towards the player, and means for locking said covering sections in position, said means being shiftable to permit separation of the covering sections whereby to render the interior of the apparatus accessible.

1,856,799. CARD TABLE COVER. GILBERT C. WATERS, Rochester, N. Y., assignor to H. F. Morriss Corporation, Rochester, N. Y., a Corporation of New York. Filed Aug. 26, 1931. Serial No. 559,373. 3 Claims. (Cl. 45—68.3.)



1. A card table cover embodying a flexible octagonal paper sheet having four long sides and four short sides and scored parallel with the long sides at a distance from each long side edge defining a rectangular area having its corners on the short sides and which area when the sheet is creased on the scored lines constitutes a playing surface fitting a rectangular table top with the remainder of the sheet flanged over the edges of the latter, the sheet being further provided with sets of perforations adjacent to the short sides through which tying strings may be passed.

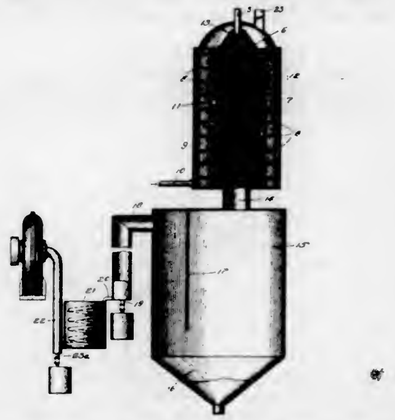
1,856,800. METHOD OF MAKING TRIMMED HEEL SEATS. CHARLES CUSHMAN ABBOTT, Auburn, Me., assignor to Abbott Wilson Machine Company, Auburn, Me., a Corporation of Maine. Filed Mar. 20, 1929. Serial No. 348,598. 1 Claim. (Cl. 12—142.)



That method of trimming the heel of a shoe sole having a stitching channel and its covering flap, consisting in trimming and severing the heel margin with the flap upturned, and in simultaneously severing the flap on a line behind the breast line.

1,856,801. DISTILLING PETROLEUM RESIDUUM. HAROLD V. ATWELL, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 15, 1924. Serial No. 699,459. 6 Claims. (Cl. 196—67.)

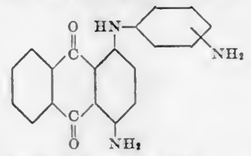
5. In apparatus for distilling and decomposing heavy oil residues for the production of coke and lower boiling oils, a chamber having a perforate wall, means for passing finely sub-divided oil residues through said chamber, means for internally heating the body of the perforated wall of said chamber, means for forcing heated inert gases into said chamber through the perforations in the wall of the said chamber whereby the gases impart heat to the oil residues within the said chamber to effect coking of the finely divided particles of residues passing therethrough and the production of lower boiling oils in vaporous form, an independent unheated separating chamber, means for passing the finely divided coked residues and vaporous products from said coking chamber to said separating chamber,



means for separately withdrawing vaporous petroleum products from said separating chamber, and means for condensing said withdrawn vaporous products.

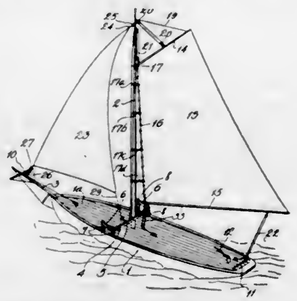
1,856,802. DYESTUFFS OF THE ANTHRAQUINONE SERIES AND PROCESS OF MAKING SAME. OSCAR BALLY, PAUL GROSSMANN, and FRIEDRICH FELIX, Basel, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Jan. 27, 1928, Serial No. 250,080, and in Switzerland Feb. 12, 1927. 14 Claims. (Cl. 260—60.)

11. As new products, the 1-arylido-4-aminoanthraquinones which contain in the aryl nucleus at least one amino-group, which products correspond with the formula:—



wherein the anthraquinone and aryl nuclei may contain sulpho groups.

1,856,803. FORE AND AFT RIGGED VESSEL. EDWARD L. BLACKMAN, Brooklyn, N. Y. Filed Sept. 10, 1930. Serial No. 480,888. 15 Claims. (Cl. 114—102.)



1. A fore and aft rigged vessel having a mast, a spar connected at its upper end to the upper portion of the mast and at its lower end adapted to be spaced from the

lower end of the mast, a fixed guide secured to and extending across the vessel but spaced from the lower end of the mast, the lower end of the spar being movably mounted on said guide, and a main sail slidably connected to said spar to be hoisted or lowered along said spar.

1,856,804. FORE AND AFT RIGGED VESSEL. EDWARD L. BLACKMAN, Brooklyn, N. Y. Filed Aug. 3, 1931. Serial No. 554,825. 19 Claims. (Cl. 114—91.)



1. A fore and aft rigged vessel having a frame, a spar pivotally connected at its lower end to the vessel and slidably connected to said frame intermediate its ends, and a main sail attached to said spar.

1,856,805. FOLDING STOOL. LESTER A. CALL, Clinton, Mass. Filed Mar. 20, 1930. Serial No. 437,531. 6 Claims. (Cl. 155—135.)



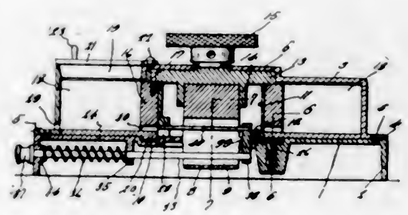
1. As an article of manufacture, a folding seat comprising a stationary flat supporting plate, a pair of pivot studs carried by said plate near the center of one edge, two series of leaves each pivotally mounted on one of said studs, said leaves being adapted to be spread out into the form of two quadrants, and last leaves of the two series coming substantially into contact with each other.

1,856,806. PROCESS OF FORMING NON ENTANGLING SPRING WASHERS. EUGENE D. COWLIN, Massillon, Ohio, assignor to The Reliance Manufacturing Company, Massillon, Ohio, a Corporation of Ohio. Filed June 9, 1931. Serial No. 543,151. 5 Claims. (Cl. 10—86.)

1. A process of forming non-entangling spring washers comprising, coiling the washer stock into closely coiled helical formation, subjecting the washer stock to axial tension, the axial tensioning of each portion of the stock being effected immediately before the coiling thereof, and then cutting the coiled stock into split ring segments not exceeding 360°, the axial tensioning being effected by bending the stock out of the helical formation and axially toward the coil, but not substantially beyond the plane perpendicular to the coil axis and passing through the place of bending in the outermost helical surface of the coiled stock, and said cutting being such that the gap between the ends of each segment is sufficiently small so that the washers will not interlink in handling.

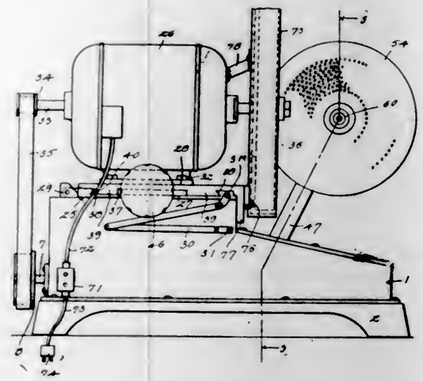


1,856,807. DENTAL BURR CABINET. LEWIS M. CIBOCH, Brookfield, Ill. Filed Sept. 20, 1930. Serial No. 483,350. 3 Claims. (Cl. 312—97.1.)



1. A dispensing cabinet of the character described comprising a supporting base, a housing mounted on the base, a centrally disposed bearing mounted vertically on the base and having a transverse slot therethrough extending above and below the base, an upstanding bearing sleeve rigidly mounted on the base in spaced, concentric relation to the first named bearing, a horizontally disposed drum rotatably encircling the bearing sleeve and having a series of circumferentially spaced, radially disposed, alternately long and short pockets extending thereinto from its outer periphery and terminating in spaced relation to its inner periphery, said pockets being opened at their top, bottom and outer ends, said pockets being further adapted for the reception of articles to be dispensed, the housing being provided with an outlet opening, said pockets being further adapted to successively communicate with the outlet opening when the drum is rotated, the drum being further provided with a plurality of radial passages communicating, at one end, with the inner periphery of the drum and at their outer ends with the inner ends of the pockets, the bearing sleeve being provided with a notch in transverse alignment with the slot in the first named bearing and the outlet opening in the housing, said notch being further adapted to communicate with the passages in the drum when said drum is rotated, a flat annular plate rigidly mounted on the lower side of the drum and rotatably encircling the bearing sleeve, said plate extending over the lower ends of the pockets and constituting a bottom wall for said pockets, an annular series of teeth on the lower side of the plate, a spring pressed detent mounted for vertical reciprocation in the supporting base and engageable with the teeth in a manner to releasably retain the drum against rotation, a disk rotatably mounted on the upper end of the first named bearing in the housing and rigidly connected to the drum, an operating knob fixed on the disk for manually rotating said disk and the drum, and slidable ejector mounted on the supporting base for movement into the pockets in a manner to eject the articles from said pockets through the outlet opening in the housing.

1,856,808. GRINDING MACHINE. CARSON C. GIBSON, Hamburg, Iowa, assignor to Two Way Electric Grinder Company, Hamburg, Iowa. Filed July 29, 1930. Serial No. 471,504. 5 Claims. (Cl. 51—105.)



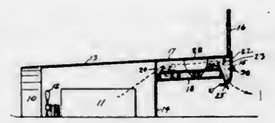
1. A grinding machine, comprising an electric motor, a grinding wheel fixed to the armature shaft of the motor, means supporting the motor for adjustment to arrange the grinding wheel in a vertical or horizontal position, means adapted to rotatably support the article to be sharpened and rockably mounted to move the article in opposite directions across the peripheral face of the grinding wheel when said wheel is in vertical position, means operable to rotate the article and rock the article supporting means and including a shaft, and means establishing a driving connection between the armature shaft and said last shaft removably connected to one of such parts to free the motor for adjustment to arrange the grinding wheel in horizontal position.

1,856,809. RODENT AND VERMIN POISON DEVICE. RANSOM P. GIBSON and HARRY W. WOODY, Beverly, Kans., assignors of one-third to W. W. McCanles. Filed July 1, 1931. Serial No. 548,215. 8 Claims. (Cl. 111—92.)



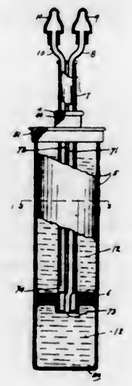
1. A device of the class described comprising a tube having a point at one end thereof, said tube having an opening therein adjacent the pointed end, a spring pressed sleeve for normally closing the opening, a hopper on the upper end of the tube, a valve for controlling the flow of material from the hopper to the tube, and means for raising the sleeve to expose the opening when the valve is moved to open position.

1,856,810. VENTILATOR. ERNEST P. HOPWOOD, Portland, Oreg. Filed Dec. 7, 1929. Serial No. 412,301. 3 Claims. (Cl. 98—2.)



1. A ventilator for automobiles, the combination of a reversible door in the top side of an automobile body directly in front of the wind-shield adapted to open forwardly or backwardly, means for controlling said door, and a wind box under said ventilator communicating therewith and with the interior of the engine compartment and with the interior of the automobile, said wind box having control doors at its points of communication with said engine compartment and automobile interior.

1,856,811. NASAL IRRIGATOR. TOYOJIRO INAKI, Fresno, Calif., assignor of one-half to Hoichi Sumida, Fresno, Calif. Filed July 11, 1931. Serial No. 550,131. 2 Claims. (Cl. 128—250.)

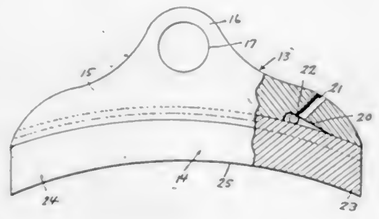


1. In a nasal syringe the combination of a tube having closures at both ends, a piston within the tube, a piston stem having two conduits laterally within said stem, one having an opening under the piston and the other having an opening above the piston, each of said conduits terminating at the ends outside the tube with a tip adapted to fit the nostril.

1,856,812. BRAKE HEAD AND SHOE ASSEMBLY. RAYMOND L. JIRKA, Western Springs, Ill. Filed Oct. 7, 1931. Serial No. 567,484. 5 Claims. (Cl. 188—244.)

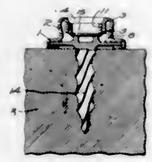
1. A longitudinally curved brake head having suspension means and provided in its bottom with a longitudinal groove, an arcuate brake shoe having a rib fitting in said

groove, the rib and groove being shaped at corresponding ends to prevent displacement of the shoe through said



ends, and self-acting means at the opposite end of the head and shoe to prevent displacement of the shoe through the last named end.

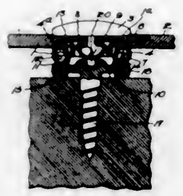
1,856,813. SNAP FASTENER STUD MEMBER. WALTER I. JONES, Arlington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 4, 1929. Serial No. 397,399. 1 Claim. (Cl. 24—219.)



A snap fastener member comprising, in combination, an apertured cap having means for engagement with a cooperating fastener member, said cap also having a base, an attaching element having a head secured within the base of said cap and a threaded shank portion projecting from the head of said attaching element for securing the snap fastener element to a support, means providing a depression in the head of said attaching element, a third part independent of the cap and the attaching element and secured between the cap and the head of the attaching element and concealing the head of the attaching element, and said third part having a portion adjacent to the depression in the head of the attaching element which permits insertion of a tool into said depression for rotation of said attaching element when it is desirable to remove the fastener member from a supporting structure.

1,856,814. SNAP FASTENER. WALTER I. JONES, Arlington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 4, 1929. Serial No. 397,400. 3 Claims. (Cl. 24—217.)

3. A fastener stud comprising, in combination, an attaching element having a head portion and a shank portion, a cap member secured to the head portion of said attaching element and having a stud head and neck for cooperative engagement with a fastener socket, said stud head having an aperture therethrough, means providing a pocket in the bottom of the cap member into which the head portion of the attaching element is fitted and secured and non-rusting covering means extending over the head portion of the attaching element to conceal the same when viewed through the aperture in the head of the cap member and tool-engaging means provided as a part of the said covering means and adapted to be engaged by



a tool inserted through the aperture in the head of the cap member when the shank portion of the attaching element is being secured to a supporting structure.

1,856,815. PROCESS FOR INCREASING THE LUSTER OF EFFECT THREADS. OSKAR KNECHT, Binningen, near Basel, and ERNST STOCKER, Basel, Switzerland, assignors to the Firm: Chemical Works formerly Sandoz, Basel, Switzerland. Filed Aug. 2, 1928, Serial No. 297,103, and in Germany Aug. 20, 1927. 2 Claims. (Cl. 26—48.)

1. A process for increasing the luster of mercerized cotton, which has been esterified with aromatic carboxylic and sulphonic acid chlorides, consisting in subjecting the said esterified fibres to a treatment with moist steam under superatmospheric pressure, the temperature of steam being not higher than 110° C., and the duration of the steaming operation being from 1 to 20 minutes.

1,856,816. GOLF PUTTING APPARATUS. JAMES P. LUDDY, Broad Brook, Conn. Filed Dec. 26, 1930. Serial No. 504,923. 3 Claims. (Cl. 273—32.)

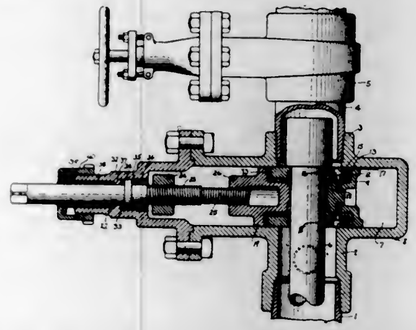


1. A golf putting device comprising a pair of end sections and a plurality of intermediate sections capable of being nested within one of said end sections, while the other of said end sections is adapted to be inverted and placed over the end section in which said intermediate sections are to be nested, all of said sections adapted to be placed end to end to produce a putting surface, and interengaging means between the meeting ends of said sections for holding the same against accidental creeping when the sections are in end to end position.

1,856,817. BLOW-OUT PREVENTER. JOHN R. MARTIN and WALTER E. KING, Houston, Tex., assignors, by direct and mesne assignments, of one-half to said Martin and one-half to James S. Abercrombie, Houston, Tex. Filed Aug. 29, 1927. Serial No. 216,309. 8 Claims. (Cl. 251—55.)

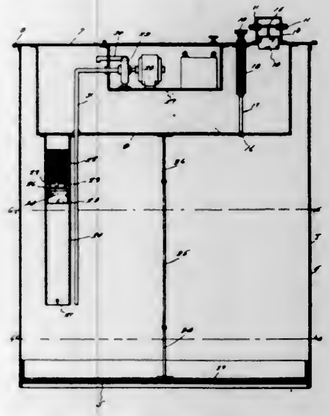
1. In a blowout preventer adapted for use in combination with a well casing having a drill stem therein, a

housing on said casing, opposite valve members in said casing, segmental packing at the upper and lower sides of said valves adapted to fit about a drill stem, lips on



said packing presented in the direction to be expanded by fluid pressure, and means to move said valves toward said drill stem.

1,856,818. FISH RECEPTACLE. PHILANDER D. MORGAN, Baton Rouge, La. Filed Dec. 31, 1929. Serial No. 417,718. 3 Claims. (Cl. 119—5.)

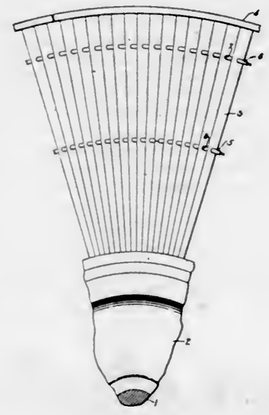


1. In a device of the class described, a tank, a lid hingedly mounted on the tank, a compartment depending from the lid into the tank, a pipe depending from the bottom of the compartment, an electro-magnet in the pipe, a pair of spaced contacts in the pipe below the electro-magnet, a float in the pipe having a bridge plate thereon for said contacts, said electro-magnet holding the bridge plate in connection with said contacts when the circuit to the electro-magnet is closed a pipe rising from the lid in communication with the compartment, a float in the last mentioned pipe, contacts on opposite sides of the last mentioned pipe, a contact on the float adapted to rest on the contacts in the last mentioned pipe, the bottom of said compartment being formed with an aperture, a needle valve associated with said aperture, a housing depending from the lid, a storage battery in the housing, a motor and a pump in the housing and operatively connected together, an inlet pipe connected to the pump and terminating in the tank, an outlet pipe connected with the pump and terminating in the compartment, a circuit connecting the battery with the contacts of the first and second mentioned pipes and with the motor and electro-magnet.

1,856,819. PROCESS OF VULCANIZING RUBBER. CLAYTON OLIN NORTH and WINFIELD SCOTT, Nitro, W. Va., assignors to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Original application filed Apr. 8, 1926, Serial No. 100,684. Divided and this application filed Nov. 21, 1929. Serial No. 408,926. 14 Claims. (Cl. 18—53.)

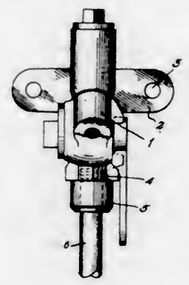
1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of a vulcanization accelerator comprising a heptaldehyde derivative of an alkylidene-di-aryl-amine.

1,856,820. ELASTIC FLUID TURBINE. ERNEST L. ROBINSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1931. Serial No. 540,684. 4 Claims. (Cl. 253—77.)



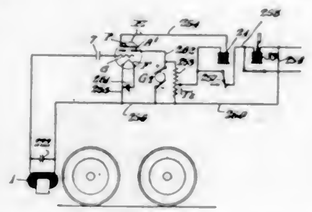
1. The combination with a turbine rotor having a row of buckets, of a tubelike member extending through passages in said buckets, and means provided within the hollow space of said tubelike member, said means being freely movable within said spaces whereby it is adapted to dampen vibration of said buckets.

1,856,821. RETAINER VALVE. JOSEPH J. SALE, Fayetteville, W. Va. Filed Jan. 21, 1930. Serial No. 422,412. 1 Claim. (Cl. 303—1.)



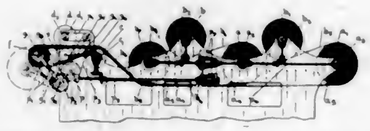
A retainer valve having depending integral threadless sleeve in spaced relation to and in axial alignment with the threaded pipe opening of the valve.

1,856,822. TRAIN CONTROL SYSTEM. ARBA G. WILLIAMSON, Carnegie, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Nov. 10, 1926, Serial No. 147,403. Divided and this application filed Nov. 14, 1930. Serial No. 495,725. 11 Claims. (Cl. 246—63.)



1. A train control system including: a trackway circuit having a source of current, a train, a train-carried electron discharge device containing four elements, charged train-carried circuit means for maintaining two of said elements at a positive potential with respect to a third element, a train-carried receiving circuit, in an inductive relation with the trackway circuit and responsive to current flowing therein, to control the potential of the fourth element of said device with respect to the third element, whereby the flow of current in the circuit means of the first two-mentioned elements of said device is varied.

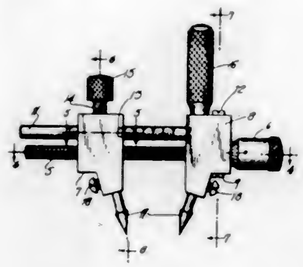
1,856,823. PRODUCTION OF SUPPLY SPOOLS OF STRIP MATERIAL. BORIS AIVAZ, Budapest, Hungary. Filed Dec. 6, 1928, Serial No. 324,165, and in Great Britain Dec. 8, 1927. 2 Claims. (Cl. 154—40.)



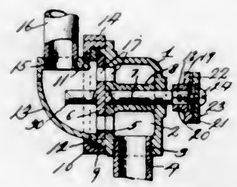
1. Apparatus for producing composite material of paper and an adsorbent, comprising a supply roll for the absorbent substance, a supply roll for the paper, arranged in such manner that the layer of paper may be led around the supply roll of the absorbent substance to receive the layer of the latter without tearing or stretching thereof, an additional supply roll for paper arranged for the application of a further layer of paper upon the exposed layer of the absorbent substance, cutting mechanism for cutting the composite material into parallel strips, and means comprising a winding spindle carrying a plurality of cylindrical formers for winding the resulting strips of composite material into supply spools.

1,856,824. MICROMETRIC DIVIDER. ROY EMERSON ALVEY, Bridgeport, Conn. Filed Apr. 30, 1929. Serial No. 359,347. 1 Claim. (Cl. 33—159.)

An instrument of the character described comprising a threaded stem having an enlarged integral graduated head on one end thereof and an unthreaded portion adjacent the head provided with an annular groove, a block rotatably mounted on the unthreaded portion of the stem having a marker thereon for cooperating with the graduations on the head, a screw threaded into the block for engagement in the groove in a manner to retain said block against longitudinal movement on the stem, a graduated measuring bar rigidly and detachably anchored in the block and extending therefrom in spaced, superposed, parallel relation to the stem, an adjustable block threaded for longitudinal movement on the stem and having an opening through which the measuring bar slidably extends, said measuring bar constituting means for preventing rotation of the adjustable block with the stem, a set screw, having an enlarged head, threaded into the adjustable block for engagement with the measuring bar for releasably securing said adjustable block in adjusted position, divider points detachably secured on the blocks and an upstanding handle member rigidly mounted on the first named block.



1,856,825. VALVE. PETER R. ALPHONSO, Seminole, Okla. Filed Mar. 25, 1929. Serial No. 349,822. 1 Claim. (Cl. 251—84.)



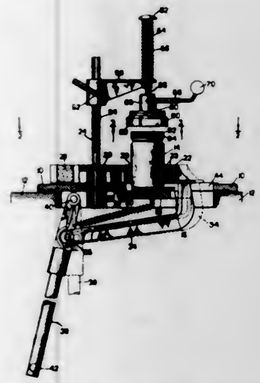
The combination with a disc valve casing, a valve seat in one side thereof, a threaded flange carried by the casing and extending outwardly from the seat and forming a disc valve receiving chamber, a disc valve rotatably mounted on said seat in the valve chamber, said disc valve being of substantially the same thickness as the flange and engaging the flange, a casing section, a flange carried by the casing section, said flange engaging the threaded flange of the valve casing and overlying the disc valve and a retaining nut threaded on the flange of the valve casing and cooperating with the casing section for forcing its flange into close engagemet with the threaded flange and the disc valve.

1,856,826. OIL DRAINING DEVICE FOR AUTOMOTIVE ENGINES. EMMETT L. BENNETT, Cincinnati, Ohio. Filed Jan. 12, 1927, Serial No. 160,576. Renewed Aug. 24, 1931. 9 Claims. (Cl. 184—106.)



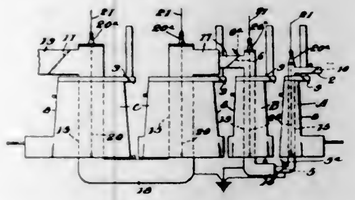
1. The combination with a crank case of an automotive engine formed with a bottom oil drainage opening; of a valve for controlling said opening, and means for operating said valve including an open-ended tubular actuating member communicating with said drainage opening and positioned interiorly of said crank case and extended through the upper wall of the latter to form an outer handle portion, said tubular member, valve, and drainage opening affording a continuous conduit through the crank case from above the latter and exteriorly thereof through said drainage opening.

1,856,827. BOTTLE CAPPING MACHINE. EBEN H. CARRUTHERS, Astoria, Oreg. Filed Feb. 1, 1929. Serial No. 336,719. 6 Claims. (Cl. 226—88.)



3. In a bottle capping machine, clamping means for holding a capped bottle against rotation, in combination with a chuck having a hub with a plurality of freely movable jaws pivoted to said hub, and means for rotating said hub, to first cause said jaws to draw into contact with the cap and then screw the cap on the bottle, substantially as described.

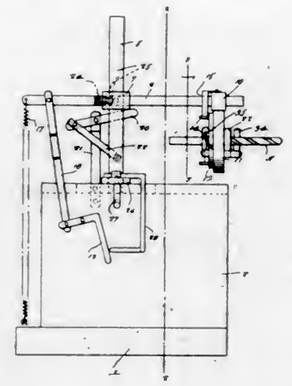
1,856,828. ART OF TREATING HYDROCARBONS. LOUIS BOND CHERRY, Louisville, Ky., assignor, by mesne assignments, to C and C Developing Company, Kansas City, Mo., a Corporation of Arizona. Filed Mar. 11, 1922. Serial No. 542,980. 12 Claims. (Cl. 196—57.)



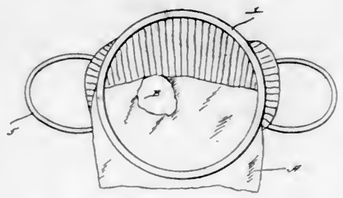
1. In the treatment of hydrocarbons by distillation and subjecting the hydrocarbon vapors to the radiant energy of hot walls and high frequency oscillatory electrical discharges, that step which consists in causing the vapors to expand from stage to stage while subjecting the vapors to said radiant energy and electrical discharges.

1,856,829. MEANS FOR HOLDING AND ADJUSTING A DRILL BIT WHILE THE SAME IS BEING SHARPENED. AUGUST GASSMANN, Cleveland, Ohio. Filed Mar. 10, 1931. Serial No. 521,537. 2 Claims. (Cl. 51—219.)

1. A device of the class described comprising a frame, a member slidably arranged on the frame, a standard carried by the member, a collar on the standard, a second collar arranged at right angles to the first collar and pivoted thereto, a rod passing through the second collar, a bit holder rotatably supported by the front end of said rod, a lever pivoted to the frame for moving the sliding member and standard thereon, and means actuated by the movement of the lever for tilting the bar and at the same time moving the front end of the bar in an arcuate path to cause one-half of the end of a bit held in the holder to be sharpened and beveled.



1,856,830. HOSE DARNING CLAMPING RING. GRACE E. GIBBONEY, Seattle, Wash. Filed Dec. 2, 1929. Serial No. 411,077. 1 Claim. (Cl. 223—14.)

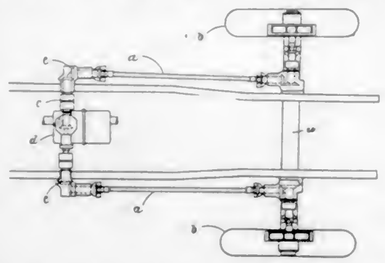


A hose darning clamping ring comprising a rigid metallic annulus having a circumferentially extending channel of substantially V-shaped formation in its inner periphery for the reception of the hose and a resilient clamping ring of circular cross section adapted to seat in the channel in a manner to frictionally bind the hose therein, said clamping ring comprising a pair of complemental sections having spaced opposed ends and a pair of resilient loops having their opposite ends integrally connected to the opposed ends of the sections for resiliently connecting said sections together in spaced relation, said loops extending inwardly, then downwardly and outwardly and then upwardly and outwardly from the sections and constituting guards for retaining adjacent portions of the hose outwardly of the annulus.

1,856,831. FRONT WHEEL DRIVE SYSTEM FOR MOTOR VEHICLES. SYDNEY SLATER GUY, Wolverhampton, England. Filed Dec. 21, 1929, Serial No. 415,705, and in Great Britain Dec. 24, 1928. 2 Claims. (Cl. 180—43.)

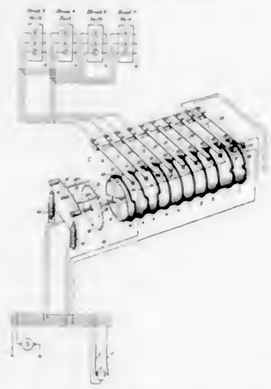
1. In motor vehicle driving mechanism in which each propelling wheel is driven by means of a longitudinal shaft running alongside the main frame from the ends of a transverse shaft operated from a motor driven variable speed gear, the interposition between said transverse shaft and variable speed gear of a disconnectible drive

comprising a shaft arranged at right angles to and in constant driving connection with the transverse shaft, a pinion slidably arranged on said right angle shaft and



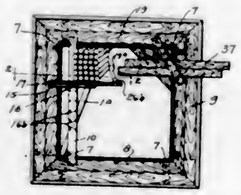
adapted to rotate therewith, and means for moving said pinion into and out of driving connection with said variable speed gear.

1,856,832. CIRCUIT CONTROLLER. CROMWELL A. B. HALVORSON, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 13, 1930. Serial No. 420,348. 18 Claims. (Cl. 200—27.)



1. In a circuit controller, a switch, a cam for operating said switch, said cam consisting of a flexible body, a support for said cam, motor means for operating said support whereby the cam may be operated, and means on said support for holding said cam thereon in any one of a number of different forms whereby said switch may be differently operated by said cam.

1,856,833. DERRICK FINGER ATTACHMENT. FRANK HAMMERSON, Maywood, Calif. Filed Apr. 3, 1930. Serial No. 441,414. 9 Claims. (Cl. 211—60.)



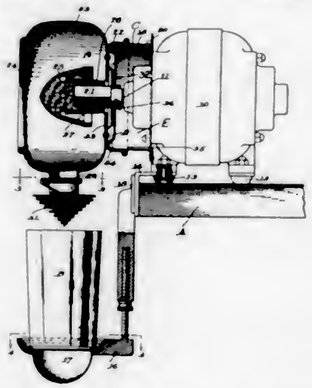
1. In combination, a derrick, a finger supported by said derrick in an elevated position, said finger extending transversely with respect to said derrick; an attachment at one end of said finger; and a plurality of dogs pivotally mounted upon said attachment and adapted to be individually moved to and from a position for intercepting the movement of well casing supported by said finger.

1,856,834. TILE AND PIPE FORM. CLARK W. HATFIELD, Seattle, Wash. Filed Jan. 12, 1931. Serial No. 508,304. 1 Claim. (Cl. 25—127.)



A tile and pipe form having in combination an outer casing comprising two cylindrical halves, a base board rest for said casing, complementary spaced apart lugs for the adjoining edges of said halves, rods for the adjoining edges passing through said lugs and into the base board, said base board having a large hole in concentric alignment with the rod holes, a pair of complementary substantially semi-cylindrical core members, a spreader member interposed between said core members the edge surfaces of the spreader having the same curvature and laying in the same cylindrical surface as the exterior surfaces of the said substantially semi-cylindrical core members, said core and spreader members seated in said large hole and projecting exteriorly above said casing, wings for the upper portion of said spreader, guides on the upper exterior ends of the cylindrical casing members adapted to receive said wings, and fingers for the upper portion of the spreader member arranged to seat in holes in the tops of the core members.

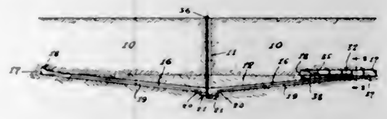
1,856,835. POWER-TRANSFERRING MECHANISM. DONALD S. HAYS, Alhambra, Calif. Filed Aug. 31, 1927. Serial No. 216,769. 2 Claims. (Cl. 146—3.)



1. In a device of the class described, a motor having a power transferring shaft provided with a free extremity

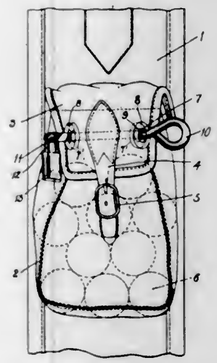
from which power may be distributed to an object to be driven, a housing for said motor, an annular support secured to the housing of the motor and including a head through which said extremity of the shaft extends, the housing having an opening at a point below the longitudinal axis of the shaft through which liquid entering the housing is free to escape therefrom, and a disk carried by the shaft and positioned in advance of the aforementioned head, the head having an orifice positioned with respect to the peripheral edge of the disk so that liquid discharged from the disk by the action of centrifugal force will be directed to the orifice from which it may find egress through the aforementioned opening.

1,856,836. METHOD AND APPARATUS FOR UNDERGROUND HYDRAULIC MINING. SYLVESTER HOWELL, Fairbanks, Alaska. Filed July 16, 1929. Serial No. 378,601. 15 Claims. (Cl. 262—3.)



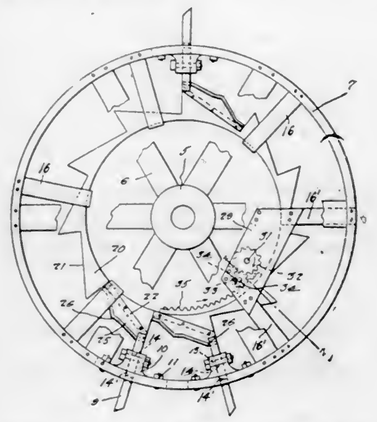
1. A method of underground hydraulic mining consisting in sinking a working shaft, driving a tunnel from said shaft adjacent the bottom thereof, driving a cross-cut at the end of said tunnel to establish a working face thereat, utilizing fluid pressure for cutting away the material to be mined, utilizing the fluid to convey the mined material to the working shaft and simultaneously therewith extracting the rare metals therefrom, separating the fluid from the waste material, elevating the latter to the surface, and returning the fluid under pressure to the working face.

1,856,837. GOLF BAG. FREDERIC E. KIP, Montclair, N. J. Filed Oct. 11, 1929. Serial No. 398,985. 1 Claim. (Cl. 150—1.5.)



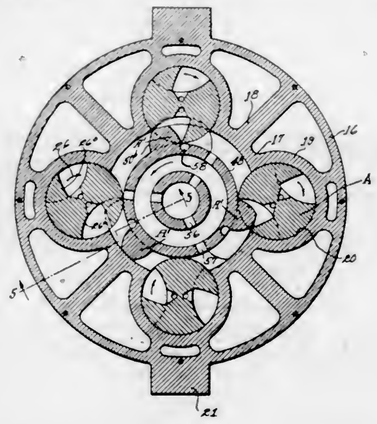
In a golf bag having a pocket for balls comprising side walls and an outer or front wall, a flap adapted to overlie said front wall and portions of the side walls, each of said side walls having an opening therein, said flap having openings adjacent its side edges adapted to register with the openings in the side walls when the flap is folded down over the front wall and said portions of the side walls, reinforcing elements in said openings, and a bolt adapted to be passed through said openings with its ends disposed at the sides of the pocket, and a lock for the bolt at one of said ends.

1,856,838. TRACTOR WHEEL. HARLEY LUCAS, Elmwood, Ill., assignor of one-half to Cornelius A. Vance, Elmwood, Ill. Filed June 27, 1930. Serial No. 464,369. 1 Claim. (Cl. 301—46.)



A traction wheel comprising in combination a rim provided with a plurality of openings, traction cleats movable radially with respect to the axis of the wheel through said openings, and an annular actuator operable circumferentially within the confines of said rim, cam shoes, there being one cam shoe for each of said cleats, means for detachably connecting said cam shoes with said actuator, said shoes and said cleats having co-operating means for effecting a positive cam connection therebetween whereby to adjust said cleats radially with respect to said rim upon rotation of said actuator, each of said shoes intermediate its ends provided with shoulders engageable with a cleat for limiting rotation of said actuator member in one direction when the cleats are fixed at the desired adjustment, and means operable independently of said actuator for fixing the cleats at the desired adjustment relative to the rim.

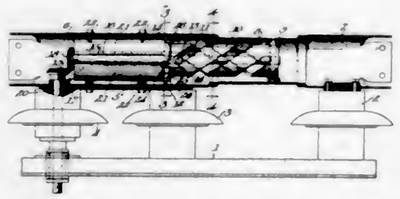
1,856,839. ROTARY INTERNAL COMBUSTION ENGINE. FREDERICK E. MACART, Los Angeles, Calif. Filed Aug. 23, 1927. Serial No. 214,917. 7 Claims. (Cl. 123—13.)



1. A rotary internal combustion engine comprising a stator and a rotor forming therebetween a plurality of working chambers, revoluble abutments in the stator hav-

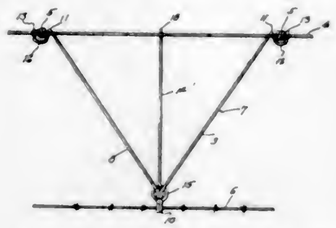
ing diametrically opposed and reversely positioned independent pockets therein each adapted to alternately communicate with the working chambers, abutments fixed to the rotor each of said abutments following the cycles of induction, compression, firing, and exhaust and movable in the working chambers, the pockets of the stator abutments providing clearance for the rotor abutments and coacting therewith to form firing chambers, inlet ports in the rotor for supplying charges to the working chambers, exhaust ports in the stator, exhaust passages in the rotor adapted to register with the ports of the stator, and timed means for firing the charges supplied to the firing chambers.

1,856,840. HIGH TENSION ELECTRIC SWITCH. HEMSLEY B. MASSEY, Greensburg, Pa., assignor to Railway and Industrial Engineering Company, Greensburg, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1930. Serial No. 435,900. 12 Claims. (Cl. 200—48.)



1. In a high tension switch, a pair of relatively movable contacts of non-circular cross-section, means for effecting relative movement of said contacts to telescope one contact within the other, and means effective at the end of the closing movement of the switch and at the beginning of the opening movement thereof to rotate one of said contact members about the axis of the telescoped members, whereby a high contact pressure may be established between said contacts.

1,856,841. FENCE PROTECTOR. EARL E. MCDONALD, Kirklin, Ind. Filed Oct. 13, 1930. Serial No. 488,528. 7 Claims. (Cl. 256—3.)



1. In a structure of the class described, in combination, a wire fence embodying horizontal line wires and vertical stay wires disposed in right angular intersecting relationship, a barked wire, and means for attaching the barbed wire to the line wires of the fence comprising a bracket having a hook in which the barbed wire is engaged, and having means for detachable connection with the line wires of said fence.

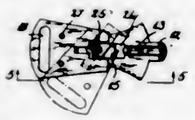
1,856,842. LENS FOR MOTOR VEHICLE HEAD LAMPS. FRANK C. MCELROY, Columbus, Ohio. Filed Oct. 17, 1929. Serial No. 400,404. 1 Claim. (Cl. 240—41.4.)

A lens for motor vehicle headlamps, comprising a disk-like body of glass, said lens having its upper end formed to include parallel horizontally extending prisms running from one side of said lens to the other, said prisms including surfaces inclined with respect to the horizontal and vertical for directing light passing therethrough to areas below the horizontal, these surfaces being reversely inclined longitudinally from the center of the lens to direct light rays angularly with respect to the axis projecting longitudinally from the lens, the lower half of said lens being provided with rows of vertically extending parallel prisms formed to direct light rays passing through



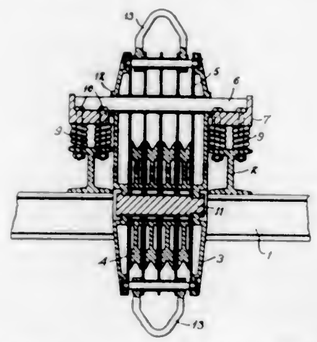
the lower half of the lens laterally with respect to the longitudinal axis thereof, the prisms of said lower half of the lens having their oblique surfaces on one side of the lens reversed in a direction away from the oblique surfaces of the corresponding prisms of the other side, the inclination of both the upper and lower prism surfaces of the lens being outwardly directed from the central vertical axis of the lens.

1,856,843. SAFETY REMOVABLE FASTENER. ABRAHAM BEBEL, New York, N. Y. Filed Dec. 1, 1931. Serial No. 578,268. 11 Claims. (Cl. 24—205.)



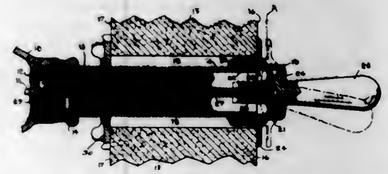
1. A safety removable fastener slide, comprising upper and lower spaced trapezoidal guide plates hingedly connected together at the central portions of the larger sides, a post projecting from one of the guide plates through the other and formed with a hook on its extended end, a latch element swivelly mounted on one of the guide plates and engageable with said hook to hold the guide plates closed, and a handle pivotally mounted on said latch element.

1,856,844. SUSPENSION MEANS FOR OIL WELL DERRICKS. OSCAR BIELER, Pittsburgh, Pa. Filed Oct. 12, 1929, Serial No. 399,243. Renewed Oct. 12, 1931. 5 Claims. (Cl. 254—139.)



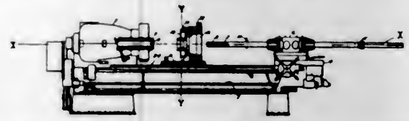
1. In a derrick the combination with a sheave block, of a pivotal support extending through said block having its axis in parallel alinement with the axis of the sheave wheel bearing shaft, and resilient supports at the respective ends of said pivotal support.

1,856,845. ADJUSTABLE EXTENSION HANDLE. PATRICK F. DONAHUE, Waterville, Conn., assignor to Scovill Manufacturing Company, Waterville, Conn., a Corporation of Connecticut. Filed Feb. 11, 1931. Serial No. 514,999. 10 Claims. (Cl. 137—139.)



1. An extension attachment forming a valve operating mechanism and comprising a threaded tubular member connected to a valve casing, a cap threaded externally and internally at one end thereof, said cap being connected to the end of the tubular member, and a manually operable lever associated with said cap for controlling the movement of a reciprocally positionable valve operating member within said tubular member, a threaded sleeve connectable to the exterior threaded portion of said cap and having an integral flange thereon adapted to be movable to a position on the cap to abut the outer surface of a wall, the flange of said sleeve concealing the threaded connecting elements of the attachment when assembled.

1,856,846. FINISHING MACHINE FOR WHEELS, ETC. WILLIAM M. DUNCAN, Alton, Ill. Filed Jan. 29, 1931. Serial No. 512,063. 2 Claims. (Cl. 29—39.)

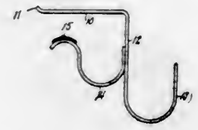


1. The combination with a lathe bed having a horizontal rotary driving head, and a turret head with horizontal operative tools successively aligned with and engaging said driving head, of a horizontal turntable mounted on the lathe bed between the driving head and turret head and having a vertical rigid ring-shaped fixture carrying a chuck and both having a bole for passage of the operative tool, and means to limit rotation and to clamp the turntable with the axis of the chuck coincident with the axis of the driving head and operating tool when the turntable is rotated to positions 180 degrees apart, substantially as described.

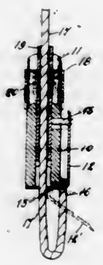
2. The combination with a lathe bed having a rotary driving head, and an operative tool slidingly engaging said driving head and mounted on the opposite end of the lathe bed in the axis of said driving head, of a horizontal turntable mounted on the lathe bed adjacent said driving head and having a rigid ring-shaped fixture vertically fixed thereon and offset from the center of the turntable to support a chuck and locate the work piece accurately in said axis of the driving head and in rotated positions 180 degrees apart, and locking and clamping means for said turntable in both of said rotated positions, substantially as described.

1,856,847. ARTICLE HOLDER. NINA C. GATES, Old Saybrook, Conn. Filed Dec. 6, 1930. Serial No. 500,445. 1 Claim. (Cl. 248—23.)

As a new article of manufacture, a sheet-metal holder for application to the edge of a flat table-top, the said holder consisting of a strip of flat sheet-metal bent to form a horizontal supporting-arm to rest flatwise upon the table-top near the edge thereof, a vertical suspension-arm extending downwardly at a right angle from the outer end of the said supporting-arm, and an upwardly-turned supporting-loop forming an extension of the said suspension-arm, the said holder also comprising a doubly-curved spring-retaining member, one end of which is rigidly secured to the rear face of the said suspension-arm and extending thence downwardly in a curve and then upwardly in a reverse curve under the said horizontal arm with which it yieldingly coacts to grip the edge of the table-top.

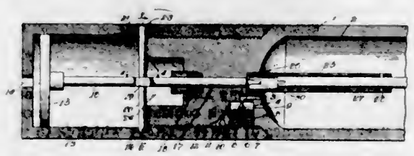


1,856,848. PICK-UP FOR AIR MAIL EXCHANGE. ROBERT HAYBECK, Philadelphia, Pa. Original application filed July 3, 1930, Serial No. 465,515. Divided and this application filed June 16, 1931. Serial No. 544,755. 5 Claims. (Cl. 258—1.)



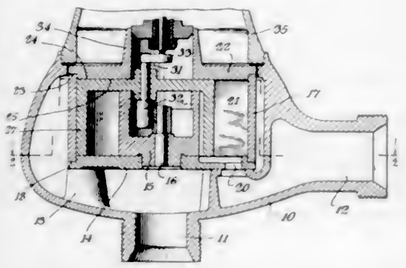
1. A pick-up for air mail exchange comprising a block having outstanding horns, a latch hinged to the block and providing means for engaging a cable loop, a tube slidable in the block, a detent carried by the tube and engaging the latch, and a plate slidable relative to the block effecting the movement of the tube.

1,856,849. BLASTING CARTRIDGE AND METHOD AND MEANS FOR OPERATING THE SAME. LAWRENCE E. LAWSON, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 7, 1929. Serial No. 398,074. 2 Claims. (Cl. 102—6.)



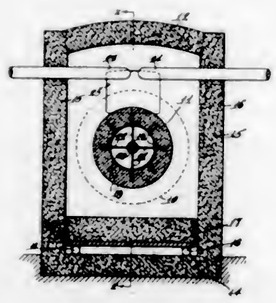
1. A blasting cartridge comprising a substantially cylindrical casing having a gas chamber formed therein, a heater support mounted in said casing, a heater unit positioned within said support with an end thereof adjacent one end wall of the chamber, a striker rod extending through said end wall in proximity to the end of said heater, a cylinder associated with said cartridge, a piston within said cylinder and having connection with a source of fluid pressure, and a frangible pin associated with said striker rod for retaining the same in inoperative position until a predetermined pressure is exerted thereon.

1,856,850. FLUID METERING DEVICE. WILLIAM L. MARDEN, Elmhurst, N. Y., assignor to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 505,778. 1 Claim. (Cl. 73—37.)



In a metering device, a cylindrical chamber, a lower cylinder head having an axial aperture, a cup-shaped extension in the chamber formed with a boss adapted to engage the aperture, an upper cylindrical head having a lower plane bearing surface, a hollow cylindrical piston closed at one end and mounted between the heads and bearing against the plane bearing surface and the extension, a guide pin carried in the extension coaxial with the chamber, an axial pin on the piston engaging the first pin, and fluid connections communicating with the chamber.

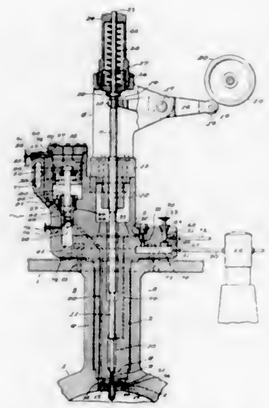
1,856,851. SINTERING REFRACTORIES FROM MOLTEN MAGNESITE OR OTHER MATERIALS. HEINRICH NEUHAUSS, Dusseldorf, Germany, assignor to The Ajax Metal Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 1, 1928. Serial No. 296,803. 11 Claims. (Cl. 25—157.)



1. The method of forming and sintering a refractory for holding molten metals, which consists in forming and sintering first the surface of the refractory which is to receive the molten metal and subsequently and successively forming and sintering the backing of the refractory.

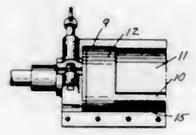
1,856,852. LIQUID FUEL VALVE FOR INTERNAL COMBUSTION ENGINES. MATTHEW PALISCA, Philadelphia, Pa. Filed Oct. 12, 1927. Serial No. 225,644. 2 Claims. (Cl. 123—139.)

1. The combination with a Diesel engine having a working cylinder, a piston reciprocated therein by the burning of a liquid fuel in the combustion chamber thereof, of a fuel valve for injecting liquid fuel into said cylinder at the end of the compression stroke of said piston and comprising a valve body passing through said cylinder and communicating with the combustion chamber of said motor, a fuel release valve therein, a fuel compression chamber in said valve body, means to maintain said chamber supplied with fuel at a pressure greatly below that of the engine cylinder at the end of the compression stroke, said valve body being provided with a passage from said fuel compression chamber to the inner end of said valve body and normally maintained closed by said fuel release valve, a fuel pressure cylinder in said valve body, a piston reciprocable therein, said fuel pressure cylinder being in constant communication at one end thereof with the interior of the cylinder of said motor, a plunger reciprocably



mounted in said fuel compression chamber, the cross-sectional area of said plunger being substantially less than the cross-sectional area of said fluid pressure piston, means to operatively connect said fluid pressure piston to said plunger, a check valve to prevent oil from said fluid compression chamber and said passage from flowing back out of said fuel valve, means positively operated by said engine to momentarily open said fluid control valve at substantially the end of the compression stroke of said piston of said motor, and a manually adjustable valve controlling the passage from the combustion chamber of said motor to the space over the fuel pressure piston in said valve body.

1,856,853. PASTE FOUNTAIN. ADOLPH POTDEVIN, Garden City, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed July 10, 1929. Serial No. 377,226. 4 Claims. (Cl. 91—49.)



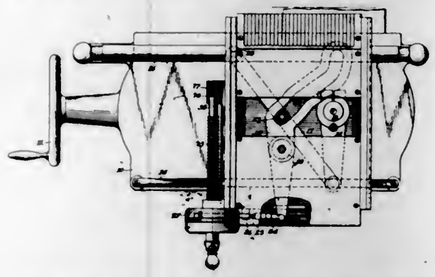
1. In a paste fountain, the combination of a paste pan, a paste feeding roller adjustable relatively to the paste pan, the periphery of said roller being provided with a paste transferring portion or surface and with lump crushing means, the latter cooperating with the edge of the paste pan, and means for preventing engagement of the lump crushing means with the pan in adjusting the roller.

1,856,854. MANICURE DEVICE. WALDEMAR SCHWANHÄUSSER, Nuremberg, Germany. Filed July 8, 1931. Serial No. 548,555. 4 Claims. (Cl. 132—73.)



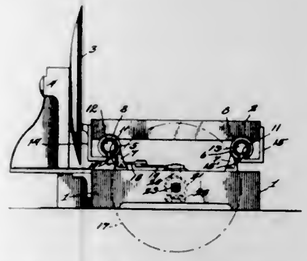
1. A manicure device comprising a pencil-like body having a manicuring element at each end thereof, a cap for selective engagement over either end of the body, and a third manicuring element carried by the cap.

1,856,855. FEEDING MECHANISM FOR SLICING MACHINES. HENDRIK STUKART, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed July 6, 1926. Serial No. 120,635. 13 Claims. (Cl. 146—102.)



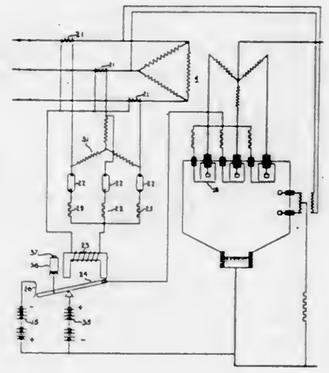
1. In a meat slicing machine, an under table having a narrow guide rib at one edge thereof and a flat bearing surface at the opposite edge thereof, a meat table having a guide face engaging one side of said guide rib and having a support engaging said bearing surface, a spring plate secured to said meat table and engaging the side of the narrow guide rib on said under table opposite that engaged by the guide on said meat table, said guide rib and spring plate being disposed at the side of the under table adjacent the operator's side of the machine, and means on the operator's side of the machine for moving the meat table.

1,856,856. SLICING MACHINE. JETZE VAN HOORN, Voorburg, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Apr. 12, 1928, Serial No. 269,525, and in Great Britain Mar. 23, 1927. Renewed Feb. 18, 1931. 10 Claims. (Cl. 146—102.)



1. In combination with a slicing machine having a reciprocable table, a supporting member formed with a longitudinally extending recess therein, a slide element mounted within said recess, and means attached to said table and slide element, said means extending under said member and upward through said recess.

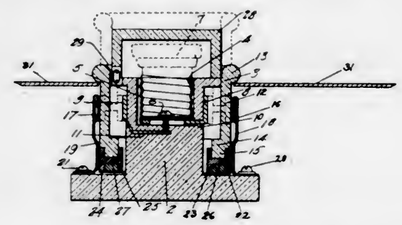
1,856,857. PROTECTIVE SYSTEM FOR RECTIFIERS. FRITZ SIEBER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 9, 1928, Serial No. 268,731, and in Germany July 21, 1927. 9 Claims. (Cl. 175—363.)



2. In a protective system for recifiers of the gaseous type including a cathode, an anode, a grid interposed between said cathode and anode, and a source of biasing potential to be applied to said grid, relay means for controlling the application of said control potential to said grid, said relay means including a space current discharge tube, a current transformer associated with said rectifier connected to said discharge tube, and circuit breaking means controlled by the current flow through said discharge tube.

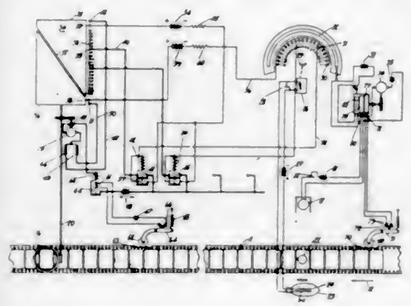
7. The combination with a polyphase rectifier device having a plurality of valve phases, a polyphase alternating-current circuit connected to said valve phases, protective grids for said valve phases, and means responsive to an asymmetrical current flow in said phases for controlling said protective grids.

1,856,858. ELECTRICAL DEVICE. GEORGE E. WADSWORTH, Erlanger, Ky., assignor, by mesne assignments, to The George B. Wadsworth Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 4, 1929. Serial No. 368,245. 11 Claims. (Cl. 200—50.)



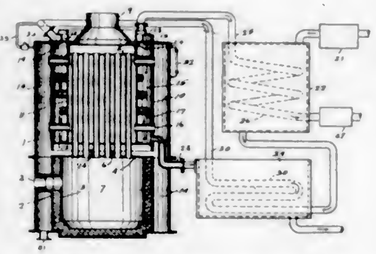
1. In an electrical device a support of insulating material bearing a fuse receptacle, terminals on said fuse receptacle, line and load terminals on said support and means for effecting a connection between the line terminal and one of said fuse terminals and between the load terminal and one of said fuse terminals, said means being rotatable through a limited arc of movement to make or break the said contact, and comprising a member of insulating material bearing contact effecting means, and mounted on the portion of said support containing said fuse receptacle, and being movable with relation thereto.

1,856,859. AUTOMATIC PRINTER. DELMAR A. WHITSON, LEWIS W. PHYSIOC, and FREDERICK F. BRUSH, Los Angeles, Calif. Filed Dec. 27, 1927. Serial No. 242,775. 20 Claims. (Cl. 95—75.)



1. In combination, means for testing the translucency of at least a portion of a motion picture negative, a plurality of means arranged selectively to respond to the operation of the testing means, means for printing from said negative by passing radiant energy through the negative, and means operated by said selectively responsive means for determining the degree of printing intensity.

1,856,860. STILL. REXFORD O. ANDERSON, Houston, Tex. Filed Nov. 1, 1927. Serial No. 230,245. 8 Claims. (Cl. 196—119.)



1. A device of the character described comprising an annular vaporizing chamber, means for circulating a heating medium around said chamber circumferentially, baffle tubes disposed across said chamber said means being open at both ends to said heating medium, means for spraying a fluid to be treated into said chamber and onto the tubes therein, means for removing the vapors from said chamber and means for removing the unvaporized fluid from said chamber.

1,856,861. BLASTING CARTRIDGE. FRANK H. ARMSTRONG, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 7, 1929. Serial No. 398,043. 5 Claims. (Cl. 102—7.)

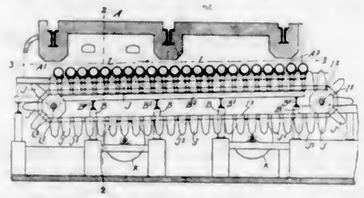


4. A blasting cartridge comprising a metallic body having an internal gas chamber formed therein, an electrode extending through a wall of said body and insulated therefrom, a charging passage extending thru said electrode and terminating within the chamber, a valve cap mounted on the outer end of said electrode, a valve stem adjustably mounted in said cap and having a substantially conical tip adapted to engage a correspondingly formed seat in the electrode, said valve stem having an axial passage extending from the outer end thereof to a point adjacent the base of the conical tip, and a transverse passage through said tip in communication with said axial passage.

1,856,862. PREPARATION OF ARYL PHOSPHATES. FRED BRYNER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 28, 1929. Serial No. 396,015. 12 Claims. (Cl. 260—98.)

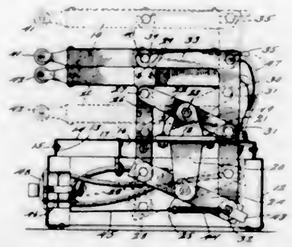
1. The method of making an aryl phosphate, which comprises reacting a phenolic compound with a phosphorus oxyhalide and blowing through the reaction mixture a gas substantially inert to the major reaction componenta.

1,856,863. PIPE ANNEALING FURNACE. STUART B. CLARK, Riverton, N. J., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Dec. 14, 1928. Serial No. 326,130. 2 Claims. (Cl. 263—8.)



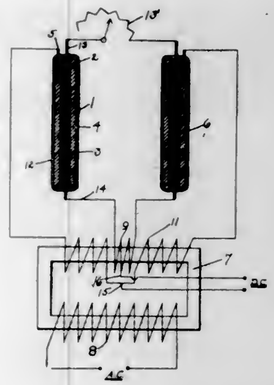
1. A pipe annealing furnace having at its bottom runways for supporting the pipe disposed in a plane lying within a range of angular positions between the horizontal and various upwardly inclined angles from the entrance to the exit of the furnace in combination with spaced pushing fingers adapted to project upward beyond the runways to engage the pipes supported thereon and adapted in connection with the plane of the runways to maintain contact with the rear of the pipes being transported through the furnace and means for moving the fingers through the furnace and returning them to operative position at the entrance of the furnace, the contacting portion of the fingers being inclined backward to an angle in excess of 30° to the plane of the runways.

1,856,864. COOKING DEVICE. ERNST C. CLAUS, Chicago, Ill., assignor, by mesne assignments, to Ernest Reich, Chicago, Ill. Filed Nov. 10, 1927. Serial No. 232,265. 5 Claims. (Cl. 53—5.)



1. A heating device, including opposed parallel cooperating heating plates mounted for relative movement toward and away from each other and adapted to assume an operative position with an article to be heated arranged therebetween and contacting therewith, and a spring operative to urge said plates relatively toward each other when they are in operative position and away from each other when in open position.

1,856,865. RECTIFIER. WILLIAM A. DARRAH, Chicago, Ill. Filed July 23, 1926. Serial No. 124,416. 24 Claims. (Cl. 175—366.)

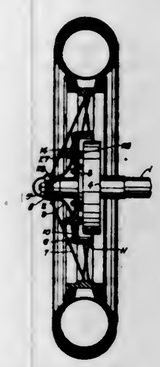


2. An electric valve, consisting of a thermo-electric couple separated by an insulating layer, and provided with means for controllably maintaining said layer at the desired operating temperature.

11. A method for rectifying alternating current which comprises interposing in an alternating current circuit a large contact area thermo-responsive element normally an insulator to the flow of current, regulating the temperature of the element so that it becomes a conductor, and then subjecting said element to the Thompson effect and/or Peltier effect.

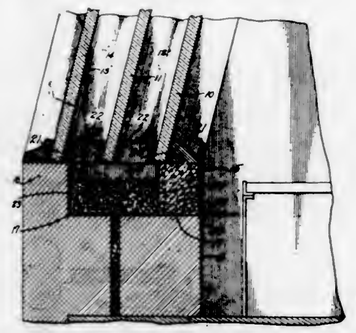
33. In a film current rectifier, means for varying the temperature of the film in accordance with the frequency of the current being rectified.

1,856,866. VEHICLE WHEEL ATTACHMENT. ALEXANDER FEIGELSON, Beaumont, Tex. Filed Dec. 10, 1928. Serial No. 324,879. 1 Claim. (Cl. 301—9.)



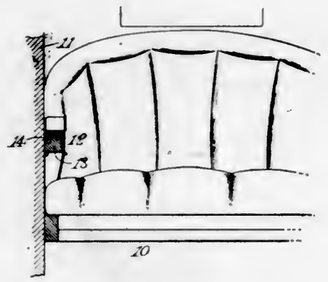
The combination of a vehicle wheel hub, a vehicle wheel, and an adapted plate, a tapered portion on said plate to receive and support a portion of a wheel hub shell, means for attaching said adapter plate to said hub, said adapter plate being of larger diameter than said hub, means for registering said hub shell upon said adapter plate, means for centering the said wheel upon said adapter plate, and means to secure said wheel in registered position.

1,856,867. WINDOW. ROLAND E. FREDERICK and WILLIAM E. HILL, Philadelphia, Pa., assignors, by mesne assignments, to Reuben E. Ottenheimer, Baltimore, Md. Filed Aug. 3, 1929. Serial No. 383,359. 1 Claim. (Cl. 183—4.)



In a refrigerating case having a plurality of spaces between the panes, means including a channel for equalizing the pressures between the spaces, one surface delineating the channel comprising dehydrating material to dehydrate the air passing therethrough.

1,856,868. SEAT SIDE ARM COVER. WALTER L. FRY, Scarsdale, N. Y., assignor, by mesne assignments, to Wil-Fry Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1928. Serial No. 318,647. 6 Claims. (Cl. 155—182.)

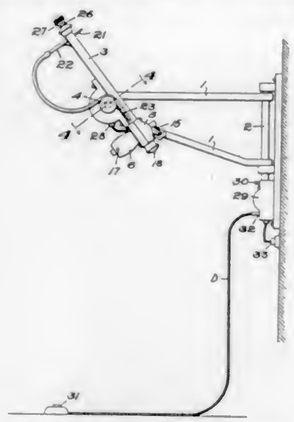


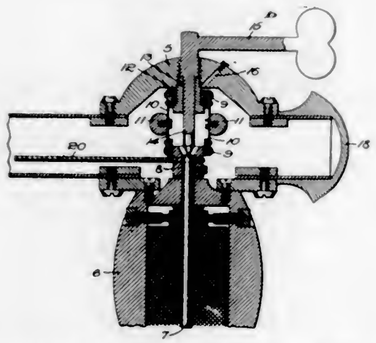
1. A slip cover for the side arm of a car seat, shaped to envelope the side arm, having a stiffened upper edge fitting snugly between the arm and car wall to bind the cover at said parts, and reinforcing and shaping parts disposed to come opposite the exposed corners of the side arm.

1,856,869. ELECTRIC DENTAL LATHE. JORGE LUIS GRIMME, Buenos Aires, Argentina. Filed Sept. 28, 1929. Serial No. 395,947. 6 Claims. (Cl. 32—14.)

1. An electric dental lathe comprising in combination, an oscillating supporting member, a hollow arm angu-

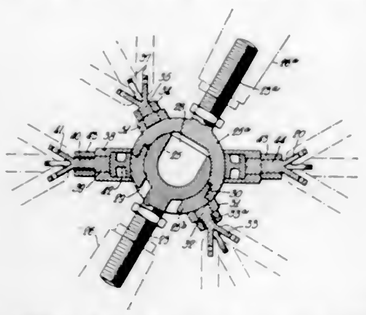
larly adjustable upon said member, an electric motor carried by one end of said hollow arm, a shaft carried by the other end of said arm, power transmission means





within said arm and connecting said motor to said shaft, and a speed regulator within said arm and connected to said motor.

1,856,870. COUPLING DEVICE. ALEXANDRE KARTVELICHVILI and EDMOND CHAGNIARD, New York, N. Y., assignors to Chagnkart International Aviation Corporation, New York, N. Y., a Corporation of New York. Original application filed Aug. 23, 1928, Serial No. 301,458. Divided and this application filed Aug. 28, 1929. Serial No. 388,912. 5 Claims. (Cl. 287—87.)



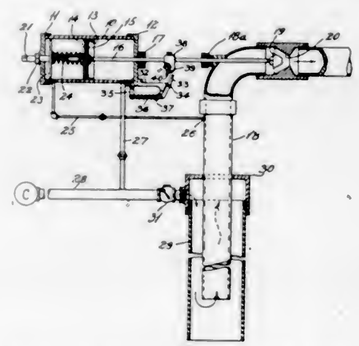
1. A coupling device of the class described including a ball and a substantially spherical socket member receiving said ball each carrying a coupling device, a ring rotatably adjustable on the socket, and a coupling member carried thereby, said ring including a pair of spaced annular sections and a central arcuate section confined between them.

1,856,871. BLASTING CARTRIDGE. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Nov. 22, 1929. Serial No. 409,022. 3 Claims. (Cl. 102—6.)



1. A blasting cartridge comprising an elongated open ended cylinder, a pressure responsive discharge assembly associated with one end of said cylinder, a charging and charge energizing assembly associated with the other end of said cylinder, said assemblies sealing the respective ends of said cylinder and forming therebetween a chamber for reception of a blasting charge, said assemblies being interchangeable with reference to the respective ends of the cylinder.

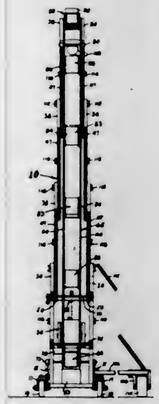
1,856,872. AUTOMATIC PRESSURE RETAINER FOR GAS LIFT WELLS. JACOB J. KOGAN, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed July 16, 1929. Serial No. 378,802. 21 Claims. (Cl. 103—232.)



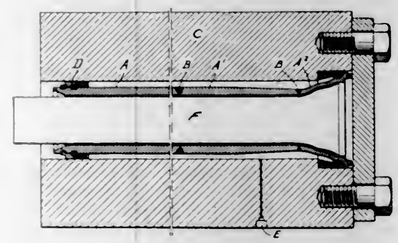
1. A method for automatically retaining pressure in a tubing in the event of a substantial or complete drop of gas pressure in the line leading from the source of supply to a casing within which the tubing is disposed, comprising cutting off flow of fluid from the tubing when the pressure in the said line drops below a certain value and simultaneously cutting off return of gas through the said line.

1,856,873. ELEVATING CONVEYER. IRA J. KUERT, Los Angeles, Calif. Filed Oct. 23, 1929. Serial No. 401,685. 9 Claims. (Cl. 198—139.)

4. In a device of the class described, a base, said base including spaced side members, a plurality of wheels adapted to support said base, said wheels being positioned inward of the outer edges of said side members, an elevating tower positioned on said base, said tower including a plurality of stationary members secured to said side members and a plurality of movable members, said stationary members being positioned inward of said side members and said movable members being positioned inward of said stationary members, a conveyer mechanism, said conveyer mechanism being supported by said tower, a platform supported by said tower, a power device, said device being mounted on said platform and confined within the limits of said side members, means to drive said conveyer from said device, said drive means being confined within the limits of said side members.



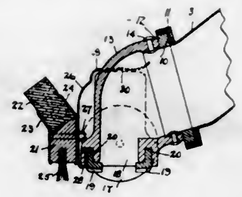
1,856,874. MANUFACTURE OF CENTRIFUGAL PIPE MOLDS. FREDERICK C. LANGENBERG, Edgewater Park, N. J., assignor to United States Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Feb. 4, 1930. Serial No. 425,763. 3 Claims. (Cl. 29—148.3.)



1. The method of manufacturing a steel mold for the centrifugal casting of pipes which consists in forming separate longitudinal sections adapted when united to form a mold, uniting said sections end to end by welded joints and then eliminating injurious variations in the hardness and density of the metal of the mold due to the formation of the welded joints by subjecting the welded mold to external fluid pressure sufficient in amount to effect a permanent radial contraction of the mold.

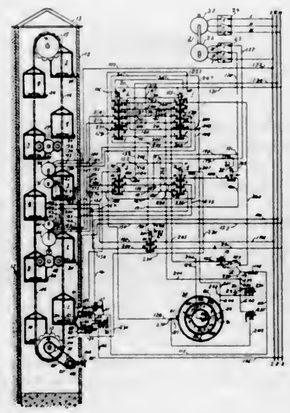
1,856,875. VACUUM CLEANER FLOOR TOOL. JOSEPH EARL LEONARD, Berkeley, Calif., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Jan. 4, 1930. Serial No. 418,471. 5 Claims. (Cl. 15—158.)

5. In combination with a vacuum cleaner including a suction nozzle mounted for swivelling movement about an axis that is inclined relative to the mouth of said nozzle, a floor tool attached to said nozzle and extending longitudinally thereof, said floor tool including a pair of floor contacting elements one of which is positioned to contact the floor when the nozzle is in normal working position, and the other of said elements extending away from the face of the nozzle and away from the nozzle



mouth at an acute angle to said face whereby when the nozzle is inverted, said other element will contact the floor.

1,856,876. GARAGE ELEVATOR. FRANK E. LEWIS, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 11, 1929. Serial No. 398,898. 32 Claims. (Cl. 187—16.)

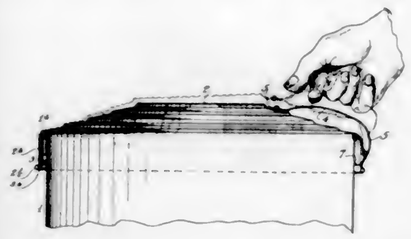


1. In a conveyor system, the combination with means defining a circuitous path past a station, a plurality of load receptacles, motive means for moving said load receptacles in said circuitous path, of control means operable to select any one of said receptacles and for causing said motive means to move said selected receptacle to said station, and including means for automatically selecting the direction in which said selected receptacle must move to reach said station by the shortest route.

1,856,877. RECEPTACLE. EDGAR O. LOEBER, Cleveland, Ohio. Filed Sept. 25, 1931. Serial No. 565,106. 6 Claims. (Cl. 220—56.)

3. A container construction comprising a receptacle having a marginal projection, a cover for said receptacle having a depending rim, said rim being formed with a slot disposed below said projection when said cover is in position, a handle having its inner end portion pivotally and slidably connected to said cover to move relative thereto outwardly substantially in the plane of such portion, the outer end portion of said handle extending through and movable in said slot, to permit movement of the handle toward and from said cover, a latch on the outer end of said handle disposed below and

within said projection when the handle is in its lower position and arranged to clear said projection when the handle is raised relative to said cover, and means be-



tween the outer end portion of said handle and said rim for preventing withdrawal of said end portion through said slot.

1,856,878. ELECTRIC CURRENT INTERRUPTER. LOUIS LUDWIG, Brooklyn, N. Y. Filed Nov. 3, 1930. Serial No. 492,996. 6 Claims. (Cl. 200—122.)



1. A current interrupting device comprising an insulating body member insertable in an electric lamp socket, a recess formed in one face of said body member, a cover secured over said recess and constituting one terminal of the device, a thermostatically-operated switch lever secured under and electrically connected with said cover, and a co-acting switch member secured in the bottom of the recess and having means which extend through the bottom wall of the recess and which constitutes the other terminal of the device.

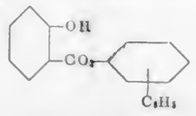
1,856,879. EYE WINDOW. JOHN L. LUFKIN, New York, N. Y., assignor to The Engineering Products Corporation, Inc., New York, N. Y., a Corporation of New York. Original application filed Nov. 13, 1925, Serial No. 68,781. Divided and this application filed Sept. 16, 1931. Serial No. 563,086. 2 Claims. (Cl. 2—205.)



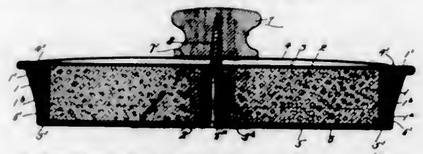
1. An article of manufacture comprising an annular eye window supporting frame of substantially T-shape in cross section so as to provide radially and axially extending flanges, an eye window, a flat protective screen contacting with one of said radially extending flanges, said screen having a marginal spacer ring secured thereto and contacting with the flat surface of said eye window, said axially extending flange having a grooved seat therein and a split ring seated within said groove and engaging said eye window.

1,856,880. ESTERS OF SALICYLIC ACID. LINDLEY E. MILLS and HENRY S. GOODWIN, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 8, 1931. Serial No. 543,018. 9 Claims. (Cl. 260—104.)

6. As a new compound, a diphenyl-salicylate having the general formula:

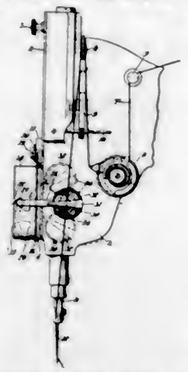


1,856,881. HEAT INSULATING STRUCTURE. VICTOR J. MOSS, Brooklyn, N. Y. Filed Dec. 28, 1929. Serial No. 417,066. 6 Claims. (Cl. 220—24.)



1. A heat-insulating structure embodying, in combination, a heat-insulating element composed of a light, porous material of low structural strength, a frame composed of a material having relatively high structural strength surrounding the edge of said insulating element, and walls of an odorless, non-porous, moisture and air-tight sealing paper arranged on the opposite sides of said insulating element and having an adhesively sealed connection with the frame to provide an air and water tight sealed compartment with said insulating material contained therein.

1,856,882. SEWING MACHINE THREAD LUBRICATING DEVICE. WALTER MYERS, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 5, 1930. Serial No. 449,728. 10 Claims. (Cl. 112—256.)

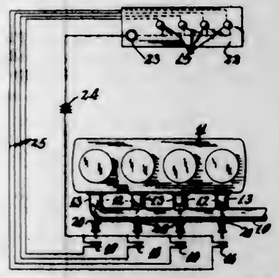


1. A sewing machine thread-lubricating device, comprising a pad of absorbent material disposed in the path of the sewing thread, a pad-holding receptacle, supporting means for said receptacle, a thread-guiding finger extending crosswise of the thread-engaging face of said pad, and a carrier for said finger removably supported by said receptacle.

1,856,883. SPARK INDICATING DEVICE FOR COMBUSTION MOTORS. PAUL NEMETH, Flushing, N. Y. Filed Sept. 8, 1930. Serial No. 480,370. 4 Claims. (Cl. 116—114.)

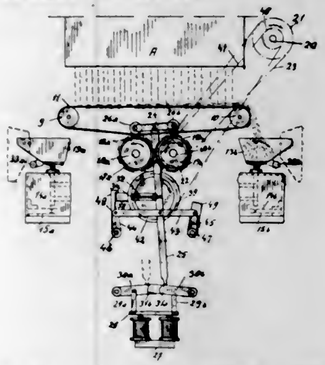
1. In a device of the class described, a transverse disc for mounting in each outlet from the cylinders of a motor

to the manifold, stems supporting said discs and slidably extending through said manifold to the exterior, means for resiliently urging said stems inwards, said means for resiliently urging said stems inwards comprising brackets



attached on said manifolds and having overhanging ends slidably supporting said stems, flanges on said stems, and expansion springs acting between said overhanging ends and said flanges.

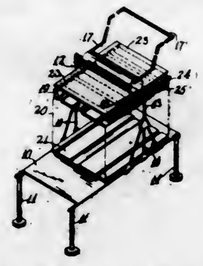
1,856,884. MEANS FOR THE AUTOMATIC WEIGHING OF GOODS OF DIFFERENT KINDS. VLADIMIR DMITRIJEVIČ POPOV, Pilsen, Czechoslovakia. Filed Apr. 4, 1930, Serial No. 441,627, and in Czechoslovakia Apr. 5, 1929. 5 Claims. (Cl. 249—28.)



1. Apparatus for weighing materials comprising in combination with a device for the delivery of a uniform stream of the material to be weighed, and in combination with two weighing machines of a normal and known type, an endless conveyor belt disposed beneath the outlet of the said device for the delivery of a uniform stream of the material to be weighed, two pulley wheels adapted to be rotated continuously in opposite directions, the said pulley wheels being adjacent the under surface of the idle portion of the said endless conveyor belt, and jockey rollers disposed adjacent the upper surface of the idle portion of the said endless conveyor belt and means actuating said jockey rollers to press the said belt alternately against the one and the other of the said two oppositely rotating pulley wheels, for the purpose of conveying a continuous uniform stream of material alternatingly into the one and the other of the scale pans of the said two weighing machines and of allowing time for the emptying of the one scale pan during the filling of the other, in such a manner that the procedure is enabled to be continuous and without interruption.

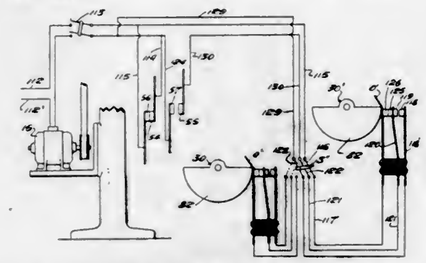
1,856,885. BALING PRESS FOR NEWSPAPERS AND THE LIKE. HOLDEN VALENTINE RASMUSSEN, Portland, Oreg. Filed Mar. 6, 1931. Serial No. 520,599. 5 Claims. (Cl. 100—2.)

1. A baling press for newspapers and the like, comprising a table, a press roller eccentrically supported above said table, and a lever for turning the roller downwards to a position rearwards past dead center, comprising a member substantially of U form and having its free end



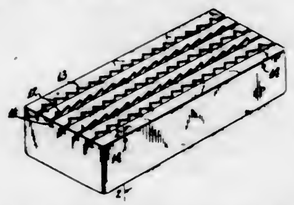
bent out of a plane of its inner end so as to be capable of resting against the top of the table and holding the press roller past the dead center position.

1,856,886. SYNCHRONIZED SOUND AND PHOTOGRAPHY. HARRISON W. ROGERS, New York, N. Y. Filed Nov. 2, 1928. Serial No. 316,788. 2 Claims. (Cl. 172—293.)



1. In combination, two independently motor driven devices, a differential gearing interposed between the two devices and driven from opposite sides by said devices, a circuit including the motor of one device, a governor actuated switch operated by the last mentioned device and in said circuit to control a predetermined speed of the motor of the last mentioned device, and a second switch in said circuit and under the control of the gearing whereby the second device through said circuit controls the speed of the motor of the first device.

1,856,887. MEAT BLOCK CLEANER. WILLIAM FRANK SCHEPPY, Elmhurst, N. Y. Filed Feb. 14, 1931. Serial No. 515,768. 4 Claims. (Cl. 145—47.)



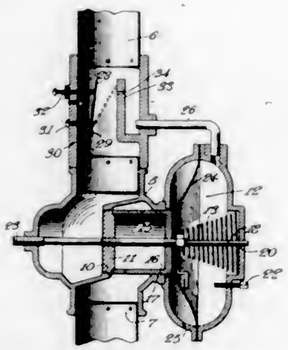
1. A meat block cleaner, comprising a block with parallel grooves extending from end to end, hack saw blades within said grooves and extending above the block so that the teeth are located at the top, and means for changing the resilient action of said blades, comprising tapered portions on the sides of said blades at locations wherein normally the flat sides of the blades act against the sides of the grooves and only upon raising of the blades do the tapered portions extend above the top of the block.

1,856,888. METHOD OF MANUFACTURING DECORATED TUBING. HENRY D. SCOTT, Wheeling, W. Va. Filed Apr. 5, 1930. Serial No. 442,021. 1 Claim. (Cl. 29—156.)



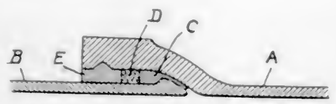
The process of making welded steel tubing having an ornamental design in substantial relief thereon, comprising forming a design in substantial relief upon a surface of a flat piece of skelp, heating the skelp to a welding temperature, and passing the skelp through apparatus for applying external pressure thereto to bend the skelp into tubular form and weld its abutting edges without substantially modifying the ornamental relief design thereon.

1,856,889. VALVE FOR PNEUMATIC DISPATCH SYSTEMS. JOSEPH JOHN STOETZEL, Queens Village, N. Y., assignor to G & G Atlas Systems, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,630. 5 Claims. (Cl. 243—12.)



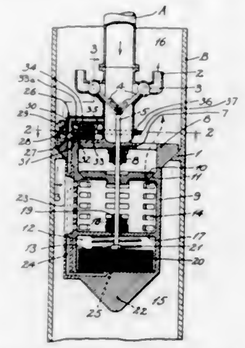
1. A control valve for a minimum flow pneumatic dispatch system comprising a valve casing adapted to be connected between a dispatch line and a suction line and having a port therebetween, a valve member controlling said port, means normally holding said valve from its seat to permit a minimum flow through said port, a pneumatic subject to the pressure within the dispatch line and operatively connected to said valve member, an auxiliary valve member arranged to stop the flow of air through the said port, and a by-pass permitting a greater flow than said minimum for equalizing the pressure on the two sides of said auxiliary valve when the latter is closed.

1,856,890. PIPE JOINT PACKING. DAVID B. STOKES, Beverly, N. J., assignor to United States Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Nov. 28, 1930. Serial No. 498,586. 2 Claims. (Cl. 288—1.)



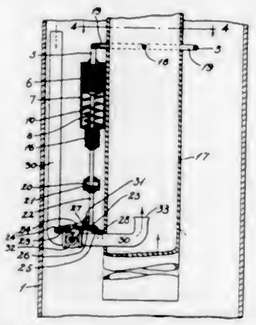
1. A packing ring for pipe joints made up of an absorbent packing material saturated with a plastic compound of glycerine and a substance substantially nonreactive with chemicals contained in the fluids passing through the pipe, said plastic compound having the characteristics of congealing at normal temperatures and liquefying when heated.

1,856,891. METHOD AND APPARATUS FOR GAS LIFT. PHILIP SUBKOW, Los Angeles, Calif. Filed May 26, 1930. Serial No. 455,913. 26 Claims. (Cl. 103—232.)



1. In a method for producing an intermittent flow from a well, the step of alternately introducing predetermined and regulated volumes of gas and of fluid into the eduction pipe of said well.

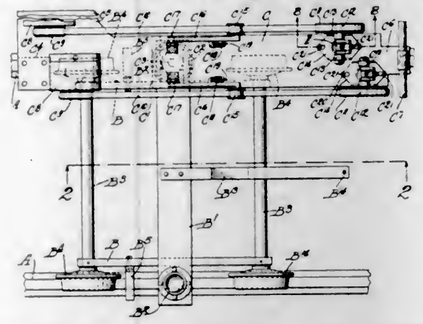
1,856,892. APPARATUS FOR GAS LIFT CONTROL. PHILIP SUBKOW and JACOB J. KOOAN, Los Angeles, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed May 26, 1930. Serial No. 455,914. 14 Claims. (Cl. 103—232.)



1. A gas lift method for oil wells comprising applying gas under pressure to an eduction tube for discharging oil from said tube, and continuously regulating the flow of gas into the tube in response to variations in static head in the well to maintain a substantially continuous introduction of gas during the oil discharge, said regulation being applied adjacent the point of introduction of the gas into the tube.

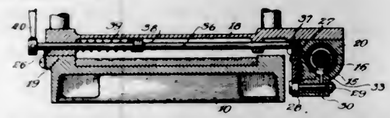
1,856,893. SPIKE DRIVER. HENRY H. TALBOYS, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 3, 1930. Serial No. 465,583. 38 Claims. (Cl. 104—17.)

1. In a spike driver, a movable carriage, a spike driving machine, carried pivotally thereby, said carriage provided with a fitting adapted to receive said spike driving machine, said machine being gravitally held upon said fitting, and being readily upwardly removable therefrom, said machine including a support, a hammer, a hammer guiding assembly and a spike gripping assembly and



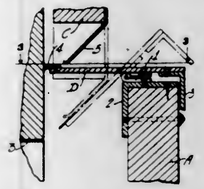
a generally horizontal supporting frame with which they are unitarily movable, said frame being freely tiltable in relation to the carriage during the normal spike driving operation.

1,856,894. WORK SUPPORT FOR SLICING MACHINES. ADRIANUS VAN DUYN, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed July 11, 1927, Serial No. 204,747, and in the Netherlands Oct. 15, 1926. 7 Claims. (Cl. 146—102.)



1. A slicing machine comprising a table, a work support slidably mounted on said table, a hollow guide member for said work support, a feed screw disposed within said guide member, said guide member having a longitudinal slot therein opening downwardly, and a feed block extending through said slot and having teeth thereon for engaging said feed screw to feed said work support relative to said table when said feed screw is rotated.

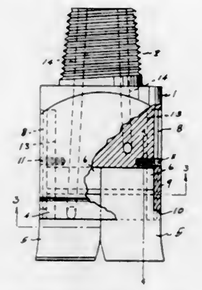
1,856,895. FIRE STOP FOR ELEVATOR DOORS. HERMAN C. WALDMAN, St. Louis, Mo. Filed May 10, 1929. Serial No. 361,914. 4 Claims. (Cl. 189—48.)



1. An elevator fire door structure, comprising a top door section spaced away from the lintel of the door opening, so as to form a passageway for a vertically-aligned door located at a higher level, and a fire stop rockably mounted on said top door section and provided with portions that lap over the top edge and the adjacent outer surface of said door section when said stop is in its operative position.

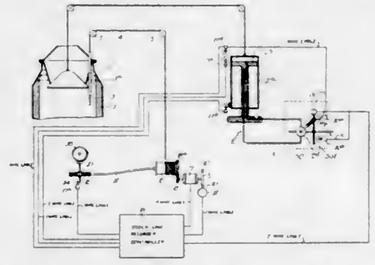
1,856,896. DRILL BIT. HARVE M. WHEELER, Houston, Tex. Filed Aug. 10, 1929, Serial No. 384,941. Renewed Mar. 7, 1932. 3 Claims. (Cl. 255—61.)

1. A drill including a drill head having a transverse end groove forming one end of the head into spaced prongs, cutting means fitted into said groove and projecting out beyond the head, removable retainer plates on the head, on each side of the cutting means and forming means for securing the cutting means against detachment from the



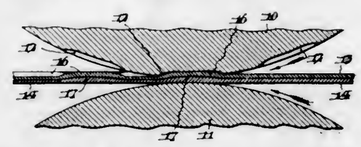
head, said prongs having longitudinal grooves forming seats, and said retaining means having longitudinal projections fitted into said seats and being effective to secure said prongs against spreading.

1,856,897. STOCK LINE RECORDER. ARTHUR J. WHITCOMB, Chicago, Ill., assignor to Freyn Engineering Company, Chicago, Ill., a Corporation of Maine. Filed Sept. 3, 1927. Serial No. 217,448. 16 Claims. (Cl. 214—36.)



1. In a device for continuously indicating fluctuations in level, in combination, a receptacle the level of the contents of which is to be indicated, a weighted test member adapted to rest for prolonged periods of time upon the top of said contents, an electric motor for raising said test member, a cable connected to said test member adapted to be wound up by said motor, means for limiting the pull of said motor upon said cable to a value sufficient to hold said cable taut without lifting said test member from said contents, a closure for said receptacle, operating means for said closure and means responsive to a raised position of said test member for controlling said closure operating means.

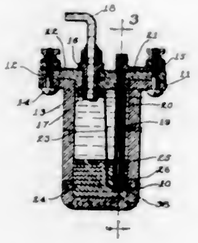
1,856,898. FABRICATION OF EMBOSSED METALLIC PLATES. ALAN D. WOOD, Lower Merion Township, Montgomery County, Pa. Filed Mar. 30, 1928. Serial No. 265,928. 6 Claims. (Cl. 80—60.)



5. The method of fabricating embossed plates by concurrently passing two metallic blank sheets in superimposed relation between a pattern or impress roller and an

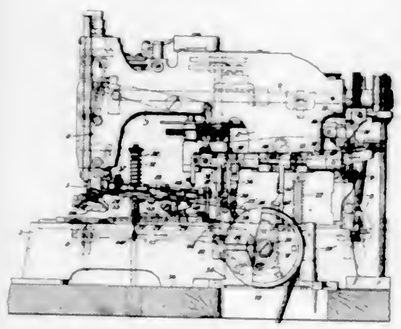
opposing plain surfaced roller with production, by a single pass of two finished plates, one of them corrugated and the other with a smooth back, and the two otherwise distinguished by surface projections varying in sharpness of outline.

1,856,899. LIQUID LEVEL GAUGE. MYRON E. ZELLER, Dearborn, Mich. Filed Oct. 19, 1929. Serial No. 400,775. 2 Claims. (Cl. 201—48.)



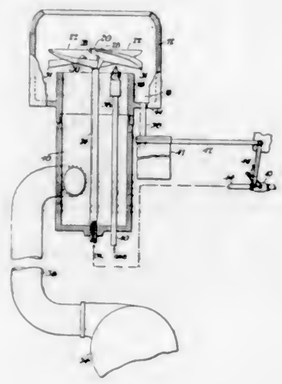
2. In a device of the character described, a fuel tank, a reservoir of insulating material containing mercury arranged so that fuel may flow from said tank into said reservoir, a cap of insulating material disposed over said reservoir having an integral open ended tube extending therefrom into said mercury, a resistance element disposed within said tube so that as the pressure of the fuel upon the mercury in the reservoir increases the mercury within the tube will rise and short-circuit a greater portion of said resistance element, said cap member having a pocket formed therein which is in connection with the upper portion of said tube, thereby allowing the displaced air to filter therethrough, and a quantity of steel wool disposed in said pocket allowing the passage of air but preventing the passage of mercury therethrough.

1,856,900. WORK-CLAMP MECHANISM FOR SEWING MACHINES. EDWARD B. ALLEN, Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 4, 1930. Serial No. 441,496. 7 Claims. (Cl. 112—76.)



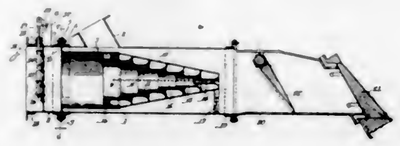
1. A work-clamp for sewing machines comprising a lower clamp-member, main and supplemental clamp-levers carried by said lower clamp-member, a clamp-foot carried by said supplemental clamp-lever, automatic means for operating said main clamp-lever, and manually operated means for moving said supplemental clamp-lever toward the lower clamp-member, and a recovery spring for lifting said supplemental clamp-lever.

1,856,901. OIL BURNER. THOMAS ANDERSON, Elmhurst, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed June 11, 1928. Serial No. 284,295. 11 Claims. (Cl. 158—92.)



1. A liquid fluid burner having an air duct, a number of inclined partially overlapping spaced fuel vaporizing plates arranged at one end of said duct, and a conduit arranged to deliver liquid fuel to the upper surfaces of each of said plates.

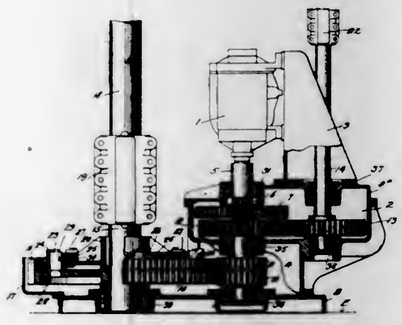
1,856,902. APPARATUS FOR BURNING POWDERED FUEL. MILTON W. ARROWOOD, Greenwich, Conn. Filed Feb. 26, 1927, Serial No. 171,098. Renewed Mar. 18, 1932. 28 Claims. (Cl. 110—104.)



1. In a device for feeding powdered fuel to a furnace, means for supplying powdered fuel and air to the furnace, means for creating turbulence in the powdered fuel and air including a series of axially aligned annular outward deflectors disposed in the line of flow, said deflectors being of successively decreasing diameters in the direction of said flow.

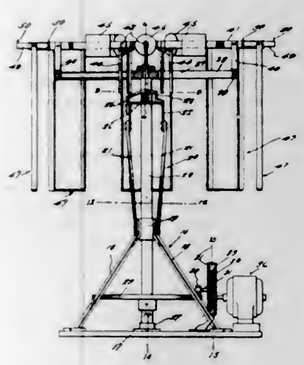
1,856,903. WINDLASS AND CAPSTAN DRIVING MECHANISM. GEORGE EUGENE BARRETT, Laurel Springs, N. J. Filed Feb. 25, 1930. Serial No. 431,237. 4 Claims. (Cl. 74—7.)

1. In a mechanism of the character described, the combination with driving means and driven means, of transmission mechanism connecting them, and consisting essentially of a shaft, a gear wheel loose thereon, means for locking it thereto, a second shaft parallel to the first, a pinion thereon, a pair of combined gear wheels and pinions, of which the gear wheels lie in the same plane and are engaged by the said pinion on the second shaft, a third shaft in line with the second shaft, a gear wheel on the third shaft engaged by the two pinions of the combined wheels, a pinion on said third shaft that engages the gear wheel on the first shaft, a fourth shaft parallel



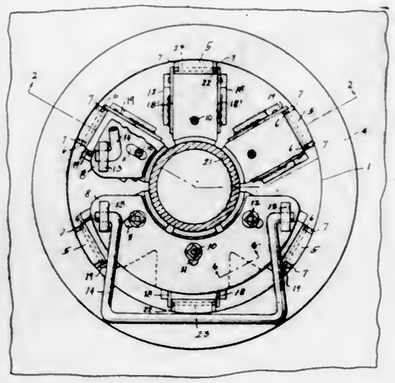
to the other shafts; and a gear wheel on the fourth shaft that is engaged by the intermediate gear wheel on the third shaft.

1,856,904. AUTOMATIC BAG HOLDER AND WEIGHER. PARRY J. CAMPBELL, Boyne City, Mich., assignor of one-half to F. Wesley Dilworth, Boyne City, Mich. Filed Dec. 8, 1930. Serial No. 500,914. 2 Claims. (Cl. 265—51.)



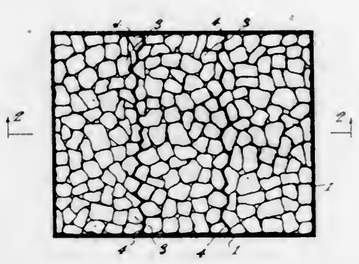
1. In a bag holding and filling apparatus of the class described, a relatively stationary support embodying a fixed stop and a complemental spring-pressed latch, a shaft mounted for rotation on said support, a head mounted on said shaft for rotation therewith, a plurality of radially disposed circumferentially spaced bag holding devices carried by the head, each device comprising a swingably mounted adjustable scale beam having a trip at one end, and having a bag hanger at the opposite end, said trip first engaging the spring-pressed latch which acts as a brake of the rotary part, after which the trip engages the stop which holds the outward part against movement, until the bag is filled and the tilting of the beam moves the trip out of engagement with the stop.

1,856,905. PIPE HOLDER. MONROE W. CARROLL, Beaumont, Tex., assignor to Jeddy D. Nixon, Harris County, Tex. Filed Jan. 4, 1930. Serial No. 418,640. 8 Claims. (Cl. 24—263.)



1. In a pipe holder a wedge shaped slip having a series of antifriction rollers movable longitudinally of the slip at its outer margin, a stop beneath and supporting said series, and a yieldable member bearing against the upper roller of said series.

1,856,906. BUILDING CONSTRUCTION. RICHARD CARVEL, New York, N. Y. Filed Sept. 11, 1930. Serial No. 481,086. 6 Claims. (Cl. 25—155.)

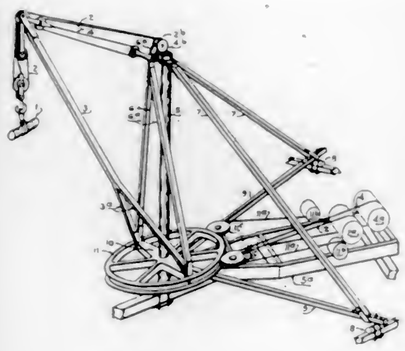


2. The method of forming concrete wall sections which comprises laying protecting material in a form of predetermined size and shape, laying facing material thereon, separating certain portions of the facing material by placing a flexible spacing member therebetween which conforms to the shape of the facing material, and pouring concrete over the facing material to bind the same together except along the line of separation.

1,856,907. DERRICK CONSTRUCTION. PAUL CHAPMAN, New York, N. Y. Filed July 24, 1931. Serial No. 552,856. 6 Claims. (Cl. 212—70.)

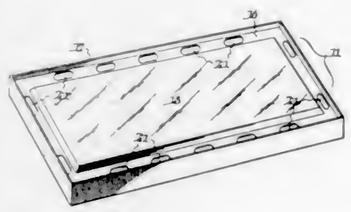
1. In derrick construction; a spread base rotating boom; a spread base rotating mast; a fixed mast; a horizontal swivel transferring the loads from the said boom and the said rotating mast to the said fixed mast at its base; a top-lift; a top-lift line; a fall line; a hollow center in said fixed mast, thru which the said top-lift line and the said fall line pass; sheaves supported by the upper end

of the said rotating mast, over which the said top-lift line and the said fall line pass downward; a horizontal pin-connected link connecting the said top-lift and rotating mast with a rotating bearing on the top of the said fixed



mast; a rotating bearing on the top of the said fixed mast; means to transfer horizontal stress only to the said fixed mast and two rigid-legs extending from the top of the fixed mast, substantially as described.

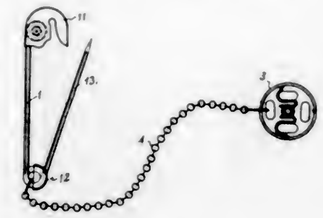
1,856,908. BURIAL VAULT. RICHARD D. COGSWELL, Millbourne, Pa. Filed Apr. 2, 1930. Serial No. 440,926. 4 Claims. (Cl. 72—7.)



1. A burial vault of masonry comprising a box-like bottom component with a lining of non-corroding sheet metal having a flange to extend over the top edge of the bottom component and secured by an interposed film of cementitious bonding material, said flange being perforated for penetration by the bonding agent with attendant formation of retaining keys; and a lid component having a perimetric recess in its under face adapted to be filled with a slow-hardening cementitious plastic and to engage over the top edge of the bottom component, with formation of a hermetical seal all around when the lid component is placed in position on the bottom component incident to interment, said lid component being also provided with a lining of non-corroding sheet metal having key openings along the bottom of the perimetric recesses aforementioned.

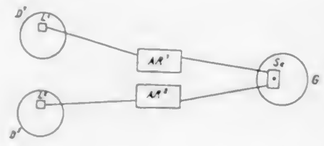
1,856,909. SECURING DEVICE FOR CLOTHING. SARA DAVID, West View, Pa. Original application filed Oct. 3, 1930, Serial No. 486,114. Divided and this application filed Sept. 2, 1931. Serial No. 560,725. 1 Claim. (Cl. 24—73.)

A securing device for clothing including in combination a safety pin, a snap fastener, and a loop-forming member, one part of the snap fastener being secured to the safety pin with its axis disposed perpendicularly to the plane in which the parts of the safety pin swing, and



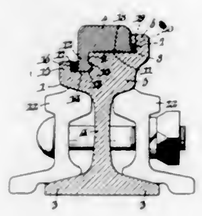
the loop-forming member being attached at one end to the safety pin and at the other end to the other part of the snap fastener.

1,856,910. PROCESS AND DEVICE FOR TRANSFORMATION OF ELECTRIC CURRENTS. JEAN DIEUX, Paris, France. Filed Jan. 8, 1930, Serial No. 419,255, and in France Apr. 18, 1929. 7 Claims. (Cl. 179—100.4.)



1. The process of recording and reproducing sounds consisting in collecting the audible vibrations of a source of sound, transforming these audible vibrations into modulated vibrated currents, analyzing these currents, amplifying the analytic currents, fixing them by engraving on two surfaces moving with different speeds but remaining at a constant ratio, synthetizing the vibrated modulated currents reproduced by said surfaces, and transforming the vibrated modulated current of the synthesis into mechanical vibrations.

1,856,911. RAIL AND METHOD OF ASSEMBLING THE SAME. ROBERT FARIES, St. Davids, and CHARLES D. YOUNG, Haverford, Pa. Filed Jan. 17, 1931. Serial No. 509,448. 10 Claims. (Cl. 238—143.)

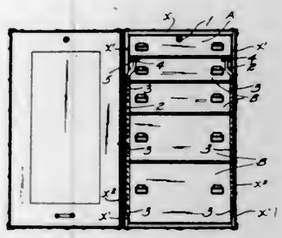


1. A rail having a compound head comprising upper and lower sections, said lower section having grooved shoulders arranged in stepped formation from one side to the other, and said upper section having laterally extending tongues adapted to fit within said grooves and to restrain relative vertical movement between said sections, and a longitudinal key welded to said lower section and adapted to serve as an abutment restraining relative lateral movement between said sections.

1,856,912. IMPROVED METHOD OF SHOOTING WELLS. JOHN J. GREBE and NOLAND POFFENBERGER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 4, 1930. Serial No. 459,257. 8 Claims. (Cl. 166—21.)

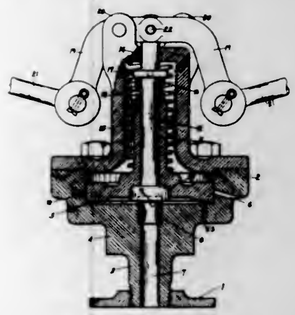
1. The method of shooting a deep well while materially reducing the damage thereby to the walls of the well (including a casing if present) above the stratum to be shot when the well contains a liquid, which comprises placing a charge of explosive in the well, bringing about the presence in the liquid above the said charge of a gaseous medium to cushion the effect upon said walls of the compression wave transmitted therethrough following the explosion of the charge and exploding the charge.

1,856,913. WARDROBE TRUNK. FREDERICK HERKERT, Jr., St. Louis, Mo. Filed Oct. 31, 1929. Serial No. 403,797. 5 Claims. (Cl. 45—94.)



5. A wardrobe trunk having a drawer section equipped with a master drawer and a plurality of additional drawers, a key-controller lock for retaining the master drawer in its closed position, and a means for locking said additional drawers consisting of a rigid locking bar shiftably mounted on said drawer section in an accessible position at the front side of same and adapted to be moved manually into overlapping relationship with said additional drawers, said locking bar being adapted to be held in its locking position by said master drawer.

1,856,914. AIR RELEASE VALVE. GUY F. HITCHCOCK, Houston, Tex., assignor of one-third to Thomas H. Meeks and one-third to Joe L. Tomlinson, Harris County, Tex. Filed Aug. 20, 1928. Serial No. 300,705. 8 Claims. (Cl. 303—80.)



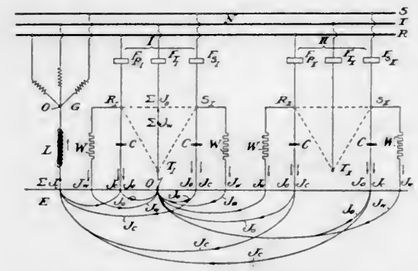
1. A valve including a valve body formed with a cylinder for containing fluid under pressure and having a relief conduit entering the cylinder and a relief port leading therefrom, a plunger in the cylinder normally closing said port, a valve associated with the plunger and independently movable relative thereto, and normally closing said conduit, means normally overcoming said pressure and holding said plunger and valve in closed position, oppositely disposed levers operatively connected to the valve, through either of which the valve and plunger may be moved to open said conduit and port.

1,856,915. SKID PREVENTING DEVICE. RICHARD IRVIN, Knoxville, Pa. Filed Oct. 8, 1930. Serial No. 487,172. 2 Claims. (Cl. 152—14.)



1. An anti-skid device for a pneumatic vehicle tire including a band of elastic material adapted to extend transversely across the tread of a tire, and an elastic channel-shaped metallic clip with converging opposite sides adapted to underlie said band, the medial web of the channel interposed between the band and the tread of the tire, and converging sides of the clip engaging opposite edges of the said band, and the outer ends of the clip adapted to engage the road, the arrangement being such that under compression incident to service the opposite converging sides of the clip exert opposite transverse compressive strains upon the band.

1,856,916. GROUND DETECTING MEANS FOR ELECTRIC CIRCUITS. JULIUS JONAS, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Filed Jan. 8, 1926, Serial No. 80,082, and in Switzerland June 13, 1925. 3 Claims. (Cl. 175—294.)



1. In an alternating current distribution system, a plurality of lines normally insulated from the ground and having associated therewith an inductive grounding device for producing a flow of compensating currents on occurrence of a ground fault on one of said lines to substantially reduce the capacity current tending to flow to said ground fault, said grounding device having a core arranged to become saturated on occurrence of a ground fault, means responsive to currents flowing across said ground fault of harmonic frequencies for indicating said ground fault, the saturation of the core of said grounding device on the occurrence of a ground fault operating to increase substantially the magnitude of the harmonic frequency currents flowing across said ground fault which actuate said indicating means.

1,856,917. SUCKER ROD COUPLING. THOMAS M. JORDAN and WILLIAM H. HERRINGTON, Kountze, Tex. Filed Oct. 11, 1930. Serial No. 487,977. 4 Claims. (Cl. 287—119.)

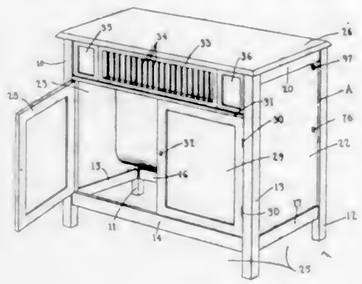
1. A sucker rod coupling comprising two members, one of said members including a ribbed pin and the other

a grooved box to receive said pin to interlock therewith, said box comprising a fixed section and a swinging section, said swinging section having a base disposed in the path of the end of the pin as the pin enters between the sections of the box to tightly engage the pin between the sections, a sleeve carried by the member having the pin for sliding movement therealong, said sleeve being en-



gageable over the sections of the second member to hold the pin clamped between said sections, and yieldable means carried by the second member and coacting with the sleeve to hold the sleeve in applied position with respect to the sections of the box, said means upon movement of the sleeve to unapplied position yieldably maintaining the sleeve in such unapplied position.

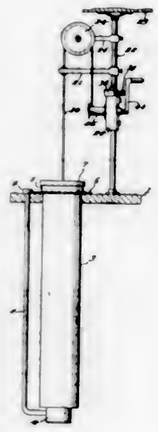
1,856,918. HUMIDIFIER. WAYNE D. JORDAN, Minneapolis, Minn., assignor, by mesne assignments, to Daniel Handelan, Minneapolis, Minn. Filed May 18, 1929. Serial No. 364,141. 16 Claims. (Cl. 261—30.)



1. A humidifier comprising a case having a curved bottom and a partition extending along said case and toward said curved bottom and forming in conjunction with the walls of said case a reversed passageway, an outlet formed at one end of said passageway, and an inlet formed at the other end of said passageway, means for spraying water into said passageway at the inlet end thereof, and a curved plate disposed within said passageway and following the curvature of the bottom of said case for the elimination of water at the reversal of said passageway.

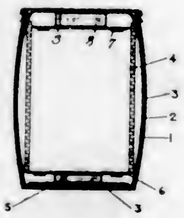
1,856,919. ICELESS COOLER. BERNARD LANDEN, Oakland, Nebr. Filed June 5, 1930. Serial No. 459,389. 1 Claim. (Cl. 187—3.)

In an iceless cooler, a casing adapted to be positioned beneath the surface of the earth, a carrier adapted for movement into and out of said casing, said carrier being adapted to move into said casing through gravity after each removal therefrom, a spool, a cable connecting said carrier to said spool and adapted to be wound upon the latter to raise said carrier, a motor for said spool, a



worm gear loose upon the motor shaft, means connecting said worm gear and motor shaft for causing them to move together when said motor shaft moves in one direction, a worm in mesh with said worm gear, and a brake for said worm.

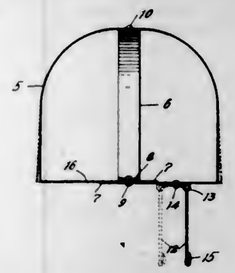
1,856,920. REFRIGERATED FOOD PACKAGE. CARL L. LOHNER and JOHN E. COVEY, Chicago, Ill., assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 17, 1930. Serial No. 482,418. 2 Claims. (Cl. 62—91.5.)



1. A refrigerator meat package comprising a wooden container, a water-proof lining covering the interior of the container, a packing of open material covering the inner side of the lining, a liner of corrugated material within the packing, a waxed paper liner within the corrugated liner to receive the meat and of a length to be gathered over the contents of the package, a solid refrigerant at the top and bottom of the container, and a cover closing the top of the container.

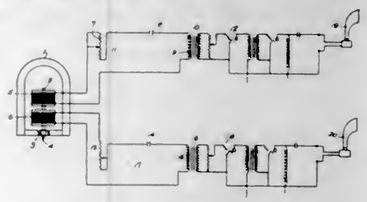
1,856,921. HAT FORM. MILTON LOWENTHAL and JACOB KALVIN, New York, N. Y. Filed Dec. 30, 1929. Serial No. 417,369. 1 Claim. (Cl. 223—21.1.)

In a device as characterized, a hat form comprising crossed members, means for pivoting said crossed members together, and means for hanging the form up from one of its crossed members, one of said members being



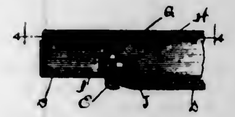
rotatable to be positioned within the other, said hanging means cooperating with the folded members for retaining the same in folded position.

1,856,922. PHONOGRAPH ELECTRICAL REPRODUCER. ARNO MERKEL, New York, N. Y., and RICHARD R. HALPENNY, Bridgeport, Conn., assignors to Ray G. MacPherson and James E. MacPherson, New York, N. Y. Filed Apr. 28, 1928. Serial No. 273,539. 1 Claim. (Cl. 179—100.1.)



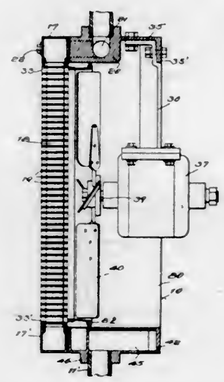
An electrical reproducer for phonographs comprising an electromagnetic pick-up device having a plurality of electromagnetic pick-up coils, reproducing means having a corresponding number of energizing coils, and an audio amplifier connecting each pick-up coil with an energizing coil and having its input circuit including said pick-up coil, the primary of an audio transformer, a condenser for tuning said circuit to resonance at a determined frequency in the audio frequency range, and a resonance broadening resistance for varying the potentials generated in the primary coil responsive to varying amplitudes of motion of the armature of the pick-up device, the said input circuits of the audio amplifiers being tuned to resonance at different frequencies in the audio range.

1,856,923. DEVICE FOR MOUNTING GLASS, MIRRORS, ETC. HARLEY H. MILLER, Middletown, Ohio, assignor to The Miami Cabinet Company, a Corporation of Ohio. Filed Oct. 15, 1928. Serial No. 312,417. 12 Claims. (Cl. 45—18.)



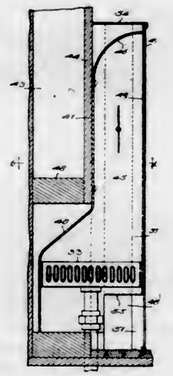
1. A glass or mirror mounting fixture composed of a button, an opening arranged in the side of the button adapted to receive a glass or mirror, said opening having walls so arranged as to be substantially parallel with the sides of the glass or mirror adjacent to the walls and resilient means fixedly attached to and holding said button in place on a mirror support.

1,856,924. AIR HEATING UNIT. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 7, 1929. Serial No. 384,204. 19 Claims. (Cl. 257—137.)



9. In a device of the class described, a heating unit comprising an upper tank and a lower tank connected by tubular members, means for supporting said unit comprising fluid conducting frames, one of said frames being rigidly secured to one of said tanks and the other frame frictionally engaging the tank connected therewith providing means compensating for linear expansion and contraction of said tubular members, means supported by one of said frames for projecting a current of air through said heating unit, and walls connecting said frames and cooperating therewith, and with said heating unit to form a housing for said air projecting means.

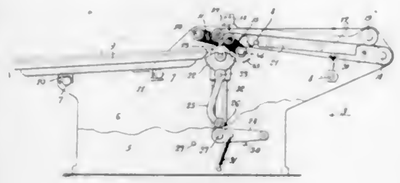
1,856,925. WALL RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 7, 1929. Serial No. 384,202. 9 Claims. (Cl. 257—136.)



2. A radiator stack having a radiator chamber in combination with a wall of a room with which said stack is associated, said wall having a recess, a duct adapted to

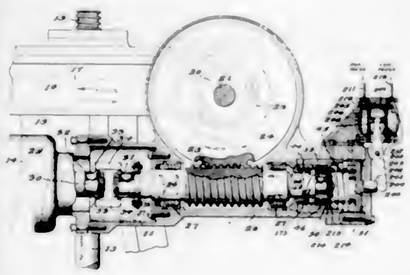
be located outside of said wall communicating with and extending from said chamber, said duct being offset relatively to a portion of said chamber a portion of said chamber being located in said recess, and an air inlet provided in said chamber.

1,856,926. MACHINE FOR DEVELOPING SENSITIZED PAPER. KNUD MURCK, Forest Hills, N. Y., assignor to Charles Bruning Company Inc., a Corporation of New York. Filed May 28, 1929. Serial No. 366,690. 9 Claims. (Cl. 95—94.)



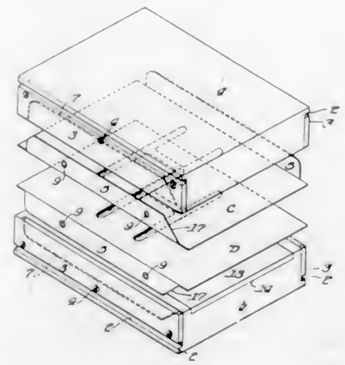
1. A machine for developing sensitized paper comprising in combination a trough containing the developing solution, a developer roller removably supported in the trough, a plurality of superposed pairs of driven tapes feeding the paper past the developer roller, gravity operated strippers for preventing the paper from clinging to the developer roller, gravity operated members for insuring contact between the paper and the developing roller and means for driving the latter and the said tapes.

1,856,927. VALVE CONTROL. ERWIN J. PANISH, Bridgeport, Conn. Filed Feb, 17, 1930. Serial No. 428,962. 20 Claims. (Cl. 137—139.)



1. In a valve opening and closing device having valve-actuating mechanism and a driving motor therefor; means for automatically controlling opening and closing movements of the valve by said motor and valve-actuating mechanism and for automatically determining the extents of movement of the valve in both closing and opening directions, said means including means operated when the motor applies a predetermined torque to the valve-actuating mechanism incidental to cessation of movement of the valve for rendering the motor inoperative to apply power to the valve-actuating mechanism; and means responsive to one-sided fluid pressure against the valve for making said last-named means operative only when a greater torque than said predetermined torque is applied by the motor to the valve-actuating mechanism.

1,856,928. EMBOSSING SHEET METAL. WILLIAM J. PANNIER, Jr., Pittsburgh, Pa., assignor to Pannier Brothers Stamp Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 16, 1930. Serial No. 475,765. 13 Claims. (Cl. 101—28.)

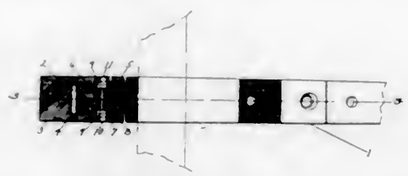


1. Embossing members for action on sheet metal consisting of a pair of sheet metal die members, one having projections and the other having corresponding registering depressions, and quickly detachable resilient interlocking means for mounting said die members in operative relation to each other.

1,856,929. LIGHTWEIGHT BUILDING MATERIALS. JOHN SANFORD PECK, Scarsdale, and EUGENE V. BARRETT, White Plains, N. Y. Filed Nov. 13, 1930. Serial No. 495,420. 13 Claims. (Cl. 106—21.)

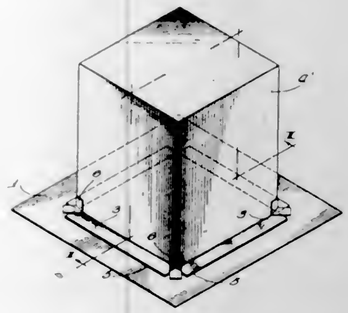
1. The method of producing light weight building material which comprises producing a mixture of water and an argillaceous material and a sufficient amount of a water-soluble gas dissolved therein to produce a porous mass on subsequent heating, then heating the mixture to liberate the gas and form a porous mass.

1,856,930. DIPPER TOOTH STRUCTURE. PHILIP T. ROBIN, Erie, Pa., assignor, by mesne assignments, to The Wellman Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 16, 1929. Serial No. 414,305. 8 Claims. (Cl. 37—142.)



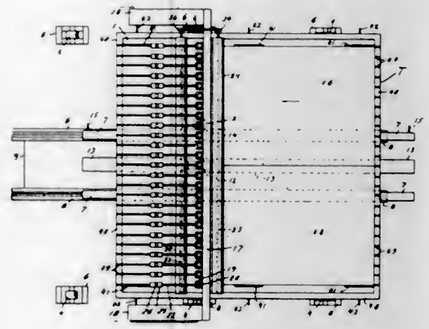
1. The combination of a dipper tooth base; a detachable tooth on said base, said base and tooth having a tongue and socket connection, the outer member of the connection having a key plug receiving opening and the inner member of the connection having a key plug receiving socket; a key plug in the opening extending into the key plug receiving socket locking the tooth on the base, said key plug being insertable into the opening and from the opening into the socket; and a bolt extending through the members of the connection locking the key plug in place.

1,856,931. ENVELOPE AND METHOD OF TREATING FURNITURE. WELLINGTON W. SCOTT, Waukegan, Ill., assignor to Arwell Products Company, Waukegan, Ill., a Corporation of Illinois. Filed Nov. 8, 1930. Serial No. 494,341. 6 Claims. (Cl. 167—3.)



5. An article de-verminizing envelope comprising a base member, a chambered section, and a plurality of adhesive flanges and straps on said chambered section for securing said section to said member in air tight relation to provide an air-tight de-verminizing chamber within the envelope.

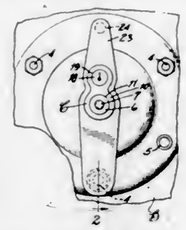
1,856,932. METHOD AND APPARATUS FOR MAKING PLASTER BOARD. HARRIS W. SHAW, Williamsville, N. Y., assignor to National Gypsum Company, Buffalo, N. Y., a Corporation of Delaware. Filed Oct. 1, 1929. Serial No. 396,482. 14 Claims. (Cl. 154—1.)



3. Apparatus for forming a plurality of parallel grooves on a surface comprising a plurality of spaced grooving tools, a plurality of spaced guides respectively engaging said tools and permitting the independent vertical movement of said tools, independent means for pressing each of said tools downwardly in its guide and means for moving a surface beneath said tools.

1,856,933. SPARE WHEEL LOCK. FREDRICK A. SMITH, Waukegan, Ill., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Jan. 18, 1930. Serial No. 421,693 1 Claim. (Cl. 70—90.)

The combination with a spare wheel carrier having securing bolts and a spare wheel with holes corresponding in position to the bolts, of a stud projecting from the carrier, a lock body fitted upon the stud and having radially projecting arms integral therewith, one arm having a socket at its end to receive one of the bolts securing the spare wheel to the carrier and the other arm having a

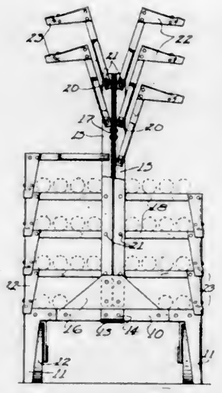


lug for entering the registering holes of the carrier and wheel at another point of the wheel, and means for releasably securing the lock body upon the stud.

1,856,934. REFINING LUBRICATING OIL. JAMES G. STAFFORD, Whiting, Ind., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed June 16, 1928. Serial No. 286,073. 2 Claims. (Cl. 196—147.)

2. In the refining of lubricating oils, the improvement which comprises contacting the lubricating oil with a comminuted solid consisting solely of a non-metallic adsorbent at a temperature of about 500–600° F. for about 2–5 minutes in the presence of a maintained atmosphere of a reducing gas.

1,856,935. RACK. GILES M. TURNER, Milwaukee, Wis. Filed May 9, 1930. Serial No. 451,026. 5 Claims. (Cl. 211—182.)

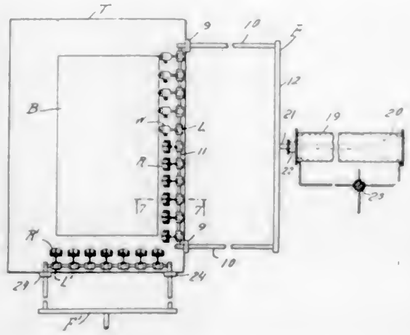


4. In a rack, the combination of a frame, a plurality of swingable supports pivotally mounted on said frame and arranged one above another, said supports each having outer corner portions, and angle members carried at the outer corner portions of said supports and releasably engageable with the corner portions of the adjacent supports, said angle members at their end portions overlapping the corner portions of the adjacent supports.

1,856,936. PLASTER BOARD APPARATUS. JOHN J. TURNER, Williamsville, N. Y., assignor to National Gypsum Company, Buffalo, N. Y., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 298,983. 7 Claims. (Cl. 154—1.)

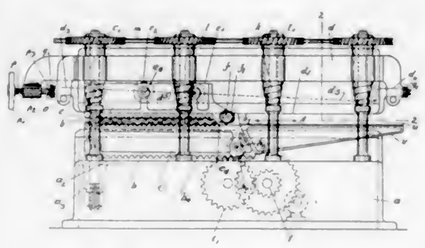
1. Apparatus for impressing a plurality of parallel grooves on a surface comprising a plurality of spaced

parallel rollers each having a groove forming extension thereon, means for separately movably mounting each of



said rollers, means for independently pressing each of said rollers downward and means for simultaneously moving all of said rollers over a surface.

1,856,937. STRAIGHTENING AND ROLLING MACHINE. KARL FRIEDRICH UNOERER, Pforzheim, Germany. Filed Dec. 20, 1928, Serial No. 327,241, and in Germany Dec. 27, 1927. 15 Claims. (Cl. 153—54.)



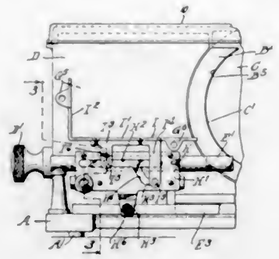
1. A straightening and rolling machine comprising in combination with the upper and lower straightening or rolling rolls, an upper supporting surface, and a lower supporting surface over which said rolls roll during the straightening and rolling operation.

1,856,938. METHOD AND MEANS FOR LEAVENING. EDWIN O. WITH, Madison, Wis., assignor to The Wisconsin Alumni Research Foundation, Madison, Wis., a Corporation of Wisconsin. Filed May 10, 1928. Serial No. 276,809. 11 Claims. (Cl. 99—10.)

9. A baking powder containing acetone dicarboxylic acid and starch as a diluent.

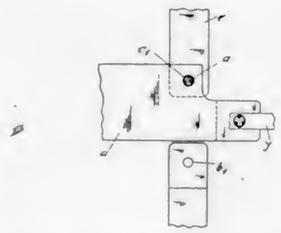
1,856,939. SLICING MACHINE. WALLACE B. WOLFF, Chicago, Ill., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed June 26, 1929. Serial No. 373,705. 4 Claims. (Cl. 146—102.)

1. In a slicing machine including a knife and means for actuating it, a carriage and means for guiding the carriage past the cutting edge of the knife, a work support mounted upon said carriage, arms depending from said work support, opposed to the opposite sides of said



carriage, the sides of said carriage being provided with slots, members on said arms adapted to penetrate said slots, said slots including a branch at one end.

1,856,940. APPARATUS FOR THE PRODUCTION OF ORNAMENTAL CHAINS, SO CALLED SNAKE CHAINS. JOSEF ALVERA and KARL SCHOFER, Pforzheim, Germany. Filed Aug. 13, 1930, Serial No. 474,982, and in Germany Aug. 17, 1929. 2 Claims. (Cl. 59—14.)

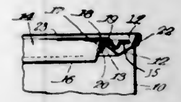


1. In a snake chain making machine a connecting link feeding arm, a casing link feeding arm, a shiftable matrix plate for both the connecting links and the casings links, a ram adapted to force a stamped connecting link out of said plate into said connecting link feeding arm when said plate is in its extreme forward position, a second feeding ram adapted to force the stamped casing link out of said plate into said casing link feeding arm when said plate is in its extreme rear position, a third ram adapted to force from below the connecting link out of said connecting link feeding arm into said casing link feeding arm carrying the casing link ejected from said matrix plate by said second ram and thereby to connect the connecting link with the casing link, a chain forming matrix under said casing link feeding arm, and a fourth ram adapted to eject the pair of connected links out of said casing link feeding arm into said chain forming matrix.

1,856,941. CAN. CARL A. ANDERSON, Chicago, Ill., assignor to General Can Company, a Corporation of Maine. Filed Jan. 17, 1931. Serial No. 509,297. 1 Claim. (Cl. 220—59.)

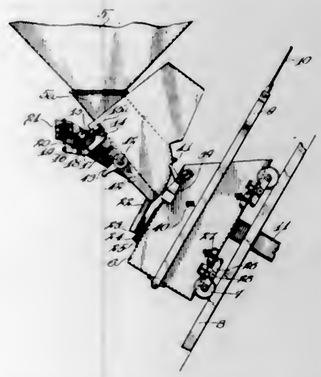
A receptacle having a top terminating in an inner peripheral bead, a cover having a channel into which said bead is adapted to seat frictionally when said cover is pressed into position on said receptacle, sealing material within said channel for forming an air tight seal with said bead, said channel having a wall extending beneath

the lower edge of said bead, and lugs in said lower portion of said wall engaging the lower edge of said bead for supplementing the frictional engagement of said cover



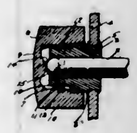
and bead and resisting movement of said cover in a direction to destroy the air tight seal between said cover and bead.

1,856,942. ELECTRICAL GATE CONTROL. HUBERT E. BAKER, Cleveland, Ohio, assignor to The Brady Conveyors Corporation, Chicago, Ill. Original application filed May 28, 1929, Serial No. 366,630. Divided and this application filed Jan. 8, 1931. Serial No. 507,471. 6 Claims. (Cl. 214—125.)



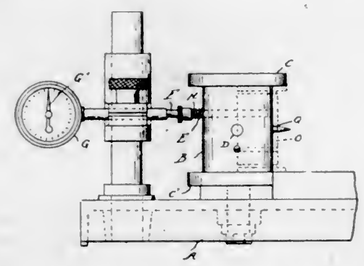
1. A skip loading apparatus comprising a hopper having an outlet, a gate for the latter tiltable from closed to open position, a projection carried by the gate, a latch adapted to receive the projection for retention and having clearance for an extended entry of the projection, a skip positioned for inclined travel opposite the gate, an abutment carried by the latter, and a lever carried by the skip and engageable on the ascent of the latter when the gate is tilted to restore the same to initial position, the lever clearing the abutment when the gate rises beyond the initial position by the operation of its projection in the clearance of the latch.

1,856,943. FISHING REEL. LE BONSIEUR, Elyria, Ohio, assignor to The General Industries Company, Elyria, Ohio, a Corporation of Ohio. Filed Mar. 5, 1928. Serial No. 259,014. 10 Claims. (Cl. 308—166.)



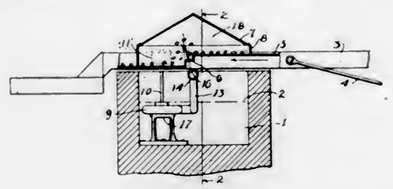
1. In a fishing reel, the combination with a pair of spaced end plates, a spool shaft extending between the plates, journaled bearings carried by both said plates for the ends of said spool shaft, one of said bearings comprising a longitudinally bored bearing boss projecting from an outer surface of its supporting end plate, said bearing comprising an exteriorly threaded portion and a longitudinally spaced annular portion having a relatively smooth surface and a cap for said boss screw threaded onto the exterior threads thereof and a longitudinally spaced annular portion having an internal annular groove, a spring wire loop fitted within said groove and formed to expand outwardly to bring portions thereof having a relatively large diameter circular locus into frictional engagement with said groove, said wire loop being provided with other portions having a smaller internal circular locus adapted to engage the smooth annular surface of the boss to frictionally restrain rotative movements of the cap, said cap comprising an axially disposed inner surface engageable with the end of the spool shaft forming a thrust bearing surface therefor.

1,856,944. APPARATUS FOR VERIFYING ARTICLES PRODUCED IN QUANTITY. LOWELL C. BLOMSTROM, Detroit, Mich., assignor to Federal-Mogul Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 15, 1928. Serial No. 319,474. 11 Claims. (Cl. 33—172.)



1. An inspection apparatus for use with articles produced in quantity, consisting of a body member provided with projections corresponding in position and size with the machined portions of the articles to be tested, a stem slidably supported by said body member in position to be actuated the full extent of its possible path of travel only if none of the projections encounters an unmachined portion of the article under test, and an indicating gauge adapted to be operatively engaged by said stem when the latter has been fully actuated by the unobstructed movement against it of the article under test.

1,856,945. FRUIT PROCESSING MEANS. JOHN C. CURRIER and CHARLES W. LIPE, San Jose, Calif. Filed June 25, 1929. Serial No. 373,665. 4 Claims. (Cl. 146—200.)



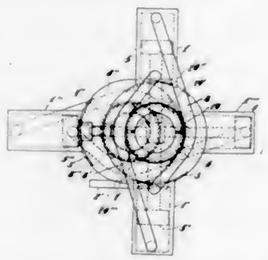
1. A fruit spraying apparatus of the character described comprising a liquid tank having an open top to contain a heated spraying solution, a cover spaced from and disposed over the top of said tank, a perforated conveying member movable over said tank and beneath said cover, a pump submerged in the liquid in said tank, said pump having its intake port disposed slightly beneath the level of the liquid in the tank so as to draw off the hottest portion thereof, said pump having a fluid dis-

charge port terminating above the level of the liquid in the tank and disposed beneath the said conveying member for discharging fluid through the latter and on to the fruit to be treated, and means for actuating said pump.

1,856,946. FIBER PRODUCT AND PROCESS OF MAKING SAME. WILLIAM A. DARRAH, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 431,057. 18 Claims. (Cl. 92—21.)

1. A fiber sheet, consisting of a felted mass of fibers cemented into an aggregate by a precipitated emulsion of drying oil.

1,856,947. ROTARY ENGINE. FERNAND D'AUVRAIN, Brussels, Belgium. Filed May 2, 1928, Serial No. 274,508, and in Belgium May 6, 1927. 1 Claim. (Cl. 121—59.)



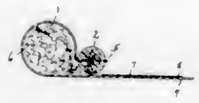
In a rotary engine of the type set forth, the combination of a frame, two spaced and parallel shafts, bearings for said shafts supported by and slidable on said frame, a rotary element at the end of each shaft and having opposite and coaxial cylinders, pistons in said cylinders, a floating spider intermediate the shafts and rigidly connecting all the pistons, an axially arranged distributing chamber in each bearing, an admission and an exhaust pipe ending in each distributing chamber, two distributing conduits on each rotary element, two diametrically opposed ports in the distributing chamber registering respectively with the distributing conducts, ports provided in the cylinders on either side of the piston and communicating respectively with the conduits of the corresponding rotary element, the rear part of each cylinder communicating with the front part of the opposite cylinder.

1,856,948. ASSEMBLING DEVICE. EARL W. DOLAMORE, Bronson, Mich., assignor to Harry A. Douglas, Bronson, Mich. Filed June 23, 1930. Serial No. 463,342. 4 Claims. (Cl. 248—20.)



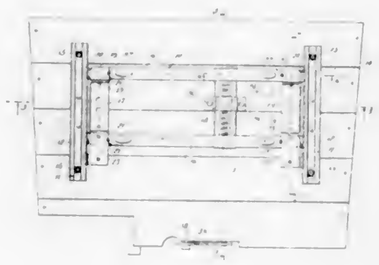
3. An assembling device including a U shaped spring metal bracket for receiving an object between its sides; a base on said bracket for contacting with the object; a spring metal clamping member carried by one of the bracket sides for clamping the object against the base and the other bracket side; and an apron continuing from the bracket base oppositely to the fingers and from which said other bracket side directly extends.

1,856,949. CIGARETTE ROLLER. FRIEDRICH EBERHARDT, Youngstown, Ohio. Filed Sept. 22, 1931. Serial No. 564,283. 1 Claim. (Cl. 131—5.)



In a device of the class described, a rectangular flexible apron, a roller pin, one end of said rectangular flexible apron held between a slotted opening in said roller pin, said slotted opening passing through a central portion of the same, a scraper edge extending slightly beyond the circumference of said roller pin for the purpose of scraping tobacco backwardly into a loop when the tobacco is pressed backwardly into a loop portion formed in said rectangular flexible apron when starting the rolling action of the device in order to form a cigarette, substantially as described.

1,856,950. ADJUSTABLE SEAT FOR VEHICLES. GERHARD FLINTERMANN, West Orange, N. J. Filed May 8, 1929. Serial No. 361,404. 4 Claims. (Cl. 155—14.)

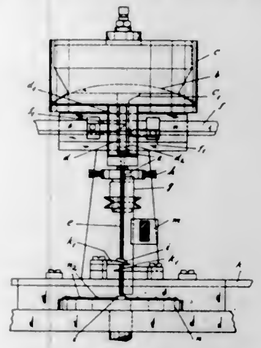


1. A device of the class described comprising a fixed support, spaced guides mounted upon said support, a seat support adjustably mounted upon said guides, a rack mounted upon said seat support and movable therewith, a worm disposed below and engaging said rack, a housing surrounding said worm, and a guiding and restraining member extending over said rack and rigidly attached to said housing and said fixed support.

1,856,951. DEVICE FOR FEEDING THE GUIDE SLEEVES FOR SPRING RINGS TO THE POINTS FOR WORKING. BERNHARD FOERSTER, Pforzheim, Germany. Filed Feb. 19, 1930. Serial No. 429,760, and in Germany Oct. 14, 1929. 4 Claims. (Cl. 29—60.)

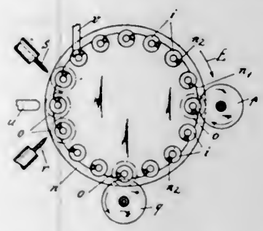
1. A device for feeding the guide sleeves for spring rings to the points of working, comprising in combination

a container, a side wall of said container having a downwardly directed slot leading to a discharge aperture for



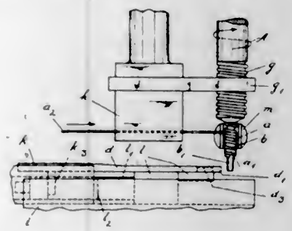
the blanks, and a revolving bottom plate of said container sloping towards the outside adapted by its rotation to feed the blanks to the discharge aperture in said side wall.

1,856,952. PROCESS FOR WORKING GUIDE SLEEVES FOR SPRING RINGS. BERNHARD FOERSTER, Pforzheim, Germany. Filed Jan. 20, 1931, Serial No. 509,966, and in Germany Oct. 14, 1929. 2 Claims. (Cl. 29—160.6.)



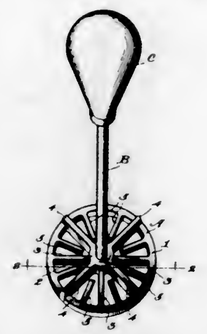
1. A process for working guide sleeves for spring rings, consisting in cutting the slot, in which the shank of the catch button runs, by means of a cutter, and in finishing said slot by means of a similar tool the cutting edge of which moves in opposite direction.

1,856,953. MACHINE FOR THE PRODUCTION OF SPLIT RINGS. BERNHARD FÖRSTER, Pforzheim, Germany. Filed Jan. 17, 1930, Serial No. 421,465, and in Germany Feb. 23, 1929. 7 Claims. (Cl. 140—92.)



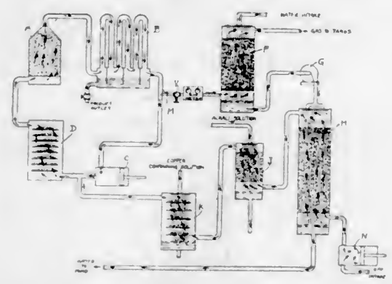
1. A machine for the automatic production of split rings, comprising in combination means for producing wire spirals having approximately two turns, a removing and conveying means, and a pressing means in which the work inserted by said conveying means is compressed to form a split ring.

1,856,954. VEGETABLE MASHER. GEORGE A. HAYWARD, Watertown, Conn. Filed Oct. 1, 1929. Serial No. 396,531. 1 Claim. (Cl. 146—219.)



In a vegetable masher, a manipulating handle having a mashing and whipping head connected thereto, said head comprising a rim and a hub, a plurality of radially disposed spoke members connecting said rim and hub and lying in the same plane as said rim, a plurality of intervening radially disposed paddle members connecting said rim and hub and extending upwardly out of said plane, and a plurality of mashing elements carried by the rim and projecting inwardly into the space between the said radially disposed spoke and paddle members forming V shaped apertures in said head through which the material may freely pass, said spoke members and mashing elements being wedge shaped in cross section, with their pointed edges upwards.

1,856,955. PROCESS FOR PRODUCTION OF NITROGEN-HYDROGEN GAS MIXTURES FREE FROM OXYGEN. LOUIS CLEVELAND JONES, Greenwich, Conn., assignor to Chemical Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 11, 1930. Serial No. 427,458. 7 Claims. (Cl. 237—7.)

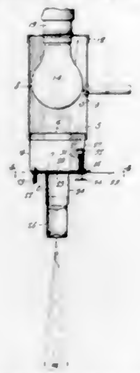


1. The process for the production of nitrogen-hydrogen gas mixtures free from oxygen for ammonia synthesis, which comprises deoxidizing a water supply with a gas free from oxygen, washing the raw nitrogen-hydrogen gas mixture with said deoxidized water, and then passing the gas mixture so purified to the ammonia synthesis.

1,856,956. PROJECTING MACHINE. HENRY B. JORDAN, Staunton, Va. Filed Feb. 15, 1930, Serial No. 428,800. Renewed Mar. 24, 1932. 2 Claims. (Cl. 88—27.)

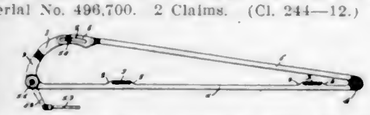
1. A projecting device of the class described comprising a body having an opening at one end thereof, a lamp in the body, a perforated plate spaced from that end of the

body which is formed with the opening, a barrel carrying plate pivoted to the first plate, means for rotatably connecting a member carrying the matter to be projected to



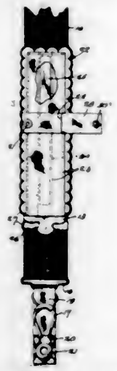
the first plate and means whereby the pivotal point of said member can be adjusted toward and away from the perforation in the plate.

1,856,957. VARIABLE LIFT WING. RUSSELL ANDREW JUMONVILLE, New Orleans, La. Filed Nov. 19, 1930. Serial No. 496,700. 2 Claims. (Cl. 244—12.)



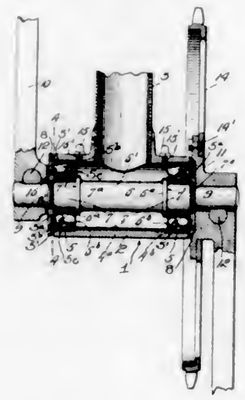
1. An aeroplane wing, comprising lower and upper ribs which have their ends pivotally connected, struts spacing the lower ribs, each of the upper ribs comprising a front and a rear section, the rear section being straight and long and having its free end widened, curved and slotted, each of the front upper rib sections being short, arched and having their free ends slotted to receive the reduced free ends of the rear rib sections therein, pivots passing through the slotted ends of the front sections to be received in the slots of the rear rib sections, means for sliding the ends of the rib sections one on the other to bring the upper rib sections toward or away from the lower rib sections to increase or decrease the thickness of the wing, and means for locking the upper rib sections adjusted.

1,856,958. HOSE SUPPORTER. MYRTLE M. KAPITZKY, Cleveland, Ohio. Filed Apr. 9, 1930. Serial No. 442,783. 3 Claims. (Cl. 241—1.)



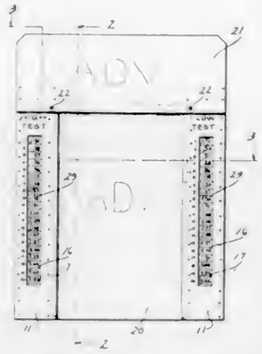
1. A supporter comprising an elastic strap having a clasp adjacent one end, a guard piece secured to said strap and in operative position overlying said clasp, and a fastener secured to said guard piece and slidably encircling said strap, and permitting relative sliding of said strap with respect to said guard piece.

1,856,959. HUB FOR CRANK HANGERS AND WHEELS OF BICYCLES. JOSEPH G. KOPSKY, Union City, N. J. Filed Apr. 11, 1931. Serial No. 529,421. 2 Claims. (Cl. 208—98.)



1. A hub for crank hangers and wheels of bicycles embodying, in combination, a cylindrical hub casing open at opposite ends, ballbearing units separable from said casing and composed of inner and outer race-members, ball members interposed between said race-members retainers for spacing apart said ball members, said hub having at opposite ends seats for frictionally engaging the outer race-members of said ballbearing units, a spindle having at opposite ends seats for the inner race-members of said ballbearing units, an annular radially-disposed member closing the outer face of said hub to prevent the access of dust and dirt to the ball members of said ballbearing units, and means at the outer end of the said spindle for locking the ballbearing units thereto.

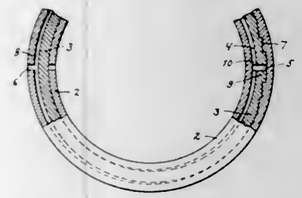
1,856,960. COMBINED ADVERTISING AND PRICE DISPLAY BOARD. LA VERNE E. LARSON, Waukesha, Wis. Filed Apr. 7, 1930. Serial No. 442,228. 4 Claims. (Cl. 40—64.)



1. A device of the character described, comprising spaced upright channels flanged at their respective margins, means connecting said channels to comprise a frame,

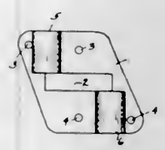
cover plates for the respective channels spaced from marginal portions of said flanges to provide guideways at the sides of the channels, and a removable panel receivable in said guideways.

1,856,961. RESTRICTING MEANS FOR COMPOSITE PISTON PACKING RINGS. TAGE MADSEN, Gottenborg, Sweden. Filed July 7, 1931, Serial No. 549,227, and in Great Britain July 14, 1930. 2 Claims. (Cl. 74—109.)



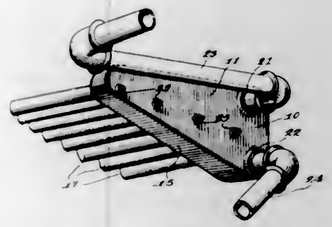
1. In a packing ring composed of two complete slit rings with interengaging annular projections and recesses the recesses being wider than the projection and restricting hooks provided at the ends of one of the rings, the radial depth of said hooks being smaller than the maximum radial space in the recess behind the projection.

1,856,962. CURTAIN SUPPORT FIXTURE. JOHN MANNA, Youngstown, Ohio. Filed July 22, 1930. Serial No. 469,828. 1 Claim. (Cl. 156—22.)



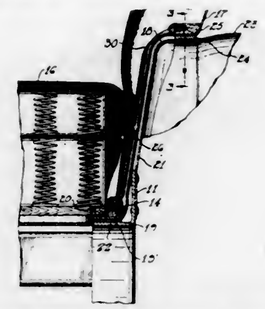
In a device of the class described, a rectangular plate provided with a central rectangular slot, a pair of screw holes formed one at an upper outer portion and a second pair at a lower outer portion and spaced apart, an upper and a lower loop socket formed in said rectangular plate by looping said portions on each side of said rectangular slot for the purpose of supporting a curtain and drape rod, substantially described as set forth.

1,856,963. MANIFOLD. PERRY S. MARTIN, Harrisonburg, Va. Filed Jan. 14, 1928. Serial No. 246,801. 11 Claims. (Cl. 257—248.)



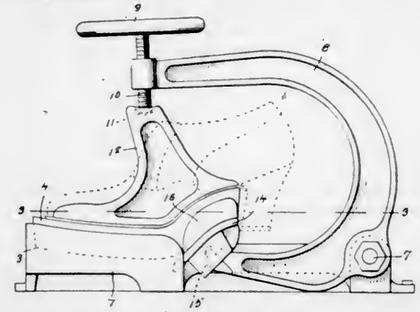
1. A single-piece manifold having a pair of compartments therein, and a plurality of pipe tappings aligned in a single series in which alternate tappings communicate with one compartment while the others communicate with the other compartment.

1,856,964. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 7, 1927. Serial No. 159,515. 6 Claims. (Cl. 296—28.)



1. In a vehicle having a frame member with a portion thereof removed and a body structure including a panel, supporting sill members for said body arranged in relatively different horizontal planes, the upper sill being adapted to form a support for the panel and the lower sill being adapted to rest on the frame member at the zone of the removed portion, said body panel being secured to the lower sill, a stiffening member extending between the sills and secured at either end thereto, and a housing for a wheel of the vehicle secured at one side thereof to the frame member at the zone of the removed portion and secured at the other side thereof to the said upper sill, said housing being adapted to reinforce the frame member at the point where it has been weakened by the removal of a portion thereof.

1,856,965. MACHINE FOR CEMENTING LEATHER TAPS ON SHOES. SAMUEL MUSCARELLA, Nunda, N. Y. Filed June 16, 1931. Serial No. 544,903. 3 Claims. (Cl. 12—33.)

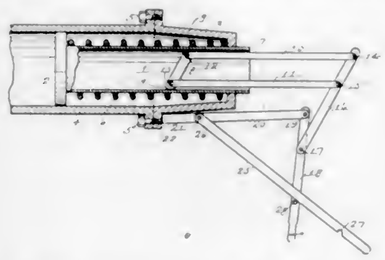


1. A shoe repair machine comprising a supporting base having at its forward edge a channel, a pad located in the channel, strips embedded in the material of the pad and disposed transversely thereof, an arm pivoted to the supporting base, a block member pivoted upon said arm and having an edge portion extending under the rear edge of the channel, a last adapted to enter the shoe, and a screw carried by said arm and adapted to bear upon the last.

1,856,966. PIPE DRAWING AND HOLDING DEVICE. HARVEY L. PATTERSON, Grand Rapids, and HOWARD J. QUAIFE, Wyoming Township, Kent County, Mich. Filed Sept. 6, 1929. Serial No. 390,692. 2 Claims. (Cl. 29—87.1.)

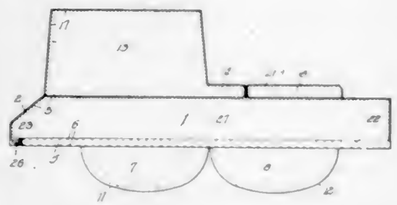
1. A device for drawing a pipe longitudinally and holding the same against longitudinal movement, comprising:

a gripping member longer than the pipe's internal width and adapted to be swung to a position wherein its ends operatively engage the pipe's internal surface; a pair of rods pivotally connected at their spaced apart inner ends



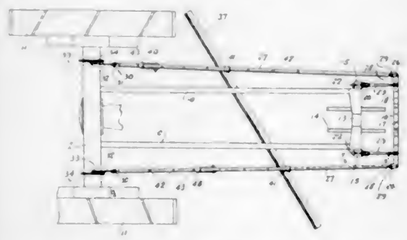
to the gripping member; a fulcrum member; a lever fulcrumed thereon; a link pivotally connected at one end to the lever and adjacent its other end pivotally connected to the spaced apart outer ends of the rods.

1,856,967. CAP. FREDERICK W. PEETZ, Webster Groves, Mo. Filed Nov. 29, 1930. Serial No. 499,029. 2 Claims. (Cl. 2—195.)



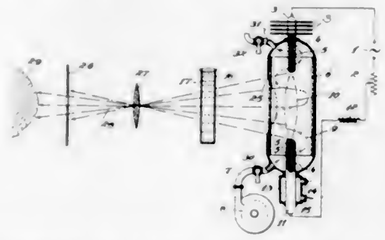
1. In a cap of the class described, a head band, a flap crown section seamed along its inner edge to a part of the upper edge of the head band, a crown supporting strip seamed along its inner edge to the upper edge of the head band adjacent one end of the crown section, a pair of side flaps stitched along their inner edges to the lower edge of the head band and adapted to be turned up against the head band to conceal the head band, a pleated strip stitched to the outer face of the head band near one end thereof and adjacent one of the side flaps and a hook secured to the inner face of the head band opposite the end carrying the pleated strip and adapted for engagement with a selected pleat.

1,856,968. ROAD GRADER. ALBERT W. PRESSGROVE, Tecumseh, Kans. Filed Mar. 10, 1931. Serial No. 521,527. 3 Claims. (Cl. 37—155.)



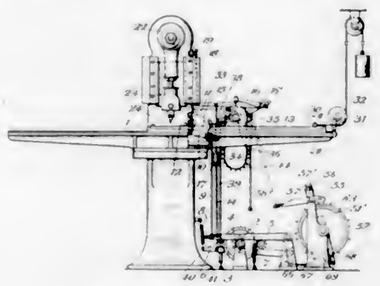
1. In a structure of the class described in combination, a wheel supported tractor frame, rocker arms adjustably supported on the rear portion thereof, links depending from said rocker arms, a front draw bar, means for connecting said draw bar with the front portion of the tractor frame, a sub-frame including spaced parallel rod members, the forward portions of said rod members being pivotally connected to the end portions of said draw bar, and yieldable connections between the rear end portions of the rod members and said links.

1,856,969. APPARATUS FOR TREATING LIVING CELLS BY MEANS OF RAYS OF LIGHT. TIBERIUS REITER and DIONYS GÁBOR, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, a Corporation of Germany. Filed Sept. 26, 1928, Serial No. 308,467, and in Germany Sept. 6, 1927. 11 Claims. (Cl. 174—177.)



1. Apparatus for treating living organisms with rays of light, comprising an electric arc lamp with at least one electrode containing silver.

1,856,970. PUNCHING PRESS, PARTICULARLY FOR PATTERN CARDS AS USED IN KNITTING MACHINES AND THE LIKE. FRITZ SIEGRIST, Oftringen, Switzerland. Filed Dec. 23, 1930, Serial No. 504,404, and in Switzerland Jan. 11, 1930. 9 Claims. (Cl. 164—87.)

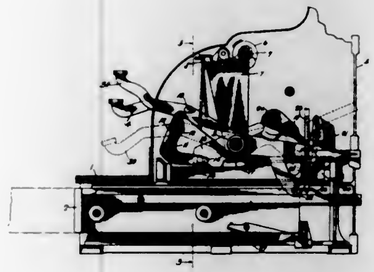


1. A mechanism for controlling the operation of a punch press in the making of jacquard pattern cards in which the punching operations of the press are governed by operations of a clutch in the driving connection, comprising a detent for operating the clutch, a feeler arm and means connecting the latter to said detent to move the same in accordance with movements of the feeler arm, means for imparting an oscillating movement to the feeler arm and an endless pattern chain having adjustable contact studs adapted to control the oscillations of said feeler arm.

1,856,971. DRAWER RELEASE MECHANISM. JOHN Q. SHERMAN, Dayton, Ohio. Filed May 13, 1926. Serial No. 108,839. 2 Claims. (Cl. 235—22.)

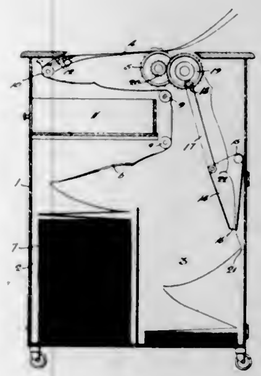
1. In a cash register or the like wherein a cash drawer is provided with a detent operatively connected with a movable bar arranged transversely of a series of value

key key levers and actuated by any key lever of the series to disengage the detent from the drawer characterized by an additional key lever having therein a clearance recess in which the bar is received upon operation of the said additional key lever permitting the operation of the



last mentioned key lever without operating said bar, and an operative connection between the last mentioned key lever and the drawer detent wholly independent of the operative connection between the detent and the value keys.

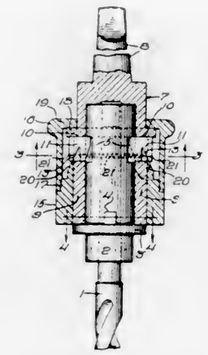
1,856,972. PAPER FOLDING MACHINE. JOHN Q. SHERMAN and ALBERT W. METZNER, Dayton, Ohio; said Metzner assignor to said Sherman. Filed Feb. 25, 1929. Serial No. 342,546. 15 Claims. (Cl. 270—79.)



1. Means for separating multiple interfolded strips and refolding one or more thereof, including a strip feeding mechanism common to a plurality of interfolded strips, and a guide member in relation with which one or more of said strips are advanced by the strip feeding means, and actuating means for transmitting to the guide member a to and fro motion, reversing said motion in accordance with the direction of succeeding folds of the strip.

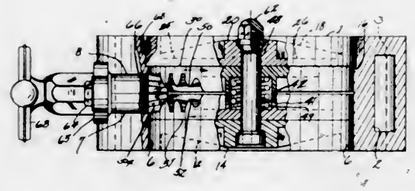
1,856,973. QUICK CHANGE CHUCK. JOHN HUGO SMITH, Detroit, Mich. Filed Feb. 6, 1930. Serial No. 426,258. 10 Claims. (Cl. 279—74.)

2. A tool chuck comprising a hollow collet-receiving member having slots therein, radially slidable lugs in the slots, a collet for disposition within the member notched to receive the lugs, means urging the lugs radially inwardly to lock the collet in said member, a collar outside said member axially movable thereon, a cam surface on



each lug, and cam means on the collar coacting with the cam surfaces on the lugs to retract them from engagement with the collar upon axial movement of the collar.

1,856,974. SELF-GRINDING STOP VALVE. MICHAEL SMOLENSKY, Garfield Heights, Ohio. Filed Aug. 30, 1930. Serial No. 478,896. 8 Claims. (Cl. 251—90.)

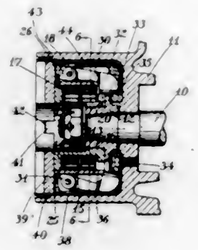


1. A stop valve comprising a body having an axial bore and a radial bore, spiders in said axial bore having aligned open and closed areas, valve disks within said bore intermediate said spiders, opposed cams on said disks, said disks having open and closed areas alignable with the open and closed areas of said spiders consequent upon a rotation of said disks, said cam means being positioned on said disks to bring the high portions thereof into engagement when the closed areas on said disks are aligned with the openings in said spiders whereby said disks are moved axially apart and into stressed engagement with said spiders, a pin co-axial with said central bore rigidly secured to said spiders, whereby said spiders are reinforced axially, and are retained in their normal positions when the disks are in stressed engagement therewith.

1,856,975. SHAFT COUPLING. WALTER J. SPENGLER, Sidney, N. Y., assignor to Scintilla Magneto Company, Inc., Sidney, N. Y., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,344. 10 Claims. (Cl. 123—149.)

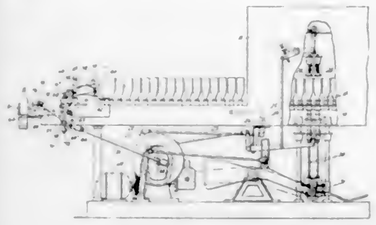
1. In a device of the class described, a hollow driven member, a driving member journaled therein, yielding driving means connecting said members, means for positively limiting relative angular movement between said members, a fixed detent member, a weighted pawl pivoted on said driven member to swing radially, and adapted when moved inwardly to engage said detent, said driven member

having an opening through which the nose of said pawl projects when the pawl is moved inwardly, said driving member having a cam adapted to engage and move the



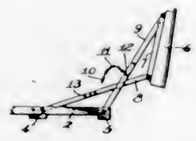
nose of said pawl outwardly to release the same from said detent after a predetermined angular movement of the driving member in advance of said driven member.

1,856,976. UNLOADING MACHINE. HENRY A. STRELOW, Milwaukee, Wis., assignor to Twentieth Century Machinery Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 2, 1929. Serial No. 382,866. 6 Claims. (Cl. 198—27.)



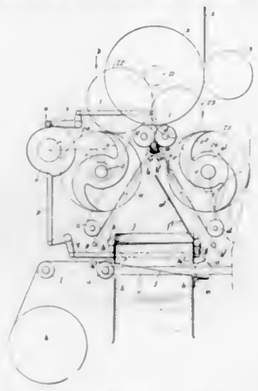
1. In a device of the character described, the combination with a carriage and an oscillatory support therefor, of actuating connections for said support including lost motion linkage, an ejector operatively associated with said carriage for the discharge of articles therefrom and means connecting said ejector with a portion of said linkage for actuation thereby following the cessation of movement of said support.

1,856,977. FOLDING DESK AND CHAIR. SWEN M. SWENSSON, Chicago, Ill. Filed Nov. 27, 1929. Serial No. 410,163. 3 Claims. (Cl. 45—6.)



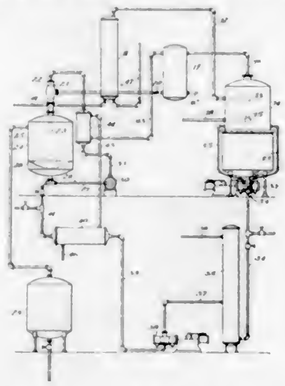
1. In combination in a device of the character described, a fixed horizontal base, a top substantially parallel to the base, a pair of legs at each side of the top pivoted at their upper ends to such top with the members of each pair crossing each other at their central portions when the device is in position of use and pivoted at their lower ends to the base, and stop means cooperating between each pair of legs permitting them to swing in the same direction toward folded position but preventing movement in the reverse direction after the legs have reached their crossed position of use.

1,856,978. DELIVERY AND PACKING APPARATUS FOR PRINTING PRESSES. ARTHUR TERREY, London, England. Filed Apr. 13, 1929, Serial No. 354,952, and in Great Britain Apr. 20, 1928. 5 Claims. (Cl. 93—93.)



1. Delivery and wrapping apparatus for printing presses, comprising means whereby quires or the like of single copies of the product of the press are deposited horizontally on the wrapping material, means to deposit a predetermined number of the said quires or the like in a horizontal pile and alternately, and means to pass said wrapping material around said pile and securely fasten same.

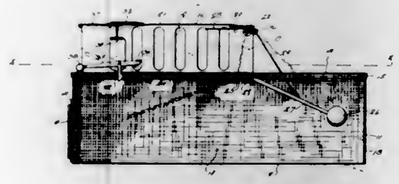
1,856,979. EXTRACT AND BEVERAGE AND METHOD FOR MAKING THE SAME. ULYSESS G. TODD, Rochester, N. Y., assignor to The Pfaudler Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 16, 1926. Serial No. 148,719. 3 Claims. (Cl. 202—43.)



1. The method of treating a liquid containing flavoring and aromatic substances which comprises removing therefrom a plurality of ingredients including flavoring and aromatic substances, and incorporating said flavoring and aromatic substances in a body of liquid from which said plurality of ingredients have been removed by circulating said body of liquid repeatedly through a closed path and supplying said flavoring and aromatic substances to said body of liquid during such circulation.

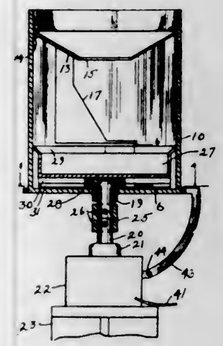
1,856,980. RAT OR MOUSE TRAP. JERRY M. WEAVER, Hopkinsville, Ky., assignor of one-half to James Elmer Coleman, Allensville, Ky. Filed June 20, 1931. Serial No. 545,736. 4 Claims. (Cl. 43—70.)

1. A trap of the character described comprising a cage, a trap door pivotally carried by the top of the cage, means for constantly urging the door into closed position, a releasable latch engaging the door for holding the door in closed position, a tripping bar carried by the latch disposed transversely of the door whereby to swing the latch into released position upon depression of the bar, a housing disposed about the trap door and having one end there-



of open, a closure for closing the open end of the housing, and connecting means connecting the closure with the means for holding the trap door in closed position whereby to swing said closure into open position upon closing of the trap door and coactively swing said closure into closed position upon depression of the trap door.

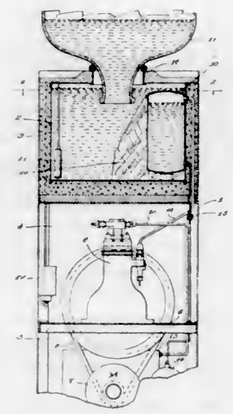
1,856,981. COAL DISTRIBUTOR. TRAUB WILKES, New York, N. Y. Filed Jan. 8, 1932. Serial No. 585,566. 4 Claims. (Cl. 198—128.)



1. A centrifugal coal distributor for coal bins or the like comprising a receiving cylinder, an orificed rim secured therein, a plate secured to said cylinder below the orifice of said rim, a web projecting upwardly on one side of said plate, a rotatable hopper within said cylinder below said plate, walls dividing said hopper into a plurality of compartments, the top edges of said walls being bent in the direction said hopper is rotated, each compartment having an opening in the side thereof adjacent said dividing wall, said cylinder having an opening into the same plane with said openings in said hopper compartments, and means for rotating and supporting said hopper within said cylinder.

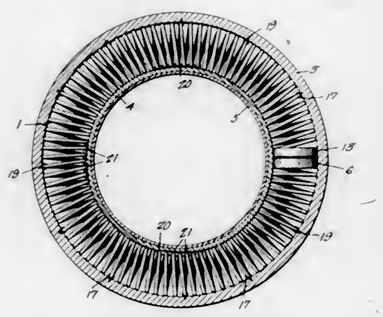
1,856,982. METHOD AND APPARATUS FOR COOLING DRINKING WATER. FRANK R. WEST, Detroit, Mich., assignor to Rice Products Inc., Detroit, Mich., a Corporation of Michigan. Filed Aug. 13, 1927. Serial No. 212,640. 12 Claims. (Cl. 62—141.)

1. The method of utilizing mechanical refrigeration in cooling drinking water, which comprises providing a relatively large supply of drinking water, cooling said water by directly positioning the volatile refrigerating medium therein and reducing the heat transfer effect between



the water and the cooling unit by insulating the refrigerating medium with a layer of ice, whereby to materially reduce the strain on the compressor.

1,856,983. VEHICLE TIRE. AUGUSTIN BLÁZQUEZ, Central Baguanos, Cuba. Filed May 31, 1930. Serial No. 458,390. 2 Claims. (Cl. 152—8.)

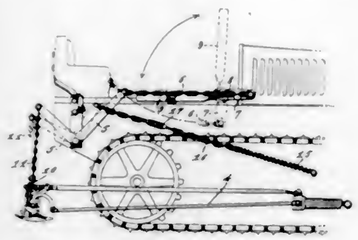


1. A filler for tire casings comprising an annular body in the form of a helical spring, a coating of yieldable material covering the coils, and means, upon the outer turns of the coils of the body, engageable in the inner side of the tread portion of the casing in which the body is installed, the means comprising a split ring engaging about the respective coil, and a spur upon the outer side of the ring.

1,856,984. SICKLE BAR CONTROL. GLENN A. CHADBOURNE, Chadborn, Mont. Filed Nov. 17, 1930. Serial No. 496,259. 2 Claims. (Cl. 56—25.)

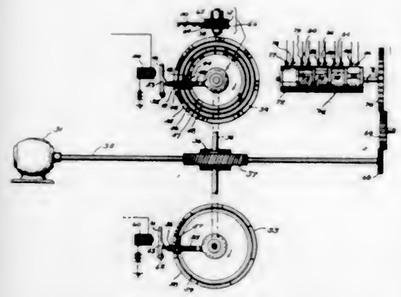
1. In a tractor mower including the sickle bar assembly and its supporting means, a bell crank supported from the tractor, a shaft journaled on the tractor, a lever for rocking the shaft, a flexible member adjustable as to its length connecting the bell crank to a part on the shaft,

a lever pivoted to the supporting means of the sickle bar assembly, a flexible member connecting the bell crank with



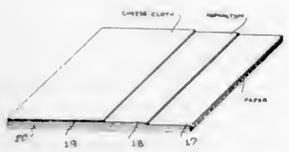
the upper end of the lever and a connection adjustable as to its length for connecting the lower end of the lever with an upwardly extending part on the assembly.

1,856,985. REGENERATIVE REPEATER FOR START-STOP SYSTEMS OF AUTOMATIC TELEGRAPHY. ROBERT F. DIRKES, Jamaica, N. Y., and JAMES N. ANDERSON, Jr., North Plainfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed May 16, 1930. Serial No. 453,008. 21 Claims. (Cl. 178—53.1.)



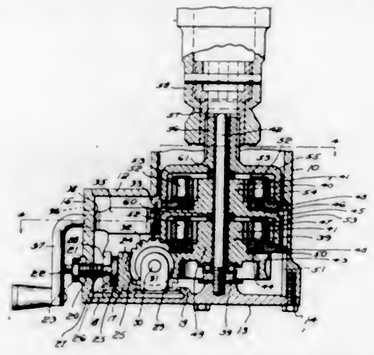
1. In a start-stop telegraph system, a receiving distributor, means responsive to incoming impulses for starting said distributor into operation, a local distributor and means controlled by said local distributor operating as an auxiliary to said starting means for controlling the starting of the receiving distributor.

1,856,986. ADHESIVE SHEETING. RICHARD GURLEY DREW, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a Corporation of Minnesota. Filed July 27, 1925. Serial No. 46,492. Renewed Oct. 1, 1931. 11 Claims. (Cl. 154—50.)



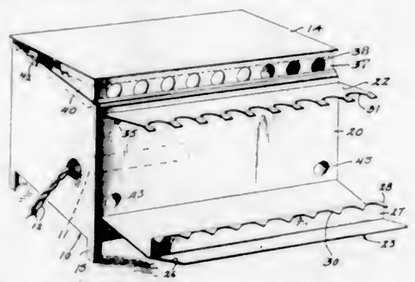
1. A normally removable and reusable adhesive tape comprising a paper backing having one side thereof coated with an adhesive which is tacky under normal atmospheric conditions, its opposite side coated with a protective coating including a waterproofing material.

1,856,987. TRAVERSING MACHINE GUN MOUNTING. ALBERT E. ELSEA, East St. Louis, Ill. Filed Aug. 13, 1931. Serial No. 556,886. 12 Claims. (Cl. 89—40.)



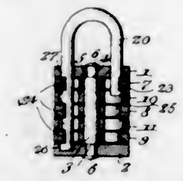
8. In a traversing machine gun mounting, planetary gearing having an operating part, a machine gun pintle connected with the operating part, and means to drive the planetary gearing.

1,856,988. STERILIZING APPARATUS. ELLA M. A. ENLOWS, RICHMOND A. BROOKS, and REISTER R. GROOMES, Washington, D. C. Filed Oct. 6, 1930. Serial No. 486,786. 10 Claims. (Cl. 167—3.)



5. In combination with a sterilizing cabinet having a hinged cover, a support adapted to hold an atomizer bottle in inclined position, and means extending over the top edge of a wall of said cabinet for securing the support thereto, said means having an extension thereon operative to hold the cover in inclined position and provided with an aperture therein thru which the spray tips extending from the bottle may project within the cabinet.

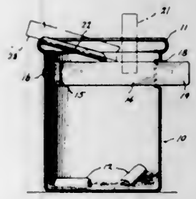
1,856,989. PERMUTATION LOCK. WALTER FRED FOERSTER, Evansville, Ind., assignor of one-half to Frederick William Boerner, Posey County, Ind. Filed May 14, 1931. Serial No. 537,435. 2 Claims. (Cl. 70—113.)



1. A permutation lock of the rotatable disc and sliding hasp type, comprising a cage composed of top and bottom discs, and a pin connecting said discs, a hasp

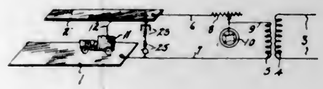
which is slidable through the top disc, and a plurality of independent discs each of which is rotatably mounted on the said pin and located between the top and bottom discs, certain ones of said rotatable discs being locking discs adapted to lock or release the hasp, and one of said group of rotatable discs being of a false or decoy character, and, while being rotatable, having no locking action on the hasp.

1,856,990. ASH RECEIVER. EDITH S. FRANK, New York, N. Y. Filed May 31, 1930. Serial No. 458,883. 2 Claims. (Cl. 131—51.)



1. An ash receiver for cigarettes and the like including the combination with a receptacle, of a pair of crushing jaws comprising a pair of elongated spring members arranged to extend transversely through said receptacle and normally lying in spread apart relation to each other, the front portion of said receptacle having an opening through which the free ends of the said jaws project, the projecting end portions of said jaws constituting finger pieces, whereby a cigarette extended vertically downward between said jaws will be extinguished by clamping pressure of said jaws induced by manipulation of said finger pieces and said cigarette drops to the bottom of said receptacle on release of said finger pieces.

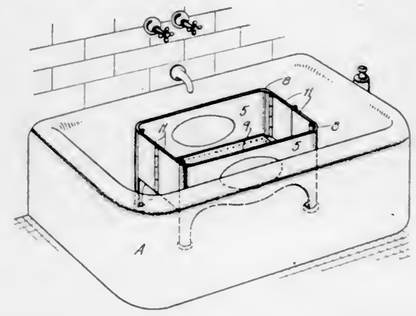
1,856,991. TOY OR AMUSEMENT DEVICE. ALBERT W. FRANKLIN, New York, N. Y. Filed May 24, 1930. Serial No. 455,231. 23 Claims. (Cl. 104—149.)



23. In a device of the type described, the combination comprising spaced conductors, a movable vehicle supported to move over at least one of said conductors, means for steering the vehicle, and means connected thereto and operable externally thereof for controlling the means for steering the vehicle whereby the vehicle may be continuously guided to the right or left under the positive control of the externally controlled steering means.

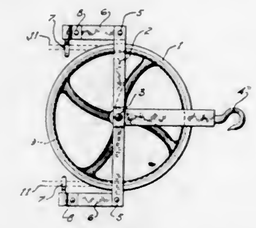
1,856,992. INFANT'S BATHTUB. CLARENCE W. GADDESS, New York, N. Y. Filed Oct. 18, 1930. Serial No. 489,647. 1 Claim. (Cl. 4—177.)

An infant's tub adapted to be used with a bathtub comprising a pair of side members each having its ends curving inwardly, a pair of legs depending from each side member, a pair of end members hingedly connected at their outer edges with the curved ends of the side members, each end member consisting of a pair of sections pivotally connected together at their inner or abutting edges, an inwardly extending flange at the lower end of each section of each end member, a pair of bottom sections each having its outer edge hingedly connected to the lower edge of a side member with the end of each bottom section spaced from the curved end of the side section and from the end sections when the tub is in set up position, said bottom sections having perforations



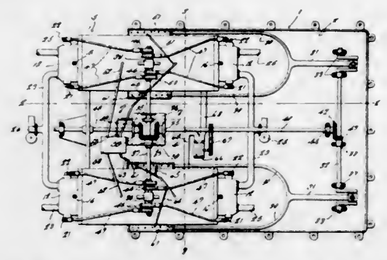
therein and one of the bottom sections having an offset inner edge for overlapping the inner edge of the other bottom section.

1,856,993. PULLEY. NELLIE A. IRWIN, Waterloo, Quebec, Canada. Filed May 26, 1930, Serial No. 455,601, and in Canada Feb. 19, 1930. 2 Claims. (Cl. 254—197.)



1. In a pulley, a supporting frame having bars projecting vertically and rearwardly beyond the circumference of the pulley, arms each formed of a metal strip folded upon itself and hingedly mounted at their inner ends on the vertical extremities of said frame and adapted to swing in a normally horizontal position forwardly of the pulley and line guiding means rigidly secured to the outer ends of said arms.

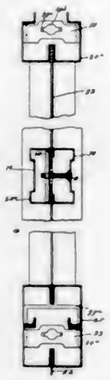
1,856,994. INTERNAL COMBUSTION ENGINE. TANIS GABILL, Berlin, N. H. Filed Aug. 8, 1930. Serial No. 473,927. 2 Claims. (Cl. 123—63.)



2 In an internal combustion engine, the combination comprising an oil pan, a pair of spaced, parallel cylinders disposed horizontally in the pan, pistons mounted for reciprocation in the cylinders, a crank shaft mounted in the pan transversely with respect to the cylinders and

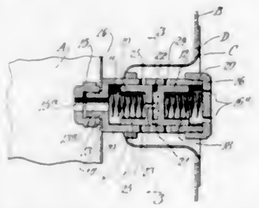
in spaced relation to one end thereof, a cam shaft extending transversely above intermediate portions of the cylinders, means connecting the valves of the cylinders to the end portions of the cam shaft for actuation thereby, a shaft extending in substantial parallelism with the cylinders and having its ends operatively connected to intermediate portions of the crank shaft and the cam shaft for actuating said cam shaft, a driven shaft operatively connected with said intermediate portion of the cam shaft for actuation thereby, an oil reservoir disposed above the horizontal plane of the cylinders, a pump disposed in the pan and having a pipe connection with the reservoir for discharging oil thereinto from the pan, means operatively connecting the pump to the cam shaft for actuation thereby, and pipes connecting the reservoir with the cylinder for conducting oil by gravity to said cylinders.

1,856,995. METALLIC WALL STRUCTURE. EARL F. HAUSERMAN, Cleveland Heights, LEROY D. MOWERY, Cleveland, and JOHN A. BOHNSACK, East Cleveland, Ohio, assignors to The E. F. Hauserman Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Sept. 7, 1926, Serial No. 134,110. Divided and this application filed Aug. 20, 1928. Serial No. 300,634. 12 Claims. (Cl. 189—34.)



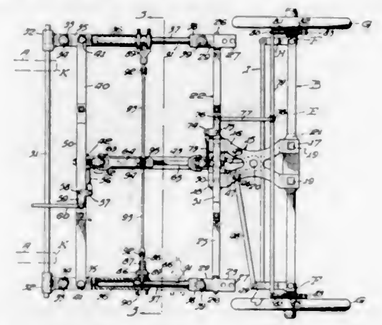
1. In partition construction, the combination of assemblable upright supporting elements each of generally channel form, spaced ties connecting opposed flanges thereof without obstructing access to the opening between the assemblage forming a symmetrical hollow post having uniform longitudinal recesses on all four sides, and a plurality of panel units in removable vertical assembly between such uprights.

1,856,996. RELIEF VALVE. ROSCOE S. HEISE, Dayton, Ohio. Filed July 5, 1928. Serial No. 290,316. 3 Claims. (Cl. 137—53.)



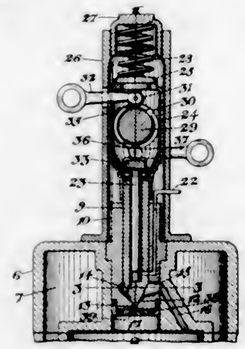
1. A relief valve comprising a barrel, a piston slidable therein, a spring on each side of said piston tending to maintain it in a neutral position, passages in the piston and barrel which are normally out of registration with each other when the piston is in the neutral position but may be brought into registration when said piston is moved in either direction by pressure from said neutral position so as to permit gas on either side of the valve to pass the valve.

1,856,997. TRAILER CONTROL. FRANK JACOBS, Prairie, Idaho. Filed Mar. 5, 1931. Serial No. 520,380. 13 Claims. (Cl. 280—33.55.)



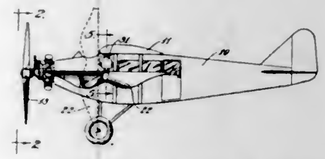
1. A control mechanism for interposition between a towing vehicle and a trailer, the trailer having steering arms connected by a steering rod, comprising a supporting member mounted on the rear of the towing vehicle, a frame structure mounted on the trailer, a draft tongue pivotally connected with said supporting structure and slidable through said frame structure, the rear end of said draft tongue having a slidable and pivotal connection with said frame structure and having an operative connection with one steering arm shiftable with respect to said pivotal connection to be disposed forwardly or rearwardly therethrough, and releasable means for normally preventing sliding movement of the draft tongue.

1,856,998. FUEL INTAKE FOR INTERNAL COMBUSTION ENGINES. GEORGE T. JOHNSON, Denver, Colo. Filed July 13, 1926. Serial No. 122,199. 18 Claims. (Cl. 123—33.)



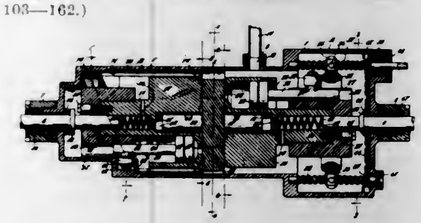
1. In an internal combustion engine, a cylinder, a piston therein, a mixing chamber having an entrance for the admission of fuel, a discharge port connecting said chamber with the cylinder and a passage for the admission of a pressure fluid from the cylinder to said chamber, a valve controlling the discharge port and said passage, means for driving a charge of fuel into the chamber through the said entrance and mechanism for the operation of the valve and said means at determine points in the movement of the piston.

1,856,999. AIRPLANE SAFETY DEVICE. JOSEPH KISS, River Forest, Ill., assignor of one-half to Arthur Schirmacher, Oak Park, Ill. Filed Dec. 2, 1931. Serial No. 578,585. 4 Claims. (Cl. 244—25.)



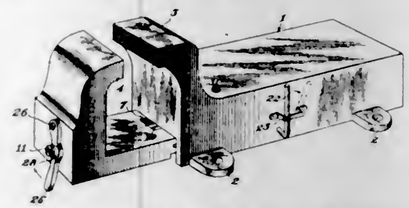
1. The combination in an airplane of a propeller and motor-driven shaft therefor, an auxiliary rotative propeller including an air funnel and normally disposed in an ineffective position on the plane, means for moving the auxiliary propeller into an effective position whereby air rushing through said funnel will rotate the auxiliary propeller, and means for transmitting motion of the auxiliary propeller to said propeller shaft should the motor stall whereby the rotation of the auxiliary propeller will drive the first-named propeller and sustain the plane in flight.

1,857,000. HYDRAULIC TRANSMISSION MECHANISM. JOHN JOSEPH KLESCHKA, Waterbury, Conn. Filed Oct. 5, 1927. Serial No. 224,200. 1 Claim. (Cl. 103—162.)



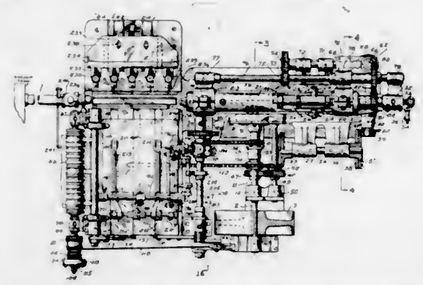
A device of the character set forth including a casing having rotatable cylinders and rotatable piston guides slidably supporting piston stems of pistons slidably mounted in the cylinders and means for rotating the cylinders and piston guides, rollers carried by the stems, a ring engaging the rollers, oppositely disposed worm shafts journalled in the casing and having the threads of one shaft reversely arranged from the threads of the other shaft, nuts engaging the threads of the shafts and pivotally connected to the ring at opposite sides thereof, and an endless sprocket chain connecting the shafts for rotation one by the other, one of the shafts extending outwardly of the casing and shaped to be engaged by an operating device for rotating the shafts to vary the angles of the ring.

1,857,001. VISE. KNUTE OMHOLDT, Iron Mountain, Mich., assignor of one-fourth to Leo H. Mortensen, Iron Mountain, Mich. Filed Aug. 3, 1931. Serial No. 554,921. 3 Claims. (Cl. 81—27.)



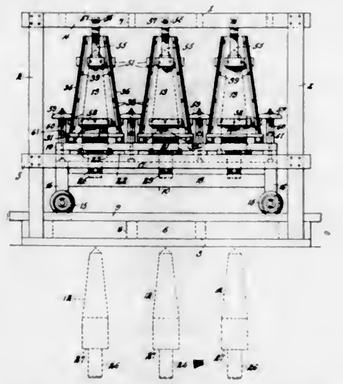
1. A vise comprising a base, a fixed jaw carried by said base, a movable jaw for cooperation with the fixed jaw for gripping objects of different sizes, a shank on the movable jaw, spaced elements carried by said shank and slidably mounted in the base, a plate slidably mounted between said elements, teeth formed on said elements and plate, tension dogs carried by said base for engagement with the teeth, a control means carried by the base for disengaging the dogs from the teeth, a cam shaped element connected to the plate, and a second cam shaped element pivoted to the movable jaw for cooperating with the first named cam shaped element in tensioning the movable jaw against an object after being adjusted thereto.

1,857,002. PAPER TUBE FORMING MACHINE. GORDON V. PLANTE, Atlanta, Ga., assignor to The National Paper Company, Atlanta, Ga. Filed Apr. 7, 1928. Serial No. 268,205. 4 Claims. (Cl. 93—81.)



1. In a paper tube forming machine, a reciprocating spindle mounted therein, means for revolving and stopping the rotation of the spindle at a predetermined period, means for feeding a sheet of paper into the machine, means for cutting the sheet of paper into the desired lengths, means for moving the sheet of paper from the point of cut off to a desired position under the spindle, means for lifting and winding the sheet of paper around the spindle, with its edges overlapping, means for wiping the overlapping edges firmly together and means for cutting the tube into desired lengths and means for forcing the tube from the spindle on the retraction of said spindle.

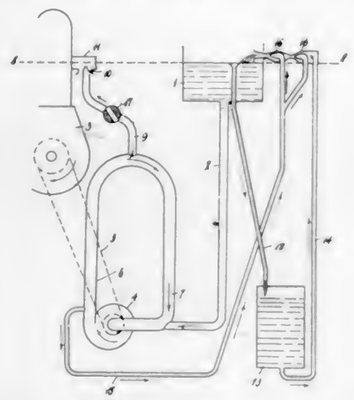
1,857,003. APPARATUS FOR MOLDING HOLLOW CONCRETE BLOCKS. BENJAMIN F. P. POORE, Greenville, Miss. Filed Aug. 10, 1928. Serial No. 298,842. 5 Claims. (Cl. 25—119.)



1. A molding apparatus of the class described, including a fixed main frame, a movable carriage, a pallet mounted on the movable carriage, an upwardly tapered form removably arranged upon the pallet, and upper and lower

holding devices mounted respectively on the main frame and on the carriage and engaging the form at the upper and lower portions thereof for securing the form on the pallet to prevent the form from being lifted by concrete or other plastic material when the same is poured into the form.

1,857,004. APPARATUS FOR FEEDING LIQUID FUEL TO INTERNAL COMBUSTION ENGINES. MARCEL JOSEPH ACHILLE REBILLET, Lyon, France. Filed July 6, 1928, Serial No. 290,722, and in France July 11, 1927. 2 Claims. (Cl. 103—5.)



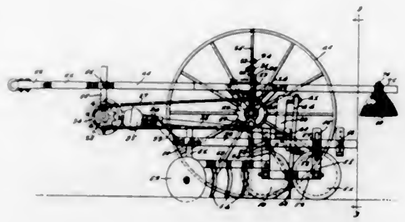
1. In a fuel supply system having a constant level fuel tank and a fuel delivery pump supplying fuel to the delivery conduit of the system, a device for maintaining constant level in the constant level tank comprising a main fuel reservoir below the constant level tank, a supplementary fuel feed conduit tapping from the fuel delivery conduit, an overflow conduit from the constant level tank to the main fuel reservoir, an uptake conduit leading from the bottom of the said main fuel tank and delivering to the constant level tank, ejector nozzles on delivery end of said supplementary fuel feed conduit issuing to the delivery end of the uptake conduit and forming therewith an ejector, delivering to said constant level tank.

1,857,005. VALVE MECHANISM FOR INTERNAL COMBUSTION ENGINES. JOSEPH G. SCHOTTHOEFER, Peoria, Ill. Filed Aug. 1, 1931. Serial No. 554,576. 8 Claims. (Cl. 251—145.)



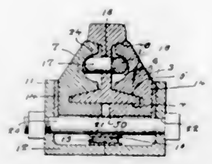
3. A valve mechanism for an internal combustion engine, including a reciprocatory valve stem provided at one end with a valve and at its other end with a head, said head including a pair of members one of which is arranged to be engaged by a valve tappet and is formed with an internal chamber to receive the end of the stem, the other of said members having an opening through which the stem extends, said members having screw threaded engagement with each other, and a separately formed locking means mounted in one of said members about the portion of the stem therein, said locking means and the member in which it is mounted having correspondingly beveled surfaces in contact with each other to cause said locking means to be pressed into locking frictional engagement with the valve stem by screwing the member in one direction and to remove said pressure by screwing said member in the other direction.

1,857,006. VINE CUTTER. WARREN A. SERIGHT, Fruitland, Iowa. Filed Feb. 27, 1931. Serial No. 518,856. 5 Claims. (Cl. 55—107.)



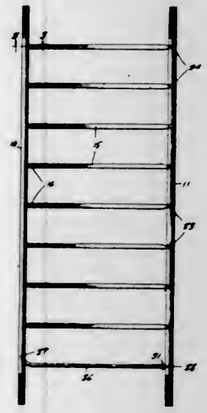
1. In a vine cutting machine, a main frame, wheels supporting the frame, a cutting frame, vine cutting mechanism carried by the cutting frame and including a vertically disposed reciprocatory knife and means acting upon each side of the knife to hold the vines in position for cutting, operating mechanism carried by the main frame, and a universal drive connection between the main and cutting frames to operatively connect the frames and provide a driving connection between the operating mechanism and the cutting mechanism.

1,857,007. RAIL JOINT. SYLVARIUS A. SPRINKLE, Martinsburg, W. Va. Filed Feb. 5, 1932. Serial No. 591,179. 7 Claims. (Cl. 238—156.)



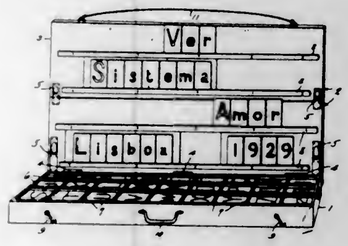
1. In a rail joint, two rail chairs, on which the base flanges of the confronting ends of two rails rest and in whose fishing spaces the chairs are received, said chairs having their confronting faces grooved, longitudinal rod members secured to the webs of the rails extending in opposite directions through the respective grooves, and having offset ends disposed opposite but slightly out of contact with the diagonally opposed ends of the respective chairs, together with means for binding the chairs against the rails.

1,857,008. METALLIC STRETCHER. MARVIN E. ADCOCK, Coalinga, Calif. Filed Mar. 2, 1931. Serial No. 519,662. 2 Claims. (Cl. 5—82.)



1. A stretcher comprising a pair of tubular side rails, one of which is provided with socket openings, cross bars pivoted to the other side rail and having globular heads adapted to engage in said socket openings.

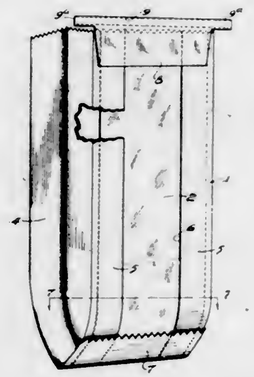
1,857,009. EDUCATIONAL APPLIANCE. MANUEL ANTUNES AMOR, Lisbon, Portugal. Filed Aug. 2, 1930. Serial No. 472,696. 1 Claim. (Cl. 35—9.)



An educational appliance comprising a box having compartments for the reception of stencil characters, a lid hinged to the box, means to secure the lid and support the same when the lid is in open position, an extension member hinged to the free edge of the lid, means to secure the extension member to the lid and hold the same in the common plane of the lid when the lid is in open position, individual letter and numeral rectangular stencils, each of a size and shape adapted to fit in one of the compartments of the box, each having a single letter or numeral character, and longitudinally arranged bars on the lid and the extension member, spaced apart and adapted each to receive character stencils thereon and permit the arrangement of the stencils to form words and numbers and display such formed words and numbers.

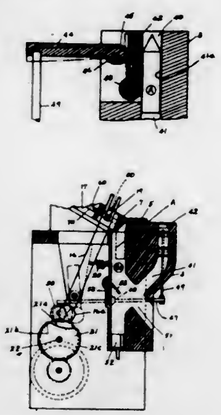
1,857,010. WINDOW BAG. TRUE M. AVERY, Glens Falls, N. Y., assignor to Union Bag & Paper Corporation, Hudson Falls, N. Y., a Corporation of New Jersey. Filed June 30, 1930. Serial No. 464,967. 2 Claims. (Cl. 229—53.)

1. A bag comprising a body portion composed of paper and having a window opening in a wall thereof and portions of said wall at opposite sides of said opening extending longitudinally to the mouth of the bag, a strip of transparent material having the characteristics of "Cellophane" extending across said window opening and secured to said longitudinally extending portions of said wall, said transparent material having a serrated edge at



the mouth of the bag, and a reinforcing strip for said transparent material extending across said window opening adjacent to the mouth of the bag and secured to said transparent material and to said portions of the bag wall at opposite sides of the window opening.

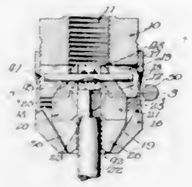
1,857,011. BIT-FORGING MACHINE. LOUIE BORTKEWICZ, Racoon, Pa. Filed May 23, 1930. Serial No. 455,005. 2 Claims. (Cl. 76—5.)



1. In combination with a blank-feeding device including a chute, a pivotally mounted die in the wall of said chute, and means for continuously oscillating said die, whereby a blank, upon entering the device, moves by gravity past said oscillating die and is straightened.

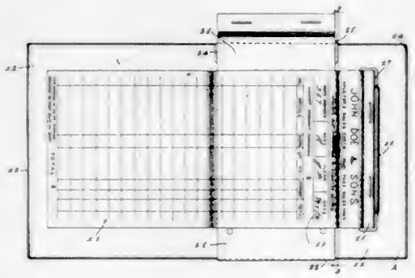
2. In combination with a bit-forging machine including a forging head and operating means for powerfully reciprocating such forging head, a blank-feeding device, which feeding device comprises a chute arranged at an angle to the horizontal, and a pivotally mounted die associated with said chute, together with connections from said operating means to said die for effecting the oscillation of said die about its pivotal mounting, whereby a blank, upon entering the device, moves by gravity past said oscillating die and is straightened.

1,857,012. TAP HOLDER. MARK H. CORLEY, Chicago, Ill., assignor to Procunier Safety Chuck Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 13, 1931. Serial No. 522,252. 5 Claims. (Cl. 279—56.)



1. A tap holder comprising a body having a tapered cavity in one end and transverse slots cutting through the cavity, a shell adapted to screw onto the slotted end of the body, the shell having a tubular portion terminating at one end to form an internally tapered cavity, said shell having openings in the tubular portion, spaced tap gripping jaws engaging with the tapered cavities to hold a tap therebetween, cooperating means on the jaws and body for holding the gripping jaws against rotary movement relative to the body, said means being so disposed with relation to the slots in the body that the space between the gripping jaws is in alignment with said slots whereby the tap end may be seen through said openings for proper adjustment within the tap holder.

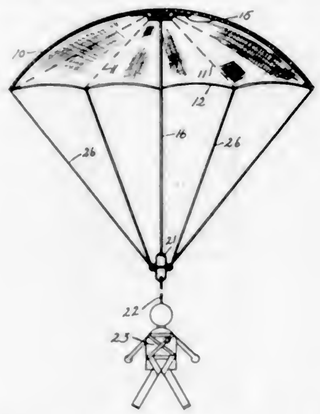
1,857,013. SALESBOOK. WALTER O. CRITCHFIELD, Shelby, Ohio. Filed Sept. 11, 1931. Serial No. 562,331. 4 Claims. (Cl. 282—8.)



1. A salesbook of the kind described comprising a cover formed with a supporting section, an overlapping section and a closure section, a swinging hanger on the supporting section, a pad removably carried by the hanger and superimposed upon said supporting section, a slide on the overlapping section and movable longitudinally thereof, a pad hung upon the slide and adapted to underlie an uppermost sheet of the first named pad and susceptible of traversing the under side of said sheet.

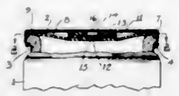
1,857,014. PARACHUTE. FRANK A. DUCOTY, Middletown, Pa. Filed Nov. 2, 1931. Serial No. 572,655. 2 Claims. (Cl. 244—21.)

1. A parachute comprising a closed dome, anchoring means secured to the top of said dome, an anchor line extending from said anchoring means, a pilot ring secured to said anchor line, guy lines secured to the base line of said dome, guy rings secured to said guy lines, a transverse ring forming part of said pilot ring, said guy rings being secured about said transverse ring, and extended anchor means depending from said pilot ring whereby said



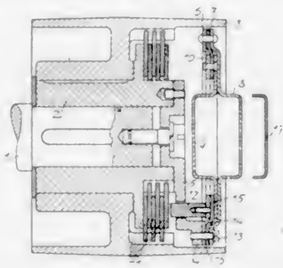
parachute bears a maximum weight through the anchor line, and its base line is free of tension during the process of opening.

1,857,015. VENTED CONTAINER AND RELIEF VALVE THEREFOR. CLAIR M. GERE, Belfast, N. Y. Filed Dec. 2, 1930. Serial No. 499,600. 1 Claim. (Cl. 215—56.)



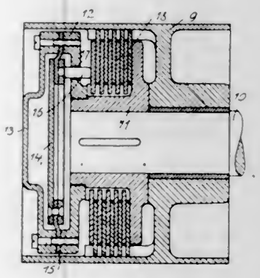
Receptacle comprising a container and a lid member therefor, a liner member in said lid member clamped between said lid member and said container, and a relief valve between said lid member and said liner member, said valve being secured to one of said members and having transversely disposed intersecting slits on its lower face and a communicating chamber on its upper face, said lid member having a vent in communication with said chamber and said liner member having an aperture exposing said intersecting slits.

1,857,016. CENTRIFUGAL FORCE FLUID PRESSURE CLUTCH. FRANTIŠEK GÖTZ, Pilsen, Czechoslovakia. Filed Oct. 4, 1930, Serial No. 486,482, and in Czechoslovakia Feb. 24, 1930. 4 Claims. (Cl. 192—105.)



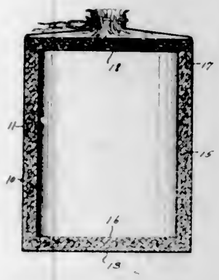
1. A friction clutch employing the centrifugal force of a liquid for the pressure for the transmission of power, comprising a driving shaft, a driven member, a pressure chamber containing liquid and mounted on the shaft for rotation therewith in such manner that the shaft does not pass therethrough, the said pressure chamber comprising a cover member and an axially movable plate movable relative to the said cover, the said cover and plate, when the clutch is not in action, being seated on each other along the portion of the chamber in which the rotating liquid is found during rotation of the clutch, and means for transmitting the driving force of said plate to said driven member.

1,857,017. TRANSMISSION MECHANISM. FRANTIŠEK GÖTZ, Pilsen, Czechoslovakia. Filed Dec. 5, 1929, Serial No. 411,962, and in Czechoslovakia Dec. 11, 1928. 4 Claims. (Cl. 192—105.)



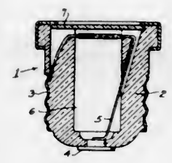
1. A friction clutch employing the centrifugal force of a liquid for the pressure for the transmission of power, comprising a driving shaft, a driven member, a pressure chamber containing liquid and mounted on the shaft for rotation therewith, said pressure chamber being restricted adjacent its periphery in stepwise relation to the enlarged central portion and comprising a cover member and an axially movable plate movable relative to the said cover, and means for transmitting the force from the movable plate to the driven member.

1,857,018. COOLING RECEPTACLE. DOROTHY D. HANSON, Coeur D'Alene, Idaho. Filed Oct. 21, 1930. Serial No. 490,222. 2 Claims. (Cl. 45—134.)



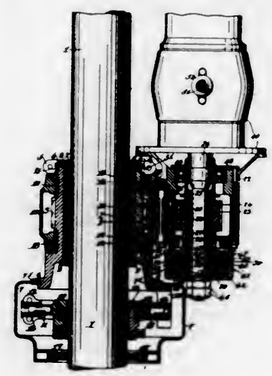
1. In a cooler of the character described, comprising an outer fabric casing, an inner porous casing adapted to be saturated with a volatile liquid, a lid for said inner casing, and a draw cord engaging said outer casing and adapted to close the upper end thereof whereby to prevent drying of the inner casing.

1,857,019. FUSE INDICATOR. MARIAN E. HASSELL and EDWARD W. GORHAM, Miami, Fla., assignors of three-fourths to said Hassell and one-fourth to said Gorham. Filed Mar. 30, 1931. Serial No. 526,482. 14 Claims. (Cl. 200—121.)



1. A closed casing having a part thereof transparent and colorless, and means in said casing operable by heat to form a colored deposit upon said part to indicate a temperature within said casing beyond a predetermined maximum.

1,857,020. POWER TRANSMISSION GEARING. ERNEST CHARLES HATCHER, Northwood, England, assignor to J. Stone & Company Limited, Deptford, England, a Company of England. Filed Aug. 20, 1930, Serial No. 476,587, and in Great Britain Sept. 9, 1929. 5 Claims. (Cl. 105—130.)

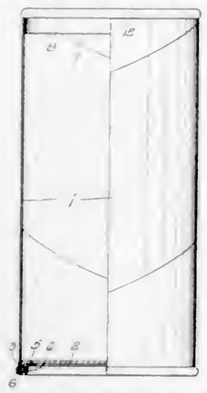


1. Transmission gearing comprising an automatic clutch device consisting of a driving part, a driven part external to said driving part, shallow segmental shoes operatively associated with the driving part and centrifugally expansible into clutching engagement with the driven part, cam-like elevations on the inner sides of said shoes, and complementary cam means located on the driving part and operative upon said elevations for augmenting the centrifugal clutching effect.

1,857,021. CONTAINER. WILLIAM P. HICKS, Webster Groves, Mo., assignor to Sefton National Fibre Can Co., Maplewood, Mo., a Corporation of Delaware. Filed July 28, 1930. Serial No. 471,248. 2 Claims. (Cl. 229—5.5.)

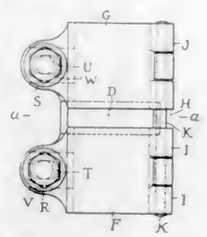
1. The combination in a container, of a tubular paper body, a fixed closure for one end of said paper body, a removable friction plug top closure for the opposite end of said paper body, said top embodying a paper disk having an upright flange, a flat paper disk adapted to contain identification data seated upon said flanged paper disk, an inner and outer flanged metallic retaining ring, the inner flange of said retaining ring being seated upon

the flat paper disk and the outer flange of said retaining ring engaging the end face of the flange of the paper disk and then rolled over to cause the free edge thereof to bite



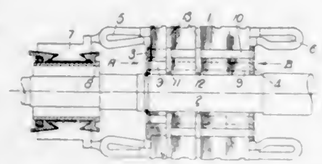
into the outer face of the flanges of the paper disk for locking the elements together and to serve as a stop for the friction plug top.

1,857,022. TUBE COUPLING. THOMAS PROSSER HINGLEY, London, England. Filed Nov. 6, 1930, Serial No. 493,851, and in Great Britain Dec. 19, 1929. 2 Claims. (Cl. 189—36.)



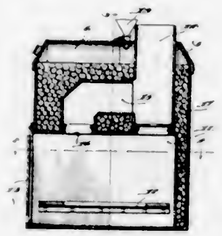
1. A coupling for connecting tubes together in axial alignment, comprising a rod having a peripheral ring between its ends and of which the opposite ends are adapted for insertion, respectively, in the ends of a pair of tubes to be connected together, a curved member having a pair of flaps hinged thereto at one edge, one for each tube; means on the flaps and curved member for securing them together, and means on the curved member for engaging the ring of said rod when said rod is positioned within the tubes with its ring positioned between the tubes.

1,857,023. DYNAMO ELECTRIC MACHINE. DONALD BAIGHT HOSEASON, Bowdon, England, assignor to Associated Electrical Industries Limited, a Company of Great Britain. Filed Aug. 30, 1930, Serial No. 479,043, and in Great Britain Sept. 4, 1929. 6 Claims. (Cl. 171—252.)



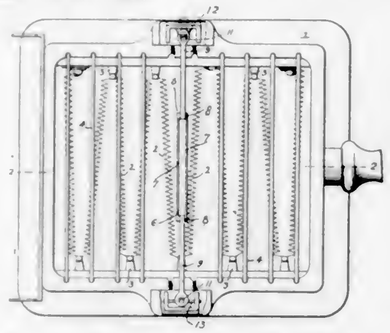
1. In a dynamo electric machine, a core consisting of packets of laminations in spaced relationship and having slots extending from end to end for receiving slot windings therein between the teeth of the core, and said core having a plurality of perforations behind the slots in the laminations providing longitudinal air ducts extending entirely through the core from end to end and communicating with the space between packets which provide a series of radial air ducts extending between the winding slots but with the ducts through one packet in line with an imperforate part of an adjacent packet.

1,857,024. STEAM BATH FURNACE. JOHN G. HULME, Chisholm, Minn. Filed June 26, 1929. Serial No. 373,843. 2 Claims. (Cl. 122—40.)



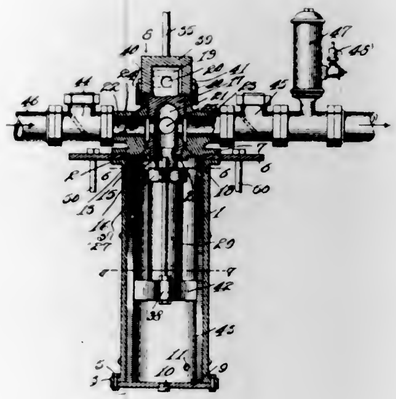
2. In a vapor bath generator, the combination of a shell defining a fire box, an open ended casing enclosing said fire box and in spaced relation thereto, a flue in communication with an upper portion of said fire box and extending in a plane horizontal therewith, a vertically disposed flue in communication with said first named flue and in spaced relation to said casing, heat retaining objects positioned within the space defined by said casing, fire box and flues, a closure for said open ended casing comprising a portion rigidly secured to said casing and having an aperture for accommodation of said vertically disposed flue and a hood member hingedly mounted to said rigid member, and means carried by said rigid member for spraying a liquid on said heat storing means for generation of a vapor.

1,857,025. THERMOSTATIC ELEMENT. ALPHEUS O. HUBXTHAL, Philadelphia, Pa., assignor to Proctor & Schwartz Electric Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Feb. 24, 1928, Serial No. 256,648. Divided and this application filed Jan. 7, 1930. Serial No. 419,117. 1 Claim. (Cl. 219—19.)



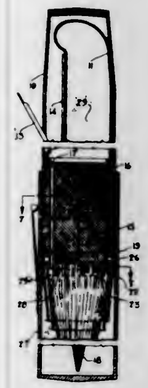
The combination of a toaster having means for supporting the toast and heating elements located back of the said means; and a thermostatic element extending from one side of the toaster to the other and in position close to the bread being toasted, and having a comparatively short section of expansible metal interposed between relatively non-expansible sections and so arranged that the said expansible section will be completely covered by the bread or other material being toasted.

1,857,026. BOOSTER PUMP FOR WINDMILLS. ROBERT A. LIGON, Fort Stockton, Tex. Filed May 2, 1929. Serial No. 359,919. 4 Claims. (Cl. 103—218.)



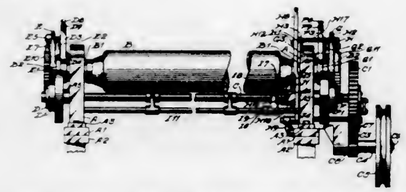
1. In pumping apparatus, a head and a hollow body communicable with a pipe line, having a bore merging with a shoulder in the body, a tubular rod having a hollow piston, and a hollow plug carrying the rod, being fitted in the body and said bore to suspend the piston, having openings for communication of the pipe line with said rod and a stop engaging the shoulder to make a water seal at said bore.

1,857,027. FOUNTAIN WRITING INSTRUMENT. FRANK MAH, Vancouver, British Columbia, Canada. Filed May 20, 1929. Serial No. 364,502. 4 Claims. (Cl. 15—133.)



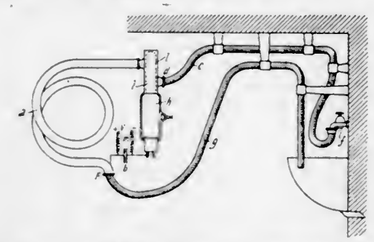
1. A fountain writing instrument comprising a barrel casing, a compressible reservoir contained within said casing, a stopper having a side outlet and inlet passage therethrough and an encircling sleeve forming a binder for securing said compressible reservoir to the stopper, a bunch of bristles secured in a back and firmly held to said stopper beside said passage and a tapered sleeve fixedly secured and embracing said bunch of bristles and extending upwardly to direct the flow in filling the reservoir.

1,857,028. SHEET FEEDING MECHANISM FOR PLAITING MACHINES. FRANK MANANT, Ayer, Mass. Filed Feb. 12, 1927. Serial No. 167,796. 12 Claims. (Cl. 223—39.)



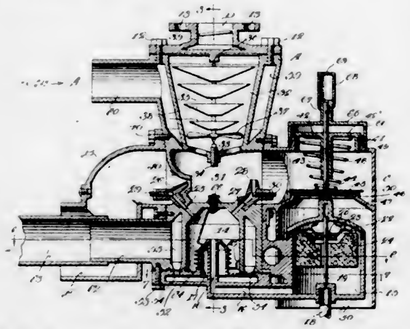
1. In a machine of the kind described, the combination with a feed roll, of a first mechanism at one end of said roll for repeatedly turning said roll and a second mechanism at the other end of said roll for at times turning said roll farther than the roll is turned by the first mechanism.

1,857,029. COOLED RADIOFREQUENCY APPARATUS. WILHELM MOSER, Berlin, Germany, assignor, by mesne assignments, to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 29, 1926, Serial No. 105,387, and in Germany May 23, 1925. Renewed Feb. 7, 1930. 12 Claims. (Cl. 250—27.)



1. In an oscillation circuit in combination a cooled tubular inductance coil having inlet and outlet ends and a cooled vacuum tube having an anode, a metallic jacket surrounding said anode having an inlet and outlet, metallic means for connecting said anode and said metallic jacket, a source of cooling fluid and means for connecting said second named inlet to said source and metallic means for connecting said inductance inlet end to said jacket outlet whereby said connecting metallic means acts as an electric path and as a cooling fluid path.

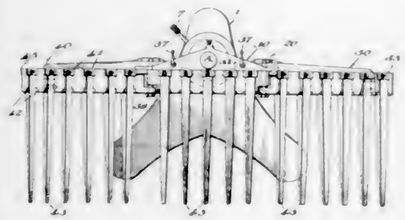
1,857,030. CARBURETOR. HUGH B. PARKER, Jacksonville, Fla. Filed Oct. 14, 1929. Serial No. 399,552. 15 Claims. (Cl. 261—12.)



1. In a carburetor, a liquid fuel supply chamber, an initial mixing chamber arranged at one side of said sup-

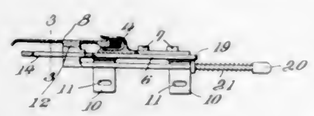
ply chamber, air inlets opening into said initial mixing chamber, a final mixing and vaporizing chamber at the side of said initial mixing chamber opposite to the said supply chamber, and means for utilizing the hot exhaust gases from an engine for heating the fuel in its passage through said fuel supply chamber and said final mixing and vaporizing chamber only.

1,857,031. COMBINED HOIST AND CONVEYER. EDWARD SCHAFFER, Seattle, Wash. Filed Aug. 2, 1929. Serial No. 382,963. 2 Claims. (Cl. 5—86.)



1. A lifting apparatus including a carrier composed of a supporting member equipped with a plurality of laterally opening longitudinally spaced finger receiving sockets with pairs of laterally spaced lugs arranged one pair in advance of each of said sockets, and a plurality of object supporting fingers having each a longitudinally extending lip spaced from the body of the finger to form a socket to receive and fit over the edge of said supporting member, said finger fitting between said lugs when the parts are assembled and having an extension in advance of said socket to enter the socket on the supporting member and equipped with means to limit its insertion in said socket, the lugs operating to hold the fingers against lateral movement.

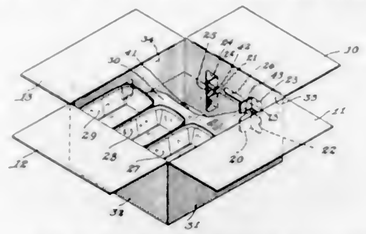
1,857,032. HEM FOLDER FOR SEWING MACHINES. KURT SCHNURRBUSCH, Berlin-Pankow, Germany, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Filed Apr. 29, 1930, Serial No. 448,299, and in Germany June 12, 1929. 2 Claims. (Cl. 112—141.)



1. A hem folder comprising an outer folder member, an inner folder member cooperating therewith for forming a hem pocket in the edge portion of a fabric, said inner folder member being adapted to be moved from within the outer folder member for the completing of the hem pocket in a circular article, said inner folder member having a guiding means for directing and positioning a tape into the hem pocket, said guiding means being capable of releasing the tape when the inner folder member is retracted.

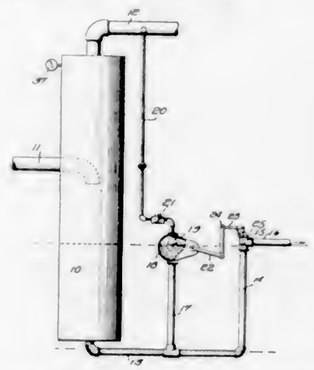
1,857,033. CARTON. ELROY P. SHERMAN, Ashtabula, Ohio, assignor to The Ashtabula Corrugated Box Company, Ashtabula, Ohio, a Corporation of Ohio. Filed Oct. 1, 1930. Serial No. 485,598. 4 Claims. (Cl. 229—15.)

1. A carton for shipping fruit in small baskets, said carton comprising a base, sides and top, said sides rising perpendicularly from said base and partitions in said carton paralleling said base, portions of said sides cut away in pairs vertically spaced approximately a partition thickness so as to leave relatively short vertically-disposed flaps integral at one end with said sides, said flaps being bent



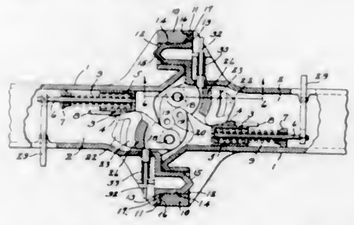
inwardly to serve as cushioning elements to provide supports for said partitions in upright and inverted positions of said carton and to provide ventilating openings.

1,857,034. APPARATUS FOR SEPARATING LIQUIDS FROM GASES. JOHN YOUNG SNYDER, Shreveport, La. Filed Nov. 13, 1920. Serial No. 406,891. 11 Claims. (Cl. 183—2.7.)



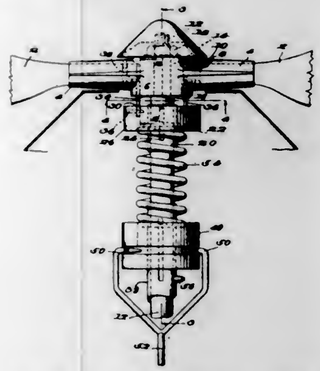
1. In apparatus for separating liquid from gas, a tank wherein said liquid and gas are continuously accumulated, and means automatically operable to discharge substantially all the liquid accumulated in said tank when the liquid has risen to a predetermined height in said tank, said means being initially operable by the weight of the liquid within the tank and being continued in operation by the pressure of the gas in said tank.

1,857,035. COUPLER. CHARLES H. TOMLINSON, Mansfield, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 5, 1928. Serial No. 283,006. 11 Claims. (Cl. 213—152.)



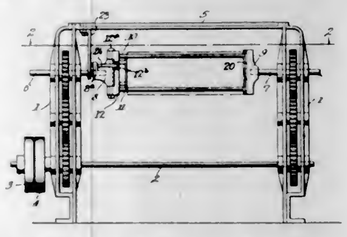
11. A car coupler head having a contact face for limiting movement of said head toward the head of a connected coupler, a coupling knuckle pivoted on said head for holding said head to the head of said connected coupler, and means comprising cam surfaces on said knuckle and head respectively for retracting said knuckle bodily relative to said contact face to draw said contact face against the face of the connected coupler.

1,857,036. ADJUSTABLE PROPELLER. WALTER WISK, New Britain, Conn. Filed Apr. 3, 1929, Serial No. 352,255. Renewed Sept. 28, 1931. 4 Claims. (Cl. 170—163.)



1. In a propeller, a shaft, a plurality of blades mounted to rotate with said shaft, the longitudinal axes of said blades being fixed relative to said shaft, said blades being adapted to be turned to a lower pitch about their longitudinal axes by the pressure of air thereon, a collar movable longitudinally of said shaft, means for varying the pitch of said blades upon movement of said collar, a second collar movable longitudinally of said shaft, a spring between said collars for urging said first named collar in a direction such as to increase the pitch of the blades, and means for moving said second-named collar to vary the tension of said spring.

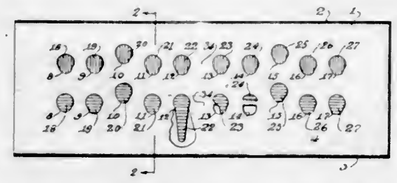
1,857,037. MACHINE FOR WINDING CLOTH, ETC., ON CLOTH BOARDS. FRANK M. BACON, North Adams, Mass. Filed Mar. 28, 1931. Serial No. 526,073. 9 Claims. (Cl. 242—62.)



1. In a winding machine, aligned rotatable cross-heads, a yoke pivoted on one cross-head, a board holder carried by the yoke and adapted to be normally engaged with the opposite cross-head; and means on the yoke for automatically locking the cross-heads against rotation when the holder is swung out of alignment with the cross-heads.

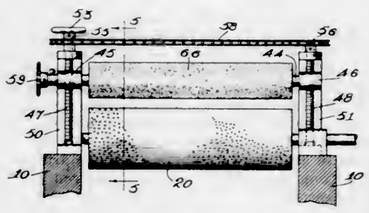
1,857,038. COUNTING CARD. SAUL BADANES, Brooklyn, N. Y. Filed Apr. 14, 1931. Serial No. 530,103. 4 Claims. (Cl. 35—2.)

1. In a device of the class described, the combination of a backing, of a series of removable slips associated with said backing, means to support said slips in said backing, said slips arranged in two parallel rows comprising ten slips in each row, the first, second, fourth,



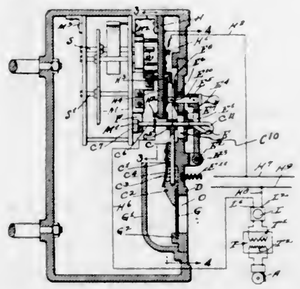
fifth, sixth, seventh, ninth and tenth slip being on a straight line, the third and eighth slip of each row being arranged higher than the rest of the slips.

1,857,039. GARNETT OR BATTING MACHINE. ALBERT BRECKENRIDGE, Chicago, Ill., assignor to Superior Felt and Bedding Co., a Corporation of Illinois. Filed Mar. 24, 1930. Serial No. 438,468. 2 Claims. (Cl. 19—108.)



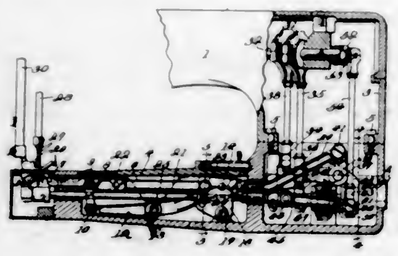
1. In a machine of the character set forth, the combination with a roll covered with cardcloth, of means for cleaning said roll comprising rotatably journaled pins, bearing blocks screw-threaded on said pins, a shaft journaled in said bearing blocks, a brush on said shaft, means for driving said shaft, means operatively connecting said pins whereby they are constrained to rotate in unison, and manually operable means for rotating said pins to bring said brush into and out of effective engagement with said roll.

1,857,040. FIRE ALARM MECHANISM. GEORGE F. BULEN, Los Angeles, Calif. Filed July 16, 1929. Serial No. 378,671. 10 Claims. (Cl. 177—372.)



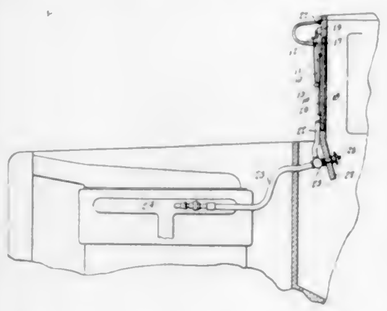
7. A device of the class described having in combination with a mechanism provided with a plunger bearing against a sheet of frangible material so that the mechanism operates upon fracture of said sheet, a hammer pivoted externally of the device and adapted when forced against the frangible sheet to fracture said sheet by impact at a point offset from said plunger.

1,857,041. SEWING MACHINE. NORMAN V. CHRISTENSEN and WALTER M. HANNEMAN, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 14, 1926. Serial No. 101,985. 8 Claims. (Cl. 112—215.)



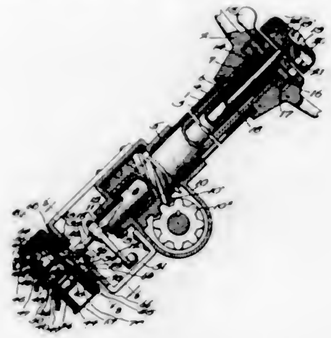
1. A sewing machine including a main frame having a depending member open at its lower end, a detachable work supporting arm connected to and closing the lower end of said depending member, a feed bar extending lengthwise of said work supporting arm, a feed dog carried thereby, a looper shaft extending lengthwise of said work supporting arm, a looper carried thereby, a main shaft in said frame extending over said depending member, an eccentric on said main shaft, a lever in said work supporting arm for raising and lowering the feed dog, an eccentric rod cooperating with said eccentric and connected to said lever, a second eccentric on said main shaft, a sleeve mounted on a pin supported in said work supporting arm, an arm projecting laterally from said sleeve, an eccentric rod cooperating with said second eccentric and connected to said arm for oscillating said sleeve, a second arm mounted on said sleeve and devices connecting said second arm to said feed bar for moving said feed bar endwise, a third arm mounted on said sleeve, and devices connected to said third arm and to the looper shaft for moving the looper shaft endwise, a crank on said main shaft, and devices actuated by said crank for oscillating said looper supporting shaft.

1,857,042. WINDSHIELD WIPER. REUBEN N. COLLEY, Providence, R. I. Filed Apr. 24, 1930. Serial No. 447,047. 2 Claims. (Cl. 15—255.)



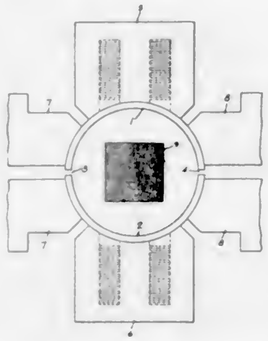
1. A windshield wiper of the class described having a pair of parallel strips, flexible wiper elements carried by said strips, tongues at the opposite ends of said strips, means connecting said tongues of one strip with the tongues of the other strip to thereby provide a rectangular wiper frame, flexible elements bridging the flexible wiper elements adjacent said tongues and secured in place by the said means, said means being hollow to form conduits for hot air and means for conducting hot air to said hollow means.

1,857,043. CIRCUIT CONTROLLER. GEORGE L. CRAGG, Chicago, Ill., assignor to Harry A. Douglas, Bronson, Mich. Filed Feb. 6, 1928. Serial No. 252,257. 9 Claims. (Cl. 200—59.)



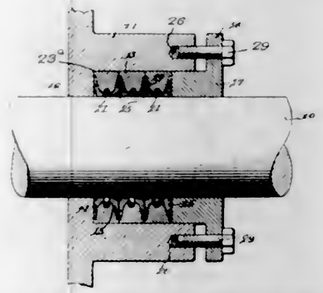
1. The combination with the steering shaft of an automotive vehicle; of a hand wheel coupled with said shaft for turning it; switching means adapted to control the signaling circuit of the vehicle and inclusive of an operating push button disposed at the front side of said wheel and movable along the axis of the steering shaft; and switching means adapted to control the lighting circuit of the vehicle and inclusive of a switch lever mounted to be rotatable upon an axis that extends along the steering shaft and accessible for operation above the aforesaid wheel, both of said switching means including an operating rod common thereto which is reciprocable along the steering shaft to control the signalling circuit and rotatable to control the lighting circuit; said button being assembled with the rod to push the rod thereby to close the signaling circuit; and said lever having a portion passing thru said button provided with thumb and finger engaging portions upon opposite sides of its axis and being coupled with the rod to turn it to control the lighting circuit.

1,857,044. ELECTRICAL WELDING APPARATUS. WILLIAM E. CRAWFORD, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 17, 1928. Serial No. 306,420. 3 Claims. (Cl. 219—6.)



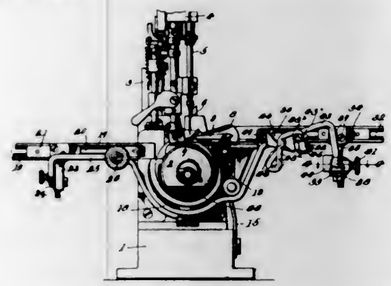
1. In an apparatus for electrically welding a plurality of separate seams in an article simultaneously by the application of separate phase alternating currents from a single multiphase current source, a magnetic member arranged to impede the inter-flow of current through the article between the seams being welded.

1,857,045. PACKING. WILLIAM T. DEAN, Beaumont, Tex., assignor to Switzer Packing Company, Beaumont, Tex., a Corporation of Texas. Filed July 10, 1928. Serial No. 291,643. 1 Claim. (Cl. 286—25.)



In a rod packing, a shaft and housing, a packing within the housing comprising a plurality of packing units, each unit including a pair of metallic rings adapted to form an annular groove between the opposing sides thereof, a ring of resilient material within each groove and extending outwardly therefrom to fit within the packing housing and hold the associated pair of rings spaced from each other, each of said rings having a planiform face for abutting relation with the planiform face of the next ring of the adjacent unit, said rings further having their outer edges formed with an offset about its inner periphery, said resilient rings having an annular groove upon their inner periphery, a compressible lubricant means in said grooves, and means for applying pressure against the sides of said metallic rings for compression of said resilient rings.

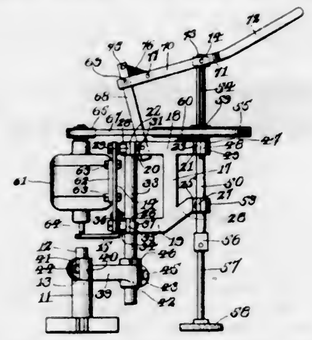
1,857,046. SEWING MACHINE FOR INSERTING ELASTIC BANDS IN STITCHED ARTICLES. HARRY E. DYKEMAN, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 10, 1930. Serial No. 427,210. 14 Claims. (Cl. 112—2.)



1. The combination of a work support, a stitching mechanism, a folder located in front of the stitch forming mechanism for inturning the edge portion of a fabric to form a hem pocket, and means for guiding an endless elastic tape through the folder and into the formed hem pocket, said means including a guide roller located in advance of the folder for guiding and directing the elastic tape into said folder, said guiding roller being mounted for rotation on an axis inclined to the plane of the work support whereby the elastic tape is directed in predetermined fixed path into the folder.

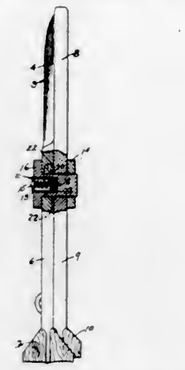
1,857,047. GRINDING MACHINE. GUY ENOCHSON, Austin, Minn. Filed Sept. 30, 1929. Serial No. 396,293. 8 Claims. (Cl. 51—245.)

1. A grinding machine comprising a vertically adjustable element, a bracket provided at its outer end with superposed bearings, a motor carrier, means for clamping the carrier and the inner end of the bracket to the upper portion of said element, a foot piece, an angularly adjustable arm connected to said foot piece and supporting said element, a rotatable and vertically adjustable spindle, spindle driving means mounted on the upper of said bearings, said



spindle extending through said driving means and bearings, said spindle and driving means having coacting means for rotatably and slidably connecting the spindle to said driving means, a support carried by the bracket, and spring controlled means connected with said support and with the spindle for vertically adjusting the latter.

1,857,048. MEANS FOR LUBRICATION OF PINTLE AND HINGE SECTIONS OF PRUNING SHEARS. GEORGE F. HICKOK, Burlingame, Calif. Filed Apr. 21, 1930. Serial No. 445,908. 2 Claims. (Cl. 30—11.)

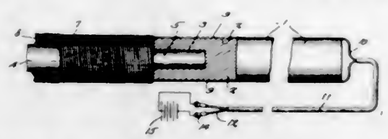


1. In a pruning device of the character described, pruning members having registering openings near the bases of the blades thereof, a hollow pintle positioned in said openings having an orifice in the wall thereof and serving as a pivotal connection for said blades, the frictional surface about the opening of one of said blades bearing a plurality of channels for the conveyance of a lubricant, an absorbent substance within the hollow pintle for the retention of said lubricant, said pintle being provided with a filling opening leading to said bore.

1,857,049. MAGNETIC AXLE PULLER. JAMES DAUGHERTY HOPKINS, Midway, Ky. Filed Sept. 13, 1930. Serial No. 481,749. 1 Claim. (Cl. 175—367.)

A magnetic fishing tool characterized by ease of assembly, and comprising a rod-like handle and a coil, the coil comprising a core and a winding that forms a body about

the core, the inner end of the core projecting beyond the inner end of the body, the winding being formed into a cable beyond the outer end of the handle, and that portion of the winding that is between the cable and the body being in the form of a loop, the handle having a socket in its inner end, and oppositely-disposed straight grooves on its outer surface, the loop being capable of being opened laterally, so that the handle can be placed within the loop, and the side portions of the loop being engaged in



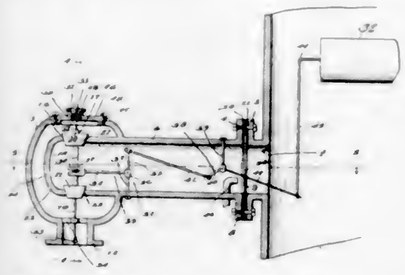
the grooves of the handle, with said end of the core mounted in the socket of the handle, the inner end of the handle being of substantially the same area and diameter as the body, and being in abutment with the inner end of the body, to protect the inner end of the body: the projecting inner end of the core, and the socket, being arranged concentrically with respect to the handle and the body, which construction, coupled with the fact that the body and the handle, are of the same diameter, facilitates the mounting of the side portions of the loop in the grooves.

1,857,050. FIXTURE SUPPORTING WEDGE. DANIEL L. JONES, Orange, N. J., assignor to J. H. Balmer Co., Newark, N. J., a Corporation of New Jersey. Filed May 14, 1930. Serial No. 452,488. 4 Claims. (Cl. 248—20.)



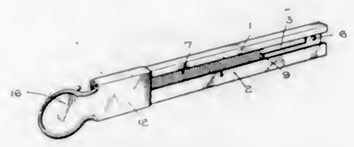
1. A fixture supporting wedge adapted to fit within a grooved fixture base, said wedge having opposite side walls, each having an inwardly depressed portion intermediate its length to define on each wall longitudinally spaced side bearing surfaces for contact with the inner confronting walls of the receiving grooves at isolated points.

1,857,051. MEANS FOR CONTROLLING THE LIQUID LEVEL IN CONTAINERS. ARTHUR D. JOHNSTON, Pampa, Tex. Filed July 19, 1930. Serial No. 469,221. 4 Claims. (Cl. 137—103.)



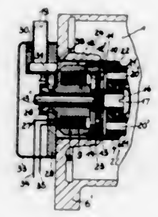
1. In a means for controlling the liquid level in containers, a valve adapted to release the excess liquid in the container, means for actuating said valve in accordance with the level of the liquid in said container, a screen to shield said valve and said controlling means from sediment or other foreign matter in the liquid and a blow pipe for removing sediment from said screen.

1,857,052. BOX, CASE, OR HOLDER FOR GRAMOPHONE NEEDLES. GEORGE BASIL KING, Edgbaston, Birmingham, England. Filed Oct. 16, 1929, Serial No. 400,030, and in Great Britain Oct. 26, 1928. 2 Claims. (Cl. 206—66.)



1. A holder for gramophone needles comprising a clip having edges of channel form for engaging over opposite ends of the needles, said edges each being formed near one end to permit of the discharge of the needles one by one, the back of said clip having a longitudinal slot and forwardly projecting lugs at the edges of said slot forming stops for the needles.

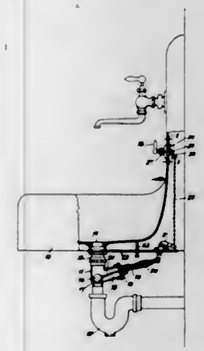
1,857,053. SERVO-MECHANISM FOR BRAKES. FRANZ KRATZ, Stuttgart, Germany, assignor to Servo-Frein Dewandre, Societe Anonyme, Liege, Belgium. Filed Apr. 27, 1929, Serial No. 358,646, and in Germany May 4, 1928. 5 Claims. (Cl. 121—38.)



1. A brake servo mechanism comprising a cylinder having an opening in the head thereof, said cylinder having a bevelled surface at the outer end of said opening, a piston within said cylinder having operative connection to the brake operating means, a plate, a housing inserted in said opening and detachably secured to said plate, means to detachably fasten the plate to the head of the brake cylinder, a sealing ring in the space formed at the junction of the surface of the housing with the flat radial surface of the plate and the bevelled surface at the outer end of the opening in the head of the brake cylinder, said housing having passages connecting the housing to the interior of said cylinder, valve means in said housing for controlling the flow of fluid through said passages, and an electro-magnet in said housing for controlling said valve.

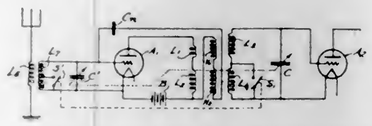
1,857,054. DRAIN STOP VALVE. PETER LUPPES, Brooklyn, N. Y. Filed Mar. 16, 1931. Serial No. 523,156. 1 Claim. (Cl. 4—203.)

The combination with a drain outlet, of a seat in the outlet, an inclined tubular extension in communication with the outlet above the seat, a gravity valve member arranged within the extension and movable under its own weight on the seat to obstruct the outlet, and said extension being sufficiently large to enable the valve member to be withdrawn from the seat into the extension clear of the outlet, a rod, a stuffing box on said extension mounting the rod for axial movement, one end of the rod being connected with the valve member by flexible means, a lever connected with the other end of said rod, a spring connected with said lever, and manipulable means connected with said lever to operate it to withdraw the valve member into the extension through the intervention of said rod and flexible means, and also to retain said valve member within said extension, and said spring serving to cause



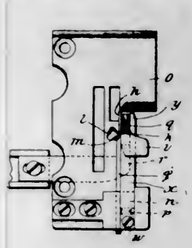
return movement of the lever and rod when the manipulatable means is released, to allow the valve member to move onto said seat to obstruct the outlet.

1,857,055. COUPLING SYSTEM. WILLIAM A. MACDONALD, Little Neck, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Feb. 15, 1929, Serial No. 340,244, and in Great Britain and Australia Feb. 15, 1929. 42 Claims. (Cl. 179—171.)



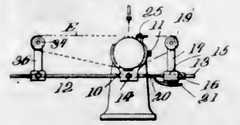
1. In a radio receiver adapted to operate over a high-frequency band and over a low-frequency band, a plurality of substantially identical tunable circuits including inductance coupled together in succession, a single band-changing control interconnecting a plurality of switches each having a single contact and an arm maintained always at a fixed base potential, one switch only being connected in each circuit and adapted to modify said inductance, and uni-control means for simultaneously tuning said circuits.

1,857,056. TRIMMING DEVICE FOR SEWING MACHINES. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Dec. 20, 1929, Serial No. 415,477, and in Germany Apr. 25, 1929. 6 Claims. (Cl. 112—127.)



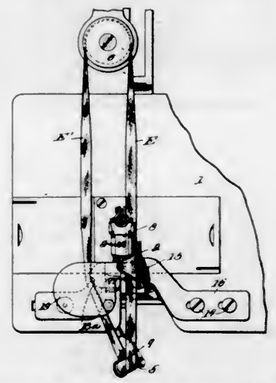
1. A trimming device for sewing machines including a throat plate, a stationary trimming blade carried by said throat plate and located at one side of the needle and forming the wall of the needle opening between the needle and the movable trimming blade, a movable trimming blade mounted beneath the throat plate and projecting above and overhanging the throat plate and cooperating with said stationary blade in the trimming of the lower layer only of two fabric sections being stitched.

1,857,057. SEWING MACHINE. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Feb. 11, 1930, Serial No. 427,578, and in Germany Feb. 20, 1929. 8 Claims. (Cl. 112—136.)



1. The combination of a work support, a stitching mechanism, a folder located in front of the stitch forming mechanism for inturning the edge portion of a fabric to form a hem pocket, and means for guiding an endless elastic tape through the folder and into the formed hem pocket, said means including guiding devices located in front of and in rear of the stitching mechanism over which the elastic tape may be stretched, said guiding devices being so positioned that the portion of the elastic tape passing between the guiding devices and over the work support lies substantially in a straight line.

1,857,058. SEWING MACHINE FOR INSERTING ELASTIC BANDS IN STITCHED ARTICLES. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed May 1, 1930, Serial No. 448,957, and in Germany Oct. 29, 1929. 8 Claims. (Cl. 112—136.)

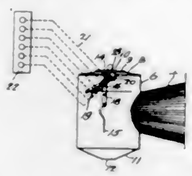


1. The combination of a work support, a stitch forming mechanism, a folder located in front of the stitch forming mechanism for inturning the edge portion of a fabric to form a hem pocket, and means for guiding an endless elastic tape with the plane of the face of the tape horizontal through the folder and into the hem pocket, said means including guiding rollers located one in front and the other in rear of the stitch forming mechanism and with their axes positioned so that the return stretch of the elastic tape passes over the work support.

1,857,059. DEVICE FOR MINIATURE GOLF COURSES. JAMES H. MATHESON and DONALD E. MATHESON, Edgewood, Pa. Filed Oct. 24, 1930. Serial No. 491,050. 2 Claims. (Cl. 177—384.)

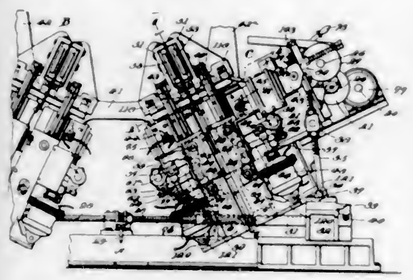
2. A game apparatus comprising a conical member, a tubular receptacle mounted at the apex thereof, a shaft

rotatably mounted in and extending externally of the receptacle, means mounted on the shaft and within the receptacle for arresting the flight of a golf ball, and indicating means mounted externally of the receptacle and operative in conjunction with the arresting means, the said indicating means comprising a lever rigidly mounted



on the said shaft, the said lever having a pin, a second lever lying in the path of the pin, a plurality of contact points in operable relation with said second lever for completing electric circuits when the second lever is rotated by the pin on said first lever, the second lever is adapted to remain in contact with the point until manually returned to normal position.

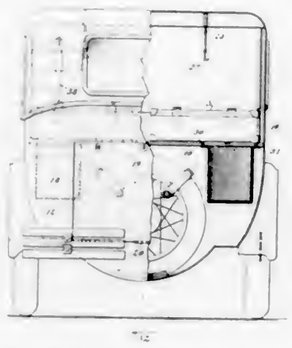
1,857,060. ELECTRIC WELDER. FRED P. MCBERTY, Warren, Ohio. Filed Apr. 5, 1928. Serial No. 267,605. 27 Claims. (Cl. 219—4.)



1. An apparatus for welding the back and side portions of an automobile body together comprising electrodes having associated therewith vertically movable clamping bars for clamping and maintaining the adjacent edges of the body portions in perfect alignment with each other on said electrodes, an electric welding circuit including said electrodes, one of said electrodes in separated relation in respect to the other and movable to and from the same, toggles at the ends of the clamping bars and having operative connection therewith for raising and lowering them, cylinders having therein pistons for operating said toggles, an equalizing bar interconnecting said pistons, means for moving the movable electrode towards the stationary electrode to bring the edges of the body portions into abutment under pressure, and means for turning off the electric welding current after said abutment occurs and the weld is completed.

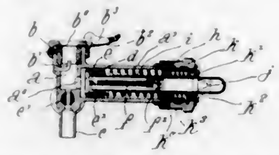
1,857,061. AUTOMOBILE BODY. ALFRED I. MCGLOUGHLIN, New York, N. Y. Filed Nov. 21, 1930. Serial No. 497,293. 2 Claims. (Cl. 296—37.)

1. In an automobile of the sedan type, a body fashioned to provide a carrying space in rear of the rear seat, extending from the roof to a plane below the usual bottom line of the vehicle body and across the entire width of the vehicle and a horizontal partition disposed in a plane below that of the upper edge of the rear seat back rest and extending therefrom to the rear wall and subdividing said carrying space into upper and lower compartments, the former being open to the interior of the body and the latter having a doorway opening through the rear wall of the body and a door normally closing said doorway, said partition having an opening at one side of its transverse



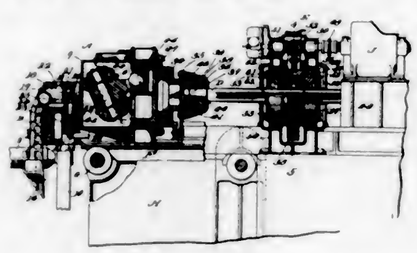
center and a receptacle holder depending from said opening into the lower compartment for the reception of a removable receptacle.

1,857,062. PRESSURE INDICATING INFLATOR. LOUIS MARCEL MERCIER, Neuilly sur Seine, France. Filed Nov. 11, 1930, Serial No. 494,984, and in Belgium Nov. 22, 1929. 10 Claims. (Cl. 116—34.)



1. A pressure indicating assembly comprising a chamber provided with an opening adapted to be connected to a source of fluid pressure, a piston responsive to pressure variations in said chamber, said piston having an opening therein, a valve mounted in said opening, and means operative to open said valve when the pressure in said chamber reaches a predetermined value.

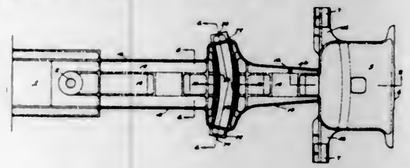
1,857,063. MANIPULATOR FOR ROLLING MILLS. RALPH D. NYE, Wheeling, W. Va., assignor to Wheeling Mold & Foundry Division of The Continental Roll & Steel Foundry Company, Wheeling, W. Va., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,280. 20 Claims. (Cl. 80—48.)



6. A rolling mill manipulator comprising a driven rock shaft, a plurality of rock arms carried by said shaft and pivotally supporting manipulator fingers, said fingers free to swing upon their pivotal support and adapted to be raised and lowered by the rock arms and said rock shafts,

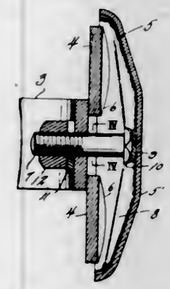
means carried by said rock arms for positioning the fingers when in their lowered positions, and means independent of the drive means of the fingers for retarding the movements of the rock arms as the same assume positions to lower the fingers, and said retarding means accelerating the movement of the rock arms and the fingers when the rock arms are lifted to raise the fingers.

1,857,064. LOCOMOTIVE FRAME. MENAHEM RIVKIN, Philadelphia, Pa. Filed June 18, 1930. Serial No. 462,009. 7 Claims. (Cl. 105—174.)



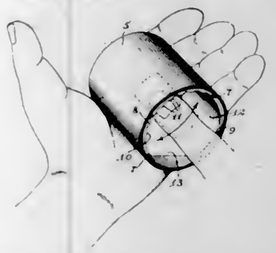
1. The combination in a locomotive, of a main frame terminating at a point in front of the rear truck, and having a central rear end extension narrower than the main frame, said extension having an integral foot plate and boiler support, and having a transverse radial guide for the truck.

1,857,065. BUMPER CONSTRUCTION. HERMAN R. SAXON, Toledo, Ohio. Filed Dec. 26, 1930. Serial No. 504,731. 6 Claims. (Cl. 293—55.)



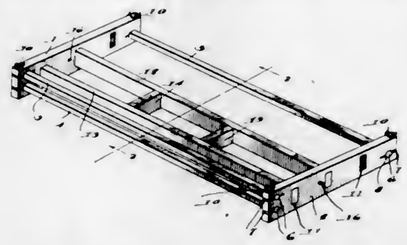
1. An assembly maintaining element for the parts of a bumper comprising a sheet metal concavo-convex head engaging a part and a threaded stem weld anchored directly in the concave side of the head independently of disfiguring the head exterior, said head extending from the head interior to engage another part.

1,857,066. BLADE SHARPENER. NATHAN SCHWARTZ, New York, N. Y. Filed Oct. 8, 1930. Serial No. 487,312. 4 Claims. (Cl. 51—211.)



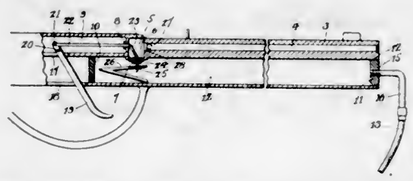
1. In a blade sharpening device, a cross sectionally elliptical tubular casing having longitudinally extending ribs projecting inwardly from the sides of the casing which are of lesser radius, a marginal inwardly projecting flange at one end of said casing and a pair of semi-elliptical sharpening elements removably fitted within the casing respectively on opposite sides of the ribs and in abutting relation to the marginal end flange.

1,857,067. FRAME FOR MAKING HOOKED RUGS. GEORGE P. SEILER, New Orleans, La. Filed Mar. 9, 1931. Serial No. 521,336. 2 Claims. (Cl. 112—9.)



1. A frame for making pairs of "hooked" rugs simultaneously comprising a pair of spaced end bars, a side bar connecting similarly disposed ends of the end bars together, a pair of side bars connecting the other ends of the end bars together, a pair of parallel spacing bars supported by the end bars and located between the first-mentioned side bar and the second-mentioned side bars and spacing blocks frictionally held between the bars in parallel spaced relation.

1,857,068. AIR RIFLE. ANTHONY SKINDEL, Wildwood Villas, N. J. Filed Feb. 18, 1931. Serial No. 516,771. 3 Claims. (Cl. 124—8.)

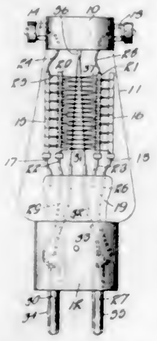


1. An air rifle comprising a body portion having a barrel port provided with a bore, a pressure relieving chamber at the rear of said port and permanently opening into the bore, a compressed air receiving chamber below said other chamber and bore, a pull bar chamber at the rear of the pressure relieving chamber, a compressed air supply line opening into said receiving chamber, a normally closed valve for controlling communication between said chambers, and shiftable means carried by said body portion and extending through the pull bar chamber and into the pressure relieving chamber for shifting said valve to establish communication between said pressure relieving and air receiving chambers to provide for the discharge of a projectile mounted in said bore, said means including a pull bar.

1,857,069. STATIC ELIMINATOR TUBE. EARL TEEL, Norman, Okla., assignor of one-half to F. B. Swank, Norman, Okla. Filed Jan. 6, 1930. Serial No. 418,915. 1 Claim. (Cl. 250—27.5.)

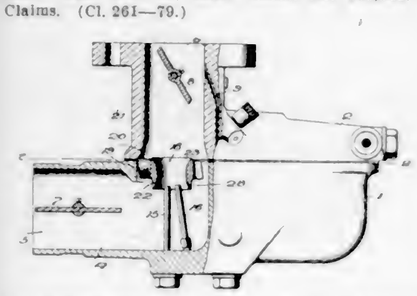
An electric discharge tube comprising an envelope terminating in a re-entrant support at one end thereof, electrodes mounted on said support in said envelope and having leads passing through said support, a base having terminals fixed to said envelope adjacent said support, a cap having terminals fixed to the opposite end of said envelope, each of two of said electrodes constituting a

wound coil inductively coupled to the other, another of said electrodes constituting a filamentary cathode having leads connected to the terminals of said base, one end of



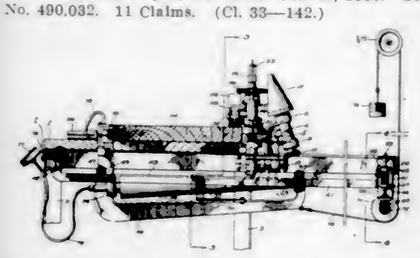
each of said wound electrodes being connected to a terminal in said base and the other end of each of said wound electrodes being connected to a terminal in said cap.

1,857,070. CARBURETOR. WILLIAM M. THOMAS, Albuquerque, N. Mex., assignor of one-fourth to Fred W. Lee and one-fourth to Bryan G. Johnson, Albuquerque, N. Mex. Filed Nov. 18, 1930. Serial No. 496,541. 10 Claims. (Cl. 261—79.)



1. In a carburetor, the combination of means forming a main air passage and means forming a constriction therein comprising a ring of smaller diameter than said passage having a central passage therethrough and supported in said passage by radially extending fins there being a greater number of fins on one side of the ring than on the other and means in said central passage for supplying fuel to the air flowing therethrough.

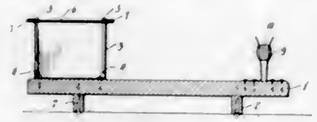
1,857,071. BOARD-FEET COMPUTER. MONTROSE GRAHAM TULL, Wayne, Pa. Filed Oct. 20, 1930. Serial No. 490,032. 11 Claims. (Cl. 33—142.)



3. A device of the class described comprising means for slidably receiving a board endwise, indicating means, means, comprising a plurality of rollers and a corresponding plurality of rotatable members each having roller contact zones of different diameters, said members respectively engaging with said rollers, for actuating said indicating means from the sliding board proportionately to the three dimensions of said board, and means for causing constant pressure between said rollers and members.

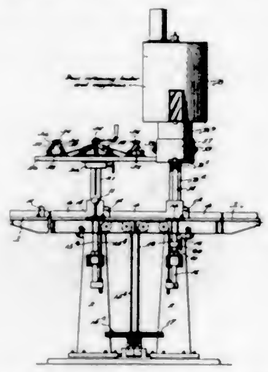
7. A device of the class described comprising means for slidably receiving a board endwise, a second means operable proportionately to the thickness of said board, a third means for actuating said second means from the sliding board proportionately to the board thickness, a fourth means operable by said second means proportionately to the width of said board, means for relatively associating said second means and the means operable thereby so as to establish therebetween a velocity ratio in accordance with the board width, indicating means, driving means therefor operable by said fourth means, said second and fourth means each comprising a rotatable member having roller contact zones of different diameters, and said third and second means each comprising a roller respectively engaging with said members, and means for causing constant pressure between said rollers and members.

1,857,072. BAIT CONTAINER AND CUTTING BOARD. ELMER E. WILSON, Santa Clara, Calif. Filed Dec. 3, 1930. Serial No. 499,789. 2 Claims. (Cl. 43—55.)



1. A container for the purpose stated, comprising an open-top receptacle, beaded studs on the walls of said receptacle and projecting above its top, a cover of flexible absorbent material having eyelets therein to receive said studs to hold it on the receptacle, and the edges of said cover of double thickness to prevent the cover sagging when in position on the receptacle.

1,857,073. HOOD CAPPING CONTAINER. WILBUR L. WRIGHT and LEE D. PIERCE, Fulton, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed Sept. 26, 1925, Serial No. 58,780. Renewed Mar. 10, 1931. 35 Claims. (Cl. 226—83.)

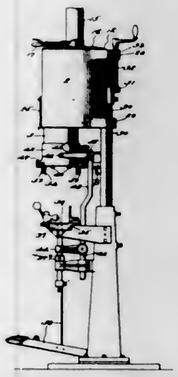


1. Apparatus for hood capping containers comprising means for delivering onto a bottle mouth, a paper material hood cap having a flaring skirt embodying a binder in a moldable condition, hood cap skirt molding mechanism, associated with said means, for compressing and molding said skirt against and completely around the bottle neck, and means for advancing said mechanism with the bottle while

continuing to hold the moldable cap skirt compressed until set to permanent secured condition.

35. In the art of hood capping containers, those steps which include maintaining a multiplicity of hood cap disks in a temporarily moldable condition by heat to provide a constant supply of such disks, causing said disks to advance in procession; bringing together the heads of successive containers and successive moldable disks from said supply for securing on the respective heads; molding the still moldable hood cap disks on the container heads; and advancing a succession of said hood capped containers to a discharge station and holding the caps on said succession of containers while setting in molded form.

1,857,074. HOOD CAPPING CONTAINER. WILBUR L. WRIGHT and LEE D. PIERCE, Fulton, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed Sept. 25, 1925. Serial No. 58,613. 30 Claims. (Cl. 226—83.)

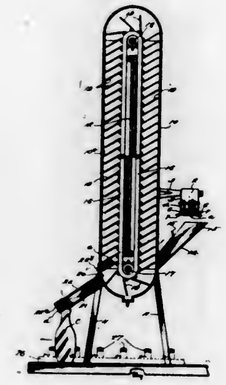


1. Means for successively dispensing flaring skirted hood caps onto container mouths, embodying a heating chamber of a capacity to receive stacks of nested binder carrying paper material hood caps and providing a discharge station, means to advance several of said stacks within the chamber toward said discharge station, provision being made for heating the caps in said chamber to maintain the same in moldable condition, and cap skirt gripping means at said discharge station.

7. In the method of hood capping containers those steps which comprise heating a stack of nested previously-formed sheet paper material hood caps having flaring annular skirts carrying binder material to render said skirts moldable by heat and hard when set at atmospheric temperatures, and maintaining said stack heated to provide a supply of temporarily moldable caps; then successively applying the skirted caps while still hot and moldable to container heads; and then pressing the depending hot moldable skirts and thus maintaining the same until cooled to hard securing form on the container heads.

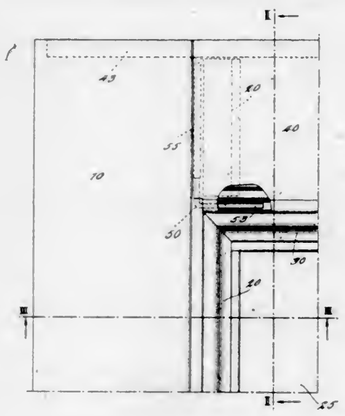
1,857,075. HOOD CAPPING CONTAINER. WILBUR L. WRIGHT and LEE D. PIERCE, Fulton, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed Nov. 2, 1925. Serial No. 66,431. 26 Claims. (Cl. 226—83.)

14. In the method of hood capping containers with plastic hood cap disks; those steps which include reducing at least the skirt forming portions of a multiplicity of plastic hood cap disks to a temporarily moldable condition while maintaining the disks spaced apart, to establish a supply of such temporarily moldable disks; advancing such supply of spaced temporarily moldable disks toward a hood capping station; and successively removing temporarily moldable disks from said supply and applying the same while



still moldable to the heads of a procession of containers for contraction and holding until set to securing form and condition on such heads.

1,857,076. HOLLOW METAL DOOR AND THE LIKE. OSCAR E. ZENKER, Glendale, N. Y. Filed Nov. 20, 1929. Serial No. 408,531. 4 Claims. (Cl. 189—46.)

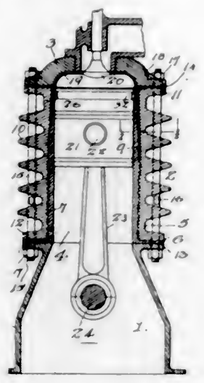


3. The combination of a molding adapted to be joined to a stile or the like, a molding adapted to be joined to a rail or the like, said moldings having opposed parallel channels and being complementally mitered to form a miter joint, and an angle member adapted to have its legs slid into said channels and to be permanently secured therein.

1,857,077. INTERNAL COMBUSTION ENGINE. ERNIE ADAMSON, Rockville Center, N. Y. Filed Nov. 3, 1930. Serial No. 493,104. 5 Claims. (Cl. 123—191.)

1. The combination in an internal combustion engine with a head having a dome therein, of a piston having a

central boss in its face and an annular, concave recess surrounding the boss, and the outer upwardly curved face



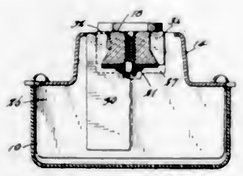
of the recess merging into a thin annular edge on the face of the head of substantially the same exterior diameter as the piston.

1,857,078. REFRIGERATING SYSTEM. LEON BUEHLER, Jr., and WILLIAM HENRY AUBREY, Waynesboro, Pa., assignors to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Jan. 6, 1930. Serial No. 418,932. 4 Claims. (Cl. 62—160.)



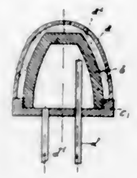
1. An evaporator for a refrigerating system comprising a pair of upper headers having transverse headers connecting them, a pair of lower headers having transverse headers connecting them, a plurality of bowed tubes connected in spaced relation to the upper and lower transverse headers, the said bowed tubes being bent in the form of W's and having their ends slightly bent to enter the transverse headers, substantially as set forth.

1,857,079. ELECTRIC RECEPTACLE AND HOUSING THEREFOR. JOHN R. COOK, Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Mar. 21, 1931, Serial No. 524,387. Renewed Jan. 28, 1932. 14 Claims. (Cl. 247—13.)



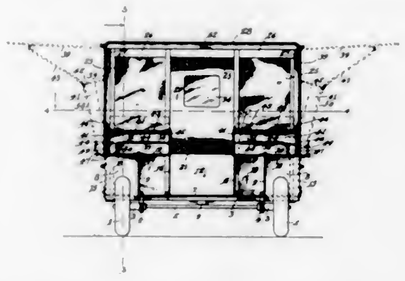
12. An electric fitting comprising an insulating body having a plurality of mutually insulated electrical devices mounted therein and adapted to be connected to different electrical systems, in combination with a housing for said fitting comprising base and cover members, baffling means located in the central portion of the housing in a transverse plane and dividing said housing into two isolated compartments, each containing one of said devices, said means being secured to said housing.

1,857,080. PROCESS FOR THE MANUFACTURE OF SILICA ARTICLES WITH GLAZED SURFACE. GASTON DELPECH, Nemours, France, assignor to The Société Quartz & Silicé, Paris, France, a Corporation of France. Filed June 9, 1927, Serial No. 197,772, and in France July 15, 1926. 3 Claims. (Cl. 49—78.1.)



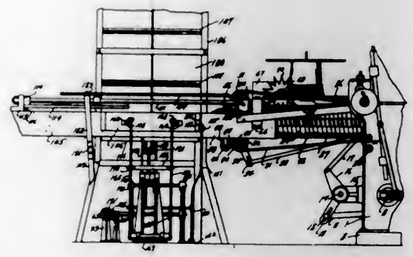
1. A process for the manufacture of silica articles with glazed surfaces, consisting in first molding a blank, substantially similar geometrically to the article to be obtained, supporting this blank over but spaced from a pattern, which has on its active face a shape and dimensions corresponding to those of the article to be obtained, heating said blank to a temperature adapted to produce the remelting and glazing thereof, out of contact with the pattern, and to produce its softening to effect the subsidence of part of the blank onto the pattern under the action of the surface tension and weight of the softened silica, then transferring the blank onto another pattern, exactly similar to the first, onto which the remainder of the blank then similarly subsides.

1,857,081. TRAILER. JOHN CLELLAND FONTAINE, Shreveport, La. Filed Dec. 9, 1929. Serial No. 412,844. 8 Claims. (Cl. 296—23.)



1. A trailer including a wheel-supported structure, partitions therein dividing the bottom portion of the structure into a central aisle and opposed groups of compartments, superposed fixed and movable bed sections hingedly connected at their outer ends and disposed above the respective groups of compartments, side panels hingedly connected to and normally suspended from the top of the structure, connecting panels normally resting on the superposed bed sections and hingedly connected to the upper bed sections and to the side panels respectively, each upper bed section being movable outwardly and downwardly into position flush with the lower bed section to support the connecting panel in an upstanding position and the side panel in an outwardly and downwardly inclined position, and foldable reinforcing means connected to the bed sections, said means including hingedly connected strips, a hinge connection between one of the strips and the upper bed section and a hinge connection between the other strip and the lower bed section, said strips being movable to position between the bed sections and the side panels when the parts are in their normal positions.

1,857,082. AUTOMATIC CARTON PACKING MACHINE. WILLIAM E. HALL, Monroe, Mich., assignor to Fred M. Longnecker, Delta, Ohio. Filed Sept. 6, 1927. Serial No. 217,601. 20 Claims. (Cl. 226—16.)



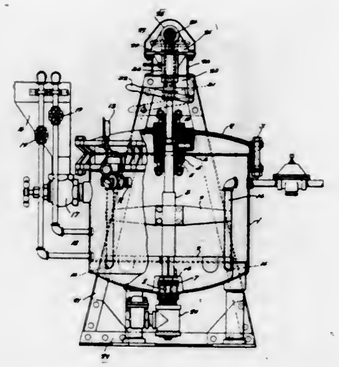
1. An article handling machine comprising a way for receiving articles in a series, means for isolating sections of said series of articles as a group, said way having a lateral opening and a transfer device for removing said groups from the way through said opening.

1,857,083. COLOR PHOTOGRAPHY. JOSEPH B. HARRIS, Jr., Los Angeles, Calif. Filed May 7, 1930. Serial No. 450,350. 2 Claims. (Cl. 88—16.2.)

1. The method of making a combined sound and color photograph which comprises, first, making a red color selection negative and a green color selection negative, and a sound record negative, then forming, in positive stock, a latent image from the red color selection negative adjacent the emulsion face of the positive stock, and a latent image from the green color selection negative and a latent sound record from the sound record negative, both adjacent the carrier of the positive stock, then developing the latent image adjacent the face of the emulsion and toning, with a metal salt, the developed image, then clearing with a potassium bichromate bath, then developing the latent sound record and that the latent image adjacent the carrier, then fixing, then toning the last developed images with a metal salt toning solution.

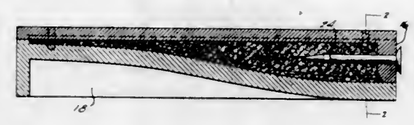
1,857,084. AIR PRESSURE DISPENSER. JOSEPH F. GOETZ, Dayton, Ohio, assignor to The Columbia Mixers Corporation, Hamilton, Ohio, a Corporation of Ohio. Filed May 28, 1928. Serial No. 281,306. 4 Claims. (Cl. 91—45.)

1. The herein described system of mixing and distribution of liquids, including a pressure tank, agitator means therein, driving means for the agitator, a sprayer head for the agitated liquid, a high pressure fluid conduit leading to the sprayer head, a branch conduit from said high pressure conduit leading to the pressure tank, a pressure reducer in said branch conduit, a discharge conduit from the tank leading to the sprayer head, a valved bypass conduit communicating at its ends with the high pressure conduit, a cutoff valve in the high pressure conduit between the connections of said bypass conduit, a receptacle for said bypass conduit for the introduction of a cleansing agent, and a valved bypass connection between the high pressure conduit and the discharge conduit adjacent to the sprayer head, the arrangement being such that normally fluid under pressure is delivered to the sprayer head while a portion of the fluid under reduced pressure is delivered to the tank and induces simultaneous delivery to the sprayer head through the discharge



conduit of the liquid contents of the tank, and subsequently upon adjustment of the several valves a quantity of cleansing agent is delivered under fluid pressure from the introduction receptacle through the high pressure conduit to the bypass connection with the discharge conduit and thence in reverse direction through the discharge conduit to the tank.

1,857,085. METHOD OF MOLDING SPONGE RUBBER ARTICLES. HARRY M. HOOD, Chicago, Ill., assignor to Featheredge Rubber Company, Inc., a Corporation of Illinois. Filed Aug. 17, 1928, Serial No. 300,182. Renewed Sept. 4, 1931. 5 Claims. (Cl. 18—38.)

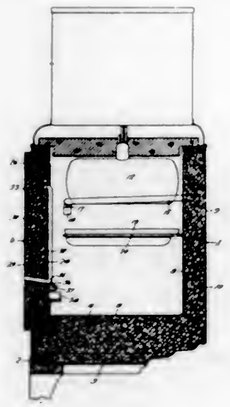


4. The method of molding sponge rubber articles of considerable thickness which comprises the steps of providing a metal heat conductor adapted to contact with a mold wall and extend into the mold cavity and covering substantially more than one-half of the mold surface with a sheet of sponge rubber compound and then subjecting the mold to heat so that such compound may be heated quite rapidly to cause even blowing, and after blowing may be heated internally and externally to cause even curing.

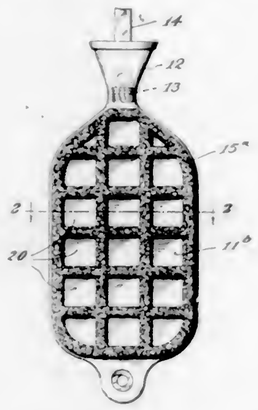
1,857,086. MEANS FOR PREVENTING CONDENSATION IN REFRIGERATOR WALLS. DAVID F. KEITH, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 20, 1928. Serial No. 320,630. 17 Claims. (Cl. 62—1.)

2. A refrigerator comprising a cabinet having spaced-apart inner and outer walls and enclosing a cold chamber, the space between said walls containing insulating

material, the cabinet incorporating a passageway leading from its exterior to said space and passing in intimate heat exchanging relation to the cold chamber, the same being so arranged as to drain any moisture condensed therein away from said space.



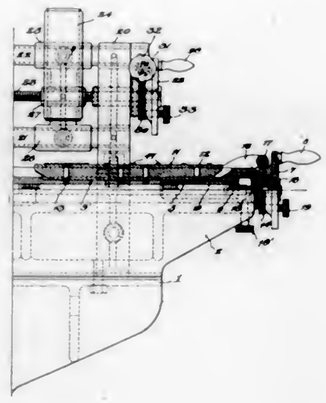
1,857,087. HEAT EXCHANGING CONTAINER. BRUNO LINDEMANN, Berlin, Germany. Filed Jan. 26, 1928, Serial No. 249,565, and in Germany Aug. 25, 1927. Renewed Mar. 24, 1932. 3 Claims. (Cl. 128—258.)



1. A heat exchanging container in the form of a relatively flat bag of sheet rubber, the outer surfaces of the opposite sides of the bag being provided with layers of sponge rubber, said layers of sponge rubber being apertured at spaced intervals to expose the bag walls proper.

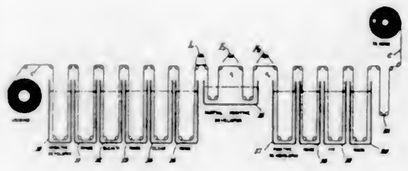
1,857,088. MEASURING MACHINE. MALCOLM K. PARKHURST, New York, N. Y., assignor to Brown & Sharpe Mfg. Co., Providence, R. I. Filed Dec. 28, 1928. Serial No. 328,986. 8 Claims. (Cl. 33—125.)

7. In a measuring apparatus, opposed movable work engaging means, graduated means carried by one of said work engaging means, a microscope for observation of said graduated means having a cross hair carrying member, means to mount the cross hair carrying member for lateral movement relative to the eye piece whereby to compensate for discrepancies of said graduated means,



a series of devices each for positioning the member in a predetermined location, and means for mounting the devices for selective operation.

1,857,089. REVERSING PHOTOGRAPHIC NEGATIVES. VIRGIL B. SEASE, Parlin, N. J., assignor to Du Pont Film Manufacturing Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1931. Serial No. 567,627. 3 Claims. (Cl. 95—5.)

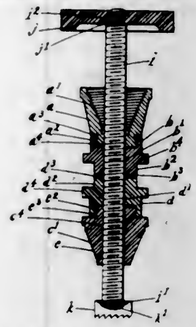


1. In a reversal process for producing a positive cinematic image in a roll of undeveloped silver halide cinema film containing a latent negative image of differently exposed cinematic scenes; the steps of vigorously developing said negative image and subsequently chemically removing the silver therefrom: flashing said roll with only enough light to deliberately under-expose the therein remaining latent positive image so as to permit a partial positive image to be developed therefrom; developing said partial positive image and separately flashing each of said scenes with the additional amount of light that the partial positive image of each of said scenes visibly indicates as necessary for the desired intensification thereof, and then subsequently submitting said roll to final developing and finishing operations.

1,857,090. VALVE RESEATING TOOL. JOHN TEKAVEC, Cleveland, Ohio, assignor of one-half to L. D. Farrell, Cleveland, Ohio. Filed June 12, 1929. Serial No. 370,265. 6 Claims. (Cl. 90—12.5.)

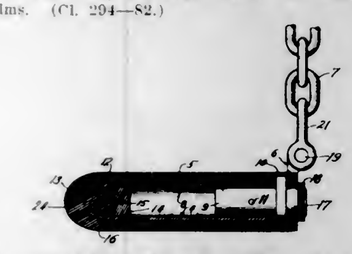
1. A valve reseating device comprising a threaded tool spindle equipped with reversibly mounted actuating means and cutter, the tool spindle also having threaded

adapting devices mounted thereon, each device having an axial bored annular grooved hub; rotatably mounted



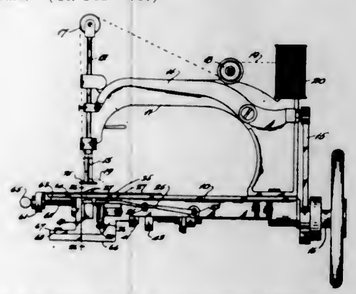
bossed caps with locking surfaces and axial aligned bores, secured to each adapting device, and means in the caps to position the tool spindle.

1,857,091. PAPER ROLL HOISTING PLUG. FREDERICK VON DER HORST, Chicago, Ill., assignor to The Tribune Company, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1931. Serial No. 552,775. 5 Claims. (Cl. 294—82.)



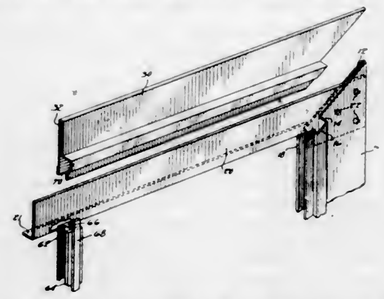
1. A hoisting device for paper rolls or the like comprising a rubber covered plug adapted to be inserted in the end of the roll core and provided at its projecting end with means affording connection with a lifting member.

1,857,092. TUFTING MACHINE. TROY OTIS ANDERSON, East Lake, and JEHUE RUSSELL EARP, Chattanooga, Tenn. Filed Mar. 19, 1929. Serial No. 348,241. 16 Claims. (Cl. 112—79.)



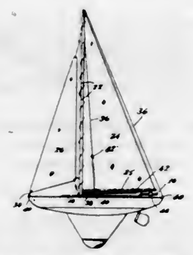
1. In a tufting machine, the combination with a reciprocating needle and means for guiding a strand thereto, means for holding a fabric for penetration by the needle and a doubled portion of the strand forming a loop, a rotary knife positioned below the fabric holding means and arranged to pass through and sever each loop as formed, and a clamp arranged to grip both sides of the loop simultaneously during severing movement of the knife.

1,857,093. WINDOW SASH AND MUNTIN CONSTRUCTION. HARRY E. CAMPBELL, Baltimore, Md., assignor to Campbell Metal Window Corporation, Baltimore, Md., a Corporation of Maryland. Filed Aug. 3, 1929. Serial No. 383,189. 10 Claims. (Cl. 189—76.)



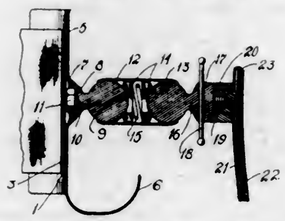
1. A window-frame comprising side and bottom members formed with glass channels, a plate connecting the upper parts of such side members so that a piece of glass may be slipped by such plate into said channels and a folded cover plate adapted to be slipped over said connecting plate to hold the upper edge of the glass, said cover completely hiding said plate upon the inside and being adapted by shape and size to be positioned upon the plate to complete the frame with the cotonur of the side members so that the cover is the visible portion of the inside of the top.

1,857,094. TOY BOAT. ALFRED M. DOERFLER, Mansfield, Mass., assignor to Everett E. Kent, Newton, Mass. Filed Feb. 3, 1931. Serial No. 513,065. 11 Claims. (Cl. 46—37.)



1. A toy boat having means by which the rig may be converted, comprising, in combination with the hull, a mast-retaining device extending fore and aft and including mast-engaging means, at a multiplicity of points along its extent, for holding the heel of a mast removably at any of said points.

1,857,095. PHYSICIAN'S HEAD MIRROR. JOHN B. GLOWACKI, Chicago, Ill. Filed Nov. 29, 1929. Serial No. 410,544. 10 Claims. (Cl. 128—22.)



1. A physician's head mirror device comprising a head band, a plate supported thereon, a ball on said plate, a

finger piece integrally formed on said plate to facilitate adjustment of the head band, a mirror, a ball thereon, a sleeve enclosing said balls, and a spring in said sleeve separating said balls.

1,857,096. CARTRIDGE FUSE. JOHN B. GLOWACKI, Chicago, Ill. Filed Aug. 11, 1927. Serial No. 212,240. 7 Claims. (Cl. 200—131.)



1. A cartridge fuse comprising a body, a thimble rigidly secured on one end thereof, a plate integral therewith and having an offset slot therein closed at both ends, an open notched thimble rigidly secured on the opposite end of said body and countersunk at one end, a removable closure plate seated in the countersunk end of said thimble and having an offset slot therein closed at both ends, a pair of oppositely positioned offset projections formed on said closure plate on the ends of a secant line and adapted to seat in offset notches provided in said open thimble, a fuse element removably positioned diagonally within said body with the ends of said fuse element projecting through the slots in said plates and projecting in opposite directions from one another, said fuse element having a cross-section sufficient to substantially fill up said slots and contact caps removably engaged on said thimbles for pressing the respective ends of the fuse element in tight contact with said plates to insure positive contacts.

1,857,097. REPLACEABLE FUSE ELEMENT. JOHN B. GLOWACKI, Chicago, Ill. Filed Jan. 10, 1929. Serial No. 331,498. 3 Claims. (Cl. 200—135.)



1. A replaceable fuse element comprising a fusible metal strip having an irregular opening therein forming aligned melting sections of different resistances.

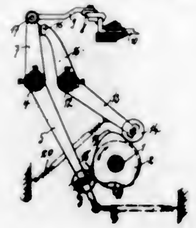
1,857,098. RENEWABLE FUSE ELEMENT. JOHN B. GLOWACKI, Chicago, Ill. Filed Dec. 19, 1930. Serial No. 503,410. 10 Claims. (Cl. 200—135.)



1. A renewable fuse element comprising a fusible strip of metal embracing a body section and end sections connected by reduced portions, said element having mounting slots extending through the end sections and the reduced portions and continuing into the body section.

1,857,099. VIBRATION FREE DRIVE FOR SHAFT AND CAM ACTUATED MEMBERS OR FLAT-FULL FASHIONED MACHINES. PAUL LIEBERKNECHT, Einsiedel, near Chemnitz, Germany, assignor of one-half to Maschinenfabrik-Eeinsiedel, Gesellschaft mit beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Filed Nov. 11, 1931, Serial No. 574,394, and in Germany July 9, 1930. 3 Claims. (Cl. 66—82.)

1. A driving device for the actuation of the members driven by aid of shafts in flat-full fashioned machines, particularly the facing bar and needle bar, comprising a movable abutment which operates on the lever producing the forward and return movement of the said members at the position of the lever where it transmits movement and force and before the lever commences its return movement,

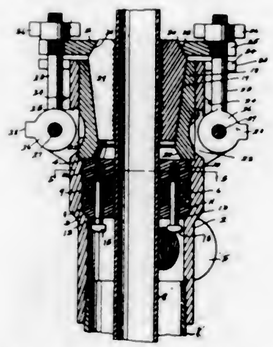


and an additional force producing means which supports the lever in its return movement, whereby the vibration set up at these places at the moments of reversal is rendered non-deleterious.

1,857,100. ABSORBENT PAPER. FRANK H. MCCORMICK and GEORGE L. SCHWARTZ, Wilmington, Del., assignors, by mesne assignments, to The Celastic Corporation, Arlington, N. J., a Corporation of Delaware. Filed Aug. 25, 1931. Serial No. 559,302. 35 Claims. (Cl. 92—13.)

1. A process of producing absorbent pulp comprising dispersing cellulose fibers of paper making length in pulp form with a swelling agent and stopping the reaction between the pulp and swelling agent when the crinkling of the fibers is sufficient to produce a freeness increase above 14%

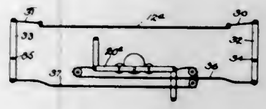
1,857,101. CASING HEAD AND BLOW OUT PREVENTER. JEDDY D. NIXON, Houston, Tex., assignor to American Engineering Corporation, Houston, Tex., a Corporation of Texas. Filed June 20, 1931. Serial No. 545,696. 14 Claims. (Cl. 166—14.)



1. A casing head having an annular inside seat and an annular, upwardly facing inside shoulder above said seat, an adapter in the head seated on said shoulder and having an inside, downwardly tapering slip seat, a hold-down plate above said adapter, hold down rods on the head having means which engage and interlock with the adapter when the rods are in one position and having means which engage the hold down plate when the rods are in another position.

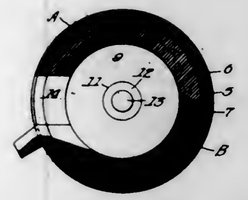
1,857,102. FULL FASHIONED KNITTING MACHINE. BRUNO E. PFUELLER, Reading, Pa., assignor of one-half to E. Louis Kotzen, Reading, Pa. Filed Mar. 6, 1931. Serial No. 520,488. 2 Claims. (Cl. 66—82.)

1. In a full fashioned knitting machine having a series of slur cocks each mounted to travel on a fixed guide track, and a connecting bar fixedly spacing said slur cocks and longitudinally reversely movable to jointly reciprocate said slur cocks, means for moving said connecting bar comprising a coulier mechanism having a pitman longitudinally reciprocated in spaced parallel relation to said



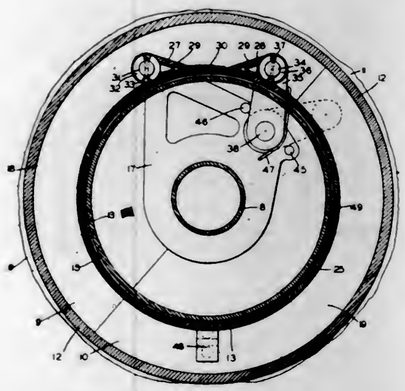
connecting bar, and connections from each end of said pitman to the opposite end of said connecting bar to reversely move said bar in like directions with said pitman by similar alternating endwise pulls on said bar whereby equal spaced relations of said slur cocks are constantly maintained in both directions of their movements.

1,857,103. LINING FOR FURNACES. RICHARD P. SOUTH, Cleveland, Ohio, assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 22, 1929. Serial No. 349,169. 7 Claims. (Cl. 266—43.)



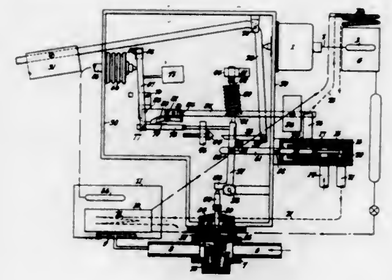
1. In a closed cylindrical furnace, a lining comprising a cylindrical body and annular end pieces in interfitting engagement with the body, the upper portion of said cylindrical body and end pieces formed of a high temperature-resistant refractory and the lower portion of said body and end pieces coacting to hold molten metal and being formed of a slag-resistant refractory.

1,857,104. BRAKE. PAUL H. WILKINSON and FREDERICK GEBHART, Los Angeles, Calif.; said Gebhart assignor to said Wilkinson. Filed Aug. 28, 1929. Serial No. 388,967. 11 Claims. (Cl. 188—77.)



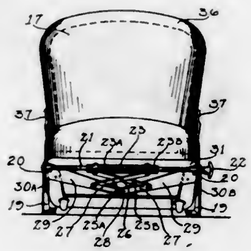
1. A braking mechanism for an airplane comprising a stationary structure, a wheel journalled thereon, a brake drum rigid with said wheel, a stranded metal cable encircling and engaging said drum with one complete turn only, one end of said cable being carried by said stationary structure, an arm mounted for rotary movement upon said stationary structure, the other end of said cable being carried by said arm, and means for imparting rotary movement to said arm.

1,857,105. REFRIGERATING APPARATUS. JOSEPH WILLIAM WINTER, Penfield, Pa., assignor to Master Domestic Refrigerating Company, Inc., Conshohocken, Pa., a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,898. 4 Claims. (Cl. 62—5.)



1. In refrigerating apparatus of the absorption type, including a generator, a condenser, and an evaporator; the combination with a gas burner arranged to heat said generator, an auxiliary refrigerant conduit to said generator and an auxiliary refrigerant conduit to said condenser; of automatically operative valve means controlling the supply of fuel gas to said burner and said auxiliary refrigerant to said generator and to said condenser; and thermostatic means arranged to operate said valve means in accordance with the temperature of a region being refrigerated by said apparatus; including a corrugated metal bellows, a lever adapted to be shifted by said bellows, and a pawl lever provided with a weight, adapted to restrain said bellows lever until there is sufficient pressure accumulated in said bellows to tilt said pawl lever and thereby release said bellows lever and permit snap action thereof.

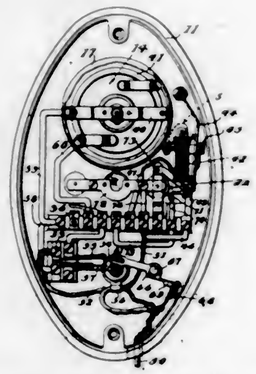
1,857,106. ADJUSTABLE VEHICLE SEAT. WILLIAM K. BISHOP, Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland N. Y., a Corporation of New York. Filed Apr. 26, 1929. Serial No. 358,188. 3 Claims. (Cl. 155—14.)



3. In a vehicle seat, the combination of a laterally shiftable seat base, a pair of stationary support stanchions respectively associated with the seat end regions, bearing means for each such stanchion, a manipulative fulcrum shaft mounted between said bearings and which shaft is provided with oppositely disposed screw threads, nut means for each of said threads, holder means secured to

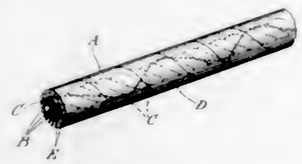
the base and comprising spaced flank flanges each having a slot and which slots are respectively adapted to slidably receive the shaft therethrough, thrust lug means and a self-locking linkage including a pair of crossed levers having complementary end portions respectively adapted to be positively actuated by said nuts together with a toggle link interconnecting the opposite lever ends and pivotally engaging with said lug for base shifting purposes.

1,857,107. APARTMENT HOUSE TELEPHONE. JOSEPH O. CADIEUX, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn., a Corporation of Delaware. Filed June 4, 1930. Serial No. 459,143. 7 Claims. (Cl. 179—2.)



1. An apartment house telephone system comprising vestibule and apartment transmitters and receivers and circuits therefor including a source of current, a vestibule switch and an apartment hook switch for connecting the apartment receiver in circuit with the source of current when the receiver is on the hook and the vestibule switch is closed, said hook switch having contacts for opening the circuit through the vestibule switch and closing the talking circuit, a signal bell connected with the source of current and a local apartment switch for controlling the circuit through the signal bell.

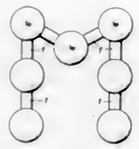
1,857,108. BRAKE BAND LINING. DUDLEY A. DOM, Wyoming, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,886. 14 Claims. (Cl. 139—420.)



1. A friction material composed of a woven fabric having threads containing reinforced asbestos paper in which the reinforcement is integral with the paper.

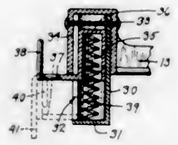
1,857,109. LINKS FOR SERIAL LAMP SUPPORTS. HERMANN LAUB, Kehl, Germany. Filed Mar. 29, 1930, Serial No. 440,120, and in Germany May 5, 1929. 1 Claim. (Cl. 40—130.)

In a lighting chain comprising links serving as lamp supports and as means for connecting the lamps in series, each link comprising an elongated body portion of insulating material, said body portion being forked at one end and having a reduced extension at the other end, the reduced extension of one link fitting between the forked parts of an adjacent link; the extension and one of the



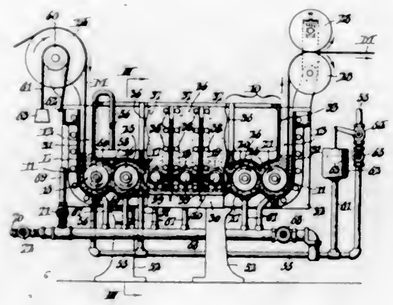
forked parts being perforated, the other forked part having a recess; and an electrical conductor extending from the bottom of said recess to the perforation in the extension and forming a conducting wall for said perforation.

1,857,110. GRAB DEVICE. HENRY M. LUNDY, Spokane, Wash. Filed May 13, 1930. Serial No. 451,972. 2 Claims. (Cl. 258—2.)



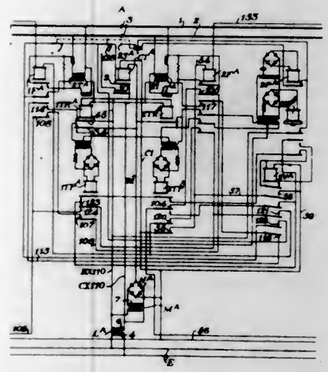
1. A releasing device comprising a cup member, a cylindrical housing connected to the cup and having a slot therein, a sleeve member slidably mounted within the cylindrical housing, a short arm for said sleeve slidably disposed through the housing slot, a lip member for the arm, and a spring arranged to yieldingly retain the sleeve in one end portion of the cylindrical housing.

1,857,111. DYEING MACHINE. JOHN MACADAM, Jr., Cragmere, Del., assignor to Joseph Bancroft & Sons Co., Wilmington, Del., a Corporation of Delaware. Filed Dec. 19, 1927. Serial No. 241,004. 8 Claims. (Cl. 8—18.)



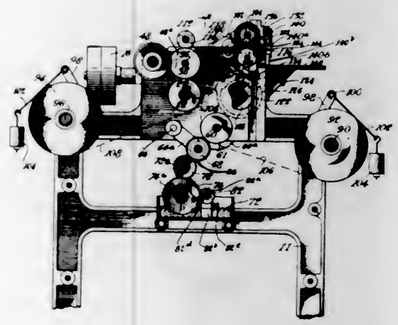
1. An apparatus of the character described comprising a dye vessel and active dyeing rolls therein at opposite sides of the material treated, there being a substantial speed differential between the material and the surface of said active rolls, and the number of active rolls at the two sides of the material being the same, so as to produce like action of the dye liquor on said sides; and inactive guide rolls in said vessel round which the descending and ascending material passes on its way to and from said active rolls.

1,857,112. RAILWAY TRAFFIC CONTROLLING APPARATUS. HERBERT A. WALLACE, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 17, 1930. Serial No. 496,130. Renewed Oct. 2, 1931. 27 Claims. (Cl. 246—43.)



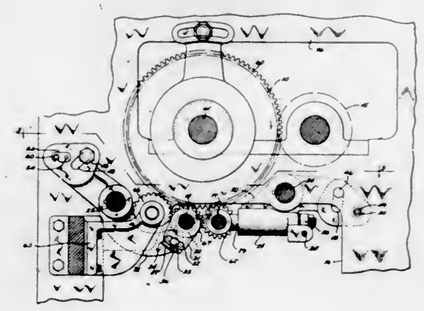
6. In combination, a stretch of traffic rails over which traffic may move in either direction, a signal to govern traffic through the stretch, a code following track relay and a code following line relay each responsive to coded current, and said relays arranged to govern the operation of the signal, a current source adapted to supply coded current, and directional means to render the current source effective to supply coded current to either the track relay or to the line relay depending upon the direction of traffic.

1,857,113. MACHINE FOR MAKING ENVELOPES. EUGENE CONTI, Mt. Vernon, N. Y., assignor to Alexander Herz, New Rochelle, N. Y. Filed July 1, 1930. Serial No. 465,077. 12 Claims. (Cl. 93—19.)



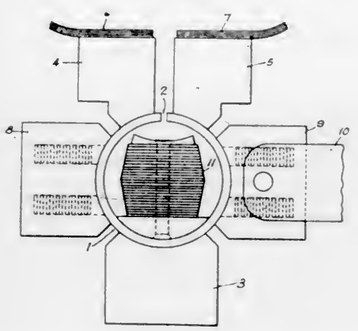
1. In an apparatus for making envelopes, means for continuously feeding a sheet of material to a pasting roller, means for applying strips of adhesive to one surface of the sheet, means for continuously superimposing a second sheet upon the pasted surface of the first sheet, means for cutting said sheets adjacent the points of application of said adhesive, and means for immobilizing the sheets adjacent said cutting means during the cutting operation.

1,857,114. FOLDING MECHANISM. CURTIS S. CRAFTS, Oak Park, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Apr. 8, 1930. Serial No. 442,586. 35 Claims. (Cl. 270—77.)



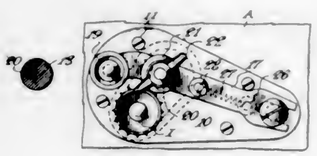
1. A folding mechanism including in combination a folding cylinder, a pair of folding rollers, means carried by said cylinder for folding a group of sheets between said rollers and an eccentric mounting for one of said folding rollers for variably positioning one of the rollers.

1,857,115. ELECTRICAL WELDING APPARATUS. WILLIAM E. CRAWFORD, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 17, 1928. Serial No. 306,421. 6 Claims. (Cl. 219—6.)



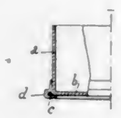
1. In apparatus for welding longitudinal seams in tubular blanks having spaced edges, in combination, electrodes for engaging the walls of the blank near the spaced edges, means cooperative with the electrodes for exerting pressure on the blank, and means external to the blank for exerting a pull on the opposite side walls of the blank to maintain positive and fixed engagement between the electrodes and the blank while the edges are separated during the welding operation.

1,857,116. PAD ROLLER MOUNTING FOR MOTION PICTURE PROJECTION MACHINES. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 28, 1929. Serial No. 417,119. 6 Claims. (Cl. 88—17.)



1. A pad roller mounting construction for motion picture machines which comprises a plate having a journal therein, a bearing movably disposed in said journal, a pad roller supporting arm eccentrically supported from said bearing, means for moving the bearing to move the arm to predetermined normal positions, and means for automatically restoring the arm to one or the other of said normal positions when the hand is released.

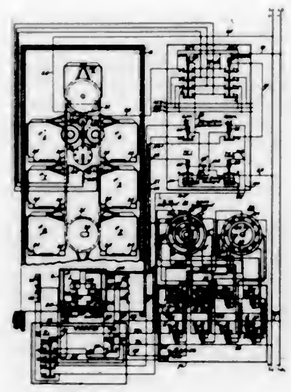
1,857,117. MACHINE FOR PLACING BANDS ON VARIOUS ARTICLES. LOUIS EDOUARD DIOT, Neuilly-sur-Seine, France, assignor to Societe Anonyme Parfumerie Houbigant, Paris, France, a French Company. Filed Mar. 29, 1930, Serial No. 440,039, and in France June 21, 1929. 30 Claims. (Cl. 216—57.)



1. A machine for placing bands on various articles, the said machine comprising in combination a fixed support on which a strip intended to form the bands to be placed is exposed, a mandrel to receive the article on which a band is to be affixed, a movable mandrel carrier, means for imparting an alternating motion to the said mandrel carrier relative to said fixed support, means for imparting to the mandrel provided with the said article during each forward movement of the mandrel carrier, a rolling motion over the strip exposed on the fixed support, means for stopping the said rolling motion at the end of each forward movement of said mandrel carrier and means for removing the article provided with the band from the fixed support.

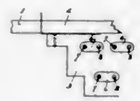
1,857,118. CIRCUITOUS ELEVATOR. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,387. 29 Claims. (Cl. 187—16.)

1. In a circuitous elevator, the combination with a plurality of load receptacles movable through an endless path successively past a loading station, and motive means for moving said receptacles, of a control system for said motive means comprising call means operable to collectively establish an individual call for each of a plurality or receptacles,



and means operable to effect a response of said motive means to the established calls to move the called receptacles to the landing station by the shortest route.

1,857,119. WIRE BENDING MECHANISM. WALTHER DALHEIMER, Eindhoven, Netherlands, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1926, Serial No. 140,369, and in the Netherlands Nov. 27, 1925. 15 Claims. (Cl. 153—20.)



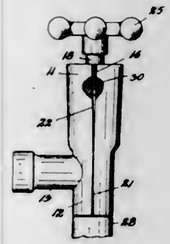
1. A wire bending device comprising a stationary chuck for holding the wire, a movable member having at least one pair of pivots, arms mounted upon said pivots to permit said member to swing upon said arms, a second chuck mounted upon said member in alignment and spaced from the first chuck and comprising a slidable spring pressed jaw, and means to move the member.

1,857,120. PROJECTOR LAMP. FREDERICK TRANSOM, Washington, D. C. Filed May 29, 1930. Serial No. 457,404. 3 Claims. (Cl. 240—41.37.)



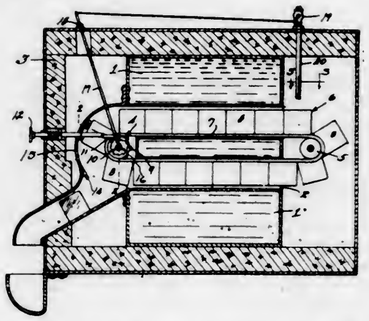
2. In a projector lamp, a reflecting surface generated by the revolution of a parabolic generatrix curve around the axis of the projector, with the axis of the generating curve offset from the projector axis, and with the curve extending from said axis of revolution to form a full circle window aperture, in combination with a circular source of light, located substantially in the circular focal line of the reflecting surface for illuminating said surface, whereby the full area of the window aperture is illuminated by reflected light outwardly directed and substantially parallel to the axis of the projector.

1,857,121. TUBULAR CLAMP. OTTO M. LADE, Cleveland, Ohio. Filed May 24, 1929. Serial No. 365,706. 9 Claims. (Cl. 173—259.)



1. A clamping device comprising a continuous tube split into approximate halves longitudinal of the tube pivotally connected together intermediate their ends with contacting edges abutting each other and slightly separated normally at their ends, an intermediate fulcrum pin comprising a transverse pin whose ends are brazed or welded in the tube, said fulcrum pin being parallel with the tube and sufficient flexibility exists in such pin to permit essential rocking in the plane of the tube, and means for insertion in one end of the tube whereby the opposite ends of said halves will be forced together at the opposite ends.

1,857,122. ICE CUBE FORMING AND DISPENSING DEVICE. ALVIN G. SHERMAN, Grosse Pointe, Mich. Filed Jan. 16, 1930. Serial No. 421,124. 10 Claims. (Cl. 62—108.5.)



1. Means for freezing and dispensing ice cubes, comprising a series of containers formed of a flexible material to which ice does not readily adhere and shaped to form the ice cubes, said containers being connected together to form a belt, sharp freezing means forming a freezing zone, means for moving said belt through said zone, and means for distorting the containers for removal of ice therefrom.

Patents Nos. 1,857,123 to 1,858,232

THE

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Reissues	7—No.	18,455 to No.	18,461, inclusive.
Plant Patents	1—No.	16	
Designs	44—No.	86,902 to No.	86,945, inclusive.
Patents	1,110—No.	1,857,123 to No.	1,858,232, inclusive.
Total	1,459		

Notice of Cancellation

U. S. Patent Office, *Washington, Apr. 25, 1932.*

Quin Sharpe Drug Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Hoffmann-La Roche Inc., Nutley, N. J., to effect the cancellation of the trade-mark registration of Quin Sharpe Drug Co., of Vicksburg, Miss., No. 41,567, dated December 1, 1903, and the notice of such proceeding sent by registered mail to the said Quin Sharpe Drug Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Quin Sharpe Drug Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Adjudicated Patents

(D. C. Del.) Gaumont patent, No. 1,177,697, for developing, fixing, toning and otherwise treating photographic films and prints, claims 1, 2, and 17 *Held* not infringed. *Cinema Patents Co.* v. *Craft Film Laboratories*, 56 F.(2d) 265.

(C. C. A. Miss.) Sutter patent, No. 1,183,694, for fireproof insulating building material and process of producing the same, claims 1 and 4 *Held* invalid. *Zenitherm Co.* v. *Art Marble Co. of America*, 56 F.(2d) 39.

(D. C. Del.) Gaumont patent, No. 1,209,696, for apparatus for drying photographic films, claim 15 *Held* not infringed. *Cinema Patents Co.* v. *Craft Film Laboratories*, 56 F. (2d) 265.

(D. C. N. Y.) Sullivan patent, No. 1,293,974, for check-issuing machine, claims 1, 2, 5, 11, 12, and 19 *Held* valid and infringed and claims 3 and 4 *Held* not infringed. *General Register Corporation* v. *Lock-Stub Check Co.* 56 F.(2d) 276.

(D. C. Cal.) Mettler patent, No. 1,440,614, for gas burner, claim 3 *Held* valid but not infringed. *Mettler* v. *Peabody Engineering Corporation*, 56 F.(2d) 184.

(C. C. A. Tex.) Edwards patent, No. 1,514,585, for testing device for oil wells, claim 6 *Held* valid but not infringed. *Edwards* v. *Johnston Formation Testing Corporation*, 56 F.(2d) 49.

(D. C. N. Y.) Kaufmann patent, No. 1,700,535, for protector for mattresses, *Held* invalid. *Kaufmann* v. *Tames*, 56 F.(2d) 193.

(C. C. A. Tex.) Cook patent, No. 1,733,006, for method of coating pipes, *Held* invalid. *Wailes Dove-Hermiston Corporation* v. *Oklahoma Contracting Co.*, 56 F.(2d) 143.

(D. C. Ga.) Young patent, No. 1,759,561, for knitted fabric, *Held* invalid. *Westcott Hosiery Mills* v. *Rich's Inc.* 56 F.(2d) 234.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,719,452, H. C. Ryding, Soaking pit, decided March 12, 1932, claim 13.

Pat. 1,721,627, L. C. F. Horle, Radio transmission system, decided April 15, 1932, claim 1.

Pat. 1,723,061, C. W. Neill and T. Neill, Traffic signal operating mechanism, decided March 23, 1932, claim 4.

Pat. 1,731,202, W. M. Phillips, Chromium plated exhaust valve, decided April 11, 1932, claims 1, 2, 3, and 4.

Pat. 1,751,939, Alexander Meissner, Insulation of electrical apparatus, decided April 11, 1932, claims 1, 3, and 4.

Pat. 1,758,462, D. H. Osborne, Insulator, decided April 11, 1932, claim 2.

Condition of Applications Under Examination at Close of Business April 23, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 78,607; Trade-Mark Division, 941. Oldest new case, Sept. 24, 1931; oldest amended, Sept. 23, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Dec. 24	†Jan. 5	549
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Dec. 1	Dec. 4	1,150
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Jan. 2	†Jan. 12	772
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Jan. 9	†Jan. 22	595
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Nov. 27	Dec. 3	478
4898 C	6. LEWERS, A. M., Carbon Chemistry	Oct. 1	Oct. 2	1,099
5725	7. JARBOE, C. G., Optics; Photography	Nov. 9	Nov. 9	1,623
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 9	Nov. 21	1,248
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 9	†Jan. 12	879
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 12	Nov. 20	1,030
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 8	Dec. 24	619
7701	12. HENRY, C. C., Machine Elements	†Jan. 6	†Jan. 2	703
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Nov. 30	Nov. 30	1,159
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Dec. 21	†Jan. 2	793
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 8	Nov. 8	2,028
5612	16. SPENCER, C. J., Telegraphy; Telephony	Dec. 25	Dec. 25	881
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 23	Oct. 26	1,429
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Nov. 25	Nov. 27	869
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Sept. 24	Sept. 30	1,827
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Dec. 29	Dec. 24	718
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 30	Dec. 10	947
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 11	†Jan. 12	670
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 24	Sept. 23	993
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 27	Dec. 10	761
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 2	Nov. 3	1,621
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Nov. 2	Nov. 2	949
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Nov. 27	Nov. 27	969
4628	28. BENSON, A. R., Internal-Combustion Engines	Oct. 23	Oct. 23	1,484
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Sept. 30	Oct. 5	1,044
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Dec. 24	Dec. 24	908
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Oct. 14	Oct. 14	1,590
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 18	Dec. 15	1,041
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 31	Oct. 28	2,445
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Nov. 21	Nov. 24	919
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Feb. 29	†Feb. 27	494
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Oct. 15	Oct. 10	1,878
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 28	Oct. 31	1,413
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Jan. 26	†Jan. 26	347
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Oct. 27	Oct. 28	1,516
7880	40. OBERLIN, J. J., Receptacles	Nov. 3	Nov. 5	2,071
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Dec. 24	Dec. 26	815
5882	42. CUTTING, H. O., Electric Signaling	Oct. 9	Oct. 13	1,497
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Nov. 23	Nov. 23	1,493
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 28	Sept. 29	1,870
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Nov. 27	Nov. 27	1,339
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Dec. 4	Dec. 13	804
7609	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Nov. 23	Nov. 23	2,063
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Oct. 29	Oct. 29	987
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 9	Oct. 9	1,562
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 9	Oct. 10	2,147
5628	51. BACKUS, C. D., Radiant Energy	Nov. 9	Nov. 9	1,300
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Dec. 30	†Jan. 13	889
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 21	†Jan. 19	577
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Oct. 7	Oct. 7	1,197
6883	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	†Mar. 10	†Mar. 10	179
	{Designs	†Mar. 29	†Apr. 11	164
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Nov. 4	Nov. 4	1,486
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Nov. 17	Nov. 28	698
5605	58. DOWELL, E. F., Abrading; Typewriting	Oct. 16	Oct. 16	1,300
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Oct. 26	Oct. 26	1,621
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Oct. 1	Oct. 2	1,573
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Sept. 29	Oct. 5	1,589
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Oct. 23	Oct. 23	1,786
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 10	Oct. 16	1,541
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Nov. 7	Nov. 9	771
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Sept. 24	Sept. 28	1,857
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—{Trade-Marks	†Mar. 28	†Apr. 11	788
	{Labels and Prints	†Mar. 23	†Apr. 9	153

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Montagne

Nos. 2,856, 2,857, 2,858, 2,859, 2,860 and 2,861. Decided February 1, 1932

1. Designs—Patentability—How Determined.

"But even if such stitching were new, appellant's designs must be judged, not from how they are made, but from the appearance of the design itself. Certainly the mechanical structure of an article may not be confused with its design, so that the applicant may, by a design patent, secure a monopoly upon some mechanical process."

2. Same—Same—Mechanical Function.

"The mere fact that the designs here sought to be patented may involve some mechanical or utilitarian function, does not render them unpatentable. However, in all cases, the invention must relate to the design, and be distinguishable from the mechanical function involved."

3. Same—Same—Double Patenting.

Patents on designs for alleged new, original and ornamental designs for hosiery *Held* properly refused since in view of the state of the art no invention is disclosed therein over what is disclosed in applicant's prior patent.

Appeal from the Patent Office. Affirmed.

Mr. Harold Olsen for Montagne.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Graham, *P. J.:*

Patent appeals Nos. 2,856, 2,857, 2,858, 2,859, 2,860, and 2,861, have, by stipulation of counsel, been jointly briefed and argued, and, inasmuch as the subject matters of said appeals is largely the same, said appeals will be herein jointly disposed of.

The appellant in each case, Patrick P. La Montagne, on June 21, 1927, filed seven applications in the United States Patent Office for design patents upon what were claimed to be new, original and ornamental designs for hosiery. One of these went to patent upon May 28, 1929, as Des. 78,636. The claims in the six remaining cases were respectively rejected by the Examiner and by the Board of Appeals.

The various designs for hosiery involved in these appeals are of the same general type. The applicant thus described his design in appeal No. 2,856:

My design essentially involves a ribbed stocking having sole, toe and heel portions of so-called plain-knitting; the latter merging into a so-called "ring-toe" section of plain-knitting contiguous to and embracing the looping-line; a ribbed instep-section; and ribbed leg and garter-top portions; the rib-knitting in the instep-section and leg and top-portions being of so-called 1-and-1 type and merges into so-called tuck-knitting in the garter-top; the ribs of the rib-knitting being in spaced apart longitudinal groups, there being in each group five rib-wales and three cylinder wales, respectively.

In No. 2,857, the description is varied by groups of six rib wales, spaced by two cylinder wales; in No. 2,858, a ribbed leg portion, garter top and instep portion, without futher details; in No. 2,859, the ribbed portion is "of the so-called 6 and 1 type," the ribs being in groups involving six cylinder wales, spaced by a rib wale, the ribbing in the top being of the "2 and 1 type." In No. 2,860, the ribbed portions are of the "2 and 1 type", and the ribs each consisting of two cylinder wales spaced by a rib wale. In No. 2,861, the rib knitting is of the "so-called 1 and 1 type, comprises so-called multitype rib knitting," and the groups each involve "five rib wales plus two cylinder wales, plus one rib wale."

Appellant's application which ripened into said Des. 78,636, illustrates a form-fitting stocking, and is thus described in the specification:

The drawing shows a ribbed stocking having the sole, toe, and heel portions of contrasting stitch from that of the ribbed leg and instep portions, the garter-top or cuff being of a different rib-formation; the rib-knitting in the leg and instep portions being characterized by the so-called "four-and-one" type and by longitudinal grouping of the ribs thereof, and the rib-knitting in the garter-top being likewise characterized by the so-called "one-and-one" type.

The Examiner, in appeal No. 2,856, quite elaborately reviewed the authorities and facts involved, and in part said:

Concurrently with this application applicant filed six other applications, one of which has become Design Patent No. 78,636, May 28, 1929. Said application was allowed after some hesitation and it is believed that this patent has exhausted the possibilities of combining in a single stocking features shown individually old in the reference. The claim of this case should further be denied allowance on this ground under the practice laid down in *Ex parte Whittington*, 347 O. G. 281.

In each of the other cases he referred to these suggestions and made them a part of his statement.

Murphy et al., 1,626,049, of April 26, 1927, La Montagne, 1,282,880, of October 29, 1918, Bennett et al., 570,694, of November 3, 1896, and La Montagne, Des. 78,636, of May 28, 1929, the last named being appellant's concurrent design patent application which went to patent, were cited as references in all the cases for the rejection of the various claims. In addition, item 86–V–2294, Sears, Roebuck & Co., 1925, was cited in all cases except in Serial No. 22,517. Certain items in catalogues of Montgomery, Ward & Co., and National Cloak & Suit Co., were also cited as references in rejecting some of the applications.

Claim is made here that appellant's various designs in question are distinctive and unusual, because of the particular stitching and methods employed in making the ribs and wales. The reference patent Montagne (mechanical) 1,282,880, discloses how a stocking may be formed with this machine with a tuck stitch welt. Bennett also discloses a cuff for a garment made in the same way. There is, therefore, nothing new in making a welt or cuff by tuck stitching.

[1] But even if such stitching were new, appellant's designs must be judged, not from how they are made, but from the appearance of the design itself. Certainly the mechanical structure of an article may not be confused with its design, so that the applicant may, by a design patent, secure a monopoly upon some mechanical process. *Protex Signal Co.* v. *Feniger*, 11 F.(2d) 43.

[2] The mere fact that the designs here sought to be patented may involve some mechanical or utili-

tarian function, does not render them unpatentable. *Ashley* v. *Weeks, etc.*, 220 Fed. 899; *Weisgerber* v. *Clowney*, 131 Fed. 477, 480; *Boyle* v. *Rousso*, 16 F.(2d) 666; *Ex parte Kochring*, 17 C. C. P. A. (Patents) 774, 37 F.(2d) 421, 393 O. G. 520; *Franklin Knitting Mills* v. *Gropper Knitting Mills*, 15 F.(2d) 375; *Dietz* v. *Burr* et al., 243 Fed. 592. However, in all cases, the invention must relate to the design, and be distinguishable from the mechanical function involved. *North British Rubber Co.* v. *Racine Rubber Tire Co.*, 271 Fed. 936.

The general design involved in all these applications of a plain, flat knit heel, sole, and toe portion, a ribbed instep and leg and the distinctive top band, is prior art, as shown by the references, even were appellant's said design patent, Des. 78,636, excluded from consideration.

[3] The rejection of appellant's various claims by the Patent Office tribunals, as appears by the Examiner's statement hereinbefore quoted, may be said to be based, not so much upon the state of the art, as upon double patenting. The Examiner held, and this decision was upheld by the Board of Appeals, that the appellant had fully covered the field of the seven applications by the one which went to patent. If this is true, of course, further grants to appellant would constitute double patenting. We intimated this view in *In re Schnell*, 18 C. C. P. A. (Patents) 812, 824, 46 F.(2d) 203, 405 O. G. 3. This view is also supported by *Graff et al.* v. *Webster et al.*, 189 Fed. 902, 908.

We agree with the Patent Office tribunals in their conclusions in this respect. In view of the state of the prior art, and in view of appellant's design patent, we are unable to discern, on inspection, anything inventive in any of the remaining designs. The decision of the Board of Appeals of the United States Patent Office is, therefore, affirmed in appeals Nos. 2,856, 2,857, 2,858, 2,859, 2,860, and 2,861.

Affirmed.

U. S. Court of Customs and Patent Appeals

ARNOLD *v.* GREENE

No. 2,849. Decided February 1, 1932

INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Record reviewed and *Held* that priority of invention should have been awarded to A., from whose patent the claims in issue were taken, on the ground that G. has no right to make those claims.

APPEAL from the Patent Office. Reversed.

Mr. Charles E. Tullar, *Mr. Alex. D. Salinger*, and *Mr. Claude H. Mott* for Arnold.

Messrs. Pennie, Davis, Marvin & Edmonds and *Mr. Clarence M. Fisher* for Greene.

BLAND, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, in an interference proceeding, awarding appellee priority of invention of counts relating to improvements in methods of operating electric furnaces.

No testimony was taken by either party. The sole question in the case is, can Greene make the counts of the interference, which are claims in the Arnold patent, copied by Greene in his application. Before the Law Examiner, Arnold moved to dissolve the interference, which motion was overruled. The Examiner of Interferences therefore rendered a pro forma decision awarding priority of invention to Greene.

Greene states that his present application is a continuation in part of three other applications filed in 1909, 1913, and 1917, respectively, which applications are not of record.

Counts 1 and 8 are illustrative and follow:

1. In the method of operating electric arc furnaces, the step comprising providing at least three available voltages, and utilizing an intermediate voltage for starting the melt.

8. In the method of operating electric arc furnaces, the step comprising providing at least three available voltages, and protecting the furnace walls against undue heat radiation by utilizing an intermediate voltage for starting and completing a melting operation, a higher voltage during such of the melting period as sufficient scrap is available to bury the arc, and a still lower voltage for refining.

The Board of Appeals, in describing and discussing the invention, said:

The specific feature of novelty set forth in the counts resides in beginning or starting the melting with a suitable voltage and subsequently raising that voltage for a second portion of the melting stage and finally lowering the voltage below the starting voltage for the refining operation. All the counts are not so limited as, for example, counts 1 and 2 do not specifically include more than the utilization of an intermediate voltage, nothing being stated as to when, if at all, the other two of the three voltages are used. Counts 3 and 4 do not specify any use being made of more than two of the three available voltages. It will be unnecessary in view of our disposition of the matters raised on appeal to consider further the possible scope of the counts.

In electric furnaces of the arc type which are used for melting down and refining metals, the latter are usually in the form of cold scrap metal or metal in irregular pieces and the proportions of the various elements of the metal must be closely regulated particularly in the making of special steels and steel alloys. In melting down this scrap metal or metal in irregular pieces, the electrodes are usually brought into contact with the material and then slightly withdrawn in order to strike the arc which generates the heat to initiate the melting operation. Obviously there is more or less irregularity of the current as the arc may move from one portion of the charge to another incident to the varying and variable resistance of the charge. After the arc has existed for a period, the charge directly in contact with the arc becomes melted and it is easier thereafter to maintain the arc and the electrodes may be brought nearer together and the voltage may be reduced. The reduction in voltage is rendered necessary for the reason that the long arc incident to the high voltage sets up intense heat which is radiated and may injuriously affect the walls of the crucible. This is particularly true after the charge surrounding the electrodes has melted and ceases therefore to protect the walls from the intense radiated heat from the arc. There is nothing new in the foregoing and it had long been the practice before either party filed his application to so operate electric arc reducing furnaces.

The Snyder Patent 1,379,942, discloses substantially the foregoing. Since it was well understood that various charges of scrap or other metal to be reduced so varied as to require different voltages to properly start the melting operation and since in furnaces of this type it was usual to have available the means for varying the voltage and the length of the arc or arcs, if there was needed any inventive concept to enable an operator to vary the voltage up or down as he saw fit, that inventive concept must be deemed to have resided in the specific order of voltage variation recited in the more specific counts and possibly implied in some of the broader counts. With the construction disclosed by Arnold as well as with the various constructions disclosed by Greene, the means for varying the voltage in substantially any order desired is shown, so that the workman, in his observance of the operation he was seeking to perform, could obtain the best results. It would seem, in consequence, one skilled in the art and having before him the disclosure of either of these parties, more particularly the disclosure found in Greene's application, would need but a mere suggestion as to the order of varying the voltage in order to carry out the method recited in these counts. Without quoting at length the various portions of Green's specification, which portions are quoted in the brief presented on behalf of Greene, we think the Law Examiner was right in his conclusion that Greene is entitled to make the counts. We regard the statement in Greene's original specification,—

"However, my invention is not limited to starting with high voltage for I find it advantageous often, when operating, to raise the power during the course of operation,"

when read in connection with the other portions of his specification and the various modifications disclosed in his drawing, as fully supporting the view that he contemplated as one method of operation that disclosed in the counts.

While we have carefully considered the views presented by Arnold in his brief, we are wholly unable to reach any other conclusion than that one skilled in this art would fully understand that the above quoted portion of Greene's specification meant that the operation would be started by a suitable voltage and afterward the voltage would be raised "during the course of operation." It is abundantly set forth by Greene that the final refining operation is to be conducted at a voltage lower than the starting voltage. We are fully satisfied that whatever invention there may be involved in the issue it is fairly disclosed in Greene's application.

For the purposes of the decision of this case, we think that the above quoted portion of the Board's decision sufficiently describes the invention, the state of the art at the time the invention was made, and the problem which the inventors were attempting to solve.

We have very carefully examined the Arnold patent and the Greene application in order to determine whether or not the subject matter of the counts, when read in connection with the Arnold patent, was disclosed in the Greene application, and we are constrained to hold that Greene's application does not disclose the subject matter of the counts involved.

Arnold's patent teaches unmistakably that there are inherent objections in starting the melt in an electric arc furnace with a high voltage because such method produces fluctuations of load which are extremely objectionable. It furthermore teaches that a low voltage such as is used to finish the melt could not be used to start the same, since it would not be high enough to establish contact. It also teaches that it is important to use the low voltage in finishing the melt. Arnold emphasizes starting the melt with a voltage intermediate between high and low, and this, we think, is the very essence of the invention as taught and claimed by Arnold.

Greene's invention relates to means for controlling the voltage of an electric arc furnace and the method of control in utilizing such means, and the inventive idea more particularly rests in affording the operator the opportunity of using whatever voltage he deems necessary in order to accomplish the result desired. When his application as a whole is considered, it seems obvious that he assumed that the melt would be started with a higher voltage than the other voltages used subsequently thereto. We find nowhere in the Greene specifications or claims any warrant for the conclusion that Greene believed or taught that it was objectionable to start the melt with a high voltage, and while he devoted much space in his application to telling how his device could be operated so as to permit free selection of any voltage necessary, he has not taught or claimed anywhere that it was desirable to start with an intermediate voltage.

The Board of Appeals, in its decision, points out that in the Greene specification is found the following:

However, my invention is not limited to starting with high voltage for I find it advantageous often, when operating, to raise the power during the course of operation, * * *.

The Board concluded that in view of this statement, when read in connection with other portions of his specification, Greene contemplates more than one method of operation and that he discloses the method of starting the melt with a voltage lower than the highest voltage required for melting.

We do not so read the Greene specifications. If he teaches anything with respect to which voltage the melt should be started with, we think he teaches the method of starting it with the high voltage. In teaching the use of his selective method, he certainly did not teach that it was undesirable to start with a high voltage. Since the claims in the Arnold specification are limited to starting with an intermediate voltage or a voltage lower than the melting voltage, we can not see how the Greene application discloses the subject matter of the counts, and therefore conclude that the Board was in error in holding that Greene could make the counts.

Admittedly, Greene teaches a method of starting the melt with a high voltage, and if it could be said that he also taught a method of starting with a low voltage, then, in the same application, he would be teaching the doing of the opposite thing. If Arnold disclosed a patentable discovery, it must necessarily rest in the particular order of applying the voltages. Another disclosure by another inventor which teaches that one may select any voltage for any step in the melt, or which teaches the opposite order of applying voltage, can hardly be said to disclose the same invention.

In the opinion of the Board, after discussing the prior art and Greene's application, is found the following:

* * * It would seem, in consequence, one skilled in the art and having before him the disclosure of either of these parties, more particularly the disclosure found in Greene's application, would need but a mere suggestion as to the order of varying the voltage in order to carry out the method recited in these counts.

This would seem to go to the question of the patentability of the subject matter. It is neither our privilege nor duty to pass upon this question and we must confine ourselves solely to the question of priority, which involves a determination of Greene's right to make the counts.

For the reasons aforesaid, we, therefore, hold that the Board was in error in holding that Greene could make the counts in interference, and in sustaining the decision of the Examiner of Interferences in awarding priority of invention of the subject matter of the counts to Greene. The motion to dissolve the interference should have been granted.

The decision of the Board of Appeals is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE HORTON

Nos. 2,827 and 2,828. Decided January 25, 1932

1. PATENTABILITY—APPEAL—WHAT MAY BE CONSIDERED. "It does not appear to us to be within our authority to review and determine material technical questions of structure upon which the ex parte tribunals of the Patent Office have made no finding."

2. SAME—METER TESTING DEVICES.

Claims for meter-testing devices *Held* unpatentable over the prior art.

APPEAL from the Patent Office.

Mr. J. Bernhard Thiess and *Mr. A. Arnold Brand* for Horton.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

These cases present appeals from the decisions of the Board of Appeals of the United States Patent Office affirming decisions of the Examiner refusing to allow all of the claims in each case (numbered 1 to 21, inclusive, in appeal No. 2,827, and 1 to 15, inclusive, in appeal No. 2,828) as defining nothing patentable over the prior art.

In both cases there were cited as references two patents to one Sachs, the first, No. 1,170,112, issued February 1, 1916, and the second, No. 1,181,483, issued May 2, 1916. In appeal No. 2,827 there was also cited Patent 1,338,180, issued to applicant, Horton, April 27, 1920.

The issues of the two appeals are so similar in their nature as that the cases were briefed together and argued orally together, and they may be disposed of in a single opinion.

Claims 1 and 10 of appeal No. 2,827 appear to be typical of those involved in that appeal:

1. In combination, a service switch mounting having a service switch associated with a protective device, terminals on said mounting for receiving gang wires, other terminals on said mounting permitting the tapping of said gang wires to establish a load circuit, said service switch being inserted in said circuit, and controlling but one of the sides thereof, the other side of said load circuit running from one of said first terminals to said load without passing through said service switch.

10. In a service and meter test system, means for providing a single service entrance installation or a gang installation for an electrical system comprising, a switch block, terminals on said block for receiving the line wires of said system, said terminals permitting the line wires to continue past said block to loads other than the branch load leading from said block, a service switch for controlling said branch load, one side of said load connecting directly to one of said line wire terminals without passing through said switch, a meter for measuring the power delivered to this load, and a test switch in the same side of the load as said service switch for directing the line current to the load from said meter during normal service condition, or disconnecting the load from the meter to permit the line current to be diverted to the load by an additional shunt connection for establishing a meter test condition, the conversion of this branch load to a meter test condition unaffecting the continuity of the current to the rest of said gang installation.

Claims 2, 6 and 13 of appeal No. 2,828 appear to be typical of those involved in that appeal:

2. In combination with terminals for an electric meter or other apparatus in a three-wire system having two active service wires, said meter having a coil connected between each of the two active service wires and two of the three load wires, of a service switch for each of the two active service wires, a load controlling switch for each of the two load wires, and means constituting a through connection between the third service wire and the third load wire, said connection being independent of said switches.

6. In combination with terminals for an electric meter having a pair of series coils between the active wires of a service circuit and the corresponding wires of a load circuit, of switching means in said active wires on each side of said coils for opening the circuits or for disconnecting the load circuit from the meter, and terminal means for affording a permanent connection for the neutral wire of said circuits.

13. In combination, a service switch enclosure, a service switch therein, fuses associated with said service switch, said service switch and said fuses being mounted parallel to each other, and a plurality of meter test devices at one end of said switch enclosure, said meter test devices being arranged parallel with respect to each other and transversely with respect to said switch and fuses.

It will be seen that the alleged inventions relate to meter-testing devices used in connection with service switches in electrical distribution systems. In appeal No. 2,827 the device is incorporated in a two-wire system. In appeal No. 2,828 the device is incorporated in a three-wire system. This constitutes the principal difference between the two cases.

Insofar as the claims in both cases were rejected upon the patents to Sachs, appellant insists:

• • • most of the claims covering said structures describe *meter testing switches which are additional to, and form no part of, the service switches*, and it is because of the emphasized characteristic that appellant contends that the claims are patentably distinguishable over the showing in the Sachs reference patents. (Italics quoted.)

Appellant then recites that in January, 1917, Patents Nos. 1,214,078 and 1,214,079 were issued to Sachs; that at the time of their issuance he (appellant) had an application for a patent pending in the Patent Office; that he (appellant) copied certain claims from the Sachs patents for the purpose of bringing about an interference; that after considerable prosecution he was permitted "to make the claims of said Sachs patents" under a decision of the Examiner's in Chief (which tribunal then existed in the Patent Office) "on the theory that the structure of said Sachs patents and the structure in said Horton application were equivalent;" that upon the interference being instituted Sachs moved to dissolve it on the ground that "Horton's structure was not equivalent to that shown by Sachs;" that the motion, after protracted proceedings before different tribunals of the Patent Office, in one of which proceedings the Primary Examiner denied Horton's right to make the claims involved in the counts, which decision was reversed by the Examiners in Chief, finally reached the Commissioner of Patents, who held with the Primary Examiner and reversed the Examiners in Chief, and that thereafter the decision of the Commissioner was affirmed by the Court of Appeals of the District of Columbia.

Appellant insists that the argument of Sachs upon the motion to dissolve may be epitomized thus:

A "load controlling switch" of the Horton type is not comparable with, or equivalent to, the "load controlling switch" recited in the Sachs patent.

Without going into details as to the claimed similarities and differences in the respective structures there in issue, because not deemed here proper, it may be further stated that the Commissioner, in his decision, which subsequently was affirmed by the Court of Appeals of the District of Columbia, held that there were differences, under the construction which he gave to the counts as claims appearing in the Sachs patent, which prevented Horton making the counts of said interference as framed.

Appellant further states that during the pendency of the interference proceedings above recited and following Sachs's motion to dissolve, he (appellant) filed a divisional application of his application involved in the interference in which he "very clearly recited his definition of a 'load controlling' switch and paralleled many of the claims which had been counts of the interference."

This divisional application appears to have ripened into Patent 1,548,883, August 11, 1925, after the disposition of the interference proceeding.

Appellant insists that his said patent, 1,548,883, must be considered in the present case along with the decisions determining the interference, for the purpose, as we understand it of sustaining his contention that there has heretofore been such a construction of claims and counts upon issues so similar to the issues here involved, as to be binding upon the tribunals of the Patent Office and to render it improper for the Sachs patents to be now cited as references against the applications involved in the two appeals we are now considering.

For the proper understanding of the precise issue presented it must be borne in mind that the identical Sachs patents cited as references against appellant's applications here involved were not involved in the interference proceedings which have been above set out. Neither were the applications here at issue there involved.

The issues here are between two patents on the one hand and two applications on the other, which never at any time came in conflict in any interference proceeding nor received adjudication or comparison by either the tribunals of the Patent Office, or by any court, in any proceeding of any kind or character, until cited in the ex parte cases here.

Appellant insists, however, that the Sachs structure, as disclosed and claimed in the counts of the Horton-Sachs interference, was similar to the structures in the Sachs patents, now cited as references against appellant's involved applications, and that said counts there received an interpretation or construction under which the Horton structure here involved (it being claimed to be similar to the Horton structure of the interference proceeding) would not read upon the Sachs structure, and that the doctrine of res adjudicata or that of stare decisis is here applicable.

It is obvious that to sustain the theory of appellant it would be necessary for this court to determine and adjudicate certain questions which, so far as the record discloses, were not adjudicated by either of the tribunals of the Patent Office.

We should first have to compare the Sachs structure involved in the counts of the interference proceeding with the Sachs structures disclosed and claimed by the patents cited as references in the ex parte case, and find that they are similar. We should then have to compare the Horton structure involved in the counts of the interference with the Horton structures involved in the applications before us and determine that they are similar. Then, as a third step, we should have to compare all the Sachs and Horton devices and claims and find them to have patentable differences.

The first two questions were not passed upon in this proceeding by either the Examiner or the Board of Appeals, and the comparison required by the last step was confined by them (as to the claims now being discussed) as has been stated, to certain Sachs patents on the one hand and the Horton applications on the other, neither of which were ever involved in the interference.

[1] It does not appear to us to be within our authority to review and determine material technical questions of structure upon which the ex parte tribunals of the Patent Office have made no finding.

In its decision in case No. 2,827, the Board of Appeals, among other things, said:

Appellant has quoted certain portions of the decision of the First Assistant Commissioner in a prior interference involving the patentee Sachs and the appellant in this case. As clearly appears in the quoted portions contained on page 7 of appellant's brief in his companion application, Serial No. 627,082, which is also before us for decision, the Commissioner gave the claims of the Sachs patent there involved a limited interpretation to sustain their validity. When so construed he held that Horton could not make the claims involved because he did not have a service and meter testing switch block as a combined structure. In the instant case the claims are the claims of an application and in order to be allowable they should distinguish in some patentable respect from the prior art. It is not seen that the Commissioner's decision on appellant's right to make the claim of the Sachs patent has any particular bearing on the question presented in this proceeding.

We perceive no error of law in this statement. The question of patentability was not involved in the interference and there was no adjudication upon it. The fundamental issue there was the question of priority and the case turned upon the ancillary issue of Horton's right to make the counts. These counts were claims of a patent to Sachs, and Horton in that proceeding was doubtless held bound by the meaning intended by the patentee, under the doctrine of cases such as *Drey* v. *Peiler*, 53 App. D. C. 35, 37, 287 F. R. 1012, 313 O. G. 665, where it was held that Peiler's disclosure—

• • • does not come within the rule of construction that, where counts are taken from the claims of a patent, the one copying the claims is bound by the meaning intended by the patentee.

Here the issue is that of patentability over the prior art cited; the claims before us were not copied from a patent but are original to the applications involved, and we are unable to discern any sound reason why they should not be given the broadest interpretation of which they are reasonably susceptible. In the case of *In re Carr*, 54 App. D. C. 270, 296 F. R. 1017; 323 O. G. 4, the court said:

After a patent has issued, and it no longer is possible for the patentee to control the phraseology of his claims, the courts will so interpret them, if possible, as to protect him; but there is no reason, as we many times have observed, why an applicant in the Patent Office should not draw his claims to cover his actual invention only. For this reason, we have uniformly ruled that claims will be given the broadest interpretation of which they reasonably are susceptible. This rule is a reasonable one and tends not only to protect the real invention but to prevent needless litigation after the patent has issued.

We have given careful study to the well-prepared briefs of appellant, and have examined the several authorities therein cited, such as *Blackford* v. *Wilder*, 28 App. D. C. 535, 127 O. G. 1255; *In re Dement*, 1920 C. D. 171; 49 App. D. C. 261; *In re Marconi*, 38 App. D. C. 286, 179 O. G. 577; *In re Henderson*, 50 App. D. C. 191, 284 O. G. 182, and numerous others, but we are unable to agree that the reasoning of any of the cited cases is applicable to the particular state of facts here appearing.

[2] There can be no question, we think, but that had there been no interference proceeding there could not be a serious contention that appellant's claims now under discussion should be allowed over the cited Sachs patents. The decisions of the Examiner make specific application of the respective ref-

erences to such claims of the respective applications. That, when the claims are given the broad interpretation, the references do anticipate them, is not seriously questioned. We are unable, therefore, to see wherein the applications of appellant are patentable, or wherein any doctrine of res adjudicata or stare decisis is applicable to render them so.

Such claims as were not distinctly and clearly anticipated by the Sachs patents (considering the cross reference in No. 1,181,483 to the application which matured into Patent No. 1,170,112) are obviously anticipated, we think, by Horton's Patent 1,338,180.

It is not deemed essential to lengthen this opinion by repeating or attempting to paraphrase the technical discussions of the Examiner. Reference may be had to these for a full understanding of the subject matter of the several disclosures.

The decisions of the Board of Appeals in both cases, 2,827 and 2,828, are affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

THE GREAT ATLANTIC & PACIFIC TEA CO. v. WORDEN GROCER COMPANY

No. 2,855. Decided February 1, 1932

TRADE-MARKS—SIMILARITY—"QUAKER MAID" AND "QUAKER".

The words "Quaker Maid" used as a trade-mark for catsup and chili sauce *Held* confusingly similar to the mark "Quaker" used upon the same goods or goods of the same descriptive properties.

APPEAL from the Patent Office. Affirmed.

Messrs. Munn, Anderson, Stanley, Foster & Liddy and *Mr. Sylvester J. Liddy* for The Great Atlantic & Pacific Tea Co.

Mr. Edward H. Merritt and *Mr. James Adkins* for Worden Grocer Company.

GARRETT, *J.*:

This is an appeal from a decision of the Commissioner of Patents affirming a decision of the Examiner of Trade-Mark Interferences, sustaining the opposition of appellee to the registration by appellant, as a trade-mark, of the words "Quaker Maid," shown in the drawings in association with a diamond or lozenge-shaped figure, which figure is separated into two substantially triangular sections between which the words appear.

The issue is quite a simple one and seems to require no extensive comment, in the light of numerous decisions of this court rendered since jurisdiction of appeals in trade-mark registration matters were transferred to us from the Court of Appeals of the District of Columbia.

Appellee bases its opposition to the registration by appellant of "Quaker Maid", for use upon catsup and chili sauce, upon the ownership by it (appellee) of the mark "Quaker" used upon identical goods in one instance (catsup) and goods of the same descriptive properties (chili sauce) in the other, alleging that it (appellee) believed it would be damaged by the confusion which would probably result.

There is no dispute of the fact that appellee was the prior user of the mark "Quaker" upon the goods referred to, but appellant insists that there is no evidence of actual confusion; that the word "Quaker" has come to have a meaning, being in such common use, which renders it public property, as it were, and prevents the acquiring of rights therein by one which will inhibit its registration by another "solely because the latter's word may contain the word of the former," and that numerous prior registrations of the mark "Quaker" with variations, all pleaded in the answer to the notice of opposition, tend to show that same has become public property which may not be exclusively appropriated for trade-mark purposes.

Insofar as the legal effect of the registrations pleaded are concerned, many holdings of this court are adverse to appellant's contention. Our recent case of *Traub Mnfg. Co.* v. *R. Harris & Co.*, 19 C. C. P. A. (Patents) ——, 53, F.(2d) 416, 414 O. G. 3, is directly in point, and in said case will be found cited numerous others which also relate directly to that issue.

But one of appellant's citations seems to require comment. It has here cited the case of *Loughran et al.* v. *Quaker City Chocolate & Confectionery Co., Inc.*, 286 Fed. 694, wherein the United States Court of the Eastern District of Pennsylvania in a suit at equity, brought under section 4915 Revised Statutes, decreed the plaintiffs therein to be entitled to register the notation "Quaker Maid" used in connection with the figure of a girl clad as "a Quaker maiden was supposed to be clothed" against the opposition of the defendant therein, who had the mark " 'The Quaker City' with the figure of a man on a gold seal," both marks applied to candy.

It appears, from an examination of the opinion in that case, that defendant's mark was registered under the ten year provision of the Trade-Mark Registration Act of February 20, 1905, it apparently being regarded as a geographical designation.

In the course of his opinion in that case, District Judge Dickinson, discussing the nature of the word "Quaker", among other things, said:

> Some words are merely the names of things. Other words, although used as names, imply the existence of certain qualities or characteristics of excellence or otherwise. The sound or sight of a word often brings with it by suggestion a train of ideas. One of the masters in literature has called such words "polarized." The word "Quaker" is of this class. Members of the Society of Friends have the reputation of putting conscience and honesty into all that they do or make. Any food product which is really Quaker-made carries with it the assertion that it is wholesome, that its ingredients are genuine and that it has been prepared by the use of methods of cleanliness. When a manufacturer of candy puts out his product under such a name he is advertising its excellence * * *. To give any one a monopoly of the use of a word of this kind is to give him the exclusive right to so advertise his product. There is no purpose in the trade-mark law to confer any such right upon him.

Appellant insists that the decision of the learned district judge (whose decree subsequently was affirmed by the Circuit Court of Appeals of the Third Circuit [296 Fed. 822] was a judicial construction of the "nature of the trade-mark 'Quaker' as applied to a food product," and that, under such construction, the word may not be so appropriated by appellee here as to avoid appellant's right to register it for use as sought.

We are unable to accept this contention. We note the Circuit Court of Appeals, in its opinion affirming the decree, said, in part:

> It occurs to us that the only inference to be drawn from the decree of the District Court authorizing registration of the plaintiffs' trade-mark is that *it is not similar* to the trade-marks of the opposing defendant. Otherwise there would be neither *justification nor validity* in the award of registration. At all events, it is our purpose by this decision on appeal to make it clear that the trade-marks here in opposition are *not* similar within the meaning of the statute and that, for this reason, the plaintiffs' right to registration adjudged by the District Court should be sustained, and for the added reason that in our opinion, the words "Quaker Maid" constitute a valid technical trade-mark. (Italics ours.)

The appellate court had previously declared itself "not concerned" with the validity of the opposer's mark—"The Quaker City."

It seems to us that the marks there, "The Quaker City" and "Quaker Maid", certainly presented no such question as to similarity as is here presented, and we are unable to agree that the statements of the district judge quoted, supra, amounted to an adjudication which should here control.

In the case at bar the validity of appellee's mark "Quaker" is not brought into question, except as invalidity might be a logical conclusion if appellant's argument as to the effect of the United States district judge's decision in the Loughran case, supra, were accepted. This, in any event, we need not further consider because appellant's brief says:

> At the outset, Appellant wishes to make clear that it is not attacking the validity of Appellee's registration. It concedes that the validity of Appellee's registration is not in issue here * * *.

Some other questions are presented and argued, but in view of the opinion which we entertain as to the similarity of the marks we need not go further.

Appellant has merely taken the mark of appellee consisting of the single word "Quaker" and added the single word "Maid" thereto. There is not even proposed a pictorial representation of a girl as was the situation in the Loughran case, supra. When pronounced without being seen the word might imply that the product was of Quaker production. It certainly cannot be said that this particular word "Maid" added to the notation "Quaker" creates a mark so dissimilar as to justify its registration over "Quaker" standing alone, for use upon goods of the same descriptive properties.

Express holdings in point will be found cited in the Traub case, supra.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,132,186. E. W. Kelley, Traffic-signaling system, filed Mar. 12, 1932, D. C., W. D. N. Y., Doc. 1179, *E. W. Kelley et al.* v. *The City of Rochester et al.*

1,144,953. A. F. Ward, Method of making pan biscuits, D. C. Calif. (Los Angeles), Doc. E Q–57–J, *Bakeries Service Corp.* v. *Langendorf United Bakeries, Inc., et al.* Decree for defendant dismissing bill Feb. 26, 1932.

1,198,860. Lesley & Enz, Circuit-controller for mechanically playing instruments; 1,198,861, Lesley & Schoen, Circuit-controller, filed Jan. 12, 1932, D. C., N. D. Ill., E. Div., Doc. 11320, *Mills Novelty Co.* v. *Gabel's Entertainer Co.*

1,198,861. (See 1,198,860.)

1,332,793. L. Bloch, Combined waste and overflow, filed Mar. 11, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4189, *The Republic Brass Co.* v. *L. Bloch et al.*

1,342,260. (See 1,394,723.)

1,352,239, E. P. Baird, Lock; 1,406,573, A. Mantanfel, same, filed Jan. 11, 1932, D. C., N. D. Ill., E. Div., Doc. 11321, *Chicago Lock Co.* v. *Baird Lock Co.*

1,370,300. (See 1,394,723.)

1,377,023, B. S. Nelson, Lubricating device, appeal filed Mar. 11, 1932, C. C. A., 2d Cir., Doc. —, *Gat Gun Lubricating Corp. et al.* v. *Adams Grease Gun Corp.*

1,394,723, 1,342,260, 1,370,300, Friendly and Burns, Toll telephone switching, filed Jan. 23, 1932, D. C., N. D. Ill., E. Div., Doc. 11374, *A. E. Burns* v. *Central Republic Bank & Trust Co. et al.*

1,406,573. (See 1,352,239.)

1,457,179, J. A. McGinnis, Machine for the manufacture of collapsible metal tubes; 1,674,467, W. T. Davis, Tube forming and handling mechanism, filed Jan. 26, 1932, D. C., E. D. N. Y., Doc. E 5960, *Wheeling Stamping Co.* v. *E. R. Squibb & Sons et al.* (Correcting notice in 416 O. G. 540 of Mar. 15, 1932, under No. 1,457,199, which patent was not involved in the suit.)

1,523,702, Moeller and Kabbes, Insulating material, D. C., S. D. Ohio, W. Div., Doc. E 751, *H. J. Kabbes et al.* v. *The Phillip Carey Mfg. Co.* Dismissed Mar. 14. 1932.

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. Ohio, W. Div., Doc. E 249, *A. B. Dick Co.* v. *Rotospeed Co.* Consent decree holding claims 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14, 16, 18, 21, and 22 valid Mar. 12, 1932.

1,599,916, J. R. Nye, Doughnut frying machine, appeal filed Mar. 12, 1932, C. C. A., 4th Cir., Doc. 3288, *Joe-Lowe Corp. et al.* v. *Doughnut Machine Corp.*

1,620,475. (See Re. 17,365.) 1,659,158. (See Re. 17,365.)

1,674,467. (See 1,457,179.)

1,719,082, H. S. Regar, Method of producing scallops in knitted fabrics, D. C., S. D. N. Y., Doc. E 52/234, *H. K. Regar & Sons, Inc.*, v. *Scott & Williams, Inc.* Decree for plaintiff (notice Mar. 11, 1932).

1,819,776, J. C. Heck, Cinematograph screen, filed Jan. 14, 1932, D. C., N. D. Ill., E. Div., Doc. 11323, *The Da-Lite Screen Co., Inc.*, v. *National Theatre Supply Co.*

1,826,609. (See Re. 17,232.)

1,838,042, H. Schwartz, Bushing structure and sealing means therefor, filed Jan. 21, 1932, D. C., N. D. Ill., E. Div., Doc. 11371, *Barrel Fitting & Seal Corp. of America* v. *American Flange & Mfg. Co.*

1,840,845, P. J. Lucey, Feeding mechanism for slicing machines, filed Jan. 20, 1932, D. C., N. D. Ill., E. Div., Doc. 11350, *American Slicing Machine Co.* v. *Cincinnati Time Recorder Co.*

1,843,339, J. S. Reynolds, Heavy-duty rotary scraper, filed Mar. 10, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E W–51M, *O. M. Reynolds et al.* v. *Killefer Mfg. Corp.*

Re. 16,495. (See Re. 17,365.)

Re. 17,213, H. W. Carlough, Hair waving pad, D. C., S. D. N. Y., Doc. E 60/292, *Keen Mfg. Corp.* v. *Chaney Products, Inc., et al.* Dismissed as to Chaney Products, Inc., and E. H. Goldeman (notice Mar. 9, 1932).

Re. 17,232, J. E. Fitzgerald, Double shipping container; 1,826,609, same, Sheet metal container, filed Jan. 13, 1932, D. C., N. D. Ill., E. Div., Doc. 11322, *The Niles Steel Products Co.* v. *Wilson & Bennett Mfg. Co.*

Re. 17,365, Bradner and Oglesby, Process and apparatus for dispersing irritants; 1,620,475, R. B. Lawrence, Hand grenade; Re. 16,495, D. B. Bradner, Production of lachrymating gases; 1,659,158, Oglesby and Ehrenfeld, Apparatus for dispersing irritants, filed Jan. 20, 1932, D. C., N. D. Ill., E. Div., Doc. 11351, *Federal Laboratories, Inc.*, v. *W. S. Darley et al.*

T. M. 134,900, The Cellucotton Products Co., Sanitary napkin, filed Jan. 21, 1932, D. C., N. D. Ill., E. Div., Doc. 11372, *Kotex Co.* v. *J. T. McCreary.*

T. M. 178,414, The Battle Creek Food Co., Special carbohydrate antitoxic food, filed Jan. 5, 1932, D. C., N. D. Ill., E. Div., Doc. 11298, *The Battle Creek Food Co.* v. *The Fair.*

T. M. 216,819, E. Frederics, Inc., Steam pad, filed Jan. 14, 1932, D. C., N. D. Ill., E. Div., Doc. 11324, *E. Frederics, Inc.*, v. *National Mineral Co.*

T. M. 224,615, O. K. Bachmann, Radiator compound, filed Jan. 25, 1932, D. C., N. D. Ill., E. Div., Doc. 11375, *O. K. Bachmann Laboratories, Inc.*, v. *Warner-Patterson Co.*

Disclaimers

Re. No. 17,533.—*Hans Scharf*, Berlin, Germany. SOUND REPRODUCER. Patent dated December 17, 1929. Disclaimer filed April 15, 1932, by the assignee, *Brandes Products Corporation.*

Hereby enters this disclaimer to that part of the claims in the specification which is in the following words, to wit:

1. Your petitioner hereby disclaims the subject matter of claim 6 except combinations in which the diaphragm is of large area for a loud speaker, and there is stiffening means for reinforcing the edge of said diaphragm.

2. Your petitioner hereby disclaims the subject matter of claims 4, 5, 7, 8, and 9 except combinations in which the diaphragm is of large area for a loud speaker.

1,575,690.—*Joseph B. Kausal*, Chicago, Ill. AISLE CHAIR. Patent dated March 9, 1926. Disclaimer filed April 9, 1932, by the patentee.

Hereby enters this disclaimer to that part of the claims in said specification, embodying claims 2 and 5 thereof, which are in the following words:

"2. A chair having a lamp chamber therein, a reflector in the chamber having a downwardly and outwardly inclined bottom, a lamp arranged in the chamber, and an outwardly offset light-directing part opposite said inclined bottom and having an opening exteriorly of the chamber, substantially as described."

"5. In a chair, the combination with a standard having a hollow leg, of a lamp chamber communicating with said hollow leg, a plate hinged in the chamber and carrying a lamp, circuit wires extending through said hollow leg to said lamp, and a closure plate for said lamp chamber having a light directing portion, substantially as described."

1,656,851.—*Carl Eric Anderson*, Stratford, and *William H. Keefe, jr.*, Bridgeport, Conn. CIRCUIT BREAKER. Patent dated January 17, 1928. Disclaimer filed April 21, 1932, by assignee, *The Bryant Electric Company.*

Hereby enters this disclaimer to claims 1 and 2 in said patent, which are in the following words, to-wit:

"1. A manually operable circuit breaker having associated means for automatically opening the circuit on overload, a casing enclosing the circuit breaker mechanism an exteriorly visible indicator having normal "on" and "off" positions on manual operation of the circuit breaker, and means locating said indicator in a different position when the circuit is automatically opened on overload.

"2. A circuit breaker having a circuit breaker mechanism, a manually actuated member for operating said mechanism to make and break the circuit, and an overload responsive member controlling said mechanism to open the circuit on overload, said manually actuated member assuming, on overload operation of the mechanism, an indicating position distinct from that assumed by it on manual operation thereof."

1,677,773.—*Eugene C. Herthel* and *Thomas De Colon Tifft*, Chicago, Ill. ART OF CRACKING HYDROCARBON OILS. Patent dated July 17, 1928. Disclaimer filed April 9, 1932, by the patentees, assignee, *Sinclair Refining Company*, consenting.

Hereby enter this disclaimer of the subject matter of claims 1, 2 and 3 of said specification excepting the improvements in cracking higher boiling hydrocarbon oils described in claims 1, 2 and 3 of said specification as limited to processes:

Wherein the "distillation under pressure" recited in the claims is a primary pressure distillation to which is supplied at least some fresh oil;

Wherein the pressure on the unvaporized oil that "is withdrawn during the pressure distillation and subjected to further vaporization by its self-contained heat" is reduced from the pressure at which the primary pressure distillation is effected in a single stage and without intermediate distillation to a pressure lower than the pressure maintained in said "distillation under pressure" by an amount sufficient to produce vaporization of a substantial part of said "oil withdrawn during the pressure distillation" by its self-contained heat.

Wherein a condensate is formed in the tower into which "vapors separated from the oil withdrawn from the pressure distillation" are passed, and such condensate at least in part is discharged from said tower without again mixing with the portion of the said oil "withdrawn during the pressure distillation" remaining unvaporized;

And, wherein the said "further vaporization" of unvaporized oil withdrawn from the primary pressure distillation is effected entirely or substantially entirely by its "self-contained heat."

1,709,427.—*Vannevar Bush*, West Medford, Mass. ELECTRICAL CONDENSER. Patent dated April 16, 1929. Disclaimer filed April 20, 1932, by the assignee, *Raytheon, Inc.*

Hereby disclaims the product as set forth in claims 2, 3, 4 and 5, except when said product is so formed that the electrodes are secured together to form a self-contained receptacle.

1,719,452.—*Herbert C. Ryding*, Birmingham, Ala. SOAKING PIT. Patent dated July 2, 1929. Disclaimer filed April 16, 1932, by the patentee.

Hereby enters this disclaimer to said claim 13 of said Letters Patent.

1,853,657.—*William M. Bradshaw*, Wilkinsburg, and *Argyle R. Rutter*, East Pittsburgh, Pa. TESTING SYSTEM. Patent dated April 12, 1932. Disclaimer filed April 19, 1932, by *Westinghouse Electric and Manufacturing Company.*

Hereby enters this disclaimer to that part of the claim in said specification appearing as claims 3 and 4 of the aforesaid Letters Patent No. 1,853,657.

CARNEGIE LIBRARY OF ATLANTA

TRADE-MARKS

OFFICIAL GAZETTE, MAY 10, 1932

[VOL. 418. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 324,200. TRUAX-TRAER COAL COMPANY, Chicago, Ill. Filed Feb. 15, 1932.

"TRUCO"

For Coal.
Claims use since Oct. 9, 1931.

Ser. No. 325,468. GOLD STAR FUR RANCH INC., Owatonna, Minn. Filed Mar. 25, 1932.

GOLD STAR FUR RANCH, INC.
GOLD STAR SILVER FOX

The words "Silver Fox" are disclaimed apart from the other features of the mark shown on the drawing.
For Live Foxes.
Claims use since 1929.

Ser. No. 325,684. FRENCH COAL COMPANY, Bluefield, W. Va. Filed Mar. 31, 1932.

PARADOX
SMOKELESS COAL

Exclusive use of the words "Smokeless Coal" is disclaimed apart from the mark as shown.
For Coal.
Claims use since Oct. 15, 1931.

CLASS 2

Receptacles

Ser. No. 325,373. ONEIDA COMMUNITY LIMITED, Oneida, N. Y. Filed Mar. 22, 1932.

SILVERDOR ANTI-TARNISH

Registration of this trade-mark shall give no right to the exclusive use of the words "Anti-Tarnish" apart from the mark as shown in the drawing.
For Chests, Cabinets, and Rolls for Silverware.
Claims use since Feb. 20, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 313,338. FISCHER'S SURFA-SAVER, INC., Cincinnati, Ohio. Filed Apr. 14, 1931.

LIQUI-BASE

The descriptive word "Base" is disclaimed apart from the mark as shown on the drawing.
For Soap—Namely, a Liquid Toilet Soap.
Claims use since Jan. 26, 1931.

Ser. No. 319,474. FRED W. DAVIS, New York, N. Y. Filed Sept. 28, 1931.



For Soaps and Shaving Creams.
Claims use since Aug. 15, 1931.

Ser. No. 322,569. B B PRODUCTS CORPORATION, New York, N. Y. Filed Dec. 31, 1931.



On the carton in which the goods are sold, the disc, lightning streak and the word "Cleanser" are colored blue. The word "Cleanser" is hereby disclaimed apart from the mark as shown on the drawing.

For A Crystal Powder Cleaning Preparation to Dissolve in Water for Use in Household, Factories, Creameries, Laundries and Garages, and on Tile and Rubber Floors, Painted Walls, Auto Radiators, and the Like.

Claims use since 1931.

Ser. No. 324,189. POLK MILLER PRODUCTS CORP., Richmond, Va. Filed Feb. 15, 1932.



For Soap.

Claims use since 1919.

Ser. No. 324,383. S. H. KRESS & CO., New York, N. Y. Filed Feb. 23, 1932.



For Soaps

Claims use since Nov. 15, 1931

Ser. No. 324,658. THE L. D. CAULK COMPANY, Milford, Del. Filed Mar. 1, 1932.

LUSTREX

For Preparation for Use by Dentists in Removing Stains from and in Cleaning and Polishing Teeth.

Claims use since Feb. 16, 1932.

Ser. No. 325,105. LOS ANGELES SOAP COMPANY, Los Angeles, Calif. Filed Mar. 14, 1932.



IT CLEANS

The words "It Cleans" form a part of the registration sought only in association with the other features of the mark shown in the drawing.

For Washing Powder.

Claims use since Feb. 5, 1932.

Ser. No. 325,216. THE DAVIES-YOUNG SOAP COMPANY, Dayton, Ohio. Filed Mar. 17, 1932.

DAY-SOL

For Liquid Dry Cleaning Soap.

Claims use since Mar. 1, 1932.

Ser. No. 325,240. THE RENOFAB PROCESS, INC., New York, N. Y. Filed Mar. 17, 1932.

RENOFAB

For Dry Cleaning Fluid.

Claims use since June, 1928.

CLASS 5

Adhesives

Ser. No. 324,665. TH. GOLDSCHMIDT A.-G., Essen-on-the-Ruhr, Germany. Filed Mar. 1, 1932.

TEGO

For Cementing Medium in Sheet Form, Particularly Sheets Carrying Adhesive for Making Compound Lumber or Veneered Work.

Claims use since May 7, 1931.

Ser. No. 325,660. CHAS. A. KRAUSE MILLING CO., Milwaukee, Wis. Filed Mar. 30, 1932.

GOLDEN HARVEST

For Gelatinized Wheat Flour Used as an Adhesive.

Claims use since Jan. 25, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 309,783. PEDRO LONGORIA, doing business as Farmacia Garza, Mercedes, Tex. Filed Jan. 9, 1931.

EL JICOTE



The portrait depicted in the drawing is a draftsman's representation of a photograph of the applicant, Pedro Longoria.

For Preparation for Eye Diseases.

Claims use since Nov. 22, 1907.

Ser. No. 311,738. MARY ELLEN KEEGAN, doing business as The Lovelie Products Co., Minneapolis, Minn. Filed Mar. 4, 1931.



The representation of the female figure forming a feature of the mark is fanciful.

For Hand Lotion.

Claims use since Jan. 2, 1930.

Ser. No. 312,681. MARK W. ALLEN & CO., Detroit, Mich. Filed Mar. 30, 1931.

LIX

The drawing is lined for red.

For Soapless Shampoo.

Claims use since January, 1930.

Ser. No. 312,682. MARK W. ALLEN & CO., Detroit, Mich. Filed Mar. 30, 1931.

LIX

The drawing is lined for green.

For Antiseptic Bouquet for Luxurious Hair.

Claims use since January, 1930.

Ser. No. 312,786. HOMER A. SUTTER, doing business as "Rub-Ene" Chemical Co., Cincinnati, Ohio. Filed Mar. 31, 1931.



All wording with the exception of the word "Rub-Ene," the letter "R," and the name "Rub-Ene Chemical Company," is disclaimed apart from the mark as shown on the drawing.

For Ointment Used to Relieve Pain, Check Secretions and Reduce Congestion in Case of Neuralgia, Neuritis, Rheumatism, and Lumbago.

Claims use since June 10, 1930.

Ser. No. 317,868. CLARENCE A. GREEN, doing business as The Indian Remedy Co., Paris, Tex. Filed Aug. 11, 1931.

GREEN'S BARK and HERB TONIC



The portrait appearing on the drawing is a photograph of the applicant's baby daughter, named Frances

E. Green. For the purpose of this registration, the name "Green's Bark and Herb Tonic" is hereby disclaimed as used separate and apart from the mark as shown.

For a Medicinal Product for the Relief of Dropsy, Goitre, Bright's Disease, Diabetes, Gall Stones Trouble, Constipation, Kidney Trouble, Rheumatism, Female Troubles, Pellagra, Ulcerated Conditions of the Stomach, Blood Poison, Neuritis, Arthritis, High Blood Pressure, Prostate Gland Trouble, for the Nerves, Tuberculosis, Running Sores, Headache, Stomach Ailments, and Lumbago.

Claims use since July, 1931.

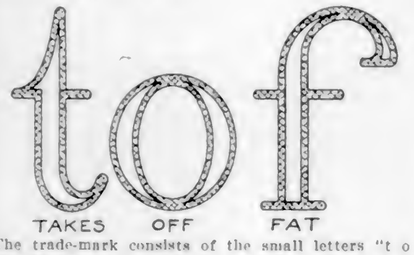
Ser. No. 318,139. JULES GIRAUX, Rouen, France. Filed Aug. 19, 1931.

GIX

For Perfumery, Face-Powders, Face Creams, Toilet Waters, Rouges, Lip Sticks, Perfumes, Deodorizing Preparations, Talcum Powders, Sachets, Dentifrices.

Claims use since July 12, 1920.

Ser. No. 320,910. GENERAL LABORATORIES, INC., Detroit, Mich. Filed Nov. 6, 1931.



The trade-mark consists of the small letters "t o f" outlined in orange color shading with the following words under the letters: "Takes Off Fat," which latter words are hereby disclaimed apart from the mark as shown on the drawing.

For Reducing Lotion.

Claims use since July 31, 1931.

Ser. No. 320,938. SAMUEL G. MCLEAN, doing business as Mac-Kee Drug Company, Oakland, Calif. Filed Nov. 9, 1931.

MACK'S



The use of the surname "Mack's" is disclaimed apart from the mark as shown.

For Alteratives, Analgesics, Anaphrodisiacs, Anesthetics, Anodynes, Antacids, Anthelmintics, Antichlorotics, Anti-Emetics, Anti-Epileptics, Antigalactogogues, Antigonorrheics, Antihodrotics, Antilithics, Antineuralgics, Antiparacatics, Antiperiodics, Antiphlogistics, Antipyretics, Antirheumatics, Antisialogogues, Antispasmodics, Antizymotics, Aperients, Aphrodisiacs, Astringents, Cardiac Sedatives, Cardiac Stimulants, Carminatives, Cathartics, Cerebral Depressants and Stimulants, Chologogues, Constructives, Counter-Irritants, Demulcents, Deodorants, Deoxidizers, Depilatories, Depressants, Diaphoretics, Digestives, Discutients, Disinfectants, Diuretics, Echolics, Emetics, Emmenagogues, Errhines, Escharotics, Expectorants, Galactagogues, Gastric Tonics, Hemostatics, Hypnotics, Irritants, Laxatives, Motor-Depressants, Motor-Excitants, Mydriatics, Myotics, Narcotics, Nervines, Nutrients, Oxytocics, Ptyalagogues, Purgatives, Pustulants; Refrigerants, Medicinal; Resolvents, Respiratory; Depressants, Respiratory; Stimulants, Restoratives, Rubefacients, Sedatives, Sialagogues, Soporifics, Sternutatories; Stimulants (Cardiac, Cerebral, Hepatic); Stomachics, Styptics, Sudorifics, Teniafuges, General Tonics, Vasoconstrictors, Vasodilators, Vascular Sedatives, Vermicides, Vesicants.

Claims use since December, 1926.

Ser. No. 322,147. CLAUDE W. WILLIAMS, Pawhuska, Okla. Filed Dec. 15, 1931.

WUNDER TABLETS

TRADE "CHIN-QUIN" MARK

The words "Tablets" and "Trade Mark" are disclaimed.

For Antiseptic Tablets.

Claims use since May, 1930.

Ser. No. 323,562. ASTA AKTIENGESELLSCHAFT, Brackwede, Germany. Filed Jan. 29, 1932.

QUADRONAL

For Preparation Used Specifically for Inflammation of the Nerves, Sciatica, Influenza, Inflammation of the Throat, Colds, Tooth Ache, Rheumatism, Nervous Stomach and Intestinal Troubles, Menstrual Disorders, Nervous Headaches, and Vascular Troubles Following Alcoholic Excess or Mental Overstrain.

Claims use since Oct. 23, 1919.

Ser. No. 323,736. ASTA AKTIENGESELLSCHAFT, Brackwede, Germany. Filed Feb. 2, 1932.

QUADRO-NOX

For Preparations Used Specifically for the Treatment of Sleeplessness and Especially Indicated in Conditions of Exhaustion, Nervous Irritability, and Neurasthemia.

Claims use since Apr. 15, 1930.

Ser. No. 323,754. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Feb. 2, 1932.

ZOÏN

For a Medicine Intended for Use in All Cases in Which a Rational Phosphorus Therapy is needed.

Claims use since June 12, 1920.

Ser. No. 324,214. GLADYS V. MCCUNE, New York, N. Y. Filed Feb. 15, 1932.



The trade-mark consists of a black background upon which the inscription and the border appear in cream. The words "Gladys McCune" are in the handwriting of the applicant.

For Beauty Creams, Lotions, and Powders.

Claims use since June, 1931.

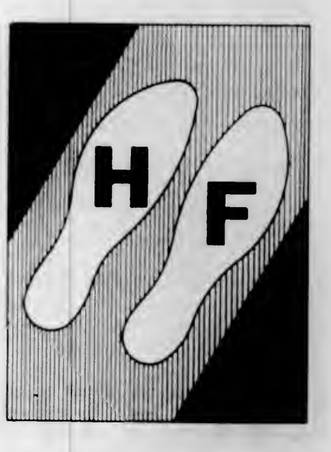
Ser. No. 324,277. J. H. ALLISON, doing business as Allison's Drug Store, Wichita Falls, Tex. Filed Feb. 18, 1932.



For Perfume, Rouge, Skin Cream, Lip Stick, Finger Nail Enamel, Brilliantine, Astringent, Muscle Oil, and Acne Cream.

Claims use since Sept. 10, 1931.

Ser. No. 324,344. JOSEPH M. GORE, Jr., doing business as Gore Products Co., New Orleans, La. Filed Feb. 20, 1932.



It is understood that the color lining shown in the drawing is used for shading purposes only.

For Preparation for the Relief of Ringworm of the Feet Caused by the Parasite, Tinea Trichophyton.

Claims use since Jan. 28, 1932.

Ser. No. 324,390. D. L. MILLER, doing business as Millerine Company, Chicago, Ill. Filed Feb. 23, 1932.

MILLERINE

For Treatment for Baldness Consisting in a Liquid Chemical Scalp-Stimulating Compound.

Claims use since Jan. 15, 1932.

Ser. No. 324,566. J. WILMER MARSHALL, doing business as The Wil-Mar Antiseptic Works, Fowblesburg, Md. Filed Feb. 27, 1932.

KLOR-RICK

For Preparation Having Bactericidal, Germicidal, Deodorant, Disinfectant, and Bleaching Properties.

Claims use since Sept. 1, 1931.

Ser. No. 324,863. WINDSOR PHARMACAL COMPANY, St. Louis, Mo. Filed Mar. 7, 1932.

NU-TABS

For Tablets for Headaches, Colds, Neuralgia, Toothache, and Muscular Pains.

Claims use since Jan. 1, 1925.

Ser. No. 324,872. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Mar. 8, 1932.

Lorinol

For Chemical Substances for Use as Thread and Fiber Moistening, Protecting, Penetrating, Smoothing, and Finishing Preparations.

Claims use since Jan. 22, 1932.

Ser. No. 324,890. KATOLOX LABORATORIES, INC., East Orange, N. J. Filed Mar. 8, 1932.

KATOLOX

For Compounds and/or Solutions of Organic Iodine and for Compounds and/or Solutions of Organic Iodine Containing Sodium Hypolodite.

Claims use since Feb. 20, 1932.

Ser. No. 324,903. ROYCE CHEMICAL COMPANY, Carlton Hill, N. J. Filed Mar. 8, 1932.

FABRITEX

For Hydrosulphite for Textile Purposes.
Claims use since Feb. 18, 1932.

Ser. No. 324,942. ATLAS SUPPLY COMPANY, Newark, N. J. Filed Mar. 9, 1932.

AcTo

For Automobile Radiator Anti-Freeze Compound, Automobile Radiator Cleaning Compound, Automobile Radiator Sealing Compound, and Automobile Radiator Rust Preventative.
Claims use since Feb. 18, 1932.

Ser. No. 324,973. TULON PRODUCTS INCORPORATED, New York, N. Y. Filed Mar. 9, 1932.

Tulon

For Medicinal Preparation for Use in the Treatment of Simple Nervousness, Sleeplessness, Insomnia Due to Simple Nervousness, Simple Headache and Simple Neuralgia, Nervous Ill-Temper and Crossness, Overwork or Overdrinking: Auto, Train, Airplane, and Sea Sickness.
Claims use since Feb. 11, 1932.

Ser. No. 325,035. DIFCO LABORATORIES, Detroit, Mich. Filed Mar. 11, 1932.

NEOPEPTONE

For New Bacteriological Peptone Having Especially High Growth Stimulating Properties.
Claims use since February, 1932.

Ser. No. 325,083. PARISTYLE NOVELTY CO. INC., New York, N. Y. Filed Mar. 9, 1932.

Aivlys

For Face Creams, Cleansing Creams, Massage Creams, Vanishing Creams, Massage Lotions, Face Lotions, Rouges, Lip Sticks, Hair Tonics, Hair Lotions, Scalp Tonics, Scalp Lotions, Hair Shampoos, Depilatories, Toilet Waters, Nail Polishes, Nail Bleaches, Nail Whitener, Nail Polish Remover, Brilliantines, Face Powders, Talcum Powders, Henna Hair Dyes, Henna Shampoos, Hair Rinses, Hair Whitener, Scalp Pomades, Liquid Hair Dyes, Eyebrow and Eyelash Coloring, Cuticle Oils and Eye Shadows.
Claims use since May 1, 1929.

Ser. No. 325,141. JAMES A. GILMORE, Spokane, Wash. Filed Mar. 15, 1932.



No claim being made to the representation of the bottles appearing on the drawing apart from the mark as shown.
For Preparation for the Treatment and Cleansing of the Scalp and for Stimulating Hair Growth.
Claims use since Nov. 15, 1931.

Ser. No. 325,808. SPA-TAB COMPANY, Baltimore, Md. Filed Apr. 4, 1932.

SPA-TAB

For Bath Tablets.
Claims use since Mar. 22, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 318,517. THE GENERAL TIMBER AND LUMBER COMPANY, Cleveland, Ohio. Filed Aug. 28, 1931.

LIP-TIP

For Perforators for Preparing and Holders for Holding Cigars, Cigarettes, and the Like During Smoking.
Claims use since Aug. 24, 1931.

CLASS 10

Fertilizers

Ser. No. 325,258. GREAT WESTERN ELECTRO-CHEMICAL CO., San Francisco, Calif. Filed Mar. 18, 1932.

CALIFOS

For Fertilizers.
Claims use since Mar. 3, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 323,334. KAUMAGRAPH COMPANY, New York, N. Y. Filed Jan. 23, 1932.

Kaumagraph

For Stamping and Printing Inks and Ink Solvents Not Including Ordinary Ink Eradicators.
Claims use since 1905.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 323,925. THE YOUNGSTOWN PRESSED STEEL COMPANY, Warren, Ohio. Filed Feb. 6, 1932.

VEOS

For Enameled Drainboards for Kitchen and Restaurant Sinks.
Claims use since July 21, 1931.

Ser. No. 325,367. FENWICK-REDDAWAY MFG. CO., Newark, N. J. Filed Mar. 22, 1932.

RANGER - SPECIAL

No claim is made to the word "Special" apart from the mark shown in the drawing.
For Hose Nozzles, Pipe Nipples, Hose Suction Strainers, Siamese Hose Parts, Metal Washers, Pipe and Hose Couplings and Extensions, Plumbing and Steam Fitting Valves of All Designs and Shapes, and Sprayers—Namely, Sprayer Nozzles, Showers, Fire Prevention Sprinkler Systems, Lawn and Irrigation Sprinklers.
Claims use since Aug. 17, 1930.

Ser. No. 325,506. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Filed Mar. 26, 1932.

ORANGE BANNER

For Metal Fence Posts.
Claims use since April, 1930.

Ser. No. 325,548. ACME STAPLE COMPANY, Camden, N. J. Filed Mar. 28, 1932.

ACME

For Stapling Machines, Tagging Machines, Binding Machines, Stitching Machines, and Tacking Machines.
Claims use since Nov. 30, 1894.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 324,734. DURAFER (INC.), Newark, N. J. Filed Mar. 3, 1932.

CENTRICAST

For Centrifugally Cast Unfinished Metal Rings Which May Be Machined for Use as Brake Drums, Flanges, Sleeves, and the Like.
Claims use since Feb. 11, 1932.

CLASS 15

Oils and Greases

Ser. No. 323,834. H. K. STAHL COMPANY, St. Paul, Minn. Filed Feb. 4, 1932.



Applicant disclaims exclusive use of the words and figures "100% Pure Pennsylvania Oil" apart from the mark shown in the drawing.
For Petroleum Products—Namely, Lubricating Oils and Greases.
Claims use since Jan. 1, 1932.

Ser. No. 324,016. THE SPARTAN REFINING COMPANY, INC., Shreveport, La. Filed Feb. 9, 1932.

Octalene

For Gasoline, Lubricating Oil, Kerosene, Naphtha, Gas Oil, and Motor and Furnace Fuel Oil.
Claims use since Jan. 28, 1932.

Ser. No. 324,089. RAY B. WILSON, doing business as Ezoil Company, Kansas City, Mo. Filed Feb. 11, 1932.

EZOIL

The word "Oil" is claimed only in association with the other features of the mark.
For Lubricating Oils.
Claims use since May 29, 1930.

Ser. No. 324,476. BERNARD M. MARKSTEIN, doing business as Full Measure Gas Company, Cincinnati, Ohio. Filed Feb. 23, 1932.

L-GAS

No claim is made for the word "Gas" apart from the mark shown in the drawing.
For Gasoline.
Claims use since Feb. 9, 1932.

Ser. No. 324,812. TRUOAS AND OIL COMPANY, Philadelphia, Pa., and Wilmington, Del. Filed Mar. 4, 1932.

MAJOR

For Gasoline, Lubricating Oil, Kerosene, Motor Fuel Oil, Furnace Fuel Oil, Lubricating Grease, Cylinder Oil, and Vehicle Grease.
Claims use since Jan. 30, 1931.

Ser. No. 324,972. THE PURE OIL COMPANY, Chicago, Ill. Filed Mar. 9, 1932.

PUROPALE

For Hydrocarbon Motor Fuel Oils, Lubricating Oils, Lubricating Greases; Engine, Dynamo, Spindle, Turbine, Gas Engine, Crankcase, and Compressor Lubricating Oil Compounds.
Claims use since Feb. 4, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 286,936. THE HARVEL CORPORATION, Newark, N. J. Filed July 11, 1929.



For Paints in Dry, Paste, or Ready Mixed Form; Varnishes, Primers, Fillers, and Paint Bases Without Solvent Vehicle.
Claims use since Aug. 1, 1927.

Ser. No. 324,442. THE MARIETTA PAINT & COLOR CO., Marietta, Ohio. Filed Feb. 24, 1932.

SYNTHESEAL

For Sanding Sealers of Clear and Transparent Type, a Lacquer Type Product for Use on Wood Only, Which is Intended as a Sealing and Sanding Coat for Purposes Where Shellac Would Ordinarily Be Used.
Claims use since July 1, 1931.

Ser. No. 325,300. TACOMA PAINT & LACQUER MANUFACTURING COMPANY, Tacoma, Wash. Filed Mar. 19, 1932.

NOX-STAIN

No claim being made to the word "Stain" apart from the mark as shown.
For Painters' Sizing.
Claims use since Jan. 30, 1932.

CLASS 17

Tobacco Products

Ser. No. 309,973. THE GOVERNOR AND COMPANY OF ADVENTURERS OF ENGLAND TRADING INTO HUDSON'S BAY, doing business as Hudson's Bay Company, Winnipeg, Canada. Filed Jan. 15, 1931.

IMPERIAL MIXTURE

No claim is made to the word "Mixture" apart from the mark as shown.
For Smoking and/or Chewing Tobacco.
Claims use since 1895.

Ser. No. 325,491. TREBOW CIGAR CORPORATION, Philadelphia, Pa. Filed Mar. 25, 1932.

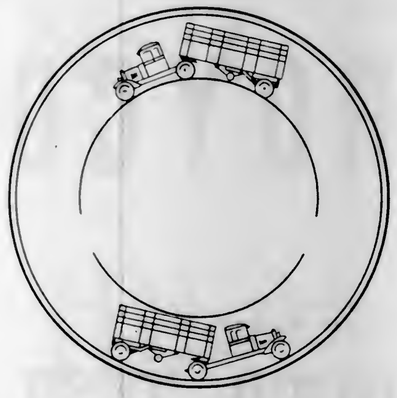
NEW PLEASURE

For Tobacco Products—Namely, Cigars.
Claims use since Jan. 15, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 322,054. MARTIN ROCKING FIFTH WHEEL AND TRAILER COMPANY, Westfield, Mass. Filed Dec. 12, 1931.



No claim is made to the exclusive use of the illustrations of the vehicle apart from the mark as shown.
For Fifth Wheels and Trailer Vehicles.
Claims use since Jan. 15, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 305,043. JENKINS TELEVISION CORPORATION, Jersey City, N. J. Filed Aug. 26, 1930.

Radiovisor

For Unitary Apparatus for the Electrical Transmission and Reception of Sound, Images, Facsimiles, Pictures, and Graphic Representations.
Claims use since July 1, 1928.

Ser. No. 314,054. JOHNS-MANVILLE CORPORATION, New York, N. Y. Filed May 1, 1931.

OHMSTONE

For Electric Insulating Compounds and Panels and Plates Made Therefrom for Use in Mounting Switches, Fuses, Relays, and the Like.
Claims use since Dec. 18, 1930.

Ser. No. 314,060. JOHN D. LANDERMAN, Brookline, Mass., assignor to Electric Steam Heating Corporation, a Corporation of Massachusetts. Filed May 1, 1931.

ELEKTRA-STEEM

Applicant hereby disclaims the exclusive right to the use of "Steem" apart from the mark as shown.
For Electric Steam Generators, Portable Electric House Heaters, and Parts Thereof.
Claims use since Dec. 1, 1926.

Ser. No. 321,642. GENERAL CONTROL CORPORATION, Wilmington, Del., and Minneapolis, Minn. Filed Dec. 1, 1931.

GC CONTROL

No claim is made to the word "Control" apart from the mark shown in the drawing.
For Electric Generator Control Apparatus Consisting of Automatic Synchronizers, Parts Thereof, and Associated Mechanism—Namely, Automatic Synchronizing Equip-

ment and Automatic Speed Matching Equipment; Load Control Devices, Electrical Switches, Frequency Control Equipment, Timing Devices, Time Control Equipment, Relays, Supervisory Control Apparatus, Panel Boards, Switch Boards, Voltage Regulating Equipment, Automatic Starting Equipment for All Types of Prime Movers, and Automatic Control Equipment for Electric Generating and Transmission Systems.
Claims use since Sept. 24, 1931.

Ser. No. 322,479. DOANE BIGELOW, Mount Washington, Ohio. Filed Dec. 28, 1931.

NUGLO

For Electric Lamp Bulbs.
Claims use since Nov. 11, 1931.

Ser. No. 324,312. FISCHBEIN COMPANY, INC., Minneapolis, Minn. Filed Feb. 19, 1932.

"SEW-A-FAN"

No claim is made, however, to the word "Fan" apart from the mark as shown on the drawing.
For Sewing Machine Fans and Air Cut-Off for Sewing Machine Fans.
Claims use since Dec. 4, 1931.

Ser. No. 324,502. THE ARROW-HART & HEGEMAN ELECTRIC COMPANY, Hartford, Conn. Filed Feb. 26, 1932.

Robia

For Sockets, Plugs, Receptacles, Switches, and Connecting Devices for Electrical Wiring Devices.
Claims use since Feb. 12, 1932.

Ser. No. 324,748. LAMP TIME CORPORATION, Milwaukee, Wis. Filed Mar. 3, 1932.

LAMP-TIME

For Electric Lamps of the Table and Floor Type Adapted to Have Incorporated Therewith an Electric Clock.
Claims use since Dec. 4, 1930.

Ser. No. 324,944. ATLAS SUPPLY COMPANY, Newark, N. J. Filed Mar. 9, 1932.

AcTo

For Spark Plugs, Flashlights, Flashlight Batteries, Electric Light Bulbs, Electric Fuses, and Electrician's Friction Tape.
Claims use since Feb. 18, 1932.

Ser. No. 325,339. NATIONAL BATTERY COMPANY, St. Paul, Minn. Filed Mar. 21, 1932.



For Storage Batteries.
Claims use since Jan. 22, 1932.

Ser. No. 325,413. ROYAL BATTERY CORPORATION, New Brunswick, N. J., and New York, N. Y. Filed Mar. 23, 1932.

ROYCO

For Electric Storage Batteries.
Claims use since Jan. 12, 1932.

Ser. No. 325,427. DURO TEST CORPORATION, New York, N. Y. Filed Mar. 24, 1932.

DURO TEST

For Incandescent Electric Lamps.
Claims use since Nov. 1, 1929.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 324,329. JOHN W. WITKO, Wilkes-Barre, Pa. Filed Feb. 19, 1932.



The figure is fanciful and not that of a living person.
For a Table Board Game Played with Pieces.
Claims use since Dec. 15, 1931.

Ser. No. 324,807. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio. Filed Mar. 4, 1932. Under ten-year proviso.

THE N.Y.
CONSOLIDATED CARD CO.

For Playing Cards.
Claims use since 1872.

Ser. No. 325,289. WALLACE G. GROSSMAN, New York, N. Y. Filed Mar. 19, 1932.

N-R-G

For Exercising Machines.
Claims use since Feb. 26, 1932.

Ser. No. 325,291. IDEAL NOVELTY & TOY CO., Brooklyn, N. Y. Filed Mar. 19, 1932.

IDEAL

For Dolls.
Claims use since 1910.

Ser. No. 325,436. MAINE YACHT CORPORATION, Dover-Foxcroft, Me. Filed Mar. 24, 1932.

TOYYOTS

For Toy Boats.
Claims use since Dec. 11, 1931.

Ser. No. 325,508. GEORGE D. BAROK, doing business as The Barok Company, Columbus, Ohio. Filed Mar. 26, 1932.

→ 21 ←
BLAK-JAK

For Coin-Controlled Ball-Projecting Amusement Device.
Claims use since Nov. 16, 1931.

Ser. No. 325,753. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y. Filed Apr. 2, 1932.

Du-Ro

For Athletic Appliances—Namely, Rowing Machines.
Claims use since Feb. 25, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 294,047. THE SMITH POWER TRANSMISSION COMPANY, Cleveland, Ohio. Filed Jan. 18, 1930.

FlexoiD

For Composition Flexible Couplings for Machinery Shafts.
Claims use since Jan. 1, 1925.

Ser. No. 313,025. THE AUTO-PRIME PUMP COMPANY, Cleveland, Ohio, assignor to Westco Pump Corporation, Davenport, Iowa, a Corporation of Delaware. Filed Apr. 7, 1931.



Applicant claims ownership of trade-mark registered under Number 251,388 on January 8, 1929.
For Pumps and Parts Thereof.
Claims use since Sept. 23, 1930.

Ser. No. 319,505. THE WASHBURN COMPANY, Worcester, Mass. Filed Sept. 28, 1931.

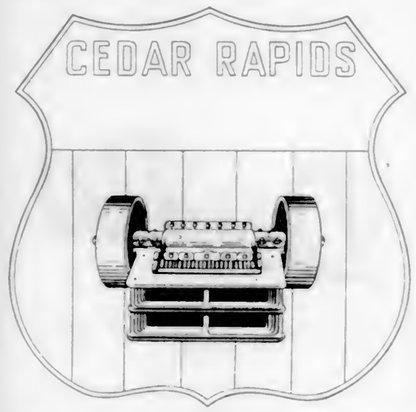


The mark consists of two cream colored bands applied to the handle, one band being spaced near each end thereof. No claim is made to the form of the handle apart from the mark as shown and described.

For Kitchen and Household Tools or Utensils—Namely, Cake Turners, Potato Mashers, Knives Made of Base Metal, Ice Picks, Kitchen Forks, Can Openers, Egg Beaters, and Various Types of Kitchen Spoons.

Claims use since Sept. 1, 1931.

Ser. No. 321,881. IOWA MANUFACTURING COMPANY, Cedar Rapids, Iowa. Filed Dec. 7, 1931.



Applicant hereby disclaims exclusive right to the use of the words "Cedar Rapids" and the representation of the machinery shown in the drawing apart from the mark shown.

For Road Material Handling Equipment—I. e., Drag Scraper Buckets, Hoists, Reciprocating Feeders, Belt Conveyors, Traction Loaders, Elevators, Vibrator Screens, Scrubbers, Steel Bins, Revolving Screens, Primary Stone Crushers, Reduction Crushers, Steel Trucks for Road Material Equipment, Sheaves, Sprockets, Screening and Loading Plants, Washing Plants, Portable Stone Crushing Plants, Cement Mixers, Bituminous Road Mixers, Bituminous Road Pre-Mixing Plants.

Claims use since Apr. 24, 1931.

Ser. No. 322,927. CATTARAUGUS CUTLERY COMPANY, Little Valley, N. Y. Filed Jan. 12, 1932.

"A Knife to WHITT-L KRAFT Make Things With"

No claim is made to the exclusive use of the slogan "A Knife to Make Things With."

For Pocket Knife.

Claims use since Nov. 20, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 321,409. ZEISS IKON AKTIENGESELLSCHAFT, Dresden, Germany. Filed Nov. 21, 1931.

MIRAX

For Photographic Apparatus—Namely, Photographic Lenses, Shutters, Light Filters, View Finders, Stereoscopes, Automatic Releases, Tripods, Tripod Heads, Camera Filters, Portable Dark Rooms, Dark-Room Lamps, Sensitized Plates, Sensitized Films, Sensitized Roll Films, Sensitized Film Packs, Sensitized Photographic Papers, Sensitized Photographic Cards, Masks, Vignettes, Finders for Picture Delineation, Plate Slides, Roll Film Slides, Film-Pack Slides, Developing Basins, Fixing Basins, Photographic-Developing Machines, Dropping Bottles, Plate Lifters, Plate Holders, Draining Clamps for Films, Washing and Draining Racks, Washing Vats, Washing Tanks, Printing Frames, Retouching Desks, Retouching Mirrors, Flash-Light Lamps, Scales for Use in the Art of Photography, Weights for Scales, Thermometers, Enlarging Apparatus, Projection Apparatus for Episcopic Projection, Projection Apparatus for Diascopic and Episcopic Projection, Projection Apparatus for Lantern Slides, Projection Apparatus for Microscopic Projection, Cinematographic Moving-Picture Cameras, Cinematographic Projectors and Machines, Cine Printing Machines, Film Rewinders, Film Examining Machines, Film Counters, Projection Tables, Projection Screens, Slide Carriers Forming Part of Projecting Machines, Condenser Lenses, Prisms, Shooting Cinemas, Hemometers, Exposure Meters, Apparatus for Testing Powders and Explosives, Chronographs, Measuring Instruments for Film Backward Movement, Gas-Pressure Meters; Instruments for Measuring the Tensive Force of Bullets, Barometers, Field Prism Glasses, Telescopes, Microscopes, Densographs, Spectrodensographs, Calculating Machines.

Claims use since Apr. 24, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 323,398. GEMLOID CORPORATION, New York, N. Y. Filed Jan. 25, 1932.

GEMLOID

For Imitation Precious Stones Made of Plastic Matters.

Claims use since Apr. 1, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 325,780. GRAND RAPIDS STORE EQUIPMENT CORPORATION, Grand Rapids, Mich. Filed Apr. 4, 1932.

CREAM-O-MATIC

For Ice Cream Making Machinery.

Claims use since Mar. 15, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 324,159. EVR-KLEAN SEAT PAD COMPANY, St. Louis, Mo. Filed Feb. 15, 1932.

DeLUXE

For Tailored Seat Covers, Seat Pads, Seat Shields, Tailored Automobile Seat Covers and Seat Pads and Shields, Tailored Chair Covers; Chair Pads and Chair Shields Made of Fabric, Leather, Imitation Leather, and Matting, and Combinations Thereof.

Claims use since March, 1921.

Ser. No. 324,161. EVR-KLEAN SEAT PAD COMPANY, St. Louis, Mo. Filed Feb. 15, 1932.

ROYAL

For Tailored Seat Covers, Seat Pads, Tailored Automobile Seat Covers and Seat Pads, Tailored Chair Covers and Chair Pads, Made of Fabric, Leather, Imitation Leather, and Matting, and Combinations Thereof.

Claims use since September, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

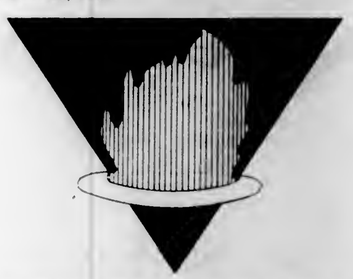
Ser. No. 312,429. HART OIL BURNER CORPORATION, Peoria, Ill. Filed Mar. 23, 1931.



For Automatically Controlled Liquid or Gaseous Fuel Burning Devices.

Claims use since May 23, 1930.

Ser. No. 324,541. STERNO CORPORATION, New York, N. Y. Filed Feb. 26, 1932.



The drawing is lined for the color red which is claimed as a material feature of the mark.

For Stoves, Heaters, Burners, Toasters, Warmers, and Cooking and Heating Outfits and Appliances, Including Teakettle Heating Outfits, Sadiron Heating Outfits, Soldering Iron Heaters, Curling Iron Heaters, Straightening Combs, Cooking Stands, Kitchenettes, Camp Cooking Outfits, Flame Extinguishers, Wind Shields, Torches, and Sterilizing Outfits, in Connection with Which a Solidified Alcohol is Employed as Fuel.

Claims use since Nov. 21, 1931.

Ser. No. 324,573. SURFACE COMBUSTION CORPORATION, Toledo, Ohio. Filed Feb. 27, 1932.

THRIFT

For Automatic Constant Demand Gas-Fired Water Heaters.

Claims use since Mar. 31, 1931.

Ser. No. 325,310. UNI-FLO GRILLE CORPORATION, Detroit, Mich. Filed Mar. 19, 1932.

UNI-FLO

For Grilles for Wall or Floor Registers or Openings Through Which Heated, Cooled, or Ventilating Air is to be Passed or Providing One or More Walls of an Enclosure or Cabinet Through Which Air is to be Circulated.

Claims use since Sept. 21, 1931.

CLASS 37

Paper and Stationery

Ser. No. 305,398. FRANK FUREDY, Penn-Wynne, Pa., assignor to George M. Hessdoefer, Philadelphia, Pa. Filed Sept. 6, 1930.

Colorgraph

For Pencils and Parts Therefor.

Claims use since Nov. 15, 1925.

Ser. No. 319,754. JERE L. WENTZ, doing business as Clifton Kraft Works, Clifton, N. J. Filed Oct. 2, 1931.

KEEP-A-POINT

For Hand Pencil Sharpeners and Hand Pencil Sharpeners Mounted in Containers.

Claims use since Feb. 20, 1931.

Ser. No. 324,814. ACE ART COMPANY, Reading, Mass. Filed Mar. 5, 1932.

JUNIOR NUACE

For Corner Mounts for Photographs.

Claims use since Jan. 7, 1932.

Ser. No. 325,494. WHITE & WYCKOFF MFG. COMPANY, Holyoke and Riverside, Mass. Filed Mar. 25, 1932.

WHITEE WYCKOFF

Applicant disclaims the outline of the label apart from the mark shown in the drawing.
For Writing and Printing Paper and Papetries.
Claims use since Jan. 10, 1932.

Ser. No. 325,623. ARNOLD A. SCHWARTZ, Dunellen, N. J. Filed Mar. 29, 1932.

IVORSTERIO MATRIX

No claim is made for the word "Matrix" shown on the accompanying drawing.
For Prepared Matrix Paper for Stereotyping.
Claims use since July, 1930.

CLASS 38

Prints and Publications

Ser. No. 319,277. FREDERICK HEIZER WRIGHT, New York, N. Y. Filed Sept. 18, 1931.

Detective Eye
WANTED

For Publication and/or Monthly Magazine.
Claims use since Aug. 18, 1931.

Ser. No. 319,278. FREDERICK HEIZER WRIGHT, New York, N. Y. Filed Sept. 18, 1931.

REWARDS
Magazine

For Periodical and/or Monthly Magazine.
Claims use since Aug. 18, 1931.

Ser. No. 322,350. ALVIN I. GARDNER, Pittsburgh, Pa. Filed Dec. 21, 1931.

VARIGRAPHS

For Section of a Newspaper.
Claims use since Dec. 1, 1931.

Ser. No. 323,271. NATIONAL CATHOLIC WELFARE CONFERENCE, Washington, D. C. Filed Jan. 21, 1932.

CATHOLIC
·ACTION·
A National Monthly

For Monthly Magazine.
Claims use since Jan. 1, 1932.

Ser. No. 324,030. THE CLAYTON MAGAZINES, INC., New York, N. Y. Filed Feb. 10, 1932.

COMPLETE
Western Love
NOVELETTES

For Periodical.
Claims use since Nov. 25, 1931.

Ser. No. 325,441. EMMETT L. SHEEHAN, doing business as The Republican Publishing Company, Washington, D. C. Filed Mar. 24, 1932.

THE NATIONAL REPUBLICAN

For Newspaper.
Claims use since Mar. 23, 1932.

Ser. No. 325,462. AMERICAN BUSINESS PUBLICATIONS, INC., New York, N. Y. Filed Mar. 25, 1932.

NUGENTS

For Monthly Magazine.
Claims use since September, 1930.

Ser. No. 325,531. FRANCIS WARD RICE, Syracuse, N. Y. Filed Mar. 26, 1932.

AROUND TOWN
Patter About Places, People and Prevailing Tastes

For Newspaper Section or Column.
Claims use since Mar. 7, 1932.

Ser. No. 325,551. AMERICAN INSTITUTE OF BANKING, New York, N. Y. Filed Mar. 28, 1932.

AIB

For Booklets.
Claims use since June, 1918.

Ser. No. 325,621. POSTAGE AND THE MAILBAG, INC., Brooklyn, N. Y. Filed Mar. 29, 1932.

Business Letters

For Magazine.
Claims use since Oct. 28, 1931.

Ser. No. 325,785. THE G. S. S. PUBLISHING COMPANY, INC., New York, N. Y. Filed Apr. 4, 1932.

Jest

For Periodical.
Claims use since Dec. 15, 1931.

Ser. No. 325,883. THREE STAR PUBLISHING COMPANY, New York, N. Y. Filed Apr. 5, 1932.



For Monthly Periodical.
Claims use since Apr. 1, 1932.

CLASS 39

Clothing

Ser. No. 309,956. L. BAMBERGER & Co., Newark, N. J. Filed Jan. 15, 1931.

"Under the China-berry Tree"

For Children's Dresses, Coats, and Sweater Suits.
Claims use since Nov. 21, 1930.

Ser. No. 322,530. LEON H. WOOLSEY, doing business as Leon Woolsey, Oakland, Calif. Filed Dec. 29, 1931.

Londonshire
HAND NEEDLED

The words "Hand Needled" are disclaimed apart from the mark as shown.
For Men's Suits and Overcoats.
Claims use since Feb. 10, 1931.

Ser. No. 323,040. HARTMAN, HURVITZ & SCHANKE, INC., New York, N. Y. Filed Feb. 8, 1932.

GOLD MEDAL FROCKS

The words "Gold Medal", "Frocks", "Style—Quality, & Value" are disclaimed apart from the mark as disclosed by the drawing.
For Dresses and Frocks for Women, Misses, and Children.
Claims use since Jan. 1, 1932.

Ser. No. 324,787. GOLDFIELD & NEWMAN, New York, N. Y. Filed Mar. 4, 1932.



No claim being made to the exclusive use of the word "Togs" apart from the mark as shown in the drawing.
For Women's, Misses', and Children's Wearing Apparel—Namely, Suits, Coats, Dresses, Skirts, Blouses, and Jackets.
Claims use since Dec. 1, 1931.

Ser. No. 324,816. BUCKINGHAM & HECHT, San Francisco, Calif. Filed Mar. 5, 1932.

STURDY-WORKER

For Leather Boots and Leather Shoes.
Claims use since Feb. 3, 1932.

Ser. No. 324,822. W. T. GRANT COMPANY, Lynn, Mass., and New York, N. Y. Filed Mar. 5, 1932.

TOY TOWN



For Boys' and Children's Outer Clothing—Namely, Boys' Wash Suits, Blouses, Knickers, Caps, Ties, and Girls' Dresses, Except Hosiery.
Claims use since Feb. 1, 1932.

Ser. No. 324,905. SAUTER BROTHERS, New York, N. Y. Filed Mar. 8, 1932.



The drawing is lined to indicate the color blue. The entire trade-mark is usually represented in said color. Exclusive use of the words "Baby Wear" is not claimed except in association with the other features of the trade-mark.

For Apparel for Infants and Children—Namely, Binders, Kimonos, Gertrudes, Gowns, Non-Slip Binders, Sacques, Infants' Bath Robes, Children's Bath Robes, Buntings and Sleeping Bags.
Claims use since Jan. 24, 1928.

Ser. No. 324,920. ALBEE SHOE COMPANY LIMITED, Montreal, Quebec, Canada. Filed Mar. 3, 1932.



For Ladies' Leather and Fabric Shoes.
Claims use since Nov. 3, 1931.

Ser. No. 325,147. LAWNDALE GARMENT COMPANY, Chicago, Ill. Filed Mar. 15, 1932.



The picture is that of an imaginary individual known to applicant's trade as Dottie Lee.
For Ladies' House Dresses and Silk Underwear.
Claims use since Feb. 1, 1932.

Ser. No. 325,157. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa. Filed Mar. 15, 1932.

Letitia

For Corsets.
Claims use since Aug. 23, 1910.

Ser. No. 325,299. POHATCONG HOSIERY MILLS, INC., Washington, N. J. Filed Mar. 19, 1932.



The drawing consists of a fanciful picture.
For Hosiery.
Claims use since Mar. 10, 1932.

Ser. No. 325,527. RICHARD PAUL INC., Los Angeles, Calif. Filed Mar. 26, 1932.

peds

For Stocking Feet.
Claims use since Mar. 15, 1932.

Ser. No. 325,593. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn. Filed Mar. 28, 1932.

"Ponies"

For Women's and Misses' Underwear.
Claims use since Feb. 2, 1932.

Ser. No. 325,632. AMAZON KNITTING COMPANY, Muskegon, Mich. Filed Mar. 29, 1932.

Amazette

For Children's Waists.
Claims use since Dec. 15, 1931.

Ser. No. 325,682. CONTINENTAL MILLS, INC., Philadelphia, Pa. Filed Mar. 31, 1932.

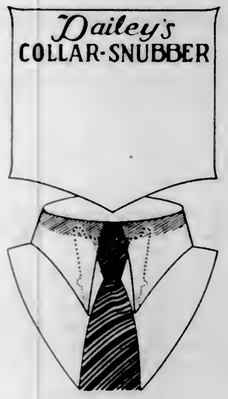
WELTERWEIGHT

For Men's and Boys' Overcoats; Men's and Boys' Topcoats; Men's, Boys', Women's and Girls' Cloaks and Capes; Men's, Boys', Women's and Girls' Suits; Men's, Boys', Women's and Girls' Jackets; Men's and Boys' Vests; and Men's and Boys' Trousers.
Claims use since Apr. 4, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 323,111. W. O. DAILEY MANUFACTURING CO., Portland, Oreg. Filed Jan. 16, 1932.



Color is not an essential feature of the mark, and the lining is merely for the purpose of shading. No claim is made to the word "Collar" nor to the representation of the goods except in the association shown in the drawing.

For Collar Stiffening and Retaining Devices, Such as Supports for Soft Collars Made of Flexible Materials, and for Collar and Necktie Holders or Stays.
Claims use since Feb. 1, 1929.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 305,417. JOSEPH J. SCHEITER & CO., Philadelphia, Pa. Filed Sept. 6, 1930.



The trade-mark consists of single reddish colored yarns woven into the hair cloth at spaced intervals to form parallel lines visible on both sides of the fabric. No claim is herein made to the representation of the goods.

For Haircloth Piece Goods Made of Cotton and Horsehair and Used as an Interlining for Reinforcement of Clothing.
Claims use since May 1, 1930.

Ser. No. 319,751. NEW YORK STATE COMMISSION FOR THE BLIND, New York, N. Y. Filed Sept. 30, 1931.

NEYOCO
INDUSTRIES
NEW YORK

No claim is made for the exclusive right to the words "Industries" and "New York" apart from the mark shown in the drawing.

For Handwoven Rugs of Silk, Cotton, and Mixtures of Silk and Cotton.
Claims use since Apr. 5, 1930.

Ser. No. 322,017. INDEPENDENT WHOLESALE DRY GOODS ASS'N. INC., New York, N. Y. Filed Dec. 11, 1931.



The lining on the drawing indicates the color gold.

For Cotton, Rayon, Linen and Silk Piece Goods, Cotton Sheets, and Pillow Cases.
Claims use since Nov. 14, 1931.

Ser. No. 323,008. S. H. KRESS & Co., New York, N. Y. Filed Jan. 14, 1932.

BONITA

For Hair Nets, Sport Nets, Linen Towels and Toweling, Sheets, Tablecloths, Textile Blankets, Textile Bath Towels, Mattress Ticking, Counterpanes, Water Wave Nets, Handkerchiefs, Turkish Towels, Pillow Cases, Napkins, Seamless Textile Rugs, Face Cloths, and Bedspreads.
Claims use since May 15, 1931.

Ser. No. 324,059. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed Feb. 11, 1932.

Peppolap

For Pile Fabrics in the Piece.
Claims use since Feb. 3, 1932.

Ser. No. 324,988. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J. Filed Mar. 10, 1932.

RUBBEX

For Absorbent Piece Goods in the Nature of Gauze for Cleaning, Polishing, and General Use.
Claims use since Feb. 10, 1932.

Ser. No. 325,402. HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed Mar. 23, 1932.

REGALIA
BROADLOOM CARPET

No claim is made to the words "Broadloom Carpet" apart from the mark as shown.
For Textile Carpets.
Claims use since Mar. 5, 1932.

Ser. No. 325,420. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed Mar. 24, 1932.

Velgera

For Pile Fabrics in the Piece.
Claims use since Mar. 15, 1932.

Ser. No. 325,456. BIGELOW-SANFORD CARPET CO., INC., Thompsonville, Conn. Filed Mar. 25, 1932.

LIVELY WOOL

No claim is made to the exclusive use of the word "Wool" apart from the mark shown on the drawing.
For Woven Textile Rugs and Carpets.
Claims use since Mar. 3, 1932.

Ser. No. 325,458. BIGELOW-SANFORD CARPET CO., INC., Thompsonville, Conn. Filed Mar. 25, 1932.



No claim is made to the exclusive use of the word "Wool" apart from the mark shown on the drawing.
For Woven Textile Rugs and Carpets.
Claims use since Mar. 3, 1932.

Ser. No. 325,529. PEPPERELL MANUFACTURING COMPANY, Boston, Mass. Filed Mar. 26, 1932.



For Blankets Woven from Cotton, Wool or Other Fibres or a Combination of Cotton, Wool, or Other Fibres.
Claims use since July 28, 1930.

Ser. No. 325,681. CONTINENTAL MILLS, INC., Philadelphia, Pa. Filed Mar. 31, 1932.

WELTERWEIGHT

For Woven Woolen and Woven Worsted Fabric, Special Woven Fabrics Having a Fleecy Pile or Surface in the Piece, Knitted Woolen and Worsted Cloths, Jersey Cloths, Eiderdowns, Chinchillas, and Special Knitted Fabrics Having a Fleecy Pile or Surface in the Piece.
Claims use since Apr. 4, 1931.

Ser. No. 325,724. PRINCE LAUTEN CORP., New York, N. Y. Filed Apr. 1, 1932.

TAFFESOIE

For Rayon Fabrics in the Piece.
Claims use since Mar. 1, 1932.

Ser. No. 325,744. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 2, 1932.

CHOCONESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Mar. 31, 1932.

Ser. No. 325,746. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 2, 1932.

MATTENESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Mar. 31, 1932.

Ser. No. 325,803. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Apr. 4, 1932.

Etonvel

For Velvets in the Piece.
Claims use since Mar. 24, 1932.

Ser. No. 325,804. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Apr. 4, 1932.

RIOVEL

For Velvets in the Piece.
Claims use since Mar. 24, 1932.

Ser. No. 325,805. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Apr. 4, 1932.

Spritzel

For Velvets in the Piece.
Claims use since Mar. 24, 1932.

CLASS 43

Thread and Yarn

Ser. No. 325,651. HANES HOSIERY MILLS CO., Winston-Salem, N. C. Filed Mar. 30, 1932.

LAZEEN

For Yarns of Silk, Wool, Cotton, and Artificial Silks.
Claims use since Mar. 17, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 320,704. JACOB STEIN, doing business as Climax Rubber Company, New York and Brooklyn, N. Y. Filed Oct. 31, 1931.



For Medicated Dress Shields, Sanitary Baby Pants, Sanitary Aprons, Sanitary Step-Ins, Sanitary Bloomers, Sanitary Chemises, Sanitary Shadow-Skirts, Sanitary Belts, Nursery Chair Ring, Shampoo-Collars, Syringe-Bags, and Surgeon's Gloves.
Claims use since October, 1930.

Ser. No. 324,775. THE L. D. CAULK COMPANY, Milford, Del. Filed Mar. 4, 1932.

SYNCOTE

For Modified Cocoa Butter Prepared for Use as a Coating for Porcelain or Similar Tooth Restorations and as a Lubricant in Other Dental Operations.
Claims use since Feb. 20, 1932.

Ser. No. 325,164. FAICHNEY INSTRUMENT CORPORATION, Watertown, N. Y. Filed Mar. 16, 1932.

ALMAC

For Clinical Thermometers, Hypodermic Syringes, and Hypodermic Needles.
Claims use since Apr. 1, 1927.

Ser. No. 325,474. KOTEX COMPANY, Chicago, Ill. Filed Mar. 25, 1932.

PHANTOM

For Sanitary Napkins.
Claims use since Mar. 21, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 320,788. HENRY K. ADAMS, doing business as Nacalsun Company, Eugene, Oreg. Filed Nov. 4, 1931.

NaCalSun

For Natural Mineral Waters.
Claims use since Jan. 1, 1931.

Ser. No. 322,971. JACOB S. POLEFSKY, New York, N. Y. Filed Jan. 13, 1932.

CHEERBIR

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Extracts for Making the Same.
Claims use since Apr. 15, 1930.

Ser. No. 325,827. P. J. KASPER SONS CO., Chicago, Ill. Filed Apr. 5, 1932.

ZIZZ

For Non-Alcoholic, Non-Cereal, Maltless Beverages, and for Syrups and Compounds in the Form of Powders, Cubes, and Pellets Used in the Preparation of Such Beverages.
Claims use since Apr. 1, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 281,144. FREDERICK P. GOODWIN, doing business as Sun Mix Corporation, Strawn, Ill. Filed Mar. 22, 1929.

Dr. Chesney's
SUN-MIX

Applicant disclaims the right to the exclusive use of the word "Mix" apart from the trade-mark as shown in the drawing.
For Poultry Feed Consisting of a Compound Mixture.
Claims use since Oct. 1, 1928.

Ser. No. 309,010. L. J. STOPPER, doing business as Keystone Malt Company, Williamsport, Pa. Filed Dec. 15, 1930.

Old English Style
IXL

No claim is made to the exclusive use of the words "Old English Style" apart from the mark as shown in the drawing.
For Malt Syrup.
Claims use since Aug. 15, 1929.

Ser. No. 316,644. BERT R. J. HASSELL, Rockford, Ill. Filed July 6, 1931.

FROSTEEKORN

For Ice Cream Confection Bar and Ice Cream in Brick and Bulk Form.
Claims use since June 20, 1931.

Ser. No. 318,391. CHOCOLAT SUCHARD SOCIETE ANONYME, Neuchatel, Switzerland. Filed Aug. 25, 1931.

Suchard
Orange

The words "Suchard" and "Orange" are lined to indicate gold, and the remainder of the design is lined to indicate orange; said word "Orange" is, for the purpose of trade-mark registration, hereby disclaimed apart from other features of the mark without, however, waiving any common law rights in the same.
For Sweet Chocolate and Chocolate Pastilles.
Claims use since May, 1931.

Ser. No. 319,150. OKLAHOMA CITY MILL & ELEVATOR COMPANY, Oklahoma City, Okla. Filed Sept. 17, 1931.

WAVERLY

For Wheat Flour.
Claims use since May 1, 1917.

Ser. No. 321,199. THE DEAN-LILLY COFFEE AND SPICE COMPANY, doing business as Dean's, Memphis, Tenn. Filed Nov. 17, 1931.

DEAN'S
VACUUM PACKED
HIGH "WE FEED YOUR GRANDMOTHERS" GRADE
PERCOLATOR
COFFEE

Applicant makes no exclusive claim to the word "Dean's" except in the association shown, and applicant makes no exclusive claim to the words "Vacuum Packed High Grade Percolator Coffee" except in the association shown.
For Coffee.
Claims use since December, 1886.

Ser. No. 321,614. QUAKER CITY WHOLESALE GROCERY COMPANY, INC., Philadelphia, Pa. Filed Nov. 30, 1931.

PENN TREATY

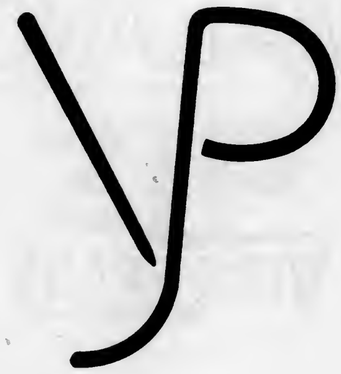
For Canned Fruits, Canned Vegetables, Canned Fish, Breakfast Cereals, Coffee, Tea, Spices, Catsup, Jellies, Jams, Fruit Preserves, Macaroni, Canned Milk, Molasses, Table Syrup, Olives, Peanut Butter, Mayonnaise, Pickles, Mincemeat, Vinegar, and Canned Soups.
Claims use since Oct. 21, 1931.

Ser. No. 322,718. F. G. VOOT & SONS, INCORPORATED, Philadelphia, Pa. Filed Jan. 4, 1932.

FAIRDALE FARM

For Sausage and Scrapple.
Claims use since Nov. 20, 1931.

Ser. No. 323,814. GARAT & COMPANY, Whiterock, Nev. Filed Feb. 4, 1932.



For Live Stock—Namely, Cattle.
Claims use since 1852.

Ser. No. 324,137. CROWN LABORATORIES, Ogdensburg, N. Y. Filed Feb. 12, 1932.

VITAX

For a Vitamin B Food—Namely, Yeast.
Claims use since Jan. 4, 1932.

Ser. No. 324,538. MILLER HIGH LIFE COMPANY, doing business as Milo Malt Co., Milwaukee, Wis. Filed Feb. 26, 1932.

Westminster

For Concentrated Malt Syrup as a Food Product.
Claims use since Feb. 12, 1932.

Ser. No. 324,713. REX LAPAYNE AND C. F. BLAKE, Glendale, Calif. Filed Mar. 2, 1932.

Electrocuted Hot Dogs

No claim is made to the words "Hot Dogs" apart from the mark as shown.
For Frankfurter Sandwiches, Weinerwurst Sandwiches, Hamburger Sandwiches, and Sausage Sandwiches.
Claims use since Feb. 15, 1932.

Ser. No. 324,721. PECANO MANUFACTURING COMPANY, Manheim, Pa. Filed Mar. 2, 1932.

WALANO

For Meal for Human Consumption Manufactured from Nut Kernels.
Claims use since Jan. 8, 1932.

Ser. No. 324,954. CAIRO SYRUP COMPANY, Atlanta, Ga. Filed Mar. 9, 1932.

WIRE-GRASS

For Cane Syrup.
Claims use since October, 1910.

Ser. No. 325,053. WESTERN MARYLAND DAIRY CORPORATION, doing business as Fairfield Western Maryland Dairy, Baltimore, Md. Filed Mar. 11, 1932.

FEED-O-LAC

For Poultry and Stock Feeding Food.
Claims use since Jan. 15, 1925.

Ser. No. 325,162. THE COLORADO POTATO FLAKE & MANUFACTURING COMPANY, Denver, Colo. Filed Mar. 16, 1932.



The pictorial representation of a potato waffle forms no part of the trade-mark sought to be registered and is hereby disclaimed.
For Potato Waffles.
Claims use since Jan. 1, 1932.

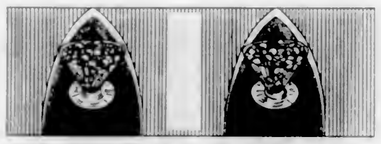
Ser. No. 325,298. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed Mar 19, 1932.

Pillsbury's

ROI DU NORD

For Flour Made from Wheat.
Claims use since October, 1926.

Ser. No. 325,314. BARRON-GRAY PACKING COMPANY, San Jose, Calif. Filed Mar. 21, 1932.



For Canned Fruit Cocktail.
Claims use since July, 1931.

Ser. No. 325,624. SUPERIOR PACKING CORP., New York, N. Y. Filed Mar. 29, 1932.

MANHATTAN CLUB

For Malt Syrup.
Claims use since Feb. 26, 1932.

Ser. No. 325,653. HENRY & CLOSE CO., Boston, Mass. Filed Mar. 30, 1932.



The words "Brand" and "Fresh Fillets" are disclaimed apart from the mark as shown.
For Fresh Fish Fillets.
Claims use since Mar. 1, 1932.

Ser. No. 325,654. HENRY & CLOSE CO., Boston, Mass. Filed Mar. 30, 1932.



The words "Brand" and "Fancy Frozen Fillet" are disclaimed apart from the mark as shown.
For Frozen Fish Fillets.
Claims use since Feb. 25, 1932.

Ser. No. 325,685. GALBAN & CO. INC., New York, N. Y. Filed Mar. 31,. 1932.

GALCO

For Food Products—Namely, Dried Peas and Beans, Lentils, Barley, and Rice.
Claims use since Dec. 8, 1931.

Ser. No. 325,736. ZIMMERMAN BROTHERS, Lock Haven, Pa. Filed Apr. 1, 1932.

TUDOR HALL



For Malt Syrup Used as a Food Product.
Claims use since June 1, 1931.

Ser. No. 325,747. EAST WHITTIER CITRUS ASSOCIATION, Whittier, Calif. Filed Apr. 2, 1932.

NOTABLE

For Fresh Citrus Fruits.
Claims use since Mar. 31, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 324,367. THE CANADA LAST COMPANY LIMITED, Preston, Ontario, Canada. Filed Feb. 23, 1932.

ZIP

For Lasts and Trees for Boots and Shoes.
Claims use since Jan. 30, 1931.

Ser. No. 325,619. GRENOLE SALES CORPORATION, New York, N. Y. Filed Mar. 29, 1932.



For Fly Catcher.
Claims use since Mar. 1, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 10, 1932

293,818. TABLE GAME SHOWING SPACES FOR PLACING PLAYING PIECES. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed December 23, 1931. Serial No. 322,398. PUBLISHED MARCH 1, 1932. Class 22.

293,819. MEN'S AND BOYS' SUITS AND PANTS MADE OF SEERSUCKER. A. SOLOMON, New Orleans, La.
Filed December 23, 1931. Serial No. 322,402. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,820. ARTIFICIAL EYELASHES. SAMUEL SOMMER, doing business as S. Sommer & Co., San Francisco, Calif.
Filed December 23, 1931. Serial No. 322,403. PUBLISHED FEBRUARY 23, 1932. Class 40.

293,821. DYES USED IN THE DYEING OF ACETATE SILKS. JOHN CAMPBELL & CO., New York, N. Y.
Filed December 24, 1931. Serial No. 322,416. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,822. SHOES OF LEATHER AND FABRICS OR COMBINATIONS THEREOF. CUSHMAN-HOLLIS COMPANY, Auburn, Me.
Filed December 26, 1931. Serial No. 322,454. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,823. SHOES OF LEATHER AND FABRICS OR COMBINATIONS THEREOF. CUSHMAN-HOLLIS COMPANY, Auburn, Me.
Filed December 26, 1931. Serial No. 322,455. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,824. MEDICINES FOR DIABETES. ANTICOMANGES. M. B. H., Berlin-Halensee, Germany.
Filed September 28, 1931. Serial No. 319,469. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,825. PREPARATION USED IN THE TREATMENT OF DISORDERED FUNCTIONS OF THE NASAL MUCOUS MEMBRANES. JACQUES ROMANO, New York, N. Y.
Filed September 29, 1931. Serial No. 319,539. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,826. ACCELERATING AND PENETRATING AGENT FOR USE IN THE DEHAIRING, TANNING, AND BATING BATHS. SYNTHETIC CHEMICALS, INC., Jersey City, N. J.
Filed October 3, 1931. Serial No. 319,708. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,827. CHEMICALS. FEEDWATERS, INC., New York, N. Y.
Filed October 6, 1931. Serial No. 319,770. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,828. FROZEN MALTED CHOCOLATE ICE CREAM BARS. HAROLD BAKER, Fort Atkinson, Wis.
Filed October 7, 1931. Serial No. 319,801. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,829. COSMETICS—NAMELY, CREAMS AND OINTMENTS FOR TREATMENT OF THE SKIN. IGNAZ ZILZ, Vienna, Austria.
Filed October 16, 1931. Serial No. 320,145. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,830. BREAD. ZINSMASTER BREAD COMPANY, Duluth, Minn.
Filed October 29, 1931. Serial No. 320,615. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,831. SANDWICHES. THOMAS E. MCEVOY, Wichita, Kans.
Filed October 29, 1931. Serial No. 320,620. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,832. CHEESE CAKE. TRANS-AMERICA BAKING CO., Chicago, Ill.
Filed October 30, 1931. Serial No. 320,648. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,833. APPARATUS FOR CONNECTION IN OR TO WATER SUPPLY LINES OR SYSTEMS FOR PURIFYING, FILTERING, AND/OR SOFTENING WATER—NAMELY, OF THE TYPE COMPRISING A TANK OR TANKS HAVING FILTERING MEDIUM OR ZEOLITE MATERIAL THEREIN FOR FILTERING AND/OR SOFTENING WATER THAT PASSES THROUGH THE TANK OR TANKS. WARD-LOVE PUMP CORPORATION, Rockford, Ill.
Filed November 3, 1931. Serial No. 320,772. PUBLISHED MARCH 1, 1932. Class 13.

293,834. COFFEE, TEA, MILK, BREAD, PIES, CAKES, AND SANDWICHES. WILLOW CAFETERIAS, INC., New York, N. Y.
Filed November 5, 1931. Serial No. 320,842. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,835. HAIR DYES. JARET LABORATORIES, INC., Chicago, Ill.
Filed November 9, 1931. Serial No. 320,932. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,836. HAND OPERATED ELECTRIC SWITCHES FOR CONTROL CIRCUITS. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed November 11, 1931. Serial No. 321,059. PUBLISHED FEBRUARY 16, 1932. Class 21.

293,837. LUBRICATING OIL. CONSERVATION CORPORATION OF AMERICA, Portland, Oreg.
Filed November 14, 1931. Serial No. 321,133. PUBLISHED FEBRUARY 16, 1932. Class 15.

293,838. RYE AND GRAHAM FLOUR. MILLBROOK PRODUCTS CO., Somerville, Mass.
Filed November 14, 1931. Serial No. 321,142. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,839. ELECTRICAL SWITCHING APPARATUS, ETC. I-T-E CIRCUIT BREAKER COMPANY, Philadelphia, Pa.
Filed November 20, 1931. Serial No. 321,339. PUBLISHED FEBRUARY 16, 1932. Class 21.

293,840. SHOES MADE OF CANVAS WITH SOLES AND TRIMMING OF RUBBER. NATIONAL BELLAS HESS CO. INC., New York, N. Y.
Filed November 25, 1931. Serial No. 321,499. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,841. SUGAR PECTIN PREPARATION USED IN THE MAKING OF CONFECTIONERY. WHITE-STOKES COMPANY, INC., Chicago, Ill.
Filed November 25, 1931. Serial No. 321,510. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,842. ROSE BUSHES, SHRUBS, VINES, TREES, AND PLANTS. ECONOMY NURSERY COMPANY, Little Silver, N. J.
Filed November 27, 1931. Serial No. 321,534. PUBLISHED FEBRUARY 16, 1932. Class 1.

293,843. FLAVORING EXTRACTS FOR FOODS. FRANCIS E. FOWLER, Jr., doing business as The Calligrapo Company, St. Louis, Mo.
Filed November 30, 1931. Serial No. 321,626. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,844. MILK, CREAM, BUTTER, AND EGGS. HENRY BECKER & SON, INC., Roseland, N. J.
Filed December 1, 1931. Serial No. 321,630. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,845. LADIES' HATS. G. HOWARD HODGE, INC., New York, N. Y.
Filed December 3, 1931. Serial No. 321,727. PUBLISHED FEBRUARY 9, 1932. Class 39.

293,846. HAIR WAVE LOTION. NATHAN HOLLAND, doing business as Holland Laboratories, Brooklyn, N. Y.
Filed December 7, 1931. Serial No. 321,879. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,847. FLY SPRAY FOR CATTLE. CALUMET REFINING CO., Chicago, Ill.
Filed December 8, 1931. Serial No. 321,903. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,848. FOOD FLAVORING EXTRACTS. CHR. HANSEN'S LABORATORY, INC., Little Falls, N. Y.
Filed December 8, 1931. Serial No. 321,910. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,849. LEAK STOPPING COMPOUND, RADIATOR CLEANER, AND AN EMULSION OF THE NATURE OF RUST PREVENTIVE. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed December 8, 1931. Serial No. 321,921. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,850. FLUORINATED HYDROCARBONS USED AS REFRIGERANTS, PROPELLANTS, AND FIRE EXTINGUISHING PREPARATIONS. KINETIC CHEMICALS, INC., Wilmington, Del.
Filed December 8, 1931. Serial No. 321,937. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,851. FLUORINATED HYDROCARBONS USED AS REFRIGERANTS, PROPELLANTS, AND FIRE EXTINGUISHING PREPARATIONS. KINETIC CHEMICALS, INC., Wilmington, Del.
Filed December 8, 1931. Serial No. 321,938. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,852. FLUORINATED HYDROCARBONS USED AS REFRIGERANTS, PROPELLANTS, AND FIRE EXTINGUISHING PREPARATIONS. KINETIC CHEMICALS, INC., Wilmington, Del.
Filed December 8, 1931. Serial No. 321,939. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,853. WHEAT FLOUR. WILKINS-ROGER MILLING CO., INC., Washington, D. C.
Filed December 9, 1931. Serial No. 321,975. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,854. PAPER OR CLOTH TREATED WITH OILS, PAINTS, ETC. IMPERIAL PAPER AND COLOR CORPORATION, Glens Falls, N. Y.
Filed December 10, 1931. Serial No. 321,995. PUBLISHED MARCH 1, 1932. Class 20.

293,855. LADIES' HATS. EVERITT & GRAF, INC., Milwaukee, Wis.
Filed January 22, 1931. Serial No. 310,252. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,856. BIRD FOODS, PET FOODS, GRAVEL FOODS; GRAVEL PAPER FOODS COMPOSED OF CATTLE BONE, IRON, AND CHARCOAL; AND BIRD SEED. SILVERTONE COMPANY, INC., New York, N. Y.
Filed January 22, 1931. Serial No. 310,264. PUBLISHED FEBRUARY 2, 1932. Class 46.

293,857. CANNED FRUITS AND VEGETABLES, COFFEE, TEA, COCOA, ETC. EDWARD T. FENWICK, Washington, D. C.
Filed February 17, 1931. Serial No. 311,132. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,858. PREPARATIONS FOR USE AS A MOUTH WASH AND THROAT GARGLE. BURROUGH BROTHERS MANUFACTURING COMPANY, doing business as Burrough Brothers Laboratories, Baltimore, Md., and Cleveland, Ohio.
Filed February 27, 1931. Serial No. 311,509. PUBLISHED APRIL 14, 1931. Class 6.

293,859. MEDICINE IN POWDER FORM, BEING AN ANTACID TO RELIEVE EXCESS ACIDITY IN THE STOMACH, ACTING ALSO AS A DIGESTANT. OXINOL LABORATORIES, INC., Yonkers, N. Y.
Filed February 27, 1931. Serial No. 311,640. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,860. DRESSED POULTRY. PRIEBE AND SONS, INC., Chicago, Ill.
Filed March 11, 1931. Serial No. 312,015. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,861. MEN'S AND BOYS' SUITS AND OVERCOATS. RUDY SHIREK CLOTHES INC., New York, N. Y.
Filed April 25, 1931. Serial No. 313,806. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,862. CRUDE OILS, CUTTING OILS, CYLINDER OILS, ETC. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa.
Filed May 4, 1931. Serial No. 314,137. PUBLISHED FEBRUARY 16, 1932. Class 15.

293,863. PETROLEUM LUBRICATING OILS. TECUMSEH PETROLEUM COMPANY, INC., Philadelphia, Pa.
Filed May 12, 1931. Serial No. 314,471. PUBLISHED JUNE 30, 1931. Class 15.

293,864. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,802. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,865. GOLF CLUBS, GOLF BALLS, BASEBALLS, BASEBALL GLOVES, BATS, TENNIS BALLS, AND TENNIS RACQUETS. DAVID BERLIN, Detroit, Mich.
Filed May 27, 1931. Serial No. 315,083. PUBLISHED MARCH 1, 1932. Class 22.

293,866. BRASSIÈRES, HOSE SUPPORTERS, AND GARTERS. I. FLEISCHER & SONS, Cincinnati, Ohio.
Filed May 29, 1931. Serial No. 315,195. PUBLISHED FEBRUARY 9, 1932. Class 39.

293,867. LIQUID AND GASEOUS FUELS DISPENSED UNDER PRESSURE IN CONTAINERS AND IN A LIQUID STATE AND WHICH FUELS BECOME GASEOUS UNDER ATMOSPHERIC PRESSURE AND NORMAL TEMPERATURES. PETROLANE, LTD., Long Beach, Calif.
Filed June 2, 1931. Serial No. 315,324. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,868. LEATHER SHOES. EPHRATA SHOE COMPANY, INC., Ephrata, Pa.
Filed June 5, 1931. Serial No. 315,514. PUBLISHED FEBRUARY 9, 1932. Class 39.

293,869. FRATERNITY BADGES, LAPEL BUTTONS; SCARF, LAPEL, AND BREAST PINS; CUFF LINKS, TIE CLASPS, CHARMS, FINGER RINGS, BELT BUCKLES, AND ORNAMENTAL SHIELDS, ALL OF PRECIOUS METAL. ALPHA OMICRON PI, State College, Pa.
Filed June 11, 1931. Serial No. 315,665. PUBLISHED FEBRUARY 16, 1932. Class 28.

293,870. FISH MEAL, A STOCK AND POULTRY FEED. FASTERFAT LIMITED, Halifax, Nova Scotia, Canada.
Filed June 15, 1931. Serial No. 315,835. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,871. STRANDED WIRE FOR STRINGING BEADS AND/OR PEARLS FOR NECKLACES. JEAN COUTURIER, Courbevoie, France.
Filed June 30, 1931. Serial No. 316,480. PUBLISHED FEBRUARY 16, 1932. Class 28.

293,872. PERFUMES, VANISHING CREAM, COLD CREAM, BEAUTY CREAMS, AND FACE POWDER. DUBUIS & ROWSELL, LIMITED, Croydon, England.
Filed July 6, 1931. Serial No. 316,686. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,873. CERTAIN NAMED WEARING APPAREL. LANE BRYANT, INC., New York, N. Y.
Filed July 10, 1931. Serial No. 316,817. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,874. THERAPEUTIC PREPARATION TO BE USED IN THE TREATMENT OF CONDITIONS CAUSED BY TINEA TRICHOPHYPA AND TINEA MICROSPORA. PUTTERINE MANUFACTURING COMPANY, INC., Miami, Fla.
Filed August 21, 1931. Serial No. 318,291. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,875. ELASTIC BODY-CONFINING BELTS, GIRDLES, BRASSIÈRES, AND COMBINATIONS OF GIRDLES AND BRASSIÈRES. KOPS BROTHER, INC., New York, N. Y.
Filed August 24, 1931. Serial No. 318,368. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,876. GASOLINE. RICHFIELD OIL CORPORATION OF NEW YORK, New York, N. Y.
Filed August 25, 1931. Serial No. 318,414. PUBLISHED FEBRUARY 16, 1932. Class 15.

293,877. PHARMACEUTICAL PREPARATIONS USED TO RELIEVE ULCEROUS CONDITIONS OF THE STOMACH ALSO GAS, BILIOUSNESS, AND NERVOUS INDIGESTION. ROBERT M. KALLEJIAN, Hollywood, Calif.
Filed August 28, 1931. Serial No. 318,526. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,878. HOSIERY. LEHIGH SILK HOSIERY MILLS, INC., New York, N. Y.
Filed August 29, 1931. Serial No. 318,562. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,879. IMITATION MAPLE SYRUP, MOLE SAUCE, PICKLED FIGS, ETC. COOPER PACKING COMPANY, National City, Calif.
Filed September 3, 1931. Serial No. 318,699. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,880. BASE METALWARE RECEPTACLES. PLATINEL, INC., Albany, N. Y.
Filed September 10, 1931. Serial No. 318,920. PUBLISHED MARCH 1, 1932. Class 13.

293,881. LUBRICATING OILS. FRED G. CLARK, INC., Cleveland, Ohio.
Filed September 15, 1931. Serial No. 319,058. PUBLISHED FEBRUARY 16, 1932. Class 15.

293,882. ELECTRICAL SYSTEMS FOR COLLECTING, AMPLIFYING, AND/OR DISTRIBUTING ELECTRICAL WAVES OF SUPER-AUDIBLE FREQUENCY, AND PARTS THEREOF. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed September 15, 1931. Serial No. 319,076. PUBLISHED FEBRUARY 16, 1932. Class 21.

293,883. ANTENNA COUPLING UNITS, EXTENSION COUPLING UNITS, INTERSTAGE TUBE AMPLIFIERS, ASSEMBLED TUBE AMPLIFIERS FOR RADIO FREQUENCY CURRENTS. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed September 15, 1931. Serial No. 319,077. PUBLISHED FEBRUARY 16, 1932. Class 21.

293,884. ELECTRICAL HARD RUBBER PRODUCTS. JOS. STOKES RUBBER CO., Trenton, N. J.
Filed September 17, 1931. Serial No. 319,156. PUBLISHED FEBRUARY 16, 1932. Class 21.

293,885. FACE POWDER, CREAM, LIQUID CLEANSER, ETC. L. T. PIVER, INC., Wilmington, Del., and New York, N. Y.
Filed December 10, 1931. Serial No. 322,006. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,886. WOMEN'S SHOES OF LEATHER AND CLOTH AND COMBINATIONS THEREOF. SHERWOOD SHOE COMPANY, Rochester, N. Y.
Filed December 10, 1931. Serial No. 322,007. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,887. SOLUBLE ALKALINE ANTISEPTIC PREPARATION USED IN THE TREATMENT OF DISEASES OF THE NASO-PHARYNGEAL AND OROPHARYNGEAL PASSAGES. UNEEDA DRUG CO. INC., New York, N. Y.
Filed December 10, 1931. Serial No. 322,008. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,888. OINTMENT USED AS A HEALING SALVE FOR SORES, CUTS, ERUPTIONS, AND OTHER SKIN DISEASES. ARTHUR HANDSCH, St. Louis, Mo.
Filed December 11, 1931. Serial No. 322,015. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,889. PREPARATION FOR STIMULATING OR INCREASING INTESTINAL PERISTALSIS. HOFFMANN-LA ROCHE, INC., Nutley, N. J.
Filed December 11, 1931. Serial No. 322,016. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,890. OIL PEPPERMINT, SINGLE DISTILLED; OIL PEPPERMINT, REDISTILLED, OIL SPEARMINT. MAGNUS, MABEE & REYNARD, INC., New York, N. Y.
Filed December 12, 1931. Serial No. 322,051. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,891. LIQUID CARBON DIOXIDE. PURE CARBONIC COMPANY OF AMERICA, New York, N. Y.
Filed December 12, 1931. Serial No. 322,063. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,892. LAXATIVES. WALGREEN CO., Chicago, Ill.
Filed December 12, 1931. Serial No. 322,074. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,893. MATERIALS AND SOLUTIONS FOR ALTERING THE IMAGES ON PRINTING PLATES. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio.
Filed December 14, 1931. Serial No. 322,079. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,894. PHOTOGRAPHIC SENSITIZING MATERIALS AND SOLUTIONS. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio.
Filed December 14, 1931. Serial No. 322,081. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,895. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed December 14, 1931. Serial No. 322,095. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,896. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed December 14, 1931. Serial No. 322,096. PUBLISHED FEBRUARY 16, 1932. Class 46.

293,897. SKIN CLEANER, SCALP STIMULANT. DANIEL HUNT, doing business as Dorchan and Co., Long Beach, Calif.
Filed December 14, 1931. Serial No. 322,106. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,898. DENTIFRICES, ANTISEPTICS, AND PREPARATIONS FOR THE TREATMENT OF CONSTIPATION. THE PEPSODENT CO., Chicago, Ill.
Filed December 14, 1931. Serial No. 322,110. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,899. ASTRINGENTS, BLEACH CREAMS, ROUGES, ETC. TERRI COSMETICS CORPORATION, New York, N. Y.
Filed December 15, 1931. Serial No. 322,144. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,900. DUSTING POWDER INTENDED FOR THE TREATMENT AND PREVENTION OF ATHLETE'S FOOT. THE ATHFOE COMPANY, San Francisco, Calif.
Filed December 16, 1931. Serial No. 322,154. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,901. LAXATIVES. LEON W. STETSON, Boston, Mass.
Filed December 16, 1931. Serial No. 322,190. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,902. CERTAIN NAMED WEARING APPAREL. WOHL SHOE COMPANY, St. Louis, Mo.
Filed December 16, 1931. Serial No. 322,199. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,903. COTTON PIECE GOODS. WHITTENTON MANUFACTURING COMPANY, Boston, Mass.
Filed December 17, 1931. Serial No. 322,241. PUBLISHED MARCH 1, 1932. Class 42.

293,904. RAW AND PROCESSED RUBBER LATEX. HEVEATEX CORPORATION, Malden, Mass.
Filed December 18, 1931. Serial No. 322,251. PUBLISHED FEBRUARY 23, 1932. Class 1.

293,905. LIQUID OIL HAIR DRESSER AND POMADE HAIR DRESSER. FREDERICK E. ISCHERLAND, Flint, Mich.
Filed December 18, 1931. Serial No. 322,256. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,906. FACE LOTION, TALCUM POWDER, AND FACE CREAM. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn.
Filed December 18, 1931. Serial No. 322,261. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,907. ASTRINGENTS, CREAMS, ROUGES, ETC. FRANK C. REILLY, New York, N. Y.
Filed December 18, 1931. Serial No. 322,270. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,908. ASTRINGENTS, CREAMS, ROUGES, ETC. FRANK C. REILLY, New York, N. Y.
Filed December 18, 1931. Serial No. 322,272. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,909. ASTRINGENTS, CREAMS, ROUGES, ETC. FRANK C. REILLY, New York, N. Y.
Filed December 18, 1931. Serial No. 322,273. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,910. WORK GLOVES; MEN'S, WOMEN'S, AND CHILDREN'S SUN SUITS; SHORTS IN THE NATURE OF UNDERWEAR, PAJAMAS, DRESS AND NEGLIGEE SHIRTS, AND WOMEN'S AND CHILDREN'S BLOOMERS. RIEGEL TEXTILE CORPORATION, New York, N. Y.
Filed December 18, 1931. Serial No. 322,274. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,911. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SIRUPS AND EXTRACTS FOR MAKING THE SAME. FOOTE & JENKS, INCORPORATED, Jackson, Mich.
Filed December 19, 1931. Serial No. 322,283. PUBLISHED MARCH 1, 1932. Class 45.

293,912. OLIVE OIL. PHILIP MERIANO, Philadelphia, Pa.
Filed December 19, 1931. Serial No. 322,288. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,913. POWDER USEFUL IN THE TREATMENT OF RHEUMATISM, ARTHRITIS, AND HYPER-TENSION. CAMFESOL PRODUCTS CO., INC., Camden, N. J.
Filed December 21, 1931. Serial No. 322,306. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,914. LIGHTNING ARRESTERS. EDWARD A. EVERETT, Long Island City, N. Y.
Filed December 21, 1931. Serial No. 322,313. PUBLISHED FEBRUARY 23, 1932. Class 21.

293,915. LIQUEFIED HYDROCARBON GAS. SHELL OIL COMPANY, San Francisco, Calif.
Filed December 21, 1931. Serial No. 322,334. PUBLISHED FEBRUARY 16, 1932. Class 6.

293,916. INSECTICIDE. E. O. CORSON, doing business as Acteen Chemical Service Company, Berkeley, Calif.
Filed December 22, 1931. Serial No. 322,359. PUBLISHED FEBRUARY 23, 1932. Class 6

293,917. SYNTHETIC METHANOL USED AS AN ANTI-FREEZE AGENT IN AUTOMOTIVE VEHICLES AND HEATING SYSTEMS. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed December 22, 1931. Serial No. 322,361. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,918. CERTAIN NAMED WEARING APPAREL. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed December 22, 1931. Serial No. 322,366. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,919. MEDICINE TO BE USED TO PREVENT AND RELIEVE SEASICKNESS, HEADACHES, NEURALGIA, SIMPLE NERVOUSNESS, AND TO REMOVE THE EFFECT OF ALCOHOLIC OVERINDULGENCE. RALPH M. HIBBS, doing business as Rex and Company, Philadelphia, Pa.
Filed December 22, 1931. Serial No. 322,367. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,920. INSECTICIDE. CHIPMAN CHEMICAL ENGINEERING CO., INC., Bound Brook, N. J., now by change of name to Chipman Chemical Company, Inc.
Filed December 23, 1931. Serial No. 322,379. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,921. BUTTER. THE FISHER BROTHERS COMPANY, Cleveland, Ohio.
Filed December 23, 1931. Serial No. 322,383. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,922. OINTMENT FOR SKIN DISEASES AND ABRASIONS OF THE SKIN. ARTHUR R. GODFREY, doing business as Richard Gordon Chemical Co., Detroit, Mich.
Filed December 23, 1931. Serial No. 322,386. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,923. RUBBER SHOE HEELS. AARON J. FRIEDMAN, INC., New York, N. Y.
Filed December 26, 1931. Serial No. 322,459. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,924. BRASSIÈRES. FAIRFORM BRASSIERE CO. INC., New York, N. Y.
Filed December 28, 1931. Serial No. 322,481. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,925. ELECTRIC DRY CELL BATTERIES. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa.
Filed December 29, 1931. Serial No. 322,502. PUBLISHED FEBRUARY 23, 1932. Class 21.

293,926. WOMEN'S AND MISSES' HATS, COATS, AND DRESSES. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed December 29, 1931. Serial No. 322,523. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,927. BREAD, CAKES, AND PIES. SOYEX COMPANY, INC., New York, N. Y.
Filed December 29, 1931. Serial No. 322,526. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,928. GIRDLES AND CORSET BRASSIÈRES. POPULAR BRASSIERE COMPANY, INC., Astoria, N. Y.
Filed December 30, 1931. Serial No. 322,559. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,929. GREASE COMPOUND USED IN COATING BATTERY TERMINALS. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed December 30, 1931. Serial No. 322,563. PUBLISHED FEBRUARY 23, 1932. Class 15.

293,930. TOYS REPRESENTING FIGURES IN VARIOUS ATTITUDES OF A PRIZE FIGHTER, BAG PUNCHER, A BOXER, A MAN WIELDING A HAMMER, AND A SPARKLER DEVICE. J. CHEIN & COMPANY, New York, N. Y., and Harrison, N. J.
Filed December 31, 1931. Serial No. 322,572. PUBLISHED MARCH 1, 1932. Class 22.

293,931. DRESSING FOR FLOORS. PALMER PRODUCTS, INC., Waukesha, Wis.
Filed December 31, 1931. Serial No. 322,596. PUBLISHED MARCH 1, 1932. Class 16.

293,932. JEWELRY FOR PERSONAL ADORNMENT, NOT INCLUDING WATCHES. D. LISNER & CO., INC., New York, N. Y.
Filed January 4, 1932. Serial No. 322,698. PUBLISHED FEBRUARY 23, 1932. Class 28.

293,933. GASOLINE. OIL CREEK REFINING CO., Titusville, Pa.
Filed January 5, 1932. Serial No. 322,761. PUBLISHED FEBRUARY 23, 1932. Class 15.

293,934. CERTAIN NAMED PAINT PRODUCTS. LEHMAN BROS., INCORPORATED, Jersey City, N. J.
Filed January 6, 1932. Serial No. 322,778. PUBLISHED MARCH 1, 1932. Class 16.

293,935. STRINGS OF PEARLS, NECKLACES, BRACELETS, ETC. COHN & ROSENBERGER, INC., New York, N. Y.
Filed January 7, 1932. Serial No. 322,789. PUBLISHED FEBRUARY 23, 1932. Class 28.

293,936. SCREWS. THE NATIONAL ACME CO., Cleveland, Ohio.
Filed January 7, 1932. Serial No. 322,800. PUBLISHED MARCH 1, 1932. Class 13.

293,937. SCREWS. THE NATIONAL ACME CO., Cleveland, Ohio.
Filed January 7, 1932. Serial No. 322,801. PUBLISHED MARCH 1, 1932. Class 13.

293,938. LEAD PIPES, LEAD TRAPS AND BENDS, ETC. THE FLEMM LEAD CO., INC., Long Island City, N. Y.
Filed January 11, 1932. Serial No. 322,882. PUBLISHED MARCH 1, 1932. Class 13.

293,939. REFINED, SEMI-REFINED, AND UNREFINED OILS AND GREASES MADE FROM PETROLEUM, BOTH WITH AND WITHOUT ADMIXTURE OF ANIMAL, VEGETABLE, OR MINERAL SUBSTANCES FOR ILLUMINATING, BURNING, POWER, FUEL, AND LUBRICATING PURPOSES. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed January 11, 1932. Serial No. 322,880. PUBLISHED FEBRUARY 23, 1932. Class 15.

293,940. OILS AND GREASES. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed January 11, 1932. Serial No. 322,890. PUBLISHED FEBRUARY 23, 1932. Class 15.

293,941. RADIO RECEIVING SETS AND PARTS THEREOF, UNITARY TRANSMITTING AND/OR RECEIVING APPARATUS, ETC. TRAV-LER MANUFACTURING CORPORATION, St. Louis, Mo.
Filed January 7, 1932. Serial No. 322,908. PUBLISHED FEBRUARY 23, 1932. Class 21.

293,942. EGGS. GOODRICH AND GALLAGHER, INCORPORATED, Waverly, Iowa.
Filed January 12, 1932. Serial No. 322,932. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,943. LEATHER. GEISMAN, MUSLINER & BRIGHTMAN, INC., New York, N. Y.
Filed January 13, 1932. Serial No. 322,956. PUBLISHED FEBRUARY 23, 1932. Class 1.

293,944. DRINKING STRAWS AND TUBES. NEW JERSEY PAPER TUBE CORPORATION, Englewood, N. J.
Filed January 13, 1932. Serial No. 322,968. PUBLISHED MARCH 1, 1932. Class 50.

293,945. UPHOLSTERY AND DRAPERY FABRICS OF COTTON, WOOL, SILK, ARTIFICIAL SILK, LINEN, OR HEMP AND MIXTURES THEREOF. ERBUN FABRICS CORP., New York, N. Y.
Filed January 14, 1932. Serial No. 323,001. PUBLISHED MARCH 1, 1932. Class 42.

293,946. [WITHDRAWN.]

293,947. [WITHDRAWN.]

293,948. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed January 15, 1932. Serial No. 323,043. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,949. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed January 15, 1932. Serial No. 323,044. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,950. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed January 15, 1932. Serial No. 323,045. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,951. COAL. THE PITTSTON COMPANY, Dover, Del., and Dunmore, Pa.
Filed January 15, 1932. Serial No. 323,059. PUBLISHED FEBRUARY 23, 1932. Class 1.

293,952. HAND BAG FRAMES AND PARTS THEREOF INCLUDING FRAME LOCKS. E. POETER & CO. INC., Irvington, N. J.
Filed January 16, 1932. Serial No. 323,096. PUBLISHED FEBRUARY 23, 1932. Class 3.

293,953. TOBACCO POUCH. SECO LEATHER PRODUCTS COMPANY, INC., West New York, N. J.
Filed January 19, 1932. Serial No. 323,176. PUBLISHED MARCH 1, 1932. Class 8.

293,954. THIN, TRANSPARENT SHEETING OF CELLULOSIC COMPOSITIONS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed January 20, 1932. Serial No. 323,193. PUBLISHED MARCH 1, 1932. Class 50.

293,955. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed January 21, 1932. Serial No. 323,222. PUBLISHED MARCH 1, 1932. Class 42.

293,956. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed January 21, 1932. Serial No. 323,223. PUBLISHED MARCH 1, 1932. Class 42.

293,957. WOOLEN PIECE GOODS. FORSTMANN WOOLEN COMPANY, Passaic, N. J.
Filed January 21, 1932. Serial No. 323,234. PUBLISHED MARCH 1, 1932. Class 42.

293,958. WOOLEN PIECE GOODS. FORSTMANN WOOLEN COMPANY, Passaic, N. J.
Filed January 21, 1932. Serial No. 323,236. PUBLISHED MARCH 1, 1932. Class 42.

293,959. WOOLEN PIECE GOODS. FORSTMANN WOOLEN COMPANY, Passaic, N. J.
Filed January 21, 1932. Serial No. 323,237. PUBLISHED MARCH 1, 1932. Class 42.

293,960. CIGARS. STARLIGHT BROS. INC., New York, N. Y.
Filed January 21, 1932. Serial No. 323,257. PUBLISHED MARCH 1, 1932. Class 17.

293,961. MOLYBDENUM METAL AND MOLYBDENUM ALLOYS AND TOOL AND CUTTING STEELS. UNIVERSAL STEEL COMPANY, Bridgeville, Pa.
Filed January 14, 1932. Serial No. 323,205. PUBLISHED MARCH 1, 1932. Class 14.

293,962. MEN'S SUITS AND OVERCOATS, CLOTHING. NATHAN LAPIDUS, Philadelphia, Pa.
Filed October 3, 1928. Serial No. 273,342. PUBLISHED APRIL 23, 1929. Class 39.

293,963. SALVE WITH A SOAP BASE USED FOR THE RELIEF AND TREATMENT OF MUSCULAR ACHES AND PAINS, POISON IVY, SUNBURN, CHIGGERS, SWELLINGS, BURNS, CHEST COLDS, SORE AND ACHING FEET, HEADACHE, ETC. MAURICE EUGENE CORDRY, Cincinnati, Ohio.
Filed June 10, 1929. Serial No. 285,336. PUBLISHED SEPTEMBER 17, 1929. Class 6.

293,964. REFRIGERATING APPARATUS. SAFETY REFRIGERATION, INC., New Haven, Conn., and New York, N. Y.
Filed November 13, 1929. Serial No. 292,371. PUBLISHED MARCH 1, 1932. Class 31.

293,965. COTTON PIECE GOODS—NAMELY, COTTON DUCK. THE HETTRICK MANUFACTURING COMPANY, Toledo, Ohio.
Filed June 13, 1930. Serial No. 302,390. PUBLISHED MARCH 1, 1932. Class 42.

293,966. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES AND SYRUPS, EXTRACTS, AND CONCENTRATES FOR USE IN PREPARING THE SAME. CALIFORNIA CRUSHED FRUIT CORPORATION, Los Angeles, Calif., now by change of name, Mission Dry Corporation, Ltd.
Filed June 12, 1930. Serial No. 302,338. PUBLISHED AUGUST 19, 1930. Class 45.

293,967. CORSETS AND BRASSIÈRES. SAKS & COMPANY, New York, N. Y.
Filed June 20, 1930. Serial No. 302,644. PUBLISHED SEPTEMBER 16, 1930. Class 39.

293,968. NONALCOHOLIC, MALTLESS, NONCEREAL BEVERAGES AND SYRUPS, EXTRACTS, AND CONCENTRATES FOR USE IN PREPARING THE SAME. CALIFORNIA CRUSHED FRUIT CORPORATION, Los Angeles, Calif., now by change of name, Mission Dry Corporation, Ltd.
Filed August 5, 1930. Serial No. 304,234. PUBLISHED NOVEMBER 18, 1930. Class 45.

293,969. NONALCOHOLIC, MALTLESS, NONCEREAL BEVERAGES AND SYRUPS, EXTRACTS, AND CONCENTRATES FOR USE IN PREPARING THE SAME. CALIFORNIA CRUSHED FRUIT CORPORATION, Los Angeles, Calif., now by change of name, Mission Dry Corporation, Ltd.
Filed August 5, 1930. Serial No. 304,233. PUBLISHED NOVEMBER 18, 1930. Class 45.

293,970. ASTRINGENTS, ASTRINGENT CERATES, ETC. VIVILLE (PARIS), INC., New York, N. Y.
Filed September 12, 1930. Serial No. 305,643. PUBLISHED NOVEMBER 4, 1930. Class 6.

293,971. DOUGHNUTS AND COOKIES. HAZLETON BAKING COMPANY, Hazleton, Pa.
Filed October 8, 1930. Serial No. 306,531. PUBLISHED DECEMBER 2, 1930. Class 46.

293,972. BRASSIÈRES, GIRDLES, AND CORSETS. I. B. KLEINERT RUBBER COMPANY, New York, N. Y.
Filed October 8, 1930. Serial No. 306,534. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,973. EMULSIFIED ASPHALT. LOUIS J. LEHMAN, doing business as Emulsified Asphalt and Application Company, North Hollywood, Calif.
Filed October 16, 1930. Serial No. 306,818. PUBLISHED JUNE 2, 1931. Class 12.

293,974. HEATING MATERIALS, BOILER TRIMMINGS, ENGINE TRIMMINGS, ETC. CRANE CO., Chicago, Ill.
Filed November 10, 1930. Serial No. 307,703. PUBLISHED DECEMBER 8, 1931. Class 13.

293,975. GASOLINE. ATLAS PETROLEUM COMPANY, Chicago, Ill.
Filed November 14, 1930. Serial No. 307,883. PUBLISHED FEBRUARY 16, 1932. Class 15.

293,976. NONALCOHOLIC, MALTLESS, NONCEREAL BEVERAGES AND SYRUPS, EXTRACTS, AND CONCENTRATES FOR USE IN PREPARING THE SAME. CALIFORNIA CRUSHED FRUIT CORPORATION, Los Angeles, Calif., now by change of name Mission Dry Corporation, Ltd.
Filed November 19, 1930. Serial No. 308,058. PUBLISHED DECEMBER 30, 1930. Class 45.

293,977. SHAVING CREAM. HUGH S. MACNAIR, doing business as Mac Blade Works, Fremont, Ohio, assignor to Otto L. Hankison, Toledo, Ohio.
Filed December 3, 1930. Serial No. 308,550. PUBLISHED MARCH 10, 1931. Class 4.

293,978. BREAD. WARD BAKING COMPANY, New York, N. Y.
Filed December 3, 1930. Serial No. 308,564. PUBLISHED JANUARY 13, 1931. Class 46.

293,979. BREAD. WARD BAKING COMPANY, New York, N. Y.
Filed December 3, 1930. Serial No. 308,565. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,980. ILLUMINATING OILS, LUBRICATING OILS, LUBRICATING GREASES, GASOLINE, KEROSENE, AND CRUDE PETROLEUM. STERLING OIL COMPANY, Emlenton, Pa.
Filed December 9, 1930. Serial No. 308,793. PUBLISHED FEBRUARY 23, 1932. Class 15.

293,981. NEEDLES FOR HAND USE—NAMELY, SEWING NEEDLES CONSISTING OF SHARPS AND BETWEENS, MILLINER'S; MATTRESS, MILLINER'S STRAW, GLOVER'S, DARNER'S, EMBROIDERY, CHENILLE, AND KNITTING NEEDLES. CONSOLIDATED SEWING MACHINE & SUPPLY CO., New York, N. Y.
Filed July 20, 1931. Serial No. 317,109. PUBLISHED FEBRUARY 16, 1932. Class 40.

293,982. INSECTICIDES. THE BLACK FLAG COMPANY, Baltimore, Md.
Filed July 21, 1931. Serial No. 317,145. PUBLISHED OCTOBER 6, 1931. Class 6.

293,983. INSECTICIDES. THE BLACK FLAG COMPANY, Baltimore, Md.
Filed July 24, 1931. Serial No. 317,269. PUBLISHED SEPTEMBER 29, 1931. Class 6.

293,984. WOMEN'S LEATHER, FABRIC, AND COMBINATION LEATHER-FABRIC SHOES. HARZFELD'S, INC., Kansas City, Mo.
Filed August 13, 1931. Serial No. 317,938. PUBLISHED FEBRUARY 16, 1932. Class 39.

293,985. BOOTS, SHOES, AND SLIPPERS MADE OF LEATHER, FELT, AND COMBINATIONS OF LEATHER AND FELT. KANEF, UDIN SHOE CO., INC., Boston, Mass.
Filed October 16, 1931. Serial No. 320,176. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,986. MEDICINAL PREPARATION FOR THE TREATMENT OF ADDISON'S DISEASE OR ANY OTHER DISEASE DUE TO THE DEFICIENCY OF THE SUPRARENAL GLAND. PARKE, DAVIS & CO., Detroit, Mich.
Filed October 19, 1931. Serial No. 320,205. PUBLISHED FEBRUARY 9, 1932. Class 6.

293,987. INSECTICIDES, FUNGICIDES, PETROLEUM OIL FOR SPRAYING LIVESTOCK, TREE SPRAYS, AND PLANT SPRAYS. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill.
Filed October 21, 1931. Serial No. 320,284. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,988. MOTION PICTURE FILMS. AUGUSTA EPSTEIN, San Francisco, Calif.
Filed October 22, 1931. Serial No. 320,339. PUBLISHED DECEMBER 29, 1931. Class 26.

293,989. LIQUID MALT SOLD AS AN INGREDIENT OF FOODS. THE ERIE SALES COMPANY, Cleveland, Ohio.
Filed October 23, 1931. Serial No. 320,358. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,990. MILK, BREAD, PIES, CAKES, AND SANDWICHES. WILLOW CAFETERIAS, INC., New York, N. Y.
Filed October 28, 1931. Serial No. 320,563. PUBLISHED FEBRUARY 23, 1932. Class 46.

293,991. MEN'S, WOMEN'S BOYS' AND CHILDREN'S SHOES AND SLIPPERS MADE WHOLLY OR IN PART OF LEATHER AND FABRICS. A. S. BECK SHOE CORPORATION, New York, N. Y.
Filed October 29, 1931. Serial No. 320,577. PUBLISHED FEBRUARY 23, 1932. Class 39.

293,992. SKIN LOTION. BITTLE KING PHARMACAL COMPANY, Anderson, Ind.
Filed October 29, 1931. Serial No. 320,578. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,993. ABSORBENT PREPARATION FOR THE RELIEF OF OVER-INDULGENCE IN FOOD OR DRINK. ROBERT C. BOOZER, doing business as Boozer Products Co., Atlanta, Ga.
Filed November 10, 1931. Serial No. 320,971. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,994. BRICKS. STEPHENS SILICA BRICK CO. LTD., Kidwelly, England.
Filed November 10, 1931. Serial No. 320,992. PUBLISHED FEBRUARY 16, 1932. Class 12.

293,995. RADIO RECEIVING SETS AND PARTS THEREOF, RADIO LOUD SPEAKERS, RADIO RECEIVING AND TRANSMITTING TUBES, RADIO CONDENSERS, AND RADIO PICK-UPS. AD. AURIEMA, INC., New York, N. Y.
Filed November 13, 1931. Serial No. 321,091. PUBLISHED FEBRUARY 16, 1932. Class 21.

293,996. MEDICAL COMPOUND FOR THE RELIEF OF CONSTIPATION, GLANDULAR DISORDERS, AUTOINTOXICATION, DISORDERS OF THE GASTRO-INTESTINAL APPARATUS. OMINA PRO VITA LABORATORIES CO., New York, N. Y.
Filed November 13, 1931. Serial No. 321,119. PUBLISHED FEBRUARY 23, 1932. Class 6.

293,997. LUBRICATING OILS AND GASOLINE. OIL CITY REFINERS, INCORPORATED, Cleveland, Ohio.
Filed November 14, 1931. Serial No. 321,145. PUBLISHED FEBRUARY 16, 1932. Class 15.

293,998. NON-ALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK. CARLO ZUCCA, Milan, Italy.
Filed November 14, 1931. Serial No. 321,152. PUBLISHED MARCH 1, 1932. Class 45.

293,999. EMPTY VANITY CASES MADE OF BASE METAL, PAPER, OR CELLULOSE. PORAY INCORPORATED, Chicago, Ill.
Filed November 16, 1931. Serial No. 321,170. PUBLISHED MARCH 1, 1932. Class 2.

294,000. MEDICINES FOR THE TREATMENT OF CANCER. NIPPON SHINYAKU KABUSHIKI-KAISHA, Kyoto, Japan.
Filed November 27, 1931. Serial No. 321,548. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,001. WATERPROOFING COMPOUND FOR WALLS, BOTH ABOVE AND BELOW GRADE. A. C. HORN COMPANY, Long Island City, N. Y.
Filed November 28, 1931. Serial No. 321,562. PUBLISHED FEBRUARY 16, 1932. Class 12.

294,002. METALLIC HARDENER FOR CONCRETE FLOORS. A. C. HORN COMPANY, Long Island City, N. Y.
Filed November 28, 1931. Serial No. 321,564. PUBLISHED FEBRUARY 16, 1932. Class 12.

294,003. PLUMBING AND STEAM FITTING SUPPLIES—NAMELY, CHECK VALVES, STOP VALVES, ETC. CRANE CO., Chicago, Ill.
Filed November 30, 1931. Serial No. 321,591. PUBLISHED JANUARY 26, 1932. Class 13.

294,004. FOOT LOTION. EARL F. METCALFE, doing business as Pedrex Laboratories, Chicago, Ill.
Filed November 30, 1931. Serial No. 321,605. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,005. FOUNDATION GARMENTS—NAMELY, BRASSIÈRES, GIRDLES, AND CORSETS. BENJAMIN & JOHNES, INCORPORATED, Newark, N. J.
Filed December 1, 1931. Serial No. 321,632. PUBLISHED FEBRUARY 16, 1932. Class 39.

294,006. WOVEN TEXTILE RUGS AND CARPETS. BIGELOW-SANFORD CARPET CO., INC., Thompsonville, Conn.
Filed December 3, 1931. Serial No. 321,717. PUBLISHED MARCH 1, 1932. Class 42.

294,007. CERTAIN NAMED PAINT PRODUCTS. THE FLOCKHART COMPANY, INC., San Francisco, Calif.
Filed December 4, 1931. Serial No. 321,756. PUBLISHED MARCH 1, 1932. Class 16.

294,008. CERTAIN NAMED WEARING APPAREL. THE VAN WERT OVERALL MFG. CO., Van Wert, Ohio.
Filed December 5, 1931. Serial No. 321,834. PUBLISHED FEBRUARY 23, 1932. Class 39.

294,009. MATCHES. THE GROCERS & PRODUCERS CO., doing business as Clover Farm Stores, Cleveland, Ohio.
Filed January 22, 1932. Serial No. 323,289. PUBLISHED MARCH 1, 1932. Class 9.

294,010. CEMENT FLOOR ENAMEL. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed January 22, 1932. Serial No. 323,293. PUBLISHED MARCH 1, 1932. Class 16.

294,011. METAL PAINT. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed January 22, 1932. Serial No. 323,295. PUBLISHED FEBRUARY 23, 1932. Class 16.

294,012. COTTON PIECE GOODS. WILLIAM J. STUERE, New York, N. Y., assignor to Nichues & Dutting, Nordhorn, Germany, a Partnership.
Filed January 22, 1932. Serial No. 323,315. PUBLISHED MARCH 1, 1932. Class 42.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

294,013. (CLASS 31. FILTERS AND REFRIGERATORS.) MCKEE REFRIGERATOR CO., Brooklyn and Coleskill, N. Y. Filed Mar. 2, 1929. Serial No. 280,185.

ICED-AIRE

For Refrigerators.
Claims use since Feb. 19, 1929.

294,014. (CLASS 15. OILS AND GREASES.) THE GASOLINE SERVICE CO., INC., Minneapolis, Minn. Filed May 31, 1930. Serial No. 301,888.

NUGAS

For Gasoline.
Claims use since Jan. 8, 1930.

294,015. (CLASS 39. CLOTHING.) LEHIGH SILK HOSIERY MILLS, INC., New York, N. Y. Filed July 29, 1930. Serial No. 303,986.

FRENCHNETTE

For Hosiery.
Claims use since Jan. 1, 1929.

294,016. (CLASS 39. CLOTHING.) L. BAMBERGER & Co., Newark, N. J. Filed Feb. 2, 1931. Serial No. 310,633.

Lovelace

For Women's Silk Underwear.
Claims use since Jan. 14, 1931.

294,017. (CLASS 39. CLOTHING.) BROWN SHOE COMPANY, INC., St. Louis, Mo. Filed Apr. 6, 1931. Serial No. 312,977.

GYM-NAS-TIC

For Shoes Made of Leather, Cloth, Canvas, or Combinations Thereof.
Claims use since Mar. 20, 1931.

294,018. (CLASS 39. CLOTHING.) THE NATIONAL GLOVE COMPANY, Columbus, Ohio. Filed May 7, 1931. Serial No. 314,291.

Eezy Wear

For Gloves Made Essentially from Leather.
Claims use since Nov. 18, 1930.

294,019. (CLASS 7. CORDAGE.) SILVER LAKE COMPANY, Newton, Mass. Filed May 12, 1931. Serial No. 314,468.

TUBEHANKS

For Sash Cord and Clothes Lines.
Claims use since Mar. 30, 1931.

294,020. (CLASS 29. BROOMS, BRUSHES AND DUSTERS.) ANDRE L. RICHARD, doing business as The Andre L. Richard Co., New York, N. Y. Filed May 20, 1931. Serial No. 314,821.

Fluff i Puff

For Powder Puffs.
Claims use since January, 1931.

294,021. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BENNETT MILLS, INCORPORATED, Philadelphia, Pa. Filed June 3, 1931. Serial No. 315,340.

SPRECKLED

For Pile Fabrics.
Claims use since Mar. 30, 1931.

294,022. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) WM. H. LOVELAND CO., Binghamton, N. Y. Filed Oct. 15, 1931. Serial No. 320,095.

Speedee Shave

For Soaps and Shaving Creams.
Claims use since February, 1931.

294,023. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) S. H. KRESS & CO., New York, N. Y. Filed Dec. 8, 1931. Serial No. 321,914.

Pinehurst

For Teaspoons, Tablespoons, Dessert Spoons, Soup Spoons, Sugar Spoons, Iced-Tea Spoons, Baby Spoons, After-Dinner Coffee Spoons, Berry Spoons, Butter Spreaders, Butter Knives, Dinner Knives, Dinner Knives (Stainless), Children's Knives, Children's Forks, Salad Forks, Oyster Forks, Dinner Forks, Dessert Forks, Cold-Meat Forks, Gravy Ladles, and Pastry Servers, All Made of or Plated with Precious Metal.
Claims use since Jan. 3, 1931.

294,024. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) LEWIS GLASHOW, New York, N. Y. Filed Jan. 18, 1932. Serial No. 323,129.

NU-TYPE

For Steam Coil Type Submerged Water Heaters.
Claims use since Apr. 29, 1930.

294,025. (CLASS 37. PAPER AND STATIONERY.) BLAKE, MOFFITT & TOWNE, San Francisco, Calif. Filed Feb. 9, 1932. Serial No. 323,985.

DRIWELL

For Paper Towels.
Claims use since Dec. 1, 1911.

TRADE-MARK REGISTRATIONS RENEWED

37,954. CERTAIN NAMED BEVERAGES. Registered March 18, 1902. JOHN A. CROWLEY, Hyde Park, Mass. Renewed March 18, 1932, to Edward T Springer, Cimarron, N. Mex., assignee.

38,511. TOILET SOAP. Registered June 24, 1902. LAMBERT PHARMACAL CO., St. Louis, Mo. Renewed June 24, 1932, to Lambert Pharmacal Company, Wilmington, Del., a Corporation of Delaware, assignee.

38,544. CERTAIN NAMED MEDICINAL COMPOUNDS. Registered July 1, 1902. JULIUS HOFMEIER, Vienna, Austria-Hungary. Renewed July 1, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

38,552. CERTAIN NAMED CHEMICAL COMPOUND. Registered July 1, 1902. ROSENZWEIG & BAUMANN, Cassel, Germany. Renewed July 1, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

38,682. A CONSERVING COMPOUND. Registered July 29, 1902. E. UTESCHER, Hamburg, Germany. Renewed July 29, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

38,800. CERTAIN NAMED MEDICAL COMPOUNDS. Registered August 19, 1902. FARBWERKE, VORM. MEISTER, LUCIUS & BRÜNING, Höchst-on-the-Main, Germany. Renewed August 19, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

38,830. HARD WOOD FLOORING, AND HARD WOOD AND BASSWOOD CEILINGS, AND SHINGLES. Registered August 19, 1902. WISCONSIN LAND & LUMBER CO., Hermansville, Mich., a Corporation of Michigan. Renewed August 19, 1932.

38,879. ARSENIC COMPOUNDS. Registered September 9, 1902. VEREINIGTE CHEMISCHE WERKE AKTIENGESELLSCHAFT, Charlottenburg, Germany. Renewed September 9, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

38,950. FILMS, PLATES AND PHOTOGRAPHIC PAPERS. Registered September 30, 1902. ACTIEN-GESELLSCHAFT FÜR ANILINE-FABRIKATION, Berlin, Germany. Renewed September 30, 1932, The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

38,951. COALTAR-DYESTUFFS. Registered September 30, 1902. ACTIEN-GESELLSCHAFT FÜR ANILIN-FABRIKATION, Berlin, Germany. Renewed September 30, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

81,398. POLISH FOR LEATHER AND LEATHER GOODS. Registered April 4, 1911. FRIEDRICH KÜNKLER, Mannheim, Germany. Renewed April 4, 1931.

82,156. POLISH FOR LEATHER AND LEATHER GOODS. Registered June 6, 1911. FRIEDRICH KÜNKLER, Mannheim, Germany. Renewed June 6, 1931.

85,079. ELECTRIC ARC-LIGHT CARBONS. Registered January 30, 1912. C. CONRADTY (INHABER PAULINE & EUGEN CONRADTY) FABRIK ELEKTRISCHER U. GALVANISCHER KOHLEN. Renewed January 30, 1932, to C. Conradty, Fabrik Elektrischer u. Galvanischer Kohlen, Nuremberg, Germany, a firm.

85,653. CANNED FRUITS AND CANNED VEGETABLES. Registered March 5, 1912. THE FREDERICK CITY PACKING COMPANY, INC., Frederick, Md., a Corporation of Maryland. Renewed March 5, 1932.

85,746. CANNED SALMON. Registered March 12, 1912. HAWK FISH COMPANY. Renewed March 12, 1932, to P. E. Harris & Co., Seattle, Wash., a Corporation of Washington, by change of name.

85,997. CYLINDER AND ENGINE OIL. Registered April 2, 1912. WM. C. ROBINSON & SON, CO., of Baltimore, Md., and Cornopolis, Pa. Renewed April 2, 1932, to Wm. C. Robinson & Son, Co., Baltimore, Md., a Corporation of Maryland.

85,998. CYLINDER-OIL. Registered April 2, 1912. WM. C. ROBINSON & SON, CO., Baltimore, Md., and Coraopolis, Pa. Renewed April 2, 1932, to Wm. C. Robinson & Son, Co., Baltimore, Md., a Corporation of Maryland.

85,999. ENGINE-OIL. Registered April 2, 1912. WM. C. ROBINSON & SON, CO., Baltimore, Md., and Coraopolis, Pa. Renewed April 2, 1932, to Wm. C. Robinson & Son, Co., Baltimore, Md., a Corporation of Maryland.

86,000. VALVE-OIL. Registered April 2, 1912. WM. C. ROBINSON & SON, CO., Baltimore, Md., and Coraopolis, Pa. Renewed April 2, 1932, to Wm. C. Robinson & Son, Co., Baltimore, Md., a Corporation of Maryland.

86,080. FRYING-PANS, SKILLETS, SPIDERS, AND GRIDDLES. Registered April 9, 1912, NEW YORK STAMPING COMPANY, Brooklyn, N. Y., a Corporation of New York. Renewed April 9, 1932.

86,093. RICE. Registered April 9, 1912. SEABOARD RICE MILLING CO., Galveston, Tex. Renewed April 9, 1912, to Comet Rice Company, Beaumont, Tex., and New York, N. Y., a Corporation of Texas, by change of name.

86,131. ALL STYLES OF LEATHER SHOES AND BOOTS. Registered April 16, 1912. GEORGE R. DAVIS, Seattle, Wash. Renewed April 16, 1932, to Thompson Bros. Shoe Co., Brockton, Mass., a Corporation of Massachusetts, assignee.

86,168. UNDERSHIRTS AND DRAWERS MADE OF TEXTILE MATERIAL. Registered April 16, 1912. TANCHUM SILBERMAN. Renewed April 16, 1932, to The Loxiton Mfg. Company, Baltimore, Md., a Corporation of Maryland, assignee by mesne assignments.

86,178. A COMPOUND OF MAPLE-SUGAR AND CANE-SYRUP. Registered April 16, 1912. CLAUDIUS M. TICE, trading as C. M. Tice Company, Boston, Mass. Renewed April 16, 1932.

86,413. A TONIC AND ANTIPYRETIC IN MALARIAL AFFECTIONS. Registered May 7, 1912. THOMAS LAMB, New York, N. Y. Renewed May 7, 1932, to Thomas Lamb, Brooklyn, N. Y.

86,755. MANILA AND SISAL ROPE AND CORDAGE. Registered May 28, 1912. COLUMBIAN ROPE COMPANY, Auburn, N. Y., a Corporation of New York. Renewed May 28, 1932.

86,768. WOUND-HEALING REMEDIES. Registered June 4, 1912. ACTIEN-GESELLSCHAFT FÜR ANILIN-FABRIKATION, Berlin, Germany. Renewed June 4, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

86,831. A REMEDY FOR DIABETES. Registered June 4, 1912. EMIL RATH, Frankfort-on-the-Main, Germany. Renewed June 4, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

86,848. DYES. Registered June 4, 1912. R. WEDEKIND & CO. G. M. B. H., Uerdingen-on-the-Rhine, Germany. Renewed June 4, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

86,864. CANNED SALMON. Registered June 11, 1912. ALASKA FISH CO. Renewed June 11, 1932, to Peril Straits Packing Co., Inc., Seattle, Wash., a Corporation of Washington, assignee.

86,982. WOUND-POWDER. Registered June 18, 1912. FABRIK PHARMACEUTISCHER PRÄPARATE KARL ENGELHARD, Frankfort-on-the-Main, Germany. Renewed June 18, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee, by mesne assignments.

87,050. LIMONENES. Registered June 25, 1912. ANTON DEPPE SÖHNE, Hamburg, Germany. Renewed June 25, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,097. TOILET SOAP. Registered June 25, 1912. NORDDEUTSCHE WOLLKÄMMEREI & KAMMGARNSPINNEREI, Bremen and Delmenhorst, Germany. Renewed June 25, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,135. PHARMACEUTICAL PREPARATIONS CONTAINING FULLERS' EARTH. Registered July 2, 1912. ACTIENGESELLSCHAFT FÜR ANILIN-FABRIKATION, Berlin, Germany. Renewed July 2, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,164. CERTAIN CHEMICALS. Registered July 2, 1912. CHEMISCHE FABRIK BANNEWITZ OALOFF HANSEN, Bannewitz, near Dresden, Germany. Renewed July 2, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,187. A NUTRITIOUS AND ENTIRELY-DIGESTIBLE CARBOHYDRATE FOR DIABETES. Registered July 2, 1912. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Höchst-on-the-Main, Germany. Renewed July 2, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,188. AN INTERNAL ANTISEPTIC FOR THE UROPOIETIC SYSTEM. Registered July 2, 1912. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Höchst-on-the-Main, Germany. Renewed July 2, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,302. SAFES AND VAULT-DOORS. Registered July 2, 1912. YORK SAFE AND LOCK CO. Renewed July 2, 1932, to York Safe and Lock Company, York, Pa., a Corporation of Delaware, assignee.

87,369. LIQUORS MADE WITH CHERRIES. Registered July 9, 1912. ROCHER FRÈRES. Renewed July 9, 1932, to Societe A Responsabilite Limitee Rocher Freres, La Côte-Saint-André, France, a Corporation of France, successor.

87,460. MIDDLINGS, BRAN, AND MIXED STOCK FEED. Registered July 16, 1912. LAWRENCEBURG ROLLER MILLS CO., Lawrenceburg, Ind., a Corporation of Indiana. Renewed July 16, 1932.

87,462. A COMPOUND OF CANE AND CORN SYRUP. Registered July 16, 1912. MANGELS, HEROLD CO. INC., Baltimore, Md., a Corporation of Maryland. Renewed July 16, 1932.

87,596. SELF-RISING FLOUR. Registered July 30, 1912. THE BLISH MILLING COMPANY, Seymour, Ind., a Corporation of Indiana. Renewed July 30, 1932.

87,649. LOOSE-LEAF BINDERS. Registered July 30, 1912. NATIONAL BLANK BOOK COMPANY, Holyoke, Mass., a Corporation of Massachusetts. Renewed July 30, 1932.

87,662. CERTAIN NAMED MACHINES AND PARTS THEREOF. Registered July 30, 1912. ADOLPH SAURER. Renewed July 30, 1932, to Societe Anonyme Adolphe Saurer, Arbon, Switzerland, a Corporation of Switzerland, successor.

87,724. GAS-BURNERS OF ORDINARY METAL. Registered August 6, 1912. GEO. BRAY & CO., LIMITED, Leeds, England, a Corporation of Great Britain. Renewed August 6, 1932.

87,725. GAS-BURNERS OF ORDINARY METAL. Registered August 6, 1912. GEO. BRAY & CO., Limited, Leeds, England, a Corporation of Great Britain. Renewed August 6, 1932.

87,784. AN OINTMENT. Registered August 6, 1912. MENLEY & JAMES, LIMITED, NEW YORK, London, England, and New York, N. Y., a Corporation of New York. Renewed August 6, 1932.

87,872. NECKTIES. Registered August 13, 1912. FRIEDMAN BROS. & SON NECKWEAR CO. INC., New York, N. Y., a Corporation of New York. Renewed August 13, 1932.

87,990. CALCULATING AND ADDING MACHINES. Registered August 20, 1912. GRIMME, NATALIS & CO., COMMANDITGESELLSCHAFT AUF ACTIEN, Brunswick, Germany. Renewed August 20, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,991. CALCULATING-MACHINES. Registered August 20, 1912. GRIMME, NATALIS & CO., COMMANDITGESELLSCHAFT AUF ACTIEN, Brunswick, Germany. Renewed August 20, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,104. CERTAIN KINDS OF STOVES, RANGES, BLOWERS, FORGES, AND OIL-LANTERNS. Registered August 27, 1912. C. M. MCCLUNG & CO., Knoxville, Tenn., a Corporation of Tennessee. Renewed August 27, 1932.

88,282. BAKING-POWDER. Registered September 10, 1912. THE HEEKIN SPICE CO. Renewed September 10, 1932, to The Heekin Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

88,292. HARMONICAS. Registered September 10, 1912. M. HOHNER. Renewed September 10, 1932, to M. Hohner, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

88,293. HARMONICAS. Registered September 10, 1912. M. HOHNER. Renewed September 10, 1932, to M. Hohner, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

88,331. CERTAIN HARDWARE AND PLUMBING SUPPLIES. Registered September 10, 1912. C. M. MCCLUNG & CO., Knoxville, Tenn., a Corporation of Tennessee. Renewed September 10, 1932.

88,344. INTERNAL-COMBUSTION ENGINES. Registered September 10, 1912. THE NEW LONDON SHIP & ENGINE COMPANY. Renewed September 10, 1932, to Electric Boat Company, Groton, Conn., a Corporation of New Jersey, assignee.

88,345. MATTRESSES. Registered September 10, 1912. NEW YORK MATTRESS COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed September 10, 1932.

88,387. THOMASPHOSPHAT. Registered September 10, 1912. THOMASPHOSPHATFABRIKEN GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Berlin, Germany. Renewed September 10, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee, by mesne assignments.

88,446. CANNED SALMON. Registered September 24, 1912. ASTORIA & PUGET SOUND CANNING CO., Bellingham, Wash. Renewed September 24, 1932, to Astoria & Puget Sound Canning Co., South Bellingham, Wash., a Corporation of Washington.

88,447. CANNED SALMON. Registered September 24, 1912. ASTORIA & PUGET SOUND CANNING CO., Bellingham, Wash. Renewed September 24, 1932, to Astoria & Puget Sound Canning Co., South Bellingham, Wash., a Corporation of Washington.

88,449. RAZORS, BLADES, KNIVES, FILES, AND SCISSORS. Registered September 24, 1912. AUTO STROP SAFETY RAZOR CO., New York, N. Y. Renewed September 24, 1932, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

88,454. SALVE FOR DERMATOLOGICAL PURPOSES. Registered September 24, 1912. DR. BAYER ÉS TÁRSA, Budapest, Austria-Hungary. Renewed September 24, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,478. AN ANTIPYRETIC, ANTINEURALGIC, AND SEDATIVE. Registered September 24, 1912. FARBWERKE VORM. MEISTER LUCIUS BRÜNING, Höchst-on-the-Main, Germany. Renewed September 24, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,508. CERTAIN NAMED SPORTING GOODS AND TOYS. Registered September 24, 1912. C. M. MCCLUNG & Co., Knoxville, Tenn., a Corporation of Tennessee. Renewed September 24, 1932.

88,517. TOILET SOAP. Registered September 24, 1912. NORDDEUTSCHE WOLLKÄMMEREI & KAMMGARNSPINNEREI, Bremen and Delmenhorst, Germany. Renewed September 24, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,524. PILLS FOR BILIOUS AND LIVER COMPLAINTS. Registered September 24, 1912. DR. J. H. SCHENCK & SON. Renewed September 24, 1932, to Joseph H. Schenck, Jr., Philadelphia, Pa., successor.

88,528. OLIVE-OIL. Registered September 24, 1912. EMMANUEL G. SOPHOS. Renewed September 24, 1932, to E. G. Sophos Co., Inc., Lowell, Mass., a Corporation of Massachusetts, assignee.

LABELS

REGISTERED MAY 10, 1932

40,671.—*Title:* SPIDER AND FLY GAME. For Indoor Game. MILTON BRADLEY COMPANY, Springfield, Mass. Published March 1, 1932.

40,672.—*Title:* YOUR GUARANTEE. For Awnings. CHICAGO AWNING & TENT MANUFACTURERS' ASSOCIATION, Chicago, Ill. Published April 5, 1932.

40,673.—*Title:* CAMPANA'S ITALIAN BALM. For Balm That Acts as a Skin Softener. COMPANA CORPORATION, Batavia, Ill. Published February 10, 1932.

40,674.—*Title:* KOPY-KIT. For Drawing Sets. ROBERT B. ENRIGHT, Brooklyn, N. Y. Published January 9, 1932.

40,675.—*Title:* CREMÊFROST. For Sherbets. GEORGIA-CAROLINA DAIRIES, Augusta, Ga. Published April 2, 1932.

40,676.—*Title:* LOCKNER'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 26, 1932.

40,677.—*Title:* ROLYAT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 22, 1932.

40,678.—*Title:* HONEY-NUT SPREAD. For Food Product Used as a Spread. HONEY-NUT PRODUCTS, Louisville, Ky. Published March 1, 1932.

40,679.—*Title:* THIS BOX IS MADE ENTIRELY OF WOOD. For Wooden Boxes. FREDERICK S. KOONS, Boyertown, Pa. Published March 22, 1932.

40,680.—*Title:* CHUCKLE WITH REG'LAR FELLARS WATER ICE. For Water Ice. PAC-KUPS INCORPORATED, Easton, Pa. Published December 22, 1931.

40,681.—*Title:* WEATHER-PROOF BRONZE STRIPS. For Bronze Strips for Windows and Doors. THE RELIABLE PRODUCTS COMPANY, Cleveland, Ohio. Published February 10, 1932.

40,682.—*Title:* WEAR A SLEEP-SHADE. For Shades to be Worn Over the Eyes for Excluding Light. SLEEP SHADE CO., San Francisco, Calif. Published April 4, 1932.

40,683.—*Title:* SUNSHINE VITAMIN-D. For Bread. SPAULDING BAKERIES, INC., Binghamton, N. Y. Published January 1, 1932.

40,684.—*Title:* THE LITTLE SCULPTOR MODELING SET. For Modeling Sets. STANDARD SOLOPHONE MFG. CO. INC., New York, N. Y. Published April 4, 1932.

40,685.—*Title:* TEXAS MADE. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published March 2, 1932.

40,686.—*Title:* "I"-LAST. For Non-Flaking Eyelash Cosmetic. WILLARD COMPANY, Chicago, Ill. Published July 14, 1931.

40,687.—*Title:* WRIGLEY'S DOUBLE MINT. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published December 30, 1929.

PRINTS

REGISTERED MAY 10, 1932

13,713.—*Title:* A. B. C. B. STANDARD ACCOUNTING SYSTEM. For Accounting Form Specimens. AMERICAN BOTTLERS OF CARBONATED BEVERAGES, Washington, D. C. Published November 10, 1930.

13,714.—*Title:* THEY SPENT A MILLION DOLLARS FOR THE THINGS YOUR CHILDREN HAVE. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published March 5, 1932.

13,715.—*Title:* DANGEROUS YEARS. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published April 9, 1932.

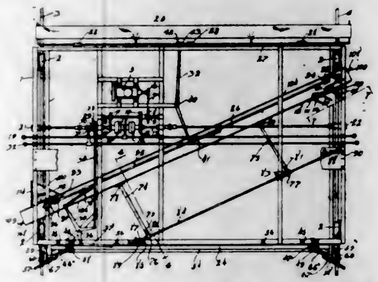
13,716.—*Title:* SUNSHINE CHAMOIS. For Chamois. HOYT & WORTHEN TANNING CORPORATION, Haverhill, Mass. Published April 6, 1932.

13,717.—*Title:* THIRSTY MILLIONS CAN'T BE WRONG. For Non-Alcoholic Beverages. LA SALLE BOTTLING COMPANY, St. Louis, Mo. Published May 1, 1931.

REISSUES

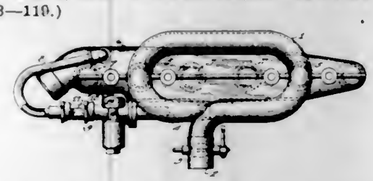
MAY 10, 1932

18,455. CONCRETE ROAD FINISHING MACHINE. EDWARD G. CARR, Chicago, Ill., assignor to The Lakewood Engineering Company, Lakewood, Ohio, a Corporation of Ohio. Original No. 1,611,412, dated Dec. 21, 1926, Serial No. 581,043, filed Aug. 11, 1922. Application for reissue filed Dec. 20, 1928. Serial No. 327,423. 20 Claims. (Cl. 94—39.)



1. In a concrete road finishing machine adapted to be advanced along a roadway, a templet or screed member extending substantially the entire width of the roadway and reciprocable transversely of the roadway as a unit and having its leading upstanding face rearwardly inclined with respect to the vertical whereby a head of concrete built up in front of the member as the machine advances will exert a downward pressure component upon the concrete beneath the member from end to end thereof.

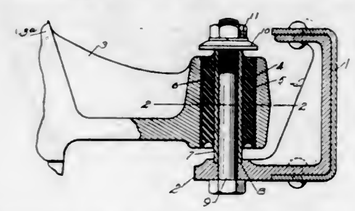
18,456. CARBURETOR. THOMAS W. KINGS, Harvey, Ill., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Original No. 1,624,604, dated Apr. 12, 1927, Serial No. 639,521, filed May 17, 1923. Application for reissue filed Feb. 6, 1929. Serial No. 338,001. 32 Claims. (Cl. 123—119.)



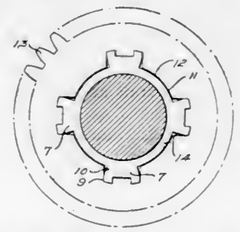
1. A charge-forming device of the class described comprising a Venturi tube, an intake manifold with which said Venturi tube is in communication at one of its ends, a fuel passageway in communication with said Venturi tube near its point of smallest diameter, a valve for controlling the level of fuel in said passageway, and means for operating said valve, said means being subject for operation, to the aspiratory action of said Venturi tube and the level of the liquid in said passageway.

18,457. VIBRATION DAMPENING MOUNTING. HUGH C. LORD, Erie, Pa. Original No. 1,778,503, dated Oct. 14, 1930, Serial No. 160,223, filed Jan. 10, 1927. Application for reissue filed Mar. 21, 1932. Serial No. 600,808. 24 Claims. (Cl. 248—14.2.)

17. In a vibration dampening mounting, the combination of a supporting member and a supported member, one of said members being provided with vibration producing means, and a mounting of resilient rubber bonded to one of said members and disposed in thrust resisting relation with the other member, said mounting including a body of rubber projecting from the member to which the mounting is bonded and so disposed as to receive the thrust through shear stress, the shear being in the direction of the vibratory thrust to be absorbed by the mounting.

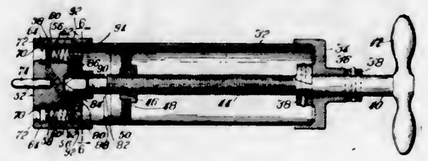


18,458. BROACH. OTTO LUNDELL, Detroit, Mich., assignor to Colonial Tool Company, Detroit, Mich., a Corporation of Michigan. Original No. 1,708,478, dated Apr. 9, 1929. Serial No. 151,338, filed Nov. 29, 1926. Application for reissue filed Dec. 26, 1930. Serial No. 504,963. 11 Claims. (Cl. 90—33.)



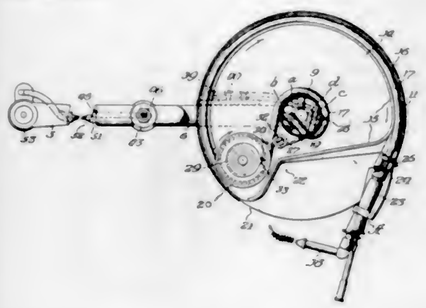
1. A broach or the like having a plurality of teeth provided with cutting end portions, a portion of the sides of said teeth being straight and a portion thereof tapering inwardly, the straight portions being adjacent the cutting ends of the teeth, and the tapering portions being of increasing depth toward the finishing end of the broach.

18,459. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Original No. 1,818,464, dated Aug. 11, 1931, Serial No. 22,489, filed Apr. 11, 1925. Application for reissue filed Oct. 24, 1931. Serial No. 570,987. 33 Claims. (Cl. 184—7.)



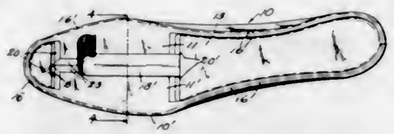
29. In combination with a machine having bearings thereon, a plate connected with said machine, oil inlet fittings, to which a grease gun may be detachably connected, on said plate, and a plurality of oiling tubes, each tube connecting an oil inlet fitting and a bearing.

18,460. DENTAL UNIT. ALPHONSE F. PIEPER, Rochester, N. Y. Original No. 1,649,251, dated Nov. 15, 1927, Serial No. 54,896, filed Sept. 8 1925. Application for reissue filed Sept. 17, 1928. Serial No. 306,586. 22 (Cl. 32—5.)



15. In combination, a casing, a tier of drums mounted to rotate on a vertical axis in said casing, each of said drums having a central opening, a plurality of conductors leading into the center of said casing and respectively to said drums, each of said conductors leading to the periphery of its respective drum and being wound thereon, means for permitting the exit of the end portions of said conductors from said casing, a dental instrument on the end of each of said conductors, and spring means for each of said drums resisting withdrawal of the associated conductor and for rotating said drum to retract it.

18,461. SHOE. LUIGI PIGNANELLI, Tacoma, Wash. Original No. 1,682,184, dated Aug. 28, 1928, Serial No. 129,703, filed Aug. 17, 1926. Application for reissue filed Oct. 17 1931. Serial No. 569,451. 6 Claims. (Cl. 36—18.)



4. In a shoe, a sole, an upper, said upper being shaped to provide complementary flap elements adapted to overlie the shoe sole, and an adhesively coated ligament for connecting the free ends of said flap elements.

PLANT PATENTS

GRANTED MAY 10, 1932

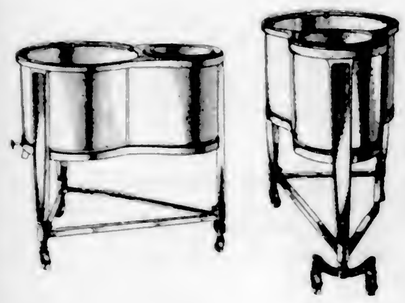
16. PLUM. LUTHER BURBANK, deceased, Santa Rosa, Calif., by Elizabeth Waters Burbank, executrix, Santa Rosa, Calif., assignor to Stark Bro's. Nurseries & Orchards Company, Louisiana, Mo. Filed Sept. 23, 1930. Serial No. 483,037. 1 Claim. (Cl. 47—1.)

The plum tree herein described characterized by the shape and color of its fruit and the size of its seed, as shown.

DESIGNS

MAY 10, 1932

86,902. COMBINED CASING FOR A WASHING MACHINE AND CENTRIFUGAL DRIER. ALPHEUS W. ALTORFER, Peoria, Ill., assignor to Altorfer Bros. Company, East Peoria, Ill., a Corporation of Illinois. Filed July 2, 1931. Serial No. 40,403. Term of patent 14 years.



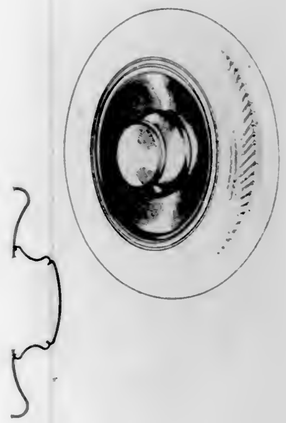
The ornamental design for a combined casing for a washing machine and centrifugal drier, substantially as shown.

86,903. HEAT ABSORBER FOR ELECTRIC LAMPS. LEON APPLEMAN, Pittsburgh, Pa. Filed July 17, 1930. Serial No. 36,380. Term of patent 3½ years.



The ornamental design for a heat absorber for electric lamps, substantially as shown.

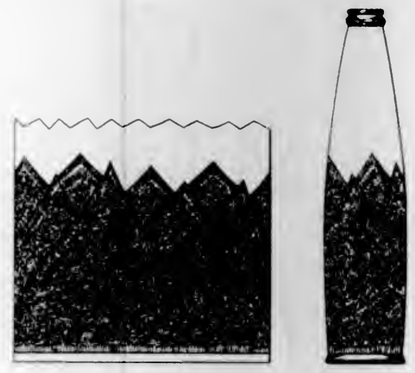
86,904. COMBINED DISK WHEEL AND HUB CAP. RUSSELL S. BEGG, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 26, 1929. Serial No. 29,789. Term of patent 14 years.



The ornamental design for a combined disk wheel and hub cap, as shown.

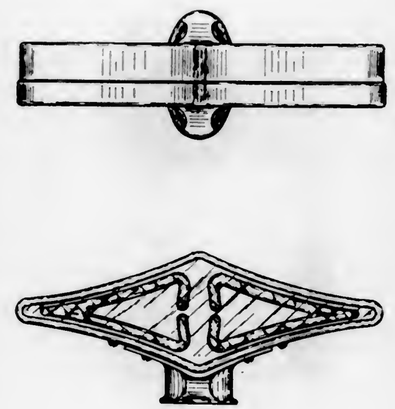
86,905. [WITHDRAWN.]

86,906. BOTTLE. ZEHNDER H. CONFAIR, Berwick, Pa., assignor to Confairs Pure Fruits, Inc., Berwick, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1932. Serial No. 43,207. Term of patent 7 years.



The ornamental design for a bottle, as shown and described.

86,907. VEHICLE DIRECTION SIGNALING LIGHT. WILLIAM JOHN CRONAN, Wethersfield, Conn. Filed Feb. 9, 1932. Serial No. 42,787. Term of patent 14 years.



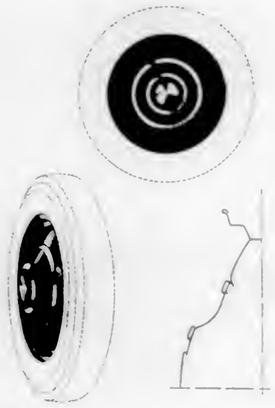
The ornamental design for a vehicle direction signaling light, as shown.

86,908. DISPLAY STAND. BENJAMIN F. CULLISON, Sharon Hill, Pa., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1932. Serial No. 43,010. Term of patent 14 years.



The ornamental design for a display stand, as shown.

86,909. DISK WHEEL. TALMON A. DAVENPORT, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 30, 1931. Serial No. 40,383. Term of patent 14 years.



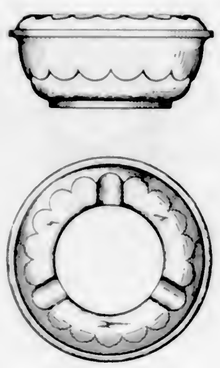
The ornamental design for a disk wheel as shown and described.

86,910. ELECTRIC CAP PLUG. REUBEN ECKSTEIN, New York, N. Y. Filed May 13, 1931. Serial No. 39,829. Term of patent 14 years.



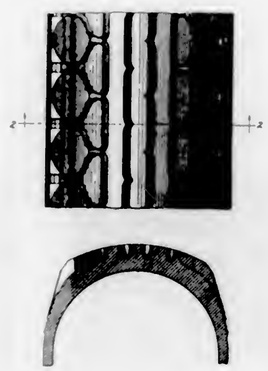
The ornamental design for an electric cap plug substantially as shown and described.

86,911. RECEPTACLE FOR ASHES AND OTHER MATERIAL. RUTH GERTH, New York, N. Y., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Mar. 5, 1932. Serial No. 43,093. Term of patent 14 years.



The ornamental design for a receptacle for ashes and other material as shown.

86,912. PNEUMATIC TIRE. THORNTON G. GRAHAM, Kent, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 12, 1932. Serial No. 43,173. Term of patent 14 years.



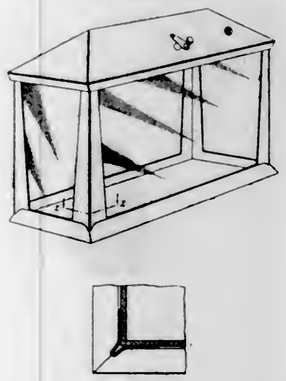
The ornamental design for a pneumatic tire as shown.

86,913. GAME BOARD. PERCY H. HALBEITER, Los Angeles, Calif. Filed Sept. 18, 1931. Serial No. 41,145. Term of patent 3½ years.



The ornamental design for a game board, as shown and described.

86,914. AQUARIUM. JOHN J. HALTERBECK, Long Island City, N. Y. Filed Feb. 11, 1932. Serial No. 42,812. Term of patent 7 years.



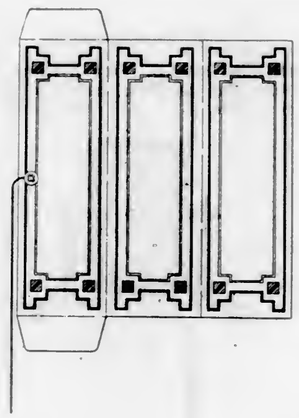
The ornamental design for an aquarium substantially as shown and described.

86,915. FLUID DISPENSING APPARATUS. JACOB W. HARTMAN, Jr., Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Feb. 29, 1932. Serial No. 43,034. Term of patent 7 years.



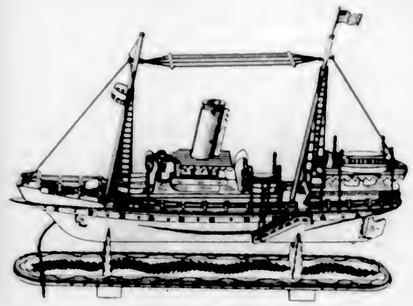
The ornamental design for a fluid dispensing apparatus as shown and described.

86,916. FOLDING ENVELOPE OR SIMILAR ARTICLE. CHARLES A. HERR, Clayton, Mo. Filed Dec. 30, 1931. Serial No. 42,300. Term of patent 14 years.



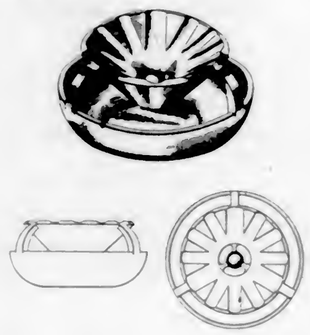
The ornamental design for a folding envelope or similar article, as shown and described.

86,917. INCENSE BURNER. ANTHONY IORIO, Corona, N. Y. Filed Mar. 10, 1931. Serial No. 39,021. Term of patent 14 years.



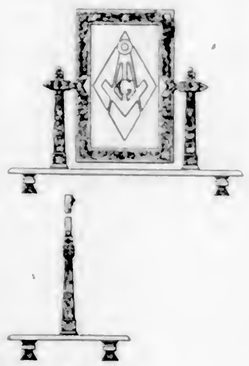
The ornamental design for an incense burner, as shown and described.

86,918. ASH TRAY. GEORGE JOHNSON, Los Angeles, Calif. Filed Mar. 28, 1932. Serial No. 43,303. Term of patent 14 years.



The ornamental design for an ash tray as shown.

86,919. EMBLEM STAND. JACK I. LONDON, New York, N. Y. Filed Jan. 29, 1931. Serial No. 38,480. Term of patent 7 years.



The ornamental design for an emblem stand, as shown and described.

86,920. COAT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 29, 1932. Serial No. 42,664. Term of patent 3½ years.



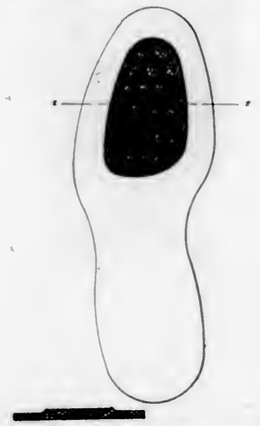
The ornamental design for a coat substantially as shown.

86,921. SHOE SOLE. HERBERT T. MASON, North Brookfield, Mass., assignor to Quabaug Rubber Company, North Brookfield, Mass., a Corporation of Massachusetts. Filed Feb. 9, 1932. Serial No. 42,794. Term of patent 3½ years.



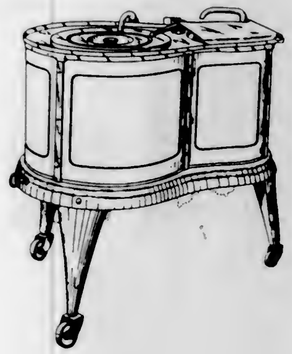
The ornamental design for a shoe sole as shown.

86,922. SHOE SOLE. HERBERT T. MASON, North Brookfield, Mass., assignor to Quabaug Rubber Company, North Brookfield, Mass., a Corporation of Massachusetts. Filed Feb. 9, 1932. Serial No. 42,795. Term of patent 3½ years.



The ornamental design for a shoe sole as shown.

86,923. COMBINED CASING FOR A CLOTHES WASHING AND EXTRACTING MACHINE. JOHN J. MCCABE, Cleveland, Ohio. Filed July 13, 1931. Serial No. 40,512. Term of patent 14 years.



The ornamental design for a combined casing for a clothes washing and extracting machine, as shown and described.

86,924. SHOE. CHARLES MILLER, New York, N. Y. Filed Feb. 5, 1932. Serial No. 42,746. Term of patent 3½ years.



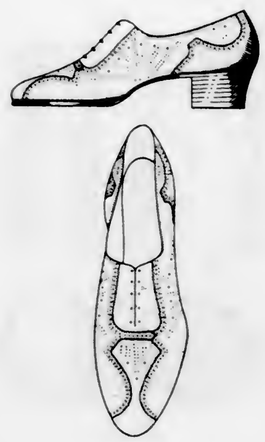
The ornamental design for a shoe, as shown.

86,925. SHOE. CHARLES MILLER, New York, N. Y. Filed Feb. 5, 1932. Serial No. 42,748. Term of patent 3½ years.



The ornamental design for a shoe, as shown.

86,926. SHOE. CHARLES MILLER, New York, N. Y. Filed Feb. 5, 1932. Serial No. 42,752. Term of patent 3½ years.



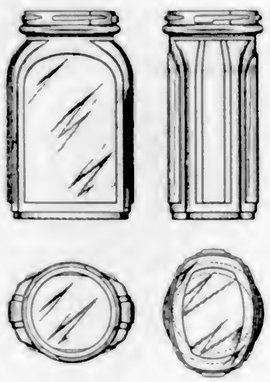
The ornamental design for a shoe, as shown.

86,927. PLATE OR SIMILAR ARTICLE OF GLASSWARE. ALBERT H. NICHOLSON and VERNON NICHOLSON, Columbus, Ohio. Filed Feb. 1, 1932. Serial No. 42,704. Term of patent 14 years.



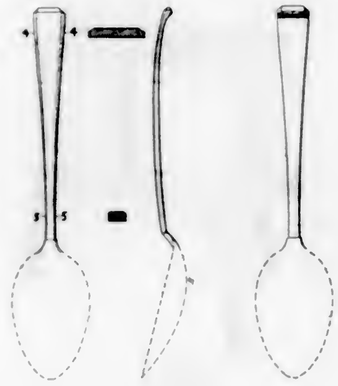
The ornamental design for a plate or similar article of glassware substantially as shown.

86,928. JAR OR SIMILAR ARTICLE. OLBERT C. NOBLE, Washington, Pa., assignor to Tygart Valley Glass Company, Washington, Pa., a Corporation of West Virginia. Filed Mar. 22, 1932. Serial No. 43,263. Term of patent 3½ years.



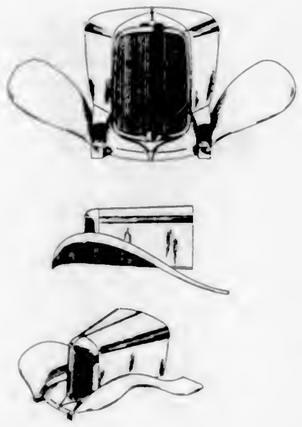
The ornamental design for a jar or similar article, as shown.

86,929. SPOON OR ARTICLE OF ANALOGOUS NATURE. HAROLD E. NOCK, Newburyport, Mass., assignor to Towle Manufacturing Company, Newburyport, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1932. Serial No. 42,991. Term of patent 14 years.



The ornamental design for a spoon or article of analogous nature, substantially as shown and described.

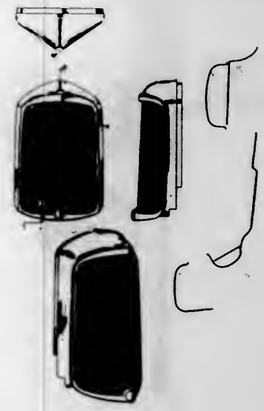
86,930. HOOD, RADIATOR, AND FENDER ASSEMBLAGE FOR AUTOMOBILES. AMOS E. NORTHUP, Detroit, Mich., assignor to Reo Motor Car Company, a Corporation of Michigan. Filed Feb. 28, 1931. Serial No. 38,862. Term of patent 7 years.



The ornamental design for hood, radiator and fender assemblage for automobiles, as shown.

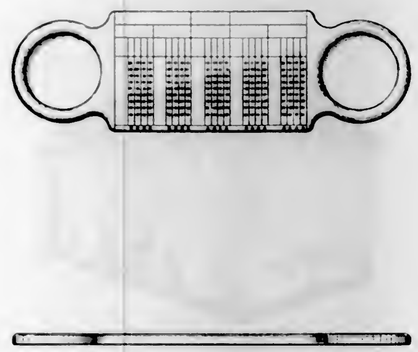
CARNEGIE LIBRARY OF ATLANTA

86,931. RADIATOR. AMOS E. NORTHUP, Pleasant Ridge, Mich., assignor to Reo Motor Car Company, a Corporation. Filed Oct. 15, 1931. Serial No. 41,402. Term of patent 7 years.



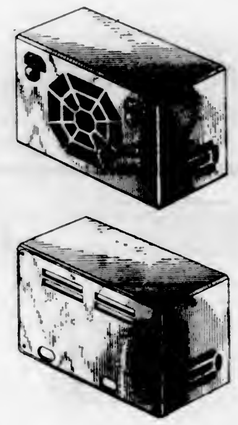
The ornamental design for a radiator, as shown.

86,932. COMBINED GAME BOARD AND TRAY. WILLIAM ANDREW O'BRIEN, San Francisco, Calif. Filed May 27, 1931. Serial No. 40,012. Term of patent 14 years.



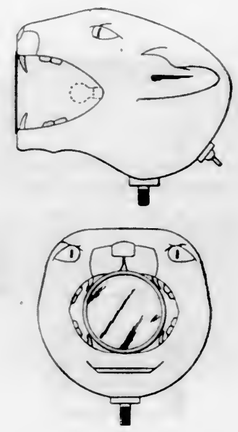
The ornamental design for a combined game board and tray, substantially as shown.

86,933. RADIO CABINET. DONALD J. PHELPS, Chicago, Ill., assignor to Phelps Radio Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 23, 1932. Serial No. 43,275. Term of patent 14 years.



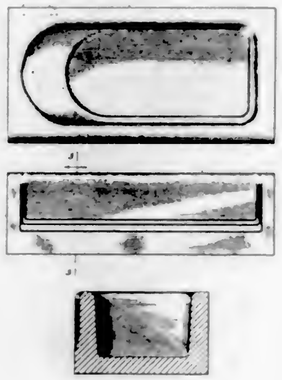
The ornamental design for a radio cabinet as shown.

86,934. HEADLIGHT. JOHN PUCUNAS, Los Angeles, Calif. Filed Feb. 24, 1932. Serial No. 42,988. Term of patent 7 years.



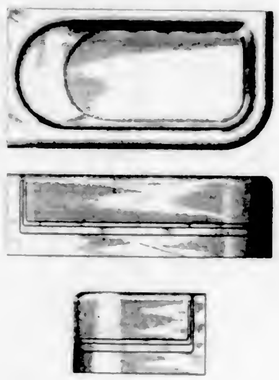
The ornamental design for a headlight, as shown.

86,935. BATHTUB. GEORGE SAKIER, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 19, 1930. Serial No. 36,403. Term of patent 14 years.



The ornamental design for a bath tub, as shown.

86,936. BATHTUB. GEORGE SAKIER, New York, N. Y., assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 19, 1930. Serial No. 36,404. Term of patent 14 years.



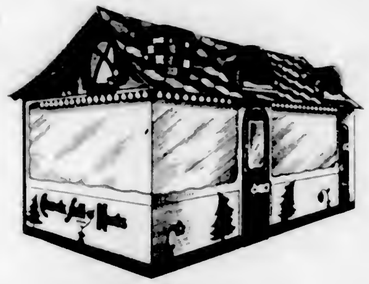
The ornamental design for a bath tub, as shown.

86,937. GLOBE FIXTURE. HERMAN E. SCHULSE, Wilmington, Del., assignor to Uniclox Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 29, 1931. Serial No. 41,258. Term of patent 14 years.



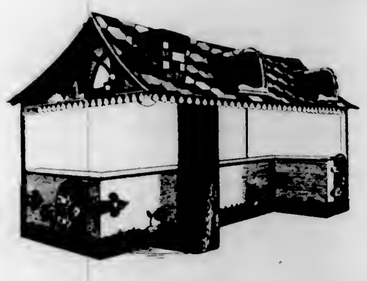
The ornamental design for a globe fixture substantially as shown and described.

86,938. STORE FRONT. WILLIAM SCHWARTZ, New York, N. Y. Filed Dec. 30, 1931. Serial No. 42,307. Term of patent 14 years.



The ornamental design for a store front as shown and described.

86,939. STORE FRONT. WILLIAM SCHWARTZ, New York, N. Y. Filed Dec. 30, 1931. Serial No. 42,308. Term of patent 14 years.



The ornamental design for a store front as shown and described.

86,940. BRACELET CHAIN. EDWIN F. M. SPEIDEL, Edgewood, R. I. Filed Aug. 13, 1931. Serial No. 40,842. Term of patent 3½ years.



The ornamental design for a bracelet chain, substantially as shown and described.

86,941. RADIO SOUND BOX. ARNO E. TAUSCHER, Chicago, Ill. Filed Mar. 7, 1932. Serial No. 43,115. Term of patent 3½ years.



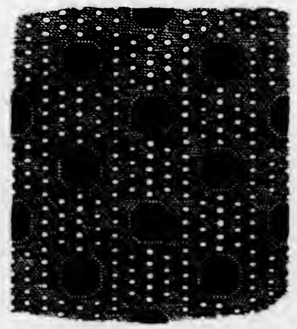
The ornamental design for a radio sound box as shown.

86,942. GAME TABLE. CHARLES A. TOCE, Houston, Tex. Filed Feb. 18, 1932. Serial No. 42,920. Term of patent 7 years.



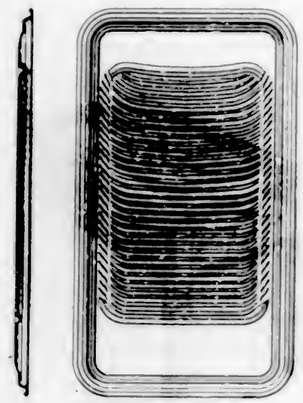
The ornamental design for a game table, as shown.

86,943. LACE. ALBERT UPTON, Paterson, N. J., assignor to Van Raalte Company, New York, N. Y., a Corporation of New York. Filed Mar. 4, 1932. Serial No. 43,072. Term of patent 3½ years.



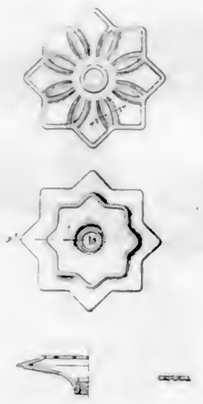
The ornamental design for lace substantially as shown.

86,944. WASHBOARD. FRANK M. VOGAN, Canton, Ohio, assignor to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed Mar. 1, 1932. Serial No. 43,047. Term of patent 14 years.



The ornamental design for a washboard, as shown.

86,945. CEILING LIGHTING FIXTURE. BERTRAM L. WATKIN, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed Feb. 23, 1932. Serial No. 42,959. Term of patent 7 years.

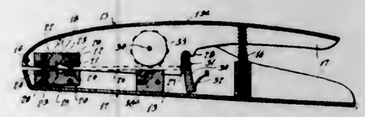


The ornamental design for a ceiling lighting fixture, substantially as shown.

PATENTS

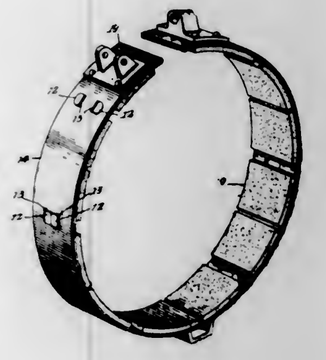
GRANTED MAY 10, 1932

1,857,123. ACCOUNTING SYSTEM AND APPARATUS. JOHN LAFAYETTE BABER, Jr., Lynchburg, Va. Filed Dec. 9, 1926. Serial No. 153,704. 10 Claims. (Cl. 101—90.)



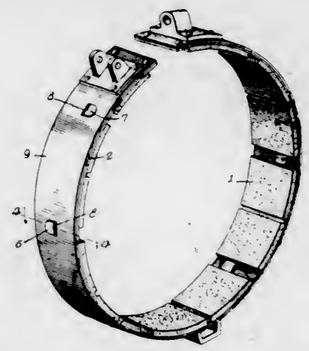
1. Apparatus of the character described comprising a marker including relatively movable members between which the material to be marked is gripped during the marking operation, a device normally arranged to hold said movable members in spaced relation and to thereby prevent operation of the marker, said device being in position to be engaged and displaced to an inoperative position by the material to be marked when the latter is properly placed between the said movable members of the marker, said device functioning when the movable members are separated subsequent to the marking operation, to push and partially eject the marked material from between said members.

1,857,124. FRICTION BRAKE. TRACY F. BRACKETT, New York, N. Y., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 19, 1928. Serial No. 313,508. 2 Claims. (Cl. 188—259.)



1. The combination of a support having a plurality of openings therein arranged in pairs spaced apart and inwardly from the marginal edges thereof, and a friction block comprising a metal back and a body mounted on the back, the back extending beyond the ends of the body, and tongues stamped from the back within the marginal edges thereof at the ends of the body projected through said openings in the support, the ends of one pair of tongues being bent outward and clenched on the support and the ends of the other pair of tongues being bent inward and clenched upon the support.

1,857,125. FRICTION BRAKE SHOE. TRACY F. BRACKETT, New York, N. Y., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 19, 1928. Serial No. 313,509. 4 Claims. (Cl. 188—259.)



1. A friction block for friction brakes comprising a metal back plate and a composition body mounted thereon said back plate projecting beyond the body at the ends thereof, and a laterally extending tongue stamped from each projecting end of the block within the marginal edges thereof, the tongues of the block being oppositely directed.

1,857,126. CHEMICAL PICTURE TELEGRAPHY RECEIVER. FRITZ DÖRING, Berlin-Frohnau, and PAUL STORCH, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 16, 1930, Serial No. 489,026, and in Germany Sept. 18, 1929. 1 Claim. (Cl. 178—13.)



An article of manufacture for use in picture telegraph apparatus comprising a roll of moist chemically treated recording paper, a slotted inner housing within which the roll is rotatably carried and withdrawn through the slotted portion of the housing to maintain the paper contained therein in a moistened state, a slotted outer housing having the slot aligned with the slotted portion of the inner housing, the inner housing and the recording paper being supported within the outer housing, and a fibrous bearing surface carried by the outer housing in the slotted portion thereof at the point where the recording paper is withdrawn for recording purposes.

1,857,127. GYNECOLOGIC INSTRUMENT. FREDERICK O. E. HOGERT, Chicago, Ill. Filed Nov. 6, 1930. Serial No. 493,835. 3 Claims. (Cl. 128—127.)

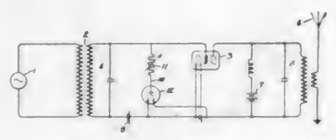
1. A one-piece gynecologic instrument of the character described, consisting of a bar comprising a body portion

adapted to underlie and support a pessary and formed with a notched forward end to engage with the rim of the pessary, and a handle portion continuous endwise with said body portion, said bar formed in its upper surface



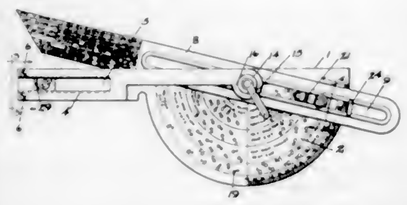
with a shallow longitudinal groove constituting a thumb guide, and at the rear end of its handle portion with a transverse notch constituting a finger rest to facilitate the stretching of the pessary by the thumb.

1,857,128. ELECTRON DISCHARGE SYSTEM. MARCUS A. ACHESON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 28, 1930. Serial No. 439,792. 11 Claims. (Cl. 250—27.)



1. The method of operating a three-element electron discharge device having a grid and cathode, and conductors connected thereto, said conductors being connected in circuit relation, and in which sufficient emission of secondary electrons from the grid may occur to produce a negative resistance between the grid and cathode which includes causing sufficient unidirectional current varying directly as the voltage between said conductors to flow from the cathode conductor to the grid conductor and through said external circuit to cause the current in the external circuit to remain approximately constant over a range of voltage variations between said conductors.

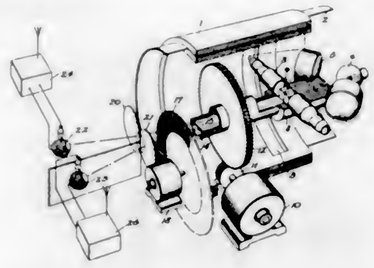
1,857,129. BEVEL GAUGE. HAROLD AHOLA, Stevenson, Wash. Filed Oct. 9, 1929. Serial No. 398,370. 3 Claims. (Cl. 33—94.)



1. In a measuring instrument of the straight edge type including a data-plate having sockets in its face, the combination of a pivotal, slotted, slidable blade mounted on the data-plate, a slide carried by the blade, and a set screw mounted in said slide for coaction with a selected one of the sockets.

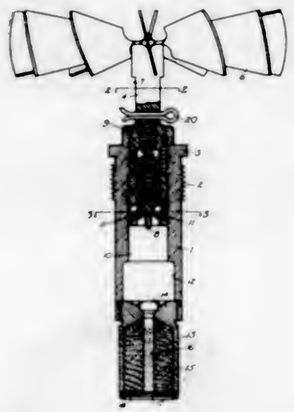
1,857,130. PICTURE TRANSMISSION. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 5, 1930. Serial No. 459,366. 11 Claims. (Cl. 178—7.)

3. Picture transmitting apparatus comprising a cylindrical member adapted to support a picture to be sent, a scanning lens member rotatably supported coaxially with said cylindrical member, a plurality of fixed photoelectric cells, and a plurality of fixed light refracting members



between the lens member and said cells arranged to direct simultaneously into the cells light rays respectively from adjacent areas in separate scanning lines of the picture.

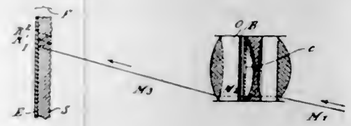
1,857,131. FUSE FOR AIRPLANE FLARES. JOHN S. BARKER, Washington, D. C. Filed Feb. 6, 1928. Serial No. 252,396. 2 Claims. (Cl. 102—36.)



1. In a fuse for airplane flares the combination of a barrel provided with two coaxial bores of different diameters; a shaft in threaded engagement with said barrel and provided with a cylindrical end portion slidingly coacting with the smaller barrel bore, the wall of said end portion having a passage therethrough; a ball in said passage; means for rotating said shaft to advance the same into said barrel; an explosive mixture carried by said barrel having associated therewith a percussion cap; and propulsive means for igniting said mixture, said means including a firing-pin held in inoperative position by said ball when said end portion is within the smaller barrel bore but released to strike said percussion cap when said end portion enters the larger barrel bore by transverse movement of said ball in said passage.

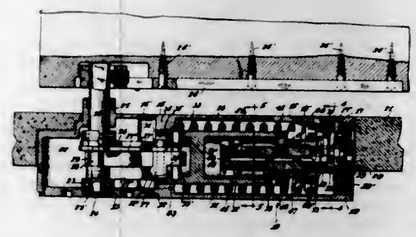
1,857,132. DIAPHRAGM FOR OPTICAL SYSTEMS. RODOLPHE BERTHON, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 21, 1928, Serial No. 263,335, and in France Mar. 21, 1927. 1 Claim. (Cl. 95—2.)

In combination, a striated film for color photography, an optical system adapted to pass light to or from said film, a color filter associated with said system and comprising color zones extending parallel with the striations on said film, and a diaphragm adjacent said filter and



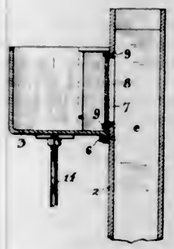
having a relatively narrow fixed opening extending transversely of said zones and of substantially uniform width throughout its length.

1,857,133. DOOR CHECK AND CLOSER. EMIL BOMMER, Brooklyn, N. Y. Filed Apr. 17, 1930. Serial No. 444,971. 12 Claims. (Cl. 16—52.)



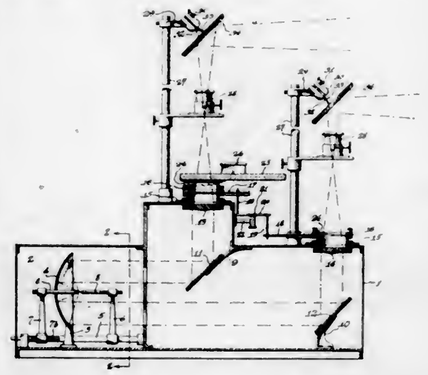
1. A device of the character described having, in combination, a case, a stationary stem body, a movable cylinder slidably embracing the stem body and therewith forming a liquid checking chamber, an extension on the cylinder forming a by-pass chamber in conjunction with the stem body, a passage for liquid leading through the stem body from said chamber to the interior of the case, and by-pass connections in the stem body, with which said by-pass chamber is adapted to establish communication to provide a branch outlet from said passage to the interior of the case.

1,857,134. COOLING MEANS FOR PHOTOGRAPHIC FILM TANKS. EARL STANDISH BOYNTON, East Orange, N. J., assignor to Photomaton, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 14, 1930. Serial No. 444,066. 1 Claim. (Cl. 257—208.)



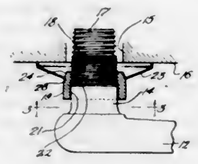
In combination with a plurality of photographic-film treating tanks arranged side by side, cooling means comprising a cooling box adapted to receive a liquid cooling medium, apertures formed in the walls of a plurality of said tanks, said apertures being in register with the cooling box, and a plurality of heat-exchange plates connected to the marginal walls of the apertures and separating the said tanks from the cooling box.

1,857,135. COMBINATION PROJECTOR. KARL BRENKERT and JOSEPH W. BRENKERT, Detroit, Mich. Filed Apr. 25, 1927. Serial No. 186,204. 2 Claims. (Cl. 88—24.)



1. A projector comprising a housing, means for producing a primary beam therein, opaque reflectors for dividing said primary beam into substantially parallel secondary beams, standards mounted on said housing, and projecting reflectors slidably mounted on said standards and having a universal connection thereto, said projecting reflectors being disposed in the paths of said secondary beams.

1,857,136. SINK FIXTURE. ALBERT C. BROWN, Chicago, Ill. Filed May 3, 1929. Serial No. 360,027. 2 Claims. (Cl. 137—111.)

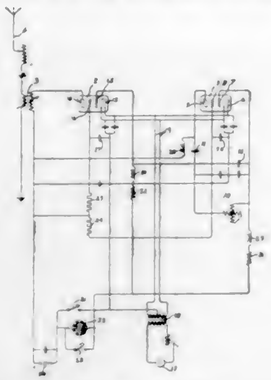


2. A faucet having a threaded shank for connection to a supply pipe and adapted to extend through a wall, an escutcheon embracing said shank, and a collar engaging said threads and pressing said escutcheon to the wall, said collar having an outer cylindrical surface merging at its bottom into a curved surface for engagement with said escutcheon.

1,857,137. TRANSMITTING SYSTEM. IRVING F. BYRNES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1928. Serial No. 265,176. 3 Claims. (Cl. 250—17.)

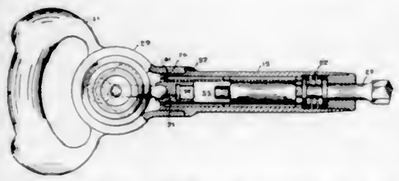
1. In a radio signaling system, an electron discharge oscillator, an electron discharge amplifier for the oscillations produced by the oscillator, both said amplifier and oscillator comprising an anode, a cathode and a control electrode, an oscillatory circuit connected between the anode and control electrode of said oscillator, an antenna circuit associated with the anode of said amplifier, and means for preventing impedance variations of said an-

tenna circuit from affecting the frequency of oscillations produced by said oscillatory circuit, comprising an additional screening electrode interposed between the anode



and control electrode of both said amplifier and oscillator and means for maintaining said additional electrode at a positive potential with respect to the cathodes.

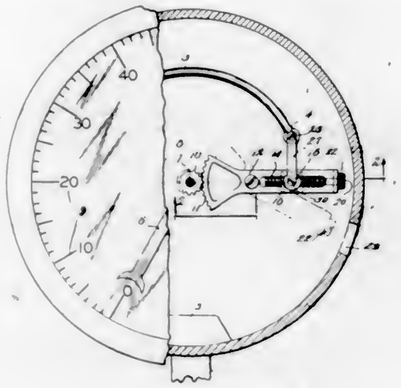
1,857,138. VACUUM POWER HAMMER. JAMES C. CAMPBELL, New York, N. Y., assignor to Portable Air Hammer Company, Inc., a Corporation of New York. Filed Feb. 15, 1928. Serial No. 254,364. 1 Claim. (Cl. 125—34.)



In a vacuum power hammer the combination of a two piece cylinder comprising a tool holder at one end carrying a tool and embodying means for controlling the hammer blow by limiting the inward movement of said tool, a reciprocatory plunger in said cylinder having an air cushion pocket, means for actuating said plunger, and a reciprocatory hammer having a head adapted to cushion in said air cushion pocket movable in said cylinder between said tool holder and said plunger, and said cylinder embodying means for producing a vacuum between the end of the hammer and the end of the plunger when said plunger is moving in a direction away from said tool holder and forcing said hammer against the end of said tool holder when the plunger moves in the opposite direction consisting of longitudinal grooves cut on the outer surface of the inner cylinder member and also having circular cut outs having through borings which borings are in alignment with said grooves adapted to maintain atmospheric pressure therein, means for interrupting the same between the hammer and plunger and means whereby said cylinder members may be assembled at the tool holder end of the outer member.

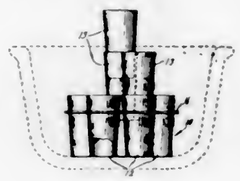
1,857,139. PRESSURE GAUGE INDICATOR. HENRY D. CARLTON, Montclair, N. J., assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 18, 1927. Serial No. 213,754. 6 Claims. (Cl. 73—109.)

3. In a pressure gauge, comprising a pressure responsive tube, an indicator dial, and a gear wheel carrying an indicating pointer thereon swinging over the dial, motion transmitting means interposed between the tube and the pointer, including a pivoted lever arm, a gear sector thereon meshing with the gear wheel of the indicating pointer, a slot in the lever arm, a slide freely movable therein, a stop member on the lever arm, a compression



spring received between the slide and stop members, a machine screw in threaded engagement at one end with the slide, the other end passing freely through the stop member, and having an enlarged head thereon, intermeshing detents upon opposed surfaces of said stop member and screw head, and a link connecting the slide member to the free end of the pressure responsive tube.

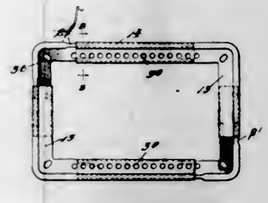
1,857,140. FLOWER HOLDER. EDWARD W. CARPENTER, Fairfield, Conn., assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 9, 1931. Serial No. 536,276. 9 Claims. (Cl. 47—41.)



1. A flower holder comprising a perforated plate, a plurality of tapered ferrules in the perforations in the plate and supported in spaced relation by the plate to form a cluster, said ferrules projecting at both sides of the plate, and said ferrules having their ends at one side of the plate arranged in the same plane to support the cluster in horizontal position on said ends being disposed on a supporting surface.

1,857,141. ADJUSTABLE NUMBER PLATE FRAME. JOHN T. COBLEY, Providence, R. I. Filed Feb. 28, 1929, Serial No. 343,469. Renewed Sept. 25, 1931. 1 Claim. (Cl. 40—155.)

In a frame for number plates, four L-shaped members formed of sheet stock each having a long side and a short side, the sides of two members each having a flange part and a channel-shaped edge part raised from the plane of the flange part, the sides of the other two each having a flange part of smaller width than the flange parts of the first two members, a channel-shaped edge part having a width adjacent the corner the same as the width of the edge parts of the first two members, and a width at the end portions less than that of the edge parts of the first two members, whereby the sides of said other two



members slidably fit into the sides of said first two members, and guide fingers on the edge and the flange parts of the first two members to guide the slidably fitting parts of the other two members, the overlapping flange parts of the interfitting long sides having openings along their length to selectively register for accommodating the bolts of different sized number plates.

1,857,142. MEANS AND METHOD OF DRESSING GRINDERS. ADOLPH L. DE LEEUW, Plainfield, N. J., assignor of one-half to Albert F. Nathan, New York, N. Y. Filed Dec. 13, 1927. Serial No. 239,704. 15 Claims. (Cl. 125—11.)

3. A grinding machine comprising a grinding wheel and a dressing mechanism therefor; said mechanism comprising two slides angularly disposed and carrying diamonds at their extremities; and means for simultaneously oscillating and repeatedly reciprocating said slides to cause said diamonds to develop a predetermined contour on said grinding wheel.

1,857,143. DRAINING TILE. CHARLES DIETRICHS, Little Ferry, N. J., assignor to Walker Cement Products, Inc., Union City, N. J., a Corporation of New Jersey. Original application filed Apr. 23, 1926, Serial No. 104,046. Divided and this application filed Apr. 20, 1928. Serial No. 271,645. 3 Claims. (Cl. 61—10.)

1. A porous concrete pipe for drainage and the like, which comprises a relatively coarse aggregate material and sand bound together by cement, said constituents being so proportioned that there is sufficient sand to assist in binding the aggregate together, but not sufficient to fill the voids between the aggregate.

1,857,144. TIRE. ERNST EGER and SHELDON P. THACHER, Detroit, Mich., assignors to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Mar. 28, 1930. Serial No. 439,580. 11 Claims. (Cl. 152—13.)



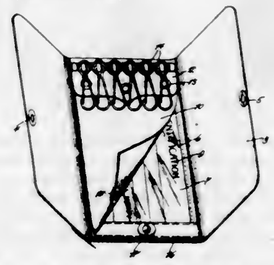
1. An inner tube having diametrically disposed dynamically balanced thickened portions adapted to fit in depressed portions of a drop center rim.

1,857,145. TONGUE AND MOUTH CLEANER. LEVI L. FUNK, Chicago, Ill. Filed Sept. 3, 1929. Serial No. 390,198. 1 Claim. (Cl. 128—269.)



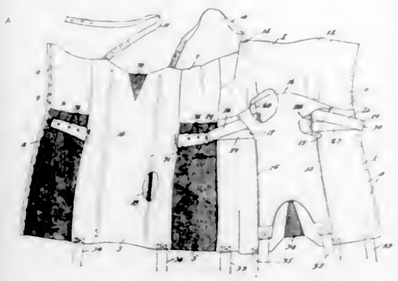
A handle provided with an aperture at one end thereof, in combination with disk members, said disk members obtained by dividing a rubber disk having a sponge body and smooth faces, with a portion of the peripheral edge integral with the members obtained by said division, and a layer of adhesive cement applied to the smooth faces of said members, the apertured end of said handle being embedded in, and said smooth faces being joined by said adhesive cement, to permit saturation of said disk members with different liquids.

1,857,146. KEY CASE. PRINCE ALBERT GARDNER, Jr., St. Louis, Mo. Filed Apr. 4, 1931. Serial No. 527,654. 4 Claims. (Cl. 150—40.)



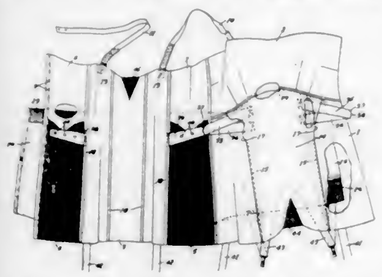
1. A case of the character described comprising a body of flexible material including a back portion having flaps in connection with the sides thereof and movable to overlapping position across said back portion, a sheet of transparent material covering the inside of said back portion and cooperating therewith to form a pocket, separate stiffeners extending the full width of said back portion and attached thereto at opposite ends of said back portion and holding said back portion of said case from folding at its ends, a flexible member approximately coextensive with said transparent member and having its upper end attached to said stiffener at the upper end of said case, and a releasable fastener device for holding the lower end of said flexible member in connection with said stiffener at the lower end of said case.

1,857,147. FOUNDATION GARMENT. ROSE M. GRAVES, Chicago, Ill., assignor, by mesne assignments, to Associated Apparel Industries, Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1931. Serial No. 531,373. 5 Claims. (Cl. 2—30.)



1. A foundation garment adapted to encircle the body of the wearer and having a stiffened panel arranged to cover the diaphragm and abdomen, a central section secured to the front of the garment concealing said panel and having openings in the sides at about the waist line, elastic straps secured to the sides of said panel and extending through the openings in said central section and partly around the outer sides of the garment at the waist line, tapes secured to the back portion of the garment and arranged to extend forwardly toward said elastic straps, and means for adjustably securing said elastic straps to said tapes to hold said panel under tension.

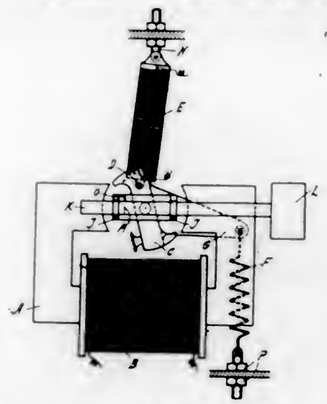
1,857,148. FOUNDATION GARMENT. ROSE M. GRAVES, Chicago, Ill., assignor to Associated Apparel Industries, Inc., Chicago, Ill., a Corporation of Illinois. Filed Sept. 4, 1931. Serial No. 561,155. 5 Claims. (Cl. 2—27.)



1. A foundation garment comprising a combined corset and brassière adapted to encircle the body, having an opening extending from top to bottom and a pair of spaced openings in the front at about the waist line, a belt secured to the inside of the garment arranged to cover the diaphragm and abdomen and having an opening extending from top to bottom, straps secured to the front portion of said belt and arranged to extend through the openings in the front of the garment, and means for holding said straps under tension at the sides of the garment.

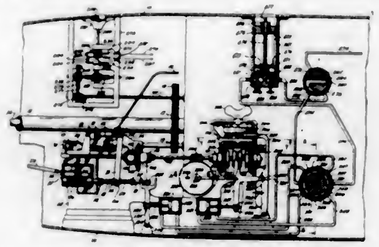
1,857,149. DEVICE FOR TESTING ELECTRIC VOLTAGE REGULATORS. HUGO GROS, Berlin, Germany. Filed Apr. 27, 1927, Serial No. 187,100, and in Germany July 8, 1926. 9 Claims. (Cl. 73—51.)

1. In a device of the class described, in combination, a regulating apparatus adapted to control a function of the output of a source of current and including a compressible carbon pile resistance, a movable armature adapted upon movement to vary the pressure upon said resistance, and a stop for limiting movement of said armature, said apparatus normally having a spring acting upon said armature to urge it toward said stop, and means for testing and aiding in adjusting said regulating apparatus comprising means substituted for said spring and adapted to



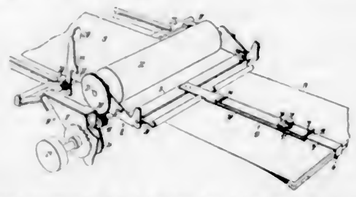
act upon said armature in the place of said spring and with a predetermined force and means for adjusting said apparatus so that said stop just limits movement of said armature by said substituted means.

1,857,150. TORPEDO. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Feb. 15, 1929, Serial No. 340,285. Renewed Sept. 21, 1931. 20 Claims. (Cl. 114—23.)



1. In combination with a moving body, means associated therewith operable upon contact with a metallic hull when said body passes in proximity thereto for redirecting said body toward said hull, and means operable upon contact with said hull when said body again passes in proximity thereto for again redirecting said body towards said hull.

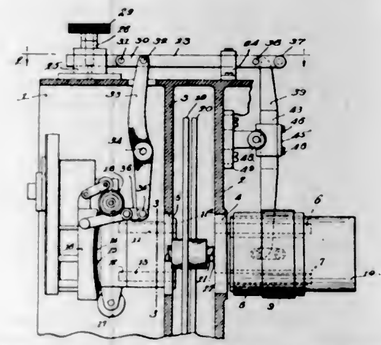
1,857,151. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 16, 1929. Serial No. 378,657. 10 Claims. (Cl. 197—140.)



1. An adjustable gage-device for a typewriting machine, including, in combination, a table, a gage-plate slidable relatively thereto, a spring resiliently pressing said gage-

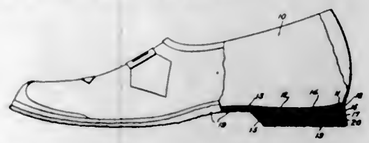
plate to said table, a pressure-member having a lever-action and formed with long and short arms, means for applying force to the long arm of said pressure-member, to cause its short arm to bind the gage-plate to the table, and a pair of pins secured to said table for guiding said gage-plate and for supporting said spring and said pressure-member.

1,857,152. COMBINED FOCUS AND IMAGE PLACEMENT ADJUSTMENT MEANS FOR MOVING PICTURE PROJECTORS. ARTHUR J. HOLMAN, Brighton, Mass. Filed Aug. 18, 1927. Serial No. 213,794. 4 Claims. (Cl. 88—16.8.)



1. In a device of the character specified, the combination of movable optical rectifying means comprising a pair of overlapping rotatable lens discs, a slidably mounted aperture unit, a slidably mounted front objective, and actuating means for adjusting said aperture unit and said front objective, said actuating means being provided with a common control member and adapted variously to position said aperture unit and said front objective according to the requirements for compensating variation in spacing of film picture centers.

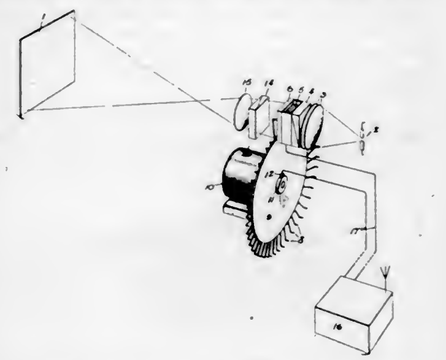
1,857,153. BATHING SHOE. CLARENCE W. HUBBELL, Naugatuck, Conn., assignor to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Aug. 8, 1928. Serial No. 298,165. 1 Claim. (Cl. 36—1.)



A bathing shoe of rubber composition including an upper, an insole, a heel of soft rubber composition secured to the insole, said heel having a breast bevelled throughout its width, an outsole covering the bottom of the sole, arch, and heel, a trim of rubber composition enclosing the side and rear portions of the heel between the upper and the outsole, and a strip of rubber composition extending round the top of the trim between opposite corners of the breast and covering the adjoining portions of the trim and the upper, all of the parts being vulcanized together to form a unit.

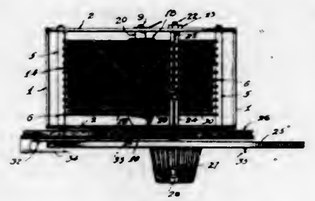
1,857,154. TELEVISION RECEIVER. RAY D. KELL, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,845. 9 Claims. (Cl. 178—6.)

1. Television receiving apparatus comprising a member which becomes double refracting when put under electric strain, optical means associated therewith for rendering visible those portions thereof subjected to electric strain,



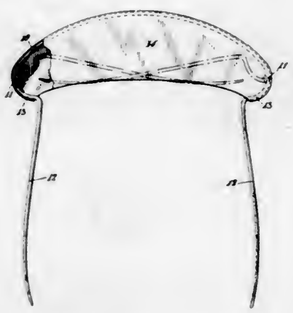
and means for subjecting points of the member successively to electric strain varied in accordance with the received signal.

1,857,155. VARIABLE CONDENSER. WILLIAM S. KELLOGG, Peoria, Ill.; Harriet A. Keas administratrix of said William S. Kellogg, deceased. Filed Sept. 24, 1927. Serial No. 221,776. 19 Claims. (Cl. 175—41.5.)



1. In a variable condenser, in combination with the rotor thereof whose plates are independently movable, mechanism including a member mounted to travel substantially parallel to the axis of mounting of the plates adapted to engage with and operate each plate independently and in successive order and after each such operation disengage therefrom.

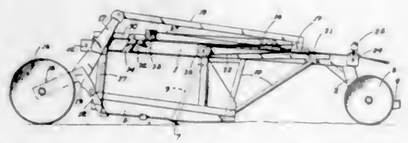
1,857,156. EYESHIELD. HERMANN LANG, New York, N. Y. Filed July 6, 1931. Serial No. 548,820. 2 Claims. (Cl. 2—12.)



1. In an eye shade, a frame comprising an outwardly curved front member provided with hinge ends, a pair of head attaching members operatively connected with the

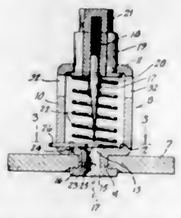
hinge ends of said front member and provided with inwardly directed connecting arms, a shield member made of a substantially closed rubber sack, having end pockets, slipped over the front member, and engaging its ends and the connecting arms of said attaching member with said pockets, the portion of said shield member between said pockets being open to permit the insertion of said frame therein.

1,857,157. SCRAPER. ROBERT G. LE TOURNEAU, Stockton, Calif. Filed Jan. 5, 1931. Serial No. 506,521. 6 Claims. (Cl. 37—126.)



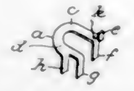
6. A scraper comprising a bowl and endgate for the bowl, means mounting said endgate for movement lengthwise of the bowl, a longitudinal beam rigid with and above the bowl, a carriage riding on top of the beam for movement along the same, rigid connections between the carriage and endgate to the sides of the beam whereby said endgate is rigid with the carriage, and means above the beam and directly applied to the carriage to pull the same along the beam.

1,857,158. CONCEALED THUMB TACK. WILLIAM J. MALONEY, Ansonia, Conn., assignor of one-tenth to William J. Maloney, jr., Ansonia, Conn. Filed Mar. 27, 1931. Serial No. 525,663. 7 Claims. (Cl. 248—50.)



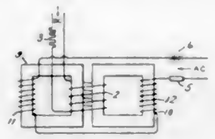
1. In a securing means, a housing open at one end, a pointed element, means serving to normally retain said element within the housing, means adapted to be operated to project the element through the open end of the housing and into a support to mount the housing on the support, and means for securing the housing to an article to be supported.

1,857,159. CLIP FOR GUARD-BOARDS OF SCAFFOLDS AND THE LIKE. ARNOLD CLARENCE MARSHALL, London, England, assignor to The Steel Scaffolding Company Limited, London, England, a Corporation of Great Britain. Filed June 18, 1929, Serial No. 371,930, and in Great Britain July 24, 1928. 7 Claims. (Cl. 304—40.)



1. A device for the purpose specified comprising two parallel members disposed in spaced relationship, a connection between one end of said members, downwardly extending projections at the end of one member arranged in spaced relationship one to the other, a downwardly extending projection at the end of the other member, and an upwardly extending projection upon said member.

1,857,160. RECTIFICATION OF ALTERNATING CURRENTS. KARL B. MCEACHRON, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 29, 1928. Serial No. 258,112. 4 Claims. (Cl. 175—363.)



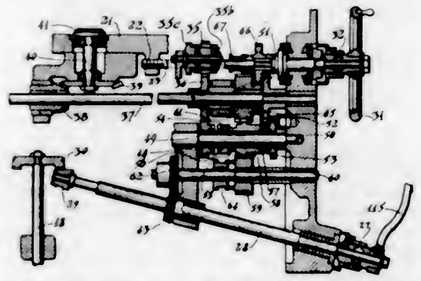
1. In a rectifier system, a magnetic core, means comprising an exciting winding for producing a substantially constant magneto-motive force in said core, a circuit including a source of alternating current and an alternating current winding wound on said core, means for absorbing the voltage induced in said exciting winding by the current of said alternating current winding, and a member comprising silicon carbide connected in series with said alternating current winding, whereby said alternating current is distorted and modified to produce a current having a large unidirectional component over a range of frequencies including relatively high frequencies and the modifying of said alternating current due to said resistance member is as effective at said high frequencies as at low frequency.

1,857,161. METHOD OF COATING AND PRODUCT THEREOF. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed May 22, 1929. Serial No. 365,244. 7 Claims. (Cl. 91—68.)

1. In the method of coating surfaces with lacquers containing derivatives of cellulose, the step of applying to such surfaces a primer or filler containing cocoanut oil.

6. An article of manufacture having at least on part of the surface thereof a coat formed by the application of a primer containing cocoanut oil.

1,857,162. MILLING MACHINERY. LESTER F. NENNINGER, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed June 7, 1924, Serial No. 718,640, Patent No. 1,747,903, dated Feb. 18, 1930. Divided and this application filed Feb. 13, 1930. Serial No. 428,176. 18 Claims. (Cl. 90—21.)

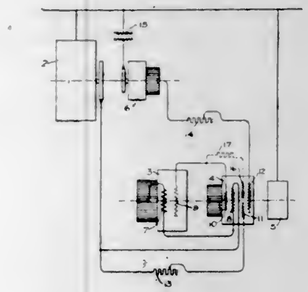


1. In a machine tool organization embodying a plurality of relatively movable parts, the combination with independent final movers for each of said parts, of a power transmission coupleable with said final movers, said transmission including gearing individual for movement of certain of the parts and an interponent sleeve member having a gear portion in joint engagement with portions of said individual gearing, and means for driving said sleeve in opposite directions for jointly reversing the direction of actuation of the gearing in engagement therewith.

1,857,163. METHOD OF TREATING FABRICS AND PRODUCT THEREOF. HERBERT PLATT, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed May 14, 1929. Serial No. 363,109. 22 Claims. (Cl. 8—20.)

1. Method of improving the scroop of a fabric containing yarns of organic derivatives of cellulose comprising treating the fabric with a polybasic aliphatic acid compound.

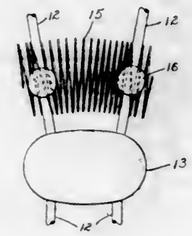
1,857,164. SPEED OR LOAD CONTROL SYSTEM. WALTER SEIZ, Baden, Switzerland, assignor to General Electric Company, a Corporation of New York. Filed Mar. 1, 1929, Serial No. 343,757, and in Germany Mar. 5, 1928. 11 Claims. (Cl. 172—274.)



1. In combination, an electrical circuit connected to voltage producing means provided with an exciting winding for regulating the voltage produced and means for energizing said exciting winding so as to maintain a substantially constant value of current flow in said circuit, the said means comprising additional voltage producing means connected to said exciting winding and a plurality of exciting windings in said additional voltage producing means to regulate the voltage produced thereby, one of said plurality of exciting windings being energized by a current proportional to the current flow in said circuit, a second of said plurality of exciting windings being energized by an independent regulating current supplied from a suitable source, these last mentioned two exciting windings being arranged to produce substantially zero resulting flux when the current in the said circuit has the desired value and a third of said plurality of exciting windings energized by one of said voltage producing means so as to automatically produce at every instant the flux necessary to maintain said substantially constant value of current in said circuit.

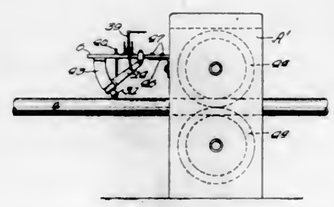
8. In combination with an asynchronous machine provided with a primary winding and a wound secondary, a load control system therefor comprising a source of alternating current connected to said primary winding, voltage producing means concatenated with said secondary, an exciting winding in said voltage producing means for regulating the voltage produced and means to energize said exciting winding whereby the current in said primary winding may be varied in a substantially constant and direct ratio to an independent regulating current without simultaneously changing the speed of said machine, the said means comprising additional voltage producing means connected to said exciting winding and a plurality of exciting windings in said additional voltage producing means to regulate the voltage produced thereby, one of said plurality of exciting windings being energized by a current proportional to the current flowing in said secondary, a second of said plurality of exciting windings being energized by the said independent regulating current supplied from a suitable source, these last mentioned two exciting windings being arranged to produce substantially zero resulting flux when said ratio prevails and a third of said plurality of exciting windings energized by one of said voltage producing means so as to automatically produce at every instant the flux necessary to maintain said ratio without a simultaneous change in speed of the said machine.

1,857,165. CUT OUT FOR SERIES LAMPS. CARL SEVERIN, Cleveland Heights, and LEO R. PETERS, Cleveland, Ohio, assignors to General Electric Company, a Corporation of New York. Filed Sept. 29, 1930. Serial No. 484,980. 5 Claims. (Cl. 176—24.)



2. In an electric lamp or similar device comprising a bulb and leads sealed thereinto, a cut-out comprising a spiral of high resistance metal extending between said leads and making close contact with an oxide film on at least one thereof.

1,857,166. MARKING DEVICE. FRANK S. SPEICHER, Pittsburgh, Pa., assignor to M. E. Cunningham Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 26, 1930. Serial No. 470,871. 7 Claims. (Cl. 101—5.)

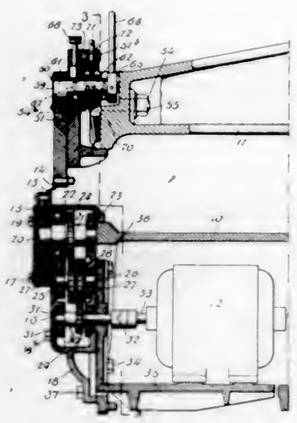


1. A marking device adapted for marking a moving object including a base member, an arm pivoted to the base member, a resiliently mounted plunger slidable in the arm, a die member carried by the plunger, and adjustable means associated with the arm for positioning the die member in the path of the moving object.

1,857,167. POWER DRIVEN SHEARS FOR CUTTING SHEET MATERIAL SUCH AS METAL, LEATHER, CARDBOARD, OR THE LIKE. ULRICH F. L. STEINDORFF and HERBERT J. HELLER, New York, and GUSTAVE A. UNGAR, Pelham Manor, N. Y.; said Ungar assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed May 20, 1927. Serial No. 192,833. 3 Claims. (Cl. 164—47.)

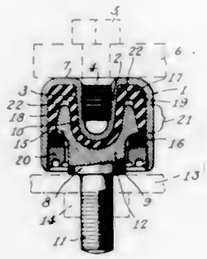
1. In a shears, a supporting framework having a standard, a movable blade and actuating mechanism therefor, a normally stationary blade mounted on said standard for vertical and lateral adjustment towards and from said

movable blade, and means for adjusting said stationary blade laterally, comprising a bracket, said bracket having a guideway in which said blade is mounted for vertical



adjustment, and a wedge interposed between said bracket and standard for adjusting said bracket and the blade thereby laterally of the movable blade.

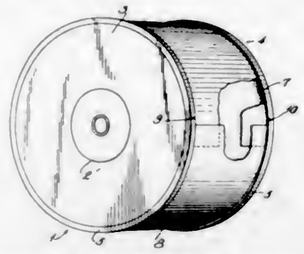
1,857,168. CUSHIONING CONNECTION. HUBBARD W. STEINER, JESS G. ELDRIDGE, and WALTER C. KEYS, Detroit, Mich., assignors to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Oct. 27, 1928. Serial No. 315,421. 13 Claims. (Cl. 248—14.2.)



1. A cushion connection comprising a metallic member in the form of a housing having a male portion forming a part thereof and disposed within said housing, a second metallic member extending within said housing and provided with a cavity interfitting said male portion, non-metallic cushioning material in said housing between said members, and means for maintaining said members and said cushioning material in cooperative relation, said cushioning material being completely enclosed by said means and the housing.

1,857,169. SHIPPING REEL. DONALD R. STEVENS, Ridgewood, N. J., assignor to The Okonite Company, Passaic, N. J., a Corporation of New Jersey. Filed Mar. 29, 1930. Serial No. 439,957. 1 Claim. (Cl. 206—59.)

In combination, a reel for cables comprising a hub and a flange at each end of the hub, a metal tire for each flange, each tire on its inner face being provided with an annular groove, and each tire on its periphery being provided with a slot opening into said grooves, and a continuous metal lagging for the reel adapted to be applied



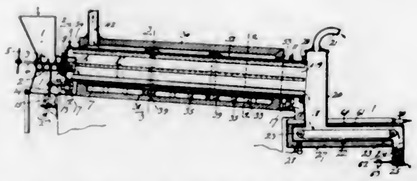
thereto through said slots so as to have its sides lying in said grooves, with the adjacent ends of the lagging overlapping.

1,857,170. COLLAR OR LIKE GARMENT PART. FREDERIC H. TABER, New Bedford, Mass. Filed Dec. 6, 1929. Serial No. 412,234. 15 Claims. (Cl. 2—143.)



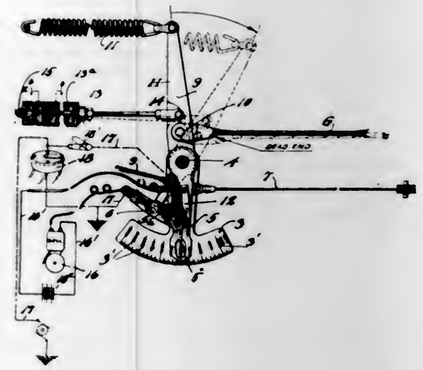
8. Stiffener blank for collars or other wearing apparel made as a shaped section of a sheet of unwoven and unspun fibre held together in a state of transverse compression by interstitial inclusions of resiliently vulcanized rubber compound.

1,857,171. RETORT. JAMES N. VANDEGRIFT, New York, N. Y., assignor to International Bitumenoil Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 24, 1928. Serial No. 264,294. 4 Claims. (Cl. 202—137.)



1. A retort including an inclined, revolvable retort cylinder through which the material to be treated travels, means forming an enclosing structure surrounding said cylinder and spaced therefrom, said structure forming a fire compartment under said cylinder, means for dividing said fire compartment laterally of said cylinder to form a plurality of fire chambers lengthwise of the cylinder, combustion means in said fire chambers and protecting plates arranged between the combustion means and the lower portion of said revolvable cylinder, said plates being spaced from and substantially concentric with said cylinder and arranged to permit the products of combustion to pass into direct contact with the upper portion of said cylinder after traversing the under side of said plates.

1,857,172. SAFETY MECHANISM FOR MATERIAL HANDLING MACHINES. CHARLES H. WAGNER, Washington, D. C., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Dec. 7, 1928. Serial No. 324,388. 4 Claims. (Cl. 177—311.)



4. In a material handling machine, a support, a turntable carried thereby, a boom disposed thereon and arranged for angular adjustment, a load handling cable on the boom, an indicator member, means for shifting the indicator member for indicating a maximum predetermined load to be handled by the machine, means for shifting the indicator incident to variations in the angular adjustments of the boom and to shift the indicator incident to rotary swing of the boom, a supplemental load operated member movable by the load being handled by the machine and arranged to cooperate with the first mentioned indicator when the load handled equals the predetermined load as indicated by the first mentioned indicator, and means for indicating that said predetermined load is being handled when the first mentioned indicator cooperates with the said member.

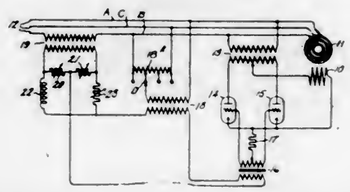
1,857,173. THERMOSTATIC SWITCH PLUG. EMIL WALDER, Philadelphia, Pa. Filed Mar. 23, 1928. Serial No. 264,057. 8 Claims. (Cl. 175—375.)



3. A thermostatic switch plug, having a casing carrying the working parts, sockets on said casing adapted to receive the prongs of a conventional electrical heating appliance, a binding post, a conducting plate, an armature forming a switch electrically connected with said plate and effective to open and close the circuit through said binding post, a pair of electromagnets controlling said armature and arranged side by side, a pair of manually adjustable contacts insulated from each other and simultaneously adjustable, one of said electro-magnets having its winding connected with said binding post and electrically connected with one of said contacts, a bimetallic thermostatic element deriving heat from one of said sockets, and a pair of contacts carried by said element and cooperating with said manually adjustable contact, the other of said electromagnets having its winding electrically connected with said element and with said conducting plate.

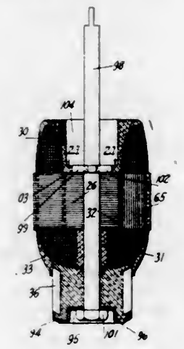
6. In a thermostatic plug, a casing, plug terminals and binding posts at opposite ends thereof, and thermostatically controlled mechanism between said terminals and binding posts and enclosed in said casing having an externally operable controlling member disposed in substantial parallelism to the planes of said terminals.

1,857,174. ELECTRIC REGULATING SYSTEM. MYRON ZUCKER, Royal Oak, Mich., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,877. 12 Claims. (Cl. 172—246.)



1. In combination, a synchronous dynamo-electric machine provided with armature and field windings, an alternating current circuit connected to said armature winding, means for energizing said field winding from said circuit including an electric valve provided with an anode, a cathode and a control grid, and means responsive to the armature current of said machine for controlling the phase relation between the potentials of said grid and anode.

1,857,175. ARMATURE. VINCENT G. APPLE, Dayton, Ohio. Filed Mar. 15, 1930. Serial No. 436,149. 10 Claims. (Cl. 171—206.)

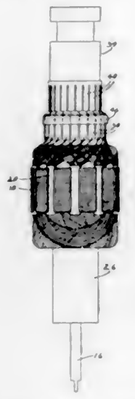


1. In a dynamo electric machine armature, a removable shaft, a winding, a mass of insulation extending into said winding, shaft driving means formed of a part of said mass, and means on said shaft adapted to be engaged by or disengaged from said shaft driving means at will.

1,857,176. TOOL FOR MAKING ARMATURES. VINCENT G. APPLE, Dayton, Ohio. Original application filed May 16, 1929, Serial No. 363,702. Divided and this application filed Aug. 15, 1930. Serial No. 475,483. 4 Claims. (Cl. 29—84.)

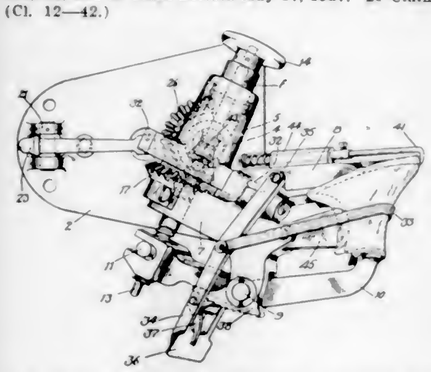
1. For building armatures of the character herein described, apparatus comprising, a cylinder having an ax-

ially extending opening adapted to receive the armature shaft, locating means extending into said opening adapted to enter the keyway in said shaft, and locating means



on the outside of said cylinder adapted to temporarily hold each segment in the position it will afterwards occupy in the commutator.

1,857,177. DEVICE FOR USE IN COVERING HEELS. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 30, 1928, Serial No. 266,068, and in Great Britain May 17, 1927. 21 Claims. (Cl. 12—42.)



1. A device of the class described comprising jaws relatively movable to engage a heel, and constrained for bodily movement with the heel simultaneously about two axes disposed at an angle to each other.

1,857,178. ELECTRICAL FITTING AND METHOD OF MAKING THE SAME. GEORGE B. BENANDER, Yalesville, Conn., assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed May 23, 1929. Serial No. 365,254. 6 Claims. (Cl. 29—155.5)



1. A combined screw shell contact and terminal strip for lamp sockets comprising a single piece of sheet metal having a threaded screw shell portion, a rearwardly extending strip, and a tongue cut from the strip.

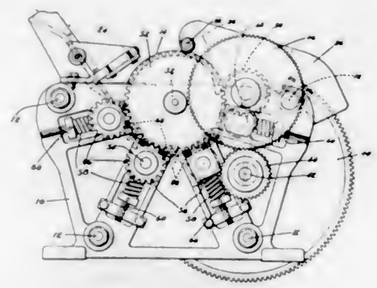
3. The method of making a lamp socket shell with an integral conductor strip having longer effective length than the diameter of the shell, which consists in severing a strip from the base of the shell blank, and cutting a tongue from said strip near the free end thereof.

1,857,179. COLOSTOMY BELT. MYRTLE A. BOWMAN, Rochester, Minn. Filed Nov. 30, 1928. Serial No. 322,978. 2 Claims. (Cl. 128—283.)



1. A colostomy belt including, a band-like elastic backing member adapted to encircle a human's body to cover a colostomy, a section of rubber sheathing formed on said elastic backing adapted to cover the colostomy on the body and held normally flat against the human's body, and reinforcing marginal edges formed about said rubber section adapted to permit the center of said rubber sheathing to expand to provide a fecal pocket.

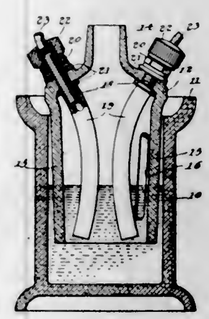
1,857,180. METHOD OF AND APPARATUS FOR OPERATING UPON SHOE-PART BLANKS. JAMES A. BROGAN, Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 19, 1928. Serial No. 271,281. 13 Claims. (Cl. 12—65.)



1. A counter-shaping machine comprising a forming roll, a plurality of pressure rolls positioned along the periphery of the forming roll and spaced therefrom, the pressure rolls having concave surface portions and the forming roll having a convex surface portion co-operable with said concave surface portions of the pressure rolls to stretch a counter blank longitudinally and transversely, the curvature of said surface portions of the pressure rolls being flatter than that of said surface portions of the forming roll, and means for driving the rolls in directions to advance the counter blank from one roll to another.

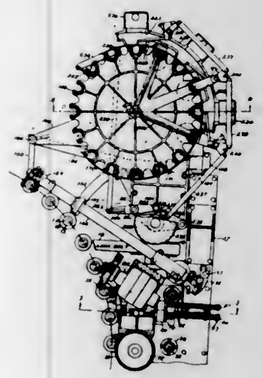
1,857,181. ELECTRIC VAPORIZER. LAWRENCE A. COLLINS, Long Beach, Calif. Filed June 28, 1930. Serial No. 464,462. 4 Claims. (Cl. 219—40.)

1. A vaporizer comprising a container of insulating material, provided at the top with a cup-shaped lip; a cover of insulating material resting loosely in said lip and having an upwardly projecting central normally open discharge spout, said cover member being also provided with a depending apron forming a gas chamber in the upper portion of said container, said apron being provided with lateral



openings in its sides; electrodes mounted on said cover and projecting downwardly into said chamber and container; and means for supplying electric current to said electrodes.

1,857,182. METHOD OF AND APPARATUS FOR SOLDERING. JOHN F. DONOVAN, East Cleveland, and FRANK J. MALLOY, Cleveland, Ohio, assignors to General Electric Company, a Corporation of New York. Filed June 25, 1930. Serial No. 463,780. 9 Claims. (Cl. 113—59.)

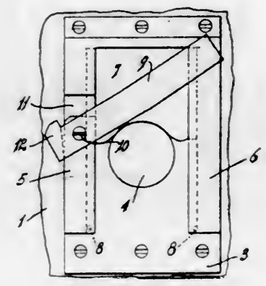


1. The method of uniting lead wires to base pins which consists in successively presenting assemblies comprising a base having longitudinally extending hollow pins projecting upwardly therefrom and lead wires projecting through said pins to mechanisms for trimming off the ends of said wires and then successively inverting said assemblies and lowering them to cause the ends of said pins to be immersed in a bath of solder.

1,857,183. TREATMENT OF CELLULOSE PREPARATORY TO ESTERIFICATION. HENRY DREYFUS, London, England. Original application filed Apr. 18, 1923, Serial No. 633,016, and in Great Britain May 24, 1922. Divided and this application filed Mar. 15, 1929. Serial No. 347,456. 5 Claims. (Cl. 260—101.)

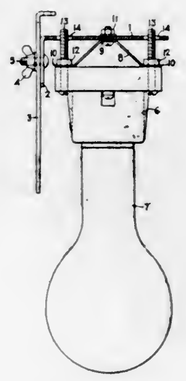
1. A process of preparing cellulose for acetylation which consists in mixing the cellulose with acetic acid of such strength that the acid crystallizes when cooled and then cooling the mixture until crystallization of the acid has occurred throughout the mass.

1,857,184. PORTHOLE CLOSURE LATCH. DAVID G. EARL, Long Beach, Calif. Filed July 16, 1929. Serial No. 378,645. 2 Claims. (Cl. 20—39.)



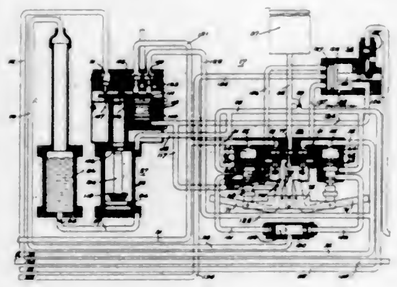
2. A port hole closure latch comprising a plate, means securing said plate over the port hole, guide strips in said plate, a shutter plate slidably mounted in said guide strips and adapted to open or close the port hole, a latch arm pivotally mounted on one of said strips, said strips having a slot formed therein, and a head on said arm adapted to extend through said slot and over said shutter plate when the shutter plate is in lowered position over the port hole.

1,857,185. VIBRATION ABSORBING MOUNTING. HAROLD J. FLAHERTY, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 24, 1930. Serial No. 497,777. 3 Claims. (Cl. 248—20.)



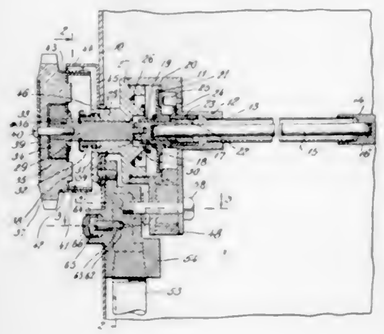
1. In combination, a support, a substantially V-shaped spring member secured at its apex to said support, a supported member and means carried by the supported member for attaching the ends of the arms of the spring member thereto, said last named means extending through the spring member and engaging said support to prevent relative rotation between said support and said supported member.

1,857,186. TRAIN CONTROL SYSTEM. HOWARD S. FOLKER, Mill Valley, Calif., assignor to National Safety Appliance Company, Reno, Nev., a Corporation of Nevada. Filed Oct. 17, 1927. Serial No. 226,637. 35 Claims. (Cl. 246—63.)



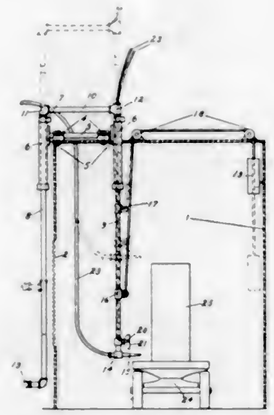
1. In a train control system, oppositely conditioned responsive means on a vehicle, selective means on the trackway permanently effective for actuating either of said responsive means that the heading of the vehicle may present in cooperative relation thereto, associated oppositely selective means on the trackway governed by traffic conditions in advance for actuating under clear traffic conditions that one of said responsive means not actuated by said permanent trackway means, and control means on the vehicle set into controlling condition by actuation of either one of said responsive means alone and restored to normal condition by substantially simultaneous actuation by both said responsive means.

1,857,187. THERMOSTATIC CONTROL MECHANISM. EDWARD L. FONSECA, Newark, N. J., assignor to The Wilcolator Company, Newark, N. J., a Corporation of Delaware. Filed Aug. 6, 1929. Serial No. 383,804. 41 Claims. (Cl. 236—15.)



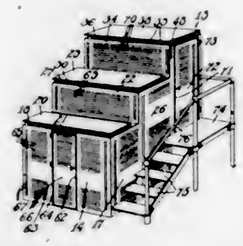
1. A fuel controller for use on a gas stove having an oven which comprises temperature-responsive means, fuel pipes, a fitting to which said pipes lead, and a casing containing a valve actuated by said means, said means, pipes, fitting and casing being disposed inside the oven, and said casing being removable while said pipes and fitting remain in position.

1,857,188. CURTAINLESS SAND BLAST NOZZLE CONTROL. WILMER A. FULKERSON and CLARENCE I. BAIN, Brookfield, Mo. Filed May 28, 1930. Serial No. 456,318. 13 Claims. (Cl. 51—8.)



1. In a sand blast control, an oscillatory shaft, a guide on each end of said shaft, a slide in each guide, means connecting one end of one slide to one end of the other slide, a handle on the other end of one slide, and a sand blast nozzle on the other end of the other slide.

1,857,189. COMPARTMENT BUILDING. CHARLES E. GILLESPIE, Seymour, Ind. Filed June 11, 1931. Serial No. 543,537. 6 Claims. (Cl. 189—1.)

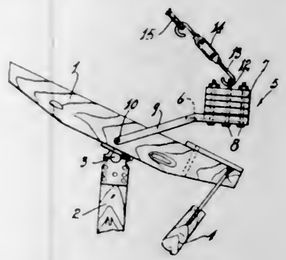


1. A knock-down chamber comprising end walls and side walls, and a pair of spaced intermediate walls substantially parallel with said side walls, the lower edge of one of said intermediate walls being disposed substantially in the horizontal plane of the upper edge of the other intermediate wall, a bed secured to said edges of said intermediate walls and to said end walls and forming a partition dividing said chamber into two independent compartments, a second bed secured to said end walls and disposed vertically beneath said first bed, and other walls cooperating with said end walls to form two non-communicating compartments, each communicating with one only of said beds, certain of said walls being formed to permit access to said compartments.

1,857,190. PROCESS FOR THE HYDROLYSIS OF CELLULOSE ACETATE. HARRY LE B. GRAY and CYRIL J. STAUD, Rochester, N. Y., and CHARLES S. WEBBER, Springfield, Mass., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1929. Serial No. 414,208. 4 Claims. (Cl. 260—102.)

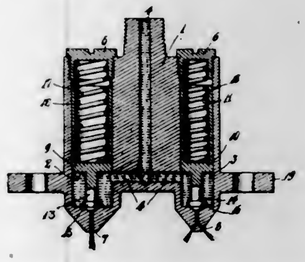
1. In the process for the manufacture of cellulose acetate the step which comprises hydrolyzing an organic acid solution of cellulose acetate in the presence of ethylene chloride.

1,857,191. BEAM COUNTERBALANCE. FRANK HARDER, Huntington Beach, JOHN B. WATSON, Garden Grove, and CHARLES W. MIDDLETON, Long Beach, Calif.; said Middleton assignor to said Harder and said Watson. Filed June 12, 1929. Serial No. 370,300. 8 Claims. (Cl. 74—71.)



1. In combination with a walking beam, a counterbalance adapted to be adjacent one end of said beam, and means pivotally securing said counterbalance to the beam, adjacent the center thereof.

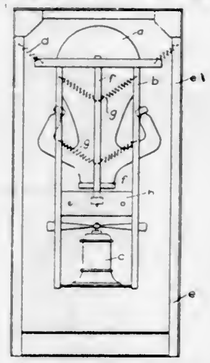
1,857,192. FUEL INJECTOR NOZZLE FOR INTERNAL COMBUSTION ENGINES. JAMES J. HAUSER, New York, N. Y. Filed June 20, 1931. Serial No. 545,652. 4 Claims. (Cl. 299—107.5.)



1. A fuel injector nozzle for internal combustion engines comprising a body, a plurality of chambers therein provided with orifices at the lower ends, a fuel oil passage through said body communicating with said chambers, a piston in each chamber, a valve on each piston adapted to open and close the chamber orifice, the effective cross-sectional areas of said pistons being different whereby they will successively lift under fuel oil pressure in the chambers.

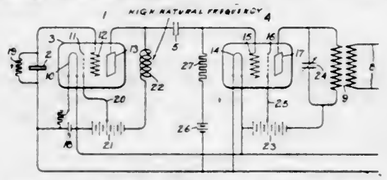
1,857,193. MERCURY ARC RECTIFIER SUPPORT. WILHELM HÖPP, Heiligensee, A E G Siedlung, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 21, 1928, Serial No. 320,959, and in Germany Mar. 23, 1928. 4 Claims. (Cl. 248—30.)

1. A support for electric discharge devices including a frame, a cradle within said frame resiliently attached thereto to depend from the upper end thereof and capable of oscillating, and a holder within said cradle adjacent the



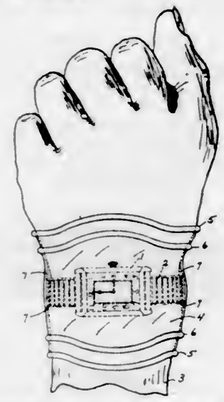
upper portion thereof resiliently attached to said cradle to depend from said upper portion for supporting the discharge device.

1,857,194. OSCILLATION GENERATOR. ALBERT W. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 26, 1926, Serial No. 90,952. Renewed July 31, 1931. 11 Claims. (Cl. 250—36.)



1. The combination of an electron discharge device comprising a grid for controlling the transmission of current between its cathode and anode, a piezo electric element connected between said cathode and said grid for predetermining the frequency of the potential of said grid and a circuit interconnecting said cathode and anode and having such constants that the circuit is tuned to a frequency at least twice that predetermined by said piezo electric element.

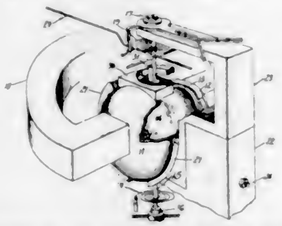
1,857,195. WRIST WATCH PROTECTOR. ALFRED H. KARPF, Rochester, N. Y. Filed Mar. 19, 1931. Serial No. 523,751. 3 Claims. (Cl. 63—2.)



1. A wrist-watch protector comprising a band of transparent water-proof material completely covering the wrist-

watch when worn, said band engaging the wearer's forearm to form therewith a water-tight enclosure for said wrist-watch.

1,857,196. TEMPERATURE INDICATING INSTRUMENT. ISAAC F. KINNARD, Lynnfield, and HAROLD T. FAUS, Lynn, Mass., assignors to General Electric Company, a Corporation of New York. Filed Dec. 19, 1929. Serial No. 415,339. 10 Claims. (Cl. 73—32.)



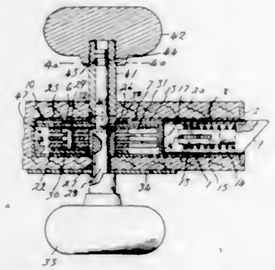
8. In combination, an electric measuring instrument, a thermocouple electrically connected with said instrument, said thermocouple having its hot end junction remote from the instrument and its cold end coupling at the instrument, said instrument being calibrated to indicate the temperature at the hot junction, and common means in said instrument for compensating for variations in temperature at the cold end coupling of such thermocouple and for temperature errors in said instrument.

1,857,197. INSULATED CONNECTER FOR OUTLET BOXES. HOMER G. KNOBLAER, Fairfield, Conn., assignor to General Electric Company, a Corporation of New York. Filed Jan. 26, 1929. Serial No. 335,357. 11 Claims. (Cl. 247—23.)



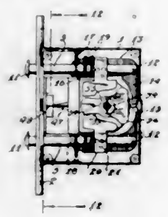
1. The combination with an armored electrical conductor and an outlet box, of a connecter provided with means for securing it to the armored conductor and to the outlet box and an insulating bushing comprising a split cylindrical sleeve located between the armor and conductors and provided with means for attaching it to said connecter the parts being constructed and proportioned so that when the securing means is operative to connect the armored conductor to the connecter the bushing will be located properly to protect and insulate the conductors from the armor and connecter.

1,857,198. COMBINATION LOCK. STANLEY KONAT, Detroit, Mich. Filed July 8, 1929. Serial No. 376,553. 5 Claims. (Cl. 70—53.)



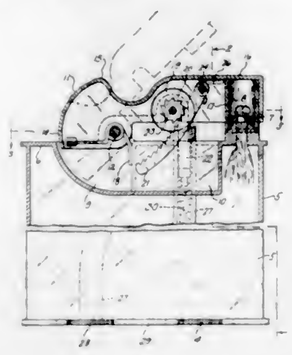
1. A lock comprising a casing, a bolt slidable in said casing, a spring normally projecting the bolt, a retractible abutment for said spring, means establishing a lost motion connection between said bolt and abutment whereby the bolt may be projected by said spring in the normal position of the abutment, and a retraction of the abutment is adapted to retract the bolt, means yieldably urging said abutment rearwardly, a plurality of coaxial tumblers normally resisting rearward actuation of said abutment and coacting in certain set positions to permit such actuation, means operable from one side of the casing for setting said tumblers and means operable from the other side of the casing for freely retracting the bolt relative to said abutment.

1,857,199. COMBINATION LOCK. STANLEY KONAT, Detroit, Mich. Filed June 23, 1930. Serial No. 462,948. 7 Claims. (Cl. 70—58.)



1. In a combination lock, a casing, a bolt pivoted in and projecting from said casing, a keeper plate formed with a marginally opening entrance portion for said bolt and with a bolt retaining portion elongated transversely to said entrance portion, spring means urging said bolt angularly toward registration with said entrance portion, a plurality of coaxial tumblers journaled in said casing and resisting response of the bolt to said spring means, and means for setting said tumblers comprising an actuating element exterior to said casing.

1,857,200. CIGAR LIGHTER. CARL JULIUS LAGERHOLM, Attleboro, Mass., assignor to Evans Case Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1928. Serial No. 325,820. 9 Claims. (Cl. 67—7.1.)

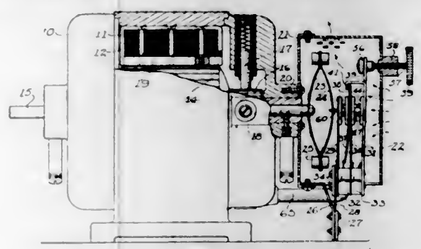


3. In construction for lighters and the like, in combination, a fuel tank having a cavity in the top wall thereof, a burner on said wall, an abrasive wheel journaled on said wall adjacent said burner, a pyrophoric element cooperating with said wheel, a manually operable snuffer arm journaled on said tank on an axis relatively remote from said burner and adapted to have a portion thereof swing downwardly into said cavity, a snuffer on said arm, a ratchet wheel operatively connected to said abrasive wheel, and a toothed arm carried by said snuffer arm and yieldingly pressed into engagement with said ratchet wheel to cause said abrasive wheel to be rotated as the snuffer arm is moved to raised position.

1,857,201. PROCESS FOR INSULATING MAGNETIC BODIES. HUBBEL LATHROP, Greenwich, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 2, 1931. Serial No. 548,484. 4 Claims. (Cl. 175—21.)

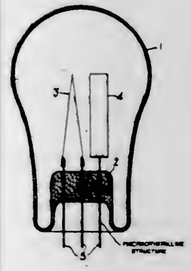
1. In the process of making a magnetic body comprising finely divided magnetic particles insulated from each other by a given amount of insulating material, the method of insulating the magnetic particles which consists in mixing said particles with a portion of the insulating material in a volatile liquid and evaporating the mixture to dryness, and mixing the resulting product with another portion of the insulating material in a volatile liquid and evaporating to dryness.

1,857,202. ELECTRIC MOTOR. ROYAL LEE, Milwaukee, Wis., assignor to Lee Engineering Research Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 29, 1929. Serial No. 374,646. 7 Claims. (Cl. 172—276.)



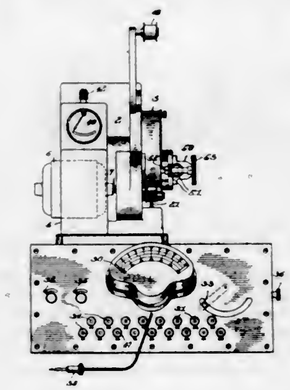
1. The combination of an alternating current motor having a secondary circuit and a main circuit, and means for controlling the speed of the motor including a periodically-operating circuit-closer connected in said secondary circuit, a second circuit-closer connected in said main circuit, and means for rendering said last-named circuit-closer effective only under conditions of relatively light load.

1,857,203. LEADING-IN CONDUCTOR. JOHANNES ANTONIUS MARIA VAN LIEMPT, Eindhoven, Netherlands, assignor to General Electric Company, a Corporation of New York. Filed Mar. 13, 1930, Serial No. 435,586, and in the Netherlands Nov. 30, 1929. 3 Claims. (Cl. 250—27.5.)



1. In combination, an evacuated envelope, a conductor within the envelope and a metallic member sealed in the envelope for supplying current to said conductor, said member having a uni-crystalline structure whereby gas leakage through the envelope in the region of the metallic member is prevented.

1,857,204. APPARATUS FOR USE IN FACTORY MANAGEMENT. LAURENCE T. LITTLEFIELD, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 22, 1928. Serial No. 327,917. 6 Claims. (Cl. 88—16.)

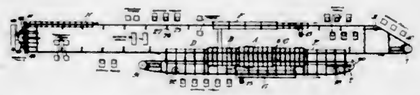


4. In a device of the character described the combination with a motion picture projector, and means for operating said projector to project a motion picture from a photographic record passing therethrough, of a magneto having a characteristic of developing electrical energy in proportion to the speed at which it is driven, means for driving said magneto from the operating means of said projector, and an electrical indicating device actuated by said magneto, said indicating device being calibrated to show the number of pictures projected per unit of time and the ratio of the apparent speed of the object projected on a screen to a standard object, a circuit network having a plurality of calibrating units connectible therein, each of said units corresponding to a different standard, and means for connecting a desired unit into said network.

1,857,205. CEMENT AND PROCESS OF MAKING IT. GEORGE LYNN, Wadsworth, Ohio, assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Jan. 3, 1930. Serial No. 418,418. 6 Claims. (Cl. 106—27.)

4. A hydraulic cement formed by mixing with a high alumina cement and water a small amount of calcium chloride.

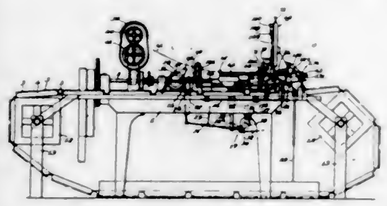
1,857,206. ENAMELING FURNACE. ROBERT MACDOUGALL, Downers Grove, Ill., assignor to Beemack Furnace Company, Cicero, Ill., a Corporation of Illinois. Filed Sept. 10, 1928. Serial No. 304,945. 13 Claims. (Cl. 25—142.)



1. In apparatus for heating enameled articles, a main furnace having enclosing walls providing consecutive drying, preheating and burning zones and a combustion chamber below said burning chamber, an auxiliary drying furnace parallel with said main furnace, a flue passage com-

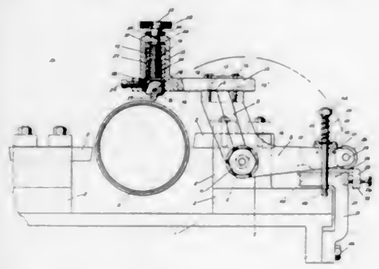
municating with said combustion chamber and having a portion extending longitudinally through the lower part of said auxiliary furnace, and an endless conveyor chain having opposite reaches arranged to traverse said auxiliary furnace and said zones of the main furnace.

1,857,207. AUTOMATICALLY ACTING BRUSH MAKING MACHINE. AUGUST MERTES, Cleveland, Ohio, assignor, by mesne assignments, to The Pittsburgh Plate Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1922, Serial No. 583,251. Renewed Oct. 17, 1931. 17 Claims. (Cl. 140—96.)



1. A brush making machine comprising means for providing openings in brush backs to receive bristles, means for making communicating openings to receiving anchoring devices, means for folding and disposing wires in the first mentioned openings, and means for arranging anchoring devices in the communicating openings.

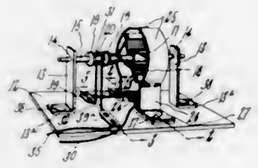
1,857,208. CHAMFERING TOOL AND HOLDER. HENRY R. METZ, Erie, Pa., assignor to Williams Tool Corporation, Erie, Pa., a Corporation. Filed Mar. 15, 1930. Serial No. 436,030. 6 Claims. (Cl. 82—25.)



1. In combination, a tool carrying block, an auxiliary tool holder comprising a bell crank pivotally mounted on said block, a bracket slidably mounted on one end of the bell crank, a tool carrying barrel slidably mounted in the bracket, means to adjust the position of the barrel, a lock on the bracket to hold the barrel in position, and means at the other end of the bell crank operable by movement of the block to bring the tool into operative position.

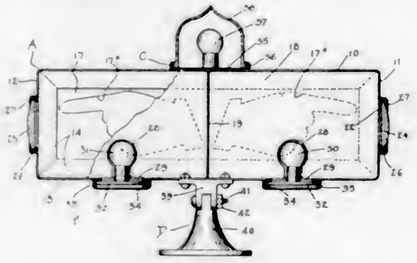
4. In combination, a machine having a tool carriage, a rocker arm pivoted on said carriage to swing vertically, an auxiliary tool holder for a ream or chamfering tool mounted on the upright arm of the rocker, means providing for horizontal and vertical adjustment of said holder, a roller on the horizontal arm, a bracket secured to the machine bed, said bracket having a horizontal arm extending inwardly over the tool carriage, a cam having a downturned lip slidably mounted on the horizontal bracket arm, a screw threaded in said lip and bearing against the bracket whereby the cam may be adjusted, upright rods mounted on the carriage, a longitudinal bar secured to the upper edges of the horizontal rocker arm, and slidably mounted on the rods, springs on the rods bearing against the bar, and nuts on the upper ends of the rods compressing the springs against the bar, whereby the roller is held in contact against the cam and the reamer is brought into cutting position with the operation of the carriage.

1,857,209. TOY ELECTRIC MOTOR. GEORGE A. MOORE, Boston, Mass. Filed Mar. 2, 1932. Serial No. 596,291. 6 Claims. (Cl. 172—36.)



1. A toy electric motor comprising motor elements including a field magnet, a rotary armature having a shaft, bearings for said shaft, a commutator on the shaft, and a pair of commutator brushes, said magnet, bearings, and brushes having feet, a base supporting said feet and having indicating means showing the required relative positions of the feet thereon, and fasteners securing said feet to the base, said indicating means showing the required location of said fasteners and feet, and enabling said elements to be assembled by a novice in building the motor.

1,857,210. AUTOMOBILE SIGNALING DEVICE. NELS H. NELSON and HENRY M. NELSON, Minneapolis, Minn. Filed Dec. 21, 1925. Serial No. 76,752. 1 Claim. (Cl. 177—329.)

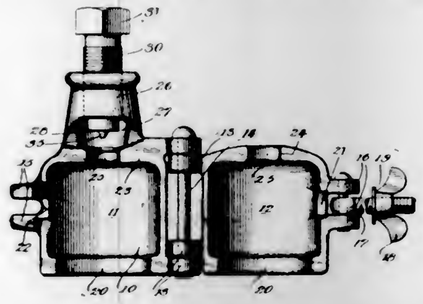


In a device of the class described, a housing formed with a bottom, a partition extending across said bottom, an electric light bulb, said partition being formed with an opening corresponding to the contour of said light bulb and being smaller near its lower end, an opening in said bottom in proximity to said partition opening, said bulb being insertable through said bottom opening and into said partition opening, said bottom opening being of sufficient dimensions to permit of the lateral movement of said bulb into and out of said partition opening, a plate for closing said bottom opening, said bulb being mounted on said plate and means for attaching said plate to said housing.

1,857,211. WHEEL PULLER. WILLIAM H. ODLUM and EDWARD HENRY PETERSON, Chicago, Ill., assignors to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 27, 1931. Serial No. 518,721. 4 Claims. (Cl. 29—85.)

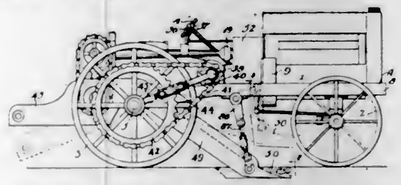
1. A wheel puller comprising a body portion which includes a housing element, a complementary housing element hinged thereto, said elements in closed condition

providing a cup shaped housing, a flange at the mouth end of each of said housing elements adapted to engage an annulus on the hub of the wheel around its circumference, said elements at their ends opposite the mouth ends being



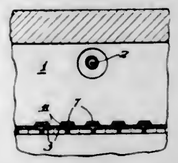
provided with recesses which register to provide an axial opening adapted to receive the end of the axle shaft, and means carried by one of the housing elements for applying axial force to the axle shaft.

1,857,212. POTATO DIGGER. JOSEPH A. PARENT, East Grand Forks, Minn. Filed Aug. 2, 1929. Serial No. 383,031. 2 Claims. (Cl. 55—51.)



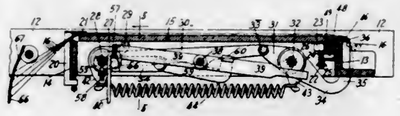
1. In combination with a tractor having a driving motor mounted thereon, a tiltable frame mounted on said tractor the forward end of said tiltable frame being positioned forwardly of the rear wheels of said tractor and being pointed to enter the earth over which the tractor is passing, an apertured belt extending upwardly and rearwardly from said pointed forward portion to carry the earth raised by said pointed forward portion upwardly and rearwardly, a shaft having a universal joint therein connected to have driven connection with said motor and slidably mounted with respect to said tractor at its rear end to have a vertical movement with respect thereto, and gear means having driven connection with said shaft and having driving connection with said belt to carry earth deposited thereon by the pointed forward end of said tiltable frame upwardly and rearwardly.

1,857,213. PROCESS OF MAKING OPTICAL DISKS. WILLIAM W. POUNDSTONE, Charleroi, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Feb. 28, 1930. Serial No. 432,066. 5 Claims. (Cl. 49—84.)



1. A process of making optical disks from rectangular glass blanks which consists in coating one of the large faces of each of the blanks with a mixture comprising a finely divided refractory material and a liquid subject to oxidation on heating to a high temperature, heating the blanks until they are plastic while supported on said coated faces and then pressing them into disk form in molds.

1,857,214. WEB POSITIONING MECHANISM. CLEMENT J. ROWE, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 10, 1926. Serial No. 128,482. 17 Claims. (Cl. 197—133.)

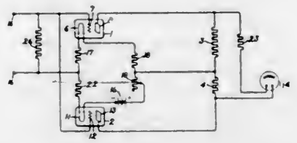


1. In a mechanism of the character described, a table to support a plurality of superimposed webs, means to engage said webs and position the same with relation one to the other, a clamping device to engage said webs adjacent to said positioning means and retain the same in their adjusted positions, and an actuating device, the operation of which will cause said webs to be first positioned by said positioning means and then engaged by said clamping device.

1,857,215. ELECTRICAL INDUCTION APPARATUS. WILLIAM E. RUDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 5, 1930. Serial No. 433,484. 4 Claims. (Cl. 175—21.)

1. The process of producing a laminated magnetic core, said process including the steps of loosely assembling the magnetic layers of said core into approximately final core form, annealing said layers while thus loosely assembled, and subsequently tightening said layers together into a final core form.

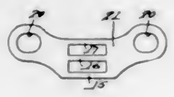
1,857,216. THERMIONIC MEASURING INSTRUMENT. BYRON W. ST. CLAIR, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 21, 1931. Serial No. 552,230. 8 Claims. (Cl. 175—183.)



1. In a thermionic voltage measuring device, two electron discharge devices having filament, grid and plate electrodes, a filament heating circuit comprising grid biasing resistors between the filaments on one side, and a

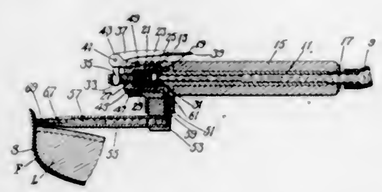
source of current, a variable resistance and a fixed resistance in series on the other side, a sensitive measuring instrument connected in shunt relation to a divided resistance between the plates of the tubes, the point of division of said divided resistance being connected to a point between the said fixed and said variable resistances in the filament heating circuit, and terminals for applying an unknown voltage to be measured, one connected to the grid electrodes and another to a point between the said grid biasing resistors.

1,857,217. BUCKLE. HENRY ST. PIERRE, Worcester, Mass. Filed June 24, 1931, Serial No. 546,459. Renewed Oct. 7, 1931. 3 Claims. (Cl. 24—163.)



1. As an article of manufacture, a flat plain buckle for holding the end of a strap comprising a straight bar at the end and two intermediate bars, each extending all the way across the buckle and means carried by the buckle for securing a mud hook thereto, the body of the buckle extending outwardly at both sides and having a pair of eyes oppositely offset from the bars for receiving two chains.

1,857,218. APPARATUS FOR SOFTENING SHOE STIFFENERS. HAROLD L. SAWYER, Lynn, and JOHN W. COSGROVE, Medford, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 14, 1927. Serial No. 233,144. 11 Claims. (Cl. 91—43.)

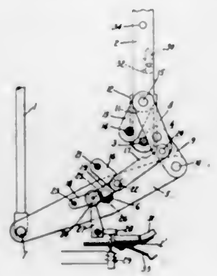


1. A device for softening the margin of a stiffener which has been incorporated in a partially lasted upper, having, in combination, a hollow handle through which liquid may pass, a valve within said handle, a flexible supply tube connected to said handle upon the inlet side of said valve for supplying thereto a solvent liquid, and a delivery nozzle for applying the solvent liquid to the margin of a stiffener connected to the handle upon the outlet side of said valve, said nozzle being parallel to and laterally offset from said handle to permit access of the nozzle to the margin of the stiffener when the upper has been drawn over a last.

1,857,219. MANUFACTURE OF REFRACTORY METAL BODIES. COLIN JAMES SMITHELLS, Bushey, England, assignor to General Electric Company, a Corporation of New York. Filed Apr. 10, 1931, Serial No. 529,291, and in Great Britain May 10, 1930. 3 Claims. (Cl. 75—1.)

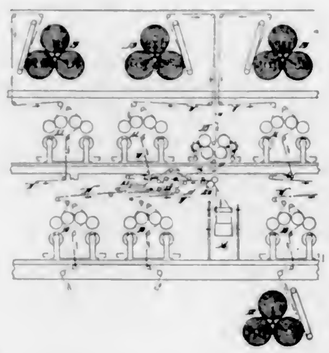
1. The process of manufacturing a body of tungsten which comprises sintering the tungsten at a temperature slightly below its melting point in an atmosphere containing sodium vapor.

1,857,220. SWITCH OPERATING MECHANISM. CARL THUMIM, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed July 11, 1930. Serial No. 467,194. 16 Claims. (Cl. 200—89.)



1. Switch operating mechanism comprising a switch operating member, an actuating member for effecting switch closing movement of said operating member, thrust-transmitting structure interconnecting said members, and means including a portion operatively connected to said actuating member and said thrust-transmitting structure, said portion being subject to a decreasing lever arm of said actuating member for increasing the mechanical advantage of the actuating member with respect to said thrust-transmitting structure during the switch closing movement.

1,857,221. HALF SPEED DECK AND INSETTING DEVICE. ISIDOR TORNBERG and HANS C. JORDHOY, Plainfield, N. J., assignors to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 29, 1927, Serial No. 187,663. Renewed May 27, 1930. 9 Claims. (Cl. 270—5.)

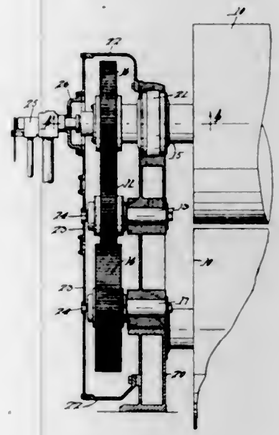


1. In a printing press, the combination with a full speed web printing deck or unit, of a half speed web printing deck located adjacent to the full speed deck and parallel thereto but out of line with it laterally and longitudinally.

1,857,222. PAPER DRIER. JOHN WARREN VEDDER, Worcester, Mass. Filed Feb. 27, 1930. Serial No. 431,907. 2 Claims. (Cl. 34—48.)

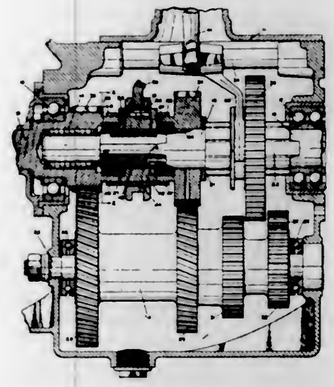
1. In a paper drying machine, the combination with steam heated cylinders over which the web of paper is

adapted to pass, a gear on the journal of each of the cylinders, gears for driving and connecting the journal gears, a box frame for supporting the cylinders having bearings therein supported entirely within said box frame for the journals of the cylinders, the second named gears having studs extending in one direction only therefrom,



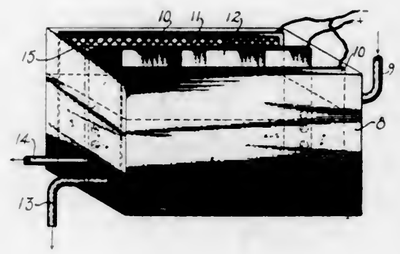
said box frame having supports for said studs and constituting the inner surface of the gear casing, and a gear casing comprising in addition a surrounding casing secured to the box frame and a plate removably mounted on the surrounding casing constituting the outside wall of the gear casing.

1,857,223. TRANSMISSION SYNCHRONIZING DEVICE. JESSE G. VINCENT and ALFRED MOORHOUSE, Detroit, Mich., assignors to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 24, 1928. Serial No. 328,126. 9 Claims. (Cl. 192—53.)



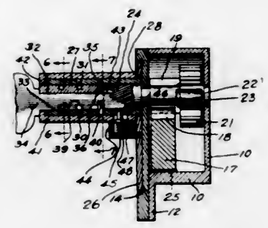
1. The combination with a motor vehicle transmission having power transmitting members and means to connect said members in driving relation, of a resilient helix between said members adapted to frictionally engage one of said members, and an actuator for said helix controlled by relative movement between said members.

1,857,224. ELECTROLYTIC PROCESS FOR THE PURIFICATION OF ACETIC ACID SOLUTIONS. CHARLES S. WEBBER, Springfield, Mass., and CYRIL J. STAUD and HARRY LE B. GRAY, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 20, 1930. Serial No. 421,988. 12 Claims. (Cl. 204—9.)



1. A process for the purification of a solution comprising only electrolytes containing ions having a high mobility and ions having low mobility these ions having the same polarity which comprises electrolyzing such solution by removing therefrom the more mobile ions, these ions traversing but a relatively short path through a porous cell to their respective electrode.

1,857,225. LOCK. JOHN WEBER, Chicago, Ill. Filed Aug. 11, 1930. Serial No. 474,345. 2 Claims. (Cl. 70—46.)

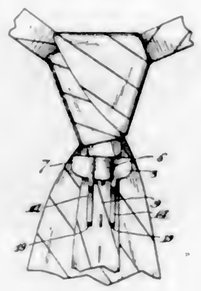


1. A lock comprising a casing, a bolt slidable therein, a cylinder supported by and projecting rearwardly from one wall of the casing, bolt operating means including a shaft journaled within the casing and having a relatively large cylindrical portion received by said cylinder, a plug rotatably mounted in said cylinder in end to end relation with said cylindrical portion of the shaft, said plug and cylindrical portion of the shaft having aligned key receiving slots, a housing surrounding said cylinder and including an offset portion, said cylinder and cylindrical portion of the shaft having aligned openings, and a spring influenced key retractable pin supported within the offset portion of the housing and normally positioned in said openings to hold said shaft against rotation.

1,857,226. NECKTIE PIN. HARRY WEISNER, Philadelphia, Pa. Filed Jan. 16, 1932. Serial No. 587,053. 4 Claims. (Cl. 24—49.)

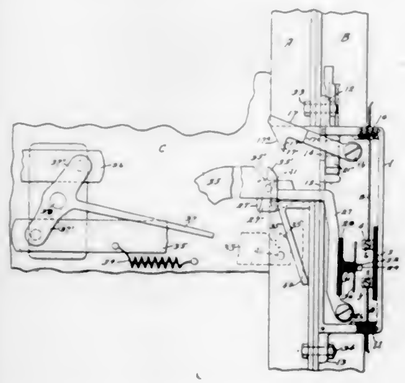
4. A necktie pin adapted to be positioned in the rear of a "four-in-hand" necktie, comprising a spreader plate having a curved central portion adapted to extend over the tongue portion of the necktie, and wing portions adapted to engage the apron portion thereof adjacent the

knot; a centrally disposed pin extending downwardly from the spreader plate, said pin extending first forwardly, then backwardly, and then downwardly to the point thereof; and a finger member disposed on each side of the pin and extending downwardly from the spreader plate, said finger members extending first forwardly, then



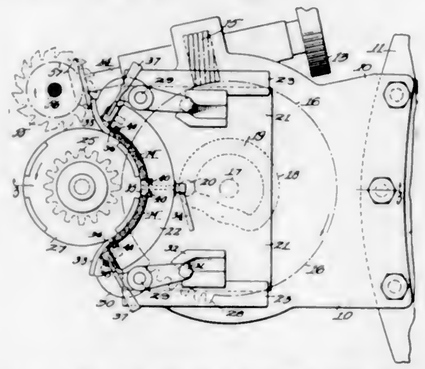
rearwardly, and then downwardly, parallel to but in a different plane from that of the corresponding plane of the pin; the pin being adapted to be inserted through the tongue portion and part of the apron portion of the necktie, and the finger members being adapted to engage the tongue portion of the necktie on the rear thereof.

1,857,227. ELECTROMECHANICAL INTERLOCK MECHANISM. JOSEPH Z. WINDER, Richmond, Ind., assignor to Richmond Fireproof Door Company, Richmond, Ind., a Corporation of Indiana. Filed Apr. 29, 1929. Serial No. 358,894. 5 Claims. (Cl. 187—31.)



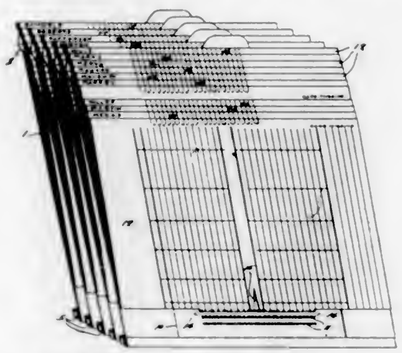
1. An electro-mechanical interlock mechanism comprising a case, a control-arm pivoted at its lower end in said case and extending upwardly and then outwardly through a slot in said case and adapted to operate automatically by gravity, when it is released, to break an electric circuit, a head forming the outer end portion of said arm and having a channel formed vertically in one side of said head, a fixed insulator attached in said case, a pair of spaced-apart posts carried by the fixed insulator, wires attached to said posts and forming parts of an electric circuit for operating a motor, an insulator movable with said arm, a connecting-bar loosely connected to said last mentioned insulator and adapted to be contacted with said posts to complete the electric circuit through said wires, a door, a latch-bar carried by the door, means whereby the operation of the latch-bar will operate said control-arm to connect and disconnect said bar with relation to said posts, a dog pivoted in said case and adapted to lock the latch-bar in securing position, and means for automatically placing said dog in securing and releasing position.

1,857,228. LATE NEWS PLATE CASTING MACHINE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 19, 1927, Serial No. 162,116. Renewed Mar. 16, 1931. 14 Claims. (Cl. 22—3.)



1. In a mold for casting a late-news insert plate, the combination with the concave back and cylindrical core, of a matrix in the back extending only part way around its concave surface, and means for completing the mold at the edges of the matrix.

1,857,229. CARD INDEX FILE. RODNEY JOHN WOOD, Dayton, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Oct. 15, 1928. Serial No. 312,521. 14 Claims. (Cl. 129—16.)



1. A record sheet carrier having a lower margin, slits in said carrier extending upwardly from said lower margin, adjacent tongues formed by said slits being flexed out of a common plane and a spacer bar interposed between the flexed tongues whereby the bottom of the carrier is spread in a fore-and-aft direction.

12. In a file drawer, a plurality of rectangular carriers supported on one edge therein and adapted for movement relative to each other, a plurality of upwardly extending

cards mounted on each carrier and arranged in overlapping offset relation thereon with one margin of each in visible relation, and means adjacent the top and bottom margins of each carrier spacing each carrier from adjacent carriers, whereby said cards are loosely retained in a predetermined space between adjacent carriers.

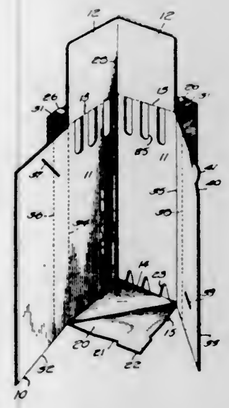
1,857,230. PROCESS OF PRODUCING FAST PRINTINGS. ARTHUR ZITSCHER and FRANZ MURIS, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Dec. 8, 1925, Serial No. 74,148, Patent No. 1,737,905, dated Dec. 3, 1929, and in Germany Dec. 25, 1924. Divided and this application filed Apr. 29, 1929. Serial No. 359,168. 12 Claims. (Cl. 8—5.)

1. In a process of producing fast printings the step comprising developing the dyestuff by reacting with an acidic substance upon a textile material impregnated with an alkali metal salt of a coupling compound suitable as developer in the art of producing azo dyestuffs on the fiber, and a salt of a sulfnitrosaminic acid of the general formula:

$$R'—N=N—R''—\left[N\begin{matrix}H\\SO_2Me\end{matrix}\right]_n$$

in which R' and R'' are aromatic radicals, Me means an alkali metal and *n* a numeral less than 3.

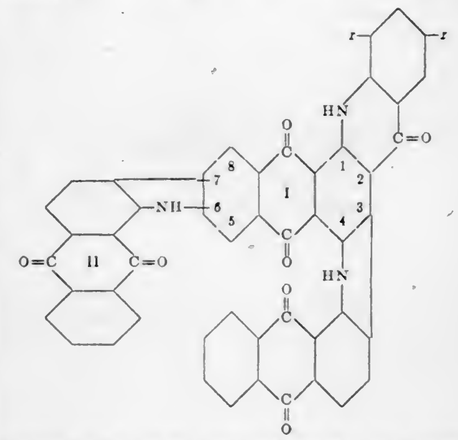
1,857,231. DISPLAY CONTAINER. GEORGE B. ALLEN, Atlanta, Ga. Filed Aug. 17, 1931. Serial No. 557,683. 11 Claims. (Cl. 206—44.)



1. A combined container and display device comprising a pair of parallel panels connected at their longitudinal edges and adapted to be bent at an angle with respect to each other, a longitudinal projection carried by each panel, said projections being connected at their adjacent longitudinal edges to each other and at one end edge to the respective panels and adapted to be bent along such edges, means carried by the panels for securing articles thereto, and lateral projections connected to the outer longitudinal edges of the panels and adapted to be bent with respect thereto to overlie the articles, said lateral projections being also adapted to be bent back of the panels for connection with each other when the panels are bent at an angle to each other at their connected edges.

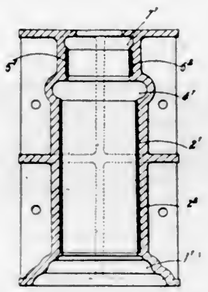
1,857,232. NEW VAT DYESTUFFS OF THE ANTHRAQUINONE SERIES. ROBERT BERLINER, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1931, Serial No. 518,910, and in Germany Feb. 28, 1930. 3 Claims. (Cl. 260—37.)

1. The new vat dyestuffs of the probable general formula:—



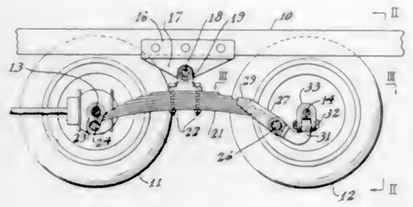
wherein the *x*'s mean helogen atoms and the nucleus marked II is linked to the nucleus marked I in 5 (NH)-6-position or in 8(NH)-7-position, said dyestuffs forming olive colored powders, nearly insoluble in the usual organic solvents, soluble in strong sulfuric acid with a violet coloration and dyeing cotton from an alkaline hydrosulfite vat strong olive shades of excellent fastness properties.

1,857,233. APPARATUS FOR THE MANUFACTURE OF OBJECTS CONSISTING OF AGGLOMERATED SUBSTANCES BY CENTRIFUGAL FORCE. GASTON BERTANDEAU, Paris, France, assignor to Societe Stac-Nord, Paris, France, a Corporation of France. Filed May 31, 1929, Serial No. 367,377, and in France June 18, 1928. 1 Claim. (Cl. 25—30.)



An apparatus for the manufacture by centrifugal force, of objects of agglomerated material, comprising a solid mold being provided with recesses of suitable shape into which are inserted sheets of a plastic, elastic or flexible substance insertible in said recesses, having therein in sunken relief the ornaments which are to appear in high relief and inversely.

1,857,234. COMPENSATING SPRING SUSPENSION SYSTEM FOR MOTOR VEHICLES. ADOLPH P. BUQUOR, Los Angeles, Calif., assignor of one-half to Clarence R. Medley, Columbus, Ga. Filed Mar. 17, 1930. Serial No. 436,622. 5 Claims. (Cl. 280—124.)

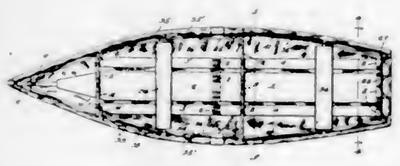


4. In a spring suspension and load equalizing system for motor vehicles embodying a vehicle frame and tandem pairs of wheels, a driving axle for one pair of wheels, a trailing axle for the other pair of wheels, sleeves mounted on the trailing axle, a spring equalizer member on each side of the vehicle pivotally connected to the frame intermediate the two axles, spring shackle means for connecting one end of each spring equalizer member to the driving axle, and a shoe engaging the other end of each spring equalizer member and a sleeve.

1,857,235. LUBRICANT. JAMES A. BURTON, Brooklyn, N. Y. Filed Dec. 23, 1929. Serial No. 416,215. 9 Claims. (Cl. 87—9.)

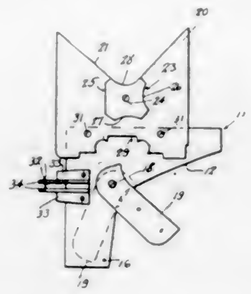
1. A penetrating lubricant comprising lubricating oil having a viscosity of approximately 100° Saybolt at 100° F., suspended graphite and a small proportion of a thinner comprising one or more volatile, non-flammable chlorinated hydrocarbons.

1,857,236. COLLAPSIBLE BOAT. ALFRED CANTZLER, Kenora, Ontario, Canada. Filed Feb. 25, 1931. Serial No. 518,210. 2 Claims. (Cl. 9—2.)



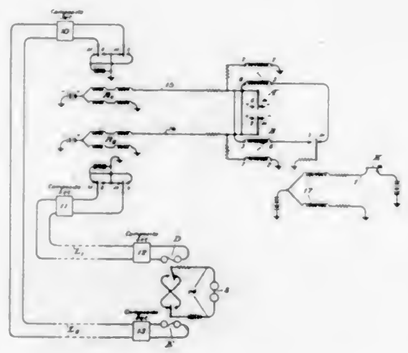
1. A collapsible boat comprising a frame including foldable floor boards, a stem hingedly connected to one of the floor boards, sectional gunnels and bottom side strips detachably connected to the stem, transverse frames detachably secured to the floor boards and interposed between and detachably connected to the gunnels, and a transom detachably connected to the gunnels, a fabric outer covering for said frame, hooks connected to the lower side strips, and a single tie device threaded through the fabric covering and the hooks and extending within the frame for binding the covering upon the frame.

1,857,237. RUNNING MOLD. OTTAVIO CHIOCCHIO, Port Chester, Rye, N. Y. Filed July 24, 1930. Serial No. 470,498. 5 Claims. (Cl. 72—181.)



3. A running mold for use by plasterers comprising a manipulating plate having a runner flange at one edge and another edge of arcuate shape for acting on the plaster, and a template adjustably and detachably attached to said plate, for selective projecting at different angles and from different edges of the template.

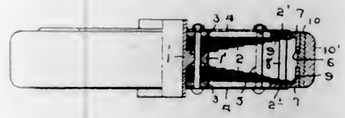
1,857,238. TRANSMISSION SYSTEM. SAMUEL I. COBY, Towaco, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 24, 1931. Serial No. 546,625. 4 Claims. (Cl. 178—2.)



1. The combination of a high speed telegraph circuit with two low speed telegraph circuits, a translating device for resolving the original high speed signals into two series of low speed signals for transmission over said low speed circuits, said translating device comprising tw polar relays for controlling the application of signals to said low speed circuits and controlled by the high speed signals, each of said polar relays having operating windings oppositely poled with respect to each other and connected to the armatures of the other of said relays, and each of said polar relays having holding windings connected to their own relay armatures.

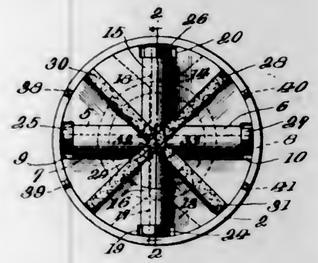
1,857,239. ELASTIC WHEEL. SALVATORE DINARO, Genoa, Italy. Filed July 30, 1928, Serial No. 296,366, and in Italy July 30, 1927. 1 Claim. (Cl. 152—28.)

In a wheel, laminated spring spokes, each including a main plate, a button member at the outer extremity of each main plate, a hub element connected with the inner extremities of the spokes, said spokes diverging outwardly from said hub element, a tire device provided with removable flanges having conical niches engaged by the but-



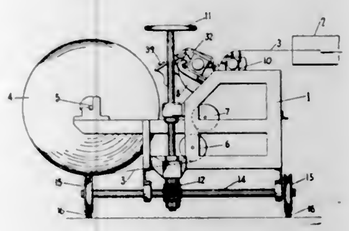
ton members, means connecting said flanges and acting to tension the spring spokes, and guide plates carried by the hub element and extending outwardly over the tire device.

1,857,240. BUFFER. IRVIN F. DITTMAR, Williamsport, Pa., assignor to The Cromar Co., Williamsport, Pa., a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,351. 7 Claims. (Cl. 15—230.)



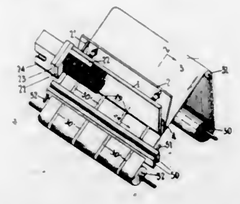
5. A buffer of the character described comprising two bolts having both ends threaded; said bolts being crossed and welded together at their centers, segmentally arranged members movably mounted on said bolts, buffing strips mounted on edge between the abutting walls of the segmentally arranged members, and nuts on said bolts for moving the segmentally arranged members inwardly and clamping the buffing strips between said abutting walls.

1,857,241. EQUIPMENT FOR VERTICAL COATING. WILLIAM H. EDMONDSON, Newburgh, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 20, 1930. Serial No. 437,375. 8 Claims. (Cl. 91—30.)



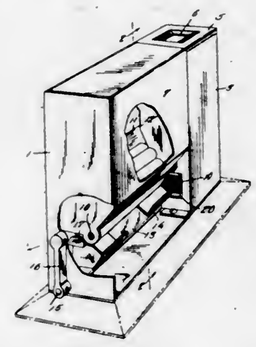
1. Equipment for vertical coating comprising in combination, a support from which a continuous supply of sheet material is adapted to be fed into said equipment, a spreader knife positioned to maintain a portion of the sheet material in substantially vertical position, a receptacle arranged to deposit coating composition on the sheet material below said knife, and means for adjusting said receptacle and knife relative to said equipment in the direction of the length of said knife.

1,857,242. STRIPING KNIFE. WILLIAM H. EDMONDSON, Newburgh, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 20, 1930. Serial No. 437,376. 14 Claims. (Cl. 91—12.)



6. A striping knife comprising an elongated trough-like member and a detachable slotted comb within and along the apex of said trough providing a wearing surface for said knife and passages for the exit of striping material in said receptacle, said comb being of material relatively hard with respect to said trough-like member.

1,857,243. COMBINED CIGARETTE CASE AND LIGHTER. CUMMINGS GARDNER, Los Angeles, Calif. Filed June 18, 1930. Serial No. 462,024. 8 Claims. (Cl. 312—86.)

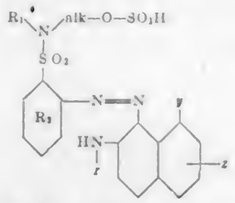


1. In a cigarette dispenser of the class described, comprising a cigarette container, the bottom thereof being open, a slidable vertically movable closure for the open bottom of the container, a swinging dispensing unit mounted below the container and including a cigarette receiving channel normally disposed in a dispensing position, said closure member being hingedly connected with the dispensing unit for movement horizontally to an inoperative position when the cigarette receiving channel is positioned below the bottom of the container to receive a cigarette therefrom.

5. In a combined cigarette case and lighter, a cigarette container, a cigarette igniting means arranged adjacent the discharge end of the container, a pivoted dispensing unit arranged below the container and provided with means for receiving a single cigarette when swung to one position, actuating means for swinging the dispensing unit with a cigarette therein to position in line with the igniting means away from the container, and means carried by the swinging dispensing unit to move the ejected cigarette deposited in said unit against the igniting means.

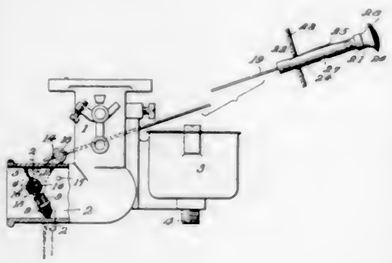
1,857,244. NEW MONOAZODYESTUFFS. WINFRID HENTRICH, Erlangen, KARL BURR and HUGO SCHWEITZER, Leverkusen-Wiesdorf, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 28, 1931, Serial No. 540,812, and in Germany June 7, 1930. 6 Claims. (Cl. 260—92.)

1. As new products azodyestuffs of the probable general formula:



wherein R_1 stands for a benzene nucleus which may be substituted by halogen, alkyl or alkoxy, "alk" stands for an alkylene group, x stands for hydrogen, alkyl or phenyl, y stands for hydrogen or a hydroxy group, z stands for a sulfonic acid group or a carboxylic acid group, but y and z not simultaneously representing a hydroxy group and a carboxylic acid group and wherein the benzene nucleus R_2 may be substituted by halogen, alkyl, alkoxy, the nitro group, the amino group and the acylamino group, being in the form of their alkali metal salts generally bluish-red to bluish-black powders, soluble in water and dyeing wool from an acid bath bluish-red to blue shades of good fastness properties.

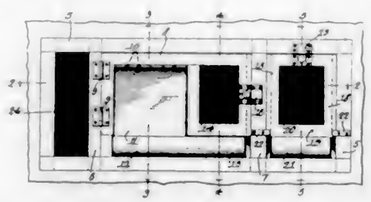
1,857,245. CARBURETOR. FRANK H. HEITGER, Flint, Mich. Filed Jan. 24, 1928. Serial No. 249,054. 4 Claims. (Cl. 137—139.)



1. In a carburetor, an air inlet, means for restricting the flow of air through said inlet, said means comprising a valve mounted off center so as to open by suction under certain conditions, manually operated means whereby said valve may be closed fully or opened fully, said manually operated means being adapted to be set in an intermediate position, and in that position, allowing said valve to open by suction, a predetermined amount from a closed position, said manually operated means including an element arranged within the inlet for engaging and releasing said valve, and movable means adapted to resist the opening of said valve when the manually operated means is in an intermediate position.

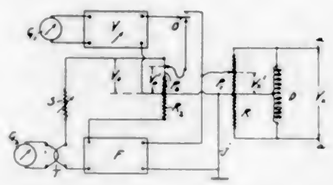
1,857,246. DOOR FOR RABBIT HUTCHES. JOHN L. KLECKNER, South Bend, Ind. Filed July 7, 1930. Serial No. 466,317. 2 Claims. (Cl. 119—18.)

1. A door for rabbit hutch, comprising a frame, said frame having recessed portions adjacent to one end thereof, plates secured to the frame and overlying the recessed portions, a removable water trough positioned within the recessed portions, a water trough section positioned within the recessed portion and contacting with the plates



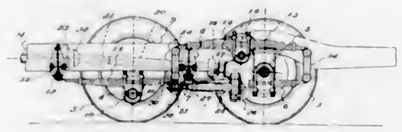
for holding the lower end of the watering trough section in position, and a latch member for holding the upper end of the watering trough section in position.

1,857,247. VOLTAGE MEASURING ARRANGEMENT. TORBERN LAURENT, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Jan. 14, 1931, Serial No. 508,750, and in Sweden Jan. 14, 1930. 5 Claims. (Cl. 179—175.3.)



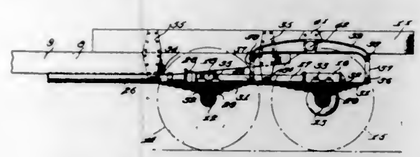
1. A device for voltage measurements comprising in combination an amplifier for alternating currents, means for connecting the amplifier to the voltage to be measured, an adjustable damping device connected with its input side to the output side of the amplifier, means for adjusting the alternating potential supplied to the input side of the damping device, and means for comparing the voltage to be measured with the voltage on the output side of the damping device.

1,857,248. VEHICLE DRIVE. ARTHUR I. MARCUM, Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed Nov. 27, 1925. Serial No. 71,644. 14 Claims. (Cl. 180—22.)



5. A road vehicle comprising a frame, tandem axles supporting said frame, a spring for each axle pivoted to swing about a pivot secured to the frame, a third spring pivoted to said frame between its ends and connected to said first named springs at its opposite ends, driven wheels on one of said axles, non-driven wheels on said other axle, mechanism to drive said first named wheels and a torque resisting element arranged to transmit the reaction due to the driving torque to said third spring adjacent its connection to the spring individual to the axle carrying the non-driven wheels.

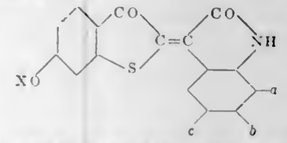
1,857,249. MULTIWHEEL ROAD VEHICLE. ARTHUR I. MARCUM, Oakland, Calif. Filed Oct. 3, 1928. Serial No. 309,988. 19 Claims. (Cl. 180—22.)



1. A multi-wheel road vehicle comprising a frame; a drive axle and a dead axle disposed adjacent one end of said frame, in tandem, with the drive axle behind the dead axle; a drive shaft extending past said dead axle and operatively connected with said dead axle; torque-resisting means associated with said drive axle and through which said drive shaft extends; and a compensating spring suspension interconnecting said axles and said frame, permitting limited endwise movement of said axles with relation to said frame, comprising springs to the mid-portions of which said axles are connected.

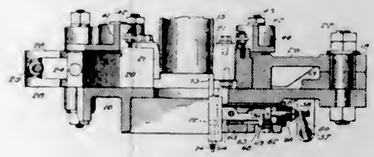
1,857,250. VAT DYESTUFFS OF THE THIONAPHTHENE-INDOLINDIGO SERIES. THEODOR MEISSNER, HANS HEYNA, and ERNST FISCHER, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 20, 1930, Serial No. 476,722, and in Germany Sept. 25, 1929. 8 Claims. (Cl. 260—48.)

1. As new products, the compounds of the following general formula:



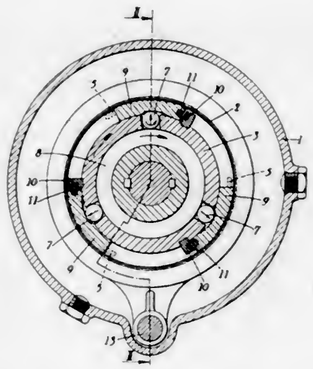
wherein X stands for an alkyl group of low molecular weight, a for balogen or an alkyl group of low molecular weight and b and c stand for hydrogen, halogen or an alkyl group of low molecular weight, dyeing cotton clear, orange tints of good fastness to light.

1,857,251. THREADING MACHINE. ERIK W. MIKAELSON, Easton, Pa. Filed Dec. 18, 1928. Serial No. 326,866. 10 Claims. (Cl. 10—90.)



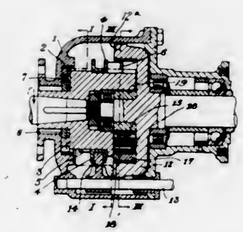
10. In a machine for threading and cutting off metal stock, the combination with a threading mechanism adapted to receive stock inserted from one end thereof, of a machine for cutting off said stock located adjacent the other end of said mechanism, means for releasing said threading mechanism from said stock to permit the latter to be passed through said mechanism to said cutting off machine, said means comprising a power actuated mechanism and a controlling means for said power actuated mechanism extending into the path of movement of said stock, and means movable on engagement of said stock with the controlling means for shifting the latter to a position out of the said path for initiating the movement of said power actuated mechanism.

1,857,252. BALL OR ROLLER CLUTCH. WILLIAM MILLER, Dunston-on-Tyne, and HAROLD THOMAS LAMB, Newcastle-on-Tyne, England. Filed Jan. 23, 1929, Serial No. 334,462, and in Great Britain Jan. 28, 1928. 5 Claims. (Cl. 188—30.)



1. A roller clutch comprising two concentric clutch members one of which is a roller-carrying member having a plurality of radial slots therein, a rolling element in each of the slots of the said roller-carrying member, a concentric revoluble ring on the said roller-carrying member, the said ring contacting with the said rolling elements, and a slidable wedge interposed between each of the said rolling elements and the other clutch member.

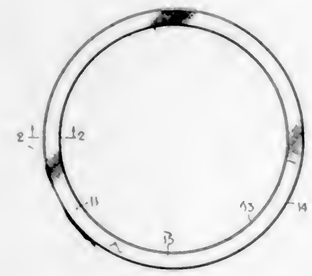
1,857,253. SPRAG FOR MOTOR VEHICLES AND THE LIKE. WILLIAM MILLER, Dunston-on-Tyne, and HAROLD THOMAS LAMB, Newcastle-on-Tyne, England. Filed Apr. 6, 1929, Serial No. 353,025, and in Great Britain Apr. 21, 1928. 4 Claims. (Cl. 192—4)



1. A spragging device for motor vehicles and the like which includes a roller friction clutch comprising two members one of which is held stationary; clutch engaging means between the two clutch members, said clutch engaging means comprising a single acting wedge adapted to coact with each roller unit when the normal direction of rotation is reversed, slidable stops on the one clutch member adapted to be slid into the path of the wedges so that on the normal direction of drive being reversed the narrow ends of the said wedges abut against the said slidable stops and prevent engagement between the wedges

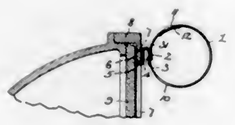
and rollers, in combination with a free-wheel device which includes rollers coacting with wedging means having oppositely disposed wedge faces, and slidable stops adapted to be brought into and out of the path of the wedging means so as to render one of the wedge faces of each wedging means inoperative or operative, a common operating member between the said spragging and free wheel devices, to which are secured the slidable stops of both clutches, the arrangement being such that when the one set of stops is in the operative position the other set is in the inoperative position.

1,857,254. METHOD OF PRODUCING RINGS. ALLEN W. MORTON, Baltimore, Md., assignor to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed Oct. 10, 1928. Serial No. 311,572. 4 Claims. (Cl. 51—278.)



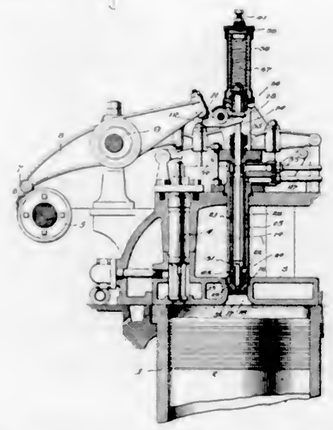
1. The method of producing annuli with opposed parallel surfaces, which consists in forming an annular blank of substantially uniform section throughout its circumference, in which the surfaces intended to be made parallel in the finished annulus are out of parallel with each other by a substantial angle, in such manner that at least one of said faces offers a line contact with a plane surface substantially parallel with the desired plane of finish, and grinding said blank between opposed grinding elements.

1,857,255. INDICATOR. EDWARD F. NEWCOME, Miami, Fla. Filed July 24, 1931. Serial No. 552,963. 1 Claim. (Cl. 240—8.4.)



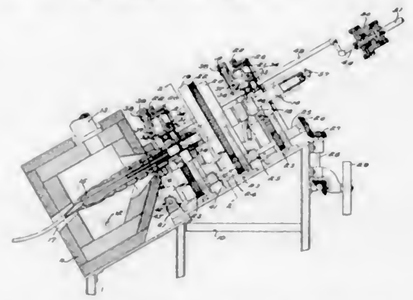
A reflecting attachment for head lights of automobiles, comprising an open ended cylinder adapted to be attached to a headlight with its axis horizontal and transverse to the axis of the head light, said cylinder being formed of sheet metal having a light reflecting inner cylindrical surface, and having a part projecting beyond the line of junction, said part being bent outwardly radially of said cylinder and then bent upon itself to form an attachment lug substantially parallel with the axis of the cylinder, said cylinder having slots formed therein parallel with the axis of the cylinder and having one of said slots on each side of said attachment lug for the purpose specified.

1,857,256. DIESEL ENGINE. BRUNO V. E. NORDBERG, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 25, 1929, Serial No. 342,442. Renewed Feb. 26, 1931. 17 Claims. (Cl. 123—33.)



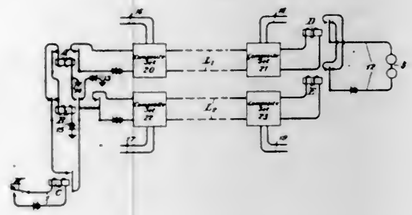
1. The method of operating a Diesel engine of the air injection type, which consists in reducing in quantity the oil fuel charge and substituting for the fuel injecting air a combustible gas under similar pressure.

1,857,257. METHOD AND MACHINE FOR FORMING GLASS TUBING FROM PRESSED GLASS BLANKS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,203. 14 Claims. (Cl. 49—17.1.)



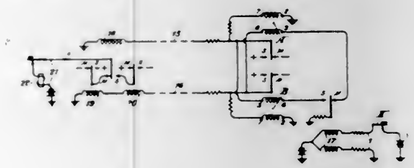
14. In apparatus for forming glass tubing from a continuous series of annular pressed glass billets including an inclined hollow mandrel adapted to receive the billets, means for successively melting the billets, means for drawing glass from the melted billets, means for supporting and continuously rotating the mandrel and for supplying compressed air to the interior thereof, said means comprising a plurality of units each including an annular bearing member, annular rotating chuck member provided with jaws movable into and out of gripping relation with the mandrel, and a clutch element adapted to move the jaws into and out of gripping relation with the mandrel whereby alternate billets may be moved in the mandrel-part of the unit and the mandrel may be supported and rotated by the unit, means for supplying compressed air through the gripping jaw to the interior of the mandrel when in gripping relation, and means for preventing the escape of compressed air from the mandrel when the jaws are out of gripping relation therewith.

1,857,258. TRANSMISSION SYSTEM. WILTON T. REA, Flushing, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 9, 1931. Serial No. 536,287. 8 Claims. (Cl. 178—2.)



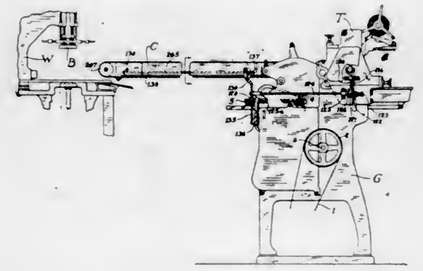
1. A telegraph system comprising a sending loop and a receiving loop, two transmission lines, means for transmitting the signals originating in said loop over said lines so that the maximum frequency of the signal impulses on the lines is less than the maximum frequency of the signal impulses in the loop, said means consisting of a relay arrangement consisting of two relays each of which controls the frequency of application of signals applied to different ones of said lines, a circuit for operating said relay arrangement completed solely over the contacts of said relays and said sending loop and controlled by the signals originated in said sending loop, and relay means in each of said transmission lines for jointly controlling said receiving loop.

1,857,259. TRANSMISSION SYSTEM. WILTON T. REA, Flushing, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 24, 1931. Serial No. 546,624. 4 Claims. (Cl. 178—2.)



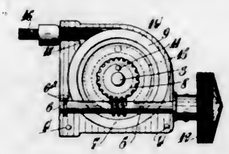
1. A telegraph system comprising two lines interconnecting two stations, sending apparatus at one of said stations comprising two polar relays each having its armature connected to one of said lines and having sources of marking and spacing current connected to the contacts of said armatures, operating circuits for said polar relays, a single switching means for controlling said operating circuits, said operating circuits being so arranged that the initial positioning of said switch will cause marking currents to be applied to both of said lines, the subsequent operation of said switch will cause marking current to be applied to the first of said lines and spacing current to the second of said lines, the subsequent operation of said switch will cause spacing current to be applied to both of said lines, and the subsequent operation of said switch will cause spacing current to be applied to the first of said lines and marking current to the second of said lines; and receiving apparatus at the other of said stations, said receiving apparatus comprising polar relays in each of said lines, a receiving loop circuit, and means controlled jointly by said polar relays for applying signals of different polarities to said loop circuit, said last mentioned means being so arranged that the application by said sending apparatus of marking currents to both of said lines will cause marking current to be applied to said loop, the subsequent application by said sending apparatus of marking current to the first of said lines and spacing current to the second of said lines will cause spacing current to be applied to said loop, the subsequent application by said sending apparatus of spacing current to both of said lines will cause marking current to be applied to said loop, and the subsequent application by said sending apparatus of spacing current to the first of said lines and marking current to the second of said lines will cause spacing current to be applied to said loop.

1,857,260. WRAPPER TABBING MECHANISM. ERNEST G. RIDER, Philadelphia, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 21, 1928. Serial No. 294,436. 33 Claims. (Cl. 93—54.)



1. Wrapper coating mechanism comprising an adhesive-coated member, means to feed an individual wrapper into engagement therewith, and sheet-guiding structure providing a curved aperture through which a wrapper is fed by said means into engagement with said member in a bowed condition.

1,857,261. WINDSCREEN ADJUSTING MECHANISM. CHARLES HILAIRE HENRI RODANET, Versailles, France, assignor to Société Anonyme: Etablissements Ed. Jaeger, Seine, France, a Joint-Stock Company of France. Filed Apr. 15, 1929, Serial No. 355,297, and in France Apr. 20, 1928. 4 Claims. (Cl. 296—84.)

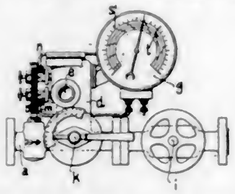


1. In a mechanism for operating the wind screens of motor vehicles, a flexible cable capable of transmitting pulling and pushing strains, means for securing one end of the said cable to the wind screen, a fixed frame, a drum adapted to rotate in the said fixed frame, means for securing the second end of the cable to the said drum, operating means for rotating the said drum, acting to prevent accidental rotation of the said drum when not acted upon by the said operating means.

1,857,262. APPARATUS FOR MEASURING THE OUTPUT OF REFRIGERATING MACHINES. FRIEDRICH SCHIPPER, Wiesbaden, Germany. Filed Jan. 6, 1927, Serial No. 159,474, and in Germany July 21, 1926. 4 Claims. (Cl. 88—14.)

1. In a refrigerating machine flow meter for the evaporating medium, the combination of a vertical pipe having

a restriction therein and an inspection glass opening in the wall thereof in advance of said restriction, the wall of said pipe having another opening therein, and an



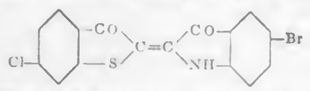
illuminating device arranged to throw light through the last named opening into the interior of the pipe normally to the optical axis of said inspection glass.

1,857,263. PROCESS OF STRENGTHENING COTTON, ARTIFICIAL SILK, ARTIFICIAL FOILS OF CELLULOSE, VISCOSE, OR THE LIKE AND MATERIAL PREPARED BY THIS PROCESS. KURT SPONSEL, Frankfort-on-the-Main-Hochst, and KURT JOCHUM, Frankfort-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 2, 1929, Serial No. 383,152, and in Germany Aug. 10, 1928. 3 Claims. (Cl. 8—20.)

1. As new articles of manufacture threads, fabrics and sheets of cellulose containing glyoxal residues.

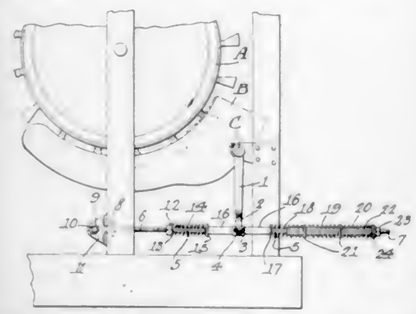
1,857,264. NEW DYESTUFF OF THE THIONAPHTHENE-INDIGO SERIES. NORBERT STEIGER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 27, 1930, Serial No. 484,932, and in Germany Oct. 11, 1929. 1 Claim. (Cl. 260—49.)

As a new compound the dyestuff of the thionaphthene-indole-indigo series corresponding probably to the formula:



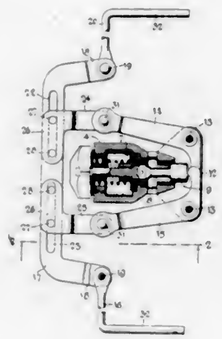
which dyestuff is when dry a violet powder soluble in concentrated sulfuric acid with a dark green color and yields a light yellow hydrosulfite vat from which the vegetable and animal fibers are dyed grey shades.

1,857,265. AUTOMATIC ADJUSTING ATTACHMENT FOR CONCAVES. NEAL W. STEPHENS, Caldwell, Kans. Filed Aug. 13, 1930. Serial No. 475,026. 1 Claim. (Cl. 130—27.)



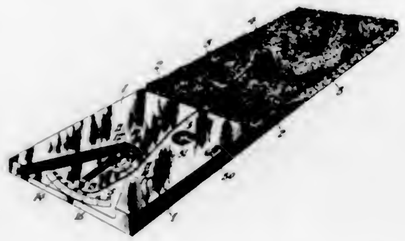
The combination with a cylinder, of a concave, a pivot device for supporting the concave at one end, an arm secured to the pivot device and adapted to swing with the concave about the axis of said device, a rod pivotally mounted, a member slidable thereon and pivotally engaged by the arm, springs on the rod at opposite ends of said member, and means on the rod for varying the compression of the springs and for shifting the normal position of the slidable member relative to the rod and correspondingly changing the normal position of the concave relative to the cylinder.

1,857,266. VALVE ACTUATOR. HENRY NORTON SUDDUTH, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Apr. 10, 1931. Serial No. 529,231. 3 Claims. (Cl. 303—80.)



1. The combination with a valve of the type including a pair of levers each shiftable independently of the other, and in a direction opposite to the direction of motion of the other to open said valve; of an actuator for said levers having lost-motion connections with each lever and adapted to actuate one or the other of the levers according as the actuator is shifted in one or the other of two reverse directions.

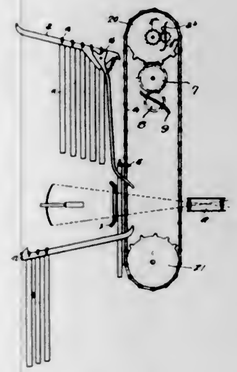
1,857,267. APPARATUS FOR MEASURING THE FLIGHT OF A BALL. ALFRED GEORGE TYLER and EDMUND FRITCHAF STRUCKMAN, London, England. Filed Dec. 26, 1928, Serial No. 328,557, and in Great Britain Mar. 6, 1928. 5 Claims. (Cl. 265—20.)



3. In an apparatus of the kind described, a support, a drum on said support, a ball, a strand connected to the ball and wound on said drum, an arm pivoted for movement in horizontal and vertical directions and having guides through which the strand passes, means to indicate the horizontal and vertical movements of said arm upon the ball being struck, a braking mechanism for said drum actuated by the vertical swinging movement of said arm for effecting braking of the drum in proportion to the extent of said vertical swinging movement, said drum having means to indicate the extent of unwinding of the strand.

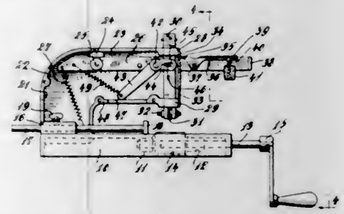
4. In an apparatus of the kind described, a support, a drum on said support, a ball, a strand connected to the ball and wound on said drum, an arm pivoted for movement in horizontal and vertical directions and having guides through which the strand passes, means for latching the arm in horizontal and vertical displacement, and means on the drum for engaging the latching means upon the strand being wound on the drum, said last means moving the latching means to inoperative position.

1,857,268. APPARATUS FOR PROJECTING DIAPOSITIVES. HUGO WIRTSCHAFTER, Vienna, Austria. Filed Jan. 14, 1927, Serial No. 161,204, and in Austria Jan. 20, 1926. 4 Claims. (Cl. 88—28.)



4. Apparatus for projecting diapositives, in combination, means to continuously move the diapositives through the apparatus, and means to temporarily retard the movement of the diapositives when the latter cover the window of the projecting apparatus.

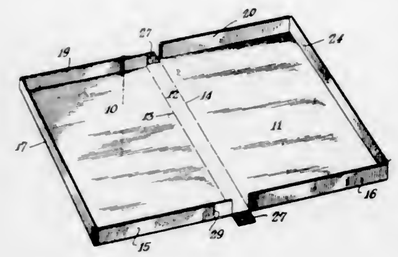
1,857,269. TILE CUTTING MACHINE. ERNEST H. WOLBER, Clifton, N. J. Filed Jan. 19, 1931. Serial No. 509,647. 12 Claims. (Cl. 25—105.)



1. In a tile cutting machine, a spindle, means on said spindle for cutting a tile, means for adjusting the position of said tile, means for lowering said spindle to cutting position, and means for exerting a continuous downward pressure on said spindle.

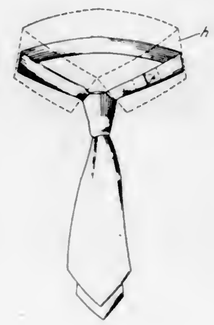
1,857,270. FOLDED BOX. CHAMPE S. ANDREWS, North Chattanooga, Tenn. Filed Dec. 26, 1930. Serial No. 504,693. 17 Claims. (Cl. 229—34.)

1. A folded box formed from a one piece blank comprising a body section, and a cover section, and a back section joining said body and cover sections, said body and cover sections having side and front walls, tabs integral with said back section and adapted to engage said side walls to secure the back in set-up position, said



side walls being recessed to receive said tabs and said tabs being seated in said recesses whereby they extend flush with the surface of said sides.

1,857,271. NECKTIE. LUIS BIANCHI, Olavarria, Argentina. Filed Jan. 22, 1930, Serial No. 422,570, and in Argentina Dec. 16, 1929. 1 Claim. (Cl. 24—50.)

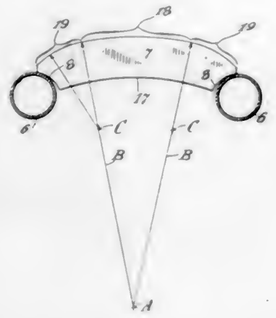


In a necktie clasp, a male member and a female member both perforated for the passage of threads fastening the members to the necktie, a curvilinear triangular portion formed on the front part of said male member having a notch formed at the extreme outer end of said triangle, said female member constituting a casing of substantially quadrilateral form, lips formed on said casing to facilitate the introduction of the male member, and a stop in said casing adapted to engage in the notch of said male member.

1,857,272. LOCOMOTIVE ARCH. JOHN C. CHAPPLE, St. Louis, Mo. Filed Nov. 5, 1928. Serial No. 317,203. 3 Claims. (Cl. 110—87.)

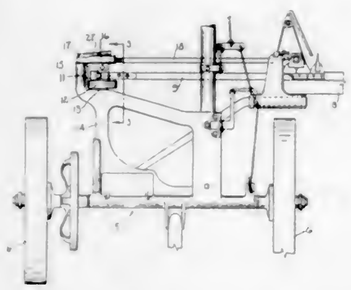
1. A refractory arch brick having opposite edge portions provided with means for engagement upon spaced supporting elements of a firebox structure, said brick being arched between said edge portions and having an upper convex surface extending between said edge portions in substantially concentric relation with the lower concave surface of the brick to provide central and intermediate sections of the brick structure of substantially uniform thickness, and the upper surfaces of said edge portions of the brick being curved on relatively short arcs

merging into the remaining upper surface of the brick and in convergent relation to the lower concave surface of the brick to thereby provide continuations of the brick



arch constituting edge portions on the brick of gradually decreasing thickness for contact with the spaced supporting elements.

1,857,273. CRANK WHEEL SHIELD FOR MOWERS. WILBUR J. COULTAS, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 31, 1930. Serial No. 440,343. 8 Claims. (Cl. 56—1.)

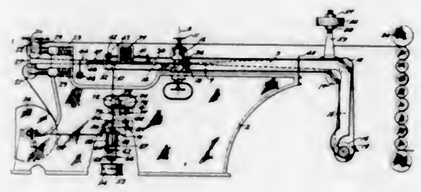


3. In a mower having a crank wheel protecting bowl and a drag link socket pivotally connected to said bowl by a bolt, a shield for mounting over the front end of the bowl comprising a sheet metal stamping having a vertical portion and a rearwardly curved horizontal portion underlapping said bowl, said vertical portion having a hole aligning with and receiving the drag link pivot bolt for mounting said vertical portion, said horizontal portion having a hole aligning with a hole in the lower portion of said bowl to accommodate a second bolt for securing said horizontal portion to said bowl, and the upper edge of the vertical portion curved forwardly to form a semicircular rib.

1,857,274. PIGMENTED OIL COMPOSITION AND PROCESS OF INHIBITING OXIDATION THEREOF. JOHN C. EMHARDT, Newburgh, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 21, 1924. Serial No. 700,817. 10 Claims. (Cl. 134—79.)

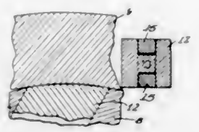
1. A coating composition comprising a cellulose compound, a fatty oil having a tendency to become rancid, a pigment of the group composed of lithopone and titanium oxide, and a compound containing the radical of an acid of the group composed of citric and malic acids.

1,857,275. METHOD OF MAKING PAPER. DOZIER FINLEY, Berkeley, Calif., assignor, by mesne assignments, to Toledo Scale Manufacturing Co., Toledo, Ohio, a Corporation of New Jersey. Original application filed Oct. 2, 1922, Serial No. 591,694. Divided and this application filed Apr. 28, 1930. Serial No. 447,829. 1 Claim. (Cl. 92—46.)



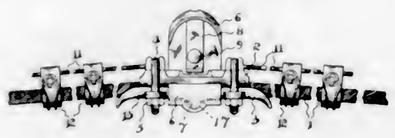
The method of controlling the operation of a machine for producing a uniform product which comprises continuously weighing the product as it is delivered from the machine, utilizing the weighing machine with means for recording the weight per unit length of said product, and adjusting the speed of the machine in accordance with the indications of the weighing machine.

1,857,276. COMPRESSOR. WILLIAM C. GIBSON and ADAM GABRIEL, Chicago, Ill., assignors of one-third to Acme Industrial Co., a Corporation of Illinois. Filed June 12, 1930. Serial No. 460,688. 2 Claims. (Cl. 230—152.)



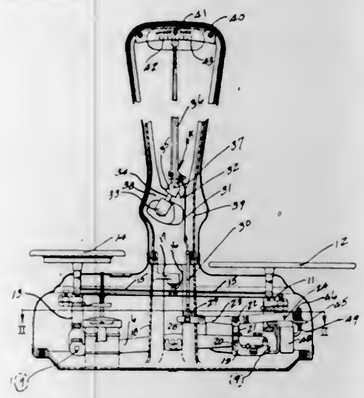
2. A compressor comprising a cylinder having end walls and a circumferential wall and a longitudinal depression in the inner surface of the circumferential wall, a rotor eccentrically supported within said cylinder and extending into said depression, said depression being curved to conform to the periphery of the rotor, and piston blades carried by said rotor, said piston blades being of sufficient width to span said depression.

1,857,277. SUSPENSION CLAMP FOR ELECTRIC CONDUCTORS. ARTHUR C. GOODWIN and THOMAS H. BARNARD, Toronto, Ontario, Canada. Filed Dec. 2, 1926. Serial No. 152,191. 8 Claims. (Cl. 248—31.)



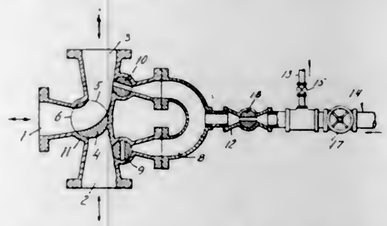
5. In a suspension clamp for horizontal electric conductors and the like, the combination of a clamping member adapted to be engaged with a conductor; and a hanger having a part below the clamping member on which said clamping member is adapted to rest, the inner sides of said hanger being spaced from the sides of the clamping member, the clamping member having an oscillatory engagement with said hanger in both horizontal and vertical planes.

1,857,278. WEIGHING SCALE. HALVOR O. HEM, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed June 30, 1930. Serial No. 464,895. 14 Claims. (Cl. 265—61.)



1. In a counter scale, in combination, a pendulum load-counterbalancing mechanism, indicating mechanism connected thereto, and base lever mechanism operatively engaging said counterbalancing and indicating mechanisms, said lever mechanism having a pendulous mass attached to one of its component members.

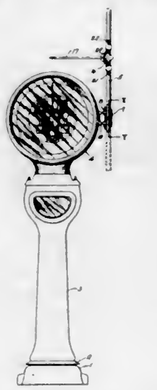
1,857,279. VALVE. EUGENE C. HEATHEL, Chicago, Ill., and WILLIS S. GULLETTE, Highland, Ind., assignors to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Feb. 26, 1929. Serial No. 342,904. 4 Claims. (Cl. 277—53.)



1. A valve comprising a body having three passages and a plug-type closure member arranged therein having two communicating ports adapted to register with one of said three passages and either of the other two of said three passages, a by-pass connection connecting the last mentioned two of said three passages and a pair of plug-type closure members arranged in said by-pass connection adjacent its junctures with the last mentioned two of said three passages, each of said by-pass closure members being arranged so that a wall of either of said by-pass closure members or a port thereof, when positioned to prevent flow between the last mentioned two of said three passages or when positioned to permit such flow respectively, is in substantial alignment with the wall of one of the last mentioned two of said three passages.

1,857,280. HEIGHT MEASURING DEVICE. SAMUEL N. HURT, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Nov. 21, 1928. Serial No. 320,927. 5 Claims. (Cl. 33—169.)

1. In a device of the class described, in combination, a weighing scale, a bar secured thereto, said bar having a plurality of indicia columns extending in opposite directions, a sliding member mounted on said bar and having a laterally extending rod adapted to gage heights and



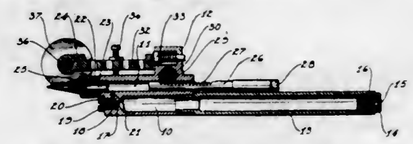
means to hold it stationary at any point on said bar and said sliding member having a plurality of indexes adapted to cooperate with said plurality of indicia columns.

1,857,281. GUN WAD MATERIAL. REGINALD H. JOHNSON, Maplewood, N. J., assignor to American Hair & Felt Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,513. 4 Claims. (Cl. 28—4.)



1. As a new article of manufacture, punch-felted gun wad felt, in which a substantial proportion of the fibres extend axially of the material and some of which ordinarily protrude from the surface of the material, impregnated with a sizing containing resin and having smooth outer surfaces so that the material can be cut into wads and used directly in loading machines without further treatment.

1,857,282. PAINTING INSTRUMENT. ARTHUR L. KLINE, Detroit, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 22, 1928. Serial No. 263,625. 19 Claims. (Cl. 91—62.6.)

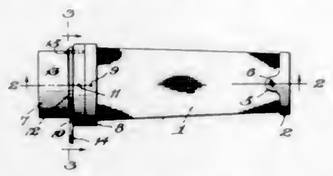


1. A painting instrument comprising a chamber having a nozzle, a reciprocating piston positioned in the chamber, an oscillatory arm on the chamber, a rotatable guide on the arm and means connecting the guide with the piston for operating the piston.

1,857,283. ASH AND FIRE PROOF CIGAR AND CIGARETTE HOLDER. ALEXANDER MACBETH, Providence, R. I. Filed May 13, 1931. Serial No. 536,986. 1 Claim. (Cl. 131—51.)

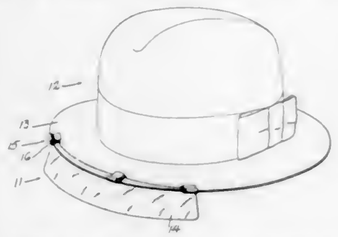
A cigar or cigarette holder composed of a foraminous cylindrical body, a ring disposed over the front end of the body and having an inwardly extending flange, a

foraminous disk engaged with the inner face of the flange, said ring having inwardly extending projections with teats struck inwardly therefrom to engage in the body, a sleeve projecting within the rear end of the body, a ring engaged over the body and secured to the sleeve for



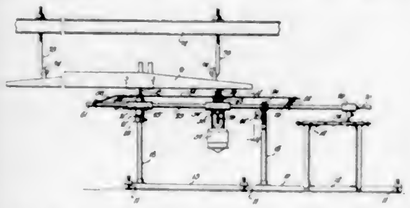
clamping the body to the sleeve, said body having a substantially semi-circular slot, a second ring abutting the last named ring, and a curved clamping member pivoted in the slot and having camming engagement with the second ring to frictionally hold the member in position against a cigar or cigarette.

1,857,284. ANTIGLARE SHIELD. HORATIO D. NELSON, Jersey City, N. J. Filed May 13, 1931. Serial No. 536,975. 9 Claims. (Cl. 2—10.)



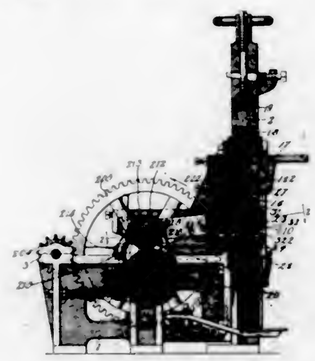
1. A reversible anti-glare device including a flexible shield having light resisting characteristics, fastening means for detachably securing the shield to the brim of a hat, said fastening means projecting on the front side of the shield when so secured, and fastening means for securing the shield in reversed position to the head of a wearer with the first mentioned fastening means spacing the shield a distance in front of the wearer's face.

1,857,285. APPARATUS FOR ENGRAVING PLATES AND OTHER OBJECTS. ROBERT S. PHILLIPS, Chicago, Ill., assignor to American Hair & Felt Company, Chicago, Ill., a Corporation of Illinois. Filed May 5, 1930. Serial No. 449,794. 7 Claims. (Cl. 90—13.1.)



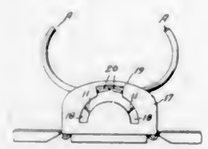
1. In an engraving apparatus, the combination of a supporting frame, a centering tool mounted on said frame and movable to an operative position relative to a fixed piece of work, a support pivotally mounted on said frame and having its pivotal axis coaxial with the center of said centering tool, a movable tool carrying frame having members slidably mounted in said support, means at a distance from said support for supporting the outer end of said tool carrying frame and permitting radial and longitudinal movement of said members, a power-operated cutting tool mounted on said tool carrying frame at a predetermined distance from said centering tool, a tracing template, a tracing tool mounted on said tool carrying frame at a predetermined distance from the center, and means for moving said tool carrying frame in accordance with the movements of the tracing tool over said template to guide the cutting tool against the fixed piece of work to reproduce the design or character of the template.

1,857,286. PRESS. JOSEPH O. POLLACK, Chicago, Ill. Filed July 13, 1929. Serial No. 377,945. 5 Claims. (Cl. 74—48.)



1. In a device of the class described, a toggle arm having a bifurcated end, a member positioned between the bifurcations of said arm, a pin connecting the bifurcations to provide a pivotal mounting for said member, a roller pivotally mounted on said member, and second pin forming a frangible connection between said member and said arm, said frangible pin being adapted to prevent rotation of said member about said first mentioned pin as a pivot under normal conditions of stress in said toggle arm and to permit such rotation by shearing off when said arm is subjected to excessive stresses.

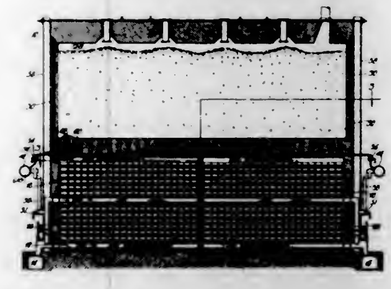
1,857,287. OPENING AND LOCKING MEANS FOR LOOSE LEAF RING STRUCTURES. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed May 5, 1931. Serial No. 535,125. 5 Claims. (Cl. 129—24.)



4. A construction as in claim 3 with the addition that the operation of the lever to open the rings automatically locks the latter in opened condition.

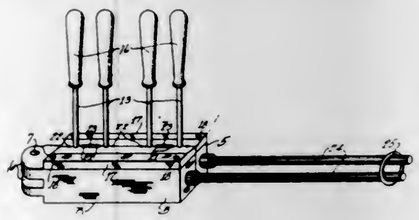
1,857,288. COMBINATION OVEN. LLOYD F. SCHRADER, Richmond Hill, N. Y., and WILLIAM H. WRIGHT, Mountain Lakes, N. J., assignors to Foundation Oven Corporation, New York, N. Y. Filed Jan. 12, 1929. Serial No. 332,151. 5 Claims. (Cl. 202—142.)

1. A coke oven comprising a series of alternating coking chambers and heating walls therefor arranged laterally of each other in a row, each of said heating walls comprising a row of combustion flues, supporting walls for said heating walls below the same having up-take and down-take ducts therein for supplying gas and air to and taking combustion products from said combustion flues



at intervals along the lengths of said heating walls, a gas regenerator and an air regenerator in superposed relation to each other between each two of the adjacent supporting walls and each of the regenerators communicating with one of said ducts.

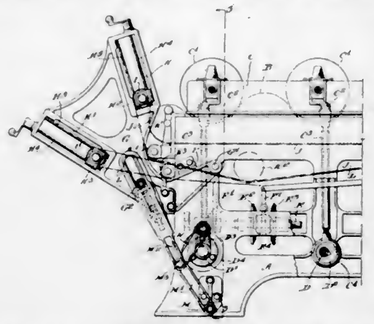
1,857,289. DENTAL APPARATUS. JACOB C. SCHWARTZ, deceased, University City, Mo., by Mercantile-Commerce Bank and Trust Company, trustee, St. Louis, Mo., assignor to Berry Dental Laboratory Co., St. Louis, Mo., a Corporation of Missouri. Filed Jan. 30, 1930. Serial No. 424,612. 3 Claims. (Cl. 22—153.)



1. A mold including, in combination, a pair of companion blocks hinged together at an end and whose inner meeting faces are provided with co-operable cavity-forming recesses for registration to form a mold-cavity, said recesses also opening upon the upper face of the respective blocks, a core-piece comprising a mandrel and a notched blade, the latter being disposed transversely within the cavity for partially parting the casting, and a pair of co-operating marginally notched cover-plates flatwise disposed on said blocks over said recesses for meeting engagement for supportingly notchwise engaging the mandrel of the core-piece and providing a finishing upper surface for the molded matter.

1,857,290. FLATWORK IRONER. JAMES H. SKITT, Philadelphia, Pa., assignor to Smith, Drum & Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 1, 1929. Serial No. 359,454. 2 Claims. (Cl. 68—9.)

1. In a flat work ironing machine having an adjustable frame for carrying the ironing rolls, an adjustable frame for tightening and relaxing the apron, toggle links adapted to actuate the apron frame and arrange to hold the apron frame in apron tightening position while the toggle links are in substantially parallel positions and a spring located between the link connected with the apron frame and said apron frame in such manner as to be put under compression as the toggle raises the frame to apron tightening position, in combination with means for adjusting the roll frame and means interconnecting the mechanism for



adjusting the roll frame with the toggle links for actuating the apron frame acting to flex the toggle as the roll frame is elevated.

1,857,291. LOOSE-LEAF BINDER. CLARENCE D. TRUSSELL, Poughkeepsie, N. Y., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y., a Corporation of New York. Filed Dec. 16, 1930. Serial No. 502,636. 9 Claims. (Cl. 129—24.)

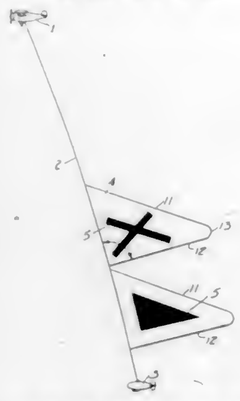
1. Loose leaf binding mechanism of the type comprising prong plates having a rocking engagement at their adjacent edges, pressed resiliently together, and movable to both sides of a neutral line so as to apply the resilient stress to hold the prongs in either open or closed position, characterized by the provision of said plates with cam portions acting to force them apart in moving to the open position.

8. A loose leaf binder comprising prong plates, a spring back plate engaging their outer edges, and a cover plate, the latter having stops to limit the opening movement of the prong plates, formed integrally as indented cups.

1,857,292. MEANS FOR DISPLAYING A SIGN IN THE AIR. ERNST UDET, Berlin-Wilmersdorf, Germany. Original application filed Mar. 26, 1930, Serial No. 438,983, and in Germany Jan. 7, 1930. Divided and this application filed Jan. 25, 1932. Serial No. 588,691. 3 Claims. (Cl. 40—127.)

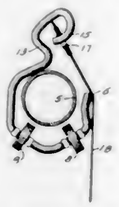
1. Means for displaying a sign or signs in the air comprising a motor-driven aircraft, a cable carried by the said aircraft, the said cable being adapted to be payed out

and hauled in and carrying a transparent foldable fabric, the sign being arranged on the said fabric and contrasting with the air, and a loading provided on the free end of the cable, the fabric being adapted to be unfolded by the air



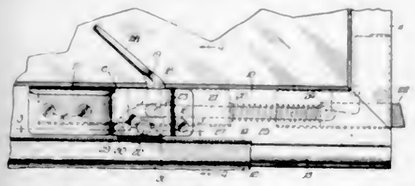
current when the cable is payed out from the aircraft and to be held taut in the air, the sheet of fabric carrying the sign having the shape of a scalene triangle, the base of the triangle being attached to the cable and the longer side of the triangle being at the top.

1,857,293. CURTAIN HOOK. ROBERT D. W. VROOM, Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 9, 1931. Serial No. 507,598. 7 Claims. (Cl. 156—21.)



4. A curtain hook, comprising a single piece of wire having a pair of angularly bent portions at the top forming straight axle portions, felt rollers on said axle portions, said wire being bent angularly downwardly and then angularly forwardly, and then having an open eye at the bottom thereof formed by again bending the wire downwardly and rearwardly, then downwardly and forwardly, and then upwardly and rearwardly, said eye being formed to prevent accidental disengagement of a curtain grommet when said hook is turned upside down.

1,857,294. SASH LOCK. CARL H. LARSON, Elkhardt, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 17, 1931. Serial No. 509,294. 7 Claims. (Cl. 292—167.)



1. In a sash lock of the starter type, a pivotally mounted operating lever provided with a handle portion and a sill-engaging cam portion, both of which portions are located on the same side of the vertical plane which passes through the pivotal axis of the lever, said handle portion being depressible to cause the cam portion to be forced against the sill.

1,857,295. SASH LOCK. YALE W. EHRET, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1931. Serial No. 514,902. 3 Claims. (Cl. 292—173.)

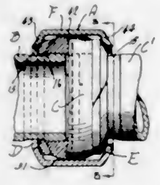


1. In a sash lock of the starter type, in combination, a starting element, a latching element, and a single finger piece operable to simultaneous project the starting element and retract the latching element, said latching element being retractible upon the application of inwardly directed pressure to the projecting end thereof without causing projection of the starting element.

1,857,296. PROCESS OF PRODUCING BALLAST-FREE SOLID FERTILIZERS. CARL EYER, FRIEDRICH FROWEIN, and FRIEDRICH KORN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 28, 1929, Serial No. 343,562, and in Germany Mar. 7, 1928. 4 Claims. (Cl. 71—7.)

1. The process of producing a ballast-free solid fertilizer which comprises decomposing crude calcium phosphate with nitric acid, adding a calcium compound to the resulting solution to precipitate dicalcium phosphate, separating the dicalcium phosphate from the solution, partially converting the solution with potassium sulphate, concentrating the resulting solution, adding at least part of the dicalcium phosphate previously separated, and converting the mixture into a dry product.

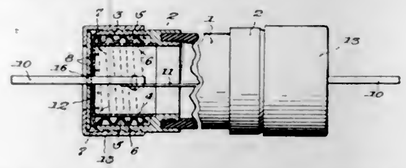
1,857,297. PIPE COUPLING. CHARLES W. FAULKNER, Welland, Ontario, Canada. Filed Aug. 17, 1927. Serial No. 213,642. 8 Claims. (Cl. 285—181.)



8. In a pipe joint construction, the combination with end to end pipe sections each having an annular external groove at a location adjacent to but spaced from the facing ends, and providing spaced shoulders, a split ring seated in each of said grooves engaging the shoulder thereof, nearest the end of the pipe sections facing the companion pipe section, compressible gasket means for the ends of said pipe sections, and means for forcing the compressible gasket means and split rings into relative engagement and the rings into firm engagement with said shoulders to seal and interlock the pipe sections together.

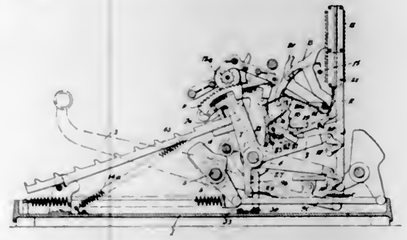
1,857,298. FUSE. JAY R. FOGAL, San Francisco, Calif. Filed Mar. 4, 1931. Serial No. 520,130. 10 Claims. (Cl. 200—132.)

1. A fuse of the character set forth comprising a body portion and a fuse link disposed within said body portion, end contacts carried by said body portion and connected with said fuse link and an internally and externally threaded element associated with one of said con-



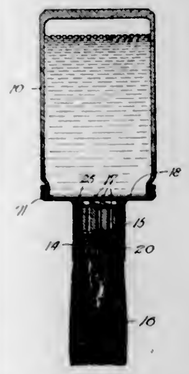
tacts and defining inner and outer spiral passages for the escape of gases from the interior of said fuse body to the atmosphere.

1,857,299. ADDING MACHINE. JEROME A. FRIED and CHARLES SCHRODER, Ithaca, N. Y., assignors, by mesne assignments, to Morse Products, Inc., Ithaca, N. Y., a Corporation of New York. Filed May 12, 1925, Serial No. 29,794. Renewed Feb. 1, 1927. 5 Claims. (Cl. 235—60.)



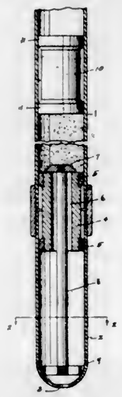
1. In an adding machine a diverging lever train and a floating rack normally disconnected, connecting means therefor, a totalizing mechanism, means associated with the totalizing mechanism normally to inhibit the action of the floating rack but adapted to release said floating rack and actuate said connecting means in the totalizing operation.

1,857,300. FOUNTAIN BRUSH. JOHN GISZTL, Corona, N. Y. Filed Oct. 10, 1930. Serial No. 487,801. 2 Claims. (Cl. 15—133.)



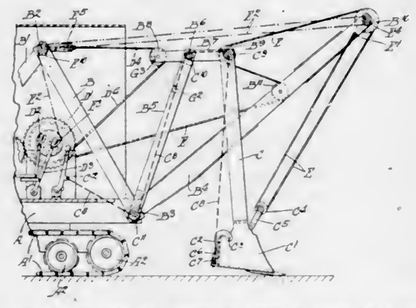
1. A fountain brush comprising, in combination, a container for storing a liquid, a cover detachably secured to said container, an open-ended ferrule attached to said cover, a block positioned within said ferrule, a plurality of bristles the upper portions of which peripherally positioned around said block and wedge between said block and the inner lateral surface of said ferrule to form a space of conoidal shape below said block, cementing means to hold said bristles, ferrule and block together, a plurality of open-ended passages in said block, the said cover having a plurality of holes therein adjacent to said passages, and a removable pad contained within said cover for sealing said holes.

1,857,301. APPARATUS AND PROCESS FOR CEMENTING WELLS. JASPER A. HARDCASTLE, Damon, Tex., assignor, by direct and mesne assignments, of one-fourth to Jesse H. Hardcastle, Houston, Tex., and one-fourth to R. L. Waxler. Filed July 1, 1929. Serial No. 375,040. 13 Claims. (Cl. 166—1.)



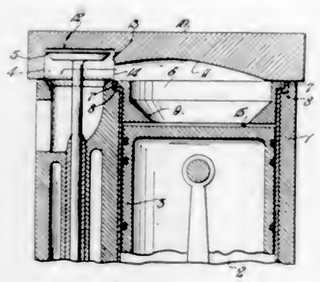
1. The combination with a casing in a well bore, of an upper plunger and a lower plunger fitted in the casing and spaced apart to receive a load of plastic cementitious material between them, said lower plunger having a vertical passageway therethrough, a valve normally closing said passageway, and means for opening the valve at the lower end of the casing to permit the discharge of said load through said passageway.

1,857,302. EXCAVATING MACHINE. PERCY O. HAWKINS, Hammond, Ind., assignor of one-half to George A. Rust, Worth, Ill. Filed July 25, 1931. Serial No. 553,035. 7 Claims. (Cl. 214—136.)



1. In an excavating device, a base, a boom, a support pivoted to the base, a rocker arm pivoted intermediate its ends to said support, a bucket stick pivoted to said arm, sheaves mounted at the opposite ends of said rocker arm, a plurality of hoisting drums, a pull back cable associated with one of said drums and passing about a sheave on one end of said arm and a crowding and bucket hoisting cable associated with another said drum and passing about a sheave at the opposite end of said rocker arm.

1,857,303. HEAT REDUCING STRUCTURE FOR EXPLOSIVE ENGINES. WILLIAM G. HERMSMEYER, Fort Worth, Tex. Filed May 29, 1929, Serial No. 366,851. Renewed Mar. 30, 1932. 2 Claims. (Cl. 123—191.)



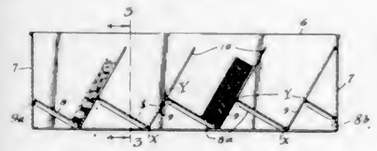
1. In an explosion engine cylinder having an annular seat formed around the inner margin of the cylinder bore at the combustion chamber end thereof, an explosion centering ring mounted in this end of the cylinder, the said ring being beveled inwardly to facilitate its function and having a surrounding lip adapted to fit in the said annular seat of the cylinder margin.

1,857,304. PROTECTOR. CORNELIUS B. HICE, Humble, Tex. Filed Sept. 19, 1929. Serial No. 393,644. 1 Claim. (Cl. 131—51.)



A protector of the character described comprising an elongated tubular hood formed of foraminated material, one end of which is closed, clamp jaws attached to the other end of the holder and a single ring around the jaws to contract said jaws.

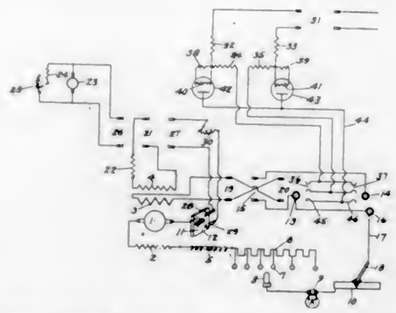
1,857,305. CURRENCY TRAY. JOSEPH W. HOLLIDAY, Red Wing, Minn. Filed Mar. 28, 1930. Serial No. 439,844. 6 Claims. (Cl. 206—72.)



1. In a currency tray, a series of bill holding compartments each comprising a bottom inclined from the horizontal, and a back disposed at least at 90° with relation to said bottom, said back being of less height than the width of a bill, and extensions or guides projecting upwardly from said back and lying in substantially the same plane therewith, said extensions constituting front partitions for the adjacent rear compartments.

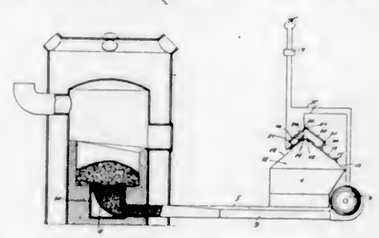
1,857,306. ARC WELDING SYSTEM. CLAUDE J. HOLSLAG, South Orange, N. J., assignor to Electric Arc Cutting & Welding Company, Newark, N. J. Filed Aug. 18, 1930. Serial No. 476,102. 22 Claims. (Cl. 219—8.)

2. For an arc welding system, a generator having; its armature adapted to be connected into an arc welding circuit, at least one series field winding in the arc circuit, a main field winding, a source of energization for said main winding separate from the generator, said source having a potential materially higher than the voltage for which said main winding is wound to give normal excitation for the generator armature, and an impedance in the



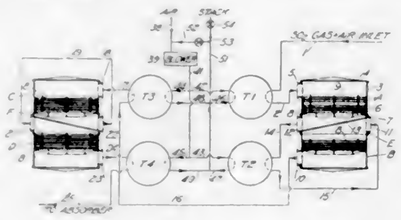
main field winding circuit such as to cut down the voltage of said energizing source so said main winding will normally give full-load excitation.

1,857,307. STOKER MOTOR CONTROL. WILLIAM WALTER HUDSON, Salt Lake City, Utah. Filed Apr. 3, 1931. Serial No. 527,604. 3 Claims. (Cl. 110—108.)



1. In a stoker, a hopper having means for feeding fuel to a fire-pot, a blower having means for conducting combustion air to the fire-pot, an electric motor for driving said blower, a closure for said hopper to normally prevent discharge of back-blown dust-laden air from said hopper, said closure embodying a normally closed door, a normally closed switch embodied in the circuit of said motor, and means connecting said door with said switch for automatically opening said switch when said door is opened, thereby stopping the motor and blower and preventing back-blowing of dust-laden air through the open door.

1,857,308. CATALYTIC APPARATUS. HANS O. C. ISENBERG, New Rochelle, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1926. Serial No. 105,348. 7 Claims. (Cl. 23—288.)



1. In an apparatus for the conversion of sulfur dioxide to sulfur trioxide by the contact process, the combination of a converter, and a heat transfer unit connected thereto

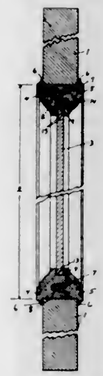
comprising a shell having an inlet and an outlet therein, and a conduit section arranged within said shell between and in series with said inlet and said outlet, said conduit section being in a substantially horizontal position, and said inlet and said outlet being in substantially right-angle relation to said conduit section.

1,857,309. FASTENER. ISIDOR JACOBS, Union City, N. J. Filed June 19, 1929. Serial No. 371,971. 4 Claims. (Cl. 24—205.)



1. A fastener stringer comprising a stringer tape, a pair of cords, and an embracing tape about such cords in the form substantially of a figure 8 holding said cords together and attached on one side of said stringer tape at one edge thereof, said stringer tape edge being folded, and said cords forming a bead on each side of said folded edge and interlocking fastener members each having jaws embracing the bead on each side of the folded edge.

1,857,310. PANEL DOOR CONSTRUCTION. WILLIAM H. KING, Weed, Calif. Filed Feb. 24, 1931. Serial No. 517,775. 3 Claims. (Cl. 20—35.)



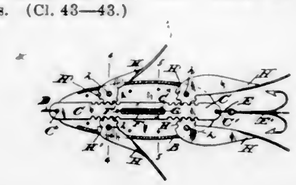
1. A panel door comprising a main frame with an opening for the panel, moldings fitting within the opening on opposite sides of and overlapping the frame of the door, a panel embraced by the moldings and a lock joint on the moldings between the panel and the door frame.

1,857,311. INDICATOR. PAUL KOLLSMAN, Woodhaven, N. Y. Filed Dec. 10, 1931. Serial No. 580,119. 48 Claims. (Cl. 116—129.)



1. The combination with an indicator having an operating means, an indicating means controlled thereby, a scale means and a reference means, of a setting means for the indicating, scale and reference means arranged to cause a movement therebetween such that the indications vary in opposite directions in equal degrees.

1,857,312. FISH LURE. HERMAN OTTO KUEHN, Detroit, Mich. Filed June 11, 1931. Serial No. 543,651. 3 Claims. (Cl. 43—43.)



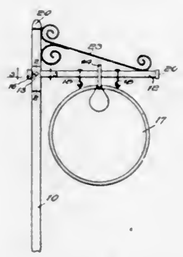
1. In a fish lure, a body portion; a rack-bar extending longitudinally through the device; a plurality of swinging members pivoted therein, each member having a segmental gear at one end in mesh with the rack-teeth of the bar, the free ends of said swinging members extending through openings in the side walls of the device, the ends being bent whereby they may encounter the resistance of the water when submerged; means for securing a hook to one end of the rack-bar; means attached to the other end of said rack-bar, whereby said rack-bar and the swinging members may be shifted in one direction; and a spring, to return said rack-bar and swinging members to their initial position when released from control of said last named means.

1,857,313. MACARONI DIE. DANIEL MALDARI, Brooklyn, N. Y. Filed Sept. 13, 1930. Serial No. 481,680. 3 Claims. (Cl. 107—14.)



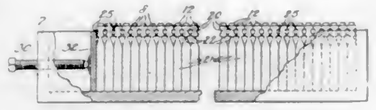
3. Means for producing spiral macaroni, a die having a plurality of removable units therein, each said unit being provided with a centrally disposed well, a discharge port at the side thereof, and each said unit being provided with a cut-away portion adjacent the discharge port, and removable forming means in each said well and at right angles to the longitudinal axis thereof and adjacent and co-operating with the discharge port thereof, each said forming means having a cut-away portion at one side thereof to expedite the dough passing adjacent thereto.

1,857,314. SIGN SUPPORT. MILTON K. MARKKMAN, Crystal Lake, Ill. Filed Jan. 20, 1930. Serial No. 422,235. 2 Claims. (Cl. 40—128.)



1. The combination with a tubular upright having a pair of aligned apertures therein, of a cross arm snugly fitted in said apertures, one end of said cross arm adjoining said upright being threaded and a cap secured to said threaded end, a bolt passing through said upright and through the portion of the cross arm within the limits of the upright.

1,857,315. METHOD OF PROOFING TYPE SLUGS. HARLEY J. MEGLEY, Chicago, Ill. Filed Jan. 29, 1930. Serial No. 424,149. 5 Claims. (Cl. 101—1.)

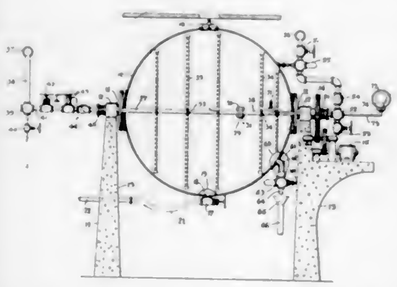


1. The method of taking a trial impression of a plurality of printing slugs which comprises forming said slugs of substantially type high height, with printing faces and with weakened portions within their height, grouping the slugs side by side and holding same together below the weakened portions whereby multilation of the slugs above the weakened portions by direct contact with the holding means is avoided and at the same time multilation of the slugs above the weakened portions by pressure of the slugs upon each other is prevented, then taking a trial impression of the printing faces of the grouped slugs with said slugs in substantially type high position and thereafter reducing the height of said slugs to less than type high height by severing the slugs along said weakened portions.

1,857,316. MANUFACTURE OF WALL-BOARD AND THE LIKE. ARTHUR E. MILLINGTON, San Francisco, Calif., assignor, by direct and mesne assignments, to The United States National Bank of Portland, Oreg., as trustee. Filed May 26, 1927. Serial No. 194,288. 9 Claims. (Cl. 92—13.)

1. The process of making wall board from saw mill waste and the like which includes the steps of reducing the waste to pieces which will pass through a screen of a predetermined mesh, boiling the reduced waste in a weak solution of soda ash long enough to separate the gums and resins from the fibers and loosen the fibers to soften the waste, washing the material to remove the gums and resins from the fibers, and then mechanically effecting separation of the fibers whereby to provide a finished board of soft, self-sustaining material capable of resisting breaking and other strains without use of a binder or filler.

1,857,317. FIBER LIBERATION. ARTHUR E. MILLINGTON, Oakland, Calif., assignor, by direct and mesne assignments, to The United States National Bank of Portland, Oreg., as trustee. Filed Feb. 21, 1928. Serial No. 255,885. 10 Claims. (Cl. 92—7.)

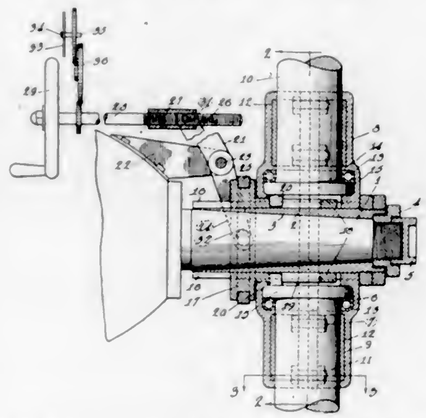


1. In an apparatus of the character described, the combination with a rotary digester and means for rotating it, of means for automatically injecting hot water into the digester at each rotation of the digester, and means for automatically allowing a part of the liquid contents of the digester to escape at each rotation of the digester.

1,857,318. HYPOCHLORITES. CHARLES MINDELEFF, New York, N. Y., assignor to Louise G. Robinovitch, Golden, Colo. Filed May 11, 1928. Serial No. 277,102. 2 Claims. (Cl. 23—86.)

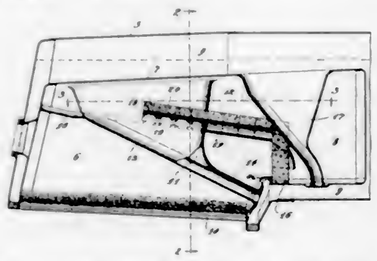
1. The combination with a liquid hypochlorite, of a fragrant oil that overlies the hypochlorite.

1,857,319. VARIABLE PITCH PROPELLER. CHARLES H. MONROE, Berkeley, Calif. Filed Oct. 18, 1929. Serial No. 400,640. 2 Claims. (Cl. 170—163.)



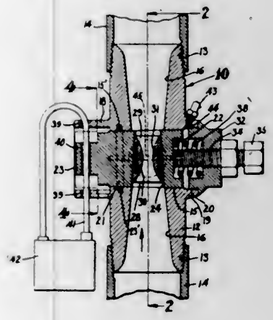
1. In a variable pitch propeller, a rotary member having radial hubs extending therefrom and formed with longitudinal grooves in the surface thereof, propeller blades rotatable in said hubs, a sleeve slidable on the member having prongs riding in the grooves with angular slots formed in the prongs and studs extending from the propeller blades into the slots.

1,857,320. BAFFLE WALL. JOHN E. MUHLFELD, Scarsdale, N. Y. Filed Jan. 18, 1928. Serial No. 247,536. 1 Claim. (Cl. 122—68.)



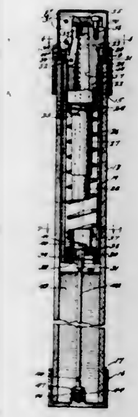
In combination with a locomotive firebox having laterally spaced siphons therein opening through the crown sheet of the firebox and each provided with a lower obliquely inclined tubular extension opening through the throat sheet, and arch tubes extending through the firebox between the siphons and the side walls of the firebox; a vertically positioned baffle wall in advance of the siphons, and a horizontally inclined arch wall abutting the upper end of said vertical wall extending rearwardly therefrom, said arch wall consisting of baffle brick supported upon the arch tubes and trunnions fixed to the siphons and the side walls of the firebox, and extending rearwardly between the siphons and the firebox walls at a point intermediate the upper and lower parts of the siphons to thereby expose a maximum area of the siphon to the direct action of flame and radiant heat from the fuel bed.

1,857,321. FLUID CONTROL DEVICE. FRED A. NEMEC, Whittier, Calif. Filed July 18, 1930. Serial No. 468,906. 5 Claims. (Cl. 251—91.)



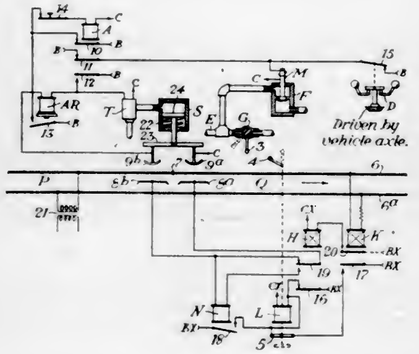
1. In a fluid control device, a body having a transverse tapered aperture and a longitudinal aperture on each side of said tapered aperture, said longitudinal aperture being flared outwardly, a tapered plug in said tapered aperture, a cap for the large end of said tapered aperture, a plurality of means to urge said plug to its seat, said plug having a tapered bore, a flow bean removably mounted in said tapered bore, means to releasably lock said plug against rotation when said bean is in flow position, said body having an aperture therein, said last mentioned aperture being disposed adjacent said bean when the latter is in closed positon whereby said bean may be replaced without removing said device from a flow line.

1,857,322. HIGH TENSION CUT-OUT AND THE LIKE. ERIC N. NORDHEM, Chicago, Ill. Filed May 27, 1929. Serial No. 366,262. 20 Claims. (Cl. 200—117.)



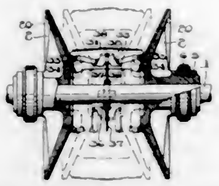
1. A cut-out device comprising in combination a tubular shell having a cap closing its lower end, a ferrule mounted on its upper end, a cartridge adapted for insertion into the upper portion of said shell, said cartridge including a tubular casing of conducting material, a head member rotatably mounted on the upper end thereof, means for at times locking the head member and the shell of the cartridge together against rotation, suitable markings on the head member and on the upper end of the shell of the cartridge for indicating the relative angular positions of said parts with respect to each other, a spiral spring within said cartridge having a normal length less than the length of the cartridge, a connection between the upper end of said spring and the head member aforesaid, an insulating block connected to the lower end of the spring, there being a central perforation in said insulating block, a shank block having an enlarged head and a downwardly depending shank adapted to extend through the opening aforesaid, a rod of conducting material having its upper end connected to the shank block and its lower end connected to the cap at the lower end of the shell, said rod being provided with a section of reduced torsional strength adjacent to its lower end, and a fusible retaining member extending between the shank block and the lower portion of the cartridge shell, and including an inner hub portion nonrotatably connected to the shank block and an outer peripheral portion nonrotatably connected to the lower portion of the cartridge shell, together with a series of spokes extending between the peripheral portion aforesaid and the hub portion and engaging the hub portion in substantially tangential manner, whereby said spoke portions serve to restrain the hub and peripheral portions against relative rotation due to torsional tendency of the spring, substantially as described.

1,857,323. RAILWAY TRAFFIC CONTROLLING APPARATUS. BERNARD E. O'HAGAN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 23, 1931. Serial No. 546,250. 4 Claims. (Cl. 246—182.)



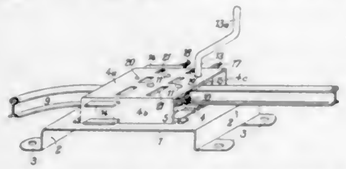
1. Railway traffic controlling apparatus comprising a trackway tripping device, a home relay for controlling said device, a clearing relay for controlling said device, a partial trackway circuit for said clearing relay including a back contact of said home relay and terminating in two spaced contact rails, said partial circuit being provided with a low resistance shunt around the clearing relay including a front contact of said home relay, a train-carried acknowledgment restoring relay, a stick circuit for said acknowledging relay including a normally closed acknowledging push button, a pick-up circuit for said acknowledging relay including said push button and a front contact of said restoring relay, a partial train-carried circuit terminating in two shoes which register with said two contact rails respectively and including a source of current and a back contact of said acknowledging relay as well as the winding of said restoring relay, said partial circuits being so proportioned that when the shoes engage the contact rails the clearing relay will close when the low resistance shunt is open but the restoring relay will not close unless said shunt is closed, and brake controlling apparatus on the train controlled by said tripping device and by said acknowledging relay.

1,857,324. SPEED CHANGING APPARATUS. TAKESHI OKUMURA, Kamikyo Ku, Kyoto, Japan. Filed Aug. 15, 1928, Serial No. 299,822, and in Japan Aug. 19, 1927. 2 Claims. (Cl. 64—8.)



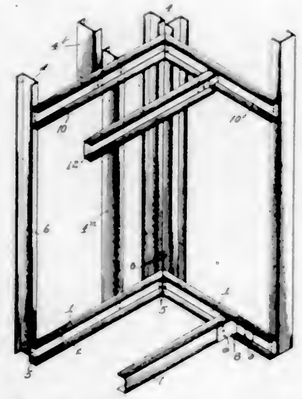
1. Speed changing apparatus comprising a plurality of rim units slidably engaged in radial slots of a pair of opposed discs rotatable on a rotating shaft, a ring fixed to the shaft, guide rods fixed to the ring, balancing weights slidably guided on said rods, and links pivotally connecting the weights and discs.

1,857,325. DEVICE FOR BENDING TOY RAILS. FRIEDRICH OTTENSTEIN, Nuremberg, Germany. Filed May 19, 1931, Serial No. 538,548, and in Germany May 9, 1930. 1 Claim. (Cl. 153—54.)



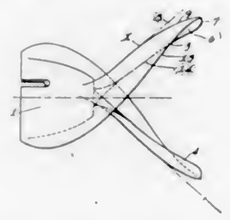
A device for bending rails comprising a frame, a stirrup slidable in the side walls of the frame, a second stirrup slidable in the frame, a feed roller carried by the latter stirrup, a second feed roller journaled in the frame, a pair of axles fixed in the frame, intermediate rollers journaled on the axles, and means for adjusting the first named stirrup to change the relative position of the rollers carried thereby with respect to the intermediate rollers, means for rotating the feed roller carried by the second stirrup, and means for adjusting the second stirrup as and for the purpose set forth.

1,857,326. BUILDING CONSTRUCTION. ALFRED B. PATTERSON, Tulsa, Okla., assignor to Patterson Steel Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Oct. 18, 1928. Serial No. 313,228. 2 Claims. (Cl. 189—34.)



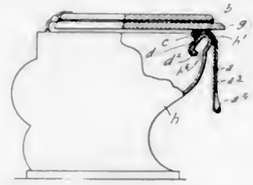
2. A steel frame corner construction including channel sill members arranged edgewise with the flanges thereof mitered—a stud bolted to the web of one sill member and a stud bolted to the web of the other sill with the flanges of said studs directed away from the corner, and angle plates bolted to said studs to hold same together.

1,857,327. PROPELLER. JOHN H. PILET, San Francisco, Calif. Filed Aug. 3, 1929. Serial No. 383,246. 2 Claims. (Cl. 170—159.)



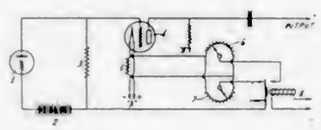
1. A propeller having rearwardly extending blades fashioned with concave leading and convex trailing faces in transverse section, these curved faces becoming less pronounced toward the tips of the blades, and the end portions of the blades turned inwardly with respect to the blade lengths for presenting spoons adapted for gripping fluid as the propeller is revolved.

1,857,328. TOILET BOWL. FREDERICK PIPER, Portland, Oreg. Filed Jan. 17, 1931. Serial No. 509,519. 1 Claim. (Cl. 4—119.)



A sanitary shield comprising a clamping member adapted to be placed on the rim of a closet bowl, an apron hinged to said clamping member, a spring on the hinge member for causing the apron to assume an inclined position above the rim of the bowl.

1,857,329. PICTURE TRANSMISSION. RICHARD H. RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 13, 1926, Serial No. 101,611. Renewed Aug. 13, 1930. 29 Claims. (Cl. 178—7.)



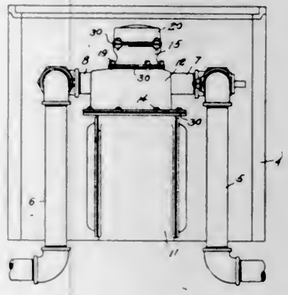
1. In combination, an amplifier device, means for producing potential changes thereon, and means for producing at time periods of relatively wide separation an abrupt change in the grid bias to points above and below the normal bias for producing at said predetermined rate an increase above normal output and a decrease below normal output from the amplifier.

1,857,330. PICTURE TRANSMISSION. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 7, 1929. Serial No. 338,073. 3 Claims. (Cl. 41—17.)



1. A picture comprising a background of arbitrary light value having disposed thereon a field of markings arranged in substantially parallel lines, the spacing between lines thereof being fixed and the concentration of the various markings of the same line being varied to produce effects of varying light value, and the average massing of said field of markings being varied from line to line of the picture between predetermined limits to produce alternate lines lighter and darker than the normal picture light value for each line.

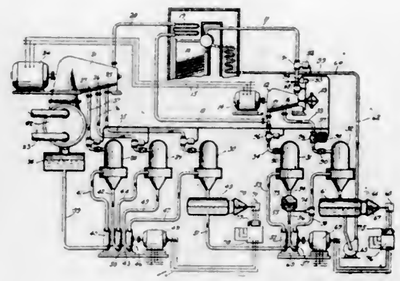
1,857,331. CURB METER. JAMES F. REID, Pittsburgh, Pa., assignor, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1926. Serial No. 137,016. 7 Claims. (Cl. 73—167.)



1. The combination in a gas meter, of a gear housing having a lubricant chamber formed therein, there being an opening within said gear housing communicating with said chamber, a plug for said opening, and a register box mounted on said gear housing and removable therefrom for giving access to said plug.

1,857,332. POWER PLANT. RALPH C. ROE, Englewood, N. J., assignor of one-half to Stephen W. Borden, Summit, N. J. Filed Oct. 12, 1929. Serial No. 399,152. 13 Claims. (Cl. 60—94.)

1. A steam power plant comprising steam generating means, a turbine, a condenser, a plurality of direct steam and water contact feed water heaters, a plurality of centrifugal pump elements, bleed conduits connecting each of said feed water heaters with points of different pressure in the turbine, said bleed conduits being of normally constant effective flow area permitting a maximum flow of steam therethrough, corresponding to the maximum load, at all times during normal operation, and additional conduits connecting the aforesaid plant parts for conducting steam from the steam generating means to the turbine and condenser and for conducting water from the condenser through the feed water heaters in the order of increasing pressure and thence to the steam generating means, said pump elements being interposed between the condenser and the lowest pressure heater, and between the heaters, and between the highest pressure heater and the steam generating means, said pump elements being situated below said heaters, the vertical disposition of a pump element between two of said heaters and said two heaters being sufficient to provide separate liquid columns acting on the suction and discharge sides of said pump element operative to adjust the quantity of water pumped by said pump element to the quantity being pumped as a whole through the heaters.



1,857,333. NEW SYNTHETIC RESINS. LEO ROSENTHAL, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 23, 1929, Serial No. 357,600, and in Germany Apr. 30, 1928. 16 Claims. (Cl. 260—7.)

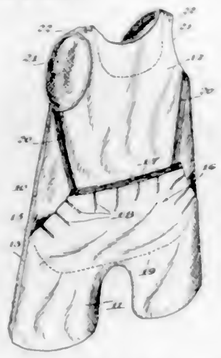
1. Process which comprises heating for about 3 to 15 hours a crude solvent naphtha of a boiling point between about 150 to 195° C. with the addition of a borofluoro-fatty acid as condensing agent.

1,857,334. OIL GAUGE. HAROLD H. RUBERT, Detroit, Mich., assignor, by mesne assignments, to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 31, 1929. Serial No. 389,787. 4 Claims. (Cl. 73—120.)



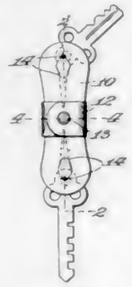
1. An oil gauge comprising an elongated strip of material having a limited portion thereof divided longitudinally into a plurality of sections deflected with respect to the undivided portion of the strip and turned at an angle with respect to the plane of the strip so as to conform substantially to the inner circumference of a tube.

1,857,335. DROP-SEAT GARMENT. WILLIAM D. SCALF, Pineville, Ky. Filed Aug. 19, 1931. Serial No. 558,113. 3 Claims. (Cl. 2—78.)



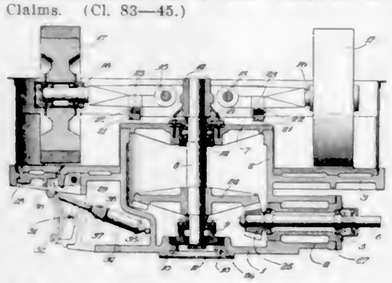
1. A garment comprising a body portion having arm holes, leg members upon said garment, a drop-seat formed with said body portion, an elastic strap member secured to the upper edge of said seat, and elastic strap members secured to and extended between the lower edge of said arm holes and upper portion of said drop seat.

1,857,336. KEY CONTAINER. LESTER L. SHERWOOD, Los Angeles, Calif. Filed Feb. 17, 1930. Serial No. 429,085. 4 Claims. (Cl. 150—40.)



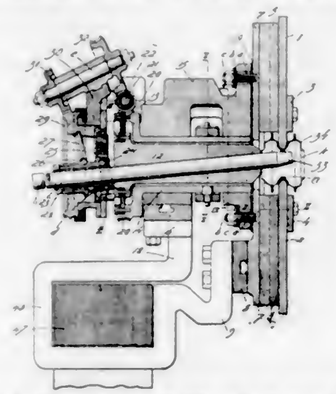
1. A key container, comprising a pair of side walls of flexible material, a strap having one end secured to the central portion of one of said side walls, the other side wall being provided with slits for the accommodation of said strap, said side walls being provided in their end portions with coinciding apertures and a thong threaded through said apertures.

1,857,337. MULLING MACHINE. HERBERT S. SIMPSON, Chicago, Ill. Filed Dec. 2, 1929. Serial No. 411,060. 4 Claims. (Cl. 83—45.)



1. In a mulling machine, a casing having a base, a cylindrical portion above said base forming a lubricant chamber and a radial flange forming a mulling pan, mullers in said pan, a vertical shaft connected to said mullers and extending into said lubricant chamber, a cover for said chamber, a dust proof bearing in said cover for said shaft, said casing having a longitudinal bearing, a shaft mounted in said bearing and extending into said lubricant chamber, and intermeshing gears on said shafts.

1,857,338. MACHINE FOR WELDING TUBULAR OBJECTS. CARL GUSTAF LEONARD SJÖLANDER, Dalsborg, Sweden. Filed May 22, 1929, Serial No. 365,083, and in Sweden May 23, 1928. 11 Claims. (Cl. 219—6.)



2. In an electrical welding machine for joining tubular objects, a rolling inner electrode, means for rolling said electrode, means for giving said electrode a reciprocating axial movement during the welding operation in addition to its rolling movement along the inside of the work, current-conducting means embodying said electrode, and means for changing the tension of the current to impart higher tension thereto at the start of the welding operation than during the remainder of said operation, thereby insuring sufficient strength at the starting point of the weld.

1,857,339. SAFETY RAZOR. THEODORE L. SMITH, Concord, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 18, 1930. Serial No. 496,445. 6 Claims. (Cl. 30—12.)



1. A safety razor comprising a cap member, a guard member, studs on one of the members for engaging in locating holes in the other member, the members being adapted to hold a blade therebetween with the studs engaging within holes in the blade, one of the studs being reduced toward its free end whereby a shoulder is formed thereon and said reduced portion being adapted to locate the blade by engaging a tab extending into the stud receiving blade aperture, and means for clamping the members together, the said shoulder being adapted to upset the tab when the blade is clamped into shaving position.

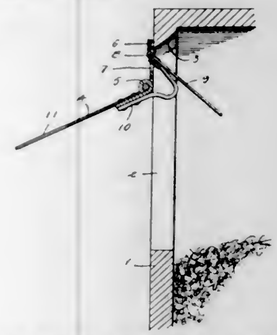
1,857,340. ABRASIVE ARTICLE. ERNEST B. WYATT, Haddonfield, N. J., assignor, by mesne assignments, to Minnesota Mining and Manufacturing Company, St. Paul, Minn., a Corporation of Delaware. Filed Jan. 5, 1929. Serial No. 330,666. 2 Claims. (Cl. 91—68.)

1. The method of making an abrasive article having a backing, a facing of abrasive material and a binder bonding the abrasive material to the backing, which comprises applying the abrasive material in determinate quantity to the running backing coated with binder material and at the place of application and during the time of such



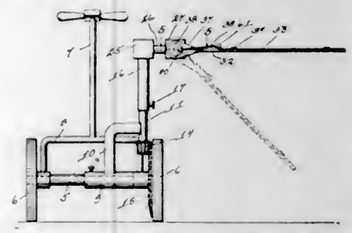
application rapidly vibrating the backing by an application of force to the rear side thereof whereby a portion of the deposited material will be thrown into the air above the backing and afterward settle back onto the backing.

1,857,341. GATE FOR TRAP NESTS. ALBERT ABBINK, Firth, Nebr., assignor of one-fourth to Richard Abbink, one-eighth to Jacob C. Ruigh, and one-eighth to John Doeschot, Firth, Nebr. Filed Apr. 25, 1931. Serial No. 532,953. 7 Claims. (Cl. 119—50.)



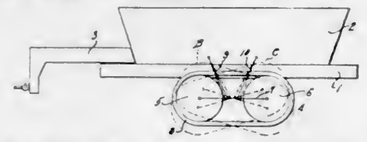
1. In a nest structure of the character described having an entrance opening through one wall, a gate for said entrance opening, hinge means between the top edges of said gate and the top of said opening, an elongated trigger arm having pivotal connection at one end with the top edge of said opening and normally extending into the nest, a shoulder forming a part of said trigger structure, and a curved finger member having one end secured to the inner face of the gate adjacent the top edge and having the other end directed across the top edge of the gate and disposed in the same vertical plane as the trigger to engage said shoulder by its free end when the gate is swung to opened position.

1,857,342. HEDGE CUTTER. CHARLES A. ALBRECHT, East Chicago, Ind. Filed Mar. 12, 1930. Serial No. 435,261. 6 Claims. (Cl. 56—237.)



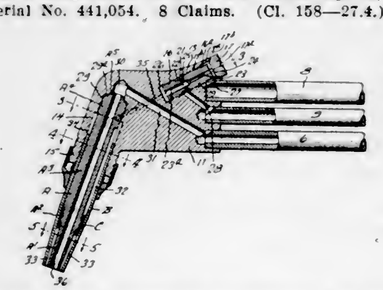
1. A device of the character described comprising a wheeled carriage, including an axle, a handle, a yoke connecting the handle to the axle, a sleeve fixedly secured to the axle, a telescopic support rising from the sleeve, a cutter adjustably connected with the upper end of said support and means for actuating said cutter.

1,857,343. LAND VEHICLE. ARTHUR P. ARMINGTON, Willoughby, and FRANK R. HIGLEY, Cleveland Heights, Ohio, assignors to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Aug. 10, 1929. Serial No. 385,010. 7 Claims. (Cl. 280—80.)



1. In a land vehicle, a body, and running gear therefor including an endless tread creeper assembly and means supporting said body thereon, said creeper assembly including a pair of wheels and a member serving to maintain said wheels in spaced relation and said supporting means including a pair of non-parallel links each connected at one end with said body, and at the opposite end with said spacing member at a point between said wheels.

1,857,344. BLOWPIPE. FRANCIS S. AUSTIN, Pittsburgh, Pa., assignor to Carbo-Oxygen Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,054. 8 Claims. (Cl. 158—27.4.)

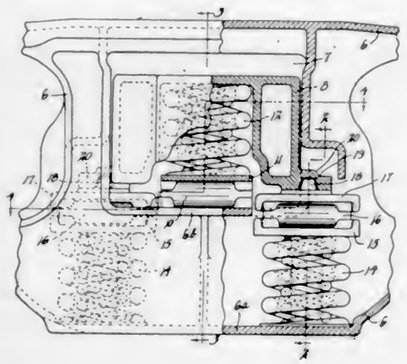


1. A blowpipe comprising in combination a tip having a bore for cutting oxygen and passages for delivering a mixture of preheating gases to the delivery end of said tip adjacent to the said bore, a head to which the said tip is secured, a passage for cutting oxygen in said head, a pipe connected with said head for supplying cutting oxygen to said passage, a valve for controlling the supply of cutting oxygen through said pipe, the conduit formed by said pipe, passage and bore being unobstructed and of substantially the same cross sectional area throughout its length and being of materially greater cross sectional area than the cross sectional areas of the said passages, and means for adjustably limiting the opening movement of the said valve, thereby to vary the pressure and velocity of the oxygen delivered into said conduit.

1,857,345. LATERAL MOTION FREIGHT CAR TRUCK. FRANKLIN L. BARBER and EDWIN W. WEBB, Chicago, Ill., assignors to Standard Car Truck Company, Chicago, Ill., a Corporation of New Jersey. Filed Sept. 17, 1931. Serial No. 563,338. 1 Claim. (Cl. 105—186.)

In a car truck, the combination with the side frames and the bolster, of two independent sets of springs, lateral motion rollers and bearing plates co-operating to support each end of said bolster from the respective side frames, one set of which springs and the upper roller bearing plate travel with the bolster and the rollers over the lower roller bearing plate, which is stationary with

the side frame, and the other of which sets of springs are stationary on the respective side frames and support non-traveling lower roller bearing plates having rollers there-

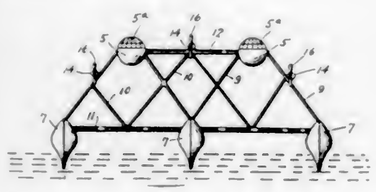


on surmounted by upper bearing plates which are articulated to the bolster and travel laterally therewith on said rollers over said non-traveling lower bearing plate.

1,857,346. PROCESS FOR THE RECOVERY OF NITRIC ACID. CHRISTOPH BECK, Ludwigshafen-on-the-Rhine, and HELMUT WEISSBACH, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 19, 1928, Serial No. 327,177, and in Germany Dec. 31, 1927. 5 Claims. (Cl. 23—161.)

1. The process for the recovery of nitric acid which comprises treating a solution containing nitric acid and another volatile acid with a gas comprising sulphur dioxide and oxidizing the nitric oxides liberated.

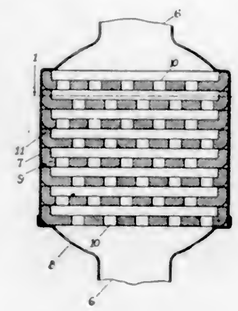
1,857,347. HYDROPLANE SHIP. WILLIAM A. BEEBE, New Orleans, La. Filed Dec. 7, 1931. Serial No. 579,583. 4 Claims. (Cl. 114—66.5.)



1. A hydroplane ship of the class described including, in combination, a plurality of elongated spaced parallel coextensive pontoons, a plurality of aeroplane wings disposed transversely between the pontoons, a plurality of hulls, means for supporting the hulls above the pontoons and between the pontoons, and aeroplane wings extending transversely between the hulls, comprising a plurality of covered girder frames disposed between the pontoons and the hull.

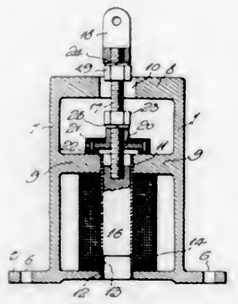
1,857,348. FILTER FOR GASEOUS SUBSTANCES. WILLIAM BOKENKROGER, Edgewater, N. J. Filed May 14, 1928. Serial No. 277,432. 2 Claims. (Cl. 183—75.)

2. A device of the character described comprising a tubular container, said container being contracted at one end, detachable retaining means on the other end of said container, a plurality of porous plates stacked in said container between said contracted end and said retaining means having a series of perforations formed in the bodies of said plates, and complementary sectorial rims forming a unit with each of said plates, on opposite sides thereof,



locating said plates in spaced relation to each other so that the perforations of each of said plates face solid parts of said bodies of the adjacent plates.

1,857,349. SOLENOID. ARTHUR SMITH BOEHM, Baltimore, Md. Filed July 24, 1931. Serial No. 552,947. 5 Claims. (Cl. 175—341.)



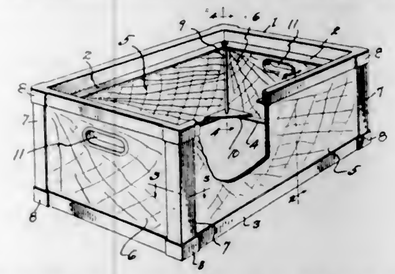
1. A solenoid comprising a coil, a core slidable in said coil and having a rigidly attached rod projecting longitudinally therefrom; two fixed stops spaced apart along said rod and secured in fixed relation with each other and in fixed relation with said coil, a third stop on said rod adapted to strike one of said fixed stops to limit movement of said core and rod in one direction and adapted to strike the other of said fixed stops to limit the movement of said core and rod in the other direction, and adjusting means connecting said third stop with said rod, said adjusting means allowing adjustment of said core with respect to said coil to vary the strength of the pull which the coil will exert on the core.

1,857,350. BOX. HENRY E. BROCK, Detroit, Mich., assignor to Woodsteel Box Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 8, 1929. Serial No. 353,337. 2 Claims. (Cl. 217—69.)

1. A box comprising a pair of continuous frame members formed of sheet metal and providing a channel and having a flange extending inwardly of the frame from one edge of the channel, the frames being positioned with the open side of the channels facing each other, a wood panel member having its opposite edges positioned in the channels of the respective frames, a bottom member supported on the flange of the lower frame, bolts extending through

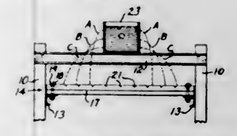
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the flanges of the respective frame members adapted to hold the same rigidly in assembled relation, and metal elements extending between the two frames on the ex-



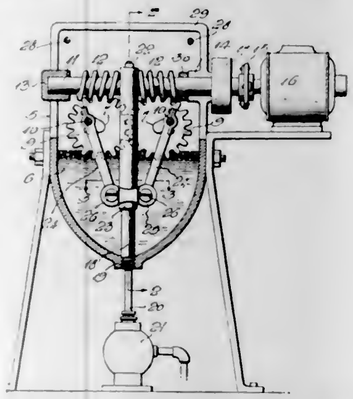
terior of the box limiting the extent to which the frame members may be drawn together by the bolts thereby preventing collapse of the wood panels.

1,857,351. COOLING TOWER. EDWIN BURHORN, Hoboken, N. J. Filed May 31, 1929. Serial No. 367,594. 6 Claims. (Cl. 261—114.)



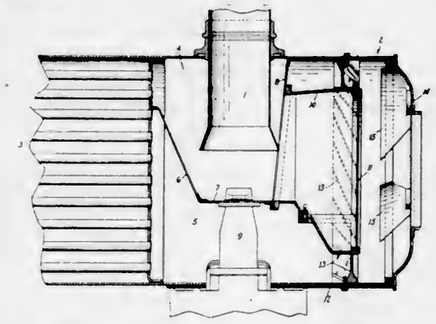
1. In a cooling tower a distributing vessel having a closed bottom and upright sides, and along each side a series of discharge apertures arranged at different depths to cause the issuing streams to project to different lateral distances, and a cooling deck spaced therebelow comprising members located to receive and redistribute the several streams from the distributing vessel.

1,857,352. MECHANICAL MOVEMENT. ELMER E. CANNON, Waukomis, Okla. Filed June 12, 1931. Serial No. 543,937. 2 Claims. (Cl. 74—14.)



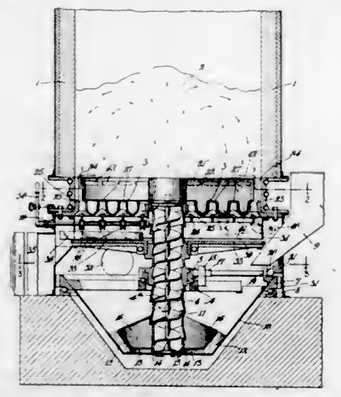
1. A mechanical movement comprising an oil-containing casing, two parallel horizontal shafts mounted in said casing and each having a crank and a gear, a drive shaft mounted horizontally in said casing at right angles to said crank shafts and having two oppositely pitched worms meshing with said gears respectively, a vertical imperforate tube secured to and rising rigidly from the bottom of said casing, said tube extending to a point above the lower edges of said gears allowing the oil level in the casing to reach said gears without discharging through said tube, a rod passing through said tube, a sleeve in the casing slidably surrounding said tube and extending below said lower edges of said gears, whereby the contacting surfaces of said tube and sleeve will be lubricated by the casing-contained oil, said sleeve having its upper end secured to the upper end of said rod, and pitman rods in said casing connected to said cranks and to said sleeve.

1,857,353. SPARK ARRESTER. GUY CARPENTER, New York, N. Y. Filed July 26, 1929. Serial No. 381,202. 4 Claims. (Cl. 110—122.)



1. The combination, with a locomotive having boiler tubes and a shell, of a smoke box at the forward end of said boiler tubes, a stack which leads from said smoke box, partitions which form a chamber which encloses the lower end of said stack, an exhaust nozzle which leads into said chamber below said stack, an exhaust port in the front wall of said chamber, a cylindrical member connected to the front wall of said chamber, which surrounds said port, there being an annular space between the outer wall of said cylindrical member and the shell of the boiler, a plurality of diagonally-inclined vanes located in said annular space, a series of curved direction blades attached to the front end of the smoke box, and a screen covering the opening to the cylindrical member.

1,857,354. UNDERFEED MECHANISM FOR FUEL BEDS. WILLIAM B. CHAPMAN, Jackson Heights, N. Y. Filed July 29, 1926. Serial No. 125,620. 23 Claims. (Cl. 110—45.)



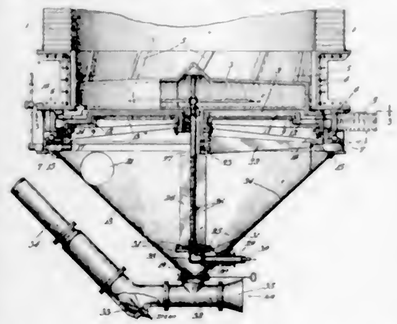
1. An underfeed mechanism for fire beds or the like comprising an upstanding hollow column, a feed screw enclosed thereby, a rotary pan enclosing the lower end of

said column and means associated with said pan for delivering fuel into the lower end of said column.

13. In combination, an underfeed mechanism for firebeds comprising means for feeding fuel upwardly into the central zone of the fuel bed, a firebed supporting member, and up and outstroking agitating member disposed in the lower portion of the firebed immediately above said supporting member and adapted to cause a vertical undulating movement in the firebed, means for producing relative rotation between said member and the firebed, and means affording ash removal from the firebed at its bottom portion.

18. The method of operating firebeds which comprises feeding fuel upwardly through the central portion of the firebed to the top portion thereof, turning an agitating member through the lower part of the firebed to produce an outward and vertical undulating motion therein and distribute the fuel and promote uniform conditions of combustion respectively in annular zones of the firebed, and withdrawing ash from the lower portion of the firebed to cause the partially consumed fuel to travel gradually downward around the central column of upwardly traveling fresh fuel.

1,857,355. ASH REMOVING APPARATUS FOR GAS PRODUCERS AND THE LIKE. WILLIAM B. CHAPMAN, Jackson Heights, N. Y., assignor, by mesne assignments, to The Cooper-Bessemer Corporation, Mount Vernon, Ohio, a Corporation of Ohio. Filed July 29, 1926. Serial No. 125,621. 7 Claims. (Cl. 48—85.2.)



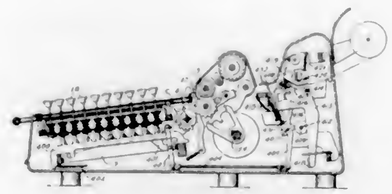
3. In combination, a gas generator adapted to contain a fire bed and having an agitating member working in the bottom of the fire bed to reduce the ash to fine sizes, a receptacle disposed beneath the fire bed to receive the ash, means for introducing the blast for the fire bed into said receptacle, said receptacle being provided with an ash discharge opening, and means operating in the ash in said receptacle for loosening the ash therein to cause the blast pressure to force the ash through said discharge opening.

1,857,356. CALCULATING AND LISTING MACHINE. GEORGE C. CHASE, South Orange, and LEE R. BROWN, East Orange, N. J., assignors to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Dec. 14, 1929, Serial No. 414,142, and in France Dec. 17, 1928. 4 Claims. (Cl. 235—60.)

1. In a calculating and listing machine having ordinal type-carrying members and printing hammers; members movable to align the type and further selectively movable into the path of said hammers to prevent the printing of zero to the left of any highest order digit to be printed.

2. In a calculating and listing machine having a drive shaft, forwardly or reversely rotatable to record items as positive or as negative amounts respectively, and a shiftable two-color printing ribbon carrier; means operable by said shaft in the reversal thereof to shift said ribbon carrier.

4. In a calculating machine having registering mechanism and numeral bearing members adapted to be set to represent amounts added to or subtracted from the registered; setting mechanism including two severally adjustable members, and a coordinating lever adapted to transmit opposite movements of different extent to the

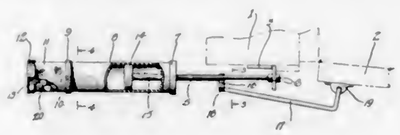


related numeral bearing member upon adjustment of one or the other adjustable member respectively, and to transmit a movement representing the difference of said opposite movements upon concomitant adjustment of both said members.

1,857,357. POTENTIALLY REACTIVE PHENOLIC CONDENSATION PRODUCTS AND PROCESS OF PREPARING SAME. OSCAR A. CHERRY and FRANZ KURATH, Chicago, Ill., assignors to Economy Fuse & Manufacturing Company, Chicago, Ill., a Corporation of New York. Filed Apr. 9, 1928. Serial No. 268,795. 6 Claims. (Cl. 260—3.)

1. The process which consists in heat treating furfural and a phenolic body, and heat treating the resultant product with a quantity of a methylene containing substance sufficient to form a fusible reaction product by combining with the furfural-phenol product and phenol and to supply sufficient additional methylene groups to render the fusible reaction product potentially reactive, then adding furfuramide to fix the additional methylene groups in the resinous layer, and then discharging the water.

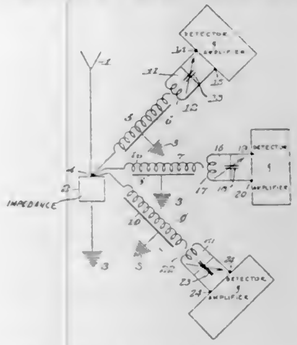
1,857,358. DRY VAPOR SPRAY. EUGENE COHN and HAROLD COHN, Chicago, Ill., assignors to Sadie Cohen, Chicago, Ill. Filed Mar. 14, 1930. Serial No. 435,862. 5 Claims. (Cl. 167—3.)



3. A device adapted to be operated by a swinging door of the type described comprising a cylinder provided with a plurality of supporting rods fixed to a supporting stationary structure, a piston disposed within said cylinder, a piston rod connected with the piston and extending to the exterior of the cylinder, a sliding block guided by said rods and connected with the piston rod, a moving element, an arm secured to said moving element and connecting the latter with said sliding block, and a perforated insecticide-containing chamber associated wtih said cylinder.

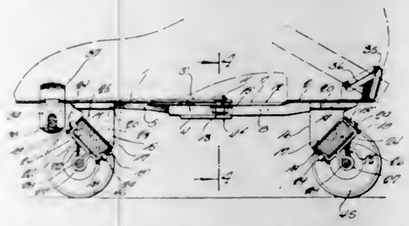
1,857,359. RADIO SIGNALING. LOUIS COHEN, Washington, D. C. Filed Aug. 13, 1928. Serial No. 299,386. 8 Claims. (Cl. 250—9.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. In a system for multiplex reception of radio signals comprising an antenna which is grounded through an impedance, a plurality of wave conductors connected at the junction point of connection of said antenna to said impedance, each of said wave conductors being separately adjustable to respond to the wave length of one of the signals desired to be received, a separate receiving circuit



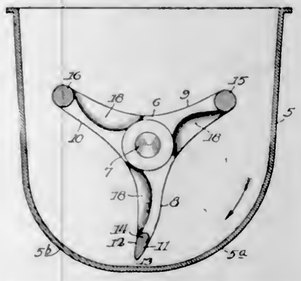
system coupled to each of said wave conductors, and each of said receiving circuit systems being provided with means for detecting and amplifying said signals.

1,857,360. ROLLER SKATE. JOHN S. COLDWELL, Milwaukee, Wis., assignor to Globe-Union Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed July 20, 1931. Serial No. 551,929. 6 Claims. (Cl. 208—173.)



1. A roller skate including toe and heel plates, said toe plate having a rearwardly projecting extension formed along its side edges with flanges having vertically extending portions provided with inturned lower ends, said heel plate having a forwardly projecting flanged girder slidably interfitted with said flanges of said extension and their inturned ends and releasable means coacting with said extension and said girder for securing the same in various adjustments.

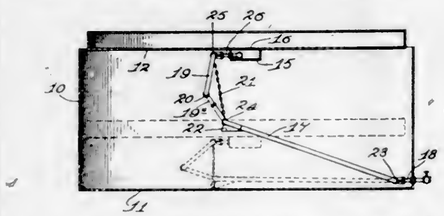
1,857,361. DOUGH MIXING MACHINE. LOUIS HENRY DAVIS, Urbana, Ill. Filed Nov. 24, 1928. Serial No. 321,564. 2 Claims. (Cl. 259—109.)



1. In a dough-mixing machine, the combination with a mixing chamber of an agitator frame revolubly mounted

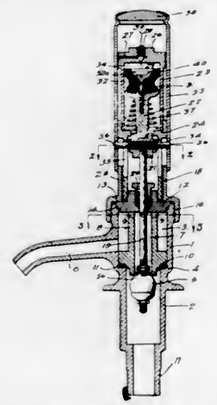
therein and comprising end members, a plurality of straight rods extending between said end members, said rods being parallel with the axis of the agitator frame and at different distances from said axis, and a spreader blade also extending between said end members parallel to the axis of the agitator frame and further from said axis than are said rods, the rod immediately following said spreader blade being arranged to travel in a path nearer the axis of the agitator frame than the path of travel of the rod immediately preceding said spreader blade.

1,857,362. DRAINAGE APPARATUS. CLAYTON L. DAY, Chicago, Ill., assignor to Chicago Bridge & Iron Company, a Corporation of Illinois. Filed Nov. 7, 1930. Serial No. 494,155. 5 Claims. (Cl. 220—26.)



1. Drainage apparatus for a movable roof for a container formed of piping, comprising: a lower rigid portion with its lower end pivotally mounted substantially at the bottom of the container; a collapsible and swingable upper portion with its upper end connected to the roof by a swivel joint and its lower end connected to the upper end of the lower rigid portion by a swivel joint; and an outlet section leading from the lower end of the lower section to the outside of the container.

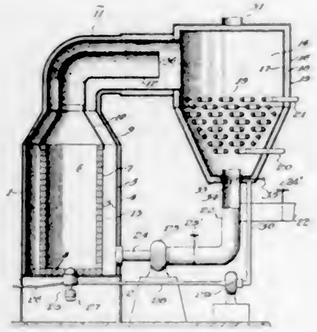
1,857,363. AUTOMATIC FAUCET. CHARLES F. DENCKLAU, Los Angeles, Calif. Filed Aug. 8, 1928. Serial No. 298,361. 3 Claims. (Cl. 251—138.)



1. In an automatically closing faucet, the combination of a valve body having a delivery spout, a valve seat within the body, said valve body having a water chamber to receive and accumulate water passing from the valve seat toward the spout, a valve closure co-operating with the seat and having a stem passing upwardly through the body, a pneumatic cylinder open to the atmosphere at its lower end and connected to the upper end of the body, a pneumatic piston moving therein and connected with said stem, a depressible shell surrounding the pneumatic cylinder and connected with the stem for depressing the same to open the valve and move the pneumatic

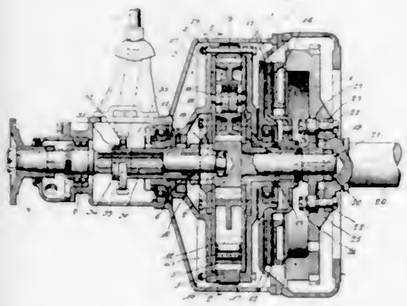
piston toward the open end of the pneumatic cylinder, and operating to admit air in the pneumatic cylinder above the pneumatic piston, said cylinder having a bleeder port to effect the retarded closing of the valve.

1,857,364. FURNACE. NICHOLAS G. DE RACHAT, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed May 29, 1929. Serial No. 366,915. 4 Claims. (Cl. 263—20.)



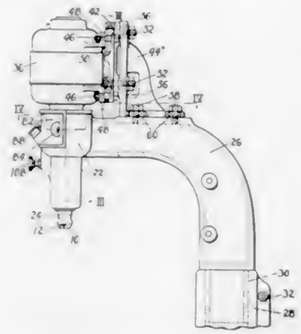
2. A method of circulating gases in a heat transfer device comprising passing the fresh products of combustion from a combustion chamber to a heating chamber, removing regulated amounts of the spent products of combustion admixed with a limited quantity of free air passed in heat exchange relation with said heating chamber and passing the same adjacent the walls of the combustion chamber, and subsequently mixing the same with the fresh products of combustion in the heating chamber.

1,857,365. VARIABLE SPEED TRANSMISSION. ADIEL Y. DODGE, South Bend, Ind. Filed Mar. 12, 1930. Serial No. 435,139. 7 Claims. (Cl. 74—34.)



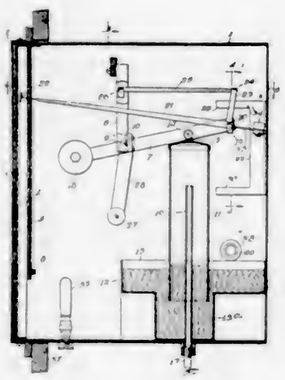
1. A variable speed transmission comprising a driving gear, a gear carrier, gearing carried by said gear carrier and meshing with said driving gear, a driven gear meshing with said gearing and coaxial with said driving gear, whereby said driving gear may precess with respect to said gear carrier, and means for controlling the amount of said precession, comprising a fluid reservoir rotatable with the gear carrier and having a surface adjacent the teeth of said gearing, a fluid passage rotatable with the gear carrier, and a movable member forming a portion of the wall of said reservoir and movable to control the flow of fluid in said passage to control the amount of said precession.

1,857,366. LIP TURNING MACHINE. HARRY E. DOW, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 4, 1929. Serial No. 368,256. 8 Claims. (Cl. 12—30.)



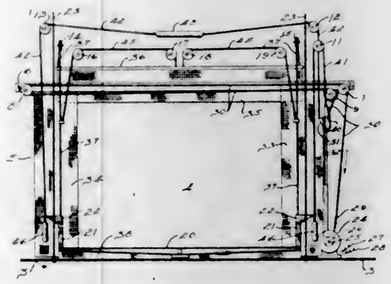
1. A lip turning machine comprising, in combination, a shaft provided with a lip turning tool, an electric motor, an adjustable mounting for the motor comprising connections adapted to be loosened to permit adjustment of the position of the motor and to be tightened to secure the motor in adjusted position, a flexible coupling connecting the tool shaft and the motor shaft having a member adjustable lengthwise of said shafts into a position overlapping the adjacent portions thereof to insure accurate initial alinement of the shafts, and bearings for said adjacent shaft portions spaced apart to permit said adjustment of said coupling member.

1,857,367. PRESSURE INDICATOR. LEWIS M. ELLISON, Chicago, Ill. Filed Apr. 16, 1927. Serial No. 184,265. 15 Claims. (Cl. 73—31.)



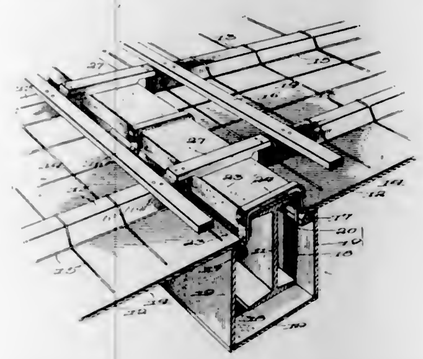
1. An indicator, comprising a pivoted operating lever, an arm pivotally connected at one end with the lever and having its other end free to serve as a pointer for the indicator, the pivotal connection between the arm and the lever moving with the lever in the swinging thereof, means acting on the arm in the swinging of the lever to so shift the arm about its pivotal connection with the lever that the arcuate movement of the lever is converted into a straight line movement for the free end of the arm, and means for moving the lever.

1,857,368. CURTAIN DEVICE. JOHN E. FLYNN, Detroit, Mich., and MORGAN W. ELLIOTT, Lexington, Ky. Filed May 6, 1930. Serial No. 450,126. 7 Claims. (Cl. 88—24.)



1. In combination with a picture screen, drapes arranged around the border of said screen, a common means for moving said drapes towards and from the center of said screen whereby to vary the effective size of said screen, means initiating movement of part of said drapes in advance of movement of the remainder thereof comprising a lost motion connection between said drapes, and an equalizing means for preventing certain of the drapes from sagging.

1,857,369. SOUNDPROOF BUILDING CONSTRUCTION. THOMAS J. FOSTER, Ridgewood, N. J. Filed Feb. 2, 1929. Serial No. 337,091. 13 Claims. (Cl. 20—6.)



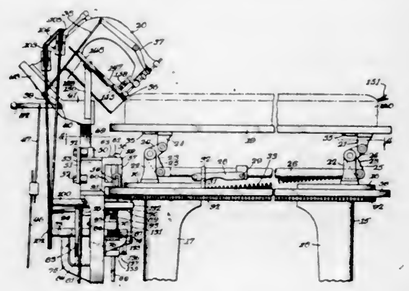
1. In building construction, a plurality of spaced joists, sound deadening material resting on said joists, joist encasement and floor slab-supporting units extending under said joists, means for supporting said units from said joists engaged with said sound deadening material to be sound insulated from said joists thereby, and floor slabs supported by said units.

1,857,370. REMOVAL OF WAX FROM OIL. STANARD R. FUNSTEN, Haverford, and IVAN M. PERKINS, Penfield, Pa., assignors to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 24, 1929. Serial No. 373,471. 14 Claims. (Cl. 196—19.)

2. A process for dewaxing a wax-containing oil involving separation of wax from oil, which comprises adding to the oil a high-boiling compound contained in coal tar, thereby to condition the wax-containing oil to cause wax agglomeration, chilling the oil, thereafter removing wax from the oil.

14. The process of separating naturally occurring waxy substances from a mineral oil, which comprises dissolving said mineral oil in a solution of an organic diluent and a crystalline organic compound of coal-tar residue origin, having a high melting point; said diluent being a solvent for both said crystalline organic compound and said waxy substances, the volume of the diluent being at least equal to the volume of the oil, chilling the resultant solution to a temperature low enough to precipitate considerable quantities of said waxy substances and said crystalline organic compound, and separating said precipitated waxy substances and said crystalline organic compound from the solution of said mineral oil.

1,857,371. MECHANISM FOR SEWING MATTRESSES. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 20, 1928. Serial No. 307,220. 3 Claims. (Cl. 112—3.)

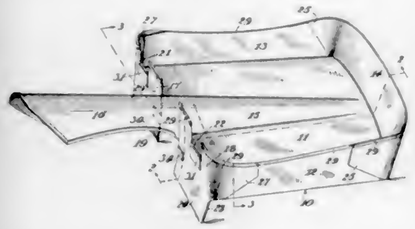


1. In a machine of the class described, the combination of a main frame, a vertically adjustable, two-position table mounted on said main frame for supporting a mattress structure so as to facilitate stitching of the edges of the top and bottom face sheets of ticking to the adjacent edge of the border strip of ticking, means for mounting said table on said frame so as to permit vertical adjustment thereof into raised or lowered position, said mounting means including a plurality of arms interconnected for unitary movement and pivoted to said table and frame, said arms being operative to effect substantially parallel upward movement of the entire table as an incident to lifting force applied to any selected part of the table, a sewing machine mounted on said main frame so as to be movable around the periphery of said table for effecting said stitching, and means for actuating and propelling said sewing machine around said table, said table when in its uppermost position being adapted to support a mattress structure including the filling, a border strip of ticking, a layer of padding over the top of said filling, and a face sheet of ticking disposed over said padding while said sewing machine is actuated to stitch together said face sheet and border strip, said table when in its lowermost position being adapted to support said parts in inverted position with a layer of padding disposed over the uncovered side of said filling, and a second face sheet of ticking disposed over said last-mentioned layer of padding, said sewing machine being then operable to stitch said second face sheet to the adjacent edge of said border strip.

1,857,372. UTENSIL. DORA P. GLEASON, White Plains, N. Y. Filed Nov. 15, 1930. Serial No. 495,833. 5 Claims. (Cl. 65—65.)

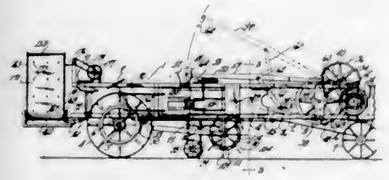
1. A receptacle of the character described comprising a bottom, sides and ends, a portion of said bottom being

curved upwardly at a progressively increasing angle to divide said receptacle, said curved portion being provided with a prolongation beyond the end of the receptacle



forming a handle therefor, and means depending from one end of the receptacle to tilt the bottom thereof when the receptacle rests on a plane surface.

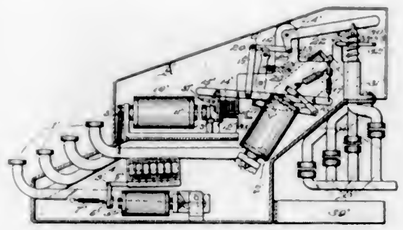
1,857,373. HAY BALER AND LOADER. MICHAEL GOGGINS, Roswell, N. Mex. Filed Oct. 13, 1928. Serial No. 312,236. 8 Claims. (Cl. 100—25.)



1. In a device of the kind described, a frame including a baling chamber having a feed opening, a plunger mounted for reciprocation in the baling chamber, a door mounted on the frame and adapted to normally close the said feed opening, and cooperating means upon the door and plunger whereby the door is opened by the inward movement of the plunger into the baling chamber and is locked in that position until the completion of the outward movement of the plunger.

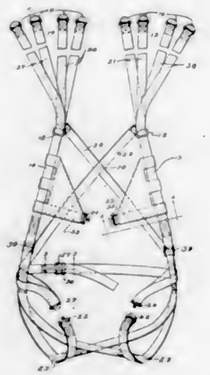
1,857,374. CRYPTOGRAPH ENCIPHERING AND DECIPHERING DEVICE. GEORGE A. GRAHAM, Washington, D. C., LOUIS M. EVANS, Alexandria, Va., and WILLIAM F. FRIEDMAN, Washington, D. C.; Citizens National Bank and Mary E. Evans executors of said Louis M. Evans, deceased. Filed Mar. 28, 1929. Serial No. 350,713. 4 Claims. (Cl. 197—4.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. In combination with an independent printing mechanism having a keyboard; a cryptograph adapted to be positioned over the keyboard of said printing mechanism, said cryptograph including a translator operative as one unit thereof; means for communicating the action of said translator to the keyboard of said printing mechanism, said means consisting of a set of selectable members pertaining to said translator, a set of drag-link members, a set of slotted members, a set of drive bars, a set of plungers, a print magnet, and a printing drive pin operated by said print magnet, said selectable members being respectively connected with said drag-link members, said drag-link members being respectively connected to said slotted members, said slotted members being respectively connected to said drive bars, said drive bars being respectively connected to said plungers, said plungers hovering respectively over the keys of said keyboard, all of said means being arranged, connected, and associated so that when a selectable member of said translator is selected and said print magnet is actuated, said printing drive pin engages the slotted member connected to the



selected member and causes the drive bar pertaining to said selected member to actuate the plunger connected to said drive bar so as to strike the key over which said plunger is hovering.

1,857,375. COMBINATION PARACHUTE HARNESS. EDWARD L. HOFFMAN, Dayton, Ohio. Filed June 14, 1930. Serial No. 461,191. 17 Claims. (Cl. 244—21.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

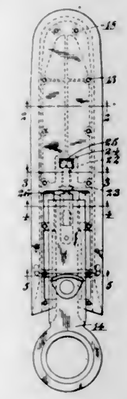


1. A parachute body harness comprising a double set of main lift straps, each set adapted for attachment to an individual parachute pack, one of said sets of main lift straps including means adapted for ready attachment to or detachment from said body harness to provide a double parachute pack arrangement.

6. A parachute harness comprising a plurality of main lift straps arranged in pairs and adapted for attachment to a parachute, the lower end of each pair of lift straps terminating in a leg strap and a seat strap, respectively, so constructed and arranged with respect to one another, to form a seat support for the wearer.

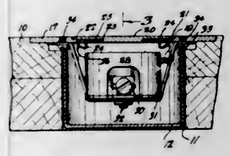
1,857,376. MINING MACHINE. AUSTIN YOUNG HOY, London, England, assignor to Sullivan Machinery Company, Chicago, Ill., a Corporation of Massachusetts. Filed Apr. 7, 1930, Serial No. 442,313, and in Great Britain Aug. 7, 1929. 15 Claims. (Cl. 262—28.)

1. In a mining machine of the type described, a jib which is slidably mounted upon a support for adjusting the cutter chain, having a cutter-chain channel around its periphery and comprising two longitudinal sections with the joint face between them lying in a horizontal plane through the cutter chain channel, and removable



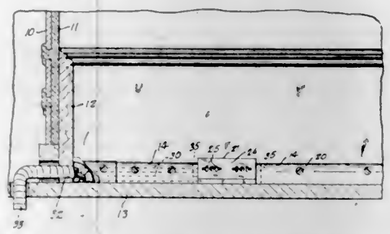
shims interposed between the two sections, said sections each having a guideway adapted for slidable attachment to the support.

1,857,377. FLOOR RECEPTACLE MOUNT. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed Oct. 27, 1927. Serial No. 229,035. 2 Claims. (Cl. 247—20.)



1. In a floor outlet, a plate adapted to be mounted over a recess, said plate having an opening therethrough, a receptacle, a substantially U-shaped metal supporting strap, means rigidly securing a receptacle to the portion of the strap between the arms thereof, said strap having the end portions of its arms bent laterally, means securing the bent ends of the arms against the underside of the plate in position to dispose the receptacle centrally beneath the opening in the plate, and a removable closure for the opening in the plate.

1,857,378. BASEBOARD WIRING DEVICE. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed Aug. 17, 1928. Serial No. 300,369. 9 Claims. (Cl. 247—3.)



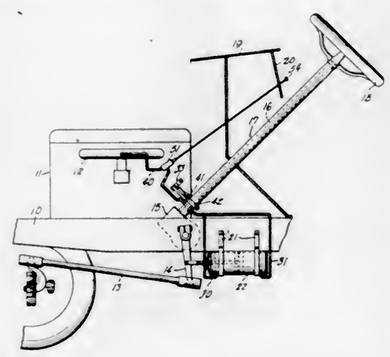
1. In a wiring device of the character described, a hollow molding to fit in the corner between two walls, a receptacle comprising an insulating body to be inserted between two sections of said molding, said body having an extension at each of its ends, said extensions shaped to fit within the adjacent end portions of two sections of said molding and be held thereby, spring contacts mounted on said body, and means for connecting lead wires in said molding to said contacts, said body being provided with knife blade contact openings in its front wall leading to said contacts to receive the blade contacts of an attachment plug cap.

1,857,379. SWITCH HANDLE. HARVEY HUBBELL, Jr., and CHARLES E. AVERY, Bridgeport, Conn., assignors to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 30, 1929. Serial No. 359,276. 3 Claims. (Cl. 200—172.)



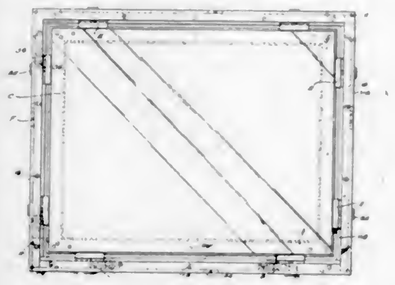
3. A handle for a toggle switch comprising a substantially flat body member having pivots on its lateral side edges and means on one end for operative connection with the switch mechanism, a reduced stem projecting from the other end of said body member forming shoulders, a knob secured on the free end of the stem, a sheet metal eyelet having a neck embracing the stem and engaging the knob at its free end, said eyelet also having a skirt at the other end of the neck seated on said shoulders, and said knob having a tight fit on the stem and securing the eyelet thereon with its skirt portion seated on the said shoulders.

1,857,380. POWER STEERING GEAR. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed Aug. 9, 1929. Serial No. 384,636. 2 Claims. (Cl. 180—79.2.)



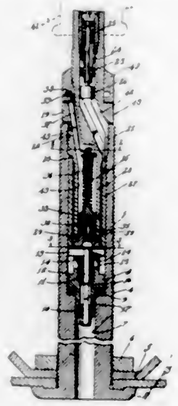
1. In a steering mechanism for motor vehicles having a steering shaft and a steering lever arm operatively connected to the shaft, a cylinder, a low pressure operated piston in said cylinder operatively connected to the steering lever arm, conduits leading to said cylinder to each end of the travel of said piston, a conduit leading from the intake manifold of the vehicle motor, a valve for connecting said manifold conduit to either of the cylinder conduits, means for operating said valve including a slip clamp fitted about the steering shaft, a valve shifting lever operatively connected to said slip clamp, and means limiting the movement of the clamp in either direction.

1,857,381. NEGATIVE HOLDER FOR PHOTOGRAPHIC PRINTING MACHINES. WILLIAM C. HUEBNER, Chicago, Ill., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,272. 9 Claims. (Cl. 95—76.)



1. In a holder for negatives for photographic printing machines, the combination with a base member having a central opening; of an upstanding wall on and extending around the periphery of the base member, said wall having vacuum seal forming means thereon; adjustable means mounted on said base member for securing a negative in adjusted position thereon; means mounted on said base member for adjusting the level of the negative with respect to the base member; and means on said base member for detachably receiving a registering device.

1,857,382. TIRE VALVE. WALTER L. INGRAM, Chicago, Ill., assignor of one-half to Franklin W. Ingram, Chicago, Ill. Filed Mar. 16, 1929. Serial No. 347,676. 1 Claim. (Cl. 152—11.5.)



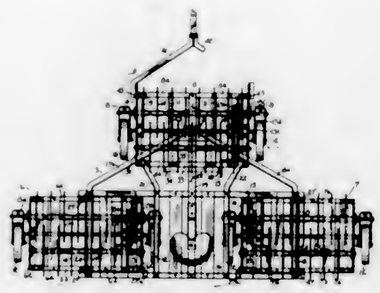
An inflating valve comprising a tubular casing, said casing being provided with a removable extension having a pair of passageways therein, one of the passageways in the extension being arranged for communicating with the interior of the casing, a valve disposed within said casing, means including a sleeve disposed within the casing and the passageway communicating with the interior of the casing for opening the valve when an air hose is applied to the casing, a relief valve disposed within said sleeve and provided with an auxiliary stem extending through the other of said passageways, and operating means slidably disposed upon said extension and connected with the auxiliary stem of said relief valve.

1,857,383. GRASS TRIMMER FOR SPRINKLING SYSTEM NOZZLES. CARL EMIL JOHNSON, Coronado, Calif. Filed July 22, 1929. Serial No. 379,080. 2 Claims. (Cl. 97—226.)



1. In a grass trimmer for sprinkling system nozzles, an annular centering means having a conical lower face adapted to fit over a sprinkling head of a sprinkling system, a rod secured thereto and extending upwardly from said centering means, a collar at the upper end of said rod, a flanged plunger reciprocally mounted on said rod and enclosing both said rod and collar, means for resiliently holding said plunger in raised relation to said centering means, and a knife secured to said plunger and extending over and guided by said centering means.

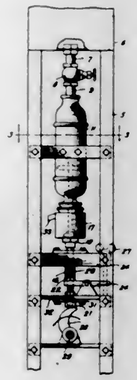
1,857,384. CULTIVATING IMPLEMENT. CHRISTIAN E. JOHNSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 16, 1929. Serial No. 392,758. 9 Claims. (Cl. 55—11.)



1. A rotary hoe implement comprising a frame, a pair of hoe gangs connected with the rear portion of said frame, means connecting said gangs with said frame permitting lateral adjustment of said gangs relative to said frame for varying the spacing between said gangs, and a front hoe gang pivotally connected with the front portion of said frame.

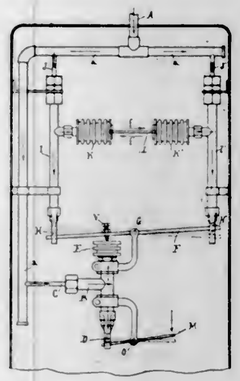
1,857,385. OIL AND/OR REAGENT FEEDER. WILLIAM T. KNIGHT, McGill, Nev. Filed Aug. 6, 1930. Serial No. 473,494. 1 Claim. (Cl. 221—96.)

An oil distributing mechanism comprising a tank, a receptacle positioned beneath said tank, a cup beneath said receptacle, a valve interposed between said receptacle and said cup, means for actuating said valve, said means including a rod secured to said valve and to said cup and



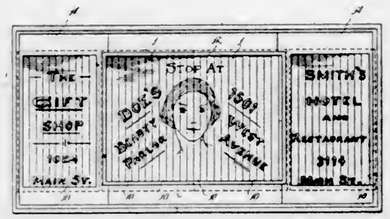
having a pusher button formed thereon, a cam adapted to engage said pusher button, and means for limiting the downward stroke of said rod for the purpose specified.

1,857,386. RELAY DEVICE FOR AUTOMATIC CONTROL BY THE USE OF A FLUID UNDER PRESSURE. ROGER LANQUETIN, Courbevoie, France. Filed Feb. 5, 1930, Serial No. 425,980, and in France Feb. 9, 1929. 1 Claim. (Cl. 137—78.)



A relay device for automatic regulation by the utilization of a fluid under constant pressure, comprising expansible members arranged in such a way that one of the members is in communication with a chamber having a valve at its lower part operated by a pivoted lever, an expansible member on the open end of said chamber and an oscillating lever, acted upon by the said expansible member, carrying at each end a needle valve controlling the closing and opening of two chambers, each in communication as desired with the fluid under pressure employed, each of the said two chambers communicating with an expansible member analogous to the first, the free ends of the said expansible members being connected together by a rod arranged to follow the deformations of these members.

1,857,387. CHANGEABLE EXHIBITOR. ELAINE VON DER LIPPE-LIPSKI, Washington, D. C., assignor of one-fourth to Albert Cayton, Washington, D. C. Filed Oct. 24, 1929. Serial No. 402,282. 10 Claims. (Cl. 40—36.)



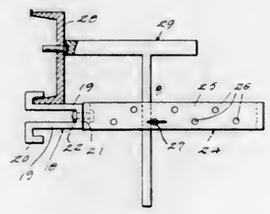
1. A changeable sign exhibitor comprising a signboard structure forming a casing having an opening through which the signs are exposed, a plurality of sign carrying frames arranged in groups side by side, one of the groups having a smaller number of frames than the other, a plurality of bars having media faces mounted in each frame, and means for operating said bars to bring the media faces successively to front position, means for shifting the sign carrying frames laterally, and means for moving the groups of sign carrying frames forwardly and rearwardly respectively for bringing the said frames successively to exposure position in rotation.

1,857,388. BOLT. ANDREW LYLE LINDERMAN and THOMAS J. MAINES, Pittsburgh, Pa. Filed July 7, 1931. Serial No. 549,168. 2 Claims. (Cl. 85—9.)



2. A sheathing bolt comprising a shank having a head formed at its one end, the nether face of said head being provided with an annular ridge between the peripheral edge of said head and the surface of said shank, a plurality of fins projecting laterally from said shank and extending from the shank angularly upward and terminating in the nether face of said head immediately within said ridge.

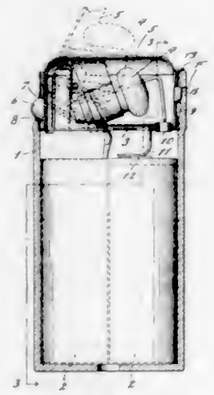
1,857,389. DEVICE TO FACILITATE THE DRIVING OF RIVETS TO POSITION. HENRY B. MORGAN, Corbin, Ky. Filed May 3, 1930. Serial No. 449,490. 3 Claims. (Cl. 78—53.5.)



1. A device of the character described, comprising an elongated rectangular frame having the side members thereof provided with aligned apertures, a substantially

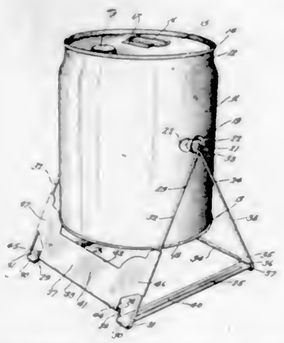
U-shaped member having spaced side legs and a straight yoke portion connecting said legs at one end thereof and positioned against one end of the frame, a pivot pin connecting the said yoke portion of said member with the adjacent end of the frame whereby relative rotary motion about an axis longitudinal to the frame, may be effected, between the frame and the member, means forming a part of said member for engaging a body in which a rivet is to be set, a pin member disposed transversely of the frame in a pair of aligned apertures, and a rivet bucking element comprising a handle designed to extend through the frame and fulcrum against said pin, and a head at one end of the handle adapted to engage the head of a rivet.

1,857,390. FLASH LIGHT. BERNARD F. MULDOON, Mountainview, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Filed July 14, 1930. Serial No. 467,760. 7 Claims. (Cl. 240—10.67.)



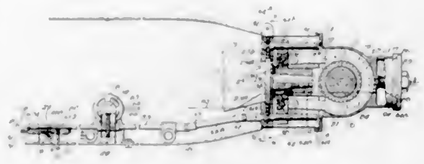
1. A flash light comprising a casing with one end open, a housing disposed in said casing adjacent said open end, and a spring clip on said housing having a projection received in a recess in the casing and having a portion projecting outwardly from said open end and shaped to form a thumb piece.

1,857,391. CONTAINER SUPPORT. HENRY M. NICHOLLS, Chicago, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed June 23, 1928. Serial No. 287,787. 5 Claims. (Cl. 248—52.)



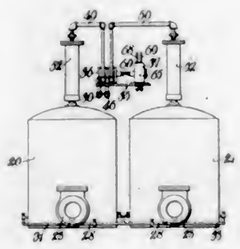
1. In a collapsible supporting rack for containers, in combination, a front wire member, a rear wire member, said front and rear members being each bent to form supporting arms and transverse parts, and a pair of base members having pivotal folding connections with said transverse parts, one of said wire members being bent to form pivot parts adapted to engage complementary pivot parts of a container to mount the latter and to permit it to be tilted to pouring posiion at any angle and the other of said wire members having eyes to engage said pivot parts.

1,857,392. PROPELLER APPARATUS. MOSES C. NIXON, Chicago, Ill. Filed July 14, 1930. Serial No. 467,767. 44 Claims. (Cl. 170—163.)



1. In a propeller apparatus, the combination of a driving shaft, a propeller blade carried by said shaft and mounted so that it may be adjusted about its longitudinal axis, a rotatable member slidably mounted with respect to the shaft and operatively connected with said blade for shifting the position of the latter about its axis, a non-rotatable member operatively connected with the rotatable member, stationary guides slidably engaged by the non-rotatable member and operating means having threaded connection with said non-rotatable member for shifting said members for the purpose specified.

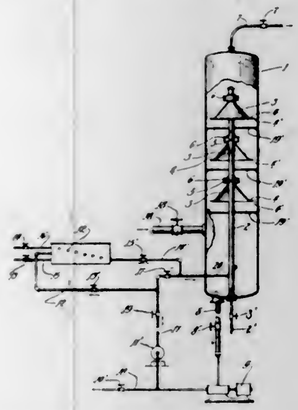
1,857,393. PUMPING MECHANISM. JOHN OLIPHANT, Chicago, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Original application filed Mar. 24, 1924, Serial No. 701,569. Divided and this application filed Mar. 12, 1925. Serial No. 15,095. Renewed Nov. 10, 1930. 10 Claims. (Cl. 103—245.)



1. In combination, a pair of displacement tanks, a compressor, pressure and suction lines respectively connected with the discharge and intake of said compressor, valve means for connecting one of said lines to one of said tanks, and the other to the other and vice versa, and a trap between said tanks and said compressor in said suction line provided with means for automatically venting the same on each reversal of the connection to said tanks.

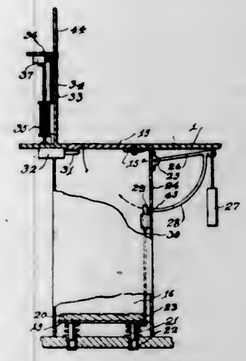
9. In combination, a displacement tank, a pump having suction and discharge connections, and means for connecting said tank alternatively with said suction connection and with said discharge connection including a plurality of means in series, one of which is in the suction connection, for preventing liquid being carried over from the displacement tank to the pump.

1,857,394. VAPOR CONDENSATION. NEAL S. OLSEN, Brooklyn, N. Y., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 9, 1927, Serial No. 182,234. Renewed Jan. 15, 1931. 3 Claims. (Cl. 196—139.)



1. A dephlegmator comprising a shell having vapor inlet and outlet and a liquid outlet, a vertical pipe mounted within said shell provided with liquid discharge ports, means for returning regulated portions of reflux from said shell to said vertical pipe, baffles adjacent said liquid discharge ports having edges terminating adjacent the interior wall of said shell, and secondary baffles adjacent said discharge ports for directing the liquid discharged through the ports onto said first mentioned baffles.

1,857,395. BURGLAR TRAP. EUGENE E. PAGE, Gary, Ind. Filed July 6, 1931. Serial No. 549,014. 2 Claims. (Cl. 43—59.)



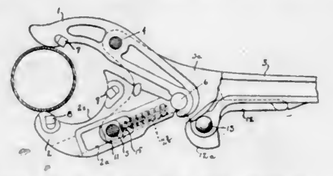
2. In a device of the class described, the combination of a trap, of a swinging door above said trap, a solenoid for keeping said door in an upward position, a movable floor at the bottom of said trap, a swinging arm on the outside of said trap, a weight supported by said swinging arm, a curved element attached to said arm, the other end of said curved element protruding into the interior of said trap, a bolt for keeping said curved element from moving inwardly in said trap, a rod connecting said movable floor and said bolt, said movable floor supported on a set of compression springs, a cushion on said floor and a vertically hinged door in one of the walls of said trap.

1,857,396. DENTAL WAX CUTTING AND ADAPTING INSTRUMENT. ARTHUR E. PECK, Los Angeles, Calif. Filed Aug. 9, 1929. Serial No. 384,625. 1 Claim. (Cl. 32—10.)



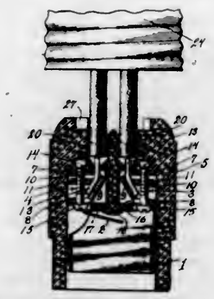
A dental wax cutting and adapting tool having a nib which is of quarter turn length and has an inner face which lies at an angle of about 30° across the axis of the nib shank; the nib having a full rounded outer surface adaptable for burnishing and with which the inner angular face meets to provide a cutting edge at the bottom of the nib.

1,857,397. TONGS. JOSEPH A. PETERSON and CARL E. OLSEN, Houston, Tex. Filed Dec. 10, 1929. Serial No. 412,993. 11 Claims. (Cl. 81—91.)



1. A tong having a handle, a jaw pivotally mounted on said handle, a jaw pivotally and slidably mounted on said handle, and a locking member to positively move said jaws together and prevent opening of said jaws.

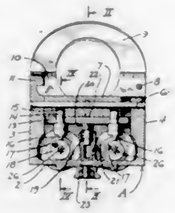
1,857,398. WIRING TERMINAL CONSTRUCTION. PAUL D. PHILLIPS, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1928. Serial No. 304,650. 2 Claims. (Cl. 173—259.)



1. A wiring terminal construction comprising a swivel screw held against endwise movement, a member having a pair of spaced bearing portions in which said screw is

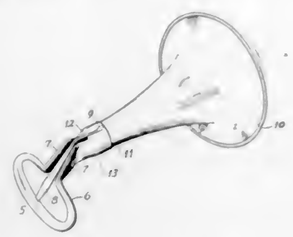
swiveled and an intermediate inclined backing portion, and a nut between said bearing portions engaged and moved axially by said screw, between which nut and the backing portion the wire is held.

1,857,399. PERMUTATION LOCK. UMBERTO PIAGNERI, San Francisco, Calif. Filed Jan. 13, 1930. Serial No. 420,360. 9 Claims. (Cl. 70—112.)



1. In a lock, a housing, a bolt slidably mounted on the housing transversely thereof, a hasp pivotally attached to the bolt, a latch on the free end of the hasp, a keeper on the housing which the latch normally engages, and locking means retaining the latch in engagement with the keeper, said locking means when unlocked permitting sliding movement of the bolt, the hasp and the latch away from the keeper.

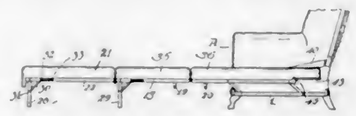
1,857,400. JEW'S HARP. HARRY W. PIDGEON, Chicago, Ill. Filed Sept. 29, 1930. Serial No. 485,022. 3 Claims. (Cl. 84—375.)



1. The combination of a jew's harp and an amplifier, the harp having arms, and a tongue mounted between said arms, and the amplifier comprising a horn, having an inlet and an outlet, and means connecting said inlet to the arms of the harp. Said means comprising a coupling having an outlet telescoping with the inlet of said horn, and said coupling having an inlet, the end walls thereof being fixed to the arms of said harp.

1,857,401. COMBINATION ARTICLE OF FURNITURE. EMANUEL POLIKOFF, Minneapolis, Minn. Filed Feb. 10, 1930. Serial No. 427,291. 1 Claim. (Cl. 5—36.)

A combination article of furniture having a seat portion and a back portion, a frame mounted in said seat portion, a movable frame member connected by links to said first frame member to be movable upwardly and forwardly in substantial parallelism with said first frame, a second frame member hingedly connected to said first frame member and movable to lie coextensive with said first movable frame member, a third frame member hingedly connected to said second frame member and having an upholstered seat portion permanently connected thereto, said third frame member being movable to lie coextensively with said first and second movable frame members, foldable legs connected to the second and third foldable frame members, a removable seat cushion and a removable back cushion, said cushions being adapted to be positioned on the second and first frame members, respectively, and a wedge-shaped cushion hingedly connected to the back of said article of

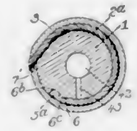


furniture and adapted to overlie the cushion on the first movable frame member when said movable frame members are in an extended position.

1,857,402. CAUSTIC SILICATE. PAUL O. ROCKWELL, Baltimore, Md. Filed Apr. 5, 1930. Serial No. 442,030. 5 Claims. (Cl. 252—2.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).

1. A process of making caustic kaolin for absorbing water and acid vapors, comprising introducing granular kaolin into a solution containing 4 or 5 parts of caustic alkali to 1 part of water at 100° C., allowing the temperature to rise to 140° C. during 10 to 20 minutes, draining the solution, baking the caustic kaolin above 300° C. to secure rapid and complete drying, and screening to size.

1,857,403. CUTTING APPARATUS FOR STONE, COAL, AND THE LIKE. WARREN A. ROSS, Chicago, Ill., assignor of one-fourth to Donald M. Carter, Chicago, Ill., and five-eighths to Truman O. Boyd, Long Beach, Calif. Filed Mar. 9, 1925. Serial No. 13,971. 20 Claims. (Cl. 125—5.)



1. A cutting apparatus comprising an inner driven member, a series of cutters connected therewith having cutting ends, means for driving said inner member so as to cause said cutting ends to cut the material, and an outer member surrounding the inner member and provided with openings through which the cutting ends of the cutters project so as to be in cutting relation to the material to be acted upon.

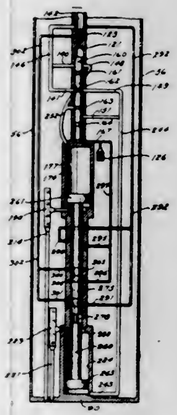
1,857,404. REMOVAL OF WAX FROM OIL. JOHN E. SCHOTT, Bayonne, N. J., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 5, 1929. Serial No. 376,287. 14 Claims. (Cl. 196—19.)

1. A method for dewaxing a wax-containing oil involving separation of wax from oil, which comprises adding to the oil a petroleum distillation residue of low A. P. I. gravity, thereby to condition the wax-containing oil to cause wax agglomeration, thereafter removing wax from the oil.

1,857,405. DEEP WELL FLUID-MOTOR PUMP. BERNARD H. SCOTT, Glendale, and SAMUEL E. ROSS, Long Beach, Calif., assignors to Scott-Ross and Company, Los Angeles, Calif., a Corporation of Delaware. Filed July 21, 1926. Serial No. 123,860. 16 Claims. (Cl. 103—46.)

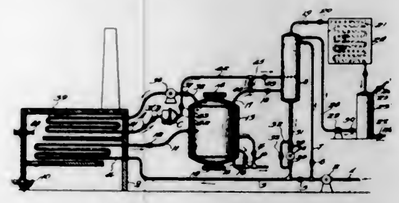
1. In a deep well fluid-motor pump, the combination of: a body having an outer shell and a central core disposed within said shell to form a passage space between said

core and said shell, there being formed in said core a pair of aligned piston chambers and a piston rod bore connecting said chambers; pistons disposed in said chambers; a piston rod disposed in said bore and connecting said pistons; check-valved means for supplying a fluid to be pumped to the inner ends of said piston chambers; check-valved means for permitting pumped fluid to be exhausted



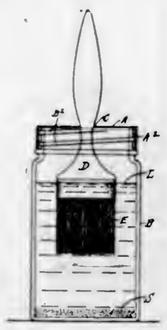
from the inner ends of said piston chambers into said passage space; means for supplying an operating fluid alternately to the outer ends of said chambers to cause the reciprocation of said plunger member; and means permitting the exhaust of used operating fluid from the outer end of each of said chambers into said passage space when operating fluid is being admitted into the outer end of opposite chamber.

1,857,406. PROCESS FOR HYDROCARBON OIL CONVERSION. JEAN DELATTRE-SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 92,679, filed Mar. 6, 1926. This application filed June 3, 1929. Serial No. 368,123. 4 Claims. (Cl. 196—60.)



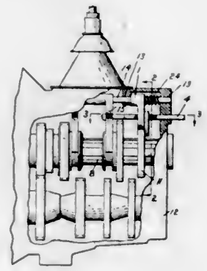
1. A method of hydrocarbon oil conversion comprising passing a stream of oil through an elongated passageway located in a furnace wherein the oil is heated to a cracking temperature, in then transferring the heated oil into an enlarged reaction drum where substantial separation of vapors takes place, in withdrawing a portion only of said vapors and subjecting them to a superheating temperature while removing the remaining vapors for dephlegmation, in passing said superheated vapors to a dephlegmating zone, in subjecting all the vapors separated from the oil in the process to dephlegmation in said dephlegmating zone, in removing and condensing the vapors which are still uncondensed after passage through the dephlegmating zone.

1,857,407. BRUSH SUSPENDING DEVICE. ROME C. SEYFORTH, Hastings, Minn. Filed July 12, 1929. Serial No. 377,903. 3 Claims. (Cl. 206—15.1.)



1. In a brush suspending device for an upright receptacle provided with a removable cover with a web normally in horizontal plane; brush suspending means consisting of said cover being provided with elongated aperture means formed in its web and of a form to allow insertion of the bristle end of a brush freely therethrough, downwardly, and further to engage the brush handle frictionally and suspend the said bristle part within the receptacle.

1,857,408. STOP FOR ROTATING PARTS. EDWARD M. SHINKLE, Higginsport, Ohio. Filed Feb. 21, 1929. Serial No. 341,802. 15 Claims. (Cl. 192—4.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

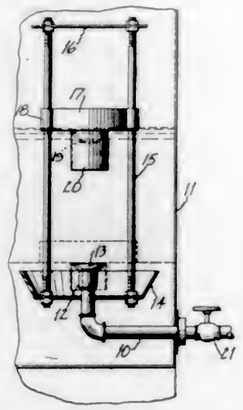


1. In a device of the character described, the combination with a rotating element, of a double ended pawl member pivotally mounted adjacent said element, means on said element adapted to be engaged by either end of said pawl, and means for positively positioning said pawl to prevent revolution of said element in one direction, said means including means cooperating therewith for selectively restraining the said pawl from operation.

1,857,409. AUTOMATIC CUT-OFF VALVE FOR STORAGE TANKS. CLARENCE W. SMITH, Mexia, Tex., assignor of one-half to Pearl Buchanan and one-fourth to Lemuel G. Vandersall. Filed Sept. 4, 1928. Serial No. 303,871. 5 Claims. (Cl. 137—68.)

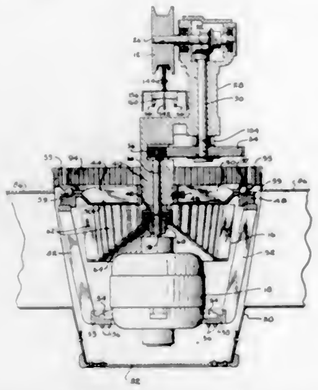
1. In an automatic cut-off valve for liquid storage tanks, a discharge pipe having a valve seat at its inlet

end, a float carrying a valve member for engaging the valve seat, means carried by the float for preventing air



entering the valve seat, and a guard below the valve seat preventing the effluent stirring up the sediment in the bottom of the tank.

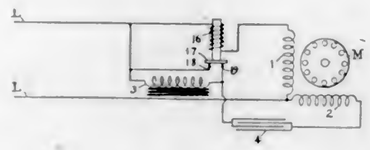
1,857,410. APPARATUS FOR OPERATING ON SPINNING FRAMES AND OTHER MACHINES. JOSEPH J. SMITH, Cambridge, Mass.; William J. Smith, executor of said Joseph J. Smith, assignor to Firth-Smith Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 21, 1920. Serial No. 136,772. 14 Claims. (Cl. 15—20.)



1. Apparatus of the class described having, in combination, an overhead track, a blower mounted to travel along the track, relatively wide air directing means for said blower to direct air downwardly normally extending transversely of the direction of travel of said blower, and means for turning said air directing means in one direction to cause it to extend longitudinally of said direction of travel so as to permit it to clear an obstruction in its path and for further turning it in the same direction to return it to its normal position as it passes said obstruction.

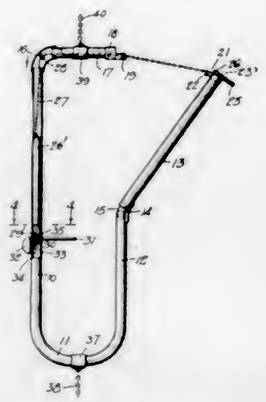
9. Apparatus for operating upon a spinning frame or other machine having, in combination, an overhead track, a blower mounted on the track to travel over the machine, and air directing means associated with said blower having a discharge orifice for directing air downwardly over the top of the machine and having laterally arranged discharge orifices suitably inclined to direct air downwardly and inwardly over the sides of the machine.

1,857,411. MEANS FOR OPERATING POLYPHASE MOTORS FROM A SINGLE-PHASE SOURCE. MILLARD COLE SPENCER, East Orange, N. J., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J., a Corporation of New Jersey. Filed Nov. 21, 1929. Serial No. 408,726. 5 Claims. (Cl. 172—233.)



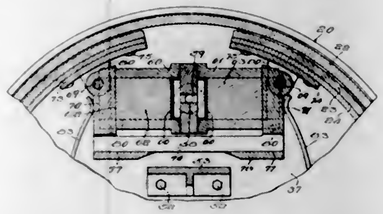
1. A two-phase induction motor supplied from a single-phase source, a condenser and an inductance coil in series with one of the motor windings, and means for cutting the inductance coil out of the circuit when the motor comes up to speed.

1,857,412. CATTLE STANCHION. JOHN H. SUTTON, Los Angeles, Calif. Filed Feb. 24, 1930. Serial No. 430,933. 1 Claim. (Cl. 119—149.)



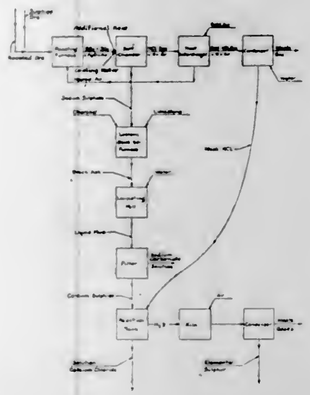
A cattle stanchion comprising a frame including a plurality of spaced apart legs, one of which is provided with a tilting section, a dog on the tilting section, a keeper on the other leg, said keeper disposed in the path of movement of the dog, a sliding weight in said other leg, a flexible connection between the weight and the said dog, and a weighted trigger carried by said other leg and having a portion disposed with respect to the sliding weight so as to engage therewith and hold same in a position of suspension, and means on the trigger extending into the neck-receiving space of the frame and adapted to be engaged by the neck of an animal so as to release the trigger from the weight and permit same to descend and exert a pull upon the flexible connection and thereby move the tilting leg section to a closed position while establishing an interlocked connection between the aforementioned keeper and its co-acting dog.

1,857,413. FLUID OPERATED APPARATUS. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 8, 1927. Serial No. 211,529. 10 Claims. (Cl. 188—152.)



1. Brake mechanism comprising, in combination, a brake drum, a brake band engageable with said drum, a pivotally mounted cylinder, a piston mounted therein, a guide member pivotally connected to said brake band and operatively related to said piston in a manner to be moved thereby, means carried by said cylinder and guide member, respectively for securing said member against angular displacement around its pivotal connection and with respect to said cylinder and piston, and means for introducing fluid under pressure into said cylinder to displace said piston.

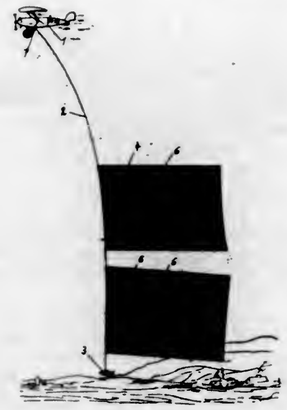
1,857,414. METHOD FOR ECONOMIC RECOVERY OF SULPHUR FROM SMELTER SMOKE. ALFRED M. THOMSEN, San Francisco, Calif. Filed Apr. 18, 1927. Serial No. 184,597. 3 Claims. (Cl. 23—226.)



1. In a method for the economic recovery of sulphur from smelter smoke resulting from an ore roasting process by increasing the sulphur trioxide and sulphur dioxide content of the gases liberated, the steps which consist of diluting the charge of raw ore with ore already roasted, and of admitting to the roasting furnace preheated air.

1,857,415. AERIAL ADVERTISING AND APPARATUS. ERNST UDET, Berlin, Germany, assignor to the Firm: Udet-Schleppschrift Gesellschaft mit beschrankter Haftung, Berlin, Germany. Filed May 19, 1928, Serial No. 279,087, and in Germany June 1, 1927. 10 Claims. (Cl. 40—127.)

1. The method of aerial advertising which consists in suspending from motor driven aircraft a substantially vertical disposed cable device with a flexible and readily furlable sheet bearing visible announcing or advertising material and attached along one edge to said device and towing the same through the air at sufficient speed to



cause the unfolding and extension of the sheet by the airstream for exhibiting the visible announcements in a vertical plane.

1,857,416. ELECTRODE SUPPORTING MEANS FOR ELECTRICAL PRECIPITATORS. KURT VON EBERHARD, Frankfort-on-the-Main, Germany, assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed May 7, 1930, Serial No. 450,560, and in Germany May 23, 1929. 3 Claims. (Cl. 183—7.)



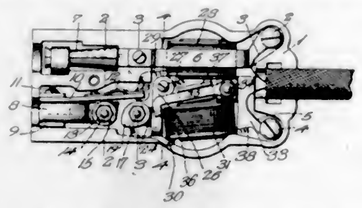
1. In an electrical precipitator, an electrode member, a supporting member, a main hanging means normally supporting said electrode member on said supporting member in such manner that the electrode member hangs vertically, and auxiliary hanging means connected to said electrode member adjacent the main hanging means and adapted to support said electrode member in the same vertical position in case of breakage of the main hanging means.

1,857,417. THERMOSTATICALLY CONTROLLED ELECTRIC CIRCUIT. EMIL WALDER, Philadelphia, Pa., assignor to The Beardsley & Wolcott Mfg. Co., a Corporation of Connecticut. Filed Oct. 27, 1926. Serial No. 144,435. 22 Claims. (Cl. 175—375.)

7. A thermostatic plug comprising a plug casing, a pilot terminal therein, a thermostat member connected to said terminal and carrying a contact, a contact carrying spring movable by said member, and cooperating contacts carried in said casing.

19. A thermostatically controlled electric control mechanism for electrically heated devices comprising a

main circuit having a contact mechanism and a plurality of normally closed thermostatically controlled contact mechanisms therein, a shunt circuit connected to one of the latter mechanisms and controlling the first mentioned



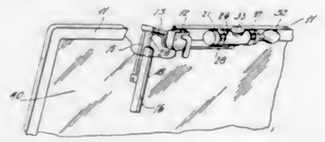
contact mechanism, and another shunt circuit controlled by said thermostatically controlled contact mechanism and likewise controlling said first mentioned contact mechanism.

1,857,418. SEAT COVER. HARRY G. WEDLER, St. Louis, Mo., assignor to The Wedler-Shuford Co., St. Louis, Mo., a Corporation of Missouri. Filed Nov. 9, 1927. Serial No. 232,044. 7 Claims. (Cl. 155—182.)



7. A seat cover comprising a seat covering section having its side edges conforming generally to the contour of the side edges of the seat for which the cover is intended, flaps comprising separate sections of material having free lower edges and their upper edges lapping and secured to the front and rear edges of said section respectively and arranged to enfold and extend under the front and rear sides of a cushion to which the cover is applied, flaps comprising separate sections of material having free lower edges and their upper edges lapping and secured to the ends of said seat covering section respectively and arranged to enfold the ends of the cushion to which the cover is applied, and means forming a binder strip enfolding the lapped edges of said seat covering section and said flaps and also forming a pliable frame that is located above the marginal portions of the seat when the seat cover is properly applied on the seat.

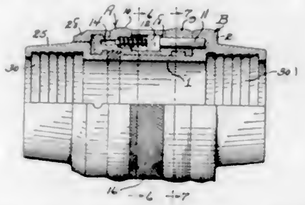
1,857,419. WINDSHIELD WIPER. CLARENCE B. WILLIAMS, Santa Barbara, Calif. Filed Nov. 26, 1929. Serial No. 409,820. 2 Claims. (Cl. 15—255.)



1. A windshield cleaner comprising a double wiper member of rubber or the like, the double sides of which touch one another and present a pair of adjacent scrubbing edges, a liquid tube having an outlet between said double sides, and a holder holding said wiper member and liquid tube in assembly.

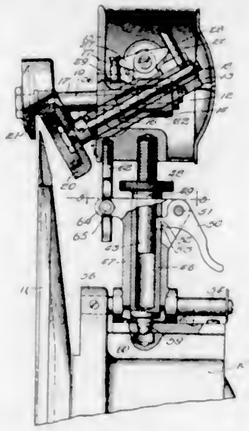
1,857,420. COUPLING DEVICE. EDGAR WARREN WOLFORD, San Jose, Calif. Filed Sept. 9, 1930. Serial No. 480,737. 1 Claim. (Cl. 285—175.)

A device of the class described comprising a female member and a male member, said female member having an internal groove formed with notches in its walls and the male member having lugs thereon passing through the notches when the members are placed together, whereby by turning one member in relation to the other, the lugs will be moved into engagement with the unnotched portions of the walls, locking pins carried by the female



member and the male member having keeper recesses therein for receiving the pins whereby turning movement of the members is prevented, a cam ring on the female member for retracting the locking pins, said female member having spaced exterior collars thereon between which the locking ring is rotatably arranged and spring means for holding the locking collar in inoperative position.

1,857,421. SHARPENER FOR SLICING MACHINES. JOHN N. WOODINGTON, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed May 12, 1927. Serial No. 190,758. 30 Claims. (Cl. 51—248.)

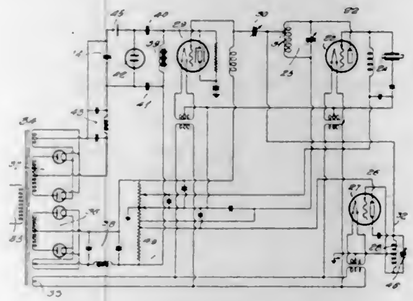


25. In a slicing machine, the combination with a slicing knife, of a sharpening grinder, a burr removing grinder, means for shifting said grinder successively into contact with said knife by movement transversely to the plane of said knife, means for shifting said grinders away from said knife in a direction parallel to the plane of said knife, and means acting automatically when said grinders are moved away from said knife in a direction parallel to the plane of said knife to move the said grinders out of contact with said knife transversely to the plane of said knife and in reverse order from their movement into contact with said knife to cause the burr removing grinder to remain in contact with the knife a short interval of time after the sharpening grinder has been removed.

1,857,422. STROBOSCOPE. ROBERT H. WORRALL, Washington, D. C. Filed Dec. 24, 1930. Serial No. 504,625. 8 Claims. (Cl. 176—124.)

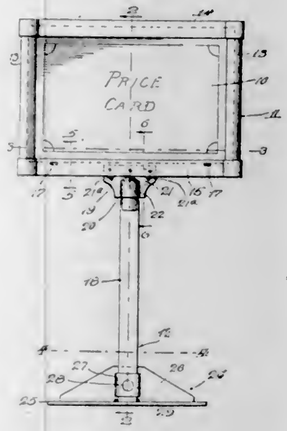
2. A stroboscope comprising a constant frequency oscillator circuit, a variable frequency oscillator circuit,

means for combining the effects of said oscillator circuit for producing a beat frequency, a glow discharge tube sub-



ject to the beat frequency of said circuits, and means for subjecting said glow discharge tube to a flashing potential at each recurring beat.

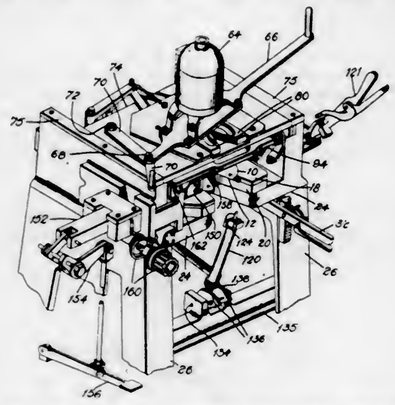
1,857,423. SIGN HOLDER. MILTON ZADEK, Chicago, Ill., assignor to Reflector Hardware Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1931. Serial No. 506,128. 9 Claims. (Cl. 40—148.)



1. A sign holder comprising a frame having upright and upper and lower horizontal frame members provided with a marginal slot for receiving a card or sign, a stand for said frame having a part entering said slot, and supports at the lower corners of the frame extending into the slot in a plane disposed above the upper end of said stand and serving to support and line up the card or sign with the frame.

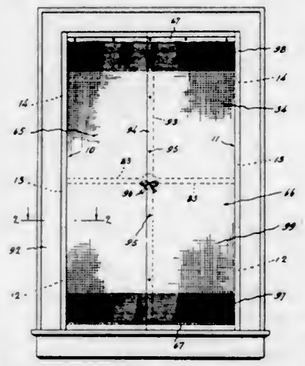
1,857,424. HEEL-SEAT FITTING MACHINE. HARRIE A. BALLARD, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 25, 1927, Serial No. 170,881, and in Great Britain Apr. 17, 1926. 41 Claims. (Cl. 12—31.5.)

1. A machine for operating upon shoe parts having, in combination, a cutter arranged to trim surplus material from a shoe part, and means for moving the cutter peripherally of the heel-seat of the shoe from approximately one end of the heel breast line of the shoe to approximtely



the other end thereof during the trimming operation in a path the form of which is determined by a dimension of the shoe being operated upon.

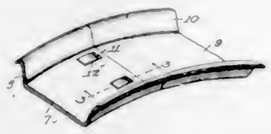
1,857,425. SCREEN. JOSEPH BREWER, Bronx, N. Y. Filed Dec. 15, 1930. Serial No. 502,545. 12 Claims. (Cl. 156—38.)



6. An adjustable window screen and the like including a pair of vertically adjustable side frame members adapted to be disposed against a building wall at the sides of a window opening, each of said side frame members including telescopic upper, intermediate and lower sections, each of said sections being of substantially hollow U-shape in cross section, with the open portions disposed against said wall, said frame sections having means for coarse and fine adjustment, including a plurality of horizontal slots in said lower section, a pin extending through said intermediate section, said pin having portions disposable in said horizontal slots, said intermediate sections including a plurality of vertical slots, a spring clip on said upper section having a pin adapted to enter said vertical slots, upper and lower arbors to support a screen between said side frame members, each of said arbors including an outer sleeve and intermediate and inner members, a nut within said outer sleeve, a headed screw threaded in said nut, a hollow cap secured to said headed screw, a second hollow cap secured to said inner arbor section, hubs secured to said upper side frame sections, said hubs each having an annular groove and each of said hollow caps having an internal flange to enter said groove, each of said arbor sections having a plurality of alignable apertures, a spring held pin on each of said intermediate and

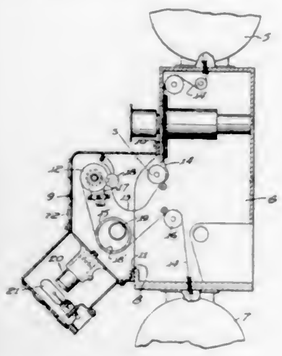
inner arbor sections adapted to enter said aligned slots to adjust the length of said arbor, said headed screw being manipulable to perfect said arbor adjustment, a plurality of sections mounted on said upper and lower arbors, the outer sides of said screen sections having a plurality of eyelet portions therein, fastening devices to connect said eyelet portions with sections of said side frame members, a centre bar to brace said screen sections and side frame members, said screen sections including a pocket to receive said centre bar and said side frame members having means to support the ends of said centre bar.

1,857,426. DEMOUNTABLE RIM. AARON BROWN, Chicago, Ill. Filed Apr. 30, 1931. Serial No. 533,956. 1 Claim. (Cl. 301—31.)



A demountable rim comprising a main rim section having tire-retaining flanges at the sides thereof, a complemental rim section also having tire-retaining flanges at the sides thereof and extending between the ends of the main rim section and adapted to complete the rim, one of the sections having in one end thereof a pair of laterally spaced openings and a pair of open-ended sockets disposed inwardly of and facing the openings, the other section having at the contiguous end thereof a pair of laterally spaced outwardly extending tongues arranged to extend through the openings and to fit slidably in the sockets so as to form a pair of detachable connections whereby the complemental rim section may be removed bodily from the main rim section, said tongue and socket connections being disposed at opposite sides of the central parts of the rim-sections and in close proximity to the tire-retaining flanges and coacting with one another to prevent lateral rocking of the complemental rim-section relatively to the main rim-section, and releasable locking means between the other ends of the two sections.

1,857,427. SOUND-ON-FILM REPRODUCING APPARATUS. JAMES H. BURNSIDE, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1930. Serial No. 486,232. 4 Claims. (Cl. 88—16.2.)



1. The combination with a motion picture projector having an intermittent film progressing mechanism including an intermittent sprocket and a lower constant speed sprocket, of a unitary sound film attachment including a carrying casing, an adjustable tensioned guiding means including a main roller and smaller roller and over which the film below the lower loop is passed, and a slit block interposed between the latter and the constant speed sprocket whereby the loop is maintained between the guiding means and the intermittent sprocket and the constant speed sprocket draws the film through the attachment.

1,857,428. MILLING CUTTER FOR FORMING GIN OR LINTER SAW TEETH. ROBERT H. BUTTERS, Atlanta, Ga. Filed Aug. 26, 1929. Serial No. 388,418. 2 Claims. (Cl. 29—103.)



1. A milling cutter for forming or renewing gin or linter saw teeth including a hub portion and a plurality of teeth radiating therefrom, the said hub being extended to provide an integral annular reinforcing rib at the upper side of said cutter which rib is so located at its juncture with the body of the cutter as to avoid interference with providing the required relief on the teeth.

1,857,429. FERMENTATION OF CELLULOSIC MATERIALS. LEO M. CHRISTENSEN, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Oct. 21, 1929. Serial No. 401,385. 11 Claims. (Cl. 260—120.)

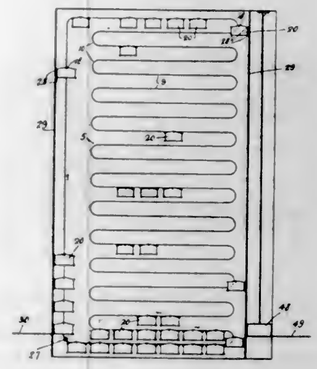
1. In a process for the fermentation of cellulosic materials, the step which comprises inoculating a fermentable mash containing xylose residue and corn stalks with acid-producing thermophilic bacteria.

1,857,430. MANUFACTURE OF CHOCOLATE. LEE H. CLARK, Haverford, Pa. Filed Oct. 20, 1927. Serial No. 227,621. 10 Claims. (Cl. 99—16.)

9. In the treatment of chocolate liquor resulting from grinding of cocoa bean, the steps comprising continuously passing such chocolate liquor into the influence of centrifugal force and by sedimentation due to the action of centrifugal force separating the liquor into a fraction containing a greater proportion of hard and gritty solids than is contained in the original chocolate liquor and a fraction containing a lesser proportion of hard and gritty solids than is contained in the original chocolate liquor, and continuously withdrawing said second fraction from the influence of centrifugal force while retaining said first fraction within the influence of centrifugal force, and employing said second fraction so withdrawn and separate from said first fraction in the manufacture of chocolate.

1,857,431. VEHICLE STORAGE APPARATUS. MALCOLM S. CLARK, Ferndale, Mich., assignor of one-fifth to Starrett Building Company, a Corporation of Illinois, one-fifth to Harnischfeger Corporation, a Corporation of Wisconsin, one-fifth to Walter W. Ahlschlager, Inc., a Corporation of Illinois, one-fifth to Albert B. Fridaker, Chicago, Ill., and one-tenth to Bert B. Balkema, Detroit, Mich. Filed Nov. 21, 1927. Serial No. 234,847. 5 Claims. (Cl. 214—16.1.)

1. In an apparatus of the class described, an endless track including a plurality of vertically spaced horizontal runs and runs connecting alternate ends of said horizontal runs, storage cages supported for movement along said



track means for moving said storage units, and an elevator operating adjacent said endless track for unloading storage cages of any horizontal run of said track.

1,857,432. FELT. PHILIP W. CODWISE, Kenmore, N. Y., assignor, by mesne assignments, to Certain-teed Products Corporation, a Corporation of Maryland. Filed July 8, 1925. Serial No. 42,316. 1 Claim. (Cl. 92—13.)

The method of making felt which comprises preliminarily steaming wood chips, impregnating the same under pressure with excess of sodium hydroxide solution of 5% or less concentration, draining off the liquor after impregnation to an extent to leave an amount containing 4% to 14% of alkali in relation to the weight of the chips, cooking the chips with this liquor under pressure under such conditions as to soften them and incompletely release the bond between the fibres to maintain the fibres in their natural positions in the chips, and then shredding the chips to separate the same for the most part into bundles of the fibres, and matting the same into sheets.

1,857,433. FELT. PHILIP W. CODWISE, Kenmore, N. Y., assignor, by mesne assignments, to Certain-teed Products Corporation, a Corporation of Maryland. Filed Aug. 19, 1926. Serial No. 130,361. 17 Claims. (Cl. 92—3.)

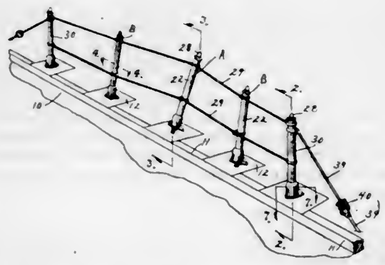
1. The process of producing a fibre product from wood which consists in modifying by incomplete chemical treatment the substances naturally encrusting and binding the fibres of the wood while not completely releasing in said treatment the fibres from each other, and subdividing the wood for the most part into bundles of long fibres maintaining approximately the natural arrangement of the fibres with respect to each other in the bundles.

1,857,434. GUY WIRE ANCHOR DEVICE. ELMER K. COLE, Winterset, Iowa. Filed Sept. 9, 1929. Serial No. 391,232. 1 Claim. (Cl. 254—190.)

A cable anchor device comprising in combination an anchor rod formed with a loop, and a roller eye formed complete of a single piece of malleable metal, and having a central opening, and also having its ends spaced apart far enough to permit it to be placed in position with the loop of the anchor rod contained within said central opening, said roller eye being of such shape that when its adjacent ends are pressed together it will be substantially round in outline and capable of free rotation upon the anchor loop.

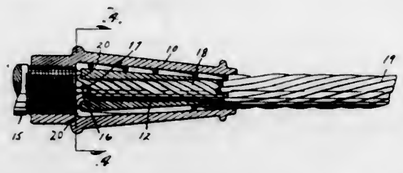


1,857,435. HIGHWAY FENCE. ELMER K. COLE, Winterset, Iowa. Filed Mar. 25, 1930. Serial No. 438,748. 4 Claims. (Cl. 256—13.1.)



1. A highway fence comprising a series of spaced base blocks adjacent to one side of the highway, a post on each base, means for yieldably supporting the post in an upright position to tilt in all directions and whereby the resistance against outward tilting movement is greatest, a horizontal cable adjacent to the inner face of said post, and means for fastening said cable to said post.

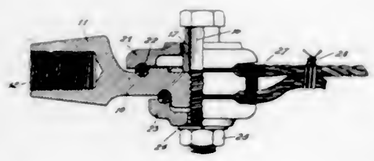
1,857,436. CABLE SPLICE. ELMER K. COLE, Winterset, Iowa. Filed Nov. 3, 1930. Serial No. 493,019. 4 Claims. (Cl. 24—126.)



4. A cable splice for wire cables of the class having a central strand of wires spirally arranged and an outer layer of wires spirally wound in an opposite direction, said

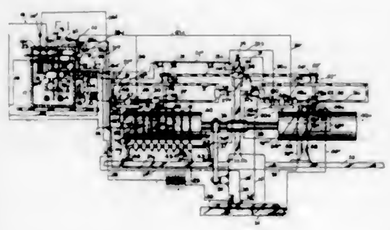
splice comprising a socket conical in shape and having its interior tapered toward the end in which the cable is to be inserted, and a hollow conical wedge having its interior substantially cylindrical and formed with spiral grooves to receive the wires of the central strand and to impart a rotary movement to the wedge when being forced into the cable, said wedge having its outer surface tapered to force the outer strands of the cable against the interior of the socket, said wedge being split longitudinally at one side along an irregular line to prevent an outer cable strand from entering the space between the edges of the split portion.

1,857,437. CABLE CLAMP. ELMER K. COLE, Winterset, Iowa. Filed Feb. 24, 1931. Serial No. 517,837. 3 Claims. (Cl. 24—125.)



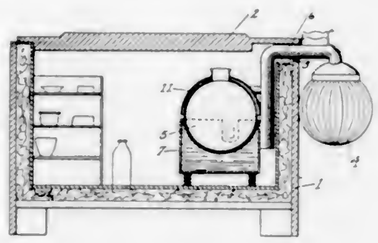
1. A cable clamp comprising a body portion having a substantially flat surface, a bolt seated in the body portion, a cable retaining post on said flat surface of the body, a sleeve rotatively mounted on the bolt, two wedges on the end of the sleeve adjacent to the body and so shaped that a cable may be passed around the bolt and the post and be supported by the post spaced apart from the wedges and the bolt when the wedges are in one position, and that when the sleeve is turned the wedges will engage the adjacent surfaces of the cable on both sides of the bolt, a clamping member loosely mounted upon the bolt and formed with an opening through which said sleeve is projected, and means on one of the clamping members for opposing the outward movement of the cable when engaged by the wedges.

1,857,438. PHONOGRAPH-DICTAPHONE COMMUNICATION APPARATUS. GEORGE R. COOPER, Upper Darby Township, Delaware County, Pa. Filed Sept. 22, 1928. Serial No. 307,712. 4 Claims. (Cl. 179—6.)



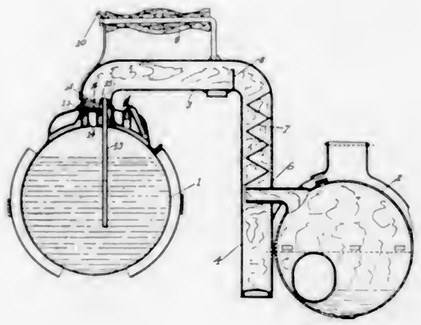
1. In apparatus of the character described, the combination of a plurality of record holders, means for rotating said record holders, recording and reproducing means positioned in cooperative relation with records on the respective record holders, and supporting mechanism for said means comprising a fulcrumed lever tiltable to disengage one of said means from its record when the other of said means moves toward its record and means comprising an electrical circuit controlled by the rocking of said lever for operating said lever.

1,857,439. REFRIGERATING DEVICE. LEWIS M. CROSLEY, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 19, 1928. Serial No. 320,312. 5 Claims. (Cl. 62—120.)



1. In an absorption system refrigeration device comprising a cooling box and a removable unit having, when installed with the cooling box, a generator-absorber outside the cooling box, and a condenser-evaporator inside the cooling box, solid surfaced means within the box for retarding absorption of heat by said condenser-evaporator.

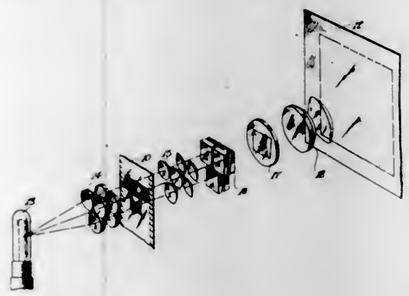
1,857,440. REFRIGERATION DEVICE. LEWIS M. CROSLEY, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 19, 1928. Serial No. 320,313. 6 Claims. (Cl. 62—120.)



1. In an absorption system refrigeration device the combination of a generator-absorber chamber, a condenser-evaporator chamber, a conduit between them, means for establishing a liquid seal between the interior of the conduit and the generator-absorber chamber, a passageway from the generator-absorber chamber terminating at a point below the level of said seal, and a valve for said passageway.

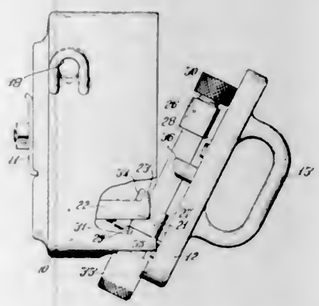
1,857,441. COLOR PROJECTING MACHINE. MARSHALL DE FRANCISCO, New York, N. Y. Filed Sept. 30, 1927. Serial No. 223,008. 5 Claims. (Cl. 88—16.4.)

1. A device of the class described, comprising, in combination with a main screen, an image fixing medium having a plurality of unicolored images thereon, an auxiliary screen located between the main screen and the image fixing medium, a plurality of prisms between the image-fixing medium and auxiliary screen whereby the unicolored images are projected on the auxiliary screen



in superposition and coincidence without substantial distortion, and an adjustable lens between the auxiliary screen and main screen.

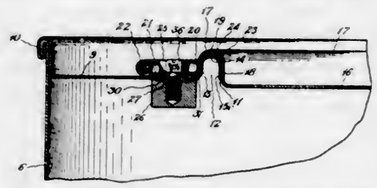
1,857,442. FUSE BOX STRUCTURE. JOHN F. DOHRWARDT, South Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 14, 1929. Serial No. 407,038. 15 Claims. (Cl. 200—133.)



2. A device of the type described, comprising in combination a member in the form of a box open at one face, a lid member in the form of a plate loosely mounted on the box for closing said face, terminals in said box in spaced relation to each other, a conductor element carried by said plate and movable therewith into releasable engagement with said terminals, and interengaging lugs carried by said lid member and said box member for swingingly supporting said lid member from its lower end and adapted positively to limit outward swinging of the lid on the box so as normally to hold said lid member swung outwardly to a slight angle from the vertical with the upper end of the conductor element out of engagement with the corresponding terminal.

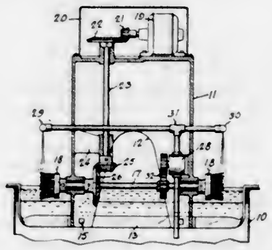
1,857,443. REMOVABLE HEAD BARREL. CHARLES T. DRAPER, Cleveland Heights, Ohio, assignor to The Draper Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 20, 1930. Serial No. 430,062. 3 Claims. (Cl. 220—55.)

1. In a sheet metal barrel, a head provided with an opening, an annular U-shaped lip formed in the head at the opening, a cover for the head opening, an annular U-shaped rib in the cover adjacent the periphery thereof, an annular flange extending outwardly from the U-shaped rib, an upturned rolled bead formed at the outer periphery of the annular flange, and unyielding means clamping the beaded flange against the head maintaining the beaded



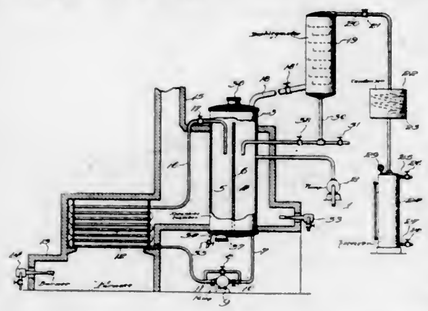
flange in sealed relation around its entire periphery with the head, and maintaining the U-shaped lip and U-shaped rib in coacting seated sealed arrangement.

1,857,444. MACHINE FOR WASHING VEGETABLES. EUGENE E. EDENHARDER, West Allis, Wis., assignor of one-third to Helen E. Edenharder and one-third to Jacob E. Edenharder. Filed Dec. 7, 1927. Serial No. 238,394. 4 Claims. (Cl. 146—201.)



1. In a vegetable washing machine, a frame adapted to be supported on a liquid containing tank, a shaft journaled in the frame and projecting at its ends therefrom, means for rotating the shaft, and scrubbing brushes attached to the projecting ends of the shaft, the scrubbing faces of the said brushes standing in planes transverse to the axis of the shaft and operating in the liquid in the tank when the frame is positioned thereover, whereby a scrubbing action may be performed at each side of the tank.

1,857,445. PROCESS AND APPARATUS FOR CONVERTING HYDROCARBONS. GUSTAV EGLOFF, Chicago, Ill., and WILLIAM R. HOWARD, Washington, D. C., assignors to The Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Sept. 1, 1922, Serial No. 585,617. Renewed June 27, 1927. 3 Claims. (Cl. 196—48.)



1. A process of cracking petroleum oil, consisting in passing the oil through a heating coil and heating it to a conversion temperature, preventing substantial vapori-

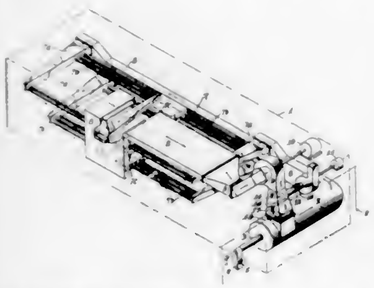
zation in the heating coil, passing the heated oil to an enlarged expansion chamber where vaporization takes place, in preventing the return of any unvaporized oil from said chamber to the heating coil, in withdrawing the vapors from said expansion chamber and subjecting them to dephlegmation and returning selected portions of the reflux condensate to the expansion chamber, maintaining said reflux condensate in a pool separate from the heated oil introduced to the chamber from the heating coil, introducing charging oil to be treated into the pool of reflux condensate and forcing the combined mixture to the heating coil.

1,857,446. KNIFE AND KNIFE HOLDING MEANS FOR VENEER LATHES. PARHAM M. ELDER and CLARENCE L. ORTON, Portland, Oreg. Filed June 17, 1929. Serial No. 371,460. 3 Claims. (Cl. 144—212.)



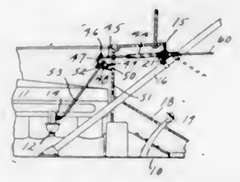
1. In a veneer lathe the combination of a knife bar of A-shaped cross section, one side of the bar provided with a recess for the knife and with threaded sockets adjacent such recess, a knife clamping bar formed to lie against said side of the knife bar, and with a head projecting into the said recess of the latter, the opposed faces of one wall of said recess and of the head of said clamping bar being adapted to provide an inwardly tapering wedge-shaped knife holding space between them, a knife correspondingly wedge-shaped in said knife receiving space, bolt recesses in said knife bar having shoulders in one side thereof, bolts having hooked heads inserted through said recesses and threaded in said bolt sockets, the hooked heads of said bolts being adapted to engage with the shoulders in said recesses to permit a pivotal action of said clamping bar relative to said bolt and said knife, and a set screw threaded into the heel of the clamping bar and bearing on said knife bar, whereby said knife is clamped firmly by the clamping bar along its entire length and close to its cutting edge against said knife bar.

1,857,447. HEATING SYSTEM FOR BAKE OVENS. EUGENE OSCAR ENGELS, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Sept. 11, 1930. Serial No. 481,112. Renewed Aug. 20, 1931. 4 Claims. (Cl. 107—55.)



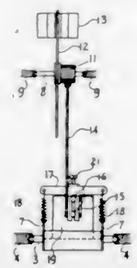
1. In combination a bake oven having a flue radiator therein, a furnace having a gas-air burner, conduits connecting the combustion chamber of the furnace with the radiator in continuous closed circuit, a gas impeller located within said closed circuit and power-driven, an exhaust fan operative independently of said impeller and having its intake side in communication with said circuit between the outlet of said radiator and the inlet to said furnace, for maintaining pressure less than atmospheric within the radiator and within the furnace chamber, said exhaust fan arranged to discharge outside of said circuit.

1,857,448. ACCELERATOR FOR INTERNAL COMBUSTION ENGINES. PEARL G. FRAZIER, Polk City, Iowa. Filed Oct. 7, 1929. Serial No. 397,902. 7 Claims. (Cl. 74—39.)



1. In combination, an automobile carburetor having a throttle and an arm for controlling the same, a support, a tubular shaft rotatively mounted in said support and extending forwardly and rearwardly, means for operatively connecting the forward end of said tubular shaft with said throttle lever, whereby a rocking movement of said shaft will cause the lever to be moved to its open or closed position, the rear end of said shaft having an operating lever pivotally mounted to swing from a position in alinement with the tubular shaft to position substantially perpendicular thereto, and means for slidably supporting said operating lever whereby it may be moved longitudinally within said tubular shaft.

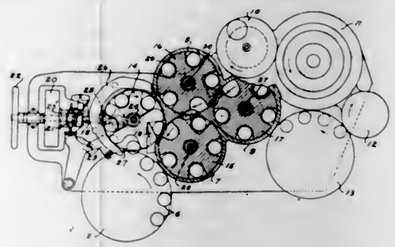
1,857,449. ELECTRIC REGULATOR. HEINRICH GÜTTINGER, Wettingen, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 22, 1930, Serial No. 454,573, and in Germany May 31, 1929. 6 Claims. (Cl. 171—229.)



6. In an electric regulator, a driving member having a bearing surface, a damped recoil device, an adjustable bearing element mounted on said recoil device and supported on the said bearing surface, and adjustable means elastically connecting said driving member and said recoil device.

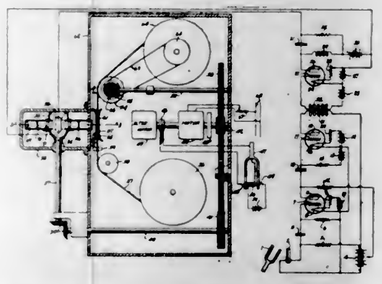
1,857,450. PROCESS OF HEAT TREATING EDIBLE SUBSTANCES. OSWALD H. HANSEN, Cedarburg, Wis. Filed Jan. 28, 1931. Serial No. 511,663. 7 Claims. (Cl. 99—8.)

8. The process of sterilizing and packing food products consisting in placing the food product under pressure above atmospheric, causing a liquid medium containing a large per cent of water and heated to a temperature above 212° F. and maintained under pressure sufficient to prevent boiling to contact with the food product for rendering the same sterile, and sealing the same in a container.



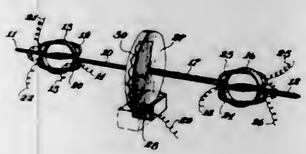
7. The process of sterilizing and packing food products consisting of rendering the product sterile by causing the same to contact with a liquid heated to a temperature sufficient to sterilize the food product and above its normal boiling point and subjected to pressure sufficient to prevent boiling, and sealing the heat treated product in a container while subjected to high temperature and pressure.

1,857,451. ELECTRIC SYSTEM FOR RECORDING AND REPRODUCING SOUND. EDMUND H. HANSEN, New York, N. Y. Filed Nov. 25, 1927. Serial No. 235,526. 15 Claims. (Cl. 179—100.3.)



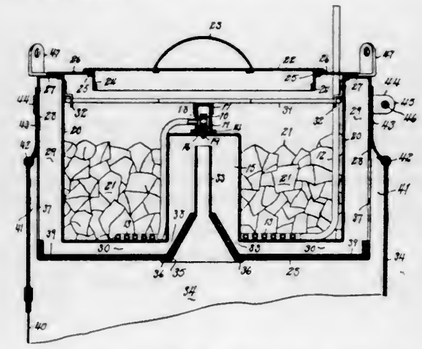
1. Apparatus for recording sound having, in combination, a multiple optical head having radial optical systems, audio frequency receiving means connected to said head, a light-sensitive film adapted to be light affected by said radial optical systems, and interrelated supporting and activating means for the film and optical head for causing the two to travel in planes at a right-angle to each other at a predetermined point.

1,857,452. RATIO METER. SIDNEY HAUSMAN, Arlington, N. J., and WALTER VEIT, New York, N. Y. Filed Jan. 12, 1929. Serial No. 332,109. 13 Claims. (Cl. 235—61.)



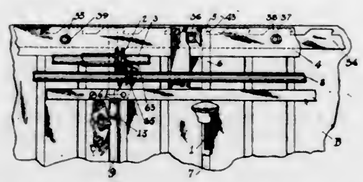
13. An electric measuring instrument comprising a rotatable spindle; two pairs of coactively arranged inductance coils, each pair having one coil fixed and the other mounted on said spindle; means for passing an electric current through one of said coils and for passing other electric currents through the remaining coils so that counter-torques will be exerted upon said spindle; and means automatically operable by said spindle for varying said first-named current to equalize said torques; whereby said first-named current will always be proportional to a predetermined algebraic function of said other currents when said equality is thus automatically established.

1,857,453. TENT-HEAD FIXTURE FOR INHALATIONAL THERAPY. YANDELL HENDERSON, New Haven, and HOWARD W. HAGGARD, Woodbridge, Conn. Filed Nov. 22, 1930. Serial No. 497,379. 10 Claims. (Cl. 128—185.)



1. A tent-head fixture for inhalational therapy having a body, a removable ice-container located therein, a mixing-chamber rising within the said ice-container, an injector coordinated with the said mixing-chamber, means for supplying gas to the injector, and a funnel located within the mixing-chamber and opening downward through the head, whereby the expired air is drawn through the head and cooled therein and thence into the mixing-chamber and discharged from the funnel, by the suction created by the said injector.

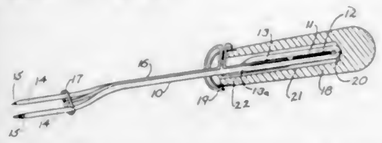
1,857,454. COMPUTING MACHINE. JULIUS C. HOCHMAN and GUSTAVE O. DEGENER, New York, N. Y., assignors of three-fourths to said Hochman and one-fourth to Maurice Samburg. Filed Oct. 26, 1921, Serial No. 510,545. Renewed June 7, 1928. 12 Claims. (Cl. 235—129.)



1. In a full stroke mechanism, in combination, a member including a toothed portion having symmetrical teeth, a pair of identical pawls symmetrically arranged with respect to said member, one end of said toothed portion moving beyond one of the pawls in its travel toward the other and the other end moving beyond the other pawl in it travel toward the first pawl, a member interposed between said pawls and actuated by said toothed portion to deflect one pawl out of contact with the toothed portion as the latter reaches the pawl in the operative stroke, and to similarly deflect the other pawl as the toothed portion reaches said other pawl in the return stroke, said interposed member including a tooth for performing the

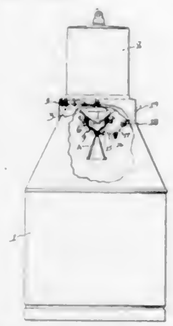
locking function of the second pawl after the toothed portion has cleared said pawl and before the end of the stroke, and to perform the function of the first pawl after the toothed portion in its return movement has cleared said first pawl.

1,857,455. EJECTOR FORK. THOMAS S. HUTCHISON, Chicago, Ill. Filed Aug. 7, 1931. Serial No. 555,670. 2 Claims. (Cl. 30—5.)



1. In an ejector fork, the combination of a fork member comprising a metal wire bent into a shank loop, a body portion, and spaced tines, an ejector member comprising a metal wire bent into a flat loop loosely surrounding said tines, a body portion extending along the fork member, a ring surrounding the fork member, and a flat hook extending through said shank loop, a retracting spring connecting said hook and the butt end of said shank loop and contained in said shank loop, and a handle on and surrounding said shank loop with its end adjacent said ring.

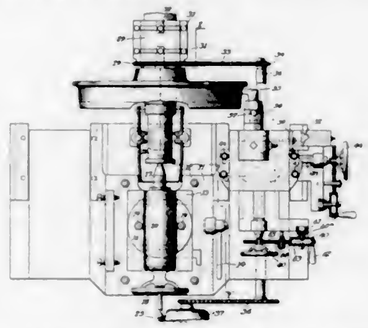
1,857,456. SHIELD FOR CARBIDE FEEDS IN ACETYLENE GENERATORS. HERBERT G. IRWIN, Amarillo, Tex. Filed May 19, 1927. Serial No. 192,555. 8 Claims. (Cl. 48—53.)



3. In an acetylene generator having a water chamber and a carbide feed hopper with a valve controlled carbide feed outlet mounted on the water chamber, a vertically disposed tubular shield dependent from about the carbide feed outlet, said shield having an inner and an outer circumferential wall impervious to acetylene and water moisture under generator pressure forming a sealed annular enclosure, elastic material in said enclosure, the inner wall of the shield being elastic to be expanded and compressed with said enclosed elastic material by gas pressure in the generator and to return to normal size and thickness when gas pressure in the generator is released, provided to prevent the formation of carbide residue deposit on the inner surface of the shield and consequent capillary attraction conveying water moisture from the rim of the shield upward into the shield and carbide feed outlet.

1,857,457. WHEEL TREAD REFACER. CHARLES P. KIMMEL, Gary, Ind. Filed May 5, 1930. Serial No. 449,881. 6 Claims. (Cl. 82—4.)

1. In a device for resurfacing car wheels without removing the wheels and axle from their operative positions beneath a car, the combination of means acting through the car journal box for relieveing the weight of the car and truck from the journals, means for raising the car wheels and axle and centering the axle between supports, means cooperating with the axle for rotating the wheels, a cutting tool supported on a movable tool head, a guide stem mounted thereon, means for moving said cutting tool across the tread and flange of a wheel, and a flange contour guide, said guide cooperating with the guide stem on said movable tool head whereby the cutting tool is adapted to automatically follow the contour of the flange when crossing the same.



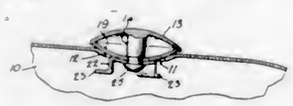
6. In a device for resurfacing car wheels without removing the wheels and axle from their operative position beneath a car, the combination of means acting through the car journal box for relieving the weight of the car and truck from the journals, means for raising the car wheels and axle and centering the axle between supports, a split gear adapted to be clamped to the axle, a motor for rotating the axle and wheels, a cutting tool, a movable tool head, and means cooperating with said tool head for progressively guiding said tool across said wheel tread.

1,857,458. RAILROAD CROSSING. CHARLES P. KIMMEL, Gary, Ind. Filed Jan. 20, 1932. Serial No. 587,735. 7 Claims. (Cl. 238—8.)



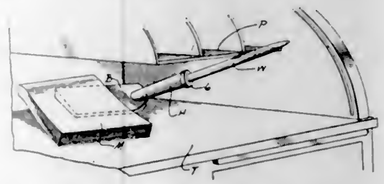
1. In a railroad crossing, the combination with the track rails, ties and tie plates, of a pair of guard rails spaced a suitable distance from and extending parallel to the track rails for the length of the crossing, said guard rails being of generally T-section, formed in two parts that are joined through their webs, the lower part having a foot flange adapted to overlie the tie-plates and be spiked to a tie.

1,857,459. VALVE FOR COOKERS. RALPH N. KIRCHER, West Bend, Wis., assignor to West Bend Aluminum Company, West Bend, Wis., a Corporation of Wisconsin. Filed May 7, 1928. Serial No. 275,735. 3 Claims. (Cl. 137—53.)



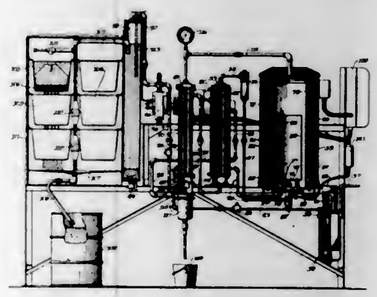
1. A cover for a cooking vessel having in the top thereof a concave depression forming a valve seat with a centrally located through aperture therein, in combination with a closure member normally resting in the said seat, the said closure member being constituted of two concavo-convex sections meeting at their rims, one of the said sections carrying a stud by means of which the other is united thereto, to form the closure member as a light, hollow body, and means attached to the closure member to retain it in operative position with relation to the cover, and means for connecting the said guiding means to the hollow closure member.

1,857,460. PENHOLDER. DONALD L. LA CHANCE, Chicago, Ill. Filed Feb. 19, 1931. Serial No. 516,870. 1 Claim. (Cl. 120—108.)



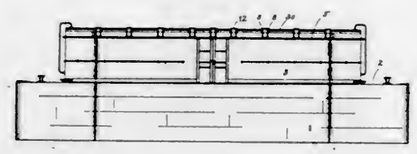
As a new article of manufacture, a pen holder in the general form of a golf club head having the sole for its base and the hosel for its holder, the base being of greater mass along one longitudinal edge than the other and upwardly curved at one end, and the holder extending obliquely from the upwardly curved end of the base, whereby the base may be tilted upon its upwardly curved end by force upon the holder but normally remaining horizontal upon a plane surface.

1,857,461. IMPURE OIL RECLAIMER. EDMOND H. LAMBERT, Piedmont, Calif., and RALPH L. SKINNER, ERIC GEERTZ, and PAUL WILLIAMS, Detroit, Mich., assignors to Skinner Automotive Device Co., Inc., Detroit, Mich., a Corporation of California. Filed Mar. 26, 1928. Serial No. 264,716. 9 Claims. (Cl. 196—16.)



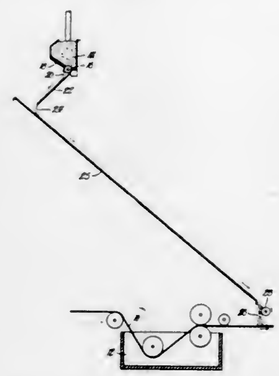
8. In an oil-reclaimer, the combination of an oil-rectifying chamber, means to supply oil-aerating air to said chamber, means to heat the contents of said chamber, a condenser, means to conduct impure oil through said condenser into said chamber, thermostatic means automatically governing the flow of such impure oil into said chamber by the temperature of the oil in said chamber, a pump, means to operate said pump, a connection to permit said pump to suck the gases and vapors from said chamber through said condenser and to draw impure oil into said rectifying-chamber through said condenser and to deliver the purified oil at atmospheric pressure during the continued application of said suction, and means to deliver the condensate automatically from said condenser.

1,857,462. ROOF STRUCTURE. ALFRED C. LEIGH, Bellevue, Pa., assignor to Dravo Contracting Company, a Corporation of Pennsylvania. Filed Jan. 3, 1931. Serial No. 506,356. 2 Claims. (Cl. 108—1.)



1. A roof structure for the hatchway of a barge or other vessel, secure against weather, and offering minimum obstruction to travel, including, in combination with opposite walls extending along opposite fore-and-aft edges of the hatchway, a plurality of roof sections applicable to and removable from such walls and adapted to be applied side by side and to extend abeam, the adjacent edges of two sections being provided each with an upstanding strip and a downwardly extending marginal flange, a gutter formed upon the face of each marginal flange, and a cover strip resting upon two assembled sections between the upstanding strips thereof and overlying such gutters.

1,857,463. ROOFING. ROBERT MACLEAN, Chicago, Ill., assignor to Amalgamated Roofing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1929. Serial No. 402,144. 4 Claims. (Cl. 91—68.)

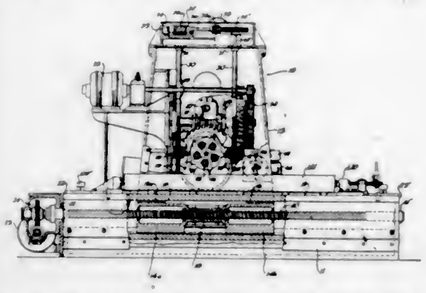


3. The method of producing shaded effects upon a strip of coated roofing which comprises dropping a sheet-like stream of granular matter subdivided into bands of different optical characteristics upon and inclined surface, blending the areas defined by the adjoining edges of said bands during the passage of the granular matter down said surface, and moving the strip of roofing underneath the delivery end of said inclined surface.

1,857,464. CHIPPING MACHINE. GEORGE W. LENTZ, Canton, Ohio, assignor to The Bonnot Company, Canton, Ohio, a Corporation of Ohio. Filed July 3, 1930. Serial No. 465,582. 10 Claims. (Cl. 90—38.)

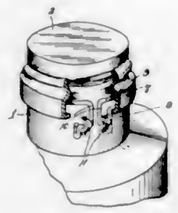
1. A machine tool including a bed, a carriage mounted for horizontal longitudinal movement on the bed, an elevator mounted for vertical movement on the carriage, a tooth tool operatively mounted on the elevator for selective rotation about an axis extending transversely of the direction of movement of the carriage, power means for ro-

tating the tool, means for vertically moving the elevator on the carriage, power means for horizontally moving the carriage on the bed, and common control means for the



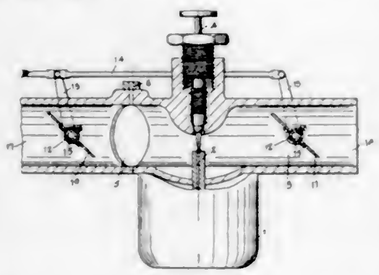
tool rotating means, the carriage moving means, and the elevator moving means, the control means being located on the carriage adjacent the tool.

1,857,465. HOLDER. JOHN A. MAKER, Duluth, Minn., and JAMES A. MEDLEY, Superior, Wis. Filed Apr. 4, 1928. Serial No. 267,410. 3 Claims. (Cl. 221—60.)



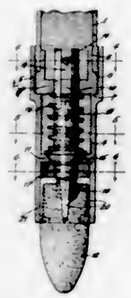
1. An internally screw threaded closure of the type described having an inwardly flanged extension about the open circumferential edge thereof, a circular spring control wire removably mounted within the extension and pivotally attached to a container externally of the closure.

1,857,466. CARBURETOR. MARION MALLORY, Toledo, Ohio. Filed Nov. 4, 1929. Serial No. 404,577. 5 Claims. (Cl. 123—100.)



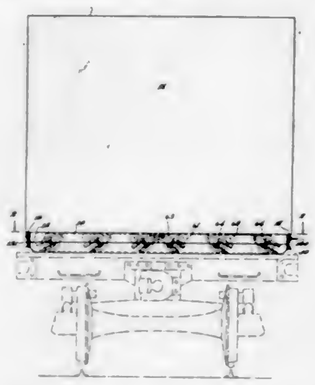
1. In a carburetor for an internal combustion engine, the carburetor having a passageway communicating at one end with the intake of the engine, the carburetor having a fuel inlet communicating with the passageway and an air inlet for said passageway on the side of the fuel inlet opposite to the point of connection of the carburetor with the intake of the engine, a valve for closing the said passageway and interposed between the air inlet and the fuel inlet, a second valve for closing the passageway interposed between the fuel inlet and the intake of the engine, a throttle valve for closing the passageway and interposed between the fuel inlet and the second named valve, means for automatically operating the first and second named valves according to the speed of the engine, and means for manually operating the throttle valve.

1,857,467. FOUNTAIN MARKER. WALTON C. MARSH, Belleville, Ill., assignor to Marsh Stencil Machine Company, Belleville, Ill., a Corporation of Illinois. Filed Dec. 21, 1931. Serial No. 582,277. 8 Claims. (Cl. 120—43.)



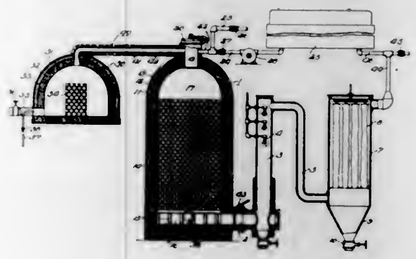
1. A fountain marker comprising a main reservoir adapted to contain fluid, an end wall for said reservoir having an opening therethrough, an auxiliary reservoir arranged to receive fluid through said opening and having a discharge outlet, a valve for opening and closing said discharge outlet, a stem in connection with said valve extending through said opening, means admitting fluid from said main reservoir to said auxiliary reservoir when said valve is closed and for preventing flow of fluid from said main reservoir to said auxiliary reservoir when said valve is in an open position, a spring for holding said valve closed, and an applicator tip attached to said valve.

1,857,468. FREIGHT CONTAINER. JAMES F. MCGINNESS, Spring Valley, N. Y. Filed Mar. 25, 1931. Serial No. 525,124. 10 Claims. (Cl. 105—366.)



1. In a freight container of the character described, a base normally in contact with the floor for supporting said container thereon, adjustable rollers associated with said base and normally positioned inoperatively above the floor level, an axially shiftable, substantially horizontal bar mounted on said base, and means operable by said bar when shifted to adjust said rollers downwardly into operative positions assuming the support of said container.

1,857,469. MANUFACTURE OF CARBON BLACK. CARROLL MILLER, Pittsburgh, Pa., assignor to Thermatomic Carbon Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 12, 1931. Serial No. 521,926. 9 Claims. (Cl. 134—60.)



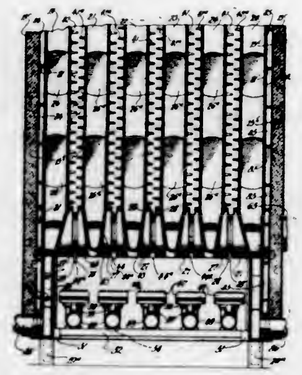
1. The process of producing carbon black, which comprises mixing a hydrocarbon gas to be decomposed with a mixture of a diluent gas consisting principally of the gaseous decomposition products obtained from the decomposition of a previously treated quantity of a hydrocarbon gas and a diluent gas consisting principally of the gaseous combustion products obtained from the combustion of fuel, decomposing the mixture at a high temperature to yield solid carbon particles, and separating the carbon particles from the gaseous decomposition products.

1,857,470. PROCESS FOR OBTAINING ORTHOPHOSPHORIC ACID AND/OR CONVERSION PRODUCTS THEREOF. CHARLES H. MILLIGAN and SIMON KLOSKY, Newark, N. J., assignors to The American Agricultural Chemical Company, a Corporation of Delaware. Filed Aug. 26, 1930. Serial No. 477,984. 3 Claims. (Cl. 23—165.)

1. In the process of obtaining phosphoric acid or conversion products thereof from materials containing inorganic phosphates by admixing a phosphate containing material with sulphuric acid in quantity sufficient to form orthophosphoric acid, thereafter contacting the admixed materials with an extraction liquid consisting predominantly of an organic substance or substances, which extraction liquid is water immiscible and is a solvent for orthophosphoric acid, thereafter separating said extraction liquid and dissolved phosphoric acid from undissolved material and removing the dissolved phosphoric acid or conversion products thereof from said extraction liquid, the step of contacting said admixed materials with an extraction liquid consisting predominantly of a water immiscible mono hydroxyl alcohol of not exceeding 8 carbon atoms in the chain carrying the hydroxyl group and the aliphatic ester of an alcohol of not exceeding 8 carbon atoms in the chain carrying the hydroxyl group, said alcohol being present in the ratio of from 20 to 80 parts by weight of the total ester and alcohol.

1,857,471. BOILER STRUCTURE. JAMES PATRICK MORLEY, Michigan City, and SIMON JOSEPH LONERGAN, La Porte, Ind., assignors to Bastian-Morley Company, La Porte, Ind., a Corporation of Indiana. Filed Aug. 30, 1928. Serial No. 302,940. 20 Claims. (Cl. 122—210.)

1. In a liquid heater, a combustion chamber, a plurality of hollow liquid-containing sections arranged side by side in spaced relation, the spaces between said sections forming gas-travel passages in communication with said combustion chamber, and heat-absorbing transferring means including a plurality of rows of flat projections on the opposed faces of said sections and extending within the gas-travel area between said sections, said projections on one section wall being staggered vertically and horizontally with respect to those on the opposed section wall to positively deflect the gases flowing through said passages lengthwise and sidewise thereof beneath the projections on both opposed faces.



1,857,472. NECKTIE. JAMES YANCEY MORRIS, High Point, N. C. Filed May 7, 1930. Serial No. 450,502. 2 Claims. (Cl. 2—150.)

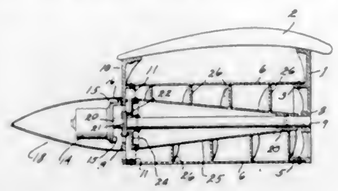


1. A necktie comprising a conventional necktie, a knot member adapted to be associated with said necktie, said knot portion comprising a shell like member through which both ends of the necktie are adapted to be passed, said shell like member having a covering thereon similar to the material out of which the necktie is made, an upstanding pivoted member mounted on a transverse pivot in the inside of said shell member, means operable from the exterior of the shell for moving said pivoted member against a portion of the necktie to hold the same in adjusted position, and for locking said pivoted member in adjusted position.

1,857,473. AIRPLANE PROPELLER. ARTHUR G. IM OBERSTAG, Detroit, Mich. Filed Nov. 20, 1929. Serial No. 408,427. 6 Claims. (Cl. 170—156.)

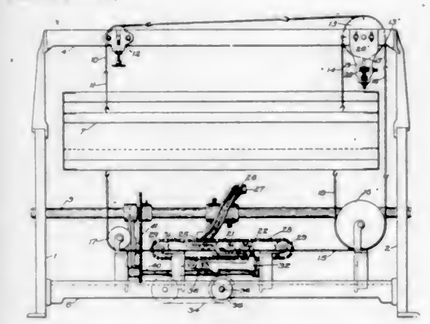
1. In an airplane propeller, a forward and a rear bracket adapted to be secured to the forward and rear edge of an airplane wing respectively, a cylindrical casing secured to and connecting the brackets, a drive motor secured to the rear bracket and extending rearwardly therefrom, a streamline housing secured to the rear bracket and enclosing the drive motor, a shaft rotatably mounted in the forward bracket and secured to the drive motor shaft, a conical air screw base secured to the said shaft within the cylindrical housing, the conical base and streamline housing being of smaller diameter than the cylindrical casing,

an air screw secured to the conical base and extending between the conical base and cylindrical casing, the forward and rear brackets being provided with air openings



therethrough, the area of the air openings in the forward bracket being greater than the area of the air openings in the rear bracket.

1,857,474. SHEDDING MECHANISM FOR LOOMS. SILAS A. PIERCE, Swansea, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Nov. 27, 1931. Serial No. 577,516. 14 Claims. (Cl. 139—66.)



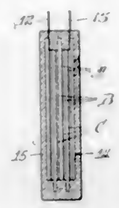
1. A shedding mechanism for looms, comprising a plurality of harness frames, means including harness cords for raising and lowering each harness frame independently of the others, means for locking each frame in raised or lowered position, a pair of treadles positioned respectively above and below lengths of said cords directly underneath the harness frames, means for reciprocating said treadles in opposite directions lengthwise of said cords and pattern controlled means for selectively connecting any of said lengths of cords for movement with either of said treadles, to thereby move the respective harness frame from one locked position to the other.

1,857,475. MEANS FOR ATTACHING HEELS TO SHOES. JUSTIN P. QUIRK, St. Louis, Mo., assignor to United Wood Heel Company, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 14, 1929. Serial No. 399,496. 11 Claims. (Cl. 36—24.5.)



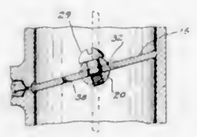
1. A heel of the character described comprising a heel body having a recess in its front upper portion for receiving the rear end portion of a shank stiffener and having a shelf in front of and below said recess for receiving and supporting the rear end portion of an outsole.

1,857,476. CONDENSER AND CONDENSER MATERIAL. RICHARD S. REYNOLDS, Louisville, Ky. Filed May 13, 1927. Serial No. 190,985. 4 Claims. (Cl. 175—41.)



1. A condenser comprising insulated metal strips staggeredly wound and having thereon a coating of microscopic thickness of live rubber overcoated with an equally thin coating of shellac, and a housing therefor of hardened rubber adapted to extend inwardly of the edges of and completely encase said foil strips in a rigid shell.

1,857,477. VALVE CONSTRUCTION. GEORGE F. RITTER, Toledo, Ohio, assignor to The Tillotson Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed May 23, 1928. Serial No. 280,084. 15 Claims. (Cl. 251—11.)

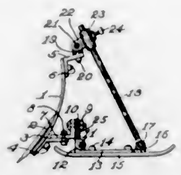


8. In a device of the character described, in combination, a conduit, a valve structure in said conduit comprising a transversely extending shaft having a slot, a valve disc in said slot, said disc having a plurality of raised portions for properly positioning the disc with respect to said shaft and said conduit; and means including a screw for securing the disc to said shaft.

1,857,478. MANUFACTURE OF ARTIFICIAL RESINS. EDMUND CHARLES ROSSITER and WILLIAM CHARLES DAVIS, London, England. Filed Dec. 2, 1929, Serial No. 411,200, and in Great Britain Dec. 22, 1928. 4 Claims. (Cl. 260—4.)

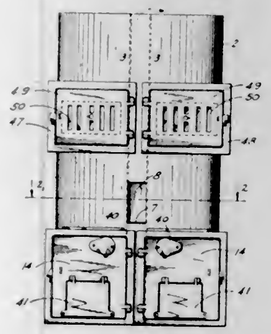
1. The condensation of a phenol with an aldehyde in the presence of not more than 10% of dicyandiamide calculated on the weight of the phenol employed.

1,857,479. ADJUSTABLE GAUGE AND STOP FOR GRADER BLADES. JESSE R. ROYER, Janesville, Iowa. Filed May 5, 1930. Serial No. 449,905. 1 Claim. (Cl. 37—143.)



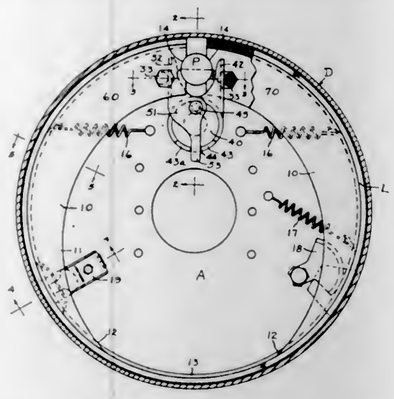
In combination with a grader blade and a slide-shoe, a link pivotally connected to the forward part of said slide-shoe and adjustably connected with the lower part of the grader blade, a lug connected to the upper part of said grader blade for universal movement and having a sleeve thereon, and a rod having its upper end adjustably mounted in said sleeve and having its lower end pivotally secured to the rear of said slide-shoe.

1,857,480. FURNACE. EMIL F. SCHONBERGER, Cleveland, Ohio, assignor to The Smokeless Furnace & Boiler Co. Inc., a Corporation of Ohio. Filed Oct. 7, 1929. Serial No. 397,883. 6 Claims. (Cl. 126—111.)



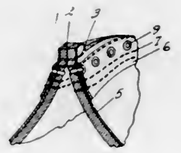
1. A furnace, including a cylindrical casing, a pair of spaced parallel walls separating said casing to provide opposite chambers and an air space therebetween, a fire box disposed in each chamber including superposed portions supported thereby in spaced relation to said casing, grates disposed in the bottom of the fire box and an ash pit therebelow, a flue opening disposed in the rear at the upper end of each chamber and ash pit, a stack conduit connecting the upper openings to said stack, downwardly extending tortuous conduits connecting each of the first mentioned conduits to the ash pit opening of the adjacent chamber, and dampers in each of said first mentioned conduits adapted to maintain the passage to the stack closed and the passage to the ash pit of the opposite chamber open or vice versa.

1,857,481. BRAKE MECHANISM. JOHN SNEED, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 15, 1928. Serial No. 261,761. 15 Claims. (Cl. 188—78.)



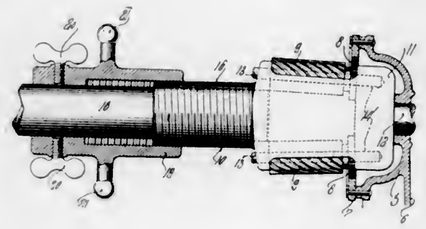
1. Shoe expanding mechanism for a brake, comprising a rotatable cylinder, a member pivotally and eccentrically mounted on said cylinder, a second member pivotally and concentrically mounted on said cylinder, each of said members having arms extending away from the cylinder and engaging the ends of the shoe, said members engaging each other whereby rotation of said cylinder spreads said arms.

1,857,482. GAME BALL LACED OPENING. WILLIAM A. SONNETT, Cincinnati, Ohio, assignor to The P. Goldsmith Sons Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 30, 1929. Serial No. 389,561. 1 Claim. (Cl. 273—65.)



A cover for a game ball having a laced opening with perforations extending through said cover for receiving the lacing, said cover comprising an outer cover composed of segments of leather, inner lining pieces of cloth and a reinforcing piece of thin flexible non-stretchable material, said cover segments, lining pieces and reinforcing piece being stitched together and having the perforations therein in alignment, and eyelets extending from the inner surface of the reinforcing piece through the perforations and into the inner surface of the outer cover segments.

1,857,483. TOOL. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 26, 1928. Serial No. 315,284. 2 Claims. (Cl. 90—12.)

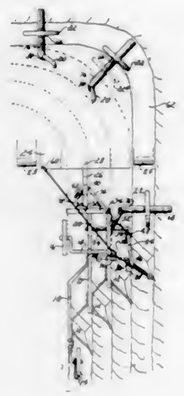


1. A portable tool for tapering the ends of conduit members at the time of installation, comprising a supporting member, a spindle rotatably mounted in the supporting member, cutting members carried by the spindle, an exteriorly threaded projection formed on the spindle providing a guide for receiving the end of the conduit member to be tapered, a sleeve threaded on said extension, means for clamping the conduit in the sleeve member, and means whereby the sleeve member may be restrained against rotation as the spindle is rotated to draw the sleeve and consequently the conduit toward the cutting members.

1,857,484. CORNER PLOW. CLARK EMIL STROBURG and GLEN ORTA STROBURG, Blockton, Iowa. Filed Apr. 6, 1931. Serial No. 528,088. 6 Claims. (Cl. 97—105.)

1. An improvement in corner plows of the type having a plow bottom held in elevated position during straight-away travel and adapted to be automatically lowered while

rounding a corner, said improvement consisting of a slidably mounted furrow wheel for the plow frame, arranged



in advance of the corner plow bottom, and capable of lateral sliding movement whereby it may remain in and follow a furrow throughout a turn of the plow.

1,857,485. PARACHUTE. IGNACIO M. TINTORÉ, San Francisco, Calif. Filed Apr. 27, 1931. Serial No. 533,108. 2 Claims. (Cl. 244—21.)



2. In a parachute having the usual sail and shrouds connecting the outer edges thereof with a harness, a spreader consisting essentially of a rigid ring-shaped member, said spreader being connected to the sail solely by shrouds secured to the sail at a point substantially midway between its center and outer edge.

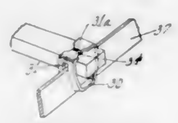
1,857,486. CENTRIFUGAL BLOWER. WILLIAM E. TRUMPLER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 8, 1931. Serial No. 535,838. 4 Claims. (Cl. 230—132.)

1. A multi-stage centrifugal blower including a plurality of impellers, diffuser chambers to receive the fluid from the impellers, a diaphragm between adjacent impellers, vanes on the diaphragm forming guideways to convey fluid from a diffuser chamber to a succeeding stage impeller,



and a wall forming a closure for one side of the guideways and having notches through which fluid flows to the inlet openings of the guideways.

1,857,487. SWITCH BLADE DEVICE. GEORGE B. WADSWORTH, Covington, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Original application filed Mar. 24, 1921, Serial No. 455,027, Patent No. 1,675,435, dated July 3, 1928. Divided and this application filed July 2, 1928. Serial No. 289,943. 6 Claims. (Cl. 200—166.)

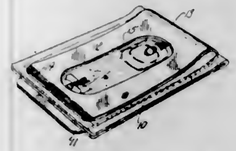


1. In an electrical switch, the combination with a bar of non-conductive material slotted transversely to receive the switch blade, and means for securing the blade to the bar comprising a metallic clip having portions to engage over the bar and the blade, and to engage two opposed faces of the blade on either side of the bar, and having portions to be turned over beneath the blade.

1,857,488. BILL CLIP. LEO WEEKS, Des Moines, Iowa. Filed Feb. 11, 1931. Serial No. 515,031. 1 Claim. (Cl. 24—259.)

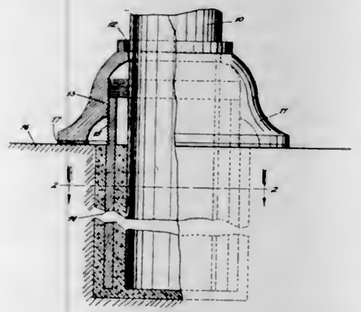
A bill clip comprising a strip of resilient material folded over on itself to form a spring connecting part and two opposing portions yieldably engaging each other for substantial parts of their lengths between their ends and adapted to resiliently grip and hold between them paper currency or the like without obstruction at the side edges, one of said portions projecting slightly beyond the other at their free ends, and the other of said portions being

turned slightly away from the first portion at its free end, the latter portion having an elongated hole through which



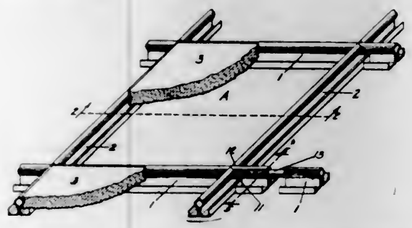
currency or the like held by the clip may be inspected or a thumb or finger may be inserted for manipulating the currency or for opening the clip.

1,857,489. METHOD OF AND APPARATUS FOR ANCHORING STANDARDS. FRED W. WEITZ, Des Moines, Iowa. Filed Mar. 16, 1931. Serial No. 523,143. 7 Claims. (Cl. 72—101.)



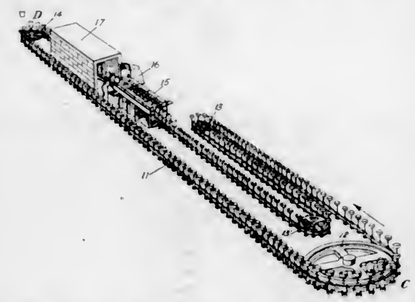
3. In a device of the class described, the combination of a standard, an anchoring sleeve surrounding and spaced apart from the lower end of the standard and screw threaded at its upper portion, and a flange loosely mounted on the standard and provided with a screw threaded portion to engage the screw threaded portion of the anchoring flange, the upper end of the flange being formed with a recess, and caulking in said recess engaging the standard, said caulking being formed of lead and being driven into position.

1,857,490. WALL SURFACE CONSTRUCTION. HERBERT J. R. BARRETT, Los Angeles, Calif. Filed July 14, 1930. Serial No. 467,753. 3 Claims. (Cl. 72—24.)



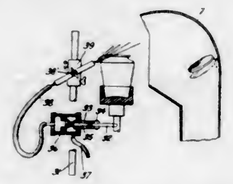
2. A wall surface construction comprising a plurality of frame members, certain of which extend transversely with respect to the others so as to provide a reticulate frame structure, sectional wall surface members shaped to fit in the spaces between said frame members and provided with inwardly extending recesses at their edges, said frame members extending between edges of adjacent wall surface members and having resilient portions so disposed as to project into said recesses in the wall surface members when said wall surface members are inserted therebetween, the resilience of said projecting portions enabling said portions to yield sufficiently to permit forcible insertion of said wall surface members between opposing members and into said position.

1,857,491. METHOD AND APPARATUS FOR COMPLETING PRESSED BLOWN WARE OR BLOWN WARE. ROBERT J. BEATTY, Columbus, Ohio, assignor to The Federal Glass Company, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 20, 1927. Serial No. 220,674. 5 Claims. (Cl. 49—50.)



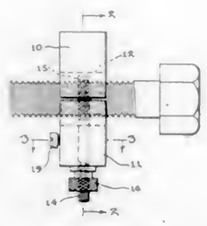
4. The method of removing excess material from glass blanks which comprises continuously conveying blanks with their caps uppermost past a crack-off station, rotating said blanks while passing said crack-off station, and effecting cracking off at said crack-off station by causing each blank at the line at which cracking off is desired to contact in turn with each of a series of opposed parallel pairs of pin points of flame which are arranged along the line of travel of said blanks and spaced so as to cause an alternate heating and cooling of the blanks along the cracking off line while said blanks are both rotating and travelling through said crack-off station.

1,857,492. METHOD AND APPARATUS FOR COMPLETING PRESSED BLOWN WARE OR BLOWN WARE. ROBERT J. BEATTY, Columbus, Ohio, assignor to The Federal Glass Company, Columbus, Ohio, a Corporation of Ohio. Original application filed Sept. 20, 1927, Serial No. 220,674. Divided and this application filed Nov. 21, 1927. Serial No. 234,782. 18 Claims. (Cl. 49—5.)



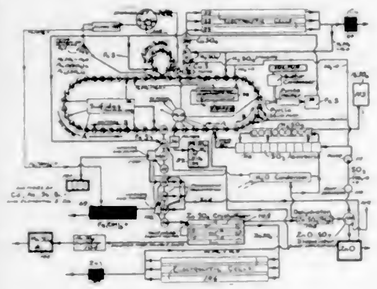
18. Apparatus for removing excess material from glass blanks comprising an endless conveyor, a series of blank supporting members on said conveyor, means for impinging each one of a series of pin points of flame upon each blank at the line at which cracking off is desired as they are transported by said conveyor, said pin points of flame being spaced so as to effect an alternate heating and cooling of the blank along the cracking off line, means for rotating said blanks as they are transported under subjection to the said series of spaced pin points of flame, means for blowing off the cracked-off portion from said blanks as they are carried onwardly by said conveyor, and means for finishing the edges of said blanks by applying flames thereto while the blanks continue in their course of travel.

1,857,493. THREAD CHASER. WILLIAM T. D. CAMPAIGNE, Spooner, Wis. Filed Feb. 28, 1929. Serial No. 343,389. 1 Claim. (Cl. 10—101.)



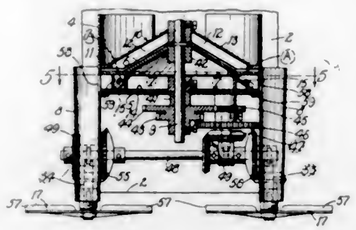
A thread chaser consisting of a pair of blocks, studs carried in the edge of one block and extending through holes in the other to bring the two into edge facing position, each block being recessed on its face contacting with the other to provide a polygonal opening existing half in one and half in the other, nuts engaged with the studs and bearing on the block having sliding engagement with the studs, and a cutter carried by the latter block and invading the opening defined by the two, the cutter being cross-sectionally polygonal and extending through a correspondingly shaped slot formed in the block by which it is carried, and a set screw threadingly engaged with said block and bearing upon the cutter to maintain the adjustment of the latter, the stud-carrying block bearing on the work but the cutter-carrying block being held by the cutter out of contact with the work until the full depth of cut is accomplished by the repeated adjustment of said nuts.

1,857,494. METHOD AND MEANS FOR TREATING SULPHIDE ORES AND THE PRODUCTION OF SULPHURIC ACID THEREBY. GEORGE CAMPBELL CARSON, Los Angeles, Calif. Filed Oct. 6, 1925. Serial No. 60,840. 25 Claims. (Cl. 23—125.)



7. The method of separating the metal values contained in mixed sulphide ores which comprises maintaining a flowing stream of acidulated sulphating agent in liquid form with the acid strength in the stream increasing in the up-stream direction, introducing the mixed sulphides in comminuted condition into said stream, discharging into said stream jets of acid-forming agents in such manner as to cause the sulphides in the stream to move in a direction which is counter to the directional flow of the liquid, oxidizing the various sulphides when they reach the respective parts of the stream where the acid strength is sufficient to attack them, thus to convert the sulphides into the corresponding sulphates, and dissolving the sulphates in the stream at the points therein where the respective sulphates were thus formed.

1,857,495. DISTRIBUTOR. STEPHEN CHASE, Dunedin, Fla., assignor to Stephen Chase, jr., Hamilton, Ohio. Filed Apr. 8, 1929. Serial No. 353,525. 17 Claims. (Cl. 221—120.)



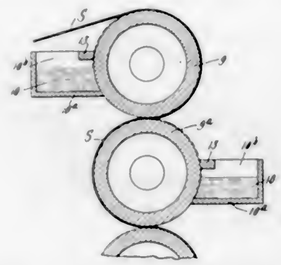
1. A distributor comprising a hopper, at least one sideward chute on the hopper and communicating therewith, a rotating material support therein, a false bottom for the hopper located above said material support so as to form a peripheral tunnel having moving bottom and inner walls, means for delivering material into said tunnel to move therein, at least one diverter within the tunnel on the receding side of the chute for diverting material thereto, the relation between the dimension of said tunnel and said delivery means being such as to substantially fill, with said material, that portion of the tunnel between said delivery means and said diverter.

1,857,496. PAPER ARTICLE AND METHOD OF MAKING THE SAME. ALBERT L. CLAPP, Danvers, Mass. Filed July 16, 1926, Serial No. 123,023. Renewed Nov. 9, 1931. 7 Claims. (Cl. 18—47.5.)

3. A method which comprises treating an asbestos-cellulose paper with a solution of sodium silicate, sprinkling a finely divided, inorganic filler capable of reacting with the sodium silicate onto the surface of the paper, and moulding the paper under pressure at an elevated temperature into an article of the desired shape.

5. An article comprising interfelted fibrous material permeated with a hardening composition comprising asbestos and sodium silicate, having a smooth, hard surface filled with the reaction product of a fine, inorganic filling material and sodium silicate.

1,857,497. METHOD OF SURFACE FINISHING PAPER OR FIBER BOARD AND PRODUCT OF SAME. ALBERT L. CLAPP, Danvers, Mass. Filed Feb. 14, 1927. Serial No. 168,224. 12 Claims. (Cl. 92—40.)



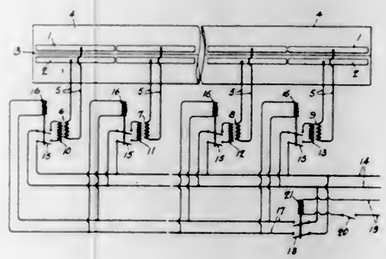
1. A process of treating unsized paper after drying while in the course of its manufacture, which comprises applying an aqueous solution of a glaze-imparting sizing to the surface of the paper, and immediately calendering the same.

12. A calendered paper filled with lime and asbestos, sized only at its surface portion with the reaction product of sodium silicate solution and with lime and asbestos, said paper having the characteristics of said sodium silicate solution having been applied to the surface of the paper immediately before calendering.

1,857,498. TREATMENT OF PULP ARTICLES AND MATERIAL THEREFOR. ALBERT L. CLAPP, Danvers, Mass. Filed Sept. 27, 1928. Serial No. 308,881. 7 Claims. (Cl. 91—70.)

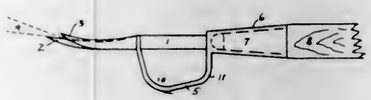
1. A method which comprises impregnating throughout pre-moulded cellulose pulp articles with a sodium silicate solution containing kieselguhr in suspension therein, and heat-drying the articles at temperatures insufficiently high to decompose the pulp.

1,857,499. CONTROL FOR ELECTRICAL WELDING CURRENTS. WILLIAM E. CRAWFORD, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Jan. 28, 1929. Serial No. 335,700. 6 Claims. (Cl. 219—4.)



1. In an electrical welding machine, an apparatus for controlling the welding current which comprises a plurality of transformers arranged in parallel and having high impedance values, means to distribute the current from said transformers to separate portions of the seam to be welded, and means for individually controlling the delivery of current through said transformers substantially simultaneously.

1,857,500. WEED PULLER. ALEXANDER DAVISON, Valley Stream, N. Y., assignor of three-tenths to The Inventions Exploitation Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 1, 1930. Serial No. 472,306. 4 Claims. (Cl. 254—132.)

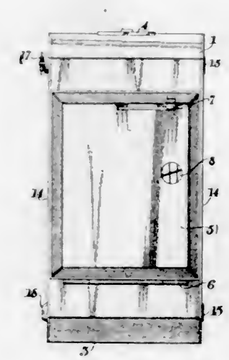


1. A weed puller, comprising a handle, and a fork attached to said handle and having a plurality of tines, one of said tines being longer than the adjacent tine and curved upwardly, the adjacent tine being also curved upwardly but more sharply toward its point so that a transverse plane across the top of the central tine and a transverse plane across the bottom of the adjacent tine form a relatively sharp acute angle.

1,857,501. LUBRICANT. GEORGE F. GALLAGHER, Albany, N. Y. Filed Sept. 19, 1928. Serial No. 307,059. 4 Claims. (Cl. 87—9.)

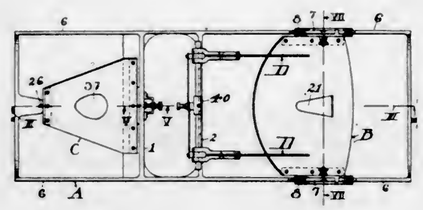
1. A lubricant containing, by volume, 27% to 32% of heavy lubricating oil, 0.25% to 1% of amyl acetate, from 2% to 2.5% of a vegetable oil selected from the group, olive oil and cottonseed oil, and the balance principally kerosene.

1,857,502. BODY CONSTRUCTION FOR CAMERAS. CARL C. FUERST and JOHN CHRISTIE, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 14, 1930. Serial No. 488,580. 9 Claims. (Cl. 95—32.)



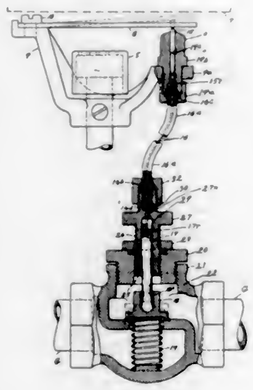
1. In a camera body construction, the combination with a front body portion, a removable body portion and a hinge connection therebetween, of a side plate attached to the side of one body portion and adapted to make surface contact with the side of the other body portion, whereby the camera body is provided with a light seal.

1,857,503. COMBINED SINUS AND MASTOID HEAD-REST. DAVID M. GHRIST, Glendale, Calif. Filed July 30, 1928. Serial No. 296,265. 10 Claims. (Cl. 250—34.)



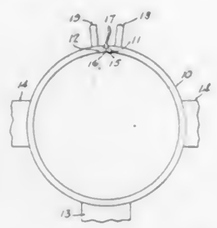
3. In a head rest comprising a frame, a panel mounted transversely of said frame adapted to support the head of a person face downward, a second panel mounted longitudinally of said frame and adapted to support the head of a person in a sideways position, and means mounted on said frame adapted to cooperate with either of said panels for holding the head of a person in a substantially fixed position.

1,857,504. THERMOSTATIC CONTROL FOR BURNERS. AUGUST J. HARTFIELD and MAX KOEHLER, Huntington Park, Calif. Filed Apr. 16, 1930. Serial No. 444,744. 2 Claims. (Cl. 158—117.1.)



1. In a device of the class described, a driving element, a thermostatic element independent of and contacting said driving element and operable when heated to move said driving element in one direction, a flexible resilient connection independent of and continually impinging upon said driving member, a guide for said flexible member, a valve movable in one direction by pressure from said flexible member, and a spring tending to move said valve in the opposite direction.

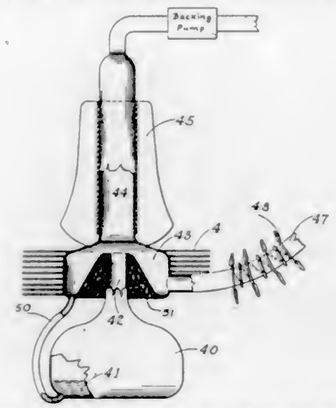
1,857,505. METHOD OF BUTT WELDING BY MEANS OF A FLASHING ELECTRIC ARC. WARREN F. HEINEMAN, Shorewood, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Mar. 21, 1928. Serial No. 263,328. 6 Claims. (Cl. 219—10.)



1. The method of electrically welding abutting edges together, which consists in reducing the thickness of the abutting edges by providing a recess in the surface extending across their meeting line, passing an electrical current through the edges until a gap is produced therebetween, and pressing the edges heated by the current together to effect their coalescence on a line for their full length.

1,857,506. VACUUM PUMP. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 19, 1929. Serial No. 341,105. 7 Claims. (Cl. 230—101.)

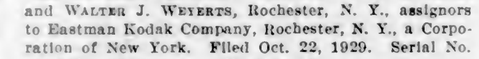
1. A vacuum pump comprising means for producing a stream of vapor, a condensing tube, a jet through which said stream of vapor flows to said condensing tube, a bulb connecting said jet and said tube, a conduit communi-



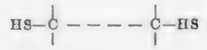
cating with the receptacle to be exhausted and with said bulb, and separate heat dissipating means for the condensing tube and for the bulb.

1,857,507. PROCESS FOR THE SEPARATION OF SILVER BY ELECTROLYSIS. KENNETH C. D. HICKMAN and WALTER J. WEYERTS, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 22, 1929. Serial No. 401,610. 35 Claims. (Cl. 204—16.)

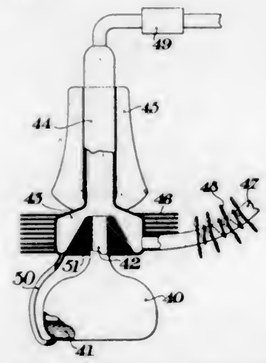
1. A process for the deposition of silver which comprises electrolyzing a thiosulfate solution containing silver and an activator which includes in its chemical formula one of the groupings:



and

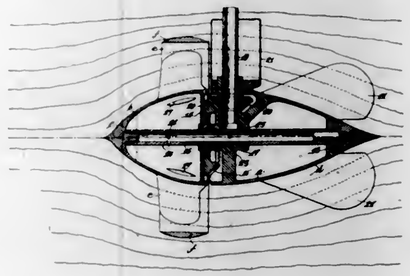


1,857,508. METHOD OF EVACUATING. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 4, 1931. Serial No. 527,714. 12 Claims. (Cl. 230—101.)



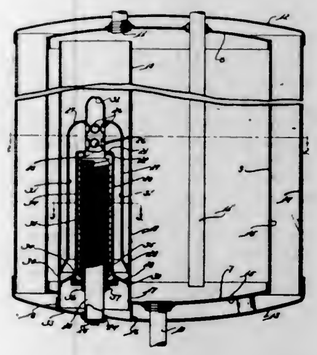
1. The method of evacuating a closed receptacle to obtain a high vacuum therein which comprises removing a portion of the entrained gases in the vessel to be evacuated by means of a current of phthalic acid ester vapors.

1,857,509. PROPELLER OR TURBINE FOR WATER, AIR, AND GASES. AXEL HOLMSTROM, Monte Carlo, Monaco. Filed Apr. 8, 1929, Serial No. 353,407, and in Germany Oct. 12, 1928. 7 Claims. (Cl. 170—172.)



1. A propeller in combination with a stream-line core at the propeller axis, the front part of the core being rotatable with the propeller and the rear part fixed and a circumferential guide around the outside of the propeller.

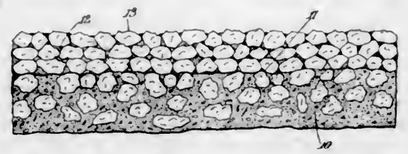
1,857,510. ELECTRIC HEATER. LOUIS B. HYDE, Detroit, Mich. Filed Oct. 12, 1929. Serial No. 399,211. 2 Claims. (Cl. 219—38.)



1. A hot water heater of the class described, comprising: a water tank; a tube positioned in said tank in communication therewith and terminating at its upper end adjacent the top of said tank; a tube extending inwardly of said tank and centrally of said first mentioned tube and having an outlet opening at its inner end of less area than its cross sectional area; a heating element embracing said second mentioned tubular member and positioned inwardly of said tank; means embracing said heating element for sealing the same from communication with the interior of said tank; and means embracing said sealing means to provide a water receiving space, said second mentioned tubular member having perforations communicating with said space and said first mentioned tubular member having openings communicating with said space.

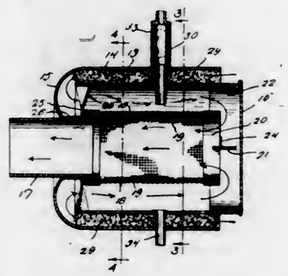
1,857,511. TOP SURFACE OF CONCRETE AND THE LIKE AND METHOD OF FORMING THE SAME. NATHAN C. JOHNSON, Englewood, N. J. Filed Aug. 24, 1928. Serial No. 301,882. 5 Claims. (Cl. 94—24.)

1. The method of forming a monolithic body of concrete for bearing traffic, which comprises pouring a body of concrete and superimposing upon the same a layer of concrete embodying a relatively higher percentage of stone



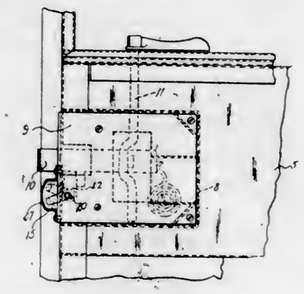
aggregate, and treating the upper surface of said layer with a material for delaying the setting of the concrete which when removed will reveal the aggregate.

1,857,512. AIR CLEANING AND MOISTENING DEVICE. RALPH D. MATTESON, Boise, Idaho. Filed Nov. 18, 1930. Serial No. 496,476. 5 Claims. (Cl. 183—19.)



1. An air cleaning and moistening device for motors comprising spaced inner and outer horizontal tubular casings, said outer casing being open at one end, a closure for the adjacent end of the inner casing, whereby air enters the device through the space between said casings, a tubular liquid absorbent element located axially of and within the inner casing and through which the air passes in leaving the device, means including a water supply pipe discharging onto the top of the absorbent element for maintaining said element in a moistened condition, and an axial coupling sleeve extending from the other end of the outer casing for association with the carbureter of the motor.

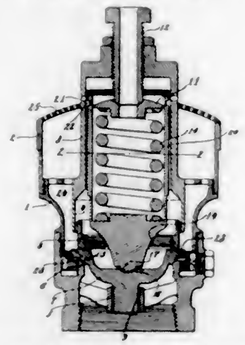
1,857,513. DOOR LATCH. MARVIN W. MOESTA, Detroit, Mich., assignor to Murray Body Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 7, 1925. Serial No. 41,987. 11 Claims. (Cl. 292—139.)



1. In a latch, the combination with a latching bolt, a roll-back for actuating the bolt and an operating handle, of a one-piece link operatively connecting the roll-back

and handle including a transversely extending base, arms formed integral with said base at each end thereof, one of said arms directly connected to the handle and the other of said arms directly connected to the roll-back, said link being rotatable on the axis of the handle.

1,857,514. LOCOMOTIVE SAFETY VALVE. BARTHOLOMEW J. MORRISON, Baltimore, Md., assignor to The Coale Muffler & Safety Valve Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 17, 1929. Serial No. 414,657. 1 Claim. (Cl. 137—53.)

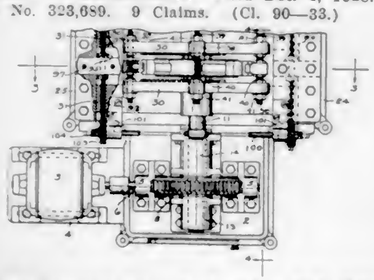


The combination in a locomotive safety valve of a valve member having a top guide forming a cup, a valve spring, a top abutment for the valve spring, a bottom abutment for the spring in the form of a spring button bearing on the valve near the center of the cup, said spring button having upright cylindrical walls forming a spring casing, enclosing and protecting the spring, the valve structure comprising a correspondingly cylindrical spring chamber in which said casing slides freely, said chamber having release openings near the top and the casing having corresponding grooves to impound the water and conduct it to said release openings.

1,857,515. PHOTOGRAPHIC DEVELOPER FOR USE AT HIGH TEMPERATURES. LOWELL E. MUEHLER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 427,944. 6 Claims. (Cl. 95—88.)

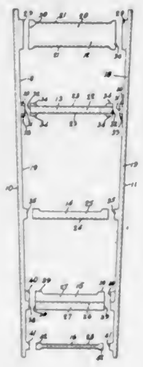
1. A photographic developer substantially free from fogging effects when used at high temperatures including formalin and a halogen substituted hydroquinone.

1,857,516. ROTARY BROACHING MACHINE. JOHN OAKLEY, Springfield, Mass., assignor to Perkins Machine and Gear Company, Springfield, Mass., a Corporation of Massachusetts. Filed Dec. 4, 1928. Serial No. 323,689. 9 Claims. (Cl. 90—33.)



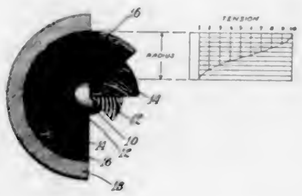
9. In a broaching machine, a rotary work carrier, a driving shaft therefor, a pair of frames positioned in a surrounding relation to said shaft on opposite sides of said carrier and movable along the axis of said shaft, adjustable means inter-connecting said frames and arranged to lock the frames in a definite spaced relation to each other, and a tool holding member carried by said means between said frames and adjustable relative to said frames to position the tool parallel to the axis of the carrier.

1,857,517. METHOD OF RESISTANCE WELDING AUTOMOTIVE VEHICLE FRAMES. WALTER E. RICHTER, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed June 11, 1928. Serial No. 284,646. 5 Claims. (Cl. 219—10.)



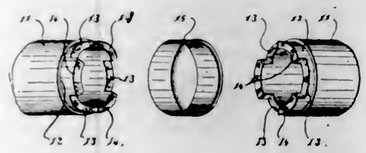
5. The method of making an automobile frame of accurate dimensions from side bars and cross members, that comprises the steps of disposing a plurality of cross members in predetermined spaced relation, disposing a pair of side bars in contact with the ends of the cross members in predetermined longitudinal positions, passing electric currents through the points of contact of the side bars with the cross members to heat the contact points to welding temperature, and advancing the side bars simultaneously to a predetermined relative transverse position to weld them to the cross members and to form a frame of accurate dimensions.

1,857,518. GOLF BALL. CHARLES R. SIBLEY, Lake Mary, Fla., assignor to Sibley-Pym Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed Feb. 3, 1930. Serial No. 425,401. 4 Claims. (Cl. 273—62.)



1. A golf ball comprising a soft rubber center, a core consisting of rubber thread wound upon the center under low tension and increasing continuously and without abrupt change in its tension as the diameter of the core increases, first at a relatively slow rate, then at an accelerated rate, then finally again at a reduced rate to a maximum tension at its outer surface, and an enclosing shell for said core.

1,857,519. METHOD OF SPLICING PAPER CORES, TUBES, AND THE LIKE. RICHARD SPRY, Port Alfred, Quebec, Canada. Filed Apr. 26, 1930. Serial No. 447,619. 5 Claims. (Cl. 93—94.)

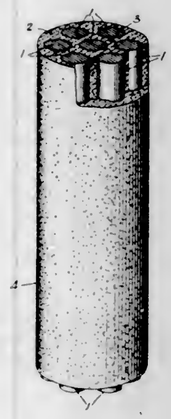


1. The method of splicing paper cores, tubes and the like including preparing opposed ends of core or tube sections for interlocking engagement; and applying a band over said ends.

1,857,520. PURIFICATION OF SODIUM ACETATE. HERBERT G. STONE, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed July 2, 1928. Serial No. 290,053. 6 Claims. (Cl. 260—122.)

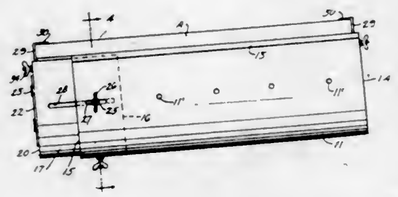
6. In the process of purifying crude sodium acetate, the step which comprises subjecting dried sodium acetate containing empyreumatic impurities to a temperature above 200° C. but below the fusion point of the sodium acetate in an atmosphere free from reactive gases until the empyreumatic impurities contained therein are charred.

1,857,521. METALLIC ARC WELDING ELECTRODE. RICHARD STRESAU, Wauwatosa, and JOHN J. CHYLE, Milwaukee, Wis., assignors to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed May 31, 1930. Serial No. 457,850. 6 Claims. (Cl. 219—8.)



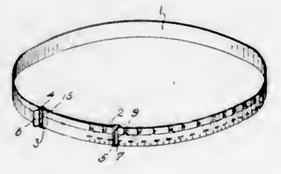
1. A composite electrode for arc welding comprising, in combination, a plurality of metallic rods, a binder possessing insulating properties carrying the rods in spaced relation, said binder being subject to decomposition by the heat generated by the arc and capable of giving a residue which electrically connects the ends of the rods being fused to facilitate the transfer of the arc from one rod to another, and means for delivering current to the metallic rods at the end of the electrode opposite from the arc.

1,857,522. CONTAINER FOR TABLES. ERNEST W. UNGEHEUER, Dallas, Tex. Filed Mar. 16, 1931. Serial No. 522,901. 5 Claims. (Cl. 45—75.)



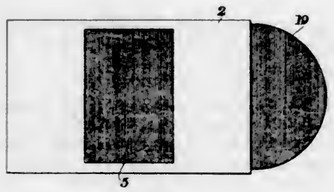
1. In a container for tables, an elongated container including adjustable sections, whereby said container may be varied as to length, and adjustable attaching means for securing said container to the edges of a table, said attaching means being detachable.

1,857,523. FILM HOLDING STRAP. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 3, 1929. Serial No. 390,144. 2 Claims. (Cl. 33—179.)



1. In a film coil holder, the combination of a substantially circular strap having overlapping ends, with means for varying the overlap of the strap ends including two loops, one attached to one end of the strap and the other attached to the other end of the strap, each loop providing a passageway for the strap, and a handle extending radially from each loop, one loop having a fixed opening through which the strap may slide freely, and the other strap being split forming two arms adapted to press upon said strap and to form a tensioning means permitting the strap to frictionally slide through the split loop when said handles are moved relative to each other to vary the size of the film coil holder.

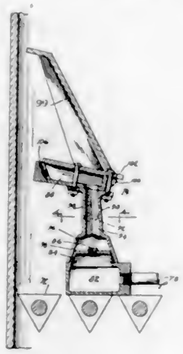
1,857,524. FILM PACK. DONALD L. WOOD, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 29, 1930. Serial No. 498,995. 16 Claims. (Cl. 95—22.)



1. A photographic film pack comprising a casing provided with an exposure aperture, a septum within said casing, a film magazine integral with said septum, a

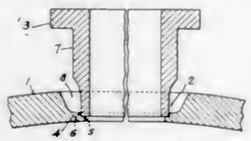
continuous film strip for a plurality of exposures in said film magazine, and opaque strip material extending from said film strip around said septum in a serpentine path through said casing.

1,857,525. GAS BURNING APPARATUS. WILLIAM AUSTIN BECKETT, Kingsville, Ontario, Canada. Filed Mar. 24, 1930. Serial No. 438,379. 7 Claims. (Cl. 158—7.)



6. A gas burner comprising, in combination, a manifold having an inlet and a crown portion provided with a plurality of outlets, a mixing chamber supported above said manifold by complementary vertically grooved plates secured together and forming tubular passageways leading from the outlets of the manifold into the mixing chamber, said plates seated upon said manifold upon opposite sides of the crown to support the mixing chamber thereabove.

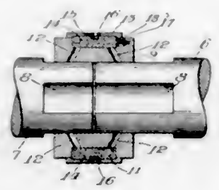
1,857,526. METHOD OF ELECTRIC WELDING PRESSURE VESSELS. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,387. 4 Claims. (Cl. 219—10.)



1. The process of welding a tubular connector to a thick walled vessel having an opening, comprising chamfering the wall defining the opening to provide a welding groove and a shoulder for receiving and centering the connector, shaping the wall of the connector to seat on the shoulder, mounting the connector on the shoulder to center it and complete the welding groove, and welding from both sides of the vessel wall to fuse the shoulder and lower edge of the connector together and deposit weld metal uniting the connector and vessel wall.

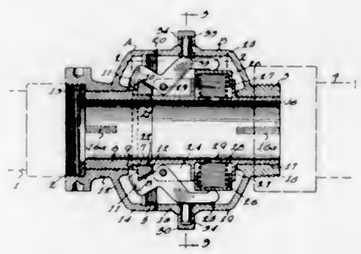
1,857,527. MEANS FOR LUBRICATING CONNECTERS. BENJAMIN S. BURRELL, East Chicago, Ind. Original application filed Apr. 14, 1928, Serial No. 270,070. Divided and this application filed Feb. 11, 1931. Serial No. 515,089. 4 Claims. (Cl. 64—91.)

1. In combination, a rotatable drive member, a rotatable member to be driven thereby, and a rotatable coupler member encircling at its ends the ends of the others of said members and having loose driving connection with each thereof thereby providing a driving connection between said first and second-named members, said rotatable coupler member containing an endless lubricant chamber surrounding the opening in said coupler member and



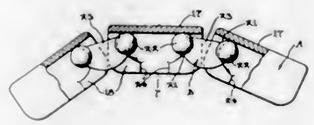
communicating with the interior of said coupler member for supplying lubricant to the driving and driven surfaces of said members.

1,857,528. COUPLING. JOHN F. CANTELL, San Francisco, Calif. Filed Nov. 13, 1931. Serial No. 574,807. 9 Claims. (Cl. 285—173.)



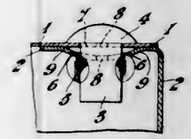
1. A coupling comprising two separable parts, one part having a tubular portion with a conical-shaped head, and a casing spaced from the head; and the other part having a tubular portion designed to make a liquid-tight connection with the first tubular portion, catches pivotally carried by the second part and engageable with the base of the cone head, pistons actuated by the pressure of the fluid in the tubular portions for urging the catches into locked position, and a casing cooperating with the first casing for forming a housing to enclose the operating elements.

1,857,529. CONVEYER CHAIN. WILLIAM R. COPPAGE, Cherrydale, Va. Filed Mar. 23, 1931. Serial No. 524,699. 3 Claims. (Cl. 198—180.)



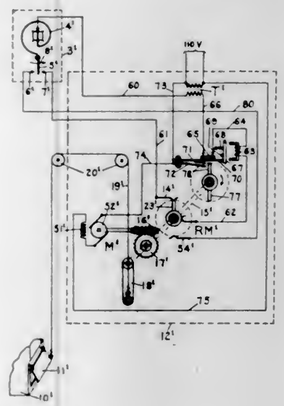
1. A conveyer chain comprising first and second links, each of the first links being of channel shape lengthwise and having side walls, said walls forming pockets in the end portions of each link, each of the second links including balls engaging a pair of pockets of adjacent first links, and a web joining the balls, the ends of the walls of each of the first links forming flaring mouths through which the webs extend, each of said webs and each mouth being shaped to prevent rotation of the links relatively to one another lengthwise of the chain.

1,857,530. MEANS FOR THE FASTENING TOGETHER OF PLATES OR SHEETS. GEORGE FRANCIS JOHN DANDRIDGE, Bedford, and GEORGE AUGUSTUS MOWER, London, England. Filed Aug. 8, 1929, Serial No. 384,401, and in Great Britain Oct. 1, 1928. 1 Claim. (Cl. 85—5.)



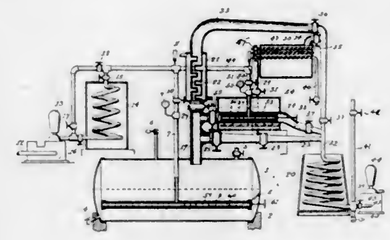
Means for fastening plates together comprising a removable rivet like device formed with a head and having diametrically opposed lateral projections punched out of its shank at a given distance from said head, adapted to co-operate with over-lapping plates having registering holes for giving access to said rivet like device and its projections, and depressions on the outer surface of a convexity pressed out of the inner one of the plates at an angle to the shaped enlargements whereby upon the bolt being passed through the registering holes and enlargements in the plates and then rotated, the projections lock with the depressions and the bolt is retained in position to clamp the plates together by the resilience produced by the convexity of the plate.

1,857,531. FURNACE REGULATOR. OSCAR H. DICKE, Rochester, N. Y., assignor to Pioneer Heat Regulator Corporation, a Corporation of New Jersey. Filed Mar. 20, 1929. Serial No. 348,650. 12 Claims. (Cl. 236—78.)



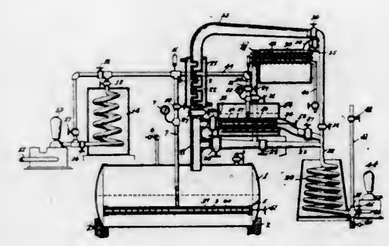
1. In a temperature regulating device, the combination with a shaft, of a crank on said shaft, heat control means operated by said crank, a motor for driving said shaft, a relay for controlling said motor which if operated to its active condition applies current to said motor, said relay including two spring fingers biased toward each other and holding means for holding one finger away from the other finger, and means operated by said motor for moving both of said fingers in a position so that said one finger may be held by said holding means and then disengaging said other finger and allowing it to be operated quickly to its biased normal position where it is out of engagement with said one finger.

1,857,532. APPARATUS FOR TREATING HYDROCARBONS AND THE LIKE. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Nov. 18, 1914, Serial No. 872,698. Divided and this application filed Oct. 16, 1920. Serial No. 417,310. Renewed Aug. 18, 1930. 3 Claims. (Cl. 196—99.)



2. In an apparatus for cracking petroleum oil, the combination with a still, means for heating a body of oil in the still, a plurality of fractional condensers, connections between said still and said fractional condensers whereby either fractional condenser may be placed in communication with the still and reflux condensate returned to the still from one of said condensers, means for withdrawing condensate from the other condenser, a final condenser in communication with both of said fractional condensers and means for maintaining a superatmospheric pressure on the oil in said still.

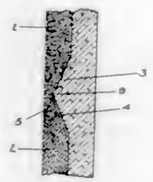
1,857,533. METHOD OF TREATING HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 445,669, filed Feb. 17, 1921. This application filed Mar. 3, 1927. Serial No. 172,536. 4 Claims. (Cl. 196—66.)



1. A process for cracking heavy hydrocarbon oil for the production of gasoline-like hydrocarbons which comprises introducing the oil to an initial heating zone and heating the same therein to a temperature sufficient to effect substantial vaporization of the oil, passing the evolved vapors to a super-heating zone to which no liquid oil from said initial heating zone is admitted, superheating a permanent hydrocarbon gas independently and exteriorly of said initial heating zone and said superheating zone, introducing the superheated gas directly and without previous passage thru said initial heating zone to said superheating zone and into physical contact with the vapors therein, superheating the vapors in said superheating zone to a temperature materially in excess of that maintained in said initial heating zone and in the

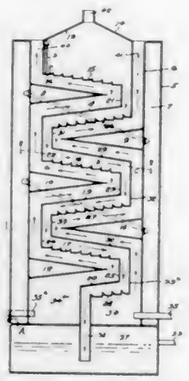
absence of liquid oil from said initial heating zone, removing the superheated vapors and said gas from said superheating zone and cooling the same sufficiently to condense said vapors out of the gas, and collecting the resultant distillate as the final product of the process.

1,857,534. BUILDING MATERIAL. GEORGE H. ELLIS, St. Paul, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Filed July 9, 1928. Serial No. 291,355. 9 Claims. (Cl. 72—31.)



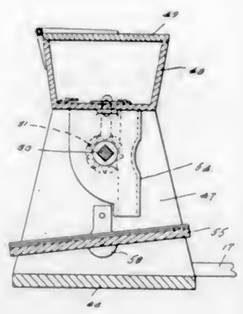
1. A board having one face marginally beveled to provide a knife edge disposed in the plane of the opposite face, and having its opposite margin double beveled to provide a knife edge lying at a point between the faces.

1,857,535. EVAPORATING APPARATUS. HAROLD H. ELLISTON, Independence, Kans. Filed May 16, 1930. Serial No. 452,946. 4 Claims. (Cl. 159—13.)



2. A device of the character described, comprising an inner compartment surrounded by a water jacket, a plurality of closed wedge shaped compartments projecting alternately in opposite directions from the opposite inner side walls of the water jacket and into said inner compartment, a pair of zig-zag webs, each shaped to form a plurality of riffle plates and plane portions connected by vertical runs, said webs lying in internested but spaced relation with respect to each other, and with respect to the faces of said closed chambers, the space between the confronting faces of the webs constituting a course of water travel, and the spaces between the respective webs and their associated closed chambers constituting courses of heat travel, and means for conducting a liquid to be vaporized to the water jacket, and means for conducting the said liquid from the said water jacket successively through the several closed chambers, and means for conducting said liquid from the last of said closed chambers to the uppermost of the riffle plates.

1,857,536. COMBINATION GRASS AND GRAIN PLANTER. JOSEPH F. FIALA, Solon, Iowa. Filed Feb. 19, 1930. Serial No. 429,644. 1 Claim. (Cl. 275—14.)



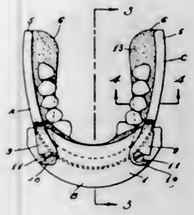
A seed dispensing mechanism comprising a wheeled support, a container for the seed, a discharge spout extending from the container, and an adjustable board from which the seed may be scattered disposed under the spout, said board being provided with trunnions, supporting members for the seed container having openings therein for receiving the trunnions, one of said trunnions being provided with threads, and a nut on the said threaded trunnion for engaging the adjacent prop whereby the board may be adjusted to any suitable inclination.

1,857,537. THIEVING TUBE. FREDERICK J. FRANK, Elizabeth, and FRANK J. SHOCK, Secaucus, N. J. Filed Feb. 5, 1931. Serial No. 513,721. 1 Claim. (Cl. 137—18.)



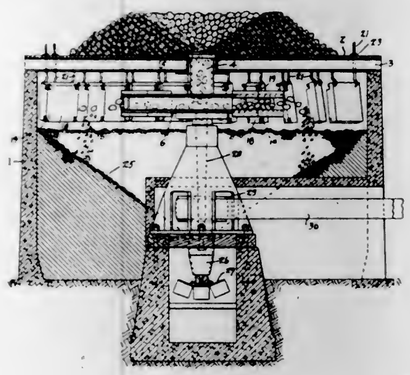
A thieving tube including a tubular body having a transparent portion, an open lower end and an apertured upper end, a sleeve fixedly connected to the upper end of the body, a rod slidable therein and projecting thereabove, and a valve at the lower end of the rod for engagement by the lower end of the body to close said end, said sleeve and rod each including detachably connected sections, there being cooperating means on one of the sections of the sleeve and one of the sections of the rod for locking the valve in sealing contact with the open end of the body or in spaced relation to said body.

1,857,538. DENTAL BRIDGE INVESTMENT SUPPORT. WILLIAM C. GOSSE, San Francisco, Calif. Filed June 15, 1931. Serial No. 544,554. 5 Claims. (Cl. 32—6.)



3. A dental bridge investment support comprising a central curved portion and side hinged portions, all of said portions having inwardly extending flanges.

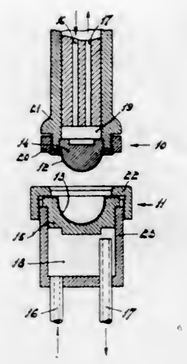
1,857,539. CENTRIFUGAL ROCK CRUSHER. ALVAH D. HADSEL, San Francisco, Calif. Filed Apr. 22, 1929, Serial No. 357,190. Renewed Mar. 15, 1932. 10 Claims. (Cl. 83—46.)



1. In a centrifugal rock crusher, a runner for receiving rocks centrally and for discharging them peripherally, said runner having substantially parallel side walls with pockets formed therein for holding a layer of rock that will prevent other rock from striking the walls, said pockets being formed by partitions and end walls.

1,857,540. DEVICE FOR MANUFACTURING HOLLOW GLASS BODIES BY MEANS OF PRESSING AND BLOWING. JAN JESAIJAS CHRISTIAAN HARDENBERG, Eindhoven, Netherlands, assignor to L. A. Nypels, The Hague, Netherlands. Filed May 7, 1928, Serial No. 275,813, and in the Netherlands Dec. 10, 1927. 4 Claims. (Cl. 49—72.)

1. A pressing device comprising a plunger and a former adapted for pressing glass to a preliminary shape, prior to its being blown, the parts of the said plunger and former which contact with the glass comprising a hood made of a metal of great heat conductivity, heat insulating material, with which the said hood contacts on its side remote from the glass, comprising the remainder of the plunger and former, the thickness of the metal hood being sufficiently great, dependent upon the mass and substance of the heat insulating material and the mass of the glass charge, to efficiently conduct away sufficient heat from the glass charge to maintain the surface temperature of the



glass charge substantially uniform, while maintaining the surface temperature of the plunger and former below the limit where wetting occurs.

1,857,541. ARYLATED AMINONAPHTHALENE DERIVATIVES. HEINRICH HEIMANN and PAUL VIRCK, Dessau in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1927, Serial No. 236,358, and in Germany Dec. 13, 1926. 10 Claims. (Cl. 260—128.)

3. The process which comprises treating a naphthalene compound of the general formula

$$C_{10}H_6Z_2$$

in which one Z represents the group —OH or —NH_2 and the other Z represents H, —OH or —NH_2 with an amino compound of the general formula

$$H_2N—C_6H_5—_nX_n,$$

wherein n means 1 or 2, and wherein one X means —OH and the other X may be H, methyl, or a carboxylic acid group, while agitating in the presence of an aqueous solution of a bisulfite salt at a temperature between about 100° C. and about 145° C.

1,857,542. AMINO ARYLATED AMINO NAPHTHALENE DERIVATIVES. HEINRICH HEIMANN and PAUL VIRCK, Dessau in Anhalt, Germany, assignors to General Analine Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 15, 1929, Serial No. 407,564, and in Germany Dec. 13, 1926. 8 Claims. (Cl. 260—128.)

1. The process which comprises treating, while agitating, in the presence of an aqueous solution of a bisulfite salt at a temperature between 100° and 150° C. a naphthalene compound of the general formula

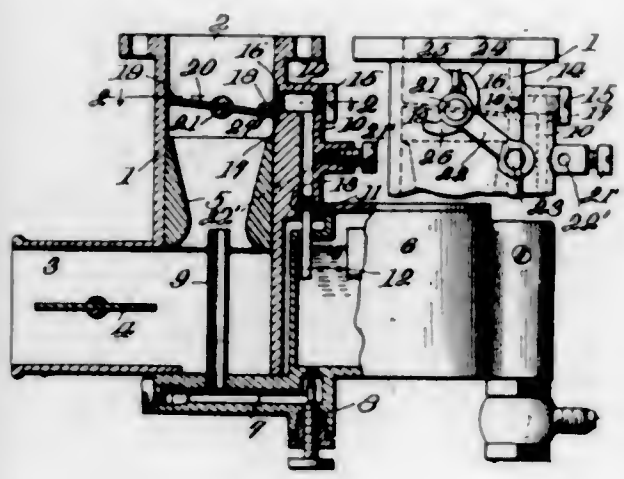
$$C_{10}H_8Y_2,$$

in which at least one Y represents the group —OH or —NH_2 and the other Y's represent H or halogen, with a diamino compound of the general formula

$$H_2N—C_6H_{4-n}X_n—N\begin{matrix}R\\R'\end{matrix},$$

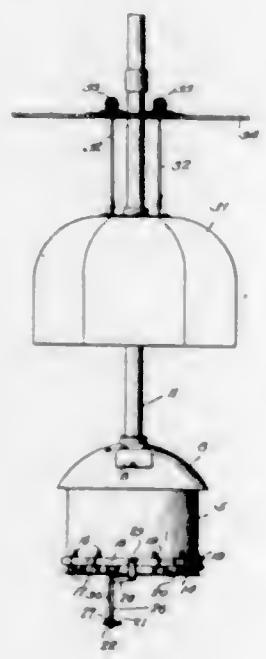
wherein X means H, halogen, alkyl, —COOH, —SO_3H, wherein n stands for 0, 1 or 2 and wherein R and R' represent H, alkyl, or phenyl which may be substituted by halogen, alkyl, —OH, —COOH, or —SO_3H.

1,857,543. CARBURETOR. FRANK H. HEITGER, Flint, Mich. Filed July 28, 1928. Serial No. 296,004. 1 Claim. (Cl. 261—41.)



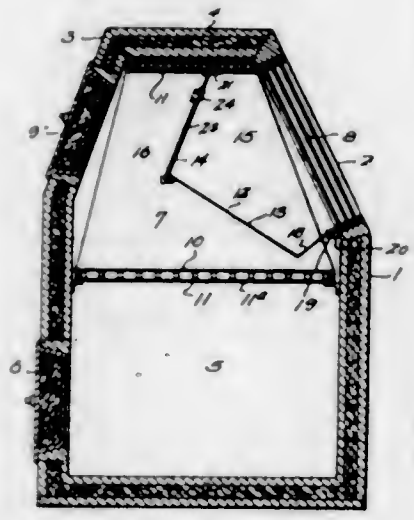
The combination with a carburetor, of a carbureting passage having an air inlet and a main fuel feed discharging into said passage, an auxiliary fuel passage having a communiction with the carbureting passage, a throttle valve mounted in the outlet and having its shaft arranged in substantially the same horizontal plane with the outlet of the auxiliary fuel passage to move into closed position on the communicating side in the direction of travel of the fuel and air passing through said carbureting passage, said throttle valve having means for varying the communication of said auxiliary passage.

1,857,544. BROODER STOVE. JOHN HENDERSON, Cadillac, Mich. Filed Apr. 28, 1930. Serial No. 448,101. 2 Claims. (Cl. 236—6.)



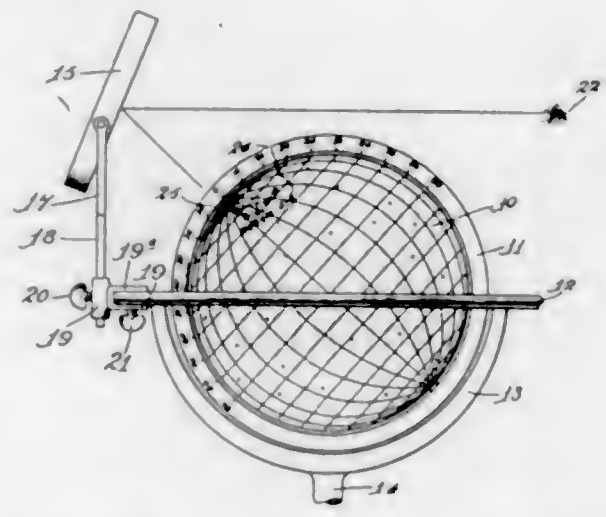
1. A device of the class described, a body portion having a combustion chamber and having openings establishing communication between the combustion chamber and atmosphere, brackets secured to the outer surface of the body portion, upper and lower extensions forming a part of the brackets, a band surrounding the body portion and operating between the extensions of the brackets to guide the band in its movements, closures carried by the band and adapted to move over the openings to regulate the passage of air through the openings, and thermostatically controlled means for operating the band.

1,857,545. REFRIGERATOR SHOW CASE. CLEMENT V. HILL, Trenton, N. J., assignor to C. V. Hill & Co., Inc., Trenton, N. J., a Corporation of New Jersey. Filed Oct. 9, 1930. Serial No. 487,579. 13 Claims. (Cl. 62—89.5.)



1. A refrigerator show case having a refrigerating chamber provided with a display panel and a door, a jacketed refrigerating coil in said chamber in the form of a loop bounding the top and bottom of the chamber and sides of the chamber except those in which the panel and door are arranged, and a baffle partition disposed in said chamber between the door and panel and separating the same into storage and display compartments.

1,857,546. CELESTIAL GLOBE. MARCUS A. HIRSCHL, Chicago, Ill. Filed May 7, 1931. Serial No. 535,756. 6 Claims. (Cl. 35—5.)



1. A celestial globe having constellations shown thereon as if seen from outside the celestial sphere; a mounting for said globe; and a mirror supported from the mounting in a position to allow the image of a portion of the globe to be seen in the mirror, whereby constellations shown on said portion of the globe may be seen in the mirror as if looked at from inside the celestial sphere.

1,857,547. CHROMIUM PLATING. CHAD H. HUMPHRIES, Indianapolis, Ind., assignor to Metals Protection Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Nov. 25, 1927. Serial No. 235,757. 2 Claims. (Cl. 204—1.)

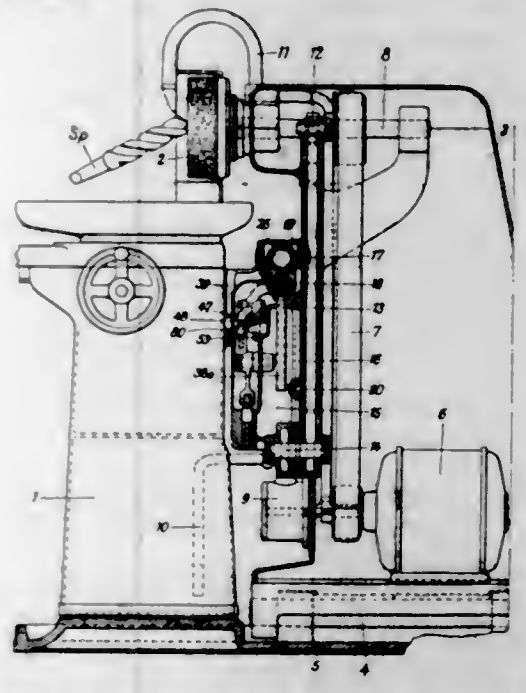
1. In plating chromium from CrO_3 plating baths containing small amounts of Cr_2O_3 and SO_3 in which it is desirable to maintain the SO_3 content between a fixed minimum and a fixed maximum, the process of replenishing and maintaining the bath which comprises adding thereto from time to time commercial chromic acid containing va-

riable amounts of SO_3 as an impurity and also adding solid barium chromate to the bath from time to time in amounts sufficient to maintain the SO_3 between the desired minimum and maximum content in solution in the bath.

1,857,548. TECHNICALLY PURE CrO_3. CHAD H. HUMPHRIES, Indianapolis, Ind., assignor to Metals Protection Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 3, 1928. Serial No. 258,993. 4 Claims. (Cl. 204—1.)

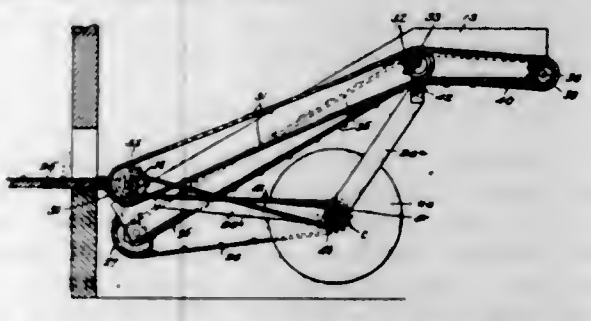
1. As a new composition of matter for making substantially purse solutions of CrO_3 on addition of water, a dry mixture of crude CrO_3 containing SO_4'' ion as an impurity and a reactive barium compound, said barium compound being present in an amount corresponding to the amount of SO_4'' present.

1,857,549. GRINDING MACHINE. VIKTOR JERECZEK, Berlin-Steglitz, Germany. Filed Feb. 27, 1930, Serial No. 431,886, and in Germany Feb. 27, 1929. 6 Claims. (Cl. 51—55.)



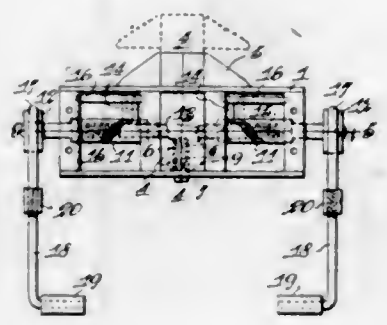
1. A grinding machine comprising a long hollow arm pivoted on the base of the machine, a grinding wheel mounted on said arm, a driving motor, a transmission between said motor and grinding wheel, a pump mounted upon said arm driven from said motor, an hydraulic mechanism including a working cylinder and a control piston for effecting a swinging movement of the pivoted arm, adjustable stroke limiting devices for the control piston, and means whereby one of the stroke-limiting stops can be disengaged to enable the pivoted arm to move into its extreme oblique position.

1,857,550. LITTER REMOVER. FREDOLPH JOHNSON, HARRY W. JOHNSON, and ARTHUR F. JOHNSON, Little Falls, Minn. Filed Aug. 24, 1929. Serial No. 388,173. 7 Claims. (Cl. 198—203.)



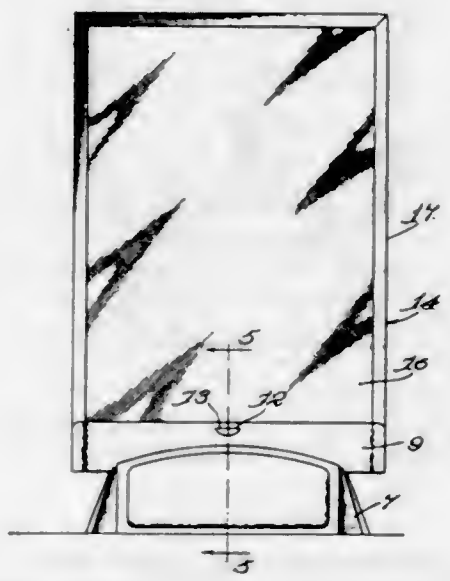
1. A litter cleaning device comprising a litter conveyor, an elevator frame adjacent the delivery end of the conveyor and having its lower end at a lower level than the delivery end of the conveyor, a take-up drum for receiving the conveyor and supported by the elevator frame and a guide for the conveyor for guiding the conveyor from its delivery end to the take-up drum.

1,857,551. TIRE DEFLATION INDICATOR. WALTER L. JONES, St. Louis, Mo. Filed July 18, 1930. Serial No. 468,937. 9 Claims. (Cl. 200—58.)



9. In tire deflation indicators wherein a switch is fixedly located adjacent each wheel for closing an electric signalling circuit; a wheel-carried unit comprising a support, a switch closing arm carried by said support, means normally holding said arm from actuating said switch, and other means to release said arm and cause it to actuate said switch upon excessive deflation of a tire, said holding and releasing means including duplicate latches, and latch withdrawing elements, the latter having arms to engage with the side walls of a tire at two different locations, each switch closing arm having a head with anti-friction elements for engaging said tire.

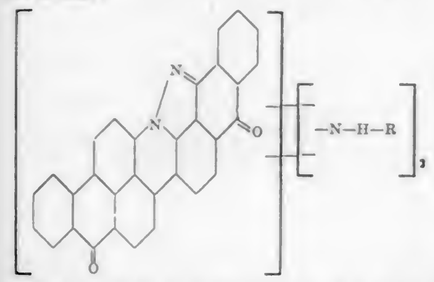
1,857,552. PLACARD DISPLAY DEVICE. JOSEPH KOMOROUS, Riverside, Ill., assignor to Parisian Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1931. Serial No. 562,164. 4 Claims. (Cl. 40—146.)



1. A placard device comprising a base having an upwardly opening groove, a placard supported in said groove and releasable means formed of interlocking parts on said base and placard for retaining said placard in position on said base.

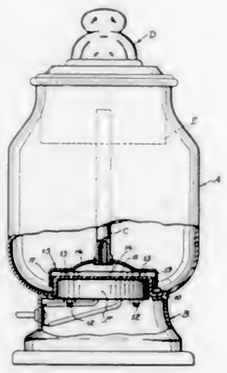
1,857,553. ANTHRAQUINONYL-AMINO DERIVATIVES OF BENZANTHRONEPYRAZOLANTHRONE. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1930, Serial No. 474,803, and in Germany Aug. 14, 1929. 2 Claims. (Cl. 260—45.)

1. As new articles of manufacture vat dyestuffs derived from N-benzanthronepyrazolanthrone corresponding to the formula:



in which R stands for an anthraquinonyl radicle, the dyestuffs dissolving in concentrated sulphuric acid to give green solutions and dyeing cotton greenish to bluish gray shades from green vats.

1,857,554. COFFEE PERCOLATOR AND THE LIKE. JOSEPH F. LAMB, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 23, 1929. Serial No. 394,526. 6 Claims. (Cl. 53—3.)



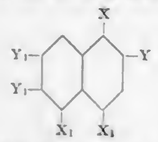
1. In a percolator or the like, a pot having a fixed member in its bottom, means for heating said member, a movable member above said fixed member and forming therewith a vaporizing chamber, a fountain tube carried by said movable member and leading from said vaporizing chamber, and an entrance passage between said fixed member and movable member leading upwardly to said vaporizing chamber, said passage having an effective area which remains constant during movement of the movable member.

1,857,555. ARYLIDES OF NAPHTHALENE DICARBOXYLIC ACIDS AND PROCESS OF MAKING SAME. LEOPOLD LASKA and OSKAR HALLER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 23, 1929, Serial No. 401,973, and in Germany Nov. 1, 1928. 14 Claims. (Cl. 260—124.)

8. As new compounds the condensation products of the naphthalene series corresponding to the general formula:

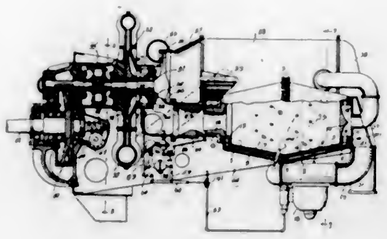
HO—R—NH—CO—naphthalene—CO—NH—R—OH

wherein one CO-group is attached to the naphthalene nucleus represented by the following scheme



in the X-position and the other CO-group in one of the X_1-positions, or one CO-group is attached to the naphthalene nucleus in the Y-position and the other CO-group in one of the Y_1-positions, and wherein R stands for a benzene, toluene or naphthalene radicle, which compounds are soluble in caustic alkalies but insoluble in sodium carbonate solution and in organic solvents.

1,857,556. POWER PLANT. ROBERT EDLEY LASLEY, Libertyville, Ill. Filed May 31, 1928. Serial No. 281,902. 5 Claims. (Cl. 60—41.)

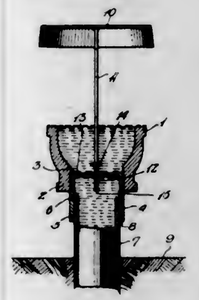


2. In combination, a combustion chamber including outer and inner sections and an intermediate section, said sections being spaced to provide annular fuel and air compartments. Mixing nozzles carried by the inner section, fuel nozzles carried by the intermediate section and extending into the mixing nozzles, a heater, a carbureter, means for conducting air from the heater to the air compartment and through the carbureter to the fuel compartment, the fuel and air being mixed in the mixing nozzles and discharged into the combustion chamber.

1,857,557. PRODUCTION OF IRON OXIDE PIGMENTS. JULIUS LAUX, Uerdingen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 4, 1928, Serial No. 252,041, and in Germany Feb. 15, 1927. 7 Claims. (Cl. 134—59.)

1. In the process of reducing an aromatic nitro compound involving the treatment with iron and an aqueous solution of a salt insufficient in amount to dissolve the iron, to the production of the corresponding amine and an iron oxide sludge, the steps of improving the pigmenting properties of said iron oxide sludge which consist in starting and carrying out the reduction in the presence of an aqueous suspension of a sparingly soluble basic compound of a trivalent metal, separating the iron oxide sludge from the resulting amino compound and purifying the former by levigation and washing out.

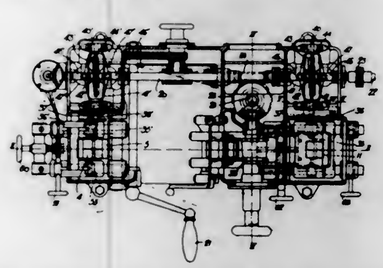
1,857,558. WATERING FOUNTAIN. HOWARD M. LEMASTER, Forest Glen, Md. Filed May 14, 1931. Serial No. 537,418. 6 Claims. (Cl. 119—74.)



5. A watering fountain of the character described, embodying a receptacle, a cover for said receptacle, connection for a source of water supply, and means under the control of said cover for controlling the flow, said means allowing such flow by seepage only.

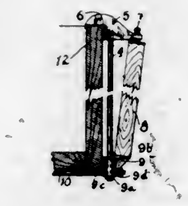
6. A watering fountain of the character described, embodying a receptacle, connection for a source of water supply, means for controlling the flow, said means allowing such flow by seepage only said means having provision to prevent its removal.

1,857,559. MOVING PICTURE APPARATUS. KARL OSKAR LEON, Lidkoping, Sweden. Filed July 30, 1928, Serial No. 296,143, and in Sweden Aug. 4, 1927. 4 Claims. (Cl. 88—16.8.)



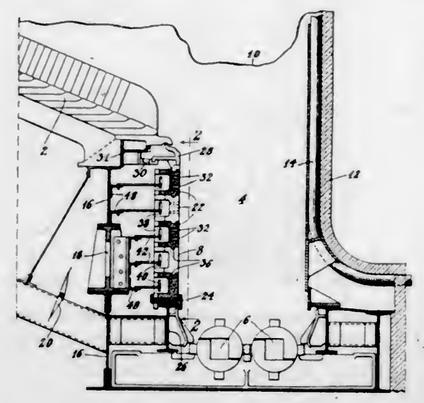
1. In a moving picture apparatus of the type having a source of light, means to produce a beam of light from said source, means to continuously move the film, a system of light reflecting means situated between said source and the film, an objective, other light reflecting means situated between said objective and a screen, and rotatably mounted parallel shafts to carry said light reflecting means, means to operate said shafts in synchronism comprising positively driven cam-discs rotatably mounted in straps rotatable about axes at right angles to the axes of the respective cam discs, and stationary means to guide said cam discs so as to cause them to oscillate about their axes upon rotation of the cam discs about their own axes, and connections between said straps and the rotatable shafts carrying the light reflecting means.

1,857,560. TIE MEMBER FOR TANKS. ROBERT L. LEWIS, Batavia, Ill., assignor to Challenge Company, Batavia, Ill., a Corporation of Illinois. Filed Apr. 15, 1929. Serial No. 355,029. 4 Claims. (Cl. 217—4.)



1. In a tank of the character described, a wall consisting of longitudinal boards arranged edge upon edge, clamping members upon the top and bottom of the wall, tie rods outside of said wall and connecting said clamping members and struts between said clamping members.

1,857,561. FURNACE WALL STRUCTURE. EDWIN LUNDGREN, Frederick, Md., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 12, 1928. Serial No. 325,553. 6 Claims. (Cl. 110—32.)

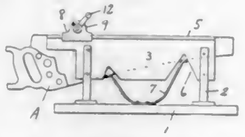


1. In a multiple retort underfeed furnace having a relatively deep ash pocket with a clinker grinder arranged at the bottom thereof, the improvement which consists in the front wall of the ash pocket being made up of blocks of refractory material arranged in superposed rows with the blocks of adjacent rows arranged in staggered relation, a metal wall structure spaced a distance in front of said front wall, and connections between said structure and said front wall for holding each block from fore and aft movement but permitting vertical and lateral movements thereof to allow for expansion and contraction of said wall.

1,857,562. METHOD FOR THE PRODUCTION OF LOW VISCOSITY CELLULOSE ESTERS. CARL J. MALM and ARNE ANDERSEN, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,940. 4 Claims. (Cl. 260—102.)

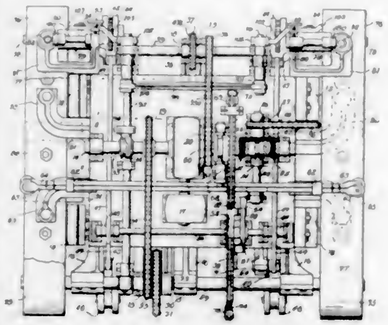
1. The process of reducing the viscosity of a cellulose ester which comprises passing ozone through the cellulose ester until the viscosity of the cellulose ester is materially reduced.

1,857,563. SAW SET. BENJAMIN H. OLIVER, Oshoto, Wyo. Filed Apr. 6, 1931. Serial No. 528,163. 2 Claims. (Cl. 76—59.)



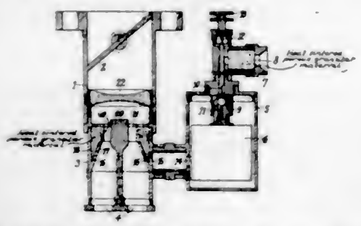
1. A saw setting device comprising a support, a pair of vertically arranged plates supported in spaced relation by said support and adapted to receive a saw between them, the upper ends of the plates having outwardly extending flanges thereon, a frame slidably arranged on the upper edges of the plates and engaging the flanges, a shaft rotatably arranged in the secon dframe, a saw setting wheel connected with the shaft and having a hub extending outwardly from each side thereof, a pair of disks between which the wheel is arranged, means for detachably connecting the disks to said hub and a spring attached to the support and engaging the rear edge of the saw.

1,857,564. FLOOR SURFACING MACHINE. CHARLES J. OLSON, Muskegon, Mich. Filed May 15, 1928. Serial No. 278,011. 9 Claims. (Cl. 51—174.)



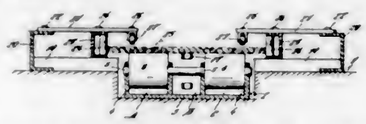
1. A floor surfacing machine comprising a frame, a power driven shaft thereon, tractor means mounted on the frame and operatively connected with the power shaft for propelling the machine, means mounted on the frame and operable by impact with a fixed object to reverse the direction of travel of the tractor means, and surfacing mechanism carried by the frame and deriving movement from the power driven shaft.

1,857,565. SURFACE CARBURETOR. AUGUST PAHL and HEINRICH HEIMANN, Berlin, Germany. Filed June 24, 1929, Serial No. 373,306, and in Germany Dec. 16, 1927. 2 Claims. (Cl. 261—99.)



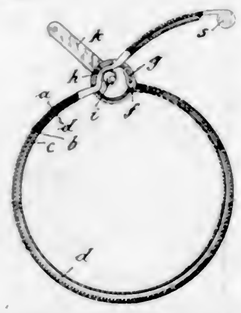
1. A surface carbureter, particularly for combustion engines, having a porous body comprising a mass of heat sintered granular material inserted for the reception and transmission of fuel to the air, said porous inserted body consisting of heat sintered porous granular quartz.

1,857,566. SHEET METAL PACK CONVEYER. JOHN W. PERRY, Wheeling, W. Va. Filed Oct. 14, 1929, Serial No. 399,509. Renewed May 22, 1931. 4 Claims. (Cl. 198—204.)



1. A sheet metal pack conveyer of the character described comprising spaced series of conveyer rollers, a power chain extending longitudinally therebetween, stationary bars on opposite sides of the rollers in spaced relation thereto, a series of arms pivotally connected at one end to each of the stationary bars in longitudinally spaced relation, shiftable bars pivotally connected to the arms inwardly of the stationary bars, guide rollers mounted on said shiftable bars and means for moving said arms and the shiftable bars in unison toward or from the conveyer rollers.

1,857,567. BLOOD PRESSURE TOURNIQUET. JOHANN PLESCH, Berlin, Germany. Filed May 27, 1931, Serial No. 540,423, and in Germany June 3, 1930. 3 Claims. (Cl. 128—327.)



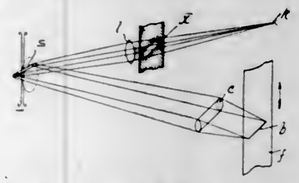
1. A blood-pressure tourniquet, forming an air cushion throughout its length, characterized in that the strap has at one end a fastener, through which the other end passes and by which said other end can be gripped along a transverse portion thereof, so that the air cushion is closed by the grip, and the portion of the strap drawn through the fastener is not inflated, said portion drawn through the fastener having an enlargement (s) preventing complete withdrawal thereof from the fastener.

1,857,568. INCUBATOR TRAY. MAE POPPLETON, Greenville, Ill. Filed May 18, 1928. Serial No. 278,763. 1 Claim. (Cl. 119—43.)



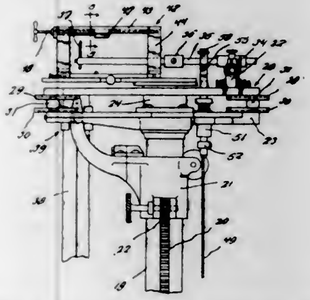
The combination with a tray open at the top and having fixed side walls spaced apart to engage opposed portions of a row of eggs to hold them against lateral tilting, said eggs being insertible downwardly into the tray onto the bottom thereof, means separate from the tray and insertible between one end wall thereof and one end egg of a row for pressing the eggs of the row against each other and the other end egg of the row against one end wall of the tray, said means including a conically coiled spring the large end of which constitutes a base for engaging the end wall of the tray, and an arcuate member connected to the small end of the spring for embracing the adjacent egg in line with the points of contact between the eggs.

1,857,569. DEVICE FOR RECORDING OF SOUND. ARNOLD POULSEN, Hellerup, and AXEL CARL GEORG PETERSEN, Copenhagen, Denmark. Filed Dec. 4, 1929, Serial No. 411,574, and in Denmark Dec. 22, 1928. 2 Claims. (Cl. 179—100.3.)



2. A system for recording sounds on a movable film, comprising a light source, a sound controlled oscillatable reflecting surface of linear dimensions, arranged to reflect a beam of light from the said light source towards the film, an optical system arranged to form on the film an image of the reflecting surface, and means for sharply defining the image formed on the film.

1,857,570. ENGRAVING MACHINE. PETER SACKERS, IRWIN REINHART, and THEODORE G. STRAUB, Evansville, Ind. Filed Dec. 31, 1928. Serial No. 329,613. 7 Claims. (Cl. 33—24.)



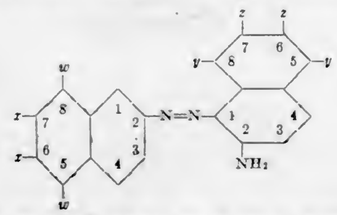
1. A machine of the character described, embodying therein a movable support for a work tool, a work tool carried thereby, a work bed beneath said work tool, a second inverted work bed above said work tool and carried by the first-named work bed, means to impart relative universal movement upon a single plane to said support and said work beds, and members operative upon said support to selectively move it away from either work bed.

1,857,571. PROCESS FOR REACTING ACID PHOSPHATES WITH AMMONIA LIQUOR. ROBERT L. SEBASTIAN, Montclair, N. J., assignor to The American Agricultural Chemical Company, a Corporation of Delaware. Filed Aug. 26, 1930. Serial No. 477,988. 4 Claims. (Cl. 71—9.)

1. Process of neutralizing material containing acid phosphate, which comprises adding sulphur dioxide to ammonia liquor containing hydrogen sulphide, and admixing the resultant liquor with material containing acid phosphate, thereby inhibiting the evolution of hydrogen sulphide.

1,857,572. METAL COMPOUNDS OF AZO-DYESTUFFS AND PROCESS OF MAKING SAME. FRITZ STRAUB and WALTER ANDEREAU, Basel, Switzerland, assignors to the Firm "Society of Chemical Industry in Basle," Basel, Switzerland. Filed Apr. 25, 1929, Serial No. 358,157, and in France, Japan, and Belgium Mar. 8, 1929. 8 Claims. (Cl. 260—12.)

1. A manufacture of new metal compounds of azo-dyestuffs by treating a disazo-dyestuff obtained by coupling in an alkaline medium one molecular proportion of a diazo-compound of the benzene series containing a hydroxy-group in ortho-position to the —N=N— group with a mono-azo-dyestuff of the general formula



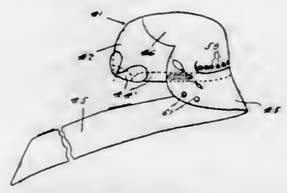
wherein one of the w's and one of the y's standing for an OH-group and the other w and the other y for a hydrogen atom, one of the x's and one of the x's representing an SO_3H-group, and the other x and the other x a hydrogen atom, the sulfo-groups being in meta-position to the OH-groups, and only one OH-group standing in 8-position, with agents yielding metals of atomic weights ranging from 52 to 58.7.

1,857,573. STAMPED SHEET-METAL LEVER. MELVILLE F. STREBE and CARROLL K. LENNING, La Fayette, Ind., and FRED W. ZINK, Detroit, Mich., assignors to Ross Gear & Tool Company, La Fayette, Ind., a Corporation of Indiana. Filed July 9, 1928. Serial No. 291,410. 5 Claims. (Cl. 287—52.02.)



1. A stamped sheet metal lever comprising a shank portion and opposite arms bent at right angles to the shank portion, said arms extending in line with the shank portion and beyond the adjacent end thereof and adapted to embrace a rod or tube, and provided with means to prevent excessive closure of the arms.

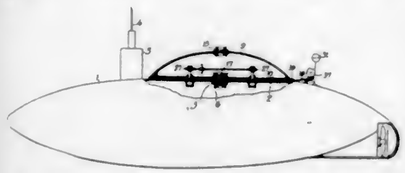
1,857,574. WEARING APPAREL. MARY G. SYKORA, Des Moines, Iowa. Filed Jan. 22, 1930. Serial No. 422,599. 4 Claims. (Cl. 2—197.)



1. A hat formed from a single length of material including a part shaped to constitute a head covering, together with an elongated extension part constituting a muffler, and means carried by the first mentioned part for adjusting the head covering formed thereby, said

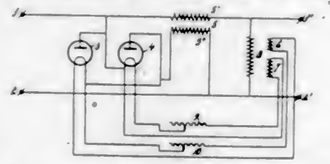
means including a pocket, an elastic member arranged in the pocket, fixed eyes arranged adjacent opposite ends of the pocket, and hooks on relatively opposite ends of the elastic member engaged with said eyes.

1,857,575. SUBMARINE LIFEBOAT. JOAQUIN VASQUEZ and MANUEL BERNARDEZ, Pontevedra, Spain. Filed Feb. 18, 1931. Serial No. 516,769. 5 Claims. (Cl. 114—16.7.)



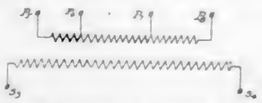
1. In combination, a submarine vessel having a top deck provided with an inlet and exit opening, a life boat adapted to rest upon said deck and having an inlet and exit opening in its bottom to register with the opening in the deck, reversible and interchangeable screw plugs for respectively closing the opening in the deck and the opening in the life boat, said plugs being operable from either the inside or the outside of the life boat, and means for attaching the life boat to and releasing it from the submarine.

1,857,576. DEVICE FOR REGULATING ALTERNATING CURRENTS. NICOLAAS ANTHONY JOHANNES VOORHOEVE, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Apr. 19, 1927, Serial No. 185,059, and in the Netherlands May 20, 1926. 3 Claims. (Cl. 171—119.)



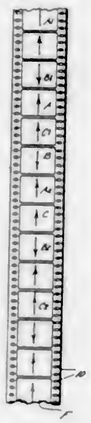
1. A device for regulating alternating voltages, comprising main leads, a load connected across said leads, two oppositely connected discharge tubes, the said tubes being connected in parallel, a transformer, the secondary winding of said transformer being inserted in one of the leads to the load, and the primary winding thereof being included in a circuit which also comprises the said parallel connected tubes, said circuit being connected across the said main leads, and a second transformer, having its primary winding connected between said leads, the said transformer having two secondary windings each connected to the filament of a corresponding one of the said discharge tubes.

1,857,577. TRANSFORMER. NICOLAAS ANTHONY JOHANNES VOORHOEVE, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Oct. 21, 1929, Serial No. 401,247, and in the Netherlands Nov. 8, 1928. 4 Claims. (Cl. 175—336.)



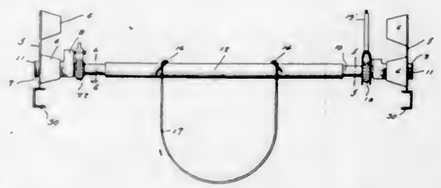
1. A transformer having its exciting coil subdivided into sections by at least one tapping, the resistance per unit of length of said sections differing mutually so as to minimize the difference in secondary voltage drop occurring when different primary voltages are supplied to corresponding sections of the exciting coil.

1,857,578. MOTION PICTURE FILM. WALTER L. WRIGHT, Santa Monica, Calif., assignor to Synchrome Corporation, Los Angeles County, Calif., a Corporation of California. Filed Nov. 5, 1928. Serial No. 317,386. 1 Claim. (Cl. 88—16.4.)



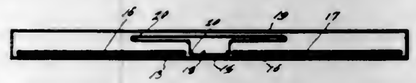
A strip cinematographic film bearing color sensation records in sets each including three different color sensation records of the same movement phase taken from a single point of vision, the set of records being arranged longitudinally of the film strip and the middle picture of each set being inverted relative to the end pictures of the set, adjacent records of each set being spaced apart longitudinally of the film strip a distance corresponding to one record, the spaces between the records of each set being occupied by records of other sets.

1,857,579. AUTOMOBILE TRANSMISSION HOIST. LEONARD J. ARMSTRONG, Mariners Harbor, N. Y. Filed Dec. 27, 1928. Serial No. 328,666. 1 Claim. (Cl. 254—166.)



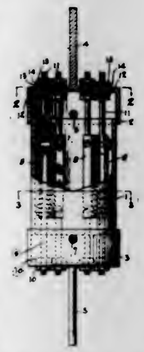
A hoisting mechanism comprising in combination a pair of opposed stands, each of which comprises a body portion having bearing receiving members projecting laterally from one side thereof adjacent the upper and lower edges thereof, said bearing receiving members being arranged diagonally with respect to one another, a bearing for reception in a selected one of said bearing receiving members, and a rotatable element supported between said stands and having its ends journalled in said bearings, said rotatable member being longitudinally extensible whereby said stands may be placed the desired distance apart.

1,857,580. PRICE INDICATOR. JOHN L. ARNOLD, Beaver Falls, Pa. Filed May 4, 1931. Serial No. 535,013. 3 Claims. (Cl. 40—96.)



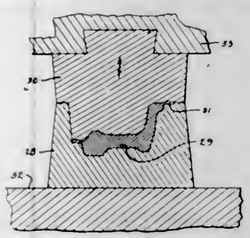
1. A price indicator comprising a casing provided on one wall thereof with three laterally spaced sight openings, a pair of endless display belts arranged in the casing in longitudinal alinement and terminating in spaced relation at confronting turns or bends of said belts, each of said belts having a portion thereof extending across one of said sight openings, a third endless belt arranged in said casing and having a portion of one run thereof in longitudinal alinement with correesponding runs of the first mentioned belts, said third belt having said portion thereof extending across the remaining sight opening.

1,857,581. RENEWABLE FUSE. ROBERT T. ATHEY, Armona, Calif. Filed Oct. 10, 1928. Serial No. 311,574. 3 Claims. (Cl. 200—125.)



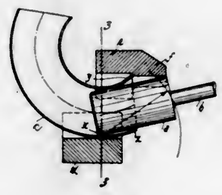
1. A fuse comprising a tubular casing, metallic covers telescoping over said casing for closing the open ends thereof, terminals carried by said covers, insulated members extending transversely of said covers and bearing against said casing for preventing the covers from moving toward each other, and a plurality of fusible members disposed in said casing and being connected to said covers for preventing the same from moving apart.

1,857,582. METHOD OF MAKING FORGED COMPROMISE BARS. WILLIAM BENDER, Downers Grove, Ill., assignor to Ramapo Ajax Corporation, New York, N. Y., a Corporation of New York. Filed May 5, 1927. Serial No. 188,879. 3 Claims. (Cl. 29—169.)



2. The method of making a compromise angle bar having a web, flange and offset which comprises, forging a suitable billet in a forming die to a finished shape having a projecting fin, removing the fin before cooling, punching bolt holes in the web before cooling, cooling the bar slowly, and then heat-treating said bar.

1,857,583. APPARATUS FOR STRAIGHTENING OUT THE ENDS OF BENT PIPES. RUDOLF HIERONYMUS BÖHLING, Hamburg, Germany, assignor to Firm Rohrbogenwerk Gesellschaft mit beschrankter Haftung, Hamburg, Germany. Filed June 17, 1930, Serial No. 461,789, and in Germany Mar. 3, 1930. 4 Claims. (Cl. 153—32.)



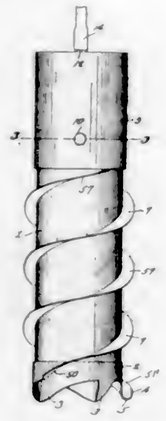
1. An apparatus for straightening the ends of bent pipes, elbows, bends, or the like, comprising two concave jaws, one being fixed and the other movable towards the fixed jaw, a pivotally movable mandrel having a cylindrical part of a cross-section corresponding to the inner cross-section of the pipe and when inserted into the end of the bent pipe contacting with its outer edge the outer part of the bent pipe, where the straight end is to commence and with its cylindrical part on one side the edge of the outer side curvature, and on the opposite side the inner side curvature of the bend, the first mentioned place of contact forming the pivot point about which the mandrel is pivoted.

1,857,584. RECEPTACLE CLEANER. FRANK BOLAGEK, Foley, Minn. Filed July 24, 1931. Serial No. 552,988. 1 Claim. (Cl. 15—164.)



A cleaner of the character described comprising a handle, an elongated brush head of U-shape in cross section, said handle being suitably connected to the brush head between the flanged portions thereof, a ductile tuft carrier, said ductile tuft carrier having its end portion bent over the ends of the head and disposed between the flanged portions of the head.

1,857,585. ICE AUGER. FREDERICK W. BROOKS, Sr., Virginia, Minn. Filed Apr. 17, 1931. Serial No. 530,983. 3 Claims. (Cl. 255—72.)



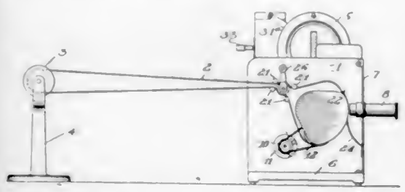
1. A tool for making fishing holes in the ice, comprising a tubular body provided at its lower end with depending teeth which slant outwardly at progressively increasing angles, the body being supplied at its lower end with a circumferentially-extended, upwardly-opening, outwardly-extended, trough-shaped reamer, located immediately in advance of the tooth which has the most pronounced outward slant.

1,857,586. COMPOSITE INSULATING MATERIAL. JOSEPH M. COFFEY, Schenectady, N. Y., assignor to Mica Insulator Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 12, 1929. Serial No. 399,360. 4 Claims. (Cl. 154—2.6.)



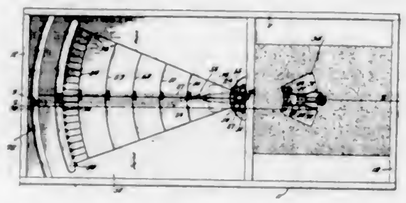
1. A commutator ring having its outer surface of mica plate prepared by cementing mica flakes together with glyptal, said ring having its inner surface of asbestos impregnated with shellac.

1,857,587. METHOD FOR USE IN FACTORY MANAGEMENT. FREDERICK E. DARLING, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 22, 1928. Serial No. 327,918. 6 Claims. (Cl. 88—16.)



6. The method of obtaining the classification for the effective effort or working speed of an operator which comprises obtaining a motion picture record at a uniform speed of an operator performing the cycle of operations under consideration, projecting the photographic record at various known speeds, estimating the speed of the operator performing the cycle of operations at each projection speed as compared to the speed of a standard operator and averaging the estimates of the speed of the operator at the various projection speeds.

1,857,588. GAME APPARATUS. WALTER DOLL, Granville, N. Y. Filed Sept. 29, 1927. Serial No. 222,772. 17 Claims. (Cl. 265—20.)



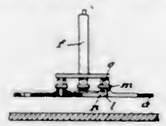
1. In apparatus of the class described, a swiveled frame, a captive member pivoted to said frame and adapted to be struck by a golf club or the like, the pivot extending substantially in the plane in which the frame may swivel, a stationary plate having two series of indications, indicating means responsive to the pivotal movement of the captive member and cooperating with one of the series, and indicating means responsive to a swiveling movement of the frame and cooperating with the other series, for separately indicating the force and angularity of a blow delivered to said captive member, both of said means extending in one direction away from the swivel and the captive member being located away from the swivel, in the opposite direction, and the first said indicating means including a movable indicator and devices operable from the captive member and acting on the movable indicator, such devices being mounted on the frame in a position to be struck by the captive member.

1,857,589. MULTIPLE ELECTRODE RADIOTRON. ALLEN B. DU MONT, Montclair, and PAUL THORNE WEEKS, Caldwell, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 20, 1924, Serial No. 714,542. Renewed Aug. 1, 1930. 13 Claims. (Cl. 250—27.5.)



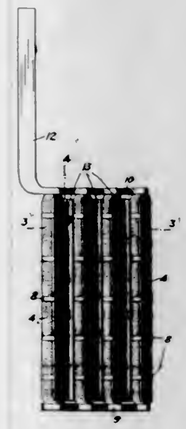
1. In a vacuum tube, a compound anode of sheet material comprising a plurality of hollow cylindrical portions and a double-wall connecting portion of less diameter than said cylindrical portions.

1,857,590. APPARATUS FOR ELECTROLYTICALLY REFINING PRECIOUS METALS. VICTOR ENGELHARDT, GEORG EGER, and HERBERT HEIN, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed May 3, 1929, Serial No. 360,072, and in Germany May 14, 1928. 7 Claims. (Cl. 204—57.)



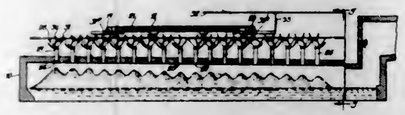
2. In an apparatus for electrolytically refining precious metals, such as silver, in combination, a central contact pillar of base metal for leading in the electric current, said pillar being in the form of a tripod, three sector-like cast anode plates so disposed that their contacting edges radiate from a central point, and members intermediate said pillar and the anode plates and consisting at least in part of the precious metal to be refined, said members being formed and arranged to rest upon each of said plates at at least one point.

1,857,591. STORAGE BATTERY. BRUCE FORD, Philadelphia, and WALTER H. BANCROFT, Bryn Athyn, Pa. Filed June 18, 1925. Serial No. 37,948. 3 Claims. (Cl. 136—43.)



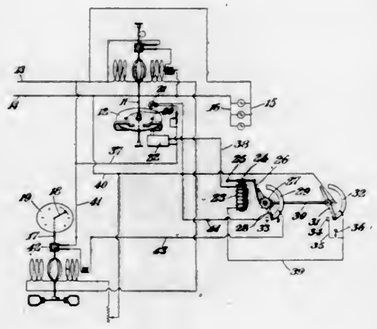
1. An alkaline storage battery plate or electrode including a unit comprising a rectangular perforated metallic envelope having internal burrs at the perforations, foraminous metal strips having smooth faces arranged in confronting relation and coterminous with the envelope, and active material applied to and between the middle portions of said strips leaving the ends bare, and the bare ends of the strips and wall of the envelope being pinched together, substantially as described.

1,857,592. FURNACE FEEDING APPARATUS. ROY A. HAWKINS, Inspiration, Ariz., and HOWARD W. MOSSMAN, McGill, Nev. Filed July 31, 1930. Serial No. 472,044. 20 Claims. (Cl. 214—18.)



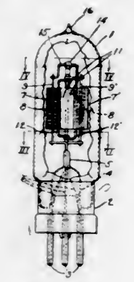
1. Apparatus for feeding charging materials to metallurgical furnaces which comprises, a continuous feeding conveyer, means for feeding materials to said conveyer, means for driving said conveyer alternately in opposite directions, electric circuits for controlling said driving means and for timing the reversal of said driving means, a carriage for said conveyer to move the discharge ends thereof to successive positions on said furnace, means for driving said carriage in alternately reversed directions, an electric circuit for timing said driving circuit to reverse said driving means with the reversal of said conveyer, and means for interrupting said circuit for successive intervals.

1,857,593. TESTER FOR WATT HOUR METERS AND THE LIKE. EDWARD B. HILL, Forest Hills, N. Y., assignor of thirty per cent to August F. Kochendorfer, Hoboken, N. J., and thirty per cent to Louis F. Falkenstein, Flushing, N. Y. Filed Nov. 20, 1930. Serial No. 496,863. 6 Claims. (Cl. 175—183.)



1. A watt hour meter testing apparatus adapted to be applied to a commercial meter to be tested and to a standard meter and including means actuated by the commercial meter for operating the standard meter during a certain period of advance of the commercial meter.

1,857,594. DUPLEX TRIODE VACUUM TUBE. SAMUEL M. KINTNER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 28, 1924. Serial No. 734,603. 13 Claims. (Cl. 250—27.5.)



10. An electron-discharge device comprising an evacuated envelope having a press therein, an electrode having a plurality of cylindrical portions, a second electrode within each of said cylindrical portions and an electrical conducting support-arm extending through said press and supporting said electrodes.

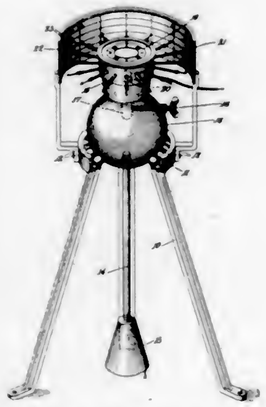
1,857,595. METHOD OF PRODUCING MOLYBDENUM-BEARING IRON. ALAN KISSOCK, Forest Hills, N. Y. Filed Nov. 1, 1927. Serial No. 230,381. 5 Claims. (Cl. 75—45.)

1. The process of producing molybdenum containing cast iron which comprises melting together iron and a molybdenum bearing alloy having a melting point so that it will melt at substantially the same time as the iron and a molybdenum content such that the desired percentage of molybdenum is substantially uniformly distributed throughout the cast product.

1,857,596. PROTEIN COMPOSITION. MICHAEL LEVIN, Brooklyn, N. Y., assignor of one-fourth to Jacob T. Basseches, New York, N. Y. Original application filed Sept. 15, 1927, Serial No. 219,820. Divided and this application field May 2, 1928. Serial No. 274,682. 10 Claims. (Cl. 106—39.)

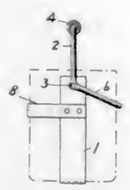
3. As a new composition of matter, pulverized cork adhesively bound by a binder comprising glue and sodium lactate as an extending agent.

1,857,597. NAUTICAL INSTRUMENT. WILLIAM LILLY, New York, N. Y. Filed Jan. 4, 1928. Serial No. 244,387. 2 Claims. (Cl. 234—1.)



1. An apparatus of the character described comprising a sphere, an annular member supporting said sphere, a pendulum suspended from said sphere, means for supporting a cylinder of paper or the like around said sphere and self-adjusting marking members supported by said sphere and having their ends engaging said cylinder.

1,857,598. DETACHABLE CARRIER. EDGAR L. LONGAKER, Trappe, Pa. Filed Feb. 27, 1930. Serial No. 431,772. 1 Claim. (Cl. 224—45.)



A detachable carrier for storage batteries including in combination a U-shaped frame adapted to underlie the bottom of and embrace the sides of a storage battery, a handle pivotally mounted on said U-shaped frame adjacent its top, stops extending laterally from said frame to embrace corners of said storage battery, and hooks extending from said frame opposite to said stops and pivotally mounted on the same pivot as said handle to be actuated by said handle.

1,857,599. BOBBIN PROTECTOR. BERNARD FENTON MACK, Allentown, Pa. Filed Nov. 1, 1929. Serial No. 403,929. 2 Claims. (Cl. 242—118.)

1. The combination with a bobbin having a barrel, two ends and a central extension beyond one of said ends, said bobbin having a central longitudinal bore to receive a driving spindle having projections connected therewith and extending longitudinally thereof at the sides and said central extension having recesses to receive said projections on said spindle and said recesses extending from said central longitudinal bore to points spaced inwardly from the lateral surface of said extension, of a protector for said extension including an annular flange extending

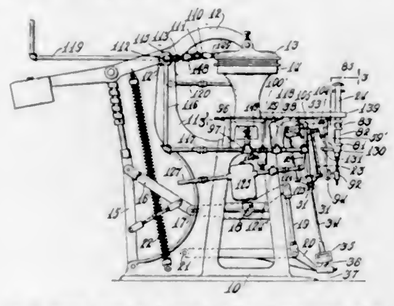


around the lateral surface of said central extension of the bobbin and a part attached to said flange and extending across the end of said extension and provided with a central opening to receive the shaft of the spindle and laterally extending openings in register with said recesses in the outer end of said central extension of the bobbin.

1,857,600. MANUFACTURE OF METAL COVERED COPPER WIRES. GEORG MASING, Berlin, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Apr. 6, 1929, Serial No. 353,245, and in Germany Mar. 3, 1928. 4 Claims. (Cl. 178—45.)

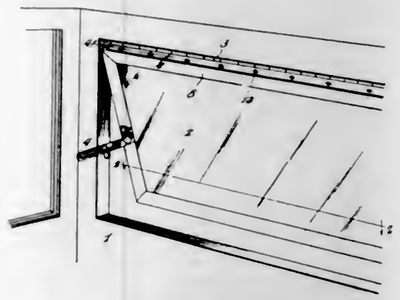
1. As a new article of commerce, a heat treated metal covered wire having a copper conductor composed of copper completely deoxidized in the melted state.

1,857,601. OPERATIVE MECHANISM FOR STEAM PRESSES. HARRY H. MCDERMOTT, Chicago, Ill. assignor to The Prosperity Company, Inc., a Corporation of New York. Filed May 23, 1929. Serial No. 365,540. 13 Claims. (Cl. 68—9.)



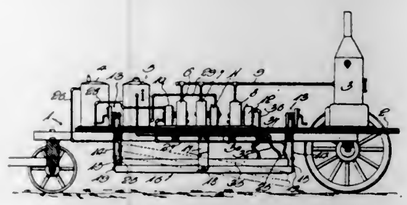
1. In a press having a head and a buck, means to heat said head and buck, a cylinder having a reciprocating piston operatively connected to said head to effect raising and lowering thereof, and valve mechanisms for successively supplying live steam and exhaust steam from the head and buck to one end of the cylinder for lowering said head and for successively supplying exhaust steam from the head and buck and live steam to the other end of the cylinder for raising the head.

1,857,602. WINDSHIELD FRAME. BRUNO A. OBST, Milwaukee, Wis. Filed Jan. 5, 1931. Serial No. 506,727. 2 Claims. (Cl. 296—93.)



1. A cushioning member for windshields and analogous structures comprising a frame formed of elastic material having a continuous opening therein entirely surrounding the frame and defining a flexible diaphragm facing the inner portion thereof, said frame being provided at said diaphragm with integral inwardly extending converging flanges adapted to bear against opposite sides of a window glass with the edge of the glass bearing against the adjacent side of the diaphragm, the frame being further provided with a circumferential outwardly extending sealing flange and a single flexible lip of less length and thickness than the sealing flange and extending laterally from the frame in spaced relation to said sealing flange, and reinforcing channel bars housed within the opening of the frame and having their open sides presented to the diaphragm and their edges at said open side bearing against the diaphragm on opposite sides of the window glass whereby the diaphragm will receive and absorb any shock or vibration imparted to the window glass.

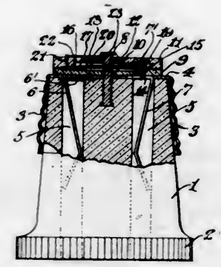
1,857,603. SNOW MELTING APPARATUS. JOHN RECTOR PETERS, New York, N. Y., assignor of one-tenth to John J. Planeta, New York, N. Y. Filed Sept. 26, 1929. Serial No. 395,354. 4 Claims. (Cl. 126—271.2.)



1. A machine of the character described comprising a carriage, a support mounted beneath the carriage for vertical tilting movement, means carried by said carriage for pivotally adjusting said support, a burner carried by said support for directing flame downwardly, and a compressed air box carried by the support above the burner and having outlets for directing air adjacent the flame of the burner.

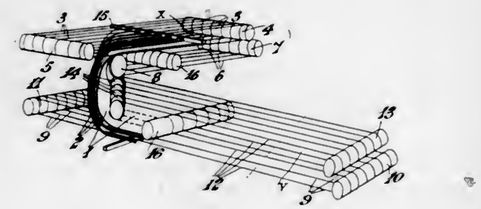
1,857,604. FLASH LIGHT PLUG. ALBERT H. POST, Waterbury, Conn., assignor to Henry Hyman, Brooklyn, N. Y. Filed Dec. 17, 1926. Serial No. 155,361. 1 Claim. (Cl. 200—122.)

A flash light plug comprising an insulating base, a threaded shell on said base adapted to screw into a lamp socket, a pair of contacts in said base one of which is connected to said shell, a central contact at the end of said plug, a thermostatically operated make and break element connected to said central contact and the other



contact of said pair of contacts, and a pair of insulating discs at the end of said base between which said make and break element is located.

1,857,605. NEWSPAPER CONVEYER. HAROLD HERBERT RAPLEY, Bedford, England. Filed Sept. 16, 1929, Serial No. 393,026, and in Great Britain Oct. 15, 1928. 7 Claims. (Cl. 198—190.)

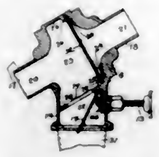


1. A newspaper conveyer comprising two conveyer sections extending in different directions along which, one after the other, a continuous stream of newspapers is adapted to pass, two parallel guide elements, one upon one side of the plane of one of said conveyer sections and the other upon the other side of said plane, wherein the guiding of the stream out of directional and planar alignment with the first section into that of the second is adapted to be effected by both causing its path to curve and the stream itself simultaneously to turn about said path as axis.

1,857,606. RADIATOR FILTER. JOSEPH RENDELMAN, Philadelphia County, Pa. Filed Dec. 5, 1928. Serial No. 323,988. 4 Claims. (Cl. 210—165.)

1. A filter device for automotive vehicles consisting of a hollow casing, adapted to permit the free flow of fluid therethrough; filter means removably carried by the said casing for impounding the removing foreign insoluble substances carried by the said fluid, locking means carried by the said casing and coperating with the said filter means to lock the same in place; a container removably carried by the said casing, the said container being adapted to receive the said foreign substances impounded by the said filter means; a second locking means carried by the said casing, the said second locking means cooperating with the said container to lock the same in operative position; each said locking means consisting of a swinging member carried by the said casing, a threaded bearing

member carried by the said swinging member, a movable collar carried by the said threaded bearing member and a fastening member carried by the said threaded bearing



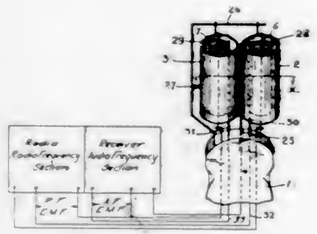
member, the said fastening member being adapted to firmly hold each said collar of each said locking mechanism against the filter device and container respectively.

1,857,607. MEANS FOR SUSPENDING A HAMMOCK. CHARLES F. RICHARDSON, Brookline, Mass. Filed Oct. 22, 1927, Serial No. 228,023. Renewed July 8, 1931. 3 Claims. (Cl. 5—127.)



1. A flexible hammock with a ring at each end; two anchor-cords, one attached to each hammock ring, while the free end of each cord is adapted to be anchored to the ground; two suspending cords, one cord attached to each hammock ring, while the free ends of the suspending cords are attached to a suspending ring; and means for securing said suspending ring to a fixed point of suspension above said hammock, for the purpose of suspending said hammock from said fixed point.

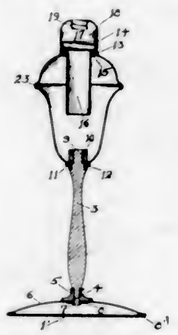
1,857,608. ELECTRON DISCHARGE DEVICE. FLOYD KARKER RICHTMYER, Ithaca, N. Y. Filed July 29, 1924. Serial No. 728,831. 7 Claims. (Cl. 250—27.)



5. In combination with a radio receiving system comprising circuits of different frequencies and an electron tube having a unitary anode, a unitary cathode and separate grids, means for impressing a periodic E. M. F. derived from a circuit of one of said frequencies on one grid and for impressing a periodic E. M. F. derived from a circuit of another of said frequencies on another grid.

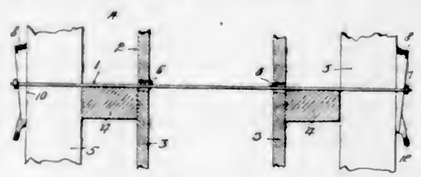
1,857,609. ATOMIZER SUPPORT. ALLEN F. RUFFIN, Waterbury, and ARTHUR L. WECKLER, Thomaston, Conn., assignors to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 23, 1928. Serial No. 279,872. 3 Claims. (Cl. 299—88.)

1. In an article of the character described, the combination of an essence holder of such small size as to require other support than itself, a casing into which the holder depends, a threaded neck secured to the casing into which neck the holder is threaded, a cap closing the neck, an



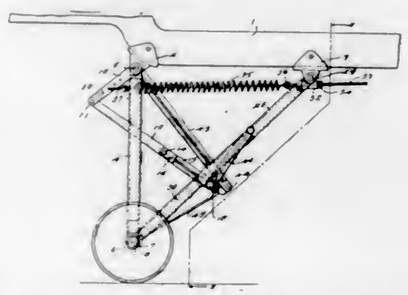
atomizer connected with the casing and in communication with the holder, and a base dimensioned to support the casing and atomizer in an upright position.

1,857,610. FORM TIE. TAMIS C. SCHENK, Brooklyn, N. Y., assignor to Richmond Screw Anchor Co., Inc., a Corporation of New York. Filed May 1, 1931. Serial No. 534,153. 5 Claims. (Cl. 25—131.)



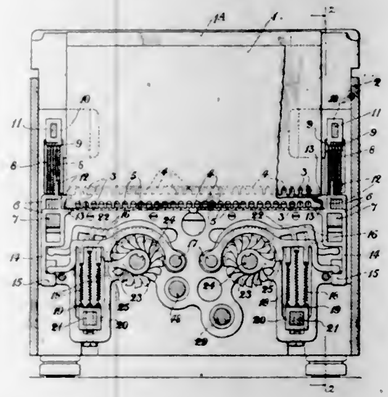
1. A form tie having a stop welded thereto against which a form may rest, and means for holding a form against the stop, the weld making the tie brittle at the point of the weld without decreasing substantially the tensile strength of the form tie, the weld making the tie easily breakable when bent at the weld.

1,857,611. LANDING GEAR. HOWARD E. SWIFT, Westfield, Mass. Filed Aug. 15, 1929. Serial No. 386,053. 8 Claims. (Cl. 280—33.1.)



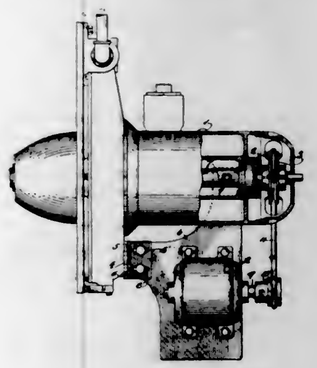
5. A semi-trailer landing gear including in combination a vehicle frame, a support for one end of the semi-trailer pivotally mounted on the under side of the frame, a locking toggle for bracing the support, a lever for breaking the toggle and spring means for swinging the support to raise it to running position.

1,857,612. CARD AND LIKE INDEXING, SORTING, TABULATING, AND LIKE APPARATUS. EDGAR WORRALL TAYLOR, Birmingham, England, assignor to Infallible Card Selecting Company Limited, Birmingham, England. Filed Apr. 7, 1930, Serial No. 442,221, and in Great Britain May 7, 1929. 20 Claims. (Cl. 129—16.1.)



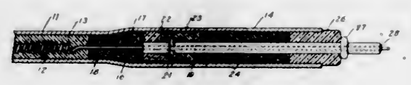
1. A selective card or like cabinet comprising a container, means for locking a number of cards or like elements within the container, means for selecting and releasing any particular element from the locking means, a series of movable ejecting members corresponding to the different cards or the like and above which the respective cards or the like are individually supported, and means acting upon the ejecting members to cause certain members to eject any desired card or the like when said card or the like has been released from its locking device by the operation of the selecting and releasing means.

1,857,613. OIL BURNER. RALPH S. WHALEY, Seattle, Wash., assignor to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed July 9, 1930. Serial No. 466,650. 1 Claim. (Cl. 248—15.)



Means for adjustably mounting a motor on a machine comprising a plate for receiving the motor, a supporting bracket for said plate, a slot and bolt connection for attaching the plate to said bracket for sliding relative adjustment, a slot and bolt connection for anchoring said bracket to said machine for sliding adjustment in a direction transverse to said first adjustment, and a slot and bolt means for adjustably anchoring another portion of said plate to said machine to provide for the aforesaid sliding adjustments of the bracket and of the plate and bracket.

1,857,614. TUBULAR HEATER TERMINAL. CHRISTIAN BERGH BACKER, Ottawa, Ontario, Canada. Filed Dec. 17, 1929, Serial No. 414,731, and in Canada Aug. 28, 1929. 3 Claims. (Cl. 201—67.)



1. A terminal structure for a tubular heating unit having an outer metal tube, a resistor therein having an end portion extending beyond the end of the tube and electric-insulating material therebetween, said terminal structure including a tubular terminal surrounding the end portion of the resistor and projecting beyond the end of the tube and having a collar thereon adjacent to the inner end thereof, a bushing of electric-insulating material on said tubular terminal and prevented from longitudinal movement in one direction relatively thereto by said collar, an outer bushing of electric-insulating material interfitting with the end of the metal tube, a second collar on said tubular terminal for holding the outer bushing in proper position, and a brazed connection between the outer ends of the resistor wire and of the tubular terminal.

1,857,615. TUBULAR HEATER. CHRISTIAN BERGH BACKER, Ottawa, Ontario, Canada. Filed Dec. 17, 1929. Serial No. 414,733. 2 Claims. (Cl. 201—67.)

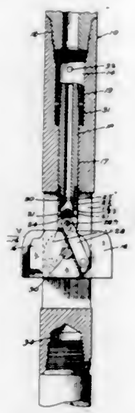


2. The method of making a tubular heater which includes assembling within a metal tube a helically wound resistor and a plurality of longitudinally-extending strips of metallic magnesium, each bent to arcuate shape in lateral section the edges thereof being located relatively close to each other and the radius of curvature being greater than the radius of the internal surface of the tube, subjecting the assembly to the action of high pressure steam, whereby to convert the metallic magnesium to a hard, dense layer of crystalline magnesium hydroxide and providing a longitudinally uniform radial thickness of such layer around the resistor.

1,857,616. HYDRAULIC UNDERREAMER. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Feb. 3, 1931. Serial No. 513,135. 6 Claims. (Cl. 255—76.)

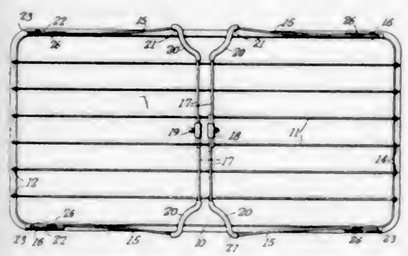
1. A tool of the character described comprising a barrel adapted to be connected at its upper end with a drill stem, a pilot bit connected to the lower end of the barrel, said pilot bit having a central passageway formed downwardly through its upper end and emerging adjacent the point of the bit, said barrel being formed with longitudinal passageways contiguous to its periphery extending from the upper end of the barrel to a point adjacent the lower end thereof and in communication with the pilot

bit passageway at the lower end of the barrel, the upper end of said passageways communicating with the interior of the barrel at a point adjacent the upper end of the



barrel whereby circulating fluid from the drill stem will pass through said passageways and lubricate said bit, and reaming means carried by the barrel and positioned intermediate the ends thereof.

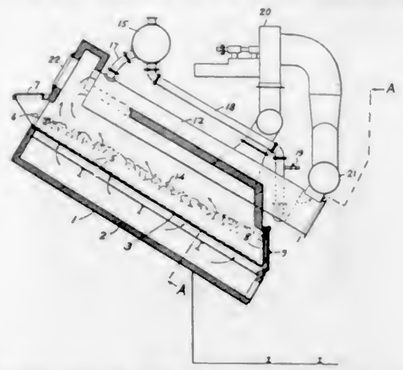
1,857,617. CLOTHES RACK. ALBERT E. BEARDON, East Orange, N. J. Filed Dec. 2, 1929. Serial No. 410,992. 9 Claims. (Cl. 211—178.)



2. A clothes rack, comprising a frame, supporting legs pivoted thereto, spring plates overlying the pivoted portions of said legs and having inturned stop flanges and opposed to said stop flanges idented leg portions, said stop flanges and leg portions engaging over opposite edges of the legs to yieldingly retain the same in position.

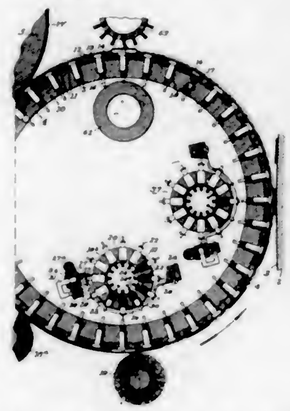
1,857,618. APPARATUS FOR COOLING COKE. WILSON T. BOSLER, Philadelphia, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 4, 1928. Serial No. 310,375. 6 Claims. (Cl. 202—228.)

1. Apparatus for cooling coke comprising a closed casing, a fire tube boiler, an inclined foraminous coke wharf, said wharf forming a lower wall of said casing, a portion of the shell of said boiler being arranged in the casing in spaced, uninterrupted confronting relation to said wharf and above the same and inclined in a similar direction to the horizontal, means for providing and maintaining hot coke in batches quiescent upon said wharf and beneath said shell, two chambers provided beneath the foraminous wharf both of said chambers separately and directly communicating with the closed casing through said wharf, a gas conduit from one of said chambers to one of the ends of the fire tubes of the boiler, a fan for circulating inert gas, a second gas conduit connected with



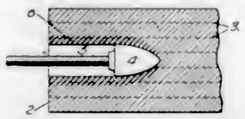
the fan and with the other of said chambers, and a third gas conduit connected with the fan and with the other ends of the fire tubes of the boiler.

1,857,619. ROTARY INLAYING MACHINE. WALTER J. BLENKO, Pittsburgh, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed June 21, 1929. Serial No. 372,610. 19 Claims. (Cl. 154—24.)



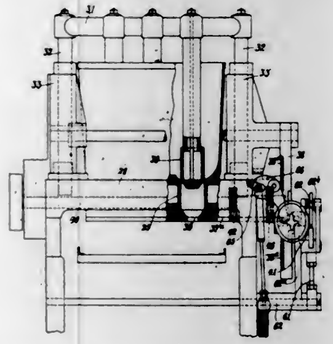
1. In a rotary inlaying machine, a die roll, a stripper therein, a stripper roll, actuating pins on the stripper roll, the pins being movable into or out of stripper engaging position, and means for controlling the movement of the pins to their engagement with the stripper.

1,857,620. MANUFACTURE OF HOLLOW METAL BARS. MCCLEANE BROWN, Sewickley, Pa. Filed Aug. 9, 1927. Serial No. 211,710. 9 Claims. (Cl. 80—62.)



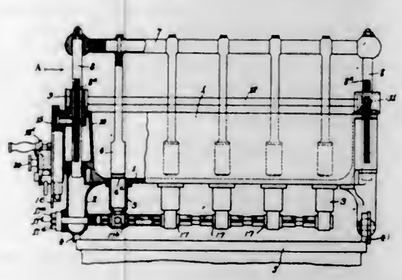
1. The method of making a hollow center bar or the like from a previously rolled pile of rectangular bars consisting in first forming an axial opening through the rolled bar with surrounding condensation, then inserting within the bar a metal tube containing refractory material, and then reducing the bar and welding it to the tube by pressure.

1,857,621. DEPOSITING MACHINE FOR DOUGH, SEMIFLUID, PASTY, OR LIKE MATERIALS. ROBERT MARTIN CHAMBERS, Finaghy, Belfast, Ireland, assignor to George Martin and Teresa Martin, Belfast, Ireland. Filed Feb. 7, 1931, Serial No. 514,244, and in Great Britain Mar. 26, 1930. 7 Claims. (Cl. 107—28.)



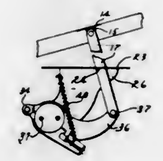
1. A machine for depositing quantities of plastic material from a bulk supply thereof, comprising a trough for said bulk supply, a plurality of cylinders communicating with said trough, plungers for ejecting material entering said cylinders from said trough, valve means for controlling the discharge of said quantities from said cylinders, actuating means for said valve means, operating means adapted to operate said plungers, a toothed wheel, means for rotating said toothed wheel uniformly, a toothed segment having the same number of teeth as said toothed wheel and a gap in the pitch circle thereof, and transmission mechanism between said toothed segment and said plungers whereby an intermittent motion is imparted to said plungers such that during operation of said valve means a pause occurs in the operation of said plungers.

1,857,622. DEPOSITING MACHINE FOR DOUGH, SEMIFLUID, PASTY, OR LIKE MATERIALS. ROBERT MARTIN CHAMBERS, Finaghy, Belfast, Ireland, assignor to George Martin and Teresa Martin, Belfast, Ireland. Original application filed Feb. 7, 1931, Serial No. 514,244, and in Great Britain Mar. 26, 1930. Divided and this application filed July 15, 1931. Serial No. 551,186. 5 Claims. (Cl. 107—28.)



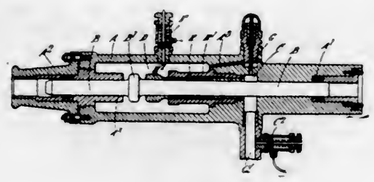
1. A machine for depositing quantities of plastic material from a bulk supply thereof, comprising a trough for said bulk supply, a plurality of containers communicating with said trough, ejectors for depositing material entering said containers from said trough, valve means for controlling the discharge of said quantities from said containers, actuating means for said valve means, cam means operatively connected with said ejectors, operating means whereby for a uniform movement of said cam means an intermittent motion is imparted to said ejectors such that during the operation of said valve means dwell periods are provided in which the ejectors are stationary, and means for adjusting said cam means so as to vary the interval between said dwell periods.

1,857,623. BALANCE SUPPORT. WYCLIFFE L. CLARK, Jamestown, N. Y. Filed Mar. 12, 1930. Serial No. 435,138. 10 Claims. (Cl. 217—60.)



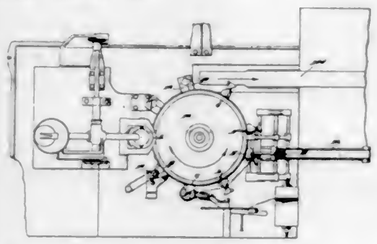
1. In a cabinet having a hinged lid therefor, a balance support comprising a member fixed to said cabinet, pivotally joined rotatable elements mounted on said member, a link connecting one of said elements with said lid, tension means connecting the other of said elements with said member and friction means adapted to resist the action of said tension means according to the position of said lid relative to said cabinet.

1,857,624. PERCUSSION TOOL FOR WAVE TRANSMISSION APPARATUS. WILLIAM RUSSELL DEGENHARDT, London, ALLAN FRED DE FRAINE, Wembley, and ROBERT HENRY BICKNELL, deceased, Westminster, England, by Robert Alan Wimberley Bicknell, London, and Arthur Bicknell, Birmingham, England, legal representatives of Robert Henry Bicknell, deceased, assignors to The Francois Cementation Company Limited, Doncaster, England, a British Company. Filed Feb. 28, 1928, Serial No. 257,708, and in Great Britain Mar. 25, 1927. 3 Claims. (Cl. 60—54.6.)



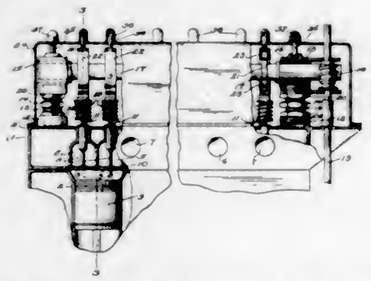
1. In a percussion tool for operation by compressional liquid wave-transmission mechanism, the combination with a percussion rod and a working chamber, of a sleeve surrounding said rod with relative longitudinal movement between them, one end of said sleeve being in contact with the liquid in said chamber, and a chamber containing a single body of liquid in which the other end of said sleeve is disposed, said sleeve being so constructed that after a forward stroke has been performed it is moved back by the pressure of the liquid in the second-mentioned chamber ready for the next forward stroke.

1,857,625. PACKAGING MACHINE. RALPH N. DOBLE, Bayside, N. Y., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1928. Serial No. 254,470. 16 Claims. (Cl. 93—7.)



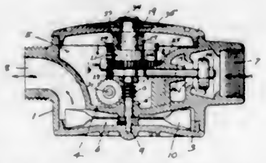
1. In a packaging machine, in combination, bag filling mechanism, tag feeding mechanism, tag punching mechanism, and means for fastening a flexible band to the punched tag and to the filled bag.

1,857,626. VALVE MECHANISM FOR INTERNAL COMBUSTION ENGINES. GLENN E. EDMUNDS, Columbus, Ohio. Filed Aug. 30, 1929. Serial No. 389,411. 3 Claims. (Cl. 123—90.)



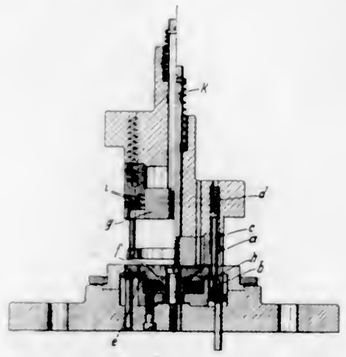
1. In an internal combustion engine, a valve operating shaft, bearings arranged at the opposite ends of said shaft for effecting its support and rotation, and a pair of screws having opposed right and left hand threads engaged with said bearings and with a stationary base for adjusting said shaft and the valve operating mechanism carried thereby.

1,857,627. HOSE TIMER. DONALD ELDER, Berkeley, Calif. Filed Feb. 24, 1930. Serial No. 430,755. 5 Claims. (Cl. 221—101.)



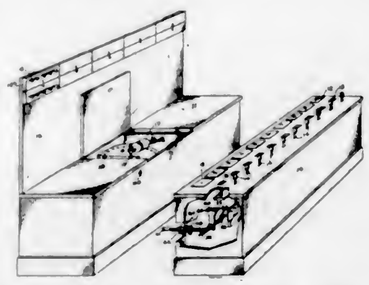
1. A water flow timing device comprising a chambered casing provided with a water inlet and outlet passage, a valve for the passage closed by the water pressure, a rotatable shaft provided with a cam for opening said valve, the end of said shaft projecting from the casing and provided with means for manually revolving the shaft, a water wheel in the water passage operated by the flow therethrough, and timing gearing connecting the shaft with said water wheel for revolving the cam to permit closing of the valve.

1,857,628. BOX STAMPING AND DRAWING TOOL. FRIEDRICH EISENLOHR, Cannstatt, Germany, assignor to Blechdosen- und Plakatfabrik K. G., Cannstatt, Germany. Filed Feb. 19, 1930, Serial No. 429,783, and in Germany Feb. 25, 1929. 2 Claims. (Cl. 113—48.)



1. A device for shaping hollow bodies such as tablets boxes with set-off rim, comprising in combination a die, a ring supplemental to the die and functioning in the formation of the rim of the box, a sectional expansible plunger cooperating with said die and ring, resilient means for contracting the sections of said plunger and means for expanding said sectional plunger whereby to expand a portion of the box.

1,857,629. AMUSEMENT DEVICE. DAVID EPSTEIN, JAMES H. FOWLER, and CHARLES A. BOUFFIER, New York, N. Y.; said Fowler and said Bouffier assignors to said Epstein. Filed June 11, 1930. Serial No. 460,314. 21 Claims. (Cl. 273—1.)



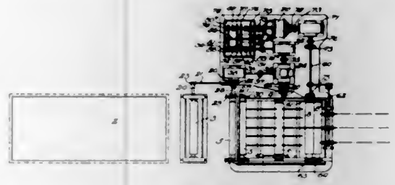
1. An electrically operated amusement device comprising a motor, a plurality of indicators, a motor circuit for said motor indicator circuits for said indicators, a plurality of means for influencing operation of said motor including a main switch, a player switch and an automatic maker and breaker for said motor circuit, and means operated by said motor for successively closing and opening said indicator circuits.

1,857,630. METHOD FOR REDUCING DRY GELATIN TO SOLUTION. EMERY T. ERICKSON, Chicago, Ill. Filed Mar. 8, 1930, Serial No. 434,472. 14 Claims. (Cl. 23—268.)

1. The method of saturating a mass of finely divided particles of material, which consists in creating an inwardly converging spray of liquid, causing the liquid comprising said spray to converge substantially at a point, and then passing each of said particles through said point in single file.

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1,857,631. COATING MACHINE DRIVE. ARCHIBALD D. EVANS, Warren, Ohio, assignor to The Wean Engineering Company, Inc., Warren, Ohio, a Corporation of Ohio. Filed July 14, 1930. Serial No. 467,851. 9 Claims. (Cl. 91—12.7.)

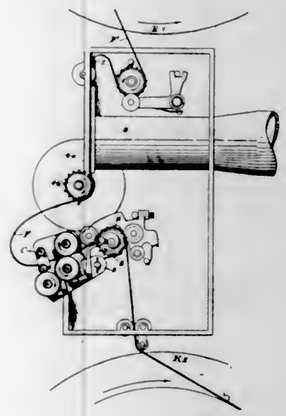


1. A drive for coating machines having entrance, center, and exit rolls, comprising a prime mover, a speed change unit operatively connecting the entrance and center rolls with the prime mover, and constant speed ratio gearing connecting the prime mover and exit rolls.

1,857,632. METHOD OF PURIFYING AND DRYING CRUDE IODINE. CHARLES W. GIRVIN, Long Beach, Calif., assignor of forty per cent to Levering Lawrason, Los Angeles, Calif. Filed Nov. 19, 1930. Serial No. 496,823. 9 Claims. (Cl. 23—216.)

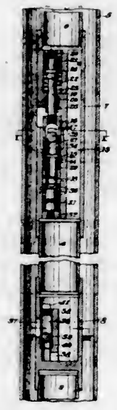
3. The method of purifying and drying crude iodine comprising placing the crude iodine in an acid and iodine proof container and covering the crude iodine with concentrated sulfuric acid, heating the iodine to slightly above its melting point so as to reduce the iodine to a fused mass, cooling the fused iodine to ordinary room temperature, removing the sulfuric acid, washing the fused iodine, and scraping from its surface any remaining coating of impurities.

1,857,633. MOTION PICTURE FILM CLEANER. JOSEPH G. GRAMSA, Buffalo, N. Y., assignor of one-half to Elmer B. Chapman, Buffalo, N. Y. Filed Sept. 4, 1928. Serial No. 303,678. 9 Claims. (Cl. 88—17.)



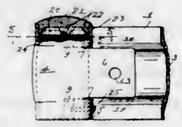
6. In a motion picture machine the combination with the film feeding mechanism thereof of a film cleaner comprising a cleaning element, means for supporting said element, means arranged to maintain a portion of its surface in contact with the film, and means operatively connected to the said film feeding mechanism for feeding said element in the direction of its length so as to change the surface portion of said element in engagement with the film.

1,857,634. METHOD OF AND APPARATUS FOR AUTOMATICALLY RAISING LIQUIDS FROM WELLS. EDGAR E. GREVE, Bellevue, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 17, 1927. Serial No. 240,806. 13 Claims. (Cl. 103—233.)



1. An apparatus for elevating liquids from a well including an actuating fluid pressure pipe having outlet openings arranged at different vertical levels therein, automatically operable balanced piston valves for controlling the discharge of actuating fluid from said pipe, said valves being actuated by the height of the column of the liquid in the well, and means for preventing the liquid being raised from entering the pressure fluid supply pipe.

1,857,635. AUTOMOBILE BUMPER. MILTON B. HAMMOND, Grand Rapids, Mich., assignor to Wolverine Bumper & Specialty Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Apr. 27, 1931. Serial No. 533,119. 6 Claims. (Cl. 293—55.)

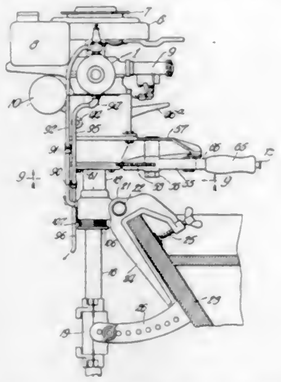


1. In an automobile bumper: a bar having rearwardly extending end portions curved in a horizontal plane, comprising tongues continuously curved toward the bar, and mounting tongues extending approximately parallel with the bar intermediate its end portions.

1,857,636. OUTBOARD MOTOR. OSCAR S. HEIDE, Chicago, Ill. Filed Aug. 21, 1929. Serial No. 387,298. 16 Claims. (Cl. 115—18.)

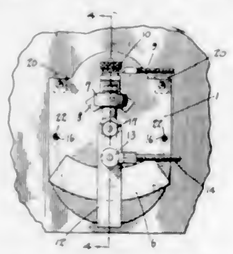
1. An outboard motor having a propeller-operating shaft separate from the motor shaft, a propeller shaft with which the propeller operating shaft is in constant driving

connection, a clutch connecting said motor shaft to the propeller operating shaft, means for releasing the clutch, and means in operative connection with the motor shaft,



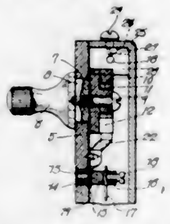
regardless of whether or not the propeller-operating shaft is connected therewith, for operating a submerged pump for pumping cooling water to the engine.

1,857,637. AUTOMATIC CIRCUIT BREAKER. NOAH A. HICKOK, Oakland, Calif. Filed Mar. 13, 1929. Serial No. 346,667. 5 Claims. (Cl. 200—52.)



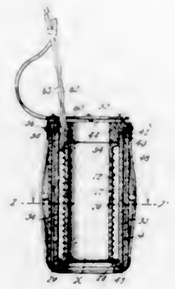
1. An automatic ignition circuit breaker for automobiles comprising a base, a weighted member swingably carried by the base and having a roller thereon, a smooth face conductor having cammed ends contacting with the roller during the normal swinging of the latter, said member when swung through a predetermined angular distance in either direction clearing the conductor and breaking the circuit, and means for locking the member against return movement and thus completing the circuit again during further revolving of the base.

1,857,638. KEYLESS SWITCH. ANDREW HIRT, New York, N. Y. Filed Oct. 20, 1928. Serial No. 313,778. 2 Claims. (Cl. 200—8.)



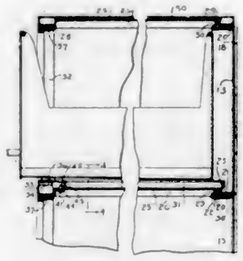
1. In a keyless switch of the character described, a housing, a contact post, a contact ring having an extension thereon, a contact strip having one end thereof secured to the housing by the post, a piercing lip on the strip, and the end of the strip being bent out of the plane of the center portion thereof to engage said ring extension.

1,857,639. HEATER ELEMENT FOR PERMANENT WAVING OF HAIR. BENNO F. JANCKE, Brooklyn, N. Y., assignor to Townsend Manufacturing Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 1, 1927. Serial No. 230,339. 3 Claims. (Cl. 219—24.)



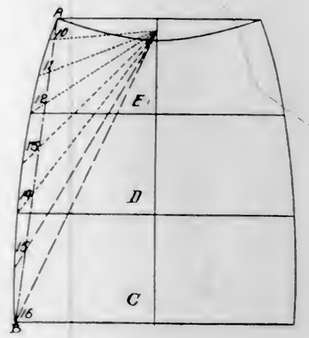
1. A heater element for use in permanent waving of hair, of the type having an inside electrical resistance heater, adapted to produce a steaming temperature around the hair, and a housing comprising inner and outer enclosing walls, said inner enclosing wall being a tubular member of glass enclosing a space within its inner or smaller circumference within which a strand of hair enclosed in a moisture containing wrapper is placed and around the outer or larger circumference of which the electrical resistance heater is disposed and arranged to transmit heat through said wall to vaporize said moisture, said outer wall comprising porous heat lagging material.

1,857,640. METAL FILING CABINET. CARL A. JOHNSON, Celoron, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y., a Corporation of New York. Filed Apr. 18, 1931. Serial No. 531,025. 3 Claims. (Cl. 312—107.)



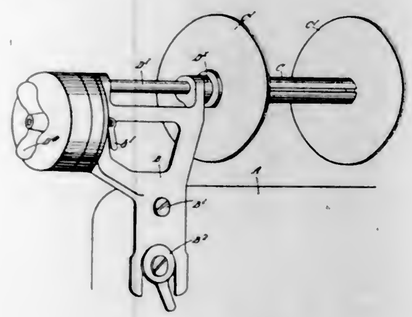
1. A filing case unit comprising a body having a closed side, top and rear walls, a strap in said body mounted adjacent the forward edges and secured to certain of said walls, a rail connecting the forfward lower edges of said side walls, and flanges terminating the ends of said strap, said flanges being mounted in and engaged with said rail whereby to reinforce the drawer opening of said unit.

1,857,641. ACOUSTIC DEVICE. JOHN CLIFFORD JOHNSON, Glen Cove, N. Y. Filed June 3, 1931. Serial No. 541,819. 12 Claims. (Cl. 181—30.)



1. An acoustic trap comprising an open-ended housing, wire-fabric supporting means mounted in said housing, said means being substantially J-shaped in cross-section, and sound-absorbing material supported on said supporting means.

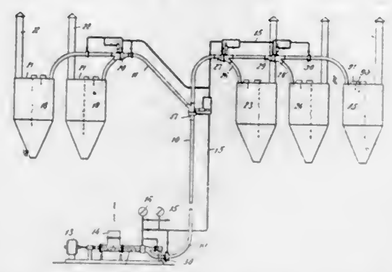
1,857,642. CALCULATING AND SIMILAR MACHINE. ALBERT EDWARD JONES, Westminster, England, assignor to The Whitehead Torpedo Company Limited, Westminster, England, a British Company. Filed June 14, 1929, Serial No. 370,887, and in Great Britain Dec. 4, 1928. 10 Claims. (Cl. 242—107.)



1. In a calculating or similar machine in which data is recorded on a long strip of paper, a device comprising a roller for receiving the strip of paper issuing from the machine, a spindle supported at one end only, means for removably mounting said roller on said spindle, and spring operated means for rotating said spindle so that the strip of paper is wound automatically on said roller as said strip issues from the machine.

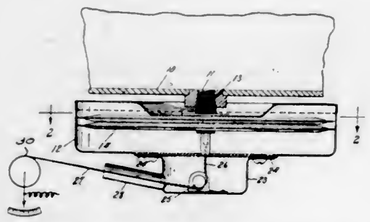
1,857,643. CONVEYING SYSTEM. ALONZO G. KINYON, Allentown, Pa., assignor, by mesne assignments, to the estate of James W. Fuller, deceased, Catasauqua, Pa. Filed Mar. 8, 1924. Serial No. 697,723. 1 Claim. (Cl. 302—28.)

A conveying system of the class described which comprises the combination of a main transport line, means for propelling material therethrough, a plurality of bins located along the main line, branch connections between each of the bins except the last and the main line, the last bin being directly connected to the main line, a two-way valve for controlling each branch connection, the said valve being alternately operable to open the branch and close the main line beyond the branch, and to close the branch and open the main line beyond the branch, a central control station, means remotely controlled at the central station for opening and closing said valves, means for indicating the condition of said valves, means



associated with each bin except the last operable when the material in said bin has reached said predetermined high level to actuate the operating means of the valve associated with said bin to close the branch line feeding that bin, and means associated with the last bin only and operable when the material in said bin has reached said predetermined high level to shut down the propelling means.

1,857,644. LIQUID LEVEL GAUGE. CARL KNOBLOCH, Akron, Ohio. Filed Sept. 7, 1928. Serial No. 304,597. 8 Claims. (Cl. 73—54.)

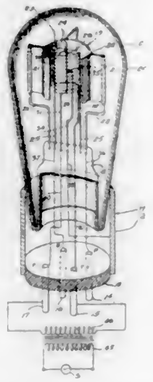


7. The combination with a tank having an aperture in the bottom thereof, a pressure responsive diaphragm connected to the outside of the tank and in communication with the tank through said aperture, a short rigid stud attached to and projecting from the center of the diaphragm outside of the tank, an indicator relatively remote from said diaphragm, and attenuated flexible means connecting the indicator relatively remote from said diaphragm to the stud, said flexible means being swivelled in the latter.

1,857,645. VACUUM TUBE CONSTRUCTION. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Harrison, N. J., a Corporation of Delaware. Filed Mar. 11, 1927. Serial No. 174,511. 2 Claims. (Cl. 250—27.5.)

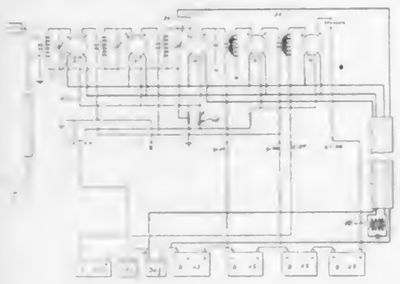
1. A thermionic relay comprising an evacuated container having therein an anode; a control electrode; and a filamentary cathode adapted to be heated by fluctuating currents to cause electron emission; a base secured to said container; four terminals positioned on said base; a fifth terminal; a conducting surface film on the container; a connection between the anode and one of said terminals;

a connection between control electrode and another of said terminals; a connection between the mid-point of said cathode and said fifth terminal; a connection be-



tween the surface film and the fifth terminal; and connections between opposite ends of said cathode and the remaining two base terminals.

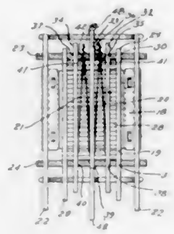
1,857,646. THERMIONIC TUBE CONNECTING MEANS. WALTER LOUIS KRAHL, Montclair, N. J., assignor, by mesne assignments, to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Dec. 10, 1927. Serial No. 239,027. 4 Claims. (Cl. 250—27.)



1. In a connection harness for use in adapting a direct current radio circuit for alternating current operation, a four wire cable, taps on two of said wires adapted to be connected to the filament terminals of the tubes, an insulating clip on the end of a third wire adapted to electrically contact with one end of a grid leak and insulate said grid leak from its normal support at that end, and having the fourth wire connected to one of the first two wires at a point adjacent the tap for connection to the filament of the detector tube.

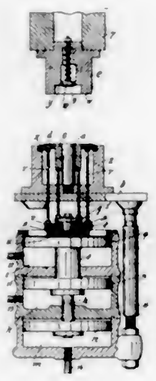
1,857,647. UNITARY ELEMENT STRUCTURE FOR VACUUM TUBES. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Oct. 2, 1929. Serial No. 396,668. 6 Claims. (Cl. 250—27.5.)

1. In a vacuum tube having a stem, a pair of spaced supports, a plurality of support posts extending between said supports and terminating above said stem thereby combining with the supports to provide a unitary structure, a filamentary cathode positioned between two of said support posts and having one end attached to one, and the other end attached to the other, a grid mounted upon another pair of said support posts, and an anode mounted



upon another pair of said support posts, thereby including the filament, grid, and anode as part of the unitary structure independent of any support from the stem.

1,857,648. DRAWING PRESS. OTTO KÜHNER, Goppingen, Germany, assignor to L. Schuler A.-G., Goppingen, Germany, a Corporation. Filed Mar. 31, 1930, Serial No. 440,527, and in Germany Apr. 12, 1929. 4 Claims. (Cl. 113—46.)

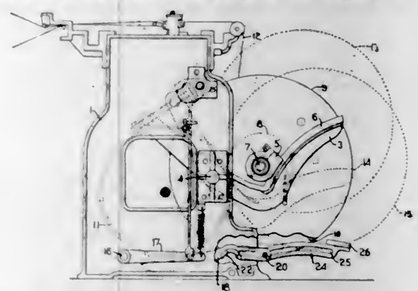


1. A drawing press comprising a table, an outer annular blank holder and an inner annular blank holder, both fitted to slide with respect to said table, a fixed drawing punch on said table, a matrix adapted to cooperate with said holders and said punch, a cylinder disposed in a fixed position with respect to said table and having two compartments, a piston mounted to slide in the first compartment, a piston rod on said piston, means operatively connecting said piston rod to said inner blank holder, a piston mounted to slide in the second compartment and on said piston rod, and means operatively connecting said piston in the second compartment to said outer blank holder.

1,857,649. WARPER TREADLE. HARRY A. LEONARD, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed June 24, 1931. Serial No. 546,476. 6 Claims. (Cl. 28—32.)

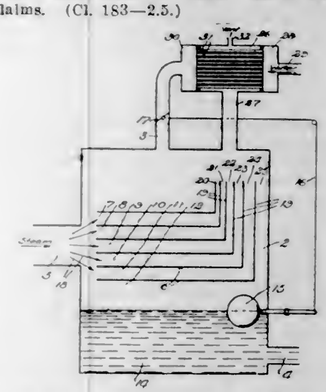
1. A warper for winding a headed beam comprising beam supporting arms having their forward ends movable downward for doffing the beam, and a starting treadle having a pair of arms pivoted at their rear ends and extending forward beneath the beam and between the heads thereof and a treadle board connecting the for-

ward ends of the arms in which each of said arms is extensible and contractible to enable the operator when the arms are extended and the beam is full readily to op-



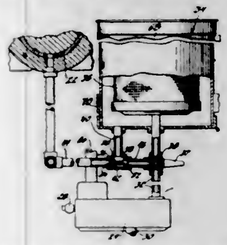
erate the treadle and to enable the beam to be doffed without interfering with the treadle when the arms are contracted.

1,857,650. METHOD AND APPARATUS FOR DEAERATING. JOHN R. MCDERMET, Jeannette, Pa., assignor to Elliott Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed Jan. 28, 1931. Serial No. 511,874. 13 Claims. (Cl. 183—2.5.)



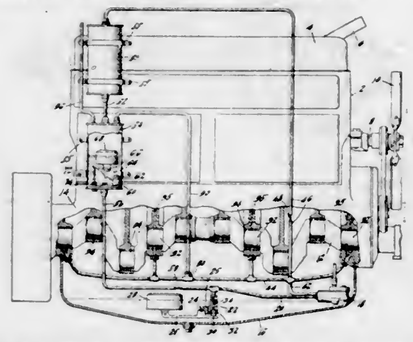
1. In the method of deaerating, the steps comprising passing the water to be deaerated through a heat exchanger, progressively subjecting the water to the action of steam in successive strata, continuously separately withdrawing steam and released air from such strata, and subjecting the strata having the least temperature rise to an increased withdrawal effectiveness.

1,857,651. OIL FILTERING SYSTEM. CHARLES W. MCKINLEY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Mar. 28, 1928. Serial No. 265,261. 12 Claims. (Cl. 184—6.)



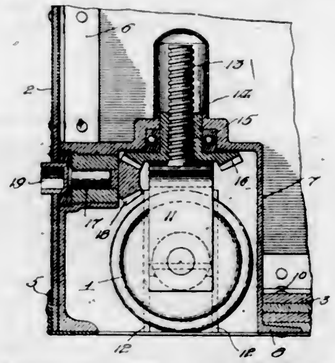
2. In combination with an engine having a force feed lubricating system, means to force the lubricant to the working parts of said engine, pressure relief means interrelated with said force means, a piping system leading from the force means, a first filter in said system between the force means and working parts, a bypass to allow the lubricant to flow through the system without passing thru the first filter, a second filter in said system, and means to return the lubricant from said second filter to the pump.

1,857,652. OIL FILTER. CHARLES W. MCKINLEY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Mar. 27, 1929. Serial No. 350,297. 18 Claims. (Cl. 184—6.)



1. In combination with an engine having a lubricating system including an oil pan, a pump in the system to withdraw oil from the pan, an oil filter adapted to receive lubricant from the system, a receptacle having a flow connection from the filter to receive lubricant therefrom, a flow connection from the system to the receptacle, and a flow connection from the receptacle to the pump.

1,857,653. SHIPPING CONTAINER OR FREIGHT CAR BODY SECTION. GEORGE R. MEYERCORD and OLIN H. BASQUIN, Chicago, Ill., assignors to Haskelite Manufacturing Corporation, a Corporation of New York. Filed Apr. 16, 1931. Serial No. 530,510. 10 Claims. (Cl. 105—366.)

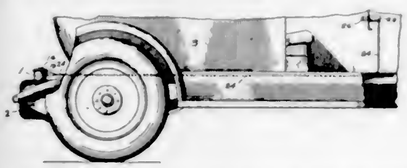


1. The combination with a shipping container in the form of a box adapted normally to rest its bottom wall on any flat supporting surface, of rolling supports therefor, and connecting means between said supports and the container, including devices to lower the container with respect to the supports and cause it to rest on its bottom wall or raise it far enough to cause the said rolling supports alone to rest on the supporting surface and sustain the weight of the container.

2. The combination with a shipping container adapted normally to rest its bottom wall on any flat supporting sur-

face, of rolling supports, connections between said supports and the container, and means for applying power from points outside of the container to raise the container high enough to cause it to be carried by said supports or lowered far enough to cause it to rest on the supporting surface independently of said supports.

1,857,654. LOCK FOR CONTAINERS. WESLEY J. MYLAR, Oakland, Calif. Filed Nov. 10, 1930. Serial No. 494,634. 6 Claims. (Cl. 70—90.)

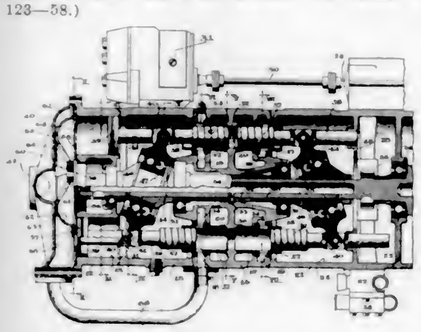


1. A lock cap for containers comprising a bushing mounted within the inlet opening of a container in normal rotatable relation thereto; a cap threaded onto one end of the bushing to close the inlet opening, the bushing normally rotating with the cap to prevent removal of the cap; and means to engage and hold the bushing against rotation whereby the cap may be unscrewed.

1,857,655. PROCESS OF PREPARING SECONDARY AND TERTIARY ALIPHATIC AMINES FROM PRIMARY ALIPHATIC BASES. OTTO NICODEMUS and WALTER SCHMIDT, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 18, 1929, Serial No. 408,154, and in Germany Nov. 27, 1928. 3 Claims. (Cl. 260—127.)

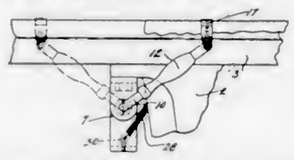
1. Process of preparing secondary and tertiary aliphatic amines from primary aliphatic amines, which comprises passing the vapor of a primary aliphatic amine at a temperature below 300° C. over a metal which is known to be a hydrogenating catalyst.

1,857,656. TWO STROKE CYCLE INTERNAL COMBUSTION ENGINE. LEE OLDFIELD, Chicago, Ill. Filed Sept. 26, 1928. Serial No. 308,357. 19 Claims. (Cl. 123—58.)



1. A barrel type internal combustion engine comprising a main shaft, a plurality of cylinders arranged parallel to the main shaft, said cylinders having intake and exhaust ports at opposite ends thereof, intake and exhaust connections therefor, a pair of opposed pistons in each cylinder, one piston controlling the exhaust port and the other controlling the intake port, a swash plate connected to each of the exhaust pistons and journaled at an angle on said shaft, a second swash plate connected to each of the intake pistons and similarly journaled on said main shafts, the exhaust and intake swash plates being angularly offset on said main shaft in such a manner as to cause the exhaust pistons to uncover and cover the exhaust ports slightly in advance of the similar cycles of the intake ports, supercharger cylinders at one end of and aligned with said power cylinders, pistons in said supercharger cylinders connected to the adjacent power pistons, and an eccentrically movable valve for said supercharger cylinders adapted to control both the intake and discharge through a single port for each cylinder.

1,857,657. PRESS CLAMP. ROBERT C. PAULY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Norwood Station, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 30, 1928. Serial No. 273,886. 5 Claims. (Cl. 68—9.)



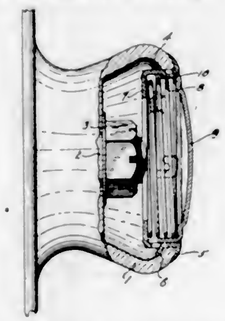
1. In a pressing machine, a bed, a transverse work clamp mounted for swinging movement to substantially two different clamping locations upon the bed, supporting means therefor positioned to support said clamp in its different locations, and a tension device effective upon said clamp in its different locations.

1,857,658. APPARATUS FOR STUNNING ANIMALS TO BE SLAUGHTERED. ADOLF PFRETZSCHNER, Pasing, near Munich, Germany. Filed Jan. 29, 1930, Serial No. 424,386, and in Germany Feb. 6, 1929. 5 Claims. (Cl. 175—311.)



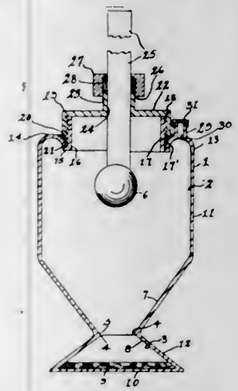
1. In an apparatus for stunning animals to be slaughtered the combination of a travelling path adapted to convey the animals to be slaughtered, railings at either side of and along said travelling path, electric contacts oscillatably arranged above said travelling path and adapted to bear consecutively on the body of the animal.

1,857,659. HUB CAP. JAMES S. REID, Shaker Heights, Ohio, assignor to The Reid Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 17, 1930. Serial No. 468,674. 2 Claims. (Cl. 301—108.)



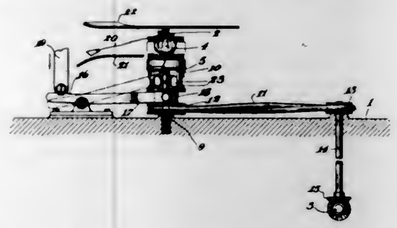
1. A hub cap, comprising a relatively stationary ring-like member adapted for attachment to a wheel hub, a closure shell member telescoping thereinto, spring means lying between the closure and stationary members and urging the former outwardly, and yieldable releasable locking means between said closure and ring-like members.

1,857,660. SEDIMENT RETAINER. GEORGE RIESTENBERG, Cincinnati, Ohio. Filed Nov. 18, 1930. Serial No. 496,478. 4 Claims. (Cl. 210—57.)



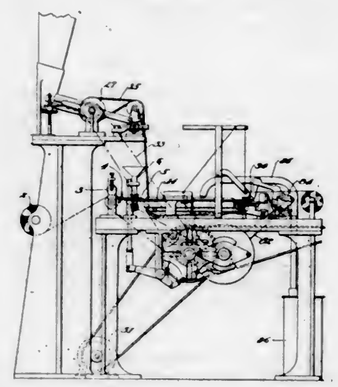
1. A liquid container comprising connected upper and lower casings having chambers therein communicating with each other by a port therebetween, said casings respectively having their lower and upper walls inclined downwardly and inwardly and upwardly and inwardly toward said port, the upper edges of the walls of said upper casing being inclined downwardly and inwardly, an upwardly extending neck integrally connected with the inner edges of said upper edges whereby a depression in said container is formed around said neck, a cap fixed to said neck and having an opening therein and having its lower edges in said depression, a vertical rod slidable in said opening, a ball fixed to the lower end of said rod and adapted to close said port when said rod is manually forced downwardly, a sealing agency in said depression whereby the lower edge of said cap is sealed with respect to the opening in said neck.

1,857,661. STRING WINDING DEVICE FOR BAGGING MACHINES. PAUL ROHRIG, Bellaire, N. Y., assignor to Pneumatic Scale Corporation, Ltd., Norfolk Downs, Mass., a Corporation of Massachusetts. Filed May 27, 1929. Serial No. 366,132. 10 Claims. (Cl. 226—56.)



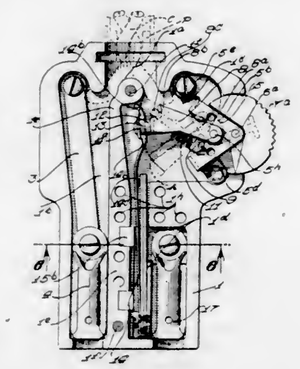
1. A string winding attachment for bag machines comprising a hollow cylindrical member vertically positioned with reference to its axis and provided at its upper periphery with vertically projecting yieldable members, means for continuously rotating said cylindrical member about its axis, and means for vertically raising the same during the rotation thereof into a position where said yieldable members may catch the string of the bag therebetween.

1,857,662. TEA BAGGING MACHINE. PAUL ROHRIG, Bellaire, N. Y., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 6, 1931. Serial No. 513,821. 8 Claims. (Cl. 93—3.)



1. In a tea bagging machine, in combination, a plurality of bag holding members, means for moving the bag holding members through successive stations, mechanism for applying a flexible handle comprising a string and a tag to the neck portion of a bag held by the bag holding means, and mechanism for winding the string of the handle thus applied around the neck of the bag while the latter is held by the bag holding means.

1,857,663. ELECTRIC CONNECTION PLUG. MARTIN S. RUNSVOLD, San Diego, Calif. Filed Dec. 28, 1929. Serial No. 417,027. 6 Claims. (Cl. 200—138.)

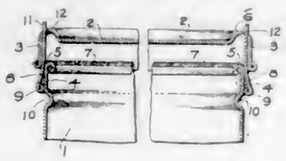


1. In a device of the class described, a pair of terminal means connectible to a heating element, the one terminal means secured to the one lead of an electric circuit, a thermostat member arranged to receive heat from the other of said terminal means, a contact arm associated with said thermostat but free of its movement in one direction, a switch mechanism securable to the other lead of said electric circuit, and a contact lever forming a part of said switch mechanism, said lever shiftable into and out of engagement with said contact arm by the action of said switch, said contact arm shiftable into and out of engagement with said contact lever by the distortion of said thermostat member.

1,857,664. TREATMENT OF GOLD AND SILVER. MAX SCHLÖTTER, Berlin, Germany, assignor to Asociacion de Productores de Yodo de Chili, Valparaiso, Chile. Filed Oct. 26, 1929, Serial No. 402,796, and in Germany Dec. 11, 1928. 7 Claims. (Cl. 204—1.)

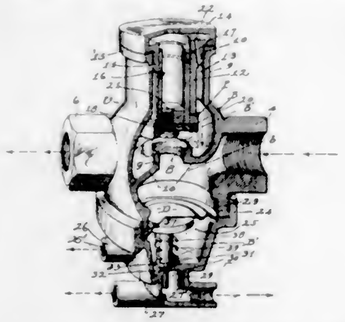
1. An electrolytic method of producing gold and silver which consists in electrolyzing a solution of iodide of the metal in an alkali iodide admixed with another oxygen-free halogenide.

1,857,665. SEALED CAN AND METHOD OF MAKING THE SAME. HARRY SEGELL, Boston, Mass., assignor of one-half to Arthur H. Parker, Lexington, Mass. Filed Mar. 15, 1930. Serial No. 436,022. 7 Claims. (Cl. 220—61.)



1. A sealed can comprising a can body, a cover for the can having a skirt portion which fits over the upper end of the can body and a locking ring interposed between the skirt portion and said upper end of the can body, said locking ring having fingers which extend through and are interlocked with the cover.

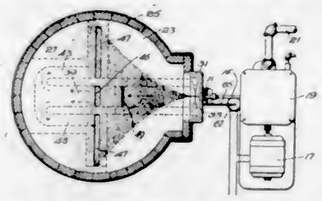
1,857,666. COMBINATION CHECK, PILOT AND UNLOADING VALVE FOR COMPRESSED AIR SYSTEMS. ALBERT A. SMALLHOUSE, Los Angeles, Calif. Filed Oct. 15, 1927. Serial No. 226,498. 9 Claims. (Cl. 137—153.)



1. A valve mechanism comprising an inlet and an outlet, separate chambers connected with said inlet and said outlet, a valve for regulating communication between said chambers, a third chamber permanently closed against communication with said other chambers, and open to the atmosphere, means for connecting said third chamber with a pressure line, said chamber being normally closed to pressure from said line, and means operable when pressure in said inlet chamber reaches a point below normal, whereby pressure in said pressure line may be relieved through said third chamber.

1,857,667. LIQUID FUEL BURNER. GEORGE J. STADLER, Boston, Mass., assignor to Arthur H. Ballard, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed June 13, 1928. Serial No. 285,038. 3 Claims. (Cl. 158—4.5.)

1. In a liquid fuel furnace, the combination with a heater having a combustion chamber provided with a floor, of a burner nozzle having a jet forming orifice, means for forcing a mixture of atomized liquid fuel under pressure through the orifice to form a jet within the combustion chamber over the floor, and an air admission passage formed beneath the floor for preheating the air, said passage having an air inlet at one side of the heater and extending thence across the heater beneath the floor and



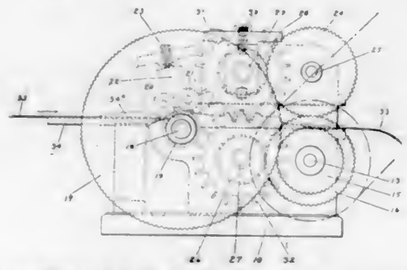
provided near the mid portion of the chamber with an air delivery opening through the floor and in line with the jet, said passage extending thence to the opposite side of the heater and thence reversely to an air delivery opening laterally positioned out of line with the jet and relatively remote from the nozzle and adapted to deliver air to the flared portion of the jet.

1,857,668. BUMPER FOR DUST MOPS AND BROOMS. ALFRED D. SUND, Santa Rosa, Calif. Filed Dec. 17, 1929. Serial No. 414,690. 3 Claims. (Cl. 15—246.)



1. A bumper leg for a broom comprising a pair of co-operating members of opposite form secured together by means of a pair of clamp bolts, and forming when secured together, an encompassing clamp between said bolts, and a conical bumper receiving socket beyond one of said bolts, and a resilient bumper in said socket.

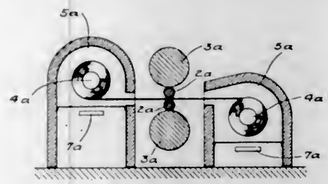
1,857,669. TESTING AND FLEXING MACHINE. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1928. Serial No. 250,928. 18 Claims. (Cl. 73—51.)



1. A testing and flexing apparatus for strip material comprising a pair of cooperating rotatable feed members having means for flexing and rubbing said strip between them, means for rotating said members to feed said strip forward, and means for retarding the speed of passage of sid strip between said members.

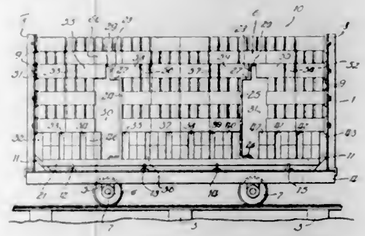
1,857,670. ROLLING METAL STRIP. ABRAM P. STECKEL, Youngstown, Ohio, assignor to The Cold Metal Process Company, Youngstown, Ohio, a Corporation of Ohio. Filed June 15, 1927. Serial No. 198,915. 3 Claims. (Cl. 29—18.)

1. The method of rolling metal strip which includes coiling a strip of hot metal in a heating chamber, uncoiling the same and feeding it from the chamber through a roll pass and to another heated chamber, coiling the



strip therein in a direction opposite to that in which it was first coiled, and periodically reversing the direction of rolling.

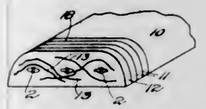
1,857,671. METHOD OF AND MEANS FOR MANUFACTURING BRICKS. ARTHUR J. THERRIEN, Northbrook, Ill., assignor to National Brick Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 28, 1928, Serial No. 281,018, Patent No. 1,773,827, dated Aug. 26, 1930. Divided and this application filed May 18, 1929. Serial No. 364,021. 18 Claims. (Cl. 105—373.)



1. In combination, a platform for supporting a unit pile of bricks, said platform having a pair of upwardly extending guides for guiding the pile of bricks to form arches outside of them and a pier between them.

2. In combination, a platform for supporting a unit pile of bricks, said platform having end guides for defining the ends of the unit pile, and a guide between the end guides for defining a transverse arch in the pile.

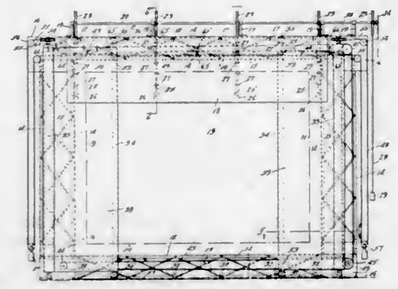
1,857,672. SHOE FILLER PIECE. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 10, 1927. Serial No. 232,279. 8 Claims. (Cl. 36—30.)



1. An article of manufacture comprising, a sheeted layer of spreadable shoe-filler material of condensed compacted form, having embedded therein strength giving string-like means for aiding lengthwise coherency of the layer.

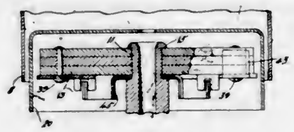
1,857,673. STAGE OR SCREEN MODIFIER. EARL J. VALLEN, Akron, Ohio. Filed May 31, 1930. Serial No. 458,287. 13 Claims. (Cl. 88—24.)

1. In apparatus of the class described, a curtain adapted to bound one side of a display, a roll upon which the curtain is rolled, a batten, the free edge of said curtain being fixed to said batten, means tending to yieldably turn said roll to roll said curtain thereon, chain means



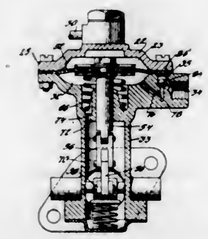
to move the batten to and from the roll, and means for supporting a normally unsupported edge of the curtain on the batten moving chain as it is unrolled from the roll.

1,857,674. SPEEDOMETER WITH ROTATING MAGNET. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Oct. 7, 1926, Serial No. 140,198. Renewed Apr. 29, 1929. 3 Claims. (Cl. 264—13.)



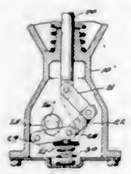
1. In a magnetic measuring instrument a casing of magnetic material, a permanent bar magnet, means to vary the efficiency thereof comprising a shoe of magnetic material slidable along an end of said magnet toward and from the casing and heat sensitive means to control the position of said shoe.

1,857,675. FUEL AND AIR PUMP. ABRAHAM M. BABITCH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed July 7, 1928. Serial No. 290,962. 3 Claims. (Cl. 103—4.)



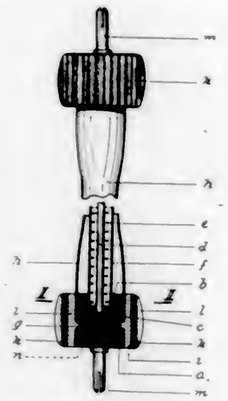
1. In means for simultaneously pumping air and a liquid fuel, a main casting providing an air pump chamber, a cover casting providing a fuel pump chamber, a reciprocable diaphragm pumping element secured between said castings and adapted to displace air and fuel from said chambers alternately, means for reciprocating said diaphragm, there being a separate inlet opening to each of said chambers, and a separate valved outlet opening from each of said chambers, one pair of said openings being provided in said cover casting and another pair of said openings being so provided in said main casting as to be accessible only upon the removal of said cover casting.

1,857,676. PUMP DRIVE. ABRAHAM M. BABITCH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed July 7, 1928. Serial No. 290,964. 2 Claims. (Cl. 103—205.)



1. In a fuel pump of the class described, a hollow body part having a laterally extending bearing for a rotatable shaft adjacent its lower end, a cover fastened to the upper end of said body part, a flexible pumping diaphragm held between said cover and upper end, a reciprocating operating rod the upper end of which is connected with said diaphragm, a guide for said rod, a spring surrounding said operating rod and acting to force it and said diaphragm upward, two links arranged as a toggle, said links being pivotally connected together and the upper end of the upper of them being pivotally connected with the lower end of said operating rod, a third link one end of which is pivotally supported within said pump body, and the other end of which is pivotally connected with the lower end of the lower one of said two links, and a shaft rotatable in the bearing aforesaid and the inner end of which is operatively associated with said third link.

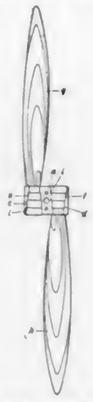
1,857,677. HAIR CURLER. KARL GEORG STRÖHER, Rothenkirchen in Vogtland, Germany. Filed Jan. 3, 1930, Serial No. 418,258, and in Germany July 22, 1929. 1 Claim. (Cl. 219—24.)



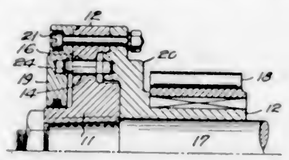
A hair curler comprising a heating unit including a core of insulating material, a heating coil on said core, and a casing of insulating material surrounding said coil, a support of insulating material attached to the end of said heating unit, a hollow shaft secured on said support with its inside diameter reduced toward the centre of its unsupported portion, and current-conducting means on said support connected with said coil.

1,857,678. SCREW PROPELLER FOR USE UPON AIRCRAFT. HEINRICH SUKOHL, Berlin-Waldmannslust, Germany. Filed Apr. 17, 1930, Serial No. 444,936, and in Germany Apr. 22, 1929. 5 Claims. (Cl. 170—173.)

1. A propeller for air-craft, comprising a wooden blade formed at its inner end with a journal tapering from its end towards the body of the blade and composed of a plurality of stepped cylindrical portions bounded at their adjacent ends by transverse annular shoulders perpendicular to the axis of said journal, and a hub formed with a bore corresponding in shape to the shape of the journal and having said journal mounted therein.

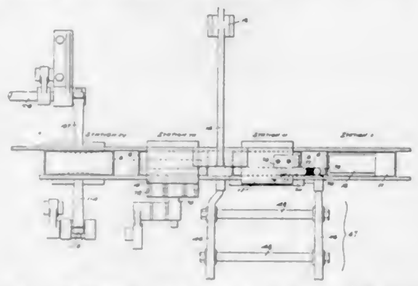


1,857,679. FLEXIBLE TRANSMISSION UNIT. CECIL OLDRIEVE THOMAS, Montreal, Quebec, Canada. Filed Dec. 12, 1929. Serial No. 413,608. 20 Claims. (Cl. 74—29.)



19. In a transmission unit, in combination, a male member and an outer female transmission member having normally concentric surfaces formed with mating grooves substantially parallel with the axis of said members, and a series of separate springs located in said grooves and forming driving connections between the said members, each of said springs comprising a pair of leaves normally curved from end to end and a pair of laterally and oppositely extending tail portions engaging adjacent springs for equalization of load.

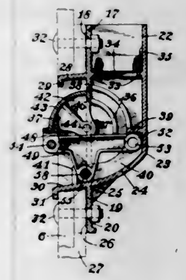
1,857,680. PACKAGING MACHINE. EDWARD VAN DER PYL, Wilton, and ROBERT H. STIMPSON, Nashua, N. H., assignors, by mesne assignments, to Frederick L. Emery, Boston, Mass. Filed Oct. 9, 1928. Serial No. 311,366. 18 Claims. (Cl. 93—7.)



1. In a packaging machine, carton lower end closing means comprising a reservoir for adhesive, a feed roll

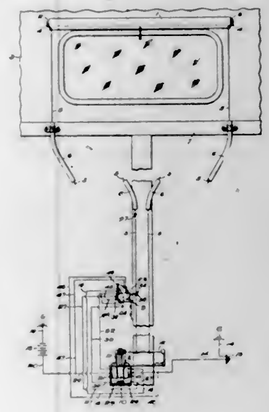
therein, rotatable quantity-regulating means therefor, and lower flap gluing means comprising a plurality of rolls normally in contact with the feed roll, and means to cause them to apply glue to the opposite faces of the lower flap.

1,857,681. VENTILATOR FOR CARS. WILLIAM E. WINE, Toledo, Ohio. Filed July 10, 1929. Serial No. 377,200. 16 Claims. (Cl. 98—6.)



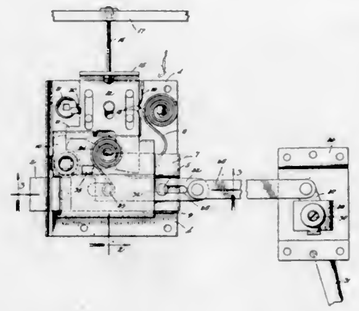
1. A ventilator for railway cars comprising a frame, said frame having an air passageway therethrough, a rockable shutter for opening and closing said passageway, a bar connected to the upper edge of said shutter, said bar being lockable to the frame when the shutter is in its open and closed positions, and means for retaining one end of the bar always within the frame.

1,857,682. CURTAIN CONTROL. WILLIAM C. BARAGWANATH, Lexington, Mass. Filed May 8, 1930. Serial No. 450,768. 4 Claims. (Cl. 156—28.)



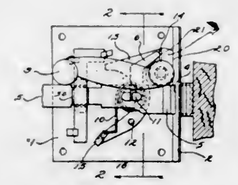
2. A window curtain and roller operating means comprising a motor, current producing means connected thereto, a curtain-cord winding drum connected to and operated by the motor, a cord operably connecting the roller and the drum; switch actuating means on the cord, and a reversible motor-operating switch controlled by said means in circuit with the motor, and electromagnetic means for effecting the reversal of the switch, and a control switch therefor.

1,857,683. REMOTE CONTROL LOCK STRUCTURE FOR VEHICLE DOORS. FRANK M. EDGAR, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 21, 1926. Serial No. 82,659. 10 Claims. (Cl. 292—173.)



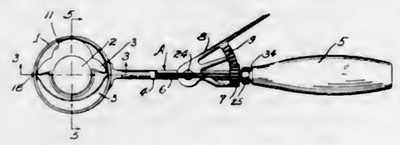
1. In a lock assembly, the combination of a slidable bolt, an outside operated roll-back for retracting said bolt, a vertically movable plate adapted to contact with said roll-back for locking same against movement, an extension on said plate having a lost motion engagement with a member adapted to be connected with a pin tumbler lock whereby the plate can be moved, and means connected to said plate and extending up through the garnish moulding of the door, to move the plate within the limits of said last motion into locking position without exerting turning effort on the member.

1,857,684. DOOR LATCH. JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed May 5, 1930. Serial No. 449,857. 14 Claims. (Cl. 292—169.)



1. Latch construction for an automotive vehicle comprising in combination a latch frame, a bolt movably mounted thereupon, retracting means for the said bolt, and a single means supported solely by the said bolt for maintaining the retracting means in a predetermined position independently of the extent of the projection of the said bolt and for projecting the said bolt.

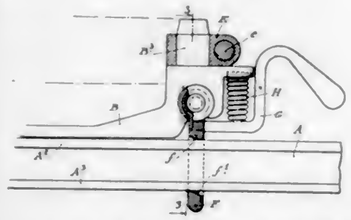
1,857,685. DISPENSING DEVICE. JOSEPH B. FRIEDMAN, Los Angeles, Calif. Filed Mar. 26, 1930. Serial No. 439,048. 8 Claims. (Cl. 107—48.)



6. A dispensing device comprising a bowl; a fixed protuberance in said bowl adapted to form a recess in ma-

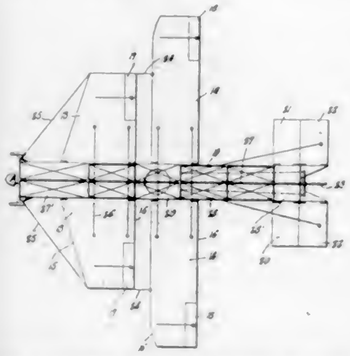
terial discharge therefrom; a handle for the bowl; a scraper pivoted to the bowl on opposite sides of said protuberance, and having an opening adapted to receive said protuberance with a clearance; and means to operate said scraper to dispense the contents in the bowl.

1,857,686. DEVICE FOR AUTOMATICALLY ADVANCING PERFORATING HAMMERS BY SLIDING ON A SUPPORT. PIERRE GOUGE, Paris, France, assignor to Societe Metallurgique de Normandie, Paris, France, a Limited Joint-Stock Company of France. Filed Feb. 8, 1930, Serial No. 426,992, and in France Nov. 12, 1929. 10 Claims. (Cl. 255—45.)



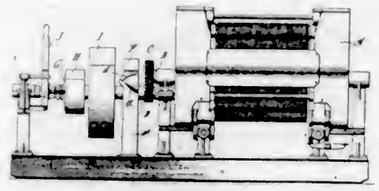
5. In apparatus for automatically advancing perforating hammers, the combination of a stationary support, a carriage slidably mounted on said support, a hammer mounted on the carriage and connected therewith, and means for preventing recoil of the carriage including an inclined surface on the carriage, a frame pivotally mounted on said carriage, a pair of rollers journalled in said frame on opposite sides of said support, and resilient means tending to wedge one of said rollers between the inclined surface of the carriage and the support.

1,857,687. AIRPLANE KITE. WAYNE E. IKEBMAN, Butte, Mont., assignor of forty per cent to Menri L. Fagg, Butte, Mont. Filed Sept. 9, 1929. Serial No. 391,254. 1 Claim. (Cl. 244—22.)



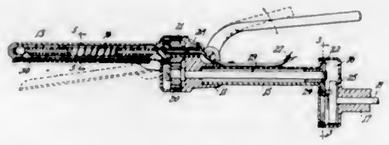
A kite comprising an elongated frame including a plurality of connected longitudinally disposed members, struts and guy wires connecting the members, longitudinal reinforcing members disposed above and connected to the frame, steering and elevating means at the rear end of the frame, front and rear pairs of wings secured to the frame and inclining upwardly and outwardly therefrom, the leading edge of the front pair of wings disposed on an incline extending outwardly and rearwardly of the frame and the leaving edge of the front wings arranged at right angles to the frame, said rear wings having the leading and leaving edges disposed parallel and at right angles to the frame, and landing means at the front and rear ends of the frame.

1,857,688. TORQUE DYNAMOMETER. ALEXANDER S. MACKENZIE, Houston, Tex., assignor to Clayton Gin Compress Company, Houston, Tex., a Corporation of Texas. Filed Feb. 3, 1928. Serial No. 251,625. 16 Claims. (Cl. 265—25.)



1. A device of the class described comprising a pair of rotatable members, yieldable means connecting them for relative turning movement, cam means encircling both of said members and actuated by said relative movement, and indicator means operated by said cam means.

1,857,689. HAIR WAVING DEVICE. SAUL EMMANUEL MELKMAN, Montreal, Quebec, Canada. Filed Feb. 26, 1930, Serial No. 431,509, and in Canada Feb. 27, 1929. 4 Claims. (Cl. 132—37.)



1. A hair waving device comprising a casing, a hollow mandrel having one end journalled in the casing, a clamping member operable to clamp the hair on the mandrel, means within the mandrel for heating it, and mechanism for circumferentially oscillating the said mandrel independently of the clamping member.

1,857,690. MOLDING, COATING, FILLING, IMPREGNATING, AND BINDING. ISADORE SIDNEY MELLANOFF, Philadelphia, Pa., assignor to Kemikal, Inc., a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,343. 4 Claims. (Cl. 91—68.)

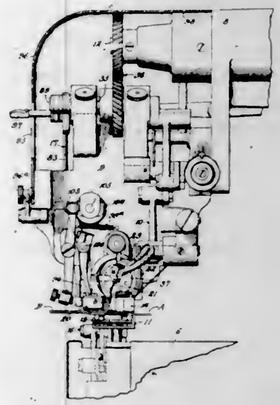
1. The method of saturating or impregnating material with the condensation product of an alkaline solution of peat reacting with an aldehyde and a phenolic body comprising, forming a solution of about one part of the condensation product when the mass is in a syrupy state to about 10 to 20 parts of solvent, treating the material to be impregnated with the solution, making a solution of about one part of the syrupy mass to about 2 to 5 parts of solvent, treating the material with the last mentioned solution, and completing the reaction by heating and pressing the impregnated material.

1,857,691. SHELLAC SUBSTITUTES. ISADORE SIDNEY MELLANOFF, Philadelphia, Pa., assignor to Kemikal, Inc., a Corporation of Delaware. Filed May 20, 1929. Serial No. 364,698. 2 Claims. (Cl. 134—26.)

1. The process of producing a shellac substitute comprising making a solution of about 100 parts of casein in about 400 to 800 parts of water containing about 16 parts of borax and about 10 parts of 26% ammonium hydroxid and then slowly adding about 4 parts of the casein in solution to about 5 parts of a condensation product made by stopping the condensation process of phenol and

formaldehyde which takes place in the presence of a material acting as a catalyst or reagent at such a point that the condensation product is a substantially transparent material which on cooling to ordinarily temperatures remains somewhat liquid while stirring.

1,857,692. TOP FEEDING MECHANISM. CHARLES W. MUELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Original application filed Aug. 26, 1927, Serial No. 215,701. Divided and this application filed Mar. 27, 1929. Serial No. 350,218. 2 Claims. (Cl. 112—212.)



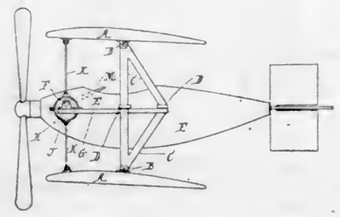
1. In a sewing machine including a stitching head, a top feed mechanism mounted on the head including a feed dog and a lever for imparting feed movements to the dog, and an actuating link adjustably connected to the lever to vary the movement thereof, the combination of a cover removably attached to and embracing the stitching head and the top feed mechanism and provided with a slot in register with the adjustable connection between the actuating link and the feed lever, and manually operable means connected to said adjustable connection and projecting outwardly through the slot of the cover whereby the feed stroke of the lever may be varied without removing the cover or the cover removed without interfering with the manually operable means.

1,857,693. CORE BARREL HAVING CORE RECEPTACLE. HARRY J. QUINTRELL, South Gate, Calif. Filed Oct. 7, 1929. Serial No. 397,885. 20 Claims. (Cl. 255—72.)



18. As an article of manufacture, a tubular core receptacle having a thin metal wall, said wall having one or more longitudinal grooves therein to permit ready parting of said wall along one of said grooves.

1,857,694. AEROPLANE. DOUGLAS HUNTLY RIGHTON, Hoanga, Dargaville, New Zealand. Filed Jan. 9, 1931, Serial No. 507,660, and in New Zealand Oct. 23, 1930. 1 Claim. (Cl. 244—12.)

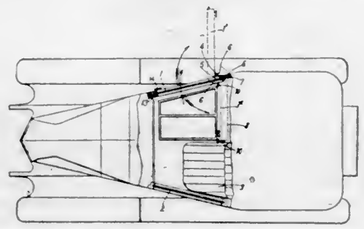


An aeroplane, comprising two substantially parallel and superposed planes, each plane being pivoted on a horizontal pivot rigidly supported by the fuselage, the two pivots being parallel and superposed, a plurality of straps each connecting both planes, an eccentric attached to each strap, a spindle for rotating all the eccentrics, and means in the cockpit operable by the pilot to rotate the spindle to incline the planes.

1,857,695. PROCESS FOR PREPARING RESINOUS WOOD FOR DIGESTION BY THE BISULPHITE PROCESS. GOTTHARD ROSÉN, Paris, France, assignor to La Cellulose Rosen, Societe Anonyme, Luxemburg, Luxemburg, a Company of Luxemburg. Filed May 16, 1931, Serial No. 538,007, and in France Aug. 7, 1930. 12 Claims. (Cl. 92—13.)

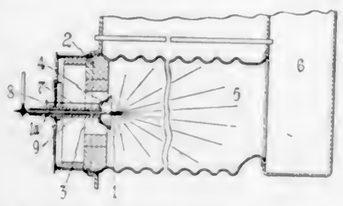
1. A process for treating resinous wood cut into chips prior to its being digested by the bisulphite process, which comprises subjecting it to at least one treatment with milk of lime, removing said milk of lime, and washing the treated material with water.

1,857,696. DOOR OF ROAD VEHICLES. LÉON SAIVES, Billancourt, France, assignor to Louis Renault, Billancourt, Seine, France. Filed Nov. 15, 1928, Serial No. 319,545, and in France Dec. 19, 1927. 2 Claims. (Cl. 296—44.)



1. A car having a driver's seat, a door pivotally mounted for movement to a position inside or outside of the car, and a grating pivotally mounted within the car and adapted for movement to a position covering the door when the latter is inside the car.

1,857,697. OIL BURNING APPARATUS FOR STEAM BOILERS. HERBERT CAMPBELL SCOTT, Wellington, New Zealand. Filed July 10, 1929, Serial No. 377,280, and in New Zealand Aug. 3, 1928. 1 Claim. (Cl. 158—1.5.)

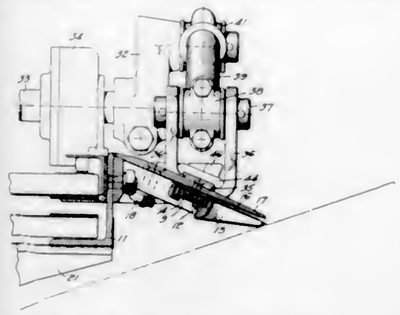


An oil burning apparatus comprising a combustion chamber having an opening, an ante-chamber, an oil tube projecting through said opening into said chamber, means for regulating the flow of oil through said tube, a second fixed tube supported by a wall of said ante-chamber surrounding said oil tube, a frusto-conically shaped air deflector sliding on said second tube and manual means secured to said deflector for sliding said deflector within said chamber or entirely out of the same into said ante-chamber.

1,857,698. PROCESS OF TREATING BATAVIAN DAMMAR RESIN. JOHANNES SCHEIBER and KURT SÄNDIG, Leipzig, and ALEXIS BLUMER, Zwickau, Germany. Filed Mar. 6, 1928. Serial No. 259,596. 2 Claims. (Cl. 134—26.)

1. The process of treating Batavian dammar resin which consists in exposing the resin to heated vapours of a constant boiling mixture of a plurality of solvents in which β-dammar-resene is substantially insoluble.

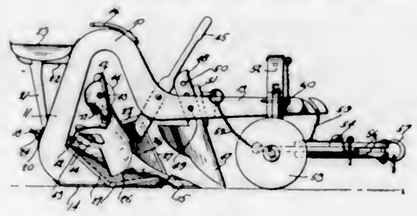
1,857,699. HARVESTER CONSTRUCTION. HORATIO W. SMITH, AUGUST D. BRAASCH, and NORRIS WALTON, San Leandro, Calif., assignors to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Feb. 4, 1930. Serial No. 425,801. 7 Claims. (Cl. 56—307.)



4. In a harvester, a header frame, means to support a sickle bar on said frame for reciprocation in a plane inclined to the surface of the ground, a shaft mounted on said frame at an angle to the plane of said sickle bar, and means to operate said bar from said shaft, including a crank on said shaft, a bracket on said bar, and a pitman interconnecting said crank and said bracket.

1,857,700. PLOW. JOSEPH SZAKACS, Lincoln, Nebr., assignor of one-half to Joseph Basman, South Milwaukee, Wis. Filed Oct. 29, 1931. Serial No. 571,879. 14 Claims. (Cl. 97—31.)

1. In a plow, a frame including a shoe having an inclined upper face, a bolt supported adjacent and parallel to said upper face, a plow share of quadrilateral form symmetrical about both diagonal lines of the quadrilateral and having the portions on opposite sides of one diagonal line inclined with respect to each other to form a dihedral angle, said plow share being tiltably mounted on said bolt and arranged for selective positioning of the ends



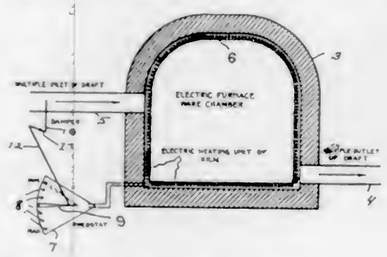
of said last diagonal line forwardly, means to releasably hold the share in tilted position, a mold board having its lower end seated in said dihedral angle and provided with a bolt receiving sleeve on its rear face, and a bolt passing through the mold board sleeve and engaging the first bolt to secure the mold board thereto.

1,857,701. FLYING TARGET. WALTER G. WARREN, Chicago, Ill. Filed Oct. 22, 1931. Serial No. 570,426. 14 Claims. (Cl. 124—17.)



1. A flying target, comprising a hollow body composed of a plurality of members snugly fitted together, the interior pressure of said body being less than atmospheric pressure whereby the members are held closed together by atmospheric pressure.

1,857,702. TEMPERATURE CONTROLLING METHOD FOR CERAMIC FURNACES OR KILNS. ARTHUR S. WATTS, Columbus, Ohio. Filed June 19, 1930. Serial No. 462,272. 7 Claims. (Cl. 25—157.)



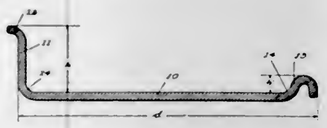
1. The method of controlling the temperature in a kiln for firing porcelains and similar ceramic products for the purpose of producing desired surface characteristics of the product, which consists in heating the kiln chamber in which the ware is located, and controlling the heating action by abrupt temperature changes by means of the ventilation of the chamber in which the ware is located, decreasing the ventilation for the development of higher temperatures and increasing the ventilation for lowering of temperatures.

1,857,703. PUNCTURE MARKER AND TUBE DEFLATER. HENRY C. WESTPHAL, El Paso, Tex. Filed May 29, 1931. Serial No. 540,973. 1 Claim. (Cl. 152—27.)



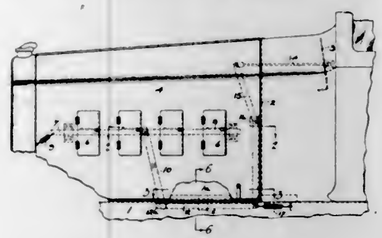
A puncture marker and tube deflater comprising a body having a point at one end thereof and a threaded nipple at the other end thereof, the point having an enlarged intermediate portion whereby the same will be held in the puncture, said body having an unobstructed bore passing through the point and the body and the threaded nipple, and a cap threaded on the nipple for closing the outer end of the bore.

1,857,704. SPECIAL METAL CHANNEL SECTION. ARTHUR E. WILKOFF and OLAF J. NYBERG, Niles, Ohio, assignors to Youngstown Steel Car Company, a Corporation of Ohio. Filed Sept. 10, 1931. Serial No. 562,185. 6 Claims. (Cl. 238—4.)



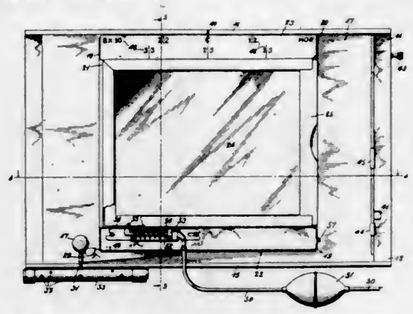
1. A channel section having a deep web and side flanges, one of the flanges being of substantial width and substantially perpendicular to the web and the opposite flange being of inverted U-shape.

1,857,705. VENTILATING ARRANGEMENT FOR AUTOMOBILE HOODS. BRUNO G. W. WOLFF and WILHELM C. F. WOLFF, Dearborn, Mich. Filed Apr. 8, 1931. Serial No. 528,524. 4 Claims. (Cl. 180—69.)



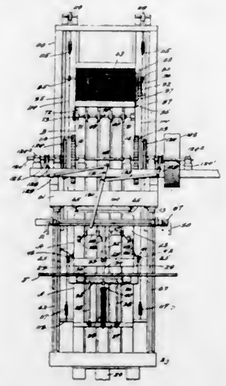
1. An arrangement of the character described comprising an apertured hood, shutters, a member movable on said hood by the movement of which said shutters open and close said hood apertures, a lever pivoted on said hood and connected to said member, and spring means tending to move said shutters to closed position relative to said hood apertures, in combination with a frame, an element movable longitudinally of said frame, means on said element for engaging and moving said lever when said element is moved in one direction, and means for moving said element.

1,857,706. CAMERA BACK. TONY ZABROCKI, Winona, Minn. Filed Aug. 17, 1931. Serial No. 557,712. 4 Claims. (Cl. 95—49.)



1. A camera back comprising, in combination, a frame having an opening and inwardly opening marginal grooves at opposite edges of its rear surface, a plate slidable in said grooves and having an exposure opening, indicia carried by said frame and plate respectively to be brought into registry to locate fractions of said exposure opening centrally of said frame opening, masking means carried by said frame to cover unused fractions of the frame opening, latch means to retain said plate in its various fractional exposure positions, and means on said plate to interchangeably hold a dark slide or a focusing screen over said exposure opening and means carried by said plate to cause closure of a shutter after focusing, actuated by movement of a dark slide to position over said exposure opening.

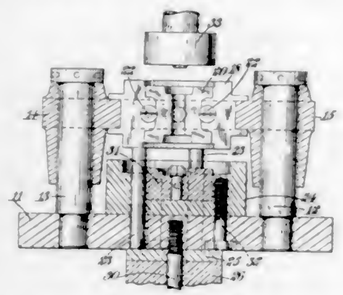
1,857,707. COTTON PRESS. RALPH BELL, Lamar, S. C. Filed June 20, 1928. Serial No. 286,914. 24 Claims. (Cl. 100—25.)



1. In a press, the combination with two vertically aligned compartments, of a sliding door separating the compartments, a ram operating in the lower compartment, a tramper operating in the upper compartment, means for continuously feeding cotton into the upper compartment, and means for rotating the tramper as it approaches the end of its upward stroke to discharge the cotton deposited thereon.

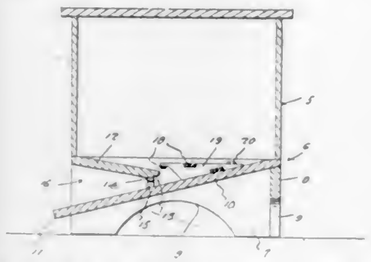
21. In a cotton press having a tramper box, a chute through which cotton is fed into said box, a normally inoperative gate associated with said chute for interrupting the flow of cotton into said box, manual means to move said gate to operative position to accumulate a predetermined roll, automatic means to move said gate into such position that the roll is retained while the cotton continues to flow into the tramper box, and means for returning said gate to inoperative position.

1,857,708. FORGING. GIUSEPPE BENEDETTO, Novara, Italy, assignor to Omes Holding Company Limited, London, England, a British Company. Filed Aug. 4, 1931, Serial No. 555,123, and in Great Britain June 10, 1930. 2 Claims. (Cl. 78—62.)



1. A die for forming two upset end portions of a forging simultaneously, comprising in combination, a pair of die blocks relatively movable in a predetermined path toward each other for engaging the two ends of the forging, a forging holder to position the forging between the die blocks, a supporting member, pillars disposed on opposite sides of said die blocks and extending parallel to the path of relative movement thereof, said pillars being carried by said supporting member, a pair of sleeve elements, each element being mounted for sliding movement on one of said pillars, parallel guides carried by said sleeve elements and engaging said holder to support the latter for movement in a plane transverse to the path of relative movement of said pillars, and means yielding in the path of relative movement of said die blocks for normally supporting the holder with a forging therein between the die blocks, whereby the forging may be forced against one die block by pressure of the other die block.

1,857,709. BEEHIVE. HENRY OSCAR BENTON, Greenville, Tex. Filed Nov. 28, 1930. Serial No. 498,813. 2 Claims. (Cl. 6—1.)



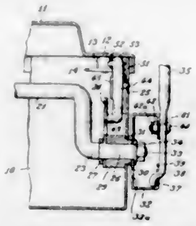
1. A base for a bee hive comprising a pair of side walls and a rear wall having openings therein, a bottom sloping downwardly and forwardly from the rear wall with its front end projecting beyond the front of the base, said bottom being located above the openings, a supplemental bottom wall sloping downwardly and rearwardly from the top of the front of the base to a point a slight distance forwardly of the center of the base, said supplemental bottom wall being spaced above the main bottom, a vertically arranged notched member located between the rear end of the supplemental bottom and the main bottom, the notch of which forms an entrance opening and a rack resting on the rear part of the bottom and having its upper surface located below the plane of the top of the base and above the plane of the rear part of the supplemental bottom, said rack consisting in a number of longitudinally extending members each having a straight upper edge and an inclined lower edge which rest on the main bottom and a number of cross pieces connecting the longitudinally extending members together.

1,857,710. ROTATING STEAM GENERATOR. JOHAN VIKTOR BLOMQUIST and TORSTEN ANDERS BLOMÉN, Stockholm, Sweden, assignors to Aktiebolaget Atmos, Stockholm, Sweden, a Corporation of Sweden. Filed Oct. 20, 1930, Serial No. 490,076, and in Sweden Oct. 24, 1929. 1 Claim. (Cl. 122—11.)



In a rotating steam boiler, a tubular steam generating element rotatably mounted in a fire place, the speed of rotation of which is controlled so that the water level within said element takes a substantially horizontal position, means for feeding water into the generating element and means for delivery of steam therefrom, a plurality of transverse partition walls positioned at suitable inter-distances along the whole length of the tubular steam generating element and extending to the shell plate around the whole circumference thereof, and permanently open central apertures positioned in the partition walls so that their lower edges are a little below the lowest normal water level in the steam generating element only, in order that said apertures shall in part form permanently open communication means between the different partitions of the boiler.

1,857,711. SAFETY SWITCH. JOSEPH JOHN DANTE, Bantam, Conn., assignor to The Trumbull-Vanderpoel Electric Manufacturing Company, a Corporation of Delaware. Filed May 25, 1929. Serial No. 365,957. 9 Claims. (Cl. 200—50.)

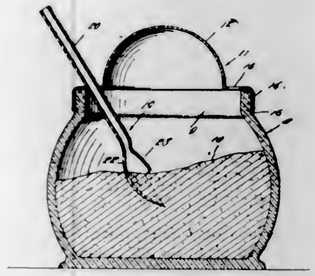


1. In a safety switch, a casing, a cover hinged to one side of said casing and having a catch depending from the inner surface thereof, a pivoted switch within said casing, a rotatable operating member for moving said switch to open and to closed positions, a bracket secured within said casing and forming a bearing parallel to one side wall of the latter, a plunger having a cylindrical body portion slidable and rotatable within said bearing, said plunger having a lateral projection at its upper end for interlocking with said catch when said operating member is moved to close said switch.

1,857,712. TABLE ACCESSORY. PAUL DE MARTINI, Jr., San Francisco, Calif. Filed Jan. 13, 1931. Serial No. 508,530. 3 Claims. (Cl. 65—59.)

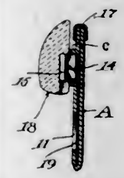
1. In a structural assembly of the class described, in combination, a sugar bowl including a transparent body portion open at its top and provided with a neck formed at a predetermined point with a vertical notch, a cover secured to said neck having a dome-shaped portion and

provided with a notch in registry with said first named notch, said first named notch extending a substantial distance below the dome-shaped portion of said cover and a spoon including a hollow tubular handle freely passing



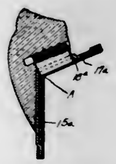
through said registering notches and having the outer portion thereof free for manual engagement, the inner portion of the spoon being formed with a scoop in feeding relation to said tubular handle.

1,857,713. CARDING DEVICE FOR ARTIFICIAL TEETH. DAVID E. EVANS, Columbus, Ohio, assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio, a Corporation. Filed Oct. 18, 1930. Serial No. 489,675. 6 Claims. (Cl. 206—83.)



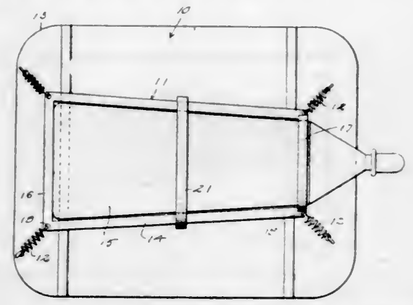
1. A carding device for artificial teeth comprising a card of sheet material having a portion thereof displaced from its plane to provide a longitudinally extending boss at one side thereof and a corresponding groove at the opposite side thereof, the walls of the boss being provided at intervals with slots, and a tooth retaining strip of non-metallic material seated in said groove and doubled at intervals to provide yielding tooth receiving and supporting lugs projecting through said slots beyond the face of the boss.

1,857,714. CARDING DEVICE FOR ARTIFICIAL TEETH. DAVID E. EVANS, Columbus, Ohio, assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio, a Corporation. Filed Dec. 1, 1930. Serial No. 499,383. 3 Claims. (Cl. 206—83.)



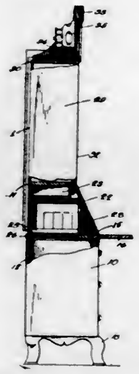
3. A carding device for artificial teeth comprising a backing, a card secured to the backing, the card and backing being bent to provide tooth engaging surfaces arranged at an angle to each other, one of said surfaces of the card having slots therein, and a tooth retaining strip between said surface and the back doubled at intervals to provide yielding tooth receiving and supporting lugs projecting through said slots beyond the face of the card.

1,857,715. NURSING BOTTLE SUPPORT. PIETRO FALVO, Indio, Calif. Filed Oct. 14, 1930. Serial No. 488,639. 3 Claims. (Cl. 248—65.)



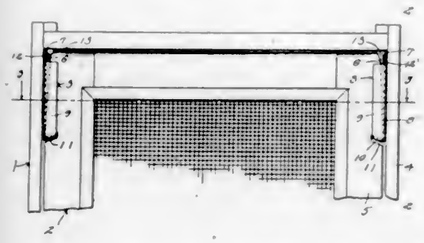
1. A nursing bottle support of the character described, comprising a base, a bottle supporting frame, resilient means mounted on the base and engaging the frame whereby to resiliently hold the frame against lateral or longitudinal movement on the base and cushioning members mounted on the base and cushioning a bottle supported within the frame.

1,857,716. COMBINED FURNITURE AND RADIO RECEIVING APPARATUS. JAMES H. FARRELL, Richmond, and CRAWFORD T. WESTMORELAND, West Point, Va. Filed Nov. 17, 1930. Serial No. 496,302. 2 Claims. (Cl. 312—7.)



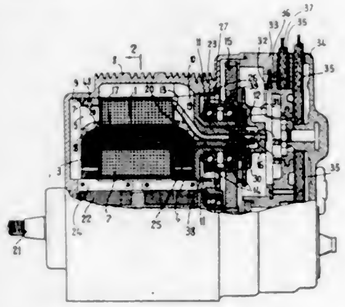
2. A combined desk and radio cabinet, comprising a desk element provided in its upper portion with a compartment, said compartment having its front side open and having an opening at its rear side, a stationary strip arranged at the bottom of the compartment and adjacent to its open front side, a lid hinged at one edge to the stationary strip to swing about a substantially horizontal axis and to cover the open front side of the compartment, a generally horizontal slidable tray mounted within the desk element at the bottom of the compartment and at the rear of the stationary strip and disposed generally in the plane of the strip, the strip limiting the forward sliding movement of the tray which is free to be shifted rearwardly from the strip, a radio receiving set mounted upon the slidable tray and having an instrument upon its forward side, and a case mounted within the compartment and held stationary therein with relation to the slidable tray and adapted to house the receiving set, said case having an opening at its rear side for the passage of the receiving set and including a front wall having an opening for affording access to the instrument from the front of the desk element.

1,857,717. HINGE FOR WINDOW SCREENS. RALPH FOCARACCI, Miami, Fla. Filed Oct. 25, 1930. Serial No. 491,302. 1 Claim. (Cl. 16—171.)



A hinge for connecting a movable frame to a fixed frame, comprising a channel member adapted to receive a stile of the movable frame and adapted to have the upper end of its side wall pivoted to the fixed frame, a lug extending upwardly and inwardly from the lower end of said wall and adapted to be embedded in said stile to secure said member to and hold it against lateral displacement from the stile, and extensions carried by the lower ends of the front and rear walls of said member and underlying and contacting with said lug and adapted to be embedded in said stile.

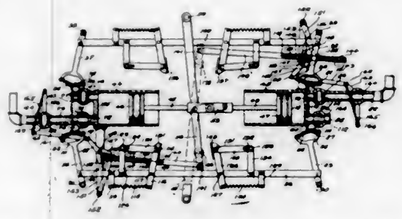
1,857,718. IGNITION MAGNETO. GIUSEPPE FOSSATI, Monza, Italy, assignor to Fabbrica Italiana Magneti Marelli Società Anonima. Filed July 30, 1930, Serial No. 471,819, and in Italy Sept. 5, 1929. 13 Claims. (Cl. 123—149.)



1. A stationary armature for ignition magnetos comprising a core, windings on said core, a part fastened on one end of said core, a collar fastened on the other end of said core, said core and part and collar being adapted to engage respective seats of the magneto frame, a sleeve extending from said collar, antifriction means on said sleeve, and a current-distributor connected with said winding and carried by said antifriction means.

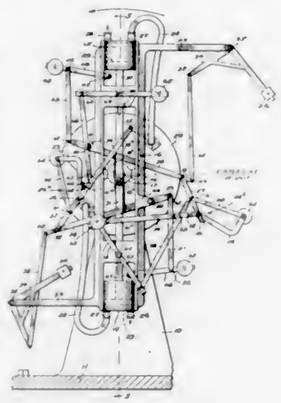
1,857,719. FLUID PRESSURE ENGINE. FRED A. GERLING, Boise, Idaho. Filed June 4, 1930. Serial No. 459,218. 4 Claims. (Cl. 121—144.)

1. In an engine, a pair of opposed cylinders, main inlet valves for the cylinders, exhaust valves for the cylinders, auxiliary inlet valves for controlling the passage of fluid pressure to the main inlet valves, pistons within the cylinders, piston rod means connecting the pistons, a pair of centralizing levers arranged near the cylinders and connected with the piston rod means, pairs of swinging levers connected with the main inlet valves and the outlet valves, rods connecting the levers in said pairs, pairs of shoes carried by the rods, trip elements carried by the centralizing levers and disposed between the pairs of shoes for coaction therewith to shift the main inlet and outlet valves, and operative connecting means between the centralizing



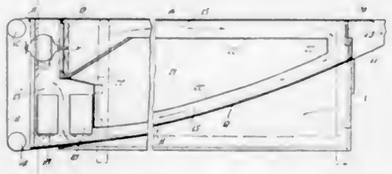
levers and the auxiliary inlet valve for closing the auxiliary inlet valves prior to the closing of the main inlet valves.

1,857,720. ROTARY FLUID COMPRESSOR. FRED A. GERLING, Boise, Idaho. Filed Aug. 19, 1930. Serial No. 476,388. 10 Claims. (Cl. 74—14.)



1. In a device of the character described, a rotary support, means mounted thereon, including reciprocatory elements, a rod connecting the reciprocatory elements, shifting levers pivotally mounted upon the support, a link connected with the rod and the shifting levers, weight carrying levers pivoted upon the support and connected with the shifting levers to move the same, and weight carrying toggle joints pivoted upon the support and connected with the shifting levers.

1,857,721. COOLING APPARATUS. BENJAMIN JAMES HALL, London, England. Filed Aug. 25, 1930, Serial No. 477,684, and in Great Britain June 26, 1930. 4 Claims. (Cl. 257—73.)



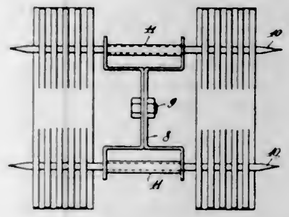
4. An apparatus of the class described, comprising a casing of substantially triangular form, a continuous duct formed in the casing, means for forcing cool air through the duct, rollers mounted outside the casing to receive a band of material to be treated, one of said rollers being mounted at the apex of the casing and two of said rollers being mounted at the larger end of the casing, the peripheries of all the rollers being in alignment with the top and bottom outer surfaces of the casing to retain the material being treated in contact with said surfaces to be cooled by the cool air passing through the duct.

1,857,722. SUPPORT. GEORGE A. HOWELL, Rock Hill, S. C. Filed Nov. 23, 1931. Serial No. 576,931. 1 Claim. (Cl. 24—17.)



A holder for sliced bread comprising an elongated plate provided at each end with an upstanding flange, an anchor on one of the flanges, a flexible strand secured at one end to the anchor, and a button on the remaining flange around which the strand can be wound at its opposite end portion after being disposed over sliced bread placed on the plate.

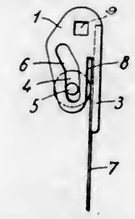
1,857,723. MANUFACTURE OF STRIP MATCHES. JOHAN WERNER JOHANSSON, Bankeryd, Sweden. Filed May 12, 1930, Serial No. 451,658, and in Sweden Apr. 9, 1930. 9 Claims. (Cl. 144—51.)



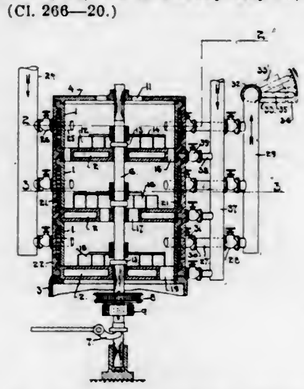
1. A conveying device to be used in connection with the manufacture of match strips of the type, which are split on opposite edges of an undivided central portion so as to form two groups of match splints connected by said central portion and in which the splints of each such group are bent alternately to opposite sides so as to form two spaced rows of splints, for supporting the strips during their conveyance for further operation, as impregnation, paraffination, dipping and drying, comprising a plurality of conveyor elements each provided with two separating members for each match strip, one for each group of splints, each adapted to engage the space between the two rows of splints of the respective group so as thereby to carry the match strip and maintain its rows of splints in their relative position during said conveyance.

1,857,724. HOLDER FOR PHOTOGRAPHIC IMAGE CARRIERS. STEFAN KAMINSKI, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Apr. 19, 1929, Serial No. 356,539, and in Germany Apr. 18, 1928. 4 Claims. (Cl. 24—244.)

1. A clamping device for holding wet photographic films or papers automatically in a suspended position comprising a pair of side members, a back member connected to said members at their upper portions and spaced from their lower portions thus forming a slit with plane, approximately parallel boundary surfaces for introducing the wet material, said side members being provided with slots extending angularly with respect to said back member, and a roller between said side members and having an axle supported in said slots.

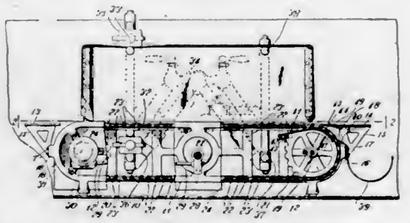


1,857,725. ROASTING APPARATUS. HANS KARL ANDREAS LASSEN, Stavanger, Norway. Filed May 14, 1930, Serial No. 452,382, and in Norway May 18, 1929. 5 Claims. (Cl. 266—20.)



1. Furnace for roasting sulphide ores comprising a plurality of superposed compartments, rabbling devices in the compartments, a main pipe for supplying air to the furnace, from said main pipe branch pipes for independent and adjustable supply of air to the several roasting compartments, from each roasting compartment an escape pipe for adjustable removal of roasting gases, a common pipe connected with the several escape pipes, and means for regulating the draft in said common pipe.

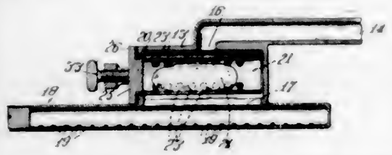
1,857,726. DISHWASHING MACHINE. WALDEMAR L. LINDGREN, Waukegan, Ill., assignor of one-half to John E. Ericsson, Chicago, Ill. Filed May 2, 1929. Serial No. 359,916. 8 Claims. (Cl. 198—195.)



1. In a dish-washing machine, the combination with a horizontally-movable skeleton carrier consisting of a pair of endless chains mounted on wheels and connected by

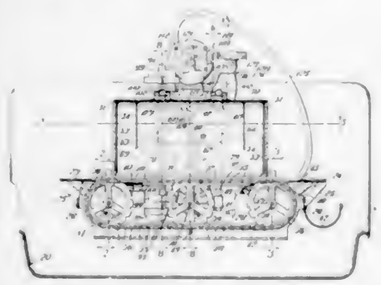
parallel transverse rods in turn connected by longitudinal wires, of means for rotating said wheels, and a cam plate beneath the same extending between the wheels over which the cutlery is discharged, and in substantial contact with the rods at the discharge point.

1,857,727. SOAP HOLDER FOR DISHWASHING MACHINES. WALDEMAR L. LINDGREN, Waukegan, Ill., assignor of one-half to John E. Ericsson, Chicago, Ill. Filed Oct. 4, 1929. Serial No. 397,200. 4 Claims. (Cl. 299—83.)



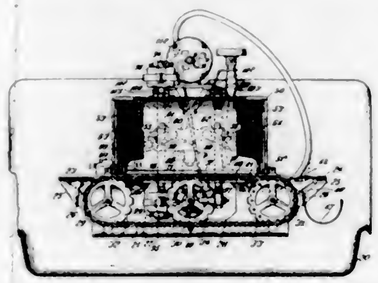
4. In a device of the class described, a soap distributing mechanism consisting of a casing rectangular in cross section having a water supply tube opening in the center of one of its sides and a perforated spray member connected with the opposite side thereof, said casing having an opening in one end, a closure for said opening, a perforated soap holder rectangular in cross section substantially coextensive in area with the interior of said casing open at one end and attached at its other end to said closure and removable therewith, said soap holder being so constructed that one of its sides has an imperforate area of substantial extent, said soap holder being arranged within said casing in spaced relation to the walls thereof with its open end adjacent the end thereof which is remote from said opening and with said imperforate area adjacent said water supply opening, said closure being adapted to make a water-tight engagement with said opening, and readily detachable means for holding said closure in water-tight engagement with said casing.

1,857,728. DISHWASHING MACHINE. WALDEMAR L. LINDGREN, Waukegan, Ill., assignor of one-half to John E. Ericsson, Chicago, Ill. Filed Dec. 28, 1929. Serial No. 417,050. 8 Claims. (Cl. 141—9.)



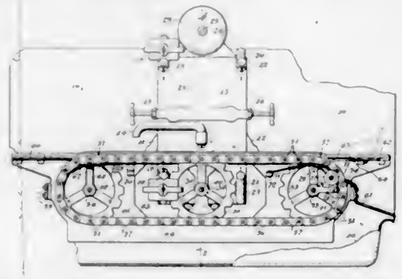
2. In a device of the class described, the combination with a sink, of conveyor mechanism supported therein, faucet connections for said sink, soapy and clear water spray pipes pivotally connected to said faucet connections so that said pipes can be swung horizontally across the conveyor mechanism or parallel to the rear wall of the sink, a bracket supported from said faucet connections, a motor mounted on said bracket, and gearing from the motor to the conveyor mechanism mounted on said faucet connections so that the conveyor mechanism can be set to operate in either direction from said motor without reversing it, said gearing comprising an upper gear casing carried by the armature shaft of the motor and rotatable about the same, a worm on said shaft within said casing, a worm wheel within the casing co-operating with said worm, a lower gear casing carried by said faucet connections and capable of adjustment by rotation through a small arc thereon, a worm and a co-operating worm wheel in said lower casing, and a shaft connecting said casings and secured to the worm wheel in the upper casing and to the worm in the lower casing, said worm wheel in the lower casing being operatively connected to said conveyor mechanism.

1,857,729. DISHWASHING MACHINE. WALDEMAR L. LINDGREN, Waukegan, Ill., assignor of one-half to John E. Ericsson, Chicago, Ill. Filed May 31, 1930. Serial No. 458,345. 8 Claims. (Cl. 141—9.)



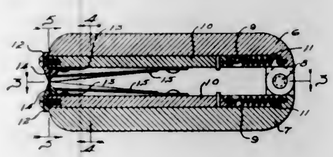
5. In a dish-washing machine, the combination with a sink, of a removable skeleton conveying apparatus therein and comprising a framework and a conveyor carried thereby, means for driving the conveyor, water-spraying members connected with the sink faucet and in use extending above and transversely of the framework of said conveying apparatus, a cover having slots in its top for said spraying members carried by the framework of the conveying apparatus immediately beneath said spraying member, and means for detachably securing said cover to the framework so that it can be removed therefrom by a horizontal movement away from the faucet without the necessity of raising it.

1,857,730. CONVEYING MECHANISM FOR DISHWASHING MACHINES. WALDEMAR L. LINDGREN, Waukegan, Ill., assignor of one-half to John E. Ericsson, Chicago, Ill. Filed Dec. 15, 1930. Serial No. 502,316. 16 Claims. (Cl. 198—203.)



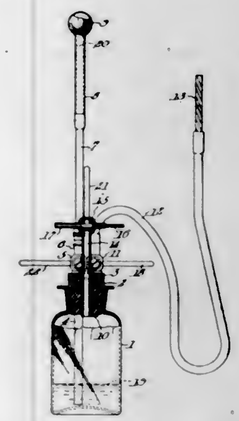
2. In a dish-washing machine, the combination with an endless skeleton conveyor adapted to receive table cutlery at one point and automatically to discharge it at another point, of a plate extending beneath a portion of the conveyor to a place just beyond the discharge point, said plate having slots therein at the discharge point, spring-pressed rollers beneath the plate projecting into the slots, and means to operate the conveyor.

1,857,731. WIRE STRIPPING TOOL. ARNE LUND, Detroit, Mich. Filed Apr. 21, 1931. Serial No. 531,734. 4 Claims. (Cl. 81—9.5.)



1. A wire stripping tool mechanism including a body portion having a longitudinal slot therein to accommodate the passage of wire through the tool, a plurality of fixed knives adjacent one end of said slot and adapted to slit the insulation of a wire longitudinally thereof as the tool is moved relative to such wire, and a plurality of slidable knives adjacent said stationary knives and adapted to sever the insulation on a wire at right angles to the longitudinal slitting of the insulation by said fixed knives and to be embedded therein, and means for exerting pressure on said knives and for moving said tool relative to the wire passing therethrough.

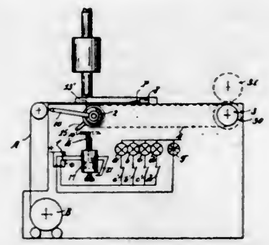
1,857,732. APPARATUS FOR TESTING THE PHYSICAL CONDITION OF HUMAN BEINGS. LEWIS F. MACKENZIE, Newark, PHILIP V. WELLS, Princeton, and EDWIN G. DEWIS, Asbury Park, N. J. Original application filed Apr. 27, 1929, Serial No. 358,660. Divided and this application filed May 27, 1930. Serial No. 456,240. 4 Claims. (Cl. 73—112.)



1. Apparatus for testing the physical condition of human beings comprising means defining a passage, means for connecting said passage with the respiratory tract of a subject, means for indicating the fluid pressure within said passage, and means for adjusting the rate of flow from said passage to any one of a plurality of predetermined values.

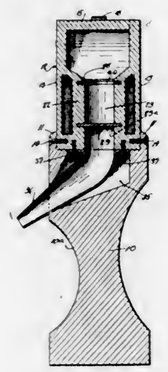
4. Apparatus for testing the physical condition of human beings comprising a chamber, a tube connected therewith and adapted to be blown into by a subject, a liquid manometer for measuring the fluid pressure within said chamber, means defining an orifice adapted to a flow of about 36 cc. of air per second at a pressure of 20 mm. of mercury, means defining an orifice adapted to a flow of about 200 cc. of air per second at a pressure of 20 mm. of mercury and a valve adapted to put either of said orifices into communication with said chamber.

1,857,733. APPARATUS FOR PRINTING POSITIVE PHOTOGRAPHIC PICTURES WITH CONTINUOUS AUTOMATIC ACTION. ERMINIO MANZOTTI and EUGENIO MANZOTTI, Piacenza, Italy. Filed Mar. 8, 1928, Serial No. 260,065, and in Italy Apr. 7, 1927. 8 Claims. (Cl. 95—75.)



1. Photographic strip-printing apparatus, comprising an endless chain conveyor; means carried by said conveyor for engaging a continuous strip of sensitized material and feeding it forward through the apparatus; a source of light; means for holding a negative in position above the source of light, a movable platen adapted to press the sensitized material against the negative; an operating lever associated with the conveyor to drive the latter intermittently; and means actuated by the rearward movement of the lever for moving the platen to press the sensitized material against the negative in printing position and for energizing the source of light for a predetermined printing interval.

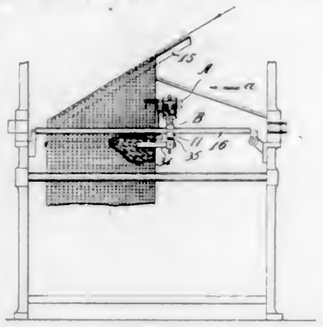
1,857,734. SUGAR DISPENSING CONTAINER. GEORGE MOLDOVAN, Meadow Lands, and STEVE NÉMETH, Washington, Pa. Filed Dec. 31, 1930. Serial No. 505,864. 1 Claim. (Cl. 221—104.)



In a measuring and dispensing device, a receptacle having a bottom opening, a base support for the receptacle, a laterally directed spout carried by the base support in communication with the receptacle opening, a block forming an integral part of the receptacle and in which the opening is formed, said block having spaced grooves extending laterally of the block opening at one side and closed at their outer ends, a reciprocating valve device having spaced apertured plates and an end connecting wall with the wall normally engaged with the block when the valve device is in closed position to prevent flow of material from the receptacle into the block opening, said apertured plates being slidable in the block grooves, springs interposed between a wall of the receptacle and the outer side

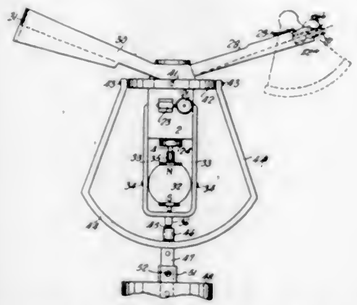
of the connecting wall of the valve device for urging the valve device to closed position and in operating pull rod for the valve device attached to the end connecting wall and extending through a wall of the receptacle and movable with the valve device in the direction of movement thereof.

1,857,735. FABRIC DOUBLING MACHINE. JOSEPH MONFORTS and FRANZ WIRTZ, Munich-Gladbach, Germany, assignors to A. Monforts, Munich-Gladbach, Germany, a Corporation of Germany. Filed Jan. 8, 1930, Serial No. 418,368, and in Germany July 23, 1929. 10 Claims. (Cl. 270—86.)



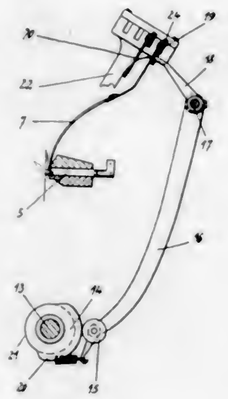
1. In combination with a web doubling machine, a plurality of stationary guides for folding the web, a feeler device mounted upon said guides adapted to contact with the edges of said doubled web, electrically operated gripping means associated with each web edge in advance of said contact point, and means for controlling said gripping means by said feeler device whereby the coincidence of the web edges is automatically regulated.

1,857,736. APPARATUS FOR USE IN COMBINATION OR IN CONJUNCTION WITH A SEXTANT ADAPTED FOR USE AS AN ARTIFICIAL HORIZON AND DIRECTION INDICATOR. LAURENCE HENRY MORRISON, Gravesend, England. Filed June 27, 1929, Serial No. 374,159, and in Great Britain July 24, 1928. 47 Claims. (Cl. 88—1.)



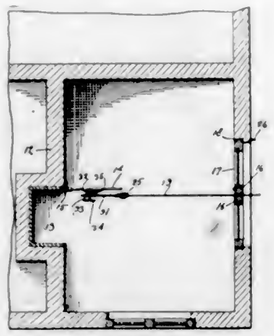
1. An artificial horizon and direction indicator comprising in combination a reflecting plane surface which tends to assume a horizontal position, an arm adapted to carry a sextant, a second arm fixed relatively to the former arm, means for carrying a horizontal line supported by the second arm, the image of which horizontal line in the reflecting surface can be observed by the sextant and forms an artificial horizon, a support for said arms, an azimuth ring, a rubber line and a pointer mounted on the support whereby the setting in azimuth of the sextant arm can be read and gimbal rings adapted to support the whole so as to be operative about a common centre.

1,857,737. FLAT HOSIERY KNITTING MACHINE. RUDI NEBICH, Chemnitz, Germany. Filed Oct. 23, 1929, Serial No. 401,851, and in Germany Nov. 13, 1928. 2 Claims. (Cl. 66—91.)



1. A flat hosiery knitting machine for making covered plush goods comprising dividing sinkers, jack sinkers, which have special upper nibs, and base thread guides projecting into the jack sinkers which lay their threads into the lower nibs of the said sinkers, and means whereby the said guides for the base threads, which during the sinking of the loops project into the jack sinkers, after the sinking of the loops are raised to such height at their points of motion reversal, that they do not get in the way of the dividing sinkers which move forward later and wherein the base thread guides are again depressed after the dividing and before the sinking of the loops.

1,857,738. CLOTHESLINE SUPPORT. GIOVANNI OLIVIERI, Maspeth, N. Y. Filed Apr. 16, 1931. Serial No. 530,044. 2 Claims. (Cl. 68—3.)

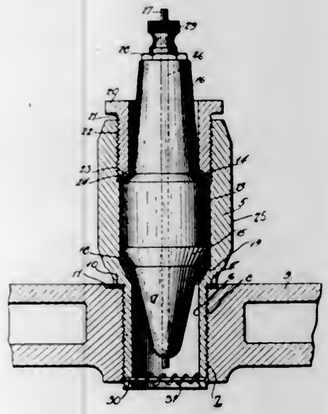


1. In a clothes hanging apparatus wherein one end of an endless clothes line is supported within a building and the other end is supported outside of the building and in which the line passes through a window of the building, said window comprising hinged sashes, the meeting edges of the sashes having line passage openings therein and shutters to close the openings carried by the meeting edge of one sash and movable into the edge of the other sash.

2. In a clothes hanging apparatus wherein one end of an endless clothes line is supported within a building and

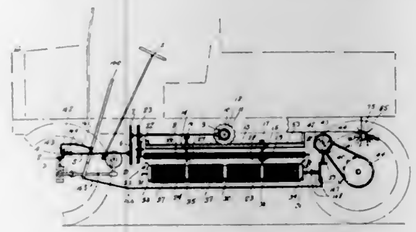
the other end is supported outside of the building and in which the line passes through a window of the building, the support for the inner end of the endless clothes line comprising a perpendicular member, an arm pivoted on the member, a rack on the free end of the arm, and to which the clothes line is attached and a manually operable pinion and pawl device coacting with the rack for placing the clothes line under tension.

1,857,739. SPARK PLUG. MICHAEL PASCO, Sacramento, Calif. Filed May 1, 1930. Serial No. 448,952. 1 Claim. (Cl. 123—169.)



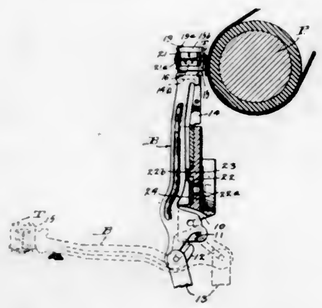
A spark plug comprising a cylindrical casing having a longitudinal opening extending therethrough, a porcelain electrode holder received in the casing, an electrode extending through the center of the electrode holder, a pin mounted transversely in the lower portion of the casing inwardly of the end thereof, and a coil spring freely rotatable upon said pin entirely within the end of the casing.

1,857,740. AUTOMATIC TRAILER TRAIN STEERING MECHANISM. WILLIAM P. PINCKARD, South Chicago, Ill., assignor of one-half to Leonard Patterson, George Adams, and Paul A. Gose, Chicago, Ill. Filed Mar. 4, 1931. Serial No. 520,171. 14 Claims. (Cl. 180—79.1.)



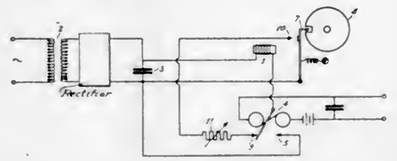
1. In combination, a lead vehicle of the wheeled type, a trailer of the wheeled type, a recording apparatus on the lead vehicle for mechanically recording the motion of the steering wheels of the said vehicle, a wheel actuating apparatus on the trailer vehicle, and transmitting means between the recording apparatus and the actuating mechanism.

1,857,741. NOISELESS TYPE ACTION FOR TYPEWRITERS. JAMES A. RAMUS, Oakland, Calif. Filed Feb. 13, 1929. Serial No. 339,534. 4 Claims. (Cl. 197—36.)



1. In a typewriter, a swingable type bar, a type head slidably connected with said type bar for movement transversely of said bar, means associated with said type bar for yielding holding said type head in extended forward position, and a resilient segment plate having a series of transverse slits extending from the outer edge thereof and forming independently operable resilient sections adapted to engage the intermediate portion of said type bar for cushioning the impact of said type bar and cooperating with the slidable type head to decrease the noise in the impact of the type head against the platen.

1,857,742. PICTURE TELEGRAPHY CIRCUIT. GERHARD RIEPER, Leipzig, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed Oct. 8, 1930, Serial No. 487,118, and in Germany Aug. 29, 1929. 3 Claims. (Cl. 178—69.5.)

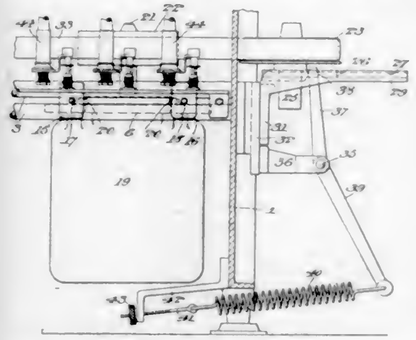


1. In a synchronizing system for picture receiving apparatus, a record drum having a slot in one end thereof, a start-stop relay system having an armature adapted to rest in said slot at predetermined time intervals, means for continually supplying current of predetermined strength to said start-stop relay, a capacity element shunting said current supply and adapted to be charged during the periods between successive operations of said start-stop relay, and a synchronizing relay responsive to received synchronizing impulses coordinated with said start-stop relay for causing a discharge of the energy stored in said capacity element and thereby producing an operation of said start-stop relay armature so as to disengage the armature from the slot in said record carrying drum.

1,857,743. SPINNING AND TWISTING MACHINE. IRVING R. ROWE, Stonington, Conn., assignor to The Atwood Machine Company, Stonington, Conn., a Corporation of New Jersey. Filed Feb. 15, 1930. Serial No. 428,696. 10 Claims. (Cl. 118—43.)

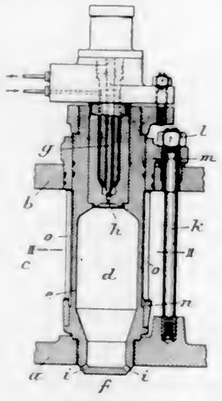
1. The combination with a spinning and twisting machine having an end frame, a spindle driving belt and pulleys for said belt, of a motor having a vertically dis-

posed shaft and a driving pulley thereon for the belt mounted within the said end frame, and at least one take-



up idler pulley horizontally disposed outside the frame, said driving and take-up pulleys being arranged in the same plane.

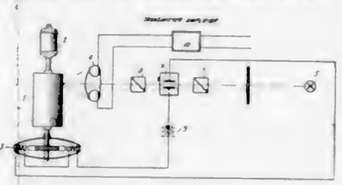
1,857,744. CYLINDER HEAD FOR INTERNAL COMBUSTION ENGINES. CHARLES SCHAER, Langenthal, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed Sept. 28, 1931, Serial No. 565,542, and in Switzerland Oct. 23, 1930. 2 Claims. (Cl. 123—32.)



1. In a liquid-cooled cylinder head for internal combustion engines the combination with a pre-ignition chamber adapted to be inserted into the cylinder head so that a part of the chamber bears on and make a fluidtight joint with the inner wall of the cooling-liquid chamber, of a thrust member engaging the wall of the pre-ignition chamber towards the inner end thereof so that this chamber is free to expand longitudinally in the outward direction.

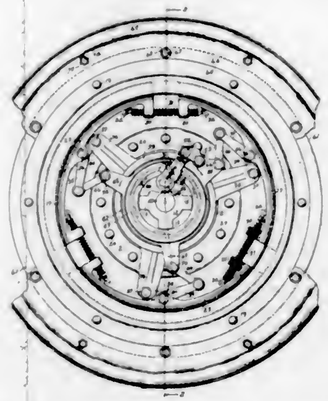
1,857,745. PICTURE TELEGRAPH APPARATUS. RUDOLF SCHMOOK, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Sept. 27, 1930, Serial No. 484,810, and in Germany Aug. 10, 1929. 1 Claim. (Cl. 178—7.)

In combination, a light source for illuminating a record surface for transmission, a photoelectric element for converting the light intensities upon elemental areas of the record surface into electrical impulses of proportionate strength, an electrostatic light valve interposed between said light source and said record surface for interrupting the supply of light upon said surface at a predetermined frequency and producing thereby an alternating current output from the photo cell, and generator means integral with the record carrying surface for pro-



ducing in accordance with the rate of transmission of the record subject a progressive rise and fall of potential upon the electrostatic light valve for regulating the frequency of light interruption thereby.

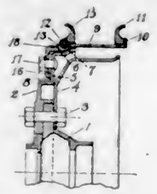
1,857,746. WHEEL STRUCTURE. GUSTAV E. STRANDT, Milwaukee, Wis. Filed May 10, 1928. Serial No. 276,562. 23 Claims. (Cl. 188—78.)



1. A wheel having spaced web portions marginally connected and forming a housing providing internally a braking surface to be contacted by a brake shoe, a brake shoe mounted within the housing, a relatively fixed support also therein, a lever fulcrumed to said support and pivotally connected with said shoe, and an oscillatory member in toggle link connection with said lever and adapted, when actuated in one direction, to utilize the lever for pressing the brake shoe against said seating

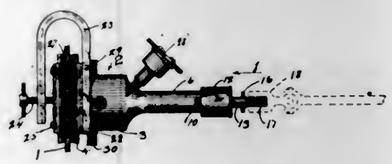
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1,857,747. METAL WHEEL. JEWELL W. VANDERVEER, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 18, 1926. Serial No. 136,269. 4 Claims. (Cl. 301—12.)



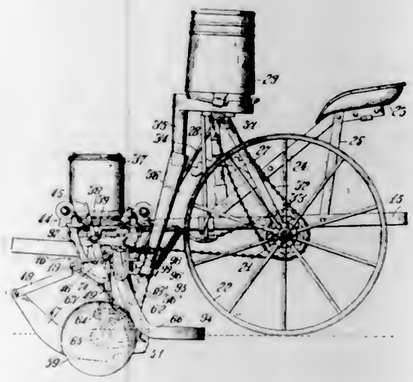
1. In a wheel, the combination of a wheel center comprising spokes having beveled seats on the spoke ends, said spokes being separated one from another at their outer ends; a demountable rim having an annular rib along one edge and having an annular beveled seating surface on its inner periphery seating directly on the beveled seats at the ends of the spokes, the rim bridging the space between the spokes and having the major portion of its width axially overhanging the seats; and clamping means detachably engaging a wall of the rim opposite the beveled seating surface of the rib forcing the seating surface into clamping engagement with the seats.

1,857,748. GLASS CUTTING MACHINE. JOHN EUGENE WALKER, Atlanta, Ga., assignor, by mesne assignments, to The Clymer Manufacturing Company, Denver, Colo., a Corporation of Colorado. Filed June 22, 1922. Serial No. 570,066. 8 Claims. (Cl. 125—20.)



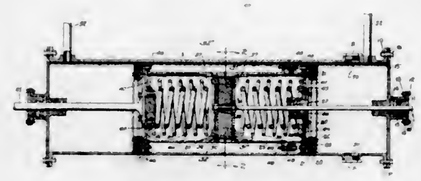
4. A device of the character specified, comprising a support having a hollow head closed to confine an abradant when the device is in use, a cutter rotatably mounted therein, means for automatically moving the cutter longitudinally, means for rotating the cutter, and means cooperating with the cutter for securing the material to be cut in place, said means including a U-shaped yoke.

1,857,749. PLANTER. CHARLES H. WHITE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 18, 1927. Serial No. 206,428. 11 Claims. (Cl. 111—73.)



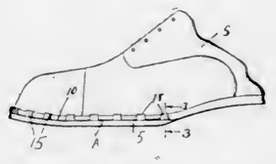
1. In a combined planter and fertilizer distributor, the combination of an intermediate furrow opener for opening a seed furrow, said intermediate furrow opener having an upwardly extending shank, seed feeding means discharging into said furrow, laterally disposed furrow openers mounted on said shank for opening secondary furrow on each side of said seed furrow, fertilizer feeding means discharging into said secondary furrows, and coacting valve means cooperating with each of said feeding means for controlling the feed of seed and fertilizer into said furrows.

1,857,750. SHOCK ABSORBER. LAWRENCE S. WILBUR, Evanston, Ill. Filed Sept. 24, 1927. Serial No. 221,742. 6 Claims. (Cl. 267—1.)



1. A shock absorbing device of the character described, comprising an outer cylinder, a cylinder head mounted upon each end of said outer cylinder and provided with a packing gland, an inner cylinder slidably mounted within said outer cylinder, a closed head upon one end of said inner cylinder, a head upon the opposite end of said inner cylinder and provided with a packing gland, an operating rod slidably mounted within a packing gland at one end of said outer cylinder, said operating rod connected to the closed head of said inner cylinder, a piston member slidably mounted within said inner cylinder, and a second operating rod secured to said piston member and slidably mounted within the packing gland on the opposite inner cylinder head and also slidably mounted within the packing gland on the opposite outer cylinder head.

1,857,751. SHOE SOLE. ROBERT WOLLMER, Milwaukee, Wis. Filed June 13, 1931. Serial No. 544,165. 3 Claims. (Cl. 36—15.)

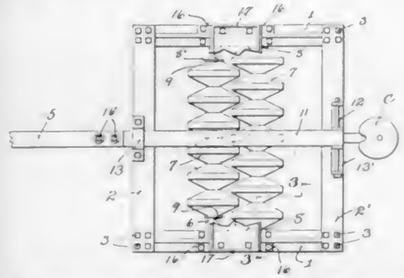


1. A detachable repair sole for shoes comprising a wear member and a plurality of upstanding hooks arranged at the marginal edge of the wear member for engagement with the worn sole and welt of a shoe, said hooks terminating short of the inner end of the wear member at one side thereof to facilitate the sliding of the repair sole on the worn sole of the shoe, and a swinging plate having shoe engaging hooks carried thereby for swinging movement into and out of engagement with the shoe arranged at the inner end of the wear member and at a point where said first mentioned hooks terminate short of the inner end of said wear member.

1,857,752. ELECTROLYTIC PRODUCTION OF TIN FROM ALKALI STANNATE OR ALKALI STANNITE LYES. WERNER FANSELAU, Berlin-Siemensstadt, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed May 13, 1929, Serial No. 362,883, and in Germany May 16, 1928. 2 Claims. (Cl. 204—17.)

2. A process for the electro-deposition of tin from alkali stannate or alkali stannite lyes having a tin content below 7%, comprising adjusting prior to the electrolysis the content of free alkali, including that liberated by hydrolysis, below 1.5%, said process employing soluble anodes, whereby said content of free alkali is maintained below 1.5% during electrolysis.

1,857,753. LAND PULVERIZER AND PACKER. JULIUS A. GAUSCHE, Racine, Wis. Filed Jan. 19, 1931. Serial No. 509,684. 2 Claims. (Cl. 55—77.)



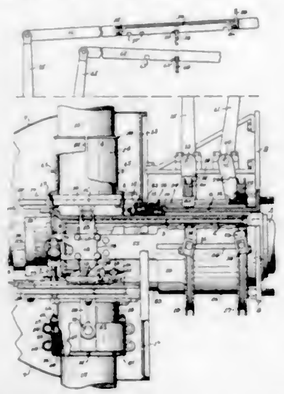
1. A combination land pulverizer and packer comprising a rectangular knock-down frame, a pair of transverse shafts carried thereby, alternately disposed gangs of conical discs mounted upon the shafts, the discs being provided with flat ground engaging surfaces, the prevalent faces of the discs being formed with flat ground engaging surfaces.

1,857,754. RIVETED JOINT. CHARLES WARD HALL, Larchmont, N. Y. Filed Mar. 26, 1925. Serial No. 18,542. 2 Claims. (Cl. 78—54.)



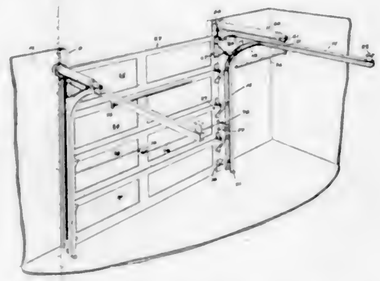
1. In a joint of the type described, the combination of two plate sections and a cover superimposed one on another and rivets set in holes formed in the bottoms of conical offsets which are stamped in the two plate sections and in the cover and are nested together the projections on one plate section within the depressions of the second plate section and the projections of the second plate section within the depressions in the cover, the heads formed on the ends of the rivets being countersunk in the depressions of the first plate section.

1,857,755. ADJUSTABLE PITCH PROPELLER. HAROLD A. HALL, Los Gatos, Calif. Filed Apr. 17, 1931. Serial No. 530,747. 16 Claims. (Cl. 170—163.)



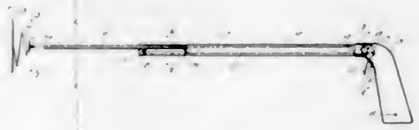
1. An adjustable pitch propeller comprising a hub; a blade mounted thereon for movement to adjust its pitch angle; and means operable while the propeller is in motion for tightly gripping said blade to secure it rigidly to said hub.

1,857,756. VERTICALLY MOVABLE HINGED PANEL DOOR. WILLIAM R. HEADLEY, Glendale, Calif. Filed Jan. 15, 1930. Serial No. 420,943. 16 Claims. (Cl. 20—20.)



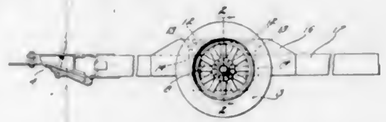
1. In a door construction having a vertically movable door guided in part by vertical guide means, a pressure guide device connected to the door and having a spring causing a reaction against the said guide to give a tight fit to the door against a structure having a door opening.

1,857,757. FLY SWATTER. CLYDE T. KIRKBY, Chicago, Ill. Filed Mar. 20, 1930. Serial No. 437,295. 6 Claims. (Cl. 43—135.)



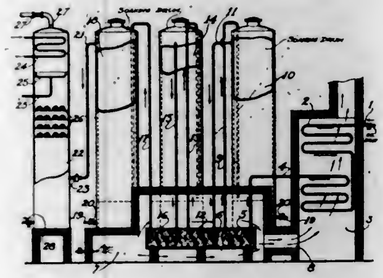
1. A device of the character described comprising a barrel housing, a plunger longitudinally reciprocal in said housing and comprising a rod having an offset portion on the inner end thereof for arresting the movement in one direction, actuating means lying adjacent said rod and extending between and connected to said offset portion and the outer end of said housing, a trigger for engaging said plunger, a resilient supporting member comprising a helical wire of substantially less diameter than that of said plunger on the outer end thereof, and a swatting disk on said supporting member, said disk being forcibly projected by said actuating means at the release of said trigger.

1,857,758. TRAILER. AUGUST F. KUESTER, Clintonville, Wis. Filed Mar. 26, 1931. Serial No. 525,461. 5 Claims. (Cl. 280—80.)



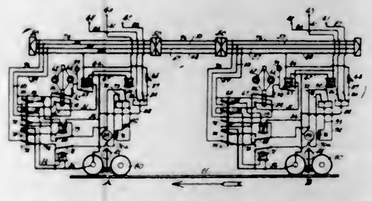
5. In a vehicle mounting, a supporting wheel, a load receiving body, spaced vertical guides carried by the body, a slide mounted in the vertical guides having a lateral portion underlying the body, a spring mounting between the body and the lateral portion, a stub axle connected with the slide receiving the wheel, the slide having a vertical guideway in vertical alinement with the stub axle, and buffer means carried by the body received in said vertical ways.

1,857,759. METHOD AND APPARATUS FOR CRACKING HYDROCARBONS. NATHANIEL E. LOOMIS, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 3, 1927. Serial No. 172,259. 3 Claims. (Cl. 196—70.)



1. The improvement in the process of cracking relatively low-boiling petroleum oils, which comprises heating the oil to a cracking and vaporizing temperature about 900° F. under a pressure of about 350–400 lbs. per square inch in an elongated passageway, further heating the oil to about 950° F. in a conduit immersed in a molten bath, then digesting the oil largely in vapor phase in a thermally insulated zone wherein some loss of heat occurs, passing the oil from the digestion zone through a heating conduit in which any loss of heat is made up, and then into another digestion stage, and recovering the cracked product.

1,857,760. ELECTRIC RAILWAY SYSTEM. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Filed Feb. 14, 1927. Serial No. 168,189. 35 Claims. (Cl. 246—31.)



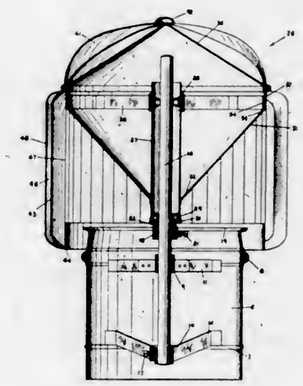
1. In an electric railway system as described, the combination, a track arranged for electric propulsion, a plurality of trucks coupled to form a train, each of said trucks embodying a motor unit and uniformly wired, a switch on each truck for connecting the motors of adjacent trucks to operated in series or in multiple and means on one truck controlled from the trackway for automatically controlling the operation of each of said motors.

1,857,761. NONSLUDGING OIL AND METHOD OF MAKING THE SAME. WARREN LEE MCCABE, Ann Arbor, Mich., and BRIAN MEAD, Belmont, Mass., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Sept. 27, 1926. Serial No. 138,114. 7 Claims. (Cl. 87—9.)

1. A sludge-resistant hydrocarbon oil heavier than kerosene and containing an alkyl compound of a metal selected from the group consisting of lead and tin.

1,857,762. ROTARY VENTILATOR. VAUGHN H. MEADOWS, Los Angeles, Calif. Filed Oct. 30, 1929. Serial No. 403,523. 1 Claim. (Cl. 98—75.)

A rotary ventilator, comprising a shaft, means for mounting said shaft axially of a ventilator pipe and extending from an end thereof, and a rotor head comprising a sleeve journaled on said shaft, a top plate rigid with said sleeve and having a peripheral flange, a plurality of driving blades secured to said top plate and arranged radially of said rotor head and angularly with respect to said plate, a plurality of substantially vertical draft vanes rigid at their upper ends with said flange, a ring secured to all of said vanes adjacent their lower ends, said ring



being of substantially the same diameter as said plate and said vanes being substantially straight and disposed substantially vertically, each of said vanes being disposed in angularity with a radius of said head drawn through the vane, and a conical deflector disposed inside said head and tapering downwards and inwards to said sleeve from adjacent the upper ends of said vanes.

1,857,763. BLACK PRINT ON TRACING CLOTH AND METHOD OF MAKING SAME. KNUD MURCK, Forest Hills, N. Y., assignor to Charles Bruning Company, Inc., a Corporation of New York. Filed May 31, 1930. Serial No. 458,893. 2 Claims. (Cl. 95—6.)

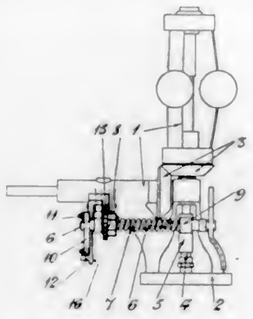
1. The method of producing prints on tracing cloth which consists in waterproofing the cloth, coating it with a light sensitive coating, exposing the tracing cloth with a negative to produce a print, developing the printed tracing cloth and thereafter removing the waterproofing.

1,857,764. SPRING DEVICE. CHARLES I. NYGARD, Elmhurst, N. Y. Filed Jan. 22, 1931. Serial No. 510,419. 2 Claims. (Cl. 267—61.)



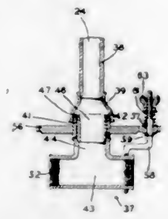
1. A torsional coil spring of the class described fashioned from a strip of wire of the same dimensions throughout its length, the wire being of greater width than thickness, the wide side faces of said strip being concave to form curved, arc-shaped recesses extending centrally and longitudinally of the strip throughout the entire spring formed thereby, and the separate coils of the spring being wound in close proximity to each other to form spaces between the coils of less dimensions than the thickness of said coils.

1,857,765. SAFETY DEVICE FOR SPEED GOVERNORS OF THE PICKERING OR LIKE TYPE. FRANK OSCAR LEVI CHORLTON, Bury, and JOHN RICHARD HAWORTH, Darwen, England. Filed Apr. 9, 1931, Serial No. 528,852, and in Great Britain Apr. 22, 1930. 2 Claims. (Cl. 74—94.)



1. A safety device for speed governors of the Pickering type, actuated by extreme movements of the governor itself, for closing the throttle valve of the engine concerned when either over-speed or under-speed is involved, comprising a trip lever with connections on opposite sides of its axis of turn, stops on said connections, a pivoted pawl provided with an extension, whereby the latter is capable of being engaged by said stops at extremes of movement of the governor itself, for closing the throttle valve of the engine, as herein set forth.

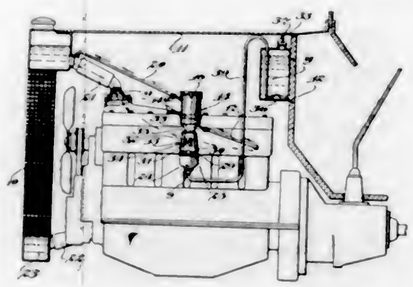
1,857,766. TANK CLEANING DEVICE. WALTER E. PETERSON, Inglewood, Calif., assignor of one-third to Joseph V. Palmer, Hermosa Beach, Calif. Filed Aug. 8, 1928. Serial No. 298,259. 9 Claims. (Cl. 299—69.)



1. In a tank cleaner, a fixed member and a rotatable member, a nozzle arranged tangentially upon said rotatable member, means for supplying fluid under pressure to said nozzle, a gear fixed to one of said members, a gear revolubly mounted upon the other member and enmeshed with the fixed gear, and means for retarding the rotation of said revolubly mounted gear.

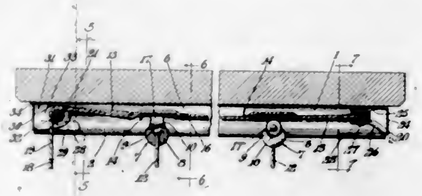
1,857,767. HEATER FOR COOLING LIQUIDS OF INTERNAL COMBUSTION ENGINES. FRANK B. RENTZ, Yankton, S. Dak., assignor, by direct and mesne assignments, to Glen V. Pickett, Yankton, S. Dak. Filed Dec. 16, 1929. Serial No. 414,372. 5 Claims. (Cl. 123—174.)

1. The combination with an internal combustion engine and a cooling system therefor including a liquid chamber surrounding the cylinders of the engine, a radiator and upper and lower conduits between said chamber and radiator, of means for heating the liquid in said system to cause a circulation thereof including a boiler having a draft flue and a heating compartment below said flue, a coiled pipe in said compartment leading from said chamber to the boiler, a conduit leading from the boiler to said system, and an oil lamp below said compartment and



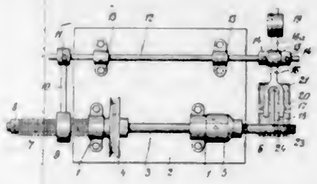
having a chimney leading thereto for heating the coil pipe and boiler, said chimney, compartment, and draft flue forming a continuous closed passageway from the lamp to atmosphere above the boiler.

1,857,768. DRAPERY AND CURTAIN SUPPORT AND OPERATING MEANS THEREFOR. HENRY REUBEL, New York, N. Y., assignor to The Kroder Reubel Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 6, 1929. Serial No. 352,977. 21 Claims. (Cl. 156—20.)



9. As an article of manufacture, a carrier for a curtain and drapery support including a body member, an axle extending through said body member and provided with a bearing member on each side thereof, a saddle member provided with lugs adapted to embrace said body member and to receive said axle, said saddle member also having an elongated body member provided with openings near each end to receive a flexible operating means.

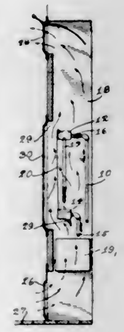
1,857,769. METHOD OF AND APPARATUS FOR MANUFACTURING HIGH OHMIC RESISTANCES. ISIDOR SILBERSTEIN, Berlin, Germany. Filed June 28, 1928, Serial No. 288,965, and in Germany July 2, 1927. 6 Claims. (Cl. 91—12.)



6. A machine for making electric resistances, comprising a holder for an insulating body, a carrier adapted to bear a liquid containing a high-resistance conductor of

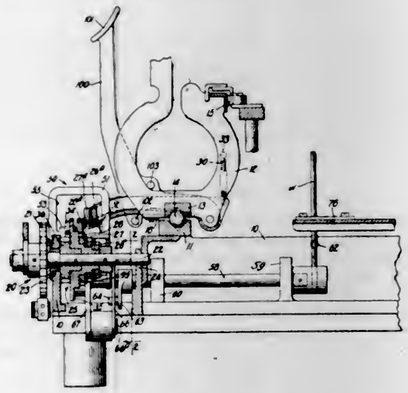
electricity and to transfer a stripe of such liquid by contact to said insulating body, and means for effecting a relative rotary motion of said holder and said carrier about the axis of the holder and at the same time a relative translation lengthwise of said axis, the extent of such translation being greater than the width of the stripe, whereby there will be formed on said body, a helical stripe the convolutions of which are out of contact with each other.

1,857,770. HUMIDIFIER. MAURICE G. STEELE, Rome, N. Y., assignor to The Hart & Hutchinson Company, New Britain, Conn., a Corporation of Connecticut. Filed Dec. 5, 1929. Serial No. 411,814. 9 Claims. (Cl. 261—103.)



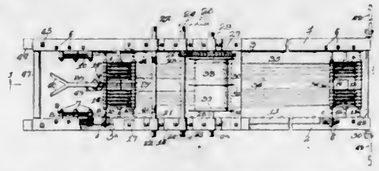
1. In a humidifier, upper and lower water tanks, a moistened absorbent sheet having one end resting on the bottom of said upper tank, the other edge being suspended in the lower tank below the water level therein, weighted means in the ends of said sheet to keep it taut, and overflow pipes in each of said tanks, the overflow pipe from the upper tank discharging into said lower tank.

1,857,771. VARIABLE FEED MECHANISM FOR TYPEWRITER CARRIAGES. FRANK H. TREGO, New York, N. Y., assignor to Varityper Incorporated, New York, N. Y., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,489. 35 Claims. (Cl. 197—84.)



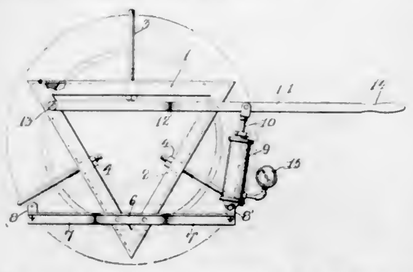
1. In a typewriting machine, the combination of a carriage, means including a shaft for controlling the feeding movements of said carriage, pinions mounted on said shaft to rotate therewith, racks movably supported on the carriage and adapted to engage one at a time with the pinions selectively, a selector shaft, means to support the selector shaft for rocking and axial movement, a handle for the selector shaft, a guide plate for said handle to control the extent of rocking and axial movements of the selector shaft, an actuating lever operated by the selector shaft, a rack controlling lever operable by the actuating lever, said rack controlling lever being effective when operated by said actuating lever to move the racks into engagement with the pinions, the axial movement of the selector shaft being effective to change the position of the rack controlling lever with respect to the racks, the rack controlling lever being constructed while swinging back to normal to disengage all of the racks except the selected one from their pinions.

1,857,772. TIE PULLER. JACOB J. VELING, Milwaukee, Wis. Filed Aug. 16, 1930. Serial No. 475,709. 3 Claims. (Cl. 254—43.)



1. A device of the class described including a frame, a carriage movable relative to the frame, a load engaging member carried by the carriage, means for moving said carriage longitudinally of the frame, and abutment members carried by the frame and arranged in spaced relation for engaging the web portions of rails to prevent said rails from buckling when the load engaging member is used for displacing the ties beneath the same.

1,857,773. BRAKE TESTING DEVICE. CARL E. WEST, Watertown, Wis. Filed Mar. 25, 1929. Serial No. 349,640. 4 Claims. (Cl. 265—1.)

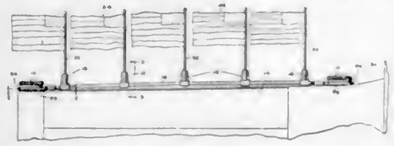


2. A brake testing device comprising a triangular body frame, means connected to each side of said frame for clamping said frame to a vehicle wheel, a supporting member transversely of one corner of the frame and connected thereto, a pressure measuring mechanism carried by the supporting member, and a lever having one end pivotally connected with the frame adjacent a second corner and operatively connected with the pressure measuring mechanism, whereby the pressure applied to the lever for rotating the wheel against the action of its brake will be registered by the pressure measuring means.

1,857,774. FLAG HOLDER FOR AUTOMOBILES. ARTHUR WICKMAN, Minneapolis, Minn. Filed June 9, 1928. Serial No. 284,087. 1 Claim. (Cl. 248—37.)

A flag holder for automobiles comprising an elongated bar adapted to extend lengthwise of the hood of the auto-

mobile, a split ring carried by the front of said bar and adapted to be secured around the neck of the radiator, a socket member extending up from the rear of said bar for



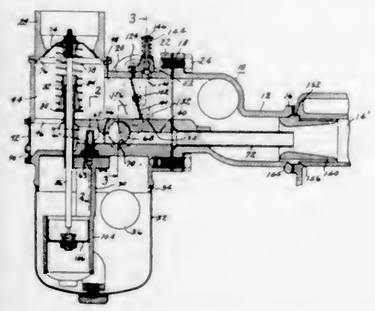
receiving the staff of a flag, said socket member extending below said bar, and a suction cup carried by the lower end of said socket member for attaching said bar at the rear of the hood.

1,857,775. SEAMLESS HOSE AND METHOD OF MAKING. JOHN M. ALLEN, Toronto, Ontario, Canada. Filed Apr. 30, 1930. Serial No. 448,648. 10 Claims. (Cl. 66—187.)



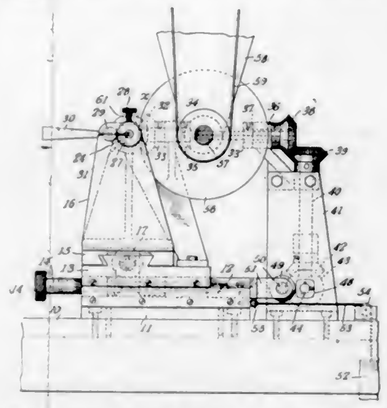
6. An improved hose having the longest course of stitches of a tapered insert portion knitted along the tapered edge of a progressively narrowed heel portion and having the tapered edge of a progressively widened portion knitted directly to the last course of knitting of said progressively narrowed heel portion.

1,857,776. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 27, 1929. Serial No. 374,118. 11 Claims. (Cl. 123—124.)



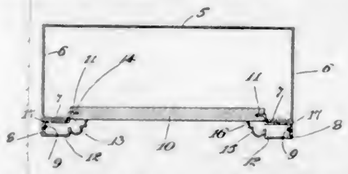
1. A charge forming device for internal combustion engines comprising a secondary mixing chamber, a primary mixture passage delivering a primary mixture of fuel and air thereto, means for supplying fuel and air to said mixture passage, a primary throttle regulating the flow therethrough, a secondary air passage supplying air to said secondary mixing chamber, means for regulating the mixture proportions comprising an auxiliary air passage communicating directly with the atmosphere and supplying air to the secondary air passage and means operated by the primary throttle for controlling the flow of air through said passage.

1,857,777. AUTOMATIC IRREGULAR CONTOUR SHAPING MACHINE. BENJAMIN D. BROWN, New York, N. Y. Filed Feb. 4, 1930. Serial No. 425,766. 9 Claims. (Cl. 51—101.)



6. In a contour shaping device, a work-part holder, a tool adjacent the holder to operate on the work part, a slide for moving one of the members parallelly with relation to an axis of the other member, a slide for moving one of the members transversely with relation to an axis of the other member, a master cam to operate in synchronism with the holder, a slidable bed upon which said slides are mounted, and means to oscillate the bed in a horizontal plane in conformity with the contour of the cam.

1,857,778. DETACHABLE PANEL MOUNTING. HARRY R. CLARK, Brooklyn, N. Y. Filed Sept. 17, 1929. Serial No. 393,168. 4 Claims. (Cl. 193—8.)

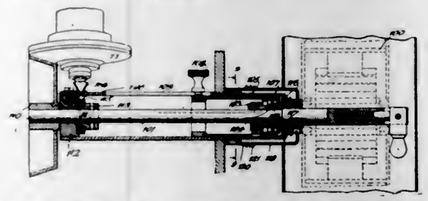


2. A closure panel for mail chutes comprising a glass plate, an ornamental sheet metal molding extending along each of the opposite side edges of said plate and having a substantially rectangular body portion providing front and rear walls, the front wall at its inner edge having a marginal flange resiliently bearing upon the front surface of the glass plate, and the rear wall of said molding having its inner edge permanently secured within the edge of the glass plate to thereby provide a smooth, unobstructed inner or rear face upon the closure plate.

1,857,779. METHOD OF PRODUCING IRON OR STEEL ALLOYS. HENNING GUSTAV FLODIN and EMIL GUSTAF TORVALD GUSTAFSSON, Stockholm, Sweden. Filed July 26, 1929, Serial No. 381,382, and in Sweden Sept. 24, 1924. 7 Claims. (Cl. 75—22.5.)

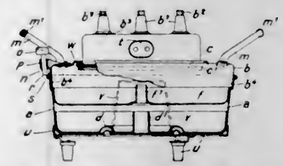
3. A method of producing an alloy of a metal belonging to the iron group directly from oxide ore of said metal and oxide ore of the alloy constituent or constituents, which, in a group of steps, includes forming separate mixtures of each of said ores with an amount of carbon-containing reducing agent proportioned to the reduction of the ore and to the desired percentage of carbon in the alloy obtained therefrom, briquetting said mixtures separately, reducing and melting said briquettes on a slag bath in an electric furnace whilst proportioning the quantity of briquettes of each kind in order to produce an alloy of the desired composition and deoxidizing the alloy produced and the slag by reducing and melting in the presence thereof briquettes containing an intimate mixture of finely divided oxide ore of a deoxidizing metal and finely divided carbonaceous material, this latter being added in a quantity proportioned to the reduction of said ore.

1,857,780. FRICTION DRIVE FOR MOTION PICTURE MACHINES. LOUIS SIMON FRAPPIER and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 1, 1929. Serial No. 382,637. 12 Claims. (Cl. 242—55.)



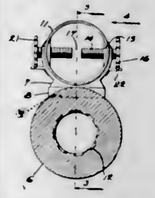
4. A reeling device comprising a substantially horizontal shaft, a bearing supporting said shaft intermediate its ends for pivotal movement, one end of said shaft being adapted to carry a reel, a friction member carried by the other end of said shaft, said member being spaced from said bearing and movable vertically in response to pivotal movement of said shaft, a friction device cooperating with said friction member and means for driving said friction device.

1,857,781. ELECTRICALLY HEATABLE KITCHEN UTENSIL. BRUNO HANYZER, Tempelhof, near Berlin, and RUDOLF BEHM, Charlottenburg, near Berlin, Germany, assignors to the Firm Multiplex, Gasfernzunder-Gesellschaft m. b. H., Berlin, Germany. Filed Nov. 21, 1928, Serial No. 320,962, and in Germany Feb. 6, 1928. 20 Claims. (Cl. 219—43.)



1. In combination with a dish electrically heatable from above, a dishlike tray, adapted to be inserted from above into the dish, a dished cover fitted into said dish in open communication with said tray, electrically operated heating means located in said cover, and means to retain said tray at a substantial distance from the bottom of the dish.

1,857,782. GUN SIGHT. JOHN HERMAN, Los Angeles, Calif. Filed Dec. 11, 1928. Serial No. 325,163. 2 Claims. (Cl. 33—53.)



1. A gun sight comprising an open-ended tube, means for securing said tube to a gun barrel adjacent the forward end thereof and in axial parallelism therewith, and a pair of pins adjustably threaded through opposite sides thereof and extending radially of the tube toward each other, the adjacent ends of said pins defining a space therebetween and the outer ends of said pins being accessible exteriorly of said tube.

1,857,783. MORTISING MACHINE. SAMUEL HUNTER, Bellevue, Pa., assignor to Armstrong & White, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1930. Serial No. 488,602. 13 Claims. (Cl. 144—27.)



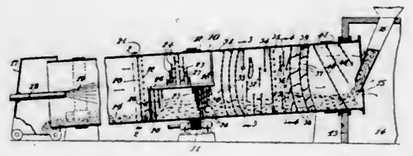
1. In a mortising machine, in combination a frame, a cutter-carrying base adjustably mounted on the frame, a carriage slidably mounted on the base, clamping means on the carriage, a bottom cutting chisel held by the clamping means, and side cutting knives carried by the clamping means.

1,857,784. TRAILER. AUGUST F. KUESTER, Clintonville, Wis. Filed Apr. 7, 1930. Serial No. 442,167. 6 Claims. (Cl. 280—80.)



1. A trailer including spaced traction wheels, axles carried thereby and having head portions at the inner ends, a platform, angular plates embracing the longitudinal edges of the platform, and means for detachably connecting said angular plates with the heads on the axles for supporting the platform below said axles.

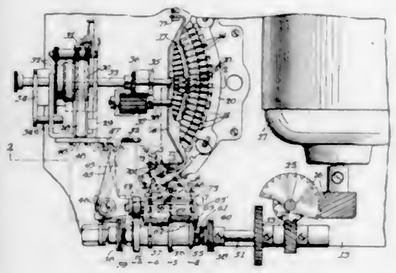
1,857,785. ROTARY DRUM. KARL ERNST EBERHARDT HOLZAPFEL, Munster, Germany, assignor to Fried. Krupp Grusonwerk A. G., Magdeburg-Buckau, Germany, a Corporation of Germany. Filed May 3, 1930, Serial No. 449,380, and in Germany May 6, 1929. 4 Claims. (Cl. 222—7.)



1. A revolving kiln drum having, with a longitudinally extending interior chamber in which the material under treatment is caused to advance lengthwise of the drum by the operation of the drum, groups of chain members arranged in adjacent planes and extending across the interior chamber, the members of the group in each plane being substantially parallel and the members of the groups in

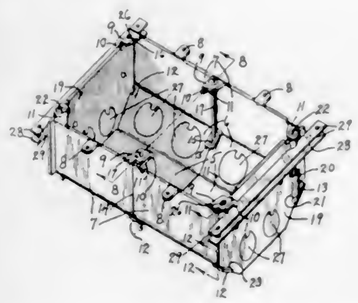
adjacent planes extending in transverse relation, said groups of members together comprising a sieve-like structure revolving with the drum for twirling and sifting the material advanced along the drum and which also serves to retard the advance of the material, producing an accumulation thereof for the twirling and sifting operations performed by said structure.

1,857,786. TELEGRAPH PRINTER AND THE LIKE. HOWARD L. KRUM, Kenilworth, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,804. 24 Claims. (Cl. 178—36.)



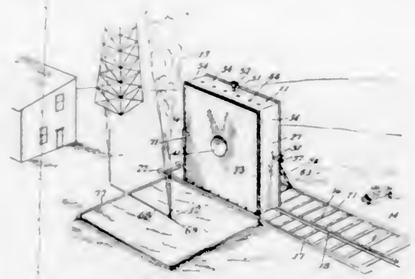
1. In a telegraphic receiving apparatus, a plurality of devices to be selected arranged in groups, more than two, shift mechanism having a corresponding number of conditions to predetermine the group to be selected, a set of independently movable permutation selectors adapted to be positioned in different combinations in response to received signals to select the individual devices of the predetermined group, and means controlled by each of certain special settings of said selectors for changing said shift mechanism to a corresponding condition from any of its other conditions.

1,857,787. ELECTRIC CONDUIT SECTIONAL OUTLET BOX. HENRY K. MEEKS and GEORGE O. MEEKS, Spokane, Wash. Filed May 26, 1930. Serial No. 455,623. 3 Claims. (Cl. 247—15.)



1. An electric conduit sectional outlet box having in combination one or more open end box units, offset lugs for the front and bottom corners of said units adapted to overlap each other when the units are disposed in abutting relation long pintles extending from the front to the rear of said units through said lugs, and end plates for said units.

1,857,788. METHOD AND APPARATUS FOR EXTINGUISHING GAS AND OIL WELL FIRES. JOHN S. MURPHY, Monterey Park, Calif. Filed Dec. 26, 1928. Serial No. 328,371. 15 Claims. (Cl. 169—2.)

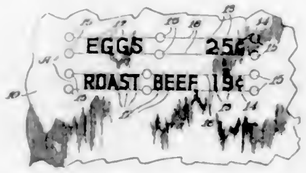


1. A device of the character described, comprising a relatively heavy block having a tapering aperture therethrough with the larger end of said aperture at the bottom of the block, means for transporting said block on its side to a position adjacent a flowing well, means for upsetting said block to fall with said aperture over said well, and flanges extending from the bottom of said block in position to be embedded in the earth about said well after the block has been upset thereupon.

4. A device of the character described, comprising a relatively heavy block, and means for transporting said block on its side to a position adjacent a flowing well, said means comprising a track, and rollers supported upon said track and supporting said block.

13. The method of extinguishing a burning well, which comprises throwing up a dyke therearound, placing water within the area surrounded by said dyke and upsetting a relatively heavy block into said water and onto said well in position to bring an aperture extending through the block into register with the well.

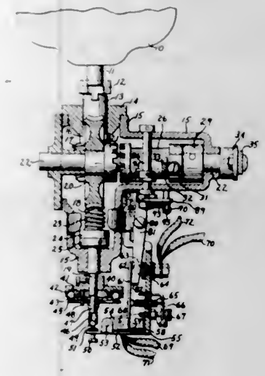
1,857,789. SECTIONAL ADJUSTABLE DISPLAY SIGN. SIGMUND A. OFTEDAL, Fargo, N. Dak. Filed Apr. 18, 1929. Serial No. 356,189. 3 Claims. (Cl. 40—144.)



1. A window display sign including, plate members, hooks formed on the top and bottom of said plates, indicia formed on the face of said plates, rods for adjustably and removably supporting said plates by engaging with said hooks under spring tension of said rods, and adjustable suction supporting cups adapted to support the ends of said rods to provide a display sign.

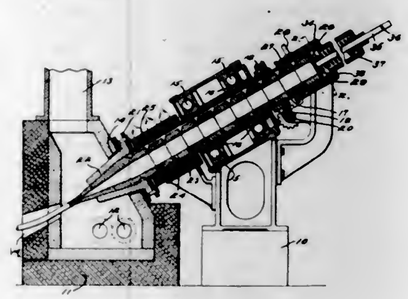
1,857,790. SPEED CONTROLLING MECHANISM. WALTER J. PASINSKI, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 16, 1928. Serial No. 254,677. 5 Claims. (Cl. 172—239.)

2. The combination with an electrical motor of a switch in the main motor circuit, means normally urging said switch toward closed position, a centrifugal governor responsive to the speed of the motor for vibrating said switch to open and closed positions to maintain the speed of



the motor constant, and means for controlling said switch independently of said governor to open and close it to start and stop the motor.

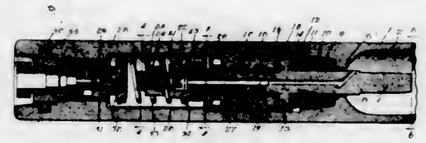
1,857,791. METHOD AND APPARATUS FOR FORMING GLASS TUBING FROM GLASS BILLETS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,202. 10 Claims. (Cl. 49—17.1.)



1. The method of forming glass tubing which comprises, forming a succession of annular billets of pressed glass, successively melting the billets to form a layer of glass upon the interior of a hollow rotating member, maintaining superatmospheric pressure within the member, and continuously drawing glass tubing from the lower end of the member.

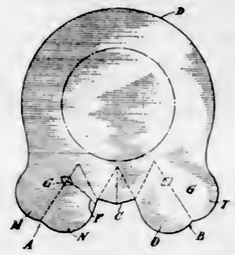
9. Apparatus for forming glass tubing comprising, a hollow member adapted to receive glass billets and mounted for rotation about an axis inclined from the vertical, means for rotating the member, means for maintaining superatmospheric pressure within the member, means for feeding billets successively into the member without destroying the superatmospheric pressure, means for advancing the billets downward within the container and into a zone of heat, means for preheating the billets, other means for melting the preheated billets to form molten glass of workable consistency, and means for drawing tubing therefrom.

1,857,792. BLASTING CARTRIDGE. HAROLD S. PIERCE and RUSSELL T. SWEENEY, Indianapolis, Ind., assignors to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 11, 1929. Serial No. 398,987. 8 Claims. (Cl. 102—7.)



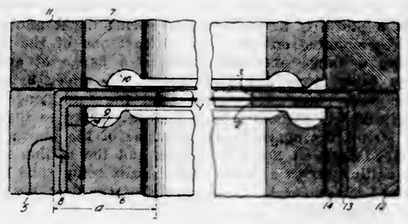
6. A blasting cartridge comprising a metallic body having a gas chamber formed therein, an electrode extending through a wall of said body and insulated therefrom, said electrode having a gas passage therein, a valve body secured to the end of said electrode and having an axial bore in alignment with said passage, a valve slidably mounted in said bore, and a cap adjustably connected with the end of said valve body and adapted to seal the end of said bore.

1,857,793. BOTTLE CAP. ENRIQUE MUNOZ Y SALI, Santiago de Cuba, Cuba. Filed June 12, 1931, Serial No. 543,861, and in Cuba Feb. 17, 1931. 7 Claims. (Cl. 215—38.)



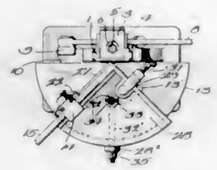
1. A blank for a bottle cap comprising a substantially circular portion of sheet material having two ears formed on its edge, said ears each having two tabs divided by a radial crease, said ears being separated from each other by a portion having a radial crease.

1,857,794. WAVE ENERGY TRANSLATING DIAPHRAGM AND METHOD OF MOUNTING IT. EDWIN H. SMYTHE, Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1929. Serial No. 383,397. 9 Claims. (Cl. 181—31.)



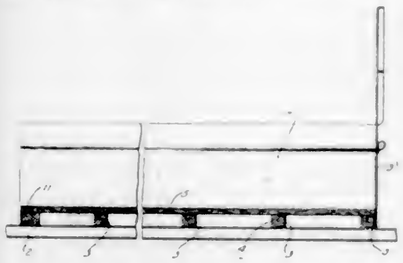
1. The method of mounting and tensioning a wave energy translating diaphragm of a material that can be stretched which consists in securing said diaphragm to a mounting member of a material that will retain its shape after being deformed and corrugating said mounting member to increase its inner peripheral dimension thereby tensioning said diaphragm.

1,857,795. CUTTING TOOL. WILLIAM F. STUCKEMAN, Chicago, Ill., assignor to H. B. Rouse & Company, Chicago, Ill., a Corporation of Illinois. Filed July 18, 1929. Serial No. 379,283. 3 Claims. (Cl. 164—10.5.)



1. The combination with a cutter; of a work holding table formed with a track circularly curved upon a center adjacent the cutter; a work presenting member having sides converging toward the cutter and movable upon the table and engaging said track to be guided in its movements; a clamping bolt whose stem has two angular parts, one of these angular parts being assembled with the work presenting member and passing through a slot formed in the table and which slots extend in the direction of movement of the work presenting member; and a clamping nut threaded upon the other angular part of the bolt stem and adapted to press against the peripheral portion of the work presenting member that is between the converging sides of said member to hold this member in selected adjustment, said table having a formation engaging the bolt stem, the angular part of the bolt stem that passes through the slot being pivoally connected with the other part of the bolt stem and in the form of a lever having fulcrum engagement with the underside of the table to draw the work presenting member downwardly upon the table when the nut is turned in a clamping direction.

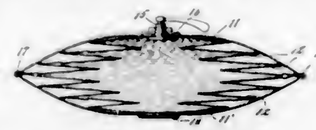
1,857,796. TRUCK BODY. LEO J. STYSLINGER, Pittsburgh, Pa., assignor to Auto Truck Equipment Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 31, 1928, Serial No. 266,327. Renewed Sept. 28, 1931. 2 Claims. (Cl. 296—28.)



1. A truck body having spaced longitudinally extending sills, a plurality of cross beams having upper and lower flanges mounted on the sills, at least one of the beams having a flange extending towards a flange of another cross beam, a nailing strip below the upper flange of each cross beam extending beyond the said flange, and longitudinally extending floor boards secured to the nailing strips, the upper flanges of some of the beams being clamped between the floor boards and the nailing strips, the nailing strips and the floor boards being thus locked against movement by the securing of the floor boards to the nailing strips.

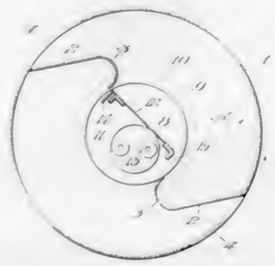
1,857,797. FIRE EXTINGUISHER. HENRY E. VAN NESS, Elmira, N. Y., assignor to Robert W. Byerly, New York, N. Y. Filed Feb. 8, 1929. Serial No. 338,366. 2 Claims. (Cl. 299—90.)

1. A fire extinguisher, comprising a closed container having a wall formed with circular bellows-folds of progressively increasing diameter, and a bowed spring extending diametrically across said container adapted



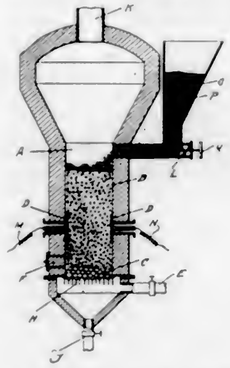
to engage an intermediate fold and tending to collapse said folds to maintain a body of fire-extinguishing liquid in the container constantly under pressure.

1,857,798. MIXING AND DRYING MACHINE. ARTHUR B. WEBB, Milwaukee, Wis., assignor to The Rightway Corporation, a Corporation of Indiana. Filed Feb. 7, 1930. Serial No. 426,453. 6 Claims. (Cl. 34—5.)



1. In a machine of the character described, a horizontal rotatable drum, buckets fixed in the drum and comprising members extending inwardly from the peripheral wall of the drum and each having at its inner end on the side that is in advance when the drum is turned in one direction, a trough extending lengthwise of the drum, and there being combined inlet and outlet openings in the said wall on the sides of said members opposite those on which the troughs are located, the said wall being continuous except where said openings occur.

1,857,799. PRODUCTION OF WATER GAS. FRITZ WINKLER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 26, 1926, Serial No. 118,849, and in Germany July 1, 1925. 3 Claims. (Cl. 48—206.)



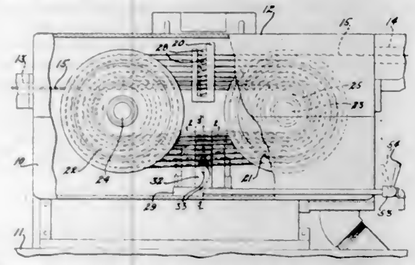
1. The process of producing water gas which comprises electrically heating a deep layer of small-sized coke from lignite, supported on a grate, by supplying an electric current to electrodes arranged within the layer of coke, and passing steam through the said layer with sufficient speed to establish a boiling action in the coke and thereby generating water gas.

1,857,800. WATER CLOSET. WILLIAM J. WOOLLEY, Chicago, Ill. Filed Mar. 14, 1929. Serial No. 346,906. 2 Claims. (Cl. 251—20.)



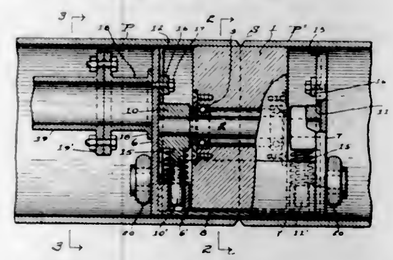
2. A closet tank inlet valve comprising a horizontally arranged valve casing, a valve in said casing, and a sleeve surrounding said valve and having an opening in its top for providing a water seal about said valve.

1,857,801. STRAND SLACKENING DEVICE. HAROLD PETER ARKEMA, Chicago, and SAMUEL MCMULLAN, Downers Grove, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,346. 5 Claims. (Cl. 205—16.)



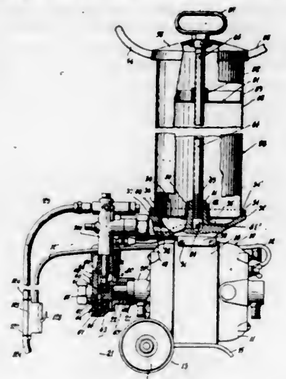
2. In a wire drawing apparatus, a driven stepped capstan and a plurality of idler sheaves for carrying the wire along a predetermined path, a plurality of wire drawing dies mounted between the capstan and the sheaves, a reciprocable deflector positioned between the capstan and the sheaves, a spring to maintain the deflector normally in a retracted position and means to force the deflector against the wire to lengthen the path thereof.

1,857,802. PIPE WELDING MANDREL. JOHN H. BAKER, Youngstown, Ohio, assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio, a Corporation of Ohio. Filed Jan. 5, 1929. Serial No. 330,507. 15 Claims. (Cl. 78—103.)



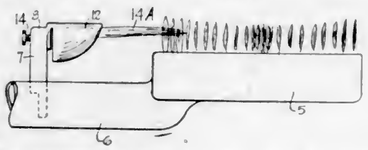
1. A mandrel of the class described, comprising a housing having parallel end plates longitudinally spaced and of less diameter than the pipe in which the mandrel is to be used, means connecting the plates together below the horizontal diameter of the mandrel, a roll disposed between the plates, a shaft on which the roll is mounted for revolution on an axis normal to the plates, a trunnion at each end of the shaft movable diametrically of the adjacent plate, yielding means operative to move each trunnion upwardly to engage the roll with the inner wall of the pipe when the mandrel is disposed therein, supporting rollers carried by each plate on opposite sides of its vertical diameter adapted to support the mandrel in the pipe with the plates and plate connecting means out of contact with the wall thereof and to resist the thrust of the roll as it is pressed against the pipe wall by said yielding means.

1,857,803. LUBRICATING DEVICE AND THE LIKE. ANTHONY BIZZARRI, New York, N. Y. Filed Aug. 8, 1927. Serial No. 211,284. 2 Claims. (Cl. 221—47.1.)



1. A pump for lubricant and the like comprising, in combination, a motor having a motor housing and a motor shaft, a tank for lubricant or the like mounted upon said motor housing and comprising a bottom member provided with an air inlet and having an inwardly extending hollow nipple the hollow of which communicates with the inner end of said air inlet, a sidewall member and an associated top member, in combination with a hollow clamping member for holding said bottom, side-wall and top members in proper relation together, the hollow of said hollow clamping member communicating adjacent its lower end with the hollow of said hollow nipple and communicating adjacent its upper end with the space within said tank; an eccentric housing, a plurality of pump casings operatively associated therewith, one of said pump casings containing the operative parts of an air pump and the other of said pump casings containing the operative parts of a fluid pump; an eccentric within said eccentric casing for operating both of said pumps; means connecting the outlet end of said air pump with the outer end of the air inlet of the bottom member of said tank; and means connecting the inlet of said fluid pump with the outlet for lubricant or the like leading from said tank.

1,857,804. SAFETY GAS BURNER. HALFDAN CARLSEN, New York, N. Y. Filed Mar. 24, 1930. Serial No. 438,541. 3 Claims. (Cl. 158—115.)



1. The combination with a burner and gas feed pipe therefor, of a safety light comprising an auxiliary pipe

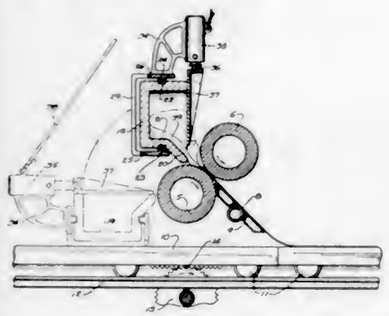
attached to said feed pipe, a hood on said auxiliary pipe, a gas jet in the auxiliary pipe extending beneath said hood, and the vertical edges of the hood adjacent the auxiliary pipe being spaced from said auxiliary pipe to provide an air passage.

1,857,805. COATED FABRIC AND METHOD OF MAKING THE SAME. DAVID CARNEGIE, Jr., Springfield, N. J., assignor to Duratex Corporation, Newark, N. J., a Corporation of New Jersey. Filed Sept. 23, 1927. Serial No. 221,624. 13 Claims. (Cl. 91—68.)

1. A coated fabric having an insoluble coating comprising a blown unpolymerized drying oil and nitro-cellulose material in a ratio greater than 1:1.

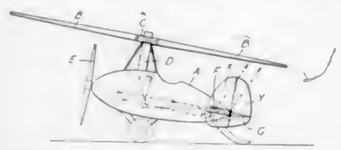
4. A method of making coated fabrics which comprises modifying the properties of a drying oil by passing into contact therewith an oxygen containing gas until a nitrocellulose solution becomes soluble therein or in substantially all proportions, admixing with said oil a nitrocellulose solution in the proportion of oil to nitro-cellulose greater than 1:1 and applying successive coatings to a fabric without ageing the individual coatings before applying each successive coating.

1,857,806. GLASS FORMING APPARATUS AND PROCESS. CARROLL CONE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 29, 1929. Serial No. 381,747. 12 Claims. (Cl. 49—33.)



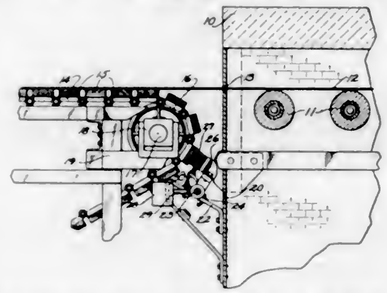
1. In sheet glass apparatus, the combination with sheet forming means, of a portable pot containing a charge of molten glass, means for removably supporting and moving said pot into a discharge position with respect to the sheet forming means, and a slidably mounted gate forming a closure for the outlet of the pot and movable with said pot for controlling the flow of molten glass therefrom.

1,857,807. AIRCRAFT WITH AUTO-ROTATIVE WINGS. JUAN DE LA CIERVA, Aldwych, London, England, assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 4, 1929, Serial No. 352,554, and in Great Britain Oct. 27, 1928. Renewed Dec. 18, 1929. 28 Claims. (Cl. 244—19.)



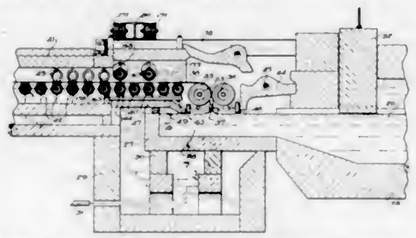
2. In combination, an aircraft having propelling means, sustaining blade surfaces swingingly and rotatively arranged for direct actuation by the relative air-flow in flight, and controllable means for effecting a flow of slipstream from the propelling means against said sustaining blade surfaces for direct actuation thereof.

1,857,808. BRUSH HOLDER. HUGO N. DIEDERICHS, St. Louis, Mo., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 27, 1928. Serial No. 249,936. 3 Claims. (Cl. 49—48.)



3. A brushing device for a cutting table including fixed brackets, a substantially horizontal shaft rockably mounted therein, a frame supported by said shaft, brushes for cleaning the table carried by said frame, arms carried by the shaft, weights carried by said arms and movable with respect thereto, said weights acting to move the frame to normally urge the brushes into engagement with said table, additional arms carried by said shaft, and adjustable elements carried by said last mentioned arms and engaging the fixed brackets for limiting movement of the brushes toward the table.

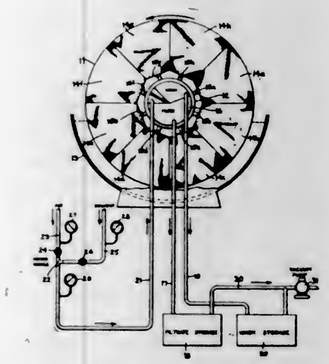
1,857,809. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, and LUKE C. MAMBOURG, Lancaster, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 20, 1927. Serial No. 214,278. 9 Claims. (Cl. 49—33.)



9. In sheet glass apparatus, a receptacle containing a mass of molten glass, a pair of rolls mounted thereabove and arranged to create a sheet forming pass, one of said rolls being supported in a stationary mounting, a mounting for the second roll pivotally connected to the other mounting, means for controlling the space between said rolls, and two pairs of rolls arranged between the first mentioned rolls and the mass of molten glass adapted for engagement with the border portions of the body of glass passing from said mass to said sheet forming pass.

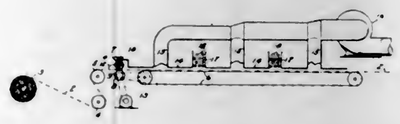
1,857,810. FILTRATION. WILLIAM P. GEE, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,636. 5 Claims. (Cl. 210—200.)

5. In combination with a continuous rotary suction filter having a reverse pressure discharge line for discharging the filter cake from the filter elements, a mixing nozzle in said line, means for separately introducing under pressure an oil solvent and a compressed gas into



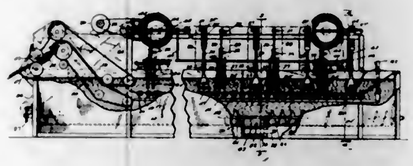
the mixing nozzle to produce a mist of the solvent in the gas whereby the waxy materials are dissolved from the pores of said filter elements after said filter cake has been discharged.

1,857,811. LINOLEUM AND SIMILAR HARD SURFACED FLOOR COVERING. ARTHUR M. GEORGE, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1928. Serial No. 259,100. 5 Claims. (Cl. 154—25.)



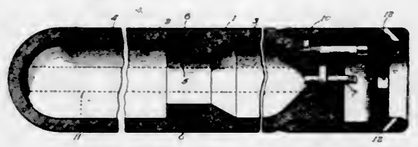
3. In the method of making a flexible hard surfaced floor covering, the steps consisting in forming a body of a filler and a binder by compression, and applying a coating containing a solvent having a dissolving action on the binder.

1,857,812. PROCESS AND APPARATUS FOR CLEANING WASTE. JOHN R. HIATT, Indianapolis, and CHARLES R. WICKER, Carmel, Ind. Filed July 14, 1928. Serial No. 292,772. 7 Claims. (Cl. 141—5.)



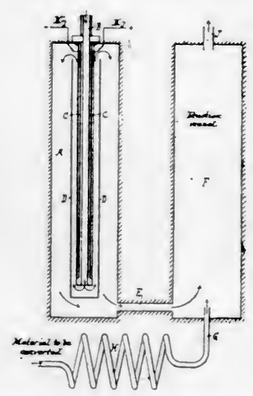
1. An apparatus for cleaning waste, comprising a tank for containing a supply of cleaning liquid, a perforate screen in said tank means for compressing the waste against said screen, and means for shredding waste on said screen.

1,857,813. BLASTING CARTRIDGE. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 24, 1929. Serial No. 402,018. 3 Claims. (Cl. 102—6.)



1. A blasting cartridge comprising a two part cylinder, the open end of one part extending into the open end of the other part, external threads formed on the said one part, internal threads formed on the said other part, said threads being arranged out of engagement and in opposed relation, and a rupturable connector having internal and external threads arranged between and joining said parts.

1,857,814. SUPPLYING HEAT IN HIGH PRESSURE REACTIONS. CARL KRAUCH, Ludwigshafen-on-the-Rhine, and MATHIAS PIER, Heidelberg, Germany, assignors, by mesne assignments, to Standard - I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Sept. 28, 1927, Serial No. 222,679, and in Germany July 28, 1926. 3 Claims. (Cl. 196—62.)

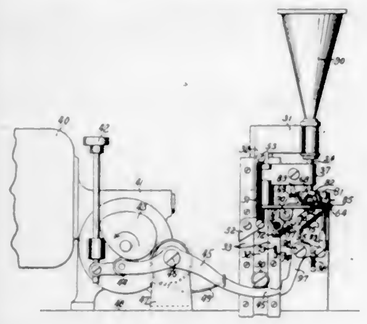


1. The process for destructive hydrogenation of bituminous materials at a temperature sufficient to effect the conversion and a pressure of the order of those employed in destructive hydrogenation which comprises preheating the bituminous material to a temperature near to but below the reaction temperature and bringing the material to the reaction temperature by contacting it only with a gas consisting substantially entirely of hydrogen which is electrically preheated to a temperature not greatly exceeding the reaction temperature, while avoiding the supplying of heat to said gas through pressure bearing walls.

1,857,815. APPARATUS FOR AUTOMATICALLY DELIVERING ARTICLES IN A UNIFORM MANNER. ARTHUR R. LAFFERTY, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 23, 1929. Serial No. 349,290. 5 Claims. (Cl. 198—33.)

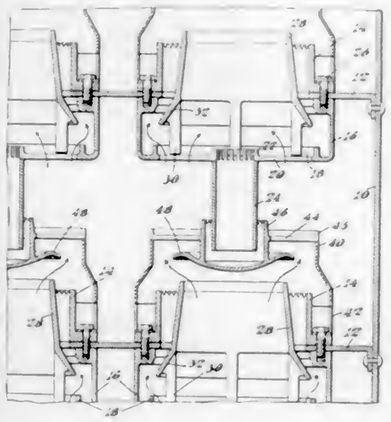
1. In a machine of the class described, a hopper for receiving tapered articles, a surface inclined so that tapered articles placed on it will roll and slide down said surface, means automatically discharging articles from said hopper one at a time onto said surface in horizontal position substantially transverse to the direction of in-

clination of said surface, means acting to accurately align each of said discharged articles in horizontal transverse position on said surface and to subsequently release the articles for movement down said surface, and guides



limiting the transverse movement of said articles to arrest them in longitudinal position with their larger ends pointing downward, said guides also acting to guide the articles into alignment one behind the other.

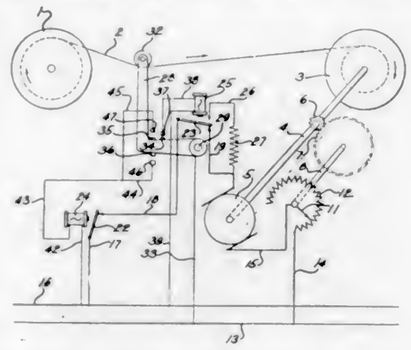
1,857,816. DISTILLATION APPARATUS AND THE LIKE. FRANK E. LICHTENTHAELER, Newton Highlands, Mass. Filed Sept. 21, 1927. Serial No. 221,062. 13 Claims. (Cl. 261—14.)



1. In a distillation column, or the like, a deck having a plurality of openings, a deck-sealing dam about each opening, a vapor riser concentric with and spaced from each sealing dam, and an overflow pipe suspended beneath the vapor riser, and means for liquid sealing the end of the overflow pipe.

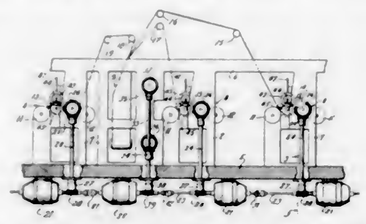
1,857,817. WINDING AND REELING DEVICE. PAUL STANCLIFF MCCANN, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 23, 1929. Serial No. 349,295. 8 Claims. (Cl. 242—45.)

1. In a device for reeling material, a takeup reel for receiving the material from a source of supply, a source of motive power for driving the takeup reel, means for reducing the effectiveness of the source of motive power, means independent of the means for reducing said effectiveness and responsive to tension in the material for further reducing said effectiveness, and means responsive



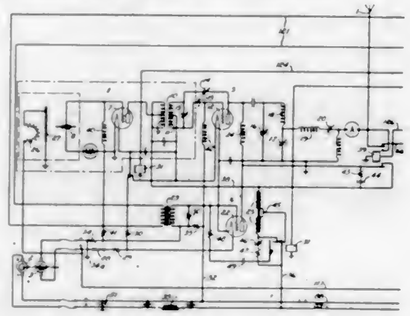
to an abnormal increase or decrease in tension in the material for rendering the source of motive power inoperative.

1,857,818. INCHING MECHANISM FOR PRINTING PRESSES. HAROLD L. MCCLEERY, Downers Grove, Ill., assignor to Allan J. Cline, Chicago, Ill. Filed Aug. 7, 1930. Serial No. 473,579. 16 Claims. (Cl. 270—5.)



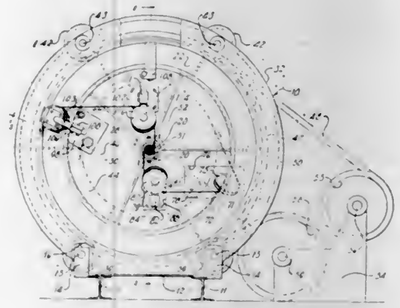
2. A printing press comprising, a plurality of associated printing units, drive means for operating said units, means for disconnecting each of said printing units from the other units of the press, and a separate inching motor for each of said printing units.

1,857,819. RADIO TELEPHONE SYSTEM. FRANCIS F. MERRIAM, Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1928. Serial No. 286,852. 6 Claims. (Cl. 179—2.5.)



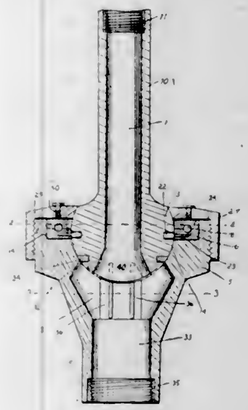
1. In a wave transmitting system an electric discharge device for supplying high frequency waves, a variable impedance device having an input circuit and an output circuit and arranged to supply low frequency waves for modulating the high frequency waves, a source for supplying current to the output circuit of said variable impedance device, an inductance coil connected in series with said source in said output circuit, and means for connecting a portion of said coil in the input circuit of said variable impedance device to produce a low frequency signaling tone.

1,857,820. SERVING DEVICE. EDGAR U. RICE, Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 24, 1930. Serial No. 438,267. 11 Claims. (Cl. 117—41.)



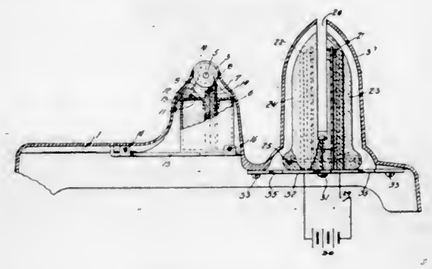
1. In a serving apparatus, a material supply, a pair of members for carrying the material and means for serving the material from one member and through the second member and from the second member to alternate juxtaposition with that served from the first member.

1,857,821. FLEXIBLE HOSE AND CONNECTION. FRANK C. RICHARDSON, Los Angeles, Calif. Filed Mar. 7, 1930. Serial No. 433,969. 4 Claims. (Cl. 285—95.)



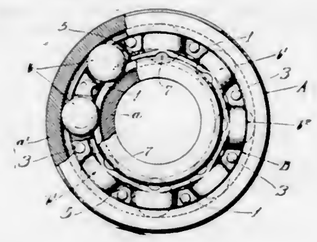
1. In combination a tubular joint section having an internal bore formed at one open end with an annular counterseat and with a ball socket intersecting said counterseat, said socket communicating with the bore of the joint section, a tubular fitting having a hollow ball removably seated in said socket and having a flaring bore passage communicating with the bore of the joint section, an annular body rotatedly mounted in the counterseat and engaging the lateral surface of the ball, a fixed annular body in said counterseat, anti-friction balls interposed between both annular bodies, a pair of diametrically opposite pinties carried by the rotatable annular body and projecting into the ball of the fitting to allow the latter to move with the rotatable body and to swivel thereupon, and means removably carried by said tubular joint section and confining the ball of the fitting and the annular bodies against displacement from the joint section.

1,857,822. IDENTIFICATION DEVICE. DERMONT H. ROBERTS, Long Beach, Calif. Filed Mar. 16, 1931. Serial No. 523,148. 12 Claims. (Cl. 41—4.)



7. In a device for personal identification, a roller, means for feeding an invisible printing fluid to said roller, a table for receiving a paper to be imprinted, a heating device in which to insert the imprinted paper for the purpose of developing the invisible imprint, and means for ventilating said heating device in order to prevent scorching of the paper and heating of the casing.

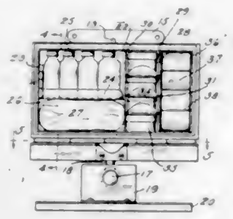
1,857,823. RETAINER FOR BALL BEARINGS. THOMAS L. ROBINSON, Valparaiso, Ind. Filed June 27, 1929. Serial No. 374,190. 4 Claims. (Cl. 308—201.)



1. A ball retainer for a ball bearing stamped from flat blanks of suitable sheet metal, comprising two substantially duplicate integral parts, each provided with a central opening and consisting of alternately arranged pocket-forming segments and radially disposed webs, the webs of different retainer parts being rigidly connected to form a unitary structure with the pocket-forming segments of connected parts in complementary relation, said retainer parts also comprising strengthening webs which connect the inner ends of the walls of adjacent pocket-forming segments,

said retainer also comprising crowned strengthening webs which connect the inner ends of the ball-pockets forming circumferential passageways which connect the ball-pockets of the retainer in series, and the remote edges only of which define the bearing opening of the retainer on the inner bearing member.

1,857,824. EMERGENCY KIT FOR AUTOMOBILES. ARTUR SCHOLZ and HENRY FRUCHT, Brooklyn, N. Y.; said Frucht assignor to Samuel Feldstein, Brooklyn, N. Y. Filed Feb. 9, 1929. Serial No. 338,716. 2 Claims. (Cl. 206—12.)

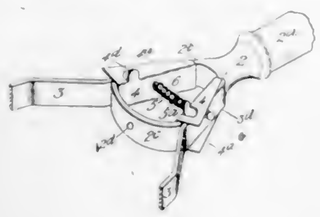


2. In an emergency kit, particularly for automobiles, partitions dividing said kit into a plurality of compartments, guides in one of said compartments, trays sliding in said guides, supporting boxes, and upturned handles on the front of said trays for the convenient operation of said trays to move the boxes in and out of said compartment.

1,857,825. METAL ROLL. WILLIAM H. SEAMAN, Hammond, Ind. Filed June 27, 1927. Serial No. 201,968. 6 Claims. (Cl. 80—58.)

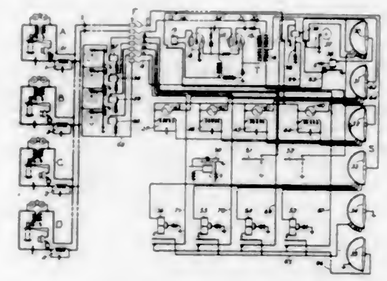
6. A chilled cast iron roll containing total carbon about 3.00% to 3.75%, chromium about .70% to 1.25%, phosphorus from about .10% to about .40%, sulphur not over about .10%, silicon about .50% to 1.50%, and manganese about .35% to .50% and having a close grained white iron primary chill and a secondary chill having no distinct line of demarkation between it and the primary chill and having a grain structure resembling that of the primary chill, and a gray or mottled iron core underlying the secondary chill.

1,857,826. FISH LANDING NET. ALBERT CHARLES SLAMEN, Melbourne, Victoria, Australia. Filed Mar. 5, 1931, Serial No. 520,197, and in Australia Apr. 5, 1930. 3 Claims. (Cl. 43—12.)



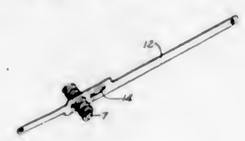
1. A net of the kind stated having supporting arms carried by sides of a handle head, each said side having pivoted to it the butt of one of the arms, and carrying a channeled socket which is resiliently pressed outwardly, each channel enclosing an arm butt when the arms are extended, and each socket pressing an arm butt so as to hold it when the arms are in closed position.

1,857,827. TELEPHONE SYSTEM. LELAND J. STACY, Caldwell, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,377. 4 Claims. (Cl. 179—8.5.)



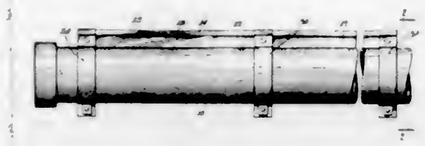
1. In combination, a line having a number of stations thereon, impedance elements of different values, one at each station, a plurality of sources of current of different characteristics, other impedance elements, and means for connecting said sources of current to said line and to said other impedance elements to identify the stations on said line.

1,857,828. CIRCUIT CONTROLLING DEVICE. HAROLD N. WAGAR, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,494. 6 Claims. (Cl. 200—166.)



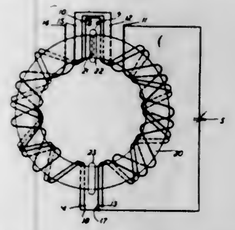
6. A spring contact unit comprising a plurality of superposed contact springs, a bushing common to and supporting all of said contact springs and a spacer interposed between each pair of adjacent contact springs for maintaining said contact springs in spaced relation, all of said spacers collectively forming a continuous spiral ridge formed integrally with said bushing.

1,857,829. SHOWER PIPE. SETH WHEELER, Jr., Albany, N. Y. Filed Feb. 19, 1930. Serial No. 429,561. 4 Claims. (Cl. 92—50.)



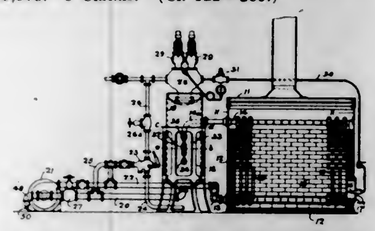
1. A shower for paper machinery or the like, comprising a pipe, a row of holes in the pipe lying in a single radial plane, and a readily removable member positioned upon the pipe along the line of the edges of such holes and having an approximately flat surface which intersects at an acute angle the projections of such holes and removable and readily adjustable straps passing around said member and said pipe adapted to position and to allow adjustment of said member substantially parallel to the axis of said pipe and in any desired circumferential position upon said pipe.

1,857,830. TRANSMISSION CIRCUIT. HORACE WHITTLE, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1930. Serial No. 475,346. 7 Claims. (Cl. 179—78.)



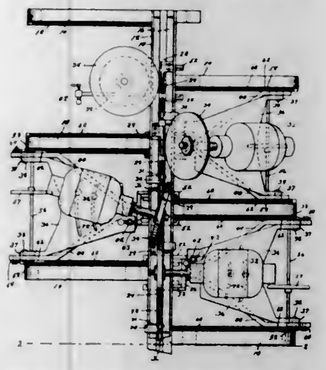
1. The method of eliminating admittance unbalance due to the residual capacity unbalance between one winding of a repeating coil and another winding of said repeating coil symmetrical to a center tap, which comprises adding a capacity element between points in said winding which have a potential opposite to that across said residual capacity, and adjusting said capacity element until the admittance currents are balanced out or eliminated.

1,857,831. STEAM GENERATOR. GEORGE B. ASHWORTH, Amsterdam, N. Y. Filed May 2, 1929. Serial No. 359,973. 5 Claims. (Cl. 122—359.)



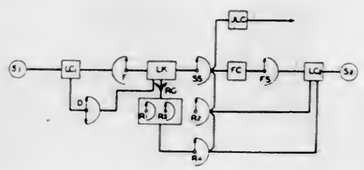
3. An accumulator for steam generators, comprising a substantially cylindrical chamber, having a steam space and a water space; and a baffle, disposed in said chamber, above the normal water level, and comprising a flange attached to a wall of the chamber, and an inverted frusto-conical shell open at the center, for the passage of steam.

1,857,832. AUTOMATIC BUFFING MACHINE. EDWIN W. M. BAILEY, Amesbury, Mass. Filed Feb. 15, 1930. Serial No. 428,777. 5 Claims. (Cl. 51—74.)



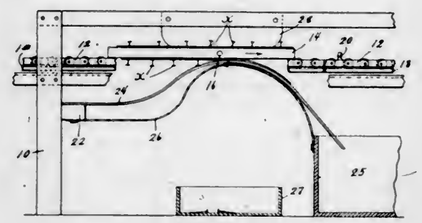
1. In a machine of the character described, means for feeding elongated strips of material in a straight predetermined path, a support disposed at one side of said path and mounted for swinging adjustment about approximately the middle longitudinal line of said path, and a shaft having an operating head thereon and mounted on said support for rotation about an axis disposed in transverse relation to said path, and arranged for adjustment thereon and transversely of its axis, to carry said head toward and from said path.

1,857,833. AUTOMATIC OR SEMIAUTOMATIC TELEPHONE SYSTEM. JOHN HENRY ELVIDGE BAKER and LESLIE BAINES HAIGH, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Filed Dec. 19, 1929, Serial No. 415,203, and in Great Britain Dec. 20, 1928. 14 Claims. (Cl. 179—18.)



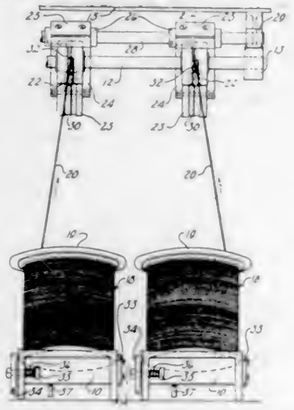
1. In a telephone system, a calling line, a line relay associated with said calling line, means for automatically locking said line relay in its operated position on the initiation of a call, means for connecting earth potential to a registering mechanism common to a plurality of calling lines, means for causing a finder switch associated with said common registering mechanism to hunt for said calling line, and means for transmitting a ringing signal to said calling line upon a connection between such line, and said common registering mechanism being completed.

1,857,834. TACK-REMOVING DEVICE FOR SKIN DRYING HOLDERS. GUY H. BERRY, Haverhill, Mass., assignor to L. H. Hamel Leather Co., Haverhill, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1929. Serial No. 407,113. 13 Claims. (Cl. 254—18.)



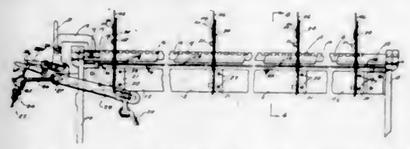
1. In a machine for drying skins, a holder having a plane surface on which the skins are secured by tacks, and means for moving said holder horizontally with said surface facing downward, a tack pulling device disposed beneath and adjacent the path of movement of the holder comprising a screen having openings therethru adapted to receive the shanks of the skin securing tacks and to engage the under sides of the heads thereof at the sides of said openings and hold the tacks against movement with the holder and permit them to fall through said openings, and supports disposed between said screen and the path of movement of the skins carried by said holder to sustain the skins as the tacks are withdrawn and to deliver the skins after the tacks have been withdrawn.

1,857,835. APPARATUS FOR HANDLING STRAND MATERIAL. EDGAR M. BIDWELL, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,479. 4 Claims. (Cl. 242—155.)



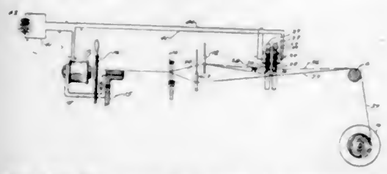
1. In an apparatus for handling strand material, a plurality of strand supplies, a rotatable shaft common to all the supplies, strand engaging rollers individual to the supplies and secured to the common shaft, and means cooperating with the rollers for maintaining the strands under constant tension.

1,857,836. FLOAT PREVENTER FOR LOOMS. LAURENCE E. BLACKMAN, Hartsville, S. C. Filed Dec. 24, 1929. Serial No. 416,252. 8 Claims. (Cl. 139—352.)



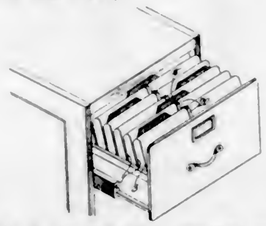
1. Float preventive means in a loom comprising additional drop wires associated with the conventional stop motion in a loom having conventional drop wires, means associated with the conventional stop motion operable to automatically drop one of the additional drop wires to operate the stop motion mechanism when any portion of the warp between the drop wires and the woven part of the fabric in the loom becomes intermingled.

1,857,837. COMBINED STOP MOTION AND FLOAT PREVENTER FOR LOOMS. LAURENCE E. BLACKMAN, Hartsville, S. C. Filed Jan. 17, 1930. Serial No. 421,449. 2 Claims. (Cl. 139—353.)



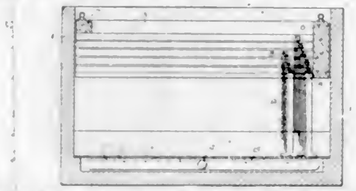
1. In a float preventer for looms, a plurality of transversely disposed bars, other transversely disposed bars mounted in the top and bottom edges of said first named bars and being insulated thereof, a plurality of drop wires mounted on said bars, electrical connections between the two portions of each bar and a magnet on the shipper lever of the loom, the dropping or raising of any of the drop wires being adapted to complete the electric circuit between the two portions of said bars to automatically stop the loom.

1,857,838. VERTICAL FILING DEVICE. VINCENT F. CASTLEMAN, Oak Park, and OSCAR J. PUTTING, Springfield, Ill. Filed Nov. 3, 1930. Serial No. 492,931. 10 Claims. (Cl. 129—16.7.)



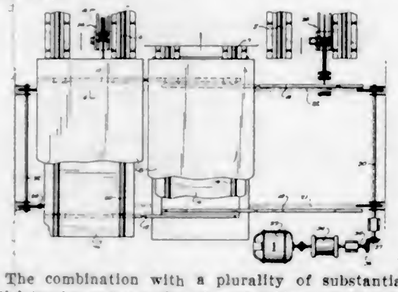
1. A device of the character described comprising a middle panel, a pair of side panels pivotally connected with the middle panel for enclosing the contents of a file placed upon the middle panel, and a reinforcing member secured to the inner side of one of said panels and having an index tab projecting beyond the pivotal connection of one of said side panels with said middle panel.

1,857,839. APPARATUS FOR TREATING TEXTILE MATERIALS. CHARLES DEWITTE, Brussels, Belgium. Filed Sept. 21, 1929, Serial No. 394,337, and in Belgium Sept. 25, 1928. 4 Claims. (Cl. 8—19.)



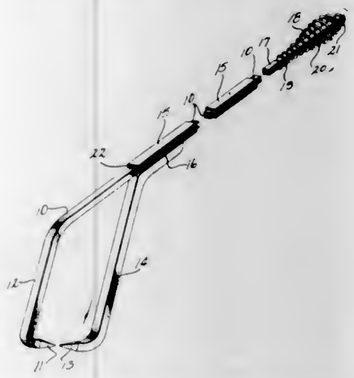
1. In an apparatus for the treatment of textile materials in the form of hanks or of fabrics by causing the liquid of treatment to circulate, a vat of treatment, means for causing the liquid of treatment to circulate in the vat, supports for the materials to be treated on which those materials are freely suspended in vertical layers and means whereby those supports are juxtaposed in series in the vat at different levels whereby the vertical layers of materials are juxtaposed by groups substantially in contact one with each other.

1,857,840. CAR OR TABLE TRANSFER MEANS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 18, 1931. Serial No. 545,354. 8 Claims. (Cl. 104—48.)



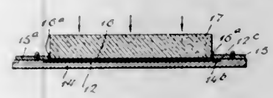
1. The combination with a plurality of substantially parallel tracks, and a series of work tables movable along the same, of a plurality of transfer cars provided at one end of said tracks and by means of which the said tables may be transferred from one track to a second track, said transfer cars being counter-balanced and each being movable between two of said tracks.

1,857,841. CLINKER TONGS. WILLIAM H. ENGEL, Milwaukee, Wis. Filed Nov. 17, 1930. Serial No. 496,078. 4 Claims. (Cl. 294—11.)



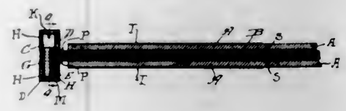
1. A tong having tong arm carrying members reciprocable upon one another, of wedge pointed teeth upon said tong arms and a stop for limiting the reciprocation of said member to prevent weighing action between said teeth.

1,857,842. METHOD OF PRODUCING PRINTING PLATES. FREDERICK C. GOLDENBAUM, Kearny, N. J., assignor to Herbert Photos, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 19, 1929. Serial No. 356,546. 6 Claims. (Cl. 101—401.1.)



1. The method of preparing a flexible non-metallic photographic printing plate which comprises producing a half-tone copper engraving patrix from a photograph, providing the copper engraving with a clear line printing caption outside the half-tone portion, preparing a lead mold matrix from the copper engraving carrying the half-tone photograph and clear line printing material, molding the flexible non-metallic printing plate from the lead mold by heat and pressure and froming integral turned flanges on the printing plate during the molding process.

1,857,843. LOOSE LEAF BINDER. LLOYD E. GOODYEAR, Chicago, Ill. Filed Nov. 29, 1929. Serial No. 410,302. 5 Claims. (Cl. 129—13.)

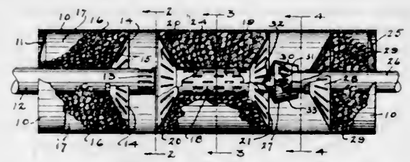


1. In a binder, the combination of a pair of binder bars of tubular formation one of which is provided in one wall with a plurality of keyhole slots and the other of which is provided with perforations, a pair of headed screws adapted to be inserted in the keyhole slots, the heads of said screws being accessible through openings in the other wall of said binder bar, and co-operating nuts for the threaded extremities of the said screws, said nuts being inserted in the interior of the other of said binder bars opposite said perforations.

1,857,844. PROCESS FOR PRODUCTION OF ALUMINUM OXIDE AND OTHER ALUMINUM COMBINATIONS. TURE ROBERT HAGLUND, Stockholm, Sweden. Filed Nov. 6, 1926, Serial No. 146,853, and in Sweden Nov. 18, 1925. 13 Claims. (Cl. 23—142.)

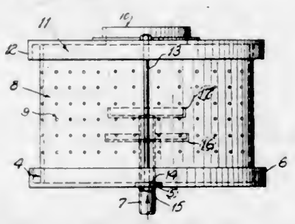
1. Process for refining raw material containing aluminum oxide consisting in forming a slag containing aluminum sulphide, decomposing aluminum sulphide by treating the slag with water and removing impurities of sulphides by treating the decomposed slag while in suspension in water with chlorine.

1,857,845. EXHAUST GAS SILENCER. FRANCIS F. HAMILTON, Indianapolis, Ind. Filed May 24, 1930. Serial No. 455,403. 11 Claims. (Cl. 137—160.)



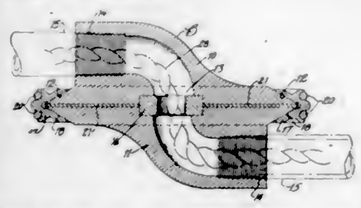
1. In an exhaust gas silencer, a shell, an intake pipe discharging into the shell, a tail pipe discharging from the shell, a surge chamber formed by filling a length of the shell with a material formed into a porous mass and a barrel through the material having openings through its side walls, said intake pipe extending within the shell toward and terminating near the forward end of said barrel, and said tail pipe projecting within the shell to have its forward end near the rear end of said barrel and surge chambers at each end of the shell formed by porous material around the intake and tail pipes.

1,857,846. OIL BURNER. SIDNEY J. HEIMAN, St. Louis, Mo. Filed Oct. 23, 1930. Serial No. 490,597. 5 Claims. (Cl. 158—92.)



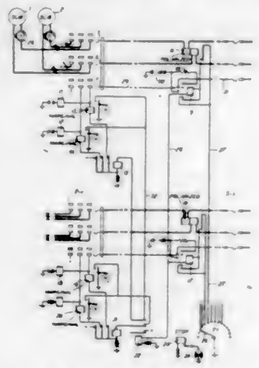
1. An oil burner comprising in combination, a cylindrical cup having a tapped hole in its center, and having a peripheral flange, a fuel supply pipe secured in the tapped hole of said cylindrical cup, a perforated sleeve positioned within the peripheral flange of said cylindrical cup, a cylindrical cap positioned on said perforated sleeve, rods passing through perforations in said cylindrical cap, and through holes formed in ears, which in turn are formed on said cylindrical cup, for securing said cup, perforated sleeve and cylindrical cap together, an imperforated disc secured to said fuel supply pipe, between said cylindrical cup and said cylindrical cap and in spaced relationship therewith.

1,857,847. JOINTED BRACKET. JULIUS A. HEINEMANN, Chicago, Ill. Filed Apr. 26, 1930. Serial No. 447,493. 4 Claims. (Cl. 285—9.)



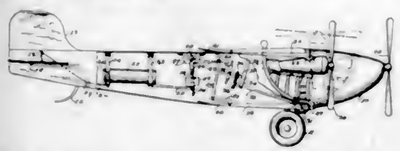
1. In a flexible joint, two flanged members lying face to face having meeting openings therethrough and having registering circular peripheries, a friction means overlapping said peripheries and urging said flanged members toward each other, and bearing means mounted in the openings within the members for retaining them against relative lateral movement.

1,857,848. COMMUNICATION SYSTEM. EDWARD E. HINRICHSEN, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,362. 6 Claims. (Cl. 179—9.)



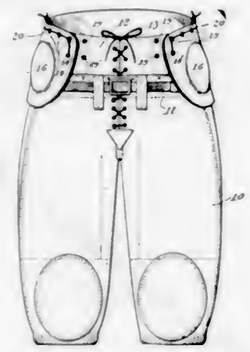
1. In combination, a line having a service meter and a relay connected in parallel circuits to one of the conductors of said line, means for causing a flow of current over said conductor to operate said meter and said relay, and means for opening the circuit of said meter to cause its release without causing the release of said relay.

1,857,849. HELICOPTER. JAKOB HOJNOWSKI, Nekoosa, Wis. Filed Mar. 17, 1931. Serial No. 523,359½. 2 Claims. (Cl. 244—29.)



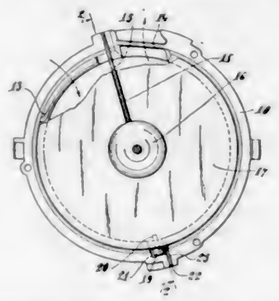
1. In an aircraft of the class described including its horizontal rudder, a means for balancing the aircraft against tilting to fore and aft, including a perforated and weighted arm, a pair of hangers pivotally suspended at their upper ends, connections between said hangers and said perforated arm, a fuel tank on said hangers and flexible connections between said hangers and said horizontal rudder.

1,857,850. FOOTBALL GUARD. RALPH R. JONES, Lake Forest, Ill. Filed Sept. 20, 1929. Serial No. 394,005. 6 Claims. (Cl. 2—23.)



1. A construction of the class described comprising a pant body having a waist guard member extending upwardly from the waist portion of said body and surrounding the upper waist portion of the wearer's body; and a pelvic guard member secured at its upper and upper forward edge to the outside of said waist guard member and depending therefrom, the rear side and lower edges of said pelvic guard member being free to swing relatively to the pant body.

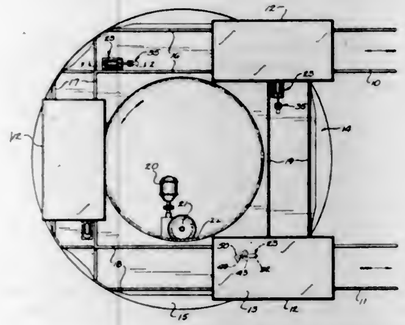
1,857,851. THRUST ROLLER PLATE CONSTRUCTION FOR FLUID METERS. WILLIAM L. MARDEN, Elmhurst, N. Y., assignor to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 2, 1931. Serial No. 506,160. 4 Claims. (Cl. 73—98.)



1. In combination with a meter housing formed with a plane slot communicating with the interior of the housing and having a movable metering element therein, a thrust bearing carried by the movable element, and a thrust plate carried by the housing and formed with a yielding offset portion adapted to engage frictionally the plane slot in the housing.

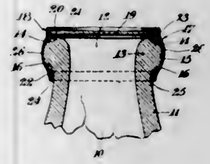
1,857,852. GLASS SURFACING APPARATUS. JOSEPH M. MCGOLDRICK, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 18, 1931. Serial No. 545,274. 12 Claims. (Cl. 104—35.)

1. In the continuous system for surfacing sheet glass, the combination with two substantially parallel tracks, glass supporting cars adapted to run along said tracks, and transfer means arranged at the corresponding ends of said tracks for effecting the transfer of the cars from one track to the other, of means carried by the transfer means for arresting the movement of the cars and bringing such cars to a stop when they reach a substantially predetermined position thereupon, and separate means also carried



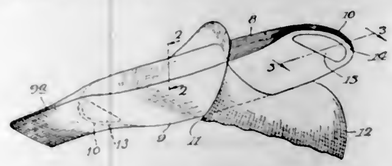
by the transfer means and cooperating with said first-mentioned means for clamping a portion of the car therebetween.

1,857,853. CLOSURE FOR CONTAINERS. MARGARET H. MCMANN, New York, N. Y. Filed Feb. 10, 1930. Serial No. 427,110. 5 Claims. (Cl. 215—41.)



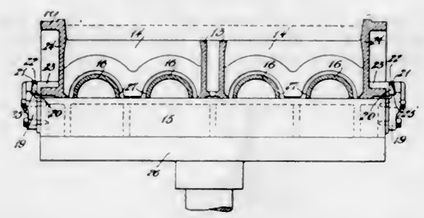
5. A closure for a bottle or the like comprising a molded elastic element and a relatively rigid transparent disc-like top, said element comprising a generally circular body portion and three inwardly disposed flanges spaced apart, the top and middle flanges embracing the disc-like top and having a substantially constant relationship to each other when the disc-like top is both in and out of place, the middle and bottom flanges having a variable relationship, the distance between them increasing when the closure is applied to the bottle.

1,857,854. SANITARY NAPKIN. EDWIN E. GLOMSTEAD, Menasha, Wis., assignor to International Cellucotton Products Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 16, 1932. Serial No. 593,360. 1 Claim. (Cl. 128—290.)



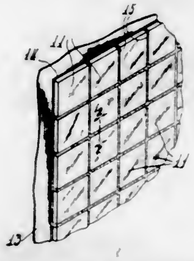
A sanitary napkin comprising a pad element and a wrapper of textile material, the pad element being formed of a plurality of relatively superposed layers of crepe paper, an area at an end portion of the pad being compacted sufficiently to permanently reduce the thickness of such end portion and to stiffen the same sufficiently to maintain an end portion in substantially flat condition when the napkin is applied.

1,857,855. APPARATUS FOR MOLDING CAST IRON PIPES AND THE LIKE. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Original application filed Mar. 19, 1928, Serial No. 262,683. Divided and this application filed Mar. 18, 1930. Serial No. 436,751. 14 Claims. (Cl. 22—96.)



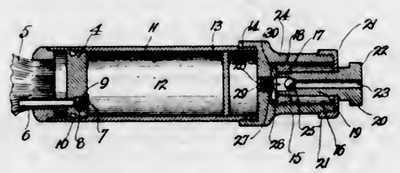
1. Apparatus for molding long castings comprising, in combination, a pattern plate having an elongated pattern part secured thereto; a flask section adapted to be placed on the pattern plate; means to prevent longitudinal displacement of the flask section on the pattern plate and lateral displacement at the ends thereof; and self-tightening wedges driven between and co-operating with the pattern plate and flask section intermediate the ends thereof and on opposite sides of the flask section to prevent relative lateral displacement.

1,857,856. METHOD OF MANUFACTURING ORNAMENTAL GLASS TILE. EMIL MEDINA, Oak Park, Ill. Filed Aug. 6, 1930. Serial No. 473,364. 9 Claims. (Cl. 41—23.)



1. The method of producing an ornamental imitation tile, including the application of paints and oils to one surface of a section of transparent material, applying a layer of pliable substance including white lead, linseed oil and plaster of Paris over said painted surface, and then applying a gripping agent over said pliable substance.

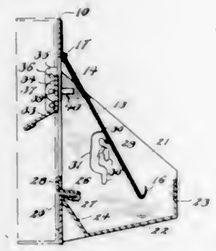
1,857,857. FOUNTAIN LATHER BRUSH. HARLAN E. MEDLEY, Kansas City, Mo. Filed Sept. 22, 1930. Serial No. 483,582. 3 Claims. (Cl. 15—137.)



1. A fountain lather brush comprising a brush head with bristles, a reservoir cylinder connected with said brush head, an air pumping device connected with the

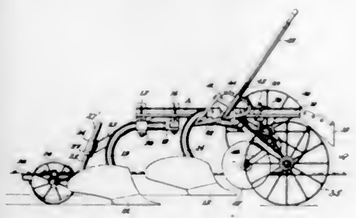
outer end of said cylinder and having valved communication therewith, and a follower disk mounted for free movement within said cylinder in response to the action of said pumping device, one of the connections between said cylinder and the other parts being detachable to permit filling of said cylinder.

1,857,858. POULTRY FEEDER. CARL G. MIKKELSEN, Hilliard, Fla. Filed Feb. 10, 1931. Serial No. 514,821. 5 Claims. (Cl. 119—52.)



5. In a poultry feeder, a supporting frame forming a feed opening, a trough deposited on one side of said frame, a downwardly swinging door carried by the frame and projecting into the trough, a flange disposed on the opposite side of said frame from said door and trough for preventing chicks depositing droppings in said trough through said feed opening, means for adjustably holding the door at various angular positions in said trough, and means for adjustably mounting said flange vertically on said frame, both of said means coacting in permitting the feeding of chicks of various ages.

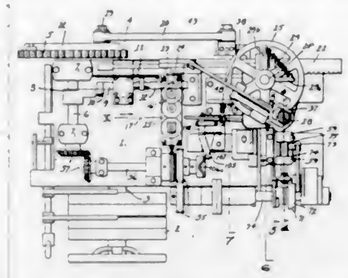
1,857,859. TANDEM SUBSOIL PLOW. JOHN NELESSEN and ANTON NELESSEN, Wrightstown, Wis. Filed Apr. 28, 1931. Serial No. 533,546. 3 Claims. (Cl. 97—80.)



1. A plow of the kind described, comprising a frame having longitudinal beams, a plow share depending from the frame forwardly thereof, a subsoil share rearwardly of the first named share, means for adjusting the subsoil share vertically and laterally of the frame, swinging axles supported by the frame in advance of the shares, means for adjusting the axles, front wheels on the axles, a trailer wheel rearwardly of the shares, and means for vertically swinging the trailer wheel and connected between the beams.

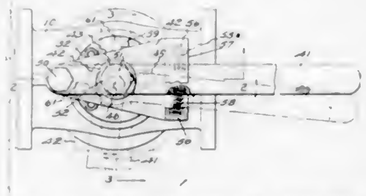
1,857,860. SPRING-WINDING MACHINE. MICHEL NIGRO, Worcester, Mass., assignor to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed May 29, 1930. Serial No. 457,353. 7 Claims. (Cl. 153—67.)

1. In a machine of the class described, the combination with a winding arbor capable of combined rotative and longitudinal movement and means for delivering wire to the periphery of said arbor, of means for moving said arbor in one direction while rotating the same to cause a single series of convolutions to be wound thereon, and means



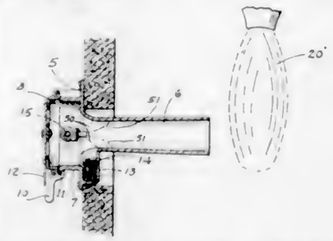
for reversing the longitudinal movement of said arbor to cause a second series of convolutions to be wound over the first series of convolutions.

1,857,861. VALVE. SVEN JOHAN NORDSTROM, Piedmont, Calif., assignor to Merco Nordstrom Valve Company, San Francisco, Calif., a Corporation of Delaware. Filed June 2, 1930. Serial No. 458,993. 7 Claims. (Cl. 251—97.)



1. In a valve, a casing having a passageway therethrough for flow of fluid and a bore formed transversely of the passageway, a rotatable valve plug disposed within said bore, a head rotatably disposed in said casing, the inner end of said head having a driving connection with one end of the plug, a rigid member engaging said one end of the plug and extending into said head, means including an operating member located externally of said casing for applying a turning torque to said head, and means for applying a thrust to said rigid member upon initially applying a turning torque to said operating member in the same direction as the rotation which turns the plug, whereby said rigid member is caused to apply a longitudinal thrust to said plug.

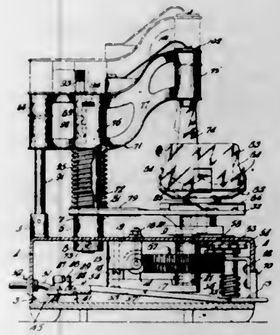
1,857,862. IGNITER. SCHUYLER C. PAGE, Rochester, N. Y. Filed Apr. 2, 1928. Serial No. 266,836. 6 Claims. (Cl. 158—10.)



2. In combination with a furnace wall having an opening therein, a unit provided with a Venturi tube extending through said opening and projecting into the furnace,

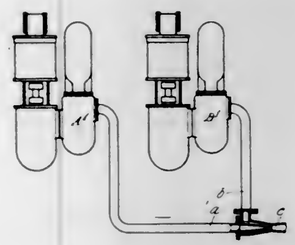
an atomized-liquid fuel burner for projecting a flame through said Venturi tube, said unit having an opening permitting access to said Venturi tube without disturbing same, and a door for closing said opening.

1,857,863. MIXING APPARATUS. WILLIAM A. PERVIER, Watertown, Mass., assignor to Charles E. Parkhurst, Somerville, Mass. Filed Jan. 3, 1931. Serial No. 506,391. 9 Claims. (Cl. 259—72.)



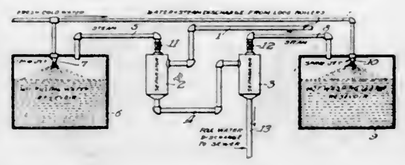
1. An apparatus of the character described comprising mortar and pestle members, means to retain said members in cooperative relation with each other, resilient means supporting one of said members for universal tipping movement relative to the other whereby the same are held in yielding engagement with each other, and mechanism for producing, between the mortar and pestle, a relative movement defining a paracentric path.

1,857,864. DUPLEX PUMP. HANS PETERS, Berlin, Germany, assignor to Knorr-Bremse Aktiengesellschaft, Lichtenberg, Berlin, Germany, a Corporation of Germany. Filed Apr. 23, 1930, Serial No. 446,681, and in Germany Apr. 26, 1929. 3 Claims. (Cl. 103—5.)



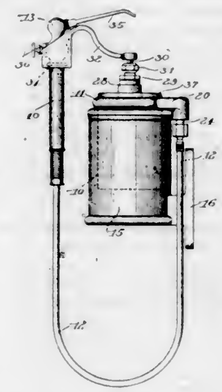
1. In a duplex pump for discharging liquids to a pressure pipe alternately from each of the pump outlets, a nozzle in said pressure pipe having tapered passages each leading from one of the said outlets and converging into a constricted neck in the pressure pipe, whereby the increase of pressure exerted on the liquid already in the nozzle at the beginning of each discharge stroke of the pump is converted into speed of flow.

1,857,865. METHOD OF AND APPARATUS FOR UTILIZING HEAT FROM BLOWN OFF BOILER PRODUCTS. BARTON P. PHELPS, Topeka, Kans. Filed Sept. 7, 1929. Serial No. 391,054. 12 Claims. (Cl. 122—396.)



1. The method of salvaging heat from products of blown off boilers, which consists in separating, under the inherent heat thereof, the volatiles from each of two separate bodies of said blown off products, thereby obtaining two separate volumes of volatiles containing different quantities of heat and directing said volatiles separately into heating relation to two different bodies of water.

1,857,866. DENTAL SPRAY. OSCAR H. PIEPER, Rochester, N. Y. Filed May 16, 1927. Serial No. 191,635. 8 Claims. (Cl. 128—257.)

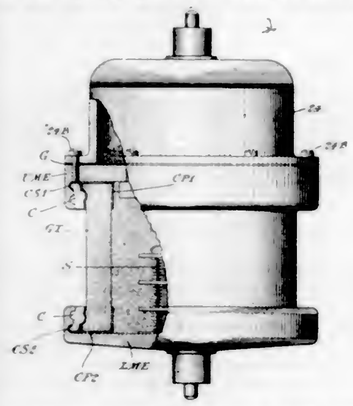


1. In a device of the class described, a container having a drip catching portion, a conduit for connecting said container with a source of water supply, a conduit forming an outlet for said container, a valve for regulating the flow of water through said outlet, a flexible tube connected at one end to said outlet conduit, a nozzle connected to the other end of said flexible tube, and a nozzle holder operatively connected with said outlet valve, said holder serving to support the nozzle in position to discharge into said drip catching portion.

1,857,867. ELECTRICAL CONDENSER. JOHN A. PROCTOR, Lexington, and WILLIAM M. BAILEY, Lynn, Mass., assignors, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Nov. 1, 1927. Serial No. 230,221. 11 Claims. (Cl. 175—41.)

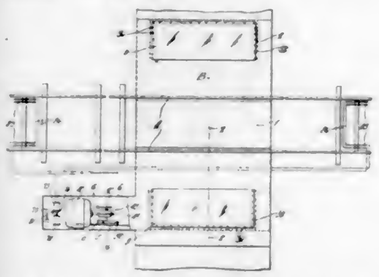
1. In a condenser, a casing comprising a dielectric tube, a metal end structure on each end of said tube, each structure comprising a plate portion disposed over the end face of said tube and a cylindrical portion surrounding the outside face of said tube, a coating of conducting mate-

rial intimately covering the outside face of said tube at each end, cementitious material between said cylindrical portions and coatings, said coatings being electrically con-



nected to their respective end structures, and a condenser assembly within said casing having its terminals connected to said end structures.

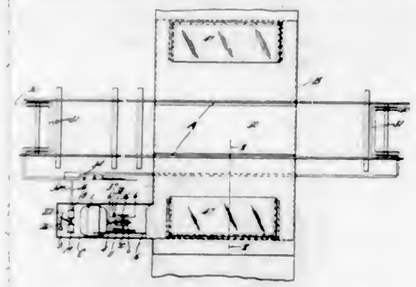
1,857,868. AUTOMATIC CROSSING GATE FOR RAILROADS. WILLIAM H. PROPER, Kansas City, Mo., assignor, by mesne assignments, to Dr. C. I. Trimble, Tulsa, Okla. Filed Oct. 14, 1929. Serial No. 399,473. 9 Claims. (Cl. 39—6.)



1. In a guard for a railroad crossing, the latter being properly recessed and prepared therefor, gates horizontally disposed at the crossing at each side of the railroad and adapted to normally lie flat with the intersecting surfaces of the crossing, and slidable bearings for the said gates at their inner margins upon which the gates may turn angularly upward at their outer margins above the surface of the crossing and may be slidably pressed inwardly in a direction coincident with its own extended plane.

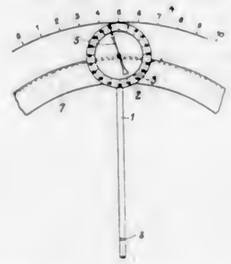
1,857,869. RAILROAD GATE OPERATING SYSTEM. WILLIAM H. PROPER, Kansas City, Mo., assignor, by mesne assignments, to Dr. C. I. Trimble, Tulsa, Okla. Filed May 16, 1930. Serial No. 452,860. 4 Claims. (Cl. 246—125.)

1. In an apparatus of the kind described for operating a pair of railroad crossing gates, an electric motor mounted adjacent the crossing as a source of power for operating the gates, a pair of solenoids mounted adjacent the motor, one thereof being a motor switch closing solenoid and the other being a motor switch opening solenoid, two pairs of electrical contacts arranged upon the railroad at each side of the crossing, a suitable source of electricity, leads connecting the motor with the source of electricity, a motor switch in the said leads, means for controlling the movements of the said motor switch through the alternate energizing of the said solenoids for closing and opening the circuit through the said motor, leads operatively connecting the said contacts and solenoids with the source of electricity, and a switch in the lead of the motor switch opening solenoid, the same standing nor-



mally open, so that upon the temporary bridging of the said contacts at either side of the crossing the motor switch closing solenoid will be energized, and separate means for temporarily closing the switch in the lead of the motor switch opening solenoid upon the removal of the bridging of the said contacts.

1,857,870. INDICATING DEVICE FOR AUTOMATIC BALANCES. GERHARD RAASCHE, Riga, Latvia, assignor to Firm Paul Raasche Söhne, Riga, Latvia, a Company of Latvia. Filed Aug. 9, 1930, Serial No. 474,252, and in Latvia Aug. 15, 1929. 2 Claims. (Cl. 116—114.)

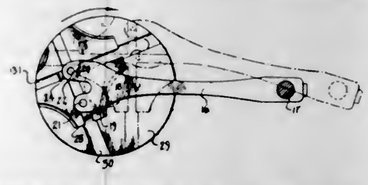


1. An indicating device for automatic balances, comprising a deflection indicator for the large units of weight carrying out a uniform arc-like motion below an equidistantly divided arcuate scale, a scale plate attached to the side deflection indicator and stating the interjacent small units of weight, a pointer adapted to rotate over the said scale plate, a gear connected with the said pointer, and a stationary toothed segment, the said gear rolling over the said segment during the motion of the said deflection indicator.

1,857,871. MECHANICAL MOVEMENT. RUSSELL J. REANEY, Ottawa, Ontario, Canada. Filed May 17, 1927. Serial No. 192,021. 3 Claims. (Cl. 74—14.)

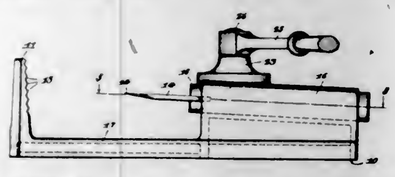
1. A mechanical movement including a rotatable member and a reciprocating member; one of said members having a pair of straight symmetrically arranged grooves at right angles to one another in one face and offset from the centre of said member with the grooves intersecting and crossing near their outer ends at a point eccentric to the centre of said member and near the outer edge of said member; and a corresponding number of blocks pivotally mounted on diverging extensions of said other member at points offset from one another and also offset from the longitudinal axis of the driving force and to opposite sides

thereof; said blocks being arranged for operation in said grooves in such a manner that not more than one of said blocks is at any time failing to exert either a pushing or pulling pressure on the walls of its respective groove during operation of the mechanical movement, thus reducing



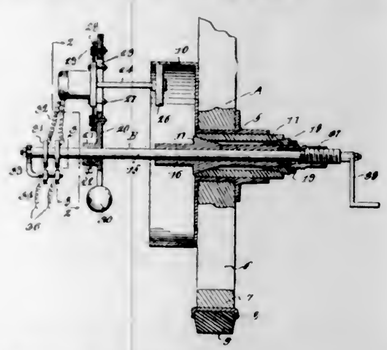
to the minimum liability of locking at dead center; said grooves and said blocks being constructed so as to prevent either of said blocks from pulling laterally out of their respective grooves as they reciprocate therein across the grooved member.

1,857,872. OYSTER OPENER. HENRY ROBINSON, New York, N. Y. Filed Dec. 17, 1930. Serial No. 503,068. 1 Claim. (Cl. 17—9.)



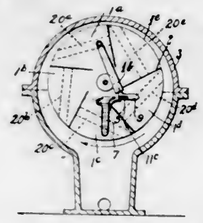
An opener for oysters and the like comprising a base having a table, a jaw rising therefrom, side walls in spaced relation to the jaw integral with the base and extending upwardly and inwardly therefrom, an inclined sleeve at the top of and integral with said walls, a plunger in said sleeve having rack teeth, a knife on the plunger in opposed relation to the jaw, a housing adjacent the end of the sleeve nearest the jaw, said housing being laterally offset with respect to the sleeve and integral therewith and with one of said side walls, a pinion disposed in said housing in mesh with said rack teeth, said housing having a socket in its lower wall, an operating shaft for the pinion journaled in said socket, and a cover for said housing in which the shaft is also journaled.

1,857,873. BRAKE DRUM TRUING DEVICE. WILLIAM H. ROSS, Allentown, Pa. Filed Feb. 12, 1930. Serial No. 427,930. 5 Claims. (Cl. 51—241.)



1. A brake drum truing device comprising a spindle, means for clamping the spindle to the hub bearing of a wheel, a shaft extending through the spindle, an arm connected with the shaft, a drive motor secured to the arm, a grinding wheel rotated by said motor, and means for adjusting the shaft in the spindle, longitudinally to draw said grinding wheel transversely over the face of the drum.

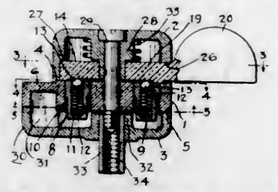
1,857,874. APPARATUS FOR TAKING SAMPLES OF LIQUIDS. RENÉ BOUSSELET, Paris, France, assignor to Compagnie pour la Fabrication des Compteurs et Materiel d'Usines à Gaz, Montrouge-Seine, France, a Joint Stock Company of France. Filed Mar. 29, 1929, Serial No. 351,089, and in France Apr. 27, 1928. 5 Claims. (Cl. 73—21.)



1. In a device of the character described, the combination with a rotating member for metering liquid flowing therethrough, of a container mounted on said member to rotate therewith, said container, the capacity of which is greater than the volume of the sample to be taken, receiving liquid from said member at a predetermined angular position thereof; and a receptacle of capacity equal to the volume of the sample, mounted in spaced relation to said container and rotating therewith, said container pouring liquid into said receptacle after a predetermined rotation of said member.

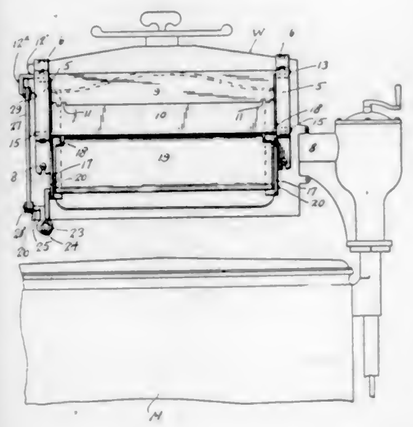
4. In a device for taking samples of liquid, the combination with a meter including an intermittently rotating member for metering liquid flowing therethrough, of a container mounted on said member to rotate therewith, said container, the capacity of which is greater than the volume of the sample to be taken, receiving liquid from said member at a predetermined angular position thereof; a receptacle of capacity equal to the volume of the sample, mounted in spaced relation to said container and rotating therewith, said container pouring liquid into said receptacle after a predetermined rotation of said member; means for reducing the meniscus of the liquid poured into said receptacle; a box for collecting the samples taken; a funnel mounted in spaced relation to said receptacle and rotating therewith, said receptacle discharging its liquid to said funnel after further rotation of said member, and means through the medium of which said funnel conveys said liquid to said sample box.

1,857,875. SWITCH FOR ELECTRICAL SYSTEMS. GUSTAVO A. SALINAS, New York, N. Y., assignor to Thomas R. Brooks, Scranton, Pa. Filed Nov. 17, 1928. Serial No. 320,054. 5 Claims. (Cl. 200—11.)



1. A controlling switch consisting of a body part and a cover forming a chamber between them, a controller in said chamber, a spring in said chamber mounted on and connected to the controller for holding the latter in a neutral position and permitting the said controller to shift in opposite directions.

1,857,876. SAFETY GUARD FOR CLOTHES WRINGERS. JOHN SCHAFFER, Greensburg, Pa. Filed Apr. 7, 1931. Serial No. 528,421. 7 Claims. (Cl. 68—132.)



1. A guard for a clothes wringer comprising a pair of guide bars adapted to be mounted on the wringer in relatively spaced relation, an apron mounted between said guide bars and including a pair of relatively foldable sections and a third section slidable vertically between said guide bars, and means for effecting a folding of said relatively foldable section and sliding movement of said slidable sections simultaneously.

1,857,877. FINISHING WELT. ROBERT C. SCHEMMEL, Union City, Ind. Filed Feb. 7, 1930. Serial No. 426,643. 6 Claims. (Cl. 155—184.)



1. A bead filler for finishing welts and the like comprising a plurality of individual strands of relatively hard material braided together and compacted to form a body having a relatively hard and smooth surface, the individual strands being capable of slight relative sliding movement whereby the braided assembly "opens up" along its inner edge when the filler is flexed around a curve.

1,857,878. RECOVERY OF A WATER SOLUBLE PREPARATION OF THE HORMONE OF THE ANTERIOR LOBE OF THE PITUITARY GLAND. WALTER SCHOELLER and MAX GEHRKE, Berlin, Germany, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Filed Sept. 25, 1929, Serial No. 395,197, and in Germany Oct. 10, 1928. 4 Claims. (Cl. 167—74.)

1. In a process for the recovery of a water soluble preparation of the hormone of the anterior lobe of the pituitary gland, the steps of removing soluble calcium salts by treating the urine of gravid mammals with water soluble salts, the anions of which form with calcium salts a water insoluble deposit, and removing the deposit thus formed.

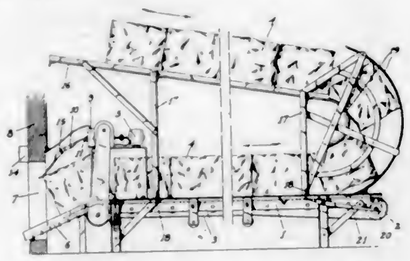
1,857,879. METAL POWDER. WALTER SCHUBARDT, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 29, 1929, Serial No. 374,964, and in Germany July 11, 1928. 3 Claims. (Cl. 75—14.)

1. A process of producing heavy metal powders, which comprises subjecting flocculent, cotton-like metal of low weight per unit of volume obtained by thermal decomposition of a metal carbonyl to mechanical comminution in a ball mill.

1,857,880. PRODUCTION OF HYDROAROMATIC-ALCOHOLS. ERWIN SCHWENK, Berlin-Neu-Westend, and HANS JORDAN, Berlin-Steglitz, Germany, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Filed Jan. 3, 1931, Serial No. 506,488, and in Germany Jan. 25, 1930. 7 Claims. (Cl. 260—153.)

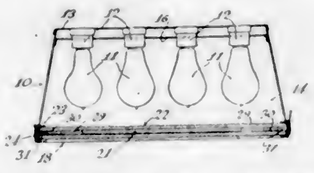
1. The process for the production of trans-hydroaromatic alcohols by treating alkali metal salts of alkyl substituted phenols with hydrogen in the presence of a hydrogenation catalyst at a temperature of 150° to 250° C.

1,857,881. AUTOMATIC VENDING MACHINE. LESLIE E. SCOTT and ERNEST A. SMITH, San Jose, Calif. Filed Aug. 29, 1930. Serial No. 478,658. 3 Claims. (Cl. 312—91.)



1. An automatic block vending machine including a horizontal conveyor to support a row of blocks, an electric motor to drive the conveyor, a circuit for the motor including a switch, a pivoted arm above the plane of the conveyor and adapted to be engaged and raised by a block leaving the conveyor, and means between the arm and switch for holding the latter closed except when the arm is thus raised; said arm comprising a pair of parts swivelly connected together for relative movement in a vertical plane whereby to permit of the engagement of said arm by blocks of different heights without altering the normal position of the upper portion of the arm.

1,857,882. CHANGEABLE SIGN FRONT. FREDERIC SHIPMAN, Los Angeles, Calif. Filed Aug. 1, 1930. Serial No. 472,276. 3 Claims. (Cl. 40—132.)



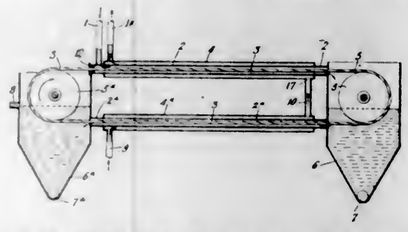
1. A sign front comprising a transparent indicia plate having transparent indicia formed in an opaque coating thereon, a colored transparent plate engaging said indicia plate on the opposite side to the opaque coating thereon and covering the area in which the indicia is formed, a plurality of opaque strips mounted on said indicia plate around said colored plate, a light diffusing plate mounted on said strips and colored transparent plates, and a frame holding said plates in assembled relation.

1,857,883. MEANS AND METHOD OF REMOVING ICE FROM ROOFS. HENNING R. SJOLANDER, Ishpeming, Mich. Filed May 28, 1930. Serial No. 456,777. 15 Claims. (Cl. 108—27.)



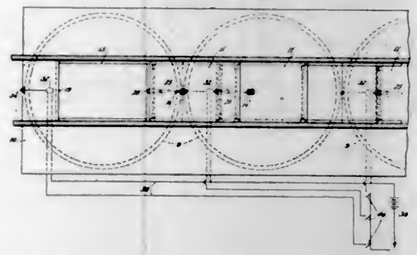
1. An article of manufacture adapted for use in providing drain channels through a body of ice on roofs or the like comprising an elongated member composed in part of a chemical capable when placed in solution with water of materially reducing the freezing point of the water said member having means at one end thereof for supporting the same on the roof.

1,857,884. PRECIPITATING APPARATUS AND PROCESS. JOHN SKOGMARK, New York, N. Y. Filed Nov. 3, 1928. Serial No. 317,096. 19 Claims. (Cl. 23—1.)



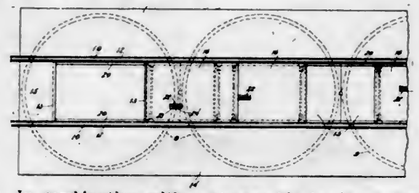
1. In an apparatus for the precipitation of solids from solution, a tubular member, means for causing a solution to flow through said member, means for effecting the precipitation of solids from the solution flowing within said tubular member, a part concentrically disposed within said tubular member, and adapted to move longitudinally in said tubular member to prevent the clogging of said member by precipitated solids, said moving means being adapted to enter the precipitating member above the level of the liquid therein.

1,857,885. COVER INSTALLATION FOR STORAGE BINS. DANIEL E. STAIR, Hudson, N. Y., and CHARLES L. MCDONALD, Washington, D. C., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Oct. 12, 1928. Serial No. 312,098. 23 Claims. (Cl. 214—16.)



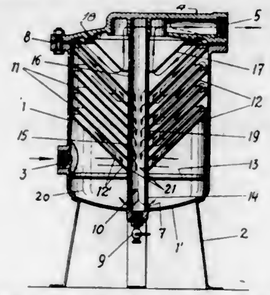
1. In combination with a series of storage bins, movable covers over the bins; a tramway over the bins; a tram car on the tramway; and movable means on the covers selectively engageable with the tram car whereby the tram car automatically opens any selected one of said covers.

1,857,886. COVER INSTALLATION FOR STORAGE BINS. DANIEL E. STAIR, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Oct. 12, 1928. Serial No. 312,099. 13 Claims. (Cl. 214—16.)



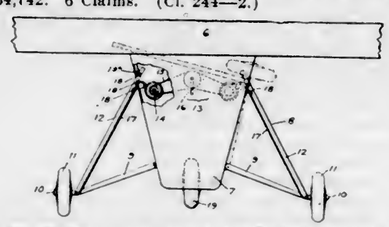
1. In combination with a storage bin having a hatchway and a movable cover thereon; a material conveyor mounted to travel over the hatchway; means on the cover engageable by the conveyor whereby the cover is opened by the conveyor; and means on the conveyor automatically operable by contact with the cover, where it is opened, to stop the conveyor when in position over the opening exposed by the moved cover.

1,857,887. WATER SEPARATOR. FRANTIŠEK STEIN, Prague, Czechoslovakia. Filed Feb. 14, 1931, Serial No. 515,786, and in Czechoslovakia Jan. 22, 1929. 1 Claim. (Cl. 183—103.)



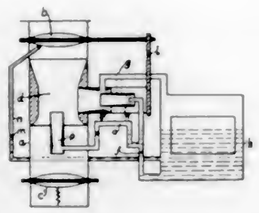
In a separator for separating water from compressed air, the combination with a casing and a lid therefor provided with air outlets, of a tube coaxially disposed in the center of said casing extending through the center of the same and having outlet openings for the escape of the water, and a plurality of inverted conical members mounted on said tube in spaced relation alternately bearing against the inner wall of said casing and separated therefrom so as to form a tortuous path for the air passing through said casing from the bottom to its top, the members bearing against the inner wall of said casing having apertures therein for the passage of the air, the topmost of said members being carried by said lid.

1,857,888. AIRPLANE LANDING DEVICE. WILLIAM B. STOUT, Detroit, Mich. Filed May 21, 1929. Serial No. 364,742. 6 Claims. (Cl. 244—2.)



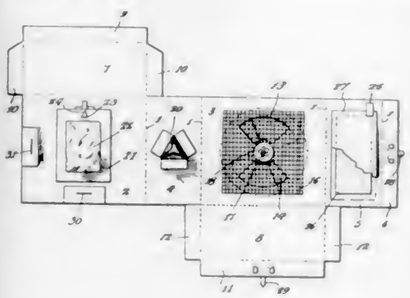
5. An airplane comprising a fuselage, a pair of transversely spaced landing wheels supported to said fuselage, and a spare wheel located between and slightly above said pair of wheels.

1,857,889. CARBURETOR. WILHELM STURM, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Sept. 23, 1929, Serial No. 394,662, and in Germany Oct. 26, 1928. 12 Claims. (Cl. 261—72.)



1. A carburetor comprising a mixing tube, a mixture throttle valve and an air throttle valve in said mixing tube, at least one choke tube directly extending into the atmosphere radially outwards from the mixing chamber of said mixing tube at a point between said throttle valves, said air throttle valve directly controlling the whole air flow to the mixing chamber except the air flow entering through said radially extending choke tube, a float chamber, a fuel pipe leading from the fuel space of the float chamber to a point of high vacuum in a radially extending choke tube and a connection from the air space of the float chamber to a point of lower vacuum in a radially extending choke tube.

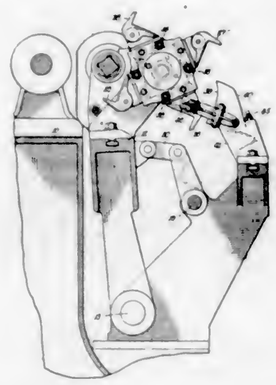
1,857,890. INSECT TRAP. DANIEL J. SULLIVAN, Graniteville, Mass. Filed Mar. 12, 1931. Serial No. 522,045. 2 Claims. (Cl. 43—107.)



1. An insect trap comprising a box-like structure having an ingress opening through one end, guards on the inner surface of the box around said opening to prevent egress, the box being provided with openings through one side, a screen covering said openings, a damper mounted adjacent said openings and adapted to cover the same, and a bait holder suspended within the box.

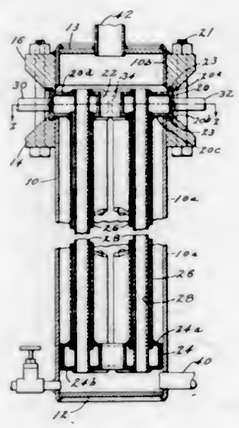
2. An insect trap blank having side and end panels, a top panel and a bottom panel, one side panel having slits therethrough near its lower edge and near its free end edge, the top panel being foldable and provided at its edges with flaps adapted to fold between and abut the inner surfaces of the sides and ends thereof, the bottom panel having similar flaps, a tongue on one of said flaps engageable through the slit near the lower edge of one side panel, a flap on an end panel, a tongue on said flap insertible through the slit at the end of the mentioned side panel, the opposite end panel being provided with an ingress opening, a screened opening in one side panel, and a bait holder suspended on the opposite side panel.

1,857,891. AUTOMATIC TURNING MACHINE. DAVID TURCOTT, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed Nov. 4, 1929. Serial No. 404,596. 13 Claims. (Cl. 142—17.)



1. In a lathe, a pair of chucks between which the work is held during the cutting operation, a pair of arms for supporting the work in centered relation to the chucks before the work is engaged by the chucks, means for automatically lowering the arms, from the work prior to the cutting operation, and means for automatically raising the arms beyond their centering positions after the cutting operation to remove the work from between the chucks.

1,857,892. HEAT EXCHANGER. JACOB LEE TURNER and JAMES G. RUSSELL, Milton, Mass. Filed Nov. 29, 1930. Serial No. 498,988. 4 Claims. (Cl. 257—228.)



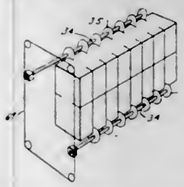
1. A heat exchanger having a two-part casing adapted to receive and discharge a fluid; an annular header secured between the parts of said casing, having connections for receiving and discharging another fluid; and a second annular header supported within said casing by a series of pairs of tubes; the tubes of each pair being arranged one inside the other, with the outer tube secured to the adjacent walls of the headers and forming a passageway between the headers, and with the inner tube attached to the remote walls of the headers and forming a passageway for the casing fluid.

1,857,893. MOVING TARGET FOR PRACTICE SHOOTING. ERNST UDET, Berlin, Germany. Filed Mar. 26, 1930, Serial No. 438,983, and in Germany Dec. 9, 1929. 6 Claims. (Cl. 124—16.)



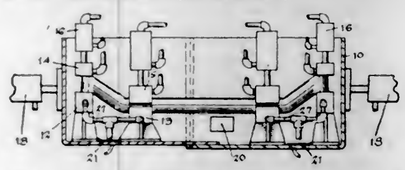
1. Means for target practice comprising a motor-driven aircraft, a cable carried by the said aircraft, the said cable being adapted to be payed out and hauled in, a transparent fabric attached to the cable along one edge and adapted to be readily folded behind the cable, said fabric bearing a silhouette of a flying machine and the like forming a moving target for practice shooting, and a loading provided on the free end of the cable and adapted to hold the cable in a substantially vertical position, the fabric being adapted to be unfolded by the air current when the cable is payed out from the aircraft and to be held taut in the air.

1,857,894. ICE SCORING MACHINE. MICHIEL J. ULINE, Toledo, Ohio, assignor, by mesne assignments, to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed July 2, 1923, Serial No. 649,138. Renewed Apr. 3, 1928. 36 Claims. (Cl. 125—14.)



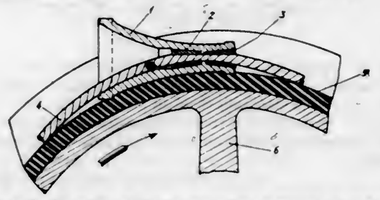
25. In an ice scoring machine, the combination of means for supporting an ice cake, scoring means on opposite sides of said ice cake, and means for moving said scoring means transversely across said ice cake in opposite directions upon the opposite sides thereof.

1,857,895. METHOD OF HEAT TREATING AXLES. BERTIS H. URSCHEL, Bowling Green, Ohio, assignor to Urschel Engineering Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 26, 1930. Serial No. 477,813. 10 Claims. (Cl. 148—21.)



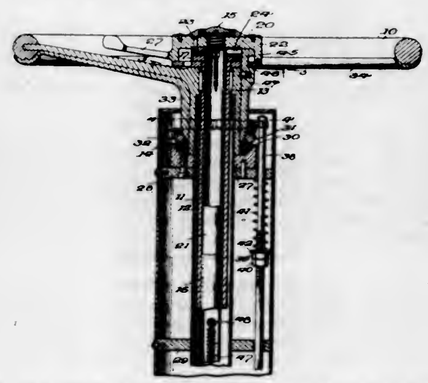
1. The process of forming a mechanical element which consists in enclosing metal auxiliary parts within the body of the metal of the mechanical element, subjecting the element and the parts to a relatively high temperature and directing a cooling fluid against the auxiliary parts, and subjecting the body of the mechanical element to a cooling fluid.

1,857,896. CHAIN PUMP. CARLOS VELLINO, Barcelona, Spain. Filed Apr. 25, 1929, Serial No. 358,113, and in Spain Apr. 25, 1928. 4 Claims. (Cl. 103—73.)



1. In a chain pump, a cable carrying a series of pistons, a driving pulley for said cable, said pistons having a hollow trumpet shape whose outline has substantially the same curvature as the peripheral curvature of said driving pulley, so that the pistons when passing over the pulley may adapt themselves substantially to the rim of the pulley thus avoiding any undue stress on the cable.

1,857,897. AUTOMATIC SAFETY CONTROL FOR MOTOR VEHICLES. JAMES A. VINCENT, Providence, R. I. Filed Nov. 4, 1930. Serial No. 493,385. 6 Claims. (Cl. 74—39.)

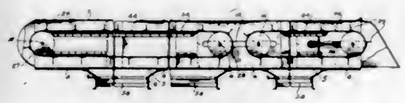


1. In a steering wheel assembly, a steering post, a steering wheel secured thereto, a fixed tube concentrically arranged within said steering post, a movable tube concentrically arranged within said first named tube, an operating handle carried by said movable tube above said steering wheel, said movable tube being adapted for operative connection with a vehicle control, a secondary steering wheel slidable on said first named steering wheel, means on said secondary steering wheel for locking both of said steering wheels in a fixed position, means on said secondary steering wheel for manually moving the same to unlocked position, a spring urged actuator rod associated with said steering post and adapted for connection with vehicle control means, and means connecting said actuator rod and secondary wheel for moving said secondary wheel under movement of said actuator rod.

1,857,898. DISTRIBUTOR CONVEYER. JEFFREY JOHN WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La. Filed Apr. 1, 1931. Serial No. 527,010. 3 Claims. (Cl. 19—74.)

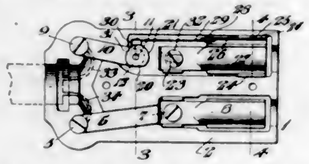
1. An endless belt conveyer distributor comprising a sheet metal casing, a pulley journaled in one end of said

casing, means for rotating said pulley, the other end of said casing having the side walls thereof provided with slots, a pulley mounted to slide in said slots, means for moving the last named pulley in said slots, the opposite walls of said casing intermediate the ends thereof being



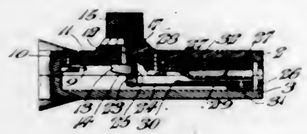
provided with slots, a pair of pulleys slidably and rotatably mounted in the last named slot, means for connecting said pulleys to maintain them in parallelism and at a fixed distance apart during their sliding movement, and means for rotatably connecting one of said pair of pulleys to the other.

1,857,899. THERMOSTATIC SWITCH PLUG. EMIL WALDER, Philadelphia, Pa., assignor to The Beardsley & Wolcott Manufacturing Company, a Corporation of Connecticut. Filed Mar. 3, 1927. Serial No. 172,284. 7 Claims. (Cl. 200—139.)



1. In a thermostatic switch for an electrical plug, a transversely split pilot terminal, a conducting member extending substantially throughout the length of said terminal and having a portion disposed beneath the bottom portion of said terminal and an upstanding portion on its front end, holding means holding the rear end of said terminal in contact with the rear end of said conducting member, a thermostatic connection connected to said upstanding portion on said conducting member and carrying a contact on its rear end, and a manually adjustable rotatable contact disc co-operating with said last mentioned contact.

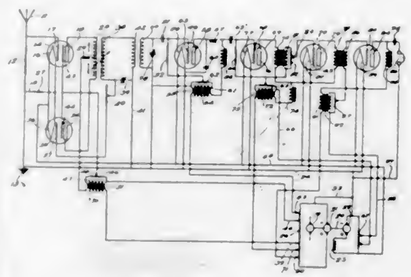
1,857,900. THERMOSTATIC ELECTRICAL PLUG. EMIL WALDER, Philadelphia, Pa., assignor to The Beardsley & Wolcott Manufacturing Company, a Corporation of Connecticut. Filed Mar. 7, 1927. Serial No. 173,437. Renewed Dec. 5, 1929. 16 Claims. (Cl. 200—138.)



1. In a thermostatic switch plug, a terminal socket therein, a thermostatic member responsive to temperature changes of said socket, a spring movable independently of said member and electrically connected to said socket and said spring being flexed by the movement of said thermostatic member, a contact, and a cooperating contact carried by said spring and engageable with said contact.

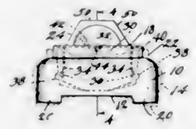
1,857,901. CONSTANT CURRENT AMPLIFIER SYSTEM. PHILIP JOHN WALSH, San Francisco, Calif. Filed July 30, 1928. Serial No. 296,140. 14 Claims. (Cl. 179—171.)

1. In an amplifier system, a pair of devices the impedances of which can be varied in accordance with signaling impulses, means for varying the impedance of one of said devices in accordance with the signaling impulses to be amplified, a source of constant current for supplying current to both devices in parallel, and a link circuit connecting the two devices, for impressing on the other of



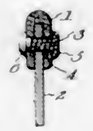
said devices, impulses present in the first device, in such a direction as to vary the impedance of the said other device in a sense opposite to the variation of the impedance of the said first device.

1,857,902. GAME APPARATUS. JOHN WEBER, Cleveland, Ohio. Filed Feb. 14, 1931. Serial No. 515,821. 15 Claims. (Cl. 273—143.)



1. In a game apparatus, a resilient distortable casing, a bearing frame having a rotatable indicia carrying element therein, said frame being received within said casing and held therein solely by the resiliency of the distortable casing.

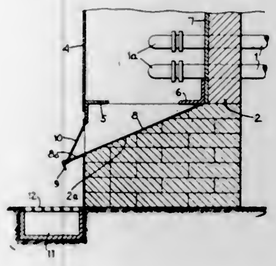
1,857,903. ELECTROLYTIC APPARATUS. ALBERT G. WENSLEY and WALTER S. JACKSON, Anaconda, Mont., assignors to Anaconda Copper Mining Company, Anaconda, Mont. Filed Mar. 12, 1931. Serial No. 522,152. 1 Claim. (Cl. 204—6.)



In electrolytic apparatus, the combination with a plate electrode, of a strip formed of rubber engaging an edge of said electrode and a fastening member formed of rubber extending through said electrode and said strip to secure said strip to said electrode.

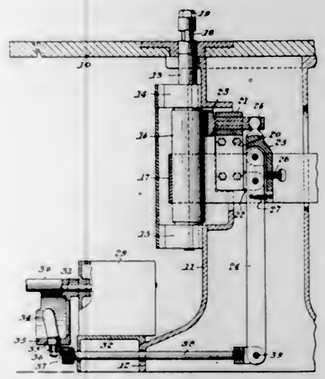
1,857,904. MEANS FOR SCAVENGING TUBULAR HEATERS OF DEPOSITED MATERIAL. GEORGE D. WHITE, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1928. Serial No. 322,566. 2 Claims. (Cl. 196—122.)

1. A tubular heating furnace adapted for heating oil, comprising a plurality of heating tubes having removable connecting means and arranged in a bank, a masonry furnace setting about the bank, having its base projected beyond and sloping away from the lower edge of the tube bank, and an impervious metal covering extending over



the surface of and projecting beyond said sloping portion adapted to form a drain table for the reception of liquid and solid materials being scavenged from the tubes.

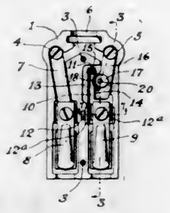
1,857,905. CONTROL MECHANISM. CLINTON G. WILDERSON, Leetonia, Ohio; The Guardian Trust Company, Cleveland, Ohio, and Myrna Wilderson executors of said Clinton G. Wilderson, deceased. Filed June 18, 1930. Serial No. 461,983. 8 Claims. (Cl. 192—2.)



1. The combination with a device having a spindle, and a reversible driving motor therefor, of a reversing switch for the motor and means operated by movement of said switch to the off position for initially applying a brake to the spindle and then releasing it.

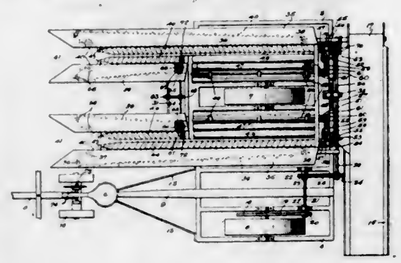
1,857,906. THERMOSTATIC SWITCH. FRANK E. WOLCOTT, West Hartford, and LOUIS V. LUCIA, Hartford, Conn., assignors, by mesne assignments, to The Beardsley & Wolcott Mfg. Co., a Corporation of Connecticut. Filed Mar. 28, 1928. Serial No. 265,389. 9 Claims. (Cl. 200—139.)

1. In a switch, a thermostatically controlled contact carrying member, a movable contact carrying member, adjusting means for the latter movable relative thereto to adjust the contact carrying portion thereof, a casing enclosing said mechanism, cooperating means in part on the casing and in part movable with said adjusting means



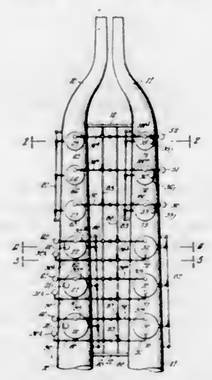
for holding said adjusting means in different positions including a plurality of interengaging surfaces, and a spring holding said surfaces in interengagement.

1,857,907. CORN PICKING AND HUSKING MACHINE. HENRY F. YORK, Haxtum, Colo. Filed July 8, 1930. Serial No. 466,538. 8 Claims. (Cl. 56—110.)



1. In a machine of the character described, the combination with a pair of screw corn stalk lifters and conveyors, of a pair of snapping rolls disposed beneath the said screws, a pair of husking rolls disposed at one side and in a lower plane than the said snapping rolls, and husk loosening means disposed above the husking rolls and at the side of the same opposite that on which the snapping rolls are located.

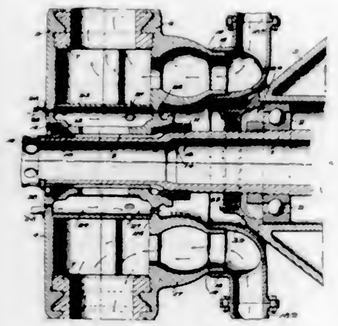
1,857,908. WIND INSTRUMENT. ROBERT J. HATHAWAY, Jr., Chicago, Ill. Filed Nov. 28, 1930. Serial No. 498,829. 11 Claims. (Cl. 84—381.)



10. A wind instrument comprising two tubes, each of said tubes being provided with vents, closure members for said vents, means adjacent one of said tubes for controlling

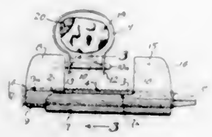
closure members of the other tube, means adjacent one of said tubes solely for controlling the closure members of that tube, and a mouth-piece common to said tubes, said mouth-piece having two passages communicating with said tubes.

1,857,909. PROPELLER. CLINTON H. HAVILL, Orange, N. J., assignor to The American Propeller Company, Baltimore, Md., a Corporation of Maryland. Filed Nov. 25, 1929. Serial No. 409,700. 19 Claims. (Cl. 170—172.)



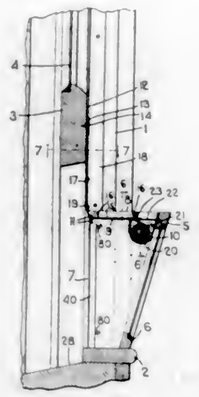
1. In a propeller having a hollow hub adapted to communicate with the exhaust manifold of an engine, a plurality of hollow, apertured blades carried by said hub, a shaft for driving said hub, a baffle plate carried by said hub and surrounding said shaft, said baffle plate being spaced from said shaft to form a chamber, and means for establishing communication between the outside air and the chamber and between the latter and the interior of the hub whereby relatively cool air will be drawn through said chamber to insulate said shaft from the heat of said exhaust gases during rotation of said shaft, hub and blades.

1,857,910. DENTAL MATRIX RETAINER. ROBERT R. IMPEY, San Francisco, and RAY WHIPPLE, Mill Valley, Calif. Filed Oct. 29, 1929. Serial No. 403,288. 3 Claims. (Cl. 32—17.)



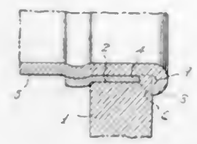
1. A matrix band retainer comprising an aligned axially rotatable shaft, said shaft threaded right hand at one portion thereof and threaded left hand at another portion thereof, a block threadedly mounted on each of said contrary threaded portions of said shaft and provided with opposed faces, said blocks adapted to reciprocate simultaneously in oppositely defined paths upon axial rotation of the shaft, one of said blocks having associated therewith an elongated channel portion adapted to guide said blocks in alignment with relation to each other, pins mounted on one of said blocks adapted to slidably receive and support the ends of a looped matrix band, openings in the other block to releasably engage said pins, the path of movement of said blocks on said shaft being of greater length than the length of the pins.

1,857,911. WINDOW VENTILATOR. EARLE F. JOHNSON, New York, N. Y. Filed Apr. 6, 1931. Serial No. 528,123. 7 Claims. (Cl. 98—88.)



1. The combination with a window frame having a window opening and a window sash therefor, of an open-topped ventilator member secured to the window frame and an air-filtering curtain closing the open top of the ventilator member and secured to the window sash, whereby the entire space between the front of the ventilator member and the window sash will be closed by said curtain regardless of the extent to which the window sash is raised.

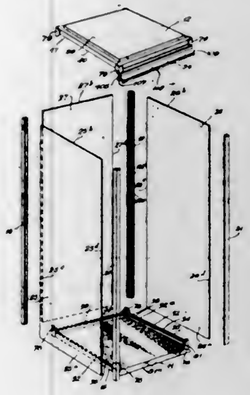
1,857,912. ART OF ANCHORAGE AND PRODUCT THEREOF. NOAH M. JONES, Baltimore, Md. Filed Oct. 28, 1929. Serial No. 403,025. 15 Claims. (Cl. 29—157.5.)



5. The art of anchoring a tubular body to a sheet comprising forming a sheet with an opening proportioned to receive the tubular body, forming a rabbet about the opening in the material of the sheet at the outer face thereof, locating a differential expansion compensating ferrule in the opening inward of the rabbet, inserting a tubular body through the ferrule to a position with the end portion of the tubular body extending beyond the sheet, placing welding material in the rabbet and welding the tubular body to the sheet across the rabbet, and effecting a second weld between the tubular body and the sheet outward of the first weld.

1,857,913. BOOTH CONSTRUCTION. JULIUS JUDELSON, New York, N. Y. Filed Feb. 21, 1929. Serial No. 341,708. 28 Claims. (Cl. 20—3.5.)

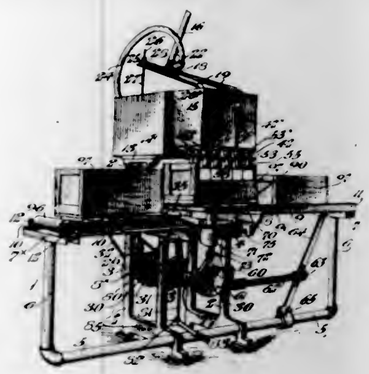
28. In booth construction, a floor portion for said booth comprising an elongated member of angular cross-section having a bottom wall and an upstanding wall, a second elongated member fixed to said first named bottom wall and having an upstanding wall parallel to said first named upstanding wall and forming a groove therewith, a bottom board having an edge portion supported by said bottom wall, an upstanding panel having a bottom edge portion frictionally received within said groove, and an upstanding post having a groove frictionally receiving a side edge portion on said panel and abutting the top edges of said upstanding walls.



1,857,914. MIXED FERTILIZER. ERNST KEYSSNER and HELMUT MENGDEHL, Ludwigshafen-on-the-Rhine, Germany. Filed July 28, 1930, Serial No. 471,411, and in Germany Aug. 8, 1929. 5 Claims. (Cl. 71—9.)

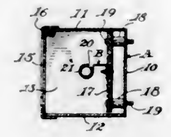
1. Mixed fertilizers comprising urea and a vegetable material initially containing urease which has been exposed to a temperature between 80° C. and 150° C.

1,857,915. LIQUID FILLING MACHINE. ABRAHAM S. KIRSHNER, Philadelphia, Pa. Filed Dec. 11, 1929. Serial No. 413,155. 17 Claims. (Cl. 226—106.)



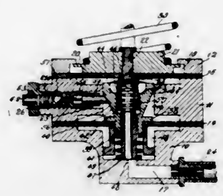
1. In a device of the character stated, a vertically movable table, a ram depending from said table, a cam below said ram for actuating the latter, a laterally movable pusher, actuating means intermediate said cam and said pusher, a shaft for said cam, a manually operated crank handle, connections from said handle to said cam shaft, a supply tank, a measuring tank in communication therewith, a displacing float in said supply tank, and connections from said cam shaft for depressing said float.

1,857,916. ELECTRIC SIGN. LOUIS A. KOCH, Jr., Louisville, Ky. Filed Sept. 2, 1931. Serial No. 560,800. 3 Claims. (Cl. 40—130.)



1. An electric sign unit comprising a plate of insulating material adapted to be detachably secured in a casing in covering relation to the rear wall thereof, a "neon" tube mounted on the plate, a flexible tubular insulating member engaged on each end of the tube, a binding post carried by and projecting into the bore of each member, and an electrical connection leading from each binding post to the adjacent terminal of the tube.

1,857,917. AIR PRESSURE REGULATOR. GEORGE KOEHLER, Jr., and WALTER P. HILL, Cincinnati, Ohio, assignors to Kellogg Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed June 22, 1929. Serial No. 372,991. 14 Claims. (Cl. 50—23.)

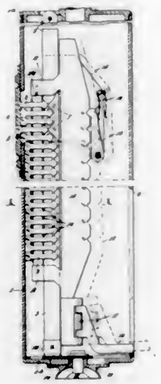


1. The combination with a source of continuous air pressure, of a casing having a chamber therein, a piston dividing said chamber into inlet and outlet chambers and having limited reciprocation therein, a valve opened by the piston and controlling air inlet flow into said inlet chamber, a valve in the piston controlling communication between inlet and outlet chambers and a pressure determining adjustment means initiating movement of the piston in a valve opening direction.

1,857,918. DIE PRINTING MACHINE. ULRICH KOHLER, Bern, Switzerland, assignor to Hasler A.-G. vormals Telegraphenwerkstatte von G. Hasler, Bern, Switzerland, a Corporation of Switzerland. Filed June 13, 1929, Serial No. 370,707, and in Switzerland June 27, 1928. 5 Claims. (Cl. 101—91.)

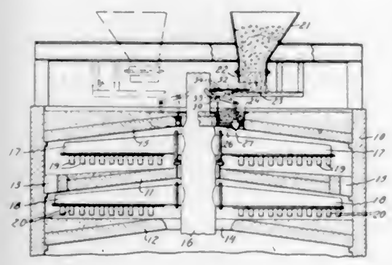
1. A die printing machine comprising a hollow cylinder, rows of dies arranged in the said cylinder in the longitudinal direction thereof and capable of being displaced in the said longitudinal direction and of being set transversely thereto and of which a group of at least two dies in each row can be printed, the dies in each group being spaced apart and capable of being set independently of one another, means for longitudinally guiding the rows of dies, at least two cams fixed relatively to the said lon-

gitudinal guiding means for simultaneously setting the dies to be printed from, heads at the ends of the dies, flat guide bars standing on edge on either side of each row



of dies for guiding the dies independently of one another and lateral lugs on at least one of the said flat guide bars and facing the other bar, as and for the purpose set forth.

1,857,919. FEEDING MECHANISM FOR ROASTING FURNACES. RICHARD COOPER KUNKEL, Pulaski, Va., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Mar. 8, 1929. Serial No. 345,325. 12 Claims. (Cl. 83—44.)



1. In a roasting furnace having a feed opening, a closure for the feed opening, means including a movable sweep for periodically depositing in the vicinity of the opening so as to be held back by the closure a quantity of granular material to be treated in the furnace, positively operated means actuated synchronously with the periodical deposition of the granular material for opening the closure to allow the material to pass through the feed opening into the furnace, and means for closing the closure substantially simultaneously with the completion of the flow of the material through the opening.

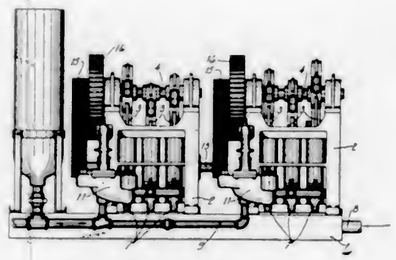
1,857,920. LIGHT SENSITIVE PAPERS AND OTHER BASES AND LIGHT SENSITIVE LAYERS THEREFOR. ROBERT LANTZ, Saint-Denis, France, assignor to Societe des Anciens Etablissements Salvatori, Leperche; Frangialli & Cie., successeurs, Paris, France, a Corporation of France. Filed Feb. 1, 1930, Serial No. 425,343, and in France Feb. 9, 1929. 10 Claims. (Cl. 95—7.)

1. Process for making light sensitive layers or a paper or other suitable base provided with such layer, which comprises mixing with a suitable light sensitive diazo-compound, a naphthalene sultone adapted to form a coupling component for said diazo-compound when subjected to the action of an alkali.

1,857,921. CATALYTIC PRODUCTION OF ESTERS. WILBUR A. LAZIER, Wilmington, Del., assignor to E. I. du Pont de Nemours Company, Wilmington, Del., a Corporation of Delaware. Filed June 14, 1928. Serial No. 285,501. 22 Claims. (Cl. 260—106.)

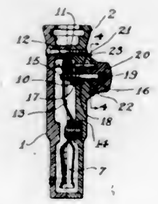
1. In the carrying on of a catalytic dehydrogenation process for converting alcohols to esters: passing the alcohol into catalytic relation to a catalyst consisting substantially of a difficultly reducible dehydrogenating oxide of a metal at a temperature at which esters will form in substantial amounts, said temperature being in excess of 350° C.

1,857,922. PUMPING APPARATUS. FRANK H. LEWIS, San Jose, Calif., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Mar. 25, 1930. Serial No. 438,810. 5 Claims. (Cl. 103—10.)



1. In a pumping system, two pumps connected in parallel and having independent drive shafts, a motor provided with an extended shaft and removable drive means connecting each pump shaft with an end of said motor shaft.

1,857,923. THERMOSTATIC SWITCH DEVICE. LOUIS V. LUCIA, Hartford, Conn., assignor, by mesne assignments to The Beardsley & Wolcott Mfg. Co., a Corporation of Connecticut. Filed Mar. 28, 1928. Serial No. 265,459. 6 Claims. (Cl. 200—139.)



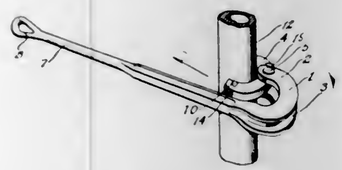
1. In a switch, a casing, a thermostatically controlled contact carrying member therein, a cooperating contact member therein, screw means for adjusting the latter including an operating member outside the casing, means for limiting the rotation of said operating member, and spring means normally holding said operating member in engagement with said casing.

1,857,924. MASTER CONTROL CABINET FOR JAIL DOOR OPERATING SYSTEMS. JOHN K. MARDICK and LLOYD J. WHITE, San Antonio, Tex., assignors to Southern Prison Company, San Antonio, Tex., a Corporation of Texas. Filed July 6, 1931. Serial No. 549,043. 7 Claims. (Cl. 189—5.)



1. A master control cabinet for jail door operating systems having vertical guides at the opposite sides; a pair of slidable door panels mounted in said guides; and counterbalancing connections between said panels which insure movement of the panels simultaneously in opposite directions when opened and closed; said counterbalancing connections being such that the opening into the cabinet is entirely unobstructed when both panels are wide open.

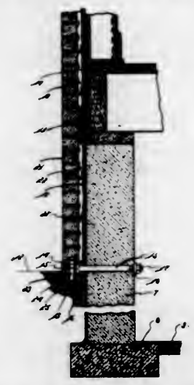
1,857,925. TONGS. WILLIAM F. MARTIN, Madison, Kans. Filed May 16, 1929. Serial No. 363,601. 1 Claim. (Cl. 81—98.)



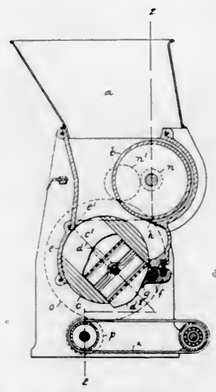
A tongs construction comprising a shank, the end of which is diverted laterally and bent back to constitute a truly hook-shaped head merging directly with the shank to engage over a pipe or other cylindrical object, a handle carried by the head, an arcuate jaw pivoted to the end of the hook-shaped head, the pivot being offset with respect to the axis of the object to be engaged and engaging means carried by the jaw.

1,857,926. VENEERING CONSTRUCTION. EDWARD J. MASON and HENRY W. MASON, Detroit, Mich. Filed Oct. 22, 1930. Serial No. 490,399. 3 Claims. (Cl. 72—0.5.)

1. A veneering construction adapted for use on structures having a foundation wall projecting upwardly from the grade line, comprising: a horizontally disposed supporting plate secured to and projecting outwardly from the outer surface of said foundation wall; a layer of veneering supported on and projecting upwardly from said supporting plate; and a concrete mass for encasing said plate and its securing means.



1,857,927. VARIABLE DIVIDING MACHINE FOR DOUGH. JACK VIKRUSS MASON, Cheadle Hulme, Cheshire, England. Filed Apr. 12, 1930, Serial No. 443,806, and in Great Britain Sept. 3, 1929. 8 Claims. (Cl. 107—15.)

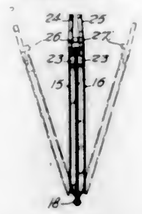


1. An apparatus of the class described comprising a receptacle having an inlet and an outlet, a material receiving member revoluble in said receptacle and provided with a through opening which forms a pocket for receiving the material, a double-faced piston slidably mounted in said opening, one of the faces of the said piston acting as a bottom for the pocket and the other arranged to be moved outwardly beyond the end of said member when the material is delivered into the pocket, and means engaging the exposed face of the piston for moving the latter inwardly, whereby all excess material is removed from the pocket as the latter passes said inlet.

1,857,928. POCKETBOOK TOP. CHARLES J. MCCABE, Brooklyn, and IRVING SCHOENHOLZ, Cedarhurst, N. Y., assignors to McCabe & Schoenholz, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 25, 1929. Serial No. 402,402. 3 Claims. (Cl. 150—29.)

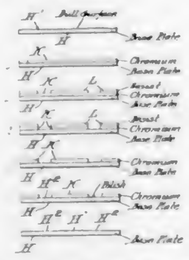
1. A handbag frame comprising U-shaped members hinged to each other at the free ends of the legs of the U,

each member being in the form of a stamping channeled inwardly to provide opposed spaced inner and outer walls extending upwardly and outwardly and an upwardly and outwardly extending channel therebetween, whereby the upper and outer ends of the handbag fabric can be passed over the outer surfaces of the outer walls of the channels and over the top edges of such walls and secured in



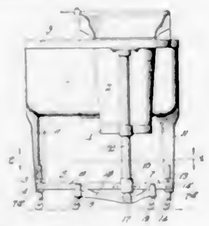
position in such channel, locking members for holding said frame members against separation and operating members therefor, all operatively associated with the said outer walls, and presenting the channels substantially unobstructed whereby said outer walls add to the resiliency of the lock operating members and the lock operating members when in locked association tend to prevent the spreading of the opposed walls of each channel.

1,857,929. DECORATING AND ETCHING METALS. JAMES C. MCFARLAND, Fort Thomas, Ky., assignor to The Wadsworth Watch Case Co., Dayton, Ky., a Corporation of Kentucky. Filed June 22, 1828. Serial No. 287,535. 6 Claims. (Cl. 41—43.)



4. A method of treating metal surface, which comprises: giving a desired finish to said surface; producing a chromium plating design on a portion of the surface thus finished; and producing a contrasting finish on the exposed area of the original surface while the chromium serves as a resist.

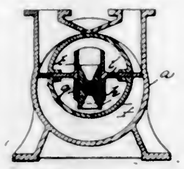
1,857,930. SUPPORT FOR WASHING MACHINES. ALPHEUS W. ALTORFER, Peoria, Ill., assignor to Altorfer Bros. Company, East Peoria, Ill., a Corporation of Illinois. Filed Jan. 25, 1928. Serial No. 249,382. 5 Claims. (Cl. 280—43.)



1. In a three point frame suspension, caster wheels vertically adjustable at two of the points of suspension,

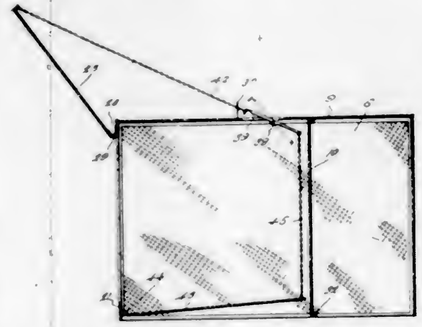
an equalizing member pivotally connected at the other point of suspension, means to vertically adjust said member, and caster wheels at the opposite ends of said member.

1,857,931. CAPSULAR PUMP. JOHANN H. AXIEN, Hamburg, Germany, assignor to Hinrich Springer, Altona, Germany. Filed June 11, 1929, Serial No. 369,952, and in Germany June 12, 1928. 1 Claim. (Cl. 103—144.)



In a capsular pump, a cylindrical casing having vertically disposed inlet and outlet ports and formed with a chamber, a centrally disposed stub shaft rotatably mounted in one side of the casing, an elongated cylindrical guide block mounted on the stub shaft, an elongated cylindrical guide mounted to reciprocate on the guide block and provided with a slot to straddle the stub shaft, a blade equal in length to the diameter of the chamber and extending from the cylindrical guide, a cylindrical piston mounted eccentrically in the chamber and on the blade, and a driven shaft extending centrally from the piston and eccentrically with reference to the chamber and mounted in the opposite side of the casing.

1,857,932. TRAP. LUIGI BASSO, Harrison, N. Y. Filed Nov. 18, 1931. Serial No. 575,884. 4 Claims. (Cl. 43—61.)

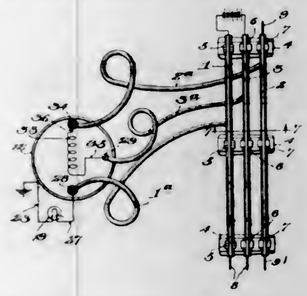


1. A trap of the character described comprising a box-like structure provided with a transversely extending partition therein defining a live bait compartment, partitions extending away from the first-mentioned partition for defining imprisoning chambers, a closure for each of the imprisoning chambers, a swingable tread plate in each of the chambers, a rocker arm, a chain extension on each of the closures, said rocker being provided with a hook for engagement with the corresponding chain extension, and a chain connection between the free ends of the tread plates and the said rocker.

1,857,933. SEMAPHORE AND TRACK FOR TOY RAILWAYS. HARRY S. BECKER, River Forest, Ill., assignor to American Flyer Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 26, 1926. Serial No. 111,845. 3 Claims. (Cl. 246—81.)

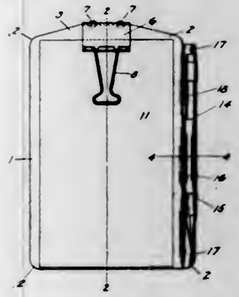
1. A toy metallic signal tower for toy railway systems and operating means therefor including a track section comprising metal ties, two wheel bearing rails secured to

said ties, and one rail being insulated from the ties and the other in metallic contact therewith, a third rail also insulated from the ties, an electrically operated semaphore signal member mounted on the tower and connected



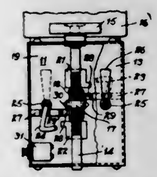
electrically with said insulated wheel bearing rail and insulated third rail, a lamp, and electrical connections respectively between said uninsulated wheel bearing rail and said tower, said tower being electrically connected with said third rail.

1,857,934. SCORE CARD HOLDER. MERRILL M. BLACKBURN, Davenport, Iowa. Filed May 16, 1928. Serial No. 278,071. 3 Claims. (Cl. 40—11.)



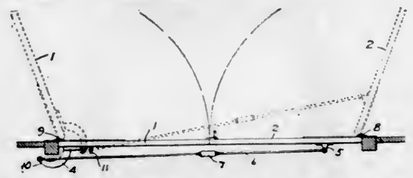
1. In a holder of the character indicated, a plate having an edge thereof bent over at an angle to the body thereof, to serve as means whereby a clamp may be secured to the plate, a somewhat U-shaped clamp having the part thereof remote from its open side secured to the bent over part and having one of its jaws on each side of the plate, arranged to receive between themselves and opposite sides of the plate articles to be held by the clamp.

1,857,935. AUTOMOBILE SIGNAL SWITCH. HARRY BLUM and FRANCIS J. FARLEY, McKees Rocks, Pa. Filed June 23, 1930. Serial No. 463,198. 3 Claims. (Cl. 200—59.)



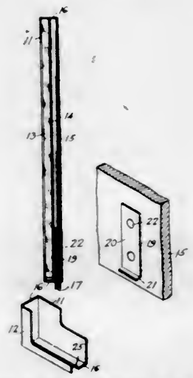
1. Circuit-controlling apparatus for signal lamps and the like comprising a screw-threaded shaft, means for rotating said shaft, a movable contact member having screw-threaded engagement with the shaft, a pair of stationary contact members positioned to be engaged by the movable contact member during traveling movement thereof along the shaft, a manually-operable switch movable into engagement with each of said stationary contact members, and a bar connected at one end to each of the said switches, the other end of each bar extending into the path of movement of the said movable contact member whereby the bars may be moved to actuate the said switches.

1,857,936. DOOR WORKER. WILLIAM BRUGMANN, Philadelphia, Pa. Filed July 8, 1929. Serial No. 376,728. 1 Claim. (Cl. 268—62.)



A combination including a door frame, a pair of co-operating doors hingedly mounted in said frame, brackets mounted on the upper corners of said doors adjacent the hinges thereof, a link connecting said brackets and adjustable in length, a keeper on said door frame for receiving said link therein when the doors are open to retain them in open position, one of said brackets being curved rearwardly toward the hinged edge of the door on which it is mounted to permit limited opening of the other door while said first mentioned door remains closed and said bracket being resilient to permit movement of said link relative to said keeper, and a chain for moving said bracket to withdraw said link from said keeper.

1,857,937. BACK FOR PICTURE FRAMES. HOWARD L. BUDD, Brooklyn, N. Y., assignor to Friedman Silver Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 28, 1929. Serial No. 374,316. 10 Claims. (Cl. 40—152.)

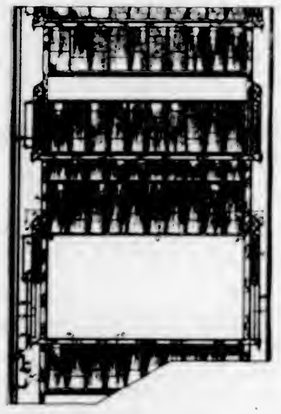


10. In a back for a picture frame, a non-metallic sheet adapted to be fitted into a frame, a metallic reinforcing strip for the lower edge of the back, and a metallic projection extending forwardly of the front face of the back near the lower edge thereof.

1,857,938. DOOR OPERATOR. SAMUEL E. BUETTELL, Chicago, Ill., assignor to Cross Parking Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Mar. 21, 1929. Serial No. 348,899. 4 Claims. (Cl. 187—52.)

1. In combination, a building having a plurality of floors provided with an elevator shaft extending vertically

of said building and an elevator adapted to travel in the hatch, of a door in said hatch at each floor, pneumatic means individual to each door, a valve for operating said



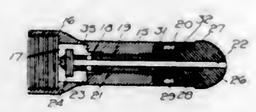
means, an air supply line for supplying air to each pneumatic means, a valve in said supply line, and means for operating the last mentioned valve when the elevator is in a predetermined position in said shaft.

1,857,939. ARTIFICIAL FISH BAIT. FREDERICK C. CAMERON, Lumberton, N. C. Filed Dec. 30, 1929. Serial No. 417,375. 4 Claims. (Cl. 43—47.)



1. An artificial bait comprising a body of buoyant material having longitudinally arcuately curved parallel sides and a weight mounted on the bottom edge of said body for movement longitudinally thereof to tilt said body with one end or the other upward according to the position of the weight.

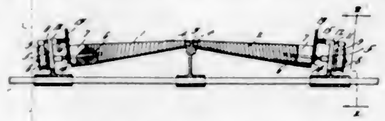
1,857,940. VALVE COCK. MICHEL CHOUINARD, Montreal, Quebec, and JOSEPH PHILIPPE PARADIS, Longueuil, Quebec, Canada. Filed Dec. 5, 1930. Serial No. 500,256. 5 Claims. (Cl. 251—8.)



2. In a hose nozzle, a barrel forming a handle and having a bore intermediately situated and connecting enlarged end bores, a hollow stem carrying a valve at one end and an integral pierced head at the other end capping the end of said barrel and reciprocating in seating and unseating said valve and a packing gland and packing compressible in said barrel during the movements of said stem and head.

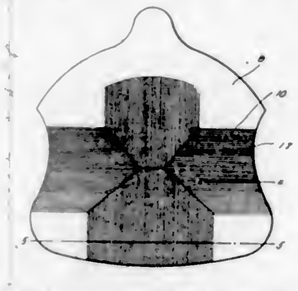
1,857,941. CLOTH GUIDE. CLIFTON CORLEY and ELMER A. FLEMING, Greenville, S. C. Filed Dec. 17, 1930. Serial No. 503,029. 6 Claims. (Cl. 26—66.)

1. A fabric guide including inclined rolls cooperating to exert opposed drawing tendencies on the fabric relative to the longitudinal central line of the fabric, a deflecting roll cooperating with each of said drawing rolls, said deflecting roll being normally free and operated by the fabric when deflected from the normal line of travel, gearing operated in the movement of a particular deflecting roll, an element actuated by said gearing, and means operated by the ele-



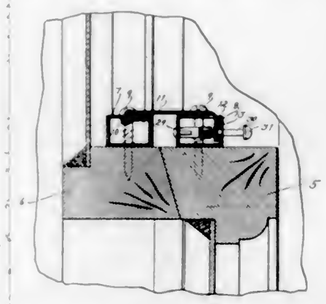
ment to interrupt the fabric drawing tendency of the rolls with which the affected deflecting roll is associated without changing the normal inclination of the roll with respect to the line of travel of the fabric to thereby release the fabric to the drawing tendency of the opposing rolls.

1,857,942. CHAIR SEAT. RALPH CURCIO, Gardner, Mass. Filed Oct. 16, 1930. Serial No. 489,192. 4 Claims. (Cl. 155—178.)



1. A chair bottom comprising a board having recesses in its front and side marginal edges and further having recesses in the front and side marginal portions of its lower side communicating with the edge recesses, said board still further having a recess in its upper side having extensions communicating with the edge recesses, and a flexible sheet disposed in the third named recess, said sheet including integral extensions disposed around the front and side edges of the board and having their free end portions secured in the second named recesses.

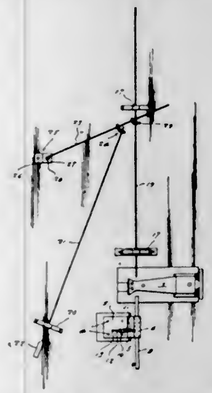
1,857,943. WINDOW FASTENER. JOSEPH THOS. DAWICKI, Jr., Jersey City, N. J. Filed June 5, 1931. Serial No. 542,404. 1 Claim. (Cl. 292—207.)



A lock for windows comprising in combination with two window sashes, a housing member carried by the meeting rail of each sash, a pivoted member carried by one of said housing members, a right angular extension on said pivoted member, said right angular extension having a plurality of openings therein, a slot in one of the walls of the other housing, said slot adapted to receive the right angular extension of the pivoted member, and means for engagement with the openings in the right angular extension of the pivoted member to lock it in the housing, said last mentioned means comprising a sliding bar, and a plurality of projections on said sliding bar for entrance into the openings of the pivoted member and openings in the side wall of the housing in which it is mounted, and a spring for moving said bar into locking position.

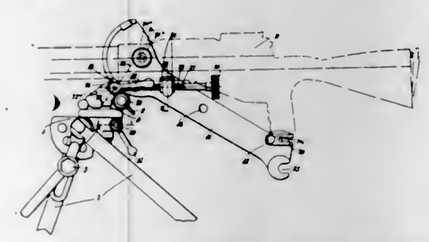
CARNEGIE LIBRARY OF ATLANTA

1,857,944. SEWING MACHINE ATTACHMENT. EDWARD DEMBER and FRANK WEINDER, Chicago, Ill. Filed Jan. 24, 1931. Serial No. 511,066. 3 Claims. (Cl. 112—63.)



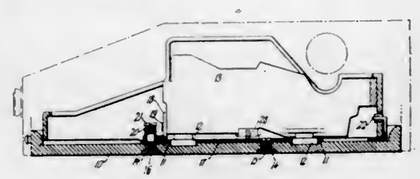
1. A belt inverting attachment for sewing machines comprising a horizontally disposed plate having a vertically offset portion, a sleeve on the offset portion, an elongated tube mounted for sliding adjustment in the sleeve and adapted for insertion in the belt in a manner to support said belt during the sewing of the longitudinal marginal portion thereof, a slidable rod engageable with the belt for inserting and driving said belt through the tube as the sewing operation progresses, means for manually actuating the slidable rod.

1,857,945. GUN CARRIAGE. MAURICE DE BOIGNE, Paris, France, assignor to Societe Anonyme des Anciens Etablissements Hotchkiss & Compagnie, St. Denis, France, a Joint-Stock Company of France. Filed Aug. 7, 1931, Serial No. 555,847, and in France Aug. 12, 1930. 6 Claims. (Cl. 89—40.)



1. A mounting for machine guns or light guns adapted both for ground and anti-aircraft firing and comprising in combination a tripod including a head, a support mounted to swivel on said head, a cradle pivotally mounted on said support, and housings provided at the upper end of said support in alignment with the axis about which the cradle pivots on said support, said housings being adapted to accommodate the trunnions of the gun.

1,857,946. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1928. Serial No. 260,844. 3 Claims. (Cl. 248—16.5.)



1. Means for fastening a typewriter frame having feet to a baseboard, comprising, a hanger plate having its parts in a single plane, said hanger plate having a perforation near each end through which the feet may be inserted and withdrawn perpendicular to said plate, means for fastening the plate to said baseboard, said means passing through the base board and typewriter frame for preventing the frame from moving perpendicularly from the base board.

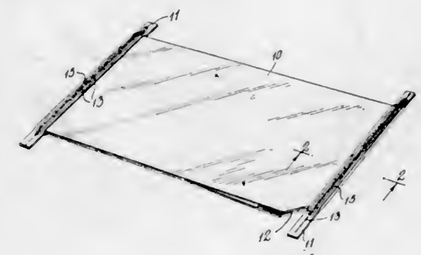
1,857,947. REFINING AND PURIFICATION OF METALS. GEORGE F. DORAN, Worcester, Mass. Filed Mar. 14, 1931. Serial No. 522,789. 6 Claims. (Cl. 75—17.)

1. A process of refining molten metal which comprises adding thereto potassium permanganate and carbon in amount sufficient to produce a deoxidizing reaction.

1,857,948. PROCESS OF PREPARING CELLULOSE XANTHATE. RENE DOSNE, Hawkesbury, Ontario, Canada, assignor to Canadian International Paper Company, Montreal, Canada. Filed Aug. 26, 1929, Serial No. 388,640, and in Canada Apr. 12, 1929. 8 Claims. (Cl. 260—10.)

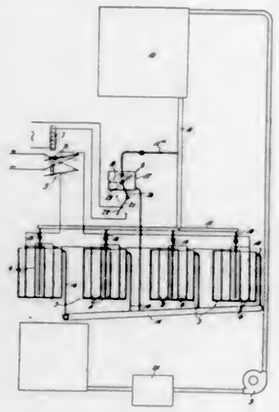
1. A process of regulating the aging capacity of alkali cellulose which comprises adding an alkali metal sulphite to the cellulose.

1,857,949. SIFTPROOF BAG AND METHOD OF MAKING THE SAME. ELI FREYDBERG, New York, N. Y., assignor to Freydberg Bros. Inc., New York, N. Y., a Corporation of New York. Filed Jan. 16, 1931. Serial No. 509,242. 4 Claims. (Cl. 229—62.)



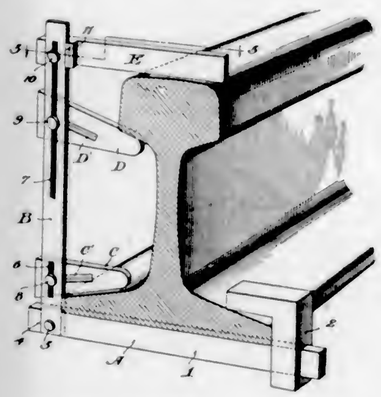
1. A bag having one end closed by a line of stitches, and means for closing the openings formed by the stitches to render the bag sift-proof, which consists in coating the stitches with a water repellent composition including a solvent adapted to be applied at normal temperature in fluent form, said composition when dry being freely flexible with and adherent to the surfaces to which applied during filling of the bag and handling of the filled bag.

1,857,950. ELECTROLYTIC PRODUCTION OF WHITE LEAD. ROBERT JOHN FROST, Clayton, Victoria, Australia. Filed June 18, 1929, Serial No. 371,940, and in Australia July 6, 1928. 1 Claim. (Cl. 204—61.)



The process of electrolytically manufacturing white lead, comprising immersing lead electrodes in an aqueous solution of sodium bicarbonate of 15 grams to four gallons, passing a direct current of a capacity of 0.002 ampere at 6 volts to one square inch of electrode surface through the electrolyte, and reversing the direction of current flow at about every fifteen minutes, the current being reversal automatically by the electrolyte during its circulation.

1,857,951. FIELD TEMPLATE FOR RAILS AND JOINTS. WILLIAM EYRE GADD, Glen Olden, Pa. Filed Mar. 30, 1929. Serial No. 351,224. 3 Claims. (Cl. 33—174.)



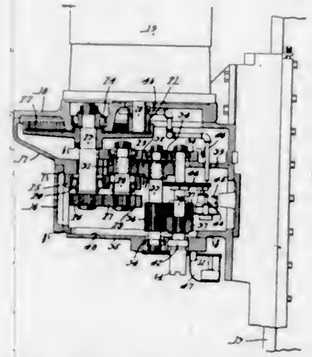
3. A rail gauge comprising a member adapted to be disposed against the bottom face of a rail, an upright carried by said member, means for securing said member against the bottom face of a rail with the upright disposed in a predetermined definite position relative to the side of the rail, rail gauge elements, and means mounting said rail gauge elements on said upright for longitudinal adjustments therealong and for pivotal adjustments relative thereto.

1,857,952. SHIMMED RAIL JOINT. WILLIAM EYRE GADD, Glen Olden, Pa., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed Nov. 11, 1931. Serial No. 574,402. 10 Claims. (Cl. 238—244.)



1. A rail joint including the rails, the splice bar, shim elements interposed between the ends of the splice bar and the rail flanges, a shim element interposed between the medial portion of the head of the bar and the under sides of the rail heads, and means permanently connecting said shim elements together in a unitary structure.

1,857,953. MULTIPLE SPINDLE BORING MACHINE. ARTHUR C. GOUGH, Fitchburg, Mass., assignor to Shaw Crane-Putnam Machine Company, Inc., Fitchburg, Mass., a Corporation of Delaware. Filed June 27, 1928. Serial No. 288,760. 1 Claim. (Cl. 77—22.)



In a multiple boring machine, the combination with a permanent casing having a bearing, a main shaft having one end mounted in said bearing, a series of shafts, gearing mounted on said shafts, a series of bearing spindles adapted to be driven by said gearing, and a set of removable plates carrying the bearings for said shafts and spindles and adapted to be detached and replaced for the purpose of spacing the bearing spindles differently, of an oil pump connected with one of said spindles to be operated thereby, an oil tank for supplying the oil thereto, a baffle plate surrounding each of said spindles and preventing passage of the main part of the lubricant down along the spindle, a surface in one of said removable plates on which the oil from the baffle plates is collected, and means for draining the oil from said surface into the tank.

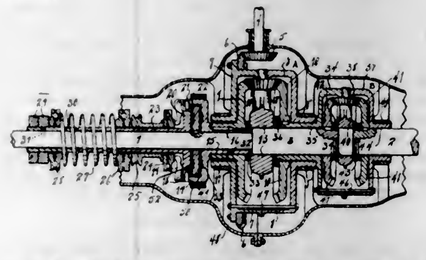
1,857,954. PUMPING SYSTEM. NORRIS E. GUNDERSON, St. Louis, Mo. Filed Jan. 21, 1929. Serial No. 333,800. 5 Claims. (Cl. 103—113.)

1. A pumping system comprising, in combination, a motor driven centrifugal pump, a priming-water supply for said pump, means connecting said water supply with said pump embodying a normally closed valve having an electrically operated actuator, an output control device embodying a pair of contacts which are automatically closed when it is desired to start the pump, an electrically operated starter for the pump motor having an actuating coil, and a control mechanism for priming the pump automatically comprising a float chamber connected to the suction side of the pump, a float device in said chamber, a two position switch and an air release valve actuated by said float device, a first circuit through said



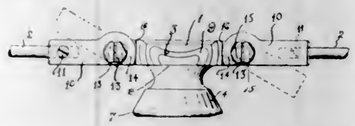
coil and said contacts closed when said switch is in one position and a second circuit through the actuator of said valve and said contacts closed when the switch is in its other position, said switch closing said first circuit when the air release valve is closed and closing said second circuit when said air release valve is open.

1,857,955. DIFFERENTIAL FOR MOTOR VEHICLES. SAMUEL A. B. HAMILTON, Jr., Fort Worth, Tex. Filed Aug. 20, 1931. Serial No. 558,203. 6 Claims. (Cl. 74—99.)



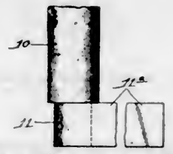
1. In a differential for motor vehicles comprising differential gears and axles driven thereby; auxiliary differential gears for driving said first named gears, locking means for one of said auxiliary gears for increasing the speed of said axles, means for driving said auxiliary differential gears, and a clutch keyed to one of said axles and cooperating with said gears to permit said axles to revolve faster than said driving means.

1,857,956. TERMINAL CONNECTER AND SUPPORT FOR LINE WIRES. ANDREW HIGH, Detroit, Mich. Filed Nov. 11, 1929. Serial No. 406,248. 2 Claims. (Cl. 173—313.)



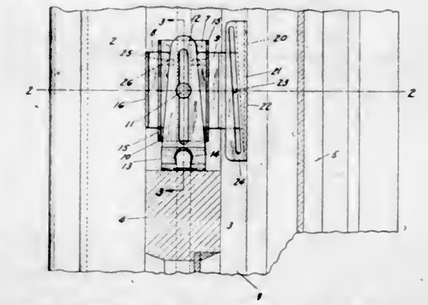
1. A terminal connecter and support for line wires including an insulator, a head rigidly secured to said insulator and formed with an extension and a shoulder adjacent said extension, a member forming a pivot extending from said extension, and a terminal hook member for the end of a line wire formed to detachably engage and turn upon said pivot member, and formed to engage said shoulder and bind thereagainst to prevent disengagement of said terminal member from said pivot member when said terminal member is turned to an angular position relative to said head.

1,857,957. CANDLE. MARCUS A. HIRSCHL, Chicago, Ill. Filed Mar. 11, 1931. Serial No. 521,863. 2 Claims. (Cl. 67—22.)



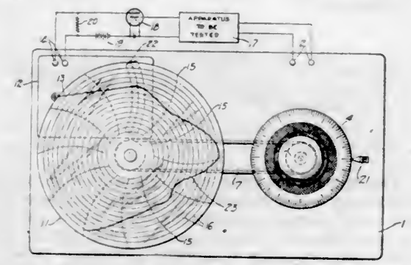
1. A candle having a roll of a strip of flexible sheet material imbedded in its lower end, portions of said strip adapted to be unwound and torn off to reduce the diameter of the lower end of said candle.

1,857,958. SAFETY LATCH FOR WINDOWS. ADOLPH E. HUSS, Davenport, Iowa. Filed Sept. 16, 1929. Serial No. 392,759. 10 Claims. (Cl. 292—288.)



1. In a safety catch for windows, a base plate having guiding projections extending from a face thereof adjacent two opposite edges thereof, holding means engaging said guiding projections and slidable with relation thereto and to the base plate, and cam means slidable with relation to the base plate and the holding means and capable when moved in one direction of forcing the holding means laterally to engage fixed elements of the window structure.

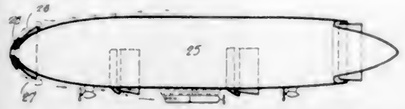
1,857,959. CURVE PLOTTING SYSTEM. SAMUEL ISLER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 23, 1930. Serial No. 483,852. 5 Claims. (Cl. 175—183.)



1. A curve plotting system comprising, a source of current, mechanically movable means adapted to control said

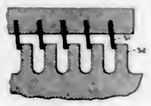
current, a plotting member having two-dimensional coordinate lines thereon, said plotting member being adapted to be moved in the direction of one of said coordinates by said mechanically movable means; and an electrical indicating device under control of said current and having a movable needle positioned in a manner adapted to move with reference to said plotting member in the direction of the other of said coordinates.

1,857,960. RESISTANCE ELIMINATOR FOR AIRCRAFT AND WATER CRAFT. EDWARD JOHNSON, New Rochelle, N. Y. Filed Mar. 26, 1930. Serial No. 439,148. 11 Claims. (Cl. 244—12.)



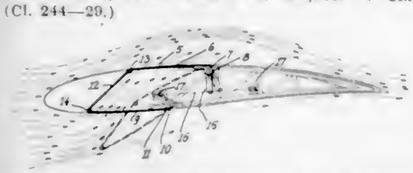
1. In a propelled device, a body provided with two communicating passages, one passage opening forward of the other passage, said forwardly opening passage having a dimensional decrease to the atmosphere while said other passage has a dimensional increase to the atmosphere thereby causing a continuous circulation of air or water from the rear opening therethrough as and for the purposes specified.

1,857,961. BI-METAL PACKING. CARL J. LAMB, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 15, 1927. Serial No. 240,233. 1 Claim. (Cl. 286—10.)



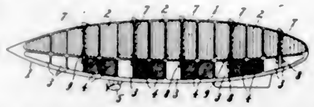
In a labyrinth packing for two relatively rotatable members, an annular packing element carried by one member and extending substantially radially outwardly therefrom, and a second annular packing element carried by the other member and extending substantially radially inwardly in axial-clearance packing relation to the first-mentioned packing element, the second packing element being composed of laminæ of metals of different coefficients of expansion, the lamina having the higher coefficient being on the side adjacent the first-mentioned packing element, whereby, in case of accidental contact of the packing elements and consequent heating thereof, the second packing element will bend away from the first-mentioned packing element to prevent damage to the packing elements.

1,857,962. LATERAL CONTROL MEANS FOR AIRPLANES. THOMAS B. LAVELLE, Hempstead, N. Y. Filed Nov. 8, 1930. Serial No. 494,265. 7 Claims. (Cl. 244—20.)



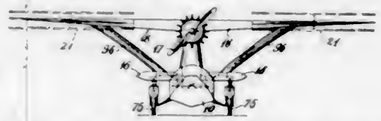
2. The combination with an airplane of a supporting airfoil having a slot therethrough respectively near each opposite end thereof, respective closure means for said slots, said closure means co-acting with the forward boundary of said slots to provide clearances extending in an upwardly rearward direction, and independent means for separately operating said closure means.

1,857,963. AIRSHIP. ERNST AUGUST LEHMANN, Friedrichshafen, Bodensee, Germany, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Friedrichshafen, Bodensee, Germany. Filed July 18, 1931, Serial No. 551,650, and in Germany July 21, 1930. 2 Claims. (Cl. 244—3.)



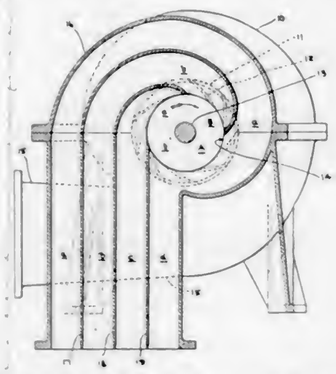
1. In an airship subdivided longitudinally into individual compartments, gas cells inflated with non-inflammable lifting gas in the upper portions of said compartments, and gas cells inflated with an inflammable lifting gas and gas cells inflated with a heavier fuel gas for the motors in the lower portions of said compartments; said fuel gas cells being arranged in pairs between which at least one gas cell containing inflammable lifting gas is inserted.

1,857,964. FLYING MACHINE. HENRY M. LEONARD, Ridgewood, N. Y. Filed Mar. 14, 1931. Serial No. 522,555. 14 Claims. (Cl. 244—29.)



1. In combination with a flying machine having wings, gill ailerons mounted on each wing and comprising an upper and a lower gill member on the leading edge of the wing and of shapes to form a leading edge and be tangent against said wing, a vertical spar shaft having threads of different bands, brackets engaging said threads, stud shafts projecting from said brackets, hinge levers rotative on said stud shafts and pivotally connected with the leading edges of said gill members, push rods pivotally connected on said gill members intermediately and adjustably on said brackets, and means for turning said spar shaft, means for moving said gill members directly away from each other to various positions off said wing, means for adjusting said push rods, and means for tilting said gill members about their front axes in any position.

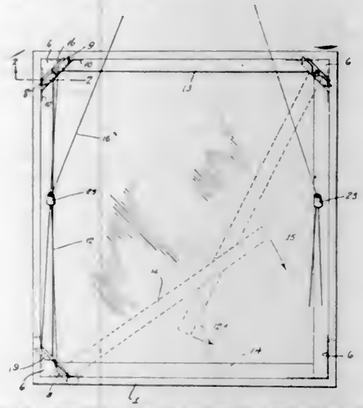
1,857,965. PUMP. JOSEPH P. LIDIAK, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 28, 1930. Serial No. 439,761. 3 Claims. (Cl. 230—133.)



1. In centrifugal pumping or blowing apparatus, the combination of a runner mounted to rotate about a fixed

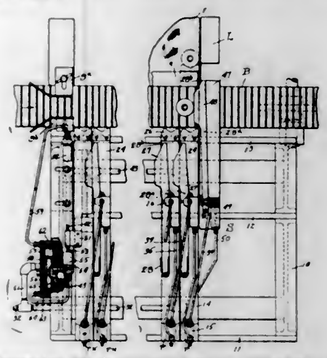
axis, means defining a fluid inlet opening adjacent the center of the runner; a spiral or volute-shaped conduit means extending in a plane substantially parallel to the inlet opening and communicating with such opening at the inner end thereof; the conduit means being so arranged with respect to the eye as to direct the flow of fluid in the general direction of rotation of the runner; and partition means dividing such conduit into a plurality of spiral or volute-shape passages communicating at their inner ends with different portions of the inlet opening.

1,857,966. PICTURE FRAME. FELIX LONG, New City, N. Y. Filed Mar. 13, 1931. Serial No. 522,290. 9 Claims. (Cl. 40—156.)



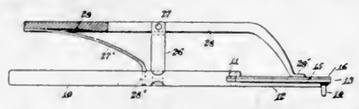
1. In an assembly of the character described, a rectangular picture frame rabbeted at its back to provide a recess adapted to receive a glass, a picture and a backing, retainers mounted on the frame and extending across the rabbet at the corners of the frame to form pockets and four strips respectively positioned in the rabbets at the four sides of the frame with the ends of the several strips extending into the corner pockets to hold the strips in position and thus maintain the glass, picture and backing against inadvertent displacement, each of said retainers having flanges extending into and secured within the rabbet to reinforce the corners of the frame.

1,857,967. LEER STACKER. EDWARD H. LORENZ, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,295. 13 Claims. (Cl. 198—31.)



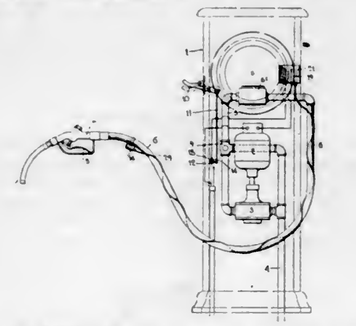
1. A glassware stacker comprising a plurality of pusher arms, means to move each of said arms, and means associated with an arm to control the moving means of the arm next adjacent.

1,857,968. PALLET HOLDER. WILBERT S. MAHR, Lynn, Mass. Filed Apr. 15, 1931. Serial No. 530,411. 12 Claims. (Cl. 81—7.)



1. In a pallet holder, a handle; an imperforate plate secured to one end thereof and provided in the upper face thereof with depressions to receive the pivot pins of pallets; an immovable plate superimposed thereon and provided with two perforations to receive the body portions of said pallets; a perpendicular support on said handle; and a spring-pressed clamp lever pivoted thereto and having a forked end normally contacting with said perforated plate at a point between said perforations.

1,857,969. FLUID DISPENSER. DAVID J. NELSON, Hamburg, N. Y., assignor to Martin & Schwartz, Inc., Buffalo, N. Y. Filed June 23, 1930. Serial No. 463,125. 4 Claims. (Cl. 221—95.)



1. In a fluid dispenser, a casing, a pump therein, a motor therein for operating said pump, switch means in the motor circuit to control the operation of said motor, a hose supplied with liquid by said pump, means on the free end of said hose for operating said switch means, and means on said casing for conditioning said circuit for operation by said first named switch means.

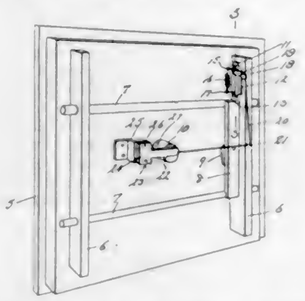
1,857,970. MAGNETIC ALLOY OF HIGH PERMEABILITY. HANS NEUMANN, Berlin-Siemensstadt, and HEINRICH KÜHLEWEIN, Berlin-Marienfelde, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Apr. 25, 1931, Serial No. 532,994, and in Germany Sept. 28, 1929. 6 Claims. (Cl. 175—21.)

1. A magnetic iron-nickel cobalt alloy containing 0.5 to 3.5 per cent. of cobalt, 30 to 90 per cent. of nickel, the whole of the remainder consisting of iron.

1,857,971. SAFETY DEVICE FOR VAULT OR SAFE DOOR LOCKS. JULIUS OLESCHAK, Jr., Philadelphia, Pa. Filed Sept. 4, 1930. Serial No. 479,610. 1 Claim. (Cl. 109—3.)

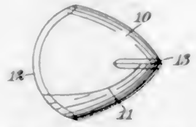
The combination with a vault or safe door including supporting members on the inner face of said door, lock bolt mechanism slidably mounted in said supports, handle mechanism for actuating the lock bolt mechanism, a permutation lock mechanism controlling the mechanism, a bracket on the inner face of the door in the region of the permutation lock mechanism, of a holding member including a base for securement to the bracket and an arm projecting from said base across the inner end of the permutation lock mechanism, said arm having a trans-

verse groove in one face thereof to weaken said arm between the bracket and the permutation lock mechanism, an auxiliary latch mounted on one of the supports for coaction with the locking bolt mechanism, a spring to move said auxiliary latch into a notch in the lock bolt mechanism and pivoted lever having one end connected



with the latch and a flexible connector having one end attached to the opposite end of said lever and passing around a guide post and connected to the free end of the weakened holding member to normally maintain the spring under tension and the auxiliary latch out of engagement with the notch and the locking bolt mechanism.

1,857,972. MANUFACTURE OF HOLLOW ARTICLES OF RUBBER. EDWARD ALFRED PHILLIPS, London, England, assignor to The India Rubber, Gutta Percha and Telegraph Company Limited, London, England, a British Company. Filed Sept. 18, 1931, Serial No. 563,485, and in Great Britain Oct. 10, 1930. 21 Claims. (Cl. 154—2.)



1. A method of making rubber blanks for use in the manufacture of rubber articles which comprises the step of closing the two open ends of an open ended tubular blank of unvulcanized rubber in such a manner that the line of closure of one end extends in a direction transverse to the line of closure of the other end.

1,857,973. SELF-ADJUSTING FASTENER SLIDE. DANIEL I. REITER, New York, N. Y. Filed June 23, 1931. Serial No. 546,179. 19 Claims. (Cl. 24—77.)



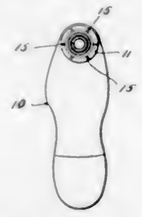
1. In a fastener slide, a slotted main slide member adapted to have a strap passed through the slots thereof and having a central aperture therein for the passage of a stud, an auxiliary slide member in the form of a substantially rectangular sheet metal plate, a snap fastener socket carried by the auxiliary member and adapted to engage a cooperating snap fastener stud passed through the aperture, said socket being arranged wholly on one side of the plate, and means for attaching the auxiliary member to the main member and permitting relative longitudinal movement therebetween, whereby the first-mentioned fastener element may be adjusted relatively to the main slide member.

1,857,974. EAR PROTECTOR. JOSEPH RENO, Jamaica, N. Y., assignor of one-half to Antone Seafidi, Astoria, N. Y. Filed Aug. 5, 1931. Serial No. 555,165. 5 Claims. (Cl. 132—45.)



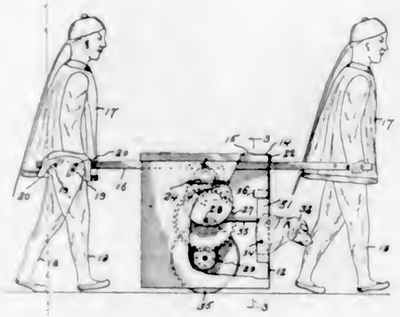
1. An ear protector, comprising a shell having an open back with a top downturned edge and a bottom downturned edge, and means between said edges for supporting the shell upon one's ear comprising an elastic band with its ends tied through apertures in said downturned edges.

1,857,975. SHOE PLATE. FREDERICK D. REYNOLDS, St. Louis, Mo. Filed Oct. 23, 1930. Serial No. 490,569. 3 Claims. (Cl. 36—73.)



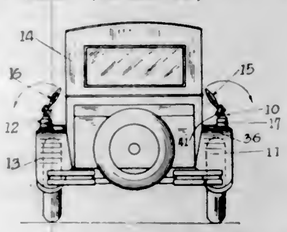
1. A shoe plate of the class described comprising a single piece of sheet metal stamping having its edge flanged upwardly for engagement with the surface to which it is applied and provided with a central portion having a downwardly presented convex face and a plurality of spaced concentrically disposed corrugations, the convex face of said central portion being disposed on a different horizontal plane with respect to the faces of said corrugated portions, said plate being provided intermediate its outermost corrugation and said flanged edge with a plurality of spaced apertures for receiving attaching nails.

1,857,976. TOY. LIONEL I. RIVARD, New Haven, Conn., assignor of one-half to Lawrence F. Dwyer, Torrington, Conn. Filed Dec. 22, 1930. Serial No. 504,035. 8 Claims. (Cl. 46—45.)



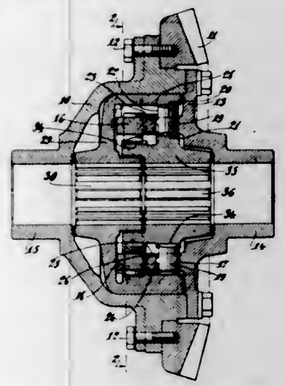
3. A toy having a box member with an opening through one wall thereof; an in-and-out member in the form of the head of an animal or the like pivotally connected to the box member and movable therethrough; a carrier member upon each of two sides of the box member so positioned that one of said carrier members is in front of said opening; a bar connecting the carrier members and passing through the box member; traction wheels supporting the box member; a spring motor within the box member providing a source of power to rotate said wheels; a crank shaft journaled within the box member and actuated by said motor; and a connecting member between the crank shaft and said in-and-out member, whereby during the rotation of the crank shaft a rocking motion is imparted to the in-and-out member, which is thereby caused to move in a substantially in-and-out path toward and away from the adjacent carrier member.

1,857,977. DIRECTIONAL SIGNAL. PETER ROBBIANO, Lakeport, Calif. Filed June 1, 1931. Serial No. 541,156. 1 Claim. (Cl. 116—39.)



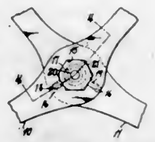
In a directional signal of the class described, a cylindrical casing, a swingable signal arm mounted on said casing and comprising an elongated illuminated member adapted for wig-wag motion relative to said casing, a bellows mounted in said casing, an air line connected to the lower end of said bellows, a bulb connected to said air line, a rack member secured to the upper end of said bellows, a pinion carried by the signal arm normally engaging said rack so that when the bellows is expanded the said arm is wig-wagged by virtue of intermittent pressure on said bulb.

1,857,978. POWER APPORTIONING MEANS. AZOR D. ROBBINS, New Brunswick, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 9, 1931. Serial No. 543,110. 5 Claims. (Cl. 74—7.)



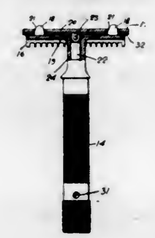
1. A power apportioning device comprising opposed driven members and a driving member therebetween, driving wedges carried by the driving member to engage the driven members, inner and outer retaining bands on the driving member, and ribs on the wedges to engage the bands.

1,857,979. TONGS FOR TABLE SERVICE. OTTO C. SCHAEFER, Meriden, Conn., assignor to The Napier Company, Meriden, Conn., a Corporation. Filed Oct. 31, 1931. Serial No. 572,277. 2 Claims. (Cl. 294—118.)



1. Tongs for table service, comprising two members, each formed with a pocket and with a radial notch intersecting the pocket, a spring entering the said pockets and having ends extending into the said notches, and means for connecting the two members together.

1,857,980. SAFETY RAZOR. HYMAN R. SEGAL, New York, N. Y., assignor to Segal Founders Corporation, New York, N. Y., a Corporation of New York. Continuation of application Serial No. 311,442, filed Oct. 10, 1928. This application filed Jan. 30, 1931. Serial No. 512,337. 4 Claims. (Cl. 30—12.)

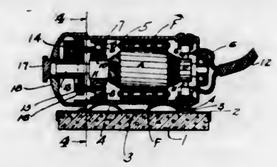


1. A safety razor including, in combination, a handle, a guard mounted thereon, a rod slidable within said handle, a clamping plate pivotally carried by said rod whereby the clamping plate may be tilted with respect to said guard and a blade formed with a centrally disposed aperture to receive said clamping plate when the latter is in tilted position.

1,857,981. ANTIOXIDANT. LORIN B. SEBRELL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 4, 1931. Serial No. 535,095. 8 Claims. (Cl. 18—50.)

1. A method of treating rubber, gutta percha and balata which comprises incorporating therein a naphthanthraquinone.

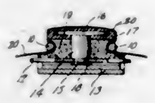
1,857,982. VIBRATOR OR LIKE MECHANISM. WILLIAM G. SHELTON, St. Louis, Mo. Filed Feb. 20, 1929. Serial No. 341,476. 10 Claims. (Cl. 128—36.)



1. In a vibrator, a motor, a shaft rotatable by said motor, an anti-friction bearing device for supporting said shaft and including an inner race mounted on said shaft

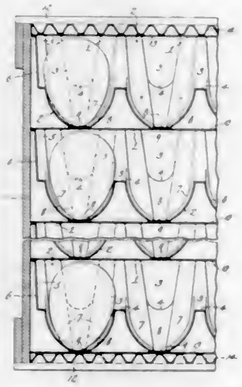
and anti-friction elements on said race and a spacer for said elements, an unbalanced weighted wheel freely rotatable on said shaft, and a member providing a yielding operative connection between said spacer and the outer portion of said wheel for rotating the latter.

1,857,983. HOSE SUPPORTER BUTTON. HENRY J. STUART, New Haven, Conn. Filed May 1, 1931. Serial No. 534,194. 7 Claims. (Cl. 24—245.)



1. A hose supporter comprising a metal clamping loop including spaced arms, a button comprising a base, a head, a stem connected at one end to the head and at the other end secured to the base and a shank of substantially the same diameter as the head, said head comprising a flat metal disc covered with a protective material, said shank comprising a thick layer of felt surrounding the stem, said loop adapted to co-operate with the shank to clamp a garment, and the shank being of greater diameter than the distance between the arms of the loop whereby the loop will form its own head on the button by depressing portions of the shank.

1,857,984. EGG CASE FILLER. GEORGE W. SWIFT, Jr., Bordentown, N. J., assignor to George W. Swift, jr., Inc., Bordentown, N. J., a Corporation of New Jersey. Filed Oct. 27, 1930. Serial No. 491,447. 4 Claims. (Cl. 217—26.5.)

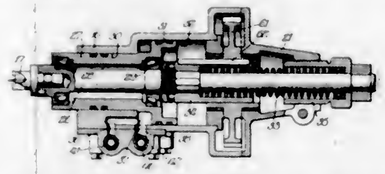


1. A filler tray for egg cases provided with pockets open at the top, insular platforms disposed in a common plane above the top surfaces of eggs placed in said pockets, each of said insular platforms being centrally arranged with respect to the top openings of a group of said pockets, said pockets comprising substantially ovate lower half portions disposed below the common axial plane of said eggs and upwardly-flared upper half portions extending above said common axial plane of the eggs to the common plane of said insular platforms, downwardly-arched walls respectively depending from and between the edges of adjacent insular platforms to a common plane adjacent said common axial plane of the eggs, said downwardly-arched walls with their upwardly-divergent limbs intersecting the upper half portions of adjacent pockets to form upwardly-widened channels disposed above the common axial planes of eggs reposing in said pockets.

1,857,985. PROCESS OF MANUFACTURING VARIOUS PRODUCTS FROM CORNSTALKS, SUGAR CANE, AND SIMILAR VEGETABLE MATERIAL. GUSTAV TAUBE, Riga, Latvia, assignor of twenty-six and two-thirds per cent to Israel B. Brodie, New York, N. Y., twenty-six and two-thirds per cent to Sidney Musher, Baltimore, Md., and twenty-six and two-thirds per cent to Boris M. Rubin, Seagate, N. Y. Filed Aug. 30, 1930. Serial No. 479,101. 3 Claims. (Cl. 92—13.)

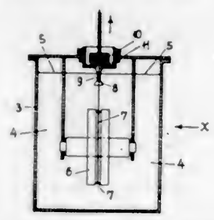
1. A process of producing cellulose products from stalks of corn and similar vegetable material, which includes the step of evacuating the free spaces and cells of the raw material, the subsequent step of dissolving the soluble content of said raw material by treatment in water for eight to twelve hours, then the step of reevacuating the spaces and cells in the undissolved material and then the step of treating said undissolved material in lye solution.

1,857,986. AUTOMATIC TURNING MACHINE. DAVID TURCOTT, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed Nov. 4, 1929. Serial No. 404,595. 2 Claims. (Cl. 142—53.)



1. In a lathe, a frame, a plurality of knives mounted for rotary movement on the frame, a carriage hinged for movement toward and away from the frame from a loading position to a cutting position and back again, manually operated means for moving the carriage, head and tail stocks having axially aligned work-engaging members for holding a piece of work therebetween, spring means for shifting one of the work-engaging members toward the other to grip the work, fluid-operated means for shifting the same work-engaging member away from the other to release the work, means for automatically actuating the fluid-operated means when the carriage is moved away from the frame upon completion of the cutting operation, and manually operated means for rendering the fluid-operated means inoperative whereby to allow the spring means to operate.

1,857,987. COVERING OF WIRE, THREAD-LIKE AND FILAMENTARY MATERIAL, AND THE LIKE, WITH INDIA RUBBER, GUTTA-PERCHA, BALATA, OR SIMILAR MATERIALS OR COMPOUNDS THEREOF AND APPARATUS THEREFOR. DOUGLAS FRANK TWISS and EDWARD ARTHUR MURPHY, Birmingham, England, assignors to The Anode Rubber Company Limited. Filed Jan. 18, 1928, Serial No. 247,736, and in Great Britain Jan. 28, 1927. 3 Claims. (Cl. 91—68.)



1. A process of coating filamentary materials uniformly with a rubber composition which comprises passing the material through a bath of a viscous dispersion of rubber

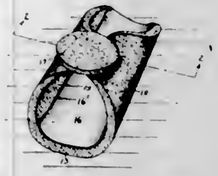
constituents, and withdrawing the filamentary material and the dispersion materials adhering thereto through a restriction and thence centrally through a limited body of said dispersion material and centrally through the surface of said limited body of dispersion material.

1,857,988. CHAIN POST AND METHOD OF MAKING THE SAME. PAUL O. UNGER, Chicago, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Sept. 27, 1930. Serial No. 484,926. 5 Claims. (Cl. 59—35.)



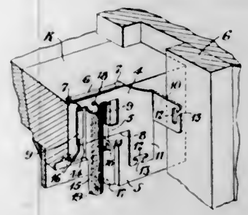
1. The herein described method of forming a chain post which consists in severing a plurality of equal links from a metal bar having an offset flange, beveling said links, aperturing the same, assembling the same into a chain and forming the chain into a cylindrical rod-like member.

1,857,989. WASHING IMPLEMENT. GEORGE VIRNEBURG, New York, N. Y. Filed Mar. 6, 1930. Serial No. 433,528. 5 Claims. (Cl. 15—244.)



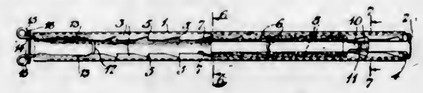
2. A washing implement comprising a tubular body of porous material, an inner lining of non-porous material covering the inner wall of said body, and a non-porous sheet mounted on said lining to form a soap pocket between itself and said lining, said lining having perforations beneath said non-porous pocket forming sheet whereby soap foam may pass from said pocket to the exterior of said tubular body.

1,857,990. CURTAIN SUPPORT. RICHARD C. VOGT, West New York, N. J. Filed Nov. 25, 1930. Serial No. 498,061. 8 Claims. (Cl. 156—22.)



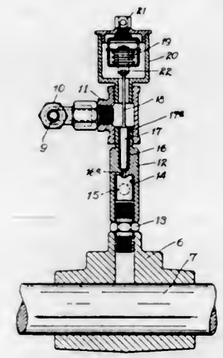
2. As an article of manufacture, a curtain rod bracket comprising a sheet metal plate integrally formed with a pair of curtain rod supporting ears disposed at a right angle to each other, integrally formed with slide-retaining guides, and integrally formed with an attaching barb; a sheet metal slide mounted upon said plate, slidably retained by said guides, integrally formed with a barb opposed to said barb upon the plate and integrally formed with an elongated spring housing extending beyond one end of the slide and forming a handle for shifting the slide; and a spring in said housing, connected to said plate and slide and tending to shift the latter for moving its barb toward the plate barb for releasably gripping a window structure.

1,857,991. CURTAIN ROD. RICHARD C. VOGT, West New York, N. J. Filed Aug. 20, 1931. Serial No. 558,258. 12 Claims. (Cl. 156—19.)



4. The combination of a longitudinally extensible curtain rod; a spring carried by said rod and tending to contract it longitudinally; a pair of spaced supporting prongs carried by the rod at each end thereof and comprising resilient shanks extending longitudinally from the rod ends and having enlarged anchoring heads at their outer ends; and a pair of supporting brackets for the rod each including means defining a pair of opposed keeper recesses opening toward each other and clearance for transverse insertion of said prong shanks into said recesses, the prongs being compressible toward each other for insertion into the recesses and resiliently expansible into holding engagement therewith, and the headed prongs anchoring the rod to the brackets and resisting contraction thereof by said spring.

1,857,992. LUBRICATING APPARATUS. FREDERIC WILKES, Wilkinsburg, Pa. Filed Dec. 22, 1930. Serial No. 503,889. 6 Claims. (Cl. 184—68.)

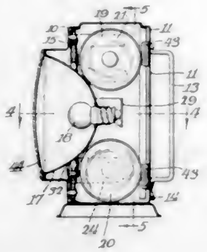


1. Lubricating apparatus comprising a vertically-extending conduit having a portion of its wall of elongated form and tapering toward one end thereof, and a valve comprising a body portion of elongated form, and covered with cord-like fibrous material spirally wound on the body portion, the said valve cooperating with the tapering wall of the conduit to control flow of lubricant.

1,857,993. ELECTRIC LANTERN. LEE M. WILEY, Marion, Ind., assignor to Delta Electric Company, Marion, Ind., a Corporation of Indiana. Filed Dec. 3, 1929. Serial No. 411,356. 3 Claims. (Cl. 240—10.63.)

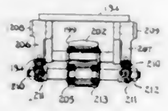
1. In an electric lantern of the type which includes a casing containing a battery, a reflector and a lamp supported in the reflector and having one terminal electrically connected therewith, a plate of insulating material supported in the casing for mounting the battery having

a pair of spaced apart and normally unconnected switch terminals mounted on a face of the plate and provided with conductors establishing a circuit including the bat-



tery, reflector, lamp and switch terminals, said casing being excluded from the circuit, and a switch adapted to bridge the terminals to complete the circuit.

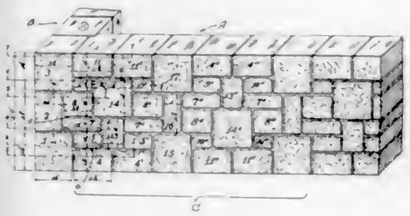
1,857,994. MACHINE FOR AND METHOD OF BUILDING PNEUMATIC TIRE FLAPS. DAYTON L. WILLIAMS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 18, 1929. Serial No. 400,516. 10 Claims. (Cl. 154—9.)



7. The method of manufacturing flap material which comprises assembling a plurality of strips of fabric in superposed relation, shaping the strips into arcuate form transversely thereof, and crimping the assembled strips while they are in arcuate form.

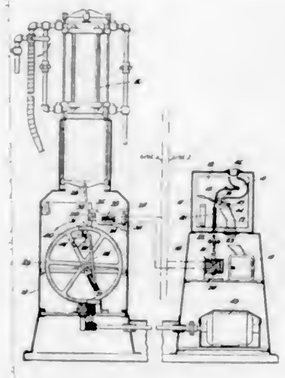
10. A device for preforming a strip of flexible material comprising intermeshing, toothed rollers, one of which is arcuate longitudinally in a convex manner and the other of which is arcuate longitudinally in a concave manner.

1,857,995. BUILDING WALL CONSTRUCTION. JOHN H. ALLES and GEORGE KOHL, St. Louis, Mo. Filed May 1, 1929. Serial No. 359,550. 6 Claims. (Cl. 72—37.)



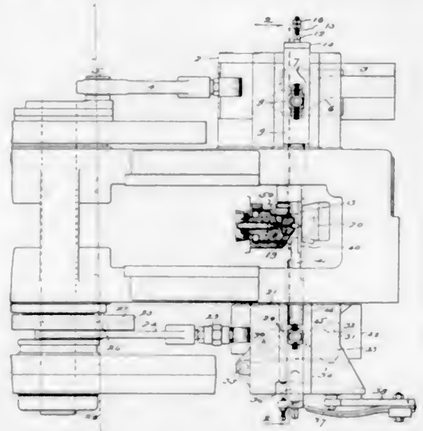
1. In a wall construction, two walls intersecting to form a corner, a series of corner blocks arranged one above the other and cooperating to present irregular surfaces in the directions of both of said walls, the contours of said surfaces being the same, and blocks each of greater depth than said corner blocks and overlapping each other at the rear of said corner blocks to key said walls together in addition to keying produced by said corner blocks.

1,857,996. STOP MECHANISM. CHARLES BRAHY, Staten Island, N. Y., assignor to Charles E. Marion, New York, N. Y. Original application filed Oct. 8, 1929, Serial No. 398,162. Divided and this application filed Sept. 19, 1930. Serial No. 483,039. Renewed Oct. 5, 1931. 8 Claims. (Cl. 194—13.)



1. A stop mechanism comprising, in combination, a cam secured to rotary driving means, a lever operable by said cam, a rod operable by said lever, a second lever, two adjacent contact points one of which is carried by said second lever, said rod being provided with a yieldable connection to said second lever, electro-mechanical means electrically connected with said contact points and provided with a movable element attached to motor-actuating means, means to keep said contact points normally disengaged, and means to bring said contact points into temporary abutment so as to momentarily close the circuit through said electro-mechanical means to actuate said movable element.

1,857,997. CUT-OFF MECHANISM FOR HEADING MACHINES. CHARLES T. BRENNAN, Waterbury, Conn. Filed May 27, 1931. Serial No. 540,266. 9 Claims. (Cl. 29—34.)

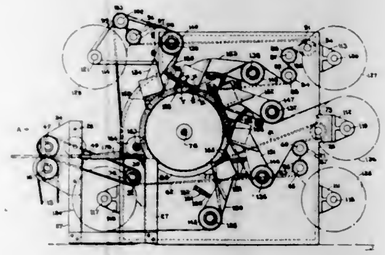


1. A cut-off mechanism for metal heading machines which have bushings through which the stock is fed and punches and dies for shaping the stock, said mechanism comprising a cutter blade and a backing blade, a slide with a cam for reciprocating the cutter blade across

the feed bushing and toward and from axial line with the punch and die, and a slide with a yielding cam for reciprocating the backing blade across the axial line of the punch and die and toward and from the axial line of the feed bushing, said cams causing the blades to come together with a yielding pressure opposite the feed bushing, move together from said bushing toward the axial line of the punch and die and then separate.

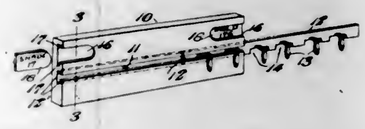
6. A cut-off mechanism for metal heading machines which have bushings through which the stock is fed and punches and dies for shaping the stock, said mechanism comprising a cutter blade and a backing blade, mechanism for reciprocating the cutter blade across the feed bushing and toward and from axial line with the punch and die, and mechanism for reciprocating the backing blade across the axial line of the punch and die and toward and from the axial line of the feed bushing, said backing blade reciprocating mechanism comprising a slide, a cam for reciprocating said slide, a cam fixed to said slide, a plate with a cam hinged to said slide, a roll mounted on said plate, a cam bar engaged with said roll, and a spring pressed plunger engaged with said cam bar.

1,857,998. MACHINE FOR BUILDING TIRE FLAPS. HAROLD M. BROWN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 6, 1928. Serial No. 297,794. 5 Claims. (Cl. 154—9.)



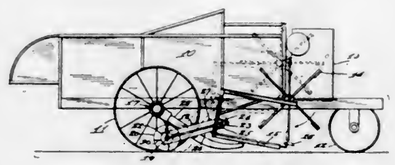
1. An apparatus for assembling multi-ply material comprising means for supplying a plurality of strips of material, individual means for stitching each strip upon an adjacent strip, such means comprising a resiliently pressed shoe having a surface varying progressively from substantially flat to a predetermined contour.

1,857,999. CARDING DEVICE FOR ARTIFICIAL TEETH. MYER CHAREN, Philadelphia, Pa., assignor to Universal Dental Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 27, 1930. Serial No. 478,009. 5 Claims. (Cl. 206—83.)



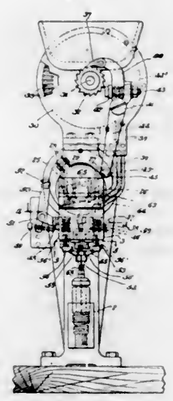
1. A carding device of the character stated comprising a non-metallic panel having a longitudinal slotted portion in the face thereof having undercut track-like formations and having open ends, and a metal bar having struck out therefrom a plurality of pendant, resilient tangs for artificial teeth removable reception, said bar being arranged for endwise movement through said slotted portion.

1,858,000. COMBINATION HARVESTER-THRESHER. LEON R. CLAUSEN, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Sept. 18, 1929. Serial No. 393,353. 8 Claims. (Cl. 56—364.)



1. The combination, with the header element of a combination harvester-thresher, of a gleaner comprising supporting wheels, means for combing stubble, a conveyer, means for yieldingly connecting the gleaner to the header, and rotary means cooperating with the combing means for elevating grain to the conveyer to be carried by the latter and delivered onto the header.

1,858,001. AUTOMATIC RIVETER. CHALON E. CORSON and WILLIAM A. WRIGHT, Bridgeport, Conn., assignors to The Milford Rivet and Machine Company, Milford, Conn., a Corporation of Connecticut. Filed Dec. 15, 1925. Serial No. 75,508. 3 Claims. (Cl. 78—49.)

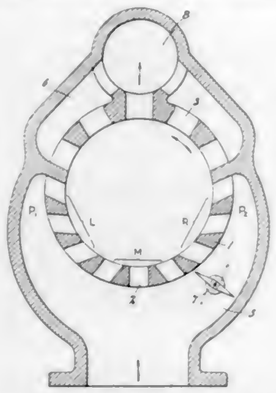


1. A riveter comprising a driver, a rivet slideway, jaws to which rivets are delivered from said slideway, arms connected with said jaws, elastically mounted posts supporting said jaws, and a punch operable by said driver for driving a rivet from said jaws.

1,858,002. TWO CYCLE ENGINE. CHARLES G. CURTIS, New York, and EARLE R. NEWTON, Jamaica, N. Y. Filed July 2, 1930. Serial No. 465,269. 9 Claims. (Cl. 123—65.)

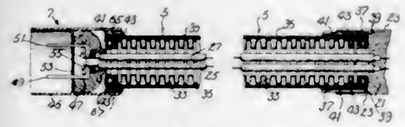
3. A two-cycle internal combustion engine comprising a cylinder, a bank of air inlet ports on one side of the cylinder, longitudinally oblique ports in the middle por-

tion of the bank, more nearly horizontal ports in the end portions of the bank arranged to direct air streams back toward the inlet side of the cylinder, and means



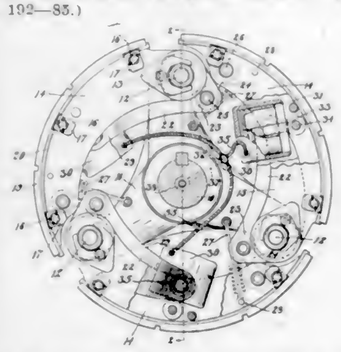
increasing the effect of the flow from one side of the bank relative to the other so as to cause the air within the cylinder to rotate.

1,858,003. HEATER. EDWARD A. DOWNEY, University City, Mo. Filed Mar. 6, 1931. Serial No. 520,505. 3 Claims. (Cl. 219—141.)



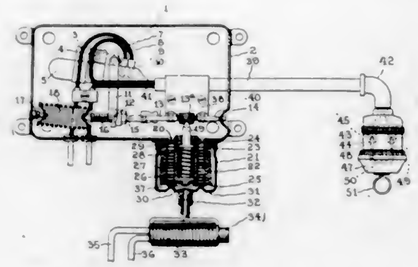
1. A heater comprising an electrically operable heating element, electrical leads running to said element, a sheath covering said leads, said sheath comprising a metallic bellows, said bellows being joined to said element with a fluid tight joint whereby said leads are sheathed by a fluid-tight, flexible construction.

1,858,004. FRICTION CLUTCH. CLARENCE M. EASON, Waukesha, Wis., assignor to Fawick Manufacturing Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Dec. 24, 1930. Serial No. 504,507. 8 Claims. (Cl. 192—85.)



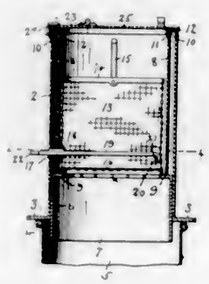
1. In a friction clutch, the combination of a driven shaft, a shoe support thereon, friction shoes and operating levers pivoted to said support, and individual floating, fluid-pressure actuators respectively interposed between each of said levers and the next-adjacent shoes.

1,858,005. CONTROL MEANS. LEWIS W. EGGLESTON, Detroit, Mich., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 11, 1927. Serial No. 182,882. 12 Claims. (Cl. 200—140.)



1. A control switch comprising a make-and-break device adapted to control a circuit, means to actuate said device, a catch receptacle associated with said device, and means whereby disassociation of said receptacle from said device breaks the circuit through said device.

1,858,006. ASH RIDDLER. BENJAMIN F. ENGLAR, Baltimore, Md. Filed Sept. 24, 1930. Serial No. 484,056. 5 Claims. (Cl. 209—344.)



1. An ash sifter comprising a cylinder terminating in an annular flange and a wire basket movably mounted within said cylinder, and another cylinder mounted within the first cylinder and projecting below said flange, said last cylinder having an inturned upper flange upon which the basket is adapted to seat.

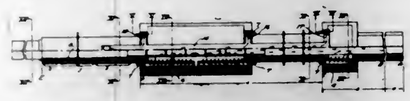
1,858,007. METHOD AND AGENT FOR RECOVERY OF OXIDIZED ORES. STUART A. FALCONER, Elizabeth, and LUDWIG J. CHRISTMANN, Jersey City, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed June 1, 1931. Serial No. 541,528. 8 Claims. (Cl. 209—166.)

1. In the flotation concentration of ores, the method which comprises adding to the flotation circuit as a promotor a mixture of mercaptobenzothiazole and an alkali metal sulphide.

1,858,008. TUNNEL KILN. EDWIN B. FORSE and CHARLES F. GEIGER, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed May 9, 1928. Serial No. 276,222. 15 Claims. (Cl. 25—142.)

1. In a tunnel kiln, a kiln structure having a tunnel therethrough, and radiating combustion chambers arranged

along the side of the tunnel and extending substantially parallel therewith at a plurality of separated points in



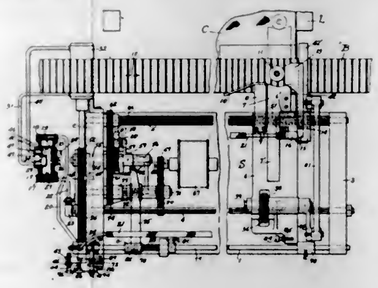
the tunnel, said combustion chamber having the operating characteristics of a combustion chamber of silicon-carbide refractory.

1,858,009. NECKTIE. ESTHER GERTSFELD, New York, N. Y. Filed June 24, 1931. Serial No. 546,493. 3 Claims. (Cl. 2—146.)



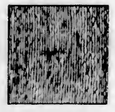
1. A necktie having a body portion provided with folds, said necktie body being composed of an outer fabric, a lining extending over and covering the inner face of the same, an interlining disposed between the outer fabric and lining, a group of flexible loops attached to one of the folds, said loops having their ends disposed between the outer fabric and the lining, and buttons on the face of the other fold for engagement by said loops.

1,858,010. WARE STACKING MECHANISM. GEORGE J. GRIZEY, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 9, 1930. Serial No. 419,498. 18 Claims. (Cl. 198—31.)



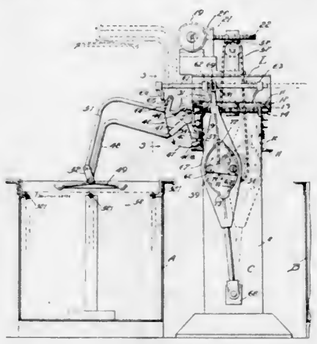
1. In combination, a conveyor on which glassware is to be stacked in longitudinal rows, a second conveyor carrying articles of glassware toward the first conveyor, means for transferring said articles from the second to the first conveyor, comprising a pusher mechanism, means responsive to the movement of the glassware for actuating the pusher, and means for moving said pusher mechanism into alignment with another of said longitudinal rows of ware on the first conveyor prior to the next succeeding actuation of said pusher.

1,858,011. HALFTONE SCREEN. JOHN G. GUEOVJIAN, New York, N. Y. Filed Feb. 5, 1930. Serial No. 425,969. 4 Claims. (Cl. 95—81.)



1. A half-tone screen comprising two superposed plates of transparent material, one carrying upon its inner surface a plurality of lines of opaque material each line having an irregular course and arbitrarily spaced from any of its adjacent lines.

1,858,012. ELECTROLYTIC PROCESSING MACHINE. ALBERT H. HANNON, Springfield, Ohio. Filed June 3, 1931. Serial No. 541,863. 7 Claims. (Cl. 204—5.)

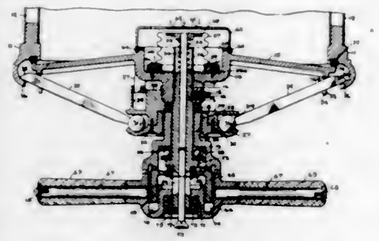


1. In an electroprocessing machine, a solution tank having an electrical connection, a carriage, an insulated work-support arm pivotally mounted on the carriage and extending over the tank, means for moving the carriage along the tank, a bus bar having an electrical connection of different potential than said connection and contacting with the arm in lower position, a movably mounted lifter at the end of the tank, and means for operating the lifter to engage and raise the arm as the arm approaches.

1,858,013. STERILIZER DOOR. HARRY J. HEINS, Jersey City, N. J., assignor to Kny-Scheerer Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1930. Serial No. 489,491. 6 Claims. (Cl. 220—55.)

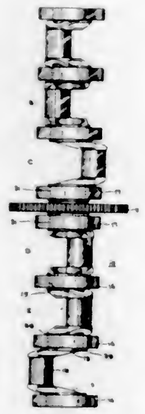
1. In a sterilizer a door, a stud bolt secured in said door, an operating member mounted over said stud, a housing carrying handles secured over the outer end of said stud, a rod slidably running through said stud and held in its normal position by a compression spring secured in position over its inner end by a cap secured to said rod, a pressure bellows mounted over said cap and operating said rod, an interconnecting member mounted in said housing and pinned to said rod through a slot in said stud and having longitudinal pins sliding in openings in said housing and rotating therewith and teeth on its

inner end adapted to mesh with one set of teeth on the outer end of said operating member and a second set of teeth on the inner end of said housing adapted to engage a second set of teeth on the outer edge of the operating



member in a clockwise direction, clamping bars mounted on said door and operated at their outer ends by a disc threadably mounted over said operating member, the latter having a left hand thread.

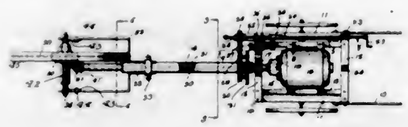
1,858,014. ENGINE CRANK SHAFT. HERBERT T. HERR, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1929. Serial No. 337,897. 11 Claims. (Cl. 34—38.)



6. In an engine crank shaft structure, the combination of a plurality of crank shaft sections, each section embodying a crank pin portion, a female sleeve portion projecting axially from one section, a male sleeve portion projecting axially from the other section and fitting within the female portion, a journal surface provided upon the exterior surface of the female sleeve portion, a crank shaft supporting bearing cooperating with said journal surface, an inwardly-projecting flange provided on each sleeve portion, and means for detachably securing said flanges to each other.

1,858,015. POWER SAW. JAMES F. HODGSON, Minersville, Pa. Filed Oct. 8, 1931. Serial No. 567,731. 8 Claims. (Cl. 143—43.)

2. A portable sawing machine comprising a portable frame, a rotatable support carried by and extending from said frame, a saw frame on the outer end of said support for rotation therewith, a saw mounted in said frame, means for driving the saw, and means for rotating said support for changing the angular positions of said saw, said means including a shaft on the portable frame, driving connections between the shaft and support, said shaft being



slidable with relation to said driving connections, and a locking means operable by said shaft into and out of engagement with said rotatable support.

1,858,016. PLURAL-MEMBER STYLUS OR THE LIKE. WILLIAM D. LA RUE, Maple Shade, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,575. 4 Claims. (Cl. 274—38.)



1. A stylus comprising a record engaging member, a shank having a slotted end closed on the major portion of said member, and a fused coating of metallic borate on adjacent surfaces of said member and shank.

1,858,017. PROCESS OF MAKING ALKALI CELLULOSE. LEON LILIENFELD, Vienna, Austria. Filed Feb. 16,1922, Serial No. 537,062, and in Austria Aug. 1, 1919. 13 Claims. (Cl. 260—152.)

5. A process which comprises grinding a cellulosic body and caustic alkali, while air of known moisture content is passed through, in such total volume as to allow absorption of sufficient water to complete the formation of alkali cellulose, but not sufficient to dissolve the whole of the alkali.

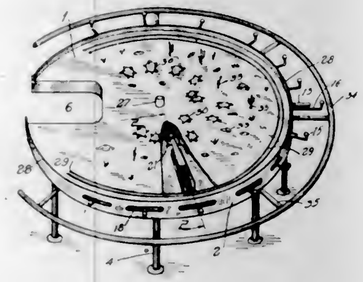
1,858,018. PROCESS FOR THE MANUFACTURE OF ETHERS OF CARBOHYDRATES. LEON LILIENFELD, Vienna, Austria. Filed Apr. 25, 1921, Serial No. 464,357, and in Austria May 5, 1920. 6 Claims. (Cl. 260—152.)

6. The process of making ethers of a carbohydrate having the empirical formula $n(C_6H_{10}O_5)$ which comprises intimately mixing such a carbohydrate, water, and alkali in the proportions for the etherification reaction at not substantially above room temperature, aging the resulting mixture, and then treating the same with an etherifying agent.

1,858,019. MANUFACTURE OF ARALKYL ETHERS OF CELLULOSE AND PLASTICS CONTAINING SAME. LEON LILIENFELD, Vienna, Austria. Filed Feb. 28, 1924, Serial No. 695,854, and in Austria Apr. 1, 1919. 14 Claims. (Cl. 260—152.)

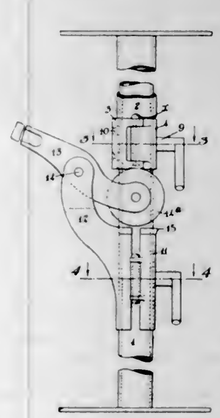
1. A process of making aralkyl derivatives of cellulose, which comprises reacting on a cellulosic material with an inorganic acid ester of an aralkyl alcohol, in the presence of an alkali.

1,858,020. ELECTRICAL GAME. ELVIN LINKE, Denver, Colo. Filed Mar. 24, 1931. Serial No. 524,819. 11 Claims. (Cl. 273—86.)



2. In a game apparatus a table having a magnetically permeable top, a plurality of electromagnets movable beneath said top, means for manually moving said magnets from center toward circumference of said top, objects carrying magnetic material and adapted to be moved over said top by the movement of said magnets, means near the circumference of said top for automatically de-energizing said magnets when one of said objects engages said de-energizing means, and means for automatically retracting said magnets toward the center of said table when said manually operable means are released.

1,858,021. SHORE. ARNOLD CLARENCE MARSHALL, London, England, assignor to The Steel Scaffolding Company Limited, London, England, a Corporation of Great Britain. Filed Mar. 14, 1929, Serial No. 346,929, and in Great Britain May 25, 1928. 4 Claims. (Cl. 254—114.)

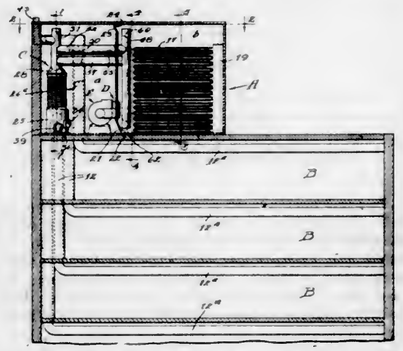


1. A prop comprising a tubular member, a second member slidable therein, an opening in the wall of said first member, a clamp secured to said first member, one element of which clamp engages the second member through the opening in said first member, a detachable clamp upon the second member and a lever mounted upon said clamp engaging the clamp of the first member.

1,858,022. METHOD OF PREVENTING THE DECOMPOSITION OF CARBON TETRACHLORIDE AND PRODUCT THEREOF. LAWRENCE F. MARTIN and ARTHUR A. ELSTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 3, 1929, Serial No. 360,310. Renewed Mar. 7, 1931. 11 Claims. (Cl. 23—250.)

1. The method of preventing the decomposition of halogenated aliphatic hydrocarbons which comprises adding thereto cyclohexane.

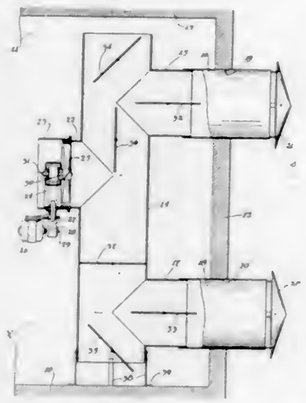
1,858,023. AIR CONDITIONING APPARATUS FOR STORAGE ROOMS. CHARLES A. MOORE, Edina, Minn. Filed Mar. 18, 1924, Serial No. 700,060. Renewed Dec. 2, 1929. 49 Claims. (Cl. 257—8.)



1. In an apparatus of the class described, the combination with a structure constituting a plurality of superimposed storage rooms, a housing superimposing said structure, a partition in said housing forming a first chamber and a second chamber, said partition having an upper and a lower port therethrough, an adjustable closure for each port, a pair of conduits for each room, each conduit having a horizontal branch reaching through the upper portion of its respective room, one conduit communicating with the second chamber at the bottom thereof and having a longitudinal opening in the lower side of its horizontal branch, the other conduit communicating with the first chamber at the top thereof and having a longitudinal opening in the upper side of its horizontal branch, an appliance in the first chamber including two upright ducts, means for affecting the temperature thereof, one duct having a valved opening at the lower portion thereof in communication with the first chamber, valved means associated with said ducts and selectively adapted to bring the upper ends thereof into communication with the outer air and with the first chamber, valved means associated with the lower end of the second duct and adapted selectively to bring the same into communication with the outer air, the first chamber and the first duct, a pair of upright pipes in the second chamber, valves at the ends of said pipes, inter-chamber ducts for said pipes, each inter-chamber duct being joined at one extremity with its respective pipe near the upper end thereof and having branches at its other end connected with the appliance ducts near their upper ends, valves in said duct branches, temperature affecting means in the second chamber and blower mechanisms selectively operable for blowing air into the second chamber from the first chamber and vice versa.

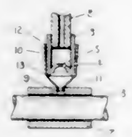
49. In combination, a storage room, a source of supply of temperature affected air, two conduits, one an air ingress conduit leading from said source to the room and the other an air egress conduit leading from the room back to said source, said conduits communicating at the same proximity, though at different levels, with the interior of the room, through one wall of the room near the ceiling and midway between other opposite walls of the room.

1,858,024. VENTILATING AND AIR CIRCULATING DEVICE. CHARLES A. MOORE, Edina, Minn. Filed Sept. 17, 1930. Serial No. 482,632. 15 Claims. (Cl. 98—33.)



7. In combination with a structure forming a chamber, a main pipe disposed in upright position therein and communicating at its upper end with the upper portion of the chamber and at its lower end with the lower portion of said chamber, an upper branch pipe issuing from the upper portion of the main pipe and communicating with the outer atmosphere, a lower branch pipe issuing from the lower portion of said main pipe and communicating with the outer atmosphere, said main pipe having an opening therein bringing the same into communication with the interior of the chamber at an elevation between the junctions of said main pipe with said upper and lower branch pipes, and means for obstructing the passageway within said main pipe between said opening and one of said branch pipes.

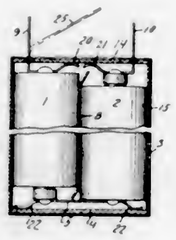
1,858,025. GREASE GUN. LOUIS A. PARADISE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Dec. 28, 1928. Serial No. 328,921. 1 Claim. (Cl. 221—47.4.)



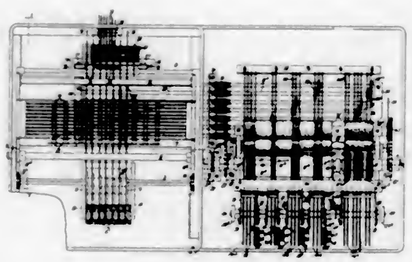
In a grease gun of the type described including a nozzle having a concave depression in the end thereof, and an opening in the center of the depression communicating with the inside of the gun, the combination therewith of a supplementary nozzle adapted to be placed over the other nozzle, the supplementary nozzle having a tip portion of conical shape and having an opening in the apex thereof communicating with the inside of said tip portion.

1,858,026. BATTERY. WALTER B. SCHULTE and JOHN S. ZOOK, Madison, Wis., assignors to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed July 30, 1929. Serial No. 382,181. 7 Claims. (Cl. 136—108.)

1. An electric battery comprising a unit of electrically connected, laterally adjacent dry cells, metallic strips in permanent electrical connection with the terminal poles of said unit and projecting upwardly therefrom, a sheet metal tube laterally encasing said unit and conforming to the lateral contour thereof, stiff insulating sheet covers, over the top and bottom respectively of said unit and closing the ends of said metal tube, said metallic strips projecting freely through apertures in said top cover, the top and bottom edges of said metal tube being turned in substantially perpendicularly to the sides to form narrow ledges, said covers resting against said ledges inward indentations in said tube immediately below said top cover and immediately above said bottom cover and maintaining said covers in place at the top and bottom respectively of said tube.



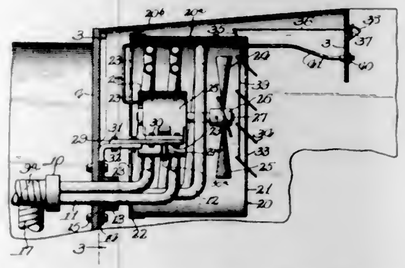
1,858,027. COMBINED TYPEWRITING, COMPUTING, AND CHECK-PROTECTING MACHINE. HERBERT H. STEELE, Lynbrook, N. Y., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1924. Serial No. 749,401. 42 Claims. (Cl. 235—59.)



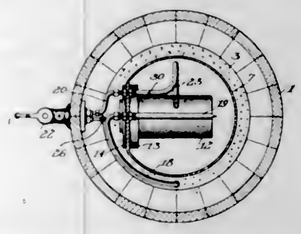
1. A check typing, printing and adding machine including a single series of typing, printing and adding numeral-keys, types responsive to said keys for typing an amount upon a check, means for supporting the check while being typed, 10-step indexing mechanism responsive to said keys, a series of settable check printing devices selected by and co-operatively associated with said indexing mechanism, a second supporting means for holding the check during the printing operation, adding mechanism also co-operatively associated with said indexing mechanism to be operated 9 steps thereby for adding the amounts typed upon the checks, means for cycling said check-printing devices and the adding machine concomitantly, and means for subsequently subjecting the check to the action of said printing devices while the adding machine is stationary.

1,858,028. AUTOMOBILE HEATER. JAMES J. SUNDAY, Chicago, Ill., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,072. 4 Claims. (Cl. 257—137.)

2. A heater for a motor vehicle comprising a heat medium conducting member adapted to receive the exhaust gases of the vehicle engine, a fan adapted to circulate air about said member, an electric motor serving to drive said fan, said heat medium conducting member surrounding said motor, and means located between said member and said motor to prevent said motor from becoming heated by said member.

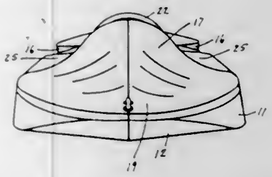


1,858,029. BEVERAGE DISPENSER. LEWIS G. AMES, Rochester, N. Y., assignor to Richardson Corporation of Rochester, N. Y., a Corporation of New York. Filed Mar. 21, 1930. Serial No. 437,834. 1 Claim. (Cl. 225—21.)



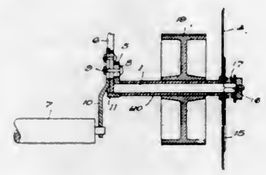
A beverage dispenser comprising a liquid container, means for supplying liquid to said container under pressure, means for withdrawing liquid from said container, said means comprising a conductor having an open end near the bottom of the container and rising therefrom to a point adjacent its top, and means in said conductor at its point of highest elevation for permitting the escape of gas from the container.

1,858,030. SPEED BOAT CONSTRUCTION. BERNARD R. BATTY, Indianapolis, Ind., assignor to Earl M. Hicks, Lebanon, Ind. Filed May 31, 1930. Serial No. 458,254. 12 Claims. (Cl. 114—66.5.)



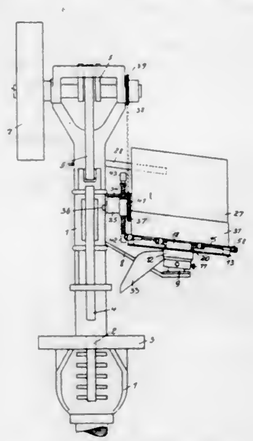
1. In a speed boat the combination of a buoyant stabilizer having one side substantially conforming to the boat side and suitably secured thereto, another side forming an upper surface and having a downward inclination from the boat side and pitched upwardly toward the bow of the boat, and a lower surface having an upward inclination and inclined upward and outwardly from the boat side.

1,858,031. EDGE TRIMMING ATTACHMENT FOR LAWN MOWERS. WILLIAM BENNET, and ALEC FARRAR, Christchurch, and PETER MACKINNON, Sidney, Quay, Kaiapoi, New Zealand. Filed Dec. 14, 1929, Serial No. 414,120, and in New Zealand Jan. 19, 1929. 2 Claims. (Cl. 56—251.)



1. An edge trimming attachment for a lawn mower comprising an axle provided at one end with a knuckle joint for detachably securing it to the frame of the mower to cause such axle to extend laterally from one side of the mower, the said knuckle joint permitting the angle of said axle being varied in an up and down direction in relation to the mower, a circular cutter rotatably carried upon said axle and means for rotating said cutter when said mower is moved along the surface of a lawn.

1,858,032. FILLING APPARATUS FOR POWDERED OR GRANULAR MATERIAL. HEINRICH BIMBER, Lauf, Germany, assignor to Steatit-Magnesia Aktiengesellschaft, Berlin-Pankow, Germany, a Corporation of Germany. Filed May 27, 1929, Serial No. 366,127, and in Germany June 2, 1928. 4 Claims. (Cl. 221—108.)

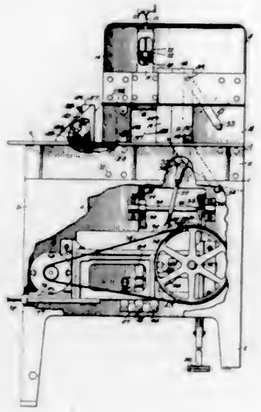


1. An apparatus for feeding measured amounts of loose material, comprising a movable member having a pocket, pins secured to said member in the direction of the movement thereof one behind the other, a driving mechanism for moving said member comprising revolving arms adapted for engagement with said pins, means for supplying loose material to said pocket, and means for opening said pocket when in delivering position.

1,858,033. TRIMMING MACHINE. FRED M. BRACKETT and LEO C. WILLIAMS, Topeka, Kans., assignors to The Brackett Stripping Machine Co., Topeka, Kans., a Copartnership consisting of Edward M. Brackett and Fred M. Brackett. Filed Dec. 16, 1929. Serial No. 414,426. 12 Claims. (Cl. 164—54.)

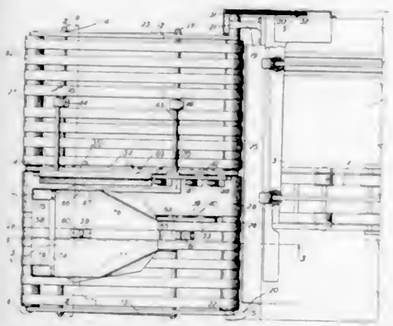
1. In a trimming machine, a support, a member for clamping a book to the support, a knife, knife actuating

means including a normally idle shaft and a constantly rotating shaft, means including a pedal for operating the clamping member, a bar pivoted to the pedal, and means



including said bar automatically rendered effective upon operation of the pedal for effecting driving connection between the shafts.

1,858,034. END SHEET FOLDING APPARATUS. FRED M. BRACKETT, LEO C. WILLIAMS, and DIETRICH DANEKE, Topeka, Kans., assignors to The Brackett Stripping Machine Co., Topeka, Kans., a Copartnership consisting of Edward M. Brackett and Fred M. Brackett. Filed May 5, 1930. Serial No. 449,812. 16 Claims. (Cl. 270—86.)



1. In apparatus of the character described, a support, means for moving a book across the support, means for effecting partial closure of the book while the same is being moved across the support, and means operating on the partially closed area of the book to press the margin of one portion thereof against the opposite portion.

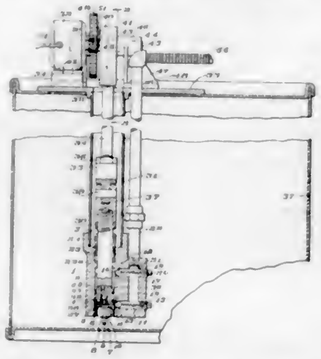
1,858,035 LIQUID DISPENSING APPARATUS. ERIC HEYWOOD BRADLEY, Dayton, Ohio, assignor to The National Pumps Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 1, 1928. Serial No. 309,461. 15 Claims. (Cl. 221—100.)

1. In a liquid dispensing apparatus comprising a delivery receptacle, a delivery hose leading from said receptacle, a nozzle on said hose, a drain pipe and a receptor connected with said drain pipe and adapted to receive said nozzle, a retaining member carried by said receptor and spaced laterally therefrom, and a second retaining member extending laterally from said nozzle and arranged



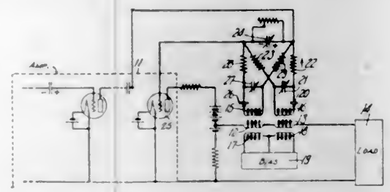
to engage the lower side of the retaining member on said receptor when rotatory movement is imparted to said nozzle in said receptacle.

1,858,036. PUMP. ERNEST L. BROWN, Watertown, Mass., assignor to Better-Built Pumps, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1929. Serial No. 382,745. 3 Claims. (Cl. 103—187.)



1. A pump including a casing having a piston chamber, a piston reciprocal within said chamber, a piston rod extending from one end of said piston, said piston having a passage formed therethrough and said piston rod having a laterally extending duct providing communication between said passage and the end of the piston chamber in which the piston rod operates, means for reciprocating said piston, a check valve opening in the direction of said end of said chamber controlling flow of fluid through said passage and said duct, an inwardly opening check valve controlling inlet of fluid to the other end of said piston chamber, a boss integral with said piston casing at one side thereof, said boss having a fluid passage extending longitudinally therethrough and open at one end of said boss, said casing and said boss having lateral outlet passages communicating with said piston chamber beyond the limits of the piston movement in each direction, respectively, and with said fluid passage in said boss, outwardly opening check valves controlling said outlet passages, and a discharge conduit connected to said boss and communicating with the open end of the fluid passage therein.

1,858,037. ZERO CORRECTING CIRCUIT. EVERETT T. BURTON, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 19, 1928. Serial No. 293,816. 12 Claims. (Cl. 179—171.)



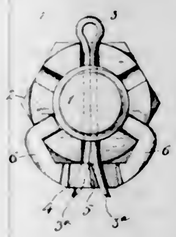
1. In combination with a signal impulse amplifier, a work circuit having a quiescent condition during the reception of impulses of normal maximum amplitude, a coil connected to the output circuit of the amplifier, and a biasing source of electromotive force supplying current for said coil adapted to maintain it magnetically biased up to an intensity equal to that of the normal maximum amplitude of the received signal impulses, said work circuit being connected to said coil for receiving therefrom short sharp impulses produced by the reception of a signal wave departing from the zero axis of impulses by more than a normal maximum amplitude, and the consequent overcoming of the biasing current of said coil, whereby the quiescent condition of said work circuit is changed to an energized condition.

1,858,038. LUG STRAP. JOSEPH H. CHADBOURNE, Danielson, Conn., assignor to E. H. Jacobs Mfg. Co., a Corporation of Connecticut. Filed May 29, 1930. Serial No. 456,894. 1 Claim. (Cl. 139—153.)



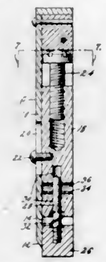
An improved process of making lug straps which consists in assembling a plurality of strips of textile material, certain of said strips being of less length than the total length of the strap and greater than one-half of said length, constructed and arranged to provide predetermined portions to constitute a reinforcing overlap at the central portion, and forming said plurality of straps into final or U-shaped form.

1,858,039. LOCK FOR CASTELLATED NUTS. GEORGE T. COOKE, South Norwalk, Conn. Filed July 24, 1931. Serial No. 552,842. 2 Claims. (Cl. 151—5.)



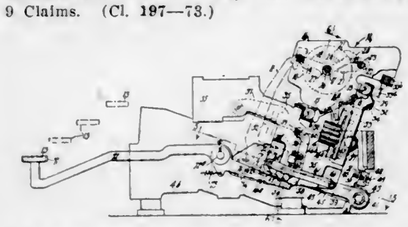
1. A locking device for a castellated nut comprising, a block having passages therethrough forming between them a wedge, and means for rigidly holding said block against the side of such a nut with the apex of said wedge facing a notch therein, said holding means comprising a rigid hook at each end of said block, the ends of said hooks being inturned toward each other to hook into the two notches on opposite sides of the first mentioned notch, to embrace that portion of said nut between said two notches.

1,858,040. PACKING STABBER. HENRY W. DE JARNETTE, Des Moines, Iowa, assignor of one-half to John C. Hol, Des Moines, Iowa. Filed July 21, 1930. Serial No. 469,369. 4 Claims. (Cl. 164—119.)



1. In a packing stabber, an L-shaped chisel, and a depth gauge and protector for the point thereof comprising a protector member, a stop therefor, spring means to hold said member away from said stop and in position for protecting said chisel point and limit means to limit the movement of said protector member away from said stop, said stop having a slot and screw connection with said chisel, a shoulder on said chisel and a set screw in said stop and engaging said shoulder.

1,858,041. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1925. Serial No. 71,876. 9 Claims. (Cl. 197—73.)



1. In a typewriting machine, the combination with a revoluble platen, a platen-carriage, and rails for guiding said carriage in its letter-feed movement, of adjustable means for relatively truing said platen for parallelism to said rails, said means including adjustable devices for shifting and securing the bearing of one end of the platen, the other end of said platen being in a fixed bearing.

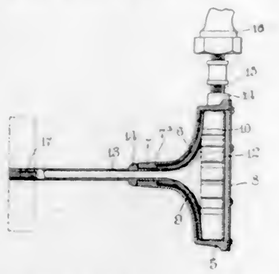
1,858,042. HIGHER ALKYL RESORCINOLS. ALFRED R. L. DOHME, Baltimore, Md., assignor to Sharp & Dohme, Inc., Baltimore, Md., a Corporation of New Jersey. Filed Oct. 12, 1927. Serial No. 225,833. 6 Claims. (Cl. 260—154.)

1. New and useful germicidal and antiseptic products comprising alkyl resorcinols having not less than eight carbon atoms in the alkyl group.

1,858,043. FLUID MOTOR. RICHARD J. GLASS, Columbus, Ohio. Filed Mar. 20, 1931. Serial No. 523,974. 4 Claims. (Cl. 253—2.)

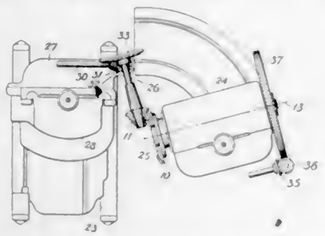
1. A liquid motor including a housing having a chamber including a circular portion at one end and a hollow

lateral extension thereof of conoidal form, a rotor mounted in said housing in parallel relation thereto, said rotor including a hollow member, the interior surface of which is of conoidal form, said member provided at its base with a circular series of vanes to rotate within the circular



portion of the housing, a nozzle in the housing for conducting liquid pressure to the rotor, and a hollow work shaft constituting the exhaust of the motor, said work shaft fixed to the apex of the rotor and extending through the apex end of the taper portion of the housing.

1,858,044. METHOD OF AND APPARATUS FOR BURNISHING GEARS. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Apr. 9, 1928. Serial No. 268,636. 15 Claims. (Cl. 29—90.)



1. The method of burnishing tapered gears, which comprises bringing a worm and a tapered gear into engagement with the axis of the worm offset from and angularly disposed to the axis of the gear and extending diagonally across the face of the gear, and rotating the worm on its axis continuously in mesh with the gear.

15. In apparatus for burnishing taper gears, a work spindle adapted to support a tapered gear, a tool spindle, a taper worm of constant pitch mounted on the tool spindle, means for adjusting the spindles relatively to each other to bring the worm and gear into engagement with the axis of the worm offset from and angularly disposed to the axis of the gear, means for producing pressure between the worm and gear while in engagement, means for rotating the tool and work spindles continuously on their respective axes, a rotatable carrier, on which one of said spindles is mounted, movable about an axis intersecting the axis of the work spindle, and means for moving the carrier continuously on its axis whereby to roll the worm and gear together continuously while in mesh.

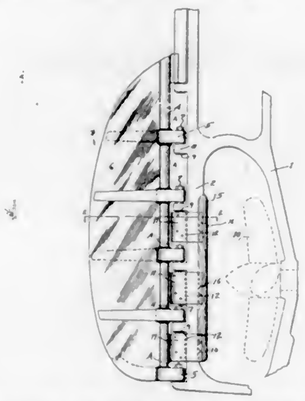
1,858,045. WIRE SUPPORT. LEM E. HENDEE, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed June 13, 1928. Serial No. 284,988. 2 Claims. (Cl. 173—314.)

2. A device of the character described, comprising an insulator having an axial conductor receiving opening and split diametrically to divide the same into complementary sections, a bracket having a part engaged with a flat walled recess formed in one section at its outer central portion so as to be spaced considerably from the extremities of the split between the insulator sections, a clamping member having a part engaged with a flat walled recess formed in the outer central portion of the other



insulator section, whereby said part of the clamping member is likewise spaced considerably from the extremities of the split between the insulator sections, and means spaced from the insulator for drawing the clamping member toward the bracket to hold the insulator sections together and the insulator to the bracket.

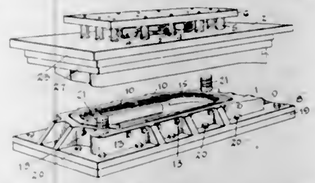
1,858,046. RUDDER POST ATTACHMENT. ROBERT HILL, Oakland, Calif. Filed Aug. 26, 1931. Serial No. 559,401. 7 Claims. (Cl. 115—34.)



1. A rudder post attachment of the class described comprising a ship having a rudder post, a rudder, hinge members for said rudder post and said rudder, detachable means for filling the space between the rudder post, the rudder and the hinge members.

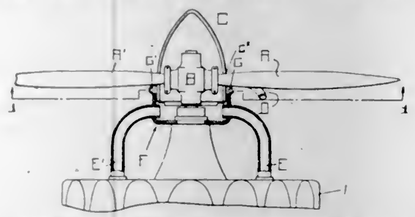
1,858,047. SHEET METAL DIE. GEORGE E. IRELAND, Toledo, Ohio, assignor, by mesne assignments, to The City Auto Stamping Company, Toledo, Ohio, a Corporation. Filed June 10, 1930. Serial No. 460,259. 24 Claims. (Cl. 113—49.)

1. In a die, a stationary clamping member, a movable die member and a movable clamping member, the clamping members having endless spaced clamping surfaces engaging the inner and outer margins of a flaring endless sheet metal blank for supporting the sheet metal blank in a position that its surface will be inclined to the direction of movement of the movable die member, and means



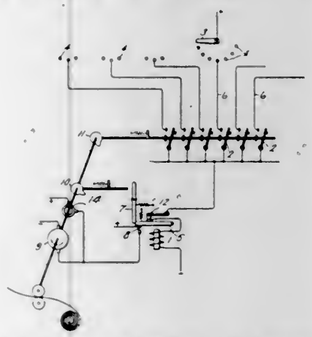
for guiding the movable die member intermediate the clamping surfaces of the clamping member and in a direction substantially perpendicular to the plane thereof.

1,858,048. AEROPLANE ENGINE EXHAUST. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to C. Francis Jenkins, Inc., Washington, D. C. Filed Feb. 1, 1929. Serial No. 336,855. 6 Claims. (Cl. 60—32.)



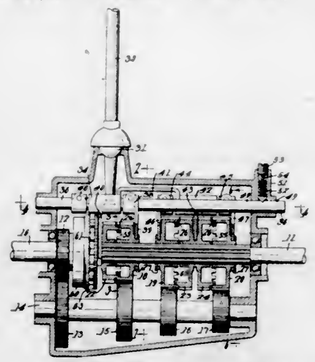
1. In a device of the character described, a motor, a propeller having a hub and blades rotated by the motor, exhaust manifolds, an exhaust gas collector consisting of an exhaust pan and a hollow nose-cap enveloping the hub of the propeller, said exhaust gas collector receiving the exhaust from the motor, means for clamping the nose cap to the blades of the propeller in spaced relation to the hub thereof, and exhaust pipes extending outwardly from the nose-cap and rotating with the propeller.

1,858,049. TICKET ISSUING MACHINE. ARTHUR J. JOHNSTON, Aldan, Pa., assignor to General Electric Company, a Corporation of New York. Filed June 19, 1930, Serial No. 462,358, and in Great Britain July 9, 1929. 4 Claims. (Cl. 271—2.4.)



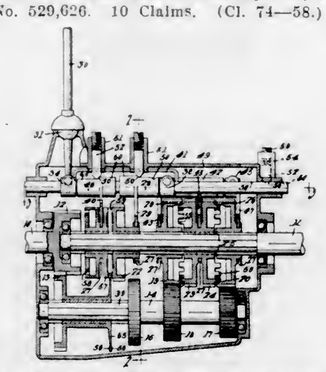
1. In a ticket issuing machine, the combination of driving means for said machine, a relay, a circuit for said relay, contacts in said circuit, means responsive to the energization of said relay for opening said contacts and for effecting the operation of said driving means, locking means for maintaining said contacts open, and means controlled by said driving means for releasing said locking means.

1,858,050. CHANGE SPEED GEAR SET. NATHANIEL LOMBARD, Worcester, Mass. Filed Mar. 23, 1931. Serial No. 524,521. 4 Claims. (Cl. 74—58.)



1. In a transmission gear set, the combination with a motor shaft, a driven shaft and a counter-shaft, of means by which the counter-shaft is driven constantly, from the driving shaft, a gear on the counter shaft, a pair of gears on the driven shaft, one normally meshing with the gear on the counter-shaft but freely rotatable on the driven shaft, the other located adjacent to the said gear on the driven shaft and slidably keyed thereto and normally out of mesh with the gear on the counter-shaft, said pair of gears having frictional surfaces on their adjacent sides adapted to come into contact with each other to drive the keyed gear from the loose gear by friction prior to the movement of the tight gear into mesh with the gear on the counter-shaft, a slidable rod adapted to be moved longitudinally by the operator and having movably mounted thereon a yoke for engaging the keyed gear and moving it, two collars fixed on the rod and spaced from the ends of the yoke when in neutral position, said rod having notches and a spring-pressed plunger normally engaging in one of said notches, whereby when the rod is pushed over the plunger will be forced outwardly in the notch while the keyed gear comes into frictional contact with the conical surface on the loose gear, for the purpose described.

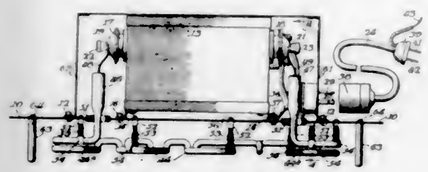
1,858,051. HIGH SPEED GEAR SHIFT. NATHANIEL LOMBARD, Worcester, Mass. Filed Apr. 13, 1931. Serial No. 529,626. 10 Claims. (Cl. 74—58.)



1. In a transmission gear set, the combination with a motor shaft, a driven shaft and a counter-shaft, of a gear on the motor shaft and a disc and gear slidably keyed to the counter-shaft, said gears meshing with each other by which the counter-shaft is driven, another gear on the counter-shaft, a pair of gears on the driven shaft, one normally meshing with the last named gear on the

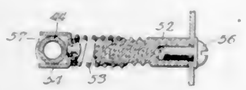
counter-shaft but freely rotatable on the driven shaft, the other having the same size and number of teeth and located adjacent to the said gear on the driven shaft and slidably keyed thereto, said pair of gears having frictional surfaces on their adjacent sides adapted to come into contact with each other to drive the loose gear by the tight gear by friction prior to the movement of the keyed gear into mesh with the gear on the counter-shaft, and a pair of intermeshing gears, one fixed on the counter-shaft and the other slidingly keyed to the driven shaft, the latter having a friction surface adapted to engage said disc to be driven thereby to bring it up to speed before shifting.

1,858,052. SIGN. ARCHIE J. MCMASTER, Chicago, Ill., assignor to G-M Laboratories, Inc., Chicago, Ill. Filed July 18, 1929. Serial No. 379,134. 6 Claims. (Cl. 40—130.)



1. In a neon sign, a mounting panel, a transformer mounted on one side thereof, a luminescent tube, means for resiliently mounting said tube on the opposite side of the panel, terminal members for said tube, said panel having apertures through which the terminal members extend, the terminal members being supported only by the tube to permit movement thereof upon expansion and contraction of the tube, and a flexible conductor connecting the terminal members with the transformer.

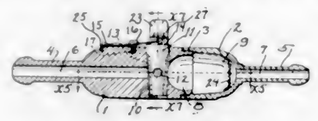
1,858,053. SUPPORT FOR LUMINESCENT TUBES. ARCHIE J. MCMASTER, Chicago, Ill., assignor to G-M Laboratories, Incorporated, Chicago, Ill., a Corporation of Illinois. Original application filed July 18, 1929, Serial No. 379,134. Divided and this application filed Jan. 2, 1930. Serial No. 417,996. 1 Claim. (Cl. 248—30.)



In a neon sign, a mounting device for mounting a neon tube on a panel comprising an insulating mounting post rigidly secured at one end to the panel, the other end of the post being threaded, a U-shaped clip substantially encompassing three sides of a tube and leaving the other side open, a transparent cement for securing the tube in said clip, said cement bridging the open end of the arm of the U-shaped member, and a helical spring secured to said clip and threaded over the threaded portion of said post.

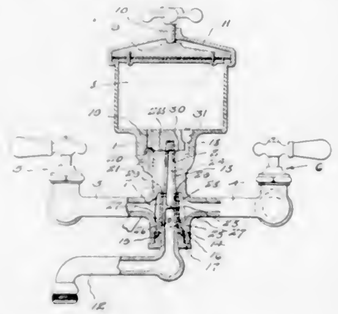
1,858,054. MULTIPLE-WAY BY-PASS VALVE. WILBUR G. MILLER, Los Angeles, Calif. Filed Feb. 2, 1927, Serial No. 165,348. Renewed Sept. 30. 1931. 8 Claims. (Cl. 251—112.)

1. In combination, a valve barrel having a screw threaded socket and a taper valve-plug seat, a taper valve plug in such seat, said plug having a bearing at its larger end; a spring lever arranged with one end resting on the barrel and the other end tip resting on said bearing, and spaced from the barrel between said ends and from said socket; and a screw extending through and journalled in the spring and screwed into said socket



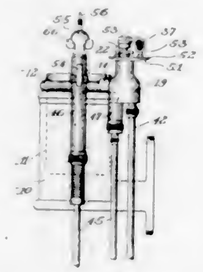
and having a head to act on the spring to cause it to variably press the taper plug into its taper seat in said barrel.

1,858,055. FOUNTAIN WASHING DEVICE. HOWARD C. MYERS, Oneida, N. Y., assignor of one-half to Isabel L. Lewis, Oneida, N. Y. Filed June 12, 1929. Serial No. 370,226. 8 Claims. (Cl. 299—83.)



8. A fountain washing device including a laterally swingable nozzle, a valve controlling the flow of water to the nozzle, a soap receptacle having an inlet passage and an outlet passage, and valve means operable by the lateral swinging of the nozzle for controlling the flow of water through the nozzle, to the inlet passage of the soap receptacle, and to the outlet passage of the soap receptacle respectively.

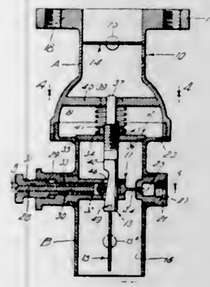
1,858,056. DENTAL APPARATUS. ALPHONSE F. PIEPER, Rochester, N. Y. Filed July 2, 1928. Serial No. 289,744. 11 Claims. (Cl. 128—257.)



1. In a device of the class described, a closed container having inlet and outlet passages for fluid under pressure, a valve casing connected with the outlet passage of the container, a flexible tube connected with the casing and having a nozzle on its outer end provided with a self closing valve, a supply conduit connected with said inlet passage and independent of said flexible tube, a second supply conduit connected with the casing and a valve

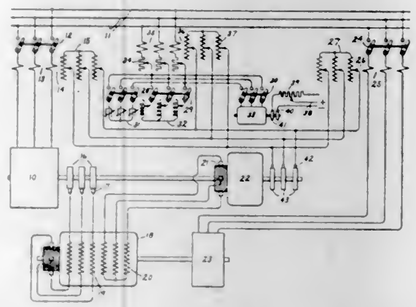
within the casing between the ends of said tube and the second supply conduit adapted in one position to establish communication between said ends while closing said outlet passage and in another position serving to close the second supply conduit and to establish communication between the tube and outlet passage of the container.

1,858,057. CARBURETOR. FRANK E. PILLING, Long Beach, Calif. Filed May 4, 1929. Serial No. 360,422. 4 Claims. (Cl. 261—51.)



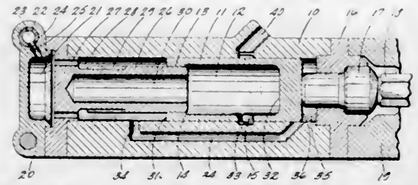
1. A carburetor including, a tubular body having an enlarged upper portion forming a mixing chamber, a valve seat on the interior of the body at the lower end of the mixing chamber, a fuel valve for controlling a port discharging into the body at a point spaced below the mixing chamber, a stem on the fuel valve, a flow actuated valve in the mixing chamber adapted to cooperate with the seat and operable out of cooperation with the seat by the flow of fluid through the body, and means operatively connecting the valves including, a cam operatively engaging the stem of the fuel valve, and an adjustable connection between the cam and the flow actuated valve whereby the fuel valve and the flow actuated valve may have the desired relative operation.

1,858,058. SLIP REGULATION OF ASYNCHRONOUS MACHINES. ERICH REIMANN, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 2, 1930, Serial No. 441,022, and in Germany Apr. 11, 1929. 10 Claims. (Cl. 172—274.)



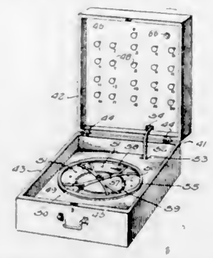
10. In combination, a source of alternating current, a wound secondary asynchronous machine having its primary winding connected to said source, a commutator machine having an exciting winding, connecting means for impressing on said secondary a voltage whose magnitude is substantially directly proportional to the voltage of said commutator machine, frequency changing means for energizing said exciting winding, an alternating current dynamo electric machine mechanically connected to said commutator machine and having its primary winding connected to said source, and means for energizing said frequency changing means with a current whose magnitude is substantially directly proportional to the current flowing in the primary winding of said dynamo electric machine.

1,858,059. FLUID OPERATED TOOL. JOHN E. RENFER, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 5, 1931. Serial No. 513,670. 3 Claims. (Cl. 121—17.)



3. In a fluid actuated machine, a cylinder, a plug secured to one end of said cylinder and extending therein, a cylinder constant pressure chamber toward one end of said cylinder, inlet passages within said plug for continually supplying motive fluid to said chamber, a cup-shaped piston reciprocable within said cylinder having a periodical pressure chamber, exhaust passages from said chamber to the periphery of said piston, intermittent pressure area formed by one end of said piston, means within said plug and controlled by said piston for admitting pressure fluid to said periodical pressure chamber, ports within said cylinder controlled by said piston for supplying motive fluid to said intermittent pressure area and ports within said cylinder for exhausting the pressure exerted upon said intermittent pressure area and within said periodical pressure chamber.

1,858,060. AMUSEMENT DEVICE. THOMAS A. RICCI, Richmond, Va. Filed Nov. 28, 1930. Serial No. 498,716. 5 Claims. (Cl. 273—142.)

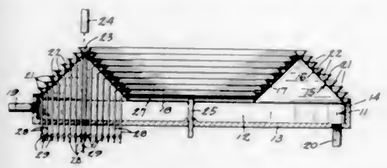


1. In an amusement device of the character described consisting of a casing having a partition, a path of inner contacts mounted on said partition connected to an electrical circuit having signals therein; a path of outer contacts mounted on said partition connected to an electrical circuit having signals therein, a rotatable wheel, a pair of brushes secured to said wheel and adapted to respectively engage said inner and outer contacts to operate one or more signals.

1,858,061. EVAPORATOR. JULIUS ROEMER, Lakewood, Ohio. Filed May 6, 1929. Serial No. 360,965. 11 Claims. (Cl. 257—181.)

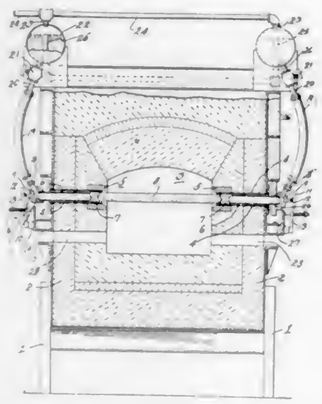
5. An evaporator comprisng; two upwardly converging intersecting annular walls; a series of annular fins

disposed on each annular wall forming a series of annular troughs each positioned to underlie the trough next above, whereby liquid introduced into the top trough of each annular wall will fill such top trough and then over-



flow into the troughs below, and the liquid contained in said troughs is spread over areas totalling substantially greater than the combined horizontal area subtended by both said walls; and means for introducing water into such top trough of said walls.

1,858,062. ELECTRIC FURNACE. ALFRED RUCKSTAHL, Detroit, Mich., assignor to Holcroft & Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 4, 1930. Serial No. 486,340. 8 Claims. (Cl. 13—20.)



1. In a device of the character described, an electric furnace having a series of openings in opposite sides thereof a series of hollow tubular refractory bar supports mounted in the said apertures, a series of refractory bars mounted between and supported by the said supports, the refractory bars and supports being adapted for connection in an electric circuit, a tank at each side of the furnace and above the said supports, a water supply pipe opening into the top of each tank, an outlet pipe one end opening above the bottom of each tank open to atmosphere to prevent pressure in the tanks, and a series of conduits each connecting the bottom of one of the tanks with each of the refractory bar supports on the respective sides of the furnace, the said conduits being provided with a section of rubber hose, the conduits opening into the interior of the hollow refractory bar supports.

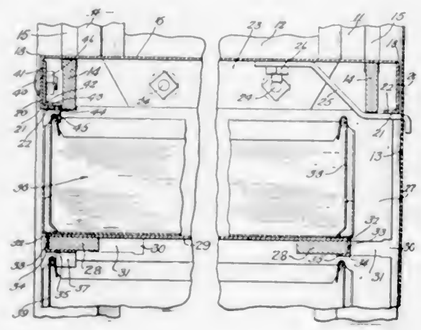
1,858,063. HEATER UNIT FOR CATHODES OF VACUUM TUBES AND METHOD OF PRODUCING SAME. WALTER J. SKINNER, Bloomfield, N. J., assignor to Van Wickland Products Co., Newark, N. J., a Corporation of New Jersey. Filed Feb. 7, 1931. Serial No. 514,156. 8 Claims. (Cl. 250—27.5.)

1. A device of the character described comprising a filament wire formed into a double helix, an insulating collar at each end of the helix, each collar being formed with a central aperture, a rod passing through the central aperture of each collar and through the central axis



of the helix, each collar being formed with two side apertures spaced from the central aperture, the filament wire passing through both side apertures of each collar.

1,858,064. RACK. WALTER N. VANCE, North Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed June 20, 1929. Serial No. 372,303. 6 Claims. (Cl. 45—7.)



5. The combination of a rack comprising spaced main shelves, auxiliary shelves arranged between the main shelves, drawers slidably mounted on said main and auxiliary shelves, removable means depending from the forward edges of the main shelves for limiting the sliding movement of the drawers on a lower auxiliary shelf, and means struck from the auxiliary shelves and integral therewith for limiting the sliding movement of a drawer arranged below said auxiliary shelf.

1,858,065. LOCKING MECHANISM. JOSEPH VERDERBER, Cleveland, Ohio. Filed Aug. 22, 1928, Serial No. 301,191. Renewed Oct. 26, 1931. 4 Claims. (Cl. 192—8.)

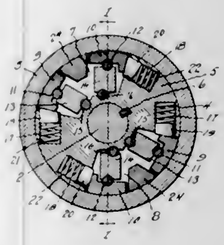
1. A locking mechanism for preventing movement between two relatively movable members including a sleeve adapted to be fixed with respect to one of said members, a generally circular disk non-rotatably secured to the other of said movable members, said disk being provided with a plurality of circumferential notches extending radially inwardly, bores in corresponding faces of said notches, thimbles in said bores, spring means urging said thimbles outwardly, an operating member having projections thereon extending into said notches, respectively, a friction block in each of said notches adapted to be engaged by one of said projections, said friction blocks and

the inner ends of said notches each being provided with depressions for receiving bearing means, means cooperating with said depressions to provide with said disk and said friction blocks a locking mechanism for locking said sleeve and said disk against relative rotation in one direction, said friction blocks each being provided at one



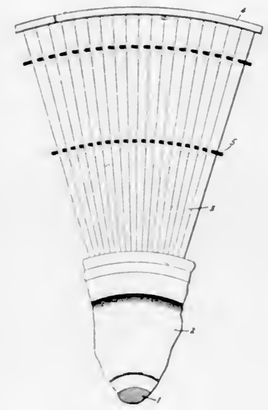
end with a lateral extension for cooperation with said thimble, said projections and said friction blocks having such dimensions circumferentially of said sleeve as to nearly but not completely fill said notches, said operating member serving to render said locking mechanism ineffective.

1,858,066. LOCKING MECHANISM. JOSEPH VERDERBER, Cleveland, Ohio. Filed Oct. 11, 1928, Serial No. 311,764. Renewed Oct. 26, 1931. 7 Claims. (Cl. 192—8.)



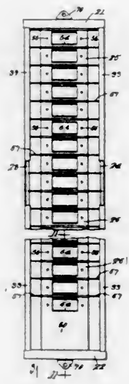
1. In a locking member of the character described, the combination of a shaft, a sleeve surrounding said shaft and non-rotatable with respect thereto, a generally circular disk fitting within said sleeve and having a plurality of peripheral notches therein extending radially inwardly, bores in corresponding faces of said notches, thimbles in said bores, spring members urging said thimbles outwardly, an operating member having projections thereon extending into said notches respectively, a plurality of pairs of friction blocks arranged in each of said notches and adapted to be engaged by said projections respectively, said friction blocks and the inner ends of said notches each being provided with depressions for receiving bearing means, means cooperating with said depressions to provide with said disk and said friction blocks locking mechanism for locking said sleeve and said disk against relative rotation in either direction said friction blocks each being provided at one end with a lateral extension for cooperation with said thimble, said projections and said friction blocks having such dimensions circumferentially of said sleeve as to nearly but not completely fill said notches, said projections on said operating member serving to render said locking mechanism ineffective as a means for moving said shaft in either direction.

1,858,067. ELASTIC FLUID TURBINE. GLENN B. WARREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 21, 1930. Serial No. 490,232. 3 Claims. (Cl. 253—77.)



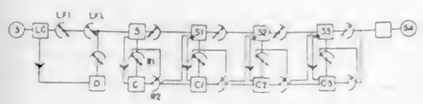
1. The combination with a turbine rotor having a row of buckets, of a continuous tie wire for the buckets comprising a plurality of strands extending through passages in the buckets, said strands being loose enough that they do not become tight when the wheel expands due to centrifugal force.

1,858,068. TIME CARD HOLDER. EDWARD G. WATKINS and HAROLD E. HOBBY, Gardner, Mass., assignors to Simplex Time Recorder Company, Gardner, Mass., a Corporation of Massachusetts. Filed Oct. 9, 1930. Serial No. 487,511. 11 Claims. (Cl. 40—124.)



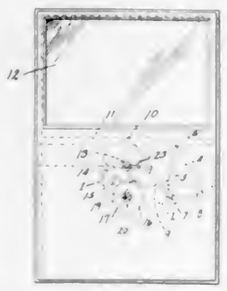
1. A card holder comprising an elongated open-front casing having in-turned front edge portions, a plurality of partition members, and side bars in which said partition members are mounted, said side bars being longitudinally slidable in said casing for assembly therewith.

1,858,069. AUTOMATIC TELEPHONE EXCHANGE SYSTEM. ESMOND PHILIP GOODWIN WRIGHT, Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Filed July 12, 1929, Serial No. 377,726, and in Great Britain Sept. 13, 1928. 14 Claims. (Cl. 179—18.)



1. In a telephone system, the combination of a plurality of conversation switches, a control switch, means for operating said control switch in response to impulses to hunt for a predetermined conversation switch and for marking said switch.

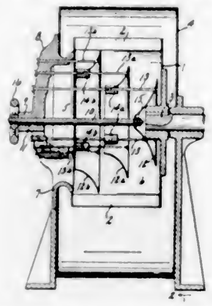
1,858,070. CENTER LIFT WINDOW REGULATOR. EDWARD L. ACKERMAN, Detroit, Mich., assignor to Ackermann-Blaesserfezzy, Inc., Detroit, Mich., a Corporation of Michigan. Filed May 17, 1930. Serial No. 453,115. 6 Claims. (Cl. 268—126.)



1. In a window regulator, a plate having an angular depression, an arm pivotally mounted in the angular depression, the angular depression being provided with an arcuate slot adjacent the free end of the said arm, a pin carried by the free end of the said arm and extending through the slot, a lifting arm pivotally connected at one end to the pin on the opposite side of the arcuate slot from the first named arm, the free end of the lifting arm being adapted for engagement against the lower edge of a window, a gear rotatably mounted on the plate, an arm formed integrally with the gear and pivoted to the lifting arm intermediate its ends, crank operated means for turning the said gear on its axis and yieldable means resisting rotation of the gear to lower the window and assisting rotation of the gear to raise the window.

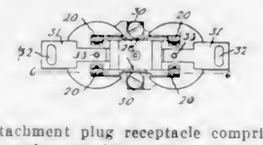
1,858,071. CENTRIFUGAL APPARATUS. THOMAS CHESTER, Pittsburgh, Pa. Filed Oct. 20, 1931. Serial No. 569,949. 4 Claims. (Cl. 230—114.)

2. In a centrifugal device comprising a rotatably mounted impeller and a casing therefor having an inlet opening, a plurality of members arranged for adjustment along the axis of said impeller between closed position at said opening and open position within the impeller, said members being adapted for cooperation one seating upon another to close said opening when in said closed position, and each to direct flow from a portion of said opening to a portion of said impeller when in said open position, each of said members having for the latter



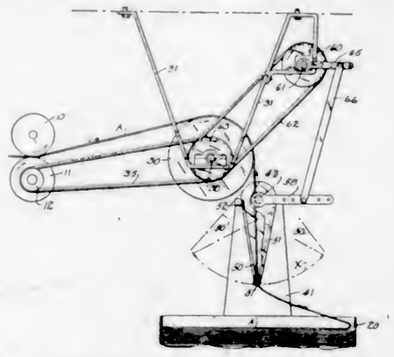
purpose an anticlastic surface concentric with said impeller, one of said members being circular and another being annular.

1,858,072. ATTACHMENT PLUG RECEPTACLE. ELLIOTT CLEMENCE, New York, N. Y., assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed June 25, 1927. Serial No. 201,504. 11 Claims. (Cl. 173—330.)



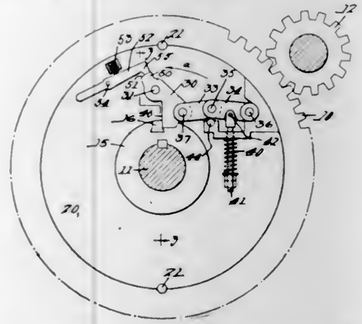
1. An attachment plug receptacle comprising an insulator body portion provided with a plurality of recesses from the top thereof, duplicate circuit contact members and, duplicate receptacle attaching straps, which are located in said recesses, a pair of cover plates mounted thereover with a single attaching means for each of said cover plates whereby said cover plates are held in operative position, and lug means on said contact members for engaging the sides of said recesses and said cover plates whereby said contact members are firmly held in operative position.

1,858,073. PAPER DELIVERY MECHANISM. FRED B. COLE, Norwalk, Ohio, assignor to Rotary Printing Company, Norwalk, Ohio, a Corporation of Ohio. Filed Sept. 15, 1930. Serial No. 481,871. 3 Claims. (Cl. 270—79.)



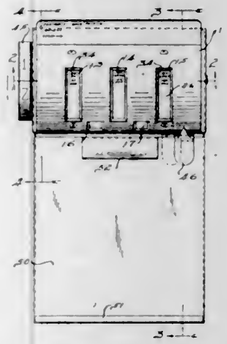
1. The combination of a rotary drum over which a web of paper may pass, means for rotating it, a hollow guide pivotally mounted adjacent the drum having a comparatively wide entrance mouth and a discharge mouth, standards pivotally supporting the guide, a rock arm on the guide, a pulley rotatably connected with the drum, a crank driven by the pulley, and a pitman connecting the crank and rock arm.

1,858,074. OVERLOAD RELEASE. MARK H. DAMERELL, Worcester, Mass. Filed Apr. 10, 1930. Serial No. 443,201. 3 Claims. (Cl. 192—56.)



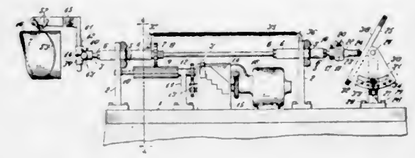
1. An overload release comprising a driving member, a driven member movable thereby, a connector movably mounted on said driving member, means effective to hold said connector in operative position during normal operation of the driven member but permitting said connector to yield and to be moved to inoperative position under abnormal strain, and a spring-actuated latch effective to retain said connector in inoperative position after such yielding movement and to exert a cam action on said connector to give said connector a slight independent movement to clearance position.

1,858,075. BRIDGE SCORING DEVICE. WILLIAM V. DE GALAN, Grosse Ile, Mich. Filed Mar. 24, 1931. Serial No. 524,936. 3 Claims. (Cl. 235—90.)



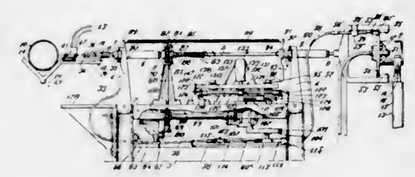
1. In a bridge scoring device, a panel having relatively narrow window openings therein for the card suits, indicia on said panel to identify the window openings, a drum journaled back of said panel, groups of scoring indicia on said drum for tricks taken in excess of the required book, means for rotating said drum to bring the group thereon corresponding to the number of excess tricks taken into registry with said openings and means for moving said drum axially to bring the desired appropriate indicia thereon, corresponding to the trick value, into registry with the window openings.

1,858,076. APPARATUS FOR CUTTING PIPE FOR ANGLE BENDS. FRANK J. DOUGLASS, Chicago, Ill., assignor to Douglass Brothers Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 6, 1930. Serial No. 493,819. 14 Claims. (Cl. 266—23.)



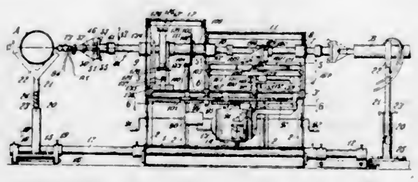
1. In a pipe cutting apparatus, a supporting frame, a shaft journaled for both rotary movement and bodily reciprocating movements longitudinally of the axis of the shaft, means for supporting a pipe section with its longitudinal axis in substantial prolongation of the axis of the shaft, a cutting torch, means for supporting the torch in offset relation at one end of the shaft so that the torch may be revolved about the pipe section as the shaft is rotated, means for rotating the shaft, and means for imparting one complete cycle of reciprocations to the shaft for each rotation thereof.

1,858,077. PIPE CUTTING AND BEVELING APPARATUS. FRANK J. DOUGLASS and ALBERT S. MCCAWLEY, Chicago, Ill., assignors to Douglass Brothers Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 6, 1930. Serial No. 493,820. 34 Claims. (Cl. 266—23.)



2. In a pipe cutting apparatus, means for supporting a pipe-section, a cutting torch, means for supporting the torch, revolving same about the pipe section, and moving the torch longitudinally of the pipe as the torch is revolved, and means for automatically varying the inclination of the torch with respect to the longitudinal axis of the pipe so as to vary the bevel of the cut produced in the pipe.

1,858,078. APPARATUS FOR CUTTING AND BEVELING PIPES. FRANK J. DOUGLASS and ALBERT S. MCCAWLEY, Chicago, Ill., assignors to Douglass Brothers Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1931. Serial No. 507,978. 39 Claims. (Cl. 266—23.)



1. In a pipe cutting apparatus, an operating shaft, a cutting torch carried by the shaft in offset relation thereto,

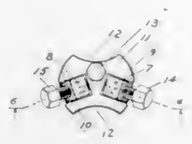
and a means for rotating and simultaneously reciprocating the shaft, said means being adaptable for imparting either one or two complete cycles of reciprocations to the shaft for each rotation thereof.

1,858,079. CONVEYER CHAIN. ROBERT R. FAUNTLEROY, St. Charles, Ill. Filed Dec. 6, 1930, Serial No. 500,651. Renewed Apr. 1, 1932. 2 Claims. (Cl. 198—189.)



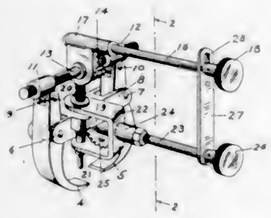
1. A chain link comprising a lower part formed with a curved inner surface and having upturned ends forming the bearing ends of the link, a rib formed on said ends adjacent the bearing surface, the ends extending longitudinally of the lower part to terminate in flat portions, a top part formed with grooves and terminating in flat portions adapted to interfit with said lower part, and means securing the top and lower part rigidly together.

1,858,080. DENTAL CROWN REMOVER. OSCAR A. FLAGSTAD, Minneapolis, and REUBEN G. LEE, Hoffman, Minn. Filed Apr. 28, 1930. Serial No. 447,797. 6 Claims. (Cl. 32—10.)



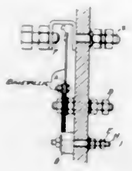
1. A crown remover comprising a body member, not more than two coacting jaws pivotally secured to the body member for movements in planes disposed angularly with respect to each other, a forcing member carried by the body member, and means for effecting a clamping action to the jaws.

1,858,081. DENTAL CROWN REMOVER. OSCAR A. FLAGSTAD, Minneapolis, and RUEBEN G. LEE, Hoffman, Minn. Original application filed Oct. 10, 1927, Serial No. 225,298. Divided and this application filed Apr. 28, 1930. Serial No. 447,798. 12 Claims. (Cl. 32—10.)



1. A dental crown remover comprising a pair of jaws adapted to grip the sides of the crown, a link pivotally connecting the jaws, a tooth engaging screw operating through the link between the jaws, and a pair of shafts extending from the remover, one of which has a worm-screw mechanism for operating the jaws and the other of which has a gear mechanism for operating the screw.

1,858,082. TIME DELAY DEVICE. EDOUARD FOUCAULT, Paris, France, assignor to General Electric Company, a Corporation of New York. Filed Mar. 14, 1930, Serial No. 435,890, and in France Aug. 20, 1929. 5 Claims. (Cl. 200—122.)

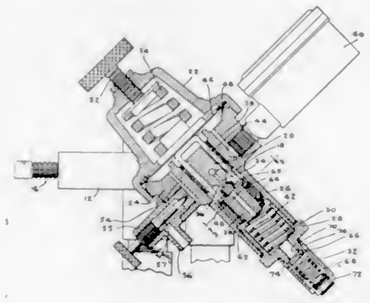


1. A thermal responsive device having oppositely acting portions in heat conducting relation and means for heating only one of said portions to effect operation of the device whereby the heat conducted to the other portion effects the reverse operation of the device when the heating of said one portion ceases.

1,858,083. COMPOUND FOR PREPARING MOLDS FOR METAL CASTINGS. GEORGE H. GOLDSMITH, Toronto, Ontario, Canada. Filed Oct. 7, 1929. Serial No. 398,095. 9 Claims. (Cl. 22—189.)

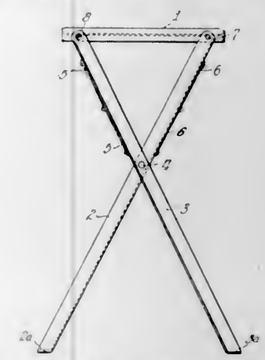
1. Compound for treating dry sand cores and molds comprising a compound containing carbon-tetrachloride and a finely powdered inert filler material suspended therein by agitation to be applied directly to the dry cores or molds or by dipping the latter thereinto.

1,858,084. PRESSURE REGULATING DEVICE FOR GASES. JAY A. HEIDBRINK, Minneapolis, Minn. Filed Oct. 25, 1928. Serial No. 315,000. 5 Claims. (Cl. 50—23.)



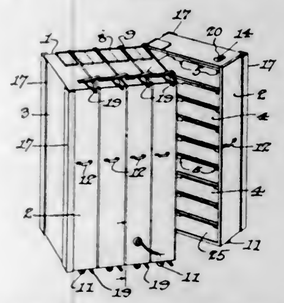
1. In a pressure regulating device for gases, the combination of a source of supply of gas under pressure, a dished member, a diaphragm closing the open end of said dished member to form a chamber, a connection for delivering gas from said source to said chamber, a valve seat in said connection, a tubular member carried by said dished member, a slidable block in said tubular member, a plug carried by one end of said block for constituting a valve for engagement with said valve seat, a peripheral shoulder on said end of the block, a spring in said tubular member engaging the other end of said block and tending to hold said valve against said seat, a sleeve surrounding said block in spaced relation to the inner wall of said tubular member, said sleeve being held in position between said shoulder and said spring, balls carried by said sleeve engaging said inner wall, a valve opening member interposed between said diaphragm and said block, a connection having a passageway leading from said chamber, and a device for controlling the volume of gas going through said passageway.

1,858,085. FOLDING STAND. WILLIAM W. HORN, River Forest, Ill. Filed Apr. 30, 1928. Serial No. 273,790. 4 Claims. (Cl. 45—11.)



1. In a folding stand, a rectangular top frame, pairs of supporting members pivoted together in crossed relation at opposite sides of the frame, each pair comprising an inner member and an outer member, said inner member being of L cross-section and having an outer flange pivoted to the top frame and an inner flange projecting inwardly toward the top frame, means for releasably securing the outer members to the frame, and crossbraces connecting said outer members, the top frame when released fitting into the inner supporting members and the cross-braces confining said frame in said inner members when the supporting members of each pair are disposed in superposed parallel relation.

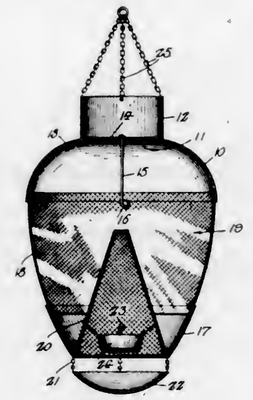
1,858,086. BAKER'S PROOFING CABINET. CHARLIE E. HOUSE, Farmington, Iowa. Filed June 17, 1931. Serial No. 545,127. 6 Claims. (Cl. 107—7.)



6. In a baker's proofing cabinet, the combination of a multiple number of cabinet units, each unit being independently mounted on casters, each unit being vertically hinged to the adjacent unit for a swinging movement, a series of shelves in each of the cabinet units, each of said shelves having recessed portions for the passage of steam from one compartment to the compartment above in the several units of the cabinet, a pan of water in the central cabinet unit, a heating element in said pan of water, and means electrically connecting said heating element with a source of electric current whereby steam sufficient for the purposes of the cabinet may be produced within the cabinet.

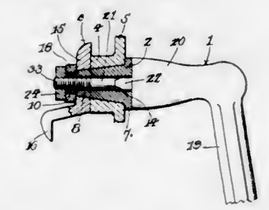
1,858,087. INSECT TRAP. CHRISTINA C. HOWARD, Great Falls, Mont. Filed Mar. 20, 1931. Serial No. 524,164. 1 Claim. (Cl. 43—107.)

An insect trap comprising a suspendable structure including an open-ended upwardly flaring reticulated member, imperforate centrally apertured concavo-convex members secured to the open ends of the reticulated member in covering relation to said ends, an upwardly extending reticulated open-ended cone having its base secured within the opening of the lower of said imperforate members,



a bait receptacle suspended on said lower imperforate member below the opening thereof, a bait receptacle suspended on and arranged within the lower portion of said reticulated cone, a removable cover for the opening of the upper imperforate member, and a bait holder suspended from said cover into said perforate member.

1,858,088. STOVE LATCH. HARRY C. HOWARD, Rockwood, Tenn. Filed Nov. 25, 1929. Serial No. 409,634. 3 Claims. (Cl. 292—202.)

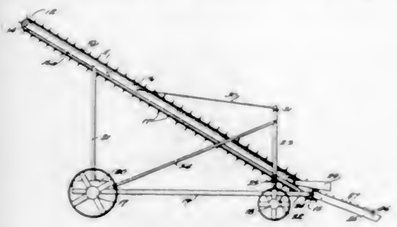


1. A stove handle comprising, an anchoring portion adapted to be inserted through a door of a stove, a latching portion operable by the anchoring portion, means for securing said portions in position with respect to the stove, and a detachable handle proper portion for actuating the anchoring and latching portions to latch and unlatch the door, said handle proper portion being removable when the door is latched, said anchoring portion being rotatable by manipulation of the handle proper portion, said latching and anchoring portions being interengaged to provide for the unitary rotation thereof.

1,858,089. STACKER. CLAUDE D. HOWEY, Newcastle, Wyo. Filed June 3, 1931. Serial No. 541,906. 1 Claim. (Cl. 198—113.)

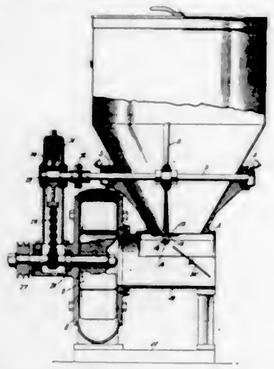
A stacker comprising an inclined frame, a series of spaced chains traversing the frame and provided with teeth, and tines carried at the lower end of the frame and themselves provided with toothed chains driven in unison with the stacker chains, a vehicular apparatus on which the stacker frame is pivotally mounted, and means for elevating the stacker frame to inclined position or lowering it onto the vehicular apparatus, said means comprising standards, cables trained over pulleys at the upper ends

of the standards and anchored one end to the stacker frame, and reels mounted on the standards to which the other ends of the cables are secured, the stacker frame embodying a foldable rear extension, and uprights car-



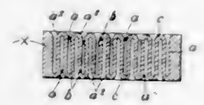
ried by the vehicular apparatus and engagable with said extensions in the elevated position of the stacker frame but foldable over the stacker frame in the lowered position of the latter and prior to the folding of its extension.

1,858,090. FRUIT AND VEGETABLE DUSTING APPARATUS. JOHN C. HULL, Gasport, N. Y., assignor to "Friend" Manufacturing Company, Gasport, N. Y., a Corporation. Filed Mar. 29, 1930. Serial No. 440,086. 6 Claims. (Cl. 43—148.)



1. An apparatus of the character described comprising a blower housing, a hopper for containing treating materials, said hopper being in communication with the blower housing, a fan within the housing for discharging air and treating materials therefrom, a shaft for driving said fan, said shaft being horizontally disposed, a mixer blade within the hopper and a shaft for driving the same, a countershaft, said countershaft deriving its power from the blower fan shaft and a flexible detachable joint operatively connecting the mixer shaft and countershaft and permitting removal of the hopper and its mixer shaft without disturbing the position of the countershaft.

1,858,091. BRICK, BLOCK, SLAB, AND THE LIKE. FRANK HUMPHRIS, Parkstone, Dorset, England. Filed Nov. 30, 1928, Serial No. 322,801, and in Great Britain Jan. 2, 1928. 5 Claims. (Cl. 72—41.)

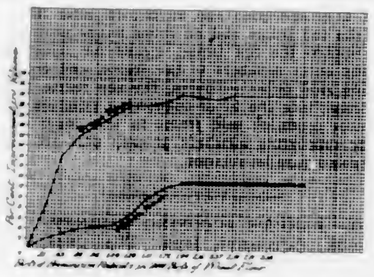


1. A hollow building element of cementitious material comprising partition walls bounding cavities separated thereby, said partition walls being spaced apart at distances less than the depth of the cavities to provide narrow open mouths to each of said cavities and the surface bordering the said mouths being rounded.

1,858,092. HEAT TREATMENT OF STRONG ALUMINUM ALLOYS. NOAK VICTOR HYBINETTE, Wilmington, Del., assignors to The Nicralumin Company, a Corporation of Michigan. Filed Dec. 10, 1929. Serial No. 413,139. 9 Claims. (Cl. 148—21.1.)

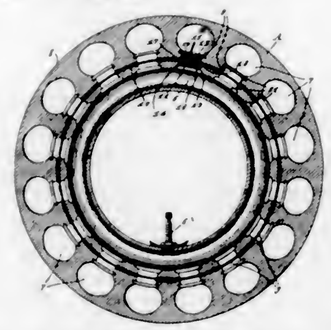
1. The process of aging aluminum alloys susceptible to heat-treatment by quenching and aging, which comprises regulating the temperature of aging by beginning the aging at a low aging temperature and thereafter progressively increasing the temperature until the maximum temperature at which the alloy is to be aged is reached.

1,858,093. PROCESS AND COMPOSITION FOR IMPROVING CEREAL PRODUCTS. JOHN P. IOANNU, Philadelphia, Pa., assignor to Pennsylvania Salt Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1930. Serial No. 444,790. 16 Claims. (Cl. 99—10.)



15. A cereal product containing a composition including at least two ammonical compounds, at least one of which is a sulphate and at least one of which is a persulphate, the amount of composition added being below that percentage which will appreciably increase the ash content of the cereal product.

1,858,094. PNEUMATIC TIRE. ANGEL RIVAS IRUZ, Torreon, Mexico. Filed Dec. 19, 1930. Serial No. 503,570. 1 Claim. (Cl. 152—22.)

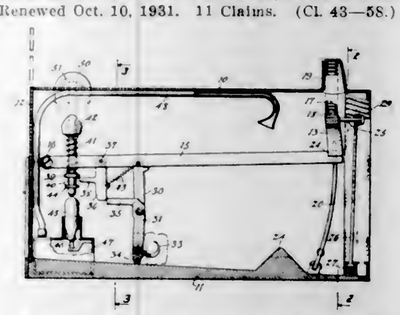


A tire construction of the character described, comprising a resilient annular body having a continuous circular conduit and a plurality of spaced cells circumferentially and concentrically of the conduit, reversely acting and varying tensioned valves controlling communication between each cell and the conduit, a casing containing the valves between each cell and the conduit and embedded in the body, and a continuous reinforcement embedded in the body between the conduit and cells, and embracing the casings.

1,858,095. METHOD OF MAKING PARTIAL OXIDATION PRODUCTS. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Original application filed Oct. 21, 1924, Serial No. 745,025. Divided and this application filed Feb. 16, 1929. Serial No. 340,367. 10 Claims. (Cl. 260—116.)

1. The process of treating saturated hydrocarbons consisting of the methane series normally gaseous and heavier than methane which comprises mixing a gas containing free oxygen therewith and passing the mixture through a heated reaction zone under superatmospheric pressure to form partial oxidation products.

1,858,096. ANIMAL TRAP. WALTER J. LEMENTY, New York, N. Y. Filed June 17, 1929, Serial No. 371,624. Renewed Oct. 10, 1931. 11 Claims. (Cl. 43—58.)

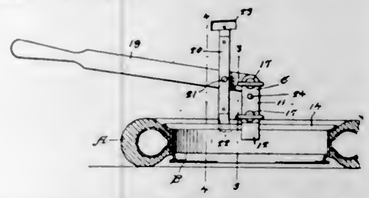


1. A device of the character described, including a body, a bait holder within said body, means operable upon movement of said bait holder to discharge asphyxiating gas within said body, and means simultaneously operable for hermetically sealing said body.

1,858,097. MANUFACTURE OF ARTIFICIAL MATERIALS. LEON LILIENFELD, Vienna, Austria. Filed Mar. 13, 1930, Serial No. 435,647, and in Austria Mar. 16, 1929. 19 Claims. (Cl. 260—100.)

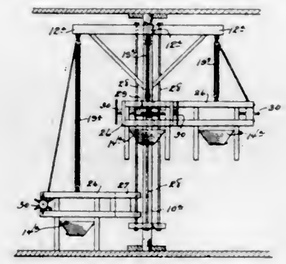
10. A process of making cellulose derivatives which comprises treating alkali cellulose with a halohydrine and carbon bisulphide.

1,858,098. TIRE TOOL. CHARLES W. LINDE, Vineland, N. J. Filed Apr. 17, 1931. Serial No. 530,970. 2 Claims. (Cl. 157—6.)



2. A tool of the character described comprising a swinging lever, a clamping leg adapted to grip one edge of a tire rim carrying a tire to project above the plane of one side thereof and pivotally supporting the lever tangentially to said rim and tire, a tire iron carried by the lever at one side of its axis of movement and having opposite working tips alternately engageable between the tire and rim, and means for permitting adjustment of the lever upon the leg.

1,858,099. ROTARY BIN. JAMES RICHARD MASSENGALE, Eden, Miss. Filed Dec. 21, 1929. Serial No. 415,814. 1 Claim. (Cl. 221—146.)

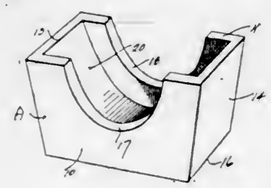


Rotary bins comprising a vertically disposed and rotatably mounted standard, horizontally disposed arms secured to the upper end of the standard, spaced guide rods attached to the arms and the lower portion of the standard and spaced from the latter, rectangular shaped frames arranged radially of the standard and each having a reduced end disposed adjacent the standard, said reduced ends of the frames slidably mounted on the rods, bins carried by the frames, and means for raising and lowering the frames on the guide rods.

1,858,100. PROCESS OF TREATING SILICA-BEARING MATERIALS. THOMAS O. MCADOO, Salem, Va., assignor to International Silica Corporation, a Corporation of Virginia. Filed July 23, 1928. Serial No. 294,937. 6 Claims. (Cl. 252—2.)

1. The process of removing silica from silica-bearing compounds which consists in digesting the silica-bearing compounds in an acid bath, subjecting the digested material to 44 lbs. of steam pressure and removing the silica.

1,858,101. SEALING BOX, BRACE, AND LINER FOR UNDERGROUND PIPES. ROBERT W. MCAFEE, Atlanta, Ga. Filed Aug. 27, 1928. Serial No. 302,408. 1 Claim. (Cl. 72—106.)

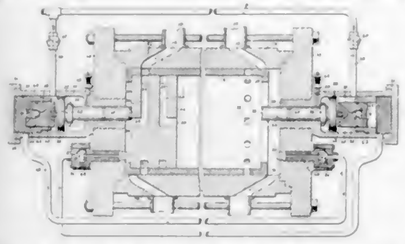


As an article of manufacture a mortar box of the class described comprising spaced side walls provided with pipe seating recesses thereon, and end walls connecting the ends of said side walls with their outer surfaces diverging upwardly, the box being open at the top thereof, and the seats on said walls opening at the top of said box.

1,858,102. PRESSURE FLUID GENERATOR. JOSEPH B. MCKEOWN, Grand View, N. Y. Filed Aug. 8, 1928. Serial No. 298,270. 4 Claims. (Cl. 60—44.)

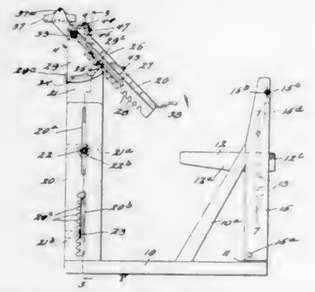
1. The combination with a pressure generator including a combustion chamber, and a freely movable piston in said chamber; of devices associated with said chamber and operable to force charges of combustible fuel under pressure alternately into opposite ends of said chamber, for the purpose of generating pressure charges, each device including a nozzle positioned to discharge fuel into one end of said chamber, and means at the end of the chamber remote from the nozzle end thereof operated by

the movement of the piston to operate the device, exhaust passages respectively in communication with the opposite ends of said chamber, and said generator also being



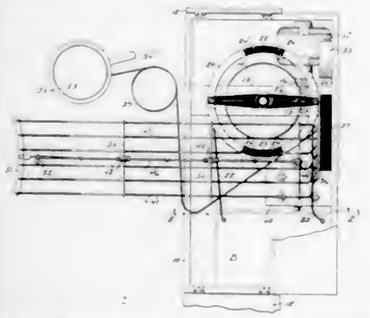
provided with means operated by the movement of the piston, to control the discharge of the pressure charges from said chamber through said passages alternately.

1,858,103. ADJUSTABLE DESK AND SEAT ARRANGEMENT. VADAKKATH RAMUNNI MENON, Singapore, Straits Settlements. Filed Dec. 27, 1928. Serial No. 328,800. 3 Claims. (Cl. 45—110.)



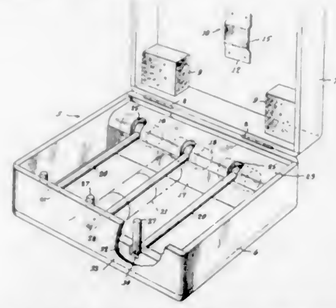
2. A desk having a work table and a support on which said table is pivotally and slidably mounted, a member pivotally connected to said support and arranged beneath said table and positioned to contact with and hold said table in any desired position of pivotal adjustment, said table being rotatable and movable laterally relative to said support and said member, a notched bar carried by said table and a projection on said member adapted to be engaged in any desired one of said notches by sliding said table relative to its support and means for securing said member in any desired position of pivotal adjustment.

1,858,104. DEPILATORY. JENNINGS B. MILES, Johnson City, N. Y. Filed Nov. 19, 1930. Serial No. 496,777. 3 Claims. (Cl. 174—177.)



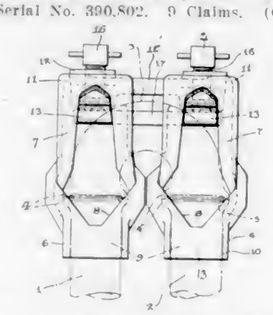
1. In an electric hair removing device, a cabinet, a pair of arcuate-shaped positive and negative contact plates therein and connected with a source of current, a rotatable member movable above said plates, brushes carried by said member for contact with the plates, an electrode electrically connected with one of the brushes, a pivotally adjustable extensible arm mounted within the cabinet and an electrode carried by said arm and electrically connected with the other brush, whereby operation of the rotatable member will reverse the polarity of the electrodes.

1,858,105. SEWING CHEST. JOHN E. MULREY, Trenton, N. J. Filed Mar. 10, 1931. Serial No. 521,604. 4 Claims. (Cl. 223—53.)



1. In a sewing chest, an article-holding spindle pivotally mounted at one end and pivotally-mounted means secured to said spindle adjacent its other end and functioning as a handle and as means for retaining articles on said spindle.

1,858,106. PIPE COUPLING. PETER MICHAEL NAGY, Alliance, Ohio, assignor to Transue & Williams Steel Forging Corporation, Alliance, Ohio. Filed Sept. 6, 1929. Serial No. 390,802. 9 Claims. (Cl. 285—20.)



2. A pipe coupling device comprising sets of jaws adapted to grip pipe ends, a clamping member joining said sets of jaws, and including means for forcing certain ends of the sets of jaws together.

1,858,107. FACEPLATE. ARVID H. NERO, West Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 27, 1931. Serial No. 518,829. 5 Claims. (Cl. 247—23.)

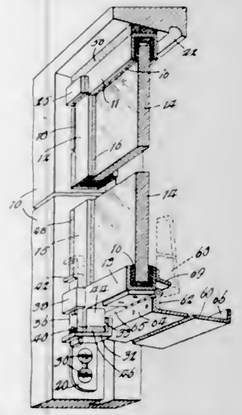


1. A face plate for electrical apparatus, comprising an apertured plate of insulating material, a metallic collar embedded in said plate around the aperture, a jewel located within said collar, a portion of said collar being turned over and engaging said jewel for holding it in position.

1,858,108. MEDICINAL BOUGIE, BALL, AND THE LIKE AND METHOD OF MAKING SAME. OSKAR NEUBERT, Elberfeld, near Cologne-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Filed Feb. 4, 1927, Serial No. 166,011, and in Germany Mar. 20, 1926. 12 Claims. (Cl. 167—64.)

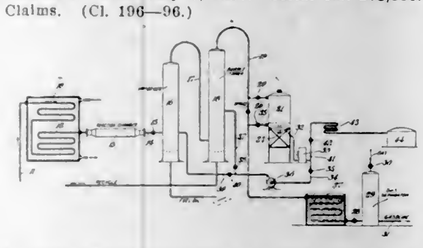
1. Process for the manufacture of medicinal bougies, balls and the like involving incorporating an effective remedial substance in a ground mass and forming the resulting mixture into objects of predetermined shapes and sizes, characterized in that the effective remedial substance is incorporated in a ground mass comprising extract of licorice and a water-soluble aromatic hydrotrophical substance, and the resulting mixture is kneaded with a mixture comprising gum tragacanth and water.

1,858,109. VEHICLE WINDOW. ERWIN J. PAULI, Brooklyn, N. Y. Filed Aug. 24, 1929. Serial No. 388,243. 9 Claims. (Cl. 296—44.)



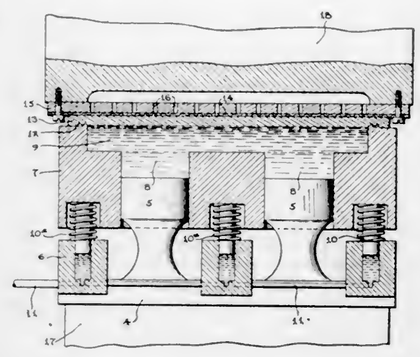
1. A motor vehicle having a window opening with a side rail, upper and lower supporting brackets located on said side rail, in combination with a window comprising a pane permanently secured in a frame, a bolt on said frame, said upper supporting bracket having arms adapted to embrace said frame, said lower supporting bracket having an aperture adapted to cooperate with said bolt, all to hold said frame in assembled position in said window opening.

1,858,110. REFINING HYDROCARBON DISTILLATES. HARRY P'EASE, Barnsdall, Okla., assignor to The Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed July 7, 1927. Serial No. 203,889. 9 Claims. (Cl. 196—96.)



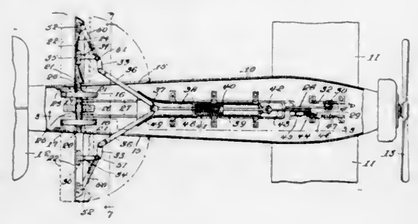
1. In the process of treating vaporized hydrocarbons by passing the same through solid adsorptive material, the step which comprises periodically increasing the pressure differential through the adsorptive material by reducing the pressure applied to the effluent hydrocarbons materially below that applied to the entering hydrocarbons.

1,858,111. IMPREGNATING APPARATUS. LOUIS DU BOIS REES, New York, N. Y., assignor to Hans Rees' Sons, Incorporated, New York, N. Y. Filed Oct. 14, 1931. Serial No. 568,846. 4 Claims. (Cl. 91—18.)



1. An article impregnating apparatus comprising a piston member, a cylinder member, said members forming a variable sized basin over the mouth of which the article to be impregnated may be placed, one member being movable relatively to the other, pressure exerting means for causing one of said members to move relatively to the other for forcing an impregnating fluid from the basin into an article arranged across the mouth of the same, and pressure fluid operated means for effecting a tight seal between the article and the mouth of the basin, the last mentioned means including an auxiliary cylinder and piston.

1,858,112. BRAKE FOR AIRPLANES. ALBERT J. ROBERTS, Cleveland, Ohio, assignor of seventeen per cent to I. R. Whan, Cleveland, Ohio. Filed July 19, 1930. Serial No. 469,161. 9 Claims. (Cl. 244—29.)

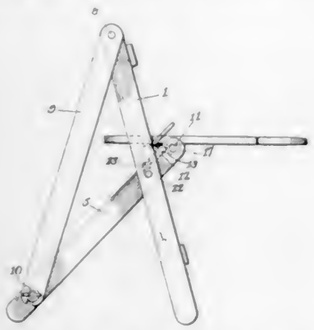


1. In combination with an airplane, wings located upon opposite sides of the fuselage adjacent the tail, a cylinder within the fuselage, means to mount the wings for horizontal swinging movement, means to swing the wings outward and project them laterally at opposite sides of the fuselage and to fold the wings inward substantially flush with said sides, said last means engaging with one end of the cylinder for exerting a forward and inward pull on said wings and means to tilt the wings horizontally.

1,858,113. GAME APPARATUS. WILLIAM J. ROCHE, Cochranton, Pa. Filed May 14, 1930. Serial No. 452,483. 14 Claims. (Cl. 273—102.)

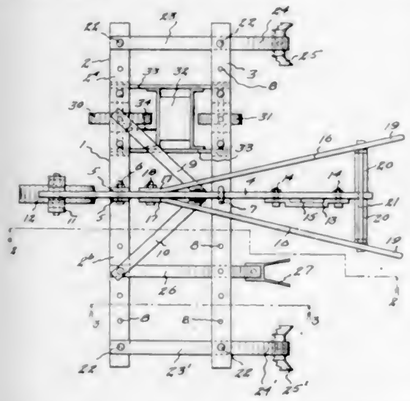
1. A game apparatus comprising a set of value indicating paddles, means for pivotally supporting said paddles eccentrically thereof, outwardly projecting, upwardly inclined spacers positioned between the paddles and

having their lower ends anchored rearwardly of said means, a support for said spacers, said paddles and support having coacting means for releasably holding said



paddles in nonvalue indicating position, and projectable means for impacting said paddles to shift them on their pivots to value indicating position.

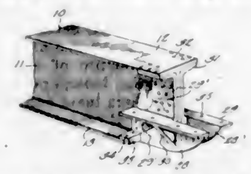
1,858,114. PLOW. OLIVER G. ROBERTS, San Benito, Tex. Filed Nov. 30, 1929. Serial No. 410,813. 3 Claims. (Cl. 97—167.)



1 In a plow, a frame structure comprising a front cross member, a rear cross member, a supporting member at right angles to and centrally of said cross members, said supporting member having its center located between said cross members, a wheel rotatively mounted on the front end of said supporting member, a main rigid plow mounted on the rear end of said supporting member, handle bars secured to said supporting member, spring foot pieces adjustably secured to said cross members on opposite sides of said supporting member and at equal distances from said supporting member, auxiliary plows on said spring foot pieces, a spring bar attached to said cross member between one of said auxiliary plows and said supporting member, and a fender carried by the free end of said spring bar.

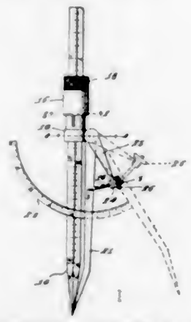
1,858,115. WALKING BEAM. WILLIAM SCHWEMLEIN, Parkersburg, W. Va., assignor to The Parkersburg Rig & Reel Company, Parkersburg, W. Va., a Corporation of West Virginia. Filed Feb. 3, 1930. Serial No. 425,666. 3 Claims. (Cl. 308—21.)

1. In a walking beam structure comprising a web and upper and lower flanges associated with the web, a pair of members secured to one end of the beam, each of said members including a vertical flange seated against the web of said beam and a horizontal flange extending longi-



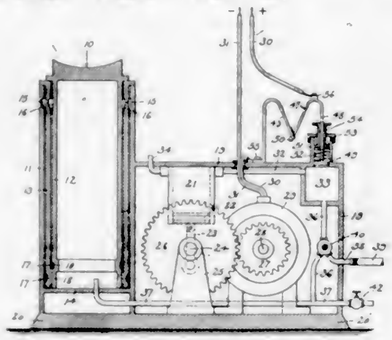
tudinally beyond said beam, said horizontal flanges being arranged parallel to and spaced from each other, and bearing blocks arranged on said horizontal flanges.

1,858,116. CALIPER OR DIVIDER. HIRAM H. SHELTERS, Detroit, Mich. Filed May 5, 1928, Serial No. 275,350. Renewed Dec. 15, 1931. 1 Claim. (Cl. 33—154.)



A measuring instrument comprising a pair of relatively movable pivotally connected legs, a curved arm carried by one of the legs movable across the face of the companion leg, a bolt member mounted upon the leg, a nut for the bolt member having a circumferential groove, and an arm pivoted at the connection for the legs and terminating in a forked extremity receivable within the circumferential groove of the nut to facilitate a fine adjustment of the legs.

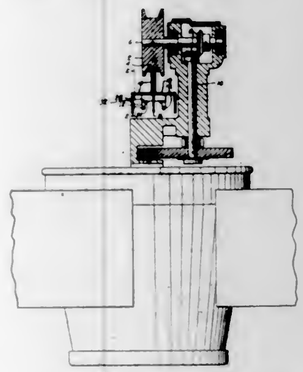
1,858,117. PISTON OPERATED SNAP SWITCH. FRED SIEPP, Kimball, Nebr. Filed June 16, 1930. Serial No. 461,421. 1 Claim. (Cl. 200—82.)



A circuit breaker comprising a U-shaped spring arm having one end fixed to a support and connected in an electric circuit and having a slot and opening in communication with each other and with the slot opening through the free end of the arm, a second U-shaped spring arm connected to the electric circuit and located adjacent the first mentioned arm and having one end

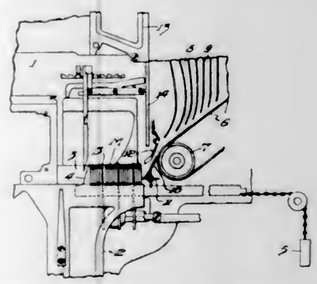
movably mounted and adapted to be actuated by the increase and decrease of air pressure within the reservoir, and a head on the other end of the second mentioned arm, said last named end of the second mentioned arm adapted to travel within the slot and in contact with the walls thereof during the movement of the second arm in one direction and be prevented from moving out of the slot by said head until the opening is reached which permits the head to move therethrough and allow quick separation of said arms by their resiliency causing a quick breaking of the circuit.

1,858,118. TRACK AND TROLLEY WIRE STRUCTURE FOR ELECTRICALLY PROPELLED CARRIAGES. JOSEPH J. SMITH, deceased, Cambridge, Mass., by William J. Smith, executor, Brockton, Mass., assignor to Firth-Smith Company, Boston, Mass., a Corporation of Massachusetts. Original application filed Sept. 21, 1926, Serial No. 136,772. Divided and this application filed June 22, 1928. Serial No. 287,499. 2 Claims. (Cl. 191—30.)



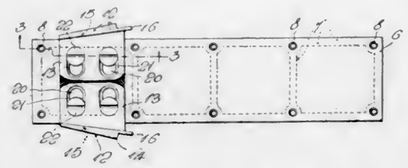
1. A suspended track structure for an electrically driven carriage having, in combination, a supporting strip transversely arranged vertically, strips secured to opposite sides of said supporting strip having their upper edges bent outwardly to support the carriage wheels and having their lower portions bent outwardly and downwardly to provide with said supporting strip downwardly opening channels, blocks of insulating material mounted within said channels, and trolley wires secured to said blocks and located within the channels.

1,858,119. ASSEMBLER STAR WHEEL. SAMUEL E. SPERRY, Hollis, N. Y., assignor to Intertype Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 7, 1929. Serial No. 412,524. 2 Claims. (Cl. 199—27.)



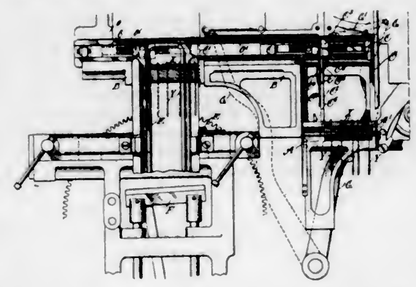
1. An assembler star wheel for typographical machines comprising a shaft and relatively thin parallel-sided flexible blades detachably secured thereto and extending outwardly from and exposed beyond the peripheral surface of said shaft.

1,858,120. SKI. GEORGE S. STEVENS, Boston, Mass. Filed Aug. 10, 1931. Serial No. 556,213. 5 Claims. (Cl. 208—184.)



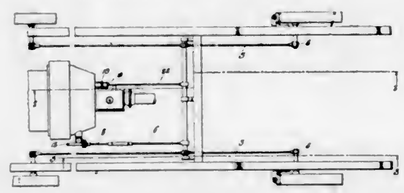
1. In combination with a ski, an extended foot plate attached thereto, said foot plate having a frictional surface, toe clips having frictional lower surfaces, and means for fastening the toe clips with their frictional surfaces in extended co-acting engagement with the frictional surface of the foot plate.

1,858,121. TYPOGRAPHICAL MACHINE. ANTHONY J. STOUGES, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Jan. 4, 1930. Serial No. 418,466. 9 Claims. (Cl. 199—32.)



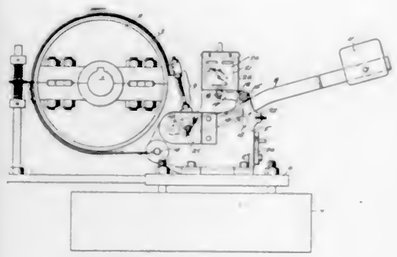
1. In or for a typographical machine, the left-hand finger of a line transfer carriage comprising an upper fixed section and a lower section hinged thereto, the said sections being formed both above and below the axis of the hinge with cooperating non-resilient bearing surfaces, for the purpose described.

1,858,122. EMERGENCY BRAKE. GEARLD DEAN THATCHER, Syracuse, N. Y. Filed Apr. 1, 1929. Serial No. 351,760. 7 Claims. (Cl. 192—13.)



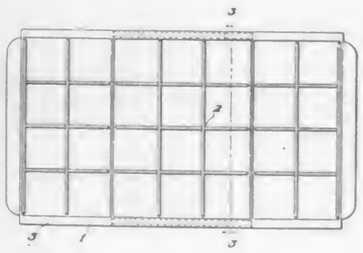
1. In combination with the emergency brakes of a vehicle, means for applying such brakes by the clutch pedal of a vehicle and manually operated means for holding the brakes in applied position so that the pedal can be released without releasing the brakes.

1,858,123. ELECTRICALLY CONTROLLED BRAKE. JOSEPH W. THROPP, Trenton, N. J. Filed Nov. 18, 1930. Serial No. 496,489. 2 Claims. (Cl. 188—174.)



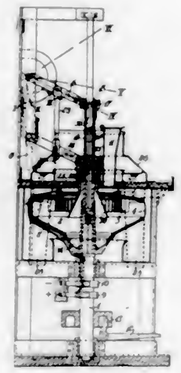
1. In apparatus of the class described, a brake actuating lever, a pivoted latch for holding said lever, said latch having normally horizontally and vertically disposed arms, said vertically disposed arm being formed to provide a hook which just supports said lever when the latch is in operative position, whereby slight pivotal movement of said latch is required for release and resetting of said lever, a solenoid having an armature attached to said horizontally disposed arm for actuating said latch, and a stop disposed adjacent said vertically disposed arm so as to limit the movement of the latch to the required amount, whereby said armature is maintained within the attractive range of said solenoid to prevent damage thereof and said lever may be reset without deenergizing said solenoid.

1,858,124. ICE CUBE TRAY. HENRY B. TURNER, Lawton, Okla. Filed Feb. 4, 1931. Serial No. 513,423. 1 Claim. (Cl. 62—108.5.)



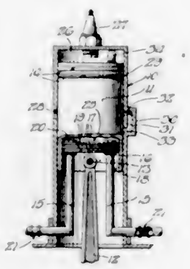
A tray of the class described having grids therein providing ice cube compartments, said tray being made up of a number of sections having their ends confronting and having their edges rounded to provide the same with beads and rods fixed in certain of the beads, projecting therefrom and received in the beads of the cooperating tray sections.

1,858,125. GALVANIZING OR ELECTROPLATING PROCESS. MICHAEL VON DEVECIS, Budapest, Hungary, assignor to Waldberg Societe Anonyme, Paris, France. Filed Dec. 4, 1929, Serial No. 411,663, and in Hungary May 15, 1929. 9 Claims. (Cl. 204—11.)



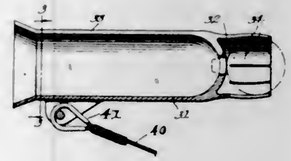
1. An electro-plating process, comprising the feature of holding the articles to be plated in contact with the negative pole of the source of electric current not only by their intrinsic weight but also by means of a centrifugal force.

1,858,126. INTERNAL COMBUSTION ENGINE. CHESTER A. WOOD, Columbia, Ill. Filed Nov. 4, 1929. Serial No. 404,741. 3 Claims. (Cl. 123—74.)



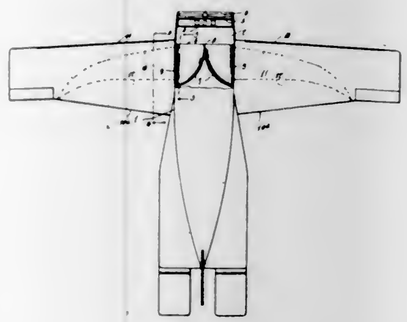
2. In an internal combustion engine, a cylinder having an explosion chamber, a piston reciprocal in said cylinder, conduits extending through said cylinder from the lower end thereof, the inner ends of said conduits being threaded, plates mounted on said conduits at the inner ends thereof, spacing plates between said first named plates and of less diameter than said first named plates, nuts on the threaded portions of said conduits above and below the uppermost and lowermost of the first named plates, said plates co-operating with the head of said piston to enclose an area, said area varying in volume as said piston is reciprocated, said piston having a port therein communicating with said area, a boss on the wall of said cylinder providing a chamber, said cylinder having ports therein in communication with said last named chamber whereby when said piston is in its lowermost position communication will be established between one of said last named ports and the port in the piston, the other of said ports being in communication with said last named chamber and said explosion chamber.

1,858,127. GRAPPLE FOR AIRPLANE PACKAGE TRANSFER APPARATUS. LYTLE S. ADAMS, Seattle, Wash., assignor to Airways Patent Corporation, a Corporation of Delaware. Filed May 10, 1929. Serial No. 361,957. 6 Claims. (Cl. 258—1.)



1. A two part attachable connection for the carrier and suspending cable of an airplane transfer apparatus comprising an elongated receiving member adapted to receive a cooperating member from either direction, and a spring seat on one end of the receiving member for the cooperating member, said receiving member having means for passing the cable therethrough when the cooperating member is engaged in one of its cooperating positions.

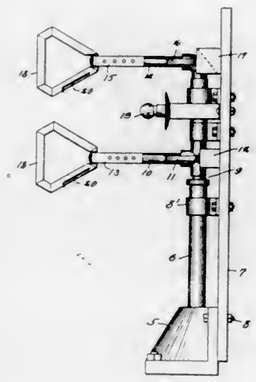
1,858,128. AEROPLANE. WILLIAM M. ALEXANDER, Monroe, N. C. Filed Nov. 5, 1931. Serial No. 573,199. 2 Claims. (Cl. 244—18.)



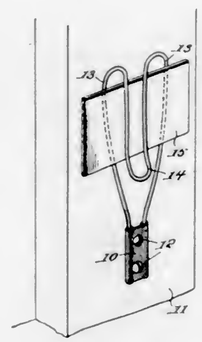
1. In an aeroplane, a body having a tubular opening in its forward end, a propeller mounted in said opening and adapted to discharge air through the opening, the sides of said body having openings communicating with said tubular opening, deflectors mounted in said tubular opening and having rearwardly curved walls directed laterally to the openings in the sides of the body to deflect air through said openings, planes secured to the body above the side openings for discharge of air therefrom against the under side of the planes, and a grooved flange on the under side of each plane extending outwardly of the plane from the forward edge of each side opening.

1,858,129. TRAIN ORDER DELIVERY CRANE. GEORGE M. BARNETT, Riverton, Ala. Filed July 7, 1930. Serial No. 466,334. 2 Claims. (Cl. 258—2.)

1. A train order delivery crane comprising a support, laterally extended arms mounted for swinging movement on the support, spring members having their side faces disposed vertically, extending from the ends of the laterally extended arms, and rigid hoops fitted between the spring members of the arms.

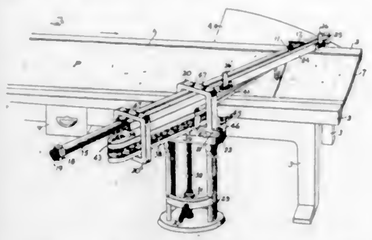


1,858,130. HOLDER. ROBERT S. BENNETT, Glens Falls, N. Y. Filed Apr. 17, 1931. Serial No. 530,939. 2 Claims. (Cl. 24—255.)



1. A holder of the character described comprising an elongated base plate having rolled edges, and a single strand of wire formed to provide spaced outer loops closed at their upper ends, and extended downwardly to provide an intermediate loop closed at its lower end and terminating directly above said base plate, the free ends of said outer loops being arranged parallel and in close proximity to each other and received by said rolled edges of the plate.

1,858,131. APPARATUS FOR AND METHOD OF MAKING DECKLED EDGED PAPER. GEORGE W. BICKING, Washington, D. C. Filed Apr. 17, 1931. Serial No. 530,967. 18 Claims. (Cl. 92—38.)



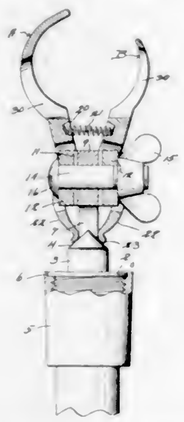
1. A device for effecting the impinging of fluid on a sheet of paper pulp during formation thereof comprising means adapted to move entirely crosswise of the sheet of pulp and to deliver fluid thereto during its passage.

1,858,132. LOOSE LEAF BINDER. FREDERICK C. BINGHAM, New York, N. Y., assignor to Boorum & Pease Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 3, 1930. Serial No. 499,782. 18 Claims. (Cl. 129—41.)



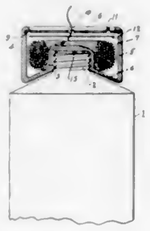
1. A flexible post for a loose leaf binder comprising a flexible central unit, in combination with a plurality of elements threaded thereon and engaging each other to form the exterior of the post, and spring means associated with said central unit and tending to keep the post rigid by pressing said elements together.

1,858,133. FUSE AND SWITCH HANDLING DEVICE. HENRY W. BODENDIECK, Taylorville, Ill., assignor to Tip's Tool Company, Inc., Taylorville, Ill., a Corporation of Illinois. Filed Oct. 15, 1929. Serial No. 399,822. 10 Claims. (Cl. 81—3.8.)



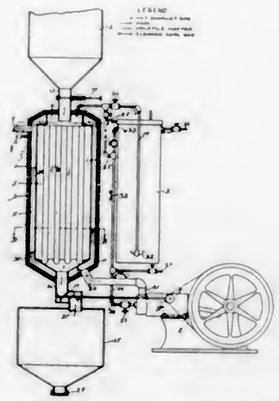
1. A handling device of the class described comprising a handle, a sleeve in threaded engagement therewith, a part carried by the sleeve, clamping jaws mounted upon said part for movement one towards the other in a general direction angular to the general direction of swinging movement of the part, said handle upon rotation in one direction moving the jaws one towards the other, said jaws being also adjustable from a position substantially in alignment with the handle to an angle of substantially 90° with respect to such handle, the rotation of the handle in one direction moving the jaws one toward the other irrespective of the adjustment of said jaws with respect to the handle.

1,858,134. COMBINED CAP AND DENTAL FLOSS CONTAINER. HERBERT N. BOOTH and OSCAR L. WESTGATE, Rochester, N. Y. Filed Sept. 20, 1929. Serial No. 393,972. 3 Claims. (Cl. 221—60.)



1. A dispenser closure cap comprising a hollow perforated cap member adapted to act as a closure member for a dentifrice tube, a coil of dental floss disposed within said hollow closure member with one end projecting through the perforation in the closure member, and a perforated floating disc threaded on the end of the floss and supported by said floss against the hollow closure member, so that the perforations in the disc and closure member register with one another the perforation in the disc being smaller than the perforation in the hollow closure member.

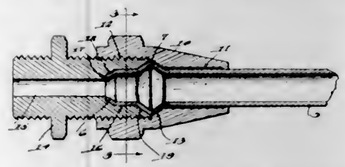
1,858,135. COAL CARBONIZING POWER PLANT AND METHOD OF REDUCING COAL. OLIVER S. BOWMAN, Colorado Springs, Colo. Filed Jan. 12, 1925. Serial No. 2,048. 5 Claims. (Cl. 202—30.)



1. In combination, an engine adapted to discharge hot exhaust gases, a carbonizer including two passages in mutual heat exchange relation, means for feeding low grade carbonaceous fuel thru one of the passages of said carbonizer, means for passing said hot exhaust gases from said engine thru the other passage of the carbonizer to provide the necessary heat units to carbonize the low grade fuel, means for conducting gas from said one of the passages to the engine, and means controlled by said engine for controlling the discharge of carbonized fuel from the said one of the passages.

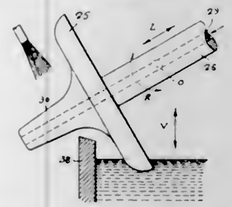
4. The method of converting coal into mechanical energy, coke, coal tar and coal gas which comprises coking the coal by transferred heat, separating the coal gas and coal tar from the evolved fluid matter, changing part of the coal gas into hot gases and mechanical energy, transferring the heat from the hot gases into said transferred heat, and separating the coke from the unreduced coal by means of part of said mechanical energy.

1,858,136. COUPLING. CHARLES M. BRENNER, Shreveport, La., assignor to Alphonse Brenner Company, Inc., Shreveport, La., a Corporation of Louisiana. Filed Mar. 27, 1931. Serial No. 525,847. 1 Claim. (Cl. 285—86.)



In combination, a coupling member having a bore extending therethrough, said bore being enlarged at one end and formed to produce a socket having an inclined bearing face at the inner terminus thereof, the outer end of said socket being flared to produce an inwardly inclined shoulder, a nut element threadedly engaged with said coupling member and having an inclined shoulder opposed to said end, a tube having one end fitted into said socket and having said end tapered to produce a conical bearing face for engagement with the inclined bearing face at the inner terminus of said socket, said tube being formed with an annular enlargement adjacent said end, said enlargement being engaged on either side by said inclined shoulders and said tapered end of said tube being forced into engagement with the bearing face at the inner end of said socket when said nut is tightened on said coupling member.

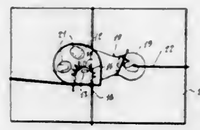
1,858,137. APPARATUS FOR USE IN THE MANUFACTURE OF GLASSWARE. LEON JEAN BROCHE, St. Cloud, France, assignor to Tropenas Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 20, 1926. Serial No. 136,632. 8 Claims. (Cl. 49—55.)



1. In apparatus for the manufacture of glass products, a container of molten glass, and a feeder cooperating therewith, said feeder comprising a rotor arranged to dip its peripheral area into the bath of molten glass in the container, and to cause flow of lifted glass from said peripheral area, along one face of the rotor toward its axis to form a gather for delivery together with means for severing said gather intermittently from the rotor.

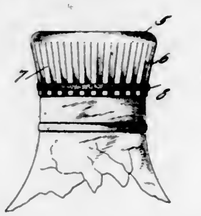
6. In apparatus for the manufacture of glass products, a container of molten glass and a feeder cooperating therewith, said feeder comprising a rotor adapted to dip its peripheral area into the bath of molten glass in the container and having an axial projection on which the molten glass may accumulate and a flange on said projection acting as a dam for said molten glass.

1,858,138. PARCEL TIE. COLUMBUS W. CEARLEY, Bedford, Ind., assignor of two-fifths to Sant Rutherford, Bedford, Ind. Filed Feb. 26, 1931. Serial No. 518,570. 2 Claims. (Cl. 24—18.)



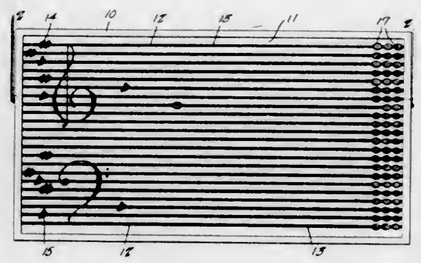
1. A tie device of the class described made from a single blank comprising a plate having a hook for fastening a terminal of a cord thereto, a portion of said blank being folded over another portion and partly in contact therewith, said folded portions being adapted for passage of the cord between them and around the part thereof in contact, a tongue on one of the portions and secured through the other portion, and integral ribs on said portions adapted for engagement by the other terminal of a cord.

1,858,139. SANITARY COVER OR CLOSURE. FRANK L. DAILEY, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Feb. 3, 1930. Serial No. 425,587. 1 Claim. (Cl. 215—96.)



A cover having a skirt formed with inner and outer crimps, the outer crimps being spaced apart in the contracted relation of the cover, and an elastic binder secured to and throughout the width of the outer crimps and bridging the space between such outer crimps, such bridging portions forming elastic stretches wholly free of any connection with the cover and of a length corresponding to the widths of the inner crimps.

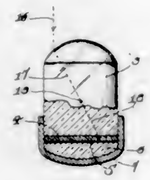
1,858,140. CHART. CORA GRACE DEWHIRST, Payson, Ill. Filed Oct. 8, 1930. Serial No. 487,300. 2 Claims. (Cl. 84—471.)



2. A musical notation device comprising a frame, a backing crossing one side thereof, clef characters upon said backing indicating treble and bass staffs spaced wires

stretched across the frame and said clef characters are spaced from the backing, each alternate wire being of one shade to represent lines of the staff and the intervening wires being of a different shade indicating spaces of the staff and note bodies slidable upon the wires, and sharp and flat symbols detachably mounted upon the wires.

1,858,141. REFLECTING UNIT. CLINTON C. DODGE, Charlestown, Ind., assignor to Louisville Frog, Switch & Signal Company, Louisville, Ky., a Corporation. Filed Aug. 9, 1929. Serial No. 384,727. 3 Claims. (Cl. 88—1.)

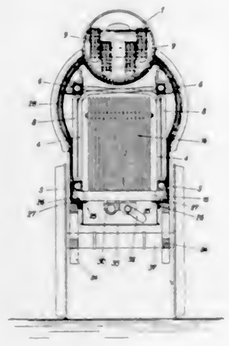


1. A reflecting unit comprising a non-colored lens of plano-convex contour, a transparent light ray coloring element positioned against and free of direct connection to the plane face of the lens, said element having its rear face provided with a reflecting medium, a holder secured to the rear portion of and extending rearwardly from the lens, and a filler member within the rear portion of the holder and retaining said element against the plane surface of the lens.

1,858,142. COLLOIDAL MONO-SODIUM TETRAIODOPHENOLPHTHALEIN. ESCO F. ELLZEY, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 21, 1928. Serial No. 248,570. 12 Claims. (Cl. 167—70.)

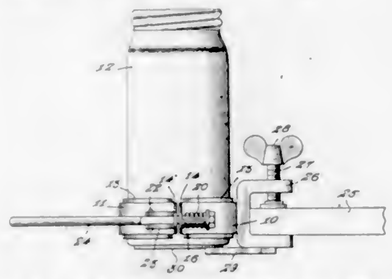
1. A process of producing a mono-alkali metal salt of tetraiodophenolphthalein in colloidal form, which comprises acidifying a solution of a di-alkali metal salt of tetraiodophenolphthalein in the presence of a protective agent.

1,858,143. SUPERHEATER INSTALLATION. OTTO ENGLER, Kassel-Wilhelmshohe, Germany, assignor, by mesne assignments, to The Superheater Company, New York, N. Y. Filed Oct. 29, 1930, Serial No. 492,039, and in Germany Nov. 9, 1929. 9 Claims. (Cl. 122—400.)



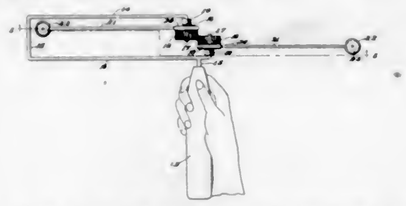
1. The combination with a locomotive having a frame including longitudinal beams, wheel axles, a boiler provided with a fire box and an adjoining flue having walls formed of water tubes, of a superheater group having tubes extending into said flue and having headers lying at the bottom of the flue, said superheater group having dimensions of such relation to those of the locomotive frame that it may be moved between the longitudinal beams of said frame clear of the locomotive wheel axles, whereby the superheater group may be inserted and removed while the locomotive wheel axles are in position.

1,858,144. JAR HOLDER. ANDREW FARIELLO, Schenectady, N. Y. Filed July 26, 1930. Serial No. 470,940. 2 Claims. (Cl. 81—33.)



1. In a jar holder, a pair of substantially semi-circular gripping members arranged in opposed relation, apertured ears extending from opposite ends of said members, said ears being arranged in pairs, means connecting one pair of ears to provide for relative adjustment, means connecting the ears of the other pair to hold the semi-circular members in gripping position, a U-shaped attaching clamp rigid with the central portion of one of the gripping members, and a jar support carried by the clamp and positioned beneath the gripping members.

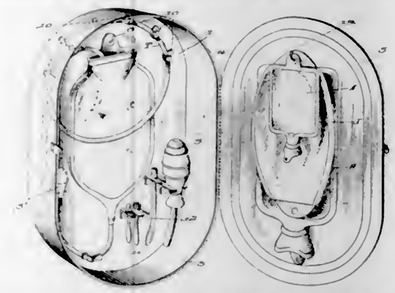
1,858,145. TOY. ALFRED FELARDO, New York, N. Y. Filed Oct. 25, 1930. Serial No. 491,238. 3 Claims. (Cl. 46—14.)



2. A toy of the character described comprising a handle, an elongated frame secured to said handle, limbs included in said frame, one of said limbs being shorter than the other, trunnions formed with each of said limbs and arranged in parallel planes, gears on said trunnions and having grooves circumferentially arranged thereon, said gears meshing with each other, rigid arms having their opposite ends looped upon themselves, with one of the looped ends of the arms secured in said grooves for fixing the arms to the gears, and weights secured in the other looped ends.

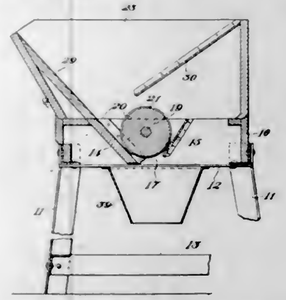
1,858,146. HYGIENIC CABINET. ROBERT O. FERGUSON, Bristol, Tenn., assignor of one-half to Bert E. Elliott and Frank M. Elliott, Detroit, Mich. Filed Dec. 30, 1929. Serial No. 417,490. 2 Claims. (Cl. 312—113.)

1. A cabinet having a back wall, means for supporting a fountain syringe in vertical position on said wall, comprising a device for sustaining the bag of the syringe, means for supporting the discharge tube in curved form arranged above said device and constructed to permit the tube to be coiled about the mouth of the bag, and additional means for supporting, in curved form, the terminal portion of the discharge tube in position for the nozzle



to be held within the mouth of the bag, said additional means being arranged below and within the first-named supporting means.

1,858,147. FRUIT CRUSHER. UBALDO FORBIDUSSI, Delcarbon, Colo. Filed Dec. 5, 1930. Serial No. 500,351. 3 Claims. (Cl. 146—123.)



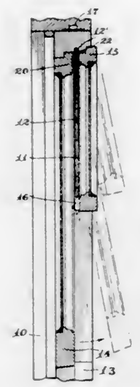
1. In a fruit crushing machine, a frame, reversely inclined panels carried by the frame and having edges spaced apart to define a discharge opening, a reversely tapered crushing roller mounted for rotation in the frame between the inclined panels, a reversely inclined surface for one of the panels, said surface being parallel with and slightly spaced from the periphery of the reversely tapered roller, a spiral rib extending around the roller, and means within the hopper to guide the fruit to one side of the axial center of the roller.

1,858,148. ARTIFICIAL FLOWERS AND METHOD OF MAKING THEM. SELMA MARIE FREESE, Temperance, Mich. Filed Feb. 15, 1930. Serial No. 428,803. 7 Claims. (Cl. 41—13.)



1. An artificial flower or the like composed of rubber sponge cut to form whereby a natural appearance together with moisture resisting qualities is imparted to the flower.

1,858,149. WINDOW. WILLIAM P. GODFREY, Brooklyn, N. Y. Filed Oct. 4, 1930. Serial No. 486,464. 20 Claims. (Cl. 20—42.)



1. A window having a window frame with guideways extending in a predetermined direction, a sash disposed for longitudinal movement in the guideways in the said direction, and a second sash hinged to the first mentioned sash.

1,858,150. PROCESS FOR CONCENTRATING VOLATILE ALIPHATIC ACIDS. ADOLF GORHAN, Liesing, near Vienna, Austria, assignor, by mesne assignments, to Firm of Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 24, 1928, Serial No. 280,393, and in Germany June 2, 1927. 10 Claims. (Cl. 260—122.)

1. A process for converting dilute volatile aliphatic acids into concentrated form, consisting in bringing the dilute acid in the form of vapor in contact with a salt in solution, said salt being capable of forming with the acid a double salt.

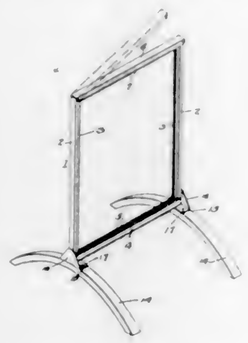
1,858,151. PROCESS FOR CONCENTRATING VOLATILE ALIPHATIC ACIDS. ADOLF GORHAN, Liesing, near Vienna, Austria, assignor, by mesne assignments, to Firm of Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 24, 1928, Serial No. 280,394, and in Germany June 2, 1927. 10 Claims. (Cl. 260—122.)

4. A process for converting dilute volatile aliphatic acids into concentrated form, consisting in extracting the acids in the form of double salts from solutions of the acids in organic solvents, and decomposing the double salts by heating to recover the concentrated acids.

1,858,152. PORTABLE SIGN FRAME. HOWARD T. HALLOWELL and FRANK BENNETT, Jenkintown, Pa., assignors to Standard Pressed Steel Co., Jenkintown, Pa., a Corporation of Pennsylvania. Filed Apr. 23, 1930. Serial No. 446,722. 1 Claim. (Cl. 40—135.)

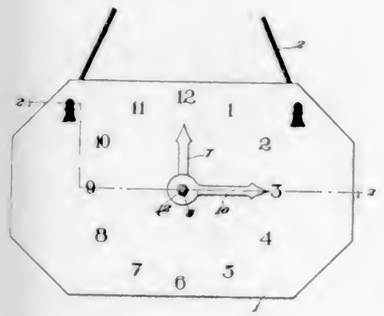
The combination in a portable sign, of a frame having channel members at each side and at the bottom, said channel members having flanges which are bent towards each other so as to be spaced apart only sufficiently for the reception of the sign; a movable upper member also channel shaped and having flanges bent towards each other and spaced apart similar to the flanges of the side and

bottom members, the body portion of the upper member being of a greater width than the body portions of the



side members, so as to fit the upper ends of the said side members; and bolts securing the upper members to the side members.

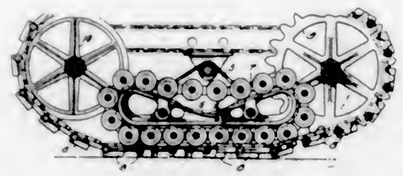
1,858,153. NUMBER WORK DIAL. EMMETT KYLE HAMMOND, Newport News, Va. Filed Nov. 7, 1930. Serial No. 494,110. 1 Claim. (Cl. 35—2.)



An educational device for pupils of primary and elementary grades, comprising a flat plate having circularly arranged figures thereon numbering from one to twelve, a supporting board for the dial plate, said plate having a central round opening therethrough, a knob having a barrel extending through said opening, and having its outer face squared, a hand having a squared opening received over the squared end of the barrel, a washer surrounding the barrel and arranged against the outer face of the plate, a second knob having a spindle extending through the barrel and having a squared end formed with a threaded extension, a second hand having a squared opening to be received on the squared end of the spindle and a nut screwed on the extension of the spindle and contacting with the outer face of the said hand.

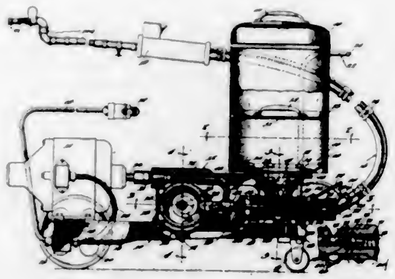
1,858,154. TRACTOR. GEORGE R. HANKS, Clinton, N. J., assignor to The Linn Manufacturing Corporation, Morris, N. Y., a Corporation of New York. Filed Dec. 11, 1928. Serial No. 325,142. 4 Claims. (Cl. 305—9.)

2. A traction unit having, in combination, a flexible track and its complemental supports and a system of load transmitting elements, including a rocker beam and aligned, mated runner blocks, the runner blocks being of T-section to provide a central track and flanking or wing tracks, and flanged rollers operating between the runner



blocks and the flexible track, their hubs engaging the central track and their flanges engaging the wing tracks for transferring the load to the flexible track.

1,858,155. GREASING APPARATUS. CLEO HARRIS, Cincinnati, Ohio, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 29, 1930. Serial No. 448,368. 3 Claims. (Cl. 221—47.1.)

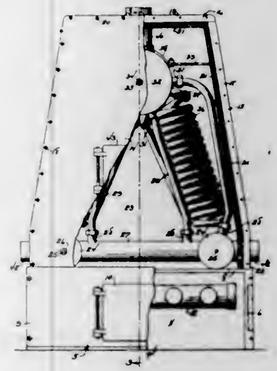


2. In a device of the class described, a pump casing, a pump cylinder element mounted therein, a reservoir in communication with said cylinder, a piston in the cylinder, means for reciprocating said piston, a funnel-shaped intake opening in said pump casing extending from the reservoir to the cylinder, and a passageway extending from the intake opening entirely around the cylinder, said cylinder having a transverse slot therein defining a passageway from the encircling passageway to the bore of the cylinder and to the path of reciprocation of the pumping piston.

1,858,156. HEATING FURNACE. NATHANIEL G. HOLLAND, Norfolk, Va., assignor to Old Dominion Marine Railway Corporation, Norfolk, Va., a Corporation of Virginia. Filed Feb. 18, 1931. Serial No. 516,745. 3 Claims. (Cl. 122—327.)

1. A furnace construction, comprising a lower body assembly forming a fire chamber and having an upper ledge, a superposed housing having separable ends, front, back and top detachably connected with each other, the ends, front and back superimposed upon the lower body assembly, a fluid circulating unit within the housing including lower spaced connected drums, an upper drum, tubes detachably connected with said drums for communication with each other, a plurality of coils detachably connected

with the lower and upper drums and upwardly converging, baffles arranged on opposite sides of the upper drum and saddle straps bridging said upper drum and forming hang-

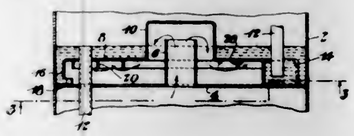


ers for the baffles, studs on the ends of the drums and engaged in the front and back of the housing, and means engaging the studs exteriorly of the housing.

1,858,157. FUSE. JOHN LAGANDRO, Camden, N. J. Filed Dec. 5, 1930. Serial No. 500,387. 7 Claims. (Cl. 200—121.)

1. A plug fuse device comprising a body having threaded shell and tip contact terminals, means carried by said body and connected across said terminals for visually indicating the rupture of a fusible element, and a cartridge fuse removably carried by said body and connected across said terminals, thereby normally short circuiting said means.

1,858,158. GAS AND LIQUID CONTACT APPARATUS. WILBUR G. LAIRD, New York, N. Y., assignor to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 6, 1927. Serial No. 224,350. 6 Claims. (Cl. 261—114.)



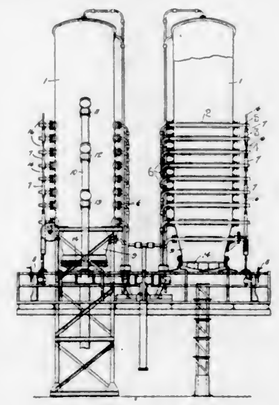
1. In a bubbler plate gas and liquid contact apparatus, a bubbler tray comprising a vapor chimney extending thereabove, a perforated distributor plate above and spaced from said tray comprising an opening surrounding said chimney, a bubbler cap in said opening over said vapor chimney and an adjustable connection between said plate and said cap whereby the lower edge of said cap may be raised or lowered with respect to said plate.

1,858,159. BAG. HERMAN B. LAYMON, Spencer, Ind. Filed Jan. 10, 1930. Serial No. 419,919. 6 Claims. (Cl. 229—57.)



1. In a bag, a transparent body, a single relative thick stiff strip of material located within and embraced by the body at one end thereof and solely closing the bottom of the same, and means to secure the strip within the body.

1,858,160. SEPARATING DEVICE FOR SOLIDS AND LIQUIDS. ALBERT EDWARD LEEK, Wigan, England, assignor to Wigan Coal and Iron Company, Limited, Wigan, England, a British Company. Filed Jan. 21, 1930, Serial No. 422,407, and in Great Britain Jan. 25, 1929. 1 Claim. (Cl. 210—182.)

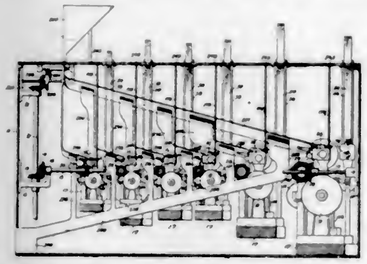


A device for the separation of solids from mixtures of liquids and solids comprising a container, the axis of which is inclined to the vertical, a plurality of filter trays, the edges of which lie in planes parallel to the axis of the container, means to pass liquid and solid material to said container, means to draw off liquid from said trays individually, an extension piece on the lower end of said container disposed about a vertical axis, a closing door normally lying in a horizontal plane, a filter tray mounted on said door, means to draw off liquid from the interior to said tray, means to tilt said door with said tray about a horizontal axis to discharge the filter cake upon it, and means to tilt said filter trays individually to separately discharge filter cakes upon them.

1,858,161. SORTING AND PACKAGING MACHINE. HENRY BURTON LOGIE, Roselle Park, N. J. Filed Nov. 9, 1928. Serial No. 318,252. 19 Claims. (Cl. 226—14.)

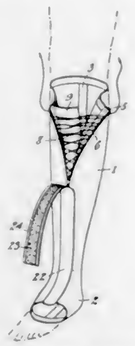
2. In an apparatus for packaging coins, the combination of a magazine adapted to contain a plurality of coin car-

tridges, said magazine having means for guiding the cartridges during downward movement thereof, and a device for discharging one cartridge at a time at regular



intervals from the magazine, said device including means engageable with the cartridge to prevent relative turning movement of the cartridge.

1,858,162. STOCKING. WILLIAM H. MACNAMEE, Yonkers, N. Y., assignor to Trio Specialty Company Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 16, 1929. Serial No. 414,508. 3 Claims. (Cl. 128—165.)



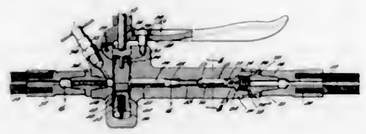
2. A limb supporting stocking including an integral foot and ankle enclosing member, said stocking being open at the front, said opening extending from the top to and through the foot and ankle enclosing member and providing spaced apart front edges, webbing secured along one edge to the inner face of the stocking, the free edges of the webbing being located inwardly of the spaced edges of the stocking so that the last mentioned edges will overlap the free edges of the webbing, lacing receiving means secured to the free edges of the webbing and covered by the edges of the stocking, lacings cooperating with the lacing receiving means for adjusting the edges of the stocking towards each other, and a cushioning and protecting means covering the lacings and adapted to obliterate completely any appearance of the lacings and edges of the stocking and to provide a smooth exterior for the stocking.

1,858,163. CLOSURE. HENRI MARIE MATHIEU DE BOISSAC, St. Germain en Laye, France, assignor to The Society Pierre Remy & Cie., Clichy, France. Filed Apr. 14, 1930, Serial No. 444,250, and in Belgium Jan. 31, 1930. 2 Claims. (Cl. 215—44.)



1. In a closure, a male element having a plurality of external extensions formed thereon whose radii increase towards a maximum in a predetermined direction then decrease, said male element having abutments formed thereon adjacent the portions of said external extensions of decreasing radius, and a deformable female element having a plurality of internal extensions positioned to ride over said external extensions when said female element is rotated on the male element in the direction of increasing radius of said external extensions, said internal extensions being formed so as to be first spread apart by said external extensions and then move towards one another and engage said abutments when the points on said external extensions of maximum radius have been passed.

1,858,164. HIGH-PRESSURE VALVE. FREDERICK MAY, Cincinnati, Ohio, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 12, 1930. Serial No. 427,786. 6 Claims. (Cl. 257—132.)

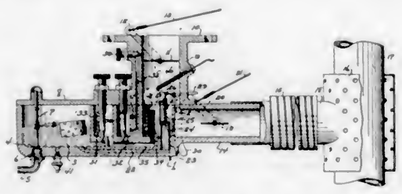


5. In a high pressure lubricating control valve, a body having a passageway therethrough, said passageway having opposingly arranged spaced apart seats therein, a valve element of elongated form loosely slidably disposed for movement between said seats, said valve element adapted to be seated normally on one seat by pressure in the intake end of the valve body, a plunger axially aligned with and contacting the normally seated end of said valve element, said valve element, in relation to the bore in which it moves, providing clearance for passage of grease past the same, and means for actuating said plunger.

1,858,165. PROCESS OF OBTAINING ALUMINUM HYDRATE. THOMAS O. MCADOO, Edgewood, Va., assignor to International Silica Corporation, a Corporation of Virginia. Filed July 19, 1928. Serial No. 294,063. 3 Claims. (Cl. 23—143.)

1. A process of producing alumina from shales containing chemically combined alumina, silica and iron, which consists in digesting the said shales in a mixture of hydrochloric and hydrofluoric acids and water, heating under pressure the solution thus formed, precipitating the silica content from the solution by the addition of a substantially small amount of alkali thereto, precipitating the iron content from the solution by the addition of a further amount of alkali sufficient to form aluminate, and, finally, precipitating the alumina from the aluminate solution by the addition of an acid to said solution.

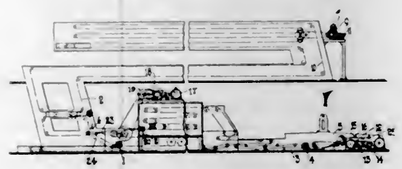
1,858,166. CARBURETOR. RALPH MENKHAUS, Greensburg, Ind. Filed May 22, 1931. Serial No. 539,352. 1 Claim. (Cl. 261—41.)



A carburetor comprising a body, mixing and fuel chambers in said body, a nozzle in the mixing chamber, means for regulating fuel from the fuel chamber to said nozzle, a sleeve extending into said mixing chamber and having

a valve seat, a spring pressed valve normally engaging the seat, said body having a passage between the sleeve and the fuel chamber, a stem on the valve, an air intake pipe in communication with the mixing chamber, a control valve in said air intake pipe, a neck on the body and in communication with the mixing chamber and connected to the air intake manifold of the engine, a lever pivotally mounted on the neck and engaging the stem, an operating arm for said valve, an arcuate shaped portion on said arm to engage the lever for unseating the second mentioned valve when the first named valve is moved into a position to close the air pipe, a heating medium manually controlled and located in the neck, and a control valve in the neck.

1,858,167. SPEED CONTROL GEAR FOR MACHINERY. JOSEPH FRANCIS NAYLOR, Earlestown, England, assignor of one-half to T. & T. Vicars Limited, Earlestown, England, a British Company. Filed May 14, 1930, Serial No. 452,371, and in Great Britain June 12, 1929. 1 Claim. (Cl. 74—59.)



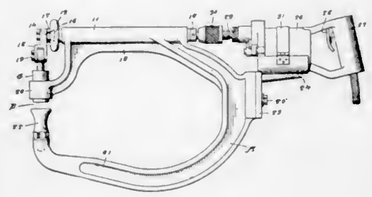
In a synchronizing device for controlling the speeds of independently driven shafts, one of said shafts being driven through a variable speed transmission, means for synchronizing the speeds of said shafts when one of said shafts acquires a different angular velocity than the other, the said means comprising a rotating cam fixed for rotation with respect to one of said shafts, and a rotating electrical contact member fixed for rotation with respect to the other of said shafts, a lever system mounted on a fixed pivot and engaged with said cam to be rocked thereby and carrying a second contact member adapted to cooperate with said rotating contact member, and electrically actuated means for varying the speed ratio of said transmission and including conductors operatively connected to said contact members whereby a departure of said shafts from synchronism causes said lever system to bring said contact members together to close an actuating circuit through said conductors and means for varying the speed of driving said one shaft and thereby restoring synchronism.

1,858,168. MANUFACTURE OF PHENOL FORMALDEHYDE CONDENSATION PRODUCTS. ALFONS OSTERSETZER, Klosterneuburg, and FRANZ RIESENFELD, Vienna, Austria, assignors, by mesne assignments, to Pollopas Limited, Nottingham, England, a Limited Company of England. Filed Mar. 20, 1928, Serial No. 263,205, and in Austria May 21, 1927. 5 Claims. (Cl. 260—4.)

1. A process for the manufacture of phenol formaldehyde condensation products, which comprises neutralizing with one of the group consisting of phthalic, lactic and hydrochloric acids the colloidal resin solution prepared from 1 mol of phenol and about 2.5 mols of formaldehyde in the presence of a basic condensing agent, and free such product from water to such an extent that a hardened gel results in the pores of which product no drops of water of the colloidal order of magnitude remain, and the material has therefore a transparent appearance.

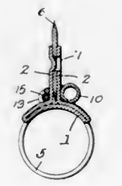
5. Glass-clear condensation products comprising the reaction products formed by reacting one mol of phenol and two and one-half mols of formaldehyde in the presence of sufficiently strongly alkaline medium to prevent precipitation, adding one of the group consisting of phthalic, lactic and hydrochloric acids, in such quantity that the reaction mass is weakly acidic, and distilling the mass until the water content is completely removed.

1,858,169. ELECTRIC FENDER TOOL. NIILO PESOLA, Fitchburg, Mass. Filed Apr. 21, 1931. Serial No. 531,821. 1 Claim. (Cl. 153—48.)



A tool of the character described comprising a substantially C-shaped rigid frame presenting a nose opening between its ends, a bearing sleeve formed at the uppermost portion of said frame, a power shaft journaled in said sleeve, an anvil removably fitted on one end of the frame at the nose opening, a yieldable hammer mounted on the other end of the frame and coactive with the anvil, an eccentric connection between said hammer and said power shaft, a saddle adjustably connected with the frame opposite the entrance opening, and driving means clamped in the saddle and operatively connected with the power shaft.

1,858,170. CUTTING IMPLEMENT. JOSEPH EDWARD POOLE, Pretoria, South Africa. Filed Mar. 30, 1928. Serial No. 265,999. 1 Claim. (Cl. 30—14.)

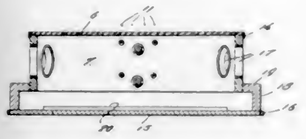


The combination of a wide finger receiving ring formed with an arch-shaped outwardly tapered extension having a pair of wings slightly spaced apart at the longitudinal center of said extension, the latter at its smaller end extended beyond the wings, one wing being formed with apertures, means struck from the other wing and confronting the apertures to secure a safety razor blade between the wings, and a channeled cover member pivoted at the inner ends of the wings and adapted to be swung onto the same to enclose the razor blade.

1,858,171. BANJO. JOSEPH PROVIDENTI, Charleston, W. Va. Filed Feb. 17, 1931. Serial No. 516,420. 1 Claim. (Cl. 84—271.)

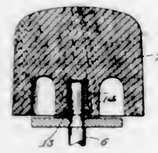
An all-wood banjo body comprising an annular rim provided with circumferentially spaced tone holes, a relatively thin disc-like head of spruce wood forming a top for the rim and rigidly secured to the adjacent edge of said rim, a two-part resonator comprising a disc-like part of a diameter greater than the head and rim, said disc-like part being of one solid piece of spruce wood, the remaining part of the resonator including an imperforate ring-

like member of general L-shaped cross section having one flange secured rigidly to the marginal edge portion of the disc-like part and having its remaining flange secured



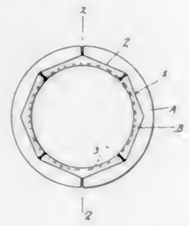
to the exterior face of the lower remaining edge portion of said rim, said last named flange being disposed in a plane spaced from the aforesaid tone holes.

1,858,172. HAT RENOVATING MACHINE. GEORGE V. RHODES, Seattle, Wash., assignor to Rhodes Electric "Hat-Man" Inc., Seattle, Wash., a Corporation. Filed June 25, 1928. Serial No. 288,174. 1 Claim. (Cl. 223—21.)



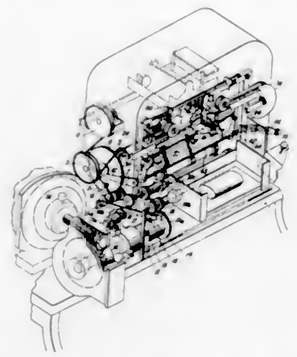
A hat renovating machine comprising a vertical rotatable shaft, a hat block having a bearing for the shaft, means located below the upper end of the shaft and engaging said shaft and bearing for preventing rotation of the block on the shaft and adapted to release the block for rotation relative to the shaft upon upward movement of the block, said shaft fitting the walls of the bearing, so that on removing a hat from the block by lifting said hat from first one side and then the other side thereof will cause the shaft and its bearing to bind and prevent separation of the block from the shaft.

1,858,173. PACKING RING. WALTER R. SMITTLE, St. Louis, Mo. Filed June 23, 1931. Serial No. 546,385. 2 Claims. (Cl. 288—3.)



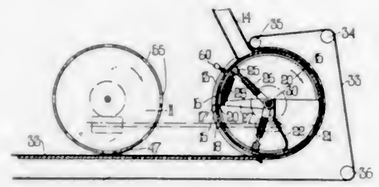
1. A packing ring of the class described comprising inner and outer rings each formed of a number of sections, the ends of the sections abutting each other when each ring is contracted, the inner circumference of the outer ring being formed with a plurality of flat or straight faces, and the outer circumference of the inner ring being formed of similar straight faces, the flat faces of one ring contacting with the flat faces of the other ring and a spring located in the inner ring for forcing the rings outwardly.

1,858,174. CARD PERFORATING MACHINE OR THE LIKE. ARTHUR THOMAS, Thornton Heath, England, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed Jan. 10, 1930, Serial No. 419,974, and in Great Britain Jan. 21, 1929. 3 Claims. (Cl. 164—112.)



1. In a punch perforating machine, the combination of a carriage, a cable in the form of a loop having one end anchored and the other end attached to the carriage, a device engaging with the loop and adapted to move in a circular path and means for moving said device, whereby the loop is extended and the carriage caused to return to its initial position with a simple harmonic motion.

1,858,175. MACHINE FOR APPLYING A LAYER OF PLASTIC MATERIAL TO ARTICLES, SUCH AS BISCUITS. HAROLD HARDMAN TUNSTALL, Liverpool, England, assignor of one-half to T. & T. Vicars Limited, Earlestown, England, a British Company. Filed May 12, 1930. Serial No. 451,822, and in Great Britain June 8, 1929. 15 Claims. (Cl. 107—1.)



1. Apparatus for applying a layer of plastic material such as cream, icing or the like to biscuits or the like, comprising a biscuit hopper, a shaft and means for driving the same, a hollow drum fixed on said shaft and having spaced pockets on its periphery and rotatably mounted opposite said hopper so that an individual biscuit may pass from said hopper into an individual pocket of the drum, said drum also having ports in its wall in alinement with the pockets and through which the material may pass onto the biscuit in the pockets, means within the drum for measuring the quantity of material on the biscuit, and means for holding the biscuit in said pockets during the application of the said material.

1,858,176. PACKING EXTRACTOR. ERVIN F. WEBB, Beaumont, Tex. Filed Apr. 11, 1930. Serial No. 443,458. 1 Claim. (Cl. 81—81.)

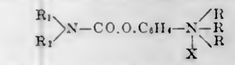
A packing extractor comprising a bendable tubular guide member, a plate formed on said member adjacent one end to provide a finger piece for permitting a person to obtain a grip on the member, and a flexible and semi-rigid extracting element extending through the tubular member and slidable and rotatable relative thereto and having one end bent in spiral shape for engaging into a packing



during the rotation of the extracting element, the other end of said extracting element bent to provide a finger ring and located adjacent the finger plate of the tubular member.

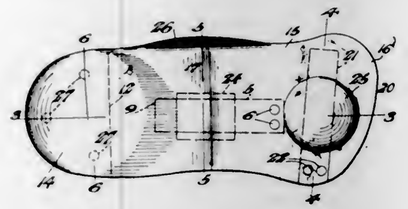
1,858,177. PRODUCT FOR DESTROYING ANIMALS. JOHN ALFRED AESCHLIMANN, Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a Corporation of New Jersey. Filed Sept. 5, 1929, Serial No. 390,659, and in Germany Oct. 19, 1928. 5 Claims. (Cl. 167—46.)

1. A poisoned food for animals comprising in addition to a food product a urethane derivative of the structure



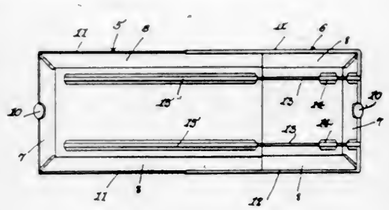
R_1 and R_2 being selected from a group comprising alkyl radicals, and hydrogen; R representing an alkyl group, and X representing a salt forming group.

1,858,178. HEEL AND ARCH SUPPORT. HARRY H. AHERN, Newport News, Va. Filed July 12, 1930. Serial No. 467,498. 4 Claims. (Cl. 36—71.)



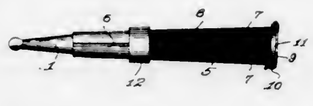
2. In a device of the character stated, a support composed of a pair of upper and lower thin plates secured together and having a central foot arch supporting portion, a raised instep-engaging portion at the inner edge of said plates, a longitudinally extending bowed spring secured to said bottom plate, a tubular resilient cushion slidably mounted on said spring, a transverse front spring at the bottom of said support, a front bulged portion above said transverse spring, and a cushioning material intermediate said plates.

1,858,179. ADJUSTABLE DELIVERY BOX. ALBERT MONROE BAY, De Soto, Mo. Filed Aug. 14, 1930. Serial No. 475,259. 2 Claims. (Cl. 220—S.)



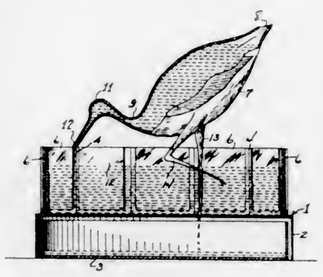
1. A delivery box of the character described comprising a pair of sections, the bottom of one section being provided with elongated guides, and elongated rods each secured at one end to the bottom side of the other section, their remaining ends slidably disposed into the guides on the bottom side of the first-mentioned section.

1,858,180. CIGARETTE ASH AND SPARK PROTECTOR. MILO L. BJORNSTAD, Duluth, Minn. Filed Oct. 19, 1931. Serial No. 569,782. 3 Claims. (Cl. 131—51.)



1. A cigarette holder including a mouth piece having a tapered portion and provided with an opening that communicates with its smoke passage and in which one end of a cigarette is received, a reticulated tubular member which is flared from one to its second end and which has reinforcing wires on its inner end and which wires are received in the grooves of the mouth piece and said reticulated tube being limited by its tapered formation when moved outwardly on the mouth piece to conceal the cigarette therein.

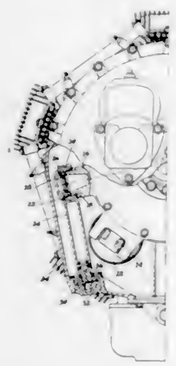
1,858,181. AQUARIUM. GASPAR ROBERT BOSSETTA, New Orleans, La. Filed June 28, 1930. Serial No. 464,518. 4 Claims. (Cl. 119—5.)



4. An aquarium comprising a base, a receptacle arranged in said base, a bowl including a portion of said base and being supported thereby, a hollow object adapted to receive water, means for supporting said object in said bowl and including a communicating tubular portion in communication with the receptacle and bowl to allow

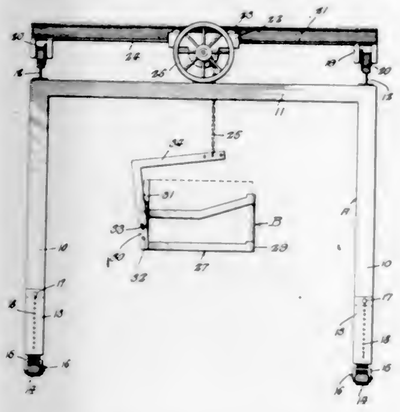
water to pass from the latter to the receptacle, and said object having an inlet at one end and an outlet at its opposite end with the outlet arranged for disposing water in said bowl.

1,858,182. ENGINE OR PUMP. MOGENS LOUIS BRAMSON, London, England, assignor of one-half to Aero Syndicate Limited, London, England, a Company of Great Britain. Filed Mar. 3, 1931. Serial No. 519,826, and in Great Britain Mar. 6, 1930. 9 Claims. (Cl. 74—14.)



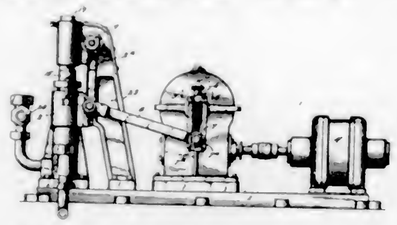
4. In an engine of the kind described, in combination, a crank-case, a wobbler within said crank-case, and a straight link jointed at one end to the periphery of the wobbler and jointed at the other end to the crank-case.

1,858,183. STACKING APPARATUS. WILLIAM C. BRIDGES, Benton, Ark. Filed Feb. 18, 1931. Serial No. 516,751. 1 Claim. (Cl. 294—63.)



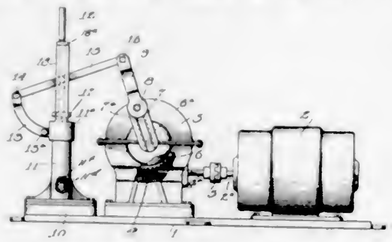
In an apparatus of the character described, grasping means including a skeleton-like body open at one side, top and bottom, retaining wings formed by opposite ends of the body, gripping levers operatively pivoted together and pivotally supported on the body for spaced grasping action upon its contents, and an extension on one lever overhanging the body and having suspension connection with a carriage.

1,858,184. LIQUID PUMP. CLARENCE O. BUENGER, Chicago, Ill., assignor to Hills-McCanna Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1930. Serial No. 419,768. 4 Claims. (Cl. 103—57.)



1. In a pump mechanism the combination of a motor a speed reducing unit operatively connected to the motor, said unit having an operating shaft provided with a crank arm, a link connected with said crank arm, a pump plunger and a rack and pinion connection between the plunger and said link whereby the plunger is automatically reciprocated by the reciprocation of said link by said crank arm.

1,858,185. LIQUID PUMP. CLARENCE O. BUENGER, Chicago, Ill., assignor to Hills-McCanna Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1930. Serial No. 419,767. 5 Claims. (Cl. 103—57.)



1. In a pumping mechanism, the combination of a reciprocating plunger pump, a motor for driving same, a speed-reducing gear interposed between the pump and the motor, a crank on the speed-reducing gear, a beam operated by the said crank, said beam pivotally connected to the pump plunger and fulcrumed beyond said plunger; and a link for fulcruming said beam, said link being pivotally mounted and arranged to compensate for the lateral movement of the fulcrum, with respect to the plunger during the operation thereof.

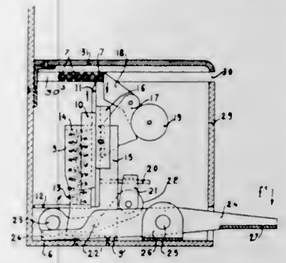
1,858,186. METHOD OF AND REAGENT FOR TREATING WET OILS. JESSE J. CANFIELD, Tallant, Okla., assignor, by mesne assignments, to Empire Oil and Refining Company, Dover, Del., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,081. 6 Claims. (Cl. 196—4.)

5. The method of treating an oil-water mixture to inhibit the formation of water-in-oil emulsions and to resolve any such emulsions previously formed, comprising subjecting the oil-water mixture to the action of a liquid mixture of an isopropyl naphthalene sulfo compound, water, cresylic acid and a low freezing point liquid halogen derivative of an aromatic hydrocarbon.

1,858,187. MUSIC LEAF TURNER. GIUSEPPE CARBEGANI, Suresnes, France. Filed Sept. 18, 1929, Serial No. 393,513, and in France Sept. 20, 1928. 3 Claims. (Cl. 84—498.)

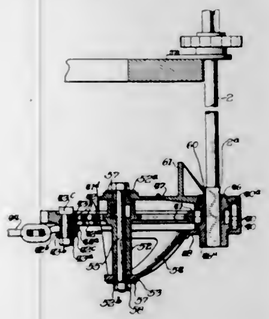
2. A music leaf turner comprising a plurality of leaf turning arms each pivotally mounted for swinging move-

ment in a horizontal plane and also for vertical angular movement and having an upstanding leaf engaging outer end, springs to impart swinging movement to said arms, a movable member having a stop finger to engage between the outermost arm and the next, a second movable element having a pivotally mounted stop to engage the outer side of the outermost arm, connecting elements be-



tween the said movable elements to simultaneously reversely actuate the same, prime moving means to operate said connecting elements, and a casing having a cam slot in which the arms are arranged to swing, said cam slot being so formed as to move the outer end of each arm downwardly as the latter nears the end of its swinging movement and thereby cause the upstanding end thereof to be disengaged from the leaf turned thereby.

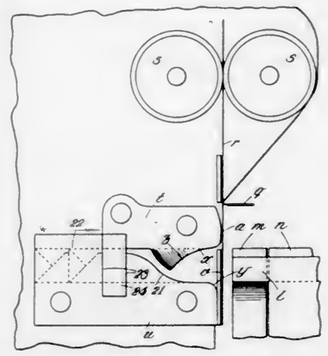
1,858,188. HAND BRAKE MECHANISM. THOMAS K. CUMMINS, St. Paul, Minn., assignor to Northern Malleable Iron Company, St. Paul, Minn., a Corporation of Minnesota. Filed Apr. 11, 1928. Serial No. 269,145. 3 Claims. (Cl. 74—112.)



1. A power increasing mechanism comprising a rotary member provided with one or more apertures, a bolt for passing through said apertures, a trunnion or thimble adapted to fit on said bolt and be held in position by the same, and a chain having a link adapted to fit loosely on said trunnion or thimble.

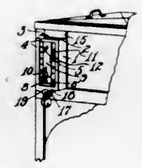
1,858,189. APPARATUS FOR WRAPPING ARTICLES. CLIFFORD JOHN DOWNING, North Finchley, London, England, assignor to The Union Cold Storage Company, Limited, London, England. Filed Jan. 8, 1931, Serial No. 507,475, and in Great Britain Feb. 13, 1930. 11 Claims. (Cl. 93—2.)

1. In an apparatus for wrapping articles comprising a die, means for feeding the article to be wrapped in front of the die, means for feeding a sheet of wrapping material between the article and the die, means for causing relative movement between the die and the article so that the faces of the die fold opposite parts of the wrapping material over the article leaving projecting portions, and curved means within the die to fold said projecting portions against the article leaving a portion of the wrapping material rectangular in cross section projecting from the trailing end of the article, that improvement



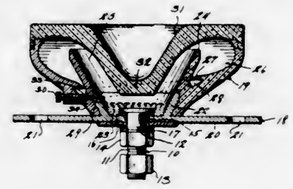
which comprises a reciprocable element having means to fold down one of the sides of the projecting portion when moved in one direction and having means when moved in the other direction to fold down the opposite side and then successively the two remaining sides of the projecting portion.

1,858,190. COIN BOX. CHESTER A. FRICK, Muncie, Ind., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed June 21, 1929. Serial No. 372,775. 6 Claims. (Cl. 232—44.)



1. In a coin receptacle, the combination with a stationarily mounted casing having an unobstructed U shaped coin channel of a width and cross-sectional area to accommodate a single coin and having one side open, of a transparent cover plate for the open side of said channel, said channel having an inlet opening in one leg and an escape opening in the other leg.

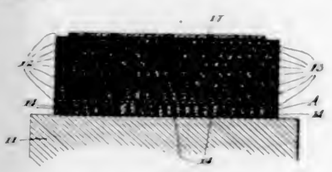
1,858,191. AUTOMATIC CIRCUIT BREAKER. CLAIR H. HADLEY and BERYL L. HADLEY, Paonia, Colo. Filed Feb. 25, 1931. Serial No. 518,251. 4 Claims. (Cl. 200—152.)



1. A circuit breaker of the character described comprising a casing of non-conducting composition, a pair of electrodes mounted within the casing in spaced rela-

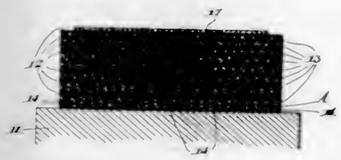
tion to each other, an inverted frustro-conical baffle mounted within the casing and dividing the casing into an inner and an outer chamber, said baffle terminating at the upper end thereof in spaced relation to the adjoining wall of the casing whereby to provide a continuous passage from the inner chamber to the outer chamber, a liquid conductor mounted within the inner chamber and normally contacting with each of said electrodes, said casing having a passage connecting the inner and the outer chambers adjacent the lower end thereof, and a normally closed valve member closing said opening.

1,858,192. APPARATUS FOR PRESSING LEATHER. CHARLES GEORGE SHAW, Huntsville, Ontario, Canada. Filed Feb. 9, 1929. Serial No. 338,875. 29 Claims. (Cl. 149—23.)



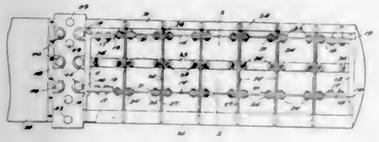
29. In apparatus for pressing leather and the like, the combination with a press comprising an upper platen and a lower platen, one of which is movable toward the other and one of which is heated and has a polished surface, means for heating the surface, and a compressible resilient pad for the press having a cushion between which and the polished surface the leather is pressed.

1,858,193. MANUFACTURE OF LEATHER. CHARLES GEORGE SHAW, Huntsville, Ontario, Canada. Filed Feb. 9, 1929. Serial No. 338,876. 14 Claims. (Cl. 149—23.)



1. In the manufacture of vegetable tanned sole leather, the steps in the compaction between a die of a press and a cushioning pad in the press of pieces of uneven thickness to substantial uniform firmness, which consists in applying pressure greater than one thousand pounds per square inch, simultaneously to a substantial area of the piece, cushioning the pressure on the flesh side of the leather flexibly in all vertical planes and using cushioning tension at the edge to harden the edges of the leather.

1,858,194. AIRPLANE WING. LEWIS J. TETLOW, Holyoke, Mass. Original application filed Aug. 19, 1929, Serial No. 386,925. Divided and this application filed Mar. 28, 1930. Serial No. 439,783. 19 Claims. (Cl. 244—12.)



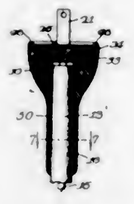
1. In an airplane, a wing having a frame comprising end members and spars connecting said members and fore-and-aft ribs formed of flanged strips secured to said spars by integral flanges extending from the strips, said spars and strips being rectangular in cross section and of equal height at their intersections.

1,858,195. ANTITAIL SPIN DEVICE. LEWIS J. TETLOW, Holyoke, Mass. Filed May 2, 1930. Serial No. 449,275. 12 Claims. (Cl. 244—29.)



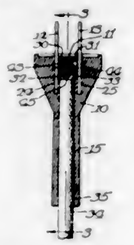
1. In an airplane having fuselage, a stabilizer, a rudder, and elevators: air current actuated tail lifting means attached to said elevators.

1,858,196. ELECTRIC PLUG CONNECTER. HUGO H. WERMINE, Villa Park, Ill., assignor to Belden Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1927. Serial No. 178,945. 28 Claims. (Cl. 173—361.)



17. A connecter member comprising a base made of a soft, flexible, elastic, rubber-like material, removable connecter pins supported in said base, and a retainer for said pins, all of the parts being removably held in assembled relation by the elastic properties of the material of the base.

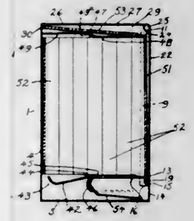
1,858,197. ELECTRIC PLUG CONNECTER. HUGO H. WERMINE, Villa Park, Ill., assignor to Belden Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 15, 1928. Serial No. 261,780. 12 Claims. (Cl. 173—361.)



1. In a connecter of the class described, the combination of a body member having an aperture extending therethrough and a recess in the front end of said body member, said recess being spaced radially outwardly and separated from said aperture by a portion of the body member, a contact prong having its inner end portion seated in said recess, and its outer end portion projecting outwardly from the front end of the body member, a conductor disposed in said aperture and connected to said contact prong and a closure member for the front end of said aperture, serving with the body member to enclose the connection between the conductor and prong, said closure

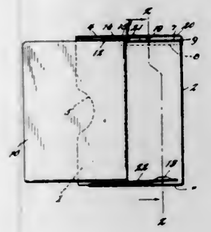
member having interlocking engagement with the body member and said body member and closure member being relatively distortible so as to permit such interlocking parts to be so assembled.

1,858,198. PACKAGE CONTAINER. BERNHARD GOERG, Mount Vernon, WILLIAM R. ZUHLKE, Yonkers, N. Y., and WILLIAM E. KUGEMAN, Jr., Paris, France, assignors by mesne assignments, to National Automatic Container Corporation, Baltimore, Md., a Corporation of Maryland. Filed Aug. 16, 1928. Serial No. 299,936. 15 Claims. (Cl. 206—41.)



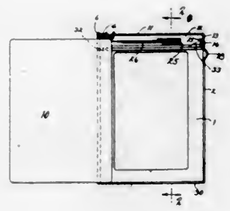
1. In a device of the character described, a container having an open top and an open end, a cover member cooperable with said container and operable to close the open top thereof, cutting means normally positioned within said container adjacent said open end and extending across the same below the plane of the top edge of said end opening whereby said cutting means will act upon insertion of a package through said open end to cut the package top free along its end and sides, and means carried by said cover member operable to engage the freed package top whereby to open said package top as said cover member is opened.

1,858,199. CIGARETTE PACKAGE CONTAINER. GEORGE DE MAZIROFF, New York, N. Y., assignor to National Automatic Container Corporation, Baltimore, Md., a Corporation of Maryland. Filed Dec. 7, 1929. Serial No. 412,387. 8 Claims. (Cl. 206—41.)



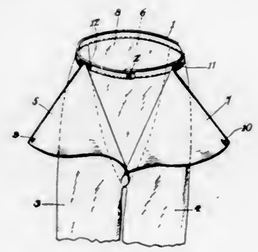
2. A device adapted to hold a pack of cigarettes comprising a container having an opening at one end to admit the pack and an opening in the top to permit removal of the cigarettes, the bottom portion of the container being of a width substantially that of the pack and the top portion being slightly wider than the bottom portion, and a blade extending the width of said container arranged operatively below the top of said container and presenting its cutting edge toward the open end thereof, whereby the top of the pack is sliced along two lines of severance upon relative movement of the pack and blade.

1,858,200. CIGARETTE PACKAGE CONTAINER. GEORGE DE MAZIROFF, New York, N. Y., assignor to National Automatic Container Corporation, Baltimore, Md., a Corporation of Maryland. Filed Aug. 22, 1930, Serial No. 477,025. Renewed Feb. 24, 1932. 12 Claims. (Cl. 206—41.)



1. A device adapted to hold a pack of cigarettes comprising a container of substantially the same shape as the pack to be held, having one end and a portion of the top adjacent the opposite end thereof open, a movable cover adapted to close the opening in the top of the container, a blade holder carried by said cover and arranged to frictionally hold a blade parallel to and slightly below the top of said container, and a removable blade disposed in said holder and presenting its cutting edge toward the open end of said container whereby the top of the pack is sliced upon relative movement of the pack and the blade.

1,858,201. PAJAMA TROUSERS. GEORGE P. KIMMEL, Washington, D. C. Filed Jan. 3, 1931. Serial No. 506,413. 3 Claims. (Cl. 2—227.)

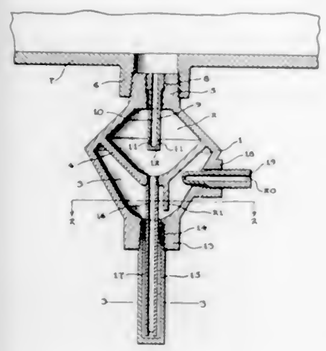


1. In pajama trousers, a waist band adapted to be secured about the body of a wearer, legs permanently secured to the waist band at the sides and back of the latter, the rear portions of the legs being disposed in overlying relation, the front portions of the legs being disconnectible from the front of the waist band, and means for detachably securing said front portions with respect to the waist band adjacent the sides of the latter to support said front portions in overlying relation.

1,858,202. PRESSURE RELIEF VALVE. WALTER G. WATKINS, Kansas City, Mo., assignor to Skelly Oil Company, El Dorado, Kans. Filed Sept. 5, 1931. Serial No. 561,462. 3 Claims. (Cl. 137—53.)

1. A pressure relief valve comprising a unitary casting forming a chamber, a partition located in said chamber and forming an upper and a lower compartment therein, a liquid container removably secured to said casting adjacent said lower compartment and in communication therewith, a column of liquid in said container, a tube

leading from said upper compartment into said liquid container and having its lower end normally sealed by said liquid, an inlet nozzle extending through a wall of said



chamber into said upper compartment, and an outlet nozzle extending through another wall of said chamber into said lower compartment.

1,858,203. PURIFICATION OF PHOSPHORIC ACID. AUGUSTUS H. FISKE, Warren, and CHARLES S. BRYAN, East Providence, R. I., assignors to Rumford Chemical Works, Rumford, R. I., a Corporation of Rhode Island. Filed Jan. 13, 1931. Serial No. 508,349. 2 Claims. (Cl. 23—165.)

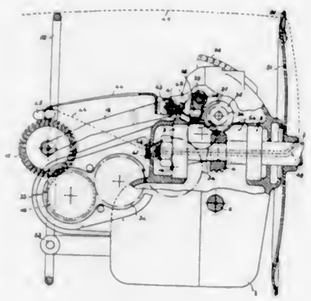
1. In the freeing of phosphoric acid liquors from fluorine, those steps including the boiling of the liquor with hydrated silica and precipitating a salt of hydrofluosilicic acid.

1,858,204. METHOD AND DEVICE FOR THE PRODUCTION OF PILES OF CONCRETE AND THE LIKE. EDGARD FRANKIGNOUL, Brussels, Belgium, assignor to Compagnie Internationale des Pieux Armes Frankignoul, Societe Anonyme, Liege, Belgium. Original application filed Nov. 15, 1927, Serial No. 233,445, and in Belgium Nov. 30, 1926. Divided and this application filed Oct. 6, 1931. Serial No. 567,169. 8 Claims. (Cl. 61—57.)



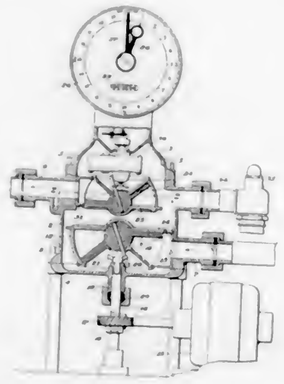
1. A method for constructing concrete piles or the like comprising the steps of driving into the soil a shaft lining, a driving point and a rammer, pouring concrete in said lining and causing a part of the concrete contained in the lining to fall underneath the rammer.

1,858,205. DOUBLE TWIST FLYER SPINNING MACHINE. ALBERT FÉRIER, Lyon, France, assignor to Blanchini, Ferier Société en nom Collectif, Lyon, France. Filed Apr. 29, 1931. Serial No. 533,671, and in France June 20, 1930. 2 Claims. (Cl. 117—21.)



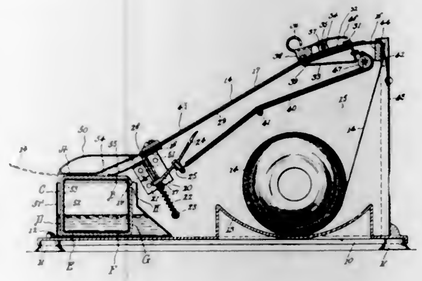
1. In a double twist flyer spinning machine, a horizontal spindle or pirn, a winding bobbin driven by said spindle, a traversing thread guide, a stationary head axially aligned with said pirn and through which the thread is guided on its passage from the pirn to the thread guide, the diameter of the aperture in said head being less than that of the pirn, a yoke connected to the thread guide, a double cross-threaded screw engaging with said yoke, the threads of said screw being connected at their ends to form reversing grooves for the yoke, and a casing pivotally mounted on said spindle or pirn and maintained in constant equilibrium by gravity, said casing housing the driving gear for the bobbin, guide and screw.

1,858,206. LIQUID DISPENSING APPARATUS. WALTER A. HERSEY, Wellesley, Mass., assignor to Hersey Manufacturing Company, South Boston, Mass., a Corporation of Massachusetts. Filed June 3, 1930. Serial No. 459,064. 7 Claims. (Cl. 221—95.)



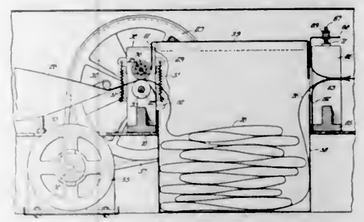
1. In a liquid dispensing apparatus, the combination of a pump, a liquid measuring device including an operating element, a single liquid holding casing in which said pump and operating element are mounted in series, and means for driving said pump.

1,858,207. STRIP PAPER SEALER. HERMAN H. HILLMER, Omaha, Nebr., assignor to Jubilee Manufacturing Co., Omaha, Nebr., a Corporation of Nebraska. Filed Mar. 28, 1929. Serial No. 350,767. 2 Claims. (Cl. 91—14.5.)



1. In a strip paper sealer, including serving and severing means, a fluid receptacle past which the paper strip is fed, a perforated rectangular frame fitted reversibly and rotatably in said receptacle, a capillary felt covering said frame and having a plurality of moistening surfaces on each of its sides, a spring guide to hold the frame in adjusted position adapted to engage an intermediate part of the upper exposed portion of the felt to guard the strip from the surface underlying the guide, and a pressure member overlying the moistener for pressing the strip against the felt surface in advance of the guide.

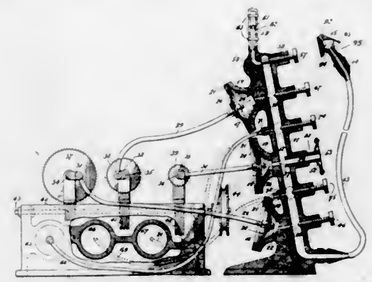
1,858,208. DISPLAY APPARATUS. HOMER H. INGERSOLL, Chicago, Ill., assignor to Animated Displays, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed May 2, 1930. Serial No. 449,150. 9 Claims. (Cl. 40—32.)



1. In a display apparatus for displaying matter on an endless belt, means for displaying said belt in a vertical position, means for advancing the belt, means for rotating said belt through an angle to a substantially horizontal position while advancing it in the same direction, and means for collecting and storing the belt in horizontal folds.

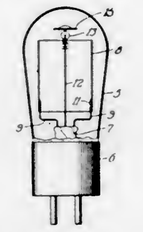
1,858,209. VIBRATORY MASSAGE APPARATUS. JAMES S. LANG, Boston, Mass.; Old Colony Trust Company executor of said James S. Lang, deceased. Filed May 5, 1927. Serial No. 189,137. 4 Claims. (Cl. 128—39.)

3. A vibratory apparatus comprising an air container having an air conductor leading therefrom with applicator carried by it, a vibratory air displacing mechanism for effecting mass vibrations of the air within the air container and air conductor therefrom, an inwardly-closing valve arranged to prevent admission of air into the air container, but opening to permit escape of air from the air container when subjected to air pressure therein above atmospheric pressure, means whereby during the vibration of the air displacing mechanism a compression of air above atmospheric pressure will be obtained in a zone adjacent the air



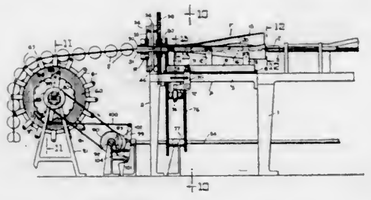
displacing mechanism, said valve being located within said zone, and means for vibrating the air displacing mechanisms.

1,858,210. ELECTRONIC TUBE. ARCHIE J. MCMASTER and CHARLES E. PARSON, Chicago, Ill., assignors to G-M Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed July 7, 1930. Serial No. 466,107. 4 Claims. (Cl. 250—27.5.)



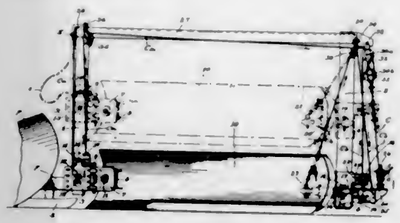
1. A method of producing a light sensitive electron emissive surface which consists of applying a silver oxide coating to a metallic plate, heating said plate to reduce the silver oxide, placing an atmosphere containing oxygen around the plate and reoxidizing the plate, and subsequently forming a light sensitive surface on the plate.

1,858,211. SPRING TURNING MECHANISM. BERNARD R. SCHNEIDER, Lyndhurst, and KARL KAISER, Ridgefield, N. J., assignors, by mesne assignments, to S. Karpen & Bros., Chicago, Ill., a Corporation of Illinois. Filed Aug. 9, 1930. Serial No. 474,238. 18 Claims. (Cl. 226—18.)



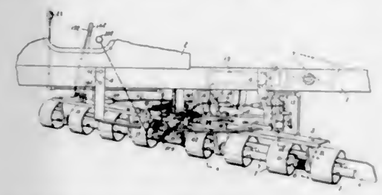
1. In a device of the character described, means for receiving a row of coil springs spacedly enclosed in covering material, and means for turning said covering material relative to an enclosed coil spring.

1,858,212. SNOWPLOW. GEORGE C. SOULE and JOHN B. WOODBURY, South Portland, Me., assignors to Maine Steel Products Company, Portland, Me., a Corporation of Maine. Filed Aug. 1, 1930. Serial No. 472,236. 13 Claims. (Cl. 37—44.)



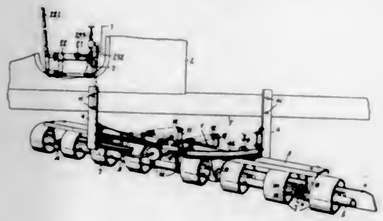
6. In a snow plow, the combination with a frame and a wing having a universally adjustable connection therewith, of a push arm having its inner end slidably mounted on the frame and its outer end fastened to the wing to follow the adjustments thereof, and a means for simultaneously adjusting both ends of said push arm.

1,858,213. ROAD SCRAPER. ERNEST A. WEEKS, Kalamazoo, Mich., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Filed Jan. 11, 1928. Serial No. 245,982. 19 Claims. (Cl. 37—155.)



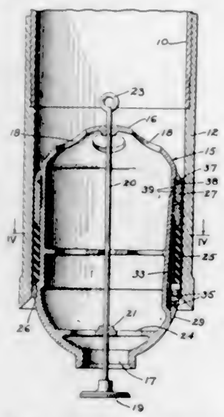
7. A scraper structure comprising the combination of an adjustable supporting beam, a scraper with pivotal supports therefor, and a hydraulic cylinder mounted on said supporting beam connected to actuate and control said scraper and hold it by hydraulic pressure as specified.

1,858,214. ROAD SCRAPER. ERNEST A. WEEKS, Kalamazoo, Mich., assignor to Root Spring Scraper Company, Kalamazoo, Mich. Filed Nov. 28, 1928. Serial No. 322,552. 9 Claims. (Cl. 37—155.)



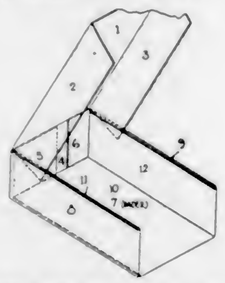
7. In a scraper structure, the combination of a truck chassis, a scraper structure comprising a supporting beam attachment to said chassis, a scraper adjustably supported on said beam, a hydraulic power cylinder piston structure mounted on said beam and connected to apply pressure to said scraper to hold it to the ground, means for elevating said scraper, and a hand operated hydraulic pump on said chassis with connections to supply said hydraulic cylinder.

1,858,215. CEMENTING PLUG. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Nov. 19, 1929. Serial No. 408,311. 8 Claims. (Cl. 166—13.)



1. A device of the character described comprising a body adapted to be lowered through a string of well casing, a normally contracted expansible member carried by the body, means engageable with the lower edge of the casing to secure the body in its lowered position, said means acting to expand the expansible member against the inner surface of the casing whereby the lower end of said casing will be sealed.

1,858,216. PAPER TRANSFER FILE. JOHN COLON, New York, N. Y., assignor to George P. Schinzel, jr., New York, N. Y. Filed Dec. 30, 1931. Serial No. 583,983. 4 Claims. (Cl. 229—16.)

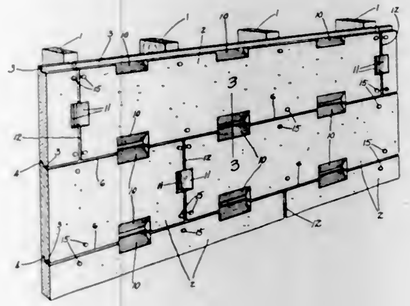


1. A collapsible casing for use with file cases, said casing having an open end and formed from a single blank of material creased and folded to provide a bottom, side flanges for said bottom having tongues extending therefrom at the open end of said casing, said tongues being foldable inwardly upon said flanges and being of sufficient length to combine therewith to form longitudinally elongated slots therebetween, and a top for said casing having depending flanges insertable into said slots.

1,858,217. BUILDING MATERIAL. GEORGE H. ELLIS, St. Paul, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Original application filed July 9, 1928, Serial No. 291,355. Divided and this application filed Feb. 17, 1930. Serial No. 429,035. 8 Claims. (Cl. 72—31.)

1. A plurality of boards having edge portions reduced in thickness and overlapped to form an expansion joint,

said edge portions being cut away to provide an open joint on the face side, said edge portions being notched at intervals also on the face side to provide transverse enlargements of the open joint which extends transversely



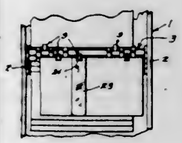
of and extends laterally at both sides of the open joint, whereby alternate wide and open joint portions are provided which form, when the plaster enters the open joint, a longitudinally continuous plaster key having alternate wider and narrower portions.

1,858,218. TOILET ACCESSORY. WILLIAM FRIEDMAN, New York, N. Y. Filed Nov. 2, 1929. Serial No. 404,274. 15 Claims. (Cl. 132—83.)



1. In a device of the character described providing a main powder chamber, a dispensing plate, and a closure plate normally forming a substantially closed auxiliary powder chamber in connection with the said dispensing plate.

1,858,219. CARD HOLDER. LE ROI E. HUTCHINGS, Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Nov. 11, 1929. Serial No. 406,247. 9 Claims. (Cl. 129—16.7.)



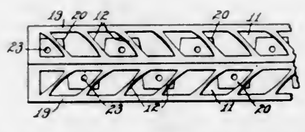
2. In combination, a supporting element having a plurality of spaced lugs thereon, an index card, and card holders on said card detachably engageable with said supporting element between said lugs.

5. In combination, a supporting element comprising a wire having a plurality of spaced lugs thereon, a signal for index cards, and a holder engaged with said signal and detachably and resiliently connected to said wire for selective sliding movement between two of said lugs.

1,858,220. PRODUCTION OF METAL CARBONYLS. LEO SCHLECHT and EMIL KEUNECKE, Ludwigshafen-on-the-Rhine, and WALTER SCHUBARDT, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 18, 1929, Serial No. 364,319, and in Germany May 23, 1928. 6 Claims. (Cl. 23—203.)

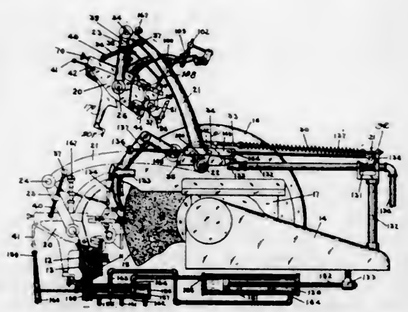
1. The process of forming metal carbonyls from materials containing the carbonyl forming metals which comprises intimately mixing the said material with substances preventing sintering under the subsequent conditions of reduction and reducing the materials at a temperature above 500° C., but below the melting point of said metals to obtain the same in an unsintered condition and then treating the reduced materials with carbon monoxide to form the metal carbonyls.

1,858,221. EDGE ANCHOR FOR BUILDING SHEETS. JOSEPH SIEGFRIED, La Fayette, Ind. Filed Mar. 31, 1930. Serial No. 440,413. 5 Claims. (Cl. 72—101.)



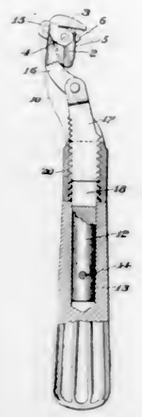
1. As an article of manufacture, an anchor strip for sheet building material consisting of a sheet of metal transversely plurally slit across an intermediate fold line and bent along said intermediate longitudinal fold and adjacent parallel fold lines to form two series of oppositely-projecting double-thickness fingers, and bent along two other parallel fold lines to form two oppositely-projecting arms substantially parallel with the double-thickness fingers and forming therewith two oppositely-presented channels.

1,858,222. GRINDING MACHINE. HERBERT A. SILVEN, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1928. Serial No. 329,488. 34 Claims. (Cl. 51—238.)



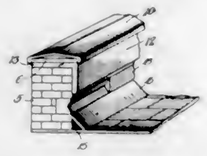
11. A grinding machine having a base, a work supporting table thereon, a grinding wheel rotatably mounted to grind the work, a steadyrest including a frame having an adjustable work steadying shoe, a movable support for the steadyrest arranged to move the rest bodily to and from an operative position relative to the work, and means including a clamping mechanism to simultaneously clamp the steadyrest rigidly in engagement with said table and to move the steadyrest shoe relative to the frame and position it adjacent to the piece of work to be ground.

1,858,223. SAFETY RAZOR. CHARLES J. EMERSON, Winchester, Mass., assignor to Emerson Apparatus Company, Melrose, Mass., a Corporation of Rhode Island. Filed Feb. 27, 1931. Serial No. 518,602. 5 Claims. (Cl. 30—12.)



1. A safety razor comprising a blade holder including guard and cap members hinged together and adapted to engage a safety razor blade and to clamp it in position for shaving, a handle for said holder extending at approximately right angles thereto, said handle including a grip portion and a shank split to provide two arms which are rigidly connected to one of said members, a plunger slidable in the split section of said shank and having threaded edges, cooperating means on the handle and plunger whereby rotation of the plunger is prevented, a sleeve mounted to rotate on said handle but held against substantial movement longitudinally of the handle, said sleeve being internally threaded to engage the threaded edges of said plunger, and positive connections between said plunger and one of said holder members operable to relatively swing said members about their hinge connection to clamp or release a blade.

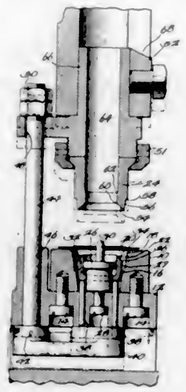
1,858,224. ROOF COVERING. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed June 25, 1928. Serial No. 288,232. 7 Claims. (Cl. 72—86.)



1. A parapet building wall construction comprising a raggle block for securing the ends of roofing strips to a wall, coping strips capping the wall, and a strip covering the wall between the coping and the raggle block.

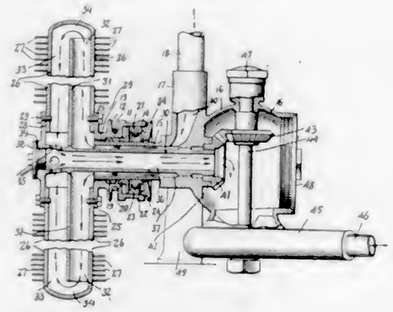
1,858,225. MACHINE FOR FORMING COMMUTATOR RINGS. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Nov. 11, 1926. Serial No. 147,710. 20 Claims. (Cl. 18—19.)

1. A machine for making insulating rings, having a recessed die provided with an annular shoulder at the top, a receding die which when depressed forms an annular channel in conjunction with the recessed die, and an annular projecting die for forcing the work sheets into the



channel formed by the recessed and receding dies, the projecting die having an annular shoulder for cooperating with the annular shoulder of the recessed die for finishing the work sheet as the recessed die descends.

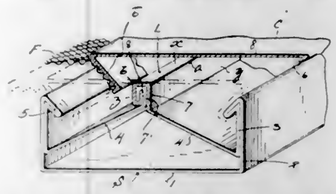
1,858,226. ROTARY RADIATOR. CHARLES HLAVATY, New York, N. Y. Filed Aug. 1, 1928. Serial No. 296,805. 3 Claims. (Cl. 257—127.)



2. The combination of a journal neck of substantially cylindrical form, means for supporting said journal neck in a stationary position, a tubular shaft extending through said journal neck and revoluble relatively thereto, a radiator connected with said tubular shaft and therewith revoluble relatively to said journal neck, a revoluble sleeve connected with said radiator, means for actuating said revoluble sleeve and thereby turning said radiator and said tubular shaft, a stuffing box carried by said sleeve and engaging said journal neck, said stuffing box including a gland movable relatively to said sleeve for the purpose of adjusting said stuffing box relatively to said journal neck, and means for adjusting said outer member of annular form relatively to said sleeve, and thereby adjusting said gland.

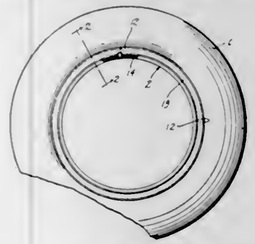
1,858,227. WINDOW SCREEN. THEODORE JOHNSON, Erie, Pa., assignor to Johnson Metal Products Co., Erie, Pa. Filed July 22, 1930. Serial No. 469,859. 10 Claims. (Cl. 156—14.)

4. A stile of the class described formed from a single sheet of material and comprising a base strip having flanges disposed in the same general direction, said flanges being continued by reverted flanges, said reverted flanges



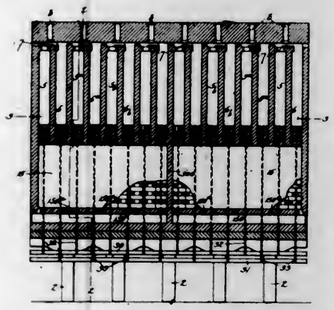
being continued by brace plates disposed one toward the other, said brace plates having extension plates in interlocking engagement one with the other.

1,858,228. MEANS FOR ORNAMENTING RIMS. GEORGE ALBERT LYON, Allenhurst, N. J. Filed July 11, 1930. Serial No. 467,325. 11 Claims. (Cl. 41—10.)



1. An automobile wheel rim having a base and tire engaging side flanges extending outwardly therefrom and an ornamental ring strip of relatively thin sheet metal applied to the outer face of one of said flanges and interlocked with said flange to form an ornamental covering for at least a portion of said flange.

1,858,229. REGENERATIVE COKE OVEN. CARL OTTO, Hellerup, Denmark. Filed Mar. 10, 1925. Serial No. 14,472. 1 Claim. (Cl. 202—142.)

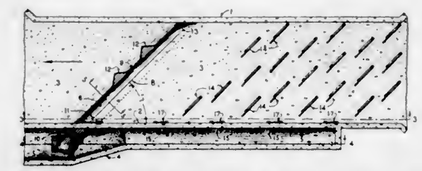


A coke oven provided with a roof, a series of alternate coking chambers and heating walls therefor, said walls being each provided with vertical combustion flues, communicably connected at their tops, separating walls between two adjacent combustion flues, a removable brick mounted on the top of each separating wall and extending substantially to the roof of the oven, said brick being adapted to permit the passage of gas at least on one side thereof and being adapted to regulate the rate of passage of burning gas from one flue to the adjacent flue.

1,858,230. FERTILIZER MATERIAL AND PROCESS FOR MANUFACTURING THE SAME. GEORGE P. WALTON and ROBERT F. GARDINER, Washington, D. C. Filed Mar. 26, 1929. Serial No. 350,121. 12 Claims. (Cl. 71—6.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

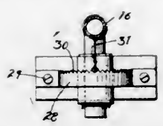
10. A process for preparing fertilizer material from peat, which comprises incorporating the peat with a hot melt essentially comprising mono-potassium phosphate and phosphoric acid, digesting the peat therein, and neutralizing the excess of acid.

1,858,231. VORTEX SAND TRAP AND DEFLECTOR RIFFLE. RALPH L. PARSHALL, Fort Collins, Colo., dedicated by assignments, to The Government and People of the United States of America. Filed Sept. 14, 1931. Serial No. 562,739. 3 Claims. (Cl. 61—12.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



3. A deflector riffle comprising a rigid channel having side walls and a floor, a series of rows of flat triangular plates attached at their lower edges to the bed of said rigid channel, said plates being spaced diagonally across the channel along the rows and so positioned as to cause sand and débris carried in the lower portion of a stream to move laterally across said channel substantially as described.

1,858,232. AUTOMOBILE HOOD BRACKET LAMP. SEBASTINO PIOMBO, San Francisco, Calif. Filed May 12, 1931. Serial No. 536,726. 2 Claims. (Cl. 240—7.1.)



1. An automobile hood bracket of the class described comprising an arm, a pivot bearing for said arm, an electric light bulb on said arm, a semi-circular member having notches therein, a spring fixed to said arm having its end in engagement with said notches whereby the arm moving in either direction will snap the spring out of one notch into the next.

Patents Nos. 1,858,233 to 1,859,278

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THE OFFICIAL GAZETTE

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Issue of May 17, 1932

Trade-Marks	155—No.	294,026 to No.	294,180,	inclusive.
T. M. Renewals	20			
Labels	37—No.	40,688 to No.	40,724,	inclusive.
Prints	12—No.	13,718 to No.	13,729,	inclusive.
Reissues	15—No.	18,462 to No.	18,476,	inclusive.
Designs	43—No.	86,946 to No.	86,988,	inclusive.
Patents	1,041—No.	1,858,233 to No.	1,859,273,	inclusive.
Total	1,333			

NOTICE TO ATTORNEYS

The Patent Office has received numerous protests from trade-mark proprietors that their trade-marks are frequently used as common nouns in patent specifications.

Applicants and their attorneys are urged to avoid using trade-marks in patent specifications and to employ in their stead properly descriptive terms. If, however, a trade-mark is used, suitable acknowledgment should be made that it is a trade-mark, as, for example, by stating that the article or product in question is one which is sold under such and such a trade-mark and/or by capitalizing the first letter of the word constituting the trade-mark and inclosing the word in quotation marks.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Notice of Cancellation

U. S. Patent Office, *Washington, Apr. 25, 1932.*

Quin Sharpe Drug Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Hoffmann-La Roche Inc., Nutley, N. J., to effect the cancellation of the trade-mark registration of Quin Sharpe Drug Co., of Vicksburg, Miss., No. 41,567, dated December 1, 1903, and the notice of such proceeding sent by registered mail to the said Quin Sharpe Drug Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Quin Sharpe Drug Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Photostat Copies

In ordering photostat copies of United States and foreign patents, when only the number of the patent is given the whole patent, comprising specification and drawing, will be furnished, unless the order specifically states that the "specification only" or "drawing only" is required. Care should be taken in making out orders for foreign patents to give the year of the patent, as in old French and British patents the number will vary according to the year.

Reissue Applications—Drawings

"58. In reissue applications the drawings upon which the original patent was issued may be used upon the filing of suitable permanent photographic copies thereof, if no changes are to be made in the drawings."

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,632,767, E. J. Bloom, Chassis lubrication, decided March 1, 1932, claim 2.

Pat. 1,672,796, W. B. Whitmore, Sound reproducer, decided February 24, 1932, claims 1, 2, and 8.

Pat. 1,759,520, F. T. Parsons, jr., Method and article for wiping inky surfaces, decided April 20, 1932, claims 1, 2, and 6.

Pat. 1,767,777, A. A. Thomas, Loudspeaker, decided March 28, 1932, claims 14 and 25.

Pat. 1,816,851, J. R. Ingram, Age resisting vulcanized rubber compound, decided April 16, 1932, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15.

Pat. 1,827,629, C. W. Vogt, Refrigerating apparatus for package goods, decided April 18, 1932, claims 1, 2, 6, 11, 13, 14, and 20.

Condition of Applications Under Examination at Close of Business April 30, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 88,086; Trade-Mark Division, 997. Oldest new case, Sept. 30, 1931; oldest amended, Oct. 3, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
6024	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	†Jan. 2	†Jan. 14	537
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Dec. 7	Dec. 10	1,145
4003	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Jan. 8	†Jan. 16	756
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Jan. 18	†Feb. 4	596
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 2	Dec. 12	472
4898 C	6. LEWERS, A. M., Carbon Chemistry	Oct. 8	Oct. 12	1,996
5725	7. JARBOE, C. G., Optics; Photography	Nov. 18	Nov. 18	1,614
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 23	Nov. 27	1,268
4024	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 21	†Jan. 22	897
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 21	Nov. 27	1,011
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 15	Dec. 24	628
7701	12. HENRY, C. C., Machine Elements	†Jan. 13	†Jan. 9	671
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 7	Dec. 7	1,167
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Dec. 30	†Jan. 12	803
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 17	Nov. 17	2,018
5012	16. SPENCER, C. J., Telegraphy; Telephony	Dec. 30	Dec. 30	890
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 30	Nov. 2	1,400
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 5	Dec. 7	860
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Oct. 2	Oct. 3	1,810
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 2	†Jan. 2	702
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 9	Dec. 22	952
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 22	†Jan. 18	656
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 6	Oct. 6	978
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 2	Dec. 10	779
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 9	Nov. 9	1,607
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Nov. 9	Nov. 6	968
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Dec. 8	Dec. 9	982
4029	28. BENSON, A. R., Internal-Combustion Engines	Oct. 30	Oct. 30	1,474
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Oct. 10	Oct. 10	1,034
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 2	†Jan. 2	907
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Oct. 21	Oct. 22	1,601
4085	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 26	Dec. 30	1,030
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Nov. 3	Nov. 3	2,421
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Dec. 1	Dec. 1	912
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Mar. 14	†Mar. 19	439
7028	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Oct. 21	Oct. 20	1,836
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 5	Nov. 6	1,405
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Feb. 3	†Jan. 26	343
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 2	Nov. 2	1,503
7880	40. OBERLIN, J. J., Receptacles	Nov. 13	Nov. 16	2,055
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	†Jan. 11	†Jan. 11	785
5882	42. CUTTING, H. O., Electric Signaling	Oct. 23	Oct. 17	1,501
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Nov. 30	Nov. 30	1,466
4087 B	44. SHAFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 30	Oct. 7	1,861
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Dec. 4	Dec. 4	1,306
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Dec. 12	Dec. 21	781
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Nov. 30	Nov. 30	2,061
5828 C	48. ROEPKE, O. B., Electricity, General Applications	Nov. 7	Nov. 7	965
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 9	Oct. 10	1,563
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 17	Oct. 17	2,133
5028	51. BACKUS, C. D., Radiant Energy	Nov. 19	Nov. 19	1,284
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 8	†Jan. 21	880
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 2	†Feb. 4	568
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Oct. 16	Oct. 16	1,173
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Mar. 25	†Mar. 24	180
	Designs	†Apr. 9	†Apr. 20	177
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Nov. 11	Nov. 13	1,494
3629	57. NICOLSON, C. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Nov. 30	Dec. 4	692
5605	58. DOWELL, E. F., Abrading; Typewriting	Oct. 26	Oct. 23	1,380
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Oct. 26	Oct. 26	1,630
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Oct. 10	Oct. 10	1,578
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 6	Oct. 14	1,571
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Oct. 30	Oct. 30	1,799
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 19	Oct. 23	1,525
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Nov. 19	Nov. 19	763
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Oct. 7	Oct. 6	1,848
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	†Apr. 2	†Apr. 15	771
	Labels and Prints	†Apr. 1	†Apr. 19	136

DECISIONS IN PATENT AND TRADE-MARK CASES

Supreme Court of the District of Columbia

BOGGS *v.* ROBERTSON, COMMISSIONER OF PATENTS

51,437. Decided June 23, 1931

1. PATENTABILITY—MAP PROJECTION.

Claims for a map projection *Held* properly refused on the ground that the subject matter does not come within the purview of section 4886, Revised Statutes.

2. SAME—PRINTED MATTER.

"I am of opinion that in all cases where the printed matter, irrespective of the material upon which it is printed, is the sole feature of alleged novelty it does not come within the purview of the statute, as it is merely an abstract idea," and claims for such printed matter are not patentable under the terms of section 4886, Revised Statutes.

3. SAME—SAME.

"Where the paper or physical body upon which the matter is printed is designated to be used with the printed matter, as by tearing apart or punching, it becomes more than an abstract idea but an actual physical article of manufacture within the terms of section 4886, Revised Statutes (35 U. S. C. A. 31), and as such is patentable if it be a new and useful inventive concept."

Mr. Ralph B. Stewart for Boggs.

Mr. T. A. Hostetler for the Commissioner of Patents.

ADKINS, *J.:*

[1] I think the claims were properly refused in the Patent Office on the ground that the subject-matter does not come within the purview of section 4886, Revised Statutes (35 U. S. C. A. 31).

Plaintiff relies upon the generally accepted definition that a manufacture is "whatever is made by the art or industry of man, not being a machine, or composition of matter, or a design."

It is apparent from the authorities cited by plaintiff that to be a patentable manufacture the thing or object resulting from such industry must be composed of component parts which constitute a novel and useful entity; and that where the physical means embodying an inventive idea is novel, such means may be patentable whether the idea is itself old or new.

Plaintiff does not disclose any means for which a patent may issue; but on the contrary the whole novelty of the case resides merely in the abstract idea of using certain geometrical curves for a particular purpose.

The authorities are uniform in holding printed matter per se to be unpatentable, i. e., where an idea is simply an abstraction the mere reduction of it to writing does not amount to invention. The decisions listed in plaintiff's brief hold various printed sheets and books wherein the claimed novelty resides in the system of arrangement or identity of the printed matter to be without the scope of the patent statutes. Other cases cited by him held valid patents for the following objects—index book; transfer ticket; scrip book; menu card; advertising card. The index book case, *Johnson* v. *Johnson*, 60 F. 618, involved a set of index books the leaves of which were used in cooperation to locate names and certain data.

The transfer ticket case, *Cincinnati Traction Co.* v. *Poue*, 210 F. 443, involved in general the street-car transfer ticket in general use today with a coupon to be either torn off or left on to indicate a. m. or p. m. use of the ticket. The paper on which the printed matter appeared was used physically in addition to serving as a mere support for the printed matter. The coupon was also arranged to be punched to indicate dates and time of the day.

The scrip book case, *Rand, McNally & Co.* v. *Exchange Scrip Book Co.*, 187 F. 984, involved a book having a series of coupons to be detached from a strip for use in payment of transportation calculated in terms of money instead of mileage coupons.

The *Benjamin Menu Card Co.* v. *Rand, McNally Co.*, 210 F. 285, involved a menu card consisting of a combined waiter's check, a cook's check, and a guest's check. Here again the physical card was used by tearing it into definite parts and as such was an article of manufacture.

The advertising card case, *Mitchell* v. *International Tailoring Co.*, 170 F. 91, involved an advertising card consisting of two parts so designed that one of the parts could be thrown away after having served its purpose while the other part was designed to be kept. The card was physically used in addition to its use as a support for the printed matter.

In each of these cases the thing involved was a physical object adapted to be handled and used in a certain manner due to the physical construction thereof; in each case the complete object was formed of a definite form and substance of a physical body supplemented by indicia disposed thereof in a particular manner to provide an actual physical cooperation between the body and indicia.

In the present case, no article comprising a definite physical body and structurally-related indicia is shown; but merely a system of lines without reference to any tangible article.

[2, 3] Plaintiff's thorough brief discusses a large number of decisions on both sides of the question here involved. I am of opinion that in all cases where the printed matter, irrespective of the material upon which it is printed, is the sole feature of alleged novelty it does not come within the purview of the statute, as it is merely an abstract idea. But where the paper or physical body upon which the matter is printed is designed to be used with the printed matter, as by tearing apart or punching, it becomes more than an abstract idea but an actual physical article of manufacture within the terms of section 4886, Revised Statutes (35 U. S. C. A. 31), and as such is patentable if it be a new and useful inventive concept.

The decisions make this distinction—that where no dependence exists between the printed matter and the object on which arranged such matter is merely

an idea reduced to writing and is not a manufacture.

The present claims are worded so as to cover a mere mental vision, and in fact it is not material upon what surface the projection may be reproduced or how the reproduction is effected; the so-called manufacture is completely lacking in material substance.

In *American Fruit Growers* v. *Brogdex Co.*, 404 O. G. 1043, decided at this term, the United States Supreme Court ruled that an orange, the rind of which has become impregnated with borax through immersion in a solution and thereby rendered resistant to blue mold decay is not a manufacture, or manufactured article, within the meaning of section 31, Title 35, U. S. Code, stating—

"Manufacture", as well defined by the Century Dictionary, is the "production of articles for use from raw or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand labor or by machinery". Also, "everything made for use from raw or prepared materials".

Addition of borax to the rind of natural fruit does not produce from the raw material an article for use which possesses a new or distinctive form, quality or property. The added substance only protects the natural article • • •. There is no change in the name, appearance or general character of the fruit. It remains a fresh orange • • •.

In *Anheuser-Busch Assn.* v. *U. S.* 207, U. S. 556, the same Court said—

"Manufacture implies a change, but every change is not a manufacture, and yet every change in an article is the result of treatment, labor, and manipulation, as set forth in *Hartrauft* v. *Wiegmann*, 121 U. S. 609. There must be a transformation, a new and different article must emerge • • •".

If plaintiff's map lines were drawn, sculptured or otherwise reproduced upon a natural marble slab there would be no conversion of such natural object into a new and distinct object "made for use from raw or prepared materials".

Plaintiff relies on the fact that numerous patents for printed devices have been granted in the past by the Patent Office and particularly for map projections. While these actions of the Patent Office are persuasive they are not controlling and the question should now be decided on the merits.

In the recent decision of the United States Court of Customs and Patent Appeals, *Ex parte Russell*, application Serial No. 98,392, decided April 15, 1931, patent appeal 2,673, [410 O. G. 820, 48 F.(2d) 668, 18 C. C. P. A. (Patents) 1184,] it was held that "the mere arrangement of printed matter on a sheet or sheets of paper, in book form or otherwise, does not constitute 'any new and useful art, machine, manufacture or composition of matter' • • • as provided in section 4886 Revised Statutes;" Russell, No. 1,481,744, January 23, 1924, and No. 1,435,663, November 14, 1922.

In the case of *In re Dixon*, 44 F.(2d) 881, 18 C. C. P. A. (Patents) 711, 402 O. G. 3, the court held unpatentable an application relating to a form of promissory note with attorney's fee clause, and a declaration of lien written thereon. The court said—

Both the Examiner and the Board of Appeals rejected the application on the ground that the alleged invention did not constitute a new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, as required by section 4886 R. S. We are in entire accord with the decisions of the Patent Office tribunals. The law is well settled by *Hotel Security, etc.* v. *Lorraine Co.* 160 F. 467; *Berardini* v. *Tocci*, 200 F. 1021; *Moore* v. *United States*, 50 Ct. Cls. 120; *In re Moeser*, 27 App. D. C. 307.

The last-mentioned decision of the Court of Customs and Patent Appeals is particularly interesting.

Plaintiff's claims were properly denied and the bill of complaint will be dismissed.

U. S. Court of Customs and Patent Appeals

IN RE LUNDQUIST

No. 2,847. Decided February 1, 1932

PATENTABILITY—TEMPORARY SAFE.

Claims for a temporary safe *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Clarence D. Kerr, *Mr. C. L. Redfield*, and *Mr. E. C. Sanborn* for Lundquist.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant filed his application in the United States Patent Office on March 16, 1925, for a patent on an improvement in safes. Certain claims in his application were allowed by the Examiner, and claims 13 to 18 inclusive thereof were denied. On appeal to the Board of Appeals the decision of the Examiner was sustained, and appellant has brought the matter to this court for review. The refused claims naturally divide themselves into two classes, of which claims 13 and 16 are illustrative, and are as follows:

13. In a temporary safe, a receptacle provided with a channel thru which valuables may be inserted but not withdrawn and an opening thru which they may be withdrawn after being inserted, a door serving to close said opening, and door locking means provided with dual control part of which control consists of a lock operable by a key the key removable from the door after being locked.

16. In a temporary safe, a receptacle provided with a channel through which valuables may be inserted but not withdrawn and an opening through which they may be withdrawn after being inserted, a door serving to close said opening, a heavy device for holding the door in closed position, and dual control for holding said heavy device against release, one part of said dual control consisting of a lock operable by a key.

The references relied upon by the Board of Appeals were: Poland et al., 1,607,361, Nov. 16, 1926; Ehrlich, 1,416,179, May 16, 1922; Aschwanden (Swiss), 63,515, Jan. 13, 1913.

Appellant's device consists of a money receptacle to be used in service stations and similar places where burglaries are apt to occur. In the form shown by his drawings, he shows a circular metal safe with a slot in the side for the insertion of money, and with a removable top, which top is circular in form and is manually engaged with the top of the safe. When this top is inserted in the safe and manually rotated, lugs on the sides of the top engage in recesses in the sides of the safe and thus holds the top against removal when locked. The top is locked in place by means of a bolt which is operated by two key locks.

The object of the invention is to obtain a receptacle into which money can be placed and which will require two keys to open it, one key being customarily kept in the service station or location of the safe, and the other kept in some other place.

This method, it is said, secures the contents of the safe against burglary, and it is claimed the device has been successful commercially.

The principal claim of the appellant to invention in his device rests in the feature of two locks operable by keys. In rejecting the claims as to this feature, the Board of Appeals relied particularly upon the reference Poland and West. Poland and West discloses a similar safe, having a slot for the insertion of money and having two locks for the door of the safe. While Poland and West, in the drawings, illustrates two combination locks upon this door, in the specification we find the following language:

An object of the invention is to provide a safe with a door and to control the opening of the door by means of multiple and independent locks, each having separate controlling devices, as combination sets, so that the door cannot be opened through the usual means of the lock mechanism, except by the release of the locks by properly authorized persons, each being provided with the necessary key or combination to the exclusion of others for his respective lock. In other words it is an object to provide a safe having a door with multiple locks so that, while the immediate attendant of the safe may be in possession of *a key* or combination for one of the locks, he cannot open the door without the presence of a properly authorized person, as an auditor or collector having a knowledge of the combination, for the other lock in the door. (Italics ours.)

Again this specification recites that the door is provided with a plurality of bolts—

separately operative by a suitable form of lock structure, indicated diagrammatically at 21, each lock structure being controlled by a separate key or preferably, combination • • •.

We are of opinion that the Poland and West reference fully anticipates the lock feature of appellant's refused claims. In so far as the primary locking device, consisting of lugs and recesses, is concerned, that feature is found in the reference Ehrlich.

It is argued that the bayonet lock bolts shown in Poland and West would not be operable by keys, because of their size. If this were true, we are of opinion no invention would lie in constructing the said bolts and keys of such sizes as to make them so operable.

We are of opinion that the Board of Appeals properly rejected claims 13 to 18, inclusive, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

HERST *v.* NIELSEN

No. 8,863. Decided February 1, 1932

1. INTERFERENCES—BURDEN OF PROOF.

N.'s application being a division of a prior application filed before that of H., the burden is upon the latter to establish his case "and unless this burden is fully discharged the senior applicant must prevail. This burden is not changed by the fact that the patent may have issued to the junior applicant. It is also greatly increased by the concurring decisions of the Patent Office tribunals."

2. SAME—PRIORITY—ORIGINALITY.

Evidence reviewed and *Held* insufficient to establish that H., the junior party, was the first and original inventor.

APPEAL from the Patent Office. Affirmed.

Messrs. Gifford & Scull and *Mr. Charles S. Grindle* for Herst.

Mr. B. G. Foster for Nielsen.

GRAHAM, *P. J.:*

An interference was declared in the United States Patent Office on February 24, 1928, between a Patent No. 1,649,228, issued to the appellant Edward Herst, on November 15, 1927, upon an application filed April 1, 1927, and a pending divisional application of the appellee, Karl K. Nielsen, Serial No. 245,312, filed January 9, 1928. Nielsen's parent application, which discloses the invention here in issue, was filed January 28, 1927.

The subject matter involved in the interference is an electric candle socket, adjustable as to length, by means of two slidably interfitting yoke-shaped members, fastened at any position by tightening a single screw associated with a strut member between the two yoke-shaped members. The issue of the interference was defined in three counts, but it will not be necessary, for the purposes of this opinion, to quote them here.

[1] The sole and only question is one of originality. Nielsen's parent application having been filed before that of Herst, the burden is upon Herst of establishing his case, and unless this burden is fully discharged the senior applicant must prevail. *Hunter* v. *Stikeman*, 13 App. D. C. 214, 85 O. G. 610. This burden is not changed by the fact that patent may have issued to the junior applicant. *Hunt* v. *McCaslin*, 10 App. D. C. 527, 79 O. G. 861. It is also greatly increased by the concurring decisions of the Patent Office tribunals. *Turnbull* v. *Curtis*, 27 App. D. C. 567, 123 O. G. 2312.

From the record it appears that in August, 1925, the appellant, then known as Edward Herskovitz, was vice president of a company known as the Peerless Light Company, with its principal place of business at Chicago, Ill. An uncle of appellant, William Herskovitz, was president of the company. This company was engaged in selling electric candle sockets, which were at and before that time, made with slidable adjustable yoke-members, fastened with two screws. These were manufactured for the Peerless Company by the Alcor Manufacturing Company, also of Chicago, of which the appellee, Karl K. Nielsen, was then manager.

A letter, dated August 20, 1925, was received by the appellant's company from its correspondent Peerless Light Company, of San Francisco, making certain complaints against the candle sockets theretofore sold by the San Francisco company, and furnished by the appellant's company. These were sockets manufactured by the Alcor Company. This letter was produced by appellee while testifying and is in the record. He states that it was brought to him by an employee of appellant's company, Irving B. Eppenstein, after its receipt, with the request that the Alcor Company remedy the defects complained of in the letter. The letter is as follows:

Quite a number of complaints have come in recently regarding the construction of our No. 3819 candle socket, most important of which are as follows:

(1) The binding screw is at the bottom instead of the top, making it impossible to adjust when in the cup.

(2) The contacts are mounted on too light material, bending easily when pressure is put on the binding screws and can be shorted across.
(3) Due to the location of contacts shorts can readily happen.
(4) Threads in base of socket are very poor, having received reports from the trade that it makes it necessary to retap about 50% of the sockets.
Is it not possible for Alcor to make the necessary changes?

Nielsen testified that Eppenstein brought no sample with him at that time; that he thereupon proceeded to attempt to remedy the defects complained of, and, in his study, conceived the idea of a single screw adjustment; that he thereupon made a sample, by hand, showing this construction. The witnesses Hansen, Haumann, Schmidt, and Kluk, employees at that time of the Alcor Company, amply corroborate Nielsen as to the making of this sample and the disclosure of its principles. Nielsen testifies that he thereupon took the sample to the appellant personally, and that the same was then approved by the appellant, and an order was issued by the Peerless Company to the Alcor Company to change its dies to manufacture this new model of socket. The shop order to change these dies is in evidence and is dated September 28, 1925. It is significant that in the formal letter written by the appellant to appellee, directing the Alcor Company to change these dies, and which is dated September 18, 1925, this statement is made:

We are writing this letter to authorize you to proceed with the necessary dies for the changing of our No. 3819 candlestick *in accordance with the sample submitted.* (Italics ours).

Under the evidence, we are satisfied that the sample here referred to was a sample submitted by Nielsen.

Beween the time these changes were ordered and January, 1926, the Alcor Company continued to furnish to the Peerless Company the old style sockets, but in January began to furnish the new style and this was continued until the Peerless Company, by reason of financial difficulties, was forced to discontinue operations.

On the other hand, Herst testified that he conceived the ideas embodied in this new socket in August, 1925, and disclosed them to others in the company. An employee of the Peerless Company, Richard Otto, testified that appellant told him to make up a sample socket in July, 1925, and that he did so at that time. William Herst, formerly William Herskovitz, president of the Peerless Company, testified that appellant showed him a sample socket incorporating the new ideas, in July or August, 1925.

Ben Henshel, a traveling salesman for the Peerless Company, testified that he saw the appellant working at a socket at his desk, sometime in the summer of 1925, which appellant showed to him and which embodied the features of the invention in issue. The witness Eppenstein also testified that Herst showed him, sometime in July, 1925, a model of the invention in issue, *made of brass*, and that he, Eppenstein, took this with him when he went to see Nielsen.

On this record, both tribunals in the Patent Office found priority of invention in Nielson. We would not be justified in reversing this finding unless we felt that the weight of the testimony was plainly contrary to such a finding. This we are unable to find.

The evidence on the part of Herst is not satisfactory nor of that convincing nature which carries conviction of its verity. Herst, himself, would not make a sworn preliminary statement in the interference, and testified only after service of subpœna. He was uncertain as to his facts and dates and did not testify that he made a model of his invention. He stated that he made his invention after he changed his name to Herst, which appears to have been in 1926. Certainly, originality of this invention may not be predicated upon this sort of evidence.

[2] His witnesses also are uncertain, and, in many instances, inconsistent in their statements of facts. They are supported by no documentary or other exhibits. The sample which they say was made by the appellant is not produced, nor is any satisfactory reason given for its nonproduction. After considering the whole of Herst's record, one falls short of being convinced that he was the first inventor of this device.

On the other hand, Nielsen's testimony is amply corroborated by oral testimony and by documentary exhibits, and seems to bear upon its face the indicia of truthfulness. Upon the whole record we are convinced the tribunals of the Patent Office did not err in their conclusions.

The decision of the Board of Appeals is affirmed.
Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BUCHHOLTZ

No. 2,845. Decided February 1, 1932

PATENTABILITY—SIGNAL SYSTEM.

Claims for a method of controlling traffic and for a signal system *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Sturtevant & Mason and *Mr. Herbert H. Porter* for Buchholtz.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.:*

This appeal is taken from a decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Primary Examiner in rejecting, for want of invention over the prior art, all of the claims of appellant's application, filed on June 24, 1921, numbered 1 to 13, inclusive.

Claims 1 and 7 are illustrative of the claims in issue and read as follows:

1. The method of controlling traffic along intersecting streets which comprises signalling at alternate intersections on each street for traffic thereon to proceed and cross-traffic to halt, signalling at the interposed intersections along each street for traffic thereon to halt and the cross-traffic to proceed, and simultaneously reversing all of said signals at time intervals proportionate to the time required for a vehicle to travel between adjacent signals at the allowed speed.

7. A signal system for controlling traffic along a highway comprising signal stations spaced along said highway, forming traffic control blocks therebetween, a signal at each station capable of giving "Stop" and "Go" indications and means for controlling the alternate exhibition of said "Stop" and "Go" indications to give to the driver of a vehicle travelling at the speed permitted on said highway a "Go" signal at each station.

The references relied upon are: Sirrine, 976,939, November 29, 1910; Proceedings of the Eighth National Conference on City Planning, Cleveland, June 5–7, 1916, pp. 88–89; "The Signal Engineer," vol. 1, pp. 459 et seq.

Other references were cited by the Examiner, but not relied upon by the Board of Appeals.

As will be gathered from the quoted claims, the application involves an arrangement of traffic signals at all intersections along a given street; they are so set that at any one time every alternate signal will be the same, as for example, "Go", while at the same time the signals at the intermediate intersections will present the "Stop" sign. Also, the signals presented to traffic on the intersecting streets will be the opposite of that shown at such intersections to traffic on the street first referred to. All signals are changed at the same time, so that all those previously set at "Go" will, upon the change being made, be set at "Stop", and vice versa. The length of time that the signals are maintained is adjusted so that, in theory, a car starting across an intersection when it presents the "Go" signal, if operated at the allowed speed, will not arrive at the next intersection before the signal at that intersection has changed to "Go", thus permitting an uninterrupted passage along said street.

The patent to Sirrine shows a system of traffic signals at the intersections along a given street in which all of the signals are identical at any given time, thus permitting the flow of traffic along said street throughout its length, while traffic on all cross streets is suspended. Upon the signals being simultaneously changed, traffic along the street first above mentioned is suspended at the various intersections, and traffic is then permitted along all the intersecting streets.

The reference publication, "Proceedings of the Eighth National Conference on City Planning," contains a statement by a Mr. John P. Fox, suggesting a street traffic system described as:

• • • having a synchronous system of signals, which will change *successively* from safety to danger along the avenues so that vehicles will run along the avenues at a uniform speed in groups, with twenty second intervals between. *In those intervals the cross traffic can pass or make turns, without delaying the main line of traffic.* (Italics ours.)

Both the Examiner and the Board of Appeals rejected the claims in issue as unpatentable over Sirrine, in view of the above quoted statement.

Appellant contends that the above quoted statement is readable literally on Sirrine and adds nothing to it, and that Sirrine does not disclose a system of traffic signals in which the setting of each signal is opposite to that at the next intersection. He contends that "successively" in the quoted matter means that all the lights in the system referred to will be at one time set at "Go" and, after a time interval, all will be changed to read "Stop."

Upon this point, we quote as follows from the brief of the Solicitor of the Patent Office:

In Webster's dictionary "successively" is not defined, otherwise than being indicated as an adverb. The corresponding adjective "successive" is defined by Webster, however, as "following one after another in a line or series." A system of signals changing *simultaneously* from *Stop* to *Go* (or from *Go* to *Stop*), as in Sirrine and appellant's example [an example by appellant which he argues shows the Sirrine patent structure operating as taught by Fox], can not be said to be changed "following one after another in a line or series," that is, *successively*. For signals to change "successively from safety to danger along the avenues," as stated by Fox, it appears, according to the dictionary meaning of *successively*, that one signal must change from safety to danger, then thereafter the next signal along the avenue must change from safety to danger, and so on along the line or series of signals. • • • (Italics quoted.)

We consider that this discussion of the point is sound and do not deem it necessary to add anything to it. Furthermore, we call attention to the last sentence quoted from the reference publication, as follows:

• • • In those intervals the cross traffic can pass or make turns, without delaying the main line of traffic.

If, as appellant contends, the statement by Fox is merely a restatement of the method disclosed by Sirrine, we can see no consistency between this interpretation of the publication reference and the language last above quoted. Clearly, if along a given street all signals read "Stop" at the same time, as disclosed by Sirrine, it can not be said that traffic on intersecting streets can pass or make turns *without delaying the main line of traffic.* To our mind, this last sentence is clearly confirmatory of the view of the Fox statement which was adopted by the tribunals of the Patent Office, and is clearly indicative that what was intended to be suggested by the preceding language was a system of staggered traffic signals. Appellant's contention that the language last above quoted means that the main line of traffic may continue to move between intersections while the cross traffic is passing is not persuasive, because that would be true under any system of traffic signals.

As we are clear that the two references to which we have adverted negative the invention claimed by appellant, it is unnecessary to consider other matters argued by him relating to other references.

The decision of the Board of Appeals is affirmed.
Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,059,329, W. C. Buckman, Blow pipe apparatus, D. C. Del., Doc. E 763, *Air Reduction Co., Inc.*, v. *The Oxweld Rrd. Service Co.* Consent decree dismissing bill Mar. 3, 1932.

1,173,079, E. W. F. Alexanderson, Selective tuning system; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,297,188, I. Langmuir, System for amplifying variable currents; 1,618,017, F. Lowenstein, Wireless telegraph apparatus; 1,702,833, W. S. Lemmon, Electrical condenser; 1,728,879; Rice & Kellog, Amplifying system, D. C., S. D. N. Y., Doc. E 60/174, *Radio Corp of America et al.* v. *F. W. Lang et al.* (*Lang Radio Co.*). Consent decree (notice Mar. 16, 1932.)

1,177,097, L. Gaumont, Developing, fixing, toning and otherwise treating photographic films and prints; 1,209,696, same, Apparatus for drying photographic films, D. C. Del., Doc. E 799, *Cinema Patents Co., Inc.*, v. *Craft Film Laboratories, Inc.* Dismissed for want of equity Mar. 10, 1932.

1,209,696. (See 1,177,697.)

1,212,840, F. J. Straub, Building block and method of making same, D. C. Del., Doc. E 777, *Crozier-Straub, Inc., et al* v. *N. B. Kelly et al.* Dismissed Mar. 8, 1932. Same, filed Mar. 18, 1932, D. C., M. D. Pa. (Scranton), Doc. 908, *Crozier-Straub, Inc., et al* v. *W. O. Baer et al.* (*Baer & Bentz.*) Same, D. C., N. D. N. Y., Doc. 2446, *Crozier-Straub, Inc., et al.* v. *Binghamton Brick Co., Inc.*

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,403,932, R. H. Wilson, Electron discharge device; 1,465,932, E. H. Colpitts, Multiplex radiotelegraph system, D. C., S. D. N. Y., Doc. E 60/175, *Radio Corp. of America et al.* v. *F. W. Lang* (*Lang Radio Co.*). Constant decree for plaintiff (Mar. 16, 1932).

1,251,377. (See 1,173,079.)

1,264,990, H. H. Stephens, Sewage treating apparatus; 1,543,002, E. Geiger, Cleaning apparatus; 1,452,458, same, Cleaning brush; 1,610,431, W. L. D'Olier, Disc screen; 1,624,221, same, Screen-cleaning apparatus; 1,740,578, same, Screen, D. C., S. D. N. Y., Doc E 51/348, *San-Dis Engineering Corp.* v. *Shevlin Engineering Co., Inc.* Dismissed Mar. 9, 1932.

1,281,884, M. J. Trumble, Process and apparatus for converting petroleum oils, filed Mar. 11, 1932, D. C., Del., Doc. E 958, *Universal Oil Products Co.* v. *Atlantic, Pacific & Gulf Refining Co.*

1,297,188. (See 1,173,079.)

1,305,690, H. S. Coyer, Grid making machine, D. C. Del., Doc. E 787, *DeForest Radio Co.* v. *Duovac Radio Tube Corp.* Dismissed Mar. 8, 1932.

1,307,734, A. V. Guilborg, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, D. C., S. D. N. Y., Doc E 64/70, *Alemite Corp.* v. *Brandfield Corp.* Decree for plaintiff (notice Mar. 9, 1932).

1,320,662, W. H. Tomlinson, Doughnut machine; 1,333,389, Comb & Peaney, Machine for cooking doughnuts; 1,414,713, Sherman & Morris, Cooking apparatus; 1,486,986, Morris & Bergner, Cooking apparatus and method; 1,492,541, 1,402,542, 1,665,017, J. C. Bergner, Cooking apparatus, appeal filed Mar. 12, 1932, C. C. A., 4th Cir., Doc. 3287, *Demoo, Inc., et al.* v. *Doughnut Machine Corp.*

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1,377,023, B. S. Nelson, Lubricating device; 1,603,916, W. F. Hundemer, High pressure grease conduit, D. C., S. D. N. Y., Doc. E 43/142, *Gat Gun Lubricating Corp. et al.* v. *Adams Grease Gun Corp.* Patent 1,603,916 sustained; dismissed as to 1,377,023 Dec. 5, 1931.

1,403,475. (See 1,231,764.) 1,403,932. (See 1,231,764.)

1,414,713. (See 1,320,662.)

1,438,560, E. F. Slattery, Repair link for tire chains; 1,692,577, 1,734,830, R. R. Roth, Emergency repair link, D. C. Del., Doc. E 816, *E. F. Slattery et al* v. *Eureka Auto Chain Co.* Patent 1,438,560 held valid and infringed, 1,692,577 and 1,734,830 held invalid; counterclaim dismissed Mar. 1, 1932.

1,452,458. (See 1,264,990.) 1,465,932. (See 1,231,764.)

1,475,980. (See 1,307,734.) 1,486,986. (See 1,320,662.)

1,492,541. (See 1,320,662.) 1,402,542. (See 1,320,662.)

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1,548,152, L. L. Mack, Postage meter, D. C. Del., Doc. E 822, *Mack Holding Co.* v. *Whitlock Metered Mail Co., Ltd.* Dismissed Mar. 8, 1932.

1,594,334. (See 1,847,817.) 1,594,335. (See 1,847,817.)

1,603,916. (See 1,377,023.) 1,610,431. (See 1,264,990.)

1,618,017. (See 1,173,079.) 1,624,221. (See 1,264,990.)

1,648,808, L. A. Hazeltine, Wave signaling system, D. C., S. D. N. Y., Doc. E 50/69 *Hazeltine Corp.* v. *E. J. Edmond & Co., Inc.* Dismissed without prejudice (notice Mar. 16, 1932). Doc. E 50/70, *Hazeltine Corp.* v. *E. G. Latham & Co., Inc.* Decree as above.

1,665,017. (See 1,320,662.) 1,692,577. (See 1,438,560.)

1,702,833. (See 1,173,079.)

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed Mar. 15, 1932, D. C., S. D. N. Y., Doc. E 66/98, *Ruben Condenser Co. et al.* v. *Polymet Mfg. Corp.*

1,714,191. (See 1,710,073.)

1,715,323, A. M. Hahn, Hosiery, D. C. Del., Doc. E 746, *Artcraft Silk Hosiery Mills, Inc.*, v. *Combine Hosiery Corp.* Dismissed Mar. 8, 1932.

1,728,879. (See 1,173,079.)

1,730,199, H. A. Farrand, Coiling means for concavo-convex springs, D. C. Del., Doc. E 813, *H. A. Farrand, Inc.*, v. *Mayhew Steel Products, Inc.* Consent decree dismissing bill Feb. 27, 1932.

1,734,830. (See 1,438,560.) 1,740,578. (See 1,264,990.)

1,800,335, S. Battilani, Shoe tree, D. C., S. D. N. Y., Doc. E 60/281, *S. Battalani* v. *Saks & Co., Inc.* Consent order of discontinuance Mar. 16, 1932.

1,807,697 (*a*), 1,846,266, L. A. Lyon, Cover for spare automobile tires, filed Feb. 29, 1932, D. C. Del., Doc. E 954, *Lyon, Inc., et al.* v. *Clayton & Lambert Mfg. Co.*

1,807,697 (*b*), G. A. Lyon, Cover for spare automobile tires, D. C. Del., Doc. E 896, *Lyon, Inc., et al.* v. *Tropic-Aire, Inc.* Claims 4 to 22, inclusive, held valid and infringed Feb. 29, 1932.

1,846,266. (See 1,807,697 (*a*).)

1,847,817, D. Cole, Lubricating system; 1,594,334, E. J. Sweetland, Method of preventing wear of the moving parts of an automotive internal combustion engine; 1,594,335, same, Means for filtering oil in the lubricating system of internal combustion engines, filed Mar. 7, 1932, D. C. Del., Doc. E 957, *Dooley Improvements, Inc.*, v. *Motor Improvements, Inc., et al.*

Des. 84,415, M. Gross, Knitted fabric, filed Mar. 16, 1932, D. C., S. D. N. Y., Doc. E 66/103, *Amrein Freundenberg Co., Inc.*, v. *J. Garfield et al.* (*Garfield-Stahl Co.*).

Des. 84,741, Des. 84,742, F. Grossman, Sport shoe, D. C., S. D. N. Y., Doc. E 64/198, *J. Grossman, Inc.*, v. *Carlisle Shoe Co., Inc.* Consent order of discontinuance Mar. 14, 1932. Same, D. C., E. D. N. Y., Doc. E 5932, *J. Grossman, Inc.*, v. *I. Miller & Sons, Inc.* Discontinued Mar. 17, 1932.

Des. 84,742. (See Des. 84,741.)

Disclaimers

1,751,930.—*Alexander Meissner*, Berlin, Germany. INSULATION OF ELECTRICAL APPARATUS. Patent dated March 25, 1930. Disclaimer filed April 27, 1932, by the assignee, *Radio Corporation of America.*

Enters this disclaimer relative to claims 1, 3 and 4 of said Letters Patent, to wit:

"1. An electrical apparatus comprising one or more members housed within said casing and spaced therefrom, said spaces being subject to electric potential stresses produced by said member or members, there being pulverized piezo-electric material disposed in said spaces, whereby said members are insulated from the casing and one another."

"3. An electrical apparatus comprising a casing, one or more members to be insulated from the casing and each other, housed within said casing, the spaces between said casing and member or members, being subject to electric potential stresses, said spaces being filled with a pulverized piezo-electric substance having high thermal conductivity.

"4. In an electrical apparatus, as defined in claim 3, said pulverized substance including quartz".

1,824,964.—*Charles F. Osgood*, Claremont, N. H. MINING MACHINE. Patent dated September 29, 1931. Disclaimer filed April 26, 1932, by the assignee, *Sullivan Machinery Company.*

Hereby enters this disclaimer to that part of the claims in said specification which are in the following words, to wit:

"3. In a mining machine, a machine frame slidable on its bottom on the mine bottom, a horizontal motor carried thereby having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor, and feeding means driven from the opposite end of said motor for feeding the machine bodily laterally over the mine bottom comprising relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and rotatable on horizontal transversely extending axes in a direction to draw in their respective flexible feeding means by power.

"6. In a mining machine, a machine frame slidable on its bottom on the mine bottom, a horizontal motor carried thereby having its axis extending longitudinally of the machine cutting mechanism driven from one end of said motor, and feeding means driven from the opposite end of said motor for feeding the machine bodily laterally over the mine bottom comprising relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and rotatable on horizontal transversely extending axes in a direction to draw in their respective flexible feeding means by power and disposed at the end of the machine remote from said cutting mechanism.

"7. In a mining machine, a machine frame slidable on its bottom on the mine bottom, a horizontal motor carried thereby having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor, and feeding means driven from the opposite end of said motor for feeding the machine bodily laterally over the mine bottom comprising coaxially arranged relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and rotatable on horizontal transversely extending axes in a direction to draw in their respective flexible feeding means by power.

"8. In a mining machine, a machine frame slidable on its bottom on the mine bottom, a horizontal motor carried thereby having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor including a pivoted cutter bar swingable into positions at opposite sides of the machine and lengthwise of the machine, and feeding means driven from the opposite end of said motor for feeding the machine bodily laterally over the mine bottom in any position of said bar comprising relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and rotatable on horizontal transversely extending axes in a direction to draw in their respective flexible feeding means by power.

"9. In a mining machine, a machine frame slidable on its bottom on the mine bottom, a horizontal motor carried thereby having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor including a pivoted cutter bar swingable into positions at opposite sides of the machine and lengthwise of the machine, and feeding means driven from the opposite end of said motor for feeding the machine bodily laterally over the mine bottom in any position of said bar comprising relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and rotatable on horizontal transversely extending axes in a direction to draw in their respective flexible feeding means by power and disposed at the end of the machine remote from said cutting mechanism.

"10. In a mining machine, a machine frame slidable on its bottom on the mine bottom, a horizontal motor carried thereby having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor including a pivoted cutter bar swingable into positions at opposite sides of the machine and lengthwise of the machine, and feeding means driven from the opposite end of said motor for feeding the machine bodily laterally over the mine bottom in any position of said bar comprising coaxially arranged relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and rotatable on horizontal transversely extending axes in a direction to draw in their respective flexible feeding means by power."

"22. In a mining machine, a machine frame slidable on its bottom directly on the mine bottom, a horizontal motor carried by said frame and having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof, and machine feeding mechanism driven from the opposite end of said motor including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal transversely extending axes at the end of the machine remote from said cutter bar, and mechanism for effecting rotation of said members separately or simultaneously in a direction to draw in said flexible feeding means at relatively slow speed or at relatively high speed or to permit them to rotate in a direction to pay out said flexible feeding means under frictionally controlled resistance.

"23. In a mining machine, a machine frame slidable on its bottom directly on the mine bottom, a horizontal motor carried by said frame and having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof, and machine feeding mechanism driven from the opposite end of said motor including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal transversely extending axes at the end of the machine remote from said cutter bar, and mechanism for effecting rotation of said members separately or simultaneously in a direction to draw in said flexible feeding means at relatively slow speed or at relatively high speed, to permit them to rotate in a direction to pay out said flexible feeding means under frictionally controlled resistance or to permit them to rotate in a direction to pay out said flexible feeding means without such resistance.

"24. In a mining machine, a machine frame slidable on its bottom directly on the mine bottom, a horizontal motor carried by said frame and having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof and pivotally mounted on said frame to swing horizontally relative thereto, mechanism driven by said motor for swinging said cutter bar relative to said frame, and machine feeding mechanism driven from the opposite end of said motor including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal transversely extending axes at the end of the machine remote from said cutter bar, mechanism for effecting rotation of said members separately or simultaneously in a direction to draw in said flexible feeding means at relatively slow speed or at relatively high speed, and means to control the actuation of each of said feed operating members independently of each other.

"25. In a mining machine, a machine frame slidable on its bottom directly on the mine bottom, a horizontal motor carried by said frame and having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof and pivotally mounted on said frame to swing horizontally relative thereto, mechanism driven by said motor for swinging said cutter bar relative to said frame, and machine feeding mechanism driven from the opposite end of said motor including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal transversely extending axes at the end of the machine remote from said cutter bar, mechanism for effecting rotation of said members separately or simultaneously in a direction to draw in said flexible feeding means at relatively slow speed or at relatively high speed or to permit them to rotate in a direction to pay out said flexible feeding means under frictionally controlled resistance.

"26. In a mining machine, a machine frame slidable on its bottom directly on the mine bottom, a horizontal motor carried by said frame and having its axis extending longitudinally of the machine, cutting mechanism driven from one end of said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof and pivotally mounted on said frame to swing horizontally relative thereto, mechanism driven by said motor for swinging said cutter bar relative to said frame, and machine feeding mechanism driven from the opposite end of said motor including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal transversely extending axes at the end of the machine remote from said cutter bar, and mechanism for effecting rotation of said members separately or simultaneously in a direction to draw in said flexible feeding means at relatively slow speed or at relatively high speed, to permit them to rotate in a direction to pay out said flexible feeding means under frictionally controlled resistance or to permit them to rotate in a direction to pay out said flexible feeding means without such resistance.

"27. In a mining machine, a frame slidable directly on its bottom on the mine bottom, a horizontal motor carried by said frame and having its power shaft extending longitudinally of the machine, the height of said motor being only that requisite for the power producing function and determining the height of the machine, cutting mechanism driven from one end of said motor and including a horizontal plane cutter bar projecting from said frame at one end thereof, the top and bottom plane surfaces of said bar lying in planes intersecting said motor, and machine feeding mechanism driven from the opposite end of said motor and including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal axes extending transversely of the machine at the end thereof remote from said cutter bar, said members being rotatable simultaneously in a direction to draw in their respective flexible feeding means by power.

"28. In a mining machine, a frame slidable directly on its bottom on the mine bottom, a horizontal motor carried by said frame and having its power shaft extending longitudinally of the machine, the height of said motor being only that requisite for the power producing function and determining the height of the machine, cutting mechanism driven from one end of said motor and including a horizontal plane cutter bar projecting from said frame at one end thereof, the top and bottom plane surfaces of said cutter bar lying in planes intersecting said motor, and machine feeding mechanism driven from the opposite end of said motor and including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal axes extending transversely of the machine at the end thereof remote from said cutter bar, plural speed mechanism between said motor and said feed operating members for effecting rotation thereof in a direction to wind in said

flexible feeding means separately or simultaneously at either a relatively slow speed or at a relatively high speed, and means to control the actuation of each of said feed operating members independently of each other.

"29. In a mining machine, a frame slidable directly on its bottom on the mine bottom, a horizontal motor carried by said frame and having its power shaft extending longitudinally of the machine, the height of said motor being only that requisite for the power producing function and determining the height of the machine, cutting mechanism driven from one end of said motor and including a horizontal plane cutter bar projecting from said frame at one end thereof, the top and bottom plane surfaces of said cutter bar lying in planes intersecting said motor, and machine feeding mechanism driven from the opposite end of said motor and including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal axes extending transversely of the machine at the end thereof remote from said cutter bar, and plural speed mechanism between said motor and said feed operating members for effecting rotation thereof in a direction to wind in said flexible feeding means separately or simultaneously at either a relatively slow speed or at a relatively high speed or to permit said members to rotate in a direction to pay out said flexible feeding means under frictionally controlled resistance.

"30. In a mining machine, a frame slidable directly on its bottom on the mine bottom, a horizontal motor carried by said frame and having its power shaft extending longitudinally of the machine, the height of said motor being only that requisite for the power producing function and determining the height of the machine, cutting mechanism driven from one end of said motor and including a horizontal plane cutter bar projecting from said frame at one end thereof, the top and bottom plane surfaces of said cutter bar lying in planes intersecting said motor, and machine feeding mechanism driven from the opposite end of said motor and including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal axes extending transversely of the machine at the end thereof remote from said cutter bar, and plural speed mechanism between said motor and said feed operating members for effecting rotation thereof in a direction to wind in said flexible feeding means separately or simultaneously at either a relatively slow speed or at a relatively high speed, to permit said members to rotate in a direction to pay out said flexible feeding means under frictionally controlled resistance or to permit said members to revolve in a direction to pay out said flexible feeding means without such resistance.

"31. In a low vein room and pillar mining machine, a frame slidable on its bottom directly on the mine bottom, a low compact horizontal motor carried by said frame and having its power shaft extending longitudinally of the machine, the height of the motor being only that requisite for the power producing function and determining the height of the machine, cutting mechanism driven by said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof, the top and bottom plane surfaces of said cutter bar lying in planes intersecting said motor, and machine feeding mechanism driven by said motor including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal axes extending transversely of the machine at the end thereof remote from said cutter bar, mechanism for effecting rotation of said members in a direction to draw in said flexible feeding means separately or simultaneously at either a relatively slow speed or a relatively high speed, and means to control the actuation of each of said feed operating members independently of each other.

"32. In a low vein room and pillar mining machine, a frame slidable on its bottom directly on the mine bottom, a low compact horizontal motor carried by said frame and having its power shaft extending longitudinally of the machine, the height of the motor being only that requisite for the power producing function and determining the height of the machine, cutting mechanism driven by said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof, the top and bottom plane surfaces of said cutter bar lying in planes intersecting said motor, and machine feeding mechanism driven by said motor including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal axes extending transversely of the machine at the end thereof remote from said cutter bar, and mechanism for effecting rotation of said members in a direction to draw in said flexible feeding means separately or simultaneously at either a relatively slow speed or a relatively high speed or to permit said members to rotate in a direction to pay out said flexible feeding means under frictionally controlled resistance.

"33. In a low vein room and pillar mining machine, a frame slidable on its bottom directly on the mine bottom, a low compact horizontal motor carried by said frame and having its power shaft extending longitudinally of the machine, the height of the motor being only that requisite for the power producing function and determining the height of the machine, cutting mechanism driven by said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof, the top and bottom plane surfaces of said cutter bar lying in planes intersecting said motor, and machine feeding mechanism driven by said motor including relatively rotatable feed operating members each adapted to cooperate with flexible feeding means and disposed on horizontal axes extending transversely of the machine at the end thereof remote from said cutter bar, and mechanism for effecting rotation of said members in a direction to draw in said flexible feeding means separately or simultaneously at either a relatively slow speed or a relatively high speed, to permit said members to rotate in a direction to pay out said flexible feeding means under frictionally controlled resistance or to permit said members to rotate in a direction to pay out said flexible feeding means without such resistance."

"68. In a mining machine, a machine frame adapted to rest upon and slide in any direction over the mine bottom, a centrally located horizontal motor having its power shaft extending longitudinally of the machine, cutting mechanism driven from one end of said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof, machine feeding mechanism driven from the opposite end of said motor and including relatively rotatable feeding members each adapted to cooperate directly with flexible feeding means and disposed at the end of the machine remote from the cutter bar, said members being each separately or both simultaneously rotatable in a direction to draw in said flexible feeding means by power, and truck driving mechanism driven from one end of said motor.

"69. In a mining machine, a machine frame adapted to rest upon and slide in any direction over the mine bottom, a centrally located horizontal motor having its power shaft extending longitudinally of the machine, said motor having its casing resting directly on the mine bottom and the vertical dimension of the motor determining the height of the machine, cutting mechanism driven from one end of said motor including an elongated plane cutter bar projecting horizontally from said frame at one end thereof, machine feeding mechanism driven from the opposite end of said motor and including relatively rotatable feeding members each adapted to cooperate directly with flexible feeding means and disposed at the end of the machine remote from the cutter bar, said members being rotatable either separately or simultaneously in a direction to draw in said flexible feeding means by power, and truck driving mechanism driven from one end of said motor."

1,840,124.—*John F. O'Connor*, Chicago, Ill. FRICTION SHOCK ABSORBING MECHANISM. Patent dated January 5, 1932. Disclaimer filed April 27, 1932, by the assignee, *W. H. Miner, Inc.*

Hereby disclaims from the scope of claim 2 of Patent No. 1,840,124 any friction shock absorbing mechanism except where the "plate spring means" is composed entirely of spring plates only and the "means on" the pressure-transmitting "member engaging the plate spring means to force the same inwardly of the mechanism" engages directly the outer ends of the spring plates, and the spring plates have direct "sliding frictional engagement with the friction surfaces of the casing".

TRADE-MARKS

OFFICIAL GAZETTE, MAY 17, 1932

[VOL. 418. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 323,422. SCHLITZ BREWING COMPANY, Milwaukee, Wis. Filed Jan. 25, 1932.

"HUMIDO PACK"

Exclusive use of the word "Pack" is disclaimed apart from the mark as shown.

For Hops.

Claims use since Jan. 18, 1932.

Ser. No. 325,828. KAUFHERR & CO., Newark, N. J. Filed Apr. 5, 1932.

"Silhouette"

For Calfskins, Hides, and Skins.

Claims use since Mar. 25, 1932.

Ser. No. 325,913. THE KOPPERS COMPANY OF DELAWARE, Pittsburgh, Pa. Filed Apr. 8, 1932.



The mark consists of spots of material on the surface of lumps of coal having the appearance of burnished copper or flaming gold. The drawing is intended to show, by way of example, coal colored or spotted with metal flakes having the appearance specified. Applicant disclaims the representation of a lump of coal shown in the drawing.

For Coal.

Claims use since Mar. 3, 1932.

CLASS 2

Receptacles

Ser. No. 319,683. ALL-STEEL-EQUIP COMPANY, Aurora, Ill. Filed Oct. 3, 1931.

A·S·E

For Steel Storage Baskets, Shop Boxes, Shop Taper Pans, Crane Boxes, Shop Bins, Stacking Boxes, and Tool Boxes.

Claims use since Apr. 1, 1927.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 297,771. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.

PABCO

For Type Cleaner for Removing Ink.

Claims use since Sept. 25, 1924.

Ser. No. 320,785. CHARLES W. LANGDALE, Ottumwa, Iowa, Filed Nov. 4, 1931.



For Wall Paper Cleaner and a Preparation for Cleaning Painted, Enameled, or Varnished Walls, Woodwork, and Floors.

Claims use since Jan. 1, 1928.

Ser. No. 325,439. THE PHOENIX OIL COMPANY, Cleveland, Ohio. Filed Mar. 24, 1932.

GOLD-FLO

For Cleaning Compound for General Household Use.
Claims use since Jan. 30, 1932.

Ser. No. 325,560. JOSEPH WARREN BULLEN, doing business as The Bullen Chemical Company, Folcroft, Pa. Filed Mar. 28, 1932.

BULLEN'S
Universal Cleaner

B. U. C.

No claim being made to the word "Cleaner" except as shown.
For Cleanser for Cleaning, Preserving, and Renewing Varnished and Painted Surfaces of All Kinds and Also for General Household Use.
Claims use since Jan. 1, 1907.

Ser. No. 325,756. POTTER & MOORE LIMITED, London, England. Filed Apr. 2, 1932.



For Perfumed Soap.
Claims use since June 21, 1929.

Ser. No. 325,868. E. T. BROWNE DRUG CO. INC., New York, N. Y. Filed Apr. 7, 1932.

SKIN-SUCCESS

For Medicinal and Toilet Soap.
Claims use since Dec. 1, 1886.

CLASS 5

Adhesives

Ser. No. 325,311. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Mar. 21, 1932.

FLUIDX

For Adhesive Liquid Paste.
Claims use since Mar. 16, 1932.

Ser. No. 325,333. KROMA COLOR COMPANY, Sandusky, Ohio. Filed Mar. 21, 1932.

TOPS-ALL

For Adhesive Liquid Paste.
Claims use since Mar. 16, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 299,615. WILLIAM C. MCINTIRE, Charlotte, N. C. Filed Apr. 29, 1930.



For Liniment for External Use for the Treatment of Inflammation and Swelling, Soreness, Pain, and for General Use as a Counter-Irritant.
Claims use since Apr. 8, 1930.

Ser. No. 309,047. HUPMAN HERBALIST COMPANY, Binghamton, N. Y. Filed Dec. 15, 1930. Under 10-year proviso.

TAKE IT AND LIVE LONG ...HERBALIST... TAKE IT AND LIVE LONG

For Medicinal Compound for Use as a Blood Purifier.
Claims use since Jan. 1, 1890.

Ser. No. 314,028. HARRY W. GOLDSTEIN, Houston, Tex., assignor to Southland Importing Company, Inc., Houston, Tex., a Corporation of Texas. Filed Apr. 30, 1931.

MARVO

For Laxative Tonic.
Claims use since May 1, 1928.

Ser. No. 316,694. COMPAGNIE FRANCAISE DES MARQUES ET PRODUITS CHARLES HENRY, Paris, France. Filed July 7, 1931.

HENRIODE

For Pharmaceutical, Antiseptic, Cicatrisant, Non-Toxical Product for the Throat, Mouth, and Feminine Hygiene.
Claims use since Dec. 18, 1925.

Ser. No. 316,695. COMPAGNIE FRANCAISE DES MARQUES ET PRODUITS CHARLES HENRY, Paris, France. Filed July 7, 1931.

AJOL

For Pharmaceutical Product for the Prevention of Syphilis.
Claims use since Dec. 18, 1925.

Ser. No. 316,696. COMPAGNIE FRANCAISE DES MARQUES ET PRODUITS CHARLES HENRY, Paris, France. Filed July 7, 1931.

CURÉROS

For Pharmaceutical Antiseptic Product for Urinary Passages, Especially for Blennorrhagia.
Claims use since Oct. 4, 1927.

Ser. No. 320,912. VICTOR E. PASS, doing business as Stadium Pharmacies, Baltimore, Md. Filed Nov. 6, 1931.

VICK-E

For Cough Medicines, Cold Capsules, Salicylate Compound, Larkspur Lotions, Laxatives, Diuretic Compounds, Liquid Analgesic, Beef and Iron Compound, Boil Salve, Yeast and Iron Tonic, Nervines, Red Castor Oil, Eye Wash, Ear-Ache Drops, Tincture of Iodine, and Nasal Oil, Blackberry Compound, Chest Rub, Throat Gargle, Baby Cough Syrup, Ephedrine Nasal Jelly, Liquid Analgesic Balm, Analgesic Balm, Beef, Iron, and Wine; Alterative Compound, Flaxseed, Wild Cherry and Rock Candy.
Claims use since June 5, 1924.

Ser. No. 322,714. SCOTT & GILBERT CO., San Francisco, Calif. Filed Jan. 4, 1932.

S&G

For Sheep Dip, Cathartic Pills, Headache Tablets, Toothache Drops, Arnica Salve, Carbolic Salve, Witch Hazel Salve, Hamburg Tea (Laxative), Stockman's Liniment, Condition Powders, Syrup of Ipecac, Tincture of Green Soap, White Liniment, Oil of Citronella, Castor Oil, Aceita Rosade (Rose Oil), Extract of Witch Hazel, Fluid Ext. Cascara Sagrada, Fluid Ext. Aromatic Cascara, Solution Boric Acid, Solution Carbolic Acid, Oil of Eucalyptus, Camphorated Oil, Carron Oil, Spirits of Camphor, Aromatic Spirits Ammonia, Solution Argyrol, Glycerine, Spirits of Nitre, Sweet Oil, Fluid Ext. Jamaica Ginger, Tincture of Benzoin, Tincture of Iron, Essence of Peppermint, Oil of Cloves, Tincture of Iodine, Oil Wintergreen, Oil Peppermint, Tincture Arnica, Calomel, Cocoa Butter, Chloroform Liniment, Comp. Licorice Powder, Potassium Permanganate, Insect Powder, Gall and Hoof Healing Ointment, Quinine Sulphate, Charcoal Tablets, Cardamon Seeds, Dobell's Solution, Ointment Zinc Oxide, Blue Ointment, Rochelle Salt, Petroleum Jelly, Oil Sweet Almonds, Peroxide of Hydrogen, Lime Water, Poultry Lice Powder, Powdered French Chalk, Ant Powder, Whole Flaxseed, Chamomile Flowers, Powdered Orris Root, Moth Balls, Argentine Ant Poison, Sasafras Bark, Bicarbonate Soda, Epsom Salt, Boric Acid, Senna Leaves, Cow Grease Which is a Preparation of Medicated Petrolatum, Powdered Borax, Crushed Soap Bark, Powdered Alum, Foot Powder, Sulphur, Glauber Salt, Sacred Bark, Ground Flaxseed, Salt Petre, Cream of Tartar, Poison Oak Medicine, Purple Pills, Honey Horehound and Tar, White Pine and Tar, Menthol Balm, Headache Powder, Eucalyptus Ointment, White Rose Eye Water, Cascara Comp. Tablets; Korn Killer Which is a Liquid Corn Medicine; Poison Oak Salve, Rose Water, Bay Rum, Cucumber Oil, Cucumber and Almond Cream.

Claims use on sheep dip, cathartic pills, headache tablets, toothache drops, arnica salve, carbolic salve, witch hazel salve, Hamburg tea (laxative), Stockman's liniment, condition powders since on or about Feb. 1, 1907; on syrup of ipecac, tincture of green soap, white liniment, oil of citronella, castor oil, aceita rosada (rose oil), extract of witch hazel, fluid ext. aromatic cascara, solution boric acid, fluid ext. cascara sagrada, solution carbolic acid, oil of eucalyptus, camphorated oil, carron oil, spirits of camphor, aromatic spirits ammonia, solution argyrol, glycerine, spirits of nitre, sweet oil, fluid ext. Jamaica ginger, tincture of benzoin, tincture of iron, essence of peppermint, oil of cloves, tincture of iodine, oil wintergreen, oil peppermint, tincture arnica, calomel, cocoa butter, chloroform liniment, comp. licorice powder, potassium permanganate, insect powder, gall and hoof healing ointment, quinine sulphate, charcoal tablets, cardamon seeds, Dobell's solution, ground mustard, ointment zinc oxide, blue ointment, Rochelle salt, petroleum jelly, oil sweet almonds, peroxide of hydrogen, lime water, poultry lice powder, powdered French chalk, ant powder, whole flaxseed, chamomile flowers, powdered orris root, moth balls, Argentine ant poison, sassafras bark, bicarbonate soda, epsom salt, boric acid, senna leaves, cow grease, powdered borax, crushed soap bark, powdered alum, foot powder, sulphur, glauber salt, sacred bark, ground flaxseed, salt petre, and cream of tartar, rose water, bay rum, cocoanut oil, cucumber and almond cream since on or about Jan. 1, 1925; and on poison oak medicine, purple pills, honey horehound and tar, white pine and tar, menthol balm, headache powder, eucalyptus ointment, white rose eye water, cascara comp. tablets, korn killer, poison oak salve since on or about Dec. 1, 1931.

Ser. No. 322,774. HOWARDS & SONS LIMITED, Ilford, England. Filed Jan. 6, 1932.

FLODIA

For Perfumery—Namely, a Chemical Substance for the Fixation of Perfumes.
Claims use since June 17, 1931.

Ser. No. 323,354. THE PEROXIDE CHEMICAL CO., St. Louis, Mo. Filed Jan. 23, 1932.

WESTERN PEROXIDE

No claim is made to the word "Peroxide" apart from the mark as shown on the drawing.
For Hydrogen Peroxide.
Claims use since Feb. 1, 1930.

Ser. No. 323,388. GEORGE F. BURKHARDT, doing business as The Pylo Co., Hazleton, Pa. Filed Jan. 25, 1932.

PyLO
Dr. George's Ointment

The word "Ointment" is disclaimed apart from the other features of the mark shown in the drawing.
For Pile Ointment.
Claims use since Nov. 15, 1931.

Ser. No. 324,334. AIKEN AND MASCHO, Dallas, Tex. Filed Feb. 20, 1932.

BEARCAT

For Preparation for Increasing the Efficiency of Gasoline and for Removing Carbon from Internal Combustion Engines or Gasoline Compounds.
Claims use since June 1, 1931.

Ser. No. 324,741. HO-MO-LO CORPORATION, Detroit, Mich. Filed Mar. 3, 1932.

HO-MO-LO

For Medicinal Compounds for Use in Conditions Arising from Sluggish Bowels.
Claims use since Feb. 2, 1932.

Ser. No. 324,771. ATLANTIC PHARMACAL COMPANY, Boston, Mass. Filed Mar. 4, 1932.

APCO

A SURE HIT

For Insecticides.
Claims use since February, 1931.

Ser. No. 324,846. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Mar. 7, 1932.

MOUS-DED

For Seeds Treated with Poison and Used for Killing Mice.
Claims use since Nov. 18, 1931.

Ser. No. 324,958. E. FUCINI & CO. INC., New York, N. Y. Filed Mar. 9, 1932.

L'AMERICANO

American Bitters
FOR MEDICINAL PURPOSES
MANUFACTURED BY E. FUCINI & CO. INC. NEW YORK

No claim is made to the words "For Medicinal Purposes" or to the words "Manufactured by", "New York", "L'Americano," and "American Bitters" apart from the remainder of the mark.
For Tonic for Digestion.
Claims use since Dec. 26, 1931.

Ser. No. 325,086. THE BRUNDAGE BROS. CO., Toledo, Ohio. Filed Mar. 14, 1932.

FLYCO

For Insecticide.
Claims use since February, 1923.

Ser. No. 325,137. DYALINE, INC., Collinsville, Ill. Filed Mar. 15, 1932.

DYALINE

For Non-Irritating, Non-Toxic, Antiseptic Socket Dressing, Pyorrhea Treatment, and an Aqueous Solution of an Analine Dye Having Antiseptic and Analgesic Properties and May be Used as a Surgical Dressing Wherever Indicated.
Claims use since Feb. 1, 1932.

Ser. No. 325,165. THE FARASTAN COMPANY, Philadelphia, Pa. Filed Mar. 16, 1932.

AMBAZIN

For Antiseptic for External and Internal Use.
Claims use since Mar. 11, 1932.

Ser. No. 325,243. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Mar. 17, 1932.

TARZOL

For Insecticides and Fungicides.
Claims use since Mar. 8, 1932.

Ser. No. 325,261. KALLE & CO. AKTIENGESELLSCHAFT, Wiesbaden-Biebrich, Germany. Filed Mar. 18, 1932.

VIVERAL

For Desizing Agent.
Claims use since Nov. 30, 1931.

Ser. No. 325,265. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed Mar. 18, 1932.



For Chemicals for the Treatment of Rubber Prior to or During the Curing or Vulcanizing Thereof.
Claims use since Feb. 5, 1932.

Ser. No. 325,266. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed Mar. 18, 1932.



For Chemicals for the Treatment of Rubber Prior to or During the Curing or Vulcanizing Thereof.
Claims use since Feb. 5, 1932.

Ser. No. 325,271. E. R. SQUIBB & SONS, New York, N. Y. Filed Mar. 18, 1932.

ORTHOCAINE

For Local Anesthetics.
Claims use since Mar. 4, 1932.

Ser. No. 325,296. OMNIUM DE SPECIALITES & PRODUITS CHIMIQUES, SOCIETE ANONYME, Paris, France. Filed Mar. 19, 1932.

LAXOBIL

For Laxative and Treatment for Intestinal Affections in Tablet Form.
Claims use since Mar. 3, 1922.

Ser. No. 325,374. CLARIBEL AIDA PLOWRIGHT, Manchester, England. Filed Mar. 22, 1932.

LUV

For Lipstick.
Claims use since Sept. 5, 1931.

Ser. No. 325,475. LEO LEVINE, doing business as Hansa Chemical Co., Boston, Mass. Filed Mar. 25, 1932.

GERMATIN

For Antiseptic Lotion for the Scalp and Hair and a Pomade for Scalp Nourishment and Hair Dressing.
Claims use since 1928.

Ser. No. 325,523. KAVALCO PRODUCTS INC., Nitro, W. Va. Filed Mar. 26, 1932.

KRONITEX

For Tricresyl Phosphate.
Claims use since July 5, 1930.

CLASS 10

Fertilizers

Ser. No. 325,191. TENNESSEE COAL, IRON & RAILROAD COMPANY, Birmingham, Ala. Filed Mar. 16, 1932.

US STEEL

For Ground Open Hearth Basic Slag Used as a Fertilizer.
Claims use since Oct. 19, 1930.

CLASS 11

Inks and Inking Materials

Ser. No. 325,312. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Mar. 21, 1932.

HANDI-BAR

Applicant disclaims the use of the word "Bar" separate and apart from the word "Handi" of the mark.
For Drawing, Painting, and Printing Ink.
Claims use since Mar. 16, 1932.

CLASS 12

Construction Materials

Ser. No. 324,827. THE NURRE COMPANIES, INCORPORATED, Bloomington, Ind. Filed Mar. 5, 1932.

NURALITE

For Slabs and Tiles Made of White and/or Colored Glass.
Claims use since Jan. 1, 1930.

Ser. No. 325,032. THE ATLAS MINERAL PRODUCTS COMPANY, Mertztown, Pa. Filed Mar. 11, 1932.

VITROBOND

For Acid Resisting Bonding and Lining Materials Used in the Construction of Tanks, Vats, Etc.
Claims use since June 15, 1931.

Ser. No. 325,047. PLASTERCON WALL BOARD COMPANY, Buffalo, N. Y. Filed Mar. 11, 1932.

EVENAIRE

For Thermal and Sound Insulating Wall Board.
Claims use since Mar. 9, 1932.

Ser. No. 325,149. PLASTERCON WALL BOARD COMPANY, Buffalo, N. Y. Filed Mar. 15, 1932.

EVENAIRE

For Thermal and Sound Insulating Wall Board.
Claims use since Mar. 9, 1932.

Ser. No. 325,207. THE BRITISH COLUMBIA LUMBER AND SHINGLE MANUFACTURERS LIMITED, Vancouver, British Columbia, Canada. Filed Mar. 17, 1932.

CAN-TIM

For Wooden Beams, Doors, Flooring, Laths, Mouldings, Planks, Poles, **Railway Ties, Scantling,** Shutters, Siding, and Parquetry; **Paving and Building Blocks, Composite** Sheets of Wood, **Composition Flooring,** Ready-Cut Houses, Sashes and **Sash Frames, Wooden Shingles,** Studding, Swinging Doors, **Veneered Panels, Wainscoting,** Waterproofed Wood, **Weatherstrip, Window Frames,** Wood Mantels, Knockdown **Houses; Box Lumber,** Box Shooks, Boards, and Shiplap; **Shop and Factory Lumber,** Lumber for Use in Building Railway Cars, **Silo Stock,** Tank Stock, Ladder Stock, **Airplane Stock, Ceilings,** Interior Trim, Door Frames, Timbers for Structural and Ordinary Construction Purposes; Stepping, Trunking, and Capping; Pipe Stock.
Claims use since Sept. 1, 1931.

Ser. No. 325,412. ROSTONE, INCORPORATED, Lafayette, Ind. Filed Mar. 23, 1932.

ROSTONE

For Composite Structural Materials—i. e., Plastic Blocks, Slabs, and Tiles of Artificial Stone.
Claims use since July 11, 1927.

Ser. No. 325,609. WESTERN BRICK COMPANY, Danville, Ill. Filed Mar. 28, 1932.

WESTMOLD

For Bricks.
Claims use since Mar. 7, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 317,652. ARTHUR WATERMAN, Boston, Mass. Filed Aug. 4, 1931.

SQUAREG

For Skillets or Frying Pans Produced in Cast and Sheet Metal, as Iron, Aluminum or Aluminum Alloys, and Steel.
Claims use since May 12, 1931.

Ser. No. 325,775. ATLAS SUPPLY COMPANY, Newark, N. J. Filed Apr. 4, 1932.

ACTO

For Anti-Skid Chains.
Claims use since Feb. 19, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 324,961. A. P. GRIMM FOUNDRY COMPANY, INC., Bound Brook, N. J. Filed Mar. 9, 1932.

SOLIDBRITE

No claim is made to "Brite" except in the association shown on the drawing.
For Aluminum Alloys.
Claims use since December, 1931.

Ser. No. 325,396. THE BASTIAN-BLESSING COMPANY, Chicago, Ill. Filed Mar. 23, 1932.

REGOROD

No exclusive claim is made herein to the word "Rod" apart from the mark shown.
For Welding Metals.
Claims use since Mar. 10, 1932.

CLASS 15

Oils and Greases

Ser. No. 310,105. CONTINENTAL OIL COMPANY, Ponca City, Okla. Filed Jan. 19, 1931.

GERMOIL

For Lubricating Oil.
Claims use since Aug. 27, 1930.

Ser. No. 310,106. CONTINENTAL OIL COMPANY, Ponca City, Okla. Filed Jan. 19, 1931.

GERMOL

For Lubricating Oil.
Claims use since Aug. 27, 1930.

Ser. No. 317,713. GASETERIA INCORPORATED, Indianapolis, Ind. Filed Aug. 6, 1931.



For Lubricating Oils.
Claims use since December, 1929.

Ser. No. 318,692. SOCONY-VACUUM CORPORATION, New York, N. Y. Filed Sept. 2, 1931.

SOCONY-VACUUM

For Petroleum and Products of Petroleum with or without Admixture of Other Materials for Illuminating, Heating, Power, Burning, Lubricating, Greasing, Tempering, Quenching, Slushing, and Flushing; Mineral Wax, Candles, Penetrating Oil, Road Dressing Oil, and Absorbing Oil for Benzol Vapors Obtained in the Distillation of Coal.
Claims use since Aug. 17, 1931.

Ser. No. 322,725. OIL CREEK REFINING CO., Titusville, Pa. Filed Jan. 4, 1932.

OILCREEK

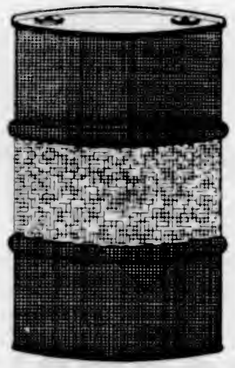
The words "Oil Creek" are disclaimed apart from the other features of the mark shown in the drawing.
For Gasoline, Naphtha, Kerosene, Motor Fuel Oil, Furnace Oil, Steam Refined Cylinder Oils, Light and Heavy Machine Oils, Motor and Tractor Oils, Paraffine Wax, and a General Line of Light and Heavy Lubricating Oils for all Purposes.
Claims use since Aug. 10, 1929.

Ser. No. 324,937. THE PENNZOIL COMPANY, Los Angeles, Calif. Filed Mar. 7, 1932.

MAXOL

For Lubricating Oils and Greases.
Claims use since Jan. 27, 1931.

Ser. No. 325,297. THE PENNZOIL COMPANY, Los Angeles, Calif. Filed Mar. 19, 1932.



The trade-mark consists of a yellow band between two bands of black on the sides of containers, as indicated by the lining shown in the drawing. The representation of the container is disclaimed.
For Lubricating Oils and Greases.
Claims use since May 1, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 321,746. BRENNEREI UND PRESSHEFE-FABRIK TORNESCH GESELLSCHAFT MIT BESCHRANKTER HAFTUNG, Tornesch, Germany. Filed Dec. 4, 1931.



For Varnishes, Prepared Shellac and Lacquers, Ready Mixed Paints.
Claims use since July, 1931.

Ser. No. 324,418. S. W. ADAMS & CO., Philadelphia, Pa. Filed Feb. 23, 1932.

ADAMS-MAVIS JAPAN DRIER



The words "Japan Drier" and "Varnish" are disclaimed apart from the mark as shown on the drawing.
For Japan Drier and Varnish.
Claims use since Oct. 1, 1931.

Ser. No. 324,673. WILLIAM H. STONEMAN, doing business as Country Gentleman Products Co., Albany, N. Y. Filed Mar. 1, 1932.

Painteria

For Paints in Ready Mixed Form, Paint Enamels, and Varnishes.
Claims use since Jan. 27, 1932.

Ser. No. 325,113. RINSHED-MASON COMPANY, Detroit, Mich. Filed Mar. 14, 1932.

INDUSTROLITE

For Ready Mixed Paint, Paint Enamel, Lacquers, Undercoatings, and Enamel-Primer for Inside Buildings.
Claims use since July 9, 1930.

Ser. No. 325,114. RINSHED-MASON COMPANY, Detroit, Mich. Filed Mar. 14, 1932.

PER-MAX

For Ready Mixed Paint, Paint Enamel, Lacquers, Undercoatings, and Synthetic Paint Enamel.
Claims use since Jan. 5, 1932.

Ser. No. 325,115. RINSHED-MASON COMPANY, Detroit, Mich. Filed Mar. 14, 1932.

RIMACO

For Ready Mixed Paint, Paint Enamel, Lacquers, Undercoatings, and Paint for Interior Wall Purposes.
Claims use since Mar. 19, 1928.

Ser. No. 325,116. RINSHED-MASON COMPANY, Detroit, Mich. Filed Mar. 14, 1932.

RIMALOID

For Ready Mixed Paint, Paint Enamel, Lacquers, Undercoatings, and Lacquer for Automotive Products.
Claims use since Sept. 26, 1931.

CLASS 17

Tobacco Products

Ser. No. 313,727. THE AXTON-FISHER TOBACCO CO., Louisville, Ky. Filed Apr. 24, 1931.

Twenty Grand

For Cigarettes.
Claims use since Apr. 22, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 324,503. THE DAVIS WELDING & MANUFACTURING COMPANY, Cincinnati, Ohio. Filed Feb. 29, 1932.

DAVISBILT

The drawing is lined for red, no claim being made to the word "Bilt" apart from the mark as shown.
For Truck Tank, Trailer Tank, and Semi-Trailer Tank Bodies.
Claims use since Aug. 7, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 310,817. RCA VICTOR COMPANY, INC., Camden, N. J. Filed Feb. 6, 1931.

KINESCOPE

For Cathode Ray Tubes and Thermionic Tubes.
Claims use since Sept. 30, 1930.

Ser. No. 312,702. DUNCAN MACKENZIE'S SONS CO., INC., Fieldsboro and Trenton, N. J. Filed Mar. 30, 1931.

MACMAR

For Electric Laboratory and Industrial Furnaces.
Claims use since Apr. 30, 1930.

Ser. No. 319,856. BEST ELECTRIC CORPORATION, New York, N. Y. Filed Oct. 8, 1931.

TRAVEL TONE

For Electric Batteries.
Claims use since Sept. 1, 1931.

Ser. No. 324,767. UNITED ELASTIC CORPORATION, Easthampton, Mass. Filed Mar. 3, 1932.

ELASTICORD

For Self-Folding and Self-Coiling Electric Conductors.
Claims use since Jan. 7, 1932.

Ser. No. 325,372. THE OKONITE COMPANY, Passaic, N. J. Filed Mar. 22, 1932.

OKOLITE

For Insulated Wires and Cables.
Claims use since Dec. 9, 1927.

Ser. No. 325,492. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass. Filed Mar. 25, 1932.

MAGMOTOR

For Generators for Radio Receiving Sets.
Claims use since Feb. 17, 1932.

Ser. No. 325,545. J. R. ACKERMAN CORPORATION, Philadelphia, Pa. Filed Mar. 28, 1932.

VULCO

For Electrical Water Heaters of the Type in Which the Water, While Passing Therethrough, is Heated by Resistance Coils.
Claims use since Oct. 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 325,398. ESSEX RUBBER COMPANY, Trenton, N. J. Filed Mar. 23, 1932.

"BUILDOR"

For the purpose of this registration no exclusive claim is made to the word "Essex" or to the word "Rubber" apart from the mark shown in the drawing.
For Toy Building Blocks.
Claims use since Jan. 27, 1932.

Ser. No. 325,903. THE DRAPER-MAYNARD COMPANY, Plymouth, N. H. Filed Apr. 8, 1932.

STEELTEX

For Foot Balls, Basket Balls, Volley Balls, and Soccer Balls.
Claims use since Jan. 15, 1932.

Ser. No. 326,020. THE OAK RUBBER COMPANY, Ravenna, Ohio. Filed Apr. 12, 1932.

BARTEX

For Toy Rubber Balloons.
Claims use since Mar. 18, 1932.

Ser. No. 326,021. THE OAK RUBBER COMPANY, Ravenna, Ohio. Filed Apr. 12, 1932.

BALLTEX

For Toy Rubber Balloons.
Claims use since Mar. 18, 1932.

Ser. No. 326,022. THE OAK RUBBER COMPANY, Ravenna, Ohio. Filed Apr. 12, 1932.

SUNTEX

For Toy Rubber Balloons.
Claims use since Mar. 18, 1932.

Ser. No. 326,023. THE OAK RUBBER COMPANY, Ravenna, Ohio. Filed Apr. 12, 1932.

GASTEX

For Toy Rubber Balloons.
Claims use since Mar. 18, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 312,350. THE ORVILLE SIMPSON COMPANY, Cincinnati, Ohio. Filed Mar. 20, 1931.

ROTEX

Applicant claims ownership of registered trade-mark No. 93,111 issued Aug. 19, 1913.
For Lawns for the Ceramic Industry, Sizers for the Abrasive Materials Industry, Screens, Sifting and Sorting Machines and Separators for Industrial Use in Material Handling and Treating.
Claims use since 1923.

Ser. No. 322,977. UTILITY BLADE CORPORATION, Irvington, N. J. Filed Jan. 13, 1932.

PRINCE

For Safety Razors and Safety Razor Blades.
Claims use since Dec. 15, 1931.

Ser. No. 324,461. COMPO SHOE MACHINERY CORPORATION, Boston, Mass. Filed Feb. 25, 1932.

COMPO

For Shoe Machinery—Namely, Sole Roughers, Forepart Trimmers, Forepart Roughers, Shank Trimmers, Shank Roughers, Lasting Machines, and Sole Laying and Affixing Machines.
Claims use since September, 1928.

Ser. No. 324,755. ONTARIO KNIFE COMPANY, Franklinville, N. Y. Filed Mar. 3, 1932.

Tru-Edge

No registration rights are claimed to the word "Edge" apart from the mark as shown.
For Kitchen and Table Knives and Forks, Butcher Knives, Shoe Knives, Grape Knives, Coring Hooks, Pitting Spoons, Cotton Sampling Knives, Corn and Vegetable Knives, Beet Topping Knives, Spatulas and Palette Knives, Cleavers, Putty Knives, and Paint and Wall Scrapers, All Made of Base Metal.
Claims use since July 1, 1912.

Ser. No. 325,885. TRIANGLE MECHANICAL LABORATORIES CORP., Brooklyn, N. Y. Filed Apr. 7, 1932.

LIGHTNING

For Razor Blades.
Claims use since Mar. 29, 1932.

Ser. No. 325,886. TRIANGLE MECHANICAL LABORATORIES CORP., Brooklyn, N. Y. Filed Apr. 7, 1932.

World

For Razor Blades.
Claims use since Mar. 29, 1932.

Ser. No. 325,934. ALLIS-CHALMERS MANUFACTURING COMPANY, Milwaukee and West Allis, Wis. Filed Apr. 9, 1932.

TEXSTEEL

For Power Transmission Machinery, Comprising Rotary Sheaves and Drives Consisting of Driving and Driven Sheaves and Flexible Endless Driving Belts Cooperating with Said Sheaves to Transmit Power from One Sheave to the Other.
Claims use since May 22, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 316,513. THE VITASCOPE CORPORATION, Providence, R. I. Filed June 30, 1931.



No claim is made to the exclusive use of the words "The Movie Maker," "Movies for Millions," and "Providence, R. I., U. S. A." apart from the mark as shown.

For Photographic Supplies—Namely, Reels, Tripods, and Camera Containers.

Claims use since May 16, 1931.

Ser. No. 324,269. THE "SOCIÉTÉ ANONYME SOLEX", Neuilly-sur-Seine, France. Filed Feb. 17, 1932.

SOLEX

For Measuring Tools—Namely, Calipers, Micrometers, Gauges, Caliper Squares, and Their Parts.

Claims use since May 17, 1927.

Ser. No. 325,264. E. B. MEYROWITZ, INC., New York, N. Y. Filed Mar. 18, 1932.



Applicant disclaims the words "Aviation Goggles, Made in U. S. A., E. B. Meyrowitz, Inc., New York, U. S. A."

For Goggles and Eye-Protectors.

Claims use since May 27, 1931.

Ser. No. 325,904. ETHYL GASOLINE CORPORATION, Wilmington, Del., and New York, N. Y. Filed Apr. 8, 1932.

ETHYL

For Compression Pressure Gauges.

Claims use since Mar. 17, 1932.

Ser. No. 325,948. FISHER SCIENTIFIC COMPANY, Pittsburgh, Pa. Filed Apr. 9, 1932.

CASTALOY

For Burette Clamps and Clamp Holders and Parts Thereof.

Claims use since Mar. 29, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 324,762. G. A. SODEN & Co., Chicago, Ill. Filed Mar. 3, 1932.



No claim is made to the representation of a diamond nor to the word "Blu" nor to the words "First Quality Diamond," apart from the mark shown in the drawing.

For Genuine Diamonds and Jewelry for Personal Wear, Not Including Watches, Containing Genuine Diamonds.

Claims use since Oct. 31, 1931.

Ser. No. 325,022. ERNEST STEINER & Co., INC., New York, N. Y. Filed Mar. 10, 1932.

HOT-CHA

For Bracelets, Necklaces, Ear-Rings, Pins, Clips, and Finger Rings.

Claims use since Feb. 26, 1932.

Ser. No. 325,328. INTERNATIONAL SILVER COMPANY, Meriden, Conn. Filed Mar. 21, 1932.



No claim is made to the word "Trophy" apart from the mark shown in the drawing.

For Prize Cups, Symbolic Figures and Trophies Made of or Plated with Precious Metal.

Claims use since Mar. 7, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 325,042. MAGNUM PRODUCTS, INC., New York, N. Y. Filed Mar. 11, 1932.

HANDI-PUFFS

The word "Puffs" is disclaimed apart from the mark shown on the drawing.

For Fabric Pads for the Application and Removal of Cosmetics.

Claims use since Mar. 15, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 320,568. JOHN S. BOOTH, Dallas, Tex. Filed Oct. 27, 1931.



No claim being made to the words "Plate" and "The Quick Freeze Refrigeration" except in the association shown on the drawing.

For Refrigeration Units.

Claims use since Aug. 1, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 322,010. VIRGINIA CRAFTSMEN INC., Harrisonburg, Va., New York, N. Y., and Chicago, Ill. Filed Dec. 10, 1931.

VIRGINIA CRAFTSMEN REPRODUCTIONS

The word "Reproductions" being disclaimed apart from the mark shown.

For Reproductions of Antique Furniture—Namely, Beds, Tables, Chests of Drawers and Blanket Chests, Chairs, and Desks.

Claims use since May, 1928.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 314,224. AUSTIN MANUFACTURING AND SALES CORP., Syracuse, N. Y. Filed May 6, 1931.

OXYMETER

For Air-Circulating Blowers for Coal Burning Heaters.

Claims use since Sept. 15, 1928.

Ser. No. 318,244. MASTER OIL BURNER, INC., Worcester, Mass. Filed Aug. 20, 1931.

MASTER OIL BURNER

The words "Oil Burner" are disclaimed apart from the mark as shown in the drawing.

For Oil Burners.

Claims use since Apr. 29, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 323,291. THE GROCERS & PRODUCERS CO., doing business as Clover Farm Stores, Cleveland, Ohio. Filed Jan. 22, 1932.

CLOVER FARM

For Jar Rubbers.
Claims use since 1912.

CLASS 36

Musical Instruments and Supplies

Ser. No. 310,658. RCA PHOTOPHONE, INC., New York, N. Y. Filed Feb. 2, 1931.

THE EMBLEM OF RCA PERFECT SOUND
PHOTOPHONE
SOUND EQUIPMENT

No claim is made to the expressions "Perfect Sound" and "Sound Equipment" apart from the mark as shown.
For Sound Recording Mechanisms of the Phonograph Type, Sound Reproducing Mechanisms of the Phonograph Type, Wax Sound Records, Composition Sound Records and Other Sound Records Adapted for the Mechanical Reproduction of Sound, Apparatus for Mechanically Inscribing Sound Upon Records, Apparatus for Mechanically Reproducing Sound.
Claims use since Jan. 28, 1930.

CLASS 37

Paper and Stationery

Ser. No. 325,385. NORTHERN PAPER MILLS, Green Bay, Wis. Filed Mar. 21, 1932.

NOR-VEND

For Paper Towels.
Claims use since Feb. 2, 1932.

Ser. No. 325,730. THE TISSUE COMPANY, Saugerties, N. Y. Filed Apr. 1, 1932.

Dwarfold

For Paper Napkins and Handkerchiefs.
Claims used since Jan. 2, 1932.

Ser. No. 325,829. MYERS PAPER COMPANY, Memphis, Tenn. Filed Apr. 5, 1932.

Sootheen

For Toilet Paper, Bathroom Tissue, and Skin Cleansing Tissue.
Claims use since Feb. 10, 1932.

Ser. No. 325,916. NEWARK PARAFFINE & PARCHMENT PAPER CO., Newark, N. J. Filed Apr. 8, 1932.

LUSTASEEL

For Wax Paper.
Claims use since Mar. 8, 1932.

Ser. No. 325,919. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y. Filed Apr. 8, 1932.

''PARCHWRAP''

For Greaseproof and Imitation Parchment Paper.
Claims use since Apr. 1, 1932.

CLASS 38

Prints and Publications

Ser. No. 322,115. EDWARD L. SIEKMEIER, Oak Park, Ill. Filed Dec. 14, 1931.

OFFICIAL UNION LABOR DIRECTORY

For a Periodical Publication.
Claims use since Aug. 1, 1916.

Ser. No. 324,331. WESLEY H. SHIRK, doing business as Engineers Publishing Company, Philadelphia, Pa. Filed Feb. 17, 1932.

ROTAGRAPH

For Books, Charts, Magazines, Data Sheets, and Drawings.
Claims use since Sept. 1, 1931.

Ser. No. 324,443. NATIONAL SALES SERVICE, Salt Lake City, Utah. Filed Feb. 24, 1932.



The words "Savings Certificates" and "Certificates" are disclaimed apart from the other features of the mark shown in the drawing.
For Savings Certificates.
Claims use since Jan. 10, 1932.

CLASS 39

Clothing

Ser. No. 319,144. THE JOSEPH & FEISS COMPANY, Cleveland, Ohio. Filed Sept. 17, 1931.

CELARON

For Men's and Young Men's Suits.
Claims use since Aug. 25, 1931.

Ser. No. 323,600. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Filed Jan. 29, 1932.

LUXITE Microseam

For Hosiery.
Claims use since Jan. 23, 1932.

Ser. No. 324,939. JOSEPH E. GROTTA, New York, N. Y. Filed Mar. 8, 1932.

SCARVEST

For Blouses to be Worn by Women.
Claims use since Dec. 18, 1931.

Ser. No. 325,024. THINGS SHOE STORES, INC., Boston, Mass. Filed Mar. 10, 1932.

DR WHITNEY'S COMFORT SHOES

Applicant disclaims the exclusive right to the use of the descriptive expression "Comfort Shoes" except in combination with the mark as shown in the drawings.
For Shoes Made of Leather, Rubber or Fabric, or Combinations of These Materials.
Claims use since July 1, 1931.

Ser. No. 325,324. WALTER FRED HOSIERY MILLS, INC., Nashville, Tenn. Filed Mar. 21, 1932.

PEEP TOE

No claim is made to the word "Toe" apart from the mark shown.
For Hosiery.
Claims use since Feb. 23, 1932.

Ser. No. 325,370. JAMES E. LUDLAM, Belleville, N. J. Filed Mar. 22, 1932.



No claim is made for the expressions "Shoes Made With" and "The Ludlam Flexible Rigid Arch" apart from the mark as shown in the drawing.
For Shoes Manufactured from Combinations of Materials Including Leather, Rubber, and Fabric.
Claims use since Mar. 8, 1932.

Ser. No. 325,537. VAN RAALTE COMPANY, New York, N. Y. Filed Mar. 26, 1932.

VAN RAALTE
RUN PRUF
STOCKING

No claim being made to the words "Stocking" and "Run Pruf" apart from the mark shown, no common-law rights being disclaimed.
For Hosiery.
Claims use since Mar. 22, 1932.

Ser. No. 325,666. TOBIN & EDELMAN, Philadelphia, Pa. Filed Mar. 30, 1932.



No claim is made to the words "Frocks" and "Joy in Every Tog for Every Tot" apart from the mark as shown.
For Children's Dresses.
Claims use since Mar. 2, 1932.

Ser. No. 325,780. H. DAROFF & SONS, INC., Philadelphia, Pa. Filed Apr. 4, 1932.



For Outer Suits for Men and Boys.
Claims use since Feb. 15, 1931.

Ser. No. 325,852. IMPERIAL HOSIERY CO., Pittsburgh, Pa. Filed Apr. 6, 1932.

Modernage

For Hosiery.
Claims use since Mar. 28, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 323,869. NEUSS, HESSLEIN & CO., INC., New York, N. Y. Filed Feb. 5, 1932.



For Grey Cotton Piece Goods.
Claims use since Oct. 15, 1931.

Ser. No. 324,233. STANDARD TRADING MILLS, New York, N. Y. Filed Feb. 16, 1932.

ROXY

For Cotton Pillow Cases, Cotton Bed Sheets, Cotton Bed Spreads, Cotton and Silk Curtains, and Cotton and Wool Blankets.
Claims use since Jan. 15, 1931.

Ser. No. 324,820. C. M. DELAND, New York, N. Y. Filed Mar. 5, 1932.

BEAUVETTE

For Cotton, Rayon, Silk, and Woolen Piece Goods.
Claims use since Mar. 10, 1925.

Ser. No. 324,978. AMERICAN BEMBERG CORPORATION, New York, N. Y. Filed Mar. 10, 1932.

Bemberg

For Woven, Knitted, Netted, Textile and Pile Fabrics in the Piece, Comprised in Whole or in Part of Artificial Silk. Applicant is the owner of registration No. 222,453 for the term "Bemberg."
Claims use since Jan. 1, 1932.

Ser. No. 325,151. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Mar. 15, 1932.

Sprayvel

For Pile Fabrics.
Claims use since Mar. 2, 1932.

Ser. No. 325,528. PEPPERELL MANUFACTURING COMPANY, Boston, Mass. Filed Mar. 26, 1932.

ABBOTSFORD

For Blankets Woven from Cotton, Wool, or Other Fibres or a Combination of Cotton, Wool, or Other Fibres.
Claims use since Mar. 14, 1932.

Ser. No. 325,745. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 2, 1932.

CRAYANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Mar. 31, 1932.

Ser. No. 326,030. WILLIAM SKINNER & SONS, New York, N. Y. Filed Apr. 12, 1932.

TROUBLEPROOF

For Silk Crepes in the Piece.
Claims use since March, 1931.

Ser. No. 326,047. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 13, 1932.

Reine du Soir

For Pile Fabrics in the Piece.
Claims use since Apr. 7, 1932.

Ser. No. 326,057. H. R. MALLINSON & CO., INC., New York, N. Y. Filed Apr. 13, 1932.

OLYMPIC

For Silk Piece Goods.
Claims use since Apr. 15, 1924.

CLASS 43

Thread and Yarn

Ser. No. 316,139. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed June 22, 1931.

SELO

For Cotton Thread and Yarn.
Claims use since May 20, 1931.

Ser. No. 325,055. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany. Filed Mar. 12, 1932.

Cuprofino

For Thread and Yarn.
Claims use since Oct. 31, 1928.

Ser. No. 325,671. AMERICAN GLANZSTOFF CORPORATION, New York, N. Y. Filed Mar. 31, 1932.



The words "Rayon" and "Yarns" are not claimed exclusively by the applicant other than in the manner set forth.
For Threads and Yarns.
Claims use since Aug. 15, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 284,945. PETER A. KANOUSE, Los Angeles, Calif. Filed June 3, 1929.

TRUPLASTIC

No claim is made to the word "Truplastic" apart from the other features of the mark as shown in the drawing.

For Hydrous Cement and Impression Material for Dental Impressions.

Claims use since March, 1919.

Ser. No. 318,361. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Filed Aug. 24, 1931.



The words "Trade Mark" appearing on the drawing are disclaimed.

For Hospital and Sick-Room Enameled and Metal Ware and Hospital and Sick-Room Rubber Products—Namely, Bed Pans, Douche Pans, Irrigators, Pus Basins, Urinals, Nasal Douche, Irrigator and Syringe Rubber Tubing, Irrigator-Syringe and Combination Attachment Sets, Irrigator, Syringe and Water Bottle Accessories.

Claims use since Oct. 2, 1929.

Ser. No. 318,362. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Filed Aug. 24, 1931.

LUXOR

For Hospital and Sick-Room Enameled and Metal Ware—Namely, Bed Pans and Douche Pans.

Claims use since Oct. 2, 1929.

Ser. No. 318,363. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Filed Aug. 24, 1931.

ODEX

For Hospital and Sick-Room Enameled and Metal Ware—Namely, Bed Pans.

Claims use since Oct. 2, 1929.

Ser. No. 318,364. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Filed Aug. 24, 1931.

SERVALL

For Hospital and Sick-Room Enameled and Metal Ware—Namely, Bed Pans.

Claims use since Oct. 2, 1929.

Ser. No. 325,583. SCHNEIDER BROTHERS INCORPORATED, Chicago, Ill. Filed Mar. 26, 1932.

LE NARD

For Manicure Implements, Manicure Sets, and Manicure Kits.

Claims use since Mar. 5, 1932.

Ser. No. 326,043. THE KILLIAN MANUFACTURING CO., Akron, Ohio. Filed Apr. 12, 1932.

KI-MACO

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.

Claims use since Mar. 17, 1930.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 322,223. PACIFIC PRODUCTS, INC., San Francisco, Calif. Filed Dec. 17, 1931.

CrémeOlime

For Carbonated Beverages of Lime Flavor Sold as Soft Drinks.

Claims use since Nov. 4, 1931.

Ser. No. 323,439. KELLOGG COMPANY, Battle Creek, Mich. Filed Jan. 25, 1932.

PEP

For Grape Juice.

Claims use since Sept. 1, 1914.

Ser. No. 325,606. SUNSPRAY BEVERAGES, INC., Brooklyn, N. Y. Filed Mar. 28, 1932.

Sunspray

For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks—Namely, Still Fresh Fruit Beverages and Cocoa Drinks.

Claims use since Sept. 1, 1929.

Ser. No. 325,993. H. E. NEWMAN, doing business as Great Falls Orange Crush Bottling Company, Great Falls, Mont. Filed Apr. 11, 1932.

EMPIRE CLUB

For Mineral Water and for Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts Used in Making the Same.

Claims use since Feb. 15, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 290,370. LUCULLUS BAKERY, INC., Brooklyn, N. Y. Filed Sept. 28, 1929.

Lucullus

For Fresh Fruit Cake, Coffee Cake, Muffins, Layer Cake, Ornamented Cakes, Buttercream Cakes, Pies, Puff Pastry, Plumpudding, Heavy Fruit Cake, Marzipan, Loaf Cake, Pound Cake, Cookies, Macaroons.

Claims use since May 10, 1922.

Ser. No. 310,332. ERLE E. EMERY, doing business as Erle E. Emery Co., Los Angeles, Calif. Filed Jan. 24, 1931.

ROWDY

For Fresh Vegetables and Cantaloupes.

Claims use since Jan. 15, 1930.

Ser. No. 310,877. OTCO'S PURE FOOD PRODUCTS COMPANY, Atlanta, Ga. Filed Feb. 9, 1931.

OTCO'S

N-R-G

For Fruit Cereal.

Claims use since Sept. 4, 1930.

Ser. No. 317,823. DANIEL P. BEATON, doing business as Parachute Confection Company, Winnipeg, Manitoba, Canada. Filed Aug. 3, 1931.



The trade-mark consists of the pictorial representation of a parachute suspending a lady, and the word "Parachute" appearing on the picture as on the drawing.

For Candy.

Claims use since Jan. 10, 1931.

Ser. No. 319,434. NORTHERN LIMESHELL PRODUCTS, Seattle, Wash. Filed Sept. 24, 1931.

Shellime

For Poultry Food.

Claims use since July 7, 1930.

Ser. No. 322,659. SISTERS OF ST. BENEDICT OF CROOKSTON, Mount St. Benedict, Crookston, Minn. Filed Jan. 2, 1932.



"Honey" is disclaimed apart from the mark as shown in the drawing.

For Honey Cream, Cream Honey Butter, Cream Honey Meringue, and Fruit Honey Spread.

Claims use since November, 1930.

Ser. No. 323,804. FRIGIVEND CORPORATION, Dayton, Ohio. Filed Feb. 6, 1932.

Jacanjil

For Ice Cream.
Claims use since Sept. 8, 1931.

Ser. No. 324,114. THE "PRIDE OF RIDGEWAY" GROWERS ASSOCIATION, Route 2 Norlina, N. C. Filed Feb. 12, 1932.

PRIDE OF
RIDGEWAY

For Fresh Cantaloupes.
Claims use since 1920.

Ser. No. 324,506. CEDAR ISLAND OYSTER COMPANY, Greenport, N. Y. Filed Feb. 26, 1932.

CEDAR ISLANDS

For Oysters in Their Natural State.
Claims use since 1918.

Ser. No. 325,321. VITO COSTA & SONS, Chicago, Ill. Filed Mar. 21, 1932.

SOLE-MIO

For Alimentary Paste Products—Namely, Macaroni.
Claims use since July 1, 1931.

Ser. No. 325,782. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash. Filed Apr. 4, 1932.

EFEMCO

For Wheat Flour.
Claims use since July 1, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 325,616. DU PONT VISCOLOID COMPANY, New York, N. Y. Filed Mar. 29, 1932.

PYRAHEEL

For Cellulosic Plastic, in Sheets, for Covering Heels of Boots, Shoes, and Slippers, and Embossed to Represent Leather or Textiles.
Claims use since Mar. 7, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 17, 1932

294,026. BIAS BINDING TAPES AND CLOTHS. BIAS BINDING COMPANY, New York, N. Y.
Filed July 25, 1931. Serial No. 317,297. PUBLISHED MARCH 1, 1932. Class 40.

294,027. TOOTHPOWDER AND HAIR REMOVING PREPARATION IN THE NATURE OF AN ESPECIALLY PREPARED POWDER. HARRY B. KIMBLE, doing business as Kim Chemical Products Company, Albuquerque, N. Mex.
Filed July 30, 1931. Serial No. 317,471. PUBLISHED MARCH 1, 1932. Class 6.

294,028. DUSTING ANTISEPTIC POWDER AND A LAXATIVE MEDICINE FOR LIVE STOCK. THE CHATTANOOGA MEDICINE COMPANY, Chattanooga, Tenn.
Filed August 8, 1931. Serial No. 317,790. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,029. LIVER CATHARTIC AND LAXATIVE MEDICINE. THE CHATTANOOGA MEDICINE COMPANY, Chattanooga, Tenn.
Filed October 19, 1931. Serial No. 320,184. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,030. TOMATO JUICE AND TOMATO JUICE COCKTAIL. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y.
Filed October 22, 1931. Serial No. 320,298. PUBLISHED MARCH 1, 1932. Class 46.

294,031. PERFUMERY. RENAUD ET CIE OF AMERICA, Boston, Mass.
Filed October 22, 1931. Serial No. 320,315. PUBLISHED MARCH 1, 1932. Class 6.

294,032. INVERTASE PREPARATION SUITABLE FOR USE IN THE CONVERSION OF SUCROSE IN THE PREPARATION OF FOODS AND INGREDIENTS OF FOODS. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed November 6, 1931. Serial No. 320,880. PUBLISHED MARCH 1, 1932. Class 46.

294,033. LINIMENT FOR THE RELIEF OF ALL MUSCULAR AILMENTS, NEURITIS, CHEST COLDS, SWELLINGS OF ALL KINDS, SPRAINS, AND STRAINS OF ALL KINDS. VERLY SMITH, doing business as The All-American Trainer, South Bend, Ind.
Filed November 9, 1931. Serial No. 320,948. PUBLISHED MARCH 1, 1932. Class 6.

294,034. CHEWING GUM HAVING ANTISEPTIC AND DEODORANT PROPERTIES. PAUL F. CLARK, Kansas City, Mo.
Filed November 16, 1931. Serial No. 321,160. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,035. CERTAIN NAMED FANCY GOODS, FURNISHINGS, AND NOTIONS. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed November 30, 1931. Serial No. 321,600. PUBLISHED MARCH 1, 1932. Class 40.

294,036. VETERINARY MEDICINE FOR USE IN THE TREATMENT OF GARGET, BLOODY MILK, STRINGY MILK, AND NONCONTAGIOUS MASTITIS. H. W. NAYLOR, doing business as H. W. Naylor Co., Morris, N. Y.
Filed December 7, 1931. Serial No. 321,885. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,037. VETERINARY MEDICINE FOR USE IN THE TREATMENT OF DIARRHEA. H. W. NAYLOR, doing business as H. W. Naylor Co., Morris, N. Y.
Filed December 7, 1931. Serial No. 321,886. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,038. CONCENTRATED TOMATO JUICE COCKTAIL. F. ROMEO & CO., INC., doing business as Juliet Packing Co., New York, N. Y.
Filed December 12, 1931. Serial No. 322,071. PUBLISHED MARCH 1, 1932. Class 46.

294,039. CERTAIN NAMED WEARING APPAREL. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed December 14, 1931. Serial No. 322,102. PUBLISHED MARCH 1, 1932. Class 39.

294,040. STOMACH POWDER. PERCIVAL W. BEIRNES, doing business as R. Burns Company, Los Angeles, Calif.
Filed December 14, 1931. Serial No. 322,088. PUBLISHED MARCH 1, 1932. Class 6.

294,041. SPECIAL MINERAL POWDER USED AS A TOUGHENER FOR STEEL, ETC. WHELITE DISTRIBUTORS, Los Angeles, Calif.
Filed December 15, 1931. Serial No. 322,146. PUBLISHED MARCH 1, 1932. Class 6.

294,042. PREPARATION FOR THE RELIEF OF SALT WATER ITCH, ATHLETE'S FOOT, DHOBIE'S ITCH, RINGWORM, AND BARBER'S ITCH. ALBERT BERNARD HIRSCHMAN, doing business as Hirschman Laboratories, San Pedro, Calif.
Filed December 7, 1931. Serial No. 322,346. PUBLISHED MARCH 1, 1932. Class 6.

294,043. LYE. CALIFORNIA SOAP COMPANY, Los Angeles, Calif.
Filed December 22, 1931. Serial No. 322,354. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,044. QUEBRACHO EXTRACT. TANNERS TRADING COMPANY, Boston, Mass.
Filed December 22, 1931. Serial No. 322,375. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,045. MEN'S, WOMEN'S, AND CHILDREN'S HATS AND SHOES MADE OF LEATHER, RUBBER, OR FABRIC AND/OR ANY COMBINATION THEREOF. BEST & CO., INC., New York, N. Y.
Filed December 29, 1931. Serial No. 322,493. PUBLISHED MARCH 1, 1932. Class 39.

294,046. CANNED VEGETABLES, CANNED FRUITS, CANNED FISH, ETC. GREENSPAN BROTHERS COMPANY, Perth Amboy, N. J.
Filed December 16, 1931. Serial No. 322,171. PUBLISHED MARCH 1, 1932. Class 46.

294,047. BIAS FOLD TAPE. C. M. S. WHOLESALE CHAIN CORPORATION, New York, N. Y.
Filed December 16, 1931. Serial No. 322,163. PUBLISHED MARCH 1, 1932. Class 40.

294,048. CANDY CONFECTIONS. OXFORD CONFECTIONERY COMPANY, Oxford, Pa.
Filed May 19, 1930. Serial No. 300,805. PUBLISHED SEPTEMBER 9, 1930. Class 46.

294,049. REENFORCED, WATERPROOF, AND WINDPROOF SHEET BUILDING PAPER. W. RALSTON & CO., INC., Niagara Falls, N. Y.
Filed August 21, 1931. Serial No. 318,292. PUBLISHED OCTOBER 20, 1931. Class 12.

294,050. LIQUID, SEMI-LIQUID, POWDER, PASTE AND PLASTIC COMPOSITIONS OTHER THAN PAINTS FOR WATERPROOFING WOOD, METAL, CEMENT, AND OTHER STRUCTURAL MATERIALS. TOCH BROTHERS, INC., New York, N. Y.
Filed May 29, 1930. Serial No. 301,731. PUBLISHED SEPTEMBER 1, 1931. Class 12.

294,051. MEAT LOAF COMPRISED MAINLY OF BEEF AND PORK; SAUSAGE, FRANKFURTERS, PORK SAUSAGE. ARNOLD BROS., Chicago, Ill.
Filed May 31, 1930. Serial No. 301,779. PUBLISHED APRIL 21, 1931. Class 46.

294,052. CHEWING GUM COMPRISING A CORE OF CHEWING GUM AND A THICK COATING OR COVERING OF HARD CANDY. FRANK H. FLEER CORPORATION, Philadelphia, Pa.
Filed July 31, 1930. Serial No. 304,046. PUBLISHED MARCH 1, 1932. Class 46.

294,053. MEDICINE IN THE FORM OF TABLETS FOR USE IN TREATMENT OF RHEUMATISM AND DYSPEPSIA. FREDERICK H. BRISTOW, Los Angeles, Calif.
Filed October 14, 1930. Serial No. 306,727. PUBLISHED JANUARY 13, 1931. Class 6.

294,054. MEN'S CLOTHING—NAMELY, SUITS, COATS, VESTS, AND TROUSERS. LOB-HUBBART, INC., Philadelphia, Pa.
Filed November 10, 1930. Serial No. 307,723. PUBLISHED MARCH 1, 1932. Class 39.

294,055. DRY CLEANING POWDER. NO-RING CORPORATION, New York, N. Y.
Filed November 12, 1930. Serial No. 307,825. PUBLISHED MARCH 31, 1931. Class 4.

294,056. CHEWING GUM. PULVER COMPANY, INC., Rochester, N. Y.
Filed January 17, 1931. Serial No. 310,072. PUBLISHED MAY 19, 1931. Class 46.

294,057. OUTER WEARING APPAREL FOR WOMEN AND GIRLS — NAMELY, STREET DRESSES, SUITS, COATS, SKIRTS, FROCKS, AND SUIT, DRESS, AND COAT ENSEMBLES. KAY BROTHERS, INC., St. Louis, Mo.
Filed February 20, 1931. Serial No. 311,278. PUBLISHED MARCH 8, 1932. Class 39.

294,058. AUTOMOBILE TIRES. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed March 5, 1931. Serial No. 311,792. PUBLISHED MARCH 1, 1932. Class 35.

294,059. COFFEE. ARABAN COFFEE CO., INC., Boston, Mass.
Filed March 31, 1931. Serial No. 312,744. PUBLISHED MARCH 1, 1932. Class 46.

294,060. ELECTRICAL HAIR WAVING APPARATUS. THE REALISTIC PERMANENT WAVE MACHINE COMPANY, Cleveland, Ohio.
Filed May 12, 1931. Serial No. 314,460. PUBLISHED MARCH 1, 1932. Class 44.

294,061. TOILET ARTICLES, PREPARATIONS, AND PRODUCTS—NAMELY, SKIN TONICS, SKIN LOTIONS, SKIN CREAMS, AND ROUGE. BENJAMIN ANSEHL, doing business as The Benjamin Ansehl Company, University City, Mo.
Filed June 1, 1931. Serial No. 315,235. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,062. CANNED FRUITS AND VEGETABLES, JELLIES AND JAMS. CLARA MAY DOWNEY, doing business as Olney Inn, Olney, Md.
Filed June 13, 1931. Serial No. 315,793. PUBLISHED MARCH 1, 1932. Class 46.

294,063. BEACH AND LAWN UMBRELLAS. GOLD MEDAL FOLDING FURNITURE CO., Racine, Wis.
Filed June 24, 1931. Serial No. 316,201. PUBLISHED MARCH 1, 1932. Class 41.

294,064. PRESSURE OPERATED BELL RINGERS, BELL RINGERS OF THE VACUUM TYPE, PORTABLE CRANES FOR REMOVING CYLINDER HEADS FROM RAILWAY LOCOMOTIVES; GREASE LUBRICATORS FOR PISTON RODS, VALVE STEMS, AND AIR PUMP RODS; EXHAUST PIPES FOR RAILWAY LOCOMOTIVES, PORTABLE PAINTING MACHINES, RAIL WASHERS, TRACK SANDERS, AND WHISTLE OPERATING MECHANISM. VILOCO RAILWAY EQUIPMENT CO., Chicago, Ill.
Filed June 27, 1931. Serial No. 316,389. PUBLISHED MARCH 1, 1932. Class 23.

294,065. ROOFING, SHINGLES, BUILDING PAPERS—NAMELY, WATERPROOFING, THERMAL AND ACOUSTICAL INSULATING PAPERS AND FELTS, ALL OF WHICH COMPRISE A BODY OF FIBROUS MATERIAL IN SHEET FORM WHICH MAY OR MAY NOT BE COATED, AND/OR SATURATED IN WHOLE OR IN PART WITH A BITUMINOUS OR ASPHALTIC COMPOUND. THE PARAFFINE COMPANIES, INC., doing business as Paint Products Company, San Francisco, Calif.
Filed June 30, 1931. Serial No. 316,499. PUBLISHED AUGUST 18, 1931. Class 12.

294,066. MATTRESSES. LEATH AND COMPANY, Rockford, Ill.
Filed July 6, 1931. Serial No. 316,653. PUBLISHED MARCH 1, 1932. Class 32.

294,067. ICE CREAM AND FROZEN CONFECTIONS. JEROME F. GLASSER, Cicero, Ill.
Filed December 26, 1930. Serial No. 309,340. PUBLISHED JUNE 16, 1931. Class 46.

294,068. OPTICAL GOODS, INCLUDING LENSES AND BLANKS, LENSE FRAMES, ETC. JOSEPH HOLLINGER, New York, N. Y.
Filed January 8, 1932. Serial No. 322,824. PUBLISHED MARCH 1, 1932. Class 26.

294,069. DRESSES FOR WOMEN AND MISSES. SCRUGGS-VANDERVOORT-BARNEY DRY GOODS COMPANY, St. Louis, Mo.
Filed January 8, 1932. Serial No. 322,833. PUBLISHED MARCH 1, 1932. Class 39.

294,070. MEN'S, WOMEN'S, AND CHILDREN'S ARTIFICIAL SILK, SILK, WOOL, COTTON, AND LISLE HOSIERY OR COMBINATIONS THEREOF. S. L. GILBERT & CO. INC., New York, N. Y.
Filed January 6, 1932. Serial No. 322,772. PUBLISHED MARCH 1, 1932. Class 39.

294,071. HOSIERY. ARTCRAFT HOSIERY MILLS, INC., Philadelphia, Pa.
Filed January 5, 1932. Serial No. 322,728. PUBLISHED MARCH 1, 1932. Class 39.

294,072. HOSIERY. OPPENHEIM, COLLINS & CO. INC., Wilmington, Del.; New York, Brooklyn, and Buffalo, N. Y.; Philadelphia and Pittsburgh, Pa.; and Cleveland, Ohio.
Filed December 19, 1931. Serial No. 322,348. PUBLISHED MARCH 1, 1932. Class 39.

294,073. BUILDING STONE WHICH IS DRESSED AND READY FOR USE. BENEDICT STONE PRODUCTS COMPANY, Chicago, Ill.
Filed December 16, 1931. Serial No. 322,156. PUBLISHED FEBRUARY 16, 1932. Class 12.

294,074. FRUIT CANDIES. THE FRUIT BROCHETTE CO., New York, N. Y.
Filed December 11, 1931. Serial No. 322,201. PUBLISHED MARCH 1, 1932. Class 46.

294,075. CHOCOLATES AND CHOCOLATE CANDY. ALIMENTA SOCIÉTÉ COOPÉRATIVE, Cureghem, near Brussels, Belgium.
Filed December 21, 1931. Serial No. 322,304. PUBLISHED MARCH 1, 1932. Class 46.

294,076. INSULATING BOARD, INSULATING LATH, INSULATING TILE, LOW DENSITY ROOF AND REFRIGERATION INSULATION. HAWAIIAN CANE PRODUCTS, LIMITED, Honolulu, Territory of Hawaii.
Filed December 16, 1931. Serial No. 322,173. PUBLISHED MARCH 1, 1932. Class 12.

294,077. THERMAL AND SOUND INSULATING BUILDING PRODUCTS. CHARLES LACHMAN CO., INC., Philadelphia, Pa.
Filed January 6, 1932. Serial No. 322,775. PUBLISHED MARCH 1, 1932. Class 12.

294,078. FRESH, DRIED, AND CURED DATES. MRS. JOHN R. PORTER, Orange, Calif.
Filed January 7, 1932. Serial No. 322,806. PUBLISHED MARCH 1, 1932. Class 46.

294,079. THERMAL AND SOUND INSULATING BUILDING PRODUCTS MADE OF HAIR, HAIR-FELT, ASBESTOS, ASBESTOS PAPER, PAPER AND CLOTH OR COMBINATIONS THEREOF AND QUILTED. CHARLES LACHMAN CO., INC., Philadelphia, Pa.
Filed January 6, 1932. Serial No. 322,776. PUBLISHED MARCH 1, 1932. Class 12.

294,080. COFFEE. PAXTON AND GALLAGHER CO., Omaha, Nebr.
Filed January 15, 1932. Serial No. 323,057. PUBLISHED MARCH 1, 1932. Class 46.

294,081. RAILROAD TIES. HOBBS-WESTERN COMPANY, St. Louis, Mo.
Filed January 18, 1932. Serial No. 323,130. PUBLISHED MARCH 1, 1932. Class 12.

294,082. ROCK ASPHALT. THE CARTER-WATERS CORPORATION, Kansas City, Mo.
Filed January 22, 1932. Serial No. 323,278. PUBLISHED MARCH 1, 1932. Class 12.

294,083. CANDY BARS. F. A. MARTOCCIO COMPANY, doing business as Hollywood Candy Co., Minneapolis, Minn.
Filed January 23, 1932. Serial No. 323,346. PUBLISHED MARCH 1, 1932. Class 46.

294,084. COFFEE. D. W. OHLANDT & SONS, Charleston, S. C.
Filed January 23, 1932. Serial No. 323,352. PUBLISHED MARCH 1, 1932. Class 46.

294,085. WET AND DRY PACKED SHRIMP. CANNARELLA BRO. & SONS, Thunderbolt, Ga.
Filed January 25, 1932. Serial No. 323,391. PUBLISHED MARCH 1, 1932. Class 46.

294,086. CANNED VEGETABLES. COLUMBUS FOODS CORPORATION, Columbus, Wis.
Filed December 26, 1931. Serial No. 322,458. PUBLISHED MARCH 1, 1932. Class 46.

294,087. VEGETABLES. CLEVE LEE, Santa Maria, Calif.
Filed December 18, 1931. Serial No. 322,259. PUBLISHED MARCH 1, 1932. Class 46.

294,088. SLICED ROASTED OR UNROASTED PEANUTS OR ALMONDS AND OTHER NUTS FOR BAKERS' AND CONFECTIONERS' USE. PLANTERS NUT AND CHOCOLATE COMPANY, Wilkes-Barre, Pa., and Suffolk, Va.
Filed January 23, 1932. Serial No. 323,358. PUBLISHED MARCH 1, 1932. Class 46.

294,089. MEN'S SUITS AND OVERCOATS. THE A. NASH COMPANY, doing business as Hannon Clothes Maker, Cincinnati, Ohio.
Filed October 16, 1931. Serial No. 320,130. PUBLISHED MARCH 8, 1932. Class 39.

294,090. COMBINATION TROUSER SKIRTS. MARCIA C. BOHR, San Francisco, Calif.
Filed November 2, 1931. Serial No. 320,715. PUBLISHED MARCH 8, 1932. Class 39.

294,091. TABLE SAUCE IN THE NATURE OF A DRESSING FOR MEATS, SANDWICHES, SOUPS, SPAGHETTIS, GRAVIES, AND SEA FOODS. FRANK S. LEGGETT, Albany, Ga.
Filed November 4, 1931. Serial No. 321,061. PUBLISHED MARCH 8, 1932. Class 46.

294,092. ELECTRICALLY ILLUMINATED AIRPORT MARKERS. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed November 11, 1931. Serial No. 321,057. PUBLISHED FEBRUARY 16, 1932. Class 21.

294,093. DUMBWAITERS, FREIGHT AND PASSENGER-ELEVATORS, HOISTS, CRANES, LIFTS, CARS, HOISTING GEAR, AND PARTS THEREOF. SEDGWICK MACHINE WORKS, New York, N. Y.
Filed January 19, 1932. Serial No. 323,177. PUBLISHED MARCH 1, 1932. Class 23.

294,094. COMPOSITION FOR APPLICATION TO SURFACES, WALLS OR PARTITIONS, CEILINGS, AND THE LIKE, AS A SOUND DEADENER. THE J. E. HARRIS COMPANY, Wooster, Ohio.
Filed August 13, 1931. Serial No. 317,937. PUBLISHED FEBRUARY 23, 1932. Class 12.

294,095. HOLLOW SHEET METAL UNITS FOR DOORS, FRAMES, LOUVERS, FLOORS, WALLS, ROOFS, PARTITIONS, AND FORMS FOR CONCRETE STRUCTURE. TRUSSBILT STEEL DOORS, INC., Minneapolis, Minn.
Filed October 21, 1931. Serial No. 320,286. PUBLISHED MARCH 1, 1932. Class 12.

294,096. HOSIERY. MOCK, JUDSON, VOEHRINGER CO., INC., Long Island City, N. Y.
Filed August 20, 1931. Serial No. 318,248. PUBLISHED MARCH 8, 1932. Class 39.

294,097. PERIODICAL. NEW-BROAD PUBLISHING CO., INC., New York, N. Y.
Filed August 27, 1931. Serial No. 318,488. PUBLISHED DECEMBER 15, 1931. Class 38.

294,098. UNDERWEAR AND ATHLETIC OUTER CLOTHING. THE B. V. D. COMPANY, INC., Baltimore, Md.
Filed January 14, 1932. Serial No. 322,983. PUBLISHED MARCH 8, 1932. Class 39.

294,099. SWEATER COATS AND SWIM SUITS. TOM WYE INC., Winchendon, Mass.
Filed December 26, 1931. Serial No. 322,476. PUBLISHED MARCH 1, 1932. Class 39.

294,100. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS; MEN'S AND BOYS' PAJAMAS. WILLIAM ATKIN CO., INC., New York, N. Y.
Filed December 26, 1931. Serial No. 322,444. PUBLISHED MARCH 1, 1932. Class 39.

294,101. WOMEN'S AND CHILDREN'S HOSIERY AND WOMEN'S AND MISSES' UNDERWEAR MADE OF GLOVE SILK, SILK AND RAYON, AND RAYON. FAIRY SILK MILLS, Shillington, Pa.
Filed December 31, 1931. Serial No. 322,579. PUBLISHED MARCH 1, 1932. Class 39.

294,102. WOMEN'S AND MISSES' SKIRTS, DRESSES, JACKETS, COATS, AND BLOUSES. STAR SKIRT CO. INC., doing business as Star Maid Dresses, Inc., New York, N. Y.
Filed January 5, 1932. Serial No. 322,754. PUBLISHED MARCH 8, 1932. Class 39.

294,103. BOYS' SUITS, CREEPERS, ROMPERS, PLAY SUITS, OVERALLS, AND CHILDREN'S DRESSES. STANDARD ROMPER CO. INC., New York, N. Y.
Filed January 9, 1932. Serial No. 322,864. PUBLISHED MARCH 8, 1932. Class 39.

294,104. HOSIERY MADE OF COTTON AND RAYON IN COMBINATION, HOSIERY MADE OF COTTON, AND HOSIERY MADE OF COTTON, RAYON, AND SILK IN COMBINATION. E. M. HOLT PLAID MILLS, INC., Burlington, N. C.
Filed January 12, 1932. Serial No. 322,933. PUBLISHED MARCH 8, 1932. Class 39.

294,105. NECKTIES. BOTANY WORSTED MILLS, Passaic, N. J.
Filed January 14, 1932. Serial No. 322,990. PUBLISHED MARCH 1, 1932. Class 39.

294,106. MEN'S SUITS, INCLUDING COATS, VESTS, TROUSERS, AND KNICKERBOCKERS; AND COATS AND KNICKERBOCKERS FOR WOMEN AND CHILDREN. ALFRED DECKER & COHN, INC., Chicago, Ill.
Filed January 14, 1932. Serial No. 322,998. PUBLISHED MARCH 1, 1932. Class 39.

294,107. HOSIERY. H. STANLEY GILBERT, New York, N. Y.
Filed January 14, 1932. Serial No. 323,003. PUBLISHED MARCH 8, 1932. Class 39.

294,108. DRESS SHIRTS. ROLLAND LEE SPAIDE, doing business as The Beachcroft Shirt Company, Butler, Pa.
Filed January 15, 1932. Serial No. 323,065. PUBLISHED MARCH 8, 1932. Class 39.

294,109. INTERNAL COMBUSTION ENGINES AND SPARE PARTS OF SAME. THE AUTOCAR COMPANY, Ardmore, Pa.
Filed January 18, 1932. Serial No. 323,117. PUBLISHED MARCH 1, 1932. Class 23.

294,110. UNDERWEAR OF KNITTED FABRIC FOR WOMEN AND CHILDREN. VAN RAALTE COMPANY, New York, N. Y.
Filed January 20, 1932. Serial No. 323,213. PUBLISHED MARCH 8, 1932. Class 39.

294,111. MANUFACTURED KNITTED WEAR—NAMELY, SWEATERS, BATHING SUITS, AND FANCY KNITTED APPAREL — NAMELY, LADIES' DRESSES, SUITS, AND SHAWLS. BEDFORD KNITTING COMPANY, Malden, Mass.
Filed January 21, 1932. Serial No. 323,221. PUBLISHED MARCH 8, 1932. Class 39.

294,112. HOSIERY. NEISNER BROTHERS, INC., Rochester, N. Y.
Filed January 22, 1932. Serial No. 323,303. PUBLISHED MARCH 8, 1932. Class 39.

294,113. HOSIERY. HERMAN ZIPKIN & CO., INC., New York, N. Y.
Filed January 25, 1932. Serial No. 323,433. PUBLISHED MARCH 8, 1932. Class 39.

294,114. MEN'S, WOMEN'S, AND CHILDREN'S UNDERWEAR. MAX J. FRIEDMAN CORPORATION, New York, N. Y.
Filed January 29, 1932. Serial No. 323,578. PUBLISHED MARCH 8, 1932. Class 39.

294,115. MEN'S AND BOYS' FELT AND STRAW HATS AND CLOTH CAPS, MEN'S SILK HATS, AND FELT AND STRAW HATS FOR WOMEN AND CHILDREN. JOHN B. STETSON COMPANY, Philadelphia, Pa.
Filed July 16, 1929. Serial No. 287,210. PUBLISHED MARCH 1, 1932. Class 39.

294,116. CERTAIN NAMED WEARING APPAREL. NOFADE COCOON CORPORATION, New York, N. Y.
Filed September 28, 1929. Serial No. 290,375. PUBLISHED MARCH 1, 1932. Class 39.

294,117. FRESH CITRUS FRUITS AND FRESH TOMATOES. SOUTHERN FRUIT DISTRIBUTORS, INC., Orlando, Fla.
Filed October 29, 1929. Serial No. 291,743. PUBLISHED FEBRUARY 24, 1931. Class 46.

294,118. CHEMICALS — NAMELY, SOLVENTS — NAMELY, ALCOHOL AND CARBON BISULPHIDE USED IN THE ARTS FOR PHARMACEUTICAL PURPOSES, ENAMELS, AND WAX; MEDICINES—NAMELY, DIGESTION TABLETS; TOILET PREPARATIONS—NAMELY, COLD CREAM AND HAIR WASH, DENTIFRICES, DENTAL POLISH, MOUTH WASHES, DISINFECTANTS, DEODORANTS, INSECTICIDES, AND VAGINAL DOUCHES. MATILDA CREGER, doing business as The Efas Laboratories, San Francisco, Calif.
Filed December 28, 1929. Serial No. 294,150. PUBLISHED MARCH 1, 1932. Class 6.

294,119. FILING SUPPLIES—NAMELY, FOLDERS, GUIDES, CARDS, INDEXES, SIGNALS, TABS. JAMES FRANK DUNLEAVY, Boston, Mass.
Filed February 12, 1930. Serial No. 295,938. PUBLISHED MAY 20, 1930. Class 37.

294,120. IMPERVIOUS FILM COATINGS IN THE FORM OF LACQUERS. BREVOLITE LACQUER COMPANY, North Chicago, Ill.
Filed March 31, 1930. Serial No. 298,137. PUBLISHED MARCH 8, 1932. Class 16.

294,121. IMPERVIOUS FILM COATINGS IN THE FORM OF LACQUERS. BREVOLITE LACQUER COMPANY, North Chicago, Ill.
Filed March 31, 1930. Serial No. 298,140. PUBLISHED MARCH 8, 1932. Class 16.

294,122. IMPERVIOUS FILM COATINGS IN THE FORM OF LACQUERS. BREVOLITE LACQUER COMPANY, North Chicago, Ill.
Filed March 31, 1930. Serial No. 298,141. PUBLISHED MARCH 8, 1932. Class 16.

294,123. INSTRUMENT FOR EXERCISING AND TREATING THE EYES. AMERICAN OPTICAL COMPANY, Southbridge, Mass.
Filed July 24, 1931. Serial No. 317,266. PUBLISHED MARCH 1, 1932. Class 44.

294,124. WATCHES AND PARTS THEREOF. HANS WILSDORF, Geneva, Switzerland.
Filed August 10, 1931. Serial No. 317,865. PUBLISHED MARCH 8, 1932. Class 27.

294,125. A TABLE BOARD GAME PLAYED WITH PIECES. THE JUNTO GAME AND NOVELTY COMPANY, St. Paul, Minn.
Filed August 29, 1931. Serial No. 318,560. PUBLISHED MARCH 8, 1932. Class 22.

294,126. ELECTRICAL HAIR DRYING APPARATUS. FRANZ STRÖHER, Rothenkirchen, Germany.
Filed September 3, 1931. Serial No. 318,729. PUBLISHED FEBRUARY 2, 1932. Class 44.

294,127. BASE PLATES USED IN THE MANUFACTURE OF ARTIFICIAL DENTURES. UNITED DENTAL CORPORATION, New York, N. Y.
Filed September 29, 1931. Serial No. 319,555. PUBLISHED MARCH 1, 1932. Class 44.

294,128. DENTAL INSTRUMENTS AND SUPPLIES. UNITED DENTAL CORPORATION, New York, N. Y.
Filed September 29, 1931. Serial No. 319,554. PUBLISHED MARCH 1, 1932. Class 44.

294,129. MASSAGING MACHINES OR DEVICES. CLAUD H. FOSTER, doing business as Foster Mfg. Co., Cleveland, Ohio.
Filed September 29, 1931. Serial No. 319,564. PUBLISHED MARCH 1, 1932. Class 44.

294,130. OCRES. SOCIETE DES OCRES DE FRANCE, Auxerre, France.
Filed October 31, 1931. Serial No. 320,701. PUBLISHED MARCH 8, 1932. Class 16.

294,131. TWINE, LINES, STRING, AND CORDAGE OF COTTON AND RAYON AND COMBINATIONS THEREOF. ELEANOR S. REYNOLDS, doing business as James E. Reynolds and Co., New York, N. Y.
Filed November 18, 1931. Serial No. 321,311. PUBLISHED MARCH 8, 1932. Class 7.

294,132. CLOCK-WORKS FOR HOROLOGICAL INSTRUMENTS, WATCHES OF ALL KINDS, CLOCKS, WALL-CLOCKS, CHIMNEY-CLOCKS, TABLE-CLOCKS, TIME PIECES, CHRONOGRAPHS, AND CHRONOSCOPES. ETABLISSEMENTS ED. JAEGER, Levallois-Perret, France.
Filed November 25, 1931. Serial No. 321,489. PUBLISHED MARCH 8, 1932. Class 27.

294,133. CLEANING POWDER AND STAIN REMOVER FOR ARTIFICIAL PLATES AND TEETH. THE DENACO AGENCY, San Francisco, Calif.
Filed December 8, 1931. Serial No. 321,908. PUBLISHED MARCH 1, 1932. Class 4.

294,134. SOAP. HENRY T. LAWSON, Atlanta, Ga.
Filed December 11, 1931. Serial No. 322,020. PUBLISHED MARCH 1, 1932. Class 4.

294,135. CERTAIN NAMED PAINT PRODUCTS. BRICKER & ANDES, Brooklyn, N. Y.
Filed December 29, 1931. Serial No. 322,497. PUBLISHED MARCH 8, 1932. Class 16.

294,136. GOLF CLUBS AND PARTS OF GOLF CLUBS. KENNETH SMITH, Kansas City, Mo.
Filed January 4, 1932. Serial No. 322,715. PUBLISHED MARCH 8, 1932. Class 22.

294,137. CLEANSING COMPOUND FOR AUTOMOBILES AND OTHER VEHICLES. THE WARNER CHEMICAL COMPANY, New York, N. Y.
Filed January 5, 1932. Serial No. 322,756. PUBLISHED MARCH 1, 1932. Class 4.

294,138. SHAMPOO SOAP. OREON SHAMPOO CO., Chicago, Ill.
Filed January 9, 1932. Serial No. 322,859. PUBLISHED MARCH 1, 1932. Class 4.

294,139. CARBON PAPER AND TYPEWRITER RIBBONS. L C SMITH & CORONA TYPEWRITERS INC., New York, N. Y.
Filed January 13, 1932. Serial No. 322,973. PUBLISHED MARCH 8, 1932. Class 11.

294,140. DUSTING CLOTHS. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J.
Filed January 13, 1932. Serial No. 323,010. PUBLISHED MARCH 8, 1932. Class 29.

294,141. BALL-PROJECTING GAMES. DEVICE MANUFACTURERS, INC., Youngstown, Ohio.
Filed January 19, 1932. Serial No. 323,166. PUBLISHED MARCH 8, 1932. Class 22.

294,142. CIGARS. CORRAL, WODISKA Y CA., Tampa, Fla.
Filed January 21, 1932. Serial No. 323,225. PUBLISHED MARCH 8, 1932. Class 17.

294,143. TOOTHPICKS. THE GROCERS & PRODUCERS CO., doing business as Clover Farm Stores, Cleveland, Ohio.
Filed January 22, 1932. Serial No. 323,288. PUBLISHED MARCH 1, 1932. Class 44.

294,144. SOAP. BOURJOIS, INC., New York, N. Y.
Filed January 23, 1932. Serial No. 323,321. PUBLISHED MARCH 1, 1932. Class 4.

294,145. GOLF CLUBS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed February 1, 1932. Serial No. 323,662. PUBLISHED MARCH 8, 1932. Class 22.

294,146. VEHICULAR TOYS. KEYSTONE MFG. CO., Boston, Mass.
Filed February 1, 1932. Serial No. 323,665. PUBLISHED MARCH 8, 1932. Class 22.

294,147. COFFEE. M. J. B. CO., San Francisco, Calif.
Filed November 11, 1931. Serial No. 321,029. PUBLISHED MARCH 1, 1932. Class 46.

294,148. ASBESTOS METALLIC SHEET PACKING AND BRAKE LINING. RAYBESTOS-MANHATTAN, INCORPORATED, Passaic, N. J., and Bridgeport, Conn.
Filed December 14, 1931. Serial No. 322,123. PUBLISHED MARCH 1, 1932. Class 35.

294,149. OPHTHALMIC LENSES. RENAUD OPTICAL COMPANY, INC., Petersburg, Va.
Filed December 15, 1931. Serial No. 322,138. PUBLISHED MARCH 1, 1932. Class 26.

294,150. LADIES' AND MISSES' DRESSES. ISIDORE DOISCHMAN, Alton, Ill.
Filed December 17, 1931. Serial No. 322,210. PUBLISHED MARCH 1, 1932. Class 39.

294,151. PLOWS. EMPORIA MACHINE CO. INC., Emporia, Va.
Filed December 23, 1931. Serial No. 322,381. PUBLISHED MARCH 1, 1932. Class 23.

294,152. BOOTS AND SHOES OF LEATHER, RUBBER, AND FABRIC OR ANY COMBINATIONS THEREOF. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y.
Filed December 29, 1931. Serial No. 322,503. PUBLISHED MARCH 1, 1932. Class 39.

294,153. APPAREL BELTS, SUSPENDERS, BRACES, AND GARTERS. PIONEER SUSPENDER COMPANY, Philadelphia, Pa.
Filed December 31, 1931. Serial No. 322,600. PUBLISHED MARCH 1, 1932. Class 39.

294,154. BOLTING CLOTH OF SILK USED IN FLOUR SIFTING. TOBLER, ERNST & TRABER, INC., New York, N. Y.
Filed January 2, 1932. Serial No. 322,661. PUBLISHED MARCH 1, 1932. Class 42.

294,155. COMBINED LINIMENT AND OINTMENT. HARRY S. COFFMAN, doing business as Coffman & Bloch, Portland, Oreg.
Filed January 4, 1932. Serial No. 322,686. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,156. MEN'S, WOMEN'S, AND CHILDREN'S LEATHER GLOVES. ELITE GLOVE CO. INC., Gloversville, N. Y.
Filed January 5, 1932. Serial No. 322,760. PUBLISHED MARCH 1, 1932. Class 39.

294,157. PREPARATION FOR TREATING HAIR AND FOR USE IN WAVING OR CURLING HAIR. THE NESTLE-LEMUR COMPANY, New York, N. Y.
Filed January 12, 1932. Serial No. 322,938. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,158. PREPARATION FOR THE TREATMENT OF COUGHS DUE TO COLDS AND MINOR BRONCHIAL INFLAMMATIONS AND IRRITATIONS. RUZZO BROS., Philadelphia, Pa.
Filed January 16, 1932. Serial No. 323,097. PUBLISHED MARCH 1, 1932. Class 6.

294,159. MEDICINAL PREPARATIONS FOR TREATMENT OF COLDS, HEADACHE, NEURITIS, AND FEVER. VICTOR ALEXANDER KOWALEWSKI, doing business as Vialco Laboratories, West Haven, Conn.
Filed January 22, 1932. Serial No. 323,299. PUBLISHED MARCH 1, 1932. Class 6.

294,160. SEMI-FLUID PREPARATION FOR THE RELIEF OF PILES AND HEMORRHOIDS. EDWARD J. FALLER, doing business as Consumo Laboratories, Chicago, Ill.
Filed January 25, 1932. Serial No. 323,395. PUBLISHED MARCH 1, 1932. Class 6.

294,161. ENDOCRIN PREPARATION FOR USE AS A UTERO-OVARIAN REGULATOR THROUGH OVARIAN ENDOCRINE FUNCTION AND THAT OF ASSOCIATED SYNERGISTIC GLANDS. THE HARROWER LABORATORY, INC., Glendale, Calif.
Filed January 25, 1932. Serial No. 323,404. PUBLISHED MARCH 1, 1932. Class 6.

294,162. DRESS PATTERNS. JOSEPH M. SHAPIRO, doing business as Simplicity Pattern Company, New York, N. Y.
Filed August 29, 1931. Serial No. 318,569. PUBLISHED MARCH 1, 1932. Class 26.

294,163. METAL NOVELTIES—NAMELY, BENCHES, TABLES, RADIO-TABLES, AQUARIUM STANDS, FERNERIES, CHAIRS, MAGAZINE RACKS, BOOK ENDS, AND BOOK RACKS. DICK BROS., INC., Reading, Pa.
Filed September 15, 1931. Serial No. 319,060. PUBLISHED MARCH 1, 1932. Class 32.

294,164. COMBINED SAFETY RAZORS AND SHARPENING DEVICES AND PARTS THEREOF, INCLUDING SAFETY RAZOR BLADES. RONSON PRODUCTS, INC., Newark, N. J.
Filed September 24, 1931. Serial No. 319,369. PUBLISHED MARCH 1, 1932. Class 23.

294,165. POWER HAMMERS AND TRIP HAMMERS. BARBOUR STOCKWELL COMPANY, Cambridge, Mass.
Filed November 6, 1931. Serial No. 320,851. PUBLISHED MARCH 1, 1932. Class 23.

294,166. POWER HAMMERS AND TRIP-HAMMERS. BARBOUR STOCKWELL COMPANY, Cambridge, Mass.
Filed November 6, 1931. Serial No. 320,852. PUBLISHED MARCH 1, 1932. Class 23.

294,167. FAN AND DUCT TOILET VENTILATORS. KIRK S. BLANCHARD, Holley, N. Y.
Filed November 21, 1931. Serial No. 321,405. PUBLISHED MARCH 1, 1932. Class 34.

294,168. LADIES' DRESSES. MAX WIESEN & SONS CO. INC., New York, N. Y.
Filed December 8, 1931. Serial No. 321,927. PUBLISHED MARCH 8, 1932. Class 39.

294,169. ELECTRIC HAND DRILLS. WODACK ELECTRIC TOOL CORPORATION, Chicago, Ill.
Filed December 11, 1931. Serial No. 322,034. PUBLISHED MARCH 1, 1932. Class 23.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

294,170. (CLASS 46. FOOD AND INGREDIENTS OF FOODS.) CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Nov. 23, 1931. Serial No. 321,417.

H. G. Prince & Co's

FINEST

For Canned Fruit, Canned Vegetables, Catsup, Tomato Sauce, Tomato Puree, Canned Fish, Olives, Pickles, Pickle Relishes, Chili Sauce, Jams, Fruit Preserves, Canned Hominy, Chow Chow, Sauerkraut, Maraschino Type Cherries, Tomato Juice, Canned Beans With Pork and Tomato Sauce.

Claims use since June 1, 1910, on canned fruit and canned vegetables; since September, 1920, on catsup, tomato sauce, and tomato puree; since Nov. 1, 1928, on canned fish; since Nov. 19, 1928, on olives; since Dec. 5, 1928, on pickles and pickle relish; since Feb. 28, 1929, on chili sauce; since Sept. 6, 1929, on jams; since Sept. 23, 1929, on fruit preserves; since Oct. 14, 1929, on canned hominy; since Dec. 12, 1929, on chow chow; since Dec. 26, 1929, on sauerkraut; since Jan. 9, 1930, on maraschino type cherries; since Jan. 14, 1930, on tomato juice; since Jan. 22, 1930, on canned beans with pork and tomato sauce.

294,171. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) M. R. CADY & CO., INC., Grand Rapids, Mich. Filed Feb. 25, 1932. Serial No. 324,455.

CADY'S MOTH CASSER THEIR DEADLY ENEMY

For Insecticide Cakes.
Claims use since Feb. 28, 1931.

294,172. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE AMERICAN FLOOR SURFACING MACHINE COMPANY, Toledo, Ohio. Filed Feb. 9, 1932. Serial No. 323,081.

HIGH SPEED

For Abrasives Coated on Cloth and Paper or Both.
Claims use since Dec. 11, 1929.

294,173. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DONAHOE'S, INC., Pittsburgh, Pa. Filed Jan. 27, 1932. Serial No. 323,485.

Donahoe's

For Canned Vegetables—Namely, Kidney Beans, Lima Beans, Cut Green Stringless Beans, Whole Stringless Beans, Cut Golden Wax Beans, Whole Wax Beans, Sliced Beets, Diced Beets, Diced Carrots, Sweet Corn, Sauer Kraut, Mixed Vegetables, Sweet Peas, Pumpkin, Spinach, Tomatoes, and Asparagus; Canned Fruits—Namely, Apricots, Peeled Apricots, Applesauce, Royal Ann Cherries, Peaches (Halves), Peaches (Sliced), Bartlett Pears, Pineapple (Sliced), Pineapple (Crushed), Prunes, Fruits for Salads, Blackberries, Black Raspberries, Red Raspberries, Loganberries, Strawberries, and Grapefruit; Miscellaneous Goods—Namely, Honey, Jelly of Assorted Flavors, Dill Pickles, Sweet Pickles, Sweet Mixed Pickles, Sour Pickles, Fruit Preserves, Sweet Relish, Canned Red Salmon, Canned Shrimp, Vinegar, Apple Butter, Limburger Cheese; Food Flavoring Extracts—Namely, Vanilla Extract, Lemon Extract, Almond Extract, Banana Extract and Orange Extract, Pastry Flour, Macaroni, Noodles, Spaghetti, Canned Pink Salmon, California Sardines in Tomato Sauce, Mayonnaise Dressing, Thousand Island Dressing, Sandwich Spread, Eggs, Olive Spread, and Tartar Sauce.
Claims use since January, 1916.

294,174. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT M. SHELLABARGER, Denver, Colo. Filed Dec. 17, 1931. Serial No. 322,235.

PINK WHITE LOTION

For Lotion for Chapped and Rough Skin.
Claims use since September, 1929.

294,175. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN W. MCCALDER, Pullman, Wash. Filed Nov. 30, 1931. Serial No. 321,604.

Dutton's

For Candy.
Claims use since 1908.

294,176. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ELIZABETH ARDEN, INC., New York, N. Y. Filed Oct. 1, 1931. Serial No. 319,604.

NOSHINE

For Anti-Shine Preparation for Application to the Skin.
Claims use since July 10, 1929.

294,177. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) SAN-NAP-PAK MFG. CO., INC., New York, N. Y. Filed July 29, 1931. Serial No. 317,442.

STERLING

For Absorbent Cotton, Absorbent Gauze, and Sanitary Napkins.
Claims use since Apr. 1, 1930.

294,178. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SUPERIOR MACHINE TOOL COMPANY, Kokomo, Ind. Filed Aug. 17, 1931. Serial No. 318,084.

SUPERIOR

For Metal Working Machine Tools—Namely, Metal Drilling Machines, Grinding Machines, and Lathes.
Claims use since July 1, 1912.

294,179. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) CHARLES B. ABBOTT, Lowell, Mass. Filed Mar. 19, 1931. Serial No. 312,286.

KON-KAV

For Brooms.
Claims use since Feb. 5, 1931.

294,180. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Apr. 9, 1931. Serial No. 313,132.

TU-TONE

For Inner Tubes Constructed Wholly or in Part of Rubber for Use in Pneumatic Tire Casings for Motor Trucks, Motor Cars, Motor Cycles, Bicycles, Aeroplanes, and Other Vehicles.
Claims use since Mar. 25, 1931.

TRADE-MARK REGISTRATIONS RENEWED

38,462. CERTAIN NAMED BRUSHES. Registered June 17, 1902. LEOPOLD ASCHER COMPANY, New York, N. Y., a Corporation of New York. Renewed June 17, 1932.

38,820. TYPE-WRITER RIBBONS. Registered August 19, 1902. THE MILLER-BRYANT-PIERCE COMPANY, Aurora, Ill., a Corporation of Illinois. Renewed August 19, 1932.

38,829. HYDRAULIC AIR-PUMPS. Registered August 19, 1902. THE CLEVELAND FAUCET CO. Renewed August 19, 1932, to The Bishop & Babcock Mfg. Company, Cleveland, Ohio, a Corporation of Ohio, successor.

85,935. CERTAIN ELECTRICAL MACHINES AND SUPPLIES. Registered April 2, 1912. ALLMÄNNA SVENSKA ELEKTRISKA AKTIEBOLAGET, Vesterås, Sweden, a Corporation of Sweden. Renewed April 2, 1932.

86,091. COFFEE. Registered April 9, 1912. W. S. SANDERSON AND BRO., Denver, Colo. Renewed April 9, 1932.

86,926. BISCUIT. Registered June 11, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed June 11, 1932 to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

86,927. BISCUIT. Registered June 11, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed June 11, 1932 to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

86,929. BISCUIT. Registered June 11, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed June 11, 1932 to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

87,014. COAL-TAR COLORS. Registered June 18, 1912. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland, a Corporation of Switzerland. Renewed June 18, 1932.

87,015. A CERTAIN PHARMACEUTICAL PREPARATION. Registered June 18, 1912. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland, a Corporation of Switzerland. Renewed June 18, 1932.

87,016. CERTAIN PHARMACEUTICAL PREPARATIONS. Registered June 18, 1912. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland, a Corporation of Switzerland. Renewed June 18, 1932.

87,075. CERTAIN MEASURING AND SCIENTIFIC APPLIANCES. Registered June 25, 1912. ICA ACTIEN-GESELLSCHAFT, Dresden, Germany. Renewed June 25, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,242. BISCUIT. Registered July 2, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed July 2, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

87,356. BISCUIT. Registered July 9, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed July 9, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

87,468. BISCUIT. Registered July 16, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed July 16, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

87,469. BISCUIT. Registered July 16, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed July 16, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

87,479. FACE-CREAMS, FACE-POWDERS, AND ROUGE. Registered July 16, 1912. LOUIS PHILIPPE, New York, N. Y. Renewed July 16, 1932, to Louis Philippe, Inc., Chicago, Ill., a Corporation of New Jersey, assignee by mesne assignments.

87,594. CRACKERS. Registered July 30, 1912. BISHOP & COMPANY, Los Angeles, Calif. Renewed July 30, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey, assignee.

87,627. LUBRICATING OILS AND GREASES. Registered July 30, 1912. GEORGE A. HAWS. Renewed July 30, 1932, to Panhard Oil Corporation, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,776. CALFSKIN, KNOWN IN THE TRADE AS KIP, AND COWHIDE. Registered August 6, 1912. A. C. LAWRENCE LEATHER CO., Boston, Mass. Renewed August 6, 1932, to A. C. Lawrence Leather Company, Peabody, Mass., a Corporation of Maine.

87,779. WIRE ROPE. Registered August 6, 1912. A. LESCHEN & SONS ROPE COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed August 6, 1932.

87,944. PORK MEAT. Registered August 13, 1912. THE TAYLOR PROVISION COMPANY, Trenton, N. J., a Corporation of New Jersey. Renewed August 13, 1932.

88,333. BISCUIT AND SUGAR-WAFERS. Registered September 10, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 10, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,334. BISCUIT. Registered September 10, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 10, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,335. BISCUIT. Registered September 10, 1912, NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 10, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,336. BISCUIT. Registered September 10, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 10, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,337. BISCUIT. Registered September 10, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 10, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,338. BISCUIT. Registered September 10, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 10, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,413. BISCUIT. Registered September 17, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 17, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

88,414. BISCUIT. Registered September 17, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 17, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

LABELS

REGISTERED MAY 17, 1932

40,688.—*Title:* "AKEX STOPS ACHES HEALS WOUNDS". For Preparation for Treating Post Operative Pains and Wounds in the Oral Cavity. AKEX LABORATORIES, Cleveland, Ohio. Published March 2, 1932.

40,689.—*Title:* BATHROOM TISSUE—THREE ROLLS. For Bathroom Tissue. BADGER TISSUE MILLS, Kaukauna, Wis. Published February 26, 1932.

40,690.—*Title:* TOWER CLEANSER. For a Preparation Used as a Water Softener, Detergent, and Cleanser. PERCY L. BADT, San Francisco, Calif. Published February 1, 1932.

40,691.—*Title:* DUNCAN'S GOLD SEAL GENUINE YO-YO. For Bandelore Toys. DONALD F. DUNCAN INC., Chicago, Ill. Published March 26, 1932.

40,692.—*Title:* THE NEW LIFE TOOTH POWDER. For Tooth Powder. GEORGE S. ELDRED, doing business as George S. Eldred Company, Chicago, Ill. Published March 15, 1932.

40,693.—*Title:* E M E MEDICINE FOR MANGE. For Preparation for Treatment of Mange and Skin Diseases of Dogs. BASCOM W. EMICK, HARRY H. MCCOY, and HARRY EDES, trading as E. M. E. Manufacturing Co., Pikesville, Md. Published March 10, 1932.

40,694.—*Title:* WHEATIES. For Whole Wheat Flakes. GENERAL MILLS, INC., Minneapolis, Minn. Published February 16, 1932.

40,695.—*Title:* COUNTRY CLUB CORN FLAKES. For Cereal—Namely, Corn Flakes. THE KROGER GROCERY & BAKING COMPANY, Cincinnati, Ohio. Published March 25, 1932.

40,696.—*Title:* LIBERTY QUICK WASHING FLUID CLEANSER. For Fluid Cleanser for All Laundry Purposes. LIBERTY CHEMICAL MFG. CO., Detroit, Mich. Published December 22, 1931.

40,697.—*Title:* THE BOOKMAN SHIRT. For Shirts. LIONDALE SHIRT CO. INC., New York, N. Y. Published November 2, 1931.

40,698.—*Title:* AINTREE. For Cigars. MAGIDSON CIGAR CO., Milwaukee, Wis. Published April 18, 1932.

40,699.—*Title:* M-C-MILK OF MAGNESIA. For Pharmaceutical Preparation Used as an Antacid, a Laxative, or a Mouth Wash. MARINE CHEMICALS COMPANY, LTD., San Francisco, Calif. Published February 28, 1932.

40,700.—*Title:* M-C-MILK OF MAGNESIA. For Pharmaceutical Preparation Used as an Antacid, a Laxative, or a Mouth Wash. MARINE CHEMICALS COMPANY, LTD., San Francisco, Calif. Published February 28, 1932.

40,701.—*Title:* MASON'S PEAKS. For Candy. MASON, AU & MAGENHEIMER CONFECTIONERY MANUFACTURING COMPANY, Brooklyn, N. Y. Published December 10, 1930.

40,702.—*Title:* GOLDEN CRUST BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,703.—*Title:* BETTY ANNE BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,704.—*Title:* RYE BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,705.—*Title:* QUALITY BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,706.—*Title:* WHITE FLOUR AND WHOLE WHEAT. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,707.—*Title:* BLUE RIBBON BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,708.—*Title:* BUTTER TOP BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,709.—*Title:* NICKEL LOAF BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,710.—*Title:* AMERICAN BEAUTY BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,711.—*Title:* HOME TOWN BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,712.—*Title:* READY SLICED BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,713.—*Title:* PULLMAN LOAF. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,714.—*Title:* HOME MADE BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,715.—*Title:* FAMILY LOAF BREAD. For Bread. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Published April 1, 1932.

40,716.—*Title:* CHARMLEAF. For Cigars. ELOY R. MONTERO, Philadelphia, Pa. Published April 14, 1932.

40,717.—*Title:* PROTECTION. For Eggs. NATIONAL POULTRY RESEARCH LABORATORIES, LTD., San Francisco, Calif. Published February 15, 1932.

40,718.—*Title:* BLUE SEAL. For Egg Noodles. NOODLES PRODUCTS CORPORATION, New York, N. Y. Published December 23, 1931.

40,719.—*Title:* BLUE SEAL. For Egg Drops. NOODLES PRODUCTS CORPORATION, New York, N. Y. Published December 23, 1931.

40,720.—*Title:* R-F. For Macaroni. RAVARINO & FRESCHI IMPORTING & MANUFACTURING COMPANY, St. Louis, Mo. Published December 30, 1931.

40,721.—*Title:* ROBERTS SWEETMEAT. For Sugar Cured Pork Products. ROBERTS AND OAKE, INC., Chicago, Ill. Published February 10, 1932.

40,722.—*Title:* SELECTED EGGS. For Eggs. S. C. S. Box Co., INC., Palmer, Mass. Published December 15, 1931.

40,723.—*Title:* SIMMONS ARROWROOT DESSERT. For Preparation for Making Desserts and Sauces. T. N. SIMMONS, INC., Stamford, Conn. Published December 22, 1931.

40,724.—*Title:* BIF SPRAY. For Spray for Flies, Moths, Mosquitos, Gnats. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published January 25, 1932.

PRINTS

REGISTERED MAY 17, 1932

13,718.—*Title:* THE WUNDERLICH TUBE. For Vacuum Tubes. ARCTURUS RADIO TUBE COMPANY, Newark, N. J. Published April 1, 1932.

13,719.—*Title:* NEW! BALLOON CUSHION CLEANING. For Vacuum Cleaners. CLEMENTS MFG. CO., Chicago, Ill. Published March 22, 1932.

13,720.—*Title:* FORT MASSAC TABLE SETS. For Folding Table Sets, Bridge Sets, Folding Chairs, and Tables. THE FORT MASSAC CHAIR COMPANY, Metropolis, Ill. Published January 4, 1932.

13,721.—*Title:* BOTH THE HOLEPROOF HALF-SOCK AND AUTOGART ARE STYLED WITH THIS IN MIND. For Self-Supporting Socks, That Is, Socks Worn without the Conventional Garter. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Published January 15, 1932.

13,722.—*Title:* FRESHEST BREAD IN THE WORLD'S FINEST WRAPPER. For Bread. THE W. E. LONG CO., Chicago, Ill. Published March 28, 1932.

13,723.—*Title:* NOW CELLOPHANE WRAPPED. For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 1, 1932.

13,724.—*Title:* SEE WHAT YOUR ARE GETTING BEFORE YOU BUY. For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 11, 1932.

13,725.—*Title:* NOW SEE THAT YOU GET FRESH BREAD! PERFECT BREAD! BREAD THAT HAS NOTHING TO HIDE! For Bread. THE W. E. LONG CO., Chicago, Ill. Published March 30, 1932.

13,726.—*Title:* A SHOWCASE OF GLASS. For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 4, 1932.

13,727.—*Title:* NUTRITIOUS MILK POPSICLE EASY TO EAT. For Frozen Confections. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Published March 3, 1932.

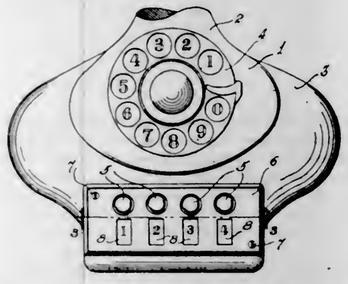
13,728.—*Title:* PRINTED BLANKS. For Printed Blanks. THE POSTOGRAPH COMPANY, Baltimore, Md. Published June 30, 1930.

13,729.—*Title:* LUCKEE MONKEE. For Hand-Carved Stones. ANNE P. SAVITT, doing business as Anne P. Savitt Co., New Haven, Conn. Published October 15, 1931.

REISSUES

MAY 17, 1932

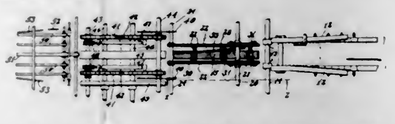
18,462. AUXILIARY BASE AND SWITCH ATTACHMENT FOR TELEPHONES. CARLOS F. JOHANNING, Denison, Tex. Original No. 1,783,936, dated Dec. 2, 1930, Serial No. 400,761, filed Oct. 19, 1929. Application for reissue filed Feb. 13, 1932. Serial No. 592,829. 9 Claims. (Cl. 177—333.)



1. The combination of a desk telephone having a base, an auxiliary base adapted to receive said telephone base, and means on said auxiliary base for controlling electrical circuits.

9. The combination of a desk telephone having a base, an auxiliary base adapted to receive said telephone base, an extension on the front side of said auxiliary base including a panel, and electrical circuit closing elements mounted on said panel.

18,463. ENVELOPE MACHINE. HAROLD J. GOSS, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Original No. 1,765,419, dated June 24, 1930, Serial No. 286,010, filed June 16, 1928. Application for reissue filed Aug. 22, 1931. Serial No. 558,815. 34 Claims. (Cl. 93—62.)

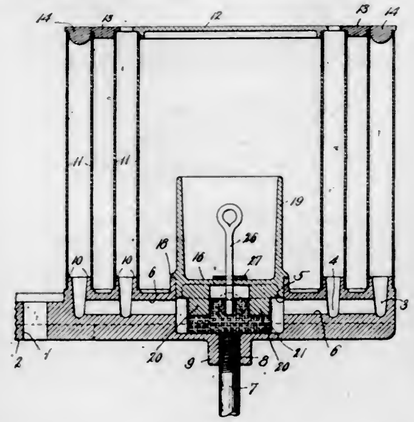


1. A blank folding machine having primary and secondary folding mechanisms, and a travelling turn-table mechanism for transporting the blanks from one folding mechanism to the other and turning them while travelling.

10. Mechanism for turning blanks comprising a rotary member movable to turn the entire blank bodily, and without substantial lateral movement of the center of gravity of the blank, by frictional engagement with the latter; and means to support the blank in position for such turning action by said member.

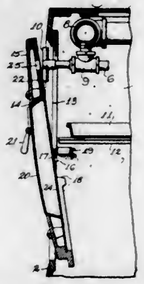
18,464. FUEL OIL BURNER. LAWRENCE E. JOHNSON, Melrose, and ERNEST C. LEACH, West Peabody, Mass., assignors to Lynn Products Co., Lynn, Mass., a Corporation of Massachusetts. Original No. 1,764,794, dated June 17, 1930, Serial No. 264,591, filed Mar. 26, 1928. Application for reissue filed Feb. 12, 1932. Serial No. 592,814. 18 Claims. (Cl. 158—87.)

1. A fuel oil burner embodying a base having a central vaporizing chamber and vapor distributing conduits connected therewith, two annular combustion chambers, one within the other, surrounding said vaporizing chamber and in communication therewith through said conduits, each combustion chamber having a pair of perforated cylindrical walls, and covers comprising a circular and an annular plate, the circular plate resting on the upper edge of the inner wall of the inner combustion chamber



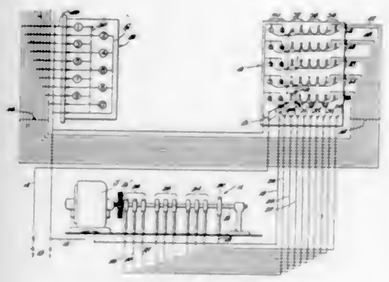
and the annular plate resting on the upper edges of the outer wall of the inner combustion chamber and the inner wall of the outer combustion chamber and said annular plate having radial spacing lugs to engage the top edge of the outer wall of the outer combustion chamber.

18,465. STOVE. WALTER F. ROGERS, Oak Park, Ill., assignor to Crown Stove Works, Cicero, Ill., a Corporation of Illinois. Original No. 1,773,754, dated Aug. 26, 1930, Serial No. 421,527, filed Jan. 17, 1930. Application for reissue filed Mar. 3, 1932. Serial No. 596,663. 6 Claims. (Cl. 126—37.)



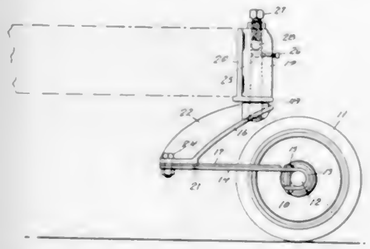
1. A gas stove comprising a burner, a front wall having an opening therein, a valve controlling the supply of fuel to said burner, a rotatable handle located in horizontal alinement with said opening for operating said valve, and a hinged door movable into and out of position for closing said opening, said door having a socket therein adapted to accommodate said valve handle when said door and handle are both in closed positions, said handle when open being adapted to span said socket to obstruct the closing of said door.

18,466. PAGING SYSTEM. JOHN DUROSS, Roxbury, Mass., assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass., a Corporation of Massachusetts. Original No. 1,719,396, dated July 2, 1929, Serial No. 752,877, filed Nov. 29, 1924. Application for reissue filed Mar. 9, 1931. Serial No. 521,319. 3 Claims. (Cl. 177—353.)



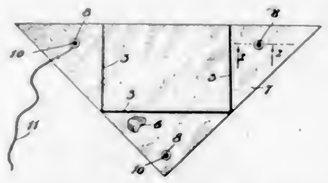
3. A paging system having, in combination, a set of annunciator devices, each representing a different signal, a call unit having a plurality of similar sets of manually controlled calling contact devices, each set thereof having contact devices for and corresponding to the separate annunciator devices, connections from the separate annunciator devices to the corresponding contact devices of the several sets, a flasher having a plurality of switching means, one for each set of contacts of the call unit, means for closing the flasher switching means successively, independent connections from the several flasher switching means to the call unit, and a source of energy connected at one side to all of the annunciator devices and at the other side to the flasher switching means, whereby a plurality of calls may be set up on the unit and successively exhibited on the set of annunciator devices.

18,467. SPRING CASTER. HARRY W. DEISLER, Bucyrus, Ohio, assignor to The Wellington Machine Company, Wellington, Ohio, a Corporation of Ohio. Original No. 1,755,537, dated Apr. 22, 1930, Serial No. 323,990, filed Dec. 5, 1928. Application for reissue filed May 15, 1931. Serial No. 537,694. 11 Claims. (Cl. 16—44.)



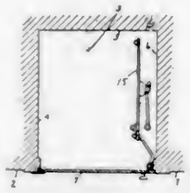
11. A caster construction comprising a load supporting bearing element adapted to be attached to a load to be supported, a second bearing element, swivelable on said first bearing element, on a substantially vertical axis, bearing balls between said elements, a rigid bracket secured to said second bearing element and extending laterally downwardly therefrom with respect to said vertical axis, a wheel and axle therefor disposed on the opposite side of said swiveling axis from said bracket and a pair of substantially horizontal spring arms interconnecting said laterally disposed bracket and the opposite ends of said wheel axle.

18,468. DIAPER. CHARLES M. SCHWARTZ, Philadelphia, Pa., assignor, by mesne assignments, to Diapex Corporation, New York, N. Y., a Corporation of New York. Original No. 1,723,303, dated Aug. 6, 1929, Serial No. 194,939, filed May 28, 1927. Application for reissue filed Aug. 4, 1931. Serial No. 555,853. 5 Claims. (Cl. 128—284.)



2. A new article of manufacture comprising a child's diaper composed of an outer layer of impervious paper in substantially triangular form, an inner layer of absorbent material, fastening means for holding the layers together and for holding the garment in folded position about the wearer, said means comprising fastener members passing through the layers and providing spaced projections on the garment near each of the terminals thereon, and a flexible member adapted to pass between and connect each of said projections on the outside of the garment to hold the garment on the wearer.

18,469. FOLDING BED. NEIL SINCLAIR, Oakland, Calif., assignor to Rip Van Winkle Wall Bed Company, Inc., Oakland, Calif., a Corporation of California. Original No. 1,714,642, dated May 28, 1929, Serial No. 702,214, filed Mar. 27, 1924. Application for reissue filed Nov. 19, 1929. Serial No. 408,399. 7 Claims. (Cl. 5—170.)

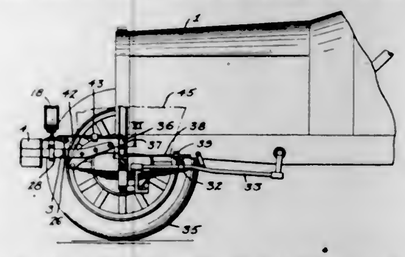


7. A wall bed mounting comprising a horizontally disposed supporting arm vertically pivoted at one end to a point adjacent a closet side wall and pivotally supporting the bed at the other end adapting the bed to swing outwardly from a position within the closet substantially parallel with and adjacent said side wall, to an out position at right angles therewith extending beyond said side wall substantially half the width of the bed, and a guiding arm pivoted at one end to a point within the closet adjacent said side wall forwardly of said supporting arm and at its other end pivotally connected to the bed insuring such movement of the bed upon swinging the same, said guiding arm arranged to clear the outer corner of said wall in the out position of the bed.

18,470. DIRIGIBLE ROAD LIGHT. LAWRIE L. WITTER, Jamaica Plain, Mass. Original No. 1,797,707, dated Mar. 24, 1931, Serial No. 299,744, filed Aug. 15, 1928. Application for reissue filed Jan. 30, 1932. Serial No. 591,717. 9 Claims. (Cl. 240—62.52.)

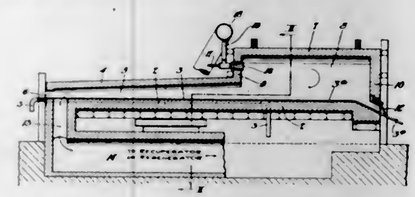
1. A dirigible light for automobiles, comprising the combination of a supporting member, a cooperating light supporting member mounted on the first member for pivotal movement thereon in a horizontal plane, clamping means

cooperating with the first member and adapted to secure the same to the bumper on or adjacent to a supporting arm thereof forwardly of and at least partially laterally inside the adjacent fender, means connected to the second named member and extending outwardly to a position for-



wardly of and laterally outside the said fender, and means for connecting the last named means with the steering mechanism in such manner as to automatically pivot the second named member in the same direction as the steering mechanism moves the front wheels.

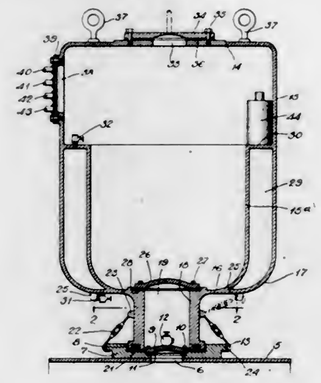
18,471. HEATING FURNACE. ALBERT L. CULBERTSON, Mount Lebanon, Pa.; Laverna M. Culbertson and The Union Trust Company of Pittsburgh, executors of said Albert L. Culbertson, decensed. Original No. 1,789,966, dated Jan. 27, 1931, Serial No. 331,015, filed Jan. 8, 1929. Application for reissue filed Mar. 30, 1931. Serial No. 526,507. 3 Claims. (Cl. 263—6.)



3. A continuous heating furnace for heating billets, sheet bars and the like comprising top, bottom, side and end walls, said top wall being stepped upwardly from a point intermediate the ends of said furnace to one end wall to form a high combustion chamber of more than one-third the total length of the furnace, said furnace being provided at the end farthest from the high combustion chamber with an inlet port through which the material to be heated enters said furnace, and a discharge opening adjacent the other end of said furnace through which the heated material is discharged, at least one fuel burner mounted in the back wall of said high combustion chamber adjacent the top thereof and adapted to direct a flame toward the forward end wall of said furnace, and a flue connection adjacent the rear or entering end of said furnace, said flue communicating with the interior of said furnace, said burner and said flue being arranged to cause the flame after being projected toward the forward end wall of said furnace to reverse and flow back along said furnace under the flame body issuing from said body and then continue rearwardly in contact with the material to be heated through substantially the length of the furnace.

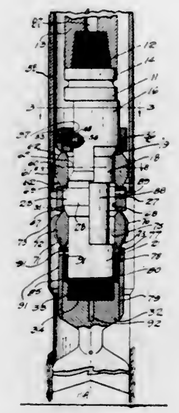
18,472. SUBMERGIBLE APPARATUS. HUGH J. FINN, deceased, Brooklyn, N. Y., by Anna May Finn, administratrix, Brooklyn, N. Y. Original No. 1,803,526, dated May 5, 1931, Serial No. 274,380, filed May 2, 1928. Application for reissue filed Nov. 5, 1931. Serial No. 573,270. 5 Claims. (Cl. 61—69.)

1. A submergible apparatus for use in conjunction with vessels having a hatchway in the hull thereof and a flanged ring encircling the hatchway, comprising a large hollow body, an admission opening at the top thereof and a cover plate closing said opening, a reduced tubular extension projecting beyond the lower end of said body, the chamber in said extension normally opening outwardly through the lower end thereof, a closure plate at the top of said ex-



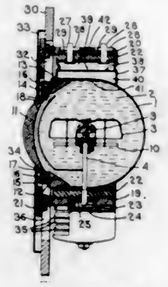
tension controlling the communication between said chamber and the interior of said body, securing devices for said plate in the interior of said body, and means movably supported externally of and adjacent the upper end of said extension for detachably engaging the flanged ring on the hull of the vessel in securely coupling the apparatus to the vessel.

18,473. UNDERREAMER. WALTER H. HAZLETT, Los Angeles, Calif., assignor, by direct and mesne assignments, to John Grant, Los Angeles, Calif. Original No. 1,647,040, dated June 19, 1928, Serial No. 745,324, filed Oct. 23, 1924. Application for reissue filed June 1, 1931. Serial No. 541,479. 32 Claims. (Cl. 255—75.)



1. In a rotary underreamer, the combination of: a body having a substantially concentric bearing portion and an adjacent eccentric bearing portion; a rotary cutter normally positioned on said concentric portion of the body; and means operable to axially translate said cutter from said concentric bearing portion onto said eccentric bearing portion for rotation thereon when the body is rotated.

18,474. MAGNETIC COMPASS. GUSTAVE A. SALZGEBER, East Milton, Mass. Original No. 1,799,648, dated Apr. 7, 1931, Serial No. 290,301, filed July 5, 1928. Application for reissue filed Feb. 20, 1932. Serial No. 594,343. 7 Claims. (Cl. 33—223.)

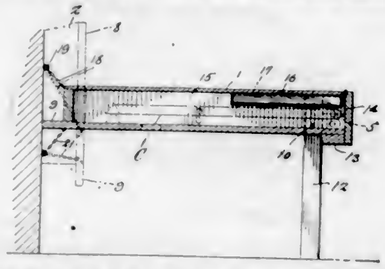


6. A compass comprising a compass bowl containing liquid and having a window on one side, said bowl having above its lower end an extension divided by a flexible diaphragm into two chambers, both situated outside of the bowl, and one of which communcates with the interior of the bowl and contains air which remains trapped in said chamber and the other of which communicates with the atmosphere, and a compass card in said bowl, the air in the first-named chamber and the flexible diaphragm co-operating to compensate for expansion and contraction of the liquid in the bowl.

7. The combination with an instrument board having an opening, of a supporting member secured to the instrument board, a compass bowl mounted on the supporting member and situated in the rear of the instrument board and visible through said opening, the wall of the compass bowl which is thus visible through said opening in the instrument board being transparent and in the form of a spherical lens, and a magnetically-controlled compass card within the bowl and visible through said spherical lens.

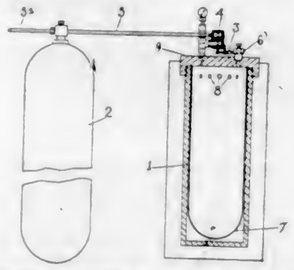
18,475. FOLDING WALL TABLE. SAMUEL E. TIMMONS, Oklahoma City, Okla., assignor to Elizabeth Timmons, Oklahoma City, Okla. Original No. 1,796,635, dated Mar. 17, 1931, Serial No. 159,659, filed Jan. 7, 1927. Application for reissue filed Nov. 4, 1931. Serial No. 573,032. 1 Claim. (Cl. 45—51.)

The combination with a fixed upstanding structure having a plane surface, of a table top, supporting elements secured to the upstanding structure and inclined downwardly away therefrom, said elements being located entirely outside of the upstanding structure, the lower ends of said elements being attached to the top of the table adjacent one end thereby to hold said end of the table by gravity against the plane surface of the upstanding structure, elements secured to the upstanding structure and extending upwardly away therefrom, said elements being located entirely outside of the upstanding structure, the upper ends of said elements being attached to the table top near one end to hold it against upward swinging movement relative to the supporting elements, and legs movably connected to that end of the table top remote from the upstanding structure and constituting means for



supporting said end when the table top is set up for use, said elements cooperating with the table top to hold it in an upstanding position and maintain it by gravity against the upstanding structure while in either extreme position or in any intermediate position, thereby to prevent the table top from pounding against the upstanding structure.

18,476. METHOD AND DEVICE FOR THE REGASIFICATION OF LIQUEFIED GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Britz, Germany. Original No. 1,747,366, dated Feb. 18, 1930, Serial No. 254,913, filed Feb. 16, 1928, and in Germany Mar. 29, 1927. Application for reissue filed Feb. 12, 1932. Serial No. 592,639. 16 Claims. (Cl. 62—1.)



1. The process of gasifying liquefied gases, which comprises depositing a body of liquefied gas in a vessel capable of being warmed and constructed to provide an envelope of heat insulation interposed between the deposited body of liquefied gas and the source of heat, and during gasification subjecting the said heat insulation to an increase in pressure from an external source whereby the rate of gasification is accelerated.

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DESIGNS

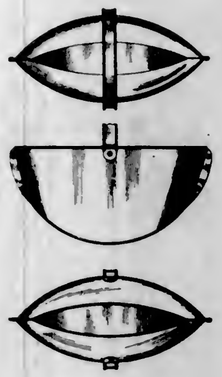
MAY 17, 1932

86,946. JEWELLED BRACELET CHAIN. MAURICE ANDERSON, Edgewood, R. I., assignor to Levy, Anderson Co., Inc., a Corporation of Rhode Island. Filed July 9, 1931. Serial No. 40,474. Term of patent 3½ years.



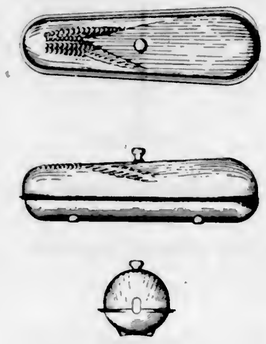
The ornamental design for a jewelled bracelet chain, substantially as shown.

86,947. TOY SAND PAIL. ANTONIO BARONE, Brooklyn, N. Y. Filed Mar. 19, 1932. Serial No. 43,238. Term of patent 7 years.



The ornamental design for a toy sand pail as shown.

86,948. CORN SERVING DISH. BERT C. BERRY, Moline, Ill. Filed Jan. 2, 1931. Serial No. 38,177. Term of patent 14 years.



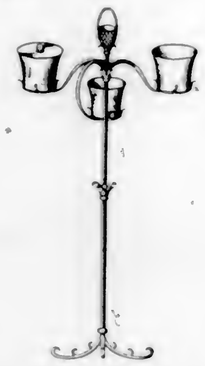
The ornamental design for a corn serving dish as shown.

86,949. SOUVENIR EMBLEM OR SIMILAR ARTICLE. ROBERT E. BRAGG, Washington, D. C. Filed Nov. 16, 1931. Serial No. 41,748. Term of patent 14 years.



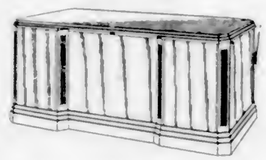
The ornamental design for a souvenir emblem or similar article as shown.

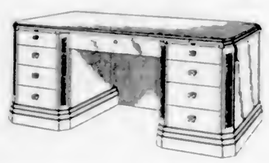
86,950. SMOKER'S STAND. FAYE E. DONOVAN, Modesto, Calif. Filed Mar. 16, 1932. Serial No. 43,211. Term of patent 7 years.



The ornamental design for a smoker's stand, as shown.

86,951. DESK OR ANALOGOUS ARTICLE OF FURNITURE. RICHARD W. ERICSON, Chicago, Ill. Filed Feb. 16, 1931. Serial No. 38,691. Term of patent 3½ years.





The ornamental design for a desk or analogous article of furniture, as shown.

86,952. THRESHOLD. FORREST C. GARRISON, Chicago, Ill., assignor to Oscar C. Rixon Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 17, 1930. Serial No. 34,909. Term of patent 14 years.



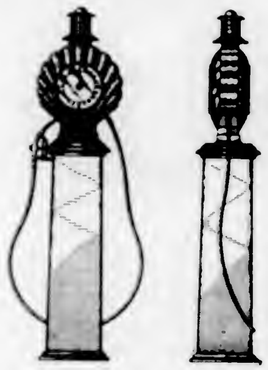
The ornamental design for a threshold substantially as shown.

86,953. TILE COUNTER. LEONARD G. GRAY, Decatur, Ill. Filed Jan. 22, 1932. Serial No. 42,587. Term of patent 7 years.



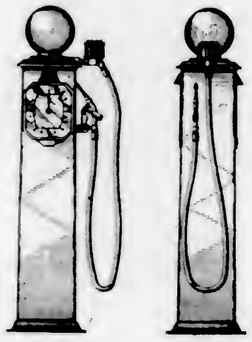
The ornamental design for a tile counter, as shown and described.

86,954. FLUID DISPENSING APPARATUS. WILLIAM M. GRIFFIN, Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Dec. 14, 1931. Serial No. 42,067. Term of patent 7 years.



The ornamental design for a fluid dispensing apparatus as shown and described.

86,955. FLUID DISPENSING APPARATUS. WILLIAM M. GRIFFIN, Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Feb. 29, 1932. Serial No. 43,033. Term of patent 7 years.



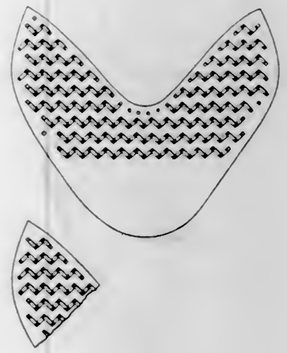
The ornamental design for a fluid dispensing apparatus as shown and described.

86,956. SHOE COVERING WITH CROSS-LACE ORNAMENTATION. NICHOLAS R. HAKIM, New York, N. Y. Filed Jan. 7, 1932. Serial No. 42,398. Term of patent 3½ years.



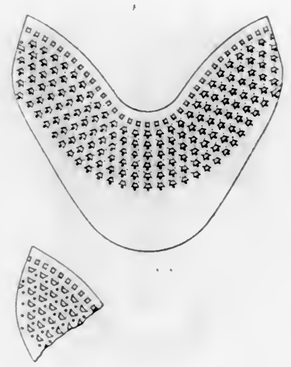
The ornamental design for shoe covering with cross-lace ornamentation as shown and described.

86,957. SHOE COVERING WITH ZIGZAG-LACE ORNAMENTATION. NICHOLAS R. HAKIM, New York, N. Y. Filed Jan. 7, 1932. Serial No. 42,399. Term of patent 3½ years.



The ornamental design for a shoe covering with zigzag lace ornamentation as shown and described.

86,958. SHOE COVERING WITH SINGLE-LACE ORNAMENTATION. NICHOLAS R. HAKIM, New York, N. Y. Filed Jan. 7, 1932. Serial No. 42,400. Term of patent 3½ years.



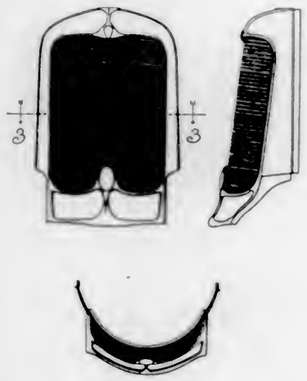
The ornamental design for shoe covering with single-lace ornamentation as shown and described.

86,959. CANDY BAR. CHARLES F. HAUG, Brooklyn, N. Y., assignor to Mason Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y., a Corporation of West Virgina. Filed Dec. 26, 1929. Serial No. 33,927. Term of patent 14 years.



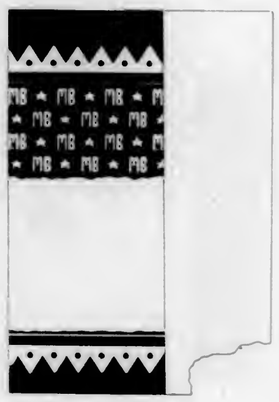
The ornamental design for a candy bar, as shown.

86,960. RADIATOR SHELL. HERBERT V. HENDERSON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 12, 1932. Serial No. 42,818. Term of patent 14 years.



The ornamental design for a radiator shell substantially as shown.

86,961. CRAYON LABEL. ROBERT N. INGERSOLL, Longmeadow, Mass., assignor to Milton Bradley Company, Springfield, Mas., a Corporation of Massachusetts. Filed Feb. 26, 1932. Serial No. 43,008. Term of patent 7 years.



The ornamental design for a crayon label, as shown.

86,962. SPOON, KNIFE, FORK, OR OTHER ARTICLE OF FLATWARE. JOHN LEECH, Bridgeport, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Mar. 11, 1932. Serial No. 43,153. Term of patent 7 years.



The ornamental design for a spoon, knife, fork or other article of flat-ware, substantially as shown and described.

86,963. CURTAIN ROD BRACKET. STANLEY E. MAVES, Freeport, Ill., assignor to Western Newell Manufacturing Company, Freeport, Ill., a Corporation of Illinois. Filed Mar. 12, 1932. Serial No. 43,175. Term of patent 7 years.



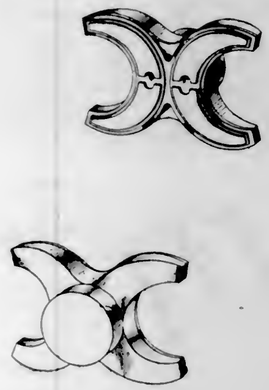
The ornamental design for a curtain rod bracket, substantially as shown.

86,964. SHOE. CHARLES MILLER, New York, N. Y. Filed Feb. 5, 1932. Serial No. 42,750. Term of patent 3½ years.



The ornamental design for a shoe, as shown and described.

86,965. VEHICLE SIGNAL. NELS H. NELSON, Minneapolis, Minn. Filed Feb. 27, 1932. Serial No. 43,030. Term of patent 14 years.



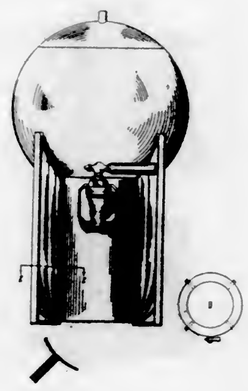
The ornamental design for a vehicle signal, as shown.

86,966. PAJAMAS. IRA H. OBERNDORFER, Brooklyn, N. Y. Filed Feb. 23, 1932. Serial No. 42,957. Term of patent 7 years.



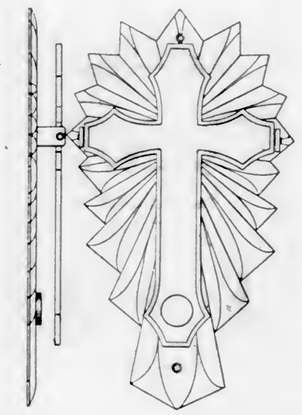
The ornamental design for pajamas substantially as shown and described.

86,967. COFFEE MAKER. AMBROSE D. OLDS, Wichita, Kans., assignor to The Coleman Lamp & Stove Company, Wichita, Kans. Filed Jan. 15, 1932. Serial No. 42,498. Term of patent 7 years.



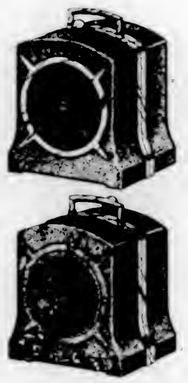
The ornamental design for a coffee maker as shown.

86,968. DOOR KNOCKER. WILLIAM E. OLSON, Waterloo, Iowa. Filed Dec. 7, 1931. Serial No. 41,989. Term of patent 3½ years.



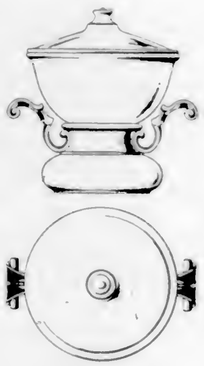
The ornamental design for a door knocker, as shown.

86,969. AIR CONDITIONING DEVICE. FRED M. OPITZ, Milwaukee, Wis. Filed Sept. 18, 1931. Serial No. 41,143. Term of patent 3½ years.



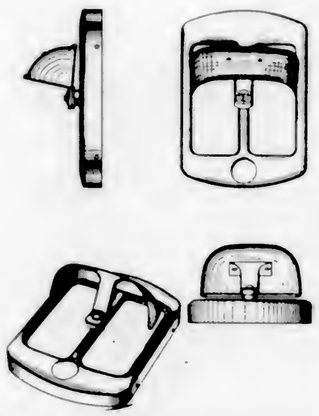
The ornamental design for an air conditioning device, as shown.

86,970. COMBINATION COOKING AND SERVING DISH. FREDERICK J. OSIUS, Miami, Fla. Filed Feb. 26, 1932. Serial No. 43,007. Term of patent 3½ years.



The ornamental design for a combination cooking and serving dish, as shown.

86,971. COMBINED RADIATOR SHELL AND DEFLECTOR. HARVEY S. PARDEE, Ravinia, and BENJAMIN KIRSCH, Chicago, Ill., assignors to Auto Radiator Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 23, 1931. Serial No. 42,184. Term of patent 7 years.



The ornamental design for a combined radiator shell and deflector, substantially as shown.

86,972. TEXTILE FABRIC. GEORGE H. PERKINS, Wellesley, Mass., assignor to Powdrell & Alexander, Inc., Danielson, Conn., a Corporation. Filed Jan. 18, 1932. Serial No. 42,529. Term of patent 3½ years.



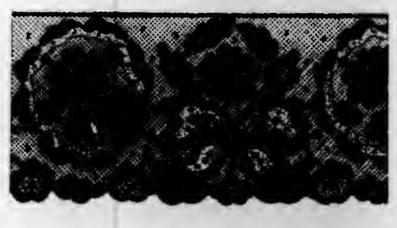
The ornamental design for textile fabric, as shown.

86,973. LACE. EDOUARD PORET, Calais, France. Filed Jan. 20, 1932. Serial No. 42,550. Term of patent 3½ years.



The ornamental design for lace, as shown.

86,974. LACE. EDOUARD PORET, Calais, France. Filed Jan. 20, 1932. Serial No. 42,551. Term of patent 3½ years.



The ornamental design for lace, as shown.

86,975. LACE. EDOUARD PORET, Calais, France. Filed Jan. 20, 1932. Serial No. 42,552. Term of patent 3½ years.



The ornamental design for lace, as shown.

86,976. LEATHER JACKET. STANFORD RAYMOND, Stockton, Calif. Filed Sept. 1, 1931. Serial No. 40,976. Term of patent 3½ years.



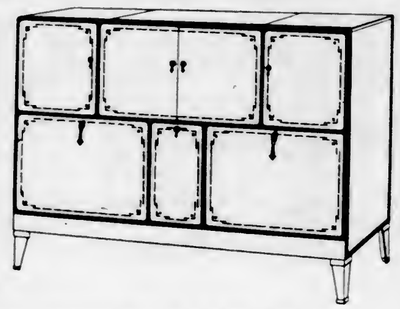
The ornamental design for a leather jacket, as shown and described.

86,977. ELECTRIC RANGE. ALFRED J. REEDY, Battle Creek, Mich., assignor to A-B Stove Company, Battle Creek, Mich. Filed Feb. 25, 1932. Serial No. 43,002. Term of patent 7 years.



The ornamental design for an electric range, as shown.

86,978. STOVE. ALFRED J. REEDY, Battle Creek, Mich., assignor to A-B Stove Company, Battle Creek, Mich. Filed Feb. 25, 1932. Serial No. 43,003. Term of patent 7 years.



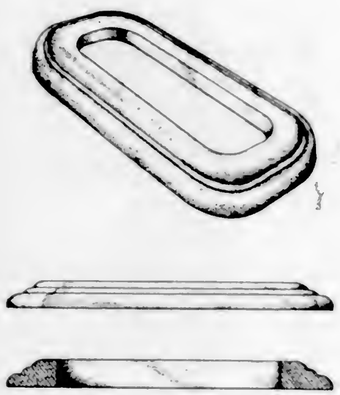
The ornamental design for a stove, as shown.

86,979. BOTTLE OR SIMILAR CONTAINER. FRANK C. REILLY, New York, N. Y. Filed Apr. 1, 1932. Serial No. 43,354. Term of patent 14 years.



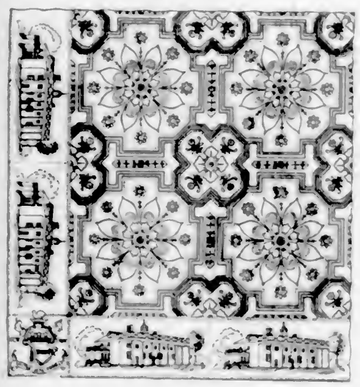
The ornamental design for a bottle or similar container as shown.

86,980. SEPULCHER COMPASS OR ANALOGOUS ARTICLE. AARON W. ROBERTS, Dallas, Tex. Filed Mar. 24, 1931. Serial No. 39,225. Term of patent 14 years.



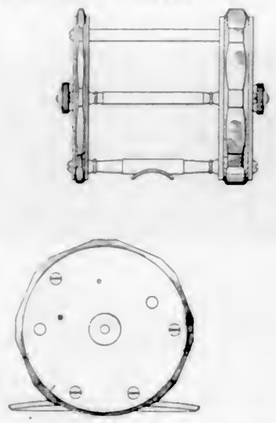
The ornamental design for a sepulcher compass or analogus article as shown.

86,981. BEDSPREAD. FRANK E. RUDD, Louisville, Ky. Filed Feb. 23, 1932. Serial No. 42,966. Term of patent 3½ years.



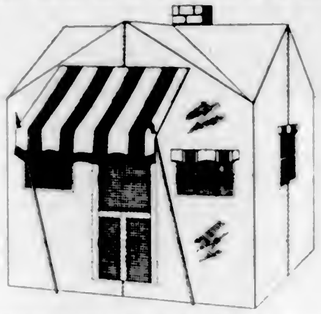
The ornamental design for a bedspread substantially as shown and described.

86,982. FISHING REEL FRAME. SAMUEL G. RUSSELL, Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Oct. 14, 1931. Serial No. 41,385. Term of patent 14 years.



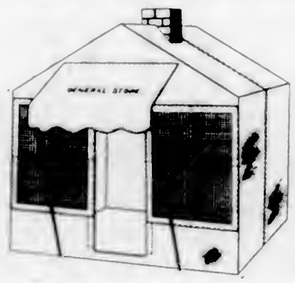
The ornamental design for a fishing reel frame, as shown and described.

86,983. CANVAS PLAY TENT. ISIDORE P. SMITH, Ottawa Hills, Ohio, assignor to The Hettrick Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 14, 1932. Serial No. 43,191. Term of patent 7 years.



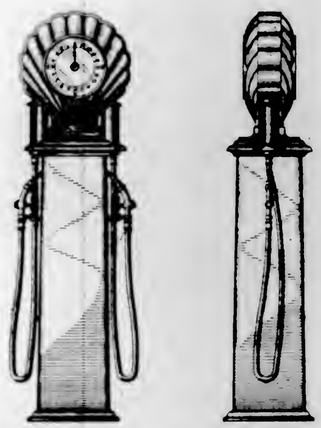
The ornamental design for a canvas play tent as shown and described.

86,984. CANVAS PLAY TENT. ISIDORE P. SMITH, Ottawa Hills, Ohio, assignor to The Hettrick Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 14, 1932. Serial No. 43,192. Term of patent 7 years.



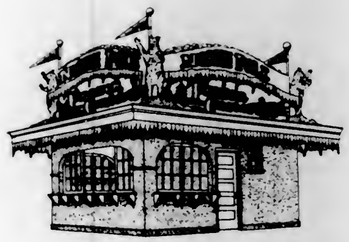
The ornamental design for a canvas play tent as shown and described.

86,985. FLUID DISPENSING APPARATUS. HOWARD SOMERVELL, Evanston, Ill., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Dec. 14, 1931. Serial No. 42,068. Term of patent 7 years.



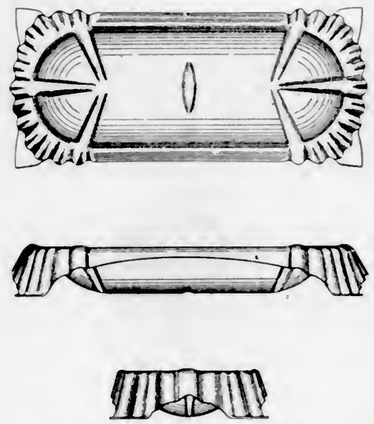
The ornamental design for a fluid dispensing apparatus as shown and described.

86,986. FROZEN CUSTARD STAND. CECIL TURNER and RAY TURNER, Petersburg, Ill. Filed July 9, 1931. Serial No. 40,479. Term of patent 7 years.



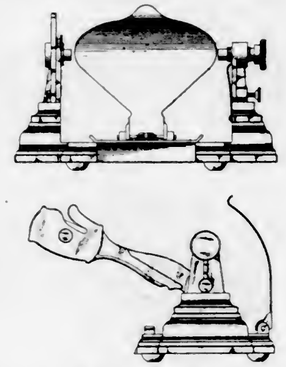
The ornamental design for a frozen custard stand as shown and described.

86,987. FEED TROUGH. FRANK M. VOGAN, Canton, Ohio, assignor to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed Mar. 11, 1932. Serial No. 43,156. Term of patent 14 years.



The ornamental design for a feed trough, as shown.

86,988. SPOOL HOLDER OR SIMILAR ARTICLE. OTTO VOGL, Chicago, Ill., assignor to Chicago Printed String Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 4, 1932. Serial No. 43,070. Term of patent 7 years.

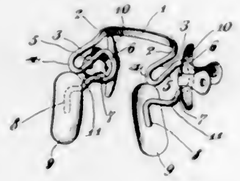


The ornamental design for a spool holder, or similar article, as shown.

PATENTS

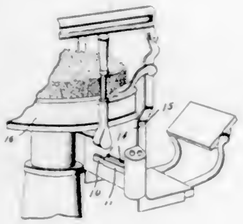
GRANTED MAY 17, 1932

1,858,233. OPHTHALMIC MOUNTING. Earle J. Richard Beattey, Edgewood, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Dec. 21, 1928. Serial No. 327,504. 4 Claims. (Cl. 88—42.)



1. An ophthalmic mounting comprising a bridge the opposite end portions of which include a couple of arms located one above the other, a third arm connected at its front end to the front end of the lower of the said couple of arms, the three arms being located in approximately the same general vertical plane, and straps in contact with and secured to the connections between the front ends of the lowermost of the said couple of arms and the front end of the said third arm.

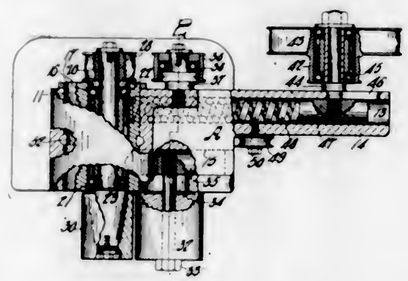
1,858,234. HEADREST HOLDER. Leo C. Benitz, Philadelphia, Pa. Filed July 26, 1930. Serial No. 470,842. 2 Claims. (Cl. 155—188.)



1. A headrest holder comprising a tube the bottom and back walls being continued beyond an end of the tube, a section continuing the front wall and diverging relative to the back wall, a section continuing the top wall and diverging relative to the bottom and stopping short of the limits of the back and bottom, and means supporting the tube with the opening provided by said stoppage uppermost as an entry way.

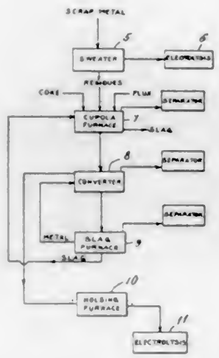
1,858,235. CHUCKLESS AND CENTERLESS MACHINING DEVICE. Ottis R. Briney, Pontiac, Mich. Filed Aug. 18, 1927. Serial No. 213,809. 19 Claims. (Cl. 51—79.)

1. A device of the character described including a rotatable stub and a spindle eccentrically journaled therein and having work contact means and a cable having one end thereof secured to peripheral surface of said stub and contacting a portion of said surface, and a weight on



the other end of said cable to rotate said stub and thereby move said spindle eccentrically to abut said contact means on said work.

1,858,236. METHOD OF RECOVERING COPPER. Harvey M. Burkey, Plainfield, and Lawrence E. Cole, Rahway, N. J., assignors to American Metal Company, Ltd., New York, N. Y., a Corporation of New York. Filed Aug. 19, 1930. Serial No. 476,340. 7 Claims. (Cl. 75—62.)

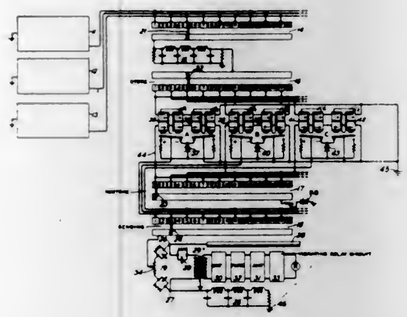


1. The method of recovering copper from copper-bearing material which comprises smelting the material, blowing the resulting black copper in a converter to produce blister copper, subjecting the slag produced in the converter to contact with incandescent carbon, thereby reducing the oxidized copper, and separating and returning the resulting metal to the converter.

1,858,237. SUBMARINE CABLE TELEGRAPH SYSTEM. Everett T. Burton, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 31, 1931. Serial No. 554,216. 9 Claims. (Cl. 178—32.)

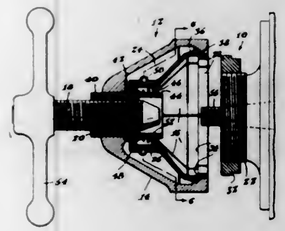
1. In a signaling system, a method which comprises converting a transmitted wave including a frequency corresponding to a given dot frequency into a revised wave

constituted solely of impulses of greater average time between voltage changes, effecting a second revision of the transmitted wave to give the impulses of the revised



wave a predetermined length, and impressing the wave of impulses of predetermined length upon the outgoing signaling circuit.

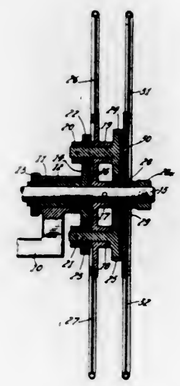
1,858,238. WHEEL PULLER. Arthur L. Cornwell, Wellsville, N. Y. Filed May 1, 1931. Serial No. 534,202. 14 Claims. (Cl. 29—85.)



1. A wheel puller comprising an adaptor for engaging the hub of a wheel, a body member having an opening at its front end for receiving the adaptor thereinto, means within the body member for engaging the adaptor and preventing its return outward movement through said opening, means carried by the body member for engaging an axle on which the engaged wheel is mounted and for forcing the member outwardly therefrom, and means for causing outward movement of the first-named means in a substantial radial direction to permit removal of the adaptor through said opening.

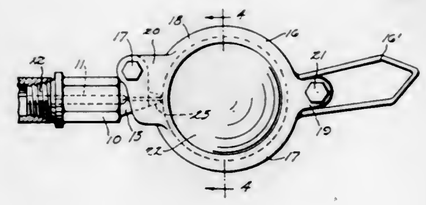
1,858,239. DOUBLE SHUTTER AND DRIVING MECHANISM THEREFOR. Augusto Dina, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed May 29, 1930. Serial No. 456,956. 2 Claims. (Cl. 74—34.)

1. A compound epicyclic gear train for driving motion picture machine shutters which comprises a support, a pair of oppositely rotating shutter disks, a shaft mounted on said support on which one of said disks is fixed, the other disk being supported but rotatable upon said shaft, a gear fixed and movable with said second disk, a gear fixed stationary on said support with its center in line with the axis of said shaft, a pair of auxiliary shafts disposed on said first disk on the opposite sides of its center,



gears on corresponding ends of said auxiliary shafts and meshing with said stationary gear and gears on the other corresponding ends of said auxiliary shafts and meshing with the gear fixed to the second disk.

1,858,240. GAUGE COCK. Charles A. Fischer, Fort Worth, Tex. Filed Oct. 10, 1931. Serial No. 568,186. 10 Claims. (Cl. 251—126.)

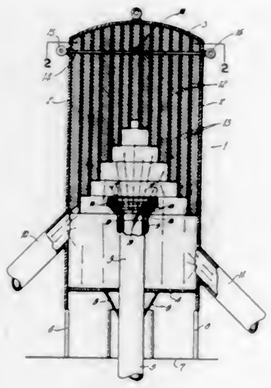


4. In a gauge cock, a nipple having a passage therethrough, a nozzle at the outer end of the passage of the nipple, a pivoted arm, and a large soft metal ball loosely mounted in said arm and engaging said nozzle to close the same, the ball constituting a weight and exposed for free revolving to provide new seats for the nozzle.

1,858,241. VELOCITY RETARDING DEVICE FOR FLUID CONVEYING PIPE LINES. Dean R. Giles, Kansas City, Mo., assignor of twenty-four and one-half per cent to James S. Bryan and twenty-four and one-half per cent to Frank Heenan, Oklahoma City, Okla. Filed Feb. 12, 1931. Serial No. 515,321. 10 Claims. (Cl. 166—14.)

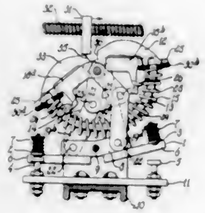
1. A device of the class described, embodying a housing for receiving a high velocity and high pressure fluid, a

baffle structure for receiving the impact of such fluid consisting of a plurality of alternating layers of hard metal



and a comparatively soft semi-pliable substance, said layers disposed within said housing in a manner presenting their edges to the incoming fluid.

1,858,242. SNAP OPERATING MECHANISM. HOWARD E. HODGSON, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 9, 1931. Serial No. 527,920. 7 Claims. (Cl. 200—67.)



7. The combination with a pivoted contact member movable in opposite directions between given circuit controlling positions, of a pair of operating toggles associated with said member and connected thereto on opposite sides of the pivot thereof, a common supporting shaft for said toggles, each of said toggles being movable in one direction upon said shaft through its straightened position to move said contact member into one of said circuit controlling positions and to lock the same therein, an operating member rotatably mounted upon said shaft and adapted upon rotation in opposite directions to positively actuate said toggles for release of said contact member in said circuit controlling positions, and spring means associated with said operating member and adapted to act upon release of said contact member by either of said toggles to move the other of said toggles through its straightened position with a snap action.

1,858,243. ELECTRIC SWITCH. ANDREW KUZMETH, South Bend, Ind. Filed June 28, 1930. Serial No. 464,601. 7 Claims. (Cl. 200—33.)

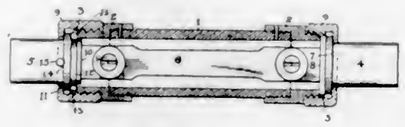


1. An electric switch comprising a deflatable non-conducting air-bulb, spaced terminal bars carried by said bulb, a contact plate carried by said bulb and adapted to engage and span said bars upon depression of said bulb, and means for holding said plate in engagement with said bars during the initial expansion of said bulb.

1,858,244. REFRACTORY COMPOSITION. CLEMENS A. LAISE, Tenafly, N. J., assignor to Callite Products Company, Incorporated, Union City, N. J., a Corporation of New Jersey. Filed May 14, 1930. Serial No. 452,513. 2 Claims. (Cl. 75—1.)

1. A composition of matter comprising tungsten carbide 60% to 85% mixed with a finely divided silicon carbide 2.5 to 15% bonded with molten cobalt 5% to 30%.

1,858,245. RENEWABLE FUSE. FRANK C. LA MAR, New York, N. Y., assignor to Great Western Fuse Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 23, 1928. Serial No. 264,138. 2 Claims. (Cl. 200—131.)

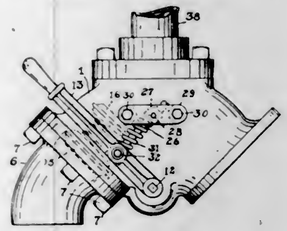


1. In a renewable fuse, the combination of a tubular body formed of insulating material, a metal ferrule fixed on the end of said body and provided with a pair of diametrically opposed notches in its outer end, said ferrule also having screw threads on its outer surface, a blade terminal having a fixed abutment adjacent to its inner end and arranged to have the fusible link detachably connected to its inner end, said blade being also provided with a transversely extending hole, a washer provided with a transversely disposed slotted opening closed at both ends and arranged to be slid down over the blade and to rest against the end of the ferrule, said washer being provided with a rib to engage said notches to prevent relative rotative movement between the body and the terminal, a pin driven through said hole to secure said washer in place, and an annular cap screwed down onto said ferrule and having an inwardly extending annular flange arranged to bear on said slotted washer.

1,858,246. PUMP MANIFOLD. JOSEPH R. MAHAN, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed May 7, 1930. Serial No. 450,394. 2 Claims. (Cl. 277—20.)

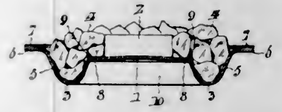
1. In a valve, a casing having an outlet opening and two inlet openings, inlet pipes removably connected to

the casing and opening into the said inlet openings, valve seats removably mounted in the pipes, a pivotally mounted arm within the casing, and valves carried by the arm, one valve adapted to rest on one outlet seat when the arm is at one limit of travel and the other valve adapted to rest on the other seat when the arm is at the other



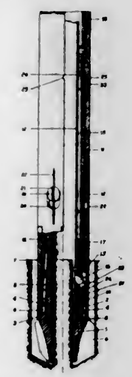
outlet limit of its travel in combination with means for automatically completing the shifting of the arm from one limit of travel to the other whenever pressure in the open inlet ceases and pressure in the other inlet is established, after the pressure in the latter inlet has shifted the arm beyond a predetermined limit.

1,858,247. BUTTER CHIP. CAMERON E. MILLIRON, Forest Hills, N. Y., and JOHN F. FINNEGAN, Chicago, Ill. Filed Dec. 9, 1929. Serial No. 412,684. 2 Claims. (Cl. 65—15.)



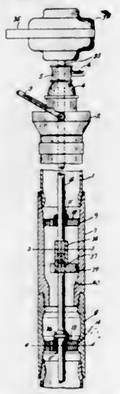
1. A metal butter chip comprising a crowned support adapted to accommodate a block of butter of customary size having a peripheral bead serving to hold the block of butter squarely on the support, and a surrounding channel for the accommodation of ice having an outer wall terminating in a horizontally extending peripheral flange to afford a handle portion.

1,858,248. CORE CATCHING DEVICE. FLOYD L. SCOTT and HENRY T. BAGGETT, Houston, Tex., assignors to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Aug. 19, 1930. Serial No. 476,300. 4 Claims. (Cl. 255—72.)



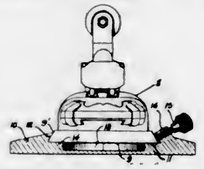
1. A core drill including a drill collar, a drill bit thereon, said drill collar having an upwardly extending sleeve thereon, a drive sleeve telescoping over said drill collar, an interior packing sleeve at the upper end of said drill collar, a vent connected with the outer side of said packing sleeve, and core-engaging means actuated by the relative movement of said collar and drive sleeve.

1,858,249. FAST ROTATING WELL DRILL. FLOYD L. SCOTT and LEWIS E. GARFIELD, Houston, Tex., assignors to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Mar. 9, 1931. Serial No. 521,053. 8 Claims. (Cl. 255—28.)



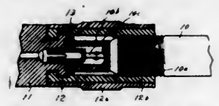
5. A drill pipe, a bit thereon, a drive-shaft axially of said pipe, bearings in said pipe for said shaft, a motor at the upper end of said shaft, said shaft being detachably connected with said bit whereby said bit may be rotated independently of said pipe.

1,858,250. ELECTRIC FLATIRON ATTACHMENT. ALVA T. SMITH, Milwaukee, Wis. Filed Mar. 23, 1931. Serial No. 524,641. 2 Claims. (Cl. 68—26.)



1. A metal ironing plate for connection with a self-heated flat iron comprising a plate member having an even and unobstructed work face, and means for detachably connecting said plate member to the work face of a flat iron, the size of the plate member being such that edges thereof will project beyond corresponding edges of the work face of the flat iron to which it is attached a distance substantially greater than necessary for attachment purposes and a distance which will so increase the maximum transverse width of the flat iron as to materially decrease the amount of time necessary in ironing a piece of material.

1,858,251. COUPLING. DELPHIN H. SPICER, Lakewood, Ohio. Filed Sept. 23, 1930. Serial No. 483,901. 10 Claims. (Cl. 285—157.)



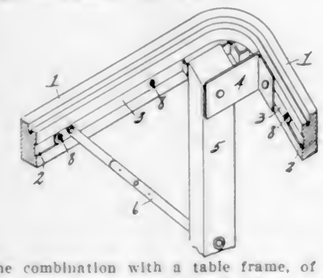
7. As an article of manufacture, a sealing member for a tire valve including a soft metal disk, having thereon a boss adapted to engage and depress a valve pin.

1,858,252. HAIR CUTTING GAUGE. ALBERT EDWARD STEINKAMP, Cincinnati, Ohio. Filed June 20, 1931. Serial No. 545,807. 1 Claim. (Cl. 132—45.)



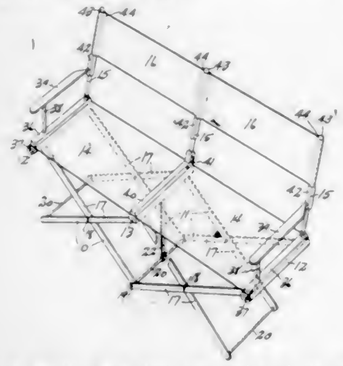
A hair cutting gauge, made of an oblong plate of sheet metal, having a right-angle flange at one end on one side of the plate—the other side, opposite the flange, having a number of prongs, each of said prongs (except the first one) being bent at a point to leave short, horizontal extensions to the face-side of the gauge, while the longer ends of the prongs run parallel to and in the same direction as the flange.

1,858,253. FOLDING TABLE. WALTER C. ULINE, Nappanee, Ind. Filed June 27, 1929. Serial No. 374,125. 4 Claims. (Cl. 45—11.)



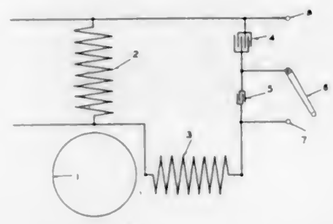
1. The combination with a table frame, of a unitary assembly comprising a corner bracket, an angle bracket carried by one arm of said corner bracket in spaced relation to the other arm thereof, a table leg pivotally mounted between said corner bracket and angle bracket, and a foldable brace member pivotally mounted at its ends respectively to said leg and corner bracket, and means for securing said assembly to said table frame.

1,858,254. FOLDABLE SETTEE. WALTER C. ULINE, Nappanee, Ind. Filed Jan. 22, 1930. Serial No. 422,624. 11 Claims. (Cl. 155—130.)



1. In a settee, front and rear units of leg members pivotally interconnected in lazy tongs manner, spacers extending between the lower ends of said leg units, seat rails carried by the upper ends of said leg units, and a strut extending between the center seat rail and the center spacer to support said leg units in operative position.

1,858,255. ALTERNATING CURRENT MOTOR. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Jan. 28, 1931. Serial No. 511,702. 3 Claims. (Cl. 172—233.)



3. In an alternating current motor, an induced member, an inducing member provided with a main inducing winding and with a auxiliary inducing winding displaced therefrom, a phase displacing circuit comprising said auxiliary inducing winding and two condensers connected in series with each other and with said auxiliary winding, one of said condensers having greater capacity than the other, and a shunt circuit for rendering the said condenser of smaller capacity ineffective at starting.

1,858,256. LIFE SAVING DEVICE. LOREN A. WOLFE, Baltimore, Md. Filed Mar. 17, 1931. Serial No. 523,304. 8 Claims. (Cl. 227—28.)

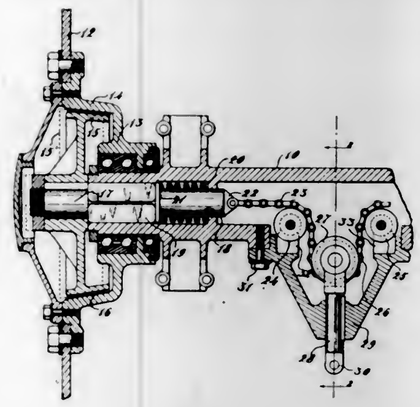


4. In a fire escape, a gripper comprising a grip block provided with a friction channel and a pocket at each end of the channel, a split sheave journaled for rotation in each of the pockets, a rope trained over the sheaves and along the friction channel, and guide means for guiding the rope to the sheaves at the ends of the gripper.

1,858,257. MOTOR CAR AXLE AND BRAKE. OTTAVIO ZANCAN, New York, N. Y. Filed Apr. 24, 1930. Serial No. 446,955. 8 Claims. (Cl. 188—204.)

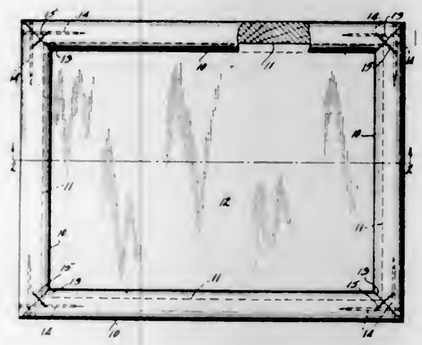
1. In a motor car, an axle comprising two hollow wheel supports one at each side thereof, wheels rotatably mounted on said supports, braking means for said wheels com-

prising a member axially movable within and extending beyond each support with respect to the wheel mounted



thereon, a flexible element connecting said two members, and means to actuate said flexible element and cause inward movement of said two members.

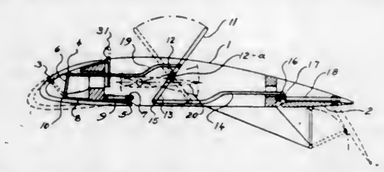
1,858,258. SIGN. JOHN M. ALDERFER, Sharon Center, Ohio. Filed Oct. 21, 1929. Serial No. 401,094. 1 Claim. (Cl. 40—152.)



The combination in a sign structure of a sign panel of sheet metal coated with non-corrosive water-proof material, and a wooden frame for supporting said panel, said frame having a groove about its inner periphery into which said panel snugly fits and said frame comprising sections along each edge of the panel secured together by means extending only across adjacent ends of the sections outwardly of said groove whereby the corrosion of said securing means will not result in streaks of rust forming down the face of the sign, said sections being mitered so as to be in abutment at the corners of the panel and said securing means extending across the mitered joints.

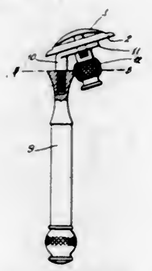
1,858,259. AIRPLANE. HERACLIO ALFARO, East Cleveland, Ohio. Filed Sept. 22, 1928. Serial No. 307,704. 11 Claims. (Cl. 244—29.)

1. An airplane having wings provided with ailerons positioned entirely beyond the tips thereof, each wing having a nose portion extending the full length thereof which is bodily adjustable to vary the area and camber



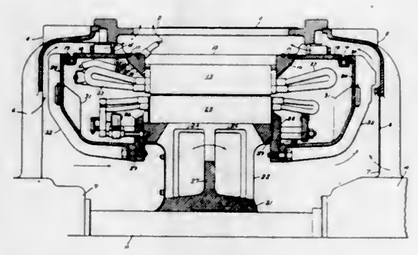
of the wing, and spoiler plates mounted in the forward portions of the wings and operatively connected to said ailerons.

1,858,260. SAFETY RAZOR. JOHN W. ASHWORTH, New York, N. Y., assignor to Ashworth Advertising Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 6, 1929. Serial No. 383,862. 1 Claim. (Cl. 30—12.)



A safety razor embodying a guard plate provided with a centrally disposed hole, a clamping plate provided with a centrally disposed threaded clamping post extending through the hole in the guard plate, a handle plate positioned rearwardly of the guard plate and having a hole through which the clamping post extends, a nut screwed on to the clamping post to clamp all of said plates together, a threaded handle post carried by the handle plate and extending in angular relation to the handle plate and to the axis of the clamping post, and a handle screwed on to said handle post, said handle being provided with a cut out adapted to be occupied by a portion of the nut when the nut is screwed on to the clamping post for the purpose of locking the handle against inadvertent release from the handle post.

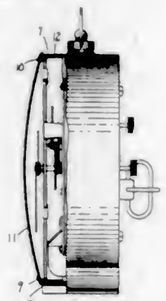
1,858,261. INCLOSED FAN-COOLED MOTOR. HAROLD L. BARNHOLDT, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 23, 1930. Serial No. 422,777. 10 Claims. (Cl. 172—36.)



1. A cooling system for an inclosed dynamo-electric machine having a rotor and a stator in a casing and bearings at the end of said casing which comprises air

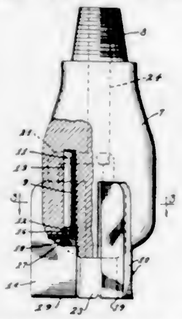
ports in the periphery of the machine casing, air passages between the machine casing and the stator of the machine and in communication with the air ports in the periphery of the frame, means to regulate the air capacity at the opposite ends of the passages, air ports of sufficient capacity to admit cooling air for the machine at one end of the casing and ports of small capacity at the opposite end of the casing, said ports being in proximity to the bearing to cause the cooling air to also cool the bearing, air passages through the rotor of the machine, closure means to exclude the cooling air from the windings of the machine, means on said closure means to exclude dirt from the windings, means on said closure means to radiate heat to the cooling air, and impeller means to cause the flow of cooling air.

1,858,262. SHEET-METAL BEZEL FOR UNBREAKABLE CLOCK-CRYSTALS. ELOF L. CARLSON, Bristol, Conn., assignor to The E. Ingraham Co., Bristol, Conn., a Corporation. Filed Oct. 27, 1928. Serial No. 315,403. 1 Claim. (Cl. 58—91.)



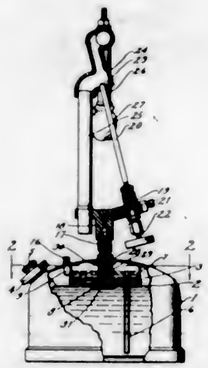
A sheet-metal bezel for clock-crystals, comprising a cylindrical assembly-flange adapted to be telescoped into a clock-case, a hollow stop-shoulder formed at the outer edge of the said flange and larger in overall diameter than the same, an inwardly-turned outwardly-inclined retaining-flange forming an extension of the said stop-shoulder, and an annular groove located within the said hollow stop-shoulder; and a concavo-convex unbreakable crystal having its edge inserted into the said annular groove in which it is retained under tension against outward displacement by the said inwardly-turned outwardly-inclined retaining-flange, with the inner face of which its outer face, adjacent its edge, has surface-contact throughout the width of the said flange for the excinsion of dust and for compensation for changes in the crystal due to shrinkage.

1,858,263. ROTARY EXPANSION DRILLING TOOL. JAMES CHARLTON, Houston, Tex. Filed Apr. 13, 1929. Serial No. 354,746. 2 Claims. (Cl. 255—76.)



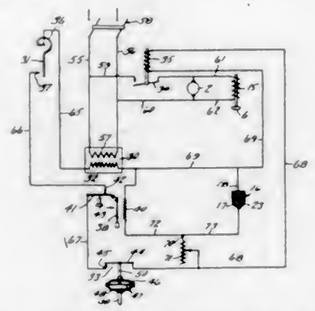
1. A rotary expansion drilling tool comprising a body provided with bearing recesses in its lower end, cutters provided with pivots projecting above the upper ends of the cutters into the bearing recesses, plugs threaded into the lower ends of the recesses and provided with recesses engaged by the lower ends of the pivots, the cutters projecting below the lower end of the body and the outer ends of said cutters sharpened to form cutting edges.

1,858,264. DEVICE FOR BURNING LIQUID FUELS. WILLIAM C. COLEMAN, Wichita, Kans., assignor to The Coleman Lamp and Stove Company, Wichita, Kans., a Corporation of Kansas. Filed Nov. 7, 1929. Serial No. 405,330. 10 Claims. (Cl. 158—81.)



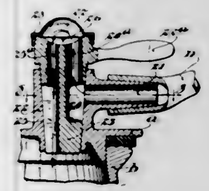
1. A container to hold liquid fuel and air under pressure in contact therewith, a vapor burner associated with the container, a smaller secondary container to receive the flow of liquid from the fuel space of the main container, a conduit communicating the secondary container with the vaporizer of the burner, valved means communicating the air space of the main container with the secondary container to equalize the pressures therein, to cause liquid fuel in the secondary container to be replaced by air and vapour, and means associated with the conduit supplying the burner to cause the air released from the secondary container to the burner to entrain portions of liquid fuel from within the secondary container to produce a combustible mixture at the burner.

1,858,265. BURNER CONTROL SYSTEM. JOHN ALGER DAHLSTROM, Bay Village, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 18, 1930. Serial No. 421,634. 9 Claims. (Cl. 158—28.)



2. In combination, a switch biased toward open position, electromagnetic means for closing said switch and for retaining it closed, a device adapted to be subjected to a source of heat and whose electrical resistance is variable when hot and cold, and a circuit arrangement including said electromagnetic means and said device, said device when hot serving by reason of its variable resistance to reduce the current delivered to the electromagnetic means thereby to render said means capable only of holding the switch closed and incapable of closing the switch if opened.

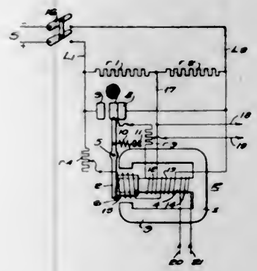
1,858,266. MILKING APPARATUS. LAURITS DINESEN, Minneapolis, Minn. Filed Jan. 13, 1930. Serial No. 420,454. 2 Claims. (Cl. 31—62.)



1. A piston adapted for use in a cylinder wherein it is arranged to be given both reciprocatory and oscillatory movements, said piston having swivelled heads that will partake of reciprocatory but not of oscillatory movements of said piston.

2. A rotary valve adapted to be mounted in a valve seat and through which milk is to be drawn, said valve being formed with an inverted trap and provided over said trap with a transparent cover, making visible the flow of milk through said trap.

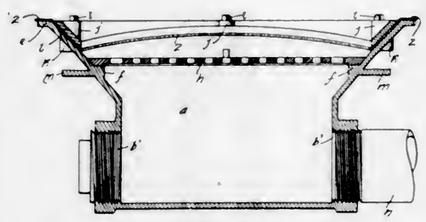
1,858,267. AMPLIFYING SYSTEM. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 23, 1930. Serial No. 477,327. 7 Claims. (Cl. 171—312.)



1. The method of amplifying voltages which comprises opposing a magnetomotive force proportional to an input voltage against a magnetomotive force proportional to an output voltage, and varying the output voltage in accordance with the unbalanced difference of said magnetomotive forces in a manner to reduce said difference.

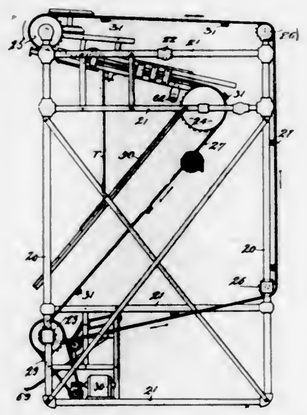
1,858,268. DRAIN FIXTURE. WELLS S. FLEMING, Portland, Oreg. Filed Nov. 28, 1928. Serial No. 322,448. 1 Claim. (Cl. 285—31.)

A drain fixture comprising a basin-body having opposite sides making an acute angle with each other, one side being of greater height than the other, the interior face of the side of lesser height being substantially plane and the side of greater height being formed to meet said plane face, the basin-body being open at the top and the plane touched by the rim thereof making an acute angle with the higher of said sides, one end wall of the basin-body being adapted to have a drain pipe connected thereto, and



a clamping ring removably secured on the rim of said basin-body to secure the margin of a sheet of roofing material.

1,858,269. METHOD OF AND APPARATUS FOR DISPLAYING RUGS AND OTHER ARTICLES. CHARLES E. GILBERT, New York, N. Y. Filed Nov. 27, 1928. Serial No. 322,266. 4 Claims. (Cl. 40—84.)



1. Apparatus for displaying rugs and the like comprising conveyors spaced apart, means for moving said conveyors in unison, means for attaching and carrying a plurality of rolls of rugs to and on said conveyors, means for successively unrolling each of said rugs, means for rerolling said unrolled rugs and means for preventing said rugs from rerolling unevenly.

1,858,270. DEEP WELL PUMP. JAMES A. GLOVER, Wichita, Kans. Filed Aug. 31, 1929. Serial No. 389,798. 3 Claims. (Cl. 121—164.)

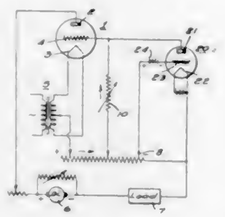
1. A motor comprising two valve casings, each having a fluid inlet, two fluid supply outlets in spaced relation, and an intermediate exhaust, a valve in each casing movable therein, to communicate one of the supply outlets with the inlet and at the same time establish communication between the other outlet and the exhaust, a power cylinder for each valve casing having spaced ports connected to the supply outlets in the valve casing, power pistons in the cylinders between the inlet ports, gear racks outside the cylinders connected to the pistons, a main pinion in mesh with each rack, secondary pinions driven by the main pinions, racks meshing with the secondary pinions, a crank shaft operated by the second mentioned racks and means connecting the valves to the crank

shaft to cause the valve in one casing to uncover the exhaust to one of the supply outlets and establish communication between the inlet of the other valve casing and its



complementary supply outlet and uncovering the exhaust port of the other valve casing to the remaining supply outlet.

1,858,271. REGULATOR. LEROY R. HARNESS and SAMUEL A. BOKOVOY, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 20, 1929. Serial No. 415,480. 3 Claims. (Cl. 171—312.)

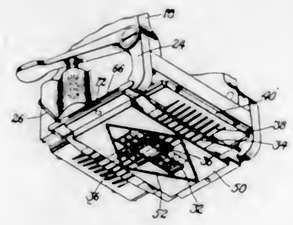


1. An electric circuit comprising an electric-discharge device having an anode, a cathode and a control electrode, a source of space current for said device, an impedance device in series with said source, said anode and said cathode, an impedance device connected between said control electrode and the first-mentioned impedance device, and an electric-discharge device connected in shunt relation to the second-mentioned impedance device to thereby control the impedance offered to said space-current by the first-mentioned electric-discharge device.

1,858,272. TREATMENT OF BAUXITE, CLAY, AND INTERMEDIATE ALUMINUM BEARING ORES. LESLIE G. JENNESS, New York, N. Y., assignor to Intermetal Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1929. Serial No. 384,809. 5 Claims. (Cl. 23—93.)

2. The process of separating aluminum from clay which comprises pulverizing the clay; then, first, igniting it at a temperature of 300° C. and gradually increasing the ignition temperature to about 900° C., thereby slowly driving off substantially all the water of composition; then passing over said clay at a temperature of 400° C. to 450° C., sulphur chlorides and chlorine until substantially all iron and titanium are chlorinated and volatilized; then raising the temperature of the ore while said gases are still passing over it to temperatures between 600° C. and 700° C., thereby reducing, chlorinating and volatilizing the aluminum oxide content of said clay; then continuing to heat the clay to between 750° C. and 850° C. thereby reducing, chlorinating and volatilizing the aluminum contained in the aluminum silicate in said clay.

1,858,273. MARKING MACHINE. GUY LA FORREST KEENE, Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 14, 1929. Serial No. 339,852. 7 Claims. (Cl. 101—110.)

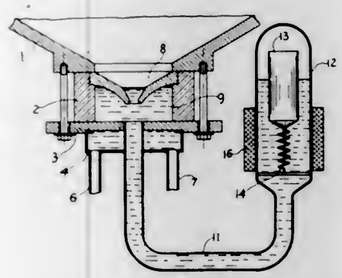


1. In combination, a type head having a plurality of type carrying disks, a type carrying plate removably mounted on said head constructed and arranged for supporting assembled removable type pieces arranged to print individual characters, and an auxiliary printing plate detachably secured to the under side of said type carrying plate constructed and arranged to print an imitation window around the characters printed by the type pieces on the type carrying plate simultaneously with the printing of the characters.

1,858,274. PROCESS FOR REDUCING OXIDE ORES. LUDWIG KERN, FERNANDO C. KERN, and FREDERICK E. KERN, Webster Groves, Mo. Filed Apr. 22, 1929. Serial No. 357,331. 15 Claims. (Cl. 75—14.)

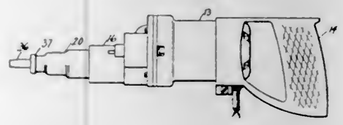
1. The process of reducing oxide ores, which comprises forming a mixture of comminuted ore, comminuted solid distillable carbonaceous material, and a chlorine containing material, plasticizing the mixture, forming the plastic mixture into briquettes, heating the briquettes out of contact with air sufficiently to distil the volatiles and to reduce the ore to the metallic state, and recovering the metal from the solid residue.

1,858,275. RECTIFIER. ERNST KOBEL, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Feb. 28, 1930, Serial No. 432,034, and in Germany Mar. 7, 1929. 5 Claims. (Cl. 175—363.)



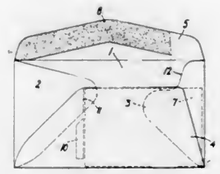
1. In an electric current rectifying device of the metallic vapour type, a metallic tank having an aperture through the bottom portion thereof, a well adapted to receive a liquid cathode material associated with the aperture in said tank, means associated with said well for defining the surface area of cathode material exposed to the interior of said tank, and means for controlling the area of exposed cathode material in dependence on the flow of current through the device.

1,858,276. HAND TOOL. DAVID B. MILLER, Greenfield, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Apr. 18, 1930. Serial No. 445,323. 1 Claim. (Cl. 144—32.)



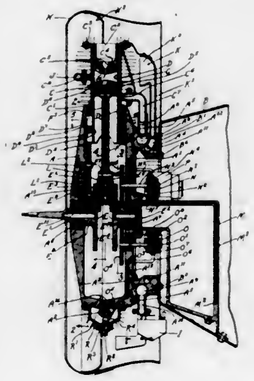
In a rotary power driven tool, in combination, a driven shaft having a clutch member at its forward end and being recessed at said end to provide a socket, a spindle extending into said socket, a spring within said socket, members at the rear end of said socket and at the rear end of said spindle adapted for centering said spring, housing means providing a mounting for said spindle and a shoulder, an annular clutch member slidably mounted on said spindle forwardly of the aforesaid clutch member, said annular clutch member and said spindle being formed with complimentary grooves, means for slidably mounting said annular clutch member on said spindle, said mounting means comprising cylindrical bearing members fitting into said complimentary grooves, and annular shoulder on said spindle adapted to limit the rearward movement of said annular clutch member relative to said spindle, a ring surrounding said spindle forwardly of said clutch member and adapted to seat against said first mentioned shoulder and to limit the forward movement of said annular clutch member and said spindle, an annulus carried on said spindle forwardly of said ring, said annulus being formed with a lateral bore and with an annular external groove and said spindle being formed with a recess, means to hold said annulus on said spindle, said holding means including a screw extending through the bore in said annulus and into the recess in said spindle, the head of said screw having a notch and a split ring fitting within said annular groove and extending through said notch, and a coil spring interposed between said annulus and said ring.

1,858,277. ENVELOPE. ELMER G. OVERLY, Greensburg, Pa. Filed Apr. 25, 1930. Serial No. 447,148. 12 Claims. (Cl. 229—71.)



1. An envelope comprising a body portion having a window opening therein, flap portions comprising a side flap and a bottom flap, and a stop for limiting movement of an enclosure smaller than the envelope, formed by the adhesive union of said flaps.

1,858,278. INTERNAL COMBUSTION MOTOR. STANLEY M. PACKARD and JESSE R. PACKARD, Southgate, and WAYNE L. SHUCK, Los Angeles, Calif. Filed June 6, 1929. Serial No. 368,922. 5 Claims. (Cl. 123—75.)

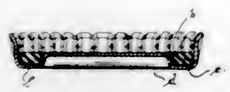


1. An internal combustion motor comprising in combination a housing including a cylinder with intake and exhaust ports, a single non-rotatable sleeve valve reciprocable in said cylinder and provided with intake and exhaust passages for registration respectively with the intake and exhaust ports of said cylinder, a crank shaft, a piston reciprocable in said sleeve valve and operatively connected with said shaft, a cam in said housing geared to said shaft, slide means for operably connecting said cam and said valve, means formed on said cam for moving said valve in opposite directions, and means cooperating with said slide means for preventing the rotation of said sleeve valve during the reciprocation thereof.

1,858,279. METHOD OF MAKING BOTTLE CAPS. CECIL J. PARKER, Govans, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 27, 1930. Serial No. 439,302. 4 Claims. (Cl. 113—80.)

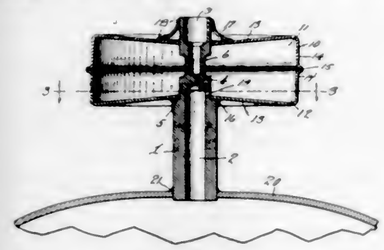
1. A method of making bottle caps embodying therein the extrusion in tubular form of a compound containing rubber, a filler, and a low content of a vulcanizing agent, the

separation of the tube, in its unvulcanized condition, into rings, the delivery of such rings to a skirted metallic shell within and adjacent the skirt thereof, and the subjection



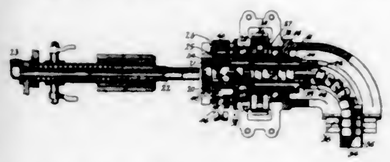
of the metallic shell and its contained ring to a vulcanizing temperature, whereby said ring will be bonded to the metal shell and will be simultaneously semi-vulcanized.

1,858,280. SAFETY BLOW-OFF DEVICE. MARC RESEK, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 430,595. 13 Claims. (Cl. 220—89.)



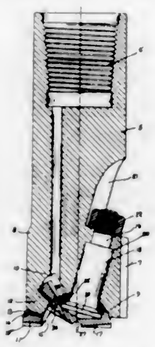
1. A safety blow-off device comprising a flexible wall enclosing a pressure chamber, means being provided for admitting pressure fluid to said chamber, and a vent conduit having a normally closed part exposed to the interior of the chamber, portions of said conduit on opposite sides of said part being fixed, respectively, to said wall and against movement with respect thereto whereby when said wall is flexed by abnormally high internal pressure and a strain is thus imposed upon the aforesaid part of the conduit, said part will rupture and vent the casing.

1,858,281. NUT THREADING MACHINE. LEWIS A. SAFFORD, Philadelphia, Pa., assignor to Automatic Nut-Thread Corporation, Buffalo, N. Y., a Corporation of New York. Filed Mar. 11, 1929. Serial No. 346,082. 4 Claims. (Cl. 10—129.)



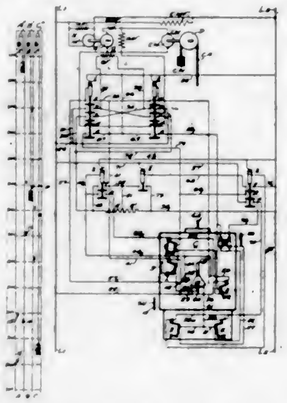
2. A nut threading machine comprising a rotary hollow spindle, a bushing mounted in said spindle to turn therewith and provided internally with a plurality of longitudinal lands forming guides which are adapted to be engaged by some parts of the peripheral face of the nuts which are being threaded and also with longitudinal clearance channels alternating with said lands and arranged opposite other parts of the peripheral face of said nuts, the end parts of the said channels having the form of internal grooves in the end parts of the bore of said bushing, and the central parts of said channels between the ends thereof having the form of slots which extend from the bore of the bushing to the periphery thereof, and a screw threading tap arranged in the bushing and adapted to be engaged by the nuts to be tapped.

1,858,282. WELL DRILL. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Jan. 18, 1930. Serial No. 421,691. 6 Claims. (Cl. 255—71.)



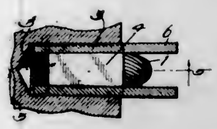
1. A well drill including a head, a plurality of outer cutters thereon positioned to drill the outer portion of the well bottom, and a single rotatable cuter mounted to cut the center of the hole, said single cutter bearing against the inner ends of said outer cutters to hold them in position.

1,858,283. CONTROL SYSTEM FOR ELEVATORS. HAROLD W. WILLIAMS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1929. Serial No. 366,278. 10 Claims. (Cl. 172—152.)



1. In a control system for elevators, an elevator car operable in a hatchway past a plurality of floors, motive means for said car, means for controlling said motive means to cause said car to run at a plurality of different speeds, means defining a plurality of zones of operation for said car, each zone including a plurality of adjacent floors, said zone defining means including means operable by movement of said car in one direction within one predetermined distance of the boundary between two of said zones for actuating said control means to cause said car to travel at one of said speeds, means operable by movement of said car in said one direction within a lesser distance of said boundary for also actuating said control means to cause said car to travel at said one speed, and means operable by movement of said car in the opposite direction within a predetermined distance of said boundary for actuating said control means to cause said car to operate at another of said speeds.

1,858,284. ELECTRIC CURRENT CONDUCTING BOND. MORRIS SCHWARTZ, Chicago, Ill. Filed Mar. 17, 1926. Serial No. 95,302. 1 Claim. (Cl. 173—283.)



An electric current conducting bond including a metallic shell constituting a terminal plug and having a partition dividing its bore into two receiving spaces, this partition terminating short of the entering end of the plug; and a metallic rod element bent at the entering end of the plug to be received in both receiving spaces, the rod, where bent, being surrounded by the shell to be guarded thereby.

1,858,285. CELLULOSE ACETATE COMPOSITION OF MATTER CONTAINING GUAIACOL ACETATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 15, 1931. Serial No. 562,996. 2 Claims. (Cl. 134—79.)

1. A composition of matter comprising cellulose acetate and approximately an equal amount of guaiacol acetate.

1,858,286. CELLULOSE ACETATE COMPOSITION OF MATTER CONTAINING SALICYL ALDEHYDE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 15, 1931. Serial No. 562,997. 2 Claims. (Cl. 134—79.)

1. A composition of matter comprising cellulose acetate and approximately an equal amount of salicyl aldehyde.

1,858,287. CELLULOSE ACETATE COMPOSITION OF MATTER CONTAINING ETHYL ACETYL GLYCOLLATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 15, 1931. Serial No. 562,999. 2 Claims. (Cl. 134—79.)

1. A composition of matter comprising cellulose acetate and approximately an equal amount of ethyl acetylglycollate.

1,858,288. BATTERY TERMINAL CONNECTION. HAROLD C. TERRELL and FRANK A. KERKHOFF, Cincinnati, Ohio, assignors to The Ohio Parts Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 4, 1928. Serial No. 323,745. 3 Claims. (Cl. 173—259.)



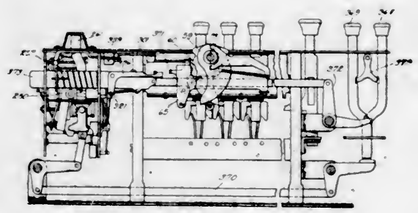
1. A battery terminal connection comprising a casting including an attaching portion for the battery terminal and a clamping portion for a flat conductor, said clamping portion including a mouth extending crosswise of said attaching portion and having a flat wall and a flat complemental lip, the base of said mouth being next to said attaching portion, said flat wall being perpendicular to the axis of said attaching portion and said flat lip extending from said base at an acute angle to said flat wall for forming said mouth wedge-shaped, and said lip arranged to be pressed toward said wall for clamping said flat conductor in said mouth.

1,858,289. WINDOW. MICHAEL J. TRACY, St. Louis County, Mo. Filed Feb. 6, 1931. Serial No. 513,834. 10 Claims. (Cl. 189—69.)



1. A window of the character described comprising a vertical series of window sections, rockable rods attached to and supporting the upper edges of said sections respectively, mechanism for swinging said sections successively outwardly to outwardly and downwardly inclined positions by continued operation of said mechanism in one direction, and interlocking means preventing swinging of said sections other than by operation of said mechanism.

1,858,290. CALCULATING MACHINE. EDWARD C. WALTER, Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Oct. 27, 1930. Serial No. 491,373. 3 Claims. (Cl. 235—63.)

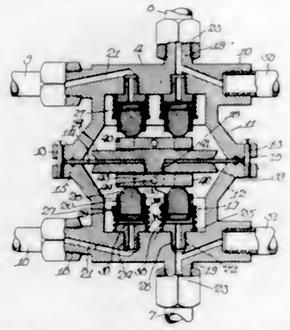


1. In a calculating machine having a product register carriage and multiplier mechanism, including means settable to determine the extent of a plural cycle registering operation and cooperating carriage shifting means operable at the conclusion of said operation; means including members common to said registration determining and to said shifting means and settable selectively by the registration determining means to determine right-hand or left-hand shifting of said carriage.

1,858,291. VALVE. JOHN B. BURDETT, Chicago, Ill., assignor to Burdett Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed May 29, 1930. Serial No. 456,874. 7 Claims. (Cl. 137—144.)

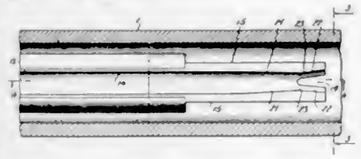
1. In a system of the class described, the combination of independent sources of fluid supply, a part to be supplied, mechanism including a chamber for each source, valve members in said chamber, a connection leading from each source to its corresponding chamber, a connection leading from each chamber to said part to be supplied.

and a diaphragm separating said chambers and operating said valve members alternately to connect said sources to the part to be supplied, said valve members being held



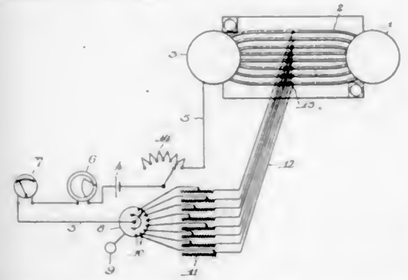
in actuated position by the pressure of the connected source and remaining actuated until said pressure is substantially exhausted.

1,858,292. POURING TROUGH. FRANK G. CARRINGTON, Anniston, Ala., assignor to Ferric Engineering Company, a Corporation of Delaware. Original application filed Nov. 7, 1928, Serial No. 317,817. Divided and this application filed July 24, 1931. Serial No. 552,898. 4 Claims. (Cl. 22—65.)



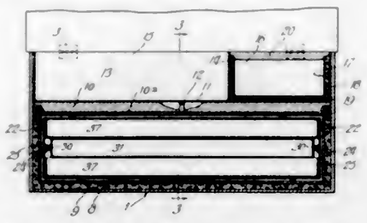
1. An apparatus for depositing molten metal in a rotating mold comprising a trough extending longitudinally within the mold and having a terminal spout portion, a channel in the trough having a slotted opening within the spout portion, and means restricting the width of the channel so as to increase its effective depth adjacent and in advance of the slotted opening.

1,858,293. METHOD OF AND DEVICE FOR DETECTING TEMPERATURE CHANGES IN HEATING OR COOLING TUBES, COILS, ETC. HOMER T. DARLINGTON, West Chester, Pa., assignor, by mesne assignments, to Oil Corporation of America, a Corporation of Delaware. Filed Apr. 25, 1927. Serial No. 186,464. 5 Claims. (Cl. 73—32.)



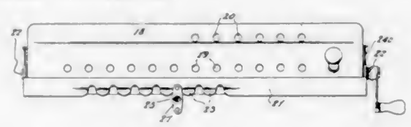
1. The method of indicating the thermal conditions of a series of heated tubes consisting of passing an electric current through each of said tubes in succession one at a time and measuring said current whereby undue heating of any tube is apparent.

1,858,294. LUNCH BOX. JAMES H. DEVINE, Champaign, Ill. Filed June 21, 1928. Serial No. 287,105. 4 Claims. (Cl. 126—261.)



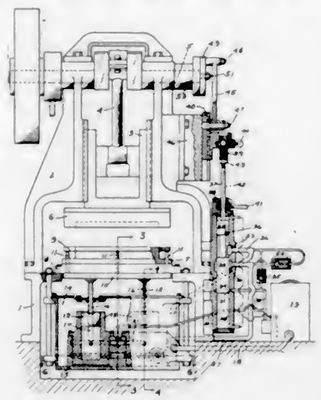
1. In a lunch kit, a casing, a container within the casing and thermally insulated therefrom, a frame removably mounted in the container and open at one side, channel members secured to the inner face of each end wall of the frame and extending transversely thereof, and a tank having end lugs fitting into the channel members and cooperating therewith to support the tank substantially centrally of the frame.

1,858,295. CALCULATING MACHINE. HUGO E. ENDERS, Belleville, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,042. 2 Claims. (Cl. 235—63.)



1. In a calculating machine, the combination of a rotatable shaft, crank elements carried thereby, a register carriage, and a swinging ball mounted on said carriage and formed with a serrated edge adapted to rest upon and mesh with said crank elements at two spaced points, and means for rotating said shaft, to swing the ball relatively to the carriage and effect shifting of the carriage.

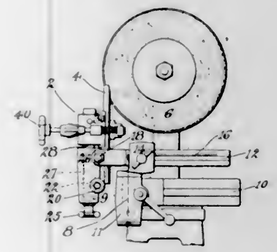
1,858,296. PRESSURE PAD. WALTER FERRIS, Milwaukee, Wis., assignor to Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 1, 1930. Serial No. 448,931. 11 Claims. (Cl. 113—46.)



1. The combination, with a press having a ram operated by a crankshaft, of a hydraulic pressure pad comprising a pressure member, hydraulic means for sustaining said

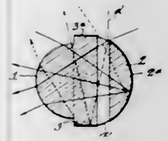
member including a piston and a cylinder, a plunger valve for controlling the expulsion of liquid from said cylinder and having a number of restricted orifices through which said liquid is expelled, means for adjusting said valve to vary the effective total area of said orifices and mechanical means for operating said valve in synchronism with said ram.

1,858,297. ABRADING MACHINE. WILLY FROMM, Frankfort-on-the-Main, Germany, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 16, 1925, Serial No. 30,779, and in Germany June 2, 1924. 15 Claims. (Cl. 51—96.)



3. In an abrading machine, a grinding element, a work holder adapted to hold a curved knife blade having a cutting edge transverse to its axis of curvature, said work holder being arranged to be oscillated about an axis of oscillation and being mounted for tilting adjustment, relative to the axis of oscillation, into any one of a plurality of positions and for oscillation in any of said positions across the face of the grinding element, and means to vary the axis of oscillation to cause it to coincide with the axis of curvature of the cutting edge, whereby the cutting edge of the knife will be ground with substantially a uniform bevel.

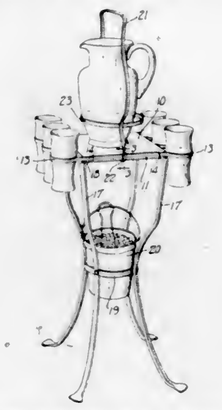
1,858,298. LIGHT REFLECTING UNIT. PAUL P. HORNI and ROBERT M. SUTPHEN, Newark, N. J.; said Sutphen assignor to said Horni. Filed Dec. 11, 1929. Serial No. 413,266. 11 Claims. (Cl. 88—1.)



1. A light reflecting lens having a convex hemispherical anterior face, a concave hemispherical posterior face, a cylindrical portion uniting the two hemispheres, the posterior hemisphere and the cylindrical surface being mirrored with parts on the side of the lens left unmirrored to admit light to the interior of the lens from the side.

1,858,299. BEVERAGE SET. HARRY KORN, Brooklyn, N. Y., assignor to Artcraft Iron Works, Inc., a Corporation of New York. Filed July 25, 1931. Serial No. 553,088. 6 Claims. (Cl. 211—74.)

1. A beverage stand having a square table top composed of a frame and an enclosed tile, supporting legs for the frame, a plurality of tumbler supporting rings secured to two opposite edges of the frame, and a handle secured to the other edges of the frame, the handle being in the

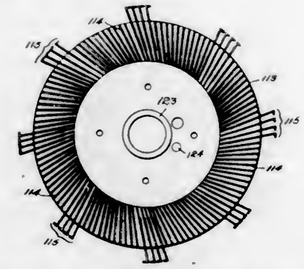


form of an inverted U-shaped loop adapted to accommodate a water pitcher and carrying a horizontal ring to encircle such pitcher.

1,858,300. REFRACTORY COMPOSITION. CLEMENS A. LAISE, Tenafly, N. J., assignor to Callite Products Company, Incorporated, Union City, N. J., a Corporation of New Jersey. Filed May 13, 1930. Serial No. 452,126. 6 Claims. (Cl. 75—1.)

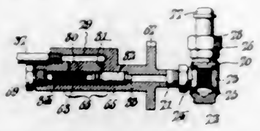
1. An alloyed composition of matter comprising tungsten carbide and aluminum oxide, in the proportions 60% to 90% tungsten carbide, 2% to 25% aluminum oxide, bonded with a metal of the iron group.

1,858,301. MECHANISM FOR PATTERNING CONTROL OF KNITTING MACHINES. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, Mass., a Corporation of Massachusetts. Filed July 9, 1927. Serial No. 204,590. 5 Claims. (Cl. 66—108.)



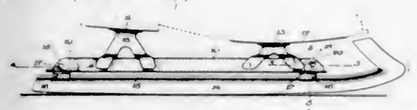
"1. A "diagonal" reverse plating, circular, independent needle, knitting machine of the so-called Banner type having a rotary element of the knitting head, a spindle having a gear fast thereon in mesh with and driven by a gear upon said rotary element; a disk-like base member carried by said spindle above said spindle gear, and having a quickly detachable driving connection with said spindle gear; a jack receiving member mounted upon said base member; said base member and said jack receiving member having interengaging formations and permitting ready separation but causing the driving of the jack receiving member when so engaged, and separate jack-like members supported upon said receiving member and adapted to cooperate with instrumentalities at the knitting head in effecting change in plating.

1,858,302. OIL BURNING APPARATUS. ALBERT E. MARSHALL, Baltimore, Md., assignor to Fluid Heat, Incorporated, a Corporation of Maryland. Filed Apr. 23, 1928. Serial No. 272,077. 1 Claim. (Cl. 158—36.)



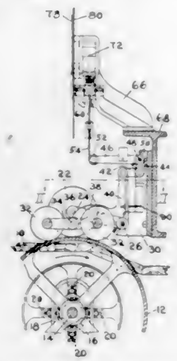
In oil burning apparatus including a burner feed tube and atomizing nozzle, a pump to deliver oil under pressure to the nozzle, and a motor to drive the pump; a drain valve in the feed tube embodying an elongated casing having an axial bore, means providing an integral offset paralleling passage communicating with the bore by well spaced apart ports, and a spring-influenced piston having a conical end coacting with a corresponding seat in said bore adapted to automatically shut-off the flow of oil from the pump, and to draw oil from the feed tube by suction through the offset passage into the axial bore aforesaid, thereby to prevent flooding of the burner.

1,858,303. ICE SKATE. FRANK MACMILLAN, Fort Lee, N. J. Filed Dec. 22, 1931. Serial No. 582,526. 8 Claims. (Cl. 208—167.)



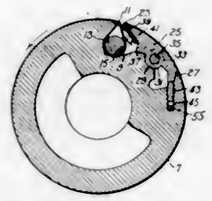
1. An ice-skate comprising a body including a shoe-support, a resilient runner having a longitudinally convex ice-engaging surface, and means providing vertical pivot connections between said runner and the body at points adjacent the respective ends of the runner.

1,858,304. MEASURING MACHINE. GEORGE E. MCLAUGHLIN, Peabody, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Mar. 24, 1927. Serial No. 178,024. 16 Claims. (Cl. 33—148.)



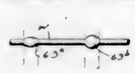
1. In a measuring machine, a support for a piece of work to be measured, means for feeding the work, a plurality of measuring elements spaced from each other in directions from front to rear and from side to side of the work support and adapted to contact with the work during feeding thereof to measure the thickness dimensions of the work at a plurality of points simultaneously, indicating means, and connections between the indicating means and the measuring elements comprising means for averaging the thickness dimensions obtained by the plurality of measuring elements whereby an average dimension for all of the measuring elements is indicated by the indicating means.

1,858,305. PRESS CYLINDER. CHARLES A. MEISEL, Milton, and JOHN P. E. NEILSON, Quincy, Mass., assignors to Meisel Press Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed June 14, 1928. Serial No. 285,319. 13 Claims. (Cl. 101—415.1.)



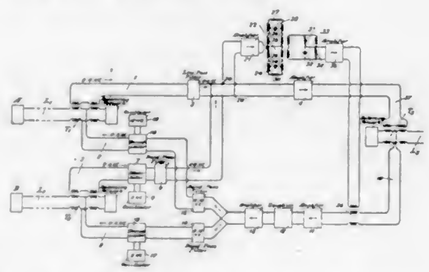
1. A cylinder of the class described having a recess defining an edge, said cylinder including a peripheral segment pivotally mounted between its ends and having at one end an edge over which a covering may be secured presented in close opposition to said edge of the recess and at its other end formed to cooperate with the adjacent surface of the cylinder to provide a substantially continuous cylindrical support for such covering, and releasable means underlying said other end and acting directly thereon for forcing it outwardly into position with the surface of said segment lying at the surface of the cylinder.

1,858,306. METHOD OF SWAGING BULBS ON WIRE. RONALD MORESCHINI, Pittsburg, Calif. Filed June 11, 1928. Serial No. 284,519. 2 Claims. (Cl. 10—54.)



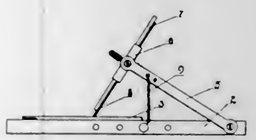
2. The method of forming bulbs or enlargements upon a continuous wire at regular intervals, which consists in simultaneously upsetting the metal of the wire by a swaging operation at a plurality of positions at a predetermined distance apart to form a plurality of enlargements thereon, intermittently moving the wire forwardly longitudinally said predetermined distance and swaging the metal to thereby initially form an enlargement at the first swaging position and add additional metal to the previously formed enlargements at the succeeding swaging position or positions.

1,858,307. MEANS FOR COMPENSATING FOR NON-LINEAR DISTORTION IN TRANSMISSION CIRCUITS. HARRY NYQUIST, Millburn, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 28, 1930. Serial No. 464,687. 8 Claims. (Cl. 178—44.)



8. In a system for reducing the distortion produced by the non-linearity of the characteristics of the materials employed in the transmission line of a multi-channel signaling system, the combination with a transmission line over which two-way signaling by a plurality of channels is maintained, of a terminal circuit having input and output branches, a plurality of trunk circuits each connected conjugately to the said input and output branches and a distortion correction circuit connected between said input and output branches to create and to impress upon the output branch a neutralizing wave substantially like but in phase opposition to the distortion created in the received signal wave by the said transmission line.

1,858,308. APPARATUS FOR THE PREPARATION OF FILMS OF BLOOD. WALTER SCHILLER, Vienna, Austria. Filed Mar. 12, 1930, Serial No. 435,326, and in Austria Mar. 16, 1929. 3 Claims. (Cl. 88—40.)



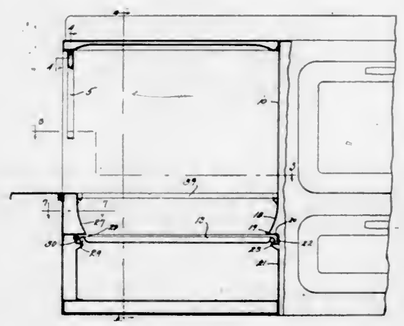
1. In an apparatus for the preparation of films of blood for examination, a fixed supporting base plate, a blood carrying plate slidably mounted in the base plate, a frame hingedly mounted on the base plate, a film spreading plate swingably mounted in the frame, adapted to be held in a stationary position while the slidable plate is slid along the base plate for the purpose of spreading the drop of blood out into a film.

1,858,309. NECKTIE STRETCHER. PHILIPP SCHWARZ, Wuppertal, Germany. Filed Nov. 25, 1930, Serial No. 498,127, and in Germany Oct. 23, 1929. 2 Claims. (Cl. 223—19.)



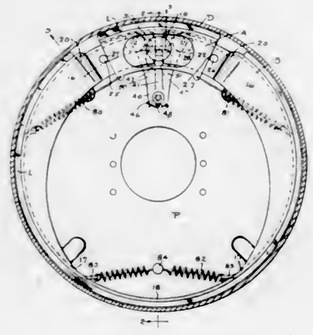
1. As an article of manufacture, a wedge-shaped flat plate of uniform thickness throughout having a narrow longitudinal slit extending from the edge of the broad end of the plate to a point near the narrow end of the same and terminating at its inner end in an oblong slot so as to leave a pair of relative wide and flat side portions, and a flat bowed connecting portion, the flat side portions tapering throughout their length and toward the bowed portion.

1,858,310. STOVE STRUCTURE. ALVIN G. SHERMAN, Detroit, Mich., assignor to The Detroit Vapor Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 8, 1930. Serial No. 419,408. 24 Claims. (Cl. 126—39.)



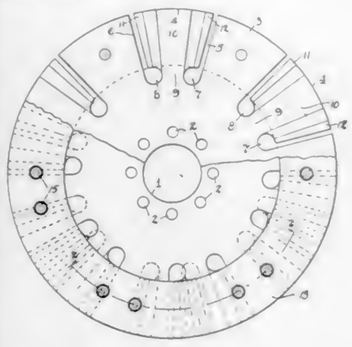
1. In a cooking stove, a back splash member fabricated to provide a dished out central portion and a flange or flanges on one or more of its edges, said flange or flanges being secured to other parts of the stove and said dished out portion extending rearwardly of the back of the stove.

1,858,311. BRAKING DEVICE. JOHN SNEED, Detroit, Mich., assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 30, 1927. Serial No. 223,020. 38 Claims. (Cl. 188—78.)



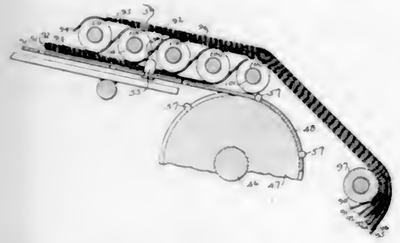
1. In a brake, a substantially annular shoe and a servo shoe overlying the ends of the first shoe both radially and axially.

1,858,312. CLUTCH PLATE. CHARLES B. SPASE, Syracuse, N. Y., assignor to Ira Saks, Cleveland, Ohio. Filed Oct. 23, 1931. Serial No. 570,539. 9 Claims. (Cl. 192—107.)



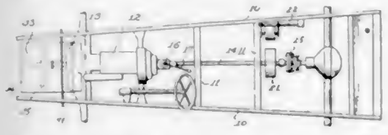
1. A clutch plate having a plurality of alternate flat and laterally offset peripheral sectors, radially extending slots positioned between said sectors, circular enlargements tangential to the inner ends of said slots.

1,858,313. MANIFOLDING MACHINE. MILTON C. STERN and WILLIAM C. PFEIFFER, Dayton, Ohio, assignors to The Ecry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed July 29, 1929. Serial No. 381,798. 10 Claims. (Cl. 197—133.)



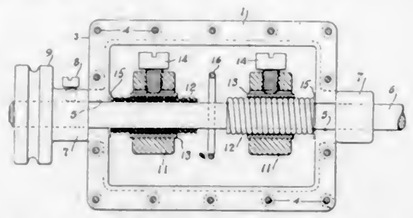
8. In a machine for collating sheets, a continuously traveling collating means and means to feed a plurality of sheets thereto successively independently of one another as the collating means moves whereby the sheets will be grouped in the collating means in alignment but each sheet being independently collated.

1,858,314. POWER UTILIZING APPLIANCE FOR MOTOR VEHICLES. CLYDE W. SUMMERLOT, Terre Haute, Ind. Filed Apr. 9, 1931. Serial No. 528,937. 6 Claims. (Cl. 180—53.)



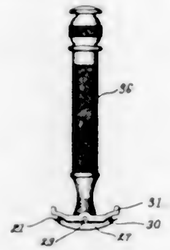
1. In combination, a motor vehicle including a chassis and engine mounted therein, a rear axle, a drive shaft connecting the engine and rear axle, a universal joint interposed between the drive shaft and rear axle, said joint including a displaceable member adapted to disconnect the drive shaft from the rear axle, and a drive pulley carried by the drive shaft.

1,858,315. LUBRICATED BEARING. RALPH H. THATCHER, Springfield, Ohio. Filed Aug. 16, 1930. Serial No. 475,790. 4 Claims. (Cl. 308—128.)



1. In a lubricating apparatus, a housing adapted to contain a lubricant, an arm in the housing having a loop at one end, a coil spring in said loop, a soft metal plate between the spring and the arm, means acting on the plate to grip the spring, a shaft in the spring, and means in the housing to convey lubricant to the shaft adjacent the spring.

1,858,316. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, and THEODORE L. SMITH, Concord, Mass., assignors to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed July 30, 1930. Serial No. 471,689. 13 Claims. (Cl. 30—12.)



7. A safety razor blade adapted to be flexed transversely by the clamping action of a holder and comprising two cutting-edge portions separated longitudinally by a slot and connected at their ends by flexing hinges which are located beyond the cutting-edge portions, the latter being bounded at their ends by transversely-extending recesses which limit the cutting-edges to a length not exceeding that of the slot.

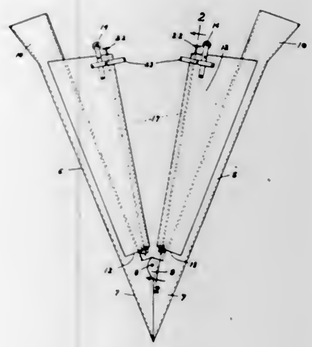
1,858,317. REFRACTORY FOR CONTACT WITH MOLTEN GLASS. PAUL G. WILLETTS, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Aug. 25, 1928. Serial No. 302,151. 2 Claims. (Cl. 106—10.)

1. A batch mixture for a ceramic refractory comprising homogeneous granular grog containing the derivatives of 30% silica and 70% Georgia Klondike kaolin fired to high temperature and having substantially the same physical and chemical characteristics as the refractory to be produced, and a raw binding material for the grog composed of approximately 30% silica and 70% Georgia Klondike kaolin, both of sufficient fineness to pass a screen of the order of a 325 mesh screen.

1,858,318. TOBACCO PLANT TRANSPLANTER. ORVILLE E. WOODWARD, Germantown, Ky., assignor of one-half to George W. Hinson, Germantown, Ky. Filed July 27, 1931. Serial No. 553,271. 5 Claims. (Cl. 111—4.)

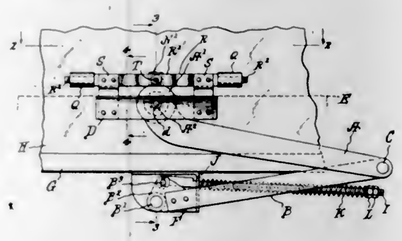
1. A transplanter comprising a pair of uniform body members pivoted together adjacent the bottoms thereof,

the bottoms of the members being developed into spade portions, a reservoir carried by each body member above the pivotal mounting, a handle member on each body



member, an outlet valve in each reservoir discharging into the space between the spades and means disposed immediately adjacent each handle for actuating the valve in the respective reservoirs.

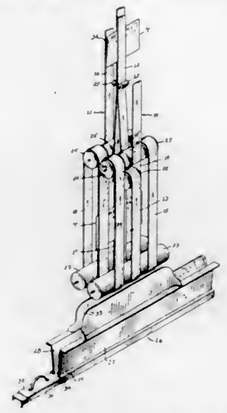
1,858,319. DEVICE FOR CONTROLLING WINDOWS OF THE VERTICALLY SLIDING TYPE. WILLIAM YOUNG, Carluke, Scotland. Filed Sept. 15, 1931, Serial No. 562,963, and in Great Britain Sept. 3, 1930. 3 Claims. (Cl. 16—200.)



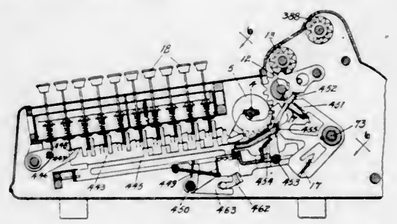
1. The combination with a window frame and a sash slidable therein, levers having pivotal connections with said window frame and sash, a stop for the sash mounted on the window frame, a cam for releasing the stop, cam actuating means supported by the window frame and adapted to engage said levers whereby to permit holding the sash in fixed position, and also to permit releasing the sash to slide, and spring tensioned means associated with the levers adapted to hold said levers in balanced position during the sliding of the sash.

1,858,320. TRANSFER MECHANISM FOR STRAP CONVEYERS. BRUCE BEARDSLEY, Brooklyn, and WILLIAM C. CHADBOURNE, Elmhurst, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1929. Serial No. 406,656. 6 Claims. (Cl. 198—165.)

1. A conveyer for transporting sheet material comprising two strap conveyer systems disposed side by side with their operating runs in contact and adapted to grip such sheet material there-between, each system being composed of one or more endless straps positioned end to end and forming a break in the conveyer system at their adjacent ends, said contacting straps at the advance side of said break diverging slightly to loosen the grip on said material and an auxiliary strap system extending across said break and adapted to grip said material after the grip of said diverging straps has been loosened and while the material is still under the propelling action thereof, for delivering it to the contacting straps at the opposite side of the break.



1,858,321. CALCULATING MACHINE. GEORGE C. CHASE, South Orange, and CHARLES F. SCHWEITZER, Bloomfield, N. J., assignors to Monroe Calculating Machine Company, Orange N. J., a Corporation of Delaware. Filed Aug. 28, 1931. Serial No. 559,834. 7 Claims. (Cl. 235—79.)

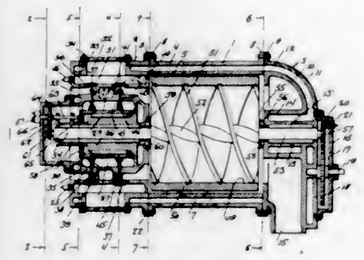


1. In a calculating machine having digit keys, selector mechanism settable selectively to represent an amount set up on said keys or a multiple of such amount, and actuators controlled by said mechanism; key controlled multiplier mechanism including means operable automatically to shift said selector mechanism from one set position to another, and means operable automatically to selectively determine the number of cycles of operation of said actuators.

1,858,322. ROTARY COMBUSTION ENGINE. MARTIN COOPER, Thomasville, N. C. Filed Dec. 30, 1927. Serial No. 243,658. 1 Claim. (Cl. 60—41.)

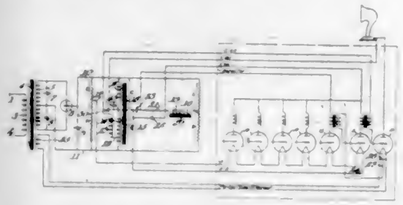
A combustion engine comprising a housing, a rotor within the housing, a shaft projecting from the longitudinal center of the rotor at each end thereof, an exhaust housing secured to one end of the rotor housing having means for rotatably supporting one end of the shaft of the rotor, a valve housing secured to the opposite end of the rotor housing, a hub in the valve housing for supporting the other end of the rotor shaft, the valve housing having a series of radially disposed combustion chambers surrounding the same, said chambers each having intake and discharge passages, the discharge passages opening into the rotor housing toward the adjacent end of said rotor, intake and exhaust control valves in each of said combustion chambers for controlling the flow of the intake and exhaust gases from said chamber, said valve housing pro-

vided with radially directed passages located for direct communication with said valves whereby direct access may be had to said valves from the outside of said valve housing, removable plates normally closing said radially directed passages, a rotary cam sleeve in said valve housing secured to the adjacent end of the rotor shaft for rotation therewith, inwardly extending radially disposed stems for said valves slidably supported by the valve housing, anti-



friction rollers carried by the inner ends of the stems for engaging the cam sleeve, the outer face of said cam sleeve being comparatively straight from edge to edge, firing plugs associated with said combustion chambers, a timer for the firing plugs, a ring gear on said rotary cam sleeve, means for driving the ring gear and the timer, and a shell removably secured to the outer end of said valve housing for permitting access to the inner ends of said valves from the outer end of said valve housing.

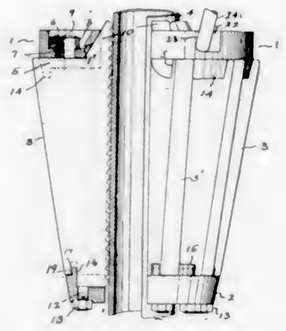
1,858,323. APPARATUS FOR ENERGIZING AN AUDION CIRCUIT. GEORGE B. CROUSE, Woodcliff, N. J., assignor to Conner Crouse Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 20, 1928. Serial No. 248,250. 6 Claims. (Cl. 250—27.)



1. In apparatus for energizing the filament and plate circuits of an audion amplifier from a source of rectified current, impedances providing a path across said source, and impedances of a different type cooperating with the impedances of said path to provide two Wheatstone bridges having said path in common as two adjacent balancing arms thereof, and means for connecting the said filament and plate circuits across the respective bridges as arms conjugate to the said source.

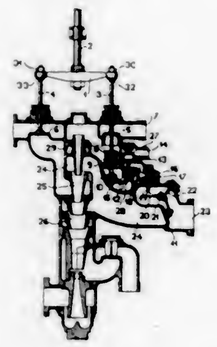
1,858,324. PIPE HOLDING SLIP. HARRY R. DECKER, Houston, Tex. Filed Sept. 27, 1926. Serial No. 137,913. 11 Claims. (Cl. 24—263.)

1. A pipe holding slip comprising a plurality of sections, each section including a holder composed of an upper and a lower arcuate anchor whose inner sides have radial grooves and a plurality of jaws between said anchors whose ends are fitted into the corresponding grooves, means securing said jaws to said anchors, the upper ends of said jaws having upward extensions which abut against the inner side of said upper anchor and the lower anchor having outside abutments against the inner sides of which the lower ends of the respective jaws abut, said upper anchor and the abutments of the lower anchor being thus adapted to prevent the outward, or radial, movement of the jaws relative to said holder, the outer sides of the end jaws of said sections being countersunk at their lower



ends and upwardly extending projections carried by the lower anchor and resting in said respective countersunk portions.

1,858,325. ARRANGEMENT FOR STARTING AND STOPPING EXHAUST STEAM INJECTORS. HANS DEUTSCH, Vienna, Austria, assignor to Firm Alex. Friedmann, Vienna, Austria. Filed May 5, 1931, Serial No. 535,251, and in Austria May 9, 1930. 3 Claims. (Cl. 103—265.)



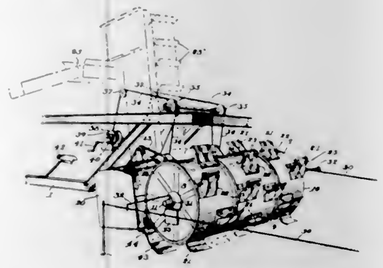
1. An arrangement for starting and stopping exhaust steam injectors which contain a device which under the action of boiler steam holds the exhaust steam valve in the open position when the locomotive regulator is open while it admits throttled boiler steam as auxiliary steam to the injector when the locomotive regulator is closed, comprising a manually operated member, an adjustable member actuated by the former member and pivotally connected therewith, a water valve, a main steam valve, a control valve adapted to admit boiler steam to said device for supplying exhaust steam or auxiliary steam, pivotal connections between said adjustable member and said main steam valve and said water valve, a fixed stop adapted to limit the lift of said water valve, this arrangement being adapted to convert the pivot between said adjustable member and said water valve into a fixed fulcrum for the adjustable member after the water valve has engaged with said stop and to enable said adjustable member to cause on its further movement about said pivot the opening of said main steam valve and a mechanical connection having a lost motion between said adjustable member and said control valve, adapted to raise the latter from its seat only after said main steam valve has been opened.

1,858,326. ARRANGEMENT FOR SECURING ELASTIC ARTICLES TO RIGID SUPPORTS. PETER ANDREAS HARSEM, Oslo, Norway, assignor to Imperator Hestesko A/S, Tonsberg, Norway, a Norwegian Concern. Filed May 7, 1930, Serial No. 450,524, and in Norway Jan. 29, 1930. 4 Claims. (Cl. 168—12.)



4. As a new article of manufacture, a nail seating consisting of a sheet-metal member bent into U-shaped form, the bight portion maintaining the limbs in spaced relation, one limb having an upwardly bent portion upon its free edge, and nail-receiving openings in the limb.

1,858,327. CHANNELING MACHINE. JOSEPH I. HAYS, Jackson, Tenn. Filed Mar. 12, 1931. Serial No. 522,085. 3 Claims. (Cl. 37—108.)



1. A channeling machine for roadbeds including a rotatable cutting drum, independent means for supporting each end of the drum, means for independently raising or lowering either of said drum supporting means, and guiding means on each end of said drum.

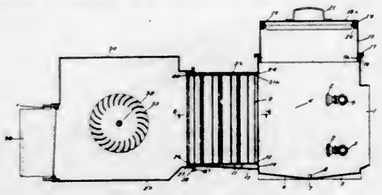
1,858,328. CONVEYING OF MATERIAL. HANS HEYMANN and ERNST LEHR, Darmstadt, Germany, assignors to the Firm: Carl Schenck, Eisengiesserei und Maschinenfabrik Darmstadt G. m. b. H., Darmstadt, Germany. Filed Oct. 27, 1925, Serial No. 65,160, and in Germany Oct. 31, 1924. 9 Claims. (Cl. 198—220.)



5. A conveying device adapted to vibrate at a frequency of at least 500 vibrations per minute, comprising a conveying trough imperforate for the greater portion of its length, means for causing said trough to vibrate comprising a rotary body, and an unbalanced mass adjustable with respect to the radius of said rotary body.

1,858,329. HUMIDIFIER. FRANK J. HOERSTING, Dayton, Ohio. Filed Mar. 2, 1931. Serial No. 519,388. 3 Claims. (Cl. 261—115.)

1. In combination, a humidifier chamber, a scrubber chamber connected to the humidifier chamber, a scrubber and scrubber frame slidably mounted in said scrubber chamber and means for causing the entry and removal of the scrubber from the scrubber chamber through said humidifier chamber, said humidifier chamber having a de-



tachable cover closing, an opening through which said scrubber can be introduced and removed and an air inlet opening in which water spray means are located.

1,858,330. INSTALLATION FOR HEATING THE GROUND. FRANZ HÖRNING, Steinheim, Germany. Filed Mar. 14, 1928, Serial No. 261,623, and in Germany Mar. 19, 1927. 6 Claims. (Cl. 47—48.)



6. A sterilizing and heating apparatus for the purpose specified, comprising a distributing pipe pervious to steam, a steam supply means, said supply means having steam outlets discharging in the distributing pipe in alternate directions.

1,858,331. SHIELD. RUTH C. HUGHES, Topeka, Kans. Filed May 9, 1931. Serial No. 536,269. 1 Claim. (Cl. 2—174).



A shield having an opening for a head and separated by a slit extending from the head opening to the outer edge, the edge portion of the shield surrounding the head opening being folded on itself, and means for securing the end edges formed by said slit in overlapping relation, and including fastening elements on the outer side of said folded over portion adjacent one of said end edges, and additional fastening elements, complemental to the first mentioned fastening elements, arranged on the inner side of said folded over portion adjacent the other of said end edges.

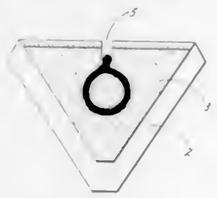
1,858,332. METHOD OF AND APPARATUS FOR RECORDING THE FREQUENCY OF IMPULSES. WERNER KUNZE, Waldmannslust, near Berlin, Germany, assignor to Firm Elektrizitatsgesellschaft "Sanitas" m. b. H., Berlin, Germany. Filed Apr. 4, 1930, Serial No. 441,650, and in Germany Feb. 11, 1928. 4 Claims. (Cl. 234—1.)

1. The herein described method of making a record of the frequency of impulses, which consists in printing a

pair of lines disposed angularly of each other in accordance with the said impulses on a record surface, and moving the said surface transversely of the said lines at a velocity such that the forward line printed by an impulse is intersected by the rear line of the preceding impulse.



1,858,333. HAIR INCLOSURE. WILBUR S. LEWIS, Lakewood, Ohio, assignor to The Nestle-Le Mur Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 20, 1930. Serial No. 496,941. 4 Claims. (Cl. 132—36.2.)

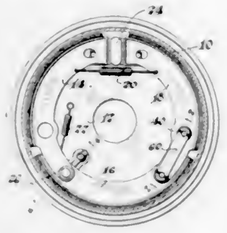


1. A hair inclosing pad comprising a plurality of sheets of material including an outer sheet of thin pliable metal and an inner sheet of absorbent material, said sheets being generally triangular in shape and secured together at a common edge and having a slot extending into the body of the sheet from said common edge.

1,858,334. PRODUCTION OF ORTHO-AMINO-HALOGEN-ANTHRAQUINONES. RHYS JENKIN LOVELUCK, ERNEST GEORGE BECKETT, and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes Limited, Grangemouth, Scotland. Filed Dec. 21, 1929, Serial No. 415,786, and in Great Britain Dec. 28, 1928. 2 Claims. (Cl. 260—60.)

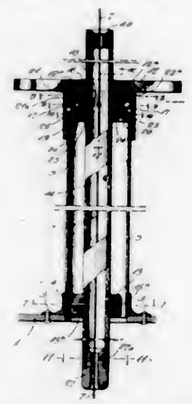
1. A process for the production of 1-amino-2-chlor-anthraquinone in a state of good purity, which comprises mixing together anthraquinone-1-amino-2-sulphonic acid and potassium per sulphate in sulphuric acid, mixing the product with hydrochloric acid and sodium chlorate in an aqueous solution at a temperature of about 100° C., and mixing the product thus obtained with sodium hydrosulphide.

1,858,335. BRAKE. KENNETH E. LYMAN, Rockford, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 2, 1929. Serial No. 337,149. 10 Claims. (Cl. 188—78.)



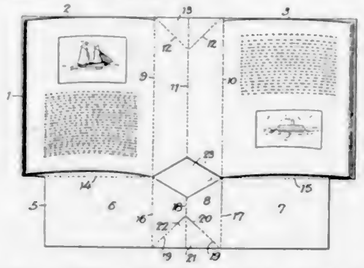
1. A pivot and mounting comprising two elements arranged to rest against each other, at least one of which comprises a tapered embossment pressed therefrom, a pivot passing through said elements and having a portion engaging one of them on the side opposite the other and a nut threaded on the pivot and engaging said other element to clamp the parts together.

1,858,336. ANTENNA LEAD-OUT INSULATOR. CARLOS B. MIRICK, Washington, D. C., assignor to National Electrical Supply Company, Washington, D. C., a Corporation of Virginia. Filed Jan. 9, 1930. Serial No. 419,595. 13 Claims. (Cl. 173—311.)



2. An antenna lead out insulator for air-craft, comprising a tubular member attachable to the aircraft in a position adjacent the exterior thereof, an insulator telescopically insertable through said tubular member from the interior of the aircraft and projectible beyond the limits of said tubular member with the exterior walls of said insulator spaced from the interior walls of said tubular member, and means carried by said insulator for guiding an antenna wire therethrough to a position trailing from the aircraft.

1,858,337. DISPLAY DEVICE. JOHN J. MURRAY, Yonkers, N. Y. Filed Aug. 19, 1931. Serial No. 558,143. 8 Claims. (Cl. 40—149.)

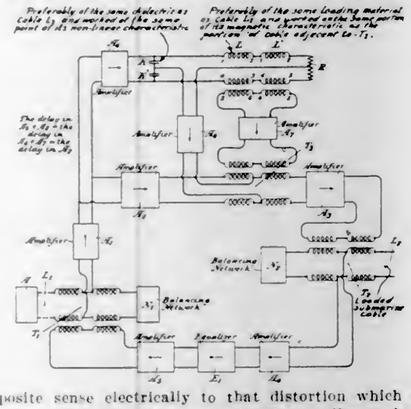


1. A display device comprising a card having oppositely extending wing portions forming display surfaces, an intermediate foldable portion forming a supporting upright, and a base portion cooperating with the upright to form a supporting stand for the wings.

1,858,338. MEANS FOR COMPENSATING FOR NON-LINEAR DISTORTION IN TRANSMISSION CIRCUITS. HARRY NYQUIST, Millburn, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 28, 1930. Serial No. 464,686. 7 Claims. (Cl. 178—44.)

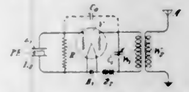
2. In a system in which the distortion of a signal wave is created by the non-linearity of the characteristics of

materials employed in the transmitting medium, the method which consists in predistorting the signal wave in an



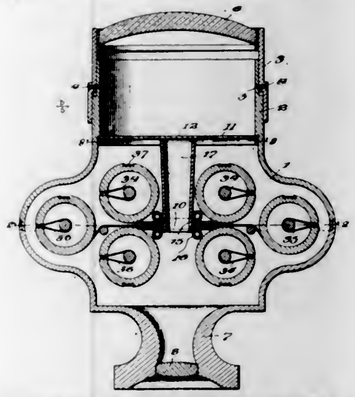
opposite sense electrically to that distortion which will be produced in the signal wave by the non-linear characteristics of the materials of the transmitting medium.

1,858,339. PIEZO ELECTRIC OSCILLATOR. RUSSELL S. OHL, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 24, 1926. Serial No. 118,350. 3 Claims. (Cl. 250—36.)



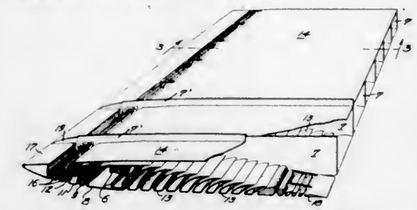
1. The method of producing oscillations of predetermined frequency with a piezo-electric crystal capable of being set into vibration in a plurality of modes, which consists in selecting the desired mode of vibration and changing the effective reactive value of the crystal to a capacitance of definite magnitude to correspond to the predetermined frequency.

1,858,340. PHOTOGRAPHIC EXPOSURE METER. GUY E. OSBORNE, Chauncey, Ohio, assignor of one-tenth to Harry B. Noble, Athens, Ohio. Filed June 18, 1929. Serial No. 371,905. 6 Claims. (Cl. 88—23.)



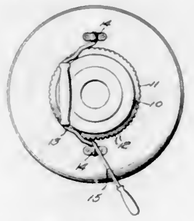
1. A photographic exposure meter comprising a casing, a lens system, a plurality of superimposed movably mounted light density comparators comprising flexible webs having on their surfaces gradient scale readings indicative of major film speeds by means of the passage of light rays through the lens system and aforesaid comparators.

1,858,341. AIRCRAFT WING. ROLLAND T. RICHART, Santa Barbara, Calif. Filed Sept. 3, 1929. Serial No. 389,928. 15 Claims. (Cl. 244—12.)



1. A wing comprising a ceiling keel, and a plurality of vanes arranged beneath said keel and forming air channels curving upwardly and rearwardly of said wing.

1,858,342. JAR COVER. MICHAEL A. ROLLMAN, Mount Joy, Pa. Filed Mar. 22, 1930. Serial No. 438,166. 2 Claims. (Cl. 215—46.)



1. A jar having a threaded nipple and a lever having its end pivoted to the top of the jar at one side of the nipple, and a screw closure-cap for said nipple, this cap being provided at its lower edge with an outwardly-projecting flange serrated at its edge to provide laterally-facing flat-faced abutments, for the purpose set forth.

2. A jar having a threaded nipple and a threaded closure-cap adapted to be screwed onto said nipple, said cap being provided with a circumferential series of abutments on its exterior each having at least one flat face, the top of said jar adjacent said series of abutments being provided with an upstanding member adapted to afford a fulcrum for an unscrewing tool, as set forth.

1,858,343. DRAFTING INSTRUMENT. ARLE M. SALTNASS, Minneapolis, Minn. Filed Feb. 13, 1931. Serial No. 515,623. 1 Claim. (Cl. 120—98.)



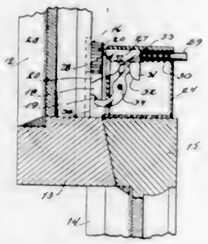
A new article of manufacture, comprising a handle, a metal ferrule fitted on one end of the handle and having a bead thereon forming a shoulder, a sleeve having an out-

wardly extending flange at each end thereof with one end of the sleeve fitting over the ferrule with a flange on the sleeve abutting the shoulder bead to limit the entrance of the ferrule in the sleeve, a plug closing the other end of the sleeve and forming with the ferrule a receptacle in the sleeve and a resilient sleeve carried by the first mentioned sleeve and retained thereon by the two flanges.

1,858,344. MANUFACTURE OF MERCAPTO-ARYL-THIAZOLES. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Oct. 11, 1928. Serial No. 311,979. 5 Claims. (Cl. 260—44.)

1. The process for the preparation of a mercapto-benzothiazole comprising the reaction between an arylaminobenzo-thiazole and hydrogen sulfid under superatmospheric pressure.

1,858,345. AUTOMATIC WINDOW FASTENER. WILLIAM M. SPINDLER, New Orleans, La. Filed Jan. 18, 1930. Serial No. 421,838. 11 Claims. (Cl. 292—98.)



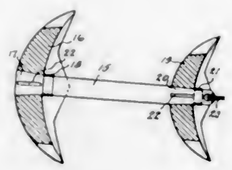
1. A window fastener including a keeper and a latch respectively adapted to be secured to parts of a window movable toward and from each other to close and open the window, said latch including a housing, a latch hook mounted in the housing for protraction therefrom into latching engagement with the keeper, a plunger normally protracted from said housing and having a bevelled nose engaging the keeper upon closing the window to retract the plunger, and operative connection between the latch hook and plunger to protract the hook as the plunger is retracted.

1,858,346. MAGNETIC FLUID LEVEL GAUGE. GEORGE L. STRAUGHAN, Chesapeake, W. Va. Filed Mar. 5, 1930. Serial No. 433,343. 2 Claims. (Cl. 137—102.)



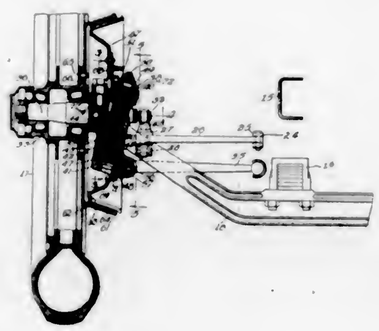
1. In a device of the class described, a receptacle, a lid, means for securing the lid on the upper end of the receptacle, a signal, a valve carried by the receptacle in spaced relation to the lid and admitting pressure to the signal from the receptacle, a bracket located on the receptacle and spaced from the lid, a first lever fulcrumed intermediate its ends on the bracket and engaged at its inner end with the valve, a second lever located below the first lever and fulcrumed intermediate its ends on the bracket, and having its outer end loosely engaged within the outer end of the first lever, a yoke connected to the inner end of the second lever and extended downwardly within the receptacle, and a float in the receptacle, the float being movable between the outer end of the first lever on the one hand, and the yoke on the other hand.

1,858,347. ANCHOR. EDWARD B. SWIFT, Seattle, Wash. Filed Dec. 26, 1929. Serial No. 416,536. 8 Claims. (Cl. 114—206.)



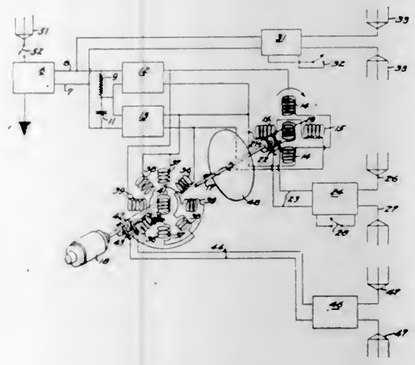
3. In an anchor, a stock, a star anchor member on the rear end of said stock, another star anchor member on the forward end of said stock, and an anchor line connected with the forward end of said stock in front of said last named anchor member, both of said anchor members being concave on the side toward the front end of said stock.

1,858,348. BRAKE MECHANISM. CECIL HAMELIN TAYLOR, Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed May 19, 1924, Serial No. 714,187. Divided and this application filed Dec. 22, 1928. Serial No. 327,847. 15 Claims. (Cl. 188—194.)



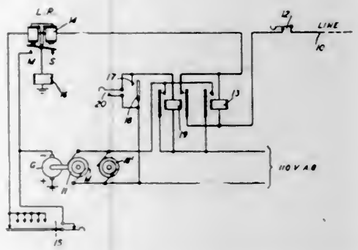
1. In combination, a vehicle steering wheel, and a cone clutch brake associated therewith having maximum braking efficiency when said wheel is in its normal position, said mechanism including means for varying the braking effectiveness for various angular positions of the steering wheel with respect to its normal position.

1,858,349. SIGNALING SYSTEM. FREDERICK EMMONS TERMAN, Stanford University, Calif. Filed May 10, 1929. Serial No. 361,911. 13 Claims. (Cl. 250—17.)



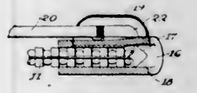
1. The method of signaling which comprises generating a master oscillation, generating a rotating field with said oscillation rotating an element in said field to produce a second oscillation of different frequency, and transmitting both of said oscillations.

1,858,350. PRINTING TELEGRAPH SYSTEM. ALLAN WEAVER, Port Washington, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 22, 1931. Serial No. 558,783. 6 Claims. (Cl. 178—4.1.)



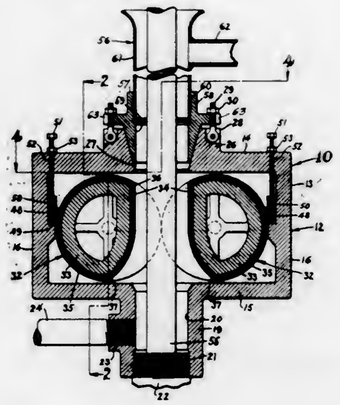
1. A printing telegraph station having, in combination, motor driving mechanism, circuit controlling instrumentalities for starting said motor mechanism into operation, a single source of power for both said motor driving mechanism and for said circuit controlling instrumentalities, and means for disabling said circuit controlling instrumentalities to stop said motor mechanism.

1,858,351. LOCK SLIDER FOR SLIDE FASTENERS. ERNEST M. WHITNEY, Providence, R. I., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed May 14, 1930. Serial No. 452,351. 8 Claims. (Cl. 24—205.)



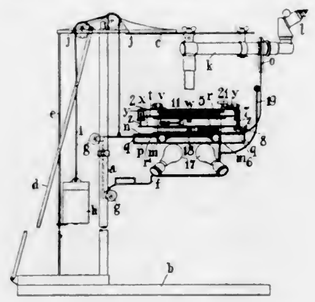
5. A slider for slide fasteners comprising overlying wings having means for guiding interlocking members, said slider having means joining said wings and a rigid extension integral with said joining means adjacent one wing, a part at least of said last mentioned wing being flexible relative to said rigid extension to act as a slider lock, a pull member pivoted to said rigid extension and having a cam adapted to act on said flexible portion to lock the slider.

1,858,352. COMBINATION DRILLING VALVE AND BLOW-OUT PREVENTER. JOHN YOUNG, Los Angeles, Calif. Filed Apr. 7, 1930. Serial No. 442,155. 7 Claims. (Cl. 166—15.)



1. In a drilling apparatus, the combination of a well casing, a drill stem rotatable in said casing, a supplementary casing, there being an aperture in said supplementary casing through which said drill stem extends, a pair of cylinders rotatably mounted in said supplementary casing, said cylinders having aligned peripheral grooves therein, said grooves being arranged to form circular apertures of varying diameters and a cushion member in said apertures.

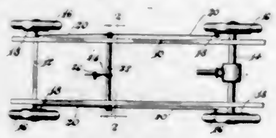
1,858,353. APPARATUS FOR USE IN CONNECTION WITH PHOTOGRAPHIC AERIAL SURVEYS. ARTHUR CYRIL WEBB ALDIS, Sparkhill, Birmingham, England. Filed Feb. 26, 1930, Serial No. 431,551, and in Great Britain Mar. 21, 1929. 6 Claims. (Cl. 33—1.)



1. In apparatus for ascertaining the amount of error due to camera tilt in aerial photographic surveys, the combination comprising a stereoscope, means for supporting a pair of aerial photographs, one of which is a rectified photograph containing no error due to camera tilt, whilst the other is an uncorrected photograph, a pair of screens of similar pattern one of which is appropriate to and is

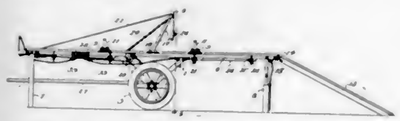
placed on the rectified photograph, whilst the other corresponds to a known angle of tilt and is placed on the uncorrected photograph, and means for correlating the photographs and screens, substantially as described.

1,858,354. BRAKE. WILLIAM J. ANDRES, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 2, 1929. Serial No. 343,963. 4 Claims. (Cl. 308—203.)



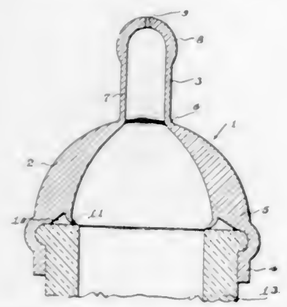
1. A shaft support comprising a single stamping bent upon itself to provide a housing having a transverse opening, a plurality of anti-friction members positioned in the housing with their peripheries extending over the perimeters defining the opening and means for shifting the position of one of the members relative to the opening.

1,858,355. AUTOMOBILE RACK. PINK T. BYNUM, Callibam, Tex. Filed July 11, 1929. Serial No. 377,535. 1 Claim. (Cl. 254—88.)



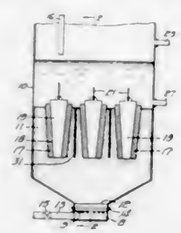
Apparatus for the purpose set forth comprising a wheeled axle, a frame secured to and rising from the axle whereby to rock, parallel channeled side bars carried by said frame and projecting in opposite directions therefrom, cross bars having overhanging flanges along their front and rear edges, slides at the ends of the cross bars spanning the inner side portions of the respective channeled bars, plates slidable upon the respective cross bars and having their edges engaged under the flanges thereon, and jacks carried by said plates.

1,858,356. NIPPLE. FRANKLIN BROWN, White House, N. J., assignor to General Health Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 24, 1930. Serial No. 490,975. 2 Claims. (Cl. 128—252.)



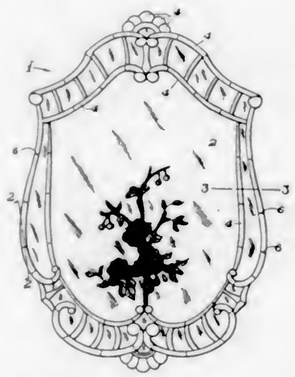
2. In a nipple of the class described, the combination of a body member having a thick wall portion and a relatively thin nipple portion, a shoulder at the bottom of said body portion, a series of circular grooves formed in the bottom face of the body portion, and a relatively thin flange member extending beyond said shoulder and adapted to hug the neck of the nursing bottle.

1,858,357. FILTER METHOD AND APPARATUS. HARRISON S. COE, Palo Alto, Calif. Filed Mar. 3, 1930. Serial No. 432,737. 10 Claims. (Cl. 210—139.)



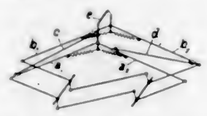
1. A method of filtering fluid feed material thru a granular filter medium characterized by the use of a pocket forming member, said method comprising establishing a filter bed of said material and embedding said member therein, withdrawing said member from said bed thereby forming a pocket in said bed, and admitting fluid material to be filtered into said pocket.

1,858,358. ART OF DECORATING MIRRORS AND THE LIKE. CHARLOTTE GOWING COOPER, Columbus, Ohio. Filed Sept. 17, 1930. Serial No. 482,548. 1 Claim. (Cl. 41—22.)



The art of decorating mirrors which comprises the arranging on the face of said mirrors relatively thin flat vertical edged strips of colored transparent glass, said strips being arranged with certain of their edges adjoining so as to form a decoration on said face, and transparent adhesive uniting the strips so arranged to the face of the mirror, the vertical edges and the transparent adhesive to permit true reflection of an image in said mirror.

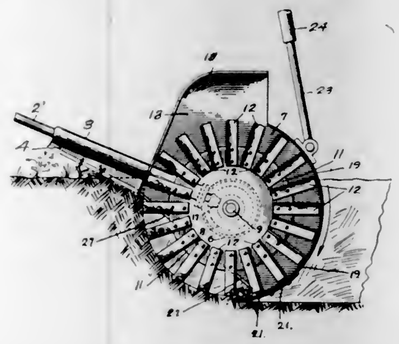
1,858,359. SCISSORS SHAPE COLLECTOR FOR ELECTRIC VEHICLES. ABRAHAM COUWENHOVEN, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed May 14, 1928, Serial No. 277,721, and in Germany May 18, 1927. 1 Claim. (Cl. 191—66.)



A scissors shape collector for electric vehicles with transverse reinforcement consisting of diagonal members, wherein the diagonal members are articulated to the upper

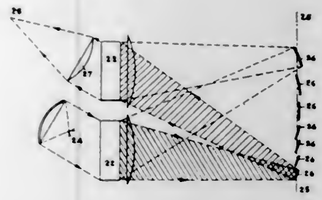
scissors arms, the upper scissors arms of each half of the collector are connected by a single diagonal member and the pivotal points of the diagonal members are so formed that the scissors of one collector and its arms are capable of being twisted without causing binding friction in the joints, said diagonal members having a ball joint movement on the pivots.

1,858,360. EXCAVATOR. HOWARD E. CRUSE, San Francisco, Calif. Filed June 6, 1931. Serial No. 542,496. 12 Claims. (Cl. 37—94.)



10. The combination with a motor vehicle of an excavator; a torque tube hingedly connected at its front end to said vehicle and connected at its rear end to said excavator to limit the descent of said excavator into the soil by engaging the front edge of a ditch being excavated.

1,858,361. OPTICAL DEVICE FOR RESOLVING AND COMBINING LIGHT RAYS. NARCISO DESIRELLO, Genon-Rivarolo, Italy. Filed Sept. 7, 1927, Serial No. 218,086, and in Germany Sept. 7, 1926. 2 Claims. (Cl. 88—1.)

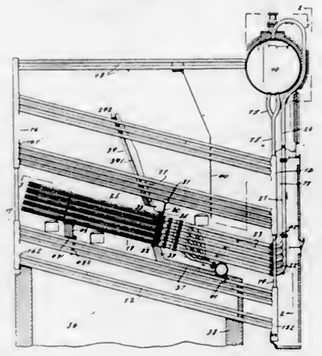


1. Optical device for resolving and combining light rays, comprising a first prism member on which the composite parallel rays from a source of radiation impinge, a first converging lens arranged with its plane substantially parallel to the first composite prism and on which the single unicolor ray pencils leaving said composite prism impinge on different angles and are concentrated in separate focal points along a line substantially parallel to the optical plane of the prism element, a set of concave mirrors along the said focal line and deflecting the said rays against a second converging lens arranged with its optical plane within the plane of the first named lens, a second composite prism member arranged behind the second lens formed as the first one and complanar thereof, on which the light pencils from the second lens impinge and a further converging lens arranged rearwardly of the second prism member and concentrating the recomposed spectral pencils in a single focus.

1,858,362. MANUFACTURE AND EXTRACTION OF NITROGENOUS PRODUCTS FROM PRODUCTS OF ANIMAL ORIGIN. MAURICE KAHN, Paris, France. Filed July 5, 1924, Serial No. 724,540, and in France July 7, 1923. Renewed July 26, 1928. 12 Claims. (Cl. 71—6.)

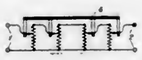
1. A process for the manufacture of nitrogenous products, comprising the steps of mixing carbon bisulphide with a protein product of animal origin and a proteolytic ferment other than such as may be present in said product of animal origin; subjecting the mixture to heat at a moderate temperature for a period long enough to effect auto-digestion; and separating the liquid extract obtained thereby from the solid residue.

1,858,363. STEAM BOILER AND SUPERHEATER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 7, 1929. Serial No. 338,111. 12 Claims. (Cl. 122—478.)



6. In a steam boiler comprising a steam space, a superheater, a plurality of saturated steam outlet pipes leading from said steam space to said superheater, branched fittings to which the respective outlet pipes are connected, each branched fitting supplying steam to a plurality of sets of superheater tubes connected in series, the tubes supplied from the respective branches being connected in parallel.

1,858,364. MULTIPLE SLIDE WIRE POTENTIOMETER. WALTER KOENIG, Jr., Hackensack, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 14, 1929. Serial No. 363,069. 13 Claims. (Cl. 178—44.)

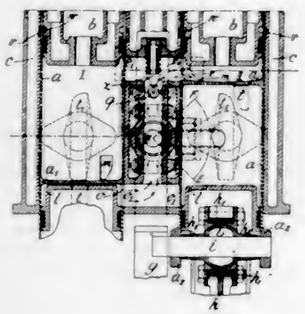


6. A device for attenuating electrical currents or voltages, comprising in combination, an input and an output section, a plurality of intermediate and a plurality of variable terminal attenuating means interposed in succession between said sections, for dividing a plurality of times in succession, current or voltage delivered to said input section, and a single control element for adjusting simultaneously the settings of said plurality of potentiometers.

1,858,365. INTERNAL COMBUSTION ENGINE. PAUL LANDIS, Zurich, Switzerland. Filed Dec. 16, 1929. Serial No. 414,533. 7 Claims. (Cl. 123—45.)

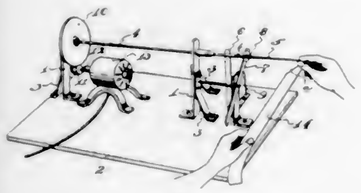
2. A multiple cylinder internal combustion engine comprising two cylinders, a tubular piston in each cylinder having a bottom substantially in the middle of its length

and capable of an oscillatory motion about its axis for the purpose of opening and closing ports in the skirt, a gudgeon pin of each piston prolonged at least to one side, a movable guide member into which the said prolongation engages, a control member for reciprocating the said guide member and oscillating the piston in addition to its reciprocating movement, a crank case, a crank shaft



and two stationary internal projections provided with packing rings extending from below and from above towards the bottom of the piston and into the tubular skirt of the piston, the said projections in conjunction with the bottom of the piston divide the cylinder space into two working chambers of which the lower serves for the generation of compressed air and the upper as an explosive chamber.

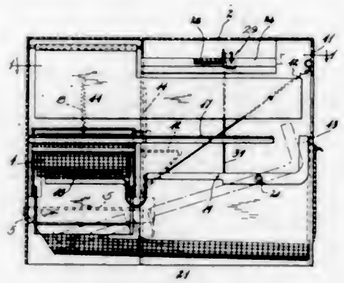
1,858,366. CIGARETTE HOLDER AND METHOD OF MANUFACTURE. PAUL H. LEHMANN and PARK P. SIMPSON, Dallas, Tex. Filed Aug. 8, 1930. Serial No. 473,843. 3 Claims. (Cl. 93—77.)



1. The herein described method for manufacturing cigar and cigarette holders which consists initially in cutting strips of material into predetermined lengths and cutting their ends at an oblique angle, in applying the said ends to a rotating mandrel to spirally wind said strips thereon, in inserting a ferrule over said wound strip, in cutting off the irregular end of the strip and ferrule and finally in inserting reinforcing tips in either end to finish the article.

1,858,367. TRAP NEST. THOMAS LEONARD, Compton, Calif., assignor to Leonard Automatic Sure Kno Trapnest Co., Ltd., Los Angeles, Calif., a Corporation. Filed Mar. 27, 1929. Serial No. 350,262. 9 Claims. (Cl. 119—47.)

1. A trap nest for fowls comprising a nest compartment, a pair of nests pivotally mounted in said compartment, an exit passage between said nests and open thereto, an egg tray pivotally mounted in said passage, said egg tray being adapted to be depressed by the egg laid by the fowl, recording means in said passage, means operatively connecting said egg tray and recording means whereby the



recording means is exposed when said tray is depressed, said recording means being acted upon by the fowl as it leaves the nest.

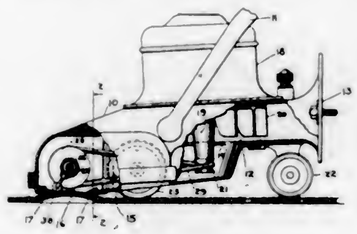
1,858,368. PROTECTIVE COATING. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,829. 5 Claims. (Cl. 91—68.)

1. The method of protecting oil containers used for the storage of crude and partially refined oil from deterioration, which comprises coating the body with paint substantially impervious to moisture, and applying a surface coating of animal glue to the coating of paint.

1,858,369. PLASTIC PAINT. HARRY K. LINZELL, La Grange, and HERMAN A. SCHOLZ, Oak Park, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1928. Serial No. 321,028. 10 Claims. (Cl. 106—34.)

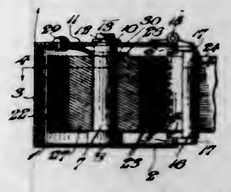
1. A plastic composition including a mixture of dead burned gypsum coarsely ground so that 90–100% of same passes a 100 mesh screen and dead burned gypsum ground so that 90–100% of same passes a 325 mesh screen, a farinaceous substance, a water soluble gumlike hardening substance, and an accelerator, the dry mixture being adapted to be mixed with water and harden upon drying.

1,858,370. SUCTION CLEANER. CHARLES E. LUCKE, New York, N. Y., assignor to The Hoover Company, a Corporation of Ohio. Original application filed Oct. 23, 1922, Serial No. 596,185. Divided and this application filed Sept. 16, 1927. Serial No. 219,859. 18 Claims. (Cl. 15—13.)



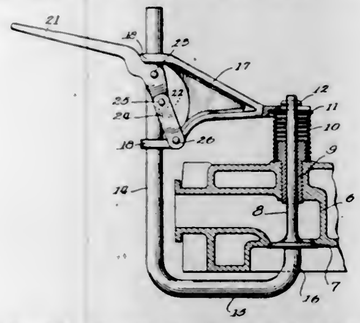
1. In a suction cleaner having a downwardly facing suction mouth, a rotatable member mounted above the suction mouth, the rotatable member having mounted thereon and rotatable relatively thereto agitating elements having fixed orbits of travel, and means driving the rotatable member.

1,858,371. GOLD LEAF LAYING DEVICE. WILLIAM S. LUTZ, Merchantville, N. J. Filed Sept. 30, 1931. Serial No. 566,005. 1 Claim. (Cl. 41—7.)



A gold leaf laying device comprising an annular casing having an opening in the vertical annular wall thereof, a stem secured to the bottom of said casing and extending beyond the upper edge thereof, said stem having an enlarged base portion and a reduced top portion, lugs carried by the annular vertical walls of said casing in registration with said opening, a roller journaled in said lugs, a cover for said casing hinged to the upper of said lugs, said stem projecting through said cover, a catch pivoted on the upper side of said cover and having a hooked end adapted to engage the reduced portion of said stem to lock said cover in closing position, a gold leaf roll carrying spool mounted for free rotation around said stem and resting on said enlarged base, and a spring carried by the under side of said cover and adapted to bear on said spool.

1,858,372. VALVE SPRING COMPRESSOR. NORRIS F. MCNAUGHT and EDWARD H. PETERSON, Chicago, Ill., assignors to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 9, 1931. Serial No. 573,818. 2 Claims. (Cl. 29—86.3.)



1. A device of the class described comprising a substantially L shaped member having its base arm offset in a line parallel to its other arm, a movable jaw member provided at one end with spaced arms receiving and adapted to reciprocate upon the last mentioned arm of the L shaped member, said movable jaw member having a bifurcated end disposed in alignment with the aforesaid offset portion of the L shaped bar, said bifurcated end being rabbeted on the surface thereof opposed to the said offset portion, a lever pivoted to the L shaped member between the aforesaid spaced arms of the movable jaw member, and a link pivotally connecting said lever with the movable jaw member, said lever and link and their several pivots constituting a locking toggle, substantially as and for the purpose set forth.

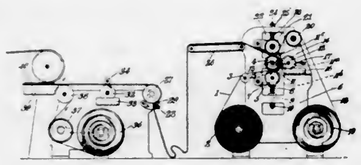
1,858,373. PROPELLANT EXPLOSIVE. JOSEPH D. MCNUTT, New Haven, Conn., assignor, by mesne assignments, to Winchester Repeating Arms Company, a Corporation of Maryland. Filed July 26, 1929. Serial No. 381,389. 4 Claims. (Cl. 52—10.)

2. A propellant powder, comprising gun cotton, charcoal, sulphur, barium nitrate and basic lead nitrate.

1,858,374. PROCESS FOR MAKING JAMS, JELLIES AND KINDRED PRODUCTS. WILLIAM A. ROOKER and VICTOR E. SPEAS, Kansas City, Mo., assignors to Speas Mfg. Co., Kansas City, Mo., a Corporation of Missouri. Filed Aug. 3, 1929. Serial No. 383,421. 4 Claims. (Cl. 99—11.)

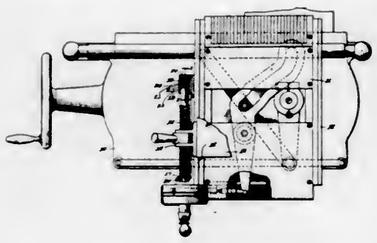
1. A process of making a jelly-like product, comprising boiling a mixture of sugar, water and pectin to a desired concentration of the sugar, lowering the temperature of the boiled mass to about 170° F. or less, adding an organic acid thereto in an amount sufficient to effect, jellifying, and permitting such mass to cool whereby setting takes place.

1,858,375. MACHINE FOR MAKING DOUBLE-FACED CORRUGATED PAPER BOARD. LOUIS H. SCHROEDER, Woodhaven, and JOSHUA WAGNER, Brooklyn, N. Y., assignors to Progressive Corrugated Paper Machinery Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 8, 1926. Serial No. 100,515. 4 Claims. (Cl. 154—32.)



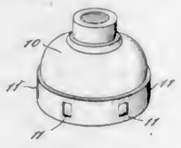
1. A machine for making double-faced corrugated paper board comprising means for continuously making and feeding a long single-faced corrugated paper, a mechanism adapted to continuously apply a facing sheet to the unfaced side of said single-faced corrugated paper and feed along the double-faced board thus formed, and an adjustable tension device located between said means and said mechanism for acting upon the single-faced paper as it is fed to said mechanism, said device acting as a brake on the single-faced corrugated paper in opposition to the feeding action of the mechanism aforesaid.

1,858,376. FEED MECHANISM FOR SLICING MACHINES. ANTON C. SENSOW, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Oct. 8, 1926. Serial No. 140,255. 17 Claims. (Cl. 146—102.)



15. In a slicing machine, the combination with a feed screw, of a spring for producing end thrust on said feed screw, a member interposed between said screw and spring to transmit said end thrust from said spring to said screw and means for preventing rotation of said member when said feed screw is actuated.

1,858,377. SHELL AND CAP FOR ELECTRIC LIGHT SOCKETS. FRANK SLADY, Brooklyn, N. Y., assignor to Leviton Manufacturing Company, Brooklyn, N. Y., a Copartnership consisting of Isidor Leviton and Evser Leviton. Filed June 26, 1925. Serial No. 39,637. 7 Claims. (Cl. 173—362.)



1. In an electric light fixture, a cap having openings therein, a shell slit along lines at an acute angle to each other, the metal adjacent said slits being bent to form an extension to project into one of said openings when said cap is placed on said shell, the metal of said extension being bent backwards.

1,858,378. EXPANDING BAR. BENJAMIN WALTER SNODGRASS, Denver, Colo. Filed July 11, 1927. Serial No. 204,965. 3 Claims. (Cl. 262—12.)

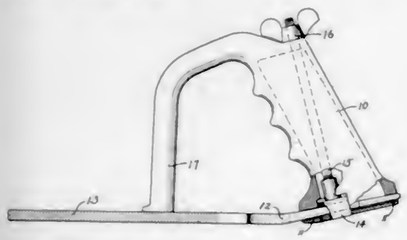


1. In an expanding bar, an inner wedge bar having its opposite sides beveled, each of said sides being provided with a rib, and an outer wedge member composed of four segments, each of said segments provided with a groove adapted to engage a rib on the sides of the inner wedge bar, said outer segments forming a circular shaped bar when the inner wedge bar is in its contracted position.

1,858,379. PROCESS FOR WEIGHTING TEXTILE MATERIAL. HAROLD W. STIEGLER, South Manchester, Conn., assignor to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Aug. 21, 1928. Serial No. 301,167. 13 Claims. (Cl. 8—13.)

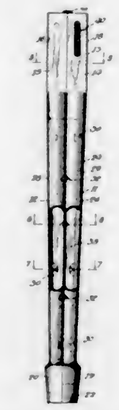
1. The process of weighting textile material which comprises treating it with a dilute water solution of a hydrolyzable metal salt, said solution containing a substance furnishing negative ions common to said metal salt in an amount sufficient to inhibit effectively the hydrolysis of said salt.

1,858,380. FILE HANDLE. VIDA L. STODDARD, Frankfort, Ind. Filed June 3, 1931. Serial No. 541,827. 1 Claim. (Cl. 29—80.)



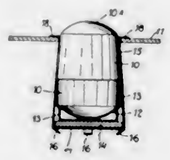
In a file holder, a grip having its lower end oblique to the plane of the file and having a tang receiving passageway near the oblique end and having a notch cut through the grip across said passageway said grip being hollow from the passageway to near the top of the grip, the upper end of the grip being carried over and around and downwardly to contact the file and form a steadying leg, a block seated in the notch and adapted to receive a file tang therethrough said block having a threaded socket and said block being made of a metal softer than that of the file tang and a bolt threaded at both ends having one end screwed into the socket and having the other end passed through the hollow grip and out through a hole in the top of the grip and a nut outside of the grip on the bolt to move the block and fasten the tang in the grip, the lower surface of said block being substantially flush with the oblique lower surface of the grip when the block is in gripping engagement with the file tang and said lower surface of the grip being then out of the plane of the filing movement of the cutting surface of the file.

1,858,381. LEG CONSTRUCTION. WALTER N. VANCE, Chicago Heights, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Aug. 17, 1929. Serial No. 386,612. 18 Claims. (Cl. 45—48.)



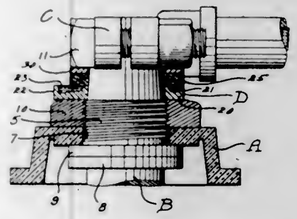
7. A leg comprising a plurality of sections having slotted inwardly turned free edges, and an attaching plate having lugs struck out therefrom and engaging the slots in said free edges for holding said sections together.

1,858,382. REFLECTOR BUTTON AND HOLDING MEANS THEREFOR. JOHN R. WALD, Huntingdon, Pa. Filed Oct. 10, 1930. Serial No. 487,641. 4 Claims. (Cl. 88—1.)



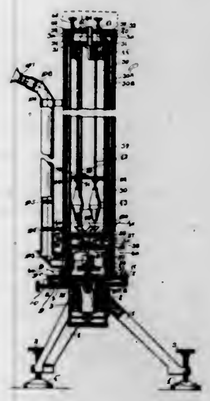
1. A sign comprising a flat holder and a plurality of reflecting units therein, each including a lens formed of a cylindrical body of glass having the outer end convex and the side walls immediately adjacent thereto tapered inwardly toward such end, and a container for said reflecting unit adapted to hold it through engagement of the tapered portion thereof with a similar tapered portion of the container, one end of the container abutting the under surface of the holder and having lugs extending therethrough and flanged over on the outer surface of said holder to retain the unit in position therein.

1,858,383. BATTERY TERMINAL PROTECTOR. JAMES F. ANDERSON, St. Petersburg, Fla. Filed Apr. 18, 1928. Serial No. 270,969. 8 Claims. (Cl. 136—163.)



1. A cable terminal protector for the terminal posts of storage batteries comprising a ring member having a radial extension, said extension having a pocket in its upper side communicating with an endless annular channel provided in the upper side of the ring member, said channel to receive an acid resisting liquid, and an annulus of absorbent material arranged in superposed contacting relation with the upper side of the ring member and above the channel provided therein, said annulus to have circumferential contact with the terminal post and being of such external diameter as to not extend over and cover said pocket in the ring extension.

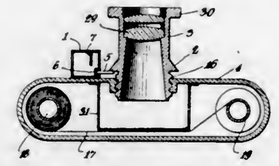
1,858,384. PENDULUM APPARATUS. JOSEF ANDRE, Rochester, N. Y. Filed May 7, 1929. Serial No. 361,243. 25 Claims. (Cl. 88—1.)



1. A pendulum apparatus comprising a hollow pendulum adapted to have light rays pass therethru from one end to the other thereof, a fixed light source near one end of said hollow pendulum and spaced from it, means for supporting said pendulum to permit a free oscillation thereof and allow light from said fixed light source to fall into and pass thru said pendulum during the oscillation thereof, and means for observing the movement of the light rays passing thru said pendulum during the oscillation thereof.

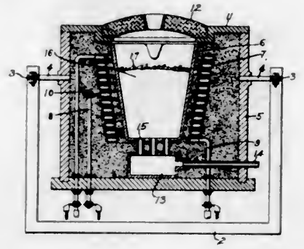
1,858,385. PHOTOGRAPHIC CAMERA. OSKAR BARNACK, Wetzlar, Germany, assignor to Ernst Leitz Optische Werke, Wetzlar, Germany. Filed Sept. 3, 1931, Serial No. 560,987, and in Germany Oct. 18, 1930. 4 Claims. (Cl. 95—44.)

1. In a camera having a distance finder an objective, and its mounting, a special rim on said mounting bearing graduations for indicating the distances, a worm gear on said mounting within the camera housing, a system of levers within the distance finder, a mirror, movable in said distance finder, and a spring controlled pin on one



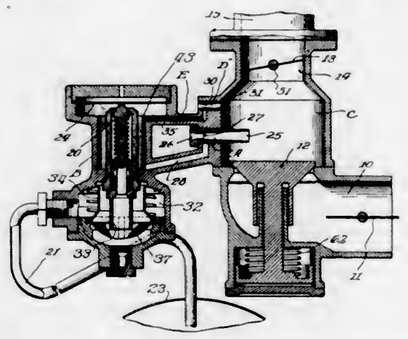
of the levers of said system adapted to be pressed against said rim to transmit the axial movement of the objective to said mirror within the distance finder.

1,858,386. PROCESS FOR PREPARING AND PURIFYING ALLOYS. PORTER H. BRACE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 7, 1927. Serial No. 231,477. 11 Claims. (Cl. 75—22.5.)



1. The process of purifying an iron alloy which comprises placing it in an induction furnace in a molten condition and passing a stream of hydrogen-bearing gas free from oxidizing ingredients through it and maintaining a reducing atmosphere over the surface of the molten metal, said alloy being maintained in a molten condition by electrical energy supplied to said furnace.

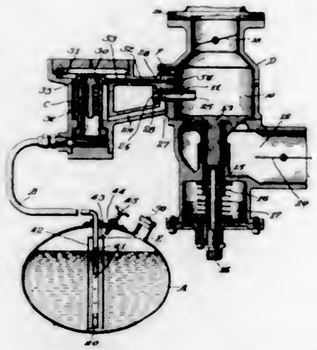
1,858,387. CARBURETOR. CLIFFORD C. BRADBURY, Glencoe, and ROBERT F. BRACKE, Chicago, Ill., assignors to Curtis B. Camp, trustee, Glencoe, Ill. Filed Oct. 10, 1928. Serial No. 311,646. 27 Claims. (Cl. 261—72.)



1. In a carburetor, an induction chamber, means for maintaining a substantially constant depression in said chamber, a fuel chamber, a fuel nozzle operable by induction chamber depression to conduct fuel from the fuel

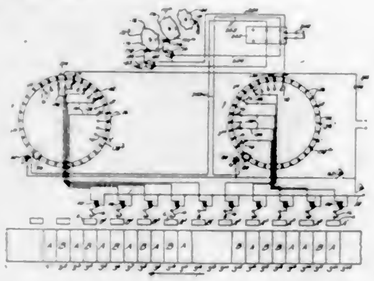
chamber to the induction chamber, and a Venturi tube having an unrestricted air inlet having one end communicating with the induction chamber and having its throat communicating with the upper region of the fuel chamber to withdraw gas from said fuel chamber, the passage between the throat of said Venturi tube and said fuel chamber offering relatively high resistance to the passage of fuel therethrough and relatively low resistance to the passage of air therethrough.

1,858,388. FUEL FEED SYSTEM FOR CARBURETORS. CLIFFORD C. BRADBURY, Glencoe, Ill., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed Sept. 8, 1929. Serial No. 389,902. 9 Claims. (Cl. 261—72.)



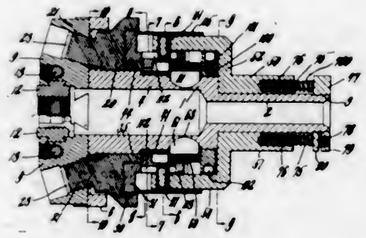
1. A fuel feed system for carburetors comprising a low level supply tank, a fuel chamber at substantially the level of the carburetor and connected with said supply tank, means for maintaining the fuel chamber under a depression in pressure to cause the fuel to be lifted thereto, means for admitting air to the fuel at the main supply tank, whereby the fuel may pass to the fuel chamber in slugs, and other means subjecting the air in said fuel chamber to a suction greater than the depression created by said first means for withdrawing the air from the fuel chamber after the fuel and air has been lifted thereto.

1,858,389. CONTROL DEVICE. CLINTON W. BROWN, Morrisville, and JOHN A. SOISSA, Philadelphia, Pa., assignors, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 4, 1930. Serial No. 425,755. 32 Claims. (Cl. 101—199.)



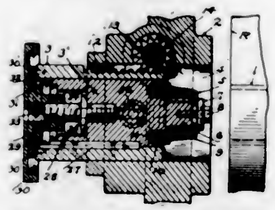
9. A device for controlling the order of operations of a plurality of series of mechanisms which comprises means on each mechanism for holding it inoperative or releasing it to permit operation of the mechanism during each cycle of its operation, means associated with the holding means of each mechanism of at least one series yieldably tending to maintain said holding means in the holding position, means associated with the holding means of at least one other series yieldably tending to maintain said holding means in the released position, means associated with each holding means for moving it into the opposite position against said yieldable means, and means movable in timed relation to said mechanism adapted to actuate successively said moving means of both series in the same order as the associated mechanisms are encountered by a portion of material passing therethrough.

1,858,390. TORSION RELEASED DIE. ERNEST T. BYSSHE and ROBERT R. FINN, Springfield, Vt., assignors to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed June 26, 1929. Serial No. 373,718. 19 Claims. (Cl. 10—95.)



1. A mechanism of the class described comprising a body, chasers carried by said body and movable between closed operative positions and open inoperative positions, means biased to move said chasers to open positions, latching means for holding said chasers against moving to open positions and movable to release said chasers, and means for moving said holding means to chaser released position, said mechanism including cooperating latch parts for preventing movement of said holding means to chaser released position until one of said parts has been rocked to a predetermined extent about the axis of work operated on by said chasers.

1,858,391. CHUCK MECHANISM FOR WEB ROLLS. HERMAN P. CLAUBERG, Jersey City, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 22, 1926. Serial No. 143,343. 6 Claims. (Cl. 242—68.)

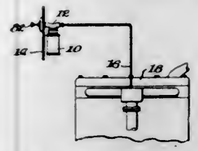


1. In a chuck mechanism for supporting a web roll, the combination with framing of inner and outer telescoping blocks having a sliding movement in the framing and non-rotatable with respect to each other, a core engaging member carried by one of the blocks, a rack carried by the other of the blocks, a gear engaging the rack, an operating arm for operating the gear, and means for locking the arm in core engaging position.

1,858,392. DECARBONIZING APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 26, 1929. Serial No. 388,343. 6 Claims. (Cl. 123—198.)

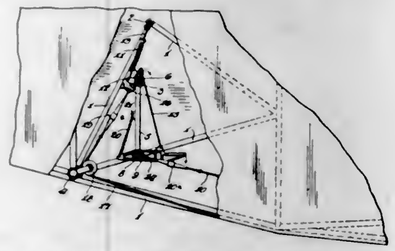
1. In apparatus of the class described, the combination of a valve body, a carbon solvent container detachably

secured thereto, a conduit leading from said container to the intake manifold of an internal combustion engine, a valve adapted to close said conduit, and an aperture



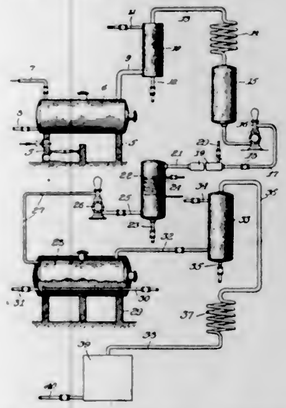
in said body to permit entrance of air when said valve is in closed position, said aperture admitting the air to said conduit on the side of said valve nearest said container.

1,858,393. AIRPLANE WHEEL BRAKE OPERATING MEANS. RICHARD HENRY DEPEW, Jr., Forest Hills, N. Y., assignor, by mesne assignments, to The Aviation Patent and Research Corporation, a Corporation of New York. Filed Aug. 8, 1928. Serial No. 298,231. 6 Claims. (Cl. 244—29.)



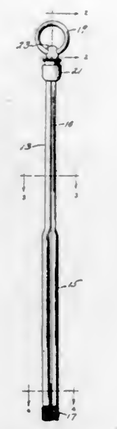
1. The combination in an airplane having wheel brakes and rudder controlling mechanism of separate manually operable brake operating means for each wheel including a separate lever for each wheel associated with said rudder controlling mechanism and adjacent thereto but separately and independently engageable and operable.

1,858,394. PROCESS FOR TREATING HYDROCARBON OILS. STERLING H. DIGGS and JOHN M. MCGEE, Casper, Wyo., and THOMAS S. COOKE, New York, N. Y., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 5, 1928. Serial No. 259,314. 16 Claims. (Cl. 196—31.)



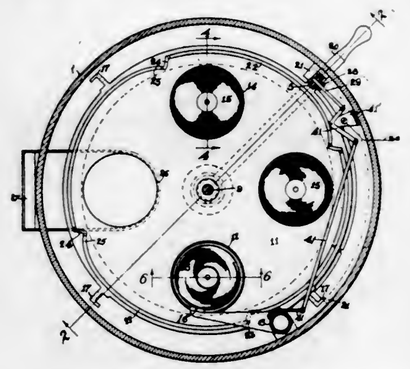
1. The method of treating sulfur containing hydrocarbon oils comprising distilling said oils to form a distillate having an end point not less than 5° F. nor more than 35° F. above that of the desired finished product, treating said distillate with sulfuric acid, and redistilling said treated distillate to form a distillate product having the end point desired.

1,858,395. OIL BURNER LIGHTER. JOHN S. EAGAN, Providence, R. I. Filed July 13, 1931. Serial No. 550,428. 5 Claims. (Cl. 158—10.)



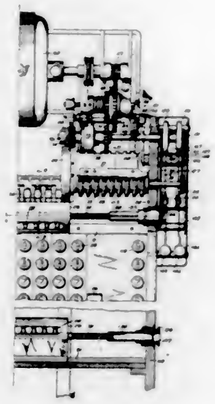
1. In an oil burner lighter, an integral tubular shaft including a flattened portion at one end thereof, an oblong ignition tip of fire resistant material gripped by said flattened portion and projecting from the end thereof, and an annular terminal member pivotally supported upon the other end of the shaft.

1,858,396. SOUND RECORDING AND RECORD VENDING MACHINE. EDMUND FEY, San Francisco, Calif. Filed July 8, 1929. Serial No. 376,659. 5 Claims. (Cl. 274—10.)



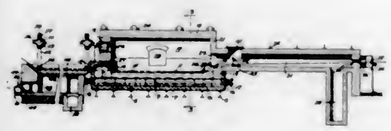
1. In a sound recording machine comprising a rotatable record support, means for rotating the support, a turntable adapted to carry a plurality of records, means for actuating the turntable whereby a plurality of records may be successively delivered to and from the record support, vibration transferring apparatus pivotally mounted to engage with and disengage from a record on the support, and means for lowering and raising the vibration transferring apparatus, which said means comprises a projection on the said apparatus riding in a groove in the turntable.

1,858,397. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed June 1, 1926. Serial No. 112,757. 20 Claims. (Cl. 235—144.)



1. In a calculating machine, a frame, a carriage displaceable longitudinally on said frame, a register mounted on said carriage, a zero resetting device movable with the carriage and associated with said register, an electric motor mounted on said frame, and means for causing the motor to operate the zero resetting device to reset the register to zero in any of a plurality of positions of the carriage.

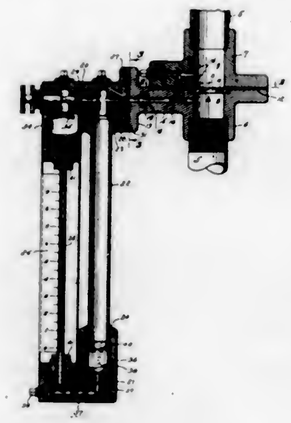
1,858,398. APPARATUS FOR HEAT TREATING WIRE. MARTIN H. GERRY, 3d, San Francisco, and CLAUDE J. BROOKS, Redwood City, Calif., assignors to E. H. Edwards Co., San Francisco, Calif., a Corporation of California. Filed May 31, 1928. Serial No. 281,680. 5 Claims. (Cl. 263—3.)



2. In a wire treating furnace, a hearth comprising an inverted arch of refractory earth material, means for supporting the arch, means for applying flame over the hearth, means for confining the flame to a central portion of the hearth, and means for passing wire into and out of the furnace externally to said central portion.

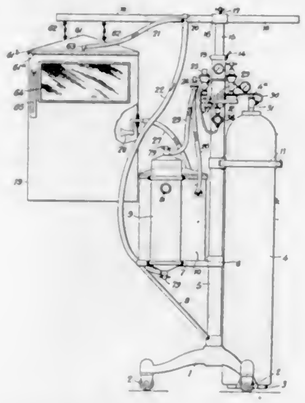
1,858,399. FLOW-METER CONSTRUCTION. BARTON JONES, Los Angeles, Calif. Filed May 21, 1928. Serial No. 279,399. 3 Claims. (Cl. 73—167.)

1. In combination; a differential pressure gauge having separate passages leading from adjacent points of its exterior surface; a companion device having separate passages leading from different sources of pressure to similarly positioned points of its exterior surface; and a gasket of substantial thickness interposed between said surfaces and engaging them on its opposite sides; said gasket having a hole therethrough opposite one of the passages of each of said devices, and a concentric arcuate slot therethrough opposite the other of said passages.



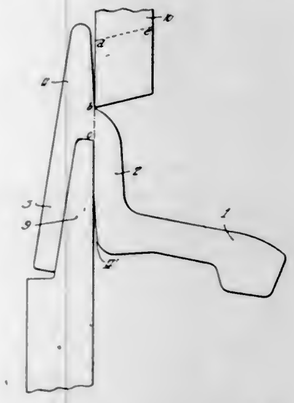
2. A construction as set forth in claim 1 wherein said devices are adapted for being connected together with said surfaces in a plurality of rotative relations about an axis that is perpendicular to the surfaces, and that is concentric with said hole in the gasket.

1,858,400. OXYGEN THERAPY APPARATUS. FREDERICK W. KOEHLER, Wilkinsburg, Pa. Filed Sept. 17, 1930. Serial No. 482,025. 3 Claims. (Cl. 128—191.)



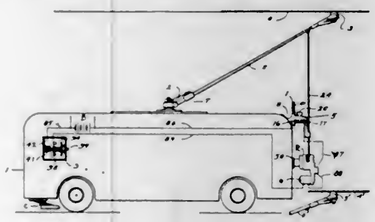
1. An oxygen therapy apparatus comprising in combination, a treating chamber of a size to at least partially cover a patient, said chamber having an inlet and an outlet passage for circulating treated air therethrough, of a source of treating medium under pressure, a cooler and a regenerator, a system of piping connecting said chamber with the pressure source and with the cooler and regenerator, an injector having its suction side connected to the regenerator and its delivery side to the cooler whereby to muffle the hissing sound of the fluid pressure passing to the system, and pressure regulating means for releasing a constant supply of the treating medium at a constant predetermined pressure independently of the pressure of said source.

1,858,401. MEANS FOR SHEARING CONTINUOUS BARS. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed Apr. 13, 1929. Serial No. 354,777. 2 Claims. (Cl. 164—47.)



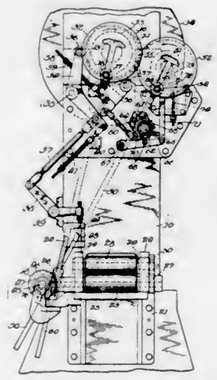
1. In shearing means for shearing off the base of a continuous type of rail joint bar for converting it into a non-continuous type of bar, a lower fixed shear blade for disposal between the flange and the base of the bar, and shaped to hold and position the bar thereon, and an upper moving blade co-operating with said lower blade to shear off the base of the bar while said flange and said base are in normal relation to each other.

1,858,402. TROLLEY POLE DEVICE. ERNST A. LARSSON, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Sept. 11, 1930. Serial No. 481,146. 20 Claims. (Cl. 191—86.)



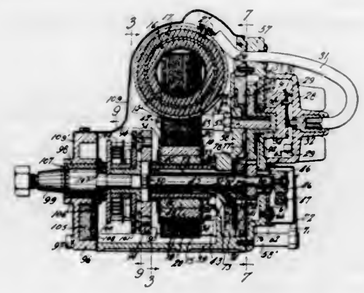
1. A system comprising a vehicle, a current collector mechanism pivotally mounted thereon and having means biased to raise the mechanism about its pivot point, a retrieving mechanism having a rotatable drum, an electric motor operatively connected to the drum to rotate the drum and electrically operated means to make such operative connection at will of the vehicle operator and means biased to break said operative connection, a flexible member connecting the collector mechanism and the drum to draw the collector mechanism downward when the motor rotates the drum in one direction, a hold down mechanism comprising a base having secured thereon guides for the collector mechanism and a movable latch biased to its latching position to engage and hold the collector mechanism down and a normally closed switching mechanism operated by the downward movement of the collector mechanism to control the operation of the electric motor when the pole has been lowered to a predetermined position, a normally open switch under control of the operator and a circuit connecting the switch, the hold down mechanism and the electric motor in series and to a source of power such that when the normally open switch is closed the motor will operate and the operative connection between the motor and drum be made to rotate the drum to draw the collector mechanism downward until it engages the normally closed switch and opens the same to open the operating circuit and release the drum from the motor.

1,858,403. JUMP FEED MECHANISM. FREDERICK J. LITTELL, Chicago, Ill., assignor to F. J. Littell Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 24, 1931. Serial No. 552,863. 5 Claims. (Cl. 164—89.)



1. In a press of the character described, in combination with feeding rollers, an actuating shaft operatively connected to said rollers, a main drive shaft for the press, a reciprocating rod actuated thereby, said rod having connection to the actuating shaft for rotating the rollers, and other means including an auxiliary shaft and a reciprocating rod operated therefrom, said rod having connection to the drive shaft for increasing the rotation of the rollers at intervals.

1,858,404. MAGNETO. TERRENCE G. LOUIS, West Springfield, Mass., assignor to Wico Electric Company, West Springfield, Mass., a Corporation of Massachusetts. Filed July 22, 1930. Serial No. 469,789. 17 Claims. (Cl. 123—149.)



1. In a magneto, stationary and movable elements effective on relative movement to produce a change of flux and cause the generation of an electromotive force, a frame supporting the stationary element, a stud fixed to and projecting from said frame, said movable element be-

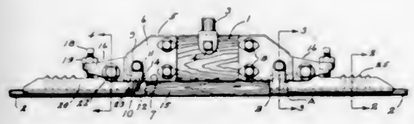
ing journalled on the exterior of said stud, an independently journalled driving member axially spaced from the stud and having an end face movable adjacent an end face of the movable element, and interengaging means between said end faces for driving the movable element from said member.

1,858,405. PHOTOGRAPHIC MOUNT. JOHN MACLAURIN, Ware, Mass. Filed Sept. 24, 1931. Serial No. 564,840. 4 Claims. (Cl. 40—158.)



1. An article of the character described comprising a photograph, and a backing therefor comprising a sheet of paper, one side of which is adhesively secured to the back of the photograph, the other side of said sheet having a multiplicity of raised portions distributed over approximately the entire surface of the paper and separated by intervening lower portions.

1,858,406. SECTION INSULATOR. SAMUEL S. MATTHES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Oct. 25, 1930. Serial No. 491,136. 11 Claims. (Cl. 191—39.)



1. A section insulator comprising an insulating bar and end members secured to the ends of the bar in insulated relation to each other, a wire holding member pivotally secured to each end member, adjustable means to engage and hold the wire holding members against pivoting and to change the alinement of the holding members relative to each other and means on each holding member to secure a conductor thereto.

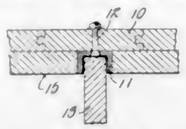
1,858,407. LOADING STATION AND PLATFORM. FREDERICK E. MCCAIN, Detroit, Mich. Filed Apr. 18, 1930. Serial No. 445,279. 3 Claims. (Cl. 104—30.)



1. A structure of the character described comprising floor levels located beneath the normal highway level, side walls projecting upwardly from said floor levels to a point above the normal highway level, upwardly inclined ramps supported by said side walls for permitting passage of automobiles over and above said floor levels, downwardly inclined ramps between said floor levels and having tracks accommodating the passage of street cars, and doors and stairs for permitting the entrance of passengers from said normal street level to said lower levels.

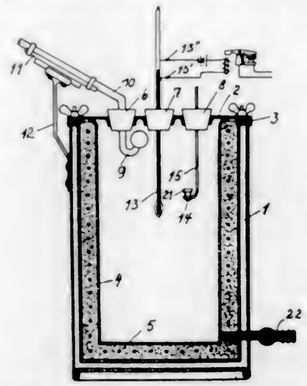
1,858,408. FREIGHT CAR. JOHN T. MCENIRY, Bessemer, Ala. Filed Apr. 23, 1930. Serial No. 446,769. 1 Claim. (Cl. 105—376.)

The combination with a freight car or the like of a pair of channel irons vertically secured to and embedded in the sides of said car with their edges flush with the inside surface of the walls of the car and a plurality of partition boards loosely placed in vertical position one above the



other in said channel irons and of a length greater than the distance between the inside surfaces of said walls of the car, substantially as set forth.

1,858,409. PROCESS FOR MEASURING WATER CONTENTS. ERICH MITTELSTEINER, Welzow, Germany. Filed Dec. 28, 1929, Serial No. 417,154, and in Germany Dec. 19, 1927. 3 Claims. (Cl. 23—230.)



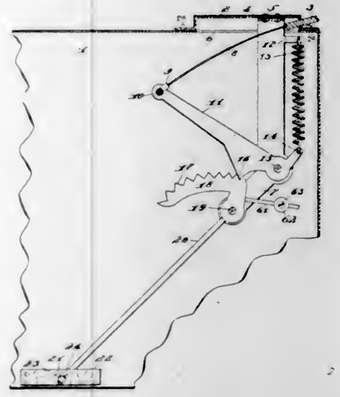
1. A process for measuring water contents of solid or liquid bodies, consisting in introducing a measured quantity of test material into an airtightly closed space, heating said space to a constant temperature, and measuring after a certain time the augmentation of the gas and steam volume contained in said space.

1,858,410. WINDING CONE. FRANK E. MOREY, Chicago, Ill., assignor to Oscar Heineman Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1920. Serial No. 414,284. 1 Claim. (Cl. 40—10.)



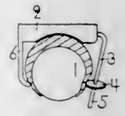
In combination with a winding cone formed with a countersunk centrally apertured tip, a button formed with a glove-fastener shank adapted to snap into and out of the aperture of said tip and a head occupying the countersink, said head including a colored disc symbolic of the size of the thread to be wound on the cone.

1,858,411. AUTOMOBILE LIQUID LEVEL INDICATOR. WILLIAM H. MUZZY, Evanston, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed June 25, 1923. Serial No. 647,724. 3 Claims. (Cl. 73—82.)



1. In an automobile the combination with a fuel supply tank, of a depth indicating gage, a pivoted stop element in the tank having teeth disposed in a series eccentric to the pivot of the element, a float controlled means to rotatably position the stop element, a member having a projection for selectively engaging a tooth on the stop element, a wire and connections between the member and the gage, a spring for moving the member and thereby the connections and the wire in a direction such as to engage the member projection with the stop element tooth, a brake mechanism for arresting the speed of the automobile and a common means for operating the brake mechanism and moving the wire against the tension of the spring.

1,858,412. TRACTION PROMOTING ACCESSORY FOR AUTOMOBILES. PAUL A. NEUMANN, Chicago, Ill. Filed Mar. 19, 1931. Serial No. 523,736. 4 Claims. (Cl. 152—14.)

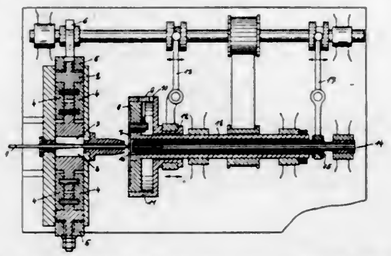


1. In traction promoting accessories for automobiles the combination of a traction promoting body fitting the periphery of a tire, a member attached to the traction promoting body and provided with revolvable round bodies adapted to be rolled over the outer side of the tire and to grip it near the rim, and members attached to the traction promoting body and adapted to be pressed against the inner side of the tire near the rim.

1,858,413. CALCIUM BORIDE. ERICH NOACK, Leverkusen-Wiesdorf-on-the-Rhine, and FRIEDRICH SCHUBERT, Cologne-Deutz-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 16, 1931, Serial No. 537,988, and in Germany Dec. 30, 1929. 4 Claims. (Cl. 23—204.)

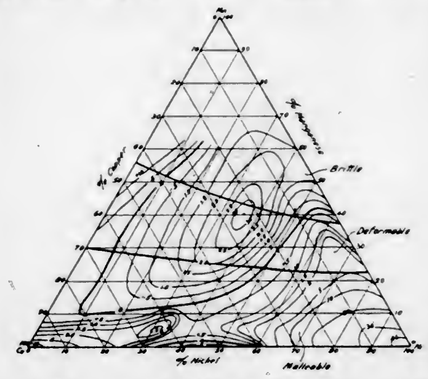
1. The process for the production of calicum boride which comprises heating to a bright white heat a mixture of carbon, a calcium compound which dissociates at the reaction temperature and a boron compound of the group consisting of boric acid anhydride, boric acid and salts thereof.

1,858,414. MACHINE FOR MAKING INDENTED TAPER PINS. WILHELM NÖLLENBURG, Dusseldorf, Germany, assignor to the Firm: Malmedie & Co. Maschinenfabrik Aktien-Gesellschaft, in Dusseldorf, Germany. Filed Aug. 11, 1928, Serial No. 299,077, and in Germany July 20, 1927. 4 Claims. (Cl. 29—27.)



1. In a machine for automatically making indented taper pins from wire, means for supporting a wire length, means for forming the wire including a series of radially movable tools encircling the wire, said tools being of chisel form and acting to longitudinally indent the wire, a ring mounted for rotary reciprocatory movement, means for operating the ring, and means intermediate the ring and said tools whereby in the movement of the ring the tools are forced into operative engagement with the wire, and means for severing the wire into appropriate lengths immediately following the operation of the forming means.

1,858,415. ALLOY. NORMAN B. PILLING, Plainfield, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 23, 1924. Serial No. 739,260. 6 Claims. (Cl. 75—1.)

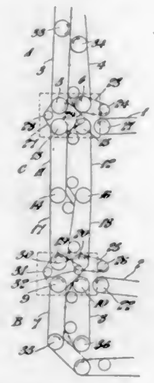


1. An alloy comprising 15% to 55% copper, less than 47% and more than 22% nickel and more than 20% manganese, said alloy having a negative temperature coefficient of resistance greater than 1×10^{-4} per degree centigrade.

1,858,416. CONVEYER. HAROLD HERBERT RAPLEY, Bedford, England, assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 25, 1930, Serial No. 423,318, and in Great Britain Mar. 8, 1929. 9 Claims. (Cl. 198—81.)

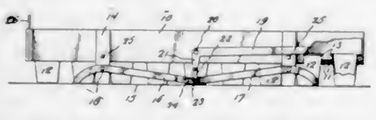
1. In a conveyer system, in combination, a plurality of independently operable conveyer sections, a supply

source associated with each of said conveyer sections, an intermediate conveyer section, and means for rendering



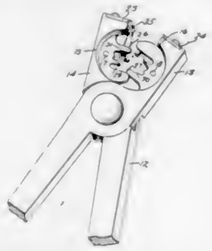
said intermediate conveyer section operable to deliver articles from one of said sources to the conveyer section associated with another of said sources.

1,858,417. CONTAINER FILLING MACHINE. FRED B. REID, Hollywood, Fla. Filed Dec. 30, 1930. Serial No. 505,629. 4 Claims. (Cl. 226—93.)



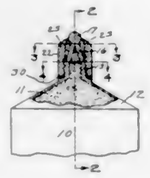
1. A filling machine of the character described comprising in combination with a support, a receptacle having countersunk openings in the bottom thereof, adapted to slidably receive containers to be filled, means including pivotally mounted legs arranged at opposite sides of the receptacle for supporting the latter elevated above the support, with said containers depending from the bottom thereof, and means for spreading said legs to lower said receptacle, whereby said containers are projected within the latter by contact with said support.

1,858,418. TOOL. CHARLES A. ROWLEY, Bloomfield, N. J., assignor to The Rajah Company, Bloomfield, N. J., a Corporation of New Jersey. Filed Sept. 12, 1930. Serial No. 481,381. 9 Claims. (Cl. 81—15.)



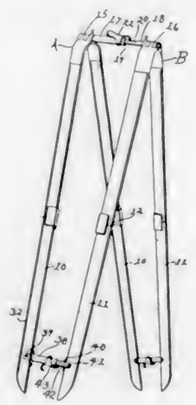
1. A crimping tool comprising a pair of complementary jaws and means for moving said jaws to or away from one another, said jaws having overlapping parts adapted to define an opening between said jaws before the jaws are fully closed together and shaped so that upon further closing of the jaws said opening is narrowed in a direction transverse to their movement whereby said jaws first clamp in said transverse direction the part to be crimped, and projections on said jaws into said opening adapted to engage the part to be crimped and to force re-entrant folds therein after it has been confined in the transverse direction by the preliminary movement of the overlapping parts.

1,858,419. CAP FOR PASTE TUBES. ALVIN F. SETHER, Eugene, Oreg. Filed Mar. 12, 1930. Serial No. 435,241. 6 Claims. (Cl. 221—60.)



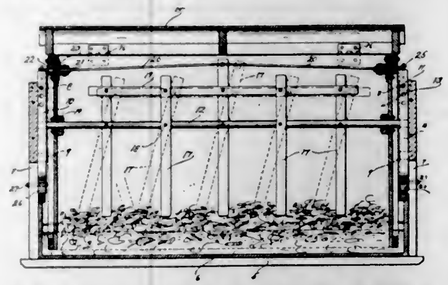
1. In a paste container the combination of a flexible tube having a threaded outlet with a pair of arms projecting from the end of said outlet and converging toward each other in a manner to permit an opening to exist between said arms communicating with said outlet tip, said arms terminating in a tip of circular cross section, a cap on said outlet having a recess formed therein larger than said tip, the outer end of said cap converging to form an opening adapted to be closed by said tip, and a gasket between said cap and the junction of said tube and threaded outlet.

1,858,420. TROUSERS STRETCHER. HENRY SONDERSEN and HENRY GLEMMING, Brooklyn, N. Y. Filed Dec. 2, 1930. Serial No. 499,548. 2 Claims. (Cl. 223—19.)



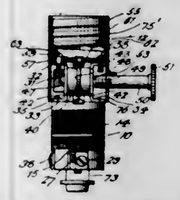
1. In a stretcher for trousers, a pair of frames having spaced side members, hinge plates secured to said side members, hinge pins extending through said hinge plates to hingedly join said pair of frames and extended beyond said hinge plates, the extended portions of said hinge pins being slidably associated, and a locking device on the extended portions of said hinge pins for securing the side members of each frame in corresponding adjustment.

1,858,421. FEEDER. EDD YOST and PHILIP STULL, Danville, Ohio. Filed Apr. 17, 1931. Serial No. 530,981. 6 Claims. (Cl. 119—53.)



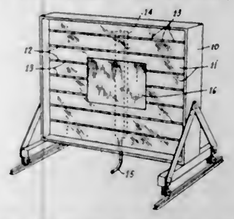
1. In a device of the character described, a trough, a hopper pivotally mounted in operative position to the trough for feeding material to the trough, an agitator arranged in the hopper, and means for transmitting the movement of the hopper to said agitator.

1,858,422. RHEOSTAT-LAMP SOCKET. CARL L. WEICHELT, Philadelphia, Pa., assignor to Wirt Company, Philadelphia, Pa., a Corporation of Maine. Filed Feb. 10, 1930. Serial No. 427,167. 6 Claims. (Cl. 201—49.)



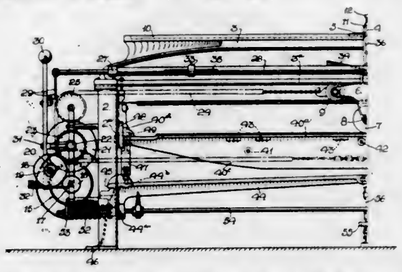
1. A rheostat-lamp socket comprising a lamp socket having an inner and an outer contact, a body carrying a resistance element, a pair of brackets located intermediate the lamp socket and the body and securing the same in axial alignment with one another, terminals for the resistance element extending from that end of the body connected to the brackets, rotary switching means journalled in the brackets and carrying an arcuate short-circuiting contact cooperatively positioned relatively to one of said lamp socket contacts and the resistance terminals to provide a direct conducting path upon rotation of the switching means between said one of said lamp socket contacts and the respective resistance terminals, and lead-in terminals, one in electrical connection with the resistance element and the other in electrical connection with the other of said lamp socket contacts.

1,858,423. PHOTOGRAPHIC APPARATUS. ELLIS WEISKEN, New York, N. Y. Filed Apr. 10, 1931. Serial No. 529,018. 10 Claims. (Cl. 88—24.)



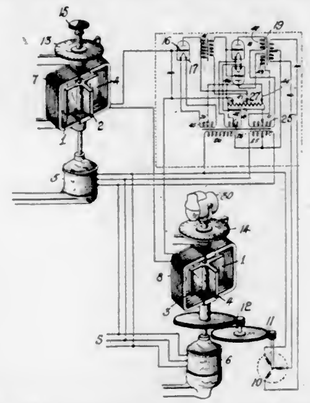
1. A combined focussing screen and retaining member for sensitized material, comprising a series of fixed, separated translucent sections, and means to apply suction to one surface of the sections through the intervening spaces.

1,858,424. MACHINE FOR ROLLING AND FINISHING LEATHER. EVAN GEORGE WILSON, Waterloo, near Liverpool, England. Filed June 18, 1928. Serial No. 286,381. 6 Claims. (Cl. 149—12.)



1. In a machine of the kind specified, a work-supporting bed composed of a plurality of pivotal sections, spring means mounted on said sections to maintain the same in their normal positions and to permit individual and simultaneous pivotal movement of the sections, buffer pieces mounted on said sections to maintain adjacent edges thereof in constant abutment or contact during pivotal movement of the sections, and spring means mounted below said sections and adapted to resiliently support and maintain the work on the sections in continuous engagement with a rotary work-operating tool throughout the movement of such tool over the work.

1,858,425. MEANS FOR POSITIONING REMOTE OBJECTS. BRUNO A. WITTKUHNS, Chatham, N. J., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 11, 1930. Serial No. 488,051. 6 Claims. (Cl. 172—239.)

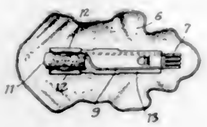


1. In a self-synchronous remote control system, a two-part transmitter comprising rotatable pole pieces, a rotatable winding adjacent said poles, means for continuously relatively rotating one of said parts, and means for turning the other of said parts to any desired position, a two-part receiver having similar poles and winding, means for relatively rotating one of said parts driven from the same supply as said first mentioned rotating means, a reversible motor for rotating the other of said parts, and an amplification circuit in circuit between said windings and motor for controlling the movements of said motor.

1,858,426. JUMPING FROG. HARRY G. WOOLWORTH, Washington, D. C. Filed Mar. 28, 1932. Serial No. 601,690. 5 Claims. (Cl. 46—40.)

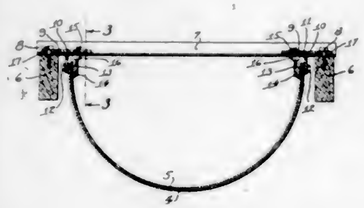
3. A device of the character described comprising a body, a spring actuated kicker device therefor having a

substantially rigid projecting member, a pliable portion on the end of said rigid member, and a deformable spring



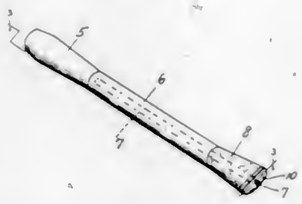
clip adapted to engage said pliable portion and retard the release of said kicker for predetermined periods, substantially as set forth.

1,858,427. FLUME JOINT SUPPORT. LAURENCE W. WYMAN, Oakland, Calif., assignor to California Corrugated Culvert Company, Berkeley, Calif., a Corporation of California. Filed July 24, 1931. Serial No. 552,945. 5 Claims. (Cl. 61—15.)



1. A sheet metal flume comprising a pair of trough sections having their ends overlapping to form a joint; a supporting crosspiece positioned above said joint; a T-shaped bracket carried by said crosspiece, said bracket having its depending leg secured to the upper edge portion of the outer trough section; a lug secured to the upper edge portion of the inner section, said lug movably engaging one horizontal arm of said bracket; and means for forcing said lug downwardly to tighten said joint.

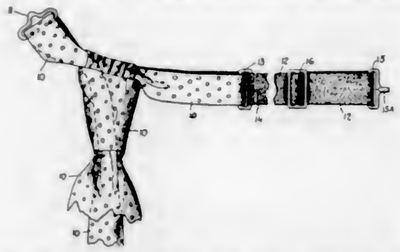
1,858,428. SMOKER'S APPLIANCE. LLOYD F. BAILEY, La Porte City, Iowa. Filed Mar. 19, 1931. Serial No. 523,867. 1 Claim. (Cl. 131—12.)



A mouthpiece for the stem of a cigarette holder, pipe or the like comprising a tubular core and a sleeve formed of a yieldable material on one end of said core, and penetrating prongs radiating from said core and embedded in said sleeve for securing the latter against movement relative to the core.

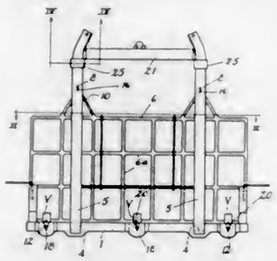
1,858,429. NECKTIE AND METHOD OF TYING SAME. CHARLES M. BEDFORD, Brooklyn, N. Y. Filed Nov. 19, 1930. Serial No. 496,619. 1 Claim. (Cl. 2—155.)

The combination with a four-in-hand necktie of the standard form, of means associated therewith adapting it to be formed into its usual-appearing knotted condition with the knot embracing the neck band and forming side loops therewith, said means including a substantially non-stretchable band, a length-adjustment thereon, slidable



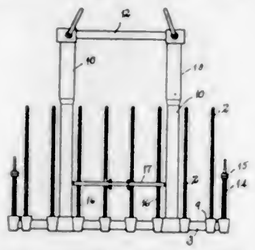
connecting means between tie and band at one end which is secured to the band, and disconnectible means slidably connecting the other end of the band and the tie.

1,858,430. PICKLING CRATE. WILLIAM J. BRADDOCK and CHARLES W. HALLER, Wheeling, W. Va., assignors to Wheeling Bronze Casting Company, a Corporation of West Virginia. Filed Mar. 26, 1930. Serial No. 439,032. 8 Claims. (Cl. 266—7.)



6. In a pickling crate the combination of a base, a plurality of mutually spaced grids extending upwardly from the base, spaced upright members attached to said base, a rod passing through said grids and said uprights and terminally formed to prevent retraction thereof, a rod passing through the grids and an aperture in the base and terminally formed to prevent retraction thereof, spacing members interposed between the grids and carried by said rods, and wedging means associated with at least one grid to maintain the members in firm mutual engagement.

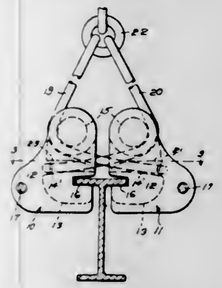
1,858,431. PICKLING APPARATUS. WILLIAM J. BRADDOCK and CHARLES W. HALLER, Wheeling, W. Va., assignors to Wheeling Bronze Casting Company, a Corporation of West Virginia. Filed Oct. 24, 1931. Serial No. 570,823. 5 Claims. (Cl. 266—7.)



1. A pickling crate comprising a plurality of frame sills comprising upwardly projecting partition posts cast integral with the body of each sill, end sills extending

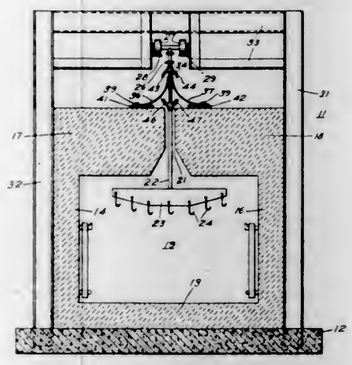
transversely of the frame sills, and connection between the frame sills and the end sills comprising a block of metal cast around and shrunk to the mutually adjacent regions of the frame sills and the end sills.

1,858,432. WORK HANDLING DEVICE. WILLIAM W. CHEWNING, Chester, Pa. Filed Jan. 12, 1931, Serial No. 508,360. Renewed Mar. 22, 1932. 9 Claims. (Cl. 294—16.)



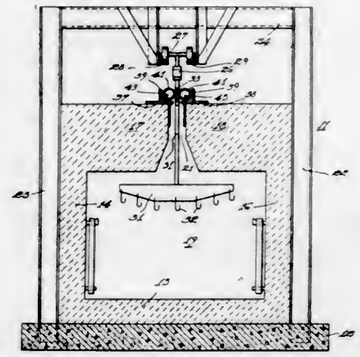
1. A work handling device, comprising a pair of grip-members, each grip-member having a recess formed in its inner face for receiving the flange of the work, and cables for supporting the grip-members, each cable having a relatively movable engagement with the outer side of the corresponding grip-member, and extending inwardly beyond the same, and connected with the companion grip-member, the arrangement being such that the cables draw the upper and lower ends of the grip-members together, and also serve to suspend the same.

1,858,433. SLOT CLOSURE. ORA A. COLBY, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 519,044. 3 Claims. (Cl. 263—8.)



1. In a horizontal-chamber heat-treating furnace having a slot in the roof-wall, an endless conveyor chain moving above the slot and having spaced material-supporting rods depending therefrom into the slot, said material-supporting rods having plates disposed end-to-end in close proximity to each other, and stationary means on the roof-wall including sets of resilient sheets of arcuate shape in lateral section located in end-to-end relation and each having one edge secured to the roof-wall adjacent to the slot and extending towards the slot and having the other edge engaging the plates carried by the depending material-supporting rods.

1,858,434. SLOT CLOSURE. ORA A. COLBY, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 18, 1931. Serial No. 523,501. 3 Claims. (Cl. 263—8.)



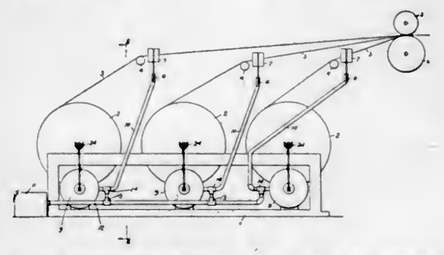
1. In a horizontal-chamber, heat-treating furnace having a horizontal slot in its roof wall, an endless conveyor chain moving above the slot and having material-supporting rods depending therefrom and into the slot, and a slot-closure means comprising filler plates extending between the material-supporting rods and carried thereby, a tubular structure at each side of the rods and filler plates extending parallel with the slot, means on the roof wall adjacent to the slot for supporting the tubular structures in light operative engagement with the respective sides of the filler plates and means on said supporting means cooperating with the tubular structures to prevent longitudinal movement thereof.

1,858,435. COMBINATION CITROUS FRUIT SQUEEZER AND FOOD HOLDER. CHARLES S. CONLON, Tulsa, Okla. Filed Jan. 9, 1931. Serial No. 507,699. 4 Claims. (Cl. 100—49.)



1. A lemon squeezer comprising a collapsible tapered receptacle for the reception of a piece of lemon, the smaller end of said receptacle being provided with means for receiving a support.

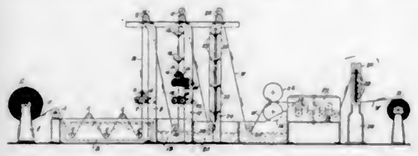
1,858,436. AUTOMATIC SIDE CONTROL FOR ROLLS. CHARLES A. DICKHAUT, New Brunswick, N. J., assignor to John Waldron Corporation, New Brunswick, N. J., a Corporation of New Jersey. Filed June 18, 1930. Serial No. 461,891. 20 Claims. (Cl. 242—76.)



1. In a device for adjusting the paths of a plurality of traveling sheets, each having an associated roll, the

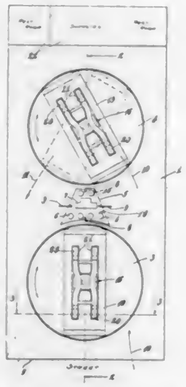
combination with said rolls of individual fluid operated means for adjusting the position of said rolls, and means common to said fluid operated means for maintaining the pressure thereof.

1,858,437. RECLAIMING USED VEGETABLE PARCHMENT TYMPANS. JOHN R. DUFFORD, Paterson, N. J., assignor to The Paterson Parchment Paper Co., Passaic, N. J., a Corporation of New Jersey. Filed Sept. 18, 1929. Serial No. 393,374. 7 Claims. (Cl. 15—269.)



1. The process of reclaiming used vegetable parchment tympan paper, which comprises subjecting such used tympan paper to a chemical agent capable of reacting with the constituents of the ink and thereby reducing the adhesive capacity of the ink in the devices, subjecting the surface of the chemically treated used tympan to a physical wiping action of such limited intensity as to remove the loosened ink from the crevices of the faces of the used tympan while preserving the parchmentized fibrous character of the surfaces of the de-inked tympan, washing and finally calendering the de-inked tympan.

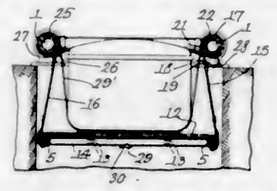
1,858,438. SERVICE STATION. JOSEPH ALEXANDER DUNN, Los Angeles, Calif. Filed Aug. 24, 1931. Serial No. 559,001. 14 Claims. (Cl. 104—44.)



1. In a device of the class described, the combination of a pair of turntables, a distributing station positioned between the turntables, and means for rotating the turntables whereby one of said tables may be positioned at an angle with reference to said distributing station to allow said vehicles to move on to said tables from one side of and leave from the other side of said distributing station.

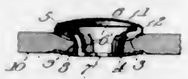
1,858,439. GRAVE CONCEALING DEVICE. WILLIAM C. EVANS, Casey, Iowa. Filed Jan. 24, 1931. Serial No. 511,065. 5 Claims. (Cl. 27—30.)

1. In combination with the side rails of a casket lowering device, a grave concealing device comprising an adjustable frame, a covering for the frame, straps connected with the frame and wound on the side rails, said straps adapted to unwind from the side rails to lower the grave concealing device as the side rails are rotated to lower a casket, and clamps for connecting the straps at one side of the frame to the casket lowering device



to automatically release the straps at one side of the casket lowering device when the grave concealing device reaches a predetermined point within the grave.

1,858,440. FLOATING SNAP FASTENER SOCKET. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 15, 1930. Serial No. 436,210. 1 Claim. (Cl. 24—216.)



A snap fastener socket, comprising a cap rounded on top and peripherally and having an inset back rim terminating in fingers, and a stud-engaging element having a flange of sufficiently less external diameter than the internal diameter of the rounded cap and loosely held in said cap by said fingers turned inwardly below said flange and forming a back to support the stud-engaging element loosely within the cap to permit the stud-engaging element to be floatable in the cap to facilitate the assembling and setting of the device, the exposed portion of the stud-engaging element being resilient and having an inturned stud-engaging portion, the inturned fingers of the cap forming the back of the cap being spaced apart from the flange of the stud-engaging element, and an attaching element received and secured between said flange and the inturned fingers, the stud-engaging member being so positioned and related to the cap and attaching element as to have free floatability therein.

1,858,441. SEPARABLE FASTENER. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 13, 1931. Serial No. 568,607. 1 Claim. (Cl. 24—216.)

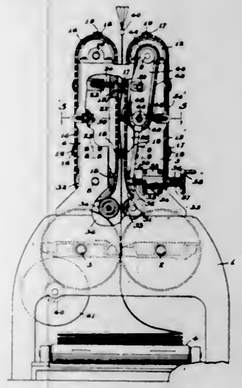


A separable fastener socket, having a resilient barrel portion and a resilient upwardly turned flange extending laterally from and integral with its lower end, and a bead projecting inwardly into the barrel portion and downwardly below said resilient flange at the junction of the barrel portion and said flange, and a collet of metal heavier than the metal of the barrel portion and its flange and provided with a straight bottom underlying the bottom of the flange and extending in close proximity to the bead and below the level of the bead and in close contact throughout its width with the outer face of the upwardly turned flange and having a flange forming an obtuse angle with the straight bottom and of less width than the bottom of the collet and curled loosely upon the top of the resilient flange to permit the expansion and contraction of the socket in the engagement with and disengagement from a complemental stud, said barrel portion having a hole in its top, combined with a cap having a connector provided with a tubular portion which enters said hole in the barrel portion and is clinched therein to set the device upon an object.

1,858,442. MAGNETIC ALLOY. ALBERT A. FREY, Forest Hills, Pa., and GUERNEY H. COLE, Middletown, Ohio, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 17, 1931. Serial No. 551,548. 10 Claims. (Cl. 175—21.)

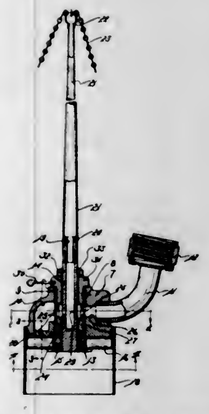
10. A transformer core composed of a plurality of laminations of magnetic sheet material, each of said sheets being formed of an alloy comprising at least 90% iron, .1% to 6% silicon and .1% to 6% arsenic.

1,858,443. FEED MECHANISM FOR SHEET MATERIAL. GEORGE L. FULK, Mentor, Ohio, assignor to The Overfold Company, Chardon, Ohio, a Corporation of Ohio. Filed May 9, 1931. Serial No. 536,133. 17 Claims. (Cl. 270—30.)



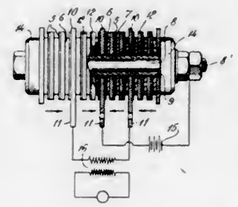
1. A device for feeding sheet material comprising a plurality of gripping devices, means for moving said devices successively in spaced relation and in the same direction into engagement with a strip of sheet material to feed the same and for releasing each gripping device from the strip subsequent to the engagement of another gripping device with the strip, and means for variably deflecting the strip between successive gripping devices to vary the rate of feed of the strip.

1,858,444. WASHING APPARATUS. GEORGE GEDDES, Detroit, Mich. Filed June 21, 1930. Serial No. 462,796. 2 Claims. (Cl. 15—69.)



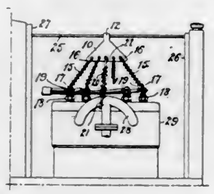
1. A device of the class described, comprising: a head, a bushing mounted in said head; said head having a chamber formed therein; a second bushing rotatably mounted in said first mentioned bushing, said bushings having openings formed therein adapted for registering upon rotation of said second mentioned bushing to a predetermined position; a conduit for delivering liquid into said head, said head having a passage leading from said conduit to said openings in said bushings; a supporting post rotatably mounted concentrically of said second bushing and having openings formed therein communicating with an internal recess formed in said second bushing in communication with the openings formed in said second bushing, said supporting post being tubular at and above said openings; a tubular arm mounted on the upper end of said post and projecting upwardly therefrom; a turbine wheel carried on the lower end of said post, said head having passages formed therein for directing water from said chamber against said turbine for rotating said post.

1,858,445. RECTIFIER. CARL HAMBUECHEN, Belleville, Ill., assignor to The B-L Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 31, 1930. Serial No. 440,635. 9 Claims. (Cl. 175—366.)



1. An electric current rectifier of the dry type comprising a copper sulphide electrode element having a bonding surface of an inorganic salt of an electro-positive metal, and an electro-positive electrode element of aluminum, magnesium or zinc contacting with said surface.

1,858,446. TESTING DEVICE. WILLIAM E. HAUPT, Philadelphia, Pa. Filed Aug. 1, 1930. Serial No. 472,475. 9 Claims. (Cl. 175—183.)

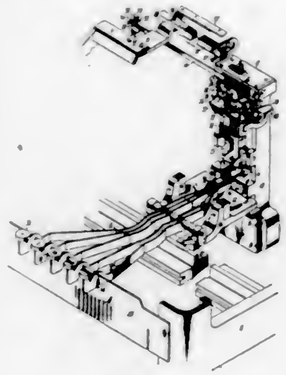


1. A testing device comprising a holder, means upon the holder for attaching the same to a support, a plurality of coiled springs, hooks formed upon the opposite ends of the springs, said holder having an opening formed through the same through which the hooks upon said springs may be inserted and embrace a portion of the holder for supporting the springs thereon.

1,858,447. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,245. 5 Claims. (Cl. 197—178.)

1. In a typewriting and tabulating mechanism, a set of key-operated stops, a universal bar operable by said stops, a pivotal mounting for said universal bar, a movable

friction-pad mounted concentrically with said universal bar, a driving spring between the universal bar and the friction-pad, a brake-strap attached at its ends to the



carriage of the typewriting machine, and a companion friction-pad against which said movable pad is pressed by said spring.

1,858,448. REMOVABLE HEADLIGHT FOR TOY LOCOMOTIVES. CHARLES R. JOHNSON, Fairfield, and WILLIAM E. THORN, Bridgeport, Conn., assignors to The Ives Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 6, 1930, Serial No. 426,329. Renewed Jan. 14, 1932. 13 Claims. (Cl. 240—7.1.)



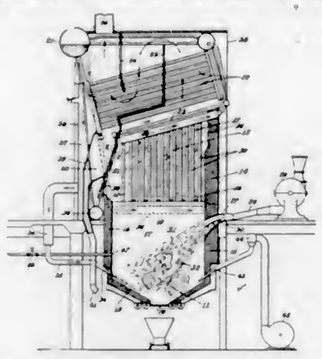
7. A toy locomotive including a boiler having a head provided with an opening, a lens in said opening, and a lamp within said boiler and directly in the rear of the lens and arranged to direct light rays toward said lens.

1,858,449. INTAGLIO INK COMPOSITION. GEORGE D. KNIGHT, Redwood City, Calif., assignor to Emory Winship, San Francisco, Calif. Filed Apr. 16, 1928. Serial No. 270,585. 1 Claim. (Cl. 134—36.)

A quick drying ink for use in intaglio printing of relatively high fluidity and a degree of homogeneity sufficient to cause it to enter and be retained in the depressions of a hard metal intaglio printing form after wiping thereof and to be withdrawn from said depressions by paper without spreading on or excessive penetration in said paper, consisting entirely of a syrup of an asphaltic base and a hydrocarbon solvent, a syrup of dextrine and water in the ratio of approximately three parts of said asphaltic syrup to one part of said second named syrup and pigment.

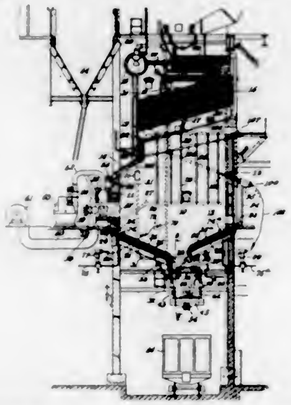
1,858,450. PULVERIZED FUEL COMBUSTION. JAY GOULD COUTANT, New York, N. Y., assignor, by mesne assignments, to Drake Non-Clinkering Furnace Block Company, Inc., a Corporation of New York. Filed Oct. 5, 1925, Serial No. 60,435, and in France Oct. 7, 1924. 13 Claims. (Cl. 122—235.)

1. Method of combustion of pulverized fuel, for example for firing boiler furnaces, consisting in introducing the fuel in suspension in air of combustion, into a substantially uncooled first zone, furthest removed from the boiler, laterally surrounded by substantially uncooled walls, thereby to maintain the highest combustion rate in such first zone, with temperature at or above the fusion point of ash, conducive to complete combustion, and causing the combustion gases to pass therefrom onwardly through a laterally enclosed temperature reducing zone,



between the high temperature zone and the boiler, while progressively cooling the gases traveling through the reducing zone toward the boiler, namely by maintaining cooled walls laterally surrounding the temperature reducing zone, whereby the gases reach the boiler at a reduced temperature substantially free from melted ash.

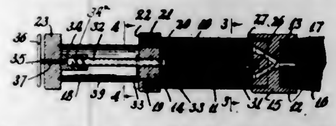
1,858,451. PULVERIZED FUEL COMBUSTION. JAY GOULD COUTANT, New York, N. Y., assignor to Furnace Engineering Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 17, 1927. Serial No. 176,137. 8 Claims. (Cl. 122—235.)



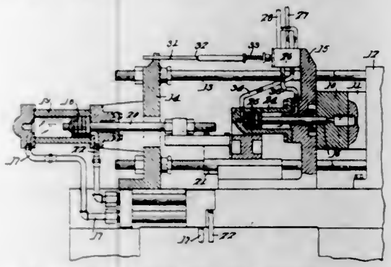
1. A pulverized fuel boiler furnace comprising a combustion chamber having a first or hot zone with uncooled refractory walls followed by a water cooled zone between the hot zone and the boiler and containing water passages, a water cooled floor comprising circulation tubes, and circulation connections leading water from the boiler to the water floor, thence from the water floor to the water passages of the cooled zone, and thence to the boiler.

1,858,452. MAGAZINE SHAVING BRUSH. ANTHONY LANCELLOTTI, New York, N. Y. Filed Sept. 19, 1930. Serial No. 482,940. 4 Claims. (Cl. 15—137.)

1. A magazine shaving brush, comprising a tubular handle for receiving and holding shaving cream, a bristle structure on one end of said handle and having passages for the passage of shaving cream from the handle to the bristles, a plunger on the other end of said tubular handle and depressible for forcing shaving cream from said tubular handle through said passages, and means normally closing said passages to prevent water from entering the tubular handle when the bristles are washed clean from the shaving cream and openable upon depression of the plunger for the continuous passage of shaving cream through the passage onto the bristles, comprising a disc valve flat against a base element on said bristle structure so as to cover the entrances to said passages and formed with apertures alignable with said entrances in one position only, means for urging the disc valve out of said position, and means for turning the disc valve into said position upon depression of said plunger, said means for urging the disc valve into its closed position comprising a spring attached at one of its ends upon a pin projecting from said base element and at its other end upon the pin projecting from said disc valve.

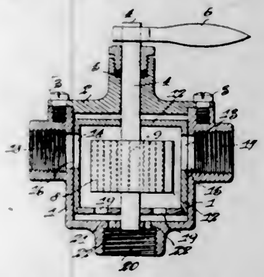


1,858,453. CASTING MOLD EJECTOR. WILLIAM M. LESTER, Shaker Heights, Ohio. Filed Mar. 19, 1931. Serial No. 523,839. 4 Claims. (Cl. 22—94.)



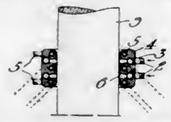
1. In a die casting machine, the combination with a movable element for reciprocating one member of the die, a cylinder carried by said element, a piston in the cylinder having a rod constituting the ejector, a valve casing carried by said element having a stem provided with a shoulder, whereby, when the casing is moved back until the shoulder engages a stationary part of the machine, the valve will be shifted thereby, and means for then introducing a fluid behind the piston to project the ejector.

1,858,454. MIXING VALVE. JAMES K. LUND, Chicago, Ill., assignor to Dole Valve Company, Chicago, Ill., a Corporation of Illinois. Filed June 14, 1930. Serial No. 461,179. 4 Claims. (Cl. 236—12.)



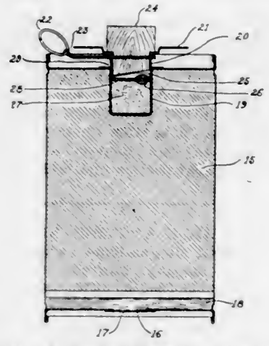
1. A mixing valve for mixing fluids of different temperatures, comprising a casing having separate inlets for the fluids of different temperature, and an outlet for the mixed fluids, a hollow rotatably mounted control member in the casing having separated ports opposed to the admission ports in the casing, a thermostat within said hollow control member and connected therewith so as to move the hollow control member to vary the cross-sectional area of the admission ports so as to maintain a uniform temperature of the water in the control member, and a connection between the interior of said control member and the outlet of said casing.

1,858,455. ELECTRIC FURNACE. PAUL LOUIS JOSEPH MIGUET and MARCEL PAUL PERRON, St. Julien de Maurienne, France. Filed June 12, 1930, Serial No. 460,749, and in France Feb. 20, 1930. 11 Claims. (Cl. 13—15.)



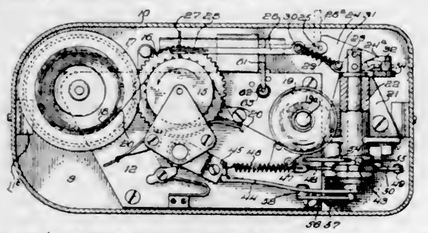
1. An electrode connection for electric furnaces comprising a conducting member adapted to encircle an electrode and to define an annular space between said member and the electrode and means for supplying a semi-solid conductive paste to said annular space.

1,858,456. PHOSPHORUS CONTAINER. JAMES E. MILLS, Edgewood, Md. Filed Jan. 25, 1928. Serial No. 249,480. 4 Claims. (Cl. 167—47.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



4. A process of producing white phosphorus smoke screens comprising, storing the white phosphorus in an airtight container, exposing the white phosphorus to the atmosphere, causing it to ignite, the heat of combustion melting the white phosphorus and delivering it from the container at a predetermined rate of flow.

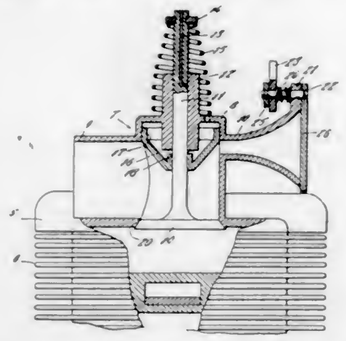
1,858,457. TIME STUDY RECORDER. JOHN C. MOTTASHED and ARTHUR W. PAYNE, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 25, 1930. Serial No. 431,149. 18 Claims. (Cl. 234—41.)



1. In a machine for recording elements of an operation or a succession of operations, the combination of a tape

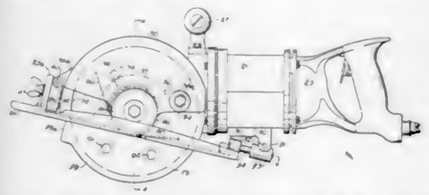
movable longitudinally at a timed rate of speed, a stylus engaging the tape, devices for separately shifting the stylus in parallel paths transversely of the tape and for setting the stylus in predetermined transversely spaced positions to form parallel longitudinal lines during travel of the tape representing successive elements of an operation, and manually operated means for selectively controlling said devices.

1,858,458. ENGINE EXHAUST. EARNEST A. PUTNAM, Iowa City, Iowa. Filed July 31, 1929. Serial No. 382,361. 13 Claims. (Cl. 123—177.)



1. In combination with an internal combustion engine having an exhaust valve opening and an exhaust pipe section communicating therewith, an exhaust valve comprising a valve seat portion adapted to close said opening, a stem extending from said valve seat portion into said pipe section and slidable in a guide, and means for preventing the exhaust gases from coming into contact with said guide, said means being disposed about said stem and between said valve seat portion and said guide.

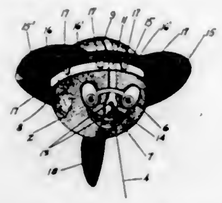
1,858,459. PORTABLE CUTTING TOOL. BLAINE B. RAMEY, Stoneleigh, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed Jan. 3, 1930. Serial No. 418,267. 12 Claims. (Cl. 143—43.)



3. In a portable, electrically powered saw, a motor frame and associated frame work for operatively supporting a saw disc, a work contacting shoe, a saw disc shield mounted on the said associated frame work, pivot means connecting said shoe to the shield and a shoe connecting mechanism comprising in effect a universal joint for connecting the shoe to the motor frame, and a revoluble disc cover telescopically arranged relative to said disc shield.

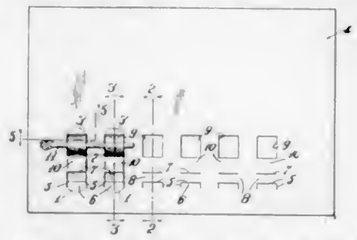
9. In a motor driven portable cutting tool, the combination of a frame, a cutter journalled in said frame, a motor carried by the frame for driving the cutter, a universal connection between the base plate and the frame, a cutter guard adjustable about the cutter axis, a universal connection between the base plate and said cutter guard, one of said universal connections embodying a lost motion connection whereby the depth of cut can be varied by movement of the cutter guard about the cutter axis.

1,858,460. AERIAL TOY. MAURITZ C. RANSEEN, Minneapolis, Minn. Filed July 21, 1928. Serial No. 294,413. 24 Claims. (Cl. 46—55.)



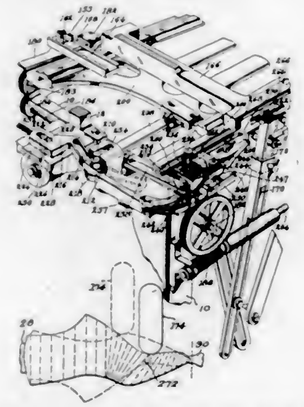
16. The combination with an inflatable element, of an annular wing member adapted to encircle said element, when the latter is inflated, and means for attaching said wing member to the periphery of the element.

1,858,461. DISPLAY CARD. WALTHER RASTER, Chicago, Ill., assignor to Justrite Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 24, 1930. Serial No. 423,034. 2 Claims. (Cl. 206—80.)



1. A display card for electric wiring clips of the kind specified, equipped with an opening adapted to receive the loop formation of the clip, a pair of slots through which the shank of the clip is passed, and a retaining member secured to the card and spanning said opening within the loop formations of said clips.

1,858,462. COPYING LATHE. GEORGE F. RYAN, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 20, 1929. Serial No. 372,315. 87 Claims. (Cl. 142—15.)

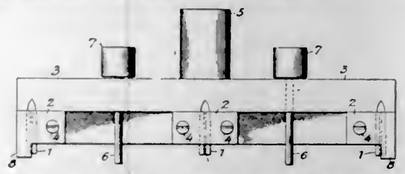


64. In a pattern copying machine, two pairs of primary instrumentalities, viz., model wheel and tool carriages and a model holding and rotating means and a block holding

and rotating means, a third carriage on which the model wheel and cutter carriages are mounted, length grading mechanism connecting the two first-mentioned carriages, and driving mechanism for the other of the two first-mentioned carriages mounted on the third carriage, a lever mounted on the main frame, means for oscillating the lever in a cycle having the same period as the rotation period of the model and block rotating means, a connection between the oscillating lever and the third carriage, and means for automatically varying the point of connection to the lever as the work piece is formed comprising a rack connected to the said driving carriage, a gear operated by the rack, and a crank pin adjustably mounted on the gear.

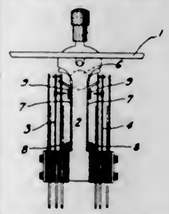
75. That improvement in the art of pattern copying which consists in relatively displacing tracings of laminæ of a model in a direction oblique to their planes and in pantographically reproducing them as laminæ in such relatively displaced positions in a block.

1,858,463. GRAVITY ACTUATED TENSION REGULATOR FOR DRAWING PRESSES. FERDINAND A. SCHAEFER, Baltimore, Md. Filed Dec. 22, 1928. Serial No. 328,025. 15 Claims. (Cl. 113—46.)



1. The combination for simultaneously stamping and drawing on a single acting press a plurality of depressions on an integral strip of sheet metal, said combination comprising of a plurality of drawing punches and a corresponding number of drawing dies, and punches and dies being adapted and positioned on their respective holders to register with each other and one or more gravity actuated means intermediate each pair of punches or dies for maintaining the strip at a uniform tension during the stamping and drawing process.

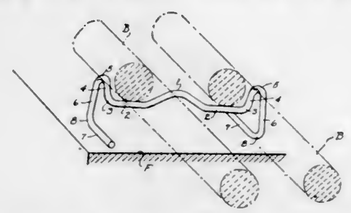
1,858,464. SWITCH KEY. RUDOLF SCHAUMBERGER, Munich, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Filed Feb. 2, 1931, Serial No. 512,910, and in Germany Feb. 5, 1930. 6 Claims. (Cl. 200—1.)



1. In a switch key, sets of contact springs, an operating member normally pivoted between said sets of contact springs, and a rebound spring between said contact springs and said operating member to absorb the overthrown of said member by said contact springs when it is moved from its contact operating to its normal position.

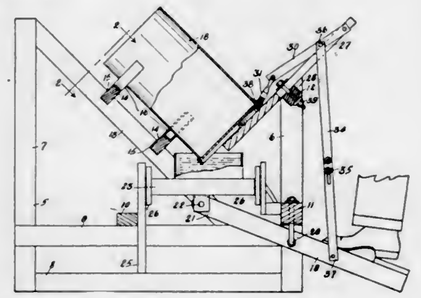
1,858,465. SUPPORTING DEVICE AND METHOD OF FORMING THE SAME. THEODORE SCHMITT, Cleveland, Ohio. Filed June 13, 1929. Serial No. 370,524. 6 Claims. (Cl. 72—122.)

1. A concrete reinforcing bar chair, comprising a single piece of elongated metal stock having a vertically disposed rounded arch formation substantially at the mid point thereof, bar supporting depressed portions adjacent the arch, and upwardly extending loops joining the depressed portion, said loops each having a substantially vertical side and an outwardly inclined side, the outwardly



inclined side and the respective said vertical portions lying in planes substantially normal to a vertical plane passing through the arched formation, the ends of said stock extending in said normal planes respectively in opposite directions to provide a rest support for the chair.

1,858,466. PAINTING DEVICE. LOUIS SCHOTT, Cincinnati, Ohio, assignor to The Cincinnati Galvanizing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 11, 1930. Serial No. 460,363. 3 Claims. (Cl. 91—26.)

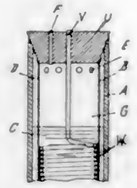


1. A device for applying coating liquid to the base flange of cylindrical containers and the like and comprising an inclined frame with aligned arms for receiving the body portion of a container, a table member for supporting the base of the container, said member being adjustable toward and away from the inclined frame, a treadle pivotally connected to the frame and having a carrier at one end adapted to hold a can of coating liquid, said carrier being adapted upon downward actuation of the treadle to approach the lowermost portion of the container whereby said portion is immersed in the liquid, said treadle being likewise connected by means of a link to a lever arm pivotally secured to said table member and having a brush pivotally attached to its end, downward movement of the treadle serving to move a brush into contacting relationship with the outer face of the base flange for spreading thereon the coating liquid upon rotation of the container.

1,858,467. APPARATUS FOR DISTILLING OIL. SIGBERT SEELIG, Berlin-Charlottenburg, Germany. Filed Aug. 13, 1928, Serial No. 299,316, and in Germany Aug. 20, 1927. 1 Claim. (Cl. 196—92.)

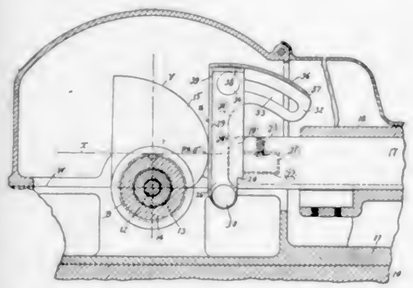
An apparatus for distilling oil, comprising a reaction vessel externally heated, a plug of insulating material closing the upper open end of said vessel, a tubular member suspended from said plug and spaced from the bottom of the vessel, an annular space being formed between the walls of said member and the vessel, pressure equalizing

perforations being provided in said tube near said plug forming intercommunication between said space and the interior chamber in said member, a molten metal bath in the chamber partly filling said chamber to a height considerably below said perforations in said tubular mem-



ber, a feed pipe carried in said plug and terminating with tightly packed helical coils below the surface of said bath, and a vapor collecting pipe for the refined oil also carried in the plug and terminating with its lower end adjacent to the surface of the bath.

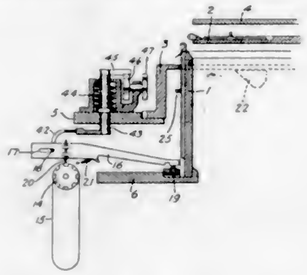
1,858,468. METHOD OF AND APPARATUS FOR GENERATING THE TEETH OF GEARS AND GEAR SHAPER CUTTERS. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Mar. 29, 1930. Serial No. 440,078. 21 Claims. (Cl. 51—52.)



1. The method of generating involute surfaces on the teeth of gear shaped articles of different pitch diameters by means of a cutting element engaging the teeth of the blank in a single plane while the blank is oscillated about its axis and is simultaneously given a correlated linear movement toward and away from the cutting element by means of an involute cam engaging an abutment, which comprises varying in predetermined amount the relationship between the cam and abutment to change the correlated linear movement of the blank to generate the teeth of gear shaped articles of different diameters while using the same cam.

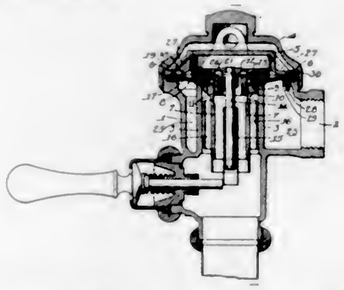
1,858,469. CIRCULAR KNITTING MACHINE. JULIUS SIEMAY, Philadelphia, Pa., assignor to Jacquard Knitting Machine Co., Inc., a Corporation of New York. Filed Oct. 16, 1930. Serial No. 489,113. 18 Claims. (Cl. 66—20.)

1. In a circular multi-needle-bed knitting machine having yarn-feeding means including means for feeding simultaneously a plurality of yarns separately, pattern mechanism to cause the needles on which the face of the fabric is knitted to knit from said plurality of yarns selectively, a plurality of fancy-effect needle-projecting cams for the needles on which the back of the fabric is knitted, said cams being mounted at different distances from the edge of the bed for said back-forming needles and being allocated to different yarns of said plurality of simultaneously-fed yarns, and at least one plain-fabric needle-projecting cam, for the needles on which the back of the fabric is knitted, so placed as to cause needles projected by it to knit from one of the yarns of the knitting machine and being movable into and out of operating position, said fancy effect and plain fabric cams together being located at more than two different distances from



the edge of the bed for said back-forming needles, and at least those of said fancy-effect needle-projecting cams other than any that may be so placed as to cause needles projected thereby to knit from the same yarn as needles projected by a plain-fabric cam being movable into and out of operating position.

1,858,470. FLUSH VALVE. WILLIAM E. SLOAN, Chicago, Ill. Filed Apr. 28, 1924. Serial No. 709,362. 5 Claims. (Cl. 137—93.)

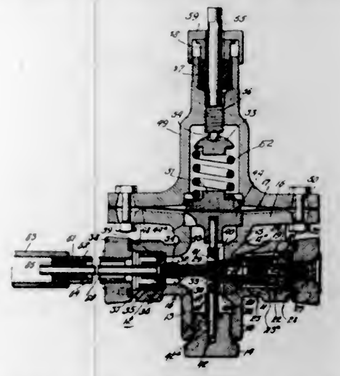


4. A valve comprising a casing having a passageway therethrough, a hollow cylindrical portion in said casing, a diaphragm extending across the casing and dividing it into two chambers, a centrally located opening through said diaphragm, a guide connected with said diaphragm and loosely received in said hollow cylindrical portion, an auxiliary valve mounted on said diaphragm, a flexible stiffening device connected with said diaphrgam whereby it is given sufficient lateral rigidity and the noise due to the pounding of said guide against said hollow cylindrical portion when the valve is operated is prevented.

1,858,471. EXPANSION VALVE. ROMEYN L. SMITH, New Brunswick, N. J., assignor to Brunswick-Kroeschell Company, New Brunswick, N. J., a Corporation of New Jersey. Filed May 28, 1930. Serial No. 456,328. 13 Claims. (Cl. 50—23.)

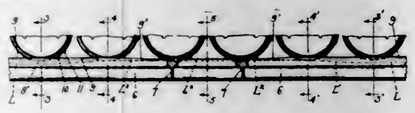
1. A valve comprising a casing enclosing a chamber, a diaphragm constituting one wall of the chamber, an inlet and an outlet passage for said chamber, a seat with a port at said inlet passage, a diaphragm controlled member with a port to cooperate with the port in the said seat, and a tubular member extending from said outlet passage and controlled by said diaphragm controlled member as to communication with the port in the seat.

9. A valve comprising a casing enclosing a chamber and having an inlet and an outlet, a diaphragm constituting one wall of the chamber, a diaphragm controlled member for controlling said inlet, a delivery tube connected with said outlet but thermally insulated therefrom, and



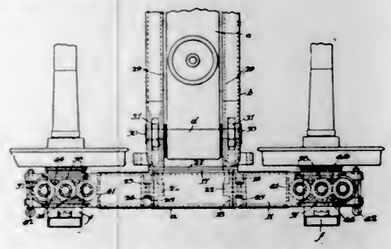
an outer tube surrounding said delivery tube, said outer tube being connected with said casing and thermally insulated from said delivery tube.

1,858,472. RAILWAY CROSSING. CLEON W. SYMONDS, Pasadena, Calif. Filed Jan. 19, 1931. Serial No. 509,630. 1 Claim. (Cl. 246—457.)



A rail crossing consisting of standard rails having tread and groove portions extending across the intersection, the intersection gap being in width the same as the width of the groove in both directions, the bottoms of the intersecting grooves being flush with each other at their intersections and raised above the normal level of the rail groove, and the tops of the intersecting rail heads tapering downwardly as they approach the intersection to transfer the supporting contact of the wheel from its tread on the top of the rail to its flange in the bottom of the groove without any vertical movement of the wheel.

1,858,473. CAR TRUCK. HOWARD D. TAYLOR, New York, N. Y., assignor to Flexible Truck Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed June 8, 1928, Serial No. 283,805. Renewed Mar. 24, 1930. 17 Claims. (Cl. 105—198.)

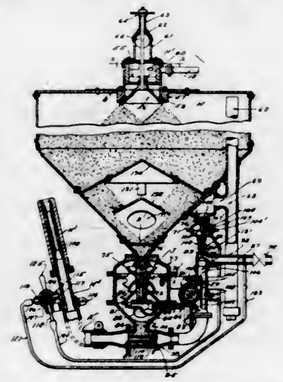


1. In a car truck, side frames having enlarged central bearing openings, means chambered to receive and support the truck bolster and bolster springs and comprising journals mounted in the bearing openings of the side frames, the bearing openings and the journals having truncated upper portions shaped to permit the limited relative rocking movement of the side frames, substantially as described.

1,858,474. SILK IMPROVED IN WEIGHT, DURABILITY, AND APPEARANCE AND PROCESS FOR OBTAINING THE SAME. FRIEDRICH W. WEBER, Hackensack, N. J., assignor to Maywood Chemical Works, Maywood, N. J., a Corporation of New Jersey. Filed Feb. 2, 1927. Serial No. 165,504. 7 Claims. (Cl. 8—13.)

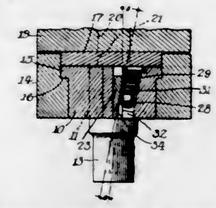
5. The process of weighting silk which comprises treating the silk fiber with a solution of a tin compound and treating the same with a soluble phosphate, then treating the fiber with a solution of a salt of a rare earth metal, and again treating the fiber with a soluble phosphate.

1,858,475. SAND BLASTING MACHINE. FRANKLIN H. WOLEVER, Chicago, Ill. Original application filed Feb. 4, 1924, Serial No. 690,387. Divided and this application filed Oct. 4, 1928. Serial No. 310,412. 1 Claim. (Cl. 51—12.)



A sand blasting apparatus comprising a storage tank for blasting sand provided with a discharge opening, a sand pump to receive sand from said discharge opening, a hose connected with the discharge end of said pump, a jet nozzle connected to the free end of said hose, a pressure air line, a conduit connecting said air line to the inlet side of said sand pump, a pressure closed valve in said conduit to cut off air pressure to said sand pump, a diaphragm connected to said latter valve, a casing to enclose it, and a manually controlled valve connected to said air line and to said casing and adapted in one adjustment to transfer pressure from the air line to said casing below said valve diaphragm to open the air line valve against the pressure of said line and in another adjustment close the air line to said diaphragm casing and to open said casing to the atmosphere.

1,858,476. TOOL RETAINER. CHRISTIAN A. BIRKEBAK, Detroit, Mich., assignor to Ex-Cell-O Aircraft and Tool Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 25, 1929. Serial No. 357,900. 14 Claims. (Cl. 279—30.)



1. A tool retainer comprising, in combination, a socket member having an aperture adapted to receive a tool and having an elongated key-way opening to said aperture along one side thereof, a tool having a sliding fit in said

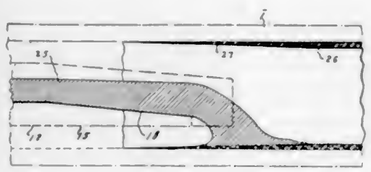
aperture, an elongated longitudinal key rigid on said tool and having a sliding fit in said key-way, and spring-pressed wedge means projecting into said key-way and coacting with said key to prevent withdrawal of said tool from said aperture.

1,858,477. BICYCLE AND MOTORCYCLE SEAT. FRED BLAKE, Indianapolis, Ind. Filed Jan. 26, 1931. Serial No. 511,132. 4 Claims. (Cl. 208—15.)



1. A bicycle and motorcycle seat having a cavity suitably located to normally receive and partly contain the private organs of male riders, the rearward portion of said cavity having a substantially circular plan formation, the circular plan of which extends forwardly beyond its own center, the forward portion of said cavity being completed by walls tangent to said circular formation, the lines of said walls trending toward intersection in the forward portion of said saddle, and a channel, the walls of which merge with the forward ends of the first mentioned walls, said channels serving to partly receive the private organs of female riders and to partly contain the private organs of male riders under certain conditions, and a floor, the surface of which merges with the surfaces of said cavity and channel.

1,858,478. PROCESS OF CASTING METAL CENTRIFUGALLY. FRANK G. CARRINGTON, Anniston, Ala., assignor to Ferric Engineering Company, Anniston, Ala., a Corporation of Delaware. Filed Nov. 7, 1928. Serial No. 317,817. 6 Claims. (Cl. 22—200.)



1. The process of casting metal centrifugally within a rotating mold which comprises pouring a stream of molten metal into the mold from a stream flowing longitudinally of the mold, constricting the flowing stream just before it falls into the mold so that its depth is greater than its width, and moving the mold relative to the stream to build up the casting helically.

1,858,479. PRINTING DEVICE. CLIFTON CHISHOLM, Cleveland, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del., a Corporation of Delaware. Filed July 26, 1929. Serial No. 381,162. 6 Claims. (Cl. 101—375.)

1. In a printing device the combination of a long, narrow base strip having an upwardly extending rigid retaining device thereon, an embossed printing strip shorter than the base strip and having inwardly projecting edge flanges whereby the printing strip may be mounted on the base strip with the ends of the base strip extending beyond the printing strip and an arcuate printing member having parallel arcuate ledges overhanging the projecting ends of the base strip but with sufficient clear-



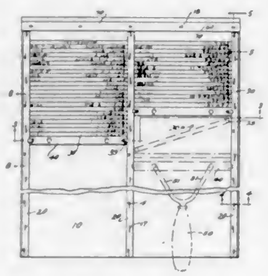
ance to enable the printing devices to be skewed free from the ledges, said ledges forming abutments for the printing strips.

1,858,480. PRINTING MEMBER. CLIFTON CHISHOLM, Cleveland, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del., a Corporation of Delaware. Filed Apr. 18, 1930. Serial No. 445,499. 21 Claims. (Cl. 101—396.)



1. A composite printing member comprising a comparatively long and narrow base strip, and a printing strip surmounting the base strip and held thereto, the base strip projecting beyond the ends of the printing strip and not being materially wider than the printing strip whereby when the composite members are compacted in a form the printing strips will substantially engage each other.

1,858,481. FLEXIBLE GALLEY. CLIFTON CHISHOLM, Cleveland, and PETER M. COLQUHOUN, Lakewood, Ohio, assignors, by mesne assignments, to American Multigraph Co., Wilmington, Del., a Corporation of Delaware. Filed Apr. 18, 1930. Serial No. 445,501. 13 Claims. (Cl. 101—377.)

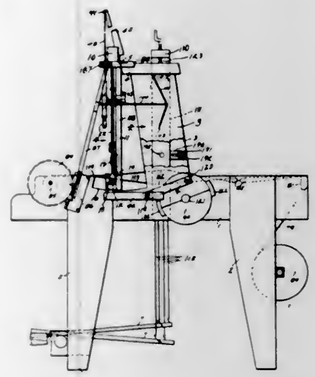


1. The combination of a flexible base carrying a pair of spacially arranged parallel overhanging slats and composite printing members extending transversely of the slats and comprising a base portion and a printing portion removably carried by the base portion, the ends of the base portion extending beneath the slats.

1,858,482. WEAVING MECHANISM. DAVID C. CHURCHILL, Berea, Ky. Filed Dec. 2, 1929. Serial No. 411,005. 11 Claims. (Cl. 139—29.)

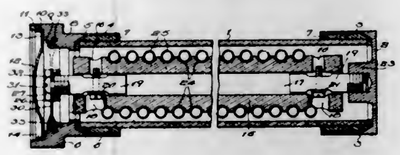
1. In a picking mechanism for hand-operated looms, a frame, a pair of picker sticks mounted for reciprocating movement on the frame, and hand-operated means for

alternately reciprocating the sticks, said means comprising a flexible linear element of polygonal form, a support for the polygon at one side thereof, a handle on the opposite side thereof for elongating the polygon, and a



flexible connection between each of the picker sticks and the polygon, joined to the latter at opposite sides thereof and at points between the supported side and handle side of the polygon.

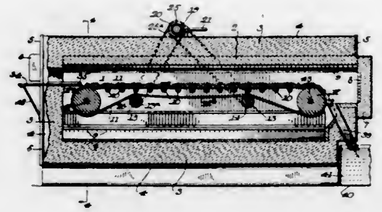
1,858,483. RESISTANCE UNIT. NICHOLAS J. CONRAD, Wilmette, Ill., assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,507. 10 Claims. (Cl. 201—67.)



6. An electric apparatus comprising an enclosing tube, an insulating core within the tube, current conducting means mounted on said core, said core having a central longitudinal bore at the end thereof, a rod having one end inserted into the bore, said core having a radial opening therein adjacent the longitudinal bore, a screw passing through the radial opening and threaded into the rod, said opening being of appreciably larger diameter than the diameter of the screw thereby permitting a limited free sidewise movement of the screw in the radial hole and a similar longitudinal movement of the rod, said current conducting means being connected to said rod through said screw, and means for supporting the other end of the rod within the tube thereby supporting the core.

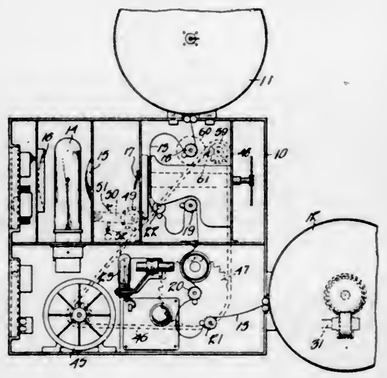
1,858,484. CONVEYER. WILLIAM B. COOLEY, Milwaukee, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 22, 1929. Serial No. 365,122. 2 Claims. (Cl. 263—8.)

1. In a heat treatment furnace of the conveyer type a heat treatment chamber, an endless belt conveyer mounted for movement wholly within said heat treatment chamber and a plurality of rollers members spaced at intervals along the length of said conveyer and within said chamber for supporting the under surface of said conveyor and providing means for advancing charges through said heat



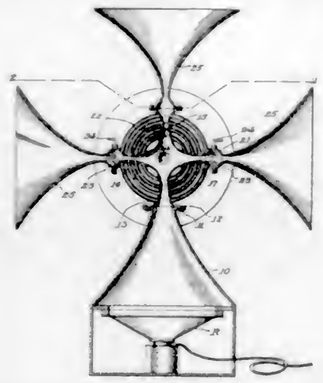
treatment chamber during the process of heat treatment, and means for imparting motion simultaneously to said roller members and to said endless conveyer, discharge means below one end of said conveyer and a removable door in the end of said chamber above said discharge means for affording access to the charges on said conveyer.

1,858,485. PICTURE PROJECTING AND SOUND REPRODUCING MACHINE. LAURENCE M. CORCORAN, Caldwell, N. J., assignor to Orval R. Platter and Howard Frankel, North Vernon, Ind. Filed Apr. 6, 1931. Serial No. 528,171. 3 Claims. (Cl. 179—100.3.)



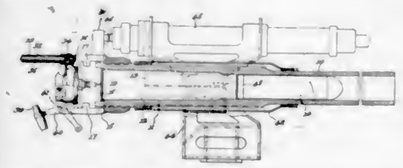
1. In a picture projecting and sound reproducing machine, a casing for housing the various elements, a plate rigidly secured to said casing, a shelf projecting from the lower edge of said plate and adapted to receive an exciter lamp, a socket for said lamp comprising a sleeve threaded on its exterior and adapted to enter an opening in said shelf and adjusting nuts carried by said sleeve one above and one below said shelf to adjust said sleeve and lamp vertically, a lug projecting from the upper edge of said plate and adapted to receive an optical unit and a brace connecting said shelf and lug to form a rigid structure, substantially as set forth.

1,858,486. GENERAL TONE CONTROL APPARATUS. WILLIAM R. D'ALFONSO, New York, N. Y. Filed May 3, 1929. Serial No. 360,181. 5 Claims. (Cl. 181—27.)



1. An amplifying device of the class described, comprising an amplifying chamber including a central chamber and outlets therefor, the inner walls of which chamber are curved, the walls converging and thereafter diverging to form extensions.

1,858,487. CANNON. LOUIS L. DRIGGS, Jr., New Rochelle, N. Y. Filed Feb. 11, 1931. Serial No. 515,102. 11 Claims. (Cl. 89—24.)



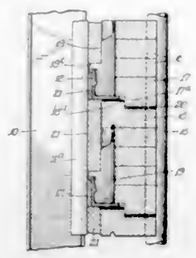
1. In a cannon, a barrel, a frame mounted across the rear end of the barrel and having guide ribs therein, a breech block slidably mounted upon said ribs in the frame and disposed to engage against the rear end of the barrel when the breech block is slid inwardly, and manual means connected to the breech block and mounted on the frame for sliding the breech block into and out of position, a portion of said manual means adapted to be telescopically received and concealed by said frame when the breech block is in its innermost position.

1,858,488. PROCESS OF GROWING YEAST. ALBERT K. EPSTEIN, Chicago, Ill. Filed Oct. 5, 1925. Serial No. 60,678. 6 Claims. (Cl. 195—20.)

6. A process of manufacturing yeast which comprises propagating yeast in a yeast-nutrient solution, which consists of a water solution of carbohydrate material, a substantially pure substance urea, non-ammoniacal inorganic yeast-nutrient salts, including a sufficient amount of a mixture of phosphates to give an initial reaction of the solution of approximately pH_6 to pH_7, and aerating the same during yeast propagation.

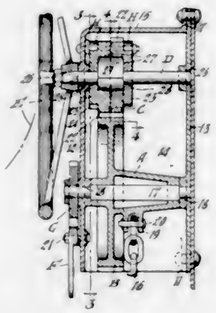
1,858,489. FURNACE CONSTRUCTION. RAYMOND D. FOLTZ, South Orange, N. J., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 30, 1928. Serial No. 322,659. 9 Claims. (Cl. 122—6.)

1. In a furnace having a plurality of water tubes arranged collaterally in a row, a wall construction comprising a supporting frame spaced from the row of tubes, brick supports carried by said frame, refractories arranged to form wall sections supported independently one above another by said brick supports to constitute a closure wall



extending along the row of tubes, and anchoring means extending parallel with the tubes and anchoring refractories in the wall to maintain their inner ends in the desired association with the tubes.

1,858,490. HAND BRAKE. HENRY FUCHS, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 15, 1930. Serial No. 488,825. 13 Claims. (Cl. 74—112.)



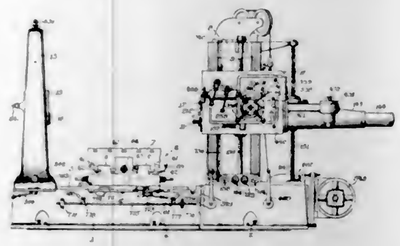
1. In a hand brake mechanism, the combination with a rotary chain winding member; of intermeshing gear means for actuating said member, certain of said gear means having interrupted teeth, said interrupted gear means being rotatable to a position to completely disengage the teeth thereof from the cooperating gear means; and means for positioning said interrupted gear means with the teeth disengaged, thereby permitting rotation of the chain winding member in unwinding direction while said interrupted gear means remain idle.

1,858,491. BORING MACHINE. KEITH F. GALLIMORE, Fond du Lac, Wis., assignor to Giddings & Lewis Machine Tool Co., Fond du Lac, Wis., a Corporation of Wisconsin. Filed Apr. 7, 1930. Serial No. 442,055. 51 Claims. (Cl. 29—26.)

1. A horizontal boring machine comprising, in combination, a horizontal bed, a saddle reciprocable along said bed, a work support reciprocable on said saddle transversely of said bed, a column on one end of said bed, a headstock vertically reciprocable on said column, said headstock having two parallel spindles and self-contained variable speed means for driving said spindles and feeding them axially, a column on the other end of said bed, an end support vertically reciprocable on said last mentioned column, and means for driving said saddle, said table, and said headstock and end support, each independently, said means

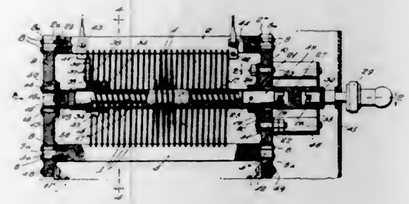
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including a reversing clutch and an actuating element therefor for each unit, each element upon movement from neutral in either direction being effective to institute movement of the corresponding unit in the same direction.



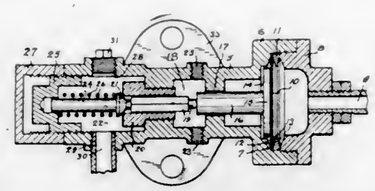
44. In a boring machine, a headstock comprising, in combination, a relatively small auxiliary spindle mounted for rotation and for axial feed, a relatively large main spindle mounted for rotation and for axial feed, the range of feed of said main spindle being greater than that of said auxiliary spindle, a power drive including a master clutch, means including a clutch for connecting said drive selectively to said spindles to feed the latter, a shifter member for actuating said last mentioned clutch, and means operable in timed relation to the feed of either spindle, said means comprising a cam for opening said master clutch upon movement of said auxiliary spindle into its initial position and upon movement of said main spindle into either extreme position, and comprising a supplemental cam normally in inoperative position, and movable into operative position, and movable into operative position by said shifter member upon actuation of the latter to institute the feed for said auxiliary spindle, said supplemental cam being effective to open said master clutch upon movement of said auxiliary spindle in its extreme protracted position.

1,858,492. INDUCTANCE SYSTEM. LOUIS A. GEBHARD and CORRIE F. RUDOLPH, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1930. Serial No. 445,415. 12 Claims. (Cl. 171—242.)



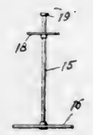
1. A high frequency inductance system comprising a frame structure including end plates of synthetic porcelain material, radially extending zones of porcelain formed on the adjacent faces of said end plates, longitudinally extending bars interconnecting said end plates, and disposed between correspondingly aligned radial zones of porcelain on the adjacent faces of said end plates, a helical inductance mounted upon said longitudinally extending bars, said bars each being formed from synthetic porcelain, and means for securing the ends of said bars with respect to the adjacent faces of each of said end plates.

1,858,493. FLUID PRESSURE BRAKE RETAINER VALVE MECHANISM. GEORGE CHARLES GEORGE, Seattle, Wash., assignor to J. R. Dodson, Portland, Oreg. Filed Mar. 5, 1929. Serial No. 344,188. 6 Claims. (Cl. 303—78.)



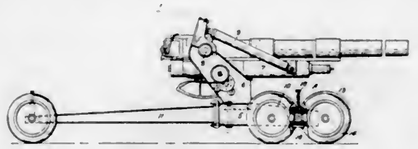
1. In a fluid pressure brake retainer valve mechanism the combination with an auxiliary reservoir and triple valve, of a retainer valve casing connected to said triple valve and auxiliary reservoir, a retainer valve in said casing, a pressure device in the casing, exposed to the pressure in the auxiliary reservoir, a single spring acting against both said valve and said pressure device, the connection between said casing and said triple valve being at the side of the casing, and a screw plug in the end of the retainer valve casing, bearing against the spring, and adjustable to vary the tension of the spring without disconnecting the connections between the casing and the triple valve and auxiliary reservoir.

1,858,494. CHAPLET. SAMUEL H. GIBSON, Lakewood, Ohio, assignor to The Fanner Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 18, 1930. Serial No. 489,048. 2 Claims. (Cl. 22—184.)



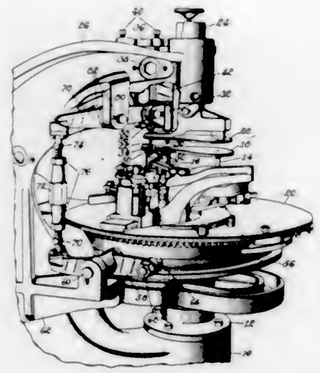
1. A chaplet comprising a relatively long thin stem of substantially uniform diameter, a flat transversely extending head attached to one end thereof, a flat transversely extending disc attached to said stem and spaced apart from said head, and an abutment at the opposite end of said stem of greater cross-sectional area than said stem but less than said disc.

1,858,495. GUN CARRIAGE. ELMER C. GOEBERT, U. S. Army, Philadelphia, Pa., and THOMAS A. CONLON, Silver Spring, Md. Filed Apr. 2, 1931. Serial No. 527,189. 8 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



8. In a gun carriage, a bogie comprising a plurality of axle units, means for connecting the axle units, a frame trunnioned in the connecting means, and screw-jacks carried by the frame.

1,858,496. PUNCHING APPARATUS. HENRY B. GREENOUGH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 11, 1930. Serial No. 435,001. 13 Claims. (Cl. 12—25.)



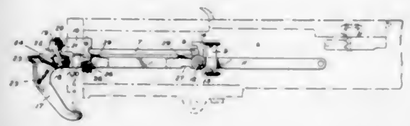
1. In a sole rounding machine wherein a knife is guided by and driven about a pattern against which a sole is clamped, thereby to trim the margin of the sole, means for forming one or more positioning surfaces in the sole while the knife is operating upon the sole.

1,858,497. REFRACTING LUMINOUS TUBE. LEE HALL, Chicago, Ill., assignor to Claude Neon Federal Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 15, 1929. Serial No. 407,542. 2 Claims. (Cl. 176—122.)



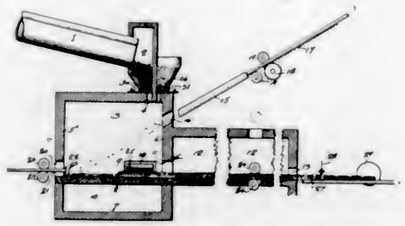
1. A luminous conductor tube, said tube having a tubular bore and having substantially thick walls surrounding said bore, said walls being formed on one side of varying thickness to refract the light rays given off by the gas in said tube to direct the rays emitted from the tube in an intensified beam of light extending substantially the length of the tube.

1,858,498. BOLT OPERATING MECHANISM FOR MACHINE GUNS. JAMES L. HATCHER, U. S. Army, Winchester, Va. Filed Apr. 22, 1931. Serial No. 531,972. 7 Claims. (Cl. 89—27.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



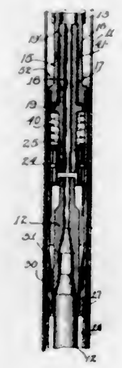
7. Mechanism for manually operating the bolt of a machine gun including supporting means securable to the gun, a slide carried by the supporting means and engageable with the bolt, and means on the slide fulcrumed on the supporting means in initially retracting the slide.

1,858,499. KILN FOR PRODUCING CELLULAR BLOCKS. WARNER HATHAWAY and KEMPER SLIDELL, Madison, Wis., assignors, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed Aug. 19, 1929. Serial No. 386,788. 14 Claims. (Cl. 25—1.)



1. In apparatus of the class described, the combination of a bloating chamber, a charging device for spreading granular earthy material evenly in the form of a layer within the bloating chamber, an annealing chamber in communication with the bloating chamber, and means for removing the material, when bloated to the form of a slab, from the bloating chamber to the annealing chamber, such means including a pusher adapted to engage the rear end of the bloated slab and thrust it forwardly into the annealing chamber, and also including means for engaging the bloated slab and advancing the same through the annealing chamber, and cutting means at the discharge end of the annealing chamber for severing the slab into sections.

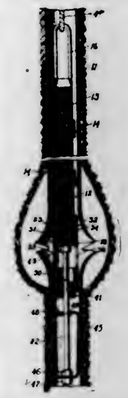
1,858,500. METHOD OF AND ROTARY SOCKET FOR FISHING OBJECTS FROM WELLS. FRANK J. HINDERLITER, Tulsa, Okla. Filed Mar. 21, 1929. Serial No. 348,695. 24 Claims. (Cl. 294—102.)



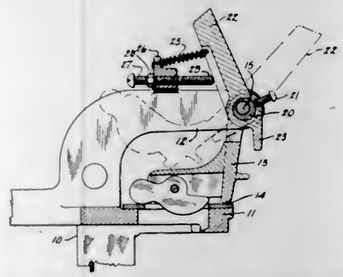
1. The method of removing an object from a well with a given tool which consists in lowering the tool in the well to a position adjacent said object, forming a seal in said well at said position, removing liquid from above said position to enable the hydraulic pressure in the bottom of said well to force said object free from the bottom of the well, and then raising said object from the well.

1,858,501. APPARATUS FOR CEMENTING WELL CASINGS. FRANK J. HINDERLITER, Tulsa, Okla. Filed Sept. 25, 1929. Serial No. 394,951. 3 Claims. (Cl. 166—19.)

1. In a device for depositing a sealing material in a well, a hollow member having a discharge opening, a sleeve on said member having an opening for registration with said discharge opening, a rod mounted on said sleeve, said elements being axially movable relative to each other, a drag shoe carried by said rod for engagement with the wall of the well, a latch for securing said rod and sleeve against relative movement upon the upward pull of said member, means effecting a registration of the openings by lowering said member after the rod and sleeve have been secured together, and a detent for latching the member and sleeve against relative movement when the openings are in registration.



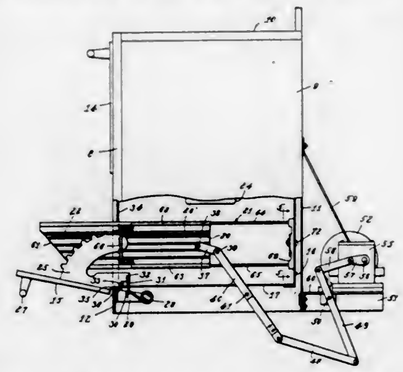
1,858,502. TENTERING FRAME CLIP. FLORENT HINNEKENS, Prospect Park, N. J. Filed Oct. 15, 1930. Serial No. 488,781. 4 Claims. (Cl. 26—62.)



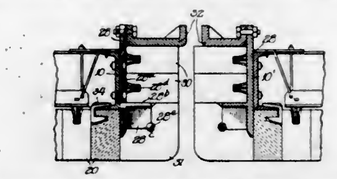
1. In a tentering clip, embodying a fabric-gripping table and a coacting gripping jaw swingable about a transverse axis parallel to said table, means for swinging the jaw about the said axis and for simultaneously elevating the entire jaw to vary the distance between its contacting edge and the table surface, comprising a bushing rotatably mounted in fixed bearings of the clip, a spindle eccentrically mounted in the bushing and adapted to oscillatably support the said jaw, a lever secured to the bushing, and means engaging one arm of said lever for angularly moving the same to effect an adjustment of the gripping jaw with reference to the table.

1,858,503. BROILER OVEN. PETER I. HOLLMAN, Rockford, Ill., assignor to Geo. D. Roper, Corporation, Rockford, Ill., a Corporation of Illinois. Filed Dec. 13, 1928. Serial No. 325,683. 13 Claims. (Cl. 126—340.)

1. In a broiler oven, the combination with a burner mounted in the upper portion of said oven, and an oven door arranged to swing down in opening, of guides in said oven at opposite sides thereof each providing upper and lower guideways, a pair of slides at opposite sides of said oven providing a plurality of vertically spaced ledges for supporting a broiler pan at different elevations with respect to the burner, said slides being formed of sheet metal and each having the upper and lower edges thereof bent substantially the full length thereof to provide bearing portions slidably received on said guideways, and means providing an operating connection between said slides and the oven door whereby the slides are arranged to be extended in the opening of the door and returned in the closing thereof.

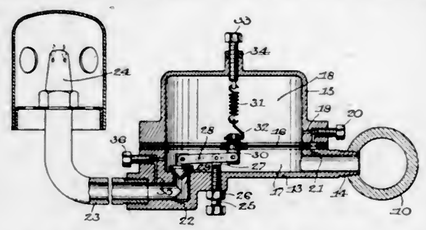


1,858,504. FURNACE CLOSURE. LOUIS H. HOSBEIN, Winnetka, Ill., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1930. Serial No. 466,090. 18 Claims. (Cl. 263—23.)



8. A furnace cover comprising a frame, means supporting same for horizonttal traveling movement, refractories suspended on the frame to form a continuous closure therebelow with its lower surface in substantially a common plane, abutment members depending from the frame and engaging marginal refractories laterally about the periphery of said closure, and devices for adjusting some of the abutment members toward and from the closure.

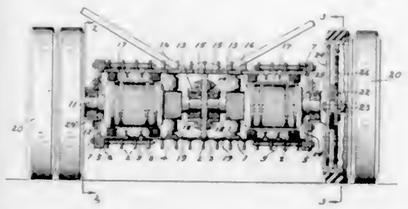
1,858,505. AUTOMATIC LIGHTER FOR BURNERS. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Edward N. Jacobi, trustee, Milwaukee, Wis. Filed June 24, 1929. Serial No. 373,357. 6 Claims. (Cl. 158—115.)



1. A lighter for a burner having valve connection with a supply pipe, comprising a casing communicating with the supply pipe, a diaphragm in the casing dividing it into a

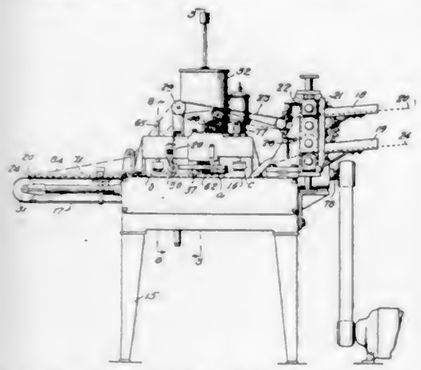
pressure chamber and a counter-pressure chamber, there being a restricted communication between the two chambers, a pilot flashing valve operated by the diaphragm, and a pilot with its supply controlled by the pilot flashing valve.

1,858,506. ELECTRIC MACHINE. REED E. JACOBS, Oakland, Calif. Filed Dec. 1, 1930. Serial No. 499,286. 4 Claims. (Cl. 180—65.)



1. An electric machine comprising a tubular frame, transverse reinforcing members having openings for receiving the tube and being welded to the tube, and plates secured to the ends of the tube, a partition disposed midway in the tube, a motor shaft disposed on each side of the partition and being rotatably carried thereby, the outer ends of the motor shafts being rotatably carried by the end plates, motors mounted in said tube, and wheels operatively connected to the outer ends of the motor shafts.

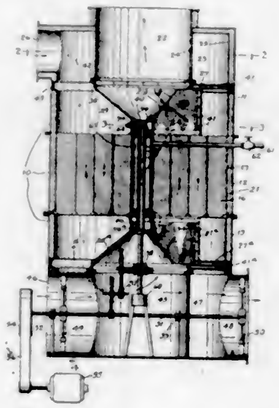
1,858,507. RAVIOLI MACHINE. SHERMAN JENNEY, New York, N. Y. Filed May 31, 1928. Serial No. 281,675. 3 Claims. (Cl. 107—1.)



1. A machine of the class described including means for moving a strip of material, a plate formed with a series of openings, means for conveying and compressing a filling substance into said openings, means for expressing such substance from said openings on to the upper face of said strip and further means acting during the withdrawal of such expressing means to retain the substance in properly disposed position upon said strip.

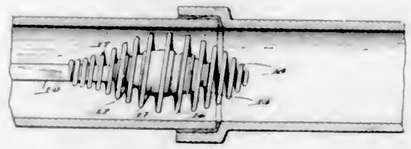
1,858,508. REGENERATIVE HEATING DEVICE. ERIK PEDER KIONELL, Stockholm, Sweden, and ERIK HARALD KIGNELL, Faymoureau, France, assignors to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden, a Corporation of Sweden. Filed Oct. 9, 1925, Serial No. 61,617, and in Sweden Mar. 14, 1925. 12 Claims. (Cl. 257—6.)

3. A regenerative heating device comprising a stationary cylindrical casing, a cylindrical frame-work in said casing, the ends of said frame-work determining planes, said frame-work having compartments in the same, regenerative material in said compartments having passages through the same, a supply channel and a discharge channel for a fluid to be heated, said channels being situated at opposite ends of said frame-work, a supply channel and a discharge channel for a fluid giving off heat also situated at opposite ends of said frame-work, a rotatable circular valvular device mounted co-axially with said frame-



work and said casing and comprising a portion having openings through the same providing communication between said channels and said compartments, any part of one opening being radially displaced from any part of another opening, and plates extending between said portion and the planes of the ends of the frame-work and to the main casing to prevent direct communication between said openings and attached to said portion at points between said openings.

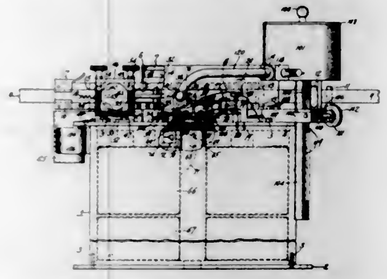
1,858,509. PIPE AND SEWER ROD. ANTON P. KJERULFF, Lake Charles, La. Filed Mar. 20, 1931. Serial No. 524,107. 10 Claims. (Cl. 15—104.30.)



1. A pipe cleaning device comprising a flexible rod, a tapered coiled spring member slidably mounted thereon and means for transmitting motion from said rod to said spring member.

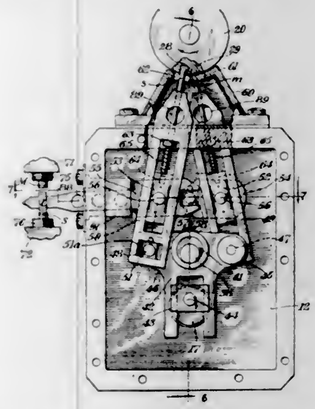
1,858,510. TELEGRAPHIC RECORDER. ERNEST KNOPP, Bronx, and FRANK KUNC, New Rochelle, N. Y., assignors to H. O. Boehme, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 25, 1931. Serial No. 525,142. 2 Claims. (Cl. 178—89.)

2. In a device of the character described, an electromagnet having a core, said core having a radial longitudinal slot open laterally and at the outer end of the core, a stylus pivotally mounted upon a transverse axis, a frame in coaxial telescoping relation with said core, a signalling circuit comprising an armature coil carried by said frame in coaxial telescoping relation with said core, a stem projecting outwardly from said frame and pivotally connected to said stylus, a stem projecting inwardly from said frame and into said radial slot, and a link pivotally con-



nected at one end to said last mentioned stem within the slot and pivotally connected at the other end to a fixed support.

1,858,511. AUTOMATIC TELEGRAPH KEYING HEAD. FRANK KUNC, New Rochelle, and ERNEST KNOPP, Bronx, N. Y., assignors to H. O. Boehme, Inc., New York, N. Y., a Corporation of New York. Filed May 22, 1931. Serial No. 539,334. 23 Claims. (Cl. 178—17.)



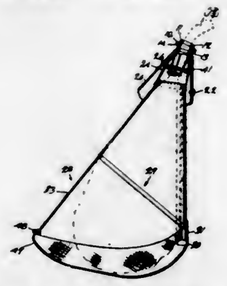
1. In an automatic keying head in combination a movable contact arm, a positively driven arm operating element, a coupling device adapted to positively couple said arm with said operating element, and a tape perforated to represent the signals to be keyed, and being interposed between said operating element and said coupling device for preventing the arm coupling by said device, except through a perforation in said tape.

1,858,512. REENFORCED COLUMN. FREDERICK C. LANGENBERG, Watertown, Mass., and GUSTAV A. REINHARDT, Youngstown, Ohio. Filed Dec. 21, 1926. Serial No. 156,234. 1 Claim. (Cl. 72—75.)



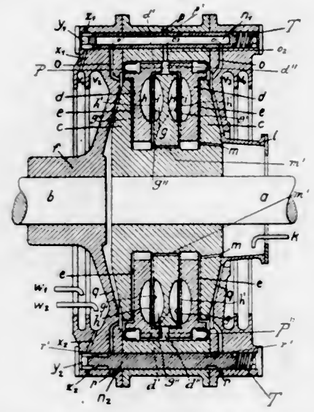
The improved column comprising a cylindrical casing provided with ribs on the inside and outside thereof extending radially thereof and integrally united throughout its length, said column casing being filled with concrete.

1,858,513. DATE PROTECTOR OR SHIELD. ARTHUR LE GRAND, Indio, Calif. Filed June 19, 1930. Serial No. 462,279. 31 Claims. (Cl. 47—26.)



1. A protector for fruit comprising a collar structure adapted to be secured around a stem above the fruit to restrict moisture running down the said stem, and a shield covering the fruit to shed and deflect moisture and moisture falling directly on the fruit, said collar forming the sole supporting means for the shield.

1,858,514. COUPLING DEVICE. JACOB LELL, Heidenheim-on-the-Brenz, Germany, assignor to J. M. Voith, Heidenheim-on-the-Brenz, Germany, a Corporation of Germany. Filed July 14, 1928, Serial No. 292,717, and in Germany July 14, 1927. 16 Claims. (Cl. 192—85.)

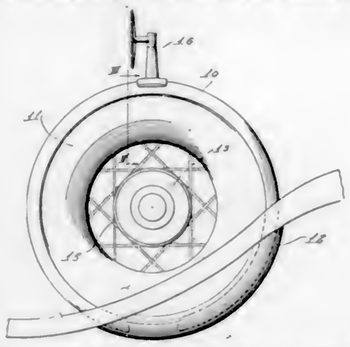


1. A coupling device comprising a driving member, a driven member, a friction element mounted to rotate with the driven member but movable axially thereof, said driving member having a space receiving said element, a pipe for supplying fluid to said space, a valve for controlling the fluid to fill said space, a second valve for controlling said fluid so that it may act under centrifugal force to cause said element to effect operative engagement with said driving member, a third valve to release said fluid to enable said element to be disconnected from said member, and a fourth valve to control the discharge of said fluid from said device.

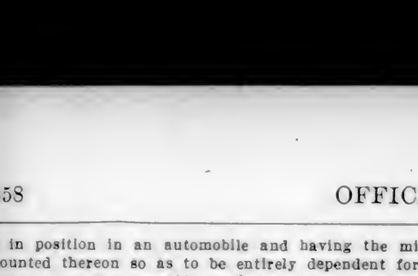
1,858,515. COMBINATION MIRROR AND TIRE COVER. GEORGE ALBERT LYON, Allenhurst, N. J., assignor to Lyon Incorporated, Asbury Park, N. J., a Corporation of Delaware. Filed Apr. 1, 1931. Serial No. 526,883. 2 Claims. (Cl. 45—97.)

2. The combination with a rear view mirror for an automobile, of a spare tire cover having means for securing

it in position in an automobile and having the mirror mounted thereon so as to be entirely dependent for its proper support upon said cover, the plane of such cover in position being such as to bring the mirror into the line of vision of the automobile operator so that the mere operation of mounting the cover on the tire will enable the mirror to be properly supported on the tire and such that an angularity of the mirror to said line of vision may be adjusted by the circumferential movement of the cover relative to the tire, the width of said mirror being less than the width of said cover so that the former will be protected by the latter.

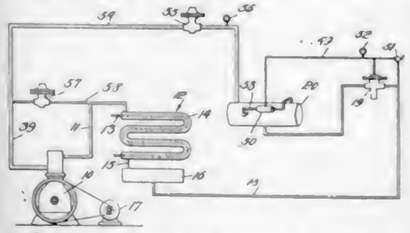


1,858,516. AUTOMATIC BURNER LIGHTER. HAROLD A. MANTZ, Milwaukee, Wis., assignor to Edward N. Jacobi, trustee, Milwaukee, Wis. Filed June 24, 1929. Serial No. 373,359. 14 Claims. (Cl. 158—115.)



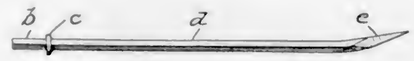
1. A lighter for a burner having a valve-controlled connection with a supply pipe, comprising a pilot, and means for admitting an increased supply of gas to the pilot operative upon a reduction in pressure in the supply pipe incident to the opening of the burner valve.

1,858,517. REFRIGERATING SYSTEM. HENRY H. MARSHALL, Highland Park, N. J., assignor to Brunswick-Kroeschell Company, New Brunswick, N. J., a Corporation of New Jersey. Filed June 25, 1930. Serial No. 463,678. 8 Claims. (Cl. 62—115.)



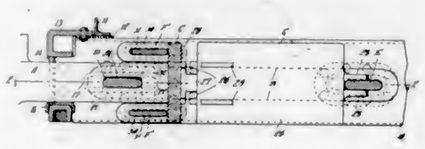
1. In a refrigerating system including a compressor, an evaporator, and a suction line leading from the evaporator to the compressor, means for controlling the effective capacity of the compressor, such controlling means including an automatic pressure valve for varying the passage of refrigerant in said suction line to control the evaporator pressure and another valve for admitting gas into said suction line for decreasing the capacity of the compressor.

1,858,518. MINER'S TOOL FOR PUNCHING AND SHEARING COAL. EDWARD J. NEWBAKER, Windber, Pa., assignor to The Berwind-White Coal Mining Company, Windber, Pa., a Corporation of Pennsylvania. Filed July 8, 1930. Serial No. 466,405. 2 Claims. (Cl. 262—33.)



1. A punching and shearing tool adapted especially for coal mining and comprising a shank composed of a substantially straight body extending throughout the major portion of its length and a comparatively short working end rigid and integral with the main body and whose axis has an inclination relative to the axis of the main body of between 5 and 30 degrees, said working end being substantially pyramidal in form and whose sides taper from the sides of the body toward substantially a common point whose lateral distance from the axis of the body substantially exceeds half the thickness of the body.

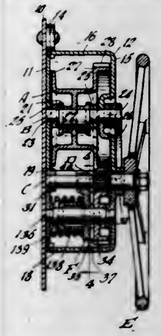
1,858,519. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,835. 1 Claim. (Cl. 213—60.)



In a railway draft rigging, the combination with spaced draft sills having front and rear key slots and additional key receiving slots adjacent said front slots; of a coupler; shock absorbing mechanism between said sills; side members disposed on opposite sides of said shock absorbing mechanism and having a lost motion connection with said coupler, including a coupler key extending through said side members and coupler shank and working in said front slots of the draft sills; a follower interposed between the butt end of the coupler shank and the shock absorbing mechanism, said follower having forwardly projecting arms embracing the side members; keys extending through said arms and into said additional slots of the draft sills; and a key extending through the rear end portions of the side members and supporting the shock absorbing mechanism at the inner end, said last named key being slidably supported within the rear slots of the sills.

1,858,520. HAND BRAKE. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 6, 1930. Serial No. 418,797. 4 Claims. (Cl. 74—112.)

1. In a hand brake, the combination with a chain winding drum; of a rotatable, eccentric supporting means on which the drum is mounted for rotation; a pinion for operating said drum; means cooperating with said pinion for preventing retrograde movement of the drum, including an interengaging pair of ratchet members, said members having cooperating ratchet teeth, each tooth having a pair of reversely inclined engaging surfaces; and means



for turning said eccentric support to disengage the pinion and drum to permit free running of the drum and release of the brakes.

1,858,521. METHOD OF MAKING HALOGENATED HYDROCARBONS. MARK E. PUTNAM, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 26, 1927. Serial No. 215,765. 11 Claims. (Cl. 260—161.)

1. In a process of making halogenated hydrocarbons by treating a hydrocarbon with a halogen, the steps which consist in scrubbing the exit gases from the reaction with the liquid halogenated product thereof and distilling the resulting solution to recover unreacted hydrocarbon absorbed therein.

1,858,522. PROCESS OF CHEMICALLY TREATING AND BLEACHING CELLULOSE PULP. GEORGE A. RICHTER and MILTON O. SCHUR, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed June 6, 1928. Serial No. 283,452. 7 Claims. (Cl. 92—13.)

1. A process which comprises treating unbleached sulphite pulp at about room temperature as a flowable aqueous pulp suspension in a solution containing not more than about ½% to 1% caustic soda based on the weight of air-dry pulp, washing the pulp, and bleaching the pulp.

1,858,523. PROCESS OF CHEMICALLY TREATING AND BLEACHING CELLULOSE PULP. GEORGE A. RICHTER and MILTON O. SCHUR, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Original application filed June 6, 1928, Serial No. 283,452. Divided and this application filed Aug. 16, 1929. Serial No. 386,487. 6 Claims. (Cl. 8—2.)

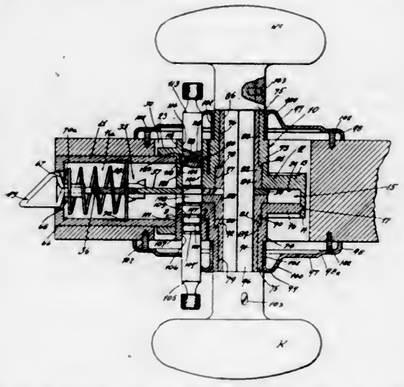
1. A process which comprises treating cellulose pulp with a dilute alkaline solution at about room temperature, maintaining the pulp in contact with the solution for a substantial period of time, and adding bleach to the alkaline solution to whiten the pulp.

1,858,524. ARCH SUPPORT AND PROTECTOR THEREFOR. WILLIAM M. SCHOLL, Chicago, Ill. Filed Dec. 27, 1927. Serial No. 242,593. 5 Claims. (Cl. 36—71.)



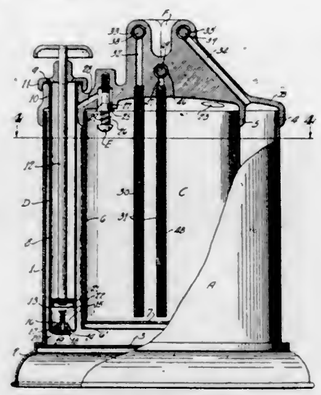
5. In combination, an arch support including a relatively stiffened arched member having a rounded forward end and a covering for said member, and a molded rubber pad-like protector secured to said covering and including a pair of flaps defining a slot therebetween curved to fit the rounded forward end of said member, said flaps embracing the forward margin of said member, and an angularly disposed lip on said pad to cause said pad to grip said member without being secured thereto.

1,858,525. DOOR LATCH OR LOCK. HERMAN D. SCHROEDER and FREDERICK H. KOCH, Los Angeles, Calif. Filed Sept. 11, 1928. Serial No. 305,248. 14 Claims. (Cl. 70—29.)



8. In a device of the character described, a tubular spindle housing, a radially extending bolt housing, a latch bolt mounted in the bolt housing for reciprocation therethrough to and from projected position, an operating spindle journaled in the spindle housing, a throwing cam on said spindle and having cam engagement with the bolt, said cam being operable by spindle rotation to retract the bolt from projected position, a dog mounted at one side of the spindle housing for reciprocation parallel to the spindle, said dog being movable, when said bolt is projected, into engagement with the cam to hold it from rotation, and a key-controlled pin mounted at the opposite side of the spindle housing and movable to clear the dog from engagement with the cam.

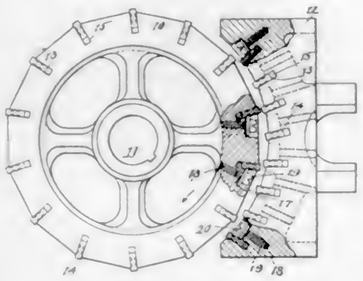
1,858,526. TORCH. MARKUS M. SCHWARZKOPF, St. Louis, Mo. Filed June 23, 1930. Serial No. 463,299. 4 Claims. (Cl. 158—33.)



1. A torch comprising, in combination, an outer container, an inner container, a top-closure common to said

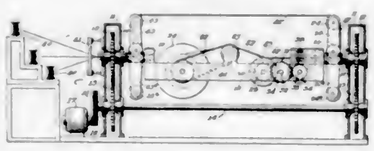
containers, the closure having a port for providing communication between said containers, means comprising a biased valve for automatically regulating communication through said port between the containers, the closure having a mixing-chamber and separate communicating passages for providing communication between the respective containers and the mixing-chamber, valves for independently controlling communication through said passages between the respective containers and the mixing-chamber, and a burner-tip for directional discharge of fluid from the mixing-chamber.

1,858,527. KNIFE FOR HULLERS. OLIVER G. SIMMONS, Lakewood, Ohio, assignor to The National Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 27, 1927. Serial No. 222,250. 2 Claims. (Cl. 83—14.)



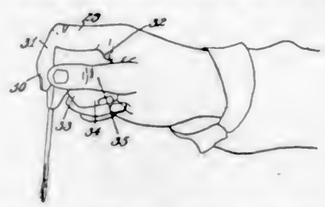
1. A knife for hullers and the like of the type having a cylinder and a concave provided with knife grooves comprising a relatively flat metallic bar of rectangular cross section having cutting edges extending along the longitudinal edges thereof and of a width shorter than the depth of the knife grooves in the cylinder and concave whereby when the knife is secured in position in a knife groove with its cutting edge properly exposed it will not reach the bottom of the groove, said metallic bar having a pair of grooves arranged on opposite sides of the bar and extending parallel with the cutting edges thereof, each groove of each pair of grooves being arranged a fixed distance from its adjacent cutting edge whereby the bar may be reversibly secured in the knife groove of the cylinder or concave with a groove of the bar in proper position to be engaged by a knife retaining means.

1,858,528. TWISTER OR STRANDER. WILLIAM E. SOMERVILLE, Coal City, Ill. Filed Aug. 28, 1931. Serial No. 559,957. 6 Claims. (Cl. 117—16.)



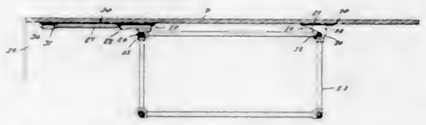
1. In a wire rope or cable making machine a cradle, supporting means for the cradle, said cradle being maintained against rotation, a take up reel and haul off mechanism mounted upon said cradle, rotatable twisting arms arranged adjacent the ends of the cradle, a shaft separate from the cradle supporting means and connecting the arms for rotating them independently with respect to the cradle, and means for rotating the said shaft.

1,858,529. GRIP. CHESTER T. SPICKLEMIRE, Whitehall, and IRMA TAYLOR, Muskegon, Mich. Filed July 31, 1931. Serial No. 554,287. 12 Claims. (Cl. 223—37.)



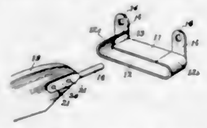
5. A grip for tools comprising a generally rectangular body, thicker at its top than at its bottom, and thicker at its rear side than at its front side, and a continuous groove formed in the upper and rear sides of said body and let into the corner between said sides to form a smoothly rounded curve laterally bounded by projecting ears, the lower rear corner of said body being notched, and the front side of said body being rearwardly recessed in a smooth curve.

1,858,530. COT FASTENER FOR AMBULANCES. HENRY VAN DEEST, Freeport, Ill., assignor to Henney Motor Company, Freeport, Ill., a Corporation of Delaware. Filed Mar. 23, 1931. Serial No. 524,486. 3 Claims. (Cl. 296—19.)



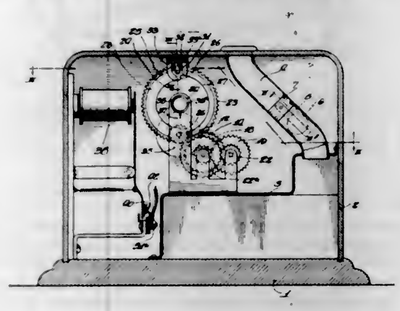
1. In fastening means for a cot or the like comprising a pair of spaced bases suitably supported adjacent the front and rear portions of a cot to be fastened, a hook projecting rigidly from the one base and facing in one direction to hold one portion of the cot, a companion hook projecting from the other base and facing in the opposite direction to hold the other portion of the cot, and means for slidably mounting the last mentioned hook on its base for movement toward and away from the first hook, spring means on said base normally urging the slidable hook to move relative to the base in one direction to hold the cot portion thereon, a rod fixed to said hook and extending from the base to an operating point, a handle on said rod at the operating point, and stop means for abutment with the handle to hold the same in either one of two positions, the handle in one position being held by the stop means to prevent movement of the hook by the cot against the action of the spring means, and the handle being held by the stop means in its other position to hold the hook in retracted position and against movement under action of the spring means.

1,858,531. HANGER SUPPORT. MORRIS VICTORSOHN, New York, N. Y., assignor to Victorson Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 11, 1928. Serial No. 253,609. 6 Claims. (Cl. 312—172.)



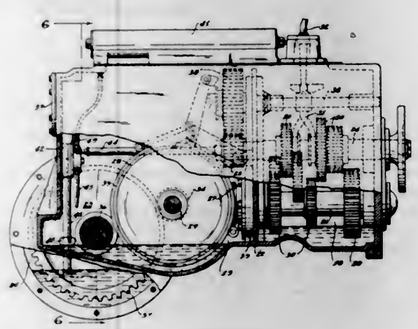
1. A hanger support formed of a metal blank and comprising an elongated pocket member open at one side, extensions integral with the rear wall of the pocket member for anchoring the same to a support, and said member having an opening in its top through which the trunnions of garment hangers may be dropped into the pocket.

1,858,532. ELECTRIC HOROLOGICAL SAVINGS DEVICE. JOHN E. WHEELER, Chicago, Ill. Filed Oct. 31, 1930. Serial No. 492,515. 8 Claims. (Cl. 194—6.)



1. The combination with a coin depositary of an electrically driven clock, a supply circuit for said clock, a coin conduit having contacts arranged so as to be closed by the deposite of a coin therein, a circuit closing relay actuated by the closing of said contacts, a second relay for closing said supply circuit when its operating coil is energized by the closing of said first relay, and a controller for effecting a sequential opening of said relays.

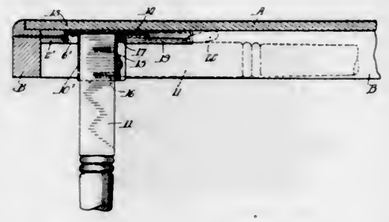
1,858,533. LUBRICATING SYSTEM. ROLLIN H. WHITE, Cleveland Heights, Ohio, assignor to The Cleveland Tractor Company, Cleveland, Ohio. Filed Apr. 19, 1930. Serial No. 445,788. 10 Claims. (Cl. 184—6.)



1. In a transmission lubricating system for tractors, a change speed compartment, a drive gear compartment, a wall separating the compartments, said wall having an opening above the bottom of the change speed gear compartment through which oil overflows, and means for supplying oil to the change speed compartment.

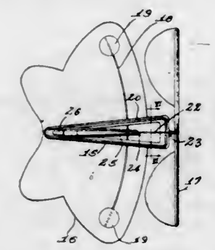
1,858,534. TABLE. JOSEPH E. WOOD, Chicago, Ill., assignor to The Dearborn Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1929. Serial No. 361,939. 8 Claims. (Cl. 45—11.)

1. The combination of a table frame, a leg supporting member secured only to said frame at the corner thereof, a leg, means hinging said leg on said supporting member whereby said leg may be swung substantially parallel with the frame, and means mounted on said supporting member



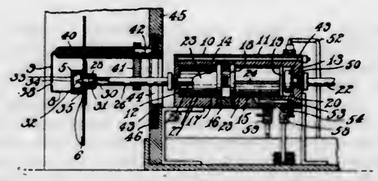
for embracing the upper end portion of the leg when the leg is swung on its hinge to open position for holding the leg in rigid relation to the supporting member.

1,858,535. AERIAL TOY. SOREN S. ADAMS, Asbury Park, N. J. Filed Feb. 23, 1932. Serial No. 594,503. 1 Claim. (Cl. 46—50.)



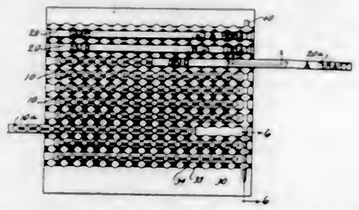
As an article of manufacture, an aerial toy including a frame, wing means connected thereto with said frame substantially centrally thereof, a propeller-like element at one end of said frame, and means connected to said frame arranged to be wound by the turning of said element, said frame being made of such thin sheet material as to require a depressed portion in the same to give it sufficient rigidity to resist distortion when in use in the toy and being triangular in shape with the legs of the triangle reenforced by longitudinal ribs formed therein.

1,858,536. OIL BURNER. EVERETT M. CARTER, Indianapolis, Ind. Filed May 25, 1928. Serial No. 280,428. 1 Claim. (Cl. 158—77.)



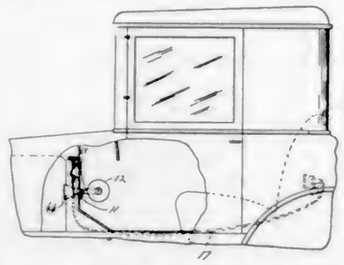
In an oil burner, a rotary oil sprayer, means to rotate the same, and a plural electrode spark igniter therefor, the electrodes of said igniter being mounted on said sprayer for rotation therewith.

1,858,537. HOLDER FOR PRINTING MEMBERS. CLIFTON CHISHOLM, Cleveland, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del., a Corporation of Delaware. Filed Apr. 18, 1930. Serial No. 445,500. 22 Claims. (Cl. 101—368.)



1. The combination of a holder, base strips slidably mounted thereon, printing strips slidably mounted on base strips, and means on holder for stopping the base strip without stopping printing strip.

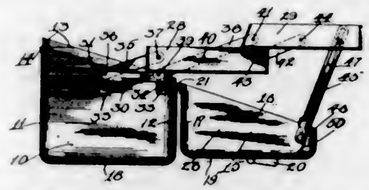
1,858,538. TROUBLE LIGHT FOR AUTOMOBILES. THOMAS J. COOLICK, Detroit, Mich. Filed Mar. 22, 1928. Serial No. 263,723. 1 Claim. (Cl. 200—153.)



A combined storage reel and automatic switch for a flexible electrical conductor, having, in combination with an enclosing shell, a storage drum rotatably supported therewithin, and a flexible insulated conductor carried upon said drum, a screw-threaded projection carried by and projecting substantially axially from one end of said drum and having a spring-pressed conducting plunger projecting substantially axially from its extremity, a traveling actuating member threadedly carried on the projection from the drum, but non-rotatable therewith, being mechanically connected to but electrically insulated from the enclosing shell and axially movable with respect to the drum upon rotation of the latter, a contact member carried by the shell in substantial axial alignment with the drum and plunger, and engageable by the latter, another contact member also carried by the shell laterally of the first, and a lever member actuable by the traveling actuating member to make and break an electrical circuit between the contact members.

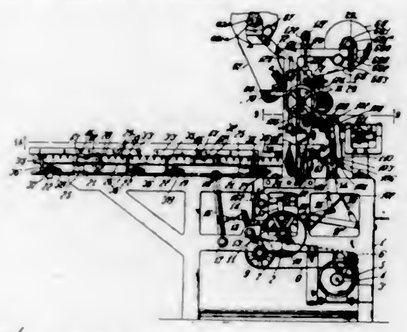
1,858,539. TACKLE BOX. CLARENCE L. DEWEY, Elkhart, Ind., assignor to Outing Manufacturing Company, a Corporation of Indiana. Filed June 26, 1926. Serial No. 118,616. 2 Claims. (Cl. 206—16.)

1. A box including a box body and cover divided at the ends to provide one relatively high rigid front wall of the box body and a relatively low rear wall therefor, said high and low walls being connected by slanting edges of such location as to cause said rear wall to be of substantially one half the overall height of the box and whereby said slanting edges of said body and cover will aline themselves when the cover is in open position, the rear wall of said body and cover being hinged together, in combination with a tray, links for connecting said tray to the body, pivot points between the links and said box body disposed substantially at portions of said box body between a horizontal plane, projected from the top of said rear wall and the slanting edges of said box body and an operative connection between the tray and the cover to move said tray



over said low rear wall to a position of rest above the cover when the cover is moved to a full open position with its top in a plane substantially parallel to the plane of the box body bottom.

1,858,540. WRAPPING MACHINE. CHARLES DOERING, HENRY H. DOERING, GEORGE ALSTAD, and BERTEL SKOGLUND, Chicago, Ill., assignors to said Charles Doering and said Henry H. Doering. Filed Nov. 28, 1928. Serial No. 322,476. 20 Claims. (Cl. 93—2.)



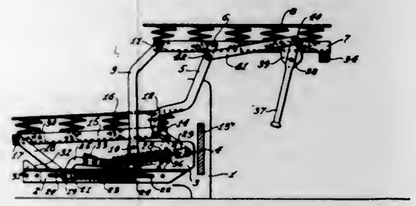
1. In a wrapping machine, article and paper feed mechanisms and an article receiving and transferring carrier, said mechanisms arranged cooperatively to deposit an article on the carrier together with a sheet of paper partially wrapped about the article, folding mechanism for folding in the ends of a sheet wrapped around the article, said folding mechanism spaced from and disposed at a higher elevation than the feed mechanism, means in the transferring carrier for engaging the article during transfer to the folding mechanism, the latter including means for imparting an arcuate movement to the article during transfer, means associated with said transferring carrier for completing the wrapping of the sheet about the article, and means included in the folding mechanism for removing the article from the transferring carrier.

1,858,541. AUTOMOBILE BUMPER. THOMAS I. DUFFY, Detroit, Mich., assignor, by mesne assignments, to William J. McIntyre, Detroit, Mich. Filed May 5, 1928. Serial No. 275,397. 14 Claims. (Cl. 293—55.)



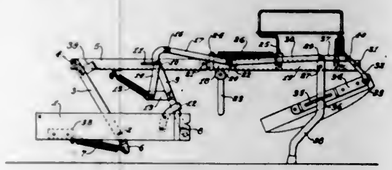
1. A vehicle bumper comprising an integral impact member having a web portion depressed below the impact receiving surface of said member, a portion of said web being removed to provide an opening through said member and the remaining portion of said web being of less thickness than the remainder of said member.

1,858,542. FOLDING DAVENPORT OR BED. WILLIAM J. DUVALL, St. Louis, Mo., assignor to Smith & Davis Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 19, 1929. Serial No. 415,194. 8 Claims. (Cl. 5—22.)



1. A folding davenport bed, comprising, end supports, a top section, a bottom section, levers pivoted to each support and connected with said top section to move said top section to positions beside and above said bottom section, means connecting the front portion of said bottom section with one of said levers to raise said bottom section when said top section is moved to extended position, a strut pivoted at one end to the rear portion of said bottom section and having sliding engagement at its other end with an end support, means connecting said sliding end with one of said levers in order to move said strut to raise said bottom section, a spring bearing on the end of said last lever to assist in raising said top section from extended position, and a spring bearing on the sliding end of said strut to assist in raising the same.

1,858,543. FOLDING DAVENPORT BED. WILLIAM J. DUVALL, St. Louis, Mo., assignor to Smith and Davis Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Mar. 25, 1931. Serial No. 525,083. 5 Claims. (Cl. 5—31.)



1. In a folding davenport of the character described, an end support, a folding bed frame having inner, outer and intermediate sections jointed for movement to extended and collapsed positions, means movably connecting said bed frame with said support, a supporting foot pivoted to said outer section, a link connecting said foot with said intermediate section adapted to lower said foot in extended position, a seat frame having means whereby it is lowerably mounted on the outer end of said outer section, means connecting said seat with said foot, and means connecting said link with said first means adapted to lower said seat frame in extended position.

1,858,544. CALIPER. CARL G. ERICKSON, Evanston, Ill. Filed Oct. 4, 1928. Serial No. 310,407. 5 Claims. (Cl. 33—174.)

3. In a measuring instrument, a rod, a movable member adapted to be moved with respect to said rod, two arms pivoted together, means pivoting one of said arms to said rod, the other arm being pivoted to said movable member, one arm being so shaped that as the other arm is moved toward the rod after it has reached a certain position, a portion of the said one arm is moved away from the rod, and means for preventing further movement of the said other arm when the point on the said portion farthest



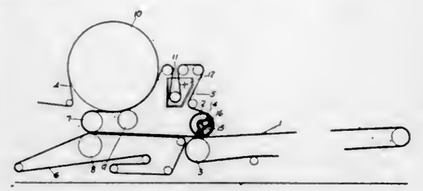
away from the rod is substantially the same distance from the rod as the point on the said other arm farthest away from the rod.

1,858,545. SUCTION BOX LEVER FOR SUCTION ROLLS. HILAND R. FARNSWORTH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Filed Mar. 26, 1928. Serial No. 264,637. 16 Claims. (Cl. 92—53.)



9. In a suction roll, a shell, a movably mounted suction box therein and adapted to support said shell when the shell is in inoperative position and means for supporting said box.

1,858,546. YANKEE FOURDRINIER MACHINE. HILAND R. FARNSWORTH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Filed Dec. 5, 1928. Serial No. 324,032. 3 Claims. (Cl. 92—49.)

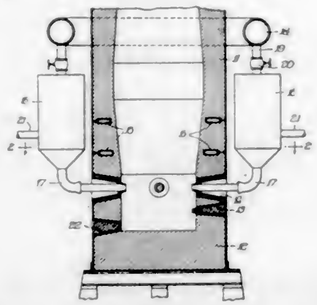


3. In a machine of the class described, a Fourdrinier wire, a plain bottom couch roll around which the wire carrying the paper web is trained, a pick-up felt and a top suction couch roll between which and said plain bottom couch roll said pick-up felt and wire with the web therebetween are adapted to pass and be pressed, said suction couch roll having a suction area including the line of pressure contact between the two rolls to cause said web to be transferred from the wire to said pick-up felt.

1,858,547. PROCESS OF CANNING MILK AND OTHER PRODUCTS. RICHARD M. GARRETT, Yonkers, N. Y. Filed Oct. 29, 1929. Serial No. 403,368. 1 Claim. (Cl. 73—51.)

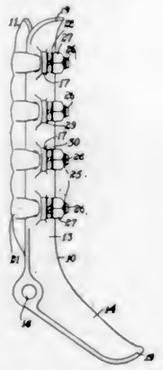
A method of detecting the presence of a leak in a can which contains a food product, which tends to coagulate at a predetermined temperature, which consists in subjecting the outside of said can to the action of a compressed gas at a temperature which is below the temperature at which said food product will coagulate in the leak or leaks of the can, and prior to subjecting said food product to said predetermined temperature so that the compressed gas can freely enter said can through the leak or leaks therein, and then transporting said can to a zone containing a gas whose pressure is lower than the pressure thus established within the can, so that the excess of pressure within the can causes the same to bulge outwardly.

1,858,548. METHOD OF MAKING MALLEABLE IRON. EDWARD L. IVES, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 24, 1929. Serial No. 334,861. 2 Claims. (Cl. 75—50.)



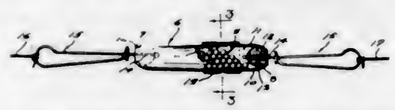
1. The method of making malleable iron which comprises melting pig iron together with iron ore in a reducing atmosphere in a shaft furnace whereby the iron ore is reduced and the resultant iron from the pig iron and ore may have a carbon content lower than that of the pig iron in the charge.

1,858,549. DEAD END CLAMP. RALPH L. JENNER, Le Roy, N. Y., assignor to Lapp Insulator Company, a Corporation of New York. Filed July 29, 1930. Serial No. 471,557. 6 Claims. (Cl. 24—135.)



3. A dead-end clamp comprising an angled body member adapted to receive a cable, said body member having a tapering throat to receive and grip said cable progressively more tightly and having a wavy floor, a keeper member constructed to co-operate with said body member and having an oppositely waved under-surface, said keeper member having parts cut away for lightness and other parts reinforced, guide-tipped bolts extending unitarily from said reinforced parts, aperture ears on said body member for receiving said bolts, and means for securing and locking said members in operative association.

1,858,550. FISHING GEAR. CLAY O. KAHLE, Seattle, Wash.; Belle J. Kahle administratrix of said Clay O. Kahle, deceased. Filed Feb. 5, 1930. Serial No. 426,065. 5 Claims. (Cl. 43—45.)

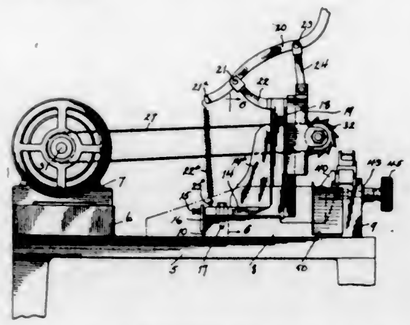


1. In fishing gear, the combination wtih a barrel housing having the opposite ends socketed to engage spherical beads journaled for rotative movement therein, said beads having means to respectively engage extremities of complementary fishline and tackle, of a recess provided in said barrel, a feed aperture for inserting weight charges to said recess, and closure means encasing said barrel for sealing the aperture.

1,858,551. MANUFACTURE OF GLYCIDIC ACIDS. ANTOINE ADOLPHE KAUFMANN, Geneva, Switzerland. Filed Oct. 21, 1929, Serial No. 401,387, and in Germany Oct. 29, 1928. 4 Claims. (Cl. 260—116.)

1. A process for the manufacture of glycidic acids, consisting in the oxidation of α. β. unsaturated aldehydes in an alkaline medium with hypo-halites.

1,858,552. POWER CUTTING MACHINE FOR PRINTERS' BORDERS. JOHN DALE KEENAN and EMIL FIGGE, New York, N. Y., assignors to American Steel Chase Co., Inc., New York, N. Y., a Corporation of New York. Filed May 11, 1929. Serial No. 362,444. 4 Claims. (Cl. 90—15.)



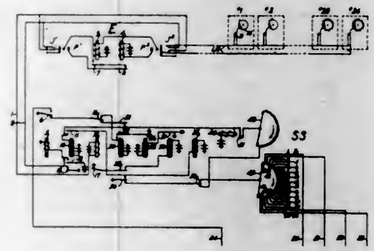
1. A machine for simultaneously cutting and mitering a printer's border rule comprising a base having a work support, a bracket adjustable on the support, a spindle head slidable on the front of the bracket, a shaft having a double bevelled toothed cutter on the spindle head, a hand lever connected to the bracket and spindle head for moving the cutter vertically with respect to the side of rule, a forked clamping member on the front of the work support for engaging the inner side of the rule adjacent each side of said cutter, and manually actuable means to dislodge the rule after mitering.

1,858,553. METHOD OF AND MEANS FOR RECORDING AND REPRODUCING SOUNDS. GIOVANNI LIGUORI, Munich, Germany. Filed Nov. 2, 1931, Serial No. 572,585, and in Germany July 27, 1931. 14 Claims. (Cl. 179—100.2.)



1. A system of magnetically recording and reproducing sounds by means of magnetizable wire, bands and the like, consisting of energizing a closed main magnetic circuit in accordance with the varying intensity and pitch of the sound waves, producing a magnetic shunt influenced by said closed main magnetic circuit, and positioning the magnetizable wire, band and the like in the field of said magnetic shunt.

1,858,554. WATCHMAN'S SUPERVISORY SYSTEM. CLARENCE E. LOMAX, Oak Park, and OSCAR C. LEVY, Chicago, Ill., assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 2, 1929. Serial No. 343,871. 10 Claims. (Cl. 177—360.)

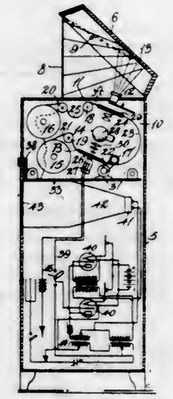


6. In a signalling system, a line extending to a central office and terminating in an automatic selector switch, signalling stations on said line each having means for progressively operating said switch onto a different one of its bank contacts, a group of relays one for each station and each controlled by the preceding relay and connected in successive order to consecutive ones of said bank contacts, means responsive to the operative means at the first of said stations for operating said switch onto a bank contact to operate the first of said relays, means responsive to the operative means at the succeeding stations in consecutive order for operating the succeeding relays one after another, signalling means controlled by said relays, and means responsive to the operation of the last of said relays for operating said signalling means.

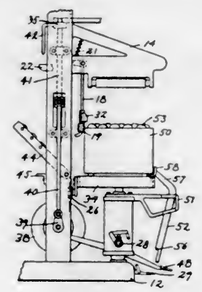
1,858,555. MOTION PICTURE AND SOUND REPRODUCING APPARATUS. FREEMAN H. OWENS, New York, N. Y. Filed June 4, 1923, Serial No. 643,153. Renewed Mar. 19, 1929. 12 Claims. (Cl. 88—16.2.)

6. In a talking motion picture device of the class described, an image projector, a light sensitive element and a common source of light directly therebetween, means to pass a sound and image film through said device, said means continuously passing said film between said source and said light sensitive element and intermittently between said source and the image projector.

9. In a talking motion picture device of the class described, an image projector, a light sensitive element and means to pass a sound and image film past said element and said projector in two directions, said film having a plurality of rows of corresponding sound and image photographs thereon to permit running of the film in opposite directions, said sound photographs leading said image photographs in one row, lagging in another row, said lead and lag being equal.



1,858,556. BOX LIDDING MACHINE. HALE PAXTON, Sanger, Calif. Filed July 17, 1930. Serial No. 468,682. 27 Claims. (Cl. 1—10.)

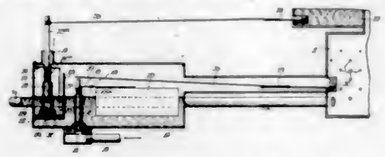


1. In combination with a box lidding machine having a frame, a nailing table adapted to be raised and lowered, means for raising and lowering said nailing table, a reciprocating driving head, and an opening in the rear of the machine, adapted for a box to pass through, of a gate adapted to be held in operative relation as a stop adjacent to the nailing table and across said rear opening when the nailing table is at its lowest point of travel and during the upward travel of said nailing table, and means for making said stop inoperative when the nailing table is approximately at the top of its path of travel.

1,858,557. EMERGENCY FLOAT CONTROL FOR OIL HEATERS. HOWARD I. PIATT, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Jan. 14, 1931. Serial No. 508,586. 11 Claims. (Cl. 236—21.)

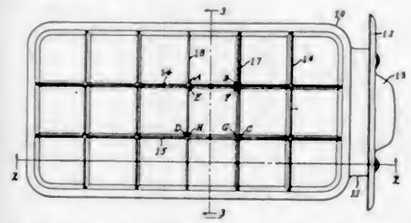
1. An emergency control for liquid fuel burners comprising, in combination with the burner, a fuel supply, a float chamber traversed by the fuel, a valve therein nor-

mally actuated by the float to close at a predetermined level of the fuel in the chamber, a thermostat subject to the head of the burner and so disposed with reference



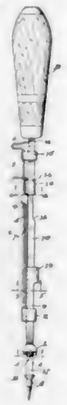
to said valve as to close the same when the temperature drops below a predetermined minimum regardless of the normal float control.

1,858,558. REFRIGERATING APPARATUS. DONALD H. REEVES, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,348. 4 Claims. (Cl. 62—108.5.)



1. An ice-making container for domestic mechanical refrigerators comprising a tray and partitions dividing the tray into compartments for forming ice blocks, said partitions being of uniform thickness and diverging from one another to form tapering compartments.

1,858,559. SCREW HOLDING DEVICE. CHARLES I. RICHART, Whittier, Calif. Filed Sept. 18, 1930. Serial No. 482,698. 6 Claims. (Cl. 145—52.)



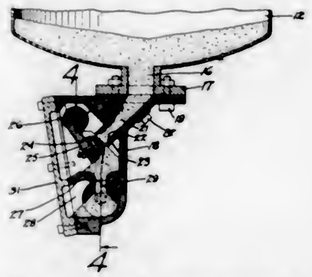
1. A screw holding device comprising a longitudinal strip having a finger hold at its rear end and laterally projecting ears adjacent its forward end with shanks projecting forwardly from the ears and terminating in spring jaws, the ears being adapted to be bent around the shank of a screw driver for sliding movement longitudinally thereof with the longitudinal strip projecting rearwardly along the shank of the screw driver and the shanks of the spring jaws projecting forwardly along opposite sides of the blade of the screw driver so that the spring jaws are adapted for longitudinal projection or retraction relative to said blade, the shanks of the spring jaws being bent so as to normally laterally expand the jaws, and a second longitudinal strip having a finger hold at its rear end and laterally projecting ears at its forward end, the last mentioned ears being adapted to be bent around the operatively positioned shanks of the spring jaws for sliding movement longitudinally thereof with the second mentioned strip projecting rearwardly along the shank of the screw driver and said operatively positioned second mentioned ears adapted to contract the spring jaws by forward shifting of said ears along the normally bent shanks of the jaws.

1,858,560. SHOTGUN. RALPH B. ROSENSTIEL, Freeport, Ill. Filed Mar. 24, 1931. Serial No. 524,913. 9 Claims. (Cl. 42—79.)



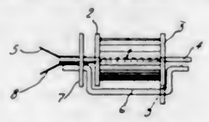
1. A shot-gun barrel having near its muzzle end but spaced back therefrom a single substantially straight bore of reduced caliber as compared with the caliber of the main bore in the breech end of the barrel, there being a shoulder at the intersection of said bores, said main bore being smooth and uninterrupted, the bore of the barrel at its muzzle end being of larger caliber than said straight bore.

1,858,561. SAND BLAST MACHINE. RICHARD RUEMELIN, Minneapolis, Minn. Filed July 26, 1926. Serial No. 124,979. 3 Claims. (Cl. 51—12.)



1. A sand tank, a valve casing attached to the tank and having an upper valve chamber and a lower mixing chamber, and passages respectively establishing communication between the tank and valve chamber, and valve and mixing chambers, a pipe line communicating across the mixing chamber beneath the latter passage at a level intermediate the top and bottom of the chamber, a valve in the upper chamber adapted to close the first mentioned passage, both chambers being open at one side, and a plate removably closing the chambers and allowing simultaneous access to both, when removed.

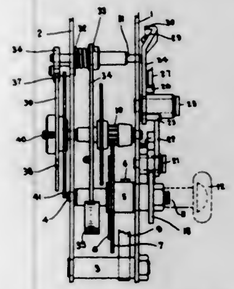
1,858,562. ELECTROMAGNETIC RELAY. HUGO SCHEDLBAUER, Vienna, Austria, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed May 28, 1930, Serial No. 456,432, and in Germany Sept. 2, 1929. 1 Claim. (Cl. 200—87.)



An electromagnetic relay comprising an energizing coil wound upon a flat iron core between two coil flanges secured on said core at substantial distances from the ends

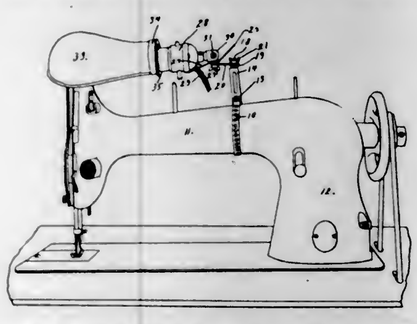
thereof, one of said coil flanges provided with an aperture, a U-shaped armature having flaring ends and arranged substantially parallel to the surface of said core, said armature projecting through said aperture and positioned thereby with one of its flared ends adjacent an end of said core, means for insulatedly fulcruming said armature at its other flared end on said core at its other end, and soldering tags on the end of said armature and core adjacent said fulcrum means whereby said armature and core may be included in an electric current circuit, said armature adapted to be moved on said fulcrum and within said aperture upon the energization of said coil to engage its free end with said core, and adapted to be oppositely moved by gravity upon the deenergization of said coil, thereby closing and opening the current circuit of the armature and core each time the coil is energized and deenergized.

1,858,563. ALARM CLOCK. MAX SCHLENKER, La Salle, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed Aug. 29, 1930. Serial No. 478,641. 7 Claims. (Cl. 58—16.)



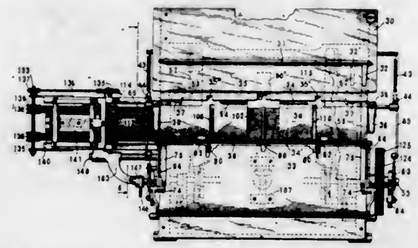
7. In an alarm clock, a bell, a hammer associated with said bell, a driving means, a plurality of toothed wheels, one having a greater number of teeth than the other, mounted on a shaft associated with said driving means and mechanism associated with said driving means for bringing said hammer into position to be actuated first by one of said toothed wheels and then by the other of said toothed wheels, said means comprising a lever and a cam actuated by said driving means, in combination with a time movement having means for releasing said driving means at a predetermined time and manually operated means for stopping said driving means.

1,858,564. LIGHTING DEVICE FOR SEWING MACHINES. EDWARD E. SEE, Omaha, Nebr. Filed Apr. 14, 1930. Serial No. 444,101. 3 Claims. (Cl. 240—2.14.)



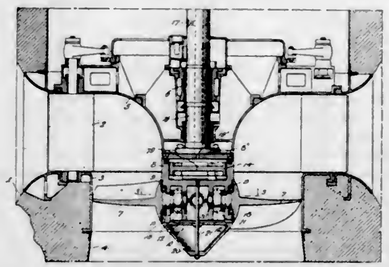
1. In a lighting device for sewing machines, an electric lamp-socket, a bracket to which said socket is pivotally connected to swing about a horizontal axis, the bracket having a resilient stop-arm adapted to yieldingly support the socket in a substantially horizontal position and having another stop-arm adapted to yieldingly support the socket in a raised position, an arm to which said bracket is connected to swing about a vertical axis, an upright support-member to which said arm is swingably connected, and a clamp-member for connecting said upright support-member to the arm of a sewing machine.

1,858,565. FOLDING MACHINE AND METHOD. SAMUEL SOKOLOW, North Bergen, and JOHN E. PRESTON, Newark, N. J., assignors to F. & C. Manufacturing Co., a Corporation of New York. Filed Dec. 30, 1930. Serial No. 505,520. 17 Claims. (Cl. 270—61.)



1. In a folding machine, two pairs of members for gripping and stretching a fabric in one direction, and a sliding plate for folding one edge along the line of the gripping members.

1,858,566. HYDRAULIC MACHINE. ROGER V. TERRY, Hilton Village, Va., assignor to Newport News Shipbuilding and Dry Dock Company, a Corporation of Virginia. Filed Aug. 5, 1931. Serial No. 555,193. 12 Claims. (Cl. 253—143.)

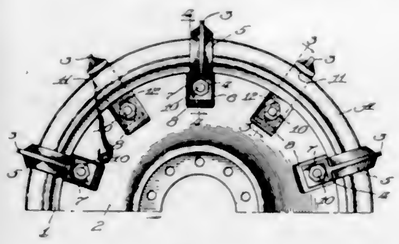


1. In an hydraulic machine, a runner, vanes pivoted therein on radial axes in a plane transverse to the shaft thereof and having the pivots thereof located to cause the axes thereof to lie above or up-stream with relation to the effective centers of water pressure on said vanes, yieldable devices within the runner hub which produce turning moments about said pivots whereby the flow of water past said vanes will permit their active surfaces to assume various angles relative to their plane of rotation, and connections between said parts to maintain said vanes substantially in definite lines with reference to the direction of water flow past said vanes for maximum efficiency.

1,858,567. GROUTER FOR WHEELS. ARTHUR B. WEBB, Milwaukee, Wis., assignor to The Rightway Corporation, a Corporation of Indiana. Filed July 24, 1930. Serial No. 470,376. 4 Claims. (Cl. 301—50.)

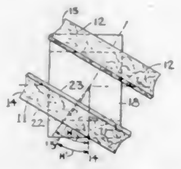
4. In combination, a wheel having on one side thereof a circular series of seats arranged in a plane at right angles to the axis of the wheel, a rigid, U-shaped grouter,

one arm of which is adapted to extend across the tread of the wheel and the other arm of which is adapted to lie at right angles to one of said seats, the latter arm of the grouter having at the end a broad base to rest against the seat on the wheel and having on one side in the plane of the U a flat bearing face, each seat on the wheel having a bolt hole therethrough, the grouter having



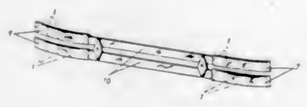
bolt holes extending through said base and through said face on the side at right angles to each other, and a bolt adapted to extend through one of the bolt holes in the wheel and through either of the holes in the grouter in order to hold the grouter rigid with one arm projecting across the wheel tread or with both arms lying beside the wheel.

1,858,568. METHOD OF GRINDING GEARS. ERNEST WILDHABER, Rochester, N. Y. Filed Sept. 25, 1926. Serial No. 137,792. 11 Claims. (Cl. 51—278.)



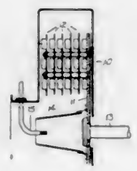
1. The method of grinding gears, which consists in providing a gear blank and a grinding wheel trued to a single circular arc, in mounting said grinding wheel on an axis offset from and nonparallel to the axis of said gear blank adjacent the point of nearest approach of the axis of the grinding wheel with respect to the axis of the gear blank, the axial distance of the working surface of said grinding wheel from said point of nearest approach being smaller than the outside radius of said gear blank, in rotating said grinding wheel in engagement with a tooth side of said gear blank, and in providing angular and linear feeding motions between said grinding wheel and said gear blank.

1,858,569. PROTECTIVE COVERING FOR AUTOMOBILE BUMPERS. CHARLES B. WOODWORTH, Port Dickinson, N. Y. Filed June 26, 1930. Serial No. 463,938. 2 Claims. (Cl. 293—55.)



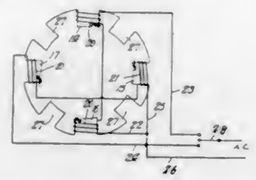
2. A protective covering for the ends of bumper bars comprising a plurality of spring clips and an elongated sheath secured to and holding said clips in spaced relation whereby to provide an elastic and flexible covering for said ends.

1,858,570. APPARATUS FOR CENTRIFUGALLY TREATING GASES, VAPORS, AND THE LIKE. MAX AURIG and GEORG BRÜCKLMAYR, Munich, Germany, assignors to Luise Theisen and Fred Hans Theisen, Munich, Germany. Filed June 24, 1929, Serial No. 373,396, and in Germany July 6, 1928. 4 Claims. (Cl. 261—90.)



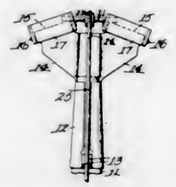
1. In a centrifugal apparatus for the purpose specified, the combination with a casing, of a rotor therein comprising discs spaced apart and having each a plurality of series of surface projections each series of projections extending in a line from the hub to the periphery of the disc and constituting a rib with numerous interruptions, the projections on the face of one disc extending into the spaces between the projections on the opposite face of an adjacent disc, and a horizontal shaft supporting and adapted to rotate all the discs within the casing.

1,858,571. ALTERNATING CURRENT MOTOR. EDWARD L. BARRETT, Chicago, Ill., assignor to Utah Radio Products Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1929. Serial No. 354,193. 5 Claims. (Cl. 172—278.)



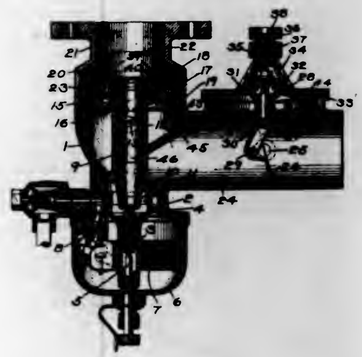
2. An alternating current motor comprising, in combination, a rotor, and means for inducing rotation of said rotor in one direction or the other including poles permanently shaded to induce rotation of said rotor in one direction, other poles permanently and oppositely shaded to induce rotation of said rotor in the opposite direction, means for selectively energizing the similarly shaded poles, and means for preventing the flow of flux from the energized poles to the unenergized poles.

1,858,572. PACKAGE PICKER. JOHN T. BEECHLYN, Worcester, Mass. Filed June 11, 1931. Serial No. 543,647. 12 Claims. (Cl. 294—22.)



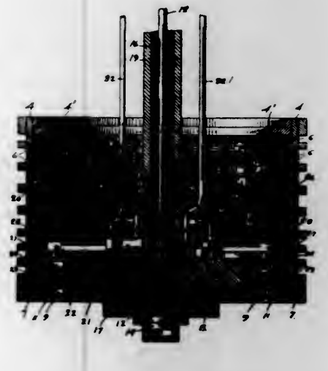
1. As an article of manufacture, an article handling device comprising a pair of gripping arms pivotally mounted and means whereby said arms will swing toward each other when they swing bodily vertically.

1,858,573. CARBURETOR. LAURENCE J. BERKELEY, Cleveland, Ohio. Filed July 12, 1929. Serial No. 377,733. 9 Claims. (Cl. 261—54.)



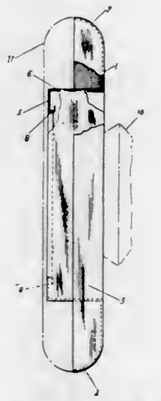
1. In a carburetor, the combination with a primary mechanism for supplying a mixture of air and liquid fuel and a throttle valve for controlling the flow of the mixture through a conduit from said mechanism to the engine, of means for supplying additional air to the primary mixture at a point between the valve and the engine and a baffle member for directing the flow of additional air across the flow of the primary mixture.

1,858,574. CENTRIFUGAL SEPARATOR. MICHAEL N. BONSIAKOS, San Francisco, Calif. Filed Sept. 2, 1931. Serial No. 560,691. 5 Claims. (Cl. 210—74.)



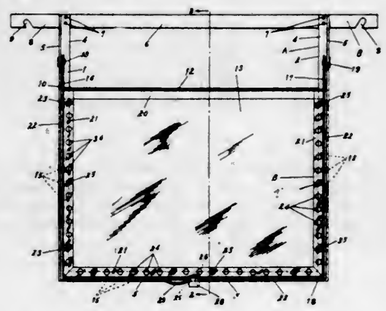
1. The combination with a centrifugal separator having perforated walls and an annular discharge opening in the bottom thereof and adjacent to the internal wall of said separator, of an annular scraper movably mounted within said separator and in contact with the said internal wall; a plurality of gates mounted within said separator and above the scraper to close the annular, discharge opening of said separator; means for opening said gates; and means for moving the scraper over the internal wall of said separator to remove accumulated material therefrom.

1,858,575. CAMERA BODY. CARL A. BORNMANN, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Aug. 18, 1930. Serial No. 476,055. 5 Claims. (Cl. 95—32.)



1. A one piece polygonal stamping adapted for use as a camera body or the like, having a Z-shaped cross section, the outwardly directed foot of the Z terminating in an upward extension and the inwardly directed arm terminating in a hook shaped fastening means for bellows.

1,858,576. FILM AND PLATE HANGER. CARL BORNMANN, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Aug. 18, 1930. Serial No. 476,057. 3 Claims. (Cl. 95—100.)



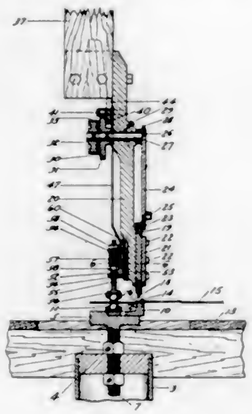
1. A film and plate hanger comprising a pair of open frames pivoted together and provided with cooperating flanges forming retaining channels for the edges of the film or plate therein, and means on said flanges for engaging the film or plate at spaced points only, said means comprising oppositely disposed lugs formed on said flanges at spaced intervals for aligned engagement with said film edges on opposite sides thereof.

1,858,577. ACCELERATOR FOR THE VULCANIZATION OF RUBBER. ADRIEN CAMBRON, Montreal, Quebec, Canada, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Original application filed Jan. 20, 1926, Serial No. 82,613, and in Germany Jan. 19, 1927. Divided and this application filed Mar. 28, 1928. Serial No. 265,524. 17 Claims. (Cl. 260—130.)

1. A process which comprises condensing under essentially anhydrous conditions a straight chain aliphatic

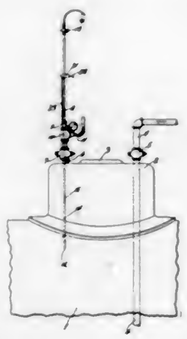
aldehyde having a plurality of carbon atoms with a primary aromatic amine in the presence of an acidic material as a catalyst and without a solvent.

1,858,578. SHEET METAL WORKING MACHINE. EDWARD M. CLARK, Davenport, Iowa, assignor to Lustrolite, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 29, 1928. Serial No. 315,718. 8 Claims. (Cl. 153—48.)



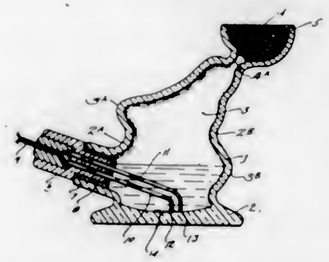
2. In a machine of the character stated, a die holder having an anti-friction means to assist in holding sheet metal being operated upon, a die secured in the die holder, a presser mechanism carrying anti-friction means adjacent the first named anti-friction means and cooperating therewith in holding the work, means to cause the dies to operate upon the metal, the anti-friction means holding the metal steady during operation thereon but permitting the same to be readily shifted as desired, and means to cause discontinuance of the functioning of the machine and to relieve the pressure of the presser mechanism.

1,858,579. GAUGING DEVICE. JOHN W. CLINKSCALES, Jr., Braman, and FRANK C. CUTTING, Tulsa, Okla., assignors to Shell Petroleum Corporation, a Corporation of Virginia. Filed Jan. 26, 1928. Serial No. 249,645. 5 Claims. (Cl. 73—52.)



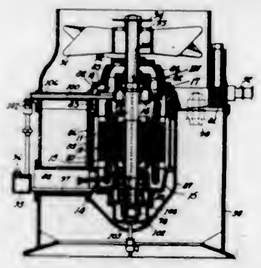
1. In a gauging device for tank cars, the combination of a sealed member adapted to be placed in communication with the interior of the tank, a tube slidably mounted through said sealed member, said tube having spaced openings through its walls, a thermometer supported in said tube and having a scale registering with one of said openings, and packing material between the tube and thermometer and located between said openings whereby the temperature of a sample under conditions within the tank may be read from the exterior of the car while the liquid around the bulb of the thermometer is subjected to the conditions within the tank.

1,858,580. THERAPEUTIC DISPENSER FOR VOLATILE SUBSTANCES. EDWARD COLLINS, San Mateo, Calif., assignor, by mesne assignments, of one-eighth to Fred F. Russell, Oakland, Calif., and seven-eighths to Edward B. Anderson, Portland, Oreg. Filed May 10, 1930. Serial No. 451,264. 2 Claims. (Cl. 128—192.)



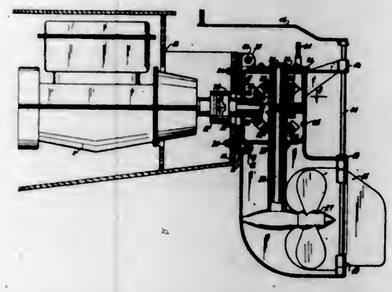
1. An electric liquid vaporizing device comprising a one piece container, inwardly extending bends disposed at oppositely disposed sides of the container, a hump disposed on each side of the container, one above and one below the bends, a cup-shaped recess terminating the discharge end of the container, a plug receiving boss rearwardly extending from the container, an electric plug adapted for placement within the plug receiving boss, a cementitious binder disposed between the plug and the plug receiving boss to render the joint liquid tight, an electric conductor disposed within the plug and electric terminals outwardly extending from the inner end of the plug, the electric terminals being spaced apart and terminating in spaced relationship with the inner bottom wall of the container, and a carrying agent disposed within the cup-shaped recess.

1,858,581. BLOWER. FRANS H. C. COPPUS, Worcester, Mass., assignor to Anna M. C. Wechsberg, Vera L. Wood, and Frans H. C. Coppus, trustees, Worcester, Mass. Original application filed Sept. 14, 1925, Serial No. 56,113. Divided and this application filed Mar. 31, 1927. Serial No. 180,018. 25 Claims. (Cl. 104—52.)



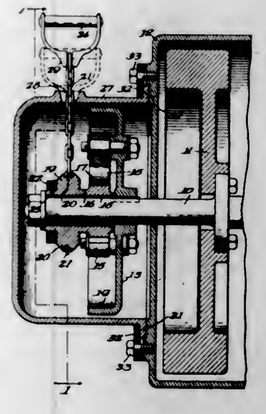
1. In a blower of the class described, the combination of a casing for conveying the hot gases, a fan within the casing having a hollow hub, a shaft to drive the fan, a second casing around the shaft, and means for passing air through said second casing and through the fan hub for cooling the latter.

1,858,582. MEANS FOR PROTECTING THE PROPELLER AND RUDDER OF BOATS. EMERY H. FAHRNEY, Chicago, Ill. Filed Dec. 22, 1928. Serial No. 327,781. 6 Claims. (Cl. 115—41.)



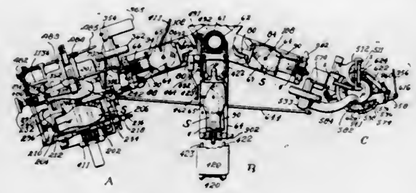
1. In combination, a boat, a motor therein fixed against bodily movement, a propeller, a support for the propeller, a propeller shaft, means connecting the propeller support to the boat, for swinging movement with respect to the motor, means yieldingly holding the propeller in a position to project below the boat bottom, the last recited means embodying an element destructible under abnormal stress, and a separable connection between the propeller shaft and the motor.

1,858,583. STARTING DEVICE FOR ENGINES. EMERY H. FAHRNEY, Chicago, Ill. Filed Nov. 15, 1929. Serial No. 407,449. 5 Claims. (Cl. 74—55.)



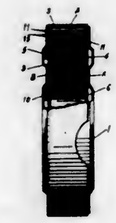
1. In combination a rotatable shaft, a starter therefor embodying co-operating pawl and ratchet mechanism, one part of which mechanism is secured to the shaft for rotation therewith, means for rotating the other, said means embodying a flexible member adapted to be wound up and unwound, a casing forming a housing for said mechanism, said flexible member passing through the casing to the outside thereof, and means mounting said casing for rotation.

1,858,584. SHOE MACHINE. FREDERICK M. FURBER, deceased, Revere, Mass., by Samuel R. Cutler, administrator, Revere, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 16, 1926. Serial No. 129,469. 282 Claims. (Cl. 12—17.)



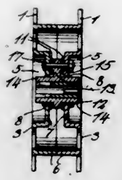
1. The combination with a support for a sole-portion, of a member arranged to engage a sole-portion near one extremity and furnishing an axis about which said portion may be rotated, and retaining means for the opposite extremity of the sole-portion, said retaining means being organized to permit such rotation.

1,858,585. PHOTOGRAPHIC FILM CARTRIDGE. FRANK J. GANTNIER, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Aug. 18, 1930. Serial No. 475,949. 6 Claims. (Cl. 95—9.)



1. A film cartridge comprising a reel having a hub and spaced flanges adapted to receive windings of film thereon, a leader strip attached at one end to the outer end of the wound film and wound about the same on said reel, and a protective strip interwound with said leader strip, said protective strip being slightly wider than said leader strip and the space between said flanges.

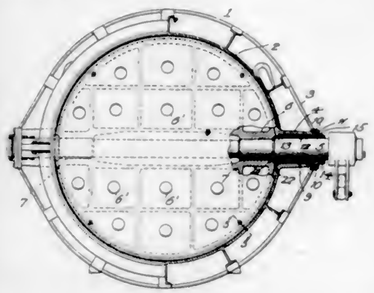
1,858,586. MOVING PICTURE REEL. LOUIS B. GOLDBERG, NATHAN GOLDBERG, WILLIAM GOLDBERG, and JACOB M. GOLDBERG, Denver, Colo. Filed Oct. 20, 1930. Serial No. 489,844. 3 Claims. (Cl. 242—70.)



3. A moving picture reel comprising two substantially identical parts each having a circular rim and a central portion provided on one side with a circular flange of uniform width, a spacer located between the two parts with-

in the space enclosed by the flanges, the spacer and the two parts of the reel having registering openings for the reception of clamping bolts and means for interlocking the spacer and the two reel parts for holding them in a predetermined relative rotary position independently of the clamping bolts and the flanges.

1,858,587. VALVE SEAL. WILLIAM F. GRANT, Newport News, Va., assignor to Newport News Shipbuilding and Dry Dock Company, a Corporation of Virginia. Filed Sept. 6, 1929. Serial No. 390,717. 11 Claims. (Cl. 251—11.)



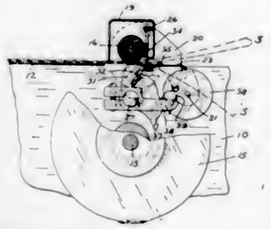
1. In an hydraulic valve structure of the butterfly type, a bushing in which the valve shaft rotates, and packing means surrounding said bushing between the same and the valve disc.

1,858,588. SCALE BEARING. HARLAN A. HADLEY, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed Apr. 16, 1927. Serial No. 184,310. 12 Claims. (Cl. 308—2.)



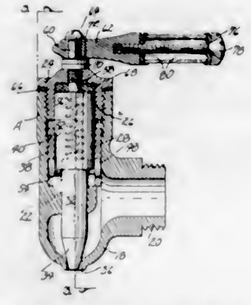
1. In a device of the character described, the combination with a support, of a bearing seat having a recess therein mounted for longitudinal adjustment on said support, a bearing having a nose thereon mounted in said recess, and nibs on said seat adapted to prevent oscillation of said bearing longitudinally of said seat.

1,858,589. ANTIPILFER RECORD MACHINE. LOUIS F. HAGEMANN, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed July 25, 1929. Serial No. 380,889. 22 Claims. (Cl. 282—16.)



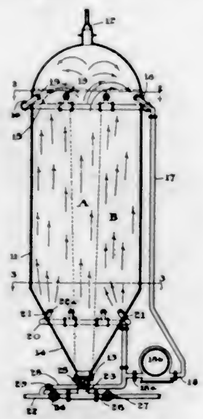
1. In a manifolding machine, in combination, feed mechanism for record strips, releasable feeding means for feeding a record strip into a filing compartment, a separate strip checking device for checking reverse movement of the record strip from said filing compartment, means for setting said checking device in strip checking position, and means for preventing release of said strip checking device when said feeding means is released.

1,858,590. OIL FOUNTAIN FAUCET. WALTER R. HENION, Minneapolis, Minn., assignor to Boe Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 13, 1930. Serial No. 428,108. 5 Claims. (Cl. 251—40.)



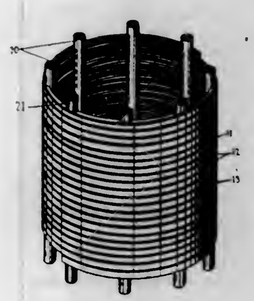
1. In a faucet construction, a cylindrical valve body, a valve member slidable relative thereto, a cylindrical cage inserted in said body having a spiral groove, said valve member having a pin coacting therewith, and notch and pin means to prevent rotation of the cage with respect to the valve body.

1,858,591. APPARATUS FOR MAKING PULP. REX W. HOVEY, St. John, New Brunswick, Canada. Filed Nov. 3, 1928, Serial No. 317,084, and in Canada July 15, 1926. 1 Claim. (Cl. 92—7.)



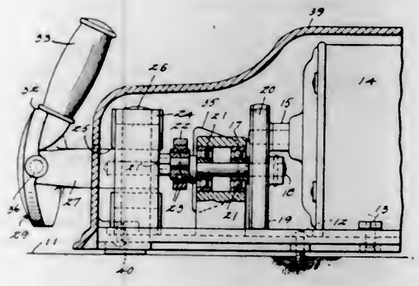
An apparatus for cooking pulp which comprises a digester provided with means for introducing a heating fluid into the bottom of the digester at the central axis, a header located near the top of the digester having a series of pipes adapted to withdraw hot liquor from the top of the digester into the header, a pipe leading from the header to the bottom of the digester, a second header located at the bottom of the digester and provided with a series of pipes leading from the said lower header into the zone between the central axis and the periphery of the digester, and a circulating pump between the headers adapted to pump the hot liquor from the top of the digester into the bottom header.

1,858,592. WELL SCREEN. EDWARD E. JOHNSON, St. Paul, Minn., assignor to Edward E. Johnson, Incorporated, St. Paul, Minn., a Corporation. Filed Apr. 1, 1929. Serial No. 351,690. 10 Claims. (Cl. 166—8.)



1. A well screen comprising a supporting member formed with a number of grooves, a plurality of well screen elements having webs, said webs being disposed within said grooves, and solder keys formed on said member and disposed between the webs of said screen elements.

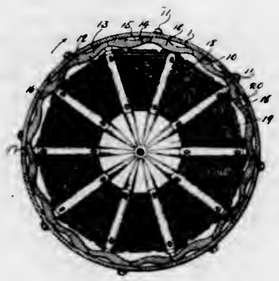
1,858,593. EXERCISING MACHINE. DOUGLAS KENDALL and DON HEYER, Hollywood, Calif. Filed June 27, 1929. Serial No. 374,304. 1 Claim. (Cl. 128—63.)



In an exercising machine, a laterally swingable oscillator having abdomen engaging members on one end and a counterbalance on the other end, a motor having a shaft, a shaft counter to the shaft of the motor, driving connections between the motor and the counter-shaft, and a pitman eccentrically connected with the counter-shaft and operatively connected with the counterbalance end of the oscillator.

1,858,594. MILL. FRANK E. MARCY, San Diego, Calif. Filed Apr. 30, 1928. Serial No. 273,803. 6 Claims. (Cl. 83—9.)

5. A rolled steel liner for mill drum shells, comprising liner sections extending lengthwise of the drum, the adjacent edges of the liner sections being beveled to facilitate placement and removal of the sections, each section being provided with wave or undulating surfaces on its wearing face and its inner face, the formation on the wearing face leading the formation on the inner face.



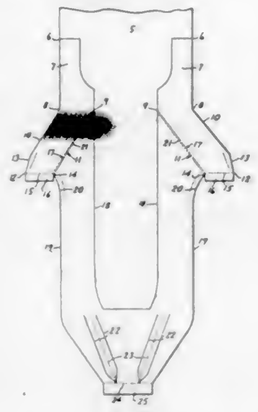
1,858,595. ADJUSTABLE GARMENT SUPPORT. WILLARD H. PARKER, Fairfield, Iowa, and ALBERT P. CANNON, Keithsburg, Ill. Filed Dec. 29, 1930. Serial No. 505,452. 2 Claims. (Cl. 248—7.)



1. A supporting device, comprising a pair of telescoping tubes, means for supporting one of said tubes, means on the other tube for supporting an object, an actuating rod slidably mounted in the inner tube, said rod having a part snugly fitting within said tube and provided with a laterally opening notch having an inclined face and of greater width at its lower end, said inner tube being formed with an opening in its wall opposite said notch, a rolling locking member confined in said notch and having a part projecting through the opening of the inner tube into engagement with the wall of the outer tube, said inner tube projecting beyond one end of the outer tube and formed

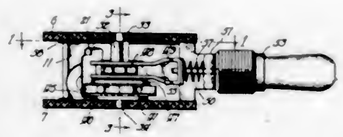
with a second lateral opening in such projecting portion, said actuating rod being formed with a laterally opening socket disposed opposite to said second mentioned lateral opening in the inner tube, a bracket on the projecting portion of said tube, a bell-crank lever fulcrumed on said bracket and having one end extended through the second mentioned opening of the inner tube into the socket of said actuating rod, and a spring mounted between the inner tube and the handle portion of said bell crank lever for normally drawing said actuating rod downwardly and causing said inclined face to press said locking member into engagement with the wall of the outer tube.

1,858,596. STOCKING. HENRY PETERS, Clifton, N. J., assignor to Universal Patents Holding Co., Weehawken, N. J., a Corporation of New Jersey. Filed Sept. 13, 1930. Serial No. 481,674. 1 Claim. (Cl. 66—172.)



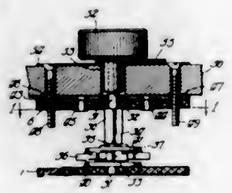
A blank or web for a full fashioned hose, said blank being knitted in its entirety on a single flat knitting machine, the main thread of said blank being continuous over substantially the entire area of said blank, the upper heel portions having reinforced areas formed of reinforcing threads looped with the main thread and the adjacent heel and sole portions having reinforced areas formed of other reinforcing threads looped with the main thread and an overlap between said upper heel reinforced areas and said adjacent heel and sole reinforced areas having both reinforcing threads looped with the main thread, said heel portions being formed with an outward carrier movement.

1,858,597. MULTIPLE CIRCUIT CONTROLLING SWITCH. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, Valparaiso, Ind., a Corporation of Indiana. Filed Feb. 17, 1930. Serial No. 429,024. 6 Claims. (Cl. 200—64.)



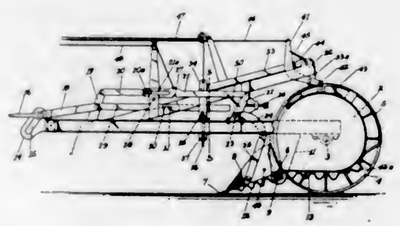
6. A movable bridging contact assembly for switches comprising spaced frame members, a spindle journalled in said frame members and having slidably and non-rotatably mounted thereon a bridging contact and an actuating element, insulating washers on opposite sides of said bridging contact, and means rotatably receiving said spindle interposed between said actuating element and bridging contact, said last named means being movable in a plane perpendicular to said spindle, and a pawl for moving said actuating member guided by said last named means.

1,858,598. ROTARY SNAP SWITCH. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, Valparaiso, Ind., a Corporation of Indiana. Filed Feb. 17, 1930. Serial No. 429,025. 3 Claims. (Cl. 200—63.)



1. A switch of the character described including spaced frame members of insulating material, opposed groups of spacing members of conducting material holding said frame members in spaced relation, certain of said spacing members having wiring terminals and stationary contacts connected therewith, and securing means for mounting said switch on a support mounted between the groups of spacing member, said securing means including a bar rigidly mounted on one of said frame members and mounting screws screwthreaded into said bar.

1,858,599. AUTOMATIC CONTROL SCRAPER. COLLIS P. RENAUD, Tulare, Calif. Filed Mar. 24, 1930. Serial No. 438,403. 25 Claims. (Cl. 37—140.)

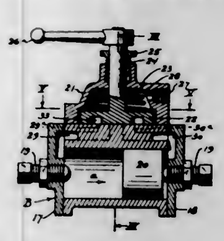


10. A scraper including a dumping bowl normally clear of the ground, an apron and scraping blade unit separate from but positioned in connection with the bowl to scrape dirt and deliver the same into the bowl, means movably mounting the unit so that it may be raised clear of the ground without disturbing the bowl, and to such a position as to cause the unit to form a closure for the lower front portion of the bowl and means to thus raise the unit.

1,858,600. APPARATUS FOR CURING MEATS. JOHN E. ROSBERG, San Francisco, Calif., assignor of one-half to Tiedemann & Harris, Inc., San Francisco, Calif., a Corporation of California. Filed Nov. 29, 1930. Serial No. 498,998. 1 Claim. (Cl. 221—103.)

In an apparatus of the character described a measuring device comprising a cylinder having a pair of ports formed therein and connected with opposite ends of the cylinder, a valve housing having a chamber formed therein in communication with said ports, means for delivering a liquid under pressure to said chamber, a discharge port formed in the cylinder, a piston in the cylinder, a

disc valve mounted in the housing, said valve having a port formed therein adapted to direct liquid under pressure to either end of the cylinder and said valve having a channel formed in its lower surface which is in constant communication with the discharge port and which



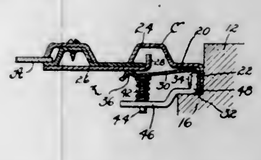
is adapted to register with either end of the cylinder alternately, and means for imparting an oscillating movement to the valve to bring its port into register with one end of the cylinder and the channel into register with the opposite end of the cylinder or vice versa.

1,858,601. COMBINED CLUB AND FIREARM. REGINALD F. SEDGLEY, Philadelphia, Pa. Filed Nov. 27, 1928. Serial No. 322,204. 14 Claims. (Cl. 42—1.)



1. The combination with a policeman's club having a slot, of a firing mechanism concealed within said club and having a trigger disposed in said slot and provided with a boss which effects cocking of the trigger when pressed by the holder of the club.

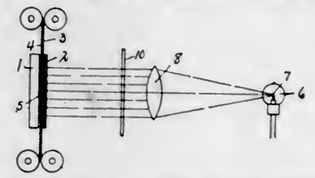
1,858,602. FRICTION SUPPORTING MEANS FOR SCREENS AND STORM SASHES. DARIUS E. SHRAUGER, Atlantic, Iowa. Filed Feb. 24, 1930. Serial No. 430,576. 2 Claims. (Cl. 189—73.)



1. Friction supporting means for a window closure unit, comprising a rigidly mounted supporting member, a friction plate arranged parallel therewith, a bracket substantially parallel with and spaced from the plate, a stud carried by the plate and extending loosely through the bracket, and a tension spring coiled on said stud for causing the plate to exert yielding pressure on a unit mounted between itself and the supporting member.

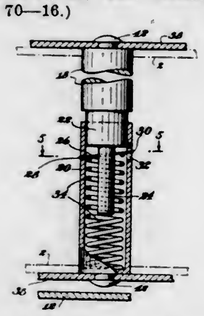
1,858,603. APPARATUS FOR PRINTING FROM A NEGATIVE SOUND RECORD TO A POSITIVE. EARL I. SPONABLE, New York, N. Y. Filed Mar. 26, 1928. Serial No. 264,703. 6 Claims. (Cl. 95—75.)

1. An apparatus for printing from a negative sound record to a positive comprising a wall having an opening therein past which a negative and positive move in overlying relation, a source of light, means for causing rays of light from said source to pass through said opening



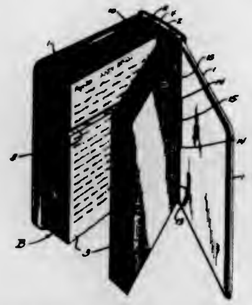
in a direction normal to the negative, and means between the source of light and the negative which is opaque to rays of light of comparatively long wave length.

1,858,604. ESCUTCHEON. ERNEST L. TEICH, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed May 19, 1930. Serial No. 453,544. 6 Claims. (Cl. 70—16.)



5. An attaching device of the class described comprising a socket member, a member adapted to enter said socket member, and means acting automatically when said members are thus engaged to secure the two members together comprising a gripping washer mounted for tipping movement in the socket member and adapted to receive the end of the other member, and a spring tending to tip said washer so as to cause it to grip the inserted member, said socket member being adapted to receive the spring and washer through the inner end thereof and being constructed to closely fit a portion of the other member.

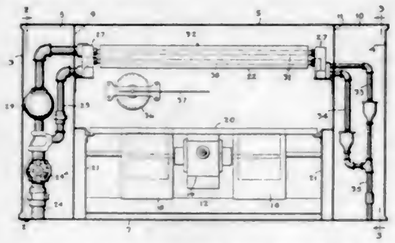
1,858,605. LESSON MARKER AND MEANS OF HOLDING IN BOOK. GEORGE B. VON ALVENSLEBEN, Eureka, Calif. Filed Mar. 22, 1932. Serial No. 600,472. 8 Claims. (Cl. 116—119.)



1. In a bookmarker set, the combination of a marker comprising a flexible section shaped to extend along the inside edge of the page adjacent the binding, having out-

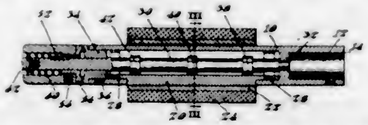
wardly forked ends and a part extending out from the flexible section to beyond the edge of the sheet to indicate the position of the marker and a holder at each end of the book for positioning said marker in the book comprising a retaining loop positioned to be engaged by said forked ends and shaped to follow the curve normally taken by said forked ends when the book is opened and closed, a bar fastened to said loop and resting on the tops of the leaves, and means to connect the holders.

1,858,606. MULTIPLE TEMPERATURE CONTROL FOR HEATING AND VENTILATING UNITS. ELLIS L. WERFT, Philadelphia, WARREN EWALD, Ardsley, and PERCIVAL P. HENSHALL, Philadelphia, Pa., assignors to John J. Nesbitt, Inc., Holmesburg, Pa., a Corporation of New Jersey. Filed Apr. 17, 1930. Serial No. 445,108. 6 Claims. (Cl. 257—137.)



1. A heating and ventilating unit having, in combination, a heating element, blower means and means for actuating the same, a mixing damper arranged adjacent the heating element, means for supplying fluid to the heating element including automatic and manual controlling means, means for adjusting the mixing damper relatively to the heating element including automatic controlling means, both automatic controlling means being actuated by the temperature surrounding the unit.

1,858,607. SPINDLE. JOHN E. WHALEN, Hopkinton, Mass., assignor to Seamans & Cobb Company, Hopkinton, Mass., a Corporation of Maine. Filed Apr. 17, 1928. Serial No. 270,703. 7 Claims. (Cl. 242—72.)

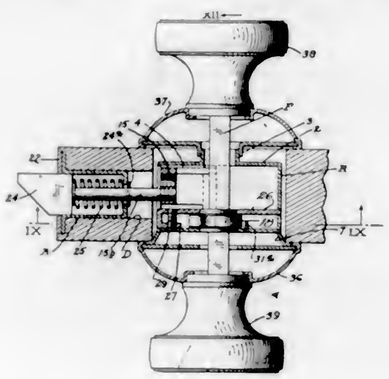


1. A rotatable member for supporting a body having a tube-like passage, for rotation therewith, comprising gripping members adapted to be expelled into engagement with said body, resilient means for retracting said gripping members, a cam within said gripping members for expelling said gripping members, a handle splined to said cam and engageable with said body, and means for locking said handle upon contact of the handle with said body.

5. A rotatable spindle for supporting tubes comprising a body provided with expansible gripping members, a manually operable handle carried by said spindle having means for expanding said gripping members, adjacent surfaces of said body and said handle being toothed, and resilient means normally holding said toothed handle against said toothed body.

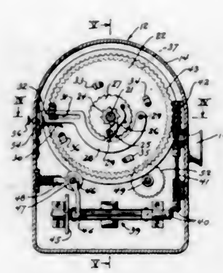
1,858,608. DOOR LATCH. ELLIS L. WILSON, San Anselmo, Calif. Filed May 19, 1930. Serial No. 453,603. 9 Claims. (Cl. 292—69.)

1. In a latch structure of the character described, a housing, a rib in one end of the housing, a narrow plate extending crosswise of the housing, a retractor reciprocally mounted between said plate and the end of the housing, and means on the retractor engaging the opposite



edges of the plate and the rib, said rib and plate forming a three-point track upon which the retractor is reciprocally mounted.

1,858,609. RIP CORD PULLING DEVICE. ABRAHAM V. ZIPSER and CYRIL ROCHE, Alameda, Calif. Filed July 28, 1930. Serial No. 471,125. 10 Claims. (Cl. 244—21.)

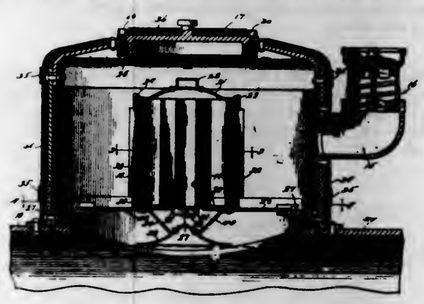


1. In a parachute rip cord pulling device the combination of, a rip cord, an energy storing means adapted when released to pull the rip cord, a timing means driven by said energy storing means, and a stop for said energy storing means adapted to be rendered inoperative by said timing means after a predetermined interval of lapsed time to permit said energy storing means to pull said rip cord.

10. In a device of the character described the combination of, a rip cord pulling element, a timing device for controlling the operation of said pulling element, and a single energy storing spring for driving both said rip cord pulling element and said timing device.

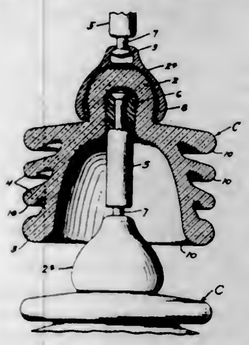
1,858,610. REFRIGERATION AND STORAGE AND CARRIAGE OF GASOLINE AND OTHER VOLATILE MATERIALS. THOMAS A. BANNING, Jr., Wilmette, Ill., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 16, 1928. Serial No. 270,352. 29 Claims. (Cl. 62—91.5.)

11. In a tank for the retention of liquids, a dome reaching upwardly therefrom and having its interior in communication with the interior of the tank above the normal level of liquid therein, a body of solid carbon dioxide



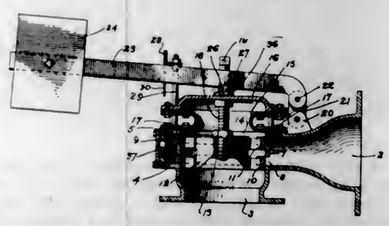
within said dome and above the level of liquid within the tank, and means for supporting said body in such position, substantially as described.

1,858,611. HIGH TENSION INSULATOR. SVEND BARFOED, San Francisco, Calif. Filed Feb. 11, 1931. Serial No. 514,977. 4 Claims. (Cl. 173—318.)



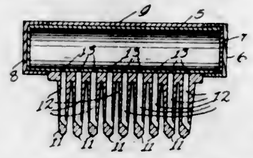
1. An insulator having a body portion, a plurality of projecting annular flanges formed thereon, the outer edge of said flanges being enlarged and rounded to such a degree as to establish a field between adjacent flanges which will not be overstressed to break down the insulating value of the surrounding air when subject to high potential surges.

1,858,612. PRESSURE REGULATING VALVE. FRED C. BELL, Alameda, Calif., assignor to Thyle Machinery Company, San Francisco, Calif., a Corporation of California. Filed Dec. 20, 1927. Serial No. 241,314. 3 Claims. (Cl. 50—27.)



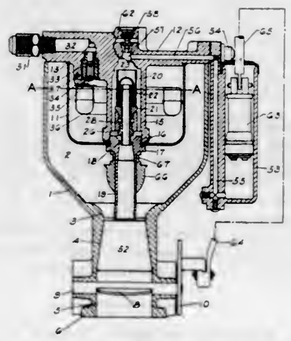
1. In a device of the character described, the combination with a cylinder and a valve slidably mounted therein, of an annular flexible diaphragm secured to one end of the cylinder, a pressure plate secured to the diaphragm forming a closure for one end of the cylinder, a lever extending across the pressure plate and engageable therewith, said lever being pivotally attached to the cylinder at one side of the pressure plate and having an adjustable weight on its opposite end to exert a predetermined pressure on the pressure plate, a stem connected with the valve and extending through the pressure plate, and an adjustable connection between the pressure plate and stem whereby the valve may be raised or lowered with relation to the pressure plate and from a point exterior of the plate.

1,858,613. DISPENSING DEVICE. JACOB ARMIN BENDER, Union City, N. J. Filed Aug. 19, 1931. Serial No. 558,132. 1 Claim. (Cl. 132—13.)



In a device of the kind described, a liquid container having discharge perforations, a plurality of teeth arranged spaced from each other and in a row and having dispensing passages therein, a tubular portion carrying the teeth and embracing said container, end caps on the container and confining the tubular portion therebetween and permitting rotation of the container for bringing the perforations into and out of registration with the passages, and means active upon said portion to normally hold the passages in the teeth out of registration with the perforations.

1,858,614. CARBURETOR. GEORGE M. BICKNELL, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed June 28, 1930. Serial No. 464,451. 13 Claims. (Cl. 261—34.)

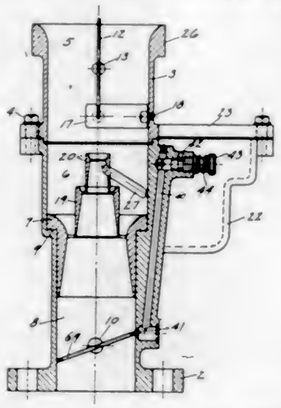


1. In a carburetor, a body member having an annular seat, an extension of said body member substantially coaxial with said seat; a down draft passageway in said extension; a standpipe threaded into the lower end of said extension and having a flange thereon, and a fuel bowl having its upper rim held in contact with said seat by screwing said standpipe in place.

1,858,615. CARBURETOR. GEORGE M. BICKNELL, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 18, 1930. Serial No. 496,396. 12 Claims. (Cl. 261—41.)

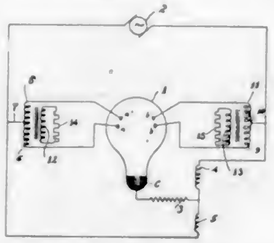
1. In a carburetor, means forming a mixing conduit, a venturi in said conduit, a second venturi discharging

substantially at the throat of said first named venturi, a constant level fuel chamber, a nozzle receiving fuel



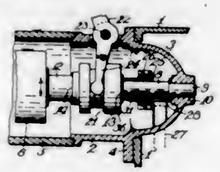
from said constant level chamber, said nozzle discharging at an angle against the air stream at an acute angle to the path of flow of air in the said second venturi.

1,858,616. BACK-FIRE TRAP FOR RECTIFIERS OR CONVERTERS. WERNER BOHRAUS, Montreal, Quebec, Canada. Filed May 30, 1930. Serial No. 457,560. 6 Claims. (Cl. 175—363.)



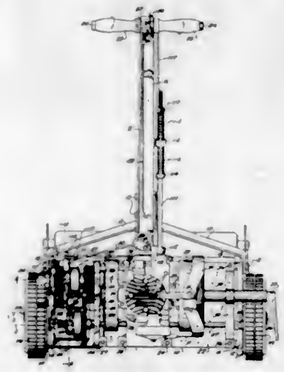
1. The combination with a rectifier or converter, of a back-fire trap comprising a pair of anodes connected to a common circuit, reactances interposed in the portion of the circuit leading to said anodes, said reactances being connected in parallel from said circuit to the anodes so as to compose separate circuits for the latter, each reactance including an auxiliary winding inductively coupled to the primary reactance, and non-inductive resistance coupled to said primary reactance.

1,858,617. STARTER DEVICE. DALMAR T. BROWNLEE, Indianapolis, Ind. Filed Aug. 4, 1930. Serial No. 472,935. 10 Claims. (Cl. 74—7.)



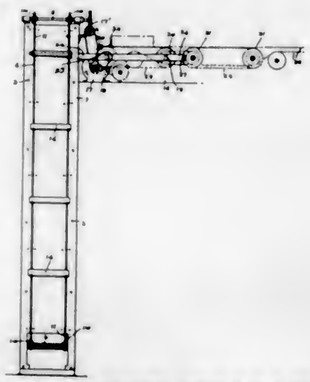
1. A starter device including a shiftable sleeve provided with a conical clutch surface having a helical thread groove, one portion of the groove having less width than the remaining portion thereof, a threaded nut operable on the clutch surface of the sleeve, the thread in the nut having a width corresponding to the lesser width of the groove, a pinion carried by the sleeve, and means to rotate the sleeve.

1,858,618. POWER DRIVEN MOWER. JOHN A. E. CARLSON, Racine, Wis., assignor to Jacobsen Manufacturing Co., Racine, Wis., a Corporation of Wisconsin. Filed May 17, 1926. Serial No. 109,491. 17 Claims. (Cl. 56—26.)



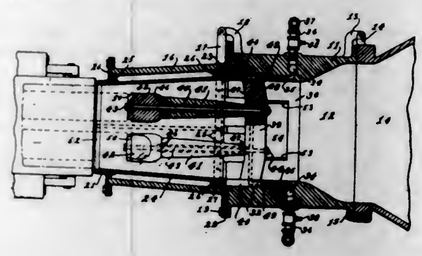
1. In a power mower including a frame and supporting traction means, a cutting element supported by said frame, and a motor mounted on said frame, a drive shaft connected to said motor, means including a driven shaft and clutch thereon for providing a driving connection between said drive shaft and said traction means, means providing a driving connection between said cutting element and said drive shaft and including a second clutch carried by said drive shaft, and means for controlling said clutches independently of each other.

1,858,619. TRAY CARRYING CONVEYER. RUDOLF D. DELAMERE, Toronto, Ontario, Canada, assignor to Delamere and Williams, Limited, Toronto, Ontario, Canada. Filed Mar. 11, 1929. Serial No. 346,209. 9 Claims. (Cl. 198—20.)



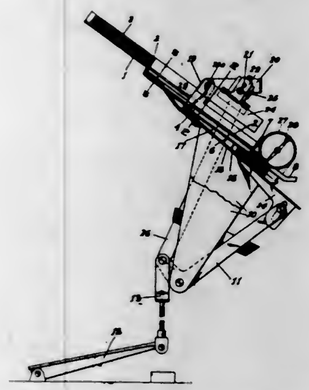
1. A tray carrying conveyer, comprising a vertical conveyer, a horizontal conveyer extending from said vertical conveyer, a pair of arms adapted to extend into the path of operation of said vertical conveyer in a horizontal position, and means for moving said arms in unison with an orbital movement in parallel relation to a fixed horizontal plane to lift the tray from the vertical conveyer and carry it outwardly therefrom in a horizontal position and deposit it on the horizontal conveyer.

1,858,620. HOLLOW BRICK AND TILE MOLDING MACHINE. LARS FRANDSEN, Los Angeles, Calif. Filed Mar. 19, 1929. Serial No. 348,186. 15 Claims. (Cl. 25—17.)



1. The combination with a plastic material, mixing and feeding machine of a two-part housing hinged to said machine the two parts of said housing being hinged to each other, a mold detachably arranged in the outer portions of said housing, a core removably positioned within said housing and means for delivering lubricating fluid to the front and rear portions of the external surfaces of the core and the rear portions of the internal surfaces of said mold.

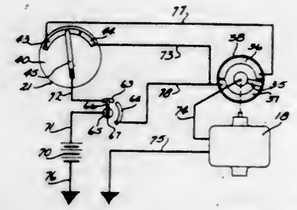
1,858,621. PAPER FOLDING MACHINE. CHARLES H. GUNN, Burlingame, Calif. Filed Sept. 2, 1930. Serial No. 479,156. 10 Claims. (Cl. 270—61.)



1. A paper folding machine including transversely spaced ledges forming supports for a sheet of paper along its side edges, a platform between and lower than the ledges, oppositely facing grooves extending lengthwise of the ledges, and being formed under the ledges at the level of the platform, and means for engagement with the sheet between the ledges to press the same down onto the platform, whereby the sheet is bent and the portions of the sheet originally resting on the ledges project upwardly; and to then force the sheet at the bends into the grooves whereby to cause said portions to be folded onto the main body of the sheet.

1,858,622. MOTOR CONTROL SYSTEM. SEBASTIAN GYSIN, Milwaukee, Wis. Filed Dec. 14, 1929. Serial No. 414,199. 2 Claims. (Cl. 172—239.)

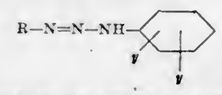
1. In a motor control system, the combination of an electrical motor, a source of electrical energy, three switches each comprising a movable contact and two stationary contacts, electrical conductors connecting the stationary contacts of one of the switches with the stationary contacts of another of the switches, one of the stationary contacts of the remaining switch being electrically connected with the movable contact of one of the other switches, and the other stationary contact of said



remaining switch being electrically connected with the stationary contact of the second of the other switches, and electrical conductors connecting the movable contacts of two of the switches, motor and electrical source.

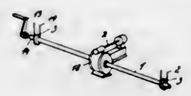
1,858,623. DIAZO-AMINO COMPOUNDS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, ERNST TIETZE, Cologne-on-the-Rhine, ANTON OSSENBECK, Cologne-Mulheim, and PETER BACKES, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed July 9, 1929, Serial No. 377,076, and in Germany July 14, 1928. 4 Claims. (Cl. 260—86.)

1. As new products the compounds of the probable general formula:



wherein R stands for the residue of a diazotizable aromatic amine suitable for producing azodyestuffs, one *y* stands for a carboxylic acid group and the other *y* stands for a substituent of the group consisting of the carboxylic acid and sulfonic acid groups and wherein the nuclei may be further substituted by substituents selected from the group consisting of alkyl, alkoxy, halogen, hydroxyl, the nitro group and substituted amino group, being generally greyish to orange crystalline powders, stable towards heat, percussion, friction and neutral and alkaline substances, and being split up in aqueous solution by acid reacting agents into the two starting components.

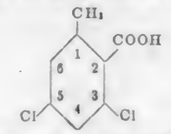
1,858,624. MECHANISM FOR OPERATING FOLDING MOTOR CAR TOPS. ARNOLD HESS and EMIL HESS, Solothurn, Switzerland. Filed July 22, 1930, Serial No. 469,888, and in Germany July 27, 1929. 4 Claims. (Cl. 74—7.)



1. A mechanism for operating folding motor car tops comprising a hollow operating shaft, manual and mechanical means for rotating said shaft, a clutch forming part of said mechanical means, a rod inserted in said hollow shaft and adapted to throw out said clutch, automatic means for throwing in said clutch and lugs for cooperating with helical grooves in the boss of the hand crank so as to throw out said clutch by rotating the hand crank after placing same on the outer end of said hollow shaft.

1,858,625. 3.5-DIHALOGEN-1-METHYL-BENZENE-2-CARBOXYLIC ACIDS AND PROCESS OF PREPARING THE SAME. ERWIN HOFFA, Hochst-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 13, 1927, Serial No. 226,038, and in Germany Oct. 23, 1926. 3 Claims. (Cl. 260—108.)

3. As new product, 3.5-dichlor-1-methyl-benzene-2-carboxylic acid of the following formula:



being readily soluble in alkalies, sodium carbonate, sodium acetate, alcohol, glacial acetic acid, chloroform, benzol, difficultly soluble in benzine or water; having, after being recrystallized from water, a melting point of 154° C. to 155° C. and forming an acid amide which melts at 167° to 169° C.

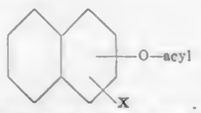
1,858,626. CASH REGISTER. MAX JACOB, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Feb. 8, 1924, Serial No. 691,484, and in Germany Mar. 1, 1923. 13 Claims. (Cl. 235—9.)



1. A machine of the kind described comprising a number wheel, an actuating member therefor, an amount setting member, means for differentially displacing said actuating member according to the amount set by said setting member subsequent to the setting thereof, said displacing means including a positively actuated connecting and interlocking member between said setting member and said actuating member.

1,858,627. PROCESS FOR MANUFACTURING ARTETRAHYDRONAPHTHOLS AND THEIR ESTERS. ERNST KORNEN, Fechenheim, near Frankfort-on-the-Main, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 19, 1928, Serial No. 320,540, and in Germany Nov. 21, 1927. 13 Claims. (Cl. 260—107.)

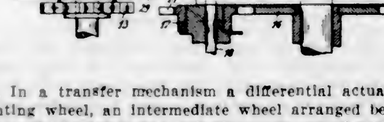
1. A process which comprises treating naphthol esters of the general formula:



wherein X stands for hydrogen, an alkyl group or a carboxylic ester group, with hydrogen, under superatmospheric pressures and at temperatures between about room temperature to about 110° C. in the presence of a base metal hydrogenation catalyst.

1,858,628. WATER INSOLUBLE AZODYESTUFFS AND PROCESS OF MAKING SAME. LEOPOLD LASKA and ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 17, 1929, Serial No. 379,060, and in Germany July 25, 1928. 8 Claims. (Cl. 260—95.)

1. A process which comprises combining a diazotized aromatic amino compound with a 2.3-hydroxynaphthoyl-4-amino-1-alkoxy-methylbenzene of the general formula:



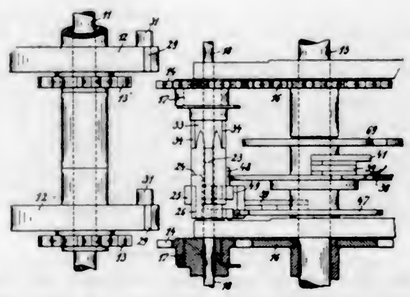
wherein one X means hydrogen and the other X a methyl-group.

1,858,629. WATER INSOLUBLE AZODYESTUFFS. LEOPOLD LASKA and ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 17, 1929, Serial No. 379,061, and in Germany July 25, 1928. 7 Claims. (Cl. 260—95.)

1. As new compounds azodyestuffs corresponding probably to the general formula:

wherein aryl represents the residue of an aromatic diazotizable aminocompound, which dyestuffs yield when mixed with the usual substrate valuable orange to red to blue to black color lakes and orange, to red to blue to black dyeings fast to light when produces on the fiber.

1,858,630. TRANSFER MECHANISM. KARL AUGUST LEHMANN and ERNST BREITLING, Essen, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed July 31, 1928, Serial No. 296,446, and in Germany Oct. 6, 1927. 13 Claims. (Cl. 235—138.)



1. In a transfer mechanism a differential actuator, a counting wheel, an intermediate wheel arranged between them and adapted to transmit the movement of said actuator to said counting wheel, a rockable carrier for said intermediate wheel upon rocking of which the intermediate wheel transfers a unit to its counting wheel, a driving

member, means for establishing a co-operative relation between said driving member and said carrier when the counting wheel of the next lower order passes from 9 to 0, and means for normally locking said carrier against movement throughout the movement of said driving member and for releasing said carrier for movement upon operation of said means for establishing said cooperative relationship.

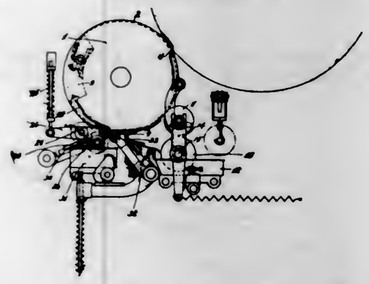
1,858,631. PROCESS FOR PRODUCING A COATING OF CHROMIUM ON OBJECTS OF IRON AND STEEL OR ALUMINUM AND PARTICULARLY ON KNIVES, FORKS, AND SPOONS. HEINRICH LEISER, Berlin-Friedenau, Germany. Filed July 16, 1928, Serial No. 293,314, and in Germany July 21, 1927. 3 Claims. (Cl. 91—68.2.)

1. A method for covering with chromium objects formed from coarse-grained metals, comprising the steps of covering the objects with a coating of melted tin, arranging a second coating of an electro-positive metal thereon, and thereafter applying a coating of chromium thereon.

1,858,632. STABLE PREPARATIONS OF VAT DYESTUFFS AND PROCESS FOR MAKING SAME. KARL FRITZ MAENNCHEN and FRANZ HÜMMERICH, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 1, 1926, Serial No. 139,012, and in Germany Oct. 17, 1925. 3 Claims. (Cl. 8—6.)

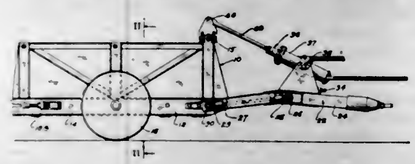
1. As new products, stable vat dyestuff preparations comprising a vat dyestuff, alkali starch and hydrosulfite.

1,858,633. ROTARY DEEP IMPRESSING PRINTING MACHINE. WILHELM MAILAENDER, Stuttgart-Cannstatt, Germany. Filed Dec. 6, 1926, Serial No. 153,012, and in Switzerland Nov. 8, 1926. 8 Claims. (Cl. 101—157.)



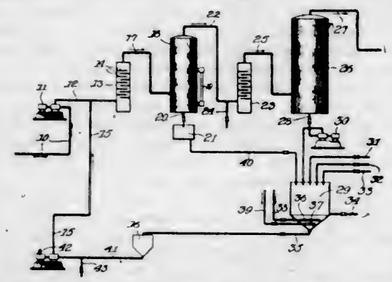
1. A rotary deep impressing printing machine, including a scraper for removing the greater part of the color strip a stripping roller for the removal of the remainder of the color strip, said roller at the line of contact being movable in a direction opposite to the direction of movement of the cylinder.

1,858,634. SCRAPER. EARL B. MALOON, Oakland, Calif., assignor to American Tractor Equipment Company, Oakland, Calif., a Corporation of California. Filed Apr. 1, 1931. Serial No. 526,979. 3 Claims. (Cl. 37—129.)



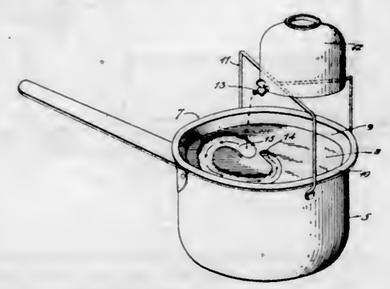
1. A scraper of the character described comprising a pair of side frames, a transverse frame member arranged at the forward end of the side frames at the top thereof, a transverse conveyor shaft arranged at each end of the scraper and extending transversely between the side frames and journalled therein, a conveyor carried by said shafts, a pair of ground engaging members disposed one at the outside of each of the side frame members, an axle for said ground engaging members extending transversely of the frame at a point substantially midway between the forward and rear ends thereof, a drawbar structure having a yoke portion pivotally connected to the side frames at the forward ends thereof, said connection enabling relative vertically swinging movement between the side frames and the drawbar structure, a hydraulic cylinder pivotally mounted on the drawbar structure, a piston in said cylinder, a piston rod conected to the piston, a connection between said piston rod and said transverse frame member whereby reciprocation of the piston will oscillate the forward end of said scraper vertically.

1,858,635. SWEETENING HYDROCARBON OILS. ARTHUR R. MARTIN, Destrehan, La., and PATRICK J. KELLY and KENNETH H. REPATH, Tampico, Mexico, assignors to Pan American Petroleum & Transport Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 25, 1927. Serial No. 186,276. 5 Claims. (Cl. 196—33.)



1. The method of sweetening hydrocarbon oils with doctor and reactivating the partially exhausted doctor resulting from such sweetening operation which consists in treating said oil with doctor, separating partially exhausted doctor therefrom, subsequently precipitating substantially anhydrous lead sulfide from the oil, converting said lead sulfide into lead sulfate and dissolving said sulfate in the partially exhausted doctor solution thereby converting it into active plumbite.

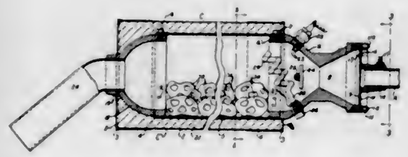
1,858,636. COOKING APPARATUS. WILLIAM ARTHUR MCCAULEY, Tulsa, Okla., assignor of one-third to John Lee Raleigh, Tulsa, Okla. Filed June 2, 1931. Serial No. 541,715. 2 Claims. (Cl. 53—1.)



1. A cooking apparatus comprising a cooking pot, a heat-absorbing top for said pot, and a water reservoir provided with means for discharging a slow stream of

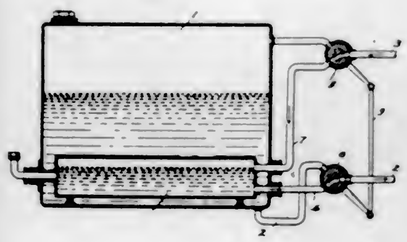
water onto said top, whereby the water so discharged will become highly heated, said top having an opening for discharging the hot water into the pot to compensate for water which has vaporized in said pot.

1,858,637. EXHAUST GAS BURNING ATTACHMENT FOR ALL INTERNAL COMBUSTION ENGINES. HARRY H. MCDONALD, St. Louis, Mo., assignor of one-third to T. C. Brandle, St. Louis, Mo. Filed July 2, 1928. Serial No. 290,003. 1 Claim. (Cl. 60—30.)



An exhaust gas burning device for internal combustion engines comprising a housing arranged for association in communication with the exhaust conductor of an internal combustion engine whereby products of combustion from said internal combustion engine will pass into said housing, ignition means located at the intake end of said housing for igniting unburned gases contained in the products of combustion as same pass from said exhaust conductor into said housing whereby said unburned gases are consumed within said housing, an element located in the path of travel of said products of combustion and adapted to be heated to a very high temperature by the burning of gases within the housing, a plurality of blocks of refractory material located within the housing likewise adapted to be heated to a high temperature by the burning gases within the housing, said heated element and said heated blocks of refractory material being adapted to ignite any unburned gases passing through the housing which are not ignited by said ignition means and a gas-distributing element at the entrance of the housing for deflecting the stream of gases entering same, said housing having a gas passageway formed therethrough which extends in a single direction, and said housing being provided with means to admit combustion-supporting air therein.

1,858,638. DUAL LUBRICATING SYSTEM FOR AIRPLANE ENGINES. RUSSELL L. MEREDITH, Washington, D. C. Filed Apr. 18, 1928. Serial No. 270,948. 8 Claims. (Cl. 184—6.)



1. A device of the character described including a main lubricating oil tank, a feed line from the tank to an engine, a return line from the engine to the tank, a supplemental lubricating oil tank within the main tank, a feed line from the supplemental tank to supply oil therefrom to the engine, a return line to the tank to receive oil from the engine, a two-way valve in the feed lines from the tanks, a two-way valve in the return lines to the tanks, and means connecting said valves for simultaneous actuation.

1,858,639. TOP. EDWIN OBAM, Dallas, Tex. Filed July 6, 1931. Serial No. 548,772. 3 Claims. (Cl. 46—32.)



3. The combination in a spinning top, of a master top having a sheet-like conical body and an integral beaded spinning point, a plurality of nested sheet-like conical tops nested in said master top, and a cap top having a sheet-like conical body nested in the upper nested top and provided with a cord notch in its edge.

1,858,640. MANUFACTURE OF AMINE HYDROHALIDES. MARK E. PUTNAM, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 14, 1929. Serial No. 392,725. 8 Claims. (Cl. 260—130.5.)

1. The method of making an aromatic amine hydrohalide, which comprises reacting in the vapor phase and at a temperature below 250° C., between an aromatic amine and a hydrogen halide.

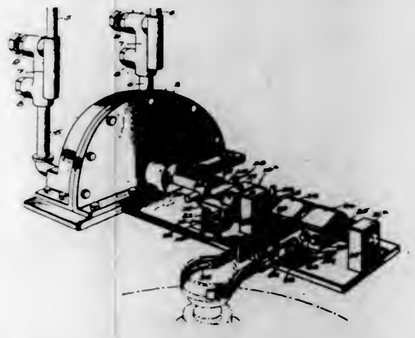
1,858,641. LAWN RAKE. GUSTAV RAPSCH, Great Neck, N. Y. Filed Sept. 21, 1931. Serial No. 564,162. 1 Claim. (Cl. 55—10.)



A lawn rake attachment embodying a plate having two members lying at an obtuse angle to each other, one plate forming a fastening flange adapted to lie against the teeth of the rake and being provided with bolt-holes and the other plate being provided with forwardly projecting sharpened V-shaped teeth, and means for adjustably clamping the aforesaid clamp plate to the face of the teeth.

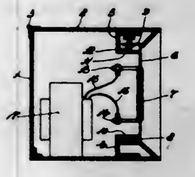
1,858,642. TAKE-OUT MECHANISM FOR GLASS FORMING MACHINES. JAMES W. ROSS, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed June 23, 1927. Serial No. 200,906. 7 Claims. (Cl. 214—1.)

1. A transfer device including an oscillatory shaft, grippers carried by said shaft, means normally tending to force the grippers together, wedging means for separating the grippers adjacent one end of their stroke, a member for maintaining the grippers separated during the return



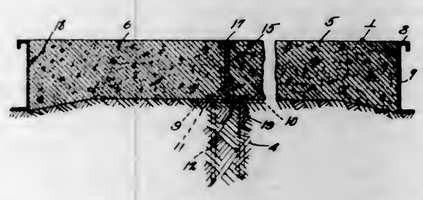
stroke, and means to release said member thereby permitting the grippers to move toward each other adjacent the end of the return stroke.

1,858,643. ADVERTISING INSTALLATION. PIETER SCHOUWSTRA, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Nov. 21, 1929, Serial No. 408,878, and in the Netherlands Dec. 5, 1928. 7 Claims. (Cl. 40—130.)



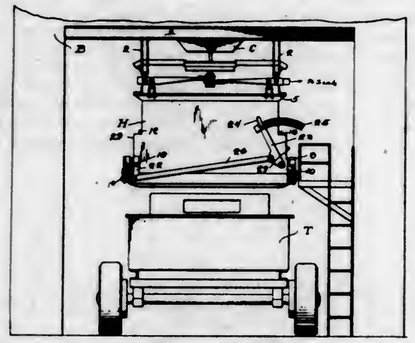
7. An installation comprising a box, at least one rail in the said box, a plurality of shields carrying gas-filled discharge tubes thereon independently clamped to the said rail, means for clamping the shields to the rail in such manner that they are separately and independently removable therefrom without disturbance of the remaining shields, and a cover on the said box having a rim which, when the box is closed, overlaps the said shields.

1,858,644. CONCRETE FORM. CARL A. SMITH, Defiance, Ohio. Filed Nov. 7, 1929. Serial No. 405,392. 1 Claim. (Cl. 25—118.)



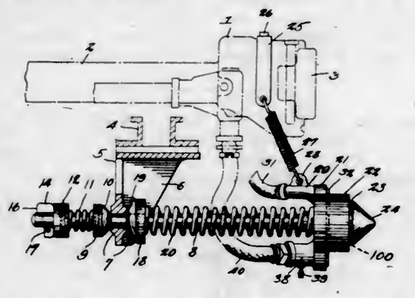
In a device of the class described, an anchor including a base plate and brackets thereon, a securing element connecting the brackets, and a form having its lower edge extended between the brackets and detachably engaged with the securing elements.

1,858,645. APPARATUS FOR HANDLING BULK MATERIALS. LEWIS E. SMOOT, Washington, D. C. Filed Dec. 17, 1929. Serial No. 414,687. 18 Claims. (Cl. 221—118.)



1. A hopper comprising a body portion having a discharge opening, constricting means within the hopper and adjacent to the discharge opening thereof for varying the effective area of discharge thereof, and closure means for the discharge opening cooperating with said constricting means in all positions thereof to effectively close the discharge opening as defined by said constricting means.

1,858,646. HOSE COUPLER. JOSIAH SULLIVAN, Dallas, Tex. Filed Nov. 7, 1930. Serial No. 494,118. 1 Claim. (Cl. 285—24.)

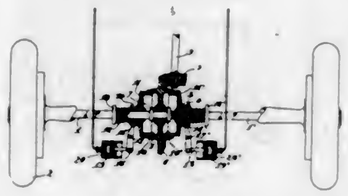


In a hose coupling for cars, a slide including a head having a fluid conduit, means carried by the head for aligning two like heads to effect a coupling of the conduits of the heads, means for mounting the slide for reciprocation, a draw bar located above the slide, a car-coupling head carried by the draw bar, a U-shaped anchor inverted over the car-coupling head and supported thereby, portions of the sides of the anchor embracing the car-coupling head closely, the lower ends of the sides of the anchor being spaced from the car-coupling head, downwardly converging springs having their upper ends connected to the lower parts of the sides of the anchor, the lower ends of the springs being connected to the slide, adjacent to the head of the slide, and securing means uniting the anchor detachably with the car-coupling head.

1,858,647. SYSTEM FOR TRANSMITTING MOTION TO THE DRIVING WHEELS OF MOTOR CARS. GEORGE CAROL SCHÜLE VON HILVETY, Buenos Aires, Argentina. Filed Nov. 24, 1930. Serial No. 497,892. 1 Claim. (Cl. 74—7.)

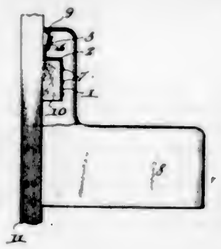
Improved system for transmitting motion to the driving wheels of motor cars, substantially comprising a clutch for each driving wheel, which allows of engaging or dis-

engaging said wheel or its axle from the drive shaft, and means for operating said clutches, operated from the steering mechanism, the means for operating the clutches comprising, in connection with each clutch, a cylinder with a piston for operating said clutch, a cock arranged to cooperate with the displacements imparted to the steering mechanism and adapted, when in its medium position corresponding with an advance on a straight line, for connecting said cylinders with the outer air, so that the pistons will not operate the clutches and these latter will remain engaged, and when in a deviated position corresponding with the taking of a curve, for connecting one of said cylinders with a compressed air supply and



the other with the outer air, or vice-versa, whereby the piston acted upon by the air, will operate its clutch and cause the free rotation of the respective driving wheel, while the other wheel will remain engaged, and a neutralizing cock for each cylinder, operated by hand or otherwise, for interrupting at will the connection between the cylinder and the first mentioned cock and establish the communication with the outer air, so that the respective driving wheel will remain engaged, independently of the movements of the steering mechanism, or establish a direct connection with the compressed air supply, so that said wheel will remain engaged independently of the movements of the steering mechanism.

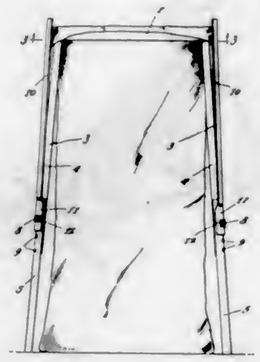
1,858,648. HANGER FOR LAVATORIES, SINKS, AND THE LIKE. CHARLES GEORGE WAHNSIEDLER, Evansville, Ind. Filed Jan. 6, 1930. Serial No. 418,842. 2 Claims. (Cl. 248—30.)



1. The combination with a non-metallic strip adapted to be attached to a wall, of independent metallic brackets adapted to support a sink or lavatory, said brackets having parts which rest on the upper edge of the said strip and provided with sockets to receive parts on a sink or lavatory, said brackets being independently fastened to said non-metallic strip.

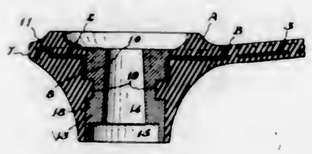
1,858,649. SACK HOLDER. LLOYD L. WEAKLEY, Quincy, Fla. Filed Nov. 18, 1930. Serial No. 496,482. 4 Claims. (Cl. 83—26.)

1. A sack holder comprising a frame, supporting legs for the frame, pins projecting outwardly from said frame for engagement by portions of a sack passed upwardly through the frame and downwardly about the frame, and resilient strips carried by said legs and extending longi-



tudinally thereof with their upper ends free and adapted to overlap downturned portions of the sack and bind the same against outer ends of said pins.

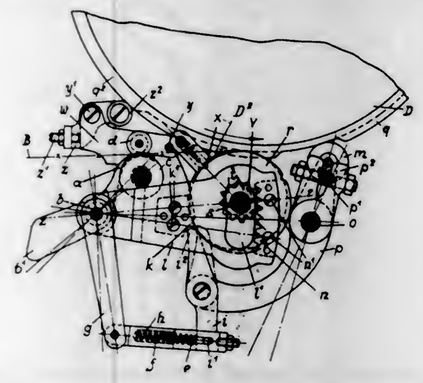
1,858,650. STEERING WHEEL. HARRY WEIDA, Plainfield, N. J., assignor to American Hard Rubber Company, New York, N. Y., a Corporation of New York. Filed May 13, 1929. Serial No. 362,705. 2 Claims. (Cl. 74—33.)



1. In a composition steering wheel, a reinforcing spider including a hub annulus having a depending inner flange, a separately formed hub member in intimate telescoping engagement with said flange and having radially extending portions engaging one side of said annulus to hold said hub against axial movement in one direction relative to said flange, said hub member having a recess formed therein adjacent the edge of said flange, and a body of composition material surrounding said spider and hub member and extending into intimate contact with the walls of said recess to lock said hub against axial movement in the other direction relative to said flange.

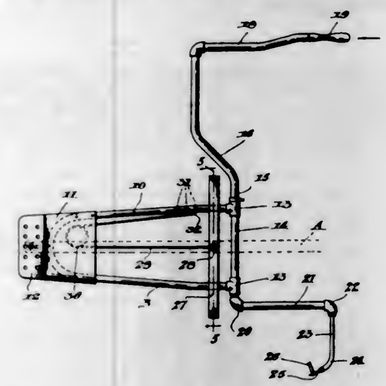
1,858,651. APPARATUS FOR DISPLACING THE COUNTER PRESSURE ROLLER ON THE MISSING OF A SHEET IN MULTIPLE REPRODUCTION APPARATUS. RUDOLPH WEIDE, Berlin, Germany, assignor to Hermann Hurwitz & Co., Berlin, Germany. Filed Sept. 9, 1929, Serial No. 391,418, and in Germany Sept. 6, 1928. 4 Claims. (Cl. 101—247.)

1. Apparatus for displacing the counter-pressure roller on the missing of a sheet in multiple reproduction apparatus comprising, in combination, with a counter-pressure roller and the printing drum, a stop piece, a curved disc connected with the printing drum and continuously moving said stop piece to and fro, a stop adapted to be engaged by said stop piece, a gearing adapted to displace the counter-pressure roller and controlled by said stop, and



a feeler controlled by the sheet to be fed and controlling said stop piece so as to engage said stop and moving it for displacing the counter-pressure roller, if no sheet is fed.

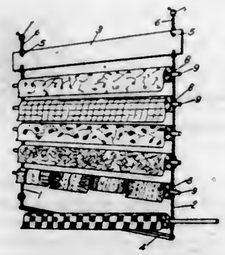
1,858,652. HOEING ATTACHMENT FOR CULTIVATORS. EVERETT WIGLE, Kingsville, in Gosfield South Township, Essex County, Ontario, Canada. Filed June 15, 1929. Serial No. 371,204. 5 Claims. (Cl. 97—179.)



1. The combination with a cultivator, of a hoeing attachment comprising a light, durable, substantially U-shaped framework, bearing members carried by the framework, an oscillatable standard member journalled in the bearings and adapted to operatively carry a hoe blade, means for moving the standard to correspondingly adjust the position of the hoe, means for resiliently mounting said attachment on a cultivator frame, and a housing adapted to partially encase the resilient mounting.

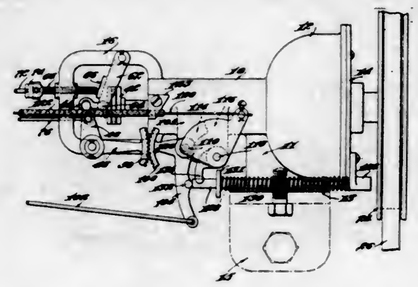
1,858,653. DISPLAY RACK. RODERICK H. WILLCOX, Columbus, Ohio, assignor to Columbus Coated Fabrics Corporation, Columbus, Ohio, a Corporation of Ohio. Filed July 21, 1930. Serial No. 469,427. 2 Claims. (Cl. 211—113.)

1. A display rack comprising a plurality of vertically disposed chains made up of links having flat surfaces, means for maintaining said chains in spaced vertical relation, rings disposed at an angle to said vertically disposed chains and interlocked in loops of said chains for supporting a plurality of poles, and poles adapted to contain the material to be displayed mounted in said rings, the flat surfaces



of the links of said chains engaging the peripheral surfaces of said poles to thereby exert a braking action on said poles.

1,858,654. SPEED CONTROL MECHANISM. ERASTUS E. WINKLEY, Lynn, Mass. Filed Aug. 16, 1924, Serial No. 732,586. Renewed Nov. 28, 1928. 14 Claims. (Cl. 264—3.)



1. Speed control mechanism for engine driven motor vehicles comprising, in combination, a shaft driven from the engine, governor weights rotating with said shaft, a member arranged to be moved by said weights to different positions depending upon the position of the governor weights at different speeds of said shaft, a spring acting on said member in opposition to the force exerted thereon by said weights, said spring being adjustable to balance said weights at a given operating position of them, a throttle valve for the engine, and means under the control of the driver and independent of said member for opening said valve to a degree serving to bring said governor weights to said known position and for then placing said valve under the control of said movable member.

1,858,655. FLOOR COVERING. JULIAN T. BALDWIN, West Chester, Pa., assignor to Sandura Company, Inc., Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 8, 1927. Serial No. 159,917. 5 Claims. (Cl. 91—68.)

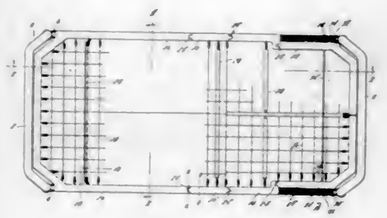
1. A floor covering comprising a sheet of fibrous material impregnated with a saturant having as its two major ingredients a resin and a substantially chemically stable plasticizer for the resin, the surface of said impregnated base being free from tackiness under ordinary conditions of floor covering usage.

1,858,656. SUPPORT FOR BLOWTORCHES. SAMUEL BATHERMAN, Bronx, N. Y. Filed June 13, 1930. Serial No. 460,949. 2 Claims. (Cl. 248—20.)



1. A device of the character described comprising a resilient support engaging member formed from a strip of resilient metal bent upon itself to form two spaced parallel legs, a perforated right angular extension projecting from one of the legs of said support engaging member, a U-shaped resilient clip having an enlarged body portion adapted for bearing engagement with the right angular extension of the support engaging members, means for securing said U-shaped clip to said right angular extension of the support engaging member, and an article embracing resilient clip carried by said U-shaped clip.

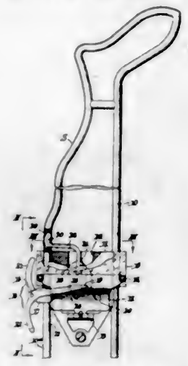
1,858,657. BED. ANTOINETTE BELL, New Hartford, N. Y. Filed Jan. 25, 1929. Serial No. 335,094. 2 Claims. (Cl. 5—68.)



1. A bed of the class described comprising a frame consisting of side and end members and legs for supporting the same, a mattress supporting frame comprising an intermediate section attached to the side members of the bed frame, a head section having its rear end pivotally connected to the front end of the intermediate section, means for holding the head section in adjusted position, a thigh section having its front edge pivotally connected to the rear edge of the intermediate section, a foot section having its front end pivotally connected to the rear end of the thigh section, said head, intermediate and thigh sections being disposed in superimposed relation to the side rails of the bed frame and said foot section being of less area than the rear part of the bed frame whereby it can pass through said rear part of the bed frame, spring latch means carried by parts of the side rails for holding the foot section in horizontal position, said foot section comprising two sections separated at the longitudinal center of the bed, latch means for connecting the two sections of the foot section together at the rear of the bed, means for adjustably holding the thigh section in a raised diagonal position, and means for holding both sections of the foot section in raised horizontal position.

1,858,658. FORM FOR DRYING HOSIERY AND THE LIKE. EMIL J. BERGER, Hatfield, Pa., assignor to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Oct. 17, 1930. Serial No. 489,369. 3 Claims. (Cl. 223—17.)

1. In a form for drying hosiery and the like, a profile frame embodying rack teeth and over which the knitted article is drawn; a weight member slidable on the frame and adapted to tension the knitted article lengthwise; and a detent automatically actuated as the knitted article

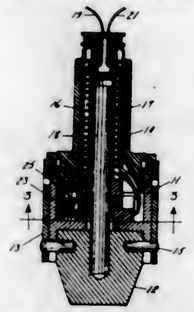


is pulled taut on the form by the weight member, to lock with one of the rack teeth on the profile frame, thereby to prevent subsequent gravitation of said weight member.

1,858,659. TRI-DIPHENYL PHOSPHATE. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 28, 1929. Serial No. 396,016. 9 Claims. (Cl. 260—98.)

1. The method of making tri-(ortho-diphenyl) phosphate, comprising reacting ortho-phenyl-phenol with a phosphorus oxyhalide.

1,858,660. THERMOSTATICALLY CONTROLLED HEATING DEVICE. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 25, 1927. Serial No. 235,445. 2 Claims. (Cl. 200—138.)

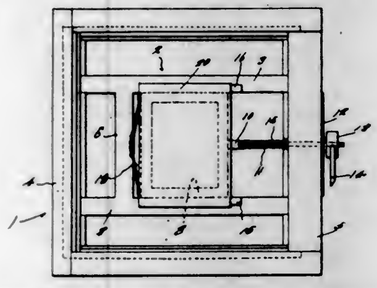


1. A device of the class described comprising a pair of relatively movable contact points, means for yieldingly urging said points into contact to establish an electrical circuit, and means expandible by heat for sliding one contact point over the other to clean the surfaces thereof, and for separating said points to break said circuit.

1,858,661. CAMERA. DELANIA E. DECKER, Jeffersonville, Ind. Filed Sept. 8, 1930. Serial No. 480,513. 1 Claim. (Cl. 95—36.)

A camera including a plate holder, a pair of spaced, parallel bars removably mounted in the holder and having channels in their opposed edges, an integral connecting bar extending between the first named bars adjacent one end of said first named bars, a pair of plate retaining

lugs formed integrally on one side of the first named bars in spaced relation to the connecting bar, an elongated spring having an intermediate portion secured to the connecting bar on the edge thereof adjacent the retaining lugs, the ends of the spring extending away from the connecting bar, integral plate engaging flanges on the end portions of the spring, said spring engageable with the plate in a manner to yieldingly engage said plate against the lugs and, in conjunction with the lugs constituting means for releasably securing the plate on the first named

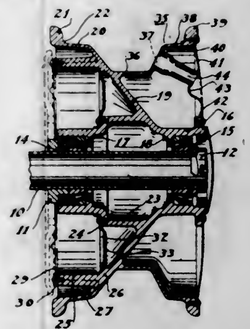


bars, each lugs being bevelled on its plate engaging edge to form a space between itself and a bar to receive a portion of the plate; a screen frame slidably mounted in the channels in the first named bars, a grid screen fixed in the screen frame, a rod connected to the screen frame and passing through a part of the holder, a dial plate on said part of the holder through which the rod passes, the outer end of the rod being threaded, a nut on the threaded end bearing against the dial plate and a finger on the neck co-operating with the dial to indicate the amount of movement of the screen frame.

1,858,662. SULPHONATION PRODUCTS AND PROCESS OF MAKING SAME. FRIEDRICH FELIX and OTTO ALBRECHT, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 24, 1930, Serial No. 491,068, and in Switzerland Oct. 29, 1929. 21 Claims. (Cl. 87—12.)

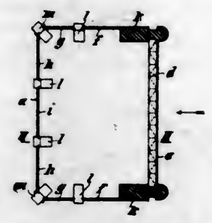
1. A process of producing new sulphonation products of unsaturated higher fatty acid compounds, which comprises the action of sulphonated aromatic carboxylic acids and of inorganic sulphonating agents on unsaturated higher fatty compounds.

1,858,663. WHEEL. FREDERICK C. FRANK, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 16, 1930. Serial No. 461,338. 8 Claims. (Cl. 301—6.)



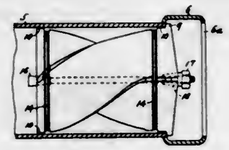
7. A wheel comprising a drop center rim member, a hub member coaxial and coextensive with said rim body, a disk body member connecting said hub and rim members, a braking flange extending from the junction between said wheel body and rim members, said braking flange lying within the outlines of said hub and rim members.

1,858,664. EMERGENCY CLOSURE OR LOCK FOR WEIRS, SLUICE GATES, AND THE LIKE. GEORG FRIEDEL, Aschaffenburg, Germany. Filed Jan. 7, 1930, Serial No. 419,135, and in Germany Jan. 8, 1929. 13 Claims. (Cl. 61—34.)



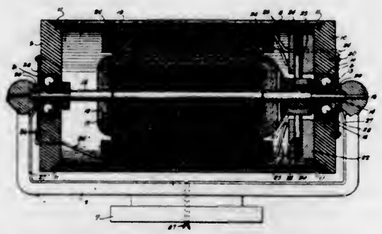
1. The method of constructing emergency closures for wier openings, characterized by floating pillar members to and sinking the same in upright positions spaced around the weir opening, floating truss-beam members to and sinking the same in positions of span between the pillar members with end support therein, and arranging sheet piling members side-by-side in leaning engagement against the sunk truss-beam members and with their lower ends resting on the bottom around the outer side of the frame structure formed by said pillar and truss-beam members.

1,858,665. FLUID CIRCULATING DEVICE FOR BOILER TUBES. JOHN L. GIBSON, Brooklyn, N. Y. Filed June 15, 1931. Serial No. 544,476. 9 Claims. (Cl. 137—112.)



1. In a boiler tube of the class described, a screw circulating device formed longitudinally in separate sections insertable within said tube, and means adapted to jointly expand said sections and clamp the marginal edges of the screw-blades to the inner surface of said tube.

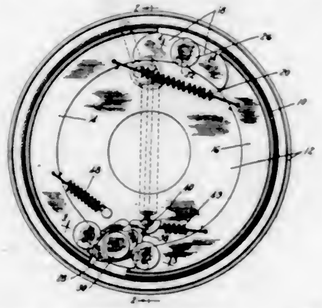
1,858,666. SELF-CONTAINED IMPULSE ACTUATED INTERNALLY PROPELLED POWER UNIT. JOHN H. GILMER, North Vernon, Ind. Filed Nov. 14, 1929. Serial No. 407,238. 1 Claim. (Cl. 172—36.)



In an electrically driven tool or power unit, a frame, a stationary shaft carried thereby, a rotary casing provided with a work performing surface and including end

heads of insulating material, said heads having recesses in their outer faces, ball bearings between the heads and shaft and disposed in said recesses, detachable conductor plates closing said recesses, line conductors connected with the conductor plates, armature and field windings respectively carried by the shaft and casing, conducting connectors on the shaft and casing and between the windings, and current conductors between one of the conductor plates and the field winding and between the other conductor plate and the armature winding.

1,858,667. BRAKE. RUDOLPH A. GOEPFRICH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 29, 1929. Serial No. 389,147. 8 Claims. (Cl. 188—78.)



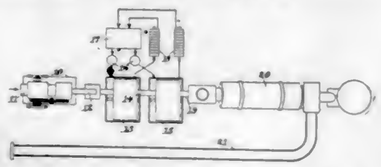
1. A brake comprising a rotatable drum, friction elements within the drum and applying means therefor including a shaft, a two-part floating cam on the shaft and an arm fixedly mounted on a shaft between the cam parts.

1,858,668. COMBINATION INSTRUMENT-HOLDER, WASTE-VESSEL AND ADAPTER. FRANK R. HART, Pacific Grove, Calif. Filed Aug. 1, 1930. Serial No. 472,368. 2 Claims. (Cl. 174—177.)



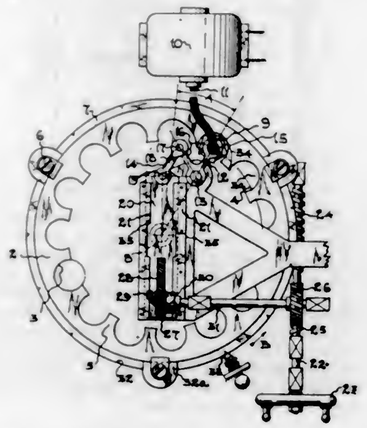
1. The combination with an ultra-violet ray machine having means to support a portable lantern which is removable from the means; of a waste-vessel carried by the lantern and portable therewith, means in the rear wall of said vessel carrying an ultra-violet ray applicatory instrument, and tubing arranged to supply fluid to said instrument wherever disposed.

1,858,669. RECOVERY OF TIN FROM SCRAP TINNED PLATE AND LIKE TIN-CARRYING MATERIAL. JOHN WILLIAM HINCHLEY, London, England, assignor to The African Tin Recovery Company, Limited, Port Elizabeth, South Africa, a Company of South Africa. Filed Dec. 24, 1930, Serial No. 504,529, and in Great Britain Jan. 14, 1930. 10 Claims. (Cl. 75—56.)



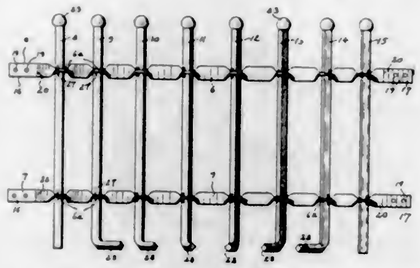
1. A cyclic de-tinning process which comprises the steps of de-tinning solution by dissolving metallic lead in an aqueous solution of caustic alkali with the aid of oxygen introduced into the solution, treating the tin-carrying material with the solution of lead thus produced, and regenerating fresh de-tinning solution for re-use from the metallic lead precipitated in the tin-treatment step.

1,858,670. MANUFACTURE OF MEANS FOR PRODUCING A STRAIGHT LINE MOTION OF LENSES IN CINEMATOGRAPH APPARATUS OR OF OTHER OBJECTS. WESLEY ERNEST JOHN, Johannesburg, Transvaal, Union of South Africa. Filed Oct. 16, 1931, Serial No. 569,130, and in Great Britain Aug. 27, 1930. 4 Claims. (Cl. 90—15.)



1. In a machine for the purpose described, a circular work table mounted to revolve on its center, a fixed bracket overhanging said table in spaced relation thereto, a guide formed on said bracket and extending diametrically over said table, a bell crank lever having two arms and pivoted to the bracket at the junction of its arms, one of said arms extending toward the periphery of the table and the other being inclined toward the guide, a slide in said guide reciprocable therein, a link connecting the last mentioned arm and slide, a revolving cutter carried by the first arm, and means to rotate the table and reciprocate the slide simultaneously.

1,858,671. WINDOW GUARD. ABRAHAM KAUFMAN, Bronx, N. Y. Filed Jan. 26, 1931. Serial No. 511,125. 15 Claims. (Cl. 20—72.)



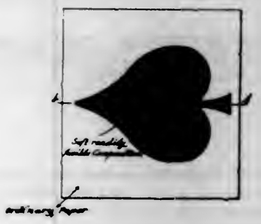
1. A grille of the kind described, comprising a plurality of regularly spaced substantially square longitudinal bars and substantially flat transverse members connecting said bars and bendable between said bars, so that said grille may be bent to extend in an arc.

1,858,672. DEVICE FOR HOLDING SPINNING RINGS. ALFRED H. LAWE, Biddeford, Me., assignor to Saco-Lowell Shops, Newton Upper Falls, Mass., a Corporation of Massachusetts. Filed May 7, 1929. Serial No. 361,169. 2 Claims. (Cl. 118—59.)



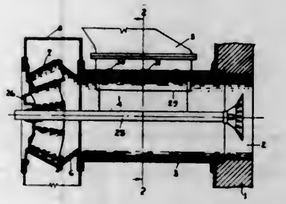
1. In a spinning frame, the combination of a ring rail having a circular aperture therethrough, the wall of said aperture being bevelled at the lower side of the rail, a ring holder seated on said rail and having a shank projecting through said aperture, said shank including an outer surface tapered in the same general direction as said bevelled surface on the ring rail, and a split spring ring engaging the tapered surfaces of both said rail and holder and tending to contract, whereby it acts on said tapered surfaces to draw said holder downwardly against said rail and tends to lock the holder in said position.

1,858,673. TRANSFER. WINTHROP STANLEY LAWRENCE, Brooklyn, N. Y., assignor to Kaumagraph Company, New York, N. Y., a Corporation of New York. Filed May 3, 1929. Serial No. 360,305. 5 Claims. (Cl. 41—33.)



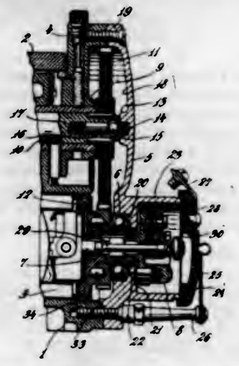
1. A heat transfer having a base on which a primary element is printed with a fusible composition, and a background element which overlays said primary element, said background element being printed with a composition which melts at a lower temperature than said first mentioned composition, said primary element and said background element being releasable from said base by means of heat and pressure.

1,858,674. METHOD OF AND APPARATUS FOR BURNING FINELY DIVIDED FUEL. JOHN P. LEASK, Stamford, and HORACE T. DYER, Greenwich, Conn., assignors to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 4, 1927. Serial No. 172,604. 11 Claims. (Cl. 110—104.)



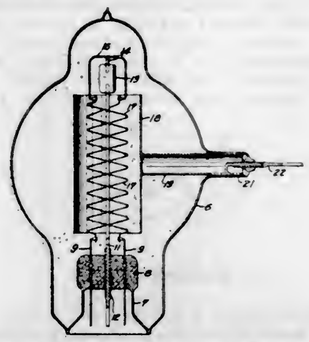
1. The method of burning finely divided fuel which consists in delivering such fuel with carrier air tangentially to the wall of a burner tube, causing the fuel to travel in a spiral path in a general direction transverse to the line of feed along the inner wall of said tube toward the end thereof, and discharging the fuel so carried into a combustion chamber.

1,858,675. INTERRUPTER GEAR HOUSING. JOHN FREDERICK MARTIN, Springfield, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Dec. 2, 1930. Serial No. 499,426. 1 Claim. (Cl. 171—209.)



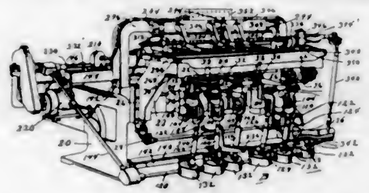
A magneto comprising a framework designed to mount distributor mechanism at one end thereof, said framework having a gear housing at the opposite end and an armature chamber therein below the gear housing, a cover plate for the gear housing and one end of the chamber, said cover plate being of substantially the same height as the framework and having a rim on its interior face to engage the rim of the gear housing and being concave on said face, said rim also having an annular projection at the lower part and the framework having a shoulder at the end of the armature chamber to receive said projection, the rim also having opposed projections at its sides adjacent the top of the armature chamber, a distributor gear on the armature, said gears meshing with each other between said opposed projections, and an integral timer casing in line with the armature chamber on the outer face of the plate, said casing having one or more operating cams therein.

1,858,676. CATHODE. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed June 4, 1928. Serial No. 282,524. 6 Claims. (Cl. 250—27.5.)



1. A cathode comprising a support member especially adapted for emitting electrons having an electron emitting surface, and a suspended helical heating element surrounding and supported by said member, said heating element having an electron emitting surface.

1,858,677. MULTIPLE SPINDLE BORING MACHINE. ELLIOTT J. MCKNIGHT, Gardner, Mass. Filed July 15, 1930. Serial No. 468,174. 26 Claims. (Cl. 144—112.)



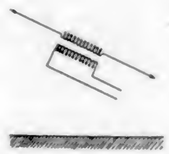
1. A multiple spindle boring machine having a stationary work supporting table, a plurality of bit spindle carriages reciprocable toward and away from said table, a separate tilting support for each spindle carriage, individual means associated with each bit spindle carriage and carried by the tilting support therefor arranged to reciprocate the carriage, and common actuating means for all of said reciprocating means separate from said tilting supports and operating continually in the same direction.

1,858,678. SHEET METAL NORMALIZING FURNACE. ELMER E. MCVEY, Youngstown, and WILLIAM F. BARTHOLOMEW, Warren, Ohio. Filed Feb. 23, 1929. Serial No. 341,925. 5 Claims. (Cl. 263—6.)



1. A normalizing furnace comprising a central chamber, and a recuperative chamber adjacent each end thereof and communicating therewith, a plurality of burners extended through the walls of the central chamber and operable to heat said chamber to a predetermined temperature, means for substantially confining within the central chamber the heat generated by the burners, adjacent conveyers extending through all of said chambers and respectively adapted to progressively carry material to be normalized therethrough from opposite ends of the furnace along vertically spaced paths and in opposite directions and means disposed adjacent the inner end of each recuperative chamber operable to quickly reduce the temperature of said material as it passes into said chamber from the central chamber.

1,858,679. ARRANGEMENT FOR TRANSMITTING AND RECEIVING SHORT WAVES. ALEXANDER MEISSNER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 6, 1927, Serial No. 181,462, and in Germany Apr. 8, 1926. 7 Claims. (Cl. 250—11.)



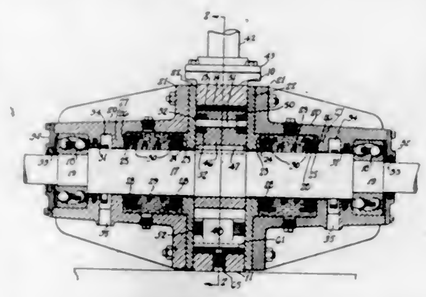
6. In combination, a plurality of individual antennæ arranged in a plane, a source of high frequency energy, and a plurality of equal length leads between said source and said antennæ, the plane of said antennæ being inclined with reference to the horizontal so as to form an angle between 40 degrees and zero degrees to form the desired angle with the ground for directional broadcasting.

1,858,680. WATERPROOFED HEAT INSULATING MATERIAL. ALLAN B. MERRILL, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 20, 1927. Serial No. 207,128. 4 Claims. (Cl. 154—44.)



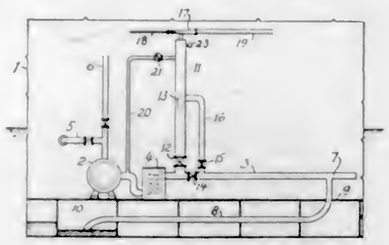
1. A rough-surfaced board or stiff sheet of matted vegetable fibers having unfilled interstices and on a surface thereof having an adherent waterproof film of vulcanized rubber which closely conforms on its outer side to the irregularities of said surface, the surface fibers of which retain their original arrangement.

1,858,681. ROTARY PUMP. JOHN A. OLSON, Portland, Oreg. Filed Feb. 20, 1929. Serial No. 341,301. 2 Claims. (Cl. 103—140.)



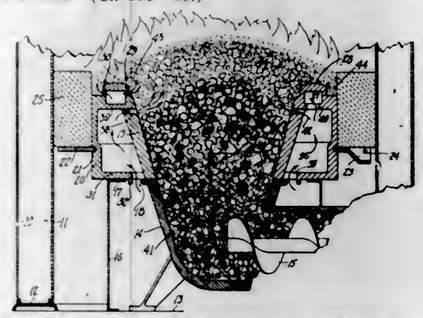
1. In a rotary pump the combination of a rotor casing having a cylindrical lining mounted therein, a cylindrical rotor eccentrically mounted within said lining, said rotor having pockets formed in the side thereof, each of said pockets having an arcuate bucket hinged therein, the curves of said buckets being concentric with their axes, each of said buckets having a radially outwardly extending lip formed along one edge thereof adapted to engage the interior of said lining, a portion of the trailing edge of said lip lying outside of the outermost curve of said bucket.

1,858,682. OIL PUMPING APPARATUS. BENGT OLSSON, Eltingville, N. Y., assignor to Charles J. O'Neill, New York, N. Y. Filed Sept. 15, 1928. Serial No. 306,111. 9 Claims. (Cl. 103—5.)



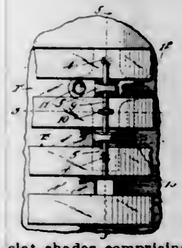
1. In a pumping apparatus an upright vacuum chamber, a pomp suction connected to the lower part of said chamber and a direct nonreturn by-pass from said pump suction to the upper part of said chamber.

1,858,683. ROUND TUYÈRE FOR FURNACES. CYRUS J. PARKER, Portland, Oreg.; Mary E. Parker, executrix of said Cyrus J. Parker, deceased, assignor to Iron Firearm Manufacturing Company, Portland, Oreg., a Corporation. Filed May 16, 1927. Serial No. 191,606. 4 Claims. (Cl. 110—45.)



1. A fire pot for underfeed stokers consisting of a plurality of hollow curved tuyère sections joined in circular form having a groove formed around the outer side of same, each section having a main chamber and an auxiliary chamber communicating therewith, said main chamber having inlet and outlet openings, said auxiliary chamber having unequal outlet openings on opposite sides thereof, an annular sectional plate having its inner edge lying within said groove, and means for clamping the sections of said plate together.

1,858,684. HANGER FOR SLAT SHADES. HENRY W. PRATT, Jersey City, N. J., assignor to William H. Lutton Company, a Corporation of New Jersey. Filed Aug. 22, 1931. Serial No. 558,710. 7 Claims. (Cl. 156—16.)



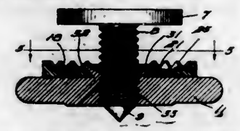
4. A hanger for slat shades comprising a base plate to be attached to a support and having a plurality of spaced upstanding lugs to receive a slat of a slat shade between them, and a member cooperating with said lugs to overlie such slat and separably connect it to said base plate.

1,858,685. METHOD OF BINDING BOOKS. WALDO L. SEMON, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1929. Serial No. 356,228. 6 Claims. (Cl. 281—21.)



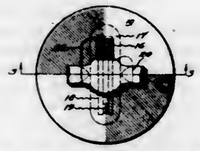
1. A book comprising a plurality of leaves, sections of the back edge of said leaves being bent alternately in opposite directions.

1,858,686. BUTTON. GEORGE E. SHARPLES, Cranston, R. I., assignor to D. M. Watkins Company, a Corporation of Rhode Island. Filed Dec. 30, 1931. Serial No. 583,841. 3 Claims. (Cl. 24—105.)



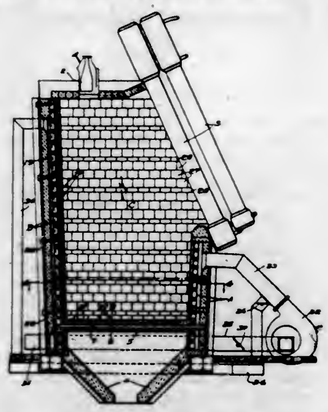
2. In a button, a head, a shank upon the head provided with a thread, a back plate, a forwardly directed flaring bearing integral with the center of the plate, said plate and bearing being provided with a central hole, and said hole being provided with a thread engageable with the first thread, a rotatable disk engaging the front of the plate and provided with a central opening for the reception of the bearing, said opening being provided with a taper conforming with the gearing of the bearing, a lateral flange upon the end of the bearing in sliding engagement with the plate, and forwardly directed teeth upon the margin of the disk.

1,858,687. CIRCUIT INTERRUPTER. MILTON H. SHOENBERG and LESTER SCHON, San Francisco, Calif.; said Schon assignor to said Shoenberg. Filed Sept. 2, 1926. Serial No. 133,136. 6 Claims. (Cl. 200—122.)



1. A device of the class described adapted to be removably inserted in a lamp socket comprising a relatively thin wafer of insulating material having a recess extending across the center of the same, an interrupter element disposed within said recess, said element serving to repeatedly vary an electrical current, and a metallic member mounted upon one face of said wafer and adapted to span said recess.

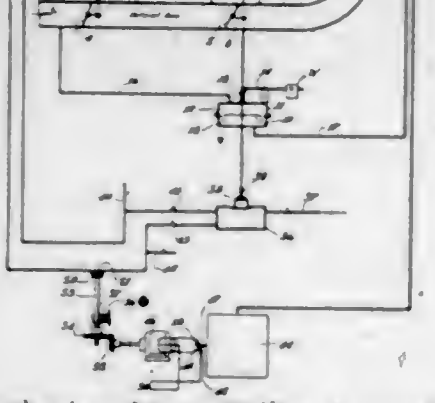
1,858,688. PULVERIZED FUEL FURNACE. ARTHUR E. SMITH, Cambridge, and OSCAR NYGAARD, Saugus, Mass., assignors to Bernitz Furnace Appliance Company, Boston, Mass., a Corporation of Massachusetts. Filed July 18, 1925. Serial No. 44,470. 6 Claims. (Cl. 110—28.)



1. In a pulverized fuel furnace, a screen comprising a series of screen sections, means for supporting said sec-

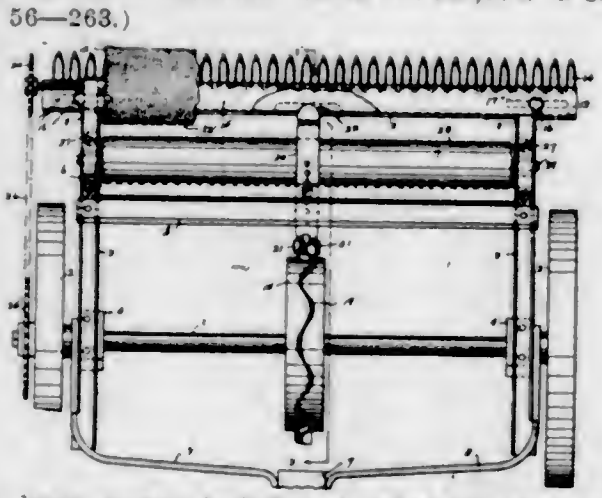
tions in position extending across the lower part of said furnace, each section including a series of hollow bricks located end to end with the spaces in them communicating with each other and forming air passages, and means for supporting said bricks in said relationship.

1,858,689. MECHANISM FOR CONTROLLING A PLURALITY OF FLUID FLOWS. CHARLES H. SMOOT, Maplewood, N. J. Filed Feb. 1, 1930. Serial No. 425,124. 8 Claims. (Cl. 48—180.)



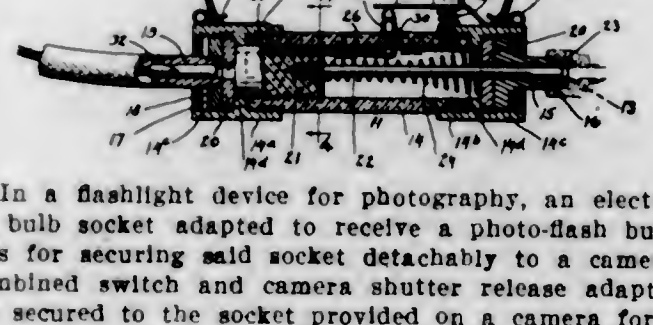
1. In a mechanism for controlling a plurality of fluid flows, a regulator for each flow, primary means responsive to a varying function of all of the flows for controlling said regulators in unison, secondary means varying with the pressure differentials across said regulators for maintaining a predetermined ratio between the fluid flows, and a device responsive to the thermal content of all of said flows for automatically adjusting said secondary means to vary said ratio.

1,858,690. LAWN MOWER. JOHN B. STOKES, Houston, Tex. Filed Feb. 25, 1929. Serial No. 342,504. 2 Claims. (Cl. 56—263.)



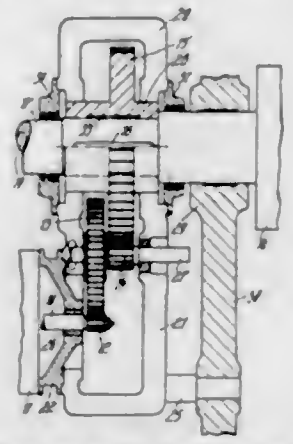
1. A lawn mower including a rotatable axle, ground wheels fixed thereon, a frame work having side members provided with bearings on said axle, said side members extending forwardly, a transverse cross bar secured to said side members at the forward ends of said side members, a transverse cutter bar support attached to said ends, a cutter bar fixed to said support, a reciprocable cutter bar mounted on the fixed cutter bar and having oblong slots, said cutter bars having forwardly extending spaced blades, an inverted channel iron forming a housing above said cutter bars and secured to said support, bolts for securing said housing and fixed cutter bar to said support, said bolts passing through said slots, a cam wheel fixed on said axle, having a peripheral double acting cam, said reciprocable cutter bar having a bearing notch, an actuating lever pivoted to said cross bar, one end of which works in said notch and spaced bearings carried by the other end of said lever between which said cam works.

1,858,691. FLASH LIGHT DEVICE. MONROE D. B. STROECKER, Detroit, Mich. Filed Jan. 28, 1931. Serial No. 511,778. 7 Claims. (Cl. 67—29.)



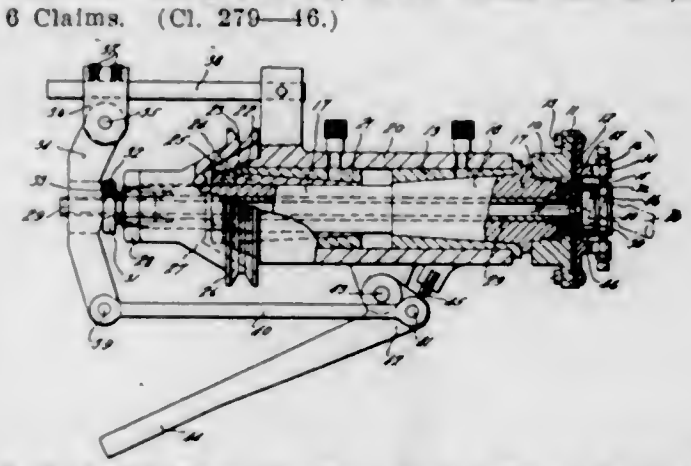
1. In a flashlight device for photography, an electric light bulb socket adapted to receive a photo-flash bulb, means for securing said socket detachably to a camera, a combined switch and camera shutter release adapted to be secured to the socket provided on a camera for a cable release; said combined switch and cable release having means for securing a cable release thereto, a spring pressed piston actuatable by said cable release, and a spring contact for said switch actuatable by said piston.

1,858,692. DRIVING GEAR FOR DRUMS. ALBERT TACKE, Rheine in Westfalia, Germany. Filed Jan. 3, 1930, Serial No. 418,394, and in Germany Jan. 3, 1929. 2 Claims. (Cl. 74—28.)



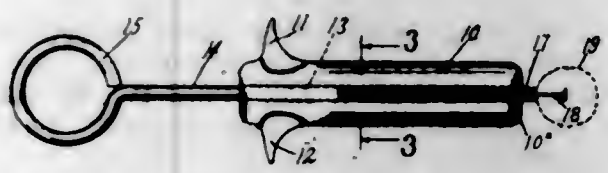
1. In an individual electric drive for internally heated rollers in combination an electric motor, a reduction gear connected to said motor, a casing surrounding said reduction gear and carrying said motor, said roller having a hollow shaft end for supplying a heating medium to the roller, and a gear wheel fixed to said shaft end and journalled in said casing, and having a hollow hub and means contained in the hollow hub portion for preventing the transfer of heat from said shaft end to said gear wheel.

1,858,693. CHUCK. CHARLES E. VAN NORMAN, Springfield, Mass., assignor to Van Norman Machine Tool Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1928. Serial No. 257,050. 6 Claims. (Cl. 279—46.)



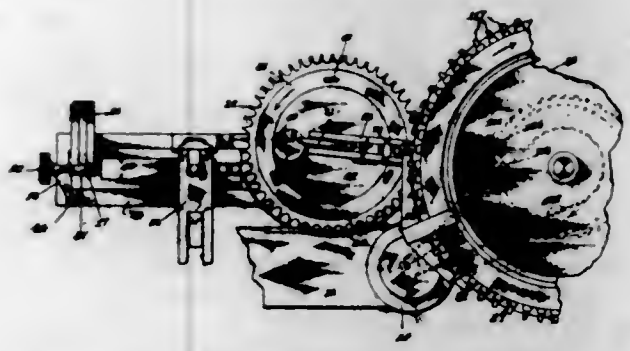
5. In a diaphragm chuck, a chuck body, a diaphragm secured thereto, chuck jaws carried by said diaphragm, means for flexing said diaphragm for moving said chuck jaws, and work stop means secured to said chuck body and independent of said diaphragm.

1,858,694. THROAT APPLICATOR. WILLIAM E. WALSH, New Haven, Conn., assignor to The Connecticut Hard Rubber Company, New Haven, Conn. Filed Aug. 11, 1930. Serial No. 474,557. 2 Claims. (Cl. 128—269.)



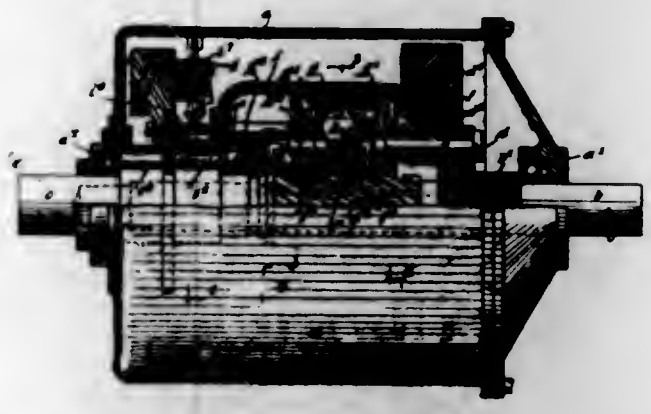
1. In a throat applicator, a flattened body adapted to be received in the mouth and having an axial bore, a rod extending through said bore, and means on the end of said rod adapted to receive and support antiseptic treated material, said flattened body being relatively wide and adapted to contact with the tongue over an extended area to depress the same, and being relatively thin whereby the mouth may be substantially closed during the application of the antiseptic.

1,858,695. BOTTLE CAP ASSEMBLING MACHINE. ANDREW WEISENBURG, Philadelphia, Pa. Filed Sept. 6, 1929. Serial No. 390,753. 18 Claims. (Cl. 113—80.)



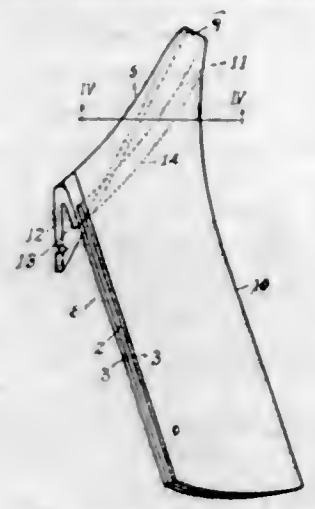
1. A bottle cap assembling machine comprising a conveyor having a rib provided with alternate straight and inclined parts, feed means for introducing shells onto said conveyor where they are intermittently advanced, a guide to prevent lateral displacement of said shells, a star wheel to which the shells are transferred by said conveyor, and means including feeding mechanism for introducing a resilient disc into said shell.

1,858,696. TRANSMISSION. CARL W. WEISS, Brooklyn, N. Y. Filed July 8, 1931. Serial No. 549,348. 13 Claims. (Cl. 74—14.)



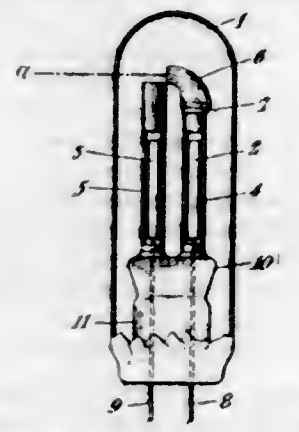
1. In a transmission, the combination of a driving member, a driven member, an intermediate member engaged with the driving member to rotate therewith and having limited relative movement, a rolling body interposed between the intermediate body and the driven member, and means to move the intermediate member longitudinally with respect to the rolling body.

1,858,697. PLOWSHARE. CLARENCE E. WISE, Pittsburgh, Pa., assignor to Crucible Steel Company of America, a Corporation of New Jersey. Filed Oct. 9, 1929. Serial No. 398,277. 1 Claim. (Cl. 97—125.)



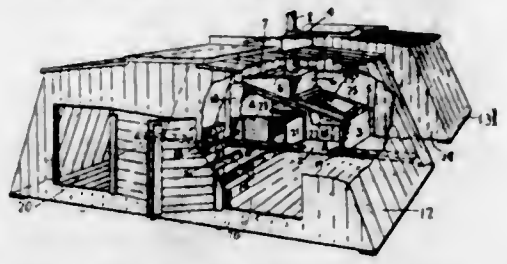
A plowshare comprising a solid nose and rearwardly projecting opposite wings formed of hard steel, a relatively soft metal integral filling projecting rearwardly from said nose between said wings, and a gunwale having a flange united to a side face of said nose and extending rearwardly beyond the line of juncture of said nose with said soft metal filling.

1,858,698. NEON LAMP FOR TELEVISION. FREDERICK W. ZONS, New York, N. Y. Filed Nov. 26, 1929. Serial No. 409,805. 4 Claims. (Cl. 176—122.)



1. A glow discharge vacuum tube comprising an envelope; electrodes operatively supported therein; and means for guiding the glow discharge comprising tubes, one for each electrode, said tubes containing the electrodes at one end and being open-mouthed at the other end, the mouths of said tubes being juxtaposed to deliver into each other, one of said tubes having a portion thereof adjacent its mouth directed endwise to the wall of the container so that the glow discharge therein is viewable end-on through said wall.

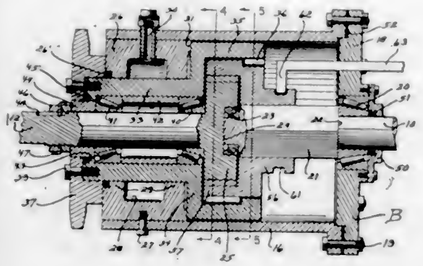
1,858,699. FARROWING HOUSE. WILLIAM D. BAYLEY, Springfield, Ohio. Filed Apr. 22, 1929. Serial No. 357,050. 11 Claims. (Cl. 119—16.)



1. An enclosed unitary structure having a plurality of separated hovering spaces for pigs and a heating means therein, in connection with a plurality of separate hog houses all arranged about said unitary structure each in

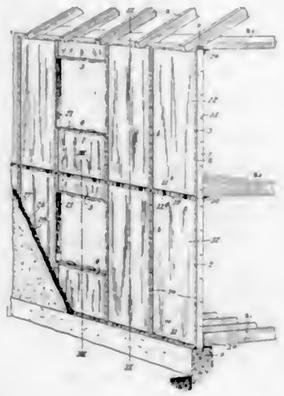
communication with one of the hovering spaces of said structure, the communication between each hog house and its associated hovering space being such as to exclude mature hogs from the hovering space.

1,858,700. POWER TAKE-OFF. WALTER BESONSON, Raymond, Wash. Filed Mar. 30, 1931. Serial No. 526,478. 9 Claims. (Cl. 74—7.)



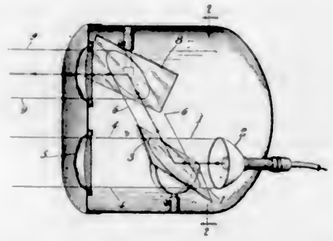
6. In a power take-off unit the combination of a tubular casing, a cover plate closing the forward end of the casing, a ring bearing fixed in the rear portion of the casing, a power take-off member rotatable in the ring bearing and having an internal ring gear at its forward end, a driven shaft rotatably journaled in the member and provided at its forward end with a spur gear offset rearwardly from said ring gear, a drive shaft journaled extended thru the front cover plate and having a bearing at its rear end in said spur gear, means for preventing longitudinal movement of the shaft, a clutch member slidably and non-rotatably mounted on the drive shaft and embodying a double ring gear having internal teeth for meshing with the spur gear and external teeth for meshing with said ring gear, and operating means for the clutch member whereby the double ring gear may mesh either with the spur gear or with the ring gear or partially mesh with both the spur gear and ring gear simultaneously.

1,858,701. BUILDING CONSTRUCTION. HENRY BOETTCHER, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed July 25, 1929. Serial No. 380,804. 9 Claims. (Cl. 72—16.)



1. In a building structure, metal frames arranged at an angle to one another, the frames being made of members which are channel-like in cross section, the web of a channel on one frame engaging the flange of a channel on another frame, insulating panels in the frames, the panels being a portion only of the depth of the frames, and a filler strip at the junction of the frames.

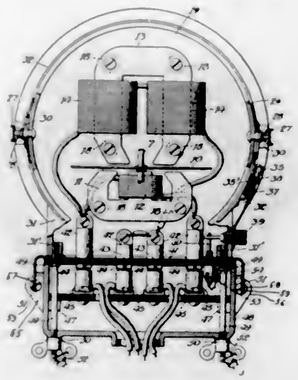
1,858,702. APPARATUS FOR AND METHOD OF LIGHTING AUTOMOTIVE VEHICLES. KARL D. CHAMBERS, Montgomery, Ala. Filed Feb. 9, 1928, Serial No. 252,985. Renewed Sept. 12, 1931. 10 Claims. (Cl. 88—1.)



1. The method of lighting motor vehicles comprising projecting plane polarized light from such a vehicle, which comprises dividing a collimated light beam into two beams, polarizing each of said beams in a different plane, said planes being at an angle to each other and rotating said planes relative to each other, so as to place them in parallelism.

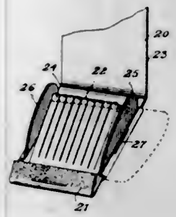
7. An apparatus for projecting polarized light comprising a light source, a parabolic reflector adapted to collimate a majority of the beams therefrom, a specularly reflecting polarization pile positioned in front of said reflector adapted in part to reflect and in part to refract the collimated beams, and mirrors so positioned as to change the planes and directions of said reflected beams so that these beams are in planes substantially parallel to the refracted beams and are projected in similar direction thereto.

1,858,703. ELECTRICITY METER. ALBERT L. EMENS, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Original application filed Jan. 11, 1929, Serial No. 331,731, Patent No. 1,762,218, dated June 10, 1930. Divided and this application filed Aug. 5, 1929. Serial No. 383,671. 2 Claims. (Cl. 247—2.)



1. The combination with a casing for an electricity meter; of a service connection box applied to the meter casing; a terminal block confined between the service connection box and the meter casing and carrying the meter terminals; and a skirted cap having an end wall confined between said terminal block and the meter casing and having its skirt overlying the joint between the terminal block and the adjacent end of the service connection box to guard against the access of moisture, at said terminal block, to the interior of the service connection box.

1,858,704. MATCH PACKAGE. BENJAMIN H. FREEDMAN, New York, N. Y., assignor to Hudson Holding Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,452. 3 Claims. (Cl. 206—29.)

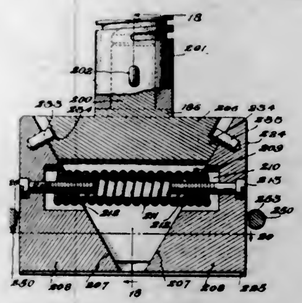


1. A match package having a cover strip, a match strip extending crosswise on said cover strip and adapted to have portions of said cover strip folded over it, and a wall provided along one edge of said cover strip, said wall consisting of an infolded wing on the cover strip having its base fastened to the cover strip and its body portion projecting outwardly from its point of securement.

1,858,705. HACK SAW BLADE. HOWARD M. GERMAN, Crafton, Pa., assignor to Universal Steel Company, Bridgeville, Pa., a Corporation of Pennsylvania. Filed July 11, 1929. Serial No. 377,606. 16 Claims. (Cl. 148—31.)

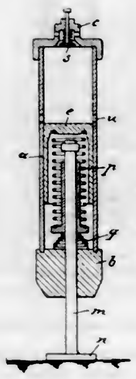
1. A hardened steel hack saw blade containing chromium in excess of 3% but not over about 12% and tungsten about 2% to 12%, and containing embedded abrasive nodules of cementite.

1,858,706. BOX MACHINE. JULIAN A. GILES, Derby, Conn. Filed Nov. 2, 1928. Serial No. 316,683. 9 Claims. (Cl. 93—59.)



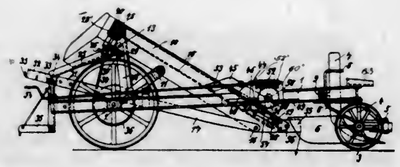
1. In a machine for forming boxes having end and corner flaps; a box folding mechanism, comprising a die having an opening therethrough; one or more filler plates supported by said die and projecting into said opening; and blocks projected into said opening and supported by said dies, said blocks being formed so that as the blank moves thereby the corner flaps will be turned inwardly in advance of the end flap; and means for actuating said blocks whereby pressure will be applied to all of said flaps after the same have been moved into their permanent position.

1,858,707. MECHANICAL PERCUSSIVE TOOL. KONRAD HAAGE and ALBERT PFLÜGER, Esslingen-on-the-Neckar, Germany. Filed June 8, 1929, Serial No. 369,285, and in Germany June 13, 1928. 2 Claims. (Cl. 123—7.)



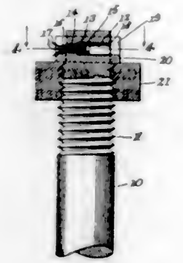
1. A mechanical percussive tool comprising a rod, a cylinder having a tup at its lower end which is fitted to slide on said rod, and a piston mounted to slide in said cylinder so as to form a combustion chamber with the top of said cylinder and adapted to move independently of, and to come into engagement with, said rod.

1,858,708. POTATO GATHERING MACHINE. HERMANN HOFFMEISTER, Klein-Quenstedt, near Halberstadt, Germany. Filed Aug. 8, 1929, Serial No. 384,336, and in Germany June 24, 1929. 1 Claim. (Cl. 55—138.)



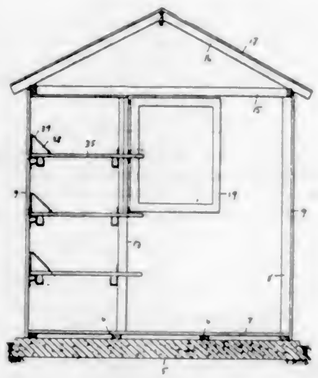
In a potato gathering machine, in combination with the machine frame and with the rear axle of the machine, an elevator displaceable in relation to said rear axle, slide blocks, a stop on each slide block, two stop rails on said frame elevator resting on said stops, an endless screw mounted on said frame, a worm wheel engaging with said endless screw, racks meshing with said worm wheel adapted to raise and lower said elevator around said rear axle, and guides on said machine frame for said blocks.

1,858,709. NUT LOCK. ROBERT H. JOHNSON, Washington, D. C. Filed Oct. 2, 1929. Serial No. 396,877. 1 Claim. (Cl. 151—5.)



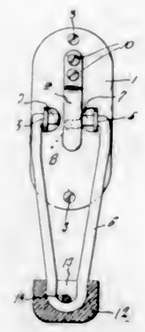
An improved nut lock comprising a slotted nut, a threaded bolt for receiving said nut and having a shouldered chamber extending laterally therethrough with a smaller opening beyond the shoulder, a plunger mounted to reciprocate in said chamber and confined therein, and a group of spring fingers carried by the central portion of said plunger and adapted to project out through said smaller opening, and to pass through the slot in the nut, said fingers having outwardly flared terminal portions for expanding against the outer portion of the slotted nut and to hold the device in the locked position.

1,858,710. POULTRY BROODING HOUSE. CHARLES J. KELLEY, Anselmo, Nebr. Filed Sept. 14, 1929. Serial No. 392,635. 1 Claim. (Cl. 119—22.)



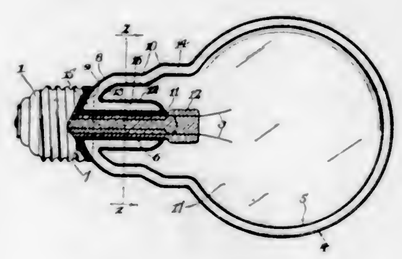
A poultry brooding house comprising side walls and a roof, posts located in the house spaced from one of the walls thereof, brackets connected to said wall and the posts and each bracket being formed with a hook part, with the hook portions of the brackets connected to the walls being spaced from said walls, a plurality of floor units having cleats on the bottom faces for engaging the hook portions of the brackets, each unit having openings in that end adjacent the wall and located between the extremity of the end and the adjacent cleat, triangular shaped members connected to the upper face of the floor unit and between which the openings are located and wire mesh connected to the inclined edges of said members for covering the openings, said inclined edges sloping downwardly and forwardly away from the said wall.

1,858,711. DOORSTOP. ROY WILLIAM LANE, Canton, Ohio. Filed June 9, 1931. Serial No. 543,215. 1 Claim. (Cl. 292—338.)



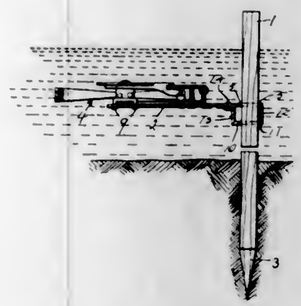
A door stop comprising a plate having a pair of apertured ears struck up therefrom, a substantially U-shaped brace member having its ends inturned and journalled in the apertures of said ears, one of the inturned ends of the brace member being offset to form a crank, said crank being disposed between the ears to prevent accidental displacement of the member, a flat spring attached at one end to the plate with its free end engaging said crank to secure the brace member in a raised or lowered position and a foot for the brace member comprising a rubber block having a recess for receiving the bight portion of the brace member and a removable pin inserted through the block for securing the block to said member.

1,858,712. INCANDESCENT LAMP. CHARLES H. LOUTTIT, Portland, Oreg. Filed Dec. 4, 1929. Serial No. 411,587. 2 Claims. (Cl. 176—16.)



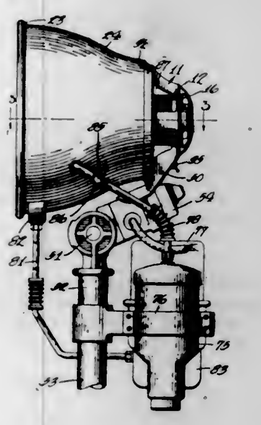
2. An incandescent lamp comprising, a socket plug formed in its inner end face with a recess, a lead-in wire supporting stem projecting from the plug, and a vacuum-type globe carried by the stem, said globe including an outer wall having a neck portion encircling and snugly engaging the stem and extending into said recess, said outer wall further having a main body portion merging into the neck portion and extending in contacting relation with the wall of the recess, said globe further including an inner wall having a neck portion fused with the neck portion of the outer wall and extending in parallel, spaced relation thereto, said inner wall further having a main body portion merging into the neck portion thereof and extending in parallel spaced relation to the main body portion of the outer wall.

1,858,713. TRAP SET. JOHN W. MARTIN, Amorita, Okla. Filed Mar. 3, 1931. Serial No. 519,837. 3 Claims. (Cl. 43—96.)



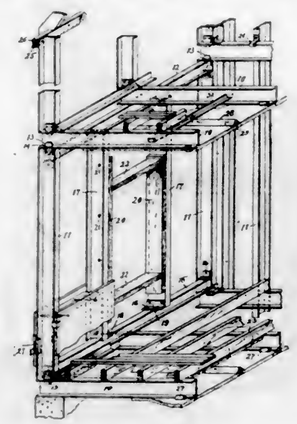
1. In a device of the character set forth, a stake, a trap, a plate carrying the trap and provided with an opening to receive the stake, and a bar carried by the plate and provided with an opening registering with said first opening and to receive the stake, the walls of the openings constituting clutch elements engaging the stake to hold the plate in adjusted position on the stake, said clutch elements functioning to release the plate from the stake for downward movement when the plate is vibrated.

1,858,714. APPARATUS FOR THERAPEUTIC AND OTHER PURPOSES. WENDELL L. MARTIN, Cleveland, Ohio, assignor to The Martin Brothers Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 8, 1932. Serial No. 585,482. 36 Claims. (Cl. 128—256.)



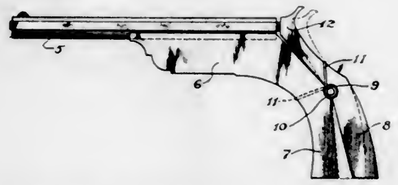
1. A drier, comprising: a casing provided with an inlet and with an outlet; a circulator for drawing a stream of air in through said inlet and expelling such air through said outlet; a heater for heating such air; and a shell surrounding said casing, but spaced therefrom, and with said casing defining a passage opening into the stream of such air, whereby additional air is drawn through between said casing and said shell into said stream, absorbing heat from said casing to maintain said casing against overheating, and joining said stream only when at least partially heated.

1,858,715. BUILDING CONSTRUCTION. STEWART R. MCKAY, Shaker Heights, Ohio. Filed Aug. 6, 1928. Serial No. 297,740. 4 Claims. (Cl. 72—16.)



1. In a building construction comprising spaced flanged steel frame members, a partition formed of wall board secured to the flanges of certain of said frame members, and means engaging the inner surface of said wall board for reenforcing said wall board against lateral displacement between adjacent frame members.

1,858,716. TOY GUN. ARTHUR STANLEY NORBURY, Windsor, Ontario, Canada. Filed Feb. 5, 1930, Serial No. 426,123, and in Canada Feb. 7, 1929. 1 Claim. (Cl. 124—14.)

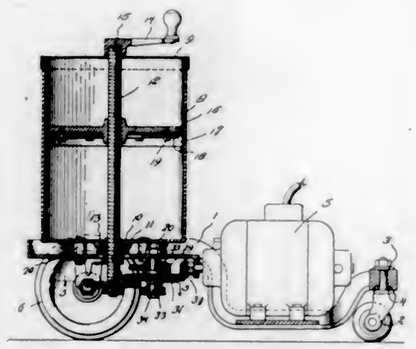


In a toy gun adapted to shoot elastic bands; a solid elongated barrel; a stock rigidly fastened to the underside of said barrel at the rear thereof and having an angularly depending rear end; an angular complemental member operating on the angularly extending depending rear end of said stock and having its upper end provided with an angularly cut flat face opposed to the rear end of the barrel and serving to co-operate therewith to normally hold against the rear end of the barrel the overlapped ends of an elastic stretched over the outer end of said barrel, along the sides thereof and over the rear end of said barrel; and a fulcrum spring connecting said complemental member with said angularly extended depending rear end of the stock at the connection of the angular portions of said complemental member and said stock end.

1,858,717. GREASE GUN APPARATUS. ELMER T. OLSON, Minneapolis, Minn., assignor to Benton-Olson Company, Minneapolis, Minn., a Copartnership composed of Henry C. Benton, Leland R. Benton, and Elmer T. Olson. Filed Feb. 11, 1930. Serial No. 427,636. 6 Claims. (Cl. 221—47.1.)

1. A grease gun apparatus consisting of a grease tank, a threaded spindle extending through the tank, and a feed plunger mounted in threaded relationship thereon,

a grease pump in open communication with the tank, means for forcing a predetermined amount of grease from the tank into the pump, sealing means for the tank consisting of a grooved member fixed to the spindle, and an annular lip extending from the tank and fitted in said groove.



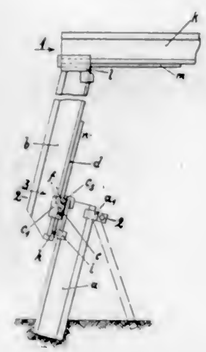
1,858,718. MEDICAL THERMOMETER. MICHAEL PHILIPSEN, Vedbæk, Denmark. Filed Jan. 9, 1929, Serial No. 331,335, and in Denmark Mar. 28, 1928. 2 Claims. (Cl. 73—52.)



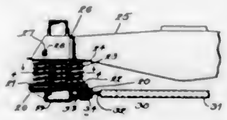
1. A thermometer of the character described including a casing with an indicating scale and a passage for a temperature responsive fluid extending through said casing adjacent the scale, a substantially oval shaped entrance body at one end of the thermometer, and a reduced cylindrical portion of smaller cross-sectional area than the casing and entrance body connecting said casing and entrance body, said portion having a bore communicating with said passage in the casing but not communicating with the entrance body, and a quantity of temperature responsive fluid in said portion.

1,858,719. PROP CONSTRUCTION FOR MINES. HUGO QUEENS, Gladbeck, Germany. Filed Nov. 21, 1929, Serial No. 408,824, and in Great Britain Oct. 11, 1929. 6 Claims. (Cl. 248—2.)

1. A prop construction for use in mines, open on the sole, comprising in combination a cap, two part legs, slidable cap angles at the connecting point between said cap and said legs, connecting shoes in said legs, a pair of wedge-shaped members between said shoes and said legs, and a spring adapted to coact with said wedge-shaped members all of the said elements adapted to form a frame yieldable against lateral and superincumbent pressure by the neutral shifting of the individual parts.

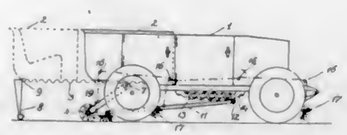


1,858,720. RAILWAY CAR TRUCK. THOMAS H. SYMINGTON, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Apr. 18, 1929. Serial No. 356,063. 12 Claims. (Cl. 105—208.)



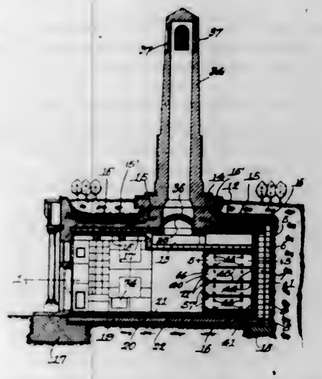
5. In a railway car truck, the combination of a pair of side frames, springs carried by said frames, a bolster resting on said springs, and a tie link connecting said frames and free from the load impressed on said springs, said link comprising a pipe and means secured within the ends thereof for securement to said frames.

1,858,721. MOTOR VEHICLE. CHARLES VÉKONY, Miskolcz, Hungary. Filed Oct. 2, 1929, Serial No. 396,721, and in Germany Aug. 22, 1929. 1 Claim. (Cl. 180—82.)



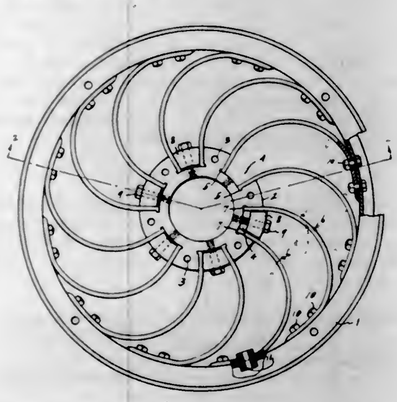
A safety arrangement on motor driven vehicles for preventing accidents due to the sudden braking, comprising in combination with the chassis, a rearwardly shiftable body portion of the vehicle on said chassis, two brake drums oscillatably mounted under said chassis adapted to roll over the ground and to conform with the irregularities in the surface of the road, two telescopic two-part shafts, and toothed gearing connecting each of said drums with said shiftable body portion so that at the commencement of the braking the centre of gravity of the vehicle is shifted towards the rear.

1,858,722. MAUSOLEUM. EDWARD H. WALKER and GEORGE L. W. MONG, Somerset, Pa. Filed Nov. 29, 1929. Serial No. 410,570. 4 Claims. (Cl. 72—7.)



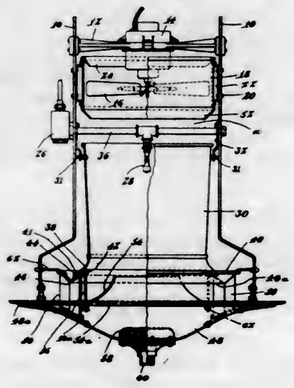
3. A mausoleum construction including side and end walls, crypt including floor slabs, keepers carried by the floor slabs, closure slabs, hook members supported within the closure slabs and adapted to engage the keepers to secure the closure slabs in position, and means for exerting a pull on the hook members to draw the closure slabs in position.

1,858,723. RESILIENT WHEEL. WALTER E. WEAVER, Houston, Tex. Filed May 12, 1931. Serial No. 536,767. 1 Claim. (Cl. 152—50.)



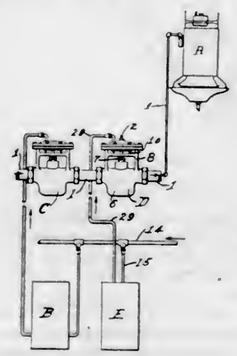
A resilient wheel for detachable mounting on a conventional wheel hub comprising a ring having plane faces and shaped to be fitted over the wheel hub, said ring further having a series of spaced, peripheral, inwardly converging pockets, said pockets having communication with the faces of the ring, the walls of the pockets having transverse grooves in their inner ends, the ring still further having threaded openings extending radially from its inner periphery to the bottoms of the pockets, a felly, resilient, arcuate spokes secured to the felly and having their inner end portions disposed in the pockets in abutting engagement with the walls thereof, ribs on the inner ends of the spokes engaged in the grooves of the pockets, tapered blocks insertable in the pockets between the spokes for anchoring said spokes in the pockets, said block having radial openings in alignment with the ring openings, and bolts extending through the blocks and threadedly engaged in the ring openings for securing the blocks in position, the ring still further having a series of smooth openings extending transversely between its faces intermediate the pockets for the passage of bolts for connection with the wheel hub.

1,858,724. HUMIDIFIER. JOSEPH ARMSTRONG, Allston, Mass., assignor to American Moistening Company, Providence, R. I., a Corporation of Maine. Filed May 14, 1926. Serial No. 109,185. 11 Claims. (Cl. 261—30.)



1. A humidifier comprising, in combination, a tubular casing; means for supplying spray in the casing; and means for creating a current of air through said spray, comprising a fan within the casing driving air through said spray; there being an opening in the casing wall between said fan and spray, through which opening air is drawn into said casing by the said driven air.

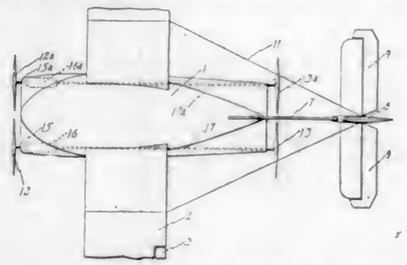
1,858,725. HUMIDIFYING SYSTEM. JOSEPH ARMSTRONG, Conimicut, R. I., assignor to American Moistening Company, Providence, R. I., a Corporation of Maine. Filed Sept. 4, 1929. Serial No. 390,412. 3 Claims. (Cl. (Cl. 236—44.)



1. A humidifying system comprising, in combination, a humidifier; a water supply therefor; a pair of valves controlling the flow in said supply, one of said valves be-

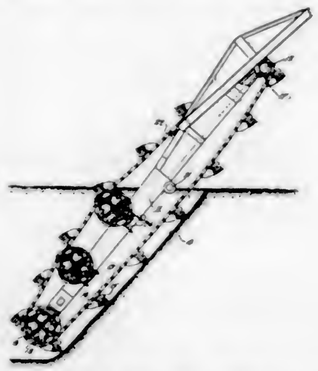
ing adapted when moved to travel continuously between wide open and closed positions and the other valve being adapted when moved to travel continuously between wide open and a partly-closed position; separate power actuated means for moving each valve; a source of power; humidity-responsive apparatus controlling the flow of power to effect said continuous travel of the first said valve; and thermally responsive apparatus controlling the flow of power to effect the said continuous travel of the second said valve.

1,858,726. AIRPLANE ENGINE ARRANGEMENT. GIUSEPPE M. BELLANCA, New Castle, Del. Filed June 7, 1930, Serial No. 459,745. Renewed Mar. 19, 1932. 4 Claims. (Cl. 244—14.)



1. In an airplane having a fuselage, a plurality of pairs of engines within the fuselage adapted to drive a plurality of pairs of tractor and pusher propellers, the engines of each pair being arranged one above the other.

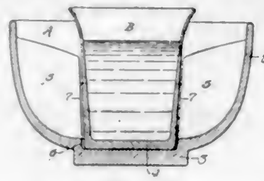
1,858,727. TRENCH WIDENER. HANS J. BENTSON, Los Angeles, Calif., assignor to Austin Machinery Corporation, Muskegon, Mich., a Corporation of Virginia. Filed Feb. 13, 1929. Serial No. 339,512. 7 Claims. (Cl. 37—87.)



1. In a trenching machine, the combination of a continuously moving main digging and conveying mechanism, comprising a boom, an endless conveyor moving above and below said boom, and an auxiliary digging mechanism comprising a plurality of digging elements fixed on and extending laterally from said boom, said elements being individually adjustable lengthwise of said boom.

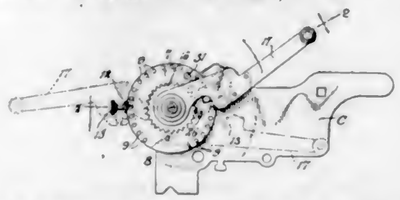
1,858,728. COCKTAIL SERVICE. JOHN M. CREIGHTON, Moundsville, W. Va., assignor to Fostoria Glass Company, Moundsville, W. Va. Filed Jan. 21, 1931. Serial No. 510,080. 6 Claims. (Cl. 65—15.)

4. An ice dish having wall and base portions, a food receptacle receiving socket in the base portion, and a plurality of inwardly converging partition members forming compartments for receiving and retaining cracked ice



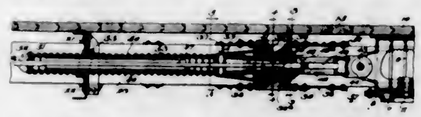
therein and around the socket, said members having free inner edges adjacent the socket to provide a space for positioning a food receptacle therein.

1,858,729. CONDENSED BILLING DEVICE. EBENEZER ALFRED DAVIDGE, London, England, assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed June 7, 1930. Serial No. 459,740. 8 Claims. (Cl. 197—117.)



1. In a condensed billing machine, the combination of a rotatable feeding element, and operating means for rotating the element in opposite directions including an operating handle pivoted coaxially of the feeding element, a disc fixed against rotation and provided with a plurality of openings arranged in a concentric series, a stop pin projectable through any predetermined one of said openings into the path of movement of the handle, a ratchet wheel fixed to the feeding element to rotate therewith, a pawl pivoted to the handle for engaging the ratchet wheel, means for yieldably retaining the pawl in either its engaged or disengaged position, a fixed stop on the disc, a pawl throw-out trip axially journaled on the feeding element and movable between the adjustable stop pin and the fixed stop, a pawl throw-in trip fixed to the disc between the adjustable stop pin and the fixed stop, and means for retaining the stop pin in a retracted position out of the path of movement of the handle.

1,858,730. CAR CONSTRUCTION. OTHO C. DURYEA, Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 8, 1928. Serial No. 298,317. 11 Claims. (Cl. 213—8.)



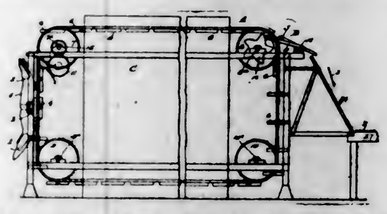
1. In a car structure of the type embodying a bolster and a draft and buffing member extending substantially the length of the structure and mounted for movement relative to said bolster, cushioning means for yieldingly resisting relative movement of said member including a wedge housing, tie plates secured to said draft and buffing member for rigidly connecting said member and housing, and means for resisting said relative movement and including friction shoes operatively positioned within said housing, said last named means being operatively connected to the body bolster.

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1,858,731. PROCESS OF PREPARING ETHERS OF CARBOHYDRATES. OTTO ERNST and KURT SPONSEL, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 22, 1928, Serial No. 287,642, and in Germany June 30, 1927. 4 Claims. (Cl. 260—152.)

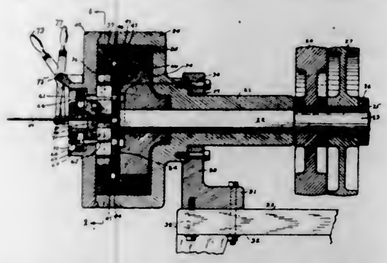
3. In the process of preparing ethers of a carbohydrate of the type formula $(C_6H_{10}O_5)x$ the step which comprises expelling the air from the carbohydrate by means of gaseous carbon dioxide and subsequently removing the carbon dioxide by means of an alkali solution.

1,858,732. MECHANISM FOR REMOVING ARTICLES FROM THEIR CARRYING TRAYS. RALPH A. FARNHAM, Herkimer, N. Y., assignor, by mesne assignments, to Holed-Tite Packing Corporation, New York, N. Y., a Corporation of New York. Filed May 1, 1929. Serial No. 359,510. 8 Claims. (Cl. 198—27.)



1. In combination with a series of traveling trays adapted to support articles, means for dislodging the articles from the trays, said means including a rock shaft, means for rocking the same, and a member carried by the shaft and yieldable relatively thereto, and adapted to be operated by the shaft to engage the articles on the successive trays and dislodge the same.

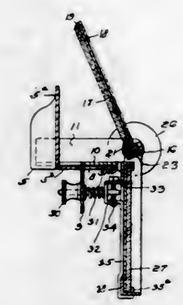
1,858,733. TAP FORMING MACHINE. JULIUS FLACHBART, Kent, Ohio. Filed Aug. 31, 1927. Serial No. 216,709. 9 Claims. (Cl. 78—45.)



1. In a machine of the type described, a rotatable member, means for rotating said member, a floating rack, a friction ring carried by said rack, and means carried by said rotatable member to engage said friction ring whereby said rack is rotated, rotatable members carried by said rack, a plurality of radially movable dies normally outside the path of movement of said rotatable members, and means adapted to be moved into the path of movement of said rotatable members to thereby cause said dies to be moved into engagement with the work.

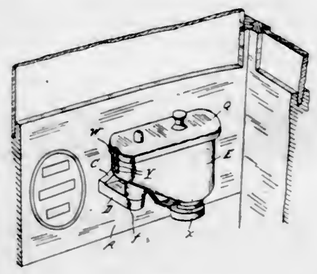
1,858,734. COMBINATION REAR-VIEW MIRROR SET FOR AUTOMOBILES. JOHN FOTAKIS, Detroit, Mich. Filed Sept. 8, 1930. Serial No. 480,578. 9 Claims. (Cl. 45—97.)

1. A structure of the character described, comprising a pair of mirror frames and mirrors carried thereby, means for mounting one of said mirrors for bodily swinging movement into and out of covering position with respect to the other of said mirrors, means for effecting a limited



angular adjustment of the other of said mirrors while maintaining its relation to the first of said mirrors, and means for maintaining said other mirror under spring tension throughout its positions of adjustment.

1,858,735. DISPENSER FOR TOBACCO OR GRANULAR MATERIAL. JAMES A. GOODSELL, Hudson, Mich., assignor of one-half to Elwin M. Goodsell, Hudson, Mich. Filed July 3, 1930. Serial No. 465,472. 11 Claims. (Cl. 206—41.5.)

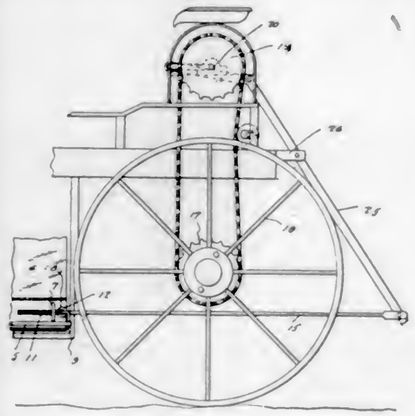


1. In combination with a supporting bracket, a container supported thereby in position of limited rotatability about a selected portion of said bracket as an axial center, said container having a delivery aperture in its bottom portion which is normally closed by the engagement thereunder of a projecting portion of said bracket, an agitating screw rotatably supported within said container operatively adjacent the delivery opening therein, and means operatively connecting said bracket and said container whereby upon the manuualy induced rotative movement of said shell said agitating screw is actuated.

1,858,736. ATTACHMENT FOR DIRT MOVING MACHINES. CHARLES J. HAUGH, Alma, Nebr. Filed June 4, 1931. Serial No. 542,162. 1 Claim. (Cl. 198—230.)

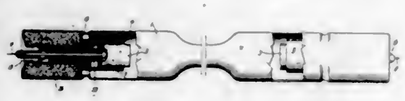
In an apparatus of the class described, an elongated plate, a rod mounted longitudinally along the plate, a pair of scrapers having openings to receive the rod and slidable on the rod and the plate, means independently of said rod holding the scrapers in spaced relation to each other, means for reciprocating the scrapers back and forth on the plate longitudinally thereof, said means comprising a rocker, a rod connecting one end of the rocker with one of the scrapers, a shaft having a crank, a pitman

connected with said crank and said pitman being connected with said rocker, a sprocket on said shaft, a second sprocket adapted to be connected with the wheel



of a dirt moving machine, and a chain trained over said sprockets for transmitting movement of said wheels to said shaft.

1,858,737. ELECTRIC DISCHARGE DEVICE. WILLIAM F. HENDRY, Ossining, N. Y., assignor, by mesne assignments, to Manhattan Electrical Supply Company, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 4, 1927. Serial No. 180,788. 9 Claims. (Cl. 176—126.)



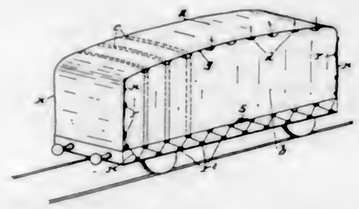
1. In a luminescent tube, an envelope filled with a rare gas, two widely spaced electrodes within said envelope, at least one of said electrodes having its active surface in the form of a hollow cylinder, said cylinder being surrounded by a sleeve of insulating material spaced from the exterior surface of said hollow cylinder a slight distance, and heat conducting means filling the space between the nonactive portion of said electrode and said envelope for reducing the operating temperature of the electrodes.

1,858,738. CIGAR CONTAINER. GUY ELMO HERNIS, Stevens Point, Wis. Filed Jan. 18, 1930. Serial No. 421,774. 1 Claim. (Cl. 206—41.)



A shipping container for cigars or similar articles comprising a receptacle including two separable members joined together by threads, the male threads having an inturned flange designed for rigid abutment against a corresponding inturned flange on the female member whereby to rigidly hold the two members against bending movement and thereby prevent injury to the cigar or similar article within the container.

1,858,739. WAGON TILT. CHARLES HOFRICHTER, Bronsdorf, Germany. Filed Apr. 23, 1930. Serial No. 446,643. 6 Claims. (Cl. 135—1.)



1. A wagon tilt, comprising, in combination, a longitudinal middle part; two separate longitudinal side parts, straps extending transversely over said three parts on the inner surface thereof and being connected with them, substantially as set forth.

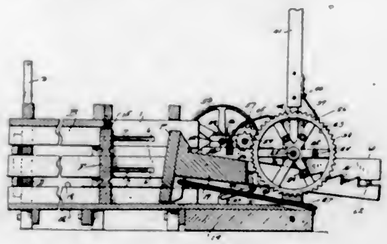
1,858,740. OXIDATION OF AMMONIA. FRITZ JOST, Herne-Bornig, Germany, assignor to Patentverwertungs A. G. "Alpina," S. A. pour l'Exploitation de Brevets "Alpina," Patents Exploitation Cy. "Alpina," Ltd., Basel, Switzerland. Filed July 31, 1930, Serial No. 472,203, and in Germany Aug. 3, 1929. 2 Claims. (Cl. 23—162.)

1. The process of oxidizing ammonia comprising conducting a mixture of ammonia and an oxygen containing gas at a temperature of 650–800° C. in contact with platinum gauze, which has previously been subjected to a mechanical densifying treatment.

1,858,741. CATALYZER. FRITZ JOST, Herne-Bornig, Germany, assignor to Patentverwertungs A. G. "Alpina," S. A. pour l'Exploitation de Brevets "Alpina," Patents Exploitation Cy. "Alpina," Ltd., Basel, Switzerland. Original application filed July 31, 1930, Serial No. 472,203, and in Germany Aug. 3, 1929. Divided and this application filed Aug. 12, 1931. Serial No. 556,713. 1 Claim. (Cl. 23—233.)

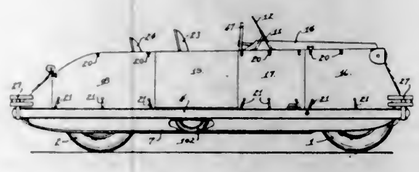
A catalyzer for oxidizing ammonia consisting of platinum gauze densified by mechanical pressure.

1,858,742. BALING PRESS. ALBERT J. KRUSE, Fredericksburg, Tex. Filed Oct. 4, 1930. Serial No. 486,429. 10 Claims. (Cl. 100—7.)



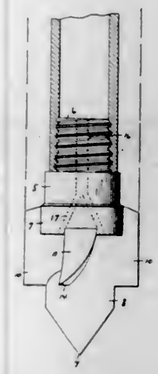
5. The combination with the baling chamber of a press having a feed opening in communication therewith; of a reciprocating plunger working in said chamber, an elongated member carried by the plunger, a rotatable member having laterally disposed parts, the elongated member having a rack with which said parts engage upon rotation of the rotatable member for moving the plunger on its compression stroke, a rock arm for contact with the elongated member of the plunger for maintaining said elongated member in proper position in mesh with the lateral parts of the rotatable member, and means for throwing the elongated member of the plunger in a position free of the rotatable member.

1,858,743. MONOCAR. JAMES LANGSTRETH, San Francisco, Calif. Filed Dec. 13, 1929. Serial No. 413,763. 10 Claims. (Cl. 180—33.)



1. In a motor vehicle, an elongated horizontal frame member, a pair of wheels arranged in tandem and positioned within the respective end portions of said frame member, means for resiliently mounting said frame upon said wheels, risers extending upwardly from said frame member, body panels removably positioned upon said risers, said panels forming an inclosed body supported upon and positioned above said horizontal frame member, an engine carried by said frame to the rear of the forward wheel, driving connections between said engine and the rear wheel, and a housing inclosing the upper portion of said engine and spaced from said body panels.

1,858,744. BIT FOR DEEP WELL DRILLING. JAMES C. LUNSFORD, Pampa, Tex. Filed Mar. 6, 1931. Serial No. 520,674. 1 Claim. (Cl. 255—61.)

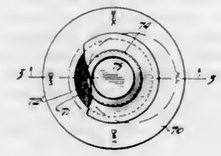


A rotary drilling bit comprising a substantially cylindrical body provided adjacent its lower end with a circumferentially extending shoulder, a pilot blade extending from the body at the last named end thereof and terminating in a point, said blade being laterally extended as it approaches said end of the body to provide oppositely extending reamer blades, additional reamer blades projecting from relatively opposite sides of the pilot blade in alternate relation to the first mentioned reamer blades, and having inclined upper edges arranged in a plane below the upper edges of the first named reamer blades, and the first named reamer blades having upper inclined edges merging into the upper surface of said shoulder.

1,858,745. PROCESS FOR THE REACTIVATION OF POWDERED OR FINE GRAINED ADSORPTIVE CARBON. ANTON MACKERT, Frankfort-on-the-Main, Germany. Filed May 28, 1929, Serial No. 366,766, and in Germany and Austria June 8, 1928. 7 Claims. (Cl. 252—3.)

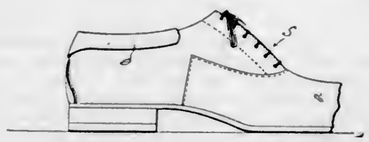
1. A process for the revivification of spent powdered active carbon which comprises molding the spent carbon into shapes without binding agents, and subjecting the molded carbon without agitation to the action of a gas mixture containing free oxygen in an amount not exceeding 8% by volume and having a temperature not exceeding 350°, the proportion of free oxygen and the temperature of the gas being so adjusted that the adsorbed impurities are removed with substantially no oxidation of the active carbon.

1,858,746. COMBINED LIGHTING AND SIGNAL SWITCH FOR AUTOMOBILES. JOHN W. C. MILLER, Roanoke, Va. Filed Jan. 9, 1930. Serial No. 419,597. 14 Claims. (Cl. 020—7.)



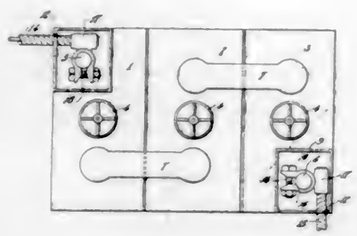
1. A switch for controlling the lights and audible signal of automobiles, comprising an insulating base including upper and lower sections, fixed contacts for bright, dim, side and tail light, battery and signal connections carried by the base, a push button slidably mounted relatively to the base, a contact member slidably mounted between the sections of the base for selectively engaging the fixed contacts for the lights, and means connecting said contact member with the push button for conjoint sliding movement therewith.

1,858,747. HEEL PROTECTOR FOR HOSE. CHESTER D. MORALES, Raymond, Wash. Filed June 3, 1931. Serial No. 541,878. 2 Claims. (Cl. 36—55.)



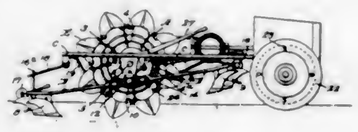
1. As a new article of manufacture, a shoe attachment comprising a single blank of material presenting a bottom portion, opposed side portions, and a transversely curved end portion connecting the rear ends of the side portions; the upper marginal edges of the side and end portions being foldable on an imaginary line continuing from the forward end of one side portion to the corresponding end of the other side portion; the foldable marginal portion at opposite edges of the blank being separated from the side portions by short longitudinal slits extending inwardly from the said edges of the blank; and the side portions at the bottom edges thereof being separated from the bottom portions by relatively short slits extending inwardly from the edges of the blank constituting a said lower edge portion of said sides.

1,858,748. PROTECTIVE DEVICE FOR THE TERMINALS OF STORAGE BATTERIES. HENRY A. PARADIS and WALTER C. ANDERSON, Chicopee Falls, Mass. Filed Aug. 13, 1929. Serial No. 385,653. 1 Claim. (Cl. 136—163.)



As an article of manufacture, a cup-shaped member formed of soft rubber having an opening in its bottom portion to permit stretching for receiving a battery terminal of a storage battery for providing a leak-proof fit around the terminal and another opening in a side of the cup-shaped member for receiving a battery cable, the second opening having a slit communicating with the same and extending to the upper edge of the cup-shaped member for permitting the easy insertion and removal of the cable of the battery, whereby the said member may be readily placed on a battery terminal and removed, and whereby a battery cable may be readily placed on a terminal and removed.

1,858,749. MOTOR TRACTION PLOW. WILLIAM PATERSON and MAY H. PATERSON, Oakland, Calif. Filed Oct. 14, 1930. Serial No. 488,570. 5 Claims. (Cl. 97—28.)



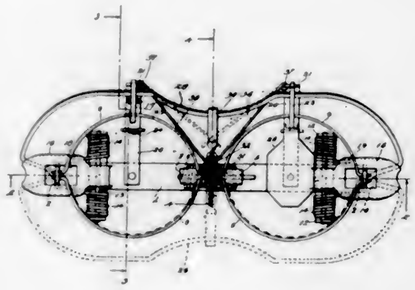
1. In a motor traction plow, a chassis supported by a traction wheel and two steering wheels, said traction wheel having movable coulters fixed in pairs to rocking shafts, said rocking shafts being journalled in boxes fixed on the inner face of said traction wheel, a disk turnably mounted upon the axle of said traction wheel, a brake band formed upon the periphery of said disk, connecting rods connecting said disk with said coulters on one side of said traction wheel; a slidable clutch mounted upon said axle, said clutch having pins attached, adapted to project through holes in said disk and engage in corresponding holes in the hub of said traction wheel and a brake-strap and brake lever applicable to said disk.

1,858,750. GOLF GAME. ALFRED G. RANNEY, San Antonio, Tex. Filed June 17, 1930. Serial No. 461,772. 8 Claims. (Cl. 273—87.)

1. In a game of the class described, an elongated rectangular base having one or more depressions formed therein, each depression being relatively deep at one end and relatively shallow at its opposite end, the bottom of the depression at said ends being relatively flat and having an intermediate portion sloping from the flat bottom portion of the deep end upwardly to the flattened portion of the shallow end, tunnels formed in the base connecting said depression, said tunnels leading from the shallow end of the depressions to the deep end of the next adjacent depression, and a ball movable over the base.

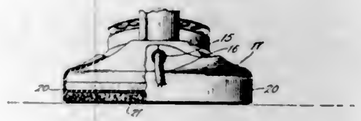


1,858,751. JAW TRAP. EDWARD RUTHERFORD, Cameron, La., assignor of one-third to John Walter Rutherford and one-third to Joe Rutherford, Cameron, La. Filed Feb. 10, 1931. Serial No. 514,817. 8 Claims. (Cl. 43—88.)



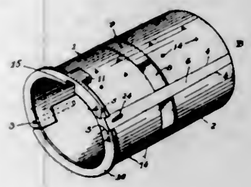
1. A trap of the character described, comprising a base, a pair of jaw members having pivotal connection with said base, spring means for closing said jaws over the base, a trigger mechanism for holding said jaws open against the tension of the spring means, an elongated substantially U-shaped frame having each end pivotally connected with said base, said frame being of a depth to swing over said jaws from one side of the trap to the other, an arm pivotally attached at one end to the base and having loose connection at its other end with the frame, and spring means mounted on the base and engaging the arm to actuate the same, and normally urging the frame through the arm to the side of the trap remote from the trigger mechanism, said trigger mechanism being designed to hold the frame in set position with the jaw members.

1,858,752. ATTACHMENT FOR STANDS AND THE LIKE. CHARLES RALPH SENTNEY, Hollywood, Calif. Filed Dec. 24, 1930. Serial No. 504,520. 7 Claims. (Cl. 248—41.)



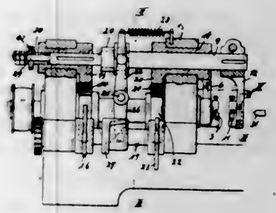
1. An attachment for telephone stands and the like comprising: a molded rubber shape adapted to encircle the sides of a stand and be held thereon by its resiliency and an insert of rubber having a higher coefficient of friction in the base thereof.

1,858,753. EXPANSIBLE BUSHING FOR WINDING CORES. JAMES A. TAYLOR, Portland, Me., assignor to Nellie Bartlett Taylor, Portland, Me. Filed Apr. 27, 1931. Serial No. 533,205. 6 Claims. (Cl. 242—72.)



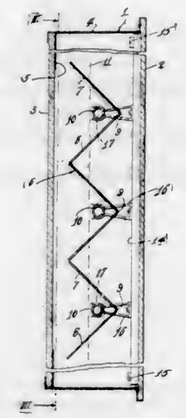
1. An expansible bushing for a paper winding core comprising a two-part tubular member, a longitudinal hinge pivotally connecting said parts, a key-slot in the end of said core, and means whereby, simultaneously, said bushing may be both frictionally and positively secured in said core.

1,858,754. LATHE. KARL TESSKY, Esslingen-on-the-Neckar, Germany. Filed Dec. 10, 1930, Serial No. 501,370, and in Germany Dec. 20, 1929. 3 Claims. (Cl. 29—56.)



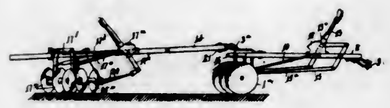
1. A lathe comprising rocking tool holder arms, and a hollow shaft on one of said holder arms, another holder arm mounted in said hollow shaft for rotation, one of said two holder arms being arranged to be rocked only, while the other is arranged to be rocked and displaced.

1,858,755. ILLUMINATED SIGN. CECIL VAN WYCK and RALPH C. HYDE, Los Angeles, Calif., assignors to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del., a Corporation of Delaware. Filed Jan. 5, 1931. Serial No. 506,623. 2 Claims. (Cl. 40—132.)



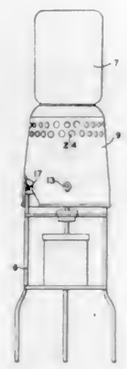
1. In an illuminated sign, a casing, a translucent front wall for said casing, a reflector behind said front wall comprising a plurality of flat reflectors forming a plurality of adjacent groups of two reflectors each, the two reflectors of each group being arranged in V-shaped cross section relative to each other with the open side of the V directed toward said front wall, and the contiguous reflectors of each two adjacent groups forming a V-shaped cross section relative to each other with the open side of the V directed away from said front wall, and a tubular lamp disposed between the reflector forming each of said groups and parallel with the adjacent edges of the reflectors forming each group.

1,858,756. DISK HARROW. TIMOTHY CLARK WARDLEY, Elora, Ontario, Canada, assignor to T. E. Bissell Company Limited, Elora, Ontario, Canada, a Corporation of Canada. Filed Sept. 17, 1930. Serial No. 482,587. 5 Claims. (Cl. 55—88.)



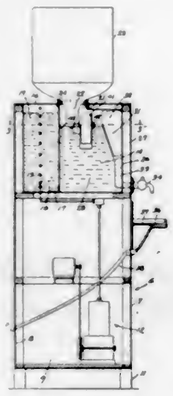
1. A disk harrow comprising a center frame; a beam having a journal at each end; two disk gangs each provided with an axle having a bearing adjacent to its outer end in which one of the journals is entered for pivotally connecting the disk gang to the beam, and a bearing adjacent to its inner end; levers connected with the bearings adjacent the inner ends of the axle for adjusting the cutting angles to the disk gangs and flexible suspenders connected with the same bearings and adjustably connected with the beam for vertically inclining each disk gang relatively to the land and maintaining it in its inclined position.

1,858,757. OLLA. RICHARD WOLFE, Los Angeles, Calif., assignor to California Consolidated Water Co., Los Angeles, Calif., a Corporation of Delaware. Filed July 31, 1930. Serial No. 472,151. 5 Claims. (Cl. 62—91.)



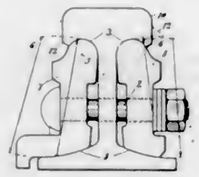
1. An olla construction comprising a container of permeable material, a jacket supporting said container, said jacket engaging the container adjacent the upper end thereof and extending substantially to the lower end thereof to conceal the major portion of the container, and means for supporting said jacket.

1,858,758. COMBINATION DRINKING CUP AND WATER VENDING MACHINE. RICHARD C. WOLFE, Los Angeles, Calif., assignor to California Consolidated Water Co., Los Angeles, Calif., a Corporation of Delaware. Filed Oct. 30, 1930. Serial No. 492,250. 3 Claims. (Cl. 225—21.)



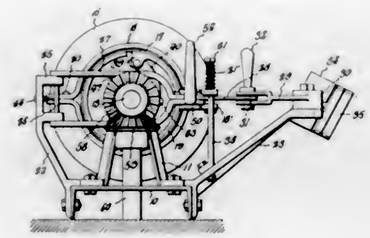
3. In combination, a main reservoir adapted to contain a liquid, an auxiliary reservoir having a valve outlet, a receptacle dispensing device mounted upon said main reservoir and having a rotary element adapted to dispense a receptacle each time it is rotated through a predetermined arc, a shaft journaled between its ends to said main reservoir adjacent said auxiliary reservoir and connected at one end to said rotary element to be turned simultaneously therewith, and a dipper mounted upon the other end of said shaft and adapted to be immersed in the liquid within said main reservoir when the shaft is in one extreme position and adapted to discharge its contents into said auxiliary reservoir when the shaft is turned to its other extreme position.

1,858,759. RAIL JOINT CONNECTION. GUSTAVE YSEBOODT, Schaerbeck-Brussels, Belgium. Filed Aug. 27, 1930, Serial No. 478,157, and in Germany Aug. 27, 1929. 4 Claims. (Cl. 238—244.)



1. A rail joint connection, comprising in combination with the rail and the fish plate, a hinge connection formed between said rail and said fish plate at a constant distance from the rail web adapted to prevent lateral shifting of the edge of said fish plates, and slightly curved supporting surfaces opposite said hinge connection having the centre at a distance from the fulcrum of said hinge connection adapted on the fish plate bolts being tightened to clamp said fish plates against said rail through the intermediary of said joint.

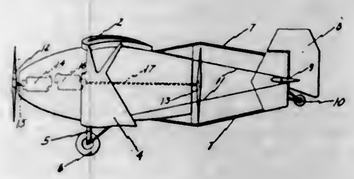
1,858,760. TROLLING AND THE LIKE WINCH. CHRISTIAN M. AKERVICK and HENRY AKERVICK, Seattle, Wash. Filed May 30, 1930. Serial No. 457,562. 8 Claims. (Cl. 254—187.)



1. A winch including a line carrying drum, the line having a weight thereon, means for driving the drum to reel the line thereon, a brake for the drum, means for operating the brake, a clutch on the drum, means on the driving means for operating said clutch, and a line guide in normal operative relation with the brake and clutch operating means and operable by said weight whereby to simultaneously engage the brake and disengage the clutch.

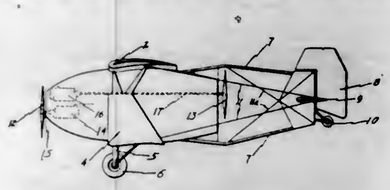
1,858,761. AIRPLANE ENGINE ARRANGEMENT. GIUSEPPE M. BELLANCA, New Castle, Del. Filed June 7, 1930. Serial No. 459,741. 1 Claim. (Cl. 244—14.)

In an airplane having a fuselage terminating adjacent the trailing edge of the wing, support members extending from said fuselage upwardly for a relatively short distance and downwardly to the termination thereof, an empennage carried by said support members at the termination, a plurality of motors mounted closely adjacent each other in tandem in the forward part of the fuselage adapted to drive tractor and pusher propellers, respectively, the pusher propeller being located in the larger



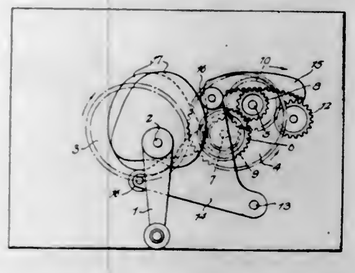
space between the support members so that the slip stream therefrom is substantially unobstructed for impingement on the empennage.

1,858,762. AIRPLANE ENGINE ARRANGEMENT. GUISEPPE M. BELLANCA, New Castle, Del. Filed June 7, 1930. Serial No. 459,743. 1 Claim. (Cl. 244—14.)



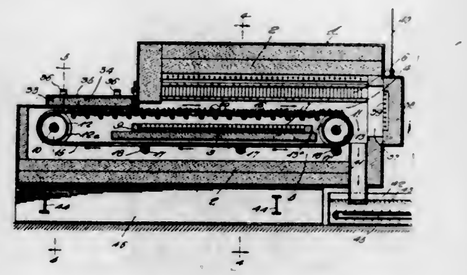
In an airplane having a fuselage terminating adjacent the trailing edge of the wing, support members extending from said fuselage, an empennage carried by said support members, a plurality of engines arranged one above the other within the fuselage adapted to drive tractor and pusher propellers respectively, the engines being equidistant from a plane passing through the horizontal center of the fuselage and lying in a central vertical plane, the pusher propeller being located in the space between the support members so that the slip stream therefrom is substantially unobstructed for impingement on the empennage.

1,858,763. MECHANICAL MOVEMENT. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,249. 1 Claim. (Cl. 74—7.)



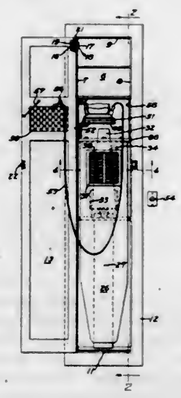
In a mechanical movement, a drive shaft, a variable radius gear mounted on said shaft, a cam mounted on said shaft, a driven member having gearing connection with said variable radius gear, and means including a rack interposed between said cam and said driven member and adapted to modify the variable movement imparted by said variable radius gear to said driven member.

1,858,764. BELT CONVEYER. WILLIAM B. COOLEY, Milwaukee, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 1, 1931. Serial No. 526,936. 4 Claims. (Cl. 263—8.)



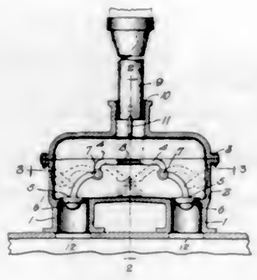
1. An electric furnace comprising a shell, a refractory lining for said shell, a flanged rotatable drum mounted within said shell adjacent each end thereof, a horizontally extending partition in said shell between said drums, roller members disposed above and below said partition and disposed in lines substantially tangent to the upper and lower peripheries of said drums, an endless flexible conveyer carried by said drums and supported by said roller members and conforming to the shape of said flanged drum, heating elements disposed within said refractory lining above said conveyer, a charging aperture located adjacent one end of said conveyer, and heating elements disposed beneath the conveying portion of said conveyer for the uniform heat treatment of articles disposed on said conveyer through said charging aperture.

1,858,765. IRONING BOARD CABINET. OTTO P. CRAMER, San Francisco, Calif. Filed Oct. 31, 1927. Serial No. 229,916. 4 Claims. (Cl. 312—184.)



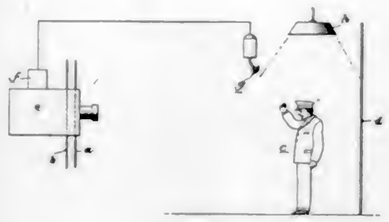
4. In combination with an ironing board cabinet adapted to contain an ironing board and provided with a door for closing the cabinet, a metal grille in said door, a sad iron shelf pivotally mounted within the cabinet adjacent to the grille, and spring means normally urging the shelf outwardly away from the back of the cabinet and against the grille when the door is in closed position and to an outwardly extending position when the door is open, said shelf being pressed inwardly by the grille to an enclosed position when the door is closed, and said shelf being adapted to safely support a heated sad iron in either the enclosed or outwardly extending positions.

1,858,766. FILLING STATION VALVE OPERATING DEVICE. STANLEY DABROSKI, Springfield, Mass. Filed Dec. 2, 1931. Serial No. 578,566. 3 Claims. (Cl. 284—18.)



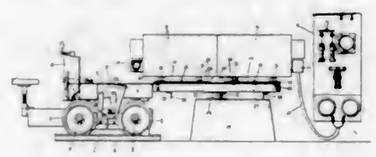
1. In a valve operating device, a pipe having a valve, an operating lever for said valve, a filling pipe nozzle, and means whereby said lever is operated to open said valve upon insertion of said nozzle, said lever being out of the path of said nozzle and said nozzle having an automatically opening catch engaging said lever.

1,858,767. METHOD AND MEANS OF PRODUCING COMPOSITE PHOTOGRAPHS WITH SOUND ACCOMPANIMENT. CARROLL H. DUNNING, Los Angeles, Calif., assignor to Dunning Process Company, a Corporation of California. Filed Oct. 1, 1928. Serial No. 309,692. 1 Claim. (Cl. 88—16.2.)



In the production of a motion picture comprising two components, the method of controlling the various sounds related to each component, which includes photographing the first component without sound, making a positive colored transparency therefrom whose shadows will pass light of approximately their own color and whose high lights will pass either neutral or complementary light; placing said transparency forwardly of an unexposed negative; making a composite photographic record on the unexposed negative by photographing the second component through the positive transparency of the first component by illuminating the second component with a light that will pass uniformly through both high lights and shadows of the transparency and by illuminating the background of the second component with a light that will pass through the high lights but not the shadows of the transparency; simultaneously recording the desired synchronous sounds of the second component, and combining sound and composite picture record into one synchronous unit.

1,858,768. CHARGING TRANSFER TABLE. GEORGE O. ELLSTROM, University City, Mo., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed July 8, 1929. Serial No. 376,657. 28 Claims. (Cl. 104—34.)



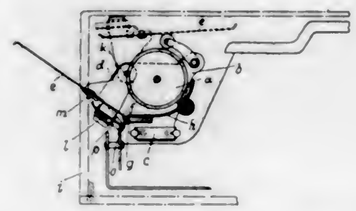
1. In a system of battery charging, a loading and unloading station, a charging device situated remotely therefrom, and a transfer device for holding a plurality of battery units, said transfer device being operable to simultaneously move battery units toward said station and charging device.

1,858,769. SEMITRAILER MOTOR TRAIN. CLYDE EASKINE, St. Louis, Mo., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1931. Serial No. 530,743. 1 Claim. (Cl. 280—33.2.)



A semi-trailer motor train comprising a tractor, a semi-trailer coupled thereto and having road wheels adjacent its rear end, a fifth wheel element carried by the trailer and disposed over said wheels, a second semi-trailer having a fifth wheel element at its front end engageable with the first named fifth wheel element and road wheels at its rear end, a body on the first semi-trailer extending forwardly from its fifth wheel element, and a body on the second semi-trailer extending over the said fifth wheel elements and terminating in proximity to the body of the first trailer.

1,858,770. TYPEWRITER. HERBERT ETHERIDGE, Rodelheim, near Frankfort-on-the-Main, Germany. Filed Feb. 7, 1931, Serial No. 514,078, and in Germany Feb. 10, 1930. 5 Claims. (Cl. 197—143.)

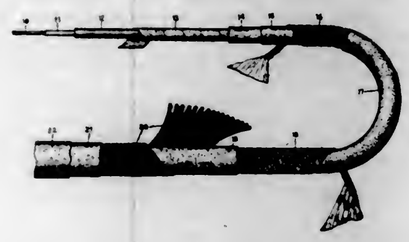


1. In a typewriter comprising a carriage and a hinged paper rest, lateral brackets to said carriage for the support of the platen, pivoted arms on said brackets, a paper rest rigidly attached to said arms, and means in connection with said paper rest to adjustably support marginal stops thereupon.

1,858,771. PROCESS FOR THE PRODUCTION OF BERYLLIUM OXIDE OR BERYLLIUM HYDROXIDE FROM TECHNICAL ALKALI-BERYLLIUM DOUBLE HALIDES, IN PARTICULAR FLUORIDES. HELLMUT FISCHER, Berlin-Siemensstadt, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Jan. 17, 1931, Serial No. 509,541, and in Germany June 4, 1930. 3 Claims. (Cl. 23—24.)

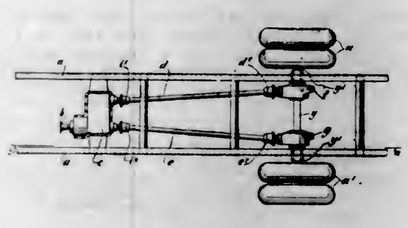
1. A process for the production of beryllium oxide or beryllium hydroxide from technical alkali-beryllium double halides, which comprises treating the alkali-beryllium double halide with a strong caustic alkali solution containing the same alkali metal as the double halide and further treating the solution, after separation of the alkali-halide precipitate, to obtain beryllium hydroxide.

1,858,772. PARK CABLE. OTTO ARTHUR FREDERICKSON, Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,183. 6 Claims. (Cl. 173—266.)



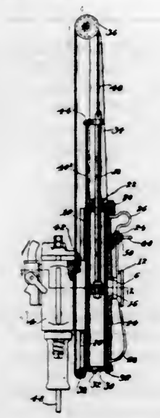
1. An electrical cable adapted for underground use and having the usual conductor insulation and lead sheath and including in combination therewith servings of relatively hard twisted and flattened paper disposed exteriorly of the lead sheath and therearound said servings constituting by themselves a hard relatively rigid protective layer for the lead sheath.

1,858,773. MULTIPLE TRANSMISSION SHAFT DRIVE FOR MOTOR VEHICLES. ERVING R. GURNEY, Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 17, 1930. Serial No. 421,420. 1 Claim. (Cl. 180—70.)



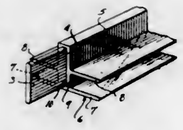
A vehicle comprising a frame, a power shaft offset thereon with respect to the median plane of the frame, final drives mounted at opposite sides of the frame, rearwardly of the shaft, a power apportioning means on the frame, a propeller shaft in line with the first shaft and driving one of the final drives from the apportioning means, and a second propeller shaft symmetric with the first and connecting the apportioning means with the other final drive.

1,858,774. FEEDING DEVICE FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 31, 1929. Serial No. 336,359. 5 Claims. (Cl. 255—45.)



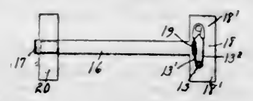
1. In a feeding device for rock drills, the combination of a rock drill, a rock drill shell slidably carrying the rock drill, a cylinder mounted in the shell, a piston in the cylinder, a piston rod having one end connected to the piston and the other end projecting through the cylinder, means for selectively introducing pressure fluid into opposite ends of the cylinder to advance and retract the piston and flexible means attached fixedly to both the rock drill and to the projecting end of the piston rod to transmit the movement of the piston to the rock drill for advancing and retracting the rock drill.

1,858,775. CAME AND PROTECTED STAY BAR. WILLIAM HENDERSON, Mineola, N. Y. Filed Nov. 12, 1929. Serial No. 406,546. 6 Claims. (Cl. 189—77.)



1. A leaded glass window, formed by the assembly of the glass sections and cames having leaves substantially flush with their surface, and having on the outside of the window and across the entire window one or more protruding sockets integral with the material of the entire came and forming therewith a moisture-proof casing and a staybar inserted in said socket completely encased with the integral material of the came and supported at both sides of the window.

1,858,776. FASTENER FOR SHOULDER STRAPS. MARGARET HERMANNS, Merrick, N. Y. Filed Apr. 8, 1931. Serial No. 528,562. 3 Claims. (Cl. 24—73.)



3. As an article of manufacture, a fastener for shoulder straps on women's garments comprising a flexible band foldable upon itself to be looped around said straps,

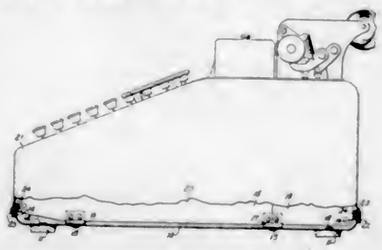
a safety pin adapted to be carried by one end of said band, loop means on the other end of said band for engaging the pinning leg of said safety pin, said pin adapted to be closed after said pinning leg is pinned through a garment and cushioning means at the end portion of said bands.

1,858,777. JACQUARD-DESIGN-MECHANISM FOR FLAT KNITTING MACHINES. CURT HILSCHER, Chemnitz, Germany. Filed Aug. 16, 1928, Serial No. 300,025, and in Germany Aug. 18, 1927. 3 Claims. (Cl. 66—96.)



1. In an jacquard mechanism for flat knitting machines, a jacquard card having openings therein, jacks movable toward and from said card, means for resiliently urging the jacks toward the card and into the openings, fixedly mounted covering needles, members adjacent the jacks and adapted to act upon the needles of the machine when said jacks are in their advanced position, and actuating means arranged to advance those jacks which have entered the openings, to withdraw the jacks from the openings, and to hold the jacks out of engagement with the card.

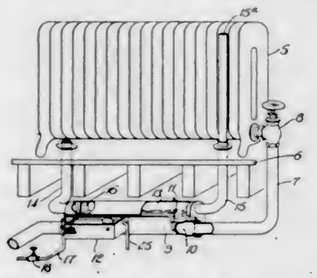
1,858,778. SUPPORT AND HOUSING FOR CALCULATING MACHINES. ALLEN A. HORTON, deceased, Detroit, Mich., by Kathleen H. Horton, Plymouth, Mich., and Detroit Trust Company, successor to Detroit and Security Trust Company, executors, Detroit, Mich., assignors to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Original application filed Jan. 29, 1926, Serial No. 84,616. Divided and this application filed Mar. 2, 1931. Serial No. 519,612. 5 Claims. (Cl. 235—1.)



1. A support and casing for calculating machines comprising a base pan supporting a calculating machine, said base pan having relatively short upstanding sides and ends, a sound deadening strip positioned on the edges of said sides and ends, and a casing enclosing said calculating machine and resting on said sound deadening strip.

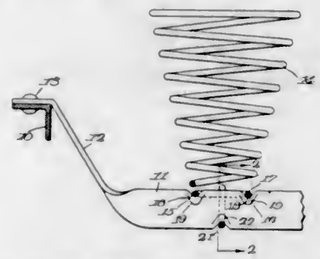
1,858,779. DUAL ELECTRIC CIRCUIT CONTROL DEVICE. THOMAS H. IRELAND, Rockville Center, N. Y. Filed Nov. 8, 1930. Serial No. 494,334. 8 Claims. (Cl. 236—44.)

2. An automatic control device for humidifiers of the class described involving a float controlling the supply of water to the humidifier, said device comprising a member controlling the operation of the float, an armature for operating said member and having oppositely disposed arms, electromagnets arranged adjacent the arms of the armature, said magnets being in independent electric circuits whereby the completion of the respective circuits will actuate said arms to impart different movement to said member to control the actuation of said float, an automatically



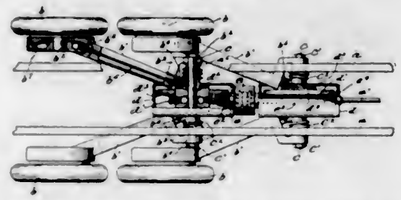
actuated switch controlling the completion of the circuit to said magnets, and a humidostat controlling the actuation of said switch.

1,858,780. SPRING SUPPORT FOR BED BOTTOMS AND THE LIKE. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 2, 1926. Serial No. 139,072. 1 Claim. (Cl. 5—265.)



In a bed spring including a series of axially vertical coil springs, means for supporting the springs comprising a relatively wide but thin metal strap disposed on edge and having a series of notches swaged in its upper edge for receiving portions of a series of springs to position the same on the support, the metal displaced in forming said notches being disposed adjacent the bottom and sides of the respective notches so as to maintain the cross sectional area of the strap substantially uniform throughout its length.

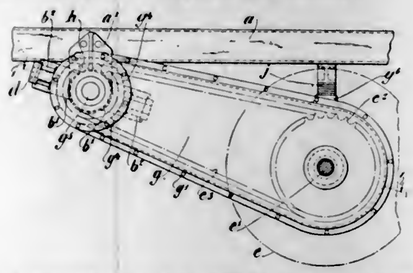
1,858,781. TRIANGULAR DRIVE FOR MOTOR VEHICLES. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 24, 1929. Serial No. 388,116. 1 Claim. (Cl. 180—22.)



A drive for motor vehicles comprising a frame, a drive shaft thereon, a plurality of pairs of driving wheels, spaced anchor tubes on the frame, a differential carried by each tube, a third differential driven by the drive shaft and driving the first differentials, spiders journaled on

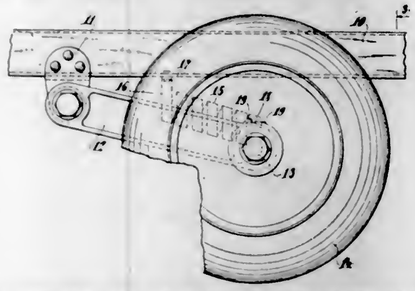
the tubes at either sides of the differentials, means to mount the wheels on the spiders, and angular drive shafts carried by the spiders for transmitting the drive from the differentials to the wheels.

1,858,782. INDIVIDUAL WHEEL MOUNTING AND DRIVE. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,089. 3 Claims. (Cl. 180—72.)



1. In combination with a frame, an axle, an axle housing and a wheel, means to mount the wheel on the frame individually comprising a housing upon which the wheel is mounted, a bracket mounted rotatably on the axle housing, arms on the bracket, a driving sprocket mounted on the axle and carried within the housing, trunnions mounting the housing on the arms and lying in the plane of the sprocket, and means to mount the sprocket to follow the movement of the housing.

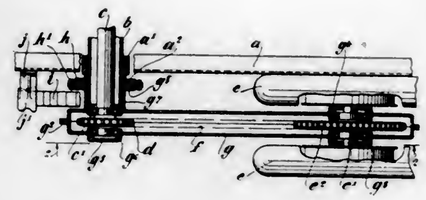
1,858,783. SPRING MOUNTING FOR STUB AXLES. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 9, 1931. Serial No. 514,384. 1 Claim. (Cl. 280—124.)



In combination with a vehicle frame and wheel, an arm journaling the wheel, a bracket for mounting the arm on the frame for movement about a horizontal axis and in a vertical plane offset with respect to the vertical plane of the vehicle frame, and a torsional coil spring secured to the frame at one end and engaging the arm at the other end, the spring having its axis substantially parallel to the axis of the arm and being mounted in such manner that vertical motion of the arm produces torsional stresses in the spring coils about the axis thereof.

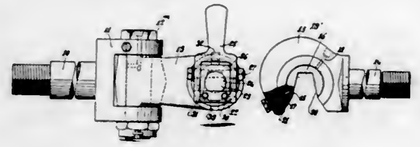
1,858,784. INDIVIDUAL WHEEL MOUNTING. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1931. Serial No. 521,961. 2 Claims. (Cl. 180—72.)

1. An individual wheel mounting comprising a frame, a wheel, a bracket on the frame formed with a sleeve, an axle housing carried in the bracket, a wheel support journaled on the axle housing and mounting the wheel, an outwardly projecting flange on the sleeve, a flange on the



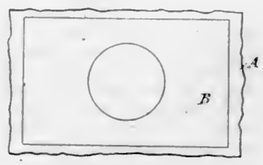
support, means to secure the flanges together, means in the support to drive the wheel, and a spring between the support and frame.

1,858,785. TRAILER COUPLING. FERDINAND MILLER, Elizabeth, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 6, 1931. Serial No. 506,865. 8 Claims. (Cl. 280—33.15.)



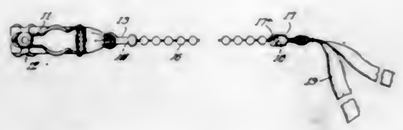
1. A tractor element, a trailer element, a bifurcated extension upon one of the elements, a hook upon the other element, a bifurcated link journaled in the first bifurcation, a pin journaled in the link bifurcation, interengaging means on the pin and hook, and means to lock the interengaging means in engaged position.

1,858,786. PICTURE. EUGENE V. MYERS, East Orange, N. J. Filed June 3, 1929. Serial No. 367,978. 4 Claims. (Cl. 95—5.1.)



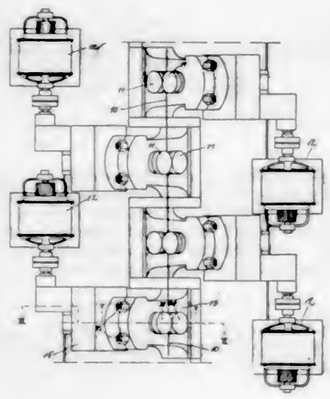
2. The method of producing color pictures for mounting in other than a flat plane, which comprises photographing the normal original when flat upon films distorted in substantially the same manner as the ultimate mounting, the photographs being taken through color screens, and then preparing color plates from said films.

1,858,787. DEVICE FOR HOLDING BABY IN BED. HELEN L. OTTENHEIMER, Chicago, Ill. Filed Dec. 8, 1930, Serial No. 500,715. Renewed Mar. 25, 1932. 7 Claims. (Cl. 24—72.5.)



7. In a device for holding a child in bed, a garter clasp adapted to be attached to the bottom of the child's night-dress, a swivel ball chain, a swivel connection between the clasp and one end of the chain, a tape adapted to be tied to the bed near the foot thereof, and a swivel connection between the opposite end of the chain and said tape, said connection being intermediate the ends of the tape, whereby the ends may be used for tying.

1,858,788. ROLLING MILL. WILHELM JULIUS PAUL ROHN, Hanau-on-the-Main, Germany. Filed June 21, 1928, Serial No. 287,226, and in Germany Aug. 8, 1925. 1 Claim. (Cl. 80—36.)



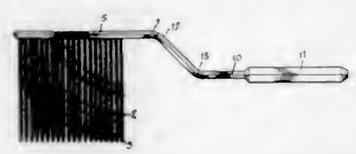
A rolling plant comprising a plurality of rolling mills in tandem relation for simultaneously operating upon successive portions of an advancing rod fed from one of said mills to the subsequent one, said mills being independent from said other in mechanical respect, a plurality of electric driving motors of the compound wound type, one for each of said mills, the compound winding of said motors comprising a series field winding and a second field winding, a generator, an energizing generator coordinated therewith, electric connections to supply said motors with current from said generator, electric connections to supply each of said second windings with current from said energizing generator, field resistors one for each of said second windings, and overload relays one coordinated with each of said driving motors to be controlled by the current driving the latter, and adapted to cut off the current supply of all of said driving motors.

1,858,789. SPINNING AND TWISTING MACHINE. IRVING R. ROWE, Stonington, Conn., assignor to The Atwood Machine Company, Stonington, Conn., a Corporation of New Jersey. Filed Oct. 4, 1930. Serial No. 486,339. 10 Claims. (Cl. 118—48.)



1. The combination with a spinning and twisting machine having an end frame and a spindle driving belt of an auxiliary frame secured to said end frame, longitudinal guide rails and racks on said auxiliary frame, a carrier having a shaft provided with pinions thereon arranged to coact with said racks, a motor and its driving pulley mounted on said carrier, and means carried by said shaft for actuating the pinions to move the carrier, motor and its driving pulley to adjust the tension of the belt.

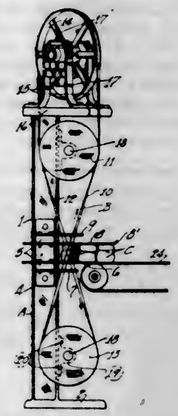
1,858,790. FOOD BREAKER. CALE J. SCHNEIDER, Toledo, Ohio. Filed Sept. 21, 1931. Serial No. 563,933. 5 Claims. (Cl. 30—9.)



3. In a utensil for dividing foods, an arm having a handle portion located at one end of the arm, a plurality of straight parallel pins extending from closely spaced points along substantially the entire length of the arm in a direction transverse to the length of the arm and substantially in a plane common to the plane of the handle portion and forming means for puncturing and penetrating the food and for dividing the food along the plane defined by the pins.

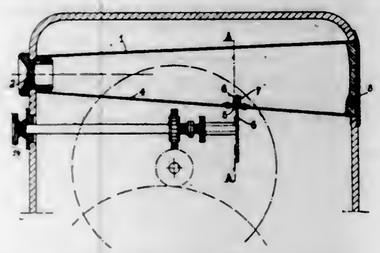
1,858,791. SLICING MACHINE. EDWARD J. SCHNEIDER, St. Louis, Mo., assignor to Papendick, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Feb. 27, 1930. Serial No. 431,729. 5 Claims. (Cl. 146—88.)

1. A slicing machine comprising a pair of spaced rotary drums, a blade in the form of an endless band reeved in a helicoidal manner about said drums to comprise a plurality of pairs of cutting-members traveling intermediate and over said drums, and means including an adjustable



pulley for tensioning said blade, the blade passing from one end of one of the drums to and over the pulley and then returning to the opposite end of said one drum.

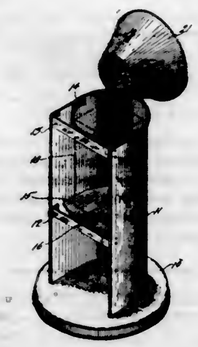
1,858,792. FILM-COUNTER FOR CINEMATOGRAPHIC VIEW-TAKING APPARATUS. ANDRÉ NOËL MERLE, Vincennes, France, assignor to Pathé Cinéma, Anciens Établissements Pathé Freres, Paris, France. Filed Feb. 17, 1928, Serial No. 255,030, and in France Dec. 2, 1927. 4 Claims. (Cl. 88—16.)



1. In a cinematographic view taking apparatus, a film feeding mechanism, a finder comprising an eye-piece lens and an objective lens, a movable member provided with a graduated scale projecting partially in the field of said finder and adapted to bring successively all the portions of said scale in the field of said finder, a driving mechanism and gearing means between said driving mechanism and said film feeding mechanism and between said driving mechanism and said graduated member adapted to impart proportional speeds to said film feeding mechanism and to said graduated member, whereby it is possible to see at every instant through the finder the scenes to be photographed and the length of the film which has been exposed.

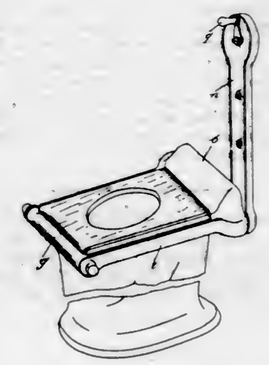
1,858,793. BAG HOLDER. ARCHIBALD REYNOLDS, Colts Neck, N. J. Filed Dec. 22, 1930. Serial No. 504,002. 4 Claims. (Cl. 226—58.)

1. In a device of the character described, the combination of a vertically disposed member formed substantially U shaped in cross section so as to provide an open front, transversely disposed tie elements secured across the open front of said member, a shelf having one end pivotally connected to the rear portion of said member and adapted



to have its movable end supported upon one of said tie elements, and a funnel pivotally mounted adjacent the upper edge of said member in a manner as to permit the same to be swung into or out of the upper open portion of said member.

1,858,794. DEVICE FOR THE MECHANICAL OBTAINMENT OF A CHANGEABLE PAPER OR SIMILAR COVERING FOR THE SEATS OF WATER-CLOSET BASINS. ENRICO VALLECCHI, Florence, Italy. Filed May 7, 1931, Serial No. 535,614, and in Italy Nov. 27, 1930. 6 Claims. (Cl. 4—247.)



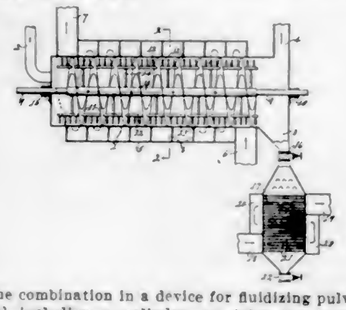
1. In combination, a closet seat, rollers mounted front and rear of said seat, a paper roller carried on the rear roller and unwinding over the seat to rewind upon the front roller, said paper being provided with spaced apertures, intermediate traction rollers over which the paper passes from the rear roller to the seat, means for driving the front roller from the intermediate rollers, and means for driving the intermediate rollers to draw off paper from the rear roller to be taken up by the front roller.

1,858,795. WEIGHING APPARATUS. ADRIANUS VAN DUYN, Hillegersberg, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of the Netherlands. Filed July 31, 1931, Serial No. 554,297, and in Great Britain Aug. 15, 1930. 4 Claims. (Cl. 265—27.)



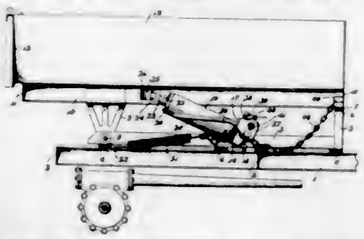
1. Weighing apparatus having, in combination, platform means, weighing mechanism adapted to carry said platform means, a resilient mounting for said platform means upon which said platform rests, and anti-friction bearing means arranged between said platform means and weighing mechanism.

1,858,796. APPARATUS FOR FLUIDIZING AND CARBONIZING PULVERIZED COAL. LESLIE S. WILCOXSON, Ridgewood, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 11, 1929. Serial No. 331,861. 2 Claims. (Cl. 259—9.)



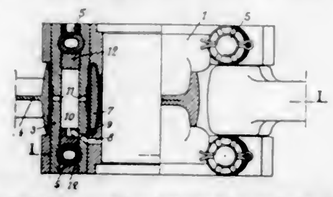
1. The combination in a device for fluidizing pulverulent material including a cylinder, an inlet for introducing unfluidized material to one end thereof, an outlet for fluidized material at the opposite end thereof, a helical vane within said cylinder and extending longitudinally thereof formed so as to feed unfluidized material away from said outlet whereby only completely fluidized material reaches said outlet, and stirring arms mounted upon said vane and movable with said vane relatively to said cylinder for fluidizing the material therein.

1,858,797. MANUAL HYDRAULIC HOIST. PHILIP S. WOOD and FRANKLIN H. DEWEY, Detroit, Mich., assignors to Wood Hydraulic Hoist & Body Co., Detroit, Mich., a Corporation of Michigan. Filed Nov. 25, 1929. Serial No. 409,512. 2 Claims. (Cl. 298—19.)



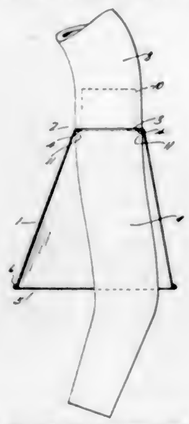
1. A dumping body comprising a frame, a body pivoted thereto, a cross bar extending between and connected to opposed sides of the frame and mounted thereon for free limited tilting movement, a hydraulic cylinder connected to and extending upwardly and to the rear from the cross bar, a piston within the cylinder, a piston rod extending from the piston beyond the rear end of the cylinder, means pivotally connecting the rear end of the piston rod to the underside of the body, a pump at the front end of said cylinder for pumping oil into said end, means for taking oil from the upper end portion of the cylinder during the pumping operation, and a horizontal shaft extending from said pump adapted to be manually turned to operate the pump, said shaft extending at right angles from the cylinder to a side of the unit for access for manual operation.

1,858,798. CONNECTING ROD OF ENGINES WITH RADIALLY ARRANGED CYLINDERS. MARIUS JEAN-BAPTISTE BARBAROU, Paris, France. Filed June 4, 1929, Serial No. 368,400, and in France July 5, 1928. 1 Claim. (Cl. 74—17.)



In an internal combustion engine with radially arranged cylinders, the combination of a crankshaft, a master connecting rod with a two-piece head comprising a body portion and a cap, a number of pivot pins extending through said body and said cap, a number of small connecting rods pivoted to said pivot pins, respectively, clamping bolts on either side of the crank pin for securing said cap to said body portion, the axes of each clamping bolt forming an angle different from ninety degrees with the plane of contact of said cap and body portion and converging toward the middle line of the master connecting rod, and interfitting portions in the diametral plane of contact between said cap and body portion, said interfitting portions having the shape of circular arcs.

1,858,799. GASOLINE TANK PROTECTOR. PAUL A. BERTAUT, Eau Gallie, Fla. Filed Jan. 23, 1931. Serial No. 510,706. 2 Claims. (Cl. 221—100.)



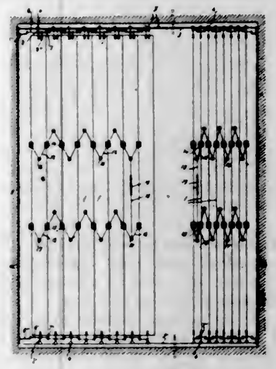
1. In a device of the kind described, in combination with a pump hose including a nozzle threaded on a reduced shank in the end of the hose, a cone shaped bell having an aperture in its smaller end and an inwardly extended lip around the said aperture and adapted to fit over the said reduced shank between the hose and nozzle.

1,858,800. GOLF TEE. CHARLES A. BOATMAN, Waterloo, Iowa. Filed Mar. 9, 1931. Serial No. 521,067. 7 Claims. (Cl. 273—33.)



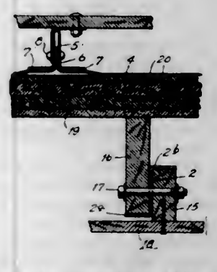
4. A golf tee, consisting of a hollow open end body having evenly thin elastic walls, with a fluffy hirsute nap upon the whole or parts of its surface to serve as movement retarding means when the tee is propelled through the air.

1,858,801. EXTENSIBLE SHUTTER. EDMOND BOLARD, Paris, France. Filed Apr. 30, 1931, Serial No. 533,955, and in France June 5, 1930. 3 Claims. (Cl. 156—17.)



1. An extensible shutter comprising in combination, a plurality of parallel upright slats pivotally mounted upon parallel axes extending longitudinally of the slats, a fixed rail overlying the ends of the slats, rollers carried by said slats and riding said rail, said rollers having their axes coincident with the axes of pivotal mounting of the slats, a plurality of bars fixed one to each slat on the pivotal axis thereof, the bars of adjacent slats having their ends juxtaposed and hinged together, fixed means for pivotally receiving and holding the bar of one end slat, means for maintaining the slats parallel to each other, means for varying the incidence of the slats and for collapsing or extending the shutter, and means for limiting the distance to which the shutter may be extended.

1,858,802. REFRIGERATOR CAR. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1931. Serial No. 510,388. 16 Claims. (Cl. 108—5.)



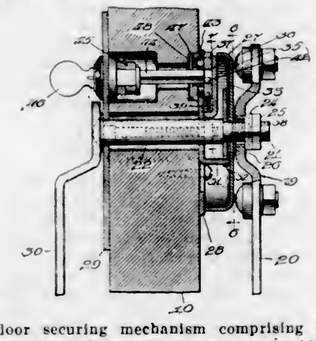
1. A refrigerator car comprising side plates, carlines connecting said side plates, a single course metal roof extending from side plate to side plate above said carlines, and insulation substantially filling the space between the tops of said carlines and the underside of said single course metal roof.

1,858,803. COVER FOR UNDER FLOOR PIPING. JOHN E. BURKS, Brooklyn, N. Y., assignor to Charles Hartmann Company, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 18, 1928. Serial No. 300,450. 4 Claims. (Cl. 72—70.)



2. A cover for under-floor piping or the like comprising a series of straight and angled sections, each of which is formed with corrugations extending transversely of its length, the sections being connected at each joint by one section overlapping the next section to an extent equal to at least one corrugation, whereby the series are locked together against displacement in an end-wise direction independent of supplemental securing means.

1,858,804. DOOR-SECURING MECHANISM. EVOLD H. CARLSON, Chicago, Ill. Filed Jan. 12, 1931. Serial No. 508,166. 9 Claims. (Cl. 70—29.)



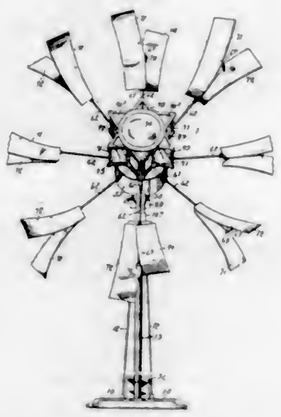
1. A door securing mechanism comprising in combination, a door, bolt securing means on said door for retaining the same in a closed position, releasing means on one side of said door, locking means on the same side of the door for preventing unauthorized actuation of said releasing means, a second, independently operable releasing means on the opposite side of said door, said first releasing means being connectible to said bolt means through said second releasing means, and means on the same side of the door as said second releasing means for neutralizing said locking means to free said first releasing means for movement.

1,858,805. WOOD HEEL. GEORGE CLAUSING, Portsmouth, Ohio, assignor to The Vulcan Corporation, Portsmouth, Ohio, a Corporation of Ohio. Filed Oct. 11, 1930. Serial No. 488,070. 1 Claim. (Cl. 36—34.)



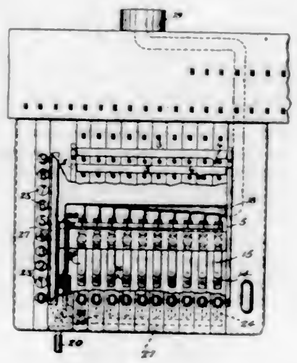
A heel having a V-shaped groove extending heightwise of the heel along the middle of the heel breast, said heel having a cover enclosing said heel, end portions of said cover tucked within said groove, and a filler piece securing said tucked in edges within said groove.

1,858,806. ILLUMINATING DEVICE. KARL EDISON, Roscoe, N. Y. Filed Dec. 24, 1930. Serial No. 504,545. 8 Claims. (Cl. 240—10.1.)



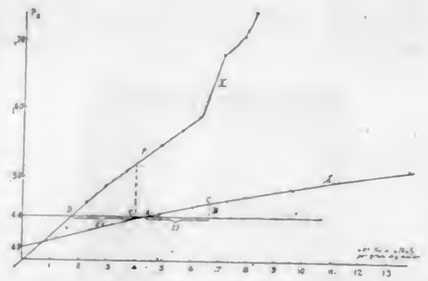
1. An illuminating device comprising a standard, a light source supported on said standard, means for rotating said light source on said standard, reflector means mounted on axes extending radially about said light source, means for rotating said reflector means about the said radial axes and means for directing light from said source to said reflector means.

1,858,807. CALCULATING MACHINE CONTROLLING ONE OR MORE SECONDARY MACHINES. KONRAD EICHENAUER, Neu-Rossen, near Merseburg, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Aug. 11, 1928, Serial No. 298,938, and in Germany Aug. 13, 1927. 3 Claims. (Cl. 235—1.)



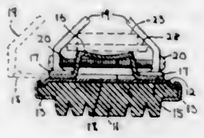
1. In an apparatus for performing and recording all types of calculations and composed of a calculating machine and a recording machine electrically controlled by the keys of said calculating machine, in combination, rows of keys in said calculating machine, contacts associated with each row of similarly numbered keys and arranged to control electrical circuits leading to the recording machine, and operating trains between said contacts and said keys, and including a common transfer member for each row of keys of like number, such members being controlled by said keys, said contacts and said trains being arranged side by side and operatively offset continuously in the direction of the rows of keys of like number by the distance between two keys and disposed between the transverse rows of keys running from 0 to 9.

1,858,808. BIOLOGICAL PRODUCTION OF BUTYL ALCOHOL AND ACETONE. FREDERIK CHARLES GERRETSEN, Groningen, Netherlands. Filed Oct. 20, 1930, Serial No. 490,054, and in the Netherlands Apr. 16, 1928. 6 Claims. (Cl. 260—135.)



1. The process of manufacturing butyl alcohol and acetone from a mash of waste pulp of potato flour factories, comprising the step of adding an alkaline substance to the mash substantially equivalent to two and one half cubic centimeters of decinormal sodium hydroxide for every gram of dry material in the mash, plus the quantity necessary to produce a pH of approximately 4.4 in the original sterilized mash.

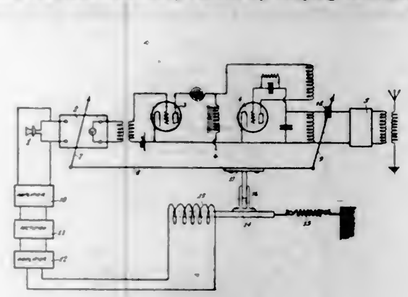
1,858,809. BRAKE AND CLUTCH PEDAL PAD. OLIVER C. RITZ WOLLER, Chicago, Ill. Filed Feb. 5, 1931. Serial No. 513,646. 8 Claims. (Cl. 74—81.)



1. A pedal pad comprising, in combination, a support, a cushioning pad secured on one face of said support, the opposite face of said support providing a pedal engaging surface, jaw means carried by said support and adapted to engage one edge of a pedal when it is in contact with said surface, a guideway formed in said support and located between said surface and said cushioning pad, a jaw member slidable in said guideway and adapted to engage the opposite edge of the pedal, a screw holding member transversely disposed with respect to said guideway, and a screw extending through said jaw and holding members for moving the jaw member into clamping engagement with the edge of the pedal.

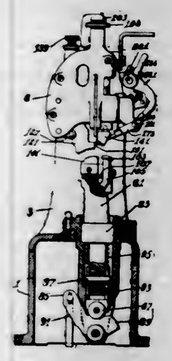
1,858,810. SIGNALING METHOD AND MEANS THEREFOR. WALTER VAN BRAAM ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 4, 1928. Serial No. 310,240. 13 Claims. (Cl. 250—17.)

1. The method of radiating a low frequency signal by modulating high frequency energy therewith which includes varying the amplification of the low frequency signal so that the average percent of modulation of the high frequency energy shall remain substantially constant, and simultaneously reactively varying the strength



of the energy radiated in a manner opposite in sense relative to the manner in which the amplification of the low frequency signal is varied.

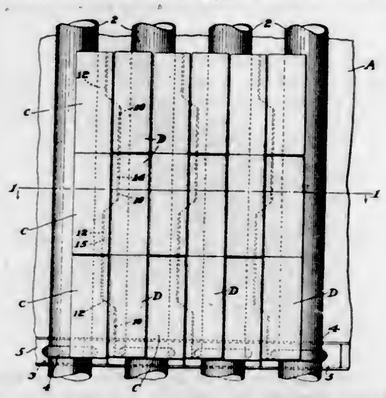
1,858,811. TAPE APPLYING MACHINE. WILLIAM THOMAS BUCKINGHAM ROBERTS, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 17, 1928, Serial No. 255,170, and in Great Britain Mar. 14, 1927. 36 Claims. (Cl. 154—42.)



1. A tape laying machine, having in combination, tape feeding and pressing instrumentalities, and an elongated tape guide mounted for rocking movement about an axis which is longitudinal with respect to the direction in which the guide is constructed and arranged to guide tape.

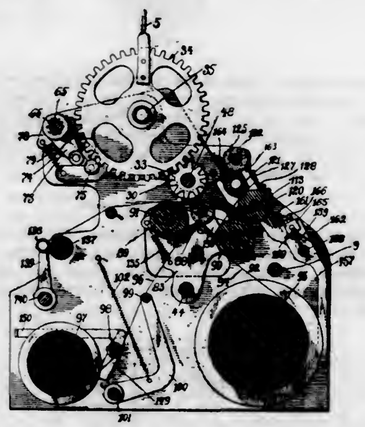
1,858,812. FURNACE WALL. ARTHUR E. SMITH, Newton, and BENJAMIN H. SNOW, Melrose, Mass., assignors to Bernitz Furnace Appliance Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 8, 1930. Serial No. 494,312. 7 Claims. (Cl. 122—6.)

1. In a furnace wall, the combination with a series of upwardly extending tubes and a rear wall section backing up said tubes, of a front wall section for protecting the surfaces of said tubes at the fire side of the wall, said front section comprising blocks arranged in two opposed series between each pair of adjacent tubes, the blocks in each series being positioned end to end and each bearing against a tube, the blocks of one series having inclined faces located between the tubes and bearing against similarly inclined faces on the blocks of the other series, and each block having a rectangular face portion lying in



front of the plane of the forward edges of the tubes and each protecting approximately half of the width of the front face of the tube against which it bears.

1,858,813. TICKET PRINTING, ISSUING, AND RECORDING MACHINE. ALBERT S. WHEELBARGER and GROVER C. COIL, Dayton, Ohio, assignors to Ohmer Fare Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 29, 1925. Serial No. 65,532. 63 Claims. (Cl. 101—66.)

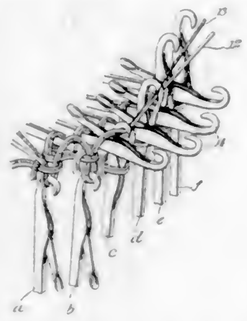


1. In a machine of the class described, a driving gear, a gear driven thereby, an oscillating printing frame actuated by the driven gear, and means operated by the printing frame whereby a record is printed as said frame moves in one direction and a part of a ticket is printed as said frame moves in the opposite direction.

1,858,814. RIB-KNITTED FABRIC AND METHOD OF MAKING THE SAME. ELMER U. AMES, deceased, Collingswood, N. J., by Camden Safe Deposit and Trust Co., Camden, N. J., executor, and HARRY S. HORROCKS, Philadelphia, Pa.; Camden Safe Deposit and Trust Co., assignor to Caroline F. Ames. Filed Mar. 16, 1929. Serial No. 347,667. 5 Claims. (Cl. 66—25.)

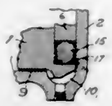
1. The process of effecting a change from normal to reverse plating in ribbed fabric formed on two coacting

series of independent needles comprising operating such needles independently, and during the knitting operation while two yarns are being acted on thereby in plating re-



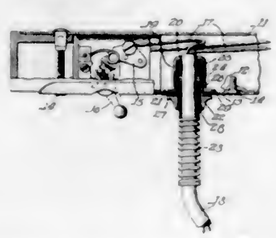
lation, deflecting certain of the needles of one series at the thread-receiving end whereby a change from normal plating to reverse plating is caused to take place.

1,858,815. PACKING. GEORGE D. BECKER, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed June 23, 1930. Serial No. 463,070. 5 Claims. (Cl. 74—108.)



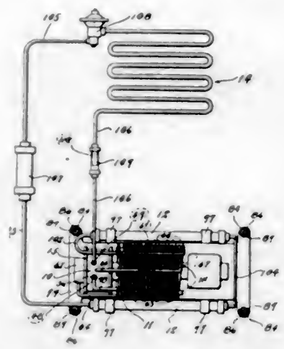
1. A packing for forming a tight joint between relatively moving surfaces accessible to a lubricant, comprising a body, of a sulphur chloride compound of vegetable oil, and a reinforcing element having mechanical characteristics in contact with and protecting said body from rubbing contact.

1,858,816. CONDUCTOR CORD ATTACHMENT. CHANDOS BURKHARDT, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Sept. 26, 1929. Serial No. 395,447. 5 Claims. (Cl. 173—322.)



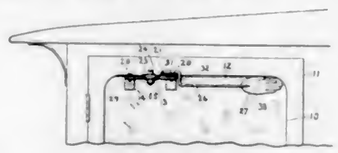
1. In combination with a base member and a flexible conductor cord, of means for anchoring the cord to the base member comprising a socket member within said base member and having an abutment therein, a flexible tubular reinforcing member having a terminal flange received within said socket member, a bushing between said flange and said abutment, and means cooperating with said socket member and engaging said flange to compress said bushing into frictional engagement with the cord.

1,858,817. COMPRESSOR. JOHN O. CARREY, St. Louis, Mo., assignor to C & C Engineering Co., Inc., St. Louis, Mo., a Corporation of Missouri. Filed Jan. 24, 1927. Serial No. 163,141. 34 Claims. (Cl. 230—175.)



1. In an apparatus of the class described, the combination of a fluid displacement mechanism comprising a stationary support, a plurality of cylinders mounted in a straight line in said support, a horizontally disposed shaft mounted in said support and extending through said cylinders and forming a pivot for the oscillatory movement thereof, pistons operating in said cylinders and imparting oscillatory movement thereto in correlation with their reciprocating movement, each of said pistons being provided with a longitudinally disposed slot for receiving said shaft, means for actuating said pistons, and a casing for wholly enclosing and hermetically sealing said mechanism.

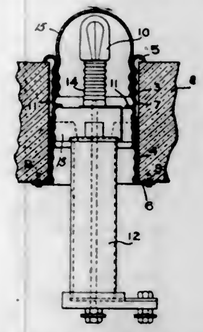
1,858,818. AUTOMOBILE SIGNAL. CHARLES J. CHEVRE, Fairfield, Conn. Filed Aug. 14, 1931. Serial No. 556,998. 8 Claims. (Cl. 116—52.)



1. An automobile signal device comprising a plate, a pair of arms bent downwardly from the plate and adapted to lie against the outside face of the window pane of the door adjacent the driver's seat, a pair of jaws having horizontal portions slidably mounted on said plate adapted to extend over the upper edge of the window pane and vertical portions adapted to lie against the inner face of the window pane and clamp the pane on the plate, screws for securing the jaws in adjusted position, a lever pivoted on said plate for movement in a horizontal plane, an extension on said lever carrying a signal arm, and another extension on said lever reaching over the upper edge of said window pane to the interior of the automobile and there provided with a handle by means of which the signal may be swung from inoperative to operative position and vice versa.

1,858,819. SWITCHBOARD LAMP. ALFRED CORBETT, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 13, 1927. Serial No. 212,067. 7 Claims. (Cl. 177—329.)

4. A switchboard lamp comprising a pair of complementary threaded shells having threaded engagement with one another and disposed within an opening in a switchboard panel and constituting an internally threaded socket member, the outer ends of the shells having portions of greater width than the diameter of the opening for engaging the opposite faces of the panel and for clamp-

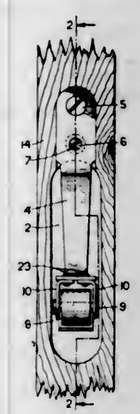


ing the socket in operative positions, a lens threaded into one end of the socket member, a resistor element threaded into the other end thereof and a lamp socket mounted on the resistor element.

1,858,820. PROCESS OF PREPARING PECTIN. ROBERT DOUGLAS, Rochester, N. Y., assignor, by mesne assignments, to General Foods Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 25, 1925. Serial No. 52,460. 4 Claims. (Cl. 99—11.)

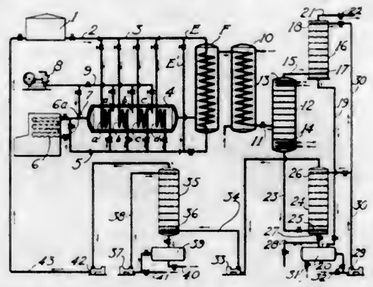
1. The process of preparing pectin from fruits comprising removing the natural sugar therefrom, processing the remaining pulp in the presence of a solvent to obtain the pectin in solution, converting the starch in the solution by the action of a suitable diastatic enzyme, concentrating the resultant solution and adding the concentrate to alcohol with stirring, dehydrating the precipitate and then drying it.

1,858,821. METHOD OF MAKING SASH SUSTAINERS. EDWARD H. ELLISON, Jamestown, N. Y., assignor, by mesne assignments, to Austral Window Company, New York, N. Y., a Corporation of Maine. Original application filed Apr. 27, 1926, Serial No. 104,896. Divided and this application filed Apr. 9, 1928. Serial No. 268,506. 6 Claims. (Cl. 113—116.)



1. The method of manufacturing a housing for window sash sustainers which comprises cutting an entire housing blank from a sheet, bending a pair of portions of said blank through substantially 90°, and bending another pair of portions of said blank, including those portions already bent, through substantially 90° toward each other to form top, side and rear walls, and bending the body of said blank to form a surface concave inward.

1,858,822. PROCESS FOR THE TREATING OF HYDROCARBON MATERIALS. PER K. FROLICH, Cambridge, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 14, 1927. Serial No. 226,076. 5 Claims. (Cl. 260—156.)

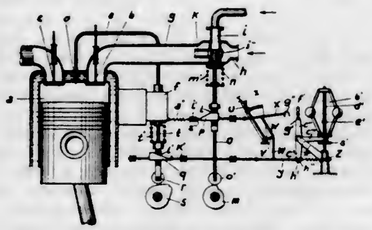


1. In a continuous process for obtaining normally liquid oxygen-containing products from hydrocarbons comprising low boiling and normally gaseous hydrocarbons, the step of bringing together said hydrocarbons and air under pressure in excess of 1,000 lbs. per square inch in a reaction zone, maintaining said zone at a predetermined temperature between 350 and 700° C. by circulation of a stream of fresh hydrocarbon therethrough in heat interchanging relation to the reacting materials, separating the normally liquid oxygen-containing products from the resulting mixture, separating the hydrocarbon and returning it to process.

1,858,823. DEHYDROGENATION PROCESS FOR MAKING ESTERS. CRAWFORD H. GREENEWALT, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 8, 1928. Serial No. 284,001. 6 Claims. (Cl. 260—106.)

1. In the process of forming ethyl acetate and gaseous products by bringing the vapor of ethyl alcohol under high superatmospheric pressure successively into contact with a series of catalytic dehydrogenating masses containing a difficultly reducible dehydrogenating metal oxide, the step which comprises removing the gaseous products from the alcohol and ethyl acetate between successive contacts.

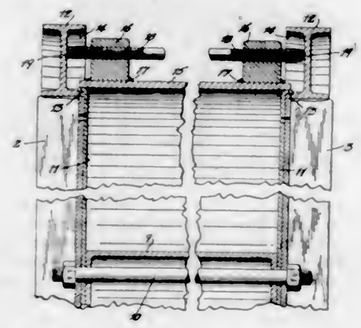
1,858,824. METHOD AND HIGH COMPRESSION INTERNAL COMBUSTION ENGINE FOR WORKING WITH GAS AND LIQUID FUEL. VICTOR HEIDELBERG, Bensberg, near Cologne, Germany, assignor to Motorenfabrik Deutz, Aktiengesellschaft, Cologne-Deutz, Germany. Filed July 30, 1929. Serial No. 382,109. 8 Claims. (Cl. 123—1.)



1. The method of operating a Diesel engine, which comprises compressing in the engine cylinder a mixture of air

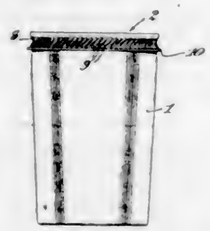
and fuel to a temperature less than its igniting point; igniting said compressed mixture by injecting into it a liquid fuel having an igniting point less than said temperature due to compression; and varying the richness of said air and fuel mixture in proportion to the load on said engine, while under all loads maintaining the amount of said liquid fuel injected constant and less than that necessary to operate the engine under no load or idle conditions.

1,858,825. CABLE REEL AND METAL LAGGING. ETHAN N. HESCOCK, Westfield, N. J., assignor to Henry B. Newball Corporation, Garwood, N. J., a Corporation of New Jersey. Filed May 2, 1930. Serial No. 449,228. 10 Claims. (Cl. 206—59.)



1. A new article of manufacture comprising a cable reel provided with adjustable lagging to protect the material wound on the cable reel, and means to adjust the lagging in the axial direction of the reel to adjustably secure the lagging to the reel.

1,858,826. FRICTION CLOSURE CAP. NORMAN N. HOLLAND, New York, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Mar. 18, 1927. Serial No. 176,397. 13 Claims. (Cl. 215—38.)



1. As an article of manufacture, a closure cap comprising a cover portion and a depending skirt, said skirt having a circumferential groove therein with elongated depressions extending across said groove at an angle and of greater length than the width of the groove.

7. A sealed package comprising a container having a smooth cylindrical side wall sealing surface, and a friction closure cap having a cover portion and a depending skirt, said closure cap having a plurality of adjacently arranged overlapping projections in the skirt thereof inclined to the plane of the cover portion at substantially the same angle thereto and adapted to engage the substantially cylindrical side wall of the container, whereby rotation of the cap in the proper direction tends to cam it from the smooth cylindrical side wall of the container.

1,858,827. WIRE WHEEL HUB ASSEMBLY. J. HAROLD HUNT, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Feb. 6, 1929. Serial No. 337,744. 6 Claims. (Cl. 301—9.)

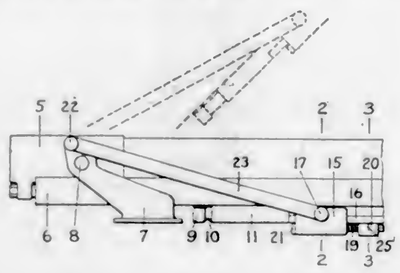


5. The combination with the permanent hub barrel and flange of a vehicle wheel, of a hub shell for demountable wire wheels comprising a shaped generally cylindrical hollow shell body enveloping the hub barrel and open at the forward end, an annular member disposed within and closing the rear end of the shell about the hub barrel and against the hub flange, a forward series of wire spokes anchored in the forward end of the shell body, a rear series of spokes transfixing the rear end of the shell body and anchored in the annulus, and bolts attaching the annulus to the hub flange.

1,858,828. MANUFACTURE OF PIGMENT COLORS. CARL IMMERHEISER and BODO ZSCHIMMER, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 22, 1926, Serial No. 103,966, and in Germany May 1, 1925. 12 Claims. (Cl. 134—58.5.)

1. The process of manufacturing pigment colors which comprises acting with an iron salt on nitroso-beta-naphthol in the presence of a basic dyestuff and precipitating the pigment color by means of an alkaline agent.

1,858,829. COUNTERPOISE MECHANISM. BRYAN P. JOYCE, Dover, N. J. Filed Oct. 23, 1931. Serial No. 570,660. 8 Claims. (Cl. 89—37.)



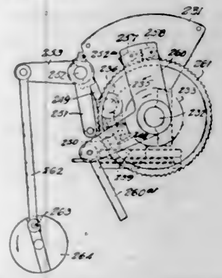
3. The combination with a top carriage including a gun and cradle trunnioned therein; of a counterpoise

mounted on said cradle, a tension member at each side of the cradle and one end of said tension members being pivoted in the top carriage and the other end being pivoted to means engaging said counterpoise.

1,858,830. WATERPROOFING COMPOSITION AND METHOD OF PREPARING. JOHN C. KRATOVILLE, Ironton, Ohio, assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 26, 1927. Serial No. 208,653. 6 Claims. (Cl. 134—78.5.)

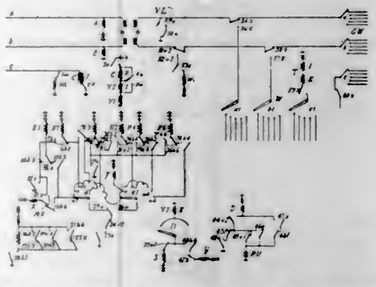
5. A permanently mobile waterproofing solution suitable for waterproofing concrete by penetration of the surface thereof, consisting of at least three parts of aluminum stearate in not more than 100 parts of organic solvent therefor, and a small amount of peptizing agent and having an Engler viscosity not greater than 45 seconds per 100 cc. at 0° F.

1,858,831. AUTOMATIC DOUGH DIVIDING AND WORKING MACHINE. OTTO KREMMLING, Hamersleben, near Oschersleben, Germany. Filed Oct. 6, 1927, Serial No. 224,308, and in Germany Oct. 26, 1926. 8 Claims. (Cl. 107—15.)



1. A feeding mechanism of the character described, comprising a main feed roller, an auxiliary feed roller co-operating therewith, a chamber adapted to receive material fed by said rollers, said chamber having a guide wall concentric with the main feed roller, and an outlet, a member arranged to reciprocate circumferentially of said main feed roller, along said guide wall, and a slide arranged to move with said member and also to reciprocate thereon transversely into and out of engagement with the main feed roller.

1,858,832. CIRCUIT ARRANGEMENT FOR STEPPING SWITCHES. WALTER KUSCHE, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Filed Aug. 18, 1930, Serial No. 475,890, and in Germany Oct. 30, 1929. 20 Claims. (Cl. 179—18.)



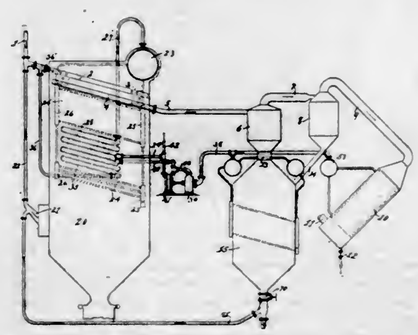
3. In a telephone system, a trunk having access to automatic switches over two branches, means for transmitting trains of impulses for positioning certain of said automatic switches over one of said branches, a rotary stepping switch associated with said trunk adapted to be advanced by every impulse train from the position reached owing to the preceding impulse train, and means controlled by the impulse trains that serve to position said automatic switches over one branch for positioning said stepping switch to determine over which particular branch the connection is to be established.

1,858,833. SPRING SHOE ATTACHMENT. GUY M. LEACH, Detroit, Mich. Filed July 22, 1930. Serial No. 469,660. 1 Claim. (Cl. 36—11.7.)



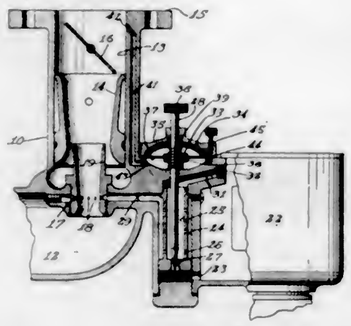
In a device of the character described, a principal upper member for the same, the said member being formed as a plate adapted to conform to the sole of a shoe, an upwardly extending heel support formed integral with the said plate, front and rear members for the device disposed underneath the said plate, depending ears integral with the said plate and upon the underneath surface thereof at the front and rear of the same, and similarly formed ears integral with the said underneath members to respectively engage the first-named ears, each of the last-named ears being provided with an elongated slot, and all ears adapted to oscillate relative to each other, and a plurality of springs interposed between the aforesaid plate and the said underneath members, for the intended purpose.

1,858,834. PULVERIZED COAL CARBONIZATION PROCESS. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 30, 1928. Serial No. 316,083. 4 Claims. (Cl. 202—17.)



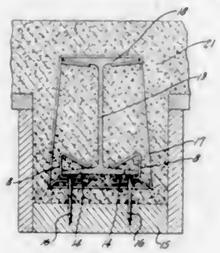
1. A coal carbonization process which comprises entraining pulverized coal in a stream of superheated steam to form an attenuated column, removing the fluid and solid products of carbonization from said column, burning some of the removed products to produce high pressure superheated steam and heat for carbonization, extracting some heat from remaining products for the production of low pressure steam, using some of the high-pressure steam to compress the low pressure steam, joining the compresed low pressure steam with the high pressure steam after utilization in effecting compression, and then superheating the aforesaid combined steam with some of the heat from the burning products.

1,858,835. CARBURETOR. ALEXANDER C. MABEE, Villa Park, and CAMERON A. WHITSETT, Chicago, Ill.; said Whitsett assignor to Bendix Stromberg Carbureter Company, South Bend, Ind., a Corporation of Illinois, and said Mabee assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Original application filed Dec. 31, 1923, Serial No. 683,534. Divided and this application filed Sept. 19, 1930. Serial No. 482,942. 10 Claims. (Cl. 261—69.)



1. In carbureting apparatus, the combination of a mixture passageway having air and fuel inlets, mixture proportioning means having a normal position and a mixture varying position, and actuating means comprising a suction responsive movable member for moving said mixture proportioning means to its mixture varying position, said mixture proportioning means automatically returning to normal position after a predetermined interval.

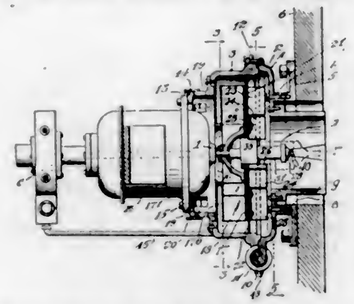
1,858,836. STRUCTURAL STEEL WRAPPING SPACER. FORREST H. MARTELL, Milwaukee, Wis., assignor to S. M. Siesel Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 14, 1930. Serial No. 435,814. 2 Claims. (Cl. 72—109.)



1. In a building construction, a flanged beam, a pair of metallic spacing members engaging opposite sides of a flange thereof, each spacing member having a yieldable clip portion and an offset recessed portion, a separate wrapping element surrounding the beam and engaging the offset recessed portions of the spacing members and supported by said members spacedly, outwardly of all portions of said flange, and cementitious material surrounding the beam encasing the same, the spacing members and the wrapping element.

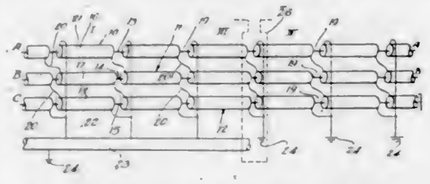
1,858,837. OIL BURNER SYSTEM. GEORGE H. MESSER, Newark, N. J. Filed Oct. 25, 1929. Serial No. 402,364. 15 Claims. (Cl. 158—77.)

1. Oil burning apparatus comprising a low pressure and large volume air pump including a casing having an outlet opening, a pressure fuel atomizing nozzle arranged substantially coaxially within said outlet opening of the air pump casing, a fuel pump for supplying fuel to said nozzle under pressure, means for driving said air pump and said fuel pump, whereby a jet of fuel under pressure



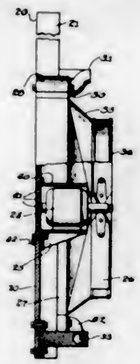
is projected into the air currents passing through said outlet opening, and adjustable means for regulating the turbulence of the air currents in said outlet opening.

1,858,838. CABLE SHEATH BONDING. KENNETH W. MILLER and DENNEY W. ROPER, Chicago, Ill. Filed Mar. 28, 1930. Serial No. 439,594. 8 Claims. (Cl. 171—97.)



1. An electric circuit for transmitting alternating current comprising insulated conductors enclosed in metallic sheaths physically separated from each other, the sheaths comprising a plurality of sections serially electrically bonded to one another in a continuous transposed relation, and a grounding connection to one transposition bond at each transposition point.

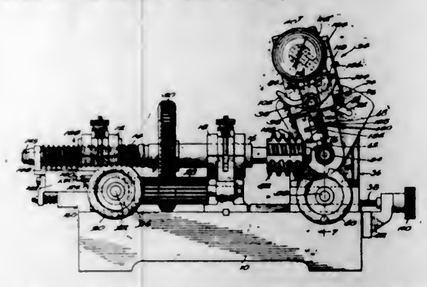
1,858,839. HEATING UNIT. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Original application filed Apr. 7, 1923, Serial No. 630,617. Divided and this application filed Apr. 20, 1928. Serial No. 271,493. 14 Claims. (Cl. 257—137.)



8. A heat exchange device comprising a support, radiators arranged upon opposite sides of the support, air

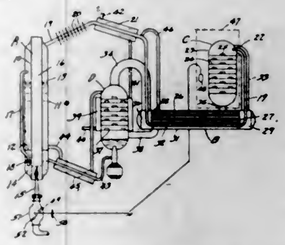
advancing means including a motor for advancing air through said radiators, said means being mounted upon said support, a housing for the motor, and means for ventilating said motor housing.

1,858,840. HOB TESTER. CARL G. OLSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed Aug. 6, 1929. Serial No. 383,909. 16 Claims. (Cl. 73—51.)



1. In a hob testing machine of the class described, a rotary axially movable work supporting spindle, a lead screw for axially moving said spindle, threaded means for receiving said lead screw, testing means positioned in association with said work spindle, said testing means including a contactor for engaging the work supported by said spindle, and means for superimposing a compensating movement upon the lead screw during the rotation thereof within the threaded means.

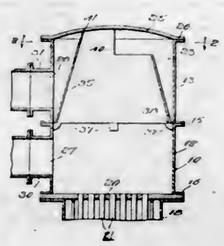
1,858,841. REFRIGERATION. HARRY C. PIERCE, Rutherford, N. J., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed June 13, 1928. Serial No. 285,002. 6 Claims. (Cl. 62—119.5.)



2. An absorption refrigerating system comprising a generator, a condenser, an evaporator, an absorber and conduits connecting said generator, condenser, evaporator and absorber including conduits for circulating an inert gas between and through said evaporator and said absorber, said generator comprising a main chamber and an auxiliary circulating chamber and having a flue extending through both said chambers, a burner located adjacent to one end of the flue and heat radiating means located in the flue and adapted to be heated to incandescence by heat from the burner, said heat radiating means being arranged so that the major portion of the radiant heat therefrom is directed against the wall of one of said chambers.

1,858,842. SEPARATOR. THOMAS RAY and JOSHUA R. RAY, Manistee, Mich. Original application filed Jan. 18, 1928, Serial No. 247,542. Divided and this application filed June 10, 1929. Serial No. 369,866. 4 Claims. (Cl. 183—93.)

1. In a device of the class described, a casing member having an inlet opening for the introduction of moist vapor, a steam outlet opening adjacent the upper portion thereof and out of the direct path of such vapor, and a liquid outlet opening adjacent the lower portion thereof,

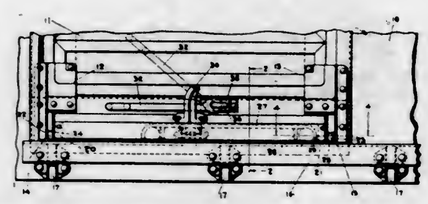


and a baffle disposed between the steam and liquid outlet and opposite said inlet opening whereby such vapor may impinge thereagainst.

1,858,843. PROCESS FOR DRYING OIL VARNISHES. LE ROY U. SPENCE, Boscobel, Wis., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 25, 1927. Serial No. 215,504. 5 Claims. (Cl. 34—24.)

3. The method of drying a varnish film which comprises subjecting a film-coated article to a preliminary baking in air at a temperature of 100 to 110 degrees C. until said film reaches the tacky stage and then subjecting it to ozonized air having a concentration of 0.1 to 0.9 per cent ozone until said film is dry.

1,858,844. DOOR ELEVATING MECHANISM. AXEL WASBERG, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 7, 1930. Serial No. 473,733. 6 Claims. (Cl. 16—99.)

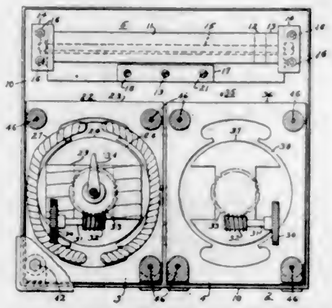


1. In door elevating mechanism, the combination with a runway pivoted eccentrically to said door, of actuating means for said runway, said means comprising a bracket member secured to the runway and having a slot and an operating lever pivoted to said door and extending through said slot, said slot being substantially vertical and said lever lying normally in a substantially horizontal plane, whereby said lever is operable from the ground or from a platform.

1,858,845. VOLTAGE COMPENSATOR. EDWARD R. WOLPERT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 28, 1929. Serial No. 403,086. 16 Claims. (Cl. 171—119.)

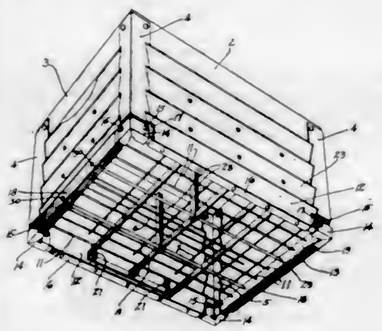
1. A compensator for compensating for the voltage drop in an electric circuit comprising a core having a substantially closed magnetic circuit, a portion of the core being adapted to move relatively to the other portion, series-connected windings disposed on the stationary and the

movable portions of the core member, a resistor connected in parallel-circuit relation to said windings, and means for so varying the relative positions of the portions of the



core that the magnetizing effect of the windings may buck or boost each other to produce variable-voltage drops across said resistor, when energized.

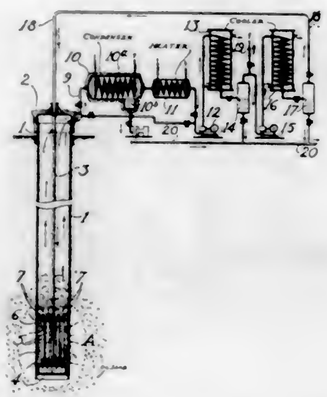
1,858,846. CRATE. CHARLES A. WOOLSEY and HENRY V. BOWMAN, Minneapolis, Minn., assignors to United Milk Crate Corporation, Minneapolis, Minn., a Corporation of Ohio. Filed July 25, 1928. Serial No. 295,168. 7 Claims. (Cl. 217—69.)



5. A crate comprising pairs of oppositely arranged walls and each wall having a detachable bottom rail, a grid forming the bottom of the crate and comprising a metallic frame adapted to be fitted between the bottom rails of a pair of said walls, hangers on the frame having offset end portions adapted to engage the upper edges of the bottom rails between which said frame is fitted, and a plurality of rods supported in said frame and having their terminals supported in the bottom rails of the other pair of said walls.

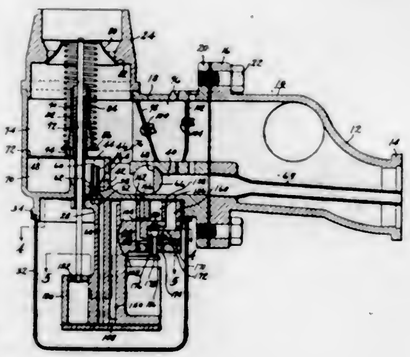
1,858,847. PROCESS FOR OBTAINING HYDROCARBONS FROM WELLS. PHILIP L. YOUNG, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 28, 1928. Serial No. 295,871. 2 Claims. (Cl. 166—21.)

1. The method of lifting hydrocarbon vapors to the surface of the earth from a natural gas bearing stratum through a well which opens into the natural gas bearing stratum above the level of any liquid in the stratum which comprises passing gas under greater than atmospheric pressure in a confined stream into the well, expanding the gas from the confined stream into the well at the opening of the well into the stratum in the direction of the outlet of the well and above the level of any liquid in the stratum with sufficient velocity to obtain less than atmos-



pheric pressure directly upon the gas producing sands, and withdrawing the mixed gases through the outlet of the well.

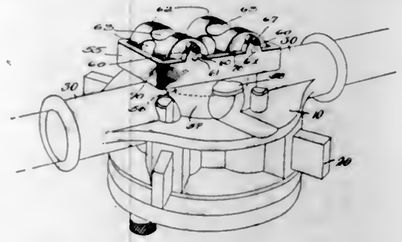
1,858,848. CHARGE FORMING DEVICE. FRED E. ARMSTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,323. 21 Claims. (Cl. 261—34.)



1. A charge forming device for internal combustion engines comprising a mixture passage, means for supplying fuel and air thereto, a throttle, and means for supplying additional fuel to the mixture passage on closing movement of the throttle.

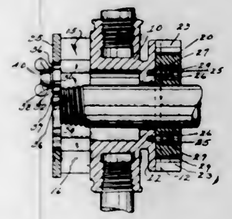
1,858,849. WORKHOLDER FOR DIESTOCKS AND THE LIKE. BRADFORD T. BORDEN, Cleveland, Ohio, assignor of one-half to William A. Neracher, Warren, Ohio, and one-half to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Jan. 9, 1930. Serial No. 419,633. 5 Claims. (Cl. 10—127.)

1. In a pipe guide for pipe working tools, the combination of a frame, a pair of cylinders mounted therein on opposite sides of the pipe axis and on axes parallel with each other and transverse of the pipe axis, each cylinder having a plurality of notches in its periphery, the



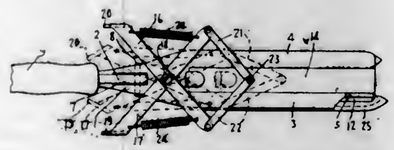
notches in each cylinder being of different depth and each of them having curved edges whereby cooperating notches may define different pipe receiving openings.

1,858,850. PIPE GUIDE FOR DIESTOCKS. BRADFORD T. BORDEN, Lakewood, Ohio, assignor of one-half to The Borden Company, Warren, Ohio, a Corporation of Ohio, and one-half to William A. Neracher, Warren, Ohio. Filed Sept. 18, 1930. Serial No. 482,760. 8 Claims. (Cl. 10—127.)



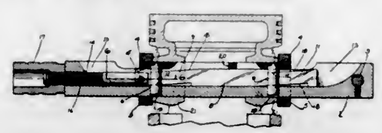
1. The combination with a frame having an opening for the passage of a pipe, a pair of blocks having non-circular exteriors and the frame being provided with fixed means to engage such exteriors and hold the blocks in any one of several positions, said blocks having notches of different depth in their periphery, selected ones of which may register with the pipe opening, and means for permanently holding the blocks to the frame while allowing their movement to present different notches.

1,858,851. HAIR WAVER. CHARLES A. BUCHANAN, Plain City, Ohio, assignor, by mesne assignments, to The Griswold Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1930. Serial No. 500,311. 12 Claims. (Cl. 132—32.)



1. A hair waver which consists essentially of two parts hinged together in scissors-like formation, each of the parts being forked with extending prongs, each of the prongs in one of the parts having comb-like teeth and the prongs in the other part adapted to lie respectively adjacent at least the inner sides of said teeth when the prongs are in closed position, a sliding element located between the toothed prongs of one member, handles on the pivoted portion for opening and closing the same and means in proximity to these handles for causing a sliding movement of the sliding member.

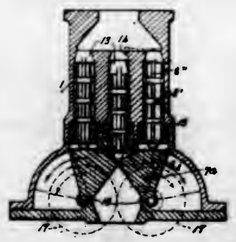
1,858,852. TOOL CUTTING GROOVES. CHARLES H. CLEVELAND, CHARLES A. HEINE, and JOHN T. ALLISON, Minneapolis, Minn. Filed Aug. 5, 1929. Serial No. 383,544. 8 Claims. (Cl. 82—4.)



1. In a tool of the class described, the combination of an arbor having spaced apart transverse sockets therein, cutting elements movably mounted in said sockets, said arbor also having a longitudinal groove therein, a slide mounted in said groove and having inclined portions engageable with said elements, means for actuating said slide whereby the cutting elements may be moved relative to the arbor, and said longitudinal groove being open at one side to receive said slide.

8. In a tool for cutting grooves in bearings, the combination of an arbor adapted to be inserted in a bearing and having spaced apart sockets therein, a groove-cutting element movably mounted in each socket and each provided with a notch having inclined walls, said arbor having open groove therein extending lengthwise thereof, a slide movably mounted in said groove and having inclined surfaces engaged with the inclined walls of the notches in said elements, a stem connected with said slide and projecting from one end of the arbor, a nut received in threaded engagement with said stem, relative rotation of said nut causing said slide to move in the arbor whereby said cutting elements also are moved, means for rotating said arbor, and guide collars adjustably secured to the arbor to retain it in position in the bearing.

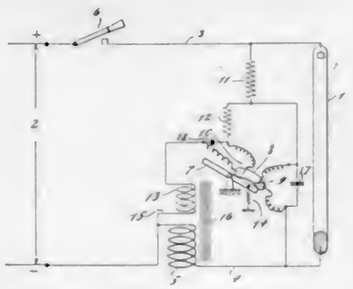
1,858,853. COMBINED MIXING AND VAPORIZING DEVICE. ABEL DEFRANCE and PIERRE VERSILLÉ, Paris, France. Filed Oct. 9, 1926, Serial No. 140,656, and in France June 25, 1926. 4 Claims. (Cl. 48—180.)



1. In a device for improving the fuel mixture, more particularly adapted for internal combustion engines using heavy fuel, in combination a block provided with a series of channels extending therethrough for the passage of the mixture, a conical seat formed upon the outlet end of each channel, a mixing element mounted for sliding movement in each of said channels and formed of a central core with external radial ribs which are circumferentially slotted in at least one place in the length thereof so as to form in each channel at least one expansion chamber, a plain conical part formed at one end of the core of each mixing element and adapted to cooperate with the conical

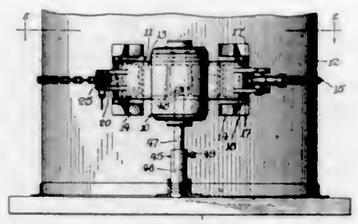
seat of the respective channel, a return spring fixed to and surrounding the opposite end of each element urging the same into its opening position, and a controlling device operatively connected to the throttle of the carburetor capable of moving the several mixing elements back and forth in their respective channels.

1,858,854. LAMP STARTING DEVICE. HANS M. ERDMANN, New York, N. Y., assignor to Ne-Arga Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,678. 5 Claims. (Cl. 176—45.)



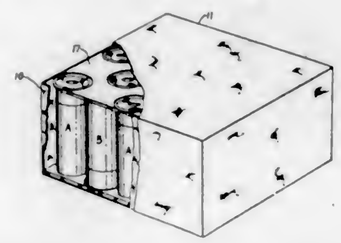
1. In a lighting system, a lamp, a power source therefor, an inductance in series with said lamp, a circuit shunted directly across the terminals of said lamp, switching means responsive to energization of said inductance for opening said circuit and simultaneously closing a circuit through holding means for maintaining said switching means in operated position so that said circuit remains open.

1,858,855. VIBRATING DEVICE. JOSEPH F. HAAS, Forest Park, Ill., assignor, by mesne assignments, to Electric Tamper & Equipment Company, Ludington, Mich., a Corporation of Michigan. Filed Apr. 26, 1930. Serial No. 447,485. 4 Claims. (Cl. 259—91.)



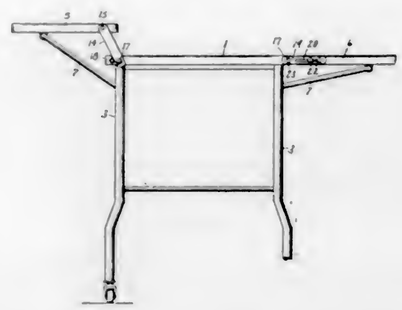
1. A device of the character described comprising, in combination, a supporting structure adapted to be secured upon a column form or the like, means adapted to extend about a form to secure the support in position thereon, and a standard adapted to carry the weight of said support while said securing means is adjusting and tightened about the form, said standard being removable after the supporting structure has been secured in position.

1,858,856. ARTICLE SPACER FOR PACKING BOXES. EGBERT C. HADLEY, Southport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed May 4, 1929. Serial No. 360,359. 1 Claim. (Cl. 206—56.)



A package including a container; shot shells arranged therein; each of said shells having a metallic rim end and a waterproofed fibrous end; said shells being arranged side by side and alternate shells being reversed end for end; means for separating the shells and preventing contact therebetween comprising members having a plurality of apertures extending transversely through them, with solid portions therebetween; said members being placed adjacent the shell ends with the fibrous ends of the shells bearing against the solid portions and the rims received in the apertures of said members, said apertures being sized to fit said rims.

1,858,857. STAND OR TABLE. REGINALD C. HUNTLEY, Sturgis, Mich., assignor to Sturgis Posture Chair Company, Sturgis, Mich. Filed June 27, 1930. Serial No. 464,243. 6 Claims. (Cl. 45—47.)



1. The combination with a stand or table comprising legs and a top, of a shelf, a bail-shaped strut having its arms pivotally mounted on a pair of the legs and its cross portion pivotally secured to the under side of said shelf, links pivotally secured to the edges of the shelf adjacent its inner end and having bayonet slots at their inner ends, said top having laterally projecting studs with which said slots may be engaged for supporting said shelf in erected position, said top having rests with which the inner edges of said links engage when the shelf is erected, and a coiled spring arranged on the cross portion of said strut with one end of the spring secured thereto, the other end of the spring terminating in an arm engaging the shelf, said spring acting to urge the inner end of said shelf downwardly when the shelf is erected and to support the shelf in upright position when the shelf is collapsed.

1,858,858. TOY WAGON. MILO JANAS, Elyria, Ohio. Filed Feb. 14, 1929, Serial No. 339,884. Renewed Dec. 11, 1931. 7 Claims. (Cl. 280—87.5.)

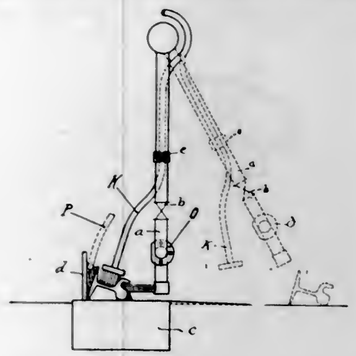


1. In a toy vehicle, a bed, a front axle and a pair of wheels therefor, a depending front bracket on the bed, a bolster supported on the front axle and having swivelling connection with the bracket on vertical and horizontal axes, a rear axle and a pair of wheels therefor, a bolster supported on the rear axle and formed to have a planular upwardly forwardly sloping surface parallel to the rear axle, a depending rear bracket connected to the bed and having a planular surface in coincidence with said sloping bolster surface, the bolster and bracket having a pivot connection with each other on an axis at right angles to said surfaces.

1,858,859. PROCESS OF PRODUCING LEATHER IMITATION, PARTICULARLY AN IMITATION OF THE SO-CALLED ANTIQUE LEATHER. ERNST KATZ, Vienna, Austria. Filed June 29, 1928, Serial No. 289,330, and in Austria Sept. 3, 1927. 2 Claims. (Cl. 91—68.)

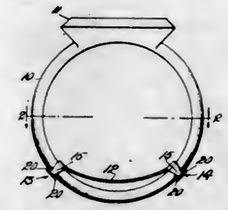
1. A process of producing imitations of leather, particularly of the so-called antique leather, with respect to the mottled and blurred decorative effect thereof, which consists in dressing with starch a vegetable fibrous fabric, hot calendering the fabric base thus obtained, manually applying thereto a first coat of coloring by stippling with a sponge, drying, applying in the same way a second coloring and repeating said alternate dyeing and drying until the desired mottled and blurred effect is attained, drying a last time and finally calendering the imitation of leather thus obtained.

1,858,860. APPARATUS FOR THE MANUFACTURE OF RAILS WITH HARDENED HEADS. HEINRICH KURZ, Duisburg-Ruhrort, Germany. Original application filed July 7, 1928, Serial No. 291,036, and in Germany Aug. 22, 1927. Divided and this application filed June 13, 1929. Serial No. 370,699. 8 Claims. (Cl. 266—3.)



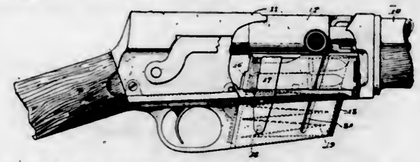
1. Apparatus for the manufacture of rails with hardened heads, comprising means for conveying continuously at a given speed the rail to be treated overturned on its side, and hardening spraying means adapted to direct a substantially horizontal spray of cooling medium only against the rail head.

1,858,861. FINGER RING GUARD. HARRIS LEVIN, Freeport, N. Y., assignor to The Lion Safety Pin Clutch Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 14, 1931. Serial No. 556,952. 18 Claims. (Cl. 63—17.)



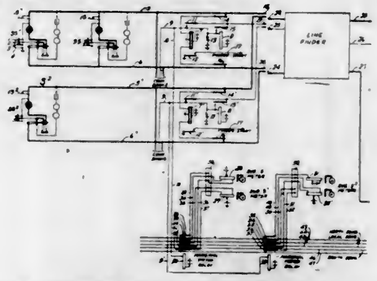
1. A finger-ring guard, comprising an elongated member and clasping means carried thereby and adapted in conjunction with such member to fully encompass the shank of a ring, such means including interlocking elements engageable at a point clear of the finger bearing surface of the elongated member.

1,858,862. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Jan. 19, 1931. Serial No. 509,745. 5 Claims. (Cl. 42—50.)



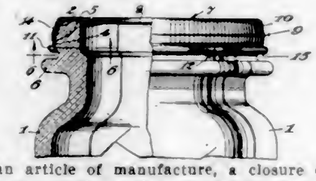
1. In a box magazine for firearms, a spring follower provided at one end with downwardly extending fingers adapted for engagement by the end of a leaf spring whereby the follower is retained in the magazine, and an aperture in the follower adapted to receive an implement whereby said fingers are disengaged from such spring to permit removal of the follower.

1,858,863. MEASURED SERVICE TELEPHONE SYSTEM. JOHN E. OSTLINE, Berwyn, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 23, 1930. Serial No. 477,338. 30 Claims. (Cl. 179—8.5.)



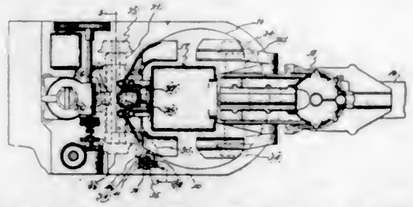
1. In a measured service telephone system wherein a group of subscribers' lines receive different classes of metered service, means for charging some of said lines for every completed connection, means for giving other of said lines free service to local zones and for charging for every completed call to other zones, means for giving the remaining lines in said group free service to the local and a near zone for charging for every completed call to other zones, and means common to said group of lines for controlling the charging means.

1,858,864. SEALED PACKAGE. ABRAHAM PODEL, New York, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Jan. 21, 1929. Serial No. 333,847. 4 Claims (Cl. 215—38.)



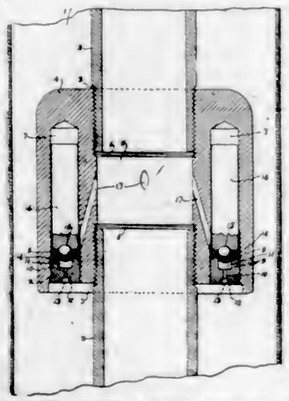
4. As an article of manufacture, a closure cap comprising a cover portion, a depending skirt, the upper portion of said skirt being flared outwardly from the cover portion down, a gasket secured to the flared portion of said skirt designed to engage a correspondingly flared sealing zone on a container, instruck projections formed in the lower portion of said skirt for resiliently engaging an inclined surface on the container for urging the cap in sealed position.

1,858,865. MINING MACHINE. PETER ROOZEE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 18, 1930, Serial No. 445,480. Renewed July 27, 1931. 35 Claims. (Cl. 262—28.)



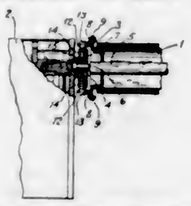
1. In a mining machine, a truck frame, a turntable thereon, a forwardly projecting cutting element supported on said turntable, means for supporting said truck frame for movement about a mine comprising a floating axle, and means for selectively holding said axle in a fixed relation with respect to said truck frame or allowing said axle to move with respect to said truck frame controlled from above said truck frame.

1,858,866. AUXILIARY LIFT. FORREST H. THORPE, Columbus, Ohio, assignor to The Columbus Sucker Rod Company, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 18, 1929. Serial No. 392,323. 2 Claims. (Cl. 103—232.)



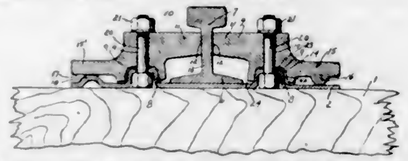
1. In an auxiliary lift, a union member having a longitudinal passage therein, a plurality of longitudinal chambers in said member with a diagonal duct for each chamber leading into the passage, a plug in one end of each chamber, said plug having a restricted passageway terminating in a pressure cavity and a valve seat, a ball valve adapted to rest in said seat and close the passageway, and a weight resting loosely upon each ball.

1,858,867. CURTAIN OPERATING MECHANISM. CHARLES A. ULRICH, Hartford, Conn. Filed Sept. 14, 1931. Serial No. 562,635. 18 Claims. (Cl. 156—28.)



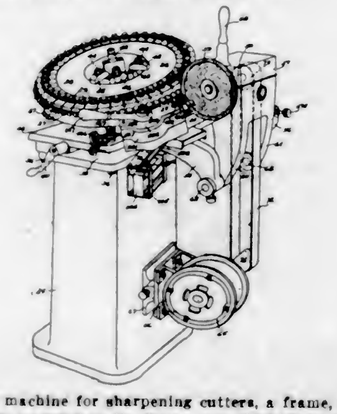
4. An adapter for curtain rolls comprising a body disposable opposite the end of a roll and having a driving connection and radially located roll gripping means comprising clamping members engageable with the roll rim and operating means for said clamping members carried by said body.

1,858,868. TIE PLATE AND RAIL BRACE. JOHN A. WELTON, Dover, Ohio. Filed May 12, 1930. Serial No. 451,607. 14 Claims. (Cl. 238—292.)



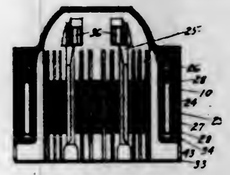
1. In combination with a railway rail and tie, a thrust element provided with a portion adapted to abut transversely upon the rail web, a stationary wedge element secured to the tie, means for clampingly moving the thrust element toward the tie on said wedge element to laterally thrust the thrust element against the rail web.

1,858,869. CUTTER SHARPENER. HERBERT J. WHITE, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Feb. 14, 1931. Serial No. 515,825. 16 Claims. (Cl. 51—55.)



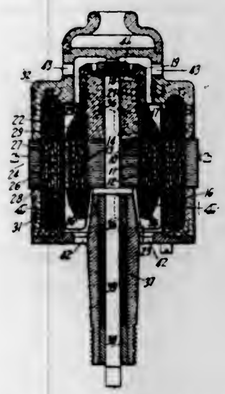
1. In a machine for sharpening cutters, a frame, a pair of supports mounted on the frame, one of which is adapted to carry the cutter to be sharpened and the other of which is adapted to carry a rotary grinding wheel, a grinding wheel journaled in the latter support, one of said supports being movable toward and from the other to move the grinding wheel into and out of engagement with the cutter to be sharpened, a gauging device mounted on the frame for movement into and out of gauging position with reference to the cutter, and means operative to cause the movements of the gauging device to alternate with those of the grinding wheel.

1,858,870. DYNAMO ELECTRIC MACHINE FIELD ELEMENT. VINCENT G. APPLE, Dayton, Ohio. Filed Apr. 5, 1928. Serial No. 267,782. 6 Claims. (Cl. 171—252.)



1. A dynamo electric machine field element comprising, a slotted core, coils in said slots extending axially beyond said core and having axially extending spaces of considerable size between coils of adjacent poles, and a continuous mass of insulating material providing a covering for the coils at each end of the core joined by integral struts of the same material extending thru the said spaces.

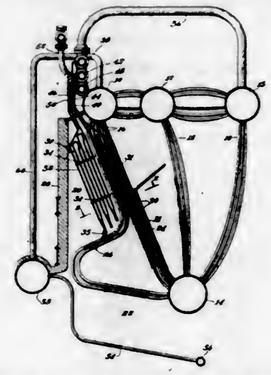
1,858,871. DYNAMO-ELECTRIC MACHINE WITH IMPROVED COOLING MEANS. VINCENT G. APPLE, Dayton, Ohio. Filed Apr. 30, 1930. Serial No. 448,646. 7 Claims. (Cl. 172—36.)



3. In a dynamo electric machine, an armature comprising a magnetizable core having winding apertures, coils in said apertures and extending beyond the ends of the core, leads emanating from said winding, commutator segments attached to said leads, and an integral mass of insulation of high thermal conductivity extending between about said segments, into the said winding between the turns thereof and forming a covering thereover, and extending outwardly from said covering at each end of the core to form a series of circumferentially spaced apart fins.

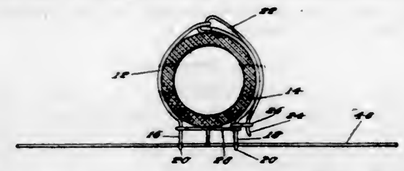
1,858,872. COMBINED SUPERHEATER AND BOILER. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Jan. 21, 1930. Serial No. 422,329. 14 Claims. (Cl. 121—478.)

1. The combination of a furnace, a boiler heated thereby, two groups of superheater elements, one of which is arranged to receive a relatively large amount of radiant heat from said furnace as compared to the other, said other group of superheater elements so arranged with respect to said boiler and furnace that the percentage of



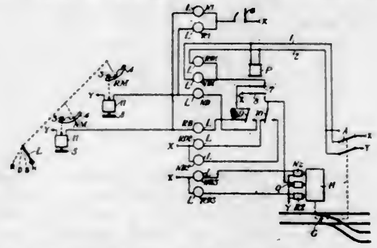
its surface in the stream of combustion gases from the furnace increases automatically with increase in rate of operation of the furnace, and connections leading steam from the boiler first through said radiant group of elements and then through said other group.

1,858,873. WIRE SUPPORT FOR INSULATORS. ENOCH ASP, Manistique, Mich. Filed Feb. 24, 1930. Serial No. 430,580. 3 Claims. (Cl. 173—313.)



2. A wire support for insulators, comprising elements adapted to surround an insulator, and grip a wire to be supported, said elements comprising a pair of semi-circular arms, a cross-brace connecting the forward ends of the arms, means for locking the arms and the brace in wire-supporting position, said means comprising a third arm pivotally connecting the rear ends of the two first-named arms and adapted to draw the same into tightened relation with the insulator, and a bifurcated wire-receiving crotch formed in the medial portion of said brace.

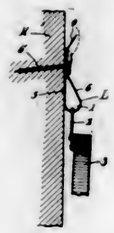
1,858,874. RAILWAY SWITCH CONTROLLING APPARATUS. GODFREY BAUMGARTNER, Astoria, N. Y., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 9, 1931. Serial No. 549,697. 5 Claims. (Cl. 246—135.)



5. In combination, a railway switch having normal and reverse positions, a control lever for said switch, locking means for said lever and electromagnets for releasing said

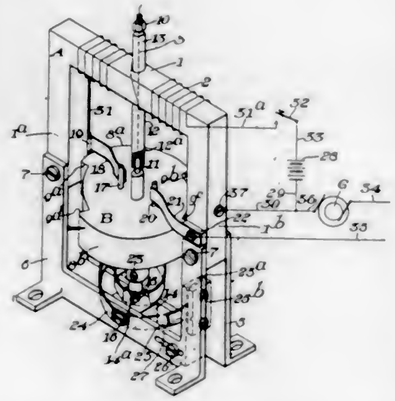
locking means, a polarized indication relay, a circuit for said relay including two wires and a pole-changer operated by said switch as well as a source of current located at the switch, and circuits for said electromagnets controlled by said relay and including said source and said wires.

1,858,875. PICTURE HOOK. MAURICE BLUMENTHAL, Brooklyn, N. Y. Filed May 10, 1930. Serial No. 451,302. 2 Claims. (Cl. 40—145.1.)



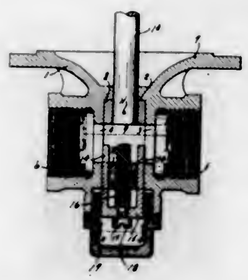
1. A picture hook comprising a strip of material bent into U shape so as to form a seat between the legs of the U within which to hang a picture, the legs of the U having mating apertures therethrough, and a fastening device adapted to extend through said mating apertures and to be driven into a wall like support, said fastening device having a head at its outer end to retain the legs of the U against detachment therefrom, and one of said legs having a bendable extension thereon bendable to overlie the upper end portion of the other leg.

1,858,876. CODING APPARATUS. PAUL N. BOSSART, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,342. 7 Claims. (Cl. 200—90.)



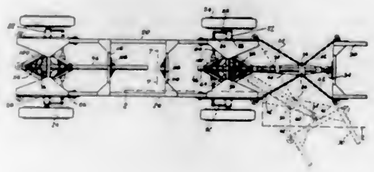
1. Coding apparatus comprising a magnet having two poles, a filament, a cylindrical armature suspended by means of said filament to oscillate between said poles and having two projections one located adjacent each said pole, resilient means including said filament for biasing said armature to one position, a contact controlled in accordance with the position of said armature, and a winding for said magnet controlled by said contact.

1,858,877. VALVE. GEORGE R. BROWN and GEORGE F. NAAB, Cleveland, Ohio, assignors to The North American Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 457,743. 1 Claim. (Cl. 277—32.)



Valve means of the class described, comprising a valve body having a cylindrical valve chamber with opposed lateral ports, a valve rotatable in said chamber for controlling communication between said ports, and having for the purpose a through transverse passage opening, the valve being provided on its face with a pair of opposed grooves, each extending longitudinally from one of the mouths of said opening, a yoke member having legs fitting for sliding movement in the openings defined by said grooves and the valve body, and having a transverse bridge joining said legs, and screw means associating said bridge with said valve to provide longitudinal adjustment of the yoke member on the valve.

1,858,878. TRAILER. KENNETH M. BYRON, Detroit, Mich., assignor to Stephen A. Griggs, Detroit, Mich. Filed Oct. 17, 1928. Serial No. 312,946. 19 Claims. (Cl. 280—33.55.)

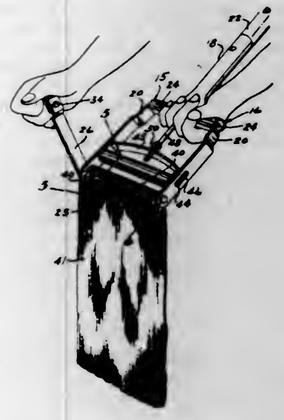


1. In combination with a tractor, a trailer having road wheels swiveled for turning, steering mechanism coupled therewith and provided with spaced apart front and rear steering pole bearings, draft means connecting the trailer with the tractor and a steering pole slidably supported within said bearings and coupled with the tractor.

1,858,879. COMBINED MOP HEAD AND WRINGER. OSCAR CARLSON, Minneapolis, Minn., assignor to Reel-Mop Corporation, Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 16, 1929. Serial No. 392,831. 5 Claims. (Cl. 15—119.)

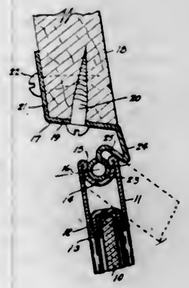
1. A mop head and wringer comprising a head having a pair of prongs, a mop holding roll journaled on said prongs, a crank arm on the roll for rotating the same to wind a mop thereon, a handle on the crank arm comprising a hand-piece equipped stem mounted for endwise sliding

movement in the arm and supporting the handle for movement to and from an operative position, said stem having an annular lock groove in its inner end portion and a



yielding member on the crank arm arranged to be projected substantially radially into the lock groove to hold the handle in an operative position.

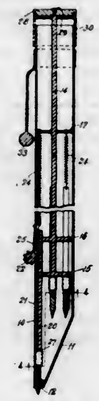
1,858,880. WINDSHIELD HINGE. PHILIP CARLSON, Trumbull, Conn., assignor, by mesne assignments, to The Bridgeport-City Trust Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 11, 1928. Serial No. 305,193. 4 Claims. (Cl. 296—92.)



1. In a device of the character described, a wind shield including a bar provided with a longitudinal open channel of greatest width inwardly of its open side, and an anchor bar adapted to be secured to a support having a depending portion bent into a substantially cylindrical portion to fit into said channel to form a hinge connection, said depending portion extending downwardly in front of the upper edge of the bar to form a weather shed.

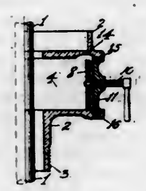
1,858,881. MULTICOLOR PENCIL. LOUIS CARUANA, Astoria, N. Y. Filed Dec. 20, 1930. Serial No. 503,646. 8 Claims. (Cl. 120—14.)

5. A multi-color pencil comprising a casing, having an opening at one end thereof, a turret member positioned in said casing and comprising a shaft, and a plurality of disks on said shaft provided with registering openings



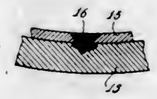
for receiving a plurality of crayons, and means for advancing a selected crayon through said opening into writing position.

1,858,882. STUFFING BOX AND PACKING THEREFOR. JAMES R. COLE, Tulsa County, Okla. Filed Apr. 16, 1930. Serial No. 444,697. 6 Claims. (Cl. 286—16.)



2. A stuffing box adapted to receive a polished rod passed thru its packing chamber, and having a packing chamber open at opposite sides of the polished rod and with said opening arranged so that a packing element may be inserted therethru on either side of said polished rod; means of compressing said packing element against said polished rod and against the walls of said packing chamber one of which means is a breech block adapted to be held in position on said stuffing box by the pressure exerted in compressing said packing element within said stuffing box.

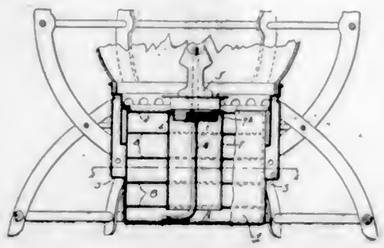
1,858,883. METHOD OF MAKING LAMINATED STRUCTURES. HERBERT E. COOK, Cuyahoga Falls, and DAVID J. RICHARDS, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 458,447. 4 Claims. (Cl. 219—10.)



4. The method of attaching a readily weldable metal facing to the surface of an iron casting, said method comprising forming cavities in the surface of the casting,

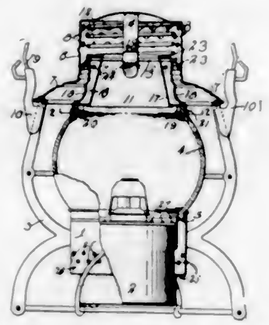
filling said cavities with molten metal and bonding the deposited metal to the casting, cooling the casting, removing protruding deposited metal, providing openings though the metal facing, superimposing the facing on the casting in intimate contact therewith with its openings aligned with the deposited metal, filling said openings with molten metal, and bonding said molten metal to the previously deposited metal.

1,858,884. OIL FOUNT. ROBERT A. CURRIE, Syracuse, N. Y., assignor to R. E. Dietz Company, New York, N. Y. Filed June 11, 1929. Serial No. 370,042. 1 Claim. (Cl. 67—81.)



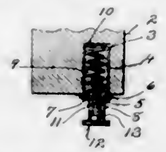
An oil fount for lanterns, comprising a closed casing having an opening at the top to receive and mount a burner and its depending wick, a tube in said casing approximately alined with said opening for receiving said wick, and communicating with the space in said casing around the tube at approximately the top and bottom of the tube, said tube extending into close proximity to the bottom of said casing, and partition means surrounding said tube and subdividing the chamber of said casing around said tube into a plurality of compartments, the compartments formed by said partition means having such limited communication with one another that oil in the casing may move from compartment to compartment with sufficient rapidity to supply the wick, and is restricted in such movement to such an extent that when the lantern is given abrupt movements, the forcing of air through the wick tube, by slushing of the oil in the casing, sufficiently to cause flickering or extinguishment of the flame is prevented.

1,858,885. LANTERN. ROBERT A. CURRIE and FRANK N. THIEL, Syracuse, N. Y., assignors to R. E. Dietz Company, New York, N. Y., a Corporation. Filed Oct. 18, 1929. Serial No. 400,564. 15 Claims. (Cl. 240—38.)



1. In a lantern, a frame having a globe seat and a dome, a globe holder extending up into and movable vertically in said dome and engaging with said globe to confine the globe to said seat, means in said dome confining said holder releasably in engagement with the globe, said holder having an annular bottom wall fitting over the upper end of the globe, with a flange engaging with the globe to keep the globe and holder alined when in contact, said annular bottom wall of the holder extending inwardly in a radial direction for a short distance from the globe, said holder also having inner and outer spaced walls connected to the inner and outer periphery of said bottom wall and a top wall connecting the upper ends of the inner and outer walls to provide a ring-like chamber between the inner and outer walls, said bottom wall of the holder having apertures arranged at intervals entirely around the same, the outer wall of the holder having apertures arranged peripherally around the same in the portion enclosed in the dome, whereby air may enter said globe by first entering said dome, then said chamber and then descending through the chamber, through the bottom wall thereof, into said globe, in a downward direction along the inner wall of the globe, whereby uniform down draft of air may be provided within said globe substantially free from varying air currents outside of the globe.

1,858,886. DOOR BUFFER. EDWARD J. DEGUENTHER, Milwaukee, Wis. Filed Feb. 23, 1928. Serial No. 256,347. 5 Claims. (Cl. 16—85.)



1. A door buffer comprising a casing, a plunger slidably carried by and projecting from said casing and having a threaded hole, a head having a threaded shank screwed into said hole, a washer located on said shank between said head and the outer end of said plunger for regulating the distance between said plunger and head, a spring disposed between said casing and plunger for urging said plunger outwardly, and means for limiting the outward motion of said plunger.

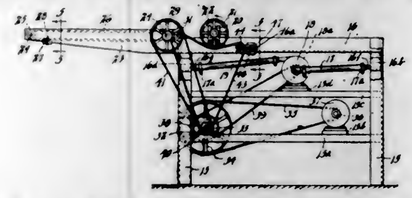
1,858,887. ELECTRIC HAIR CLIPPER. ALBERT J. DREMEL, Racine, Wis. Filed Aug. 14, 1931. Serial No. 557,049. 4 Claims. (Cl. 30—1.)



1. An electric hair clipper including a casing comprising upper and lower longitudinally separable sections, the upper section being provided with a separate compartment adjacent its forward end and terminating above the lower section, a motor carried by the upper section, actuating mechanism mounted within said separate compartment, and a removable blade unit detachably secured within the lower section beneath said separate compartment and operatively connected with said actuating mechanism.

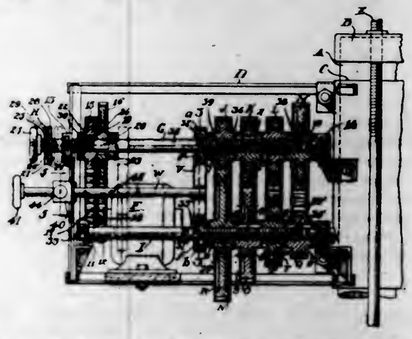
1,858,888. METHOD AND APPARATUS FOR DEVELOPING PRINTS. GLEN M. DYE, Minneapolis, Minn. Filed Apr. 27, 1927. Serial No. 186,925. 15 Claims. (Cl. 95—89.)

1. An apparatus for treating sensitized photographic sheets having in combination, a receptacle adapted to contain liquid for treating sensitized photographic sheets, a submerging means adjacent one end of said receptacle, means for delivering sheets to said receptacle at said end,



and an accelerating means for receiving prints from said last mentioned means and for directing said sheets into said receptacle toward said submerging means.

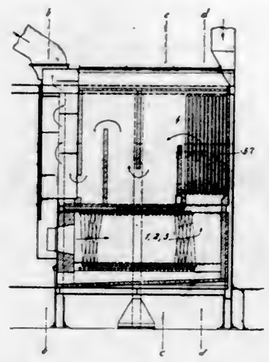
1,858,889. CHANGE SPEED MECHANISM. WILLIAM W. EDWARDS, Los Angeles, Calif. Continuation of application Serial No. 413,243, filed Dec. 11, 1929. This application filed June 1, 1931. Serial No. 541,236. 1 Claim. (Cl. 74—59.)



In a change-speed mechanism, a counter-shaft, a driven shaft, a series of sets of sprocket wheels loosely revoluble on each of said shafts, a sprocket chain interconnecting each set of said wheels, each of said wheels being formed with a keyway extending longitudinally of and contiguous the wheel-carrying shafts, the keyways of adjacent wheels being normally disposed out of alignment with each other, a sleeve on each of said shafts slidable longitudinally thereof, a manually operable slide bar, a connection between said slide bar and each of said sleeves so that reciprocation of said slide bar will effect corresponding movement of each of said sleeves, a retractable spring-pressed key carried by each of said shafts slidable longitudinally thereof, connections between said keys and said sleeves for causing said keys to collectively advance lengthwise of said shafts on effection movement of said sleeves to dispose said keys in position to be engaged with the keyways of companion pairs of said wheels, a knob fixed on said counter-shaft manually turnable to rotate said counter-shaft to dispose the key carried thereby in a position to cause it to be engaged with a keyway on one of the wheels, and means for power driving said counter-shaft at variable speeds including manually operable means for placing said counter-shaft in neutral.

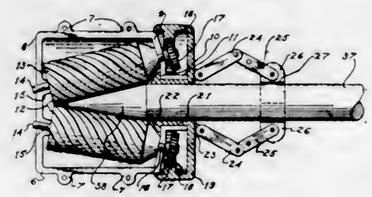
1,858,890. TUBULAR STEAM GENERATOR. MARTIN EDLE, Spandau, near Berlin, Germany, assignor to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Feb. 3, 1927, Serial No. 165,715, and in Germany Feb. 4, 1926. 5 Claims. (Cl. 122—356.)

1. In a tubular heat exchanger having a plurality of groups of parallel arranged tube lines adapted to exchange heat between the medium circulating through the tubes and the medium outside of said tubes, said tubes being disposed in the heater so that the total of all different heat transfer conditions encountered throughout the entire length of one of said parallel lines is the same for



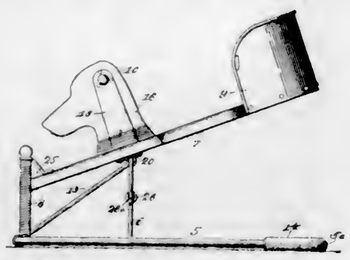
all parallel lines within a group, the tubes of at least two of said groups of parallel lines being coiled up adjacent to each other in each group in the manner of a multiplex screw, said two coil groups being connected in series.

1,858,891. PENCIL SHARPENER. RUSSELL SMITH HARRIS, St. Mary's, Ontario, Canada. Filed May 29, 1930. Serial No. 456,979. 5 Claims. (Cl. 125—95.)



1. A pencil sharpener including a pair of rotatable pencil sharpening members; pencil operated rotating means for rotating said members; and pencil clamping means carried by the said pencil operated rotating means.

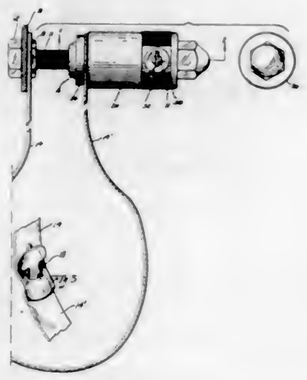
1,858,892. CHILD'S TEETER BOARD. EDWIN HETHERINGTON, Cedar Rapids, Iowa. Filed June 17, 1929. Serial No. 371,487. 11 Claims. (Cl. 272—55.)



1. In a teeter-board, the combination of a base formed of tubular material with a serpentine rear end, a sup-

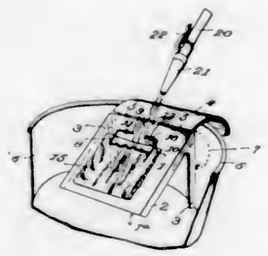
porting bridge attached to the base, and a board pivotally mounted thereon, the incurve of the base serving as an abutment against the downthrust of the board, and the outcurves serving to stabilize the base against tipping.

1,858,893. LOCK. FREDERIC K. HEYER, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed Oct. 12, 1929. Serial No. 399,117. 4 Claims. (Cl. 70—90.)



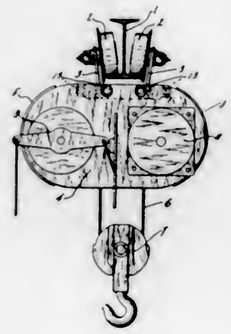
1. An automobile tire lock comprising a strap adapted to surround the tire, means for securing said strap in position comprising a bolt, a nut threaded on said bolt, a casing surrounding said nut and secured against axial movement relatively thereto, a headed portion of said nut adapted to extend outside of the casing to create a groove in juxtaposition to said casing, said groove being adapted to carry said strap.

1,858,894. WASHER. JOSEPH H. JOHNSTON, Port Angeles, Wash. Filed July 14, 1931. Serial No. 550,741. 2 Claims. (Cl. 68—11.)



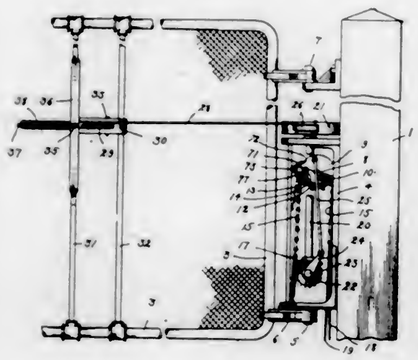
2. A washing attachment, comprising a plate, a clamping element pivotally mounted on the plate, including a rod bent to form inturned ends and a transverse portion, the transverse portion being bent to provide a series of vertically disposed convolutions, the spaces between the convolutions affording passages for the flow of fluid over an article clamped on the plate, the lower edges of which cooperate with the plate to clamp an article being washed, eyes on the plate to receive the inturned ends of the rod, and a spring mounted on one of the inturned ends, one end of the spring engaging the rod and the opposite end engaging the plate.

1,858,895. TROLLEY FRAME. WINFRED H. JUERGENS, Cleveland, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Nov. 12, 1930. Serial No. 495,119. 6 Claims. (Cl. 212—134.)



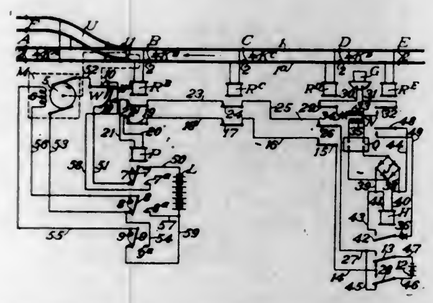
2. Hoisting apparatus of the class described comprising a hoisting assembly having opposed side plates, a carriage assembly having opposed side plates, and an open rectangular frame adapted to be positioned between the side plates of said hoisting assembly and to receive the side plates of said carriage assembly, whereby one of the assemblies may be secured with the other thereof oriented in either of two rectangularly related positions.

1,858,896. GATE OPERATING MECHANISM. NELS HENRY LARSON, Pepin, Wis. Filed June 22, 1931. Serial No. 545,902. 2 Claims. (Cl. 39—33.)



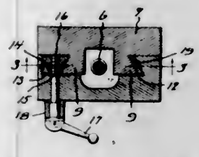
2. Gate operating mechanism including a housing, a vertical shaft within the housing having a wheel thereupon for operating the gate, a counter shaft connected by bevel gears to the vertical shaft, a power shaft connected by a crank arm to said counter shaft, and a sprocket wheel and chain for operating the power shaft, said chain leading to operating stations remote from said housing.

1,858,897. RAILWAY SWITCH CONTROLLING APPARATUS. SAMUEL M. LUCAS, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 12, 1928. Serial No. 305,899. 21 Claims. (Cl. 246—219.)



17. In combination, a railway switch, a track circuit adjacent said switch and means controlled by said track circuit and responsive only to the sound waves from a train whistle for operating said switch.

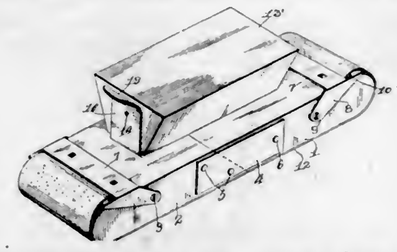
1,858,898. HEAD CLAMP. LOUIS H. MESKER, Shaker Heights, Ohio, assignor to The Cleveland Planer Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 11, 1928. Serial No. 284,517. 1 Claim. (Cl. 90—52.)



In a device of the character described, a harp having a central groove for the reception of a tool adjusting screw, a pair of projections, one on each side of said groove adjacent the same, said projections extending longitudinally of said harp and having angular outer faces extending outwardly away from the body of said harp, said projections being spaced from the edges of said harp to provide harp body bearing surfaces, a head slide cooperating with said harp and being provided with head slide projections adjacent the edges thereof, said projections having bearing faces adapted to cooperate with said harp body bearing surfaces, the inner faces of said head slide projections interlocking with said angular outer faces, a gib between one of said angular outer faces and one of said inner faces, there being a single circular bore through one of said head slide projections having its outer edge substantially at the edge of said projection, an annular block having one beveled side, said block being positioned in said bore and fitting snugly therein, and means extending through said slide for pulling said block toward the slide to cause said bevel on said block to wedgingly grip the adjacent projection on said harp, the lengths of said projections being such that bearing contact is attained between those bearing surfaces which are adjacent the edges of the harp and slide.

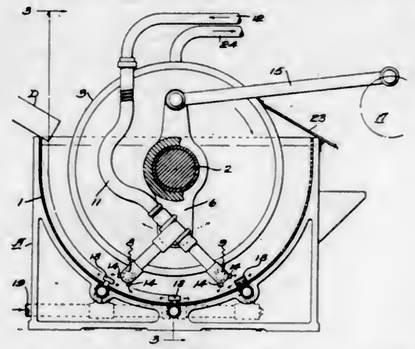
1,858,899. SANDPAPER HOLDER. RICHARD MONTBRIAND, Milwaukee, Wis., assignor to Paul A. Ziomke, Milwaukee, Wis. Filed May 29, 1930. Serial No. 457,064. 1 Claim. (Cl. 51—187.)

In a sand paper holder, a body having its upper face provided with recesses, a sand paper retaining plate hingedly carried by the body and overlying the upper top face of the body and extending transversely across the same, the plate having a sand paper receiving slot therein extending substantially the full length of the same, and depending prongs carried by the inner face of the plate



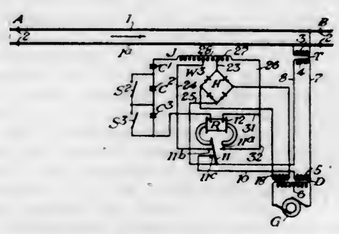
for extension through said paper threaded through the slot and into the recesses in the body when the plate is in its lower position and in engagement with the top face of the body.

1,858,900. FILTER. CHARLES W. MOORE, Barberton, Ohio, assignor to Oliver United Filters Inc., San Francisco, Calif., a Corporation of Nevada. Filed Dec. 10, 1928. Serial No. 324,948. 5 Claims. (Cl. 210—199.)



1. An apparatus of the class described comprising a filter tank, a rotary filter therein, means to supply the tank with the pulp to be filtered, a mechanical agitator within said tank, and a series of jets carried by the agitator adapted to introduce a liquid under pressure to increase the ratio of liquids to solids in the mixture during filtration.

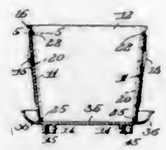
1,858,901. RAILWAY TRAFFIC CONTROLLING APPARATUS. LEWIS L. NETTLETON, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1928. Serial No. 270,680. 22 Claims. (Cl. 246—40.)



1. In combination, a stretch of railway track, a resonant circuit, means for varying the natural period of

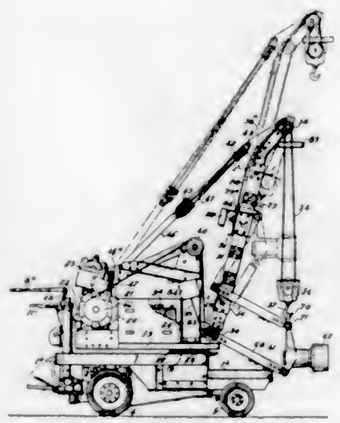
said circuit, and means for supplying the rails of said stretch with alternating current which is modulated at a frequency which depends upon the natural period of said circuit.

1,858,902. FLOWER BOX. LOUIS PRANTL, Rochester, N. Y. Filed Dec. 3, 1930. Serial No. 499,748. 11 Claims. (Cl. 47—34.)



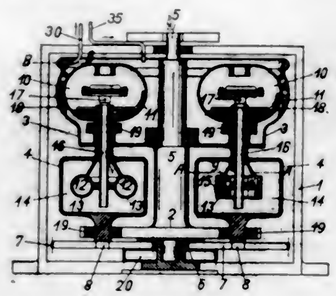
1. A flower box comprising separate cast metal side members, a separate cast metal bottom member, lugs on said side and bottom members welded together for securing said parts together to form an integral structure and leaving a drainage joint between said side and bottom members, and means on said bottom member for retaining said drainage.

1,858,903. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed July 24, 1929, Serial No. 380,266. Divided and this application filed Feb. 27, 1930. Serial No. 431,721. 4 Claims. (Cl. 212—55.)



1. In apparatus of the class described, the combination of a wheel mounted frame, a boom pivotally mounted thereon and comprising an inner section and an outer section each consisting of a pair of channel members, the channel members of the outer section being disposed within the channel members of the inner section to permit adjustment of the outer section relative to the inner section, and the adjacent channel members of said sections having their channels in opposed relation, pairs of blocks fitting within the opposed channels, one pair of blocks being secured to the inner end of the outer section and the other pair of blocks being secured to the outer end of the inner section, means for clamping the channel members and blocks together, and means for swinging said boom about its pivot.

1,858,904. COMPRESSOR WITHOUT GLANDS FOR USE ESPECIALLY IN REFRIGERATING MACHINES. LUDWIG KORBEL, Mannheim, Germany. Filed July 31, 1930, Serial No. 471,952, and in Germany Aug. 5, 1929. 6 Claims. (Cl. 62—115.)



1. In a refrigerating machine, the combination with a closed condenser, a closed vaporizer, and a closed compressor, of a hollow shaft constituting a passage for the flow of refrigerating fluid from the vaporizer to the compressor and comprising a support for the said vaporizer and compressor and condenser, and a conduit extending through said shaft comprising a passage for the flow of refrigerating fluid from said condenser to said vaporizer.

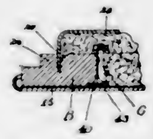
1,858,905. COMPOSITION FOR TREATING ARTERIOSCLEROSIS AND METHOD OF PREPARING SAME. NICHOLAS A. RUMANCEFF, New York, N. Y. Filed June 27, 1929. Serial No. 374,302. 3 Claims. (Cl. 167—58.)

1. An improved composition for the treatment of arteriosclerosis comprising a solution in water of the following salts in about the following proportions:

Na_2HPO_4, secondary sodium phosphate	0.20
$NaHCO_3$, sodium bicarbonate	0.33
KCl, potassium chloride	0.35
NaCl, sodium chloride	About 4.25
Distilled water	100.00

said composition being enclosed in calcium-free containers.

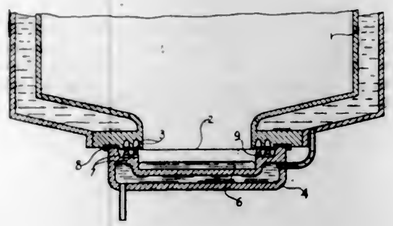
1,858,906. REFRIGERATOR DOOR. WALTER G. SEEGER, St. Paul, Minn., assignor to Seeger Refrigerator Company, St. Paul, Minn., a Corporation of Minnesota. Filed Dec. 14, 1927. Serial No. 239,944. 7 Claims. (Cl. 20—35.)



1. A door including, an outer and an inner enameled plate, said outer plate having an annular reinforcing edge formed thereabout, an insulating frame having each side thereof of integral construction, and means for securing the inner plate with its edges extending into said frame.

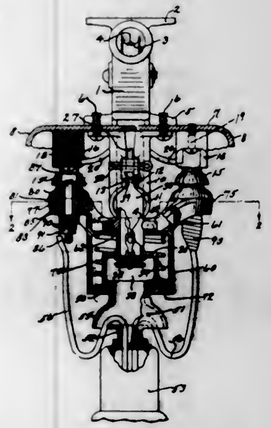
1,858,907. ELECTRIC CURRENT RECTIFIER. OSKAR SEITZ, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed July 23, 1929, Serial No. 470,199, and in Germany July 26, 1929. 3 Claims. (Cl. 250—27.5.)

1. In an electric current rectifier construction, a tank having an aperture through the bottom thereof, the portion of said tank defining the aperture being formed to provide descending ribs, a well for receiving cathode material and to close the aperture through said tank, the tank



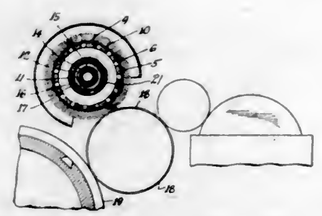
engaging edge of said cathode well being formed with channels therein, the ribs and channels being arranged in interspersed noncontacting manner.

1,858,908. LAMP HANGER STRUCTURE. ALLISON J. THOMPSON, Cleveland, Ohio. Filed July 25, 1929. Serial No. 380,888. 2 Claims. (Cl. 173—328.)



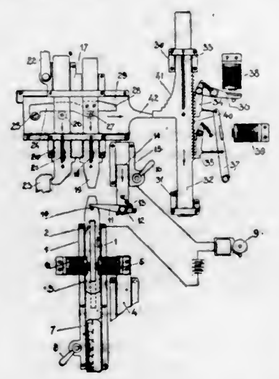
1. A contact assembly for lamp hangers comprising an upper hanger member, a lower hanger member, fixed contacts carried by said upper hanger member, floating contact members carried by said lower hanger member and adapted to cooperate with the fixed contacts carried by said upper hanger member to form a complete circuit, a latching mechanism for locking said fixed contacts and floating contacts in cooperative relation, supports for said floating contacts having tapered apertures and taking the form of incomplete closures, each of said floating contact members embodying an electrical connection with a lamp, a contact member for cooperation with one of said fixed contacts, and an insulator body portion tapered correspondingly to the tapered aperture in said support and adapted to rest in and be embraced by said support, the contact members and supports being of such nature as to permit removal of the contacts from the supports without disassembly of the contact members.

1,858,909. PRINTING METHOD AND APPARATUS. ARTHUR RONALD TRIST, London, England, assignor, by mesne assignments, to Pantone Corporation, New York, N. Y., a Corporation of Delaware. Filed July 25, 1930. Serial No. 470,571. 14 Claims. (Cl. 101—147.)



4. Printing apparatus comprising, in combination, a printing plate having mercurialized and non-mercurialized areas, a rotatable brush with its hairs in light contact therewith, and means for projecting mercury onto the hairs of said brush for transmittal to the mercurialized areas of said plate.

1,858,910. JUSTIFIER FOR PHOTOGRAPHICAL OR OTHER TYPESETTING MACHINES. EDMOND UHER, Jr., Budapest, Hungary, assignor to Uhertype Aktiengesellschaft, Glarus, Switzerland. Filed Mar. 14, 1930, Serial No. 435,917, and in Germany Mar. 18, 1929. 12 Claims. (Cl. 199—51.)

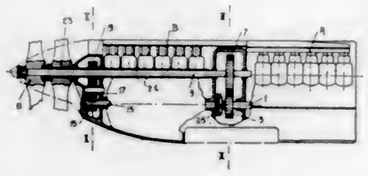


1. A justifier for type setting machines, comprising a slide adapted to be displaced in a straight line so as to take up the remainder of line in the form of its stroke, a second side parallel with the former and adapted to temporarily be fixed in any position, means for transmitting at a variable reducing ratio unidirectional strokes of the first-mentioned slide to the second slide, and a counter of word spaces arranged as a third slide to be displaced in a direction parallel with the strokes of the two other slides and carrying a cam surface adapted to control the transmission ratio between the latter.

1,858,911. DEVICE FOR COUPLING TWO AIRCRAFT ENGINES WITH PULLING OR TRACTIVE SCREW PROPELLERS ROTATING IN OPPOSITE DIRECTIONS. TRANQUILLO ZERBI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed May 28, 1930, Serial No. 456,468, and in Italy Oct. 18, 1929. 4 Claims. (Cl. 244—25.)

1. In a propelling system for aircraft, the combination with a pair of propellers turning in opposite directions

and co-axial shafts for said propellers, of a casing, a pair of V-engines mounted in longitudinal alignment on said casings, supports for said propeller shafts in said casing,



crank-shafts mounted in alignment in said casing and means for coupling one of said crank-shafts with a propeller shaft and for coupling the other crank-shaft with the other propeller shaft.

1,858,912. AWNING FIXTURE. FRANK J. ARNDT, Ventnor, N. J. Filed Aug. 18, 1931. Serial No. 557,884. 4 Claims. (Cl. 156—15.)



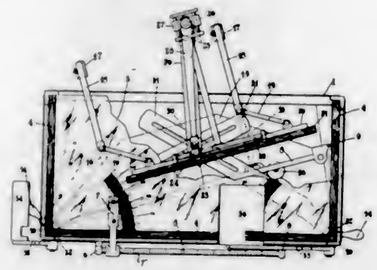
2. In an awning fixture the combination with a base having an outwardly projecting awning pole bearing, said base having a pair of forwardly protruding ears with a space there between, of a clamp arranged in said space and pivotally supported on the base, said clamp being arcuate and adapted to oppose the arcuate bearing, said clamp having an abutment end, and means pivotally carried by the base and adapted to come in engagement with the abutment end to lock the clamp against the awning pole.

1,858,913. PROPELLER. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed Oct. 4, 1929. Serial No. 397,179. 20 Claims. (Cl. 170—163.)



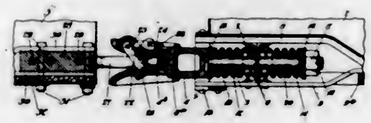
1. A propeller structure comprising, a shaft for rotating said propeller, a hub structure rigidly secured to said shaft, axially adjustable blades mounted therein, means for adjusting said blades while the propeller is in motion, said means comprising intermeshing gears mounted on said blades, hub and shaft, together with means for rotating said gear carried by said shaft for imparting movement to said other gears to effect axial adjustment of said blades.

1,858,914. APPARATUS FOR THE MEASUREMENT OF FEET, LASTS, AND THE LIKE. HARRY BRADLEY, London, England, assignor to The British Boot, Shoe and Allied Trades Research Association, London, England. Filed May 31, 1928, Serial No. 281,834, and in Great Britain July 7, 1927. 8 Claims. (Cl. 33—3.)



2. Foot and last measuring apparatus comprising in combination a pivoted bar, a side plate associated therewith and adapted to move with said bar parallel to an edge thereof and lie along one side of the foot or last to be measured, a locating member adapted to move along the side plate, means to give indication of the angular movement of said bar and means adapted to give in angular measurements the relative movements of said locating member.

1,858,915. CAR COUPLER. CARROLL BURTON, Johnstown, Pa. Filed Feb. 12, 1929. Serial No. 339,419. 2 Claims. (Cl. 213—13.)



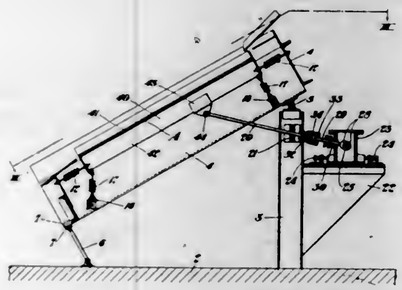
2. In combination with a mine car, a transverse coupler-head supporting member, means including a draw-bar strap mounted along the bottom of said car and secured to said transverse member and to the main frame of said car for transmitting loads from said transverse member to the main frame of said car, said transverse member being provided with an opening to receive the shank of a coupler-head, a coupler-head comprising a body portion and a shank, said shank portion extending freely through said opening in said transverse member, and resilient means for pressing said coupler-head in opposite directions relative to said transverse member and adapted to normally maintain said head in substantially central position with freedom to rock up and down and to yield in the direction of load, a yoke member secured to the forward end of said drawbar strap, said yoke member having its side portions extending parallel with slight clearance along the faces of said body portion of the coupler-head so as to guide said head and prevent side swinging thereof, and said yoke being spaced vertically above and below said coupler-head a sufficient distance to permit a limited vertical movement of said coupler-head caused by the erection of a track.

1,858,916. CONTROLLING DEVICE FOR LAMINATED VEHICLE SPRINGS. GEORGE W. CRABTREE, Cleveland Heights, Ohio. Filed Nov. 19, 1928. Serial No. 320,253. 14 Claims. (Cl. 267—48.)



1. A controlling device for a laminated main spring, including a set of supplemental leaves for the main spring, means for compressing said leaves and a plural number of the leaves of the main spring together, and coupling means connecting a series of said supplemental leaves to one of the short laminations of said laminations of said main spring, for shifting said supplemental leaves upon each other during flexing movements of the main spring.

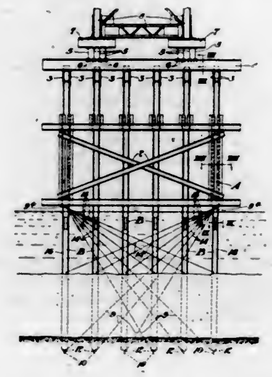
1,858,917. SCREEN. THOMAS J. DAVIS, deceased, Duquesne, Pa., by Clara J. Davis, executrix, Duquesne, Pa. Original application filed Dec. 14, 1927, Serial No. 239,958. Divided and this application filed Jan. 25, 1929. Serial No. 335,070. 2 Claims. (Cl. 209—329.)



1. In a screening mechanism an inclined rigid frame, a rigid support for the rear end of said frame, a single screening element mounted in and substantially filling the space within said frame, resilient means for supporting said element vertically and horizontally, and means for moving said screening element against the tension of at least some of said resilient means, said means including a cam-shaft mounted on said rigid support, cams on said shaft, and a plurality of connecting rods connected to said single element and adapted to be alternately engaged by said cams.

1,858,918. PILING CONSTRUCTION. JAMES L. DE VOU, Pittsburgh, Pa. Filed July 23, 1930. Serial No. 470,125. 4 Claims. (Cl. 61—53.)

1. A steel pile for use in erecting bridges and the like comprising a length of rolled metal H-beam section having a point at its lower end, side plates extending upwardly from the lower end of said H-beam section a material distance, the distance said plates extend upwardly along said pile being at least equal to the distance said pile is to be driven into the earth, said side plates being arranged between the flanges of said H-beam section adjacent the outer edges thereof and having their upper

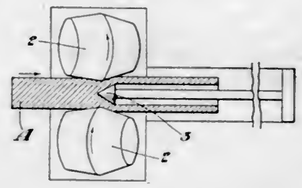


ends bent inwardly into contact with the web of said H-beam section, and said plates being secured to said H-beam section by line welds forming water-tight connections.

1,858,919. PURIFICATION OF GASES CONTAINING HYDROGEN SULPHIDE. WALTER CHARLES D'LENY and JAMES RITCHIE PARK, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, London, England, a British Company. Filed Apr. 16, 1930, Serial No. 444,869, and in Great Britain Apr. 26, 1929. 1 Claim. (Cl. 23—225.)

The process of purifying gas containing hydrogen sulphide which comprises bringing the gas into contact with an alkaline suspension of a mixture of iron and nickel compounds containing 10–25 gram molecules of nickel per 100 gram molecules of iron.

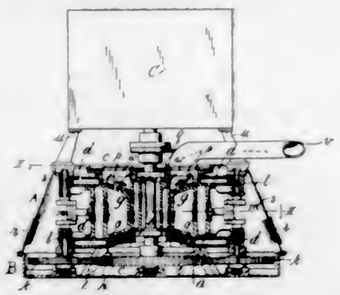
1,858,920. METHOD OF MAKING SEAMLESS TUBES. JERRY JAY DUNN, Ellwood City, Pa., assignor to National Tube Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 23, 1928. Serial No. 264,063. 8 Claims. (Cl. 80—62.)



8. The method of making large diameter seamless tubes which consists in piercing a solid heated blank by cross-rolling over a piercing plug, controlling the work in said cross-rolling operation so as to prevent the twisting of a line on the blank in one direction continuously more than 18 degrees and to form a tubular blank having a diameter slightly greater than that of the solid blank and a wall thickness of more than three times the thickness of the wall of the finished tube, then subjecting said tubular blank to a second piercing operation by cross-rolling over a piercing plug, controlling the work in said cross-rolling operation so as to prevent the twisting of a line on the tubular blank in one direction continuously

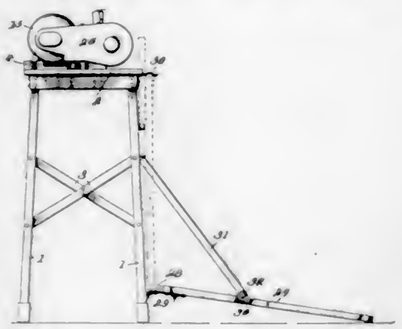
more than 15 degrees and to very materially increase the diameter and length of the tubular blank and to decrease the wall thickness of the blank to approximately twice the thickness of the wall of the finished tube, and then subjecting said tubular blank to a cross-rolling operation over an expanding plug, controlling the work in said cross-rolling operation so as to prevent the twisting of a line on the tubular blank in one direction more than 35 degrees, reduce the wall thickness not less than forty and not more than sixty percent of the wall thickness of the tubular blank, increase the diameter of the tubular blank not less than thirty percent, and also causing a change in the length of the blank inversely proportional to the change in its cross-sectional area.

1,858,921. ELASTIC FLUID COMPRESSOR. GEORGE EDWARD THOMAS EYSTON, London, England, assignor to Powerplus (1927) Limited, London, England, a Corporation of Great Britain. Filed Sept. 22, 1928, Serial No. 307,711, and in Great Britain Nov. 26, 1927. 8 Claims. (Cl. 230—212.)



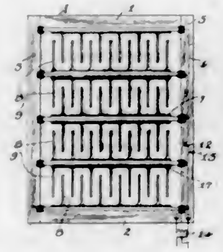
1. In an elastic fluid compressor, the combination of a compression cylinder and piston, a cooling device in said compression cylinder, and means for causing the fluid compressed to move bodily over the surface of such cooling device during the operation of the piston.

1,858,922. MASSAGING APPARATUS. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed Oct. 7, 1929. Serial No. 397,995. 5 Claims. (Cl. 128—63.)



3. A massaging apparatus including in combination a motor, an actuating shaft operated thereby, vibrating arms for imparting movement to an applicator, devices carried by the actuating shaft for operating said arms, a frame for supporting said motor and the parts actuated thereby, a supporting platform hinged to said frame adjacent the lower portion thereof, a bracket hinged to the platform and adapted to engage beneath a projecting angle bar on the frame when said supporting platform is in operative position, and a yielding latch for holding said supporting platform in inoperative position adjacent said frame, said bracket being so proportioned as to hold the front of the frame raised from the floor so that the combined weight of the apparatus and the individual standing on the platform may be utilized for maintaining said apparatus in fixed position during the operation thereof.

1,858,923. INSECT ELECTROCUTOR. WILLIAM M. FROST, Spokane, Wash. Filed Nov. 1, 1928. Serial No. 316,555. 19 Claims. (Cl. 43—112.)



1. In an insect electrocutor, a support, a plurality of electrical conductor bars arranged in substantially parallel spaced relation on said support, spaced parallel arms projecting laterally from each of said bars, each of said arms being turned about its axial plane to lie at an acute angle to the plane of the bar, the arms of adjacent bars projecting between and spaced from each other, and means for supplying adjacent bars with current of opposite polarities.

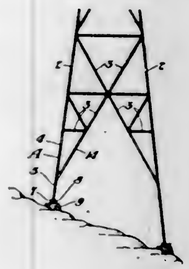
1,858,924. WING SURFACE WITH AUTOMATICALLY VARIABLE CURVATURE. JACQUES GERIN, Levallois-Perret, France. Filed Jan. 14, 1931, Serial No. 508,743, and in France Jan. 21, 1930. 3 Claims. (Cl. 244—12.)



1. In a wing surface having an automatically variable curvature, a fixed part comprising the leading edge of the surface, a second part articulated to the rear edge of the first part and a third part articulated to the rear edge of the said second part, resilient means interposed between the first and second parts on the one hand and the second and third parts on the other hand for returning the said parts to the maximum position of curvature of the whole of the wing surface, inextensible cables interposed between the second and third parts in such a manner that starting with a predetermined pressure on the second part of the whole of the wing surface assumes a double curvature of very slight bearing power.

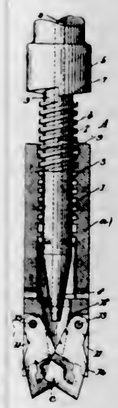
1,858,925. SHORT LEG TOWER EXTENSION. CHAUNCEY MARSH GOODRICH, Windsor, Canada. Filed Apr. 5, 1928. Serial No. 267,707. 1 Claim. (Cl. 189—21.)

In a tower structure for mounting on a rock surface, footings for the tower legs, said footings each comprising a plurality of anchor bolts secured in said rock, a concrete pad formed around said bolts, a pair of short length channel members mounted on said pad and arranged at right angles with one flange parallel and in contact with said pad, and with their web portions extending vertically, one of said channel members being positioned with one end abutting the back of the web of the other channel member at a point intermediate the ends of said last named channel member so as to form a triangular recess to receive angle-shaped anchor-stubs, said channel mem-



bers being secured to said bolts and forming stiff members, and extensible angle-shaped anchor-stubs mounted in the recesses formed by said channel members and having their flanges secured to the vertical webs of said channel members.

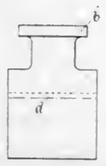
1,858,926. OIL TOOL DEVICE. HERBERT E. GRAU, Los Angeles, and ANDREW J. COLMERAUER, Redondo Beach, Calif. Filed Mar. 27, 1928. Serial No. 265,056. 2 Claims. (Cl. 255—75.)



1. In an oil tool device, an annular bit head, the bore of which is tapered adjacent an end thereof, a transverse slot in said bit head at the zone of said tapered bore, blades pivotally depending from said bit head at an end thereof and normally confined within said slot, a mandrel formed with a tapered end for reception within said tapered bore to contact with said blades and positively move the same outwardly from the slot.

1,858,927. METHOD OF MAKING VALVES. TOM FREDERICK GRAY and EDGAR ANDREW BOLTON, Adswood, Stockport, England, assignors to Victory Valves Limited, Adswood, Stockport, England, a British Company. Filed Dec. 31, 1930, Serial No. 505,902, and in Great Britain Jan. 4, 1930. 5 Claims. (Cl. 29—157.1.)

1. In the production of a parallel slide valve body, machining a hole through a solid forging from side to side where the valve throughway is to be, flame cutting said throughway working from said hole, machining a chamber

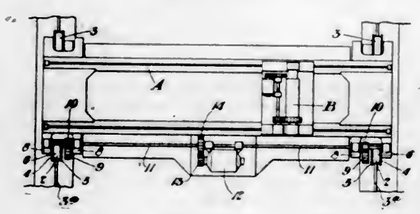


midway between the ends of said throughway, and flame cutting a hole from the cover flange of the valve into said chamber.

1,858,928. AZO DYESTUFFS DERIVED FROM AMINO-ETHERS OF HYDROXYDIARYLS. ERNEST F. GRETHER and GERALD H. COLEMAN, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 26, 1929. Serial No. 373,940. 15 Claims. (Cl. 260—95.)

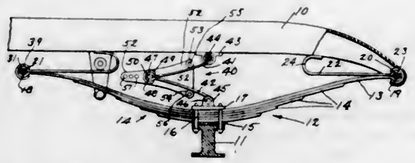
1. The method of making an azo dye which comprises coupling a diazotized amino-ether of diphenyl wherein the ether group is in the same benzene nucleus as the azo bridge, with an azo component capable of being coupled in alkaline solution with diazo-components to form direct-developed dyes.

1,858,929. TRACK WHEEL. ROBERT J. HARRY, Homestead, Pa. Filed June 12, 1930. Serial No. 460,721. 2 Claims. (Cl. 295—31.)



1. The combination with a traveling crane adapted to travel on a track composed of spaced substantially parallel rails, of track wheels arranged in pairs on said crane, at least one pair of said wheels being arranged to be positively driven at the same number of revolutions in a given time, said wheels each comprising a body portion having a flange on each side of the tread and having its tread in the form of the frustrum of a cone.

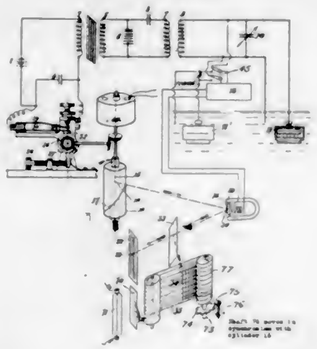
1,858,930. VEHICLE SUSPENSION. THOMAS A. HOOVER, Oakland, Calif., assignor of one-third to Augustus L. Hoover, Los Angeles, Calif., one-third to Isabel Bensberg, Los Gatos, Calif., and one-third to Elma Putnam, Oakland, Calif. Filed Aug. 7, 1929. Serial No. 384,141. 11 Claims. (Cl. 267.—46.)



1. A vehicle frame suspension comprising a semi-elliptical spring bundle mounted upon a vehicle axle, said bundle having an upper main leaf forming a spring eye

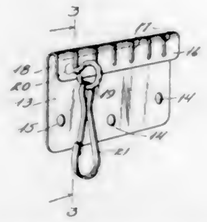
at its forward end and a spring eye at its rear end, the main leaf having auxiliary springs oscillatably joined with said main leaf, said auxiliary leaves extending toward the vertical medial plane of said spring and terminating in recurved loops upon which a vehicle frame rests, means pivotally connecting the forward spring eye with the vehicle frame, and means confining the recurved loop of the rear auxiliary spring in articulate relation with the vehicle frame.

1,858,931. METHOD AND APPARATUS FOR SOUNDING AND FOR LOCATING SUBMARINE OBSTACLES BY MEANS OF ULTRA-AUDIBLE WAVES. PAUL LANGEVIN and CHARLES LOUIS FLORISSON, Paris, France, assignors to Societe de Condensation et d'Applications Mecaniques, Paris, France, a Corporation of France. Filed Dec. 8, 1924, Serial No. 754,615, and in France Dec. 27, 1923. 2 Claims. (Cl. 177—386.)



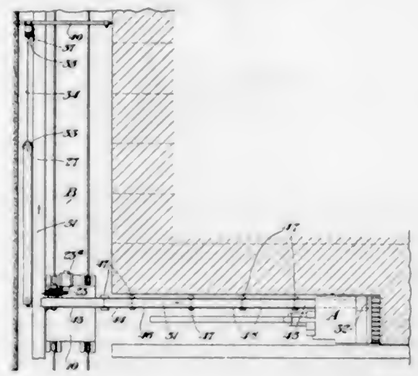
1. Apparatus for sounding and locating submarine obstacles, comprising means for the emission and reception of ultra-audible waves, a variable resonance circuit connected to said means, an oscillating circuit cooperating with said resonance circuit and adapted to produce in said resonance circuit a single set of damped oscillations, means for actuating the oscillating circuit, a circuit of reception permanently connected to the resonance circuit, means in said circuit arranged to detect the pulsations of current produced in said circuit at the time of the emission and at the time of the reception.

1,858,932. CHANNEL KEY PLATE. CHARLES LORBER, Louisville, Ky. Filed July 8, 1931. Serial No. 549,509. 2 Claims. (Cl. 150—40.)



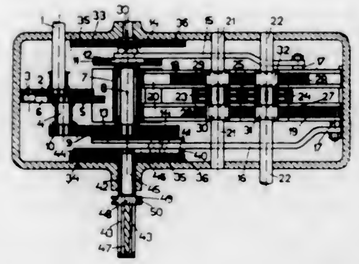
2. In a key case, a key plate formed of a metallic plate having a body adapted to be secured to the body of the case, said plate having its upper portion bent forwardly and downwardly to form a portion parallel to the upper part of the body, said forwardly and downwardly bent portion being provided with a series of spaced openings, the upper part of said body and said forwardly and downwardly bent portion forming an inverted U-shaped channel open at the bottom and positioned wholly in front of the body, and swivel eyes having a shank extending through the respective openings and movable therein, and provided with heads located in said channel and protected by the body from contact with the material of the case to which the plate is secured.

1,858,933. MINING MACHINERY. FREDERICK B. MILLER, Scottdale, Pa. Filed Sept. 13, 1929. Serial No. 392,450. 1 Claim. (Cl. 198—203.)



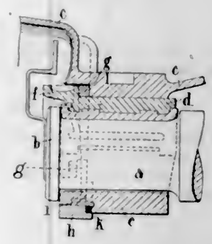
A conveyer mechanism comprising in combination a carriage, a tandem belt drive on said carriage, an idler pulley mounted in advance of said carriage for advancing and retracting movement relative to the material to be conveyed, a second idler pulley yieldably anchored at a point to the rear of and distant from said carriage and in substantially the same horizontal plane as said first mentioned idler pulley, said second named idler pulley being connected to one end of a cable, the other end of which is connected to a take-up drum, a torque motor for normally tending to operate said drum to pull said cable away from said first named idler pulley under constant tension thereby forming a yielding retractable anchor for said second named idler pulley, a single endless conveyer belt trained over said idler pulleys and said tandem belt drive, and telescopically arranged troughs extending between said carriage and the mounting for said first named idler pulley through which said conveyer belt travels.

1,858,934. TRANSMISSION GEAR. WERNER NEURATH, Vienna, Austria. Filed Sept. 10, 1930, Serial No. 481,004, and in Austria Oct. 1, 1929. 13 Claims. (Cl. 74—54.)



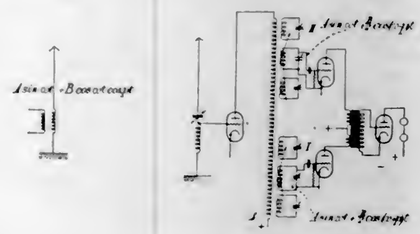
1. A gear with gradually and progressively changeable ratio comprising a rotary shaft S, a set of members adapted to reciprocate at displaced phases, a second shaft 22, a gear adapted to transform the rotary movement of the first shaft into reciprocating movements of the said members, a gear adapted to transform the reciprocating movements of the said members into a rotation of the second shaft, and means for imparting to the first shaft a regularly variable angular velocity so as to obtain an at least approximately uniform angular velocity of the said second shaft.

1,858,935. AXLE BEARING. WALTER PEYINGHAUS, Egge, near Volmarstein, Germany. Filed Feb. 11, 1931, Serial No. 515,094, and in Germany Feb. 14, 1930. 2 Claims. (Cl. 308—54.)



1. An axle bearing for railway vehicles, comprising means for top lubrication, a fixed journal collar, an axle box, a two-part bearing bush embraced by the axle box by more than 180° and capable of being turned through 180° into its operative position, a flange forming an oil catcher on the front end of the upper member of the two-part bearing bush, and a semi-annular key interposed between the said front flange and the axle box for eliminating the play between the bearing bush and the collar, caused by lateral wear, as and for the purpose set forth.

1,858,936. PROCESS AND APPARATUS FOR UNDISTURBED RADIOCOMMUNICATION. JÓZEF PLEBANSKI, Warsaw, Poland. Filed Dec. 29, 1927, Serial No. 243,434, and in Poland Jan. 7, 1927. 8 Claims. (Cl. 250—10.)

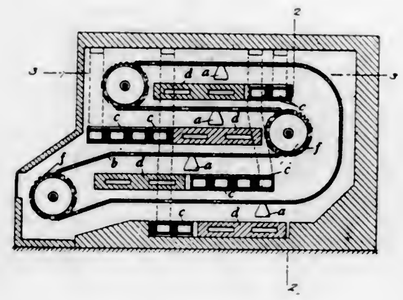


1. A method of radio-communication, comprising the phase-shifting of the two modulated side bands of one wave transmission, by addition, to the ordinary modulated wave represented by

$$e = A \sin \omega t + B \sin pt \sin \omega t.$$

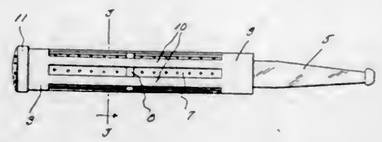
(where ω is 2π times the frequency of the carrier wave and p is 2π times the frequency of the modulating wave) of the non-modulated carrier wave phase-shifted through a definite phase angle, the resultant modulated wave having carrier and phase-shifted side bands, passing the phase-shifted side bands in the receiver through filters and detectors, and combining them together in a differential arrangement.

1,858,937. BAKING OVEN. JOHN EDWARD POINTON, Peterborough, England, assignor to Baker Perkins Company Incorporated, New York, N. Y. Filed Feb. 27, 1929, Serial No. 343,187, and in Great Britain Mar. 22, 1928. 2 Claims. (Cl. 101—57.)



1. A baking oven wherein the goods are carried on a continuous conveyor through the oven and pass between independent heating elements adapted to impart top and bottom heat to the goods, each element comprising a section formed of refractory material of great heat storage capacity and a section formed of material having less heat storage capacity, said sections enclosing a tortuous chamber enclosing a localized and concentrated heat source, whereby the bulk of the heat developed is communicated to the refractory material section of the element to afford a plurality of "solid heat" zones.

1,858,938. SMOKER'S APPLIANCE. WILLIAM J. RAFTEY, Ulster Park, N. Y. Filed Feb. 6, 1931. Serial No. 513,995. 1 Claim. (Cl. 131—51.)

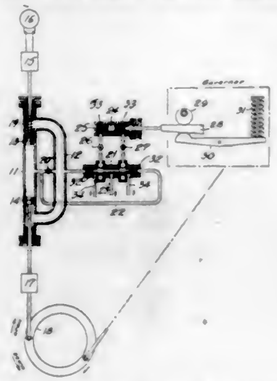


A smoker's appliance including in combination a casing for accommodating a cigarette projecting from one end of a cigarette holder, said casing comprising inner and outer concentric tubes of equal length, the inner tube being perforated and the outer tube being provided with a circular series of relatively spaced slots elongated longitudinally, said inner tube at one end thereof adapted to receive one end of the cigarette holder, a cap threadedly engaged with the outer tube remote from the first named end of the inner tube, and longitudinally spaced asbestos rings circumjacent the inner tube.

1,858,939. PROCESS OF AND APPARATUS FOR GOVERNING THE SPEED OF PRIME MOVERS. CHARLES R. REID, Shawinigan Falls, Quebec, Canada. Filed Jan. 9, 1929. Serial No. 331,165. 14 Claims. (Cl. 290—40.)

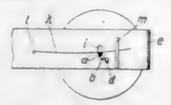
1. Means for governing the speed of prime movers having power supply regulating means which comprises, means responsive to load variations, a vessel adapted to contain an incompressible fluid, a pair of pistons positioned to confine fluid in said vessel, said pistons being operatively connected respectively to said sensitive means and to the power supply regulating means for movement thereby, and

fluid pressure operated means connected to said vessel to receive therefrom fluid expelled by relative movement of said pistons, said fluid pressure operated means being also



operatively connected with the motive fluid supply regulating means of the prime mover to adjust the same in accordance wtih load variations.

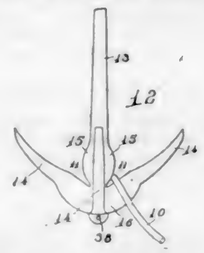
1,858,940. LOCKING DEVICE IN CHILDREN'S WHEELED TOYS. JOHANNES RICHTER, Brandenburg-on-the-Havel, Germany, assignor to the Firm Ernst Paul Lehmann Patentwerk, Brandenburg-on-the-Havel, Germany, a Company of Germany. Filed July 14, 1930, Serial No. 467,859, and in Germany Aug. 24, 1929. 1 Claim. (Cl. 46—48.)



In a spring driven wheeled toy having a frame, an axle journalled at one end in said frame, driving wheels for the toy on said axle, said frame having a vertical slot therein and a locking device comprising a crank on the axle adapted to engage the frame, the other end of the axle slidably engaging the slot in the frame so as to enable the axle to tilt from a position with the top unsupported by its driving wheels and the crank in engagement with the frame into a position with the toy supported by said wheels and the crank out of engagement with the frame, the combination with a weak blade spring fixed at one end to the frame and bearing against the axle so as to urge the axle into the position with the crank in engagement with the frame, of guiding means for the free end of the spring, on the frame, said spring being capable of yielding upon the toy being placed on a support with the driving wheels resting thereon so as to enable the axle to move the crank out of engagement with the frame.

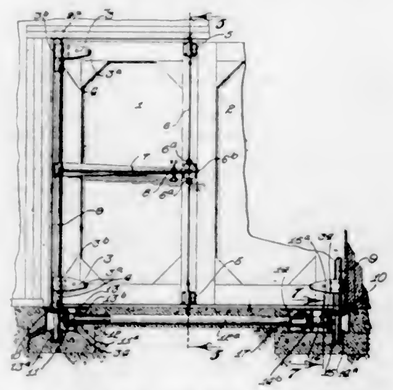
1,858,941. GRAPNEL. JAMES P. SALMON, Philadelphia, Pa. Filed Nov. 26, 1930. Serial No. 498,226. 7 Claims. (Cl. 294—66.)

1. A grapnel having a shank, means operable to drag and lift said shank, a fluke extending from the lower terminal portion of said shank at an acute angle with respect thereto and having a length and an angle of divergence with respect to said shank such as will tend to cause the free tip of the fluke to remain close to the surface being dragged, regardless of the angle between the median plane common to said shank and fluke and the surface over which the grapnel is being dragged; locking means at the juncture of said fluke and said shank to hold a recovered line against displacement with respect thereto, said fluke having a relatively long guiding edge between the tip thereof and said locking means for guiding and transferring the engaged line from the tip to said locking means, by means of the dragging of the grapnel, and for preventing the unhooking of the grapnel from the caught line due to any



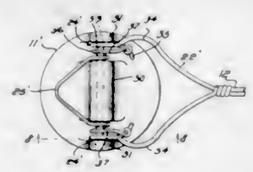
disturbances prior to its firm locking in said locking means; the juncture of said fluke and shank being thickened.

1,858,942. GARAGE DOOR OPENING AND CLOSING APPARATUS. ALEXANDER STROCHALEN, San Diego, Calif. Filed June 19, 1929. Serial No. 372,115. 7 Claims. (Cl. 268—35.)



1. In a device of the class described, a complementary pair of garage doors, a pair of vertically journalled shafts adjacent the normally hinged edges of said doors, hinges for said doors, one of said doors having hinges secured to the therewith adjacent shaft, said second door having hinges journalled on said second shaft, and movable relative thereto, bolt means on said second door for locking said doors in closed position, means on said second shaft for engaging said second door and initially withdrawing said bolts, and means for causing the simultaneous rotation of said shafts and swinging of said doors.

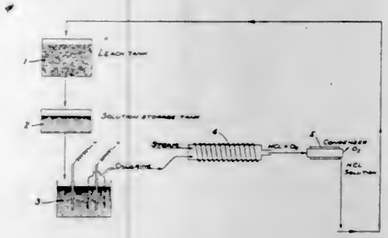
1,858,943. PAD MOUNTING. FRANK J. STUART, St. Louis, Mo. Filed July 13, 1929. Serial No. 378,117. 3 Claims. (Cl. 128—105.)



1. In a pad of the character described, a pad having a pin fixed thereon, a mounting pivoted on the pin, a V-

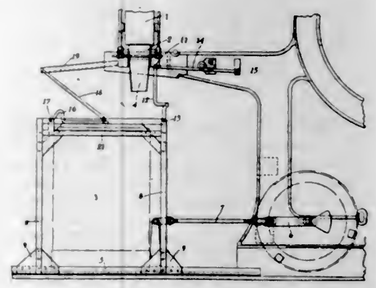
shaped wire tongue having helical springs formed medially of its sides and engaged revolubly on the pin, the opposite parts of the wire being extended beyond the springs, and connected with the mounting.

1,858,944. HYDROMETALLURGICAL TREATMENT OF ORES. URLYN C. TAINTON, Johannesburg, Transvaal, Union of South Africa. Filed Aug. 20, 1924. Serial No. 733,121. 3 Claims. (Cl. 204—15.)



1. A process for the recovery of metals from oxidized or roasted ores, which consists in leaching such material with a chloride solution to form a metallic chloride, electrolyzing the solution with an insoluble anode to precipitate the metal and set free the chlorine, causing such chlorine to react with a reagent capable of forming therewith oxygen and a chloride free of sulphate and carbonate, dissolving the thus formed chloride in water to form a leaching solution free of sulphate and carbonate, and leaching a fresh lot of ore with such solution.

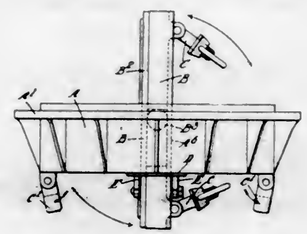
1,858,945. DEVICE FOR PACKING SLIVER INTO CANS. WERNER THIERFELDER, Leipzig, Germany, assignor to James Mackie and Sons, Limited, Belfast, Ireland, a Company of Great Britain. Filed May 28, 1931, Serial No. 540,785, and in Germany June 5, 1930. 18 Claims. (Cl. 19—159.)



1. A packing device for a moving sliver can, comprising a member supporting said can and moving with it, a packer mounted on said member and means for moving said packer into and out of the mouth of said can.

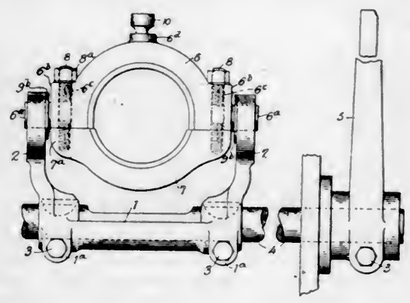
1,858,946. SHIP'S LIGHT. THOMAS UTLEY, Tuebrook, Liverpool, England. Filed May 10, 1930, Serial No. 451,367, and in Great Britain May 13, 1929. 11 Claims. (Cl. 114—178.)

1. A ship's light comprising a main frame having grooves or channels formed on its inner surface and provided with an internal flange having a rubber seating in one face, said flange being provided with openings adjacent the ends of said grooves or channels, a glass holder having trunnions fitted in said grooves or channels so as to be capable of sliding and angular movement therein, and closing plates provided with rubber pieces



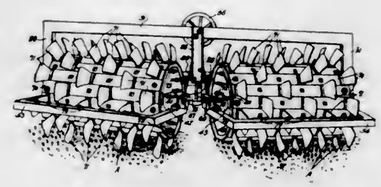
adapted to fit in the openings in the flange so that the rubber pieces form a continuation of the rubber seating in the flange.

1,858,947. CLUTCH COLLAR. ANDREW W. AITKEN, Springfield, Ohio, assignor to The Buffalo-Springfield Roller Co., Springfield, Ohio, a Corporation of Ohio. Filed Apr. 24, 1931. Serial No. 532,665. 11 Claims. (Cl. 192—98.)



1. A clutch collar comprising complementary sections, one of the sections having opposed trunnions extending therefrom; and all parts of the other section lying within a pitch circle of less diameter than the distance between the inner ends of the trunnions; and means for detachably attaching the sections together.

1,858,948. COMBINED GROUND WORKING AND PULVERIZING MACHINE. LEE BIRD, Rock Spring, Ga. Original application filed June 21, 1927, Serial No. 200,490. Divided and this application filed July 31, 1928. Serial No. 296,459. 12 Claims. (Cl. 55—11.)



2. A ground working implement having a frame, drums arranged in an end to end relation and carrying ground engaging devices, a single means for simultaneously angling the drums relative to the line of travel to predetermined positions, means for guiding one end of each drum

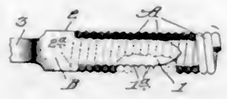
during the angling operation along arcuate paths and for holding the drum axes in their predetermined positions when passing over undulating ground the drums being so mounted that when placed in angled position, the drum axes will intersect at a point between the two drums.

1,858,949. REFRACTOMETER. ERNEST N. BROWN, Johnston City, Ill. Filed Feb. 20, 1928. Serial No. 255,768. 4 Claims. (Cl. 88—20.)



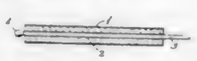
1. A refractometer including in combination a tube, a sleeve rotatably mounted therein, a lens carrier mounted in the sleeve for movement therewith, a bushing rotatably and slidably mounted in said tube, a lamp mounted in the bushing in axial alinement with said lens carrier, means operable from the exterior of the tube for simultaneously rotating said lens carrier and the bushing, other means independently of the first means for effecting an axial movement of the bushing relative to the lens carrier for varying the distance between the lens carrier and the lamp, and additional means for rotating the lamp and moving the latter axially of the bushing respectively.

1,858,950. CURTAIN ROD. GUSTAF A. CARLSON, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 10, 1931. Serial No. 556,287. 4 Claims. (Cl. 156—19.)



3. In a device of the character set forth: a coil-spring rod; and a connector having a threaded shank engaging convolutions of said coil-spring and having also a resilient substantially closed hook portion.

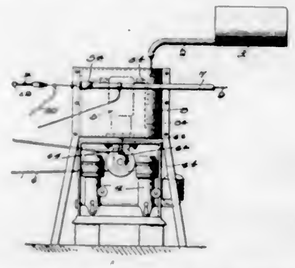
1,858,951. CIGARETTE AND SIMILAR ARTICLE. WALTER GEORGE CHARLEY, Punta San Juan, Cuba. Filed June 11, 1930, Serial No. 460,524, and in Cuba Mar. 29, 1930. 5 Claims. (Cl. 131—52.)



1. In cigarettes and similar articles, the arrangement of a longitudinal axial chute through the body of the cigarette outletting on the ends thereof; a thin pipe inserted through said chute, and a stem of any suitable material inserted through the thin tube, one of the ends of the stem protruding from the forward end of the article, slightly spaced therefrom, and being made of a friction-inflammable material, and its opposite end protruding from the rear end of the cigarette.

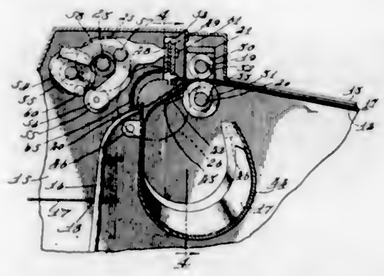
1,858,952. METHOD AND APPARATUS FOR SEALING CREVICES IN ROCK FORMATIONS OR THE LIKE. GEORGE W. CHRISTIANS, Chattanooga, Tenn. Filed Aug. 7, 1926. Serial No. 127,896. 9 Claims. (Cl. 61—36.)

1. The method of sealing a crevice in rock formation or the like, which consists in extending a hole to the place where the crevice occurs, placing a conduit having a perforated wall in said hole, closing the perforations in the conduit with puncturable material before placing the conduit in the hole, forcing a thermo-plastic substance through said conduit and exerting sufficient pressure on



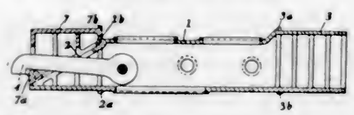
the same to cause it to puncture said material and exit through the perforations and into said crevice, directly heating the interior of said conduit, and utilizing the heat for maintaining the thermo-plastic substance in fluid and heated condition during its travel through said conduit and into said crevice.

1,858,953. AUTOGRAPHIC REGISTER. ALLEN B. COOKE, Chicago, Ill., assignor to United Autographic Register Company, Chicago, Ill., a Corporation of Illinois. Original application filed Sept. 14, 1926, Serial No. 135,451. Divided and this application filed Sept. 25, 1929. Serial No. 395,071. 9 Claims. (Cl. 164—49.)



1. In a register of the character set forth, a casing provided with a platen, strip-feeding means adapted to feed strips across and project them beyond said platen, a stationary lower cutter bar positioned beyond said platen over which the upper strip, or strips, may be fed, means for deflecting the remaining strips away from said cutter bar, a cutter blade and an associated clamping member disposed above and coacting with said stationary cutter bar, and means for operating said blade and clamping member.

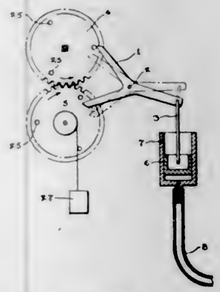
1,858,954. ROOF SUPPORT FOR USE IN MINES. FRANK COOKSON, Newcastle-on-Tyne, England. Filed Nov. 1, 1930, Serial No. 492,785, and in Great Britain Nov. 23, 1929. 9 Claims. (Cl. 248—30.)



1. A horizontal chock-piece for use in chock structures for supporting the roofs of mines, comprising at its ends load carrying portions adapted to support the ends of

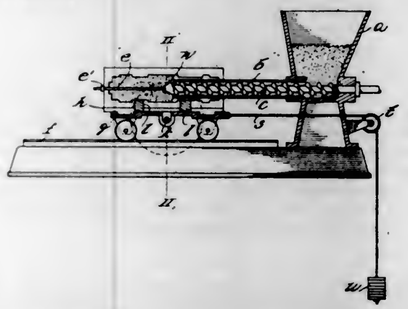
other chock pieces, at least one of said load carrying portions comprising two wedge-shaped members having substantially the same wedge angles, said members being oppositely arranged one on the other, and quickly releasable catch means for normally holding the said members together.

1,858,955. PNEUMATIC CLOCK SYSTEM. MARTIN FISCHER, Zurich, Switzerland. Filed Mar. 19, 1927, Serial No. 176,692, and in Switzerland Mar. 21, 1926. 2 Claims. (Cl. 58—42.)



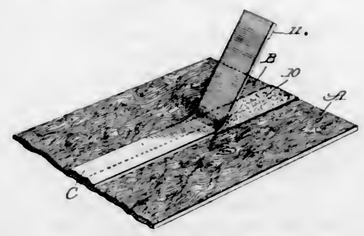
1. A pneumatic clock system including a main clock comprising a cylinder; a piston in said cylinder; a three-armed lever having one arm pivotally connected with said piston; two intermeshing toothed wheels forming a part of the clockwork; and a series of pins arranged on each wheel to alternately engage the second and third arms of the lever to cause a pressure and partial vacuum in the cylinder by the piston.

1,858,956. MOLDING MACHINE. HEINRICH HEPPERLE, Mulheim, Ruhr, Germany. Filed Sept. 25, 1928, Serial No. 308,192, and in Germany Nov. 5, 1925. 5 Claims. (Cl. 25—14.)



1. In a molding machine of the character described, the combination of a feed tube, a hopper communicating with one end of said tube for the introduction of the molding material therefrom thereinto, a movable carriage, a mold mounted on the carriage and telescopically engaging the discharge end of the tube, a feed screw arranged coaxially within and extending at one end beyond the discharge end of the tube, said end of the feed screw being provided with a wedge-shaped head disposed within the mold chamber and presenting inclined surfaces operating to feed the material longitudinally of the mold and also laterally thereof, said feed screw being hollow throughout, a hollow core rod provided with lateral apertures spaced throughout its length, said rod extending through the feed screw and having one end fixed to the mold end, and means for opposing a yielding resistance to the movement of the carriage and the mold under the pressure of the material fed into the mold by the feed screw.

1,858,957. VENEER PANEL AND METHOD OF FORMING. FERDINAND W. HUMPHNER, Oak Park, Ill., assignor to Mid-States Gummed Paper Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 10, 1931. Serial No. 568,158. 5 Claims. (Cl. 144—309.)



1. A veneer panel comprising at least two sheets of veneer united edgewise by a strip of split paper overlapping and bonded to adjacent edges of the sheets.

1,858,958. ORGANIC SELENO COMPOUND. MORRIS S. KHARASCH, College Park, Md. Filed Aug. 14, 1926. Serial No. 129,291. 18 Claims. (Cl. 260—13.)

6. A water soluble salt of a compound of the following general formula

$$R—M(—Se—R_{Ac})n$$

in which R is any organic radical group, R_{Ac} is an organic radical containing an acid group, M is a metal of a group forming compounds stable toward water with the metal bonded to a carbon atom of an organic group and having valence greater than 1, and n is an integer greater than 0 and at least 1 less than the valence of the metal, the metal and the selenium in the compound being bonded to the carbon atoms of the groups R and R_{Ac} respectively.

1,858,959. WEFT PILE CARPET. LEONHARD KOCH, Oelsnitz in Vogtland, Germany. Filed Oct. 7, 1930, Serial No. 486,890, and in Germany Oct. 30, 1929. 3 Claims. (Cl. 139—393.)

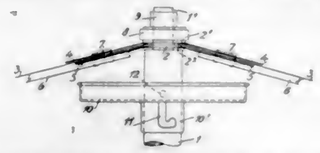


1. A weft pile carpet fabric comprising stock wefts cut from chenille made from pile wefts, sets of stuffing warps, a crossed warp twined from side to side of each set of stuffing warps with a pile weft inserted at every twist, and binder threads uniting the pile wefts between the sets of stuffing warps, stiffening wefts alternating with the stock wefts, and ground warps interwoven with the stock wefts and stiffenings wefts, said stock wefts being assembled so that the tufts of one stock weft which are bent in one direction fit between the tufts in the next stock weft which are bent in the opposite direction.

1,858,960. PARASOL OR UMBRELLA. PAUL KRÜGER, Berlin, Germany. Filed July 14, 1931, Serial No. 550,791, and in Germany July 18, 1930. 1 Claim. (Cl. 135—20.)

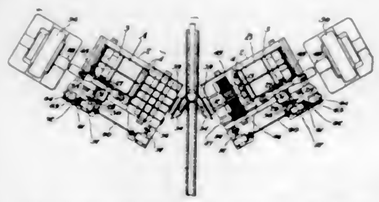
A parasol or umbrella, comprising, in combination with the stick and the covering and with flexible means for attaching the center portion of the covering to the stick; an abutment member located upon the stick above said means; spokes connected with said covering and terminat-

ing at their inner ends beyond the periphery of said abutment member; and movable means located upon the said stick below the said covering and adapted to be shifted



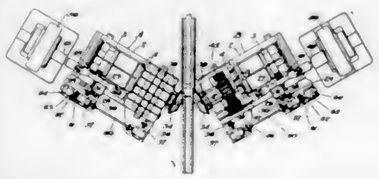
along the stick towards the covering so as to lift it and to draw its center portion over the circumference of said abutment member, substantially as set forth.

1,858,961. TUBE EXPANDING MACHINE. JAMES V. MAZURIE and OLOF F. OLSON, Gary, Ind., assignors to National Tube Company, a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,537. 7 Claims. (Cl. 80—13.)



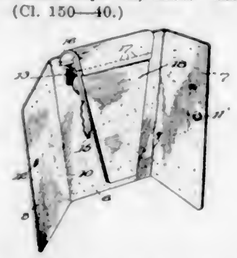
3. In an expanding mill for expanding seamless tubes, a housing, a roll-shaft, journal bearings for said shaft, said bearings being mounted for sliding movement relative to said housing in a direction parallel with the longitudinal axis of said shaft and being held against vertical and transverse movement relative to said housing, and being fixed against longitudinal movement relative to said roll-shaft, a thrust bearing engaging the rear end of said shaft, a screw threaded plunger engaging the rear face of said thrust bearing, a worm-wheel journaled in said housing and having its hub bored and internally threaded to serve as a nut on said screw threaded plunger, and motor operated means for rotating said worm-wheel to move said plunger in against or away from said thrust bearing to thus force said thrust bearing, said shaft and said journal bearings to move outwardly bodily relative to said housing or to free said shaft and said bearings for inward movement bodily relative to said housing.

1,858,962. TUBE EXPANDING MILL. JAMES V. MAZURIE and OLOF F. OLSON, Gary, Ind., assignors to National Tube Company, a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,538. 8 Claims. (Cl. 80—13.)



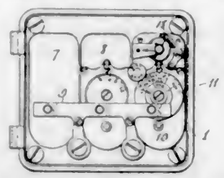
5. In an expanding mill for expanding seamless tubes the combination of a base, a housing on said base, a roll-shaft journaled in said housing and held against vertical movement relative to said housing, guide slots in said base, a pair of wedge blocks slidably mounted in each of said slots, wear-plates on said housing and slidably engaged by said wedge blocks, said wear-plates being inclined opposite to said wedge blocks, a nut in each of said wedge blocks, a screw shaft having a threaded engagement with the nuts in each pair of wedge blocks, and power means for simultaneously rotating said screw-shafts to thereby shift said wedge blocks and move said housing and roll-shaft vertically.

1,858,963. KEY CASE. CHARLES J. MENSMAN, Washington, D. C. Filed Sept. 18, 1930. Serial No. 482,864. 6 Claims. (Cl. 150—40.)



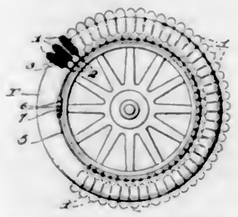
2. A device of the character described including a flexible key case having an open edge, means for pivotally supporting keys adjacent said edge so they may be swung out when the case is opened, a flexible cover flap for said open edge connected to the case at said edge, and an elongated relatively stiff member connected to the flap and extending substantially the length of the case.

1,858,964. TIME LOCK MECHANISM. CHARLES A. MILLER, Stamford, Conn., assignor to The Vale & Towne Manufacturing Company, Stamford, Conn. Filed June 23, 1927. Serial No. 200,930. 38 Claims. (Cl. 70—26.)



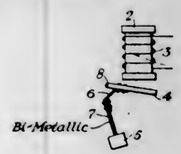
1. In a time lock assembly, a safe bolt and a detent positioned to prevent the full withdrawal of the same, a time movement adapted to move the detent from said position after a relatively long interval of time, and an emergency mechanism normally inoperative and adapted to move the detent from said position after a relatively short interval of time, and means actuated by said bolt for rendering said mechanism operative.

1,858,965. COVERING FOR MOTORCAR TIRES. TOKIJIRO NAOAMINE, Tokiirimachi, Uyeda, Japan. Filed Jan. 7, 1930, Serial No. 419,168, and in Japan May 29, 1929. 1 Claim. (Cl. 152—16.)



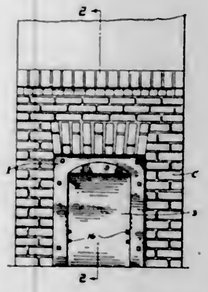
An armor for pneumatic tires, comprising a plurality of coiled springs arranged radially of the tire and side by side and covering the circumference of the tire, said springs being independent of one another and each being provided with a restraining wire extending therethrough from end to end, and provided with attaching devices at its ends and retaining rings on opposite sides of the tire and to which the said springs are connected by said attaching devices, the wire of the convolutions of the central portion of each spring, which bear on the tread portion of the tire being cross sectionally cylindrical and the wire of the end convolutions of each said spring which recede from said central convolutions being rectangular in cross section and presenting flat, relatively broad outer and inner surfaces to bear respectively on the road and against the tire.

1,858,966. ELECTRICAL RELAY. BERNARD E. O'HAGAN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1930. Serial No. 500,296. 2 Claims. (Cl. 175—336.)



1. A relay comprising an operating winding having a positive temperature resistance coefficient, a pivoted armature, a weight attached to said armature, and a bi-metallic strip interposed between said armature and said weight to decrease the torque due to said weight in response to increase of temperature.

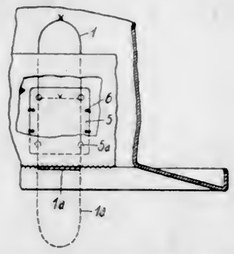
1,858,967. FIREPLACE FIXTURE. EARNEST SAMUEL PETTIEGREW, Gadsden, Ala. Filed Aug. 5, 1929. Serial No. 383,535. 1 Claim. (Cl. 126—120.)



A unitary fireplace fixture comprising a metal front, and two sides and a back of fireclay, the sides having their rear edges curved forwardly towards the top and the back curved to conform with the curves of said back side edges to seat on the same and means for removably securing said parts together consisting of angle irons having a lug on one arm in a plane parallel with that of the other arm, said latter arm adapted to engage the back, and a bolt adapted to pass through the metal front and engage said lug, whereby said parts can be secured or released from a position in front of the fireplace.

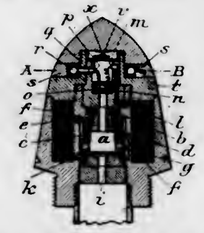
1,858,968. MEANS FOR HANGING UP HATS. WALTER PIOCH, Dresden, Germany. Filed June 30, 1931, Serial No. 547,967, and in Germany July 8, 1930. 4 Claims. (Cl. 2—188.)

1. The combination with a hat including a body and a sweat band, of suspension means including a plate of stiff material secured between the sweat band and body and provided with spaced cord guiding means, and an endless strand having sides held between the sweat band and



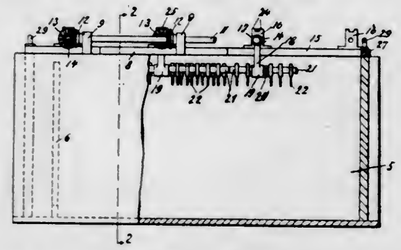
body and guided by said guiding means, said strand having a loop portion projecting downwardly from beneath the sweat band.

1,858,969. ELECTRIC FUSE FOR PROJECTILES. HERBERT RÜHLEMANN, Sommerda, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorff, Germany. Original application filed June 22, 1927, Serial No. 200,683, and in Germany June 26, 1926. Divided and this application filed Mar. 3, 1930. Serial No. 432,865. 1 Claim. (Cl. 102—38.)



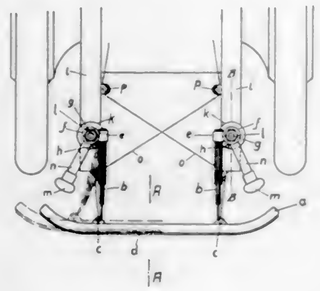
An electric impact-fuse for projectiles comprising a source of current, a condenser for storing current furnished by said source of current and an electric igniting means and a contact adapted to be closed on impact, said igniting means and said contact being connected in series with the discharge circuit of said condenser.

1,858,970. TENTERING FRAME FOR THE WET TREATMENT OF FABRICS. EMIL SCHAEFER, Goldach, Switzerland. Filed July 28, 1930, Serial No. 471,377, and in Germany Aug. 3, 1929. 5 Claims. (Cl. 8—16.)



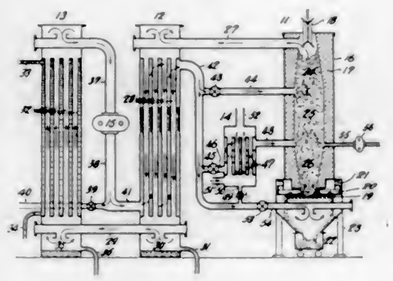
1. A tentering frame for the wet-treatment of webs of fabrics, comprising in combination, two oppositely arranged bars, pin carriers displaceably arranged on said bars and adapted to receive the web of fabric placed in zig-zag fashion from the carriers on one bar to the carriers of the other bar, screw threaded bushings to which said bars are connected, and screw threaded spindles cooperating with said bushings for altering the distance of said bars from each other.

1,858,971. SHOCK ABSORBING DEVICE FOR MOTOR CARS. XAVER SEITZ, Constance, Germany. Filed July 17, 1929, Serial No. 378,096, and in Germany July 25, 1928. 4 Claims. (Cl. 180—83.)



1. In a shock absorbing device for motor cars, a bumper bar, springs yieldably supporting said bar for movement of said bar laterally of the car, and means to attach the springs to front wheel springs of said car.

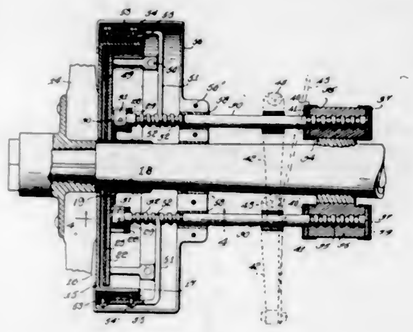
1,858,972. PROCESS FOR EVAPORATIVE CARBONIZATION OF ORGANIC MATERIALS. FREDERICK T. SNYDER, New Canaan, Conn. Filed June 8, 1925. Serial No. 35,802. 23 Claims. (Cl. 202—7.)



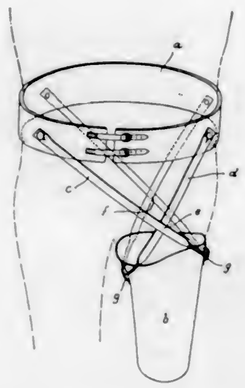
1. A method of obtaining hydrocarbons from solid carbonizable material which will yield hydrocarbons on the distillation, which method comprises treating the material in successive stages of preheating, distilling and quenching the material treated with a circulation of heated permanent non-oxidizing gas being substantially entirely a distillation product previously derived from the material, the amount of circulating gas passed in contact with the material decreasing from the preheating stage to the quenching stage and the temperature of the gas in contact with material in the distilling stage being sufficiently high to effect distillation of the material.

1,858,973. VEHICLE BRAKE. JOHN G. STEELE, Latrobe, Pa. Filed Feb. 24, 1928. Serial No. 256,688. 14 Claims. (Cl. 188—70.)

5. In a brake construction, a rotatable brake drum including a disk portion and a cylindrical flange, a brake member movable parallel to the axis of said drum and adapted to engage the disk portion thereof, a second brake member movable at an angle to the axis of said drum and adapted to engage the cylindrical flange thereof, a rock shaft mounted parallel to the axis of said drum and connected at one end to said first named brake member, means for effecting longitudinal movement of said shaft as it is rocked about its axis, and means connected between said shaft and the other brake member to actuate the latter upon longitudinal movement of said shaft.

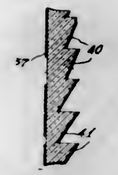


1,858,974. ATTACHMENT FOR ARTIFICIAL LEGS. JAMES ARTHUR SWAIN, London, England. Filed Aug. 13, 1931, Serial No. 556,872, and in Great Britain Sept. 4, 1930. 2 Claims. (Cl. 3—11.)



1. An attachment by means of which an artificial leg can be supported from the body of the user, such attachment comprising a belt to which two straps connected to the limb are secured each in two places, the two straps being so arranged that they cross each other at the front and rear of the body of the wearer, beneath the belt at a point approximately at the axis of the hip joint, this arrangement providing unrestricted movement of the hip joint and securing the artificial limb to the body to a corresponding degree in any movement of the body.

1,858,975. ADVERTISING SIGN. PERCIVAL LEO TA'BOIS, London, England, assignor of seven-twentieths to Walter Sefton, London, England. Filed May 11, 1928, Serial No. 276,844, and in Great Britain June 20, 1927. 4 Claims. (Cl. 40—130.)



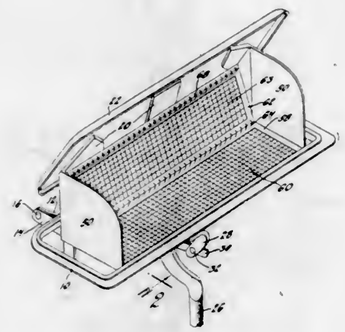
2. For use as a reflecting display sign, a sheet of glass whereof one face is plain, display matter in front of said plain surface, the rear surface being corrugated and having a silvered coating forming a row of reflecting strips extending across and behind said sheet and being inclined to the display front in the same general direction forming surfaces which intercept the incident light reflecting it all through the front of the sign thereby preventing shadow effects, the said row being parallel to the sheet front in its general direction.

1,858,976. DIKE. JOSEPH H. THORNLEY, Evanston, Ill. Filed June 2, 1930. Serial No. 458,996. 9 Claims. (Cl. 61—3.)

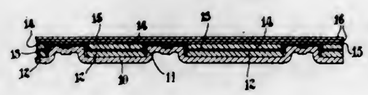
9. A dike for creating a sedimentary control bar in a river including a plurality of A-shaped frame structures spaced laterally from each other along the line of the dike by such intervals as to develop substantially the full strength of the anchorages of each frame structure, each frame structure comprising front and rear piles having their major portions extending into the soil below the river, said front pile being inclined downstream to react in tension and having means projecting laterally from the lower portion thereof establishing a tension resisting anchorage of said front pile in the river bed, said rear pile being inclined upstream to react in compression and having a bearing value as great as or greater than the anchorage value of said front pile, means rigidly joining the upper portions of said front and rear piles together, and connecting means extending transversely between said frame structures to intercept débris in the stream.

1,858,977. COWL VENTILATOR. ALFRED ZECH, Detroit, Mich., assignor to Industrial Wire Cloth Company, Wayne, Mich., a Corporation of Michigan. Filed Nov. 17, 1930. Serial No. 496,134. 2 Claims. (Cl. 98—2.)

1. In a cowl ventilator having a stationary rim, a movable back plate disposed within said rim with its plane transverse to the plane of the rim, a cover secured to the upper edge of the plate, and a flexible screen having its forward edge secured to the forward edge of the rim and having its upper edge secured to the back plate adjacent the upper edge of the latter, the screen including a plurality of wire mesh frames movably secured to one another and to the ventilator parts aforementioned.



1,858,978. MOLD AND PROCESS FOR THE PRODUCTION OF PRINTING PLATES FROM RUBBER. ROBERT DAVOS BAIN and JAMES NELSON, London, England, assignors to Lamson Paragon Supply Company Limited, London, England. Filed Dec. 11, 1928, Serial No. 325,387, and in Great Britain May 18, 1928. 6 Claims. (Cl. 18—44.)



2. The process of manufacturing a rubber printing plate which comprises placing moistened flong on the type to be reproduced, beating said flong, providing the beaten flong while on the type with a stout backing, drying said flong, removing said backed flong from the type, treating the surface thereof with a solution of cellulose nitrate, placing a semi-cured sheet of rubber on said flong, and subjecting said rubber to vulcanization.

1,858,979. PUMP. FRANK S. BARKS, St. Louis, Mo. Filed July 5, 1928. Serial No. 290,379. 8 Claims. (Cl. 103—218.)

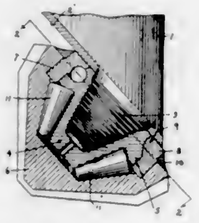
4. A pump comprising a pump cylinder and piston in the cylinder, a hollow piston rod for driving said piston, means for sucking charges from the container into the cylinder and discharging them through said piston rod upon reciprocation thereof, means for reciprocating the piston rod comprising a reciprocating air engine having a piston rod and a piston, means for fastening said engine to said pumping elements, the piston rod thereof abutting a portion of said hollow pump piston rod, whereby simultaneous reciprocation of the engine piston rod and the pump piston rod may be effected but whereby the latter is independently rotatable of the former, a full-stroke valve mechanism for the engine so connected and driven by the

engine as to require non-rotation of said engine piston and piston rod, said valve mechanism causing intermittent application of air behind one side of the engine piston



only and intermittent release thereof and a return spring associated with the pump for returning all the reciprocating parts to their initial positions.

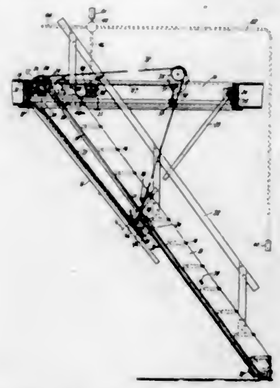
1,858,980. ROLLER BIT. GUY E. BEHNKE, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Aug. 1, 1931. Serial No. 554,444. 7 Claims. (Cl. 255—71.)



1. A drill having a head; a frusto-conical, externally threaded spindle carried by said head; a frusto-conical, internally threaded bushing on said spindle, said bushing having adjacent its base portion an external annular flange; a frusto-conical cutter on said bushing; bearing rollers between said bushing and cutter and supported by said flange; and a ring threaded in said cutter and engaging said flange to hold said cutter on said bushing; said cutter, ring and bushing having openings for a tool to permit said bushing to be removed from said spindle.

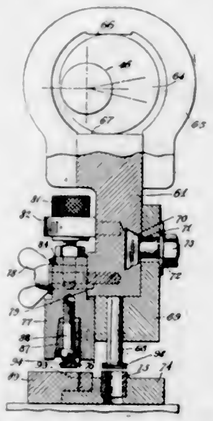
1,858,981. DISAPPEARING STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,611. 9 Claims. (Cl. 228—50.)

1. A disappearing stairway of the ceiling panel type comprising, in combination, a panel hinged at one end of the ceiling opening, a stair structure carried by the panel and extensible and retractible thereon to reach the lower floor, links pivoted at their upper ends on each side of the opening, tracks along the side edges of the panels on which the lower ends of said links run, said tracks permitting movement of the links beyond dead center positions perpendicular to the panel, means on the stair structure for engaging the links as the stair structure is extended to move the links beyond said dead center position, means on the stair structure for engaging the links to move them back of their dead center



position as the stair structure is retracted, and means for lowering and raising the panel and extending and retracting the stair structure.

1,858,982. PRINTING PRESS PUNCHING ATTACHMENT. CARL W. BRENN, Montclair, N. J., assignor to Autographic Register Company, Hoboken, N. J. Filed Oct. 9, 1926. Serial No. 140,434. 9 Claims. (Cl. 164—98.)



1. A punching device adapted to be mounted on a printing press frame, comprising a gang of punching units, a movable head in which said punching units are mounted, said punching units being adjustable transversely of the printing press frame relative to each other and to the head to accommodate different kinds of work, a frame in which said head is mounted for movement, and means for adjusting said frame and head transversely of the printing press frame to effect a transverse adjustment of the gang of punching unit en bloc.

1,858,983. WINDOW FRAME AND SASH. HARRY E. CAMPBELL, Baltimore, Md., assignor to Campbell Metal Window Corporation, Baltimore, Md., a Corporation of Maryland. Filed Dec. 18, 1930. Serial No. 503,167. 9 Claims. (Cl. 189—78.)

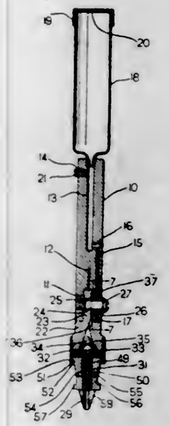
1. In combination, a casement window frame having the usual L-shaped recess and a sash frame having the usual plate adapted to contact with such frame on the

outer face thereof, a glass rabbet formed on the sash adapted to receive glass from the inside, yieldable members on the inside of the sash and united therewith forming glass stop channels with restricted openings, and adapted substantially to contact with the inner leg



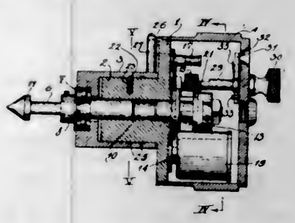
of the frame when the window is closed, and glass stops having projections adapted to be snapped into said channels so that when the window is closed said glass stops will be held in place by said yieldable members and said yieldable members will be reinforced by said frame.

1,858,984. STRIPING INSTRUMENT. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 24, 1928. Serial No. 272,384. 22 Claims. (Cl. 91—62.6.)



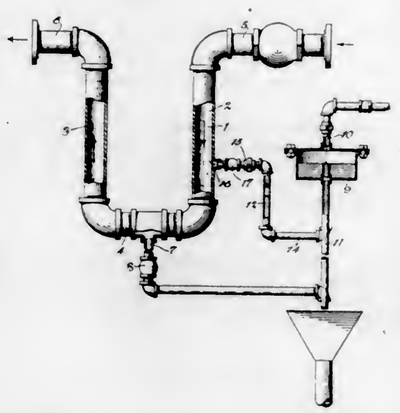
1. A striping instrument comprising a body, a plump therein, a nozzle and a rotatable means on and extending laterally from the nozzle for actuating the pump to eject fluid from the nozzle at a rate commensurate with the rate of movement of the instrument.

1,858,985. STROBOSCOPIC APPARATUS AND METHOD. PETER DAVEY, New York, N. Y., assignor to Vibroscope Inc., New York, N. Y., a Corporation of New York. Filed Jan. 26, 1926. Serial No. 83,984. 14 Claims. (Cl. 88—14.)



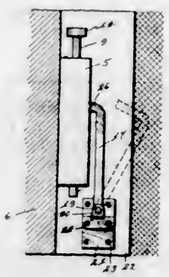
2. In stroboscopic apparatus, a flash-illuminator, a shaft, a center point on the end of said shaft through which the shaft can be driven, and means mounted directly on the said shaft to open and close a circuit and thereby controlling the lighting of said illuminator.

1,858,986. AUTOMATIC CUT-OFF FOR GAS BURNERS. ARCHIBALD H. DAVIS, Jr., Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 18, 1928. Serial No. 300,587. 1 Claim. (Cl. 137—153.)



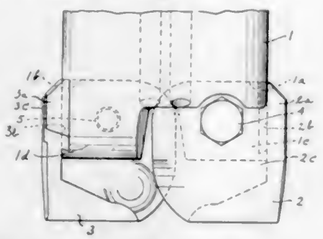
In an apparatus of the character described, the combination comprising a gas conduit having a U-shaped portion, a manometer having one end communicating with one leg of the U at a point substantially above the base of the U, a reservoir in communication with the other end of the manometer, and an overflow pipe to maintain a constant level of liquid in said reservoir.

1,858,987. LOCKING DEVICE FOR WINDOW SCREENS. JOSEPH T. DAWICKI, Jr., Jersey City, N. J. Filed July 6, 1931. Serial No. 548,924. 4 Claims. (Cl. 292—207.)



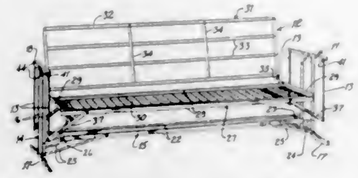
1. A latching device of the character described comprising a slidably mounted keeper, expansion means for moving said keeper to a locking position, means for moving said keeper to a non-locking position, releasable means for holding said keeper in a non-locking position, and a latch arm having a bifurcated end movable into alinement with said keeper, the movement of said latch arm actuating said releasable means to release said keeper, whereby the keeper is moved into locking engagement with the bifurcation in the end of the latch arm by said expansion means.

1,858,988. DRILL BIT. OSWALD DUDA, South Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Apr. 23, 1928. Serial No. 272,080. 6 Claims. (Cl. 255—61.)



1. A drill blade having an outer side portion extending at substantially a right angle to its body portion, said side portion having spaced, longitudinally extending cutting teeth, and an internal longitudinal groove for the reception of the side of a bit head.

1,858,989. GLIDER. PHILIP E. G. ERICSON, St. Charles, Ill., assignor to The W. H. Howell Company, Geneva, Ill., a Corporation of Illinois. Filed Dec. 8, 1930. Serial No. 500,850. 3 Claims. (Cl. 5—124.)



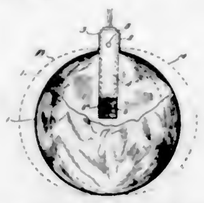
1. A glider comprising a stand having a horizontal cross frame and a seat frame of substantially equal length, said seat frame having movably mounted end extensions, movable end extension members carried by said cross frame and vertically supporting end frame members spaced from said cross frame and seat frame, and suspension members pivotally connecting the end extensions of the seat frame to said end frame members, whereby in set up position the seat frame is suspended by its end extensions and spaced from the end frames and in knocked down position the end extensions and end frames are movable to form a structure of a length substantially that of the seat frame.

1,858,990. METHOD OF AND MEANS FOR ROLLING SEAMLESS TUBING. PEHR A. FOREN, Milwaukee, Wis., assignor to Globe Steel Tubes Co., Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 16, 1928. Serial No. 270,290. 18 Claims. (Cl. 80—62.)



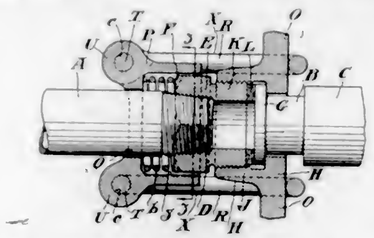
1. The improved method of forming seamless tubing which comprises inserting a bar into a tubular blank, passing the blank and bar between two successive pairs of rolls respectively disposed in planes normal to each other, passing the blank and bar between two other successive pairs of rolls respectively disposed in planes normal to each other and at angles of substantially forty-five degrees with respect to the planes of said first pairs of rolls, and reshaping the blank after it passes said last named pairs of rolls to free the same from the bar.

1,858,991. DECORATIVE BALLOON. CARL A. FROST, Chicago, Ill. Filed Jan. 24, 1930. Serial No. 423,128. 3 Claims. (Cl. 240—10.)



1. In a decorative light the combination of a translucent inflatable balloon, a translucent member inserted into the interior of the balloon and having a decorated portion, and illuminating means inserted into said member within said decorated portion, whereby the transmitted light from the illuminating means will reproduce the decoration on the balloon, said balloon being supported so that the swaying of the latter relative to the illuminant will cause movements and changes of the decoration on the balloon.

1,858,992. HOSE COUPLING. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 9, 1930. Serial No. 442,840. 6 Claims. (Cl. 285—172.)



1. A coupling comprising a pair of threadedly connected members, a spring seated with one end against one member, means arranged coaxially with the members and serving as a seat for the other end of the spring, said means being slidably interlocked with one member, and means on the first said means engaging the other member for preventing unscrewing of the members.

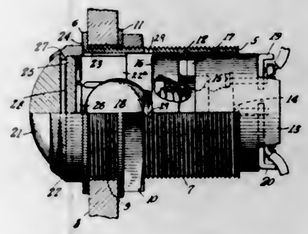
1,858,993. PROCESS FOR PRODUCING CELLULOSE ESTERS. GEORGES HEBERLEIN and ALBERT BODMER, Wattwil, Switzerland, assignors to Heberlein & Co., A. G., Wattwil, Switzerland, a Corporation of Switzerland. Filed Aug. 25, 1928, Serial No. 302,138, and in Germany Sept. 30, 1927. 10 Claims. (Cl. 260—101.)

1. Process of producing cellulose esters which comprises producing a swelling action in the cellulose without substantial production of hydrocellulose, and while it is in the swollen condition and not alkaline in reaction treating said cellulose with a reagent to esterify it.

1,858,994. SIGNAL LAMP. HAROLD R. KIRKLAND, New York, N. Y. Filed Aug. 20, 1930. Serial No. 476,471. 1 Claim. (Cl. 177—329.)

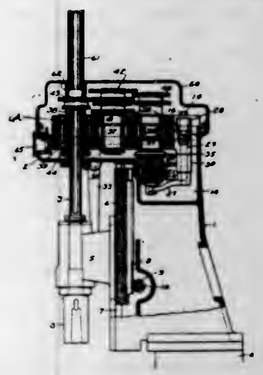
A lamp for annunciators, signal purposes and the like, comprising in combination, a generally cylindrical sleeve of a length sufficient to form a lamp housing and a holder for a lamp socket, said sleeve being externally screw-threaded and having an external flange at the front end of the same for engagement with a supporting panel, said sleeve being open at the opposite ends and having within the same an internal shoulder positioned a definite lamp-

spacing distance back from the open front end of the sleeve, a two-part lamp socket consisting of companion parts of a size to fit into the open front and back ends of the sleeve and to enter into stopped relation with the opposite sides of the internal shoulder in the sleeve and whereby said socket is so positioned as to definitely locate a lamp with respect to the front end of the sleeve, socket terminals on the back of the rear piece of said two-part socket and positioned by said internal shoulder in definite relation to the rear end of the sleeve, interlocking portions on said companion parts of the lamp socket and whereby the lamp socket thus definitely positioned is secured within the sleeve in the proper relation to receive a lamp entered through the open front end of the sleeve



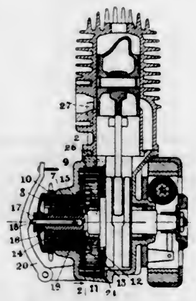
and with the socket terminals exposed in the desired relation for wiring at the back of the sleeve, a readily removable lamp cover closing the front of the sleeve and in stopped relation with respect to the front end of the sleeve and thereby positioned in definitely spaced relation to a lamp in the socket which is definitely positioned back of the front end of the sleeve and a nut on the externally screw-threaded portion of the sleeve adapted for clamping engagement with the back of the panel in which the sleeve is mounted and whereby upon the backing off of this nut the sleeve may be removed through the front of the panel, after separation of the two part socket, with the rearward part of the socket remaining attached to its wiring at the back of the panel.

1,858,995. DETACHABLE SPINDLE DRIVE AND FEED UNIT. DAVID C. KLAUSMEYER, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 4, 1929. Serial No. 390,251. 3 Claims. (Cl. 10—129.)



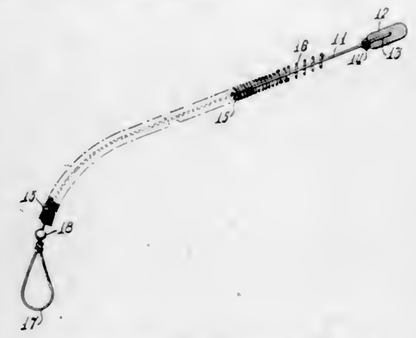
1. An upright drilling machine combining a column; a closed transmission housing at the upper end thereof having a removable cover; a unitary transmission assembly removably mounted in said housing; a drill spindle shaft extending into said housing; a spindle feed head mounted on said column and supporting the lower end of said spindle shaft; feed mechanism therefor; a power driven shaft in said housing; a gear train including pick-off change speed gears mounted in said housing for rotating said spindle from said power driven shaft; and a gear train mounted in said housing having an operative connection to said feeding mechanism including pick-off change speed gears mounted in said housing for independently varying the rate of feed, said spindle rotating and feeding gear trains being embodied in and forming part of said removably mounted transmission assembly.

1,858,996. CHANGE SPEED GEAR. ALFRED LESAGE, Schweinfurt, Germany. Filed Jan. 2, 1932, Serial No. 584,550, and in Germany July 30, 1930. 10 Claims. (Cl. 74—58.)



1. Associated change gear sets, each of which sets comprises a rotating sun gear, a rotating internal gear encircling the sun gear and coaxial therewith, and a set of idler gears, said associated change gear sets also having means operatively associated with the idler gear sets, whereby at will all of said idler gear sets will be non-functioning and whereby at will any selected one of the idler gear sets can be arranged in respect to the coaxial sun gear and internal gear corresponding thereto to impart a selected transmission ratio through a change gear set thus selected.

1,858,997. SPIRAL FISH CABLE. JACOB W. LEWIN, Oak Park, Ill. Filed July 9, 1930. Serial No. 466,767. 4 Claims. (Cl. 175—376.)



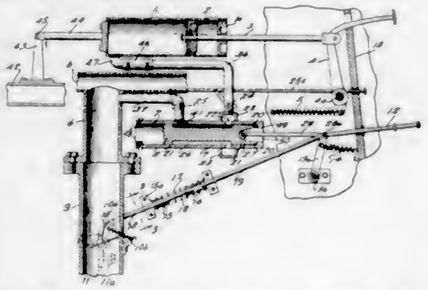
4. An article of the class described comprising, in combination, a flexible housing, a cable extending through said housing, a fixed stop on one end of said cable, an adjustable stop on the other end of said cable, said stops being adapted to abut the respective ends of said housing to prevent removal of said cable, and means on said cable extending beyond said adjustable stop to secure wires thereto.

1,858,998. STOVE LEG. HENRY C. MAUL, Detroit, Mich., assignor to Detroit, Michigan Stove Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 20, 1931. Serial No. 531,446. 15 Claims. (Cl. 126—304.)



1. In stove construction, the combination of a frame member, a corner plate secured to said frame member and having a central aperture therein, and a hollow tubular stove leg having a cap piece provided with an upwardly projecting fixed bolt passed thru said corner plate aperture and secured to the plate.

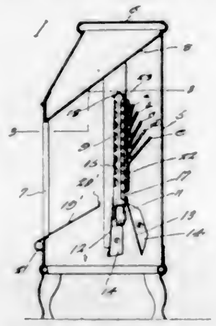
1,858,999. VACUUM POWER CLUTCH. HENRY JOHN DE NEVILLE MCCOLLUM and JAMES HARRY KEIGHLEY MCCOLLUM, Long Branch, N. J. Filed Dec. 20, 1930. Serial No. 503,767. 7 Claims. (Cl. 192—.01.)



1. A vacuum power clutch mechanism having, in combination, a cylinder pivotally connected to the frame of the motor vehicle, a piston in said cylinder, a piston rod connected to said piston, a clutch pedal, means for connecting said piston rod to said clutch pedal, said piston rod working through a head in said cylinder, said head having means co-operating with said piston rod to prevent air from leaking into or out of said cylinder, a valve casing having ports connected by passageways to said cylinder, a valve in said valve casing having part of its periphery in the form of a full bodied section and part of its periphery tapered, an intake manifold connected by a passageway to said valve casing, a second pedal pivotally connected to said valve, a carburetor having a throttle valve, said carburetor throttle valve being also operatively connected to said second pedal and means for allowing said first mentioned valve to be moved before said carburetor throttle valve is moved from the idling position.

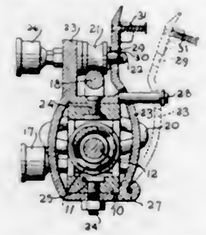
1,859,000. HEATING STOVE. HARRY L. MCKOWN, Wheeling, W. Va. Filed Feb. 6, 1930. Serial No. 426,352. 6 Claims. (Cl. 126—92.)

1. A heating stove of the character described comprising a casing, having an open front, a vertically disposed partition mounted within the casing, a burner mounted at the lower portion of the partition and in spaced relation thereto, a plurality of baffles arranged on the rear side of



the partition for retarding the flow of heated air to collect vapor thereon, and a pair of aprons, one at each side of the burner and between which the cold air rises.

1,859,001. TRACTOR HITCH. EARL MEEK, Bonetraill, N. Dak. Filed Sept. 15, 1930. Serial No. 482,089. 4 Claims. (Cl. 280—33.16.)



1. An overload release coupling including a frame, a compression spring carried by said frame and having one end contacting therewith, a rod slidably carried by the frame, positioned through said compression spring and having one end connected to the free end of the latter, a lever swingingly connected to the free end of said rod, and a roller structure including an axle having its one end portion carried by said frame, and an arm movably carried by the frame supporting the other end of said axle and movable to permit side-wise positioning of said lever beneath said roller.

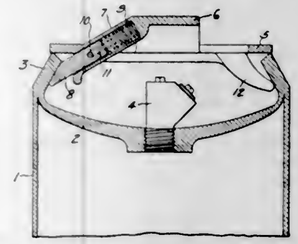
1,859,002. PROCESS FOR THE MANUFACTURE OF 1-PHENYL-2,3-DIMETHYL-5-PYRAZOLONE. ADAM OSER and ADRIEN LAURENT, Lyon, France, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France, a Corporation of France. Filed June 17, 1931, Serial No. 545,072, and in Great Britain Nov. 19, 1930. 8 Claims. (Cl. 260—45.)

1. A process for the manufacture of 1-phenyl-2,3-dimethyl-5-pyrazolone by causing gaseous methyl halides to react on 1-phenyl-3-methyl-pyrazolone.

1,859,003. CONTAINER AND COACTING AND SELF-FASTENING CAP THEREFOR. LOUIS ARTHUR RAGAN, St. Louis, Mo., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 29, 1928. Serial No. 309,245. 11 Claims. (Cl. 220—55.)

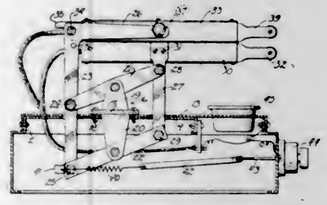
1. A container having in combination, opposed extensions on an outer surface thereof, one of said extensions having its inner surface sloping inwardly toward a point

located without the container, a cover plate having a lug adapted to engage with the inner surface of one extension and a spring-actuated plunger adapted to engage with the



said extension which has an inwardly sloping surface whereby the cover plate is maintained in position on the container by the said lug and plunger.

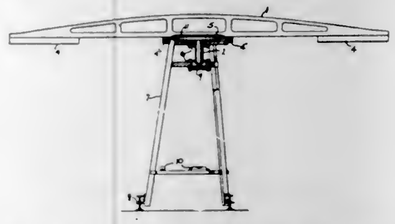
1,859,004. HEATING DEVICE. ERNEST REICH, Chicago, Ill. Filed May 20, 1927. Serial No. 192,941. 25 Claims. (Cl. 53—5.)



1. A heating device, including a plurality of heating plates, and means for causing said plates to reciprocate in opposite directions, said plates moving vertically and horizontally but always remaining parallel during their reciprocation.

22. A heating device, including superposed heating plates, both of said plates being mounted for vertical reciprocation toward and away from each other, and connections between said plates whereby one of said reciprocating plate is counter-balanced by the other of said plates.

1,859,005. MEANS AND METHOD OF OBSERVING AND MEASURING ELECTROMAGNETIC FIELDS. NORMAN H. RICKER, Houston, Tex., assignor to J. P. Scranton, Houston, Tex., trustee. Filed July 10, 1928. Serial No. 291,633. 12 Claims. (Cl. 175—182.)

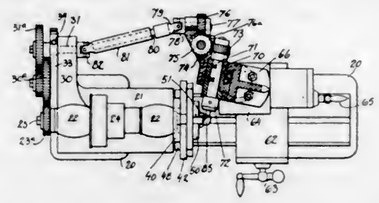


1. A method of observing and measuring alternating electro-magnetic fields, which consists in comparing

$$\frac{\triangle H}{\triangle s}$$

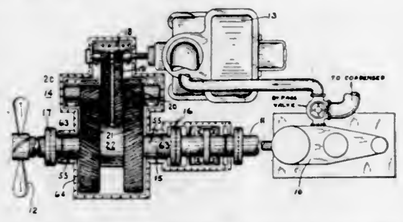
with H, where H is the electro-magnetic field, and s is the distance in any particular direction.

1,859,006. FILE CUTTING LATHE. THEODORE A. SCHAAD, Detroit, Mich. Filed July 30, 1928. Serial No. 296,108. 13 Claims. (Cl. 82—2.)



1. In a lathe, a head stock, a spindle rotatably mounted therein and provided with a cutter head, a pair of cutters radially movable in and carried by said head, means for driving said cutters, means for moving said cutters radially with respect to the axis of the spindle, a tail stock comprising a rotatable work holder, means for adjusting the angle of the work holder with respect to the paths of the movement of the cutters, and means for rotating the work holder, the latter means comprising power transmitting means constructed to permit the adjustment of the work holder without disengagement, the cutter moving means being adapted to determine the alternate action of said cutters on said work and their linear movement during the cutting action.

1,859,007. REDUCTION GEARING. IRA SHORT, Essington, and JESSE ORMONDROYD, Swarthmore, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 25, 1930. Serial No. 491,262. 3 Claims. (Cl. 74—7.)

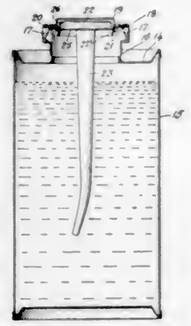


1. In reduction gearing, a spindle member having a pair of spaced outer journal portions separated from an intermediate portion of larger diameter by cylindrical seats of intermediate diameter, said intermediate portion having terminal journal portions and said seats being connected to said terminal journal portions by radial abutment faces; a gear member including a hub having spaced bearing portions fitting the terminal journal portions and provided with a pair of spaced webs connected to spaced gear rims; collars fitting said seats, abutting said abutment faces and of larger diameter than the hub bearings so as to hold the gear member axially in place; a circular series of screws extending substantially parallel to the gear axis for connecting each collar to the intermediate portion of the spindle; sets of interfitting radial projections carried by the collars and the gear member and arranged externally of said webs; and springs arranged between adjacent sets of projections.

1,859,008. DETACHABLE SPOUT FOR CONTAINERS. FRANK R. STAMER, Floral Park, N. Y., assignor to Mundo Products, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 5, 1930. Serial No. 479,835. 1 Claim. (Cl. 221—24.)

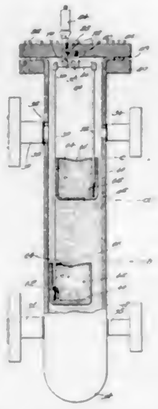
The combination of a fluid container having a nozzle provided with an inwardly and with a downwardly extending flange adjacent to its outlet end, a disc, an an-

nular flange on said disc adapted to be seated within said downwardly extending flange in fluid-tight manner when said disc is pressed down the opening of said nozzle, a substantially horizontal flange on said disc adapted to rest on said inwardly extending flange, a spout so mounted



on said disc as to extend into said container when said disc rests upon said inward flange in one position thereof, and to extend outwardly of said container when said disc is seated within said downwardly extending flange in the reverse position thereof, and a sealing cap for closing the outlet of said nozzle.

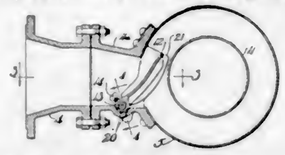
1,859,009. WATER COLUMN FOR STEAM BOILERS. GEORGE W. STETSON, Hingham, Mass. Filed July 5, 1927. Serial No. 203,487. 3 Claims. (Cl. 137—102.)



1. A water column for steam boilers comprising a column cylinder, upper and lower floats of equal cubic capacity within the cylinder, the lower float being heavier than the upper float by an amount approximating one-half the weight of water contained in each float, a centrally pivoted lever at the upper portion of the column, and connections between each float and one end of the lever to cause movement of the lever upon rising and falling of the water level beyond predetermined limits.

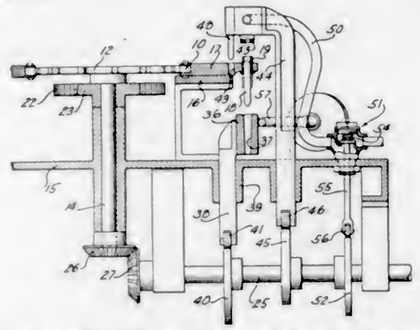
1,859,010. VANE VALVE. CHARLES WALCOTT STRATFORD, Oakland, Calif. Filed Jan. 30, 1928. Serial No. 250,606. 1 Claim. (Cl. 183—40.)

In a centrifugal vapor liquid separator, an inner cylinder and an outer cylinder, said outer cylinder provided with an orifice, a valve body secured by a vapor-tight connection to said outer cylinder adjacent its orifice, a rotatable shaft mounted in the valve body, a vane closure for said orifice having one of its vertical edges secured thereto, a stationary vane closure guide positioned



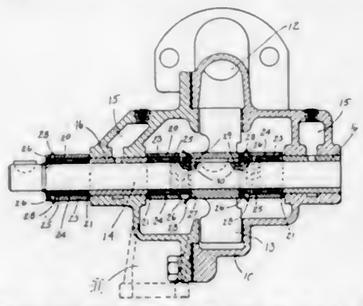
in said valve body, the closure and the stationary guide extending through the orifice of the outer cylinder into the space provided between the outer and inner cylinders.

1,859,011. METHOD OF AND APPARATUS FOR MAKING GLASS ARTICLES. CHARLES WALES, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 6, 1929. Serial No. 337,763. 6 Claims. (Cl. 49—7.)



6. In an apparatus for making bulbs from individual lengths of glass tubing, a conveyor for supporting and intermittently advancing the tubes, heating means for reducing to a molten state and closing an end of each tube as it is advanced by the conveyor, means for applying a predetermined air pressure for a predetermined period of time within each tube to extend the closed molten end thereof, an open ended member having a bore for receiving the molten end of the tube and confining the diameter of the extended portion to the same diameter as the tube while leaving the lengthening closed end of the tube unconfined, and means for heating the member to prevent chilling of the heated tube when inserted therein.

1,859,012. PACKING FOR ROTATING SHAFTS. CARL J. WINKLER, Indianapolis, Ind., assignor to Schwitzer-Cummins Company, Indianapolis, Ind., a Corporation. Filed Jan. 26, 1931. Serial No. 511,158. 8 Claims. (Cl. 286—7.)



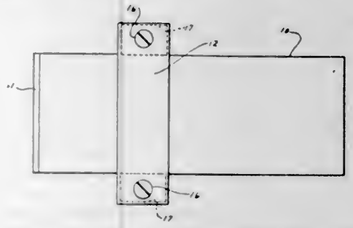
2. The combination with a rotatable shaft and a bearing for supporting the same, of a packing structure comprising a sleeve adapted to bear directly against said bearing, packing material positioned within said sleeve and surrounding the shaft for providing a seal therebetween, and means keyed to said shaft and removably interlocked with said sleeve for causing said sleeve and the packing material contained therein to rotate with said shaft.

1,859,013. SPEAKING APERTURE FIXTURE. JULIUS H. WISE, St. Louis County, Mo. Filed Feb. 27, 1931. Serial No. 518,738. 6 Claims. (Cl. 89—36.)



1. A speaking aperture fixture comprising a body portion having a band, and two juxtaposed rows of obliquely disposed deflector plates, the plates of one row being arranged at right angles to the plates of the other row whereby the passages formed by one row of plates is intersected by the plates of the other row, and means for securing said body portion within an aperture of a bullet-proof wall.

1,859,014. PAPER MACHINERY. HARRY WRIGHT, Jr., Chillicothe, Ohio, assignor, by mesne assignments, to The Mead Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 13, 1930. Serial No. 481,672. 6 Claims. (Cl. 92—74.)

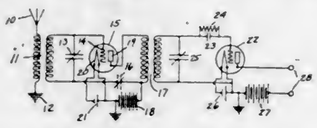


1. A device of the class described comprising a scraping blade, and a finger guard between the ends of said blade and loosely held thereon.

1,859,015. TREATMENT OF HYDROCARBON OIL PRODUCED IN GAS MANUFACTURE. ALAN R. ALBRIGHT, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Oct. 10, 1928. Serial No. 311,714. 6 Claims. (Cl. 196—23.)

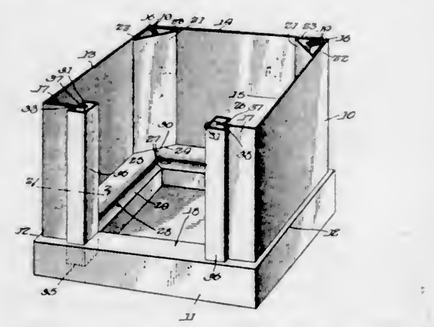
1. In the manufacture of fuel gas, the steps which comprise transferring tar acid originally contained by the gas to a solution of an alkali, and employing the resultant solution for the treatment of hydrocarbon light oil removed from the gas.

1,859,016. CIRCUIT FOR RADIO COMMUNICATION. ROBERT NEIL AUBLE, Indianapolis, Ind. Filed Mar. 16, 1929. Serial No. 347,495. 6 Claims. (Cl. 179—171.)



1. A radio frequency amplification circuit including a thermionic tube having filament, grid and plate electrodes, a source of electric potential for heating said filament, an input transformer having one terminal of its secondary winding connected to said grid electrode, a tuning condenser connected in parallel with the secondary winding of said input transformer and having no conductive connection with the filament electrode, a second condenser having one terminal connected to the second terminal of the input transformer, an output transformer having one terminal of its primary winding connected to said plate electrode and the opposite terminal of its primary winding connected to the second terminal of said second condeuser, and a source of electric potential having one terminal connected to the second terminal of the primary winding of said output transformer and its other terminal connected to said filament electrode.

1,859,017. SHOWER BATH CABINET. JOHN O. BARCE, Chicago, Ill. Original application filed Aug. 19, 1929, Serial No. 386,758, and in Canada Feb. 5, 1931. Divided and this application filed Oct. 17, 1931. Serial No. 569,419. 10 Claims. (Cl. 4—145.)

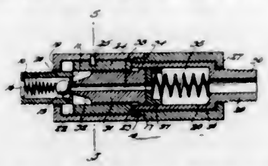


1. A shower bath cabinet of the character described comprising in combination a cast receptor having integral sides to provide a receptor basin, said sides being provided with an interior groove and having their upper faces inwardly inclined toward the receptor basin, sheet metal shower cabinet walls having inwardly extending base flanges downwardly inclined corresponding to the inclination of the upper faces of said receptor sides and resting thereupon, said flanges having extremities entering said groove and conforming to the contour of the receptor sides adjacent said groove, and means for forcing said side walls laterally to hold said extremities in said groove and provide a tight joint between the side walls and said receptor.

1,859,018. COUPLING. CLAYTON O. BEDFORD, New York, N. Y. Filed June 23, 1928. Serial No. 287,879. 11 Claims. (Cl. 284—18.)

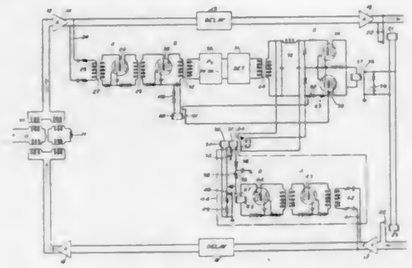
1. In a device of the class described, the combination of a fitting provided with a cylindrical intake port, the wall outlining the port coacting with the wall defining the outer face of the fitting to form a sharp circular edge providing an exposed seat for receiving a coupling nozzle, a

spring pressed valve within the fitting normally closing said port, a coupling adapted to be demountably secured to the fitting, said coupling including a shell, a nozzle slidably mounted in the shell and provided at one end with a conical nose adapted to be intruded into the intake port to move the valve into open position and engaging said sharp circular edge to provide a circular line contact therewith having a relatively small radius and outlining a relatively small area and its outer end defining its maximum diameter and providing a pressure receiving surface



of relatively large area, a spring within the shell bearing on the nozzle at its opposite end and tending normally to force the nozzle in a direction towards the fitting and into position to open the valve in the fitting, means for admitting fluid under pressure to said large area end of the shell opposite the end engaging the fitting, said opposite end of the nozzle exposed to the pressure admitted to the shell through said means and having an area acted upon by said pressure equal to the maximum cross sectional area of the nozzle.

1,859,019. VOICE-OPERATED RELAY CIRCUITS. BJÖRN G. BJÖRNSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,363. 10 Claims. (Cl. 178—44.)

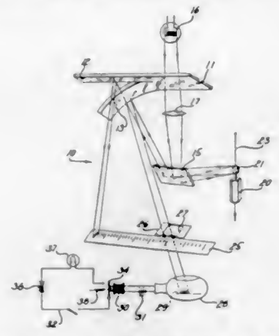


1. In a voice-operated relay circuit, a path over which voice frequency currents and relatively sustained alternating currents may be transmitted, tandem detectors associated with said path, a relay controlled by the second detector, means rendering said second detector selectively responsive to syllable frequency currents, and means associated with said first detector for rendering said relay operative in response to sustained voice frequency currents having a high level.

1,859,020. METHOD OF AND APPARATUS FOR MEASURING MATERIALS. LAUREL HERMAN BROWN, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,339. 8 Claims. (Cl. 177—311.)

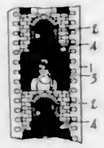
1. A testing device comprising means emitting a light beam of varying direction, a reflector in the path thereof having two distinct surfaces reflecting light into distinct regions respectively, and separate indicating means in said regions respectively.

8. In a testing device, variation detecting means including a pivotal mirror, a fixed source of light to illuminate the mirror, an adjusting mirror to receive a light beam from the pivotal mirror, a substantially plane reflector to receive light from the adjusting mirror, a warped reflector to receive light also from the adjusting mirror, a graduated scale to receive light from one of the two reflectors, a photo-electric cell to receive light



from the second of the two reflectors, a perforated delimiting screen interposed between the second reflector and the photo-electric cell, and signal means operated by the cell.

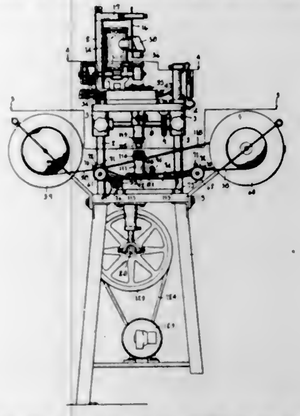
1,859,021. METHOD OF PRODUCING MOTION PICTURES. JAKOB BURKHARDT, Detroit, Mich., assignor to Third Dimension Pictures, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 9, 1929. Serial No. 331,309. 7 Claims. (Cl. 88—16.6.)



1. The method of producing the appearance of relief in motion pictures consisting of projecting upon a screen in superimposed relation a succession of background pictures and a succession of foreground or image pictures, the background pictures having light excluding masks thereon corresponding in size and configuration to the foreground or image pictures, the foreground or image pictures being projected in registering relation to their masks on the background pictures.

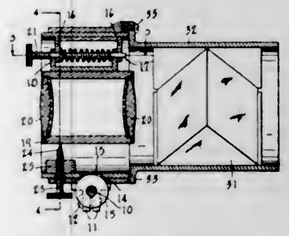
1,859,022. PROJECTION PRINTING MACHINE. JAKOB BURKHARDT, Detroit, Mich., assignor to Third Dimension Pictures, Inc., New York, N. Y. Filed Dec. 18, 1929. Serial No. 414,935. 26 Claims. (Cl. 88—24.)

1. In a printing machine, the combination with a projecting mechanism, of a positive film mechanism comprising a base member mounted for adjustment transversely of the path of the film and having feed finger slots therein, feed fingers and actuating means therefor, film guide members rabbeted to receive the edges of the film mounted on said base member in opposed relation, a spring pressed thrust member on one of said guide members engaging an edge of the film at the printing point, channeled pressure shoes disposed to engage the film in operative relation to said feed fingers, a mask holder pivotally mounted at one side of the path of the film and slotted to receive said pressure shoes and having a mask opening therein with surrounding mask seat, a mask reversibly arranged in said seat and having a recess in its face, a mask reducing member removably mounted in said recess, a mask clamping frame pivotally mounted at one side of said mask holder so that it may be swung out of the path thereof permitting the opening of the mask holder, a post on said mask holder having a clamping yoke mounted thereon, said clamping plate being provided with pins engaging the ends of said yoke, a pressure shoe thrust plate mounted on said post to engage said pressure shoes,



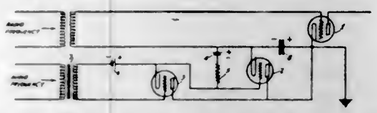
a spring arranged between said thrust plate and yoke, a pressure spring for said yoke arranged on said post at the outer side of the yoke.

1,859,023. PROJECTION APPARATUS FOR MOTION PICTURES. JAKOB BURKHARDT, Detroit, Mich., assignor to Third Dimension Pictures, Inc., New York, N. Y. Filed Dec. 18, 1929. Serial No. 414,939. 13 Claims. (Cl. 88—16.6.)



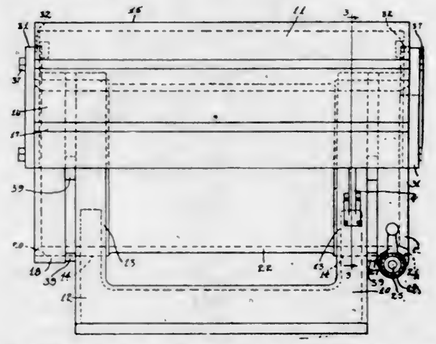
13. In a projecting apparatus, the combination of a lens box, lens holders mounted within said lens box for pivotal adjustment to and from each other and for independent longitudinal adjustment, means for independently adjusting said lens holders longitudinally of their pivots, and an adjusting means disposed opposite said lens holder pivots and having a tapered tip coacting with both of said lens holders.

1,859,024. GRID MODULATION. WERNER BUSCHBECK, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 4, 1930, Serial No. 418,477, and in Germany Jan. 7, 1929. 2 Claims. (Cl. 179—171.)



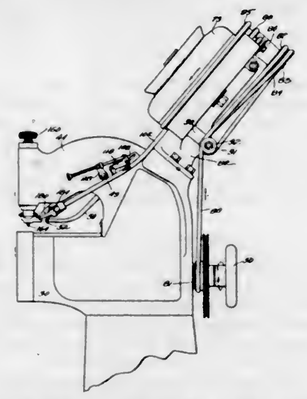
1. A modulating system comprising an electron discharge device having an anode a cathode and a grid, means for subjecting said grid to high frequency potentials, a condenser serially connected between said grid and said cathode, an electron discharge device having an anode a catnode and a grid electrode, means for connecting its cathode to anode impedance in parallel with said condenser, means for negatively polarizing the grid of said last mentioned electron discharge device, and, another electron discharge device having its output electrodes connected across the grid and anode of the device connected across said condenser, said last mentioned electron discharge device having its input electrode subjected to signaling potentials.

1,859,025. TILTING TABLE. NORMAN B. CHACE, Cincinnati, Ohio, assignor to The Fosdick Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 8, 1927. Serial No. 231,976. 4 Claims. (Cl. 90—58.)



1. A tilting table for use with machine tools comprising a stand having a pair of bearing members, a movable table having a pair of ring-like bearing members, in axial alignment with the bearing members of the stand, a sleeve received in the bores in the bearing members, the sleeve being fixed in the bearing members in the stand, cooperating means carried by the sleeve and one of the bearings of the movable table for moving the table relative to the stand, and means comprising semi-circular clamping plates and bolts to effect circumferential binding independently at each end of the sleeve for securing the table in adjusted positions upon the sleeve.

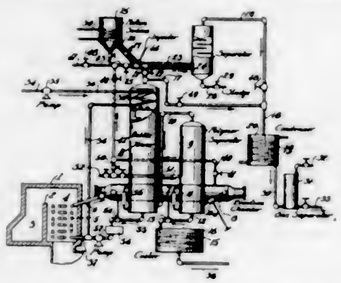
1,859,026. FASTENER SETTING MACHINE. EARLE M. CROSBY, Birmingham, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Nov. 8, 1927. Serial No. 231,959. 5 Claims. (Cl. 1—3.1.)



1. Assorting mechanism for fasteners having widely and closely spaced pairs of projections, comprising a hopper having a discharge passage, and a stop normally

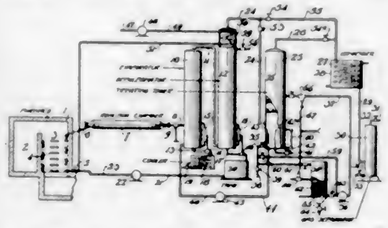
projecting into said discharge passage for preventing progress of a fastener in the passage except when the widely spaced projections occupy a position in advance of the closely spaced projections during passage of a fastener part through the discharge passage.

1,859,027. PROCESS FOR TREATING PETROLEUM HYDROCARBONS. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 4, 1927. Serial No. 231,110. 4 Claims. (Cl. 196—28.)



4. A method of treating hydrocarbon vapors comprising the steps of combining with liquid sodium a non-reactive hydrocarbon gas, intermingling the mixture with the hydrocarbon vapors, said metal and gas being maintained at pressures substantially in excess of the pressures of the hydrocarbon vapors, and separating the metal and polymers from the hydrocarbon material.

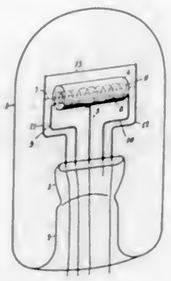
1,859,028. METHOD OF TREATING PETROLEUM HYDROCARBONS IN THE VAPOR PHASE. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 8, 1927. Serial No. 231,895. 2 Claims. (Cl. 196—28.)



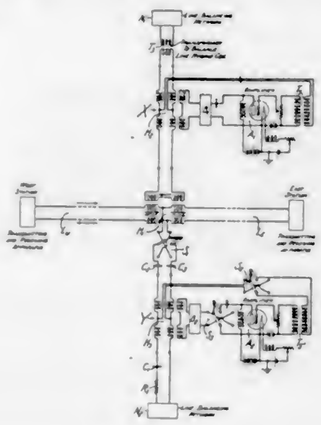
1. A method of treating petroleum hydrocarbons, comprising introducing vapors of cracked hydrocarbons into a treating tower, introducing liquid metallic sodium into said tower to flow countercurrent to the vapors, separating the metal from the hydrocarbon, heating the metal to an optimum temperature for treating the hydrocarbon vapor and recirculating it in contact with the hydrocarbon vapors.

1,859,029. ELECTRIC DISCHARGE TUBE. JAN HENDRIK DE BOER and KAREL MARINUS VAN GESSEL, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 26, 1929, Serial No. 409,804, and in the Netherlands Dec. 15, 1928. 4 Claims. (Cl. 250—27.5.)

1. In an electron discharge device, the combination with an evacuated envelope containing co-operating electrodes one of which is heatable and a pair of current supply leads connected to said heatable electrode, of a coherent body of zirconium of high electrical resistance connected during normal operation of said device to said leads whereby sufficient current passes through said heatable electrode and said body to maintain said electrode at operating temperature and said body at a temperature which renders it capable of combining permanently with the common occluded gases in said envelope.



1,859,030. DISTORTION CORRECTION IN TRANSMISSION SYSTEMS. HOMER W. DUDLEY, Teaneck, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 4, 1929. Serial No. 330,169. 6 Claims. (Cl. 178—44.)

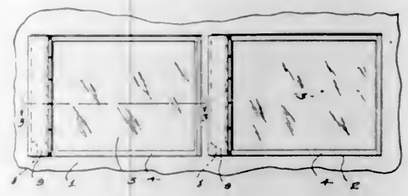


1. In a transmission system, a transmission line for transmitting electrical waves, two or more two-way repeaters for amplyfying said waves, each of said repeaters having a nonlinear amplification characteristic tending to produce wave distortion in the system, said repeaters being so connected with said line that in a portion thereof the distortion energy produced by one of said repeaters opposes that produced by another of said repeaters.

1,859,031. VENTILATING SIDE WINDOW FOR MOTOR VEHICLES. OLIVER M. EDWARDS, Syracuse, N. Y., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 29, 1928. Serial No. 309,136. 5 Claims. (Cl. 296—44.)

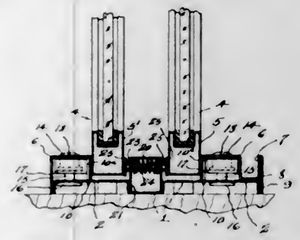
1. The combination with a motor vehicle body having a side window frame and a ventilating opening in front of the front edge of the window opening of the frame, of a sash pivoted on a vertical axis located near and spaced

apart from the front edge of the sash, the rear end of the sash being movable outwardly whereby the front edge of the sash moves inwardly and the sash having means at



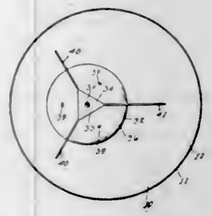
its front end for normally closing the ventilating opening and opening it when the rear end of the sash is swung outwardly.

1,859,032. WINDOW CONSTRUCTION WITH DEMOUNTABLE STOP. OLIVER M. EDWARDS and ROY T. AXE, Syracuse, N. Y., assignors to The O. M. Edwards Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 11, 1929, Serial No. 354,387. Renewed Sept. 11, 1931. 11 Claims. (Cl. 189—73.)



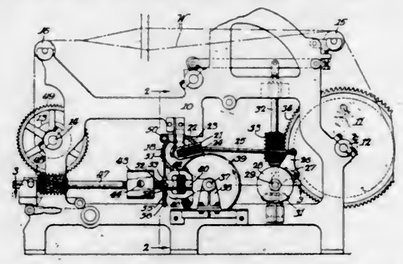
1. In a window construction, a frame member, a demountable stop mounted on the frame member, the frame member being formed with a slot underlying the stop, a fastening member extending transversely through the stop and having a head movable through the slot upon relative endwise movement of the fastening member and the frame member and into a position crosswise of the slot upon rotary movement of the fastening member to interlock the head with the frame and a spring tending to move the fastening member axially outwardly.

1,859,033. AGITATOR FOR WASHING MACHINES. GEORGE M. GIBSON, Pella, Iowa, assignor to Woodrow Washing Machine Company, Pella, Iowa, a Corporation of Iowa. Filed Sept. 25, 1928. Serial No. 308,151. 6 Claims. (Cl. 259—101.)



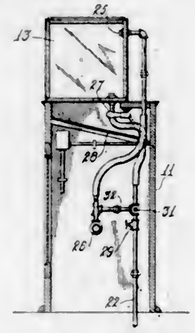
1. In combination, a horizontal support, a shaft projecting upwardly through said support and rotatively mounted to said bottom, the upper end of said shaft having a head provided with vertical ribs, a substantially bell shaped agitator hub detachably secured to the upper end of said shaft and the upper end of said head, said hub being provided with vertical grooves to receive the vertical ribs of said head, means for detachably connecting said hub with said shaft, the outer face of said hub having agitator blades, the inner face of said hub being provided with inwardly extending fins, said hub having openings between said fins, and an annular plate on top of said horizontal support of such height and diameter that an annular space will be provided between the periphery of said plate and the lower end of the inner face of said hub and between the lower edge of said hub and the upper face of said horizontal support.

1,859,034. AUTOMATIC TAKE-UP MOTION FOR LOOMS. JOHN M. GRAEF, Neenah, Wis., assignor to Valley Iron Works Company, Appleton, Wis., a Corporation of Wisconsin. Filed Jan. 29, 1931. Serial No. 512,054. 7 Claims. (Cl. 139—99.)



1. In a warp feed for looms, the combination with let-off mechanism, of take-up mechanism so geared as to always have a greater movement than that of the let-off mechanism; said take-up mechanism including a weight-controlled differential movement responsive to variations in tension on the warp, a clutch in the drive of said take-up mechanism, and means actuated by an element of said differential movement of shifting said clutch.

1,859,035. COMPARATOR. ARTHUR J. HALL, Appleton, Wis. Filed Dec. 19, 1929. Serial No. 415,244. 2 Claims. (Cl. 88—14.)



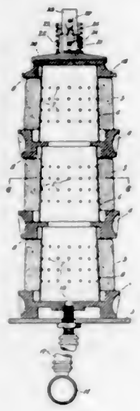
1. A comparator for a filtering system, comprising, a cabinet, a plurality of transparent compartments arranged above said cabinet; an influent line connecting each of said compartments with a different part of said filtering system; each of said compartments having an outlet whereby a continuous flow of water therethrough is maintained; a plurality of lights arranged in said cabinet below said compartments; and a light deflector angularly arranged in said cabinet for directing the light rays upwardly rearwardly through said compartments to increase the visibility through the water passing through said compartments.

1,859,036. METHOD AND MATERIAL FOR CLEARING DRAIN PIPES AND FOR OTHER USES. EVERETT J. HALL, New York, N. Y., assignor to Metals Disintegrating Company, Inc., Elizabeth, N. J., a Corporation of New Jersey. Filed May 26, 1925. Serial No. 32,938. 2 Claims. (Cl. 44—3.)

1. A composition of matter for the use set forth, comprising alkali metal hydroxide, and particles comprising aluminum alloyed with silicon, the particles being graded definitely into predetermined different sizes.

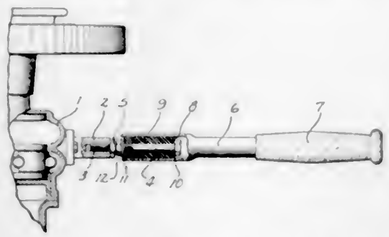
2. A heat producing compound comprising alkali metal hydroxide and an "aluminum-plus content."

1,859,037. METHOD OF TREATING FINE FILAMENTOUS THREAD IN PACKAGE FORM. CHARLES A. HUTTINGER, Lakewood, Ohio, assignor to Acme Rayon Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed May 4, 1929. Serial No. 360,354. 6 Claims. (Cl. 18—54.)



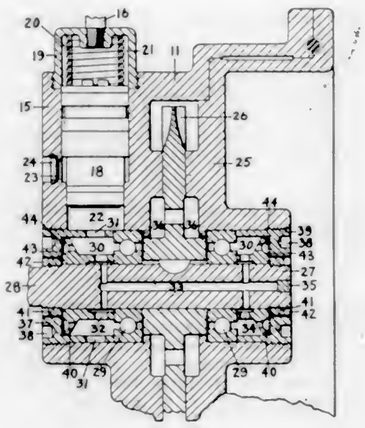
1. A process of treating a thread of fine filamentous character in package form consisting in subjecting the package to the action of a treating liquid while the package is mounted so as to be free to elongate longitudinally a part of the elongation which it tends to make under the treatment, and then to be restrained from further elongation.

1,859,038. HANDLE MOUNTING. FINN T. IRGENS, Wauwatosa, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed June 22, 1931. Serial No. 546,068. 4 Claims. (Cl. 306—29.)



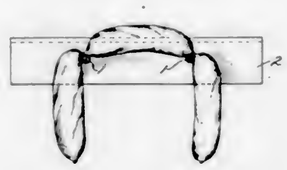
1. A handle mounting comprising a handle member having a socketed end portion and a mounting member, a tubular elastic mass positioned within said socketed end portion and clamping means coacting with said elastic mass and adapted to distort it in a radial direction into engagement with the wall of the socket.

1,859,039. PACKING. BRYAN P. JOYCE, Davenport, Iowa. Filed Sept. 16, 1927. Serial No. 219,989. 6 Claims. (Cl. 286—9.)



1. In a pressure fluid machine, packing rings mounted between relatively movable parts of the machine to provide a packing chamber between them, a piston mounted in one of the machine parts and forming therewith a piston chamber, said piston chamber and packing chamber being full of packing fluid and in open communication with each other, means for subjecting said piston to pressure from the machine fluid, said piston being constructed to place the packing fluid under greater pressure than the machine fluid, and resilient means acting on and co-operating with the piston to maintain the packing fluid under pressure at all times and in excess of the machine fluid pressure prior to action of said machine fluid on said piston.

1,859,040. METAL SMOKE STICK FOR FRANKFURTS. JOHAN AUGUST KELLERMANN, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 5, 1928. Serial No. 267,598. 5 Claims. (Cl. 99—2.)



5. A sausage support for smoke-house use comprising a pair of rigidly connected bars of minimum size consistent with adequate strength for customary loads said bars being spaced according to the standard length of sausages, to receive the tissue part which connects adjacent end-connected sausages when said support is disposed horizontally for use.

1,859,041. DEPOSIT BOOK. EDWARD A. KELLY, Indianapolis, Ind. Filed May 18, 1931. Serial No. 538,095. 7 Claims. (Cl. 283—52.)

1. A vest pocket size, multiple deposit book including a plurality of substantially similar deposit coupons arranged in groups, a receipt form for each group of coupons, the receipt form being positioned above the associated coupons, and all receipt forms being of progressively



increasing length from top to bottom of the book and with the last receipt form of shorter length than the coupons for the purpose set forth.

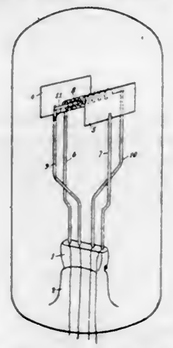
1,859,042. CHUCK. JOHN J. KOLAR, West Bend, Wis. Filed Sept. 11, 1929. Serial No. 391,872. 2 Claims. (Cl. 279—58.)



1. A chuck comprising a supporting shaft having an axial bore, a chuck housing having a sleeve at one end receiving the shaft, the housing being opened at one end and having its inner wall flared outwardly toward said opened end, a plurality of segmental jaws received in the housing each independent of the other, an adjusting rod slidably mounted in the bore, a plate carried by the inner end of the rod, and means connecting the independent jaws to the plate, each of the jaws being freely movable of the other jaws and all of the jaws being movable around the plate.

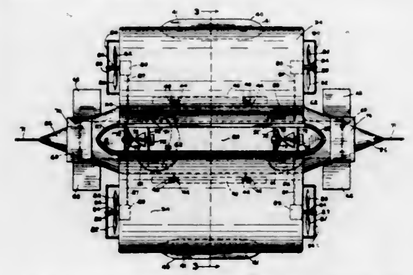
1,859,043. ELECTRIC DISCHARGE TUBE. JOHANNES HENDRICUS JOSEPHUS MAARTENS, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 22, 1929, Serial No. 408,963, and in the Netherlands Dec. 15, 1928. 4 Claims. (Cl. 250—27.5.)

1. An electron discharge device comprising an evacuated envelope containing co-operating electrodes one of which is heatable, an inwardly extending support on the wall of said envelope, and an elongated coherent body of zirconium secured at one end to said support with its free end sufficiently near said heatable electrode to cause



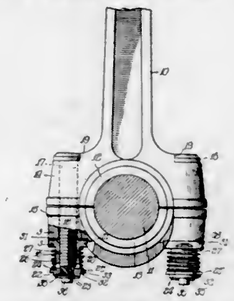
said free end to be heated to a temperature which renders said body capable of combining permanently with the deleterious gases evolved in said envelope.

1,859,044. AIR VEHICLE. EDWARD E. MOE, Omaha, Nebr. Filed June 16, 1930. Serial No. 461,425. 5 Claims. (Cl. 244—14.)



1. An airplane comprising a hull, wings extending outwardly from the opposite sides of the hull, said hull having opposite tapering end portions extending beyond the wings, a vertical rudder carried upon the outer end of each tapering end of the hull, pontoons carried upon the outer ends of said wings, landing gear carried by the hull, and means mounted on the hull for propelling the airplane.

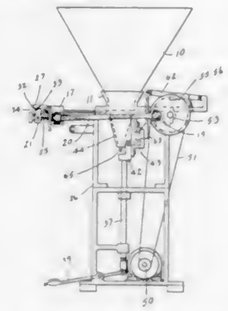
1,859,045. WEAR COMPENSATING BOLT. GUSTAV C. MONCKMEIER, Chicago, Ill. Filed July 16, 1927. Serial No. 206,166. 5 Claims. (Cl. 85—32.)



1. In a device of the type described, a bolt, a nut which is mounted in such a way as to advance along the bolt against a member when turned, a spring for turning the

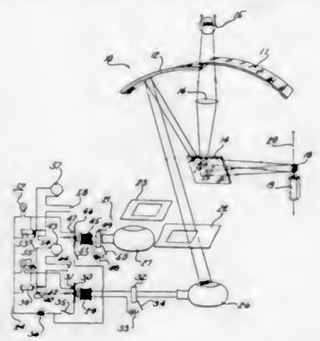
nut, and serrations in the front face of the nut adapted to clutch with corresponding serrations in the face of the member against which the nut is advanced whereby to prevent the nut from being turned by the spring except when a slight amount of clearance is present between the nut and such member.

1,859,046. PROCESS OF FORMING ICE CREAM CONES. VINCENT M. OREAR, Evansville, Ind., assignor, by mesne assignments, to Ardee Patents Corporation, Evansville, Ind. Filed Apr. 2, 1930. Serial No. 440,925. 1 Claim. (Cl. 107—54.)



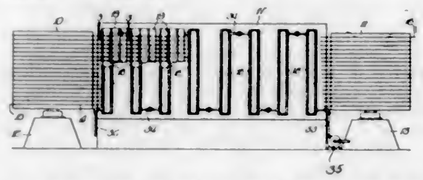
A process of forming a sanitary dispensable ice cream cone for individual consumption, comprising supplying to a pressure sustaining form a covering generally conforming to the shape thereof and of insufficient rigidity itself to sustain a normally free flowing semi-frozen ice cream mix at ordinary temperatures, supplying a measured quantity of the ice cream mix to the covering while in the form, solidifying the ice cream mix in the covering while sustained by the form, then removing the frozen ice cream mix and its covering from the form, and maintaining the form of said commodity by keeping said frozen ice cream mix below ordinary temperatures until dispensed for immediate consumption, the covering protecting the edible mix during consumption.

1,859,047. APPARATUS FOR DETERMINING INDICATIONS OF MEASURING INSTRUMENTS AND CONTROLLING APPARATUS THEREBY. CHRISTIAN PAULSON, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1929, Serial No. 359,338. Renewed Nov. 27, 1931. 5 Claims. (Cl. 236—69.)



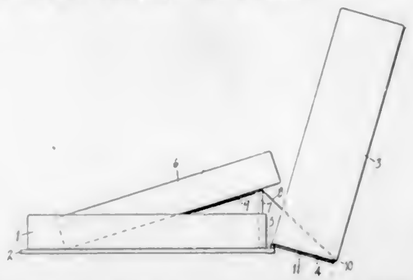
1. A control apparatus, including electrical means responsive to a condition to be controlled, reflecting means actuated by the electrical means, means for producing a beam of light, means for deflecting the beam into the reflecting means and receiving it again therefrom, reflecting means for receiving the beam as it leaves the deflecting means in one direction, a separate reflecting means for receiving the beam as it leaves the deflecting means in another direction, separate light sensitive means positioned opposite each of the two latter reflecting means to be energized by the beam as it is emitted therefrom, and means actuated by each of the light sensitive means to control the condition.

1,859,048. MACHINE FOR MAKING METAL WOOL. LEVANDER PETERSON, Chicago, Ill., assignor to James H. Rhodes & Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 17, 1928. Serial No. 326,491. 2 Claims. (Cl. 29—4.5.)



1. In a machine for making metal wool from wire, a pair of horizontally spaced vertically extending grooved cylindrical drums about which a wire is wound in a number of substantially horizontal elongated loops, means for rotating the drums, a block between the drums, rows of hollow vertically extending bed plates on the sides of the block across which the wire is drawn, conduits connecting the chambers in the plates in series, means for causing a cooling fluid to flow through the chambers in the plates, and knives arranged in vertical tiers opposite the plates for cutting the wool from the wire.

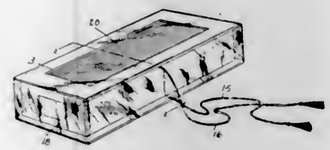
1,859,049. DISPLAY BOX. EDWARD W. POPPE, Kalamazoo, Mich., assignor to Kalamazoo Paper Box Company, Kalamazoo, Mich. Filed Mar. 5, 1930. Serial No. 433,200. 6 Claims. (Cl. 206—44.)



4. In a display box, the combination of a body member, a cover member having its rear wall hinged to the rear of the body member at the bottom thereof so that the cover member telescopes with the body member when closed, a tray loosely disposed within the body member, a rigid tray support at the rear of the body member, and a strap secured to the bottom of the tray and to the cover and arranged over said support so that the bottom of the tray is lifted from the body member and drawn rearwardly upon said support when the cover is opened.

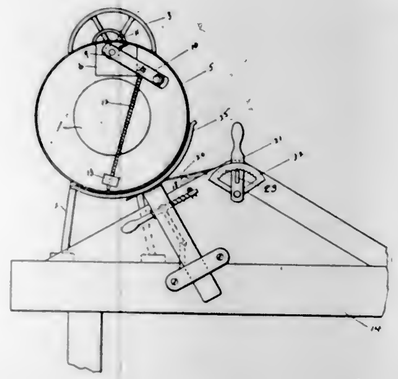
1,859,050. DISPLAY BOX OR PACKAGE. EDWARD W. POPPE, Kalamazoo, Mich. Filed Nov. 10, 1930. Serial No. 494,552. 8 Claims. (Cl. 206—44.)

1. A package comprising a box including a cover having an opening in the top thereof, a tray arranged within said box and supported in spaced relation to the top, bottom and one side wall thereof providing a closure receiving space, a closure of fibrous material longitudinally scored on its outer side slidably arranged within said closure space to be drawn across the top of the tray to cover



the contents thereof and close said opening in said cover, a sealed wrapping of transparent material for said box providing a transparent outer closure for said opening in said cover, and pull cords attached to opposite edges of said closure and disposed through aligned openings in one side wall of said box and said wrapping.

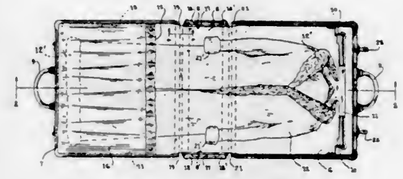
1,859,051. CURTAIN WRAPPING MACHINE. ALFRED RICHTER, Chicago, Ill. Filed Apr. 26, 1930. Serial No. 447,657. 2 Claims. (Cl. 242—74.)



1. In a curtain wrapping machine, the combination of a wrapping-spindle, means for rotating said spindle, hooks mounted upon a rotatable shaft for engaging the articles to be wrapped about said spindle, said hooks being of a shape and mounting to extend above the periphery of the spindle when said hooks are in engagement position, means for reciprocating said hooks alternately into and out of engagement with the article to be wrapped, means for retaining said shaft and hooks in such alternate positions until manually moved, and means for applying spring tension to the article to be wrapped about said spindle, substantially as shown, and for the purposes set forth.

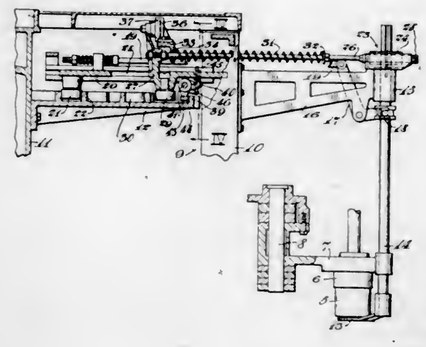
1,859,052. WARDROBE CASE. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Apr. 15, 1929. Serial No. 355,138. 2 Claims. (Cl. 190—41.)

1. A wardrobe case comprising, an intermediate section and end sections hingedly connected to the opposite ends of said intermediate section, all of said sections having side walls of substantially similar height and said end sections being so hinged that when said sections are unfolded a continuous receptacle, of length equal to the combined length of all of said sections and having a substantially continuous bounding wall of substantially uniform height,



is formed, and the side walls of said intermediate section being provided with longitudinal slots the side of which are formed to overlap the adjacent end corners of the side walls of both of said end sections when said sections are folded together.

1,859,053. GLASSWARE FORMING MACHINE. HAROLD A. ROHRICH, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 10, 1929. Serial No. 377,149. 5 Claims. (Cl. 49—5.)

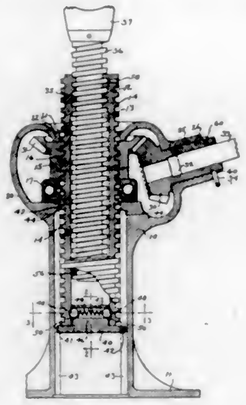


1. In combination, a blank mold movable in a closed path about a vertical axis, cut-off mechanism individual to the mold and movable therewith, said mechanism including a knife, a vertical rock shaft supporting the knife, means including a spring device for rocking the shaft in one direction, cam controlled means to move the knife in the other direction and tension the spring device for the next succeeding cutoff operation, and means to cushion stopping of the knife movement in one direction.

1,859,054. JACK. WILLIAM B. RUNYAN, Dayton, Ohio, assignor to The Dayton Malleable Iron Company, Dayton, Ohio, a Corporation of Ohio. Filed June 4, 1928. Serial No. 282,722. 15 Claims. (Cl. 254—102.)

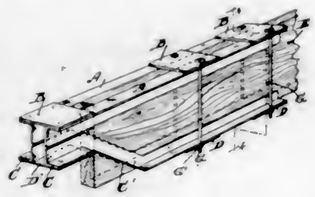
1. A lifting jack comprising a hollow standard, an externally threaded outer screw member mounted in the standard, an inner screw member threaded in the outer screw member, means for elevating the screw members comprising an internally threaded rotatable collar engag-

ing the threads of the outer screw member, and means yieldingly carried by the outer screw member for relative rotational movement with respect thereto and comprising



a member slidably guided in the standard for causing axial movement of the outer screw member on rotation of the collar.

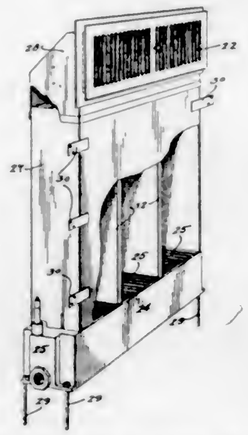
1,859,055. ADJUSTABLE HANGER FOR BEAMS AND JOISTS. HERBERT E. SCHLESINGER, Ypsilanti, Mich. Filed Sept. 18, 1929. Serial No. 393,362. 7 Claims. (Cl. 20—94.)



6. A joist supporting hanger adapted to be adjustably mounted upon the ends of a joist to lengthen the latter to fit spans of various size; said joist supporting hanger comprising an upper pair and a lower pair of opposing longitudinal members spaced apart laterally to embrace opposite sides of the joist, said upper and lower pairs of opposing members being also spaced apart vertically in parallel relation at one end to receive the ends of a joist, the opposite end portion of the lower pair of longitudinal members being bent toward the upper pair of members adjacent said end portion, the immediate adjacent end portions being parallel to the upper members to provide a bearing for the joist, adapted to rest upon a support; a plurality of transverse plates attached to, and overlapping respectively the walls of the upper and lower members; and bolts fitted with nuts extending through the walls of the opposing members, whereby upon adjusting the nuts, said members may be drawn toward each other to grip and adjustably secure said hanger to the end of the joist.

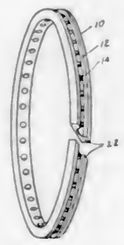
1,859,056. CONCEALED HEAT EXCHANGE UNIT. EDWARD H. SEELEY, Minneapolis, Minn., assignor to McQuay Radiator Corporation, Minneapolis, Minn., a Corporation of Delaware. Filed Feb. 13, 1930. Serial No. 428,062. 9 Claims. (Cl. 257—136.)

2. A heat exchange unit adapted to be mounted in a wall structure above an air intake opening therein, said unit comprising a heat exchange element, a stack leading from said element, a deflecting bonnet for the stack having an air outlet opening, and an upright baffle in the stack dividing the same into two independent flues that are en-



tirely above the heat exchange element, said baffle being constructed and arranged to prevent cross circulation of air in the stack while passing therethrough.

1,859,057. METHOD OF MAKING PISTON RINGS. WALTER J. SIX, Indianapolis, Ind. Filed Feb. 21, 1931. Serial No. 517,424. 11 Claims. (Cl. 29—156.62.)

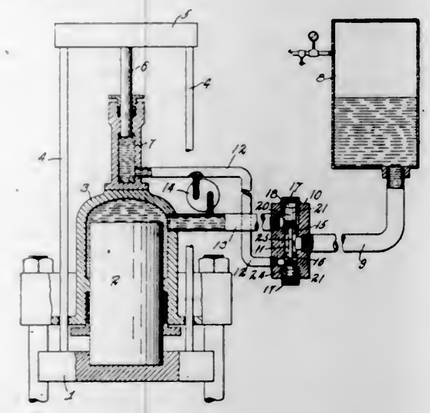


5. The process of forming split rings consisting in spirally winding a strip of metal into a helical coil, cutting the coil to form individual split rings, mounting the individual rings on a substantially cylindrical arbor, clamping the same in place thereon with their free ends in abutting alignment and thereafter heat treating the rings while in this position, passing the heat treated rings with their ends in abutting alignment through a grinder for finishing the side edges thereof to the prescribed dimensions, mounting said rings over a mandrel adapted to increase the diameter thereof by exerting an outward radial pressure thereagainst so as to spread the rings and cause the free ends to be spaced from each other, a portion of said mandrel being relieved for permitting the free ends to be drawn inwardly from a true circle, heat treating the rings when in this position and thereafter grinding the same to cause the said rings when in normal operative position to approach a true circle.

1,859,058. PRESS SYSTEM. THOMAS F. STACY, Piqua, Ohio, assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Filed Jan. 7, 1930. Serial No. 419,095. 11 Claims. Cl. 138—17.)

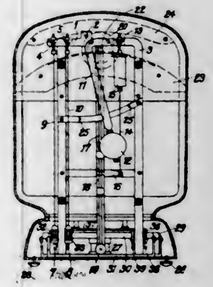
1. In a hydraulic press system, a main ram, an oppositely acting pull-back ram, a source of fluid under pressure

connected to each of said rams, a check valve in each connection of said source to said rams and preventing return flow of said fluid from said rams toward said source,



means for transferring fluid between said rams in either direction to vary the effectiveness of said rams alternately, and means interposed between said check valves, and preventing the seating of both valves at the same time.

1,859,059. AUTOMATIC BALANCE. GERHARD RAASCHE, Riga, Latvia, assignor to the Firm Paul Raasche Söhne, Riga, Latvia, a Latvian Company. Original application filed Aug. 9, 1930, Serial No. 474,252, and in Latvia Aug. 15, 1929. Divided and this application filed Oct. 8, 1931. Serial No. 567,725. 2 Claims. (Cl. 265—62.)

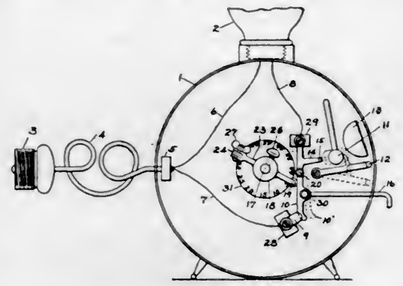


1. Automatic balance comprising a separately disposed deflection indicator pointing out the large units of weight on an equidistantly divided arcuate scale, an inclinatory lever, a lever arm for the said deflection indicator, and a draw bar connecting the said inclinatory lever with the said lever arm, the relative length of the said lever arm and inclinatory lever being proportioned according to the formula

$$r_x = 1.7453\ r.\ \sin\frac{350-\beta}{4}$$

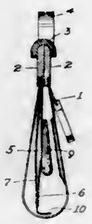
insuring uniform arcuate motion of the said inclinatory lever, β indicating the full deflection of the deflection indicator in degrees; r, the length of the lever arm of the deflection indicator; and r_x, the length of the lever arm of the inclinatory lever.

1,859,060. ELECTRIC TIME SWITCH. FRANK URSO, Buffalo, N. Y. Filed July 30, 1931. Serial No. 553,936. 4 Claims. (Cl. 200—38.)



3. In a device of the class described, including an alarm clock, an alarm hammer, an electric switch operable by said hammer for closing said switch, a minute hand shaft, a graduated stationary disk concentric with said shaft, a lever adjustably mounted on said shaft, said lever having oppositely disposed arms for contacting with and opening said switch, means for adjusting said lever so either one of said arms will open said switch a maximum elapsed time of thirty minutes after the closing of said switch, and a link on one of said arms adjustable for throwing out of operative position with said switch, whereby the opposite arm will open said switch a maximum elapsed time of one hour.

1,859,061. HAND-BAG. OSSIP JOSEPH WALINSKY, New York, N. Y. Filed June 24, 1929. Serial No. 373,320. 5 Claims. (Cl. 150—36.)



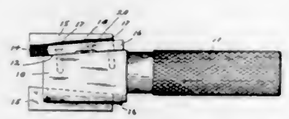
3. A hand bag comprising a body portion and frame members, a lining member secured at the junction of said body member and frame member and free at its other edges so as to be withdrawn partially from the bag, and an opening adjacent the edge of said lining member furthest from the attached edge.

1,859,062. MANUFACTURE OF LIQUID HYDROCARBONS. HEIN ISRAEL WATERMAN, Delft, Netherlands, assignor to De Batuafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Mar. 13, 1929, Serial No. 346,818, and in the Netherlands Apr. 16, 1928. 4 Claims. (Cl. 196—53.)

1. A process for the production of liquid hydrocarbons from carbonaceous materials, which comprises heating carbonaceous material under elevated pressure in the presence of hydrogen and of a molybdenum- and iodine-containing contact mass at elevated temperature in a manner to avoid as much as possible an intensive splitting and consequent formation of hydrocarbons of low molecular weight; withdrawing the lower-boiling reaction products in a gaseous state from the reaction vessel to separate them from the high-boiling residue, while the

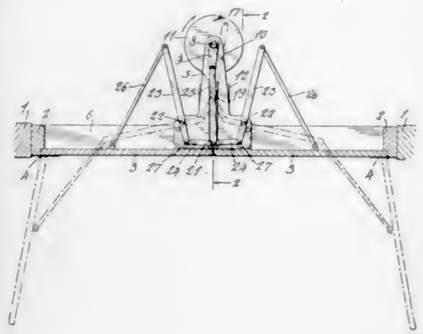
reaction mass is still at high temperature; and again heating the high-boiling residue under the pressure in the presence of hydrogen and of a molybdenum- and iodine-containing contact mass for converting the residue into lower-boiling hydrocarbons.

1,859,063. ADJUSTABLE PLUG GAUGE. ERIK H. ALDERSON, Poughkeepsie, N. Y., assignor to Standard Gage Company, Inc., Poughkeepsie, N. Y., a Corporation of New York. Filed May 28, 1930. Serial No. 456,585. 3 Claims. (Cl. 33—178.)



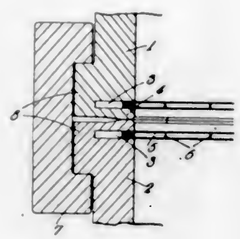
1. An adjustable plug gauge comprising a body portion provided with tapered faces, adjustable gauging members formed with a tapered base corresponding to the tapered faces of said body portion, said ganging members formed with a gauging face and a beveled side and adapted to be mounted upon the tapered faces of said body portion with their gauging faces in opposed parallel relation with each other, a locking plate formed with a corresponding bevel and adapted to be secured upon the tapered face of said body portion and in locking relation with said gauging members.

1,859,064. ELECTRIC DOOR OPENING AND CLOSING DEVICE. CHARLES E. ALLEN, Arvada, Colo. Filed Jan. 29, 1931. Serial No. 512,061. 2 Claims. (Cl. 268—63.)



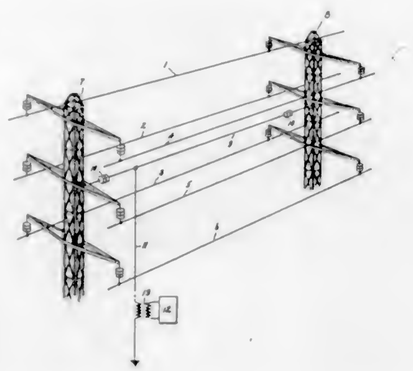
1. A device for simultaneously opening and closing the two halves of a double door comprising an elongated bracket adapted to be supported at one end from the wall directly above the door, the other end being free and provided with a bearing in which a shaft is journalled, a crank arm secured to the lower end of the shaft, a guide secured to the underside of the bracket and extending in the direction of the length thereof, a crosshead slidably connected with the guide, a connecting rod having one end connected with the crank arm and the other end with the crosshead, two pivots secured to the underside of the bracket, one on each side of the guide, a lever connected to each pivot at a point between its ends, a link extending from one end of each lever to the crosshead and means for turning the shaft whereby the crosshead will be reciprocated on the guide and the levers oscillated about their stationary pivots.

1,859,065. JOINT FOR PIPES OR VESSELS FOR CONTAINING FLUID UNDER PRESSURE. DAVID MARTIN ANDERSON, Sheffield, England, assignor to English Steel Corporation Limited, Sheffield, England, a British Company. Filed Sept. 5, 1931, Serial No. 561,390, and in Great Britain Dec. 24, 1930. 5 Claims. (Cl. 285—193.)



1. Jointing means for pipes or vessels for containing fluid under pressure comprising in combination with one of the members to be connected of a flexible portion on said member in proximity to the end thereof and forced into contact with the opposite member by the internal fluid pressure, the member having the flexible portion being cut away adjacent the flexible portion to constitute a groove to which the fluid has access to enable the flexible portion to be forced more readily into contact with the opposite member, and the base of the flexible portion beyond the groove in proximity to the bottom thereof being reduced in thickness to increase its flexibility.

1,859,066. SIGNALING SYSTEM. WALTER R. G. BAKER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 6, 1923. Serial No. 673,191. 5 Claims. (Cl. 177—352.)

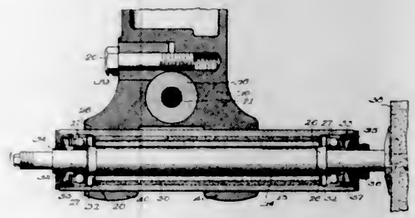


2. The combination in a high frequency transmitting system of a high potential electrical transmission line supported above the earth, said transmission line comprising more than two conductors arranged in intersecting planes, a coupling conductor extending parallel to the conductors of said transmission line and located entirely within a space enclosed by planes passing through adjacent conductors, high frequency apparatus for energizing said coupling conductor and a connection between said coupling wire and said high frequency apparatus.

1,859,067. METHOD OF PRODUCING MAGNETIC MATERIALS. CHARLES PHILIP BEATH, La Grange, and HERBERT MARTIN EDWARD HEINICKE, Elgin, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1927. Serial No. 229,790. 7 Claims. (Cl. 148—12.)

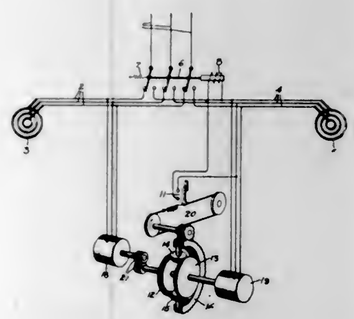
1. A method of producing magnetic materials, which consists in heating a magnetic material to a temperature at which it becomes malleable, and working the material until it reaches a temperature slightly above that at which it ceases to be malleable.

1,859,068. ELECTRIC GRINDER. CHESTER H. BEACH, Racine, Wis., assignor to The Dumore Company, a Corporation of Wisconsin. Filed May 1, 1929. Serial No. 359,483. 6 Claims. (Cl. 308—187.)



1. A portable tool having a cylindrical housing, a cylindrical member of fibrous material within the same, ball bearing raceways at opposite ends of said housing, a spindle mounted in said ball bearing raceways and having a reverse taper adjacent each raceway and a washer of fibrous material in contact with said fiber cylinder and also in contact with said reverse taper portions to supply oil to said ball bearing raceways.

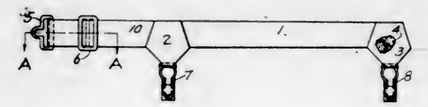
1,859,069. SYSTEM OF ELECTRIC DISTRIBUTION. ROYCE A. BEEKMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 19, 1929. Serial No. 379,507. 9 Claims. (Cl. 171—97.)



1. In combination, a source of alternating current, a load circuit connected to said source, an auxiliary source of current, and means controlled by the frequency of said source of alternating current for effecting the disconnection of said load circuit from said alternating current source and the connection of said load circuit to said auxiliary source when the frequency of said source of alternating current decreases below a predetermined value.

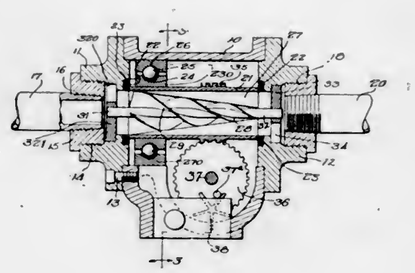
3. In combination, a variable frequency source of alternating current, a substantially constant frequency source of alternating current, a load circuit normally connected to said variable frequency source, and means including means responsive to the relative frequencies of said sources for effecting the disconnection of said load circuit from said variable frequency source and the connection of said load circuit to said substantially constant frequency source when the frequency difference between said sources exceeds a predetermined value.

1,859,070. GARTER. SOPHUS P. C. BORSON, Loveland, Colo. Filed Jan. 5, 1931. Serial No. 506,617. 3 Claims. (Cl. 241—6.)



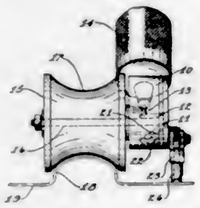
1. In a garter arranged to make two turns around the leg of the wearer, the combination of a non-adjustable contracting band whose length is substantially three-fourths of the total length of the garter, with an adjustable equalizing band whose effective length is substantially one-fourth of the total length of the garter, a hose supporter having its upper front edge fixedly secured to one end of the said contracting band and its upper back edge fixedly secured to one end of the said equalizing band, and a second hose supporter having its upper front edge fixedly secured to one end of the said contracting band and carrying on its surface a fastener arranged to engage another fastener slidably mounted on the said equalizing band.

1,859,071. GREASE METERING DEVICE. WALTER D. BURGER, Forest Park, Ill. Filed Sept. 17, 1929. Serial No. 393,259. 6 Claims. (Cl. 73—37.)



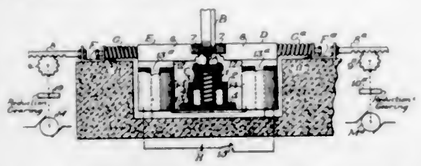
1. In a grease metering device, the combination with a tubular rotor through which grease is adapted to be passed; of a stator disposed within the rotor; vanes disposed in radial planes within said tubular rotor and extending longitudinally thereof, and helical vanes extending spirally from end to end of said stator and adapted to cooperate with the vanes of said rotor.

1,859,072. STRIPING INSTRUMENT. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 19, 1928. Serial No. 320,234. 23 Claims. (Cl. 91—62.6.)



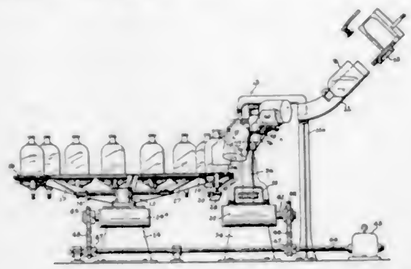
1. In a striping instrument nozzle, independently spring pressed and relatively movable telescoping scoring sections.

1,859,073. RAILWAY CAR RETARDER. HAROLD C. CLAUSEN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 8, 1930. Serial No. 442,525. 3 Claims. (Cl. 188—62.)



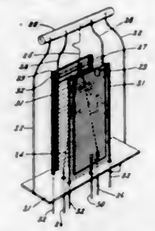
1. In a car retarder of the electromagnetic type comprising two brake shoes of magnetizable material extending parallel to a track rail on opposite sides of the track rail and movable into engagement with the wheel of a car for retarding the motion of the car, and magnetic means for moving said shoes into engagement with said wheel, the combination, with the aforementioned instrumentalities of resilient means for supporting the track rail whereby the vertical position of said rail varies with the weight of the car and varies the position at which said shoe engages said wheel and the frictional force between said shoes and said wheel.

1,859,074. GLASSWARE FORMING APPARATUS. ALBERT N. CRAMER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,795. 17 Claims. (Cl. 49—14.)



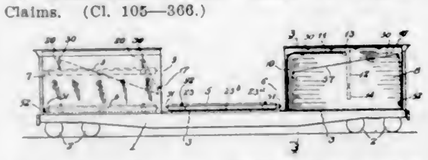
11. A setting-up device comprising an annular series of trough-like bottle holders rotatable about a vertical axis past article receiving and discharging stations, means to position the holders at the receiving station to support bottles in a cumbent position, means employing the force of gravity to deliver articles to the holders, means to position the holders to support the articles in an upright position at the discharge station, means to cause discharge of the articles from the holders at said discharge station, and means to alternately contract and expand the article holders to thereby cause alternate gripping and releasing of articles placed in said holders.

1,859,075. THERMIONIC VALVE. LEONARD J. DAVIES, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Dec. 12, 1928, Serial No. 325,632, and in Great Britain Dec. 13, 1927. 3 Claims. (Cl. 250—27.5.)



1. An electron discharge device comprising an electron emitting cathode, an anode consisting of a plurality of flat members, screen grids in the form of flattened cylinders surrounding said members, and a control grid in said device for cooperating with said cathode and anode.

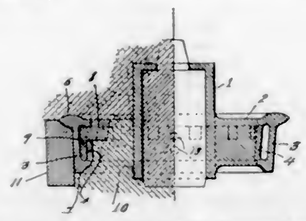
1,859,076. METHOD AND APPARATUS FOR HANDLING FREIGHT. WILLIAM S. DIETRICH, Greenville, Pa. Filed Feb. 12, 1932. Serial No. 592,585. 28 Claims. (Cl. 105—366.)



1. A method of handling freight, which includes the steps of loading a plurality of independent dolly cars, moving said dolly cars with intact loads over trackways to a point adjacent a trackway on a railway car, transferring said dollies with intact loads to said car trackway, and moving each of said dollies on said trackway into an individual fixed housing on said car.

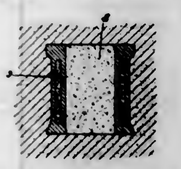
2. A method of handling freight, which includes the steps of loading a plurality of independent dolly cars, moving said dolly cars with intact loads over trackways to a point adjacent a trackway on a railway car, transferring said dollies with intact loads to said car trackway, moving each of said dollies on said trackway into an individual fixed housing on said car, and engaging each of said dollies in resilient relation with said car within said fixed housing.

1,859,077. CAST WHEEL. WILLIAM M. DUNCAN, Alton, Ill. Filed Jan. 5, 1931. Serial No. 506,699. 6 Claims. (Cl. 295—27.)



1. A cast wheel comprising walls forming an outer rim constituting the tread, an inner rim spaced therefrom by an interposed chamber, the inner rim having openings communicating with said chamber and dividing the inner rim into partial segments, substantially as described.

1,859,078. MOLDED METALLIC CORE. WILLIAM M. DUNCAN, Alton, Ill. Filed Jan. 19, 1931. Serial No. 509,705. 3 Claims. (Cl. 22—113.)



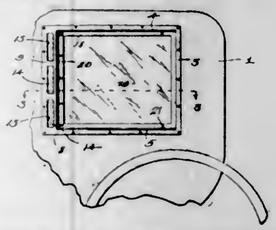
1. The combination with a mold, of a chill core comprising a mixture of fine metallic particles and sand held together by a suitable binder and disposed in said mold at the place where a chill is desired in the poured casting, and another core disposed in said mold and spaced from said chill to shield the resulting chilled surface of the interposed portion of said casting from the heat of the body of the casting, substantially as described.

1,859,079. METHOD OF CASTING WHEELS AND OTHER ARTICLES. WILLIAM M. DUNCAN, Alton, Ill. Filed June 22, 1931. Serial No. 545,970. 1 Claim. (Cl. 22—212.)



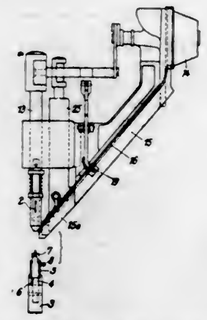
The method of casting a circular article having a double walled hollow rim integrally connected by spokes to a hub, in a sand mold, consisting of chilling the outer wall of said rim, shielding the inner wall opposite the ends of the spokes from the said chilling action so as to retard the loss of heat therefrom and to prevent strains and fractures while the article is cooling.

1,859,080. VENTILATING WINDOW FOR AUTOMOBILES. OLIVER M. EDWARDS, Syracuse, N. Y., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed July 28, 1927, Serial No. 209,135. Renewed Aug. 10, 1931. 10 Claims. (Cl. 296—44.)



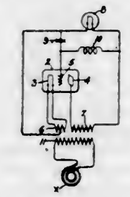
1. The combination with an automobile body having a window opening in the side thereof, of a window construction comprising a frame arranged to be set into said opening and formed with upper and lower laterally extending weather plates, a sash pivotally connected on an upright axis at its front end to the frame and movable laterally inwardly and outwardly between the weather plates and means for operating the sash.

1,859,081. RIVETING MACHINE. HEINRICH ELSNER, Dresden, Germany. Filed Aug. 26, 1929, Serial No. 388,467, and in Germany May 4, 1929. 5 Claims. (Cl. 218—2.)



1. A riveting machine comprising in combination a lower tool, a subdivided feeding device for guiding a rivet to the said lower tool and having a front part adapted to move up and down, and a locking mechanism attached to the said front part and adapted to release only one rivet at a time from a column of rivets in the feeding device.

1,859,082. CIRCUIT INTERRUPTER. ALAN S. FITZ GERALD, Schenectady, and HARRY L. PALMER, Scotia, N. Y., assignors to General Electric Company, a Corporation of New York. Filed May 23, 1927, Serial No. 193,428. Renewed Sept. 14, 1931. 14 Claims. (Cl. 175—373.)



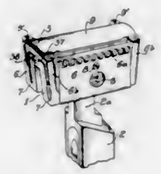
5. In combination with a thermionic tube comprising a filament, a plate and a grid element, a source of alternating current and a current operated device connected in series, the series connection being located across the plate and filament, a bridge connected across the terminals of said current operated device, said bridge comprising a condenser and a reactance connected in series, said grid element being connected to said bridge at a point between the condenser and the reactance.

8. In combination with a thermionic tube comprising a filament, a plate and a grid, a source of current connected to said filament whereby said filament is heated, another source of electric energy and a current consuming device connected in series with said plate and said filament whereby said thermionic tube operates as a rectifying device and allows current to be supplied to said current consuming device in one direction, a condenser having one pole connected between said current consuming device and said filament and another pole connected to said grid whereby said grid is charged in terms of potential energy existing in said current consuming supply circuit and interrupts the flow of electric energy through said thermionic tube, an impedance connected across said condenser and said current consuming device whereby said condenser is discharged over said current consuming device and said impedance and causes a corresponding decrease of the grid potential to again permit flow of electric energy through said thermionic tube.

12. Apparatus for generating a periodic current comprising a source of current, a single electric valve, a capacitor, a circuit for charging said capacitor from said

source including said valve, a discharging cirult for said capacitor comprising a non-emissive conducting path, and means for maintaining said valve non-conducting during the discharge of said capacitor.

1,859,083. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1928. Serial No. 265,907. 17 Claims. (Cl. 30—12.)

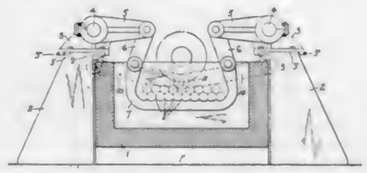


1. A safety razor comprising a blade holder provided with means to detachably retain a blade, a handle pivotally connected with the blade holder whereby the latter may extend in the direction of the handle and at an angle thereto, said handle being provided with a magazine having a side opening for admission of blades, a cover for the magazine opening movably carried by the handle to permit insertion of blades into the magazine through said opening, and an ejector carried by the handle, said ejector being slidable separately from the cover, the handle being provided with a space for the passage of blades from the magazine to the blade holder.

1,859,084. TEXTILE TREATING PROCESS AND COMPOSITION. HERBERT C. GORE, Scarsdale, and STEPHEN JÓZSA and CHARLES N. FREY, New York, N. Y., assignors to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed Jan. 11, 1930. Serial No. 420,281. 7 Claims. (Cl. 8—2.)

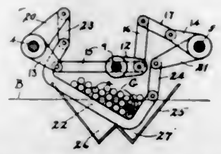
1. The process of simultaneously desizing and improving the wettability of textiles, which includes passing the textile through a solution containing an active starch liquefying enzyme and having mixed therewith oleic acid and a substance of the empirical class consisting of trichlorethylene, naphthalene-sulfonic acids, pine oil, hexanol and tetralin.

1,859,085. PICKLING APPARATUS FOR RODS, TUBES, AND BARS. CHARLES W. HALLER, Wheeling, W. Va., assignor to Wheeling Bronze Casting Company, Wheeling, W. Va., a Corporation of West Virginia. Filed Aug. 28, 1929, Serial No. 388,949. Renewed Aug. 22, 1931. 10 Claims. (Cl. 265—7.)



1. In combination with a pickling tank, a series of columns on each side of the tank, shafts rotatably supported by the columns and extending longitudinally of and adjacent to the sides of the tank, radial arms on the shafts extending inwardly in overlying relation to the tank, links pivoted to the inner ends of the arms and depending therefrom, substantially U-shaped cradles having their bottoms roughened and the upper ends of their sides pivoted to the lower ends of the links, a crank arm disposed to aline with the space centrally between the shafts, arms depending from the shafts, driving links pivoted to the crank arm and to the lower ends of the depending arms of the shafts, and means to impart rotary movements to the crank arm.

1,859,086. PICKLING APPARATUS. FRED HAMM, Martins Ferry, Ohio, assignor to Wheeling Bronze Casting Company, a Corporation of West Virginia. Filed Nov. 10, 1930. Serial No. 494,496. 9 Claims. (Cl. 266—7.)

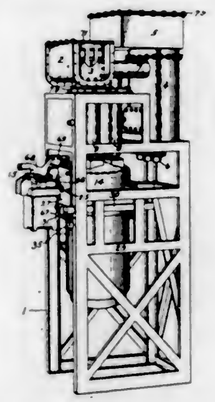


8. The method of pickling a group of elongate things of metal, which comprises the steps of immersing the group in a pickling bath, alternately raising the group from a support, tilting the group, and returning the group to a position upon the support, thus causing the members of the group to rotate severally about their longitudinal axis and to jar against one another, by revolving the group as a whole.

1,859,087. METHOD OF PRODUCING MAGNETIC MATERIALS. HERBERT MARTIN EDWARD HEINICKE, Elgin, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1927, Serial No. 229,801. Renewed Nov. 20, 1931. 8 Claims. (Cl. 148—12.)

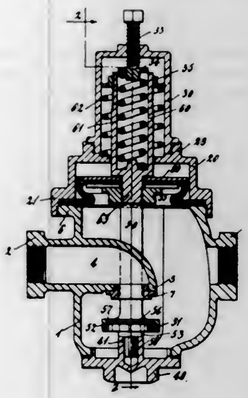
1. A method of making magnetic materials, which consists in heating the material to a temperature of approximately 1325° C., working the magnetic material at a temperature above that at which it ceases to be malleable, and quenching the material.

1,859,088. ELECTRIC SWITCHING APPARATUS. CHARLES H. HILL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 31, 1927. Serial No. 243,977. 9 Claims. (Cl. 175—298.)



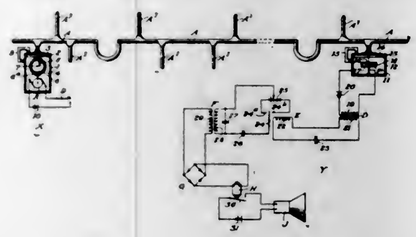
1. Electrical switching apparatus comprising a frame, a U-shaped yoke guided for vertical movement within said frame, a main switch unit mounted within said yoke and detachably and rigidly secured thereto, said frame and switch unit having cooperating disconnecting switch contacts, and means cooperating with the open end of said yoke maintaining said switch unit in position including a plate on which switch operating mechanism is mounted.

1,859,089. VALVE. FRANKLIN T. HOLMES, Springfield, Mass., assignor to Tryco Products, Inc., Westfield, Mass., a Corporation of Massachusetts. Filed Aug. 15, 1929. Serial No. 386,077. 4 Claims. (Cl. 50—23.)



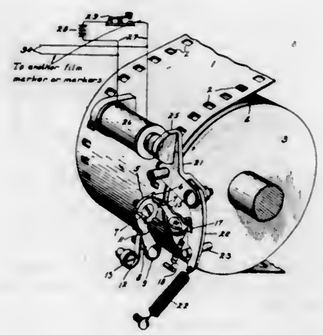
1. The combination with a pressure regulating valve comprising a valve, a valve operator, a low pressure expansion cylinder and means for limiting the stroke of the valve operator, of a plunger-diaphragm connected in marginal portions to the cylinder for tightly sealing the same and in central portions to the valve operator for actuating the valve, and having expansible corrugated intermediate portions for axial expansion in partial contact with the cylinder walls, said intermediate portions also containing circumferential sections of lesser resistance to wear for said plunger-diaphragm to act in said cylinder as a diaphragm of relatively great stroke in nonworn condition and as a plunger of like stroke if partly or completely ruptured in said lesser resistance sections.

1,859,090. SIGNALING APPARATUS. HAROLD O. HOLTE, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 8, 1925. Serial No. 21,550. 2 Claims. (Cl. 177—352.)



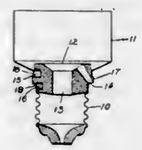
2. Apparatus for signaling between two points on a train comprising in combination with the brake pipe having the usual branches, means for impressing upon the air in said brake pipe pulsations of such frequency that the effective length of the branch pipe having the greatest effective length is less than one of the wave length of said pulsations, and a signal controlled by said pulsations.

1,859,091. FILM MARKING APPARATUS. CHARLES A. HOXIE, Alplaus, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 20, 1929. Serial No. 394,128. 3 Claims. (Cl. 164—87.)



1. Apparatus for making a reference mark on a moving film comprising a wheel having a plurality of peripherally spaced perforating points arranged adjacent the film, a member for retaining the points of said wheel out of contact with the film, means tending to rotate the wheel to cause a point thereof to engage the film, means for displacing said member from its retaining position and means for returning said member to its retaining position prior to the engagement of the next point of the wheel with the film.

1,859,092. BASE FOR INCANDESCENT LAMPS AND SIMILAR DEVICES. EUGEN HURWITZ, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 15, 1929, Serial No. 407,533, and in Germany Dec. 21, 1928. 2 Claims. (Cl. 176—32.)

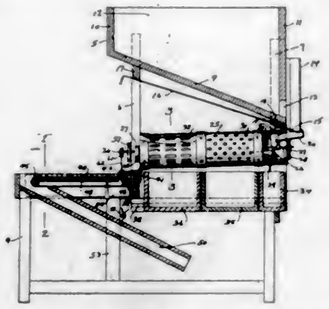


1. A base for incandescent lamps and similar articles comprising an insulating block having passages therethrough for leading-in conductors and a collar and upper and lower metal shells united to said block and separated by said collar, said upper shell being shaped so that it may be cemented to a bulb neck and said lower shell being threaded to engage a socket.

1,859,093. BEAN SORTER. JOHN J. JUNGERS, Attica, N. Y. Filed Sept. 3, 1927. Serial No. 217,484. 5 Claims. (Cl. 209—124.)

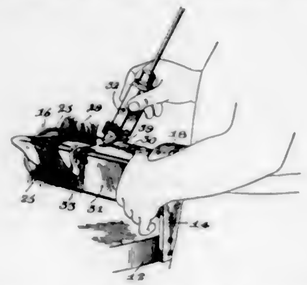
3. A bean sorter comprising a rigidly mounted, stationary feed hopper, a rotatable, inclined, separator drum, a nozzle pivotally mounted at the outlet end of the hop-

per for directing beans from the hopper to the feed drum, cam means mounted on the drum shaft and engageable with the opposite end of the nozzle for shaking the same,



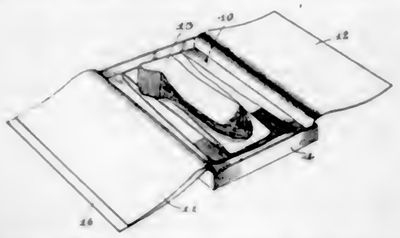
the drum comprising various sections having different sized perforations, and a receptacle under each of the various sections.

1,859,094. METHOD AND APPARATUS FOR CUTTING OFF FLOAT THREADS. HARRY E. KATZENMOYER, Rosedale, Pa., assignor to Fisher Hosiery Co. Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1930. Serial No. 444,675. 11 Claims. (Cl. 26—11.)



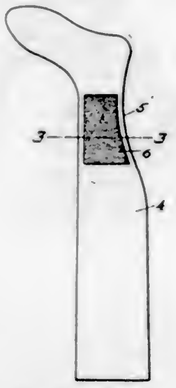
1. A method of removing loose ends of float threads from circular knit hosiery, consisting in intermediately severing the float threads, stretching a stocking inside out on a form with the ends of the float threads projecting outwardly in opposite directions, and then clipping said loose ends from the fabric.

1,859,095. PACKAGE BOX. HARRY E. KATZENMOYER, Rosedale, Pa., assignor to Fisher Hosiery Co. Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1930. Serial No. 444,676. 1 Claim. (Cl. 206—46.)



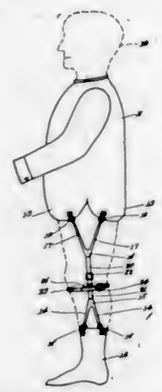
A package of the character described, comprising a cover, and a box body including a bottom and upstanding walls, a content cover flap secured to one wall, a content separating sheet having its medial portion fitted to the bottom of the box, and a false bottom arranged within the box, over said medial portion of the separating sheet to retain the latter in position with its ends projecting beyond opposite sides of the box, said ends forming flaps reversely foldable inward beneath the cover flap to function as content partition sheet.

1,859,096. HOSIERY DRYING FORM. HARRY E. KATZENMOYER, Rosedale, Pa., assignor to Fisher Hosiery Co. Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 22, 1930. Serial No. 446,246. 1 Claim. (Cl. 223—17.)



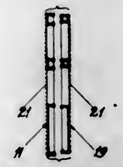
A hosiery form provided at opposite sides of its ankle portion with patches of unborn calf skin with the hair thereon, and the hair side facing outwardly.

1,859,097. SHIRT AND SOCK SUPPORT. OTTO B. KAYSER, Lynnville, Iowa. Filed Sept. 13, 1930. Serial No. 481,751. 1 Claim. (Cl. 241—1.)



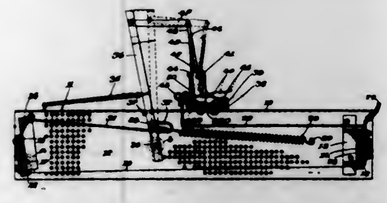
In a shirt and sock support, upper and lower webs, divergent straps carried by the webs fastening devices carried by the straps for attachment respectively to the shirt and to a sock at the outer side of the leg, elastic strap sections carried by the webs, adjustable connecting means for the strap sections to vary the spacing apart of the webs, a limb encircling band, means for adjustably fitting the band to the leg against the knee, and a loop carried by the band at the outer side thereof for slidably and loosely receiving the elastic strap sections therethrough to maintain the latter in line with the leg when the knee is bent.

1,859,098. FABRIC COVERED BUCKLE. STEPHEN LERMA, Brooklyn, N. Y. Filed Feb. 25, 1932. Serial No. 595,048. 4 Claims. (Cl. 24—163.)



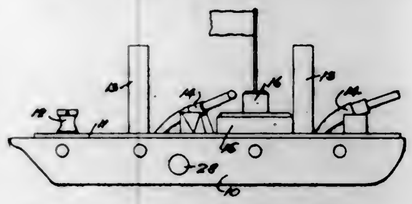
1. A buckle having a body formed of two dished plates of sheet metal secured together at their peripheries in substantially parallel spaced relation, each of said plates being provided with two apertures separated by an integral cross-bar of hollow rectangular section, said cross-bar having single walls spaced apart and positioned in the same planes as the front and rear faces of the buckle and having double walls spaced apart and facing laterally of the front and rear faces.

1,859,099. THERMOELECTRIC MOTOR. GEORGE P. LEWIS, Forest Hills, and RAYMOND E. SABIN, Flushing, N. Y. Filed Sept. 19, 1930. Serial No. 482,924. 6 Claims. (Cl. 171—327.)



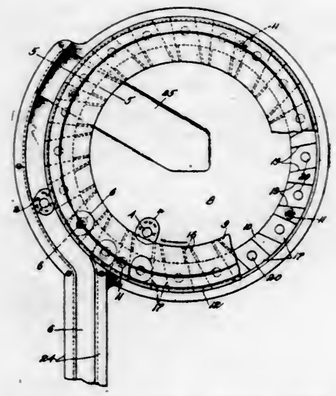
1. In a thermo-electric motor, the combination with a support, of a movable actuating element thereon, a lever, a connection between said element and lever, an expansible element consisting of a resistance wire connected with the lever and included in an electric circuit, means for resiliently acting on said lever to maintain the wire under tension, an electric switch also included in the circuit, and operative connection between the said actuating element and the switch.

1,859,100. EXPLOSIVE TOY. THOMAS S. LEWIS, Memphis, Tenn. Filed Feb. 26, 1931. Serial No. 518,441. 2 Claims. (Cl. 273—102.)



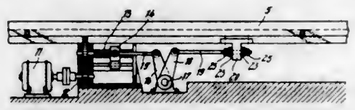
1. An explosive toy, comprising a hollow structure having a cover loosely laid thereon, and objects dispersably positioned on said cover, a striker hinged within said hollow structure and adapted to be swung upward about said hinge against said cover, a retractable spring urging said striker toward said cover, means for holding said striker in retracted position, a trigger engageable with said holding means to secure same in holding position, a plunger shiftably mounted within said hollow structure and having its ends projecting therewithout, a double acting cam carried by and projecting upward from said plunger into the path of said trigger, said cam being adapted to trip said trigger on movement in either direction, and guide members disposed on either side of said cam, slidably holding said plunger and cam thereon in position.

1,859,101. FASTENER PLATE FEEDING MECHANISM. MICHAEL M. LYONS, Detroit, Mich., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 27, 1926. Serial No. 131,902. 10 Claims. (Cl. 1—3.1.)



1. In a mechanism for feeding fastener plates, each of which is provided with a hole nearer one end than the other, a hopper for holding a supply of said plates and provided with a guideway through which the plates can escape from said hopper, a shoulder in said guideway for stopping said plates, and a pin having an inclined face for directing said plates against said shoulder, said pin being so spaced from said shoulder that it enters the holes in said plates if they are right end foremost and thereby allows them to dodge said shoulder but prevents such dodging if they are wrong end foremost.

1,859,102. CAR RETARDING APPARATUS. AUGUST MEYER, Berlin-Schoneberg, Germany. Filed Aug. 30, 1930. Serial No. 478,848. 4 Claims. (Cl. 188—62.)

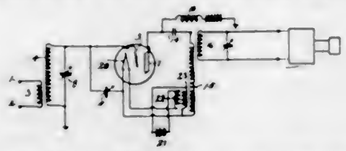


1. In car retarding apparatus the combination of a brake bar extending horizontally adjacent to a track rail over which the vehicle to be retarded travels, a brake shoe member extending horizontally to and in contact with a vertical face of said brake bar and a plurality of sliding members secured to said brake shoe member and located in inclined recesses in said vertical face of said brake bar.

1,859,103. TRANSMISSION SYSTEM. BYRON B. MINNIUM, Chicago, Ill., assignor to Stewart Warner Corporation, Richmond, Va., a Corporation of Virginia. Filed Nov. 26, 1929. Serial No. 409,792. 3 Claims. (Cl. 179—171.)

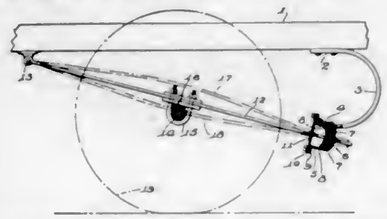
1. In an amplifier system employing multi-electrode electron discharge devices, means for suppressing undesirable oscillations due to inter-electrode capacities including an

input inductance connected to the grid of said device, a filamentary cathode for said device, an output inductance having one end connected to the anode of said device, the opposite end of said output inductance being directly con-



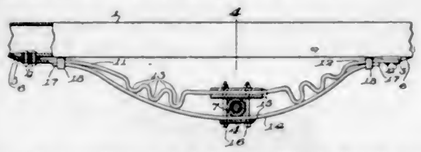
nected to said cathode, a pair of balancing coils inductively related to said output inductance, each coil of said pair being connected to a leg of said filament, and a source of filament heating current connected in parallel with said coils.

1,859,104. SPRING SUSPENSION OF VEHICLES. THOMAS MUNRO, Philadelphia, Pa. Filed May 7, 1929. Serial No. 361,173. 2 Claims. (Cl. 267—56.)



1. A spring system for vehicles, comprising the combination of a frame, a spring element pivotally connected at one end to said frame and slidably connected at its opposite end to another portion of said frame through the medium of a resilient member having a natural period of vibration different from that of said element, and anti-friction means carried by the free end of said member and in direct engagement with the free end portion of said element.

1,859,105. SPRING SUSPENSION OF VEHICLES. THOMAS MUNRO, Philadelphia, Pa. Filed May 7, 1929. Serial No. 361,174. 4 Claims. (Cl. 267—36.)



1. The combination of a vehicle, with a spring having its opposite ends fixed with respect to and separated from said vehicle by a vibration-absorbing medium, an axle connected to an intermediate portion of said spring, the opposite portions of said spring being shaped so as to permit their respective overall lengths to vary with the rise and fall of said axle with respect to said vehicle, and a spring leaf also connected to said axle and with its free end portions bearing slidably against said first spring in the neighborhood of its fixed ends.

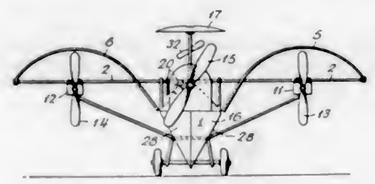
1,859,106. SAFETY RAZOR. JOSEPH MUROS, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Oct. 6, 1928. Serial No. 310,782. 2 Claims. (Cl. 30—12.)

1. The combination with a blade having one or more openings, of a blade holder, a corresponding number of positioning lugs on said holder for cooperation with said openings, each lug including a body portion fixed at one of its ends to said holder and being provided at its other end with an enlarged head having a polygonal transverse cross-section into which the bounding figure of the trans-



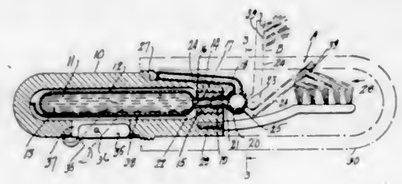
verse cross-section of said body portion is inscribed, the configuration of each opening in said blade corresponding to that of the transverse cross-section of the head of a lug co-operating therewith.

1,859,107. HEAVIER-THAN-AIR AIRCRAFT. WILHELM MUSS, Hanover, Germany. Filed Feb. 11, 1931, Serial No. 514,973, and in Germany Feb. 21, 1929. 19 Claims. (Cl. 244—15.)



1. An aeroplane comprising in combination a body portion having propelling and lifting air-screws and driving means therefor, a longitudinal series of arched planes extending laterally on each side of said body portion, and separate propellers associated with the front planes on each side of the body, the planes successively increasing in width from front to rear of the body portion.

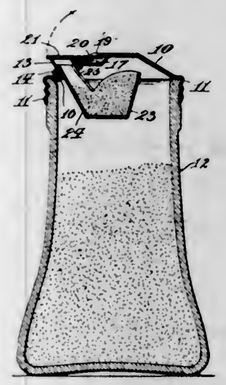
1,859,108. DISPENSER. FRED NADOOLMAN, Brooklyn, N. Y. Filed July 30, 1930. Serial No. 471,637. 3 Claims. (Cl. 221—60.)



1. In a device of the nature described, a barrel having an open threaded end, a flexible medicated liquid containing sac in the barrel open at one end, a plug screw threadedly maintained in the barrel and having a bore adapted to receive the open end of the sac, a socket screw threadedly maintained in the plug, the said socket member having a bore therein in alinement with the plug bore and a duct pivotally mounted in the socket and provided with an opening adapted to be brought into and out of registry with the bore in the socket member.

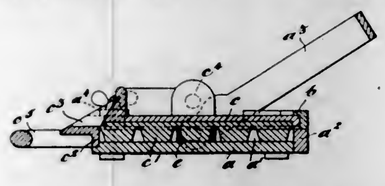
1,859,109. MEASURING AND DISPENSING CONTAINER. BENJAMIN M. OSWELL, Los Angeles, Calif. Filed Nov. 21, 1930. Serial No. 497,180. 5 Claims. (Cl. 221—98.)

1. In a measuring and dispensing container, a cap adapted to be removably positioned on a receptacle, a discharge spout projecting from said cap, a measuring cup positioned beneath the central portion of said cap, a tubular member projecting upwardly from one side of said cup



and the upper portion of which tubular member is slotted lengthwise and removably seated in the lower portion of said discharge spout.

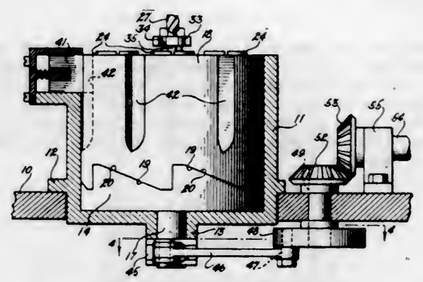
1,859,110. MOLD FOR CASTING PRINTERS' FURNITURE. JOHN EDWARD PHILLIPS and ALBERT GEORGE THACKERAY, Worcester, England. Filed Apr. 26, 1930, Serial No. 447,498, and in Great Britain Jan. 29, 1930. 2 Claims. (Cl. 22—136.)



1. A mold comprising a base plate having a channel opening through the top and an end thereof, a closure plate adapted to be removably superimposed upon said base plate to close the upper side of said channel, means carried by the closure plate for cooperation with the base plate to close the open end of said channel when the closure plate is superimposed upon the base plate, said closure plate having an opening formed therethrough for the introduction of molten metal into the channel, a projection on the under side of said cover to extend into the channel of the base plate, and a member adapted to be disposed in said channel to vary the effective length of the channel.

1,859,111. INDEXING APPARATUS. GEORGE LYNDEN ROCK, Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 28, 1927. Serial No. 222,572. 7 Claims. (Cl. 77—64.)

1. In an indexing apparatus for reciprocating and rotatably indexing a drum member of an article working apparatus having a plurality of article holding spring collets arranged in one end surface of the drum member and a work tool adjacent thereto, driving means including an oscillatory element arranged coaxially with the drum member, the drum member and the element provided with abutting cooperating surfaces for imparting reciprocatory and rotary motions to the drum member during an oscillation of the element in opposite directions, means adjacent the end of the drum member containing the collets and cooperating with the articles therein when the latter are in a work performing position and during a reciprocation of the drum member to and from the work tool for causing the collets to successively grip and release the articles, and means



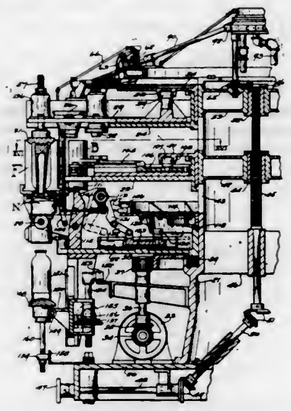
for locking the drum member from rotation in one direction during the reciprocatory movement thereof by the element.

1,859,112. METHOD OF MANUFACTURING ELECTRICAL RESISTANCES. ISIDOR SILBERSTEIN, Berlin, Germany. Filed Dec. 11, 1929, Serial No. 413,167, and in Germany Dec. 18, 1928. 4 Claims. (Cl. 201—76.)



4. The herein described method of manufacturing electrical resistances, which consists in applying a coating of resistance material to a carrier of insulating material, applying thereto a protective coating, and thereafter grinding through the protective layer, the resistance material and into the carrier a helical groove of a shape suitable for leaving a coating of the desired resistance on the carrier.

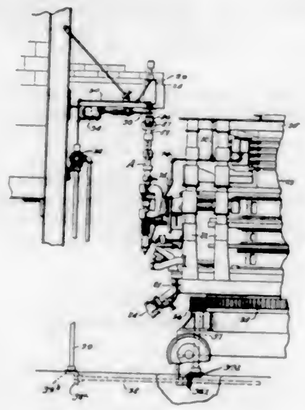
1,859,113. GLASS BLOWING MACHINE. LEONARD D. SOUBIER, Woonsocket, R. I., assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 27, 1922, Serial No. 564,183. Renewed Oct. 26, 1931. 27 Claims. (Cl. 49—9.)



1. In a glass blowing machine, the combination of a blank mold and a neck mold in register, means to introduce a charge of glass into said molds and form the neck of the article, means to open the blank mold leaving the

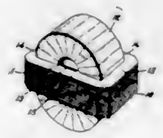
blank supported in and projecting upwardly from the neck mold, a finishing mold, means to close the finishing mold around the upwardly projecting blank, and means to blow the blank in the finishing mold.

1,859,114. MEANS FOR MAKING BLOWN GLASS ARTICLES. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Original application filed Sept. 20, 1924, Serial No. 738,762. Divided and this application filed Oct. 27, 1928. Serial No. 315,472. 8 Claims. (Cl. 49—5.)



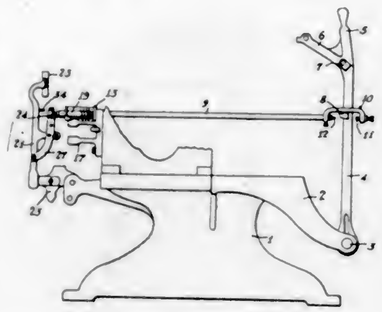
3. The combination of a container for molten glass having an outlet opening thru which the glass issues, receiving devices brought successively to a receiving position beneath the outlet, each said device comprising means to engage and grip the lower end of the issuing glass, means to move the receiving device downward with the glass while the latter is connected to the supply body within the container, means operating periodically to sever the glass at a point beneath the outlet while the receiver is moving downward, and means within the container operating periodically in synchronism with the operations of the severing means to retard and control the issuance of the glass.

1,859,115. MAGNETIC CORE. CLAUDE M. SUMMERS, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Nov. 9, 1931. Serial No. 573,792. 4 Claims. (Cl. 175—356.)



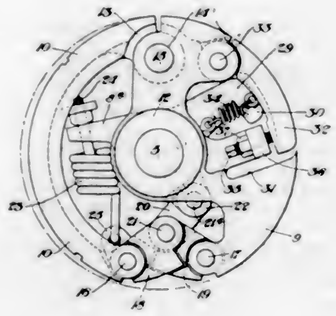
1. Electrical induction apparatus including a magnetic core having a gap extending partially across the magnetic circuit of the core, the core extending integrally past at least one side of said gap, and a magnetic insert secured in said gap to reduce the magnetic reluctance of the core.

1,859,116. SLUG LEVER ATTACHMENT FOR TYPOGRAPHICAL MACHINES. HERMAN T. SUNDSTROM, Houston, Tex. Filed Mar. 3, 1930. Serial No. 432,597. 8 Claims. (Cl. 199—61.)



1. In a type forming machine, a frame, an ejector lever pivoted thereon, a slug lever on said frame pivoted to swing in a plane perpendicular to that of said ejector lever, and means actuated by the movement of said ejector lever to move said slug lever.

1,859,117. TAKE-UP BLOCK. EDWARD THOMAS, Cleveland, Ohio, assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Feb. 17, 1931. Serial No. 516,477. 4 Claims. (Cl. 242—74.)

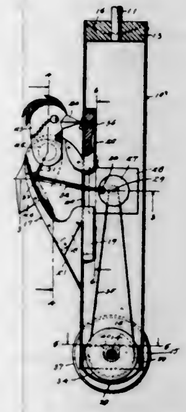


3. A take-up or drawing block comprising a drum on which the material to be drawn is wound, a material-gripping device mounted to cooperate with the drum, a segment pivotally mounted on the perimeter of the block adjacent said device, and an adjusting screw for adjusting said segment relatively to the surface of the block.

1,859,118. FIGURE TOY. JAMES H. THOMPSON, Bluefield, W. Va., assignor to Claude Edward Godsey, Bluefield, W. Va. Filed Apr. 25, 1931. Serial No. 532,883. 3 Claims. (Cl. 46—45.)

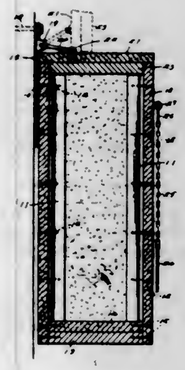
1. A figure toy of the character described comprising an elongated hollow body, a drive shaft carried by the body, wheels mounted on the drive shaft, a figure mounted on the outer surface of the body, said body having an opening in a wall thereof, said figure having a fixed portion and a rockable portion, means for securing said fixed portion in a position to overlie the opening, a driven

member mounted in the body and engaging the rockable portion, a drive member mounted on the shaft, and means connecting the driving member with the driven member



said securing means including oppositely extending portions formed with the figure and disposed inwardly of the body.

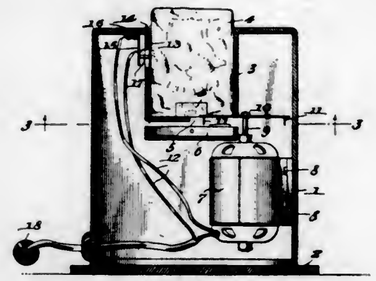
1,859,119. THERMOBOX. WILBUR F. VANDERWALL, West Concord, Minn. Filed May 13, 1930. Serial No. 452,023. 1 Claim. (Cl. 220—18.)



In a thermo container of the character described including an elongated box having an open end, a bracket secured to said box and having a looped upper end portion whereby to permit securing thereof on a supporting member, a closure member for the open end of said box, a U shaped hinge member secured to said closure member at a point spaced outwardly from the inner end portion thereof, said hinge member also swingingly engaging said bracket.

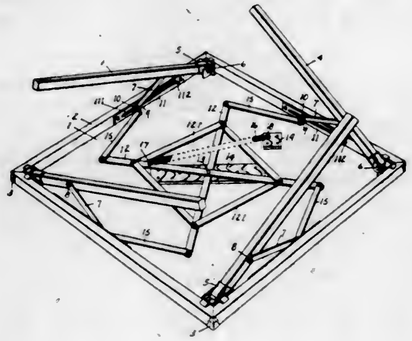
1,859,120. CIGARETTE PACKAGE OPENER. FRANK L. WEST and LA VELLE A. MARTIN, Bradenton, Fla. Filed May 21, 1930. Serial No. 454,492. 6 Claims. (Cl. 131—59.)

1. In a cigarette package opener, the combination with a normally inoperative electric motor, and a cutter adapted to be driven by said electric motor, and an electric switch controlling the circuit of said motor, of means for guiding the package of cigarettes to said cutter in position to enable the package to automatically close said



switch, thereby to complete the circuit of said motor, whereby the motor is started when the switch is closed as aforesaid.

1,859,121. AUTOMATIC FOLDING TABLE. JOHN J. WILKINSON and MICHAEL A. WILKINSON, Owego, N. Y., assignors to The Carrom Company, Ludington, Mich. Filed Dec. 8, 1930. Serial No. 500,731. 8 Claims. (Cl. 45—11.)



4. In a folding card table, the combination of the top, a folding leg, a pivoted brace for said leg, a slotted slideway at the side of said table having a deflected catch portion at the outer end of said slot, a slide having an engaging pin for traversing said slideway pivotally connected to the upper end of said brace, and spring means connected to force the slide to the outer end of the slot to maintain the leg in locked position.

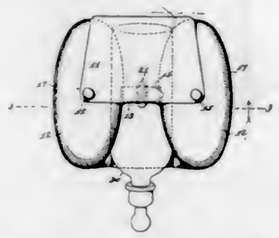
1,859,122. SAFE PROTECTIVE APPARATUS. JOHN W. YOUNG, Pittsburgh, Pa. Filed Apr. 15, 1930. Serial No. 444,498. 4 Claims. (Cl. 109—6.)



1. A gas protective assembly applicable to safe doors and the like and comprising a gas emitting apparatus adapted to emit an incapacitating gas, means for setting

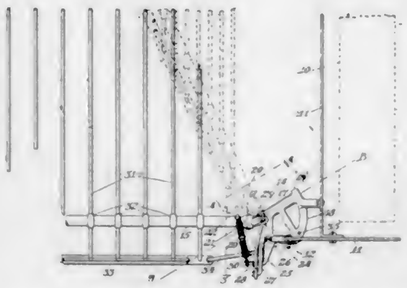
said apparatus into operation, said means embodying an ignition device, a flexible member engaging and normally retaining said device in inoperative position, and a cutting device adapted to sever said flexible member and release said ignition device, said cutting device being rigidly connected to and operable by displacement of the front plate of said door.

1,859,123. BOTTLE HOLDER. GERTRUDE F. BALLERT, Scotia, N. Y. Filed Jan. 9, 1931. Serial No. 507,739. 4 Claims. (Cl. 248—65.)



1. A bottle holder consisting of a stuffed body adapted to embrace the body of a bottle, said stuffed body consisting of end sections and a middle section, the middle section being gradually sloped from back to front for the purpose of retaining the bottle in an inclined position, and tension means secured to the end sections, whereby to tensionally retain the stuffed body in place on the body of the bottle.

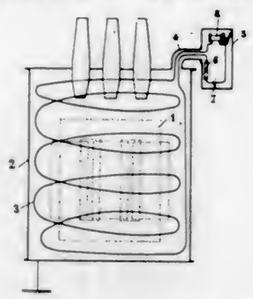
1,859,124. BUNDLE CARRIER FOR HARVESTERS. BERT R. BENJAMIN, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Substitute for application Serial No. 1,772, filed Jan. 12, 1925. This application filed July 9, 1930. Serial No. 466,895. 24 Claims. (Cl. 56—480.)



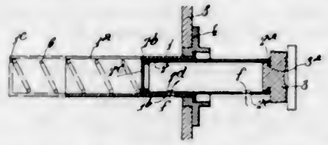
1. In combination, a frame, a carrier support including an angularly bent portion, means for rockably journaling said bent portion on the frame, carrier means on the support, and means for rocking the bent portion on a fixed axis whereby the support will have a downward movement along a line angularly spaced from the projected axis of the bent portion.

1,859,125. MEANS FOR THE PROTECTION OF ELECTRICAL APPARATUS. JOSEPH BETHENOD, Paris, France. Filed Jan. 10, 1930, Serial No. 419,934, and in France Jan. 22, 1929. 18 Claims. (Cl. 175—294.)

1. Means for protecting electrical apparatus when a fault occurs in the insulation, comprising in combination an aperiodic receiving system sensitive to the high-frequency electro-magnetic radiation produced by the spark, arc or discharge accompanying the occurrence of said fault, means for influencing said receiving system by said radiation, screens for protecting said means and said receiving system from external radiations, and means connected to said receiving system for operating a suitable protecting device when said radiation occurs.

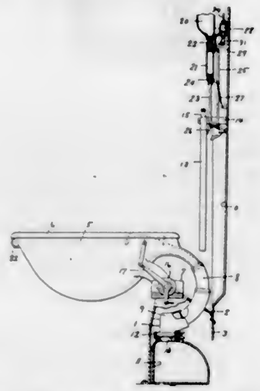


1,859,126. COCK. PIERRE EUGÈNE BOEUF, Ermont, France. Filed Mar. 14, 1930, Serial No. 435,911, and in France Mar. 25, 1929. 2 Claims. (Cl. 221—27.)



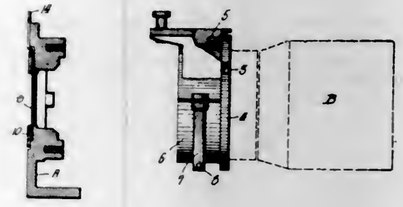
1. In a cock, a fixed outer tube, a movable inner tube and means for allowing the displacement, in translation only, of the said inner tube relative to the said outer tube, said tubes constituting a cock of the telescopic type, a gripping and operating member forming a bung mounted at the outer end of the inner tube and capable of an angular displacement on and relative to the said inner tube, a fixed threaded member, and a threaded portion on the said gripping and operating member engageable with the fixed member for locking the said inner tube in the closed position.

1,859,127. TOILET. EDWARD D. BUFMYER and OLAF HELSTROM, Willapa, Wash. Filed Apr. 27, 1931, Serial No. 533,284. Renewed Feb. 20, 1932. 7 Claims. (Cl. 4—169.)



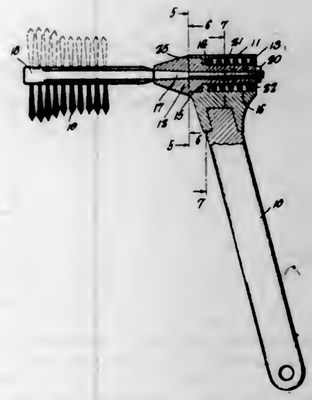
1. A toilet comprising a supporting structure, a bowl mounted for swinging movement in a vertical plane on the supporting structure, a back rest mounted shiftably on a support adjacent the rear of the bowl, and means operatively connecting the back rest to the bowl for shifting said back rest to inoperative position when the bowl is swung upwardly.

1,859,128. MOVING PICTURE PROJECTOR. J. BURGI CONTNER, Lakeland, Fla. Filed Apr. 6, 1929. Serial No. 353,105. 1 Claim. (Cl. 88—24.)



In combination, a split sleeve-like adjustable adapter clamp of a projecting device, a lens carrier cooperating with the clamp, an adapter in the form of a cylindrical part having a flange at its outer end, the interior of the carrier being concentric, means for removably holding a lens in the adapter, and a pin on the flange to engage in the clamp when the cylindrical part fits therein.

1,859,129. TOOTHBRUSH. JOHN H. COSTENBADER, Norfolk, Va. Filed Dec. 19, 1930. Serial No. 503,581. 3 Claims. (Cl. 15—172.)



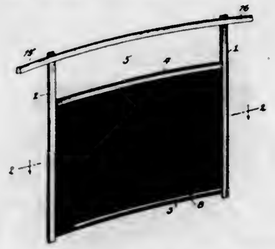
1. In a toothbrush, a handle, an angularly disposed socket at one end thereof, a brush carrying shank, a plug carried at the inner end of the shank and rotatably and axially movable within the socket, and spaced means surrounding the socket and engaging the plug to hold the shank against rotation.

1,859,130. VEHICLE WHEEL LOCK. JOHN EDWIN DANT, Louisville, Ky. Filed Oct. 9, 1931. Serial No. 567,908. 4 Claims. (Cl. 70—90.)

1. A vehicle wheel locking mechanism comprising a relatively stationary hollow axle including a wall provided with a slot, a wheel including a hub rotatable about the axle, a ratchet internally of the hub, a latching element in the axle, and a key-controlled mechanism in the axle to urge the bolt through the slot into latching engagement with the ratchet.

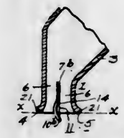


1,859,131. FILM HANGER. FREDERICK A. DEPPERMAN, Rivervale, N. J. Filed Apr. 30, 1931. Serial No. 534,081. 4 Claims. (Cl. 95—100.)



1. A film hanger comprising a frame having a pair of uprights extending beyond the frame, a supporting bar connected with said uprights, said uprights being substantially U-shaped in cross section, while the members connecting the uprights are bowed from one end to the other, said last mentioned members being formed with channels for the reception of film, said film being bowed by said members centrally and at the ends held straight by the uprights whereby a tension will be produced on the film to prevent accidental displacement thereof.

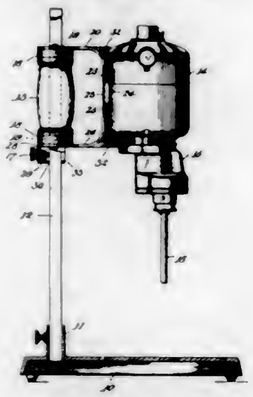
1,859,132. SUCTION COMB. JÖRGEN F. H. FECHTENBURG, Cheltenham Township, Montgomery County, Pa. Filed Nov. 20, 1928. Serial No. 320,607. 5 Claims. (Cl. 119—84.)



1. The combination of a suction nozzle having a hollow body portion terminating in an elongated mouth opening of restricted width and wherein opposite sides of said mouth opening are defined by a pair of relatively spaced rectilinear walls extending in planes substantially parallel to each other with the edges of said walls at the mouth opening unbroken and disposed in a common plane substantially at right angles to the planes of said walls, and a comb disposed in said mouth opening in a plane intermediate and in substantially parallel spaced relation to each of said side walls, providing an unobstructed relatively narrow air passage extending from said mouth

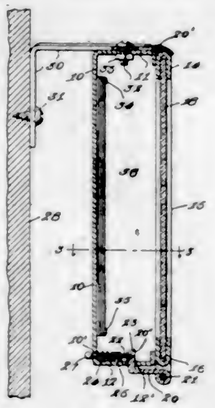
opening into the said hollow body portion of the nozzle at each side of the comb between the comb and the adjacent side wall of the nozzle whereby the suction will be concentrated at each side of the comb.

1,859,133. HANDLE AND MOTOR ASSEMBLY FOR ELECTRIC UTILITY DEVICES. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed June 4, 1931. Serial No. 542,187. 4 Claims. (Cl. 248—15.)



2. A bracket for an electric utility device having a column and a driving motor, comprising a stirrup-shaped bracket adapted to be fastened to the motor casing, a hollow handle secured between the arms of the stirrup and adapted to surround the column, and a clamping device on the bracket for securing the same to the column.

1,859,134. LICENSE AND CARD HOLDER. CHARLES FOTI, Arnold, Pa., assignor of one-eleventh to Antonio Saulle, one-eleventh to Menotti Giudice, one-eleventh to Pasquale Scanga, one-eleventh to Ferdinando Gatto, one-eleventh to Alfio Castorina, Arnold, Pa., and one-eleventh to Paolino Nicolazzo, one-eleventh to Salvatore Runco, one-eleventh to Marco Nicolazzo, New Kensington, Pa., one-eleventh to Antonio Cimino and one-eleventh to Giuseppe Fratongeli. Filed Feb. 18, 1931, Serial No. 516,724. Renewed Mar. 31, 1932. 3 Claims. (Cl. 40—10.)



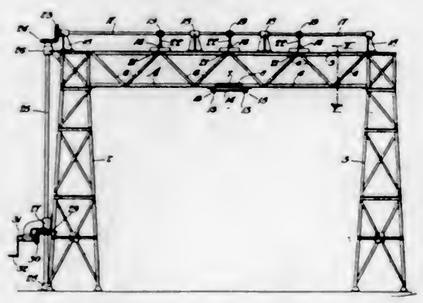
1. In a device of the class described, a housing including upper, lower and rear walls, a swinging closure for the front of the housing and spaced from the rear wall thereof, means for supporting the housing outwardly from the surface of a stationary member within the body of a vehicle, and securing means for the closure, these means comprising a plurality of elements one of which is pivoted directly to the closure and the other of these elements engaging and retaining the pivoted element and including a headed portion projecting rearwardly from the housing and into the space between the housing and stationary member, whereby it is protected from observation and from easy manipulation by unauthorized persons.

1,859,135. SHOE NAIL FOR MOUNTAIN SHOES. RUDOLF FUCHS, Eggenberg, near Graz, Austria. Filed Feb. 9, 1931, Serial No. 514,666, and in Austria Jan. 27, 1930. 2 Claims. (Cl. 36—74.)



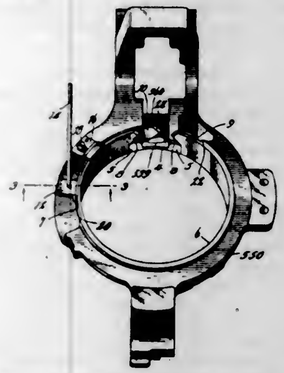
1. In an article of the class described, a side-plate provided at one end with projections adapted to be inserted into the upper protruding edge of the sole of a shoe from above and having a rigid ground engaging projection at the other end, a bottom plate rigidly secured at right angles to said ground-engaging projection and hook-shaped claws joined to said projection and flexible along the line of joining, said claws having prongs adapted to be driven into the sole, and said prongs being of arcuate form with the center of curvature at the line of joining of the claws to the ground engaging projection.

1,859,136. TRUSS. CHAUNCEY MARSH GOODRICH, Windsor, Ontario, Canada. Filed Nov. 4, 1930. Serial No. 493,400. 1 Claim. (Cl. 189—37.)



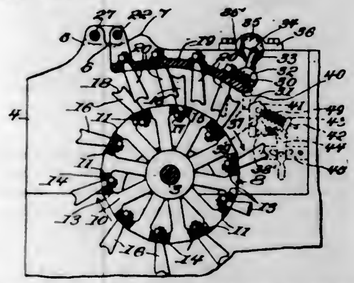
A truss having bottom and top chord members secured together by diagonal bracing, at least two of said diagonal bracing members being secured to said top chord member at the center of said chord member and to spaced points on said bottom chord member, said bottom chord member being divided to form two parts at a point immediately below the point of connection of said diagonal bracing members with said top chord member, a splice member bridging and connecting the parts of said bottom chord member, means for adjustably securing the parts of said bottom chord member and said splice member together, said means including bolts passing through close fitting holes in said bottom chord member and elongated holes in said splice member, lugs on each of the parts of said bottom chord member and a threaded bolt connecting said lugs and having nuts adapted to be threaded on and off the bolt to force the parts of said chord member toward each other or permit said parts to move away from each other to adjust the camber of said truss.

1,859,137. GAP CLOSING DEVICE FOR LATCH RINGS OF KNITTING MACHINES. IVAN W. GROTHEY, Laconia, N. H., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Apr. 9, 1931. Serial No. 528,902. 13 Claims. (Cl. 66—112.)



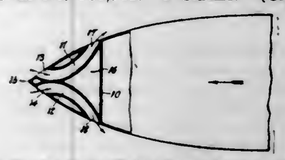
1. In a knitting machine, the combination with a latch guard ring having a latch engaging surface and a gap for the operation of yarn guides of means for closing said gap presenting a surface to the needles latches concentric with the latch engaging surface of the ring, said means being movable to a position behind said latch engaging surface to open said gap.

1,859,138. CYLINDER AND CONCAVE FOR THRESHING MACHINES. FRANK J. HABA, Caldwell, Kans. Filed Aug. 22, 1929. Serial No. 387,617. 3 Claims. (Cl. 130—27.)



3. A concave structure for an overshot threshing cylinder comprising a concaved body spaced above the cylinder, a crank shaft journaled above the cylinder pivotally supporting the rear edge of the body and capable of raising the rear of the body, means supporting the forward portion of the body and capable of permitting the body to slide and move rearwardly and upwardly and a spring pressed dog for holding the shaft and rear portion of the body at normal position.

1,859,139. BOW CONSTRUCTION FOR SHIPS. MICHAEL J. HANLON, Weehawken, N. J. Filed Sept. 24, 1931. Serial No. 564,941. 3 Claims. (Cl. 114—67.)

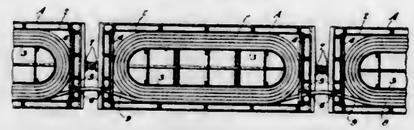


1. A hull for watercraft having a bow portion formed with a water passage extending through the fore peak, said passage having an intake adjacent the stem for admitting water at the region of positive pressure and having lateral and rearward outlets for discharging the water at the region of negative pressure, said passage being located substantially in a horizontal plane passing through the bow wave.

1,859,140. PROCESS FOR THE MANUFACTURE OF ALKYL CYANIDES. HENRY BOHN HASS and JERRY REUBEN MARSHALL, La Fayette, Ind. Filed Dec. 6, 1929. Serial No. 412,279. 7 Claims. (Cl. 260—108.)

1. A process for the conversion of an alkyl chloride to an alkyl cyanide by metathesis with a metallic cyanide in which the reaction is catalyzed by the presence of an iodide.

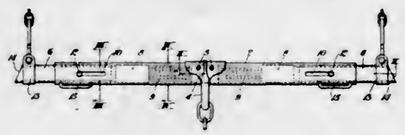
1,859,141. METHOD OF SHIPPING CABLE. ALEXANDER O. HOEFTMANN, OWEN A. MCNAMEE, and JAMES J. MORRISON, Worcester, Mass., assignors to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed June 11, 1931. Serial No. 543,708. 10 Claims. (Cl. 105—367.)



1. The method of loading and shipping a cable in railroad cars, consisting in furnishing the cars with a form constructed and arranged to provide a substantially annular stowage space, and laying the cable in coils in said spaces.

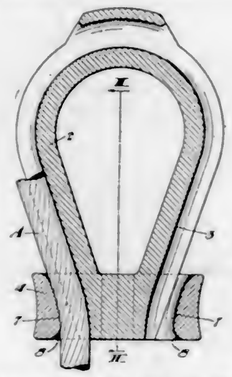
2. The method of loading and shipping a cable in railroad cars, consisting in furnishing the car with a form constructed and arranged to provide elongate annular stowage spaces extending the car's length, and laying the cable in said spaces in successively ascending horizontal elongate coil layers.

1,859,142. SINGLETREE. ANDREW HORNE, Uniontown, Pa. Filed May 19, 1931. Serial No. 538,571. 1 Claim. (Cl. 278—90.)



A singletree comprising a tubular body having longitudinal slots near its ends, a plug mounted in said tubular body in the center thereof, a draft connection fixed to said body by elements passing through said body and into said plug, said plug being substantially coextensive with said draft connection and serving to strengthen the central portion of said body to which said draft connection is fixed, angularly ended tubular extensions, beams encompassed by said extensions and extending, in each instance, beyond one end thereof in enlarged proportions, said extensions and beams being fitted in the end of said tubular body with the enlarged ends of the beams innermost, springs in said body on each side of said plug and contacting with the ends of said beams, studs inserted through the slots in said body and engaging said extensions to limit the movement of said extensions relative to said body, and trace connections fitted to said extensions adjacent their outermost ends and inward from said angularly shaped end portions so as not to interfere with the wedge or cam action of such surfaces.

1,859,143. WIRE ROPE THIMBLE. JAMES FORREST HOWE, Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed May 27, 1931. Serial No. 540,475. 4 Claims. (Cl. 24—123.)



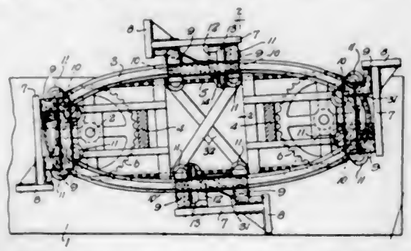
1. A rope thimble having a rope groove therein and a squeezer ring secured to said thimble, said squeezer ring having rope grooves at each end provided with outwardly flaring lower ends to permit a spread of the rope mounted on said thimble, said squeezer ring consisting of a two-part ring enclosing the inner end of the thimble, said ring being divided on a line between the ends of the rope groove and each of the parts of said ring being provided with lugs adjacent their abutting ends, and said thimble being provided with recesses to receive said lugs, said lugs fitting snugly within said recesses so as to deliver the stresses caused by the spread of the rope outwardly against the squeezer ring to the thimble.

1,859,144. COTTON PICKER SPINDLE. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed May 12, 1930. Serial No. 451,570. 7 Claims. (Cl. 56—50.)



1. A cotton picking spindle comprising a cone-shaped body having a spiral shoulder facing towards the apex of the body and extending from base to apex thereof, said shoulder being provided with teeth the outer surfaces of which are parallel to the axis of the spindle.

1,859,145. CHAIN PROPELLER. ERNEST N. KERR, Bloomington, Ill. Filed Dec. 21, 1931. Serial No. 582,470. 8 Claims. (Cl. 115—63.)

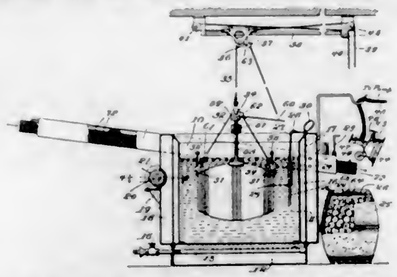


1. In a chain propeller having opposite endless elliptical tracks, a plurality of carriages having each a longitudinal support, bearing members hung from said support, trucks having pivotal bearing in said members and provided with upper and lower wheels engaging said tracks, a paddle blade carried by said support, and sprocket gearing having operative connection with said carriages; the paddle blade of each carriage projecting inwardly past the forward end of its support to a position adjacent said track, the support and blade together being of T-form, and the carriage following in the wake of its paddle blade.

1,859,146. HALOGEN CONTAINING DYESTUFFS OF THE DIBENZANTHRONE SERIES AND PROCESS OF MAKING SAME. KARL KRAUER, Basel, Switzerland, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 8, 1931, Serial No. 567,759, and in Switzerland Oct. 18, 1930. 6 Claims. (Cl. 260—61.)

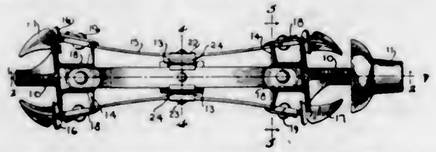
4. As new products the dyestuffs of the dibenzanthrone series containing chlorine, obtained by causing formaldehyde to act upon such compounds of the dibenzanthrone series which contain at least one *x*-H group, *x* being O or NH, in presence of chlorosulfonic acid, which products dissolve in sulfuric acid to red-violet to blue solutions, yield with an alkaline hydrosulfite solution red-blue to blue vats, and dye cotton blue, grey to red-brown tints.

1,859,147. APPARATUS FOR PRESERVING NATURAL FOODSTUFFS. FRANK B. KUCZYNSKI, Leavenworth, Kans. Filed Oct. 8, 1928. Serial No. 311,156. 3 Claims. (Cl. 99—2.)



1. An apparatus for preserving natural food stuffs comprising a tank adapted to contain paraffin, a burner chamber beneath the tank, a source of heat within said chamber, a heat jacket surrounding the tank and communicating with the burner chamber, a hot air chamber surrounding and communicating with the heat jacket, and a chute at one side of and communicating with the hot air chambers to receive hot air from the latter to act upon the food stuffs passed through the chute.

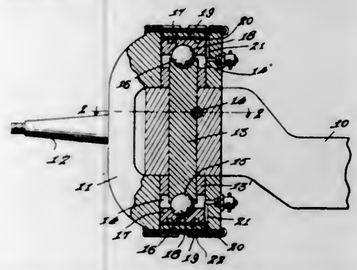
1,859,148. BOILER TUBE SCRAPER. WALTER MACLEAR, Hillside, N. J.; Joseph R. MacLear administrator of said Walter MacLear, deceased. Filed Nov. 30, 1929. Serial No. 410,757. 2 Claims. (Cl. 15—104.17.)



1. A boiler tube scraper, comprising a spindle, a hub mounted on the spindle, spring arms carried by the hub, scrapers mounted upon the free ends of said spring arms, and expanders carried by the spindle adapted to engage said arms, said hub having in opposite sides transversely extending sockets adapted to receive the intermediate portions of said arms and provided at opposite sides of said sockets with outstanding and overturned ribs engaging

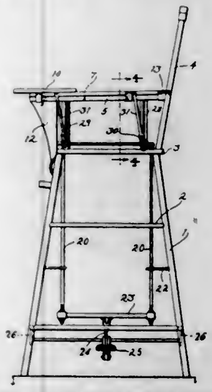
against the outer faces of said arms to bind the latter in the sockets and maintain the arms against edgewise movement therein, each of said arms provided with a pair of transversely disposed and spaced apart ribs at the inner side of the arm adapted to engage the opposite side portions of said hub for interlocking the arm on the hub and maintaining the arm against longitudinal and edgewise displacement in the socket of the hub.

1,859,149. COMBINATION BALL BEARING STEERING KNUCKLE. WILLIAM L. MEGGS, Jacksonville, Fla. Filed Oct. 15, 1930. Serial No. 488,950. 1 Claim. (Cl. 280—96.1.)



An axle mounting comprising a bolt provided at its ends with sockets, balls located in the sockets, bushings surrounding the end portions of the bolt, a yoke having pockets receiving the bushings, the end portions of the bolt and the balls, plugs threaded in the pockets and bearing against the balls, the pockets having channels at the sides of the plugs, washers bearing against the plugs and having portions entering the channels, and locking elements screwed into the pockets and bearing against the washers.

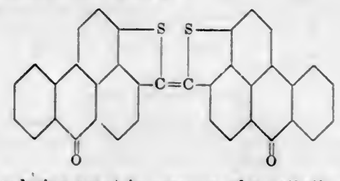
1,859,150. BABY CHAIR. JOSEPH V. MORAN, Brooklyn, N. Y. Filed Mar. 31, 1931. Serial No. 526,721. 5 Claims. (Cl. 155—127.)



1. A high chair comprising a frame structure, a vertically movable seat portion therein, a tray, means for moving the tray outwardly as the seat portion is moved upwardly and for moving the tray inwardly or rearwardly as the seat portion is moved downwardly.

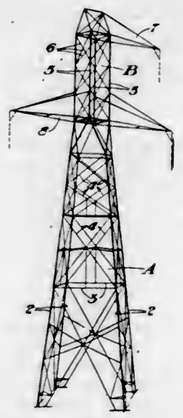
1,859,151. MANUFACTURE OF A DYESTUFF OF THE ANTHRAQUINONE SERIES. WILHELM MOSER, Riehen, near Basel, Switzerland, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Nov. 28, 1930, Serial No. 498,914, and in Switzerland Dec. 19, 1929. 1 Claim. (Cl. 260—53.)

A manufacture of a dyestuff of the anthraquinone series of a high degree of purity by treating the blue-green dyestuff described in Patent No. 1,044,797 and corresponding very probably to the formula



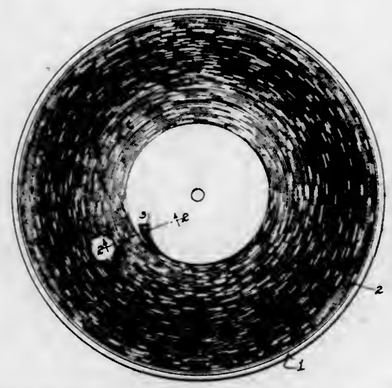
with a reducing agent in presence of an alkali, removing the leuco-compound thus separated from the solution containing the secondary dyestuff.

1,859,152. TOWER. NORMAN B. OBBARD, Sewickley, Pa. Filed Mar. 18, 1931. Serial No. 523,601. 8 Claims. (Cl. 189—12.)



1. The combination with a transmission line of a tower, the lower part of which is of rectangular cross-section with its sides at an angle to the line, and the upper part of which is of rectangular cross-section with two sides parallel to the line.

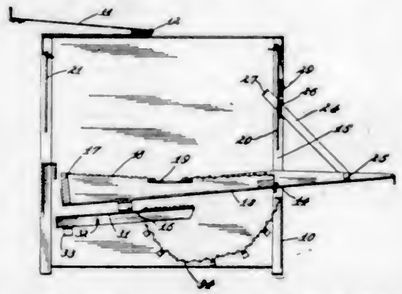
1,859,153. NEEDLE GUIDE FOR RECORDS. JOHN S. O'LEARY, Philadelphia, Pa. Filed Dec. 6, 1929. Serial No. 412,185. 1 Claim. (Cl. 274—42.)



A phonographic record having, at the starting end of its sound record groove, a plurality of stylus guiding grooves located within the bounds of the record groove and in the

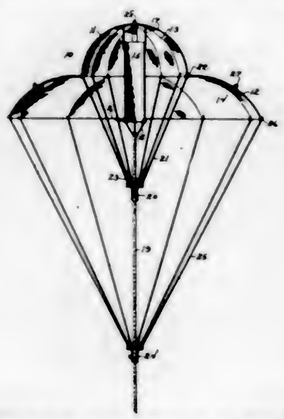
same horizontal plane therewith, said guiding grooves leading to the said starting end of the sound record groove on arcuate lines eccentric to the axis of rotation of the said sound record groove, and having their inner ends merging with one another and with the said starting end of the sound record groove.

1,859,154. AUTOMATIC TRAP NEST. PINKNEY OWEN, Frankewing, Tenn. Filed Nov. 1, 1930. Serial No. 492,812. 3 Claims. (Cl. 119—47.)



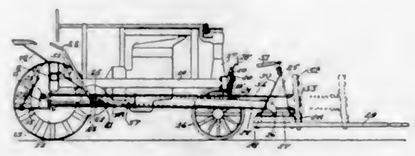
1. A trap nest comprising a body having swingably mounted entrance and exit doors, a treadle pivotally and eccentrically mounted within the body having a portion outwardly projected in advance of the entrance door normally operable to retain the exit door closed, an arm member actuated by the extended portion of the treadle having its opposite end offset and projected within the body, the entrance door having an opening in alignment with the offset end of the arm member, a trip lock carried by the entrance door and projected within said slot for contacting engagement with the offset end of the arm member to prevent more than one hen occupying the trap at one time, a tray for the treadle having a fabric covering therefor, a ring carried at the center of the covering and in communication with the uppermost inclined side thereof, a platform tiltably mounted beneath the covering having a fabric covered face disposed immediately beneath the opening in the ring for contacting engagement with eggs passed therethrough, and a trip mechanism operable by the platform for releasing the exit door.

1,859,155. PARACHUTE. FRANK R. OWENS, Beaver Crossing, Nebr. Refile of abandoned application Serial No. 321,424, filed Nov. 23, 1928. This application filed Oct. 27, 1930. Serial No. 491,614. 3 Claims. (Cl. 244—21.)



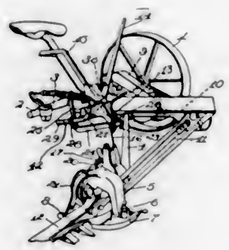
1. In a parachute, a body portion of flexible material shaped to provide a dome-like formation when in open position, a flexible tubular member having flexible connection with the top of the dome and being of a length to project beyond the lower end of the dome when the latter is collapsed, a ring secured in the lower end of the tube, a rope secured to said tube, ropes connected to the dome of the parachute and having a sliding connection with the rope attached to the tube, and ropes connected to the outer edge of the body and having a positive connection with the tube connected rope.

1,859,156. SWEEP RAKE. CHARLES PEARSON, Cicero, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Oct. 20, 1930. Serial No. 489,814. 16 Claims. (Cl. 56—27.)



1. The combination with a tractor having a power take-off shaft, of a sweep rake having a frame carried by the tractor, a clearer slidably carried on the rake, means operable from the power take-off shaft for sliding the clearer on the rake to clear the same, and means automatically operable to disengage said means after the clearer has been moved a predetermined distance.

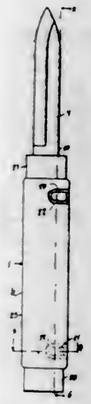
1,859,157. MOWING MACHINE. CHARLES PEARSON, Cicero, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Oct. 20, 1930, Serial No. 489,815, and in Germany June 30, 1930. 5 Claims. (Cl. 56—274.)



1. In a mower having a frame, a cutter bar including cutting mechanism, means including a clutch for driving the cutting mechanism, a rising and falling coupling arm connecting the cutter bar with the frame, means including a lift arm for raising and lowering the cutter bar, a stop to limit upward movement of said coupling arm, means to locate the stop in or out of the path of movement of the coupling arm, and means operable by the movement of said lift arm to disconnect the clutch to stop the cutting mechanism drive when the stop is in position to limit upward movement of the coupling arm.

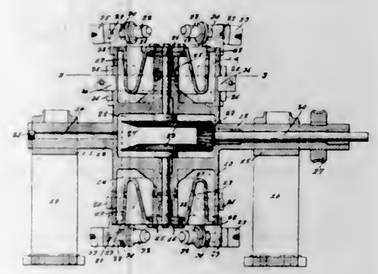
1,859,158. SAFETY POCKET KNIFE. THOMAS PERNEK, Sr., Hartford, Conn. Filed Mar. 29, 1928. Serial No. 265,690. 9 Claims. (Cl. 30—10.)

1. In a pen knife, a handle having a central wall, tongues struck out from said wall, said handle having recesses therein on either side of said wall, said tongue being bent in opposite directions into said recesses, and a



blade slidably mounted in each of said recesses and engageable by said tongues to hold said blades in adjusted positions in the handle.

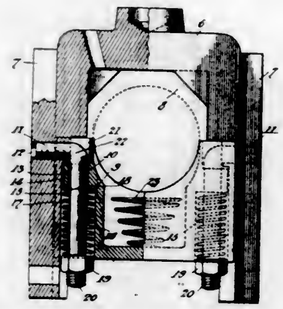
1,859,159. COILER FOR HOT ROD MILLS. ALBERT PERRETT, Pittsburgh, Pa. Filed June 16, 1931. Serial No. 544,897. 8 Claims. (Cl. 242—83.)



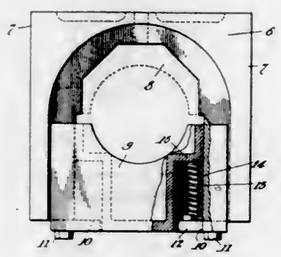
1. In a mechanism of the character described, a turning housing, rotatable coiler receptacles arranged in opposite ends of said housing, means for driving the receptacles for rotation in unison, rollers arranged about the housing and movable into confronting relation to the receptacles, and means for moving said rollers into and out of confronting relation to the receptacles.

1,859,160. LOCOMOTIVE JOURNAL BOX. ARTHUR FRED PHELPS, Bluefield, W. Va., assignor to West Virginia Armature Co., Bluefield, W. Va. Filed Apr. 28, 1931. Serial No. 533,532. 1 Claim. (Cl. 308—88.)

A journal box for railway car axles comprising a suitable support having guideways, an upper axle bearing block fixedly mounted therein, a lower axle bearing block movably mounted in said guideways, bolts passing freely through said lower bearing block and having angular portions mounting the same in the support, and springs mounting the lower block on said bolts, said springs operable to permit of limited angular movements of the lower block in the support and restoring to normal position thereof, substantially as set forth.



1,859,161. LOCOMOTIVE JOURNAL BOX. ARTHUR FRED PHELPS, Bluefield, W. Va., assignor to West Virginia Armature Co., Bluefield, W. Va. Filed Apr. 28, 1931. Serial No. 533,534. 3 Claims. (Cl. 308—88.)

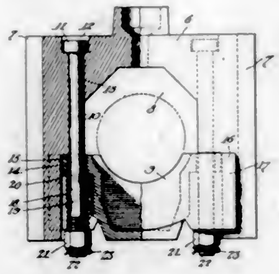


1. A journal box for railway car axles comprising a suitable support, an upper axle bearing block mounted in the support, a lower axle bearing block, bracket arms removably mounted on the support and fitting within recesses of the lower bearing block, and resilient sustaining means for the lower bearing block located within said recesses and engaging said bracket arms, said resilient means and bracket arms permitting of limited angular movements of the lower block and restoring to normal position thereof, substantially as set forth.

1,859,162. LOCOMOTIVE JOURNAL BOX. ARTHUR FRED PHELPS, Bluefield, W. Va., assignor to West Virginia Armature Co., Bluefield, W. Va. Filed Apr. 28, 1931. Serial No. 533,536. 1 Claim. (Cl. 308—88.)

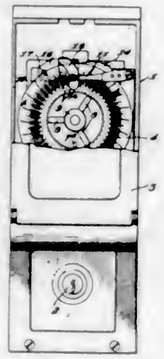
A journal box for railway car axles comprising a suitable support having recesses in the base thereof, a fixed axle bearing block closely fitting in the upper recess portion of said support, a lower axle bearing block having two opposed and insetting eyelet portions providing recesses thereunder, said recesses lying adjacent and forming chambers on either side of the bearing bolts tightly fitting in said support and freely passing through the opposed eyelet portions of the lower block, said lower bearing block having lateral projecting elements to either side of said eyelet portions loosely embracing the side walls of

said support, and springs on the bolts within the chambers beneath said eyelet portions resiliently sustaining the lower axle bearing block, said resilient means and bolts



permitting of limited angular movements of the lower block and restoring to normal position thereof, substantially as set forth.

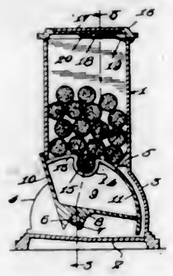
1,859,163. PROTECTOR-GUARD FOR STYLUS OF RECORDING MECHANISMS. EDWIN SANFORD PHELPS, Montclair, N. J. Filed Apr. 2, 1931. Serial No. 527,258. 2 Claims. (Cl. 234—1.)



1. In a recording mechanism including a record-receiving member and a stylus for making an inscription thereon; a protecting-guard member disposed in relation to the stylus to prevent movement of the stylus in a direction breaking contact between its marking-point and the record-receiving member during the recording-period of the recorder.

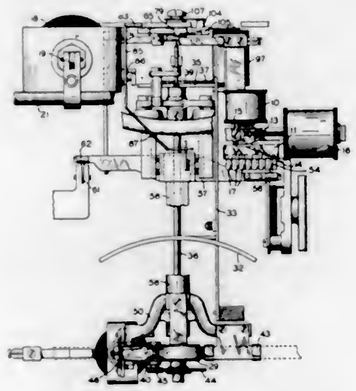
1,859,164. CIGARETTE SERVER. WILLIAM J. POLK, Madison, Wis. Filed Feb. 18, 1931. Serial No. 516,735. 1 Claim. (Cl. 312—84.)

A container and server for cigarettes, said container comprising a substantially rectangular box-like member having a base, an arched rear portion extending from the base and connected with the back proper of the container, an inwardly extending inclined lug at the juncture of the arched and straight portions of the back, the front of the container from the base thereof being cut-away a suitable distance and the sides of the said cut-away front being arched, and affording a space between the lower wall of the front and said sides, the widened portion of the sides having alining inwardly directed trunnions, a server comprising a base having a lug extension which is bifurcated to receive the trunnions therein, a front formed with the base, and an arched top connected with the front and base and extending beyond the base, said front having its upper corners provided with lateral extensions, the arched top,



from the front of the server being centrally cut-away a determined distance to provide end arms, each of which is formed with an alining depression that affords a pocket for a single cigarette.

1,859,165. AUTOMATIC TAPE CUT-OFF. JAMES F. PORTER, Yonkers, and GEORGE MARX, New York, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed May 8, 1931. Serial No. 536,002. 17 Claims. (Cl. 178—42.)

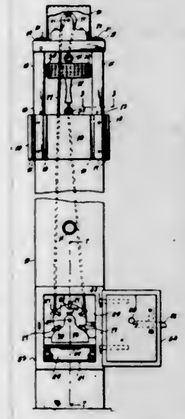


1. In a telegraph printing machine, a tape feed mechanism, means responsive to groups of code impulses for operating said tape feed mechanism, a tape severing device, a normally inoperative counting device, means responding to a group of code impulses for rendering said counting device operative and means for advancing said counting device one step for each subsequent group of code impulses received, said counting device after it has been advanced a predetermined number of steps, causing the actuation of said tape severing device.

1,859,166. CHIMNEY CLEANING APPARATUS. ANTON PREMRO, St. Michael, Pa. Filed Aug. 11, 1930. Serial No. 474,494. 1 Claim. (Cl. 15—163.)

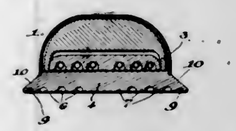
A frame for chimney tops, comprising angle corner leg plates adapted to engage the outer corners of the chimney top and extending above the chimney top, hook-shaped clip plates secured to the outer sides of said angle leg

plates below the chimney top, securing plates having their ends engaging said hook-shaped clip plates, said securing plates holding said leg plates in engagement with



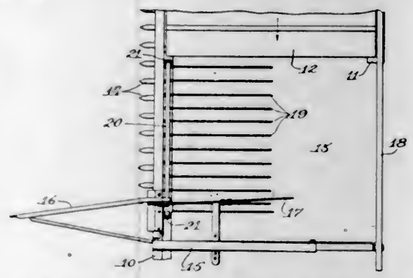
the corners of the chimney and bracing them, and a chimney cleaning apparatus mounted on the upper ends of said leg plates.

1,859,167. LAUNDRY IRON. ADAM HENRY PRENZEL, Halifax, Pa. Filed Sept. 4, 1931. Serial No. 561,245. 3 Claims. (Cl. 68—26.)



1. A laundry iron having a smoothing plate, the working face of said smoothing plate being perfectly plane and being provided with a series of endless, symmetrical depressions having a common center of symmetry, said depressions forming increasingly larger steam spaces.

1,859,168. WINDROW HARVESTER. CLEMMA R. RANEY, Riverside, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Sept. 20, 1930. Serial No. 483,147. 20 Claims. (Cl. 56—23.)



1. In a windrow harvester, means to cut the crop, means to receive and move the crop laterally of the line of draft to a point of discharge, and means utilizing the force of discharge of the crop for bending tops of stubble laterally, said means also serving to lay the cut crop in a windrow on such bent over stubble tops.

1,859,169. ALLOY. HARRY S. REAM, Jr., and FRANK J. HEIN, Dover, Ohio, assignors to Shenango-Penn Mold Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 5, 1931. Serial No. 535,302. 2 Claims. (Cl. 75—1.)

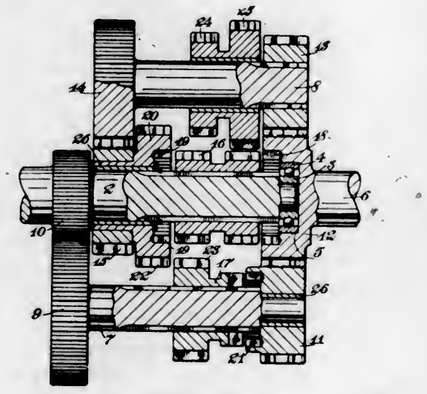
1. An alloy composed of 26% nickel, 13% copper, 1% iron, 30% tin and 30% zinc.

1,859,170. ELECTROSTATIC TELEPHONE AND MICROPHONE. EUGEN REISZ, Berlin-Dahlem, Germany. Original application filed Dec. 1, 1926, Serial No. 152,026, and in Germany Sept. 30, 1926. Continued as Serial No. 185,622, filed Apr. 21, 1927. Divided and this application filed Oct. 6, 1927. Serial No. 224,454. 17 Claims. (Cl. 179—111.)



1. A non-resonant diaphragm for an electrostatic sound translating system in combination with a flexible elastic diaphragm coated on the outside with a thin layer of finely reduced conducting material, this layer constituting one element of an electrostatic condenser, the other element being constituted by a rigid perforated curved metallic plate supporting the diaphragm, the holes of the plate being widened towards the outside.

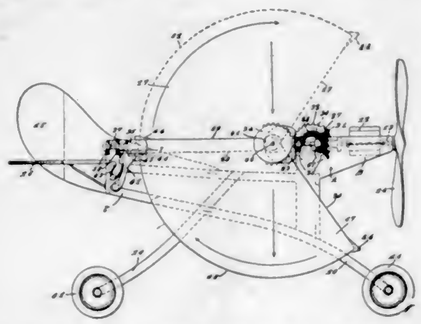
1,859,171. CHANGE-SPEED GEAR. PERCY RILEY, Hill Wootton, Warwick, England. Filed Oct. 24, 1930, Serial No. 491,005, and in Great Britain Nov. 13, 1929. 4 Claims. (Cl. 74—59.)



1. Change-speed gear mechanism comprising coaxial driving and driven shafts, two lay-shafts parallel thereto, a constant-mesh gear train constantly connecting the driving shaft to one of the layshafts, a constant-mesh gear train between this latter lay-shaft and the driven shaft, a sliding dog clutch for bringing this latter gear train into and out of operation, a constant-mesh gear train constantly connecting the driven shaft to the other of the lay-shafts, a constant-mesh gear train between this latter lay-shaft

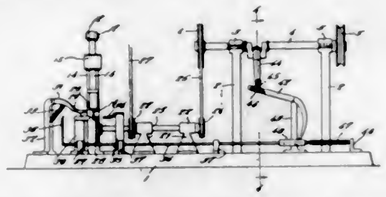
and the driving shaft, a sliding dog clutch for bringing this latter gear train into and out of operation, a sliding dog clutch for connecting the driving and driven shafts directly together, said two last mentioned sliding dog clutches having a common member slidable on the driving shaft.

1,859,172. WING OPERATING MECHANISM FOR AIRCRAFT. STANLEY ROKOSZ, Hazleton, Pa. Filed June 20, 1931. Serial No. 545,803. 2 Claims. (Cl. 244—27.)



1. In an aircraft having opposed wings, of mechanism coacting with the wings to move the same arcuately in a vertical direction edgewise and also for laterally swinging said wings successively, a propeller, motor means operating the propeller and said mechanism, and means automatically tripped by the wings for locking the same when moving vertically in an arcuate direction edgewise.

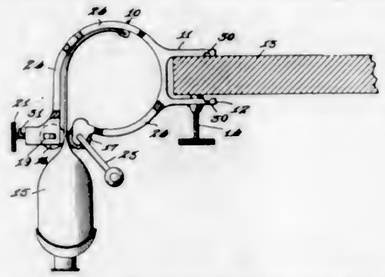
1,859,173. STITCH PICKER. HAROLD EUGENE RUGGLES, Roxbury, Mass. Filed June 30, 1931. Serial No. 547,968. 6 Claims. (Cl. 12—17.)



1. A shoe sole stitch picker comprising, in combination, a base, a punch mounted for vertical reciprocation on the base, a work supporting table on the base adjacent the punch, a rotary shaft mounted on the base, a brush fixed on the shaft adjacent the punch for operative engagement with the work means for actuating the shaft, a crank shaft rotatably mounted on the base, means operatively connecting the punch to the crank shaft for actuation thereby, and means operatively connecting the crank shaft to the first-named shaft for actuation thereby.

1,859,174. COLLAPSIBLE TUBE HOLDER AND FLATTENING DEVICE. PASQUALE J. SASSANO, East Orange, N. J. Filed Apr. 15, 1931. Serial No. 530,324. 1 Claim. (Cl. 221—60.)

A collapsible tube holder and flattening device comprising a split annular tube receiving member, spaced parallel attaching lugs projecting from one side of the member, a pair of spaced rollers journaled in the adjacent ends of said member and adapted to support a tube suspended therefrom, means for rotating one of said rollers whereby the tube is moved within the member in a flattened condition, one end of said member having slots in which the adjacent roller is slidably adjustable with relation to the other roller, a substantially U-shaped spring supporting the adjustable roller and an adjusting



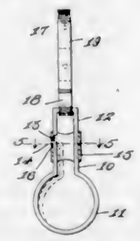
screw supported by the member and engaging said spring to tension the latter whereby its roller is mounted to yield with relation to the other roller.

1,859,175. DOLL CONSTRUCTION. EDWARD G. SCHAEFFER, Brooklyn, N. Y., assignor to American Character Doll Co., Inc., New York, N. Y., a Corporation of New York. Filed July 3, 1931. Serial No. 548,661. 1 Claim. (Cl. 46—40.)



A doll having a head provided with a neck, a skeleton provided with a top member, and a soft, pliable body part supported by said skeleton and within which the latter is arranged, the upper end of said body part being clamped between said neck and top member.

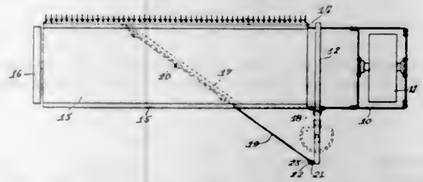
1,859,176. KEY HOLDER. EMILIANO SERVILLA, Antilla, Cuba. Filed Jan. 16, 1931. Serial No. 509,229. 1 Claim. (Cl. 59—96.)



A key holder of the character described comprising a coupling member formed from a single length of wire

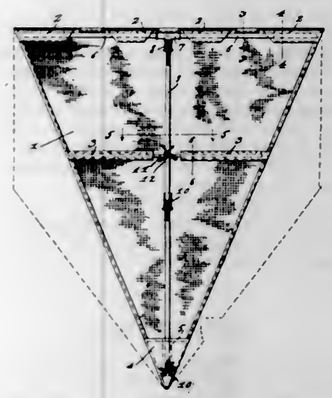
bent to provide a yieldable key receiving ring and a rigid loop-like extension open at one side, an outturned bill on one end of the wire, said bill being on the ring side of the opening, and a sleeve-like slide of a length fitted to the extension to close the side opening therein and having an aperture for the snapping engagement therein of the bill to lock the slide in closed relation to the opening in one side of the extension.

1,859,177. HARVESTER. DANIEL W. SMITH, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed July 9, 1930. Serial No. 466,770. 3 Claims. (Cl. 56—1.)



1. In a harvester, a frame including a seat support member, a platform connected to the frame and extending laterally thereof, a bar secured underneath the platform, said bar having an extended end carried by the seat support member, and means for taking up said end of the bar to spring the platform.

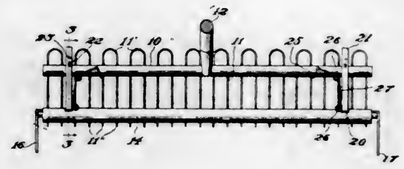
1,859,178. FOLDING SKATE SAIL. STANLEY A. SPRINKLE, Kalamazoo, Mich. Filed June 2, 1931. Serial No. 541,707. 3 Claims. (Cl. 208—183.)



1. A skating sail having transverse pockets, one of which being located at its upper end and the other at its lower end, and the remainder being intermediately disposed and having its confronting ends spaced, a supporting frame including a rod received in the transverse pockets and a vertical rod constructed of sections removably connected to the transverse rods and received in the lower pocket.

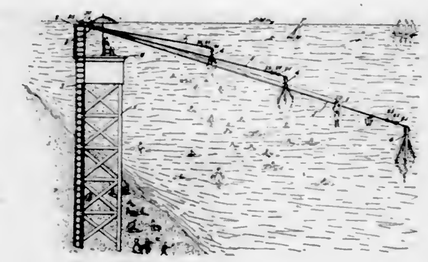
1,859,179. RAKE CLEANING DEVICE. ADOLPHE STRAHM, Lowell, Mich. Filed Mar. 9, 1931. Serial No. 521,259. 2 Claims. (Cl. 55—146.)

1. In a device of the class described, a channel element having apertures in the web of the channel, foot members extending downwardly from the ends of the channel, for engaging the ground when the apertured portion of the channel is positioned for slidable engagement with the teeth of a rake, adjustable devices for mounting the channel member on a tooth-mounting element of a rake, and resilient devices interposed between the channel member



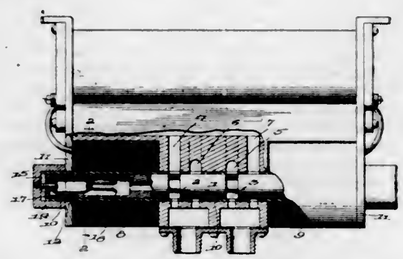
and said tooth-mounting member and yieldable incident to the normal use of the rake with the foot members in contact with the ground.

1,859,180. TROLLEY FOR BATHING BEACHES. HENRY A. THIEL, Charleston, S. C. Filed Nov. 11, 1929. Serial No. 406,454. 6 Claims. (Cl. 104—113.)



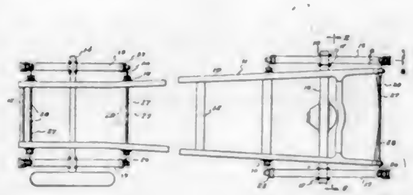
1. In a beach trolley for the use of life savers in quickly reaching a person in peril in the water, a shore tower, a pile erected in the water bed, a cable extending from the tower to the pile, a carrier supported for travel upon the cable, hand grips upon the carrier to be grasped by the life saver, and a manually operable brake upon the carrier for coaction with the said cable.

1,859,181. ALIGNING AND POSITIONING DEVICE FOR PISTON VALVES. ERNEST H. THOMPSON, Evanston, Ill. Filed Dec. 3, 1928. Serial No. 323,542. 16 Claims. (Cl. 137—139.)



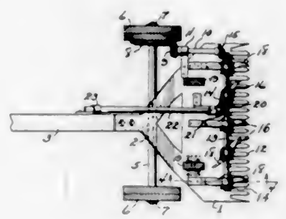
1. A piston valve including a cylinder and cooperating ports, provided with means for maintaining said piston valve in proper registry with its ports, said means being concentrically disposed longitudinally of the piston and within the cylinder, but exteriorly of the valve chamber.

1,859,182. MOTOR VEHICLE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 31, 1929. Serial No. 403,862. 12 Claims. (Cl. 280—106.5.)



1. In a motor vehicle, a frame, an axle, a pair of parallel springs fixed to the axle, a laterally movable pivoted connection between each spring end and the frame, and a link member connecting similar parallel connections.

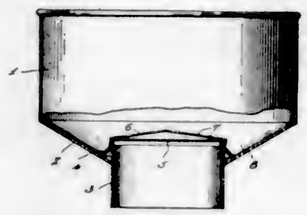
1,859,183. GRASS AND WEED CUTTER. DAVID MONROE SILFIES, Dundon, W. Va. Filed July 23, 1929. Serial No. 380,402. 1 Claim. (Cl. 56—255.)



In a mower, a plate having a reduced inner end to which is fixed a handle and having its outer end formed with spaced fingers, an axle fixed on the plate and ground wheels journaled on the axle, ground contacting rollers journaled on the plate forward of the ground engaging wheels, stub shafts arising from the plate adjacent to the finger end thereof, knives, each having its outer face centrally formed with a gear, journaled on the respective stub shafts, a transverse shaft journaled on the plate, pinions fixed on the shaft and arranged to mesh with the gears on the knives and a pinion which is approximately centrally fixed on the transverse shaft, a handle operated shaft journaled in bearings on the handle and on the plate and having a gear to mesh with the said approximately centrally fixed pinion on the transverse shaft, said transverse shaft also having a pinion fixed on one end thereof, a short longitudinal shaft journaled on the plate and having a gear to mesh with said end pinion and another pinion on its second end, and a gear wheel fixed on the face of one of the ground contacting wheels meshing with the last-named pinion.

1,859,184. STRAINER. HIRAM H. SWIFT, Evans Mills, N. Y. Filed Apr. 21, 1930. Serial No. 446,074. 1 Claim. (Cl. 210—157.)

A milk strainer comprising a bowl having an inwardly flared lower portion which merges into a spout that is extended both outwardly and inwardly with respect to the bowl, the inner portion of the spout being threaded, a tapered band arranged between the top of the spout and the bottom of the bowl and secured to both of these members, a mesh disc resting on the top of the spout, a flanged



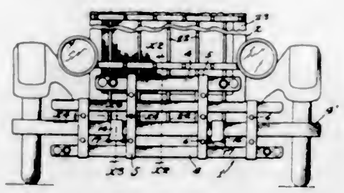
cap fitted on the top of the spout and resting on the flared band, and said cap having a conical top which is provided with series of circularly arranged apertures.

1,859,185. PARACHUTE PACK. STANLEY SWITLIK, Trenton, N. J., assignor to Switlik Parachute and Equipment Company, Trenton, N. J., a Corporation of New Jersey. Filed Aug. 12, 1930. Serial No. 474,816. 10 Claims. (Cl. 244—21.)



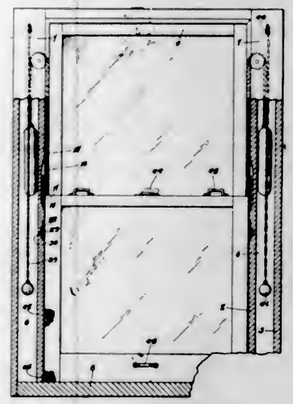
1. A container for a main parachute, comprising a periphery of fixed contour and having a base consisting of a panel connected to the periphery of fixed contour, a fabric cover member constituting a pilot chute arranged over and housing the main parachute, said cover member having a marginal flexible skirt extending past the edges of the base and releasably attached marginally to the base.

1,859,186. SAFETY FENDER. ALFRED URBACH, Los Angeles, Calif. Filed May 25, 1929. Serial No. 366,076. 9 Claims. (Cl. 180—83.)



1. In a vehicle, a fender comprising a plurality of superposed bars, means securing said bars together, brackets secured to said vehicle, means pivotally mounting said fender on said brackets so that said fender is adapted to be moved rearwardly about its pivot, and stop means on said brackets engaging said fender to normally hold the fender in approximately vertical position and permit said fender to be moved rearwardly about its pivot; and means operated by said fender when the fender moves rearwardly about its pivot and assumes a substantially horizontal position, to bring said vehicle to a stop.

1,859,187. SASH WINDOW. JOHN B. VIRGA, Washington, D. C. Filed Nov. 29, 1930. Serial No. 499,066. 4 Claims. (Cl. 20—42.)



1. A sash window comprising, a frame, an upper and a lower sash slidable in the frame, plates having arcuate slots connected with the frame, and plungers projecting from the sashes into said slots for pivotally connecting the sashes with the frame, said frame having grooves in alignment with said slots, said plungers having heads disposed within said grooves, said plungers having resilient means for forcing the heads towards the frame.

1,859,188. SILK IMPROVED IN WEIGHT AND APPEARANCE AND PROCESS FOR OBTAINING THE SAME. FRIEDRICH W. WEBER, Hackensack, N. J., assignor to Maywood Chemical Works, Maywood, N. J., a Corporation of New Jersey. Filed Jan. 25, 1928. Serial No. 249,505. 5 Claims. (Cl. 8—13.)

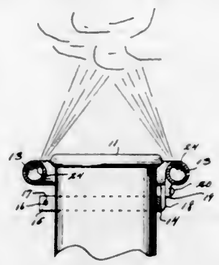
1. The process of weighting silk, which comprises treating silk in a mixture of the aqueous solutions of tin tetrachloride and of a zinc salt in the presence of an acid forming a water soluble salt with the alkali earth metals and the iron in the water used as a solvent, treating the silk with a solution of di-sodium phosphate, treating the silk with the solution of a soluble salt of a rare earth metal, treating the silk with a solution of di-sodium phosphate, treating it again with the mixture of the solutions of tin tetrachloride and of a zinc salt, and finally treating the silk again with a solution of di-sodium phosphate.

1,859,189. RING. WILLIAM WHEELER, Richmond, Ky., assignor of one-half to William Samuel De Bardeleben, Richmond, Ky. Filed July 23, 1929, Serial No. 380,396. Renewed Mar. 25, 1932. 1 Claim. (Cl. 63—15.)



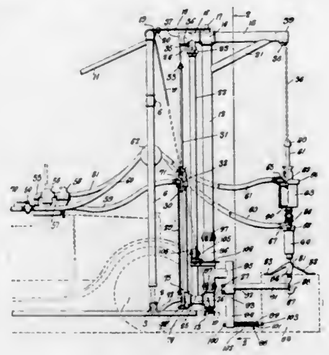
A finger ring comprising a ring portion having a chamber provided with recesses in oppositely disposed walls to provide inner and outer shoulders extending substantially the full length of said walls, tension plates secured in the recesses adjacent the outer shoulders and projecting outwardly beyond the lower shoulders, said chamber having recesses in the other walls and communicating with the recesses of the first mentioned walls to provide shoulders for limiting the movement of the tension plates outwardly of the first mentioned recesses, a setting located in the chamber, and shoulders on said setting engaged by the free edges of the plates.

1,859,190. SMOKE AND SPARK ELIMINATOR. LEWIS H. ZANE, Mauch Chunk, Pa. Filed Nov. 26, 1929. Serial No. 409,896. 1 Claim. (Cl. 261—126.)



A smoke and spark eliminator comprising an annular tubular member, adjustable clamping means for mounting said annular member in spaced relation to and about the periphery of a smoke stack, said annular member when in mounted position being substantially below the top of the smoke stack, connecting means connecting the tubular member with a steam line, said clamping means comprising a split ring and upstanding lugs secured to said ring, said tubular member having depending lug members adapted for engagement with said upstanding lugs of said ring, and means for securing the lugs of said tubular member and said ring together, said tubular member having a plurality of spaced openings adjacent the upper portion thereof, said openings being inclined in converging relation to each other whereby to project a conical column of steam over the top of the smoke stack, the apex of said column of steam being positioned at a point spaced upwardly from the top of the stack.

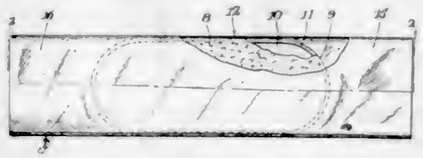
1,859,191. PIPE FORM STRIPPER. GUS ALMQUIST, Perris, Calif. Filed Mar. 7, 1930. Serial No. 434,149. 11 Claims. (Cl. 25—1.)



11. In a pipe molding and stripping machine of the class described, the combination with a split mold form, means connected with the same at opposite sides of its line of division and adjustable to open and close the form respectively, before and after molding of a pipe therein, a cylinder, a piston working therein, a unit for connec-

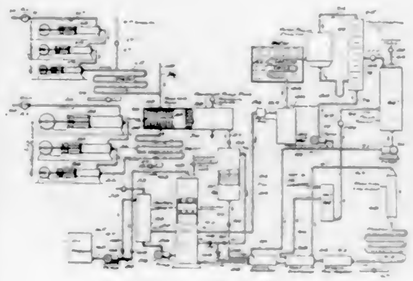
tion with the form, means for admitting the fluid under pressure into the cylinder, and a flexible element connected with the rod of the said piston and having connection with the unit fixed with respect to the form, whereby, upon admission of fluid under pressure into the cylinder, the flexible element will be tensioned to effect lifting of the form, of a cylinder mounted at one side of the form and opposite the said lever, a piston in the cylinder including a rod having operative engagement with the lever, and means for admitting a fluid under pressure into said cylinder to effect movement of the piston in a direction to actuate the lever to effect opening of the form.

1,859,192. CATAMENIAL BANDAGE. MONA C. ANDREWS, San Antonio, Tex. Filed May 18, 1928, Serial No. 278,743. Renewed May 8, 1931. 2 Claims. (Cl. 128—290.)



1. A catamenial bandage comprising an oval shaped flexible absorber pad, a flexible impervious protecting element opposing one face and of the same shape as said pad, a flexible covering overlapping said pad and element for supporting the same, said covering projecting from the opposite ends of said pad and element to provide extensions for attaching the bandage with the wearer, said element having an overlapping hem coextensive with the perimeter thereof to provide a shoulder forming to retard movement of the pad relative to said element, and said covering provided with spaced transverse slits for interconnecting said element therewith.

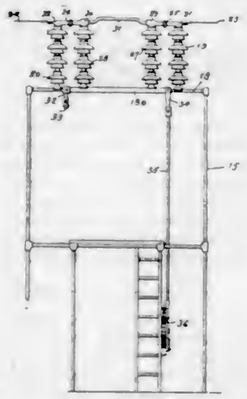
1,859,193. OIL AND NATURAL GAS CONVERSION PROCESS. ISAAC N. BEALL, Washington, D. C., assignor to John C. W. Beall, Washington, D. C. Filed Oct. 15, 1929. Serial No. 399,801. 32 Claims. (Cl. 196—62.)



19. In a process as herein described, the improvement which comprises compressing and heating a normally gaseous hydrocarbon, and separately compressing and heating an oxygen-carrying gas, then passing the two gases without reduction of pressure into and continuously through a reaction zone separate from the zones of compression without admixture of the gases prior to the reaction zone, and controlling the period and temperature of the reaction to produce a normally liquid, partially oxidized hydrocarbon mixture from the original constituents in a single step.

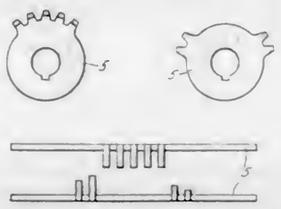
22. A conversion process for producing motor fuel, which comprises adding normally liquid partially oxidized hydrocarbons, to unoxidized, normally liquid hydrocarbons, adding an inert gas, converting the entire mixture into full vapor phase under a pressure substantially greater than atmospheric, and producing a reaction between the two constituents by the aid of heat and high superatmospheric pressure while fully in vapor phase.

1,859,194. COMBINED FUSE AND DISCONNECTING SWITCH. CHARLES E. BENNETT, Decatur, Ga. Filed May 12, 1927. Serial No. 190,867. 13 Claims. (Cl. 200—114.)



1. A combined fuse and switch for high tension lines, comprising a grounded metallic supporting structure, horizontally spaced insulators mounted at the upper portion thereof, line contacts carried thereby, movable insulating means arranged on a horizontal axis between said line contact insulators and adapted to support a fuse in horizontal position between said line contacts, and means for actuating said movable insulating means to remove the fuse bodily from the circuit and to shift it downward out of the region of conductors at line potential.

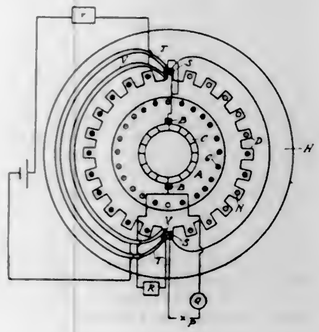
1,859,195. VARIABLE SPEED TRANSMISSION FOR REGISTERS. GEORGE C. CHASE, South Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Feb. 18, 1929. Serial No. 340,875. 1 Claim. (Cl. 235—79.)



In a calculating machine having numeral wheels, a differential selector shaft and variable speed driving means for said shaft; gears on said shaft having graded teeth

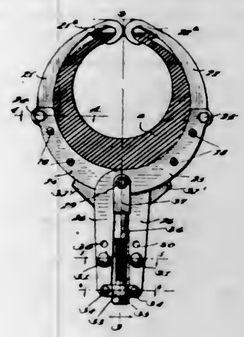
divided into groups of varying numbers, the larger group being composed of teeth of identical extent and located in an intermediate radial position relative to the smaller groups, and means for bringing selected groups of said teeth into active position relative to the numeral wheels.

1,859,196. DYNAMO-ELECTRIC MACHINE. FREDERICK CREEDY, Ealing, London, England. Filed Apr. 2, 1927, Serial No. 180,581, and in Great Britain Apr. 16, 1926. 17 Claims. (Cl. 171—223.)



1. A direct current generator comprising a field, armature and commutator, a main exciting winding on said field, an armature winding connected to said commutator, brushes on said commutator, a reverse series winding on said field connected to said brushes, said armature winding and reverse series winding being closed coupled to said main exciting winding.

1,859,197. AUTOMOBILE TIRE APPLIANCE. WILLIAM H. CROSSLEY, Klamath Falls, Oreg., assignor of one-half to James R. Elliff, Klamath Falls, Oreg. Filed Aug. 26, 1929. Serial No. 388,541. 4 Claims. (Cl. 152—27.)



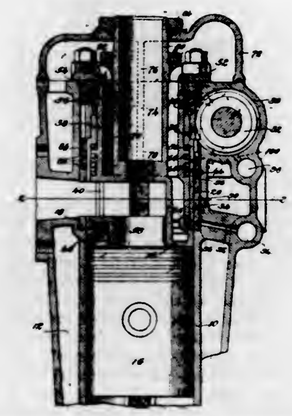
4. A tire casing spreader including a pair of crossed levers pivoted together at their point of crossing, one end of each of said levers terminating in a tire bead engaging jaw, oppositely movable arms pivotally connected intermediate of their ends to the other ends of said crossed levers, a member depending at an end thereof from the pivot at the point of crossing of said crossed levers and between the said other ends thereof, and a link pivotally connecting adjacent ends of said arm to said depending member.

1,859,198. COMBINATION GARMENT. KATHARINE E. CUNNINGHAM, Chicago, Ill., assignor to The H. W. Gossard Co., Chicago, Ill., a Corporation of Delaware. Filed Aug. 29, 1930. Serial No. 478,591. 10 Claims. (Cl. 2—30.)



1. A combination garment comprising a corset, and a brassière, said brassière comprising a front portion adapted to cover the body across the busts and being attached to the upper edge of the corset, end sections adapted to be crossed at the back and terminating in pairs of elastic straps, and means for fastening said straps to the back of the corset, said straps in each pair diverging from the point, adapted to be fastened to the corset so that one strap of each pair is adapted to exert a pull along the lower edge of its adjacent end section and the other strap of each pair is adapted to exert a pull along the upper edge of its adjacent end section.

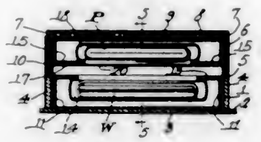
1,859,199. INTERNAL COMBUSTION ENGINE. DORSETT A. DAVISON and GEORGE E. DAVISON, Richmond, Va., assignors to The Davison Engineering Corporation, Richmond, Va., a Corporation of Virginia. Filed June 10, 1929. Serial No. 369,805. 15 Claims. (Cl. 123—80.)



1. In an internal combustion engine, a cylinder, a cylinder head extending into said cylinder and having an inner end portion closely fitting said cylinder, an outer end

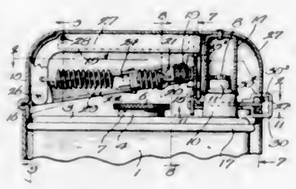
portion of reduced external diameter and an intermediate portion of greater diameter than its outer end portion and of less diameter than its inner end portion, a rotary valve surrounding the intermediate portion of said cylinder head and including a bearing portion surrounding the reduced outer end portion of said cylinder head; and means for driving said valve.

1,859,200. DISPLAY BOX. LUTHER ACHAN DAY, Sherman, Tex., assignor to Day Manufacturing Company, Sherman, Tex., and The Justin Leather Goods Company, Nocona, Tex. Filed Feb. 12, 1931. Serial No. 515,295. 2 Claims. (Cl. 206—44.)



1. A display box including a body, a cover, inserts secured in the body and cover respectively and having openings through which articles to be displayed are adapted to be forced, a fabric covering for each insert having a portion extending through the opening therein and under the walls of the opening to constitute an article holding pocket the length and width of which are greater than the length and width of the opening, and a retaining band extending across each opening, the walls of the openings constituting means for lapping the corresponding edge portions of the inserted articles to retain them in the pocket, said pocket being small enough to support the inserted article close to and substantially parallel with the apertured face of the insert.

1,859,201. IGNITER. HARRY A. DOUGLAS, Bronson, Mich. Filed May 9, 1929. Serial No. 361,671. 3 Claims. (Cl. 67—7.1.)



3. An igniter including a casing; a lever pivoted intermediate its ends upon the casing; a spring for operating the lever and attached thereto at one side of the lever pivot; a latch upon the casing for positioning the lever against the force of the spring; a striker coupled with the lever to be operable by the lever when the lever is released by the latch; a body of spark producing material engageable by the striker, when thus operated, to produce sparks; and an inflammable element in the region of said body of spark producing material to receive igniting sparks therefrom, wherein the striker is connected with the end of the lever with which the spring is connected and is provided with a guide for directing its movement upon the body of spark producing material and wherein the spark receiving portion of the inflammable element is upon the exterior of the casing and the casing is inclusive of a lid upon which the lever is mounted.

1,859,202. DRILL. JOSEPH V. EMMONS, Shaker Heights, Ohio, assignor to The Cleveland Twist Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 8 1928. Serial No. 304,748. 5 Claims. (Cl. 255—63.)

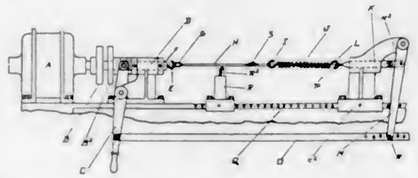


4. A percussion drill, comprising a blow-receiving shank portion, and an operating portion having a cutting end in the form of a four-sided pyramid, and two helical flutes terminating in certain of said sides.

1,859,203. METHOD AND PRODUCT FOR PRESERVING TIMBER. HENRY COOK GARDINER, Anaconda, Mont., assignor to Anaconda Copper Mining Co., Anaconda, Mont., a Corporation of Montana. Filed Jan. 12, 1929. Serial No. 332,233. 2 Claims. (Cl. 134—78.6.)

1. A toxic coating for timbers in contact with the ground and for conserving a definite quantity of moisture which will act as a vehicle for gradually impregnating the fibers of the timber with a toxic compound comprising a covering formed of a paste composed of an intimate mixture of water and dust resulting from the metallurgical reduction of arsenic-bearing ores, the wet paste acting as a storage and distributing agent for the soluble toxic ingredients, the wet paste including a hygroscopic substance selected from the group consisting of calcium chloride, sodium hydroxide, sodium carbonate, sulphuric acid, hydrochloric acid, nitric acid, sodium chloride, magnesium chloride, phosphoric acid and glycerine.

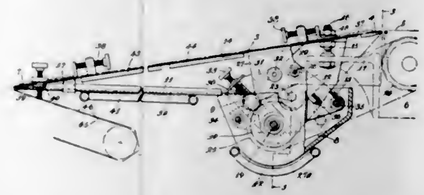
1,859,204. BELT. ELMER E. GRAY, Saugus, Mass. Filed Mar. 6, 1930. Serial No. 433,668. 5 Claims. (Cl. 28—1.)



1. The method of making a belt which includes engaging an eye having means of engaging a similar eye, with a strand of twisted basic material, assembling said material in loop form with the engaged eye thereon, the eye being at one end thereof, upon a mechanism designed to twist said material, twisting said material thereon, doubling said material at its center and engaging its end opposite said eye with the eye, engaging another similar eye with said material at its doubled portion, and retwisting the material till it forms a braided effect.

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1,859,205. CONFECTIONERY. MAX MARC GUGGENHEIM, Saginaw, Mich., and GEORGE RALPH BAKER, Willesden, London, England, assignors to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Jan. 28, 1930, Serial No. 424,120, and in Great Britain Jan. 30, 1929. 6 Claims. (Cl. 91—3.)

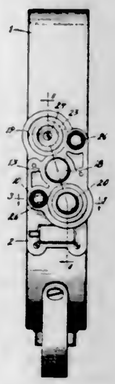


3. Apparatus for discharging chocolates from a coating machine, comprising an endless transfer conveyor adapted to receive the chocolates from the coating machine, such conveyor being rendered neutral by a coating or impregnation of tempered chocolate, means for guiding a lap of the transfer conveyor in immersed relationship with a tempering bath of chocolate, said means including a driving roller located within the bath, a table pivotally mounted for limited angular movement about the axis of said driving roller, said table supporting said transfer conveyor.

1,859,206. FOOD CONFECTION. MABEL KNEPPER HEISLER, Orwigsburg, Pa. Filed Mar. 13, 1930. Serial No. 435,643. 1 Claim. (Cl. 99—16.)

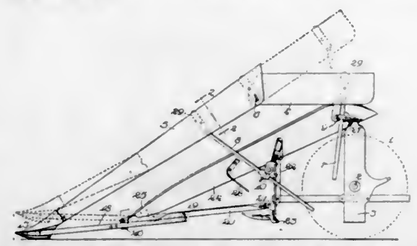
A food confection comprising equal parts of ground flaxseed and peanut butter mixed together to constitute a filling, said filling being hermetically sealed in a shell composed of white sugar, cream of tartar and sassafras oil, the product being characterized by the oily characteristic of the flaxseed nullifying the disagreeable tendency of the peanut butter to stick to the mouth.

1,859,207. PHOTOGRAPHIC CAMERA. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 23, 1929. Serial No. 415,908. 5 Claims. (Cl. 95—44.)



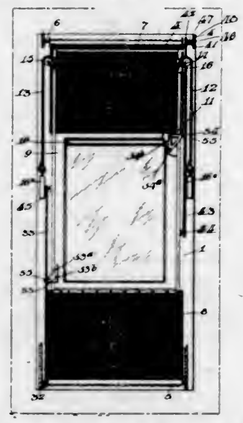
1. The combination with a photographic camera provided with a case relatively narrow transversely, of a lens carrier at the front of the camera and mounted thereon for angular movement on an axis vertically spaced from the focal axis of the camera and provided with two diametrically opposite photographic lens mounts disposed for selective registry with said focal axis in said movement of said carrier, said carrier lying substantially within the side planes of said case when in lens mount registering positions.

1,859,208. HARVESTER. PAUL KANE, Neuss, Germany, assignor to International Harvester Company, a Corporation of New Jersey. Filed Apr. 19, 1930, Serial No. 445,760, and in Germany May 16, 1929. 9 Claims. (Cl. 56—319.)



1. An outer divider for a harvester having a frame, said divider comprising two divider sections arranged longitudinally end to end and pivotally connected together, each of said sections presenting a surface curved transversely in cross section with the front section drawn out to a point, and means for supporting said sections.

1,859,209. PERMANENT WINDOW SCREEN. ERNST KOHLSAAT, Philadelphia, Pa. Filed Nov. 22, 1927. Serial No. 235,049. 1 Claim. (Cl. 156—39.)

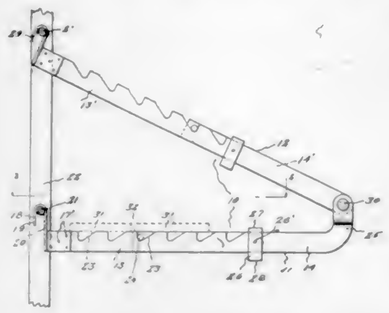


In a window structure having a sash and an angle plate secured to the lower edge of the sash, a roller mounted in the sill of the window frame and having a screen connected thereto and reeled thereabout, a sprocket loose upon one end of the roller, an idler sprocket mounted in the frame, a chain passing about the idler sprocket and the loose sprocket and provided with detachable connections with the sash, and means on one end of the roller for connecting and disconnecting the loose sprocket to and from the roller, whereby the sash may operate the roller through the medium of the chain, or the roller may remain idle when the screen is detached from the sash.

1,859,210. LADDER JACK. NELS W. MADSEN, Reno, Nev. Filed Jan. 22, 1930. Serial No. 422,657. 3 Claims. (Cl. 304—34.)

1. A ladder jack comprising a horizontal arm and an inclined arm, means permitting adjustment of the length

of each of said arms independent of the other, one of the ends of said arms being provided with ladder engaging hooks, the other ends of said arms being pivotally connected together, each of said arms comprising an outer



member and telescopic member, said outer member having a solid end and spaced parallel side bars, said telescopic member being positioned between said side bars, and means to hold said telescopic and outer members together in position.

1,859,211. PACKING RING. TAGE MADSEN, Gottenborg, Sweden. Filed Feb. 6, 1929, Serial No. 337,948, and in Great Britain Feb. 14, 1928. 3 Claims. (Cl. 288—3.)



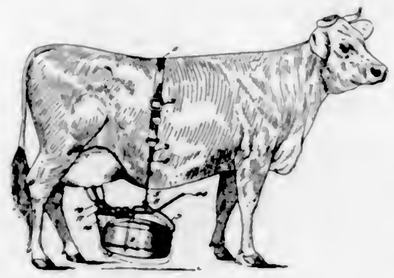
1. A packing ring comprising two rings of equal diameter and width interengaged by means of axially disposed annular flanges and recesses, the recesses being wider than the flanges and each ring divided in segments, the joints of one ring being spaced apart from the joints of the other ring and the ends of one segment radially pressing the adjacent segments of the other ring.

1,859,212. VAT-DYESTUFF OF THE DIBENZANTHRONE SERIES AND PROCESS OF MAKING SAME. BERTRAM MAYER, HUGO SIEBENBÜRGER, and KARL KRAUER, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Sept. 12, 1929, Serial No. 392,256, and in Switzerland Sept. 21, 1928. 4 Claims. (Cl. 260—61.)

3. The preparation of a new vat dyestuff, consisting in treating the $Bz_1 : Bz_1'$-dibenzanthronyl dissolved in sulphuric acid with an equivalent of nitric acid to produce a mononitrated $Bz_1 : Bz_1'$-dibenzanthronyl, and then treating the mono-nitrated $Bz_1 : Bz_1'$-dibenzanthronyl with fused caustic alcoholic potash.

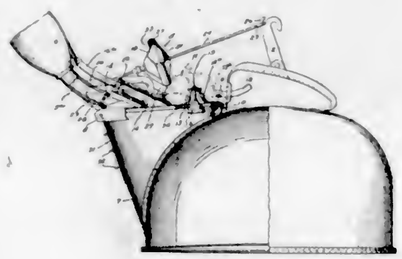
1,859,213. APPARATUS FOR MILKING. HERBERT MCCORNACK, Glen Ridge, N. J. Filed Nov. 22, 1923. Serial No. 676,241. 25 Claims. (Cl. 31—58.)

5. In a milking machine of the character described, the combination with a milk receiving bucket carrying teat cups, of means for suspending the bucket from the cow's back at a point nearer the head of the cow than the center of gravity of the bucket when the teat cups are attached to the cow's teats, whereby the weight of the bucket will be caused to exert a pull on the teats during the milking operation, said suspending means being constructed to yield and swing forward under the increasing weight of the milk which accumulates in the bucket during milking so as to increase the pull upon the teats, and flexible tension tubes transmitting the pull from the bucket to the teats.



12. In a milking machine of the class described, the combination of a milk receiving bucket, a transparent lid, milk tubes, openings in the lid to receive the milk tubes and means inserted in the ends of the milk tubes to direct the incoming milk streams against the underside of the lid.

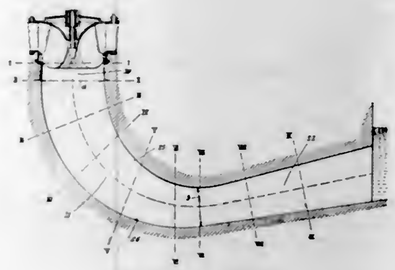
1,859,214. MILKING MACHINE. HERBERT MCCORNACK, Glen Ridge, N. J. Filed Aug. 10, 1927. Serial No. 211,886. 16 Claims. (Cl. 31—58.)



8. In a milking machine of the class described, including a milk receiving bucket, means for evacuating said bucket, and teat cups, in combination, flexible tubes attached to said teat cups for conveying milk to said bucket and for supporting the weight of the bucket in the part from the udder, and means for connecting said tubes with said bucket with capacity for ready separation therefrom including nipples projecting from said bucket into said tubes and provided with peripheral grooves and passages from said grooves to the interior of said nipples to exert suction in said grooves when the bucket is evacuated, to urge the material of said tubes into said grooves so that the tubes are interlocked with the nipples by evacuation of the bucket.

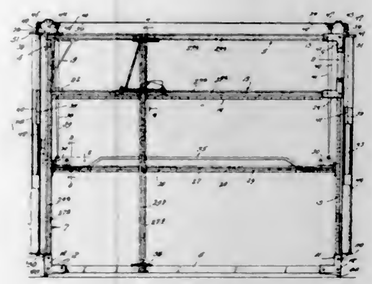
12. In a milking machine having teat cups, in combination, a milk receiving bucket, a support pivotally suspending the bucket in such fashion that the weight thereof is borne in part by the udder through the teat cups, and an oscillator interposed between the bucket and the support for mechanically swinging the bucket.

1,859,215. DRAFT TUBE. LEWIS FERRY MOODY, Philadelphia, Pa. Filed May 8, 1925. Serial No. 28,868. 36 Claims. (Cl. 253—117.)



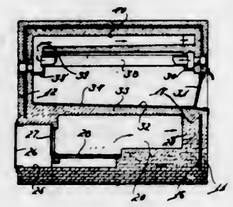
1. A draft tube comprising a bent portion increasing in cross sectional area at a decreasing rate in the direction of flow.

1,859,216. CURTAIN AND BLANKET STRETCHER. RICHARD H. O'BRIEN, Watertown, and JOHN A. BYRNE, Allston, Mass. Filed Dec. 27, 1929. Serial No. 416,814. 5 Claims. (Cl. 45—24.)



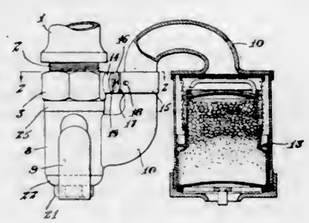
4. In a curtain or blanket stretcher, a rigid rectangular frame composed of horizontal top and bottom frame members and vertical end frame members, each of said frame members embodying a hollow tube longitudinally slotted at the inner side thereof, a fixed horizontal intermediate stretcher bar mounted in the upper portion of the frame below the top frame member and embodying a hollow tube longitudinally slotted at the upper side thereof, a vertical horizontally adjustable stretcher bar mounted in the frame and slidably engaged at its ends in the slots of the top and bottom frame members, carriages carried by the ends of said vertical stretcher bar and having wheels tracking on the inside of the top and bottom frame members at opposite sides of the slots thereof, and a plurality of further carriages attached to the vertical stretcher bar and tracking on the lower surface of the top wall of said fixed intermediate stretcher bar at opposite sides of the slot thereof, a bracket carried by the vertical stretcher bar and having an elongated base bar to which the last-named carriages are attached, the intermediate portion of said base bar having a bottom facing of frictional material, and manually operable means for pressing said intermediate portion of the base bar into frictional engagement with the upper surface of said fixed stationary stretcher bar for releasably holding the vertical adjustable stretcher bar in any position of adjustment.

1,859,217. BAKE OVEN. EDWARD H. OTTO, Detroit, Mich. Filed Apr. 22, 1929. Serial No. 356,967. 1 Claim. (Cl. 107—55.)



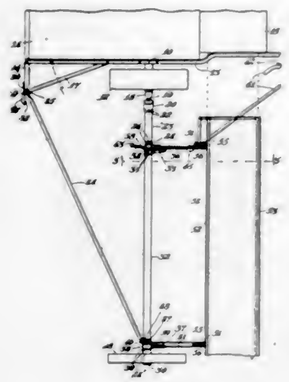
In a bake oven, a furnace construction, comprising: side walls, a front and rear wall, a top and a bottom; a grate located at substantially the medial line of said structure adjacent its bottom and accessible through the rear wall thereof; bridge walls projecting inwardly at opposite sides of said grate in parallel spaced relation and parallel to the side walls, said bridge walls terminating rearwardly of said front wall; baffle walls projecting inwardly from said front wall and extending between said bridge walls and the side walls; an oven compartment positioned above said furnace construction; a plurality of tubes projected through said oven compartment adjacent the upper side thereof and terminating with their ends in spaced relation to said front and rear walls, the front ends of said tubes communicating through a passage with the space between said side walls and said baffle walls, and the rear end of said tubes communicating through a passage with a chamber extending above said oven compartment, said chamber communicating adjacent its forward side with an outlet flue, the rear ends of said tubes being elevated relatively to the base of said last mentioned passage; a deflecting member projecting slightly inwardly of said flue at one end; and a damper for opening and closing said end.

1,859,218. VALVE. JOSEPH D. RAMSEY, Dorchester, Mass. Filed Aug. 16, 1929. Serial No. 386,373. 5 Claims. (Cl. 251—9.)



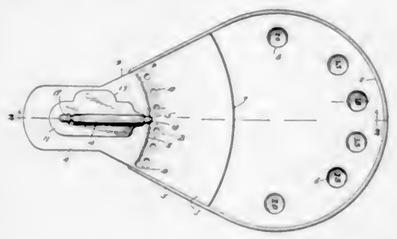
1. A valve having an inner fixed portion, a rotatable outer portion, a plurality of delivery nozzles on said outer portions, rotation of said outer portion acting to turn on or shut off the liquid flow through the nozzles, in combination with means cooperating with one nozzle to provide a sediment collecting pocket in the valve, and means cooperating with another nozzle to flush said sediment collecting pocket.

1,859,219. HARVESTER THRESHER. CLEMMA R. RANEY, Riverside, and LEE P. MILLARD, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Oct. 27, 1927. Serial No. 229,022. 19 Claims. (Cl. 56—20.)



1. In a combined harvester thresher, a thresher part, a harvester part, a non-rotatable axle, and a torque tube rotatably surrounding the axle for mounting the harvester part on said axle.

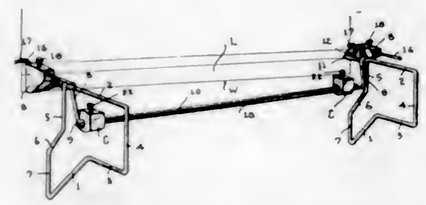
1,859,220. GAME. FRANK R. RICHARDS, Grand Junction, Colo. Filed Nov. 24, 1930. Serial No. 497,877. 1 Claim. (Cl. 273—119.)



Game apparatus including a flat paddle-shaped board having a handle portion and a field portion, a flange at the edges of the board for retaining game pieces on the field portion, an arcuate rail constituting an abutment member interposed between the end portions of the flange for retaining game pieces on the field portion, there being recesses in the field portion adjacent to and equidistant from the abutment rail for holding separate game pieces, the field portion being provided with a similar number of recesses remote from the retaining means, a spring gun mounted for lateral angular adjustment on the handle portion for ejecting game pieces one at a time from the respective recesses adjacent to the abutment rail, said rail constituting a support and guide for that end of the gun nearest the game pieces while said end is in any of its active positions.

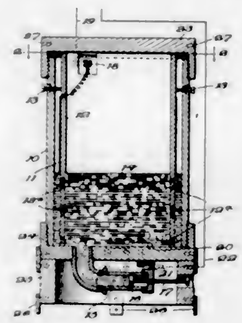
1,859,221. ARTICLE SUPPORT. LOUIS M. RICHARD, Shelton, Conn. Filed Sept. 24, 1929. Serial No. 394,858. 3 Claims. (Cl. 248—20.)

3. A support comprising two side portions of similar geometric contour, each side portion being formed of a single length of metallic element, one end of the metallic element extending rearwardly of the side portion to provide means for attaching the support to a supporting body, and the other end of each of the metallic elements



forming the side portions extending angularly to the side portion to form arms, the arms lying adjacent to each other, and means for securing the arms together.

1,859,222. APPARATUS FOR DETERMINING THE VERTICAL DEVIATION OF BORE HOLES. WALTER F. ROGERS, Houston, Tex., assignor to Gulf Production Company, Houston, Tex., a Corporation of Texas. Filed Oct. 28, 1929. Serial No. 403,040. 4 Claims. (Cl. 201—55.)

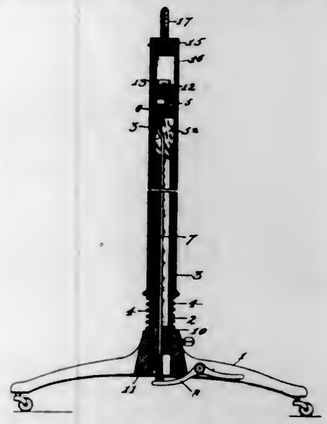


3. In a device for determining the vertical deviation of a bore hole, a casing member of such size and form as to accurately assume, when disposed therein, a coaxial position with respect to the adjacent wall portion of a bore hole, a tubular member of electrically non-conductive material coaxially supported within said casing, a helical winding of electrical resistance wire upon said tubular member, means for adjusting said tubular member to accurately dispose said winding in coaxial relationship with respect to said casing, a body of highly conductive fluid disposed in the bottom of said casing for successively shunting turns of said winding in accordance with progressive inclination of said casing with respect to the vertical, and means for adjusting said body of fluid so that, when the casing is vertically disposed, the surface of said fluid body will contact with the first turn only of said winding.

1,859,223. SUPPORTING STAND. FRED STEVENSON, North Wales, Pa., assignor to American Model Form Co., Inc., New York, N. Y. Filed Dec. 26, 1930. Serial No. 504,888. 3 Claims. (Cl. 248—3.)

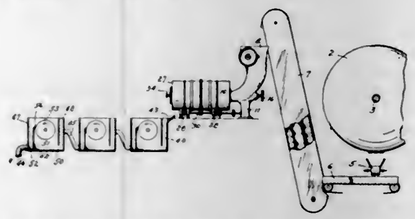
1. A device of the character described comprising telescoping pipe sections with a head carried on the upper end of the lower section, said head having in its lower portion a diametrical slot dividing said lower portion into two equal parts, said head having a recess in one side thereof, the inner wall of which recess is inclined and disposed at right angles to said diametrical slot; a wedge

member slidable within said recess and coacting with said inclined wall of the slotted head and the inner wall of the upper telescoping pipe section to lock said head and



pipe against movement relatively to each other; and an operating rod extending through said slot into said recess for supporting said wedge member therein.

1,859,224. METHOD OF MAKING RICE STRAW PULP AND APPARATUS THEREFOR. PETER SWAN, Portland, Oreg. Filed June 1, 1931. Serial No. 541,366. 4 Claims. (Cl. 92—14.)



1. A method of making rice straw pulp consisting in cooking rice straw in a cooker containing causticized liquor for approximately 40 minutes, in order to impregnate the straw with the liquor, but without changing the structure of the straw, in withdrawing the straw from the cooker and conveying the straw to a hopper and there passing it between armed cylinders for cutting and shredding the fibre, in hydrating the stock thus shredded and passing it through a rod mill where preferably soda ash is added to harden said stock, and it is reduced to pulp, and in washing the pulp.

1,859,225. PRIMING MIXTURE. EDMUND VON HERZ, Cologne-Dellbruck, Germany, assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Jan. 5, 1929. Serial No. 330,622. 14 Claims. (Cl. 52—3.)

1. A priming mixture for ammunition containing lead trinitroresorcinate and calcium silicide.

4. A priming mixture for ammunition containing mercury fulminate, lead trinitroresorcinate and lead peroxide.

1,859,226. WOOD SCRAPER. PETER S. VOSBIKIAN and THOMAS S. VOSBIKIAN, Philadelphia, Pa. Filed June 15, 1931. Serial No. 544,363. 2 Claims. (Cl. 145—47.)

2. A wood scraper comprising a handle having a laterally extending aperture near one end and a slot extending from said aperture and opening through the forward end of the handle, and oppositely projecting scraping edge carrying blade portions, each carried by a flat main portion with the flat main portions bearing against each other

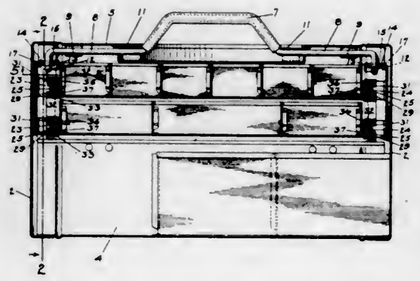


and mutually reinforcing each other, and each main portion also bearing against the wall of the slot in the handle and having means engaging in the aperture in the handle to prevent movement of the blade portions longitudinally of the handle.

1,859,227. PROCESS OF MAKING GLASS TANK BLOCKS AND LIKE REFRACTORIES AND ARTICLE MADE THEREBY. PAUL G. WILLETTS, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Continuation of application Serial No. 345,614, filed Mar. 8, 1929. This application filed Feb. 21, 1930. Serial No. 430,459. 7 Claims. (Cl. 25—156.)

1. The process of making glass tank blocks which comprises grinding non-plastic kaolin, plastic bond clay, and feldspar to impalpable fineness, mixing a relatively large amount of the non-plastic kaolin with a smaller amount of the plastic bond clay and with a still smaller amount of the feldspar, molding the mixture into blocks by dry-pressing, and firing the blocks so formed to complete vitrification and partial fusion, thereby completely transforming all of the said ingredients into crystals and glass.

1,859,228. TACKLE BOX. HERBERT C. BERRY, Minneapolis, Minn., assignor, by mesne assignments, to National Supply Company, Minneapolis, Minn., a Corporation of Minnesota. Filed July 21, 1928. Serial No. 294,329. 6 Claims. (Cl. 190—19.)

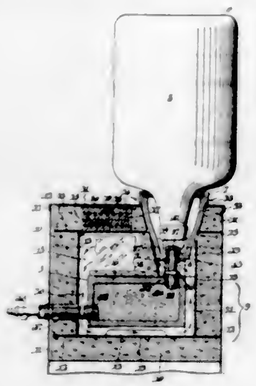


1. A tackle box having a hinged cover provided with a pivoted carrying handle, hook elements directly connected with said handle, and yieldable members secured to the end walls of the box and positioned to be engaged by said hook elements and to flex when the cover is moved into box-closing position with the handle in operative position, oscillation of the handle, when the cover is in closed position, causing the hook elements to move into locking engagement with said yieldable members.

1,859,229. LIQUID COOLING APPARATUS. CHARLES E. BONINE, Melrose Park, Cheltenham Township, Montgomery County, Pa., assignor to James H. Bell, Philadelphia, Pa. Filed Dec. 27, 1929. Serial No. 416,773. 9 Claims. (Cl. 62—91.5.)

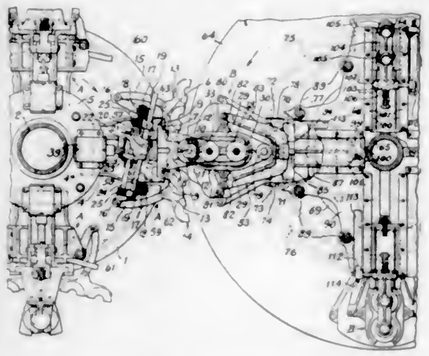
2. In liquid cooling apparatus, a reservoir for traverse of the liquid which is to be cooled; and a surrounding

thermo-insulating casing providing a space for a charge of solid carbon dioxide, and passages determining circula-



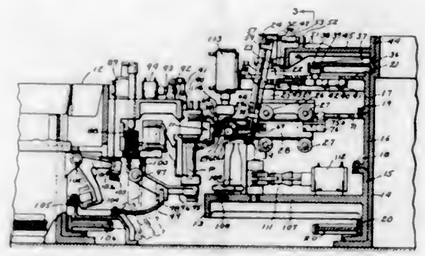
tion of the cold free gas sublimated from the refrigerant around said reservoir in a direction counter to the flow of the liquid therein.

1,859,230. MANUFACTURE OF HOLLOW GLASSWARE. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 1, 1929. Serial No. 343,614. 17 Claims. (Cl. 49—5.)



7. In glass fabricating apparatus, two adjacent rotary tables, a carrier disposed on one of said tables for travel therewith and for limited radial and oscillatory movements thereon, a stationary closed cam track beneath said table, a pair of transversely spaced cam rolls depending from said carrier and traveling in said cam track a plural cavity glass receiving and parison forming unit mounted on said carrier, a carrier disposed on said second table for travel therewith and for limited radial and oscillatory movements thereon, a closed cam track beneath said second table, a pair of transversely spaced cam rolls depending from said carrier into said second named cam track for travel on the latter, a plural cavity blow mold on said second named carrier, said cam tracks being shaped to cause travel of said glass receiving and parison forming unit and said blow mold in the same direction for a sufficient distance to permit the transfer of parisons from the parison forming unit to the cavity of said blow mould during rotation of said tables.

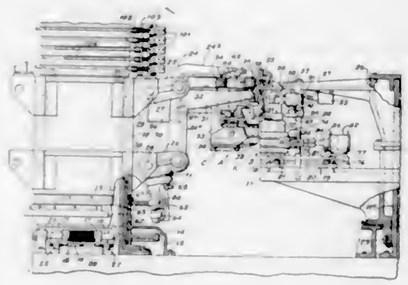
1,859,231. GLASSWARE MAKING APPARATUS. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,426. 17 Claims (Cl. 49—9.)



1. In apparatus for making glassware, a rotating parison mold table, a parison mold carried by the said table, a rotating finishing mold table, a finishing mold carried by said table, means for continuously rotating said tables, unitary means mounted upon said finishing mold table for transferring parisons from the parison mold to the finishing mold and for transferring finished glass articles from the finishing mold, and means for causing said unitary means to move in a path about the axis of the parison mold table to receive parisons from said parison mold.

17. A glassware forming machine comprising a horizontal mold table mounted for rotation about a vertical axis, a parison forming unit mounted on said table, a finishing mold table mounted for rotation about a vertical axis eccentric to the axis of the parison mold table, a finishing mold thereon, means for rotating said mold tables, and means for transferring a parison from the parison forming unit on the one table to a finishing mold on the other table while said tables are rotating, said means including a ware-holding member supported for movement above one of said tables, and means for horizontally moving said ware-holding member outwardly of its table and also for oscillating said ware-holding member to cause such a resultant movement thereof that the ware-holding member is caused to travel in vertical alignment with and in the direction of travel of the mold on the other table.

1,859,232. GLASS FORMING APPARATUS. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 4, 1929. Serial No. 352,419. 21 Claims. (Cl. 49—5.)

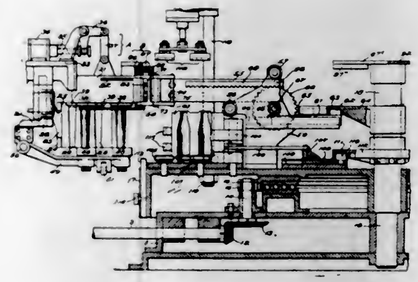


1. In glass forming apparatus having horizontally spaced glass gathering and parison transfer stations, the combination of a glass gathering and parison forming unit mounted to travel along a path having different portions extending past said stations, and means for regulably

predetermining the level of said unit at said transfer station independently of the level thereof at the glass gathering station.

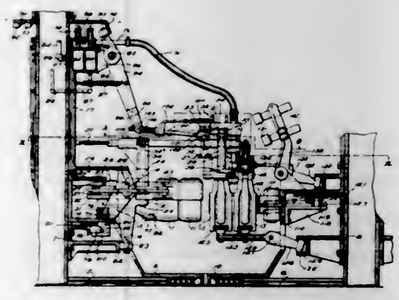
19. In a machine for forming glass articles, the combination of mold carriages arranged side by side for rotation about vertical axes, molds on the carriages, means for rotating said carriages simultaneously and in synchronism, automatic means dependent on predetermined rotative positions of the mold carriages for transferring a parison from one fold carriage to the other, and adjusting means by which the rotative position of one carriage relative to the other may be adjusted.

1,859,233. CONTINUOUSLY OPERATING GLASSWARE FORMING MACHINE. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,137. 13 Claims. (Cl. 49—9.)



1. A two-table glassware forming machine, comprising a blank mold unit mounted on one of said tables, a finishing mold unit mounted on the other of said tables, transfer tongs for transferring a blank from the blank mold to the finishing mold, said tongs being supported by a carriage mounted on the finishing mold table, means for opening and closing said tongs, means for bodily oscillating said tongs relative to said carriage, and means for effecting radial movements of said carriage and the tongs supported thereby relative to the finishing mold table.

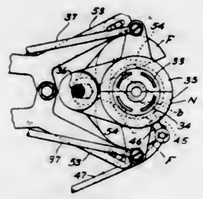
1,859,234. CONTINUOUS TWO-TABLE GLASSWARE FORMING MACHINE. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 9, 1930. Serial No. 419,513. 25 Claims. (Cl. 49—9.)



1. A glassware forming machine, comprising a parison mold table, a parison mold thereon, a neck mold associated with the parison mold, a support for the neck mold, a finishing mold table, a finishing mold thereon, means for continuously rotating said tables, means for shifting the support and neck mold laterally of the parison mold table, and means for rotating said neck mold about a vertical axis relative to said support and parison mold to align a parison supported by the neck mold with the finishing mold.

8. A glassware forming machine, comprising a pair of mold tables, means for supporting said tables for rotation about eccentric axes, plural parison molds and plural neck molds mounted on one of said tables, plural finishing molds mounted on the other of said tables, means for continuously rotating said mold tables, said finishing molds being continuously rotated in closed circular paths, and means for causing the plural neck molds to travel in circular paths in vertical and radial alignment with the finishing molds to transfer parisons from the parison molds to the finishing molds.

1,859,235. METHOD OF AND APPARATUS FOR FORMING GLASSWARE. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 29, 1931. Serial No. 511,944. 17 Claims. (Cl. 49—5.)



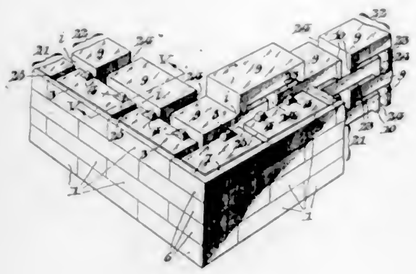
1. The method of fabricating panel bottles and the like, which comprises charging a parison mold and neck mold with glass, forming from the glass a parison of elongate and symmetrical shape in cross section having a finished neck portion, positioning said parison in a finishing mold with the sides of the parison substantially parallel with the sides of the elongate finishing mold cavity, and the major axis of the parison extending at an angle to the joint in the mold when the mold is closed, and blowing the parison to final shape in the finishing mold.

5. A glassware forming machine comprising a sectional parison mold, said parison mold having a cavity formed therein of elongate shape in cross section, the major axis of which is located in the plane of the joint of the mold, a sectional finishing mold having a cavity of elongate shape in cross section formed therein, the major axis of which is located at an angle to the joint of the finishing mold, means for forming a parison in the parison mold, means for opening the parison mold, means for effecting relative axial rotation between the parison and the finishing mold, through substantially the same angle as the angle between the major axis of the finishing mold cavity and the joint of the finishing mold, and means for enclosing the parison in the finishing mold.

1,859,236. ART OF WALL CONSTRUCTION AND BUILDING UNIT THEREFOR. EARL DWIGHT COVELL, Philadelphia, Pa., assignor to The Covell Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,045. 10 Claims. (Cl. 72—37.)

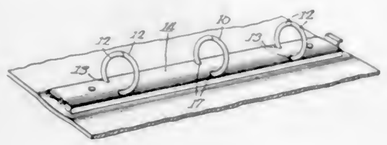
1. A wall construction comprising building units laid with predetermined spacings to provide horizontal and vertical joints, each said unit embodying a barrier ridge on or closely adjacent to a vertical face thereof and a barrier ridge outstanding from certain of the transverse vertical

faces with a spacing lug or lugs on a horizontal face in spacial relation to the ends thereof, said ridges and lugs thereby affording predetermined open horizontal and ver-



trical intervals directly accessible from one face of the wall only for the subsequent introduction and reception of bonding material.

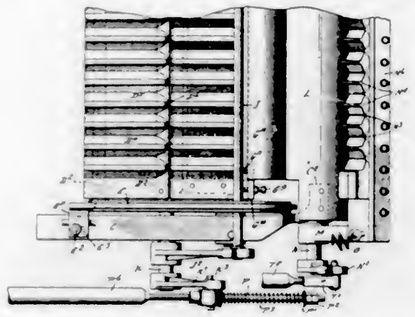
1,859,237. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Dec. 6, 1930. Serial No. 500,448. 5 Claims. (Cl. 129—24.)



3. In a loose leaf binder, a pair of wire arch toggle members bearing mating paper-holding prongs at their ends, and a pair of intermediately located paper-holding prongs secured to said toggle members and having lower end portions of said intermediately located prongs articulated to form a toggle joint.

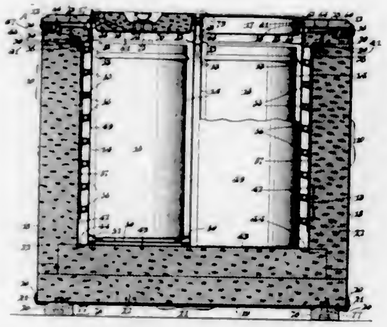
1,859,238. BOTTLE-CHARGING MECHANISM. JOHN R. GAUETTER, Cleveland, Ohio, assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 14, 1929. Serial No. 392,663. 19 Claims. (Cl. 214—91.)

1. Mechanism for charging series of bottles successively into corresponding series of holders in a bottle washing apparatus, the said mechanism comprising a platform on which the bottles are placed, a transfer tray having a plurality of grooves therein for the reception of the bodies of bottles, means pivotally supporting the said tray, means for rocking the said tray upon its support thereby to bring it into receiving position with reference to the platform and thereafter into a position for delivering the bottles therefrom, a pair of bracket arms pivotally supported adjacent the front ends thereof and having their rear ends in proximity to the series of bottle holders, a table supported by and between the said arms, the said table having grooves in the top thereof adapted to register with the grooves in the transfer tray, means adjustably supporting the rear or delivery ends of said bracket arms to align the grooves in the table with successive series of holders, means for delivering the bottles from the platform to the tray, means for delivering the bottles from the tray to the table and thence to a series of holders, and means carried by the rear or delivery end of the tray and the front or receiving end of the table for adjusting



the positions of the adjacent ends of such tray and table to insure proper alignment of the bottle receiving grooves thereon.

1,859,239. REFRIGERATION CABINET. CONRAD T. HANSEN, Bywood, Pa., assignor to Hale & Kilburn Co., Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 22, 1928. Serial No. 263,639. 6 Claims. (Cl. 220—9.)



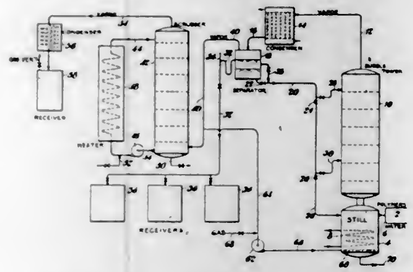
1. In a refrigeration cabinet comprising thermo-insulated walls and a bottom having an external covering and an internal lining of thin sheet metal sections with the meeting edges suitably interlocked, a similar material top marginal frame having an angle-section perimetric flange, hooked-section juncture strips co-extensive of the external covering edges overlying the angle-section flange aforesaid, and strip insulation interposed in a perimetric recession about the cabinet top intermediate the frame perimetric flange and external covering as well as between said frame and the lining to prevent thermo-conductivity between the outside and inside of the cabinet.

1,859,240. FOOD PRODUCT AND METHOD OF PRODUCING THE SAME. STROUD JORDAN, Brooklyn, N. Y., assignor to Ross and Rowe, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 23, 1931. Serial No. 582,875. 25 Claims. (Cl. 99—16.)

1. The method of producing a confection containing fats or fat material, comprising forming an emulsion with relatively small percentages of lecithin and water, and combining the emulsion with the remaining ingredients of the confection.

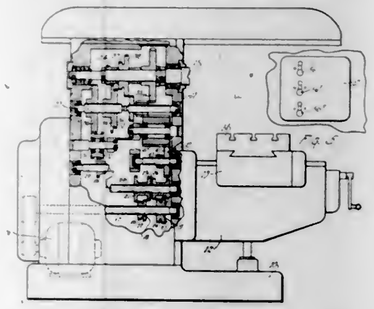
4. The method of producing tafies containing a fat material, sugars, and added water, comprising adding phosphatide to the same.

1,859,241. FORMATION AND RECOVERY OF ALCOHOLS. SYLVAN R. MERLEY, Dover, N. J., and OTTO SPRING, Okmulgee, Okla., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 6, 1928. Serial No. 267,868. 9 Claims. (Cl. 260—156.)



1. In the process of manufacturing alcohols from olefinic materials, in which such materials are reacted on with concentrated acid and the resulting acid liquor is mixed with water to hydrolyze the absorbed olefins to alcohols and acid, and in which a layer of polymers separates on the hydrolyzed materials, the improvement, which comprises separating said polymers from the remaining materials, mixing water with said polymers, and subjecting the mixture to reflux distillation for a considerable period of time to hydrolyze alcohols therefrom.

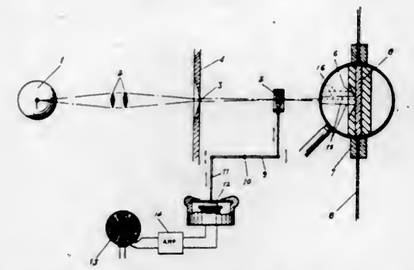
1,859,242. TRANSMISSION AND CONTROL MECHANISM. LESTER F. NENNINGER, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 19, 1930. Serial No. 469,071. 9 Claims. (Cl. 74—57.)



1. A transmission and control mechanism for a machine tool comprising a variable speed transmission, a series of back gear multipliers and a final member in serial power transmitting relationship, a reverser interposed between the backs gears and transmission, said back gears including five shiftable gears and means to selectively move any one of them into power transmitting position between the reverser and said member.

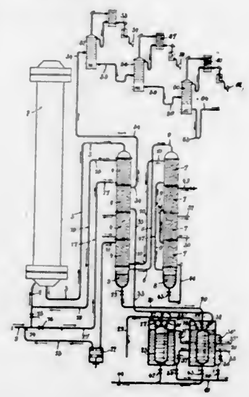
1,859,243. MEANS AND METHOD FOR RECORDING PHOTOGRAPHIC SOUND RECORDS. FREEMAN H. OWENS, New York, N. Y. Filed Sept. 17, 1928. Serial No. 306,495. 5 Claims. (Cl. 179—100.3.)

1. Means for making photographic sound records comprising a light source of constant intensity, a slit member illuminated thereby, a second slit member, a sensitized film movable past and closely adjacent an opening in said second slit member, a lens adapted to focus a beam of light from the first said slit member through the opening in said second slit member and upon said film and means controlled by and in accordance with the sound to be recorded for oscillating said lens and for causing said light beam to be directed alternately through the



opening of said second slit member and upon the masked portion thereof longitudinally of the direction of motion of said film whereby the intensity of light projected upon said film is varied in accordance with the vibrations of said sound.

1,859,244. METHOD FOR SYNTHESIZING AND SEPARATING HIGHER ALCOHOLS. GEORGES PATART, Paris, France. Filed Mar. 26, 1926. Serial No. 97,548. 9 Claims. (Cl. 260—156.)

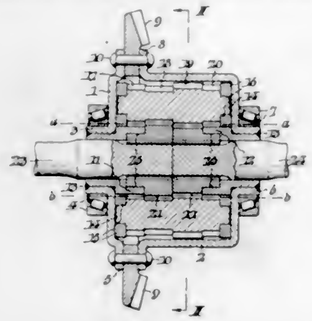


1. The method of synthesizing methyl alcohol and higher alcohols which consists in subjecting a mixture of carbon oxides and hydrogen at a high pressure and at a temperature of at least 300° C. to the action of a mixed catalyzer formed of a very intimate mixture of alkali metal salts of metal oxides of an acid nature with methanol-forming metal oxides catalysts, cooling while maintaining the pressure the gases produced by said catalytic action so as to condense the carbon dioxide and the methane contained in said gases and subjecting the remaining gases again to the action of the said catalyzer.

1,859,245. DIFFERENTIAL MECHANISM. JOSEPH PERCY REMINGTON, Philadelphia, Pa., assignor to James H. Bell, Philadelphia, Pa. Filed Oct. 2, 1930. Serial No. 485,868. 2 Claims. (Cl. 74—99.)

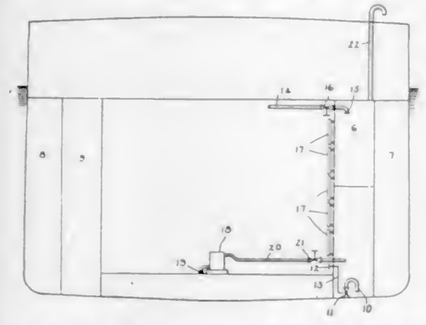
1. In differential mechanism for transmitting power at equal or varying speed to two co-axial aligned shaft sections comprising a rotatable gear case enclosing differentially toothed driven gears of slightly differing pitch diameters attached to said shaft sections, equally toothed driving gears rigidly secured co-axially in said case and

affording journal bearing for the first mentioned gears, means including a plurality of co-acting gears connecting immovably the driving and driven gears aforesaid when resistance to rotation or rotative force is confined



to one of the shaft sections, and movably connecting such driving and driven gears when unequal resistance or oppositely directed rotative forces are simultaneously applied to each axle.

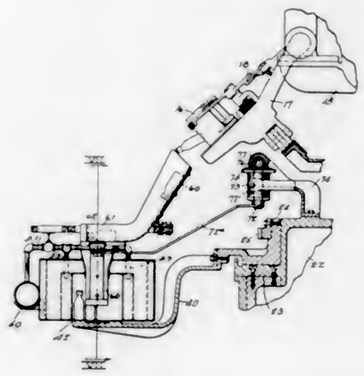
1,859,246. ANTIOIL-POLLUTION SYSTEM. HENRY E. ROSSELL and ROBERT N. S. BAKER, U. S. Navy. Filed May 7, 1929. Serial No. 361,220. 2 Claims. (Cl. 210—52.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A system for the prevention of pollution of harbor waters by the discharge of oily bilge water from a vessel afloat in port, including a receptacle on said vessel into which oily bilge water is delivered near its bottom, suction means within the receptacle and adjacent its upper portion for the removal of accumulated oil from the surface of the bilge water, and means permitting the ingress of a portion of the water on which the vessel is afloat into the receptacle to raise the level of the contents thereof without increasing the amount of oil therein, and which means also permits the discharge of said water, free of oil, from the receptacle.

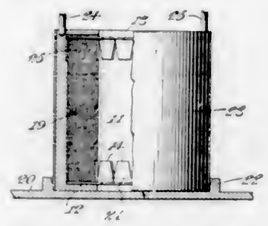
1,859,247. APPARATUS FOR PRODUCING HOLLOW GLASSWARE. LEONARD D. SOUMIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 16, 1928. Serial No. 270,282. 1 Claim. (Cl. 49—1.)

In combination, a machine for molding glass articles comprising a mold carriage, driving mechanism operable to rotate the carriage continuously about a vertical axis, means on the carriage for molding articles and periodically discharging them in succession at regular intervals at a discharging station, a lehr including a tunnel and a lehr conveyor extending therethrough, automatic mechanism for receiving the articles as they are discharged from the mold carriage and placing them in transverse rows on the lehr conveyor with a predetermined number of articles in each row, mechanism for intermittently advancing the lehr conveyor including driving connections between said conveyor and the carriage driving mechanism by which the conveyor is positively actuated at predetermined intervals, said intervals being equal to the time intervals between the placing of each two succeeding transverse rows of articles on the conveyor, whereby the conveyor is advanced



after each row of articles placed thereon, automatic take-out mechanism operating at the discharge end of the lehr tunnel and operable to remove the articles from the lehr conveyor one row at a time, means operated and controlled by the said carriage driving mechanism for effecting the operation of the take-out mechanism after each said step movement of the lehr conveyor and in synchronism with said movements of the conveyor, said lehr conveyor comprising an annular platform completely surrounding and concentric with said axis of the mold carriage, and said lehr tunnel extending concentrically with said axis along the major portion of the length of said conveyor.

1,859,248. COIL AND METHOD OF ASSEMBLY. WILBER E. STRAIT, Fort Wayne, Ind., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Oct. 10, 1930. Serial No. 487,682. 8 Claims. (Cl. 175—21.)



1. An electrical coil structure comprising, in combination, a tubular winding support, end flanges positioned on said support spaced slightly inwardly from the ends thereof and provided along their inner edges with angularly bent tongues projecting inwardly along said support, a coil winding comprising a plurality of overlying layers of fine wire wound on said support between said end flanges and overlying said tongues, the ends of said coil winding being supported by said end flanges and permanently securing said end flanges on said support, a thin tubular shell longer than the distance between the end flanges coaxially, loosely enclosing said coil winding, and a body of

hardened insulating compound filling the space between said shell and the coil winding and overlying the end flanges between the tubular support and the shell, whereby the coil winding is embedded in the hardened insulating compound between the tubular support and the shell.

1,859,249. POTHEAD DEVICE. PEARSON F. WILLIAMS, Chicago, Ill., assignor to G & W Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed June 3, 1929. Serial No. 367,884. 12 Claims. (Cl. 173—353.)



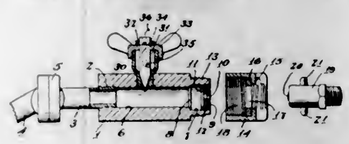
2. In a device of the character described, in combination with a pothead, of a pair of insulator members and conductors thereon, a rigid member adapted to embrace a conductor on one of the members, a member electrically connected to a conductor on the other insulator member and also electrically connected to said embracing member, and a yieldable mechanical connection between said electrically connected member and embracing member.

7. In a device of the character described, the combination of a pair of insulator members and conductors thereon, a tubular expansible member adapted to embrace a conductor on end of the insulator members, a member electrically connected to another conductor on the other insulator member and electrically connected to the expansible member, and means for pivotally connecting said expansible member and electrically connected member together.

1,859,250. MANUFACTURE OF DRY YEAST. RUDOLF BERTEL, Vienna, Austria. Filed Sept. 11, 1930, Serial No. 481,341, and in Austria Oct. 4, 1929. 7 Claims. (Cl. 99—10.)

1. A process for manufacturing dry yeast which process consists in mixing separated yeast with readily soluble solid calcium salts of lactic acid and drying the mass thus obtained.

1,859,251. COUPLING. ERNEST L. BROWN, Watertown, Mass., assignor to Better-Built Pumps, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1929. Serial No. 384,940. 1 Claim. (Cl. 285—175.)



A coupling of the character described comprising a sleeve adapted for connection at one end with a source of lubricant supply, an adapter threaded on the other end of said sleeve, a gasket interposed between said adapter and the adjacent end of said sleeve and projecting into the bore of said adapter, a second gasket slidable within the sleeve and limited against sliding movement in the direction of the adapted by said first mentioned gasket, said adapter and said first mentioned gasket having alined openings to receive a nipple and to permit direct engagement of the end of the nipple with said second mentioned gasket.

1,859,252. SEPARABLE FASTENER. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Nov. 7, 1930. Serial No. 494,022. 2 Claims. (Cl. 24—208.)

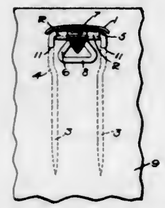


1. A separable snap fastener member having a head, a depressed portion provided in said head as an integral part thereof, said depressed portion having a bottom for upsetting the shank of an attaching member, said bottom being convex in cross-section facing toward the head, a base provided by said fastener member and a part secured to said base and having means located directly beneath the bottom of said depressed portion and adapted to be engaged by the upset shank of the attaching member when upset by the inner surface of said curved bottom to prevent separation of the attaching member from the snap fastener member.

1,859,253. CONCRETE CURING AGENT. ROY CROSS, Kansas City, Mo., assignor to Silica Products Company, Kansas City, Mo., a Corporation of Delaware. Filed July 10, 1929. Serial No. 377,329. 8 Claims. (Cl. 25—154.)

6. In the curing of concrete, the process which comprises applying to an uncured concrete surface a temporary, protective, aqueous gel coating containing bentonite, whereby the evaporation of water from the concrete surface is delayed.

1,859,254. PIN FASTENER. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 24, 1931. Serial No. 564,804. 5 Claims. (Cl. 24—152.)

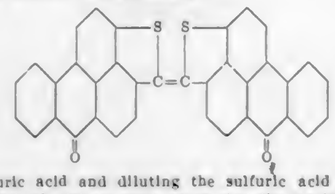


5. A double pointed pin fastener comprising an attaching part and a plate part 1, the attaching part having two sharp pointed legs 3 connected by a portion 5 having a triangular-shaped loop 6 located between the legs 3, a flat portion 8 provided at the end of said triangular-shaped loop 6, thereby providing a substantial bearing surface, hinges 2—2 provided by the plate part 1 and engaging the connecting portion 5, a stabbing prong 7 located beneath the plate part 1 and having a sharp pointed prong for engagement with the medium to which the fastener

is to be attached to lock it in place and for engagement with the flat bearing surface of the triangular-shaped loop 6 to lock the plate part 1 in a given relation to the attaching part and each of said legs 3 having a bend 4 spacing said legs closer together adjacent to their pointed ends than at the opposite ends whereby a material pierced by the legs is tensioned when the fastener is attached to facilitate piercing of the material by the stabbing prong 7.

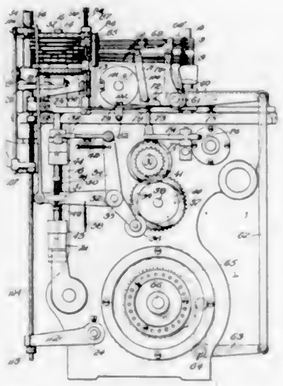
1,859,253. MANUFACTURE OF A DYESTUFF OF THE ANTHRAQUINONE SERIES. WILHELM MOSER, Riehen, near Basel, Switzerland, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Nov. 28, 1930, Serial No. 498,913, and in Switzerland Dec. 4, 1929. 1 Claim. (Cl. 260—53.)

A manufacture of a dyestuff of the anthraquinone series of a high degree of purity by dissolving the blue-green dyestuff described in Patent No. 1,044,797, and corresponding very probably to the formula



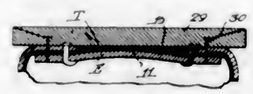
in sulfuric acid and diluting the sulfuric acid solution thus obtained with so much water that the resulting solution has the strength of about 90 per cent., the dyestuff being thus precipitated while the impurities still remain dissolved.

1,859,256. KNITTING MACHINE. ALBERT E. STEWART, Franklin, N. H., assignor to Acme Knitting Machine & Needle Company, Franklin, N. H., a Corporation of New Hampshire. Filed Oct. 5, 1928. Serial No. 310,523. 27 Claims. (Cl. 66—108.)



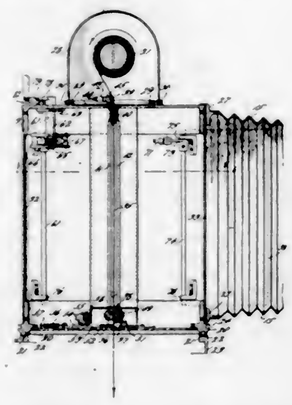
1. In a rotary knitting machine, the combination of a series of independent needles, sinkers interposes between said needles, said sinkers being arranged in sets having different butt formations, cams for selectively operating said respective sets of sinkers, operating means for said cams including a pattern drum, mechanism for giving said drum, a feeding movement, a pattern chain, means operative independently of said chain, for automatically interrupting said feeding movement at a predetermined point in the knitting operation, additional means for causing a resumption of said feeding movement, and automatic means for operating said pattern drum at a plurality of different speeds.

1,859,257. PROCESS OF FILLING SHOES. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 4, 1927. Serial No. 210,558. 41 Claims. (Cl. 12—142.)



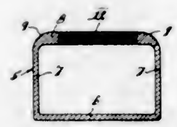
1. That process of filling shoes which comprises placing in the bottom cavity of a shoe a quantity of plastic spreadable filler material of different contour and smaller area than the cavity, and subjecting said filler material to a single stroke of pressure applied at the same time over the whole area of the cavity and solely in a direction substantially vertical to the shoe bottom to spread the filler material to the confines of the cavity.

1,859,258. PHOTOGRAPHING APPARATUS. GEORGE C. BEIDLER, Rochester, N. Y. Filed Oct. 9, 1931. Serial No. 567,942. 19 Claims. (Cl. 95—31.)



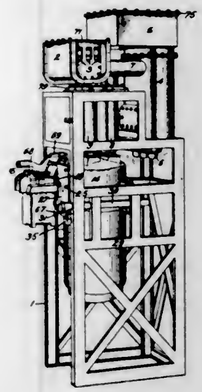
1. In a photographing apparatus, means for projecting light, a film holder rotatably mounted in light proof association with the means for projecting light, the said film holder having openings in two opposed sides, means for supporting film in the holder between the openings, shutters for closing the openings, and means for operating the shutters to open and close them when an opening in the holder guarded thereby is in position to receive the projected light.

1,859,259. ELECTRICAL WIRING CONDUIT. GEORGE L. CHAMBERLAIN and GUSS H. GNEISS, Chicago, Ill.; said Gneiss assignor to said Chamberlain. Filed July 8, 1929. Serial No. 376,769. 5 Claims. (Cl. 247—27.)



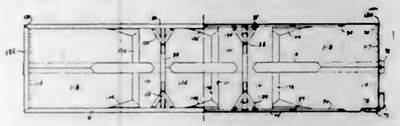
3. In a duct of the character described, an integrally formed tube of substantially rectangular cross section, said tube having relatively thin bottom and side walls, and a relatively thick top wall, the upper corner portions of said tube tapered to afford deflecting surfaces.

1,859,260. ELECTRICAL APPARATUS. CHARLES H. HILL, Drexel Hill, Pa., assignor to General Electric Company, a Corporation of New York. Original application filed Dec. 31, 1927, Serial No. 243,977. Divided and this application filed Jan. 2, 1930. Serial No. 417,940. 5 Claims. (Cl. 247—3.)



1. In an electric switching metal clad unit, a bus bar trough section adapted to contain insulating liquid and arranged to be connected at its ends to similar horizontally disposed trough sections, spaced bus bars in said section adapted to be connected with corresponding bus bars in adjacent sections, detachable cover structure for the upper side of said trough section and transverse partitions mounted within said trough section adjacent the opposite ends thereof and making a liquid tight joint with the bus bars and the trough section.

1,859,261. WELDED HOPPER CAR. WILLIAM H. MUSSEY, Chicago, and JULIAN R. RUDULPH, Homewood, Ill., assignors, by mesne assignments, to Pullman Car & Manufacturing Corporation, a Corporation of Delaware. Filed May 15, 1931. Serial No. 537,636. 20 Claims. (Cl. 105—249.)

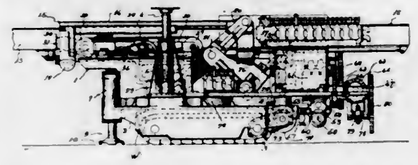


1. A welded railway car having side and end load retaining walls, sloping floor plates connecting said walls, a hollow center sill penetrating said floor plates, hollow ridge members extending transversely of the car and supporting certain of said floor plates, and braces connecting the side walls and center sill.

1,859,262. TREATMENT OF HYDROCARBON OIL. JOSEPH A. SHAW, Pittsburgh, Pa. Filed Nov. 6, 1928. Serial No. 317,699. 4 Claims. (Cl. 196—41.)

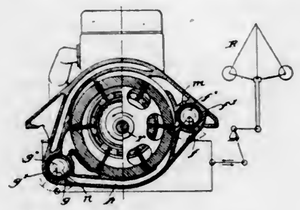
4. The process of removing acid substances from hydrocarbon oil after treatment thereof with sulphuric acid, which comprises washing said oil with a solution containing a compound of a tar acid and an alkali-forming metal, said solution being used in amount just insufficient to completely neutralize the acid substances present in said hydrocarbon oil after said treatment with sulphuric acid, removing said solution from contact with the oil and then washing the oil with a solution containing an alkali in amount sufficient to complete the neutralization of said acid substances and to remove substantially all tar acid derived by said oil during said first washing.

1,859,263. POWER SHOVEL. WILLIAM W. SLOANE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 10, 1929. Serial No. 398,778. 20 Claims. (Cl. 214—132.)



1. In a power shovel, the combination with a base frame, a beam provided with a scoop at its front end, means for carrying said beam to effect vertical movement thereof comprising elevating means for raising and lowering the forward end of said beam, supporting means cooperating with said elevating means including a pivotal support for said beam rearwardly of said elevating means, and a lever arrangement connectible with said pivotal support for causing said beam to pivot about a relatively fixed imaginary point rearwardly of the point of pivotal connection of said pivotal support to said beam upon operation of said elevating means.

1,859,264. ENGINE PROVIDED WITH A ROTARY COMPRESSOR. ARNOLD ZOLLER, Suresnes, France. Filed June 19, 1925. Serial No. 38,323, and in France June 21, 1924. 4 Claims. (Cl. 123—119.)

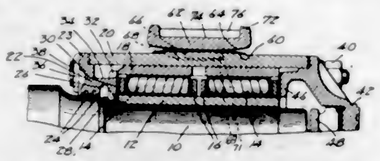


1. In an internal combustion engine, a rotary compressor adapted to produce a superfeeding up to a determined point in the operation of the engine after which the feeding is reduced beyond this point, said compressor having an exhaust pipe and an intake pipe, a valve for controlling the exhaust of the compressor, a valve for controlling the intake of the compressor, and a governor actuated by the engine for controlling closing or opening of the valves, said exhaust valve being gradually opened until a predetermined speed of the engine has been obtained when the governor will act to cause the gradual closing of the intake valve and a reduction in the feeding therethrough.

1,859,265. CAR FRAME SUPPORT AND JOURNAL BOX. RICHARD J. BRITTAIN, Jr., Bloomfield, and OTTO W. YOUNG, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 14, 1930. Serial No. 428,407. 14 Claims. (Cl. 105—223.)

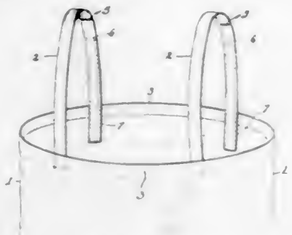
10. In a device of the character described, a journal box having its top provided with a raised portion and cavities at each side of the raised portion, a seat plate rockably mounted on said raised portion and having de-

pending retaining lugs embracing the raised portion to prevent the seat plate from shifting crosswise of the box, the cavities having end walls at the ends of the lugs to hold the seat plate from shifting bodily longitudinally of the box, and said seat plate having an upwardly pro-



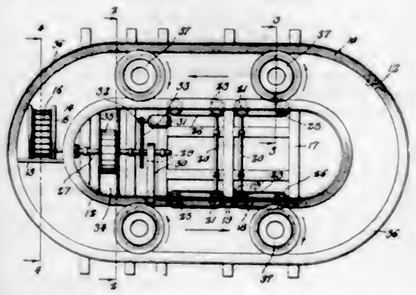
jecting lug extending longitudinally of the box to enter a recess in a frame member, and the upper surface of the seat plate at the sides of the lug having a crowned engagement with the frame member; substantially as described.

1,859,266. GARMENT. OSCAR S. DORR, Fond du Lac, Wis., assignor to Goodbar Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 519,288. 2 Claims. (Cl. 241—12.)



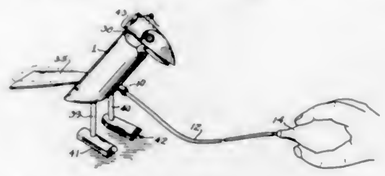
1. A garment having a shoulder strap formed with a longitudinal pocket having a mouth and with said pocket extending in a substantially vertical direction downwardly of the body of the garment to a point well below the upper edge portion of said body and secured thereto at substantially right angles to said edge, and a thin flexible stiffening strip in said pocket removable endwise through said mouth and extending to the lower end thereof and held in an upright position by its engagement within said lower end portion of said pocket which is secured to said garment vertically downward from the upper edge of said garment, and extending upwardly in said pocket to adjacent the mid-point of said strap.

1,859,267. WATER AMUSEMENT DEVICE. GUENTHER P. V. KUAZ, Seattle, Wash. Filed Apr. 7, 1931. Serial No. 528,432. 4 Claims. (Cl. 104—73.)



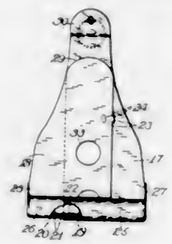
1. An amusement device comprising an endless watercourse having a constantly flowing stream of water therein, boats in the course propelled by the motion of the water, and constantly moving means carried by a side of the water course for contact by said boats whereby to intermittently impart rotary motion to said boats.

1,859,268. MUSICAL TOY. JOHN LARSON, Philadelphia, Pa. Filed Nov. 28, 1931. Serial No. 577,807. 8 Claims. (Cl. 46—40.)



1. A toy comprising a cylindrical body, a piston slidable therein, a lug projecting laterally from the one end of said piston and shaped to represent the lower part of a beak, a head pivoted to said piston and including an upper beak part normally in contact with the said lug, and means to pivot said head about said end.

1,859,269. PARCEL REMOVER FOR MAIL BOXES. HERMAN S. LYSTER, Indianapolis, Ind. Filed Oct. 23, 1929. Serial No. 401,898. 4 Claims. (Cl. 232—53.)



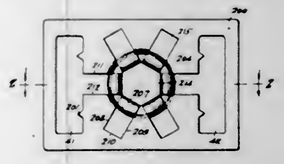
1. A parcel remover for mail boxes including a plate-like body and a pocket composed of two parts having each a body portion and a pocket portion, the parts being adjustably connected together and one of the parts having a handle projecting from the body portion, the pocket portions having each a bottom.

1,859,270. DISPLAY AND VENDING METHOD AND DEVICE. HARRY H. MCKEE and CHARLES T. WALTER, Chicago, Ill., assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 393,065. 5 Claims. (Cl. 312—120.)



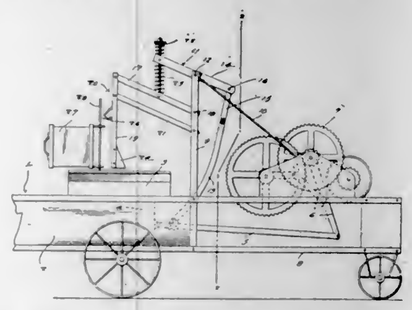
1. A refrigerated vending cabinet for packaged meats comprising a housing having a delivery outlet, a closure for said outlet having a sight opening therein, and a perflatory basket carried by said closure and arranged in the sight opening thereof for containing and displaying a specimen of said packaged meats, said basket having walls spaced from the walls of the sight opening to permit a circulation of cold air around the sides of the basket and throughout the latter.

1,859,271. SLIDE FASTENER. DANIEL I. REITER, New York, N. Y. Filed Nov. 17, 1931. Serial No. 575,677. 8 Claims. (Cl. 24—77.)



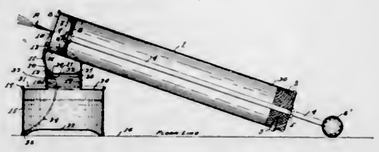
1. A one-piece socket fastener slide having a flat plate portion provided with a pair of spaced rectangular transverse slots, a prong integral with and projecting longitudinally and laterally from an edge of at least one of said slots, a rigid unmutilated and continuous socket guard wall outstanding laterally from and integral with the plate portion, where the wall joins said portion, spaced resilient fingers bent into arcuate form to subtend an angle of less than 180° and integral with one end of the guard wall and in inwardly spaced relation thereto to provide a stud-receiving opening, said fingers terminating close to the other end of the wall in free ends arranged between the plate portion and said other end of said wall and in sufficient inwardly spaced relation to said wall to yield toward but not to contact with said wall when a cooperating stud is forced into removable operable engagement with said fingers, and said other end of the wall having an opening therein of greater diameter than the least diameter of the stud-receiving opening provided by said fingers to permit the stud to be passed through either of said openings in either direction and into engagement with the fingers.

1,859,272. HAY BALER. HARRISON FEIK, Emporia, Kans. Filed Dec. 29, 1928, Serial No. 329,289. Renewed Apr. 8, 1932. 1 Claim. (Cl. 100—25.)



In a hay baler, a baling chamber provided with a feeding hopper in the top thereof, a plunger arranged for reciprocatory movement in the baling chamber, a reciprocatory plunger rod connected at the forward end to the plunger for operating the same, a vertically movable hay pushing unit arranged on the baler above the feed hopper and adapted to pass therethrough, and means for operatively connecting said pusher unit with the plunger rod whereby said pusher unit will force the hay downwardly in the baling chamber simultaneously with the rearward movement of the plunger in the baling chamber, the pusher unit being automatically raised to an inoperative position when the plunger moves forwardly in the baling chamber, said means including a pair of standards extending upwardly from the frame of the baler adjacent the rear portion of the baling chamber, a walking beam comprising a pair of connected, spaced, parallel bars, pivotally supported intermediate its ends between said standards, a bifurcated pitman pivotally connected, at one end, to the rear end of the walking beam and having its opposite end pivotally connected with the plunger rod at a point forwardly of the vertical plane of its connection with the walking beam, superposed pairs of parallel levers connected at their rear ends for pivotal movement between the standards at a point below the walking beam, the forward ends of the levers being operatively connected with the vertically movable pusher unit, and a yieldable operative connection between the forward end of the walking beam and the intermediate portions of the uppermost pair of levers.

1,859,273. LIQUID ATOMIZING DEVICE. WILLIAM A. O'CONNOR, New York, N. Y.; Frances M. O'Connor, New York, N. Y., executrix of said William A. O'Connor, deceased. Filed Dec. 22, 1928. Serial No. 327,929. 3 Claims. (Cl. 299—89.)



3. In an atomizer a cylinder, a piston, to reciprocate therein, a vertically positioned fluid container of a size and shape to commercially contain fluid when said container is detached from said cylinder, detachably connected to said cylinder, the latter being downwardly inclined from the former, an air jet opening in one end of said cylinder, a liquid rising tube, having its upper end located exteriorly of said cylinder end and in atomizing position with relation to said opening and its lower end extending into the fluid in said container, a piston rod, connected at one end thereof to said piston and extending beyond the other end of said cylinder, and a handle at the other end of said rod, for manipulating said piston and rod therewith, said cylinder, rod and handle being so disposed with relation to said container, as to have the resting surface at the bottom of said container and the under side of said handle in the same plane when said piston is at the end of its compression stroke, thereby preventing the overturning of said container.

Patents Nos. 1,859,274 to 1,860,345

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THE

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Patents	1,072—No.	1,859,274 to No.	1,860,345, inclusive.
Total	1,494		

Changes in Classification

Order No. 3,220, May 10, 1932, directs:

In *class 273, Amusement Devices, Games* (Division 62), establish the following subclass and definition:

1.5 Basketball

1.5. BASKETBALL. Devices relating to the game of basketball.

Note.—Balls for use in playing this game will be found in this class, subclass 65.

Note.—See class 248, SUPPORTS, for supports and brackets in general.

The patents contained in this subclass have been taken from class 273, subclass 1.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, May 10, 1932.*

Paul G. Lewis, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Haller Baking Company, of North Denniston Avenue, Pittsburgh, Pa., to effect the cancellation of the trade-mark registration of Paul G. Lewis, of 1635 La Brea Avenue, Los Angeles, Calif., No. 183,932, dated May 13, 1924, and the notice of such proceeding sent by registered mail to the said Lewis at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Lewis, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 25, 1932.*

Quin Sharpe Drug Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Hoffmann-La Roche Inc., Nutley, N. J., to effect the cancellation of the trade-mark registration of Quin Sharpe Drug Co., of Vicksburg, Miss., No. 41,567, dated December 1, 1903, and the notice of such proceeding sent by registered mail to the said Quin Sharpe Drug Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Quin Sharpe Drug Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

NOTICE TO ATTORNEYS

The Patent Office has received numerous protests from trade-mark proprietors that their trade-marks are frequently used as common nouns in patent specifications.

Applicants and their attorneys are urged to avoid using trade-marks in patent specifications and to employ in their stead properly descriptive terms. If, however, a trade-mark is used, suitable acknowledgment should be made that it is a trade-mark, as, for example, by stating that the article or product in question is one which is sold under such and such a trade-mark and/or by capitalizing the first letter of the word constituting the trade-mark and inclosing the word in quotation marks.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,742,235, A. G. Cooley, Relay locking means, decided April 22, 1932, claim 2.

Pat. 1,744,696, H. M. Friendly, Automatic telephone system, decided April 25, 1932, claims 22 and 23.

Pat. 1,769,811, S. D. Wells, Process of pulping fibrous material, decided April 27, 1932, claims 1 and 5.

Condition of Applications Under Examination at Close of Business May 7, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 77,515; Trade-Mark Division, 967. Oldest new case, Oct. 8, 1931; oldest amended, Oct. 12, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	†Jan. 19	†Jan. 20	527
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Dec. 14	Dec. 17	1,133
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Jan. 13	†Jan. 22	755
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Feb. 1	†Feb. 12	580
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 14	Dec. 14	449
4898 C	6. LEWERS, A. M., Carbon Chemistry	Oct. 17	Oct. 22	1,991
5725	7. JARBOE, C. G., Optics; Photography	Nov. 27	Nov. 27	1,589
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 27	Nov. 28	1,274
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Feb. 1	†Feb. 1	871
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 27	Dec. 3	994
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 22	Dec. 30	626
7701	12. HENRY, C. C., Machine Elements	†Jan. 18	†Jan. 19	655
5004	12. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 16	Dec. 16	1,156
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Jan. 2	†Jan. 20	802
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 25	Nov. 25	2,067
5612	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 8	†Jan. 9	890
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Nov. 7	Nov. 9	1,391
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 10	Dec. 10	871
4090	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Oct. 12	Oct. 12	1,821
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 7	†Jan. 9	705
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 12	Dec. 28	944
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Jan. 4	†Jan. 28	641
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 8	Oct. 13	965
5081	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 9	Dec. 15	755
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 16	Nov. 16	1,589
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Nov. 10	Nov. 12	954
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Dec. 16	Dec. 16	959
4628	28. BENSON, A. R., Internal-Combustion Engines	Nov. 7	Nov. 7	1,450
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Oct. 19	Oct. 20	1,008
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 8	†Jan. 8	897
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Oct. 30	Oct. 29	1,575
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 4	†Jan. 4	1,001
6090	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Nov. 10	Nov. 9	2,408
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Dec. 7	Dec. 7	907
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Mar. 14	†Mar. 22	452
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Oct. 30	Oct. 29	1,820
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 10	Nov. 16	1,418
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Feb. 17	†Jan. 26	320
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 7	Nov. 7	1,517
7880	40. OBERLIN, J. J., Receptacles	Nov. 23	Nov. 26	2,043
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	†Jan. 12	†Jan. 18	776
5832	42. CUTTING, H. O., Electric Signaling	Oct. 27	Oct. 22	1,477
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 9	Dec. 9	1,450
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 8	Oct. 16	1,855
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Dec. 12	Dec. 12	1,285
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Dec. 23	Dec. 24	764
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Dec. 7	Dec. 8	2,064
5595 C	48. ROEPKE, O. B., Electricity, General Applications	Nov. 14	Nov. 14	967
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 19	Oct. 19	1,554
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 25	Oct. 25	2,137
5028	51. BACKUS, C. D., Radiant Energy	Nov. 27	Nov. 27	1,291
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 19	†Jan. 28	843
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 6	†Feb. 11	581
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Oct. 26	Oct. 26	1,158
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Mar. 30	†Mar. 24	218
	Designs	†Apr. 14	†Apr. 27	185
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Nov. 16	Nov. 20	1,501
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 11	Dec. 18	689
5605	58. DOWELL, E. F., Abrading; Typewriting	Oct. 29	Nov. 2	1,361
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 5	Nov. 5	1,618
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Oct. 22	Oct. 26	1,554
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 14	Oct. 15	1,544
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Nov. 7	Nov. 7	1,788
4838	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving, Sugar, Starch, and Carbohydrates.	Nov. 1	Nov. 3	1,503
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Nov. 27	Nov. 27	749
5024	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Oct. 15	Oct. 15	1,833
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	†Apr. 11	†Apr. 19	843
	Labels and Prints	†Apr. 7	†Apr. 23	124

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

UNITED STATES GLASS COMPANY *v.* TIFFANY & COMPANY

No. 2,871. Decided February 8, 1932

TRADE-MARKS—SIMILARITY—"TIFFIN" AND "TIFFANY."

Two trade-marks for glassware, consisting the one of a gold shield bearing the letter "T" as a monogram, and the word "Tiffin," and the other of the word "Tiffinware *Held* confusingly similar to the words "Tiffany & Co." and "Tiffany" previously used by another party on the same goods.

APPEAL from the Patent Office. Affirmed.

Messrs. Byrnes, Stebbins, Parmelee & Blenko for United States Glass Company.

Mr. Rudolph L. von Bernuth, Mr. James McKinley Rose, and *Mr. Morrell S. Lockhart* for Tiffany & Co.

GRAHAM, *P. J.:*

On December 16, 1927, the appellant filed an application for trade-mark registration, Serial No. 259,033, which trade-mark comprises a gold shield bearing the large letter "T" as a monogram, and having the word "Tiffin" embossed across the shield, to be used on glass tableware. On the same day the appellant filed another application for trade-mark registration, Serial No. 259,034, comprising the single word "Tiffinware," the first part of the mark being printed in black block type, and the second part in smaller script type, to be also used upon glass tableware.

The appellee filed notices of opposition against the registration of these marks, and thereafter the Examiner of Interferences, the cases having been consolidated in the Patent Office, dismissed the notices of opposition and permitted registration. On appeal to the Commissioner of Patents this decision was reversed and registration was denied in both cases.

There is no proof of actual confusion in the record, and the decision of the matter depends upon an examination of the marks themselves. The opposer discloses, by the record, that it is the owner of three marks, namely, "Tiffany" and "Tiffany & Co.," both of which were registered in the United States Patent Office on August 31, 1920, and a trade-mark consisting of a monogram having a large letter "T," upon the stem of which is superimposed the character "&" surrounded by an "O," which, in turn, is surrounded by a "C," registered on November 6, 1928. All of these marks are shown to be used upon table glassware. The opposer shows by the stipulation on file that it has succeeded to a business which has been carried on since 1837, that it was incorporated in 1868, and since its organization has been selling jewelry, glassware, and like goods; that the words "Tiffany & Co." and "Tiffany" have been used as a trade-mark on said goods since 1853, and that the mark "T & Co.," has been used as a mark since 1878, these various marks being affixed, in practice, to the ware being sold by being printed on or burned into the merchandise, or attached thereto by stickers, tags, or otherwise.

It appears that the applicant, from 1914 to 1927, was in the habit of using stickers to designate its wares, one form of which consisted of a shield bearing thereon a monogram comprising the letters "USGCo," and, in another form, a small oblong mark, with cut corners, bearing thereon the words "Tiffin Quality Handmade," and with a dollar sign as a part of said design.

In 1927 the appellant adopted its present marks and has since used them. In the Patent Office the syllable "ware" in the word "Tiffinware" was disclaimed apart from the mark sought to be registered.

Both parties hereto manufacture a high grade quality of glassware and have extensive sales. The appellant has one of its factories in the city of Tiffin, Ohio, and contends that this was the reason, originally, that the word "Tiffin" was used in connection with its marks.

There is only one question primarily involved in this matter, namely, that of likelihood of confusion. The methods of using these marks are substantially the same in practice, and it becomes material to inquire whether one who was about to purchase high grade glassware, such as is made by these parties, would be apt to be confused as to origin by the use of the marks which the appellant seeks to register We are of opinion the Commissioner arrived at the right conclusion in this respect. "Tiffinware" is much like "Tiffany" in sound, and in appearance especially when placed on a small label as these marks are ordinarily used.

The monogram mark which is sought to be registered has, as its predominant feature, a large letter "T," which is also the predominant mark of the opposer in its monogram mark. These letters are of the same character and have the same peculiarities. The use of the word "Tiffin" with this monogram does not help the matter any, for it also bears a confusing similarity to "Tiffany."

Whatever may have been the motive of the appellant for so doing, in 1927 it abandoned the use of the initials "USGCo" upon its labels. These initials were, to a degree, identifying, and might well serve to make some distinction between the marks of the opposer and the appellant. The present marks, however, which are sought to be registered, are, in our judgment, apt to be confusing, and hence should not be registered.

In addition, if the word "Tiffin" in the mark "Tiffinware" is intended to designate the city in which one of the factories of appellant is located, it is clearly geographical. If it is not, as appellant argues, but rather has the meaning of the name of a meal, such as a luncheon, then it is descriptive, for there is no real difference in principle between say-

ing "Tiffinware" in such a case, and "tableware" or "luncheonware." As so used, the words describe simply a kind of goods.

Even if it were conceded that there is any doubt about the registrability of these marks, that doubt should be resolved against the newcomer in the field. *The B. F. Goodrich Co.* v. *Hockmeyer*, 17 C. C. P. A. (Patents) 1068, 40 F.(2d) 99, 394 O. G. 795.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

ATHERTON *v.* PAYNE

No. 2,818. Decided January 25, 1932

INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Record reviewed and *Held* that P., the applicant, has no right to make the claim in issue which was taken from the patent of A., and that priority should have been awarded the latter on that ground.

APPEAL from the Patent Office. Reversed.

BLAND, *J.*, and LENROOT, *J.*, dissenting.

Mr. Samuel E. Fouts and *Mr. J. T. Newton* for Atherton.

No appearance for Payne.

GARRETT, *J.*:

This is an interference proceeding in which Atherton has appealed to this court from a decision of the Board of Appeals of the United States Patent Office affirming a decision of the Examiner of Interferences awarding priority of invention of the subject matter to Payne.

The subject matter relates to certain features of a "remote control valve" designed primarily for use in the fuel pipe which leads to a heating furnace, electric means being provided to open the valve for permitting fuel, such as gas, to flow through the pipe, or to close the valve and stop the fuel flow. The electric circuit for so controlling the valve, it is stated, generally leads to some room or rooms remote from the furnace and the valve.

Atherton was granted a patent, No. 1,617,094, issued February 8, 1927, upon an application filed June 27, 1924, during the pendency of an application by Payne, Serial No. 513,204, filed November 5, 1921.

Following the issuance of the patent to Atherton, Payne, on January 16, 1928, copied claim 1 of the patent for the purpose of bringing about an interference. Such interference was duly declared by the Examiner on February 15, 1928.

The count reads as follows:

A remote control valve comprising in combination a valve adapted for continuous rotation in one direction, an operating stem connected to the valve to rotate therewith, contact pins on the stem, brushes supported adjacent the stem to form an electric circuit by contact with the pins, electrical means to rotate the valve step by step and cause the pins to make and break an electric circuit at various positions of the valve.

Atherton moved to dissolve the interference upon the ground that Payne "has no right to make the count * * *."

This motion was denied by the Law Examiner to whom it was referred, whereupon the Examiner of Interferences, no proofs having been taken, rendered his decision awarding priority to Payne who, by reason of his prior filing date, is the senior party.

So, we have before us as the primary issue to be determined, the ancillary question of Payne's right to make the claim.

The elements of the count are (*a*) "a valve adapted for continuous rotation in one direction;" (*b*) "an operating stem connected to the valve to rotate therewith;" (*c*) "contact pins on the stem;" (*d*) "brushes supported adjacent the stem to form an electric circuit by contact with the pins;" and (*e*) "electrical means to rotate the valve step by step * * *."

These elements are all present in Atherton, being disclosed in the drawings, as indicated by numerals, and the function of each member so indicated is specifically described in the specification. Thus, the element (*a*) is a cylindrical member numbered 13 in the drawings; element (*b*) is numbered 15 and is referred to in the specification as "an operating stem;" of element (*c*) the specification says "a contact pin 36 is fixed in the stem 15 and extends radially [and] a similar contact pin 37 is fixed in the stem 15 and extends radially and diametrically opposite the pin 36 and is spaced longitudinally from the plane of the pin 36;" element (*d*) consists of "insulated spring brushes 38 and 39;" and element (*e*) comprises "a solenoid or plunger electromagnet" and means to connect it with the valve through a pawl.

Elements (*a*), (*d*) and (*e*) are conceded to be present in Payne, but, in behalf of Atherton, it is insisted that Payne does not disclose either element (*b*), "an operating stem," etc., or element (*c*), "contact pins on the stem."

The Board of Appeals held, in effect, that a certain shaft (numbered 24) in Payne's drawing is driven from a wheel (numbered 32) through screws (numbered 33), and that one of the figures demonstrates that the drive is also through a key (numbered 25), and said:

* * * In the construction of each party all three parts, that is, the valve, the operating disk or wheel and the projecting stem which carries the contact members are rigidly united to form a unitary member. We see no patentable difference in the constructions and deem the claim in this respect readable on the Payne construction whether the shaft 24 alone or said shaft and the surrounding boss on the valve be regarded as the stem. * * *.

Upon the "contact pins" element, the Board said:

An additional reason assigned by Atherton for denying the claim to Payne is that Payne does not have contact pins on the stem. No reason is seen for not regarding the rivets 71 as such contact pins. It is true they are not radial pins extending directly from the shaft as in the Atherton construction but the language of the claim is clearly broad enough to include pins indirectly supported on the stem as in the Payne construction.

Appellant's brief says:

* * * It is true that there is a "shaft 24" extending through the ratchet wheel and valve and that these parts are connected to rotate together, as by means of a key 25; but, so far as concerns the operation of the valve, the shaft and key might be omitted. The said shaft is not an "operating stem" under any fair interpretation of the issue. It is merely a means for holding the parts together. * * * * * * *

It is an abuse of language to call the Payne "shaft 24" an operating stem for the valve. It is not a valve stem; and if it could properly be so called, *it is not an operating stem.* * * * The issue therefore calls for a stem which *operates the valve.* (Italics quoted).

Appellant further argues that even if the shaft itself, or the member built up by treating the shaft and the surrounding boss on the valve as a unitary member, be held to be an operating valve stem, "then there clearly are no pins on the stem," because the rivets 71 held by the Board of Appeals to be contact points are not located "*on the* stem" by Payne, and "the only reasonable interpretation of the issue locates the contacts *on the* stem." (Italics quoted).

These contentions of appellant as to the mechanical differences appear to be correct. So, apparently, the conclusions of the tribunals of the Patent Office were reached by applying the rule that the counts of an interference are to be given the broadest interpretation which their terminology will permit.

Appellant argues that this rule of broad interpretation may not properly be applied in a case such as that at bar; that the interference is between a *patent* and an *application*—not between two applications, and, therefore, the count being taken from the patent, its terms must be given the limited meaning which they had in the patent, and the limitations as expressed in the claim which became the count are material, and may not be ignored in an interference proceeding, whatever may be the rule in infringement and ex parte cases.

Under the facts of this case we think it unnecessary to its determination for us to discuss the arguments made and authorities cited relating to the rules of law applicable in interference contests between a patent and an application on the one hand, and between two applications on the other, nor do we regard it necessary here to discuss ambiguity or equivalency.

The count has specific limitations as recited, supra, two of which, (*b*) "an operating stem connected with the valve to rotate therewith," and (*c*) "contact pins on the stem," are in issue. Expressly defined limitations we may not disregard. *In re Bijur*, 17 C. C. P. A. (Patents) 1134, 40 F.(2d) 999, 398 O. G. 355; *Thompson* v. *Pettis*, 18 C. C. P. A. (Patents) 755, 44 F.(2d) 420, 403 O. G. 6.

Assuming without deciding that the Board of Appeals was correct in holding that the Payne structure discloses a part which meets the requirement of the court as to an "operating stem," we are unable to agree that Payne's rivets meet the limitation called for by Atherton's "contact pins on the stem." Payne's rivets are not on the part held by the Board to be an operating stem.

In *Thompson* v. *Pettis*, supra, we held, as stated in the syllabus:

A wire extending through an opening previously made in a sand plug filling an opening in a mold part and loosely passing therethrough, is not a means "embedded in the plug."

In *Field* v. *Stow*, 18 C. C. P. A. (Patents) 1502, 49 F.(2d) 1072, 413 O. G. 283, where a count relating to a mine car called for "a floor supported on * * * sill flanges" and it was insisted that "supported on" was synonymous with "supported by," a view apparently taken by the tribunals of the Patent Office, we said:

We are unable to agree with the conclusion reached by the Patent Office tribunals.

Appellant had the right to expressly limit his patent claim, as he did, to a floor supported *on* sill flanges.

The language, "A floor supported on sill flanges," in our opinion, means a floor in contact with the upper surfaces of the sill flanges. Had the count defined a floor supported *by* sill flanges it would have been sufficiently comprehensive to cover a floor in contact with either the upper or the lower surfaces of the flanges.

Since Atherton expressly limited his claim to contact points *on* the stem and Payne's disclosure does not read upon the limitation it follows that, in our opinion, Payne may not make the claim which constitutes the count in issue.

The decision of the Board of Appeals is, therefore, reversed.

Reversed.

BLAND and LENROOT, *J. J.*, dissent.

U. S. Court of Customs and Patent Appeals

IN RE MOORE

No. 2,878. Decided February 1, 1932

PATENTABILITY—ELECTRIC FURNACE.

Claims for an electric furnace *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. William L. Symons for Moore.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

This appeal is from a decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner, rejecting the claims of appellant's application for a patent upon alleged new and useful improvements in electric furnaces. There are three claims of which No. 7 is representative.

7. A tilting electric metallurgical furnace having an arcing electrode and a hearth or bottom comprising a metallic shell, a supporting layer of refractory material arranged within said shell, a superposed uniform layer of highly conducting carbonaceous material in direct contact with the charge, a layer of mortar interposed between the metallic shell and the supporting layer of refractory material, and a plurality of metal fins extending through said supporting layer and said layer of mortar, and being embedded in said layer of highly conducting carbonaceous material, whereby electric current may pass through said furnace shell to the layer of carbonaceous material and be widely distributed therethrough and whereby the various layers of said furnace bottom are effectively anchored to said furnace shell.

The references cited are: Moore, 1,304,350, May 20, 1919; Niblock, 1,430,104, September 26, 1922; Sethman, 1,481,031, January 15, 1924.

Appellant's claims are for the combination of elements producing an electric furnace of the arc type for "carbonizing a metallic charge in any one of the several ways mentioned or by employing all of the several methods at the same time." Novelty is claimed to reside in the construction of the furnace bottom.

The bottom disclosed consists of (*a*) an outer shell formed of metal plates upon which is (*b*) a layer of refractory material, which in turn has upon it (*c*) an active layer of carbonaceous material, of substantially uniform high conductivity throughout,

which contacts with the charge, and which is electrically connected with the outer metallic shell by means of (*d*) a plurality of metal strips or fins secured at one end to said outer shell and having their other ends embedded in the active layer of carbonaceous material. These fins extend through the refractory layer mentioned above as (*b*). This refractory layer is the supporting means of the active or top layer which active or top layer is the bottom proper, or hearth of the furnace.

Describing the operation for which the structure is designed, appellant's brief says:

> The molten or liquid charge 11 rests on the carbonaceous hearth 9, and a slag 12 containing lumps of solid carbonizing material 13 floats on the charge 11. When the charge is agitated in contact with the carbonaceous slag 12 on one side and the carbonaceous hearth 9 on the other side, it is very readily carbonized. Agitation may be effected by any suitable means, as by forcing a fluid through the pipe 14 and thence through the charge. The fluid used may be either a non-oxidizing or reducing gas such as nitrogen or hydrogen under pressure, or it may be in the nature of a hydrocarbon, either gaseous or liquid. A violent bubbling or ebullition of the charge is produced by the passage of the fluid therethrough, thus agitating the mass and bringing all parts thereof into intimate contact with both the carbonaceous bottom and the carbonizing slag.
>
> In addition to its carbonizing function, the improved carbonaceous bottom is found to be highly resistant to both acid and basic slags. The metallic fins 10 serve not only to distribute the current throughout the carbonaceous bottom, but also to anchor securely the various portions of the bottom together and to the shell.

In the Moore patent cited as a reference, every element of the claims of the application appears to be present, but the arrangement of these elements differs somewhat in the two structures, particularly in the fact that the hearth (the top layer with which the charge contacts) is not of carbonaceous material, nor is it *highly* conducting. It is electrically conducting at high temperature only. The strata immediately underneath said hearth, however, is of a refractory material which is electrically conducting at ordinary temperatures. The structure shows fins, arranged very much as they are in the structure of the application.

The patent to Niblock is conceded by appellant to disclose a furnace bottom having a carbonaceous hearth, and some other features incident to appellant's claims, but it is argued that in said patent:

> There is only one of the terminal members and the current is, therefore, not widely distributed throughout the hearth, nor is there any anchoring of the various furnace layers.

The patent to Sethman shows a structure in which there are alternative arrangements, that is to say, in one form the charge rests directly upon a carbonaceous layer and in the other form there is a layer of lead between the charge and the carbonaceous layer.

The rejection by the tribunals of the Patent Office seems to have rested upon the ground that it did not involve patentable invention to provide the furnace of Niblock, showing a carbonaceous hearth member upon which the charge rests, with a plurality of conducting fins, such as are disclosed in both the patents to Moore and Sethman.

The brief of the Solicitor for the Patent Office says:

> The rejection by the Board of Appeals on the combination of Moore and Niblock of course amounts to the same thing, whether stated in the form of no invention to put Moore's fins in Niblock's furnace or in the form of no invention to leave out Moore's layer 13 and allow the charge to rest directly on the layer of carbonaceous material in view of Niblock.

We are not convinced that there was error in the decision of the Board of Appeals. Appellant's structure or arrangement is one of elements, each of which, in the new relation, apparently performs the same function which it did in the prior art. That a better or more satisfactory result is obtained is doubtless true, but after all, as stated by the Solicitor, in the brief:

> * * * the result is merely the sum of a number of old results which in the patentable sense is still merely an old result.

Some authorities in point are *Hailes v. Von Wormer*, 87 U. S. 353; *In re Isherwood*, 17 C. C. P. A. (Patents) 1187, 40 F.(2d) 987, 400 O. G. 225; *In re Ackenbach*, 18 C. C. P. A. (Patents) 769, 45 F.(2d) 437, 403 O. G. 789. Numerous other cases are cited in the foregoing opinions.

Appellant has here relied strongly upon the case of *In re Champeau*, 17 C. C. P. A. (Patents) 568, 34 F.(2d) 1012, 388 O. G. 783. It seems sufficient to say that there it was found that the new combination produced a new and useful result which we regarded as evidencing more than mere mechanical skill. Here nothing more than mechanical skill in the adjustment of parts, whose respective functions were well known, appears to be present.

The decision of the Board of Appeals is affirmed. Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HAHN

No. 2,888. Decided February 1, 1932

1. PATENTABILITY—TANK CONSTRUCTIONS.
   Certain claims for an improvement in tank construction *Held* unpatentable over the prior art.
2. SAME—SAME.
   A claim for an improvement in tank construction including a "four part setting adapted to be attached in the abutment" *Held* unpatentable over the prior art.

GRAHAM, *P. J.*, and LENROOT, *J.*, dissenting as to Claim 5.

APPEAL from the Patent Office. Modified.

Messrs Howson & Howson and *Mr. William A. Smith, jr.*, for Hahn.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

Hahn has here appealed from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner refusing to allow three claims in an application for "improvement in tank construction" as defining nothing patentable over prior art.

The alleged invention relates to metal tanks adapted for use as storage receptacles for material such as ashes, coke, coal, sand, etc.

The claims are as follows:

> 5. A tank including a substantially funnel-shaped section having at least five sides, each side consisting of a plurality of flat cast metal plates secured together in edge-abutting relation, and a four part fitting adapted to be attached in abutment at the lower edge and to constitute a continuation of the said polygonal section and including a discharge opening.
>
> 20. A tank including a substantially funnel-shaped section having at least five equal sides each consisting of a plurality of cast metal plates symmetrically arranged around a vertical center line and having flanges at their abutting edges by means of which they are united in the structure.
>
> 21. A tank including a substantially funnel-shaped octagonal section each side of which is composed exclusively of four-sided flat plates, said plates being joined together at their edges and the abutting edges of adjacent plates being in each instance of equal length.

After a description of the construction, the brief filed in behalf of appellant says:

> Applying the claims before the honorable court to the construction above described, it will be seen that appealed claim 5, calls for a tank including a funnel-shaped section (3) *having at least five sides*, each side consisting of a plurality of *flat cast metal plates* secured together in edge abutting relation, and a *four part fitting* (4) adapted to be attached in abutment at the lower edge *and to constitute a continuation of the polygonal section* and including a discharge opening; claim 20 calls for a tank including a funnel-shaped section (3) *having at least five equal sides*, each consisting of a plurality of *cast metal plates* symmetrically arranged around a vertical center line and *having flanges* at their abutting edges by means of which they are united in the structure; and claim 21 calls for a tank including a substantially funnel-shaped *octagonal* section, each side of which is composed exclusively of *four-sided flat plates* joined together at their edges and the abutting edges of adjacent plates being in each instance of *equal length*. (Italics quoted.)

The references cited are: Tallerday, 567,667, September 15, 1896; Harry, 679,146, July 23, 1901; Strong, 1,442,900, July 18, 1922.

Appellant's brief contends that there are at least six essential features of the appealed claims which are not disclosed in the references, to wit:

> 1. A substantially funnel-shaped section having *at least five sides.*
> 2. A tank having a funnel-shaped section, each side of which consists of a plurality of *flat cast metal plates.*
> 3. A flat-sided funnel-shaped tank section, each side of which is composed of a plurality of *flat cast metal plates secured together in edge-abutting relation.*
> 4. A similarly constructed funnel-shaped tank portion in which the cast metal plates are *symmetrically arranged around a vertical center line.*
> 5. An assembly of *four sided flat plates joined together at their edges* in such manner that the abutting edges of adjacent plates are in each instance of *equal length* and form a funnel-shaped *octagonal* tank section.
> 6. The funnel-shaped tank section having *at least five sides*, together with a *four part* fitting adapted to constitute a lower terminal portion forming a discharge opening. (Italics quoted.)

The decision of the Board of Appeals says:

> Strong discloses a four sided tank provided with a four sided funnel-shaped section, the funnel-shaped section being constructed at its lower end to form a gate controlled outlet. The upper portion of the tank is formed of flat metal plates.
>
> Harry and Tallerday both disclose cylindrical tanks formed of sections secured together in edge-abutting relation by means of outwardly extending flanges.
>
> We have carefully compared applicant's tank with the tanks disclosed in the references relied on by the Examiner and have carefully considered the advantages stated in applicant's brief to be possessed by his tank by virtue of certain materials and structural features but we are constrained to agree with the Examiner that the appealed claims are not patentable over the references relied on. While Strong discloses a tank provided with a four sided funnel-shaped section it would appear obvious that the number of sides of the funnel-shaped section might be increased to more nearly approach the cylindrical form and that a plate construction might be used for the funnel-shaped section as well as for the upper section. The lower end of the funnel-shaped section forming the gate controlled outlet in Strong's tank is apparently four sided and, even if it were not, the choice of four sides would not we consider be a matter of invention. To make up a tank of sections secured together in edge-abutting relation by flanges is old in the art as disclosed by Harry and Tallerday and would suggest itself to any one desiring to make up a tank of sections. Further the use of cast metal plates is considered to be merely a choice of materials.

[1] Insofar as the foregoing decision of the Board of Appeals relates to claims 20 and 21, we are in accord therewith. We do not feel that all the features recited in appellant's brief as not being disclosed in the references cited present patentable elements or that they render those claims allowable, but we feel differently as to patentability of claim 5.

[2] This shows a *combination* of a tank as described with a "*four part fitting adapted to be attached in abutment*," etc., which no prior art cited, appears to anticipate and which seems to us to be inventive. It is a new and, apparently, a useful device and appellant is entitled, at least, to have any actual doubt resolved in favor of patentability. *In re Kirschbraun*, 18 C. C. P. A. (Patents) 735, 402 O. G. 8, 44 F.(2d) 675. (Italics ours.)

The decision of the Board of Appeals is modified, being reversed as to claim 5 and affirmed as to claims 20 and 21.

Modified.

GRAHAM, *P. J.*, and LENROOT, *J.*, dissent as to claim 5.

U. S. Court of Customs and Patent Appeals

IN RE CROWLEY

No. 2,854. Decided February 1, 1932

PATENTABILITY—APPARATUS FOR SURFACING SHEET GLASS.
Certain claims for an apparatus for surfacing sheet glass *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Frank Fraser, *Mr. Wm. J. Belknap*, and *Mr. Wm. H. Gross* for Crowley.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, refusing to allow, in view of the prior art, claims 1, 4 to 7, inclusive, 11, 12, 14, 15, 17, 18, 23, 24, 27, 29, 32, 33, 35, and 36 of appellant's application, filed on July 27, 1923, claim 20 of said application having been allowed.

Claims 1 and 14 are illustrative of the claims in issue and read as follows:

> 1. In an apparatus for surfacing sheet glass, a supporting table comprising a plane upper sheet-supporting surface, and means engaging the sheet peripherally to limit the lateral movement thereof, while lying freely on this surface.
>
> 14. In an apparatus for surfacing substantially flat glass sheets, a table having a rigid metallic sheet-supporting face, the supporting surface being an absolutely flat smooth plane to form a master surface which determines the ground surface of the sheet supported freely thereon, and a sheet-supporting pad of yielding material of uniform thickness covering the master surface.

The references relied upon are: Hagaman, 94,310, August 31, 1869; Haslem (reissue), 10872, October 11, 1887; Prichard, 395,631, January 1, 1889; Brockman, 497,115, May 9, 1893; Richter, 1,088,297, February 24, 1914.

The application involves a circular, sheet-supporting table, which table is mounted on a column substantially at its center point. Provision is made for rotating said table by means of gears and a drive shaft. The sheet-supporting surface proper is in the form of a square in the drawings shown in the application, and this portion of the table is of heavy metal having its upper surface ground to a plane. Upon this there is placed a pad of yielding material, preferably cork or cork composition. The square form is surrounded by four sectors which are raised above the level of the supporting area,

thus forming a recess within which the square of glass to be polished is placed. The walls formed by these sectors are covered by strips of yieldable material, such as rubber. The recess thus formed conforms to, but is slightly larger than, the form of glass to be received, and the cork pad, being yieldable, is intended to compensate for any irregularities of the surface of the glass resting upon it during the grinding of the first surface. The grinding head has upon its lower face a series of flat teeth, or projections, which perform the grinding operation on the sheet. During the placing of a glass sheet within the aforementioned recess this grinding head is elevated above the table, but during the grinding operation this head rests with its full weight upon the sheet of glass. The pivot for this head preferably turns freely, so that, when the full weight of the grinding head rests upon the glass, said head is rotated by the movement of the table and the frictional contact with the glass. The grinding head is mounted in a position eccentric to the axis of rotation of the table, and is of such diameter that the operating face will bear upon the corners of the glass sheet as well as the center thereof.

In affirming the rejection by the Examiner of all of the claims the Board of Appeals said:

Claims 1, 4, 5, 6, 7, 11, 12, 14, 15, 17, 18, 23, 24, 27, 29, 32, 33, 35 and 36 were rejected on Prichard in view of Brockman or Haslem, or on Richter, in view of Brockman and Hagaman.

The patent to Prichard discloses plates F having a recess formed in its upper surface on which sheets of slate rest while being ground by the grinding wheel C. Although the machine is for grinding slates instead of glass, the operation is analogous and we find nothing patentable in claims 1, 7, 11, 12, 15, 32 and 33 over this reference.

Claims 4, 5 and 17 specify that the supporting surface is a rotatable table. The only purpose of rotating the table is to bring all portions of the glass sheet under the grinding wheel and this is accomplished in the same way by the table of Richter which is not rotated continuously but is rotated manually at intervals. These claims do not include the grinding wheel as an element and it appears immaterial to the construction covered thereby whether the table rotates or not and we find nothing patentable in them over Richter or Hagaman in which the recess could be made larger than the sheet if the clamp were not set up.

Claims 14, 18 and 23 include a supporting pad for the glass but such a pad is shown by Brockman and in view thereof we find nothing patentable in placing a pad on the tables of Hagaman or Prichard.

Claims 35 and 36 specify that the pad is made of cork or cork composition but these are well known resilient materials and there is nothing patentable in using them in place of the rubber of Brockman.

Claims 24, 27 and 29 include both the rotatable table and the grinding wheel but we see nothing patentable therein over Richter in view of Hagaman or Prichard in which a plane supporting surface is used.

Claim 6 specifies that portions of the side walls of the recess are cut away to serve as hand holes for lifting the glass plate. This does not distinguish from Richter in which there are spaces between the ends of the side members 29 which would permit of such manipulation. Furthermore it is common to cut away portions to furnish a hand hold.

Except in one particular, we agree with the board that all of the elements of the claims here in issue are disclosed in the references, either singly or in combination, and that, where elements of the claims are found in different references, their combination, as set out in the claims here involved, did not involve invention.

We do not find the element described in claims 12, 14 and 15 as an "absolutely flat smooth plane to form a master surface" in any of the references. As to this element the Examiner stated:

The making of the table so that it forms a "master surface" absolutely flat and providing a pad of uniform thickness are obviously only desired results in any machine and depend soely upon the skill and care taken in making the machine and are limitations of degree not affecting the patentability of the claims.

We are of the opinion that the foregoing statement is correct. As we have found that the work support of the reference Prichard, provided with a recess to receive a slate to grind the surface thereof, could be used as a work support for the grinding of glass without the exercise of invention, we think it would be obvious that the supporting surface should be absolutely flat, and, the use of a pad being old, as shown by the reference Brockman, there would be no invention in using such a pad upon the surface of the work support.

We find no error in the decision of the Board of Appeals and it is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MARTIN, JR.

No. 2,882. Decided February 1, 1932

PATENTABILITY—VALVE DEVICE.

Claims for a plug-valve device *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Paul Carpenter and *Mr. Brendan J. McCann* for Martin, jr.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming the rejection by the Examiner of claims 8, 10, 13, 14, 15 and 26 of appellant's application, filed on April 19, 1924; claims 1, 2 and 3 have been allowed.

Claims 10 and 26 are illustrative of the appealed claims and read as follows:

10. In a plug valve device, in combination, a tapered valve seat, a tapered valve adapted to seat thereon under spring action, each being shouldered whereby a chamber is formed for the reception of a packing member, and a packing member in said chamber adapted to move the valve off said seat against the tension of the spring.

26. In a plug valve device, in combination, a casing having a tapered valve seat, a tapered plug valve adapted to engage said seat, the plug valve and seat being shouldered to form a recess for the reception of a packing member and a gland, said shoulders being formed at the smaller end of said plug valve, a spring for sealing said valve, a packing member engaging in said recess upon said shoulders, and a gland engaging said packing for retaining the same and for exerting pressure on said valve to move it off its seat.

The references relied upon are: Heijlman, 1,370,745, March 8, 1921; Martin, 1,456,326, May 22, 1923.

Appellant's alleged invention relates to valves, particularly of the type known as rotating plug valves. As applied to such last-named valves, a spring is provided that normally holds the valve to its seat; the upper ends of the plug and casing, respectively, are shouldered on substantially the same plane. A packing element overlies these shoulders to seal the joint between the plug and the casing. To compress this packing element a collar is provided above the same, formed with projecting flanges having holes engaged by bolts, which bolts also pass through openings in a flange upon the body of the valve casing. By tightening the nuts upon these bolts the packing may be compressed, and if compressed sufficiently the vertical thrust of the packing will lift the plug from its seat against the force of the spring in the lower chamber.

The Martin reference is a patent granted to appellant. With regard to that patent and the Heijlman reference, the Board of Appeals said:

While the specification does not so state, the structure of the claims appealed involves an improvement or carrying forward of one of the features of applicant's prior patent above cited.

In the patent applicant proposed, by exerting pressure on the packing 20 through its gland, to produce sufficient longitudinal movement of the valve to break it loose from its sent and permit its lubrication. The claims at bar are directed to the accomplishment of the same function, the alleged improvement residing in the provision of a shoulder on the plug whereby a more positive thrusting action may be communicated to the plug by longitudinal movement of the packing.

This seems to us to be an obvious remedy for any lack of efficiency that might have been inherent in the patented structure. It is an old expedient to shoulder a valve plug for the reception of packing as shown by Heijlman and while the patent may not teach the efficacy of shouldering for applicant's particular purpose we believe this to be an inherent and obvious advantage of Heijlman's structure. It would obviously be possible by a proper manipulation of the glands of the Heijlman valve to effect a desired adjustment of the plug in accordance with the teachings of applicant's patent.

In the Examiner's statement in the record we find the following:

• • • Applicant has merely modified the Martin patent by providing the plug with a shoulder to receive the direct and full thrust of the packing instead of utilizing merely the vertical component of the thrust against a tapered surface, the functions of both structures, however, remaining the same. Heijlman, however, has shown that this variation is not new in the art since he shows the packing in the lower end of the valve casing seating on shoulders on both the plug and casing to seal the joint between the two and to effect a direct thrust on the plug to move it longitudinally, as brought out in lines 45 to 51, of page 2 of his specification. Consequently, to substitute this Heijlman packing arrangement for that of Martin does not involve any invention.

We are in accord with the views of the Patent Office tribunals above quoted. We are of the opinion that the claims in issue involve nothing more than a substitution of a form of tapered plug and seat having shoulders, as disclosed by Heijlman, for the tapered plug and seat shown in appellant's patent, and that this substitution would be obvious to one skilled in the art as soon as any defect was disclosed in the functioning of appellant's patented packing arrangement. Therefore, such substitution would not involve the exercise of the inventive faculty.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C. Minn. (Minneapolis), Doc. E 1415. *Claude Neon Lights, Inc., et al.* v. *O. Paulsen et al.* (*Glo-Tube Mfg. Co.*). Dismissed Mar. 1, 1932.

1,180,141, C. Green, Leaf for sample books, filed Mar. 28, 1932, D. C., S. D. N. Y., Doc. E 66/214, *C. Green Co., Inc.*, v. *Plymouth Sample Card Corp.*

1,423,956, Mitchell & White, Tipless incandescent lamp, D. C., N. D. Calif. (San Francisco), Doc. E 2876–S, *General Electric Co.* v. *B. C. Brown et al.* (*Associated Mf'rs. Importing Co.*). Claims 6 and 7 and 19 to 24, inclusive, held valid and infringed Mar. 14, 1932. Doc. E 2970–S, *General Electric Co.* v. *J. S. H. Frank.* Decree as above.

1,451,491, S. H. Calkins, Pattern and guide strip, D. C., S. D. N. Y., Doc. E 53/326. *The Trattel Marble Co.* v. *Manhattan Terrazzo Brass Strip Co., Inc.* Decree for plaintiff (notice Mar. 23, 1932).

1,454,397, W. W. MacDonald, Hydraulic brake, filed Mar. 22, 1932, D. C., N. D. Calif. (San Francisco), Doc. 19201–K, *W. W. MacDonald* v. *Wagner Electric Corp. et al.* Same filed Mar. 25, 1932. Doc. E 3222–L, *W. W. MacDonald* v. *The White Motor Co.* Doc. E 3223–S, *W. W. MacDonald* v. *Reo Motor Car Co. et al.* Doc. E 3224–K, *W. W. MacDonald* v. *Chrysler Corp. et al.*

1,464,338, R. L. Puccinelli, Dehydrator, filed Mar. 21, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3216–S, *Chapman Dehydrator Co.* v. *O. S. Crenshaw* (*California Dehydrator Co.*).

1,467,556, W. W. Booth, Furnace bridge wall, D. C., S. D. N. Y., Doc. E 55/42, *A. Nogel et al.* v. *D. H. Zell, Inc.* Dismissed (notice Mar. 23, 1932). Doc. E 55/43, *A. Nogel et al.* v. *Girey, Inc.* Decree as above.

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection, filed Mar. 21, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E W–61–H, *The Popsicle Corp. et al.* v. *P. Hawkins* (*Byurdor Confection Co.*).

1,494,916, J. H. Jones, Clothes rack, filed Mar. 14, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E W–55–H, *E. B. Brown* (*Plumbing Sheet Metal Products Co.*) v. *Pryne & Co., Inc.*

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 62/61, *A. B. Dick Co.* v. *Multistamp Co., Inc., et al.* Consent decree for plaintiff (notice Mar. 28, 1932).

1,529,181, H. S. Holmes, Self lighting cigar or cigarette, D. C., N. D. Calif. (San Francisco), Doc. E 2668–S, *H. S. Holmes* v. *S. Benaderet, Inc., et al.* Dismissed for want of prosecution Mar. 21, 1932.

1,533,858, L. A. Hazeltine, Method and means for neutralizing capacity coupling in audions, appeal filed Mar. 28, 1932, C. C. A., 2d Cir., Doc. ——, *Hazeltine Corp.* v. *Radio Corp. of America.*

1,542,423, G. A. Taylor, Means for preventing lenkage past the pistons of internal combustion engines, D. C. Minn. (Minneapolis), Doc. E 571, *The Simplex Piston Ring Co. of America, Inc.*, v. *Seal-Tite Piston Ring Co. et al.* Dismissed without prejudice Mar. 1, 1932.

1,570,298, A. H. Fisher, Method and means for repairing tire casings, D. C. Minn. (Minneapolis), Doc. E 961, (E 242), *Kex Co., Inc.*, v. *E. Hainke.* Dismissed without prejudice Mar. 3, 1932.

1,590,322, I. Schiesinger, Knitted cap, D. C., S. D. N. Y., Doc. E 54/142, *J. B. Cohen et al.* v. *Kinderhook Knitted Cap Co.* Consent decree for plaintiff (notice Mar. 26, 1932).

1,601,575, L. C. Marshall, Piston packing, D. C. Minn. (Minneapolis), Doc. E 561, *The Simplex Piston Ring Co. of America, Inc.*, v. *Seal-Tite Piston Ring Co.* (*Kelly Piston Ring Co.*). Dismissed without prejudice Mar. 1, 1932.

1,618,909, R. B. Benjamin, Electrical connector device, D. C., E. D. N. Y., Doc. E 5863, *Beaver Mfg. Co. et al.* v. *H. Levinson et al.* Decree for plaintiff Mar. 24, 1932.

1,625,869, F. K. Plympton, Machine for making bottle closures, filed Mar. 24, 1932, D. C., E. D. N. Y., Doc. E 6157, *M. D. Plympton et al.* v. *The Fargo Corp.*

1,654,083, G. L. Earle, Building construction, D. C., E. D. N. Y., Doc. E 5752, *S. L. Earle* v. *Frank Drocsch, Inc.* Dismissed (notice Mar. 29, 1932).

1,687,013. (See 1,801,549.) 1,718,997. (See 1,470,524.)

1,789,236, S. Klein, Tag-securing means; 1,790,695, M. B. Behrman, Seal, D. C., S. D. N. Y., Doc. E 60/250, *S. Klein* v. *International Seal & Knot Protection Co., Inc.* Consent decree for plaintiff (notice Mar. 28, 1932).

1,790,695. (See 1,789,236.)

1,801,549. O. A. Frederickson, Antishort bushing; 1,687,013, same, Armored electric cable, D. C., E. D. N. Y., Doc. E 5551, *National Electric Products Corp.* v. *Circle Flexible Conduit Co., Inc.* Dismissed Mar. 28, 1932.

Re. 15,824. S. H. Calkins, Pattern and guide strip, D. C., S. D. N. Y., Doc. E 47/121, *The Traitel Marble Co.* v. *Manhattan Terrazzo Brass Strip Co., Inc.* Decree for plaintiff (notice Mar. 23, 1932).

Re. 17,416. O. Aram, Stoker construction, appeal filed Dec. 28, 1931, C. C. A., 3d Cir., Doc. 4813, *Westinghouse Electric & Mfg. Co.* v. *American Engineering Co.*

Des. 84,741, Des. 84,742, F. Grossman, Sport shoe, filed Mar. 28, 1932, D. C., S. D. N. Y., Doc. E 66/229, *J. Grossman, Inc.*, v. *Natural Bridge Shoe Co.*

Des. 84,742. (See Des. 84,741.)

Disclaimers

1,224,703.—*George Hilliard Benjamin*, New York, N. Y. METHOD OF DEHYDRATING AND CURING TOBACCO. Patent dated May 1, 1917. Disclaimer filed May 4, 1932, by the assignee, *Consumers Tobacco Company*.

Hereby enters this disclaimer by cancelling from the specification at page 1, lines 103 and 104, the words "light (preferably an"; and by further cancelling at lines 104 and 105, the words "although incandescent lights may be employed)." and by disclaiming as to each of claims 3 and 7, subjecting the tobacco to the action of any kind of electric light except electric arc light.

1,472,678.—*Ulysses M. Richardson*, Chicago, Ill. TOOTH CONSTRUCTION. Patent dated October 30, 1923. Disclaimer filed May 6, 1932, by the *patentee*, and the assignee of one-half interest, *James B. Crowley*.

Hereby disclaim from the scope of the claim of said patent all single pin artificial teeth which are not designed for pressing into a rubber plate to be vulcanized therein to form a permanent union; all such teeth which have a part of the wall of the cavity substantially undercut to form an overhanging portion, which have walls on less than two sides of the pin, and which do not have the pin secured to the lingual side thereof.

1,728,223.—*Albert W. Winship*, Utica, N. Y. WARDROBE HATBOX. Patent dated September 17, 1929. Disclaimer filed May 4, 1932, by the patentee.

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to-wit:

"4. In a hand-carrying case, the combination of a box-like body, a cover hinged thereto, a partition in the body forming a well in the body beneath the raised cover and at a right angle to the cover when the case is closed, a clothes rack movably mounted near the free end of the cover and having a transversely extending clothes rod supported in said rack, said rack being adapted to be moved so as to hold said rod farther from said cover for folding the clothes thereover with their ends extending down into said well and said rack being adapted to be moved back to carry said rod nearer the cover and means for holding the clothes opposite the cover towards the said cover.

"5. In a hand-carrying case, the combination of a box-like body, a cover hinged thereto, a partition in the body forming a well in the body beneath the raised cover and at a right angle to the cover when the case is closed, a transversely extending clothes-supporting rod extendably mounted in the free end of the cover whereby the rod when moved away from the cover may have full length dresses folded thereover with their depending ends extending down into the well and whereby the rod and the clothes thereon may be moved closer towards the cover, and means for holding the clothes opposite the cover towards said cover.

"6. In a wardrobe suitcase, or the like the combination of a box-like case slanting to be higher at one side than at the opposite side and provided with a partition spaced from the back higher side of the case and forming a well on one side and a space for wearing apparel on the other side, a flanged cover hinged to the free edge of the high side of the case and having its flanges reversely slanted relative to the sides of the case to form a rectangular box, and transverse supporting means adapted to have a garment folded thereover, whereby the lower end of the garment may be received in the well, said supporting means being removably and replaceably mounted in the upper end of the cover."

Adjudicated Patents

(D. C. N. Y.) Esnault-Pelterie patent No. 1,115,795, for aeroplane, claims 2 and 5 to 9 *Held* not infringed. *Esnault-Pelterie* v. *Chance Vought Corporation*, 56 F.(2d) 393.

(D. C. and C. C. A. N. Y.) Sudlah patent, No. 1,154,943, for soft fold-over collar, *Held* invalid. *Sudlah* v. *Jacobson*, 56 F.(2d) 421 and 425.

(D. C. and C. C. A. N. Y.) Bartlett patent, No. 1,269,996, for meter and instrument support, claims 1, 2, 6, 9, and 10 *Held* invalid. *Metropolitan Device Corporation* v. *Barber Electric Mfg. Corporation*, 56 F.(2d) 456 and 457.

(D. C. Del.) Slattery patent, No. 1,438,560, for repair link for tire chains, *Held* infringed. *Slattery* v. *Eureka Auto Chain Co.*, 56 F.(2d) 436.

(D. C. N. Y.) Stein and Austin patent, No. 1,564,378, for bleached and dyed furs and the like, *Held* valid and infringed. *Steinfur Patents Corporation* v. *J. Meyerson, Inc.*, 56 F.(2d) 372.

(D. C. N. Y.) Stein and Austin patent, No. 1,573,200, for process of bleaching and dyeing furs and the like. *Held* valid and infringed. *Id.*

(D. C. Del.) Roth patent, No. 1,692,577 for emergency repair link, *Held* invalid. *Slattery* v. *Eureka Auto Chain Co.*, 56 F.(2d) 436.

(D. C. and C. C. A. N. Y.) Barnett patent, No. 1,730,873, for electric attachment fitting, claims 1 and 3 *Held* not infringed. *Barnett* v. *F. W. Woolworth Co.*, 56 F.(2d) 418 and 420.

(D. C. Del.) Roth patent, No. 1,734,830, for emergency repair link, *Held* invalid. *Slattery* v. *Eureka Auto Chain Co.*, 56 F.(2d) 436.

(D. C. Pa.) Behrman patent, No. 1,739,280, for razor and blade therefor, claims 5, 10–12, *Held* invalid. *American Safety Razor Corporation* v. *Frings Bros. Co.*, 56 F.(2d) 449.

(D. C. Mass.) Meyers patent, No. 1,770,420, for oil-gauge wiper, *Held* invalid and, if valid, not infringed. *Meyers* v. *Apco Mossberg Corporation*, 56 F.(2d) 425.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 24, 1932

[VOL. 418. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 324,737. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Mar. 3, 1932.

Mowilith

For Artificial Resins and Plastic Masses—Namely, Substitutes for Rubber, Wood, Bone, Cork, Horn, Tortoise Shell, Whalebone, Ivory, Mother of Pearl, Amber, Meerschaum, and Celluloid.

Claims use since May, 1929.

Ser. No. 325,692. MORNING STAR NURSERIES, Onarga, Ill. Filed Mar. 31, 1932.

FERTO-PACK

Applicant disclaims exclusive use of the word "Pack" apart from the mark shown on the drawing.

For Shrubs, Trees, Roses, Perennials, Nursery Stocks, and Plants in General.

Claims use since Mar. 15, 1929.

Ser. No. 326,143. HARLAN-WALLINS COAL CORPORATION, Verda, Ky. Filed Apr. 15, 1932.

SAMBO

For Coal.

Claims use since Feb. 25, 1932.

CLASS 2

Receptacles

Ser. No. 321,224. TIDY PRODUCTS, INC., New York, N. Y. Filed Nov. 17, 1931.

"Tidyette"

For Metal Refuse Containers or Holders and Paper Liners for Same.

Claims use since May, 1931.

Ser. No. 322,576. THE ECONOMY SILO & MFG. CO., Frederick, Md. Filed Dec. 31, 1931.

Economy Silos

No claim is made to the representation of the silo or the words "Silo" appearing upon the drawing apart from the trade-mark as shown.

For Silos.

Claims use since November, 1902.

Ser. No. 322,608. OTTOMAR VOELK, Berlin, Germany. Filed Dec. 31, 1931.

Cremette

For Toilet-Articles—Namely, Unfilled Cream-Pots Made of Condensation Products.

Claims use since Aug. 28, 1931.

Ser. No. 325,403. KEYES FIBRE COMPANY, INC., Waterville, Me. Filed Mar. 23, 1932.

PULPAK

For Protective Jackets and Fillers of Moulded Pulp for Shipping, Storing, and Displaying Such Fragile or Perishable Articles as Bottles, Radio Tubes, Incandescent Bulbs, Tumblers, Eggs, Fruit, and Candles.
Claims use since Mar. 10, 1932.

Ser. No. 325,859. STANDARD PULP PRODUCTS CO., INC., New York, N. Y. Filed Apr. 6, 1932.

SERVRITE

For Molded Pulp Plates.
Claims use since May 9, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 322,405. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed Dec. 23, 1931.

TUX

For Automobile Top Dressing.
Claims use since Nov. 19, 1931.

Ser. No. 323,558. WILLIAM M. OUTON, doing business as No-Burn-No Products Co., Chicago, Ill. Filed Jan. 28, 1932.



The words "No-Burn" and "Economical and Clean to Use" are disclaimed apart from the mark as shown on the drawing.
For Nonexplosive and Nonburning Cleaning Fluid—Namely, a Type and Roll Cleaner.
Claims use since Jan. 5, 1930.

Ser. No. 325,424. CORNISH MINING CO., Cornish, Me. Filed Mar. 24, 1932.

ALUMET

For a Preparation for Cleaning and Polishing Aluminum, Gold, Silver, Porcelain, and the Like, as Well as for General Household Cleansing Purposes.
Claims use since Apr. 28, 1923.

Ser. No. 326,122. WOHL SHOE COMPANY, St. Louis, Mo. Filed Apr. 14, 1932.

Vande

For Polishing and Cleaning Preparations and Dressings for Boots, Shoes, and Leather Goods.
Claims use since Mar. 16, 1932.

CLASS 5

Adhesives

Ser. No. 325,794. LAMAC PROCESS COMPANY, Erie, Pa. Filed Apr. 4, 1932.

LAMAC

For Waterproof Adhesive Cement.
Claims use since July, 1924.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 308,897. JAMES E. MCCARTHY, Notre Dame, Ind. Filed Dec. 12, 1930.

HYPOXYSIN

For Pharmaceutical Preparation Used as a Stimulant to the Unstriped Muscle (Uterine).
Claims use since Mar. 30, 1930.

Ser. No. 309,142. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany. Filed Dec. 18, 1930.

Jodalcet

For Antiseptics, Hemostatics, Styptics, Astringents, Escharotics, for Use in Septic and Aseptic Operation Wounds, Traumatic Wounds, Phlegmons, Abscesses, Panaritin, Ulcus Cruris, Ulcus Molle, Anal Fissures, Hemorrhages After Operations of the Throat, the Larynx, the Nose, Tonsils, After Tonsillotomy, Conchotomy, Stomatitis Ulcerosa, Skin Affections.
Claims use since Oct. 15, 1914.

Ser. No. 309,145. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany. Filed Dec. 18, 1930.

Buccosperin.

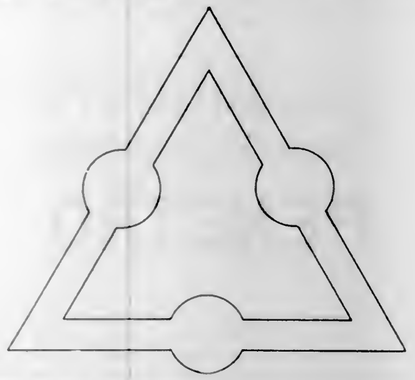
For Medicines for the Treatment of Venereal Diseases and for Treatment of Lower Abdominal Diseases Generally.
Claims use since June 12, 1915.

Ser. No. 312,400. LANDRUM LESLIE MEDLOCK, Roscoe, Tex. Filed Mar. 21, 1931.

EXTO

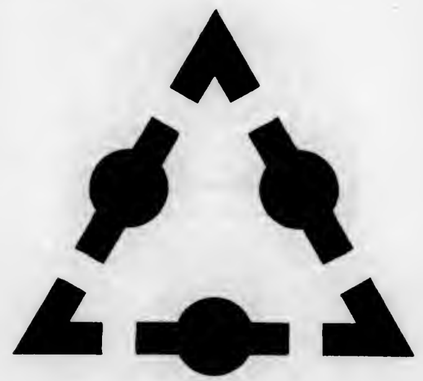
For Liniment for the Treatment of Headaches, Cold in the Head, Influenza, Neuralgia, Neuritis, Sore Throat, Rheumatism, Asthma, Hay Fever, Lumbago, Lame Back, Stiff Joints, Sprains, Swollen and Sore Muscles, Bruises, Eczema, Boils, Ring Worm, Swollen and Tired Feet, Bunions and Corns, Frost Bites, Insect Bites and Stings, Chapped Hands and Face, and Sunburn, and for Use After Shaving.
Claims use since Dec. 2, 1930.

Ser. No. 312,855. THE NEWPORT COMPANY, Carrollville, Wis. Filed Apr. 2, 1931.



For Pine-Oil and Borneol.
Claims use since September, 1916.

Ser. No. 312,856. THE NEWPORT COMPANY, Carrollville, Wis. Filed Apr. 2, 1931.



For Pine-Oil and Borneol.
Claims use since August, 1924.

Ser. No. 317,611. JOHN C. MCNAMARA, New Orleans, La. Filed Aug. 3, 1931.

IDRAZENE

For an Ointment for the Treatment of Skin Diseases of Parasitic Origin, Some Forms of Chronic Eczema, and Other Affections of the Cutaneous Surfaces, such as Chronic Ulcerations and Pruritus.
Claims use since January, 1931.

Ser. No. 319,039. JACOB SIMON, doing business as Sun Bleach Products Company, Chicago, Ill. Filed Sept. 14, 1931.

SUN BLEACH

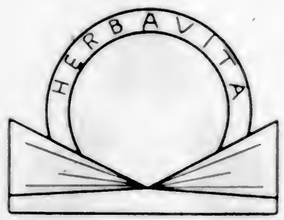
The word "Bleach" is disclaimed apart from the mark as shown in the drawing.
For Washing Fluid in the Nature of a Laundry Bleach and for Cleaning Floors, Walls, Windows, and Carpets.
Claims use since Feb. 18, 1931.

Ser. No. 319,878. GEHE & CO., AKTIENGESELLSCHAFT, Dresden, Germany. Filed Oct. 9, 1931.

Calcium Resorpta

No claim is made to the exclusive use of the word "Calcium" apart from the mark shown.
For Calcium Compound with Saponin for Medical Indications in Calcium Therapy in General.
Claims use since March, 1930.

Ser. No. 320,109. CHARLES E. SPAETH, doing business as Herbavita Laboratory, New York, N. Y. Filed Oct. 15, 1931.



For Tonic for Enriching the Blood, Building Tissues, and Increasing the Appetite.
Claims use since Sept. 5, 1931.

Ser. No. 321,770. WILLIAM T. KULL, doing business as Rheumatox Company, Cleveland, Ohio. Filed Dec. 4, 1931.



The drawing is lined for yellow.
For Preparations for the Treatment of Lumbago, Neuritis, and Rheumatism.
Claims use since December, 1927.

Ser. No. 321,918. MAEBELLE STOWERS REYNOLDS, doing business as Cille Reynolds, New Orleans, La. Filed Dec. 8, 1931.



Cille-Reynolle

The portrait is that of the applicant and known to applicant's trade as Cille-Reynolle.
For Skin Tonic, Cleansing Powder, Beauty Pack, and Kler Boil and for Counteracting Hydrosulfites and Sul-
Claims use since Mar. 21, 1921.

Ser. No. 323,089. RUETTA HOCKETT, doing business as Mae Day Personality Permanent Wave Beauty Salon, Long Beach, Calif. Filed Jan. 16, 1932.



The picture is that of an imaginary individual known to applicant's trade as Mae Day.
For Cleansing Cream, Wrinkle Cream, Face and Skin Lotions and Face and Skin Creams, Bleach Cream, Hand Lotion, Scalp Oil, Brilliantine, Eyelash Grower, Curling Fluid, Face Rejuvenation Fluid, Nail White, Cuticle Cream, Astringent, Stimulating Bleach Pack, Rouge, and Face Powder.
Claims use since Jan. 2, 1925.

Ser. No. 324,065. RICHARD T. DUNN, doing business as J. S. Merrell Drug Company, St. Louis, Mo. Filed Feb. 11, 1932.

MERRELL'S Penetrating OIL

For Liniment for the Treatment of Sprains, Rheumatism, Neuralgia, Cramps, Toothache, Lame Back, Stiff Joints, and Similar Ailments.
Claims use since January, 1878.

Ser. No. 324,132. PLOUGH, INC., doing business as The St. Joseph's Laboratories, Memphis, Tenn. Filed Feb. 13, 1932.

PENETRO

For Medicinal Preparation—Namely, Mutton Suet Salve for External Use in the Treatment of Colds, Croup, Rheumatic Pains, Lumbago, Neuralgia, Sprains and Muscular Soreness, Bruises, Boils, Insect Bites, Frost-Bite, Chapped Hands, Sunburn, and Minor Burns and Scalds.
Claims use since Jan. 29, 1932.

Ser. No. 324,450. MAXWELL WEINTRAUB, doing business as Maxwell Chemical Company, Brooklyn, N. Y. Filed Feb. 24, 1932.

CHIEF CARBON CHASER



No claim is made herein to the registration of the word "Carbon" apart from the mark shown in the drawing.
For Liquid Carbon Remover.
Claims use since Feb. 11, 1932.

Ser. No. 324,730. PHILIPP BROTHERS, INC., New York, N. Y. Filed Feb. 27, 1932.



SEETOL

For Monomethyl Paramidophenol (Photographic Chemical).
Claims use since Dec. 2, 1931.

Ser. No. 324,871. BETTY JEAN LABORATORIES, Fort Wayne, Ind. Filed Mar. 8, 1932.

Betty Jean
BEAUTY AIDS

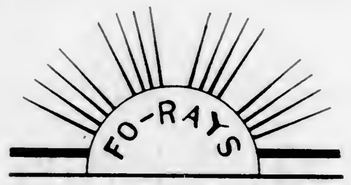
The words "Beauty Aids" are disclaimed apart from the other features of the mark shown in the drawing.
For Cold Cream, Face and Body Powder, Lemon Rapid Cleansing Cream, Shampoo, Skin Lotion, Almond Lotion, Strawberry Cleansing Cream, Astringent Beauty Pack, Facial Rinse, Hair Wave Oil, Hair Reconditioning Oil, Cuticle Cream, Tissue Cream, and a Cucumber Cream in the Nature of a Healing Lotion Having Astringent Properties.
Claims use since 1920.

Ser. No. 325,189. HENRY H. SIMMONS, Casper, Wyo. Filed Mar. 16, 1932.



The words "Never Freezes" appearing on the drawing are disclaimed except in the association shown.
For Antifreeze Compound.
Claims use since Oct. 20, 1929.

Ser. No. 325,257. NORBERT J. FORET, doing business as Foret Laboratories, Raceland, La. Filed Mar. 18, 1932.



For Foot Lotion for the Treatment of Foot and Toe Irritation.
Claims use since Sept. 1, 1931.

Ser. No. 325,295. NATIONAL ALUMINATE CORPORATION, Chicago, Ill. Filed Mar. 19, 1932.

TANOIL

For Water Treatment Compound in the Form of Hard Round Balls Used for the Prevention of Incrustation and/or Foaming by Dissolving the Same in the Feed Water of the Boilers, Etc.
Claims use since Feb. 11, 1932.

Ser. No. 325,349. SCOTT-SHERRY, Boston, Mass. Filed Mar. 21, 1932.

PEDIATREX

For Evacuant for Infants and Children.
Claims use since Mar. 5, 1932.

Ser. No. 325,387. LEON A. SMOLEN, doing business as Nebo Drug Co., New York, N. Y. Filed Mar. 21, 1932.

NEBO

For Tooth Ache Drops, Ear Ache Drops, Wart Remover and Corn Remover Preparations, and for an Antacid Antifermentative Gastric Stimulant and a Preparation Indicated in Amenorrhea, Dysmenorrhea, and Other Menstrual Disorders.
Claims use since March, 1928.

Ser. No. 325,426. RICHARD T. DUNN, doing business as J. S. Merrell Drug Company, St. Louis, Mo. Filed Mar. 24, 1932. Under 10-year proviso.

MERRELL'S COUGH BALSAM

For Cough Balsam, a Medicinal Preparation for the Treatment of Coughs, Colds, Croup, Hoarseness, Bronchitis, and Influenza.
Claims use since January, 1878.

Ser. No. 325,449. JAQUES MANUFACTURING COMPANY, Chicago, Ill. Filed Mar. 24, 1932.

GOLD LABEL

For Baking Powder.
Claims use since June 6, 1905.

Ser. No. 325,461. THE COSMETIC RESEARCH LABORATORIES, Wilkes-Barre, Pa. Filed Mar. 25, 1932.

CORELA

For Line of Toilet Preparations—to wit, Permanent Waving Lotion, a Concentrated Preparation Used in Finger Waving, Finger Waving Lotion (Fast Drying), and Oil Shampoo.
Claims use since Feb. 15, 1932.

Ser. No. 325,559. THE BON AMI COMPANY, New York, N. Y. Filed Mar. 28, 1932.

BON AMI

For Tooth Paste.
Claims use since Mar. 4, 1932.

Ser. No. 325,569. THE DEANE PLASTER CO., Yonkers, N. Y. Filed Mar. 28, 1932.

TAPETTE

For Medicated Adhesive Bandage Dressing.
Claims use since Mar. 2, 1932.

Ser. No. 325,603. L. SONNEBORN SONS, INC., New York, N. Y. Filed Mar. 28, 1932.

FONOLINE

For Petrolatum for Medicinal Purposes.
Claims use since June 24, 1929.

Ser. No. 325,622. RÖHM & HAAS COMPANY, Philadelphia, Pa. Filed Mar. 29, 1932.

HYDROCIDE

For Chemical for Use in the Textile Industry Particularly for Prevention of Marking Off and Staining in the Kier Boil and for Counteracting Hydrosulfites and Sulfoxylates in Textile Printing.
Claims use since Feb. 25, 1932.

Ser. No. 325,637. GASTON J. BLOCK, Brooklyn, N. Y. Filed Mar. 30, 1932.

TEMPTATION

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid and Solid Form, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyelashes and Eyebrows, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Body Powder, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Powders, Nail Polishes, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Dec. 28, 1931.

Ser. No. 325,636. HOUBIGANT, INC., New York, N. Y. Filed Mar. 30, 1932.

AUTRE CHOSE

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lip Sticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.
Claims use since Mar. 4, 1932.

Ser. No. 325,657. HOUBIGANT, INC., New York, N. Y. Filed Mar. 30, 1932.

DESINVOLTURE

For Perfumes, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lipsticks, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.
Claims use since Mar. 4, 1932.

Ser. No. 325,731. U. S. OIL COMPANY, East Providence, R. I. Filed Apr. 1, 1932.

USCOSOL

For Hydrosulphite Products or Compounds—Namely, Sodium Formaldehyde Hydrosulphite, Zinc Formaldehyde Hydrosulphite, Sodium Hydrosulphite.
Claims use since Mar. 28, 1932.

Ser. No. 325,735. DORIS A. WUSTER, doing business as D. A. W. Laboratories, Baltimore, Md. Filed Apr. 1, 1932.

D·A·W

For Drawing and Healing Salve.
Claims use since Mar. 22, 1932.

Ser. No. 325,861. A. YANNI & SON, McKeesport, Pa. Filed Apr. 6, 1932.

LUCKY DAY

For Washing Fluid Possessing Incidental Properties for Bleaching, Removing Stains, Scorch, and Mildew, and Also Acting as a Disinfectant and Deodorant.
Claims use since Mar. 2, 1932.

Ser. No. 325,933. ALLIS-CHALMERS MANUFACTURING COMPANY, Milwaukee, Wis. Filed Apr. 9, 1932.

AKON

For Preparations for Treating Fluids for Use in Boilers, and Other Fluid Containers of Steam Power and Heating Systems, and Other Containers, to Remove or Inhibit Further Formation of Scale and Like Deposits on the Surfaces of the Boilers and Other Containers, and to Modify Characteristics of the Fluid.
Claims use since Dec. 16, 1931.

Ser. No. 326,035. THE WALLINGFORD LABORATORIES, INC., Wallingford, Conn. Filed Apr. 12, 1932.

ALICE AMES

For Cold Cream, Vanishing Cream, Cleansing Cream, Tissue Cream, Lemon Cream, Almond Cream, Liquid Cream, Suntan Cream for Adding a Shade of Tan to the Skin, All for the Skin; Skin Bleach, Lipsticks, Rouge, Eyebrow Pencil, Face Powder, Dusting Powder for the Skin, Talcum Powder, Shampoo, After Shaving Lotions, Astringents, Hand Lotion, Nail Polish, Preparation for Removing Nail Polish.
Claims use since Feb. 1, 1932.

Ser. No. 326,163. SCHERING CORPORATION, New York, N. Y. Filed Apr. 15, 1932.

SARÁKA

For Laxative Preparation.
Claims use since Apr. 2, 1932.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 326,102. HITT FIREWORKS COMPANY, doing business as Hitt Manufacturing Company, Seattle, Wash. Filed Apr. 14, 1932.

PHOTOLUMARS

For Photographic Flashes.
Claims use since Mar. 12, 1932.

CLASS 12

Construction Materials

Ser. No. 306,127. BRADLEY LUMBER COMPANY OF ARKANSAS, Warren, Ark. Filed Sept. 27, 1930.

ARTWOOD

The lining on the drawing represents the color brown. No claim is made to the use of the word "Floors" apart from the mark as shown in the drawing.
For Flooring Material Made of Wood, Such as Flooring Strips, Inlaid Pieces, and the Like.
Claims use since Aug. 27, 1930.

Ser. No. 313,497. EL REY PRODUCTS CO., Los Angeles, Calif. Filed Apr. 18, 1931.

EL REY LOK

The use of the word "Lok" apart from the mark shown in the accompanying drawing is disclaimed.
For Composition Shingles.
Claims use since March, 1930.

Ser. No. 318,567. ROBINSON MANUFACTURING COMPANY, Everett, Wash. Filed Aug. 20, 1931.

PLYWALL

For Sheets of Wood Veneer.
Claims use since July 23, 1931.

Ser. No. 325,892. CELLIZED OAK FLOORING, INC., Memphis, Tenn. Filed Apr. 7, 1932.

*CELLized

For Wood Blocks for Floors and the Like.
Claims use since Feb. 25, 1928.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 297,773. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.

PABCO

For Roofing Nails.
Claims use since February, 1927.

Ser. No. 325,713. THE HOPP PRESS, INC., New York, N. Y. Filed Apr. 1, 1932.

CELUXO

For Price Ticket Holders.
Claims use since Mar. 28, 1932.

Ser. No. 325,779. CHEMUNG FOUNDRY CORPORATION, Elmira, N. Y. Filed Apr. 4, 1932.



The words "Sound Castings" are disclaimed apart from the other features of the mark shown in the drawing.
For Curb, Valve, Roadway, and Meter Boxes; Manhole Frames and Covers, and Valve Vaults.
Claims use since Feb. 1, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 297,315. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa. Filed Mar. 14, 1930. Under section 5b of the act of 1905 as amended in 1920.

MIDVALE☆☆☆

For High Speed Steel.
Claims use since Sept. 26, 1929.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 313,420. CERRO DE PASCO COPPER CORPORATION, New York, N. Y. Filed Apr. 16, 1931.

C DE P

For Copper Bullion, Lead Bullion, Zinc Concentrates, Lead Concentrates; Flue Dust from Copper Convertors Containing Chiefly Lead; Bismuth Metal; and Metal Alloys Containing Chiefly Bismuth and Lead.
Claims use since 1906.

Ser. No. 325,209. CERRO DE PASCO COPPER CORPORATION, New York, N. Y. Filed Mar. 17, 1932.

BENDALLOY

For Fusible Alloys, Composed of Bismuth, Lead, Tin, and Cadmium.
Claims use since Jan. 29, 1932.

Ser. No. 325,210. CERRO DE PASCO COPPER CORPORATION, New York, N. Y. Filed Mar. 17, 1932.

DENTALLOY

For Fusible Alloys Composed of Bismuth, Tin, Lead, and Antimony Which May Contain Some Cadmium.
Claims use since Dec. 19, 1931.

Ser. No. 326,140. KREMENTZ & COMPANY, Newark, N. J. Filed Apr. 15, 1932.

KREMALOY

For Tarnish and Corrosion Resisting Metal Alloy Similar in Appearance to Silver and/or White Gold and/or Platinum and Used for Metal Jewelry Such as Wrist Watch Bracelets and the Like.
Claims use since Oct. 15, 1931.

CLASS 15

Oils and Greases

Ser. No. 324,064. DRYER, CLARK & DRYER OIL CO., Oklahoma City, Okla. Filed Feb. 11, 1932.



The portrait is that of Mrs. Minnie Dryer of Oklahoma City, Okla. No claim is made herein to the words "All Pennsylvania Motor Oil," apart from the mark shown in the drawing. The drawing is lined to indicate use of the colors red and blue as shown.
For Motor Lubricating Oil.
Claims use since Oct. 3, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 309,444. SHELL OIL COMPANY, San Francisco, Calif. Filed Dec. 29, 1930.

SHELL

For Furniture Polish and Automobile Polish.
Claims use since Feb. 1, 1930.

Ser. No. 325,855. THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio. Filed Apr. 6, 1932.

VITA-SEAL

For Dry and Ready Mixed Paints, Paint Enamels, Stains, Lacquers, and Varnishes.
Claims use since Mar. 28, 1932.

Ser. No. 326,224. M. J. MERKIN PAINT CO. INC., New York, N. Y. Filed Apr. 18, 1932.

POROSEAL

For Inside Paint, Containing China Wood, Oil Varnish, Mineral Pigments, Mineral Spirits, and Metallic Drier.
Claims use since Jan. 1, 1930.

CLASS 17

Tobacco Products

Ser. No. 325,888. YOCUM BROTHERS, Reading, Pa. Filed Apr. 7, 1932.

YOCUM'S
OFFICIAL

For Tobacco Products—Namely, Cigars.
Claims use since November, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 325,705. BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind. Filed Apr. 1, 1932.

PNEUDRAULIC SHOCK STRUT

The applicant disclaims the use of the words "Shock Strut" in the mark as shown.
For Shock Struts.
Claims use since May 29, 1931.

Ser. No. 325,959. QUAKER STATE OIL REFINING COMPANY, Oil City, Pa. Filed Apr. 9, 1932.

Roll-o-Miles

For Mechanical Device on Which to Record Oil Servicing for Vehicles.
Claims use since Mar. 29, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 322,831. LOUIS A. PRIESS, Minneapolis, Minn. Filed Jan. 8, 1932.

KEYLITE

In the drawing the trade-mark is vertically lined to indicate the color red.
For Combination Leather or Fibre Key Cases and Flashlights.
Claims use since Mar. 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 312,596. THE BILLINGS & SPENCER COMPANY, Hartford, Conn. Filed Mar. 27, 1931.

Duo-Forged

The word "Forged" is disclaimed except in the association shown on the drawing.
For Golf Clubs.
Claims use since Jan. 1, 1931.

Ser. No. 318,052. THE CRAWFORD, MCGREGOR AND CANBY COMPANY, Dayton, Ohio. Filed Aug. 17, 1931.

MACGREGOR SCOOPER

For Golf Clubs.
Claims use since Mar. 10, 1931.

Ser. No. 320,437. KEMKIT CHEMICAL CORPORATION, Brooklyn, N. Y. Filed Oct. 24, 1931.

KEMKIT

For Chemical Outfit for Educational Purposes Sold as a Unit.
Claims use since December, 1927.

Ser. No. 321,718. BRAUER BROS., INC., St. Louis, Mo. Filed Dec. 3, 1931.

Ride 'Em Cowboy

For Toy Cowboy Accessories—Namely, Ammunition Holders, Cartridge Belts, Pistol Holsters, Knife Sheaths, Lariats, and Cuffs.
Claims use since Aug. 15, 1931.

Ser. No. 324,083. REEVES PULLEY COMPANY, Columbus, Ind. Filed Feb. 11, 1932.

-BOX POLO-

For Indoor or Outdoor Board-Game Played with a Ball and Two or More Sticks.
Claims use since Nov. 31, 1931.

Ser. No. 325,433. MAC-COL MANUFACTURING COMPANY, INC., St. Louis, Mo. Filed Mar. 24, 1932.

HANDY

For Rowing Machine-Body Builder and Reducing Exerciser.
Claims use since Mar. 5, 1932.

Ser. No. 325,956. MERION SPORTING GOODS MFG., CORPN., Philadelphia, Pa. Filed Apr. 9, 1932.

GOLF-O-TEE

No claim being made to the words "Golf Tee" apart from the mark as shown.
For Golf Tees.
Claims use since May, 1931.

Ser. No. 326,088. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

THE BRUTE

For Golf Balls.
Claims use since Mar. 25, 1932.

Ser. No. 326,089. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

COLLEGIAN

For Golf Balls.
Claims use since March, 1929.

Ser. No. 326,090. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

LONGFLITE

For Golf Balls.
Claims use since February, 1932.

Ser. No. 326,091. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

LONG SHOT

For Golf Balls.
Claims use since February, 1932.

Ser. No. 326,093. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

RED FOX

For Golf Balls.
Claims use since March, 1929.

Ser. No. 326,095. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

Silver Bullet

For Golf Balls.
Claims use since Mar. 25, 1932.

Ser. No. 326,096. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

SILVER FLITE

For Golf Balls.
Claims use since February, 1932.

Ser. No. 326,097. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

SILVER FOX

For Golf Balls.
Claims use since Mar. 25, 1932.

Ser. No. 326,098. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

Silver Streak

For Golf Balls.
Claims use since March, 1929.

Ser. No. 326,099. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

UNIVERSAL

For Golf Balls.
Claims use since March, 1929.

Ser. No. 326,287. IDEAL NOVELTY & TOY CO., Brooklyn, N. Y. Filed Apr. 20, 1932.

TRU-FLESH

For Dolls.
Claims use since Mar. 25, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 301,776. APEX MANUFACTURING CO. INC., Syracuse, N. Y. Filed May 31, 1930.

APEX

For Rock, Sand, Gravel, and Grain Screens.
Claims use since Jan. 1, 1930.

Ser. No. 318,083. SUPERIOR MACHINE TOOL COMPANY, Kokomo, Ind. Filed Aug. 17, 1931.

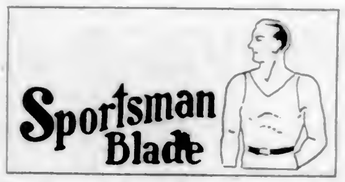
The drawing is lined to indicate the color red.
For Machine Tools—Namely, Metal Drilling Machines, Grinding Machines, and Lathes.
Claims use since July 1, 1912.

Ser. No. 318,325. SUPERIOR MACHINE TOOL COMPANY, Kokomo, Ind. Filed Aug. 22, 1931.

SUPERIOR

Applicant disclaims from the composite mark the word "Superior" when used separate and apart from the mark. The drawing is lined to indicate the color red.
For Machine Tools—Namely, Metal Drilling Machines, Grinding Machines, and Lathes.
Claims use since July 1, 1912.

Ser. No. 324,563. PAUL KALETSCH, Monaco, Pa. Filed Feb. 27, 1932.



No claim is made to the word "Blade" shown in the drawing. The portrait appearing in the drawing is purely fanciful.

For Razor Blades.

Claims use since Sept. 15, 1931.

Ser. No. 324,727. U. S. DUPLICATOR CO., Chicago, Ill. Filed Mar. 2, 1932.

Autocopy
ELECTRIC
DUPLICATOR

The words "Electric Duplicator" are disclaimed apart from the mark as shown.

For Electric Gelatine Duplicating Machines and Parts of Electric Gelatine Duplicating Machines.

Claims use since Oct. 1, 1931.

Ser. No. 325,514. CLEMSON BROS., INC., Middletown, N. Y. Filed Mar. 26, 1932.

MOLY

For Saws and Saw Blades.

Claims use since Dec. 5, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 313,570. THE WALMAN OPTICAL CO., Minneapolis, Minn. Filed Apr. 20, 1931.



For Optical Frames, Mountings, and Lenses.

Claims use since Mar. 1, 1931.

Ser. No. 318,099. SOCIETE GENEVOISE D'INSTRUMENTS DE PHYSIQUE, Geneva, Switzerland. Filed Sept. 12, 1931.

SOCIÉTÉ GENEVOISE

SIP

For Drawing Instruments, Astronomical Instruments, and Micrometers and Other High Precision Appliances and Instruments for Laboratory and Factory Use for Measuring, Indicating, and Testing the Dimensions and Other Characteristics of Manufactured Objects and Other Elements.

Claims use since 1861.

Ser. No. 325,583. KIMBLE GLASS COMPANY, Vineland, N. J. Filed Mar. 28, 1932.

KOLLEGIATE

For Chemical, Scientific, and Laboratory Glassware.

Claims use since Mar. 11, 1932.

CLASS 27

Horological Instruments

Ser. No. 324,221. GEORGE P. COWLES, Waterbury, Conn. Filed Feb. 16, 1932.

COWLES SYSTEM

The word "System" is hereby disclaimed apart from the mark as shown.

For Electric Clocks.

Claims use since Feb. 10, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 326,078. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J. Filed Apr. 14, 1932.

"Automit"

For Cleaning and Polishing Fabrics of the Hand-Receiving or Mitt Type.

Claims use since Mar. 7, 1932.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 325,279. PICKARD, INCORPORATED, Chicago, Ill. Filed Mar. 18, 1932.

RAVENS-WOOD.

For Chinaware and Pottery.

Claims use since Dec. 15, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 325,787. GRIGSBY-GRUNOW COMPANY, Chicago, Ill. Filed Apr. 4, 1932.

CHEF

For Electric Refrigerators and Parts Thereof.

Claims use since Mar. 30, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 307,745. SOCIÉTÉ ANONYME POUR LA DÉCORATION INTÉRIEURE MODERNE, Paris, France. Filed Nov. 10, 1930.

Dim

For Bed-Frames, Beds, Cupboards, Household and Office Chairs, Hot Water Dishes, Arm-Chairs, Rocking Chairs, Household and Office Turning Chairs, Cedar Chests, Night Tables, Bedside Tables, Dressing Glasses, Hair Dressing Tables, Powdering Tables, Secretaries, Sideboards, Tables, Easy Chairs, Show-Cases, Shelves and Supports, Stools, Plate-Boards, Benches, Round Table Stands, Couches, Sofas, Divans, Resting-Beds, Vis-à-Vis, Small Stools, Vase-Stands, Floor Whatnots, Library Book Cases, Music Cases, Ash-Pit Stands, Turning Book Cases, Writing Desks, Stationary Cases Except Containers, Mirrors, Chests Supporting Broadcasting Apparatus, Chests for Bar-Rooms, Phono-Chests, Playing, Smoking, and Writing Tables, Settees, Hassocks, Foot-Rests, Swinging Chairs, Book-Stands, Dressing and Partition Screens, Chiffoniers, Portmanteau Pegs, Hat Stands and Umbrella Stands, Jewel Chests in the Nature of Furniture, Phone Chests, Baubles, and Store Counters.

Claims use since June 1, 1914.

Ser. No. 312,265. PEERLESS STEEL EQUIPMENT COMPANY, Philadelphia, Pa. Filed Mar. 18, 1931.

KEYSTONE

For Steel Office Furniture—Namely, Filing and Line Cabinets, Counter-Height Cabinets, Letter Files, Book Cases, Shelving, Open Storage Units.

Claims use since Nov. 20, 1930.

Ser. No. 324,009. A. W. ROSEN & Co., New York, N. Y. Filed Feb. 9, 1932.

Tru-Flex

For Chemically Treated Glass Mirrors.

Claims use since Feb. 4, 1932.

Ser. No. 324,478. FRED MEDART MANUFACTURING CO., St. Louis, Mo. Filed Feb. 25, 1932.

LOCKEROBE

For Metal Clothes and Analogous Lockers.

Claims use since Feb. 10, 1932.

Ser. No. 325,830. REMINGTON RAND INC., Buffalo, N. Y. Filed Apr. 5, 1932.

SIT WEL

For Chairs.

Claims use since May 11, 1928.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 325,998. RAILWAY LOCOMOTOR COMPANY, Chicago, Ill. Filed Apr. 11, 1932.

VAPOFIER

For Oil Burner for Heating Purposes.

Claims use since Mar. 8, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 325,999. F. RANIVILLE COMPANY, Grand Rapids, Mich. Filed Apr. 11, 1932.

SUPER 8

For Leather Belting.
Claims use since Nov. 1, 1931.

CLASS 37

Paper and Stationery

Ser. No. 297,765. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.

PABCO

For Mulch Paper.
Claims use since January, 1922.

Ser. No. 324,678. UPTOWN CARD AND PAPER COMPANY, New York, N. Y. Filed Feb. 29, 1932.

LUCKY BOND

The word "Bond" used in connection with this trade-mark is disclaimed apart from the mark shown.
For Bond Paper.
Claims use since Apr. 1, 1931.

Ser. No. 324,785. DENNISON & SONS, INC., Long Island City, N. Y. Filed Mar. 4, 1932.

COLONIAL BANK NOTE

No claim is made to the words "Bank Note" apart from the mark as shown.
For Banknotes, Checks, Drafts, Bills of Exchange, and Certificates; and Paper for Banknotes, Checks, Drafts, Bills of Exchange, and Certificates.
Claims use since September, 1900.

Ser. No. 325,767. SAMUEL WARD MANUFACTURING COMPANY, Boston, Mass. Filed Apr. 2, 1932.

A Page A Day

For Record Books and Diaries.
Claims use since Jan. 17, 1932.

Ser. No. 326,082. DETROIT SULPHITE PULP & PAPER CO., Detroit, Mich. Filed Apr. 14, 1932.

Top Notch

For Wrapping Paper.
Claims use since Mar. 20, 1932.

CLASS 38

Prints and Publications

Ser. No. 312,051. INTERNATIONAL BUSINESS MACHINES CORPORATION, New York, N. Y. Filed Mar. 12, 1931.

Business Machines

For Periodical Publications—Namely, Printed News Sheets.
Claims use since July 17, 1924.

Ser. No. 312,523. THE KANSAS CITY SOUTHERN RAILWAY COMPANY, Kansas City, Mo. Filed Mar. 25, 1931.

THE FLYING CROW

For Periodicals and Descriptive Bulletins.
Claims use since July 15, 1928.

Ser. No. 324,684. EXAMINER PRINTING COMPANY, San Francisco, Calif. Filed Feb. 29, 1932.

CHOLLY EASTBAY

For Articles or Writings Published in Daily Newspaper.
Claims use since Oct. 25, 1925.

Ser. No. 324,685. EXAMINER PRINTING COMPANY, San Francisco, Calif. Filed Feb. 29, 1932.

Babette

For Articles or Writings Published in Daily Newspaper.
Claims use since Mar. 4, 1926.

Ser. No. 324,686. EXAMINER PRINTING COMPANY, San Francisco, Calif. Filed Feb. 29, 1932.

ANNIE LAURIE

For Articles or Writings Published in Daily Newspaper.
Claims use since Jan. 19, 1890.

Ser. No. 324,687. EXAMINER PRINTING COMPANY, San Francisco, Calif. Filed Feb. 29, 1932.

Cholly Francisco

For Articles or Writings Published in Daily Newspaper.
Claims use since Feb. 19, 1909.

Ser. No. 325,170. THE HAT TRADE PUBLISHING COMPANY, New York, N. Y. Filed Mar. 16, 1932.

THE AMERICAN CLOTHIER

For Semi-Annual Publication.
Claims use since January, 1932.

Ser. No. 325,816. THE C-R-C LAW LIST COMPANY, New York, N. Y. Filed Apr. 5, 1932.

THE C R LAW LIST

For Attorney's Directory, Published from Time to Time.
Claims use since April, 1908.

Ser. No. 326,084. BOB EDWARDS PUBLISHING COMPANY, Minneapolis, Minn. Filed Apr. 14, 1932.

CO-CO

For Humorous Magazine Published Monthly.
Claims use since Jan. 5, 1932.

Ser. No. 326,115. THE PRORACFORM COMPANY, Chicago, Ill. Filed Apr. 14, 1932.

Official Proracform

For Daily Periodical.
Claims use since Jan. 25, 1932.

CLASS 39

Clothing

Ser. No. 312,962. HERMANN SPIELMAN & SOHN, Vienna, Austria. Filed Apr. 4, 1931.

H.S.&S.

For Neckties of Pure Silk and Half Silk and Artificial Silk.
Claims use since June 1, 1922.

Ser. No. 312,963. HERMANN SPIELMAN & SOHN, Vienna, Austria. Filed Apr. 4, 1931.

H.S.&S.

The drawing is lined to indicate the color gold.
For Neckties of Pure Silk and Half Silk and Artificial Silk.
Claims use since June 1, 1922.

Ser. No. 319,408. THE I. T. S. COMPANY, Elyria, Ohio. Filed Sept. 25, 1931.

L&R

For Rubber Heels and Rubber Taps.
Claims use since Apr. 1, 1931.

Ser. No. 320,497. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Oct. 27, 1931.

Yankee Worsteds

No claim is made to the word "Worsteds" apart from the mark as shown on the drawing, and when used descriptively.

For Coats, Vests, Pants, and Overcoats for Men and Boys.
Claims use since Oct. 15, 1931.

Ser. No. 321,196. I. H. BARNETT & BRO., New York, N. Y. Filed Nov. 17, 1931.

Ashton

The word "Ashton" is disclaimed apart from the mark shown on the drawing.

For Men's and Boys' Dress, Negligee, and Work Shirts.
Claims use since June, 1926.

Ser. No. 323,112. LEO MOSSLER, New York, N. Y. Filed Jan. 16, 1932.

LASTICWELT
HI-TWIST

The term "Hi-Twist" is disclaimed apart from the mark as shown.

For Knitted and Woven Hosiery for Men, Women, and Children.
Claims use since Oct. 1, 1931.

Ser. No. 323,400. THE H. C. GODMAN COMPANY, Columbus, Ohio. Filed Jan. 25, 1932.

Tarsal Tred

Apart from the mark shown the words "Tarsal Tred" are disclaimed.

For Shoes Constructed of Leather.
Claims use since Dec. 3, 1931.

Ser. No. 323,661. HARRIS CLOTHING COMPANY, Baltimore, Md. Filed Feb. 1, 1932.

FR
FRATERNITY ROW

For Young Men's and Students' Three and Four Piece Suits, Overcoats, and Top Coats.
Claims use since Dec. 1, 1931.

Ser. No. 324,487. RUBINGER SPORTSWEAR, CORP., New York, N. Y., and West New York, N. J. Filed Feb. 25, 1932.

SPORTSVILLE
KNITTED FASHIONS

The words "Knitted Fashions" are disclaimed apart from the mark as shown in the drawing.

For Women's, Misses', and Children's Dresses, Two-Piece Dresses, and Three-Piece Suits.
Claims use since Dec. 5, 1931.

Ser. No. 325,049. SNUG-FIT BRASSIERE CO., New York, N. Y. Filed Mar. 11, 1932.

THE BELT IS OUT
abdo-X
THE ABDOM IS IN

The drawing being lined to indicate shading only and no claim being made to the exclusive use of the words "The Belt is Out" apart from the mark as shown in the drawing.

For Corsets, Brassières, and Combinations Thereof.
Claims use since Mar. 3, 1932.

Ser. No. 325,094. FREEMAN SHOE CORPORATION, Beloit, Wis. Filed Mar. 14, 1932.

FREEMAN

For Men's and Boys' Shoes Made of Leather and of Fabric and of Combinations of Leather and Fabric.
Claims use since March, 1922.

Ser. No. 325,188. E. H. SCHERMAN & CO., New York, N. Y. Filed Mar. 16, 1932.

Paris
Scherman's
Fifth Avenue
NewYork

The word "Scherman", as it appears in the mark as used by applicant, is a facsimile of a portion of the signature of Eugene H. Scherman, president and treasurer of applicant.

No claim of exclusive right to the use of the words "Paris", "Fifth Avenue", and "New York" is made apart from the mark as a whole.

For Women's Hats.
Claims use since Oct. 1, 1921.

Ser. No. 325,530. S. RAUH & COMPANY, New York, N. Y. Filed Mar. 26, 1932.

RAUHDY

For Shoes Made of Fabric and Leather with Soles Made of Rubber or Leather.
Claims use since Mar. 1, 1932.

Ser. No. 325,618. EDITH FOLTZ, Portland, Oreg. Filed Mar. 29, 1932.

FOLZUP

For Ladies', Misses', and Children's Wearing Apparel—Namely, Aeronautical Garments, Riding Habits, and Any Combination Skirt, Jacket, and Breeches Used for Sports Wear.
Claims use since Oct. 1, 1931.

Ser. No. 325,781. H. DAROFF & SONS, INC., Philadelphia, Pa. Filed Apr. 4, 1932.



CAMELGORA

For Outer Suits for Men and Boys.
Claims use since Feb. 15, 1931.

Ser. No. 325,818. DOMINION FABRICS CORPORATION, Boston, Mass. Filed Apr. 5, 1932.

KAMPAREE

For Sleeping Bags.
Claims use since Mar. 31, 1932.

Ser. No. 325,984. JACOB & SCHEY, New York, N. Y. Filed Apr. 11, 1932.

REELAND HOSIERY

No claim being made to the exclusive use of the word "Hosiery" apart from the mark as shown in the drawing.

For Hosiery.
Claims use since Apr. 4, 1932.

Ser. No. 326,158. ONLIBEST HOSIERY MILLS, INC., Berlin, N. J. Filed Apr. 15, 1932.

Ful-flex

For Hosiery.
Claims use since Sept. 23, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 322,391. KAUMAGRAPH COMPANY, New York, N. Y. Filed Dec. 23, 1931.

Kaumagraph

For Transfers and Roll Holders for Transfers, for Embroidery Designs, and for Decorative Designs for Use on Textiles and Other Materials.
Claims use since 1905.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 321,798. BERKWITS & BLOOMFIELD, INC., New York, N. Y. Filed Dec. 5, 1931.

Skee-felt

The term "Felt" is disclaimed apart from the mark as shown on the drawing.
For Woolen Cloth in the Piece.
Claims use since March, 1904.

Ser. No. 323,763. NEUSS, HESSLEIN & CO., INC., New York, N. Y. Filed Jan. 29, 1932.



SUPERIOR
SHEETINGS
13
MADE IN U.S.OF AMERICA
40 YDS

Applicant disclaims the terms "Superior Sheetings 13 Made in U S of America 40 Yds." apart from the mark shown on the drawing.
For Grey Cotton Piece Goods.
Claims use since Apr. 15, 1931.

Ser. No. 326,040. STEDMAN MANUFACTURING COMPANY, Asheboro, N. C. Filed Apr. 11, 1932.

STEMCO

For Handkerchiefs.
Claims use since Feb. 22, 1932.

Ser. No. 326,083. EDAY FABRICS, INCORPORATED, West New York, N. J. Filed Apr. 14, 1932.

"DUPONAISE"

For Knitted Fabrics for Underwear Made Up of Rayon and Artificial Silk.
Claims use since June 19, 1931.

Ser. No. 326,131. DOSHI TRADING CO. LTD., New York, N. Y. Filed Apr. 15, 1932.

BELLE SHANG

For Textile Fabrics—Namely, Silk Piece Goods.
Claims use since Dec. 22, 1931.

Ser. No. 326,173. AMERICAN WOOLEN COMPANY, Boston, Mass., and New York, N. Y. Filed Apr. 16, 1932.

Brionara

For Woolen Fabrics in the Piece.
Claims use since Mar. 31, 1932.

Ser. No. 326,176. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 16, 1932.

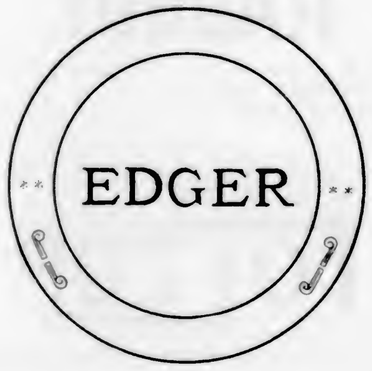
DULCET

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Apr. 15, 1932.

CLASS 43

Thread and Yarn

Ser. No. 321,317. GUDEBROD BROTHERS SILK COMPANY, Philadelphia, Pa. Filed Nov. 19, 1931.



For Threads.
Claims use since Mar. 1, 1931.

Ser. No. 325,054. I. P. BEMBERG, AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed Mar. 12, 1932.

Synthesia

For Thread and Yarn.
Claims use since Oct. 31, 1928.

Ser. No. 325,056. I. P. BEMBERG, AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed Mar. 12, 1932.

Bembella

For Thread and Yarn.
Claims use since Oct. 31, 1928.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 306,084. E. D. BULLARD COMPANY, San Francisco, Calif. Filed Sept. 26, 1930.

Everything
BULLARD
in Safety

No claim is made to the words "Everything," "In," and "Safety" apart from the drawing as shown. The lining on the drawing is to represent the color green.
For First Aid and Protective Equipment—Namely, First Aid Medical and Surgical Kits and Parts Thereof, Gas Masks, Canisters for Gas Masks, and Inhalators.
Claims use since Apr. 1, 1930.

Ser. No. 325,178. JACOB D. MARKWOOD, doing business as Electro-Magnetic Belt Company, Minneapolis, Minn. Filed Mar. 16, 1932.

VITA-NOID

For Therapeutic Electro-Magnetic Device—Namely, an Electro-Magnetic Belt.
Claims use since Nov. 20, 1931.

Ser. No. 325,601. JOSEPH SMITH, Sloan, N. Y. Filed Mar. 28, 1932.



For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Mar. 17, 1932.

Ser. No. 326,159. OXYGEN THERAPY SERVICE, INC., New York, N. Y. Filed Apr. 15, 1932.

SOLARIUM

For Hospital and Sick Room Apparatus Consisting of Oxygen Tents, Oxygen Chambers, and Respirators for Use in the Treatment of Pneumonia, Cardiac Failure, Asthma, and Other Cardio-Respiratory Disturbances.
Claims use since Mar. 1, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 300,142. THE PURE ORANGE JUICE COMPANY OF AMERICA, Chicago, Ill. Filed May 8, 1930.



The drawing is lined for green and orange. No claim is made to the name "Racklin's" or to the representation of the goods except in the association shown.
For Non-Alcoholic, Maltless Orange Juice for Beverage Purposes.
Claims use since Feb. 1, 1930.

Ser. No. 312,660. MOTHER BROWN'S PURE ORANGE JUICE COMPANY, North Arlington, N. J. Filed Mar. 28, 1931.

Mother Brown's

Exclusive use of the name "Brown's" is disclaimed apart from the mark as shown.
For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Mar. 5, 1931.

Ser. No. 322,194. VINE-GLO CORPORATION OF NEW YORK, New York, N. Y. Filed Dec. 16, 1931.

RED & GOLD



VINTAGES

No claim being made to the word "Vintages" apart from the other features of the mark shown on the drawing.
For Grape Juice.
Claims use since Nov. 27, 1931.

Ser. No. 325,691. MONUMENT BOTTLING COMPANY, Indianapolis, Ind. Filed Mar. 31, 1932.

Sun Punch

No claim is made to the word "Punch" except in the association shown in the drawing.
For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Mar. 1, 1932.

Ser. No. 325,884. SPRING MOUNTAIN VINEYARD CO. INC., New York, N. Y. Filed Apr. 7, 1932.

Salute!

The lining shown on the drawing is for shading purposes only.
For Grape Juice.
Claims use since Mar. 15, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 285,882. PIGGLY WIGGLY CORPORATION, Cincinnati, Ohio. Filed June 20, 1929.

Sunset Gold

For Food Products—Namely, Canned Fruits, Maraschino Cherries, Canned Berries, Canned Vegetables, Canned Fish, Bread, Cakes, Fruit Preserves, Jellies, Apple Butter, Peanut Butter, Honey, Olives, Tomato Catsup, Chili Sauce, Chili Powder, Spices, Vinegar, Food Flavoring Extracts, and Evaporated Milk.
Claims use since Oct. 1, 1921.

Ser. No. 307,507. RIDGEWOOD FRUIT GROWERS, INC., doing business as The Ridgewood Orchards, Ridgewood Orchards, Winchester, Va. Filed Nov. 3, 1930.



Apple-Candy

Applicant disclaims the words "Apple-Candy" apart from the mark as shown.
For Candy.
Claims use since Dec. 12, 1929.

Ser. No. 307,932. JOHN ENGLISH, doing business as United Wholesale Grocery, Schenectady, N. Y. Filed Nov. 15, 1930.

R-KAO

For Coffee and Evaporated Milk.
Claims use since Sept. 29, 1930.

Ser. No. 311,942. VIRGINIA SWEET FOODS INC., doing business as Mo-An-Mo Products Co., Indianapolis, Ind. Filed Mar. 9, 1931.

Mo-An-Mo

For Pancake Flour and Buckwheat Flour.
Claims use since Feb. 21, 1931.

Ser. No. 314,482. AMBROSIA CHOCOLATE COMPANY, Milwaukee, Wis. Filed May 13, 1931.

ROUNDS

For Candy.
Claims use since Mar. 23, 1931.

Ser. No. 316,161. FRANK M. MODICA, New York, N. Y. Filed June 23, 1931.

MODICA



The lining on the drawing is for shading only. No claim is made to the name "Modica" apart from the mark shown on the drawing. The figure on the label represents no particular person.
For Food Products, Namely, Olive Oil, Canned Peeled Tomatoes, Tomato Sauce.
Claims use since May 25, 1931.

Ser. No. 317,561. KREM-KO COMPANY, Chicago, Ill. Filed Aug. 1, 1931.

DD

SPECIAL

The word "Special" is disclaimed except in the association shown on the drawing.
For Chocolate Milk Food Beverage.
Claims use since Feb. 28, 1931.

Ser. No. 323,418. JAS. J. O'CONNOR, doing business as Jas. J. O'Connor Coffee Co., St. Louis, Mo. Filed Jan. 25, 1932.

No Meal is Better Than Its COFFEE

No claim being made to the descriptive term "Coffee" apart from the mark as shown.
For Roasted Coffee.
Claims use since 1925.

Ser. No. 323,647. THE ABILENE FLOUR MILLS COMPANY, Abilene, Kans. Filed Feb. 1, 1932.

LITE FLAKE



In the drawing the picture is fanciful.
For Self Rising Wheat Flour, Phosphated Flour, and Plain Wheat Flour.
Claims use since June 29, 1931.

Ser. No. 324,821. EMPIRE GUM COMPANY, New York, N. Y. Filed Mar. 5, 1932.

PICK - A - POP

For Candy.
Claims use since Feb. 29, 1932.

Ser. No. 325,294. LIBBY, MCNEILL & LIBBY, Chicago, Ill. Filed Mar. 19, 1932.

Lynnwood

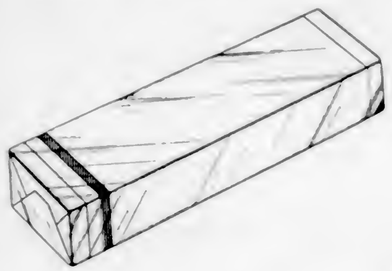
For Canned Fruits, Canned Vegetables, Tomato Juice, Sauerkraut Juice, and Peach Jam.
Claims use since Dec. 1, 1915.

Ser. No. 325,377. ELEANOR GIVEN THOMPSON, Kansas City, Mo. Filed Mar. 22, 1932.

Jessie Wylie

The name "Jessie Wylie" being disclaimed apart from the mark as shown on the drawing.
For Scotch Short Bread.
Claims use since Feb. 29, 1932.

Ser. No. 325,416. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Filed Mar. 23, 1932.



The trade-mark is applied to the goods in the form of a narrow band, strip, or ribbon-like member of a red color encircling each individual package of chewing gum adjacent one end. The representation of the container of the goods is disclaimed as a part of the trade-mark.
For Chewing Gum.
Claims use since Mar. 11, 1932.

Ser. No. 325,639. BLUM BROS. & WEINSTEIN, Jersey City, N. J. Filed Mar. 30, 1932.

O SOLE MIO

OLIVE OIL

No claim is made to the words "Olive Oil" apart from the mark as shown.
For Olive Oil.
Claims use since June 15, 1931.

Ser. No. 325,655. JOHN HOFFMANN & SONS CO., Milwaukee, Wis. Filed Mar. 30, 1932.

THERMOLIZED

For Coffee.
Claims use since Mar. 1, 1932.

Ser. No. 325,670. JOHN H. WILKINS COMPANY, Washington, D. C. Filed Mar. 30, 1932.

just wonderful!

For Coffee.
Claims use since Aug. 1, 1921.

Ser. No. 325,696. JOSEPH STOLLER, New York, N. Y. Filed Mar. 31, 1932.



The drawing is lined for gold. The descriptive word "Egg" is hereby disclaimed apart from the mark as shown on the drawing. The representation of an egg is hereby disclaimed unqualifiedly.
For Eggs.
Claims use since Mar. 26, 1932.

Ser. No. 325,771. WINTER HAVEN CITRUS GROWERS ASSOCIATION, Winter Haven, Fla. Filed Apr. 2, 1932.

UMPIRE



For Fresh Citrus Fruits.
Claims use since December, 1910.

Ser. No. 325,918. PROTEO FOODS, INCORPORATED, Chicago, Ill. Filed Apr. 8, 1932.

PROTEO

For Specially Prepared Baking Products—Namely, Bread.
Claims use since Mar. 4, 1932.

Ser. No. 326,006. ALASKA LIVESTOCK & PACKING COMPANY, Seattle, Wash. Filed Apr. 12, 1932.

WHITE ROVER

For Dog Food.
Claims use since Dec. 5, 1931.

Ser. No. 326,007. F. V. BIRBECK, Watsonville, Calif. Filed Apr. 12, 1932.

FIREBRAND

For Fresh Vegetables.
Claims use since Aug. 31, 1931.

Ser. No. 326,034. FRED F. TUGEL, doing business as Appleton Produce Company, Watsonville, Calif. Filed Apr. 12, 1932.

Legal Tender

For Fresh Deciduous Fruits, Dried Fruits, Fresh Vegetables.
Claims use since Sept. 16, 1930.

Ser. No. 326,044. TONE BROS., Des Moines, Iowa. Filed Apr. 11, 1932.

HI-VAC

For Coffee.
Claims use since Apr. 7, 1932.

Ser. No. 326,045. AMERICAN STORES COMPANY, Philadelphia, Pa. Filed Apr. 13, 1932.

HINDU BELLE

For Salad Dressing.
Claims use since Apr. 1, 1932.

Ser. No. 326,180. NATHAN FELDMAN, doing business as Felko Supply Company, New Brunswick, N. J. Filed Apr. 16, 1932.

FELKO

For Malt Syrup.
Claims use since 1926.

Ser. No. 326,207. FEDERAL MILL, INC., Lockport, N. Y. Filed Apr. 18, 1932.

16 CYLINDER

In the drawing the lining indicates shading only.
For Wheat Flour.
Claims use since Mar. 21, 1932.

Ser. No. 326,228. PACIFIC EGG PRODUCERS COOPERATIVE, INC., New York, N. Y. Filed Apr. 18, 1932.

SCOUTS

For Eggs.
Claims use since Nov. 21, 1927.

Ser. No. 326,310. THOMPSON'S SPA INC., Boston, Mass. Filed Apr. 20, 1932.

VAGABOND

For Candy.
Claims use since Mar. 4, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 325,423. COMPAÑIA CERVECERA INTERNACIONAL, S. A., Habana, Cuba. Filed Mar. 24, 1932.

Trimalta
EXTRACTO TRIPLE DE MALTA
CIA CERVECERA INTERNACIONAL HABANA

No claim is made to the exclusive use of the words "Extracto Tripie De Malta" and "Habana" shown in the drawing.

For Malt Beverages Containing Less than One-Half of One Per cent Alcohol by Volume and Malt Extracts for Making the Same.

Claims use since June 11, 1929.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 326,111. MACDONALD & MUIR, Leith, Scotland. Filed Apr. 14, 1932.

HIGHLAND QUEEN

For Whisky.
Claims use since 1902.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 24, 1932

294,181. CLAMPS. THE CINCINNATI TOOL CO., Norwood, Ohio.
Filed July 30, 1931. Serial No. 317,454. PUBLISHED MARCH 8, 1932. Class 23.

294,182. SAFETY RAZORS AND SAFETY RAZOR BLADES. UTILITY BLADE CORPORATION, Irvington, N. J.
Filed December 29, 1931. Serial No. 322,528. PUBLISHED MARCH 8, 1932. Class 23.

294,183. MOTOR PUMPS. INGERSOLL-RAND COMPANY, New York, N. Y.
Filed January 6, 1932. Serial No. 322,812. PUBLISHED MARCH 15, 1932. Class 23.

294,184. MEAT TENDERING MACHINES. WALTER F. DUFFY, doing business as Acme Utility Co., Franklin, N. H.
Filed January 13, 1932. Serial No. 322,952. PUBLISHED MARCH 8, 1932. Class 23.

294,185. SPRAYERS FOR SPRAYING LIQUIDS. H. D. HUDSON MANUFACTURING COMPANY, Chicago, Ill., and Hastings, Minn.
Filed January 14, 1932. Serial No. 323,006. PUBLISHED MARCH 8, 1932. Class 23.

294,186. HAND, FOOT, AND MECHANICALLY OPERATED DEVICES FOR STRIPPING INSULATED COATINGS FROM METALLIC WIRES. PYRAMID PRODUCTS COMPANY, Chicago, Ill.
Filed January 15, 1932. Serial No. 323,061. PUBLISHED MARCH 15, 1932. Class 23.

294,187. SCREW DRIVERS AND WRENCHES. FRANCIS W. GIBSON, Boston, Mass.
Filed January 19, 1932. Serial No. 323,170. PUBLISHED MARCH 8, 1932. Class 23.

294,188. DUMBWAITERS, FREIGHT AND PASSENGER ELEVATORS, HOISTS, CRANES, LIFTS, ELEVATOR CARS, HOISTING GEAR, AND PARTS THEREOF. SEDGWICK MACHINE WORKS, New York, N. Y.
Filed January 19, 1932. Serial No. 323,178. PUBLISHED MARCH 8, 1932. Class 23.

294,189. INTERNAL COMBUSTION ENGINES OF THE DIESEL TYPE. ATLAS IMPERIAL DIESEL ENGINE CO., Oakland, Calif.
Filed January 22, 1932. Serial No. 323,277. PUBLISHED MARCH 8, 1932. Class 23.

294,190. PLOW SHARES, LISTER SHARES, MIDDLE BURSTER SHARES, METAL SHAPES, CULTIVATORS AND PARTS, CULTIVATOR SHOVELS. STOWE HARDWARE & SUPPLY COMPANY, Kansas City, Mo.
Filed January 23, 1932. Serial No. 323,370. PUBLISHED MARCH 8, 1932. Class 23.

294,191. METAL-WORKING MACHINES, SUCH AS LATHES, INCLUDING AUTOMATIC MULTIPLE-SPINDLE SCREW MACHINES. THE NATIONAL ACME CO., Cleveland, Ohio.
Filed January 26, 1932. Serial No. 323,462. PUBLISHED MARCH 15, 1932. Class 23.

294,192. RAZOR BLADES. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J.
Filed January 26, 1932. Serial No. 323,442. PUBLISHED MARCH 8, 1932. Class 23.

294,193. RAZOR BLADES. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y.
Filed January 27, 1932. Serial No. 323,475. PUBLISHED MARCH 8, 1932. Class 23.

294,194. RAZOR BLADES. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y.
Filed January 27, 1932. Serial No. 323,476. PUBLISHED MARCH 8, 1932. Class 23.

294,195. MOTION PICTURE CARTOONS. FLEISCHER STUDIOS, INCORPORATED, New York, N. Y.
Filed January 27, 1932. Serial No. 323,489. PUBLISHED MARCH 8, 1932. Class 26.

294,196. SEWING MACHINES. THE REECE BUTTON HOLE MACHINE CO., Boston, Mass.
Filed January 28, 1932. Serial No. 323,543. PUBLISHED MARCH 8, 1932. Class 23.

294,197. SEWING MACHINES. THE REECE BUTTON HOLE MACHINE CO., Boston, Mass.
Filed January 28, 1932. Serial No. 323,544. PUBLISHED MARCH 8, 1932. Class 23.

294,198. SEWING MACHINES. THE REECE BUTTON HOLE MACHINE CO., Boston, Mass.
Filed January 28, 1932. Serial No. 323,545. PUBLISHED MARCH 8, 1932. Class 23.

294,199. SEWING MACHINES. THE REECE BUTTON HOLE MACHINE CO., Boston, Mass.
Filed January 28, 1932. Serial No. 323,546. PUBLISHED MARCH 8, 1932. Class 23.

294,200. VENDING MACHINES. WILLIAM BLATT, doing business as Supreme Vending Co., Brooklyn, N. Y.
Filed January 30, 1932. Serial No. 323,606. PUBLISHED MARCH 15, 1932. Class 23.

294,201. ELECTRIC HEATING ELEMENTS FOR KITCHEN STOVES AND FOR BAYONET HEATERS EMPLOYED IN HEATING LIQUIDS. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed August 26, 1931. Serial No. 318,471. PUBLISHED MARCH 1, 1932. Class 21.

294,202. LIGHT SENSITIVE CELLS. WESTON ELECTRICAL INSTRUMENT CORPORATION, Newark, N. J.
Filed October 1, 1931. Serial No. 319,629. PUBLISHED MARCH 15, 1932. Class 21.

294,203. ELECTRICALLY OPERATED DIRECTION SIGNALS OF THE POINTER TYPE TO BE USED ON VEHICLES. SAFETURN SIGNAL CORPORATION, New York, N. Y.
Filed October 23, 1931. Serial No. 320,388. PUBLISHED MARCH 15, 1932. Class 21.

294,204. STORAGE BATTERIES. AUTO REPLACEMENT PARTS CO., Chicago, Ill.
Filed November 9, 1931. Serial No. 320,914. PUBLISHED MARCH 1, 1932. Class 21.

294,205. INCANDESCENT ELECTRIC LAMPS. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed November 11, 1931. Serial No. 321,058. PUBLISHED MARCH 1, 1932. Class 21.

294,206. SECTIONAL ENCLOSED SWITCHBOARDS AND PARTS. I-T-E CIRCUIT BREAKER COMPANY, Philadelphia, Pa.
Filed November 20, 1931. Serial No. 321,338. PUBLISHED MARCH 8, 1932. Class 21.

294,207. ELECTRICAL NICKEL-CHROME WIRE AND RIBBON, BALLAST WIRE, ETC. GILBY WIRE COMPANY, Newark, N. J.
Filed November 20, 1931. Serial No. 321,335. PUBLISHED MARCH 1, 1932. Class 21.

294,208. COMPONENT PARTS OF ENCLOSED SWITCHBOARDS, SWITCHES OR AUTOMATIC CIRCUIT BREAKERS. I-T-E CIRCUIT BREAKER COMPANY, Philadelphia, Pa.
Filed November 20, 1931. Serial No. 321,340. PUBLISHED MARCH 1, 1932. Class 21.

294,209. ELECTRIC FLASHLIGHTS, PORTABLE ELECTRIC LANTERNS, AND ELECTRIC LAMPS, OPERATED BY DRY BATTERY CELLS, NOT INCLUDING BULBS. DELTA ELECTRIC COMPANY, Marion, Ind.
Filed December 4, 1931. Serial No. 321,751. PUBLISHED MARCH 1, 1932. Class 21.

294,210. SADIRONS, TOASTERS, PERCOLATORS, ETC. SIMMONS HARDWARE COMPANY, St. Louis, Mo.
Filed December 15, 1931. Serial No. 322,140. PUBLISHED MARCH 1, 1932. Class 21.

294,211. CONNECTORS FOR ELECTRICAL CONDUCTORS. W. N. MATTHEWS CORPORATION, St. Louis, Mo.
Filed December 17, 1931. Serial No. 322,219. PUBLISHED MARCH 8, 1932. Class 21.

294,212. ELECTRIC SWITCH PLATES AND ELECTRIC WALL PLATES MOLDED FROM PLASTIC MATERIAL. PASS & SEYMOUR, INCORPORATED, Solvay, N. Y.
Filed December 17, 1931. Serial No. 322,231. PUBLISHED MARCH 1, 1932. Class 21.

294,213. EARTH MOVING EQUIPMENT—NAMELY, DIRT-MOVERS, SCRAPERS, CARRIERS, BULLDOZERS, BACK FILLERS, RIPPERS, AND SCARIFIERS, ALL HYDRAULICALLY OPERATED. AMERICAN TRACTOR EQUIPMENT COMPANY, Oakland, Calif.
Filed July 20, 1931. Serial No. 317,102. PUBLISHED MARCH 15, 1932. Class 23.

294,214. CREAMS, MUSCLE OIL, FACE POWDER, ETC. JAMES ASHBY WRIGHT, doing business as Wright Beauty Supply Company, Roanoke, Va.
Filed December 23, 1931. Serial No. 322,408. PUBLISHED MARCH 15, 1932. Class 6.

294,215. COSMETICS—NAMELY, NAIL POLISH, FACE CREAM, ROUGE, LIPSTICK, COMPACTS CONTAINING POWDER AND ROUGE, FACE POWDER, EYEBROW PENCILS, EYE SHADOW, PERFUME STICKS, LIP CREAM, AND LIP POMADE. B. KRONISH & BRO. INC., New York, N. Y.
Filed December 29, 1931. Serial No. 322,513. PUBLISHED MARCH 8, 1932. Class 6.

294,216. CENTRIFUGES, CENTRIFUGAL SEPARATORS, AND CENTRIFUGE ACCESSORIES AND EQUIPMENT. INTERNATIONAL EQUIPMENT COMPANY, Boston, Mass.
Filed January 2, 1932. Serial No. 322,640. PUBLISHED MARCH 15, 1932. Class 26.

294,217. SAFETY RAZOR BLADES. GILLETTE SAFETY RAZOR COMPANY, Boston, Mass.
Filed January 12, 1932. Serial No. 322,930. PUBLISHED MARCH 15, 1932. Class 23.

294,218. SOLVENTS FOR CLEANING DRAIN PIPES AND PLUMBING FIXTURES. DEARBORN CHEMICAL COMPANY, Chicago, Ill.
Filed January 16, 1932. Serial No. 323,084. PUBLISHED MARCH 8, 1932. Class 6.

294,219. SEDATIVES. THEODOR H. TEMMLER, doing business as Temmler-Werke Vereinigte Chemische Fabriken Hermann Temmler, Berlin-Johannisthal, Germany.
Filed January 18, 1932. Serial No. 323,149. PUBLISHED MARCH 1, 1932. Class 6.

294,220. WOOD FABRIC CURTAINS. ESTATE OF JULIUS GARST, doing business as Shredwood Curtain Co., Worcester, Mass.
Filed January 20, 1932. Serial No. 323,195. PUBLISHED MARCH 15, 1932. Class 32.

294,221. INSECTICIDES. PLANTABBS CORPORATION, Baltimore, Md.
Filed January 21, 1932. Serial No. 323,253. PUBLISHED MARCH 8, 1932. Class 6.

294,222. LAXATIVE COOKIES AND BISCUITS. THE PSYLLIUM COMPANY, Towson, Md.
Filed January 29, 1932. Serial No. 323,588. PUBLISHED MARCH 8, 1932. Class 6.

294,223. DEPILATORY IN POWDERED FORM. HARRY B. CLYMER, doing business as Josephine Le Fevre Co., Philadelphia, Pa.
Filed January 30, 1932. Serial No. 323,610. PUBLISHED MARCH 8, 1932. Class 6.

294,224. ROACH POWDER. HUNTINGTON LABORATORIES, INC., Huntington, Ind.
Filed January 30, 1932. Serial No. 323,617. PUBLISHED MARCH 15, 1932. Class 6.

294,225. PREPARATION FOR INUNCTION IN TREATMENT OF SYPHILIS. J. DOAK COMPANY, INC., Cleveland, Ohio.
Filed February 3, 1932. Serial No. 323,780. PUBLISHED MARCH 15, 1932. Class 6.

294,226. GOGGLES. WILLSON PRODUCTS, INC., Reading, Pa.
Filed February 3, 1932. Serial No. 323,797. PUBLISHED MARCH 15, 1932. Class 26.

294,227. BEARINGS FOR MACHINERY. CHRYSLER CORPORATION, Highland Park, Mich.
Filed February 4, 1932. Serial No. 323,810. PUBLISHED MARCH 15, 1932. Class 23.

294,228. SNOW PLOWS AND PARTS THEREOF. MAINE STEEL PRODUCTS CO., South Portland, Me.
Filed February 4, 1932. Serial No. 323,823. PUBLISHED MARCH 15, 1932. Class 23.

294,229. FACE COLORING PREPARATIONS. PEARL FRAZER DOVER, San Antonio, Tex.
Filed February 5, 1932. Serial No. 323,862. PUBLISHED MARCH 15, 1932. Class 6.

294,230. MEDICAL PREPARATION FOR THE TREATMENT OF HEADACHE AND OTHER PAINS. LEONARD QUARTETTI, doing business as Fervo Products Co., Chicago, Ill.
Filed February 6, 1932. Serial No. 323,905. PUBLISHED MARCH 15, 1932. Class 6.

294,231. FRESH VEGETABLES. WHITE RIVER PACKING CO., INC., Kent, Wash.
Filed January 23, 1932. Serial No. 323,378. PUBLISHED MARCH 15, 1932. Class 46.

294,232. COFFEE. THE HALLIGAN CORPORATION, Davenport, Iowa.
Filed January 25, 1932. Serial No. 323,403. PUBLISHED MARCH 15, 1932. Class 46.

294,233. COFFEE. GRIGGS, COOPER & CO., doing business as Sanitary Food Mfg. Co., St. Paul, Minn.
Filed January 29, 1932. Serial No. 323,579. PUBLISHED MARCH 15, 1932. Class 46.

294,234. FLUID FUEL BURNERS AND PARTS THEREOF. AUGUST F. MUELLER, Grant Park, Ill.
Filed February 1, 1932. Serial No. 323,670. PUBLISHED MARCH 15, 1932. Class 34.

294,235. FRESH VEGETABLES. ALEXANDER MARKETING COMPANY, San Benito, Tex.
Filed February 8, 1932. Serial No. 323,931. PUBLISHED MARCH 15, 1932. Class 46.

294,236. BACON. THE HULL & DILLON PACKING COMPANY, Pittsburg, Kans.
Filed February 9, 1932. Serial No. 323,999. PUBLISHED MARCH 15, 1932. Class 46.

294,237. COTTON TWILL FABRICS. BERTHOLD LAMM, Baltimore, Md.
Filed December 9, 1931. Serial No. 321,961. PUBLISHED FEBRUARY 23, 1932. Class 42.

294,238. MATTRESS AND TABLETOP PROTECTORS FORMED OF TEXTILE QUILTED MATERIAL. COLUMBIA-IDEAL QUILTING CO. INC., Long Island City, N. Y.
Filed December 24, 1931. Serial No. 322,420. PUBLISHED MARCH 15, 1932. Class 42.

294,239. CERTAIN NAMED PIECE GOODS. BIANCHINI, FÉRIER, Lyon, France.
Filed January 4, 1932. Serial No. 322,680. PUBLISHED MARCH 8, 1932. Class 42.

294,240. WOOLEN PIECE GOODS. FORSTMANN WOOLEN COMPANY, Passaic, N. J.
Filed January 9, 1932. Serial No. 322,845. PUBLISHED MARCH 1, 1932. Class 42.

294,241. FABRICS IN THE PIECE OF SILK, COTTON, WOOL, RAYON, AND/OR COMBINATIONS OF THE SAME. W. E. MCKAY & CO., INC., New York, N. Y.
Filed January 9, 1932. Serial No. 322,851. PUBLISHED MARCH 8, 1932. Class 42.

294,242. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed December 7, 1931. Serial No. 321,858. PUBLISHED JANUARY 12, 1932. Class 42.

294,243. PIECE GOODS OF SILK, RAYON, COTTON, WOOL, AND COMBINATIONS THEREOF. TEXTILE DYEING & PRINTING CO. OF AMERICA, INC., New York, N. Y.
Filed January 12, 1932. Serial No. 322,946. PUBLISHED MARCH 8, 1932. Class 42.

294,244. WOOLEN PIECE GOODS. FORSTMANN WOOLEN COMPANY, Passaic, N. J.
Filed January 21, 1932. Serial No. 323,229. PUBLISHED MARCH 8, 1932. Class 42.

294,245. WOOLEN PIECE GOODS. FORSTMANN WOOLEN COMPANY, Passaic, N. J.
Filed January 21, 1932. Serial No. 323,230. PUBLISHED MARCH 8, 1932. Class 42.

294,246. WOOLEN PIECE GOODS. FORSTMANN WOOLEN COMPANY, Passaic, N. J.
Filed January 21, 1932. Serial No. 323,231. PUBLISHED MARCH 8, 1932. Class 42.

294,247. WOOLEN PIECE GOODS. FORSTMANN WOOLEN COMPANY, Passaic, N. J.
Filed January 21, 1932. Serial No. 323,232. PUBLISHED MARCH 8, 1932. Class 42.

294,248. HANDKERCHIEF. SAMUEL A. BLAINE, New York, N. Y.
Filed January 26, 1932. Serial No. 323,445. PUBLISHED MARCH 15, 1932. Class 42.

294,249. COTTON PIECE GOODS; ALL COTTON, ALL WOOL, AND PART WOOL DRAPERIES; AND ALL-COTTON, ALL-WOOL, AND PART-WOOL BLANKETS. NASHUA MANUFACTURING COMPANY, Nashua, N. H.
Filed January 27, 1932. Serial No. 323,496. PUBLISHED MARCH 15, 1932. Class 42.

294,250. PIECE GOODS OF COTTON AND JUTE MIXED. NASHUA MANUFACTURING COMPANY, Nashua, N. H.
Filed January 27, 1932. Serial No. 323,497. PUBLISHED MARCH 15, 1932. Class 42.

294,251. HEAVY AND LIGHT COTTON AND RAYON PIECE GOODS. HEYMANN MERCANTILE CO., INC., New York, N. Y.
Filed January 28, 1932. Serial No. 323,534. PUBLISHED MARCH 8, 1932. Class 42.

294,252. TEXTILE RUGS. COURI BROTHERS, New York, N. Y.
Filed January 29, 1932. Serial No. 323,567. PUBLISHED MARCH 8, 1932. Class 42.

294,253. TEXTILE RUGS. COURI BROTHERS, New York, N. Y.
Filed January 29, 1932. Serial No. 323,568. PUBLISHED MARCH 8, 1932. Class 42.

294,254. TEXTILE RUGS. COURI BROTHERS, New York, N. Y.
Filed January 29, 1932. Serial No. 323,569. PUBLISHED MARCH 15, 1932. Class 42.

294,255. TEXTILE RUGS. COURI BROTHERS, New York, N. Y.
Filed January 29, 1932. Serial No. 323,570. PUBLISHED MARCH 8, 1932. Class 42.

294,256. TEXTILE RUGS. COURI BROTHERS, New York, N. Y.
Filed January 29, 1932. Serial No. 323,571. PUBLISHED MARCH 15, 1932. Class 42.

294,257. CHEWING GUM. EMPIRE GUM COMPANY, New York, N. Y.
Filed February 4, 1932. Serial No. 323,812. PUBLISHED MARCH 15, 1932. Class 46.

294,258. BROAD SILKS, AND SILK MIXTURES CONSISTING OF SILK AND COTTON, SILK AND WOOL, SILK AND RAYON, RAYON, IN THE PIECE. THE SCHWARZENBACH HUBER CO., New York, N. Y.
Filed February 5, 1932. Serial No. 323,873. PUBLISHED MARCH 15, 1932. Class 42.

294,259. COTTON BLANKETS, WOOLEN BLANKETS, AND BLANKETS MADE OF A MIXTURE OF WOOL AND COTTON. PEPPERELL MANUFACTURING COMPANY, Boston, Mass.
Filed January 29, 1932. Serial No. 323,586. PUBLISHED MARCH 8, 1932. Class 42.

294,260. LACE IN THE PIECE. LIBERTY LACE AND NETTING WORKS, New York, N. Y.
Filed February 2, 1932. Serial No. 323,750. PUBLISHED MARCH 15, 1932. Class 42.

294,261. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS, COMPOUNDS, FLAVORS, AND CONCENTRATES FOR MAKING THE SAME. ORANGE-CRUSH COMPANY, Chicago, Ill.
Filed January 2, 1932. Serial No. 322,647. PUBLISHED MARCH 15, 1932. Class 45.

294,262. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND SYRUPS, COMPOUNDS, FLAVORS, AND CONCENTRATES FOR MAKING THE SAME. ORANGE-CRUSH COMPANY, Chicago, Ill.
Filed January 2, 1932. Serial No. 322,650. PUBLISHED MARCH 15, 1932. Class 45.

294,263. TOWEL SERVICE AND DISPENSING CABINETS. SCHWARTZ SALES COMPANY, St. Paul, Minn.
Filed January 8, 1932. Serial No. 322,834. PUBLISHED MARCH 15, 1932. Class 2.

294,264. NOVELTY ICE CREAM CONFECTION, COMPRISING A BODY OF ICE CREAM HAVING A WOODEN HANDLE PARTIALLY EMBEDDED THEREIN. SOUTHWESTERN CREAMERY COMPANY, Joplin, Mo.
Filed January 12, 1932. Serial No. 322,945. PUBLISHED MARCH 8, 1932. Class 46.

294,265. LOW WATER ALARMS, COMPRISING SIGNAL DEVICES CONTROLLED BY AUTOMATICALLY OPERATED FLOAT VALVE MECHANISM. BARCO MANUFACTURING CO., Chicago, Ill.
Filed January 14, 1932. Serial No. 322,984. PUBLISHED JANUARY 14, 1932. Class 13.

294,266. GATE VALVES. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio.
Filed December 11, 1931. Serial No. 322,021. PUBLISHED MARCH 8, 1932. Class 13.

294,267. NONALCOHOLIC, MALTLESS POWDER USED IN THE PREPARATION OF SOFT DRINKS. HICO PRODUCTS COMPANY, INC., St. Louis, Mo.
Filed January 14, 1932. Serial No. 323,005. PUBLISHED MARCH 15, 1932. Class 45.

294,268. BALANCE ARMS, DOOR HOLDERS, HANDLES, ETC. AUSTRAL WINDOW COMPANY, Augusta, Me., and New York, N. Y.
Filed December 15, 1931. Serial No. 322,124. PUBLISHED MARCH 15, 1932. Class 13.

294,269. BASE METAL TABLE AND COOKING HOLLOW WARE. THE CENTRAL STAMPING COMPANY, Newark, N. J.
Filed December 16, 1931. Serial No. 322,162. PUBLISHED MARCH 8, 1932. Class 13.

294,270. TABLE BOARD GAME PLAYED WITH PIECES. ALBERT THOMPSON, Los Angeles, Calif.
Filed December 16, 1931. Serial No. 322,191. PUBLISHED MARCH 15, 1932. Class 22.

294,271. WOOD, FIBER, AND WIRE TRAYS FOR PAPERS AND THE LIKE. ALLAN FRASER, Philadelphia, Pa.
Filed December 19, 1931. Serial No. 322,285. PUBLISHED MARCH 15, 1932. Class 2.

294,272. AIRPLANES AND STRUCTURAL PARTS THEREOF. BOEING AIRPLANE COMPANY, Seattle, Wash.
Filed January 2, 1932. Serial No. 322,625. PUBLISHED MARCH 8, 1932. Class 19.

294,273. BURIAL VAULT. MEAD-SUYDAM COMPANY, Orange, N. J.
Filed January 2, 1932. Serial No. 322,644. PUBLISHED MARCH 8, 1932. Class 2.

294,274. MALT SYRUP. PURE TEST FOOD PRODUCTS COMPANY, Chicago, Ill.
Filed July 25, 1931. Serial No. 317,333. PUBLISHED MARCH 8, 1932. Class 46.

294,275. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND FRUIT JUICES AND EXTRACTS FOR THE PREPARATION OF SAME. THE RITZ EXTRACT MFG. CO., Tampa, Fla.
Filed August 18, 1931. Serial No. 318,116. PUBLISHED MARCH 15, 1932. Class 45.

294,276. AUTOMATIC COAL STOKER. CATSKILL METAL WORKS, INC., Catskill, N. Y.
Filed August 26, 1931. Serial No. 318,439. PUBLISHED MARCH 15, 1932. Class 34.

294,277. VEGETABLE FAT USED AS A BUTTER SUBSTITUTE FOR CULINARY AND BAKING PURPOSES, WHERE THE USE OF FAT, BUTTER, FAT COMPOUNDS, OR EDIBLE OIL IS REQUISITE OR DESIRED. EMANUEL KLEIN, doing business as Plant-Oil-Fat Products Co., New York, N. Y.
Filed September 2, 1931. Serial No. 318,690. PUBLISHED MARCH 8, 1932. Class 46.

294,278. TOMATO, ORANGE, LEMON, LIME, AND CLAM JUICE FOR FOOD PURPOSES. ORANGE-CRUSH COMPANY, Chicago, Ill.
Filed October 23, 1931. Serial No. 320,367. PUBLISHED MARCH 8, 1932. Class 46.

294,279. OIL AND SPIRIT STOVES AND OIL AND SPIRIT LAMPS. THE ASIATIC PETROLEUM COMPANY LIMITED, London, England.
Filed November 27, 1931. Serial No. 321,519. PUBLISHED MARCH 8, 1932. Class 34.

294,280. PADLOCKS. S. H. KRESS & Co., New York, N. Y.
Filed December 8, 1931. Serial No. 321,913. PUBLISHED MARCH 8, 1932. Class 25.

294,281. WOVEN LINEN FABRIC HOSE. EUREKA FIRE HOSE MANUFACTURING COMPANY, New York, N. Y.
Filed September 22, 1930. Serial No. 305,990. PUBLISHED MARCH 15, 1932. Class 35.

294,282. RADIO RECEIVING SETS AND TUNING APPARATUS THEREFOR. THE REPLITURA CORPORATION, Stamford, Conn.
Filed December 13, 1930. Serial No. 308,958. PUBLISHED MARCH 1, 1932. Class 21.

294,283. PERFUMERY IN LIQUID, SEMI-LIQUID, AND POWDER FORM, FACE CREAMS. AMORSKIN CORPORATION, Wilmington, Del., and New York, N. Y.
Filed July 19, 1930. Serial No. 303,620. PUBLISHED MARCH 8, 1932. Class 6.

294,284. DESK SETS (DESK STANDS AND HOLDERS). THE PARKER PEN COMPANY, Janesville, Wis.
Filed June 5, 1930. Serial No. 302,184. PUBLISHED MARCH 8, 1932. Class 37.

294,285. INSECTICIDE AND GERMICIDE. JAMES E. WEBB, doing business as Knox Chemical Company, St. Petersburg, Fla., and Knoxville, Tenn.
Filed July 8, 1931. Serial No. 316,756. PUBLISHED MARCH 8, 1932. Class 6.

294,286. WOMEN'S, MISSES', AND GIRLS' SHOES COMPOSED OF LEATHER, OF RUBBER, OF FABRIC, AND OF COMBINATIONS OF LEATHER, RUBBER, AND FABRIC. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed June 20, 1931. Serial No. 316,105. PUBLISHED MARCH 8, 1932. Class 39.

294,287. HAIR TONICS, PERSPIRATION LOTION, TOILET WATER, HAND CREAM, FACE POWDER, AND HAIR LOTION. JACK L. SINYKIN, doing business as Cinderella Cosmetics, St. Paul, Minn.
Filed June 19, 1931. Serial No. 316,055. PUBLISHED MARCH 8, 1932. Class 6.

294,288. WATER HEATERS. AMERICAN WATER HEATER COMPANY, St. Louis, Mo.
Filed June 8, 1931. Serial No. 315,517. PUBLISHED MARCH 15, 1932. Class 34.

294,289. COMPOSITE DIELECTRIC OR RESISTANCE MATERIAL IN MOLDED FORM. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed June 1, 1931. Serial No. 315,291. PUBLISHED MARCH 8, 1932. Class 21.

294,290. LUBRICATING OILS AND GREASES AND KEROSENE AND GASOLINE. THE R. J. BROWN COMPANY, St. Louis, Mo.
Filed May 28, 1931. Serial No. 315,131. PUBLISHED MARCH 15, 1932. Class 15.

294,291. SOAPS AND CLEANING COMPOUNDS. JACOB KAHN, doing business as Kahn Chemical Co. and as The Atlantic Sales Co., New York, N. Y.
Filed May 25, 1931. Serial No. 314,995. PUBLISHED MARCH 8, 1932. Class 4.

294,292. AGGREGATE FOR CONCRETE. CONSUMERS SAND COMPANY, Topeka, Kans.
Filed May 19, 1931. Serial No. 314,749. PUBLISHED MARCH 1, 1932. Class 1.

294,293. CASINGS FOR THE ELECTRICAL EQUIPMENT OF MOTORS AND SIMILAR POWER APPARATUS TO PREVENT ELECTRICAL EMANATIONS FROM LEAVING OR OUTSIDE ELECTRICAL IMPULSES FROM AFFECTING SAID EQUIPMENT. BREEZE CORPORATIONS, INC., Newark, N. J.
Filed May 7, 1931. Serial No. 314,268. PUBLISHED MARCH 1, 1932. Class 21.

294,294. DRESS SHIELDS, COMBS, AND HAIR PINS NOT MADE OF PRECIOUS METAL; TRIMMINGS—NAMELY, BINDINGS, AND TAPES, NARROW ELASTIC WEBBING. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed May 4, 1931. Serial No. 314,162. PUBLISHED MARCH 8, 1932. Class 40.

294,295. CHEMICAL CORROSION PREVENTING PREPARATIONS. NATIONAL CARBON COMPANY, INC., New York, N. Y.
Filed May 1, 1931. Serial No. 314,066. PUBLISHED JULY 21, 1931. Class 6.

294,296. COMBINATION KEY CONTAINER AND MEMO PAD. PAUL H. OLSON, St. Paul, Minn.
Filed February 5, 1931. Serial No. 310,773. PUBLISHED MARCH 8, 1932. Class 3.

294,297. BUSINESS FORMS—NAMELY, CHECKS, DRAFTS, MONEY ORDERS, SAFETY PAPER, LETTER AND BILL HEADS, PASS BOOKS, PERMANENT AND LOOSE-LEAF BOOKBINDERS, AND CHECK BOOK COVERS. THE TODD COMPANY, INC., Rochester, N. Y.
Filed January 30, 1931. Serial No. 310,582. PUBLISHED MARCH 1, 1932. Class 37.

294,298. FOOTER BARS FOR USE IN CONNECTION WITH KNITTING MACHINES FOR FULL-FASHIONED HOSIERY. CHARLES T. LA MONT, doing business as Grip-Rite Manufacturing Co., Milwaukee, Wis.
Filed January 19, 1931. Serial No. 310,130. PUBLISHED MARCH 8, 1932. Class 23.

294,299. HEATING AND COOLING CYLINDERS FOR USE ON MACHINES FOR COATING PAPER FABRICS OR THE LIKE. MAYER COATING MACHINES CO. INC., Rochester, N. Y.
Filed January 16, 1931. Serial No. 310,021. PUBLISHED MARCH 15, 1932. Class 23.

294,300. CONCRETE MIXING MACHINES, CONCRETE PREPARING MACHINES, CONCRETE MOLDING MACHINES, AND CONCRETE CONVEYING MACHINES. THE PORTLAND CONCRETE MACHINES CO., Cleveland, Ohio.
Filed January 3, 1931. Serial No. 309,594. PUBLISHED MARCH 8, 1932. Class 23.

294,301. ELECTRIC LIGHT FIXTURE UNITS. HOSPO, INC., Chicago, Ill.
Filed January 2, 1931. Serial No. 309,563. PUBLISHED MARCH 1, 1932. Class 21.

294,302. VACUUM TUBES. CABLE RADIO TUBE CORPORATION, Brooklyn, N. Y.
Filed December 23, 1931. Serial No. 322,377. PUBLISHED MARCH 1, 1932. Class 21.

294,303. WIRE, SHEET, AND RIBBON FOR GRIDS, PLATES, AND SUPPORT WIRES FOR RADIO TUBE PARTS. GILBY WIRE COMPANY, Newark, N. J.
Filed December 26, 1931. Serial No. 322,461. PUBLISHED MARCH 1, 1932. Class 21.

294,304. MICROPHONES, TRANSFORMERS, ASSEMBLED AMPLIFYING UNITS, LOUD SPEAKERS, AND PICK UPS. THOMASTON LABORATORIES, INC., New York, N. Y.
Filed December 30, 1931. Serial No. 322,566. PUBLISHED MARCH 15, 1932. Class 21.

294,305. INCANDESCENT ELECTRIC LAMPS. GAMBLE STORES, INCORPORATED, Minneapolis, Minn.
Filed January 5, 1932. Serial No. 322,736. PUBLISHED MARCH 8, 1932. Class 21.

294,306. METALLIC WIRE AND STRIPS FOR USE FOR PARTS OF RADIO TUBES. DRIVER-HARRIS COMPANY, Harrison, N. J.
Filed January 11, 1932. Serial No. 322,881. PUBLISHED MARCH 8, 1932. Class 21.

294,307. ELECTRIC ARC SWITCHES FOR CONTROLLING THE CIRCUITS TO NEON TUBES AND THE LIKE. HEALY-DAVIDSON CORPORATION, Chicago, Ill.
Filed December 14, 1931. Serial No. 322,105. PUBLISHED MARCH 1, 1923. Class 21.

294,308. MICROPHONES USED IN RADIO BROADCASTING. RADIO TELEVISION INDUSTRIES CORPORATION, Waltham and Boston, Mass.
Filed January 11, 1932. Serial No. 322,892. PUBLISHED MARCH 8, 1932. Class 21.

294,309. ELECTRICAL GOODS AND APPARATUS CONSISTING OF ELECTRIC TRANSFORMERS SUCH AS BELL-RINGING OR SIMILAR LOW POWER-OUTPUT TRANSFORMERS. EDWARDS AND COMPANY, INC., New York, N. Y.
Filed January 15, 1932. Serial No. 323,033. PUBLISHED MARCH 8, 1932. Class 21.

294,310. ELECTRICAL GOODS AND APPARATUS, CONSISTING OF ELECTRICALLY OPERATED BELLS SUCH AS SIGNALING BELLS. EDWARDS AND COMPANY, INC., New York, N. Y.
Filed January 15, 1932. Serial No. 323,034. PUBLISHED MARCH 8, 1932. Class 21.

294,311. ELECTRICAL GOODS AND APPARATUS, CONSISTING OF ELECTRICALLY OPERATED BELLS SUCH AS SIGNALING BELLS. EDWARDS AND COMPANY, INC., New York, N. Y.
Filed January 15, 1932. Serial No. 323,035. PUBLISHED MARCH 8, 1932. Class 21.

294,312. ELECTRICAL GOODS AND APPARATUS, CONSISTING OF ELECTRICALLY OPERATED BELLS AND BUZZERS. EDWARDS AND COMPANY, INC., New York, N. Y.
Filed January 15, 1932. Serial No. 323,036. PUBLISHED MARCH 8, 1932. Class 21.

294,313. ELECTRICAL GOODS AND APPARATUS, CONSISTING OF ELECTRICALLY OPERATED BUZZERS. EDWARDS AND COMPANY, INC., New York, N. Y.
Filed January 15, 1932. Serial No. 323,037. PUBLISHED MARCH 8, 1932. Class 21.

294,314. PLATE SEPARATORS FOR STORAGE BATTERIES. HOOVER BATTERY PRODUCTS CO., Kansas City, Mo.
Filed January 22, 1932. Serial No. 323,296. PUBLISHED MARCH 15, 1932. Class 21.

294,315. ELECTRIC MOTOR ACTUATED HYDRAULIC OPERATING MECHANISM. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed December 21, 1931. Serial No. 322,316. PUBLISHED MARCH 1, 1932. Class 21.

294,316. METALLIC CONDUITS OR HOUSINGS FOR ELECTRICAL CONDUCTORS. THE TRUMBULL ELECTRIC MANUFACTURING COMPANY, Plainville, Conn.
Filed January 23, 1932. Serial No. 323,374. PUBLISHED MARCH 15, 1932. Class 21.

294,317. SWITCHES, PLATES, RECEPTACLES, AND CONNECTING DEVICES FOR ELECTRICAL WIRING DEVICES. THE ARROW-HART & HEGEMAN ELECTRIC COMPANY, Hartford, Conn.
Filed January 25, 1932. Serial No. 323,386. PUBLISHED MARCH 15, 1932. Class 21.

294,318. ELECTRIC LANTERNS. BOND ELECTRIC CORPORATION, Jersey City, N. J.
Filed January 28, 1932. Serial No. 323,516. PUBLISHED MARCH 15, 1932. Class 21.

294,319. ELECTRON TUBES. CABLE RADIO TUBE CORPORATION, Brooklyn, N. Y.
Filed December 30, 1931. Serial No. 322,544. PUBLISHED MARCH 8, 1932. Class 21.

294,320. PAPER IMPREGNATED WITH OIL AND POLISHING COMPOSITION TO BE USED FOR POLISHING AND DUSTING TISSUE. BENNINGTON WAX PAPER COMPANY, Bennington, Vt.
Filed August 6, 1931. Serial No. 317,699. PUBLISHED SEPTEMBER 29, 1931. Class 4.

294,321. APPLICATORS FOR ANTISEPTICS. THE KLORAMENE COMPANY, Denver, Colo.
Filed October 16, 1931. Serial No. 320,146. PUBLISHED MARCH 8, 1932. Class 44.

294,322. ALL KINDS OF FOOTWEAR—NAMELY, SHOES, SLIPPERS, BOOTS, AND RUBBERS MADE OF LEATHER, RUBBER, OR FABRIC OR OF COMBINATIONS OF THESE MATERIALS FOR MEN, WOMEN, AND CHILDREN. TRU-FORM SHOES, INC., New York, N. Y.
Filed October 20, 1931. Serial No. 320,244. PUBLISHED MARCH 8, 1932. Class 39.

294,323. POLISHING PREPARATIONS FOR BOOTS AND SHOES. THE KIWI POLISH COMPANY PROPRIETARY LIMITED, Richmond, near Melbourne, Australia.
Filed October 22, 1931. Serial No. 320,308. PUBLISHED MARCH 8, 1932. Class 4.

294,324. POLISHING AND CLEANING PREPARATIONS AND DRESSINGS FOR BOOTS AND SHOES. THE KIWI POLISH COMPANY PROPRIETARY LIMITED, Richmond, near Melbourne, Australia.
Filed October 22, 1931. Serial No. 320,309. PUBLISHED MARCH 8, 1932. Class 4.

294,325. MEN'S SHOES MADE WHOLLY OR IN PART OF LEATHER AND FABRIC. E. T. WRIGHT & COMPANY, INC., Rockland, Mass.
Filed October 28, 1931. Serial No. 320,566. PUBLISHED MARCH 8, 1932. Class 39.

294,326. BAND FOR DRESSING THE HAIR. LOUIS M. NOTO, doing business as The Roll-A-Bob Co., Chicago, Ill.
Filed November 12, 1931. Serial No. 321,127. PUBLISHED MARCH 8, 1932. Class 40.

294,327. HANDBAGS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 11, 1931. Serial No. 322,030. PUBLISHED MARCH 1, 1932. Class 3.

294,328. WEARING APPAREL FOR MEN AND WOMEN; CAPS AND HATS OF FELT, STRAW, SILK, CLOTH, AND FUR; OVERCOATS, SPORT JACKETS, TROUSERS, KNICKERS, LEATHER JACKETS, MUFFLERS, SCARFS, AND NECKTIES. THE CROFUT & KNAPP COMPANY, South Norwalk, Conn.
Filed December 12, 1931. Serial No. 322,042. PUBLISHED MARCH 8, 1932. Class 39.

294,329. BIRD SEEDS. ARTHUR MARKOS, doing business as Mirrokel Pet Products, New York, N. Y.
Filed December 14, 1931. Serial No. 322,108. PUBLISHED MARCH 8, 1932. Class 46.

294,330. HAIR GOODS—NAMELY, HAIR TRANSFORMATIONS, HAIR WIGS, HAIR PADS, NON-ELECTRICAL CURLING IRONS, AND HAIR PINS MADE OF MATERIAL OTHER THAN PRECIOUS METAL. WELLA WAVING CORPORATION, New York, N. Y.
Filed December 14, 1931. Serial No. 322,121. PUBLISHED MARCH 8, 1932. Class 40.

294,331. WORK GLOVES OF FABRIC AND COMBINED FABRIC AND LEATHER. WELLS-LAMONT MANUFACTURING COMPANY, Minneapolis, Minn.
Filed December 22, 1931. Serial No. 322,409. PUBLISHED MARCH 8, 1932. Class 39.

294,332. HAND BAGS. A. I. MAGID COMPANY, New York, N. Y.
Filed December 29, 1931. Serial No. 322,516. PUBLISHED MARCH 1, 1932. Class 3.

294,333. ABRASIVE PAPERS AND CLOTHS. ABRASIVE PRODUCTS, INC., Boston, Mass.
Filed January 2, 1932. Serial No. 322,619. PUBLISHED MARCH 8, 1932. Class 4.

294,334. COMBINED COMB AND BRUSH (BEING A COMB WITH AN ATTACHMENT HAVING THE FACULTY OF ACTING AS A BRUSH) NOT MADE OF PRECIOUS METAL. ARTHUR J. MCCLOSKEY, Philadelphia, Pa.
Filed December 30, 1931. Serial No. 322,552. PUBLISHED MARCH 8, 1932. Class 40.

294,335. ABRASIVE PAPERS AND CLOTHS. ABRASIVE PRODUCTS, INC., Boston, Mass.
Filed January 2, 1932. Serial No. 322,620. PUBLISHED MARCH 8, 1932. Class 4.

294,336. HOSIERY. ARTCRAFT SILK HOSIERY MILLS, INC., Philadelphia, Pa.
Filed January 5, 1932. Serial No. 322,729. PUBLISHED MARCH 1, 1932. Class 39.

294,337. CATAMENIAL BANDAGES. VELDOWN COMPANY, INC., New York, N. Y.
Filed January 8, 1932. Serial No. 322,830. PUBLISHED MARCH 8, 1932. Class 44.

294,338. ABSORBENT COTTON, ABSORBENT GAUZE, AND SANITARY NAPKINS. MCCRORY STORES CORPORATION, New York, N. Y.
Filed January 9, 1932. Serial No. 322,850. PUBLISHED MARCH 8, 1932. Class 44.

294,339. COAL. NATIONAL FUEL COMPANY, Denver, Colo.
Filed January 11, 1932. Serial No. 322,888. PUBLISHED MARCH 1, 1932. Class 1.

294,340. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed January 15, 1932. Serial No. 323,042. PUBLISHED MARCH 8, 1932. Class 46.

294,341. PERMANENT WAVE PADS. BES-TONE LABORATORIES, LTD., New York, N. Y.
Filed January 19, 1932. Serial No. 323,159. PUBLISHED MARCH 8, 1932. Class 44.

294,342. ADHESIVES IN LIQUID, DRY, OR POWDERED CONDITION, AND PARTICULARLY FOR POWDER FOR MAKING AN ADHESIVE PASTE. THE ARABOL MANUFACTURING COMPANY, New York, N. Y.
Filed January 20, 1932. Serial No. 323,185. PUBLISHED MARCH 1, 1932. Class 5.

294,343. NUT FLOURS FOR BAKERS' AND CONFECTIONERS' USE. PLANTERS NUT AND CHOCOLATE COMPANY, Wilkes-Barre, Pa., and Suffolk, Va.
Filed January 23, 1932. Serial No. 323,355. PUBLISHED MARCH 1, 1932. Class 46.

294,344. PREPARED AND FLAVORED NUT FLOURS. PLANTERS NUT AND CHOCOLATE COMPANY, Wilkes-Barre, Pa., and Suffolk, Va.
Filed January 23, 1932. Serial No. 323,357. PUBLISHED MARCH 1, 1932. Class 46.

294,345. MASSAGE DEVICES. THERMASSEUR LABORATORIES, INC., Minneapolis, Minn.
Filed January 25, 1932. Serial No. 323,424. PUBLISHED MARCH 8, 1932. Class 44.

294,346. SHAVING CREAMS AND SOAPS AND PERFUMED SOAPS. T. F. BRISTOW & CO. LIMITED, London, England.
Filed December 30, 1931. Serial No. 322,543. PUBLISHED MARCH 8, 1932. Class 4.

294,347. PENCILS, PARTICULARLY SELF FEEDING PENCILS. MAGAZINE PENCIL COMPANY, INC., New York, N. Y., assignor to Hendrick J. Van Spanje, New York, N. Y.
Filed January 12, 1932. Serial No. 322,936. PUBLISHED MARCH 1, 1932. Class 37.

294,348. GOLF CLUBS, GOLF BAGS, GOLF BALLS, AND TEES. JOHN B. MACKIE, Far Rockaway, N. Y.
Filed February 8, 1932. Serial No. 323,952. PUBLISHED MARCH 15, 1932. Class 22.

294,349. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed February 8, 1932. Serial No. 323,971. PUBLISHED MARCH 15, 1932. Class 22.

294,350. ANTISEPTIC MOUTH WASH. INDEPENDENT DRUGGISTS' ALLIANCE DISTRIBUTING CO., Chicago, Ill.
Filed July 30, 1931. Serial No. 317,468. PUBLISHED MARCH 15, 1932. Class 6.

294,351. THERAPEUTIC MINERALS WHICH ARE ADAPTED FOR HUMAN USE, BOTH INTERNALLY AND EXTERNALLY, AS A BLOOD CLEANSER, TISSUE BUILDER, AND ANTITOXIC AGENT. ADOLF WALTER VON LANGE, doing business as Mineral-Kur Institute, Los Angeles, Calif.
Filed August 4, 1931. Serial No. 317,651. PUBLISHED MARCH 15, 1932. Class 6.

294,352. PREPARATION FOR QUIETING NERVES. THEODOR H. TEMMLER, doing business as Temmler-Werke Vereinigte Chemische Fabriken Hermann Temmler, Berlin-Johannisthal, Germany.
Filed August 13, 1931. Serial No. 317,961. PUBLISHED MARCH 15, 1932. Class 6.

294,353. INSECTICIDE IN LIQUID FORM. LIQUID VENEER CORP., Buffalo, N. Y.
Filed September 2, 1931. Serial No. 318,667. PUBLISHED MARCH 8, 1932. Class 6.

294,354. TOOTH PASTE. WALTER JANVIER, INC., New York, N. Y.
Filed September 23, 1931. Serial No. 319,327. PUBLISHED MARCH 8, 1932. Class 6.

294,355. FACE POWDER, LIP STICK, FACE ROUGE, CLEANSING CREAM, COLD CREAM, FOUNDATION CREAM, ASTRINGENT LOTION, NAIL POLISH, LIQUID NAIL POLISH REMOVER AND TISSUE CREAM, MASCARA, EYE SHADOW PREPARATION, HAND LOTION, CUCUMBER FACE CREAM, AND MUSCLE OIL, BENZOIN AND ALMOND SKIN LOTION, LEMON SKIN LOTION, CUCUMBER SKIN LOTION, BRILLIANTINE. HARRY D. KOENIG, doing business as Harry D. Koenig & Co., New York, N. Y.
Filed November 13, 1931. Serial No. 321,107. PUBLISHED MARCH 8, 1932. Class 6.

294,356. HAND LOTION. HARRISON REFINING CO., INC., New York, N. Y.
Filed November 21, 1931. Serial No. 321,381. PUBLISHED MARCH 15, 1932. Class 6.

294,357. MANGE OINTMENT. RYAN WILSON GOWDY, Greensburg, Ind.
Filed December 3, 1931. Serial No. 321,725. PUBLISHED MARCH 8, 1932. Class 6.

294,358. COSMETICS—NAMELY, FACE CREAMS. INDEPENDENT DRUGGISTS' ALLIANCE DISTRIBUTING CO., Chicago, Ill.
Filed December 11, 1931. Serial No. 322,018. PUBLISHED MARCH 8, 1932. Class 6.

294,359. EGG-TESTERS. CECIL STARKE HASSELL, Miami, Fla.
Filed December 14, 1931. Serial No. 322,104. PUBLISHED MARCH 15, 1932. Class 26.

294,360. PREPARATIONS FOR USE IN THE TREATMENT OF HAIR—NAMELY, HAIR DYES, HAIR LOTIONS, PREPARATIONS IN THE NATURE OF SHAMPOO FOR WASHING HAIR, PREPARATIONS FOR WAVING AND CURLING THE HAIR. WELLA WAVING CORPORATION, New York, N. Y.
Filed December 14, 1931. Serial No. 322,119. PUBLISHED MARCH 15, 1932. Class 6.

294,361. PREPARATION USED FOR CANNIBALISM IN POULTRY. APOTHECARIES HALL COMPANY, Waterbury, Conn.
Filed December 17, 1931. Serial No. 322,205. PUBLISHED MARCH 8, 1932. Class 6.

294,362. INSECTICIDES, FUNGICIDES, DISINFECTANTS, DEODORANTS, AND DERRIS ROOT. DERRIS, INC., New York, N. Y.
Filed December 21, 1931. Serial No. 322,311. PUBLISHED MARCH 15, 1932. Class 6.

294,363. PAPER (CONSISTING OF SHEETS ADAPTED TO RECEIVE COPY, WRITING, OR IMPRESSIONS). A. B. DICK COMPANY, Chicago, Ill.
Filed July 18, 1931. Serial No. 317,075. PUBLISHED MARCH 1, 1932. Class 37.

294,364. PUBLICATIONS ISSUED FROM TIME TO TIME. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed November 17, 1931. Serial No. 321,215. PUBLISHED MARCH 1, 1932. Class 38.

294,365. GUMMED SEALING TAPE. WORTENDYKE MANUFACTURING COMPANY, Richmond, Va.
Filed December 1, 1931. Serial No. 321,675. PUBLISHED MARCH 8, 1932. Class 37.

294,366. WEEKLY PUBLICATION. EMPORIUM-WORLD MILLINERY CO., Chicago, Ill.
Filed December 24, 1931. Serial No. 322,423. PUBLISHED MARCH 1, 1932. Class 38.

294,367. PERIODICAL. INTERIOR ARCHITECTURE & DECORATION PUBLISHING COMPANY, INC., New York, N. Y.
Filed December 24, 1931. Serial No. 322,428. PUBLISHED MARCH 8, 1932. Class 38.

294,368. BOND PAPER. THE PARKER-YOUNG COMPANY, Portland, Me., and Boston, Mass.
Filed January 4, 1932. Serial No. 322,705. PUBLISHED MARCH 8, 1932. Class 37.

294,369. VACUUM BOTTLES. THE AMERICAN THERMOS BOTTLE COMPANY, Norwich, Conn.
Filed January 16, 1932. Serial No. 323,082. PUBLISHED MARCH 8, 1932. Class 2.

294,370. AIR FILTERS FOR VENTILATING. OWENS-ILLINOIS GLASS COMPANY, Toledo, Ohio.
Filed January 18, 1932. Serial No. 323,143. PUBLISHED MARCH 15, 1932. Class 34.

294,371. METAL VALVES FOR CONTROLLING THE FLOW OF FLUIDS. READING-PRATT & CADY COMPANY, INC., Bridgeport, Conn.
Filed January 19, 1932. Serial No. 323,175. PUBLISHED MARCH 15, 1932. Class 13.

294,372. HAND SLEDS. KALAMAZOO SLED COMPANY, Kalmazoo, Mich.
Filed January 18, 1932. Serial No. 323,137. PUBLISHED MARCH 15, 1932. Class 22.

294,373. FLAVORINGS FOR ICINGS AND FILLINGS. HARTUNG BROTHERS, New York, N. Y.
Filed January 21, 1932. Serial No. 323,243. PUBLISHED MARCH 8, 1932. Class 46.

294,374. ALTAR AND CHURCH LAMPS. WILL & BAUMER CANDLE CO. INC., Syracuse, N. Y.
Filed January 18, 1932. Serial No. 323,154. PUBLISHED MARCH 8, 1932. Class 34.

294,375. PADLOCKS. ISSACHAR P. REESE, doing business as Reese Padlock Company, Lancaster, Pa.
Filed January 14, 1932. Serial No. 323,264. PUBLISHED MARCH 8, 1932. Class 25.

294,376. NON-ALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK. LA SALLE BOTTLING COMPANY, St. Louis, Mo.
Filed January 21, 1932. Serial No. 323,245. PUBLISHED MARCH 15, 1932. Class 45.

294,377. SAFES AND CURRENCY DRAWERS. THE YALE & TOWNE MANUFACTURING CO., Stamford, Conn.
Filed January 22, 1932. Serial No. 323,434. PUBLISHED MARCH 8, 1932. Class 25.

294,378. DOOR, WINDOW, WARDROBE, AND PARTITION LOCKS AND LATCHES. AUSTRAL WINDOW COMPANY, New York, N. Y., and Augusta, Me.
Filed January 26, 1932. Serial No. 323,443. PUBLISHED MARCH 8, 1932. Class 25.

294,379. NAILS. W. W. CROSS & COMPANY, INCORPORATED, Portland, Me.
Filed January 27, 1932. Serial No. 323,483. PUBLISHED MARCH 8, 1932. Class 13.

294,380. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. TRY ME BEVERAGE AND COMPOUND COMPANY, Birmingham, Ala.
Filed February 1, 1932. Serial No. 323,730. PUBLISHED MARCH 15, 1932. Class 45.

294,381. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. GUSTAV GUTFREUND, doing business as Lamona Extract & Mfg. Co., Des Moines, Iowa.
Filed February 3, 1932. Serial No. 323,781. PUBLISHED MARCH 15, 1932. Class 45.

294,382. GAME PLAYED WITH SPOTTED CUBES UNLIKE REGULAR DICE, THE PLAY BEING SCORED IN A SIMILAR MANNER TO THAT USED IN BOWLING ALLEYS. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed February 4, 1932. Serial No. 323,828. PUBLISHED MARCH 15, 1932. Class 22.

294,383. GAME PLAYED WITH A RULED PAD HAVING VARIOUS SUBJECTS SET OFF THEREBY. RONALD P. BOARDMAN, doing business as The Midwest Book and Game Company, Lake Forest, Ill.
Filed February 5, 1932. Serial No. 323,856. PUBLISHED MARCH 15, 1932. Class 22.

294,384. CARTOON AND COMIC STRIP. STUYVESANT LESTON HUNTLEY, Chicago, Ill.
Filed January 11, 1932. Serial No. 322,895. PUBLISHED MARCH 8, 1932. Class 38.

294,385. SOLES AND HALF SOLES FOR SHOES. SAMUEL I. MORE, Chicago, Ill., and Pasadena, Calif., assignor to Sam The Shoe Doctor, Inc., Chicago, Ill., a Corporation of Illinois.
Filed December 18, 1931. Serial No. 322,263. PUBLISHED MARCH 8, 1932. Class 39.

294,386. ELASTIC OR RUBBER BANDS BUNCHED TOGETHER AND HELD BY A CIRCULAR BAND AROUND THE CENTER THEREOF. A. W. FABER, INC., Newark, N. J.
Filed December 29, 1931. Serial No. 322,506. PUBLISHED MARCH 1, 1932. Class 37.

294,387. DAILY MIMEOGRAPHED NEWSPAPER. MARSON M. EATON, JR., Kellogg, Idaho.
Filed January 12, 1932. Serial No. 322,928. PUBLISHED MARCH 8, 1932. Class 38.

294,388. PERIODIC PUBLICATIONS. ARTHUR O. HARRIS, Buffalo, N. Y.
Filed January 13, 1932. Serial No. 322,958. PUBLISHED MARCH 8, 1932. Class 38.

294,389. WRAPPING PAPER. RHINELANDER PAPER COMPANY, Rhinelander, Wis.
Filed January 15, 1932. Serial No. 323,062. PUBLISHED MARCH 1, 1932. Class 37.

294,390. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS. WORTENDYKE MANUFACTURING CO., Richmond, Va.
Filed January 19, 1932. Serial No. 323,180. PUBLISHED MARCH 8, 1932. Class 37.

294,391. PERIODICAL. THE CLUB MANAGERS SERVICE CORPORATION, Chicago, Ill.
Filed January 21, 1932. Serial No. 323,224. PUBLISHED MARCH 8, 1932. Class 38.

294,392. PERIODICAL PUBLISHED MONTHLY. PAINT TRADE PUBLICATIONS, INC., Chicago, Ill.
Filed January 21, 1932. Serial No. 323,249. PUBLISHED MARCH 8, 1932. Class 38.

294,393. NEWSPAPER SECTION. NEWS SYNDICATE CO. INC., New York, N. Y.
Filed January 22, 1932. Serial No. 323,305. PUBLISHED MARCH 8, 1932. Class 38.

294,394. PERIODICAL. JOURNEYMEN BARBERS INTERNATIONAL UNION OF AMERICA, Indianapolis, Ind.
Filed January 16, 1932. Serial No. 323,115. PUBLISHED MARCH 8, 1932. Class 38.

294,395. WRITING PAPER. HERMAN GROVER, New York, N. Y.
Filed January 23, 1932. Serial No. 323,329. PUBLISHED MARCH 8, 1932. Class 37.

294,396. MONTHLY PUBLICATION. PAYNE COAL COMPANY, INC., Wilkes-Barre, Pa.
Filed January 26, 1932. Serial No. 323,465. PUBLISHED MARCH 8, 1932. Class 38.

294,397. TRADING STAMPS AND TRADING STAMP BOOKS. SECURITY COUPON CORPORATION, New York, N. Y.
Filed January 28, 1932. Serial No. 323,547. PUBLISHED MARCH 8, 1932. Class 38.

294,398. NEWSPAPER ARTICLES PUBLISHED IN A CONTINUING SERIES. THE ASSOCIATED PRESS, New York, N. Y.
Filed March 1, 1929. Serial No. 280,092. PUBLISHED MARCH 1, 1932. Class 38.

294,399. NEWSPAPER ARTICLES PUBLISHED IN A CONTINUING SERIES. THE ASSOCIATED PRESS, New York, N. Y.
Filed March 1, 1929. Serial No. 280,094. PUBLISHED MARCH 1, 1932. Class 38.

294,400. NEWSPAPER ARTICLES PUBLISHED IN A CONTINUING SERIES. THE ASSOCIATED PRESS, New York, N. Y.
Filed March 1, 1929. Serial No. 280,093. PUBLISHED MARCH 1, 1932. Class 38.

294,401. NEWSPAPER ARTICLES PUBLISHED IN A CONTINUING SERIES. THE ASSOCIATED PRESS, New York, N. Y.
Filed March 1, 1929. Serial No. 280,095. PUBLISHED MARCH 1, 1932. Class 38.

294,402. NEWSPAPER ARTICLES PUBLISHED IN A CONTINUING SERIES. THE ASSOCIATED PRESS, New York, N. Y.
Filed March 1, 1929. Serial No. 280,097. PUBLISHED MARCH 1, 1932. Class 38.

294,403. NEWSPAPER ARTICLES PUBLISHED IN A CONTINUING SERIES. THE ASSOCIATED PRESS, New York, N. Y.
Filed July 1, 1929. Serial No. 286,412. PUBLISHED MARCH 1, 1932. Class 38.

294,404. CERTAIN NAMED WEARING APPAREL. NORTHWESTERN BUYERS & JOBBERS, INC., St. Paul, Minn.
Filed October 12, 1929. Serial No. 291,017. PUBLISHED MARCH 8, 1932. Class 39.

294,405. INGREDIENTS OF FOODS—NAMELY, SYNTHETIC FLAVORINGS FOR USE IN CONFECTIONERY AND FOODSTUFFS. THE DOW CHEMICAL COMPANY, Midland, Mich.
Filed December 2, 1929. Serial No. 294,043. PUBLISHED MARCH 8, 1932. Class 46.

294,406. RAILROAD VEHICLE ELECTRIC LIGHTING APPARATUS. SIMPLEX EQUIPMENT COMPANY, INC., New Haven, Conn., and New York, N. Y.
Filed December 26, 1929. Serial No. 294,090. PUBLISHED MARCH 1, 1932. Class 21.

294,407. FOUNTAIN PENS AND PENCILS. MONTGOMERY WARD & CO., INCORPORATED, Chicago, Ill.
Filed January 8, 1930. Serial No. 294,538. PUBLISHED NOVEMBER 24, 1931. Class 37.

294,408. A TABLE AND PARTS THEREOF ESPECIALLY CONSTRUCTED FOR A GAME. PARKER BROTHERS, INC., Salem, Mass.
Filed January 25, 1930. Serial No. 295,229. PUBLISHED MARCH 15, 1932. Class 22.

294,409. HEATING-SYSTEM DEVICES IN THE NATURE OF RADIATOR INCLOSURES AND CABINETS SERVING PRIMARILY TO DEFLECT, CONTROL, AND DISTRIBUTE HEAT. TUTTLE & BAILEY MANUFACTURING COMPANY, New York, N. Y.
Filed February 21, 1930. Serial No. 296,372. PUBLISHED MARCH 15, 1932. Class 34.

294,410. OIL BURNERS FOR USE IN BOILER FURNACES. VOLCANO BURNER CORPORATION, New York, N. Y.
Filed September 25, 1930. Serial No. 306,075. PUBLISHED MARCH 3, 1931. Class 34.

294,411. ELECTRIC LAMP SOCKETS AND CHRISTMAS TREE LIGHTING OUTFITS. NOMA ELECTRIC CORPORATION, New York, N. Y.
Filed December 5, 1930. Serial No. 308,634. PUBLISHED FEBRUARY 16, 1932. Class 21.

294,412. COFFEE, TEAS, CHOCOLATE, ETC. EUREKA TEA CO., Chicago, Ill.
Filed December 5, 1930. Serial No. 308,619. PUBLISHED MARCH 8, 1932. Class 46.

294,413. GLASS COFFINS. GEORGE SHARPE WHITE, Nashville, Tenn.
Filed December 5, 1930. Serial No. 308,664. PUBLISHED MARCH 15, 1932. Class 2.

294,414. COATED PAPER FOR PRINTING. OXFORD PAPER COMPANY, New York, N. Y.
Filed September 22, 1931. Serial No. 319,293. PUBLISHED DECEMBER 15, 1931. Class 37.

294,415. RADIATORS OR PIPE COILS FOR HEATING, COOLING, OR DRYING PURPOSES BY MEANS OF WATER, STEAM, OR OTHER FLUID; BOILERS FOR HEATING OR STOVES FOR HEATING OR COOKING BY MEANS OF WATER, STEAM, OR AIR. NATIONAL RADIATOR COMPANY LIMITED. Kingston-Upon-Hull, England.
Filed October 29, 1931. Serial No. 320,602. PUBLISHED MARCH 15, 1932. Class 34.

294,416. FRESH CELERY. WAYNE COUNTY CELERY GROWERS' ASSOCIATION, Sodus, N. Y.
Filed November 2, 1931. Serial No. 320,743. PUBLISHED MARCH 8, 1932. Class 46.

294,417. ELECTRICAL FIRE ALARM SYSTEMS AND PARTS THEREOF—NAMELY, FIRE ALARM BOXES AND SHELLS THEREFOR. THE GAMEWELL COMPANY, Newton, Mass.
Filed November 4, 1931. Serial No. 320,780. PUBLISHED MARCH 1, 1932. Class 21.

294,418. RADIO ELECTRON TUBES. NATIONAL UNION RADIO CORPORATION, Newark, N. J.
Filed November 23, 1931. Serial No. 321,435. PUBLISHED MARCH 1, 1932. Class 21.

294,419. CANDY. HAWLEY & HOOPS, New York, N. Y.
Filed December 21, 1931. Serial No. 322,318. PUBLISHED FEBRUARY 16, 1932. Class 46.

294,420. COFFEE. GEO. W. CASWELL CO., San Francisco, Calif.
Filed December 17, 1931. Serial No. 322,207. PUBLISHED MARCH 8, 1932. Class 46.

294,421. MAGAZINES. THE EXECUTORS OF THE ESTATE OF WILLIAM EDWIN RUDGE, doing business as William Edwin Rudge, Publisher, New York, N. Y.
Filed December 19, 1931. Serial No. 322,293. PUBLISHED MARCH 1, 1932. Class 38.

294,422. PAPER. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed December 22, 1931. Serial No. 322,353. PUBLISHED MARCH 8, 1932. Class 37.

294,423. ELECTRICAL RESISTANCE AND TREATING WIRES; RADIO TUBE PARTS SUCH AS FILAMENTS, PLATES, GRIDS, AND SUPPORT WIRES; FUSE WIRES; AND SHEET, RIBBONS, AND RODS FOR ELECTRICAL PURPOSES AND USES. GILBY WIRE COMPANY, Newark, N. J.
Filed December 26, 1931. Serial No. 322,462. PUBLISHED MARCH 1, 1932. Class 21.

294,424. ELECTRICAL WAFFLE IRONS. DOMINION ELECTRICAL MFG. COMPANY, doing business as Justrite Electrical Mfg. Company, Minneapolis, Minn.
Filed January 2, 1932. Serial No. 322,631. PUBLISHED MARCH 8, 1932. Class 21.

294,425. CANDY. R. B. HOYT, doing business as Hoyt Bros., Seattle, Wash.
Filed January 18, 1932. Serial No. 323,131. PUBLISHED MARCH 15, 1932. Class 46.

294,426. SHEET METAL BOXES FOR UTILITARIAN AND NOVELTY PURPOSES. KENNEDY MANUFACTURING COMPANY, Van Wert, Ohio.
Filed January 18, 1932. Serial No. 323,138. PUBLISHED MARCH 15, 1932. Class 2.

294,427. CANNED SALMON AND SHRIMP. BENSON FISH COMPANY, Chicago, Ill.
Filed January 15, 1932. Serial No. 323,022. PUBLISHED MARCH 15, 1932. Class 46.

294,428. VEGETABLE COMPOUND FOR FLAVORING SOUPS AND SAUCES. R. HICKMOTT CANNING COMPANY, San Francisco, Calif.
Filed January 15, 1932. Serial No. 323,047. PUBLISHED MARCH 8, 1932. Class 46.

294,429. HANDKERCHIEF CASES AND PAJAMA CASES MADE OF RIBBONS, RAYON, CREPE, SILK, COTTON, OR OTHER FABRIC AND/OR ANY COMBINATION THEREOF. A. L. SIEGEL CO., INC., New York, N. Y.
Filed January 21, 1932. Serial No. 323,255. PUBLISHED MARCH 15, 1932. Class 2.

294,430. GRANULATED NUTS FOR BAKERS' AND CONFECTIONERS' USE. PLANTERS NUT AND CHOCOLATE COMPANY, Wilkes-Barre, Pa., and Suffolk, Va.
Filed January 23, 1932. Serial No. 323,356. PUBLISHED MARCH 15, 1932. Class 46.

294,431. HEATING-SYSTEM DEVICES IN THE NATURE OF RADIATOR INCLOSURES AND CABINETS SERVING PRIMARILY TO DEFLECT, REFLECT, CONTROL, AND DISTRIBUTE HEAT. TUTTLE & BAILEY MANUFACTURING COMPANY, New York and Brooklyn, N. Y.
Filed March 5, 1931. Serial No. 311,801. PUBLISHED MARCH 15, 1932. Class 34.

294,432. HEATING-SYSTEM DEVICES IN THE NATURE OF RADIATOR INCLOSURES AND CABINETS SERVING PRIMARILY TO DEFLECT, REFLECT, CONTROL, AND DISTRIBUTE HEAT. TUTTLE & BAILEY MANUFACTURING COMPANY, New York and Brooklyn, N. Y.
Filed March 5, 1931. Serial No. 311,802. PUBLISHED MARCH 15, 1932. Class 34.

294,433. POTATO CHIPS. DONALD EDWARD HOLMES, doing business as Ace Food Co., Atlanta, Ga.
Filed March 6, 1931. Serial No. 311,837. PUBLISHED MARCH 15, 1932. Class 46.

294,434. WASH BASINS, SINKS, BATH TUBS, ETC. FRANK J. BENTZ, doing business as Fixzit System, Miami, Fla.
Filed March 13, 1931. Serial No. 312,084. PUBLISHED MARCH 15, 1932. Class 13.

294,435. GASOLINE. SIGNAL OIL & GAS COMPANY, Los Angeles, Calif.
Filed April 15, 1931. Serial No. 313,392. PUBLISHED MARCH 8, 1932. Class 15.

294,436. NONALCOHOLIC, MALTLESS FRUIT-FLAVORED POWDER FOR MAKING SOFT DRINKS. SKINNER MANUFACTURING COMPANY, Omaha, Nebr.
Filed May 1, 1931. Serial No. 314,080. PUBLISHED MARCH 15, 1932. Class 45.

294,437. INCANDESCENT MANTLES OF EVERY KIND. "DIAMCO" AKT.-GES. FÜR GLÜHLICHT, Berlin, Germany.
Filed May 14, 1931. Serial No. 314,557. PUBLISHED MARCH 8, 1932. Class 34.

294,438. ROLLER SKATES. CHICAGO ROLLER SKATE COMPANY, Chicago, Ill.
Filed March 30, 1931. Serial No. 312,694. PUBLISHED MARCH 15, 1932. Class 22.

294,439. ROLLER SKATES. CHICAGO ROLLER SKATE COMPANY, Chicago, Ill.
Filed March 30, 1931. Serial No. 312,695. PUBLISHED MARCH 15, 1932. Class 22.

294,440. NEWSPAPER SYNDICATE STRIP OR PRINT. E. LEE PATTERSON, Fort Worth, Tex.
Filed July 24, 1931. Serial No. 317,271. PUBLISHED MARCH 1, 1932. Class 38.

294,441. PLACARDS, POSTERS, PAMPHLETS, AND BOOKLETS PUBLISHED FROM TIME TO TIME. PROFESSIONAL SERVICE CORPORATION, Providence, R. I., assignor to National Health Plan, Inc., a Corporation of Rhode Island.
Filed August 6, 1931. Serial No. 317,738. PUBLISHED MARCH 1, 1932. Class 38.

294,442. CANNED FRUITS AND VEGETABLES. THE VAN CAMP PACKING COMPANY, INC., Indianapolis, Ind.
Filed August 10, 1931. Serial No. 317,862. PUBLISHED MARCH 1, 1932. Class 46.

294,443. COCOA, CHOCOLATE, AND COCOA BUTTER FOR FOOD PURPOSES. C. J. VAN HOUTEN & ZOON, Weesp, Netherlands.
Filed August 18, 1931. Serial No. 318,119. PUBLISHED MARCH 15, 1932. Class 46.

294,444. ELECTROMOTORS, DYNAMOS, TRANSFORMERS, GALVANIC CELLS, ELECTRICALLY OPERATED VISUAL AND SOUND SIGNALS FOR VEHICLES, BATTERIES, AND PARTS THEREFOR. PHILIPP BURGER, Berlin, Germany.
Filed May 29, 1930. Serial No. 301,567. PUBLISHED MARCH 1, 1932. Class 21.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

294,445. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JULIUS H. MAHLER, New York, N. Y. Filed May 28, 1930. Serial No. 301,483.

CLEAR VIEW

For Head Nets for Fishermen's Use.
Claims use since May 12, 1930.

294,446. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BILTMORE CONSERVATION CORPORATION, Los Angeles, Calif. Filed Oct. 23, 1930. Serial No. 307,087.

Best-Yet

For Poultry, Hog, and Cattle Food.
Claims use since Dec. 15, 1927.

294,447. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) W. J. HOLLIDAY & COMPANY, Indianapolis, Ind. Filed Dec. 18, 1930. Serial No. 309,132.

SANDOW

For Alloy Steel.
Claims use since June 1, 1930.

294,448. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) IMPORT CENTRE, INC., New York, N. Y. Filed Mar. 14, 1931. Serial No. 312,152.

SERAFIN

For Figurines, Mannikins, Models and Lay Figures for Store, Window, and Studio Display and Parts Thereof.
Claims use since February, 1931.

294,449. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BALLARD & BALLARD CO., Louisville, Ky. Filed Mar. 24, 1931. Serial No. 312,471.

OvenReady

For Uncooked or Unbaked Dough Formations Such as Rolls or Biscuits, Bread, Crullers, and the Like.
Claims use since Mar. 9, 1931.

294,450. (CLASS 39. CLOTHING.) BERNSTEIN & FINE, New York, N. Y. Filed Apr. 6, 1931. Serial No. 312,975.

Bonifide

For Hosiery and Underwear Made of Knitted, Netted, and Textile Fabrics.
Claims use since Mar. 16, 1931.

294,451. (CLASS 37. PAPER AND STATIONERY.) LONDY CARD CORPORATION, Muncie, Ind. Filed May 2, 1931. Serial No. 314,119.

LONDY

For Cardboard Shirtboards.
Claims use since Mar. 12, 1931.

294,452. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CARMEN SANTACRUZ, San Antonio, Tex. Filed June 26, 1931. Serial No. 316,337.

SANTACRUZ

For Chile Paste.
Claims use since Apr. 1, 1931.

294,453. (CLASS 45. BEVERAGES, NONALCOHOLIC.) THE SAEGERTOWN MINERAL WATER COMPANY, Saegertown, Pa. Filed Aug. 20, 1931. Serial No. 318,255.

SAEGERTOWN LIME-RICKEY

For Nonalcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since Apr. 1, 1931.

294,454. (CLASS 12. CONSTRUCTION MATERIALS.) THE REEVES MANUFACTURING COMPANY, Dover, Ohio. Filed Sept. 17, 1931. Serial No. 319,153.

Suredrane

For Formed Sheet Metal Roofing.
Claims use since Dec. 1, 1930.

294,455. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) AMERICAN OPTICAL COMPANY, Southbridge, Mass. Filed Sept. 19, 1931. Serial No. 319,197.

FUL-VUE

For Ophthalmic Lenses and Blanks for Ophthalmic Lenses.
Claims use since Feb. 20, 1931.

294,456. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) YORK CONE COMPANY, York, Pa. Filed Oct. 10, 1931. Serial No. 319,957.

York

For Ice Cream Cones, Assorted Cream Wafers, Assorted Sugar Wafers, Peanut-Butter Sandwiches, and Ice Cream Sandwich Wafers.
Claims use since 1921.

294,457. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) E. A. SYM, doing business as E. A. Sym Co., Not Inc., Milwaukee, Wis. Filed Nov. 16, 1931. Serial No. 321,189.

CHROME SHINE

For Metal Polish.
Claims use since Feb. 5, 1931.

294,458. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. SAM MOSS, doing business as Hillcrest Farm, Columbia, Mo. Filed Jan. 8, 1932. Serial No. 322,873.

Old Time
OZARK
CORN MEAL

For Corn Meal.
Claims use since Jan. 1, 1930.

294,459. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) STANDARD BEAUTY PARLOR SUPPLY CO., New York, N. Y. Filed Jan. 29, 1932. Serial No. 323,593.

"GOLD MEDAL"

For Permanent Waving Pads.
Claims use since July, 1930.

294,460. (CLASS 2. RECEPTACLES.) RONALD D. WHITE, London, Ontario, Canada, assignor to Moulded Pulp Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 17, 1928. Serial No. 272,591.

"TITE-PACK"

For Wooden and Paper Boxes, Cartons, and Wrappers, Pads, Liners, Disks, Flats and Trays Therefor.
Claims use since May 30, 1928.

294,461. (CLASS 45. BEVERAGES, NONALCOHOLIC.) STATE BOTTLING WORKS, New York, N. Y. Filed Mar. 10, 1932. Serial No. 325,021.

DR. DICK'S

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups, Extracts, and Concentrates for Making the Same.
Claims use since 1928.

294,462. (CLASS 39. CLOTHING.) ROTHBERG-GOLDMAN, INC., New York, N. Y. Filed Mar. 16, 1932. Serial No. 325,186.

SHOULDERFORM

For Young Men's and Men's Suits.
Claims use since Oct. 1, 1930.

294,463. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BURTON BROTHERS & CO. INC., New York, N. Y. Filed Mar. 26, 1932. Serial No. 325,513.

BESTWEAVE

For Cotton Piece Goods and Mixtures of Cotton and Silk Piece Goods.
Claims use since Mar. 1, 1931.

TRADE-MARK REGISTRATIONS RENEWED

38,174. STEEL FOR CHASES FOR PRINTING PRESSES. Registered April 22, 1902. BARNHART BROTHERS & SPINDLER. Renewed April 22, 1932, to Barnhart Brothers & Spindler, Chicago, Ill., a Corporation of New Jersey, successor.

38,878. CERTAIN NAMED HOSPITAL AND SICK-ROOM APPLIANCES. Registered September 9, 1902. MEINECKE & Co., New York, N. Y., a Corporation of New Jersey. Renewed September 9, 1932.

39,018. LAXATIVE MEDICINE. Registered October 14, 1902. THE DR. WILLIAMS MEDICINE CO., Schenectady, N. Y., a Corporation of New York. Renewed October 14, 1932.

85,083. A REMEDY FOR COUGHS AND COLDS. Registered January 30, 1912. CRANE MEDICINE Co. Renewed January 30, 1932, to Helen C. Foley, Chicago, Ill., successor.

85,452. ENAMELED STEELWARE. Registered February 20, 1912. KOCKUMS JERNVERKS AKTIEBOLAG, Malmo, Sweden, a Corporation of Sweden. Renewed February 20, 1932.

85,779. CERTAIN SPORTING GOODS. Registered March 12, 1912. VICTOR SPORTING GOODS COMPANY, Springfield, Mass. Renewed March 12, 1932, to A. G. Spalding & Bros., Jersey City, N. J., and New York, N. Y., a Corporation of New Jersey, assignee.

85,962. SMOKING TOBACCO. Registered April 2, 1912. THE GOVERNOR AND COMPANY OF ADVENTURERS OF ENGLAND TRADING INTO HUDSON'S BAY, Winnipeg, Manitoba, Canada, a Corporation of Great Britain. Renewed April 2, 1932.

86,032. WINE OF THE BURGUNDY TYPE. Registered April 9, 1912. CALIFORNIA WINE ASSOCIATION, San Francisco, Calif., a Corporation of California. Renewed April 9, 1932.

86,040. PEANUT-BUTTER. Registered April 9, 1912. BYRON J. DOLPHIN, Seattle, Wash. Renewed April 9, 1932.

86,120. SAWS, CORN-KNIVES, CANE-KNIVES, HAY-KNIVES, AND MACHINES. Registered April 16, 1912. E. C. ATKINS & COMPANY, Indianapolis, Ind., a Corporation of Indiana. Renewed April 16, 1932.

86,148. LYE. Registered April 16, 1912. E. MYERS LYE COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed April 16, 1932.

86,218. MATCHES. Registered April 23, 1912. HALDENS TÆNDSTIKFABRIK, Fredrikshald, Norway. Renewed April 23, 1932, to Bryn & Halden Tændstikfabrikker Aktieselskab, Bryn, Norway, a Corporation of Norway, assignee.

86,418. FRESH GRAPES. Registered May 7, 1912. THOS. H. LYNCH, near Fresno City, Calif. Renewed May 7, 1932, to United Packing Co., Fresno, Calif., a firm, assignee by mesne assignments.

86,528. CASKS AND BARRELS. Registered May 14, 1912. THE GREIF BROS. CO. Renewed May 14, 1932, to The Greif Bros. Cooperage Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

86,598. WIRE, BARB-WIRE, AND WIRE-FENCE STRETCHERS. Registered May 21, 1912. KEYSTONE STEEL & WIRE COMPANY, Peoria, Ill. Renewed May 21, 1932, to Keystone Steel & Wire Company, South Bartonville, Peoria, Ill., a Corporation of Illinois.

86,630. CIGARS. Registered May 21, 1912. WM. A. STICKNEY CIGAR Co., St. Louis, Mo., a Corporation of Missouri. Renewed May 21, 1932.

86,660. CANNED VEGETABLES. Registered May 21, 1912. FOGG & HIRES COMPANY, Salem, N. J., a Corporation of New Jersey. Renewed May 21, 1932.

86,705. BRUSHES FOR DYNAMO-ELECTRIC MACHINES. Registered May 28, 1912. GENERAL ELECTRIC COMPANY, Schenectady, N. Y., a Corporation of New York. Renewed May 28, 1932.

86,714. METAL GATES. Registered May 28, 1912. KEYSTONE STEEL & WIRE COMPANY, Peoria, Ill. Renewed May 28, 1932, to Keystone Steel & Wire Company, South Bartonville, Peoria, Ill., a Corporation of Illinois.

86,715. METAL GATES. Registered May 28, 1912. KEYSTONE STEEL & WIRE COMPANY, Peoria, Ill. Renewed May 28, 1932, to Keystone Steel & Wire Company, South Bartonville, Peoria, Ill., a Corporation of Illinois.

86,725. CALCIMINE. Registered May 28, 1912. THE MURALO COMPANY, New York, N. Y. Renewed May 28, 1932, to The Muralo Company, Inc., New Brighton, N. Y., a Corporation of New York, assignee.

86,744. CERTAIN KINDS OF MACHINERY. Registered May 28, 1912. B. F. STURTEVANT COMPANY, Hyde Park, Boston, Mass., a Corporation of Massachusetts. Renewed May 28, 1932.

87,027. BAGGING FOR BALING COTTON. Registered June 25, 1912. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and New York, N. Y. Renewed June 25, 1932, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts.

87,031. BAGGING FOR BALING COTTON. Registered June 25, 1912. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and New York, N. Y. Renewed June 25, 1932, to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts.

87,108. ICHTHYOL-SURROGATE AND MINERAL OILS. Registered June 25, 1912. S. A. MINIERE SCISTI BITUMINOSI DI MERIDE E BESANO, Meride, Switzerland, a Corporation of Switzerland. Renewed June 25, 1932.

87,151. GLOVES AND MITTENS. Registered July 2, 1912. THE BOSS MANUFACTURING COMPANY, Kewanee, Ill., a Corporation of Illinois. Renewed July 2, 1932.

87,158. BOTTLE-WASHERS, MILK-PUMPS, CREAM-RIPENERS, AND CREAM-SEPARATORS. Registered July 2, 1912. D. H. BURRELL & COMPANY, Little Falls, N. Y. Renewed July 2, 1932, to Cherry-Burrell Corporation, Little Falls, N. Y., Wilmington, Del., and Chicago, Ill., a Corporation of Delaware, assignee by mesne assignments.

87,306. CHOCOLATE CANDIES. Registered July 9, 1912. AKTIEN-GESELLSCHAFT VEREINIGTE BERNER & ZÜRCHER CHOCOLADE-FABRIKEN LINDT & SPRÜNGLI, Kilchberg, near Zurich and Berne, Switzerland. Renewed July 9, 1932, to Lindt & Sprungli, Inc., New York, N. Y., a Corporation of New York, assignee.

87,337. BLEACHING PREPARATIONS. Registered July 9, 1912. HENKEL & CIE., Dusseldorf, Germany. Renewed July 9, 1932, to The Chemical Foundation, Incorporated, Wilmington, Delaware, and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,455. CLOCKS. Registered July 16, 1912. THE E. INGRAHAM COMPANY, Bristol, Conn., a Corporation of Connecticut. Renewed July 16, 1932.

87,623. ATTACHMENTS FOR SEWING MACHINES. Registered July 30, 1912. THE GREIST MANUFACTURING COMPANY, New Haven, Conn., a Corporation of Connecticut. Renewed July 30, 1932.

87,660. STEEL PLATES. Registered July 30, 1912. JOSEPH T. RYERSON & SON. Renewed July 30, 1932, to Joseph Ryerson & Son, Inc., Chicago, Ill., a Corporation of Illinois, successor.

87,778. WIRE ROPE. Registered August 6, 1912. A. LESCHEN & SONS ROPE COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed August 6, 1932.

87,832. SHAVING AND TOILET SOAPS. Registered August 6, 1912. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn., a Corporation of Connecticut. Renewed August 6, 1932.

87,833. SHAVING AND TOILET SOAPS. Registered August 6, 1912. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn., a Corporation of Connecticut. Renewed August 6, 1932.

87,941. DOG-BISCUITS. Registered August 13, 1912. SPRATT'S PATENT LIMITED, London, England, a Corporation of Great Britain. Renewed August 13, 1932.

88,019. RAZORS. Registered August 20, 1912. OSBORNE GARRETT & CO. Renewed August 20, 1932, to Osborne, Garrett & Co., Limited, London, England, a Corporation of Great Britain, successor.

88,088. SOAPS. Registered August 27, 1912. JOHNSON & JOHNSON, New Brunswick, N. J., a Corporation of New Jersey. Renewed August 27, 1932.

88,119. SUCTION-CLEANERS AND ATTACHMENTS THEREFOR. Registered August 27, 1912. ROSENFIELD MANFACTURING COMPANY, New York, N. Y. Renewed August 27, 1932, to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio, a Corporation of New York, assignee.

88,121. LAMP-BURNERS. Registered August 27, 1912. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn., a Corporation of Connecticut. Renewed August 27, 1932.

88,215. CERTAIN MEASURING AND SCIENTIFIC APPLIANCES. Registered September 3, 1912. THE L. S. STARRETT CO. Renewed September 3, 1932, to The L. S. Starrett Company, Athol, Mass., a Corporation of Massachusetts, assignee.

88,475. WATCHCASES. Registered September 24, 1912. ELGIN GIANT WATCH CASE Co., Elgin, Ill., a Corporation of Illinois. Renewed September 24, 1932.

88,489. A PREPARATION FOR USE IN REMOVING PRINTERS' INK. Registered September 24, 1912. HENKEL & CIE., Dusseldorf, Germany. Renewed September 24, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,512. WATER AND OTHER FLUID METERS AND PARTS THEREOF. Registered September 24, 1912. NEPTUNE METER COMPANY, Jersey City, N. J., and New York, N. Y. Renewed September 24, 1932, to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey.

88,540. TOILET PERFUMES, FACE-POWDER, AND REMEDY FOR CHAPPED SKIN. Registered September 24, 1912. E. WERTHEIMER & CIE., Paris, France. Renewed September 24, 1932, to Bourjois, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

88,547. A CLEANING PREPARATION. Registered October 1, 1912. ARMOUR AND COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed October 1, 1932.

88,572. AN ANTISEPTIC AND DEODORANT. Registered October 1, 1912. HOMER L. HOAG. Renewed October 1, 1932, to The Kinox Company, Inc., Rutland, Vt., a Corporation of Vermont, successor.

88,616. WRENCHES. Registered October 8, 1912. COES WRENCH COMPANY, Worcester, Mass. Renewed October 8, 1932, to Bemis and Call Company, Springfield, Mass., a Corporation of Massachusetts, assignee.

88,648. COD-LIVER-EXTRACT PREPARATIONS. Registered October 8, 1912. HENRY K. WAMPOLE AND COMPANY, INCORPORATED, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed October 8, 1932.

88,709. ENAMELS, READY-MIXED PAINTS, VARNISHES, AND VARNISH-REMOVERS. Registered October 15, 1912. STANDARD VARNISH WORKS, New York and Port Richmond, N. Y. Renewed October 15, 1932, to Standard Varnish Works, New York, N. Y., a Corporation of New York.

LABELS

REGISTERED MAY 24, 1932

40,725.—*Title:* THE MAY CO. EXCLUSIVE FOOT WEAR. For Footwear. A. C. CLAYTON PRINTING CO., St. Louis, Mo. Published March 31, 1932.

40,726.—*Title:* STIX, BAER & FULLER SAINT LOUIS FOOTWEAR. For Footwear. A. C. CLAYTON PRINTING Co., St. Louis, Mo. Published March 31, 1932.

40,727.—*Title:* RAJPUT. For Phonograph Records (Electrical Transcriptions). HENRY N. CREGER, Los Angeles, Calif. Published January 28, 1932.

40,728.—*Title:* OLD COLONY. For Chocolates. F. H. Dow COMPANY, doing business as Old Colony Chocolate Co., Cambridge, Mass. Published January 14, 1932.

40,729.—*Title:* HAND-SPUN. For Chocolates. HAND-SPUN CHOCOLATES, INC., Cambridge, Mass. Published January 7, 1932.

40,730.—*Title:* LAUNDRY QUEEN GRANULATED SOAP. For Soap. INDEPENDENT SOAP CO., Los Angeles, Calif. Published November 27, 1931.

40,731.—*Title:* CB 400. For Cakes. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published March 5, 1932.

40,732.—*Title:* CB 401. For Cakes. LAMBOOY LABEL AND WRAPPER Co., Kalamazoo, Mich. Published March 5, 1932.

40,733.—*Title:* CB 403. For Cakes. LAMBOOY LABEL AND WRAPPER Co., Kalamazoo, Mich. Published March 5, 1932.

40,734.—*Title:* CB 404. For Cakes. LAMBOOY LABEL AND WRAPPER Co., Kalamazoo, Mich. Published March 5, 1932.

40,735.—*Title:* CB 405. For Cakes. LAMBOOY LABEL AND WRAPPER Co., Kalamazoo, Mich. Published March 5, 1932.

40,736.—*Title:* CB 406. For Cakes. LAMBOOY LABEL AND WRAPPER Co., Kalamazoo, Mich. Published March 5, 1932.

40,737.—*Title:* CB 407. For Cakes. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published March 5, 1932.

40,738.—*Title:* CB 408. For Cakes. LAMBOOY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published March 5, 1932.

40,739.—*Title:* INTEGRITY. For Lemons. ORANGE HEIGHTS FRUIT ASSOCIATION, Corona, Calif. Published March 12, 1932.

40,740.—*Title:* HOMER. For Oranges. ORANGE HEIGHTS FRUIT ASSOCIATION, Corona, Calif. Published March 12, 1932.

40,741.—*Title:* SINCERITY. For Lemons. ORANGE HEIGHTS FRUIT ASSOCIATION, Corona, Calif. Published March 12, 1932.

40,742.—*Title:* ALICE BLUE. For Chocolates. PAGE & SHAW, INC., doing business as Marquise Chocolate Co., Cambridge, Mass. Published June 30, 1931.

40,743.—*Title:* ALICE BLUE. For Peppermint Patties. PAGE & SHAW, INC., doing business as Marquise Chocolate Co., Cambridge, Mass. Published January 7, 1932.

40,744.—*Title:* BLUE-AND-WHITE BREAD. For Bread. SCHULZE BAKING COMPANY, Kansas City, Mo. Published April 4, 1932.

40,745.—*Title:* SLICED BLUE-AND-WHITE BREAD. For Bread. SCHULZE BAKING COMPANY, Kansas City, Mo. Published April 4, 1932.

40,746.—*Title:* SUPERIOR STRINGS FOR VIOLIN, VIOLA AND CELLO. For Strings for Violin, Viola, and Cello Stradivari String Co., New York, N. Y. Published April 28, 1932.

40,747.—*Title:* READY TO BAKE PIE CRUSTS. For Pie Crust. WARD BAKING COMPANY, New York, N. Y. Published April 14, 1932.

40,748.—*Title:* HETTY HARPER'S HOMELIKE CAKE. For Cake. WARD BAKING COMPANY, New York, N. Y. Published April 13, 1932.

PRINTS

REGISTERED MAY 24, 1932

13,730.—*Title:* THE B. V. D. SPORTS MODEL. For Athletic Underwear. THE B. V. D. COMPANY, INC., New York, N. Y. Published April 15, 1932.

13,731.—*Title:* ALMOND TOFFEE ICE CREAM. For Ice Cream. PANGBURN COMPANY, Fort Worth, Tex. Published April 2, 1932.

13,732.—*Title:* PEPPERMINT STICK ICE CREAM. For Ice Cream. PANGBURN COMPANY, Fort Worth, Tex. Published April 2, 1932.

13,733.—*Title:* PECAN KRUNCH ICE CREAM. For Ice Cream. PANGBURN COMPANY, Fort Worth, Tex. Published April 2, 1932.

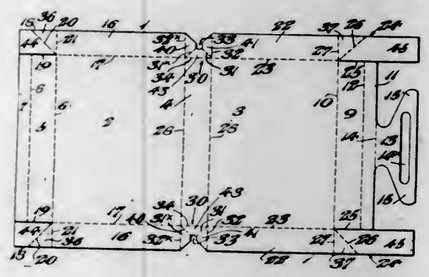
13,734.—*Title:* BLACK WALNUT-RON ICE CREAM. For Ice Cream. PANGBURN COMPANY, Fort Worth, Tex. Published April 2, 1932.

13,735.—*Title:* GOING BIG PIPPINS CIGARS. For Cigars. H. TRAISER & CO. INC., Boston, Mass. Published March 17, 1932.

REISSUES

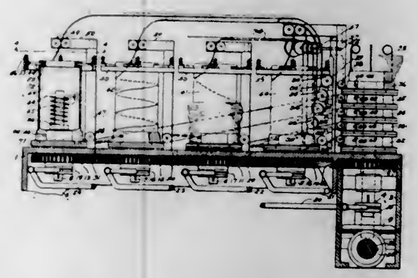
MAY 24, 1932

18,477. FOLDING CONTAINER. ISAAC APPELBAUM, New York, N. Y., assignor to Hangerette Folding Box, Ltd., New York, N. Y., a Domestic Corporation. Original No. 1,783,068, dated Nov. 25, 1930, Serial No. 432,692, filed Mar. 3, 1930. Application for reissue filed Oct. 10, 1931. Serial No. 568,171. 10 Claims. (Cl. 206—7.)



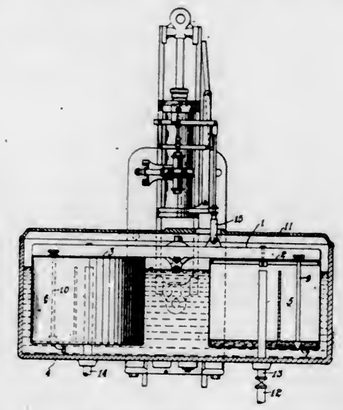
3. A box formed of a blank of sheet material comprising a bottom wall, side and end walls hingedly carried by the bottom wall, means associated with at least one end of each side wall and the adjacent ends of an end wall whereby said walls may be secured together, a reinforcing strip extending substantially the entire length of said end wall and lying in contact therewith, means for securing the reinforcing strip to said end wall, and a garment hanger member integral with the edge of said reinforcing strip and adapted to extend relatively closely over and substantially parallel to the bottom of the box.

18,478. ATTENUATION OF MATERIALS. MARTIN E. EVANS, Pittsburgh, Pa. Original No. 1,666,928, dated Apr. 24, 1928, Serial No. 518,687, filed Nov. 29, 1921. Application for reissue filed Apr. 23, 1930. Serial No. 446,774. 32 Claims. (Cl. 205—13.)



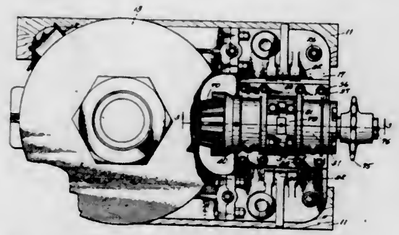
1. An apparatus for attenuating material of rod-like form comprising in combination: a plurality of coaxially mounted drawing drums, dies associated with each of said drums, and an accumulator for each pair of drawing drums to hold material taken off one of the drums constituting a pair and to supply material to the other drum of the pair.

18,479. COMBUSTION CONTROL. THOMAS A. PEEBLES, Mount Lebanon, Pa., assignor to John M. Hopwood, Dormont, Pa. Original No. 1,800,400, dated Apr. 14, 1931, Serial No. 370,525, filed June 18, 1929. Application for reissue filed Sept. 24, 1931. Serial No. 564,925. 11 Claims. (Cl. 236—26.)



9. In a pressure responsive regulating apparatus, in combination, a tank having liquid therein, a lever having an inverted bell extending into the liquid in said tank, means acting on said lever to place said lever and bell in equilibrium, means for introducing a variable pressure to said bell, a chamber partially closing the mouth of said bell and having an opening therein communicating with said tank, and means for regulating the size of said opening.

18,480. ROTARY MACHINE. EDWIN W. GOESER, Los Angeles, Calif., assignor, by mesne assignments, of one-half to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California, and one-half to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Original No. 1,612,914, dated Jan. 4, 1927, Serial No. 42,009, filed July 7, 1925. Application for reissue filed July 23, 1928. Serial No. 294,858. 9 Claims. (Cl. 255—23.)

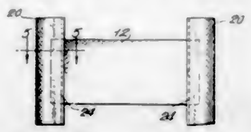


1. In a rotary well drilling apparatus, the combination of: a base; a rotary table vertically journaled on said base; a horizontally disposed self-contained pinion-shaft unit aligned radially with the axis of said table, said unit comprising a unitary bearing support engaging in opposed parallel ways in said base and having two relatively spaced

bearing housings, bearings in said housings, a pinion-shaft journaled in said bearings, and a pinion secured on the inner end of said shaft and in driving connection with said table; and means for detachably securing said unit in position in said ways.

18,481. NECKTIE. MAX HALPERN, New York, and WILLIAM MAYER, Brooklyn, N. Y. Original No. 1,803,249, dated Apr. 28, 1931, Serial No. 445,380, filed Apr. 18, 1930. Application for reissue filed Sept. 11, 1931. Serial No. 562,386. 8 Claims. (Cl. 2—151.)

1. A form for use in the manufacture of made-up neckties of bow form, comprising a substantially rectangular body portion, an elongated bow-loop-forming member secured to each end of said body portion, and extending



transversely thereof, said bow-loop-forming members each comprising a relatively soft material rolled upon itself into elongated form.

PLANT PATENTS

GRANTED MAY 24, 1932

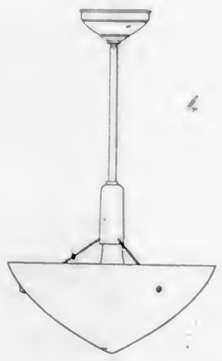
17. FREESIA. WILLIAM RUSSELL ELDER, Indianapolis, Ind., assignor to Elder and Elder Nurseries, Indianapolis, Ind., a Corporation. Filed June 17, 1931. Serial No. 545,130. 1 Claim. (Cl. 47—1.)

The variety of freesia herein described and shown, characterized particularly by its large size, waxy white lily-like color, regular and pleasing shape, bright green foliage, and the relatively small size but great number of corms produced.

DESIGNS

MAY 24, 1932

86,989. LIGHTING FIXTURE. GEORGE AINSWORTH, New Hyde Park, N. Y. Filed Dec. 15, 1931. Serial No. 42,094. Term of patent 14 years.



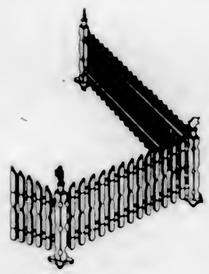
The ornamental design for a lighting fixture substantially as shown and described.

86,990. SOAP HOLDER. OREN F. BALTZLEY, Hagerstown, Md. Filed Jan. 2, 1932. Serial No. 42,353. Term of patent 7 years.



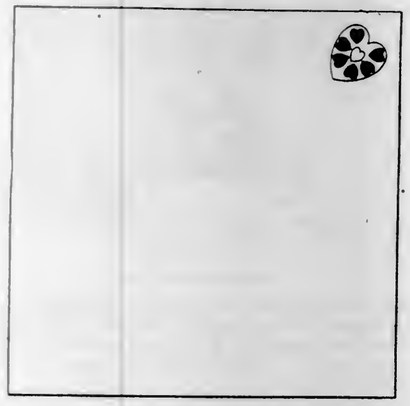
The ornamental design for a soap holder, substantially as shown.

86,991. ORNAMENTAL PORTABLE FENCE. GEORGE BEAUCHAMP, Alhambra, Calif. Filed Aug. 24, 1931. Serial No. 40,921. Term of patent 3½ years.



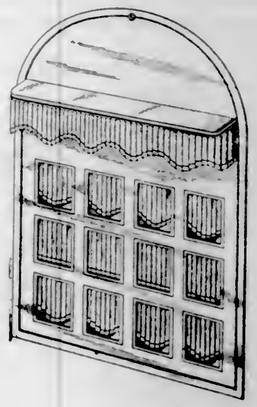
The ornamental design for an ornamental portable fence substantially as shown.

86,992. HANDKERCHIEF OR SIMILAR ARTICLE. MAY PEARL BEE, Chicago, Ill. Filed Oct. 23, 1931. Serial No. 41,490. Term of patent 7 years.



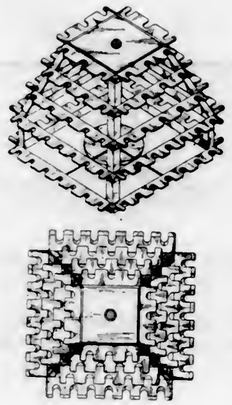
The ornamental design for a handkerchief or similar article as shown and described.

86,993. DISPLAY CARD. JOSEPH BERNHARD, New York, N. Y., assignor to Consolidated Trimming Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 9, 1932. Serial No. 43,450. Term of patent 8½ years.



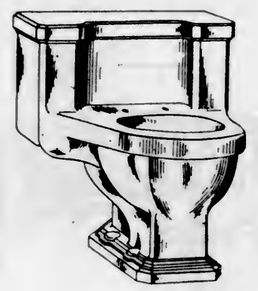
The ornamental design for a display card as shown.

86,994. DISPLAY STAND OR SIMILAR ARTICLE. HARRY BOYAR, Chicago, Ill., assignor to Boyar Schultz Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1932. Serial No. 43,123. Term of patent 3½ years.



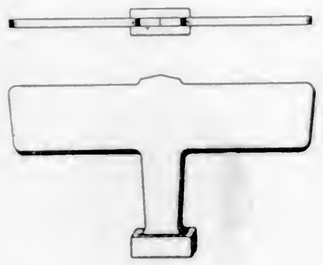
The ornamental design for a display stand, or similar article, as shown.

86,995. UNITARY WATER CLOSET BOWL AND TANK. GEORGE BRAIN, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 19, 1932. Serial No. 43,239. Term of patent 14 years.



The ornamental design for a unitary water closet bowl and tank, substantially as shown.

86,996. SIGN. DAVID C. CHURCHILL, Berea, Ky. Filed Oct. 25, 1930. Serial No. 37,374. Term of patent 7 years.



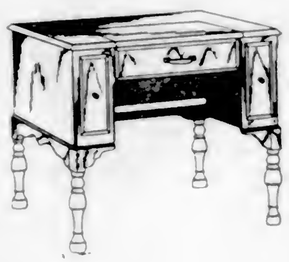
The ornamental design for a sign as shown.

86,997. LACE. GEORGES CORDIER, Calais, France. Filed Feb. 20, 1932. Serial No. 42,953. Term of patent 3½ years.



The ornamental design for lace, as shown.

86,998. DESK. CLIFFORD A. CUTLER, Buffalo, N. Y. Filed Mar. 7, 1932. Serial No. 43,112. Term of patent 7 years.



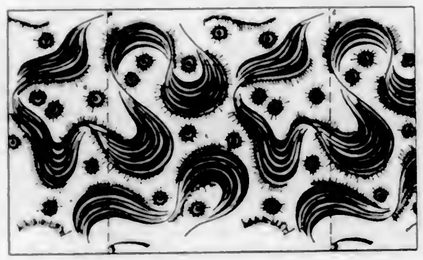
The ornamental design for a desk as shown.

86,999. WALLPAPER OR SIMILAR ARTICLE. JOSEF DORNBUSCH, Crefeld, Germany, assignor to The Artcote Papers, Inc., Irvington, N. J. Filed Mar. 23, 1932. Serial No. 43,276. Term of patent 3½ years.



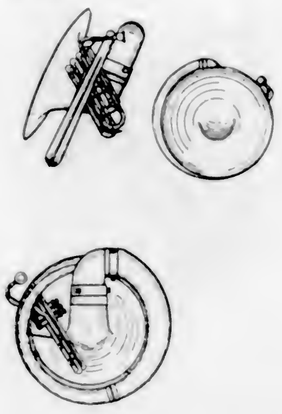
The ornamental design for wall paper or similar article as shown and described.

87,000. WALLPAPER OR SIMILAR ARTICLE. JOSEF DORNBUSCH, Crefeld, Germany, assignor to The Artcote Papers, Inc., Irvington, N. J. Filed Mar. 23, 1932. Serial No. 43,277. Term of patent 3½ years.



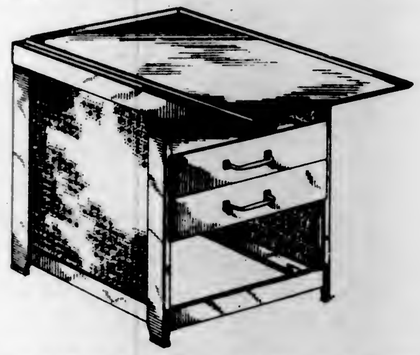
The ornamental design for wall paper or similar article as shown and described.

87,001. SOUSAPHONE. RALPH P. DOUGHERTY, Portland, Oreg. Filed Feb. 27, 1932. Serial No. 43,018. Term of patent 14 years.



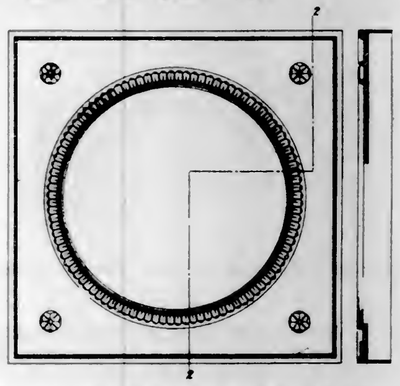
The ornamental design for a sousaphone, as shown.

87,002. STAND FOR A DUPLICATING MACHINE OR THE LIKE. JOHN J. FLANIGAN, Oak Park, Ill. Filed July 11, 1931. Serial No. 40,500. Term of patent 14 years.



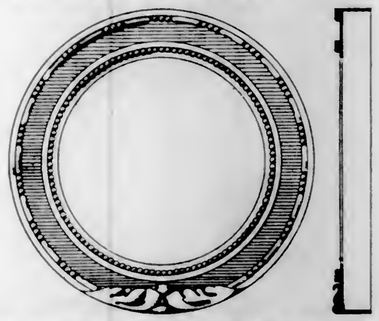
The ornamental design for a stand for a duplicating machine or the like as shown.

87,003. CLOCK FACE. GEORGES GENAILLE, Ridgefield Park, N. J., assignor to Delvicar, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 2, 1932. Serial No. 43,362. Term of patent 7 years.



The ornamental design for a clock face, as shown.

87,004. CLOCK FACE. GEORGES GENAILLE, Ridgefield Park, N. J., assignor to Delvicar, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 2, 1932. Serial No. 43,363. Term of patent 7 years.



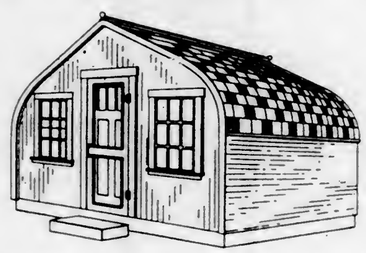
The ornamental design for a clock face, as shown.

87,005. FLOWER HOLDER. JOHN P. GILBANKS, Little Neck, N. Y. Filed Mar. 17, 1932. Serial No. 43,214. Term of patent 3½ years.



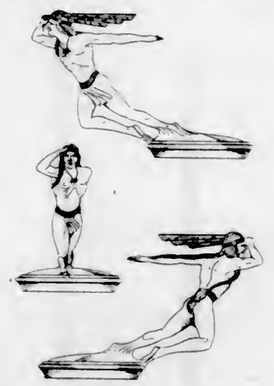
The ornamental design for a flower holder as shown and described.

87,006. PORTABLE BUILDING. HERMAN E. HARVEY, Bellefontaine, Ohio. Filed Aug. 7, 1931. Serial No. 40,797. Term of patent 14 years.



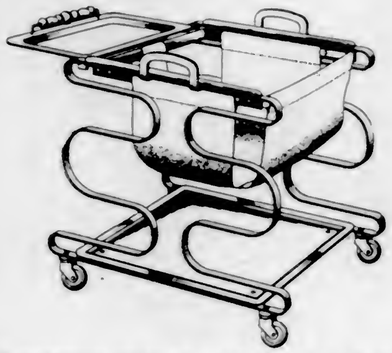
The ornamental design for a portable building substantially as shown and described.

87,007. RADIATOR CAP. GLEN A. JOHNSON, Connersville, Ind., assignor to Staut Manufacturing Co., Connersville, Ind., a Corporation of Indiana. Filed Apr. 1, 1932. Serial No. 43,353. Term of patent 7 years.



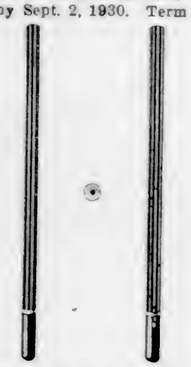
The ornamental design for a radiator cap as shown.

87,008. BABY JUMPER. JACOB KERSTEN, Kalamazoo, Mich. Filed Mar. 14, 1932. Serial No. 43,190. Term of patent 7 years.



The ornamental design for a baby jumper, as shown.

87,009. DRAWING PENCIL. KARL KREUTZER, Nuremberg, Germany, assignor to Firm J. S. Staedtler, Nuremberg, Germany. Filed Feb. 7, 1931, Serial No. 38,578, and in Germany Sept. 2, 1930. Term of patent 7 years.



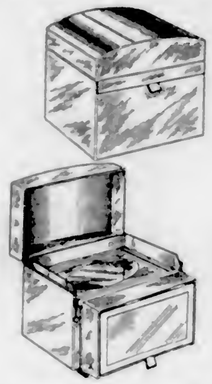
The ornamental design for a drawing pencil, as shown and described.

87,010. DRAWING PENCIL. KARL KREUTZER, Nuremberg, Germany, assignor to Firm J. S. Staedtler, Nuremberg, Germany. Filed Feb. 7, 1931, Serial No. 38,579, and in Germany Sept. 2, 1930. Term of patent 14 years.



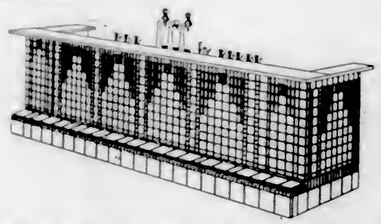
The ornamental design for a drawing pencil, as shown.

87,011. TALCUM POWDER BOX. FLORENCE N. LEWIS, New York, N. Y. Filed Nov. 13, 1931, Serial No. 41,710, and in France Aug. 20, 1931. Term of patent 7 years.



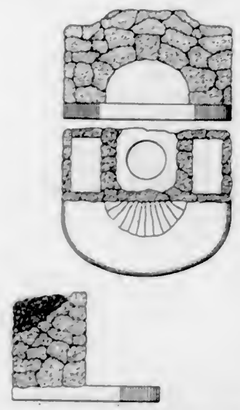
The ornamental design for a talcum powder box, as shown.

87,012. SODA FOUNTAIN. GEORGE R. LIPPITT, Cleveland, Ohio, assignor to The Bishop & Babcock Mfg. Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 27, 1931. Serial No. 40,040. Term of patent 7 years.



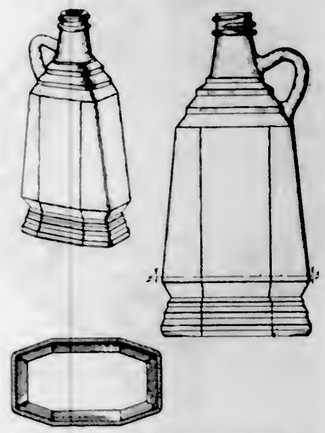
The ornamental design for a soda fountain as shown.

87,013. COMBINED ASH TRAY AND INCENSE BURNER. GEORGE R. MCALLASTER, Rochester, N. Y. Filed Jan. 6, 1932. Serial No. 42,389. Term of patent 14 years.



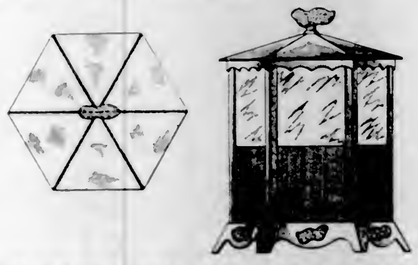
The ornamental design for a combined ash tray and incense burner, as shown and described.

87,014. CRUET OR SIMILAR CONTAINER. HARRY B. MCDONALD, Dunkirk, Ind., assignor to Hart Glass Manufacturing Company, Dunkirk, Ind., a Corporation of Indiana. Filed Mar. 28, 1932. Serial No. 43,304. Term of patent 7 years.



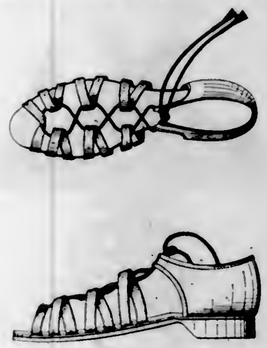
The ornamental design for a cruet or similar container, as shown.

87,015. PEANUT WARMER. WILLIAM H. MCSHANE, Kansas City, Mo. Filed Mar. 21, 1932. Serial No. 43,251. Term of patent 7 years.



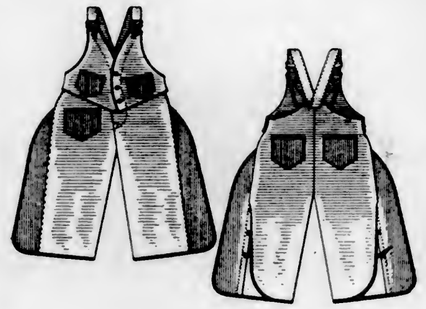
The ornamental design for a peanut warmer, as shown and described.

87,016. SANDAL. MINNIE MEYER, New York, N. Y., assignor to Golo Slipper Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 30, 1932. Serial No. 43,333. Term of patent 7 years.



The ornamental design for a sandal substantially as shown.

87,017. CHILD'S PLAY SUIT. ARMAND CLAUDE MORAND, San Francisco, Calif. Filed Mar. 16, 1932. Serial No. 43,212. Term of patent 7 years.



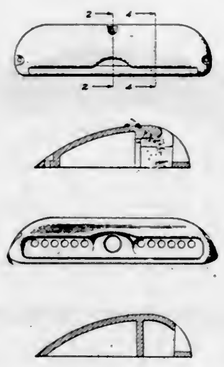
The ornamental design for a child's play suit, as shown.

87,018. CLIP. ROSE OLANS, New York, N. Y. Filed Mar. 5, 1932. Serial No. 43,087. Term of patent 7 years.



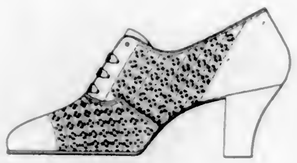
The ornamental design for a clip, substantially as shown.

87,019. TRAFFIC MARKER. RAYMOND H. OSBRINK, Los Angeles, Calif. Filed Mar. 14, 1932. Serial No. 43,180. Term of patent 7 years.



The ornamental design for a traffic marker as shown.

87,020. SHOE. FRANK E. PACKARD, Brockton, Mass., assignor to Geo. E. Keith Company, Campello, Mass., a Corporation of Massachusetts. Filed Mar. 25, 1932. Serial No. 43,286. Term of patent 7 years.



The ornamental design for a shoe, as shown and described.

87,021. WINDSHIELD CLEANER MOTOR. WILLIAM PAULUS, Buffalo, N. Y. Filed Feb. 17, 1932. Serial No. 42,910. Term of patent 3½ years.





The ornamental design for a windshield cleaner motor, as shown.

87,022. PLATE OR SIMILAR ARTICLE. KARL PSCHORR, Arzberg, Germany, assignor to Schumann China Corporation, New York, N. Y. Filed Apr. 21, 1930. Serial No. 35,338. Term of patent 3½ years.



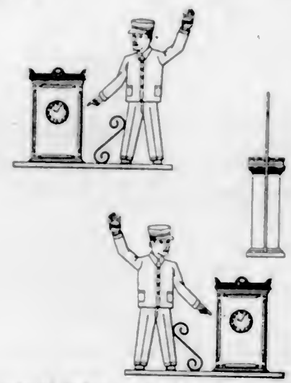
The ornamental design for a plate or similar article as shown and described.

87,023. PLATE OR SIMILAR ARTICLE. KARL PSCHORR, Arzberg, Germany, assignor to Schumann China Corporation, New York, N. Y. Filed Apr. 30, 1930. Serial No. 35,438. Term of patent 3½ years.



The ornamental design for a plate or similar article as shown.

87,024. SIGN. ELISHA LEE RADER, Otis Orchards, Wash. Filed Feb. 18, 1931. Serial No. 38,714. Term of patent 14 years.



The ornamental design for a sign substantially as shown.

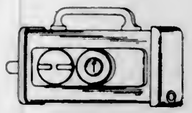
87,025. TABLE LAMP. OSCAR A. REINHOLD, Chicago, Ill. Filed Mar. 21, 1931. Serial No. 39,192. Term of patent 3½ years.



The ornamental design for a table lamp, as shown and described.

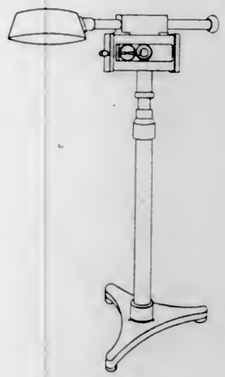
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87,026. PORTABLE WALL TRANSFORMER FOR ORIFICIAL APPLICATORS. JAY J. REKAR, Los Angeles, Calif. Filed Mar. 5, 1932. Serial No. 43,088. Term of patent 14 years.



The ornamental design for a portable wall transformer for orificial applicators, substantially as shown.

87,027. PORTABLE COMBINATION BODY RAYING REFLECTOR AND ORIFICIAL APPLICATOR STAND. JAY J. REKAR, Los Angeles, Calif. Filed Mar. 5, 1932. Serial No. 43,090. Term of patent 14 years.



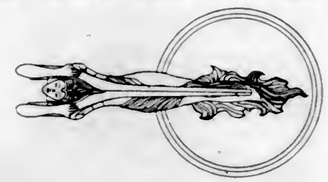
The ornamental design for a portable, combination body raying reflector and orificial applicator stand, substantially as shown.

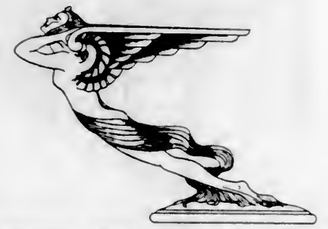
87,028. TOILET ACCESSORIES CONTAINER. ANDREW GRAHAM SHIELDS, Attleboro, Mass. Filed Mar. 30, 1931. Serial No. 39,286. Term of patent 7 years.



The ornamental design for a toilet accessories container as shown.

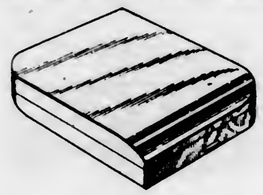
87,029. RADIATOR CAP. LOWELL J. SMITH, Connersville, Ind., assignor to Stant Manufacturing Co., Connersville, Ind., a Corporation of Indiana. Filed Mar. 26, 1932. Serial No. 43,292. Term of patent 7 years.





The ornamental design for a radiator cap as shown.

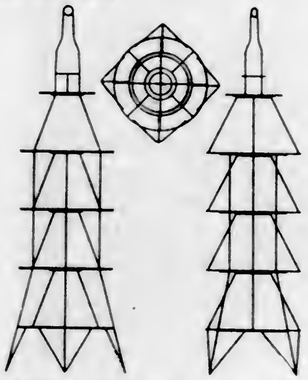
87,030. VANITY CASE. FRED SPITALNY, Elizabeth, N. J., assignor to Superior Products Corporation, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 11, 1932. Serial No. 43,154. Term of patent 3½ years.





The ornamental design for a vanity case as shown.

87,031. DISPLAY STAND. ERNEST STULIK, Buffalo, N. Y. Filed Mar. 25, 1932. Serial No. 43,285. Term of patent 3½ years.



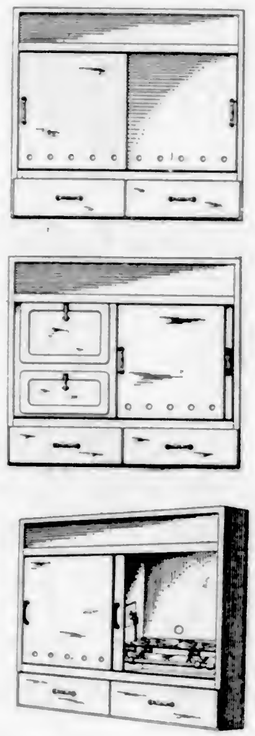
The ornamental design for a display stand, substantially as shown.

87,032. RANGE. JACOB TELLER, New Rochelle, and ARTHUR P. SCHULZ, New York, N. Y., assignors to Teller Stove Designing Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 29, 1932. Serial No. 43,045. Term of patent 7 years.



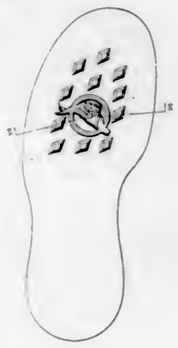
The ornamental design for a range, as shown.

87,033. WALL STOVE. SIGMOND G. WEILER, Milwaukee, Wis. Filed Aug. 31, 1931. Serial No. 40,963. Term of patent 3½ years.



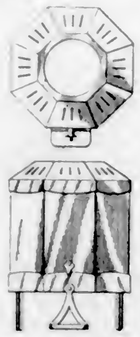
The ornamental design for a wall stove, as shown and described.

87,034. SHOE SOLE. CLARENCE L. WHITE, Cuyahoga Falls, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 20, 1930. Serial No. 34,982. Term of patent 14 years.



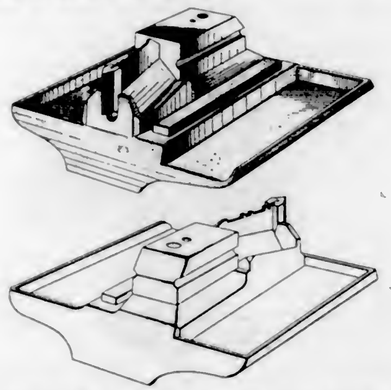
The ornamental design for a shoe sole, as shown.

87,035. ICELESS COOLER. WILLIAM C. WILLETS, Glendale, Calif. Filed Mar. 19, 1932. Serial No. 43,237. Term of patent 7 years.



The ornamental design for an iceless cooler, as shown.

87,036. MATRIX ANVIL. GEORGE L. CURLE, Minneapolis, Minn. Filed Jan. 20, 1932. Serial No. 42,564. Term of patent 3½ years.



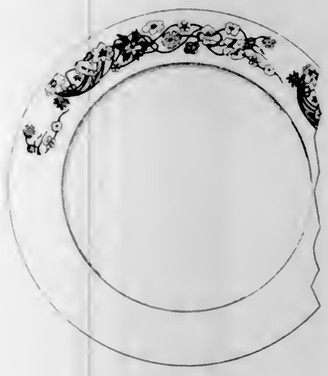
The ornamental design for a matrix anvil, substantially as shown.

87,037. PLATE OR SIMILAR ARTICLE. RANDOLPH E. LUKENS, Syracuse, N. Y., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Mar. 8, 1932. Serial No. 43,131. Term of patent 14 years.



The ornamental design for a plate or similar article, as shown and described.

87,038. PLATE OR SIMILAR ARTICLE. WALTER S. MAYER, Beaver, Pa., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Mar. 8, 1932. Serial No. 43,132. Term of patent 14 years.



The ornamental design for a plate or similar article, as shown and described.

87,039. TEXTILE FABRIC OR SIMILAR ARTICLE. EMILE DÉCHERY, Paris, France, assignor to "Jerry Dress Co. Inc.," New York, N. Y. Filed Apr. 27, 1932. Serial No. 43,620. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

87,040. TEXTILE FABRIC OR SIMILAR ARTICLE. EMILE DÉCHERY, Paris, France, assignor to "Jerry Dress Co. Inc.," New York, N. Y. Filed Apr. 27, 1932. Serial No. 43,621. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

87,041. TEXTILE FABRIC OR SIMILAR ARTICLE. EMILE DÉCHERY, Paris, France, assignor to "Jerry Dress Co. Inc.," New York, N. Y. Filed Apr. 27, 1932. Serial No. 43,622. Term of patent 3½ years.

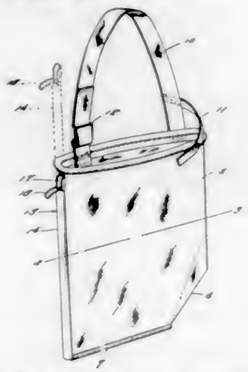


The ornamental design for a textile fabric or similar article as shown and described.

PATENTS

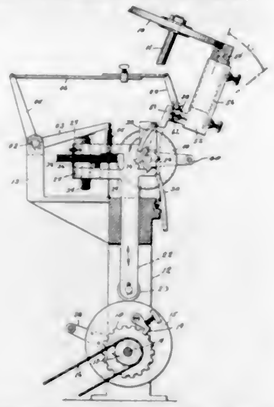
GRANTED MAY 24, 1932

1,859,274. FRUIT PICKER'S BAG. WARREN A. BAILER, Atlanta, Ga. Filed Dec. 30, 1930. Serial No. 505,630. 2 Claims. (Cl. 150—2.)



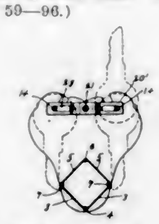
2. A fruit picker's bag comprising a rectangular-shaped container open at its top and along one vertical edge portion, and substantially half-way across the bottom, stiffening elements on the opposite side portions of the bag at the open bottom portion, a closure for the vertical edge portion, the remaining bottom portion of the bags being inclined toward the closed vertical edge portion of the bag.

1,859,275. APPARATUS FOR APPLYING MATERIAL TO ROTARY OPERATING DEVICES. DAVID C. BAILEY, Amesbury, Mass. Filed Aug. 1, 1930. Serial No. 472,320. 3 Claims. (Cl. 51—263.)



1. In combination with an operating device of the character described, having a working face, a holder having an elongated socket adapted to receive an elongated block of material and having means for clamping the same in positions of longitudinal adjustment therein, a pivotal support for said holder adjacent the bottom of its socket arranged to permit swinging movement thereof to carry one side of the block of material at the outer end of the socket into contact with said face, means to oscillate said holder continuously arranged for adjustment to permit the material to be engaged with said face at the end of the oscillatory movement in one direction and automatic means to increase the extent of said movement in said direction.

1,859,276. KEY HOLDER. LAWRENCE G. BATES, Cleveland, Ohio. Filed Apr. 12, 1929. Serial No. 354,484. 18 Claims. (Cl. 59—96.)



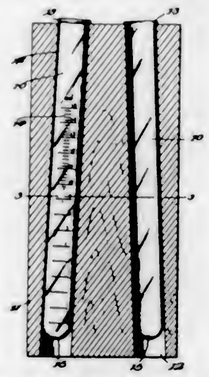
1. A key holder, which comprises casing plates, key-receiving posts therefor and an expanding toggle for swinging keys on said posts out.

1,859,277. FUSELAGE CONSTRUCTION. GIUSEPPE M. BELLANCA, New Castle, Del. Filed Nov. 8, 1930. Serial No. 494,363. 2 Claims. (Cl. 244—30.)



1. An airplane fuselage having an outer surface such that if it be divided into two equal parts by a longitudinal vertical plane, each part will represent that portion of a torus cut off by a plane passing through the torus parallel to the axis thereof and at a distance from said axis greater than the mean radius of the torus.

1,859,278. COLORIMETER. ARTHUR T. BRICE, Jr., Washington, D. C. Filed May 28, 1930. Serial No. 456,544. 6 Claims. (Cl. 88—14.)

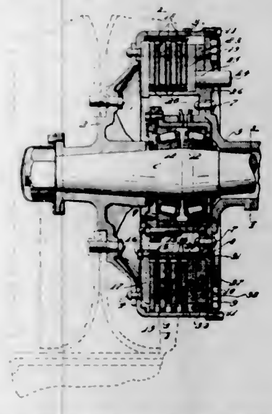


1. A colorimeter for use in conjunction with a conventional source of light and the normal unaided eyesight of an observer, comprising an opaque member having therethrough a matched pair of bores of equal length and diameter, the axes of which bores are spaced, at the top of said member, a distance substantially equal to one-half the interpupillary spacing of the eyes of the observer, and a matched pair of test tubes so received within said bores as to have their entire side wall portions shielded against the entrance of light by said opaque member, said test tubes having translucent bottoms so exposed by said opaque member that contents in said tubes, viewed through the upper ends thereof, will be transilluminated solely by light entering through the lower ends of said bores and the translucent bottoms of said tubes.

1,859,279. MANUFACTURE OF PRECOOKED LEGUME FOOD PRODUCTS. ALFRED L. CHAMBERLAIN, Port Huron, Mich., assignor of one-eighth to George R. Willcox, Saginaw, Mich. Filed June 27, 1929. Serial No. 374,287. 1 Claim. (Cl. 99—11.)

The method of preparing leguminous seeds for marketing in partially pre-cooked condition, which consists in first soaking the legumes in water for approximately eight hours, then cooking for one hour under steam pressure of approximately fifteen pounds per square inch, draining, adding a flavoring liquid, subjecting the material to partial vacuum while heating to a temperature of one hundred twenty degrees Fahrenheit for approximately one half hour and finally drying at a temperature of one hundred twenty degrees Fahrenheit to a moisture content of approximately twelve per cent, whereby there is produced a product consisting of dried leguminous seeds which retain the characteristics shape of the original seeds, but are adapted to be conditioned for table use by re-soaking and cooking for thirty minutes at atmospheric pressure.

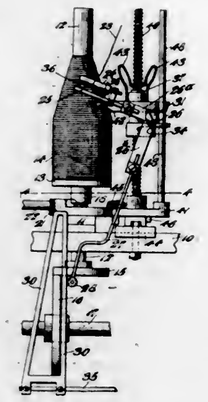
1,859,280. BRAKING AND COOLING MECHANISM FOR VEHICLE WHEELS. ELBERT A. CORBIN, Jr., Swarthmore, Pa. Filed Feb. 26, 1929. Serial No. 342,895. 7 Claims. (Cl. 188—72.)



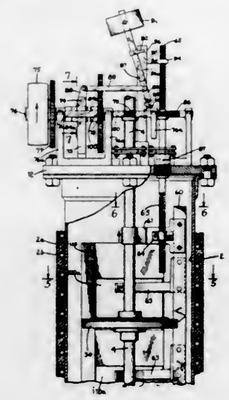
2. In a brake mechanism for vehicle wheels, the combination with a rotatable part of wheel structure, of friction elements rotatable therewith, a stationary part of the wheel structure, friction elements carried thereby to cooperate with the rotatable friction elements, springs between said elements progressively varying in capacity, in the direction of the setting movement of the brake mechanism, and means to effect a frictional gripping engagement of said friction elements.

1,859,281. WINDING MECHANISM. GEORGE E. ALLEN and JOHN G. ALLEN, Philadelphia, Pa., assignors to A. W. Allen's Sons, Philadelphia, Pa., a partnership. Filed June 8, 1928. Serial No. 283,819. 1 Claim. (Cl. 242—31.)

A quick cross traverse winding machine comprising a bobbin support, a gain mechanism automatically operable in accordance with the build-up of a bobbin on said support, a reciprocable rod extending lengthwise of the machine, an operating arm fixed to said rod and having a length at least equal to the length of the bobbin to be wound, a bell-crank pivoted to said gain mechanism having an arm projecting into the path of said operating arm, a thread guide carried by said bell-crank, and a spring holding said arm in contact with said operating arm.

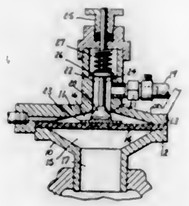


1,859,282. CONTINUOUS FILTER APPARATUS. ADDISON S. BAILEY, Houston, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 4, 1928. Serial No. 310,264. 7 Claims. (Cl. 210—200.)



1. Filtering apparatus comprising a chamber for liquid to be filtered, a plurality of filter elements contained therein, a vertical shaft upon which the filter members are mounted, movable scraping mechanism for removing deposited material from said filter members including horizontal scraping arms severally having one of their ends adapted to rest against and slide upon said vertical shaft, horizontal guide members severally having one of their ends bored to surround and slide vertically upon said shaft, a vertical bar to which the other ends of said scraping arms and said guide members are attached, and actuating means in cooperative supporting relation to said scraping mechanism for raising and lowering it in position with respect to said filter members.

1,859,283. PRIMER FOR PUMPS. BEN D. BARTON, Battle Creek, Mich., assignor to American Steam Pump Company, Battle Creek, Mich. Filed Mar. 19, 1928. Serial No. 262,834. 3 Claims. (Cl. 103—113.)



1. In a structure of the class described, the combination with a centrifugal pump and an internal combustion engine for driving said pump provided with an intake having a throttle, of a casing, a diaphragm within said casing providing a pressure chamber and a suction chamber, the said pressure chamber being connected to the pump so that said diaphragm is subject to the fluid pressure therein, said suction chamber being connected to the pump, a suction connection for said suction chamber to the intake of said engine, a suction control valve actuated by said diaphragm controlling said intake suction connection, and operating connections from said suction control valve to said throttle whereby the throttle is closed to idling position when the suction control valve is open and opened when said suction control valve is closed, the suction connection to the pump being made to a part of the pump casing which is normally at lower pressure than the part at which the pressure connection is made.

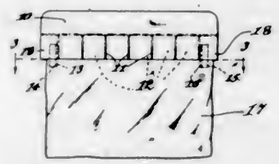
1,859,284. BOWLING ALLEY. OWEN W. BLANCHARD and MAYBELLE J. BLANCHARD, Chicago, Ill. Filed Jan. 8, 1930. Serial No. 419,311. 5 Claims. (Cl. 273—51.)



1. In a bowling alley comprising a number of detachably connected track sections and a ball receiving pit section likewise securable to one of the track sections; each said track section comprising an elongated quadrangular frame comprising parallel bowling floor supporting beams, gutter members outwardly of the outer floor beams, transverse truss members connected to and supporting the said floor beams and gutter members, two of said trusses of each section in fixed transverse position, one near each floor end of the section, removable parallel bar means engaging two of said trusses and projecting outwardly from opposite sides of the alley at the abutting ends of the track sections and adjustable toward each other to clamp the transverse parts of the abutting parts toward each other and further means secured on the exterior side parts of all the sections for adjusting vertically the connected alley sections with their floor surfaces to a desired common plane.

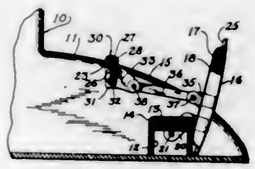
1,859,285. ICE CUBE FORMING DEVICE. ROBERT T. BRIZZOLARA, New Dorp, N. Y. Filed July 15, 1929. Serial No. 378,192. 7 Claims. (Cl. 62—111.)

1. An ice cube forming device, comprising outer and inner intersection plates forming chambers, said plates having edges terminating in a common plane, adapted to enter into a block of ice to produce ice sections in the chambers, and projections on certain of the outer plates,



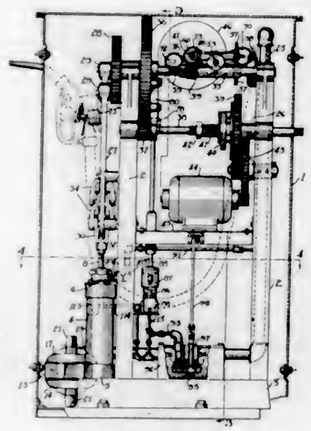
extending below the common plane of the edges of the plates and adapted to enter into the block of ice in advance of the edges of the plates.

1,859,286. RUMBLE SEAT PROTECTOR. EDWARD B. BROTHERTON, Milford, Conn. Filed Nov. 16, 1931. Serial No. 575,252. 5 Claims. (Cl. 296—65.)



1. In a vehicle body including a rumble seat arrangement, a cushion means movably mounted within the vehicle and a connection between said means and the back of the rumble seat whereby as the back is moved and the rumble seat opened for use the cushion is moved into a position over the front edge of the rumble seat opening.

1,859,287. DISPENSING PUMP. MYRON J. CASWELL and HAROLD E. CASWELL, Sandusky, Ohio. Filed Dec. 30, 1929. Serial No. 417,308. 15 Claims. (Cl. 221—103.)

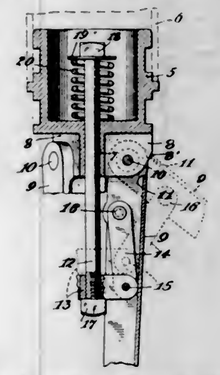


1. A dispensing pump including a cylinder, a piston cooperating therewith, mechanism for reciprocating said piston, a discharge pipe and nozzle connected with said cylinder, an abutment on said mechanism, a stop member shiftable into the path of said abutment to stop said mechanism, and means operable by pressure created by said piston, when the nozzle outlet is restricted, to shift said top member to stopping position.

1,859,288. BISMUTH ALKALINE-EARTH-METAL THIOGLYCOLATES AND PROCESS OF MAKING SAME. WALTER G. CHRISTIANSEN, Bloomfield, N. J., and WERNER M. LAUTER, Akron, Ohio, assignors to E. R. Squibbs & Sons, New York, N. Y., a Corporation of New York. Filed Mar. 23, 1929. Serial No. 349,511. 8 Claims. (Cl. 260—11.)

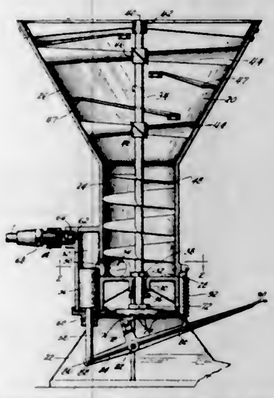
1. Bismuth alkaline-earth-metal thioglycolates.

1,859,289. TRIPOD OR SIMILAR SUPPORT. HUBERT K. DALTON, Stamford, Conn. Filed May 8, 1931. Serial No. 535,949. 4 Claims. (Cl. 248—43.)



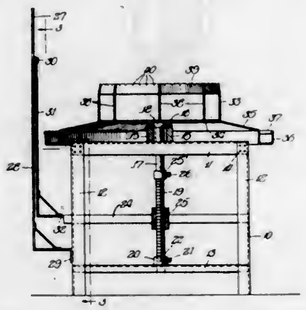
2. In a tripod, a plurality of supporting legs, a member supported thereby and to which said legs are pivotally connected at one of their ends, a spider positioned between said legs and below the pivoted ends thereof, spreader links pivotally connected at one of their ends to the spider and extending upwardly therefrom and pivoted at their other ends to the respective tripod legs, the latter link pivots being disposed out of alignment with the leg pivots and disposed inwardly thereof and with respect to the pivotal connections between the links and said spider when the tripod is collapsed, and means mounted on said member including a part operatively connected with said spider to yieldably retain the tripod legs and spreader links in folded collapsed position.

1,859,290. GREASE DISPENSING APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 9, 1929. Serial No. 398,323. 7 Claims. (Cl. 221—47.1.)



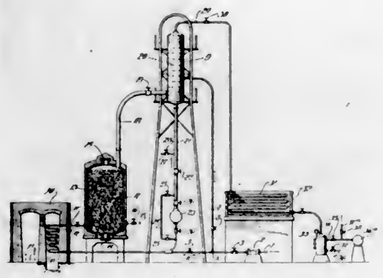
2. In a grease dispensing apparatus, a vertical cylindrical chamber having a funnel-shaped opening for admission of grease and a discharge port near its lower end, a vertically disposed shaft journaled centrally of said chamber, a plurality of inclined blades mounted on said shaft in the funnel-shaped opening of said chamber, a spiral conveyor on said shaft in said chamber below said blades, a dicharge cylinder communicating with said discharge port, an outlet conduit extending from said cylinder, a piston in said cylinder, and unitary operating means for alternately advancing said piston and revolving said shaft.

1,859,291. CASING MEASURING MACHINE. LEONARD DE MOSS, Des Moines, Iowa, assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1928. Serial No. 329,451. 6 Claims. (Cl. 33—127.)



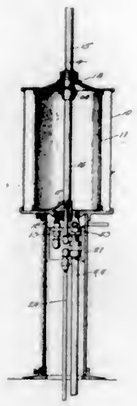
2. In a casing measuring device, a support, bearings in said support, a spindle in said bearing, a reel on said pindle, said reel comprising a casing receiving portion and a flexible marginal element having a plurality of circumferentially spaced casing securing notches therein, and indicating means operatively connected to said spindle for indicating rotations of said reel.

1,859,292. PROCESS OF DISTILLING WOOD. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 19, 1926. Serial No. 95,838. Renewed Mar. 30, 1931. 5 Claims. (Cl. 202—18.)



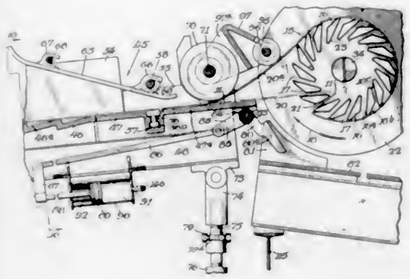
1. The method of distillation of wood which consists in packing the wood in an enlarged zone of reaction, heating hydrocarbon oil to a cracking temperature, discharging the heated oil into the enlarged zone of reaction whereby the wood is distilled by the heated oil, withdrawing the vapors from said zone and subjecting them to dephlegmation, thereby forming a reflux condensate, returning the reflux condensate to the heating stage, and finally collecting as the product of the process the combined vapors derived from the oil and wood which are uncondensed by said dephlegmation step.

1,859,293. RECEPTACLE-EVACUATING APPARATUS. HERMAN J. ENGBRECHT, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Aug. 6, 1925. Serial No. 48,602. 17 Claims. (Cl. 184—1.5.)



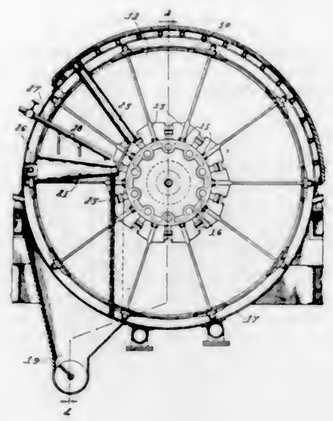
1. In apparatus for transferring liquid from one receptacle to another, means for producing flow of liquid to the transfer receptacle and for cleansing said last-named receptacle comprising a conduit having a suction inlet and common to the liquid to be transferred and to the liquid for cleansing said transfer receptacle, said conduit opening into said last-named receptacle.

1,859,294. WINDING REEL FOR METAL STRIPS. WILLIAM C. FORK, Homewood, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 4, 1929. Serial No. 330,270. 16 Claims. (Cl. 242—81.)



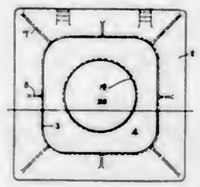
1. The combination in a winding machine for a moving metal strip, of a reel comprising a plurality of teeth adapted to engage the forward end of said strip, the rear face of each tooth extended intersecting the front face of the next succeeding tooth intermediate its end edges to define a guiding mouth for receiving the advancing edge of said strip, means for revolving said reel, and a plate of larger diameter than said reel having apertures fitted by said teeth and movable along said teeth for ejecting the wound coil from said reel.

1,859,295. PRECOATING DEVICE. AUGUST FRENCH, Hammond, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Sept. 11, 1929. Serial No. 391,855. 10 Claims. (Cl. 210—200.)



1. In a device of the character set forth, a rotatably mounted filter, means for supplying a coating material for the filtering surface of said filter, rotatable means for maintaining said material in a pool in contact with said surface, and means for rotating said filter.

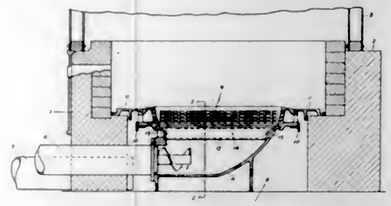
1,859,296. HOPPER DOOR FOR RAILWAY CARS. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 397,591. 10 Claims. (Cl. 105—280.)



1. A hingeable door forming part of the load retaining means of a railway dump car comprising a marginal portion, a flange depending from the inner edge of said marginal portion, and a main portion in a spaced apart plane from said marginal portion merging into said flange between its opposite edges.

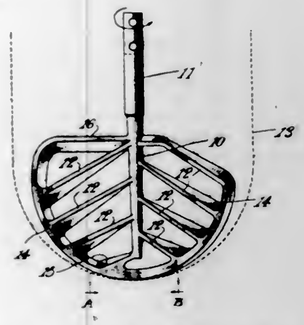
1,859,297. STOKER. WALTER J. HAAG, Dayton, Ohio, assignor to The Brownell Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 10, 1928. Serial No. 318,525. 4 Claims. (Cl. 110—44.)

4. In a furnace structure, in combination walls having transverse ledges thereon and forming an air chamber, a retort in said chamber, a transverse member adjacent each ledge, a tuyère casting supported by the transverse



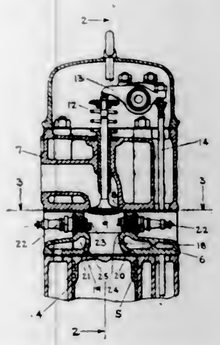
members and resting upon the retort and a dead plate supported by each ledge and the adjacent part of the tuyère casting.

1,859,298. FOOD WORKING TOOL. WILLIAM F. HACKETT, New York, N. Y. Filed July 6, 1929, Serial No. 376,326. Renewed Aug. 2, 1930. 9 Claims. (Cl. 259—134.)



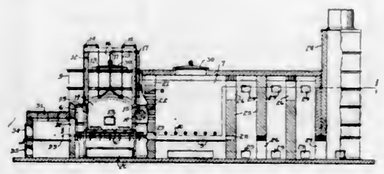
1. A rotary food beating tool comprising in combination, a member by which the tool is adapted to be rotated, a sloped blade for forcing the food downwardly upon rotation of the tool, a lower sloped blade for forcing the food upwardly upon rotation of the tool, and a sloped blade spaced from the axis of rotation of the tool for forcing the food inwardly toward the axis of rotation of the tool.

1,859,299. INTERNAL COMBUSTION ENGINE. JOHN HIRTREITER, Milwaukee, Wis. Filed Feb. 25, 1929. Serial No. 342,389. 9 Claims. (Cl. 123—191.)



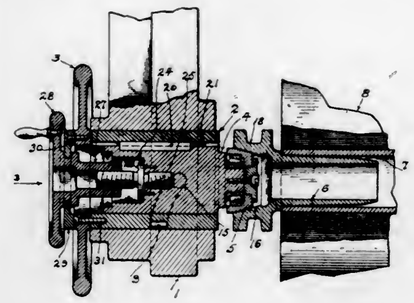
1. In an internal combustion engine of the four cycle valve-in-the-head type, the combination with the cylinder and the piston working therein, of a cylinder head having an elongated combustion space communicating with said cylinder through a restricted passage of appreciable length, means surrounding said passage for cooling the same to abstract heat from the gases as they flow through said restricted passage, combustible mixture inlet and exhaust valves seating on ports in the walls of said space facing the piston, said piston defining with the bottom of said head a space of substantially minimum clearance at the end of the compression stroke, and a sparking ignition device for said space.

1,859,300. INDUSTRIAL INCINERATOR. REINHOLD W. KRENZ, Toledo, Ohio. Filed July 24, 1929. Serial No. 380,570. 1 Claim. (Cl. 110—7.)



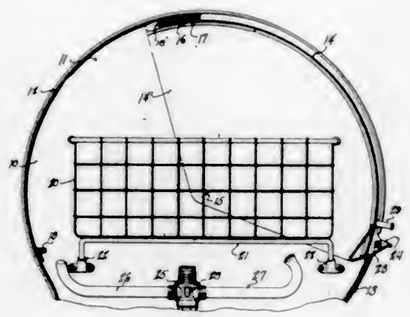
In an incinerator, a front chamber for receiving dry and highly combustible refuse material, a second chamber in rear of said front chamber for receiving other refuse material, a wall between said chambers having comparatively large draft openings therethrough at the top and bottom and smaller intermediate openings, a combustion chamber in rear of said second chamber and having a comparatively large inlet therefrom near the top and a smaller inlet near the bottom, baffles in said combustion chamber and a chimney flue leading from said combustion chamber.

1,859,301. WEB ROLL SUPPORT. FREDERICK LAMATSCH, Grantwood, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed May 16, 1929. Serial No. 363,629. 2 Claims. (Cl. 242—68.)



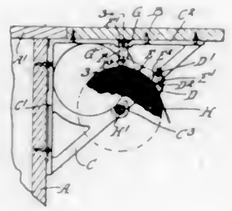
1. In a chuck mechanism, the combination of framing, a sleeve rotatably mounted in the framing, a concentric block, means connecting the sleeve and block so that they may have a relative axial movement but are held against relative rotation, a single cam groove in the sleeve, depressions at each end of the groove, a spring pressed member cooperating with the groove and arranged to enter the depressions for locking the parts against rotation in either direction, means for rotating the sleeve to effect a quick axial adjusting movement, and rigid means for effecting a fine adjustment of the block independently of the sleeve.

1,859,302. DISHWASHING MACHINE CASING. JOHN E. LEDERMAN, Milwaukee, Wis., assignor to Hydro Electric Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed July 9, 1928, Serial No. 291,197. Divided and this application filed Jan. 20, 1930. Serial No. 422,094. 1 Claim. (Cl. 220—32.)



In a dishwashing machine, the combination of a casing having parallel side walls and curved rear and front wall portions spaced apart to form a large opening, a cover having a curved wall and having side wall portions parallelly disposed, said side wall portions being pivotally mounted on the side walls of the casing, the upper end of the rear wall and the adjacent end of the cover having interlocking flanges forming a joint to seal the casing when the cover is closed, the flange on said cover being inclined downwardly from one side of the machine to the other so that any water getting into the space between the joint will readily drain therefrom back into the machine when the cover is in open position.

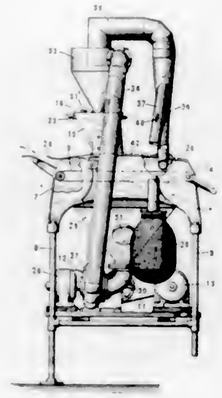
1,859,303. PAPER CARRIER. WILLIAM F. LENHART, Marshall, Mich., assignor to Sherer-Gillett Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 18, 1928. Serial No. 255,237. 7 Claims. (Cl. 242—55.5.)



1. A paper supporting member comprising a bracket having a part adapted to be fastened to a support, said bracket formed to provide a plurality of rod receiving pockets and to provide a depression in the supporting member adapted to receive a carrier for a paper knife.

1,859,304. POWDERING APPARATUS. SAMUEL LIPSIUS, New York, N. Y. Filed July 20, 1929. Serial No. 379,633. 6 Claims. (Cl. 91—59.)

1. A powdering machine comprising a housing, a conveyor for stock, a powder hopper, a device for feeding powder on said stock including a vibrating plate and a vibrator therefor and means for adjusting the position of said plate relative to said vibrator including a screw



threaded member extending to the exterior and to the front of said hopper for ready manipulation by the operator.

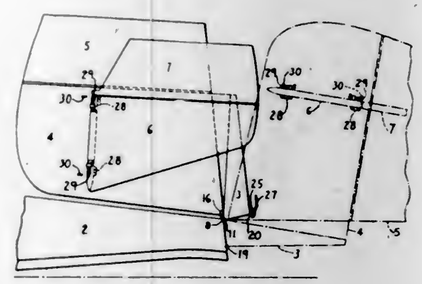
1,859,305. PNEUMATIC TIRE CASING REPAIRING DEVICE. LLOYD M. LITTLEFIELD, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed June 8, 1929. Serial No. 369,279. 4 Claims. (Cl. 152—27.)



1. A device for inserting puncture sealing plugs, which have a head and an apertured stem, into punctures in pneumatic tire casings, which comprises a hollow cylindrical member adapted to receive the stem of the plug and to be positioned in the puncture to be sealed, and having opposed apertures formed in its walls adjacent one end and so positioned with respect to the aperture in the stem of the plug as to permit the insertion of means through the apertures to hold the head of the plug firmly against the end of the cylinder.

3. A device for inserting puncture sealing plugs, which have a head and stem, into punctures in pneumatic tire casings, which comprises a hollow cylindrical member provided with an interior shoulder adjacent one end, a driving pin adapted to engage said shoulder and a conical member having a threaded connection with the driving pin through the shouldered end of the cylinder, the base of the conical member being of the same diameter as the outside diameter of the cylindrical member.

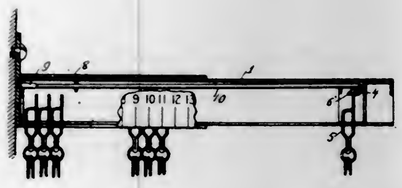
1,859,306. AIRPLANE. GROVER LOENING, New York, N. Y., assignor to Grover Loening Aircraft Company, Inc., Garden City, N. Y., a Corporation of New York. Filed Nov. 7, 1930. Serial No. 493,944. 6 Claims. (Cl. 244—29.)



3. In an airplane body having a rearwardly extending frame and a separate foldable tail end section, a plurality of hinges connecting said tail end section with the main frame, said hinges having tapered sockets and pintles, and means for simultaneously forcing said pintles in opposite directions in the sockets.

5. An airplane body having a rearwardly extending frame, and a separate tail end section which carries all the empennage and which can be displaced to dispose said empennage forwardly on top of said frame, the joint between said frame and tail end section being adjacent the empennage, the stabilizers of said empennage being also displaceably connected with the tail section.

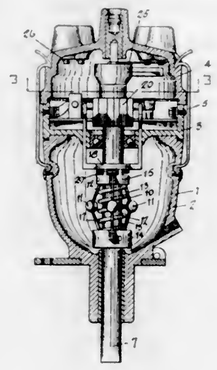
1,859,307. LAUNDRY ASSORTING APPARATUS. JOSEPH H. LYNCH, Asbury Park, N. J. Filed Jan. 30, 1929. Serial No. 336,161. 7 Claims. (Cl. 40—19.5.)



1. A laundry tag holder comprising a body having an inlet at one end, means for limiting the admission through said inlet to tags of predetermined contour, means for preventing the removal of the tags from the holder, a support, adapted to receive the holder, said support being provided with means for unlocking said preventive means when the holder is inserted in the support.

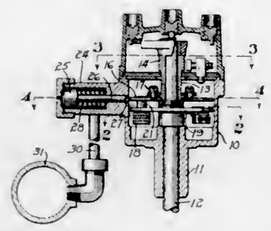
1,859,308. ENGINE IGNITION TIMER. MARION MALLORY, Toledo, Ohio. Filed Jan. 8, 1927. Serial No. 159,789. 8 Claims. (Cl. 200—22.)

1. In a timer for ignition systems of an engine, a pair of circuit closers, the primary circuit of the system completed through the circuit closers, the circuit closers being connected in parallel in the circuit, a cam for operating the circuit closers, means connected to the circuit closers for shifting the circuit closers one relative to the



other for increasing the length of time that the primary circuit is closed as measured in degrees of rotation of the cam.

1,859,309. CONTROL DEVICE FOR IGNITION TIMERS. MARION MALLORY, Toledo, Ohio. Filed Oct. 12, 1931. Serial No. 568,237. 8 Claims. (Cl. 123—117.)

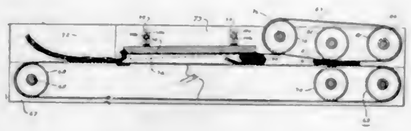


1. In an internal combustion engine, the combination with a timer shaft and a circuit breaker cam movable circumferentially with respect thereto, said cam being initially set for causing a spark after passing dead center position when the engine is idling, of means for immediately advancing the cam, when the throttle is opened, to cause the spark to occur in advance of dead center position.

1,859,310. PAD MAKING MACHINE. ELMER R. MARTIN, Springfield, Ohio, assignor to The Williams Company, London, Ohio, a Corporation of Ohio. Filed Jan. 20, 1930. Serial No. 422,236. 5 Claims. (Cl. 29—1.)

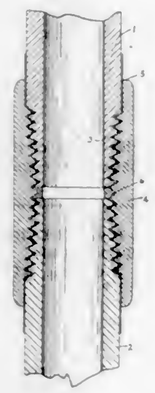
1. In a machine for making pads, a belt adapted to receive and carry thereon sections of a strip of pad material, a presser board adapted to engage the strip of pad material and cause said material to be rolled into a roll as it is moved by said belt, a second belt located above said

first belt and having portions converging toward said first belt and forming an elongated throat in conjunction with



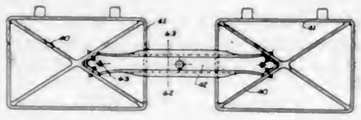
said first belt to press said rolled pad into a flat pad, the portions of the belts which engage said pad both moving in the same direction.

1,859,311. PIPE JOINT. JOSEPH H. MCEVOY, Jr., Houston, Tex. Filed June 1, 1926. Serial No. 112,736. 3 Claims. (Cl. 285—146.)



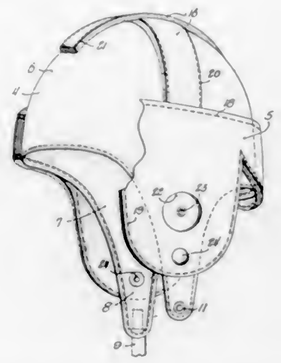
1. An electrically insulated pipe joint comprising, threaded pipe members, a threaded coupling member, a coating of electrical insulating material of less thickness than the depth of the threads upon at least one of said members and a ring of insulating material between the ends of said pipe members.

1,859,312. RAILWAY CAR CONSTRUCTION. WALTER P. MURPHY, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 14, 1929. Serial No. 332,326. 4 Claims. (Cl. 105—280.)



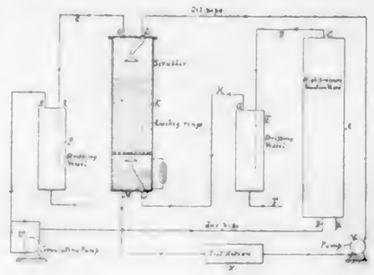
1. In a railway car, a pair of hinged dumping doors, each having a body portion with a flange adjacent its perimeter, and a stiffener extending between opposite portions of said flange, a spreader having spaced apart portions, each portion secured to the body portion of one of said doors adjacent said stiffener, and a door operating mechanism attached to said spreader adjacent the center thereof.

1,859,313. HEADGEAR. ALVIN A. PERELES, Milwaukee, Wis., assignor to Pereles Bros. Inc., Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 5, 1932. Serial No. 596,966. 4 Claims. (Cl. 2—8.)



1. In a head gear, the combination of an outer padded skeletonized head protecting section, and inner helmet section, means for detachably securing both sections together, and means for securing one of the sections about the chin of the wearer.

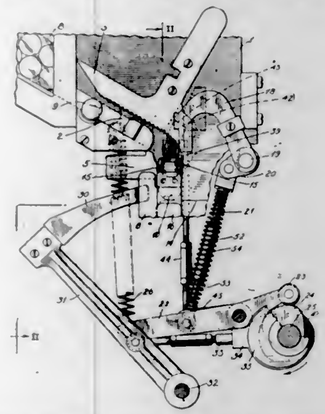
1,859,314. DESTRUCTIVE HYDROGENATION OF CARBONACEOUS MATERIALS. MATHIAS PIER, Heidelberg, and KARL WINKLER and KURT WISSEL, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed June 4, 1927, Serial No. 196,630, and in Germany June 11, 1926. 4 Claims. (Cl. 196—62.)



1. In the destructive hydrogenation of carbonaceous materials, the step of removing the gaseous hydrocarbons from the reaction gases by scrubbing the said gases freed from the liquid reaction products with a low boiling hydrocarbon of a gasoline character at a high pressure, then releasing the pressure on the scrubbing medium containing the dissolved gases and thereby effecting release of a definite portion of the scrubbed gases, and reintroducing the said portion back into the system.

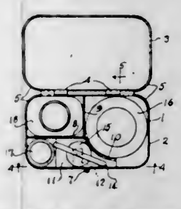
1,859,315. COIN FEEDER. BRUNO E. SEEMEL, Brooklyn, N. Y., assignor to Automatic Coinwrapping Machine Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 9, 1929. Serial No. 338,770. 7 Claims. (Cl. 133—1.)

1. In a coin feeding mechanism having a track for coins, a pusher to push coins along said track, an actuator for said pusher, means providing a yielding connection between said pusher and actuator, and a device to stop the movement of said pusher in the pushing direction, said device



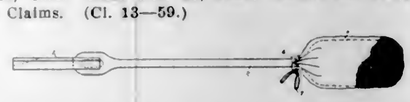
and actuator being so timed that said device acts to stop the movement of the pusher immediately after each actuation of the actuator to actuate the pusher to push a coin along said track.

1,859,316. HYPODERMIC KIT. CHARLES SPONSEL, Mancos, Colo. Filed Dec. 17, 1928. Serial No. 326,541. 2 Claims. (Cl. 206—12.)



1. In a medical case having a bottom, a one-piece partition in said case cooperating with the walls of said case to form a plurality of compartments, one in one end and two in the other end of the case, and a second bottom in one of said compartments integral with the partition to support a hypodermic syringe.

1,859,317. BRANDING IRON. CHARLES SPONSEL, Mancos, Colo. Filed Feb. 23, 1929. Serial No. 341,928. 5 Claims. (Cl. 13—59.)



5. In a method of forming a handle on a bar, filling a bag with a plastic insulating material, inserting said bar in said bag and plastic material and applying heat to said bag and plastic material to harden the plastic material and remove the bag.

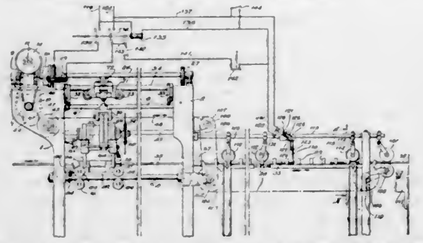
1,859,318. FULL FASHIONED CLOCKED HOSIERY AND METHOD OF PRODUCTION. FREDERICK E. STRUVE, Philadelphia, Pa., assignor to Apex Hosiery Company, Philadelphia, Pa. Filed Oct. 26, 1931. Serial No. 571,104. 4 Claims. (Cl. 66—180.)

1. As a new article of manufacture a full fashioned clocked stocking, the clock consisting of a plurality of figurative panels formed from a knitted reinforcing thread that has a split lock connection with the thread of the stocking web to form border formations for the panels,



the stocking web being provided with a plurality of openings arranged in an ornamental relation and surrounding the said figurative panels as a group.

1,859,319. MACHINE FOR CUTTING BARS, PIPES, ETC. MAXWELL H. SUSSMAN, New York, N. Y., assignor, by mesne assignments, to Steel and Tubes, Inc., a Corporation of Ohio. Filed Oct. 19, 1926. Serial No. 142,536. 22 Claims. (Cl. 29—69.)



1. In a cutter, frame members, a plurality of bars joining the frame members and therewith constituting an open framework, a work-supporting carriage resting on some of the bars, a cutting tool, a carriage for supporting the tool, a crank, supported by the framework, for moving the tool-supporting carriage with its cutting tool toward and from the work-supporting carriage, and cooperating guides on said tool-supporting carriage and the work-supporting carriage for guiding the cutting tool in its movement toward and from the work-supporting carriage, the tool-supporting carriage being supported entirely by said crank and the work-supporting carriage.

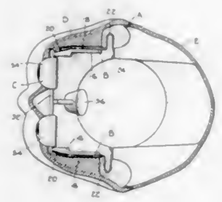
1,859,320. ONE-LEGGED TABLE. WILLARD C. WETMORE, Saybrook, Conn. Filed July 19, 1928. Serial No. 293,871. 2 Claims. (Cl. 45—46.)



1. A table of the class described, comprising a top, a leg hingedly connected to the under surface of the top

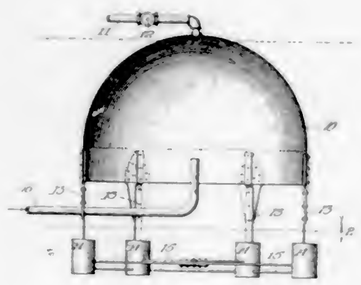
near the outer edge thereof and adapted to swing in a plane at right angles to the top and to the inner and outer edges of the top, the upper end of said leg being beveled to incline the leg at an angle greater than a right angle and to project the free end of the leg beyond the contour of the sides of the top when said beveled end of the leg engages the surface of said top, said leg serving as the sole leg of the table, the table being arranged to be supported when in use by supplemental support in addition to said sole leg.

1,859,321. MEANS FOR MOUNTING MOVABLE EYES. JOHN H. WILHELM, Rockaway Beach, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 11, 1930. Serial No. 420,051. 21 Claims. (Cl. 46—40.)



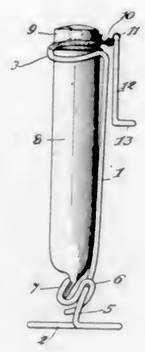
1. A molded doll's head prepared for receiving a movable eyeset, said head comprising resilient metallic means for subsequently receiving and supporting an eyeset, and recess means molded integrally in the head and appropriately shaped for receiving, encompassing, and holding the said eyeset supporting means prior to the insertion of the eyeset.

1,859,322. STORAGE OF HYDROCARBON OILS. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 5, 1928. Serial No. 290,538. 5 Claims. (Cl. 220—85.)



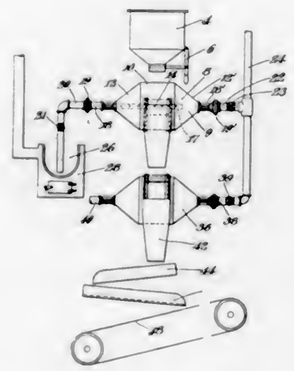
1. An apparatus for storing hydrocarbon oils comprising an open bottomed container having liquid-tight walls, weights attached to the lower portion thereof to maintain same in stable equilibrium when immersed in water so as to float therein and a conduit for withdrawing oil from the upper end of said container, said weights being of such mass that the bell may float above the surface slightly when substantially filled with oil, said weights normally resting upon the bottom.

1,859,323. SUPPORTING STAND FOR COLLAPSIBLE TUBES. FRANK WOLF, New York, N. Y. Filed Jan. 18, 1928. Serial No. 247,503. 3 Claims. (Cl. 248—41.)



1. A stand for collapsible tubes, comprising an upright portion having a pair of arms to embrace the tube at one end and a base at the other, and a cover for the top of the tube hinged to the stand adjacent the arms, together with an operating member depending from an extension of the hinge of said cover to raise said cover.

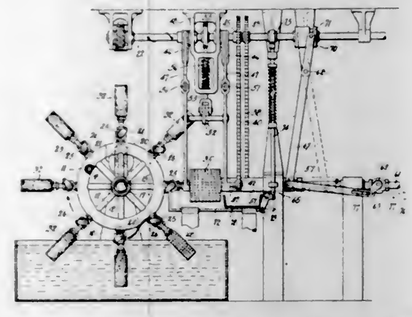
1,859,324. MIXING AGGREGATES WITH ASPHALT AND COOLING. CRAIG R. ARNOLD, Atlanta, Ga. Filed Nov. 28, 1928. Serial No. 322,336. 15 Claims. (Cl. 94—23.)



1. The method of preparing a composition of matter for application in a cold state comprising mixing mineral aggregates and bituminous oils while maintained heated, agitating said mixture while artificially cooling the same and then separating the cooled products into relatively small portions.

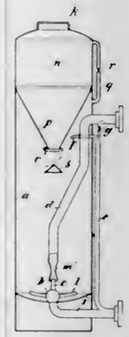
1,859,325. PROCESS AND MECHANISM FOR FORMING HOLLOW WARE ARTICLES. HARRY C. AYERST, Seattle, Wash. Filed Aug. 25, 1930. Serial No. 477,519. 9 Claims. (Cl. 92—56.)

1. The process of making hollow articles from pulp, consisting in forming a deposit of pulp upon the exterior of a perforated mold through interior suction in said mold while immersed in a mass of hydrated pulp, pressing the exterior side wall of said deposit during the maintenance of pressure, simultaneously pressing the bottom of said deposit with exteriorly applied suction, and the removal of the molded article through suction and retraction off said mold.



7. In a machine of the character described, a container for hydrated pulp, a plurality of hollow perforated molds, a carrier for said molds, means for advancing the carrier to successively position the molds within said container, means for causing interior suction to be applied to the molds while in the container to cause the deposit of a layer of hydrated pulp thereon, means with which the said molds may be pressed into rolling contact while suction is maintained to dehydrate the deposited layer of pulp, and means for cutting off the suction prior to completion of the rolling process to cause loosening of the deposit from the mold.

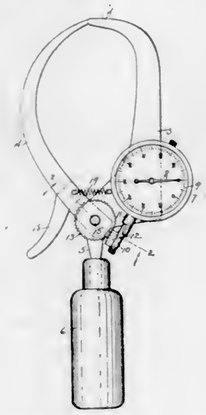
1,859,326. METHOD AND APPARATUS FOR PRODUCING FIRE EXTINGUISHING FOAM. HANS BURMEISTER, Berlin, Germany, assignor, by direct and mesne assignments, to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed June 10, 1926, Serial No. 115,089, and in Germany July 30, 1925. 19 Claims. (Cl. 169—15.)



1. The method of producing foam, more particularly for fire extinguishing purposes, which consists in storing the substances serving for the generation of the foam mixed together in a closable container, introducing water continuously under line pressure into said container to produce the fire foam in said container, and discharging the foam from said container under line pressure and the gas pressure developed within said container.

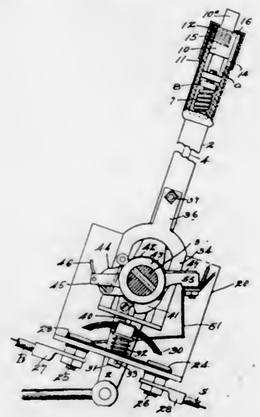
8. Apparatus for producing foam for fire extinguishing purposes comprising a container for uniformly mixed foam forming chemicals, an outlet means for foam leading upward within said container from a point adjacent its bottom to a point of use, and means adjacent the bottom of said container arranged to direct a jet of water over a local area at the bottom of the container and another jet of water into the foam outlet.

1,859,327. CALIPER. JAMES J. CARNEY, Hartford, Conn., assignor to The United Tool & Die Company, Inc., Hartford, Conn., a Corporation of Connecticut. Filed Dec. 10, 1929. Serial No. 413,026. 4 Claims. (Cl. 33—148.)



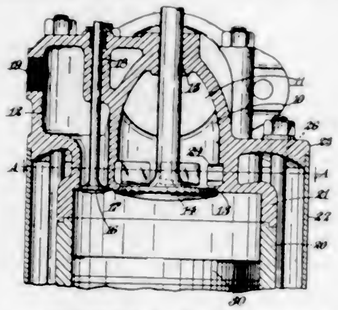
3. Calipers including a supporting blade, a blade pivotally mounted adjacent one end on said supporting blade, a toothed member secured to said pivotally mounted blade at the pivoted end thereof, an indicator including an index finger mounted on said supporting blade, a plunger projecting from said indicator and operatively connected with said finger, and a rack on said plunger engaged with said toothed member.

1,859,328. EMERGENCY BRAKE AND IGNITION AND STARTER CONTROL. PEREZ N. COBB, Sr., Hermosa Beach, Calif. Filed Oct. 1, 1928. Serial No. 309,667. 13 Claims. (Cl. 123—179.)



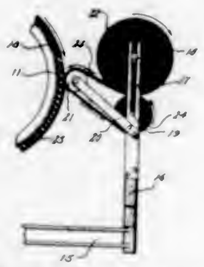
12. In combination, an emergency brake lever, and ignition and motor starter circuit control means carried by said lever, the ignition being controlled by the lever and the starter operative at any position of the lever.

1,859,329. GAS PASSAGE OF THE CYLINDERS OF INTERNAL COMBUSTION ENGINES. FRANCIS DE LAUTOUR, London, England. Filed Aug. 1, 1930, Serial No. 472,386, and in Great Britain Aug. 21, 1929. 7 Claims. (Cl. 123—32.)



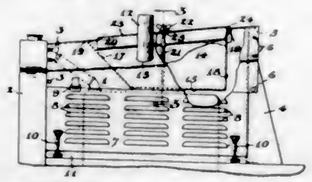
1. An internal combustion engine of the kind described having a mushroom valve controlling a central port in the cylinder head, an inlet and an outlet passage communicating therewith through which a continuous flow of air is maintained, and guide vanes disposed in the inlet passage for causing the flow to swirl co-axially with the valve over the outer face thereof.

1,859,330. GUM STRIP APPLIER FOR TIRE BUILDING MACHINES. CHARLES H. DESAUTELS, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1930. Serial No. 430,374. 2 Claims. (Cl. 154—10.)



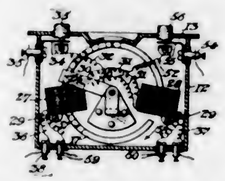
1. A device of the character described comprising vertical supports formed to freely receive a pair of spindles one above the other, a freely rotatable roll offset from said supports and adapted to guide a liner web from the upper spindle to the lower and means to press the said roll against a tire carcass on a rotatable tire building former to transfer a gum strip, carried by the liner, to the tire carcass as the liner passes over said roll.

1,859,331. CONTAINER. JAMES G. HEASLET, Cleveland, Ohio, assignor to The Cleveland Tractor Company, Cleveland, Ohio. Filed June 17, 1931. Serial No. 544,971. 1 Claim. (Cl. 296—37.)



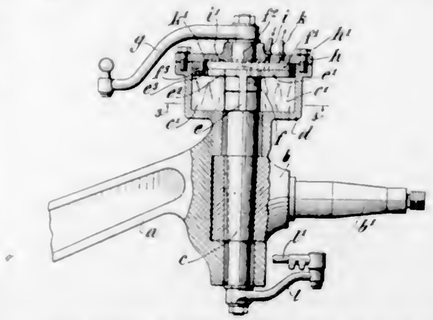
In a covering for the mechanism of a motor, a hood having an aperture therein, a container and a detachable cover therefor, said container having bottom and side portions, the upper edges of the container side portions being turned outwardly to form flanges for securing the container to the hood adjacent the aperture thereof, the edges of the hood aperture being upturned, the edges of the detachable cover being turned downwardly, whereby when in operative position the downturned edges of the cover will fit over the upturned edges of the hood aperture completely closing the same and cover securing means extending from the bottom of said container through said cover.

1,859,332. ELECTRIC INDICATING MEANS. MERION J. HUGGINS, Upper Saddle River, N. J., assignor to Autometer Company, Inc., New York, N. Y., a Corporation of Delaware. Filed June 30, 1924. Serial No. 723,241. 16 Claims. (Cl. 177—351.)



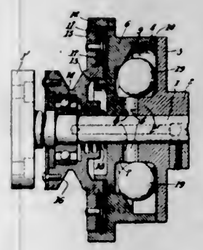
16. In electric indicating means, a casing arranged with windows, a plurality of arcuate members having calibrations circumferentially disposed about the same mounted in the casing to rotate in unison and expose a circumferentially calibrated portion through the casing windows, one of which members comprises an armature, two pairs of windings for generating two pairs of differentially energized magnetic forces and in the zones of influence of which forces the armature is located in all positions thereof and adapted to be moved under the influence of each pair of forces, contact terminals carried by the casing with which the windings are connected in open circuit and adapted for connection with a source of electricity with an external variable resistance device in the circuit of each pair of windings, and selective means for closing the circuit of either of the windings and connect a resistance device in circuit therewith.

1,859,333. HYDRAULIC STEERING GEAR FOR MOTOR VEHICLES. LYMAN C. JOSEPHS, Jr., Allentown, Pa., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 11, 1931. Serial No. 515,025. 7 Claims. (Cl. 180—79.2.)



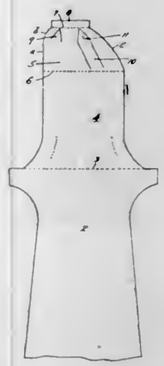
1. In a vehicle, in combination with a steering wheel knuckle and mounting therefor, hydraulic steering mechanism carried on the center line of the knuckle pin and including fixed elements and movable elements, the movable elements being movable with the knuckle and a manually operable valve for the mechanism to control the application of hydraulic pressure to the said movable elements.

1,859,334. CENTRIFUGAL CLUTCH. JOHN D. KARLE, Roselle Park, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 9, 1930. Serial No. 466,711. 1 Claim. (Cl. 192—105.)



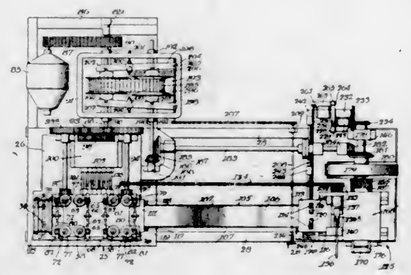
In a centrifugal clutch, a driving shaft, a driving member fixed to said shaft and having a hub, a movable clutch-member slidable on said shaft and having a hub, a diametrical rib-and-slot key-connection between said hubs, said members having between them a centrifugal weight receiving cavity with a series of centrifugal weights in said cavity, said cavity having walls against which said centrifugal weights react in their outward movement to slide said movable clutch-member on said shaft, a driven clutch-member journaled on said shaft at the side of the movable clutch-member remote from the first mentioned driving member, and a spring between said driven and movable members.

1,859,335. RIGHT AND LEFT FULL-FASHIONED-FOOT HOSIERY. VINCENT KRICK, Los Angeles, Calif. Filed Oct. 26, 1931. Serial No. 571,141. 2 Claims. (Cl. 66—184.)



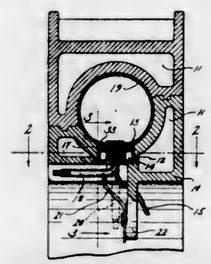
1. A full fashioned knitted foot for a full fashioned hose leg of the class knitted on a flat bed machine which comprises a knitted flat whose great toe side extends straight beyond the "start of toe" line of the foot, a selvage along the end of the toe of the flat and being offset toward the great toe end and joining the toe part of the flat by a looping line, a diamond adjacent the great toe end of the looping line and the corner of said end narrowing inward along the said diamond, a little toe "narrowing" ending in a diamond and extending from the "start of toe" line of the flat obliquely toward the near end of the said selvage and the little toe side line narrowing in to the near end of the looping line.

1,859,336. ROTARY SHEARING MACHINE. CHESTER M. MACCHESNEY and RALPH H. NORTON Chicago, Ill., assignors to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 4, 1929. Serial No. 330,394. 23 Claims. (Cl. 164—68.)



1. The combination in metal shearing apparatus, of means for feeding an elongated metal strip, a shearing device, means for supporting said strip in a curved position between said feeding means and said shearing device, and means for operating said shearing device at a speed adapted to alter said curvature at the instant of shearing the strip.

1,859,337. VULCANIZING APPARATUS. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1930. Serial No. 429,471. 3 Claims. (Cl. 18—38.)



1. A vulcanizing mold for inner tubes which comprises mold members provided with steam chambers, an opening in one of the mold members through which the valve stem of the tube is adapted to pass, an annular plug fitting in said opening and surrounding the valve stem, said plug being provided with an annular steam chamber and means to supply steam to said annular chamber independently of the steam chambers of the mold members.

1,859,338. TANK FOR RAILWAY CARS. WALTER P. MURPHY, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,098. 7 Claims. (Cl. 105—358.)

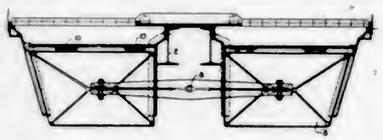
1. A railway car having a horizontally positioned tank mounted thereon, said tank comprising a rolled steel shell,

and a cast metal tank head consisting of an integral casting comprising a central portion and a continuous flange



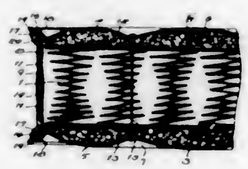
adjacent the perimeter of said portion secured to the shell, and a plurality of brackets connecting the central portion to the flange.

1,859,339. RAILWAY CAR CONSTRUCTION. WALTER P. MURPHY, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Jan. 14, 1929, Serial No. 332,326. Divided and this application filed Sept. 2, 1930. Serial No. 479,136. 9 Claims. (Cl. 105—280.)



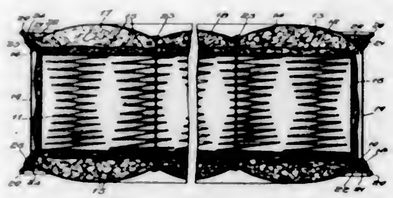
1. In a railway car, a pair of hinged dumping doors, an equalizing spreader having spaced apart portions, each engaging one of said doors adjacent its vertical medial line so as to permit universal movement between the door and the spreader, means to retain the spreader in operative relation to the door, and a door operating mechanism attached to said spreader adjacent the center thereof.

1,859,340. MATTRESS. MAX MARSACK, Sheboygan, Wis. Filed Oct. 26, 1928. Serial No. 315,240. 1 Claim. (Cl. 5—360.)



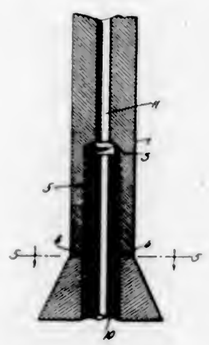
In a mattress, the combination of an inner structure comprising a plurality of vertical springs arranged in transverse and longitudinal rows, top and bottom tick portions, a quilted boxing comprising inner and outer plies of textile fabric and interposed filling materials, said outer ply being connected with the marginal edges of said tick portions, said inner ply having wide marginal edges projecting under the ticking and covering a plurality of the adjacent rows of springs, said projecting marginal edges having their overlapping corner portions stitched together.

1,859,341. MATTRESS. MAX MARSACK, Sheboygan, Wis. Filed Oct. 28, 1929. Serial No. 402,946. 1 Claim. (Cl. 5—351.)



In a mattress of the kind described and in combination, an inner spring construction, a quilted inner casing completely enclosing and closely fitting the spring construction, said casing being arranged in sections with adjacent edges of said sections connected at diagonally opposite edges of the spring construction, an outer casing completely enclosing said inner casing, filling positioned between the adjacent horizontal portions of said inner and outer casings and projecting beyond the edges of the inner casing, and stitches extending through the adjacent marginal edges of the filling and the horizontal and vertical portions of said outer casing to form a roll, the connected edges of said inner casing being fastened to the adjacent roll by the stitches forming said roll.

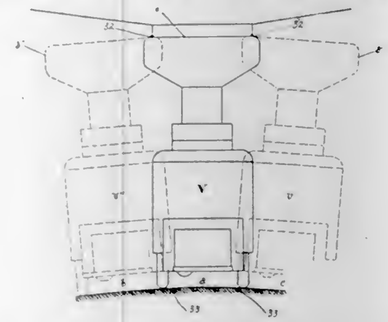
1,859,342. DRILL. WALTER C. REA, New York, N. Y., assignor to Detachable Bit Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 8, 1930. Serial No. 442,496. 3 Claims. (Cl. 255—64.)



3. In a rotary impact drill, the combination of two sections disposed in axial alignment, one constituting a drill rod and the other a bit, and a coupling connecting the drill rod and bit in relatively fixed relation, with a threaded connection between the coupling and one of the sections and a bayonet joint form of connection between the coupling and the other section, said threaded and said bayonet joint connections both movable in the same rotative direction to tighten the same whereby the tendency of the coupling to rotate in one direction will cause both connections to be maintained.

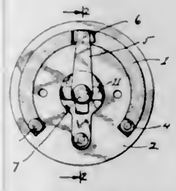
1,859,343. ELECTRIC TRACTION SYSTEM. RAYMOND ROUGÉ, Paris, France. Filed June 24, 1931, Serial No. 546,534, and in France June 25, 1930. 4 Claims. (Cl. 191—49.)

1. A system of traction upon roads by the use of a self-propelled vehicle provided with steering gear and with wheels having elastic tires, and driven by an electric motor supplied at will by an outside line or by a self-contained source of power, comprising, in combination: a single-pole overhead trolley line having a plurality of spaced wires; conducting means provided on the ground



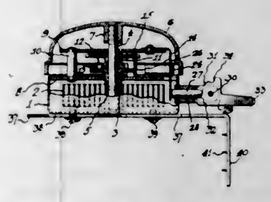
of the road on a region wider than the wheel gauge of the vehicle; and a vehicle provided with a sliding trolley and with means for the return of the current to the road through the elastic tires of the wheels.

1,859,344. RESISTANCE DEVICE. SAMUEL RUBEN, New Rochelle, N. Y., assignor to Ruben Patents Company, New Rochelle, N. Y., a Corporation of Delaware. Filed Oct. 6, 1930. Serial No. 486,698. 8 Claims. (Cl. 201—76.)



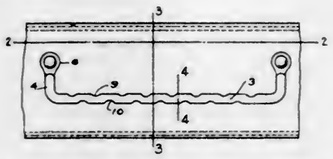
2. In a rheostat a resistance element comprising a base containing cuprous oxide and having an outer layer of a compound of copper and an element of the sulphur group, other than oxygen, of varying thickness.

1,859,345. MECHANICAL BURGLAR ALARM FOR HOME OR TRANSIENT USE. ARNOLD A. SCHANTZ, Detroit, Mich. Filed Apr. 2, 1931. Serial No. 527,216. 4 Claims. (Cl. 116—86.)



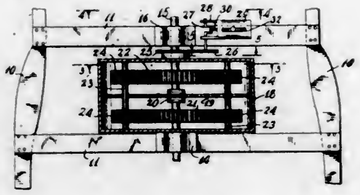
1. A device for the purpose described including a base member, a bell carried by said base, operating means in said base and bell for sounding said bell, means for holding and releasing said operating means and including a lever arm pivotally attached to said base and extending laterally from said base to swing thereon and including means for yieldingly holding said lever arm in the position to which it is turned, and a bracket secured to said base for holding said device with the laterally projecting end of said lever arm in the path of movements of a closure.

1,859,346. GRAB IRON FOR RAILWAY CARS. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 25, 1930. Serial No. 477,576. 4 Claims. (Cl. 105—461.)



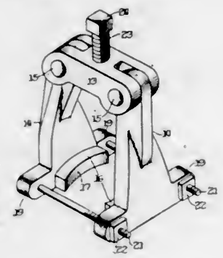
1. A grab iron for a railway car comprising a tread having depressions formed in the upper side thereof extending normal to the length of the tread.

1,859,347. GEARLESS SHIFT AND FREEWHEEL CONSTRUCTION FOR VEHICLES. MICHAEL FRANCIS SULLIVAN, New York, N. Y. Filed May 20, 1931. Serial No. 538,747. 10 Claims. (Cl. 74—34.)



1. A gearless shift and free wheel construction for automobiles and the like, comprising a driving element, a driven element for connection with the transmission of the vehicle, a planetary transmission element forming a connection between the driving and the driven element and having a drum, a resistance connected with the planetary transmission element, foot pedal means for varying said resistance from substantially zero to an amount sufficient to hold said drum against turning upon depression of the foot pedal, and adjustable means for automatically controlling the acceleration of said drum upon release of the foot pedal, comprising a dash pot adapted to retard the acceleration of said drum, said dash pot consisting of a main valve body, a valve, apertures in said valve body, a sleeve around the valve body and a groove in said sleeve, a means for locking the said sleeve in adjusted position, comprising peripheral teeth formed on the valve body, and means on the sleeve engaging said teeth.

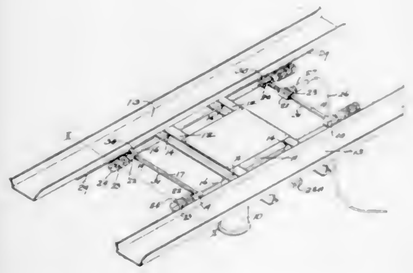
1,859,348. DEVICE FOR REMOVING HUB ASSEMBLIES FROM AXLES. FRANK SWIHART, Warsaw, Ind., assignor to The Dalton Foundries Inc., Warsaw, Ind., a Corporation of Indiana. Filed June 12, 1930. Serial No. 460,555. 1 Claim. (Cl. 29—85.)



A device for removing hub assemblies from axles having, in combination, a yoke adapted to straddle the free

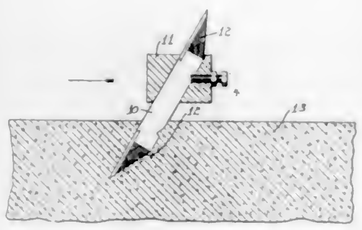
end of an axle on which a hub is mounted, said yoke comprising a base member and a pair of spaced arms having wider outer ends tapering into a relatively narrow portion, means for pivotally securing said arms to said base through said relatively narrow portions, elongated and narrow flanges on the inner faces of the arms and extending transversely of the wide ends of the arms, said flanges being opposed and having arcuate faces to engage an annular groove in the hub assembly, lugs on both sides of the arms extending laterally therefrom on the line of said flanges, bolts extending through corresponding pairs of lugs for drawing said arms toward an interposed hub assembly and securing them in such position, and means on said base arranged to engage said axle and movable to exert a separating force between the axle and yoke.

1,859,349. LIGHTING SYSTEM FOR AUTOMOBILE LIFTS. WILLIAM E. THIBODEAUX, Cleveland, Ohio. Filed Aug. 11, 1930. Serial No. 474,559. 5 Claims. (Cl. 240—2.)



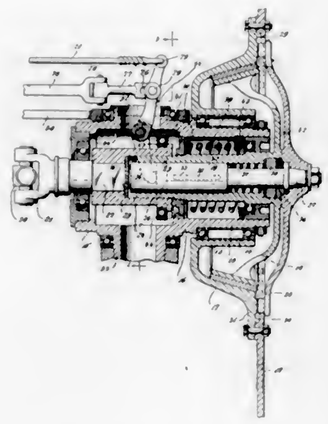
1. In an automobile lift having longitudinal rails, a plurality of rigidly interconnected lights, disposed between said rails, slidably supported by said lift, and shiftable relatively to said rails.

1,859,350. SCARIFYING TOOTH. ARTHUR B. WILSON, Perrysburg, Ohio. Filed Feb. 27, 1931. Serial No. 518,656. 4 Claims. (Cl. 262—33.)



1. A tooth comprising a wear plate portion forming the point and the wearing side of the tooth, and a brace plate slanting backward and upward from the rear side of the wear plate portion and attached to the wear plate portion at its lower end and to the body of the tooth at its upper end so that when the wear plate portion has worn off sufficiently to release the attachment of the brace plate at its lower end, the brace plate may be bent backward and upward.

1,859,351. FRONT DRIVE MECHANISM FOR MOTOR VEHICLES. OTTAVIO ZANCAN, New York, N. Y. Filed June 3, 1929. Serial No. 367,969. 6 Claims. (Cl. 180—17.)



1. In a device of the class described, the combination, with a hollow axle and a wheel rotatably mounted on said axle, of a hollow spindle axially shiftable within said axle, a friction clutch carried by said spindle, an additional spindle axially shiftable within said hollow spindle, a positive clutch carried by said additional spindle, and a clutch operating member adapted to shift first said positive clutch and then said friction clutch out of engagement with said wheel when said operating member is moved in a given direction.

1,859,352. ROTARY PLANT SUPPORT. FRED H. ALBEE, Winchester, Mass. Filed Dec. 20, 1930. Serial No. 503,704. 7 Claims. (Cl. 47—39.)

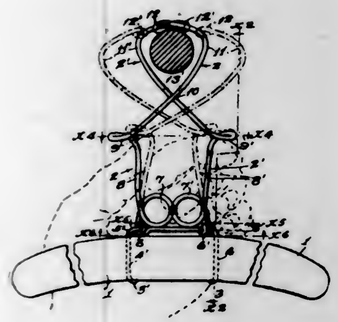


1. A rotary plant support having, in combination, a pair of discs pivotally mounted one on the other, a third disc constituting a spacer pivotally mounted therebetween, said third disc having a series of ball sockets therein projecting from each face respectively thereof, the said sockets being open to the passage of a ball thereinto from that face of said disc opposite to that from which they project, and closed to the passage of a ball therethrough on that face of said disc from which they project, and a series of balls in said sockets bearing against the adjacent faces of said two first-named discs.

1,859,353. GARMENT HANGER. DOUGLAS BOONE, Los Angeles, Calif. Filed Feb. 16, 1931. Serial No. 515,928. 3 Claims. (Cl. 223—61.)

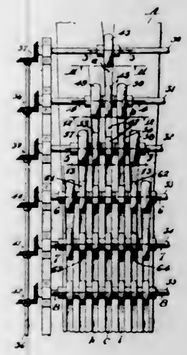
1. A garment hanger comprising spring members constituting risers reversely bent to form lateral shoulders and thence extending upwardly aslant across each other

and reversely forming support embracing loops; the shoulders and the risers below the shoulders forming finger retaining recesses in which the finger and thumb may be



caught to enable the grip of the thumb and the finger to spread apart the hooks to receive the support upon which the hanger is to be supported.

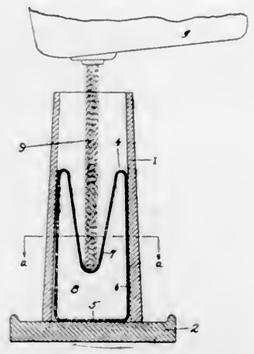
1,859,354. MEANS FOR FORMING FACING SHEETS FOR FABRICATED LATHS. GEORGE A. BUTTRESS, Los Angeles, Calif., assignor to F. and B. Holding Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 15, 1930. Serial No. 420,994. 12 Claims. (Cl. 154—30.)



1. In a machine for forming a facing sheet for fabricated lath, means for gathering the material of a fibrous sheet into parallel grooves having curved walls, and means for forming the grooves into flutes of substantially rectangular cross section.

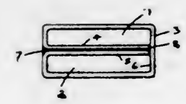
1,859,355. INGOT MOLD INSERT. WALTER M. CROWTHER, Beaver, Pa. Filed Oct. 25, 1929. Serial No. 402,427. 13 Claims. (Cl. 22—1.)

1. An insert for an ingot mold comprising a sealed bag having portions adapted to contact the walls and bottom of an ingot mold and a portion for arresting an initial quantity of molten metal poured into the mold,



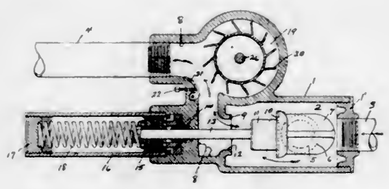
side portions being destructible by the heat of the molten metal to deposit said arrested metal upon the floor of an ingot mold.

1,859,356. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Dec. 13, 1929. Serial No. 413,864. 2 Claims. (Cl. 24—200.)



2. A slide buckle comprising a pair of metal loops arranged in a common plane and together having an upper bar and a lower bar integrally connected at one side of the loops and free at the opposite side; and straight intermediate bars integrally extending parallelly one with the other in said plane from the said free side to said connected side; and means for securing in permanent intimate union the engaging metal surfaces of the free sides of the loops.

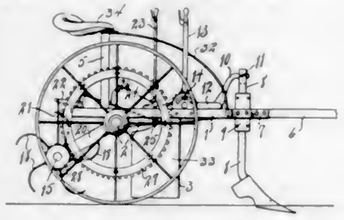
1,859,357. WATER REGULATOR. DONALD ELDER, Berkeley, Calif. Filed May 17, 1930. Serial No. 453,186. 13 Claims. (Cl. 137—144.)



1. A water regulator comprising a hollow body having a water chamber with an inlet and outlet passages, con-

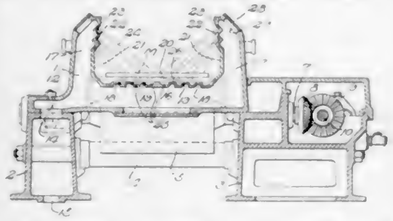
nected valve means arranged for closing one of said passages and opening the other successively, a stem on said valve means provided with a piston, a cylinder in which said piston operates and means for admitting water under pressure to said piston for operating said valve means comprising a waterwheel in a water passage of the regulator, reduction gearing driven by said waterwheel and including a threaded worm-like member, a pivoted arm engaging the thread of said worm-like member, and a valve covering a water port to said piston operated by said arm through travel imparted by said worm-like member.

1,859,358. PEANUT HARVESTER. SEBASTIAN C. FAULK, Burleson, Tex. Filed Sept. 11, 1931. Serial No. 562,288. 3 Claims. (Cl. 55—59.)



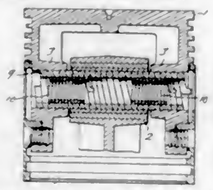
1. In a peanut harvester provided with a frame consisting of wheels and an axle therefor; a plow carried by said frame for severing the vine of the peanut from the ground, a revolving reel carried by said axle and adapted to pick up said vine, guides carried by said frame for directing said vine to said reel, and means for driving said reel.

1,859,359. APPARATUS FOR CONVEYING AND SPRAYING MATERIAL. GUSTAF L. FISK, Pittsburgh, Pa., assignor to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 13, 1931. Serial No. 529,594. 10 Claims. (Cl. 266—1.)



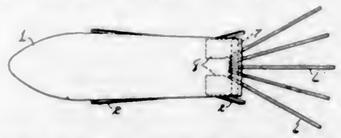
1. In a conveyor, supporting and conveying means, and a cooling trough intermediate said means and provided with corrugated bottom and side walls having jet openings therein, said cooling trough being entirely unobstructed throughout the length and width thereof in a plane above the bottom wall.

1,859,360. WRIST PIN CONSTRUCTION. PHELPS M. FREEE, Detroit, Mich. Filed July 28, 1930. Serial No. 471,363. 9 Claims. (Cl. 74—108.)



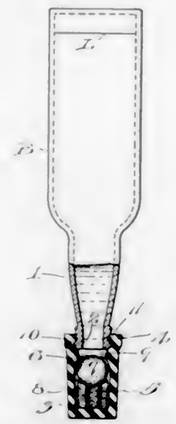
1. The combination with a piston and a connecting rod, of a bushing upon which said rod is journalled, a resilient coil extending through said bushing and into said piston at opposite ends of said bushing and resilient coils within and firmly engaging said first mentioned coil and extending across the gaps between said bushing and piston.

1,859,361. IRONING BOARD. LOUIS GOTHMAN and IRA E. SMALLEY, Rapid City, S. Dak. Filed Dec. 20, 1930. Serial No. 503,830. 1 Claim. (Cl. 68—10.)



An ironing device comprising a board, spaced blocks attached to the under side of the board and provided with parallel opposed inner faces merging into faces diverging from said parallel faces, a cross piece attached to the blocks below the diverging faced portions and bars slidable upon the cross piece and snugly through the space between the parallel faces of the blocks, said bars having downwardly projecting end portions adapted to abut against the edge of the cross piece, the arrangement being such that the group of bars may be projected from the end of the board in the form of a small ironing board and may be spread in the diverging space between the blocks to form a rack.

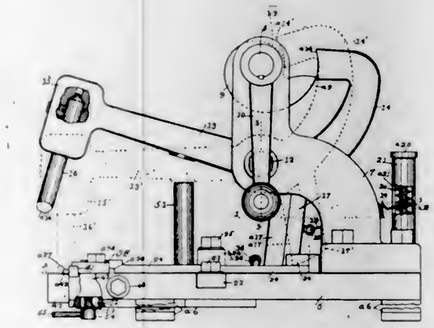
1,859,362. SEDIMENT COLLECTOR. FRANK A. GRAUMAN and ARTHUR H. GRAUMAN, Seattle, Wash. Filed July 22, 1931. Serial No. 552,518. 3 Claims. (Cl. 215—74.)



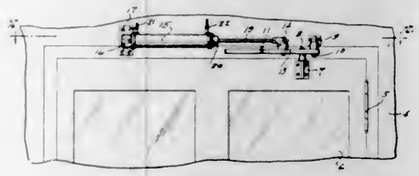
1. A sediment collector of elastic material adapted to form a closure for an inverted bottle, comprising a cap having spaced interior fins forming a seat, a valve in the collector adapted to rest upon said seat and permit precipitation of solids from the bottle, and means co-acting with the valve device when the bottle is righted to close the collector against egress of the collected sediment.

1,859,363. SAW SETTING MACHINE. CONNIE H. HART, Bellingham, Wash. Filed Jan. 30, 1931. Serial No. 512,288. 3 Claims. (Cl. 76—62.)

1. A saw setting machine including a base, a bearing bracket fastened to the base, a hammer handle mounted in a bearing on the bracket for oscillation in a vertical plane, means to adjust the position of the hammer handle longitudinally of its axis of oscillation, a hammer having a peen thereon fastened on the front end of the hammer handle, a cam mounted for revolution in a bearing on the bracket disposed to bear on the rear end of the hammer handle to raise and drop the hammer during each revolution thereof, means to revolve the cam, an arm fastened to the hammer handle extended downward therefrom proximate to the base to oscillate with said hammer handle, two levers fulcrumed on a fulcrum bar each with a rear end adapted to bear on the handle arm for oscillation thereby, a tension spring connected to both levers rearward of their fulcrums to react to cause the front ends thereof to bear against stops, said stops fastened to the base to limit the oscillation of the levers, said fulcrum bar mounted for reciprocation on the base parallel with the said axis of oscillation of the hammer handle having said lever fulcrums disposed thereon to cause the rear ends of the levers to bear one at a time on the handle arm for reciprocation thereby by the reciprocation of the fulcrum bar, means to releasably fasten the fulcrum bar to the base, an anvil fastened on the base beneath the hammer peen centrally disposed between the stop blocks, and a pawl pivoted on the front end of each of the levers disposed to engage with a tooth of a saw to move and spot the same on the anvil beneath the hammer peen when said lever end oscillates.

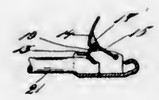


1,859,364. DOOR OPERATOR. JAMES B. HASKELL, Longville, Minn. Filed Jan. 5, 1931. Serial No. 506,576. 5 Claims. (Cl. 268—66.)



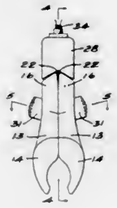
1. The combination with a door frame and a door hinged thereto, of a bracket applied to the door inward of its hinge, a second bracket applied to the door frame above the door between the door hinge and the door bracket, a cam acting lever pivoted to the second noted bracket and having a long cam slot and an intermediate laterally-projecting crank portion, said door bracket having a projection working in the slot of said cam lever, a cylinder support secured to the door frame, a cylinder pivotally connected to said cylinder support at one end, and a piston working in said cylinder and having a stem connected to the crank-acting portion of said cam lever, and means for controlling a supply of motive fluid to said cylinder for reciprocating the same in one direction to open the door and in the other direction to close the door.

1,859,365. CLASP FOR BRACELET STRAPS. SYLVESTER A. JOHNSON, North Providence, R. I., assignor to Albert E. R. Speidel, Edgewood, R. I. Filed May 23, 1931. Serial No. 539,497. 8 Claims. (Cl. 24—123.)



8. An end clasp for a cord bracelet comprising a body member having side walls, projections extending inwardly from the side walls at one end thereof, a gripping member having teeth at one end and a cam surface adjacent said end, a link pivoted at one end to the opposite end of the side walls and at its opposite end to said gripper member whereby said gripper member may be lifted from the body member for the reception of a cord bracelet end or the like and then closed by moving the end with the cam surface beneath said projections and swinging the member downwardly to cause the teeth at said end to bind the bracelet between said members.

1,859,366. HAIR WAVING DEVICE. RALPH M. KEELE, San Francisco, Calif., assignor, by mesne assignments, to Duart Manufacturing Co. Ltd., San Francisco, Calif. Filed Mar. 25, 1929. Serial No. 349,602. 9 Claims. (Cl. 132—36.)

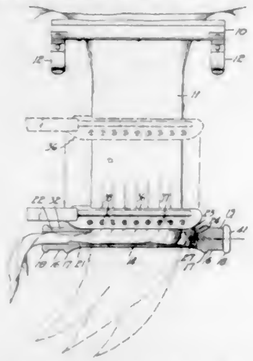


1. In a hair waving device, a pair of oppositely disposed elements adapted to impart heat to a coiled mass of hair, a pair of lever members extending from said elements, and a pair of finger hold members connected to said lever members at points located between the fulcrums of said lever members and said elements, whereby forces are adapted to be applied to said lever members to effect disengagement of said elements from heat transferring relationship with the hair.

1,859,367. HAIR WAVING APPARATUS. RALPH M. KEELE, San Francisco, Calif., assignor, by mesne assignments, to Duart Manufacturing Co. Ltd., San Francisco, Calif. Filed Apr. 27, 1931. Serial No. 533,135. 6 Claims. (Cl. 132—33.)

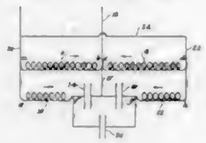
1. In a hair waving apparatus, a curler or mandrel upon which a flat strand of hair can be wound, and means for clamping the strand along one side of the mandrel, said means including a finger having one end thereof pivotally

connected to one end portion of the mandrel, the pivotal connection being on an axis normal to the finger and to the axis of the mandrel and intersecting the axis of the



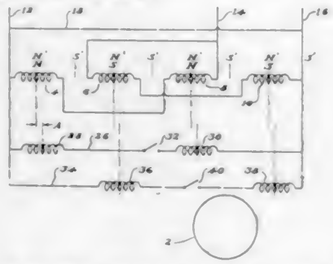
mandrel, the other end portion of the mandrel having a notch in its periphery adapted to receive and retain said finger.

1,859,368. CONDENSER INDUCTION MOTOR. CARLTON L. KENNEDY, Braintree, Mass., assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1929. Serial No. 417,198. 8 Claims. (Cl. 172—233.)



1. A condenser induction motor having, in combination, two main windings and two condenser circuits, each condenser circuit including a condenser winding and a condenser, and means for connecting the windings having provision for reversing the polarity of one main winding and the one condenser winding to change the number of poles.

1,859,369. INDUCTION MOTOR. CARLTON L. KENNEDY, Braintree, Mass., assignor to The Holtzer-Cabot Electric Company, Roxbury, Mass., a Corporation of Massachusetts. Filed Nov. 8, 1930. Serial No. 494,386. 22 Claims. (Cl. 172—278.)



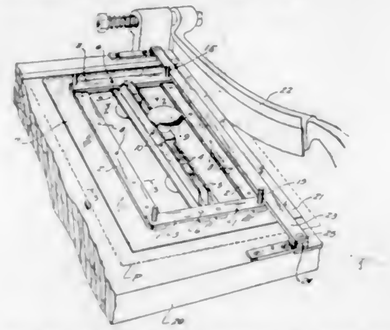
1. A changeable pole induction motor having, in combination, main windings wound for selective connection to form different numbers of poles, including at least one substantially coincident pole for the different connections, and a starting winding displaced in space from the main winding and having a polar axis displaced from the axis of said coincident pole and arranged to produce starting torque in the same direction irrespective of the main winding connections.

1,859,370. VARIABLE STROKE FEEDER. WILLIAM H. KING and ROBERT COTTAR, Weed, Calif. Filed Dec. 7, 1931. Serial No. 579,446. 5 Claims. (Cl. 144—245.)



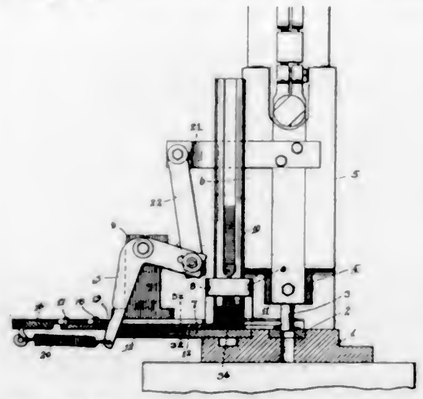
1. A reciprocating feeder comprising an elongated frame, a power cylinder mounted longitudinally on the frame, a pair of pistons within said cylinder, rods extending concentrically from said pistons and cylinder, a cross head to which one of said rods is secured, a slidable block to which the other rod is secured, means for adjustably separating said cross head and block, and a feeder shoe secured to the block for reciprocation therewith.

1,859,371. GAUGE FOR USE WITH CUTTERS. ALFRED LAUKHUFF, Milwaukee, Wis. Filed Jan. 5, 1928. Serial No. 244,583. 14 Claims. (Cl. 164—59.)



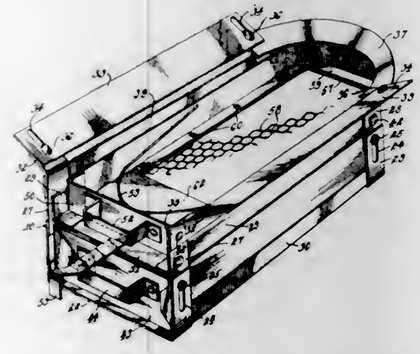
1. A gauge for use in cutting comprising a frame, means for releasably attaching the frame to the object to be cut in any desired relative position of the frame and object, and abutments adjacent the corners of the frame adapted for engagement in pairs with gauging means of a cutter.

1,859,372. FEEDING APPARATUS. ALBERT MUTSCHLER, Rochester, N. Y., assignor to A & H G Mutschler Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 30, 1929. Serial No. 396,138. 5 Claims. (Cl. 164—88.)



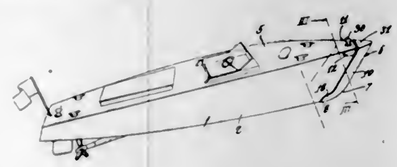
1. In a feeding apparatus for punch presses the combination of a guide, a push rod having a slot therein mounted to reciprocate in said guide, an oscillating lever engaging into the slot in said push rod and adapted to swing back and forth therein, a spring connecting said lever with said push rod to yieldingly hold said oscillating lever against one end of the slot in said push rod and reciprocate said push rod on the oscillation of said lever by means of said connecting spring, said push rod being adapted to feed a blank on the movement thereof in one direction.

1,859,373. ASH SIFTER. JOHN NESE, Niagara Falls, N. Y. Filed July 15, 1931. Serial No. 551,026. 12 Claims. (Cl. 126—244.)



1. An ash collector comprising upper and lower removable compartments, a frame having guides therein for receiving the compartments, and adjustable members in the frame for varying the width and height of the latter.

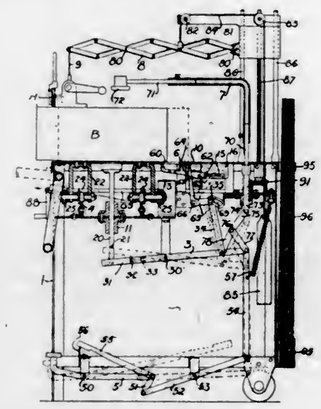
1,859,374. PROW CONSTRUCTION FOR BOATS. SAMUEL ORKIN, Beverly Hills, Calif., assignor to Calwiss Industries, Ltd., Beverly Hills, Calif., a Corporation of California. Filed June 23, 1931. Serial No. 546,208. 8 Claims. (Cl. 9—6.)



1. In a prow construction for boats, a single element of rigid construction forming a prow unit extending the full vertical height of the bow of the boat and extending rearwardly beneath a portion of the bottom of the boat, said unit being substantially V-shaped in horizontal cross section to form a pair of rigid walls extending over and on the outside of the front ends of the sides of the boat, a wedge element, and means engaging said prow element for drawing said wedge element into the interior of said V to press the boat sides outwardly into clamping relation with the walls of said V constituting the sole attachment between said prow element and said boat sides.

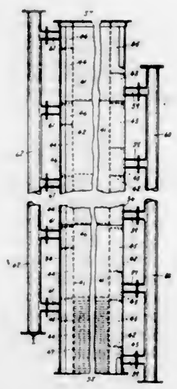
1,859,375. PACKAGE HANDLING AND BINDING APPARATUS. VINCENT TENUTA, Seattle, Wash. Filed Sept. 4, 1928. Serial No. 303,938. 10 Claims. (Cl. 100—31.)

1. A package handling table comprising a package holding turn-table mounted for vertical movement, a circular cam track and wheels carried by the table and running upon said cam track, means for raising said turntable at will, tappets carried by the turntable, and springs having



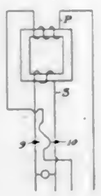
curved surfaces engaged by said tappets as the turn-table is raised to thereby impart an initial turning movement to the turn-table.

1,859,376. WAX SWEATING PLANT. HUGH LOGIE ALLAN, Burmah, British India, assignor to The Burmah Oil Company Limited, Glasgow, Scotland, a British Corporation. Filed July 25, 1930, Serial No. 470,640, and in Great Britain Oct. 2, 1929. 9 Claims. (Cl. 196—20.)



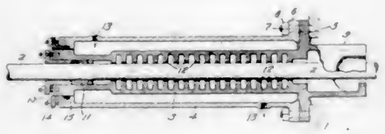
5. Apparatus for the heat-treatment of wax or wax mixture comprising a rectangular wax containing vessel, the bottom of which slopes towards one side, a vertical charging passage at the side of the vessel to which the bottom slopes and opening into said vessel, a supply pipe at the upper end of said passage, an outlet at the lower end of said passage, a wax support above the bottom of said vessel, a multiplicity of straight transverse heating or cooling fluid circulating pipes arranged in superposed transverse rows in said vessel and parallel with the side of the vessel to which the bottom slopes, inlet and outlet chambers at the ends of said vessel communicating respectively with the lowermost and uppermost groups of pipes, and intermediate end chambers connecting the pipes in groups at alternate ends.

1,859,377. CIRCUIT BREAKER. WILLIAM M. BOUDION, New York, N. Y. Filed May 6, 1929. Serial No. 360,962. 4 Claims. (Cl. 175—294.)



1. A protective device comprising a transformer feeding gas or vapor discharge devices, having a primary circuit and a secondary circuit, a destructible element maintaining the primary circuit of the transformer in energized condition, and a spark gap connected in parallel to the secondary terminals of said transformer and open normally to such extent that sparks will not pass between the terminals, said destructible element located adjacent the terminals of the secondary circuit whereby upon occurrence of an abnormal secondary potential a discharge will take place and destroy said element thereby interrupting the primary circuit of the transformer.

1,859,378. LIQUID COOLED STUFFING BOX. CHARLES B. BUERGER, Pittsburgh, Pa., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed Nov. 30, 1928. Serial No. 322,924. 4 Claims. (Cl. 286—27.)

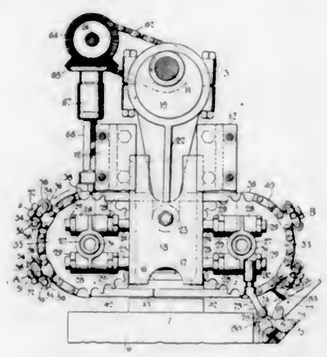


1. The combination with a pump having a pump cylinder and a reciprocating pump shaft of a jacket extending outwardly from the pump cylinder head and surrounding the pump shaft and spaced away therefrom and carrying at its outer end a stuffing box adapted to prevent the passage therebeyond of fluid from the pump cylinder, a series of fins extending inwardly from said jacket toward the pump shaft and forming a series of annular pockets surrounding the pump shaft, said series of fins being situated between the stuffing box and the pump cylinder head; a second jacket enclosing the first and spaced away therefrom and carrying a second stuffing box at its outer end adapted to seal off the space between the two jackets while permitting sliding motion between their ends; and means for introduction of a cooling medium into the space between the two jackets and means for discharge of said cooling medium therefrom.

1,859,379. PROCESS OF TREATING TOBACCO. ALMOND L. CHESLEY, Richmond, Va., assignor to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 15, 1930. Serial No. 436,253. 20 Claims. (Cl. 131—6.)

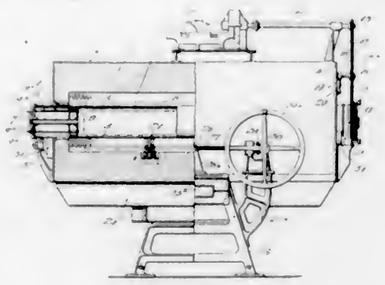
1. The method of neutralizing acidity, liberating nicotine and improving the hygroscopic qualities of tobacco, which consists in treating the tobacco with a non-volatile amine.

1,859,380. INKER FOR PRINTING FACES. HARRY L. COMPTON, Washington, D. C., assignor to The American Dairy Supply Company, Augusta, Me., a Corporation of Maine. Filed May 15, 1930. Serial No. 452,654. 13 Claims. (Cl. 101—294.)



1. An inker for reciprocating printing faces, comprising in combination; a reciprocating carrier; a printing face mounted thereon; sprockets mounted coaxially in pairs on said carrier; parallel endless chains running on said sprockets; inking rollers mounted on said chains and carried thereby across said printing face; a pair of ink distributors, each mounted between a corresponding pair of axially alined sprockets to reciprocate in the direction of the axis of the sprockets, each distributor having a cylindrical surface in contact with which said inking rolls pass; roll guiding extensions extending from one distributor to the other; means for reciprocating said distributors in unison; means for reciprocating said carrier and rotating said sprockets in timed relation; and means for supplying ink.

1,859,381. ROTARY RETORT FURNACE. FRANK J. CONDIT, Milwaukee, and EDWIN L. SMALLEY, Whitefish Bay, Wis., assignors to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1930. Serial No. 442,591. 10 Claims. (Cl. 263—34.)



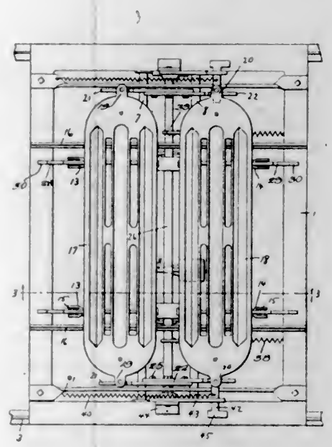
1. In a rotary retort furnace, a furnace chamber, a rotary retort, means supported by said furnace for journaling said rotary retort adjacent opposite ends thereof, and roller members mounted intermediate the ends of said retort and disposed wholly within said furnace chamber, said roller members being vertically adjustable from the exterior of said furnace chamber for engaging said rotary retort and supporting said retort when said retort is in operative position.

1,859,382. STOPPER AND RETRACTING DEVICE FOR COLLAPSIBLE TUBES. GEORGE R. CRUZE, Danville, Pa. Filed Apr. 28, 1931. Serial No. 533,524. 6 Claims. (Cl. 221—60.)



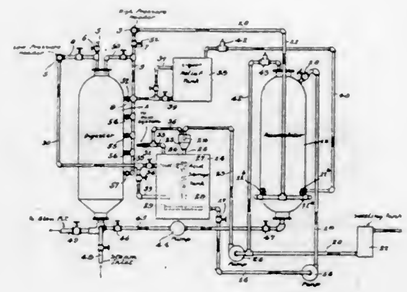
1. The combination with a tube for a fluent substance, of a stopper and diaphragm of pliable material closely fitting in the tube at the discharge end, said stopper end being folded and apertured, and said diaphragm and stopper adapted to open and move with the material when the tube is collapsed and to close and retract the emitting substance when pressure is released, as and for the purpose set forth.

1,859,383. BOOKING MECHANISM FOR RADIATOR CORE MAKING MACHINES. THERON MILTON DIVER, Edwardsville, Ill. Filed Aug. 4, 1928, Serial No. 297,532. Renewed Oct. 23, 1931. 11 Claims. (Cl. 22—9.)



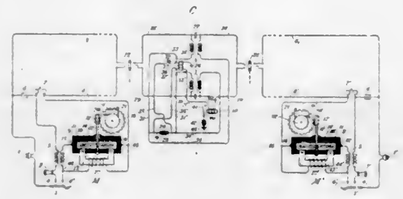
1. A booking mechanism for radiator core making machines comprising in combination a supporting frame, cross bars arranged on the frame, a core box, a core pan separate from the core box, said core box and core pan normally resting on the cross bars in an open horizontal position, means for swinging the core box and the core pan upwardly toward each other to a vertical closed position, whereby the inner opposed edges of the box and pan will rest on the cross bars, and additional means for swinging the box and pan while still in a closed position downwardly to a horizontal position for rest upon the cross bars with the pan underlying the cross bar.

1,859,384. PROCESS AND APPARATUS FOR DIGESTING FIBROUS MATERIALS. THOMAS LEONIDAS DUNBAR, Watertown, N. Y. Filed Apr. 21, 1930. Serial No. 446,046. 38 Claims. (Cl. 92—11.)



1. In the digestion of fibrous material, introducing acid liquor into a digester while discharging air to the atmosphere from the digester through an air vent until acid gas appears, and as soon as said gas commences to escape from the digester undergoing filling, immediately closing said air vent and recovering said gas.

1,859,385. TELEPHONE SYSTEM. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 1, 1929. Serial No. 382,740. 7 Claims. (Cl. 179—7.1.)

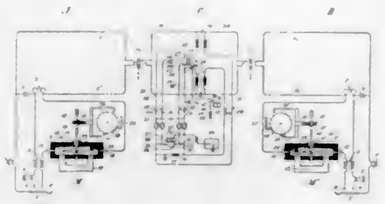


1. In a telephone system, subscribers' stations, connecting circuits for establishing talking connections between said stations, a current source for supplying talking current to said station, and a motor meter located at each of said stations in series therewith and having an armature circuit including a rotatable armature, a variable magnetic field and a counter mechanism adapted to be operated by the rotation of said armature, the variation of said magnetic field being inversely proportional to changes in current through said armature.

1,859,386. TELEPHONE SYSTEM. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 1, 1929. Serial No. 382,741. 6 Claims. (Cl. 235—92.)

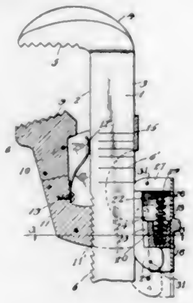
6. In combination, a permanent magnet, a receptacle of insulating material containing mercury, a pivoted disk immersed in said mercury and adapted to rotate one complete revolution in either direction in a predetermined

period of time when current of predetermined value is transmitted therethrough, the direction of said rotation being dependent upon the direction of current flow through said disk, a bar member fastened to said disk, a stop member adapted to engage said bar member when said disk



has rotated one complete revolution in either direction and to prevent said disk from rotating more than one complete revolution at a time in either direction, and means for registering only the number of times said disk rotates a complete revolution in either direction.

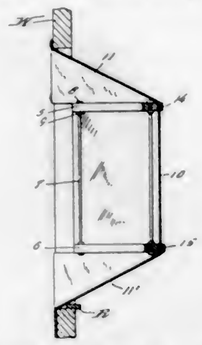
1,859,387. WRENCH. SETH N. ELLIOTT, Marine, Ill. Filed Aug. 25, 1930. Serial No. 477,609. 2 Claims. (Cl. 81—148.)



1. A wrench including a handle shank having teeth and terminating at its upper end in a fixed jaw, a movable jaw associated with said fixed jaw and having teeth normally engaging the teeth of the handle shank, a yoke embracing the movable jaw and having straps surrounding the handle shank, one of said straps being extended to project rearwardly of said handle shank and being formed with a spring seat, a locking member associated with said latter mentioned strap and having an elongated shank slidably carried between the spring seat and the handle shank, said locking member having a head at its upper end and terminating at its lower end in a thickened lug, a pin screwed into the head, a spring having one end disposed in the socket and the other end surrounding said pin, said spring urging the locking member upwardly for retaining the teeth of the handle shank and the movable jaw in engagement, and a hood fitting about the head and the lug, said hood providing means for retracting the locking member and freeing the teeth of said movable jaw from the teeth of the handle shank and providing a housing for the spring, the locking member and the projecting portion of the strap.

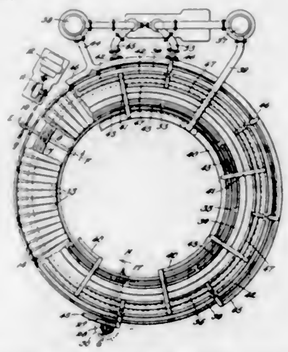
1,859,388. WEATHER STOP FOR CAB WINDOWS. GROVER J. GLAUS, Charleston, S. C. Filed May 5, 1930. Serial No. 450,034. 2 Claims. (Cl. 20—40.)

1. In a device of the class described, upper and lower frame members adapted to extend in spaced horizontal relation across the window opening of a locomotive cab, a transparent panel extending between said upper and lower frame members and terminating at its opposite ends on opposite sides of the window opening in abutting relation with the wall of the locomotive cab, a curtain member secured at one edge to the upper frame member, said curtain member extending for the full length of said frame member and having its free marginal edge portion



adapted to be secured to the wall of the cab along the upper edge and opposite side edges of the window opening, a lower curtain member secured to and depending from the lower frame member, said lower curtain member adapted to have a portion thereof extend through the lower portion of the window opening interiorly of the cab.

1,859,389. APPARATUS FOR PASTEURIZING BEER OR OTHER LIQUIDS. ROBERT FINDLAY GRAHAM, London, England. Filed Dec. 9, 1930. Serial No. 501,112, and in Great Britain Sept. 5, 1930. 5 Claims. (Cl. 126—272.)

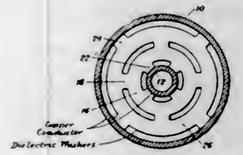


1. Apparatus for pasteurizing liquids comprising a circular carrier, radial guides on said carrier adapted for accommodating radial rows of liquid containers which contact one with another, a single guide comprising a cam of comparatively short length extending at an angle to one edge of the carrier, driving means for producing relative rotational movement of said carrier and guide whereby said guide engages successively the nearest container of the radial rows and thereby causes each row in succession to move radially of the carrier, and spraying means for directing pasteurizing liquid on to the containers.

1,859,390. CONCENTRIC CONDUCTOR SYSTEM. ESTILL I. GREEN, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 23, 1929. Serial No. 365,520. 2 Claims. (Cl. 173—265.)

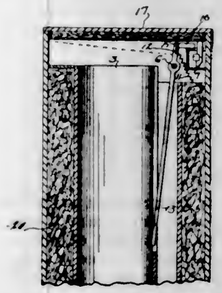
1. In a conducting system for the communication of intelligence, two concentrically arranged conductors so

connected that one acts as a return for the other, insulating spacers arranged at intervals in the space between the conductors, said spacers each comprising concentric



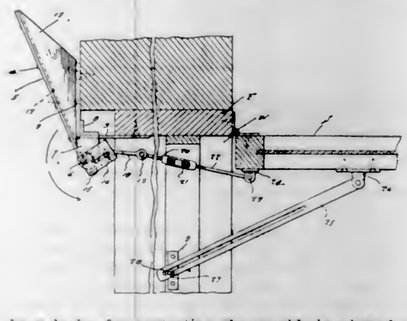
rings of dielectric material with spokes of dielectric material extending between adjacent rings, and with spokes of dielectric material extending between each conductor and the ring nearest to said conductor.

1,859,391. SANITARY MILK CABINET. PER LEE B. GROJEAN, Columbus, Ohio, assignor of one-half to Charles W. Oakes, Columbus, Ohio. Filed Aug. 18, 1930. Serial No. 476,153. 3 Claims. (Cl. 232—41.1.)



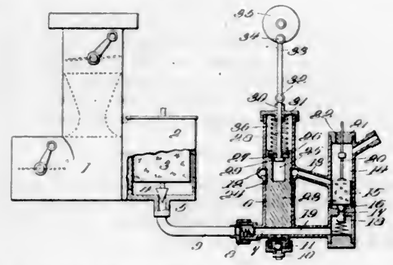
1. A cabinet having cells therein, a shaft pivotally supported by the cabinet and having levers fixed thereto which depend into the cells, and arm carried by the shaft, a plate connected with the arm, a lock casing carried by the cabinet and having a slot therein, a cover for the cabinet having a hook-catch carried thereby, means for yieldably holding the plate in position for closing the slot to prevent entrance of the hook-catch, said levers being operable upon depositing a bottle in a cell to rock the shaft to cause the arm to slide the plate to uncover the slot, as and for the purpose set forth.

1,859,392. PROTECTOR FOR THE OUTSIDE BASEBOARD OF A WINDOW. JOHN HARPER, Pontiac, Mich. Filed Jan. 27, 1931. Serial No. 511,612. 5 Claims. (Cl. 20—40.)



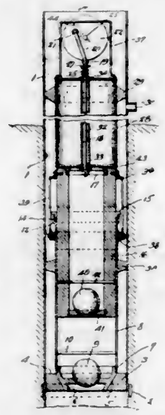
1. In a device for protecting the outside baseboard of a window, a shield comprising an elongated plate, brackets for swingably supporting the shield adjacent the baseboard, and means operatively connecting the shield with the window whereby when said window is swung to an open position, said shield will be swung to an operative position with respect to the base board.

1,859,393. FUEL FEEDING SYSTEM FOR MOTOR VEHICLES. FRANK H. HEITGER, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Indiana. Filed May 25, 1925. Serial No. 32,648. Renewed Oct. 20, 1931. 3 Claims. (Cl. 103—38.)



1. A pumping mechanism for fuel feeding systems comprising a pump barrel having a slidably mounted piston, a spring for moving said piston to discharge fuel from said pump and a piston rod slidably mounted in said piston for moving said piston on the suction stroke for compressing said spring, the movement of said piston being controlled by the consumption of fuel.

1,859,394. HYDRAULIC RAM OR PUMP. JAMES W. HOLLADAY, Plainview, Tex. Filed May 24, 1930. Serial No. 455,424. 1 Claim. (Cl. 103—227.)



In a device of the class described, a hollow piston having a downwardly-closing check valve at its lower end, a crank, means for supporting the crank for rotation, a connection joined to the piston, a pitman pivoted to the connection and to the crank, and upper members slidable on the connection and forming a closure for the upper end of the piston, spring means for seating the upper member on the piston to effect a closure of the piston, as aforesaid, and a projection on the crank, which engages the yoke, throughout a portion of the rotation of the crank, to space the upper member from the piston and then release the upper member for movement to closed position with respect to the piston, responsive to the spring means.

1,859,395. MOUTHPIECE FOR CIGARETTES. JAMES F. HUGHES, New York, N. Y. Filed May 18, 1931. Serial No. 538,379. 2 Claims. (Cl. 131—52.)



1. A cigarette mouth-piece comprising a disc adapted to lie against the cigarette end and having an inwardly bent and integral portion for penetrating the cigarette tobacco, said disc and penetrating portion being stamped from a fibrous sheet, substantially as set forth.

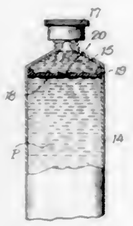
1,859,396. PHONOGRAPHIC RECORD. CARL JÄGER, Mannheim-Waldhof, Germany. Filed Aug. 20, 1930, Serial No. 476,666, and in Germany Feb. 8, 1929. 2 Claims. (Cl. 274—41.)



1. The herein described process of forming a phonographic disk for recording and reproducing purposes, consisting in providing a core of relatively soft metal formed with a stylus-receiving groove, providing the core with a flexible thin hard metal surface film conforming to the groove, the hard metal surface film being of a character readily responsive to stylus recording indentations for transmitting said indentations permanently to the soft metal core without breaking through the hard metal.

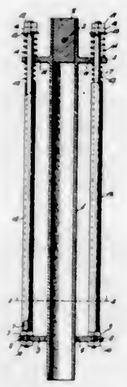
2. A phonographic record comprising a core of soft metal and a flexible thin hard metal surface film for the core, the surface film being readily responsive to stylus recording indentations, and insuring that such indentations are transmitted to and remain permanently in the soft metal without rupture of the hard metal film.

1,859,397. METHOD AND DEVICE FOR STOPPING AND REGULATING FLOW FROM COLLAPSIBLE TUBES. EDWARD F. JOHNSON and GEORGE R. CRUZE, Danville, Pa. Filed Feb. 27, 1931. Serial No. 518,872. 2 Claims. (Cl. 221—60.)



1. The combination with a tube for a fluent substance having a reduced end portion providing an annular abutment, of a separate and orificed flat diaphragm of soft pliable material having a substantially enlarged edge portion, said enlarged portion of the diaphragm closely fitting against said annular abutment and operable to open and move with the material when the tube is collapsed, and to close and retract the emitting substance when said pressure is released, as and for the purpose set forth.

1,859,398. POST DRIVER. FRANK JUDD, Sac City, Iowa, assignor to E. S. Gaynor Lumber Company, Sioux City, Iowa, a Corporation of Iowa. Filed May 26, 1930. Serial No. 455,918. 4 Claims. (Cl. 61—73.)

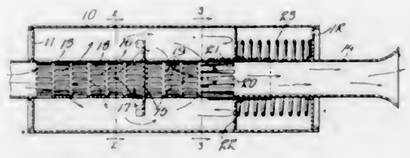


3. A post driver comprising a guide tube, a weight in the upper end of said guide tube, a plate integral with said guide tube on the outside of said tube immediately adjacent the lower end of said weight and operating handles resiliently connected to said plate.

1,859,399. NEW PROCESS FOR INTRODUCING SULPHOCYANIC GROUPS IN ALIPHATIC COMPOUNDS. HANS PAUL KAUFMANN, Jena, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Original application filed Aug. 21, 1926, Serial No. 130,770, and in Germany Aug. 27, 1925. Divided and this application filed Nov. 30, 1928. Serial No. 322,965. 6 Claims. (Cl. 260—98.)

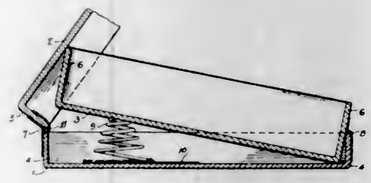
1. A process which comprises causing an alkali metal salt of sulphocyanic acid in a dissolved form and a halogen to act on an aliphatic compound of an unsaturated character.

1,859,400. MUFFLER. FRANCIS E. KERSEY, Lebanon, Ind. Filed Sept. 25, 1930. Serial No. 484,431. 4 Claims. (Cl. 137—160.)



1. A muffler comprising a cylindrical casing, a pipe extending through one end of the casing and terminating near the front end of said casing, a disk closing the end of the said pipe, a second pipe secured to the said disk and extending through the other end of the casing, said pipes being provided with openings for permitting the passage of the products of combustion, a flanged sleeve surrounding the said second pipe, spring means tending to hold the said flanged sleeve resiliently against the pressure of exhaust gases in the casing, and over said openings in the said second pipe, said openings being controlled by the said sleeve, substantially as set forth.

1,859,401. DISPLAY BOX. BYRON HASSBERG LENGSFIELD, New Orleans, La., assignor to Lengsfield Brothers, Inc., New Orleans, La. Filed Mar. 21, 1931. Serial No. 524,379. 1 Claim. (Cl. 206—44.)



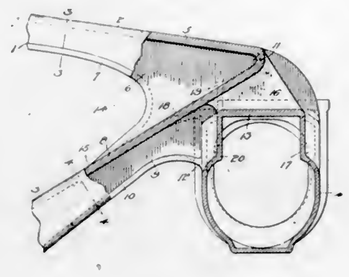
A display box comprising a bottom with marginal walls, a top with marginal walls adapted to seat on the marginal walls of the bottom, a tray with marginal walls, adapted to seat on the bottom and within the marginal walls thereof, the marginal walls of the tray having their top edges in a common plane being of greater height than those of the bottom, hinge means connecting adjacent marginal walls of the top and bottom, and hinge means connecting the opposite marginal wall of the bottom with the adjacent marginal wall of the tray and spring means adapted to force the tray into constant engagement with the top when closed.

1,859,402. RESERVOIR BRUSH. CHARLES MAHER, Portland, Oreg. Filed Sept. 13, 1930, Serial No. 481,772. Renewed Apr. 8, 1932. 3 Claims. (Cl. 15—135.)



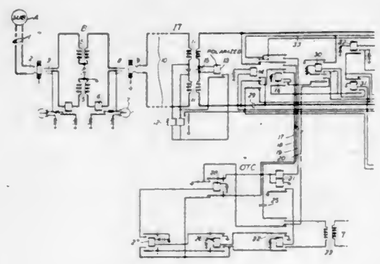
1. In a structure of the class described, in combination, a collapsible tube of the class described embodying a screw threaded discharge neck, a nozzle having a socket into which said neck is tapped, said nozzle including a tubular extension and a laterally directed discharge terminal, a brush including a back having bristles attached thereto, said back having an opening communicating with said bristles and a groove associated with said opening, the tubular portion of said nozzle being seated in said groove, and the lateral terminal extending into said opening, whereby to deliver the contents of the tube through the nozzle to the bristles of said brush, a retaining frame embracing the tube, nozzle and brush, and a clamp carried by said nozzle and detachably connected with an adjacent portion of said frame.

1,859,403. SIDE FRAME. MARK H. MARTIN, Baltimore, Md., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Aug. 26, 1925. Serial No. 52,579. 27 Claims. (Cl. 105—205.)



1. A side frame comprising a main truss portion and journal boxes separate from said truss portion but integral with the frame and braced with respect thereto by longitudinally disposed webs intermediate the side edges of said truss portion.

1,859,404. TELEPHONE EXCHANGE SYSTEM. MARCELLUS B. MCDAVITT, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 19, 1930. Serial No. 503,601. 13 Claims. (Cl. 179—27.)

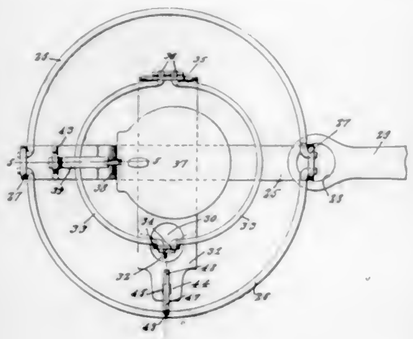


1. In combination, a relay for receiving impulses, a circuit, means for causing the operation of said impulse receiving relay and the closing of said circuit, and means for opening and closing said circuit in response to each impulse received by said relay and for holding said circuit closed when said relay releases.

1,859,405. TRAP. ALLEN MCMULLEN, Number Four, N. Y. Filed Feb. 17, 1931. Serial No. 516,377. 2 Claims. (Cl. 43—88.)

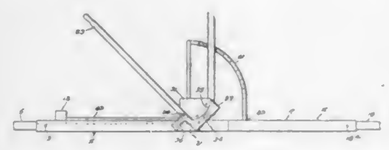
1. A double jaw spring trap for fur-bearing animals including a base having upstanding ends on which the ends of the outer jaws are journaled and one of said ends receiving therethrough the eyes of the double spring, a double spring member arranged transversely of and secured to the base, the lower arm of the spring being shorter than the upper arm and the upper arm having an elongated opening therethrough, ears on the lower arm, inner jaws having trunnions on their ends journaled through the ears and one of said ears designed to pass through the opening in the upper spring arm, a pan between the inner jaws having a keeper attached thereto, which is loosely pivoted to the base, an upstanding post

on the base having an opening therethrough and a lug element arranged centrally in the opening, a keeper plate having an eye portion which is swingably attached to the element and designed to engage with the keeper and to contact therewith, when out of such engagement to



hold the said keeper from movement between the outer jaws, and a latch member loosely carried by the upper spring designed to be automatically contacted by and to engage with one of the outer jaws for holding the outer jaws open.

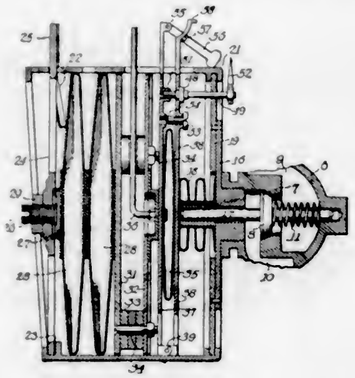
1,859,406. PIPE AND CONDUIT BENDER. GEORGE WILLIAM MEIGHAN, North Bergen, N. J. Filed Feb. 20, 1931. Serial No. 517,358. 3 Claims. (Cl. 153—32.)



3. A tube or bar bending machine of the type described comprising a base of channel form having an open frame at an intermediate point thereof, a stationary bending block adjacent the open frame at one side thereof, and a pivoted lever carrying an upwardly swinging bending block for cooperation with the stationary bending block, and an abutment slidable on the base between the stationary block and the contiguous outer end of the base, and a linear scale on the other end portion of the base, and a quadrant mounted adjacent the bending block having indicia for indicating the angularity of movement of a tube or bar being bent in the machine, said lever having also a downwardly swinging bending block cooperating with a further bending block on the base, for simultaneously upwardly and downwardly bending a tube or bar to the same degree.

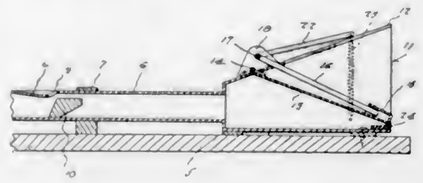
1,859,407. TEMPERATURE REGULATION. ARTHUR J. OTTO, Milwaukee, Wis., assignor to Johnson Service Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 22, 1928. Serial No. 263,754. 10 Claims. (Cl. 236—36.)

1. The combination of a thermally responsive motor; a heat controller operatively connected therewith to be actuated thereby in response to changes in temperature; adjusting means interposed in said connections for varying the relation between said motor and controller; a pneumatic motor for progressively moving said adjusting



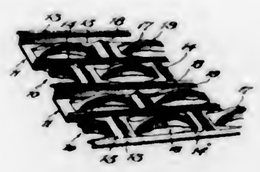
means in response to pressure changes in said pneumatic motor; and means operable from a remote point for varying the pressure in said pneumatic motor.

1,859,408. SIGNALING WHISTLE. HENRY J. OTTO, Moberly, Mo. Filed Feb. 6, 1932. Serial No. 591,411. 3 Claims. (Cl. 116—137.)



1. In a structure of the class described, in combination a whistle having a tubular body, an air intake funnel at the intake end of the tubular body of said whistle, said funnel having a plate hingedly mounted therein to serve as an air control valve, and manually manipulated actuating means for said valve.

1,859,409. REENFORCED METAL LATH. WILLIAM J. PURSER, Mineral Ridge, Ohio, assignor to The Bostwick Steel Lath Company, Niles, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 430,985. 16 Claims. (Cl. 72—116.)



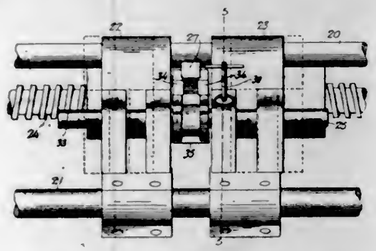
7. A metal lath structure comprising a sheet of metal corrugated to provide parallel ribs and a depression between each adjacent pair of ribs, and stiffening formations extending transversely across said ribs at points spaced longitudinally along said ribs.

1,859,410. RAIL JOINT. BRUNO SCHELLIN, Lubars, near Berlin, Germany. Filed June 17, 1930, Serial No. 461,742, and in Germany Feb. 9, 1929. 6 Claims. (Cl. 238—206.)



1. A one-piece flange clip for rail joints with fish-plates, said clip being U-shaped in cross-section and being provided with lateral claws spaced to permit the clip to be passed sidewise obliquely over the adjacent flanges separate short longitudinal keys below the rail flange for tightening the joint, and other keys passing transversely through the lateral parts of the flange clip and lying between said longitudinal keys, one of said transverse keys acting on the adjacent ends of the short longitudinal keys.

1,859,411. YARN FEEDING MEANS FOR STRAIGHT KNITTING MACHINES. RICHARD E. SCHLETTER, Philadelphia, Pa., assignor to Schletter & Zander, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 13, 1927. Serial No. 219,240. 15 Claims. (Cl. 66—129.)



1. In a straight knitting machine, a set of yarn-guide carrier bars, a reversely-threaded screw, threaded stops on the screw, a rod supported by the stops for movement in the direction of its length, a dog on the rod movable into position for engagement by one or more carrier bars of said set, and a second dog on said rod straddling the first and movable into engagement with other bars of the set.

1,859,412. TONSILLECTOME. ULYSSES SCOTT SMITH, Hannibal, Mo. Filed Sept. 25, 1931. Serial No. 565,173. 4 Claims. (Cl. 128—309.)



2. A tonsillectome comprising an elongated bar having a longitudinal slot therein, a guide on one end of the bar, said guide projecting beyond said one end of the bar, an arcuate jaw on the free end of the guide, the surfaces of said jaw being rounded, a carrier mounted on the bar and slidable operable in the slot, a raised rib on an intermediate portion of the carrier, a guard on one end portion of the rib, a series of upstanding posts on one end portion of the carrier, certain of the posts being substantially T-shaped, a snare detachably mounted on the carrier and operable through the guide for coaction with the jaw, said snare comprising a single length of heavy wire bent in loop form and having its end portions engaged with the posts in a manner to retain the snare in position on the carrier, the ends of the wire being engaged with the rib beneath the guard, and means for actuating the carrier.

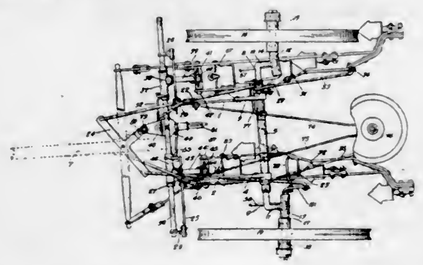
1,859,413. ALLOY. JOSEPH KENT SMITH, Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 21, 1931. Serial No. 510,278. 2 Claims. (Cl. 75—1.)

1. As a new article of manufacture, an alloy comprising beryllium, aluminum and silver, each roughly constituting about one-third of the alloy by weight.

1,859,414. PROCESS OF FORMING PULPS. EARL P. STEVENSON, Newton, and HARRY A. BURON, Boston, Mass., assignors to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,606. 7 Claims. (Cl. 92—21.)

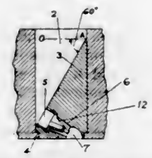
1. A process of preparing a bituminous pulp, which consists in mechanically mixing wet fibrous material composed of bitumen and fiber in a closed compartment, and under pressure, and thereafter transferring said material to another mixer where it is reduced to a pulp through hydration with water assisted by a mechanical agency.

1,859,415. CULTIVATOR. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Apr. 3, 1924. Serial No. 703,915. Renewed Feb. 20, 1931. 16 Claims. (Cl. 280—87.)



1. In an agricultural implement including a frame, the combination therewith of crank axles supported on the frame, spindles rockably supported on the crank axles, ground wheels on the spindles, a rocking member pivotally mounted on the implement and extending in opposite directions from its pivot transversely of the implement, a vertical arm integral with the inner end of each spindle, a rod connecting each arm with an end of said member, and means operable to rock one of said arms and spindle and to simultaneously actuate said member to rock the other arm and spindle whereby the ground wheels are steered angularly to the line of draft.

1,859,416. MEANS FOR MANUFACTURING MACARONI. GUIDO TANZI, Brooklyn, N. Y., assignor to Mario Tanzi & Bros., Inc., Boston, Mass., a Corporation of Massachusetts. Filed Nov. 1, 1929. Serial No. 404,025. 2 Claims. (Cl. 107—14.)

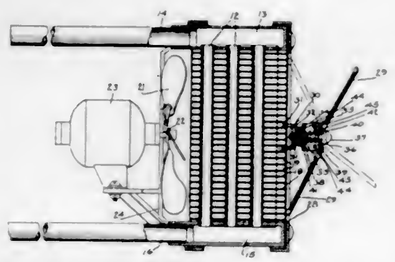


1. Means for producing spiral macaroni, comprising a die having a uniform outlet and inlet opening and a compound passage therebetween for unbalancing the flow at said outlet opening and a spiral groove positioned opposite said outlet opening for twisting and carrying the macaroni free from said die.

1,859,417. MEANS AND METHOD OF MAKING LEATHER. FRANK WAVRA, Woodriver, Ill. Filed Nov. 3, 1930. Serial No. 493,227. 6 Claims. (Cl. 149—4.)

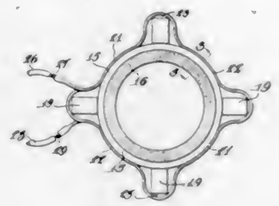
2. A composition of matter for producing improved leather, the herein described alkalining solution consisting of sodium sulphide, lime, sodium hydroxide and common salt, dissolved in water.

1,859,418. AUTOMOBILE HEATER AND DEFLECTOR THEREFOR. CARL H. WILL, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Dec. 11, 1929. Serial No. 413,278. 2 Claims. (Cl. 257—137.)



1. In combination, a heating element having an open face, a stud supported upon said heating element adjacent said open face, a member rotatably mounted upon said stud, a heat deflector having a cut-out portion in one of its side edges, ears upon said heat deflector adjacent its cut-out portion, and means supporting said ears upon said member to allow said heat deflector to swing toward and from said open face, said heat deflector being adapted to remain, against the probability of accidental displacement, at any adjusted position to which set relatively to the heating element.

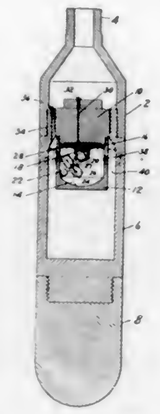
1,859,419. ELECTRIC INDUCTION FURNACE. DUDLEY WILLCOX, Lawrenceville, N. J. Original application filed Aug. 13, 1928, Serial No. 299,156. Divided and this application filed Mar. 26, 1930. Serial No. 438,921. 3 Claims. (Cl. 13—27.)



1. In an electric furnace, an inductor having each turn composed of a plurality of edgewound solid conductors electrically in parallel and a flat wound flattened water cooled tube thermally connected with all of the conductors.

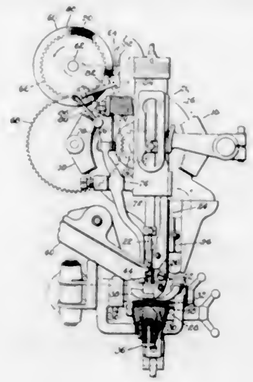
1,859,420. WELL SURVEYING DEVICE. WILLIAM E. WINN, Dallas, Tex., assignor, by mesne assignments, to Sperry-Sun Well Surveying Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 2, 1929. Serial No. 351,852. 1 Claim. (Cl. 33—205.)

A well surveying device comprising a casing adapted to enter a bore hole, means adapted to assume a fixed relationship relative to reference directions including a pendulum, a ball and socket joint supporting the pendulum for universal pivotal movement in the casing a compass



needle pivotally carried by the pendulum between its support and its lower end, and a fusible medium, said pendulum and compass needle being submerged in said medium.

1,859,421. FASTENING INSERTING AND TRIMMING MACHINE. REGINALD BOYD WOODCOCK, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 7, 1931, Serial No. 514,215, and in Great Britain Mar. 15, 1930. 11 Claims. (Cl. 12—19.1.)

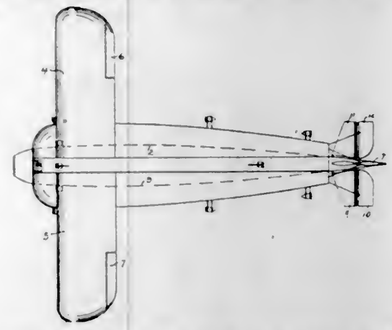


1. A machine for inserting sole attaching fastenings into shoe parts and for trimming surplus material from the marginal portions thereof having, in combination, fastening-inserting instrumentalities, an oscillating knife for trimming surplus material from a shoe part presented to the fastening-inserting instrumentalities, and means for feeding the work in a plurality of steps between the insertion of successive fastenings.

1,859,422. AIR BALANCED AIRCRAFT. ALBERTO AMBRUSO, Brooklyn, N. Y. Filed Dec. 26, 1929. Serial No. 416,309. 1 Claim. (Cl. 244—5.)

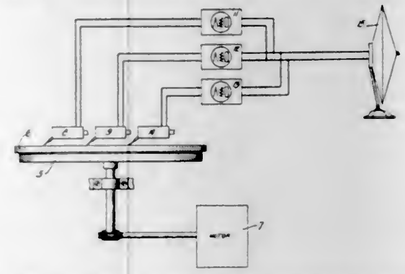
In an airship, a body member having a plurality of cabins associated therewith, the aft end of all cabins

terminating at a sharp angle to receive the pressure of the back wash of air, a plurality of means for supporting



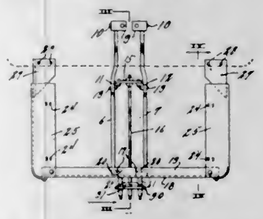
said ship in the air, and a plurality of means for driving said ship through the air, and a plurality of means for controlling said ship, all combined as herein specified.

1,859,423. SOUND RECORDING. HAROLD D. ARNOLD, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 7, 1929. Serial No. 361,094. 4 Claims. (Cl. 179—100.4.)



1. The method of producing echo or reverberation effects in the reproduction of a record made from a selection produced in a dead room which consists in reproducing in close succession the engravings of the record and controlling the loudness of each successive reproduction.

1,859,424. VEHICLE ACCESSORY REAR BRACKET. EROS V. BARKER, Bellevue, Ohio, assignor to Jacob F. Martin, Bellevue, Ohio. Filed Nov. 10, 1928. Serial No. 318,485. 6 Claims. (Cl. 224—29.)



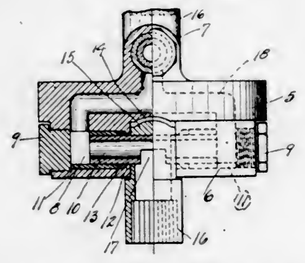
1. A vehicle body and a transverse spring, rearwardly from which said body has an overhanging portion, a pair of parallel bars anchored with the spring and protruding rearwardly beyond the overhanging portion of the body, means additionally anchoring the bars to the body at the point where said bars emerge from under said body and rearwardly from said spring, and ledge providing means extending transversely of the free ends of the bars.

1,859,425. TOOTHBRUSH. HARRY D. BELL, New York, N. Y. Filed Mar. 18, 1931. Serial No. 523,406. 6 Claims. (Cl. 3.6—28.)



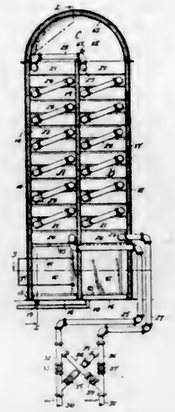
6. A tooth brush comprising a handle portion, a separable bristle supporting element, said elements having aligned bores opening into adjacent ends, a stem lying snugly in said bores and acting to connect said elements, and interlocking members on said elements adapted to hold them together when they are disposed in abutting relation.

1,859,426. UNIVERSAL JOINT. PRESTON G. BEREMAND, Lakewood, Ohio. Filed Jan. 13, 1930. Serial No. 420,372. 7 Claims. (Cl. 64—102.)



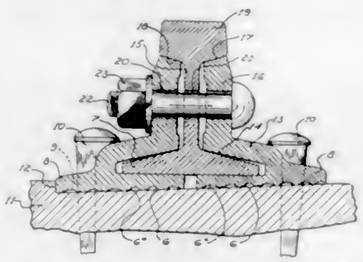
1. A universal joint comprising a centrally disposed disk, bosses formed integral therewith and on opposite faces thereof, a hollow shaft mounted in said boss, a sleeve journaled thereon, and a continuous passage through said disk and hollow shafts.

1,859,427. REFRIGERATING APPARATUS. CLAUDE A. BULKELEY, Kenmore, N. Y., assignor to Niagara Blower Company, Buffalo, N. Y., a Corporation of New York. Filed Aug. 25, 1930. Serial No. 477,484. 22 Claims. (Cl. 62—140.)



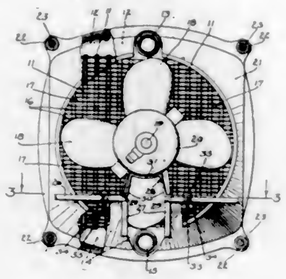
1. A refrigerating apparatus including a refrigerant conducting means, means for conducting the medium to be refrigerated progressively past said refrigerant conducting means in a reverse direction to the flow of the refrigerant and means for reversing the flow of both the refrigerant and the medium to be refrigerated.

1,859,428. RAIL JOINT CHAIR. CHARLES WESLEY BURT, Sydney, Nova Scotia, Canada. Filed Dec. 10, 1930, Serial No. 501,351, and in Canada Dec. 5, 1929. 1 Claim. (Cl. 238—188.)



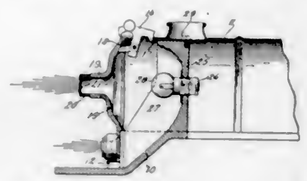
A rail joint chair including the combination with the opposed ends of rail sections and cross ties beneath the same provided adjacent their ends with inclined pockets in their upper faces having upstanding outer end walls; of a pair of complementary rail joint chair members having base portions with their under faces beveled transversely and serrated for engagement with the bottom wall of said pockets in said cross ties; the outer chair member engaging against the upstanding outer end wall of said pocket to prevent outward movement of said complementary rail joint chair members on said ties; said complementary rail joint chair members having recesses in their base portions to receive the base portions of said rail section ends with the base portions of said complementary rail joint chair members binding on the underface and the upper face of said base portions of the rail section ends; said complementary rail joint chair sections having upstanding portions opposite the web portions of said rail section ends with the upper edges of said upstanding portions of the complementary rail joint chair members bearing against the underface of the tread portions of said rail section ends; means for firmly retaining the upstanding portions of said complementary rail joint chair members in position on opposite sides of said rail section ends; and means for firmly retaining said base portions of the complementary rail joint chair member on said ties.

1,859,429. AUTOMOBILE HEATER. ORVILLE S. CAESAR, Chicago, Ill., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,719. 3 Claims. (Cl. 257—137.)



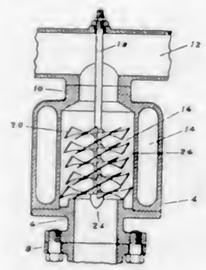
3. In a heater provided with a casing, a motor, a mounting for the motor comprising rearwardly and inwardly extending arms integrally formed with a portion of the heater casing, said arms being situated below the axis of the heater, a bracket secured to the motor and having depending legs provided with portions adapted to engage said arms, and means for securing said leg portions to said arms.

1,859,430. TOY LOCOMOTIVE. MARIO CARUSO, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 3, 1931. Serial No. 513,097. 5 Claims. (Cl. 240—7.1.)



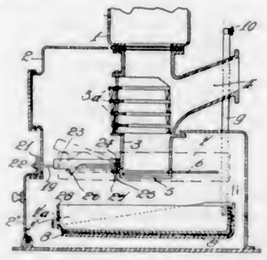
1. In a toy locomotive, a locomotive body having a boiler simulating portion open at the front, a lamp socket concealed in the locomotive body, a lamp bulb carried in the socket and disposed behind the open front, a closure member for the front of the body, the closure member being apertured to permit light from the bulb to pass through to simulate a locomotive headlight, a hinged connection between the lower edge of the closure member and the locomotive body, and a spring catch at the top of the body for holding the closure member closed.

1,859,431. VAPORIZER. FRANCIS F. CHASE, Melrose, Mass. Filed May 27, 1929. Serial No. 366,201. 3 Claims. (Cl. 48—180.)



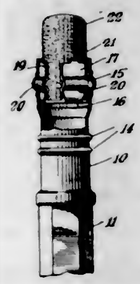
1. A vaporizer for internal combustion motors comprising a chamber, means for heating the chamber, and a stationary swirling member in the chamber comprising a plurality of inclined wings radiating from the central axis of the chamber and forming generally helical paths for flow of the mixture through the chamber, the wings terminating within the chamber to provide an annular space through which the mixture of vaporized fuel and air may freely pass upwardly.

1,859,432. STOVE. CHARLES LOUIS EMMANUEL CHENU, Bruges, Belgium. Filed May 12, 1931, Serial No. 536,891, and in Belgium May 15, 1930. 14 Claims. (Cl. 126—242.)



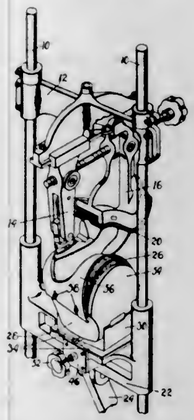
1. In a stove comprising a fire-pot with lower discharge opening and an ash-pan arranged inside a housing, the combination of a movable closing trap for said discharge opening, and means securing the compulsory closing of the trap before completing the removal of the ash-pan, with means for progressively moving the ash-pan from and towards said discharge opening.

1,859,433. ERASER HOLDER. ISIDOR CHESLER, West Orange, N. J., assignor to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 18, 1930. Serial No. 489,545. 1 Claim. (Cl. 120—38.)



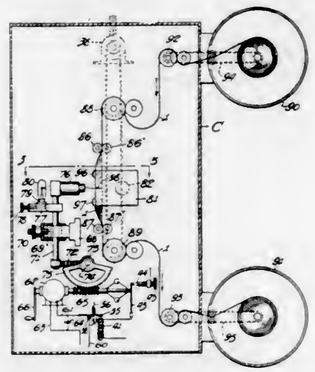
An eraser holder comprising two separable units, one unit being open at one end and having its other end adapted to seat at the end of a pencil, said unit comprising a metallic sleeve having in the vicinity of its open end an internal circular groove formed by a hollow head extending outwardly from the main portion of the sleeve, and the other unit being an eraser carrying unit, said last named unit being a socket member made from sheet metal having a center part and arms extending therefrom and so folded that its center is at one end of the eraser which it carries and its arms extend from its center along the side of the eraser, said arms being resilient and provided with ridges in circular alignment for engaging the circular groove of said sleeve to hold the two units in fixed relation when engaged, but permitting disengagement of the two units by forcing the socket and eraser from the sleeve in a longitudinal direction, and prongs extending from said arms and bent to enter the eraser.

1,859,434. SHOE-PRESSING MACHINE. HERMAN A. DAVENPORT, Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 12, 1929. Serial No. 385,272. 70 Claims. (Cl. 12—38.)



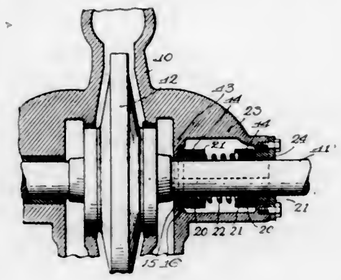
1. In a machine for applying pressure to the bottoms of shoes, a shoe-pressing member yieldable to conform to the contour of a shoe and constructed and arranged to present toward the shank portion of the bottom of the shoe a pressing face of such contour widthwise of the shoe as to accentuate its pressure first in a location between the opposite side edges of the shoe bottom and then as it yields to bring heavy pressure to bear also at said edges, said pressing face having a convex curvature lengthwise of the shoe of greater radius at the inner side of the shoe bottom than at the outer side.

1,859,435. SOUND-ON-FILM PHONOGRAPH. LEE DE FOREST, Hollywood, Calif., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of New York. Filed July 3, 1931. Serial No. 548,653. 14 Claims. (Cl. 179—100.3.)



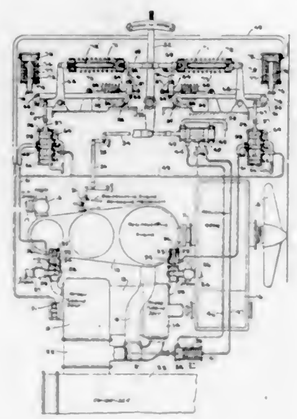
1. In a sound-on-film reproducing apparatus employing a photographic film having a plurality of sound records arranged longitudinally thereon, an optical system mounted for axial swinging movements and for projecting a light beam image upon one of said records at a time, and means for swinging the said system to cause it to scan selectively one record at a time.

1,859,436. SEAL FOR SHAFTS. AUGUSTUS C. DURDIN, Jr., Chicago, Ill., assignor to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1928. Serial No. 312,296. 6 Claims. (Cl. 286—7.)



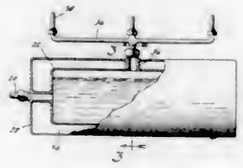
1. In a device of the class described, the combination with a rotatable shaft and a wall through which the shaft extends, of a ring surrounding the shaft and bearing against said wall, said ring having a peripheral flange spaced from the shaft, a spring for pressing said ring against said wall, and a resilient seal ring held under pressure solely by said flange and shaft and frictionally connecting said first mentioned ring with the shaft to rotate therewith.

1,859,437. GOVERNING MECHANISM FOR MARINE POWER PLANTS. WARREN B. FLANDERS, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 21, 1931. Serial No. 539,083. 6 Claims. (Cl. 137—158.)



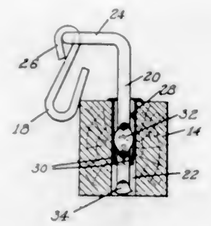
1. The combination with a reversible prime mover having an ahead and an astern admission valve, of a control mechanism for the valves comprising means including and controlled by a control member for opening either of said admission valves, means responsive to the speed of the prime mover for effecting closing movement of each valve in response to increase in speed of the prime mover, and means for releasing either admission valve from the control of the speed-responsive means upon movement of the control member to the position calling for opening of the valve, and means for restoring said control upon slowing down of the prime mover to a predetermined speed.

1,859,438. LUBRICATION. HENRY H. GILBERT, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,535. 11 Claims. (Cl. 184—104.)



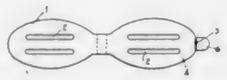
1. In an oiling system for internal combustion engines having an oil pan and an oil pump, an oil container in said pan for storing heated oil during normal running of the egine, a shell surrounding said container and spaced therefrom to form a heat insulator, a conduit leading from the pump to said container, and a second conduit leading from said container to the working parts of the engine.

1,859,439. TAG HOLDER. HARVEY L. GLIDDEN, Lexington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 22, 1929. Serial No. 365,073. 3 Claims. (Cl. 40—10.)



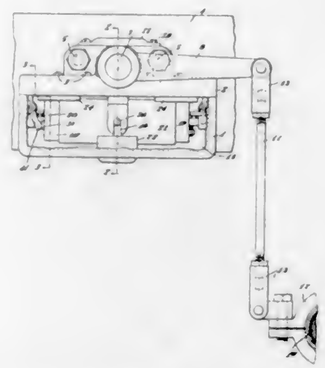
1. A tag holder comprising a spring sleeve having a tapered end portion, and a standard positioned in the sleeve and having a projection for co-operating with the tapered end portion of the sleeve for retaining the standard in position.

1,859,440. HAIR CURLING DEVICE. CHARLOTTE P. GORIN, Seattle, Wash. Filed Dec. 15, 1930. Serial No. 502,465. 4 Claims. (Cl. 132—31.)



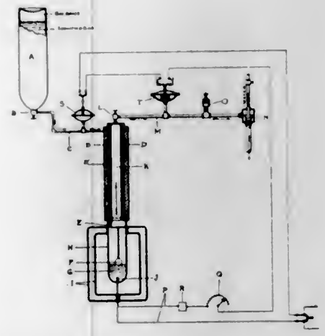
1. A hair curler comprising a pair of discs integral with each other and of inherent spring material, adapted to receive therebetween a curl and to then be forced toward each other to confine and compress the curl, and means for holding the discs in that position.

1,859,441. SHOCK ABSORBER. CHARLES E. HARRIMAN, West Bridgewater, Mass. Filed Sept. 16, 1930. Serial No. 482,171. 22 Claims. (Cl. 188—88.)



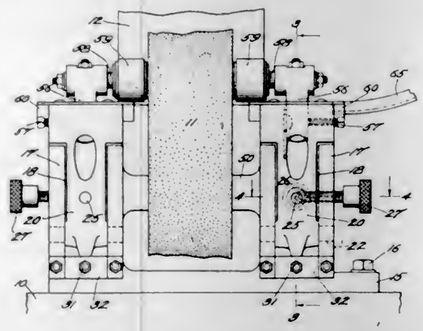
1. In a shock absorber, a fluid-containing reservoir, a pair of pistons fixed against longitudinal movement but vertically movable in said reservoir, a cylinder slidably mounted on said pistons, and means to reciprocate said cylinder.

1,859,442. APPARATUS FOR CONTROLLING GAS FLOW. CLARK T. HENDERSON, Burlingame, Calif. Filed May 3, 1929. Serial No. 360,275. 11 Claims. (Cl. 210—28.)



1. Apparatus for controlling gas flow which includes a heat insulated receptacle for a liquid adapted to emit gas upon an application of heat thereto, a duct for conducting gas from said liquid, an electrical resistance element arranged to transmit its heat to said liquid, and means for controlling at constant value an electrical current flowing through said element.

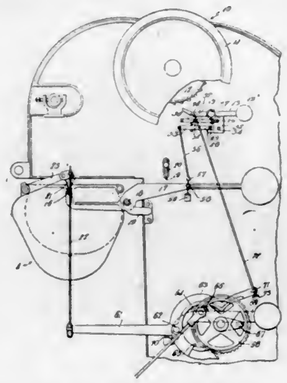
1,859,443. CENTERLESS GRINDER. HENRY JAMES HOEG, St. Clair Shores, Mich. Filed Dec. 18, 1928. Serial No. 326,886. 3 Claims. (Cl. 51—103.)



1. In a centerless grinding machine, the combination of a grinding wheel, a feed wheel, a blade for positioning the work between the wheels, means for causing the work to rotate as it moves past the edge of the grinding wheel including an arm pivotally mounted adjacent one of said wheels, a roll mounted on said arm adapted to hold the work in engagement with said feed wheel while substantially out of contact with said grinding wheel as the work moves past the edge of said grinding wheel, a stop, and means for holding said arm yieldingly against said stop.

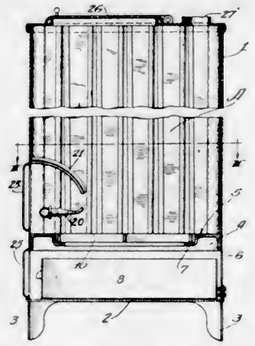
1,859,444. LATCH MECHANISM. JOSEPH B. HOWE, Worcester, Mass., assignor to John H. Harwood, Brookline, Mass., doing business as George S. Harwood & Son, Boston, Mass. Filed Mar. 7, 1930. Serial No. 434,146. 17 Claims. (Cl. 249—4.)

1. The combination in a textile machine having movable means for delivering fibrous material, a movable part which controls the movable delivery means, and an actuator, of trip mechanism comprising a pair of jointed links forming a toggle latch normally restraining said



movable part, and means operable by the actuator for breaking the toggle linkage whereby to release said movable part.

1,859,445. GARBAGE BURNER. GLADYS R. HOWLE, Chicago, Ill., assignor to Ernest O. Howle, Chicago, Ill. Filed Jan. 17, 1929. Serial No. 333,060. 2 Claims. (Cl. 110—18.)

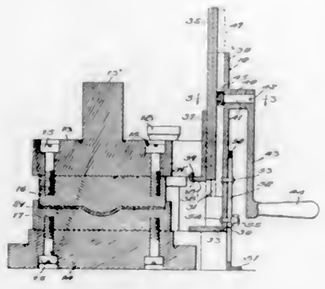


1. A garbage burner including in combination, an outer casing, a combustion chamber, a grate supporting frame in the lower end of said chamber a grate supported by said frame, said frame being provided with spaced apertures adjacent said casing, a plurality of spaced vertically disposed hollow members in communication with the apertures in said frame, said members being open to the combustion chamber from top to bottom, a gas burner within said chamber and at one side thereof, air admission ports in said casing communicating with said gas burner, a deflector curved inwardly and downwardly and spaced in overlying relation to said gas burner to protect said gas burner and to direct incoming air downwardly past said burner.

1,859,446. DEVICE FOR ASSEMBLING AND DISMANTLING DIE SETS. KASIMIA JANISZEWSKI, Milwaukee, Wis., assignor to Superior Tool and Die Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 31, 1929. Serial No. 382,549. 4 Claims. (Cl. 153—10.)

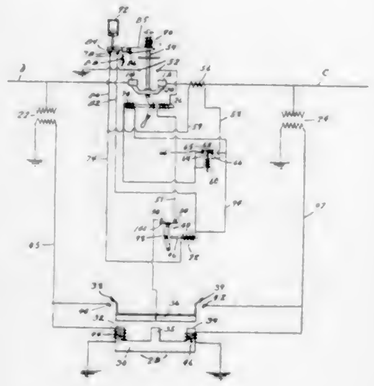
1. In a device for assembling and dismantling die sets, the combination of a relatively stationary member, a movable member mounted thereon, laterally extending elon-

gated portions formed on the respective members and having oppositely disposed faces in parallel relation with respect to each other, said portions being adapted to en-



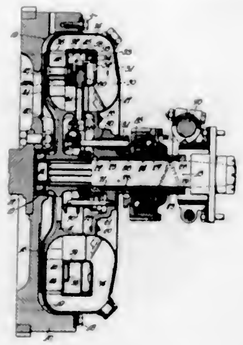
gage adjacent faces of a die set, and means for moving said members relatively with respect to each other while maintaining parallel relationship of said faces.

1,859,447. ELECTRICAL DISTRIBUTION PROTECTIVE SYSTEM. GUSTAV E. JANSSON, Atlantic, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed June 15, 1929. Serial No. 371,201. 6 Claims. (Cl. 175—294.)



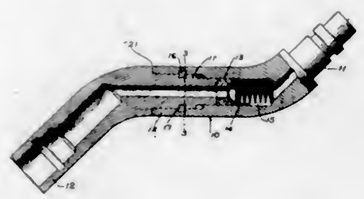
1. An electrical distribution system having two electrically independent feeder sections, a switch connecting said sections, means to trip said switch upon overload, electrically operative closing means for said switch, means selectively to energize said closing means from either section, means to disable said closing means including an overload responsive device, a pair of contacts normally shunting said device, and time-controlled bridging means for said contact members operatively associated with said switch arranged to open said shunt contact members when the switch is opened, and also to close said contact members at some predetermined time after the closing of the switch, whereby to render said device operative upon closing of the switch to disable said closing means if an overload exists.

1,859,448. HYDRAULIC POWER TRANSMITTER. GUSTAV A. KLIMEK, East Rutherford, N. J., assignor to Turbine Patents Corporation, New York, N. Y., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,086. 10 Claims. (Cl. 60—54.)



2. In a hydraulic power transmitter, a fluid impelling member, a fluid impelled turbine motor, a fluid for effecting an operative fluid couple therebetween, a plurality of adjustable vanes or blades for rendering said turbine rotor ineffective, a ring-like member for intercepting the flow of said fluid, and means for moving said ring-like member axially of the turbine rotor simultaneously with the adjusting of said vanes or blades.

1,859,449. FLEXIBLE METAL HOSE. PHILIP MACKENZIE, San Francisco, Calif., assignor, by mesne assignments, to Gat Gun Lubricating Corporation, Oakland, Calif., a Corporation of California. Filed Mar. 22, 1926. Serial No. 96,460. 2 Claims. (Cl. 137—75.)

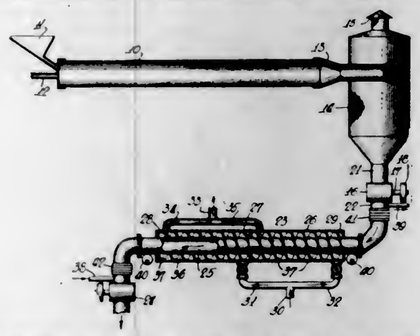


1. An articulated metallic hose for high pressure lubricating apparatus comprising a plurality of similar thick walled tubular pipe sections, each section having a short substantially rectilinear portion at each end, the axes of said end portions of each section being at an obtuse angle to each other and the intermediate portion of each section forming a smooth curve between the end portions, and means forming a lubricant-tight swivel connection between said sections, said means being of substantially the same external diameter as the sections, whereby the hose will have a substantially smooth continuous external surface and be comformable into any one of a plurality of different shapes while retaining its smooth continuous external surface.

1,859,450. ART OF ACTIVATING CARBON. ALBERT EDWARD MARSHALL, Scarsdale, N. Y., assignor to Columbian Carbon Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 20, 1930. Serial No. 476,472. 6 Claims. (Cl. 237—75.)

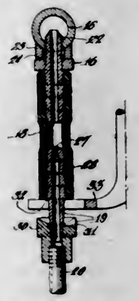
1. A cooling device for oxidizable substances, such as activated carbon, including an enclosed tubular member,

means for cooling the outside of said member, means for vibrating said member to effect the travel of carbon particles therethrough, a supply conduit, a delivery conduit,



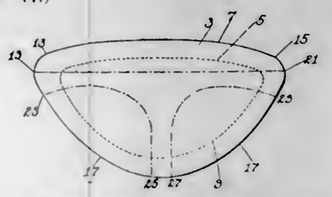
and flexible gas tight connections between said conduits and said member for preventing the transmission of the vibrations to said conduits.

1,859,451. SERIES DROP TUBE. JOSEPH A. MARTOCELLO, Philadelphia, Pa. Filed Sept. 17, 1930. Serial No. 482,496. 3 Claims. (Cl. 62—159.)



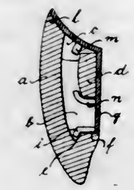
1. In an air system for an ice plant, an air supply pipe, a tap therefrom directed downwardly, a flexible tube connected with the tap, an ice can, an air pipe in the can and a plug and socket union between the pipe and flexible connection, the pipe initially depending from the supply pipe into the can and when frozen in the can to be separated from the supply pipe by pulling the plug from the socket.

1,859,452. SHOE STIFFENER AND SHOE. LUCIEN PAUL MELLERIO, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 23, 1929, Serial No. 357,525, and in Great Britain May 16, 1928. 11 Claims. (Cl. 36—77.)



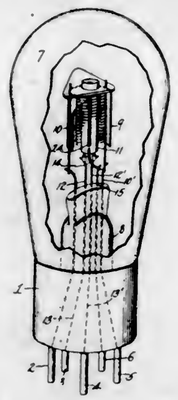
1. A toe stiffener having regions of different degrees of thermoplasticity, there being a region of lesser thermoplasticity terminating at three points on the edge of the stiffener, and regions of greater thermoplasticity separated from each other by a portion of the region of lesser thermoplasticity.

1,859,453. ARTIFICIAL TOOTH. AUGUST MERK, Radeberg, Germany, assignor to Porzellanfabrik C. M. Hutschenreuther A. G., Dresden, Germany. Filed Aug. 25, 1930, Serial No. 477,597, and in Germany Apr. 18, 1929. 2 Claims. (Cl. 32—9.)



1. An artificial tooth having a cavity in its seat, a plurality of longitudinal passages extending from said cavity to the back of the tooth, a bridge extending across said passages, a back plate, and means on said back plate for anchoring it in the cavity of said seat, on said bridge and in said passages.

1,859,454. ELECTRON TUBE. BENJAMIN F. MIESSNER, Short Hills, N. J., assignor to Miessner Inventions Inc., Short Hills, N. J., a Corporation of New Jersey. Filed Feb. 25, 1930. Serial No. 431,121. 14 Claims. (Cl. 250—27.5.)

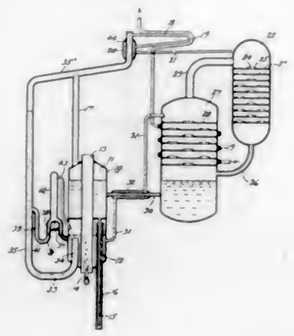


14. A cathode for electron emission including a substantially cylindrical thimble, an elongated electric heater element situated interiorly of said thimble substantially coaxially therewith and having its section of opposite current flow in as close proximity to each other as compatible with a safe insulation value between said sections, said heater element, when operatively energized, being surrounded by an electro-magnetic field of its own penetrating different segments of said thimble with different values of field intensity, the outer surface portions of said thimble being appreciably electron-emissive only in segments of comparatively low values of said field intensity.

1,859,455. REFRIGERATION. CARL GEORG MUNTERS, Stockholm, Sweden, assignor to Platen-Munters Refrigerating System Aktiebolag, Stockholm, Sweden, a Corporation of Sweden. Filed Sept. 5, 1931, Serial No. 561,388, and in Germany Aug. 13, 1930. 37 Claims. (Cl. 62—119.5.)

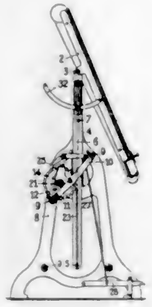
1. In refrigerating apparatus, a heated vessel, a cooled vessel and means for producing flow of liquid therebetween in periodic cycles including a riser conduit communicating with the heated vessel and extending upwardly above the heated vessel, and a cycle control conduit

member communicating with the heated vessel at a given level and with said riser conduit at a higher level, said conduit member comprising a plurality of vertical legs



connected in series by upper and lower return bends and a conduit connecting an upper return bend with said heated vessel.

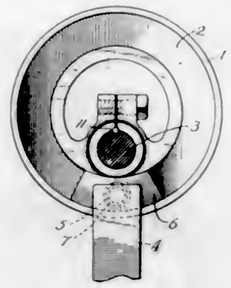
1,859,456. DRAWING TABLE. RICHARD NESTLER, Lahr, Germany. Filed Aug. 27, 1930, Serial No. 478,144, and in Germany Oct. 2, 1929. 3 Claims. (Cl. 45—110.)



1. A drawing table of the character described comprising a support, a vertically adjustable frame in said support, a drawing board carried pivotally at the upper end of the frame, a rotatable, horizontal shaft mounted in the support, pulleys on said shaft, steel bands connected to said pulleys and to the frame for carrying the latter, a plate connected to the support, a boss on said plate surrounding the shaft, a coil spring surrounding the shaft, said spring secured at one end to the shaft and resting at the other end in said boss, a ratchet wheel arranged to rotate about said boss, a detent pawl on the plate engaging said ratchet wheel, a lug on the ratchet wheel engaging the contiguous end of the spring for maintaining the latter in tension, a ratchet device for retaining the shaft, in opposition to the spring, with the frame in different positions, and foot-operated means for releasing the shaft.

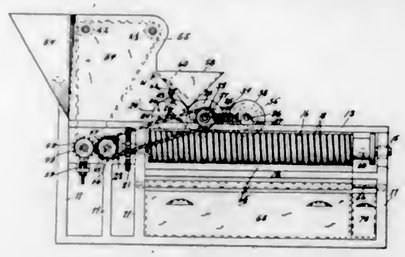
1,859,457. ECCENTRIC CAM DRIVE. WALTER F. NEWHOUSE, Benton Harbor, Mich. Filed Sept. 15, 1930. Serial No. 481,916. 7 Claims. (Cl. 74—1.)

1. An eccentric drive mechanism comprising a member to be reciprocated, a rotary cam having an eccentric cam groove or channel, the curved sides of said groove being formed on parallel curves, a curved block having parallel curved faces fitting both of the curved walls of said cam groove or channel, and means to pivotally mount said block on said member, whereby rotation of said cam is operative to cause reciprocation of said member, with incidental oscillation of said block on its mounting, while preventing



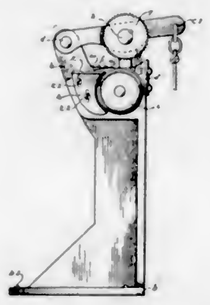
oscillation or skewing of said block relatively to the cam groove, the two sides of the block being curved about the same axis.

1,859,458. MACHINE FOR SHREDDING DATE FRUIT. JAMES H. NORTHROP, Santa Ana, Calif. Filed Apr. 15, 1931. Serial No. 530,306. 15 Claims. (Cl. 146—17.)



1. A machine for shredding date fruit including two parallel shredding rollers spaced apart a distance for shredded fruit to pass between them but not for the date seeds to pass between the rollers, crusher rollers arranged over the space between the shredder rollers, and means for rotating all of said rollers so that they move in a timed relationship to one another for the purpose specified.

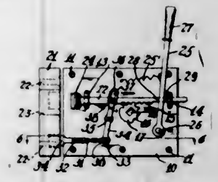
1,859,459. SHOE SOLE CHANNELING MACHINE. GIOVANNI PASSEFIUME, Portland, Oreg. Filed Feb. 10, 1930. Serial No. 427,217. 2 Claims. (Cl. 12—27.)



1. A shoe sole channeling machine comprising a base provided with an upstanding mounting, a head pivotally secured to the latter, defining a throat with the upper

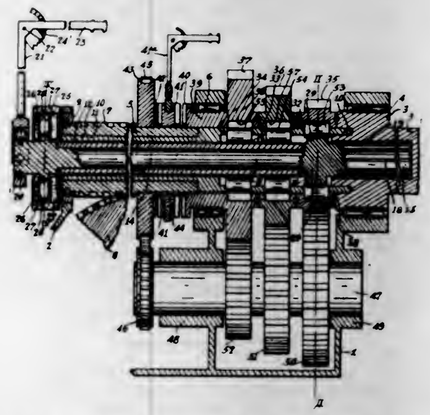
portion of said base, a pair of cooperating feed rollers carried by said head and said base respectively, positive means for driving one of said rollers, the periphery of one of said rollers being tapered to a predetermined degree and a knife element mounted in such throat in fixed horizontal relation to said last mentioned roller, said knife element being mounted in a close-fitting slot in said throat engaging the edges of said knife.

1,859,460. COMBINED DOOR LOCK AND OPENER. PAUL PELOQUIN, Brooklyn, N. Y. Filed Feb. 13, 1929, Serial No. 339,531. Renewed Oct. 23, 1931. 8 Claims. (Cl. 292—143.)



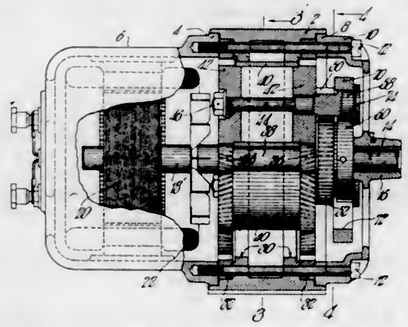
1. In combination with a door lock of the class described, a door opener comprising an opener member having formed therein an intermediate elongated aperture adapted to receive a pin secured to the case of the said device, as a means of slidably mounting the said opener member on the said pin, said opener member pivotally mounted at one extremity thereof on a pin carried by the lower extremity of a pivoted lever, said pivoted lever pivotally mounted intermediately on a pin carried in the said case, said pivoted lever operatively connected to the mechanism adapted to operate the said door lock, the said opener member provided with an enlarged extremity adapted to engage in an opening formed in a catch member as a means of partially opening the said door, an operating member as a means of adjusting the said opener member, said operating member comprising a cylindrical member having a serrated periphery rotatively mounted on a bracket member, said bracket member normally held in an extended position from a holder member by means of expansion springs coaxial on pins secured to and extended from the said holder member.

1,859,461. MANUALLY SELECTIVE VARIABLE TRANSMISSION MEANS. ADOLPHE C. PETERSON, Minneapolis, Minn. Filed Dec. 6, 1928. Serial No. 324,297. 9 Claims. (Cl. 74—59.)



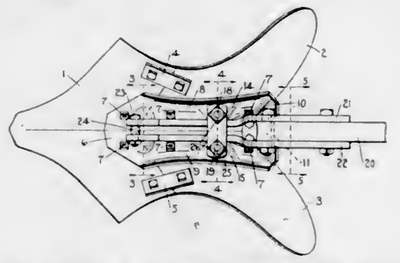
1. In a transmission means, a drive element and a driven element, transmission sets adapted to form driving means between the drive element and the driven element, engagement elements severally related to individual transmission sets and adapted to engage the related transmission set between the drive element and the driven element, a cam element movable axially of individual elements of the transmission sets and having rotational relation to the engagement elements and having yieldable means normally stationing the cam element and the engagement elements in an unengaged position relatively and adapted on application of driving torque against the cam element to form engagement through the engagement elements with a slected individual element of a transmission set.

1,859,462. SPEED REDUCTION MECHANISM. JULIAN L. PERKINS, West Springfield, Mass. Filed Jan. 14, 1931. Serial No. 508,711. 11 Claims. (Cl. 74—34.)



1. A mechanism of the class described comprising in combination, a support carrying a raceway and internal gears at opposite sides thereof, a shaft having pinions in alignment with said internal gears at opposite sides of a central portion thereof, pairs of intermediate gears about said shaft meshing with said internal gears and pinions, and cylindrical members between said pairs of gears in rolling contact with said raceway and said central portion of the shaft whereby the shaft is rotatably supported.

1,859,463. FROG FOR LISTER PLOWS. JULIUS PETERSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 18, 1929, Serial No. 347,878. Renewed Jan. 10, 1931. 12 Claims. (Cl. 97—113.)

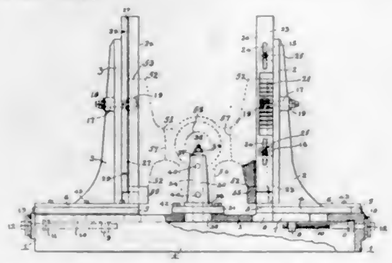


1. In a lister plow, the combination of a plow body including a share, a moldboard, and a frog rigidly secured together, said frog bent on a central longitudinal line and conforming to the pattern of the share and moldboard, a transverse closure at the rear of said frog, a pocket in said frog on each side of said line intermediate the ends thereof, bolt holes in said pockets, bolts having their heads in said pockets and projecting through said holes, a protrusion on the frog on each side of said line adjacent the forward end of the frog, a plow beam, a foot mounted on the plow beam and extending between said bolts, a plate

extending transversely of said foot engaging with said bolts to clamp the foot and frog firmly together, and notches in said protrusions and in said closure to prevent a lateral movement of the foot and frog relatively to each other.

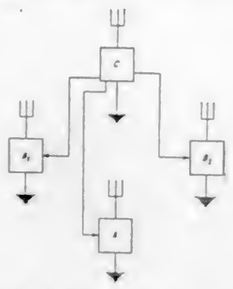
3. A frog for lister plows having sides extending at an angle from a central longitudinal line, a closure at the rear of the frog connecting the two sides and having a notch in the edge thereof, a protrusion on each side of said line adjacent the forward end of the frog, a notch in each protrusion adjacent said line, pockets one in each side of the frog and opposite each other, and bolt holes opening into said pockets.

1,859,464. FIXTURE FOR REBABBITTING LOCOMOTIVE CROSSHEADS. FRANK PRINCE, East Gary, Ind. Filed Dec. 7, 1929. Serial No. 412,415. 5 Claims. (Cl. 22—123.)



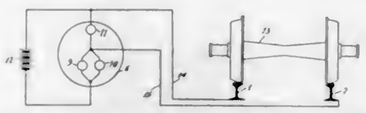
4. Means for rebabbitting cross-head shoes, comprising an adjustable support for the cross-head entering the opening for the piston rod, a hollow flanged base, separate means independently adjustable on the base toward the cross-hend shoes, a pair of co-engaging adjustable wedge shaped members on the latter means adapted to conform to the width of the shoes of the cross-head that is to be rebabbitted, and means for aligning all of the parts into actual working relation in respect of the center piston rod opening.

1,859,465. SYSTEM OF BROADCASTING. ELLISON S. PURINGTON, Gloucester, Mass., assignor to John Hays Hammond, jr. Filed Oct. 22, 1928. Serial No. 314,047. 13 Claims. (Cl. 250—2.)



1. The method of broadcasting a plurality of radio programs which comprises generating a current of a carrier frequency, transmitting said current, modulating said carrier frequency current by an audio frequency current, transmitting one of the side bands produced by said modulation to transmit one of the programs composing said broadcasting, producing a current of a band of frequencies by each of a plurality of audio frequency currents composing the remaining multiplex broadcast programs, spaced by different mean differences with respect to said carrier frequency current such that when said bands are transmitted and received they may be properly combined with said carrier frequency and distinguished from each other by means of double detection to reproduce each of said audio frequency currents, transmitting the bands thus produced, receiving at each of several localities one of the bands and the carrier frequency current thus transmitted and combining said band and said carrier frequency current to reproduce each of said audio frequencies.

1,859,466. RAILWAY ELECTRIC SIGNAL SYSTEM. EDWIN JAY QUINBY, Yonkers, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 1, 1930. Serial No. 425,109. 8 Claims. (Cl. 246—38.)



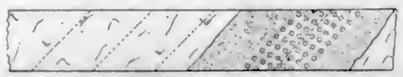
1. In a railway signalling system, an insulated block section, means for indicating the condition of said block comprising a clear signal indicator, an occupied signal indicator and a current source all thereof forming a series circuit, means whereby only one of said indicators is affected perceptibly when said block section is unoccupied, and means for short-circuiting said last mentioned indicator for decreasing the resistance of said series circuit whereby the other indicator is rendered operative.

1,859,467. MEANS FOR IDENTIFYING PRODUCTS OF A PARTICULAR ORIGIN. JOHN W. RATH, Waterloo, Iowa. Filed Sept. 14, 1928. Serial No. 306,000. 6 Claims. (Cl. 40—2.)



1. The combination with an edible body, of an inserted continuous traversing symbolic body of an innocuous edible substance having a distinctive feature which is unaffected by cooking of the whole and traversing the edible body from side to side, the symbolic body thus serving as an indication of origin of the edible body and appearing in each slice across both.

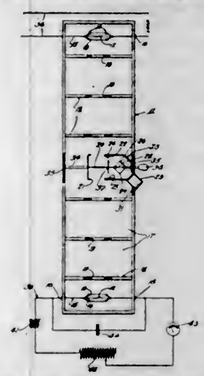
1,859,468. SPLICE AND METHOD OF SPLICING BELTS AND THE LIKE. DANIEL REPONY, Clifton, N. J., assignor to Raybestos-Manhattan, Inc., Passaic, N. J., a Corporation of New Jersey. Filed Sept. 25, 1931. Serial No. 565,149. 11 Claims. (Cl. 24—38.)



6. A belt splice which comprises a strip of laminated, rubberized canvas having its warp running the length of the strip, the ends of the plies of said strip being progressively cut back at an oblique angle to form complementary stepped ends, the ends of an outer ply being perforated near the splice, the perforations being in staggered arrangement such that every warp thread is severed within a short distance from the end, and the complementary ends being cemented together by rubber vulcanized between the overlapping stepped portions.

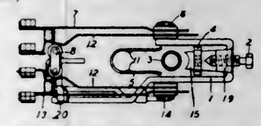
1,859,469. CURRENT MEASURING DEVICE FOR HIGH FREQUENCY CIRCUITS. DONALD E. RICHARDSON, Chicago, Ill. Filed Oct. 31, 1929. Serial No. 403,813. 8 Claims. (Cl. 175—183.)

1. A current measuring device, comprising a potential source of light illuminated by the electrical current to be measured, another potential light source, illuminated by an electrical current of determinable magnitude, and means



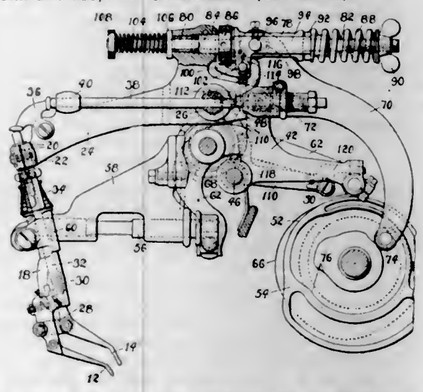
for comparing the intensity of light from said sources, whereby to compare the relative magnitudes of the electrical currents producing them.

1,859,470. SELECTOR BRUSH. RICHARD A. ROAD, New York, N. Y., and FREDERIC J. REDMOND, Arlington, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1931. Serial No. 529,056. 5 Claims. (Cl. 179—27.53.)



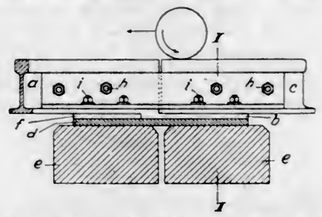
2. In a brush assembly, a brush frame, a brush rod, said frame having lugs for engagement against said brush rod, a clamp embracing said brush rod, said clamp having prongs for holding said clamp to said rod, a member serving as a nut detachably connected to said clamp, and a clamping screw for joining said nut member with said frame whereby when said screw is tightened said clamp is drawn tightly toward said lugs to embrace said rod to prevent lateral movement of said frame around said rod.

1,859,471. MACHINE FOR SHAPING UPPERS OVER LASTS. CHARLES A. ROBINSON, Salem, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 20, 1931. Serial No. 538,771. 33 Claims. (Cl. 12—2.)



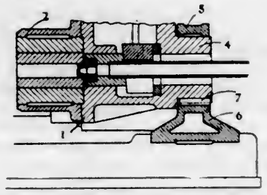
1. In an upper-shaping machine, the combination with a gripper for pulling an upper over a last, and means for laying a portion of the upper inwardly over the bottom of the last, of mechanism for operating the gripper yieldingly to pull the upper, and additional mechanism for urging the gripper yieldingly in the direction of the pull with less force in the overlaying operation than that applied in the upper-pulling operation.

1,859,472. RAIL JOINT. EDUARD ROLSHOVEN, Uetersen, Germany. Filed June 20, 1931, Serial No. 545,694, and in Germany July 8, 1930. 6 Claims. (Cl. 238—210.)



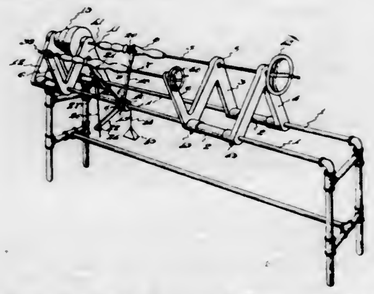
1. A rail joint for railroads, comprising a supporting plate for the abutting ends of the rails, said plate being rigidly secured to the foot of the facing rail and adapted to maintain the tread of said rail on a lower level than that of the trailing rail, a pair of sleepers arranged under the supporting plate, and a bridge plate interposed between said sleepers and the supporting plate.

1,859,473. METAL-EXTRUSION PRESS. OSWIG SCHLENSTEDT, Mulheim-Ruhr-Speldorf, Germany. Filed Jan. 28, 1930, Serial No. 423,978, and in Germany Nov. 24, 1928. 4 Claims. (Cl. 207—3.)



4. In extrusion presses, a container for the metal to be extruded, a crosshead disposed to the rear of and supporting the container, a base frame, a bearing to the rear of the crosshend mounted upon the said base frame, and a journal upon the said crosshead received into the said bearing with clearance, and adjustable wedges between said bearing and said journal for adjustment of the axial disposition of the crosshead and the container carried by it with reference to the base frame.

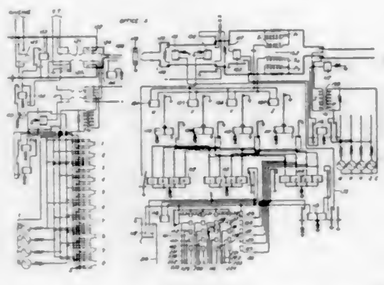
1,859,474. WOOD TURNING LATHE. ROY E. SHAWVER, Dallas, Tex. Filed May 4, 1931. Serial No. 534,913. 4 Claims. (Cl. 142—7.)



1. A turning lathe including a supported frame constructed to provide relatively parallel bed members, head

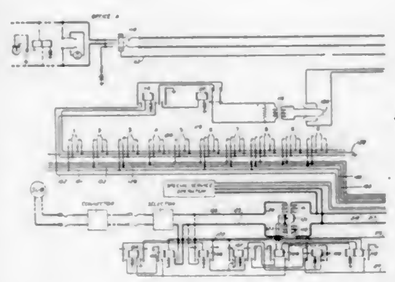
and tailstock elements including pairs of inverted V-members, the apices of which define bearings to receive spindles for holding work, one of each pair of said members having outwardly extending arms for supporting spindles to receive a pattern, a housing having an inner rotatable member mounted for sliding movement on one of said bed members, a tracer arm carried by said inner rotatable member, a cutter arm carried by said housing and means for adjusting said tracer arm relative to said cutter arm.

1,859,475. CALL INDICATOR SYSTEM. THOMAS SAMUEL SKILLMAN and LANCELOT GERHARD FREETH, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 15, 1930, Serial No. 488,870, and in Great Britain Jan. 17, 1930. 15 Claims. (Cl. 179—27.)



1. A telephone exchange system comprising two central offices and an interconnecting line, alternating current sources of different frequencies and a call indicator apparatus at each of said offices, means at each of said offices for selectively applying said alternating current frequency sources to said trunk line to transmit coded impulses thereover, devices at each end of said line responsive to said impulses, and means controlled by said responsive devices for recording said impulses in said call indicator apparatus.

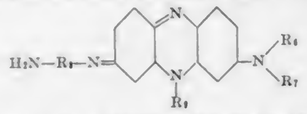
1,859,476. SEMIAUTOMATIC TELEPHONE SYSTEM. THOMAS SAMUEL SKILLMAN, Aldwych, London, England, assignor to Western Electric Company, Incorporated, a Corporation of New York. Filed Oct. 15, 1930, Serial No. 488,871, and in Great Britain Feb. 12, 1930. 22 Claims. (Cl. 179—27.)



1. In a telephone exchange system comprising a first and second telephone office, a two-way trunk line interconnecting said offices, a plurality of alternating current sources of different frequencies in each of said offices, means at said first office for selectively applying said plurality of alternating current sources to said trunk line to produce coded alternating current impulses thereover, means at said second office for applying one of said plurality of alternating current sources over said trunk line to produce alternating current impulses of a single frequency thereover, means responsive to the appropriation of said trunk line at said first office for setting up a connection at said second office by the said coded alternating current impulses, and means responsive to the appropriation of said trunk line at said second office for setting up a connection at said first office by the said alternating current impulses of a single frequency.

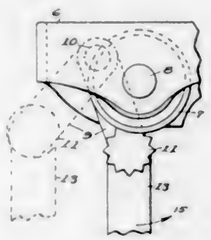
1,859,477. DYESTUFFS OF THE UREA-AZINE SERIES AND PROCESS OF PREPARING THE SAME. WILLIAM ARTHUR SILVESTER, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed May 16, 1928, Serial No. 278,340, and in Great Britain June 7, 1927. 16 Claims. (Cl. 260—29.)

1. In the manufacture of new complex urea dyes suitable for dyeing cotton and regenerated cellulose, the process which comprises treating with phosgene a sulphonated azine acid wool dye having an azine nucleus of the type



which contains three sulphonic groups and wherein R_6 represents a benzene nucleus, R_9 represents a benzene nucleus, R_8 represents an alkyl group and R_7 an alkyl or aralkyl group.

1,859,478. CAN OPENER. AUGUST K. L. STECKMANN, Peoria, Ill. Filed June 21, 1930. Serial No. 462,714. 2 Claims. (Cl. 30—3.)

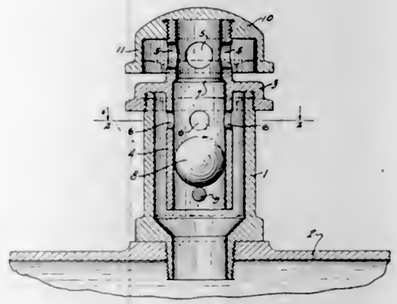


1. In a can opener the combination of a frame, a rotary cutting member pivoted to the frame, a link carried by the frame and having its pivotal point offset with relation to any line through a feed member and the cutting member, a feed member carried by the link, means for moving the feed member to advance the can, the advancing of the can through the cutting operation holding the link in position to maintain cutting relation with the can.

1,859,479. SANITARY VENT FOR GRAVITY MILK-TANKS. FREDERICK G. THWAITS, Wauwatosa, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 24, 1929. Serial No. 373,176. 2 Claims. (Cl. 220—44.)

1. A vent device for a milk tank, comprising a casing having threaded lower and upper ends, a closure member threaded on the upper end of the casing and having a tubular portion which extends downwardly into the casing and also upwardly above the closure member, both of said tubular portions having lateral air passages, a cap closing the upper end of the tubular portion and extending in spaced relation around the upper air passages,

said tubular portion between the upper and lower air passages having a valve seat, and a ball valve supported and closely confined for rolling within the bore of the



tubular portion below the lower air passages but movable upwardly to directly engage the valve seat and close the bore between the upper and lower air passages.

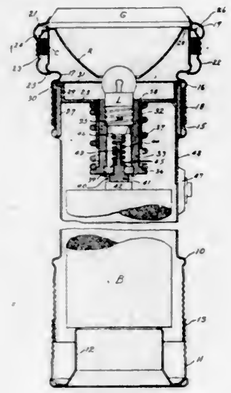
1,859,480. COT FASTENER FOR AMBULANCES. HENRY VAN DEEST, Freeport, Ill., assignor to Henney Motor Company, Freeport, Ill., a Corporation of Delaware. Filed Mar. 23, 1931. Serial No. 524,485. 4 Claims. (Cl. 296—19.)



1. Fastening means for a cot or the like comprising a pair of spaced stationary housings arranged to be suitably supported adjacent the front and rear portions of a cot to be fastened, a hook projecting rigidly from the one housing and facing in one direction to hold one portion of the cot, a companion hook projecting from the other housing and facing in the opposite direction to hold the other portion of the cot, means for slidably mounting the last mentioned hook on its housing for movement toward and away from the first hook, spring means in said housing normally urging the slidable hook to move relative to the housing in one direction to hold the cot portion thereon, the cot being arranged to be engaged on the hooks by engagement of the one portion first with the slidable hook to permit movement of said hook against the action of its spring means by manual movement of the cot so as to permit engagement of the other cot portion with the stationary hook, and a member slidable on the other housing toward and away from the stationary hook and arranged to be fixed in a position holding the cot portion engaged on the stationary hook.

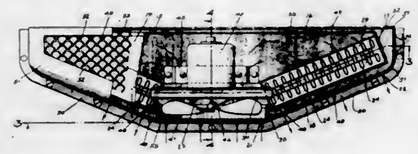
1,859,481. FLASH LIGHT. LEE J. VOORHEES, Long Island City, N. Y., assignor to National Carbon Company, Inc., a Corporation of New York. Filed Sept. 15, 1928. Serial No. 306,196. 9 Claims. (Cl. 240—10.69.)

1. The combination in a flashlight comprising a lamp bulb, and a reflector in operative relation thereto, of means for moving said lamp bulb along the axis of said reflector, a resilient member for holding said reflector in



axial alignment with said lamp bulb, and means for moving said reflector out of axial alignment with said bulb against the pressure of said resilient member.

1,859,482. HEATING APPARATUS FOR AUTOMOTIVE VEHICLES. FRED B. WINES, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Jan. 24, 1930. Serial No. 423,064. 7 Claims. (Cl. 257—137.)

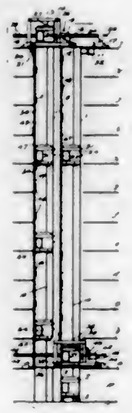


3. In combination, a heating element adapted to be positioned in a closed body and including a plurality of sets of air-circulating passages opening to said closed body, the different sets of air-circulating passages being arranged in spaced apart, oblique relation to each other, means for supplying heat to said air-circulating passages, air propelling means for withdrawing air from said closed body and for returning said withdrawn air back into said closed body, the said air propelling means being adapted to cause the withdrawn and returned air to travel through said air-circulating passages, to thus be heated and kept in continuous circulation within the closed body, and a motor adapted to support said air propelling means between said air-circulating passages.

1,859,483. ELEVATOR. LENNA R. WINSLOW, Miami, Fla. Filed Aug. 23, 1929. Serial No. 387,935. 23 Claims. (Cl. 187—16.)

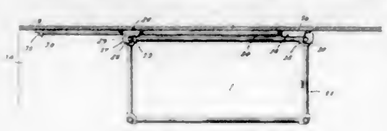
1. Elevator apparatus including an "up" shaft and a "down" shaft, transfer carriages movable across the upper

and lower ends of the shafts respectively, a plurality of independently operated cars within the shafts and movable successively from the "up" shaft into the upper transfer carriage and from the "down" shaft into the lower



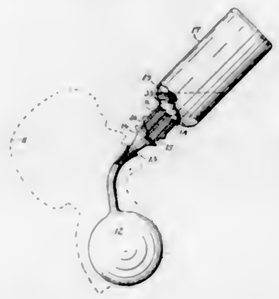
transfer carriage, means controlled by each car on entering either carriage for moving the carriage from extreme position to the other, and means controlled by each car when leaving either transfer carriage for returning the carriage to car-receiving position.

1,859,484. COT FASTENER FOR AMBULANCES. ANDREW F. WINTERCORN, Rockford, Ill., assignor to Henney Motor Company, Freeport, Ill., a Corporation of Delaware. Filed Mar. 31, 1931. Serial No. 426,713. 4 Claims. (Cl. 296—19.)



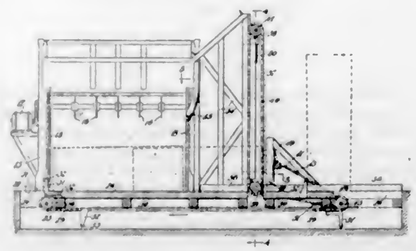
1. Fastening means for a cot or the like comprising a pair of spaced bases suitably supported adjacent the front and rear portions of a cot to be fastened, a hook projecting rigidly from the one base and facing in one direction to hold one portion of the cot, a companion hook projecting from the other base and facing in the opposite direction to hold the other portion of the cot, means for slidably mounting the last mentioned hook on its base for movement toward and away from the first hook, spring means on said base normally urging the slidable hook to move relative to the base in one direction to hold the cot portion thereon, the cot being arranged to be engaged on the hooks by engagement of the one portion first with the slidable hook to permit movement of said hook against the action of its spring means by manual movement of the cot so as to permit engagement of the other cot portion with the stationary hook, a rod extending from the slidable hook to an operating point, said rod being rotatable with respect to the base of said hook but held against endwise movement with respect thereto, a key turned with the rod from an out-of-the-way position to an operative position in which the same locks the slidable hook against movement by the cot, and a handle on said rod at the operating point for turning the same.

1,859,485. TOY NURSING BOTTLE. MARIE WITTMANN, New York, N. Y. Filed Jan. 27, 1931. Serial No. 511,499. 2 Claims. (Cl. 46—40.)



1. In a toy, a body member having a mouth opening, a receptacle situated within said member and connected with said opening, a bottle having an elongated neck, a plug within said neck, said plug fitting into said opening, and an air passage formed at least partly by a groove in said bottle neck and leading into the interior thereof.

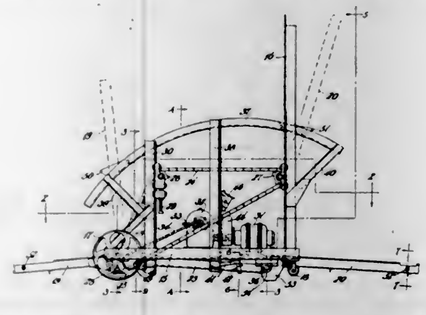
1,859,486. ICE UP-ENDING MACHINE. FRANCIS M. AIMES, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Aug. 19, 1930. Serial No. 476,335. 12 Claims. (Cl. 198—3.)



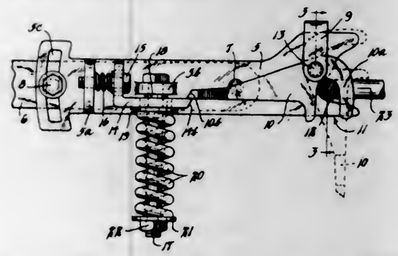
1. An ice up-ending machine comprising, in combination, a horizontal flight conveyor; a vertical flight conveyor; means for driving the two conveyors simultaneously at the same speed; a flight on the horizontal conveyor cooperating with a flight on the vertical conveyor to turn the ice cakes from an "on edge" to an "on end" position; and conveyor means to remove the up-ended ice cakes from the machine.

1,859,487. PORTABLE ICE UP-ENDING MACHINE. FRANCIS M. AIMES, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Aug. 19, 1930. Serial No. 476,336. 13 Claims. (Cl. 214—1.)

1. An ice up-ending machine comprising, in combination, a frame providing a downwardly inclined stationary support for the ice cakes on edge; a stop carried on the frame at the lower end of said downwardly inclined support; and motor-driven means on the frame engaging under the bottom edge of the ice cake when on said support to lift the higher end of the cake upwardly and to turn it through an arc of 90° about the stop as an axis until it stands on end.

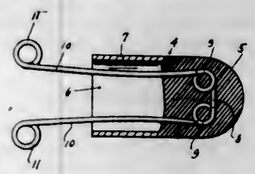


1,859,488. HITCH. ALVIN J. APMAN, near Stillwater, Minn., assignor of one-half to Mable V. Apman, Stillwater, Minn. Filed Apr. 2, 1931. Serial No. 527,109. 4 Claims. (Cl. 280—33.16.)



1. In an automatic hitch, a body having a recessed end, a coupling arm pivoted to said body at a point disposed at one side of said recess, said coupling arm having a hook at the outer end thereof cooperating with the recessed portion of said body, the opposite end of said coupling arm being provided with a retaining element, a latch mounted on said body and adapted to be moved longitudinally of said body and also transversely of said body, means for yieldingly holding said latch in extreme inward longitudinal movement and yieldable means directed transversely of said body for resisting the transverse movement of said latch, said latch having an element disposed longitudinally of said body for lapping and engaging with the retaining element of said arm.

1,859,489. CURTAIN ROD ATTACHMENT. JOHN APPLEYARD, Fall River, Mass. Filed Oct. 7, 1931. Serial No. 567,504. 3 Claims. (Cl. 223—38.)



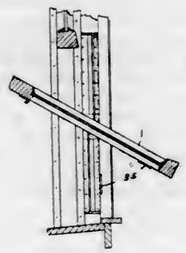
1. As a new article of manufacture, a curtain rod attachment for the purpose specified comprising a rubber body including a solid portion whose introductory end is rounded and of general convex configuration to function as a pilot, said body being fashioned at its opposite end with a socket for telescopic reception of the adjacent end of the curtain rod, the wall of said socket being of relatively thin flexible rubber to permit said wall to conform to the contour of the rod to aid in holding the attachment in place.

1,859,490. DRILLING OF OIL WELLS AND THE LIKE. ALBERT EDWARD ATKINSON, Upper Burma, British India. Filed Nov. 11, 1930, Serial No. 494,945, and in Great Britain Feb. 7, 1930. 1 Claim. (Cl. 255—1.)



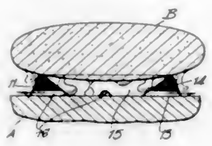
The method of correcting oil well bore holes which consists in jetting the walls of the already produced bore hole by radially disposed fluid jets upon the drill pipe the jetting commencing at a point above the bottom of the crooked bore hole to produce a new shoulder and continuing upward to where the crookedness commenced, the said shoulder being extended until the drill pipe hangs vertically, after which the jetting head is replaced by the usual drilling bit and the latter brought to operate on the newly formed shoulder.

1,859,491. TILTING WINDOW DEVICE. SAMUEL I. BAER, Youngstown, Ohio, assignor to Ellen K. Baer, Youngstown, Ohio. Filed Feb. 26, 1931. Serial No. 518,430. 4 Claims. (Cl. 20—49.)



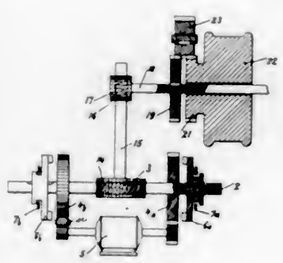
1. In a device of the character described, the combination of a sash element and slidably supporting strip element adjacent the vertical edge of said sash, means between said sash and strip for pivotally connecting the same, and means carried by one of said elements and cooperating with the other adapted to close the opening between said elements at the location of said pivot means.

1,859,492. SOAP HOLDER. JOSEPH BALESTRA, New York, N. Y. Filed Jan. 16, 1930. Serial No. 421,226. 1 Claim. (Cl. 45—28.)



A soap holder comprising a rubber ringlike body provided with a flat under face for resting flat upon a support, the inner peripheral wall of said ring like body being inwardly inclined while the outer peripheral wall is inclined in an opposite direction, the flat under side of said ring like body having radial grooves therein which open onto the outer and inner inclined peripheral walls, whereby any water from a cake of soap placed upon the top edge of the ring like body will freely drain therefrom without accumulating within the confines of said body.

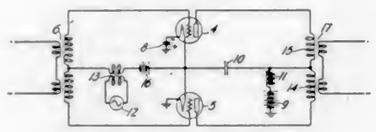
1,859,493. ELECTROMAGNETICALLY CONTROLLED REVERSING GEAR. RAOUL BERNADY, Neuilly, France, assignor to Societe d'Etudes et de Construction d'Appareils de Telemecanique, Neuilly, France, a Corporation of France. Filed Jan. 3, 1929, Serial No. 330,016, and in France Jan. 14, 1928. 2 Claims. (Cl. 192—142.)



1. A transmission chiefly for controlling aeroplane rudders comprising a driving shaft, two toothed wheels means whereby the driving shaft drives said wheels at the same speed, a driven shaft on which said wheels are loosely mounted, two friction wheels splined to said driven shaft, on either side of the toothed wheels, means for controlling the longitudinal motion of the friction wheels on their shafts, a worm on the driven shaft, a worm wheel meshing with said worm, a second worm gear controlled by said worm wheel, a pinion controlled by said worm gear, a power transmitting part, a gear wheel secured to said part and the size and toothwork of which are identical with the size and toothwork of the pinion, a pivotally mounted second pinion adapted to simultaneous mesh with the first pinion and with the last mentioned gear wheel.

1,859,494. CIRCUITS FOR ELECTRIC DISCHARGE DEVICES. HAROLD S. BLACK, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 28, 1927. Serial No. 171,582. 4 Claims. (Cl. 179—171.)

1. A balanced circuit comprising two electric discharge devices, each having a cathode and an anode, means for supplying heating current to said cathodes in series, and an output transformer having a primary winding connected to the cathode and anode of each of said devices and a secondary winding, said primary windings being ad-



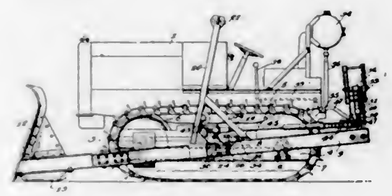
justed to produce equal effects on said secondary winding to compensate for the unbalance produced by the series cathode heating circuit.

1,859,495. CLOSURE FOR CONTAINERS. HUGH S. BRADY and JOHN J. WILLIAMS, Wheeling, W. Va., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Dec. 20, 1928. Serial No. 329,159. 7 Claims. (Cl. 215—38.)



7. A receptacle closure including a top provided with a pocket extending around its periphery, a skirt depending from said top, a gasket adapted to be arranged in the skirt with its upper edge positioned in said pocket, the lower edge of the gasket being substantially flush with the lower edge of the skirt, and centering and guiding tabs at intervals about the lower edge of the skirt and projecting downwardly therefrom.

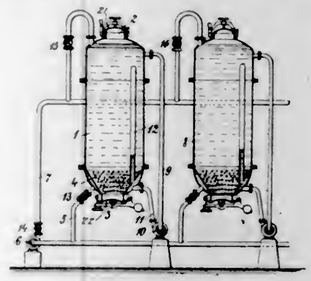
1,859,496. SCRAPER OR GRADER. HARRY C. BUFFINGTON, Springfield, Ill., assignor to The Baker Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed Mar. 21, 1931. Serial No. 524,344. 22 Claims. (Cl. 37—144.)



22. A scraper of the character described including in combination with a tractor having a track frame, a blade carrying frame connected to the tractor, a member carried by the blade carrying frame and engaging the track frame, and means for operating the member to raise and lower the blade carrying frame.

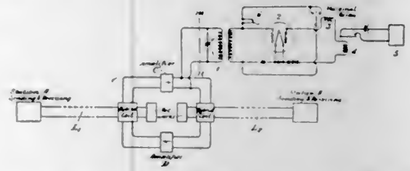
1,859,497. EXTRACTOR. WALTER BUSS, Basel, Switzerland, assignor to Buss Aktiengesellschaft, Basel, Switzerland, a Corporation of Switzerland. Filed Nov. 7, 1927, Serial No. 231,057, and in Germany Nov. 12, 1926. 5 Claims. (Cl. 87—28.)

1. Apparatus for making extracts or infusions by steeping, comprising a container, a tubular strainer extending lengthwise of said container, a liquid circulating pump, a connection from the suction side of said pump



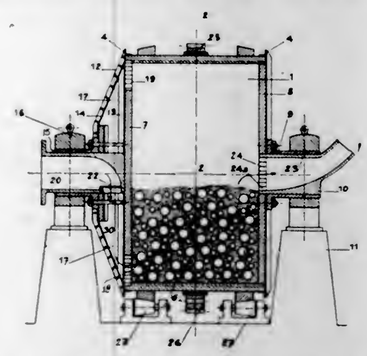
to the upper end of said tubular strainer, a connection from the pressure side of said pump to said container, and a valve in said tubular strainer.

1,859,498. VACUUM TUBE CONTROL SYSTEM. ALLEN CARPE, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 2, 1928. Serial No. 309,750. 12 Claims. (Cl. 178—44.)



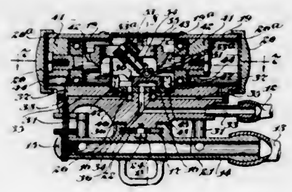
1. In an electrical controlling system, the combination with a vacuum tube of an output circuit including a source of plate voltage and a marginal relay, an input circuit including a source of negative biasing current and a source of alternating current, and a plurality of shunts, controlled by the said marginal relay, and adapted for connection across the said input circuit, to shunt one or both of said sources of current.

1,859,499. BALL MILL. JULES JEAN DESCHAMPS, Paris, France, assignor to Societe Francaise de Constructions Mecaniques, Anciens Etablissements Cail, Denain, Nord, France. Filed Apr. 14, 1930, Serial No. 444,179, and in France Apr. 24, 1929. 3 Claims. (Cl. 83—9.)



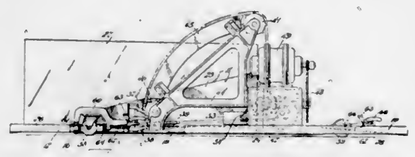
1. In a ball mill having a rotary drum containing crushing balls, a side wall at the intake end of the drum provided with apertures at the periphery thereof, an intake duct for the gaseous fluid and material to be pulverized, means attached to said drum for guiding the fluid and material from said duct to the aperture of said side wall situated at the lower position during rotation of the drum, and means for leading the fluid containing pulverized material out of the drum.

1,859,500. MILKING APPARATUS. LAURITS DINESEN, Minneapolis, Minn. Filed Jan. 13, 1930. Serial No. 420,455. 3 Claims. (Cl. 31—63.)



1. A pulsator mechanism adapted for use in milking apparatus comprising a cylinder structure, a double-ended piston working in said cylinder structure, said cylinder structure having a valve seat with intermediate and outer ports, said intermediate port being connected to a source of air pressure differing from atmosphere pressure, and said outer ports being connected to the opposite ends of said cylinder structure, a valve seated on said valve seat and movable to alternately connect said outer ports to said intermediate port, and to the atmosphere, and an endwise resilient thrust member pivotally connected to said valve and to said piston and movable from one side to the other of a dead center to shift said valve when said piston has moved a predetermined distance in either direction from extreme position, said valve and seat having pressure contacted laterally separable faces, normally pressed into contact by the endwise resilience of said thrust member.

1,859,501. ICE HANDLING MACHINE. STANLEY H. DURBIN, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Nov. 7, 1929. Serial No. 405,384. 14 Claims. (Cl. 214—1.)

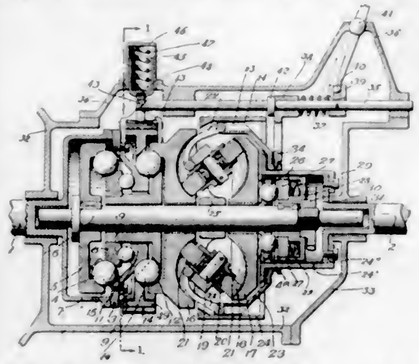


1. A machine of the class described comprising, in combination, a pivoted cradle; a power-actuated endless chain driven in a plane adjacent the cradle; an abutment fixed to the cradle between its ends; and means fixed to the chain for engagement with said abutment to swing the cradle by power on its pivot axis.

1,859,502. SPEED CHANGE GEAR. RICHARD ERBAN, Vienna, Austria. Filed June 20, 1928. Serial No. 286,909. 18 Claims. (Cl. 74—34.)

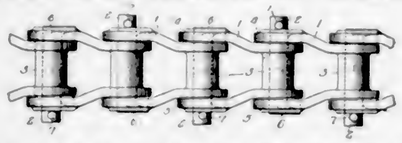
1. In combination, a rotatable driving member, a rotatable driven member, and a variable speed friction gear connection between said members including race rings and

cooperating rolling bodies movable with respect to one another to establish ratios above and below one-to-one



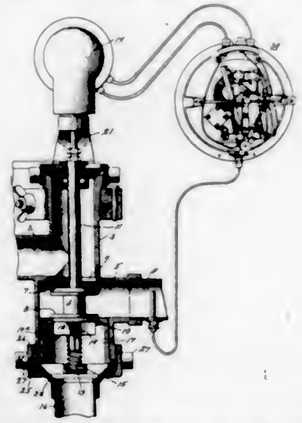
between said members, and all movable together as a unit to establish a direct drive connection between said members.

1,859,503. METHOD OF IMPROVING THE QUALITY OF LINK PINS. FRANK A. FAHRENWALD, Chicago, Ill., assignor to American Manganese Steel Company, Chicago Heights, Ill., a Corporation of Maine. Filed Feb. 6, 1929. Serial No. 337,746. 5 Claims. (Cl. 148—12.)



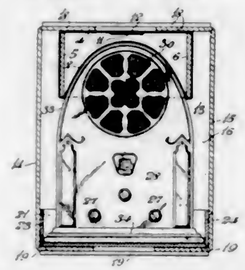
1. The method of cold-working manganese steel parts prior to use which consists in simultaneously stretching the body metal in one portion of the manganese steel part and compressing the body metal in another portion of the manganese steel part, substantially throughout the cross section thereof.

1,859,504. PASTEURIZING APPARATUS. HAROLD S. FIELDER, Chicago, Ill., assignor, by mesne assignments, to Cherry-Burrell Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 15, 1927. Serial No. 206,025. 8 Claims. (Cl. 236—93.)



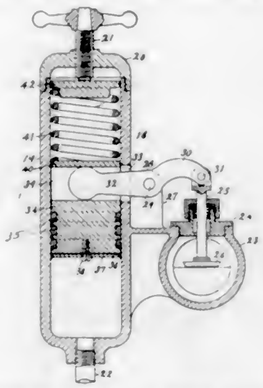
1. In apparatus of the class specified, the combination of a valve holding structure provided with inlet and outlet passages, a valve arranged within said valve holding structure and means forming a removable valve seat for said valve, said means comprising a removable member providing a chamber having an aperture which forms the valve seat, a ring or annulus having threaded connection with the valve holding structure, and a fitting also held in place by said ring or annulus and in turn holding said valve chamber structure removably in position.

1,859,505. SHIPPING CARTON SUPPORT. EARL S. GOMES, Cincinnati, Ohio. Filed Sept. 1, 1931. Serial No. 560,545. 4 Claims. (Cl. 229—14.)



1. In combination with a shipping carton, a frame having open top and bottom, a flexible endless band surrounding said frame and extending across said open top and bottom and of sufficient length to yield within said frame when the latter is placed between the carton and an article packed therein whereby said article is securely held and protected from damage.

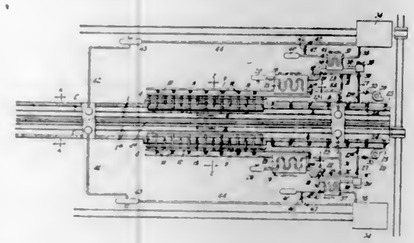
1,859,506. PRESSURE REGULATOR. CHARLES W. HADDY, New York, N. Y. Filed Sept. 20, 1929. Serial No. 393,967. 2 Claims. (Cl. 137—153.)



1. In a pressure regulator, a casing having a passage extending through a side wall thereof, a valve body projecting from said casing and having an extending valve stem, a piston slidable in said casing and provided with an operating slot alined with said passage, and a lever pivotally mounted on said valve body and having its opposite ends respectively engaging in operative relation the walls of said piston slot and said valve stem.

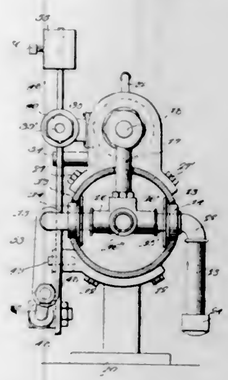
1,859,507. TWIN TUNNEL KILN. WILLIAM LEE HANLEY, Jr., Bradford, Pa. Filed May 3, 1928. Serial No. 274,730. 9 Claims. (Cl. 25—142.)

1. A twin tunnel kiln provided with two exterior walls, and an impervious central partition wall extending throughout the length of the kiln, each tunnel comprising a centrally located firing zone provided with a series of furnaces at different points longitudinally thereof, discharging their products of combustion into the firing zone, in a direction toward the said partition wall, independent means for controlling said furnaces for maintaining a gradually increasing temperature in the same direction longitudinally of each firing zone, means for withdrawing the products of combustion from each of the firing zones, each tunnel being provided with a preheating zone, communicating with one of said firing zones,



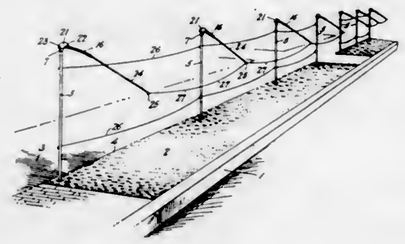
and a cooling zone communicating with the opposite end of one of said firing zones, goods conveying means movable in the same direction through each tunnel, and means for utilizing the products of combustion for heating air and discharging it into the preheating zones, whereby said central longitudinal partition wall between said tunnels will act as a heat reservoir and stabilizer, and assist in maintaining the same temperatures on opposite sides thereof in the separate tunnels at all points throughout the range of temperatures from one end of the tunnel to the other.

1,859,508. HYDRAULIC FELT CONDITIONER OR THE LIKE. JOHN L. HARRIS, Thomson, N. Y. Filed May 14, 1930. Serial No. 452,477. 5 Claims. (Cl. 92—50.)



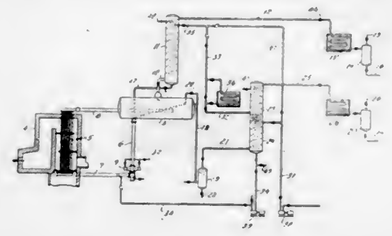
1. In an apparatus of the class described, a frame comprising a cylindrical support having longitudinal slots at the opposite sides thereof, an inlet pipe within the support, a T connected to the opposite ends of the inlet pipe and having branch pipes extending through the slots in the support, the free ends of the branch pipes being provided with nozzles, flanged rollers received within the slots and supporting the branch pipes and the inlet pipe for movement longitudinally of the support, and means for causing reciprocating movement of the inlet pipe in the support.

1,859,509. ORNAMENTAL FENCE. JOHN M. HAVERSTICK, Ventnor City, N. J. Filed Aug. 6, 1931. Serial No. 555,583. 15 Claims. (Cl. 256—1.)



1. A fence comprising a plurality of posts, cables strung between said posts, each of said posts provided with a flexible spring member located at its top, and an arm in each of said spring members and a cable strung between the said arms.

1,859,510. ART OF CRACKING HYDROCARBON OILS. EUGENE C. HERTHEL and THOMAS DE COLON TIEFT, Chicago, Ill., assignors to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed June 7, 1928. Serial No. 283,516. 3 Claims. (Cl. 196—48.)



1. In processes of cracking higher boiling hydrocarbon oils to produce lower boiling hydrocarbon oils by distillation under pressure at cracking temperatures in which unvaporized oil is withdrawn during the pressure distillation and subjected to further vaporization by its self-contained heat under a reduced pressure, the improvement which comprises passing the vapors from the pressure still into a reflux tower, passing the vapors separated from the oil withdrawn from the pressure still into another reflux tower, passing fresh oil in indirect heat exchanging relation with the vapors in the second mentioned reflux tower and thereby subjecting the vapors to condensation and then introducing this fresh oil into direct contact with the vapors in the first mentioned reflux tower, returning reflux together with admixed unvaporized fresh oil from the first mentioned reflux tower to the pressure still and separately returning condensate from the second mentioned reflux tower directly to the pressure still.

1,859,511. PICTURE AND LIKE FRAME. HEINRICH HERZOGENRATH, Berlin-Charlottenburg, and HERBERT TIADEN, Berlin-Zehlendorf, Germany. Filed Jan. 5, 1931, Serial No. 506,724, and in Germany July 10, 1929. 5 Claims. (Cl. 40—156.)

1. A frame for removably supporting a card, photograph, or the like, comprising four sides and having a sight opening and an inner ledge to receive and retain said card or photograph in the frame and an opening in one of said sides of the frame, and a removable combined

retaining and supporting bar flexible in a plane normal to the plane of frame and adapted to extend across the said sight opening and detachably engage opposite sides of said frame with one of its ends projecting through



said opening and beyond the outer side of the frame to retain said card or photograph seated on the inner ledge and in the frame and provide means for suspending the frame.

1,859,512. REFRACTORY AND METHOD OF MAKING IT. RUSSELL P. HEUER, Philadelphia, Pa., assignor to General Refractories Company, a Corporation of Pennsylvania. Filed Feb. 22, 1926, Serial No. 89,824. Renewed Sept. 10, 1931. 14 Claims. (Cl. 106—9.)

1. A step in the process of forming a magnesia refractory from magnesia free from or low in lime and a small amount of finely divided clay containing colloidal material in the presence of water, which consists in dispersing the clay gels by a dispersing agent in the presence of magnesia so that the gels cluster about the particles of magnesia.

1,859,513. WORK LOCATING AND GUIDING DEVICE. ERNEST HOPE and ALFRED E. RICHARDS, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Sept. 4, 1924, Serial No. 735,863, and in Great Britain Sept. 6, 1923. Divided and this application filed Mar. 29, 1929. Serial No. 351,088. 5 Claims. (Cl. 164—60.)



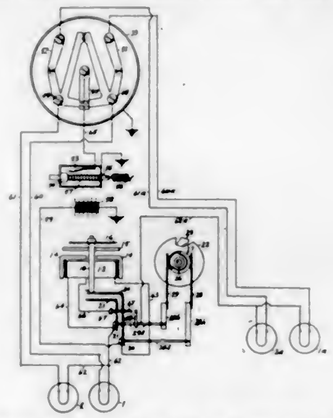
1. For use in co-operation with a gage member to guide past an operating instrumentality a piece of work to be operated upon along at least one line not parallel to any edge of the work, a jig consisting of a flat plate having an edge portion for engaging said gage member to determine the direction of the relative movement of the work and the operating instrumentality while the work is being operated upon along said line, and means for locating the work relatively to the jig with said line parallel to said edge portion of the jig.

1,859,514. MANUFACTURING OF LUBRICATING OIL. EDWARD W. ISOM, Scarsdale, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed June 6, 1927. Serial No. 197,011. 8 Claims. (Cl. 196—50.)

1. The improvement in the manufacturing and refining of lubricating oils which comprises subjecting a petroleum oil containing a lubricating oil fraction to a digestion treatment at a temperature of from 640 to 790 degrees F. from 4 to 12 hours at the pressure necessary to prevent substantial vaporization of the lubricating oil constituents.

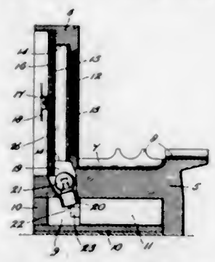
1,859,515. SIGNAL DEVICE FOR AUTOMOBILES. HOSAKU KAGEYAMA, Los Angeles, Calif. Filed Dec. 22, 1926. Serial No. 156,399. 14 Claims. (Cl. 177—337.)

1. A signaling device comprising a casing having a transparent front, electric lamps inside of the casing for illuminating said front, an audible signal carried by the casing to be operated jointly with the lamps, a plate inside of the casing, an electromagnet and a vibrator both included in said audible signal for operating the same to produce a continuous sound, said electromagnet



being mounted on one side of the plate and being connected in series circuit with said lamps and a means mounted on the other side of the plate for short circuiting said electromagnet periodically to make the sounding of the audible signal intermittent, said means being operated by said electromagnet.

1,859,516. ILLUMINATED DISPLAY DEVICE. HENRY C. KEYES, Kingman, Ariz. Filed Dec. 29, 1930. Serial No. 505,399. 2 Claims. (Cl. 40—130.)

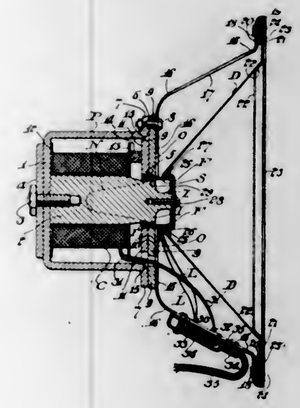


2. A device of the class described, comprising a base provided with a pair of connected recesses and with an upright extension having an aperture therein; a transparency covering said aperture; a picture-bearing medium behind and spaced from said transparency; an electric lamp mounted in one recess of said base; and an electric battery within the other recess of said base and connected to said lamp, whereby the latter may illuminate the space between said transparency and picture-bearing medium to enable the latter to be viewed through said transparency.

1,859,517. AQUEOUS DISPERSION AND PROCESS OF MAKING SAME. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 6, 1927. Serial No. 224,527. 11 Claims. (Cl. 134—1.)

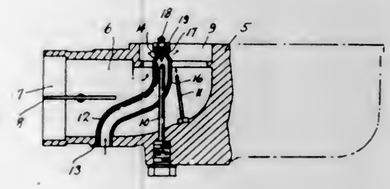
4. The process of producing aqueous dispersions of bituminous material, which comprises treating a protein to cause the same to assume a swollen plastic condition, and adding bituminous material and water in small increments to the mass whereby to maintain the mass in plastic condition while subjecting the mass to agitation.

1,859,518. ELECTRODYNAMIC SPEAKER. RUSSELL T. KINGSFORD, Wyncote, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 17, 1930. Serial No. 453,130. 9 Claims. (Cl. 179—115.5.)



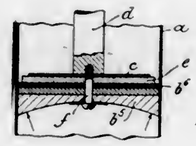
5. In telephonic apparatus of the character described, a pot element having flange structure at its open end, a field core disposed in said pot, a magnetizing winding on said core, and outer pole plate structure comprising a plate secured to the flange on said pot element, and an inner plate secured to said first named plate and terminating short of the wall of said pot element, said plates having registering apertures forming an air gap with said core.

1,859,519. FUEL ECONOMIZER. EDWARD E. LITKE, Wichita, Kans. Filed Aug. 21, 1930. Serial No. 476,848. 2 Claims. (Cl. 261—41.)



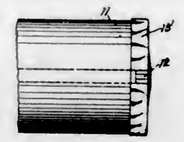
1. A fuel economizer for a carbureter having a fuel and air mixing chamber, a main fuel jet and a mixed fuel discharge in the chamber, comprising, a curved tube having its lower end communicated through the bottom of the chamber to the open air, and having its upper end closed and positioned within the discharge, the sides of the upper end of the tube being provided with a series of circumferentially spaced holes, and an intermediate curved portion of the tube being provided with an aperture through which the said main fuel jet is projected into the tube, and means carried by the upper end of the tube capable of being adjusted to control the passage of fuel from said jet and through said holes.

1,859,520. PISTON SEALING MEANS. ROBERT MAISEL, Munich, Germany, assignor of one-third to Maschinenfabrik Hörselgau Aktiengesellschaft, Waltershausen, Germany, and one-third to Dr. Wilhelm Schwarzwälder, Munich, Germany. Filed Dec. 15, 1926, Serial No. 154,903, and in Germany Dec. 31, 1925. 2 Claims. (Cl. 74—108.)



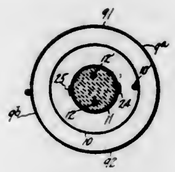
1. A piston head having a unitary elastic body of a constituency maintaining its elasticity during its useful life, said body presenting a plurality of homogeneous, soft elastic zones of different degrees of elasticity from zone to zone between opposed faces of the body.

1,859,521. PROTECTING MEANS FOR ROLLS OF PAPER. EDWARD L. MCDEVITT, Los Angeles, Calif., assignor to Frank F. Barham, Los Angeles, Calif. Filed Dec. 23, 1929. Serial No. 416,035. 2 Claims. (Cl. 206—59.)



1. A protecting wrapping for a roll of paper which includes a wrapper sheet around the roll of paper, a protecting cap formed of a plurality of superimposed layers secured together with an adhesive adapted to harden, with means for crimping the outer edge of said composite cap-forming layers over the end of said roll of paper and securing them around the end of said wrapper sheet and holding said formed cap until hard, said cap being removable with said wrapper sheet.

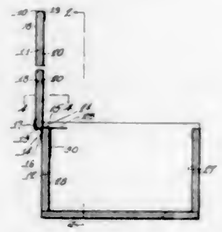
1,859,522. ELECTRON TUBE. BENJAMIN F. MIESSNER, Short Hills, N. J., assignor to Miessner Inventions Inc., Short Hills, N. J., a Corporation of New Jersey. Filed Mar. 12, 1930. Serial No. 435,046. 7 Claims. (Cl. 250—27.5.)



1. In an electron tube, the combination of a cathode thimble, a hair-pin heater element within said thimble being insulated therefrom and extending substantially

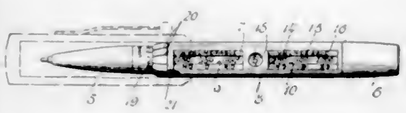
co-axially therewith, an anode surrounding said thimble and spaced therefrom, said anode being cut away in an area substantially parallel to a plane passing symmetrically between the legs of said heater element, and an electron emissive coating upon said cathode thimble at points of substantially equal magnetic field strength of each of the legs of said heater element.

1,859,523. INSIDE LABEL AND CORNER FLAP. FRANK RODGERS NEELY, Allentown, Pa., assignor to A. H. Ballet Corporation, Allentown, Pa., a Corporation of Pennsylvania. Filed Mar. 15, 1927. Serial No. 175,471. 5 Claims. (Cl. 229—6.)



5. In combination, a box body, a cover hinged thereto, and a label member constructed and arranged to be attached to the inner face of said cover and a price tag integral with said member and adapted to be disposed over the contents of the said box.

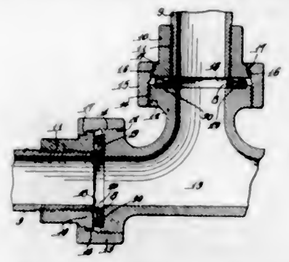
1,859,524. SCORING DEVICE. NICHOLAS E. NICOLET, New York, N. Y. Filed Oct. 8, 1931. Serial No. 567,528. 1 Claim. (Cl. 235—87.)



A scoring device for use in playing the game of bridge, comprising an inner member having a cylindrical surface bearing two groups of circumferential rows of figures indicating various honor and penalty totals obtained under different conditions of play, the figures of each circumferential row being longitudinally aligned with certain figures of the other rows to form horizontal groups, another single circumferential row of figures on said surface indicating extra and under trick values in either of the two first mentioned groups of figures, each figure of said row being longitudinally aligned with figures of the first-mentioned rows, and an outer sleeve-like member rotatable on said inner member and having longitudinally allgned elongated openings through either of which all of the figures in any horizontal group of the associated circumferential rows are visible, and further having another opening aligned with said elongated openings and through which is visible said single circumferential row of figures.

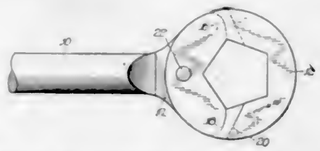
1,859,525. DISK FOR PIPE JOINTS. WILLIAM F. OBERHUBER, Lansdowne, Pa. Filed Apr. 8, 1926. Serial No. 100,559. 9 Claims. (Cl. 288—1.)

1. A disk for sealing engagement comprising an annulus of solid material having annular edges exposed for contact on its opposite side faces, the edges being undercut when viewed in radial section through the axis and located at the inner edge of the annulus and on opposite sides at a distance from the inner edge, alternating so that a contact



on one side lies between contacts on the other side to utilize the spring of the body of the disk as well as that of the undercutting to give resilience to the contact.

1,859,526. WRENCH. WILLIAM PASCOE, Norway, Mich. Filed Mar. 11, 1931. Serial No. 521,812. 2 Claims. (Cl. 81—98.)



1. A wrench for hydrants and the like comprising, in combination, a unitary head member having a nut opening therein, said head member being bifurcated for the reception of the forked extremity of a handle, a pivotal connection between the handle and the head member, said connection and said handle being so constructed and arranged that normally the converging inner marginal edges of the forked extremity coincide with the walls of the nut opening in the head member but are movable into a position overlying the opening whereby the wrench accommodates nuts of different shapes and sizes, and shoulders formed integrally with the head member for limiting the amount of pivotal movement of the handle relatively thereto.

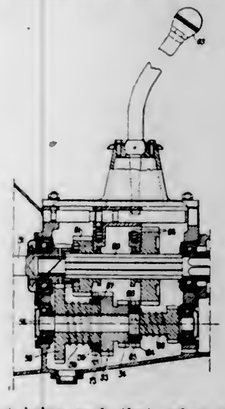
1,859,527. MANUFACTURE OF COMPOUNDS OF THE MORPHOLINE SERIES AND THE PRODUCTS. JOSEPH BARON PATMAN and HENRY ALFRED PIGGOTT, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed Aug. 1, 1928, Serial No. 296,863, and in Great Britain Sept. 1, 1927. 11 Claims. (Cl. 260—28.)

1. In the manufacture of morpholines the step which comprises reacting a toluene sulphonamide with a beta-halogeno-alcohol in the molecular ratio of at least 2 molecules of beta-halogeno-alcohol to 1 molecule of the toluene sulphonamide.

1,859,528. GEAR OR GEARING. JAMES POTTS, London, England. Filed Oct. 24, 1929, Serial No. 402,138, and in Great Britain June 25, 1929. 3 Claims. (Cl. 74—58.)

1. Automatic means for protecting the teeth of two main toothed gear wheels (termed the first and second main gears) which are to be brought into engagement by relative axial movement, comprising two coaxial intermediate toothed gear wheels (termed the friction and free intermediate gears) each having the same diameter and number of teeth, which teeth are suitable to be engaged by the

teeth of the second main gear, interconnecting means between the friction and free intermediate gears including a lost motion device, so that the said intermediate gears are adapted to rotate together but with a limited amount of angular play between them, friction means, brought into operation or enhanced by the first part of the movement to engage the two main gears, adapted to rotate the friction intermediate gear from and in the same direction as the first main gear, the free intermediate gear being relatively moved in mesh with the second main gear by initial movement to engage the main gears, so that it is rotated by the second main gear in the same direction as the friction intermediate gear driven by the first main gear,

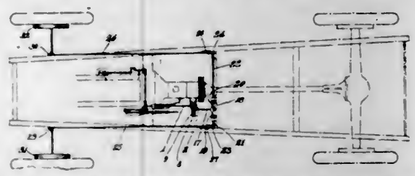


the arrangement being such that, when the main gears are relatively moved towards their engaging position, if the linear speeds of the pitch circles of the main gears are the same no relative rotary movement takes place between the intermediate gears, and the second main gear is free to be relatively moved successively into engagement with the friction intermediate gear and then into engagement with the first main gear, but if the said linear speeds vary, the permitted limited amount of relative rotary movement occurs between the intermediate gears and the teeth of the friction intermediate gear are caused to project over the gaps between the teeth of the free intermediate gear.

1,859,529. PROCESS FOR THE MANUFACTURE OF TETRAZENE EXPLOSIVES. HANS RATHSBURG, Furth, near Nuremberg, Germany. Filed Apr. 5, 1929, Serial No. 352,892, and in Germany Mar. 16, 1928. 3 Claims. (Cl. 260—125.)

1. The process for the manufacture of tetrazene-explosives which consists in assembling preheated aqueous solutions of an amino-guanidine-salt and of sodium nitrite in a reaction jar so that they will act one upon another.

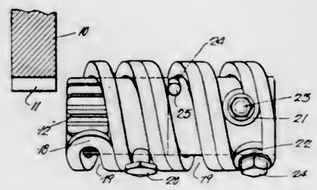
1,859,530. VEHICLE BRAKE. EDWARD A. ROCKWELL, Long Island City, N. Y. Filed Dec. 12, 1927. Serial No. 239,304. 24 Claims. (Cl. 188—140.)



1. In combination, a pressure-applying mechanism operable at will, a power brake comprising a normally rotatable but retardable brake element, said pressure-applying mechanism being operable to retard the rotation of the normally rotatable brake element, a power transmitting output connection adapted to be moved by the retardation of said brake element for moving the first mentioned pressure applying mechanism further in the direction of the initial operation at will, to increase the braking effect upon the power brake and secondary braking means brought into action by the operation of said power brake.

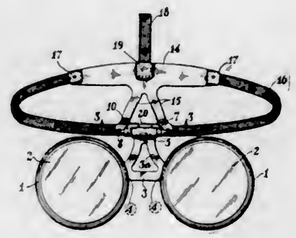
20. Power brake mechanism comprising a drive shaft, a brake element yieldably driven from said shaft for normal rotation therewith but capable of limited relative rotation with respect thereto, pressure applying mechanism operable to retard the rotation of said brake element and means operative by the relative rotation between said brake element and said shaft for producing additional retarding pressure upon said brake element.

1,859,531. MECHANICAL CONNECTION. LORENZO R. ROSS, Butler, Pa. Filed Oct. 15, 1930, Serial No. 488,934. Renewed Mar. 30, 1932. 2 Claims. (Cl. 74—7.)



1. In a mechanism of the class described, a driving member having an axial recess opening out through one end thereof, a driven member having an attaching portion movable longitudinally in said recess, a helical spring encircling the driving and driven members and having convolutions spaced uniformly for the major portion of the length of the spring, means anchoring one end of the spring to said driving member, the other end of the spring being provided with a loop, a pin carried by said driven member and movable between said uniformly spaced convolutions and engageable with said loop, said driving and driven members being formed with annular shoulders constituting a means to limit compression of said spring.

1,859,532. ADJUSTABLE GOGGLES. GEORGE ROTOLO, Glendale, N. Y. Filed Nov. 9, 1929. Serial No. 405,891. 3 Claims. (Cl. 2—14.)



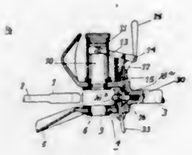
1. An eye protector comprising a substantially rigid frame member adapted to lie against the forehead and having integral substantially rigid extended arms, a rod connecting the extremities of said arms and positioned between said arms, a sleeve fixedly adjustable on said rod, transparent eye protectors connected to said sleeve and flexible means for retaining said frame member in position.

1,859,533. COUNTER FOR TURN SHOES. MERTON ROWE, Salisbury, Mass. Filed June 24, 1931. Serial No. 546,475. 3 Claims. (Cl. 36—68.)



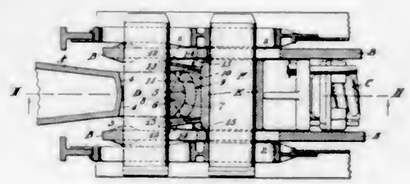
1. A counter for turn shoes having sewed heel seats consisting of a blank of pliable sheet material having its bottom edge portion of reduced thickness and formed to provide a stitch receiving portion of uniform thickness extending from the bottom edge for a substantial portion of the width of said edge portion and a beveled portion extending from said stitch-receiving portion to the full thickness of the material.

1,859,534. COUPLING FOR TRAILERS. JOHANN SCHLAGENHAUF, Oerlikon, near Zurich, Switzerland. Filed Jan. 17, 1930, Serial No. 421,498, and in Switzerland Jan. 26, 1929. 2 Claims. (Cl. 213—203.)



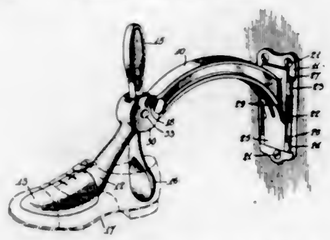
1. In a trailer coupling, a coupling head, a receiving bell for a link pivotally mounted in the said coupling head, a bolt slidably mounted on said head adapted to pass through the center of the bell, means to operate said bolt, said means comprising a spring operated lever, a pin supporting said lever against the action of the spring, a member slidably mounted in the said coupling head securing said receiving bell, and projecting into the same and adapted to retain said supporting pin in initial uncoupled position.

1,859,535. DRAFT ATTACHMENT. ERNEST H. SCHMIDT, Cleveland Heights, and HUBERT L. SPENCE, Cleveland, Ohio, assignors to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 19, 1927. Serial No. 161,992. 19 Claims. (Cl. 213—69.)



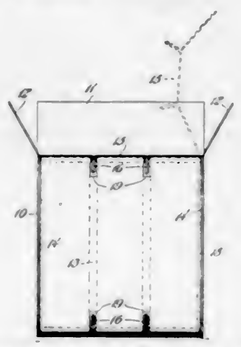
11. In a coupler attachment, the combination of a coupler shank and a yoke having horizontal aligned slots; a connecting key seating in said slots; a draft gear in said yoke and a follower between said gear and coupler shank, and independent draft and buff equalizing members, one of said members seated within said shank and bearing upon said key and the other of said members being interposed between said shank and follower and being movable rearwardly relative to said yoke in buffing, whereby said yoke may remain stationary during buffing movements of said coupler.

1,859,536. SHOE SHINING LAST. HERMAN E. SCHULSE, Bayonne, N. J., assignor to H. E. Schulse, Inc., a Corporation of New York. Filed June 5, 1928. Serial No. 282,967. 10 Claims. (Cl. 12—128.6.)



1. As a new article of manufacture a shoe shining last including a relatively fixed arm, the free end of which constitutes the toe engaging portion of the last, means movably connected to said arm constituting the counter engaging portion of the last, said toe last portion of the arm being of curved shape in cross section and having an opening therein adapted to anchor a curved adaptor seating on and embracing the said toe last portion.

1,859,537. CAN SEPARATOR FOR SHIPPING CONTAINERS. MARC R. SHOFER, Minneapolis, Minn., assignor to Iowa Fiber Box Company, Keokuk, Iowa, a Corporation of Delaware. Filed May 27, 1931. Serial No. 540,464. 4 Claims. (Cl. 229—15.)

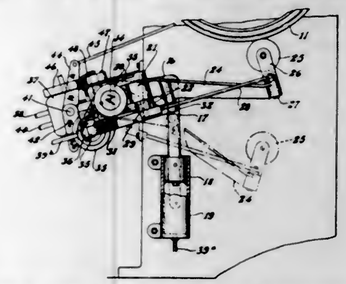


1. In combination with a paper board shipping container of rectangular cross-section, separate division and packing members for a plurality of rows of cans comprising top and bottom pad members fitting closely within the top and bottom of the container and each having integrally formed, doubled and opposed partition members extending toward each other to separate the upper and lower ends of the cans; and vertical wall members on the end pads extending the length or height of the container and reinforcing the end walls and all corners of the container.

1,859,538. TIRE BUILDING MACHINE. FLORAIN J. SHOOK, Akron, Ohio, assignor to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 12, 1929. Serial No. 413,510. 20 Claims. (Cl. 154—10.)

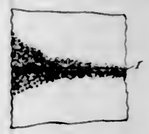
1. In a tire-building machine, the combination of a rotary band-building drum, a stitcher movable thereover, a stitcher-carrying arm pivoted for swinging stitcher-feeding and return movements lengthwise of the drum, and a support for said arm pivoted for moving the arm toward and away from the drum axis.

20. In a tire-building machine, the combination of a rotary tire form, a pair of pivoted stitcher arms interconnected for opposite swinging movements and having stitcher wheels coacting with said form, a hub carrying the stitcher arms and pivoted for stitcher-positioning



movements, and mechanism including fluid-pressure operating and valve devices controlled by the traverse of the stitcher arms for rocking said hub and swinging the stitcher arms.

1,859,539. CELLULAR BUILDING MATERIAL. KEMPER SLIDELL, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 31, 1929. Serial No. 382,358. 7 Claims. (Cl. 72—37.)



1. As a new article of manufacture, a building unit of cellular vitrified argillaceous material of substantially uniform composition throughout and of predetermined shape and dimensions, and characterized by the inclusion throughout its body of separate and closed cells separated by cell walls of vitrified material.

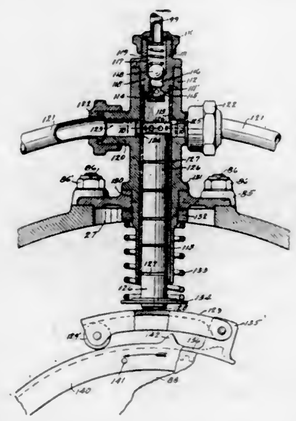
1,859,540. FASTENING DEVICE. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Dec. 14, 1929. Serial No. 414,158. 10 Claims. (Cl. 24—205.)



1. A fastener comprising a pair of flexible stringers, rows of cooperating fastener elements secured to said stringers, each of said elements comprising a strip of wire bent upon itself in a plane transverse to said stringers and having one end bent up between said bent portions out of said plane to provide means for interlocking with the elements of the other stringer.

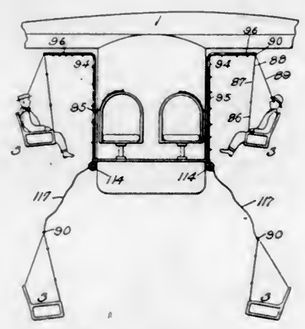
1,859,541. INTERNAL COMBUSTION ENGINE. FERI A. THAHELD, Dallas, Tex., assignor, by mesne assignments, to Guiberson Diesel Engine Company, Dover, Del., a Corporation of Delaware. Filed Apr. 7, 1930. Serial No. 442,316. 16 Claims. (Cl. 123—139.)

1. In an engine of the character described, a plurality of cylinders, a valve for each cylinder, means for operating the valves, a fuel pump for each cylinder, a plunger for each pump, pivoted operators for the plungers, revolving means periodically engaging the operators, a support to



which the operators are attached, and means for adjusting said support to simultaneously vary the stroke of said plungers and the time of fuel injection.

1,859,542. LIFE PRESERVING MECHANISM FOR AIRSHIPS. HARRY P. TRUSTY, Los Angeles, Calif. Filed Oct. 8, 1929. Serial No. 398,167. 17 Claims. (Cl. 244—21.)

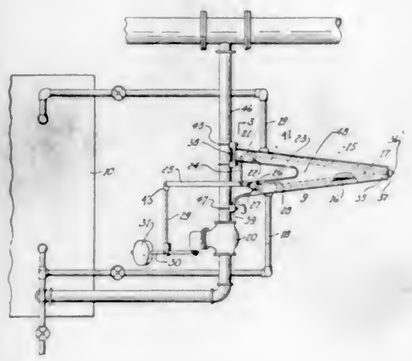


1. In a life preserving mechanism for airships, seats for passengers, parachutes connected to said seats, and means, operated by the pilot of the airship, for swinging said seats, with the passengers therein, out of the airship, and dropping the seats and passengers in said parachute.

1,859,543. PREPARATION OF CHLORIDS OF PHOSPHORUS. EDOUARD URBAIN, Paris, France. Filed May 15, 1929, Serial No. 363,415, and in France May 31, 1928. 2 Claims. (Cl. 23—205.)

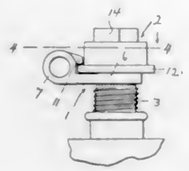
1. The process of producing phosphorus chlorides which consists in treating ferro-phosphorus with chlorine gas at a temperature at which ferrophosphorus reacts with the chlorine gas, adding an excess of ferrophosphorus at the height of the reaction to obtain a mixture of ferrous-chloride and phosphorus trichloride, and distilling the phosphorus trichloride obtained.

1,859,544. FEED WATER REGULATOR. VINCENT V. VERENSCHOTEN, Erie, Pa., assignor to Northern Equipment Company, Erie, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1929. Serial No. 411,808. 14 Claims. (Cl. 122—451.1.)



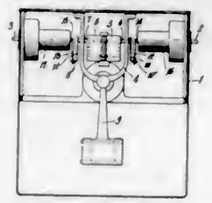
1. A boiler system comprising a feed water pipe, a feed water valve mounted in said pipe, a frame comprising two similar spaced V-shaped members, means rigidly connecting the apexes of the members together, means rigidly connecting the ends of the branches of the members with said pipe, a thermostatic feed water regulator mounted between said members, one end of said regulator being connected to said frame, and means operatively connecting the other end of said regulator with said valve and with said frame.

1,859,545. BATTERY TERMINAL. FRANK J. WALLENBERG and ARTHUR MCQUINN, Tonnwanda, N. Y., assignors, by mesne assignments, to Jiffy Battery Terminal Corporation, Buffalo, N. Y., a Corporation of New York. Filed Mar. 21, 1927. Serial No. 177,048. 10 Claims. (Cl. 173—259.)



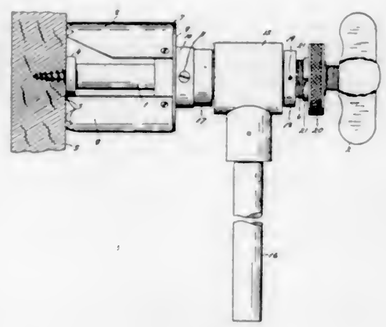
1. A terminal connector or the like, comprising a split ring having an opening of a size to fit over a terminal post, a clamping member surrounding and rotatable upon said ring, said ring and member having cooperating cam parts by which rotation of said member on said ring contracts said ring, and also having additional cooperating interlock portions preventing displacement of said member axially along said ring when said member is in ring contracting position.

1,859,546. MEANS FOR INDICATING METACENTRIC HEIGHT. JOHN LYELL WILSON, Brooklyn, N. Y., assignor to Stability Meter Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1929, Serial No. 414,398. Renewed Aug. 11, 1931. 7 Claims. (Cl. 73—151.)



6. In an apparatus of the character described, inductance varying means responsive to the angular velocity of roll of a body, inductance varying means responsive to the angle of roll, and means jointly controlled by said two first mentioned means for indicating the metacentric height of said body.

1,859,547. PLUG CUTTING TOOL. WALTER H. YOUNG, Detroit, Mich. Filed May 4, 1931. Serial No. 534,766. 2 Claims. (Cl. 44—105.)



1. In a tool of the character described, the combination with a shaft having a threaded portion, and means carried by one end of said shaft to mount the shaft on a piece of work, of means carried by the other end of said shaft for actuating the shaft to establish such mounting, a cutter freely slidable and freely rotatable on said shaft, a clutch element coaxial with the cutter and having a unitary connection therewith, a nut threaded on said shaft between said actuating means and the cutter, and movable longitudinally of the shaft independently of the cutter, said nut having clutch teeth facing the cutter for coaction with said clutch element, and means for rotatively actuating said cutter.

1,859,548. GAUGE FOR PRINTING PRESSES. WILLIAM L. ANGEL, Portland, Oreg. Filed Apr. 25, 1929. Serial No. 358,024. 4 Claims. (Cl. 101—415.)

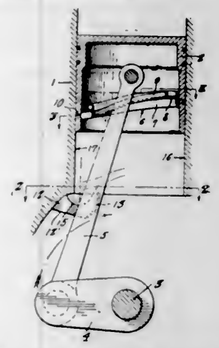
1. In a device of the class described, the combination of a body element hingedly secured together by a journal

pin seated within hinging ears formed from the body elements and outwardly extending therefrom, a stop head formed adjacent the end of one of the body elements, said head having a point formed on its lower surface and when in normal position adapted to extend below the surface base of the other of the body elements,



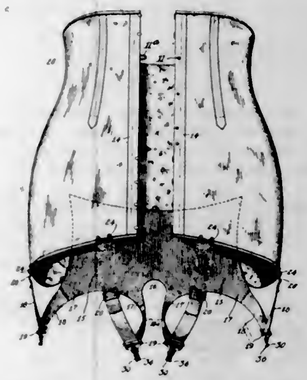
means for maintaining one end of the body elements in spaced relation with each other, and a guide bar passing through an opening disposed within one of the body elements and resting upon the other of the body elements, said guide bar extending outwardly from the stop head in order to form a guide.

1,859,549. LUBRICATING SYSTEM. MORRIS BOUCHER, March Field, Calif. Filed Nov. 13, 1929. Serial No. 406,912. 2 Claims. (Cl. 184—13.)



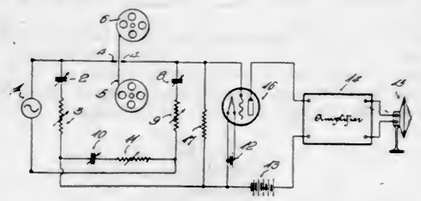
1. Oil deflectors designed to be secured in an engine directly below the piston cylinder, arranged in pairs to receive the piston connecting rod therebetween, each comprising a channeled member whose lower face is open and whose front face is curved and extended upwardly into the cylinder and whose upper face is also open.

1,859,550. CORSET. VITA BUCHANAN, New York, N. Y. Filed Sept. 4, 1926. Serial No. 133,670. 8 Claims. (Cl. 2—37.)



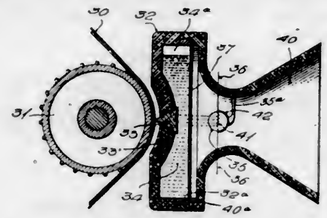
1. A corset comprising a body part adapted to be secured together to confine the body of the wearer, a single elastic seat portion, a pair of holding members each secured at one end to the outer lower corners of said seat portion, a pair of similar holding members extending in close proximity diagonally downward and forward from the middle of the lower rear edge of said seat portion and having portions partly folded upon themselves and the free ends thereof extended upward and forward, and means for severally securing the other ends of said holding members to the lower edge of the corset at the sides and front thereof, respectively, and an attaching device carried by each of said holding members and movable longitudinally thereof and adapted to engage with the stockings of the wearer, substantially as specified.

1,859,551. SOUND REPRODUCING APPARATUS. BEN J. CHROMY, Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1928. Serial No. 312,627. 4 Claims. (Cl. 179—100.3.)



1. In a device of the class described the combination of, a vacuum tube having input and output circuits, a sound record bearing film strip, electrodes disposed adjacent to the sound record of said film strip, said electrodes and said film strip comprising one leg of a bridge circuit arrangement, adjustable resistance elements in each leg of said bridge circuit arrangement means for generating high frequency oscillations, connections between said high frequency generating means and one of said electrodes, connections between the other of said electrodes and the input circuit of said vacuum tube.

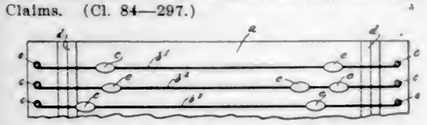
1,859,552. SOUND RECORDING APPARATUS. BEN J. CHROMY, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Sept. 17, 1928, Serial No. 306,541. Divided and this application filed Feb. 12, 1930. Serial No. 427,837. 6 Claims. (Cl. 274—5.)



1. In a sound recording device, the combination of a light sensitive film strip, a diaphragm adapted to be actuated by mechanical vibrations, a light source positioned adjacent said diaphragm, and a body of fluid confined against said diaphragm for varying the effect of said light source upon said film, the movement of said body of fluid being governed by mechanical vibrations impinging upon said diaphragm.

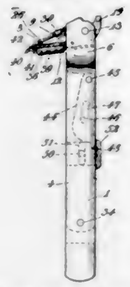
6. The method of modulating a beam of light rays comprising directing a beam of light rays upon a light absorbing medium of fluid consistency, directing sound rays upon a diaphragm positioned adjacent to said medium, and displacing said absorbing medium with respect to said diaphragm so that light from said beam is absorbed in variable quantities.

1,859,553. MEANS FOR MODIFYING VIBRATIONS OF STRINGS. NEWTON CRANE, Boston, Mass., assignor to Brayton Morton, trustee, Fall River, Mass. Filed June 8, 1925, Serial No. 35,584. Renewed Aug. 19, 1931. 15 Claims. (Cl. 84—297.)



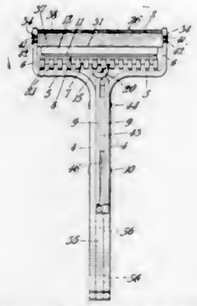
4. A vibratory member, separated supporting means on which said member is supported and between which it is adapted to vibrate as a whole, and means for modifying the harmonic vibrations thereof comprising a concentrated load applied to the member at a point unequally distant from the respective supports and adapted to vibrate with the member; the member being unloaded as to its major part.

1,859,554. COMBINED RAZOR AND BLADE SHARPENER. HUGH DE HAVEN, New York, N. Y., assignor, by mesne assignments, to De Haven Razor Corporation, New York, N. Y., a Corporation of Delaware. Filed July 24, 1925. Serial No. 45,745. 31 Claims. (Cl. 30—12.)



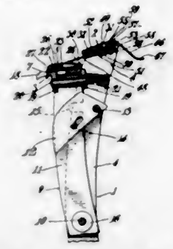
1. A razor comprising a razor blade, a blade edging element having a flat surface portion upon which the blade may move in opposite directions, said element being mounted upon the razor for reciprocation relatively to the blade.

1,859,555. RAZOR. HUGH DE HAVEN, New York, N. Y., assignor, by mesne assignments, to De Haven Razor Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 163,029. 22 Claims. (Cl. 30—12.)



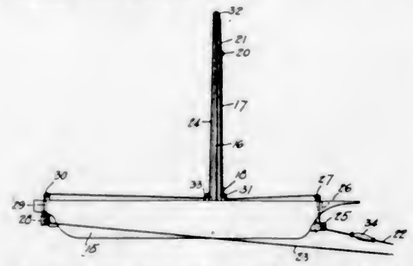
1. The combination of a razor blade with a blade sharpening instrument including a reciprocable blade edging element, a handle having therein a recess with the sides of the recess at an angle to the cutting edge of the blade, a reciprocable support supporting said blade edging element and operative within the recess and guided by the sides of the recess whereby said blade edging element has movement at a suitable angle to the edge of the blade.

1,859,556. RAZOR BLADE SHARPENING INSTRUMENT AND RAZOR BLADE. HUGH DE HAVEN, New York, N. Y., assignor, by mesne assignments, to De Haven Razor Corporation, New York, N. Y., a Corporation of Delaware. Filed June 5, 1928. Serial No. 282,964. 58 Claims. (Cl. 30—12.)



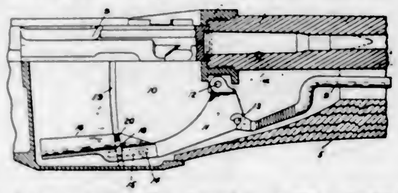
1. A razor including a blade having a body portion and a backing thicker than the body portion, a guard for the edge of the blade, a blade holder movable from a closed position to an open position and having gripping parts to enclose and engage said backing, and means to cause said gripping parts to release their grip on said backing to permit removal of the blade from the blade holder.

1,859,557. REMOTE CONTROL APPARATUS FOR MINIATURE SAILBOATS. ROBERT EDGAR, Los Angeles, Calif. Filed July 7, 1930. Serial No. 466,262. 7 Claims. (Cl. 46—37.)



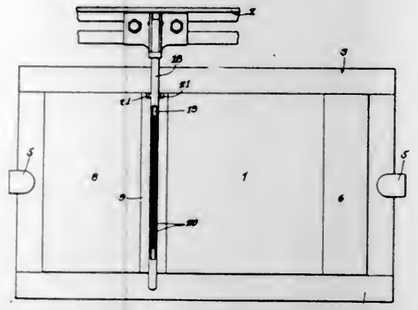
1. A toy or miniature boat having a mast, and a sail capable of being raised and lowered on the mast, a control line providing a bow towline, a stern towline, and a boat line, the boat line being operatively connected to the sail so that by pulling on one towline or the other the sail can be raised or lowered on the mast, and a latch having one part correlated to the boat line to be movable thereby and another part fixedly associated with the boat, the two parts coacting when the sail is raised to releasably retain the sail in raised position and yet permit the towlines to be manipulated to tow and steer the boat.

1,859,558. FOLLOWER. JOHN C. GARAND, Springfield, Mass. Filed Mar. 31, 1931. Serial No. 526,665. 7 Claims. (Cl. 42—18.) (Granted under the Act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



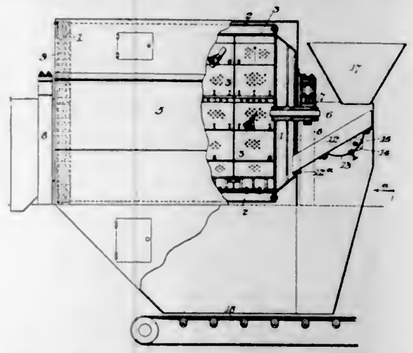
6. In a magazine rifle adapted to receive a double row of cartridges in staggered relation, and a follower for said cartridges movable from right to left hand feed or the reverse by engagement with the cartridges.

1,859,559. PERFORATING DEVICE. JEFFERSON F. GENTRY, Nashville, Tenn. Filed Feb. 24, 1931. Serial No. 517,982. 5 Claims. (Cl. 164—98.)



1. In a perforating device for connection with the platen and rocker of a printing press, a punch bar adapted to be seated on the platen, a guide plate resiliently supported above the punch bar for supporting the stock to be perforated, said guide plate having a row of vertically disposed openings, a row of punches projecting upwardly from the punch bar into said openings, and a die bar adapted to be connected with the rocker for engagement with the stock supported on the guide plate to force the punches through the stock upon the operation of the rocker.

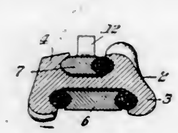
1,859,560. APPARATUS FOR PREPARING COAL. STANLEY D. HARTSHORN, St. Davids, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y., a Corporation of New York. Filed Mar. 28, 1929. Serial No. 350,704. 6 Claims. (Cl. 83—52.)



1. The combination with a rotating coal breaker of the Bradford type, of a movable screen over which the coal is delivered for passage to the breaker structure; said screen serving to remove the fines, means for imparting movement to said screen, and a housing for said breaker and screen extending beneath the latter and receiving the fines and broken coal.

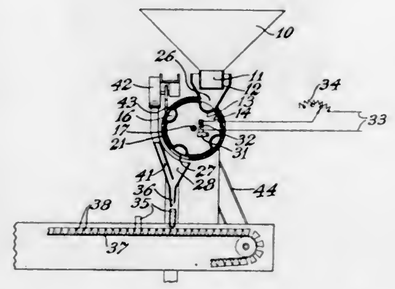
1,859,561. CABLE OR WIRE CLAMP. JEHU FREDERIC HAWORTH, deceased, Edgeworth, Pa., by The Union Trust Company of Pittsburgh, Pittsburgh, Pa., administrator, assignor to Sara King Haworth, Edgeworth, Pa. Filed June 8, 1929. Serial No. 369,386. 13 Claims. (Cl. 24—126.)

1. A cable or wire clamp, comprising a body portion having oppositely tapered housings on opposite sides thereof for the reception of portions of a cable or wire and wedge means cooperating with each of the housings for clamping the cable or wire at the portion contained therein, at least one of the housings being open laterally



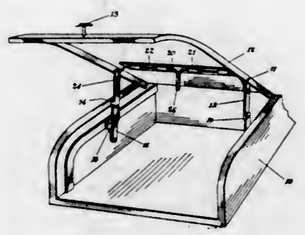
of the clamp to permit a portion of the cable or wire removed from an end thereof to be moved laterally into such housing.

1,859,562. BAG FILLING APPARATUS. TOM HUSTON, Columbus, Ga., assignor to Tom Huston Peanut Company, a Corporation. Filed Dec. 14, 1929. Serial No. 414,078. 3 Claims. (Cl. 226—49.)



2. In apparatus for filling paper bags embodying a hopper, a flanged wheel having measuring cups in the flanges thereof and arranged beneath the hopper, a cylindrical member telescoping the wheel and provided with openings therein opposite the hopper and at the point of discharge, the combination of a discharge chute registering with the latter opening, means providing an air blast downwardly through the discharge chute to open the bags and to direct the material thereinto, and means for heating the material in the pockets to prevent its adhering to the wheel or the chute.

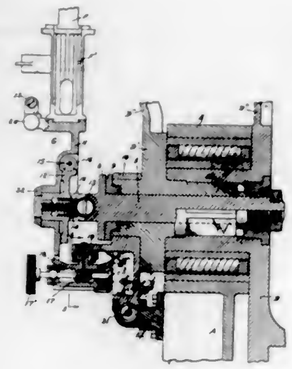
1,859,563. BRACE BAR FOLDING DEVICE. HOBERT JOEKEL, Sterling, Nebr. Filed Oct. 6, 1930. Serial No. 486,708. 2 Claims. (Cl. 296—76.)



1. A device of the character set forth including a hinged deck of an automobile body and collapsible braces therefor, an actuating member journaled to the deck, arms

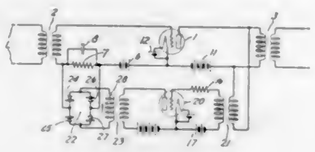
formed on the ends of the member, eye bolts slidably receiving the arms and pivotally connected to the braces, and a handle on said member to actuate the braces simultaneously.

1,859,564. INDEPENDENT LINE OF SIGHTS FOR GUNS. JAMES C. KARNES, Buffalo, N. Y. Filed July 20, 1925. Serial No. 44,917. 16 Claims. (Cl. 33—49.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



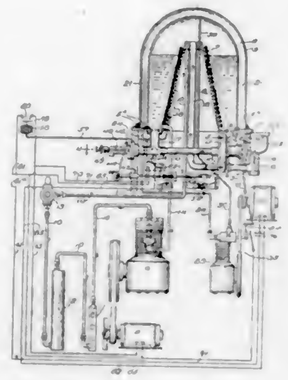
12. A sighting system for guns embodying a freely rotatable support mountable on a gun, a sight mounting jointed to the support, said joint constituting the axis of cross level, means for cross leveling the mounting, and means whereby the axis of cross level may be angularly displaced, said means cooperating to so displace the optical axis of the sight as to cause the axis of cross level to be moved to a position to indicate the desired and corrected position of the gun.

1,859,565. APPARATUS FOR REDUCING CROSSTALK CURRENTS. CLYDE R. KEITH, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1928. Serial No. 323,724. 7 Claims. (Cl. 179—171.)



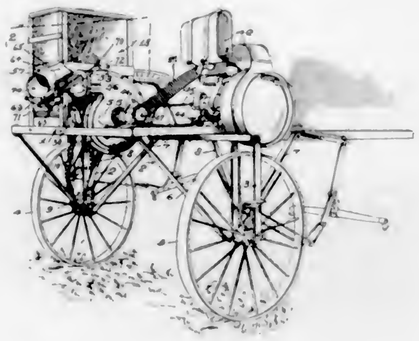
2. The combination in a transmission system of a line for the transmission of signals, and means for the suppression of disturbing currents therein comprising an amplifier therein for amplifying substantially without distortion waves of normal signal amplitude impressed on said amplifier from said line, said amplifier being normally opaque to currents of crosstalk amplitude but having means dependent upon the current transmitted through said amplifier for rendering the gain thereof as a distortionless amplifier high for currents of normal signal amplitude.

1,859,566. BEVERAGE DISPENSING APPARATUS. ISRAEL GARSON KONIKOW, Detroit, Mich., assignor to Mary Bacher, Detroit, Mich. Filed Feb. 14, 1930. Serial No. 428,432. 14 Claims. (Cl. 225—21.)



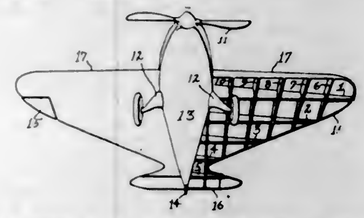
3. A beverage dispenser comprising an air sealed beverage receiver, means for introducing a beversge into said receiver under atmospheric pressure comprising an inlet cup, means for regulably withdrawing the beverage from said receiver, vacuum inducing means, a suction line connected to said means and opening in the top portion of said receiver, a valve controlling communication of said suction line and vacuum inducing means, a control element associated with said inlet cup and movable under pressure of a pouring vessel applied to said cup, and an actuating connection from said control element to said valve.

1,859,567. DUSTING MACHINE. EDGAR KNAPP and CARL G. ALLGRUNN, Middleport, N. Y., assignors to Niagara Sprayer Company, Middleport, N. Y., a Corporation. Filed May 18, 1927. Serial No. 192,287. 13 Claims. (Cl. 48—148.)



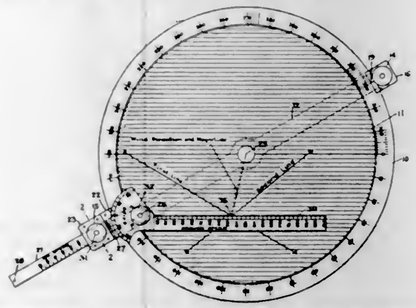
1. In a device for distributing finely divided material, means for feeding measured amounts of material, means for forcibly discharging said material and means for directing said discharge, the directing means and the feeding means being controlled by the travel of the device and the means for forcibly discharging being independently controlled.

1,859,568. AIRPLANE. LAURENCE JEROME LESH, Chicago, Ill. Filed Feb. 28, 1929. Serial No. 343,382. 3 Claims. (Cl. 244—12.)



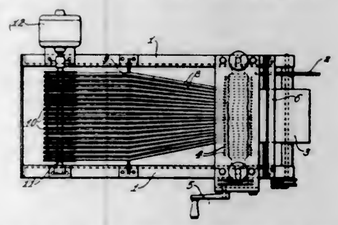
1. An airfoil having a semi-span gradient equal to its chord gradient and a lateral cantilever depth gradient equal to its profile gradient posterior to the lateral axis.

1,859,569. APPARATUS FOR DETERMINATION OF DRIFT BY AIRCRAFT. THEODORE C. LONNQUEST, U. S. Navy, and CLARENCE L. SEWARD, Jr., Washington, D. C. Filed May 28, 1931. Serial No. 540,758. 6 Claims. (Cl. 33—76.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



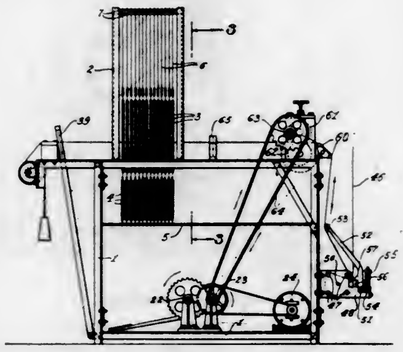
1. A drift computer comprising a graduated disk, a second disk rotatably mounted on said graduated disk and bearing a plurality of parallel lines, an arm rotatably mounted on the lower side of said graduated disk, a second arm slidably mounted at one end of said arm and bearing gradnations indicative of air speed, said arms being maintained parallel at all times, a third arm rotatably mounted at one end of said second arm and extending over said disks and bearing graduations indicative of ground speed and also bearing graduations indicative of the drift angle.

1,859,570. METHOD OF PREPARING LEATHER FOR WEAVING. PETER MATTLER, St. Louis, Mo., assignor to Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 11, 1929. Serial No. 339,041. 5 Claims. (Cl. 164—17.)



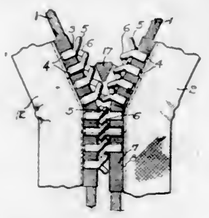
1. In the art of making leather strands, the method comprising, matching or squaring and splicing together successive hides or leather sections, and splitting the spliced sections into strands.

1,859,571. PROCESS AND APPARATUS FOR WEAVING FABRICS. PETER MATTLER, St. Louis, Mo., assignor to Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 13, 1929. Serial No. 406,742. 8 Claims. (Cl. 139—11.)



1. In the art of weaving fabrics, the process comprising, feeding a plurality of broad bands of material in layers, cutting thru the layers to cut the bands into strips, and spreading the cut strips to provide the warp for the woven fabric.

1,859,572. SEPARABLE FASTENER. NOEL J. POUX, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1929. Serial No. 387,599. 9 Claims. (Cl. 24—205.)

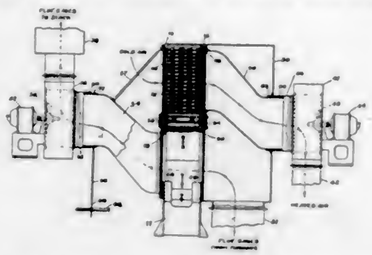


1. A separable fastener comprising a pair of stringers having opposed series of interlocking members adapted to be progressively engaged and disengaged, each member having an attaching portion for securing it to the stringer and fingers extending in diverging relation at angles to the longitudinal edge of the stringer and in planes on opposite sides of and parallel to the plane of the stringer adapted to interlock with similar engaging means on the opposite stringer.

1,859,573. HEAT EXCHANGE APPARATUS. ROBERT SANFORD RILEY, Worcester, Mass., assignor, by mesne assignments, to The Air Preheater Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 10, 1925. Serial No. 49,256. 13 Claims. (Cl. 257—6.)

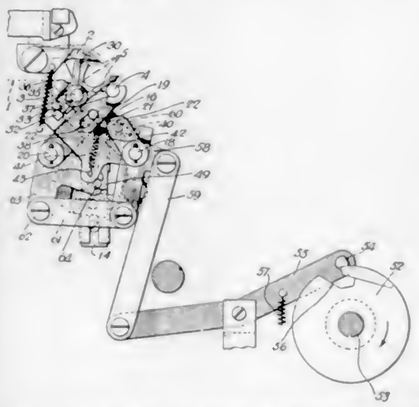
4. A furnace air preheater comprising a cylindrical drum having open ends and radial partitions forming passages therethrough, removable heat exchange material in said passages arranged to permit the passage of gas, a spindle centrally mounted in the drum, a rotatable valve plate mounted on the spindle adjacent each open end of the drum, each plate having two openings therethrough, two revoluble pipes each connected with one opening in each plate and having its free end concentric with the spindle so that the pipe may revolve with the attached

plate, and means to connect furnace gas and air flues through the other openings in the valve plates and the free ends of each revoluble pipe with the stack and the



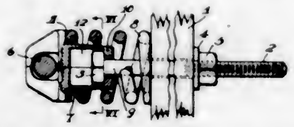
outside atmosphere, whereby the heated gas and cold air may be passed alternately through the heat exchange passages in the drum.

1,859,574. COIN STACKER. BRUNO E. SEEMEL, Brooklyn, N. Y., assignor to Automatic Coinwrapping Machine Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 6, 1929. Serial No. 337,764. 15 Claims. (Cl. 133—1.)



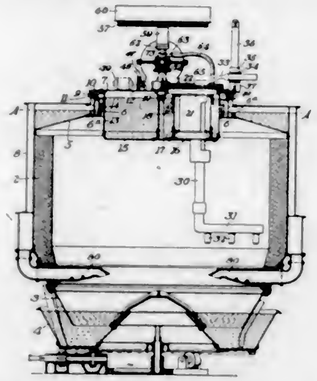
1. In a coin stacking mechanism, a backing mechanism, means to place a plurality of coins in a stack against said backing mechanism, said back mechanism then being removable from backing position, and a second backing mechanism to thereupon take over, from the first mentioned backing mechanism, the backing of said plurality of coins and back the stack, growing by the addition of further coins, until the stack is further completed.

1,859,575. CABLE SUPPORT FOR HIGHWAY BARRIERS. GEORGE S. SMITH, Pittsburgh, Pa., assignor to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1931. Serial No. 527,625. 8 Claims. (Cl. 248—31.)



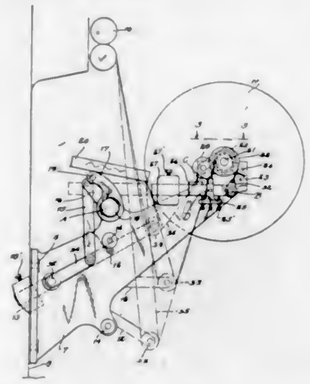
1. In a highway-barrier cable support comprising a barrier post, a headed bolt extending through the post slidably supported therein and having a non-circular head, and a helical spring surrounding said bolt, the combination of a barrier-cable clamp comprising an annular cable clamp abutting the outer end of said spring and a hollow housing integral with said clamp and extending snugly into the spring, the housing enveloping the terminal portion of the bolt and having a non-circular bore conforming to the bolt head and of sufficient length to permit relative movement of the bolt head therein and having a rear wall to engage the back of the head to limit play between it and the housing.

1,859,576. MECHANICAL GAS PRODUCER. FRANCIS H. TREAT, Bellevue, Ohio, assignor to Duff Patents Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 12, 1926. Serial No. 147,944. 15 Claims. (Cl. 48—85.2.)



1. A gas producer having a body part and a top part, one of which is rotatable with respect to the other, rotatable carrier mounted in the top, an agitator eccentrically mounted in the carrier, means for rotating the carrier in one direction only, and means coacting with the agitator for confining the same against complete rotation.

1,859,577. ATTACHMENT FOR PRINTING PRESSES. RAIMUND ARMBRECHT, Stapleton, N. Y. Filed Apr. 5, 1928, Serial No. 267,630. Renewed Oct. 14, 1931. 5 Claims. (Cl. 242—75.)



1. In a device of the class described, the combination of a material feed including a roll, with a pendulum arm adapted to feed the material gradually and uniformly from said roll, an adjustable weight for allowing a variation in the material tension, rubber cushioned stops for limiting

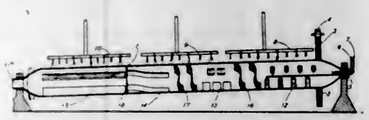
the movements of said pendulum arm, and a cam lever, a link connecting said cam lever to said pendulum to participate in the movements thereof, a handle for allowing a regulation of the relative position of said link to said lever, and a braking means engaging said cam lever and controlled by said pendulum arm for braking the material roll after a stop in the machine operation, said pendulum arm adapted to take up all material unwound from said roll.

1,859,578. TRAFFIC SIGN. ROBERT W. BAILY, Philadelphia, Pa. Filed Sept. 22, 1931. Serial No. 564,287. 8 Claims. (Cl. 40—145.)



1. In a traffic sign, a label frame supporting member formed with a relatively high and narrow horizontally extending socket chamber, adapted to receive the shank of a label frame, said socket chamber having at its inner end a downwardly extending socket chamber to engage a downwardly extending lug on the frame shank and having a rear wall adapted to contact with and form an abutment for said lug, said horizontally extending socket chamber having also at its inner end, an upwardly extending socket adapted to receive an upwardly extending lug on the frame shank and having a front wall adapted to serve as an abutment to said upwardly extending lug when the frame shank is fully inserted in the socket chamber.

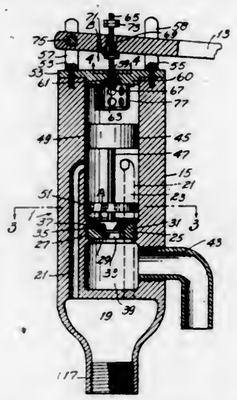
1,859,579. PROCESS FOR MAKING CELLULOSE ACETATE. FLORENTIN BIDAUD, Roussillon, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed May 27, 1927, Serial No. 194,714, and in France July 26, 1926. 10 Claims. (Cl. 260—101.)



1. The process of continuous manufacture of cellulose acetate, which comprises imparting to the materials to be treated a continuous rotary motion about an axis inclined to the horizontal thereby to cause continuous forward movement of the reacting mass during the entire reaction process and checking the speed of the mass at different points.

1,859,580. VALVE. VANNEVAR BUSH, Belmont, Mass., assignor to Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 19, 1929, Serial No. 333,728. Renewed Jan. 12, 1931. 3 Claims. (Cl. 137—104.)

1. The ball float valve for use in flush tanks and the like which comprises a valve casing, an inlet chamber in said casing, said inlet chamber being adapted to communicate with a pipe line, a central chamber in said casing, passages in said casing communicating between said inlet chamber and said central chamber, said passages being of relatively small bore adapted to minimize noises due to throttling therein, a valve in said central chamber,

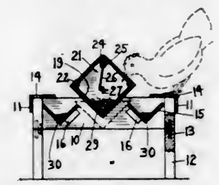


outlet means from said central chamber positioned below said valve, a relay valve positioned above said first-mentioned valve, and means comprising a float for actuating said relay valve.

1,859,581. METHOD OF MAKING STORAGE BATTERY PLATES. JOHN H. CALBECK, Joplin, Mo. Filed Apr. 28, 1927. Serial No. 187,409. 6 Claims. (Cl. 136—27.)

6. A process of the character described, including partially oxidizing a body of powdered lead sulphide to produce in said body a relatively small proportion of lead sulphate.

1,859,582. POULTRY FEEDING DEVICE. DAVID L. CRABTREE, Millard, Nebr. Filed Jan. 15, 1930. Serial No. 420,900. 2 Claims. (Cl. 119—61.)

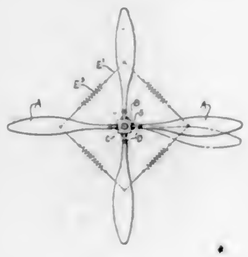


1. In a poultry feeder, a frame, perches carried by the frame, a detachable feed trough carried by the frame and spaced from said perches, detachable drip pans carried by the frame, said drip pans being disposed below and between the trough and perches and in vertical alinement with the space to prevent loss of feed, and bill wiping rails attached to the upper edges of the trough and having a plurality of recesses therein.

1,859,583. METHOD OF PRODUCING DINITROANTHRARUFINEDISULPHONIC ACID. JOYCE H. CROWELL, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 13, 1926. Serial No. 88,148. 8 Claims. (Cl. 260—58.)

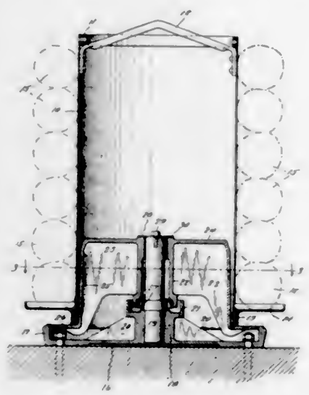
1. In the production of dinitroanthrarufine disulphonic acid by the sulphonation and nitration of anthrarufine, a method which comprises diluting the nitrated sulphonation mixture with water to produce a dilute acid solution in which impurities are insoluble and filtering off the insoluble matter.

1,859,584. AIRCRAFT WITH ROTATIVE WINGS. JUAN DE LA CIERVA, Madrid, Spain, assignor, by mesne assignments, to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 1, 1926, Serial No. 145,655, and in Great Britain Nov. 19, 1925. 40 Claims. (Cl. 170—164.)



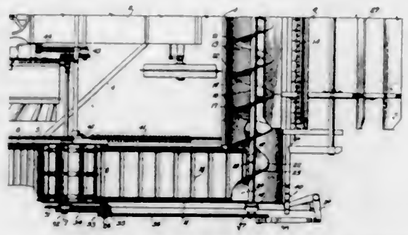
1. In an aircraft, a substantially upright common axis, a movable sustaining unit having a plurality of blades rotatably mounted with respect to the axis, and means providing for individual blade displacement to positions of substantial equilibrium between centrifugal and lift forces and between forces acting fore and aft in the general plane of rotation.

1,859,585. MEANS FOR AND METHOD OF HANDLING AND TRANSPORTING WIRE FOR BOLT MAKING MACHINES. HARRY C. ELLISON, Lakewood, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, a Corporation of New Jersey. Filed Nov. 12, 1928, Serial No. 318,713. Renewed Sept. 8, 1931. 11 Claims. (Cl. 242—129.)



11. The method of handling wire of the kind used in bolt making comprising the following steps: (1) winding the wire into coils on a reel in a coiling machine; (2) removing the coils from the reel of the coiling machine; (3) assembling a plurality of coils one upon another upon a second reel; (4) transporting the second reel with coils of wire thereon to a machine; (5) rotatably mounting the second reel adjacent to the second-mentioned machine; and (6) drawing off the wire of the coils in succession from the second reel with rotation thereof and feeding the wire into the second-mentioned machine.

1,859,586. CONVEYER FOR COMBINES OR LIKE MACHINES. CLARENCE R. GOTTSCHALL and HARRY H. PIKE, Independence, Mo., assignors to The Gleaner Combine Harvester Corporation, Kansas City, Mo., a Corporation of Delaware. Filed Oct. 3, 1927. Serial No. 223,633. 8 Claims. (Cl. 198—213.)

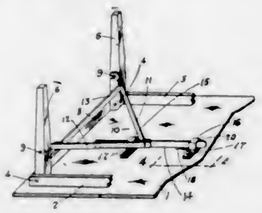


1. In harvester mechanism, a screw conveyer including a shaft, primary flighting on said shaft, and secondary flighting of graduated diameter on said shaft between the primary flighting at the delivery end of the conveyer.

1,859,587. PROCESS OF MAKING PARTIAL OXIDATION PRODUCTS. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Original application filed Nov. 5, 1919, Serial No. 335,939. Divided and this application filed Oct. 28, 1925. Serial No. 65,379. 9 Claims. (Cl. 260—156.)

1. In the process of making partial oxidation products, the steps consisting of mixing an oxygen-containing gas with finely divided hydrocarbon which is liquid at normal temperatures and pressures, passing a stream of the mixture through a hot reaction zone at a temperature below that of continuous self-sustained complete combustion, interadjusting the variable factors to produce a material percentage of alcohols, and condensing part of the products.

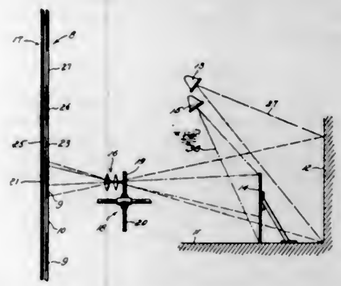
1,859,588. FOLDING TABLE. JOSEPH A. KEHRER, Columbus, Ohio. Filed Mar. 5, 1929. Serial No. 344,348. 2 Claims. (Cl. 45—11.)



1. A folding table comprising a top, two pairs of end legs pivoted to said top, two sets of brackets arranged centrally and longitudinally of the table, a bar slidably mounted in each set of said brackets, triangularly formed links connecting said bars and said legs, said bars being formed with notches in their lower edges adapted to receive certain of said brackets, and spring members engaging with the bars and serving to maintain the sliding bars in any one of their set positions.

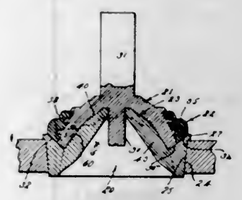
1,859,589. METHOD OF PRODUCING COMPOSITE PHOTOGRAPHS. WILLIAM VAN DOREN KELLEY and WILLIAM WALLACE KELLEY, Los Angeles, Calif. Filed Mar. 1, 1928. Serial No. 258,299. 8 Claims. (Cl. 88—16.)

1. The method of producing composite photographs which comprises; producing an uncolored positive film having picture areas spaced by clear areas; exposing a frame of a bi-chromatic sensitized film through a color filter and a picture area of said positive film simultaneously, only to light of the filter color coming from a uniform unfigured background and partially intercepted by



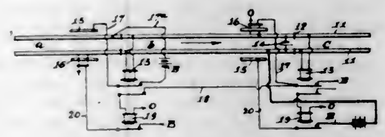
opaque objects in front of said background; and subsequently exposing the unexposed portions of said frame through a filter of complemental color and a clear area of said positive film simultaneously, only to light of said complemental color coming from said objects.

1,859,590. VALVE. ERNEST KOPPL, Long Beach, Calif., assignor, by direct and mesne assignments, of one-half to himself and one-half to Kenneth A. Wright, Los Angeles, Calif. Filed Jan. 24, 1927. Serial No. 162,989. 7 Claims. (Cl. 251—144.)



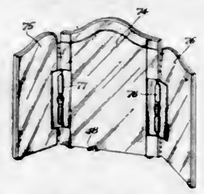
1. A slush pump valve including, a seat ring, a movable body in the form of a concavo-convex disc, a guide for the body, and ribs supporting the guide from the ring at a point above the ring, the upper parts of the guide and ribs engaging the lower side of the body when the body is in seated engagement with the ring.

1,859,591. COMPOSITE SYSTEM OF TRAIN CONTROL. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Filed Jan. 30, 1925. Serial No. 5,724. 68 Claims. (Cl. 246—63.)



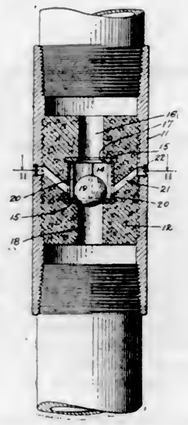
1. In a train control system, the combination of a track with a vehicle, a magnet and a ramp on said track, a block system controlling said magnet and said ramp, devices on said vehicle responding independently to said magnet and to said ramp and a translating device having three positions operated by said vehicle devices.

1,859,592. DISAPPEARING MIRROR LIGHT. ADOLPH MARCHAND, Jackson Heights, N. Y. Filed Nov. 13, 1931. Serial No. 574,729. 8 Claims. (Cl. 240—4.1.)



1. A mounting for a mirror light comprising a panel pivotally mounted on the framework of the mirror associated therewith, a lamp-carrying wall having one edge thereof attached to the rear of said panel, the opposite edge thereof having attached thereto a bracket, said pivotal mounting being on a line coextensive with the juncture of said panel and said wall, an arm pivotally connected to said bracket, and means for actuating said arm to effect a movement of said panel and wall assembly about said pivotal mounting as an axis to bring said lamp-carrying wall to an exposed position.

1,859,593. WELL CEMENTING DEVICE. OSCAR A. MELLIN, Alameda, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Sept. 9, 1931. Serial No. 561,857. 9 Claims. (Cl. 166—1.)

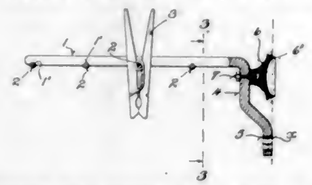


1. A well cementing device of the character described comprising a tubular member, a valve body secured therein, said valve body having a valve chamber therein intermediate the ends thereof, said valve body having a passageway extending between the upper end of the valve chamber through the upper end of the valve body, said valve body having a passageway extending from the lower end of the valve chamber through the lower end of the valve body, unobstructed ports extending radially from the chamber outwardly through the valve body and tubular member, a valve member in said chamber capable of discontinuing fluid flow from the chamber through the upper end of the valve body or from the chamber through the lower end of the valve body.

1,859,594. DRYING RACK. DICK C. MEYER and JAMES B. OLSEN, Milwaukee, Wis. Filed Mar. 11, 1929. Serial No. 346,045. 1 Claim. (Cl. 248—39.)

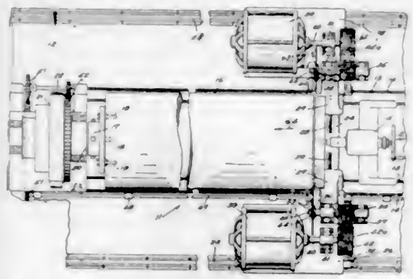
A portable rack including end brackets, said end brackets having supporting arms and depending legs, the lower

ends of said legs being offset rearwardly, vacuum cups secured to the legs above the offset portions substantially at the juncture of the legs with the arms, said offset portions engaging a surface below the vacuum cups and



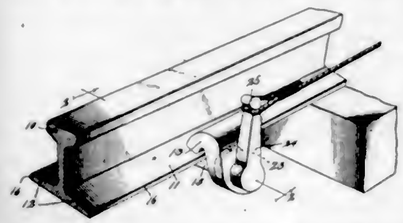
having keyhole slots therein for the reception of anchor pins, whereby the offset portions form supports and whereby the engagement of the walls of the slots with the anchor pins prevent downward slippage of the cups, whereby the vacuum will not be broken.

1,859,595. COLUMN TURNING, HONING, AND POLISHING MACHINE. DUDLEY M. MILLS, Los Angeles, Calif., assignor to Musto-Keenan Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 11, 1929. Serial No. 345,969. 4 Claims. (Cl. 51—49.)



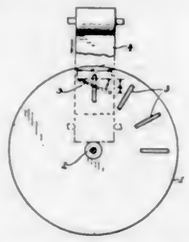
1. In a marble column turning machine the combination of: a rigid base; column suspending means comprising a bed having a way adapted to slidably support a tail stock member suspending one end of a column, and a head stock member, including a face plate suspending the opposite end of said column and driving means for rotating said face plate; and a plurality of marble shaping members adapted to substantially diametrically contact said column for the purpose of obtaining a desired equalization of pressure on opposite sides of said column during turning operations, one of said shaping members being offset in axial direction relative to the other of said shaping members.

1,859,596. RAIL CLAMP FOR LOADING MACHINES. EDMUND C. MORGAN, deceased, New York, N. Y., by Olive Eugenie Morgan, executrix, New York, N. Y. Original application filed Aug. 14, 1917, Serial No. 186,118. Divided and this application filed Sept. 13, 1928. Serial No. 305,748. 4 Claims. (Cl. 188—43.)



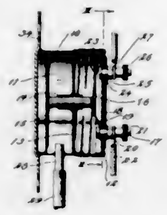
1. A rail clamp comprising a bar having cylindrical portions at opposite ends thereof, gripping members journaled on said portions and having offset jaws thereon, means for detachably securing one of said gripping members to said bar, an arm connected with the end of said bar opposite said detachable securing means for receiving the end of a cable, and an eccentric portion formed on said bar and arranged under the rail in position to grip a rail flange between said eccentric portion and said offset jaws when said arm is rotated by the tension exerted upon said cable.

1,859,597. ELECTROOPTICAL APPARATUS AND METHOD. CHARLES H. W. NASON, New York, N. Y., assignor to Jenkins Television Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Jan. 3, 1930. Serial No. 418,205. 13 Claims. (Cl. 178—6.)



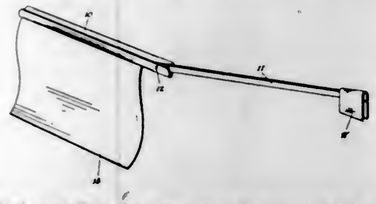
1. In an image transmission system means for scanning a film continuously in one direction, means for scanning said film in successive lines perpendicular to the length of the film, comprising a stationary light slit, means for illuminating said light slit, and means for adjusting the angle of said slit with relation to said film in accordance with the speed of movement of said film.

1,859,598. VACUUM SWITCH. CHARLES H. NORTH, San Francisco, Calif. Filed May 10, 1927. Serial No. 190,169. 1 Claim. (Cl. 200—83.)



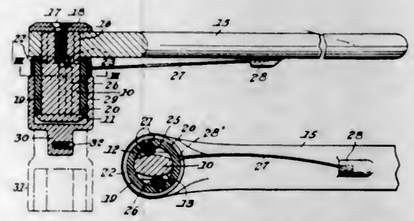
A vacuum switch of the character described comprising a housing, and a cover therefor at one end thereof, said housing and cover forming an air-tight container, a pair of binding posts extending through said cover, a resilient contact member within said container and in electrical contact with one of said binding posts, and normally assuming a position adjacent to and out of electrical contact with the second binding post, a diaphragm on the other end of said housing, a support within said housing between said cover and said diaphragm, means for evacuating air from within said container, a dielectric pin slidably mounted in said support and extending between said diaphragm and said resilient contact member whereby greater pressure on the outside of the casing than on the inside thereof by a predetermined amount will bend said resilient contact member to contact with said second binding post, the resiliency of said resilient contact member being sufficient to cause it to assume a position out of contact with said second binding post and to move said pin when the differences in pressures outside and inside the casing are decreased below said predetermined amount.

1,859,599. HIGHWAY PROTECTIVE FLAG. PHILIP J. QUINN, Lincoln, Nebr. Filed Mar. 31, 1932. Serial No. 602,165. 5 Claims. (Cl. 116—173.)



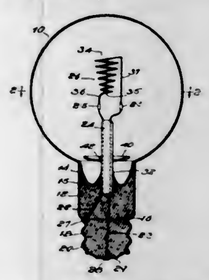
1. A flag staff having two pivotally connected sections, one of said sections having means for securing said staff to an automobile to project outwardly therefrom, and means on the outer of said sections for securing a flag thereto.

1,859,600. FRICTION CLUTCH MECHANISM. JACOB H. PRETTYMAN, Marion, Ohio, assignor to The Fairfield Engineering Company, Marion, Ohio, a Company of Ohio. Filed Aug. 4, 1930. Serial No. 473,105. 7 Claims. (Cl. 192—43.)



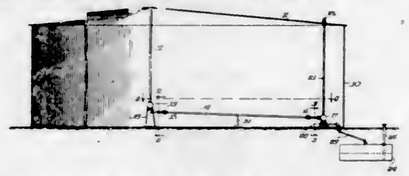
1. A friction clutch comprising a drum having a cylindrical bore, a split sleeve therein adapted to expand for frictional engagement therewith, a wedge between the ends of said sleeve, a cam within the sleeve for expanding said sleeve and a collar for said drum mounted on said cam, having a lug projecting between the ends of the sleeve for maintaining said sleeve in a substantially fixed position relative to the cam.

1,859,601. THERAPEUTIC LAMP. GEORGE D. RICE, Chicago, Ill. Filed Mar. 23, 1929. Serial No. 349,309. 1 Claim. (Cl. 174—177.)



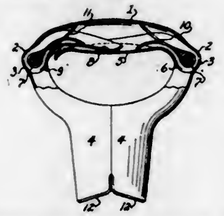
As an article of manufacture a thereapeutic lamp comprising a bulb and a filement formed directly of carbon silicate, said filament being disposed within said bulb and coiled in a plurality of convolutions to form a conical helix with its axis substantially parallel to the direction of application of rays from said lamp and directed toward the point of application, the larger end of said helix being toward the point of application of the rays from the lamp and the smaller end of the helix being away from the point of application, an insulating base sealed to said bulb substantially in axial alignment with the axis of said filament, a contact shell on said base, a frangible lead-in stem secured to said base and projecting into said bulb, a reflector disposed within the bulb and mounted on said stem on the axis of said helix, and lead-in wires entering through said base and said stem and connected with said filament.

1,859,602. VAPOR CONDENSING APPARATUS. EDWARD F. RIES, Evanston, Ill. Filed May 7, 1928. Serial No. 276,780. 8 Claims. (Cl. 220—85.)



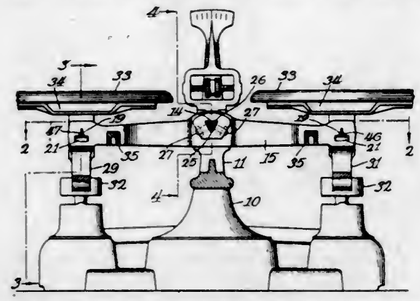
1. In a device of the class described the combination with a sealed tank, of a vapor condenser located within and near the bottom of said tank, and an outside escape vent connected to said condensing means.

1,859,603. TRANSPLANTING TOOL. HENRY J. RISSI, Collinsville, Ill. Filed July 18, 1931. Serial No. 551,693. 4 Claims. (Cl. 55—68.)



1. In a transplanting tool a handle portion for the same, a pair of ears formed upon each end of the said portion, the said handle portion being semi-circular in formation, a lever having a pair of ears formed upon one end thereof and the said ears to engage the ears of the said handle portion, also an additional lever having similar ears formed upon one end thereof and to engage the ears upon the opposite side of the said handle portion, one end of the last-named lever adapted to actuate within the first-named lever and both of the said levers adapted to actuate within the aforesaid handle portion.

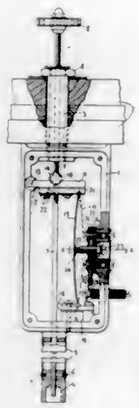
1,859,604. TRIP SCALE. HERMAN PAUL SACHSE, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1930. Serial No. 480,298. 8 Claims. (Cl. 265—54.)



1. A trip scale beam having a V-shaped transverse slot adjacent either end, a V-shaped knife in each slot bearing

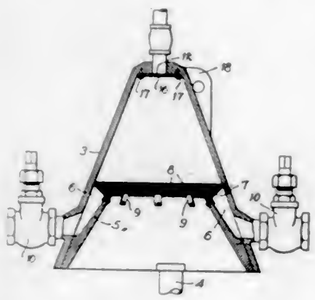
against the correspondingly shaped walls of the slot, means for locking the two knives into position, and a third knife passing through an aperture in the beam and centrally located with respect to the terminal knives.

1,859,605. ELECTRIC SWITCH. CARL A. SCHAEFER, Springfield, Ohio, assignor, by mesne assignments, to The Buckeye Incubator Manufacturing Company, Beachwood, Ohio, a Corporation of Ohio. Filed Mar. 3, 1930. Serial No. 432,693. 10 Claims. (Cl. 200—137.)



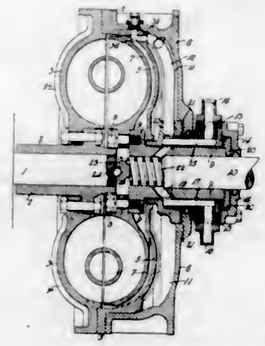
1. In an electric switch, a flat spring contact member having an inherent curvature, means for confining the ends of said member, a normally stationary contact member, said stationary contact member cooperating with said confining means to hold said spring member in an artificially curved form opposite to the inherent curvature thereof, the inherent tendency of said spring contact member being to move toward said stationary contact member, and means for increasing the artificial curvature of said spring contact member to break the contacts and decreasing the same to make the contacts.

1,859,606. OIL SAVING DOME. FREDRICK SIEVERN and EDWARD M. LYNCH, McKeesport, Pa. Filed Apr. 9, 1931. Serial No. 528,740. 6 Claims. (Cl. 166—15.)



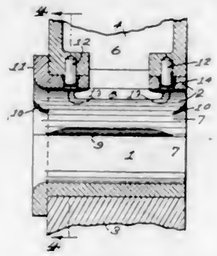
1. A dome of generally conical form having an annular partition disposed interiorly thereof and an outlet communicating with the space surrounding said partition, and an upwardly inclined screen bridging the space between the upper edge of the partition and the wall of the dome.

1,859,607. HYDRAULIC TRANSMISSION GEAR AND BRAKE. HAROLD SINCLAIR, Surbiton Hill, England. Filed June 17, 1929, Serial No. 371,658, and in Great Britain Oct. 17, 1928. 17 Claims. (Cl. 60—54.)



1. A hydraulic coupling comprising an impeller element, a runner element, an annular working chamber, a rotatably mounted transfer chamber, a connection between said chambers disposed near the outer periphery of said working chamber, a reservoir chamber, stationary means within said transfer chamber adapted to maintain a circulation of liquid between said transfer chamber and said reservoir chamber whilst said working chamber is rotating and a conduit for returning liquid from said reservoir chamber to said working chamber.

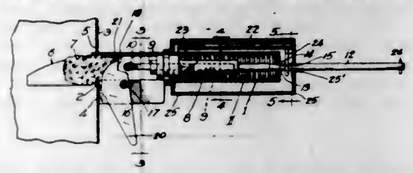
1,859,608. BEARING. ALBERT VIGNE, St. Louis, Mo., assignor to National Bearing Metals Corporation, St. Louis, Mo., a Corporation of New York. Filed July 28, 1930. Serial No. 471,208. 8 Claims. (Cl. 308—57.)



1. A bearing of the character described having an opening therein for receiving a dowel pin, and a bushing in the opening formed of material that is harder than the bearing material.

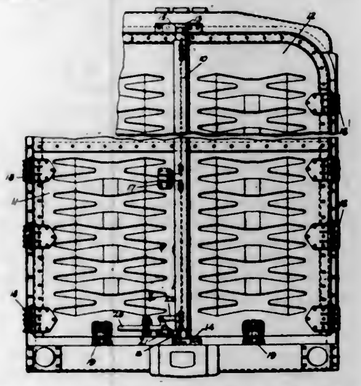
1,859,609. LIGHTING DEVICE FOR ORCHARD HEATERS. JOHN A. WALLER, Beverly Hills, Calif., assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Filed July 28, 1930. Serial No. 471,209. 5 Claims. (Cl. 67—3.)

4. Means for igniting an orchard heater comprising supporting means provided with shoulder means for engaging an orchard heater to detachably support the supporting means in position on the orchard heater, a striker member pivotally mounted on said supporting means and provided with a portion adapted to engage the orchard heater when the said striker member is operated to disengage the shoulder means from the orchard heater so as to detach the supporting means from the orchard heater, a match carrier movably mounted on said supporting means and adapted to support a match in position to engage said striker member to operate the striker member and ignite the match when said match carrier is op-



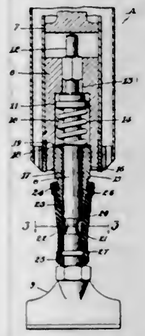
erated, spring means for operating said match carrier, and thermostatically controlled means for normally holding said match carrier from operation.

1,859,610. DOOR LOCK OPERATING MECHANISM. AXEL WASBERG, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 1, 1930. Serial No. 492,797. 8 Claims. (Cl. 292—259.)



1. The combination, with a swinging door and a locking bar pivoted for swinging movement to said door, of means for swinging said bar to inoperative position to permit opening of the door, said means comprising a lever pivoted intermediate its ends to said door and a link pivoted to said lever and said bar, said means automatically maintaining said bar in inoperative position at a predetermined point in the swinging movement of said bar.

1,859,611. DRILL SEAL. PAUL YUNGLING, Los Angeles, Calif., assignor to Monarch Oil Well Air Drill Co. Ltd., Reno, Nev., a Corporation of Nevada. Filed Feb. 24, 1931. Serial No. 517,881. 2 Claims. (Cl. 125—33.)



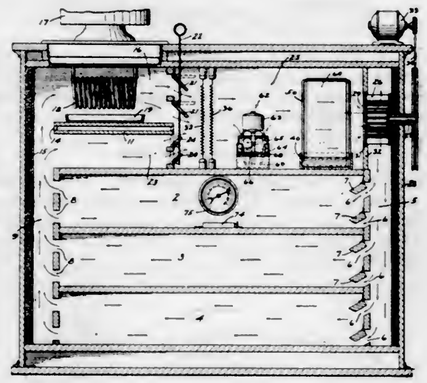
1. In a drill, a drill shank, a drill stem protruding from said shank, a bit on said stem, means for reciprocating said stem, and an elastic sleeve connected to said stem to encompass the protruding portion of the stem and affixed relatively to said drill shank to afford a liquid tight seal between said stem and shank, said shank being formed with an external channel, a tube interposed between said channel and said elastic sleeve when the stem is disposed in a retracted position, said channel being arranged to receive portions of said elastic sleeve under external pressures applied thereto when said stem is in an advanced position.

1,859,612. METHOD OF MAKING RADIATOR SHIELDS. BEN ALTHEIMER, University City, Mo., assignor to Myrtle Altheimer, University City, Mo. Filed Mar. 28, 1931. Serial No. 525,890. 5 Claims. (Cl. 93—1.)



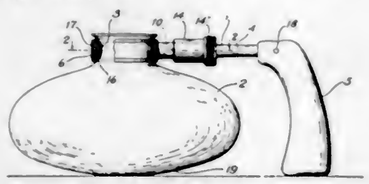
1. The method of forming a radiator shield, comprising taking a single rectangular sheet of dust-impervious paper and folding the same adjacent one end upon itself; folding diagonally at the corners of said end to form a triangular portion; folding said sheet lengthwise inwardly at the sides; folding the sheet parallel to first-mentioned fold; folding diagonally from said corners to the top of the sheet; withdrawing the longitudinally folded strip to thereby withdraw a triangular portion of quadruple ply at the top of the sheet; and then folding said last-mentioned portion against said lengthwise strip.

1,859,613. FERMENTATION CABINET. CLYDE H. BAILEY, St. Paul, Minn., assignor to General Mills, Inc., Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 448,149. 8 Claims. (Cl. 257—3.)



8. A fermentation cabinet comprising a plurality of horizontally disposed fermentation chambers communicating at their ends with suitable air circulation passages, said cabinet having a compartment therein communicating with said passages and provided with means for circulating the air within the cabinet, a cooling medium, a heating means, means for introducing moisture into the circulated air, and means for controlling the operation of the cabinet so as to maintain the circulated air at constant temperature and predetermined humidity.

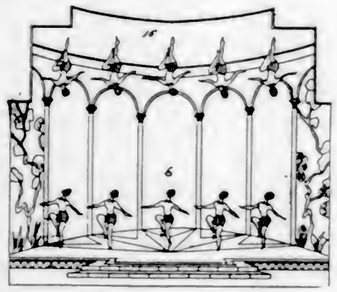
1,859,614. HANDLE FOR COFFEE MAKERS AND THE LIKE. ANNE M. BOEVER, Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Apr. 24, 1929. Serial No. 357,835. 25 Claims. (Cl. 215—100.)



1. An article transporting handle having a flexible article grasping loop, and means for forming a rigid unit of said handle and loop.

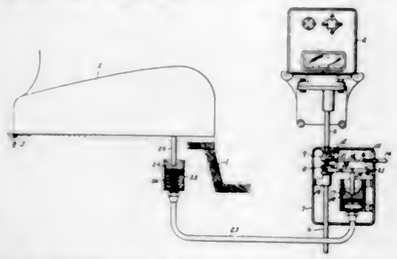
21. In combination, a receptacle having a convex bottom adapted to permit tilting of the receptacle when resting on a plane support, and a handle carried on said receptacle and having means depending therefrom and terminating substantially in the plane of said support at a laterally spaced point from said bottom and cooperating with said bottom in positioning said receptacle in upright position.

1,859,615. INVERTED DANCING APPARATUS. JOSEPH LLOYD BRIERLEY and ROY HOLMES LANKTON, Los Angeles, Calif. Filed June 15, 1931. Serial No. 544,538. 10 Claims. (Cl. 272—24.)



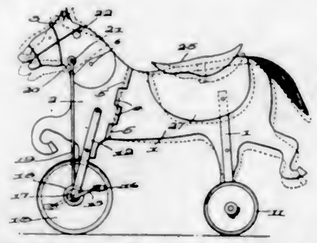
1. An apparatus as disclosed comprising a track, a carriage movable along said track, a suspension member suspended from said track, and means for suspending a performer from said suspension member in an inverted position.

1,859,616. TAXIMETER CONTROL MECHANISM. JAMES L. BROWNELL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed Mar. 14, 1930. Serial No. 435,871. 7 Claims. (Cl. 235—30.)



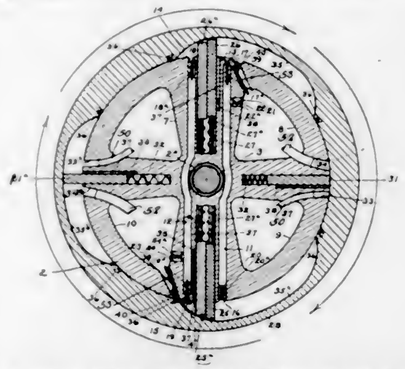
1. The combination in a motor vehicle provided with a seat supported for vertical movement, of a meter, a meter driving shaft, a driving connection for said shaft to said meter including a clutch, a spring actuated manually releasable catch for holding said clutch in engaged position, a clutch actuating means comprising a cylinder, a plunger in said cylinder operatively connected to said clutch, an actuating cylinder disposed below said seat, a plunger therein operatively associated with said seat to be actuated when the seat is moved downwardly, a return spring for said actuating plunger, and a conduit connecting said actuating cylinder to said clutch cylinder.

1,859,617. VEHICLE TOY. DAVID A. CARLSTROM, Seattle, Wash. Filed June 27, 1931. Serial No. 547,390. 2 Claims. (Cl. 208—42.)



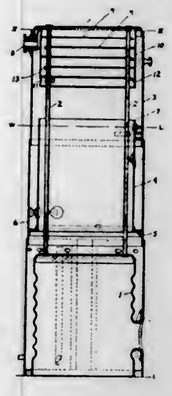
1. A polycycle comprising a horse simulated body portion made up of a back portion, a front portion pivotally secured thereto, a head portion pivotally secured to said front portion, brackets secured to the front portion, a driving shaft carried by said brackets, a wheel on said shaft, means connected to said wheel and said head portion to impart a nodding action to said head portion, a second set of brackets secured to said back body portion, a shaft supported thereby, wheels on said shaft and means connected to said shaft to impart an up and down motion to said back body portion.

1,859,618. ROTARY INTERNAL COMBUSTION ENGINE. WARD W. CLELAND, Fort Wayne, Ind. Filed Sept. 18, 1929. Serial No. 393,350. 4 Claims. (Cl. 123—14.)



1. A rotary engine comprising a stator having a plurality of air cooling openings therein, a rotor revolubly mounted on the stator and having combustion chambers therein between the stator and the rotor, abutments in the stator adapted to reciprocate in and out of the chambers successively, means to admit fuel to the chambers, a storage chamber extending diametrically through the stator and adapted to communicate at its opposite ends with the combustion chambers successively and valves to control the latter communications, one of said valves being operatively responsive to fluid pressure in any of the chambers and the other valve being operatively responsive to fluid pressure in the storage chamber.

1,859,619. BOILER STRUCTURE. FRANCIS R. DRAVO, Edgeworth, Pa., assignor to The Dravo Contracting Company, a Corporation of Pennsylvania. Filed Mar. 5, 1931. Serial No. 520,236. 1 Claim. (Cl. 122—467.)



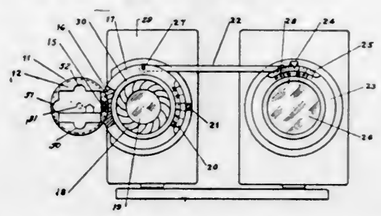
In a vertical boiler of fire-tube type the combination of a vertically standing cylindrical outer shell, an inner shell of smaller diameter and of less length than the outer, concentrically arranged within and at the upper end of the outer, the upper head of the outer shell constituting the upper head of the inner shell also, the inner shell being provided in its lower portion with an orifice in its wall establishing communication between the spaces within the two shells, a steam delivery passageway opening from the inner shell at its upper end and penetrating the wall of the outer shell, an annular plate arranged at a lower level within the outer shell and extending from the shell wall inward, and a sleeve of smaller diameter and of less length than the outer shell rising from said plate to a level lower than the lower head of the inner shell and forming with the wall of the outer shell an annular water chamber, a water inlet opening to such water chamber in the lower part thereof, the said sleeve being orificed for the circulation of water at a higher level than such inlet but at a point below its own upper rim, a bank of fire tubes extending vertically through the three said concentrically arranged parts, and means within the inner shell for causing steam entering at its lower orifice to sweep transversely across such bank of tubes in its course to the steam delivery passageway.

1,859,620. PROCESS OF MAKING PRINTING SURFACES. JOSEPH DYER, Atlantic Beach, N. Y. Filed Nov. 25, 1930. Serial No. 498,046. 6 Claims. (Cl. 95—5.)



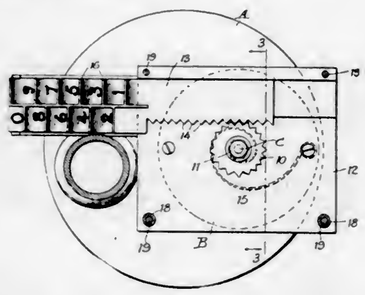
1. In the art of making printing surfaces comprising designs, a process which consists in producing a transparent reproduction of the design, diffusing a photographic negative of reduced size from the transparent reproduction by placing the reproduction and negative material a distance apart and subjecting the same to light, developing the negative material, then exposing a sensitized sheet in register with the diffused negative and a screen, removing the diffused negative and screen, and making a second exposure of the sensitized sheet through the transparent reproduction in substantially unreduced form overlying the first exposure.

1,859,621. APPARATUS FOR SETTING TO BEST PHOTOGRAPHIC EXPOSURE. REGINALD A. FESSENDEN, Chestnut Hill, Mass. Filed May 9, 1927. Serial No. 189,985. 4 Claims. (Cl. 95—10.)



1. In combination with a camera having an iris diaphragm, a lens and a concentric flange for adjusting the opening of the lens, means for determining the proper lens opening comprising means set in the periphery of said flange adapted to provide an indication of correct light intensity, a view finder position adjacent to said flange and having a side portion thereof intercepted by the peripheral means in said flange whereby when said flange is rotated various portions of said means will intercept said view finder.

1,859,622. OPERATING MECHANISM FOR AUTOMATIC TELEPHONES. WILLIAM HUBERT FITCH, Fort Worth, Tex. Filed Feb. 24, 1930. Serial No. 431,023. 6 Claims. (Cl. 179—90.)

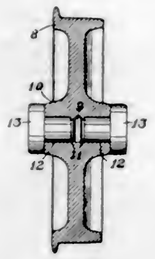


1. The combination with a telephone transmitting organization embodying a rotatable impulse controlling part, a pinion mounted upon the rotatable part, a sliding rack interengaging the pinion, and means to apply manual stress to move the rack.

1,859,623. CAST STEEL BODY AND METHOD OF HARDENING SAME. ALFRED W. GREGG, Columbus, Ohio, assignor to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed June 25, 1930. Serial No. 463,777. 6 Claims. (Cl. 148—21.5.)

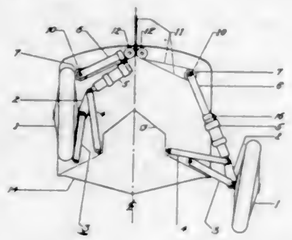
5. The method of regulating the hardening of a steel body to secure regions in said body possessing relatively different degrees of hardness comprising: the application to such a steel body of an insertable and removable body of metal in close contact to the region wherein a lower state of hardness is desired, heating said bodies to at least a critical hardening temperature, and then subjecting said bodies to a quenching operation wherein the re-

gions which are to possess a high degree of hardness are rapidly cooled through critical hardening temperatures and the regions which possess the larger mass of material



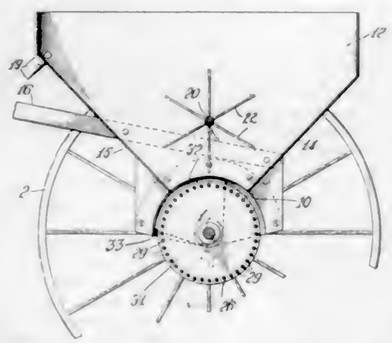
and which are to be maintained at a lower state of hardness are cooled at a slower rate and without passing through the critical hardening temperatures.

1,859,624. RETRACTABLE LANDING GEAR FOR AIRPLANES. LEROY R. GRUMMAN, Port Washington, N. Y. Filed Feb. 25, 1930. Serial No. 431,069. 26 Claims. (Cl. 244—2.)



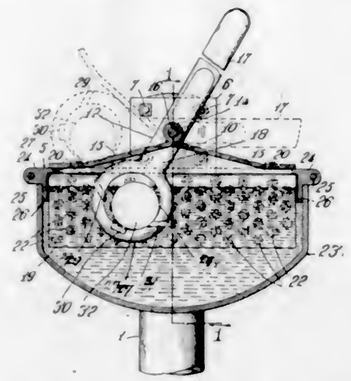
1. In an airplane and the like, a body, an undercarriage having wheels separately mounted and folding means including a jointed strut with an offset hinge to retract the undercarriage inside the body.

1,859,625. TOP DRESSING MACHINE. EDWARD M. LAING, Highland Park, Ill. Filed Oct. 8, 1928. Serial No. 311,215. 9 Claims. (Cl. 83—44.)



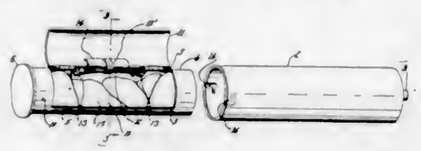
1. A distributing machine comprising a hopper having a lower discharge opening, a horizontal axle mounted beneath the opening, means for rotating the axle, a distributing cage comprising a plurality of spiders secured to the axle and open-work cylindrical walls carried by the spider, the upwardly presented portion of the cylindrical walls being positioned in the discharge opening, an adjustable valve for controlling the discharge opening, a rotatable agitator within the hopper comprising a horizontal shaft mounted in the end walls of the hopper, and gearing connecting the axle and shaft.

1,859,626. GOLF BALL WASHER. EDWARD M. LAING, Highland Park, Ill. Filed Aug. 5, 1929. Serial No. 383,540. 4 Claims. (Cl. 15—21.)



1. A golf ball cleaner comprising a receptacle for holding liquid, a pair of opposed brushes mounted in the receptacle, and a member mounted for reciprocation between the brushes, the member being of considerably less thickness than the diameter of a golf ball and formed with an opening for loosely receiving the ball, there being a plurality of spaced lugs projecting from the member at each side thereof to hold the ball within the opening while confined between the brushes.

1,859,627. UMBRELLA FOR CARRYING OVERSHOES. MABEL MARSH, Morristown, N. J. Filed July 30, 1930. Serial No. 471,726. 3 Claims. (Cl. 135—47.)

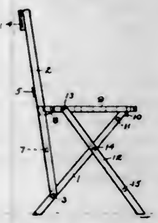


1. In an umbrella for carrying overshoes, a hollow handle open at its outer end, an overshoe case of proportions to conform to the hollow interior of said handle and insertable through said outer end into said handle, said overshoe case having a closed inner end and being provided with an opening in the side wall thereof for receiving overshoes, and an end wall for closing the outer end of said overshoe case and the outer end of said handle.

1,859,628. FOLDING CHAIR. WILLIAM NAHRWOLD, Fort Wayne, Ind. Filed Aug. 5, 1930. Serial No. 473,183. 2 Claims. (Cl. 155—147.)

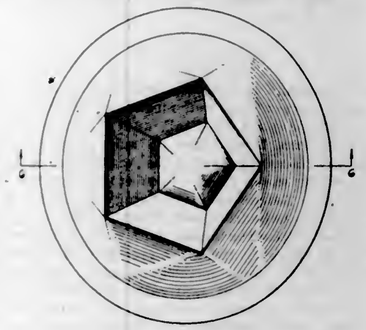
1. A folding chair comprising a back frame, two pairs of pivotally connected legs, two brackets secured to the back frame and projecting forwardly therefrom, a seat pivoted to the brackets and to the upper ends of one pair of the legs, the latter pivotal points being forward

of the pivotal points of the seat on the brackets and the lower end of the back frame being pivoted to the other pair of legs below the middle points of said legs and the



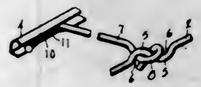
seat in open position being adapted to rest adjacent its forward end upon the upper ends of the latter pair of legs.

1,859,629. ACOUSTIC DIAPHRAGM. EVERETT C. NILSON, Worcester, Mass., assignor of forty per cent to Ralph G. Nilson, San Francisco, Calif., and twenty per cent to Nils Nilson, Worcester, Mass. Filed Feb. 9, 1928. Serial No. 253,095. 34 Claims. (Cl. 181—32.)



1. In a sound amplifying device, a diaphragm, the surface of said diaphragm comprising a hybrid surface formed by merging a cone and a pyramid.

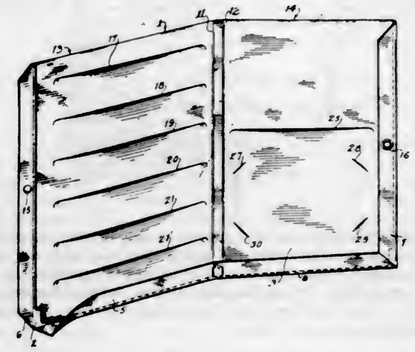
1,859,630. SPRING STRUCTURE. JOHN M. OLDHAM, Detroit, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed May 19, 1930. Serial No. 453,824. 3 Claims. (Cl. 155—181.)



3. In a spring structure, the combination of body springs, spaced spring supporting members, one of said members having oppositely facing offsets therein, and a brace having a spiral loop at one end engaged in said offsets by a rotative movement of the brace, the other end of the brace being nonrotatively secured to the other spring supporting member.

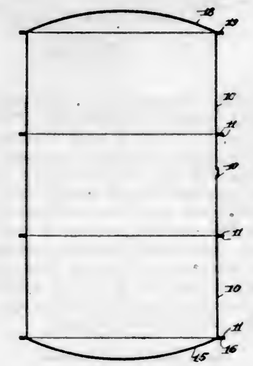
1,859,631. STATIONERY PORTFOLIO. ARTHUR E. OSBORN, Marion, Ind. Filed Apr. 27, 1929. Serial No. 358,640. 1 Claim. (Cl. 206—63.)

A stationery display device made from a blank and comprising a folder, each side of the folder including two sheets united at their exposed margins, one sheet having a plurality of parallel slots, a plurality of envelopes having flaps, said slots spaced apart a distance less than the width of the envelope flaps and of a length greater than that of the envelope whereby said envelopes may be



inserted in one slot and have the free edge of their flaps inserted in a next adjacent slot and back of the envelopes therein.

1,859,632. THIN METAL TANK AND METHOD OF MAKING THE SAME. WALTER D. PHETEPLACE, Rochester, N. Y., assignor to The Pfandler Co., Rochester, N. Y., a Corporation of New York. Filed Oct. 21, 1930. Serial No. 490,219. 6 Claims. (Cl. 220—75.)

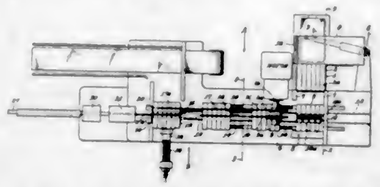


1. A tank of thin corrosion-resisting material having its inner surface substantially free from bacteria harboring crevices, comprising a plurality of hollow sections of corrosion-resisting material each having a body portion of large area relative to the thickness of the material and an outwardly extending flange extending substantially around its periphery, said sections being assembled with the flanges of adjacent sections superimposed on each other and firmly secured to each other to form an integral construction in which said flanges extend around the tank and serve as reinforcements thereof.

1,859,633. MACHINE FOR MAKING PARQUETRY BLOCKS. GLENN G. RHINEVAULT, Saginaw, Mich., assignor to W. B. Mershon Co., Saginaw, Mich. Filed Dec. 10, 1930. Serial No. 501,335. 8 Claims. (Cl. 144—2.)

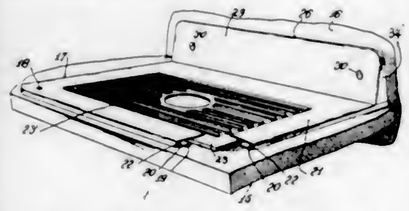
1. A parquetry block making mechanism comprising in combination a table, work-piece forwarding mechanism, a groove cutter maintained opposite the table at a fixed

distance therefrom, shearing dies arranged to only partly sever a strip of ribbon metal, V-spline forming dies, spline forwarding means arranged so as to advance the spline in alinement with a groove made in the block by said cutter whereby the edges of the V-spline are positioned



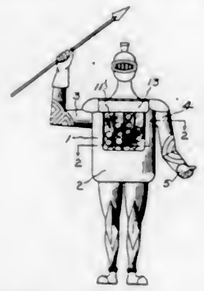
against the sides of the groove at its bottom, a spline flattening and final severing mechanism and power driven mechanism connecting a source of power respectively to said work-piece forwarder, dies, spline forwarding means and flattener and arranged to actuate the same in timed relationship to each other.

1,859,634. PROTECTION PLATE FOR AUTOMOBILES. OLIVER C. RITZ WOLLER, Chicago, Ill. Filed Sept. 28, 1929. Serial No. 395,771. 12 Claims. (Cl. 280—163.)



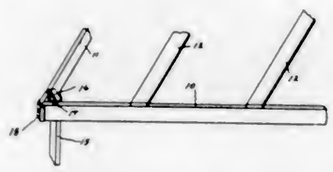
1. An automobile protection plate, comprising in combination a facing member of soft metal, a reenforcement member also of metal fixedly secured to said facing member in rear thereof and having a plurality of elongated openings therethrough enlarged at one end, and a plurality of headed securing devices firmly held in position adjacent to the inside edge of the running board of a car over which the enlarged portions of the openings are adapted to pass, said securing devices serving by engagement with the narrower portions of said openings when the reenforcement member is moved longitudinally to hold said reenforcement member and the attached facing member securely in upstanding position.

1,859,635. VENDING MACHINE. JOSEPH ROSE, Victoria, British Columbia, Canada. Filed Oct. 23, 1930. Serial No. 490,750. 1 Claim. (Cl. 312—49.)



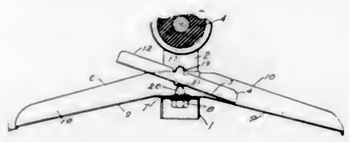
A vending machine comprising a receiving compartment and a discharge compartment, said receiving compartment having a plurality of vertical divisions between which articles to be vended are supported in columnar form, an inclined passage extending below said divisions, a duct communicating between the lower end of said passage and the discharge compartment, said discharge compartment having an arcuate bottom wall communicating at its upper end with a delivery opening, a reciprocatory arm having at its free end a hingedly mounted paddle adapted on the forward stroke of the arm to sweep an article entering said compartment from the duct along the inclined wall to the delivery opening and on the return stroke of the arm to pass over a second article entering the compartment during the movement of the first article towards the delivery opening.

1,859,636. MATTRESS STAND. JOHN C. SANGERS, Cleveland, Ohio. Filed May 12, 1930. Serial No. 451,644. 1 Claim. (Cl. 211—28.)



A mattress stand including a pair of side rails, a pair of end rails, corner legs, and means for joining at each corner a side and an end rail and a leg, said means including abutting bevel edges on said rails, notches in the adjacent faces of said rails extending completely thereacross, an inner clamp member having outwardly extending side flanges one engaging in each of said notches and an outwardly extending bottom flange having a portion extending under said rails, a downwardly extending leg engaging the inner face of said inner clamp member, an outer clamp member engaging and conforming to the outer faces of said rails and having a lower inwardly extending flange engaging the bottom surfaces of said rails, and a clamping bolt extending through said clamp members and said leg.

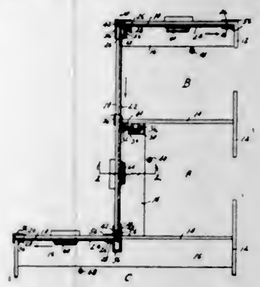
1,859,637. WRINGER. ERNEST J. SCHUDA, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 9, 1929. Serial No. 391,175. 9 Claims. (Cl. 68—32.)



1. In a wringer, the combination of a tilting board support; a tilting board on the support; and a pivotal connection between the support and the tilting board, said connection including yieldable engaging parts manually operable to detach the tilting board.

1,859,638. BANK PROTECTION DEVICE. JACOB C. TAYLOR and MAURICE A. TAYLOR, Pleasantville, Iowa. Filed Dec. 29, 1930. Serial No. 505,451. 4 Claims. (Cl. 268—2.)

1. Bank protection devices, comprising a shield of heavy, opaque material, means for supporting said shield above a customer space of a bank or like institution, and means for displacing said shield and permitting it to fall across said space, said last means including a motor



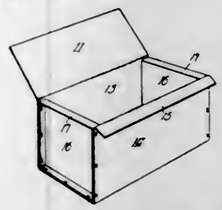
normally in open circuit, a switch for closing said circuit, and a member connected with said motor for moving said shield away from its supporting means.

1,859,639. BUTTER TUB COVER. AXEL M. WALSTROM, Minneapolis, Minn. Filed Nov. 17, 1930. Serial No. 496,174. 4 Claims. (Cl. 217—89.)



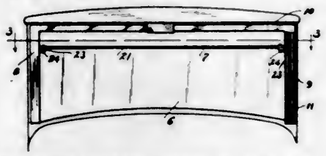
2. In combination with a tub cover having a downwardly inclined upper edge disposed above an upwardly inclined shoulder on the upper edge of a tub, and a metal band having inwardly extending edges arranged about the adjacent peripheries of said cover and shoulder, of reversely turned flanges provided on the edges of said band and normally spaced from the inside of said band, for the purpose specified.

1,859,640. METHOD OF AND APPARATUS FOR ASSEMBLING PLURAL BLANK BOXES. HARRISON B. WALTER, Chicago, Ill., assignor to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed Feb. 3, 1930. Serial No. 425,421. 2 Claims. (Cl. 93—42.)



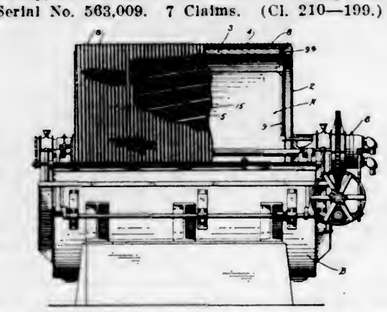
1. A method of assembling a four-walled tubular body member with a flanged end member which comprises slipping a collar over the end of the tubular body member, the collar being of such size as to somewhat deflect inwardly certain of the walls of the body member, then fitting the flanged head member within the end of the body member with the flanges projecting outwardly and substantially flush with the edges of the walls of the body member, the end member being frictionally held in place due to the inward deflection of certain of the walls by said collar, then securing three adjacent conjoined walls of the body member to corresponding flanges on the head member and leaving one wall unsecured to form a hinged closure.

1,859,641. WINDSHIELD CLEANER. GORDON SEYMOUR WEAVER, Toronto, Ontario, Canada. Filed Jan. 3, 1931, Serial No. 506,383, and in Canada Jan. 4, 1930. 3 Claims. (Cl. 15—253.)



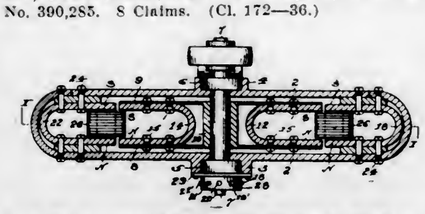
1. A windshield cleaner consisting of a shaft, driving means therefor, a pair of spaced sprockets fixed on said shaft, tensioning devices, a pair of sprockets mounted therein and aligned with the sprockets aforesaid, endless chains fitted on said sprockets, followers attached to opposite links of said chains, a wiper attached to said followers, rigid guides for engagement with said followers to advance the wiper into contact with the windshield during its working stroke, resilient forward ends projecting from the guides and inwardly curved to closely approach the forward sprockets, and mechanism for reversing the direction of rotation of aforesaid driving means at the end of the working stroke.

1,859,642. ROTARY VACUUM FILTER. SELIM E. WOODWORTH, San Francisco, Calif., assignor to Hamilton Beauchamp & Woodworth, San Francisco, Calif., a Partnership composed of E. M. Hamilton, F. A. Beauchamp, and S. E. Woodworth. Filed Sept. 16, 1931. Serial No. 563,009. 7 Claims. (Cl. 210—199.)



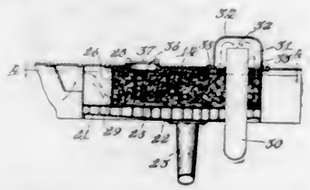
1. In a filter of the character described, a drum, a plurality of filter compartments formed on the exterior surface of the drum, said compartments being disposed on an angle with relation to the longitudinal axis of the drum, means connected with opposite ends of each compartment for drainage and for delivery of a fluid under pressure, and a filter medium forming a cover for each compartment.

1,859,643. MAGNETIC MOTOR. HARRY L. WORTHINGTON, San Francisco, Calif. Filed Sept. 4, 1929. Serial No. 390,285. 8 Claims. (Cl. 172—36.)



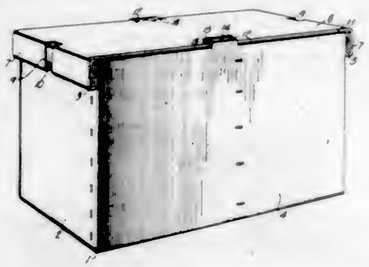
2. A motor comprising in combination a movable permanent magnet, a fixed permanent magnet, the poles of said magnets being arranged in repulsive relation, one of said magnets being shunted, and means for reversing the polarity of said shunt.

1,859,644. AIR CLEANER. HERMAN E. ALTOELT, South Bend, Ind., assignor to Oliver Farm Equipment Company, a Corporation of Delaware. Filed May 13, 1929. Serial No. 362,492. 7 Claims. (Cl. 180—10.)



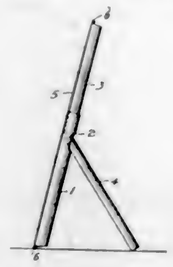
1. The combination with an air cleaner having a liquid therein, of a sediment reservoir positioned below for draining and collecting deposits from said cleaner, the reservoir having means therein for scraping deposits from said reservoir.

1,859,645. COVER FASTENER. ROY D. ANDERSON, Lawrence, Kans., assignor, by mesne assignments, to The Lawrence Paper Company, Lawrence, Kans., a Corporation of Kansas. Filed July 12, 1929. Serial No. 377,766. 8 Claims. (Cl. 225—45.)



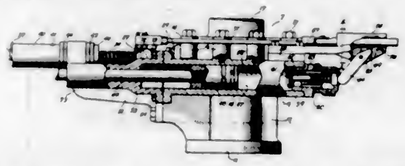
1. In combination with a box comprising a body, a detachable cover and means for securing the ends of the cover to the ends of the body, tongues extending upward from the edges of the body, the cover being provided with slots in its top and intermediate the ends thereof to receive the tongues for fastening portions of the cover to the body.

1,859,646. DISPLAY DEVICE. FREDERICK A. APPELBAUM, Woodmere, N. Y. Filed Oct. 21, 1929. Serial No. 401,028. 1 Claim. (Cl. 40—125.)



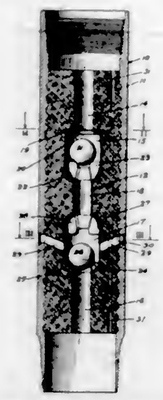
A display device as characterized comprising a plurality of hollow tubular members adapted to be nested one within the other in collapsed position of the device, two of said members being in slidable engagement one within the other and adapted to be slid to an extended position thereby providing a supporting standard of greater length than either member alone, the outer of said two slidable members having an opening at substantially the lower end of the inner of said two members when in extended position, a display sheet having means at opposite ends thereof for engagement each with an end of the said standard and adapted to be held taut by extension of the standard, and means adapted to be inserted in said opening for both retaining the standard extended, and acting as a prop to support the standard.

1,859,647. APPARATUS FOR CONTROLLING STEAM ENGINES. HENRY H. BAILEY and JACK LEE THOMAS, Oklahoma City, Okla., assignors to Mechanical Royalties Corporation, Oklahoma City, Okla., a Corporation of Oklahoma. Filed Feb. 3, 1930. Serial No. 425,470. 7 Claims. (Cl. 121—138.)



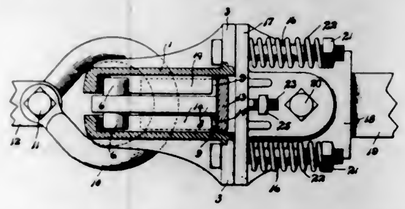
1. In combination with a steam engine and a reversing gear, a piston chamber, a piston in the chamber connected with the reversing gear, a housing having a steam inlet, an outlet to the steam engine, and a channel affording communication between the housing and the piston chamber, and a valve in the housing controlling flow of steam through the outlet or channel for selectively actuating either the steam engine or moving the piston to operate the reversing gear.

1,859,648. WELL CEMENTING DEVICE. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Sept. 9, 1931. Serial No. 561,866. 8 Claims. (Cl. 166—1.)



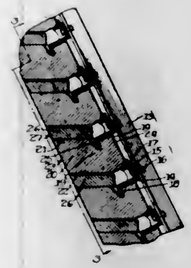
1. A device of the character described comprising a tubular member, a valve body secured therein, a passageway formed longitudinally through said body, a pair of valves arranged at a spaced distance apart in said passageway to control the passage of fluid therethrough, the uppermost valve preventing the passage of fluid upwardly through the plug, the lowermost valve preventing the passage of fluid downwardly through the plug, said body and tubular member having laterally directed unobstructed ports communicating at their innermost ends with said passage intermediate said valves and at their outer ends with the space surrounding said tubular member.

1,859,649. CUSHION SAFETY HITCH. GERRIT DEN BESTEN, Holland, Mich., Filed July 22, 1929. Serial No. 379,970. 7 Claims. (Cl. 280—33.16.)



7. A hitch comprising two hitch members located in horizontal alinement with adjacent ends normally in contact engagement, yielding spring means for holding the hitch members together, a hook pivotally mounted on one hitch member, a latch pivoted on the same hitch member and having a notch along its length engaged by the hook, movable means adapted to engage the free end of the latch to release the hook, and means actuated by the separation of the hitch members to actuate the movable means.

1,859,650. FURNACE WALL. FRANK B. BIGELOW, Detroit, Mich., assignor to Bigelow-Liptak Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 6, 1930. Serial No. 418,740. 2 Claims. (Cl. 72—101.)



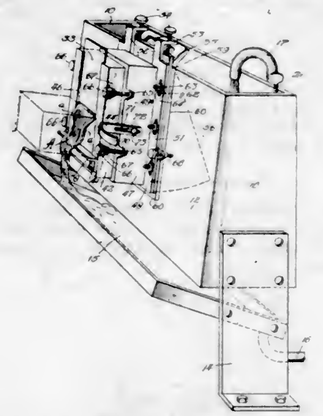
2. A refractory block for use in sloping furnace walls composed solely of two integral portions at an oblique angle to one another, each of said portions having substantially parallel upper and lower surfaces, said block having a cross groove in its top surface at approximately the junction of said two portions, the end face of one of said portions being oblique to its substantially parallel top and bottom surfaces and the end face of said other portion being at approximately right angles to its substantially parallel upper and lower surfaces.

1,859,651. ANTIFERMENTIVE SOLDERING FLUX. ERNEST F. BOWERS, Lansdale, Pa., assignor of one-third to Dana W. Bowers and one-third to Charles T. Asbury, Philadelphia, Pa. Filed Sept. 4, 1930. Serial No. 479,791. 4 Claims. (Cl. 148—25.)

4. A soldering flux having in its composition an acid derivative of the benzene series, an oily glyceride vehicle and rosin.

1,859,652. METHOD OF SEALING CARTONS, PACKAGES, AND OTHER OBJECTS. ADOLPH D. BULLERJAHN, Minneapolis, Minn. Original application filed July 17, 1927, Serial No. 199,478. Divided and this application filed Aug. 5, 1929. Serial No. 383,675. 14 Claims. (Cl. 91—68.)

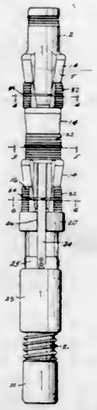
1. The method of sealing objects which consists in discharging a column of molten wax under a head maintained above the point of discharge, said column being discharged outwardly in the form of a falling sheet having thickened or lip-like marginal edges, and in conveying objects to be sealed in a line of travel to bring the discharging sheet into contact with the surface to be sealed, substantially as described.



1,859,653. CHEMICAL COMBINATION OF BORIC ACID AND POTASSIUM ACID TARTRATE, AND PROCESS OF PREPARING SAME. AUGUSTUS EDWARD CRAVER, Mount Vernon, N. Y., assignor to Weiss and Downs, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 7, 1930. Serial No. 419,204. 11 Claims. (Cl. 260—121.)

1. A urinary acidifier comprising a chemical combination of boric acid with potassium acid tartrate, said urinary acidifier having a boron trioxide content within the limits of 16 and 18% on the dry basis, and having a hydrogen ion concentration in aqueous solution equivalent to a pH of 3.0 to 3.5 and being substantially free from unreacted potassium acid tartrate.

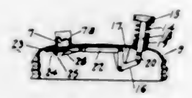
1,859,654. TUBING CATCHER. FREDERICK N. CRIPPEN, Los Angeles, Calif., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed July 23, 1930. Serial No. 470,106. 1 Claim. (Cl. 103—219.)



1. In a well tubing catcher, a support adapted to be connected to a string of tubing, superposed heads mounted on the support and each having a plurality of circumferen-

tially spaced upwardly inclined guide faces, gripper slips mounted on said heads in contact with said faces, a slidable weight mounted on the support below the heads, a coiled spring surrounding the support and upon which the weight rests, a plurality of connections between the upper end of the weight and the slips rigidly attached to the slips and rigidly attached to the weight, whereby all the slips are connected in common with the weight for movement in unison, all of said connections being resilient, and resilient rings connecting the slips of each head, the connections all being located within the diameter of the heads so as not to contact with the tubing.

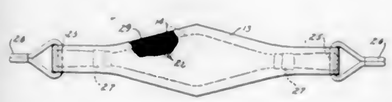
1,859,655. DEVICE FOR FEEDING GRANULAR MATERIAL. FRANK CZAPAR, Jr., San Diego, Calif. Filed Sept. 2, 1931. Serial No. 560,777. 13 Claims. (Cl. 221—66.)



1. In combination, a receptacle, a lid closure therefor provided with an orifice through which the contents of said receptacle is expelled, an agitator simulating a crow foot juxtaposed therewith, means whereby said crow foot may be reciprocated to agitate the contents of said receptacle as they are expelled therefrom, means whereby said crow foot may be oscillated to sweep over said orifice to wipe therefrom particles adhered thereto, and means to limit the oscillative travel of said crow foot.

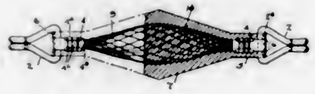
12. In a device of the kind described, a receptacle having a discharge aperture, an agitator within said receptacle adapted to loosen granular material adjacent to said aperture and to sweep thereacross whereby to free said aperture of adhering particles, a guide for slidingly supporting said agitator, a manually operable key projecting through the wall of said receptacle, yieldable means interposed between the head of said key and the wall of said receptacle, a bell-crank connection between said key and agitator, and means to pivotally support the bell-crank.

1,859,656. NONSKID CROSS LINK FOR TIRE CHAINS. GEORGE R. CUNNINGTON, Akron, Ohio, assignor, by mesne assignments, to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 27, 1927. Serial No. 222,240. 2 Claims. (Cl. 152—14.)



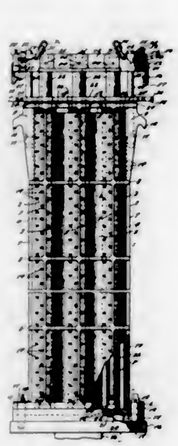
1. In or for a vehicle tire chain, a non-skid link comprising a body of flexible rubber wider centrally, and flexible metallic wires therein, said body being molded to a transverse radius less than that of the tire to which it is to be applied.

1,859,657. NONSKID LINK AND MANUFACTURE THEREOF. GEORGE R. CUNNINGTON, Akron, Ohio, assignor, by mesne assignments, to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 11, 1930. Serial No. 427,615. 18 Claims. (Cl. 152—14.)



1. A non-skid link, comprising a body of flexible rubber, metal reinforcement means in said body, and terminals for the reinforcement means, said reinforcement means extending from each terminal in independent sets toward the middle of said body of rubber.

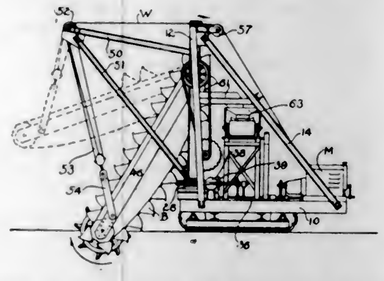
1,859,658. MOLDING APPARATUS. MALCOLM KENNETH DOUGLAS, New York, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 26, 1929. Serial No. 349,918. 6 Claims. (Cl. 22—16.)



1. In a molding apparatus, a pattern bar adapted to be positioned in a casting chamber of a flask body, and a stripper plate slidable on said bar, a supporting member secured to and extending transversely of said bar, said plate and said member having cooperable automatically acting means to hold said plate raised from the flask body.

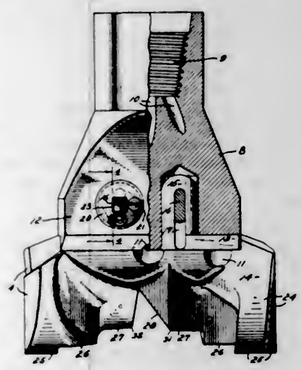
1,859,659. SWINGING BUCKET LINE EXCAVATOR. JAMES A. ELLIOTT, Seattle, Wash., assignor of one-third to Francis T. Hillman, and one-third to Lee A. Dolan, Seattle, Wash. Filed Apr. 21, 1930. Serial No. 445,866. 2 Claims. (Cl. 37—192.)

1. In a portable swinging bucket-line excavator, the combination with a base and its rigid, inverted U-shaped upright, of a rotary upright frame and a swinging bucket-line pivoted therein, a central tubular pivot pin rigid with the rotary frame and having a bearing on the base, means for rotating the rotary upright frame, a driven shaft



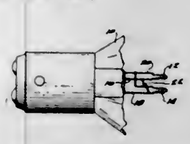
journaled in the base and said tubular pin and means for driving the shaft, and transmission mechanism between the driven shaft and the bucket-line excavator.

1,859,660. DRILLING BIT. EMIL M. ERLANDSON, Compton, Calif., assignor to Charles E. Burke, Oklahoma City, Okla. Filed Nov. 20, 1929. Serial No. 408,642. 4 Claims. (Cl. 255—61.)



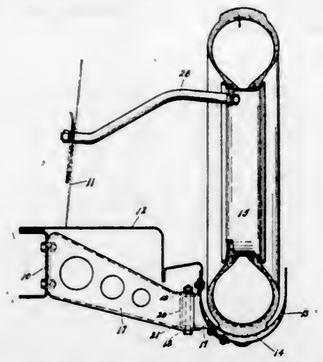
1. An earth-drilling bit having; a plurality of pairs of cutting edges, of which the innermost pair is non-radial, adapted to make a series of annular cuts at successively increased levels toward the axis of the bit; and a single upwardly sloping edge extending angularly from one of said innermost cutting edges and substantially intersecting the axis, adapted to form a cone-shaped central core.

1,859,661. THREE FILAMENT BULB. ROBERT N. FALGE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 1, 1928. Serial No. 303,443. 5 Claims. (Cl. 176—26.)



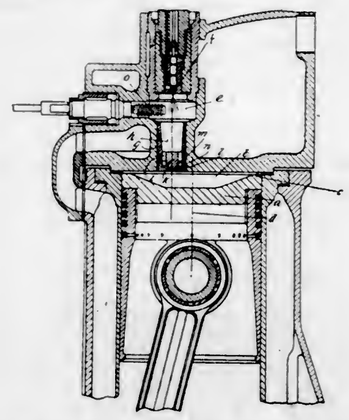
1. An incandescent lamp for automobile headlamps provided with concentrated filaments having a common lead and insulated leads, and a long life concentrated auxiliary filament connecting said insulated leads.

1,859,662. TIRE CARRIER. WALTER S. FISHER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 10, 1929. Serial No. 331,613. 2 Claims. (Cl. 224—29.)



1. A vehicle tire carrier of the class described comprising a frame including a longitudinal channel member, a fender having an indentured portion for receiving a tire unit, means for maintaining the tire unit securely within the indentured portion, and means for re-enforcing the fender including a channel arm secured to the longitudinal channel member and extending laterally thereof, a strap screwed to the base of the indentured portion of the fender, said strap having an ear portion formed therein and disposed between the flanges on the channel arm, and means for securing the strap rigidly to the arm.

1,859,663. DIESEL ENGINE. PAUL E. FRITZSCHE, Stuttgart-Unterturkheim, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany, a Company of Germany. Filed Apr. 11, 1930, Serial No. 443,442, and in Germany Apr. 12, 1929. 2 Claims. (Cl. 123—33.)



1. In an internal combustion engine a cylinder having a flat end wall defining the top side of a combustion space, a piston having a recess formed in the top thereof surrounded by an annular flat part constituting the margin of the piston top, said margin almost touching said flat wall when the piston occupies its end position, a pre-ignition chamber, a fuel inlet nozzle for introducing the fuel into the pre-ignition chamber, in which said fuel is partly burned, another nozzle arranged between the

pre-ignition chamber and the combustion space, the outlet opening of said second nozzle arranged in said flat wall forming the top of said combustion space and positioned eccentrically with regard to the recess in the piston top, and means in said second nozzle for obtaining a broad cone-shaped fuel jet directed substantially parallel to the axis of the cylinder.

1,859,664. INTERLOCKING SECTION STRIP. EDWARD FULDA, New York, N. Y. Filed Sept. 19, 1929. Serial No. 393,645. 4 Claims. (Cl. 94—8.)



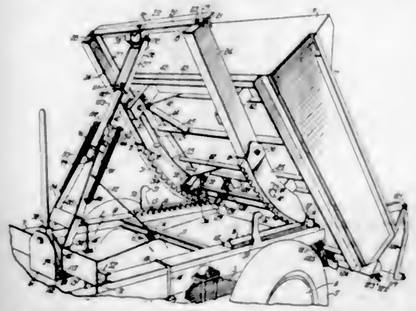
1. An interlocking section strip consisting of fin containing sections and wing containing sections disposed alternately in parallel planes and united by angularly disposed sections, wings on said wing containing sections cut from the same edge of the strip and fins on the fin containing sections said wings and fins adapted to interlock when the section strips are united.

1,859,665. METHOD AND MEANS FOR COMBINING PICTURES WITH SOUND. HARRY H. GOLDEN and IRVING NACHUMSOHN, Chicago, Ill. Filed July 31, 1929. Serial No. 382,544. 9 Claims. (Cl. 88—16.2.)



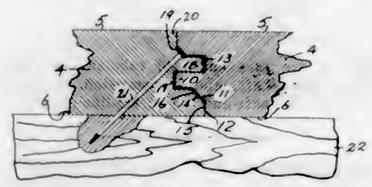
3. In a radio broadcasting system for combining audible with visual effects, a broadcasting station having means for broadcasting the audible effects, a plurality of receiving stations each having a radio receiving set for receiving said audible effects, and a picture projector at each receiving station, means associated with each projector and responsive to predetermined signals received through the corresponding receiving set thereof, for controlling the operation of its respective projector, and means at said broadcasting station for broadcasting said signals.

1,859,666. DUMP BODY. OTTO N. GREDELL, Kansas City, Mo., assignor to Standard Steel Works, North Kansas City, Mo., a Corporation of Missouri. Filed Sept. 14, 1928. Serial No. 306,040. 12 Claims. (Cl. 298—12.)



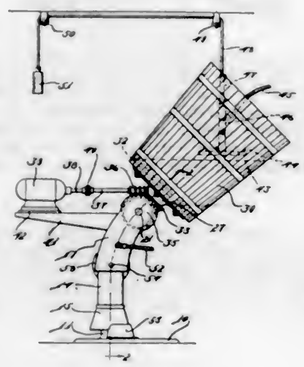
1. In a device of the character described including a frame, a dump body, body rocking means including a rocker having toothed engagement with the frame, and inwardly directed flanges, means for supporting the body from the flanges of the rocker including longitudinally spaced pairs of brackets secured to the body, a shaft journalled in the rear pair of brackets, rollers fixed to said shaft and mounted on the flanges, stub shafts fixed in the forward brackets, and rollers rotatable on said stub shafts and adapted to roll on said flanges.

1,859,667. JOINTED LUMBER. JAY K. GRUNER, St. Louis, Mo., assignor to J. K. Gruner Lumber Company, St. Louis, Mo., a Corporation of Missouri. Filed May 14, 1930. Serial No. 452,222. 2 Claims. (Cl. 20—8.)



1. Jointed lumber comprising boards each having at the side edges thereof a pair of longitudinally extending tongues with an intermediate groove therebetween and deeper from said side edges than said tongues, and a second groove extending from one face of each board to the adjacent tongue and of less depth than said other groove, said tongues being of less height than said corresponding grooves, whereby when adjacent boards are interfitted with the tongues of one board in the grooves of the other board, each board will substantially be supported by the top side only of one of the tongues of the adjacent board.

1,859,668. PLATING MACHINE. VANCE D. HAMILTON, Ferndale, Mich. Filed Sept. 5, 1929. Serial No. 390,642. 3 Claims. (Cl. 204—5.)



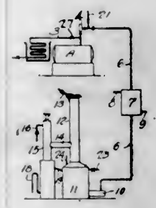
1. A plating machine of the class described, comprising: a supporting standard; a cup shaped insulating member mounted in inverted relation over the upper end of said standard; a supporting yoke; a hollow standard on said yoke embracing said insulating member; a solution container; and means for mounting said solution container tiltably on said yoke.

1,859,669. HOLDER FOR NECKTIES. RICHARD HARMS, Lubeck, Germany. Filed Nov. 20, 1930, Serial No. 496,953, and in Germany Nov. 18, 1929. 3 Claims. (Cl. 24—58.)



1. A clamping device for the stud loop of neckties, comprising in combination with the necktie and the stud loop, a sleeve in and projecting from the lower edge of the knot of the tie, and a clamping means to which the ends of said loop are attached adapted to be connected with the lower projecting end of said sleeve.

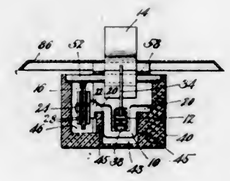
1,859,670. SAFETY BLOW OFF DEVICE. HERBERT HENDERSON, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed Aug. 31, 1925. Serial No. 53,583. 4 Claims. (Cl. 196—137.)



1. The combination with a pressure atill operable at a predetermined pressure, of a valve in free communication therewith and arranged to automatically open when subjected to a definite pressure greater than said predetermined pressure and to automatically close when less than said predetermined pressure prevails, cooling means for vapors and gases passing said valve when opened, a blowoff tank, a conduit leading from said cooling means to said blowoff tank, and a closure piece on the blowoff tank to permit the escape of gases therefrom while substantially preventing the entrance of air thereto.

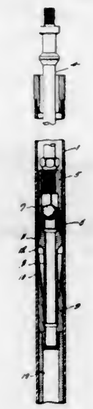
1,859,671. FLUSH SNAP SWITCH. FRANK E. JOHNSON, New Bedford, Mass., assignor to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Feb. 16, 1929. Serial No. 340,476. 2 Claims. (Cl. 200—67.)

1. A snap switch having, in combination, a base of insulating material provided with a main recess and an inner sub-recess separated by walls from the main recess, said main recess having in opposite side walls thereof upwardly opening grooves forming bearings, a substantially U-shaped rocker member pivotally supported in the sub-recess and carrying a contact blade located at one side thereof in the main recess, said rocker member having lateral end bearing extensions, each side wall of the sub-recess being continuous from end to end thereof and said side walls being provided with upwardly opening grooves forming bearings in which the end bearing extensions of the rocker member are removably mounted, the



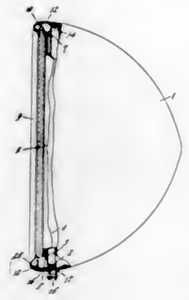
side walls of the sub-recess directly supporting and constituting means for confining the rocker member against lateral displacement, an actuating spring for the rocker member, a snap lever to actuate the spring, said lever having journal portions removably engaging the bearings in the side walls of the main recess, and a face plate secured to said base and retaining the rocker member, lever and spring in operative position therein.

1,859,672. PUMP. BERT L. MASTERS and JOHN SINADIN, Midwest, Wyo. Filed Sept. 16, 1930. Serial No. 482,339. 1 Claim. (Cl. 103—179.)



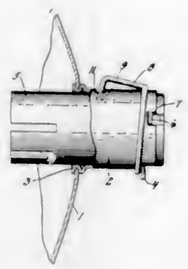
A pump comprising a barrel, and a plunger slidable in the barrel, said plunger including a series of tubular rods having fluid outlet openings in intermediate portions thereof, said rods each including an enlarged end portion having sliding contact with the casing, the end portions of the tubular rods being threaded, expansible metallic sleeves mounted on the tubular rods in spaced relation to the enlarged end portions thereof and defining, in conjunction with said enlarged end portions, fluid receiving chambers in the barrel, the openings in the tubular rods communicating with the chambers for the passage of fluid thereinto for expanding the sleeves against the barrel, said sleeves each comprising internally tapered end portions extending over the openings in spaced relation thereto, and means threadedly connecting the tubular rods together in longitudinally spaced relation.

1,859,673. HEADLAMP CONSTRUCTION. CLARENCE A. MICHEL, Cleveland, Ohio, assignor to Guide Lamp Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 415,729. 9 Claims. (Cl. 240—41.5.)



1. In a lamp construction, a lamp casing, a separate sheet metal bezel having an inwardly opening channel, an attachment device for removably securing the bezel to the lamp casing, a reinforcing ring within the channel and means associated with the attachment device for forcibly expanding said ring into tight engagement with the bezel and for holding it in expanded condition.

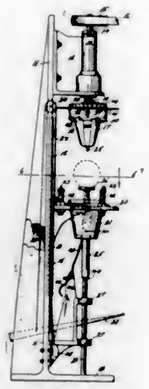
1,859,674. SOCKET RETAINER. CLARENCE A. MICHEL, Cleveland, Ohio, assignor to Guide Lamp Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 415,728. 4 Claims. (Cl. 240—41.)



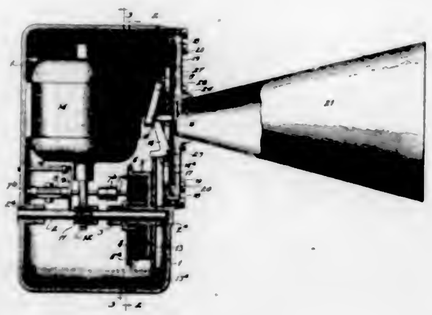
2. In a socket retaining device, a sleeve, a socket longitudinally fitted therein, transverse slots in said sleeve and socket adapted to be assembled in alinement, and a spring wire clip externally mounted on said sleeve, said clip consisting of an intermediate bight engaging within said slots, longitudinal portions extending rearwardly from said bight, and end portions extending transversely in arcuate form and partially encircling said sleeve.

1,859,675. CLAY-WORKING MACHINE. HARLEY H. MONTAGUE, Denver, Colo. Filed Feb. 18, 1930. Serial No. 429,325. 10 Claims. (Cl. 25—26.)

1. Pottery-forming means comprising complementary, axially-separable, rotatable and non-rotatable die portions, means for rotating said rotatable die portion, means operable to control the relative positioning of said die portions, pottery-trimming means on, rotatable with and axially movable between operative and inoperative positions relative to said rotatable die portion, yielding means whereby said trimming means is normally maintained in operative position and means operable by said non-rotatable die portion and adapted to engage said trimming means to move said latter means into inoperative position when said die portions are in complementary, pottery-forming relation.



1,859,676. SIGNAL. IRVING NACHUMSOHN, Chicago, Ill. Filed Aug. 4, 1926. Serial No. 127,097. 5 Claims. (Cl. 177—7.)



1. In a device of the character described, a record having an endless record track thereon, vibratile means therefor, driving mechanism for said record comprising a spring, means for maintaining a tension to said spring, indexical means moving with said record for identifying a predetermined point along the length of said track, a member coacting with said indexical means for normally preventing operation of said record by said spring and means associated with said member for controlling the operation thereof.

1,859,677. ELECTRON DISCHARGE DEVICE. IRVING NACHUMSOHN, Chicago, Ill. Filed Dec. 29, 1926. Serial No. 157,743. 2 Claims. (Cl. 250—27.5.)

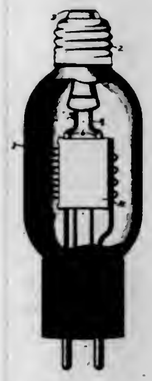
1. A triode assembly comprising a vessel, leads extending internally of said vessel from the exterior thereof,

a plurality of elements within said vessel and supported directly thereby in respective connection with said leads, one of said elements having its exterior surface in direct



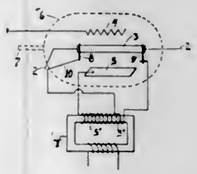
contact with the interior surface of said vessel and common spacing means for all of said elements for maintaining a predetermined spaced relation therebetween.

1,859,678. ELECTRON DISCHARGE DEVICE. IRVING NACHUMSOHN, Chicago, Ill. Filed Dec. 29, 1926. Serial No. 157,744. 3 Claims. (Cl. 250—27.5.)



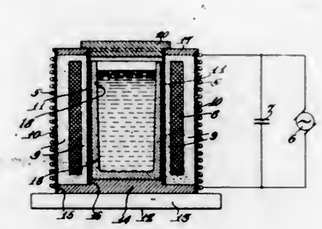
2. In an electron discharge device, a vessel means therein comprising a heater element, a thermoelectric element and an anode element, spacing means for said elements, said anode and spacing means comprising an enclosure for said heater and thermoelectric elements, whereby heat generated in said enclosure will affect the hot junctures of said thermoelectric element and generate a current therein, and a plurality of cold junctures of said thermoelectric element disposed externally of said enclosure and within said vessel.

1,859,679. VACUUM TUBE AND METHOD OF TREATING THEREOF. IRVING NACHUMSOHN, Chicago, Ill. Filed Mar. 28, 1928. Serial No. 265,391. 1 Claim. (Cl. 250—27.5.)



In the manufacture of vacuum tubes having a filament wire and an equipotential cathode disposed therearound, means for conducting a current through the cathode for heat treating said cathode, the said means embodying lead wires attached to the longitudinally opposed ends of said cathode, one of said lead wires being more easily fusible than the other of said wires.

1,859,680. INDUCTION ELECTRIC FURNACE. HEINRICH NEUHAUSS, Dusseldorf, Germany, assignor to The Ajax Metal Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 19, 1928. Serial No. 306,820. 9 Claims. (Cl. 13—27.)



1. The method of protecting a graphite inductive heating element from oxidation at high temperature produced by the passage of electric current through it which consists in covering the graphite element on all sides by a finely divided carbonaceous material adapted to take up the oxygen and shutting off access of the atmosphere to the element and covering.

1,859,681. ARTIFICIAL BAIT. UZ C. PEMBERTON and JOSEPH B. JOHNSON, Tampa, Fla. Filed May 24, 1930. Serial No. 455,337. 1 Claim. (Cl. 43—46.)



A fish lure comprising an elongated body, a transverse fin member located rearwardly of the nose portion of the body and depending perpendicular to the longitudinal axis thereof, a strut member extending upwardly and rearwardly at an acute angle from the lower edge of the fin and attaching flanges extending from the upper edges of the fin and strut respectively and secured to the body.

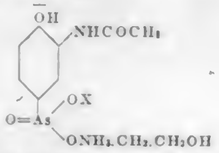
1,859,682. MEANS OF EFFECTING VISUALITY BY REFLECTED LIGHT. NORMAN H. RANSTEAD, Chicago, Ill., assignor to Jenkins Petroleum Process Company, Chicago, Ill., a Corporation of Wisconsin. Filed Jan. 30, 1929. Serial No. 336,186. 16 Claims. (Cl. 88—1.)



11. A device for visualizing the inner surface of tubes of relatively small diameter, such as those of an oil pressure still, comprising a longitudinal rod, a handle for supporting the rod, a plurality of adjustable mirrors transversely carried by said rod, means of adjusting the distance between said plurality of mirrors along said rod and means of setting each of said mirrors at various angles of reflecting relationship with the other of said mirrors.

1,859,683. STABLE AQUEOUS SOLUTIONS OF HYDROXY-ETHYLAMINO SALTS OF 3-ACETYLAMINO-4-HYDROXYBENZENEARSONIC ACID. KARL STREITWOLF, Frankfort-on-the-Main, ALFRED FEHRLE, Bad Soden-on-the-Taunus, and WALTER HERRMANN and PAUL FRITZSCHE, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Original application filed Jan. 4, 1930, Serial No. 418,648, and in Germany June 14, 1929. Divided and this application filed Feb. 6, 1931. Serial No. 514,064. 4 Claims. (Cl. 23—250.)

1. An aqueous solution of a hydroxyethylamino salt of 3-acetylamino-4-hydroxybenzene arsonic acid of the following probable formula

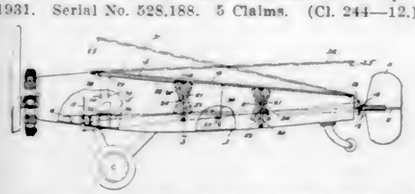


wherein X stands for hydrogen or $-NH_3.CH_2.CH_2OH$ with the addition of a stabilizing agent.

1,859,684. HYDROXY-ETHYLAMINO SALTS OF 3-ACETYLAMINO-4-HYDROXY-BENZENE-ARSONIC ACID. KARL STREITWOLF, Frankfort-on-the-Main, ALFRED FEHRLE, Bad-Soden-on-the-Taunus, and WALTER HERRMANN and PAUL FRITZSCHE, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 4, 1930, Serial No. 418,648, and in Germany June 14, 1929. 3 Claims. (Cl. 260—14.)

1. As new products hydroxy-ethylamino salts of 3-acetylamino-4-hydroxy-benzene-arsonic acid being well crystallized compounds, rather readily soluble in water, difficultly soluble in acetone, ether and benzene.

1,859,685. SAFETY APPARATUS FOR AEROPLANES. HIRAM A. THORNTON, Vincennes, Ind. Filed Apr. 6, 1931. Serial No. 528,188. 5 Claims. (Cl. 244—12.)



1. The combination with an aeroplane structure, of a safety plane centered upon and supported by the fuselage, pivotal connections between the front and back edges of said plane and the fuselage cooperating to hold the plane against movement, cooperating means on the safety plane and the fuselage for guiding said plane when tilted about either its front or its back pivotal connection, means for disengaging the safety plane at either of its pivotal connections, and means for shifting the safety plane when disengaged to swing it about its other pivotal connection.

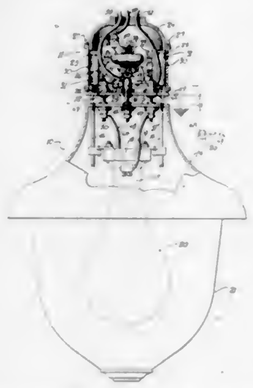
1,859,686. NEW RUBBER LIKE MASSES AND PROCESS OF PREPARING THE SAME. EDUARD TSCHUNKUR and WALTER BOCK, Cologne, Mulheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 7, 1930, Serial No. 419,198, and in Germany Jan. 15, 1927. 6 Claims. (Cl. 260—6.)

1. Process which comprises polymerizing a hydrocarbon of the formula

$$CH_2=C-CH=CH_2$$
$$\quad\quad\quad

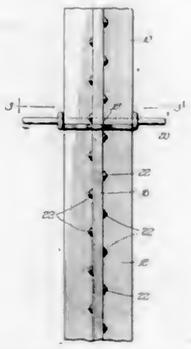
type, a tapered combustion chamber extending substantially in the direction of the axis of the combustion cylinder, the diameter of said combustion chamber increasing towards the piston with progressively increasing increment, said combustion chamber forming the end of the cylinder and communicating with it by an opening of the diameter of said cylinder, the convex end of the piston closing said combustion chamber towards the cylinder space in the top dead center of the piston, channels arranged transversely to the axis of said combustion chamber, an intake or exhaust valve at the remote end of each channel, said channel situated where the diameter of the combustion chamber is small so that but a small thickness of the confining walls is required.

1,859,694. STREET LIGHTING FIXTURE. GEORGE H. COLE, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed June 4, 1931. Serial No. 542,039. 5 Claims. (Cl. 240—25.)



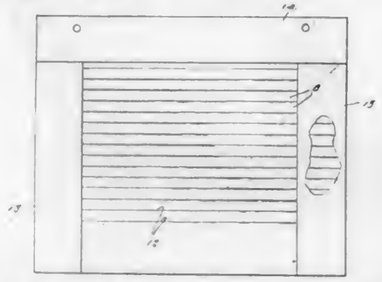
1. In a combined lighting fixture and switch, a compartment for housing the light, a compartment for housing the switch provided with circumferential apertures to permit assembling of the switch therethrough, removable plates covering said apertures, means joining said compartments to provide an air space therebetween.

1,859,695. FENCE POST. FRANK CZEMBA, Duluth, Minn. Filed Jan. 22, 1931. Serial No. 510,529. 1 Claim. (Cl. 256—37.)



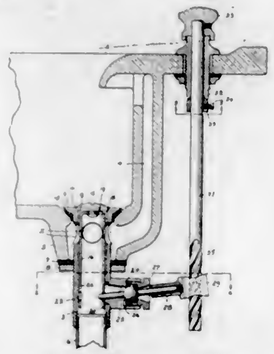
A rolled section suitable for fence posts and the like, said section being approximately T-shaped in cross section, the stem of the T being provided with a bulb having spaced studs projecting from its opposite sides and the studs being of approximately circular cross section at their line of junction with the sides of the bulb.

1,859,696. FILING DEVICE. HARRY H. DIXON, Princeton, W. Va. Filed Jan. 17, 1931. Serial No. 509,498. 4 Claims. (Cl. 129—20.)



1. A file formed from a rectangular sheet folded on parallel fold lines with alternate folds in opposite direction, each fold provided at opposite ends with tabs foldable inwardly toward one another, tabs of alternate folds folding inwardly on opposite sides of the sheet and providing between adjacent folds article-receiving pockets.

1,859,697. BATH, BASIN, AND RECEPTACLE FITTING. ALBERT H. FLECK, Cleveland, Ohio, assignor of two-fifths to Michael B. Koelliker, Cleveland, Ohio. Filed Apr. 10, 1931. Serial No. 529,023. 3 Claims. (Cl. 4—200.)

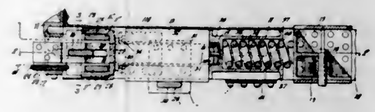


2. In bath, basin and receptacle fittings, an outlet fitting and valve, a lever for opening and closing the valve, an extension for said lever having an angular enlargement provided with an elongated slot therethrough, a spirally grooved shaft held against longitudinal movement extending through said elongated slot, plates closing opposite sides of said enlargement oppositely disposed balls loosely confined in said plates engaging the grooves of said shaft.

1,859,698. METHOD OF MAKING DUCTILE IRON-CHROMIUM ALLOYS HAVING A COLD-ROLLED FINISH. HARRY S. GEORGE, Massapequa, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Original application filed Dec. 21, 1928, Serial No. 327,750. Divided and this application filed Mar. 30, 1932. Serial No. 602,099. 9 Claims. (Cl. 148—8.)

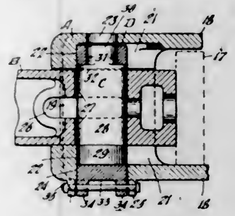
5. The method of producing a ductile article consisting of an iron-chromium alloy which contains about 8% to 40% chromium which comprises cold rolling an annealed article which is free from surface oxides, heating to temperatures sufficient to restore ductility to the article, said alloy being out of contact with carbon and the atmosphere around the alloy being free from hydrocarbon gases which produce carbon-containing surface layers on the alloy and from oxidizing scale-forming gases, immersing in an alkali solution, and immersing in an acid solution which has a concentration insufficient to destroy the cold rolled finish.

1,859,699. RAILWAY DRAFT RIGGING. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 14, 1928. Serial No. 269,959. 4 Claims. (Cl. 213—50.)



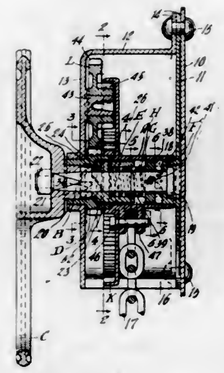
4. In a draft rigging for railway cars, the combination with draft sills and a coupler; of a horizontal U-shaped yoke member having the side arms thereof at the open end of the U provided with aligned coupler key receiving slots; a coupler key extending through the coupler shank and said yoke slots; supporting means carried by the outer end of the yoke member fixed to said side arms and engaging the under side of the coupler shank outwardly of said key connection; and guide means anchored to the draft sills, overlapping the rear end portion of the coupler shank in all operative positions of the latter and embracing the top and bottom sides thereof for preventing vertical displacement of the same.

1,859,700. COUPLER AND YOKE CONNECTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 14, 1930. Serial No. 467,796. 3 Claims. (Cl. 213—71.)



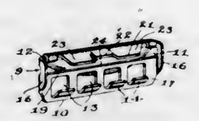
1. In a railway draft rigging, the combination with a coupler having a vertical key receiving slot in the shank thereof; of a yoke member having vertically alined, longitudinal guideways of greater width than said slot; a connecting element of oblong, transverse cross-section extending through and fitting the slot of the coupler shank, said connecting element having rounded bearing heads at opposite ends thereof engaging in said guideways respectively, said heads being of such a diameter as to fit said guideways, the head at the top end of said element being detachable, said yoke having an opening through which said element is insertible to engage the same with the coupler shank; and means for closing said last named opening and supporting the bottom head of said element to hold the parts assembled.

1,859,701. HAND BRAKE. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 8, 1930. Serial No. 494,293. 8 Claims. (Cl. 74—112.)



1. In a hand brake mechanism, the combination with a rotary brake tightening member; of a driving element connected thereto; a rotary manually actuated operating means rotatable in reverse directions; a rotary clutch member normally operatively connecting said operating means and driving element; means for opposing rotation of said clutch member during rotation of said operating means in brake tightening direction, including a retarding member rotatable with said clutch means and movable axially of the same and engageable with said fixed retarding means; spring means interposed between said retarding member and said clutch member for yieldingly holding said clutch member engaged and urging said retarding member toward the fixed retarding means; and cam means on said operating means cooperating with said clutch member, effective when said means is rotated in a direction reverse to the brake tightening direction for disengaging said clutch member to permit free running of the winding means.

1,859,702. BUCKLE FOR GARMENT SUPPORTERS. MICHAEL HAWIE, Bridgeport, Conn. Filed Dec. 29, 1931. Serial No. 583,762. 5 Claims. (Cl. 24—184.)

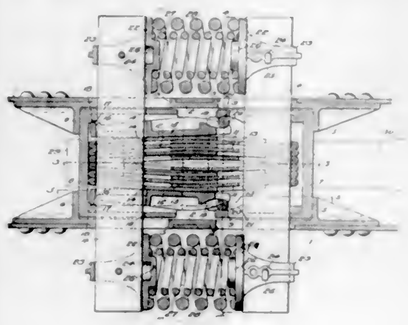


1. A garment support buckle including a back member adapted to be connected to one end of a web and having a slot for the passage of an intermediate portion of the web therethrough, and a lever fulcrumed to the back member and including an outer hand engaging portion and a rear web engaging portion, the latter being provided with a straight edge and a rearwardly extending lug, the edge of the lug coinciding with said straight edge.

1,859,703. FRICTION DRAFT GEAR. CYRUS J. HOLLAND, Chicago, Ill. Filed Mar. 6, 1926. Serial No. 92,849. 18 Claims. (Cl. 213—30.)

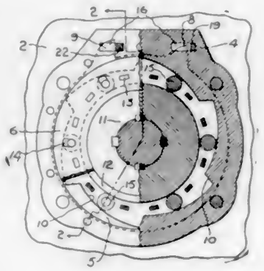
1. In a shock absorbing device, the combination of a flexible intercalated bowed plate friction resistance mem-

ber, a force applying member, means located outwardly of the resistance member for transferring energy from



the force applying member inwardly to the flexible friction resistance member, and means located outwardly of said resistance member for effecting release.

1,859,704. NONRETURN DEVICE. CHARLES DAVID JERMYN, North Vancouver, British Columbia, Canada. Filed Aug. 4, 1930, Serial No. 472,920, and in Canada Apr. 5, 1930. 2 Claims. (Cl. 192—4.)



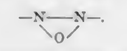
1. The combination with a motor vehicle transmission gear and drive shaft of a disc rigidly secured to said drive shaft, a casing, a plurality of cam surfaces equi-spaced formed on the inner surface of said casing and equi-distant from the drive shaft, roller carrying means mounted on opposite sides of said disc and in frictional contact therewith forming the sole means for causing the engagement or disengagement of the rollers with the cam surfaces depending upon direction of rotation of the drive shaft.

1,859,705. COMPOUNDS HAVING AN AFFINITY FOR COTTON. WERNER LANGE, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 8, 1930, Serial No. 466,592, and in Germany July 24, 1929. 15 Claims. (Cl. 260—69.)

1. As new products the compounds which have an affinity for cotton, are diazotizable on the fiber and are carboxylic acids of compounds of the general formula:

$H_2N—R—NH—OC—$phenyl$—$
$A—$phenyl$—CO—NH—R—NH_2$

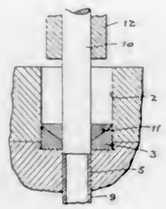
wherein R represents a radicle of a compound of the benzene series or a radicle of the naphthalene series, and A represents an atomic linkage of the group consisting of $—N=N—$ and



1,859,706. MANUFACTURE OF AZO-DYES. WERNER LANGE, Dessau-Ziebigk in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 6, 1930, Serial No. 486,866, and in Germany Oct. 16, 1929. 8 Claims. (Cl. 260—69.)

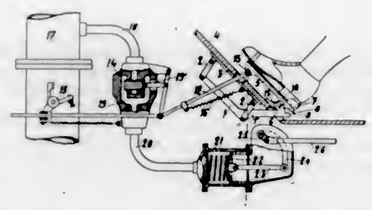
1. The process which comprises acting upon a nitrobenzoylated amino azo dye with a reducing agent which partially reduces the nitro groups and links together two molecules of the nitrobenzoylated dye with formation of an atomic linkage of the group consisting of azo and azoxy.

1,859,707. MEANS OF EXTRUDING METAL TUBES. JOHN WYCLIFFE LEIGHTON, Port Huron, Mich. Filed May 29, 1931. Serial No. 540,989. 1 Claim. (Cl. 207—3.)



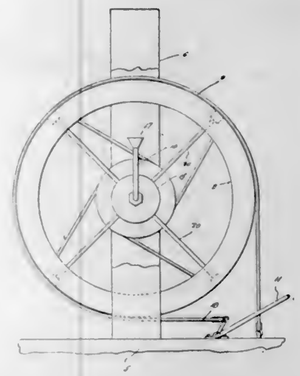
A means for forming tubes by extrusion, comprising a die having a constricted open bottom, an extrusion punch adapted to close the top of the die and to extrude a metal billet through the constricted opening in the bottom, an extrusion pin of less diameter extending through said punch into said opening, a piercing pin of the same transverse dimensions as the constricted opening in the die adapted to enter the die upon the removal of the extruding punch and to shear the tube from the flange remaining on its upper end, and a stripper adapted to remove the flange ring from the piercing pin on its outward movement from the die.

1,859,708. CONTROL OF BRAKING APPLIANCES OF MOTOR DRIVEN VEHICLES. BERNHARD LORMÜLLER, Zurich, Switzerland. Filed Oct. 24, 1930, Serial No. 491,037, and in Switzerland Oct. 31, 1929. 3 Claims. (Cl. 192—3.)



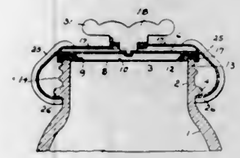
1. In an auxiliary power braking arrangement, in combination, a throttle, a valve for controlling said auxiliary power, a rod operatively connected to said throttle and to said valve for operating both, a foot rest to which said rod is linked, means for turnably mounting said foot rest on the foot board of a motor car, abutment means for limiting said turning motion of said foot rest, means adapted to permit a parallel displacement of said foot rest, abutment means for limiting said parallel movement of said foot rest, and spring means for returning said foot rest into the position of its maximum angular and parallel displacement.

1,859,709. BRAKE COOLING MEANS. WILLIAM D. MCINTYRE and JOSEPH DANCIGER, Amarillo, Tex. Filed June 11, 1931. Serial No. 543,686. 1 Claim. (Cl. 188—264.)



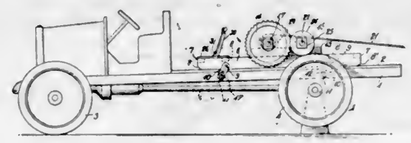
In a structure of the class described, in combination, a base, a bearing equipped frame mounted on said base, a shaft journalled for rotation in the adjacent bearing, said shaft being provided with a hollow portion constituting an oil containing reservoir, a stuffing box associated with said reservoir, an oil feed pipe connected with said stuffing box and in communication with said reservoir, a bull wheel mounted on said shaft, the periphery thereof being provided with circumferentially spaced pockets, delivery pipes connected with the reservoir and pockets, and a brake band embracing said bull wheel and mounted on said base.

1,859,710. BOTTLE OR JAR CAP. FERDINAND NEUBAUER, Brooklyn, Ohio, assignor of twenty-four and one-half per cent to Frank Forthaller and twenty-four and one-half per cent to Joseph Pazourek, Cleveland, Ohio. Filed Sept. 28, 1931. Serial No. 565,452. 5 Claims. (Cl. 215—86.)



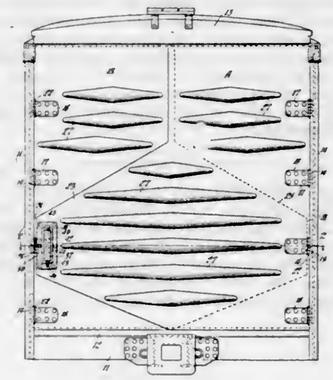
1. In a device of the character described a disc for closing the top of a jar or the like, a pair of jaw members having overlapping apertured ends, a jaw actuating member passing through said apertures and pivotally connected to said disc, said jaw members having interengaging longitudinally disposed ribs and recesses at their overlapping ends, and co-acting cam means on said jaw members and said actuating member for expanding and contracting said jaw members.

1,859,711. HAULING DEVICE. GEORGE E. NICHOLS, Abbeville, Ala., assignor, by direct and mesne assignments, to The Wonder Skidder Company, Inc., Abbeville, Ala., a Corporation of Alabama. Filed Mar. 31, 1930. Serial No. 440,351. 15 Claims. (Cl. 254—166.)



1. In combination with the driving means of a power device, a hauling device including a frame mounted on the power device, interconnected shafts journalled in said frame, a winding drum interchangeable between said shafts, and means for shifting the hauling device into and out of operative engagement with said driving means.

1,859,712. CAR DOOR CONSTRUCTION. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 21, 1930. Serial No. 430,182. 14 Claims. (Cl. 189—46.)



1. In an end door structure for railway cars, the combination with side walls of a car; of a pair of doors hinged along their outer edges to said side walls, said doors having, when closed, sections thereof overlapping, said overlapping sections approximating in width the width of the door opening.

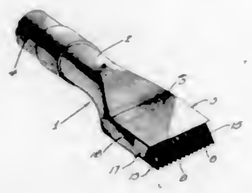
1,859,713. ARTIFICIAL BAIT. UZ C. PEMBERTON and JOSEPH B. JOHNSON, Tampa, Fla. Filed May 24, 1930. Serial No. 455,336. 1 Claim. (Cl. 43—46.)



A fish lure having a body tapering toward the longitudinal axis at each end and provided with a transverse slot located below and to the rear of the nose portion

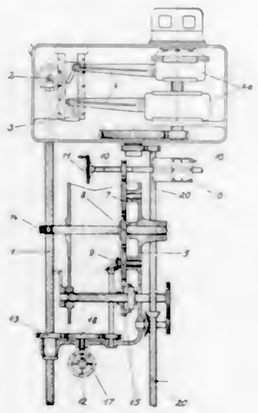
of the body and parallel to the longitudinal axis thereof, a two-plane plate bent intermediate its length to form planes at right angles, one part extending into said slot and projecting laterally upon either side of the body and the other part depending in a single plane below the body perpendicular to the longitudinal axis and a towing eye secured to the body on the central vertical longitudinal axis and substantially in the plane of said depending plate portion.

1,859,714. HAIR CLEANING DEVICE. FELIX R. RAPIDS, Chicago, Ill. Filed Apr. 18, 1930. Serial No. 445,419. 8 Claims. (Cl. 132—14.)



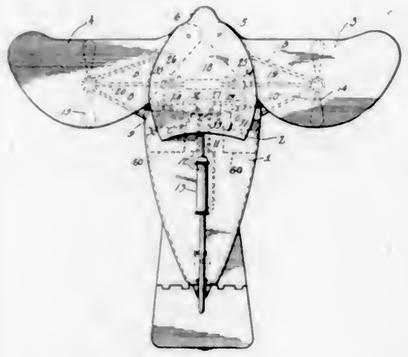
1. A pneumatic hair cleaning device comprising a hollow body portion having a plurality of narrow flat hollow teeth communicating therewith and provided with narrow elongated air inlet openings, said openings being so arranged as to be adapted to be placed substantially parallel and opposite the scalp, said hair cleaning device being adapted to be connected to the hose of an air suction device in a manner whereby the hair of the head may be drawn into said hollow body portion and subjected to an air suction.

1,859,715. ARRANGEMENT ON LATHES AND OTHER MACHINE TOOLS WITH DRIVE BY HYDRAULIC STEPLESS GEARINGS. MALTE RITTER, Magdeburg, Germany, assignor to Magdeburger Werk-Zeugmaschinenfabrik Aktiengesellschaft, Magdeburg, Germany. Filed May 20, 1930, Serial No. 454,116, and in Germany Apr. 24, 1930. 2 Claims. (Cl. 82—2.)



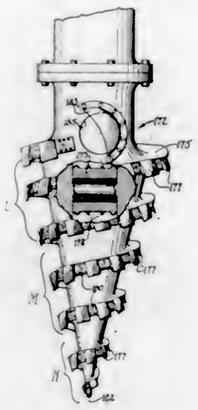
1. An arrangement on lathes and other machine tools with drive by hydraulic stepless gearing, comprising in combination a common adjusting element for said gearing, a plurality of intermediate elements between said adjusting element and said gearing, one of said intermediate elements adapted to be disengaged, an arrangement for face cutting connected to said adjusting element, and an arrangement for adjusting said hydraulic gearing independently of the position of the tool.

1,859,716. AIRPLANE. FRANK RUTRLE, Shelby, Mont. Filed Mar. 12, 1928. Serial No. 261,037. 2 Claims. (Cl. 244—15.)



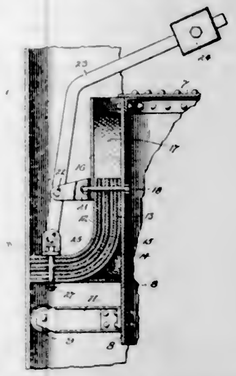
1. An airplane comprising a fuselage, wings pivotally secured thereto, propellers carried by the fuselage and arranged for rotation in a plane parallel to the wings, means for driving the propellers, compressed air actuated means for moving said wings about their pivots, an air compressor, and means operatively connecting said compressor with said first named means.

1,859,717. DRILLING AUGER. FRANK RUTRLE, Shelby, Mont. Filed Dec. 26, 1928. Serial No. 328,408. 7 Claims. (Cl. 255—69.)



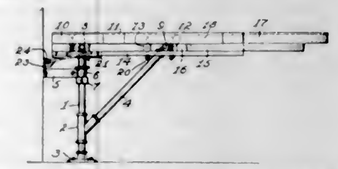
1. In a device of the type described, an auger provided with a spiral rib and having a groove cut therein, cutting teeth having portions arranged to be removably disposed within the groove, and spacing blocks disposed between the teeth.

1,859,718. GAS HOLDER. JOHN R. L. SANTOS, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1928. Serial No. 302,781. 4 Claims. (Cl. 48—176.)



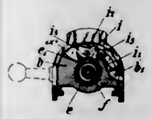
3. In a waterless gas holder, the combination of a shell; a piston movable in the shell to vary the effective volume thereof; a laminated annular seal of substantially L-shape in cross section one margin whereof is in edgewise contact with the shell; and means for feeding lubricant through said seal in the general direction of the laminæ.

1,859,719. SWINGING TABLE AND IRONING BOARD. HENRY C. SCHRAGE, West Point Township, Butler County, Iowa, assignor of one-half to Christ H. Riggert, Allison, Iowa. Filed Mar. 9, 1931. Serial No. 521,078. 2 Claims. (Cl. 68—10.)



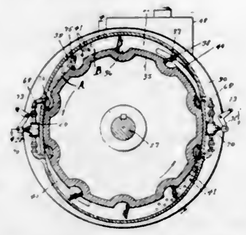
1. In combination, a table having an elongated shape, bars beneath said table at each side spaced transversely and rigidly connected at places to the table to leave side gaps therebetween, a rockable floor standard having an inclined forwardly and upwardly directed member, and said standard and member having at their upper ends lateral stems seated in said side gaps and between said bars, said table with said standard being adapted to swing laterally, and means for adjustably releasably anchoring said table in a desired angular position of swinging adjustment.

1,859,720. SAFETY DEVICE FOR FIREARMS HAVING A LONGITUDINALLY MOVABLE CLOSURE ELEMENT. LOUIS STANGE, Sommerda, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Dec. 11, 1931, Serial No. 580,393, and in Germany Sept. 11, 1931. 4 Claims. (Cl. 42—70.)



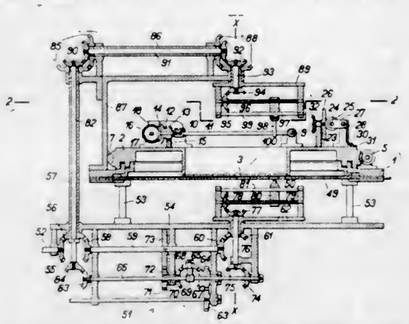
4. A safety device for firearms, comprising a longitudinally movable closure element, a casing for said element, a safety element mounted in said casing, and a handle portion for shifting said safety element and being completely withdrawn within the casing of the closure element when the safety element is in the non-safety position.

1,859,721. HYDRAULIC PUMP. ENOS STANLEY, Hackensack, Minn. Filed Apr. 26, 1927. Serial No. 186,701. 2 Claims. (Cl. 103—140.)



2. A hydraulic pump comprising a substantially oblong casing, a cylinder piston rotatively mounted within said casing, said piston being designed to fit contracted portions of said casing to divide it into a pair of cylinder chambers, the periphery of said piston being provided with a series of transversely arranged grooves, a pressure blade for each of said grooves, the forward edge of each of said pressure blades being pivotally connected to the forward edge of said groove and designed to swing outwardly by centrifugal force, the spacing of the grooves in said piston being such that a number of pressure blades may simultaneously engage the inclined surface of said oblong cylinder, a series of outlet openings arranged to simultaneously communicate with a number of the spaces between adjacent pressure blades, a spring actuated valve for each of said openings, and a compression chamber communicating with each set of outlet openings.

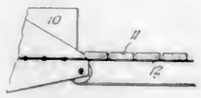
1,859,722. FIRE CONTROL APPARATUS. ADOLF STEINLE, Jena, Germany, assignor to N. V. Nederlandsche Instrumenten Compagnie, The Hague, Netherlands. Filed June 18, 1929, Serial No. 371,839, and in Germany June 22, 1928. 4 Claims. (Cl. 235—61.5.)



1. Apparatus for firing directors, for ascertaining the value and the direction of the horizontal component of the speed of an air craft, comprising a base plate, a plotting device of two members, a writing surface and a plotting pencil, of these two members the one being rigidly connected to the base plate and the other being movably disposed on the said base plate, means for moving this other member, a device consisting of a system of straight lines parallel to each other and being rotatably disposed on the base plate, an indicating device for indicating the position of this system relative to the base plate, a following device having two marks, means for coupling the

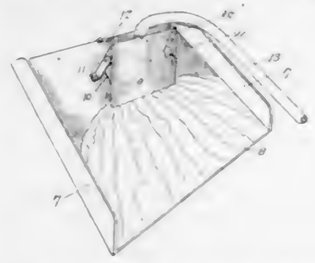
one of these two marks to the said other member of the plotting device, a driving gear, means for coupling this driving gear to the other of these two marks, a regulating mechanism provided between this driving gear and the said other mark and being adapted to regulate the speed which the driving gear imparts to the said other mark, and a second indicating device for indicating the speed which the said other mark has in each instance.

1,859,723. METHOD OF MANUFACTURING BUILDING BRICK. MERTON T. STRAIGHT, Des Moines, Iowa. Filed Jan. 2, 1930. Serial No. 417,859. 9 Claims. (Cl. 25—156.)



1. The method of forming building bricks which consists in first forming a brick of plastic material with a smooth surface, then drying to remove free moisture, then cutting one or more of its surfaces to remove the smooth surface, and then burning in the usual manner.

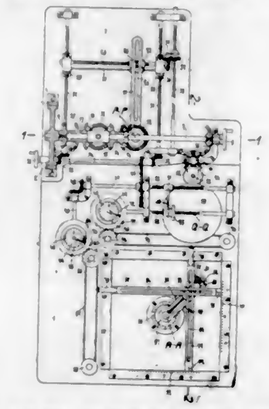
1,859,724. JUICE DISTRIBUTOR. ROBERT BROOKS TAYLOR, Kapaa, and BENJAMIN B. HENDERSON and OLAF R. OLSEN, Lihue, Territory of Hawaii. Filed Jan. 6, 1930. Serial No. 418,939. 6 Claims. (Cl. 299—74.)



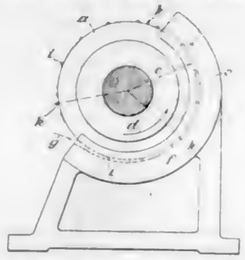
5. A juice distributor of the character described, comprising an inclined trough, a baffle plate mounted thereon so as to yieldingly bear on the trough with one edge thereof, and means for discharging the juice rearwardly of the baffle plate, the baffle plate being of less width than the trough so as to allow part of the juice to pass underneath the same and to cause the remainder of the juice to pass around the same.

1,859,725. FIRE CONTROL APPARATUS. SAMUEL JOHANNES VAN DEN BERGH, The Hague, Netherlands, assignor to the Firm N. V. Nederlandsche Instrumenten-Compagnie, The Hague, Netherlands. Filed July 19, 1926, Serial No. 123,515, and in Germany July 20, 1925. 1 Claim. (Cl. 235—61.5.)

Device for ascertaining the horizontal velocity of an aircraft, containing a sighting device which, for the purpose of following up the aircraft in elevation and azimuth, is so mounted on a base plate that it allows of being turned about a vertical and a horizontal axis, a cross slide system containing two slides whereof one is displaceably mounted on the said base plate and the other is mounted on the first slide in such a manner that it can be displaced perpendicularly to the direction of displacement of this slide, an arm being rotatable on the base plate and about an axis perpendicular to the plane determined by the directions of displacement of the said two slides, means for so coupling the said arm to the said other slide that a displacement of the two slides causes the arm to rotate about the said axis, means for so coupling the said arm to the sighting device that a rotation of the arm causes the said sighting device to turn about its horizontal axis of rotation, further means for displacing the said other slide in correspondence with the altitude of the aircraft, a speed indicator coupled to the said first slide and being provided with a pointer for indicating the velocity of displacement of this slide, a multiplication device coupled to the said sighting device and to the said first slide in such a manner that one of its parts is caused to move with a velocity proportional to the product of the angular velocity of the sighting device about its vertical axis of rotation and of the distance of the said first slide from its zero position in which the point in which the said arm engages the said other slide lies in a plane which contains the axis of rotation of the said arm and is parallel to the direction of displacement of the said other slide, another speed indicator coupled to the said part and being provided with a pointer for indicating the velocity of the movement of this part, each of the said two speed indicators being provided with a following pointer adjustably arranged in such a manner that it can be kept in coincidence with the pointer of the respective speed indicator, a device for determining a vector by means of two components which are perpendicular to each other, this device containing two carriage-guides directed perpendicularly to each other, two sliding carriages displacably supported in these guides, an arm supported rotatably about an axis perpendicular to the directions of displacement of the two sliding carriages, a slide displaceable along this arm, the slide engaging in the two sliding carriages, and means adapted to couple each of the two sliding carriages to one of the said two following pointers.

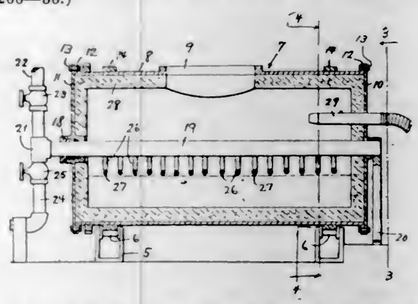


1,859,726. APPARATUS FOR THE MANUFACTURE OF BRAKE LININGS AND THE LIKE. ALFRED VON DOSKY, Plauen, Germany. Filed Apr. 4, 1930, Serial No. 441,686, and in Germany Apr. 30, 1929. 2 Claims. (Cl. 18—5.)



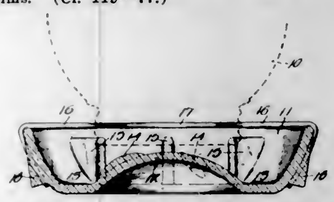
1. An apparatus for producing brake bands, linings or the like from an endless band comprising a rotary drum having a circumferential curvature substantially equal to the curvature of the finished brake lining; a U-shaped housing partly and concentrically surrounding the periphery of the drum and spaced therefrom to accommodate the band; and a plurality of projections on the periphery of the drum adapted to aid in forcing the band through the space between the drum and the housing and to mark the band to indicate the exact locations for the securing perforations.

1,859,727. COPPER TREATING FURNACE. WILLIS J. BENSON and LOUIS M. DESAMAIS, Douglas, Ariz. Filed June 9, 1931. Serial No. 543,198. 2 Claims. (Cl. 266—36.)



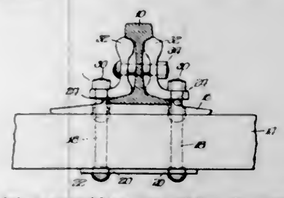
1. A metal treating apparatus of the character described comprising a cylinder having an opening in the top thereof, said cylinder being horizontally disposed, a hollow shaft upon which the cylinder is swingably mounted, nozzles projecting from the hollow shaft at points within the cylinder, and steam and air pipes, each provided with a valve, connected to the said hollow shaft.

1,859,728. CHICKEN FEEDER. EDWIN W. BOYER, Thorntown, Ind. Filed Mar. 11, 1929. Serial No. 346,180. 2 Claims. (Cl. 119—77.)



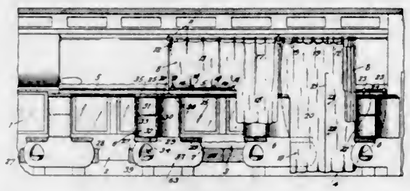
1. A chicken feeder comprising a supporting base provided on its outer edge with opposite outwardly projecting lugs, said lugs extending downwardly in close proximity to the bottom of said base, and an elongated jar holding member formed of an endless piece of wire, the ends of which are turned down to snap over said lugs on the base for securing a jar to said base, substantially as set forth.

1,859,729. RAIL JOINT. JOHN BRUNNER, Chicago, Ill. Filed June 12, 1930. Serial No. 460,668. 3 Claims. (Cl. 238—210.)



1. A rail joint assemblage comprising, in combination, a tie plate adapted to underlie the base flanges of the rails forming the joint, splice bars extending on opposite sides of the webs of the rails forming the joint, and means securing the splice bars against excessive movement relatively to the tie plate, said means comprising bolts extending completely through alined openings in the splice bars, the tie plate and the tie.

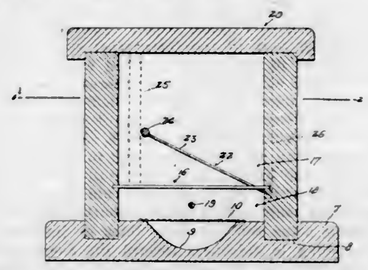
1,859,730. SLEEPING CAR. TRIMBLE DE ROODE, New York, N. Y. Original application filed June 13, 1924, Serial No. 719,772. Divided and this application filed Apr. 18, 1930. Serial No. 445,369. 26 Claims. (Cl. 105—315.)



1. In a car, the combination with a row of upper and lower berth spaces in superposed staggered relation, of berths in said spaces disposed longitudinally of the car with each lower berth overlapped substantially throughout its length by portions of two upper berths, there being a standing space for each upper and for each lower berth disposed adjacent to one another in a row alongside of said berths, the standing space of each upper berth extending down alongside of the side of a lower berth space, the standing space of each lower berth extending up alongside of the sides of two upper berth spaces, and partitions for forming and separating said standing spaces from one another.

2. In a car, the combination with a row of upper and lower berth spaces in superposed staggered relation, of berths in said spaces disposed longitudinally of the car with each lower berth overlapped substantially throughout its length by portions of two upper berths, there being a standing space for each upper and for each lower berth disposed adjacent to one another in a row alongside of said berths, the standing space of each upper berth extending down alonside of the side of a lower berth space, the standing space of each lower berth extending up alongside of the sides of two upper berth spaces, and partitions for forming and separating said standing spaces from one another and for separating the standing spaces of the upper berth spaces from the lower berth spaces and for separating the standing spaces of the lower berth spaces from the upper berth spaces.

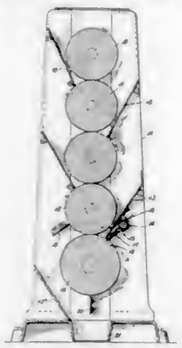
1,859,731. CIGARETTE MENTHOLATOR. EDNA L. ELLIOTT, Columbus, N. Mex. Filed Feb. 27, 1931. Serial No. 518,865. 2 Claims. (Cl. 131—30.)



1. In a combination humidor and medicament applicator of the class described, a base, a receptacle hinged thereto, said base being provided with a medicament well, a horizon-

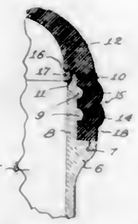
tal open-work grate in said receptacle dividing it into upper and lower compartments, moistening means in the lower compartment, said upper compartment being adapted to contain cigarettes in perpendicular stacked relationship, a hingedly mounted top for said receptacle, and a swingable follower in the receptacle adapted to aid in holding the cigarettes in perpendicular positions and to also aid in feeding the cigarettes into close contact with one another.

1,859,732. HUMIDITY CONTROL FOR COOKING HEATERS. MICHAEL WILLIAM FAHERTY, Van Nuys, Calif. Original application filed Nov. 7, 1923, Serial No. 673,398. Divided and this application filed Jan. 29, 1930. Serial No. 424,434. 2 Claims. (Cl. 87—6.)



1. In an apparatus for introducing moisture into oil bearing material, upper and lower pressure rolls mounted so that one rests upon the other, means for feeding the material between said rolls, and means for forming a continuous film of liquid on the ascending surface of the lower roll in advance of the line where the material comes in contact with the lower roll.

1,859,733. NURSING BOTTLE. LYNN FORT, Atlanta, Ga. Filed Apr. 29, 1930. Serial No. 448,334. 1 Claim. (Cl. 215—11.)



In a nursing bottle, the combination of a glass main receptacle with a soft rubber nipple removably mounted over the mouth part of the receptacle; said receptacle being cylindrical in shape and provided with an exterior annular shoulder on the upper part thereof, that part of the receptacle above the annular shoulder having an exterior screw-thread, and a rim projecting from the edge of the mouth part of the receptacle, said rim being of less thickness than the cylindrical wall to provide an annular seat on the inner face of said wall at the edge of the mouth part of the receptacle; and said nipple being of a semi-globular shape with a central mouth-piece, the wall of the nipple being comparatively thick at its base part and diminishing in thickness toward the mouthpiece to impart flexibility in the wall adjacent to the mouthpiece, the nipple being seated on the exterior annular shoulder of the receptacle and the thick base part thereof being provided with an interior thread to engage the exterior thread of the adjacent cylindrical wall of the receptacle, and a flange on the inner face of the thick base part extending inside of the said rim and abutting the annular seat at the edge of the mouth part of the receptacle.

1,859,734. METHOD OF REMOVING OXIDE COATINGS FROM METALS. HARRY S. GEORGE, Massapequa, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Dec. 21, 1928. Serial No. 327,756. 14 Claims. (Cl. 148—8.)

1. The method of removing surface oxides from ferrous articles which comprises subjecting the same to an alkaline bath containing an oxidizing agent and to an acid bath.

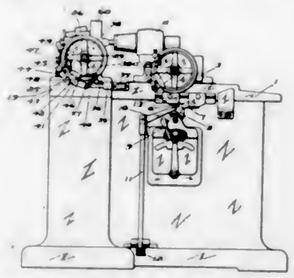
1,859,735. FINISHED IRON-CHROMIUM ALLOY ARTICLE AND METHOD OF MAKING THE SAME. HARRY S. GEORGE, Massapequa, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Dec. 21, 1928, Serial No. 327,757. Renewed Nov. 23, 1931. 12 Claims. (Cl. 148—4.)

3. An annealed iron-chromium alloy containing 8% to 40% chromium and carbon not in excess of .3% and having an unpolished unetched hot rolled surface finish free from surface oxides.

1,859,736. METHOD OF CLEANING METAL ARTICLES. HARRY S. GEORGE, Massapequa, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed June 19, 1929. Serial No. 372,222. 2 Claims. (Cl. 148—8.)

2. The method of removing coatings of hot rolled scale from alloy articles that consist largely of iron and chromium which comprises pickling in a solution containing about 10 grams per liter of concentrated hydrochloric acid and about 50 grams per liter of concentrated nitric acid at about 70° C.

1,859,737. GRINDING MACHINE. WALDO J. GUILD, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 25, 1928. Serial No. 280,609. 9 Claims. (Cl. 51—39.)

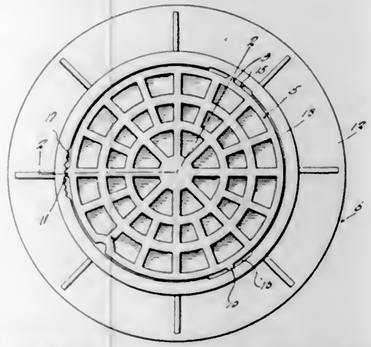


1. In a machine of the class described, the combination with a plurality of work holding and work-rotating rolls, of a driving roll, a pivotal mounting for said driving roll whereby it may be caused to approach towards or recede from the other rolls for the insertion or discharge of a workpiece, and a further pivotal mounting for said roll whereby said driving roll may be inclined to the axis of rotation of a workpiece to produce an end thrust on the latter, or placed in parallelism therewith to facilitate loading of workpieces.

1,859,738. PROCESS OF MANUFACTURING FERTILIZERS. ERLING JOHNSON, Odda, Norway, assignor to the Firm Odda Smelteverk A/S, Odda, Norway. Filed Sept. 24, 1930, Serial No. 484,242, and in Norway Sept. 28, 1929. 4 Claims. (Cl. 71—7.)

1. Process of manufacturing universal fertilizers from phosphate rock and potassium salts, comprising dissolving phosphate rock in nitric acid to form a solution, crystallizing calcium nitrate from said solution, separating the nitrate crystals from the mother liquor, converting the calcium nitrate by means of potassium salts into potassium nitrate, mixing a convenient portion of the potassium nitrate with the mother liquor from the crystallization of calcium-nitrate, drying the product.

1,859,739. MANHOLE CLOSURE. JAMES P. KEATING, Neenah, Wis., assignor to Neenah Foundry Company, a Copartnership composed of E. J. Aylward and J. P. Keating, Neenah, Wis. Filed Jan. 14, 1931. Serial No. 508,766. 4 Claims. (Cl. 94—34.)

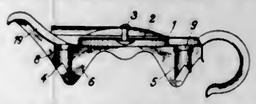


1. In a structure of the class described, in combination, a frame including a circular rim having a seating ledge, a portion of the rim above said ledge being provided with a recess and a lid seatable on said ledge and provided with a tooth engageable with the recess whereby portions of the lid are pressed against portions of the rim when the tooth is inserted in the recess and rotary movement of the lid is prevented.

1,859,740. TREATMENT OF COFFEE. DANIEL JOSEPH KENNEDY, Vancouver, British Columbia, Canada. Filed May 28, 1930. Serial No. 456,819. 3 Claims. (Cl. 99—11.)

1. The process of treating coffee which consists of subjecting the green berries to ultra violet rays until the caffeine is neutralized, of roasting the coffee and of coating the roasted coffee while in a heated condition with cocoa.

1,859,741. POURING AND CLOSING LID FOR MILK TINS. FRIEDRICH KLAPPERSTÜCK, Berlin-Friedenau, Germany. Filed Jan. 3, 1930, Serial No. 418,346, and in Germany Dec. 6, 1928. 4 Claims. (Cl. 220—51.)

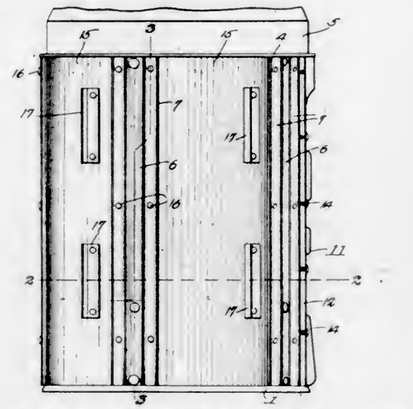


1. A pouring and closing lid for milk tins, comprising in combination a lower lid, an upper lid rotatable in relation to said lower lid, two tubular pins on said lower lid having each a long and a short point with angular recessed cutting edges of different heights extending one on each side of and connecting said points adapted to penetrate into the milk tin and to partially sever and bend over the portion of the tin head within said tubular pins, a spout on said lower lid, and closing elements mounted on said upper lid adapted to close the openings of said tubular pins, said lid being adapted to be pressed onto a tin thereby enabling said tin to be used as a milk jug.

1,859,742. PRODUCTION OF NITROGENOUS DYESTUFFS. MAX ALBERT KUNZ, Mannheim, and KARL KÖBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 16, 1928, Serial No. 254,891, and in Germany Feb. 18, 1927. 2 Claims. (Cl. 260—61.)

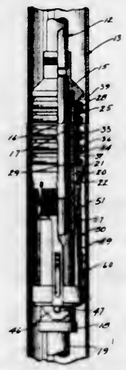
1. As new articles of manufacture, nitrogenous vat dyestuffs in which a pyranthrone radicle is combined with at least two anthraquinone radicles by nitrogen linkages.

1,859,743. FURNACE CONSTRUCTION. JAMES MERRYWEATHER, Greencastle, Ind., assignor of forty per cent to James G. Campbell, Greencastle, Ind. Filed Jan. 25, 1930. Serial No. 423,425. 1 Claim. (Cl. 126—114.)



A casing for heating furnaces including parallel sheet metal bars each having longitudinal side folds providing a longitudinal channel and a longitudinal guide flange forming an extension of one wall of the channel, rings connecting the ends of the bars, flexible metal panels bearing inwardly against the rings and flanges and projecting into channels in the bars at the sides of the panels, perforating means extending through both walls of each channel and through the panel in the channel, for holding the panel against outward flexing relative to the rings, and means for flexing the panels outwardly to release them from the channels when freed from the holding means.

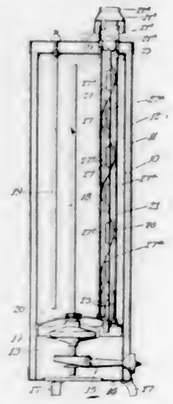
1,859,744. PACKER FOR OIL WELLS. GERHARD MEYER, Los Angeles, Calif. Filed Jan. 26, 1929. Serial No. 335,288. 15 Claims. (Cl. 166—12.)



1. In a packer, the combination of: a sleeve; a head member on said sleeve, said head member providing a pri-

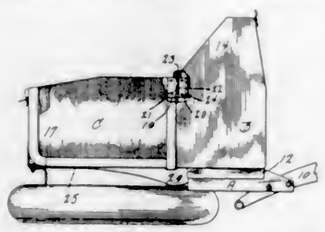
mary surface; a foot member movable on said sleeve toward said head member, said foot member providing a secondary surface; a plurality of flexible packing rings around said sleeve and between said head and foot members; and a spacing ring between adjacent packing rings, said spacing ring providing primary and secondary surfaces which are complementary to said primary and secondary surfaces of said head and foot members and engageable therewith after said packing rings are sufficiently compressed, and said packing and spacing rings being formed larger in diameter than said sleeve in a manner to provide a by-pass opening therebetween.

1,859,745. FLUE STRUCTURE FOR HEATING APPARATUS. JAMES P. MORLEY, Michigan City, Ind., assignor to Bastian-Morley Company, La Porte, Ind., a Corporation of Indiana. Filed Feb. 25, 1928. Serial No. 257,060. 9 Claims. (Cl. 122—17.)



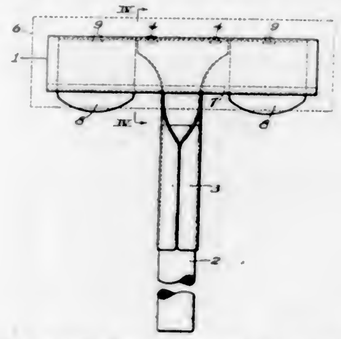
1. In a heating apparatus embodying a combustion chamber having a flue leading from the combustion chamber and a burner therein, means for directing said gases in a spiral-like course through said flue, and means for by-passing some of said gases from said spiral-like course in a direct central course part of the distance through said flue when restriction is offered to the flow through the irregular course.

1,859,746. COMBINATION TRUNK AND LUGGAGE CARRIER. CECIL H. MYERS, Sioux City, Iowa, assignor to The Gabriel Karl-Keen Company, Sioux City, Iowa, a Corporation of Delaware. Filed Dec. 5, 1928. Serial No. 323,938. 2 Claims. (Cl. 224—29.)



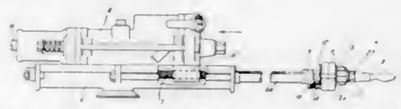
1. In a combination trunk and luggage carrier, a fixed trunk member, having a bottom wall and having an opening at the rear, a platform upon which said fixed trunk member is supported, said platform including a horizontal crosabar, a movable trunk member hinged to the fixed trunk member near the rear extremity of the bottom wall, said crossbar having a vertical face spaced inwardly from the rear extremity of said bottom wall, and means projecting from the movable trunk member, extending beyond the hinge, and adapted to engage beneath said bottom wall and against the vertical face of said crossbar when the movable trunk member is in a position removed downwardly from its normal position, to limit downward movement of the trunk member.

1,859,747. WALL PAPER CLEANER. HERBERT S. NEALE, Pittsburgh, Pa. Filed Feb. 9, 1931. Serial No. 514,383. 2 Claims. (Cl. 15—219.)



1. A wall cleaning device comprising a substantially V-shaped backing bar, a ferrule rigidly secured to the midportion of the bar in the valley formed by its converging sides, substantially V-shaped plate spring clips rigidly secured in said valley to the bar near each end and projecting beyond the lips thereof to form finger grips, and a cleaning element adapted to be wrapped around the bar and to have its edges clamped between the spring clips and the adjacent edges of the bar.

1,859,748. ROCK DRILL MOUNTING. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 13, 1929. Serial No. 346,532. 9 Claims. (Cl. 255—45.)

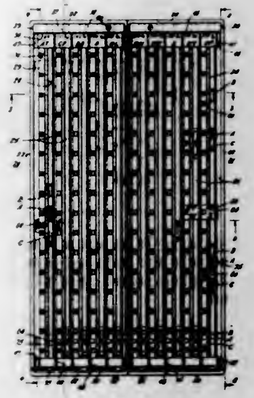


1. In a guide shell mounting for drilling machines having a feed screw, a gear case journalled on said screw, gearing within said case, a crank handle for actuating said screw through said gearing, and means for effecting a connection between said case and said screw whereby they rotate together or a connection between said case and said mounting whereby said case remains stationary relative to said screw and handle.

1,859,749. NONCORROSIVE METAL AND ARTICLE MADE THEREFROM. FELIX NICODEMO, New York, N. Y., assignor to Indestructible Alloy Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 9, 1929. Serial No. 412,918. 5 Claims. (Cl. 75—1.)

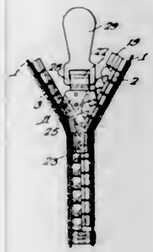
5. As a new article of manufacture, an alloy mixture comprising antimony and tin in substantially equal parts and rendered inactive to corrosion by including decomposition products of silver nitrate and copper sulfate formed at substantially the lowest melting point of the alloy comprising the antimony and tin content.

1,859,750. INDICATING DEVICE. FRANK M. PRATT, New York, N. Y. Filed Mar. 18, 1931. Serial No. 523,506. 19 Claims. (Cl. 116—135.)



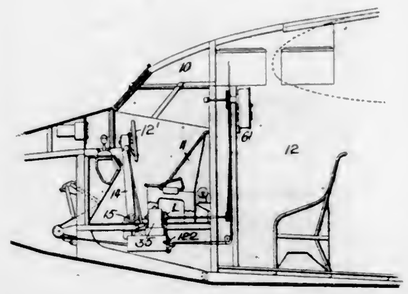
1. An indicating device comprising a guideway having a scale for showing increments in price fluctuations, a movable tab mounted on the scale for indicating on the scale the opening price, and three slides in said guideway for indicating respectively the high, low and present or last prices, said slides having pointers movable in a path independent of the path of movement of the tab.

1,859,751. SLIDABLE FASTENING DEVICE. JOHN A. H. SIERS, Jersey City, N. J. Filed July 22, 1931. Serial No. 552,314. 8 Claims. (Cl. 24—205.)



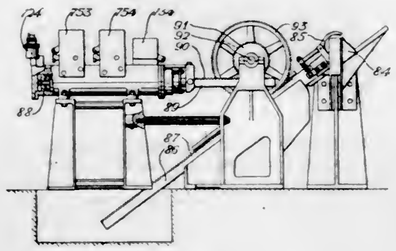
1. In a fastening device for flexible material, including a slider and comprising two series of interlocking elements, one series of said elements being provided with enlarged heads and the other series being provided with openings through which said heads may pass when said elements are separated from each other, the improvement which comprises providing said elements with substantially flat portions so positioned as to lie adjacent each other when the opposite elements are in engagement, said flat portions forming transverse flanges which are engaged by said slider to cause the respective elements of said series successively to engage and disengage each other.

1,859,752. AUTOMATIC CONTROL OF AIRCRAFT. ELMER A. SPERRY, Jr., Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 29, 1928, Serial No. 289,109. Renewed Sept. 19, 1931. 12 Claims. (Cl. 244—29.)



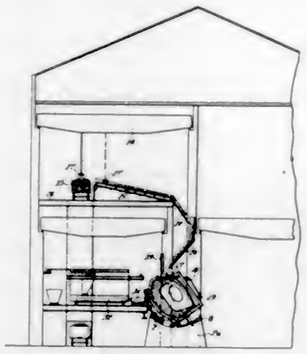
1. In an automatic control device for aircraft having ailerons and a rudder, means responsive to deviations from a predetermined course, means controlled by said deviation-responsive means for actuating said rudder to restore the craft to said course, means responsive to lateral inclination of the craft, means controlled by said inclination-responsive means for actuating said ailerons to restore the craft to horizontal position, and means whereby said aileron-actuating means actuates said rudder-actuating means.

1,859,753. METAL EXTRUDING APPARATUS. DAVID L. SUMMEY, Waterbury, Conn. Original application filed Feb. 20, 1928, Serial No. 255,644. Divided and this application filed June 21, 1929. Serial No. 372,575. 57 Claims. (Cl. 207—2.)



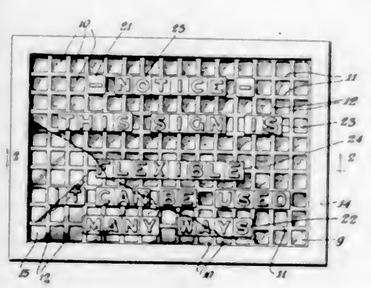
1. In an extrusion press, and in combination, a main ram having an extruding plunger, a container having a billet-receiving chamber, a die, an extrusion mandrel, means for positioning a pierced billet outside of the container chamber in alignment therewith, means for advancing the mandrel through the billet to support the same and further to insert its end in the mouth of the die, and means for advancing the main ram to enter the billet into the container chamber and further to extrude the billet into the form of a tube.

1,859,754. OPEN-HEARTH FURNACE AND APPARATUS FOR CHARGING THE SAME. FOLKE W. SUNDBLAD, Steubenville, Ohio. Filed Aug. 1, 1930. Serial No. 472,252. 5 Claims. (Cl. 263—10.)



1. An open-hearth steel furnace, means for tilting the same from a horizontal operating position through an arc of not more than sixty degrees to a charging position, and a charging door located in the side of said furnace at such an angle with the horizontal when the furnace is in its operating position that it will assume a substantially horizontal position above the furnace when the same is tilted into its charging position.

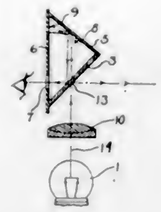
1,859,755. SIGNBOARD OUTFIT. ANDREW THOMPSON, Niagara Falls, N. Y., assignor to The Embossing Company, Albany, N. Y., a Corporation of New York. Filed Sept. 16, 1931. Serial No. 563,010. 6 Claims. (Cl. 40—142.)



1. A letter block for a sign outfit comprising a board having a plurality of square recesses which are separated by raised strips and letter blocks to be engaged by said strips, said block having four projections on its under surface arranged in a square whose dimensions correspond with those of a recess, the projections being spaced from each other a distance corresponding to the width of the raised strips on the board.

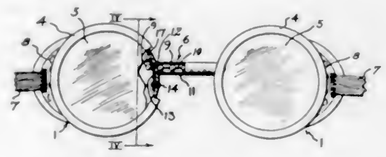
1,859,756. EYE EXAMINING INSTRUMENT. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Mar. 25, 1929. Serial No. 349,743. 5 Claims. (Cl. 88—20.)

1. In a device of the character described, a source of light, a transparent reflector positioned in line with the source of light having transparency throughout its area to produce a wide field of vision therethrough and to eliminate false shadows from the test, a polished black reflector positioned at an angle with the transparent reflector, a dull reflector so positioned that light coming through the transparent reflector will strike the polished reflector and a reduced amount of said light be reflected



towards said dull reflector to be again reduced upon reflection therefrom, towards the polished reflector and thereby reduced to a negligible degree prior to its reaching the eye of the examiner.

1,859,757. OPHTHALMIC MOUNTING. GEORGE L. TULLY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Mar. 21, 1931. Serial No. 524,303. 10 Claims. (Cl. 2—14.)



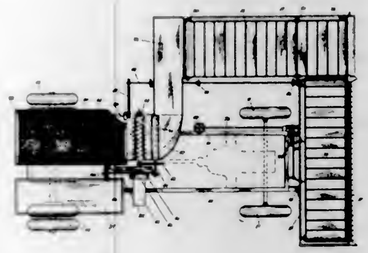
1. In a device of the character described, an eyecup having an opening on its nasal side, a bridge member having an end extending through the opening in the eyecup and a pivoted lock member engaging the end of the bridge extending into the eyecup to hold the bridge end against withdrawal from the opening.

1,859,758. LOUD SPEAKER. ROELOF VERMEULEN, Eindhoven, Netherlands, assignor to The Radio Corporation of America, New York, N. Y., a Corporation of New York. Filed Oct. 20, 1926, Serial No. 142,847, and in the Netherlands Oct. 21, 1925. 14 Claims. (Cl. 181—31.),



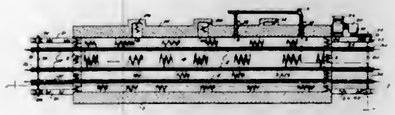
1. A loudspeaker comprising a diaphragm and a plurality of acoustic chambers in front of said diaphragm and immediately adjacent thereto, each of said chambers having a separate opening to the free air.

1,859,759. COMBINE. RALPH S. WALTERS, Grant, Nebr. Filed Mar. 17, 1930. Serial No. 436,611. 2 Claims. (Cl. 56—21.)



1. In combination, an automobile truck and a harvester attachable to and detachable from said truck as a unit, said harvester including a cutter frame releasably secured to said truck to project forwardly therefrom, a conveyor on said cutter frame for carrying the cut grain laterally, a second conveyor for receiving the cut grain from the first said conveyor and for carrying the cut grain rearwardly and upwardly, said second conveyor being positioned to one side of said truck and spaced therefrom, thrashing mechanism on the rear portion of said truck, a chute for conducting the cut grain from said second conveyor to said thrashing mechanism, a grain bin on said truck, means for delivering the thrashed grain to said grain bin, and means for discharging the chaff from said thrashing mechanism during the travel of said truck.

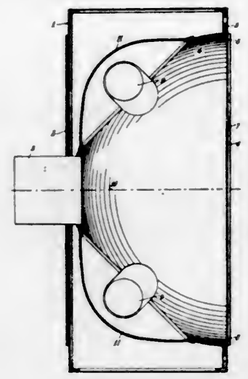
1,859,760. HEATING FURNACE. JOHN F. BEANS, Massillon, Ohio. Filed July 13, 1928. Serial No. 292,534. 3 Claims. (Cl. 263—S.)



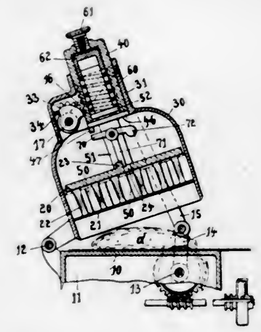
1. In a continuous furnace, a hearth provided with a longitudinal slot, a conveyor for carrying material through the furnace, T-shaped material carrying plates on the conveyor extending through said longitudinal slot, the shank portion of each plate being parallel to the direction of travel of the conveyor, and the head portion of each plate being twisted at an angle to the shank and overlapping the head portions of adjacent plates, and the head portion of each plate projecting above the furnace hearth.

1,859,761. OPAQUE PROJECTION SYSTEM. AUGUST H. BLOHM, Orange, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1927. Serial No. 180,413. 10 Claims. (Cl. 88—24.)

1. An opaque projection system comprising an objective adapted to receive rays of light from the face of an opaque object and to project said rays upon a screen, a source of light disposed between said object and said objective, a reflector disposed behind said source to direct rays of light to said object, and a second reflector surrounding said first reflector and adapted to receive rays of light deflected from said object and to reflect them back to said object.



1,859,762. DOUGH DIVIDING MACHINE. PETER BLUM, Halle-on-the-Saale, Germany. Filed Sept. 8, 1931, Serial No. 561,563, and in Austria Sept. 8, 1930. 6 Claims. (Cl. 107—20.)

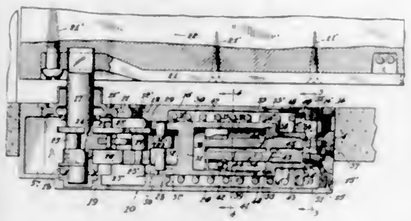


1. In a dough dividing machine of the type set forth, the combination with a platform supporting the dough, of a pressing plate for spreading out the dough on said platform, a cutting member for dividing the spread out dough into pieces, a reciprocating shaft to which said cutting member is attached, an actuating member with which the said shaft is resiliently connected and locking means cooperatively interengaging the said pressing plate and the cutting member and being responsive to retrogressive movements of the latter relatively to the progressing actuating member, so as automatically disengage the pressing plate from the cutting member when the dough has been fully spread out and is under pressure.

1,859,763. DOOR CHECK AND CLOSER. EMIL BOMMER, Brooklyn, N. Y. Filed Apr. 17, 1930. Serial No. 444,970. 8 Claims. (Cl. 16—55.)

1. A device of the character described having, in combination, a case, a stationary stem body, a movable cylin-

der slidably embracing the stem body and forming a liquid checking chamber therewith, a sleeve movable with the cylinder and forming a by-pass chamber with the stem body, spring means normally urging the cylinder and sleeve to one terminal of movement, said stem body having by-pass channels therein adapted to establish



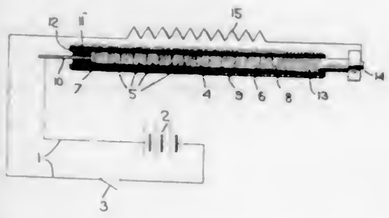
and disestablish communication with the by-pass chamber, one of said channels being in communication with the liquid checking chamber and the other being in communication with the interior of the case, and a regulating valve for the channel that is in communication with the interior of the case.

1,859,764. MAGNETIC DEVICE. GEORGES H. BOUGON, San Francisco, Calif. Filed Jan. 19, 1931. Serial No. 509,736. 10 Claims. (Cl. 172—290.)



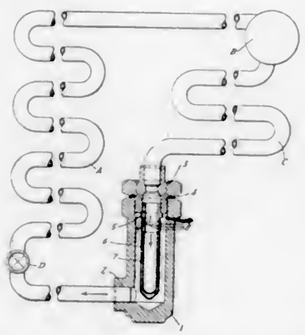
2. In a magnetic device of the character described, the combination of a row of U-shaped magnets arranged in a straight line in contact with each other and in the same positions with respect to polarity, a second row of magnets similar to said first row disposed in a plane parallel with the plane of said first magnets and in spaced and staggered relation therewith, and a freely movable member of magnetic material disposed between said rows of magnets adapted to move therebetween in response to magnetic forces exerted thereupon by said magnets.

1,859,765. THERMOSTATICALLY CONTROLLED ELECTRIC CIRCUIT. ARTHUR C. BURLEIGH, Wellesley, Mass. Filed Aug. 16, 1928. Serial No. 300,083. 1 Claim. (Cl. 201—51.)



The combination with an electric circuit, of a heating coil therein and means for controlling the operation of the heating coil comprising a tubular member of heat-conducting material situated adjacent the heating coil and adapted to be heated thereby and therefore expanding and contracting in response to variations in its temperature due to heat received from the heating coil, two terminals carried by said tubular member and connected in series in said circuit, one of said terminals being insulated from the tubular member, a plurality of resistant blocks within the tubular member and situated between and held under pressure by the terminals, one of the terminals being adjustable toward and from the other to vary the pressure of the resistant blocks and correspondingly to vary the resistance of the circuit.

1,859,766. FILTERING APPARATUS FOR REFRIGERATING SYSTEMS. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed July 24, 1928. Serial No. 294,998. 7 Claims. (Cl. 62—115.)



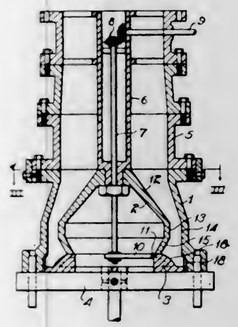
3. In a refrigerating system having a compressor, a condenser, an expansion valve and an evaporator connected together to form a closed cycle system, a filter device interposed between said condenser and said valve providing a dense porous extraction member through which the circulated liquid is caused to pass, and means continuously by-passing around said member the gaseous products of said condenser to enable the system to operate on the vapor-gas principle.

1,859,767. FUSE PULLER. BENJAMIN DOWICK, Jersey City, N. J. Filed July 7, 1930. Serial No. 465,821. 6 Claims. (Cl. 81—3.8.)



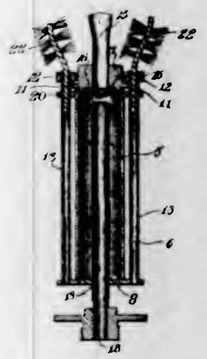
1. A fuse puller having the combination with a handle, of a pair of oppositely disposed hooks projecting from said handle being spaced apart to permit insertion between them of a fuse, said hooks being adapted to embrace the fuse when imparting a fractional turn to said handle about its longitudinal axis while said fuse is between the hooks, and a pin projecting from said handle and located between said hooks being adapted to pierce the fuse when it is embraced.

1,859,768. METHOD OF MOLDING HOLLOW CLAY BODIES. MAXWELL GERSON DUMAS, Pittsburgh, Pa. Filed Feb. 15, 1929. Serial No. 340,218. 2 Claims. (Cl. 25—156.)



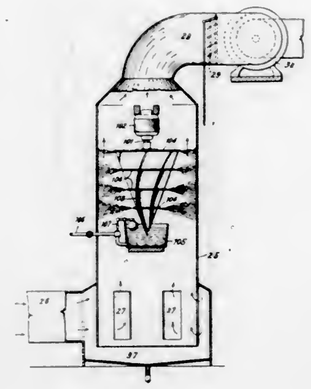
1. The method of forming hot tops which comprises molding and extruding the main body portion thereof, molding the top portion separately, placing said portions in intimate contact and joining said portions to form an integral hot top structure.

1,859,769. DISHWASHING DEVICE. CHARLES F. FITTER, Coscob, Conn. Filed Aug. 5, 1927. Serial No. 210,764. 2 Claims. (Cl. 15—128.)



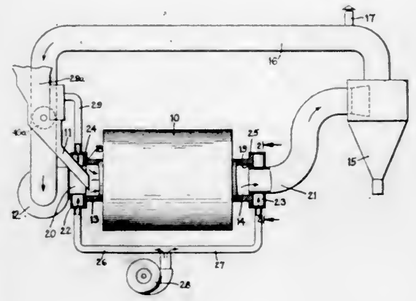
1. A hand nozzle of the character described for playing a stream of hot water comprising a body member having a water passage therethrough, heads for said body, and a plurality of tubes connected to said heads, surrounding and spaced from said body member to hold said heads and to provide an air insulated hand hold.

1,859,770. VAPORIZER. WALTER L. FLEISHER, New York, N. Y., assignor to The Cooling & Air Conditioning Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 8, 1928. Serial No. 252,760. 4 Claims. (Cl. 299—63.)



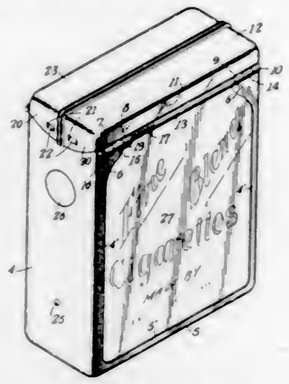
1. A vaporizer comprising a solid conical body means for supporting the same and for rotating it about its axis at atomizing peripheral velocity and rifling upon its exterior extending from the apex toward the base said rifling comprising a series of grooves terminating in various planes and means for supplying liquid to the apex.

1,859,771. JOINT SEAL. HARLOWE HARDINGE, York, Pa., assignor to Hardinge Company, Incorporated, York, Pa., a Corporation of New York. Filed Jan. 4, 1930. Serial No. 418,482. 23 Claims. (Cl. 83—9.)



1. The combination with a rotary unit having a chamber, a relative non-rotatable conduit opening in the said chamber and blower means controlling pressure within said chamber through said conduit, means including a chamber surrounding the joint of said rotary unit with said conduit, and means to maintain pressure within the last named chamber above that within the conduit.

1,859,772. CIGARETTE CASE. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Sept. 27, 1929. Serial No. 395,486. 2 Claims. (Cl. 206—41.)



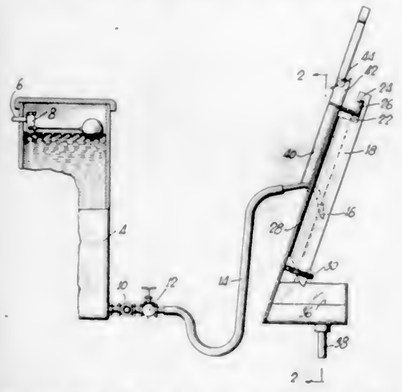
2. A cigarette package holding case, comprising end walls and a bottom, right angularly inturned flanges integral with said walls and bottom, a two-part cover opening longitudinally of the mouth of the case, and means for hingedly connecting the parts of the cover to the free ends of the end wall flanges.

1,859,773. COLLAPSIBLE BAG FRAME. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Co., Newark, N. J., a Corporation of Delaware. Filed Oct. 28, 1929. Serial No. 402,893. 2 Claims. (Cl. 150—45.)



1. A handbag frame comprising side members and pairs of pivotally connected end members pivoted to said side members, the adjacent ends of said end members being provided with cooperating shoulders to prevent said end members from assuming a position of alignment.

1,859,774. APPARATUS FOR FEEDING LIQUIDS. HARRY D. HUNT, Miami, Ariz. Filed Oct. 16, 1930. Serial No. 489,079½. 4 Claims. (Cl. 221—96.)



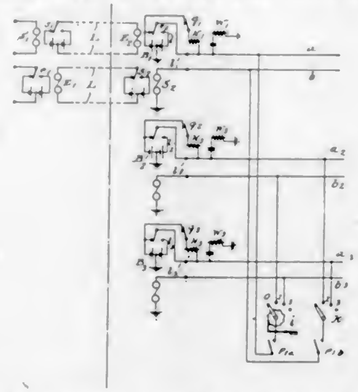
1. In a feeding device, a nozzle defining a discharge orifice and connected to a constant level supply tank, means for adjusting the orifice relatively to the level of a liquid in the tank, an inclined tube-like splash-preventing member into which the orifice discharges material, and a reservoir connected to the bottom of the tube-like member.

1,859,775. ATTACHMENT FOR PENCILS AND LIKE INSTRUMENTS. LESTER J. HYAMS, New York, N. Y. Filed Sept. 24, 1930. Serial No. 483,995. 3 Claims. (Cl. 120—84.)



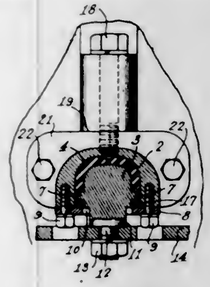
1. An attachment for pencils and like instruments embodying, in combination, a cap adapted to be removably mounted on one end of a pencil, and an annular slidable member connected to said cap and movable along the shank of the pencil for permitting the removal of said cap from one end of the pencil and the mounting of the same on the other end thereof.

1,859,776. TELEGRAPH PLANT OR TYPE-PRINTING TELEGRAPH. AUGUST JIPP, Berlin-Spandau, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Feb. 19, 1930, Serial No. 429,789, and in Germany Feb. 19, 1929. 4 Claims. (Cl. 178—2.)



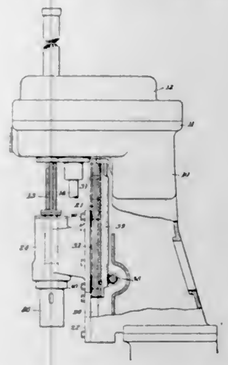
1. In a telegraph or printing telegraph system employing two pairs of wires for the transmission of traffic in two directions, a plurality of subscriber stations, sending and receiving equipment operatively associated with each subscriber station for sending traffic in one direction over one pair of said wires and for receiving traffic in another direction over the other pair of said wires, an exchange connected to each of said subscriber stations via said two pairs of wires, an automatic switchgear in said exchange and circuits controlled by said switchgear for establishing connections between said subscriber stations for the transmission of traffic in two directions, each of said circuits comprising a pair of wires, only one of said wires of each last-mentioned pair of wires being connected to said automatic switchgear.

1,859,777. CUSHIONING CONNECTION. WALTER C. KEYS, HUBBARD W. STEINER, and JESS G. ELDRIDGE, Detroit, Mich., assignors to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Dec. 20, 1928. Serial No. 327,318. 2 Claims. (Cl. 248—14.2.)



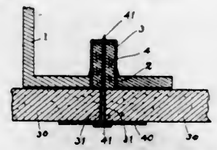
2. A cushion connection comprising in combination, a pair of metallic members provided respectively with a cavity and a projection spaced apart and defining in cross section a substantially U-shaped cavity, cushioning material U-shaped in cross section nearly filling said U-shaped cavity, a plate removably secured over the mouth of said cavity and having a clearance opening for the projection member, said projection member being provided with integral flange portions disposed within said cavity, and non-metallic yielding material intermediate said flange portions and said plate adapted to maintain said metallic members pressed against said cushioning material.

1,859,778. FEED SLIDE FOR INTERCHANGEABLE DRILL HEADS. DAVID C. KLAUSMEYER, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 4, 1929. Serial No. 390,252. 4 Claims. (Cl. 77—5.)



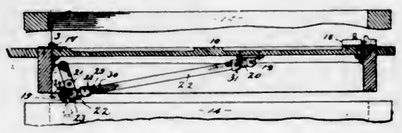
1. An upright drilling machine combining a frame; a spindle mounted therein; means for rotating said spindle, the spindle being translatable with respect to said rotating means; spaced substantially L-shaped vertically extending guide surfaces on the forward face of said frame; straps secured to said frame and cooperating with said guide surfaces to provide guideways; a spindle slide plate translatably mounted in said guideways; a spindle bracket, having a bearing providing a support for said spindle, supported by and translatable with said slide plate; means for bolting said bracket to said slide plate in any one of a plurality of predetermined vertically spaced positions; and means for translating said slide plate to feed said spindle.

1,859,779. WALL BOARD FASTENER. LEFFMAN H. LEE, Bellevue, Pa., assignor of one-sixth to William B. Wharton and one-sixth to James M. Guthrie, Pittsburgh, Pa. Filed July 8, 1930. Serial No. 466,378. 8 Claims. (Cl. 72—105.)



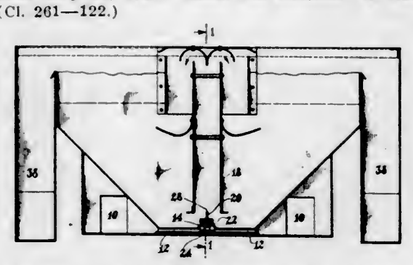
1. In combination with a steel frame member having an orifice, a fastening device to permit the nailing of material immediately to such steel frame member, which fastening device comprises a thin-walled body of metal which is secured in said orifice, said thin-walled body including a portion overlying the one peripheral edge of said orifice, the wall of said body being laterally expansible to overlie at a point intermediate its length the other peripheral edge of said orifice, and a nailable plug laterally compressed and secured in said body.

1,859,780. LATCH FOR DUMB-WAITER DOORS. DUDLEY D. LEVY, New York, N. Y., assignor to Dudley Research Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,961. 4 Claims. (Cl. 187—61.)



1. In a latch for dumb-waiter doors, the combination of a pair of parallel bars mounted for engaging each other at their opposite ends, guide members on said bars for holding the same in sliding engagement, means for pivotally supporting each of said bars at one end thereof, said bars each having a notch, and means on each of said bars for engaging said notch, said means disposed to lock the door before it is completely closed.

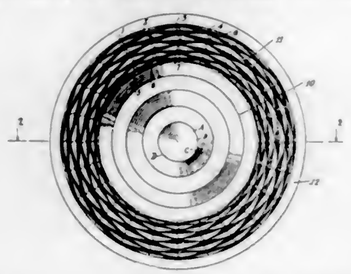
1,859,781. APPARATUS FOR TREATING LIQUID WITH A GAS. FRANK W. MACLENNAN, Miami, Ariz. Filed July 15, 1930. Serial No. 468,015. 4 Claims. (Cl. 261—122.)



1. In an ore flotation apparatus, an elongated tank adapted to contain ore pulp, a longitudinally-extending

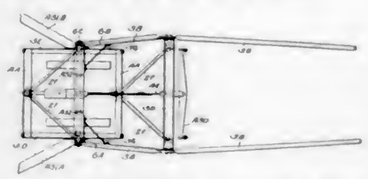
uplift chamber within said tank, an air chamber disposed beneath the lower end of said uplift chamber and substantially coterminous as to length with said uplift chamber, means disposed on the upper side of said air chamber for defining a substantially continuous slot through which to inject air in an upward direction into pulp contained within said tank, thereby producing an upward circulation of pulp through said uplift chamber, said means being responsive to changes in the pressure at which air is supplied to said air chamber for opening and closing said slot, and valve means immediately adjacent to and beneath said slot-forming means for controlling the volume of air supplied through said slot.

1,859,782. ACOUSTIC DIAPHRAGM. RUSSELL P. MAY, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 11, 1929. Serial No. 369,977. 8 Claims. (Cl. 181—32.)



1. A diaphragm comprising a circular metallic sheet provided with central concentric circular stampings and eccentric circular stampings surrounding said central concentric stampings.

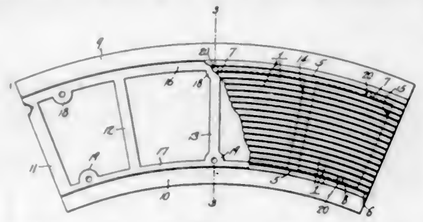
1,859,783. STALK CUTTING APPARATUS. STANLEY W. MCBIRNEY, Toledo, Ohio; dedicated, by mesne assignments, to the People of the United States of America. Filed Dec. 3, 1929. Serial No. 411,293. 3 Claims. (Cl. 56—229.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A stalk cutting apparatus comprising a cart, a longitudinal shaft pivotally supported by said cart, a rectangular knife frame pivotally supported on the shaft, whereby the knife frame becomes a floating member, a knife attached to each side of the floating knife frame and having one end extending outwardly from said knife frame and a lever adjustment associated with said knife frame to control the height of the knives from the ground, said apparatus being adapted for operation between two rows of stalks and the cutting of both rows simultaneously.

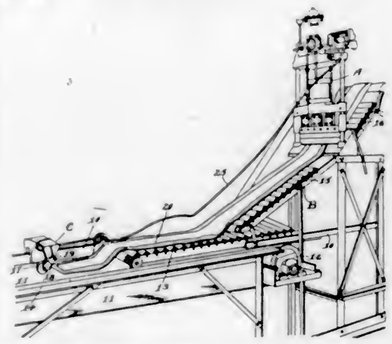
1,859,784. METHOD OF MAKING SCREEN PLATES. WALTER E. MCMURRAY, Clearfield, Pa., assignor to Clearfield Machine Company, Clearfield, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1930. Serial No. 479,649. 9 Claims. (Cl. 29—160.)

1. The method of constructing segmental screen plates, which method consists in cutting a plurality of straight bars in lengths corresponding respectively to the lengths of said bars in a completed screen plate, in arcuately bending said bars, in arranging said bars in proper spaced relations corresponding to their relative positions in the



completed screen plate by means of the bending operation, and finally in rigidly uniting said bars together at longitudinally spaced points.

1,859,785. RUBBER TIRE TREAD CUTTING MACHINE. LESTER H. MESSINGER, Jr., Bridgeport, Conn., assignor to The Black Rock Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 6, 1930. Serial No. 433,635. 12 Claims. (Cl. 164—56.)

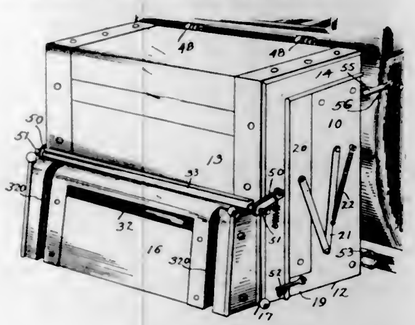


1. In a rubber tread cutting machine, the combination of a bed, posts mounted therein, a block mounted upon the upper ends of the posts, a support secured to the posts, a cylinder mounted on the supports, a reciprocatory cross head mounted upon the posts and carrying a knife, a piston within the cylinder bearing a piston rod to support and operate the cross head, rods carried by the cross head and guided in the support, a yoke connecting the upper ends of said rods, a toggle, one member of which is pivotally connected to the yoke and the other to the block, for supporting the piston and knife in a raised position against air pressure in the cylinder, a trip mechanism for said toggle including a reciprocatory rod having means to engage and break the toggle, a spring to operate the rod in the toggle breaking direction, a cylinder and piston for operating the rod against the action of the spring, an armature fixed on the rod and a magnet for holding the armature and rod against the tension of said spring and means to cause the magnet to be deenergized.

1,859,786. PRODUCTION OF ANHYDRIDES OF THE LOWER FATTY ACID SERIES. RICHARD MÜLLER, Mannheim, and FRITZ VOELLER, Heidelberg, Germany, assignors to C. F. Boehringer & Soehne G. m. b. H., Mannheim-Waldhof, Germany. Filed May 29, 1930, Serial No. 457,532, and in Germany Nov. 1, 1928. 10 Claims. (Cl. 260—123.)

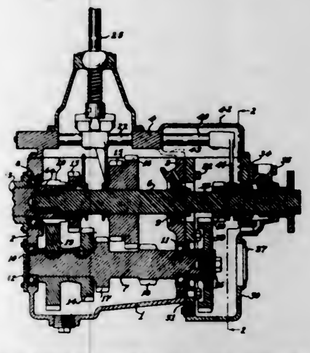
1. In the manufacture of fatty acid anhydrides, the process which comprises reacting an α, α'-dihalogenodiethyl ether with a compound having the formula R.COOM, wherein R represents one of the lower members of the group—C_nH_{2n+1} and M represents a replaceable alkali metal atom or hydrogen, to form the corresponding α, α'-diacido-diethyl ether, and decomposing the resulting reaction product to form the anhydride corresponding to the fatty acid of formula R.COOH, wherein R has its former significance.

1,859,787. AUTOMOBILE ATTACHMENT. WILLIAM W. NICKELS, Bristol, Va., assignor of one-half to William A. Dishner, Bristol, Va. Filed Aug. 10, 1931. Serial No. 556,241. 7 Claims. (Cl. 224—29.)



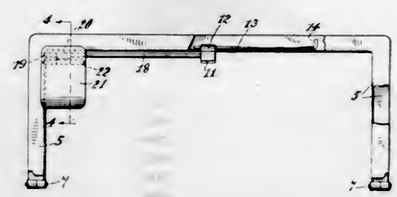
1. An automobile attachment for providing a room or chamber comprising a box-like or container member having permanent vertical walls and a floor, a roof-forming and rear wall forming member hinged at one point to the top of said container and forming a closure for otherwise open sides of said container and wall-forming members each of hinged sections and each hinged to end walls of said container for movement into and out of the same the roof forming and rear wall forming member being placed in a position as the roof of the room when in the open position and then the wall forming members that are hinged to the end walls of the container being moved to position closing the ends of the room.

1,859,788. EXTENSION TRANSMISSION GEARING. JOSEPH E. PADGETT and CARL D. PETERSON, Toledo, Ohio, assignors to Spicer Manufacturing Corporation, Toledo, Ohio, a Corporation of Virginia. Filed June 18, 1931. Serial No. 545,255. 3 Claims. (Cl. 74—58.)



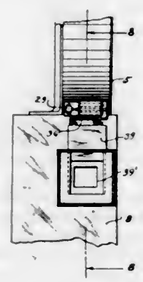
1. In a transmission gearing, the combination of a main gear box having bearings for driving and transmission shafts arranged in axial alinement and for a countershaft, an extension housing detachably mounted on the rear wall of the gear box, a transmission shaft and countershaft in said bearings and extending into the housing, gearing between the shafts in the gear box including shiftable elements, coacting gearing on the portions of the transmission shaft and the countershaft extending into the housing including a shiftable element, the main gear box and the housing being open at their tops, cover means for the open tops, shifter rods slidably mounted in the cover means, connections between the shifter rods and the shiftable elements in the main gear box, an additional shifter rod mounted in the cover means and extending into the portion of the cover for the housing and connected to the shiftable element therein and operating means for the rods carried by the cover means.

1,859,789. LATCH DEVICE FOR HAND BAGS. EDWARD POETER, Irvington, N. J., assignor to E. Poeter & Co., Irvington, N. J., a Corporation of New Jersey. Filed Nov. 17, 1931. Serial No. 575,554. 4 Claims. (Cl. 292—122.)



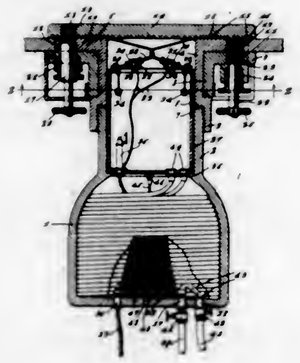
1. In combination with complementary bag frame members, latch means therefor mounted upon the frame members substantially centrally between the ends thereof, and including a latch element mounted on one frame member to move transversely thereof, a finger plate located adjacent to one end of said frame member at the top thereof, and means mounted upon said frame member and operatively connecting said finger plate with the movable latching element.

1,859,790. PROTECTIVE SYSTEM FOR MOTION PICTURE MACHINES. GEORGE S. POWERS, Opelousas, La., assignor of one-half to Eugene Ventre, Opelousas, La. Filed Nov. 14, 1929. Serial No. 407,150. 2 Claims. (Cl. 88—17.)



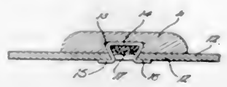
2. In a safety shutter attachment for motion picture machines, a vertically slidable shield having a plurality of eyes, a longitudinally movable arm above said shield and having elements detachably engaging said eyes to hold the shield releasably in a raised position, and a normally deenergized electromagnet having an armature in spaced parallel relation to said arm, and means connecting the armature and said arm to cause the arm to move endwise and release the eye engaging elements of the arm from said eyes when the electromagnet is energized.

1,859,791. COMMUNICATION CARTRIDGE FOR UNDERSEA VESSELS. GEORGE HAMILTON POWERS, Gloucester, Mass. Filed Sept. 22, 1930. Serial No. 483,713. 1 Claim. (Cl. 114—16.5.)



In a device of the class described, a housing formed with superposed intercommunicating compartments, the uppermost compartment opening through one end of the housing and of less size than the other compartment, a shoulder formed between the compartments, a buoyant element relensably fitted within the uppermost compartment and resting upon the shoulder, bell clappers suspended within the buoyant element for sounding an audible signal on vibration of said element when released from the uppermost compartment, visible signalling means associated with said element, anchoring means confined within the lowermost compartment and connected with the buoyant element to limit the buoyant displacement of the latter when released from the uppermost compartment, means for releasably holding the buoyant element in the uppermost compartment, a removable cover for the buoyant element, means within the buoyant element for establishing communication therefrom to a distance determined point, and means for delivering food from within the buoyant element to a distance point.

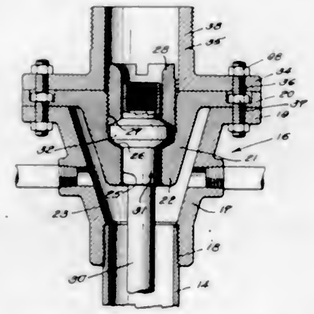
1,859,792. CERAMIC CHARACTER OR SYMBOL. WILLIS O. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Nov. 1, 1929. Serial No. 404,048. 6 Claims. (Cl. 40—142.)



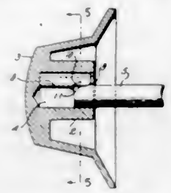
1. A ceramic symbol having one or more recesses in its reverse side, and a fastener having a head portion held in the recess and an extending portion arranged to be projected through an aperture in a support and to be bent over the edge of the aperture, said head portion having a contour corresponding to the contour of the recess whereby the symbol and fastener are maintained in an interengaging relation.

1,859,793. CASING HEAD. CHESTER A. RASMUSSEN, Long Beach, Calif. Filed Apr. 19, 1930. Serial No. 445,650. 6 Claims. (Cl. 166—14.)

1. A casing head having a flange at its upper end, a tubing support having a flange adapted to rest upon the flange of the casing head, a tubular member having a flange adapted to rest upon the flange of the tubing support, said tubing support having a central opening formed with an intermediate shoulder, said opening being threaded at one side of the shoulder, a tubing carrying fixture resting upon said shoulder, and an exteriorly threaded locking ring engaging the threaded portion of the opening and clamping the fixture to the shoulder to prevent upward movement of the tubing.

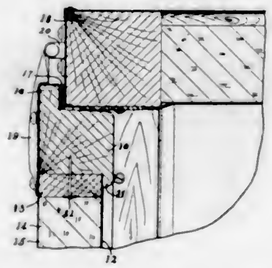


1,859,794. MEANS FOR CONNECTING KNOBS TO SHAFTS. MERRILL RATHBUN, Lockport, N. Y., assignor to Norton Laboratories, Inc., Lockport, N. Y., a Corporation of Maine. Filed Aug. 23, 1927. Serial No. 214,836. 6 Claims. (Cl. 287—53.)



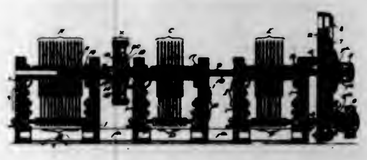
1. A knob for attachment to a shaft comprising a body portion having a bore therein to receive the end of a shaft and means for securing said knob to said shaft comprising a member terminating in a plurality of knife edges resiliently mounted in said knob and projecting into said bore adapted automatically to grip said shaft when said knob is placed thereon.

1,859,795. REFRIGERATING APPARATUS. JOHN T. RAUEN, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,662. 6 Claims. (Cl. 20—35.)



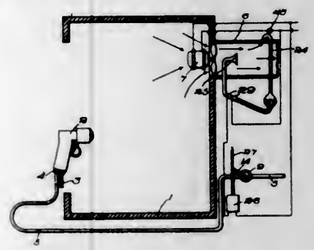
4. A unitary cover for an opening in a refrigerated cabinet comprising a body member composed of insulating material having an outwardly extending top flange and an inwardly extending bottom flange, a bottom cover plate supported upon said bottom body flange, a top cover plate bent around said top body flange, and insulation means within said body intermediate said cover plates.

1,859,796. ELECTRIC CIRCUIT TUNING DEVICE. WILLIAM A. READY, Brookline, Mass. Filed July 8, 1927. Serial No. 204,288. 4 Claims. (Cl. 74—7.)



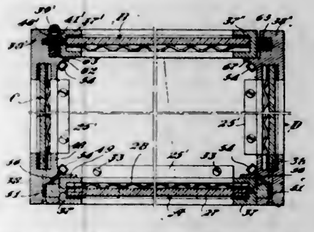
1. A device for tuning electric circuits, said device comprising two or more tuning units each having a movable tuning part and a vernier dial mechanism operatively connected by shaft means to the movable tuning parts and an axially fixed shaft operatively connected to one of said movable tuning parts and to said dial mechanism, said dial mechanism being provided with means whereby all of the movable tuning parts may be moved together or one may be moved independently of the others.

1,859,797. SPRAYING APPARATUS. WILLIAM A. READY, Brookline, Mass. Original application filed Feb. 10, 1928, Serial No. 253,394. Divided and this application filed Oct. 25, 1928. Serial No. 314,925. 6 Claims. (Cl. 91—60.)



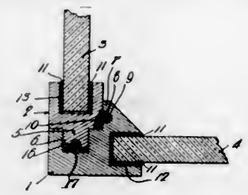
1. In a fluid spraying apparatus of the class illustrated and described, a blower, a spray gun, a fluid pressure conveying conduit connected to said gun, a valve in said conduit and combined draft operated and electrically operated means operatively connected between the blower and the valve whereby the valve is opened only after the blower is placed in operation.

1,859,798. CABINET CONSTRUCTION. WILLIAM R. RIX, Ilion, N. Y., assignor to A. N. Russell & Sons Company, Ilion, N. Y., a Corporation of New York. Filed Oct. 5, 1929. Serial No. 397,520. 7 Claims. (Cl. 312—140.)



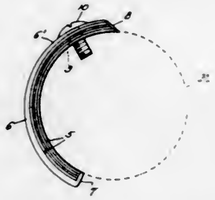
6. A frame for a cabinet panel comprising an elongate metal piece having parallel inner and outer flanges providing a longitudinal recess for receiving the edge of panel material, a longitudinal channel opening at right angles to said recess and adapted to receive a tenon of a second frame piece, and an offset flange extending at right angles to said first named flanges intermediate the recess and channel and adapted to seat against the inner side of the second frame piece.

1,859,799. CORNER JOINT FOR CABINETS OR THE LIKE. WILLIAM R. RIX, Ilion, N. Y., assignor to A. N. Russell & Sons Company, Ilion, N. Y., a Corporation of New York. Filed Oct. 7, 1930. Serial No. 486,942. 6 Claims. (Cl. 312—140.)



1. A pair of frame members constituting the corner joint of a cabinet or the like, one of the members having a channel and a flange spaced therefrom and the other member having a tenon fitting within the channel and a surface opposed to the face of said flange, the flange having a longitudinal groove for the reception of packing, and packing material between the tenon and its channel and between the flange groove and said surface.

1,859,800. SNAPPER ROLLER PAD. LOUIS R. SCHWARTZ, Lodgepole, Nebr. Filed Jan. 7, 1931. Serial No. 507,265. 1 Claim. (Cl. 130—5.)



A pad for snapper rolls comprising a plurality of superposed layers of canvas each provided with a rectangular body portion and a tapered end portion, a facing sheet of rubber of like contour, said sheet being relatively thick adjacent one end thereof and progressively decreasing in thickness toward the opposite end thereof, said sheet having opposite end portions thereof contacting the corresponding ends of the layers, one of said ends being provided with a thick flange portion, and the opposite end being beveled, and a bolt receiving opening extending through the tapered end portion of the pad.

1,859,801. AGE RESISTING VULCANIZING RUBBER COMPOUND. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Dec. 6, 1929. Serial No. 412,284. 20 Claims. (Cl. 18—50.)

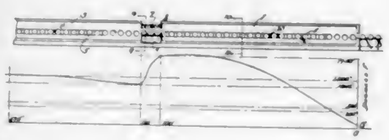
19. The process of manufacturing an age resisting vulcanized rubber product which comprises curing a rubber composition of vulcanization characteristics in the presence of an anti-oxidant comprising a reaction product of one member of a group consisting in phenol, alpha naphthol and beta naphthol, and a Schiff's base.

1,859,802. PROCESS AND APPARATUS FOR ANNEALING SHEET STEEL. DONALD M. SHANAFELT, Lakewood, GEORGE B. NISBET, Cleveland, and ALBERT H. SHONKWILER, Lakewood, Ohio, assignors to The Otis Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 22, 1929. Serial No. 372,812. 10 Claims. (Cl. 263—6.)



5. A normalizing furnace for steel sheets comprising a tunnel structure sealed sufficiently to exclude outside atmosphere, and means for continuously transporting therethrough the materials to be treated, said furnace including successively in the direction of movement of said materials, a heating section, a contiguous communicating quick quenching section and a contiguous reheating and cooling section, burners for heating said heating section and part of said reheating and cooling section, baffle means restricting the entrance and exit passages of said quick quenching section whereby the passage of heat from adjacent compartments thereinto is partially impeded and products of combustion are passed thereinto for maintaining a non-oxidizing atmosphere therein.

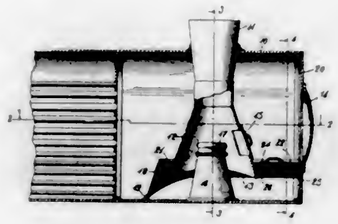
1,859,803. APPARATUS FOR CONTINUOUS TREATMENT OF SHEET STEEL. DONALD M. SHANAFELT, Lakewood, GEORGE B. NISBET, Cleveland, and ALBERT H. SHONKWILER, Lakewood, Ohio, assignors to The Otis Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 3, 1929. Serial No. 383,318. 4 Claims. (Cl. 263—6.)



4. The combination with a furnace for treating sheet steel and means for continuously progressing the steel therethrough and along a given path, of a pickling bath and washing bath arranged in the order named along said path of travel, and means enclosing the baths sealed to exclude outside atmosphere therefrom, said means communicating with said furnace, and means for heating the furnace and maintaining therein and in said enclosing means a non-oxidizing atmosphere.

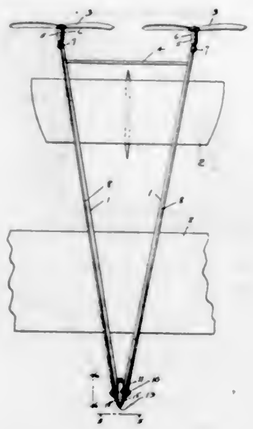
1,859,804. SPARK ARRESTER. ISAAC SIMPSON, Wilmerding, Pa., assignor of one-half to Frederic E. Lyford, Waverly, Pa. Filed June 4, 1931. Serial No. 542,128. 5 Claims. (Cl. 230—97.)

1. A spark arrester comprising, in combination, a smoke stack extending into a smoke chamber and rearwardly spaced from a closed end thereof, an exhaust nozzle projecting into said stack extension, a screen closing the space between said extension and the wall of said chamber rearwardly and laterally of the extension and a substantially horizontal screen spaced from the bottom of the chamber and closing the space between said extension and the front end of the chamber, the central portion



of said last named screen being marginally free and adapted to vibrate under the pulsating effect of steam passing through said nozzle.

1,859,805. TOY AIRPLANE. NED M. SLEEPER, Upper Lake, Calif., assignor of one-third to William H. Edmands and one-third to John C. McFadyen. Filed Feb. 24, 1930. Serial No. 430,700. 8 Claims. (Cl. 46—50.)

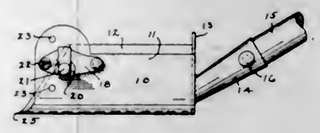


1. A toy airplane provided with a propeller motivated by a twisted rubber band, means for twisting the band comprising a roller rotatably mounted at the end of the airplane remote from the propeller, means for connecting the band to the roller for twisting upon revolving the roller, said roller being arranged and adapted for rolling along a surface to twist the rubber band, and means to prevent the roller from unspinning after twisting the band.

1,859,806. LAWN EDGE TRIMMER. JOHN A. SPENCE, Indianapolis, Ind. Filed July 14, 1931. Serial No. 550,734. 2 Claims. (Cl. 97—227.)

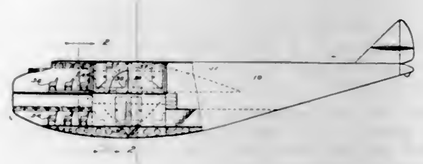
1. A trench cutter comprising a scoop with a vertical side wall, a sloped side wall, a narrow rounded bottom therebetween, the bottom being extended forwardly of

the walls to a sharpened point, a rear end forming a closing wall between the two side walls, a handle having its lower end secured to near the bottom of said rear



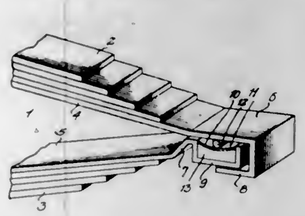
end and sloping upwardly therefrom, and a roller carrying plate rockably carried by the vertical side wall at its forward end.

1,859,807. AIRPLANE. WILLIAM B. STOUT, Detroit, Mich. Filed Mar. 28, 1930. Serial No. 439,784. 8 Claims. (Cl. 244—30.)



1. In an airplane, in combination, a fuselage having a keel built into the lower part thereof for resisting impact forces, wings having longitudinal spars therein, an engine supported by said spars, and means for transmitting impact forces acting on said engine to said keel independently of said fuselage.

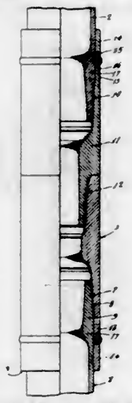
1,859,808. VEHICLE SPRING. JOHN J. TATUM, Baltimore, Md. Filed Oct. 7, 1930. Serial No. 487,058. 12 Claims. (Cl. 267—56.)



1. In an elliptical vehicle spring, opposed spring members having inner leaves provided with free ends, the free end of the inner leaf of one member being formed to provide a bearing chamber and the free end of the inner leaf of the other member being formed to provide a housing slidably and pivotally receiving said bearing chamber, and antifriction bearing and cushioning means in said chamber and between the same and a portion of the housing.

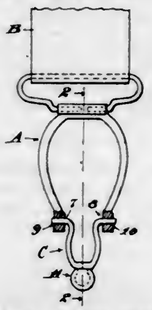
1,859,809. WELD LOCK ROTARY TOOL JOINT WITH LOCK RING SUB. EDWARD TIMBS, Los Angeles, Calif., assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 23, 1930. Serial No. 477,347. 3 Claims. (Cl. 285—146.)

1. In a drilling stem, the combination of a tool joint connecting the sections of the drill stem including a box tool joint section screw-threaded to one section of the drill stem, a pin tool joint member screw-threaded to a second section of the drill stem, the box and pin sections of the joint being threaded together, and a lock ring welded to the end of the skirt of the box portion of



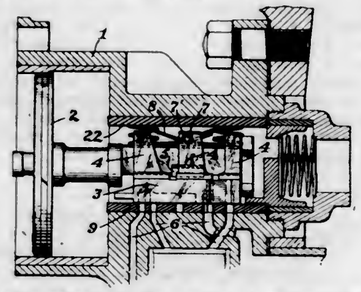
the tool joint and to the section of the drill stem threaded to the box portion of the tool joint, and the ring providing a removable drill stem supporting shoulder.

1,859,810. HOSE SUPPORTER. JAMES G. TOMPKINS, Los Angeles, Calif. Filed July 10, 1930. Serial No. 466,951. 3 Claims. (Cl. 24—246.)



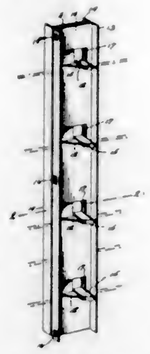
1. In a hose supporter, a hose engaging yoke, and a support on which the ends of said yoke are pivoted to permit swinging movement of said yoke completely around an axis; said yoke being unobstructed at its open end and adapted to be directly engaged with a hose to be supported and to effect wrapping of the hose thereon on rotating said yoke on its support.

1,859,811. SLIDE VALVE AND SPRING THEREFOR. CARL H. VOSS, Sheridan, Wyo. Filed Nov. 3, 1931. Serial No. 572,840. 10 Claims. (Cl. 303—1.)



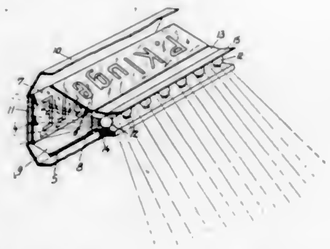
1. A slide valve including guides, a continuous spring having a helix at its opposite ends, pintles associated with the guides and with the spring for holding the spring in position in the guides.

1,859,812. WIRE CLAMP. JAMES T. WILEY, West Hamlin, W. Va. Filed Jan. 31, 1931. Serial No. 512,681. 2 Claims. (Cl. 254—83.)



1. A wire clamp of the character described comprising a fixed clamping member having flanged opposite side portions whereby to provide a channeled clamping bar, a laterally movable clamping member, flanges on each side of said movable clamping member whereby to provide a channeled movable clamping member, a plurality of longitudinally spaced wedge-shaped tightening members carried by said movable clamping member inwardly of each longitudinal edge, and means carried by said fixed clamping member and extending through said movable member and engaging said wedge-shaped tightening members of said movable clamping member whereby to force said clamping members together upon independent movement of said movable clamping member in one direction.

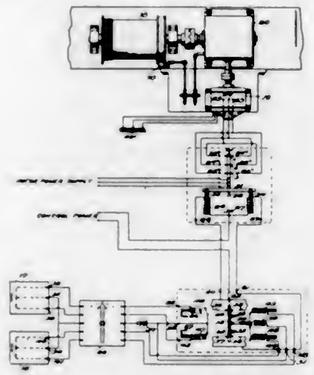
1,859,813. ILLUMINATED ADVERTISING DEVICE. KARL MAX WILHELM, Bochum, Germany. Filed Nov. 20, 1929, Serial No. 408,616, and in Germany Nov. 24, 1928. 12 Claims. (Cl. 40—77.)



1. An illuminated advertising device, comprising, in combination, a rotary hollow body, the circumferential surface of which consists of flat and transparent sides adapted to show advertisements, longitudinal slots being left between said sides and so located with respect to them that each of them lies counter to one of said sides; illuminating means arranged outside said body at the rear thereof just behind the slot there located at the time being, and means for turning the said body.

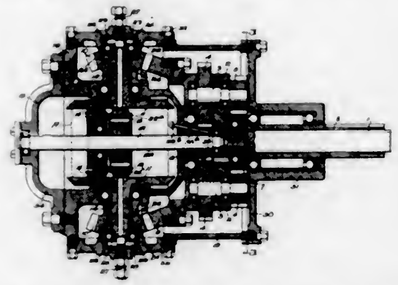
1,859,814. AUTOMATIC DRILLING CONTROL. RALPH D. WYCKOFF, Pittsburgh, Pa., assignor to Gulf Production Company, Houston, Tex., a Corporation of Texas. Filed Aug. 25, 1930. Serial No. 477,727. 9 Claims. (Cl. 255—19.)

1. A full-automatic well drilling apparatus comprising a drill stem, a bit thereon, means for rotating the drill stem, means for suspending a portion of the weight of the drill stem to decrease or increase the feeding pressure upon the bit, means sensitive to the instant torque upon the drill stem, which means effects operation of said suspending means to regulate the feeding pressure upon the bit in accordance with predetermined torque limits of safety and efficient drilling, and means effecting



operation of said suspending means to maintain the feeding pressure at a substantially constant predetermined value, said last mentioned means being so associated for control of said suspending means as to be operative only when such operation is not in conflict with the operation of the suspending means by said torque sensitive means.

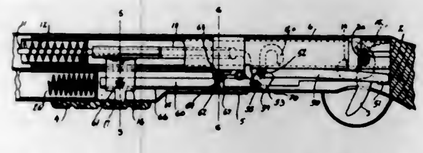
1,859,815. VARIABLE SPEED MECHANISM. WALLACE M. CUTLER, Annisquam, Mass. Filed Apr. 9, 1930. Serial No. 442,797. 8 Claims. (Cl. 74—34.)



1. A variable speed mechanism comprising, in combination, a driving shaft, a hollow driven shaft concentric with and surrounding the driving shaft, a variable friction mechanism located beyond the ends of said driving and driven shafts and being driven from said driving shaft and including a friction wheel mounted upon a shaft rotating about the same axis as the driving and driven shafts but extending beyond the ends thereof, a differential gearing interposed between the driving and driven shafts and a pinion carried by the shaft which carries the friction wheel, said pinion being in mesh with the differential gearing as and for the purposes described.

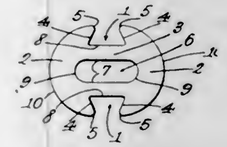
1,859,816. AIR GUN. ARNOLD J. DECKER, Wyandotte, Mich., assignor to All-Metal Products Company, Wyandotte, Mich., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,623. 10 Claims. (Cl. 124—11.)

1. A repeating gun comprising in combination, a barrel, ejecting mechanism, cocking mechanism, means for feeding a shot to a position relative to the barrel to be ejected, manually operable means for cocking the gun and for feeding the shot, and reversible check means associated with the manually operable means arranged to insure complete movement of the said operable means once said movement is started and to check reverse movement thereof until a complete cocking movement has been effected.



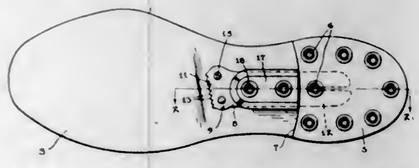
9. In an air gun, the combination of a barrel, a spring pressed ejecting means therein, a trigger, a pivoted sear, a pump handle for retracting the ejecting means to catch the same on the sear, a locking abutment for the trigger, a pivoted actuating member connected to the abutment, means having a plane surface connected for movement with the pump handle positioned so that said pivoted member intersects its line of movement whereby said member swings the pivoted member as it moves thereunder to in turn move the abutment against the trigger to lock the same against movement.

1,859,817. DEVICE FOR PAIRING HOSIERY. JESSIE A. DODD, Tulsa, Okla. Filed Dec. 24, 1931. Serial No. 583,081. 1 Claim. (Cl. 24—73.)



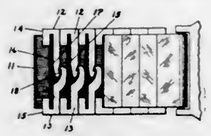
A device for holding hosiery and similar articles together and paired, during such operations as washing, the same comprising a plate of approximately oval outline, with oppositely disposed notches in its edges, the notches forming laterally projecting heads and a reduced body connecting the heads, the sides of the notches converging outwardly, to give the heads points at their ends, and there being a hole in the body.

1,859,818. ARCH SUPPORT. JACOB MILLER DOOLITTLE, Pittsburgh, Pa. Filed Nov. 5, 1930. Serial No. 493,632. 1 Claim. (Cl. 36—76.)



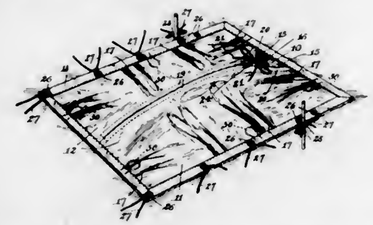
An arch support comprising a metal strip having a slotted tongue formed to engage about a nail in the heel of a shoe and between the layers of said heel, and a body portion bent upwardly from said slotted tongue for engagement with the shank of the shoe, and a resilient pad of rubber fastened to said body portion to engage the ground and abut the heel of the shoe and said strip at the bent portion thereof, said strip having a row of teeth at its outer extremity placed at an angle to the length thereof so as to parallel to the break line of the arched portion of the shoe, and fastening means adjacent said teeth for securing said strip in place.

1,859,819. STRAP FOR WRIST WATCHES. CHARLES DUERR, Brooklyn, N. Y., assignor, by mesne assignments, to S. Bruner, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 27, 1928. Serial No. 315,366. 13 Claims. (Cl. 59—80.)



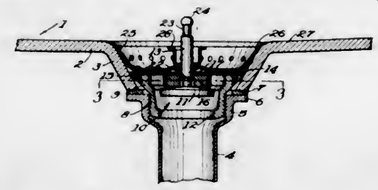
1. Means for connecting adjacent tubular sections in adjustable relation comprising pairs of coupling members, each of said members being of substantially U-shape, the legs of the opposite members of said pair extending into adjacent tubular sections, a latch on the leg of one member and a latch piece on the leg of an oppositely disposed member, said latch and latch piece being held in engagement by contact with the wall of the tubular section enclosing said legs.

1,859,820. SLEEPING ROBE OR BLANKET. MAE G. EAKER, Buffalo, N. Y. Filed Mar. 27, 1929. Serial No. 350,235. 2 Claims. (Cl. 5—343.)



1. An enclosing robe or blanket, comprising a flat bottom member, a cover member formed of two exact counterparts having their inner marginal portions adapted for connection and having the remaining marginal portions of said parts shirred and stitched to the marginal portions of said flat bottom member, said cover member having cutaway portions at the upper ends of its two counterparts forming a neck opening and having the material at said neck opening hemmed and provided with a draw string, and means for connecting the inner marginal portions of the two counterparts of said cover member together.

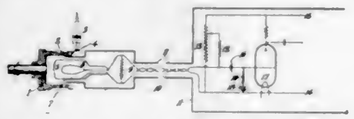
1,859,821. WASTE PIPE FITTING. DAVID H. EBINGER, Columbus, Ohio, assignor to The D. A. Ebinger Sanitary Mfg. Company, Columbus, Ohio, a Corporation of Ohio. Filed July 23, 1931. Serial No. 552,648. 3 Claims. (Cl. 4—292.)



1. A waste pipe fitting adapted to be positioned within an outlet neck formed in the bottom of a sink or the like, said fitting comprising an open ended sleeve-like body threaded at its lower end and serving to connect a waste pipe to said outlet neck, a seat formed with the lower end

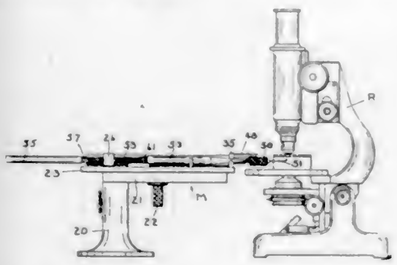
of said fitting, a stopper member engngeable with said seat and having an operating stem projecting upwardly therefrom, a perforated plate secured to the upper end of said fitting having an opening for the reception of said stem, spring pressed members mounted on the under side of said plate and engaging said stem, and a shoulder formed on the lower portion of said stem and adapted for engagement with said spring pressed members to hold the stopper member in an elevated position away from said seat.

1,859,822. PHOTO-ELECTRIC CELL CIRCUIT. JOSEF ENGL, Berlin-Grunewald, Germany, assignor to Engl Products Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 2, 1929, Serial No. 404,497, and in Germany Nov. 13, 1928. 7 Claims. (Cl. 179—100.3.)



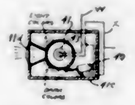
1. In a device of the kind described, in combination, a photoelectric cell, a parallel resistance connected across the terminals of said cell directly next to the cell, a twisted pair of conductors connected to said resistance, said resistance being located between the terminals of the cell and the conductors, and an amplifier connected to said conductors.

1,859,823. MICROMANIPULATOR. GEORGE W. FITZ, Peconic, N. Y. Filed Nov. 1, 1930. Serial No. 492,725. 24 Claims. (Cl. 88—40.)



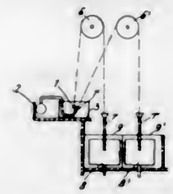
1. A micro-manipulator comprising a base, a tool holder movably mounted on said base and means for moving said tool holder, said means comprising a movable member having a cam surface operatively associated with said holder.

1,859,824. TELEVISION APPARATUS. ALEXANDRE F. GODEFROY, Los Angeles, Calif. Filed Apr. 6, 1931. Serial No. 527,949. 2 Claims. (Cl. 178—6.)



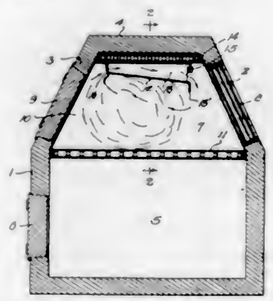
1. In a television apparatus, a multiplicity of receiving elements each of which comprises a solenoid having an armature which is operated variable distances according to the strength of the current supplied thereto, an internally illuminated cylinder, means to support said cylinder to rotate about its axis, and means to pivotally connect the armature of said solenoid with said cylinder in radially spaced relation to the axis of rotation of said cylinder, said cylinder having side walls surrounding its axis of rotation and consisting of differently colored glass areas, the intensity of the colors of said areas increasing and diminishing circumferentially of said cylinder.

1,859,825. CENTRIFUGAL SPINNING MACHINE. AUGUST HARTMANN, Barmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed Sept. 17, 1928, Serial No. 306,470, and in Germany Sept. 21, 1927. 6 Claims. (Cl. 118—1.)



1. In a centrifugal spinning machine, in combination, a row of spinning nozzles in which a greater number of such nozzles than usual for a given length of machine are employed, a series of centrifuges corresponding in number to the nozzles, and arranged in staggered rows, and guiding means so arranged that any filaments produced by said spinning nozzles will be led vertically into the corresponding centrifuges.

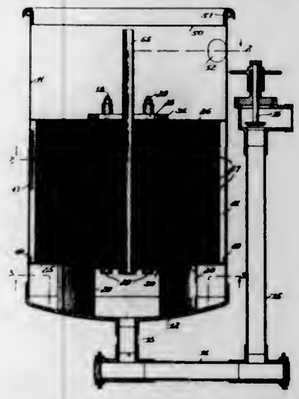
1,859,826. REFRIGERATOR SHOW CASE. CLEMENT V. HILL, Trenton, N. J., assignor to C. V. Hill & Co., Inc., Trenton, N. J., a Corporation of New Jersey. Filed Oct. 9, 1930. Serial No. 487,578. 13 Claims. (Cl. 62—89.6.)



1. A refrigerator show case having a refrigerating chamber provided with a display panel and a door at opposite sides thereof, means for refrigerating said chamber, and a baffle device arranged in the top of the chamber and forming a cold air displacement and air flow channel having inlet and exit ends arranged respectively at the door and panel sides of the chamber, said channel increasing in depth between its inlet and exit ends and provided with a depending deflector flange at its exit end.

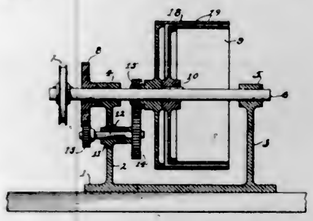
1,859,827. FOAM REDUCING APPARATUS. JENS N. JACOBSEN, Rochester, N. Y., assignor to The Pfaudler Co., Rochester, N. Y., a Corporation of New York. Filed Apr. 22, 1930. Serial No. 446,383. 3 Claims. (Cl. 183—2.6.)

1. Foam reducing apparatus comprising, in combination, a liquid container, a series of partition members extending in a generally transverse direction in said container beneath the liquid level, means for introducing foamy liquid into said container in such a way that the liquid tends to rotate between said partition members and the foam tends to separate from the liquid, and baffle means in the container beneath said partition mem-



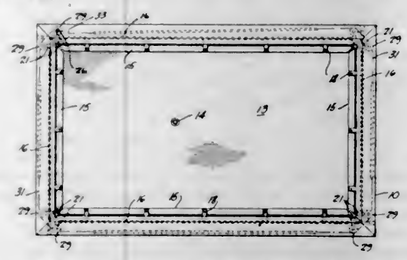
bers, for reducing rotary movement of the liquid near the bottom of the container, said baffle means serving also to support said partition members.

1,859,828. ELECTROOPTICAL SYSTEM AND METHOD OF SCANNING. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Filed Dec. 17, 1929. Serial No. 414,627. 4 Claims. (Cl. 178—6.)



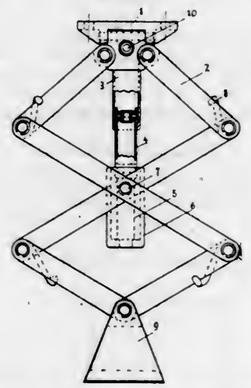
4. A television scanning member comprising a transparent rotatable member having a covering of nontransparent material thereon, and a spiral slot in said covering.

1,859,829. VACUUM CONTACT FRAME. LEO H. KLITSCHE, Los Angeles, Calif., assignor to Klitsche & Co., Los Angeles, Calif., a Copartnership composed of Amandus N. Klitsche and Leo H. Klitsche. Filed May 9, 1930. Serial No. 451,035. 12 Claims. (Cl. 95—76.)



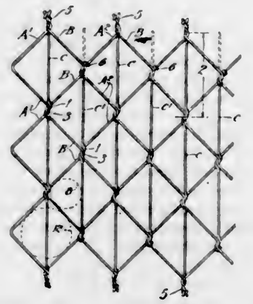
1. In a vacuum contact frame having side and end members for supporting a glass plate and a superposed blanket for the purposes set forth, a binding strip and a rock shaft journaled upon each frame member and carrying a resilient means, said means being connected to said binding strips, means for rotating said rock shafts to bring the binding strips in contacting relation to the blanket, said means applying a uniform pressure to all parts of the rock shafts, said resilient means acting to keep the binding strips and rubber blanket in close contact.

1,859,830. HYDRAULIC LIFTING JACK. REINHOLD KÜMMEL, Zurich, Switzerland, assignor to Eugen Rahm, Zurich, Switzerland. Filed Dec. 30, 1929, Serial No. 417,541, and in Switzerland Dec. 24, 1928. 2 Claims. (Cl. 254—122.)



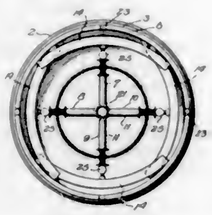
1. A hydraulic jack for lifting motor cars, comprising in combination: a double lazy-tongs mechanism, a hydraulic cylinder and piston interposed between the top and the middle joint of the said double lazy-tongs mechanism, a tubular casing fixed to the middle joint of the lazy-tongs mechanism and adapted to receive the hydraulic piston and cylinder in the collapsed condition of the jack, and a U-shaped support adapted to receive the said casing in the collapsed condition of the jack.

1,859,831. MESH-SECTIONED WIRE FABRIC. ARTHUR A. G. LAND, Chicago, Ill. Filed Apr. 11, 1929. Serial No. 354,224. 7 Claims. (Cl. 245—7.)



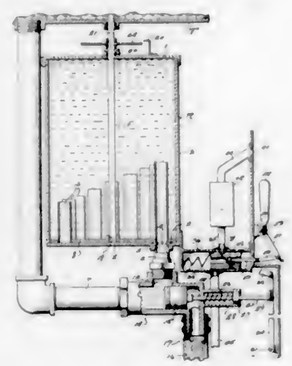
2. A wire fabric comprising zigzag strands spirally intertwined to form parallel rows of meshes, and mesh-sectioning wires each extending longitudinally of one of the said rows across the meshes of that row for effectively sectioning these meshes, each such mesh-sectioning wire passing alternately forwardly and rearwardly of one of the zigzag strands forming the row of meshes across which that mesh-sectioning stand extends and exteriorly of the intertwining of the two strands forming the said row.

1,859,832. CONVERTIBLE WHEEL. ROY R. MACKENZIE, Huntington Park, Calif. Filed July 20, 1931. Serial No. 552,039. 23 Claims. (Cl. 295—8.5.)



1. In a convertible wheel for railway and highway use, a hub, a rail flange, and a rail tread, a rim shoulder forming an extension of the rail tread and having its upper surface below that of the rail tread, said rim shoulder forming a seat for a plurality of circular rim sections with tire thereon.

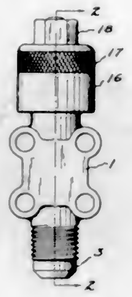
1,859,833. DISPENSING APPARATUS. JOE RIGBY MANLEY, East Liverpool, Ohio. Filed Aug. 23, 1930. Serial No. 477,390. 4 Claims. (Cl. 221—100.)



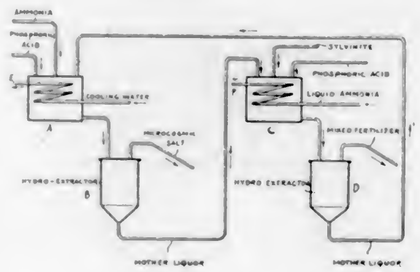
1. A liquid dispensing apparatus comprising, in combination, a receptacle having an opening, a supply pipe in communication with the receptacle through said opening, a delivery line in communication with the receptacle through said opening, a valve common to the supply pipe and the delivery line for controlling the flow therethrough, said valve when in one position opening the receptacle to the delivery line and when in a second position opening the receptacle to the supply pipe, a block supported for reciprocation, an operative connection between the block and the valve for moving the valve upon operation of the block, a hand lever, a push rod operatively engaged with the hand lever, said push rod upon movement of the hand lever in one direction moving the block in one direction, and means for automatically moving the block in the opposite direction and normally maintaining the block at the limit of its movement in such direction.

1,859,834. SHUT-OFF VALVE. EDWARD M. MAY, Detroit, Mich., assignor to Glen P. Cowan, Detroit, Mich. Filed Jan. 16, 1929. Serial No. 332,845. 6 Claims. (Cl. 251—31.)

3. In a device of the character described, a valve casing having a valve seat and a tubular extension opening to the interior of the casing opposite said seat, said extension having a peripheral flange at its outer end, a bellows open at its inner end and having a fluid tight connection to said flange, a head sealing the outer end of said bellows, a valve engageable with said seat and having a stem extending through and rigidly secured to said head, and a cupshaped cap enclosing said bellows, said cap being rotatably mounted on the stem and flange, having a threaded connection with one and held against longitudinal movement with respect to the other.



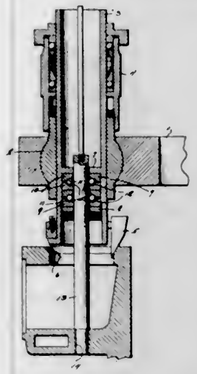
1,859,835. PROCESS FOR THE MANUFACTURE OF MICROCOSMIC SALT AND OTHER FERTILIZING MATERIAL. FERDINAND MITTEAU, Villemomble, France, assignor to Société d'Etudes Scientifiques et d'Entreprises Industrielles, Ougree, Belgium, a Firm. Filed Mar. 8, 1930, Serial No. 434,453, and in Germany Mar. 9, 1929. 10 Claims. (Cl. 23—107.)



1. The process of separating one from the other the sodium and the potassium of minerals containing sodium chloride and potassium chloride, which comprises precipitating the sodium as microcosmic salt by treating said minerals in the cold with water, phosphoric acid and ammonia in the proportion of one mole of phosphoric acid and two moles of ammonia for each mole of sodium chloride.

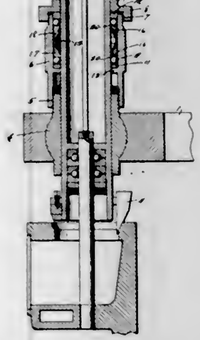
1,859,836. PILOT SUPPORT FOR REAMERS. GEORGE ELMER MOEN, Kelso, Wash. Filed Oct. 1, 1929. Serial No. 396,521. 2 Claims. (Cl. 90—12.5.)

1. In a tool of the character described, a tubular rotary tool carrying shaft, a partition disposed across the shaft adjacent one end and having a central aperture therethrough, a pair of bearing races in said tube, one of which is axially adjustable toward the other and one thereof resting against said partition, said races having confronting bearing ball receiving grooves near their inner peripheries, a centering post extending longitudinally through the shaft and passing through said races and the aperture in the partition, one of said grooves having the edge adjacent the post cut away whereby balls in the confronting grooves may move relative to the post, a row of bearing balls in said confronting grooves, and



a member in the shaft forcing said races together against the partition and crowding the balls inwardly from their grooves against the post.

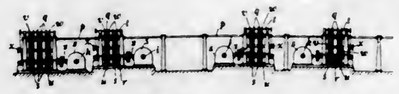
1,859,837. REAMER SHAFT HOLDER AND FEEDER. GEORGE ELMER MOEN, Kelso, Wash. Filed Oct. 1, 1929. Serial No. 396,522. 4 Claims. (Cl. 90—12.5.)



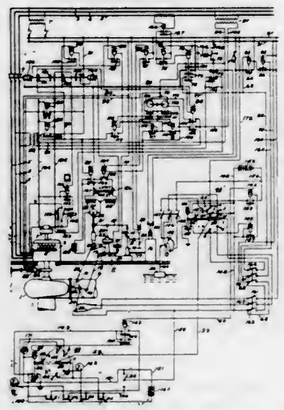
1. In a machine of the character described including a supporting arm and a sleeve carried thereby, a tool carrying shaft extending through and rotatably supported in said sleeve, a cylindrical shell surrounding the shaft, means connecting said shell with said sleeve whereby relative longitudinal movement of the shell on the sleeve may be effected, a pair of bearings arranged in spaced relation within the shell and having said shaft extended therethrough, means whereby said bearings may be shifted longitudinally in the shell, and means acting upon the shifting of the bearings to grip the shaft to prevent longitudinal movement of the same through the bearings.

1,859,838. PAPER MAKING MACHINE. THOMAS DOWNHAM NUTTALL, Bury, England, assignor to Bentley & Jackson Limited, Bury, England, a British Company. Filed Oct. 3, 1930, Serial No. 486,222, and in Great Britain Nov. 6, 1929. 3 Claims. (Cl. 92—38.)

1. In a paper making machine, a main driving shaft, a plurality of indriving shafts driven by said driving shaft, rotary elements driven by said indriving shafts and having their respective peripheral speeds determined by appropriate selection of their diameter or by gearing between them and their respective indriving shafts, and independently variable V-belt or like speed varying means for transmitting the drive from said main shaft to said indriving shafts.



1,859,839. SYSTEM OF DISTRIBUTION. HENRY V. NYE, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 4, 1927. Serial No. 180,710. 17 Claims. (Cl. 290—7.)



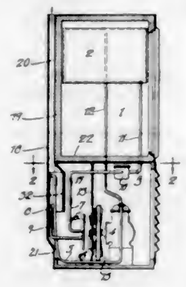
1. In a system for controlling electrical apparatus from a distance, a prime mover, a generator driven thereby, an exciter for said generator, a gate for controlling the admission of operating fluid to said prime mover, a speed governor for controlling said gate, means for releasing said governor to start said prime mover from rest, and means responsive to a predetermined exciter voltage for causing said governor to slowly increase the speed of said prime mover.

7. In combination, an a. c. distribution system, an a. c. generator, means effectively operated by a predetermined difference in frequency between said generator and system, means cumulatively responsive to a predetermined extent to intermittent phase equality between said generator and system, means effectively operated momentarily each time said generator and system are in phase, and means controlled by joint operation of the said two phase responsive means and said frequency responsive means for connecting said generator to said system.

9. In combination, a distribution system, a prime mover, a generator driven thereby, means for connecting said generator to said system, a brake for said prime mover, means fed from said distribution system for causing the release of said brake, and means for preventing the application of said brake while said prime mover is above a predetermined speed independently of failure of voltage on said distribution system.

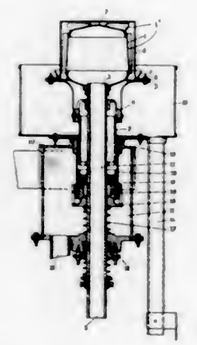
14. In combination, an a. c. distribution system, an a. c. generator, means for exciting said generator, means for connecting said generator to said system in response to substantial equality of frequency and phase as between said generator and system, and means responsive to the operation of said connecting means for increasing the excitation of said generator.

1,859,840. REFRIGERATING MACHINE. GEORGE H. PHELPS, Warehouse Point, Conn., assignor, by mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed Dec. 14, 1927. Serial No. 239,875. 6 Claims. (Cl. 62—116.)



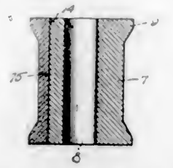
1. A refrigerating machine having a refrigerant circuit including a condenser, said machine having a cabinet in the lower part of which is a compartment formed by a partition, said cabinet having a narrow vertical air exit flue back communicating at its lower end with the top of said compartment, the entire condenser being located below said flue and enclosed within said compartment, means for blowing air into said compartment and through said condenser to said exit flue, said compartment being closed except to admit air from said blower and to discharge it into said exit flue, said condenser having a number of small passages in which the passing air is confined laterally between metal walls which communicate its cooling effect to the refrigerant, said passages all discharging directly into the lower end of said exit flue.

1,859,841. APPARATUS FOR THE IMPREGNATION OF HOLLOW ARTICLES. HENDRIK JACOBUS PRINS, Hilversum, Netherlands. Filed Dec. 30, 1929, Serial No. 417,567, and in Germany Jan. 11, 1929. 9 Claims. (Cl. 91—43.)



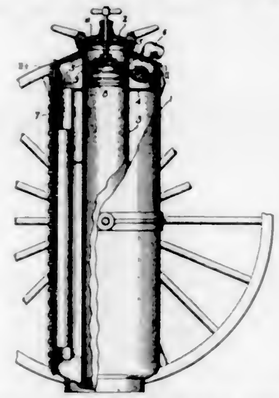
1. Apparatus for impregnating the inner walls of hollow articles such as cups, comprising a supporting base in the form of a dish on which the said article is placed, mouth towards the dish to form a completely closed container, means whereby the impregnating liquid is introduced into said dish and closed container and directed only along the inner wall of said article, means whereby said liquid is returned from said dish after use, the discharge outlet of said means being situated in proximity to the base of said hollow article.

1,859,842. SPOOL FOR THREAD. GEORGE S. RADFORD, New Canaan, Conn., assignor to Belding Heminway Company, New York, N. Y., a Corporation of Connecticut. Filed May 25, 1929. Serial No. 365,850. 4 Claims. (Cl. 242—125.)



2. A spool having an external slot extending from end to end thereof, and a thread engaging member lodged in said slot.

1,859,843. FIRE EXTINGUISHER. WALTER R. ROLLO, Utica, N. Y., assignor, by mesne assignments, to American La France and Foamite Corporation, a Corporation of New York. Filed Aug. 10, 1925, Serial No. 49,228. Renewed Sept. 20, 1930. 7 Claims. (Cl. 169—32.)



1. An invertible foam-type extinguisher comprising outer and inner containers respectively containing foam-making solutions, the inner container having an annular member secured therein and constituting a stopple seat and having its upper part spaced inward from the wall of the inner container to form therewith an annular pocket, the wall of the inner container above the base of the annular member having one or more restricted portholes or perforations, and at the base of said pocket a hole to drain solution therefrom to the exterior of the inner container.

2. A foam type engine comprising an outer container mounted to tip on a predetermined axis to an inclined discharge position less than vertical, and having a foam outlet in its top part, and an inner container of suitable size to hold a foam-making solution and having associated therewith a stopple-closed opening and a hollow structure open to the solution space of said inner container and comprising a wall interposed in the exit path of solution from the inner container, said wall being provided with portholes one or more of which are on opposite sides of the vertical plane of said tipping axis in the upright position of the engine, the aggregate area of said portholes being materially less than the cross sectional area of said stopple-closed opening, and a cross partition in said outer container having a solution passage for controlling the flow of the outer solution toward the foam outlet when the engine is tipped to said inclined discharge position, all said parts being mutually organized to produce first contact of the two solutions solely by their gravitational flow on tipping of the extinguisher.

1,859,844. WINDING MACHINE. IRVING R. ROWE, Stonington, Conn., assignor to The Atwood Machine Company, Stonington, Conn., a Corporation of New Jersey. Original application filed Mar. 10, 1930, Serial No. 434,636. Divided and this application filed Jan. 21, 1931. Serial No. 510,119. 3 Claims. (Cl. 308—24.)



1. In a winding machine, a spindle bearing and a bracket arm having an open ended recess for the insertion of the bearing, said bearing having a recess in its outer end for receiving the end of one spindle and provided with an extension at its inner end having a flat inner face forming a bearing for the adjacent end of another spindle.

1,859,845. TREATMENT OF WOOD FOR THE PRODUCTION OF PULP. JOHN D. RUE, Madison, Wis., SIDNEY D. WELLS, Quincy, Ill., and FRANCIS G. RAWLING, Madison, Wis., assignors to Arthur M. Hyde, Secretary of Agriculture of the United States. Filed Apr. 8, 1926. Serial No. 100,685. 30 Claims. (Cl. 92—11.)

24. The method of making pulp from wood which comprises digesting the wood with a solution containing as the two essential chemical ingredients normal sodium sulfite and carbonate of sodium.

1,859,846. WOOD PULP AND PROCESS OF MAKING THE SAME. JOHN D. RUE, Madison, Wis., SIDNEY D. WELLS, Quincy, Ill., and FRANCIS G. RAWLING, Madison, Wis., assignors to Arthur M. Hyde, Secretary of Agriculture of the United States. Filed Aug. 4, 1926. Serial No. 127,177. 10 Claims. (Cl. 91—11.)

1. The process of making wood pulp product, suitable for the manufacture of corrugated board, the said process comprising subjecting wood chips to a mild chemical digestion with a substantially neutral solution containing sodium sulphite and the sodium salt of a weakly ionized polybasic acid and continuing the digestion until the wood chips are softened to a uniform degree throughout but not pulped into their ultimate fibers and then mechanically treating the softened chips to open up and separate the fibers.

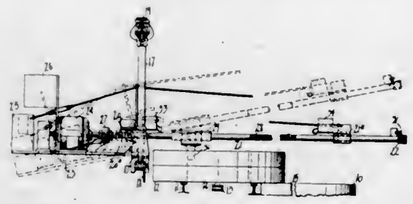
1,859,847. PULPED MATERIAL AND PROCESS OF PREPARING THE SAME. JOHN D. RUE, Madison, Wis., SIDNEY D. WELLS, Quincy, Ill., and FRANCIS G. RAWLING, Madison, Wis., assignors to Arthur M. Hyde, Secretary of Agriculture of the United States. Filed Aug. 4, 1926. Serial No. 127,178. 11 Claims. (Cl. 92—11.)

1. In the production of fibers from vegetable material for use in making paper, the method of softening and separating the fibers which comprises first, and prior to cooking, impregnating the vegetable material throughout with a softening agent, subjecting the vegetable material while all of it is covered with a softening agent in a closed vessel to heat and pressure to effect a substantially uniform softening of the material throughout the particles, thereafter subjecting the impregnated pulp in the presence of a chemical consisting of sodium sulphite and the sodium salt of a weakly ionized polybasic acid to a cooking treatment and stopping the cooking treatment when the particles are uniformly softened and the middle lamella thereof is softened and before it is completely dissolved, and thereafter mechanically separating the vegetable material thus previously chemically treated.

1,859,848. PRODUCTION OF FIBROUS PULP FROM VEGETABLE MATERIAL. JOHN D. RUE, Madison, Wis., SIDNEY D. WELLS, Quincy, Ill., and FRANCIS G. RAWLING, Madison, Wis.; said Rue and said Rawling assignors to Arthur M. Hyde, Secretary of Agriculture of the United States. Filed Sept. 3, 1926. Serial No. 133,516. 31 Claims. (Cl. 92—11.)

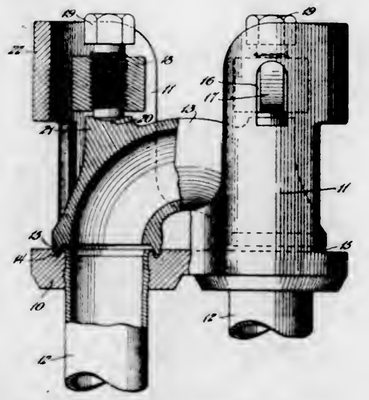
1. In the production of fibers from vegetable material for use in making paper, the method of softening the material to prepare it for subsequent mechanical separation of the fibers which comprises mildly cooking the vegetable material until softened but not pulped into their ultimate fibers with a chemical agent which consists of a solution of sodium carbonate and sodium sulphite, the former being in quantities sufficient to neutralize the acids formed by the hydrolytic action of the sulphite, and in amounts at least as great as twenty percent of the latter.

1,859,849. MOLD HANDLING DEVICE. HORACE D. STEVENS and NELSON H. MYERS, Akron, Ohio, assignors to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 15, 1927. Serial No. 213,164. 6 Claims. (Cl. 198—19.)



1. The combination with a row of vulcanizers and a conveyor for tire molds surrounding the same and transverse tracks extending between one reach of the conveyor and the vulcanizers, of a device movable lengthwise of the conveyor opposite the row of vulcanizers for moving molds in succession from the conveyor over a transverse track into a vulcanizer or vice versa.

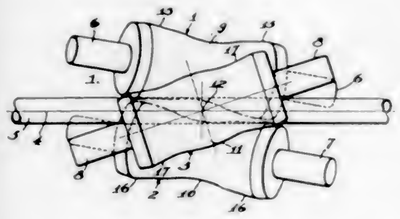
1,859,850. RETURN BEND FITTING. ROY L. STEWART, Birmingham, Ala., assignor to Fred C. Fantz, Webster Groves, Mo. Filed Dec. 4, 1930. Serial No. 500,114. 5 Claims. (Cl. 285—20.)



1. In a refinery apparatus, means for connecting a conventional return bend to a pair of still tubes comprising, a housing member having substantially circular openings therein, the walls of which are provided with circum-

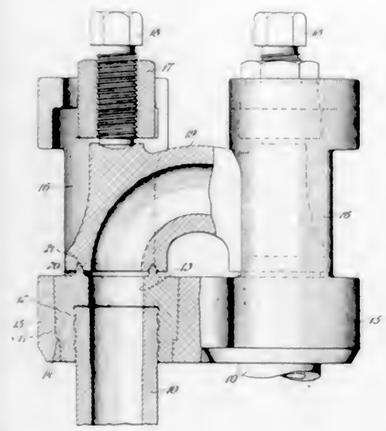
ferential recesses adapted to interlock with the walls of the pair of tubes when they are rolled into said recesses, an annular ridge on each face of said return bend, there being an annular recess in said housing surrounding each tube adapted to receive said ridge, and means carried by the housing for holding said return bend and housing in assembled relation to form a gas-tight joint.

1,859,851. STRAIGHTENING MACHINE. RALPH C. STIEFEL, Ellwood City, Pa. Filed Aug. 3, 1931. Serial No. 554,641. 2 Claims. (Cl. 153—60.)



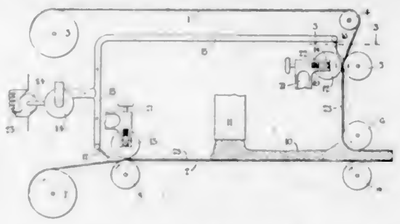
1. A machine for straightening round stock, comprising a set of three rotatable cross-rolls having their axes inclined to each other and to a central pass line, the faces of two of the rolls being concave between their ends to form a pocket for receiving progressively deflected stock, the mid portion of the third roll having its face provided with an annular projection for progressively deflecting stock into said pocket, and the ends of the three rolls being provided with annular projections collectively forming at both ends of the rolls three-point stock-engaging faces spaced equidistant from said central pass line to hold the stock firmly in said pass line at each end of said pocket.

1,859,852. RETURN BEND FITTING. HERBERT C. STOCKHAM, Birmingham, Ala., assignor to Fred C. Fantz, Webster Groves, Mo. Filed Dec. 4, 1930. Serial No. 500,115. 1 Claim. (Cl. 285—20.)



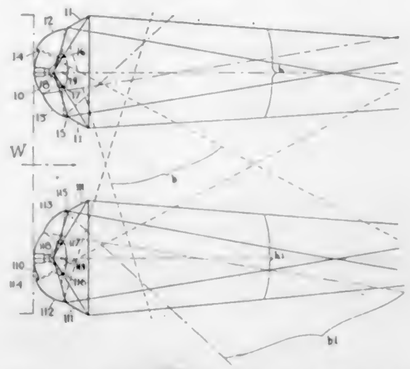
In a refinery apparatus, means for connecting a conventional return bend to a pair of still tubes, comprising a fitting having an opening corresponding to the external diameter of said tubes, the walls of said opening being provided with circumferential recesses adapted to receive the metal of the tubes when they are expanded therein, an inwardly extending flange at one end of said fitting forming an opening the same diameter as the internal diameter of said tubes, shoulders on the outer surface of said fittings, a housing member having substantially circular openings therein, the walls of which are adapted to interlock with the shoulders on said fittings, means forming a leak-proof joint between the face of the return bend and the end of said fitting, comprising a groove on one member and a rib on the other, and means carried by said housings for holding said fittings and said return bend in assembled relation to form a gas-tight joint.

1,859,853. MANUFACTURE OF WALL BOARD. GEORGE MILLER THOMSON, Caledonia, Ontario, Canada, assignor to Gypsum, Lime and Alabastine, Canada, Limited, Paris, Ontario, Canada. Filed Mar. 10, 1930. Serial No. 434,787. 7 Claims. (Cl. 154—1.)



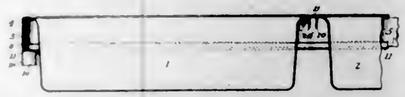
1. In the manufacture of wall board of the kind described, a method of applying adhesive to a paper web which comprises advancing said web between a support and a distributing roll arranged parallel to said support, feeding liquid adhesive into the bight between said roll and paper web, and controlling the width of the adhesive film applied to the web by regulating the rate of feed of the adhesive.

1,859,854. HEADLIGHT FOR MOTOR VEHICLES. GOSWIN WALLSTAB, Berlin, Germany. Filed Oct. 30, 1931, Serial No. 572,009, and in Germany Oct. 25, 1930. 2 Claims. (Cl. 240—41.25.)



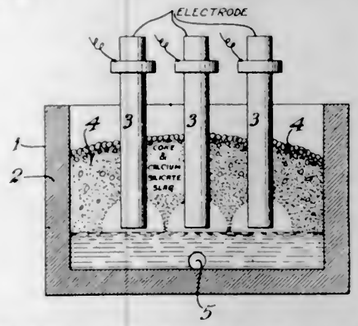
1. In combination, a pair of forwardly directed laterally spaced right and left motor vehicle head lights which are adapted to illuminate the sides of curved roads, each head light having a main reflector generally in the form of a paraboloid, a light source located in the principal axis of each of said main reflectors, the left main reflector having an auxiliary concave spherical reflector of relatively short radius of curvature located in its left side wall, and having a second auxiliary concave spherical reflector of longer radius of curvature as compared with said first named spherical reflector located in its right side wall, said first named spherical reflector having its principal axis directed to the right and forming an acute angle with respect to the principal axis of the left main reflector, and said second spherical reflector having its principal axis directed to the left and forming a comparatively smaller acute angle with respect to the principal axis of the left main reflector, an auxiliary light source for said first named spherical reflector located to the left of the principal axis of said left main reflector in position to cause its short radius spherical reflector to reflect a relatively diffuse beam of light to the right and close to the vehicle, an auxiliary light source for said second spherical reflector located to the right of the principal axis of said left main reflector in position to cause its longer radius spherical reflector to reflect a more concentrated beam of light to the left and relatively in advance of the vehicle; the right main reflector having on its right side an auxiliary short radius spherical reflector and auxiliary light source corresponding to those in the left side of the left main reflector, and also having on its left side an auxiliary longer radius spherical reflector and auxiliary light source corresponding to those in the right side of said left main reflector, whereby the short radius auxiliary reflector of one headlight and the longer radius auxiliary reflector of the other headlight reflect mutually intersecting light bundles which illuminate the roadway closely in front of and to the side of the vehicle as well as further ahead.

1,859,855. SET OF BAKING PANS. ASHLEY F. WARD and PAUL S. WARD, Cincinnati, Ohio, assignor to Ashley F. Ward, Inc., Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 28, 1930. Serial No. 423,959. 8 Claims. (Cl. 53—6.)



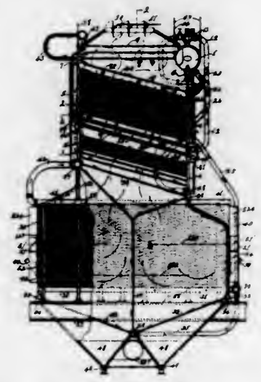
1. A set of baking pans comprising a plurality of pans, strapping means surrounding and uniting the set and comprising a strap having integrally formed stacking spacers at the corners of the set, said spacers extending below the bottom edge of said strapping means so as to contact with the tops of the corners of a set of baking pans beneath when a number of such sets of pans are stacked and maintain the stacked sets of pairs in vertically spaced relation.

1,859,856. PROCESS FOR THE PRODUCTION OF SILICON CARBIDE AND CALCIUM CARBIDE. HAROLD E. WHITE, Butler, Pa., assignor, by mesne assignments, to Swann Research, Inc., Birmingham, Ala., a Corporation of Alabama. Original application filed Nov. 23, 1925, Serial No. 70,768. Divided and this application filed Jan. 9, 1928. Serial No. 245,584. 2 Claims. (Cl. 204—62.)



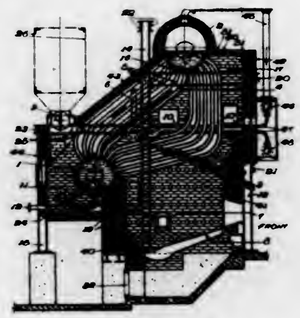
1. The herein described steps in a new process for the production of silicon carbide, which consists in charging a mixture of calcium silicate slag containing approximately 89% combined CaO and SiO_2 and carbonaceous material into an arc type electric furnace, smelting said charge, producing a molten mass, tapping said molten mass from the furnace, cooling to crystallize silicon carbide in calcium carbide, decomposing said calcium carbide with water, treating resulting calcium hydrate with acid to dissolve it, and recovering crystalline silicon carbide, substantially as described.

1,859,857. WATER TUBE BOILER. BENJAMIN B. WHITTAM, Elizabeth, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 6, 1928. Serial No. 252,063. 9 Claims. (Cl. 122—235.)



1. In a water tube boiler provided with a superheater, a natural circulation system comprising a steam and water drum, downtake and uptake headers and a bank of tubes connecting said headers, means to cause increased circulation through said system above that which would be caused by gravity by projecting feed water downwardly into said downtake headers, a connection from the water space of said steam and water drum to the lower ends of said downtake headers, and a pump in said connection driven by a turbine that is located in a steam connection from the steam space of said steam and water drum to the superheater of said boiler.

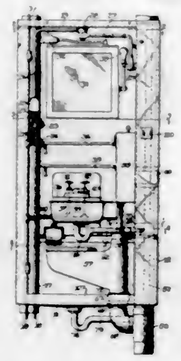
1,859,858. BOILER. PAUL WRIGHT, Birmingham, Ala. Filed Oct. 28, 1929. Serial No. 403,048. 19 Claims. (Cl. 122—331.)



1. In a boiler, the combination of a water drum arranged at the rear of the fire grate, a steam drum arranged above and forward of the water drum, a bank of

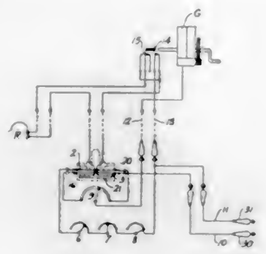
tubes extending at an acute angle upward and forward from the water drum and then approximately vertically upward to the steam drum, a second bank of tubes extending from the lower rear portion of the steam drum to the water drum, and a baffle supported beneath and adjacent to said second bank and extending from the water drum along said second bank and toward but not to the steam drum.

1,859,859. IN-A-DOOR BATHROOM. DAVID F. ZOOK, Evanston, Ill. Filed June 30, 1930. Serial No. 464,843. 7 Claims. (Cl. 4—146.)



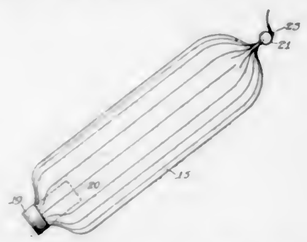
1. The combination of a cabinet having a doorway, a door therefor, a platform hinged to the inner side of said door and adapted to be swung down into operative position or to be swung up against the door into inoperative position, and a shower-bath nozzle and piping designed for use by an occupant on said platform when the latter is down in its operative position.

1,859,860. RESISTANCE MEASURING APPARATUS. CLARENCE A. ANDERSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 2, 1928. Serial No. 289,720. 16 Claims. (Cl. 175—183.)



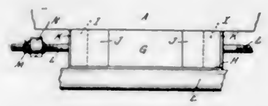
1. In a resistance testing system, a portable case housing calibrated resistances, a tube mounted on said case housing two parallel wires, and circuit connections for connecting a source of fluctuating current to said calibrated resistances in series with one wire and to the other wire in series with an unknown resistance, the connections to the two wires being such that the currents therein are opposite in direction so that value of the currents may be compared by induction means.

1,859,861. DUST SEPARATOR. HARRY R. BALLOU, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Mar. 18, 1929. Serial No. 347,804. 6 Claims. (Cl. 183—51.)



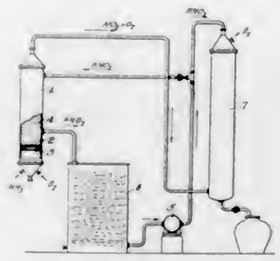
1. A pleated paper bag having a mouth, the pleats at the mouth of said bag being gathered and abutting each other to provide a continuity of thicknesses about said mouth to prevent air leaks where the bag is fastened to a suction cleaner.

1,859,862. PROCESS AND APPARATUS FOR MAKING SHEET GLASS. LOUIS BOUDIN, St. Gobain, France, assignor to Societe Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Filed Nov. 4, 1927, Serial No. 231,107, and in France Nov. 15, 1926. 2 Claims. (Cl. 49—33.)



2. The combination of a glass furnace having an issue opening in the wall thereof below the glass level therein, of a reservoir external to the furnace and adjacent to the opening, movable side cover plates above the side of the opening to control radiation from the edges of the reservoir, and a pair of rolls having a forming pass between them located in front of the reservoir.

1,859,863. PREPARATION OF CONCENTRATED NITRIC ACID BY THE CATALYTIC COMBUSTION OF AMMONIA WITH OXYGEN OR GASES RICH IN OXYGEN. IVAR WALFRID CEDERBERG, Dahlem, near Berlin, Germany, assignor to Oxyammon Aktiengesellschaft, Zurich, Switzerland. Filed Feb. 15, 1929, Serial No. 340,122, and in Germany Feb. 15, 1928. 5 Claims. (Cl. 23—162.)

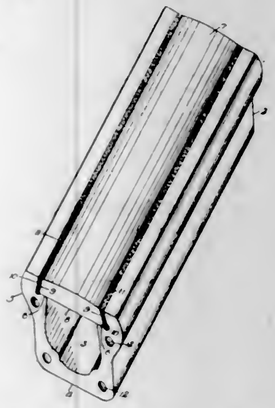


1. A process for the production of concentrated nitric acid by the catalytic combustion of ammonia with gases rich in oxygen, consisting in conducting a gas mixture

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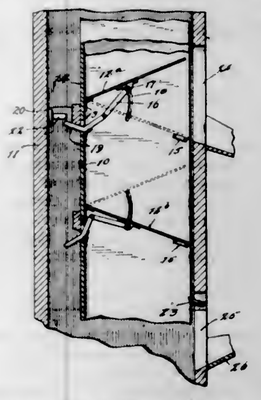
containing ammonia and oxygen into a contact zone, which in relation to the direction of flow of the gases is situated before and adjacent to a layer of cooling liquid, effecting the combustion in the said contact zone and thereupon leading the gases formed in the reaction through the said layer of cooling liquid directly after their exit from the contact zone.

1,859,864. CONDUIT. LLEWELLYN M. CHRISTIE, Pittsburgh, Pa., assignor to National Fireproofing Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 18, 1930. Serial No. 462,053. 3 Claims. (Cl. 247—35.)



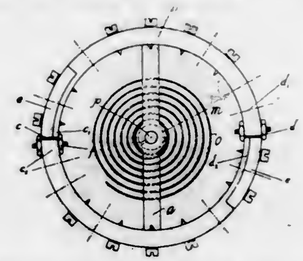
3. A conduit comprising a trough portion providing a duct and having below its upper surface a cover receiving recess the sides of which taper upwardly and inwardly, and a cover insertable into such recess by movement substantially in a plane perpendicular to the axis of the conduit, the sides of said cover when in place being adapted to be spaced from and lying generally parallel to the sides of the recess.

1,859,865. DELIVERY AND COLLECTING SYSTEM. ARTHUR E. DAVIS, East Orange, N. J. Filed Feb. 7, 1928. Serial No. 252,660. 9 Claims. (Cl. 214—97.)



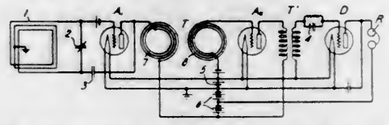
1. Apparatus for distributing goods to, and collecting goods from, the floors of a building, comprising an elevator mounted to have reciprocating upward and downward movement between the lower and upper floors served thereby, a plurality of shelves, one for serving each floor, mounted in the elevator for tilting movement between an upwardly tilted receiving position and a downwardly inclined discharge position, and an individual tilting and restoring means for each shelf for operating the shelf at the particular floor served by that shelf including a part moved with the elevator and a cooperating fixed part.

1,859,866. REGULATING DEVICE FOR CLOCKWORKS. WERNER ALBERT DUBOIS, La Chaux-de-Fonds, Switzerland, assignor to Fabrique Solvil des Montres Paul Ditisheim Societe Anonyme, La Chaux-de-Fonds, Switzerland. Filed Sept. 29, 1926, Serial No. 138,549, and in Switzerland Feb. 6, 1926. 1 Claim. (Cl. 58—108.)



In a regulating device for watches, the combination with a self compensating spiral spring of elinvar metal, of a compensating balance having a pivoted supporting arm, a plurality of mono-metallic segments secured to the arm, each segment having at least one free end and being provided with a recess extending from the free end of the segment over a relatively short length of the segment, and a monometallic element of the same length as that of said recess placed in each recess to form an integral part of the segment, said mono-metallic elements having a coefficient of expansion differing from that of the said segments.

1,859,867. WAVE TRANSMISSION CIRCUITS. HARALD T. FRIIS and AXEL G. JENSEN, Red Bank, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Nov. 20, 1923, Serial No. 675,816, Patent No. 1,727,010, dated Sept. 3, 1929. Divided and this application filed Mar. 2, 1928. Serial No. 258,475. 8 Claims. (Cl. 178—44.)



1. In an electrical system, means for transferring energy throughout a range of frequencies from an exciting circuit to an absorbing circuit, one of said circuits being tunable, said means including a coupling between said circuits comprising means having capacity reactance and inductive reactance so related to one another as to transfer energy in aiding phase, said reactances being adjusted to produce a combined reactance which varies in a predetermined way as the frequency of the transferred energy varies.

1,859,868. PROCESS OF PREPARING PIGMENTS FAST TO LIGHT. KARL GERBEL, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1929, Serial No. 345,585, and in Germany Mar. 7, 1928. 7 Claims. (Cl. 134—58.5.)

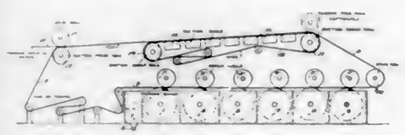
4. The process of preparing pigments fast to light which comprises adding to a substratum, which has been

prepared according to one of the well-known processes, an aqueous solution of a dyestuff containing at least one amino group, and about 1 to 3 times the weight of the dyestuff of a reduction product from molybdenum phospbotungstic acids of the general formula:

$$n(WO_3 + MoO_3)P_2O_5.3H_2O$$

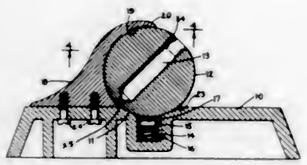
wherein n stands for one of the numbers 18 and 24 in an aqueous solution, and a precipitating agent, and boiling the aqueous suspension of the pigments, thus obtained, for about ½ to 2 hours.

1,859,869. COMBINATION BOX BOARD MACHINE. WALTER B. HADLEY, Chicago, Ill., assignor, by direct and mesne assignments, to Kellogg-Hadley Corporation, a Corporation of Delaware. Filed Feb. 16, 1931. Serial No. 516,163. 2 Claims. (Cl. 92—43.)



1. In a combination box board machine, the combination of a wet felt belt, means depositing a plurality of superimposed layers of slush pulp on said belt, a plurality of suction boxes, a metallic foraminous belt passing over said boxes, and means passing said wet felt belt over said boxes with said felt belt resting on said foraminous belt.

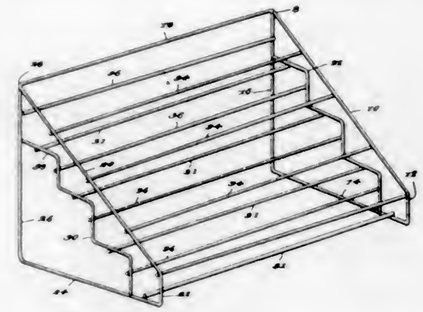
1,859,870. DESK SET. BENJAMIN W. HANLE, Elizabeth, N. J., assignor to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 20, 1928. Serial No. 300,636. 4 Claims. (Cl. 120—108.)



1. A device of the character described comprising a base member provided with a socket, a spring pressed friction device mounted in said socket, an arm extending upward from the base and overhanging the socket and friction device, and a member, containing a pen receptacle, mounted in said socket and engaged by the friction device and overhanging arm, said socket having a clearance cut at its side to permit removal of said member from the socket.

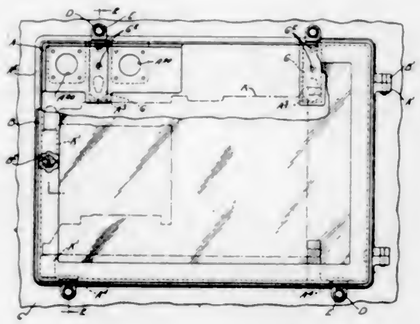
1,859,871. DISPLAY RACK. MARION E. HARLAN, San Francisco, Calif., assignor to A. Schilling & Co. San Francisco Calif. a Corporation of California. Filed Apr. 1, 1931. Serial No. 526,924. 2 Claims. (Cl. 211—158.)

1. A display rack of the class described comprising a single wire bent to form a pair of spaced substantially vertical triangular standards connected by a longitudinally extending portion of the wire, a wire of stepped formation fixed to the side and base of each standard, longitudinally extending members connecting the horizontal portions of each step forming shelves, and spaced longi-



tudinally extending members fixed to the hypotenuse of each triangular standard forming rests for packages disposed on said shelves.

1,859,872. INSTRUMENT CASE. THOMAS R. HARRISON, Wyncote, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 6, 1930. Serial No. 459,478. 10 Claims. (Cl. 247—9.)

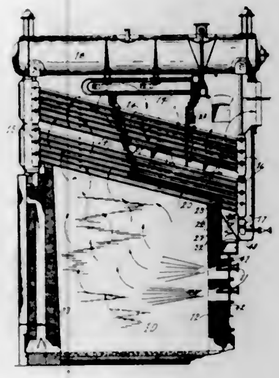


1. An instrument casing comprising a box-like body open at its front side and formed at said side with a marginal flange projecting a small distance outwardly from said body and adapted for engagement with a panel at the margin of an opening therein through which said body may extend, and having provisions at its rear side adapted for the attachment to said body, of means securing the latter to a supporting structure from which said body may project.

1,859,873. SOOT POCKET FOR BOILERS. DAVID S. JACOBUS, Montclair, N. J., and WILLIAM A. JONES, West New Brighton, N. Y., assignors to The Babcock and Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 12, 1925, Serial No. 62,063. Renewed Nov. 22, 1930. 11 Claims. (Cl. 122—298.)

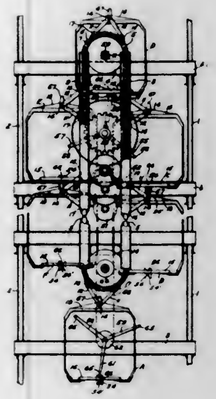
1. In combination, a water tube boiler having inclined tubes connected to a header at one end, a furnace having a wall spaced inwardly from said header, whereby a length

of tubes is situated between the wall and the header, means providing gas passes across said tubes with the lower end of one pass including said length of tubes, a



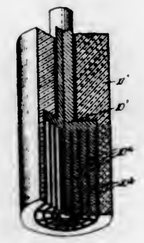
soot box disposed beneath said length, and a gas tight expansion joint between the parts of the boundary wall of said socket.

1,859,874. AUTOMOBILE STORAGE ELEVATOR. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 5, 1929. Serial No. 330,455. 15 Claims. (Cl. 198—137.)



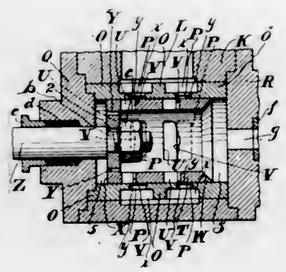
1. In an elevator system, means defining a pair of adjacent vertical columns interconnected at their respective ends, endless chains extending through the circuitous path defined by said columns each link of which comprises a plurality of laminations secured by a pin extending therethrough, a plurality of load receptacles, means for attaching each of said receptacles to said chains in spaced relation thereto, said attaching means being at right angles to the planes of movement of said chains and connecting to said chains to distribute the load on equal and opposite sides of the center of said pins, means for moving said endless chains to move said receptacles through said circuitous path with a continuous movement, whereby said receptacles will move through the vertical portions of the path at one speed and whereby the transfer of receptacles from either column to the other will be at an increased speed.

1,859,875. MERCURY VAPOR RECTIFIER. ERWIN KERN, Wettingen, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 12, 1927, Serial No. 190,714, and in Germany May 17, 1926. 14 Claims. (Cl. 250—27.5.)



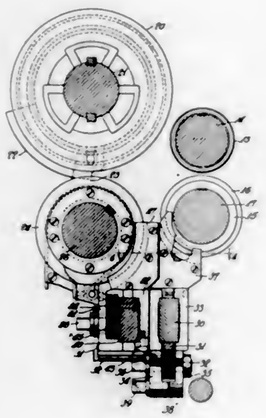
1. In a vapor rectifier, an anode having its arcing surface constituting a plurality of separated areas energized in parallel and arranged in series with respective resistances.

1,859,876. VALVE FOR FLUID ACTUATED HAMMERS. PETER F. KOPLIN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 18, 1930. Serial No. 461,960. 3 Claims. (Cl. 251—78.)



1. In a fluid actuated hammer, a throttle valve mechanism for controlling the flow of pressure fluid to said hammer, including a hollow valve having relatively wide ports therein of substantially V-shaped contour at one side and having passages along which said fluid may pass, and a valve chest surrounding the valve having openings therein cooperating with the ports to form a relatively wide passage of small area for pressure fluid, said chest extending beyond the ends of the valve to form pressure chambers in communication with one another by the passages and passing pressure fluid from one to the other to equalize the pressure at each end of the valve.

1,859,877. SLOTTING AND SCORING MECHANISM. SAMUEL M. LANGSTON, Wenonah, and WILLIAM H. CLEAVER, Audubon, N. J., assignors to Samuel M. Langston Co., Camden, N. J., a Corporation of New Jersey. Filed Nov. 11, 1930. Serial No. 494,842. 8 Claims. (Cl. 93—58.)



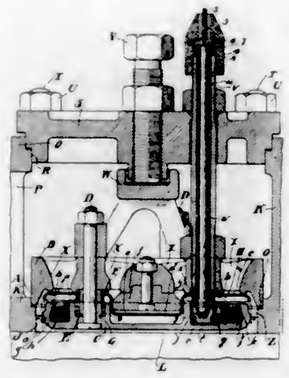
1. A slotting and scoring mechanism including a rotary slotting head, a scoring wheel cooperating with said slotting head for substantial aligned operation, a pair of rotatable adjusting members, means responsive to the rotation of one of said members for axially moving said slotting head independently of said scoring wheel, and means responsive to the rotation of the other of said adjusting members for moving said scoring wheel independently of said slotting head, said adjusting members being at different elevations and beneath said wheel and head, and sufficiently close together so that the manipulation thereof can be effected without substantial change in the position of the manipulator, either of said members being movable past the other axially of said wheel and head.

1,859,878. METHOD OF AND APPARATUS FOR MANUFACTURING CONCRETE PRODUCTS. ERNEST H. LOCKWOOD, Pasadena, Calif. Filed Dec. 29, 1926. Serial No. 157,640. 30 Claims. (Cl. 25—2.)



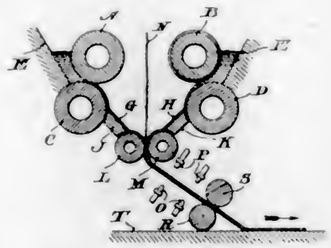
1. In a plant of the character described, the combination of: a molding floor; depressed tracks upon opposite sides of said floor; trackmolds, vertically open, adapted for alignment in successive superimposed courses across said floor from one depressed track to the other each course together with elevators disposed at each end thereof being adapted to serve as a continuous track for a molding car; elevators on wheels adapted to run on said depressed tracks, respectively, and to raise or lower or laterally move said molding car, and to connect and serve with each course of molds as said track for said molding car; a wheeled molding car adapted to run upon said track, propelled by means of a cable supported and actuated by mechanism upon said elevators or their structures.

1,859,879. VALVE MECHANISM. FREDERICK V. D. LONGACRE, Yonkers, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 11, 1930. Serial No. 443,381. 6 Claims. (Cl. 137—139.)



1. An electro-magnetic valve mechanism comprising a pair of ported stop members arranged to form a space therebetween, a coil in one member and cooperating therewith to form a magnet, a valve plate in the space controlled by the magnet and forming an armature therefor, and means for cushioning the movement of the valve plate.

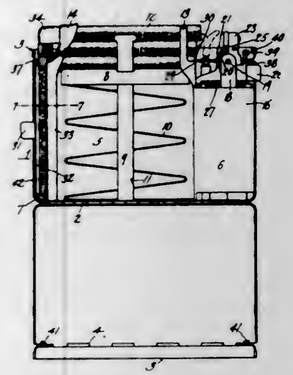
1,859,880. APPARATUS FOR FORMING REENFORCED GLASS. KARL MACHT, Ober-Salzbrunn, Germany, assignor to Schlesische Spiegelglas Manufactur Carl Tielsch, G. m. b. H., Waldenburg-Altwasser, Germany. Filed Mar. 6, 1930. Serial No. 433,714. 3 Claims. (Cl. 49—32.)



3. In an apparatus for forming a compound sheet of glass, the combination of a pair of compression rolls, a sheet forming means comprising a pair of rolls, the upper of which is circumferentially channeled and the lower of which is smooth, feeding one of the single sheets of glass to the compression rolls with that surface thereof formed by the smooth roll in contact with one of the compression rolls, a second sheet forming mechanism feeding the other single sheet to the compression rolls, and means for inserting a reenforcement between the two single sheets prior to their passage between the compression rolls.

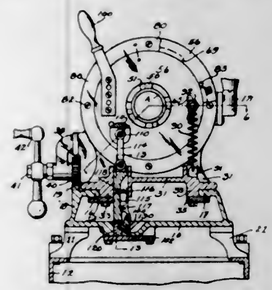
1,859,881. COMBINED CIGARETTE CASE AND LIGHTER. FRANK J. NANKIVELL, Worcester, Mass., assignor to Clark W. Parker and Charles McC. Chapman, New York, N. Y. Filed Mar. 20, 1929. Serial No. 348,582. 13 Claims. (Cl. 206—41.4.)

3. A pocket cigarette case comprising in combination a magazine for holding a pile of cigarettes, means for feeding the cigarettes toward the top of the magazine, a lighting means adjacent the magazine so located that one end of the top cigarette will be adjacent thereto and the other end of the top cigarette being adjacent a nozzle,



suction means including said nozzle and a bellows communicating with the said nozzle, means projecting through the case at one side to operate the lighting means, and means projecting through the opposite side of the case whereby the bellows may be operated pulsatingly.

1,859,882. PIPE THREADING MACHINE. IRA W. NONNEMAN, Warren, Ohio, assignor to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed June 6, 1929. Serial No. 368,812. 16 Claims. (Cl. 10—89.)



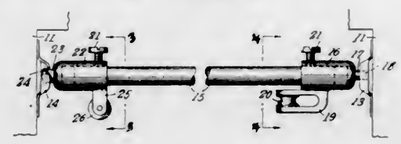
1. The combination with means for holding a pipe to be threaded, a frame adjustable lengthwise of the pipe, chasers carried by the frame, the thread cut thereby on the pipe acting as a feed screw for moving said frame lengthwise of the pipe, separable mechanism mounted in part on the frame and in part independently thereof for causing recession of the chasers, and means for locking the two parts of said mechanism together at various positions of the frame.

1,859,883. WINDOW SCREEN. ALFRED G. NORDMARKEN, Minneapolis, Minn. Filed Dec. 17, 1929. Serial No. 414,642. 2 Claims. (Cl. 156—39.)



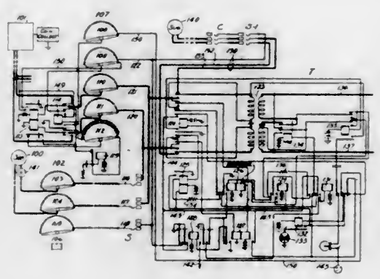
1. A fastener for screens comprising an elongated angle member adapted to be secured to the screen through one of the flanges thereof, the other of the flanges of said angle member having a lip issuing outwardly therefrom and spaced from said flange, a plate for attachment to the member to which the screen is to be fastened, a lip formed along an edge of said plate and spaced therefrom, said lip extending in the opposite direction from the lip on said angle member, said lips being adapted to be received within the respective spaces between said lips and the structures from which they issue to hold the screen fastened, said lips having the extreme edges thereof turned over to engage one another so as to hold the lips from disengagement.

1,859,884. CURTAIN FIXTURE FOR USE IN CONNECTION WITH SHADE BRACKETS. JOHN K. ODIN, New York, N. Y., assignor to Lesher, Whitman & Co., Inc., New York, N. Y. Filed May 31, 1930. Serial No. 457,707. 3 Claims. (Cl. 156—22.)



2. In a device of the kind described the combination with a bracket having a dome shaped protuberance with an elongated aperture, of a cap for the end of a curtain rod, said cap provided with an outer end formed into a pintle, said pintle adapted to be seated in the aperture of said bracket and terminating in a raised bead to prevent said pintle from being separated from said bracket by axial movement.

1,859,885. TELEPHONE SYSTEM. ROBERT C. PAINE, Boonton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,561. 12 Claims. (Cl. 179—27.)

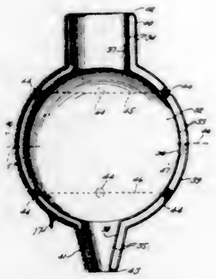


1. In a telephone system, lines of different classes, a trunk circuit consisting of two conductors, non-numerical switches for connecting lines of one class directly to said trunk, numerically operated switches for connecting lines of another class to said trunk, and means controlled over said trunk for giving different kinds of signals according to the class of line connected to the trunk.

1,859,886. DISPENSING DEVICE. AURIN E. PAYSON and MINER P. WETMORE, Norwich, Conn. Original application filed Apr. 6, 1928, Serial No. 268,013. Divided and this application filed Feb. 26, 1929. Serial No. 342,711. 12 Claims. (Cl. 215—12.)

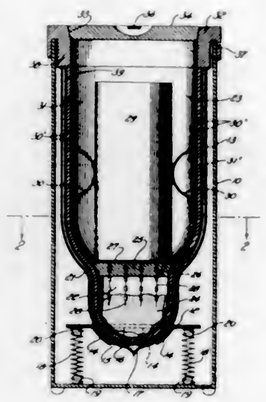
1. A double-walled vacuum jar of glass open at the top and provided at the bottom with a double-walled discharge pipe of glass integral with the body of the jar,

the inner tube of said double-walled pipe communicating with the interior of the jar and being open to the outside.



10. A double-walled vacuum jar of glass comprising a substantially spherical body provided with a neck at the top, a double-walled glass pipe extending from the bottom of said spherical body, said pipe consisting of a pair of concentric spaced tubes carried by the inner and outer walls of the jar, the inner tube being open to the interior of the jar and the outer ends of the tubes being fused together in a sealed joint, whereby said double-walled pipe constitutes an open tubular continuation of the annular vacuum chamber of the jar.

1,859,887. REFRIGERATING APPARATUS. AURIN E. PAYSON and MINER P. WETMORE, Norwich, Conn. Original application filed Sept. 21, 1928, Serial No. 307,348. Divided and this application filed July 24, 1929. Serial No. 380,541. 2 Claims. (Cl. 215—13.)



1. The combination of an outer casing adapted to hold a double-walled vacuum jar of glass, a shell of molded insulating material removably fitted within said jar, a second shell of imperforate sheet metal removably fitted within said insulating shell, an annular member removably mounted on top of said casing and engaging the rim of said jar to assist in supporting the latter firmly in upright position, said annular member being out of engagement with said inner metal shell so that the latter may be removed without disturbing said member, and a removable stopper for closing said annular member.

1,859,888. PROCESS OF REGENERATING SPENT ALKALINE LIQUOR TO FRESH ACID COOKING LIQUOR. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 2, 1927. Serial No. 165,506. 7 Claims. (Cl. 23—131.)

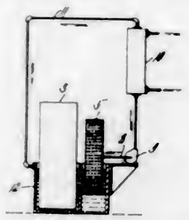
1. A process which comprises treating with sulphuric acid spent alkaline liquor resulting from the digestion of cellulosic material to coagulate organic matter from such liquor and thus to produce an alkali metal sulphate liquor, separating out the coagulated organic matter, and acidulating the liquor with sulphur dioxide, for the acid digestion of cellulosic material.

6. A process which comprises treating with sulphuric acid spent alkaline sodium base liquor resulting from the cooking of cellulosic material to coagulate organic matter from such liquor and thus to produce a sodium sulphate solution, allowing the liquor so treated to stand until the coagulated matter settles out and a substantially clear, supernatant solution is produced, separating the clear solution from the settled-out material, and acidulating the separated solution with sulphur dioxide for the acid digestion of cellulosic material.

1,859,889. PROCESS OF CONDITIONING A TISSUE OF CELLULOSE FIBER FOR CONVERSION INTO CELLULOSE DERIVATIVES AND PRODUCT OF SAME. GEORGE A. RICHTER, MILTON O. SCHUR and ROYAL H. RASCH, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 10, 1927. Serial No. 174,406. 18 Claims. (Cl. 260—146.)

15. A calendered, mercerized waterleaf tissue composed of cellulose fibers.

1,859,890. BEATING PROCESS AND APPARATUS FOR PRACTISING SAME. GEORGE A. RICHTER and MILTON O. SCHUR, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Oct. 6, 1927. Serial No. 224,427. 17 Claims. (Cl. 92—24.)



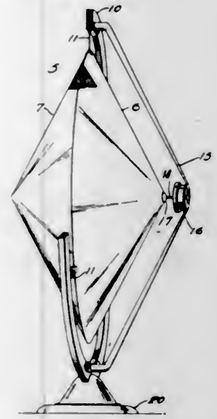
1. A process which comprises beating cellulose fiber stock, removing a portion of the stock during beating, indirectly cooling such stock, and returning it to the stock being beaten.

10. The combination with a beater engine having a washing drum for removing stock of low fiber concentration from the beater, of means for cooling the removed stock, and means for returning the cooled stock to the beater.

1,859,891. METHOD OF EFFECTING REFINING REACTIONS ON CELLULOSIC PULPS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 18, 1931. Serial No. 538,132. 16 Claims. (Cl. 92—7.)

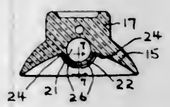
1. A process which comprises treating cellulosic fibrous material with a chemical liquor capable of refining such material, freezing out a portion of the water from such liquor to increase its chemical concentration and its refining activity while substantially preserving the fibrous material in solid condition, and thawing out and washing the refined fibrous material free from chemical liquor.

1,859,892. ACOUSTIC DEVICE. NORMAN H. RICKER, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 6, 1922. Serial No. 592,675. 12 Claims. (Cl. 181—31.)



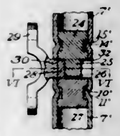
1. An acoustic device comprising a large direct-acting double conical diaphragm having a high degree of stiffness relative to mass, means attached to the outer edge of the diaphragm for substantially freely supporting said diaphragm, and means for transmitting vibrations to said diaphragm.

1,859,893. SUCTION CUP. OLIVER C. RITZ-WOLLER, Chicago, Ill. Filed Nov. 14, 1931. Serial No. 575,052. 7 Claims. (Cl. 248—39.)



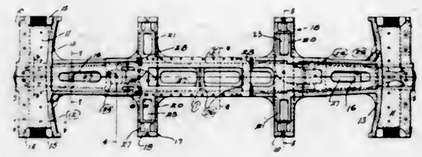
2. A suction cup comprising in combination a pliable dished disc of resilient material, means on the outer face of the disc serving as an attachment means for an article to be supported, and means providing a chamber at the inner face of the disc and having a collapsible portion extending into the concavity of the dished disc.

1,859,894. KNOCKDOWN STRUCTURAL ELEVATOR TOWER. MORGAN B. SCHILLER, Pittsburgh, Pa., assignor to American Tubular Elevator Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 19, 1930. Serial No. 445,622. 13 Claims. (Cl. 187—95.)



1. In a knock-down tower of the class described, a tubular elevator guide comprising a plurality of tube sections having projections at one end thereof, and eye members secured to the tower into which the projections extend.

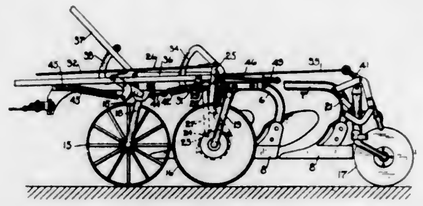
1,859,895. RAILWAY VEHICLE UNDERFRAME. WILLIAM M. SHEEHAN, Marion, Pa., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Nov. 10, 1930. Serial No. 494,782. 18 Claims. (Cl. 105—415.)



1. In a railway vehicle underframe, a longitudinal member, and an arm projecting laterally therefrom, said arm and member forming an air conduit leading from an inlet opening in said arm to an outlet opening in said member.

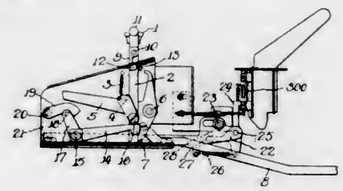
2. In a railway vehicle underframe, a main longitudinal central member having a portion adapted to mount a center plate, an arm projecting transversely therefrom and including a portion adapted to mount a blower, elements of said member and arm forming an air conduit between said arm portion and said central member portion.

1,859,896. PLOW. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 31, 1929. Serial No. 367,178. 13 Claims. (Cl. 97—73.)



1. In a power lift plow, the combination of a frame carrying a plow body, a supporting wheel for said frame, counterbalancing spring means tending to move said wheel in one direction relatively to said frame for raising said frame to transport position, and spring means adapted to exert a force on said wheel tending to move it in the other direction for lowering said frame to plowing position only after the counterbalancing force of said first named spring means has been substantially expanded.

1,859,897. SUBTRACTION KEY LATCH. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Filed Jan. 14, 1929. Serial No. 332,460. 4 Claims. (Cl. 235—130.)



1. In an adding and subtracting machine, the combination of a subtraction key, a pivoted arm arranged to be moved by said key, an arm rigid with the first arm, a cam arm arranged to be moved by the second arm, a trans-

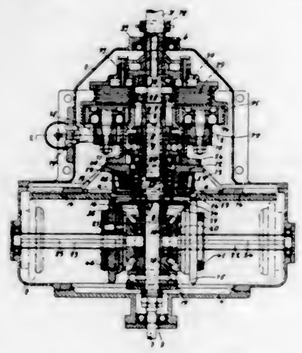
verse rock shaft on one end of which said cam arm is fixed, a longitudinally movable slide arranged to be moved by the rock shaft, a finger yieldingly mounted on the rear end of the slide, and means to prevent the taking of a total, said finger being arranged to actuate said preventing means in the rearward movement of the slide.

1,859,898. FASTENING DEVICE. STEADMAN O. TAYLOR, St. Louis, Mo., assignor to T & S Corporation, Chicago, Ill., a Corporation of Illinois. Original application filed May 25, 1928, Serial No. 280,548. Divided and this application filed May 20, 1930. Serial No. 453,966. 4 Claims. (Cl. 74—8.)



1. In combination, a cotter pin having a pair of arms provided at their outer ends with beveled edges, said edges extending in a plane at an angle to the plane of said arms and forming a V-shaped recess, the planes of said edges intersecting in a line extending in the plane of said arms, a spreader pin having a flat body portion located between said arms and having a shoulder extending laterally from its inner end, a head having inclined surfaces for engaging the beveled edges of said V-shaped recess for spreading said arms in a plane parallel with the plane of said body portion, said inclined surfaces extending across said flat body portion.

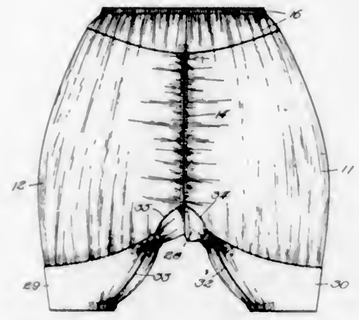
1,859,899. AUTOMATICALLY WORKING CONTINUOUS GEARING DEVICE. JOHAN EMIL THELLMOD and BIRGER ZETTERGREN, Stockholm, Sweden, assignors to Helge Gustaf Torulf, Stockholm, Sweden. Filed Mar. 21, 1930, Serial No. 437,696, and in Sweden June 4, 1929. 5 Claims. (Cl. 74—34.)



1. A gearing device of the character described comprising, a driving shaft, a variable gear connection, and means for determining and controlling the operation of said variable gear, said means including a normal pressure member associated with the driving shaft and responsive to variations in the moment of torsion of the motor power or load, a centrifugal governor, means for balancing the weight of the governor at a selected speed of rotation, means operable by the governor for varying the ratio of the gear in one direction when the selected speed of rotation is exceeded and means operable by the governor for varying the ratio of the gear in the other direction when the selected speed is not reached.

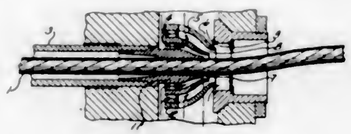
1,859,900. NETHER GARMENT. MINIFRED DAWES THOMAS, Chicago, Ill. Filed Jan. 20, 1930. Serial No. 422,108. 5 Claims. (Cl. 2—224.)

1. A new article of manufacture comprising bloomers having cuffs of separate pieces which are relatively narrow on the outer sides and wider on their inner sides, the inner sides extending upwardly to approximately the



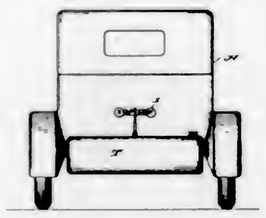
crotch of the garment and elastics extending part of the way around the cuffs on adjacent inner sides thereof to cause the cuffs to fit closely around the legs of the wearer.

1,859,901. EXTRUDING APPARATUS. BRUNO M. A. TREBES, Berwyn, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1930, Serial No. 441,791, and in Great Britain Sept. 11, 1929. 3 Claims. (Cl. 18—13.)



1. An extrusion die for applying a plurality of layers of plastic insulation such as gutta percha to a conductor in which the die comprises several parts having coaxial exit orifices, the exit orifices of the several parts being arranged so nearly in the same plane that the distance between the first and the last thereof is not greater than the thickness of the insulation applied to the conductor whereby a bend in the conductor as it passes through the die will not result in eccentric application of the plastic insulation.

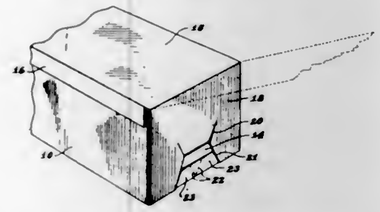
1,859,902. STOP-GO INDICATOR. HERBERT C. WEBB, Baltimore County, Md. Filed Mar. 17, 1931. Serial No. 523,329. 4 Claims. (Cl. 116—37.)



1. A movable body acceleration reversal indicator, comprising four right angular radially projecting arms horizontally rotatable on said body, two radially adjacent arms

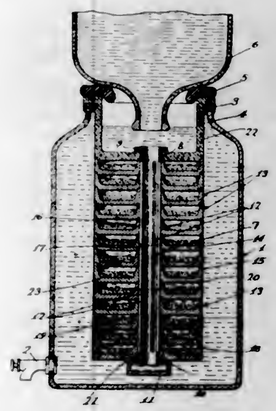
being heavier than their respective opposite arms, stops to limit the rotation of said arms, one when one heavy arm is at right angles to the direction of acceleration and another when the other heavy arm is at right angles to the direction of acceleration.

1,859,903. FOLDED BOX. CHARLES P. WELLMAN, West Medford, Mass., assignor of one-half to Champe S. Andrews, Chattanooga, Tenn. Filed June 10, 1929. Serial No. 369,536. 6 Claims. (Cl. 229—44.)



1. In a folded box, a back member having a pair of parallel cuts therein to form a strap therebetween, a separable element having folded tabs, said tabs being arranged to be folded into overlapping position to permit said element to be inserted under said strap and to be unfolded into extended position to lock said element against withdrawal.

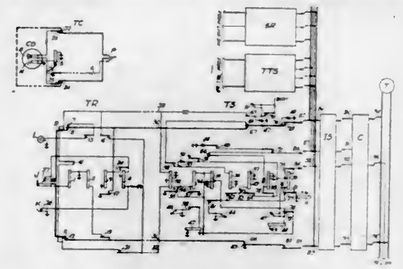
1,859,904. RADIUM FILTER EMANATOR. JOHN C. WICHMANN, Los Angeles, Calif. Filed July 21, 1926. Serial No. 123,890. 11 Claims. (Cl. 167—51.)



1. In a radium filter emanator, an annular cup-like porous vessel having a substantially horizontal base, a substantially vertical outer rim and vertical inner rim with a central opening therethrough at the inner rim, crushed radioactive material held in said vessel, and means to pass water through the inner rim into contact with the material and through the vessel.

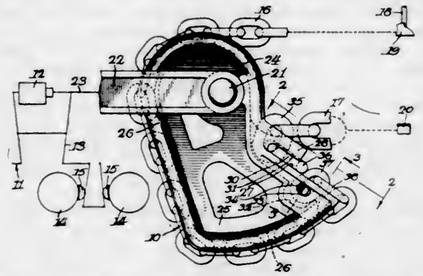
1,859,905. TESTING APPARATUS. JOHN WICKS, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 484,944. 20 Claims. (Cl. 179—175.2.)

1. In a telephone system, a test switchboard, a train of automatic switches for extending a connection from the switchboard to a subscriber's line, a feeding bridge in the first switch of the train for feeding battery in the di-



rection of the called line, and automatic means for disconnecting said bridge and for establishing a clear metallic circuit between the switchboard and the subscriber's line.

1,859,906. BRAKE MECHANISM. JACK WILSON, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 5, 1929. Serial No. 383,480. 8 Claims. (Cl. 74—110.)



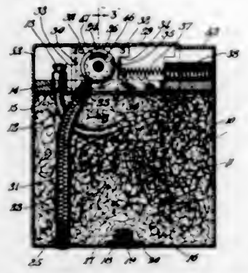
1. In brake mechanism for railway cars and the like, a reversible lever fulcrumed to form a long arm and a short arm, a projection on one edge face and having open slots at substantially right angles to each other to receive adjacent links of an operating chain, and a recess in the periphery of the said face to receive the end link of a second operating chain, said last chain cooperating with the first to hold the latter within the slotted projection.

1,859,907. METHOD FOR EMBOSSING PLASTIC MATERIAL. ROLAND G. ANDERSON, New Haven, Conn., assignor, by mesne assignments, to The Goodyear's India Rubber Glove Manufacturing Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Oct. 18, 1927. Serial No. 227,000. 2 Claims. (Cl. 18—44.)



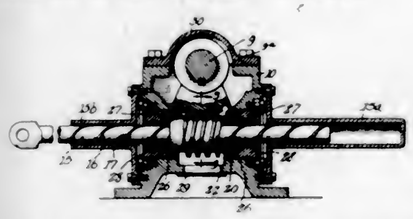
2. The method of embossing unvulcanized rubber which comprises subjecting the rubber to a yielding pressure of substantially 500 lbs. in successive impulses between a female die and an unbroken supporting surface.

1,859,908. LIGHTER. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Jan. 9, 1929. Serial No. 331,239. 8 Claims. (Cl. 67—7.1.)



7. A lighter comprising a fuel casing, a housing thereon, a sparking unit disposed within said housing, a rack member extending through said housing and engaging with said unit, said member being slidable along said fuel casing, box-like cover members on the ends of said rack member and normally lying closely adjacent said housing on opposite sides thereof to form when in the closed position a continuous closed chamber on a wall surface of said casing, the inner edges of one of said covers having an abutting engagement with said housing in normal position, the inner edges of the other cover member having a sliding relation with said housing when in normal position, said latter cover member being adapted to be moved by the finger of the operator to actuate the unit and move the other cover member, and means on the housing to engage said latter cover member to prevent excessive actuating movement.

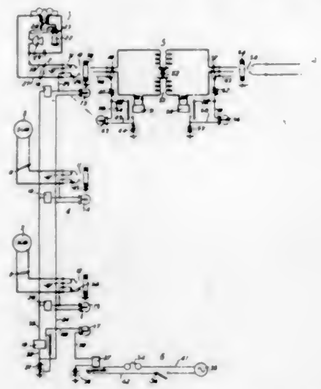
1,859,909. REVERSING GEAR MECHANISM. CLARENCE C. BERTRAM, Chicago, Ill., assignor to Barco Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 31, 1920, Serial No. 400,504. Renewed Oct. 15, 1931. 5 Claims. (Cl. 74—40.)



1. In a reversing gear mechanism, in combination, a gear casing with gearing disposed therein, and end members detachably mounted upon said casing for closing said casing and holding the gearing in predetermined relation to the casing, and a member movable through said casing for actuating said gearing, said member extending beyond the casing, and a housing structure on the casing for enclosing the projecting portion of said actuating member, both the closing members and the housing structure being attached to the casing by means readily removable from the exterior of the casing, whereby the gearing and actuating member may be readily disassembled from position in the casing.

1,859,910. TELEPHONE SYSTEM. LANGFORD J. BOWNE, Howard Beach, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 28, 1931. Serial No. 577,750. 8 Claims. (Cl. 179—72.)

1. A telephone system comprising a substation, a central station, a line circuit connecting said stations, a line signal connected to said line circuit, and a source of energizing current, a relay connected to said source of current and said line circuit in parallel with said line



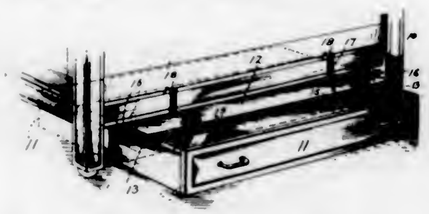
signal, and a resistance element connected in series with said relay to protect the relay against operation by leakage current in said line circuit.

1,859,911. SIGN AND SIGN CHARACTER. JAMES BOYCE, Laketon, Mich., assignor to Chicago Glass Novelty Corporation, Marion, Ind., a Corporation of Indiana. Filed Apr. 14, 1930. Serial No. 444,017. 3 Claims. (Cl. 40—135.)



1. A sign unit comprising a glass panel having a character stroke embossed on the front side thereof, a sheet of aluminum foil behind the character stroke and extending beyond the edges of the stroke, a resilient sheet behind the foil, a backing sheet behind the resilient sheet, and means to secure said panel, foil and sheets together.

1,859,912. BED WARDROBE. ANNIE LAURIE BROOKER, Richmond, Va., assignor to Boyce D. Brooker, Richmond, Va. Filed Jan. 10, 1929. Serial No. 331,408. 1 Claim. (Cl. 5—308.)

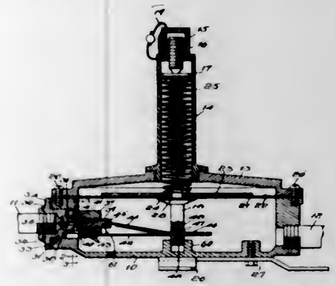


In combination with a bed, a box or holder normally under the bed and movable from beneath the bed having dimensions vertically and longitudinally that substantially utilize the space beneath the bed, a cover for the box that is movable bodily with the box, means to connect cover and bed that limit movement of the box when box and cover are moved beneath the bed and coacting disconnected means on cover and bed that stop movement of the cover when cover and box are drawn together from beneath the bed while allowing continued movement of the box.

1,859,913. PENTAERYTHRITE ETHERS. CHARLES E. BURKE, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Original application filed Jan. 27, 1928, Serial No. 250,093. Divided and this application filed Mar. 1, 1930. Serial No. 432,555. 2 Claims. (Cl. 260—151.)

1. A composition of matter comprising a tri-alkyl ether of pentaerythrite.

1,859,914. REGULATOR VALVE. WILLIAM C. BUTTNER, Winnetka, Ill., assignor to The Bastian-Blessing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 19, 1929. Serial No. 356,562. 4 Claims. (Cl. 50—26.)



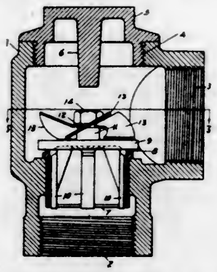
1. A fluid pressure regulating device of the kind described comprising a housing and valve mechanism mounted in the housing comprising a valve body, a reciprocally movable plunger mounted in the body operable to open and close the valve, a resilient cantilever member rigidly mounted on the valve body, a compression member fastened at one end to the free end of the cantilever member and having its other end operatively connected with the plunger, and means mounted in the plunger and engageable with said compression member for retaining the compression member and plunger in operative position.

1,859,915. STOCKING PROTECTOR AND METHOD OF MAKING THE SAME. WILLIAM R. DOWMAN, Sharon, Mass. Filed Mar. 14, 1929. Serial No. 346,936. 1 Claim. (Cl. 18—58.)



The method of making a protector for stockings which comprises dipping a form approximately the shape of a stocking in a liquid bath of vulcanized latex; removing the form and allowing the film of material thereto adhering to become solidified; followed by redipping of the form in said bath and further solidification; adding a trimming strip of the said solidified material to the upper edge of the material on the form and permitting it to bond therewith; thereafter dusting the material at the time of removal from the form.

1,859,916. VALVE. EARL E. EICKMEYER, Dayton, Ohio, assignor to The Dayton Pump and Mfg. Co., Dayton, Ohio, a Corporation of Ohio. Filed June 28, 1929. Serial No. 374,388. 3 Claims. (Cl. 251—129.)



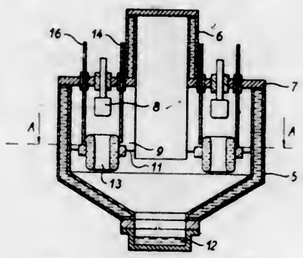
1. In a valve structure, a casing having an opening therethrough, one end of said opening forming an inlet for liquid and the other end being threaded, a second opening in said casing at right angles to the first named opening and forming an outlet, a plug for the threaded end of the first opening, said plug having an inwardly extending projection thereon, a float valve having a boss for said inlet, said valve having a plurality of guide fingers fitting within said inlet, said boss being adapted to engage said projection to limit the movement of the valve whereby the fingers are kept in engagement with the inlet, and means on said boss to cause the rotation thereof by the flow of liquid through the casing.

1,859,917. METHOD OF MAKING MAGNETIC COIL CASINGS. BERNARD A. ENGHOLM, Lakewood, and JOHN J. SWENT, Cleveland, Ohio, assignors to The Rola Company, Oakland, Calif., a Corporation of Washington. Filed Aug. 16, 1930. Serial No. 475,746. 2 Claims. (Cl. 113—51.)



1. A method of making a shell for an electromagnetic coil, comprising taking a rectangular blank, and deforming it to make a slotted cup-shaped member wherein the original side edges of the blank provide the walls of the slots, and the original end edges are pressed outwardly to form flanges which extend laterally of the cup and wherein the side portions are spaced apart sufficiently far to provide adaquate ventilation for the coil.

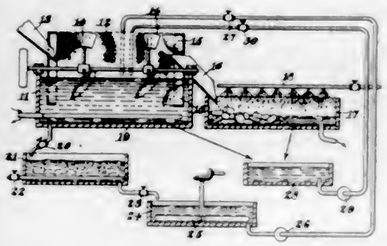
1,859,918. ARC GUIDE FOR METALLIC VAPOR RECTIFIERS. ARTHUR GAUDENZI, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Dec. 6, 1928, Serial No. 324,181, and in Germany Dec. 19, 1927. 3 Claims. (Cl. 250—27.5.)



1. In an electric current rectifier of the metallic vapor type, a container, a hollow wall depending from the top

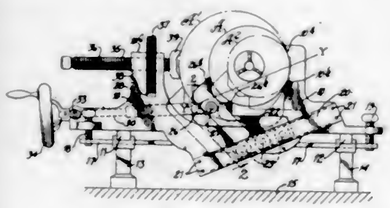
of said container, a horizontal wall connecting with said depending wall, a plurality of radial walls connecting with said depending and said horizontal walls to form a plurality of vapor expansion cells, a plurality of anodes within said container, each of said anodes occupying one of said cells, a vaporizable metallic cathode below said horizontal wall, and double-walled arc guides connecting each anode cell with the space occupied by said cathode, said arc guides being adapted to be cooled by a medium flowing therethrough, for condensing vapor passing from the cathode to the anodes.

1,859,919. RECOVERY OF TIN FROM SCRAP TIN PLATE AND LIKE TIN BEARING MATERIALS. MASON GEORGE GILBERT, Port Elizabeth, South Africa, assignor to The African Tin Recovery Company Limited, Port Elizabeth, South Africa, a Company of the Union of South Africa. Filed Oct. 23, 1929, Serial No. 401,904, and in Great Britain Jan. 15, 1929. 4 Claims. (Cl. 23—53.)



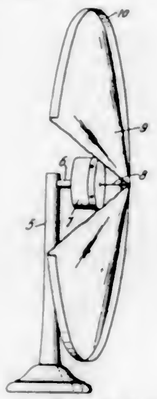
1. A regenerative process for the recovery of tin from tin-carrying metals which consists in treating the tin-carrying metal with a hot caustic alkali solution of lead acetate so as to dissolve tin from the tin carrying metal and precipitate spongy lead, treating the resulting spent de-tinning solution to precipitate tin therefrom and recover caustic alkali and acetate of alkali and regenerating de-tinning solution by dissolving said precipitated lead in a caustic alkali solution of the recovered alkali acetate, the caustic alkali which is used for this purpose being the said alkali which is recovered in the step of precipitating tin from the spent de-tinning solution.

1,859,920. VISE FOR CENTERING GENERATORS AND THE LIKE. BUTLER J. HASKINS, Chicago, Ill., assignor to Joseph Weidenhoff, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 31, 1930. Serial No. 458,184. 7 Claims. (Cl. 29—59.)



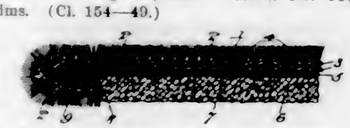
1. A vise for centering cylindrical generators and the like comprising two fixed jaws substantially equally spaced on opposite sides of a given line, and a member having two rigid jaws movable at an angle to said line adapted to grip between themselves and the fixed jaws cylindrical objects of different sizes so that the centers of the various cylindrical objects all remain on the given line.

1,859,921. ACOUSTIC DEVICE. RAYMOND A. HEISING, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1923. Serial No. 635,415. 6 Claims. (Cl. 181—31.)



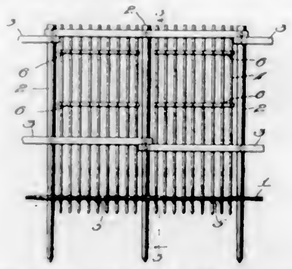
1. An acoustic device comprising a conical diaphragm having a diameter approximately ⅛ of the wave length of the lowest vibration to be reproduced and an annular member of circular cross-sectional area secured to portions of the diaphragm removed from the apex and vibratable therewith.

1,859,922. FLOOR COVERING OR RUG. ARTHUR G. HOLLAND, Bridgeport, Conn., assignor to Sidney Blumenthal & Co. Inc., New York, N. Y., a Corporation of New York. Filed Aug. 29, 1931. Serial No. 560,069. 5 Claims. (Cl. 154—40.)



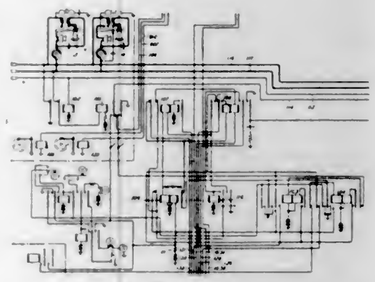
1. A floor covering or rug of the character described comprising, a pile fabric surface portion, a flexible intermediate backing portion and a resilient base portion, the peripheral portions of said pile fabric and backing being folded under so as to form an edge having pile fabric on the bottom of the rug as well as on the top.

1,859,923. METHOD AND APPARATUS FOR ANCHORAGE OF MATTRESSES TO SCREEN POLES. OTTO V. HOUGH, Lincoln, Nebr., assignor to Woods Brothers Construction Company, Lincoln, Nebr., a Corporation of Nebraska. Filed Mar. 11, 1929. Serial No. 346,040. 12 Claims. (Cl. 61—38.)



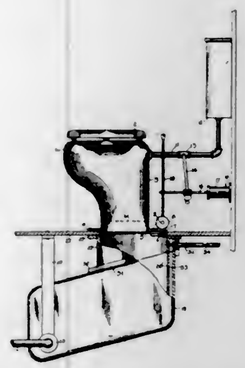
1. In a method of producing a dike or revetment in a stream, the step of interlocking the lower portions of a plurality of screen poles to the under side of a mattress while said mattress is positioned on the bed of a stream.

1,859,924. CALL CHARGING TELEPHONE EXCHANGE SYSTEM. LEWIS H. JOHNSON, Madison, and EARL S. GIBSON, Ridgewood, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1930. Serial No. 464,442. 20 Claims. (Cl. 179—85.)



1. In a telephone exchange system having a plurality of traffic zones, a plurality of telephone lines, a plurality of substations on each line, a message register for each substation, a plurality of selectors, means including one of said selectors for establishing a connection under the control of a substation of one of said lines, a message register connector circuit common to said selectors, means for recording in said connector circuit the zone of the exchange into which the connection is extended, means operative upon the establishment of a connection for rendering said connector circuit individual to said selector, and means controlled by said connector circuit for operating the message register of the calling line substation variably in accordance with the setting of said zone recording means.

1,859,925. TOILET DEVICE FOR VEHICLES. ISAIAH S. KELLEY, New York, N. Y. Filed July 17, 1930. Serial No. 468,553. 2 Claims. (Cl. 4—8.)

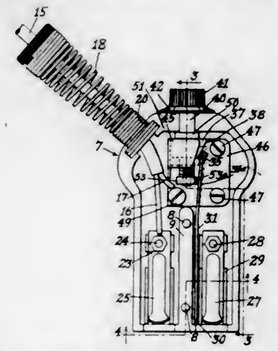


1. A toilet device for vehicles comprising a bowl, and means for flushing it, a closure for the outlet of said bowl, a depending cylindrical member supporting said closure and one part of which is provided with a double wall, and an angularly disposed receptacle adapted to be brought into close contact with said depending member, and certain parts of which are provided with a double wall in line with the double wall of the cylindrical member, and means for passing a heating medium between said walls of said receptacle and through the double wall portion of said depending member.

1,859,926. CEMENT CLINKER TREATMENT. HARRY M. LARMOUR and STEPHEN C. PIERCE, Jr., Merced, Calif., assignors to Yosemite Portland Cement Corporation, Merced, Calif., a Corporation of Delaware. Filed Mar. 19, 1929. Serial No. 348,352. 3 Claims. (Cl. 106—25.)

3. In the process of making Portland cement, the method of treating the hot clinker from the kiln, which comprises introducing to said hot clinker material selected from the group consisting of coke, coal and oil, and cooling the mass while maintaining the same substantially free from contact with oxygen.

1,859,927. ELECTRIC HEAT CONTROL. WILLIAM H. MCCALL, Glendale, Calif., assignor to Heat-O-Matic Electrical Device Corporation Ltd., Los Angeles, Calif., a Corporation of California. Filed Oct. 29, 1929. Serial No. 403,255. 5 Claims. (Cl. 200—139.)



1. In an adjustable appliance for thermostatically controlling the supply of electric current, an elongated casing of insulating material, a thermostatic control device within said casing adapted to be connected at one end of the casing with an appliance to be electrically heated, a manually operable adjusting member for said thermostatic device projecting externally and axially from the other end of the casing, and a cord holding device extending diagonally with relation to the axis of the casing and connected therewith in spaced relation to said adjusting member.

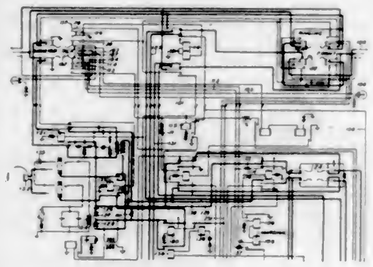
1,859,928. WINDSHIELD THERMOMETER. WILLIAM H. MACCOLLUM, Buffalo, N. Y. Filed Aug. 28, 1930. Serial No. 478,440. 12 Claims. (Cl. 73—52.)



11. A motor vehicle accessory comprising a thermometer, a supporting body therefor having a protecting skirt about the thermometer for supporting the thermometer

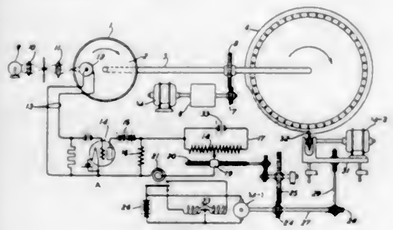
on the exterior surface of a windshield in spaced relation to the windshield glass, said skirt sealing the contact with the glass against the passage of air currents into the space occupied by the thermometer, said skirt having a single passage providing communication between the space and the exterior atmosphere, and means for attaching the supporting body to the glass, said means including a suction cup.

1,859,929. TELEPHONE SYSTEM. JAMES BURTON MCKIM, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,791. 5 Claims. (Cl. 179—27.)



1. In a telephone system, a trunk circuit, a cord circuit for cooperation with said trunk circuit, a dialing circuit associated with said cord circuit, means for locking said dialing circuit to said cord circuit and interlocking means in said trunk circuit for controlling said locking means.

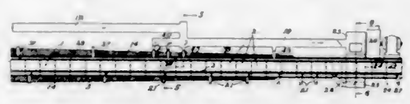
1,859,930. RECORDING AND REPRODUCTION OF INTELLIGENCE. OHMER R. MILLER, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 26, 1930. Serial No. 484,490. 6 Claims. (Cl. 179—100.2.)



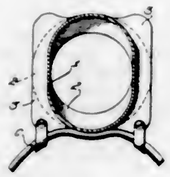
1. In combination, a medium having a record of intelligence thereon, a source of current, means controlled by said medium for varying the flow of current from said source in accordance with said record, a blank of magnetic material, and means automatically controlled by said current for cutting away a portion of said blank to form a contour which represents the variations of flow of said current.

1,859,931. LEER. VERGIL MULHOLLAND, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original application filed Dec. 27, 1927, Serial No. 242,877. Divided and this application filed Aug. 22, 1930. Serial No. 477,034. 6 Claims. (Cl. 49—47.)

1. A leer comprising an elongate tunnel, means for moving articles of glassware therethrough, a longitudinally extending temperature controlling flue associated with said tunnel and communicating at one end with a source of temperature controlling media, a plurality of dampered passages communicating with said flue and disposed at intervals therealong, said passages being progressively closer together along the length of said flue, whereby the temperature gradient in the ware controlled by said flue may be maintained constant per unit of length of the leer with the same damper settings at each of said passages.

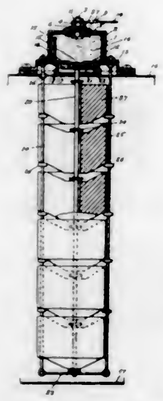


1,859,932. FLOAT VALVE HOUSING FOR REFRIGERATING PLANTS. ROBERT L. MYERS, San Diego, Calif. Filed Oct. 21, 1927. Serial No. 227,676. 2 Claims. (Cl. 62—95.)



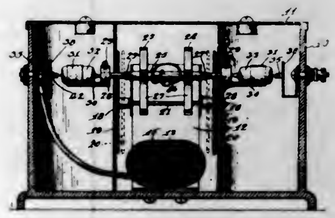
1. In a refrigerating plant, a float valve housing for the heat absorbing side of the plant substantially oval-shape in cross section, positioned with the maximum diameter vertical, and closed at both its top and bottom sides.

1,859,933. LIQUID LEVEL INDICATOR. JOHN P. NIKONOW, New York, N. Y. Filed Nov. 8, 1929. Serial No. 405,768. 1 Claim. (Cl. 73—82.)



In a liquid level indicator, the combination with guiding bars adapted to be supported in a tank, of a rod slidably supported between said guiding bars, a plurality of projections on said guiding bars, a plurality of floats slidably supported between said bars and adapted to rest on said projections, said floats being adapted to slide over said rod, a plurality of projections on said rod adapted to be actuated by said floats when said floats are successively raised by a liquid in said tank, a pressure actuated element, the end of said rod being adapted to engage said pressure element, said floats being adapted to transmit pressure to said element through said projections of said rod, said pressure being proportional to the number of floats in contact with said liquid, and means to measure the height of said liquid by measuring the variable pressure on said element.

1,859,934. ELECTRIC FLASHER. LOUIS A. M. PHELAN, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Original application filed Apr. 1, 1927, Serial No. 180,094. Divided and this application filed Nov. 26, 1928. Serial No. 321,811. 7 Claims. (Cl. 200—80.)



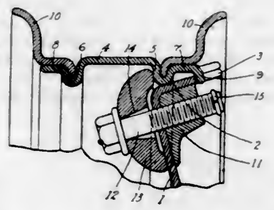
1. In an electric flasher, a rotatable shaft, an electromagnet for actuating said shaft, a plurality of mercury tube contactors for controlling electrical circuits and fixedly supported on said shaft in a substantially coaxial relation therewith, one of said electrical circuits being adapted to control the operation of said electromagnet, the other of said electrical circuits being adapted to control the flash periods through said flasher.

1,859,935. PORTABLE APPARATUS FOR SPRAYING VEGETABLES. LOYS C. POTTS and OLIVER P. ROMINE, Oklahoma City, Okla. Filed Aug. 12, 1929. Serial No. 385,286. 10 Claims. (Cl. 299—29.)



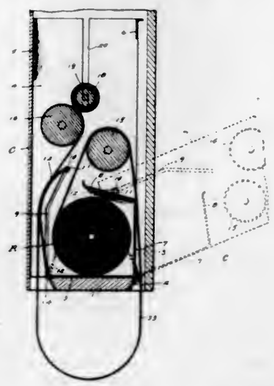
5. In an atomizer for cooling vegetables and the like, the combination with a water containing vessel having its entire top open, of an air nozzle disposed in said vessel at an oblique angle to and with its tip slightly beneath the surface of said water.

1,859,936. TIRE RIM AND MOUNT. SYDNEY I. PRESCOTT, New York, N. Y. Filed Apr. 25, 1930. Serial No. 447,127. 4 Claims. (Cl. 301—10.)



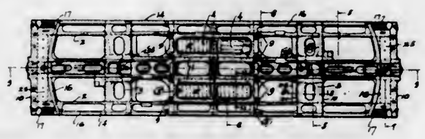
4. A tire rim comprising a continuous ring having inboard and outboard U-shaped inner peripheral ribs and wings extending from said ribs, the inboard rib and wing being adapted to engage a rim seat on a wheel body provided with a slot, and the inboard wing having a bent tongue adapted to engage the slot.

1,859,937. TOWEL SERVICE APPARATUS. SAMUEL A. SCHWARTZ, St. Paul, Minn. Filed Apr. 28, 1931. Serial No. 533,528. 6 Claims. (Cl. 312—38.)



6. A towel service apparatus comprising a supporting member, a clean towel holder, means for pivotally connecting a marginal portion of the holder to said supporting member, a plate pivotally connected to said supporting member and having a loose pivotal connection with said clean towel holder to limit the swinging movement of said clean towel holder in one direction from said supporting member.

1,859,938. RAILWAY UNDERFRAME. WILLIAM M. SHEEHAN, Marion, Pa., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Nov. 10, 1930. Serial No. 494,781. 25 Claims. (Cl. 105—415.)

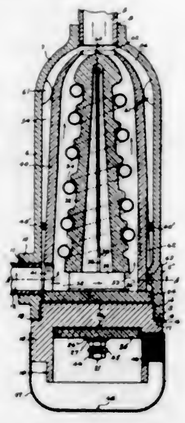


1. A railway vehicle underframe, comprising longitudinal sills having portions arranged to support a motor

positioned above said sills, and members between said sills forming therewith a closed liquid reservoir below said portions.

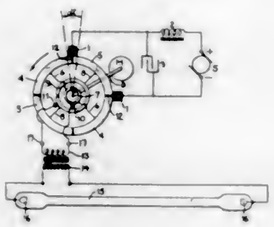
2. In a railway vehicle underframe, a pair of spaced sills on each side of the longitudinal center line of the underframe, each pair of sills including portions arranged to carry a motor positioned above said sills, and members extending between each pair of sills and forming therewith a closed liquid reservoir between the center line of the locomotive and the side thereof and below said portions.

1,859,939. ELECTRIC FLUID HEATER. MILES E. STALEY, Tacoma, Wash., assignor to Red Spot Electric Co., Inc., Tacoma, Wash., a Corporation of Washington. Filed Dec. 3, 1928. Serial No. 323,271. 19 Claims. (Cl. 219—39.)



1. An electric fluid heater of the class described, embodying a conical core of insulating material convergent from bottom to top and free from grooves and indentations, diametrically opposite rows of spaced projections on said core, leaving the remainder of the body of said core smooth and unobstructed, and a heating coil wound spirally on said core and in direct contact with the fluid, said projections and the taper of said core preventing sagging of the coil on the core.

1,859,940. ROTARY INTERRUPTER. CHARLES SPAETH, Flushing, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 20, 1928. Serial No. 313,723. 22 Claims. (Cl. 175—373.)

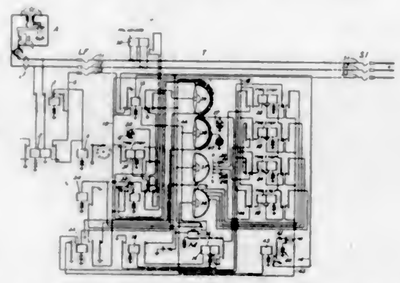


1. An interrupter comprising a pair of input means connected to a source of direct current, a condenser connected across the input means, means to short circuit the input means, an inductance in one of the input connections, a pair of output means connected to the input means, and means alternately reversing the connections between the output means and the input means.

6. A rotary interrupter comprising a pair of input brushes connected to a source of direct current, a condenser connected across the input brushes, an inductance in one of the connections to the direct current source, a pair of output brushes, a rotary segmental ring having at least two segments insulated from each other and one of said pairs of brushes in contact with the ring and so that the brushes of the pair are spaced from each other the distance of one segment, means connected to alternate segments of the segmental ring and engaged by the other pair of brushes and means to short circuit said input brushes.

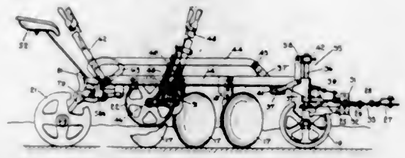
22. A rotary interrupter comprising a segmental ring divided into four segments, contact means connecting adjacent segments with a direct current circuit including a source of direct current, means to short circuit said contact means, a condenser and an inductance, rings concentric with the segmental ring, electrical connection between alternate segments and the respective said concentric rings, and other contact means connecting the said concentric rings with opposite terminals of a load.

1,859,941. TELEPHONE EXCHANGE SYSTEM. RAY L. STOKELY, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 18, 1930. Serial No. 482,699. 22 Claims. (Cl. 179—7.1.)



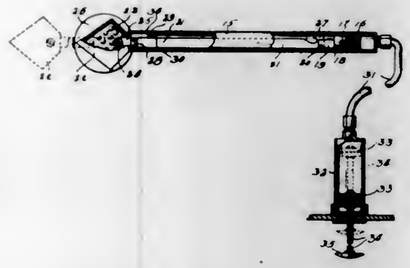
1. In a telephone system, subscribers' lines, an automatic switch, means including a trunk for extending a calling line to said switch, a message register for said calling line, control means for variably operating said register in accordance with the destination and duration of a call, means including another trunk for further extending the connection from said calling line to a called line, and means associated with and effective upon seizure of said other trunk for varying said control means in accordance with the destination of the call.

1,859,942. PLOW. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 8, 1928. Serial No. 298,197. 25 Claims. (Cl. 97—102.)



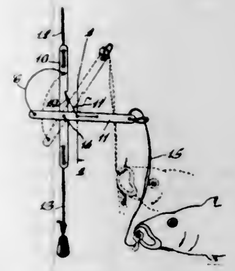
1. In a wheeled plow, the combination of a frame, furrow opening means carried thereby, front and rear furrow wheels supporting said frame, front lifting mechanism for raising and lowering the front portion of said frame relatively to said front furrow wheel, rear lifting mechanism for raising and lowering the rear portion of the frame relatively to said rear furrow wheel, said rear lifting mechanism comprising a member carrying said rear furrow wheel, oppositely mounted swinging links connecting said wheel carrying member with said frame, means operatively connecting both lifting mechanisms together, and means for actuating said lifting mechanisms, said actuating means comprising a lever pivoted on said wheel carrying a member and a cooperating latching sector secured to said wheel carrying member.

1,859,943. SIGNAL. JOHN TRUMMER, Omaha, Nebr. Filed June 19, 1931. Serial No. 545,569. 5 Claims. (Cl. 116—50.)



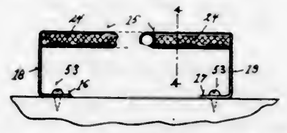
1. A vehicle signal comprising a cylinder, a piston in the cylinder, a signal arm pivotally mounted to the piston and projecting through the forward end of the cylinder, hand operated pump means for supplying pressure to the inner end of the cylinder for moving said piston back and forth therein and projecting and withdrawing said signal arm, and means between said arm and cylinder for swinging said arm upwardly when projected to a predetermined extent from the cylinder.

1,859,944. FISHING TACKLE. GEORGE L. WAITT, Wildwood Crest, N. J. Filed July 2, 1931. Serial No. 548,326. 6 Claims. (Cl. 43—15.)



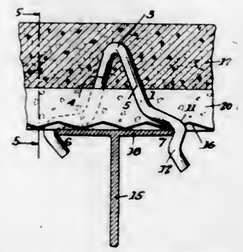
1. A device of the character described, comprising a pair of pivotally connected bars, one for suspension from a fish line and the other for suspension of the fish hook at one end, a spring connecting the hook-bearing bar with the line-suspension bar for urging the former in an upwardly-swinging direction and in contracted relation to the latter, and a catch connected to one of said bars adjacent their fulcrum for releasable engagement with the companion bar, said catch being released when a pull is exerted on the hook-bearing bar.

1,859,945. TOWEL RACK. KARL H. WHITNEY, Kirksville, Mo., assignor to Whitmanis Manufacturing Company, Inc., Kirksville, Mo., a Corporation of Missouri. Filed Feb. 4, 1929, Serial No. 337,439. Renewed Oct. 15, 1931. 5 Claims. (Cl. 211—123.)



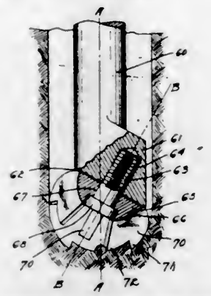
1. A towel rack constructed by stamping from a single piece of sheet material comprising an intermediate tubular section, supporting sections extending from opposite ends of said tubular section at substantially right angles thereto, and inwardly directed shoe members adapted to attach said towel rack to a wall extending from the free ends of said supporting members at substantially right angles to said supporting members.

1,859,946. CLIP. WILLIAM H. WILSON, Los Angeles, Calif. Filed Nov. 9, 1927. Serial No. 232,122. 5 Claims. (Cl. 72—118.)



5. In combination with a support, metal lath, and concrete or the like poured over said metal lath, a spring clip bent between its ends into a pair of spring members and a lock engaging member and a lath engaging member respectively at the ends of said spring members, said engaging members being adapted to be inserted through said lath with said lock engaging member engaging said lath and one edge of said support, and said lath engaging member engaging said lath and springing into engagement with the other edge of said support, said intermediate portion of the clip being embedded in the concrete.

1,859,947. ROTARY BIT. JOHN A. ZUBLIN, Los Angeles, Calif., assignor to Universal Engineering Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 8, 1925, Serial No. 54,875. Renewed Nov. 16, 1929. 5 Claims. (Cl. 225—71.)



1. In a well drilling bit the combination of: a body adapted to be secured to a drill-pipe and to be rotated thereby; a cutter rotatably supported by said body on

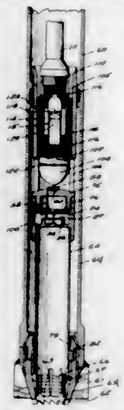
an axis inclined downwardly and inwardly towards the axis of rotation of said body; and cutter blades projecting downwardly from said cutter, each of said cutter blades having a plurality of digging points and an outer curved face connecting to one of said digging points and an outer curved face connecting to one of said digging points and adapted to engage the side wall of the hole.

1,859,948. BIT WITH CUTTERS HAVING SCRAPING AND ROLLING MOTIONS. JOHN A. ZUBLIN, Los Angeles, Calif. Filed July 29, 1929. Serial No. 381,704. 4 Claims. (Cl. 255—71.)



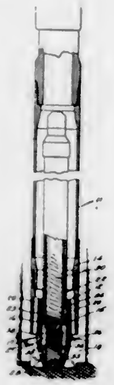
1. In a bit for drilling wells, the combination of: a body adapted to be secured to a drill column; a cutter rotatably carried by said body and rotatable about a cutter axis, said cutter axis being inclined relative to the axis of the body; digging teeth on said cutter, said teeth having cutting edges lying in the surface of a cone whose axis coincides with said cutter axis and whose apex is situated below said point of intersection of said axes; and reaming edges adjacent said teeth, said reaming edges having curved lower portions generated about said point of intersection of said axes, and having flat upper portions lying in the surface of a cone.

1,859,949. APPARATUS FOR CORE ORIENTATION. JOHN A. ZUBLIN, Los Angeles, Calif. Filed Mar. 17, 1930. Serial No. 436,512. 22 Claims. (Cl. 255—72.)



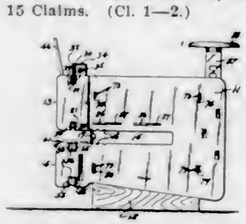
1. In apparatus of the class described, the combination of: core-engaging means; orienting means; and common operating means for operating said core-engaging means and said orienting means.

1,859,950. CORE CATCHER. JOHN A. ZUBLIN, Los Angeles, Calif. Filed July 3, 1930. Serial No. 465,477. 11 Claims. (Cl. 255—72.)



1. In a core barrel having a cutter, a core-receiving barrel, and an entrance through which the core enters said core-receiving barrel, the combination with: core-catching means including a chain-like member movable from non-gripping to gripping positions.

1,859,951. STAPLING MACHINE. JOHN C. BLEVNEY, New Rochelle, N. Y. Filed Nov. 5, 1929. Serial No. 404,897. 15 Claims. (Cl. 1—2.)

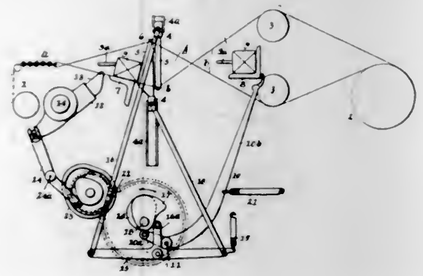


1. In a stapling machine, means to clamp material to be bound, including a vertically movable clamp member to underlie the material and a fixed abutment above and cooperative therewith, a slidable anvil means having an inclined face, means to deliver unformed staple stock upon said anvil means, staple forming means cooperative with said anvil means, staple driving means anvil retractor means connected with said driving means and having an end projected beyond the latter to engage the inclined face of said anvil means to retract the same progressively in advance of the driving movement of said driving means, staple clinching means, and rotatively actuated cams arranged in operative timed relation to actuate said clamping means and said staple forming, driving and clinching means in sequence.

1,859,952. LOOM AND METHOD OF WEAVING. GEORGE W. BOGDANFFY, Clifton, N. J., assignor of one-fourth to Benjamin Eastwood, Paterson, N. J. Filed Apr. 8, 1930. Serial No. 442,526. 3 Claims. (Cl. 139—11.)

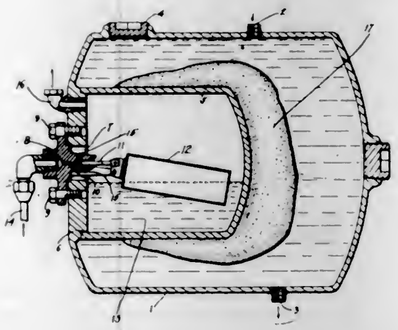
1. In a loom, the combination of a fabric take-up means, means spaced from the fabric to hold apart two sections of the warp each comprising alternate warp strands extending from the fabric, means alternately to form and eliminate crosses of said sections between the fabric and second means, lays arranged one forward and the other rearward of each cross when formed, filling-carrying shuttles movable on the lays through the respective sheds

existing forward and rearward of each such cross, a dentate beating-up device reciprocating to and from the fabric fell and having free-end dents penetrating one wall of the forward shed and in the retracted position of said device extending short of the other wall and back of the



filling deposited by the forward shuttle, and means, when each cross is eliminated, to forward the relatively rearward filling ahead of said dents, and mechanism to cause said device to perform two beating-upstrokes to each forwarding movement of the last named means.

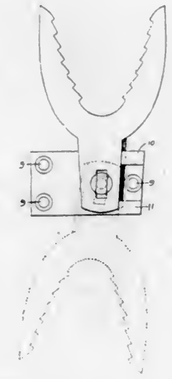
1,859,953. APPARATUS FOR COOLING LIQUIDS. OTTO F. BOYER, Los Angeles, Calif. Filed July 11, 1928. Serial No. 291,842. 3 Claims. (Cl. 62—141.)



2. In an apparatus for cooling liquids, a cylindrical tank provided with closed ends for liquid to be cooled, liquid inlet and outlet ports communicating with the interior of said cylindrical tank, a small tank within said cylindrical tank and attached to one of the closed ends thereof, an opening in said closed end communicating with the interior of said small tank, a closure for said opening, and means for introducing a liquefied refrigerant into said small tank through said closure.

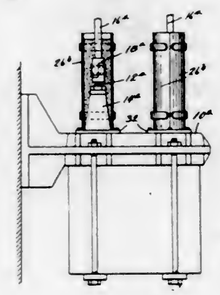
1,859,954. BONE-HOLDER. GEORGE CHRISTIAN BRAUMULLER, Newark, N. J. Filed Jan. 23, 1929. Serial No. 334,537. 2 Claims. (Cl. 146—216.)

1. A folding bench vise, comprising a stationary base plate and a bolt operatively mounted thereon, said plate having a pivot pin and two lugs projecting from one face thereof, the lugs being vertically spaced from each other and having their ends longitudinally spaced from the pivot pin, said bolt having a longitudinal slot therein adjacent one end thereof through which the pivot pin projects, said slot terminating at a distance from the end of the bolt equal to less than the distance from the pivot



pin to the adjacent ends of the lugs, the slotted end of the bolt being wedge-shaped and cooperating with the pivot pin and lugs when in operative position to form a wedging action.

1,859,955. ELECTRIC SWITCHING AND DISTRIBUTION SYSTEM. GEORGE A. BURNHAM, Saugus, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1927. Serial No. 243,902. 9 Claims. (Cl. 175—298.)

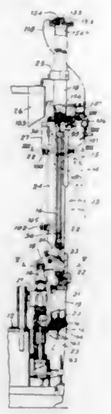


1. The combination of a pair of conductors having a breakable connection between them, a removable casing surrounding said connection and also said conductors thereat, and a mobile body of solid insulating material contained in said casing and enclosing said connection and the conductors thereat and constituting means to prevent access of a conducting gas to said connection and conductors.

1,859,956. ELEVATING TAKE-OUT. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,726. 16 Claims. (Cl. 214—1.)

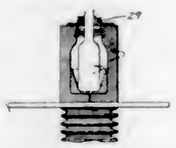
1. In apparatus for transferring glassware from a ware receiving station to a ware delivery station, means for

holding the said glassware, means for moving said holding means vertically, and automatic means for arresting



the movement of the holding means intermediate its upper and lower limits to cause a dwell in the movement of said holding means.

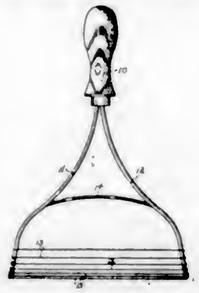
1,859,957. ROLLING PROCESS FOR GLASSWARE. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 16, 1929. Serial No. 363,518. 3 Claims. (Cl. 49—29.)



1. The method of forming hollow glassware, which comprises depositing a charge of glass in a mold, which is rotatable on a vertical axis and has an article forming cavity opening upward and concentric with the mold axis, forming the bottom of the article by pressing the glass against the bottom of the mold with a spinning tool, thereafter spinning the glass up the sides of the mold to form the sides of the article by rotating the spinning tool and the mold at relative speeds such that their adjacent portions are moving at substantially the same peripheral speed and simultaneously moving the spinning tool in a direction laterally of the mold axis to press the glass between the tool and the side of the mold, and inclining the axis of rotation of the spinning tool during the initial part of the aforesaid lateral movement so that it diverges from the axis of rotation of the mold toward the bottom of the latter, whereby the glass being spun upwardly to form the sides of the article will be thicker at its uppermost portion during the intermediate part of the spinning operation and the chill will progress in the formation of the article from the bottom toward the top thereof.

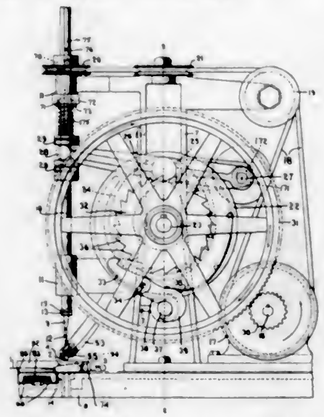
1,859,958. MIXING TOOL. JOHN T. CESSNA, Jr., Ames, Iowa. Filed Oct. 16, 1930. Serial No. 489,128. 8 Claims. (Cl. 259—144.)

1. In a device of the class described, a handle member, two duplicate one-piece loop members of spring metal extending from said handle member; said two loop members extending downwardly and outwardly away from each other and then sharply downwardly and outwardly at their lower portions in order that when said handle member is pushed downwardly and said loop members



meet resistance, their tendency will be to spring apart, and a plurality of small flexible wires extending between and secured to the lower portions of said loop members.

1,859,959. MACHINE FOR INSERTING EYELETS IN WINDOW SHADES AND THE LIKE. CALVIN N. COLPITTS, Malden, Mass., assignor to American Window Shade Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 22, 1930. Serial No. 483,416. 16 Claims. (Cl. 29—26.)

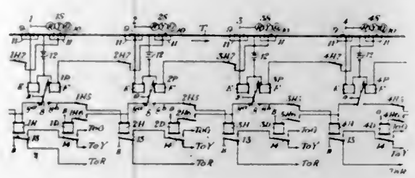


1. In a combined drill and eyelet-setting machine, the combination with a drill, of means to give the drill a feeding movement to drill an eyelet hole, of means associated with a drill and operative during such feeding movement to introduce an eyelet into said hole and set said eyelet.

14. In a machine of the class described, the combination with a drill spindle, of means including a clutch for rotating said spindle, a drill carried by said spindle, means to move the drill spindle in the direction of its axis thereby to give the drill a feeding movement, means carried by the drill spindle to introduce an eyelet into the drilled hole and to set the eyelet, and means to disengage the clutch by the axial movement of the drill spindle while the eyelet is being set.

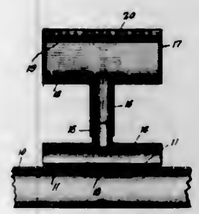
1,859,960. RAILWAY SIGNALING. PAUL H. CRAGO, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 13, 1931. Serial No. 522,245. 4 Claims. (Cl. 246—88.)

1. In combination, a railway track divided into blocks, a main relay for each block having a normal and a reverse winding and a contact member which is moved to normal or reverse position in response to momentary energization of the normal or the reverse winding and which subsequently remains in the position to which it is moved by either winding until the other winding becomes energized, means operating when a train enters a block to energize the reverse winding of the associated main relay, means operating when a train has proceeded a given distance into a block to energize the normal winding of the main



relay for the block next in the rear, a home relay and a distant relay for each block, means for energizing the home relay for a block when and only when the associated main relay is in normal position and the main relay for the block next in the rear is in the reverse position, means for energizing the distant relay for a block when and only when the associated home relay is energized and the main relay for the block next in advance is in normal position, and signals for the blocks controlled by said home and distant relays.

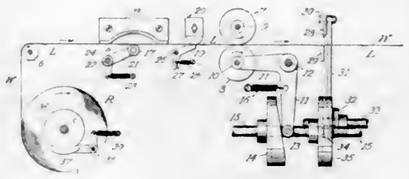
1,859,961. GAS BURNER. ROY S. DODD and LAWRENCE J. EVANS, Tulsa, Okla.; said Evans assignor to said Dodd. Filed Dec. 31, 1929. Serial No. 417,759. 1 Claim. (Cl. 158—104.)



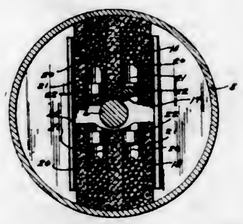
A gas burner comprising a supply pipe having a gas outlet in its upper side, transverse supports on the pipe, an elongated arcuate guard mounted on the supports having a nipple extending from its upper side directly over said outlet, a burner head of approximately cylindrical form having its upper side depressed longitudinally and having longitudinal series of gas orifices adjacent its sides, and a pipe carried by the burner head and detachably engaged on the nipple.

1,859,962. STRIP REGISTERING DEVICE. LESTER FERENCI, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Jan. 7, 1931. Serial No. 507,235. 6 Claims. (Cl. 164—48.)

1. In a strip-registering device, the combination with means for intermittently advancing a strip of material having a plurality of equally spaced printed or embossed portions, of mechanism for retracting the strip, means for subsequently cutting the strip to sever the leading printed or embossed portion therefrom, and yieldable means for frictionally engaging the printed or embossed surface only of one of said portions for stopping the retracting movement of the strip to bring the leading printed or embossed portion into predetermined position relative to said cutting means, said yieldable means yielding to permit passage of the printed or embossed portions of the strip under the tension of said strip advancing means.

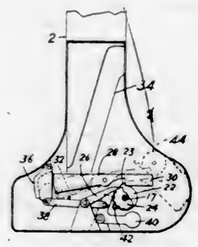


1,859,963. CLUTCH. LEROY T. FUTSCHER, Minneapolis, Minn., assignor to Edwin R. Beeman, Minneapolis, Minn. Filed Oct. 1, 1930. Serial No. 485,670. 11 Claims. (Cl. 192—105.)



1. A clutch comprising a driving member and a driven member, one of which is a drum and the other of which is provided with a single channeled shoe guide which extends into the drum and substantially the full diameter thereof, and a pair of loose shoes loosely held by the guide for contact with the drum at diametrically opposite points and subject to centrifugal force during rotation of the respective member.

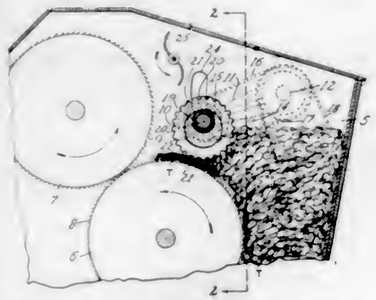
1,859,964. DISPENSING DEVICE. PERCE R. GALT, Merchantville, N. J. Filed Feb. 5, 1931. Serial No. 513,566. 1 Claim. (Cl. 194—26.)



Coin controlled means for a vending machine including a lever, a coin chute arranged to guide a coin upon one end of the lever to tilt the same, a shaft, a member carried by the shaft, interengaging means on the member and lever whereby the lever holds the shaft against rotation except when tilted by a coin, a pivoted element adjacent that end of the lever which receives the coin, a weighted bell crank, a link connecting the element and bell crank

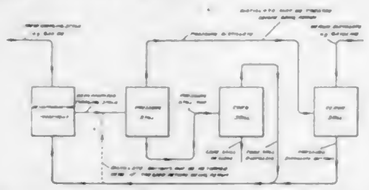
whereby the element is normally held in position to prevent a coin from falling off the lever, and means carried by the shaft operative when the shaft revolves to rock the bell crank and so move the pivoted element to release the coin from the lever.

1,859,965. TAMPER FOR CIGARETTE MACHINE FEEDS. GEORGE WILBUR GWINN, Hewlett, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 27, 1931. Serial No. 540,429. 6 Claims. (Cl. 131—39.)



1. The combination with a tobacco feed drum, of a support arranged above said drum, and a plurality of relatively large compactor rings surrounding said support and urged by gravity toward said drum.

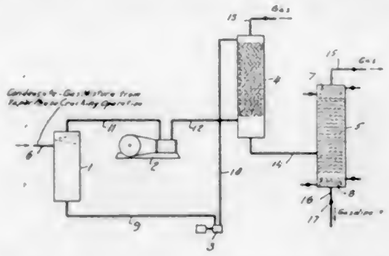
1,859,966. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Apr. 16, 1927. Serial No. 184,274. 6 Claims. (Cl. 196—49.)



3. The improvement in the cracking of heavy hydrocarbon oils for the production of lighter hydrocarbon oils therefrom, comprising distilling the heavy hydrocarbon oils under pressure and at a cracking temperature, supplying additional heavy oil to this cracking operation and withdrawing tar therefrom, fractionating the pressure distillate and subjecting the tar withdrawn from the cracking operation to distillation, recycling a heavier fraction from the fractionation of the crude pressure distillate and the distillate from the tar distillation to the first mentioned cracking operation, and subjecting the additional oil to be supplied to the cracking operation and the fractions to be recycled to a desulphurizing treatment before supplying them to the first mentioned cracking operation.

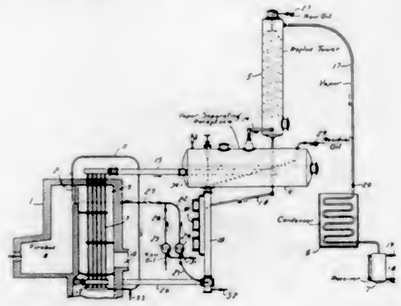
1,859,967. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Flossmoor, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Dec. 16, 1929. Serial No. 414,419. 1 Claim. (Cl. 196—8.)

In the manufacture of gasoline by cracking operations producing a mixture including a gasoline condensate and a large volume of hydrocarbon gases and vapors, the improvement which comprises effecting an initial separation of the condensate and the gases and vapors under relatively low pressure, compressing the separated gases and vapors and subjecting the compressed gases and vapors to a scrubbing operation with the separated condensate under relatively high pressure, taking off a scrubbed gas mixture from the scrubbing operation, separately



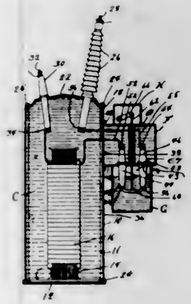
taking off a condensate mixture including absorbed constituents from the scrubbing operation and subjecting this condensate mixture to a rectifying operation under relatively high pressure, taking off a gas mixture from the rectifying operation, and taking off from the rectifying operation and reducing to normal the pressure on a rectified gasoline condensate.

1,859,968. ART OF REFINING HYDROCARBONS. WILLIAM VAUGHN ISCHIE, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed May 1, 1929. Serial No. 359,451. 2 Claims. (Cl. 196—48.)



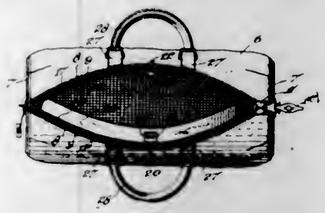
1. In cracking higher boiling hydrocarbon oils for the production of lower boiling hydrocarbon oils by pressure distillation, the improvement which comprises taking off vapors under superatmospheric pressure from a body of oil maintained at a cracking temperature in a vapor separating receptacle and subjecting these vapors to a refluxing operation, forcing reflux condensate from said refluxing operation first through a long heating element of small cross section and then through a shorter heating element of larger cross section without permitting unvaporized oil to flow from said vapor separating receptacle through said heating elements, permitting an auxiliary supply of reflux condensate from said refluxing operation to flow through the second mentioned heating element with the hot oil products from the first mentioned heating element, passing heating gases first over the first mentioned heating element and then over the second mentioned heating element whereby the oil is subjected to more severe and to less severe cracking conditions in said heating elements respectively, discharging the hot oil products from the second mentioned heating element into said vapor separating receptacle and condensing a distillate product from vapors escaping from said refluxing operation.

1,859,969. UNITARY TRANSFORMING AND CIRCUIT INTERRUPTING APPARATUS. GUSTAV E. JANSSON, Atlantic, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 18, 1929. Serial No. 364,175. 6 Claims. (Cl. 175—361.)



1. A unitary substation including a transformer having an enclosing casing adapted to contain a body of oil, a second enclosing casing connected with said transformer casing having separate upper and lower compartments, said upper compartment only being in free fluid communication with the transformer casing, an electric switch for the circuits of said trasformer having separable contact members contained in said lower compartment and operating mechanism for said switch operating through said upper compartment.

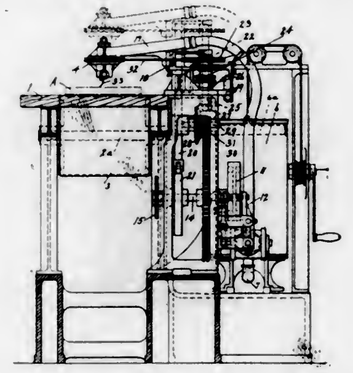
1,859,970. TRAVELING BAG. ART KAUFMANN, South Orange, N. J., assignor to K. Kaufmann & Co., Inc., a Corporation of New Jersey. Filed Nov. 8, 1927. Serial No. 231,863. 4 Claims. (Cl. 190—41.)



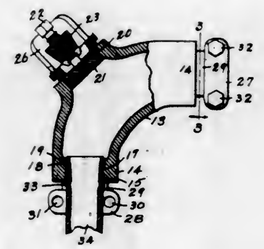
1. A frameless bag comprising a pliable, substantially cylindrical body having closed ends, said body having a longitudinal opening extending between said ends, separable fastener strips on the opposed margins of said opening to engage and disengage the same, means for manipulating said fastener strips, and auxiliary fastener means comprising cooperating elements respectively secured to the undersides of the marginal portions of said bag opening to extend beneath said fastener strips at a point intermediate the ends of said bag opening, said fastener elements when interengaged being adapted to hold the bag opening partially closed against expanding pressure whereby said fastener strips are initially disposed in substantially parallel but disengaged relation for easy manipulation without undue strain.

1,859,971. APPARATUS FOR ICING LAYER CAKES. HARRY E. KECK, Pittsburgh, Pa. Filed Sept. 21, 1928, Serial No. 307,415. Renewed Sept. 26, 1931. 13 Claims. (Cl. 107—1.)

1. In a machine for frosting cakes and the like a rotary head serving as a reservoir for frosting, driving means for rotating the same, said head having orifices therein to emit frosting material, and feeding means for intermittently supplying said material to the head, together with synchronized means for rendering said head-driving means and said feeding means effective.



1,859,972. SAFETY PIPE FITTING. FREDERICK E. KEY, St. Louis, Mo., assignor to Key Boiler Equipment Company, East St. Louis, Ill., a Corporation of Missouri. Filed Jan. 22, 1931. Serial No. 510,417. 6 Claims. (Cl. 285—203.)



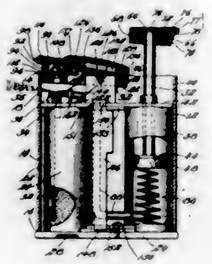
1. A safety pipe fitting comprising a hollow body portion, a pipe seat formed in one end of said body portion, an auxiliary clamping means carried by said body portion and spaced outwardly from said body portion, and means for securing said clamping means around a pipe whose end is secured in said seat.

1,859,973. ATOMIZER. GEORGE KOLLSTEDE, Providence, R. I. Filed Apr. 3, 1930. Serial No. 441,281. 22 Claims. (Cl. 299—88.)

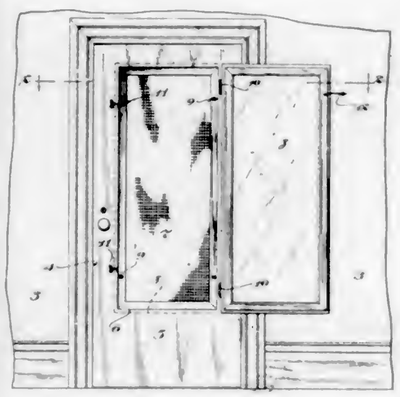
12. In an atomizer, a casing having a liquid nozzle and an air nozzle mounted on top thereof and a reciprocating member extending through the top thereof having an operating handle manually reciprocable to operate said atomizer, a cover for said atomizer movable from a closed position enclosing said air and liquid nozzles on the top of said casing to an open position to permit the operation of the atomizer and means to simultaneously latch said movable cover in closed position and said operating handle in retracted position with said cover and operating handle together completely enclosing the top of said casing.

20. An atomizer comprising a casing having a partition dividing said casing into an upper compartment and a lower compartment, said lower compartment being adapted to contain a liquid, a liquid conduit extending

through said partition and opening into said upper compartment, a pump operatively connected to said conduit within said casing, having a piston and a reciprocatory operating handle, said handle extending through said upper compartment and having an operating head, and a latch constituting a cover portion slidably movable from a position free of said head to a position engaging said operating head to lock the handle in retracted position.



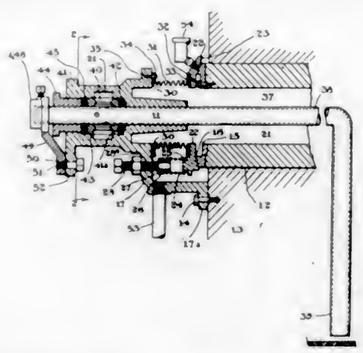
1,859,974. COMBINED GLAZED AND SCREEN DOOR. ADOLPH G. KROENKE, Faribault, Minn. Filed July 3, 1930. Serial No. 465,543. 1 Claim. (Cl. 20—35.)



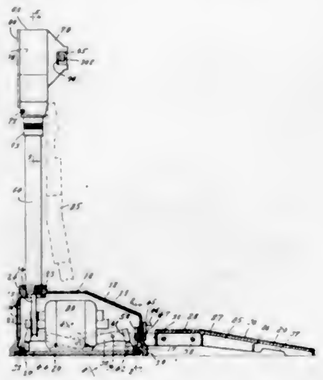
The combination with a wall structure having a door opening, of a door for the door opening hinged to the wall structure and having a panel opening, a panel for the panel opening hinged to the door at its hinged edge portion, and a bar pivotally attached at one end to the wall structure and at the other end pivotally and detachably connected to the panel for holding the panel open and permitting the door to be opened or closed.

1,859,975. STEAM FITTING FOR JOURNALS OF ROTATING CYLINDERS AND THE LIKE. BERNARD A. MALKIN, Lachine, Quebec, Canada. Filed May 25, 1929. Serial No. 366,059. 3 Claims. (Cl. 285—9.)

1. In combination, a bearing housing, a hollow rotatable element therein, a stationary casting body including steam receiving and water receiving chambers communicating with said hollow element, means for supporting said casting directly on said bearing housing and in spaced confronting relation with the adjacent end of the rotatable element, a steam supply pipe for one of said chambers supported by the casting, and a drain pipe carried by the casting and arranged axially within said rotatable element.



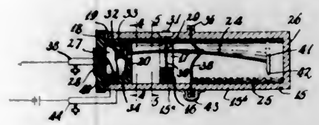
1,859,976. HEALTH EXERCISER. MICHAEL W. MCARDLE, Chicago, Ill. Filed Dec. 12, 1929. Serial No. 413,614. 20 Claims. (Cl. 128—63.)



5. In a health exerciser having an operating head, a base, and means for supporting the head upon the base, a plurality of caster arms pivotally positioned intermediate their ends within said base, casters positioned on one end of said caster arms arranged to be projected and retracted by movement of the opposite ends of said arms, a platform for the user movable from an extended operative position to a retracted inoperative position, and means operated in such movement of said platform for simultaneously moving the free ends of said caster arms whereby said casters are simultaneously and uniformly projected or retracted to move said base between its normal position upon the floor and a position supported upon said casters.

1,859,977. HEAT CONTROL EMERGENCY PLUG. ALEXANDER MERDAN, New York, N. Y., assignor to Charles Osad, Jersey City, N. J. Filed May 14, 1930. Serial No. 452,289. 7 Claims. (Cl. 200—141.)

1. A heat control emergency plug, comprising a cylindrical container with a transverse partition having a vertical slot, a plug rotative in one end of said container and formed with an inner transverse wall having a curved slot extending from near the periphery to near its center, means for holding said plug in various adjusted rotative positions, a contact rod slidably extended thru said vertical slot and into said curved slot, a heat expandible substance within said container, and said plug may be turned for positioning said contact rod from said expandible substance for closing an electrical circuit upon a predetermined expansion of said substance.

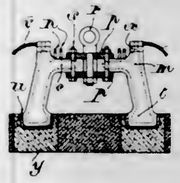


1,859,978. ROTARY DRILL. CLAUDE W. METZGER, Los Angeles, Calif., assignor to Haynes Stellite Company, a Corporation of Indiana. Filed Mar. 11, 1927. Serial No. 174,544. 4 Claims. (Cl. 255—71.)



1. A ring-shaped tip adapted to be welded to the hub of a drill bit, such tip comprising a metal ring having a deposit of non-ferrous metal forming a lip on its working edge portion, said metal deposit being more resistant to wear than the body of said ring.

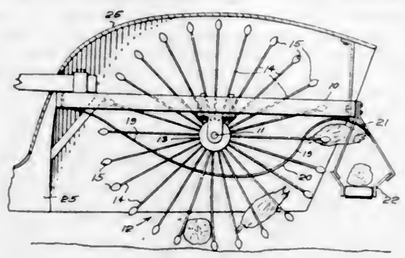
1,859,979. ELECTRIC FURNACE ELECTRODE. PAUL LOUIS JOSEPH MIGUET, St. Julien-de-Maurienne, France, assignor to Société Electro Metallurgique de Montricher, St. Julien-de-Maurienne, France. Original application filed July 8, 1926, Serial No. 121,189, and in France Nov. 4, 1925. Divided and this application filed July 3, 1930. Serial No. 465,719. 7 Claims. (Cl. 13—18.)



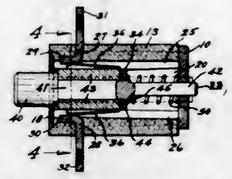
1. An electrode comprising a plurality of parallel, longitudinal sections; a conductor attached to the top end face of each section; a radial arm on each of said conductors; a central plate above and below said arms; means for clamping said arms between said plates; and a central supporting ring fixed to said plates.

1,859,980. LOOSE EAR CORN AND VEGETABLE HARVESTING DEVICE. ALBERT MUELLER, Columbus, Nebr. Filed Aug. 16, 1929. Serial No. 386,292. 2 Claims. (Cl. 56—328.)

1. A device of the character described comprising a frame, a multiplicity of reel elements mounted revolubly on the frame in close spaced relation and having flexible tines adapted to engage the ground and support the frame and clearing bars alternated between the reels, extending longitudinally of the frame from a high point at the forward part rearwardly beneath the axis of the reels but spaced closely thereadjacent, thence convergently toward the perimeter of the path of rotation of the reels and beyond for clearance of objects from between the tines.

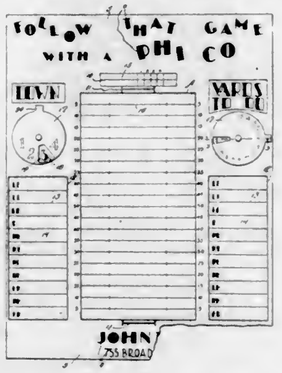


1,859,981. SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,200. 9 Claims. (Cl. 200—159.)



1. An electric switch comprising in combination, a housing, said housing being provided with a plurality of internal grooves; terminals insulatingly supported by the housing and extending in the grooves; an actuator slidably supported by the housing; a contact member provided with resilient tongues, the contact member being insulatingly carried by the actuator within the housing and the tongues extending into and slidable within the grooves; and means for moving the contact member in circuit connection with the terminals.

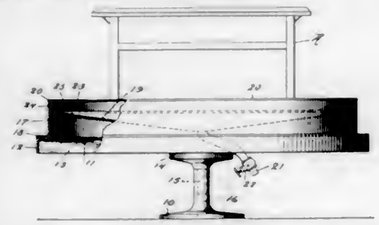
1,859,982. COMBINED ADVERTISING MEDIUM AND SCORE CARD. GEORGE LEWIS PANGRATZ and JOHN CHARLES HARB, Akron, Ohio. Filed Mar. 11, 1931. Serial No. 521,852. 4 Claims. (Cl. 116—120.)



1. A device of the character described comprising a sheet containing the representation of a playing field and having advertising spaces above and below said field,

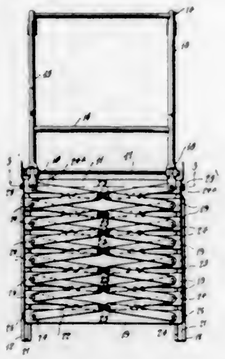
said sheet being divided by spaced vertical and transverse lines to form columns of spaces at either side of the field, said spaces being appropriately designated to contain the names of the players of the respective teams, and a plurality of independently rotatable indicators on said sheet and indicia on the sheet appropriately designating each indicator for use in connection with a particular condition or play of the game to register the varying conditions of play during various periods of play, spaces being provided on said card in which the scores of the game may be recorded.

1,859,983. VARNISH SALVAGING WORKHOLDER. JAMES M. PRILLAMAN and ARTHUR W. SHIPWASH, Martinsville, Va., assignors to said James M. Prillaman. Filed Apr. 7, 1930. Serial No. 442,283. 6 Claims. (Cl. 91—60.)



1. A work holder of the character described comprising a stationary support, a rotatable table thereon, a basin member carried by the table and having drain-off means, and a foraminous top for the table.

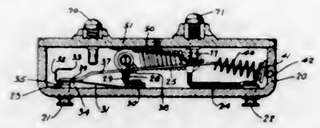
1,859,984. FOLDING FIRE ESCAPE LADDER. JOHN REESE, Goodhue, Minn. Filed Oct. 2, 1930. Serial No. 485,989. 4 Claims. (Cl. 228—38.)



1. A ladder of the class described comprising a bracket, bars extending therefrom of channeled form having restricted openings, rungs having enlarged terminals engageable in the channels of the bars and prevented from lateral disengagement therefrom, and link means pivoted together and to the rungs and adapted to limit their opening movement.

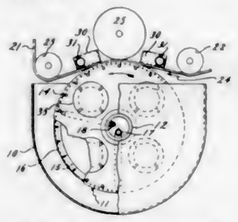
1,859,985. THERMOSTATIC SWITCH. WALTER W. RIEDEL, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 28, 1930. Serial No. 432,100. 9 Claims. (Cl. 200—138.)

1. A thermo switch comprising, in combination, a pivoted lever, resilient means engaging said lever yieldably to urge it into either one of two positions; thermostatic means arranged to flex, in response to an increase in temperature so as to move into engagement with the lever and operate it from one position to permit the resilient means quickly to shift said lever into the other



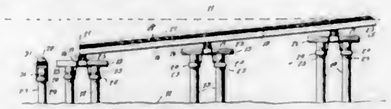
position; and switching means separate from the thermostatic means and the lever, said switching means comprising a fixed contact and a movable contact, said movable contact having a portion engageable by the lever so as to be operated by said lever.

1,859,986. CARDBOARD MACHINE. ARTHUR B. SAUNDERS, Nashua, N. H., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 3, 1930. Serial No. 432,625. 11 Claims. (Cl. 92—43.)



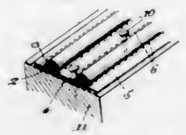
1. A cardboard machine comprising in combination a vat adapted to contain pulp, a screen roll rotatable in the vat and adapted to pick up stock therefrom, a band to which the stock is transferred from the roll a roller for pressing the band into contact with the stock on the screen roll and subsequently acting vacuum means for facilitating the transfer of the stock from the roll to the band.

1,859,987. SEAPLANE RUNWAY. OSCAR A. SANDQUIST, Coral Gables, Fla. Filed Nov. 13, 1929. Serial No. 406,918. 4 Claims. (Cl. 61—48.)



1. A runway of the class described comprising a skeleton frame capable of floating, flooring applicable to the frame of a weight which overcomes its buoyancy, and anchoring means for said flooring into engagement with which it is moved when its buoyancy is overcome.

1,859,988. ELECTRIC WIRE CONDUIT. ROBERT C. SCHEMMEL, Union City, Ind. Filed Oct. 14, 1930. Serial No. 488,627. 3 Claims. (Cl. 247—40.)



1. An electric wire conduit comprising a strip of flexible fabric folded upon itself, a plurality of electric conduct-

ing wires enclosed in the fabric in spaced apart relation, and a line of stitching passing through a plurality of plies of the fabric on each side of each wire and immediately adjacent to each wire.

1,859,989. TURNING RING BEARING FOR MACHINE TOOLS. AUGUST SCHLEGELMILCH, Dusseldorf, Germany, assignor to Schiess-Defries Aktiengesellschaft, Dusseldorf, Germany. Filed Mar. 13, 1930, Serial No. 435,496. and in Germany Mar. 8, 1929. 2 Claims. (Cl. 308—37.)



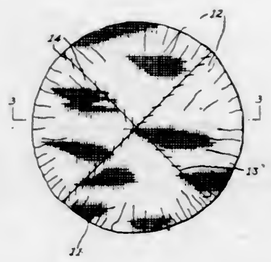
1. The combination with a stationary annular bearing having a lateral annular projection provided with a guiding surface at right angles to the axis of the bearing and a second guiding surface transverse to the first mentioned surface, of an annular tool carrier rotatable within the bearing and having an annular recessed flange fitting over said projection, said flange having annular guiding surfaces adapted to engage the guiding surfaces on said projection.

1,859,990. METAL EXTRUSION PRESS. OSWIG SCHLENSTEDT, Mulheim-Ruhr-Speldorf, Germany, assignor of one-half to Hydraulik Gesellschaft mit beschrankter Haftung, Duisburg, Germany. Filed July 19, 1930, Serial No. 469,082, and in Germany Aug. 24, 1929. 1 Claim. (Cl. 207—3.)



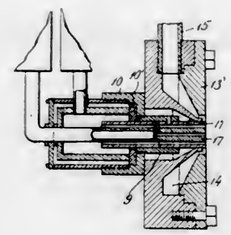
A tube extrusion press comprising a press pot, a hollow press ram co-axial with said press pot, the press pot and ram being relatively movable, a die supported by the ram, a press piston co-axially movable in relation to the ram, a co-axial mandrel supported by the said press piston and serving for the preliminary perforation of a block of work contained in the press pot, a closure member for said pres pot which acts as a guide for the mandrel and which closure member is detachably connected to the said press pot, and means for engaging said closure member with said press pot.

1,859,991. HEAT PAD FOR MOLDING COMPOUNDS. MEYER SEGAL, Chicago, Ill. Filed Feb. 11, 1929. Serial No. 339,150. 1 Claim. (Cl. 32—5.)



A pad for preventing dental molding wax from adhering to the bottom of a container in which the wax is adapted to be softened by immersion in heated water, comprising a plate member, a covering of fabric material for said plate member having the edges thereof equal in length to the diameter of said plate member, said covering including flap portions extended beyond the periphery of said plate member adapted to be bent across the side thereof opposite that across which the main portion of said fabric is extended, and means for joining the edges of said flap portions on said opposite side to retain said material in covering position relative to said plate member, whereby the wax will be prevented from adhering to the bottom of the container or to the fabric or plate member.

1,859,992. METHOD OF AND APPARATUS FOR SUBDIVIDING MATERIAL. GILBERT E. SEIL, Newark, N. J. Filed Apr. 1, 1926. Serial No. 99,077. 30 Claims. (Cl. 83—91.)



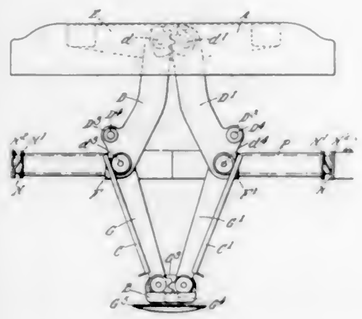
1. The method of comminuting materials, which comprises subjecting a liquid stream thereof to the suction effect of a surrounding stream of gas traveling at high velocity in a direction which is initially substantially parallel to the axis of the liquid stream and avoiding any substantial heat exchange between the gas and the liquid until the latter is disrupted and mingled with the gas.

8. The method of conducting chemical reactions between streams of liquid materials, which comprises introducing the materials in concentric streams and reducing them simultaneously to a comminuted state by a gaseous stream.

20. The method of comminuting materials, which com-

prises ejecting a liquid stream thereof in a zone of reduced pressure created by a surrounding gaseous stream traveling at high velocity in a direction which is initially substantially parallel to the axis of the liquid stream and free to expand laterally away from said axis and avoiding any substantial heat exchange between the gas and liquid until the latter enters the zone of reduced pressure.

1,859,993. LIFTING JACK. DONALD WILFRED SESSIONS, Finchley, London, England. Filed Aug. 4, 1930, Serial No. 472,912, and in Great Britain Oct. 15, 1929. 8 Claims. (Cl. 254—126.)



1. A lifting jack comprising two sets of four bars arranged side by side and pivoted together to form a toggles device, a screw device for moving the pairs of outer ends of the bars towards or away from each other, a casing secured to the jack and adapted to contain the jack when collapsed, and a lid member secured to each of two pairs of corresponding bars so that when the jack is collapsed said bars move the lid members to form a closure to the casing.

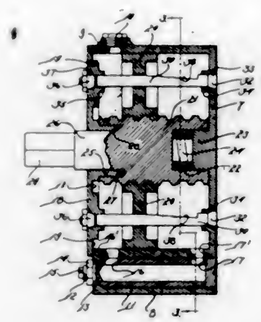
1,859,994. LIFTING JACK. DONALD WILFRED SESSIONS, Finchley, London, England. Filed Aug. 4, 1930, Serial No. 472,913, and in Great Britain June 4, 1930. 7 Claims. (Cl. 254—126.)



1. A lifting jack comprising a plurality of bars pivoted together to form a toggles or lazy-tongs device, a hollow screw threaded spindle operatively connected with said links, rotation of which spindle causes extension or collapse of the device, and a rod located slidably within the spindle and keyed thereto so that the rod can be withdrawn to any desired extent to bring its outer end into the most convenient position for being rotated thereby rotating the spindle.

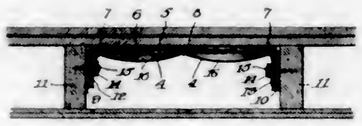
1,859,995. SHOCK ABSORBER. GUSTAVE A. SHELL, Wayne, Mich. Filed Jan. 6, 1930. Serial No. 418,721. 4 Cl. 188—88.)

1. In a device of the class described, a housing having a pair of spaced openings formed therein; a bypass mounted on said housing communicating through said openings with the interior thereof; a cup shaped sleeve rotatably mounted in said bypass; a tapered end on said sleeve; a threaded neck projecting outwardly from said tapered end and extending beyond said bypass; and a nut threaded on said neck for engaging said end tightly against the end of said bypass to provide a liquid tight seal, said sleeve



having spaced openings formed therein for registration with said openings in said housing and rotatable on its axis for varying the area of openings in registration.

1,859,996. INSULATING BLANKET AND METHOD OF CONTROLLING THE DISTORTION THEREOF. TRACY W. SIMPSON, Glencoe, Ill., assignor to American Hair & Felt Company, a Corporation of Delaware. Filed June 16, 1930. Serial No. 461,618. 17 Claims. (Cl. 20—4.)



1. Blanket insulating material comprising sheet material spaced apart, a body of insulating material interposed between said sheet material, and means whereby in the bending of opposite marginal edge-portions of the blanket the sheet material which becomes innermost will buckle between said bent portions in a direction away from the other sheet material.

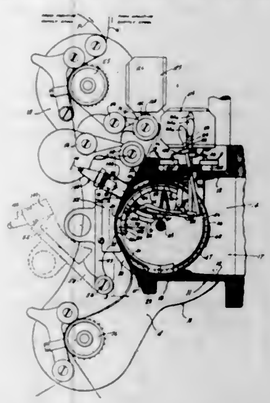
1,859,997. METHOD OF DISTILLING ALIPHATIC ESTERS. JACOB STEIN, Philadelphia, Pa., assignor to Publicker, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Aug. 15, 1931. Serial No. 557,424. 10 Claims. (Cl. 202—56.)

1. The process of distilling an aliphatic ester which comprises adding a small amount of an alkali metal salt of an aromatic acid to the crude ester to prevent hydrolysis thereof, subjecting the crude ester to heat to distil the ester, and thereafter condensing the distilled ester.

1,859,998. HYDRATED SILICA. SVEND S. SVENDSEN, Chicago, Ill., assignor to Clay Reduction Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 23, 1927. Serial No. 242,291. 9 Claims. (Cl. 23—182.)

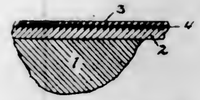
1. The method of converting silica into hydrated silica which comprises heating silica to a bright red heat, suddenly cooling the silica, treating the silica with ammonium fluoride above 34° C., and heating the mixture to volatilize ammonia silicon fluorine compounds therefrom, collecting said compounds and treating them with water and ammonia below 34° C., thereby transforming them into hydrated silica and ammonium fluoride.

1,859,999. SOUND RECORD PRINTING. SIDNEY TWINING and THOMAS M. INGMAN, Los Angeles, Calif., assignors to Paramount Publix Corporation, Los Angeles, Calif., a Corporation of New York. Filed May 25, 1929. Serial No. 365,870. 3 Claims. (Cl. 95—75.)



1. In a motion picture machine having a printing aperture, means for moving a developed and a fresh actinic film longitudinally past said printing aperture, and a pair of removable masks adapted to extend longitudinally over said aperture, said masks including a sound track mask and an action area mask, the combination of an illuminant adapted to cast actinic light rays over a limited longitudinal extent of the sound track area of the fresh actinic film, an electric circuit including a source of current connected to said illuminant, means actuated by a notch in the developed film for closing said electrical circuit, and a switch in said electrical circuit automatically opened by virtue of removing said action area mask from said aperture, and automatically closed by virtue of replacing said action area mask over said aperture.

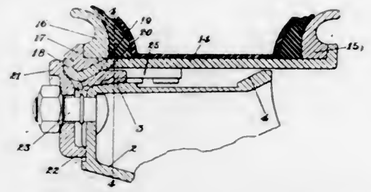
1,860,000. COVERING FOR ARTICLES OF WOOD AND SIMILAR MATERIALS. HOWARD LOBDELL VAN ARNAM, Fort Wayne, Ind., assignor to Van Arnam Manufacturing Company, a Corporation of Indiana. Filed Oct. 10, 1927. Serial No. 225,384. 3 Claims. (Cl. 154—22.)



1. The method of covering an article of wood or similar material which consists in applying upon the surface of said article a sheet of celluloid while reduced to a pliant state by cementing said sheet thereon, superimposing upon said sheet a plastic coat consisting of a solution formed of celluloid and a solvent therefor, there being included in said solution a surplus of said solvent sufficient in quantity as to dissolve the surface portion of said sheet whereby said sheet and superimposed coat are inter-related, and buffing the surface of the superimposed coat after said coat has hardened.

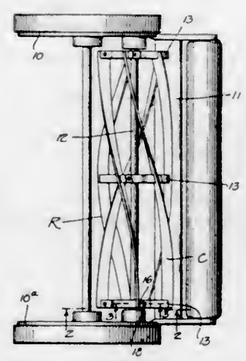
1,860,001. WHEEL STRUCTURE. JEWELL W. VANDERVEER, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 31, 1927. Serial No. 195,289. 11 Claims. (Cl. 301—12.)

1. A wheel structure having a beveled seating surface at one edge of the outer face of its periphery; a rim having an internal beveled seating surface opposing the seating surface of the structure, said rim centering with the wheel structure and said beveled surfaces facing in opposite directions axially; spacing means interposed between said beveled surfaces, said surfaces sustaining the load on the rim; clamping means for securing the dim and wheel structure in assembled relation; and a shoulder driving connection between the rim and spacing means and between the spacing means and structure.



7. A wheel structure having a beveled seating surface on the inboard edge of the periphery thereof, and a seating surface on the outboard edge of the periphery; a rim having an internal beveled seating surface facing in the opposite direction axially from that of the seating surface on the said inboard edge, and adapted to seat thereon to sustain the load and with the portions of the rim extending axially inwardly from the said internal beveled seating surface overhanging the said seating surface at the inboard edge, said rim being centered on the wheel structure supporting the load through the internal beveled seating surface on the rim and the seating surface on the outboard edge of the peripheral face of the wheel structure; clamping means for securing the rim and wheel structure in assembled relation; and spacing means interposed between the internal beveled seat on the rim and the seating surface on the outboard edge of the wheel structure.

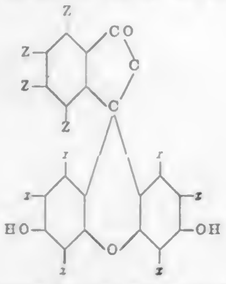
1,860,002. LAWN MOWER REEL. CHARLES R. VAN ARSDALL, Pacific Palisades, Calif. Filed Dec. 17, 1930. Serial No. 503,071. 6 Claims. (Cl. 56—294.)



1. A lawn mower reel comprising an axle having heads fixed thereto at intervals along its length, the peripheries of the heads having recesses circumferentially spaced at intervals, blades spanning the heads and entering the recesses, the heads having threaded bores opening to one wall of the recesses and having depressions disposed in the opposite wall of the recesses, the blades having protuberances received in the depressions and having depressions confronting the bores, and screws threaded into the bores and seating in the depressions of the blades for coaction with the protuberances and the depressions of the heads in fixedly securing the blades to the heads.

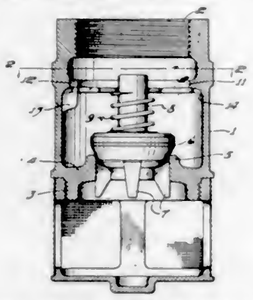
1,860,003. MERCURY DERIVATIVE OF HALOGENATED FLUORESCEINS. EDWIN C. WHITE, Baltimore, Md., assignor to Hynson, Westcott and Dunning Inc., a Corporation of Maryland. Filed Nov. 18, 1925. Serial No. 69,930. 1 Claim. (Cl. 260—13.)

The mercury containing compounds of α-dihalogeno-β-tetrahalogeno fluoresceins, having the general formula:



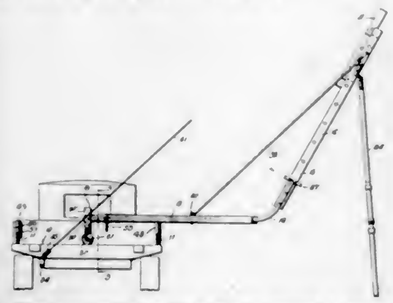
wherein Z represents halogen, and x represents hydrogen, halogen or mercury, two x's being halogen and at least one and not more than two x's being mercury.

1,860,004. CHECK VALVE. FARNHAM YARDLEY, West Orange, N. J., assignor to Jenkins Bros., New York, N. Y., a Corporation of New Jersey. Filed Mar. 19, 1930. Serial No. 437,212. 3 Claims. (Cl. 251—144.)



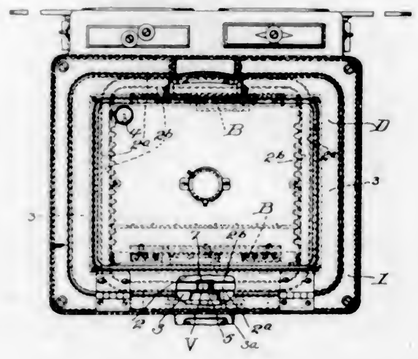
1. In a check valve having a floating guide plate for the valve stem engaging an interior flange on the casing and capable of limited lateral movement within the casing, said flange having a notch formed therein to permit the passage of one end of the guide plate and guard lugs on each side of the notch to prevent accidental disengagement of the plate and flange.

1,860,005. EXTENSION LADDER SUPPORT. JAMES C. ADAMS, Willshire, Ohio. Filed Mar. 7, 1930. Serial No. 434,126. 7 Claims. (Cl. 228—6.)



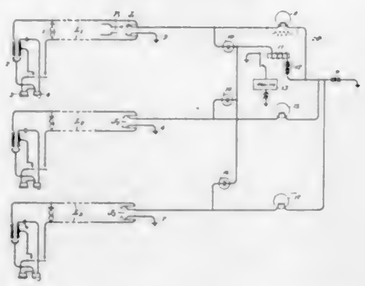
1. The combination with a vehicle having a bottom and a side, of a support, means for resiliently and rotatably attaching said support to the said bottom and arranged to be swung over and rest on said side, an extension ladder structure pivotally carried by the outer end of said support, said support having wheels bearing on said bottom whereby to permit the support to be rotated to extend to the other side or rear of the vehicle, and bracing and guying means between the ladder structure and said support.

1,860,006. COOKING RANGE. GEORGE EDWIN ATKINSON, Proctorville, Ohio, assignor, by mesne assignments, to Armstrong Appliance Corporation, a Corporation of Delaware. Filed Apr. 20, 1929. Serial No. 356,757. 4 Claims. (Cl. 126—275.)



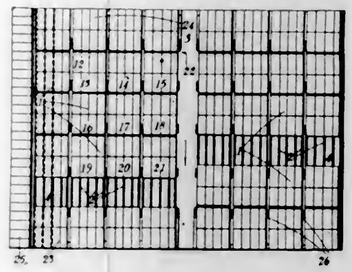
1. A range having an oven with an air space between said oven and the casing of the range, means for heating the oven, located wholly within the same a door closing the open front end of the oven, an air vent in the door communicating the interior of the oven with the room atmosphere, and an air vent communicating the air space between the oven and the said casing with the interior of the oven, substantially as described.

1,860,007. TELEPHONE OFFICE ALARM CIRCUIT. HENRY M. BASCOM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 7, 1931. Serial No. 549,252. 4 Claims. (Cl. 179—84.)



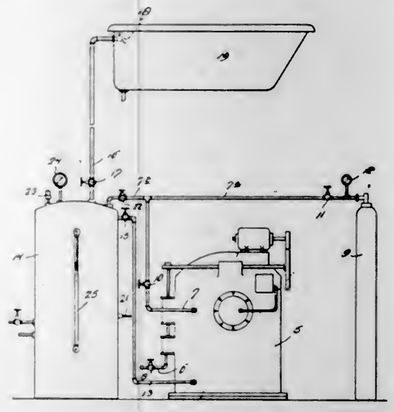
1. A telephone system comprising a plurality of subscribers' telephone lines terminating at a central office, subscribers' line lamps connected in series with each line to a common battery at said office, and an alarm relay at said office common to all of said lines, said relay being connected through an auxiliary battery to said common battery and through individual cold cathode discharge tubes to each of said lines.

1,860,008. SYSTEM OF STORING MOTOR ROAD VEHICLES. WILLIAM IVOR BELL, Chelsea, London, England. Filed June 29, 1929, Serial No. 374,905, and in Great Britain July 2, 1928. 1 Claim. (Cl. 214—16.1.)



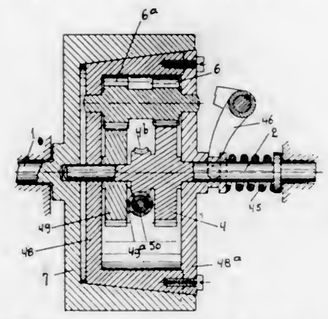
In a storage system, a building, a plurality of parallel tracks arranged on the available floor space of said building, a plurality of platforms each capable of receiving a plurality of vehicles arranged to travel on said tracks in the direction of their length, means for traversing said platforms on said tracks, a common alley way arranged parallel with said tracks and with the length of the platforms, an alley way arranged at right angles to the parallel tracks capable of being formed between any two parallel rows of platforms and a plurality of fixed storage compartments arranged so as to be entered from the alley way arranged at right angles to the parallel tracks and to the length of the platforms, the general arrangement being such that the whole available floor space, less the space required for the common alley way and the alley way arranged at right angles to the parallel tracks, is employed for storage purposes.

1,860,009. BATH APPARATUS. JOSEPH S. BELT, Amarillo, Tex. Filed Nov. 3, 1930. Serial No. 493,211. 3 Claims. (Cl. 4—180.)



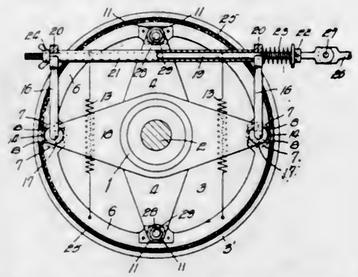
1. A bath apparatus comprising, in combination with a bath tub or the like having a water supply faucet, an automatic carbonating machine having a tank of small capacity for receiving the water as it is carbonated under pressure, means affording a constant supply of water and carbon dioxide gas for said carbonating machine, a tank of relatively large capacity in constant communication with the tank of said carbonating machine and adapted to receive and store under pressure the water carbonated by the latter, and an outlet for the carbonated water extending from the bottom of said storage tank to said supply faucet of the bath tub or the like, whereby the pressure of gas in the top of said storage tank is utilized to force the carbonated water from said storage tank to the bath tub or the like.

1,860,010. AUTOMATIC CHANGE SPEED MECHANISM. EDGARD BOURQUIN, Bry-sur-Marne, France. Filed May 2, 1931, Serial No. 534,676, and in France May 7, 1930. 7 Claims. (Cl. 74—34.)



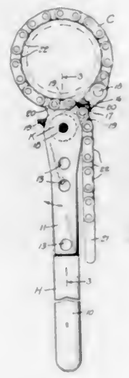
1. An automatic change speed mechanism of the type described comprising in combination a driving shaft, a casing, means for directly connecting said casing to said driving shaft, two pinions, a common axis for said pinions pivoted in said casing in parallel relation to said driving shaft, a driven shaft extending into said casing in line with said driving shaft, a toothed wheel keyed on said driven shaft and adapted to mesh with one of said pinions, a toothed wheel mounted loose on said driven shaft and adapted to mesh with the other pinion, the ratios of reduction between said pinions and said wheels respectively being different, a worm wheel integral with said driven shaft, a worm, two bearings on the second named toothed wheel adapted to support said worm in tangential relation with said worm wheel, so that it can cooperate therewith, and means for braking the rotation of said worm.

1,860,011. INTERNAL EXPANDING BRAKE. LESLIE D. BRAUKS, St. Louis, Mo. Filed May 28, 1930. Serial No. 456,689. 2 Claims. (Cl. 188—78.)



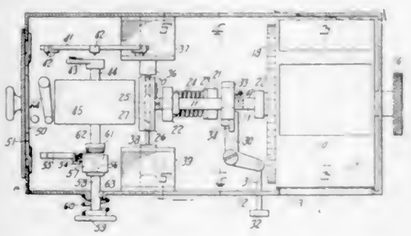
1. In an internal expanding brake structure, a brake drum, a pair of brake shoes internally of the brake drum at opposite sides of the axis of the brake drum, supporting means, anchor studs carried by the supporting means and directed laterally into the brake drum upon which the brake shoes are slidably mounted, expanding cams interposed between the ends of the brake shoes for moving the brake shoes away from each other upon the anchor studs and into braking contact with the brake drum, resilient means connecting the brake shoes for moving them toward each other upon the anchor studs when the brake is released, detachable wear plates for the thrust ends of the brake shoes and detachable wear plates carried by the brake shoes for contact with the anchor studs.

1,860,012. WRENCH. LESLIE T. CARPENTER, Lynwood, Calif. Filed Feb. 14, 1931. Serial No. 515,844. 3 Claims. (Cl. 81—67.)



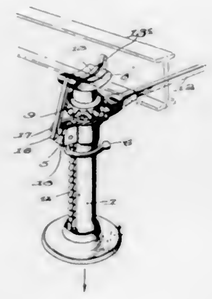
1. A wrench comprising a handle, a flexible chain having central links and side links pivotally connecting adjacent central links on opposite sides thereof, means for pivotally connecting one end of the chain to the handle to permit looping of the chain about an article to be gripped, and a series of circumferentially spaced alternating central and side teeth on the handle radially disposed and concentrically arranged with respect to said pivotal connection, the side teeth being arranged in pairs aligned transversely of the series and offset laterally relative to the central teeth for intermeshing with both the central and side chain links to effect uniform tightening of the chain around the article in response to rocking of the handle in one direction about the axis of said pivotal connection.

1,860,013. PROTECTING DEVICE FOR BANKS. ANDREW F. CAVANAUGH, Dayton, Ohio. Filed Oct. 3, 1930. Serial No. 486,207. 19 Claims. (Cl. 70—62.)



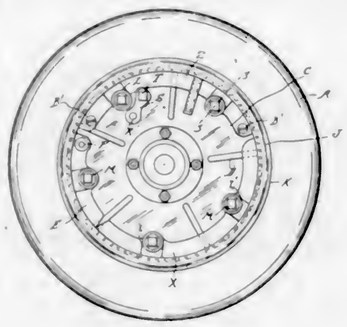
1. A device of the character described comprising a structure having a plurality of compartments and a second structure arranged to close all but one of said compartments, one of said structures being movable with relation to the other structure to successively open said compartments, and time controlled locking mechanism to retain said movable structure in each successive position for a predetermined interval.

1,860,014. LIFTING JACK. JOHN ALBERT CHEAPE, Charlottesville, Va. Filed Oct. 6, 1927. Serial No. 224,448. 14 Claims. (Cl. 254—100.)



1. A lifting-jack including slidably connected members, a trip connected with one of said members, and having a catch in position to engage the other member, whereby to hold the members in closed adjustment, a portion of said trip located in position to engage the object to be lifted, thereby causing the release of the catch from the other member and permitting it to drop by gravity to the ground or floor.

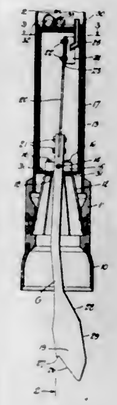
1,860,015. VEHICLE WHEEL. GEORGE CHRISTIA, Detroit, Mich. Filed July 2, 1928. Serial No. 289,741. 5 Claims. (Cl. 152—20.)



1. A vehicle wheel having in combination, a disc and a partly circumferential rim section secured to one side thereof, a second rim section hingedly connected at one end with the adjacent end of said first-named rim section, and a ring member adapted to engage interiorly of said rim sections when the latter are in their normal extended position, for holding said hinged rim section against centripetal swinging movement.

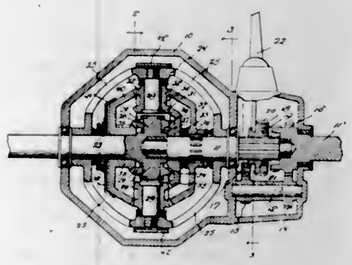
1,860,016. OVERSHOT. BRUNO J. CLOUSE, Bakersfield, Calif. Filed Apr. 28, 1931. Serial No. 533,499. 22 Claims. (Cl. 294—86.)

1. In combination, an overshot, a guiding member having a portion constructed to enter the upper end of a pipe in a bore hole, means for mounting the member in the overshot to project in advance of the latter and for movement from an inactive position



wherein the projecting portion of the member is disposed beyond the diameter of the overshot bowl, and means for moving the member from inactive to active position.

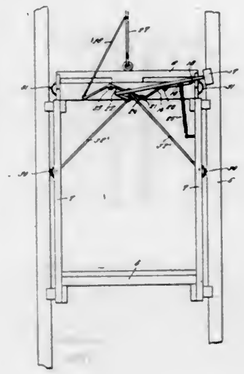
1,860,017. GEAR TRANSMISSION. GEORGE H. COOK, Santa Barbara, Calif. Filed Feb. 26, 1931. Serial No. 518,539. 5 Claims. (Cl. 74—34.)



1. In combination, a drive shaft, a driven shaft, a shiftless bevel gear transmission mechanism providing a direct drive connection between said shafts and including a plurality of gears of relatively different ratio mounted on each shaft, a ring-like member supported in spaced concentric relation about said gears, rotatably mounted intermediate gears supported by said ring-like member and constantly in mesh with certain of the aforementioned gears, similar intermediate gears rotatably supported by said driven shaft and meshing with other of the first mentioned gears, and a friction clutch member yieldably mounted on the driven shaft and adapted to frictionally engage the gear mounted thereon.

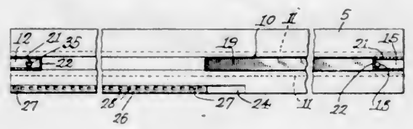
1,860,018. SAFETY STOP FOR ELEVATORS. TOM DONEFF, Burnham, Pa. Filed Aug. 5, 1931. Serial No. 555,290. 2 Claims. (Cl. 187—85.)

1. In combination, a pair of elevator shaft rails, a frame between the rails, said frame including side members, shoes slidable in the side members to engage the rails, a crank shaft having cranks, rods engaged with the cranks and with the shoes, a lever projecting from the crank shaft and having a weight on the outer end thereof tending to normally rock the shaft for engaging



the shoes with the rail, a lifting cable for the frame, means operatively disposed between the cable and the lever permitting the lever to gravitate downwardly when the cable is slack but otherwise holding the lever upwardly.

1,860,019. EQUALIZING TABLE SLIDE. WILLIAM A. DUNCAN, Statesville, N. C. Filed Apr. 1, 1929. Serial No. 351,713. 1 Claim. (Cl. 45—115.)



Equalizing mechanism for an extension table, comprising an inner member, outer members slidable on opposite sides of the inner member, the outer members being provided with recesses, racks housed completely in the recesses and fitting closely therein, the racks being trough shaped in cross section and comprising approximately parallel flanges and a wall connecting the flanges, the wall having openings, and the free edges of the flanges abutting against the bases of the recesses, securing devices passing through the said walls of the racks and entering the outer members, a pinion meshing with the openings of the racks, and means for mounting the pinion for rotation on the inner member.

1,860,020. THREAD CORE. CHARLES K. DUNLAP, Hartsville, S. C., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed Oct. 26, 1929. Serial No. 402,745. 1 Claim. (Cl. 242—118.)

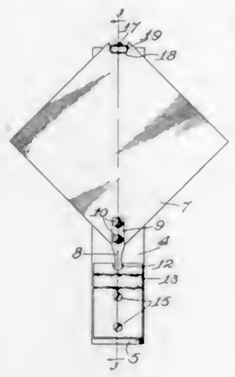
A new article of manufacture comprising a paper spool adapted for use as a thread core, said spool having a tubular paper body and a head also fabricated of paper, said head comprising a pair of flat annuli secured together face to face and concentrically arranged, the inner annulus having a central aperture of less diameter than

that of the outer annulus, the edge of the central aperture in the inner annulus fitting closely against the outer surface of the body, and the adjacent end of the body beyond the inner annulus being upset or turned radially outward to form an annular flange, the inner face of which lies closely against the outer face of the inner



annulus, the circular outer edge of which is in substantially continuous contact with the edge of the central aperture in the outer annulus, and the outer face of which lies substantially in the plane of the outer surface of the outer annulus, the finished spool having an undeformed head with flat outer surface.

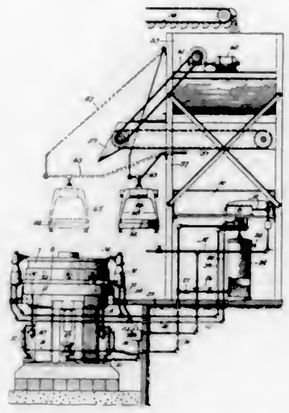
1,860,021. REVERSIBLE DISPLAY DEVICE. ISAIAH A. EAKINS, Pleasanton, Tex., assignor to General American Tank Car Corporation, Chicago, Ill., a Corporation of West Virginia. Filed June 9, 1930. Serial No. 459,965. 7 Claims. (Cl. 40—68.)



1. In a device of the character described, the combination of a support having legs extending forwardly and rearwardly, respectively, from its opposite ends and having an apertured portion extending at an angle to the intermediate portion of said support, a member for presenting on its opposite sides matter to be displayed, a stud rotatable in the aperture in said apertured portion and having a head, said member being adapted to swing outwardly from said support, and a catch device on the rearwardly extending one of said legs for holding said member in either of its positions of rotatable adjustment.

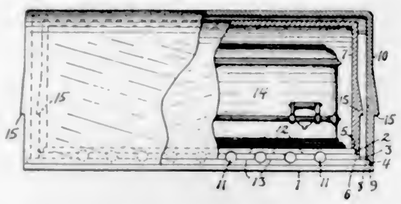
1,860,022. CONTROL SYSTEM AND APPARATUS. LEWIS EGGERT, Toledo, Ohio. Filed Aug. 30, 1929. Serial No. 389,392. 27 Claims. (Cl. 22—1.)

1. In a control system of the class described, the combination of a sand feeding mechanism, a jolting mechanism, means controlling the operations of said mechanisms in sequence, and timing mechanism for determin-



ing the duration of operating time of one of said mechanisms before the commencement of operation of the other mechanism.

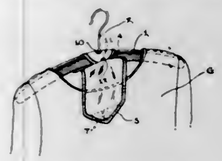
1,860,023. BURIAL VAULT. ALFRED EVARD, Fort Wayne, Ind. Filed Feb. 16, 1931. Serial No. 516,058. 4 Claims. (Cl. 72—7.)



1. In a burial vault, a base having a series of offsets extending entirely around its edges and disposed in vertical planes spaced apart and corresponding horizontal seats, and having also a series of ducts the ends of which extend through said offsets and across the intermediate seats whereby seat portions on the base between said offsets are spaced apart, an inner cover closed about its top, sides and ends, and having a rabbet formed in its lower edge to fit the innermost offset on said base, and an outer cover spaced from said inner cover and closed about its top, sides and ends, adapted to enclose said inner cover and having a rabbet formed in its lower edge to fit the outermost offset on said base, said covers each having formed on the ends thereof an outwardly extending ledge, said ducts having communication with the space between said covers.

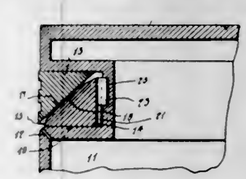
1,860,024. SHIELD ATTACHMENT FOR GARMENT HANGERS. FRANK GOLDBERG, Augusta, Ga. Filed May 10, 1929. Serial No. 362,053. 7 Claims. (Cl. 223—61.)

1. In combination with a garment hanger, a garment protecting shield having one end portion engaged with the hanger hook of the garment hanger, the extremity of said end portion being extended adjacent one side of the garment hanger for a distance beyond its point of engagement with the hanger hook, the intermediate portion of said shield extending about the adjacent portions of the garment hanger and attached to the extended extremity of the end portion of the shield, and the remaining and free end portion of the shield depending from the point of attachment of the intermediate portion of



the shield to the extended end portion of the same and adapted to be arranged over an exposed portion of a garment positioned on said hanger.

1,860,025. PISTON RING. FRANCIS R. GOOD, U. S. Navy. Filed June 4, 1931. Serial No. 542,163. 2 Claims. (Cl. 74—109.)



1. A piston ring structure comprising an outer section and an inner section, said sections being substantially triangular and engaging at their diagonal surfaces, the engaging portion of the inner section being convex providing means whereby said sections at the outer lower corner of the ring are spaced apart so that in operation a scraping edge is provided for engagement with the cylinder wall and such space will create a vacuum to retain and move a body of lubricant, a spring secured intermediate of its ends to the inner side of the inner section, a lug on one end of said spring, and a piston provided with a recess to receive said lug to prevent circumferential movement of the ring section on the piston.

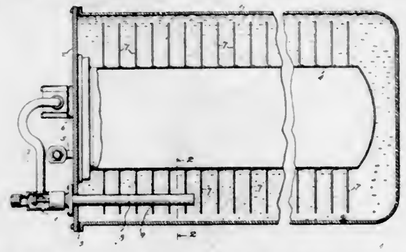
1,860,026. COLLECTOR RING FOR MAGNETOS. ISAAC Q. GURNEE, Butler, N. J. Filed Aug. 21, 1929. Serial No. 387,396. 2 Claims. (Cl. 106—23.)



1. A moldable hard rubber compound for forming magneto rings consisting of a molded and hardened composition of substantially 24.5% of rubber, crude or reclaimed, 13.2% of sulphur, 36.2% of hard rubber dust, 24.1% of asbestos and 2% of cottonseed oil.

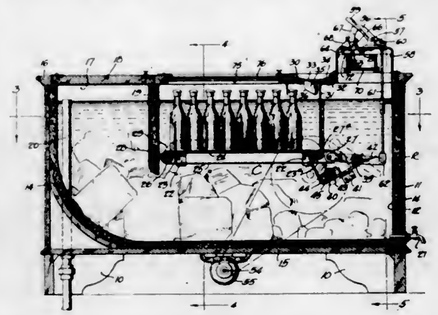
1,860,027. WATER COOLER. PAUL HAYMOND, Fairmont, W. Va. Filed Sept. 2, 1930. Serial No. 479,339. 4 Claims. (Cl. 62—95.)

1. A water cooler including a water compartment, means for cooling said compartment comprising a chamber disposed within said compartment for receiving a cooling medium, inlet and outlet pipes for said chamber, a plurality of metal fins secured to the exterior wall of said chamber and extending to points adjacent the inner wall of said compartment, a thermostat in said compart-



ment and in contact with the fins, and a valve associated with the thermostat and connected with the outlet pipe of the chamber.

1,860,028. DISPENSING MACHINE FOR BOTTLED GOODS. HERMAN E. HEAD, Arvin, Calif., assignor of two-thirds to A. J. Richardson, Arvin, Calif., one thirty-sixth to Mary Josephine Head, one thirty-sixth to James Head, one thirty-sixth to Donald Head, one thirty-sixth to Bonnie Head, one thirty-sixth to David Head, and seven thirty-sixths to Wilma Head. Filed Nov. 23, 1929. Serial No. 409,268. 2 Claims. (Cl. 312—36.)

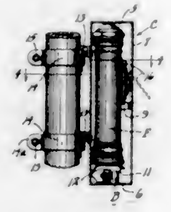


1. A machine of the character described comprising a receptacle having a top opening, a platform in the receptacle, a conveyor including an endless belt and pulleys over which the belt is trained with its upper stretch overlying the platform to support bottles in upright positions one in advance of the other for movement by the belt successively to a position wherein the foremost bottle is accessible through said opening for removal from the receptacle, a rotary driving element, means for mounting one of said pulleys for movement bodily to occupy one position wherein the belt is out of engagement with the driving element, and another position wherein the belt engages the driving element so as to be driven by the latter, and means for moving said pulley to its second mentioned position.

1,860,029. CONTAINER FOR FLASH LIGHTS AND THE LIKE. BEN HELD, Wayzata, Minn. Filed July 3, 1930. Serial No. 465,496. 1 Claim. (Cl. 206—1.)

In an article holder of the class described, an elongated casing having closed ends and provided with an elongated opening in the side thereof constituting a doorway and extending substantially the full height of said casing, the upper end of said casing constituting an abutment for one end of an elongated article, a resilient U-shaped element having one end anchored to the lower end of said casing and having a second or abutment arm extending in the direction of said doorway transversely

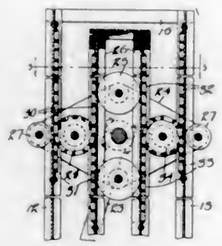
of said casing and positioned above the lower edge of said doorway, a door hinged to said doorway, means for retaining said door in closed position, said abutment arm dividing said casing to form a compartment in the lower portion thereof, said compartment being accessible from the lower portion of said doorway and means associated with said resilient element for holding a spare part in said compartment.



1,860,030. ELASTIC YARN AND METHOD OF MAKING. EDWARD C. HINCHLIFF, Rockford, Ill., assignor to Burson Knitting Company, Rockford, Ill., a Corporation of Illinois. Filed Mar. 21, 1932. Serial No. 600,122. 16 Claims. (Cl. 28—1.)

1. An elastic yarn composed of inelastic thread having loops and an elastic thread interlooped with said loops.

1,860,031. COTTON TRAMPER AND THE LIKE MACHINE. EUGENE A. HOLMGREEN, San Antonio, Tex. Filed Nov. 29, 1930. Serial No. 499,094. 1 Claim. (Cl. 74—14.)



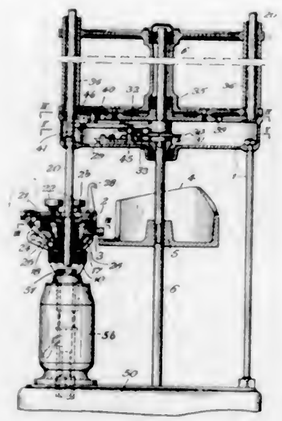
An apparatus of the class described comprising a base, a pair of vertical stationary I beams slidably mounted in said base, a cross-head slidably mounted on said I-beams and composed of a pair of diamond-shaped plates mounted one on each side of said I-beams, guide rollers mounted between each point of said plates and riding in said I-beams, twin sprockets carried by said cross-head between said stationary I-beams and said slidable I-beams, chains secured to the top and bottom of said stationary I-beams and passing beneath and above said sprockets respectively and secured adjacent the top and bottom of said slidable I-beams, a pair of connecting rods secured to said triangular plates, and a crank for operating the same to cause a reciprocating motion to said slidable I-beams, substantially as set forth.

1,860,032. ARTICLE SUPPORT. STYLES T. HOWARD, Jeffersonville, Ind. Filed June 2, 1931. Serial No. 541,677. 2 Claims. (Cl. 211—31.)



1. An article support of the character described comprising a base member having depending sides, an article supporting arm formed from a single piece of wire having one end portion thereof pivoted between said depending sides and the opposite end portion extending at substantially right angles thereto and defining a U-shaped support, a plate interconnecting said right angled portions and formed with an aperture therein, and a latch pivotally connected to said base member and extending through said aperture.

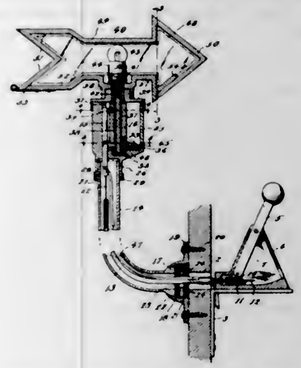
1,860,033. FEED DEVICE. HANS HUBER, Zurich, Switzerland, assignor to Firm P. F. A. G. Patentverwertungs- & Finanzierungs-Aktiengesellschaft, Zurich, Switzerland. Filed Aug. 2, 1930, Serial No. 472,708, and in Switzerland Aug. 31, 1929. 8 Claims. (Cl. 144—14.)



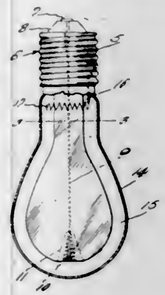
1. In a feed device for machines for quantity production of articles from bar-shaped stock material, in combination, a reciprocatory saddle, a clamping appliance provided on the said saddle for feeding the bar in the one direction of movement of the saddle, a locking member radially displaceable relatively to the said saddle for securing the latter in the one of its end positions, means for releasing the said locking member, a carriage axially displaceably mounted on the said saddle for actuating the said clamping appliance, means for moving the said carriage and the said saddle apart for closing the said clamping appliance, and means for conveying the saddle together with the carriage and the clamped bar into the other end position for advancing the bar one longitudinal feed step.

1,860,034. DIRECTION SIGNAL FOR AUTOMOBILES. THOMAS ASA KANE, McMinnville, Oreg. Filed Oct. 14, 1930. Serial No. 488,622. 1 Claim. (Cl. 116—47.)

A direction signal for motor vehicles comprising a casing, a vertically disposed shaft rotatably mounted within the casing and provided with a cam groove in its outer circumference, a slide mounted within the casing adjacent and parallel with the shaft, means within the casing for holding the slide to a rectilinear path, a projection on said slide engaged in the groove in the shaft, a rotatable indicator element mounted on the casing and connected to the shaft, and means connected with the lower end of the slide for reciprocating the slide.



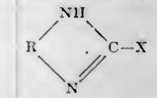
1,860,035. INCANDESCENT LAMP. THEODORE KOWVALLIS, Reading, Pa. Filed Mar. 25, 1931. Serial No. 525,235. 1 Claim. (Cl. 176—122.)



A lamp bulb of the character described comprising an inner bulb, an outer bulb spaced from the inner bulb, said inner bulb being provided with a pocket at its outer end, the inside of the pocket being provided with a reflecting surface, the outside of the inner bulb being provided with a reflecting surface, an electrode disposed around the inner end portion of the inner bulb, an electrical conductor extending longitudinally through the inner bulb and projecting into the pocket, and a spiral electrode located in the said pocket and connected to the said conductor.

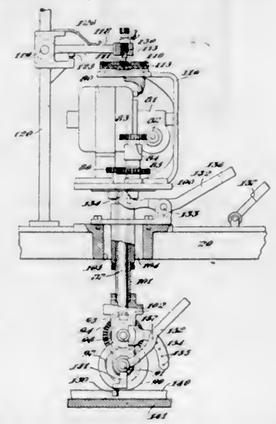
1,860,036. PIGMENT DYES. GEORG KRÄNZLEIN, CHRISTOPH HARTMANN, and ALBIN HARDT, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1928, Serial No. 299,107, and in Germany Sept. 11, 1926. 6 Claims. (Cl. 260—12.)

2. As new products, the salts formed on the one side from an organic dyestuff containing at least one acid salt-forming group and on the other side from a cyclic-organic base of the general formula:



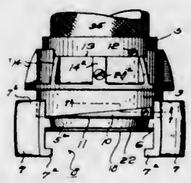
wherein R stands for a bivalent hydrocarbon radical of the group consisting of ethylene, phenylene and naphthylene and X stands for a substituent of the group consisting of hydrogen, methyl, amino, methylimino, phenylimino, tolylimino and cyclohexylimino, the said salts being insoluble or difficultly soluble in water, but soluble in alcohol, acetone, benzyl alcohol, butanol, cyclohexanone or cyclohexanol.

1,860,037. REPRODUCING MACHINE. CARLOS KREBS, Boston, Mass. Filed July 12, 1930, Serial No. 467,422, and in Great Britain May 10, 1930. 8 Claims. (Cl. 266—23.)



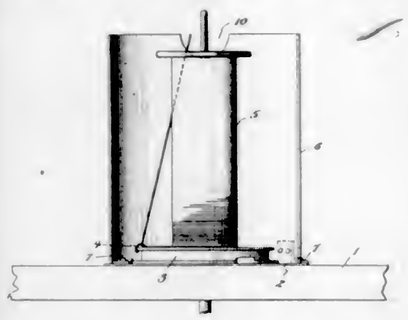
1. A reproducing machine comprising parallel motion mechanism and a pattern follower device for controlling the parallel motion mechanism, the pattern follower device comprising a unit including a motor and a pattern follower wheel adapted to be driven thereby and adapted to rest upon a pattern, the pattern follower device being mounted for vertical oscillation as a unit with respect to the parallel motion mechanism, whereby the weight of the pattern follower unit is bourne by the pattern and the pattern follower wheel is adapted to follow the pattern without transmitting to the parallel motion mechanism substantial vertical oscillations.

1,860,038. HEAVY DUTY HOSE COUPLING. HARALD LANGE, Portland, Oreg. Filed Sept. 14, 1931. Serial No. 562,783. 4 Claims. (Cl. 285—176.)



1. A coupling comprising a pair of substantially identical sections, each of said sections comprising a tubular member having at its forward end a plurality of spaced segments provided with inturned flanges at their forward edges which lie in spaced relation circumferentially of said sections, said segments being of such length that when two of said sections are brought together the segments of one section enter between the spaces between the segments of the other section, locking rings mounted for oscillation directly upon said tubular members and provided with cams adapted to be moved across said spaces upon turning movement of said rings to engage behind the said inturned flanges of the companion sections, and means for locking said rings in retracted position to prevent accidental movement of said cams across said spaces.

1,860,039. GUARD FOR SPINNING MACHINES. PAUL J. LAUX, Shavertown, Pa. Filed Nov. 18, 1930. Serial No. 496,473. 1 Claim. (Cl. 118—11.)

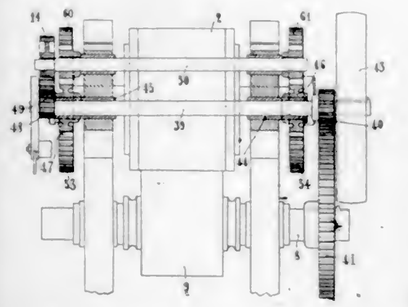


A guard for a bobbin of a spinning machine consisting of a semi-cylindrical plate passing at the rear and the sides of a bobbin and giving access to the bobbin at the front, said plate being of greater vertical dimension than a bobbin and provided in its upper edge with a notch to permit thread to pass to a bobbin, and laterally projecting brackets fixed to the lower end of the plate at opposite sides thereof and provided with openings through which fastening devices may be inserted to secure the plate to a rail.

1,860,040. SURFACING MATERIAL AND PROCESS OF PREPARING SAME. ZANVIL C. LOEBEL, New York, N. Y., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Original application filed Dec. 15, 1928, Serial No. 326,419. Divided and this application filed Mar. 7, 1930. Serial No. 434,179. 3 Claims. (Cl. 91—68.)

1. The process of producing colored granules which comprises impregnating basic granular material with a soluble salt, converting said soluble salt in situ into a colored powder, wetting the colored granular material with soluble silicate and thereafter causing said silicate to react with basic constituents of the granules whereby to form an insoluble silicate.

1,860,041. GEARING ARRANGEMENT OF MANGLING OR WRINGING MACHINES. EDMOND LOUCHET, Roubaix, France, assignor of one-half to Société Ateliers St. Eloi, Tourcoing, France. Filed July 30, 1928, Serial No. 296,362, and in France July 29, 1927. 1 Claim. (Cl. 74—7.)



In a press for squeezing textile or other materials, upper and lower pressing rollers between which the material is fed by the pressure of the rollers, means for applying power to the lower roller, intermediary gear trains imparting rotary motion to the upper roller substantially independently of lift of that roller due to passage of a portion of the material of abnormal thickness between the rollers, the gear elements of said intermediary gear trains transmitting power to the upper roller being located in a plane substantially horizontal with the axis of the upper roller; a main drive shaft, and a connection between the same and the lower roller, the rotation of the upper roller being effected by said shaft through the intermediary gear trains; an auxiliary shaft whereon the gears of the intermediary gear trains which impart rotary motion to the upper roller are mounted for rotation independently of each other; a pinion fixed for rotation with said auxiliary shaft; a plate mounted for angular adjustment at one side of the press; means for holding said plate in positions of adjustment; a rotary pinion mounted on said plate in mesh with the first-named pinion; a shaft mounted parallel to the auxiliary shaft; and a heavily-toothed gear mounted on each end of the auxiliary shaft and meshing with the said gears of the intermediary gear trains which impart rotary motion to the upper roller, thereby to permit the upper roller to rise a reasonable distance without separation of the meshing gears.

1,860,042. HOSIERY DRYING FORM. CARL LOVEN, Philadelphia, Pa. Filed May 18, 1927. Serial No. 192,441. 3 Claims. (Cl. 223—17.)



1. A stocking form consisting of a substantially flat body including both leg and foot portions and having at the toe a rounded transverse extremity whose forward edge extends substantially at right angles to the plane of the said foot portion of the form in a plane bisecting the said foot portion of the form.

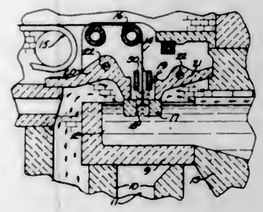
1,860,043. PRINTER'S INK AND IN THE PROCESS OF MANUFACTURING SAME. MATTHIAS LUDWIGSEN, Stockholm, Sweden. Filed Sept. 24, 1928, Serial No. 308,125. Renewed Oct. 7, 1931. 5 Claims. (Cl. 134—35.)

1. A printing ink, having a vehicle formed by combining waste sulphite liquor, alkali, and phosphoric acid together.

1,860,044. SHEET GLASS APPARATUS. LUKE C. MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 8, 1928. Serial No. 276,057. 3 Claims. (Cl. 49—17.)

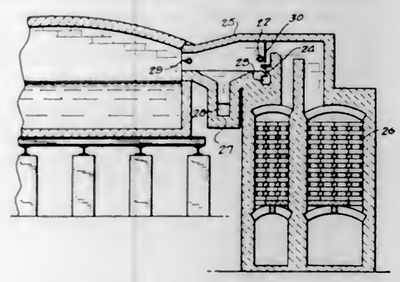
3. In sheet glass apparatus, a receptacle adapted to contain a mass of molten glass, an elongated ring member immersed within the mass of molten glass for segregating a relatively small pool of glass therefrom from

which the sheet is adapted to be vertically drawn, said member being provided with vertically extending restricted slots at its opposite ends through which the edges of the sheet pass, substantially horizontal lip tiles arranged at opposite sides of the sheet above the mass of molten



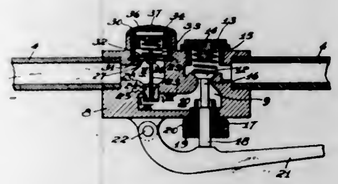
glass with the forward ends thereof resting upon said ring member, and means for adjusting the lip tiles to force said ring member downwardly into the molten glass to the desired depth, said lip tiles being disposed over and covering the molten glass within the receptacle at opposite sides of said ring member.

1,860,045. FURNACE. NESTOR MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 9, 1928. Serial No. 276,367. 9 Claims. (Cl. 158—7.5.)



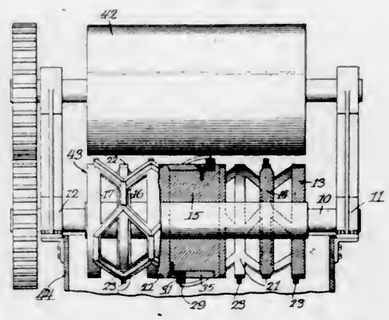
1. A regenerator of the character described, including a port, means for supplying a stream of air along the bottom thereof, means for supplying a stream of air along the top of said port, and means for supplying a stream of gaseous fuel between said streams of air, the stream of gaseous fuel contacting with said streams of air.

1,860,046. CUTTING TORCH. JAMES D. MCCUTCHEON, Pittsburgh, Pa. Filed Oct. 20, 1928. Serial No. 313,825. 5 Claims. (Cl. 158—27.4.)



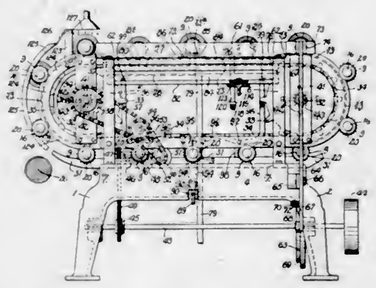
1. A cutting torch comprising in combination a nozzle adapted to deliver heating and cutting jets, separate conduits for supplying heating and cutting gas to the nozzle, a normally closed spring-actuated control valve in the cutting gas conduit, and a normally inadjustable spring-impelled regulating valve associated with the outlet of and actuated by the pressure of gas supplied from said control valve, said regulating valve being effective when the pressure of gas supplied from said control valve exceeds a predetermined pressure to maintain flow of gas to the nozzle continuously at said predetermined pressure.

1,860,047. PRINTING AND SLITTING ROLLER. ALBERT E. F. MOONE, Chicago, Ill., assignor to The Lehon Company, Chicago, Ill., a Corporation of Illinois. Filed May 6, 1930, Serial No. 450,211. Renewed Nov. 2, 1931. 9 Claims. (Cl. 101—226.)



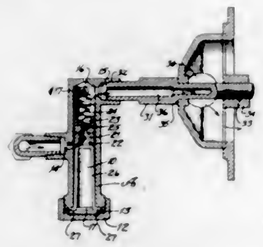
1. In a printing and slitting roller, in combination, an axle, a central cylindrical section mounted thereon provided with a circumferential channel, printing and slitting members maintained in the channel, extension end members comprising hollow cylindrical sections bearing zig-zag printing bars upon their surface, and spacer members mounted on the axle for maintaining and supporting the extension members in position.

1,860,048. MACHINE FOR SOLDERING WAFER THERMOSTATS. JOHN W. MYERS, Quincy, Ill. Filed Nov. 4, 1929. Serial No. 404,795. 9 Claims. (Cl. 113—59.)



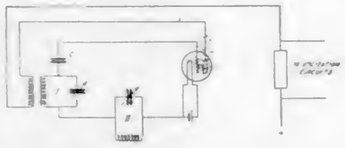
1. A machine for soldering articles having an extended circular edge portion, comprising a series of carriers having separable members for holding the article between them, each of which is provided on its outer end with a circular flange, means for continuously moving the carriers over the machine and simultaneously rotating them, an acid tank and a solder tank located on the upper side of the machine, means for guiding the articles in succession over and through said tanks with the extended edge portion of each immersed a predetermined depth in the acid and solder thereof, respectively, and stationary cam members adapted to be engaged by said flanges for separating the holding members of each carrier after the article has passed out of the solder tank.

1,860,049. SIGNAL SYSTEM. EINAR NEERUP, Oak Park, Ill. Filed Sept. 27, 1930. Serial No. 484,757. 3 Claims. (Cl. 200—82.)



1. In a device of the kind described, the combination of a casing in which is a vertical cylindrical chamber having an inlet intermediate its ends and an outlet at a somewhat higher point, a plunger formed with a constricted longitudinal passage slidable within the chamber and movable towards the upper end thereof in response to a pressure of liquid entering the inlet, stop means for limiting downward movement of the plunger to a point about opposite the inlet, an electrical contact projected into the chamber at a point in the upper region thereof, and a spring carried by the plunger extending upwardly therebeyond for engaging with the contact when the plunger is advanced to an upper position in response to a pressure of liquid against the bottom face of the plunger.

1,860,050. OSCILLATION GENERATOR. MENDEL OSNOS, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Oct. 1, 1929. Serial No. 396,445, and in Germany Sept. 27, 1928. 1 Claim. (Cl. 250—36.)



A generator for producing simultaneously a plurality of carrier waves of slightly different frequencies comprising an electron discharge device, and an input circuit therefor comprising a plurality of parallel tuned circuits tuned to different frequencies, serially connected together, and, a tuning condenser connected in series with the tuned circuits.

1,860,051. PROCESS OF FORMING BATTERY PLATES. DAVID PEPPER, Philadelphia, Pa. Filed June 12, 1929. Serial No. 370,462. 6 Claims. (Cl. 136—27.)

1. In the manufacture of electric battery electrodes in which a conducting support of the electrode to be formed is coated with lead compounds adapted to become active material, the improved method of coating such supports which consists in charging an electrolytic cell with an electrolyte of such composition that it will under conditions of use react upon and bring into solution no more than a portion of the preparation of lead suspended therein, mixing with and suspending in said electrolyte fine particles of preparations of lead adapted for use as an electrode coating, inserting in the electrolyte so prepared as the cathode electrode of the cell the conducting support and depositing thereon by electrical migratory action followed by partial reduction particles of lead preparations suspended in the electrolyte.

1,860,052. TRANSMISSION LINE. HAROLD O. PETERSON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 8, 1928. Serial No. 324,595. 15 Claims. (Cl. 178—44.)

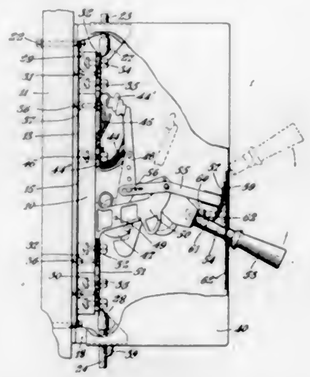


3. An open air transmission line system for conducting high frequency energy without radiation or pick-up comprising an even numbered plurality of conductors arranged in open air at the vertices of a regular polygon, and means at each end of the transmission line for connecting alternate conductors together.

1,860,053. PROCESS OF TREATING CELLULOSE MATERIAL. WILLIAM F. RICHTER, Apollo, Pa., assignor to Chemical Holding Corporation, Apollo, Pa., a Corporation of Delaware. Filed June 27, 1929. Serial No. 374,275. 7 Claims. (Cl. 260—10.)

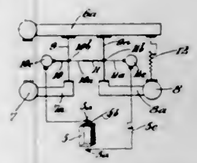
1. In the preparation of viscose by treating cellulose fiber with caustic soda and grinding the alkali cellulose thus formed, the step comprising reversing the direction of grinding at continuously repeated relatively short intervals of time.

1,860,054. WALL SWITCH. FRANK W. ROLLER, East Orange, N. J., assignor to Roller-Smith Company, a Corporation of New York. Filed Mar. 10, 1928. Serial No. 260,743. 7 Claims. (Cl. 200—168.)



1. A switch comprising a shallow box element adapted to be mounted on a wall, said element having end terminal blocks to receive connecting lead wires, a removable base plate mounted within and upon the bottom of said element and located between said terminal blocks, a switch mechanism carried by said base plate adapted to be attached and removed as a unit with said base plate to and from said element, and means comprising terminals on the face of said base plate for connecting the terminals of said terminal blocks to said switch mechanism.

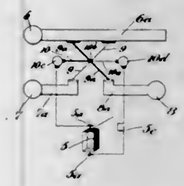
1,860,055. ELECTRICAL MEASURING INSTRUMENT. FRANK W. ROLLER, East Orange, N. J., assignor to Roller-Smith Company, a Corporation of New York. Filed Dec. 30, 1929. Serial No. 417,390. 5 Claims. (Cl. 171—95.)



1. In an electrical measuring instrument, a plurality of terminals for connection to an external circuit, a heating conductor electrically connected between certain of said terminals, a second heating conductor electrically connected between certain of said terminals, at least one of which is a different terminal from those to which said first heating conductor is connected, said heating conductors being of different current carrying capacity, a thermo-electric device of dissimilar metals having its junction in thermal conductive relationship to said first named heating conductor, a second thermo-electric device of dissimilar metals having its junction in thermal conductive relationship to said second heating conductor, and an indicating device, said thermo-electric devices being connected in the circuit of said indicating device.

4. An electrical measuring instrument comprising a base and an enclosing casing, a plurality of terminals mounted on said base forming terminals within and without said base, indicating means mounted upon said base, and a separately removable unit mounted upon said base, said unit comprising an insulating support, a plurality of conducting elements mounted on said support, terminals on said elements, and a heating conductor and a thermo-electric device connected between certain of said last named terminals.

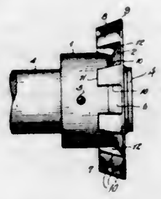
1,860,056. ELECTRICAL MEASURING INSTRUMENT. FRANK W. ROLLER, East Orange, N. J., assignor to Roller-Smith Company, a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,619. 8 Claims. (Cl. 171—95.)



1. In an electrical measuring instrument, a plurality of terminals for connection to an external circuit, a heating conductor electrically connected between certain of said terminals, a second heating conductor electrically connected between certain of said terminals, at least one of which is a different terminal from those to which said first heating conductor is connected, said conductors having certain portions only thereof in thermal relationship to each other, a thermo-electric couple of dissimilar metals having one junction of such metals in thermal relationship to both of said conductors, and means for indicating the electro-motive force generated by said couple.

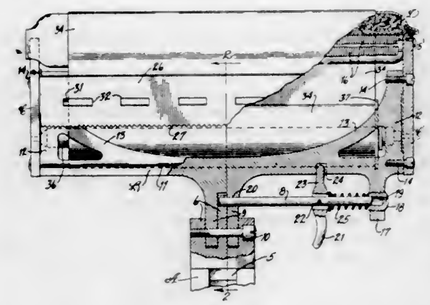
1,860,057. STITCH REMOVER. GAETANO J. SABATINO, Baltimore, Md. Filed Apr. 10, 1930. Serial No. 443,155. 4 Claims. (Cl. 12—17.)

1. A stitch removing rotary tool having a hub portion terminating in a radially tapered circumferentially extending flange member to receive the upper of the shoe, said flange member having on the inner face thereof a plurality of integrally formed spaced teeth extending endwise away from said flange member and having their



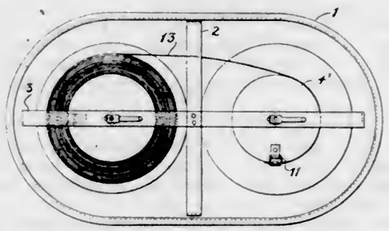
working edges inclined endwise and toward said hub portion and merging at their other ends in the periphery of said flange member.

1,860,058. ADJUSTABLE HEADREST. ARTHUR R. SCHWARZKOPF, Chicago, Ill., assignor to Theo. A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 13, 1930. Serial No. 435,427. 4 Claims. (Cl. 155—177.)



4. A head rest comprising a rigid bar having means for adjustably connecting it to a support, bracket means upstanding from the ends of the bar and having lateral bracing means connecting the brackets to the bar, whereby to provide an unobstructed space between the bracket means above the bar, and a resilient pad connected at its ends to the upper ends of said bracket means and adapted to flex into the unobstructed space above the bar.

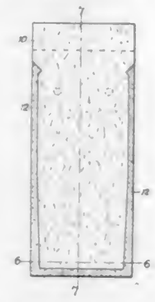
1,860,059. APPARATUS FOR DEVELOPING FILMS. JOHN WESLEY SMITH, Philadelphia, Pa., assignor to Aero Service Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 6, 1930. Serial No. 493,727. 5 Claims. (Cl. 95—94.)



1. Apparatus for developing roll films comprising a pair of vertically disposed cylinders, a cage adapted to rotatably support said cylinders in spaced relation, a

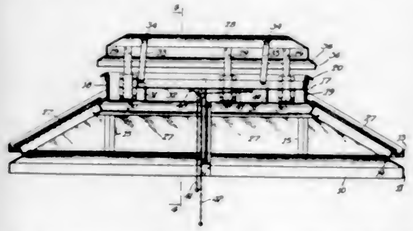
radial flange formed on each cylinder and adapted to receive and support one edge of a roll of film when wound on the cylinder, and means carried by each cylinder operable to removably secure one end of said film thereto.

1,860,060. METHOD OF MAKING SHINGLES. GEORGE B. STRYKER, Jr., Memphis, Tenn., assignor to The Weatherproof Products Company, Memphis, Tenn., a Corporation of Tennessee. Filed July 31, 1928. Serial No. 296,604. 2 Claims. (Cl. 18—60.)



1. A method of manufacturing a composite structural unit comprising a body portion and a cover portion, which consists in thoroughly mixing finely comminuted fibre, paper, and a suitable binder in the presence of hot water until the mass has a creamy consistency, passing the mass through heated pressing rollers to form a sheet, cutting the resultant sheet into suitable shapes for said body portions; mixing finely comminuted fibre, clay, lime and cement into a plastic mass, placing said body portion in a mould and then pouring thereon said plastic mass and applying pressure thereto whereby said mass will tightly bind against the body portion and produce the structural unit, substantially as set forth.

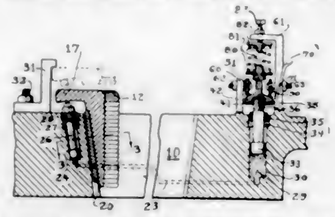
1,860,061. VENTILATOR. EMIL A. TAPPERT, Chicago, Ill. Filed May 31, 1929. Serial No. 367,358. 9 Claims. (Cl. 98—85.)



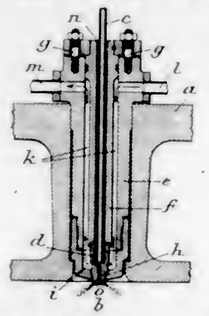
1. A ventilator comprising in combination an open rectangular member, a cap on said rectangular member, connections between said cap and said rectangular shaped member, a slidably mounted bar, arms pivotally connected to said cap and said bar, and manually operable means whereby the said bar is moved longitudinally.

1,860,062. HYDRAULIC SYNCHRONIZED LIFTING MEANS FOR SLIPS. JAMES S. TAYLOR, Tulsa, Okla. Filed Oct. 21, 1929. Serial No. 401,322. 8 Claims. (Cl. 24—263.)

1. A hydraulic synchronized lifting apparatus comprising a horizontal base having a substantially vertical hole therethrough, slips having ears near their tops adapted to slide against the walls of the hole, said base having bores under the ears of the slips and parallel to the walls of the hole, a passageway interconnecting all of the bores, a liquid or fluid in the passageway, plungers in the bores, said plungers being adapted to be reciprocated and of such length as to engage with the ears of the slips and lift said slips, and means for placing the liquid or fluid under pressure.

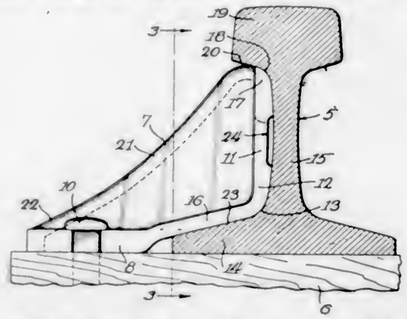


1,860,063. FUEL INJECTION DEVICE FOR INTERNAL COMBUSTION ENGINES. WERNER TOBLER, Winterthur, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed May 28, 1931, Serial No. 540,567, and in Switzerland Sept. 25, 1930. 2 Claims. (Cl. 299—107.1.)



1. In a fuel injection device for internal combustion engines the combination with a fuel delivery pipe connected at its inner end to an injection nozzle, of a wall making a liquid tight joint with the nozzle and surrounding the delivery pipe with a clearance space between the pipe and wall, and of a connection between the clearance space and the room outside the fuel injection device, whereby any fuel leaking through the joint between the nozzle and the delivery pipe may escape.

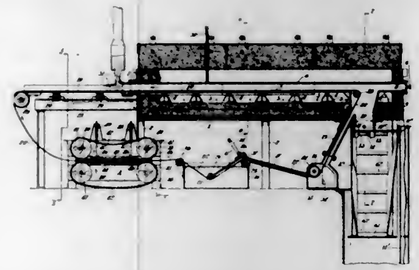
1,860,064. RAIL BRACE. ARNOLD H. TOLD, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 16, 1931. Serial No. 509,086. 5 Claims. (Cl. 238—336.)



1. A rail brace of the class described, having a base part and a front part extending upwardly from said base part, the forward portion of said base part being adapted

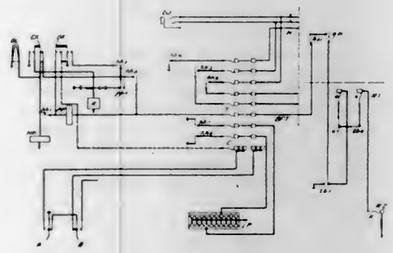
to fit over the base flange of a rail in spaced relation thereto and the portion of the brace at the junction of said base and front parts being formed to engage the fillet between the rail base flange and web portions, the upper portion of said front part being adapted to fit and engage the fillet between the head and web portions of the rail, and said front part being recessed intermediate said upper and lower fillet-engaging portions, the recess extending between said fillet-engaging portions and serving to prevent contacting of the front part of the brace with the web portion of the rail, and a hollow strut extending between said base part and front part for supporting the latter.

1,860,065. METAL TREATING FURNACE. CHARLES T. WILLARD, Roselle, and RICHARD KAIER, Cranford, N. J., assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 25, 1930. Serial No. 498,102. 10 Claims. (Cl. 266—4.)



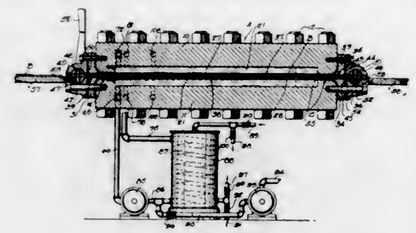
6. A furnace having a closed horizontal heating chamber constructed with an inlet at one end and an outlet in its bottom wall adjacent its opposite end, an endless belt-conveyor having an upper run passing through said chamber and a return run disposed below said chamber, a gas-tight conveyor passageway connected to the outlet of said heating chamber, a seal at the end of said conveyor passageway through which said conveyor emerges to the outside atmosphere, and work-cooling means in gas-tight communication with the outlet of said heating chamber and spaced from said seal.

1,860,066. TELEPHONE SYSTEM. ESMOND PHILIP GOODWIN WRIGHT, Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Filed May 26, 1930, Serial No. 455,636, and in Great Britain June 4, 1929. 10 Claims. (Cl. 179—27.)



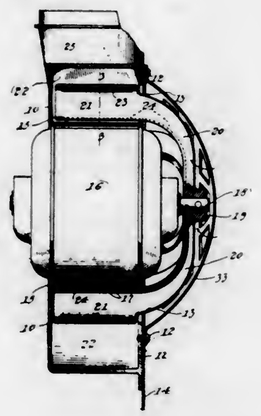
1. A telephone system comprising an operator's position, outgoing trunks terminating therein, conversational switches individual to said trunks, control apparatus associated in common with a plurality of said trunks and means adapted to identify an idle trunk in response to potential applied over a circuit including normal contacts both of a free conversation switch and of a free control apparatus.

1,860,067. APPARATUS FOR PRODUCING LAMINATED GLASS. DANIEL ADAMS, Ann Arbor, Mich., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 20, 1928. Serial No. 255,593. 10 Claims. (Cl. 49—S1.5.)



1. In apparatus for the manufacture of laminated glass, a housing for receiving the assembled layers of material to be joined, said housing being provided with openings in opposite walls thereof to allow said layers of material to be placed therein through one opening and removed therefrom through the opposite opening, means for applying pressure to the layers of material within the housing to effect the uniting thereof, and means for simultaneously opening and closing the openings in the opposite walls of said housing.

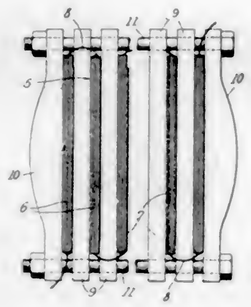
1,860,068. VENTILATING APPARATUS. EDWIN M. BASSLER, Wausau, Wis., assignor to D. J. Murray Manufacturing Company, Wausau, Wis., a Corporation of Wisconsin. Filed Apr. 26, 1928. Serial No. 273,069. 3 Claims. (Cl. 230—259.)



1. Ventilating apparatus comprising a supporting plate provided with a ventilating opening; a fan casing secured to one side of said plate around said opening and provided with a central motor space and a surrounding fan chamber having an opening registering with said ventilating opening; a motor supported in said motor space with its shaft protruding through said plate opening;

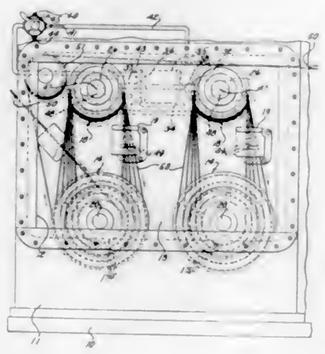
fan blade supports secured to the protruding end of said shaft and extending thence into said fan chamber through said openings; and fan blades on said supports and operating in said fan chamber.

1,860,069. MOUNTING FOR RECTIFIER PLATES. LESTER F. BIRD, Newark, N. J., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed July 26, 1930. Serial No. 470,052. 3 Claims. (Cl. 175—366.)



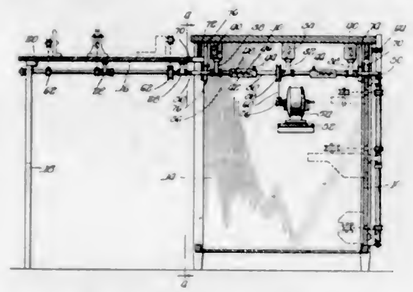
2. A rectifying device comprising a plurality of unilateral electrical conducting plates, pairs of strips of insulating material for spacing each plate from the adjacent plate, said strips having apertures in their ends, bolts passing through the apertures, end strips receiving the bolts, and means cooperating with the end strips and bolts to clamp the plates and spacing strips together.

1,860,070. STRAND WORKING APPARATUS. HARRY BLOUNT, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,886. 6 Claims. (Cl. 205—13.)



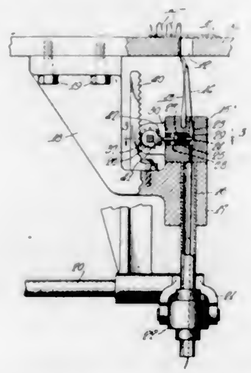
1. In a strand working apparatus a strand working means, a capstan for moving the strand through the strand working means, a plurality of rotatable shafts, each having an end portion eccentric to the axis thereof, a sheave for guiding the strand to and from the capstan and rotatable on each of the eccentric portions, a common reciprocable member operatively engaged with each of the shafts for rotating them simultaneously to change the center of rotation of the sheaves to produce slack in the strand.

1,860,071. COMBINED WORKBENCH, CABINET AND TOOL SUPPORT. HAROLD T. BODKIN, Chicago, Ill. Filed Sept. 29, 1930. Serial No. 485,136. 13 Claims. (Cl. 144—285.)



1. In a cabinet, a movable leaf initially forming a closing vertical side wall of said cabinet, a shaft rotatably journalled to the exterior surface of said leaf and a shaft rotatably journalled within said cabinet pivotally connected to the shaft carried by said leaf whereby said leaf may be raised to horizontal position and rotated about the axis of the shaft to bring its initially inner surface to the top.

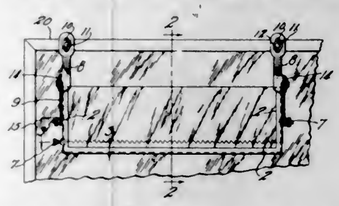
1,860,072. TENSIONING DEVICE. CLARENCE A. BRAUDES, Brooklyn, N. Y. Filed Apr. 24, 1929. Serial No. 357,622. 2 Claims. (Cl. 112—79.)



1. As a new article of manufacture, a needle carriage and a movable thread tensioning device mounted thereon, means for operating said thread tensioning device comprising a gear on the needle carriage coacting with a stationary rack as the carriage reciprocates, a cam frictionally clutched to the gear, means to limit the friction impelled movement of the cam and means whereby the position of the cam controls the operativeness or inoperativeness of the tensioning device.

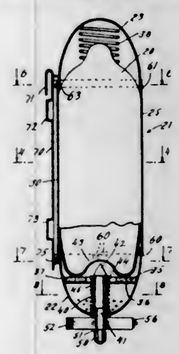
1,860,073. WINDSHIELD WARMER. CHARLES H. BREWSTER, Middletown, Conn. Filed July 18, 1930. Serial No. 468,858. 5 Claims. (Cl. 248—20.)

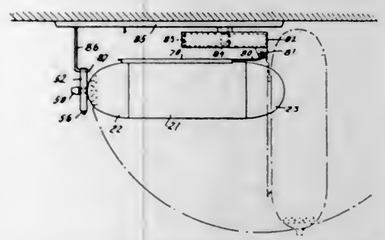
4. A bracket structure for supporting a clear vision device in position against a windshield or the like comprising a spring bracket on which the device may be turned to hold it in or out of pressure position on the



windshield, said bracket including means by which the degree of spring pressure may be changed when the device is moved vertically on the windshield.

1,860,074. FIRE EXTINGUISHING APPARATUS. WILHELM B. BRONANDER, Montclair, N. J. Filed June 6, 1929. Serial No. 368,845. 13 Claims. (Cl. 169—26.)



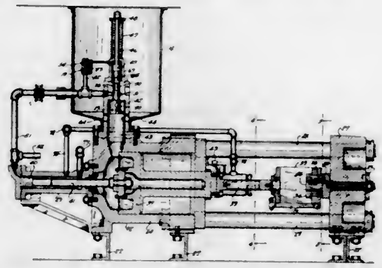


1. In combination, means for supporting a fire extinguisher container, a plunger carried thereby and movable to puncture a container supported by said means, actuating means for moving the plunger to operative position, a resilient clip embracing the plunger to hold said plunger against movement to operative position, and fusible means controlling said clip, said clip and plunger being so constructed and arranged that the plunger can be moved to operative position without breaking the fusible means.

3. In combination, means for supporting a frangible fire extinguisher container, a member mounted for movement against said container, actuating means for moving said member against the container, resilient means for holding said member against movement by said actuating means, said resilient means being biased to spread and release said member, and heat controlled means for holding said resilient means in operative position.

9. In combination, a member mounted for rotary movement, a fire extinguisher support mounted for pivotal movement thereon, means for rotating said member, a fire extinguisher container carried by the support, said support being biased to swing on said rotary member, means for puncturing said container, means for actuating said puncturing means, and heat controlled means for holding the puncturing means against actuation, holding the support against movement on its pivot and for holding said member against rotation.

1,860,075. BRIQUETTING MACHINE. ERLE J. BYERLEIN and FRED GRAF, Jr., Wauwatosa, Wis., assignors to Milwaukee Foundry Equipment Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 1, 1930. Serial No. 432,395. 10 Claims. (Cl. 18—5.)



6. A briquetting machine, comprising a frame, a hopper for holding loose material, a die member adjacent the hopper, a plunger extending into the hopper in alinement with the die, a primary cylinder having a piston for moving the plunger to force material from the hopper into the die and against a frame part and to initially compress said material to a predetermined extent, a secondary cylinder of larger diameter having a piston for moving the plunger with greater pressure for completing the compression of the material, a pump and a fluid holding tank positioned to supply fluid under pressure to the primary cylinder and at the same time permit fluid to quickly and freely flow from the tank to the secondary cylinder during the initial compression of the material, a valve controlled by the resistance of the material being compressed for directing fluid under pressure to the secondary cylinder to cause the complete compression of the material, the resistance of the material to said complete compression stopping the fluid pressure flow to the secondary cylinder and directing it to cause the hopper and die to move rearwardly to strip the briquette from the die while the plunger is holding the briquette against the frame part, electrical means actuated by the movement of the hopper and die for directing the fluid under pressure to cause the plunger to move rearwardly to its initial position to release the completed briquette and to also cause the fluid under pressure to move the hopper and die forwardly to their initial positions, said forward movement actuating the electrical means to cause the parts to again start their cycle of movements.

1,860,076. AEROPLANE CONSTRUCTION. ABNER F. CALLISON, New York, N. Y. Original application filed Nov. 11, 1925, Serial No. 68,271. Divided and this application filed Sept. 16, 1926. Serial No. 135,732. 10 Claims. (Cl. 244—30.)

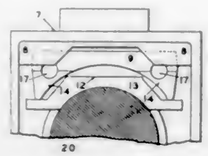


2. In an aeroplane whereof the fuselage is formed with a cargo space, a container carried in the space, and means to secure the container to the fuselage, said means including means for bracing the fuselage structure.

8. A structure of the kind described comprising a fuselage having end doors, a bottomless chamber behind

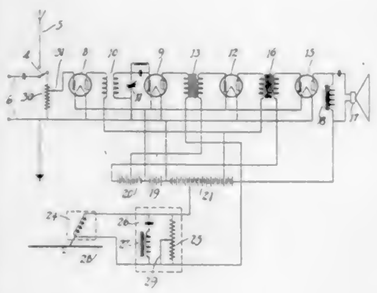
the doors, and a freight carrying container fitting the chamber of the fuselage and with the bottom of the container forming the bottom of the chambered part of the fuselage.

1,860,077. JOURNAL BEARING FOR RAILWAY CARS. STERLING H. CAMPBELL, St. Louis, Mo., assignor to Western Railway Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 6, 1930. Serial No. 473,336. 4 Claims. (Cl. 308—54.)



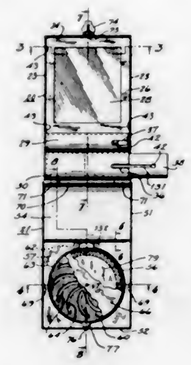
4. In a device of the class described, the combination with a journal box having a bearing face on the under side of its top, of a wedge having a longitudinally curved upper bearing face cooperating with said box bearing face, said wedge being provided at its forward end with a downwardly projecting flange forming a hand-hold, said flange being provided with a recess extending inwardly from its front face and forming a tool engaging shoulder, whereby said wedge may be lowered out of engagement with the box by a tool bearing on said shoulder and fulcruming on the forward part of the box top.

1,860,078. COMBINATION RADIORECEIVER AND PHONOGRAPH. JOSEPH L. CASSELL, New York, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 17, 1929. Serial No. 378,981. 6 Claims. (Cl. 179—100.11.)



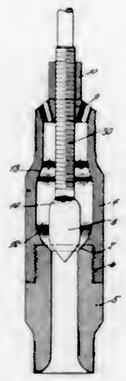
1. In combination, a carrier wave receiving circuit and an electro-magnetic reproducing unit, means for controlling the volume of the carrier wave signals, independent means for similarly varying the signals from said reproducer, and means coacting with both said means for simultaneously controlling the volume of the carrier wave signals and the signals from said reproducer in opposite sense.

1,860,079. VANITY CASE. CHARLES N. CORYELL, Mamaroneck, N. Y. Filed June 12, 1930. Serial No. 460,598. 12 Claims. (Cl. 132—83.)



1. In a vanity box, separable top and bottom covers, a mirror in said top cover, lipstick and eye crayon in said top cover alongside said mirror, and a powder holder in said bottom cover, said bottom cover having a recess to accommodate said lipstick and eye crayon when the box is closed.

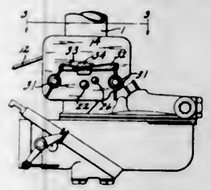
1,860,080. ADJUSTABLE BOTTOM HOLE FLOW BEAN. ELLIOTT L. DAVENPORT and GEORGE C. JACKSON, Wink, Tex., assignors to Shell Petroleum Corporation, a Corporation of Virginia. Filed Feb. 26, 1930. Serial No. 431,372. 1 Claim. (Cl. 166—2.)



A device of the class described in combination with a tubing adapted to be lowered into a well, a choking element comprising a shell mounted on the bottom end of the tubing said shell having a spider providing a bearing for a valve stem, a valve seat mounted on the bottom of the shell, a valve head secured to the valve stem, an elongation of the stem extending to the top of the well, and means including threads on the stem for adjusting the valve head with respect to the seat.

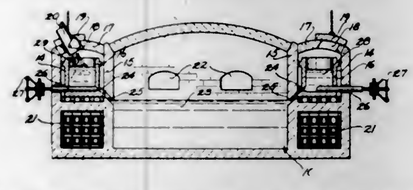
1,860,081. THROTTLE CONTROL. DAVID J. DOLAN, Cleveland Heights, Ohio. Filed June 8, 1931. Serial No. 542,996. 7 Claims. (Cl. 137—111.)

1. A device of the class described for attachment to a carburetor and comprising a housing adapted to be positioned against the side of the carburetor to enclose the throttle control lever of the latter, and means for securing



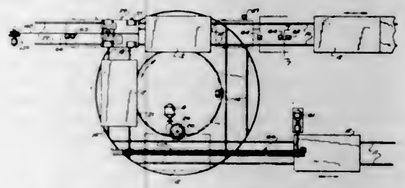
said housing in said position, said housing having a side opening to provide clearance for an actuating rod associated with said lever.

1,860,082. METHOD AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 21, 1928. Serial No. 248,477. 4 Claims. (Cl. 49—54.)



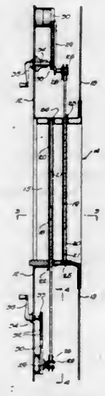
4. In a furnace construction, a glass working receptacle adapted to contain a mass of molten glass, a melting chamber arranged at each side of said receptacle and enclosed therewith, vertical walls separating the working receptacle and melting chambers and constituting the outer walls of said receptacle and the inner walls of said chambers, said vertical walls having openings therethrough, a horizontal partition wall dividing the interior of each melting chamber into upper and lower compartments, a plurality of glass melting pots arranged within the upper compartment of each chamber above the level of the molten glass in said receptacle and being provided with outlets adjacent the bottoms thereof, said outlets facing toward the working receptacle and registering with the openings in the vertical walls, heating means arranged within the lower compartment of each chamber beneath the pots therein and opposite the molten glass in the working receptacle, and horizontal means operating through each melting pot for independently controlling the flow of glass therefrom into the working receptacle.

1,860,083. SYSTEM FOR SURFACING GLASS SHEETS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 29, 1929. Serial No. 374,882. 17 Claims. (Cl. 104—38.)



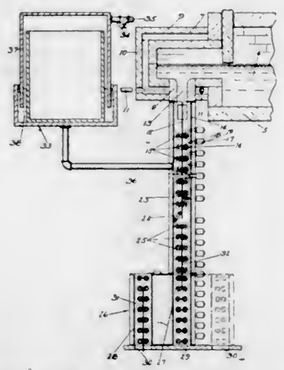
1. In a system of the class described, a pair of substantially parallel tracks, tables movable along the tracks, transfer means between the tracks at their ends, means for removing the tables from one of said tracks to a position upon said transfer means, and means operable automatically for bringing said table removing means to a stop when it reaches a predetermined position with respect to the tables to be transferred.

1,860,084. CAR WINDOW CONSTRUCTION. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 21, 1930. Serial No. 462,908. 14 Claims. (Cl. 20—52.1.)



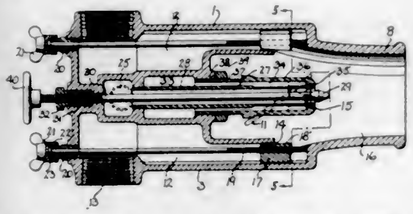
1. In a car window construction, a frame, and a plurality of window lights carried by said frame and slidable vertically in opposite directions relative to and independently of one another to opened and closed positions.

1,860,085. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Substitute for application Serial No. 151,672, filed Nov. 30, 1926. This application filed Nov. 10, 1930. Serial No. 494,675. 9 Claims. (Cl. 49—3.)



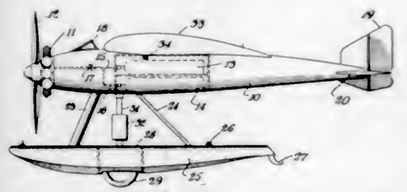
7. In sheet glass apparatus, a receptacle containing a source of molten glass, means for drawing a sheet downwardly therefrom, means for forming a closed compartment around said source and sheet, means for creating a gaseous fluid pressure within said compartment great enough to support said sheet source, means for removing the sheet from said compartment without disturbing the gaseous fluid pressure therein, and means for cutting the sheet transversely of its length.

1,860,086. FUEL BURNER. DAVID ERICKSON, Wichita Falls, Tex., assignor to E. & L. Company, Wichita Falls, Tex., a Partnership composed of David Erickson and Bert L. Ligon. Filed June 28, 1930. Serial No. 464,440. 4 Claims. (Cl. 158—11.)



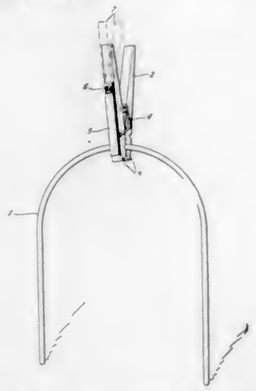
1. A fuel burner comprising a casing, a nozzle projecting forwardly therefrom, said nozzle including an inner pipe, an outer steam conducting pipe, opposed gaseous fuel passages, a discharge member into which said nozzle projects, said member having large air inlets, and adjustable valves in said fuel passages.

1,860,087. SUPERLIGHT PLANE. ANTON FEHRENBACH, New York, N. Y. Filed Jan. 17, 1931. Serial No. 509,521. 2 Claims. (Cl. 244—5.)



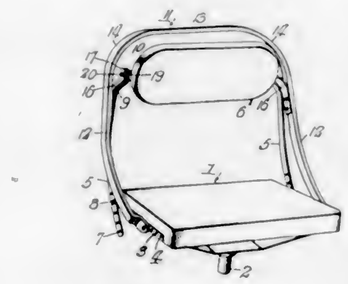
1. An airplane comprising in combination with its fuselage adapted to be partly filled with a lighter than air gas, a plurality of gas containing wings, a plurality of gas containing pontoons, means for connecting said wings to the fuselage, means for suspending said pontoons from the fuselage, and a landing gear cushioned and passed through the pontoons.

1,860,088. GAME INDICATOR. WHEATON C. FERRIS, University City, and ROSE M. BRENNAN, St. Louis, Mo. Filed Dec. 10, 1930. Serial No. 501,277. 2 Claims. (Cl. 40—67.)



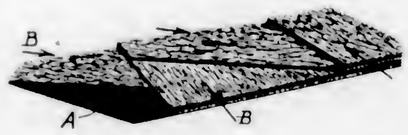
1. A game indicator, comprising, a spring clip adapted for removably clamping to a game fixture, a plurality of elongated tabs shaped and dimensioned to conform to the shape of the clip, and means for collectively pivoting said tabs frictionally on said clip, adapted for assembled arrangement of said tabs along said clip and for individual movement to display position thereon to be frictionally retained in adjusted position by said pivot means.

1,860,089. CHAIR. WILLIAM S. FERRIS, Elkhart, Ind. Filed May 23, 1930. Serial No. 454,869. 4 Claims. (Cl. 155—159.)



4. A chair embodying therein a seat, supporting arms pivotally and vertically adjustably connected to the seat, a bail including side arms and a top connecting member, said side arms being adjustably connected to the seat, connecting means between the top ends of the supporting arms and side members of the bail, said connecting means extending forwardly of the sides of the bail, and a back rest pivoted to the connecting means forwardly of the sides of the bail and located below the top connecting member of the bail.

1,860,090. PADDING RUG. DEL ROY F. FOWLER, Melrose Park, Pa. Filed Nov. 29, 1930. Serial No. 498,958. 4 Claims. (Cl. 154—33.)

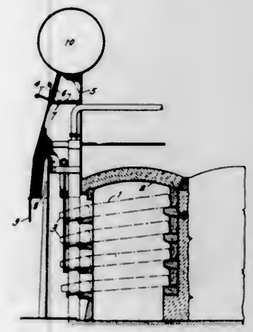


1. A padding rug made up of a multiplicity of thin veils of carded sisal fibre, such veils being so disposed that the fibres of adjacent veils cross each other at an angle, the sisal pad thus formed being secured together by lines of stitches and the composite structure being densified and brought to approximately even thickness by needling, whereby a multiplicity of fibres from the upper layers or veils extend vertically downward through the underlying layers.

1,860,091. APPARATUS FOR RECOVERING FURNACE VENTILATOR FUME. BRUCE W. GONSER, Amarillo, Tex., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 8, 1929. Serial No. 384,344. 4 Claims. (Cl. 266—19.)

3. In combination with a bank of zinc retort furnaces, a hood positioned above and in front of said furnaces and extending throughout the length of said bank, said hood being provided with a plurality of horizontally spaced

valves for selectively controlling the draft to the various furnaces and terminating in a horizontal duct by means of which the fume is withdrawn, and a downwardly ex-

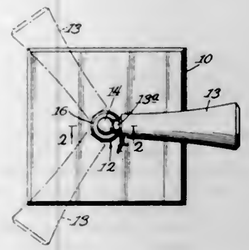


tending extension hingedly secured to said hood and adapted to hang in front of said retorts for further controlling the flow of fume.

1,860,092. PROCESS OF ESTER CONVERSION. GEORGE D. GRAVES, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,918. 10 Claims. (Cl. 260—106.)

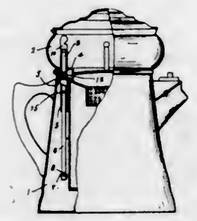
1. The process of converting two different esters, representing two different aliphatic alcohols and two different carboxylic acids, into the other esters that can be formed therefrom, which comprises reacting the esters in the presence of an inorganic acid catalyst and continuously removing a product of the reaction.

1,860,093. WRITING INSTRUMENT RECEIVING RECEPTACLE. WALTER E. GUYOT, Janesville, Wis., assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed June 4, 1930. Serial No. 459,176. 14 Claims. (Cl. 120—108.)



1. In a desk set for writing instruments, a base having an opening, a writing instrument receiving receptacle, and means for mounting said receptacle on said base for angular and rotatable movements relative to said base which includes a ball mounted on said receptacle, and a socket structure mounted on said base comprising a ball receiving-retaining portion, a cup-shaped spring-receiving portion extending into the opening in said base, a spring in said spring-receiving portion acting on said ball, an anchor member secured to said spring-receiving portion and to said base, said spring tending normally to prevent detachment of said anchor member from said spring-receiving portion.

1,860,094. FLUID-TRANSMITTING MEANS FOR COOKNG AND BREWING UTENSILS. STACEY A. HAINES, Kansas City, Mo., assignor of one-half to Harold F. Spencer, Kansas City, Mo. Filed Apr. 14, 1930. Serial No. 444,157. 9 Claims. (Cl. 53—3.)

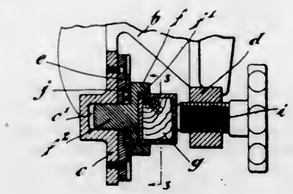


1. In a utensil, the combination of a plurality of chambers, a partition between said chambers, means for delivering the contents of one of such chambers to another, said means having definitely spaced serrations and passing through the partition between such chambers, and means associated with such partition resiliently engaging said delivery means, and cooperating with said serrations to support said delivery means in any one of a plurality of selected positions defined by such serrations.

1,860,095. LEAD ALLOY. HENRY HARRIS, London, England. Filed Sept. 19, 1931, Serial No. 563,888, and in Great Britain May 6, 1930. 3 Claims. (Cl. 75—1.)

1. An alloy consisting for the most part of lead but containing also an appreciable amount of zinc not exceeding about 1 per cent, together with tin and antimony in appreciable amount not exceeding individually about 1.8 per cent.

1,860,096. CHAIR, SEAT AND THE LIKE. FREDERICK HAGGER HEADLEY, Northfield, Birmingham, England; Annie Bowden Headley, executrix of said Frederick Hagger Headley, deceased, assignor to The Tan Sad Chair Company (1931) Limited, Birmingham, England, a British Company. Filed Nov. 3, 1928, Serial No. 317,045, and in Great Britain Feb. 20, 1928. 6 Claims. (Cl. 155—157.)



6. A chair embodying therein a member having laterally spaced arms, a device positioned between said arms and having a guide channel, means providing a pivotal connection for said devices with respect to one of said arms, a back rest post disposed in said guide channel for longitudinal adjustment, said one of said arms and said device having interengaging parts for determining the angular position of said device relative to said one of said arms and means disposed in the other of said arms coincident with the axis of said device for clamping the back rest post in said channel and for clamping said device to said one of said arms.

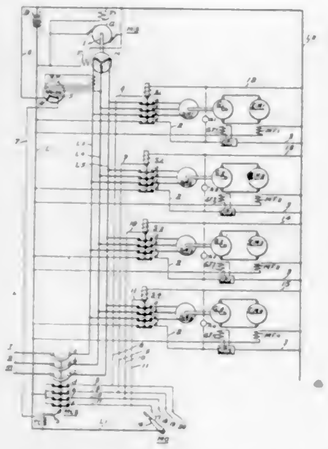
1,860,097. WATERPROOF AND FIREPROOF FIBROUS PRODUCT AND PROCESS OF MAKING THE SAME. WILFORD BACON HOGGATT, New London, Conn. Filed Mar. 31, 1930. Serial No. 440,633. 15 Claims. (Cl. 92—21.)

1. The method of making a fireproofed and waterproofed fibrous article which consists in pulping fibrous material and forming the same into the article to be produced, impregnating such article with a fireproofing compound, drying the article and finally penetrating the fireproofed article with a waterproofing material.

1,860,098. SYNTHETIC RESIN. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 20, 1931. Serial No. 552,075. 17 Claims. (Cl. 260—8.)

1. A synthetic resin composition containing at least one resin of the polyhydric alcohol-organic acid type, in which a portion of the acid is replaced by a phthalide substance and at least one synthetic resin which does not contain any phthalide substance.

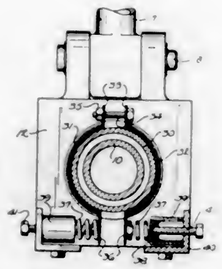
1,860,099. POWER SUPPLY SYSTEM. HENRY D. JAMES, Edgewod, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1930. Serial No. 489,724. 8 Claims. (Cl. 171—97.)



1. In a power supply system for a plurality of elevator units, a separate dynamo electric machine for transmitting power for each of said elevator units, means for connecting all of said machines to a main source of power, an auxiliary source of power, means responsive to failure of said main source of power for disconnecting said machines from said main source of power, and means for connecting a selected one of said machines to said auxiliary source of power.

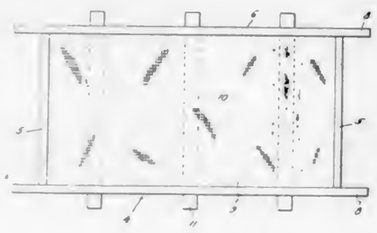
1,860,100. SHEET GLASS APPARATUS. FRANK J. KINCAID, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 15, 1930. Serial No. 495,810. 9 Claims. (Cl. 49—17.)

9. In apparatus for forming sheet glass, means for drawing the sheet upwardly, a freely rotatable roll for deflecting the sheet from a substantially vertical plane into a substantially horizontal plane, bearing brackets for supporting the roll adjacent its opposite ends, braking means including a pair of semi-circular brake bands fitting about the roll, means for connecting the brake bands together at one end, spring means carried by the bearing bracket at the corresponding end of the roll and



engaging the opposite ends of the brake bands for normally urging the bands into engagement with said roll, and means for varying the pressure of said spring means upon the brake bands.

1,860,101. RICE DRIER. MARK H. KINGHAM, Lake Charles, La. Filed Dec. 10, 1930. Serial No. 501,375. 1 Claim. (Cl. 34—17.)

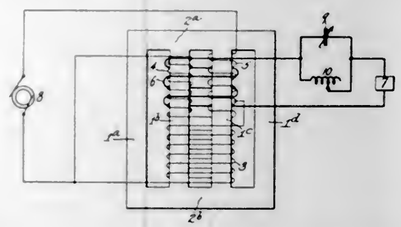


A grain drying device of the class described comprising a substantially rectangular portable box-like open top receptacle comprising a screen bottom, transverse end walls, and longitudinal spaced parallel side walls, the end portions of the side walls projecting beyond the adjacent ends of the end walls and having their lower edge portion notched to provide extensions constituting hand grips, a plurality of transversely disposed longitudinally spaced cleats disposed across the underside of the screen bottom and attached to the side walls, and forming supporting means for portions of the screen and the outermost cleats being spaced inwardly from the ends of the screen, the ends of said cleats projecting beyond the side walls to provide spacing extensions to space the respective containers of stacked tiers from each other to facilitate circulation of air between the tiers for the purpose specified.

1,860,102. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Sept. 6, 1930. Serial No. 480,086. 13 Claims. (Cl. 171—119.)

1. Alternating current controlling apparatus comprising a core, an alternating current exciting winding on a

portion of said core, a second alternating current exciting winding on another portion of said core acting in opposition to said first-named winding, an output circuit sub-



jected to the resultant flux of said core, and means for adjusting the power factor of said output circuit to compensate for changes in the load.

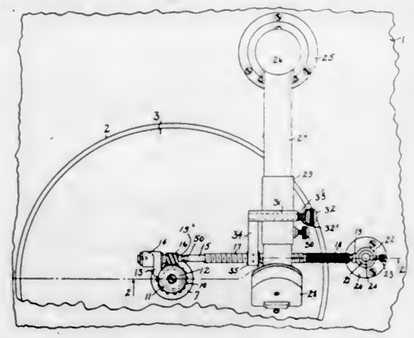
1,860,103. EXTENSIBLE LEG FOR FURNITURE. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 22, 1928. Serial No. 314,042. 1 Claim. (Cl. 5—11.)



An extensible furniture leg, comprising a lower leg member having a longitudinal series of downwardly and inwardly inclined seats opening through one face of the leg member, an upper tubular leg member telescopically embracing the lower leg member, and a loop link embracing the lower leg member below the bottom of the upper leg member and slidable longitudinally and transversely thereon into selective engagement with the seats and constituting a stop for engagement with the bottom end of the upper leg member to limit downward telescopic movement thereof when the link is in any one of the seats, the lower side of the entrance opening of each seat being above the inner bottom end of the seat, and said upper leg member closing the entrance opening into the seat which is engaged by the link.

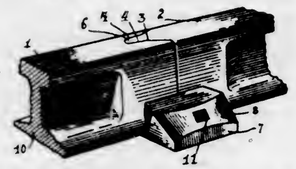
1,860,104. PHONOGRAPH ATTACHMENT. LOUIS G. LARSEN, Jersey City, N. J., assignor, by mesne assignments, to Presto Machine Products Company, Inc., a Corporation of New York, and Presto Corporation of America, a Corporation of Delaware. Filed July 15, 1930. Serial No. 468,107. 10 Claims. (Cl. 274—13.)

1. In a recording apparatus of the type described, the combination with a turntable having a central spindle, and an electric recording unit, of a rotatably supported threaded shaft, a driving head detachably secured to said spindle, a flexible connection between the driving head



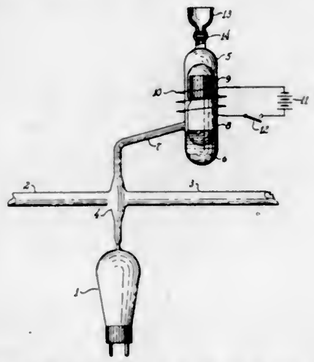
and said rotatable shaft, and means secured to said recording unit and engaging the threads of said shaft for moving the recording unit across the turntable.

1,860,105. RAIL JOINT. JOSEPH LEMIRE, St. Joseph de Grantham, Quebec, Canada. Filed June 25, 1931, Serial No. 546,790, and in Canada July 15, 1930. 3 Claims. (Cl. 238—235.)



1. In a rail joint, a pair of abutting rail ends having a tread width equal to the normal trend width of the rails, one of said ends having a slot, and a tongue at the other end receivable in said slot, said tongue and slot being offset from the longitudinal axis of the rails and formed within said tread width, and a base plate on which said ends rest.

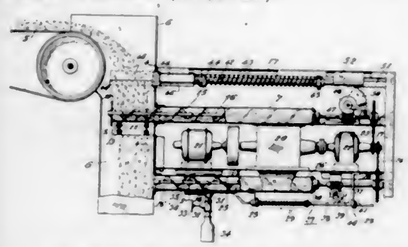
1,860,106. METHOD OF AND APPARATUS FOR MANUFACTURE OF VACUUM TUBES. JAMES D. LE VAN, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,429. 4 Claims. (Cl. 250—27.5.)



1. Apparatus for use in the manufacture of vacuum tubes containing a liquid, comprising a liquid containing

vessel to be connected to the tube for exhaustion therewith, said vessel having the liquid contained therein trapped against escape during the exhausting operation and having electromagnetic means to effect transfer of a given amount of said liquid to said tube at will.

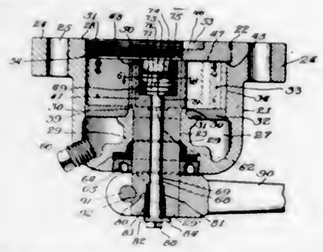
1,860,107. AUTOMATIC SAMPLER. JONAS LIEN, Port Washington, N. Y. Filed Dec. 23, 1929. Serial No. 415,984. 7 Claims. (Cl. 73—21.)



1. In combination with a chute to receive and direct a stream of material delivered to one end thereof, an automatic sampling means including a crusher mounted in spaced relation to said chute, a conveyer discharging at one end into said crusher and having a trough at its other end extending into said chute, collector plates mounted upon the opposite sides of said trough and extending upwardly therefrom in the chute, means for adjusting said plates transversely with respect to the trough to vary the distance between the upper ends of said plates and regulate the sample quantity of material segregated from the falling stream, a second conveyer receiving the ground and crushed material from said crusher and delivering the same into the chute below the collector plates, means for removing a small sample quantity of the ground material from the latter conveyer and directing the same into a collection receptacle, and operating means for said conveyers and the crusher.

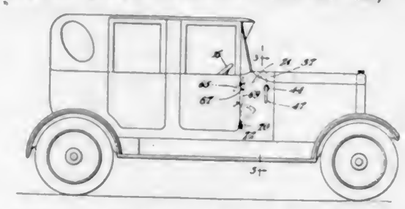
4. In sampling apparatus, a material receiving chute, and means for removing a segregated quantity of the material falling through said chute including a conveyer having one of its ends positioned in said chute, said material segregating means consisting of collector plates mounted at opposite sides of the conveyer within said chute and extending upwardly from the conveyer in the path of the falling material, and means for relatively adjusting said plates to space the same at their upper ends and thereby regulate the volume of material received by the conveyer.

1,860,108. SHOCK ABSORBER. HENRY H. LOGAN, Chicago, Ill. Filed Dec. 6, 1928. Serial No. 324,119. 2 Claims. (Cl. 188—89.)



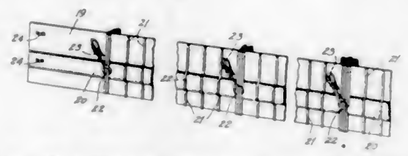
1. In a hydraulic shock absorber, the combination of a casing with a partition forming a reservoir and a working chamber, a plurality of fixed vanes carried by said partition and engaging in slots in said casing, a closure having a leakage chamber, said slots forming conduits from said reservoir to said leakage chamber.

1,860,109. AUTOMATIC ELECTRIC HAND SIGNAL. HELEN MARCIN, New York, N. Y. Filed Sept. 13, 1927. Serial No. 219,211. 3 Claims. (Cl. 116—54.)



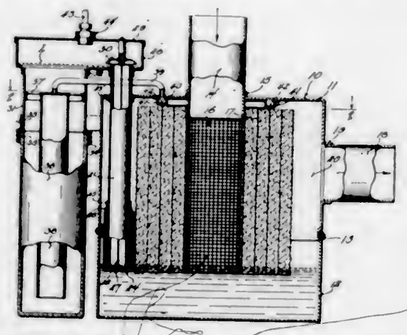
1. A directional signal device for motor vehicles, comprising a guide bar for attachment on the steering post of a vehicle and having a slot, a block slidably mounted in the slot, a signal mounted on the vehicle, said signal having the appearance of a human hand, a flexible connection between said signal and said block for raising the signal upon moving said block in one direction, a handle pivotally mounted on said guide bar and extending adjacent said block to move the block for raising said signal, and means for adjusting the friction at the pivot of said handle for causing the handle to hold the block in any position in the slot so that the signal is maintained in fully or partially raised positions or for causing the handle to move as directed by the block under the influence of the signal seeking its normal downward position.

1,860,110. PLAIT HEADING. ERNEST J. MARTENS, St. Louis, Mo. Filed Dec. 2, 1931. Serial No. 578,605. 10 Claims. (Cl. 156—10.)



2. A plait heading comprising a strip of material adapted to be secured at the top of a curtain to extend from side to side thereof, a length of tape secured at its edges to said strip and extending from end to end thereof and a series of equally-spaced, vertically-disposed stiffening ribs mounted on said strip, each of which has unattached portions extending from side to side of said tape to provide loops for engagement by a gathering hook.

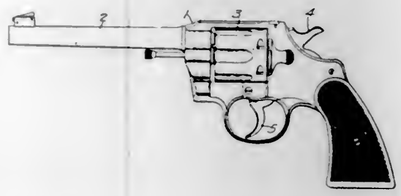
1,860,111. AIR CLEANER. ARTHUR W. MILLER, Milwaukee, Wis. Filed May 4, 1929. Serial No. 360,394. 2 Claims. (Cl. 183—9.)



1. In an air cleaner the combination of an oil retaining casing having air inlet and outlet conduits, a pervious

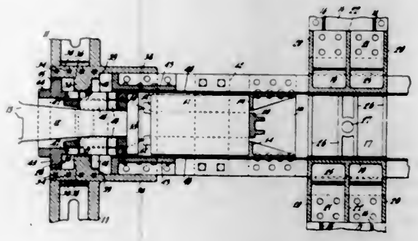
core within said casing surrounding said inlet conduit to form in effect an extension thereof to permit a radial flow of air through said core, said casing having oil therein partially immersing said pervious core, means under the influence of suction for effecting a flow of oil over said core to free the same of foreign matter absorbed from the air in passing through the pervious core.

1,860,112. REVOLVER. FREDERICK T. MOORE, East Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 23, 1930. Serial No. 483,797. 2 Claims. (Cl. 42—59.)



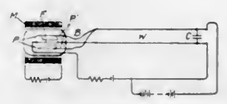
2. A revolver having at the extreme rear of the barrel an annular substantially flat face immediately surrounding the bore and having in the front face of the cylinder annular grooves surrounding the respective cartridge chambers and spaced therefrom to leave narrow annular substantially flat surfaces immediately surrounding the chambers, which latter surfaces are of a diameter no greater than that of the rear face of the barrel and are adapted upon normal rotation of the cylinder to be successively positioned in register with and in close proximity to the said rear face of the barrel.

1,860,113. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 28, 1929. Serial No. 335,477. 19 Claims. (Cl. 213—8.)



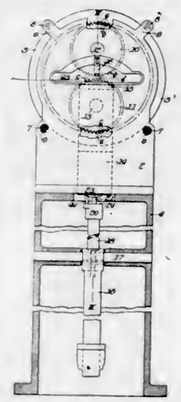
9. In a draft rigging for railway cars having fixed stop means at opposite ends thereof, the combination with a coupler at each end of the car; of shock absorbing means cooperating with each coupler and adapted to be compressed upon inward movement of the corresponding coupler during buffing action; spaced, longitudinally extending sills movable lengthwise of the car, said sills having inner stop means at opposite ends thereof, cooperating with the corresponding shock absorbing mechanism, said sills transferring the buffing forces from one shock absorbing mechanism to the other; outer stop members cooperating with each shock absorbing mechanism, said outer stop members having their outer movement limited by said fixed stops and being movable inwardly of the car during the inward buffing movement of the corresponding coupler; and means at opposite ends of the car for limiting the longitudinal movement of said sills.

1,860,114. OSCILLATION GENERATOR. KINJIRO OKABE, Sendai, Japan, assignor to General Electric Company, a Corporation of New York. Filed June 13, 1928, Serial No. 285,008, and in Japan July 1, 1927. 6 Claims. (Cl. 250—36.)



1. The combination, in an oscillation generator, of an electron discharge device comprising a cathode, a plurality of plate-like anode members arranged around and substantially enclosing said cathode, means for producing a magnetic field between said members and parallel with said cathode, a connection between each of said members and said cathode including a source of potential and a connection between said members whereby high frequency oscillations are produced, said last connection being variable to affect the oscillations produced.

1,860,115. STAMPING MACHINE. WILLIAM J. PANNIER, Jr., Pittsburgh, OSCAR M. PANNIER, Kilbuck Township, Allegheny County, and JOSEPH F. MON, Elliott Borough, Pittsburgh, Pa., assignors to Pannier Brothers Stamp Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 30, 1931. Serial No. 572,046. 7 Claims. (Cl. 101—18.)

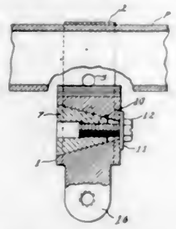


1. In a stamping machine, a pair of spaced-apart type wheels having character-bearing projections thereon, means for moving one of said wheels toward the other, and dogs for engaging and alining said character-bearing projections actuated by said means.

1,860,116. GROUNDING DEVICE OR CONNECTER. JOHN T. PEARSON, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Aug. 14, 1930. Serial No. 475,210. 3 Claims. (Cl. 247—1.)

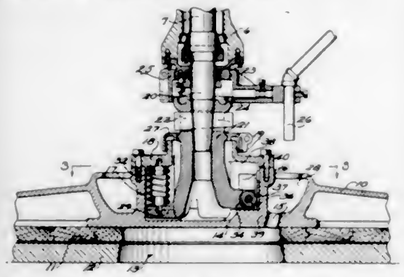
1. In a grounding device, a body, a fixed jaw carried by the body, a movable jaw for coacting with the fixed

jaw, and a wedge member interposed between the movable jaw and the body, the body and the movable jaw



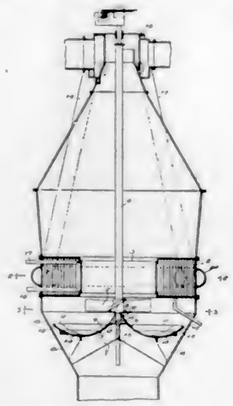
being opposed to each other and formed with a passage in their opposing faces, and the wedge being located in said passage, and means for forcing the wedge into the passage.

1,860,117. SURFACING MACHINE. INGVALD O. PEDERSEN and ERIK G. STAHLE, Pittsburgh, Pa., assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 14, 1927. Serial No. 205,665. 12 Claims. (Cl. 51—168.)



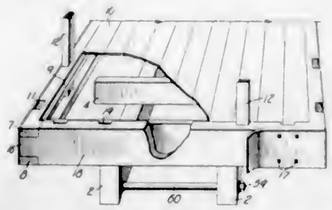
1. In combination, a spindle rotatable about a fixed vertical axis, a runner positioned at the lower end of the spindle and having a socket therein, a hub secured to said spindle and received within said socket, and spring means carried by said hub within the socket and bearing against one wall thereof for yieldably supporting said runner.

1,860,118. CRYSTAL BUILDING PAN. THOMAS RAY and JOSHUA R. RAY, Manistee, Mich. Filed Dec. 19, 1927. Serial No. 241,054. 13 Claims. (Cl. 159—45.)



13. In an evaporator, a calandria, an annular trough arranged immediately below the calandria and being spaced from the bottom thereof, and means including said trough for circulating liquid in opposite directions through different parts of the calandria and retaining relatively small sized crystals in circulation, separating larger crystals from said circulating liquid and withdrawing said larger crystals from circulation, said trough being variable and providing means regulating the size of crystals withdrawn from circulation.

1,860,119. TRUCK BODY. MYLES STANDISH, Council Bluffs, Iowa. Filed Aug. 20, 1928. Serial No. 300,725. 8 Claims. (Cl. 296—43.)



1. In a truck body, upper ribbon boards having rabbet grooves in their upper faces and spaced, vertically arranged notches in their outer faces, lower ribbon boards spaced from the upper ribbon boards and having notches on their outer faces aligning with the notches in the upper ribbon boards, a metal band overlying the outer faces of said ribbon boards and forming a closure for said notches to form stake pockets, means for securing the band to said ribbon boards, joists having notched ends to accommodate said ribbon boards and form tongues engaging between said ribbon boards and against the metal band to anchor said joists, whereby the upper faces thereof lie flush with the bottoms of said rabbet grooves, a floor supported on said joists and having side edges engaged in the rabbet grooves, and stakes engaged in said stake pockets.

1,860,120. ELECTRIC CLOCK. LEWIS J. STERN, New York, N. Y. Original application filed Apr. 18, 1924, Serial No. 707,321. Divided and this application filed Dec. 21, 1928. Serial No. 327,662. 2 Claims. (Cl. 185—40.)

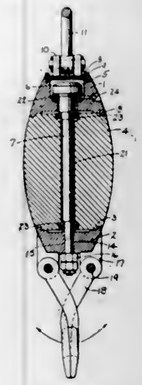


1. In an electric clock of the type wherein a clock movement unit is operated by an armature controlled by an electromagnet, a member pivotally mounted adjacent to said armature adapted to open and close the circuit through the electromagnet, a spring having one end connected to the armature at a point located on one side of the pivot of said member and the other end of said spring connected to a point of the said member located on the opposite side of said pivot, whereby the movement of the armature causes the member to move to its open and closed circuit positions, and means on the armature adapted to positively move the member to its open circuit position should said spring fail to so move it.

1,860,121. WEIGHTED ROD LINE SWIVEL. WALTER C. TROUT, Lufkin, Tex. Filed Nov. 1, 1930. Serial No. 492,735. 5 Claims. (Cl. 59—95.)

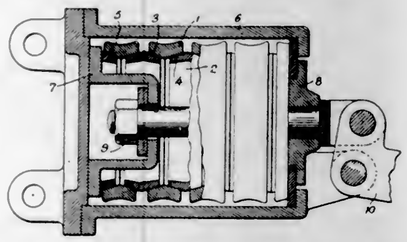
3. A combination rod line weight, swivel and hook including a hook, a cap connected thereto, a body portion

streamlined with respect to said cap, another cap on the opposite end of said body also streamlined therewith, a



center bolt passing through said body caps, and a bail on said last cap to support the device, said caps and said body being rotatably mounted with respect to each other.

1,860,122. SPRING. OSCAR R. WIKANDER, Pittsburgh, Pa., assignor to Edgewater Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 1, 1927. Serial No. 209,984. 11 Claims. (Cl. 267—1.)



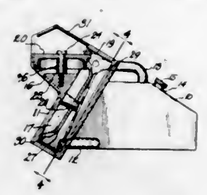
1. A spring embodying an outer spring member and an inner spring member, the former of greater cross-sectional dimensions than the latter, each spring member having a concaved face and a convex face, the convex faces of the spring members being in engagement with each other.

1,860,123. VARIABLE DIRECTIONAL ELECTRIC WAVE GENERATING DEVICE. HIDETSUGU YAGI, Sendai, Japan, assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Sept. 3, 1926, Serial No. 133,455, and in Japan Jan. 20, 1926. 11 Claims. (Cl. 250—11.)



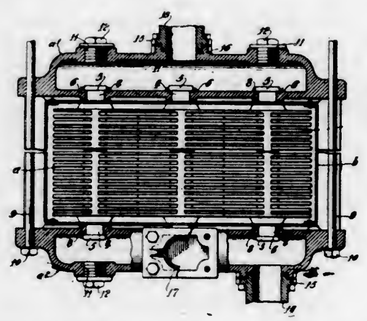
1. In wireless directional transmission the combination with a main vertical antenna for radiating electro-magnetic waves, of a number of auxiliary antennæ vertically situated at a suitable distance from said main antenna and symmetrically around it which antennæ are not electrically connected and means for varying the natural frequencies of said antennæ to the extent lower or higher than the wave frequency to utilize the wave director of such combination.

1,860,124. INKING DEVICE. WALTER H. YOUNG and EMIL O. ECKLAND, Chicago, Ill. Filed Feb. 21, 1927. Serial No. 169,890. 18 Claims. (Cl. 197—171.)



1. A typewriter ribbon inking device of the character described, including a receptacle adapted to contain an ink supply, a rotary feeder element in said receptacle actuated by direct contact with the ribbon, and means continuously extending into said ink supply intermittently operated by co-operative engagement within said receptacle with means formed in the feeder element for feeding ink intermittently from the supply to the feeder element.

1,860,125. HEAT TRANSFER APPARATUS. EDWIN M. BASSLER, Chicago, Ill., assignor to D. J. Murray Manufacturing Company, Wausau, Wis., a Corporation of Wisconsin. Filed Aug. 2, 1930. Serial No. 472,533. 1 Claim. (Cl. 257—154.)



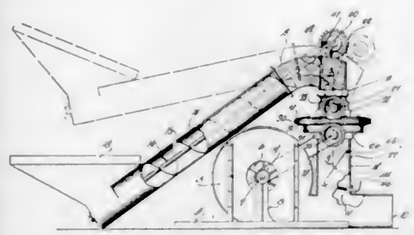
A heat transfer unit comprising supply and return manifolds, a plurality of tubular radiator elements connecting said manifolds, each of said tubular elements being a compound structure comprising a hollow casting having integral radiating fins and a separate conduit around which said casting is formed, said conduit being internally threaded at its ends, and hollow headed fittings having threaded engagement with said conduit and bearing on said manifolds.

1,860,126. DISTILLATION OF CRUDE TURPENTINE. EUGEN BERNHARD, Frankfort-on-the-Main, and VALENTIN HILCKEN, Gersthofen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 2, 1929, Serial No. 383,154, and in Germany Aug. 14, 1928. 11 Claims. (Cl. 202—46.)

1. The process of distilling crude turpentine which comprises treating the crude turpentine in vacuo while warming to a temperature below 90° C. with a finely divided mist of a liquid inert to the constituents of the

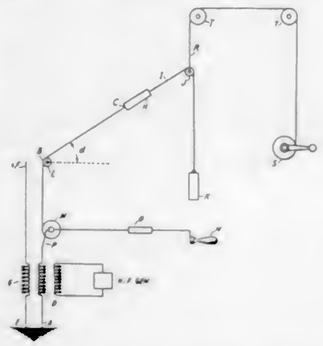
turpentine and having a boiling point not higher than the temperature chosen at the pressure applied, the temperature of warming being sufficiently high to cause boiling of the added liquid at the pressure employed.

1,860,127. PNEUMATIC CONVEYING APPARATUS. GEORGE BERNERT, Milwaukee, Wis. Filed Jan. 27, 1927. Serial No. 164,005. 7 Claims. (Cl. 302—36.)



1. In a pneumatic conveyer including a conveying duct, means for procuring a pressure current of air therein, a receiving casing connected with the duct, a mechanical conveyer in the casing and means for driving the mechanical conveyer, a second casing extended from the conveying duct, a swivel member carried by the receiving casing, a socket member rotatably mounted on the second casing to pivotally mount the swivel member whereby the receiving casing is substantially, universally, pivotally connected with the second casing for movement without disturbing the drive of the mechanical conveyer.

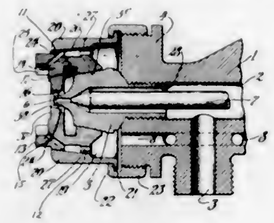
1,860,128. ANTENNA CONSTRUCTION. JOSEPH BETHENOD, Paris, France. Filed Mar. 2, 1927, Serial No. 171,993, and in France Mar. 9, 1926. 6 Claims. (Cl. 250—33.)



1. An antenna system comprising a vertical nonradiating portion, a radiating portion means for adjusting the radiating portion as to length and means for adjusting the radiating portion as to angle of inclination.

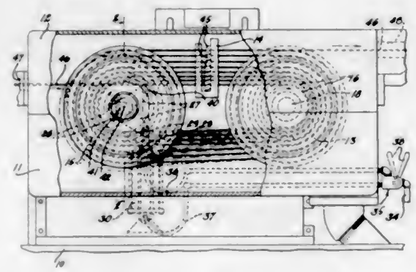
1,860,129. SPRAY GUN HEAD. MELVIN J. BINKS, Oak Park, and WILLIAM HERSLER, Chicago, Ill., assignors to Binks Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 21, 1929. Serial No. 334,024. 4 Claims. (Cl. 91—45.)

1. In a head for a flat-spray appliance, a tubular air nozzle having a central air port and having two diametrically opposite forwardly directed projections presenting curved inner faces in a common cylindrical surface coaxial with the said central air port, the air nozzle having forward face portions extending radially inward from the said faces, the air nozzle also having two diametrically



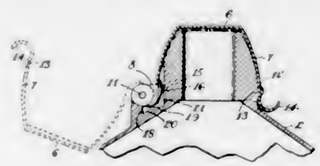
opposite and forwardly converging lateral air ports each of which opens through the juncture of one of the said curved faces with the forward face portion adjacent thereto.

1,860,130. STRAND WORKING MACHINE. HARRY BLOUNT, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,348. 7 Claims. (Cl. 205—16.)



1. In a strand working apparatus, a shaft, a sheave for guiding the strand mouted on an end portion of the shaft the end portion being eccentric to the axis thereof, a capstan, means between the capstan and the sheave for working the strand, and means for rotating the shaft to decrease the distance between the sheave and the capstan over which the strand travels.

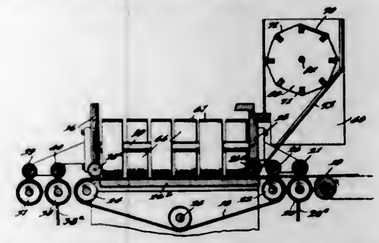
1,860,131. COLLAPSIBLE TUBE AND COVER. RAYMOND BOOTH, City Island, N. Y. Filed Oct. 29, 1931. Serial No. 571,763. 4 Claims. (Cl. 221—60.)



1. In a closure for a collapsible tube, a tube having at the reduced end a tubular extension of conical form on its outer wall and provided at the base of the extension with a pair of spaced apertured lugs, a cap having a top with the sides of conical form slightly larger in the inner walls to engage said extension outer wall, the cap having an apertured lug at the base adapted to fit between said lugs, a hinge pin located in the lugs of the cap and of

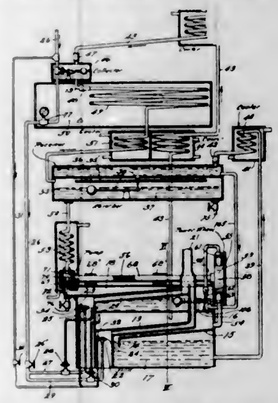
the extension whereby the cap can swing from a closed position in engagement with the said extension wall back to a fully open position, the cap and extension having means to lock the cap in the closed position, the tube at the base of the extension directly below said hinge pin, being provided with a flat wall containing a hole extending downwardly, and a spring having one end portion bent at a right angle to be inserted in said extension hole with the spring engaging the said flat wall, which spring is located beneath the hinge lug of the cap and thereby retained in such position, the spring beyond said end portion extending upward with its extremity engaging the inner wall of the cap and under tension when the cap is closed to swing the cap to the open position on release of the cap at its said locking portion.

1,860,132. CLEANING AND DRYING MACHINE. ANDREW E. BROADSTON, Norwood, Ohio, assignor to The United States Playing Card Company, Norwood, Ohio, a Corporation of Ohio. Filed Nov. 18, 1929. Serial No. 407,887. 4 Claims. (Cl. 91—59.)



4. In a machine of the class described, an endless conveyor, means for driving said endless conveyor, a series of belts disposed transversely across the surface of the conveyor, said belts having a heavy nap, and means for driving adjacent belts in reverse directions, said driving motion imparted to the belts in such wise as to exert the driving force on the upper portions thereof whereby the lower portions are slack.

1,860,133. AUTOMATIC CONTINUOUS REFRIGERATOR. MAYNOR D. BROCK, Kansas City, Mo. Filed Mar. 30, 1928. Serial No. 265,979. 7 Claims. (Cl. 62—5.)

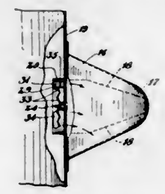


3. In an absorption refrigerating system of the character described, a distilling device having two separate compartments, an expansion chamber, an absorber, cooling means and heating means controlled by the system to maintain a differential of pressure in each of said compartments and expansion chamber respectively when the system is in operation.

1,860,134. FIREPROOF FIBER PRODUCT. ROGER B. BROWN, Trenton, N. J., assignor to Daniel Manson Sutherland, jr., Morrisville, Pa. Filed Sept. 10, 1930. Serial No. 481,069. 4 Claims. (Cl. 92—21.)

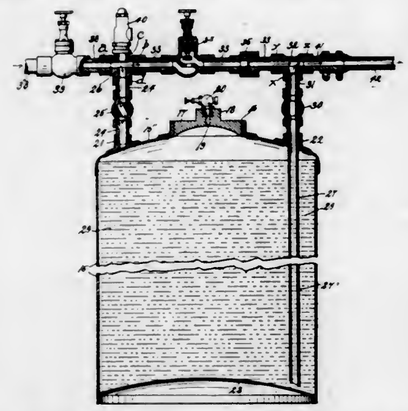
1. Wood fireproofed with a water-insoluble non-hydrolizing borate interspersed amongst its fibers.

1,860,135. VENTILATOR. FREDERIC W. BUTT, Brooklyn, and ALEXANDER MCGARY, New York, N. Y. Filed Mar. 31, 1926. Serial No. 98,676. 9 Claims. (Cl. 98—20.)



2. A ventilator comprising concentric sector shaped openings through the wall of the enclosure to be ventilated, and a closure therefor comprising concentric sector plates rotatably mounted at the apices of said openings, said plates being formed with radial corrugations, the side walls of certain corrugations being perforated whereby air drafts against the plates produce a turning movement for bringing the plates into full registration with the openings.

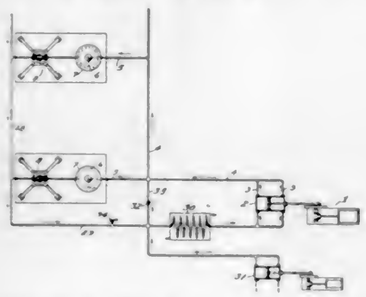
1,860,136. LIQUID SPREADING APPARATUS. JACOB W. BUNCH, Los Angeles, Calif., assignor of one-half to John C. Bowman, Los Angeles, Calif. Filed Apr. 2, 1928. Serial No. 266,712. 1 Claim. (Cl. 299—89.)



In a liquid spreading apparatus the combination with a tank having an inlet arranged centrally in its upper end through which said tank can be filled with liquid, a screw plug for normally closing said inlet, an air cock for normally closing a vent through said plug for manually releasing air or gas pressure in said tank, of means for discharging air either into the tank or over the discharge end of a siphon pipe to discharge the liquid from said tank, said means including a stand-pipe supported vertically on the upper end of said tank and arranged oppositely to a siphon pipe extending down through said tank to near the bottom thereof, valves interposed in the stand and siphon pipes, a four-way pipe fitting on the upper end of said stand-pipe, a safety valve on the uppermost arm of said four-way pipe fitting for automatically relieving excessive air or gas pressure in said tank, an inlet pipe connected

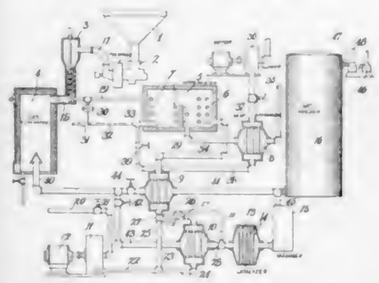
to one of the arms of said four-way pipe fitting, a control valve in said inlet pipe, a three-way pipe fitting connected to the upper end of said siphon pipe, a discharge pipe secured to one of the arms of said three-way fitting, a pipe connection between said pipe fittings, and a valve interposed in said pipe connection whereby said valves can be opened and closed to siphon the liquid from the tank so it will be saturated with air or force the liquid from the tank unmixed with air substantially as described.

1,860,137. METHOD AND APPARATUS FOR OPERATING WELLS. RICHARD H. CARR, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Apr. 17, 1931. Serial No. 530,903. 14 Claims. (Cl. 103—45.)



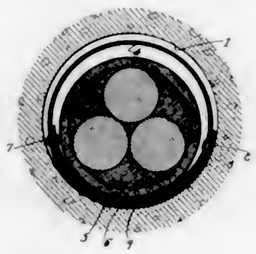
1. Apparatus for effecting the pumping of a plurality of oil wells from a common source of power, comprising: an engine driven compressor for placing an elastic working fluid under pumping pressures, a distributing line leading from the discharge side of said compressor for conducting said fluid to a plurality of wells, a pumping head arranged at each of said wells for effecting the operation of associated pumping mechanism arranged in said wells, means for heating the working fluid during its passage through said distributing line, valve means automatically operated in accordance with the stroke of said pumping head to admit said heated fluid at timed intervals into said heads and to control the regulated discharge of the fluid under reduced pressure from said heads, means for closing said valve means before the end of the pumping stroke to permit expansion of the working fluid, and a return line leading from the fluid discharge sides of said pumping heads to the fluid inlet side of the compressor.

1,860,138. METHOD OF MAKING WATER GAS. WALTER M. CROSS, Kansas City, Mo. Filed July 5, 1928. Serial No. 290,418. 2 Claims. (Cl. 48—206.)



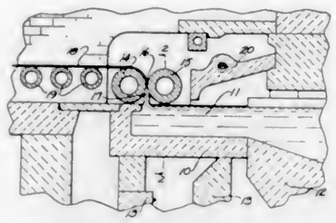
1. A continuous method of making combustible gas, comprising the steps of charging solid pulverized carbonaceous material to a stage of reaction with steam, said steam being heated to or above a predetermined temperature of reaction whereby hot gas containing carbon monoxide and hydrogen results, subsequently passing the hot gas into contact with a nickel catalyzer whereby methane is formed from carbon monoxide and hydrogen, and automatically controlling the temperature of the gas entering the catalyzer.

1,860,139. DUCT SHIELD. GEORGE C. DEAKE, Bronx, N. Y., assignor, by mesne assignments, to Metropolitan Device Corporation, a Corporation of New York. Filed June 14, 1928. Serial No. 285,264. 6 Claims. (Cl. 247—4.)



5. In combination, a duct, a cable in the duct and protruding from the end thereof, a shield interposed between the cable and the duct and extending beyond the edge of the duct, the shield comprising a sheet of asbestos material and a piece of stiffening and strengthening material mounted therein between the duct edge and the cable and extending inwardly and outwardly of the edge of said duct.

1,860,140. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 24, 1928. Serial No. 249,059. 2 Claims. (Cl. 49—33.)



2. In sheet glass apparatus, the combination with a receptacle containing a mass of molten glass and having inwardly directed peripheral projections at the opposite sides and also at the front thereof, of a pair of spaced forming rolls mounted above the receptacle for drawing a body of glass upwardly and rolling it to sheet form, said forming rolls being so positioned with respect to the receptacle that the glass advanced upwardly from said receptacle will be drawn in contact with the peripheral projections at the sides and front thereof.

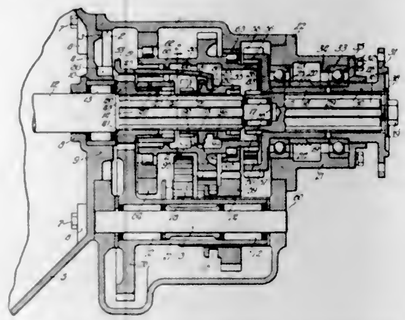
1,860,141. SKELETON PISTON HEAD. JESSE C. DUCOMMUN, Whiting, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Sept. 20, 1930. Serial No. 483,327. 4 Claims. (Cl. 74—108.)

1. As an article of manufacture, a piston having opposed working faces, integral radial ribs connecting the faces and forming a plurality of spaces therebetween, and apertures extending transversely through the ribs



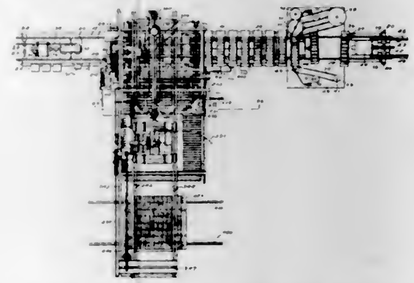
at their inner ends and establishing communication between adjacent spaces, the outer ends of said spaces opening into ring carrying grooves.

1,860,142. TRANSMISSION. THOMAS L. FAWICK, Akron, Ohio, assignor to Brown-Lipe Gear Company, Syracuse, N. Y., a Corporation of New York. Filed Nov. 6, 1928, Serial No. 317,505. Renewed Mar. 28, 1932. 10 Claims. (Cl. 74—58.)



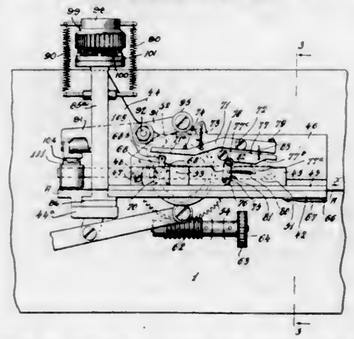
1. In a transmission, a driving shaft, a driven shaft, a gear ratio connection between said shafts, a connecting sleeve splined upon the driving shaft and shiftable to connect said shafts directly or through said gear ratio connection, a surrounding and eccentrically disposed synchronizing race connected to move with said gear ratio connection, and a synchronizing element on said connecting sleeve and shiftable into and past contact with said race in each direction.

1,860,143. HACKING MACHINE. CLAUD E. FULLER, New York, N. Y., and WILLIAM W. WALLACE, Chicago, Ill.; said Fuller assignor to New York Brick Handling Corporation, New York, N. Y. Filed Oct. 24, 1929. Serial No. 402,258. 13 Claims. (Cl. 214—6.)



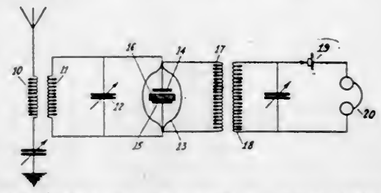
1. In an apparatus for hacking bricks onto cars, the combination of a conveyor, means for constantly operating said conveyor, a second conveyor for delivering pallets of brick in succession to the first said conveyor, means for operating the said second conveyor, means associated with the first said conveyor for arresting the movement of pallets of brick in succession until a predetermined number has been collected, and means associated with the first said conveyor for arresting the movement of the second said conveyor after a predetermined number pallets of brick have been delivered to the first conveyor.

1,860,144. STRIP FEEDING MACHINE. HENRY J. GAISMAN, New York, and CONRAD SCHUMACHER, Lynnbrook, N. Y., assignors, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Original application filed Feb. 4, 1927, Serial No. 165,903. Divided and this application filed Jan. 2, 1931. Serial No. 506,149. 7 Claims. (Cl. 271—2.5.)



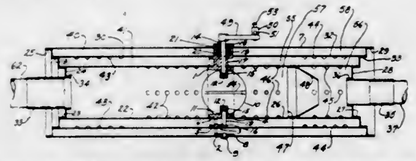
1. Means for feeding a perforated strip comprising a reciprocative member having a movable finger to enter the strip to feed it and to recede from the strip, means to reciprocate the member, an aligning member for the strip carried by the reciprocative member, means to cause the aligning member to enter the strip and means to permit said member to recede from the strip.

1,860,145. PIEZO-ELECTRIC INDICATOR. ERICH GIEBE and ADOLF SCHEIBE, Charlottenburg, near Berlin, Germany, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 6, 1926, Serial No. 146,596, and in Germany Nov. 7, 1925. 14 Claims. (Cl. 250—8.)



1. In a radio apparatus adapted to receive telegraphic communications, means to indicate visually the receipt of said communications, said means comprising a hermetically sealed piezo-electric device.

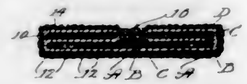
1,860,146. MUFFLER. EMMET P. GRAY, Detroit, Mich. Filed Feb. 15, 1929. Serial No. 340,086. 16 Claims. (Cl. 137—160.)



1. In a muffler, the combination of a valve, a valve housing, said valve housing being provided with a plurality of ports, and a plurality of tubular members oppo-

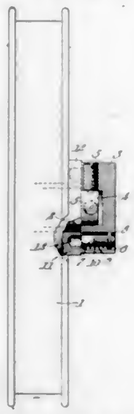
sitely disposed about said valve housing, each tubular member communicating directly with an oppositely disposed tubular member by one or more of the plurality of ports in said valve housing.

1,860,147. CLUTCH OR BRAKE LINING. WILLIAM S. HADLEY, Chicago, Ill. Filed Nov. 14, 1930. Serial No. 495,504. 2 Claims. (Cl. 139—384.)



1. A friction liner for brakes, clutches and the like, comprising an oil impregnated one piece single ply woven strip having a central oil groove woven in its face and spaced rivet apertures through the strip along said groove, whereby the rivet heads may be sunk below the plane of the face.

1,860,148. MEANS FOR EFFECTING A REVERSE MOVEMENT OF A CLUTCH-CONTROLLED SHAFT. DAVID JONES, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 14, 1929. Serial No. 407,301. 2 Claims. (Cl. 192—67.)

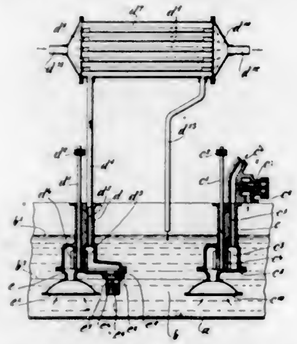


2. Means for effecting a reverse movement of a clutch-controlled drive shaft normally turning in one direction and having a drive wheel provided with a hub and sockets therein, a collar fixedly applied to the end of the drive shaft next to said hub and having a normally retracted spring pin adapted to be positively thrown into engagement with any one of the sockets in the hub of the drive wheel and frictionally held in such engagement for any desired period to permit the reversal of movement of the drive shaft to clear a jam of work in the machine and then automatically disengaged to permit the normal movement of the machine.

1,860,149. DISCHARGE TUBE. ANTON LEDERER, Vienna, Austria, assignor to W. T. P. Hollingsworth, New York, N. Y. Filed Jan. 3, 1927, Serial No. 158,833, and in Austria Sept. 27, 1926. 2 Claims. (Cl. 176—2.)

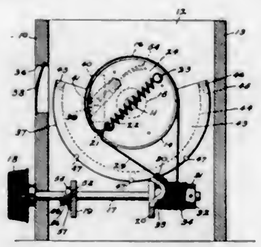
1. The method of introducing pure alkali metal into an electric illuminating lamp operating by glow discharge in rare gas between cold electrodes, for the purpose of reducing the potential drop, which consists in placing upon the surface of a metal member within the lamp a mixture consisting of an oxide of at least one alkali metal with at least one reducing metal the oxide of which is stable and substantially non-volatile at the operating temperature of the lamp, and heating said metal member sufficiently to release alkali metal vapor into the tube while the other reduction product remains on said metal member.

1,860,150. OIL COOLING SYSTEM. BRUNO LOEFFLER, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 21, 1930. Serial No. 437,796. 2 Claims. (Cl. 184—104.)



1. In combination with an oil reservoir having a pressure feed system, a cooling device, a support in the reservoir formed with a chamber, a pump in the chamber, a conduit in the support, means including the last named means to carry oil between the reservoir and cooling device, a bypass between the reservoir and communicating means, and a thermostatically actuated valve in the bypass.

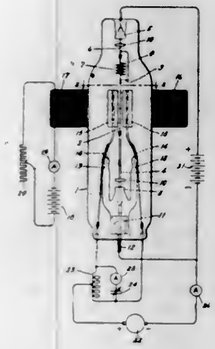
1,860,151. INDICATING CONTROL MEANS FOR INSTRUMENTS. HAROLD H. MAPELSDEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 29, 1929. Serial No. 351,092. 8 Claims. (Cl. 116—124.4.)



1. The combination of a movable member having opaque portions defining a scale through which light may be passed, a source of light and a shield therefor having an orifice arranged to project light through said scale to provide a projected image thereof, a translucent screen located in spaced relation to said member for directly intercepting and receiving the projected image of the scale, and means including a panel for holding the screen in a fixed position to be viewed.

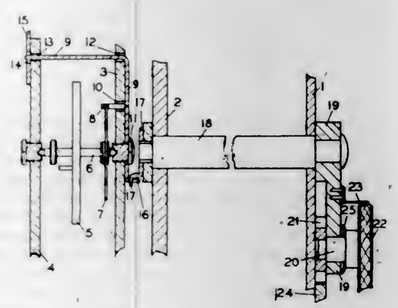
1,860,152. HIGH FREQUENCY MAGNETRON APPARATUS. ELMER D. MCARTHUR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1929. Serial No. 389,067. 4 Claims. (Cl. 250—27.)

1. In a device for generating oscillations, an evacuated envelope containing a cathode, a plurality of anodes, means for producing a cooperating magnetic field, a resonant circuit connected across the anodes and a connection between said circuit and the cathode, said anodes being substantially



flat and lying in the plane of the cathode whereby the operating efficiency of the device is maintained at an optimum value.

1,860,153. MICROMETER ADJUSTING DEVICE FOR CLOCKS AND SIMILAR MECHANISMS. ANDREW H. NEUREUTHER, Peru, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed Apr. 0, 1929. Serial No. 352,993. 1 Claim. (Cl. 58—109.)



In a micrometer adjusting device of the type that is used in regulating the operative length of the hair spring of a clock, said clock having a casing, a frame in the casing and a regulator loop member for said hair spring, in combination, a shaft journaled in the casing and frame of said clock, a slot and pin device connecting said shaft to the regulator loop member of said hairspring, a lever fastened to the other end of said shaft external to the clock casing, a knurled actuating arbor having index markings and a smaller shouldered end journaled in said lever, a pinion fastened on the smaller shouldered end of said arbor, a resilient cupped washer mounted on said arbor between the knurled part of said arbor and said lever for frictionally positioning said arbor, an indicating pointer mounted on said lever adjacent to the markings on said arbor and a stationary rack externally mounted on said clock casing engaging the pinion on said arbor.

1,860,154. STABLE SELENIUM SULPHIDE AND METHOD FOR ITS PREPARATION. BIRGER W. NORDLANDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 28, 1929. Serial No. 350,836. 7 Claims. (Cl. 23—206.)

1. Stable, chemically active selenium disulphide.

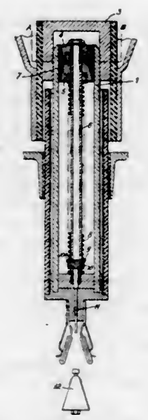
4. The method of producing stable, chemically active selenium disulphide which comprises the steps of treating a solution of hydrogen sulphide in excess with selenious acid.

1,860,155. PAPER FASTENER. RUDOLF ORTHWINE, New York, N. Y. Filed Mar. 13, 1931. Serial No. 522,223. 3 Claims. (Cl. 24—153.)



2. In a fastener of the character described the combination of a bottom supporting member, clamping arms extending from said bottom supporting member, adapted to have portions thereof bent over, a top retaining member having openings and normally spaced from said bottom supporting member, said top retaining member comprising a central body portion, longitudinal curved flanges spaced from said central portion with guide openings between them and said central body portion of said top retaining member, the said members adapted to have sheets of paper and the like clamped between them and pierced by said arms, said arms extending through the openings of the top retaining member, a pair of locking clasps each comprising a head, flanges extending from each head extending through the guide openings of the top retaining member and slidably locked with the curved flanges of said top retaining member, and downwardly inclined clamping portions having a peak end formed with each head, said peak ends adapted to bear on the bent over portions of said arms that extend through the openings of the top retaining member.

1,860,156. ELECTRIC SWITCH GEAR. GEORGE PAILIN, Manchester, England, assignor to General Electric Company, a Corporation of New York. Filed Oct. 19, 1929, Serial No. 400,988, and in Great Britain Jan. 9, 1929. Renewed Mar. 11, 1932. 13 Claims. (Cl. 200—150.)



1. In electrical switchgear of the draw-out type, contact structure comprising a stationary member and a movable member adapted to engage and electrically contact with said stationary member, a switch member coacting with

the aforesaid contact structure, and means actuated by said switch member in accordance with its circuit controlling position for varying the contact pressure between said stationary and movable members.

1,860,157. GUN. OSCAR V. PAYNE, Worcester, Mass., assignor to Auto-Ordnance Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,697. 95 Claims. (Cl. 42—3.)



1. In a firearm of the class described, the combination of a bolt, a receiver therefor, the receiver having a loading slot, a handle on the front end of the bolt and operable in the loading slot, and means on the rear end of the bolt for locking the latter.

4. In a firearm of the class described, the combination of a bolt, a pusher riding on the bolt and disposed on the upper side thereof, the bolt being capable of rotary movement independently of the pusher, and means for guiding the pusher for reciprocatory movement with the bolt.

21. In a firearm, the combination with a magazine and bolt, of a member mounted about an axis extending longitudinally of the bolt to swing transversely into path of bolt, and means operable when magazine is empty for holding the member in the path of the bolt for stopping the latter.

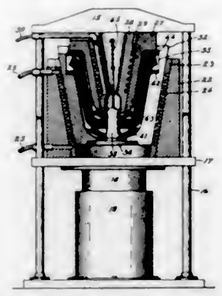
42. In a firearm of the class described, the combination of inner and outer annular wall members, each wall member having an interior shoulder for defining with the interior surface of the inner wall member an annular seat for a bolt lock, and a bolt lock disposed in said annular seat.

64. A detachable frame for firing mechanism comprising a metal strip bent intermediate its ends to provide integrally connected spaced side members, opposite portions of the side members being turned inwardly to provide a seat for the trigger bar spring.

72. An extractor comprising an elongate body having a lateral offset therein to receive the operating handle of a bolt.

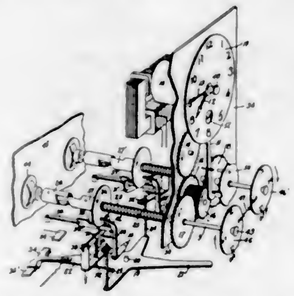
1,860,158. METHOD OF MAKING LAMINATED INSULATION EXPLOSION CHAMBER MEMBERS. CHARLES F. PETERSON, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 25, 1929. Serial No. 358,072. 3 Claims. (Cl. 18—55.)

1. The method of constructing an insulation explosion chamber member for a liquid break switch which comprises applying successive strips of fibrous material impregnated with a resinous condensation product having slitted edge portions to the sides of a dummy having the appropriate form for the interior of the chamber, forming inwardly over one end of the dummy certain of said slitted edge portions to make the bottom of the chamber



member and simultaneously forming over outwardly the other slitted edge portions to make the attaching flange of the chamber and applying heat and pressure thereto.

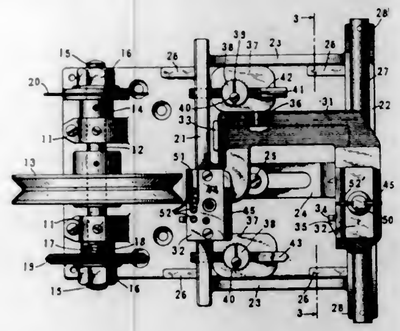
1,860,159. TIME SWITCH. WILLARD E. PORTER, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 22, 1931. Serial No. 510,490. 7 Claims. (Cl. 200—38.)



1. A time switch comprising a member mounted for rotational and axial movement, timing means for rotating said member at a uniform speed to make a revolution in a predetermined interval of time, cam means for gradually moving said member axially in one direction a limited extent while it is being rotated over substantially a full revolution, means for resisting such axial movement and for suddenly moving said member axially in the opposite direction to the same extent at one point in its revolution, a switch movable in opposite directions to different circuit controlling positions, operating means for said switch movable therewith and also movable to and from a position where it may be engaged by said member in its sudden axial movement to move said switch in one direction, means responsive to the sudden axial movement of said member for moving said operating means to the disengaging position as the member approaches the limit of such axial movement, and means responsive to the slow axial movement of said member in the opposite direction for moving said operating means to the engaging position as the member approaches the limit of such axial movement.

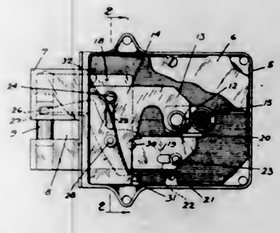
1,860,160. KEY CUTTING MACHINE. JOSEPH SCHECHTER, Brooklyn, N. Y., assignor to Segal Lock & Hardware Co. Inc., New York, N. Y., a Corporation of New York. Filed Oct. 19, 1927. Serial No. 227,070. 7 Claims. (Cl. 90—13.2.)

1. A key cutting machine including a clamp, key-cutting means forming a part of said machine and cooperating with a blank or key disposed within said clamp, said clamp including a bed plate, a second plate, one of said plates being formed with a series of openings, means for relatively



moving said plates, a comb, the teeth of which extend through said openings, a spring for projecting such comb and a shoulder forming a part of one of said plates and having its edge in line with one of the teeth of said comb.

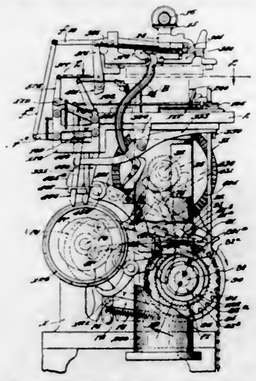
1,860,161. LOCK. JOSEPH SCHECHTER, Brooklyn, and CHARLES R. POOLE, New York, N. Y., assignors to Segal Lock & Hardware Co. Inc., New York, N. Y., a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,662. 8 Claims. (Cl. 70—14.)



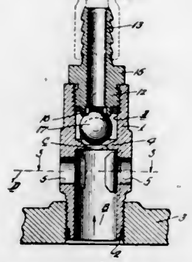
1. A lock including, in combination, a casing, a bolt projectible and retractible with respect to said casing, a supplemental bolt associated with said first named bolt, a lever rockingly supported by said first named bolt and connected to said supplemental bolt to shift the latter, a plate shiftably carried by said first named bolt and connected to said lever, means for shifting said plate, and means associated with said casing and engaging said plate to prevent a forcible retraction of said first named bolt.

1,860,162. AUTOMATIC SPLIT FOOT STOCKING KNITTING MACHINE. JOHN L. SUTPHEN, Philadelphia, Pa., assignor to Scott & Williams, Inc., New York, N. Y., a Corporation of Massachusetts. Filed May 28, 1928. Serial No. 281,091. 24 Claims. (Cl. 66—43.)

1. In a knitting machine organized for automatic knitting of stockings having inturned welts, a carrier for bight-taking and transfer implements, implements in said carrier and means for operating them, a needle carrier and needles therein, means reacting between said carriers for driving the said carriers in unison while the said instruments in them are spaced each from the carrier for the other and each other to avoid contact, and main needle cams and a yarn feed guide for the usual knitting purposes; in combination with auxiliary needle cams for forming an auxiliary knitting wave, means for feeding yarn to the auxiliary wave, and means for rendering the auxiliary knitting cams active and inactive in predetermined relation to the operation of said bight-taking and transfer devices, whereby to knit a stocking having split-tubular sections in predetermined relation to a welt having a course of transferred loops.



1,860,163. VALVE ASSEMBLY FOR AIR-COMPRESSING CYLINDERS. ANDREW WYZENBEEK, Chicago, Ill., assignor to Binks Manufacturing Co., Chicago, Ill., a Corporation of Delaware. Filed Apr. 21, 1930. Serial No. 446,037. 3 Claims. (Cl. 277—61.)

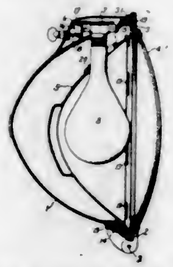


1. A valve for an air compressing cylinder, comprising: an upright tubular valve body provided intermediate its ends with two lateral inlet ports spaced circumferentially of the body, the body having an annular flange within its bore above the ports; a nipple attached to the upper end of the body and presenting downwardly directed projections above the top of the said flange; a check valve member adapted to seat by gravity upon the said flange to close the bore of the flange and spaced downwardly from the projections when thus seated; and an inlet valve member housed by the bore of the body below the said flange and presenting two resilient wings respectively controlling the lateral inlet openings, each wing being normally curved by its own resiliency against the said bore and extending across the inner end of one of the inlet openings, and each wing being adapted to be flexed away from the adjacent inlet opening.

1,860,164. SYNTHETIC RESINS. WILLIAM C. ARSEM, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 27, 1929. Serial No. 381,692. 20 Claims. (Cl. 260—8.)

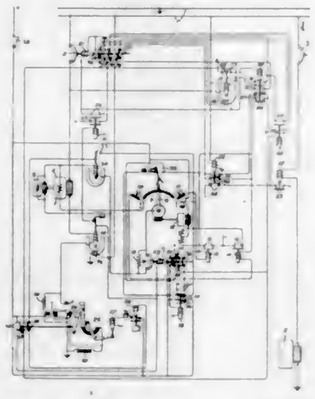
1. The process of preparing an alkyd resin which comprises heating the resin ingredients in the presence of an organic acid containing an $—SO_3H$ group, as the acid group.

1,860,165. LIGHT PROJECTOR. PERCY S. BAILEY, Beach Bluff, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 13, 1931. Serial No. 522,375. 2 Claims. (Cl. 240—41.)



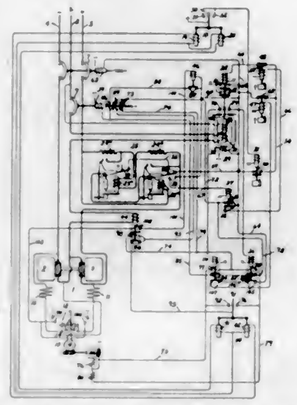
1. In a projector, a tapered casing which terminates at its forward end in a circular open side, a projection formed integral with the casing to provide a recess for the reception of a lamp support, said projection at its forward end being located within the contour of the circular open side of the casing whereby said recess at its forward end opens into said circular open side, a circular cover for the casing, a reflector mounted eccentrically in said casing, and a lens for the reflector mounted eccentrically in the cover concentric with said reflector, said cover closing the open side of the casing and the recess.

1,860,166. AUTOMATIC CONTROL EQUIPMENT. HERMAN BANY, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 4, 1931. Serial No. 534,910. 12 Claims. (Cl. 171—118.)



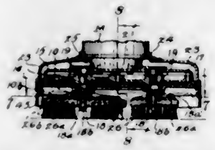
1. In combination, an electric circuit, a source of current connected to said circuit, adjustable means for regulating the voltage of said source, means associated with said source for effecting the disconnection of said source from said circuit in response to a predetermined abnormal current condition and for effecting the reconnection of said source to said circuit in response to a predetermined voltage condition of said source only after said regulating means has been adjusted so as to reduce the voltage of the source to a predetermined minimum value, and means associated with said source for effecting the disconnection of said source from said circuit in response to another predetermined abnormal current condition and for effecting the reconnection of said source to said circuit in response to said predetermined voltage condition of said source independently of the adjustment of said regulating means so as to reduce the source voltage to said predetermined minimum value.

1,860,167. AUTOMATIC SWITCHING ARRANGEMENT. HERMAN BANY and HAROLD T. SEELEY, Yeadon, Pa., assignors to General Electric Company, a Corporation of New York. Filed May 10, 1929. Serial No. 362,084. 15 Claims. (Cl. 117—118.)



1. In combination, a three wire direct current circuit, a balancer set, means for connecting the main terminals of said set to the main conductors of said circuit, means controlled by said connecting means for regulating the excitation of said set in response to the difference between the neutral voltages of said set and circuit, and means controlled by the neutral voltages of said set and circuit for effecting the connection of the neutral of said set to the neutral of the circuit.

1,860,168. FLOOR TREATING MACHINE. LUDGER J. BEDARD, Minneapolis, Minn. Filed Nov. 7, 1928. Serial No. 317,788. 2 Claims. (Cl. 15—50.)



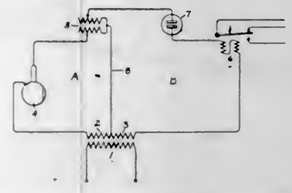
1. In a machine for treating floors, a horizontal frame mounted on wheels for moving across the floor, a shaft depending from said frame and mounted therein, means for rotating said shaft, said shaft having a diametrically disposed fulcrum pin at some distance above the lower end thereof, a floor treating element having a vertical socket connected with its top, said socket being of greater internal diameter than the external diameter of said shaft, the lower end of said shaft extending through said socket and being provided with a detachable retaining pin disposed in spaced relation below the under surface of the top of said element, the upper edge of said socket having opposed slots therein for receiving the ends of said fulcrum pin to key said element to said shaft with freedom for limited rocking movement on said pin and with freedom for limited vertical movement of said element relatively to said shaft.

1,860,169. LIGHT-SENSITIVE APPARATUS. THOMAS A. E. BELT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 6, 1928. Serial No. 297,896. 5 Claims. (Cl. 250—41.5.)

1. Means for controlling a circuit in response to light variations, said means comprising a gaseous discharge device adapted to be substantially non-conductive at

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voltages below a predetermined voltage but to pass a discharge having arc-like characteristics above said voltage, an alternating current source which normally applies a voltage across said device insufficient to cause a



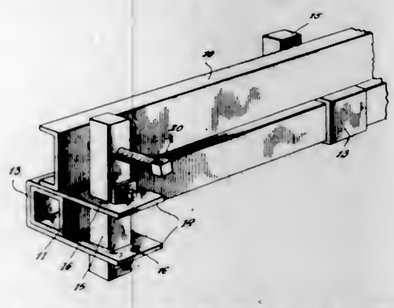
substantial discharge therethrough, and means including a light-sensitive device for increasing said voltage applied across said device sufficiently to cause an arc-like discharge to flow through said device thereby to energize the circuit to be controlled.

1,860,170. BUCKLE. WALTER T. BRONSON, Waterbury, Conn., assignor to Waterbury Buckle Company, Waterbury, Conn., a Corporation. Filed Oct. 29, 1930. Serial No. 491,870. 8 Claims. (Cl. 24—198.)



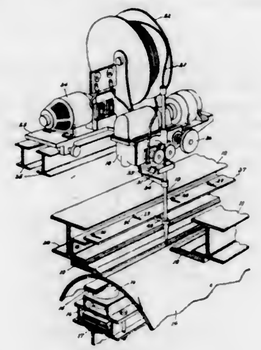
1. In a buckle, a tie-loop, a coupling bar disposed in parallel relation to said tie-loop and adjacent thereto, a deflecting bar disposed in parallel relation to said coupling bar and adjacent thereto, the said coupling bar and deflecting bar being each free at one end, and stop fingers formed at the end of each of said coupling and deflecting bars, whereby to guard against the lateral displacement of a strap.

1,860,171. BENDING AND STRAIGHTENING DEVICE. PINK T. BYNUM, Callihan, Tex. Filed May 29, 1931. Serial No. 541,074. 5 Claims. (Cl. 153—38.)



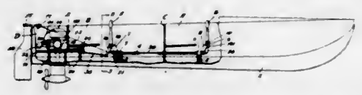
1. A bending and straightening device including a stress bar adapted to be disposed longitudinally of the member to be straightened, a yoke embracing the bar and having the legs projecting from the same side of the bar, a post adjustably mounted in the legs of the yoke and extending perpendicular to said legs, and a jack screw for engaging said member and carried by the post parallel to said legs.

1,860,172. WELDING APPARATUS. VERNI J. CHAPMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,762. 6 Claims. (Cl. 219—8.)



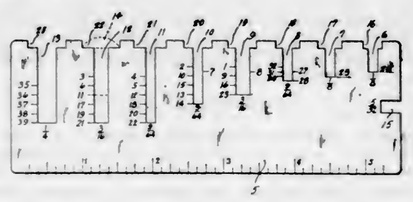
1. Welding apparatus comprising means extending along the seam to be welded for holding the work in position for welding, a welding agency, means for traversing said welding agency along the seam to be welded, a templet adjustably supported on said holding means adjacent the seam to be welded, and means for biasing said welding agency into engagement with the guiding surface of said templet.

1,860,173. COMBINED STEERING AND ENGINE CONTROL DEVICE. CHARLES N. COLSTAD, Attleboro, Mass. Filed Aug. 30, 1930. Serial No. 478,907. 10 Claims. (Cl. 115—34.)



1. A steering control device of the kind described, comprising a boat, a rudder, a plurality of spaced apart levers pivotally mounted for oscillation laterally of said boat and connected for independent simultaneous operation, a quadrant fixed to one of said levers, a quadrant fixed to said rudder, a flexible element uniting said two quadrants, whereby manipulation of either of said levers will operate said rudder.

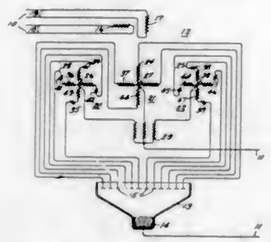
1,860,174. RIVET GAUGE. WESLEY M. CRONK, Stratford, Conn., assignor to Wright and Corson Company, Milford, Conn., a Corporation of Connecticut. Filed Jan. 7, 1931. Serial No. 507,170. 6 Claims. (Cl. 33—174.)



1. In a gauge, a body, said body having a series of recesses therein, certain of said recesses differing as to length and width, said recesses being enlarged at their

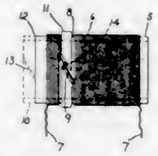
entrance ends, and said entrance ends being of different widths, and said body being provided with designating mark on the sides of the recesses to indicate the trade number of a rivet corresponding in head and shank diameters to the widths of the recess and length of shank corresponding to the depth of recess to said mark.

1,860,175. TWO-PHASE CIRCUIT CONNECTION FOR VAPOR ELECTRIC DEVICES. EARL VERNE DE BLIEUX, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,737. 10 Claims. (Cl. 175—363.)



4. In a system for transferring power between a two-phase alternating current circuit and a direct current circuit, a vapor electric device including a cathode and twelve anodes, a transformer connecting said vapor electric device to said alternating current circuit, said transformer comprising two primary windings each connected to a different phase of said two-phase alternating current circuit and three four-phase star-connected secondary winding groups, each of said secondary winding groups being connected to a different group of said anodes, said star-connected groups of secondary windings being displaced apart by thirty electrical degrees, and an interphase transformer having three windings each connected to the neutral point to a different one of said four-phase star-connected winding groups.

1,860,176. INDUCTANCE COIL. DONALD R. DE TAR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 16, 1929. Serial No. 355,574. 8 Claims. (Cl. 171—242.)



1. An adjustable inductance comprising a winding arranged in axially spaced sections separated from each other by an annular gap along the length of said winding, said gap being sufficiently wide to change the inductance of the winding by a predetermined substantial amount from that which it would have with the turns all in one section, and means to move the turns of the winding from one section to the other between adjacent ends of said sections.

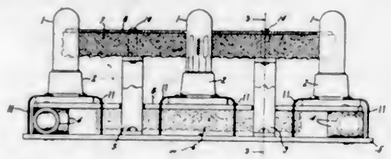
1,860,177. MARINE RAILWAY. FRANCIS R. DRAVO, Edgeworth, and VERE B. EDWARDS, Moon Township, Allegheny County, Pa., assignors to The Dravo Contracting Company, a Corporation of Pennsylvania. Filed Mar. 10, 1931. Serial No. 521,450. 23 Claims. (Cl. 61—67.)

1. In a marine railway an inclined bed, a plurality of tracks extending upon said bed, a plurality of carriages movable upon said tracks, a plurality of hauling units, one for each carriage, connection between each hauling unit and one of the said carriages, each hauling unit including a prime mover, a source of energy, means



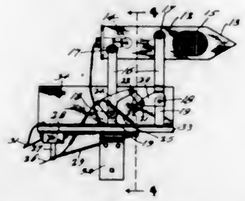
for bringing into energy-receiving association any combination of such prime movers, and means for establishing connection from said source of energy to the prime movers of such combination.

1,860,178. NONMICROPHONIC SUPPORT FOR VACUUM TUBES. CLARENCE A. GUNTHER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 31, 1928. Serial No. 303,316. 5 Claims. (Cl. 248—30.)



1. A support for preventing external vibrations from changing the space relations of electrodes in space current apparatus, said support comprising a plurality of cylindrically shaped members of elastic material having longitudinal axes angularly disposed with respect to one another, said apparatus resting upon said members, whereby the vibrational energy is dissipated in a plurality of directions.

1,860,179. DIRECTION INDICATOR FOR AUTOMOBILES. WILLIAM M. HIKE, Omaha, and WILBER J. B. KAST, Bellevue, Nebr. Filed Apr. 5, 1930. Serial No. 441,952. 1 Claim. (Cl. 116—44.)



A vehicle signal, comprising a bracket for attachment to a vehicle, a shield plate carried by the bracket and extending upwardly at the rear edge thereof, a pair of arms mounted on the bracket in spaced relation to said shield and disposed in rear thereof, a link pivoted on the upper end of each arm, an elongated indicator pivotally mounted upon the outer ends of said links in parallelogram relation thereto and to the bracket, said links adapted to swing downwardly behind said shield to dispose the indicator in back of the same, a bell crank lever mounted on one of said arms, a link between said bell crank lever and the other arm for causing the arms to move simultaneously and equally, a spring disposed between the bell crank lever and the bracket for normally urging the links to swing into a lowered position behind the shield, and manually operable means connected to the bell crank lever for moving the same against the tension of said spring to raise said arms and the indicator when desired.

1,860,180. WALL AND UNITS FOR USE THEREIN. FREDERICK E. HORNE, Malden, Mass., assignor of one-half to Robert Bacon, Winchester, Mass. Filed Jan. 9, 1930. Serial No. 419,601. 3 Claims. (Cl. 20—5.)



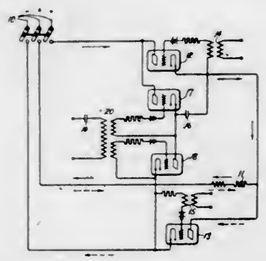
1. Wall structure, comprising a plurality of rows of shingle-like units, and a separate row of material interposed between adjacent rows of units, the units in each row being spaced apart a distance substantially equivalent to a standard vertical mortar course, said rows of material being arranged with respect to adjacent rows of units to expose a portion of said row of material substantially equivalent to a horizontal mortar course, whereby the completed wall will simulate a masonry wall with mortar courses between the units thereof.

1,860,181. IMITATION MASONRY WALL AND UNITS USED THEREIN. FREDERICK E. HORNE, Malden, Mass., assignor of one-half to Robert Bacon, Winchester, Mass. Filed Jan. 9, 1930. Serial No. 419,603. 1 Claim. (Cl. 20—5.)



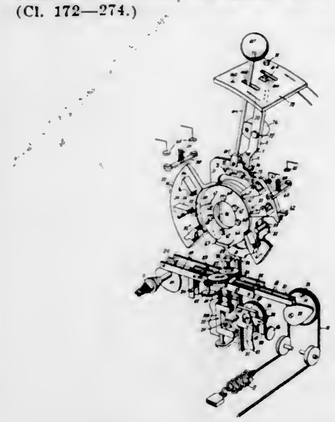
Wall structure comprising building units of nonmasonry material laid in overlapping rows, certain of said units having their lower edges beveled on their rear sides, an upturned butt on the rear bottom edge of others of said units adapted to engage said beveled edges and interlock said units, certain of said units having surfaces adapted to simulate the materials and horizontal bond courses of a masonary wall, and others of said units having surfaces adapted to simulate the materials and vertical bond courses of a masonry wall.

1,860,182. TRANSMISSION OF POWER. ALAN HOWARD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 20, 1930. Serial No. 437,625. 6 Claims. (Cl. 175—363.)



1. The combination of a plurality of current paths each including a vapor electric discharge device provided with a grid for controlling the starting of current between its cathode and anode, means for applying a holding potential successively to the grids of said devices, a capacitor, and electric discharge means arranged to connect said capacitor across the anode-cathode circuits of said devices successively for producing a neutralizing potential whereby current therein is interrupted.

1,860,183. MOTOR SPEED CONTROL APPARATUS. JOHN I. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 17, 1930. Serial No. 453,339. 26 Claims. (Cl. 172—274.)

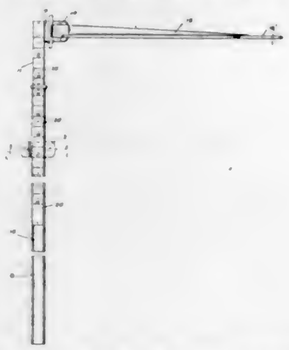


1. In a regulating device, the combination of a rotatable shaft, a movable member restricted to a linear movement, a second movable member restricted to a rotary movement, motion transmitting means between said shaft and the first mentioned movable member for transforming the rotary movement of said shaft into a linear reciprocating movement of said first mentioned movable member, and means actuated by the first mentioned movable member for rotating the second mentioned movable member through those angles whose sines are substantially directly proportional to the linear movement of the first mentioned movable member.

17. In a brush shifting device for a dynamo electric machine, the combination of two movable brush yokes, a member having a circular surface, a shifting yoke adapted to move radially and angularly on said circular surface, engaging means between said brush yokes and said shifting yoke adapted to move said brush yokes during movement

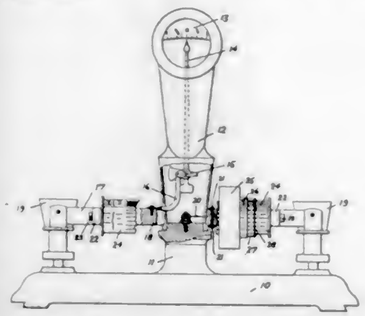
of said shifting yoke, a stationary cam, and means secured to one end of said shifting yoke adapted to engage the contour of said cam for guiding said end of the shifting yoke in accordance with said cam contour.

1,860,184. REGISTERING DEVICE. AARON J. JACOBS, Brooklyn, N. Y., assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,499. 4 Claims. (Cl. 33—169.)



1. A height-measuring device including a member mounted for vertically slidable movement, a scale associated with said member, an arm pivotally mounted on said member and having movement in a horizontal plane, a head contact portion forming a part of said arm, and a stop cooperating with said member and also forming part of said arm to limit the pivotal movement thereof.

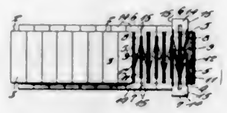
1,860,185. COMPUTING MECHANISM. HARRY M. JACOBS, Brooklyn, N. Y., assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 11, 1928. Serial No. 298,919. 4 Claims. (Cl. 285—32.)



1. In a scale, a computing mechanism including a beam member bearing indicia comprising a series of tabulations arranged according to value per unit of weight, and a poise movable longitudinally of said member and being provided with indicia for cooperation with said first named indicia, the adjacent series of indicia being of contrasting colors.

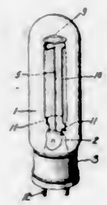
1,860,186. FLEXIBLE BAND, CHAIN, OR LINKAGE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Dec. 27, 1928. Serial No. 328,761. 7 Claims. (Cl. 59—80.)

1. A jointed band in which is comprised a pair of flat tubing lengths joined by a pair of coacting U-shaped elements each having one arm extending into one tubing length from one end thereof to partially lap past the arm extending into the same tubing length from the opposite end thereof, the two arms being confined by the tubing against relative movement in the direction of its narrower



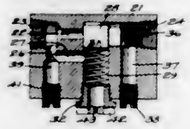
dimension but having clearance for relative movement in its wider direction, the arms of one U-shaped element terminating in hooks adapted to snap-lock with the arms of the other element when the interengaging arm ends are forced past each other into locking position.

1,860,187. TEMPERATURE CONTROLLING AND MEASURING APPARATUS. LEWIS R. KOLLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,848. 4 Claims. (Cl. 250—27.5.)



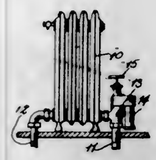
1. A temperature responsive device comprising an evacuated envelope containing an anode and a cathode comprising a foundation of metal provided with an alkali layer, said layer being adapted to emit a substantial thermionic current when the device is subjected to a temperature in the range between 80° and 150° C.

1,860,188. BRAKING SYSTEM AND VALVE. JOSEPH W. LACY, Chester, Calif. Filed Nov. 2, 1929. Serial No. 404,429. 1 Claim. (Cl. 303—69.)



A brake valve comprising a valve body having a bore therein, a solid piston reciprocable in said bore between a first position and a second position, a plug seated in one end of said bore to form an abutment, said plug having a passage therethrough to establish communication between said bore and the atmosphere, and a spring abutting said plug and said piston for urging said piston towards said first position, said body having a first passage extending entirely therethrough and intersecting said bore in a location such that said first passage is blocked by said piston in said first position, and said body having a second passage communicating with said first passage and intersecting said bore in a location such that said second passage is blocked by said piston in said second position but establishes communication with the atmosphere through said plug when said piston is in said first position.

1,860,189. THERMOSTATIC CONTROL VALVE. JAMES J. LAWLER, Mount Vernon, N. Y. Filed Nov. 21, 1929. Serial No. 408,827. 1 Claim. (Cl. 236—42.)



Valve operating mechanism comprising a valve casing having a seat therein and a valve closing on the seat, a thermostatic actuating device including an expansible tube directly engageable with the valve, a laterally disposed thermostatic element in fixed position exteriorly of the casing in communication with the expansible tube, a flexible tube connection between the upper ends of the expansible tube and thermostatic element, said thermostatic element having an axial passage therethrough defining an annular fluid space closed at opposite ends, screw plug closed filler openings at the upper ends of the expansible tube and thermostatic element, a casing having openings in its top wall removably mounted on the valve casing, a cylinder extending upwardly from the last named casing alined with the expansible tube and a tensioned hollow piston in the cylinder attached to the upper end of the expansible tube and having the filler opening therein for the tube.

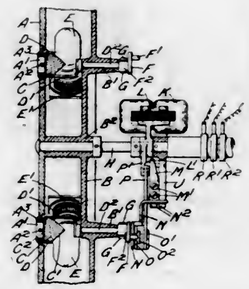
1,860,190. BAG. HAROLD J. LE VESCONTE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 30, 1928. Serial No. 289,501. 2 Claims. (Cl. 229—62.)



1. A bag having side walls, a closing strip folded about the mouth of the bag and engaging the outer faces of the side walls, a line of stitches including a needle thread formed into a series of loops and passing through the strip and the side walls of the bag, and a looper thread formed into loops interlocked with the needle thread loops and covering the needle punctures in the strip against which the said looper thread loops are laid, and a strip of adhesive applied to the line of stitches on the side of the bag opposite the looper thread loops, said strip of adhesive filling and closing the needle punctures in the closing strip against which the adhesive strip is applied.

1,860,191. SELECTIVE INDICATING MECHANISM. FREDERIK NORMAN LINSTOW, Benton, and WILLIAM ANDERSON, Hebburn-on-Tyne, England, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed May 5, 1930, Serial No. 449,991, and in Great Britain June 1, 1929. 4 Claims. (Cl. 177—353.)

2. In selective indicating mechanism, the combination of a series of indicators arranged around the circumference of a circle, each indicator having two indicating positions and an intermediate neutral position, an operating crank for each indicator, a pin on the crank, a rotatable bracket, an actuating member having a shaped slot pivotally mounted on the bracket, an electromagnet carried on the bracket, an armature therefor pivoted to the bracket so that it can be moved in either direction from a central position when the electromagnet is energized in accordance with a condition to be indicated, spring means for biassing the armature to the central position, an operative connection between the armature and the actuating member, a driving shaft for rotating the bracket



through a series of selected positions in each of which the pin on the crank of an indicator engages in the slot of the actuating member so as to form an operative connection between the indicator and said member whereby the indicator is moved into the indicating position corresponding to the direction of movement of the armature, a guide member mounted on the bracket and having a slot so shaped that the pin of the crank of each indicator engages in the slot and the indicator is moved into the neutral position as the bracket is rotated into a selected position, and means for retaining each indicator in its indicating position when the bracket is rotated to the next selected position.

1,860,192. ELECTRIC SOLDERING IRON. ERWIN A. LOCKWOOD, Royal Oak, Mich., assignor to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 9, 1929. Serial No. 391,495. 3 Claims. (Cl. 247—13.)

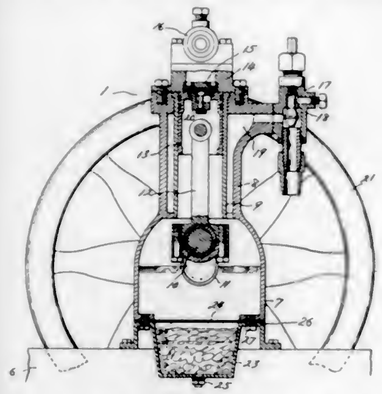


1. In an electrically heated tool, a shank, a terminal supporting bar projecting from the shank, electrical conductor plates carried by said bar, an insulator block upon said bar at one end of said plates and having a channel exposing a portion of the bar, and a cable having wires connected to the conductor plates and having a ground wire connected to the exposed portion aforesaid of said bar.

1,860,193. ACID ELIMINATOR FOR REFRIGERATING APPARATUS. HUBERT R. LORANGER, Hillsdale, Mich., assignor to Automatic Freezer Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 8, 1927, Serial No. 211,573. Renewed May 3, 1930. 5 Claims. (Cl. 230—206.)

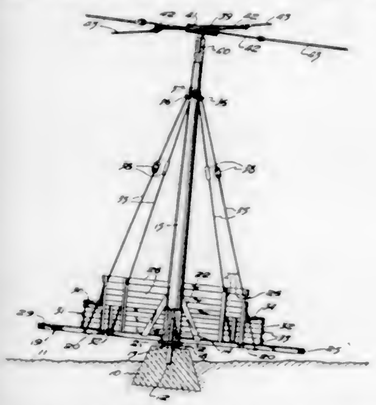
1. In a refrigerating system the combination with a compressor having inlet and outlet connections for the

refrigerating medium, of a container arranged below said connections and adapted to collect acid impurities by



gravity action, and means in said container for chemically reacting with said acid impurities to eliminate the corrosive properties.

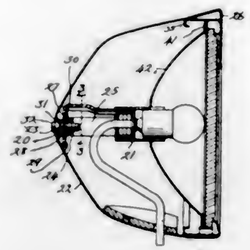
1,860,194. ROUNDABOUT OR MERRY-GO-ROUND. PETER J. MALONEY, North Bend, Wash. Filed Nov. 20, 1929. Serial No. 408,515. 1 Claim. (Cl. 272—33.)



A roundabout having a rotatable mast, a platform on the mast at a right angle to its longitudinal axis, said platform being marginally free and unobstructed whereby it may be occupant-propelled, a wall rising from the platform, seats secured to said wall and facing outwardly, and adjustable guy members extending substantially obliquely from the platform and freely through the seats and said wall to reinforce the seats and wall, said guy members constituting dividers between the seats and being fastened to the mast above said seats and wall, and the said disposition of the guy members with respect to the wall and seats permitting slight relative sliding movement between the wall, seats and guy members in accordance with adjustment of the guy members.

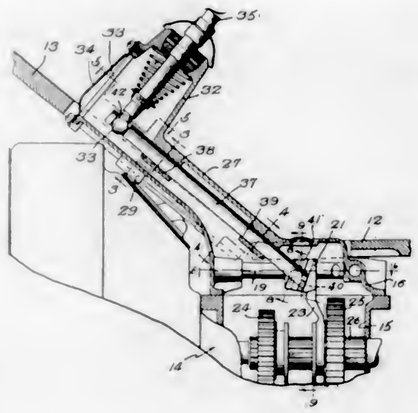
1,860,195. LAMP. ALOIS L. MARTINEK, Detroit, Mich., assignor to C. M. Hall Lamp Company, Detroit, Mich., a Corporation of Michigan. Filed May 26, 1930. Serial No. 455,866. 4 Claims. (Cl. 240—41.5.)

4. In a lamp, a lamp body, a lamp bulb socket having a portion adjacent a portion of the body, a hollow rivet extending through the adjacent portions of the body and socket, and having flanges overlapping said portions whereby the socket is secured directly to the body, a removable door for the body, a reflector having a marginal flange connected to the door and having an opening re-



ceiving the socket, and securing means for the door including a yoke projecting rearwardly from the door, and an adjustable element extending through the yoke and mounted for rotary movement within the hollow rivet aforesaid.

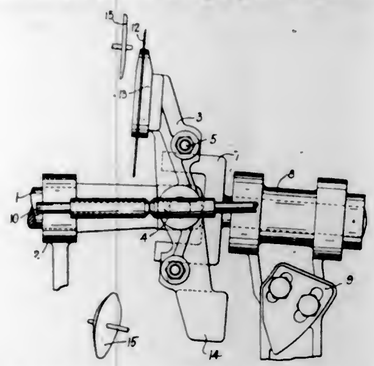
1,860,196. GEAR SHIFTING MECHANISM. JOHN A. MARTIN, Detroit, Mich., assignor, by mesne assignments, to Chrysler Corporation, a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,493. 15 Claims. (Cl. 74—39.)



1. In a vehicle, the combination with a substantially horizontally disposed floor portion and a transmission positioned below the said floor portion, of a second floor portion at an angle to the floor portion aforesaid, a control lever arranged upon the angularly disposed floor portion and a member slidably mounted upon the last mentioned floor portion having one end adapted to be engaged by said lever and the opposite end extending into said transmission for shifting the gears therein.

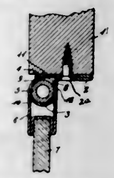
1,860,197. CIGARETTE MAKING MACHINERY. WALTER EVERETT MOLINS, Deptford, London, England. Filed Sept. 9, 1929, Serial No. 391,497, and in Great Britain Sept. 25, 1928. 6 Claims. (Cl. 131—37.)

6. In a cutting device for severing an axially moving rod into lengths, the combination with a rotatable driving element, of a driven element rotatable about an axis inclined with respect to the axis of the driving element, an intermediate member having a pivotal connection with



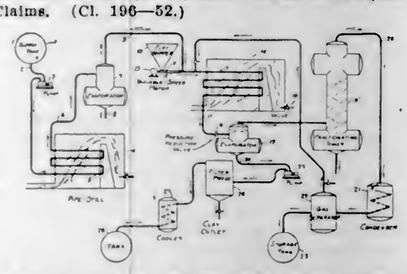
each of said elements about axes perpendicular to each other and perpendicular to the axes of the respective elements, and a cutting blade rigidly carried by said member.

1,860,198. AUTOMOBILE WINDSHIELD HINGE. PAUL B. MOORE and BENNETT LEWIS, Indianapolis, Ind., assignors to Martin-Parry Corporation, York, Pa., a Corporation of Delaware. Filed Aug. 16, 1929. Serial No. 386,447. 6 Claims. (Cl. 296—92.)



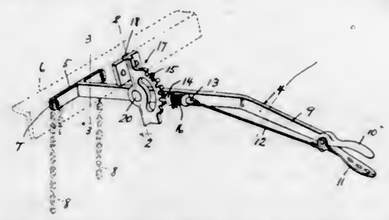
1. A windshield hinge construction of the class described comprising an upper section folded intermediate its ends and secured to the automobile header, said section being formed at one side of the bight of the fold into a plurality of spaced depending tongues curved to open toward said header, a pintle mounted upon and supported by said tongues, a lower channeled hinge section provided with a plurality of openings in its wall for receiving said tongues and having a wall portion engaging the said pintle.

1,860,199. METHOD OF CRACKING HYDROCARBON OILS. RUDOLPH C. OSTERSTROM, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Apr. 30, 1929. Serial No. 359,248. 3 Claims. (Cl. 196—52.)



1. The process of converting high boiling petroleum hydrocarbons into low boiling petroleum hydrocarbons, which comprises passing the vapors of high boiling petroleum hydrocarbon oils commingled with fuller's earth through a heated zone maintained at a temperature in excess of 1000° F., and fractionating the vapors discharged from said heated zone to separate the light from the heavy fractions.

1,860,200. FENDER ADJUSTING MEANS. CARL PFLUM and NORBA GUERIN, Connersville, Ind. Filed Feb. 26, 1930, Serial No. 431,560. Renewed Apr. 16, 1932. 1 Claim. (Cl. 97—188.)



An attachment for adjusting the fenders of an agricultural implement comprising a bracket adapted to be connected to a part of the implement frame, a segment formed with the bracket and having a part depending therefrom, a hand lever having a bearing forming projection on one side thereof, the segment having a hole therein to receive said projection, a pivot bolt passing through the projection and the lever for holding the projection in the opening in the segment, a cross piece on one end of the lever having key hole shaped slots therein for receiving the chains of the fenders, a spring pressed pawl carried by the lever and adapted to engage the teeth of the segment, a hand grip pivotally connected with the lever and associated with the hand part thereof, and a link between the hand grip and the pawl.

1,860,201. EASY OPENING CONTAINER. WILLIAM F. PUNTE, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 28, 1930. Serial No. 464,656. 3 Claims. (Cl. 220—54.)

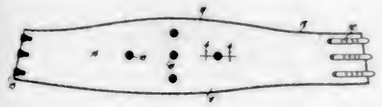


1. An easy opening container having score lines in the body adjacent one end thereof forming a rip strip, a reclosure collar disposed within said container body, said collar having an inwardly projecting bead formed therein adjacent its lower edge and providing a recess on its outer face, said recess having soft solder applied therein, whereby when the collar is inserted in the container body and heat applied thereto said solder will form a bond between the collar and the container for securing the collar therein.

1,860,202. BELT. ADOLPH B. REISMAN, New York, N. Y. Filed Oct. 17, 1929. Serial No. 400,325. 1 Claim. (Cl. 128—167.)

A health belt adapted to snugly fit about the abdominal region of a wearer comprising a flexible elongated body having curved side edges, the same being wider at its center and narrower at its opposite ends, said body including a plurality of layers of fabric material of equal sizes, the innermost layer of which is medicated flannel, a plurality of spaced fastening devices detachably join-

ing the ends of the belt, those layers of fabric material exteriorly of the inner layer being formed with a group of spaced aligned perforations at the center of the belt,



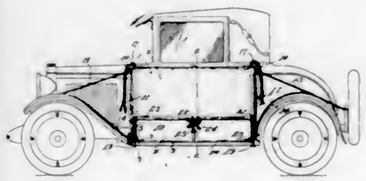
eyelets secured in the edges of said perforations for securing the perforated layers together, screens carried by said eyelets, the innermost layer being imperforate.

1,860,203. PIPE COVERING. LEWIS M. RISHEL, Detroit, Mich. Filed Nov. 24, 1928. Serial No. 321,556. 2 Claims. (Cl. 154—44.)



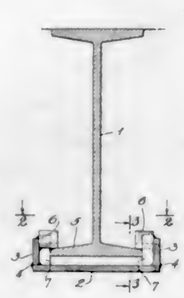
1. A device of the character described comprising a sheet metal casing cylindrical in form having two edges and adapted for interlocking relation, a resilient and compressible lining, such as felted mineral wool, secured to the casing by cementing the outer surface of the lining member thereto, the arrangement providing that in placing the device about a member to be insulated the lining directly engages the member and by reason of its resilient and compressible characteristics permits the edges of the sheet metal casing to be interlocked and maintained under tension by the lining.

1,860,204. LUGGAGE CARRIER. SAMUEL H. ROBERTS, Lexington, Ky. Filed Sept. 6, 1929. Serial No. 390,771. 6 Claims. (Cl. 150—52.)



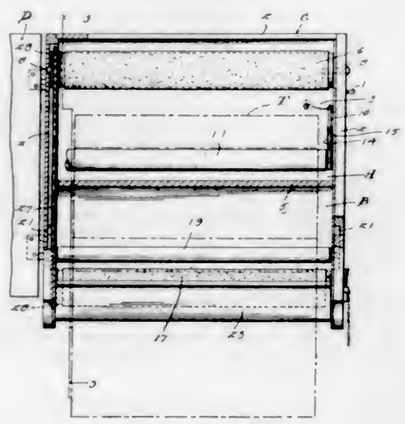
1. A luggage carrier comprising a one-piece strip of material, and ends secured to corresponding marginal edges of the strip beginning at one end to define a pair of sides and a bottom, leaving the remaining end of one side free to extend over the top of the carrier and down along the remote side.

1,860,205. BEAM PROTECTOR. ABRAHAM W. SCHENKER, Forest Hills, N. Y., assignor to The Electric Welding Company of America, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 4, 1929, Serial No. 330,296. Renewed Mar. 12, 1932. 6 Claims. (Cl. 189—37.)



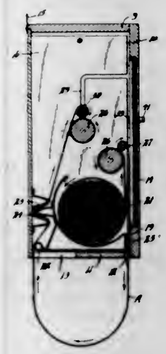
1. A bridge beam protector including a channel shaped structure to receive the lower flange of the beam to be protected and of greater width than the flange, and having means to engage above the flange to prevent downward movement of the protector, and other means to center the protector with respect to the beam.

1,860,206. TOWEL SERVICE APPARATUS. SAMUEL A. SCHWARTZ, St. Paul, Minn. Filed Apr. 28, 1931. Serial No. 533,526. 4 Claims. (Cl. 312—38.)



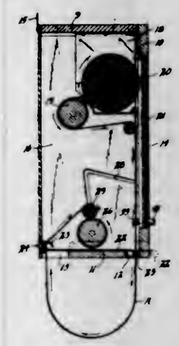
1. An apparatus of the class described comprising, in combination, a cabinet having an open portion, a door for closing said open portion, means for supporting a supply of clean toweling within the cabinet, a feed roller rotatably mounted within said cabinet and with which the toweling engages, rock arms pivoted to said cabinet for swinging movement about an axis extending cross wise of said cabinet, a roll carried by said rock arms for engagement with the toweling to hold the same in frictional engagement with the roller, and means carried by the arms for contacct with the door when the door is closed to maintain the roller in working position with respect to the toweling and roller.

1,860,207. TOWEL CABINET. SAMUEL A. SCHWARTZ, St. Paul, Minn. Filed Nov. 12, 1931. Serial No. 574,493. 11 Claims. (Cl. 312—38.)



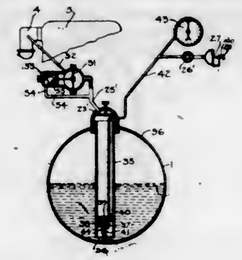
1. In a towel cabinet, soiled towel take-up means located forward of the back of the cabinet and a member slidably mounted below said take-up means for forward movement and rearward movement against the back portion of the cabinet, said member and cabinet having cooperating guide flanges and grooves whereby when said member is forwardly slid, toweling may be threaded from below said member upwardly to said take-up means between said member and the back portion of the cabinet and after the toweling is threaded said member may be slid rearwardly to cause frictional engagement of the toweling between said member and the back of the cabinet.

1,860,208. CABINET FOR TOWELS. SAMUEL A. SCHWARTZ, St. Paul, Minn. Filed Nov. 12, 1931. Serial No. 574,494. 3 Claims. (Cl. 312—38.)



1. A towel cabinet comprising a casing having a front opening, a door closing said opening, means adjacent the top of said casing for supporting a supply of clean toweling, said casing having a hand receiving opening at its bottom, soiled towel take up means adjacent the bottom of the casing whereby toweling may extend downwardly from said supply adjacent the front of the casing and depend below the bottom in a loop and then extend upwardly through said hand receiving opening adjacent the rear portion of the casing to said take up means, a plate of approximately the same width as the depth of said casing, said plate being slidably mounted adjacent said bottom and below said soiled towel take up means for forward and rearward movement, said plate when slid rearwardly substantially closing said hand receiving opening and pressing the toweling against the rear portion of the cabinet and said plate when forwardly slid permitting threading of toweling upwardly through said hand receiving opening to said take up means, said door when closed holding said plate in rearwardly slid portion.

1,860,209. LIQUID LEVEL INDICATOR. FRANK M. SLOUGH, Lakewood, Ohio. Filed Nov. 29, 1929. Serial No. 410,385. 14 Claims. (Cl. 73—54.)



4. In a liquid level indicating system for a liquid container, in combination, movable means subjected to the hydraulic pressure head of liquid in the container, and movable in a given direction responsive thereto, a fluid pressure indicator adapted to be disposed remotely to the container, a force exerting means exercising a substantially constant force on the movable means in opposition to the effect of liquid pressure exerted thereon and adapted to move it oppositely upon a reduction in value of the liquid pressure on said movable means, fluid pressure generating means, an actuating means for effecting operation of the pressure generating means operable responsive to a movement of said movable means effected by said force exerting means, the pressure generated being effective to commensurably operate said indicator and effective upon said movable means to approximately balance the opposing pressure of the liquid tending to move it.

1,860,210. GAS FILLED ELECTRIC DISCHARGE DEVICE. HANS J. SPANNER, Berlin, Germany, and ULRICH DOERING, New York, N. Y., assignors, by mesne assignments, to said Hans J. Spanner. Filed Apr. 30, 1929, Serial No. 359,328, and in Germany Sept. 21, 1928. 2 Claims. (Cl. 176—122.)

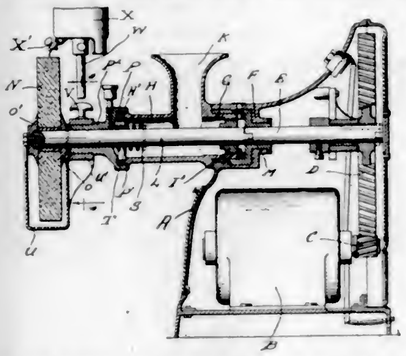


1. A gas discharge device comprising an inclosing tube, heatable thermionic electrodes positioned in opposite ends of said tube, and a conductive strip extending longitudinally along said tube throughout substantially its entire length, said strip being divided into as many electrically separated portions as there are electrodes, and means for connecting each portion to one of the electrodes.

1,860,211. TOOL GRINDER. WALTER F. STIMPSON, Louisville, Ky. Filed Oct. 15, 1928. Serial No. 312,632. 2 Claims. (Cl. 51—241.)

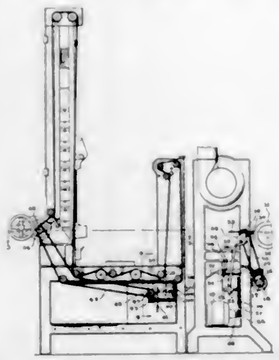
1. The combination with the housing and power devices of a ment grinder comprising a hollow casing and a shaft at the inner end of said casing in axial alignment therewith and having a stepped end portion for engagement with the grinder feed screw, of a tool grinder attachment comprising a cap having a detachable engagement with the outer end of said hollow casing, a shaft journal bearing integral with said cap, a shaft engaging

said bearing and extending inward through said hollow casing having a stepped inward end for engaging the stepped portion of said first mentioned shaft, a grinder wheel mounted on the outer end of said last mentioned



shaft and means for yieldably pressing said last mentioned shaft inward whereby it is permitted to automatically engage the stepped portion with the corresponding stepped portion of the first mentioned shaft.

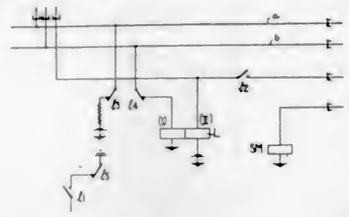
1,860,212. VARIABLE SPEED DRIVING MECHANISM FOR AUTOMATIC PRINTERS AND FINISHERS FOR SENSITIZED MATERIAL. HARRY HEWES SULLIVAN, Rochester, N. Y. Filed Oct. 21, 1931. Serial No. 570,227. 11 Claims. (Cl. 95—94.)



1. The combination with a sensitized material printing machine, a washer and a drier having wind-up mechanism, of a motor, a manually operable speed changer connecting the motor with the printing machine and varying the speed thereof, a second speed changer connected with the wind-up mechanism and actuated by the motor, and means actuated by sensitized material passing through the washer for automatically controlling said second speed changer for automatically varying the speed of the wind-up mechanism independently of the speed of the printing machine to take up slack in the sensitized material and also to prevent excessive strain on the same.

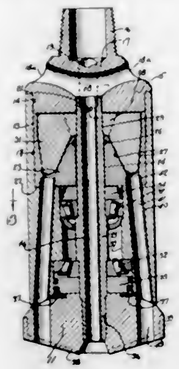
1,860,213. TELEPHONE SYSTEM. DAVID ADAM CHRISTIAN, London, England, assignor to Siemens Brothers & Company Limited, London, England. Filed May 22, 1930, Serial No. 454,712, and in Great Britain May 31, 1929. 11 Claims. (Cl. 179—27.)

1. In an automatic telephone system, a sub-exchange, a link circuit, a common controlling circuit, means for temporarily associating said circuits, a plurality of trunk lines extending to a main exchange, means controlled by the association of said circuits for operating said link circuit to find an idle one of said trunk lines, a register, means for setting said register in accordance with re-



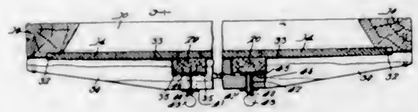
ceived impulses and for simultaneously repeating said impulses over said trunk line, and means for releasing said trunk line when the setting of said register determines that the call is for a subscriber in said sub-exchange.

1,860,214. HYDRAULIC ROTARY DRILLING BIT. MORRIS C. YEAMAN, Ponca City, Okla. Filed Mar. 7, 1931. Serial No. 520,893. 8 Claims. (Cl. 255—4.)



1. In a hydraulic rotary drilling bit of the character described, a cylindrical bit body, a tubular shaft journalled therethrough and constituting an upward exhaust for motive fluid, a rotary impeller fixed to the upper end of the shaft within the bit body, and a cutter head fixed to the lower end of the shaft exteriorly of the body.

1,860,215. LEVELING DEVICE FOR POOL AND BILLIARD TABLES. FRANKLIN W. YOUNG, Winchendon, Mass., assignor to Mason & Parker Manufacturing Company, Winchendon, Mass., a Trust Association of Massachusetts. Filed Mar. 25, 1931. Serial No. 525,185. 4 Claims. (Cl. 273—3.)



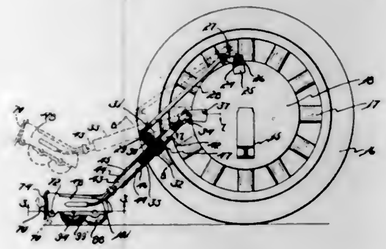
1. A pool or billiard table comprising an enclosing frame, a bed having its edges supported in said frame, cross braces extending under said bed and secured at their ends to portions of said enclosing frame, and means on said cross braces for selectively raising or lowering said bed relative to said cross braces in a plurality of different areas.

1,860,216. BALANCED MOTOR VEHICLE WHEEL. CHARLES S. ASH, Royal Oak, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Mar. 27, 1924. Serial No. 702,208. 1 Claim. (Cl. 301—5.)



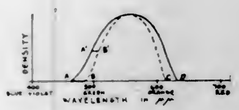
A wheel for motor vehicles comprising two unbalanced units, one mounted upon the other with the unbalanced weight of one unit in opposed relation to the unbalanced weight of the other unit, the inner of said units being offset laterally of its axis of rotation to unbalance said unit.

1,860,217. ROAD CLEARANCE DEVICE. EMANUEL AZOPARDI, Detroit, Mich. Filed Aug. 27, 1930. Serial No. 478,014. 2 Claims. (Cl. 280—160.)



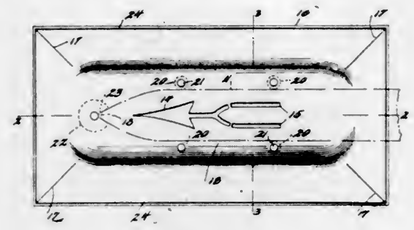
1. In a device of the class described adapted for use with a vehicle wheel capable of angular turning, supporting members projecting forwardly of and downwardly from said vehicle wheel; a housing supported on and movable relatively to said supporting members; a sweeping element in said housing; and yieldable means for resisting relative movement of said housing and said supporting members.

1,860,218. COLOR PHOTOGRAPHY. THOMAS THORNE BAKER, Hatch End, England, assignor to Harold Wade, London, England. Filed Mar. 7, 1929, Serial No. 345,247, and in Great Britain Aug. 8, 1928. 7 Claims. (Cl. 95—2.)



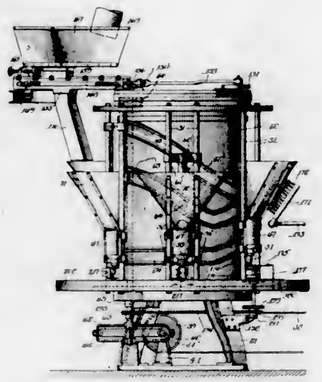
1. A method for the production of multicolor screen cinematograph films which consists in recording a master picture on a film associated with a weakly colored screen having elements which transmit overlapping spectral bands, treating the photographic image on the master film with a reducer capable of preferentially attacking the low densities, reintensifying the image, and printing therefrom on to a copying film of the color screen type.

1,860,219. STENCIL. EARL M. BARDEN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 18, 1930. Serial No. 429,384. 15 Claims. (Cl. 101—127.)



1. A stencil for use on raised surfaces comprising a resilient sheet having a design perforated therein and means on said sheet to engage the edges of said surface to position the sheet.

1,860,220. MEAT STUFFING MACHINE. WALTER BAUER, Chicago, Ill., assignor to Libby, McNeill & Libby, Chicago, Ill., a Corporation of Maine. Filed Mar. 9, 1928. Serial No. 260,292. 6 Claims. (Cl. 226—96.)

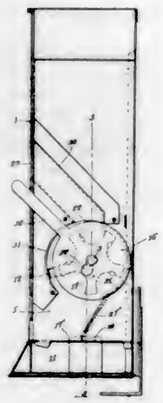


1. In a device of the character described the combination of a movable frame carrying a plurality of stuffing units, said units moving in a predetermined path, and a stationary measuring device having an outlet above the path of said units, means deriving reciprocating motion in driving connection with said movable frame and connected to said measuring device, said measuring device being adjustable to vary the charge fed to each unit, and said means being adjustable to vary the time at which the measured charges are fed to said units.

1,860,221. COIN CONTROLLED MECHANISM. WILLIAM B. BETTS, Binghamton, N. Y. Filed May 7, 1931. Serial No. 535,768. 4 Claims. (Cl. 191—1.)

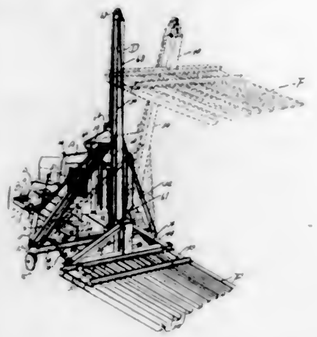
1. In a coin controlled mechanism, the combination with a support provided with a slot and a shaft mounted in and projecting outwardly from said support, said slot having a beveled wall, of a coin carrier mounted on the projecting portion of said shaft and bodily moving therewith, controlling means for said shaft, said carrier opposing said support and provided with a series of coin receiving pockets, one of said pockets having its edge beveled to provide for the discharge of a coin therefrom through said slot, at a point in advance from which the

coins are discharged from the other of said pockets, when the beveled edge of such pocket registers with the beveled wall of said slot, said slot being of rectangular contour and inclining downwardly from its rear toward its outer



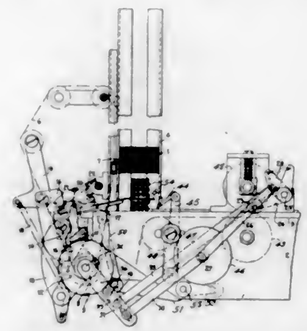
end and having the bevel of its wall inclining away from the coin carrier to form a continuation of the beveled edge of the pocket when the latter registers with said beveled wall portion of the slot.

1,860,222. HAYSTACKER. GLEN BILLINGS, Cody, Wyo. Filed Oct. 17, 1929. Serial No. 400,356. 1 Claim. (Cl. 214—113.)



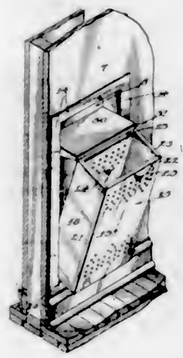
In a haystacking device the combination of a frame, an upright frame swingably hinged at its lower end to the first mentioned frame, an elevator slidable along the upright frame, a flexible cable connected with said elevator, means training said cable from its connection with the elevator upwardly along the upright frame and in a slidable relation over the top of the upright frame and thence downwardly along the upright frame to a point intermediate the ends of the upright frame and there having a slidable connection thereon, a pulley mounted on a fixed axis upon said frame appreciably spaced from the upright frame and receiving said cable thereover from said last mentioned slidable connection, said cable having another slidable connection upon said upright frame below said pulley and being trained thereover from said pulley, said cable at its free end having means to operate the same so that the elevator may be moved up or down and the upright frame swung forwardly and rearwardly.

1,860,223. DELIVERY APPARATUS FOR STACKING CARDS OR THE LIKE IN COUNTED BATCHES. ARTHUR BINGHAM, Deptford, London, England. Filed Nov. 14, 1928, Serial No. 319,426, and in Great Britain Dec. 28, 1927. 14 Claims. (Cl. 93—93.)



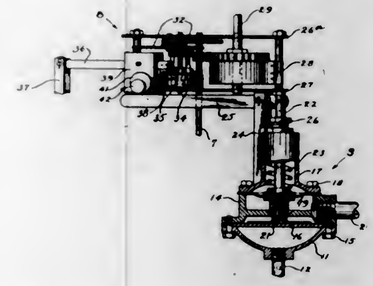
1. In apparatus of the class described, the combination with a stacker, of means for feeding blanks upwardly, one at a time, into said stacker, and mechanism operable after a predetermined number of blanks have been fed for separating the blanks so fed from subsequently fed blanks, said mechanism including means adapted to be interposed between the blanks in the stacker and moving continuously with the blanks.

1,860,224. LAUNDRY RECEPTACLE AND THE LIKE. JOHN BODE, Chicago, Ill. Filed Apr. 3, 1930. Serial No. 441,263. 3 Claims. (Cl. 220—18.)



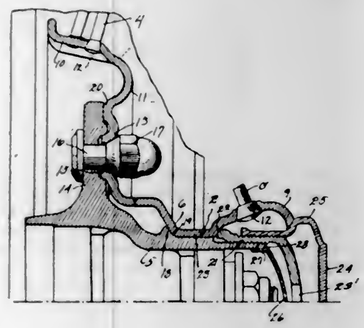
3. In a device of the class described, the combination of a housing comprising a box like structure open on its front face and closed on its back, top, bottom and sides, and provided with an outwardly extending encircling flange adapted to seat at the plaster line of the wall, and a receptacle for clothes and the like working, in said housing, said receptacle comprising a box like structure including a back, bottom and sides and being open on its entire front face, together with a unitary front wall slidably connected to the front edges of the sides aforesaid to permit up and down sliding of said front wall with respect to the receptacle to expose the bottom portion of the front face and give access thereto, and a hinged connection between the bottom of the receptacle and the front edge of the bottom of the housing permitting the receptacle to be tilted forwardly with respect to the housing, substantially as described.

1,860,225. ACETYLENE GENERATING DEVICE. ROY A. BOLEY, Kenmore, N. Y., assignor to Oxweld Acetylene Company, a Corporation of West Virginia. Filed Sept. 12, 1928. Serial No. 305,587. 2 Claims. (Cl. 48—53.3.)



1. In an acetylene generating device, having a water container, carbide storage hopper and feeding means, a regulating device comprising a pressure responsive member, a brake lever and brake shoe cooperating with the feeding means, means for the actuation thereof by the pressure responsive member, and an adjustment device cooperating therebetween for adjustment of the generation pressure, comprising a threaded nut for changing the lift of the brake shoe member at a given generation pressure.

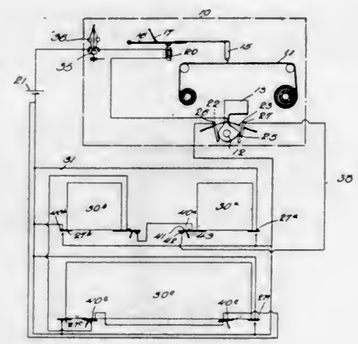
1,860,226. VEHICLE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Jan. 6, 1927. Serial No. 159,364. 4 Claims. (Cl. 301—9.)



1. In a vehicle wheel, the combination with an inner hub member, an outer hub member, means threaded upon the inner hub member and projecting within the outer hub member and engaging the latter for securing said members together, additional means also projecting into the outer hub and threaded upon the first-named means and engaging the outer hub member for securing the first-named means against movement.

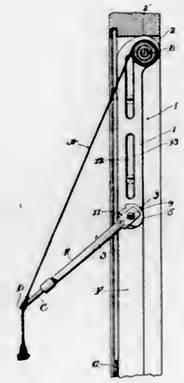
1,860,227. SYSTEM FOR RECORDING. JAMES B. BOWERMAN, Baltimore, Md. Filed Mar. 9, 1931. Serial No. 521,355. 6 Claims. (Cl. 234—1.5.)

1. In a taximeter having a traveling tape and a movable arm, the combination of a stylus operatively related to said tape, and electrical means operative to bring the stylus into record making relation with said tape, and including an electrical circuit having arranged therein a circuit



opening means responsive for actuation to the weight of a fare and a circuit controlling means operatively related to said movable arm.

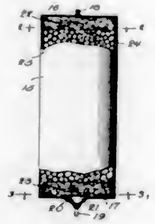
1,860,228. COMBINED SUPPORTING AND RATCHET BRACKET. WILLIAM A. BRACKEN, Eldorado, Kans., assignor of one-half to William B. Jones, Augusta, Kans. Filed Feb. 7, 1928. Serial No. 252,621. 1 Claim. (Cl. 156—44.)



A combined supporting and ratchet bracket for spring controlled rolling awning structures comprising an elongated, flat, narrow, slotted body for connection vertically to the side wall of a window opening and of a length and width less than that of said wall, said body having a rearwardly directed, upwardly inclined apertured extension at one end for suspendingly supporting a pintle of the spring controlled winding element of the awning structure, a circular enlargement projecting from the outer face of said body at the other end of the latter, said enlargement having the forward portion of its edge provided with a set of ratchet teeth disposed upon an arc, said body having at said other end a cavity opening at the inner

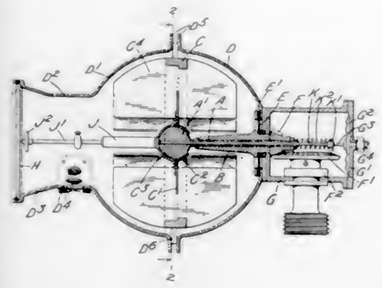
face thereof, and said enlargement having an axial opening communicating with said cavity, said opening and cavity providing respectively for the reception of a pivot for the awning structure and a holdfast means for the pivot.

1,860,229. PRESSURE FILTER. SOUTHWICK W. BRIGGS, Glenmont, Md. Filed Dec. 31, 1930. Serial No. 505,913. 9 Claims. (Cl. 210—131.)



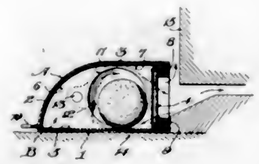
9. A pressure oil filter, comprising a casing, a body of filtering material in the casing, and an adhesive coating impervious to the liquid being filtered disposed between the inner wall of the casing and the body of filtering material, the outer portion of the body of filtering material being partly embedded in said adhesive coating.

1,860,230. DEFLECTION OR DEVIATION INDICATOR. JOHN POLLOCK BROWN, New Malden, England. Filed Sept. 20, 1930, Serial No. 483,360, and in Great Britain Oct. 17, 1929. 15 Claims. (Cl. 33—204.)



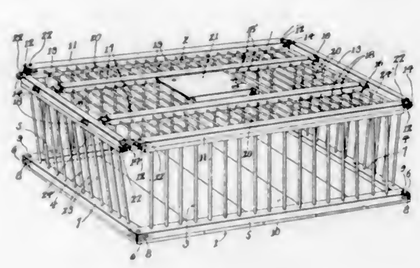
1. A deflection or deviation indicator including in combination a rotatable spindle, a rotor substantially balanced about its centre of rotation, bearing members having interengaging curved bearing surfaces respectively carried by the spindle and the rotor, the curvature of the surface of each of these bearing members being such as to coincide with the surface of a sphere whose centre lies on the spindle axis, rotation being transmitted from the spindle to the rotor by friction between the curved bearing surfaces, and means for causing slip between the engaging bearing surfaces such that in the event of angular displacement of the spindle the rotor will not be constrained to maintain its axis coincident with the spindle axis but the rotor axis will be able to oscillate about the bearing centre.

1,860,231. METHOD OF AND DEVICE FOR EXCLUDING MOTHS OR OTHER INSECTS FROM CLOSETS. ELLIOTT R. CARPENTER, Cotuit, Mass. Filed Mar. 10, 1931. Serial No. 521,594. 7 Claims. (Cl. 299—24.)



1. The herein described method of excluding moths or other insects from closets which consists in maintaining the space or crack between the bottom edge of the door and the floor of the closet sealed with a gas that is obnoxious to said insects.

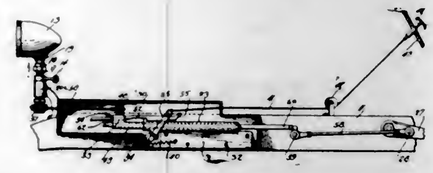
1,860,232. METHOD OF ASSEMBLING POULTRY COOP'S. OSE F. CARPENTER, Brightwood, Va. Filed July 15, 1931. Serial No. 550,973. 8 Claims. (Cl. 29—84.)



1. In a method of assembling a poultry coop of that type including a bottom having its upper face provided with end interengaging side and end rails and a top having end interengaging side and end rails detachably connected together, said rails having spaced means for receiving wall forming rods, driving wall forming rods into said means of the rails on said bottom to form the side and end walls of the coop, disconnecting the end rails of the top from the side rails of the latter, driving one of the top side rails upon the rods forming one side wall, driving the other top side rail upon the rods forming the other side wall, then successively driving the top end rails upon the rods forming the end walls of the coop while such rods are sprung outwardly and then successively connecting the end top rails to the ends of the top side rails.

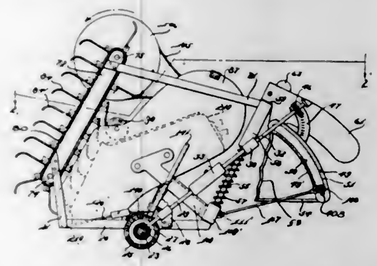
1,860,233. DIRIGIBLE HEADLIGHT FOR MOTOR VEHICLES. BIAGIS CASTIGLIA, Bronx, N. Y. Filed Dec. 11, 1930. Serial No. 501,632. 6 Claims. (Cl. 240—61.5.)

1. In dirigible headlight mechanism for motor vehicles, a pair of connected headlights carried by journalled spindles, a spring associated with one spindle for turning the headlights in one direction and latch devices interposed between the spring bearing spindle and vehicle steering mechanism for turning the headlights in the opposite direction upon movement of the steering mechanism, the latch devices including a sliding member carrying a



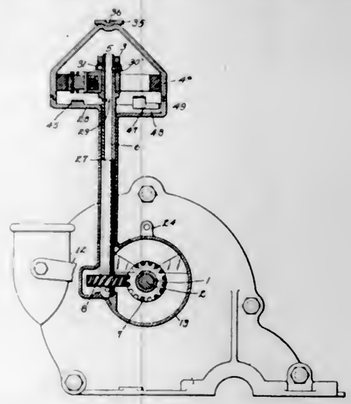
pivoted latch arm and a slide rod engageable with the latch arm for locking the headlights to the steering mechanism.

1,860,234. HAIR CLIPPING MACHINE. THEODORE CHULANOVSKI, Detroit, Mich. Filed Jan. 7, 1929. Serial No. 330,872. 11 Claims. (Cl. 30—1.)



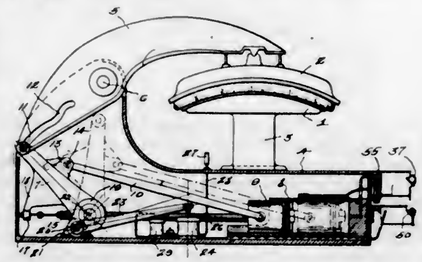
1. In a machine of the class described: a clipping mechanism; a frame for supporting said mechanism; and guide plates at opposite sides of said clipping mechanism projecting above, rearwardly and forwardly thereof.

1,860,235. TIMING ASSEMBLY FOR AUTOMOBILES. SAMUEL HERBERT CLARKE, Baltimore, Md. Filed Nov. 21, 1923. Serial No. 676,125. 8 Claims. (Cl. 200—21.)



1. A timer assembly including a shaft extension provided with means for securing it to the cam or timer shaft of an automobile, upper and lower casings having a connecting bearing sleeve, the lower casing being mounted on the said shaft extension, a vertical shaft mounted in the bearing sleeve, gearing connecting the vertical shaft with the said shaft extension and including a gear having a rotary adjustment on the extension shaft for adjusting the timer, a commutator mounted on the upper casing and forming a cap or cover for the same, and a rotary brush carried by the vertical shaft and cooperating with the commutator, a clamp having spaced portions for engaging a lug of the commutator for holding the same against relative rotary movement, and means carried by the upper casing and engaging the said cap or cover for securing the commutator in the same.

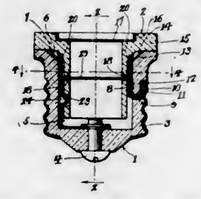
1,860,236. PRESSING MACHINE. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 21, 1928. Serial No. 301,005. 16 Claims. (Cl. 68—9.)



2. A pressing machine comprising cooperating pressing elements, one of which is movable toward and from the other, actuating mechanism for the movable element including two parts, one being a lever carrying the movposition of the same and the initial position of said lever, to move it, one of said parts having a cam and the other a follower engaging the cam, the cam being shaped to effect the opening and closing of the press, means connected to the said second part for shifting the initial position of the same and the initial position of said lever, and an actuator connected to the second part.

3. A pressing machine including in combination cooperative pressing elements, one of which is movable toward and from the other; actuating mechanism for the movable pressing element including a lever carrying a movable element; a second lever arranged at an angle to the first lever; a cam on one of said levers; a cam follower on the other of said levers coacting with the cam; a shiftable pivotal connection for the second lever; means for shifting said pivotal connection to vary the starting position of the second lever and thereby adjust the pressure between the elements; and an actuator connected to the second lever.

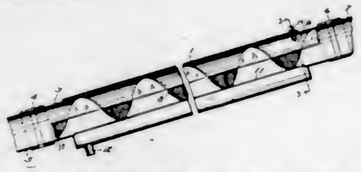
1,860,237. RENEWABLE FUSE PLUG. RICHARD M. DAVIS, West Pittston, Pa. Filed July 18, 1931. Serial No. 551,770. 3 Claims. (Cl. 200—130.)



1. A fuse plug comprising, a hollow plug section having a contact band encircling the same and a contact stud extending thereinto, oppositely disposed contact strips extending lengthwise of the inner face of the plug section and respectively engaging the stud and band, said strips being resilient and having an inherent tendency to spring

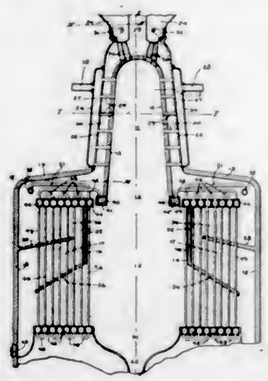
inwardly, a hollow cap section for insertion within the plug section and having diametrically opposed, circumferentially extending slots in the wall thereof, and a fuse element extending diametrically of said cap section through said slots and having the end portions thereof arranged exteriorly of said wall and bent in a direction towards the outer end of the cap section for engagement with said contact strips.

1,860,238. SPIRAL GAS AND OIL SEPARATOR. ROBERT DEMING, Cincinnati, Ohio. Filed Apr. 11, 1929, Serial No. 354,276. Renewed Oct. 21, 1931. 7 Claims. (Cl. 183—111.)



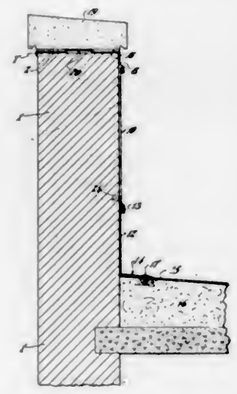
1. A device for separating liquids from gases comprising an elongated tubular casing, a conduit through which a mixture of gas and liquid flows, said conduit extending longitudinally through the casing and being in communication with the interior of the casing substantially throughout the length thereof, means in the portion of the conduit communicating with the casing for imparting a whirling motion to the stream of gas and liquid flowing through the conduit, said means being spaced outwardly from the axis of the conduit and said conduit being unobstructed inwardly of said means so that an open axial passageway through the separator is provided, an outlet for discharging liquid from said casing, and means associated with the outlet for preventing escape of gas with the liquid.

1,860,239. POWDERED FUEL FURNACE. ROBERT A. FORESMAN, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 10, 1924. Serial No. 705,670. 14 Claims. (Cl. 122—235.)



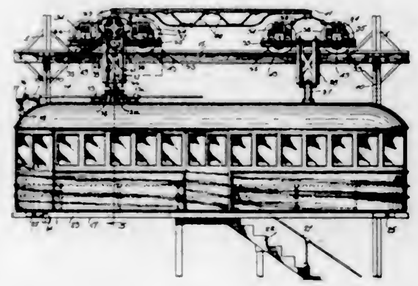
1. In a furnace for burning powdered fuel, the combination of refractory walls defining a combustion space, side walls arranged exteriorly of the refractory walls and forming with said refractory walls flue gas off-take means, other wall members arranged exteriorly of the side walls and forming air boxes in cooperation with said side walls, said air boxes being in heat exchange relation with the flue gas off-take means, and a plurality of conduits extending through the flue gas off-take means from the air boxes to the combustion space for further abstracting heat from the escaping flue gases.

1,860,240. FLASHING. EDMUND H. FRIEDRICH, Holyoke, Mass., assignor to The Cheney Company, Winchester, Mass., a Corporation of Massachusetts. Filed Nov. 6, 1929. Serial No. 405,180. 8 Claims. (Cl. 72—127.)



5. A wall flashing comprising a strip of sheet metal formed with a longitudinal and centrally disposed rib, said rib being formed with a flat top portion connected to said flashing by side walls which form acute angles at their intersections with said flashing and said flat top portion.

1,860,241. ELEVATED ELECTRIC RAILWAY. PAUL GALKO, Detroit, Mich. Filed Sept. 19, 1929. Serial No. 393,744. 3 Claims. (Cl. 104—93.)

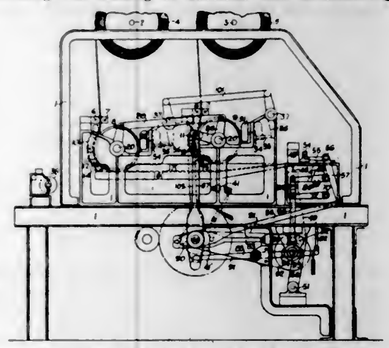


1. In an elevated electric railway, ground anchored posts, bracket arms on the posts supporting a monorail, loading platforms supported on the posts and having stairways leading therefrom to the ground and guard rails set inwardly of the edges of the platform, motor driven cars adapted for mounting on the rails, and means on the upper side of the loading platform outwardly of the guard rails adapted to be engaged by the cars to stabilize the cars during loading and unloading of passengers.

1,860,242. MANUFACTURE OF LINOLEUM. ALFRED ARTHUR GODFREY, London, England, assignor to Linoleum Manufacturing Company Limited, London, England, a Company of Great Britain. Filed Dec. 3, 1929, Serial No. 411,298, and in Great Britain Dec. 12, 1928. 17 Claims. (Cl. 154—24.)

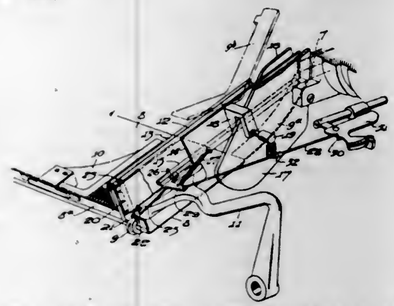
1. In a machine for manufacturing linoleum and the like with a patterned surface, the combination of means

for feeding a plurality of sections each constituting an element of the pattern, selector means for automatically controlling the feeding of sections and determining the



movements of said sections, means for feeding a backing to which the sections are fed, and means for consolidating said sections with the backing.

1,860,243. GALLEY FOR LINE CASTING MACHINES. EDMUND M. GOODBODY, Bellerose, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 18, 1930, Serial No. 503,287, and in Germany Jan. 18, 1930. 12 Claims. (Cl. 199—61.)



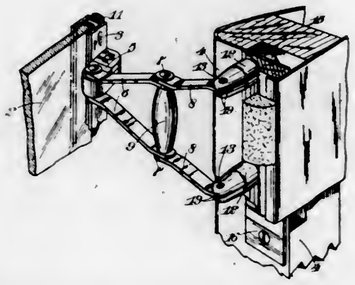
1. In a galley for line casting machines, a galley entrance embodying means for sustaining a slug in standing position on one of its ends while traveling therein, and means for turning the slug edgewise to bring its type face uppermost.

1,860,244. PAPER BAG. HERBERT A. GRANT, Newark, N. J., assignor to Miller Tompkins & Company, New York, N. Y., a Corporation of New York. Filed Apr. 16, 1930. Serial No. 444,786. 3 Claims. (Cl. 229—55.)



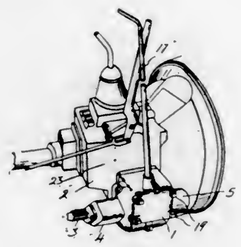
1. A multi-ply bag having as one ply a paper base with the characteristics of a parchmented kraft paper and which is coated with wax and printing ink.

1,860,245. WINDOW. EDWARD ARTHUR GREEN, Coventry, England, assignor to Humber Limited, Coventry, England, a British Company. Filed Jan. 28, 1931, Serial No. 511,865, and in Great Britain Feb. 26, 1930. 1 Claim. (Cl. 292—263.)



A combined fastener, operator and support for a window hinged at one edge in a supporting frame, comprising a pair of toggle links having side portions converging from end to end of the toggle links to provide a triangular brace structure when the toggle links are open, means for pivotally connecting the narrower end of the toggle link structure to the free edge portion of a window, means for pivotally connecting the wider end of the triangular structure to the inner edge portion of the frame, said toggle links adapted to be folded in closed position for drawing the window into the frame to the desired extent, and yieldable means for holding the toggle links in various positions of adjustment for supporting and holding the window in various open positions.

1,860,246. POWER TAKE OFF FOR FORD TRUCKS. JOSEPH E. HORSTE, Detroit, Mich., assignor to Detroit Harvester Company, Detroit, Mich., a Corporation of Michigan. Filed May 12, 1930. Serial No. 451,781. 15 Claims. (Cl. 74—7.)

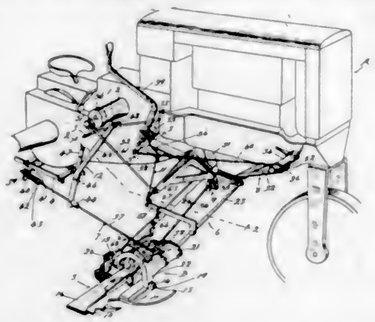


6. A power take-off attachment for trucks having a transmission housing, and a transmission in the housing including a countershaft gear, comprising a casing attachable to the housing, a shaft carried by the casing, and a common means for securing the casing to the housing and for holding the shaft stationary in the casing.

1,860,247. MOWER ATTACHMENT FOR TRACTORS. JOSEPH E. HORSTE, Detroit, Mich., assignor to Detroit Harvester Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 2, 1930. Serial No. 479,284. 11 Claims. (Cl. 56—25.)

1. The combination with a motor driven vehicle, of a mower attachment therefor including a mower having a ground engaging shoe, a yoke carried by said shoe, a mower bar pivotally mounted on said shoe, a bracket aus-

pended from the vehicle, a shaft carried by the bracket, a pair of bars terminally connected to said yoke and

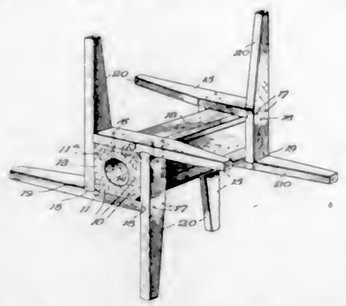


shaft, and means for swinging the mower bar, yoke and ground engaging shoe relative to the ground, including parts carried respectively by the bars aforesaid.

1,860,248. PROCESS FOR TREATING PETROLEUM EMULSIONS. JULIUS HYMAN and ARTHUR F. SCHLANDT, Chicago, Ill., assignors to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Aug. 17, 1929. Serial No. 386,734. 1 Claim. (Cl. 196—4.)

In the treatment of oil-field emulsion to recover the oil content thereof, the steps which comprise adding to such an emulsion a treating agent in the form of ammonium sulfide, and heating the resulting mixture for a period of time sufficient to break the emulsion into its component parts.

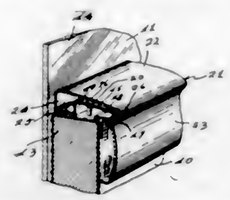
1,860,249. ROPE AND TWINE REEL. ALEXANDER F. JACKSON, Mount Vernon, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Dec. 6, 1929. Serial No. 412,201. 6 Claims. (Cl. 242—77.)



1. In a reel for rope, twine and the like, a core having a plurality of flat side surfaces at each end of its periphery and a central bore extending longitudinally thereof and a plurality of arms at each end, one arm being rigidly attached to each of said flat side surfaces on the periphery of said core.

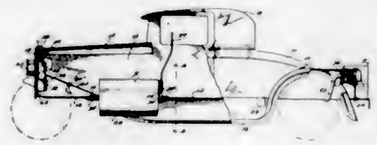
1,860,250. GARNISH MOLDING. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 22, 1929. Serial No. 357,149. 3 Claims. (Cl. 296—44.)

1. In a molding assembly, an anchorage strip having a rounded shoulder at one edge and a substantially perpendicular shoulder at the other edge, a molding strip comprising a pair of substantially right angularly arranged sections with a return-bent portion at the juncture thereof, and an inwardly extending flange on one



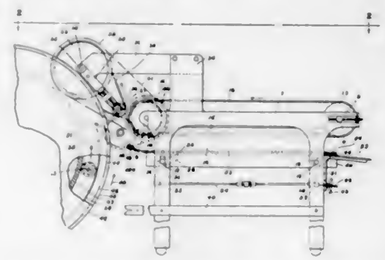
edge, said molding being adapted for snap-on engagement with said anchorage strip with the edge of said flange engaging said perpendicular shoulder and said return-bent portion embracing said rounded shoulder.

1,860,251. LIGHTING SYSTEM FOR TOY AUTOMOBILES. HARRY T. KINGSBURY, Keene, N. H. Filed July 28, 1931. Serial No. 553,695. 12 Claims. (Cl. 46—48.)



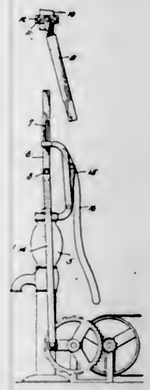
1. In a toy vehicle, a chassis assembly, a body assembly, a light support rigid with the chassis assembly, a light bulb in said support, a conductor member engaging the central terminal of said light bulb and including a member extending transversely of the vehicle, an insulating sleeve on said member, a battery having one of its terminals in conductive relationship, with the chassis and body and the other terminal in conductive relationship with said conductor member, said body and chassis engaging said sleeve and holding said conductor member in position while insulated from said body and chassis.

1,860,252. DOUGH WORKING DEVICE. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed May 9, 1928, Serial No. 276,304. Divided and this application filed Sept. 25, 1931. Serial No. 565,105. 1 Claim. (Cl. 107—9.)



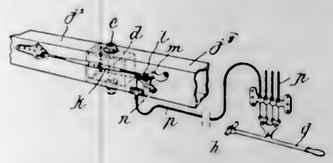
In a device of the class described the combination with a primary loaf molder comprising a movable drum and a pressure board spaced from the drum, whereby masses of dough may be given the shape of a loaf, of an auxiliary molder having a molding passage for further operating upon the loaf, a pressure plate inclined downwardly and outwardly from the primary to the auxiliary molder, and driven means associated with the auxiliary molder and comprising a belt with one run thereof projecting toward the primary molder drum in substantial parallelism with the pressure plate for continuing the shaping of the loaf and effecting positive removal of the loaf from the primary molder drum, said belt run having a small diameter roller at one extremity thereof located sufficiently close to the molding passage of the auxiliary molder so as to maintain rolling movement of the loaves and positive insertion thereof into the auxiliary molder.

1,860,253. WINDMILL AND PUMP ROD COUPLING. WILLIAM M. LANSPA, David City, Nebr. Filed May 6, 1931. Serial No. 535,545. 1 Claim. (Cl. 287—58.)



A coupling for coupling a windmill rod and pump rod, said coupling comprising a sleeve, one wall of the sleeve extending an appreciable distance beyond the end of the sleeve, securing plates adapted to be secured to a windmill rod, means for pivotally connecting the extension to one of the securing plates, one wall of the sleeve adjacent to the opposite end of the sleeve being cut away to permit the sleeve to be positioned over a pump rod, means for securing the sleeve to the pump rod, said means including a pin and elongated opening in the pump rod.

1,860,254. AIRPLANE. PIERRE LATÉCOÈRE, Paris, France. Filed Dec. 11, 1930, Serial No. 501,706, and in Belgium Dec. 21, 1929. 9 Claims. (Cl. 244—31.)



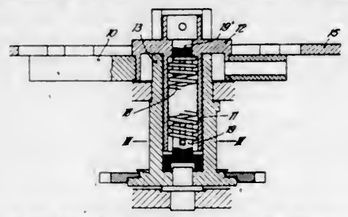
1. In a composite heavier-than-air machine provided with a central portion including a motor, and a pair of detachable wings, a compound assembly for detachably supporting said wings on said central portion comprising a first plurality of means connecting said wings to said central portion, said first plurality of means being operative to release said wings from said central portion, and a second plurality of means capable of retaining the wings in flight position when said first plurality of means has been operated to release the wings, each of said second plurality of means including a tie element extending from a wing to the central portion, and means for releasing said tie element.

1,860,255. BUDDING AND GRAFTING TAPE. PAIGE B. L'HOMMEDIEU, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Apr. 22, 1929. Serial No. 357,319. 2 Claims. (Cl. 47—7.)



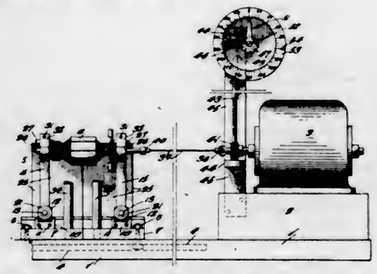
1. Sealing tape for budding and grafting purposes, comprising non-absorbent, close woven, flexible fabric, and a moisture and weatherproof, thin, viscous, pressure sensitive gum spread having healing and germicidal properties and embodying gum elastica combined with resins from *Picea excelsa, Pinus australis,* gum olibanum and wax, whereby the spread has a normal flow to convey said healing and germicidal bodies into intimate contact with individual cells.

1,860,256. MECHANICALLY OPERATED TIME FUSE FOR PROJECTILES. PAUL LIEBERGELD, Bad Thal, Germany. Filed Jan. 13, 1931, Serial No. 508,521, and in Germany Jan. 21, 1930. 5 Claims. (Cl. 102—86.)



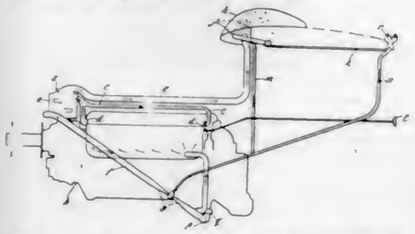
1. In a mechanically operated time fuse having a rotating release pointer for detonating control, a clockwork, a hollow center wheel spindle in driving connection with said clockwork and having an axially extending guide slot, a torsion spring adapted to act on the pointer in combination with said guide slot said spring being initially stressed to keep said pointer in close contact with the carrying walls of said guide slot.

1,860,257. METHOD OF AND APPARATUS FOR BALANCING ROTATABLE BODIES. JACOB LUNDGREN, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 30, 1927. Serial No. 209,492. 20 Claims. (Cl. 73—51.)



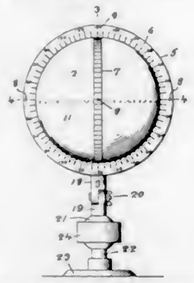
1. In a balancing machine, a vibratory bed for the specimen to be tested, consisting of a plurality of independent vibratory units, means to restrain the movement of each unit in one direction, said units being free to move in the opposite direction, and a compensator carried by each unit to compensate under centrifugal action on the specimen for unbalance in the axial plane of the specimen controlled by each unit.

1,860,258. COOLING SYSTEM OF INTERNAL COMBUSTION ENGINES. GERALD LYON, Harlington, Hounslow, CHARLES RICHARD FAIREY, Iver, and THOMAS MORGAN BARLOW, Wraydene, Burnham, England; said Lyon and said Barlow assignors to said Fairey. Filed Oct. 3, 1929, Serial No. 397,083, and in Great Britain Nov. 29, 1928. 3 Claims. (Cl. 123—174.)



1. In a cooling system for an internal combustion engine, a water jacket, a centrifugal separator positioned above said water jacket, pipes leading from said water jacket to said separator, said pipes having restricted portions directly adjacent said water jacket, a domed chamber above said water jacket, a vapor pipe connecting said separator and said domed chamber, a condenser connected to said domed chamber, a water pump for said water jacket, and water pipes leading from said separator and from said condenser to said pump, said pipes meeting before reaching said pump and having a restricted throat near said pump.

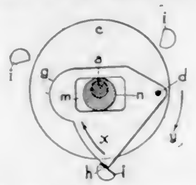
1,860,259. COMBINED INCLINOMETER AND COMPASS. JAMES E. MARSHALL, Amarillo, Tex. Filed Sept. 30, 1929. Serial No. 396,285. 1 Claim. (Cl. 33—215.)



A device of the class described comprising a spherical member having its rear half formed of metal and its front half of transparent material, an annular scale surrounding the inner part of the transparent portion, there being a second scale formed on the vertical central portion of the transparent part, a compass including a needle and a ring pivotally supported in the spherical member, whereby the compass will indicate the direction of travel and the inclination of a craft both longitudinally and transversely, the supporting means for the compass including upwardly and downwardly extending rods terminating adjacent the center of the spherical member, a bearing member at the center of the needle resting on the pointed end of the upwardly extending rod, said bearing member having a rounded upper end which is slidingly engaged by the lower end of the downwardly extending rod.

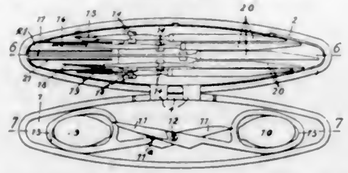
1,860,260. DRIVE CONTROL SYSTEM FOR CLOCKWORKS, METERS, AND THE LIKE. FRITZ MARTI, La Chaux-de-Fonds, Switzerland. Filed Feb. 10, 1931, Serial No. 517,061, and in Switzerland Feb. 28, 1930. 3 Claims. (Cl. 58—48.)

1. In a drive control system for clockworks, meters and the like, the combination of a driving member, a driven member, intermediate tensioning means arranged to operatively connect the driving member to the driven member, a detent device to lock periodically the driving member, while the energized tensioning means control the driven member, said detent device comprising, on the one hand, a lever associated to the driving member and provided with a projection and an opening, and on the other hand, a certain number of stops in alternate cooperation with said projection of the detent lever to lock same



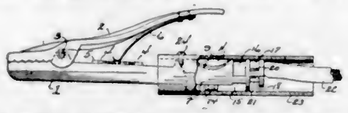
periodically, and a releasing eccentric member secured to the driven member and engaged in the opening of the detent lever, to release the detent lever after a predetermined interval of time in order to permit the driving member thus freed to advance, while reenergizing the tensioning means, to a new locking position determined by cooperation of said projection of the detent lever with the next stop, after which control of the driven member is again left to the reenergized tensioning means.

1,860,261. MANICURE SET FOR LADIES' HAND BAGS. SALOMON ROBERT HIRMANN, St. Leu-la-Foret, France. Filed Dec. 22, 1930, Serial No. 504,097, and in France Feb. 4, 1930. 3 Claims. (Cl. 132—73.)



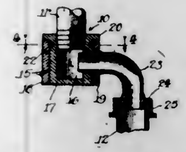
1. A manicure set adapted to be placed in a lady's hand bag, comprising a box body, a skin for polishing the nails, fitted on this box body, a removable cap adapted to cover and protect the skin, a hollow cover for closing the said box and constituting with the latter the polisher of the manicure set, two cups secured on the bottom of the box body and adapted to contain pastes for treating the nails and for holding nail scissors in open position in the said box body, a lid closing each of the said cups, means for securing and holding in position other manicure tools in the cover, and means for facilitating the removal of these tools.

1,860,262. ELECTRODE ELECTRIC WELDING DEVICE. JESSE L. NIEMANN, Columbus, Ohio. Filed Aug. 5, 1931. Serial No. 555,355. 2 Claims. (Cl. 219—8.)



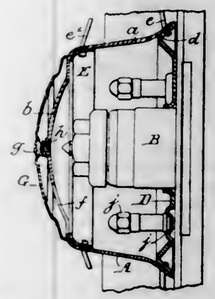
1. An electric welding device comprising a main electrode member provided at one end with a bore adapted to receive a cable and the insulation thereof, a nut passing through the wall of said member and entering said bore, a bolt passing through the opposite wall and screwed into the nut, and a clamping plate movably mounted upon said member and adapted to enter the bore thereof and means for drawing said plate in contact with the cable and the insulation thereof.

1,860,263. BAR METER CONNECTION. THOMAS F. NOONAN, Chicago, Ill., assignor to The Lattimer-Stevens Company, Columbus, Ohio, a Corporation of Ohio. Filed June 6, 1928. Serial No. 283,439. 7 Claims. (Cl. 285—3.)



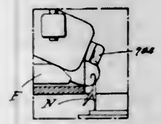
1. A meter connection comprising a connecting bar formed with two spaced chambered retaining members, two swivel heads one rotatably secured in each retaining member, and an L-shaped swivel connection secured to the side of and communicating with the interior of each swivel head, said members being slotted to permit adjustment of said connections.

1,860,264. VEHICLE WHEEL. ALFRED GEORGE BEECH OWEN, Sutton-Coldfield, and ROBERT WILFORD DOWNS, Rushall, Walsall, England. Filed Sept. 23, 1931, Serial No. 564,646, and in Great Britain May 10, 1930. 4 Claims. (Cl. 301—9.)



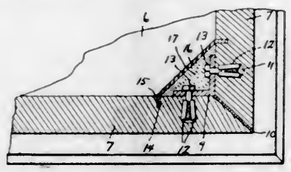
1. A detachable wheel hub comprising a casing adapted to be secured to a fixed hub having a circular series of attaching studs, a ring disc rigidly attached to the inner end of the casing and extending radially inwardly therefrom, having holes therethrough through which said securing studs are adapted to pass, a wall rigid with said casing and bridging across the end thereof over the end of said hub and axially spaced from the outer end thereof, said wall having apertures in axial alignment with said studs, through which apertures a suitable implement can be projected to engage securing nuts on said studs.

1,860,265. YARN CUTTER AND CLAMP FOR KNITTING MACHINES AND METHOD OF OPERATING SAME. ALBERT E. PAGE, Brooklyn, N. Y., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed July 19, 1927. Serial No. 206,986. 16 Claims. (Cl. 66—134.)



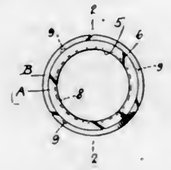
1. A method of inserting yarn for knitting which comprises first lowering toward its feeding point a yarn finger containing the yarn and then offering that yarn to the needles by movement of a clamp holding the yarn.

1,860,266. BURIAL VAULT. WINNIE L. POTTS and MORTON E. POTTS, Parsons, Kans. Filed Sept. 8, 1930. Serial No. 480,585. 1 Claim. (Cl. 72—7.)



In a structure of the class described, a pair of complemental walls, an angle plate associated with the meeting ends thereof, said walls having sockets, anchoring elements in said sockets, bolts passing through the flanges of said angle plates attached to the anchoring elements, said walls having vertical grooves, a corner plate having flanges extending into said grooves, and concrete packed between the angle plate and cornice plate for maintaining all of said parts in assembled connected relationship.

1,860,267. PACKING RING. WALTER R. SMITTLE, St. Louis, Mo. Filed Feb. 18, 1931. Serial No. 516,816. 1 Claim. (Cl. 288—3.)



A triangular shaped packing member composed of inner and outer rings, the inner ring having side walls sloping toward each other from the inner circumference and a flat outer circumference, the outer ring being of triangular shape in cross section and seated on the flat outer circumference of the inner ring, the two outer sides of the outer ring forming continuations of the sloping sides of the inner ring, each ring being formed of a number of sections, the sections having bevelled ends and the inner ring having an inner circumferential groove therein and an expanding spring located in the groove and formed of a number of convolutions located in the groove and arranged one upon another circumferentially, the sections of one ring having recesses therein and the sections of said other ring having projections for entering the recesses to prevent circumferential movement of one ring with relation to the other.

1,860,268. CASING SEAL FOR WELLS. MARK G. STEWART, Shreveport, La., assignor to Pelican Well Tool and Supply Company, Shreveport, La., a Corporation of Louisiana. Filed June 2, 1928. Serial No. 282,451. 1 Claim. (Cl. 166—10.)

A seal, for well casings, comprising a plurality of rings of plastic substance adapted to be placed in superposed relation to each other between the adjacent walls of two telescoping sections of a well casing, each ring having one end internally beveled to a predetermined angle and its opposite end externally beveled to a predetermined angle relatively less acute than the angle of the internally beveled end, the internally beveled end of one ring resting against the externally beveled end of the next adjacent

ring, providing a space between said beveled faces, said rings being adapted to be compressed longitudinally, whereby the wedge action of the externally beveled ends acting within to flare the internally beveled ends pro-



gressively from the thin weak edge thereby commencing and facilitating uniform radial flowing of the pastic rings into a homogeneous plastic mass completely filling, adapting itself to, and sealing the spaces between the said adjacent walls of the said telescoping sections of the well casing.

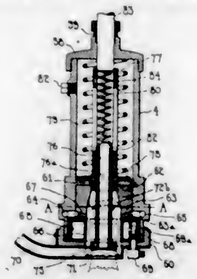
1,860,269. POWER BELT. ROBERT J. STOKES, Princeton Township, Mercer County, N. J., assignor to Thermoid Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed Sept. 30, 1930. Serial No. 485,511. 2 Claims. (Cl. 74—62.)



1. A power belt having a series of spaced apertures inclined to the direction of movement of said belt.

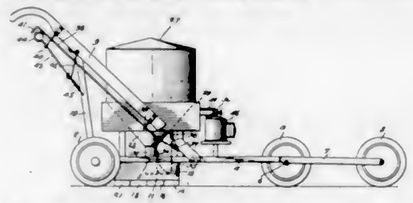
1,860,270. BOTTLING OF LIQUIDS. ERNEST BLAKELOCK THUBRON, Napier, New Zealand. Filed Oct. 22, 1926, Serial No. 143,438, and in New Zealand Nov. 14, 1925. 2 Claims. (Cl. 226—77.)

2. Apparatus for bottling liquids comprising a bottling head, means for placing the interior of said bottling head under vacuum, means for passing a liquid through said head into a bottle placed therein, means sealing said head and bottle opening from the atmosphere, a piston operable in said head to affix a closure to said bottle while said sealing means is operative, a piston rod for said piston having a vacuum passage therein, and spring-actuated projections provided in the head for retaining a



bottle closure in raised position during the period of evacuation of air from said bottle and the filling of the bottle with liquid.

1,860,271. MARKING MACHINE. CLARENCE O. WENNING, Indianapolis, Ind. Filed July 7, 1930. Serial No. 466,320. 3 Claims. (Cl. 91—25.)



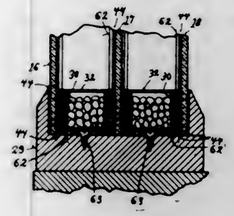
1. A marking machine including a portable structure, a box-like applicator movable therewith and relative thereto, said applicator having articulated side walls and an open bottom, and means carried by the structure for directing marking material into the applicator for rolling contact with the surface to be marked.

1,860,272. ELASTIC WELT FOR STOCKINGS. HARRY C. ABERLE, Jenkintown, Pa., assignor to H. C. Aberle Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 27, 1931. Serial No. 577,603. 10 Claims. (Cl. 66—172.)



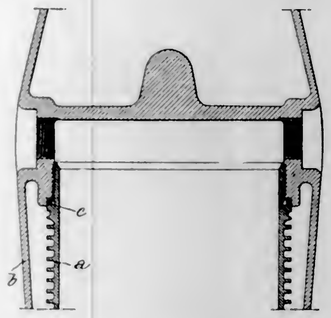
10. A stocking welt unit consisting of longitudinal warps and transverse threads binding said warps together to form the body of the welt and a selvage spaced from the body a distance sufficient to provide a readily discernable topping line on the welt.

1,860,273. REFRIGERATOR APPARATUS. EDWIN J. AHRENS, Cincinnati, Ohio, assignor to The C. Schmidt Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 26, 1928. Serial No. 249,734. 2 Claims. (Cl. 183—4.)



2. In a refrigerator wall section having a frame and spaced multiple transparent panels defining sealed chambers, channel members mounted in said frame and serving as spacing members for said transparent panels, containers in said channel members for receiving a dehydrating substance to dehydrate the gaseous contents of said sealed chambers, whereby said transparent panels will be maintained clean and free from deposits of solid or liquid substances.

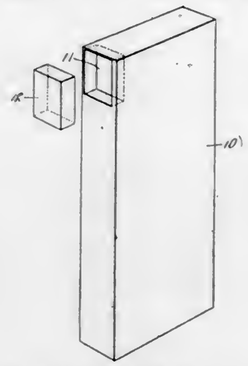
1,860,274. RESILIENT PACKING. MARC BIRKIGT, Bois Colombes, France. Filed Dec. 19, 1928, Serial No. 327,152, and in Belgium Nov. 9, 1928. 2 Claims. (Cl. 288—1.)



1. In a structure including a pair of threadedly interengaging shells, said shells having a recess formed therebetween, a resilient ferrous metal packing element having a pair of end surfaces bearing against opposite walls of said recess and tending to force said walls apart, said packing element having a lateral wall forming an angle with respect to each of said end surfaces, and a lateral surface partially contacting with, and partially out of contact with, the walls of said recess.

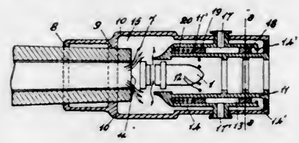
1,860,275. MEANS AND METHOD OF CEMENTING TUNGSTEN CARBIDE TO OTHER METALS. WILLIAM R. CHAPIN, Indianapolis, Ind. Filed Nov. 16, 1929. Serial No. 407,741. 6 Claims. (Cl. 76—101.)

1. The method of cementing a tungsten carbide block to a base which comprises applying a cementing compound to the base, pressing the tungsten carbide block thereto, covering the block and the base with a quantity of boric acid, subjecting the whole to a temperature sufficient to melt the boric acid to provide a coating to insulate the block and the base from injurious gases in the furnaces, and then heating the assembled base and block to a temperature sufficient to melt the cementing compound, and



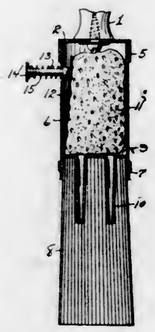
removing the shank and tool and subjecting the cementing compound to a pressure while it cools, substantially as set forth.

1,860,276. FIREARM. GUGLIELMO DE LUCE and FERRUCCIO GUERRA, Naples, Italy, assignors to Societa Italiana Miglioramento Armi, Naples, Italy. Filed July 8, 1930, Serial No. 466,569, and in Italy July 10, 1929. 10 Claims. (Cl. 89—42.)



1. In combination, a gun barrel having a bore, a conduit for a cooling medium arranged to deliver the cooling medium to the gases resulting from the firing of the charge, and a gas conduit communicating with the bore and connected with the cooling medium conduit whereby pressure of the fire gases is utilized to mix the cooling medium with the fire gases.

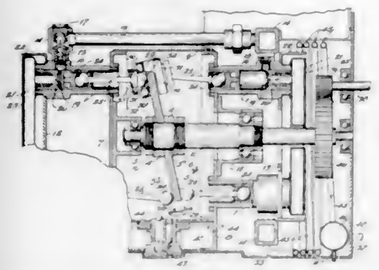
1,860,277. BRUSH. WILLIAM DENNIS, Shoreham, Vt. Filed Oct. 21, 1931. Serial No. 570,174. 1 Claim. (Cl. 15—131.)



A brush comprising a reservoir body, a partition wall of elastic material located in the body and having bristles on one side and nipples extending between the

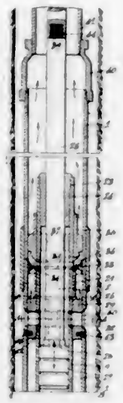
bristles, a sponge carried in the body, a movable plate located in the body and adapted to bear against the sponge and a spring pressed pin slidably mounted in the side of the body and having an end bearing against said plate.

1,860,278. PUMP OR COMPRESSOR. PARL O. ECKELS, Cleveland, Ohio, assignor to Eckels Engineering Corporation, Cleveland, Ohio. Filed Jan. 23, 1930. Serial No. 422,816. 13 Claims. (Cl. 230—186.)



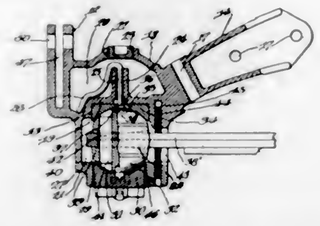
1. In an apparatus, the combination of an element having a revolving motion and an oscillating motion operating simultaneously, air filters, a plurality of cylinders for receiving filtered air, compressed air receiver, means in the cylinders for drawing air through said filters and for compressing it and forcing the same into said compressed air receivers, an expansion chamber, combined conducting and cooling means for conducting air from said receivers into said expansion chamber for expelling moisture from the air preparatory to delivering air for service.

1,860,279. PUMP. ARTHUR L. FAWCETT, Pumpville, Tex. Filed May 20, 1931. Serial No. 538,850. 6 Claims. (Cl. 103—155.)



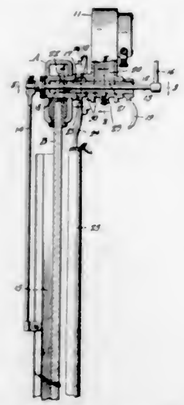
1. In a pump, an outer casing, upper and lower bushings secured to and in said casing, an inner casing spaced from said outer casing by said bushings, breather ports effecting communication between said inner casing and the exterior of said outer casing adjacent said upper bushing, said inner casing having ports adjacent said lower bushing to effect communication between the inside of said inner casing and the space between said inner and outer casings, a valve cage with a valve located in said inner casing adjacent its lower end, said upper bushing having a ring with a valve seat and liquid passes effecting communication between the space below and above the ring, a valve slidable on said inner casing and gravitating to engage said ring valve's seat to close said passes, a bushing secured in the upper end of said inner casing, and a plunger rod passing through said last named bushing and carrying a piston within said inner casing.

1,860,280. SPRING SUSPENSION. GEORGE J. FLETCHER, Chicago, Ill. Filed June 29, 1928. Serial No. 289,179. 4 Claims. (Cl. 267—54.)



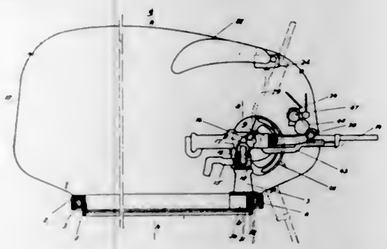
1. A suspension for a spring unit including a body providing a housing, a rotatable element confined in the housing and having an opening therein for the projection of one end portion of the spring unit, said end portion rotating said element when the spring unit flexes, said element having a ridge thereon, and a lug carried by the housing having an inclined surface thereon adapted to be engaged by said ridge to limit rotation of said element.

1,860,281. COMBINED WINDSHIELD WIPER AND HEATER. ALPHONSE C. GENTIL, Richmond, Va. Filed May 23, 1930. Serial No. 455,055. 1 Claim. (Cl. 15—253.)



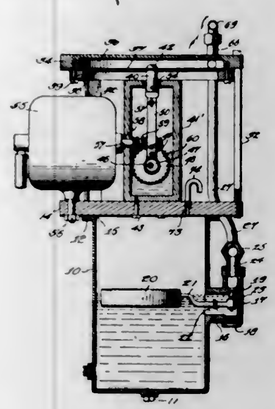
A combined windshield wiper and heater comprising a hollow supporting member, a heater arm journalled in said member, a heater secured to the arm, a slidable sleeve journalled in said member and having oppositely disposed slots opening outwardly of one end thereof, a shaft journalled in the sleeve, a wiper secured to said shaft, means for oscillating the sleeve, means whereby said sleeve may be moved endwise to occupy several positions, means to hold the sleeve in any of its positions, projections on the shaft to fit in said slots during one position of the sleeve to cause oscillation of the wiper, said sleeve having a notch communicating with one of the slots, and a lug on the heater arm to engage in said slot during one of the positions of the sleeve to oscillate the heater and to operate in said notch when said sleeve occupies one of its other positions.

1,860,282. EQUILIBRATED TURRET FOR MACHINE GUNS ON BOARD AEROPLANES. ELIE GRANAT, Paris, France, assignor of one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France, a French Company. Filed Apr. 14, 1931, Serial No. 530,043, and in France May 8, 1930. 4 Claims. (Cl. 89—40.)



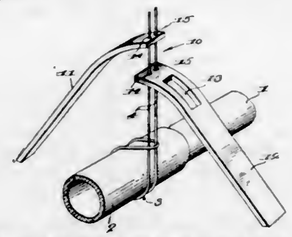
1. A machine gun system chiefly for use on aeroplanes comprising a circular rotary platform, a set of parallel machine guns, a carriage therefor, a pivot perpendicular to the platform, a non-reversible braked clutch connecting the pivot with the carriage, a second pivot normally parallel to the platform, a second nonreversible braked clutch connecting the two pivots, and means wherethrough the guns are secured to the second pivot.

1,860,283. FUEL FEEDING DEVICE. SEELEY C. GULICK, Champaign, Ill. Filed June 5, 1929. Serial No. 368,696. 2 Claims. (Cl. 103—57.)



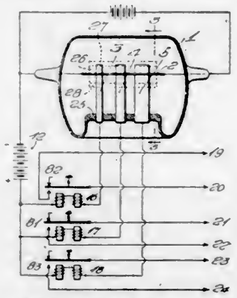
1. A fuel feeding device comprising a tank vented to the atmosphere, a discharge pipe connected to said tank near the bottom thereof, a pump including a pump chamber and a flexible diaphragm, inlet and outlet pipes connected to said pump chamber, said pipes being connected respectively to a source of fuel supply and to said tank, a transmission casing, a worm wheel mounted in said casing, driving connections between said worm wheel and said diaphgram, said transmission casing being provided with an opening spaced from the bottom thereof, a shaft rotatable in said opening and provided in said casing with a worm meshing with said worm wheel, a shaft carrying said worm wheel, bearing means rotatably supporting said last named shaft and operative to vary the distance thereof from said worm wheel, said casing being adapted to contain a lubricant in the bottom thereof and means for driving said first named shaft.

1,860,284. TOOL FOR APPLYING WIRE HOSE CLAMPS. FRED WILLIS GUNN, Boston, Mass. Filed Feb. 17, 1931. Serial No. 516,432. 2 Claims. (Cl. 81—9.3.)



1. A tool of the class described comprising a pair of independent levers each having one end curved upwardly and apertured to receive the ends of a wire which is adapted to clamp one object to the other, one of said levers having a longitudinally extending opening adjacent said apertures to receive the ends of the wire being bent, the levers extending in opposite directions to each other and held in co-operative relation solely by the wire.

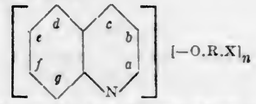
1,860,285. CONTROL APPARATUS. ROSS GUNN, Washington, D. C. Filed Dec. 23, 1929. Serial No. 416,164. 24 Claims. (Cl. 177—353.)



1. A hot cathode apparatus including an electron emitting body and a multiplicity of reeds tuned to different frequencies and located adjacent thereto, an electromagnetic actuating device responsive to different frequencies disposed in alignment with said tuned reeds for initiating and maintaining said reeds in a condition of vibration when said electromagnetic device is excited at a frequency corresponding to the frequency of any one of said reeds, and external circuits extending from each of said reeds to a control device, a source of potential, and to said electron emitting body for the actuation of the control devices therein when energy of a frequency corresponding to said reed is impressed upon said electromagnetic actuating device.

1,860,286. BASIC ETHERS OF ARYL-QUINOLINES. MAX HARTMANN and HANS ISLER, Riehen, near Basel, Switzerland, assignors to Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed May 10, 1930, Serial No. 451,505, and in Switzerland May 16, 1929. 8 Claims. (Cl. 260—38.)

1. As new products basic ethers of phenyl-quinolines of the general formula



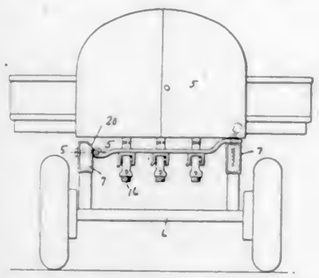
wherein R represents an alkylene radical containing at least two carbon atoms, X a tertiary amine, and *n* the

numbers 1 or 2, and wherein one of the carbon atoms *a*, *b* or *c* is linked with phenyl, and the group O.R.X is linked with one or two of the not yet substituted carbon atoms *a* and *c*, or with one of the carbon atoms *e* and *f*, or with the phenyl group, which products form with acids neutral salts and are useful in therapeutics.

1,860,287. SEXUAL HORMONES AND PROCESS FOR THE MANUFACTURE OF SAME. ERNST PAUL HÄUSSLER, Riehen, near Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a Corporation of New Jersey. Filed May 9, 1928, Serial No. 276,505, and in Germany May 16, 1927. 4 Claims. (Cl. 167—74.)

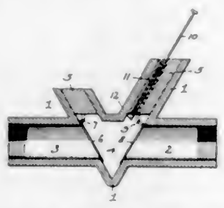
1. The process for the extraction of a sexual hormone which includes the step of extracting bile with a solvent of the group comprising ether, chloroform, and benzol.

1,860,288. OIL TANK FAUCET BAR LOCK. ROSS W. HYNDMAN, Des Moines, Iowa. Filed Aug. 28, 1930. Serial No. 478,451. 1 Claim. (Cl. 70—90.)



A locking device of the class described comprising a bar, a number of inverted U-shaped members fastened to one face of the bar, one limb of each member flaring outwardly from the other limb and of greater length than said other limb.

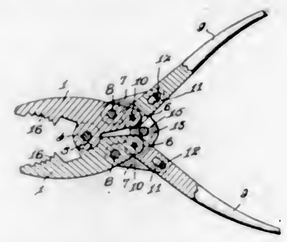
1,860,289. VALVE. CHARLES JOHNSON, Cleveland, Ohio. Filed Dec. 18, 1929. Serial No. 414,985. 2 Claims. (Cl. 137—153.)



1. A device of the class described comprising a V-shaped member of hollow construction, an inlet nipple connected with one side thereof, an outlet nipple connected with the opposite side thereof, a pair of flap valves in the member and closing the inner ends of the nipples under the action of gravity, means for raising the outlet valve whereby the pressure of gas will raise the other valve as long as the pressure continues.

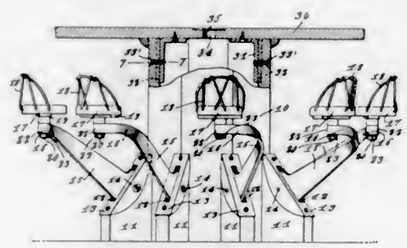
1,860,290. PLIERS. JOHN C. LEBHERZ, Nenana, Alaska. Filed May 5, 1931. Serial No. 535,227. 1 Claim. (Cl. 81—46.)

A pair of pliers comprising jaws arranged for cooperation, and having cutting blades arranged for shearing action thereon, one of said jaws having a central inwardly extending ear, the other jaw having a pair of spaced centrally extending ears receiving therethrough the first named ear and being pivoted to said ear, said jaws from their pivots having their sides reduced and their ends merging into reduced centrally arranged tongues, handle members having bifurcated ends receiving therein and being pivotally secured to the ears, links arranged



in pairs and having one of their ends pivotally secured to the jaws, and their other ends lapping the handles, said handles having elongated slots and pivots passing through the ears and slots, each pair of links having centrally arranged inwardly extending ears whose peripheries are round, the said ears being arranged in lapping relation and being pivotally connected and the links having their outer faces at points surrounding the ears reinforced.

1,860,291. COMBINATION TABLE AND CHAIR. GUST MAJCHER, McKees Rocks, Pa. Filed May 31, 1930. Serial No. 458,237. 4 Claims. (Cl. 155—123.)



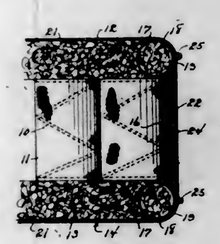
1. In combination, a table top, a pedestal supporting the top, said pedestal having openings therein, arms pivotally mounted within the openings, seats at the outer ends of the arms, means within the pedestal and engaged by the arms to yieldingly hold the same against pivotal movement, and means located in the path of the inner ends of the arms to limit pivotal movement in one direction.

1,860,292. STEEL VESSEL AND METHOD OF PRODUCING THE SAME. FRITZ NEUHAUS, Berlin-Tegel, Germany. Filed July 5, 1928, Serial No. 290,686, and in Germany Sept. 19, 1925. 5 Claims. (Cl. 29—148.2.)

1. As a product of manufacture, a vessel adapted to withstand great pressure at high temperatures, said vessel being formed of hammer welded steel plates containing substantially .2% of vanadium.

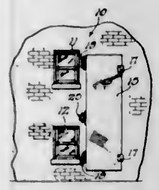
1,860,293. MATTRESS. JOSEPH NEUMAN, Elizabeth, N. J. Filed June 28, 1929. Serial No. 374,600. 1 Claim. (Cl. 5—360.)

In a mattress construction, rows of coiled springs, a cellular cover for each spring, pads arranged above and below said springs, a strip of flexible material extending around the sides and ends of the mattress and secured to the covering of the springs, edge rolls secured along the opposed longitudinal edges of the strip, spaced parallel stiffening rods, one of said rods being passed centrally through each edge roll and the other of said rods being



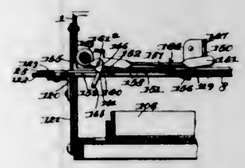
encased in said flexible strip immediately beneath the roll, an outer covering for the mattress, and said edge rolls being flexed inwardly and arranged to lie above and below the springs within the confines of the mattress.

1,860,294. FIRE ESCAPE. WILLIAM NEUSÜS, Yorkville, Ill. Filed July 30, 1929. Serial No. 382,189. 5 Claims. (Cl. 227—11.)



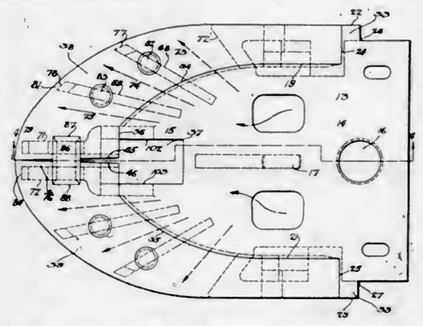
1. In combination with a building, a housing, a cover member hingedly connected to said housing, means for normally urging said cover member into open position with respect to said housing, means for hingedly connecting said housing to said building, means for urging said housing into a predetermined position relative to said building, means for resisting the action of said last named means, means providing a ladder structure mounted in said housing, and means for holding said cover member in closed position.

1,860,295. COIN CONTROLLED LOCKING MEANS. GEORGE E. NICHOLSON, Tulsa, Okla., assignor to Vending Machine Corporation of America, Tulsa, Okla., a Corporation of Delaware. Original application filed Oct. 21, 1929, Serial No. 401,207. Divided and this application filed Sept. 3, 1930. Serial No. 479,539. 6 Claims. (Cl. 194—93.)



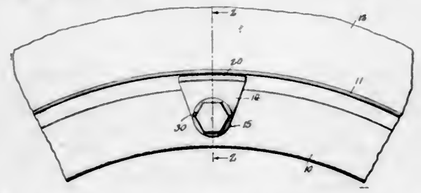
1. In a vending machine, a movable lift finger, guide means for the lift finger, a slug eliminator carried by the lift finger, a coin receiver to introduce a coin beneath said eliminator to move the lift finger, and flexible means incorporated in the finger enabling yielding when limited in movement by the guide means.

1,860,296. FURNACE TUYÈRE. HERBERT E. PRESTON, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 4, 1928. Serial No. 297,494. 12 Claims. (Cl. 110—44.)



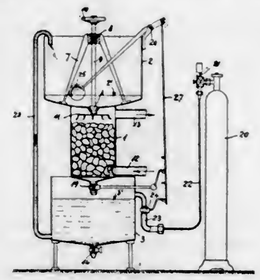
12. A tuyère block for a furnace comprising a base member having a nose portion, a plurality of protective members surrounding said nose portion, and means for loosely securing said protective members to the base member.

1,860,297. NUT LOCK. JAMES H. ROBERTS, Blytheville, Ark. Filed Apr. 3, 1930. Serial No. 441,402. 3 Claims. (Cl. 70—90.)



3. A locking device comprising a stationary member having an opening and ratchet teeth surrounding said opening, a threaded stem projecting through said opening, a nut engaged on the stem, a centrally pivoted yieldably urged pawl carried by said nut having one end engaged with said ratchet teeth, and a rotary cam member engaged with the other end of said pawl operable to rock said pawl out of engagement with said teeth.

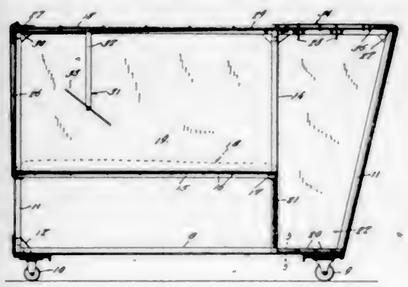
1,860,298. METHOD FOR REGENERATING THE BREATHING AIR IN CLOSED ROOMS. HERMANN STELZNER, Lubeck, Germany, assignor to Otto Heinrich Drager, Lubeck, Germany. Filed Nov. 21, 1928, Serial No. 320,987, and in Germany Dec. 24, 1927. 1 Claim. (Cl. 23—4.)



A method for regenerating contaminated air in closed rooms, which consists in causing caustic alkali solution

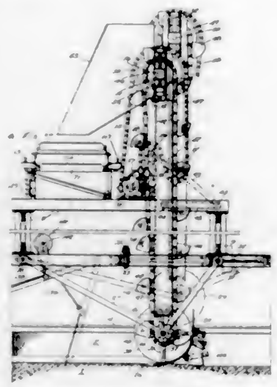
to flow in a trickling movement from one body of said solution to a second body of said solution, contacting a counter current of contaminated air with the trickling solution, adding oxygen to the air, and causing the alkali solution to circulate by the pressure of the added oxygen.

1,860,299. SUN CAR. WILLIAM J. STRANDWITZ, Camden, N. J. Filed June 9, 1931. Serial No. 543,192. 6 Claims. (Cl. 135—5.)



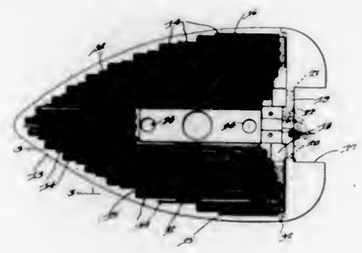
1. A structure of the class described compriaing a portable enclosure embodying front and rear compartments, the rear compartment being substantially open at its top to admit sun rays and being provided with a bed.

1,860,300. SLUDGE BED CLEANING APPARATUS. MARCUS B. TARK and ROLAND L. CLEVELAND, Philadelphia, Pa., assignors to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1928, Serial No. 325,759. Renewed Jan. 29, 1932. 8 Claims. (Cl. 210—128.)



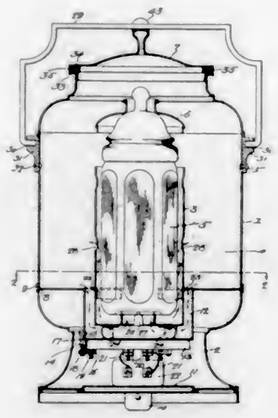
1. Apparatus for use in conjunction with sludge-drying beds and the like comprising a mobile structure adapted to travel at least in part over the said bed, means on said structure for skimming sludge from the surface of said bed, means including a transverse conveyer for delivering said sludge to a predetermined point of discharge on said structure, an elevator conveyer at one end of said structure and adapted to discharge onto said transverse conveyer, and means operatively associated with said transverse conveyer and selectively adapted to deflect material from the conveyer onto the said drying bed.

1,860,301. ELECTRICALLY HEATED IRON. NOBLE BENTON THOMAS, Logansport, Ind. Filed Mar. 26, 1928. Serial No. 264,881. 1 Claim. (Cl. 219—25.)



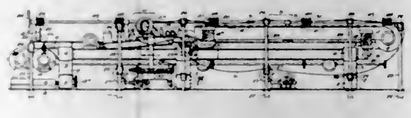
An electric iron comprising, in combination, a substantially flat metallic base having a lip extending upwardly from one face thereof at the edges, a body composed of a heat retaining non-electrically conductive material, said body having ribs formed on one face thereof extending across said body in parallel spaced apart relation to define channels therebetween, a substantially ribbon like electric resistance element directed through said channels around said ribs, and an adhesive material disposed in said channels at spaced apart intervals for retaining said resistance element therein, said body being retained on said base by said lip with the ribs thereon in abutment with said base, and means for detachably securing said body to said base.

1,860,302. BABY'S THERMOCHEST. RAYMOND M. THOMAS, Wayne, Pa. Filed Jan. 8, 1931. Serial No. 507,463. 6 Claims. (Cl. 53—1.)



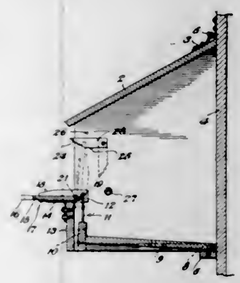
1. In a device of the type described, an inner container adapted to removably receive a vessel whose contents are to be preserved, an outer container formed to provide ample space around a portion of said inner container for solidified refrigerant and a relatively narrow jacket space around another portion of said inner container, and means for heating the liquid which accumulates in said jacket space as said refrigerant melts, whereby said vessel and its contents may be heated when desired.

1,860,303. WIRE APPLYING MECHANISM FOR FOURDRINIER PAPER MAKING MACHINES. JOSEPH A. WHITE, Melrose Park, Pa., assignor to The Moore & White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 4, 1930. Serial No. 500,097. 20 Claims. (Cl. 92—44.)



1. The combination of a Fourdrinier paper-making machine; a series of posts located some distance from the machine and parallel therewith; upper and lower sockets on the posts; a truck for the wire, said truck arranged to travel between the posts and the Fourdrinier machine; and a series of poles arranged to rest in the sockets on the posts and at the side of the Fourdrinier machine, so that as the truck travels between the posts and the machine, the wire is unreeled and the poles placed in position, so as to suspend the wire at one side of the machine, to be transferred onto the machine.

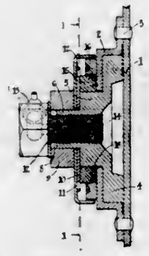
1,860,304. POULTRY NEST. STEPHEN YUHAS, Helena, Mont. Filed June 24, 1931. Serial No. 546,596. 4 Claims. (Cl. 119—49.)



1. A trap nest having an inclined top, a partially open front, an open back and an open bottom, a hanger on the top for sustaining the nest on a support, a bottom for the nest having its rear end swingably supported, a trap door swingable through the partly open front, a support for holding the door in horizontal position, hinged plates on the edges of the door projecting rearwardly therefrom and pivotally secured to the sides of the nest, hook members carried by the bottom and engaging the hinge plates, a latch plate pivotally secured to one of the sides, having its outer end cut at an angle and provided with a flange, which flange is designed to engage the outer edge of the door when weight is deposited on the floor for swinging the door to closed positon, an upper fixed and a lower removable stop element for limiting the swinging of the latch and the hinge plates having extensions to engage the front of the nest for limiting the swinging of the door to closed position.

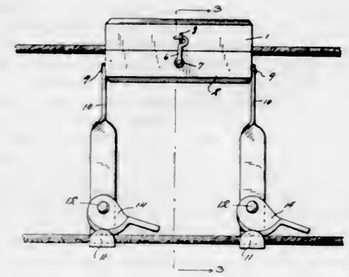
1,860,305. DUSTPROOF BEARING. ERNEST BASEMAN, Toronto, Ontario, Canada, assignor to Massey-Harris Company, Limited, Toronto, Ontario, Canada. Filed May 19, 1930. Serial No. 453,752. 6 Claims. (Cl. 308—19.)

1. In combination with relatively rotatable supporting and bearing members, means for preventing the entry of dust between said members comprising a felt washer surrounding said support and engaging said bearing, and a



metal ring engaging said bearing and having a tapered inner surface in contact with the outer periphery of said washer.

1,860,306. CLOTHESLINE CLEANER. ALFRED BRUNO BIENER, Schenectady, N. Y. Filed Aug. 7, 1930. Serial No. 473,613. 1 Claim. (Cl. 15—246.)



A clothes line cleaner comprising complementary cleaning members adapted to engage about one run of a double run clothes line, a bar secured to one of said members and having a U-shaped end engaging under and about the other run of the line, for constant engagement with said run and an eccentric securing member pivotally carried by said bar for swinging movement between and in a direction parallel to the parallel legs of said U-shaped end whereby to clamp said other run of the line in the closed portion of said end.

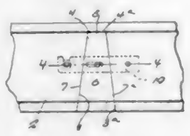
1,860,307. GOLF TEE. HARRY O. BRINCK, Los Angeles, Calif., assignor, by mesne assignments, to Robert Rosenburg, Los Angeles County, Calif. Filed Mar. 15, 1930. Serial No. 436,068. 1 Claim. (Cl. 273—33.)



An adjustable golf tee comprising a tapered and transversely curved pin for insertion into the ground, a flat stem integral with one end of the pin, a concaved ball receiving element formed integrally with the other end of the stem, said stem bendable at any point between the ball receiving element and the pin to position said element at various angles relative to the pin and permit

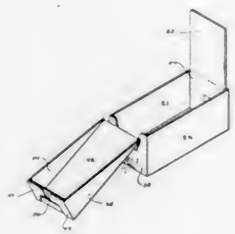
the distance between the ball receiving element and the pin to be varied, said ball receiving element having a plurality of tapered slots extending inwardly from the edges thereof and one of said slots of a larger size than the remaining slots with the stem positioned therein permitting the formation of the stem with the ball receiving element to be located inwardly of the edges of the latter and permit the ball receiving element to be easily bent into cup shape.

1,860,308. WHEEL RIM. ADAM CONTI, Akron, Ohio. Filed July 2, 1927. Serial No. 203,111. 1 Claim. (Cl. 301—31.)



A rim of the character described comprising an externally channeled annulus transversely split to present confronting reversely beveled ends to effect a substantially V-shaped gap therebetween extending through one side flange of the annulus, but terminating at the inner wall of the opposite side flange, said latter flange at the transverse split having its ends extended slightly beyond the beveled confronting ends and adapted to abut each other to maintain said beveled ends relatively wide apart, said beveled ends having tapered edges of V-shape throughout their extent, a wedge conforming to the gap between the beveled ends to be received therein for abutting said extensions and having channels in opposite edges to seat the tapered portions of said end edges, and a latch pivoted to one beveled end and having a slidable connection with the wedge and also detachably engageable with the other beveled end for retaining the wedge in the gap and the latter united with the beveled ends.

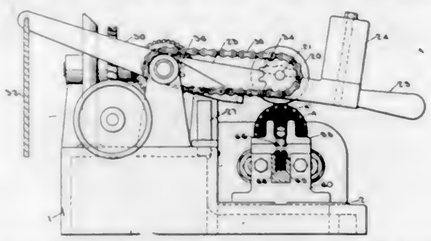
1,860,309. CARTON. BRUCE JORDAN DAVIDSON, Kew Gardens, N. Y., assignor to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed May 1, 1930. Serial No. 448,902. 24 Claims. (Cl. 206—44.)



1. A display carton comprising a box and a cover, one side of the box having a display opening, means connecting the cover to the box and adapted to close said opening.

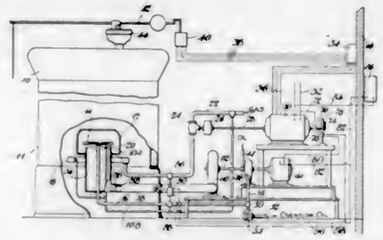
1,860,310. MACHINE FOR REMOVING ARMATURE INSULATION. HARRISON H. EATON, Toledo, Ohio, assignor to The Electric Auto-Lite Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 26, 1928. Serial No. 273,086. 4 Claims. (Cl. 15—21.)

3. In a machine of the character described, in combination a frame, a revolving brush carried by said frame, resilient means for holding an armature over said brush; a weighted member of resilient material pivotally mount-



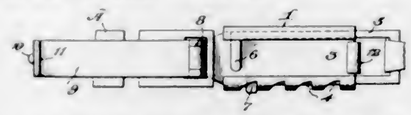
ed over said brush adapted to retain the armature in engagement with the brush; and means for rotating said resilient member.

1,860,311. OIL BURNING MACHINE UTILIZING AIR BLAST. ALBERT L. KLEES, New York, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed June 20, 1928. Serial No. 286,849. 8 Claims. (Cl. 158—28.)



1. The combination of an oil burner, means for supplying air and oil, respectively, under pressure to said burner, and unitary means for turning on and off said supplying means, said last means being operative to continue the air supply to said burner for a predetermined brief period after the oil supply has been cut off.

1,860,312. BRACELET CONNECTION. RUFUS KING, Plainville, Mass., assignor to Bugbee & Niles Company, North Attleboro, Mass. Filed Feb. 18, 1932. Serial No. 593,703. 4 Claims. (Cl. 24—206.)

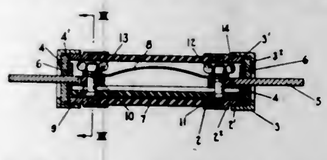


4. In a bracelet connector, a body having spaced opposed guides, a cover hinged to the body at a point spaced from the guides so as to afford a space between the guides and the hinge to receive a link, said cover being received in the space between the guides and lying substantially flush therewith, means to latch the cover to the body, keepers carried by the body and a link engaging catch member having parts slidable in the guides and having a finger engageable with the keepers.

1,860,313. FUSE. FRANK C. LA MAR, New York, N. Y., assignor to Great Western Fuse Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 19, 1930. Serial No. 429,473. 5 Claims. (Cl. 200—131.)

1. In a renewable cartridge fuse, in combination: a hollow insulating body; a metallic ferrule attached on one

end of the body and provided with an external thread; a flanged cap provided with an internal thread for cooperation with the external thread of the ferrule; a slotted washer formed with projections resting on the end of the ferrule clamped between the flange of the cap and the ferrule; a knife blade protruding through the slot in the washer, formed with a shoulder against which the washer bears and a threaded orifice for the reception of a screw threaded member; a socket attached to the knife blade; an elongated insulating bridge member having an end



inserted in the socket; a headed screw threaded member passing through the bridge member, the socket, screw threaded into the knife blade and projecting therethrough, a nut for cooperation with the projecting portion of the screw threaded member for attaching one end of a fuse link to the knife blade and means cooperating with the other end of the bridge member for forming another knife blade spaced from the first mentioned knife closing the other end of the hollow member and providing for the attachment of the other end of the fusible link.

1,860,314. TEXTILE FABRIC. WILLIAM MENDEL, Beverly, N. J., assignor to Neidich Viscose Corporation, Burlington, N. J., a Corporation of Delaware. Filed May 3, 1930. Serial No. 449,390. 15 Claims. (Cl. 96—25.)



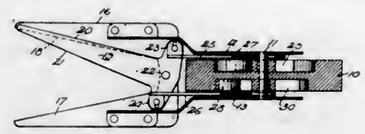
1. A braided textile fabric including a soluble filament with insoluble filaments; the soluble filament constituting a warp element of the fabric; the insoluble filaments including distinct groups interlooped upon said soluble filament as a guide.

1,860,315. CONNECTER FOR BRACELETS. FREDERICK W. NITTEL, Attleboro Falls, Mass., assignor to M S Co., Attleboro, Mass. Filed Aug. 5, 1931. Serial No. 555,199. 7 Claims. (Cl. 24—201.)



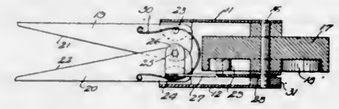
2. In a bracelet connecter, a link having guides, a pair of plates hinged together at one end and one of which has parts engaged with the guides, a cover of plate form between said parts, spring means between one of the plates and the cover and connected to the link, means carried by said cover plate and connected to the spring means, one of the hinged plates having a free end which extends over the adjacent end of the other hinged plate, and means to latch said free end of the first named hinged plate to the second named hinged plate, the plates and cover being all disposed in parallelism.

1,860,316. SHEARS. HAROLD W. CLARK, Alliance, Ohio, assignor to The Alliance Manufacturing Company, Alliance, Ohio, a Corporation of Ohio. Filed Dec. 27, 1929. Serial No. 416,775. 2 Claims. (Cl. 56—246.)



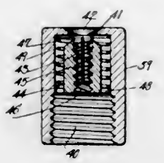
2. A shear comprising a frame, a stationary blade secured thereto, a movable blade pivoted on said stationary blade, a shaft in said frame, a wheel journaled thereon, having cam recesses on its opposite sides, unitary straight links pivoted to said movable blade and slidably engaging said shaft for substantially longitudinal reciprocation, and rollers on said links engaging said cam recesses for oscillating said movable blade.

1,860,317. SHEARS. HAROLD W. CLARK, Alliance, Ohio, assignor to The Alliance Manufacturing Company, Alliance, Ohio, a Corporation of Ohio. Filed Dec. 27, 1929. Serial No. 416,789. 2 Claims. (Cl. 56—246.)



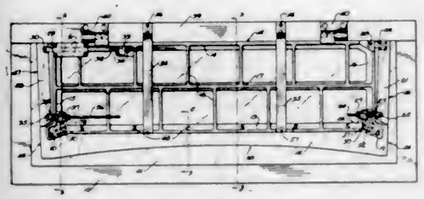
1. A portable shear comprising a frame, cooperating blades pivotally secured to said frame for oscillation to and from cutting relation, a shaft in said frame, a wheel journaled thereon having a cam recess on one face, a single straight link engaging said blades and having a slot traversed by said shaft, and a roller on said link between said shaft and blades for cooperating with said recess to oscillate the blades.

1,860,318. COLLAPSIBLE TUBE CLOSURE. HENRY CHARLES KEEBLER, Secaucus, N. J. Filed May 16, 1930. Serial No. 452,958. 2 Claims. (Cl. 221—60.)



1. A closure device for collapsible tubes comprising a cap-like casing open at one end, the opposite closed end having a discharge opening therein, the walls of said discharge opening being beveled to provide a valve seat, a beveled valve head for seating engagement with said seat, a valve member within said casing and associated with said valve head and provided with a beveled end wall, the beveled portion being opposite to the bevel of said beveled valve head, and spaced therefrom, a flange at the inner end thereof, and spring means acting upon said valve member to maintain said valve head seated upon said seat, said spring means including an expansion spring surrounding said valve member with one end seated against said flange and its opposite edge abutting the end wall of said casing.

1,860,319. ADJUSTABLE TEMPLATE. PAUL C. LAWSON and CONRAD B. SCHAFER, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 2, 1929. Serial No. 337,158. 6 Claims. (Cl. 33—76.)

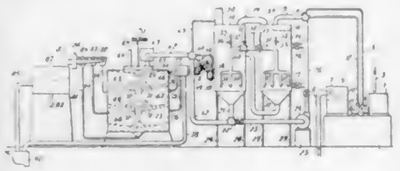


1. In cutting apparatus of the character described, a table for supporting the sheet to be cut, a template associated therewith, end members pivotally carried thereby, and a pattern plate removably secured at the front of the template, the end edges thereof being adapted to coincide with the outer edges of the end members.

1,860,320. CHEMICAL PRODUCTS. BIRGER W. NORDLANDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 14, 1929. Serial No. 363,099. 4 Claims. (Cl. 167—63.)

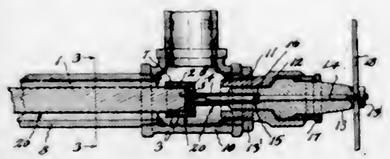
1. A chemical product comprising a hydrophilic medium and stable, chemically active selenium sulphide.

1,860,321. MANUFACTURE OF SUGAR. ELMER R. RAMSEY, Larchmont, N. Y., and ARTHUR W. BULL, Naugatuck, Conn., assignors, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed May 8, 1926, Serial No. 107,579. Divided and this application filed Nov. 12, 1930. Serial No. 495,088. 9 Claims. (Cl. 127—50.)



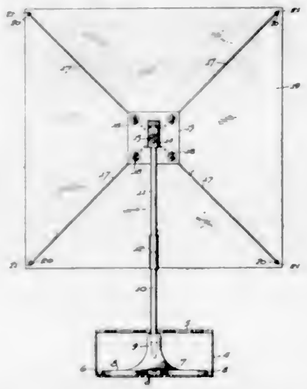
1. A method of carbonating sugar juice which includes the step of continuously mixing lime and juice in the presence of carbonated juice.

1,860,322. RESISTANCE ELEMENT FOR HYDROCARBON CRACKING PROCESSES. RUSSELL CARTER, Washington, D. C. Filed Feb. 12, 1929. Serial No. 339,462. 5 Claims. (Cl. 201—76.)



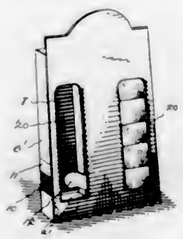
5. In the art of producing an electrical heating unit, the steps of flowing a creamy consistency of sodium silicate, fire-clay, and silica onto an electrical resistance bar, drying the coating on the bar while avoiding cracking or disruption thereof, applying a second coating on the first coating, and baking the bar and its coatings at a temperature in excess of cracking temperature of hydrocarbon materials.

1,860,323. MOTION PICTURE SCREEN. CHARLES W. EBELING, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1931. Serial No. 527,018. 2 Claims. (Cl. 88—24.)



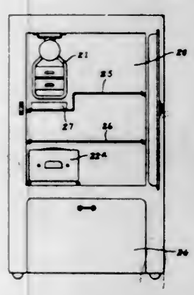
1. The herein described portable motion picture screen including a pedestal having an open ended socket, a tubular standard detachably mounted therein, a rectangular casting provided with a channeled lug centrally of and upon one side thereof for receiving the upper end of such standard, four thumb screws mounted adjacent the corners of said casting, four supporting rods adjustably attached to the casting by said thumb screws, said rods when extended and forming the four diagonals of the casting, the ends thereof being bent outwardly to form hooks, and a motion picture screen adapted to engage said hooks to be held in extended position by said rods.

1,860,324. DISPLAY AND DISPENSING CARTON. MORRIS M. EINSON, Yonkers, N. Y., assignor to Einson-Freeman Co., Inc., Long Island City, N. Y., a Corporation of New York. Filed May 17, 1930. Serial No. 453,252. 3 Claims. (Cl. 206—44.)



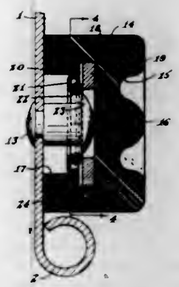
1. An advertising device of the class described composed of a front sheet, a separate backing sheet foldable and secured to said front sheet forming a pair of compartments each having collapsible walls, a supporting easel for the device cut out from said backing sheet so as to form a hinged strip located between said compartments, said strip having a folding connection with said front sheet, and said strip along a portion of its length having re-enforcing flanges at the sides thereof.

1,860,325. REFRIGERATING APPARATUS. BERTRAM B. GEYER, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,555. 7 Claims. (Cl. 62—170.)



2. In a refrigerator wherein convection currents are set up by a mechanical unit normally maintained at a temperature below the freezing point of water, the method of preserving vegetables and the like which comprises storing the vegetables in the refrigerator in heat exchange relation with the said convection currents to cool the vegetables, and restricting the circulation of the air into direct contact with the vegetables so that only a substantially small quantity of moisture is removed from the vegetables during each twenty-four hour period, whereby the growth of molds and bacteria is materially retarded.

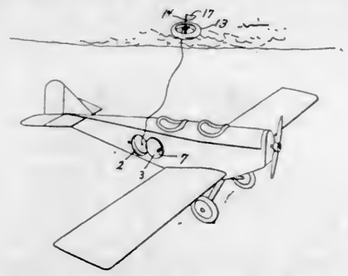
1,860,326. ENGINE HOOD ANTIRATTLING DEVICE. ALFRED F. JACKSON, Attleboro, Mass., assignor to Lewis R. Smith receiver for The Apco Mossberg Corporation, a Corporation of Massachusetts. Filed May 15, 1931. Serial No. 537,607. 6 Claims. (Cl. 292—114.)



1. An anti-rattling device of the kind described, comprising a resilient bumper having a recess therein, an undercut groove at the inner end of said recess, a retainer seated in said groove, and a spring ring confined by said retainer.

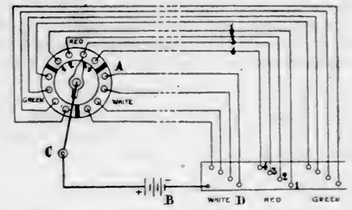
1,860,327. AEROPLANE FLOAT SIGNAL. PHILLIP A. KUHN, Galveston, Tex. Filed Oct. 21, 1931. Serial No. 570,181. 3 Claims. (Cl. 244—1.)

1. Means for marking the spot where a craft has sunk in a body of water comprising a casing attached to the craft, a door for normally closing the casing, spring means for normally holding the door in open position, a bolt for holding the door in closed position, a cylinder in which the bolt is located with the bolt projecting from one end of the cylinder, a spring for retracting the bolt, a member formed of absorbent material placed in the cylinder for normally holding the bolt projected, said



cylinder having perforations therein for the admission of water to the member, a buoy located in the casing and a flexible member connecting the buoy with the craft.

1,860,328. DEVICE FOR ELECTRICALLY LIGHTING SIGNALS. RENÉ MERCIER, Paris, France, assignor to Etablissements Aera, Paris, France, a Corporation of France. Filed Apr. 22, 1929, Serial No. 357,092, and in France May 1, 1928. 4 Claims. (Cl. 177—311.)

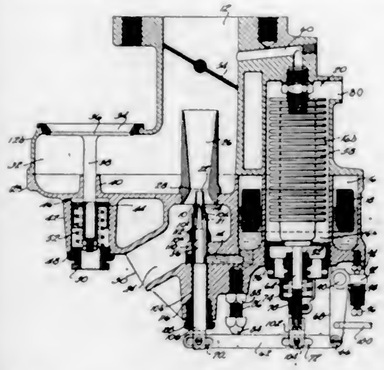


2. An apparatus for electrically firing rockets from a distance, comprising a holder for the rockets; a source of electric current; a casing having a bottom of insulating material and a circular series of contact studs mounted in said bottom; a cover for said casing; an electric firing circuit in which each rocket is connected, said circuit being connected with said current source and with said studs; a shaft rotatable in said casing; a setting lever fixed to said shaft and adapted to be moved in front of windows formed in said cover; an insulating member carried by said shaft; a contact carried by said member to move over the contact studs; a spring-returned slide mounted in guide slots in said shaft to rotate with the latter and to move longitudinally of and relatively to the shaft independently of such rotation; an insulating member secured to the casing cover; a contact ring fixed to the last-named insulating member and electrically connected with said current source; a contact carried by the slide to engage said ring when the slide is in actuated position; tell-tales pivoted beneath the windows in said cover; pivotally-mounted, spring-controlled fingers for supporting the tell-tales; and a coil electrically connecting the contact carried by the slide with the contact carried by the shaft and acting to attract the adjacent finger when the circuit is closed between the contact ring and the slide-carried contact.

1,860,329. CARBURETOR. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 16, 1928. Serial No. 300,033. 9 Claims. (Cl. 261—69.)

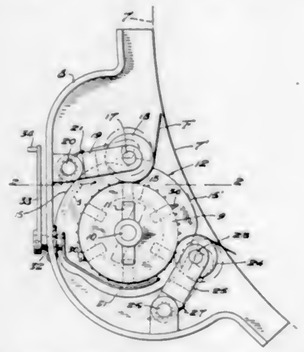
1. In an apparatus of the character described, an intake conduit having primary and secondary air inlets, a throttle therein above said air inlets, a venturi in said

primary air inlet of a capacity restricted to pass the air required for low fractional loads and at engine idling and to maintain high air velocity therethrough, a fuel jet below the throttle subject to air velocity through the venturi in said primary air inlet, means responsive to the pressure variations in the intake conduit below the



throttle for controlling said secondary air inlet, and means responsive to the variations in the differential between atmospheric pressure and the intake pressure above the throttle for varying the extent of opening of the fuel jet in inverse relation to the differential variations resulting from throttle movement.

1,860,330. FILM CONTROL AND GUIDING DEVICE FOR MOTION PICTURE PROJECTORS. HARRISON W. ROGERS, New York, N. Y., assignor to Max A. Schlesinger, New York, N. Y. Filed Oct. 20, 1928. Serial No. 313,776. 6 Claims. (Cl. 88—17.)



1. In a motion picture projector, the combination of a rotary main film guide and two spring-held pivotally mounted co-acting film guides, and means controlled by the shaft of the main film guide for successively moving said auxiliary guides into and out of engagement with the main film guide, whereby one of the co-acting film guides contacts the main film guide ahead of the next co-acting film guide, and vice versa.

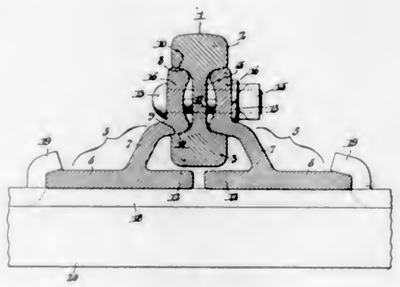
1,860,331. HAND TRUCK. DAVID M. WATSON, Ardsley, and GONZALO C. MUNOZ, Philadelphia, Pa., assignors to The American Pulley Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 7, 1930. Serial No. 486,877. 1 Claim. (Cl. 280—56.)

In a hand truck of the character described, the combination with a frame including side members having handles at their rear ends, an upstanding nose interconnecting their forward ends, and an axle with wheels adjacent said nose; of an openwork cradle bottom for the truck flat across from side member to side member toward the handles, to fully sustain a flat load, and concaved downward between said side members more and more toward the nose, to accommodate and hold a rounded or soft load; said cradle bottom comprising substantially



straight, flat cross members spanned between said side members at the end of the cradle toward the truck handles and downward concaved cross members spanned between said side members at the end of the cradle toward the truck nose, together with intermediate longitudinals extending from cross member to cross member and sloping downward relative to the side members from the flat end of the cradle toward the truck nose.

1,860,332. RAIL AND SUPPORT FOR THE SAME. CHARLES D. YOUNG, Haverford, Pa., and ARTHUR B. CLARK, Trenton, N. J. Filed Feb. 5, 1931. Serial No. 513,550. 6 Claims. (Cl. 238—279.)

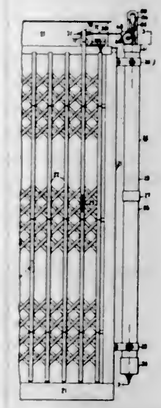


1. In combination, a rail having a web portion and heads symmetrically disposed at each end of said web portion, supports for said rail in the form of clamp members bearing on the inner surfaces of said rail heads at opposite sides but elsewhere clear of the rail heads, and clear of the rail web so that as wear occurs they may be drawn closer together, and means for securing said clamp members together with the rail gripped therebetween.

1,860,333. CLOSURE OPERATING MECHANISM. EDWARD LEE DUNN, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 18, 1929. Serial No. 356,052. 16 Claims. (Cl. 187—52.)

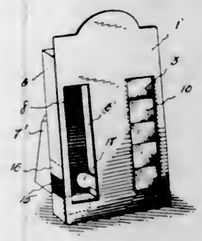
1. In an elevator system, a closure adapted when open to afford access to the elevator car, means for biasing said closure to one of its limit positions, and means for controlling said biasing means to prevent its operation

to move said closure to said limit position, said biasing means comprsing two relatively movable members whose relative movement is unaffected by said preventing means,



one of said members being connected to said closure whereby the closure may be manually moved to said limit position unaffected by said preventing means.

1,860,334. DISPLAY AND DISPENSING CARTON. MORRIS M. EINSON, Yonkers, N. Y., asaignor to Einson-Freeman Co., Inc., Long Island City, N. Y., a Corporation of New York. Filed May 17, 1930. Serial No. 453,251. 4 Claims. (Cl. 206—44.)



1. A container of the class described composed of a one sheet blank, said blank having a main section forming a front or display sheet having an inspection opening therein, a lateral extension from said main section being folded and adhesively secured to said main section to form a compartment on the back of said main section, said compartment having collapsible side walls provided with openings therein adjacent to the bottom thereof, means for closing the open top and bottom of said compartment, said means operating to retain the compartment in its set up position, and the means for closing the bottom of said compartment comprising a folded portion cut out to provide said inspection opening and said bottom closing means operating as an elevated platform or support for merchandise contained within said compartment.

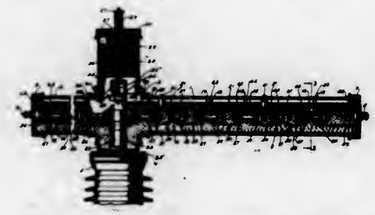
1,860,335. METHOD OF CURING CASINGS. PERRY J. LONG, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 9, 1928. Serial No. 284,281. 4 Claims. (Cl. 17—45.)

1. The method of curing casings which consists in slushing them in salt and then forcibly ejecting surplus brine quickly therefrom and to an appreciable degree through the casing walls.

1,860,336. STABLE SELENIUM SULPHIDE AND METHOD FOR ITS PREPARATION. BIRGER W. NORDLANDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Mar. 28, 1929, Serial No. 350,836. Divided and this application filed Mar. 20, 1930. Serial No. 437,619. 5 Claims. (Cl. 23—206.)

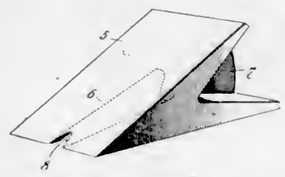
2. The method of producing a stable, chemically active selenium sulphide which comprises the steps of melting together selenium and sulphur and converting the combined mass into the chemically active form.

1,860,337. HIGH TENSION CIRCUIT INTERRUPTER. DAVID C. PRINCE, Schenectady, and WILLIAM TURNPENNY, Albany, N. Y., assignors to General Electric Company, a Corporation of New York. Filed May 19, 1931. Serial No. 538,560. 6 Claims. (Cl. 200—150.)



1. A high tension circuit interrupter comprising a housing having a pressure chamber and a relief chamber communicating therewith through a plurality of relief openings, an arc-extinguishing liquid filling said pressure chamber, and a plurality of pairs of contacts connected in series in said pressure chamber, certain pairs of said contacts being adjacent and opposite said relief openings and other pairs of contacts being remotely positioned with respect to said relief openings whereby the arcs drawn between said remotely positioned contacts generate pressure within the pressure chamber causing blasts of extinguishing liquid through said relief openings and across the arcs drawn between the corresponding adjacent pair of contacts.

1,860,338. SELF-SHARPENING DIPPER TOOTH. JOHN C. TAYLOR, Jr., Easton, Pa., assignor to Taylor Wharton Iron and Steel Company, High Bridge, N. J., a Corporation of New Jersey. Filed Aug. 27, 1931. Serial No. 559,781. 9 Claims. (Cl. 37—142.)

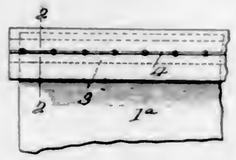


3. A digging tooth having a point formed with a recess that opens into the cutting edge to overcome bluntness in response to wear.

1,860,339. BAG AND CLOSURE THEREFOR. HAROLD J. LE VESCONTE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 30, 1928. Serial No. 289,502. 1 Claim. (Cl. 229—62.)

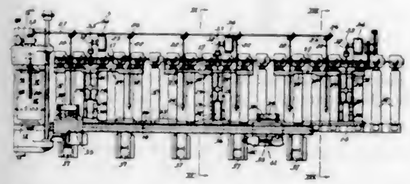
A bag having side walls, a closing strip folded about the edge portions of the side walls at the mouth of the bag, a strip of fabric of soft texture disposed between the closing strip and the side wall of the bag at each side thereof,

a line of stitches passing through the closing strip, the strips of fabric of soft texture and the side walls of the bag for closing the bag and holding the closing strip firmly in contact with the strips of fabric of soft texture,



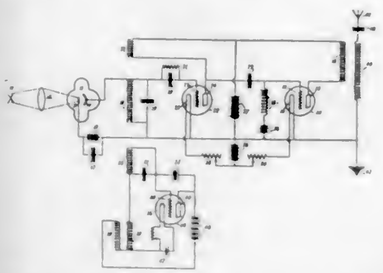
whereby said fabric strips of soft texture will contract at the needle punctures and close in against the needle thread for substantially closing the needle punctures and preventing the escape of the material from the bag therethrough.

1,860,340. APPARATUS FOR FEEDING METAL TO SHEARING DEVICES. FLORENCE C. BIGGERT, Jr., Crafton, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 8, 1930. Serial No. 500,882. 9 Claims. (Cl. 164—61.)



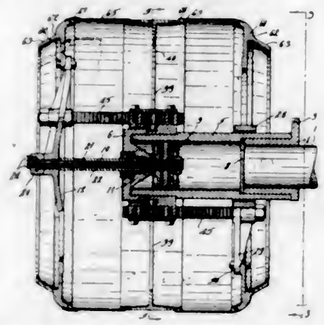
1. The combination with a metal shearing device including a pair of shearing members for trimming opposed edges of a plate or sheet, one of said members being adjustable to accord with the width of the plate or sheet, and a feed table for said shearing device, of a pair of sight-gauges associated with said table for alignment with said shearing members, said sight-gauges being disposed above the level of the feed table to permit free movement of the metal beneath them and one of said sight-gauges being adjustable to accord with the adjustment of the adjustable shearing member.

1,860,341. ELECTRICAL TRANSMISSION OF LIGHT BY PHASE CONTROL. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed July 13, 1927, Serial No. 205,306. Renewed Feb. 4, 1930. 17 Claims. (Cl. 250—8.)



1. The method of electrical transmission of light by phase control, which comprises generating at the receiving station and at the transmitting station a series of waves of a frequency accurate to within a very small degree and in phase with each other, generating at the transmitting station oscillations of a second frequency normally controlled by said first generated frequency, varying the frequency of said last named oscillations by a small amount in accordance with fluctuation in light intensity, transmitting said last generated oscillations, receiving said last generated oscillation, and combining said received oscillations with said locally produced oscillations and producing therefrom an impulse corresponding to the difference in phase between two said series of oscillations.

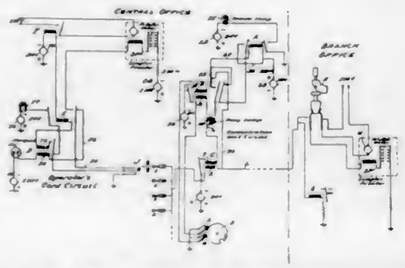
1,860,342. TELESCOPIC TIRE BUILDING DRUM. ALLEN L. HESTON, Columbiana, Ohio, assignor to The National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 9, 1929. Serial No. 384,683. 36 Claims. (Cl. 154—10.)



1. A tire building drum comprising side rings movable toward and from one another, extensions on said rings adapted to form the tire building surface, and a collapsing mechanism located within the drum and separable from the rings.

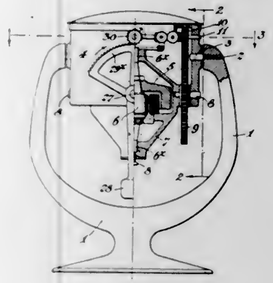
25. In a tire building form, the combination of two oppositely positioned rings having bead seats thereon, extensions upon the rings forming the tire building surface, a rotatable shaft supporting and adapted to drive said rings, and interconnecting means operating independently of the shaft for causing movement of the rings toward and from one another.

1,860,343. MULTIPLE TURRET SIMPLEX PRINTER CONCENTRATION CIRCUIT. GEORGE G. LIGHT, Kew Gardens, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 24, 1931. Serial No. 552,983. 7 Claims. (Cl. 178—2.)



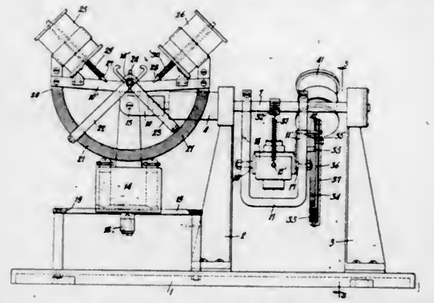
1. In an intercommunication system embodying a central station, a plurality of substations, a line from each sub-station terminating in multiplied jack-plugs at a number of turrets or operator's positions, a simplex printer at each operator's position, and an operator's cord circuit adapted to connect the printer with one of said plugs, relay means controlling said connection including an electrostatically controlled arc discharge path.

1,860,344. STABILITY METER FOR SHIPS AND OTHER MOVABLE BODIES. JOHN LYELL WILSON, Brooklyn, N. Y. Filed June 23, 1926, Serial No. 117,957. Renewed Mar. 9, 1932. 11 Claims. (Cl. 73—51.)



11. In an apparatus of the character described, an indicator, and means including a gyroscope for causing said indicator to show the metacentric height of a body.

1,860,345. APPARATUS FOR DETERMINING METACENTRIC HEIGHT. JOHN LYELL WILSON, Brooklyn, N. Y., assignor to Stability Meter Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 8, 1929. Serial No. 338,426. 10 Claims. (Cl. 73—151.)



1. In an apparatus of the character described, means responsive to the rate of rolling movement of a body, means responsive to the angle of roll, an indicator and means connecting said two first mentioned means with said indicator for causing the latter to indicate the metacentric height of the body.

Patents Nos. 1,860,346 to 1,861,431

THE

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OF THE

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Issue of May 31, 1932

Trade-Marks	138	No. 294,464 to No. 294,601, inclusive.
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Labels	28	No. 40,749 to No. 40,776, inclusive.
Prints	2	No. 13,736 to No. 13,737, inclusive.
Reissues	5	No. 18,482 to No. 18,486, inclusive.
Designs	55	No. 87,042 to No. 87,096, inclusive.
Patents	1,086	No. 1,860,346 to No. 1,861,431, inclusive.
Total	1,328	

Adjudicated Patents

(C. C. A. Mich.) Ferguson patent, No. 1,089,405, for reinforced-concrete dock or pier, *Held* not infringed. *Wabash Ry. Co.* v. *Dock & Terminal Engineering Co.*, 56 F.(2d) 574.

(C. C. A. Mo.) Townsend patent, No. 1,231,099, for closure, *Held* invalid. *Anchor Cap & Closure Corporation* v. *Linhardt*, 56 F.(2d) 542.

(C. C. A. Mo.) Taliaferro patent, No. 1,381,363, for cover for jars, claims 1–4 and 6 *Held* invalid. *Id.*

(C. C. A. Tenn.) Myers patent, No. 1,385,141, for power head, claim 7 *Held* infringed. *N. O. Nelson Mfg. Co.* v. *F. E. Myers & Bro. Co.*, 56 F.(2d) 512.

(C. C. A. Tenn.) Myers patent, No. 1,393,306, for power head, claim 1 *Held* infringed. *Id.*

(C. C. A. N. J.) Kausal patent, No. 1,509,211, for electric lamp, claims 3, 4, and 5, if valid, *Held* not infringed. *Kausal* v. *American Seating Co.*, 56 F.(2d) 557.

(D. C. N. Y.) Sargent and De Reamer patent, No. 1,567,863, for housewiring structure, claims 1 to 8 *Held* invalid. *General Electric Co.* v. *U. S. Electric Mfg. Co.*, 56 F.(2d) 630.

(D. C. N. Y.) Sargent patent, No. 1,567,864, for wall attachment means for electrical devices, claims 1 to 8 *Held* invalid. *Id.*

(D. C. Ohio.) Rockwell patent, No. 1,571,801, for double reduction bus axle, *Held* valid and infringed. *Timken-Detroit Axle Co.* v. *Eaton Axle & Spring Co.*, 56 F.(2d) 651.

(C. C. A. N. J.) Kausal patent, No. 1,575,690, for aisle chair, claims 2 and 5 *Held* invalid. *Kausal* v. *American Seating Co.*, 56 F.(2d) 557.

Trade-Marks Canceled

205,980. Sugar. Godchaux Sugars, Inc., New Orleans, La. Registered November 17, 1925. Canceled May 12, 1932.

257,893. Chemical preparation used for baths in the treatment of certain diseases. Fluid D'Or Company, Limited, Winnipeg, Manitoba, Canada. Registered June 18, 1929. Canceled April 22, 1932.

271,032. Soap. Colgate-Palmolive-Peet Company, Chicago, Ill. Registered May 20, 1930. Canceled April 22, 1932.

Notice of Cancellation

U. S. Patent Office, *Washington, May 10, 1932.*

Paul G. Lewis, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Haller Baking Company, of North Denniston Avenue, Pittsburgh, Pa., to effect the cancellation of the trade-mark registration of Paul G. Lewis, of 1635 La Brea Avenue, Los Angeles, Calif., No. 183,932, dated May 13, 1924, and the notice of such proceeding sent by registered mail to the said Lewis at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Lewis, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

NOTICE TO ATTORNEYS

The Patent Office has received numerous protests from trade-mark proprietors that their trade-marks are frequently used as common nouns in patent specifications.

Applicants and their attorneys are urged to avoid using trade-marks in patent specifications and to employ in their stead properly descriptive terms. If, however, a trade-mark is used, suitable acknowledgment should be made that it is a trade-mark, as, for example, by stating that the article or product in question is one which is sold under such and such a trade-mark and/or by capitalizing the first letter of the word constituting the trade-mark and inclosing the word in quotation marks.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Condition of Applications Under Examination at Close of Business May 14, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 77,045; Trade-Mark Division, 920. Oldest new case, Oct. 15, 1931; oldest amended, Oct. 16, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	†Jan. 27	†Feb. 3	520
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Dec. 15	Dec. 24	1,114
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Jan. 26	†Jan. 30	736
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Feb. 6	†Feb. 18	576
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 22	Dec. 23	431
4898 C	6. LEWERS, A. M., Carbon Chemistry	Oct. 22	Nov. 2	1,998
5725	7. JARBOE, C. G., Optics; Photography	Dec. 7	Dec. 7	1,568
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 4	Dec. 7	1,264
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Feb. 3	†Feb. 6	858
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 30	Dec. 8	984
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Jan. 2	†Jan. 8	633
7701	12. HENRY, C. C., Machine Elements	†Jan. 22	†Jan. 24	647
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 24	Dec. 19	1,157
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Jan. 23	†Jan. 25	794
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 5	Dec. 5	2,084
5612	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 15	†Jan. 19	892
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Nov. 16	Nov. 17	1,385
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 15	Dec. 15	850
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Oct. 19	Oct. 26	1,777
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 22	†Jan. 16	675
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 28	Dec. 29	942
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Jan. 11	†Feb. 4	626
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 15	Oct. 16	971
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 23	Dec. 17	735
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 23	Nov. 23	1,591
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Nov. 18	Nov. 18	948
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Dec. 28	Dec. 28	955
4028	28. BENSON, A. R., Internal-Combustion Engines	Nov. 14	Nov. 14	1,420
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Oct. 19	Oct. 20	1,007
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 16	†Jan. 25	896
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Nov. 7	Nov. 6	1,584
4089	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 7	†Jan. 12	995
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Nov. 17	Nov. 16	2,401
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Dec. 14	Dec. 14	919
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Mar. 23	†Mar. 22	452
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Nov. 12	Nov. 9	1,798
5859	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 20	Nov. 20	1,380
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 2	†Mar. 4	321
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 15	Nov. 16	1,522
7880	40. OBERLIN, J. J., Receptacles	Dec. 4	Dec. 7	2,021
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	†Jan. 23	†Feb. 2	790
5882	42. CUTTING, H. O., Electric Signaling	Nov. 9	Nov. 3	1,469
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 15	Dec. 15	1,463
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 16	Oct. 17	1,842
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Dec. 26	Dec. 26	1,266
4313	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Dec. 30	Dec. 30	754
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Dec. 15	Dec. 15	2,091
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Nov. 30	Nov. 27	968
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 30	Oct. 31	1,543
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Nov. 2	Nov. 2	2,126
5628	51. BACKUS, C. D., Radiant Energy	Dec. 6	Dec. 6	1,284
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 26	†Feb. 5	832
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 15	†Feb. 20	592
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Nov. 3	Nov. 3	1,140
6883	55. BOWEN, S. T.—(Bread, Pastry, and Confection Making; Cutlery	†Mar. 31	†Mar. 31	216
	(Designs	†Apr. 20	†May 2	187
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Nov. 24	Nov. 25	1,494
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 18	Dec. 26	688
5905	58. DOWELL, E. F., Abrading; Typewriting	Nov. 6	Nov. 9	1,360
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 14	Nov. 14	1,610
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Nov. 4	Nov. 4	1,555
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 29	Nov. 2	1,530
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Nov. 14	Nov. 14	1,781
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Nov. 8	Nov. 12	1,483
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Dec. 8	Dec. 8	734
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Oct. 24	Oct. 24	1,820
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—(Trade-Marks	†Apr. 18	†Apr. 25	801
	(Labels and Prints	†Apr. 14	†May 2	119

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

FOWLER *v.* AFFLECK AND ANDERSON

No. 2,885. Decided February 8, 1932

INTERFERENCE—PRIORITY—ORIGINALITY.

Evidence reviewed and *Held* to establish that A. and A., the senior parties, were the original inventors of the invention in issue and that priority was properly awarded to them.

APPEAL from the Patent Office. Affirmed.

Mr. Elliott J. Stoddard for Fowler.

Mr. Thos. S. Donnelly and *Mr. Eugene E. Stevens* for Affleck and Anderson.

GRAHAM, *P. J.:*

An interference was declared by the United States Patent Office between the application of the appellant, filed April 8, 1927, Serial No. 181, 963, and the application of the appellees, filed January 24, 1927, Serial No. 163,301. These applications covered the subject matter of a process for cleaning spraying booths where objects, such as automobiles, are painted.

The issue of the interference was expressd in two counts, which are as follows:

1. The process of removing paint and finish from the inner surface of spray booths consisting in applying, prior to the spraying operation, on the inner surface of said spray booths, a protective coating of water soluble material and removing said protective coating from said surface subsequent to the spraying operation by forcibly bringing water or steam into contact with said coating.

2. The method which comprises applying to the surface of the walls of a spray booth a coating of a water soluble adhesive compound, and subsequently removing said coating together with paint, lacquer or the like collected thereon with a fluid containing water.

Both tribunals in the Patent Office awarded priority to the appellees.

The appellant being the junior party, the burden was imposed upon him of establishing his claim of priority of conception and reduction to practice by a preponderance of the evidence. This burden of proof becomes greater here because of the concurring decisions of the tribunals below, on a question of fact. *Herst* v. *Nielsen*, 19 C. C. P. A. (Patents) ——, —— F.(2d) ——.

The case is one involving largely the question of originality. No question of diligence is raised. A third party, Schlatter, was originally involved in the interference, but his rights were disposed of by a judgment entered against him for failure to show cause.

The appellees allege, in their preliminary statement, conception on or about April 1, 1926, and reduction to practice on or about April 15, 1926. The appellant alleges conception and reduction to practice on or about October 1, 1926. As we understand it, the Examiner of Interferences found that the invention had been conceived and reduced to practice by the appellees in April or May, 1926. The Board of Appeals found a conception by appellees in the spring of 1926, as averred, and found that in a demonstration of the invention at the Dodge plant in October, 1926, appellees reduced the invention to practice. No holding was made by the Board as to the appellees' claimed reduction to practice in April or May, 1926, a holding on such point not being necessary to a decision of the case.

In the years 1926 and 1927, the appellant was division superintendent of painting and enameling in plant No. 1 of the Dodge Brothers' automobile factory in Detroit, Mich. The appellee Anderson, during 1926, was employed in said plant as acting foreman in connection with enameling bodies. A part of his duties at that time was to see that the spraying booths were kept clean. This work, it appears, was under the general supervision of the appellant. In the spring of 1927, Anderson became superintendent of painting in the truck division. The appellee Affleck was employed by Dodge Brothers in the physical testing laboratory, as a metallurgist, at the same time, apparently in the same plant, with Anderson.

It appears from the record that Dodge Brothers was having considerable trouble, during the year 1926, with the problem of keeping its spraying booths clean. Owing to the highly-inflammable character of the lacquer used in painting, the insurance underwriters were insisting upon no accumulations of this spraying material being permitted in these booths. The ordinary practice was to scrape off the enamel from the metal sides of the booths with bronze scrapers, iron scrapers not being permitted because of the possibility of sparks and consequent fires. This difficulty continued during the summer of 1926, for in June, 1926, we find the appellant participating in a meeting at the city fire marshal's office, called for the purpose of drafting an ordinance covering this subject, and on October 7, 1926, a draft of the proposed ordinance was submitted to the appellant for his approval. There is no hint in the minutes of said meeting of June 24, that anyone had any appreciation of the solution of the problem involved in the issue of this interference.

In the spring of 1926, the appellee Anderson, associated with Joseph Thimm and Randle T. Meehan, rented a garage in Detroit, where they thereafter carried on the work of painting private automobiles. Anderson worked here at odd times, when not employed at the Dodge Brothers' plant. Possession of these premises was taken April 5, 1926. During the occupation of these premises, various cars were painted there, the cars being placed in the southeast corner of the garage for painting. The painting was done by spraying, a compressor being used. In the southeast corner of this garage certain sheets of corrugated metal were placed, to protect the wall from the excess spray. The witness Meehan stated that he saw no such plates, but their presence is amply established by the testimony of several other witnesses.

While this private work was going on, the appellee Affleck was experimenting in the basement of the residence of one Weismiller, with whom he was then living, endeavoring to prepare a material for coat-

ing the sides of painting booths which could be easily and cheaply removed. He took some of this material from time to time to Anderson's garage, and it was there found, on experimenting, that it was impenetrable by enamel and could be removed with water. Much of this experimental work was done both at Weismiller's, and at the garage, by Affleck and Anderson, jointly, during the months of April and May, 1926.

The evidence, in our opinion, amply corroborates Affleck and Anderson as to what occurred at this garage. The metal plates in question were so placed as to catch the excess spray, and, although they did not cover the entire inner surface of the garage, seem to have covered that portion which would naturally be reached by the excess spray. There can be no doubt that the appellees perfected their material, applied it repeatedly to these plates and removed it, all substantially as was the later practice in the Dodge plant, after its adoption there in October, 1926.

No reason is apparent why this did not constitute a reduction to practice of the invention in issue. It will be observed that the counts of the interference are broad enough to cover a protection of the entire inner surface of a spray booth, and also such part thereof as is necessarily used, as well. It can hardly be successfully contended that in order to satisfy the counts, there must be a reduction to practice by coating the entire inner surface of a garage, 18 by 24 feet in size, with protective material, when only a small portion of the inner surface of this building would be exposed to the surplus spray. We are of opinion that the appellees have proven their claim of a conception and reduction to practice in April or May, 1926.

We might be content with this conclusion, without further discussion of the matter. However, even if the work of appellees in the spring of 1926 were not considered a reduction to practice, we are convinced by the facts appearing upon this record, that the demonstration in the Dodge plant in October, 1926, where the material was used successfully on a painting booth, was conducted by Anderson, and not by Fowler. The material which was used was procured from Affleck. The record plainly shows that up to that time Fowler had been experimenting, unsuccessfully, with a material called "Protect-O-Lac." It was only after this demonstration that Fowler began to experiment for himself along the lines indicated by the October test.

Fowler's testimony is uncertain and contradictory, and certainly not of that character which would justify this court in reversing the concurring decisions of the tribunals below. It is a significant fact that on December 8, 1926, he prepared a letter for Anderson to sign known as appellees' Exhibit 4, in which he sought to have Anderson acknowledge that the solution in question was prepared under his (Fowler's) direction, and which letter ended with this statement:

> • • • it is understood that I willingly give this firm the right to use same and this firm would not in any way or form be infringing upon my ideas or patent and I would not be entitled to any royalty from Dodge Brothers Inc., for using same.

Anderson refused to sign this letter. If, as Fowler claims, the invention was his and not Anderson's, it is difficult to understand why he so earnestly pressed the signing of this letter.

It is contended that Anderson, being under the supervision of Fowler, under the doctrine of *De Forest v. Owens*, 18 C. C. P. A. (Patents) 1424, 49 F.(2d) 826, 412 O. G. 554, was merely doing this work as a part of his employment and under the guidance and instruction of his employer, and that, therefore, the invention is that of his employer. However, the conception and reduction to practice by appellees, as we have seen, was not while they were performing their duties as employees of Dodge Brothers, but in their own time, at their own expense, and entirely independent of such employment. The rule announced in the case cited does, therefore, not apply.

The decision of said Board, awarding priority to the appellees on both counts of the interfence, is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

FASHION PARK ASSOCIATES, INC., *v.* LAPIDUS

No. 2,869. Decided February 1, 1932

TRADE-MARKS—SIMILARITY—"FASHION PARK" AND "STYL-LANE".

A trade-mark consisting of the term "Styl-Lane" arranged at the top inner rim of a circle and having thereabeneath the words "Fashionable Clothes" with the letters "N L C O" arranged as a monogram *Held* not confusingly similar to the mark "Fashion Park".

BLAND, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Mr. Clarence G. Campbell for Fashion Park Associates, Inc.

Mr. H. J. Jacobi and *Mr. William J. Jacobi* for Lapidus.

GARRETT, *J.:*

On October 3, 1928, appellee, Lapidus, filed an application in the United States Patent Office for registration as a trade-mark of the compound word "Styl-Lane" for men's clothing, alleging use thereof on suits, overcoats, etc., "since August 1927."

The drawing discloses an arrangement of the mark at the top inner rim of a circle, having underneath said mark the words "Fashionable Clothes," beneath which are the letters "N L C O," arranged as a monogram, all the words and the monogram being within the circle. There was a disclaimer as to all except the notation "Styl-Lane."

In conformity with the rules of the Patent Office, the application was passed to publication and published in the OFFICIAL GAZETTE of April 23, 1929.

Appellant, Fashion Park Associates, Inc., opposed the registration, alleging ownership and prior use of the trade-mark "Fashion Park" upon similar or identical goods, and pleading three registrations thereof which registrations are made parts of the record.

The notice of opposition alleged that appellant has built up a large clothing business which has become well known in every State by the trade-mark "Fashion Park"; that "Styl-Lane" by reason of the meaning of the words composing it ("Styl" being an obvious slight misspelling of "Style") is so similar to "Fashion Park" as to create confusion; that appellee's mark "could only be used for the purpose of obtaining the benefit of the name and reputation of opponent in the clothing trade and with the buying public," and that appellant would be damaged by its registration.

The answer of appellee insists that both "Fashion" and "Styl" are descriptive words and publici juris; denies generally and specifically the allegations of the notice of opposition as to there being a similarity likely to create confusion to the damage of appellant, and denies also the allegation as to appellee's purpose to profit from the name and reputation of appellant's business.

The Examiner of Trade-Mark Interferences dismissed the notice of opposition and adjudged appellee to be entitled to the registration sought. His decision, upon appeal, was affirmed by the Commissioner of Patents, whereupon appeal was taken to this court.

It may be here stated that drawings accompanying the last two of appellant's registrations pleaded and in evidence (the first shows no drawing) disclose the mark underneath a representation of two mounted horsemen.

Appellant insists, however, that by usage, as shown by the evidence in the instant case, and by adjudications in certain other cases (*Rosenberg Bros. & Co.* v. *Kassman & Kessner, Inc.*, 10 F.(2d) 904, and *Rosenberg Bros. & Co.* v. *Elliott*, 7 F.(2d) 962) "Fashion Park" is appellant's mark, "with or without the mounted horsemen."

Whatever may be the effect in other proceedings of the usage and the adjudication referred to, we do not regard them as being of consequence here.

The issue before us is solely as to the similarity of the marks and we are in agreement with the holdings of the tribunals of the Patent Office that they do not conflict.

This court has had occasion heretofore to determine cases wherein appellant's mark of "Fashion Park" was involved.

In *Rosenberg Bros. & Co.* v. *Horowitz*, 17 C. C. P. A. (Patents) 641, 390 O. G. 267, 35 F.(2d) 784, the issue was between "Fashion Park" and "Washington Park". We there said:

> • • • Appellant has not acquired the exclusive use of the word "park" in a trade-mark, and therefore the question is, do the words "Washington Park" so nearly resemble the words "Fashion Park" as to cause confusion or mistake in the mind of the public, or to deceive purchasers.

We held that such resemblance was not present.

In *Rosenburg Bros. & Co.* v. *Wetherby-Kayser Shoe Co.*, 17 C. C. P. A. (Patents) 794, 394 O. G. 3, 37 F.(2d) 437, "Fashion Park" and "Fashion *Lane*" were held not to conflict. (Italics new here.)

It is true that in that case the "Fashion Lane" mark was used on men's, women's and children's footwear, and we made some comment upon the dissimilarity, in fact, between these and clothing (though not holding that the respective goods were not goods of the same descriptive properties), and also reference was made to the representation of the horsemen in appellant's mark, but the concluding sentence of our opinion in the case was:

> Nor is there, in our opinion, such a similarity between the words "Park" and "Lane" as justifies, in this case the sustaining of this opposition.

In *Rosenberg Bros. & Co.* v. *The Simon Levin & Sons Co.*, 17 C. C. P. A. (Patents) 847, 395 O. G. 708, 37 F.(2d) 962, the majority of this court held "College Park" and "Fashion Park" not to be confusingly similar when applied to goods identical in character.

In *Fashion Park, Inc.*, v. *The Fair*, 18 C. C. P. A. (Patents) 1399, 412 O. G. 837, 49 F.(2d) 830, referred to in the oral argument of the case at bar, we held "Fashion Park" and "Fashion Row" to be confusingly similar when applied to men's outer clothing.

But in the instant case both words of the conflicting marks differ in practically all respects, except that there is some similarity of meaning between "Fashion" and "Style." In all other respects they differ, and each of them is a common word, open to any proper public use.

The brief of appellant says:

> A painstaking search covering the Standard Unabridged Dictionary, the Encyclopedia Britannica and Roget's International Thesaurus of English words and phrases brings us to the conclusion that "Park" and "Lane" have the common synonym "place" and both are rural suggesting trees and hedges.
>
> We therefore have it on the leading authorities on words that "Park" means "place" and "Lane" means "place."

While undoubtedly a park is a "place" and a lane is a "place," we can not conceive it to be proper to take that broad meaning which is common to innumerable other words for the purpose of trade-mark comparison.

"Park" has a number of noun meanings, such as those given in Funk & Wagnalls Dictionary:

> 1. A tract of land, generally large and enclosed, set apart for ornament or recreation. 2. An open, champaign country. 3. A picturesque sparsely wooded valley or plateau in the Rocky Mountains. 4. [Scot.] A cultivated field; paddock. 5. *Mil.* (1) An enclosure where animals, guns, wagons, etc., are placed for safety. (2) A complete train of cannon, including gunners, equipment, ammunition, etc.

The same volume defines "lane" as:

> A narrow way, path, or street.
> Syn.: See road; way.

In common usage we do not think that the same meaning is ever conveyed by, or ascribed to, "Park" and "Lane."

We rather agree with the statement in the answer of appellee that "Park" and "Lane" are dissimilar "in spelling, pronunciation, enunciation, meaning and appearance." We also agree with the tribunals of the Patent Office that they do not, in any sense proper here to be considered, have the same significance.

The view of this court that one clear purpose and manifest intent of the Congress, expressed in the Trade-Mark Registration Act of February 20, 1905, was to aid in rendering trade-marks valuable and to protect the owners thereof in the enjoyment of their value, by denying registration to such as might confuse, has been followed in the many decisions rendered by us since jurisdiction in such matters was transferred to us. Following many decisions of

the Court of Appeals of the District of Columbia, our predecessor in this field, we have uniformly resolved doubt against a new comer, and the effect of some of our decisions has undoubtedly been to somewhat modify the practice in the Patent Office.

If there were any real, intelligent ground for doubt in the instant case we should here apply the rule against appellee, but to our minds there is no such ground, and those charged with the administration of the registration act are not at liberty to lose sight of, or disregard, the rights of an applicant, as expressed in the language of section 5, which declares that, with certain exceptions specifically set forth:

No mark by which the goods of the owner of the mark may be distinguished from other goods of the same class shall be refused registration * * *.

Appellee seeks to exercise a right assured him by the law, none of the statutory exceptions being deemed applicable here. *B. F. Goodrich Co.* v. *Kenilworth Mfg. Co.*, 17 C. C. P. A. (Patents) 1106, 1108, 395 O. G. 6, 40 F.(2d) 121.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

BLAND, *J.*, dissents.

U. S. Court of Customs and Patent Appeals

HILL *v.* HILL

No. 2,840. Decided February 1, 1932

INTERFERENCE—PRIORITY—DILIGENCE.

Evidence reviewed and *Held* to establish that the invention of count 7 is disclosed in an earlier application of M. F. H., the senior party, but that E. H., the junior party, who had proven a prior conception was lacking in diligence in reducing the invention to practice from the time the senior party filed his earlier application and that priority was properly awarded to such senior party.

APPEAL from the Patent Office. Affirmed.

BLAND, *J.*, concurring.

Mr. Oscar W. Jeffery and *Mr. Harry R. Williams* for Ebenezer Hill.

Mr. Myron F. Hill pro se.

LENROOT, *J.*:

This is an appeal in an interference proceeding, No. 50,523, declared by the United States Patent Office. There were originally seven counts in the issue, counts 1 to 6, inclusive, being awarded by both tribunals of the Patent Office to Ebenezer Hill, and the seventh being awarded to Myron F. Hill. This appeal is taken by Ebenezer Hill from that part of the decision of the Board of Appeals, affirming the decision of the Examiner of Interferences, which awarded count 7 to appellee.

Count 7 reads as follows:

7. In a rotary mechanical movement for fluids, in combination, two rotor members one within and eccentric to the other, both having tooth divisions forming rotor chambers which expand and contract during rotation, said tooth divisions having contours which have continuous fluid tight engagements between them during performance of pressure functions, said rotor members capable of relative rotary motion to cause said members to receive and discharge fluid, the teeth of one rotor having epicycloidal contours, and those of the other hypocycloidal contours, a casing including high and low pressure conduits leading to said chambers, the tooth spaces of the pinion rotor having hypocycloidal contours to roll upon the teeth of the annular rotor at the center line at full mesh.

Appellant's application, No. 607,947, was filed on December 20, 1922. The application of appellee here involved, No. 616,778, was filed on February 3, 1923. The Primary Examiner held that said application of appellee was a division of his application, No. 551,079, filed on April 10, 1922, and appellee accordingly was held to be the senior party by both tribunals of the Patent Office.

The Examiner of Interferences held that the evidence was insufficient to establish conception by appellant, prior to April, 1922, of the subject matter of count 7, but, assuming that it did, appellant had failed to show diligence from just prior to April 10, 1922, appellee's filing date, and his own filing date, December 20, 1922. The Examiner accordingly awarded priority of invention as to this count to appellee.

The Board of Appeals held that the evidence was sufficient to establish conception of the subject matter of count 7 by appellant prior to April 10, 1922, appellee's filing date, but concurred in the decision of the Examiner that appellant had failed to show diligence during the period within which it was necessary, and concurred in the award of priority to appellee.

The subject matter of the count in issue, as may be gathered from the language of the count, is a rotary pressure pump for gases. It consists of an outside casing within which are two rotary gears, one within the other, both referred to as rotors. The outside rotor is fitted with teeth which project inward, said teeth meshing with cooperating teeth cut on the periphery of the inner rotor. For purposes of distinguishing between the two rotors, the outside one is commonly referred to as the annular rotor, the inner one being called the pinion, or pinion rotor. These terms will be employed in referring to the respective rotors hereinafter. The pinion has one tooth less than has the annular rotor; the diameter of the pitch circle of the pinion rotor is smaller than that of the annular rotor, said diameters bearing the same ratio to each other as the respective number of teeth on the two rotors, and the rotors are mounted eccentrically with respect to each other, the amount of eccentricity being the mean between the diameters of the respective pitch circles. Power is applied to a shaft upon which the pinion is mounted, causing said pinion to rotate; the pinion being meshed with the annular rotor, the latter also is caused to move, provision being made for its rotation within the casing of the pump. The eccentric position of the two rotors is such that relative motion between them is permitted, said relative motion being essential, of course, since the pinion has one tooth less than has the annular gear. The result of the eccentric mounting of the two rotors is that they are at full mesh at only one point for any given position of the rotors, and are farthest from full mesh at a point diametrically opposite. As the rotors are turned, those teeth moving away from the position of full mesh begin to separate, forming an enclosed space referred to as a chamber; said chamber changes in form and increases in volume as the said teeth approach the point opposite the position of full mesh, at which opposite point the volume of said chamber is a maximum; as the rotors continue to revolve beyond this point, a reverse operation results, the chamber again varying in shape and progressively decreasing in volume as it approaches the position of full mesh of the teeth. It will be understood that at all times there is a succession of such chambers about the periphery of the pinion, being of various shapes, said shapes depending upon the position of the chambers with respect to the point of full mesh, and of which some are necessarily in the process of expansion while the others are contracting. The construction is such that at all times each tooth of the pinion rotor is in engagement with one part or another of the contact surface of the annular rotor. There is a close, rolling contact between the teeth of the rotors at all times throughout the cycle of rotation; thus there is maintained a fluid-tight contact which prevents leakage of gas from the chambers hereinbefore mentioned while the same are contracting, and wear is minimized by the elimination of frictional sliding contact. The gas is introduced into the chambers while they are moving away from the position of full mesh, or, stated in another way, during that portion of the cycle when they are expanding, as heretofore detailed. When the chamber passes the point opposite the position of full mesh it begins to contract, thus subjecting the within gas to pressure. Said pressure increases as the contraction of the chamber progresses; when said gas pressure reaches a predetermined point, the gas is discharged through the outlet passage by means which it is not necessary here to discuss.

We agree with the Board of Appeals that appellant conceived and disclosed the invention in issue prior to the filing date of appellee's parent application, April 10, 1922. The Board found that appellee was entitled to said date for conception and reduction to practice, holding that appellee's application, filed on said date, disclosed the invention involved in count 7.

There are two principal issues before us: (1) Does appellee's application filed on April 10, 1922, disclose the said invention? (2) If it does, appellant being the prior conceiver, was he (appellant) diligent in reducing the invention to practice?

We will first consider the question of whether appellee's parent application does, in fact, disclose the invention embodied in count 7. If it does not, it will be unnecessary to consider the question of appellant's diligence because, in such case, upon the record before us, appellant was not only the first to conceive, but also the first to reduce to practice.

It will be observed that count 7 calls for two rotor members, one within and eccentric to the other, both having tooth divisions forming rotor chambers which expand and contract during rotation. The contours of the tooth divisions are such as to provide continuous, fluid-tight engagements between them during the performance of pressure functions, and the said rotor members shall be capable of relative rotary motion to cause the said members to receive, compress and thereafter discharge fluid. The teeth of the pinion rotor are described as having epicycloidal contours, and those of the other as having hypocycloidal contours, and the tooth spaces of the pinion rotor are described as having hypocycloidal contours to roll upon the teeth of the annular rotor at the center line at full mesh.

At this point it may not be out of place to observe that an epicycloidal curve is a curve generated by the motion of a point on the circumference of a circle which rolls upon the convex side of a fixed circle, and a hypocycloidal curve is a curve described by a point on the circumference of a circle which rolls upon the inner side of another circle.

The real question in issue upon this branch of the case is whether appellee, in his parent application, disclosed tooth spaces of the pinion rotor having hypocycloidal contours. The Board of Appeals agreed with the finding of the Examiner of Interferences that appellee in said application did disclose such hypocycloidal contours in the following language from the specification:

The * * * tooth spaces of the pinion may be determined and formed by means of a cutter having the form of an annular tooth, rotated about the pinion blank in the successive positions assumed by the tooth of the annular with relation to the pinion. * * *

With respect to this disclosure, the Examiner of Interferences said:

* * * With such a cutter operated in this manner, it seems clear that if the distance between the cuts is made small enough, the tooth spaces cut in the pinion will be such that the teeth of the outer rotor will have constant rolling contact with them, since the teeth of said outer rotor have the same shape as the tooth portions of the cutter. It clearly appears from the application of E. Hill and from the record of the parties that a hypocycloidal tooth can have true rolling contact only with a hypocycloidal tooth space. * * *

Previously in said specification, appellee had clearly described the annular tooth referred to in the above quotation as having cycloidal curves, and he further described the manner of forming the cycloidal curves of said annular tooth, thus disclosing that the annular tooth would be hypocycloidal in form, which, it is conceded, was old in the prior art.

The conclusion of the Examiner as to appellee's parent application disclosing hypocycloidal tooth spaces upon the pinion was concurred in by the Board of Appeals.

Appellant contends that both the Examiner and the Board erred in this conclusion. In his brief he states:

The only teeth mentioned are described as *annular, not* hypocycloidal and epicycloidal, and the teeth and tooth spaces of the pinion are said to be determined and formed by a cutter having the form of an *annular* tooth. If the cutter is of the form of an *annular* tooth the tooth *spaces* would be annular and neither the teeth nor the tooth spaces would have epicycloidal and hypocycloidal contours, as required by count 7.

The basic factors were overlooked by the Examiner, and the Board apparently were confused by what seemed to be an abstruse question and followed the Examiner who was mistaken as the following is believed to show.

The outer gear has a larger pitch diameter than the inner gear, and has one more tooth. If a cutter having the shape of a hypocycloidal tooth of an outer gear is used (which hypocycloid is formed on the larger pitch circle of the outer gear) for cutting a tooth space in an inner gear, which has a smaller pitch circle and fewer teeth, the result would not be a complementary hypocycloidal space, because of the difference in diameters of the pitch circles.

With regard to the use of the word *annular* by appellee in his parent application, where he describes the formation of the tooth spaces of the pinion by means of a cutter, appellant assumes that the word *annular* is used in its general sense, whereas it is clear that it should be construed as referring to a hypocycloidal tooth upon the annular or outer rotor. With regard to appellant's contention that, because the outer rotor has a larger pitch diameter than the inner rotor, and has one more tooth, a hypocycloidal tooth of the outer rotor could not be used for producing a hypocycloidal tooth space of a pinion having a smaller pitch diameter, we think that would be true if it were desired to produce upon the inner gear an exact complement of the outer tooth. But that is not desired; what is desired and called for by the count in issue are tooth spaces of the pinion rotor having hypocycloidal contours to roll upon the teeth of the annular rotor at the center line at full mesh. We think that appellee's method of producing pinion tooth spaces by means of a cutter, as described in said parent application, produces tooth spaces having hypocycloidal contours, as called for by the count; at any rate, both tribunals of the Patent Office so found, and upon such a highly technical question, before we could find that error had been committed in this respect, such error should clearly appear. Not only are we not satisfied that error has been committed, but it appears to us that the conclusion of the Patent Office tribunals was correct, and that the method of generation of pinion tooth spaces here considered does result in true rolling contact between the annular tooth and the pinion tooth space, it apparently being conceded by both parties that a hypocycloidal tooth can have true rolling contact with only a hypocycloidal tooth space.

With reference to the statement of the Examiner that, if the distance between the cuts is made small enough, the tooth spaces in the pinion will be such that the teeth of the outer rotor will have constant rolling contact with them, appellant contends that there is nothing in the disclosure in the parent application of appellee indicating that the cuts should be made small enough to secure this result, and hence the disclosure, he contends, is too indefinite to be relied upon. With this contention we do not agree. Obviously, the reference by the Examiner to the distance between cuts being small enough does not refer to the distance between tooth spaces, but to the cuts being made as the cutter is rotated upon the pinion blank. Obviously, if the feed is too rapid and the cuts are made too far apart, the rolling contact desired will not be secured; but if the cutter is slowly advanced upon the pinion blank and minute cuts are made upon each advance, or, as the Examiner puts it, if the distance between the cuts is small enough, rolling contact between the pinion tooth space and the annular tooth will be secured, and the space will be hypocycloidal in contour. The Patent Office tribunals were evidently of the opinion that the disclosure was sufficiently definite to enable one skilled in the art to generate the hypocycloidal tooth spaces upon the pinion called for by the court, and it has not been demonstrated to us that this was erroneous.

We find no error in granting appellee the date of April 10, 1922, for conception and reduction to practice of the invention in issue.

In view of our conclusion upon the question of appellant's diligence in reducing the invention to practice, it is unnecessary to consider appellee's contention that, upon the record before us, he is entitled to a date of conception and disclosure of the invention prior to the date of appellant's conception and disclosure.

We come now to consider the question of the diligence of appellant. As heretofore stated, the Examiner of Interferences found that appellant had not established conception of the invention prior to April 10, 1922, the date of appellee's constructive reduction to practice, but further found that, assuming that appellant had established conception prior to said date, he was lacking in diligence in reducing the invention to practice, and awarded priority of invention as to said count 7 to appellee. The Board of Appeals disagreed with the Examiner of Interferences as to the date of appellant's conception and disclosure, and found that he had conceived and disclosed the invention in November, 1921, but agreed with the Examiner that appellant was lacking in diligence in reducing the invention to practice from just prior to April 10, 1922, the date accorded appellee for conception and reduction to practice until his, appellant's, constructive reduction to practice on December 20, 1922, when he filed his application. Both tribunals specifically held that it had not been established that appellant was doing anything toward reducing the invention to practice during the first part of the period in which he was chargeable with diligence, the examiner of interferences finding specifically that there was no evidence of any activity upon appellant's part in reducing the invention to practice in April, May or June, 1922, while the Board held that he was lacking in diligence during the first part of the period within which he was chargeable with diligence.

While we agree with the Board of Appeals that appellant conceived and disclosed the invention in November, 1921, it is important to note that there is no evidence that he ever prepared, or caused to be prepared, working drawings of the invention until July, 1922, notwithstanding the fact that he testified that on December 1, 1921, he "had the contour properly planned and thoroughly in mind." If this be true, due diligence required that by April 10, 1922, he should have been actively taking steps to reduce the invention to practice, while the fact is that the evidence does not establish that appellant, prior to June 27, 1922, did anything, either toward actually reducing the invention to practice or filing an application for a patent for it.

Appellant contends that he was, during April, May and June, 1922, negotiating with appellee for a license to use "whatever M. F. Hill had in the way of his pump or structure", so that he could combine such features as appellee had patented with the improvements which are the subject of this interference. He further testified that these negotiations were dropped and that at no time was it necessary for him to acquire any patent rights that appellee may have had in order to enable him, appellant, to utilize the invention here involved.

In view of these facts, it is clear that such negotiations can have no bearing upon the question of appellant's diligence.

We are of the opinion that appellant has not established any activity in reducing the invention to practice from just prior to April 10, 1922, appellee's filing date, to the latter part of June of the same year.

Appellant further contends that, conceding this to be a fact, considering the intricate nature of the invention and the necessity of providing a complicated structure for its embodiment, a period of somewhat less than three months of inactivity would not constitute lack of diligence in reducing the invention to practice. Appellant, in support of this contention cites the case of *Beider* v. *Caps & Leininger*, 17 C. C. P. A. (Patents) 703, 36 F.(2d) 122, 392 O. G. 241, where we said, speaking of the invention there involved:

> Were this invention intricate and complicated, requiring extraordinary skill in building a machine to reduce it to practice and requiring study and continued thought in planning the building of it, a different situation might exist. • • •

The foregoing is, of course, a correct statement. In the case of a simple invention easily reduced to practice, little weight would be given to evidence that the inventor actively occupied himself over a long period of time in reducing it to practice, while, in the case of an intricate and complicated invention, it might require, in the exercise of due diligence, a long period of time in which to perfect and reduce it to practice, but in either case there must be reasonable activity in reducing the invention to practice. Merely because an invention is intricate and complicated does not excuse nonactivity in reducing it to practice.

We do not think the evidence establishes that appellant did anything toward reducing the invention to practice between the time of his conception in November, 1921, and June 27, 1922. During a portion of this time he was not chargeable with diligence, viz., from the time of his conception until just prior to April 10, 1922, but from that time forward to his reduction to practice he was so chargeable, and we do not think that nonactivity by appellant from immediately prior to April 10, 1922, to June 27, 1922, can be otherwise regarded than as a lack of diligence in reducing the invention to practice.

Appellant relies upon the case of *Jones* v. *Evans*, 18 C. C. P. A. (Patents) 866, 46 F.(2d) 197, 405 O. G. 841, in support of his contention that nonactivity during the time above stated did not constitute lack of diligence. In that case, we said that on the question of diligence each case must be decided upon its own facts and that all the surrounding circumstances must be considered. The facts in that case disclosed that the inventor was as active in reducing the invention to practice as the circumstances permitted; that extensive and intricate computation were required as to the character of transformers necessary for the embodiment of his invention, and that such calculations were made and transformers secured with reasonable expedition.

In the case at bar it is not established that there was any activity by appellant, in either cutting the gears embodying the invention or building a structure in which the invention could be used, during the period from immediately prior to April 10, 1922, to June 27, 1922.

The rule is well established that appellant had the burden of showing that immediately before appellee entered the field, and at that time, he, appellant, was exercising due diligence in perfecting his invention and attempting to reduce it to practice. *Martocello* v. *Kobash*, 17 C. C. P. A. (Patents) 1095, 39 F.(2d) 677, 397 O. G. 363.

We agree with the Patent Office tribunals that the evidence does not establish such diligence.

It appears that, after the original certification of the transcript of record by the Commissioner of Patents, appellee suggested a diminution of the record and proceedings in said cause, whereupon this court issued a writ of certiorari, pursuant to which certain additions to the record were certified to the court by the Commissioner of Patents and printed. The court, in issuing the writ, ruled that the assessment of costs for the printing of such additions to the record should await the final determination of the case. The additions to the record consist of what purports to be an extract from an application for patent filed by appellee in 1921, and certain claims of his application of April 10, 1922, said claims not having been included in connection with the portions of said last-named application originally certified. The additions also included a decision by the Law Examiner of the Patent Office, rendered on December 1, 1924, in which appellee was granted the right, over the opposition of appellant, to make the claim which is now count 7 here involved. With respect to the addition to the record comprising the extract from appellee's application of 1921, had we not found lack of diligence by appellant in reducing the invention to practice, it would have been necessary for us to consider appellee's contention that said extract disclosed the invention in issue and should be considered by us. Appellant, therefore, will pay the costs of printing this portion of the additions to the record, as it should have been originally certified. With respect to the other additions to the record, we are of the opinion that under no view of the case were they material to its proper determination, and appellee will pay the costs of printing such additions.

The decision of the Board of Appeals is affirmed.

Affirmed.

BLAND, *J.*, concurs in the conclusion.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,013,610, W. E. Pedley, Wall construction for dams or dikes, D. C., S. D. Calif. (Los Angeles), Doc. E S–33–J, *L. Pedley* v. *The County of Los Angeles, Calif.* Dismissed Feb. 25, 1932.

1,087,662, 1,612,510, L. R. Jorgensen, Dam construction, D. C. Oreg. (Portland), Doc. E 9183, *Constant Angle Arch Dam Co.* v. *The Inland Power & Light Co.* Dismissed Mar. 28, 1932.

1,141,402 (*a*), R. D. Mershon, Electrolytic apparatus employing filmed electrodes, filed Mar. 29, 1932, D. C., E. D. N. Y., Doc. E 6173, *R. D. Mershon* v. *M. Pickon et al.*

1,141,402 (*b*), R. D. Mershon, Electrolytic apparatus employing filmed electrodes; 1,784,674, same, Film formation and operation of electrolytic condensers, etc., filed Mar. 30, 1932, D. C. Mass., Doc. E 3608, *R. D. Mershon et al.* v. *Sprague Specialties Co.*

1,180,799, R. A. Stranahan, Spark plug; 1,529,277, O. C. Rohde, Heat resisting alloy; 1,840,437, C. E. Dewar, Spark plug; Des. 54,128, O. C. Rohde, Spark-plug core, filed Mar. 31, 1932, D. C., E. D. Mich. (Detroit), Doc. 5298, *Champion Spark Plug Co.* v. *T. G. Smith* (*Spark Plug Service Co.*). Doc. 5299, *Champion Spark Plug Co.* v. *A. Grossman* (*Standard Spark Plug Co.*).

1,181,370, A. C. Brown, Adjustable faucet attachment, D. C., W. D. Mich. (Grand Rapids), Doc. 2085, *A. C. Brown* v. *Enterprise Brass Works.* "Mandate from Circuit Court of Appeals affirming Dec. 16, 1931."

1,201,842, 1,201,843, L. C. Maltby, Mechanism for cutting tubes; 1,224,764, same, Glue-pot; 1,252,284, same, Machine for manufacturing spirally-wound straws; 1,254,336, same, Machine for manufacturing spirally-wound tubes, filed Mar. 23, 1932, D. C. Md., Doc. E 2020, *Stone Straw Corp.* v. *Maryland Baking Co. et al.*

1,201,843. (See 1,201,842.) 1,224,764. (See 1,201,842.)

1,252,284. (See 1,201,842.) 1,254,336. (See 1,201,842.)

1,307,733, A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means, filed Apr. 1, 1932, D. C., N. D. Ohio, E. Div., Doc. 4216, *Alemite Corp.* v. *C. Siefert et al.*

1,307,734 (*a*), A. V. Gullborg, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, filed Mar. 28, 1932, D. C. Minn., 4th Div., Doc. E 2333, *Alemite Corp.* v. *M. Dysthe et al.* (*Northwest Automatic Products Corp.*)

1,307,734 (*b*), A. V. Gullborg, Lubricating means, filed Mar. 29, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E W–68–J, *Alemite Corp.* v. *Smith-Johnson Corp.*

1,307,734. (See 1,307,733.)

1,321,150, H. E. Root, Controlling valve for vacuum operated power means, filed Mar. 2, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E W–42–C, *Bragg Kliesrath Corp.* v. *Engineering Productions, Inc., et al.*

1,350,605, W. E. Greenawalt, Flotation apparatus; 1,374,446, 1,374,500, same, Apparatus for treating liquids with gases, appeal filed Mar. 22, 1932, C. C. A., 10th Cir., Doc. 661, *The Stearns-Roger Mfg. Co.* v. *W. E. Greenawalt.*

1,374,446. (See 1,350,605.) 1,374,500. (See 1,350,605.)

1,410,499, A. Pacz, Metals and their manufacture, filed Mar. 30, 1932, D. C., S. D. N. Y., Doc. E 66/255, *General Electric Co.* v. *E. M. Katz, Inc., et al.*

1,475,980. (See 1,307,734 (*a*).)

1,528,480, N. A. Henderson, Milk bottle and cream separator for use therewith, appeal filed Mar. 29, 1932, C. C. A., 10th Cir., Doc. 667, *Cream Top Bottle Corp.* v. *E. Bailes et al.*

1,529,277. (See 1,180,799.)

1,530,460, J. B. Decker, Process of making toy torpedoes, etc., filed Mar. 29, 1932, D. C. Md.: Doc. E 2022, *J. B. Decker* v. *The Commercial Novelty Fireworks Co.*

1,612,510. (See 1,087,662.)

1,617,094, C. Atherton, Remote control valve, D. C., S. D. Calif. (Los Angeles), Doc. E. M–64–J, *Hy-Lo Unit & Metal Products Co.* v. *Standard Gas & Valve Co.* Claims 1, 2 and 3 of patent held valid and infringed Mar. 28, 1932.

1,645,370, W. E. Callison, Amusement device, filed Apr. 1, 1932, D. C., W. D. Okla. (Oklahoma), Doc. E 1338, *W. E. Callison* v. *Tibbs-Dorsey Mfg. Co. et al.*

1,658,353, Ronning & Ronning, Combination traction implements; 1,706,256, same, Combination tractor grader; 1,658,354, same, Earth-working attachment for tractors, filed Dec. 3, 1931, D. C. Minn., 4th Div., Doc. E 2242, *Patents Holding Corp. et al.* v. *J. D. Adams Co. et al.*

1,658,354. (See 1,658,353.)

1,694,516, A. T. Prescott, Ferry bridge, filed Mar. 31, 1932, D. C., S. D. N. Y., Doc. E 66/257, *J. E. Odgen Co.* v. *S. D. Hoffman* (*Columbia Contracting Co.*) *et al.*

1,706,256. (See 1,658,353.) 1,784,674. (See 1,141,402 (*b*).)

1,816,700, A. W. Rosen, Automobile mirror D. C. E. D. N. Y., Doc. E 5586, *A. W. Rosen & Co.* v. *A. S. Anzell et al.* Dismissed Apr. 1, 1932.

1,835,844, J. K. Butler, Electric refrigerator, filed Apr. 1, 1932, D. C., N. D. Ohio, E Div., Doc. 4217 *Automatic Refrigerator Corp* v. *The May Department Stores Co.*

1,840,437. (See 1,180,799.) Des. 54,128. (See 1,180,799.)

Des. 83,711, C. Wolfelt, Shoe, D. C., S. D. N. Y., Doc. E 59/294, *A. Geller Shoe Mfg. Co., Inc.*, v. *Ansonia Bootery, Inc.* Consent order of discontinuance (notice Mar. 30, 1932.)

Des. 86,274, L. F. Rosenbaum, Bifurcated outer garment, filed Apr. 2, 1932, D. C., E. D. Mich. (Detroit), Doc. 5300, *S. Rosenbaum & Sons Co.* (*Kalamazoo Pant Co.*) v. *Harvard Trouser Co.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,690,930, G. C. Forbes, Tri-purpose bottle, decided April 11, 1932, claims 1, 3, and 4.

Pat. 1,800,787, H. M. Friendly, Automatic telephone system, decided May 2, 1932, claims 20, 70, and 80.

Re. Pat. 17,533, Hans Scharf, Sound reproducer, decided March 17, 1932, claims 4, 5, 6, 7, 8, and 9.

Disclaimers

1,275,654.—*Harrison Hurlbert Boyce,* Oyster Bay, N. Y. INDICATING MEANS FOR MOTOR-PROPELLED VEHICLES. Patent dated August 13, 1918. Disclaimer filed May 13, 1932, by the patentee, said *Boyce, Leander Development Corporation,* a party of interest, and *Moto Meter Gauge & Equipment Corporation,* exclusive licensee, assenting.

Hereby enters this disclaimer to claims 4 and 25 of said patent, which are in the following words, to wit:

"4. Means for indicating the thermal condition of the engine of an automobile having an internal combustion engine provided with a liquid circulation cooling system, comprising the combination with the cooling system, of an indicating device having an indicating part readable from the driver's seat of the automobile, and having a temperature responsive element located in a position to be influenced by changes of temperature within the cooling system."

"25. In combination with a vehicle, having an internal combustion propelling motor, a fluid containing means associated therewith so as to be influenced by temperatures of the motor structure and means for showing normal and undesirable conditions of the power-plant, comprising a part mounted in temperature-responsive relationship to the fluid-containing means to be controlled by the changes in the temperature of said motor structure, and a sight indicator part associated with said first mentioned part,

adapted to be affected by the changing temperature conditions of the latter and located to be read by the operator of the vehicle while driving the same, said indicator part being adapted to present varying indications normally to serve as a guide for the operator in driving the motor at proper temperatures and abnormally as a warning to prevent or overcome undesirable conditions in the power plant."

1,571,900.—*Francis L. Lord,* Newark, N. J. TUNED RADIO-FREQUENCY RECEIVING SYSTEM. Patent dated February 2, 1926. Disclaimer filed May 7, 1932, by the assignee, *The Lord Laboratories, Inc.*

Hereby disclaims from claim 1 of the patent the following:—

"1. In a multi-stage transformer coupled, radio frequency system, means for varying the capacity in each transformer secondary circuit, means for varying the self-inductance of each primary and the mutual inductance of each transformer, and means for mechanically coupling said first named means with said second named means to thereby vary said capacity, said self-inductance and said mutual inductance simultaneously and in the same direction, said coils and said condensers being relatively so proportioned that objectionable feed-back oscillations are substantially eliminated."

in so far, and in so far only, as the said disclaimed subject matter relates to a movable primary coil oscillated in one-to-one ratio relative to the oscillation of the rotor plate or plates of the associated tuning condenser with the movable primary coil.

That your petitioner hereby disclaims from claim 2 of the patent the following:—

"2. In a multi-stage transformer coupled, radio frequency system, each transformer comprising relatively fixed primary and secondary coil portions, each primary further including a relatively movable coil portion, a tuning condenser connected across the secondary of each radio frequency stage, and means for mechanically coupling each movable primary coil portion with its associated tuning condenser to thereby vary the self-inductance of each primary and the mutual inductance of each transformer simultaneously with and in the same direction as the variation of the capacity of the associated tuning condenser, said coils and said condensers being relatively so proportioned that objectionable feed-back oscillations are substantially eliminated."

in so far, and in so far only, as the said disclaimed subject matter relates to a movable primary coil oscillated in one-to-one ratio relative to the oscillation of the rotor plate or plates of the associated tuning condenser with the movable primary coil.

Hereby disclaims from claim 3 of the patent the following:—

"3. In a multi-stage transformer coupled, radio frequency system, each transformer comprising relatively fixed primary and secondary coil portions, each primary further including a relatively movable coil portion, a tuning condenser connected across the secondary of each radio frequency stage and means for mounting each movable primary coil portion on the shaft of its associated tuning condenser to thereby vary the self-inductance of each primary and the mutual inductance of each transformer simultaneously with and in the same direction as the variation of the capacity of the associated tuning condenser, said coils and said condensers being relatively so proportioned that objectionable feed-back oscillations are substantially eliminated."

in so far, and in so far only, as the said disclaimed subject matter relates to a movable primary coil oscillated in one-to-one ratio relative to the oscillation of the rotor plate or plates of the associated tuning condenser with the movable primary coil.

1,767,777.—*Adolph A. Thomas,* New York, N. Y. LOUD-SPEAKER. Patent dated June 24, 1930. Disclaimer filed May 14, 1932, by the assignee, *Radio Corporation of America.*

Hereby disclaims that part of the specification of said patent which consists of claims 13, 14, 15 and 25 which are in the following words:

"13. A loudspeaking diaphragm comprising a stretched flexible sheet held constantly under tension along its surface, and a driving member connected to the center of said diaphragm, the normal tensioned condition of the diaphragm imposing substantially no pull or push load on the driving member.

"14. A loudspeaking diaphragm consisting of a single elastic sheet held in permanently curved shape whereby said sheet is always under tension along its vibratory surface, and a driving member associated with the central portion of said sheet.

"15. A sound reproducer comprising a membrane, means for holding the same constantly under tension along its vibratory surface, and a driving unit connected to the center of said membrane which is supported under tension independently of said driving unit."

"25. A direct-acting diaphragm of loudspeaking area consisting of a single elastic sheet held in permanently curved shape whereby said sheet is always stretched along its vibratory surface."

1,786,053.—*John W. Coast, jr.,* Tulsa, and *Gordon T. Granger,* Okmulgee, Okla. METHOD OF AND APPARATUS FOR TREATING HYDROCARBON OILS. Patent dated December 23, 1930. Disclaimer filed May 17, 1932, by the assignee, *Gasoline Products Company, Inc.*

Hereby enters this disclaimer to claims 11, 12 and 13 of the aforesaid Letters Patent which are in the following words, to wit:

"11. The method of continuously skimming and cracking hydrocarbons which comprises forcing a stream of oil through a skimming still under pressure without substantially cracking the constituents of the stream, reducing the pressure on the stream passing from said skimming still to vaporize portions of the oil, at the same time removing the residual oil, subjecting the vaporized portions to reflux condensation, forcing the reflux condensate through a cracking still under a higher pressure so as to crack the intermediate fraction resulting from the skimming operation, expanding the cracked stream passing from said cracking still to vaporize portions of said cracked stream, at the same time removing the cracked residual oil, discharging said cracked residual oil, subjecting the cracked vapors to reflux condensation, and adding the cracked reflux condensate to the reflux condensate produced in said skimming operation.

"12. The method of continuously skimming and cracking hydrocarbons which comprises skimming but not substantially cracking a stream of crude oil by heating the stream under pressure to a temperature high enough to vaporize the gas oil and lighter fractions, transmitting the resultant mixture to an expansion chamber, depositing the carbonaceous residual oil in said chamber and maintaining the pressure therein low enough to release said gas oil and lighter fractions in the form of vapors, removing said residual oil from the system, subjecting said vapors to reflux condensation under a pressure lower than the first mentioned pressure and thereby condensing the gas oil fraction of the crude oil, cracking the condensed gas oil by pumping it through a cracking coil under a higher pressure, transmitting the cracked mixture from said coil to a vaporizing chamber and depositing the carbonaceous residuum therein, removing said residuum from the system, subjecting the cracked vapors to reflux condensation, and mixing the resultant reflux condensate with said gas oil fraction of the crude oil passing to said cracking coil, so as to subject the mixture to the cracking operation.

"13. The method of continuously skimming and cracking hydrocarbons which comprises skimming but not substantially cracking a stream of crude oil by heating the stream under pressure to a temperature high enough to vaporize gas oil and lighter fractions, transmitting the resultant mixture to an expansion chamber, depositing the carbonaceous residual oil in said chamber and maintaining the pressure therein low enough to release said gas oil and lighter fractions in the form of vapors, removing said residual oil from the system, subjecting said vapors to reflux condensation under a pressure lower than the first mentioned pressure and thereby condensing the gas oil fraction of the crude oil, cracking the condensed gas oil by pumping it through a cracking coil under a higher pressure, transmitting the cracked mixture from said coil to a chamber and separating the vapors from the carbonaceous residuum therein, removing said residuum from the system, subjecting the cracked vapors to reflux condensation, and mixing the resultant reflux condensate with said gas oil fraction of the crude oil passing to said cracking coil, so as to subject the mixture to the cracking operation, and transmitting heat from said cracked vapors to said stream of crude oil before said stream is heated to vaporize the gas oil."

1,806,991.—*Joseph F. Fetyk,* New York, N. Y. LOCKING MECHANISM. Patent dated May 26, 1931. Disclaimer filed May 10, 1932, by the patentee, assignee, *Francis Keil & Son, Inc.,* assenting and concurring.

Hereby enters the following disclaimer:—

Whereas claim 1, after setting forth a bolt and a keeper, specifies "means for moving the bolt into the keeper, comprising a plate and a rotary member for moving the same, said rotary member being arranged to cooperate with said

plate by moving to a dead center position when the bolt is in final locking position to normally oppose the initial movement of withdrawal of the bolt from locking position by external force applied to the bolt", and whereas the bolt is not only moved but also rotated into the keeper about an axis parallel to its direction of movement in order to bring the bolt into its final locking position, and whereas the above-quoted expressions are possibly susceptible of too broad an interpretation and, when so interpreted, are liable to cover or include elements and/or arrangements not intended to be covered by these terms, such as an arrangement like that disclosed and described in United States Letters Patent No. 830, 118 to H. G. Voight, issued September 4, 1906 (which, incidentally, does not suggest or disclose my invention), wherein a nonrotating or dead-bolt H is thrown into locked position by a member K connected to an eccentric or crank extension on a rotary hub I which are made to assume a position wherein the eccentric or crank extension of the hub assumes virtually a dead center position, the liability to such possible interpretation not being intended or foreseen and thus being accidental, I hereby disclaim any such broad meaning or interpretation of the above-quoted terms of claim 1 as will cover or include thereby such a nonrotary or dead-bolt arrangement as is disclosed in the above-mentioned United States Letters Patent No. 830,118 and, to clarify the nature of this disclaimer, I disclaim, insofar as claim 1 is concerned, any lock construction in which either the bolt is not rotated about an axis parallel to the line of movement of the bolt or the movement of the bolt into final locking position is not achieved by movement of both translation and rotation of the bolt.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 31, 1932

[VOL. 418. No. 5]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 320,633. CONSOLIDATED DISPLAYS, INC., Chicago, Ill. Filed Oct. 30, 1931.

MEXICAN FLAME BALL

For Living Hardy Growing Plant of the Cactus Family, Having a Spiny Armor of Soft Red Color and a Brilliant Yellow Flower When It Blooms and Suitable for Indoor or Outdoor Planting.
Claims use since May 15, 1931.

Ser. No. 323,648. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa. Filed Feb. 1, 1932.

C-99

For Coke.
Claims use since Jan. 26, 1932.

Ser. No. 323,649. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa. Filed Feb. 1, 1932.

ATLANTIC
C-99

For Coke.
Claims use since Jan. 25, 1932.

Ser. No. 323,650. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa. Filed Feb. 1, 1932.

ATLANTIC
C-99
THE ASHLESS FURNACE FUEL

The words "The Ashless Furnace Fuel" are disclaimed apart from the trade-mark as shown on the drawing.
For Coke.
Claims use since Jan. 26, 1932.

Ser. No. 326,249. AMALGAMATED LEATHER COMPANIES, INC., Wilmington, Del.; Philadelphia, Pa.; New York, N. Y.; Boston, Mass.; Rochester, N. Y.; Chicago, Ill., and St. Louis, Mo. Filed Apr. 19, 1932.

HYLITE

For Kid, Glazed Kid, and Other Leathers.
Claims use since Oct. 1, 1931.

Ser. No. 326,429. OLD BEN COAL CORPORATION, Chicago, Ill. Filed Apr. 23, 1932.

JETOAL

For Coal.
Claims use since Apr. 1, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 324,796. EUGENE MUETH, doing business as Toil-Gien Products Co., St. Louis, Mo. Filed Mar. 4, 1932.



The representation of the toilet bowl is disclaimed apart from the mark as shown.
For Toilet-Bowl Cleaner.
Claims use since Mar. 2, 1932.

CLASS 5

Adhesives

Ser. No. 324,722. PEP MANUFACTURING COMPANY, New York, N. Y. Filed Mar. 2, 1932.

Pep

For Sealing Compounds for Use on Unions of Gasoline, Kerosene, and Oil Engines of All Types.
Claims use since July 7, 1931.

Ser. No. 326,227. MODERN SUPPLY COMPANY, Chicago, Ill. Filed Apr. 18, 1932.

MOSOL

THE MODERN SOLDER

The words "The Modern Solder" are disclaimed apart from the mark as shown in the drawing.
For Semi-Liquid Adhesive.
Claims use since Apr. 8, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 312,751. BLACKMAN & BLACKMAN, INC., doing business as Premo Laboratories, New York, N. Y. Filed Mar. 31, 1931.



No claim is made to the use of the representation of the container apart from the mark shown in the drawing.
For Chemical Preventatives for the Prevention of Venereal Diseases.
Claims use since January, 1931.

Ser. No. 313,989. ALLOLA CO., Rochester, Pa. Filed Apr. 30, 1931.

Allola

For Cold Cream, Vanishing Cream, Make-Up Creams.
Claims use since Oct. 1, 1930.

Ser. No. 315,199. THE LOUIS HEISTER COMPANY, Cincinnati, Ohio. Filed May 29, 1931.

BAKU-OL

No claim is made to the exclusive use of the word "Baku" separate and apart from the mark as shown.
For Russian Oil for Medicinal Use.
Claims use since Jan. 1, 1906.

Ser. No. 316,771. D'ORSAY PERFUMERIES CORPORATION, New York, N. Y. Filed July 9, 1931.

COMTESSE D'ORSAY

For Perfumes, Perfume Extracts, Bulk Perfumes, Toilet Waters, Face Powders, Powder Compacts, Rouge, Rouge Compacts, Talcum Powders, Dusting Powders, Lipsticks, Eyebrow Pencils, Toilet Creams, Vanishing Creams, Cleansing Creams, Bath Salts, Brilliantines, Sachet Powders, Rose Leaves, Shampoo Powders, Eau de Cologne, Body Powder, Hair Tonics, and Body, Face, Foot, Hand, and Head Lotions.
Claims use since July 7, 1931.

Ser. No. 318,565. PRIMROSE HOUSE, INC., Dover, Del. Filed Aug. 29, 1931.

Chiffon

For Skin and Toilet Preparations—Namely, Face Powders Sold in Association with a Powder Puff.
Claims use since May 2, 1921.

Ser. No. 320,753. BRITISH BEWOID COMPANY LIMITED, London, England. Filed Nov. 3, 1931.

BEWOID

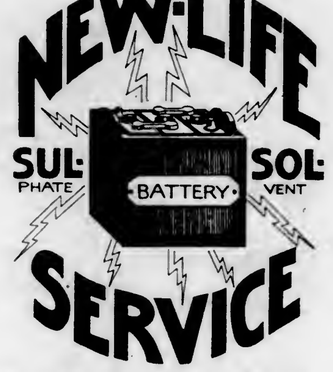
For Resinous and Animal Sizes, Emulsions of Resinous Oleaginous, Fatty, and Waxy Paper and Textile Sizing Agents, Casein and Albumen Used in Papermaking.
Claims use since Mar. 12, 1930.

Ser. No. 321,835. VITA-LAX CORPORATION, New York, and Long Beach, N. Y. Filed Dec. 5, 1931.

VITA-LAX

For Laxatives.
Claims use since Nov. 20, 1931.

Ser. No. 322,202. NEPTUNE BUCKNER, doing business as New Life Battery Company, Asheville, N. C. Filed Dec. 12, 1931.



Applicant makes no claims for the words "Sulphate Solvent, Service, Battery," and the representation of the battery, appearing on the drawing, aside from the mark as shown.
For Solvent Compound for Use in Storage Battery Compound.
Claims use since Oct. 10, 1927.

Ser. No. 322,216. KELLOGG COMPANY, Battle Creek, Mich. Filed Dec. 17, 1931.

PEP

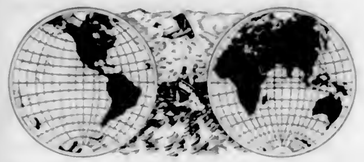
For Cough Drops.
Claims use since 1922.

Ser. No. 322,267. THE PRODERMATECT COMPANY, Scottdale, Pa. Filed Dec. 18, 1931.

PRODERMATECT

For Cosmetics Preparations—Namely, Cleansing Cream, Cold Cream, Skin and Tissue Cream, Vanishing Cream, and After-Shaving Cream.
Claims use since Nov. 5, 1931.

Ser. No. 323,266. WATERLOX, INC., Detroit, Mich. Filed Jan. 14, 1932.



For Transparent Liquid Chemical Waterproofing Compound for Steel, Linoleum, Rubber, Cork, Wood, Textiles, Paper, Leather, Canvas, Cement, and Plaster, and for Mixing with Paints and Varnishes or Used Over Them and as a Vehicle for Aluminum and Gold Bronze Powders.
Claims use since Dec. 18, 1931.

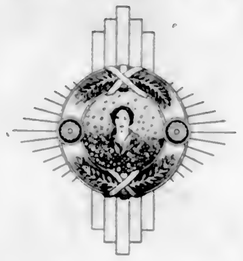
Ser. No. 323,664. FREDERICK EUGENE ISCHEBLAND, Flint, Mich. Filed Feb. 1, 1932.



For Liquid Shampoo Preparation for Cleansing the Hair and Removing Dandruff from the Scalp.
Claims use since Dec. 5, 1930.

Ser. No. 323,838. MARTINA A. PIÑA, East Chicago, Ind. Filed Feb. 3, 1932.

PIÑA'S
HAIR REVIVER



The surname "Piña's" and the words "Hair Reviver" are disclaimed apart from the mark as shown on the drawing. The portrait forming a feature of the mark is that of the applicant.
For Hair Restorer.
Claims use since Sept. 9, 1931.

Ser. No. 323,899. J. BAIN MCGILVRAY, Detroit, Mich. Filed Feb. 6, 1932.

TRE-MO

For Medicinal Preparation in Powdered Form for the Relief of Trench Mouth.
Claims use since Jan. 1, 1932.

Ser. No. 324,556. GLEBEAS IMPORTATION CO. INC., doing business as Glebeas Importing Co., New York, N. Y. Filed Feb. 27, 1932.



For Cosmetics and Facial Preparations—Namely, Face Powders, Face Creams, Depilatories, Brilliantine, Astringents, Deodorants, Toilet Waters and Perfumes.
Claims use since February, 1925.

Ser. No. 324,881. CHIPMAN CHEMICAL COMPANY, INC., Bound Brook, N. J. Filed Mar. 8, 1932.

ATLAS



No registration rights are claimed in the word "Preserves" except in association with the other features of the mark.
For Chemical Preparation Used as a Wood Preservative, Deck Cleaner, Paint Remover, Disinfectant, and for Fire-Proofing of Wood.
Claims use since 1899.

Ser. No. 325,005. LA COMPAGNIE PHARMACEUTIQUE DESBERGERS, Montreal, Quebec, Canada. Filed Mar. 10, 1932.

UPNOS

For Soporific Medicine.
Claims use since August, 1927.

Ser. No. 325,028. DAVID JULIAN BLOCK, doing business as Refrigerator Accessories Company, Chicago, Ill. Filed Mar. 9, 1932.

PUROLIZER

For Composition for Use as a Deodorizer in Ice Boxes and Refrigerators.
Claims use since Jan. 29, 1932.

Ser. No. 325,040. LA JEROME LABORATORIES, INC., Chicago, Ill. Filed Mar. 11, 1932.



The portrait, forming a part of the trade mark, as shown in the drawing, is fanciful.
For Waving Lotion and Tonic for Hair.
Claims use since Nov. 1, 1930.

Ser. No. 325,124. JOSEPH TRINER COMPANY, Chicago, Ill. Filed Mar. 14, 1932.



Applicant disclaims the words "Wine Tonic" apart from the mark shown on the drawing. The representation of the female figure forming a feature of the mark is fanciful.
For General Tonic Having a Wine Base.
Claims use since Mar. 1, 1932.

Ser. No. 325,128. THE UPJOHN COMPANY, Kalamazoo, Mich. Filed Mar. 14, 1932.

Accessorone

For Medicinal Preparation for Use as a Dietary Supplement.
Claims use since Feb. 9, 1932.

Ser. No. 325,139. JOSEPH FREILICH, doing business as Martin Laboratories, New York, N. Y. Filed Mar. 15, 1932.

CARBOPHEN

For Preparation for Relieving Muscular Aches and Pains and Simple Neuralgia.
Claims use since Nov. 2, 1931.

Ser. No. 325,272. E. R. SQUIBB & SONS, New York, N. Y. Filed Mar. 18, 1932.

RADOLATUM

For Therapeutically Activated Mineral Oils and the Life, for the Acceleration of Healing Processes Generally and for the Treatment of Affections of the Nasal Sinuses and Other Mucous Surfaces, Bacterial Cutaneous Affections, Deep Wounds, Chronic Hemorrhagic Ulcerative Colitis, Tendon-Sheath and Chronic Joint Suppurations, Osteomyelitis, and Other Conditions.
Claims use since Feb. 15, 1932.

Ser. No. 325,290. JANET HAMILTON, doing business as Hamilton Laboratories, Glendale, Calif. Filed Mar. 19, 1932.

Hamilton
Corrective HCF Formula

No claim is made to the words "Corrective Formula" apart from the trade-mark as shown.
For Corrective Formula for Stomach Troubles Resulting from Hyper-Acidity.
Claims use since Mar. 7, 1932.

Ser. No. 325,406. PARK & TILFORD, New York, N. Y. Filed Mar. 23, 1932.

FAOEN

For Cold Cream, Cleansing Cream, Hand Lotion, and a Skin Tonic.
Claims use since Feb. 1, 1932.

Ser. No. 325,440. JOHN POWELL & CO., INC., New York, N. Y. Filed Mar. 24, 1932.

PYAGROL

For Insecticide Derived or Prepared from Pyrethrum or Other Vegetable Matter or Products Combined or Not Combined with a Petroleum Liquid and Soap, Sulphonated Oils, or Other Diluent or Spreader.
Claims use since Jan. 21, 1932.

Ser. No. 325,620. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Mar. 29, 1932.

"3 SHAKES"

For Liquid Material for the Destruction of Weeds.
Claims use since Jan. 15, 1932.

Ser. No. 325,638. HOUBIGANT, INC., New York, N. Y. Filed Mar. 30, 1932.

LES HEURES CHOISIES

For Perfumes.
Claims use since Mar. 1, 1932.

Ser. No. 325,688. CHARLES G. HYRE, doing business as The Pepsotalis Company, Morgantown, W. Va. Filed Mar. 31, 1932.

Pepsotalis

For Medicinal Preparation Used for Indigestion, Sour Stomach, Acidity.
Claims use since Feb. 1, 1931.

Ser. No. 325,719. NATIONAL ALUMINATE CORPORATION, Chicago, Ill. Filed Apr. 1, 1932.

NALCO

For Chemicals Employed in the Treatment of Water, Such as for Softening, Purifying, Desilicalizing, Clarifying, Sterilizing, and Otherwise Improving the Same.
Claims use since Mar. 11, 1932.

Ser. No. 325,726. FRANK C. REILLY, New York, N. Y. Filed Apr. 1, 1932.

Nuit Profonde

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Skin Whitener in Liquid and Solid Form, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eye Lashes and Eyebrows, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Powders, Nail Creams, Nail Polishes, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Jan. 5, 1931.

Ser. No. 325,752. RICHARD B. GRAY, doing business as The Montauk Laboratories, Bay Shore, N. Y. Filed Apr. 2, 1932.

TUSPIRIN

The drawing being lined for shading purposes only.
For Medicinal Preparation to be Used in the Treatment of Colds, Coughs, Chills, Coryza, Grippe, Headache, Tonsillitis, and Simple Fever.
Claims use since Apr. 22, 1927.

Ser. No. 325,757. FELIX PREJEAN, Port Arthur, Tex. Filed Apr. 2, 1932.



BLUE SMOKE COMPOUND

The word "Compound" not being claimed apart from the other features of the mark.
For Compound to be Used as an Inhalant in Treating Catarrh, Bronchial Troubles, Asthma, Colds, Hay Fever, and Headaches and for Use as an Inhalant Tonic.
Claims use since Mar. 19, 1932.

Ser. No. 325,769. WARWICK CHEMICAL COMPANY, West Warwick, R. I. Filed Apr. 2, 1932.

IMPREGNOLE

For Substances or Chemicals for Producing a Water Repellent and/or Water-Proof Finish for Textiles.
Claims use since Mar. 11, 1931.

Ser. No. 325,792. JASON J. KITTESS, Los Angeles, Calif. Filed Apr. 4, 1932.

WHITECREST

For Bleaching Fluid.
Claims use since May 1, 1930.

Ser. No. 325,824. HERCULES POWDER COMPANY, Wilmington, Del. Filed Apr. 5, 1932.

PETREX

For Synthetic Resin to be Used in Protective Coatings and in Molded Products.
Claims use since Feb. 23, 1932.

Ser. No. 325,863. ACTONA RESEARCH LABORATORIES, INC., Philadelphia, Pa. Filed Apr. 7, 1932.

ACTOLAX

For Laxatives.
Claims use since Jan. 26, 1932.

Ser. No. 326,194. FREDERICK J. SCHARKOPF, Richmond Hill, N. Y. Filed Apr. 16, 1932.

NOXWET

For Topical Preparation Used as a Preventative of Perspiration.
Claims use since Mar. 15, 1932.

Ser. No. 326,318. ALCOLITE INC., Philadelphia, Pa. Filed Apr. 21, 1932.

ALCOLITE

For Denture Cream.
Claims use since Oct. 20, 1931.

Ser. No. 326,382. JOHANNA H. MADDEN, doing business as Skinit Co., Minneapolis, Minn. Filed Apr. 22, 1932.

SKINIT

For Salve for Wounds, Burns, Cuts, and Injuries.
Claims use since Apr. 13, 1932.

CLASS 12

Construction Materials

Ser. No. 325,672. AMERICAN RUBBER PRODUCTS CORPORATION, New York, N. Y. Filed Mar. 31, 1932.

T-S-100
The Trackless Rubber Tile

The words "The Trackless Rubber Tile" not being claimed apart from the other features of the mark.
For Rubber Tiles, Rubber Flooring in Both Block and Sheet Form, and for Rubber Flooring Accessories—Namely, Cove Bases, Rubber Mouldings, Rubber Stair Treads, Rubber Wainscoting, and Rubber Corners.
Claims use since June, 1930.

Ser. No. 325,707. THE CEMENT MARKETING COMPANY, LIMITED, London, England. Filed Apr. 1, 1932.

TINTOCRETE

For Preparation for Mixing with Cement, Lime, and Plaster to Reduce Viscosity and Susceptibility to Absorbing Moisture, and to Minimize Surface Crazing and Efflorescence.
Claims use since July 16, 1931.

Ser. No. 326,188. THE M. W. KELLOGG CO., Jersey City, N. J., and New York, N. Y. Filed Apr. 16, 1932.

THERMOSTIC

For Plastic Heat Insulation Material.
Claims use since Apr. 7, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 305,725. PHEOLL MANUFACTURING COMPANY, Chicago, Ill. Filed Sept. 15, 1930.



No claim is made to the representation of the goods per se apart from the mark as shown.

For Hardware Supplies—Namely, Screws, Nuts, Bolts, Rivets, Studs, Pins, Metal Washers, Burrs, and Dowels.
Claims use since June, 1914.

Ser. No. 325,851. HOLTITE MANUFACTURING COMPANY, Baltimore, Md. Filed Apr. 6, 1932.

NON SKIDDER

For Wear Plates for Rubber Heels.
Claims use since Feb. 20, 1932.

Ser. No. 325,992. NATIONAL ENAMELING & STAMPING COMPANY, Milwaukee, Wis. Filed Apr. 11, 1932.

PRESERVO

For Refrigerator Pans.
Claims use since Mar. 2, 1932.

Ser. No. 326,245. GULF STATES STEEL COMPANY, Birmingham, Ala. Filed Apr. 16, 1932.

SUPER-X

For Nails.
Claims use since Apr. 5, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 326,290. LUDLUM STEEL CO., Watervliet, N. Y. Filed Apr. 20, 1932.

R A·

For Corrosion-Resistant Ferrous Alloys.
Claims use since February, 1931.

CLASS 15

Oils and Greases

Ser. No. 321,007. CONTINENTAL OIL COMPANY, Ponca City, Okla. Filed Nov. 11, 1931.

SILKOL

For Lubricating Oil.
Claims use since July 22, 1931.

Ser. No. 324,290. CARL LANGER INC., Detroit, Mich. Filed Feb. 18, 1932.

TOP-O-LENE

For Lubricating Oil.
Claims use since Nov. 1, 1931.

Ser. No. 325,454. ANDERSON-PRICHARD OIL CORPORATION, Oklahoma City, Okla. Filed Mar. 25, 1932.

APCO

For Petroleum Products—Namely, Gasoline, Kerosene, and Naphthas.
Claims use since 1921.

Ser. No. 325,607. THE TEXAS COMPANY, New York, N. Y. Filed Mar. 28, 1932.

ALMINEX

For Lubricating Greases.
Claims use since Mar. 10, 1932.

Ser. No, 326,039. HY-FLASH GAS & OIL CO., INC., Toledo, Ohio. Filed Apr. 11, 1932.

VALGRAPE

For Petroleum Products—Namely, Lubricating Oils and Lubricating Greases.
Claims use since Mar. 1, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 320,571. JOSEPH A. MARTOCELLO, Sr., doing business as Jos. A. Martocello & Co., Philadelphia, Pa. Filed Oct. 27, 1931.

STAYNU

For Rust and Corrosion Preventive Liquid in the Nature of a Paint or Varnish for Coating Steel, Iron, and Other Metals.
Claims use since Aug. 9, 1931.

Ser. No. 324,950. BALL CHEMICAL COMPANY, Pittsburgh, Pa. Filed Mar. 9, 1932.

RESOLAC

For Paint Oils, Baking Varnishes, Tin Plate Lacquers, Pipe Coatings, and Paper and Cloth Coatings; Such Coatings Being in the Nature of Varnish-Type Paint.
Claims use since Feb. 23, 1929.

Ser. No. 326,147. GEORGE H. JENKINS, doing business as El Sol Products Company, Camden, N. J. Filed Apr. 15, 1932.

EL SOL

For Polish for Automobiles and Furniture.
Claims use since Mar. 26, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 323,672. OWENSBORO WAGON COMPANY, Owensboro, Ky. Filed Feb. 1, 1932.

MAXI-LOAD

For Trailers, Vehicle Bodies and Chassis, and Structural Parts Thereof.
Claims use since Aug. 1, 1931.

Ser. No. 324,485. ROCKNE MOTORS CORPORATION, Detroit, Mich. Filed Feb. 25, 1932.



For Hub Caps.
Claims use since Nov. 14, 1931.

Ser. No. 324,486. ROCKNE MOTORS CORPORATION, Detroit, Mich. Filed Feb. 25, 1932.



For Hub Caps.
Claims use since Dec. 22, 1931.

Ser. No. 325,552. AMERICAN STEEL FOUNDRIES, Chicago, Ill. Filed Mar. 28, 1932.

SIMPLEX

For Railway Equipment—Namely, Railway Car Trucks, Side Frames, Bolsters, Transoms, Spring Planks, Journal Boxes, Springs, Spring Clips, Spring Bands, Spring Seats and Brackets, Spring Caps, Brake Hanger Brackets, Swing Hangers, Center and Side Bearings, Equalizers, Spring Nests, Wheel and Axle Assemblies and the Parts Thereof; Roller, Ball, and Friction Bearings; Wheels, Axles, Cages, and Shrink Collars.
Claims use since Aug. 1, 1897.

Ser. No. 326,301. QUAKER STATE OIL REFINING CO., Oil City, Pa. Filed Apr. 20, 1932.

QUAKER STATE Roll-o-Miles

For Mechanical Device Upon Which to Record Oil Servicing for Vehicles.
Claims use since Mar. 29, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 287,071. THE HARVEL CORPORATION, Newark, N. J. Filed July 13, 1929.

CASHEL

For Electrical Insulation Compounds and Fabrics in Liquid, Semi-Liquid, Paste Form; in Sheets Plain and Laminated, and in the Form of Molding Compounds.
Claims use since July 10, 1929.

Ser. No. 322,799. MONARK BATTERY COMPANY, INC., Chicago, Ill. Filed Jan. 7, 1932.



The short horizontal lines on the drawing are not intended to indicate color but are placed there as shading merely.
For Storage Batteries.
Claims use since Nov. 15, 1931.

Ser. No. 325,615. HIRAM B. BROWNING, doing business as The Elimino Company, West Toledo, Ohio. Filed Mar. 29, 1932.

Elimino

For Radio Aerial Eliminator.
Claims use since Sept. 14, 1931.

Ser. No. 325,650. THE GAMEWELL COMPANY, Newton Upper Falls, Newton, Mass. Filed Mar. 30, 1932.

3-FOLD

For Fire Alarm Systems and Parts Thereof—Namely, Fire Alarm Boxes and Switch-Boards.
Claims use since January, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 325,155. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio. Filed Mar. 15, 1932.

HOME GAME CO.

For Playing Cards.
Claims use since 1904.

Ser. No. 325,917. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed Apr. 8, 1932.

Tell-it-to-the-Judge

For Board Game Played with Movable Pieces.
Claims use since Oct. 1, 1931.

Ser. No. 326,411. GEO. BORGFELDT & CO., New York, N. Y. Filed Apr. 23, 1932.

SKIPPY

For Toy Figures.
Claims use since Dec. 5, 1931.

Ser. No. 326,438. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio. Filed Apr. 23, 1932.

SENATE

For Playing Cards.
Claims use since Apr. 8, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 325,766. UTICA CUTLERY COMPANY, Utica, N. Y. Filed Apr. 2, 1932.

SENECA

For Pocket Knives, Butcher Knives; Paring, Carving, and Other Household Knives of Various Kinds; and Table Cutlery, All of Base Metal.
Claims use since Feb. 15, 1932.

Ser. No. 326,418. FILECRAFT, INC., Cleveland, Ohio. Filed Apr. 23, 1932.

MASTER

For Files.
Claims use since Apr. 1, 1925.

CLASS 24

Laundry Appliances and Machines

Ser. No. 317,600. GRIGSBY-GRUNOW COMPANY, Chicago, Ill. Filed Aug. 3, 1931.

Majestic

For Electric Ironing Machines and Parts Thereof.
Claims use since July 18, 1931.

Ser. No. 323,865. HORTON MANUFACTURING COMPANY, Fort Wayne, Ind. Filed Feb. 5, 1932.

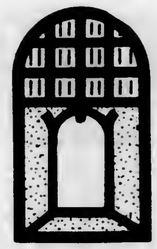
MODERN *Home*

For Laundry Washing Machines.
Claims use since Aug. 25, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 325,683. ELLIS SILVER COMPANY INC., New York, N. Y. Filed Mar. 31, 1932.



For Silver Plated Hollow Ware and Flatware.
Claims use since Mar. 25, 1932.

Ser. No. 325,761. SPEIDEL CORPORATION, Providence, R. I. Filed Apr. 2, 1932.



For Jewelry for Personal Wear or Adornment, Not Including Watches.
Claims use since Apr. 1, 1932.

Ser. No. 325,793. KREMENTZ & COMPANY, Newark, N. J. Filed Apr. 4, 1932.



For Collar Buttons, Cuff Buttons, Cuff Links, Vest Buttons, Tie Holders, Collar Holders, Wrist Watch Bands of Metal, Brooches, Bar Pins, Handy Pins, Bracelets, Belt Buckles, Necklaces, Pendants, Finger Rings, Vanity Boxes, Tie Clasps, Snaps and Catches, Scarf Pins, Watch Chains, Pocket Knives, and Studs, All Made Wholly or in Part of Precious Metal or Plated Therewith.
Claims use since July 1, 1930.

Ser. No. 326,041. THE KINNEY & LEVAN COMPANY, Cleveland, Ohio. Filed Apr. 12, 1932.

KAYNELL

For Silverware, Particularly Flat Silver.
Claims use since Oct. 1, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 326,013. THE GRADY-TRAVERS COMPANY, INCORPORATED, New York, N. Y. Filed Apr. 12, 1932.

Craft-Knit

No claim is made for exclusive rights in the word "Knit" apart from the word "Craft".
For Knitted Polishing and Dusting Cloths.
Claims use since Apr. 1, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 310,653. FRED W. MILLER, Jackson, Mich. Filed Feb. 2, 1931.

PEGGYWOOD

For Furniture—Namely, Chairs, Sofas, Cellarettes, Cedar Chests, Tables, Stands, Bedroom Furniture, Cabinets, Radio Cabinets, and Ottomans.
Claims use since Jan. 19, 1931.

Ser. No. 317,719. THE LANE COMPANY, INC., Altavista, Va. Filed Aug. 6, 1931.

LANE-ROBE

For Cedar Chests.
Claims use since May 1, 1931.

Ser. No. 320,141. STORKLINE FURNITURE CORPORATION, Chicago, Ill. Filed Oct. 16, 1931.



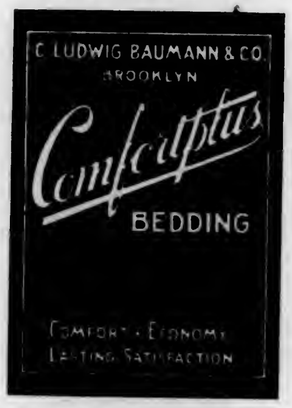
The drawing is lined for blue and pink. The words "Infant and Juvenile Furniture" are disclaimed apart from the mark as shown.
For Juvenile Furniture Comprising Beds, Basinets, Bookcases, High-Chairs, Nursery Chairs, Chests of Drawers, Toy Chests, Chiffarobes, Costumers, Cribs, Dressing Tables, Dressing Table and Folding Bathtub Combinations, Play Pens, Floor Screens, Bedroom Tables, Lamp Bases, and Baby Swing Chairs.
Claims use since Sept. 1, 1931.

Ser. No. 325,357. THE WEDLER-SHUFORD CO., St. Louis, Mo. Filed Mar. 21, 1932.

Wickertex

For Tailored Vehicle Seat Covers and Seat Pads.
Claims use since Jan. 27, 1932.

Ser. No. 325,677. C. LUDWIG BAUMANN & COMPANY, Brooklyn, N. Y. Filed Mar. 31, 1932.



No claim is made by applicant to the words "Bedding, Comfort Economy—Lasting Satisfaction" or to the word "Brooklyn," or to the representation of the label, apart from the mark shown in the drawing.
For Mattresses and Box Springs.
Claims use since Mar. 1, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 300,319. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed May 12, 1930.

AERIET

For Blower and Radiator Unit Heaters, Steam and Hot Water Heating Elements, Steam and Hot Water Heating Radiators, Humidifiers for Ventilation and Air Conditioning Purposes, Forced Draft Apparatus and Air Directing Devices for Ventilating and Air Conditioning Purposes, and Air Conditioning Apparatus for Cooling Air for Ventilating and Air Conditioning Purposes, Radiator Casings and Cabinets.
Claims use since Mar. 1, 1929.

Ser. No. 323,607. CARRIER MANUFACTURING CORPORATION, Newark, N. J., assignor to Aerofin Corporation, Newark, N. J., a Corporation of New Jersey. Filed Jan. 30, 1932.

FLEXITUBE

For Heating, Cooling, and Air Conditioning Units Employing Finned Tubing.
Claims use since Jan. 20, 1932.

Ser. No. 325,077. PUFFER-HUBBARD MFG. CO., Minneapolis, Minn. Filed Mar. 12, 1932.

HUMEO

For Electrically Controlled Humidifying Units.
Claims use since Dec. 21, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 325,817. CASIMIR A. DOMZALSKI, Detroit, Mich. Filed Apr. 5, 1932.



The term "Armored" is disclaimed apart from the other features of the mark shown in the drawing.
For Tire Patches.
Claims use since Feb. 24, 1932.

CLASS 37

Paper and Stationery

Ser. No. 300,258. BADGER PAPER MILLS, INC., Peshtigo, Wis. Filed May 10, 1930.

KITCHEN ROLL

No claim is made to the word "Kitchen" or the word "Roll" apart from the mark as shown.
For Waxed Paper Lunch Rolls.
Claims use since Apr. 25, 1930.

Ser. No. 325,476. THE MAYERS COMPANY, INC., doing business as The Independence Plan Company, Los Angeles, Calif. Filed Mar. 25, 1932.

THE
Independence
Plan

The word "Plan" is disclaimed except in the association shown.
For Pass-Books, Check-Book Covers.
Claims use since Feb. 5, 1932.

Ser. No. 326,337. NATIONAL CONSUMERS PAPER CORPORATION, New York, N. Y. Filed Apr. 21, 1932.

2 in 1

For Designers' Marking Paper in the Roll.
Claims use since July, 1931.

CLASS 38

Prints and Publications

Ser. No. 323,394. THE DOSCH-KIRCHER ORGANIZATION, Chicago, Ill. Filed Jan. 25, 1932.

Hi-Ho

For Periodical Publication.
Claims use since July, 1931.

Ser. No. 324,759. PRACTICAL MECHANICS PUBLISHING CO., Chicago, Ill. Filed Mar. 3, 1932.



For Monthly Publication.
Claims use since Feb. 24, 1932.

Ser. No. 325,179. NATIONAL HOME LIBRARY FOUNDATION, Washington, D. C. Filed Mar. 16, 1932.



No claim is made to the word "Library" apart from the mark shown.
For Books, Magazines, and Pamphlets.
Claims use since Feb. 5, 1932.

Ser. No. 325,644. LOUIS C. STONE, New York, N. Y. Filed Mar. 26, 1932.

THIS BUILDING WORLD

For Title for a Column in a Magazine.
Claims use since June 1, 1930.

Ser. No. 325,905. EDWIN M. EVANS, Bloomington, Ill. Filed Apr. 8, 1932.



For Coupons Used in Connection with the Sale of Insurance Policies.
Claims use since Feb. 1, 1932.

Ser. No. 326,150. MAXWELL LEVINSON, Philadelphia, Pa. Filed Apr. 15, 1932.

SHELTER

For Monthly Periodicals.
Claims use since Apr. 8, 1932.

Ser. No. 326,199. LOUIS B. APPLETON, doing business as Buzzy, New York, N. Y. Filed Apr. 19, 1932.

BUZZY'S

For Periodical Published at Irregular Intervals.
Claims use since Apr. 7, 1932.

Ser. No. 326,354. W. D. HOARD & SONS COMPANY, Fort Atkinson, Wis. Filed Apr. 21, 1932.

Hoard's Dairyman
The National Dairy Farm Magazine

For Periodical.
Claims use since Dec. 25, 1930.

Ser. No. 326,362. CHICAGO ROTOPRINT COMPANY, Chicago, Ill. Filed Apr. 22, 1932.

GOIN' PLACES

For Publication in Magazine Form.
Claims use since Apr. 15, 1932.

Ser. No. 326,413. EUGENE BYRNES, New York, N. Y. Filed Apr. 23, 1932.

DRAW IT Y'SELF

For Series of Cartoons or Comic Strips Published in Magazines and Daily Newspapers.
Claims use since Apr. 9, 1932.

CLASS 39

Clothing

Ser. No. 297,324. PAR-AMOUNT SHIRT SHOPS, INC., New York, N. Y., assignors to Morton Schneider, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 14, 1930.

PAR-AMOUNT

For Men's Clothing—Namely, Dress and Work Shirts, Robes, Mufflers, and Sweaters.
Claims use since March, 1915.

Ser. No. 321,197. BERKWITS & BLOOMFIELD, INC., New York, N. Y. Filed Nov. 17, 1931.



Ostrich Angora

No claim is made to the words "Ostrich Angora" apart from the mark shown on the drawing.
For Ladies' Hats.
Claims use since Sept. 1, 1931.

Ser. No. 323,745. GOLO SLIPPER COMPANY, INC., New York, N. Y. Filed Feb. 2, 1932.

Ballyhoo

For Sandals of Leather, Fabric, and Rubber, and Combinations of the Same for Men, Women, and Children.
Claims use since Jan. 27, 1932.

Ser. No. 325,050. BEN TURCHIN & BRO. INC., New York, N. Y. Filed Mar. 11, 1932.

French Sof-tee

For Ladies', Women's, Misses', and Children's Hats.
Claims use since Dec. 18, 1931.

Ser. No. 325,459. IRVING WM. BLUM, New York, N. Y. Filed Mar. 25, 1932.



Applicant disclaims the word "Form" apart from the mark shown in the drawing.
For Shoes Made of Leather, Rubber, Fabric, and Combinations of These Materials for Men, Women, and Children.
Claims use since March, 1931.

Ser. No. 325,486. HERMAN SCHATTNER, New York, N. Y. Filed Mar. 25, 1932.



Applicant disclaims the right to the exclusive use of the words "Physician's—Cushion—Health" except in connection with its trade-mark.
For Men's, Women's, and Children's Shoes Made of Rubber, Leather, Fabric, and Compositions Thereof.
Claims use since January, 1931.

Ser. No. 325,503. KEYSTON BROS., San Francisco, Calif. Filed Mar. 25, 1932.

Lasso 'em Bill

For Simulant, Juvenile, Play Apparel, Comprising Cowboy, Trooper, Police, and Indian Outfits, Including Suits, Coats, Vests, Trousers, Chaps, Belts and Leggings, Hosiery, Leather Boots and Shoes, Hats and Caps, Leather Gloves, Shirts, Bandannas, and Top-Coats.
Claims use since May 15, 1926.

Ser. No. 325,899. H. D. BOB COMPANY INC., New York, N. Y. Filed Apr. 8, 1932.

TRIMLINE
Pre shrunk

Applicant hereby disclaims exclusive use of the term "pre shrunk" as shown on the drawing.
For Collars and Collars for Collar Attached Shirts, Blouses, Windbreakers, Pajamas, Nightshirts Made of Cotton, Linen, Silk, Rayon, Wool, Worsted, Flannel, or Any Combination of These Materials.
Claims use since Apr. 1, 1932.

Ser. No. 325,939. COHEN, GOLDMAN & CO. INC., New York, N. Y. Filed Apr. 9, 1932.

Custom-tex

No claim is made to the exclusive use of the word "Custom" separate and apart from the mark as shown on the drawing.
For Men's, Boys', and Children's Outer Garments, Consisting of Coats, Vests, Pants, Trousers, Top-Coats, Overcoats; and Summer Clothing for Men, Boys, and Children, Consisting of Coats, Vests, and Pants Made of Either Woven or Knitted Material.
Claims use since Mar. 1, 1932.

Ser. No. 326,258. HICKEY-FREEMAN COMPANY, Rochester, N. Y. Filed Apr. 19, 1932.

CUSTOMIZED

For Men's Apparel, Comprising Men's Suits and Sports Suits, Consisting of Coats, Vests, Trousers and Knickers, Tuxedos, Full-Dress and Frock Garments, Top Coats, Overcoats, and Separate Trousers.
Claims use since April, 1920.

Ser. No. 326,278. ALPERIN, STRAUSS CO., INC., New York, N. Y. Filed Apr. 20, 1932.



For Boys' Blouses and Shirts.
Claims use since Dec. 15, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 324,157. A. D. ELLIS MILLS INCORPORATED, Monson, Mass. Filed Feb. 15, 1932.



The words appearing on the small seal shown in the mark, and the words "Trade Mark," "Standard," and "Uniform Cloths," so far as they may be properly used in a geographical or descriptive sense, are disclaimed apart from the mark as shown.

For Woolen Piece Goods.

Claims use since November, 1915.

Ser. No. 324,220. CONE EXPORT AND COMMISSION COMPANY, New York, N. Y. Filed Feb. 16, 1932.



No claim is made to the exclusive use of the words "Broadcloth" and "Fabrics" apart from the mark as shown in the drawing.

For Broadcloth in the Piece.

Claims use since May, 1930.

Ser. No. 325,882. SAUTER BROTHERS, New York, N. Y. Filed Apr. 7, 1932.



The drawing is lined for the color blue. The entire mark is usually represented in said color. Exclusive use of the words "Baby Wear" is not claimed except in association with the other features of the mark.

For Textiles—Namely, Pillow Slips, Crib Sheets, Diapers, Crib Blankets, and Fannels in Cut Lengths.

Claims use since Jan. 24, 1928.

Ser. No. 326,284. ELECTAIC KNITTING CO. INC., Cohoes, N. Y. Filed Apr. 20, 1932.



The expression "Two Dish Cloths" is disclaimed apart from the other features of the mark shown in the drawing.

For Textile Dish Cloths.

Claims use since 1928.

Ser. No. 326,398. SUMMERVILLE COTTON MILLS, Summerville, Ga. Filed Apr. 22, 1932.



For Cotton Cloth in the Piece.

Claims use since February, 1932.

Ser. No. 326,448. S. STROOCK & CO. INC., New York, N. Y. Filed Apr. 23, 1932.

STROOCK

ULSTERTOWN

CLOTH

No claim is made to the exclusive use of the word "Cloth" except as herein associated.

For Cloth Consisting of Llama and Wool in the Piece.

Claims use since Jan. 6, 1932.

Ser. No. 326,519. F. DUCHARNE SILK CO. INC., New York, N. Y. Filed Apr. 26, 1932.

FIFINE

For Piece Goods of Silk, Rayon, Cotton, and Wool and Mixtures of These Materials.

Claims use since Apr. 8, 1932.

Ser. No. 326,520. F. DUCHARNE SILK CO. INC., New York, N. Y. Filed Apr. 26, 1932.

MICKY

For Piece Goods of Silk, Rayon, Cotton, and Wool and Mixtures of These Materials.

Claims use since Apr. 8, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 281,066. VELDOWN COMPANY, INC., New York, N. Y. Filed Mar. 20, 1929.



No claim is made to the representation of the goods apart from the mark shown. The trade-mark consists of a longitudinal stripe colored blue, as indicated by the lining in the drawing.

For Catamenial Napkins.

Claims use since Feb. 19, 1929.

Ser. No. 326,080. WARREN E. COLLINS, INC., Boston, Mass. Filed Apr. 14, 1932.

Drinker

For Artificial Respirators.

Claims use since Nov. 11, 1929.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 323,070. TRIPLE "XXX" COMPANY, Galveston, Tex. Filed Jan. 15, 1932.

TEXO

For Non-Alcoholic, Maltless Soft Drink, Syrup, and Concentrates for Making Same.

Claims use since Dec. 3, 1931.

Ser. No. 324,175. HARRY KURTA, Jamaica, N. Y. Filed Feb. 15, 1932.



The lining on the drawing represents red color.

For Nonalcoholic, Maltless, Concentrated Syrup for Making Soft Drinks.

Claims use since May, 1931.

Ser. No. 325,479. MISSION DRY CORPORATION, LTD., Los Angeles, Calif. Filed Mar. 25, 1932.

Mission Rickey

The word "Rickey" is disclaimed except in the association shown.

For Non-Alcoholic, Noncereal, Maltless Beverages Used as Soft Drinks and Concentrates and Extracts for Preparing of same.

Claims use since Jan. 1, 1932.

Ser. No. 326,412. JAMESON GEORGE BUSTON, North Tazewell, Va. Filed Apr. 23, 1932.

Love's Dream

For Non-Alcoholic, Non-Cereal, Maltless Beverage Sold as a Soft Drink and Sirup and Extract for Making the Same.
Claims use since Jan. 1, 1930.

Ser. No. 326,435. LEO THOMA, JR., doing business as Leo Thoma Bottling Co., Kansas City, Mo. Filed Apr. 23, 1932.

HONEY BOY

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts Used in Making the Same.
Claims use since Dec. 15, 1931.

Ser. No. 326,436. LEO THOMA, Jr., doing business as Leo Thoma Bottling Co., Kansas City, Mo. Filed Apr. 23, 1932.

HONEY GIRL

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, and Syrups and Extracts Used in Making the Same.
Claims use since Dec. 15, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 305,770. THE DANNEMILLER GROCERY COMPANY, Canton, Ohio. Filed Sept. 17, 1930.

CIRCLE D

For Coffee.
Claims use since Aug. 15, 1930.

Ser. No. 306,739. MEZŐGAZDASÁGI TERMÉNY ÉS TERMÉKFORGALMI INTÉZET, Budapest, Hungary. Filed Oct. 14, 1930.



The cross hatchings are only illustrated for the purpose of differentiating light and dark colouring and are not intended to indicate any particular colours. The applicants disclaim all the descriptive and geographical reading matter on the drawing i. e. "Allami Arujegy Magyarorszag".

For Wheat, Rye, Barley, Maize, Flour Being Wheat, Rye, or Self Rising; Onions, Garlic, Apples, Pears, Turkish Apricots, Peaches, Grapes, Watermelons, Cantaloupes, Plums, Lettuce, Cucumbers, Potatoes, Parsley, Carrots, Beans, Tomatoes, Asparagus, Cauliflowers, Mushrooms, Strawberries, All Being Fresh, Dried or Canned; Fruit Preserve Made from Apples, Pears, Turkish Apricots, Peaches, Grapes, Plums, and Strawberries; Pulse, Millet, Lard, Suet, Chickens, Geese, Ducks, Turkeys, Guinea Fowls, Pigeons, Partridges, Pheasants, Hares, All Being Alive or Dressed; Steer, Cows, Sheep, and Pigs, All Being Alive or Dressed; Haddock and Carp, Canned or Alive; Goose Liver, Honey, Bacon, Salami, Butter, Curds, Cheese, Eggs.
Claims use since Feb. 15, 1930.

Ser. No. 308,859. THE CURTISS CANDY COMPANY, Chicago, Ill. Filed Dec. 11, 1930.

Baby Ruth
FRUIT *flavor* GUM

The descriptive notation "Fruit Flavor Gum" is disclaimed apart from the mark as shown.
For Chewing Gum.
Claims use since Oct. 27, 1930.

Ser. No. 312,076. WATERMAN & COMPANY, New York, N. Y. Filed Mar. 12, 1931.



The figure in the drawing is fanciful.
For Food Products—Namely, Creamed Oats.
Claims use since December, 1928.

Ser. No. 313,235. DURHAM BROS. & CO., INC., Roanoke, Va. Filed Apr. 11, 1931.

DIAMOND BEE

For Coffee.
Claims use since Mar. 26, 1931.

Ser. No. 313,336. EASTERN FRUIT DISTRIBUTORS, INC., Los Angeles and Fresno, Calif. Filed Apr. 14, 1931.

SUN-PAK

For Fresh Vegetables, Fresh Deciduous Fruits, Fresh Grapes, Cantaloupes.
Claims use since Jan. 7, 1931.

Ser. No. 313,520. WOLFF BROS. MILLING CO. INC., Paterson, N. J. Filed Apr. 18, 1931. Under 10-year proviso.

Wolff's

For Breakfast Cereal Foods and Buckwheat Flour.
Claims use since 1876.

Ser. No. 314,528. PAUL R. FORBRIGER, doing business as German American Import Co., New York, N. Y. Filed May 13, 1931.



Applicant herewith disclaims apart from the mark as shown on the drawing all the wording, except "Alpenschatz".
For Imported Cheese (Alpenschatz).
Claims use since Nov. 1, 1930.

Ser. No. 314,529. PAUL R. FORBRIGER, doing business as German American Import Co., New York, N. Y. Filed May 13, 1931.



Applicant herewith disclaims apart from the mark as shown on the drawing all the wording, except "Edelsieg".
For Imported Cheese (Edelsieg).
Claims use since Feb. 25, 1931.

Ser. No. 314,530. PAUL R. FORBRIGER, doing business as German American Import Co., New York, N. Y. Filed May 13, 1931.



Made from skimmed milk
net weight 6 oz.
Made in Germany

Applicant herewith disclaims apart from the mark as shown on the drawing all the wording, except "Harzer Lausbub".
For Imported Cheese (Harzer-Lausbub).
Claims use since Nov. 1, 1930.

Ser. No. 314,531. PAUL R. FORBRIGER, doing business as German American Import Co., New York, N. Y. Filed May 13, 1931.



Applicant herewith disclaims apart from the mark as shown on the drawing all the wording, except "Primas".
For Imported Cheese (Primas).
Claims use since Mar. 15, 1931.

Ser. No. 315,670. E. CERRUTI, INC., New York, N. Y. Filed June 11, 1931.



Exclusive use of the word "Brand" and the words "Pure Spanish Olive Oil" is disclaimed except in association with the other features of the mark.
For Olive Oil.
Claims use since September, 1930.

Ser. No. 320,467. EDGAR P. LEWIS & SONS, INC., Boston, Mass. Filed Oct. 26, 1931.

It's A Honey

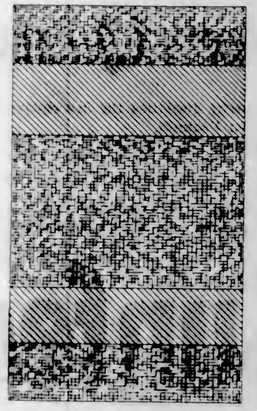
No claim being made to the word "Honey" apart from the mark shown on the drawing.
For Candy.
Claims use since Apr. 1, 1930.

Ser. No. 321,106. HAWAIIAN PINEAPPLE COMPANY, LTD., Honolulu, Territory of Hawaii, and San Francisco, Calif. Filed Nov. 13, 1931.

Sweet Treat

The descriptive word "Sweet" is disclaimed apart from the mark shown on the drawing. However, applicant does not waive its common law rights thereto in the particular combination now sought to be registered.
For Canned Pineapple.
Claims use since Aug. 1, 1928.

Ser. No. 323,453. GODCHAUX SUGARS, INC., New Orleans, La. Filed Jan. 26, 1932.



The drawing is lined for green and a goldenrod yellow. No claim is made to the representation of a carton.
For Sugar.
Claims use since Jan. 16, 1932.

Ser. No. 324,350. MARS, INCORPORATED, Chicago, Ill. Filed Feb. 20, 1932.

Milky Way Whole Eggs

The words "Whole Eggs" are disclaimed apart from the trade-mark shown on the drawing.
For Whole Eggs.
Claims use since Jan. 2, 1932.

Ser. No. 324,351. MARS, INCORPORATED, Chicago, Ill. Filed Feb. 20, 1932.

Milky Way Egg Whites

The words "Egg Whites" are disclaimed apart from the trade-mark shown on the drawing.
For Egg Whites.
Claims use since Jan. 2, 1932.

Ser. No. 324,352. MARS, INCORPORATED, Chicago, Ill. Filed Feb. 20, 1932.

Milky Way Egg Yolks

The words "Egg Yolks" are disclaimed apart from the trade-mark shown on the drawing.
For Egg Yolks.
Claims use since Jan. 2, 1932.

Ser. No. 324,854. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Mar. 7, 1932.

ROYAL

For Salad Dressing.
Claims use since October, 1876.

Ser. No. 324,865. YORKMAN CANDIES, INC., New Orleans, La. Filed Mar. 7, 1932.

YORKMAN'S
NEW ORLEANS
Bourbon

The geographical notation "New Orleans" is disclaimed apart from the mark as shown.
For Assorted Candy, Including Hard Candies, Glacé Fruits, Bon Bons, Chocolates.
Claims use since May 18, 1925.

Ser. No. 325,143. HAHN DEPARTMENT STORES, INC., Wilmington, Del. Filed Mar. 15, 1932.



For Coffee, Tea, and Cocoa.
Claims use since Dec. 15, 1931.

Ser. No. 325,534. STARK & WADDELL PACKING CORPORATION, Strathmore, Calif. Filed Mar. 26, 1932.

20
GRAND

For Fresh Citrus Fruits.
Claims use since Nov. 5, 1931.

Ser. No. 325,535. STARK & WADDELL PACKING CORPORATION, Strathmore, Calif. Filed Mar. 26, 1932.

1000 GRAND

For Fresh Citrus Fruits.
Claims use since Nov. 5, 1931.

Ser. No. 325,567. CO-OPERATIVE GRANGE LEAGUE FEDERATION EXCHANGE, INC., Ithaca, N. Y. Filed Mar. 28, 1932.

G.L.F.

For Quality Patent Flour, Whole Wheat Flour, Pastry Flour, Self-Rising Pancake Flour, and Buckwheat Flour.
Claims use since January, 1922.

Ser. No. 325,573. J. & J. W. ELSWORTH CO., New York, N. Y. Filed Mar. 28, 1932.

FIRE PLACE POINTS

For Oysters in Their Natural State.
Claims use since Jan. 12, 1909.

Ser. No. 325,577. FRANK AND COMPANY, Milwaukee, Wis. Filed Mar. 28, 1932.

SMO-KIST

For Smoked Meats—Namely, Hams; and Boiled Hams.
Claims use since Feb. 2, 1932.

Ser. No. 325,625. SUPERIOR PACKING CORP., New York, N. Y. Filed Mar. 29, 1932.

TAST-MOR

For Powdered Desserts and Malted Milk.
Claims use since Feb. 26, 1932.

Ser. No. 325,800. WILLIAM T. PUGH, Jr., Dallas, Tex. Filed Apr. 4, 1932.

Bar-Q-nut

Applicant hereby disclaims the descriptive word "Nut."
For Barbecued Peanuts.
Claims use since June 5, 1931.

Ser. No. 325,940. COMMANDER-LARABEE CORPORATION, Minneapolis, Minn. Filed Apr. 9, 1932.

Sunfed

For White Bread, Whole Wheat Bread, Macaroni, Spaghetti, Crackers, Pancake Flour, Cereal, Breakfast Food, Biscuit Flour, and Cake Flour.
Claims use since Mar. 11, 1932.

Ser. No. 326,256. ALEX. GROSSMANN & CO. INC., New York, N. Y. Filed Apr. 19, 1932.

AGC

For Eggs and Butter.
Claims use since Feb. 6, 1932.

Ser. No. 326,262. MARIE B. KUETER, Oakland, Calif. Filed Apr. 19, 1932.

Pas-tees

For Pastries.
Claims use since Jan. 15, 1931.

Ser. No. 326,378. LIBBY, MCNEILL & LIBBY, Chicago, Ill. Filed Apr. 22, 1932.

HEADLINER

For Canned Salmon.
Claims use since November, 1911.

Ser. No. 326,379. LIBBY, MCNEILL & LIBBY, Chicago, Ill. Filed Apr. 22, 1932.

SUMMIT

For Canned Salmon.
Claims use since November, 1911.

Ser. No. 326,380. LIBBY, MCNEILL & LIBBY, Chicago, Ill. Filed Apr. 22, 1932.

UTILITY

For Canned Salmon.
Claims use since November, 1911.

Ser. No. 326,422. THE GROCERS & PRODUCERS CO., doing business as The Clover Farm Stores Company, Cleveland, Ohio. Filed Apr. 23, 1932.

GREEN CUP

For Coffee.
Claims use since January, 1928.

Ser. No. 326,470. THE GROCERS & PRODUCERS CO., doing business as The Clover Farm Stores Company, Cleveland, Ohio. Filed Apr. 25, 1932.

BLUE CUP

For Coffee.
Claims use since January, 1928.

Ser. No. 326,471. THE GROCERS & PRODUCERS CO., doing business as The Clover Farm Stores Company, Cleveland, Ohio. Filed Apr. 25, 1932.

RED CUP

For Coffee.
Claims use since January, 1928.

CLASS 48

Malt Beverages and Liquors

Ser. No. 326,473. EDWARD E. HART, New York, N. Y. Filed Apr. 25, 1932.

Uneek

For Malt Beverages Containing Less Than One-Half of One Per Cent of Alcohol.
Claims use since Aug. 1, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 325,184. REGINALD S. PITTS, doing business as R. S. Pitts Mfg. Co., Hanover, Pa. Filed Mar. 16, 1932.

Pitts Leather-Kraft Work-Shop

The words "Leather-Kraft" are disclaimed except in combination with the trade-mark as shown.
For Amusement and Educational Kit Consisting of Strips of Material for Pasting, an Adhesive, a Board, a Knife for Cutting, a Sharpening Stone, a Square, and Cutting Patterns Sold as a Unit for Making Various Fancy Articles.
Claims use since November, 1931.

Ser. No. 325,634. JOHN D. HARRIS CO. INC., New York, N. Y. Filed Mar. 29, 1932.

HARAJAH
The Numdah American Rug

No claim is made to the exclusive use of the individual words "The Numdah American Rug" except in combination with the mark shown.
For Felt Rugs.
Claims use since Mar. 4, 1932.

Ser. No. 326,261. S. H. KRESS & CO., New York, N. Y. Filed Apr. 19, 1932.



For Rubber Crib Sheets.
Claims use since Apr. 12, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 31, 1932

294,464. CERTAIN NAMED WEARING APPAREL. The Big Store Company, Cincinnati, Ohio.
Filed November 20, 1931. Serial No. 321,324. PUBLISHED MARCH 1, 1932. Class 39.

294,465. SHAVING CREAM, SHAVING SOAP AND COMPLEXION SOAP. Andrew W. Young, doing business as Master Barbers Products, Limited, Toronto, Ontario, Canada.
Filed November 18, 1931. Serial No. 321,368. PUBLISHED MARCH 15, 1932. Class 4.

294,466. CLEANING PREPARATION FOR GENERAL HOUSEHOLD USE. Blackstone Smith, doing business as Holly Chemical Co., Los Angeles, Calif.
Filed November 23, 1931. Serial No. 321,444. PUBLISHED MARCH 22, 1932. Class 4.

294,467. SPECIALLY TREATED PAPER TOWEL USED FOR POLISHING GLASS. Mufti Company, Cincinnati, Ohio.
Filed November 28, 1931. Serial No. 321,574. PUBLISHED MARCH 15, 1932. Class 4.

294,468. METALS—NAMELY, MANGANESE ALLOYS. Stulz-Sickles Co., Newark, N. J.
Filed December 3, 1931. Serial No. 321,738. PUBLISHED MARCH 15, 1932. Class 14.

294,469. HARD RUBBER APPLICATOR. Old Dominion Drug Co. Inc., Dover, Del., and Washington, D. C.
Filed December 4, 1931. Serial No. 321,749. PUBLISHED MARCH 15, 1932. Class 44.

294,470. SUPPORTS FOR THE FEET. Harry Pettitt, Toronto, Ontario, Canada.
Filed December 5, 1931. Serial No. 321,819. PUBLISHED MARCH 15, 1932. Class 44.

294,471. FLOOR PREPARATIONS—NAMELY, FLOOR WAXES, FLOOR POLISHES, ETC. Vestal Chemical Co., St. Louis, Mo.
Filed November 5, 1930. Serial No. 307,566. PUBLISHED MARCH 8, 1932. Class 16.

294,472. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS FOR MAKING THE SAME. California Crushed Fruit Corporation, Los Angeles, Calif., now by change of name, Mission Dry Corporation, Ltd.
Filed August 13, 1929. Serial No. 288,466. PUBLISHED SEPTEMBER 9, 1930. Class 45.

294,473. LIQUID INSECTICIDE. Idico Corporation, New York, N. Y.
Filed November 14, 1929. Serial No. 292,402. PUBLISHED MARCH 1, 1932. Class 6.

294,474. FINGER RINGS AND MOUNTINGS THEREFOR. Benjamin & Edward J. Gross Co., Inc., New York, N. Y.
Filed January 30, 1930. Serial No. 295,358. PUBLISHED APRIL 15, 1930. Class 28.

294,475. SOAPS, AND A GENERAL CLEANING COMPOUND. Beaver Chemical Works, Beaver Dam, Wis.
Filed February 14, 1930. Serial No. 295,996. PUBLISHED MARCH 15, 1932. Class 4.

294,476. IMPERVIOUS FILM COATINGS IN THE FORM OF LACQUERS. Brevolite Lacquer Company, North Chicago, Ill.
Filed March 31, 1930. Serial No. 298,142. PUBLISHED MARCH 15, 1932. Class 16.

294,477. WASHING POWDER, SOAP POWDER, AND SOAP CHIPS. Wilkinson, Gaddis & Co., Newark, N. J.
Filed December 30, 1930. Serial No. 309,491. PUBLISHED MARCH 22, 1932. Class 4.

294,478. CIGARS. Bayuk Cigars Incorporated, Philadelphia, Pa.
Filed January 19, 1931. Serial No. 310,086. PUBLISHED MARCH 15, 1932. Class 17.

294,479. PHONOGRAPH - RECORD FEEDER AND CHANGER. Electromatic Record Changer Corp., Chicago, Ill.
Filed February 9, 1931. Serial No. 310,861. PUBLISHED APRIL 21, 1931. Class 36.

294,480. BUTTER, EGGS, CHEESE, AND DRESSED POULTRY. Beatrice Creamery Company, Chicago, Ill.
Filed March 14, 1931. Serial No. 312,134. PUBLISHED MARCH 15, 1932. Class 46.

294,481. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. Jinny Ricky Laboratories, Inc., Springfield, Mass.
Filed April 2, 1931. Serial No. 312,849. PUBLISHED JUNE 2, 1931. Class 45.

294,482. PETROLEUM AND HYDRO-CARBON PRODUCTS. El Camino Oil Company, Ltd., Los Angeles, Calif.
Filed April 2, 1931. Serial No. 312,870. PUBLISHED MARCH 1, 1932. Class 15.

294,483. GASOLINE. Deep Rock Oil Corporation, Chicago, Ill.
Filed April 6, 1931. Serial No. 313,109. PUBLISHED MARCH 1, 1932. Class 15.

294,484. DIAMONDS AND DIAMOND RINGS. Blue Bird Diamond Syndicate, Inc., Chicago, Ill.
Filed June 3, 1931. Serial No. 315,342. PUBLISHED MARCH 1, 1932. Class 28.

294,485. SHOES AND SLIPPERS OF LEATHER OR KID. The Juvenile Shoe Corporation of America, Aurora, Mo.
Filed June 25, 1931. Serial No. 316,269. PUBLISHED MARCH 15, 1932. Class 39.

294,486. PASSION FRUIT JUICE, ESSENCE, PULP, JAM, JELLY, AND SYRUP FOR FOOD PURPOSES. Cottee's Passiona Limited, Sydney, Australia.
Filed July 1, 1931. Serial No. 316,531. PUBLISHED MARCH 15, 1932. Class 46.

294,487. WRAPPING AND TOILET PAPERS. Hubbs & Corning Company, Baltimore, Md.
Filed July 13, 1931. Serial No. 316,888. PUBLISHED MARCH 15, 1932. Class 37.

294,488. MANICURE SUPPLIES, SURGICAL SUPPLIES, ETC. American Druggists Syndicate, Inc., New York and Long Island City, N. Y.
Filed October 2, 1931. Serial No. 319,635. PUBLISHED MARCH 15, 1932. Class 44.

294,489. CERTAIN NAMED MEDICAL AND SURGICAL SUPPLIES. Vadsco Sales Corporation, New York, and Long Island City, N. Y.
Filed October 2, 1931. Serial No. 319,677. PUBLISHED MARCH 15, 1932. Class 44.

294,490. LAMP BLACK AND CARBON GAS BLACK. Wilckes, Martin, Wilckes Company, New York, N. Y.
Filed October 2, 1931. Serial No. 319,755. PUBLISHED MARCH 15, 1932. Class 16.

294,491. DENTAL BURS, GRINDING WHEELS, AND HONES. Ace Dental Manufacturing Co., Weyauwega, Wis.
Filed August 28, 1931. Serial No. 318,496. PUBLISHED MARCH 15, 1932. Class 44.

294,492. COMIC STRIP. NEA Service, Inc., Cleveland, Ohio.
Filed October 2, 1931. Serial No. 319,661. PUBLISHED MARCH 15, 1932. Class 38.

294,493. SHOES OF LEATHER AND COMBINATIONS OF LEATHER AND FABRIC. Field & Flint Co., Brockton, Mass.
Filed November 3, 1931. Serial No. 320,760. PUBLISHED MARCH 15, 1932. Class 39.

294,494. RUBBER HEELS AND RUBBER SOLES. Endicott Johnson Corporation, Endicott, N. Y.
Filed January 15, 1932. Serial No. 323,039. PUBLISHED MARCH 15, 1932. Class 39.

294,495. CERTAIN NAMED WEARING APPAREL. American Lady Corset Co., Detroit, Mich.
Filed January 16, 1932. Serial No. 323,081. PUBLISHED MARCH 15, 1932. Class 39.

294,496. CAPS AND HATS FOR MEN AND WOMEN. Hodshon-Berg, Incorporated, Norwalk, Conn., and New York, N. Y.
Filed January 16, 1932. Serial No. 323,090. PUBLISHED MARCH 15, 1932. Class 39.

294,497. CARBON PAPERS AND STRIP CARBON. Copy-Craft, Inc., New York, N. Y.
Filed January 18, 1932. Serial No. 323,126. PUBLISHED MARCH 15, 1932. Class 11.

294,498. LIQUEFIED NATURAL GAS. Phillgas Company, Bartlesville, Okla.
Filed January 18, 1932. Serial No. 323,144. PUBLISHED MARCH 8, 1932. Class 6.

294,499. CLEANING AND POLISHING COMPOUND, CONTAINING SOAP. Silver Suds Manufacturing Company, Philadelphia, Pa.
Filed January 18, 1932. Serial No. 323,148. PUBLISHED MARCH 15, 1932. Class 4.

294,500. MEN'S AND BOYS' SHIRTS, JACKETS, WINDBREAKERS, UNDERWEAR, AND PAJAMAS MADE OF WOOL, WORSTED, FLANNEL, COTTON, RAYON, SILK, LINEN, OR ANY COMBINATION OF THESE. H D Bob Company Inc, New York, N. Y.
Filed January 19, 1932. Serial No. 323,160. PUBLISHED MARCH 15, 1932. Class 39.

294,501. TROUSERS FOR MEN AND BOYS. Brody-Lewis Mfg. Company, Omaha, Nebr.
Filed January 19, 1932. Serial No. 323,162. PUBLISHED MARCH 15, 1932. Class 39.

294,502. SOAP. Les Industries Reunies, Societe Anonyme, Puteaux, France.
Filed January 20, 1932. Serial No. 323,202. PUBLISHED MARCH 15, 1932. Class 4.

294,503. HOSIERY. Nomend Hosiery Mills M. B. Laubach Co. Inc., Philadelphia, Pa.
Filed January 20, 1932. Serial No. 323,205. PUBLISHED MARCH 15, 1932. Class 39.

294,504. MEN'S NECKWEAR—NAMELY NECKTIES AND SCARFS. Stern, Rutland & Lissauer, Inc., New York, N. Y.
Filed January 21, 1932. Serial No. 323,258. PUBLISHED MARCH 15, 1932. Class 39.

294,505. ELECTRIC CLOCKS. Electric Clock Corporation of America, Chicago, Ill.
Filed January 22, 1932. Serial No. 323,283. PUBLISHED MARCH 15, 1932. Class 27.

294,506. CIGARS. The Grocers & Producers Co., doing business as Clover Farm Stores, Cleveland, Ohio.
Filed January 22, 1932. Serial No. 323,290. PUBLISHED MARCH 15, 1932. Class 17.

294,507. CLEANING COMPOUND FOR WOOD AND OTHER KINDS OF FLOORS. Hillyard Chemical Company, St. Joseph, Mo.
Filed January 22, 1932. Serial No. 323,294. PUBLISHED MARCH 15, 1932. Class 4.

294,508. MUSTARD. Sandor Radanovits, Chicago, Ill.
Filed January 22, 1932. Serial No. 323,308. PUBLISHED MARCH 15, 1932. Class 46.

294,509. SOAPS. Lightfoot Schultz Company, Hoboken, N. J., and New York, N. Y.
Filed January 23, 1932. Serial No. 323,344. PUBLISHED MARCH 15, 1932. Class 4.

294,510. A DRY CLEANING PREPARATION. Jacob L. Pollock, doing business as N. R. Manufacturing Co., New York, N. Y.
Filed January 23, 1932. Serial No. 323,359. PUBLISHED MARCH 22, 1932. Class 4.

294,511. SWEATERS, INCLUDING SLIPOVER SWEATERS. Van Raalte Company, New York, N. Y.
Filed January 23, 1932. Serial No. 323,375. PUBLISHED MARCH 15, 1932. Class 39.

294,512. READY MIXED PAINT. The Watson-Standard Company, Pittsburgh, Pa.
Filed January 23, 1932. Serial No. 323,376. PUBLISHED MARCH 15, 1932. Class 16.

294,513. TOOTH BRUSHES. The Kolynos Company, New Haven, Conn.
Filed January 25, 1932. Serial No. 323,409. PUBLISHED MARCH 15, 1932. Class 29.

294,514. LIQUID FLOOR WAX. United Chemical Company, Kansas City, Mo.
Filed December 28, 1931. Serial No. 322,488. PUBLISHED MARCH 22, 1932. Class 16.

294,515. AUTO AND FURNITURE POLISH. Abeles-Lewit Co. Inc., New York, N. Y.
Filed December 29, 1931. Serial No. 322,490. PUBLISHED MARCH 22, 1932. Class 16.

294,516. WOMEN'S, MEN'S, AND CHILDREN'S HATS. National Hat Co., Inc., New York, N. Y.
Filed December 29, 1931. Serial No. 322,520. PUBLISHED MARCH 15, 1932. Class 39.

294,517. LUBRICATING OILS. Ashland Refining Company, Ashland, Ky.
Filed December 30, 1931. Serial No. 322,541. PUBLISHED MARCH 1, 1932. Class 15.

294,518. CHEMICALLY TREATED POLISHING CLOTHS. Bertha S. Jacobson, New York, N. Y.
Filed December 30, 1931. Serial No. 322,547. PUBLISHED MARCH 22, 1932. Class 4.

294,519. KNITTED PULL OVER SWEATERS, COATS, LOUNGING AND BEACH PAJAMAS, BATH ROBES, LOUNGING JACKETS, POLO SHIRTS, AND BERETS FOR MEN AND BOYS. Neustadter Bros., San Francisco, Calif.
Filed December 30, 1931. Serial No. 322,555. PUBLISHED MARCH 15, 1932. Class 39.

294,520. OILS AND LUBRICATING GREASES. Standard Oil Company of New Jersey, Wilmington, Del.
Filed December 31, 1931. Serial No. 322,606. PUBLISHED MARCH 1, 1932. Class 15.

294,521. RUBBER TIRES AND TUBES. Atlas Supply Company, Wilmington, Del., and Newark, N. J.
Filed January 4, 1932. Serial No. 322,677. PUBLISHED MARCH 1, 1932. Class 35.

294,522. PAINT COATINGS. Aluminum Industries, Inc., Cincinnati, Ohio.
Filed January 5, 1932. Serial No. 322,726. PUBLISHED MARCH 22, 1932. Class 16.

294,523. PRINTS, PUBLICATIONS—NAMELY, ETCHINGS, LITHOGRAPHS, ENGRAVINGS, WOODCUTS, DRAWINGS, AQUATINTS. Louis Icart Society, Inc., New York, N. Y.
Filed January 7, 1932. Serial No. 322,795. PUBLISHED MARCH 15, 1932. Class 38.

294,524. ARTIFICIAL TEETH. JULIUS CHARLESTEIN, doing business as Premier Dental Products Co., Philadelphia, Pa.
Filed January 6, 1932. Serial No. 322,811. PUBLISHED MARCH 22, 1932. Class 44.

294,525. PRINTS OR LABELS THAT ARE SOLD FOR APPLICATION TO OR ASSOCIATION WITH PACKAGES OR CONTAINERS OF ARTICLES OF MERCHANDISE. RECIPROCAL ADVERTISING, INC., New York, N. Y.
Filed January 9, 1932. Serial No. 322,862. PUBLISHED MARCH 15, 1932. Class 37.

294,526. INKING RIBBONS. ADDRESSOGRAPH-MULTIGRAPH CORPORATION, Cleveland, Ohio.
Filed January 11, 1932. Serial No. 322,874. PUBLISHED MARCH 15, 1932. Class 11.

294,527. COMPOUND FOR CLEANING HANDS AND GENERAL HOUSEHOLD USE. INSTANT SALES COMPANY, LTD., Philadelphia, Pa.
Filed January 11, 1932. Serial No. 322,883. PUBLISHED MARCH 15, 1932. Class 4.

294,528. WINDOW SCREENS AND SCREEN DOORS. WOODWARD & LOTHROP, Washington, D. C.
Filed January 12, 1932. Serial No. 322,947. PUBLISHED MARCH 15, 1932. Class 12.

294,529. CARBON PAPER AND TYPEWRITER RIBBONS. L C SMITH & CORONA TYPEWRITERS INC. New York, N. Y.
Filed January 13, 1932. Serial No. 322,974. PUBLISHED MARCH 15, 1932. Class 11.

294,530. DENTAL HANDPIECES. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed January 13, 1932. Serial No. 322,979. PUBLISHED MARCH 15, 1932. Class 44.

294,531. MEN'S SUITS, INCLUDING COATS, VESTS, TROUSERS, AND KNICKERBOCKERS FOR WOMEN AND CHILDREN. ALFRED DECKER & COHN, INC., Chicago, Ill.
Filed January 14, 1932. Serial No. 322,999. PUBLISHED MARCH 15, 1932. Class 39.

294,532. OLIVE OIL. NICOLA LATORRACA, doing business as Latorraca Bros., New York, N. Y.
Filed October 12, 1931. Serial No. 320,001. PUBLISHED MARCH 15, 1932. Class 46.

294,533. SYRUP. SAYRE WHOLESALE GROCERY COMPANY, doing business as Twin "AA" Syrup Company, Sayre, Okla.
Filed October 12, 1931. Serial No. 320,068. PUBLISHED MARCH 15, 1932. Class 46.

294,534. TABLE SYRUP. SAYRE WHOLESALE GROCERY COMPANY, doing business as Twin "AA" Syrup Company, Sayre, Okla.
Filed October 12, 1931. Serial No. 320,069. PUBLISHED MARCH 15, 1932. Class 46.

294,535. DRY CLEANING FLUID. THE ROESSLER & HASSLACHER CHEMICAL COMPANY, INC., New York, N. Y.
Filed November 13, 1931. Serial No. 321,122. PUBLISHED MARCH 22, 1932. Class 4.

294,536. METAL SKYLIGHT BARS. NORTHWEST LEAD CO., Seattle, Wash.
Filed November 14, 1931. Serial No. 321,144. PUBLISHED MARCH 15, 1932. Class 12.

294,537. LUBRICATING OIL. SOUTHERN LUBRICATING COMPANY, Ponca City, Okla.
Filed November 11, 1931. Serial No. 321,038. PUBLISHED MARCH 1, 1932. Class 15.

294,538. PERIODICAL PUBLICATION. THE HAIRE PUBLISHING COMPANY, New York, N. Y.
Filed November 19, 1931. Serial No. 321,287. PUBLISHED MARCH 15, 1932. Class 38.

294,539. PERIODICAL PUBLICATION. THE HAIRE PUBLISHING COMPANY, New York, N. Y.
Filed November 19, 1931. Serial No. 321,288. PUBLISHED MARCH 15, 1932. Class 38.

294,540. PANELS, SHEETS, AND THE LIKE. AMERICAN TARSO COMPANY, INC., Brooklyn, N. Y.
Filed January 26, 1932. Serial No. 323,441. PUBLISHED MARCH 15, 1932. Class 12.

294,541. CIGARS. THE GEORGE SCHAFER-H. C. PFAFF CIGAR COMPANY, Baltimore, Md.
Filed January 27, 1932. Serial No. 323,513. PUBLISHED MARCH 15, 1932. Class 17.

294,542. CIGARS. THE GEORGE SCHAFER-H. C. PFAFF CIGAR COMPANY, Baltimore, Md.
Filed January 27, 1932. Serial No. 323,514. PUBLISHED MARCH 15, 1932. Class 17.

294,543. HOSIERY. THE ALDEN MILLS, New Orleans, La.
Filed January 28, 1932. Serial No. 323,515. PUBLISHED MARCH 15, 1932. Class 39.

294,544. DESK SETS. THE PARKER PEN COMPANY, Janesville, Wis.
Filed January 29, 1932. Serial No. 323,585. PUBLISHED MARCH 15, 1932. Class 37.

294,545. SANITARY PADS. DIANA MANUFACTURING COMPANY, Green Bay, Wis.
Filed January 30, 1932. Serial No. 323,613. PUBLISHED MARCH 22, 1932. Class 44.

294,546. SOAPS, METAL POLISHES, SHOE POLISHES, ETC. S. H. KRESS & CO., New York, N. Y.
Filed January 30, 1932. Serial No. 323,622. PUBLISHED MARCH 15, 1932. Class 4.

294,547. HOSIERY. MASSACHUSETTS KNITTING MILLS, Jamaica Plain, Mass.
Filed February 1, 1932. Serial No. 323,667. PUBLISHED MARCH 15, 1932. Class 39.

294,548. SANITARY BELTS AND THE LIKE. MARCUS & WIESEN INC., New York, N. Y.
Filed February 2, 1932. Serial No. 323,752. PUBLISHED MARCH 15, 1932. Class 44.

294,549. LADIES' HOSIERY. BEAVER DRY GOODS COMPANY, Knoxville, Tenn.
Filed February 6, 1932. Serial No. 323,889. PUBLISHED MARCH 15, 1932. Class 39.

294,550. CERTAIN NAMED PAINT PRODUCTS. THE LOWE BROTHERS COMPANY, Dayton, Ohio.
Filed February 6, 1932. Serial No. 323,897. PUBLISHED MARCH 22, 1932. Class 16.

294,551. DRY CLEANING POWDER. SWANSALES CORPORATION, New York, N. Y.
Filed February 6, 1932. Serial No. 323,918. PUBLISHED MARCH 22, 1932. Class 4.

294,552. PAINTS, VARNISHES, LACQUERS, AND JAPANS. OXFORD VARNISH CORPORATION, Detroit, Mich.
Filed February 8, 1932. Serial No. 323,961. PUBLISHED MARCH 22, 1932. Class 16.

294,553. BRISTOLBOARD. NORMAN HARROWER, doing business as Linton Brothers & Company, Fitchburg, Mass.
Filed February 9, 1932. Serial No. 323,996. PUBLISHED MARCH 15, 1932. Class 37.

294,554. WASHBOARDS. NATIONAL WASHBOARD COMPANY, Chicago, Ill.
Filed July 15, 1931. Serial No. 316,977. PUBLISHED AUGUST 25, 1931. Class 24.

294,555. BRASSIÈRES, BANDEAUX, CORSETS, CORSELETTES, AND GIRDLES. MAIDEN FORM BRASSIERE CO., INC., New York, N. Y.
Filed December 14, 1931. Serial No. 322,107. PUBLISHED MARCH 15, 1932. Class 39.

294,556. SOAP. GOLD DUST CORPORATION, New York, N. Y.
Filed December 16, 1931. Serial No. 322,168. PUBLISHED MARCH 15, 1932. Class 4.

294,557. SOAP. GOLD DUST CORPORATION, New York, N. Y.
Filed December 16, 1931. Serial No. 322,169. PUBLISHED MARCH 15, 1932. Class 4.

294,558. GASOLINE. WADHAMS OIL COMPANY, Milwaukee, Wis.
Filed December 16, 1931. Serial No. 322,195. PUBLISHED MARCH 1, 1932. Class 15.

294,559. PETROLEUM PRODUCTS—NAMELY, MOTOR LUBRICATING OIL, GASOLINE, AND LUBRICATING GREASE. WADHAMS OIL COMPANY, Milwaukee, Wis.
Filed December 16, 1931. Serial No. 322,196. PUBLISHED MARCH 1, 1932. Class 15.

294,560. BULLETINS AND PAMPHLETS PUBLISHED FROM TIME TO TIME. HOME LIFE INSURANCE COMPANY, New York, N. Y.
Filed December 18, 1931. Serial No. 322,252. PUBLISHED MARCH 15, 1932. Class 38.

294,561. FOOD OF THE PIE OR SANDWICH NATURE. EVA M. WELLS, doing business as Vagabond Pie Products Co., Bakersfield, Calif.
Filed December 18, 1931. Serial No. 322,278. PUBLISHED MARCH 15, 1932. Class 46.

294,562. MAGAZINES. THE EXECUTORS OF THE ESTATE OF WILLIAM EDWIN RUDGE, doing business as William Edwin Rudge, Publisher, New York, N. Y.
Filed December 19, 1931. Serial No. 322,292. PUBLISHED MARCH 15, 1932. Class 38.

294,563. PERIODICAL PUBLISHED AT REGULAR INTERVALS. TOWN AFFAIRS COMMITTEE, Montclair, N. J.
Filed December 19, 1931. Serial No. 322,295. PUBLISHED MARCH 15, 1932. Class 38.

294,564. GRINDING AND ABRASIVE WHEELS. RAMET CORPORATION OF AMERICA, North Chicago, Ill.
Filed December 21, 1931. Serial No. 322,329. PUBLISHED MARCH 15, 1932. Class 4.

294,565. PHONOGRAPH RECORDS. REMSEN CORPORATION, New York, N. Y.
Filed December 21, 1931. Serial No. 322,330. PUBLISHED MARCH 8, 1932. Class 36.

294,566. SPECIAL SUGAR INTENDED TO BE USED IN PLACE OF ORDINARY SUGAR. GAMMA PHARMACAL CORPORATION, New York, N. Y.
Filed December 22, 1931. Serial No. 322,363. PUBLISHED MARCH 15, 1932. Class 46.

294,567. CANNED FRUITS, CANNED VEGETABLES, CANNED SLICED PINEAPPLE, AND CANNED SAUERKRAUT. ARMSTRONG GROCERY COMPANY, Sharon, Pa.
Filed December 23, 1931. Serial No. 322,376. PUBLISHED MARCH 15, 1932. Class 46.

294,568. LEATHER AND RUBBER FOOTWEAR—NAMELY, BOOTS, RUBBERS, SHOES, AND GALOSHES FOR MEN, WOMEN, AND CHILDREN. MONTGOMERY WARD & CO., INCORPORATED, Chicago, Ill.
Filed December 23, 1931. Serial No. 322,395. PUBLISHED MARCH 15, 1932. Class 39.

294,569. DESIGNS OR PATTERNS FOR EMBROIDERY AND OTHER FANCY NEEDLEWORK. ALFRED MAYER-WEISMANN, Boston, Mass.
Filed December 24, 1931. Serial No. 322,430. PUBLISHED MARCH 15, 1932. Class 40.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

294,570. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE SHARPLES SPECIALTY COMPANY, Philadelphia, Pa. Filed Dec. 18, 1928. Serial No. 276,900.

SHARPLES

For Centrifugal Machines for Dewaxing of Petroleum Oil, Etc.
Claims use since January, 1916.

294,571. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) U. S. MANUFACTURING CORPORATION, Decatur, Ill. Filed Feb. 6, 1929. Serial No. 278,965.

KANTMAR

For Fly Swatters.
Claims use since Jan. 2, 1929.

294,572. (CLASS 37. PAPER AND STATIONERY.) Z. & W. M. CRANE, INC., Dalton, Mass. Filed July 3, 1929. Serial No. 286,535.

LAIDLAWN

For Writing Paper and Envelopes, and Particularly Papeteries.
Claims use since August, 1928.

294,573. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH P. HARMER, doing business as The Harmer Laboratories Company, Philadelphia, Pa. Filed Nov. 26, 1930. Serial No. 308,333.

SNO-MELT

For Snow Melting Compound.
Claims use since Nov. 10, 1930.

294,574. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE AMERICAN HARDWARE CORPORATION, New Britain, Conn. Filed Dec. 19, 1930. Serial No. 309,161.

Good Buildings Deserve Good Hardware

For Mechanically-Operated Door-Bells, Door-Knobs, Door-Knockers, Door-Stops, Holders and Closers, Door-Quadrants, Door and Sash Pivots, Door Checks and Springs, Door-Pulls, Door Openers; Door, Window, and Transom Fittings—Namely, Door-Hooks, Push and Pull Plates, Kick-Plates, Finger-Plates, Name-Plates, Rose-Plates, Number-Plates, Letter-Box Plates, Sash-Lifts, Sash and Transom Centers, Sash-Cord Irons, Sash Rollers and Sheaves; Coat and Hat Hooks, Cabin-Door Hooks, Wardrobe-Hooks, Ceiling Hooks, Screw-Hooks, Turnbuckles, Flush Rings, Locker-Rings; Drawer Pulls, Handles, and Knobs; Picture-Knobs, Hinges, Spring-Hinges, Chest Corners and Fittings, Chest-Handles, Screws, Screw-Eyes, Cleats, Escutcheons, Hasps, Hangers, Metal Washers, Staples, Tacks, Nails and Studs, Nuts, Metal Chains, Trunk-Handles, Window-Stops, Umbrella-Clips; Metal Letters, Figures, and Monograms; Transom and Skylight

Lifters and Openers, Cupboard-Turns, Bell-Cranks, Casement and Shutter Adjusters, Shelf-Brackets, Sliding-Door Sheaves and Rails, Mouthpieces for Speaking-Tubes, Press-Guards.
Claims use since January, 1927.

294,575. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPAHATIONS.) E. TOSSE & CO. INC., Brooklyn, N. Y. Filed Jan. 10, 1931. Serial No. 309,830.

KAVALACTOL

E. TOSSE & CO., INC.

For An Internal Antigonorrheic
Claims use since Dec. 14, 1930.

294,576. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PAULINE MEDLAM BERRAY, doing business as Di-Lash Company, New York, N. Y. Filed Feb. 20, 1931. Serial No. 311,256.

DI-LASH

For Eye Lash and Eye Brows Dye.
Claims use since Sept. 1, 1930.

294,577. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GRAEFF MILLER, New York, N. Y. Filed Feb. 24, 1931. Serial No. 311,391.

Margaret Lane

For Facial Creams and Cream Rouge.
Claims use since Sept. 3, 1930.

294,578. (CLASS 39. CLOTHING.) BROWN'S BLEACH JACKET COMPANY, Worcester, Mass. Filed Apr. 2, 1931. Serial No. 312,836.

Sam Brown

For Knitted Sweaters, Coats, Vests and Jackets.
Claims use since Mar. 23, 1931.

294,579. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE NEWPORT COMPANY, Carrollville, Wis. Filed Apr. 2, 1931. Serial No. 312,854.

NEWPORT

For Pine-Oil and Borneol.
Claims use since September, 1916.

294,580. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) INTERNATIONAL PROJECTOR CORPORATION, New York, N. Y. Filed Apr. 10, 1931. Serial No. 313,265.

PACKETTE

For Magazines or Receptacles and/or Parts Thereof for Film for Picture Recording and/or Projection for Any Purposes Such as Educational, Entertainment, and Industrial Purposes.
Claims use since Mar. 31, 1931.

294,581. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) INTERNATIONAL PROJECTOR CORPORATION, New York, N. Y. Filed Apr. 10, 1931. Serial No. 313,267.

CASETTE

For Motion Picture Projection Machines, Cameras, and Film Holding Magazines or Containers as Accessories Thereto, and/or Parts of the Projector and/or Cameras, and Parts and Accessories to Said Projector and/or Cameras, and/or Projectors, or Cameras or Parts Thereof as Forming Portions of Sound and View-Taking and Reproducing Machines.
Claims use since Mar. 30, 1931.

294,582. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CRIPPEN MANUFACTURING COMPANY, Alma, Mich. Filed Apr. 25, 1931. Serial No. 313,770.

SUPERIOR

For Bean and Seed Pickers, Cleaners, Polishes, and Combination Cleaners and Polishers.
Claims use since Apr. 2, 1931.

294,583. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) STEWART-WARNER CORPORATION, Chicago, Ill. Filed Apr. 27, 1931. Serial No. 313,894.

Write-it-Urself

For Neon Signs.
Claims use since Mar. 23, 1931.

294,584. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOPHIA ROBART, Boston, Mass. Filed May 2, 1931. Serial No. 314,127.

SOPHIA ROBART

For Face Powders, Cleansing Creams, Tissue Creams, Skin Tonics, Pore Creams, Muscle Oils, Rouges, and Perfumes.
Claims use since June 3, 1930.

294,585. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) IRVING LEBISH, doing business as Lee Products Co., New York, N. Y. Filed May 8, 1931. Serial No. 314,335.

Rose Lee

For Expectorant Medicines and Shampoo Preparations for Dogs and Other Domesticated Animals.
Claims use since Apr. 14, 1931.

294,586. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GENERAL FOOD PRODUCTS COMPANY, Vernon, Calif. Filed May 19, 1931. Serial No. 314,754.

FLUFF-I-EST

For Marshmallows.
Claims use since Mar. 1, 1931.

294,587. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PERKINS PRODUCTS CO., Chicago, Ill. Filed June 5, 1931. Serial No. 315,468.

Save-a-Run

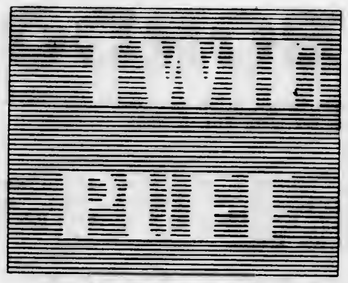
For Preparation for Stopping Runs and Tears in Hosiery.
Claims use since Nov. 10, 1930.

294,588. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) RAY V. SOWERS, doing business as Household Helps, Inc., Muncie, Ind. Filed June 13, 1931. Serial No. 315,805.

QUIK-WHIP

For Egg Beaters.
Claims use since Mar. 16, 1931.

294,589. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) DOLORES HOLLANDER, Newark, N. J. Filed July 23, 1931. Serial No. 317,247.



The lining which is shown on the drawing is for the purpose of shading only.
For Powder Puffs.
Claims use since Apr. 1, 1931.

294,590. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) HOLMAN SOAP COMPANY, doing business as Loret Laboratories, Chicago, Ill. Filed Sept. 12, 1931. Serial No. 318,987.

LORET

For Soaps, Including Toilet Soaps.
Claims use since Mar. 19, 1921.

294,591. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GREGG C. ANGLE, Spokane, Wash. Filed Sept. 14, 1931. Serial No. 319,013.

ANGLE'S SALVE

For Salve That Is Massaged Into Infected and Inflamed Parts of the Body Caused by Colds, Burns, Bruises, Sprains, Cuts, Headaches, Corns, Callouses, Insect Bites and Rheumatism.
Claims use since Mar. 1, 1928.

294,592. (CLASS 39. CLOTHING.) NEW ERA SHIRT COMPANY, St. Louis, Mo. Filed Oct. 24, 1931. Serial No. 320,528.

X-ACT-FIT

For Men's and Boy's Dress, Negligee, and Work Shirts.
Claims use since March, 1931.

294,593. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CALIFORNIA SPRAY-CHEMICAL CORPORATION, Wilmington, Del., and Berkeley, Calif. Filed Nov. 23, 1931. Serial No. 321,418.

Garden BORDO

For Insecticides, Germicides, and Fungicides.
Claims use since Feb. 3, 1931.

294,594. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ARKANSAS COMPANY INC., New York, N. Y. Filed Feb. 5, 1932. Serial No. 323,853.

ANTHROLE

For Vegetable Oil Used for Textile Dyeing and Finishing.
Claims use since 1920.

294,595. (CLASS 32. FURNITURE AND UPHOLSTERY.) EVR-KLEAN SEAT PAD COMPANY, St. Louis, Mo. Filed Feb. 15, 1932. Serial No. 324,163.

STANDARD

For Tailored Seat Covers, Seat Pads, Tailored Automobile Seat Covers and Seat Pads, Tailored Chair Covers and Chair Pads Made of Fabric, Leather, Imitation Leather and Matting, and Combinations Thereof.
Claims use since August, 1922.

294,596. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JACOBS' PHARMACY CO., doing business as Dr. Fred Palmer's Laboratory, Atlanta, Ga. Filed Feb. 16, 1932. Serial No. 324,224.

DR. FRED PALMER'S SKIN WHITENER

For Preparation Used as a Skin Bleach for Clearing the Complexion and for Whitening Sallow or Dark Skin.
Claims use since 1900.

294,597. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE BURCH CORPORATION, Crestline, Ohio. Filed Feb. 23, 1932. Serial No. 324,366.

ROSS

For Snow Plows.
Claims use since Oct. 21, 1930.

294,598. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Feb. 23, 1932. Serial No. 324,373.

Cinegraph

For Motion Picture Film Carrying Complete Images for Projection.
Claims use since May 25, 1927.

294,599. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) R. HOE & CO., INC., New York, N. Y. Filed Mar. 9, 1932. Serial No. 324,963.

SUPERSPEED

For Rotary Printing Machines Used for Printing Newspapers, Magazines, and Similar Products.
Claims use since September, 1921.

294,600. (CLASS 39. CLOTHING.) FRED'K. H. SPRAGUE CO., INC., Fitchburg, Mass. Filed Mar. 23, 1932. Serial No. 325,415.

"Spragueмade"

For Boys' Clothing—Namely, Wash Suits, Shorts, Camp Suits, Knickers, and Long Trousers; Girls' Gymnasium and Camp Suits.
Claims use since 1917.

294,601. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) G. E. PRENTICE MANUFACTURING COMPANY, Berlin, Conn. Filed Mar. 25, 1932. Serial No. 325,483.

PRENTICE

For Slide Operated Fasteners.
Claims use since 1926.

TRADE-MARK REGISTRATIONS RENEWED

38,920. MEDICINE FOR CERTAIN NAMED AILMENTS. Registered September 23, 1902. WILLIAM JOHN BAILEY, executor of the estate of Alfred Fennings, deceased. Renewed September 23, 1932, to William John Bailey, Herbert Bristow Wallen, and Francis Brian Pelly, trustees of Alfred Fennings, deceased, doing business as the Firm of Alfred Fennings, Cowes, England, successor.

83,878. BITTERS. Registered October 17, 1911. FRIEDRICH WILHELM WINKELMANN, Hamburg, Germany. Renewed October 17, 1931.

85,321. REMEDIES FOR NERVOUS DISEASES. Registered February 13, 1912. THE J. W. BRANT COMPANY, LIMITED. Renewed February 13, 1932, to The J. W. Brant Co., Albion, Mich., a Corporation of Michigan, successor.

85,874 CERTAIN KINDS OF THREADS. Registered March 26, 1912. ARNOLD OTTO MEYER, Hamburg, Germany, a Firm. Renewed March 26, 1932.

86,075. LETTER-PAPER, ENVELOPS, AND PRINTING-PAPER. Registered April 9, 1912. ARNOLD OTTO MEYER, Hamburg, Germany, a Firm. Renewed April 9, 1932.

86,171. WRITING-INKS. Registered April 16, 1912. S. S. STAFFORD, INC. Renewed April 16, 1932, to S. S. Stafford, Inc., New York, N. Y., a Corporation of New York, successor.

86,365. SHOVELS, SPADES, AND SCOOPS. Registered May 7, 1912. AMES SHOVEL AND TOOL COMPANY, Jersey City, N. J., and Boston, Mass. Renewed May 7, 1932, to Ames Baldwin Wyoming Shovel Co., Parkersburg, W. Va., a Corporation of Delaware, assignee.

87,139. CERTAIN ADHESIVES. Registered July 2, 1912. AKTIENGESELLSCHAFT FÜR CHEMISCHE PRODUKTE VORMALS H. SCHEIDEMANDEL, Berlin, Germany, a Corporation of Germany. Renewed July 2, 1932.

87,408. CERTAIN JEWELRY AND PRECIOUS METAL WARE. Registered July 16, 1912. R. BLACKINTON & Co., North Attleboro, Mass., a Firm. Renewed July 16, 1932.

87,419. LAUNDRY-STARCH POLISH. Registered July 16, 1912. E. A. BROMUND COMPANY, New York, N. Y., a Corporation of New York. Renewed July 16, 1932.

87,520. BEESWAX. Registered July 23, 1912. E. A. BROMUND COMPANY, New York, N. Y., a Corporation of New York. Renewed July 23, 1932.

87,909. TOOTH-PASTE. Registered August 13, 1912. NATIONAL PHARMACY CO., Oakland, Calif. Renewed August 13, 1932, to The National Pharmacy Company, San Francisco, Calif., a Corporation of California, assignee.

88,589 CHAMOIS-SKINS. Registered October 1, 1912. JAMES H. RHODES & COMPANY, Chicago, Ill., and New York, N. Y. Renewed October 1, 1932, to James H. Rhodes & Company, Chicago, Ill., a Corporation of Illinois.

88,590. CHAMOIS-SKINS. Registered October 1, 1912. JAMES H. RHODES & COMPANY, Chicago, Ill., and New York, N. Y. Renewed October 1, 1932, to James H. Rhodes Company, Chicago, Ill., a Corporation of Illinois.

Label 11,120. ULTRAMARINE SHEET BLUING. For Bluing. Registered May 31, 1904. FRANCIS J. GODOY, New York, N. Y. Renewed May 31, 1932.

LABELS

REGISTERED MAY 31, 1932

40,749.—*Title:* CHAMPION. For Paper. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio. Published March 2, 1931.

40,750.—*Title:* DUFF'S BRAN MUFFIN MIX. For Bran Muffin Mixture. P. DUFF & SONS, INC., Pittsburgh, Pa. Published March 17, 1932.

40,751.—*Title:* DUFF'S GINGER BREAD MIX. For Ginger Bread Mixture. P. DUFF & SONS, INC., Pittsburgh, Pa. Published March 17, 1932.

40,752.—*Title:* MISS ILLINOIS. For Canned Corn. GIBSON CANNING COMPANY, Gibson City, Ill. Published December 30, 1931.

40,753.—*Title:* DAIRY RINSE. For Calcium Hypochlorite Used as a Germicidal and Sterilizing Agent. DR. HESS & CLARK, INC., Ashland, Ohio. Published February 25, 1932.

40,754.—*Title:* FRESH EVERY DAY THE DATED CIGAR. For Cigars. J. KERNS, INC., Milwaukee, Wis. Published March 21, 1932.

40,755.—*Title:* CB—402. For Cakes. LAMBODY LABEL AND WRAPPER CO., Kalamazoo, Mich. Published March 18, 1932.

40,756.—*Title:* ZION KOSHER MAYONNAISE. For Mayonnaise. H. M. LEVIN, Philadelphia, Pa. Published June 13, 1931.

40,757.—*Title:* McCORMICK'S ELEK-TRIK ROAST COFFEE. For Electrically Roasted Coffee. McCORMICK ELECTRIC ROASTER SALES CORPORATION, Baltimore, Md. Published March 22, 1932.

40,758.—*Title:* PUNCH YOUR WEIGHT. For Punch Testing Machines. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Published June 16, 1931.

40,759.—*Title:* REDUCE WITHOUT DIETING. For Tea Used for Reducing Purposes. ADELE MOREL, INC., New York, N. Y. Published March 14, 1932.

40,760.—*Title:* SHREDDED WHEAT. For Shredded Wheat Biscuits. NATIONAL BISCUIT COMPANY, New York and Niagara Falls, N. Y., and Oakland, Calif. Published March 21, 1932.

40,761.—*Title:* MORNING STAR. For Cigars. SAM PENSKY, doing business as The Plaza Cigar Co., Brooklyn, N. Y. Published March 17, 1932.

40,762.—*Title:* WHEAT BREAD. For Bread. POLLOCK PAPER & BOX COMPANY, Dallas, Tex. Published March 15, 1932.

40,763.—*Title:* EL TORO PERFECTO THE IMPORTED CIGAR FOR 5¢. For Cigars. PORTO RICAN AMERICAN TOBACCO Co., Newark, N. J. Published April 14, 1932.

40,764.—*Title:* PORTINA THE IMPORTED CIGAR FOR 5¢. For Cigars. PORTO RICAN AMERICAN TOBACCO Co., Newark, N. J. Published April 14, 1932.

40,765.—*Title:* RED KAPS, A HOT SHOT FOR RHEUMATISM. For Rheumatism Capsules. OTTO F. PROFANT, Chicago, Ill. Published August 5, 1931.

40,766.—*Title:* SAMSON. For Paint Products. SAMSON PRODUCTS Co., New York, N. Y. Published December 28, 1931.

40,767.—*Title:* SUNOCO RADIATOR RUST PREVENTIVE. For Emulsion for Preventing the Rusting of the Cooling Chambers of Internal Combustion Engines. SUN OIL COMPANY, Philadelphia, Pa. Published March 21, 1932.

40,768.—*Title:* DOVE BRAND FERTILIZER. For Fertilizer. ARTHUR SYLVESTER, Revere, Mass. Published April 11, 1932.

40,769.—*Title:* "BLACK LEAF 40" NICOTINE SULPHATE. For Nicotine Sulphate. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published March 25, 1932.

40,770.—*Title:* NEW PLEASURE. For Cigars. TREBOW CIGAR CORPORATION, Philadelphia, Pa. Published January 15, 1932.

40,771.—*Title:* VITA SALT. For Medicinal Compound or Salt. VITA-MINN COMPANY, Minneapolis, Minn. Published March 1, 1932.

40,772.—*Title:* WARD'S READY-TO-BAKE BISCUITS. For Unbaked Biscuit Dough. WARD BAKING COMPANY, New York, N. Y. Published April 27, 1932.

40,773.—*Title:* CHA-WAR MOCCASIN. For Moccasins. CHAS. S. WARSHAW, New York, N. Y. Published September 10, 1931.

40,774.—*Title:* WEBSTER'S UNSWEETENED CHOCOLATE. For Chocolate for Cooking, Baking, and Beverage Purposes. HARRY G. WEBSTER, Melrose, Mass. Published October 15, 1931.

40,775.—*Title:* ORIOLE BREAD. For Bread. WEDEMAN'S BAKERY, Baltimore, Md. Published April 21, 1932.

40,776.—*Title:* OH HENRY SUNSHINE PEANUT BUTTER. For Peanut Butter. WILLIAMSON CANDY COMPANY, Chicago, Ill. Published March 10, 1932.

PRINTS

REGISTERED MAY 31, 1932

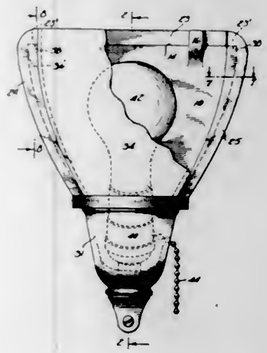
13,736.—*Title:* VENDOME CLOCKS A HOLEPROOF STYLE IN CLOCKED EFFECTS INSPIRED BY THE SIMPLE GRACE OF THE FAMOUS VENDOME COLUMN. For Hosiery. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Published December 21, 1931.

13,737.—*Title:* SILVER FIZZ. For Beverage. THE MINNEHAHA WATER CO., Cleveland, Ohio. Published March 15, 1932.

REISSUES

MAY 31, 1932

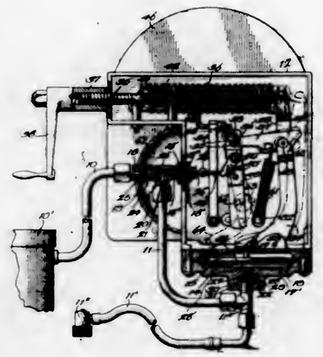
18,482. LIGHTING FIXTURE WALL BRACKET. LEROY C. DOANE and HERMAN H. WOLTER, Meriden, Conn., assignors to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Original No. 1,818,119, dated Aug. 11, 1931, Serial No. 186,001, filed Apr. 23, 1927. Application for reissue filed Dec. 31, 1931. Serial No. 584,236. 13 Claims. (Cl. 240—73.)



10. A lighting fixture of the wall pocket type comprising a support adapted to be mounted flat against a side wall, a lamp socket carried by the support, a lamp bulb in the socket, the bulb and socket being spaced forwardly of the wall surface, and a rigid, pocket-forming, diffusing and transmitting screen about the lamp bulb, the screen being formed of a single piece of translucent material and having side edge close to the wall surface to prevent the escape of direct light in lateral directions and being open at the top to allow direct light to reach the wall and ceiling above the fixture, the lamp socket being mounted close to the wall with its axis inclined away from the wall to accommodate the large portion of the lamp bulb, the screen tapering downwardly to be underneath the large portion of the bulb.

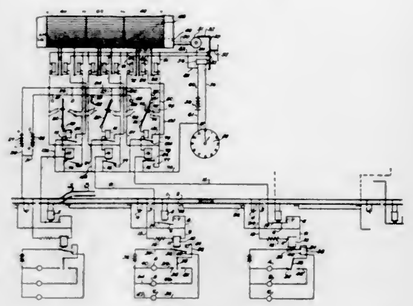
18,483. AIR SERVICE EQUIPMENT. THOMAS M. MANSON, Toronto, Ontario, Canada, assignor to Service Station Equipment Company, Bryan, Ohio, a Corporation of Delaware. Original No. 1,661,186, dated Mar. 6, 1928, Serial No. 140,222, filed Oct. 7, 1926. Application for reissue filed July 15, 1929. Serial No. 378,542. 6 Claims. (Cl. 50—3.)

1. Apparatus for filling pneumatic tires with air comprising a source of air under pressure, a flexible hose adapted to be connected to a pneumatic tire, means connecting the source of pressure with the hose, said means comprising a valve and a regulating device, the regulating device comprising means for opening said valve when pressure in said hose drops below a predetermined point and closing the valve only when the pressure in the hose rises materially above said point, and an adjusting device for said regulating means for adjusting the point at which the valve will open throughout the range of pressures commonly used for pneumatic tires, and means, including a lever operable by said adjusting device, for engagement with said valve and rendered operable by movement of said adjusting device beyond the normal range of operation



of said regulating device to maintain communication between the source of pressure and the hose regardless of pressure in the hose.

18,484. AUTOMATIC TRAIN CONTROL. PAUL J. SIMMEN, Eden, N. Y. Original No. 1,593,143, dated July 20, 1926, Serial No. 616,247, filed Feb. 1, 1923. Application for reissue filed May 17, 1928. Serial No. 278,568. 30 Claims. (Cl. 246—5.)



11. In a railway signal and dispatching system; a trackway divided into blocks; a track circuit for each block; three fixed signals at the entrance to each block for giving three different indications to the train; a circuit controlled at a central office and selectively controlling said signals; track circuit means for also controlling said signals and enforcing the display of a predetermined signal irrespective of the selection at the central office; and means at the central office rendered operable by said selected signal control circuit for indicating the movement of trains.

18,485. BLADE SYSTEM FOR TURBINES. ALF LYSHOLM, Stockholm, Sweden, assignor to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden, a Joint-Stock Company. Original No. 1,777,098, dated Sept. 30, 1930, Serial No. 287,176, filed June 21, 1928, and in Sweden June 30, 1927. Application for reissue filed Feb. 17, 1932. Serial No. 593,673. 18 Claims. (Cl. 253—77.)

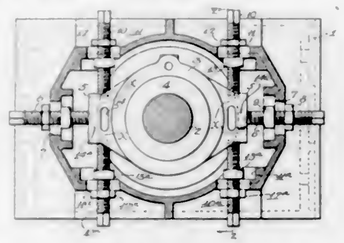


1. In a blade system for gas or steam turbines, the combination of the features that the thickness of each blade is greater at the inlet side of the blade than at the outlet side thereof, and that the blade pitch is related to the height of the blades as

$$k \sqrt{\sin \alpha}$$

where $k \geq 0.5$ and less than a value resulting in channels of impractical width and α designates the outlet angle of the blade.

18,486. BALL BEARING HOUSING. ALPHEUS O. HURXTHAL, Philadelphia, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Original No. 1,706,232, dated Mar. 19, 1929, Serial No. 191,111, filed May 13, 1927. Application for reissue filed Mar. 18, 1931. Serial No. 523,609. 6 Claims. (Cl. 308—59.)



1. The combination of a frame; a housing mounted in the frame; laterally extending lugs on the housing; adjusting screws bearing against the end of each lug; vertically adjustable screws bearing upon the upper and lower sides of the lugs, the frame being slotted for the passage of the several screws; and nuts on each screw at each side of the slotted portions of the frame for holding the screws after adjustment.

DESIGNS

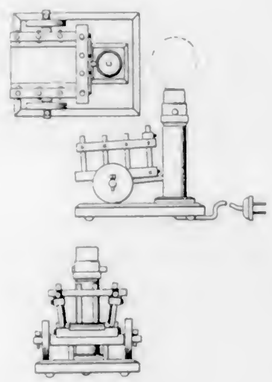
MAY 31, 1932

87,042. PLATE OR SIMILAR ARTICLE. ADRIAN R. APPLE, Glendale, Calif., assignor to Wallace China Company, Ltd., Huntington Park, Calif., a Corporation of California. Filed Mar. 15, 1932. Serial No. 43,200. Term of patent 7 years.



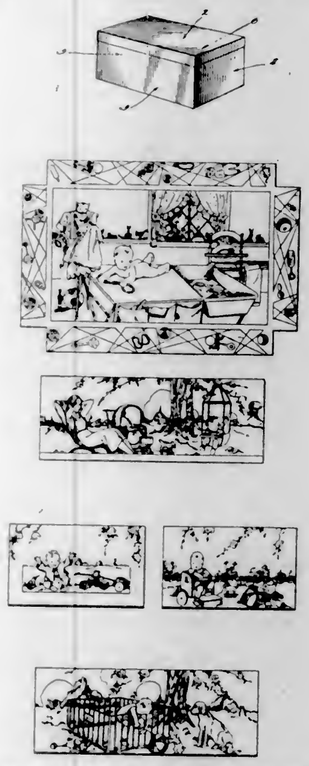
The ornamental design for a plate or similar article, as shown and described.

87,043. LAMP. EDGAR A. BARNARD, Washington, D. C. Filed Mar. 1, 1932. Serial No. 43,046. Term of patent 3½ years.



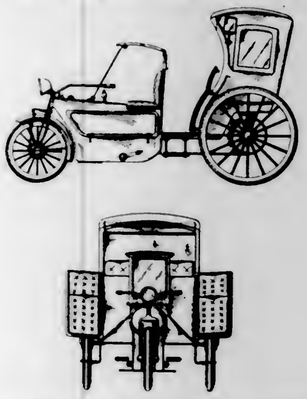
The ornamental design for a lamp as shown.

87,044. CARTON OR SIMILAR CONTAINER. JULIUS BERNSTEIN, Chicago, Ill., assignor to B. & B. Shoe Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 19, 1931. Serial No. 42,137. Term of patent 3½ years.



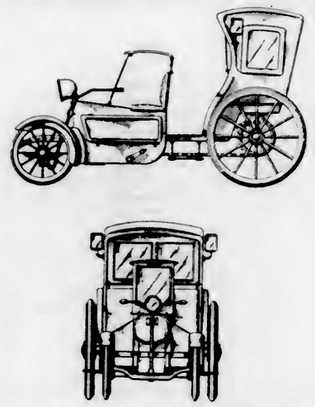
The ornamental design for a carton or similar container, substantially as shown and described.

87,045. THREE WHEEL PLEASURE AUTOMOBILE. WILLIAM H. BUTLER, New York, N. Y. Filed Feb. 27, 1932. Serial No. 43,028. Term of patent 7 years.



The ornamental design for a three wheel pleasure automobile, as shown.

87,046. AUTOMOBILE COUPÉ. WILLIAM H. BUTLER, New York, N. Y. Filed Feb. 27, 1932. Serial No. 43,029. Term of patent 7 years.



The ornamental design for an automobile coupé, as shown.

87,047. JAR. HENRY S. WADE, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 23, 1931. Serial No. 41,489. Term of patent 14 years.



The ornamental design for a jar substantially as shown.

87,048. BOTTLE. HOWARD T. CUMMING, Rochester, N. Y., assignor to Curtice Brothers Co., Rochester, N. Y., a Corporation of New York. Filed Mar. 31, 1932. Serial No. 43,347. Term of patent 3½ years.



The ornamental design for a bottle substantially as shown.

87,049. TABLE LAMP. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Mar. 23, 1932. Serial No. 43,266. Term of patent 7 years.



The ornamental design for a table lamp, substantially as shown and described.

87,050. FISH BAIT. MILTON S. DUNKELBERGER, Dayton, Ohio. Filed July 6, 1931. Serial No. 40,430. Term of patent 7 years.





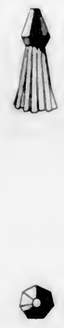
The ornamental design for a fish bait, as shown.

87,051. JAR OR SIMILAR CONTAINER. WALLACE E. GARVEY, Salem, N. J., assignor to Salem Glass Works, Salem, N. J., a Corporation of New Jersey. Filed Mar. 31, 1932. Serial No. 43,339. Term of patent 3½ years.



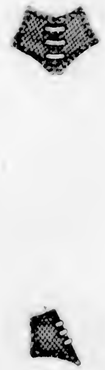
The ornamental design for a jar or similar container, as shown.

87,052. SHOE LACE TASSEL. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Jan. 29, 1932. Serial No. 42,662. Term of patent 3½ years.



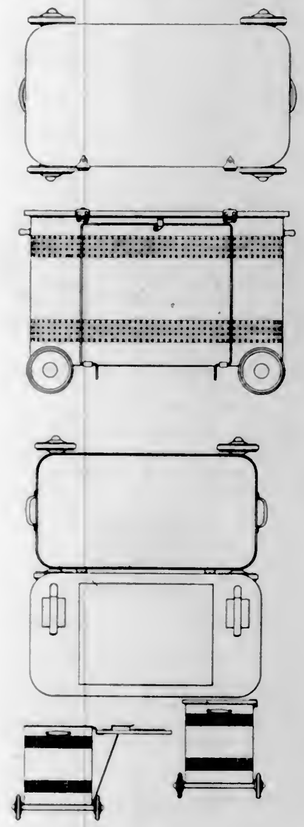
The ornamental design for a shoe lace tassel as shown.

87,053. SHOE ORNAMENT OR SIMILAR ARTICLE. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Mar. 18, 1932. Serial No. 43,225. Term of patent 7 years.



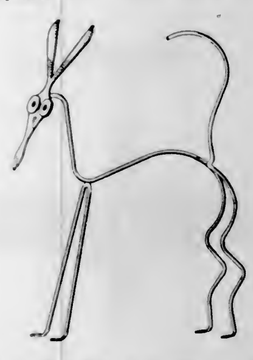
The ornamental design for a shoe ornament or similar article as shown.

87,054. VEHICLE. DONALD W. GILL, Cincinnati, Ohio, assignor to The Frank F. Taylor Company, Norwood, Ohio, a Corporation of Ohio. Filed Apr. 16, 1931. Serial No. 39,500. Term of patent 3½ years.



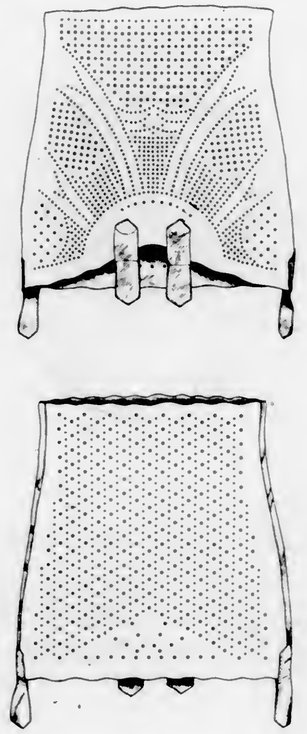
The ornamental design for a vehicle, as shown.

87,055. NOVELTY TOY. GENE GOTT, Kansas City, Mo. Filed Feb. 27, 1932. Serial No. 43,026. Term of patent 3½ years.



The ornamental design for a novelty toy, as shown.

87,056. CORSET. JEANNE F. GREIG, London, England, assignor to The Charnaux Patent Corset Company Limited, London, England. Filed Dec. 17, 1931. Serial No. 42,114. Term of patent 14 years.



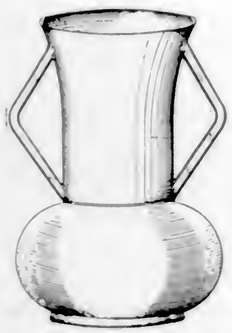
The ornamental design for a corset, as shown.

87,057. ROOFING UNIT. HARRY L. GUY, Chicago, Ill., assignor of one-half to Homer J. Luce, Chicago, Ill. Filed Mar. 5, 1932. Serial No. 43,095. Term of patent 14 years.



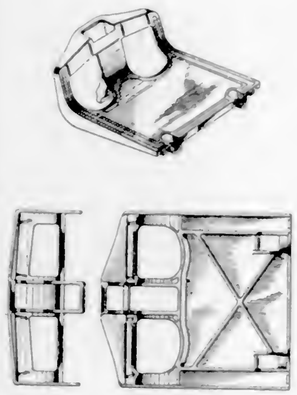
The ornamental design for a roofing unit as shown.

87,058. VASE. JAMES S. HALL, Mount Pleasant, Pa., assignor to L. E. Smith Glass Company, Mount Pleasant, Pa., a Corporation of Pennsylvania. Filed Mar. 31, 1932. Serial No. 43,351. Term of patent 7 years.



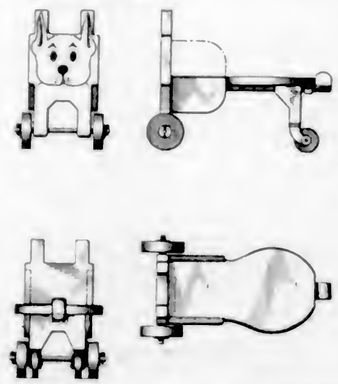
The ornamental design for a vase as shown.

87,059. FRONT FRAME MEMBER FOR ROWING MACHINES. PETER S. HARDY, Stratford, Conn., assignor to Health Developing Apparatus Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1932. Serial No. 43,125. Term of patent 7 years.



The ornamental design for a front frame member for rowing machines, as shown.

87,060. TOY VEHICLE. HENRY CONRAD HEBIG, Brooklyn, N. Y. Filed Mar. 11, 1932. Serial No. 43,151. Term of patent 3½ years.



The ornamental design for a toy vehicle as shown.

87,061. KNITTED FABRIC. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 30, 1931. Serial No. 41,273. Term of patent 14 years.



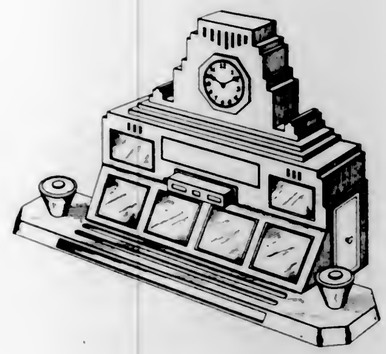
The ornamental design for a knitted fabric as shown.

87,062. AIRPLANE. HAROLD A. HICKS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed May 18, 1931. Serial No. 39,884. Term of patent 3½ years.



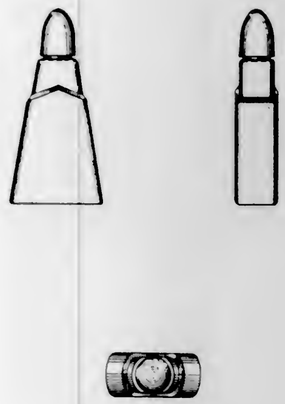
The ornamental design for an airplane as shown and described.

87,063. STAND. HARRY D. JACKSON, Fargo, N. Dak. Filed Dec. 14, 1931. Serial No. 42,083. Term of patent 3½ years.



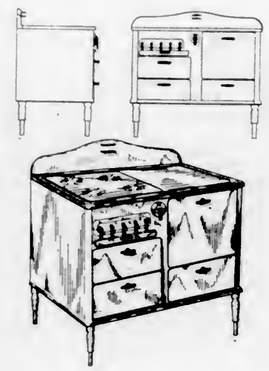
The ornamental design for a stand, as shown and described.

87,064. BOTTLE. MAE JOSEPH, Brooklyn, N. Y., assignor to Park & Tilford, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1932. Serial No. 43,319. Term of patent 3½ years.



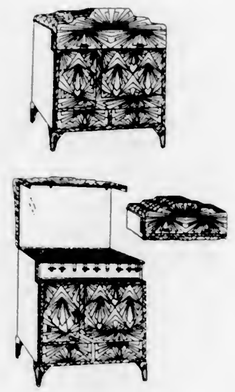
The ornamental design for a bottle as shown.

87,065. COOKING STOVE. BERTRAND B. KAHN, Cincinnati, Ohio, assignor to The Estate Stove Company, Hamilton, Ohio, a Corporation of Ohio. Filed Sept. 18, 1930. Serial No. 37,008. Term of patent 14 years.



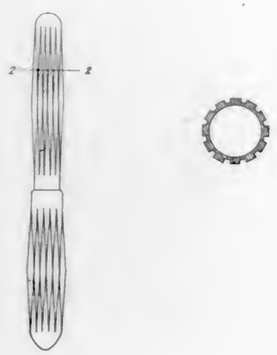
The ornamental design for a cooking stove as shown.

87,066. COOKING STOVE. MAURICE G. KLEMME, Belleville, Ill. Filed Aug. 14, 1931. Serial No. 40,849. Term of patent 3½ years.



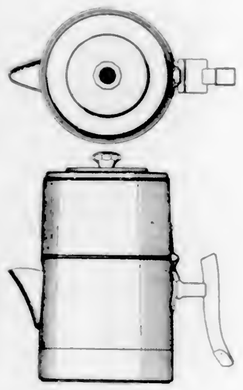
The ornamental design for a cooking stove, as shown.

87,067. FOUNTAIN PEN. AARON KOLBER, Brooklyn, N. Y., assignor to New Diamond Point Pen Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 29, 1932. Serial No. 43,318. Term of patent 7 years.



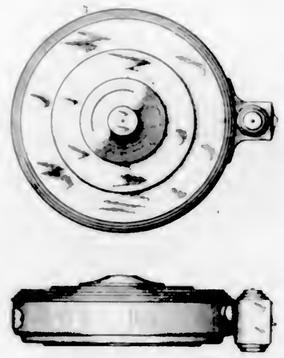
The ornamental design for a fountain pen, as shown.

87,068. DRIP COFFEEPOT. RICHARD F. KRAUSE, Massillon, Ohio. Filed Mar. 21, 1932. Serial No. 43,255. Term of patent 14 years.



The ornamental design for a drip coffeepot, as shown.

87,069. PEDESTAL DOME FOR HAIR PERMANENT WAVING MACHINES. WALTER E. LIPPERT, Hewlett, N. Y., assignor to Samuel Bonat & Bro., New York, N. Y., a Copartnership. Filed Oct. 6, 1931. Serial No. 41,318. Term of patent 7 years.



The ornamental design for a pedestal dome for hair permanent waving machines, as shown.

87,070. ENSEMBLE DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 30, 1932. Serial No. 43,330. Term of patent 3½ years.



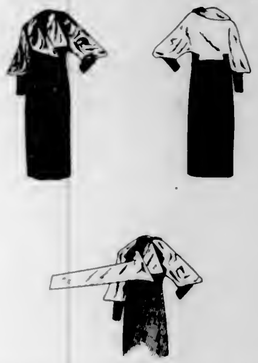
The ornamental design for an ensemble dress substantially as shown.

87,071. COAT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 9, 1932. Serial No. 43,451. Term of patent 3½ years.



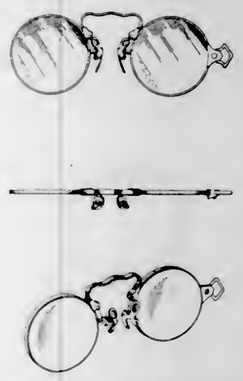
The ornamental design for a coat substantially as shown.

87,072. COAT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 9, 1932. Serial No. 43,452. Term of patent 3½ years.



The ornamental design for a coat substantially as shown and described.

87,073. PAIR OF OXFORD EYEGLASSES. JULES L. LOZEA, New York, N. Y. Filed Feb. 19, 1932. Serial No. 42,930. Term of patent 14 years.



The ornamental design for a pair of Oxford eyeglasses, as shown.

87,074. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM H. MAYER, Jr., New York, N. Y. Filed Feb. 10, 1932. Serial No. 42,810. Term of patent 7 years.



The ornamental design for a textile fabric or similar article as shown.

87,075. BIRTH-CHARM. EMANUEL MEYER, New York, N. Y. Filed Sept. 24, 1931. Serial No. 41,200. Term of patent 7 years.



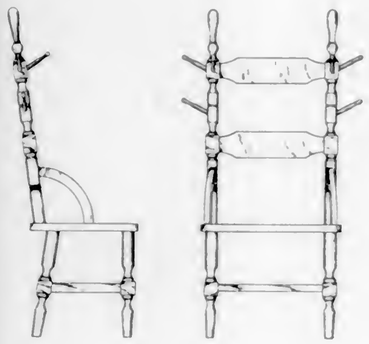
The ornamental design for a birth-charm, as shown and described.

87,076. HEAT INDICATOR FOR AUTOMOBILES. WILLARD G. MYERS, Bronxville, N. Y., assignor to Leander Development Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 2, 1932. Serial No. 43,374. Term of patent 3½ years.



The ornamental design for a heat indicator for automobiles as shown.

87,077. CHILD'S DRESSING CHAIR. VANCE C. PALMER, Sioux City, Iowa. Filed Mar. 30, 1932. Serial No. 43,329. Term of patent 7 years.



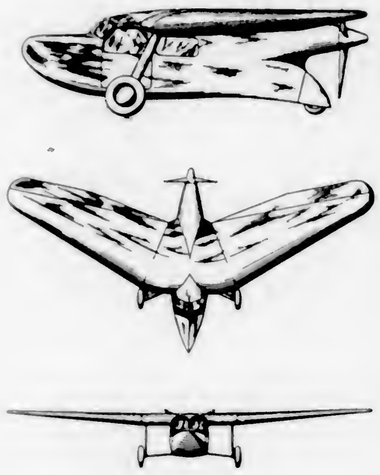
The ornamental design for a child's dressing chair, as shown.

87,078. COFFEE MAKER OR SIMILAR ARTICLE. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc., a Corporation of New York. Filed Apr. 9, 1932. Serial No. 43,448. Term of patent 14 years.



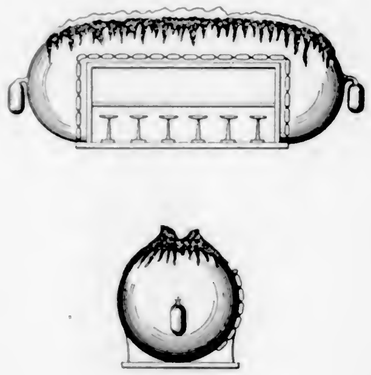
The ornamental design for a coffee maker or similar article substantially as shown and described.

87,079. AIRPLANE. JOHN PAVLECKA and VLADIMIR HENRY PAVLECKA, Detroit, Mich. Filed Nov. 23, 1931. Serial No. 41,833. Term of patent 14 years.



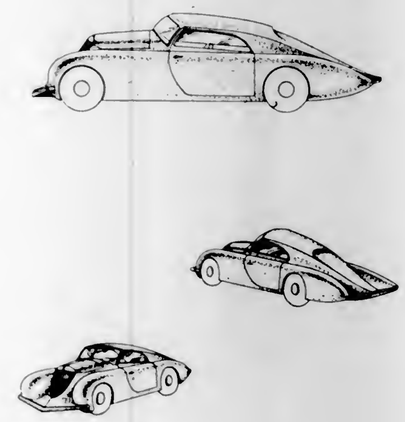
The ornamental design for an airplane, substantially as shown.

87,080. RESTAURANT BUILDING. REX LA PAYNE and CLIFTON F. BLAKE, Glendale, Calif.; said Blake assignor to said La Payne. Filed Mar. 5, 1932. Serial No. 43,102. Term of patent 7 years.



The ornamental design for a restaurant building as shown and described.

87,081. AUTOMOBILE. FREDERICK J. PIKE, Buffalo, N. Y. Filed Mar. 16, 1932. Serial No. 43,209. Term of patent 14 years.



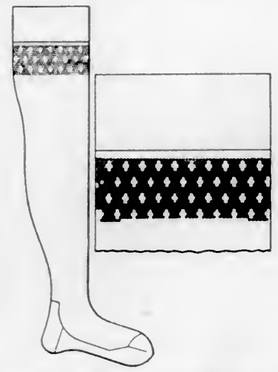
The ornamental design for an automobile, as shown and described.

87,082. TIRE. PAUL REUTER-LORENZEN, Detroit, Mich., assignor to Morgan & Wright, a Corporation of Michigan. Filed Mar. 29, 1930. Serial No. 35,067. Term of patent 14 years.



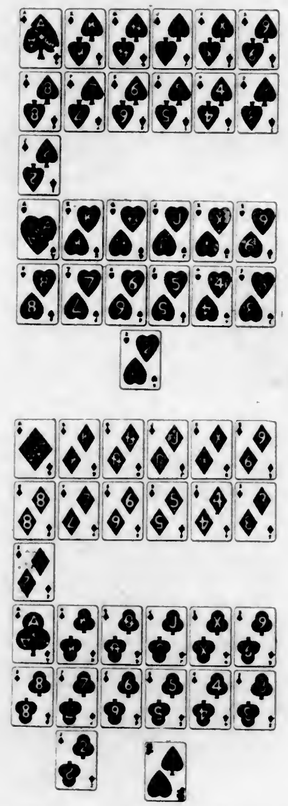
The ornamental design for a tire as shown and described.

87,083. STOCKING. STANTON D. SANSON, Philadelphia, Pa. Filed Jan. 29, 1932. Serial No. 42,670. Term of patent 14 years.



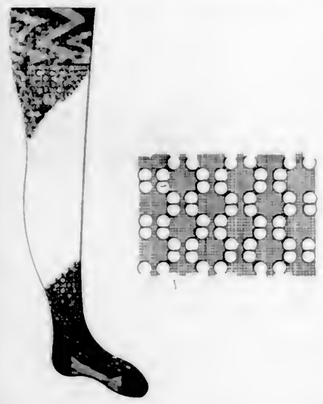
The ornamental design for a stocking as shown and described.

87,084. DECK OF PLAYING CARDS. HERBERT J. SCHAEFFER, Reading, Pa. Filed Mar. 29, 1932. Serial No. 43,320. Term of patent 14 years.



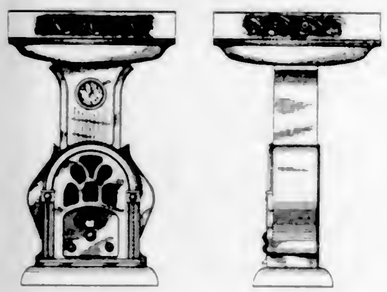
The ornamental design for a deck of playing cards substantially as shown.

87,085. STOCKING. ROBERT B. SCHINDLER, Spring City, Pa., assignor of one-half to Schuylkill Valley Mills, Inc., Spring City, Pa., and one-half to Howard Hosiery Company, Philadelphia, Pa. Filed Nov. 28, 1931. Serial No. 41,903. Term of patent 14 years.



The ornamental design for a stocking as shown.

87,086. COMBINATION RADIO AND CLOCK CABINET WITH FOUNTAIN. JAKOB SCHMIDT, Newark, N. J. Filed Apr. 1, 1932. Serial No. 43,359. Term of patent 7 years.



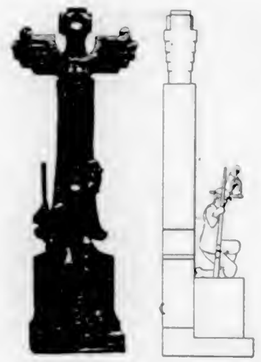
The ornamental design for a combination radio and clock cabinet with fountain substantially as shown.

87,087. METAL BURIAL VAULT. JOHN M. SEELY, near New Carlisle, Ohio, assignor to The Champion Company, Springfield, Ohio, a Corporation of Ohio. Filed Mar 17, 1932. Serial No. 43,215. Term of patent 14 years.



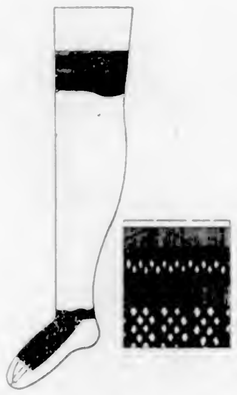
The ornamental design for a metal burial vault, as shown.

87,088. DIRECTION ROAD SIGN. JOSEPH B. STRAUSS, Chicago, Ill. Filed Sept. 14, 1931. Serial No. 41,088. Term of patent 14 years.



The ornamental design for a direction road sign substantially as shown.

87,089. STOCKING. WILLIAM TAIT, West Reading, Pa. Filed Jan. 6, 1932. Serial No. 42,391. Term of patent 14 years.



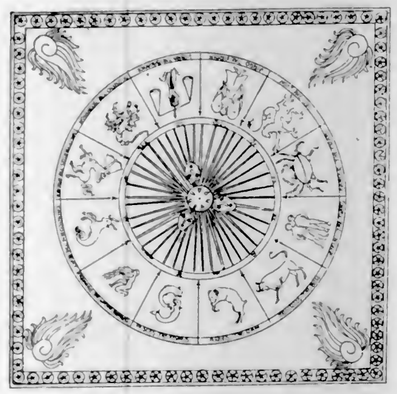
The ornamental design for a stocking substantially as shown and described.

87,090. ALARM CLOCK STAND. EDGAR R. TILLBROOK, Erie, Pa. Filed Dec. 20, 1930. Serial No. 38,046. Term of patent 3½ years.



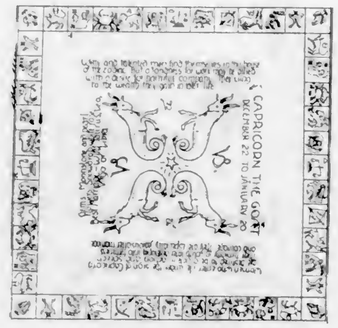
The ornamental design for an alarm clock stand, as shown.

87,091. TABLE COVER. JOHN T. VOGEL, Richmond Hill, N. Y. Filed Jan. 13, 1931. Serial No. 38,297. Term of patent 3½ years.



The ornamental design for a table cover, as shown and described.

87,092. NAPKIN. JOHN T. VOGEL, Richmond Hill, N. Y. Filed Jan. 13, 1931. Serial No. 38,298. Term of patent 3½ years.



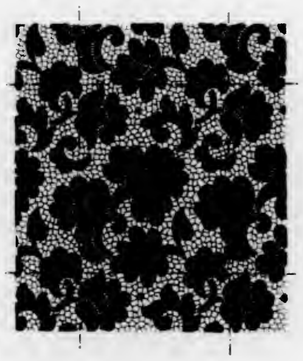
The ornamental design for a napkin, as shown and described.

87,093. PLAQUE. LEO DE HYMEL and JOHN H. DREYER, Monrovia, Calif. Filed Mar. 12, 1932. Serial No. 43,176. Term of patent 3½ years.



The ornamental design for a plaque as shown.

87,094. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Mar. 11, 1932. Serial No. 43,149. Term of patent 3½ years.



The ornamental design for lace, substantially as shown and described.

87,095. DECK OF PLAYING CARDS. JAMES W. PICKERING, Rutherford, N. J. Filed Apr. 12, 1932. Serial No. 43,464. Term of patent 7 years.



The ornamental design for a deck of playing cards as shown and described.

87,096. RUBBER BOOT. GEORGE L. VAN DINTER, Mishawaka, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Oct. 21, 1929. Serial No. 33,132. Term of patent 14 years.

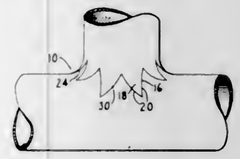


The ornamental design for a rubber boot as shown and described.

PATENTS

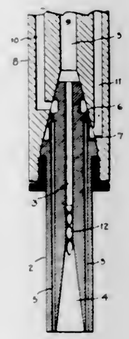
GRANTED MAY 31, 1932

1,860,346. WELDED PIPE JOINT AND METHOD OF MAKING THE SAME. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 19, 1930. Serial No. 496,585. 6 Claims. (Cl. 29—157.)



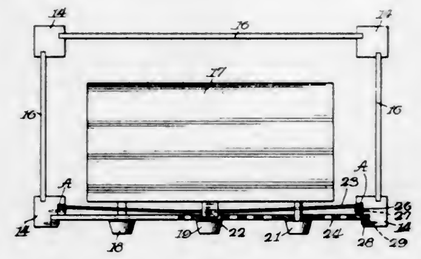
1. The method of making a permanent connection between two pipe sections, which includes: forming an opening intermediately of one section, forming the edges of said opening with a plurality of alternate indentations and projections, providing an open end of the other section with complementary indentations and projections, working the projections on each of said sections to such relation as to interlock with the indentations on the associated section and form a seam consisting of diagonals crossing the center line of the seam in alternately angularly disposed relation, tacking the sections together at consecutive pairs of diametrically oppositely disposed diagonals, oppositely angularly disposed relatively to said center line, and mid-way of each diagonal, and welding the seam closed by fusing all pairs of intersecting edges, disposed on one side of the center line, from the tacked points to the point of intersection, and then all pairs disposed on the other side of the line.

1,860,347. TORCH DEVICE. JOHN J. CROWE, Westfield, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,436. 7 Claims. (Cl. 158—27.4.)



1. A torch device of the character described having an oxygen passage provided with an enlarged downstream portion terminating in a large opening from which the oxygen stream is delivered into the atmosphere, and means for directing the oxygen outward in said enlarged portion in order to insure a wide issuing stream.

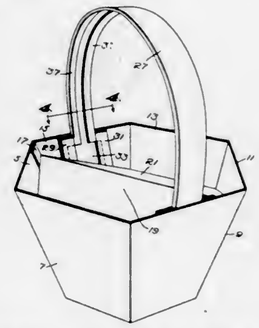
1,860,348. RADIORECEIVER. BERTRAM J. GRIGSBY, Park Ridge, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed May 28, 1928. Serial No. 280,994. 18 Claims. (Cl. 250—14.)



1. In a radio receiver the combination with a cabinet serving to house the receiving apparatus of an electrostatic reproducing unit having a substantially plane surface mounted in the cabinet and serving as one of the panels thereof

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1,860,349. COLLAPSIBLE CONTAINER. JAMES L. LARKIN, Lynn, Mass., assignor to Forbes Lithograph Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed June 5, 1930. Serial No. 459,313. 10 Claims. (Cl. 229—41.)

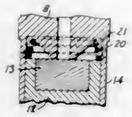


9. A collapsible container in the form of the frustum of a polygonal pyramid comprising interhinged sides and a folding bottom comprising two sections connected to opposite sides and centrally hinged to one another, their length along the hinge line being greater than the diagonal width of the polygon which is a section of the pyramid at the plane of connection whereby the portions of the bottom at the extremities of said line wedge into the adjacent dihedral angles of the pyramid to assist in holding the container expanded.

1,860,350. PRESSURE REGULATOR. FRANK S. LAWRENCE, Dunellen, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 2, 1930. Serial No. 485,875. 5 Claims. (Cl. 50—23.)

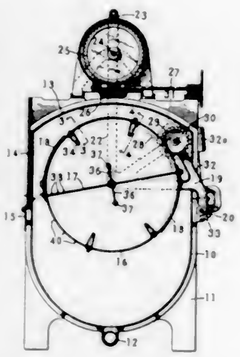
1. In a pressure regulator, the combination with a diaphragm, a nozzle, a guide tube extending from around

the nozzle, and means associated with the diaphragm to control the passage of gas from the nozzle, said means having a valve element guided in said tube to coact with said nozzle, of a dampening spring interposed between said



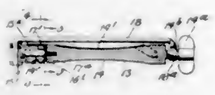
nozzle and said valve element, said spring being constrained by the wall of the tube so as to bear resiliently and rub against said wall in a manner to suppress humming.

1,860,351. DYEING MACHINE. WILLIAM E. H. BELL, Glenside, Pa., assignor to H. W. Butterworth & Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 7, 1927. Serial No. 238,277. 13 Claims. (Cl. 8—18.)



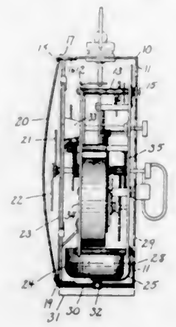
1. A cylindrical rotary receiver drum for textile treating machines, having an interior partition dividing the drum into a plurality of receiving compartments, centrally disposed radially arranged tumbler members mounted adjacent the partition and extending tumbler members mounted adjacent the peripheral wall of the drum and being displaced radially from the inner tumbler members, said partition having an imperforate zone adjacent to either side of said centrally disposed tumbler members, said zones cooperating with said tumbler members to provide liquid cushions as the drum rotates.

1,860,352. MECHANISM FOR WAVING HAIR. ALEXANDER J. BUCHL, Crestwood, N. Y., assignor to Alexander of New York, Inc., Hot Springs, Va., a Corporation of Virginia. Filed Sept. 29, 1931. Serial No. 565,754. 6 Claims. (Cl. 132—33.)



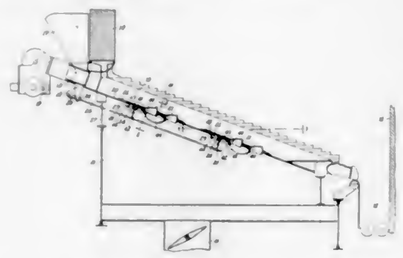
1. Apparatus for waving hair on the scalp embodying, in combination, a hair winding mechanism comprising a centrally-located winding spindle, a carriage head having a swivel connection with said winding spindle at one end, means connected with said carriage head for manual engagement and holding against rotation with the winding spindle, and a winding key fixedly connected to said winding spindle at the opposite end thereof.

1,860,353. NICKEL CLOCK. ELOF L. CARLSON and JOHN O. SIMPSON, Bristol, Conn., assignors to The E. Ingraham Co., Bristol, Conn., a Corporation. Filed Nov. 2, 1928. Serial No. 316,639. 1 Claim. (Cl. 58—16.)



In an alarm clock, the combination with a cup-shaped case open in front and having an integral back, of a time-movement installed in the said case through the open front thereof, a removable bezel mounted in the open front of the case, a crystal carried by the said bezel, a cup-shaped bell flattened on one side, and a bracket carried by the time-movement and arranged exterior to the bell, with the flattened side thereof adjacent to it and extending around under it for the attachment of the bell to it, whereby the bell is located outside of the bracket and the thickness of the clock-unit from front to rear is reduced to the minimum.

1,860,354. UNDERFEED STOKER APPARATUS. GEORGE C. COOK, Millington, N. J. Filed Apr. 1, 1927. Serial No. 180,168. 15 Claims. (Cl. 110—44.)

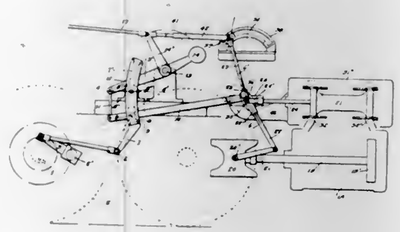


1. In an underfeed stoker of the inclined multiple retort type: the combination with elements reciprocable and oscillatable in the respective retorts, and means to reciprocate the same; of means to elevate simultaneously all the reciprocable and oscillatable elements of a retort and also to depress simultaneously all of said elements.

1,860,355. VALVE LEAD CONTROL FOR VALVE GEAR MECHANISM. JOHN A. COTTON, Calgary, Alberta, Canada. Filed Feb. 14, 1929, Serial No. 339,921, and in Canada Feb. 22, 1929. 1 Claim. (Cl. 121—163.)

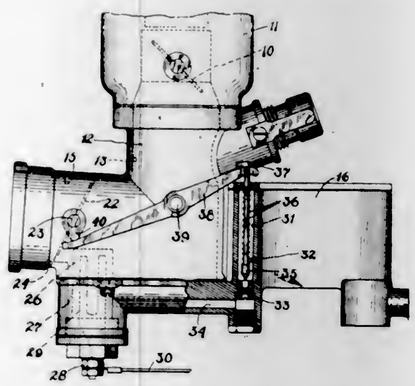
In a locomotive valve gear mechanism, the combination with the forked rear end of the valve rod, the forked

upper end of the combination lever pivotally attached to the forked end of the valve rod and the radius rod, of a block mounted between the forked ends of the combination lever and slidably carried thereby to move in a direction radial to the pivot connection between the combination lever and the valve rod, a pivot pin connecting the radius rod to the sliding block, a stationary control link having an arcuate slot therein, a link block slidably mounted in



the slot, a hanger having the ends thereof pivotally connected to the blocks and an operating connection between the control link block and the reach rod of the reversing gear of the valve gear mechanism, said control link and associated parts being positioned such that when the reversing gear is moved to its forward or rear positions, the radius rod pivot pin will be moved into axial alinement with the pivot connection between the valve rod and the combination lever.

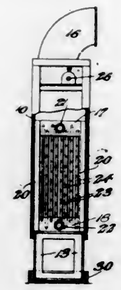
1,860,356. STARTING SYSTEM. DAVID FIRTH, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed June 7, 1929. Serial No. 369,029. 7 Claims. (Cl. 123—180.)



1. In a carbureter, an electric fuel vaporizer, a choke valve, means for supplying fuel to said vaporizer when said valve is closed, and a port in said valve for supplying a limited amount of air to mix with the vapor given off by said vaporizer.

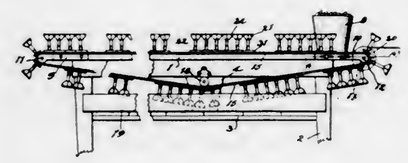
1,860,357. APPARATUS FOR COOLING AIR. HARRIS PAUL GANT, Philadelphia, Pa., assignor, by mesne assignments, to Carrier Research Corporation, Newark, N. J., a Corporation of New Jersey. Filed Aug. 8, 1928. Serial No. 298,177. 2 Claims. (Cl. 257—202.)

1. An air cooling apparatus comprising a casing having an air inlet and an air outlet, a header in said casing adjacent said inlet, a header in said casing adjacent said outlet, refrigerating coils connecting said headers in parallel slightly spaced series of convolutions arranged in alter-



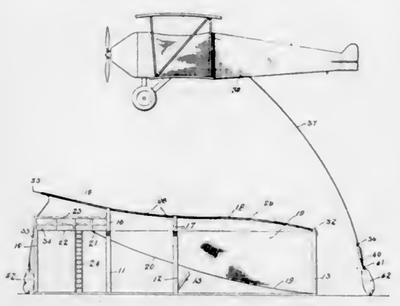
nate staggered relation, and means in said casing for impelling air therethrough between and through said coils at a high velocity.

1,860,358. LIQUID EGG GRADING MACHINE. IPHUS H. HALL, Winnipeg, Manitoba, Canada. Filed Apr. 26, 1929. Serial No. 358,409. 9 Claims. (Cl. 99—2.)



1. In an egg grading machine, an endless driven horizontally disposed conveyor, a plurality of individual liquid egg receiving cups carried by the conveyor and positioned side by side thereon and mounted to permit of the discharging to either side of the conveyor of the contents of any selected cup.

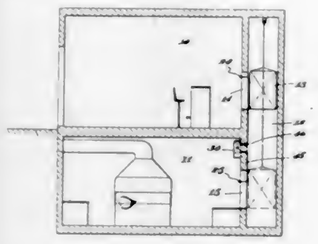
1,860,359. AIR MAIL EXCHANGE. ROBERT HAYBECK, Philadelphia, Pa. Filed July 3, 1930. Serial No. 465,515. 14 Claims. (Cl. 258—1.)



1. An air mail exchange comprising an elevated platform, a bottom member declined from said platform to the ground level, side walls enclosing said platform and helled divergingly at the lower end of the bottom member, rails

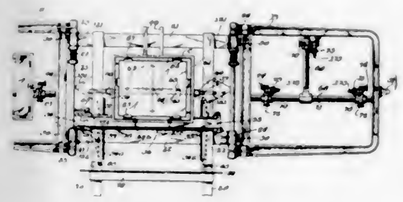
converging from points above the said ends of the side walls to form juxtaposed parallel sections above the platform, and top parts extending from the side walls to the rails.

1,860,360. COMMUNICATION SYSTEM. JEROME HIRSHFELD, New York, N. Y., assignor to Televator Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 8, 1932. Serial No. 597,475. 6 Claims. (Cl. 181—22.)



1. For use in an establishment comprising chambers located in different portions of a building, means for establishing a channel for audible communication between said chambers, said means comprising a voice amplifier, means in each chamber for operating the amplifier by the spoken word, and means for placing each chamber in open audible communication with the amplifier.

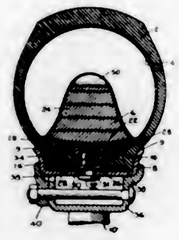
1,860,361. PREREGISTERING MEANS FOR PHOTOCOMPOSER PRINTING PLATES. WILLIAM C. HUEBNER, Chicago, Ill., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 31, 1928. Serial No. 316,284. 10 Claims. (Cl. 33—184.5.)



1. In a registering apparatus, the combination with a supporting frame; of an attaching member for a negative holder having means thereon for positioning and locating a holder with respect to the attaching member; registering means coordinated with the travel lines of the machine with which the holders are adapted for use; means whereby said registering means may be brought into predetermined relative position and location with respect to an attached holder; and means for effecting definite relative adjustments between said attaching member and registering means to thereby bring the center lines of a holder always in the same relation with respect to said register means.

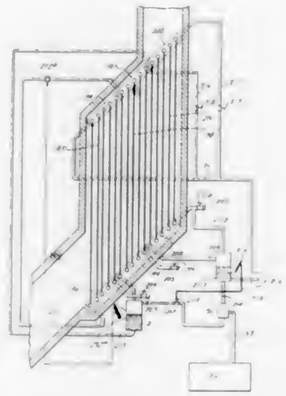
1,860,362. PNEUMATIC TIRE. LESTER L. JONES, Oradell, N. J. Filed Dec. 23, 1929. Serial No. 416,001. 15 Claims. (Cl. 152—10.)

1. A safety buffer for pneumatic tires comprising a continuous ring made of solid rubber and fabric and having a generally wedge-shaped cross section the base portion of which is broad and so shaped that the central portion thereof will rest directly on a conventional wheel rim while the edge portions thereof will rest against a wide portion of the inner surface of the beads of a conventional shoe in order to hold the shoe on the wheel



rim, and the outer portion of which extends radially beyond the wheel rim flanges and is not reinforced in a circumferential direction, and is generally designed to permit of a large amount of circumferential expansion.

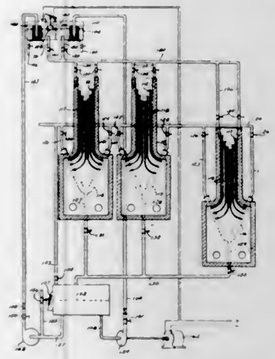
1,860,363. STEAM GENERATOR. WALTER DOUGLAS LA MONT, Larchmont, N. Y., assignor to La Mont Corporation, a Corporation of New York. Filed June 11, 1926. Serial No. 115,169. 21 Claims. (Cl. 122—1.)



1. Apparatus for the generation of steam, comprising the combination with a steam generator of the water circulating type of at least one set of auxiliary steam generating tubes, means for generating steam in the auxiliary steam generating tubes at a pressure different from that of the steam generator, said means including a connection through a suitable pressure transformer between the steam generator and the auxiliary generating tubes, and means for causing a part at least of the water from one of the steam generators to flow through said connection into the circulation of the other generator so as to be effective for causing circulation in said other generator.

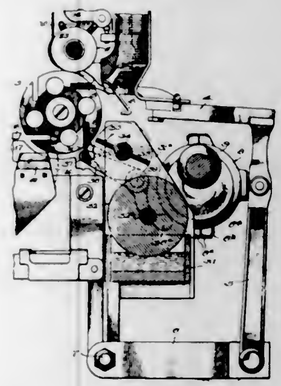
1,860,364. MULTIPLE STEAM GENERATOR WITH COMMON WATER CIRCULATION. WALTER DOUGLAS LA MONT, Larchmont, N. Y., assignor to La Mont Corporation, a Corporation of New York. Filed July 19, 1926. Serial No. 123,407. 24 Claims. (Cl. 122—1.)

1. The method of generating steam in a plurality of individual steam generators each having heat transferring tubes which comprises delivering the water to be vaporized from a common source separate from the generators in parallel to the generators, causing the water to flow unidirectionally with the steam generated through the tubes



of at least two generators, and returning to said common source at least part of any unevaporated water from the generators.

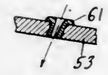
1,860,365. WRAPPING MACHINE. WILLIAM LINDSEY, Chicago, Ill., assignor to Wm. Wrigley Jr. Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 338,984. 6 Claims. (Cl. 91—18.)



1. In an adhesive-applying device the combination of an adhesive reservoir, a feed roller having its lower portion immersed in the adhesive in said reservoir, a rotative transfer blade having radially disposed edges adapted for wiping contact with the surface of said roller, a presser bar pivotally mounted adjacent the path of the edges of said blade, and tripping mechanism operative to shift said presser bar toward the edges of said blade as the same are rotated into adhesive-applying position.

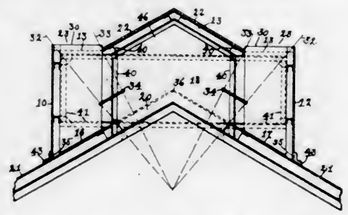
1,860,366. FURNACE AND METHOD OF OPERATING THE SAME. CHARLES E. LUCKE, New York, N. Y., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Mar. 11, 1927. Serial No. 174,501. 3 Claims. (Cl. 110—49.)

1. In combination, a furnace having a burner therein, means for mechanically supplying fuel to said burner, a bank of boiler tubes disposed over the furnace, a roof baffle adjacent the bottom of said bank, a cross baffle extending upwardly from the room baffle to form a gas pass across the tubes, nozzles in said roof baffle, and means to discharge waste gases that have passed over



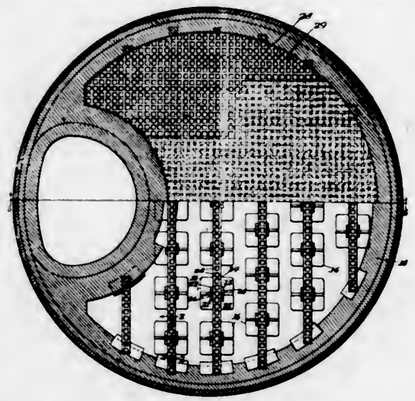
said tubes through said nozzles, the space in the furnace beneath the tubes being relatively large with respect to the gas pass across the tubes.

1,860,367. VENTILATOR. RALPH ST. LAWRENCE PEVERLEY, Chester, England, assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 12, 1928. Serial No. 311,992. 2 Claims. (Cl. 98—42.)



1. A ventilator for buildings and the like comprising an elongated body portion having substantially upright side and end walls or members and a bottom member cooperating to form a chamber open at its top and substantially closed at its bottom to the entrance into the said chamber of external air in material volume, said bottom member having a gas inlet opening for said chamber, a cap member located at the top of said chamber above said gas inlet opening and forming with said side walls gas outlet passages for said chamber, and a baffle member in said gas outlet passages arranged transversely of the latter between said upright side walls and the sides of the cap member intermediate the ends of the latter and extended above the end walls of said gas outlet passages and for a substantial distance below the sides of the said cap member.

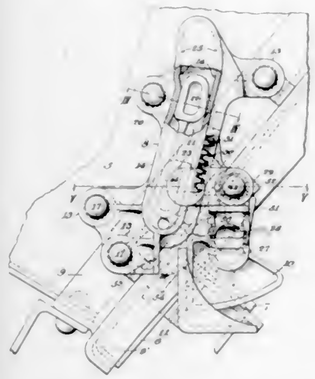
1,860,368. CHECKERWORK SUPPORTING AND HOLDING MEANS FOR BLAST STOVES. JAY J. SEAVER, Evanston, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,198. 12 Claims. (Cl. 263—19.)



7. In a hot blast stove, columns, girders resting upon the columns, said girders having upright flues there-

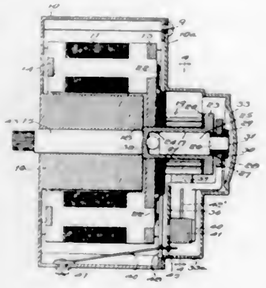
through, the portions of the columns adjacent the girders being cored in a manner that the columns will form no obstruction to any of the flues in the girders, and checker bricks supported above the girders.

1,860,369. LOCK. JAMES A. SHAFER, East Cleveland, Ohio, assignor to National Malleable & Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 14, 1929. Serial No. 362,907. 16 Claims. (Cl. 105—308.)



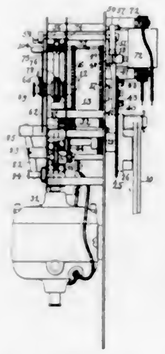
11. In a lock for the discharge door of a hopper car, a latch for locking said door, means for locking said latch, said means comprising a pawl, and a toothed element engageable thereby, and a member adapted to hold said pawl in engagement with said element, said member being provided with camming means for effecting disengagement of said pawl from said element.

1,860,370. MOTOR BRUSH HOLDER. THEODORE J. SMULSKI, Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind., a Corporation of Indiana. Filed Aug. 1, 1929. Serial No. 382,774. 7 Claims. (Cl. 171—324.)



5. In an electrical device and in combination, a housing provided with a bearing, a shaft mounted in said bearing, a rotor including an armature and commutator secured to and carried by said shaft, a brush member cooperating with said commutator, a carrier for said brush loosely mounted on said shaft, a ball positioned between said shaft and carrier substantially in the axial line of rotation of said shaft, means for retaining the carrier in engagement with said ball, and means for locking said carrier against rotation with the shaft.

1,860,371. TIME SWITCH. CARL E. SUNDBERG, Quincy, Mass., assignor to Albert & J. M. Anderson Manufacturing Company, South Boston, Mass., a Corporation of Massachusetts. Filed Apr. 1, 1929. Serial No. 351,699. 9 Claims. (Cl. 200—39.)

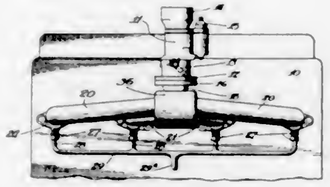


1. In combination, a switch member, a spring motor, gearing connecting one end of the spring motor with the switch member, an electric motor for intermittently rewinding the other end of said spring motor, gearing connecting the said electric motor with said spring motor, a circuit controller for said electric motor operatively connected with said spring motor and responsive to the condition of the latter to render the electric motor active, a second electric motor of less power than said spring motor, a time element, gearing connecting said time element with said second electric motor to establish a definite relation between said time element and said second electric motor, and means actuated by said time element for releasing said spring motor and permit it to operate said switch member at predetermined times.

1,860,372. FLOOR OIL. MARK T. SUNSTROM, Baltimore, Md., assignor to Alpha Chemical Company, Inc., Baltimore, Md., a Corporation of Maryland. Filed Apr. 14, 1928. Serial No. 270,161. 3 Claims. (Cl. 134—24.)

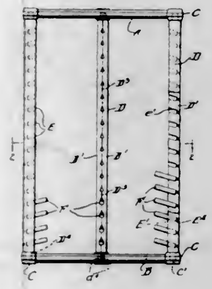
1. A nondrying oil for coating unfilled wooden surfaces of floors and the like consisting approximately of sixty-eight parts mineral oil, eighteen parts fatty acid, four parts alkaline solution and ten parts pine oil.

1,860,373. MANIFOLD FOR DOWNDRAFT CARBURETORS. HAROLD H. TIMIAN, Indianapolis, Ind., assignor to Wheeler-Schebler Carburetor Co., Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 23, 1929. Serial No. 342,098. 5 Claims. (Cl. 123—52.)



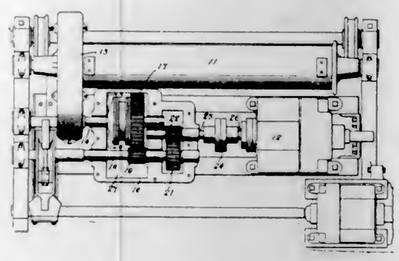
1. In an intake manifolding system for internal combustion engines, liquid fuel traps positioned at the low points therein and having drain openings therefrom, collecting means connecting said drain openings and leading to a common point of disposal, and check valves in said drain openings adapted to prevent back flow of air into said manifolding system when the engine is in operation.

1,860,374. DEVICE FOR SUPPORTING TABLEWARE IN A KILN. LAURENCE ARTHUR VINCENT, Pleasantville, Pa., assignor, by mesne assignments, to New Castle Refractories Company, New Castle, Pa., a Corporation of Delaware. Filed Feb. 6, 1928. Serial No. 252,073. 4 Claims. (Cl. 25—153.)



1. A structure for supporting a multiplicity of ceramic articles during a heat treating process comprising top and bottom frame members, a plurality of posts connected to said frame members, one of said posts comprising a plurality of parts shaped to provide a series of vertically spaced substantially horizontal recesses when said parts are connected, and ware supporting pins mounted in said recesses.

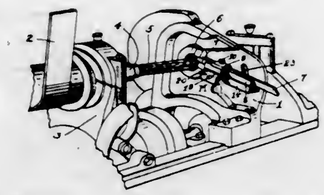
1,860,375. SAFETY LOWERING DEVICE. FRANK J. WINTERER and ARTHUR E. HOGREBE, Philadelphia, Pa., assignors to Box Crane & Hoist Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 6, 1930. Serial No. 500,564. 11 Claims. (Cl. 192—15.)



1. A safety lowering device comprising a shaft operatively connecting a hoist drum, a member rotatably and slidably mounted on said shaft and operatively connected to power means, an inclined face on said member, a flange fixedly mounted on said shaft, a ratchet rotatably mounted with respect to said flange, a pawl fixedly mounted, a pressure ring adjustably mounted on said shaft and having an inclined face adapted to co-act with the inclined face of said member for moving said member toward said ratchet and flange, friction disks idly mounted with respect to said shaft on each side of said ratchet and between said flange and said member and being partially submerged in lubricating fluid, and eccentric oil grooves arranged to drain and carry off excessive oil from between the faces of said friction disks and coacting surfaces.

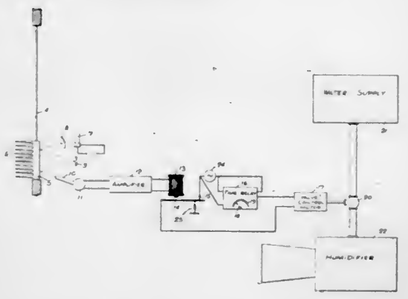
1,860,376. TURNING TOOL FOR WOOD TURNING LATHES. ALTON J. AMES, Woodstock, Me. Filed June 12, 1930. Serial No. 460,780. 1 Claim. (Cl. 142—48.)

A tool-holder for turning-tools for use on wood-turning lathes, having a transverse member thereon, comprising in combination, a tool-base adapted to be secured to said transverse member in various positions, said tool-base being pivotally secured at one end and vertically adjustable at the other end, a tool-carrying block mounted on said tool-base, and being pivotally secured at one end and adjustably secured at the other end by means of studs and screws, a revoluble nut in said tool-carrying block, a collar



screw passing through said base and engaging said revoluble nut whereby lateral adjustment of said tool-carrying block on and with respect to said tool-base may be had, said collar screw working in conjunction with a set screw, a tongue formed on the outer edge on the top of the tool-carrying block, a tool-cap with a groove fitting over the tongue of the tool-carrying block to hold tool-cap in place, and a tool-cap screw.

1,860,377. AIR CONDITIONING CONTROL. SAMUEL M. ANDERSON, Sharon, Mass., assignor to B. F. Sturtevant Company, Boston, Mass. Filed May 8, 1931. Serial No. 536,059. 9 Claims. (Cl. 236—44.)

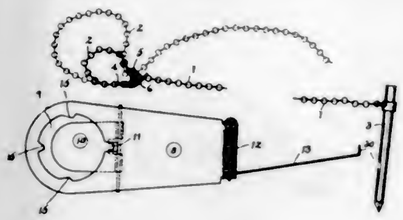


1. Apparatus for controlling the amount of moisture in the air within a room comprising a moisture source, a reflecting surface within said room having a finned radiating portion exposed to outside temperatures, means for projecting a light beam against said surface, means for changing light variations from said surface caused by any condensation of moisture thereon into electrical variations, and means for controlling the addition of moisture from said source through said electrical variations.

1,860,378. TRAP. VERNON BAILEY, Washington, D. C. Filed Nov. 12, 1930. Serial No. 495,081. 4 Claims. (Cl. 43—87.)

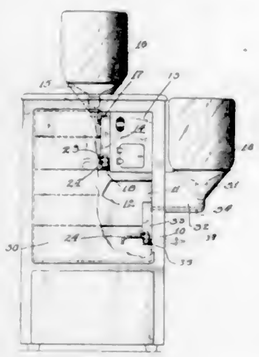
1. An animal trap including a noose and means for throwing the noose, the noose being formed of chain, and the noose-throwing means being composed of three parts—a base member, a pan hinged to the base member, and a length of wire, said length of wire being coiled at one end to form a spring and being at such coiled end

anchored to the base member at a point remote from the hinge, the said length of wire beyond its coiled end portion constituting a swinging spring-backed noose-throwing arm,



and being bent intermediate its length to form a pan-engaging shoulder, and being at its otherwise free end bent aside to form a smooth terminal link-engaging pin.

1,860,379. WATER COOLER. HOWARD E. BLOOD, Detroit, Mich., assignor to Norge Corporation, Detroit, Mich., a Corporation of Michigan. Filed Oct. 4, 1930. Serial No. 486,316. 1 Claim. (Cl. 62—44.)



In combination with a refrigerator cabinet, a water tank within said cabinet, a funnel supported by the cabinet with its mouth in position to receive an inverted water supply bottle, said water tank being of narrow width and supported on edge at one side of the cabinet freezing compartment and with its front edge adjacent to the door of the cabinet, a connection between the funnel outlet and the upper part of said tank, and a faucet supported on the front edge of said tank at the bottom thereof, said faucet comprising a valve for controlling the outflow of water and a swiveled spout adapted to be normally swung inwardly to permit closure of the cabinet door and to be swung outwardly when the door is opened for discharge of water from the tank when the faucet valve is opened.

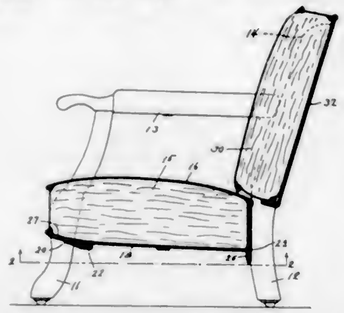
1,860,380. ADVERTISING DEVICE. ERNST BORREGARD, Great Neck, Long Island, N. Y., assignor to Leo H. Fuller, Inc., Long Island City, N. Y., a Corporation of New York. Filed Feb. 7, 1930. Serial No. 426,518. 2 Claims. (Cl. 40—7.)

1. In a device of the character described, a figure of such color and configuration as to simulate a human figure in the act of clinging to the edge of the article or package to be advertised, and with a portion thereof extended to point out and attract attention to a particular part of said article or package, and means for attaching said figure to said article or package in proper relationship thereto, comprising a spacing member of U-shaped configuration, and an attaching arm secured to safd spacing



member in co-operative relationship with said figure to secure said device to the article or package to be advertised.

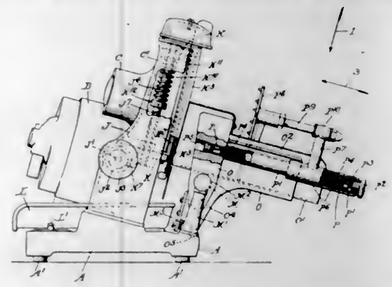
1,860,381. UPHOLSTERED CHAIR. JULIUS L. CABLE, Boston, Mass. Filed Apr. 16, 1930. Serial No. 444,693. 3 Claims. (Cl. 155—184.)



1. A chair comprising a pair of side frames, a cushion having a covering of flexible sheet material and a pocket formed of similar material on the bottom side thereof and attached to said covering, a rigid sheet metal plate disposed within said pocket and extending over the entire bottom of the cushion and beyond the side edges thereof, so that the edge portions of said plate overlap the adjacent portions of said frames, and fasteners arranged to clamp said edge portions of the plate to said frames, to provide a rigid structure and connect the cushion securely thereto.

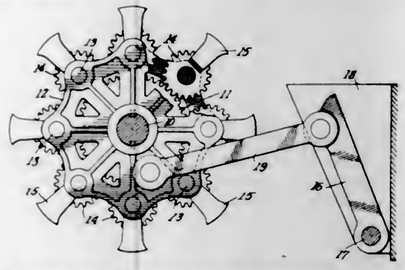
1,860,382. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed Sept. 8, 1930. Serial No. 480,395. 2 Claims. (Cl. 146—102.)

1. In a slicing machine, a knife and means for actuating it, a gauge plate and means for actuating it, a carriage and means for guiding it across the gauge plate and past the cutting edge of the knife, the carriage including a work support inclined downwardly and outwardly away from the knife, manually operable pusher means for moving the work upwardly across the work support and into close proximity to the cutting plane of the knife, spring means tending also to move said manually operable pusher means upwardly across the work supporting portion, said spring means tending also to resist the gravital movement of the work downwardly across the work support and away from the cutting plane, and stop means to arrest the spring thrust approach of the pusher means towards the gauge plate at a point spaced materially outwardly away from the cutting plane of the knife, whereby said spring means is adapted to operatively thrust pieces of work of predetermined length inserted



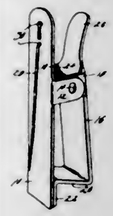
between the pusher means and the gauge plate into operative contact with the gauge plate, and whereby work pieces of lesser length may be thrust against the gauge plate by manual operation of the pusher means.

1,860,383. OSCILLATORY AND UNIDIRECTIONAL TORQUE MECHANISM. HENRY B. CHALMERS, New York, N. Y. Filed Aug. 20, 1930. Serial No. 476,457. 6 Claims. (Cl. 74—34.)



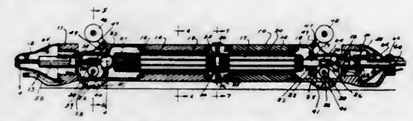
1. Apparatus of the character described comprising a driving shaft, a gear carried thereby, a frame supported to oscillate about the axis of said shaft, a plurality of pinions rotatably carried by said frame and meshing with said gear, each of said pinions having an eccentrically disposed mass, an oscillating crusher member and means of connection between said member and said frame whereby the continuous rotation of said driving shaft imparts oscillation to said member through said frame.

1,860,384. HANGER FOR HATS, GARMENTS, AND THE LIKE. HARRY J. COCKS, Des Moines, Iowa, assignor to Metal Products Company, Des Moines, Iowa, a Corporation of Iowa. Filed May 31, 1930. Serial No. 458,704. 1 Claim. (Cl. 24—85.)



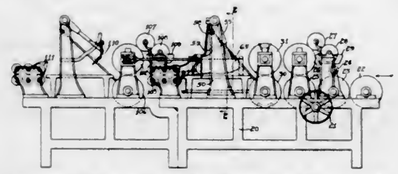
A hanger for hats, garments and the like, comprising a back plate, a clamping member spaced from and pivotally connected between its ends to said back plate, a spring for urging the lower part of said clamping member toward the back plate, the lower part of said clamping member being offset toward the back plate to provide a substantially horizontal portion constituting a positive object-supporting member, said offset portion being inclined upwardly somewhat toward the back plate, and a pin carried by said back plate for engaging upholstery or the like for suspending the hanger and an object carried thereby.

1,860,385. LOCOMOTOR. CHARLES E. CRAPO, Cleveland, Ohio. Filed Mar. 20, 1930. Serial No. 437,336. 4 Claims. (Cl. 175—377.)



2. In a locomotor for conduits and the like, an elongated body portion, a motor mounted within said body portion and extending longitudinally thereof, the motor comprising a field, a motor shaft, and a plurality of spaced armature sections on said shaft and connected to a common commutator, bearings for supporting the shaft intermediate of said armature sections, traction wheels operatively mounted on said body portion, the perimeter of said wheels being serrated to increase the tractive power thereof and means operatively connecting the wheels with the motor shaft.

1,860,386. METHOD AND APPARATUS FOR BOTTOMING BAGS. ANDREW ELLISON CURRIER, Leominster, Mass., assignor to Cornell Bag Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 28, 1930. Serial No. 478,327. 9 Claims. (Cl. 93—27.)



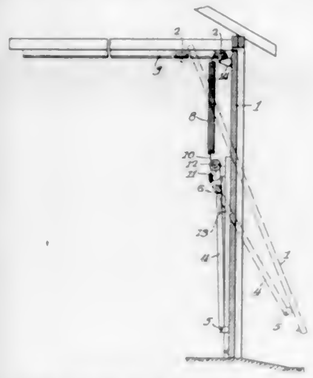
1. The method of closing the end of a multiply bag, which consists in spreading apart the ends of two sides of the bag and thereby forming opposed multi-ply flaps, folding over all of the plies of one of said flaps into bag-closing position, holding the flap in said position while forcing the outer ply to move in the plane thereof, relatively to the other plies, away from the edge of the flap, thereafter raising said outer ply above the inner plies, folding the opposed flap over said inner plies and under said outer ply, and folding down said outer ply onto the outside of said opposed flap.

3. Apparatus for bottoming multi-ply bags, comprising means to spread apart the ends of two sides of a bag and form opposed multi-ply flaps, means to fold all of the plies of one of said flaps into bag-closing position, means to thereafter separate the outer ply of the folded flap from the inner plies thereof, means to fold the opposed flap outside of said inner plies and inside of said outer ply, and means to fold said outer ply outside of said opposed flap.

1,860,387. OVERHEAD GARAGE DOOR. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed July 25, 1930. Serial No. 470,584. 5 Claims. (Cl. 20—19.)

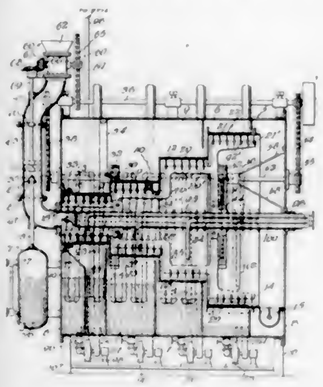
1. An overhead opening door, comprising means forming a doorway, a door rigid from top to bottom and nor-

mally disposed vertically in said doorway, overhead horizontal straight tracks disposed parallel with each other at opposite sides of the doorway, inside the building, means on the upper portion of the door to engage said tracks, forming an overhead horizontal shifting axis of tilting movement for said door, which axis is always in the same horizontal plane, serving always to prevent the upper edge of the door from projecting outside of the vertical plane of the door, with the lower edge of the door free to swing outward through the doorway, directly from the closed position thereof, in the initial opening movement of the door, door controlling means



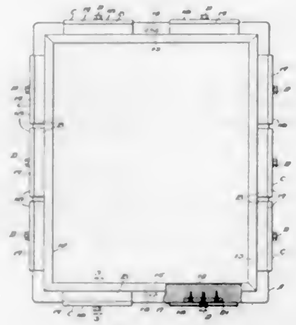
pivoted at fixed points at its lower end on the door, supporting means providing the upper end of said controlling means with a fixed horizontal axis of movement, below and parallel with said overhead axis, forming a lever fulcrum for the upper end of said controlling means, having spring means hitched at its lower end to the controlling means at a point below said fulcrum, the upper end of said spring means being fixed in position, thereby acting through the leverage of the controlling means to exert its tension upwardly on said door, whereby to assist in opening the door, and to cushion the closing of the door, said door when closed being held against vertical displacement in the plane thereof.

1,860,388. PROCESS OF EXTRACTING OIL. PHILIP R. HORNBROOK, New York, N. Y. Filed Sept. 10, 1926. Serial No. 134,601. 15 Claims. (Cl. 87—6.)



1. The process of separating oil from an oil bearing material which comprises, moving the material in a continuous path, gradually spreading the material in its movement along said path to thin the material, increase the surface exposure thereof and to give the material different thicknesses, delivering a solvent thru different thicknesses of the material across its path of movement and through the thinned portion thereof for the purpose of extracting the oil therefrom and withdrawing the solvent and extracted oil.

1,860,389. FILM HOLDER. WILLIAM C. HUEBNER, Chicago, Ill. Filed Oct. 11, 1930. Serial No. 488,012. 11 Claims. (Cl. 95—73.)



1. In a film holder, the combination with an open frame of a plurality of film attaching blocks mounted on said frame on the several sides thereof; and means for individually adjusting said blocks on the frame toward and from the opening.

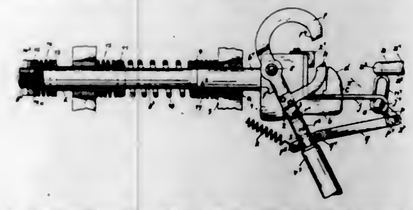
1,860,390. ADJUSTABLE PLANT STAND. JOHN LA ROCK, Chicago, Ill. Filed Mar. 14, 1930. Serial No. 435,903. 1 Claim. (Cl. 248—41.)



In a device of the character described, a standard, having a fork at the top, a basket positioned between the arms of the fork and hinged at its upper end to

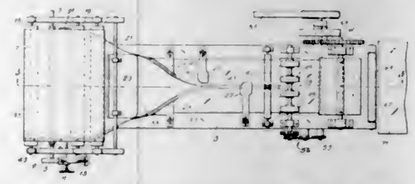
the upper ends of said arms for swinging movements about a horizontal axis, a headed pin on the standard in the vicinity of the base of the fork, and a brace connected at one end to the lower end of the basket and having therein a series of holes distributed lengthwise thereof for the reception of said pin.

1,860,391. ACCIDENTS PREVENTING COUPLING DEVICE. GEORG MEYER, Berlin-Charlottenburg, Germany. Filed May 31, 1930, Serial No. 458,063, and in Germany Feb. 28, 1930. 10 Claims. (Cl. 280—33.15.)



7. In combination with an accidents preventing coupling device, comprising a hook member terminating in a vertical cylindrical pivot having at its end a receiving face declined backward and to both sides, and a liftable leading member positioned behind the pivot: carrying arms arranged below the pivot portion of the hook member and extending behind the pivot, and a liftable leading member rockably mounted upon the said arms.

1,860,392. METHOD OF TUBING CLOTH FOR BAGS AND THE LIKE. PHILIP E. MORRILL, Webster Groves, and CHARLES V. BRADY, St. Louis, Mo., assignors to Bemis Bro. Bag Co., St. Louis, Mo., a Corporation of Missouri. Filed July 9, 1930. Serial No. 466,724. 9 Claims. (Cl. 93—35.)



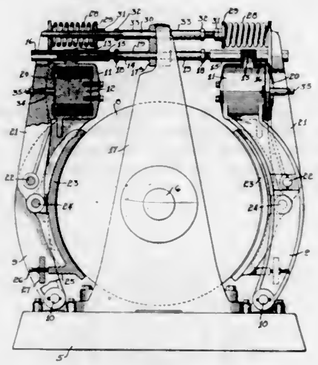
1. A method of forming tubing from fabric which comprises lining said fabric with the exception of one selvage, applying adhesive to the fabric side of the lined selvage, inclining the two selvages toward one another and joining the inclined unlined selvage to the fabric on the adhesive side of said lined selvage.

1,860,393. COMMINUTING BODY. RAY C. NEWHOUSE, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,594. 2 Claims. (Cl. 83—9.)



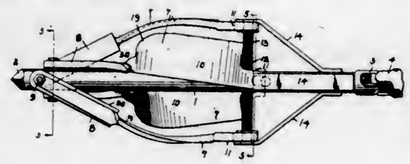
1. As an article of manufacture, a universally tumbling comminuting body wherein parallel transverse cross-sections are substantially alike and are bounded by curved lines which comprise joined alternately inwardly and outwardly disposed semi-circles of substantially equal radii and having their centers in the same circle.

1,860,394. ADJUSTABLE BRAKE STAND. FRANK L. OHLER, Toledo, Ohio, assignor to The Haughton Elevator & Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 14, 1930. Serial No. 443,949. 16 Claims. (Cl. 188—171.)



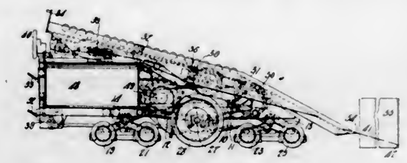
1. In combination, a brake drum, pivotally mounted brake supporting members at opposite sides thereof, means for fixing the position of said supporting members, levers fulcrumed on said supporting members, brake-shoes carried by said levers, and means for actuating said levers to set or release brakes.

1,860,395. SEWER PIPE CLEANING TOOL. IRA W. PENCE, Cleveland, Ohio, assignor to Lynn W. Merriam, Parma, Ohio. Filed Apr. 30, 1931. Serial No. 533,931. 6 Claims. (Cl. 15—104.30.)



1. A tool for cutting roots in sewers, comprising a main shaft having a boring nose, spaced members tangentially and pivotally connected to said shaft, said members comprising curved cutting blades twisted to conform to the curvature of a sewer pipe, and including straight boring portions in advance of and integral with said cutting blades, and means for rotating the tool.

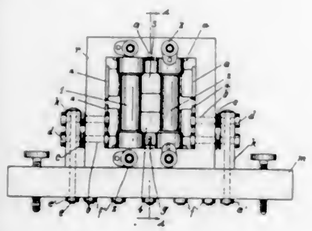
1,860,396. VEHICLE. EUGENE W. SCHELLENTRAGER, Shaker Heights, and BRADLEY E. CLARKSON, Cleveland, Ohio, assignors to Atlas Bolt & Screw Company, Cleveland, Ohio. Filed Nov. 15, 1929. Serial No. 407,417. 9 Claims. (Cl. 180—22.)



1. In a vehicle, the combination of, a main axle and vehicle driving wheels thereon, a chassis comprising pivoted arms hinged together at said main axle, steering

wheel carrying axles pivoted onto each of said arms at each side of said main axle and having cooperating vehicle steering wheels thereon, a load carrying platform pivoted onto said chassis with the axis of the pivot transversely of said chassis, a motor to rotate said driving wheels located below said platform, and a power source for said motor located below said platform.

1,860,397. METHOD AND APPARATUS FOR THE DETERMINATION OF THE CONCENTRATION OF BLOOD, MILK AND OTHER SUSPENSIONS BY MEANS OF ELECTRIC CURRENT. ALEXANDER SLAWINSKI, Poznan, Poland. Filed Dec. 31, 1928, Serial No. 329,614, and in Poland Aug. 3, 1928. 3 Claims. (Cl. 175—183.)



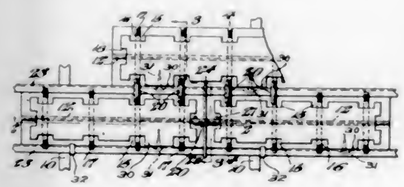
1. A method for the determination of the concentration of suspensions consisting in producing a sediment in the suspension by filling a vertical disposed and a horizontally disposed conductivity cell with said suspension and passing an electrical current through both of said cells, measuring the ratio of the conductivities of the suspensions in said cells after the sediment has been formed, measuring the height of the sediment in the vertical cell, and then computing the concentration w of the suspension from said ratio of conductivities k and height h through the equations:

$$k=\frac{(1-P)(h-PQ)}{(1-PQ)(h-P)}$$

$$P=h^{(1.1-w)^{0.71}}$$

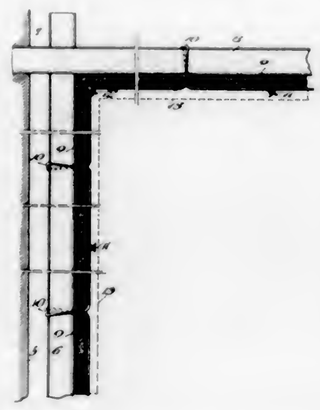
$$Q=\frac{1-0.1036w}{1+1.6438w}$$

1,860,398. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Apr. 14, 1931. Serial No. 529,915. 4 Claims. (Cl. 72—66.)



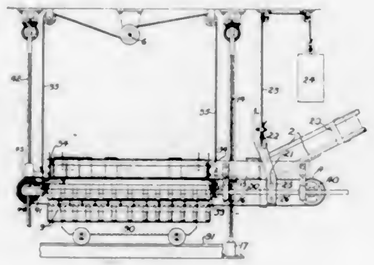
4. In a floor structure of the character stated, floor members, elongated pre-cast slabs of cementitious material arranged upon said floor members side to side in abutting relation, the sides of said slabs being bevelled and having vertical grooves therein, cross-strips of metal having slotted ends embedded in said slabs, said slotted ends being projected into said grooves, a longitudinally arranged channel embedded in each slab, said cross-strips passing through said embedded channel, un-embedded channels arranged between adjacent slabs the free ends of said cross-strips resting upon the tops of said un-embedded channels, and metal clips engaging adjacent cross-strips for coupling said slabs together, each clip comprising a flat plate having extended therefrom at right angles pendant fingers for engaging the grooves of said slabs.

1,860,399. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed July 31, 1931. Serial No. 554,218. 4 Claims. (Cl. 72—46.)



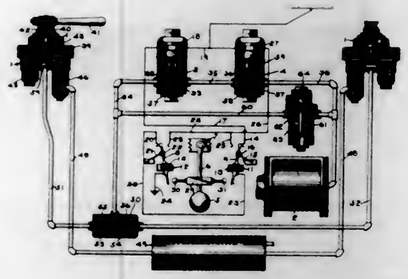
1. In a building structure, ceiling, partition, or wall-sections of plaster board, horizontal and vertical channels for supporting said plaster boards, tie wires each comprising a continuous piece of wire arranged between adjacent plaster boards, each tie wire being bent to engage around a channel and being provided with oppositely disposed prongs for abutting against the inner faces of adjacent plaster boards, adjacent prong ends being twisted together for maintaining said tie-wires including said plaster boards in position.

1,860,400. MECHANICAL TRAY LOADER. PAUL F. C. WILCKE, Seattle, Wash. Filed May 8, 1929. Serial No. 361,443. 5 Claims. (Cl. 226—15.)



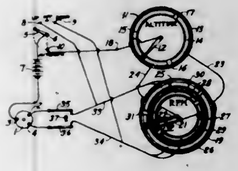
1. In a tray loader, in combination, a frame defining three sides of a rectangle, means for aligning said frame with three sides of a tray, positioned therebelow, to be loaded, a platform adapted to be positioned beneath said frame and above the tray, said frame having guides permitting lateral withdrawal of the platform, and means for depositing individual cans upon said platform, and a pair of spaced plates located without the confines of the tray and above the platform for collecting a plurality of cans thus deposited, means for advancing said plates to advance the collected cans over the platform into the space above the tray, and means for withdrawing the platform in a direction opposite the can's advance, to permit the cans thus grouped within the frame to drop into the tray therebelow the forward plate engaging the cans to retain them in advanced position while said platform is being withdrawn.

1,860,401. INERTIA BRAKE DEVICE. SAMUEL L. WILLIAMS, New York, N. Y., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1930. Serial No. 483,479. 1 Claim. (Cl. 303—24.)



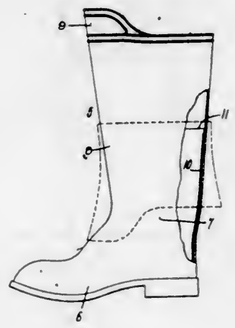
In a vehicle brake apparatus, the combination with a brake cylinder and means for controlling the supply of fluid under pressure to the brake cylinder to effect an application of the brakes, of a valve for controlling communication through which fluid under pressure is supplied to the brake cylinder, a second valve for venting fluid from the brake cylinder, both of said valves having operating stems, said stems being oppositely disposed in axial alinement, a lever having an arm extending between the valve stems, means for normally maintaining the lever arm in engagement with the stem of the first valve whereby said valve is held open, and an inertia controlled device operated upon an increase in the rate of deceleration of the vehicle for operating the lever to close said first valve and then said second valve, so as to vent fluid under pressure from the brake cylinder.

1,860,402. ALTITUDE CONTROL. HAROLD T. AVERY, Oakland, Calif. Filed July 28, 1927, Serial No. 209,061. Renewed Sept. 23, 1931. 40 Claims. (Cl. 244—29.)



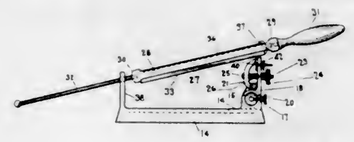
1. In a dirigible vehicle, the combination of a member positioned by the inclination of the path of the vehicle to the horizontal, a member positioned by the altitude of the vehicle, an electric trolley mechanically actuated by said latter member, two contact plates insulated from each other and so arranged that the trolley will contact with one plate when the vehicle is above a certain altitude and with the other when it is below said altitude, and means actuated by the first mentioned member to so displace the insulated junction of the two plates with respect to the range of motion of the electric trolley as to alter the altitude at which the trolley passes over said junction approximately in proportion to the change of inclination of the path of the vehicle.

1,860,403. MOLDED RUBBER BOOT WITH FLEXIBLE TOP. LAURENCE H. BURNHAM, Lexington, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed July 12, 1929. Serial No. 377,789. 2 Claims. (Cl. 36—4.)



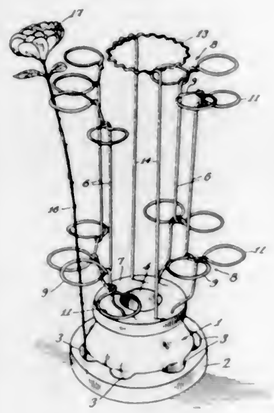
1. A rubber boot embodying a foot and leg portion of molded rubber compound, and a lining of fabric extending from the foot portion upwardly to a point substantially below the top of the leg portion, the material of adjacent surfaces of the fabric and rubber compound intermingling one with another and stiffening the lower portion of the boot, whereby the upper leg portion is rendered relatively flexible as compared to the lower leg portion.

1,860,404. SHEAR-BLADE SHARPENER. JOHN W. CARTER, Omaha, Nebr. Filed Nov. 27, 1930. Serial No. 498,517. 3 Claims. (Cl. 76—89.2.)



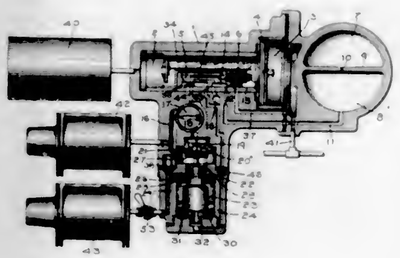
1. In devices for the purpose described, a base provided with a guide, a cylinder rotatably mounted on the base and having a slot formed longitudinally therein, an element threaded on the cylinder for controlling the rotatable movements thereof, a jaw mounted to permit adjustments longitudinally of the cylinder and having a set screw engaging in said slot, a second jaw pivotally mounted on and arranged to be pressed toward the first named jaw, and an elongated sharpening element for longitudinal reciprocation having a part engaging said guide.

1,860,405. FLOWER HOLDER. EDGAR J. CHEESEWRIGHT, Pasadena, Calif. Filed Dec. 22, 1927. Serial No. 241,823. 5 Claims. (Cl. 47—41.)



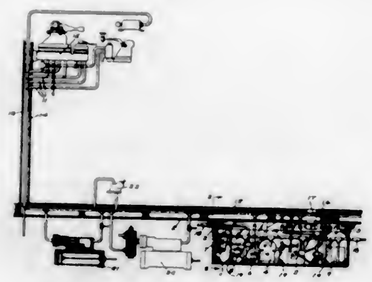
1. A flower holder comprising a base having a central hole therethrough, a flange extending from the base and having a plurality of apertures therethrough, a plurality of supporting wires extending upwards from said base and having aligned upper and lower loops therein parallel to said base and arranged substantially over said apertures, a central loop disposed over the central hole, and wires extending upwardly from the base and supporting the central loop over the central hole.

1,860,406. FLUID PRESSURE BRAKE. ALFRED CHEVILLOT, Gargan Livry, and GASTON DAUX, Sevran, France, assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 27, 1931, Serial No. 540,247, and in France July 24, 1930. 7 Claims. (Cl. 303—84.)



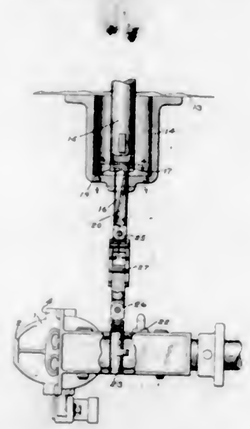
1. In a fluid pressure brake, the combination with a brake cylinder, a brake pipe, and a valve device operated upon a reduction in brake pipe pressure for supplying fluid under pressure to the brake cylinder, of valve means for controlling the rate of flow of fluid to the brake cylinder and subject on one side to brake cylinder pressure and having a position in which the rate of flow to the brake cylinder is restricted, said valve means being movable to said position by a variation in fluid pressure on the opposite side.

1,860,407. SAFETY CAR EQUIPMENT. JOSEPH M. DAPRON, St. Louis, Mo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 21, 1928. Serial No. 287,096. 1 Claim. (Cl. 303—1.)



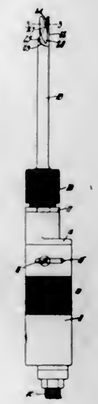
The combination with a car body, of a box secured underneath the car body, a group of fluid pressure valve devices installed in said box, and means installed in said box for heating the interior of the box, the heat from said means being adapted to pass to the interior of the car through an opening in the car body.

1,860,408. COUPLING INTERLOCK. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 5, 1928. Serial No. 275,348. 7 Claims. (Cl. 213—76.)



4. The combination with a car coupler having an axially movable coupling pin and a train pipe coupling having a rotatable locking latch, of a shaft operatively connecting said pin with said latch and having means for effecting the rotation of said shaft and said latch upon axial movement of said pin.

1,860,409. SHEARS. JOHN H. FLINK, Watertown, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed May 25, 1929. Serial No. 365,933. 19 Claims. (Cl. 164—74.)



1. A device of the character described having, in combination, a tubular cutting member, another cutting member mounted within said tubular cutting member, said cutting members having co-operating cutting edges, and means for effecting a rotative movement of one of the cutting members.

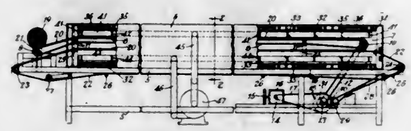
1,860,410. EXPANDING PULLEY. FRED D. FOWLER, Newton, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,230. 8 Claims. (Cl. 64—8.)



1. An expanding pulley having, in combination, a pair of end members, tie rods spaced from the pulley axis and secured to said end members, a pair of oppositely disposed tapered members slidably engaging said tie rods, shoes slidably mounted upon said tapered members, segmental sections fast to the shoes and constituting the periphery of the pulley, and means rotatable within both of the tapered members to impart a longitudinal movement thereto whereby the shoes are moved radially thereon to vary the diameter of the pulley.

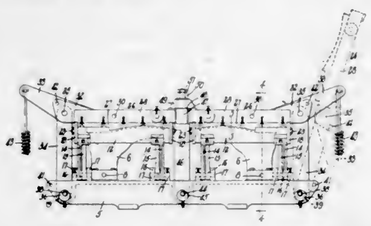
1,860,411. APPARATUS AND PROCESS FOR VULCANIZING RUBBER COATED FABRIC. ALFRED A. GLIDDEN, THOMAS M. KNOWLAND, and WARREN R. DOW, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,646. 5 Claims. (Cl. 18—6.)

3. An apparatus for vulcanizing rubber coated fabric comprising, in combination, a chamber, a conveyer belt to feed the fabric loosely into and through said chamber, another belt beneath said first-named belt and travelling in an opposite direction thereto, said last-named belt receiving the fabric from said first-named belt and reversing the positions of the upper and under surfaces of said fabric and feeding the same loosely through and out of the chamber, baffle plates positioned in parallel relation to the surface of the fabric upon the conveyer belts, and a plurality of electric heating units mounted upon said baffle plates and positioned a uniform distance from the fabric located upon the conveyer belts, means to regulate the temperature within said chamber, a plurality of flues within said chamber each provided with a plurality of apertures therein, and means to withdraw the air from the chamber through the apertures of certain of said flues and return said air into said chamber through the apertures of the other of said flues.



4. The process of vulcanizing rubberized sheet material which comprises heating a gaseous vulcanizing medium within a chamber, circulating the gaseous medium throughout the chamber, and then feeding the material through the chamber and directly exposing both sides of the material to the gaseous medium within the chamber.

1,860,412. MOLD FOR MANUFACTURING FOOTWEAR. ALFRED A. GLIDDEN and THOMAS M. KNOWLAND, Watertown, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed May 15, 1929. Serial No. 363,358. 9 Claims. (Cl. 18—17.)

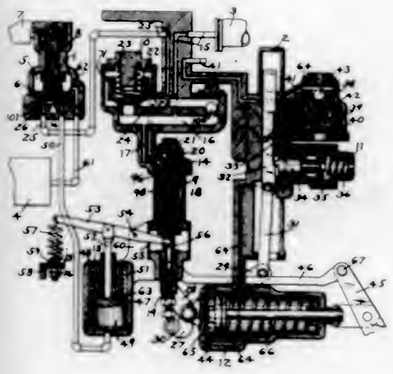


2. A mold for manufacturing footwear having, in combination, a core, a pair of oppositely disposed side presser plates projecting above said core, means to press the inner faces of said presser plates against the outer face of an upper positioned on said core and lasted to an innersole, a sole presser member positioned between said side presser plates, a link, to the upper end of which said sole presser member is pivoted, means to adjust said link vertically, a standard positioned adjacent the free end of said sole presser member, a clamp plate rotatably mounted on the upper end of said standard, and means to force said clamp plate against the free end of said sole presser member, whereby said sole presser member may be forced against an outsole positioned above said core on said innersole.

1,860,413. FLUID PRESSURE BRAKE. MILTON L. HANCOCK, East McKeesport, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1929. Serial No. 341,596. 15 Claims. (Cl. 303—22.)

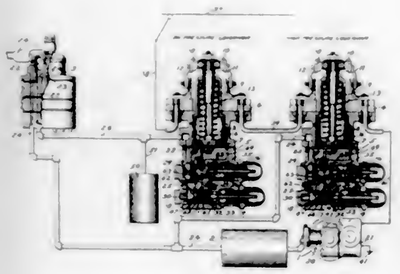
1. In a load brake apparatus, the combination with mechanism operative to limit the braking power on a car

in a service application of the brakes, including means operative to adjust said mechanism in accordance with the load on the car, of means operative independently of the



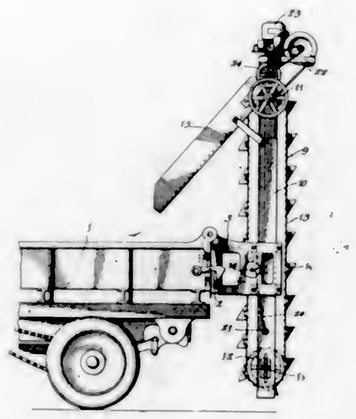
load on the car to adjust said mechanism for increasing the braking power in an emergency application of the brakes.

1,860,414. DUPLEX CONTROL OF RESERVOIR PRESSURE. MILTON L. HANCOCK, East McKeesport, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1930. Serial No. 489,011. 8 Claims. (Cl. 230—6.)



1. The combination with a reservoir, a compressor for supplying fluid under pressure to said reservoir, and a motor for operating said compressor, of two switches arranged in series in the circuit of said motor for controlling said circuit, a pair of governors, each operative by the pressure of fluid in said reservoir for controlling one of said switches and means for cutting one governor into action when the other governor is cut out of action.

1,860,415. DETACHABLE LOADING MACHINE. JOHN HERBERT HANLON, Lynn, Mass. Filed Apr. 28, 1931. Serial No. 533,539. 5 Claims. (Cl. 37—8.)



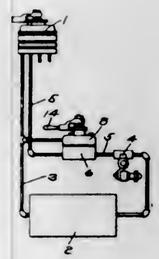
1. In a loading machine, an endless bucket elevator having side frame members, a supporting bracket therefor, said bracket being provided with guide members in which said side frame members are slidably received, and a hook portion on said bracket whereby it may be detachably secured to a truck body.

1,860,416. AUTOMOBILE AND MOTOR CYCLE SIGNAL LIGHT. FRED C. HAZEL, Binghamton, N. Y. Filed Aug. 20, 1926. Serial No. 130,446. 1 Claim. (Cl. 177—329.)



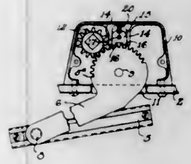
An automobile direction signal comprising a lamp casing adapted to repose upon the head lamp of a vehicle, a supporting wall depending from said casing and having its opposed side edges curved inwardly, and its lower edge curved to conform to the curvature of the head lamp casing, an outwardly projecting depending flange forming part of said wall and arranged to engage the front of the head lamp to assist in supporting the signal lamp thereon, and a split clamping band including superimposed annular clamping portions of relatively different dimensions, the upper clamping portion embracing the signal lamp casing and received by the curved edges of said wall, the lower portion embracing the head lamp, and means for connecting the ends of the band together.

1,860,417. FLUID CONTROLLING DEVICE. JOHN HUME, Houston, Tex., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 15, 1928. Serial No. 326,306. 2 Claims. (Cl. 73—51.)



1. The combination with a fluid pressure brake system of a train, said system having a brake pipe, main reservoir and a feed valve device, of a valve device having a valve provided with ports for supplying fluid under pressure from the main reservoir to the brake pipe at different rates corresponding with the number of cars in the train and having a position for supplying fluid under pressure from the feed valve device to the brake pipe.

1,860,418. UNDERSCREEN WINDOW OPERATOR. ROBERT H. HUMMERT, Dayton, Ohio, assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 16, 1931. Serial No. 522,856. 2 Claims. (Cl. 74—39.)



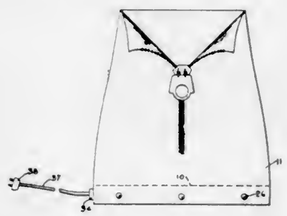
1. In a device of the type described, a casing, an operating arm having a toothed sector portion pivotally secured within the casing, means for turning said sector, a guide on the inner surface of said casing, directed toward the sector, a pawl slidable along said guide, a compression spring between the outer wall of the casing and the outer end of the pawl to press the latter into engagement with the teeth of the sector, said casing formed with a longitudinal slot, and a finger grip member to which the pawl is secured, and movable through said slot, to withdraw the pawl from engagement with the toothed sector.

1,860,419. ELECTRODE FOR NEON TYPE OF LUMINOUS TUBES. RALPH C. HYDE, Los Angeles, Calif., assignor, by mesne assignments, to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del., a Corporation of Delaware. Filed July 6, 1929. Serial No. 376,351. 6 Claims. (Cl. 176—126.)



1. In a gaseous discharge tube having an envelope enclosing a gas filling, an electrode formed of solid material within said envelope, and a sheath of mica surrounding said electrode and interposed between said electrode and the adjacent walls of said envelope.

1,860,420. ELECTRIC FOOT WARMER. ELLIS W. JOHNSON, Jamestown, N. Y. Filed Sept. 15, 1930. Serial No. 481,849. 3 Claims. (Cl. 219—19.)

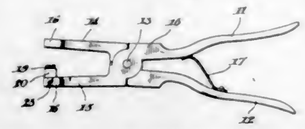


1. A device of the class described comprising a base for supporting the weight of a person, a heating element in said base, a sack joined to and projecting upwardly from said base to form a heat compartment for the feet and legs and means for drawing the upper portion of the sack about the legs of the user of the device.

1,860,421. ANIMAL MARKER. HENRY GEORGE KETCHUM, Luzerne, N. Y. Filed Mar. 15, 1929. Serial No. 347,382. 1 Claim. (Cl. 101—30.)

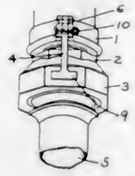
An animal marking tool comprising two pivotally connected members, each having a jaw at one side of the pivot and a handle at the other side thereof, shoes, in-

tegral with the free ends of the jaws, formed with holes therein, and a bore therethrough, type blocks formed with squared heads and rounded stems having openings therethrough adapted to detachably fit within the shoes, the openings in the type blocks registering with the bore



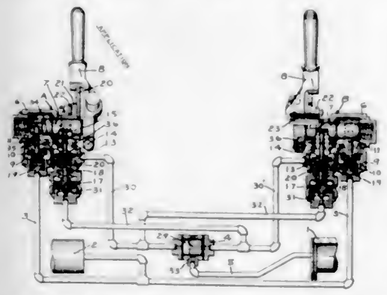
through the shoe to engage with suitable retaining means extending therethrough and operable from without the shoe whereby the retaining means are slidably operable from without the shoe to selectively or collectively retain the type blocks in the shoe.

1,860,422. METALLIC PIPE COUPLING. RAOUL T. LOISEAU, Livry-Gargan, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1928, Serial No. 327,693, and in France June 12, 1928. 1 Claim. (Cl. 285—120.)



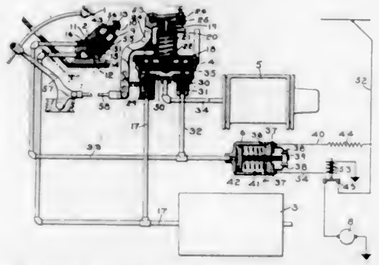
A pipe joint comprising a hollow external member, a special internal member, and a rotatable collar member for holding the external and internal members together and having a plurality of plane faces in the form of a nut, a supporting member to which said pipe joint is secured, a plate pivotally mounted on said supporting member and engaging one of said plane faces, and a stop carried by said supporting member and engaging said plate for preventing rotation of said plate in one direction, and thereby preventing rotation of the collar member in the same direction through the engagement of the plate with the plane face of the collar member.

1,860,423. BRAKE VALVE DEVICE. EWING K. LYNN, East McKeesport, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 16, 1931. Serial No. 537,762. 5 Claims. (Cl. 303—14.)



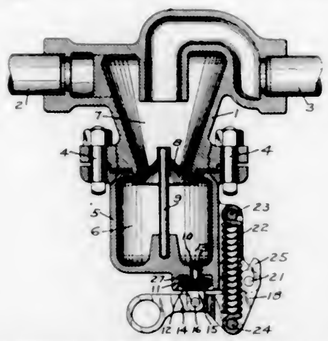
1. In a fluid pressure brake, the combination with a brake cylinder, a pair of brake valve devices disposed at separated positions on a vehicle, and each brake valve device operative to control the supply and release of fluid under pressure to and from the brake cylinder, and a double check valve for controlling communication through which each brake valve device supplies and releases fluid to and from the brake cylinder, of a check valve associated with each brake valve device and each check valve operable by the corresponding brake valve device for opening a communication for venting to the atmosphere fluid supplied to the brake cylinder by operation of the other brake valve device.

1,860,424. SAFETY BRAKE DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 21, 1930. Serial No. 422,303. 5 Claims. (Cl. 303—19.)



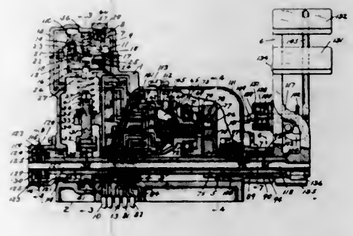
1. In a fluid pressure brake equipment, the combination with a brake cylinder and a brake valve device for controlling the admission to and the release of fluid under pressure from the brake cylinder, of a safety control valve device movable by the operator to establish communication through which fluid is released from the brake cylinder by operation of said brake valve device and operative upon release by the operator to supply fluid under pressure to the brake cylinder.

1,860,425. DIRT COLLECTOR. JOSEPH C. MCCUNE, Edgewood, and JOHN B. WRIGHT, Pittsburgh, Pa., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 15, 1930. Serial No. 436,152. 2 Claims. (Cl. 303—88.)



1. The combination with a dirt collector having a dirt collecting chamber provided with a drain outlet, of a valve for controlling said outlet, an arm for operating said valve, a pin on which said arm is pivoted, a tension spring acting on said arm and having its longitudinal axis at one side of the pin when the arm is positioned to seat the valve, and having the longitudinal axis at the opposite side of the pin when the arm is positioned with the valve unseated, so that the spring acts both to maintain the valve seated and unseated.

1,860,426. BRAKE AND POWER CONTROLLER. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 30, 1930. Serial No. 464,804. 32 Claims. (Cl. 192—2.)

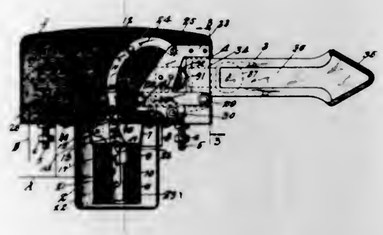


1. In a brake and power control device, the combination with a rotatable brake shaft and a power control shaft disposed in fixed relation to each other, of pedals controlled by the same foot of an operator for at any time operating said shafts independently of each other, one of said pedals being engaged by the toe of the operator's foot and the other of said pedals being engaged by the heel of the operator's foot.

26. In a control device, the combination with a casing, of an operating shaft rotatably mounted in said casing, a pedal comprising a socket portion adapted to be removably applied to said shaft for operating same, and means requiring movement of said pedal to two different positions for effecting the removal of said socket portion from said shaft.

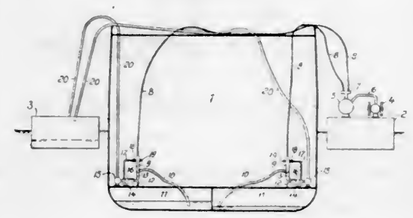
31. A control device for a car comprising an abutment movably mounted in a cylinder, a rotatable shaft, means carried by said shaft for operating said abutment, a lever for controlling the operation of said shaft, means carried by said abutment and in engagement with the wall of said cylinder for holding a lubricant and conducting said lubricant to said wall, and a passageway extending through said abutment for supplying a lubricant to the means carried by said abutment.

1,860,427. SIGNALING DEVICE. PETER J. O. MILLER, Peoria, Ill., assignor of one-half to Elmer E. Nystrom, Peoria, Ill. Filed Aug. 17, 1928. Serial No. 300,314. 1 Claim. (Cl. 177—329.)



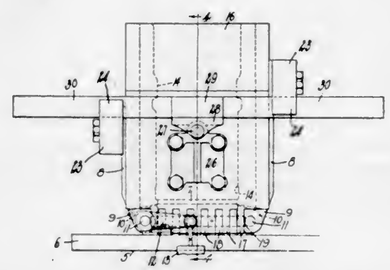
In a signal indicator, in combination, a casing having an opening in one end and with aligned tracks extending longitudinally on opposite sides thereof, a carriage movable on said tracks, an indicating arm connecting with the carriage and projecting and having movement through the opening in said casing, a lever pivoted to the casing near one end and connected with the carriage by means of a link pivotally connected with the carriage and with the lever, an operating means located below the casing, an operating connection between the lever and said operating means including an arm having a pivotal connection with the lever and means arranged for coaction with the lever for limiting the movement of the latter on the projection and withdrawal of the signal arm to the limits of its movements.

1,860,428. OIL PUMPING APPARATUS. BENGT OLSSON, Brooklyn, N. Y., assignor to Charles J. O'Neill, New York, N. Y. Filed Oct. 23, 1928. Serial No. 314,374. 4 Claims. (Cl. 103—5.)



1. In a pumping apparatus for cleaning and pumping down the tanks of a maritime vessel, a pump unit adapted to be placed directly on top of said tanks, which unit comprises a vacuum chamber, a suction hose to said chamber, liquid discharge means from said chamber, a high vacuum tank, and an air connection at all times open between th vacuum chamber and the high vacuum tank.

1,860,429. MOLD. JOSEPH E. PERRAULT, Watertown, Mass., assignor, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed May 3, 1929. Serial No. 360,050. 2 Claims. (Cl. 18—43.)

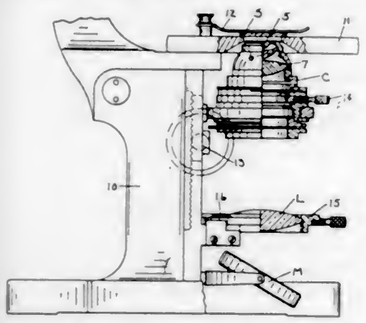


1. Apparatus for molding plastic material, said apparatus comprising a bottom mold plate, a pair of opposite side plates hinged thereto, each side plate being provided with yielding means normally to hold said plate in molding position, and a pair of opposite end plates hinged to said bottom plate, each end plate having a locking bar pivoted thereto for movement parallel thereto, each locking bar being adapted to engage both side plates and draw the plates together by a single rotative movement.

1,860,430. MICROSCOPE ILLUMINATING MEANS. MAX POSER, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 20, 1930. Serial No. 476,575. 9 Claims. (Cl. 88—40.)

1. A microscope comprising in combination a stand having a stage, a condenser mounted beneath said stage,

lens means movably mounted on said stand beneath said condenser and adapted to be selectively positioned in



alignment with the condenser, the principal focus of said lens means being located substantially in the back focal plane of said condenser.

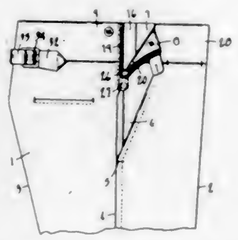
1,860,431. PROCESS OF PRODUCING LOW-VISCOSITY CELLULOSE FIBER. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed June 2, 1928. Serial No. 282,503. 33 Claims. (Cl. 92—9.)

1. A process of lowering the solution viscosity of cellulose fiber, which comprises digesting the fiber as a suspension in a hot solution of the "ic" compound of a metal of the iron-cobalt-nickel group.

1,860,432. PROCESS OF LOWERING THE SOLUTION VISCOSITY OF CELLULOSE FIBER. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Aug. 22, 1928. Serial No. 301,442. 21 Claims. (Cl. 260—146.)

1. A process which comprises oxygenating a suspension of cellulose fiber in the physical condition of pre-liberated wood pulp in an alkaline aqueous solution under a pressure of oxygenating gas materially greater than the vapor pressure of the solution.

1,860,433. TROUSERS. LESTER F. ROSENBAUM, Kalamazoo, Mich., assignor to Sam Rosenbaum Sons & Company, Kalamazoo, Mich. Filed Apr. 27, 1931. Serial No. 533,087. 3 Claims. (Cl. 2—227.)

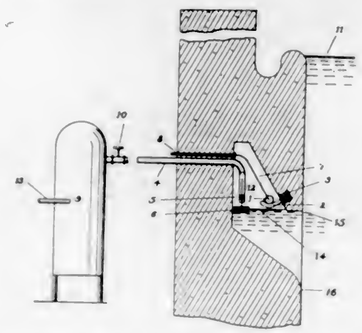


2. A pair of trousers or like garment having a continuous firm waistband across the front with a fly opening therebeneath, a waist placket opening at the side, interlocking fastener elements secured to the edges of said placket opening, and a coacting slide to actuate said interlocking fastener elements to unite the edges with a continuous fastener to form a close fitting band and garment that will be effectively supported on the body of the wearer.

1,860,434. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. WALDO L. SEMON, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1928. Serial No. 301,438. 35 Claims. (Cl. 18—50.)

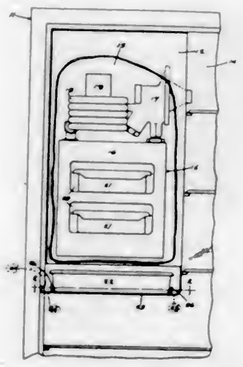
6. The method of preserving rubber which comprises treating rubber with the condensation product of an aliphatic aldehyde with a diaryiamine containing two amino-groups.

1,860,435. RADIATING MARINE APPARATUS. CHARLES W. SIRCH, Los Angeles, Calif. Filed Mar. 12, 1928. Serial No. 260,957. 3 Claims. (Cl. 167—3.)



1. In apparatus for treating a body of liquid with radiant energy, the combination of a chamber having a depressed opening to admit the liquid into the chamber, the upper portion of said chamber operating as a pocket to retain a gas under pressure to prevent the level of the liquid rising unduly in the said chamber, radiating means supported in the chamber above the liquid level for emanating rays into the liquid, and automatic means for maintaining the pressure of the gas in the pocket to prevent the liquid from submerging the radiating means.

1,860,436. MECHANICAL REFRIGERATION. CHARLES C. SPREEN, Detroit, Mich., assignor, by mesne assignments, to Seeger Refrigerator Company, St. Paul, Minn., a Corporation of Minnesota. Filed Nov. 5, 1926. Serial No. 146,385. 6 Claims. (Cl. 62—103.)



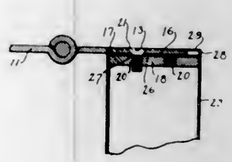
1. In a mechanically refrigerated cabinet, a chamber, a shield in said chamber dividing said chamber into communicating compartments, one of said compartments being adapted to receive a cooling unit, and means forming a part of said shield within said last mentioned compartment adapted to support a removable pan beneath the cooling unit.

1,860,437. SHOE AND SHANK STIFFENER THEREFOR. OTTO H. L. THELEN, Lynn, Mass. Filed Feb. 16, 1928. Serial No. 254,653. 4 Claims. (Cl. 36—76.)



1. A shoe shank stiffener comprising a rigid metal strip symmetrical about a longitudinal axis and molded lengthwise to the desired contour and having a central longitudinally extending stiffening rib formed by opposite side portions, said ridge forming side portions being of greatest width adjacent to the rear end of the stiffener and narrowing toward its forward end, the forward end of said stiffener terminating at least as far back as the break line of the sole.

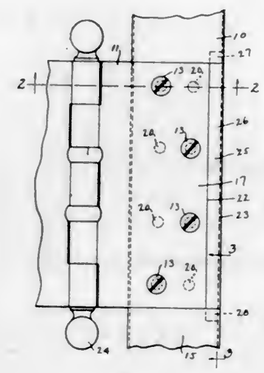
1,860,438. HINGED STRUCTURE. URBAN C. THIES, Dayton, Ohio, assignor to The Globe Wernicke Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 12, 1929. Serial No. 413,532. 11 Claims. (Cl. 189—46.)



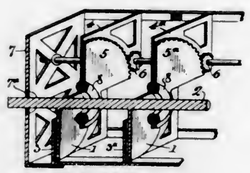
10. In combination, a sheet metal door, a reversible hinge therefor, said door being provided with a depression in the door edge for receiving said hinge, an attaching member for said hinge positioned within said door and secured thereto, means for attaching said hinge to said attaching member, a filler member having a surface lying flush with a side of the hinge and having a surface lying flush with the door face, and means for removably securing said filler member adjacent said hinge.

1,860,439. HINGED STRUCTURE. URBAN C. THIES, Dayton, Ohio, assignor to The Globe-Wernicke Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 18, 1930. Serial No. 445,295. 7 Claims. (Cl. 189—46.)

7. In combination, a door, a hinge therefor, said door having a depression extending from one side to the other of the door edge for receiving said hinge, and a filler member filling the space within the depression between the end of the hinge and the face of the door, said filler member having a thickness equal to the thickness of the hinge, and having means at the end thereof for securing it in place.



1,860,440. ROTARY VARIABLE CONDENSER. ARTHUR M. TROGNER, East Orange, N. J., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1929. Serial No. 342,571. 6 Claims. (Cl. 175—41.5.)



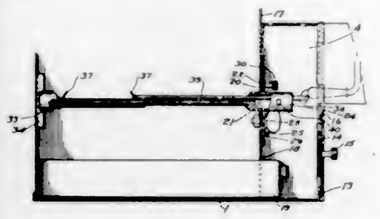
1. A rotary variable condenser comprising in combination two sets of stationary plates, one set of said plates positioned echelon in respect to the other, two sets of movable plates arranged to be rotated about a common axis, said sets of movable plates disposed in offset parallel planes each in respect to the other, said sets of movable plates electrically connected to said sets of stationary plates respectively and each set of said stationary plates electrically insulated from the other.

1,860,441. HARDENED ARTIFICIAL MATERIALS AND PROCESS OF PREPARING THEM. ARTHUR VOSS, Frankfort-on-the-Main-Hochst, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Original application filed Sept. 19, 1928, Serial No. 307,042, and in Germany Sept. 20, 1927. Divided and this application filed Jan. 7, 1930. Serial No. 419,191. 10 Claims. (Cl. 260—4.)

1. The process which comprises treating phenolaldehyde condensation products containing carboxyl groups with

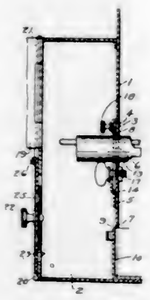
a nitrogen base selected from the group consisting of ammonia, aliphatic amines and cyclic amines and heating the water-soluble compounds thus obtained to a temperature of between 100° C. and 200° C.

1,860,442. FURNACE. FLORENCE WARES, Seattle, Wash. Filed July 9, 1928. Serial No. 291,330. 2 Claims. (Cl. 126—173.)



2. In a furnace grate of the pivotally mounted type having trunnions eccentrically positioned in relation to the longitudinal axis of said grate and with removable shaker handles adapted to operate on said trunnions, scrapers slidably mounted on said grates and of sufficient length to maintain parallel relation between the scrapers and grates and thereby prevent binding, upwardly inclined flanges at the front and rear edges of said scrapers, bars extending from the scrapers thru the grate trunnions at the front, connecting means at the ends of the bars smaller than the diameter of the trunnions allowing passage of the shaker handle hubs thereover, and means on the trunnions for gripping and holding the hubs of the handles.

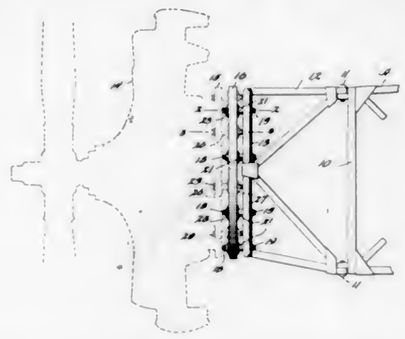
1,860,443. FURNACE FRONT. FLORENCE WARES, Seattle, Wash. Original application filed July 9, 1928, Serial No. 291,330. Divided and this application filed Apr. 6, 1931. Serial No. 527,903. 3 Claims. (Cl. 110—172.)



2. In a furnace of the type having shaker grates and an ash pan, a plate forming the furnace front having horizontal openings for the grate bars and ash pan, a closure for the said grate bar opening, a box like housing enclosing the lower portion of said furnace front, doors at the outer end of said housing, and a damper in one of the said doors.

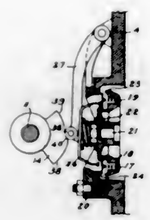
1,860,444. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, deceased, Detroit, Mich., by Emma F. Woolson, executrix, Bloomfield Village, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 22, 1930. Serial No. 469,898. 4 Claims. (Cl. 248—14.2.)

1. In an aeroplane, in combination, a frame having a transversely extending forward portion, an engine having a transversely extending rearward portion, said forward portion of the frame and rearward portion of the engine being spaced apart and substantially parallel, a vibration absorbing member interposed between said portions and arranged substantially parallel thereto, means connecting



said member to the engine, and means connecting said member to the frame, said means, respectively being attached to said member at spaced points, the entire weight of the engine being transmitted through said vibration absorbing member to the frame, and torque and vibration developed by the engine being cushioned thereby.

1,860,445. COMPRESSOR VALVE. PELLE ANDERSSON, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Original application filed May 10, 1926, Serial No. 107,907. Divided and this application filed Jan. 18, 1929. Serial No. 333,414. 7 Claims. (Cl. 230—25.)

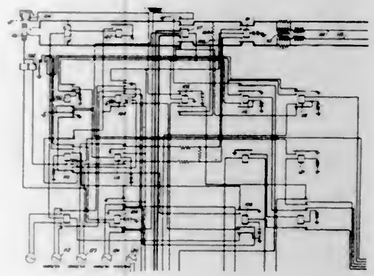


1. An unloading device for compressors comprising in combination, a valve seat element adapted to be inserted in a compressor, a valve therein actuated during operation of the compressor, a stop for limiting the opening movement of said valve secured to said seat element, said stop being provided with an annular lip for closely surrounding a periphery of said valve when in full open position and means for holding said valve in full open position during unloading of the compressor.

1,860,446. SIGNALING SYSTEM. RAND S. BAILEY, Montclair, and NEAL D. NEWBY, Woodridge, N. J., and DWIGHT L. MOODY, Hempstead, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 11, 1930. Serial No. 488,110. 7 Claims. (Cl. 179—43.)

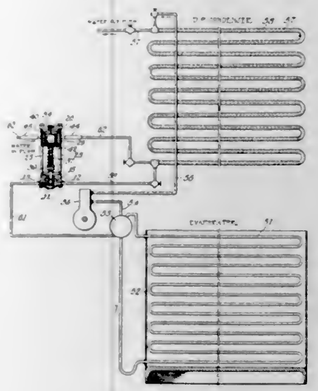
1. In a signaling system, a transmitting station, a receiving station, a line interconnecting said stations, a

source of alternating signal current of predetermined characteristic at said transmitting station adapted to be applied to said line, signal receiving means at the receiving station adapted to be controlled by said signal current, a second source of alternating current of different charac-



teristic at the receiving station, means responsive to the control of said signal receiving means to apply said second source of current to the line, and means at the transmitting station responsive solely to said second current to disconnect said first current from the line.

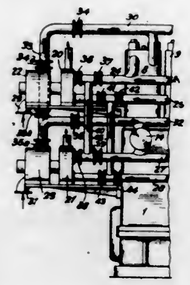
1,860,447. REFRIGERATION. JOHN G. BERGDOLL, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed July 21, 1928. Serial No. 294,418. 12 Claims. (Cl. 62—115.)



1. The combination with a refrigerating system of the compressor condenser expanded type, of a valve for throttling the outflow from the condenser; means for passing cooling fluid in heat exchanging relation with the condenser; and thermally responsive motor means subject directly to the temperature of the cooling fluid leaving the condenser and operatively connected with said valve to close the same progressively as the temperature of the cooling fluid rises and so arranged that the valve is normally open and commences to close as the refrigerant leaving the condenser approaches its critical temperature.

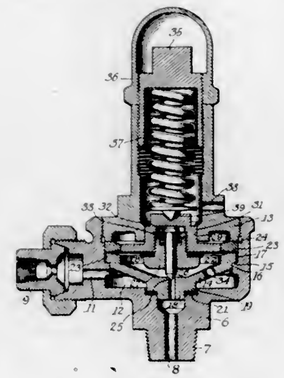
1,860,448. [WITHDRAWN.]

1,860,449. DOUBLE ACTING INTERNAL COMBUSTION ENGINE WITH EXHAUST TURBINES AND CHARGING AIR COMPRESSORS. ALFRED BÜCHI, Winterthur, Switzerland. Filed Mar. 7, 1929, Serial No. 345,093, and in Switzerland Mar. 10, 1928. 3 Claims. (Cl. 60—13.)



3. In a double-acting internal combustion engine, in combination; cylinders having outer and inner operative sides, a first charging unit comprising an exhaust turbine, a compressor for the charging air driven by said exhaust turbine, conduit means for the exhaust gases interposed between said outer sides of the cylinders and said exhaust turbine, conduit means for compressed air interposed between said compressor and the outer sides of the cylinders, a second charging unit comprising an exhaust turbine, a compressor for the charging air driven by said exhaust turbine, conduit means for the exhaust gases interposed between said inner sides of the cylinders and said exhaust turbine, conduit means for compressed air interposed between said compressor and the inner sides of the cylinders, said exhaust turbines being provided with a multi-chamber inlet casing, and groups of cylinders exhausting into said chambers of the inlet casing.

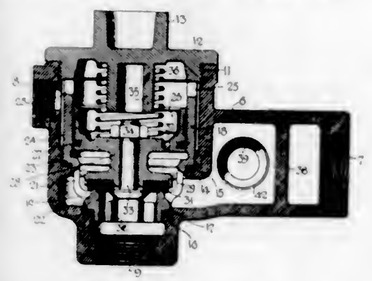
1,860,450. DIAPHRAGM ACTUATED VALVE. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to the New York Air Brake Company, a Corporation of New Jersey. Filed May 3, 1928. Serial No. 274,950. 1 Claim. (Cl. 137—153.)



In a device of the class described, the combination of a body having an inlet passage, a discharge passage, and an annular shoulder above said passages; a gasket surrounding said discharge passage; a combined valve seat and diaphragm support sustained on said shoulder in sealing relation with said gasket, there being a ported valve seat in the upper face of the support leading to the discharge port in the body and another passage in said support through which fluid may pass from the inlet

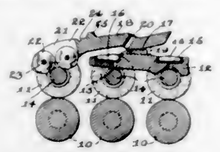
port to the space above said support; a diaphragm mounted on said support; a valve arranged to be actuated by said diaphragm and to coact with said seat; a releasable means for clamping said diaphragm against said support; and loading means carried thereby and urging said valve in a closing direction.

1,860,451. AIR BRAKE. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Oct. 9, 1930. Serial No. 487,617. 3 Claims. (Cl. 303—19.)



1. In a deadman emergency vent valve, the combination of a ported body having an open side; a valve and motor unit bodily insertible through said open side, and including a cylinder and valve seat rigidly connected together, and a piston and valve rigidly connected together, the piston working in said cylinder and the valve coacting with said seat; gasket means for sealing said cylinder and seat to said body, in coactive relation with parts therein; and a removable closure for said open side serving to force said cylinder and seat against said gasket means.

1,860,452. SPINNING FRAME SADDLE. THOMAS K. COX and HENRY L. GASSETT, Columbus, Ga. Filed July 25, 1930. Serial No. 470,742. 1 Claim. (Cl. 19—138.)



A spinning frame saddle, comprising a rear section having lubricant wells in its upper side near its opposite ends and having openings therethrough leading from the bottoms of the wells, said rear section also having in its under side a bearing depression in register with the adjacent lubricant opening to seat upon the rear top roll shaft and hold the front end of the section at its adjacent lubricant opening across the intermediate top roll shaft, said rear section further having a forwardly tapering lug on its upper face adjacent the forward well, a front section having a forked front end and provided at the under side of its rear end with a pair of rearwardly diverging flanges to embrace said forwardly tapering lug, said front section also having a lubricant opening through its rear end portion leading to the forward ends of the flanges to conduct a lubricant to the flanges and the lug and into said front well of the rear section.

1,860,453. AMUSEMENT DEVICE. MELVILLE A. DELAWARE, West Scarboro, Me. Filed July 6, 1931. Serial No. 549,000. 4 Claims. (Cl. 104—23.)

1. A device of the character described comprising a suspension cable, a car suspended from said cable and movable therealong, a pair of spaced cables extending parallel to said suspension cable and adapted to be grasped by an occupant of the car to propel the car along said



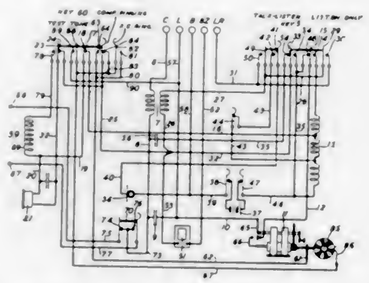
suspension cable, means carried by the car and engaging said second mentioned cables to prevent lateral swinging movement of the suspended car.

1,860,454. RAZOR BLADE HOLDER. HERMANN L. DESSELL, Philadelphia, Pa. Filed Sept. 26, 1928. Serial No. 308,891. Renewed Sept. 8, 1931. 7 Claims. (Cl. 30—9.)



1. A device of the character described comprising an elongated body member having a flat face having one end serving as a handle, a retaining plate having means thereon for holding a safety razor blade, said plate and blade being disposable against one flat face of the body and being shiftable thereon to bring either of opposite corners at one end of the blade into projecting inclined relation to the edge of the body, and means for clamping the blade and plate immovable.

1,860,455. LINEMAN'S TEST SET. EGINHARD DIETZE, Westfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 2, 1931. Serial No. 560,853. 9 Claims. (Cl. 179—175.1.)

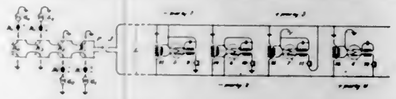


1. A lineman's telephone set to be connected to lines in a signaling system in which carrier currents are employed in the transmission of signals, said telephone set including a filter to prevent cross-talk between the carrier channels and interference with the carrier conversation by the telephone set.

1,860,456. PROCESS OF CONTROLLING THE LUSTER OF FABRICS. CAMILLE DREYFUS, New York, N. Y. Filed Aug. 4, 1927. Serial No. 210,732. 2 Claims. (Cl. 18—48.)

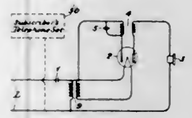
1. Process of imparting differential luster effects to a fabric composed in part at least of an organic derivative of cellulose comprising delustering the same, locally applying water to the fabric and then subjecting it to a calendering treatment at a temperature above 100° C. but below the melting point of the organic derivative of cellulose whereby lustrous patterns are produced where the water has been applied.

1,860,457. SIGNALING SYSTEM FOR PARTY TELEPHONE LINES. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 15, 1931. Serial No. 544,604. 4 Claims. (Cl. 179—34.)



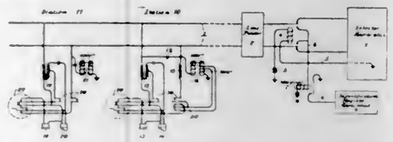
1. A party telephone line signaling system comprising a line, means for applying alternating current with direct current of either polarity superimposed thereon to either the tip or ring side of said line, a plurality of subscribers' sets connected to said line, vacuum tube oscillators with audible responsive devices in their plate circuits at each of said subscribers' sets, means for supplying the filament current for each of said tubes from the alternating current applied to the line, and means for obtaining selectivity in the operation of said oscillations by supplying the plate potential for said tubes from the different signaling current potentials applied to said line.

1,860,458. TELEPHONE SIGNALING SYSTEM. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 15, 1931. Serial No. 544,605. 10 Claims. (Cl. 179—81.)



1. A line over which signaling currents are being transmitted, a subscriber's telephone set connected to said line, said set including signaling means comprising a vacuum tube oscillator having its filament and plate circuits so connected to said line that the signaling currents transmitted over said line will be utilized as operating currents for said circuits, and an audible responsive device connected in the plate circuit of said oscillator.

1,860,459. SIGNALING ARRANGEMENT FOR TWO PARTY TELEPHONE LINES. WILLIAM HOPPLE EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 27, 1931. Serial No. 547,338. 4 Claims. (Cl. 179—8.5.)



1. A telephone line having two subscribers' stations connected thereto, grounded ringing apparatus of high impedance connected to one side of the line at one of said stations, grounded ringing apparatus of high impedance connected to the other side of the line at the other of said stations, and means at said last mentioned station operative when a call is initiated therefrom for reducing the impedance of the ringer thereat and for so changing its connection to the line that inductive interference will not be caused by such connection.

1,860,460. MECHANICAL GAME. ANGELO J. GUMINA and GEORGE T. OVERING, Jr., New Orleans, La. Filed Mar. 25, 1931. Serial No. 525,283. 6 Claims. (Cl. 273—86.)

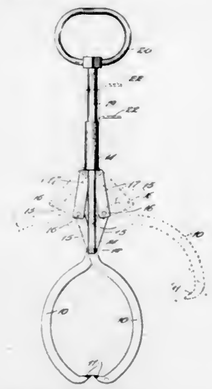


3. A game apparatus comprising a casing, a pair of threaded shafts disposed longitudinally in parallel relation in the casing, a follower having an object mounted upon each shaft, a manually operable shaft disposed in line with the forward ends of the threaded shafts, complemental clutch elements carried upon the threaded and manually operable shafts, check controlled means for advancing one of the clutch elements into interlocking position, governor controlled means connected to the opposite clutch elements for withdrawing the same from the shaft elements upon a predetermined speed of operation of the shafts, a separate motor for each threaded shaft to turn the same backwardly, circuit means operable by the travelers when moved to their innermost positions for reversing the direction of movement of the travelers, and means operable upon the return of the travelers to normal position for stopping said motors.

1,860,461. PROCESS OF PREPARING STABLE CELLULOSE ESTER SOLUTIONS. EMIL HUBERT, Elberfeld, ALEX RÖST-GRANDE, Dormagen, and KARL WEISBROD, Elberfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 3, 1928, Serial No. 310,177, and in Germany Oct. 10, 1927. 4 Claims. (Cl. 260—102.)

1. In the process of preparing stable cellulose ester solutions, the step which comprises adding to a solution obtained by esterifying cellulose with an organic acid in the presence of a contact acid, a magnesium compound of the group consisting of oxide, hydroxide and salts of acids weaker than the contact acid, in a quantity at least sufficient to react with all of the contact acid present.

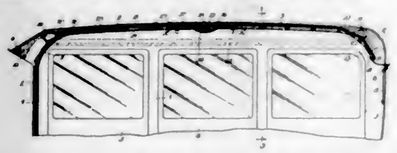
1,860,462. GRAB HOOK. ANDREW JOHNSON, Edgewater, Colo. Filed July 27, 1931. Serial No. 553,457. 2 Claims. (Cl. 294—115.)



1. A tool of the kind indicated comprising a sleeve, an actuating bar slidably mounted in the sleeve, a pair of

jaws having a common pivotal connection at the lower end of the sleeve, and operative connections between the bar and the jaws to rock them toward and away from each other upon relative movement of the sleeve and bar, the bar at its upper end having a hand grip and the sleeve being provided at its upper end with a lateral ear for finger engagement to effect such relative movement of the sleeve and bar.

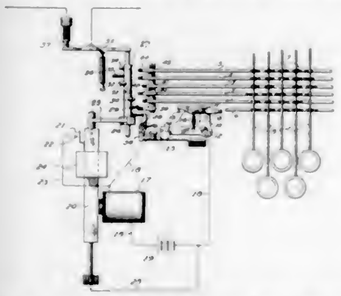
1,860,463. AUTOMOBILE TOP. HARRY E. KAPLAN and BERNARD L. BOUER, Chicago, Ill. Filed May 24, 1929. Serial No. 365,756. 1 Claim. (Cl. 296—137.)



The combination of an automobile top having side and end walls and an opening in its top, guiding means disposed along the edges of said opening, means forming compartments at each of the ends of said opening, a roof member comprising two units formed of a plurality of hinged sections foldable upon each other for storage in said compartments, handles at adjacent ends of said units, transverse lugs substantially midway between the ends of said opening, said handles being secured to said lugs to retain said units in closing position over said opening when extended from said compartments.

1,860,464. SELECTIVE SYSTEM AND APPARATUS THEREFOR. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Refile for abandoned application Serial No. 750,625, filed Nov. 18, 1924. This application filed Nov. 30, 1928. Serial No. 322,047. 38 Claims. (Cl. 178—4.)

1. A telegraph system comprising apparatus adapted to transmit code combinations of selecting conditions each



preceded by a synchronizing condition; and receiving apparatus responsive to said selecting conditions, and maintained in synchronism with said transmitting apparatus by said synchronizing condition and by certain of said selecting conditions.

1,860,465. BRIQUETTE AND PROCESS FOR MAKING THE SAME. GUSTAV KOMAREK, Chicago, Ill., assignor to Berwind Fuel Company of Delaware, Chicago, Ill., a Corporation of Delaware. Filed Dec. 2, 1929. Serial No. 411,209. 15 Claims. (Cl. 44—6.)

1. A fuel briquette having a heat united deliquescent abrasion resistant coating.

5. A briquette comprising combustible material and a surface coating comprising a deliquescent salt and sulphite liquor.

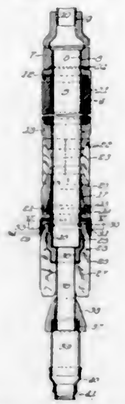
9. The process of preparing a fuel briquette which comprises heating the briquette surface and applying thereto a coating of a deliquescent material and an abrasion resistant film producing substance.

12. The process of forming a fuel briquette having a deliquescent abrasion resistant coating united thereto which comprises separately applying a deliquescent material and an abrasion resistant film forming substance to the surface of the briquette to form a strong film or envelope about the briquette without substantially reducing the deliquescence of the coating.

1,860,466. PULP BOARD. GUSTAVE LANDT and HUBERT LEOPOLD BECHER, Trenton, N. J., assignors to The Agasote Millboard Company, Fanwood Road, N. J., a Corporation of New Jersey. Filed Aug. 13, 1924. Serial No. 731,871. 7 Claims. (Cl. 92—21.)

1. Molded pulp board comprising a compressed mixture of from 30 to 50 parts of Montan wax, by weight, to 100 parts of fibre.

1,860,467. PRESSURE FLOOD PACKER. PATRICK H. MACK, Bradford, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 6, 1929. Serial No. 376,396. 10 Claims. (Cl. 166—12.)

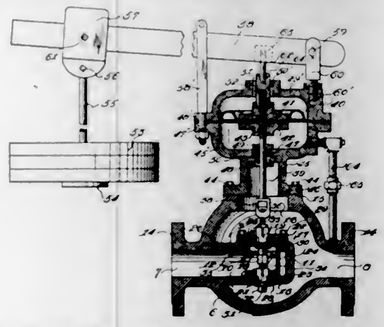


4. In a well packer, a body member, packing means for sealing the body member in a well, gripping means capable of being expanded into engagement with surrounding walls of the well for securing the body member in position, and means for expanding the gripping means including an expanding member operable by hydraulic pressure.

1,860,468. REGULATING VALVE. ALLEN D. MACLEAN, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Filed June 8, 1927. Serial No. 197,386. 1 Claim. (Cl. 50—27.)

In a gas regulator valve, a valve body having an inlet and an outlet separated by a wall having two axially aligned openings, the upper opening being substantially larger than the lower opening; a valve cage fitted within said openings having upper and lower outstanding flanges for gas-tight engagement around the openings in said wall; means for securing said cage to said wall with both flanges thereof in gas-tight engagement around said openings; upper and lower valve seats around aligned openings within said cage; a valve stem extending through the openings in said cage; two valves adjustably secured to said stem for engaging said valve seats, one valve being within said cage; the upper portion of said valve cage being connected to the lower portion thereof by two webs unequally spaced peripherally of said cage; the

upper wall of said valve body having an opening larger than the outstanding flanges on said cage whereby said cage and valves may be inserted and removed through said opening and the upper and lower portions of said wall defining the two openings therein may both be ma-

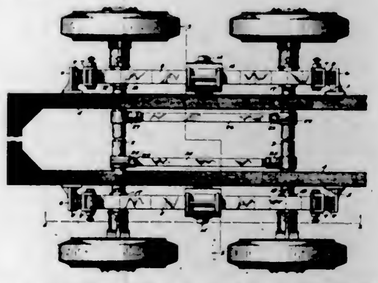


chined through the upper opening in the valve body; a regulator casing having a diaphragm and a rod operable thereby secured over the opening in said valve body; and means for detachably connecting said diaphragm rod and said valve stem.

1,860,469. PROCESS FOR OBTAINING ACTIVE SUBSTANCES FROM HYPOPHYSIS GLANDS. CARL LUDWIG LAUTENSCHLÄGER, Frankfort-on-the-Main, WILLY LUDWIG, Frankfort-on-the-Main-Hochst, and OTTO SCHAUMANN, Wiesbaden, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 1, 1929, Serial No. 336,913, and in Germany Feb. 4, 1928. 4 Claims. (Cl. 167—74.)

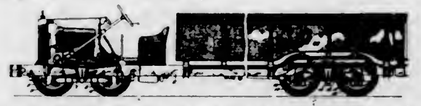
1. The new process for obtaining extracts containing the active substances of the posterior and the anterior lobe of the hypophysis which consists in treating the whole hypophysis at a temperature of between 1° C. and 70° C. with agents causing a hydrolysis of the hypophysis and precipitating from the reaction product the albumin degradation products by neutralization of the hydrolyzing agent.

1,860,470. ROAD VEHICLE SPRING SUSPENSION. ARTHUR I. MARCUM, Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed Aug. 4, 1923, Serial No. 655,693. Renewed Oct. 17, 1931. 6 Claims. (Cl. 180—22.)



2. A vehicle including tandem axles, substantially parallel torque arms between said axles holding them in definite spaced relation, said arms being flexible in directions to permit relative movement of the axles in substantially vertical planes, a frame, a spring secured to said frame by connections that yieldingly resist endwise movement of the frame relative to the spring, a second spring secured to said axles in a manner to permit deflection of the spring without substantial separation of the axles, and means connecting said spring intermediate their ends.

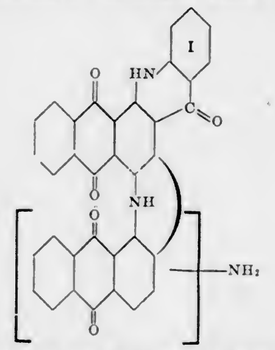
1,860,471. ROAD VEHICLE. ARTHUR I. MARCUM, Oakland, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed Aug. 11, 1923. Serial No. 656,875. 6 Claims. (Cl. 280—124.)



1. In a road vehicle, a frame, a body on said frame, a pair of axles having a fixed spread disposed below the front part of the frame, dirigible wheels on said axles, a pair of axles disposed below the rear end of the frame, said axles being free of restricting connections that prevent their movement to positions of non-parallelism in a horizontal plane, non-dirigible wheels on said axles and upwardly bowed leaf springs on both sides of the frame connected at their ends to the latter axles, a flat leaf spring connected at its ends to the frame associated with each bowed spring and means connecting the flat and bowed springs of each pair together at their centers, differential flexure of the upwardly moved springs serving to move the axles to positions of non-parallelism in the horizontal plane.

1,860,472. VAT DYESTUFFS OF THE ANTHRAQUINONE ACRIDONE SERIES. WALTER MIEG, Opladen, and ROBERT BERLINER, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed June 14, 1929, Serial No. 371,046, and in Germany June 25, 1928. 4 Claims. (Cl. 260—37.)

1. The compounds of the probable general formula

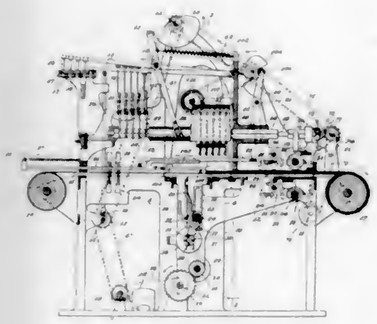


wherein the nucleus marked I may be substituted by halogen, said compounds forming dark powders difficultly soluble in the usual organic solvents, dyeing cotton from an alkaline hydrosulfite vat strong reddish-grey to black shades of good fastness properties also to chlorine.

1,860,473. COMPOSITIONS CONSISTING OF WOODEN FIBERS AND ARTIFICIAL THREADS. ALBERT MÖHRING and GUIDO SCHULTZE, Elberfeld, and PAUL SCHLACK, Berlin-Karlshorst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 21, 1929, Serial No. 394,380, and in Germany Sept. 22, 1928. 3 Claims. (Cl. 19—146.)

1. As new articles of manufacture mixed textile goods composed of woolen fibers and artificial threads prepared from a mixed cellulose ester of nitric acid and a lower fatty acid being fast to boiling.

1,860,474. LOOM. HARRY M. PATERNAYAN, New York, N. Y. Filed May 17, 1930. Serial No. 453,425. 51 Claims. (Cl. 139—4.)



1. In a loom, the combination with a stationary structure, of a needle assembly movable with respect thereto, said assembly including a plurality of needles pivotally movable with respect to each other, said assembly further including means for vertically reciprocating said needles, an inclined guide coacting with one end of the needle to forwardly tilt said needles during the upper end of the vertical movement to provide a forward arcuate path at the upper extremity of their cycle.

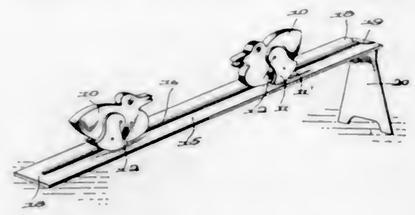
1,860,475. PROCESS AND APPARATUS FOR TREATING ARGILLACEOUS MATERIAL. WILLIAM B. PINE, Okmulgee, Okla. Filed July 22, 1930. Serial No. 469,903. 18 Claims. (Cl. 25—2.)



1. A process for treating a mass of materials containing clay or shale which consists in heating said mass to a temperature at which the mass becomes somewhat plastic but not fused, compacting and densifying the mass to reduce voids by subjecting it while so heated to mechanical working, and then molding the mass under pressure.

1,860,476. WALKING TOY. WILLIAM I. RAVERT, Hazleton, Pa., assignor to A. W. Drake Manufacturing Company, Hazleton, Pa., a Corporation of Pennsylvania. Filed May 14, 1931. Serial No. 537,385. 14 Claims. (Cl. 46—40.)

1. In combination with an inclined track having a guide rib extending from the upper surface thereof, an animal simulating toy arranged to move down the track, said toy including a body provided with a recess arranged to engage said rib, spaced members pivoted to the sides



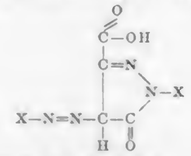
of the body and adapted to coact with the track for imparting an oscillating movement to the toy when mounted on the track.

1,860,477. DIGESTER. CARL F. RICHTER, Watertown, N. Y., assignor to Stebbins Engineering and Manufacturing Company, Watertown, N. Y., a Corporation of New York. Filed Oct. 28, 1931. Serial No. 571,681. 7 Claims. (Cl. 92—19.)

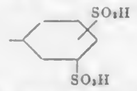
1. A digester for cooking fibrous materials with chemical liquors, lined throughout with carbon bricks.

1,860,478. DYESTUFFS OF THE TARTRAZINE SERIES. EUGEN ROMIG and KARL HOLZACH, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 10, 1930, Serial No. 487,899, and in Germany Oct. 22, 1929. 3 Claims. (Cl. 260—87.)

1. As new articles of manufacture dyestuffs of the tartrazine series corresponding to the general formula:



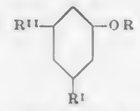
in which X stands for the radicle:



which may be further substituted by a methyl group, and in which the hydrogen atoms of the acid groups may be replaced by ions of an alkaline earth metal.

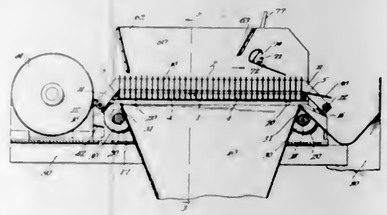
1,860,479. SYNTHETIC RESINS. LEO ROSENTHAL, Vohwinkel, near Elberfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 25, 1929, Serial No. 373,684, and in Germany July 2, 1928. 20 Claims. (Cl. 260—7.)

1. The process which comprises stirring a mixture of a crude solvent naphtha and a m-substituted arylalkyl ether of the general formula:



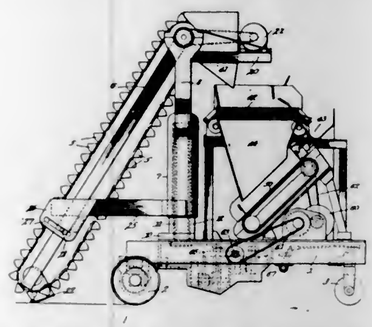
wherein R and R^1 stand for alkyl groups and R^{II} stands for hydrogen which may be substituted by an alkyl group, with the addition of a polymerization catalyst of the group consisting of tin tetrachloride, zinc chloride, strong sulfuric acid, ferric chloride, borofluoro acetic acid and antimony pentachloride for several hours.

1,860,480. SCREENING APPARATUS. GEORGE F. ROYER, Wilkes-Barre, Pa., assignor to Royer Foundry & Machine Company, Wilkes-Barre, Pa., a Corporation of Pennsylvania. Filed Mar. 19, 1930. Serial No. 437,223. 21 Claims. (Cl. 209—396.)



1. In a screening apparatus, a screen having a screening body comprising two units each including a plurality of parallel members connected together, the members of one unit extending transversely of those of the other, and means for actuating both said units to simultaneously move the members thereof in opposite directions through parallel substantially circular paths.

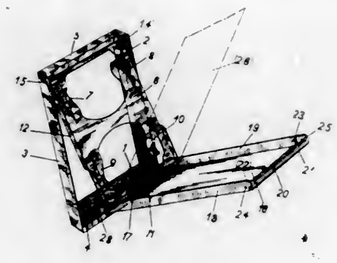
1,860,481. APPARATUS FOR HANDLING MOLDERS' SAND. GEORGE F. ROYER, Wilkes-Barre, Pa., assignor to Royer Foundry and Machine Company, Wilkes-Barre, Pa., a Corporation of Pennsylvania. Filed Apr. 15, 1930. Serial No. 444,554. 16 Claims. (Cl. 262—2.)



1. In an apparatus for handling molders' sand in foundries, the combination of a truck, a vertical shaft mounted on the truck, an elevator having its frame connected to said shaft, adapted to lift sand from the level of the surface on which the truck travels to points above the upper end of said shaft, means for automatically imparting continuous oscillatory movement to said shaft, and means for driving the elevator mounted to oscillate with the elevator about the axis of the shaft.

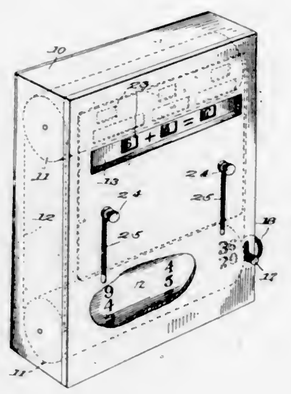
1,860,482. PHOTOGRAPHIC FILM-PACK CASING. MAX SCHMIDT, Dessau in Anhalt, and PAUL HANKE, Wolfen Kreis Bitterfeld, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 7, 1930, Serial No. 419,169, and in Germany Jan. 10, 1929. 5 Claims. (Cl. 95—22.)

1. In a photographic film pack casing, a sheet metal main body member comprising a front wall and four side walls, the whole body member being made of one piece, an exposure window cut into the front wall of the main body member, the upper side wall of the latter being extended and bent downwardly, this extension thus



forming a partition which divides the casing into two compartments, said partition being provided with resilient tongues and also at its lower edge with a cylindrical guide member for the film.

1,860,483. EDUCATIONAL DEVICE. FRANK J. SEWALL, Columbiana, Ohio. Filed Oct. 11, 1929. Serial No. 398,997. 11 Claims. (Cl. 35—2.)

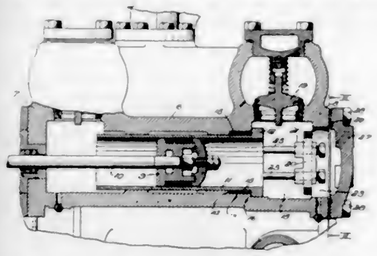


1. An educational device comprising a movable carrier of mathematical symbols arranged in a plurality of groups, the symbols of a group being in alinement crosswise of the direction of movement of the carrier and including a symbol to state a problem and its answer, means to display in succession less than all the symbols of a group to state a problem and certain of the remainder of them to give the answer and selective means to determine which symbol or symbols less than all of a group shall be displayed comprising an apertured member shiftable at will into cooperative relation with different ones of said symbols.

1,860,484. PUMP LINER HOLDING DEVICE. JOHN M. SHIMER, Wilkinsburg, Pa., assignor to Wilson-Snyder Manufacturing Corporation, Braddock, Pa., a Corporation of Pennsylvania. Filed June 12, 1930. Serial No. 460,602. 15 Claims. (Cl. 74—108.)

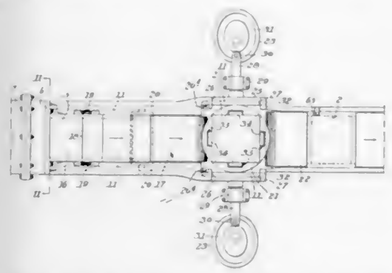
1. In combination, a pump cylinder having an opening and an inwardly facing seat adjacent said opening,

a liner for the pump cylinder, and spacing means for retaining the liner in position comprising an annular



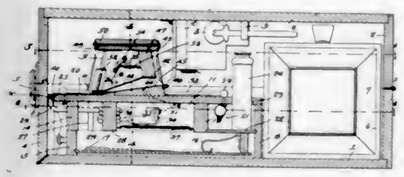
element engaging said seat, said spacing means including the annular element being removable through said opening.

1,860,485. CONVEYER. ROY A. SHIPLEY, Canton, Ohio, assignor, by mesne assignments, to National Fireproofing Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Aug. 30, 1927. Serial No. 216,373. Divided and this application filed Dec. 3, 1928. Serial No. 323,318. 7 Claims. (Cl. 25—1.)



1. In a conveyer system, a plurality of conveyer sections for moving material, a turntable disposed between certain of the conveyer sections, and means for performing work upon the material while halted on the turntable.

1,860,486. FINGERPRINT APPARATUS. HERBERT G. SMITH, Rochester, N. Y., and THEODORE BURRICK, Detroit, Mich. Filed Oct. 2, 1931. Serial No. 566,552. 11 Claims. (Cl. 41—4.)

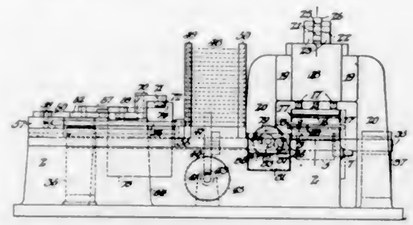


6. Fingerprint apparatus including a structure for supporting a card in position to receive prints, an ink block mounted for back and forth sliding movement thereon, means carried by the ink block for gripping a card, and drawing it with said block when moved along the supporting structure, a clamping strip cooperating with the supporting structure to grip a card, a shaft having a crank, a driving connection between the crank and strip, means for rotating the shaft to move the crank in either direction past a dead center, and a spring for shifting the crank in either direction when moved past said dead center.

1,860,487. WATER SOLUBLE CONDENSATION PRODUCTS OF SULPHONATED AROMATIC HYDROCARBONS OR HYDROXY DERIVATIVES THEREOF WITH ARALKYL HALIDES. ALFRED THAUSS, Cologne-Deutz, GUSTAV MAUTHE, Cologne-Holweide, and ARNOLD DOSER, Cologne-Mulheim, Germany, asignors, by mesne assignments, to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 19, 1928, Serial No. 313,635, and in Germany Oct. 31, 1927. 6 Claims. (Cl. 260—64.)

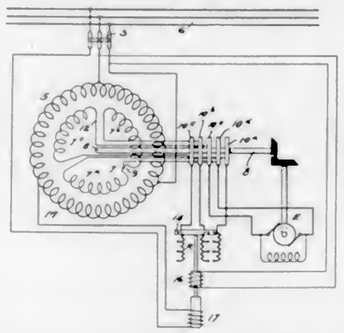
1. The process which comprises causing an aralkyl halogenide containing at least one halogen atom in the aryl nucleus to act upon an aromatic hydroxy sulphonic acid in the presence of strong sulphuric acid.

1,860,488. MEANS FOR ATTACHING SHEETS OF CELLULOID AND THE LIKE TO MANDRELS. JOHN N. WHITEHOUSE, New York, N. Y., assignor to Sanite Corporation, Burlington, N. J., a Corporation of New Jersey. Filed Feb. 26, 1929. Serial No. 342,719. 10 Claims. (Cl. 18—3.)



1. In means for attaching sheets of celluloid and the like to mandrels; a rotary body arranged to turn in contact with a mandrel, means for bringing a mandrel in contact with said rotary body, and means for applying a solvent to said rotary body; whereby the mandrel is coated with the solvent by the turning movement of said body; means for carrying said mandrel from said rotary body to a position of pressing contact with a sheet of celluloid; and means adapted to present such a sheet in cooperative relation with said mandrel.

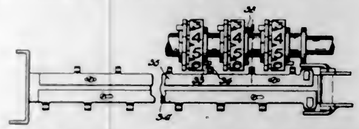
1,860,489. INDUCTION-SYNCHRONOUS MOTOR SYSTEM. ROBERT B. WILLIAMSON, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 273,797. 10 Claims. (Cl. 172—280.)



1. In combination, a dynamo-electric machine adapted for operation as both an alternating current induction motor and a synchronous motor, said motor having its secondary

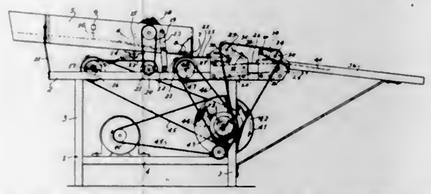
or exciting element provided with a distributed winding of the three-phase type having its phase winding sections connected in Y to provide a point which is neutral with respect to voltage induced in said winding sections during operation of said machine as an induction motor, a direct current exciter supplied with mechanical energy by said machine and electrically connected between the inner terminal of one of said phase winding sections and said neutral point, and a variable resistance connectible to the outer terminals of the several phase winding sections.

1,860,490. ATTACHMENT FOR CALCULATING MACHINES. EDWIN F. BRITTEN, Jr., Maplewood, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed July 22, 1929. Serial No. 379,948. 3 Claims. (Cl. 235—79.)



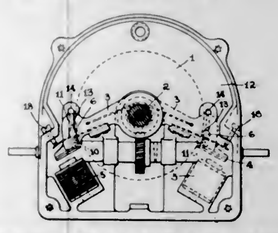
1. The combination of a numeral wheel provided with a zero-setting stop and a secondary stop, a clearing bar associated with said wheel, and a stop mounted on said bar and movable from one position to another for rendering it effective with relation to the first said stop or the second said stop.

1,860,491. FACING AND STACKING MACHINE. ARTHUR E. BURTCHAELL, San Francisco, Calif. Filed Feb. 19, 1929. Serial No. 341,239. 4 Claims. (Cl. 198—33.)



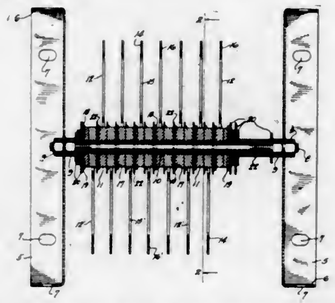
1. An apparatus for facing snaps and the like, comprising a vibrating hopper provided with a stepped bottom downwardly inclined toward one end and communicating with a discharge slot in the lower end of said hopper, means within the hopper for acting on the snaps to remove from said bottom steps all snaps excluding a single layer, an advancing and supporting means onto which the snaps discharge from the hopper with one face resting thereon, and means at the end of said advancing means for reversing any snaps presented thereto in an inverted position.

1,860,492. MOTOR. EDGAR M. BUTLER, Brooklyn, N. Y., assignor of twenty-five per cent to Anders Jordahl, New York, N. Y. Filed Apr. 30, 1929. Serial No. 359,210. 7 Claims. (Cl. 172—126.)



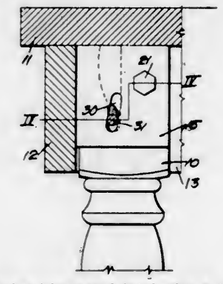
1. A motor comprising a shaft, a disc rigidly mounted thereon, an electromagnetically vibrated arm loosely mounted on said shaft, and a roller disposed between the periphery of said disc and said arm and adapted to be wedged against said disc upon vibration of said arm so as to rotate said disc by imparting rapid and successive impulses thereto.

1,860,493. GRID RESISTANCE. HARRY E. CAMPBELL, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed Jan. 21, 1929. Serial No. 333,900. 9 Claims. (Cl. 201—69.)



8. The combination with a grid resistance and supporting means therefor including a rod, said grid having a lug with an open slot for engagement with said rod and said lug having a shoulder concentric with said rod, of a washer surrounding said rod and having an annular flange to overlap said shoulder on said lug for locking said grid on said rod subject to release by relative movement of said lug and member along said rod.

1,860,494. TABLE LEG HINGE AND LATCH. RALPH O. CLARK, Memphis, Tenn. Filed Sept. 14, 1931. Serial No. 562,702. 3 Claims. (Cl. 45—11.)

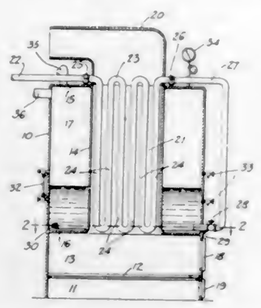


1. In a table leg hinge and latch, for a table having top rails, a U-shaped hinge member secured to the inner side of a rail, said member having a slot in one leg thereof, a table leg having its upper end disposed between the legs of said member, a hinge bolt passing through said member legs and said table leg, a plate rigidly secured to said table leg adjacent the slotted leg of said member, said plate having a slot adapted to receive a latch pin, a latch pin loosely pivoted through one leg of said member, and having its opposite end projecting through the slots in said plate and the adjacent leg of said member.

1,860,495. BOILER. MAX DOERNER, Astoria, N. Y. Filed Sept. 22, 1928. Serial No. 307,617. 1 Claim. (Cl. 122—420.)

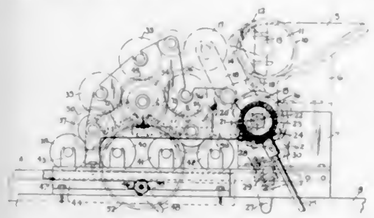
In a steam boiler comprising a structure having a firebox, a smoke pipe connection, and a passage for gases of combustion between the firebox and the smoke pipe connection, an annular chamber for water and the generation of steam

around the said passage, a coil within the said passage, union connections at the sides of the said smoke pipe connection and externally of the boiler, the inlet and the outlet of the said coil being each connected to one of the said



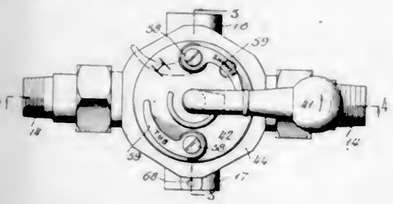
union connections, the one union connection to which the said inlet is connected being connected to the feed water supply for the boiler, and a perforated pipe at the bottom of the chamber connected to the union at the said outlet of the said coil.

1,860,496. INKING MECHANISM. MICHAEL A. DROITCOUR, Providence, R. I., assignor to Harris-Seybold-Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,772. 7 Claims. (Cl. 101—357.)



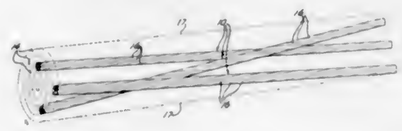
1. In a printing-press inking mechanism, ink distributing rollers, means for simultaneously rotating and vibrating same actuated from the press, means comprising a Scotch yoke for adjusting the length of the vibrating strokes of said rollers from zero to maximum as desired without disconnecting said actuating means from the press, and means for lifting said rollers to an inoperative position and simultaneously and separately disconnecting said rotating and vibrating means from said rollers without disturbing their timed relation with each other and with the press.

1,860,497. VALVE. GROVER S. EBLE, Whitestone, N. Y. Filed May 7, 1928. Serial No. 275,567. 12 Claims. (Cl. 277—7.)



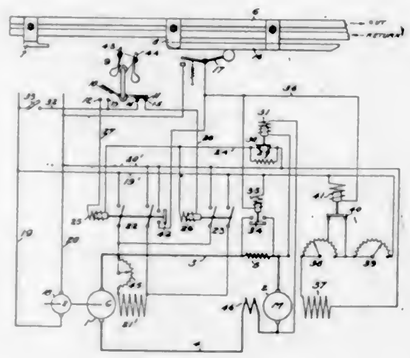
1. In a mixing valve assembly, a valve housing provided with a pair of inlets and an outlet, a pair of valve plugs, one for each inlet, a single manually operable handle carried by said housing, cam means connected with said handle whereby said valve plugs are both adjusted to their closed positions in the inoperative condition of said mixing valve, and whereby one of said valve plugs is adjusted to its fully open position before the opening movement of the other valve plug begins, and means independent of said handle mounted within said housing for controlling the volume of flow through said outlet.

1,860,498. ELECTRICAL CABLE. LEROY STEARNS FORD, River Forest, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Aug. 3, 1925, Serial No. 47,654. Divided and this application filed Dec. 4, 1928. Serial No. 323,599. 6 Claims. (Cl. 173—81.)



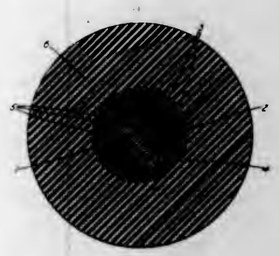
4. A multi-conductor cable containing a plurality of layers of spirally laid quads, adjacent layers being laid in opposite directions, and the direction of the phantom twist of all of the quads in each layer being opposite to the spiral lay of that layer.

1,860,499. MOTOR CONTROL SYSTEM. WILLIAM C. FURNAS and GEORGE E. COOPER, West Allis, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 3, 1927. Serial No. 172,239. 11 Claims. (Cl. 172—240.)



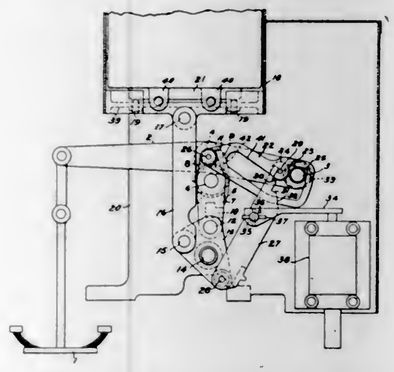
4. In combination with a driven member adapted to be reversed, a motor for driving said member, a generator connected to said motor, means for strengthening the field of said motor, means for opening the field circuit of said generator, means for reclosing the field circuit in the reversed direction, and means responsive to the movement of said member for first causing operation of said motor-field strengthening means, then of said generator field circuit opening means, and then of said generator field circuit reverse-closing means.

1,860,500. CONDUCTOR. JOHN J. GILBERT, Douglaston, N. Y., asignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1929. Serial No. 343,601. 7 Claims. (Cl. 178—45.)



1. A loaded conductor for submarine telephone communication comprising a central portion surrounded by closely fitting surrounding strands, each strand having its inductance increased by a thin layer of high permeability magnetic material substantially completely covering the external surface of the strand.

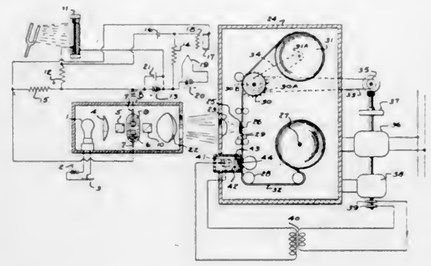
1,860,501. SWITCH GEAR. BENJAMIN GROB, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 15, 1928. Serial No. 312,421. 12 Claims. (Cl. 200—89.)



1. In a switch, operating means for said switch, actuating means for said operating means, a normally positive collapsible mechanism between said actuating and operating means, and means for normally maintaining said collapsible mechanism in its positive condition including a link operatively related to said collapsible mechanism, a stationary abutment, an element carried by said link cooperable with said stationary abutment, and means operative to effect collapse of said collapsible mechanism without affecting the position of said abutment.

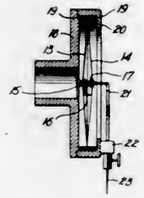
1,860,502. ELECTRIC SYSTEM FOR RECORDING AND REPRODUCING SOUND. EDMUND H. HANSEN, New York, N. Y. Filed Aug. 26, 1927. Serial No. 215,672. 6 Claims. (Cl. 179—100.3.)

1. In systems for recording sound by electro-optical methods upon a light sensitive moving film the combination of: a sound modulated light arranged to light affect said film; an alternator adapted to generate electrical impulses and arranged to rotate in common with a prime mover utilized to move said film, and a second



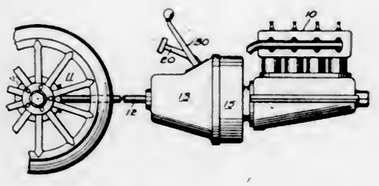
light modulated by the impulses from said alternator and arranged to light affect said film simultaneously with said first mentioned light.

1,860,503. ACOUSTIC DIAPHRAGM. NEWMAN H. HOLLAND, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 12, 1926. Serial No. 115,474. 2 Claims. (Cl. 181—32.)



2. An acoustic diaphragm comprising two sheets of metal foil secured together at their peripheries, a screw frictionally engaging the inner center portion of one of said sheets and having a threaded engagement with the other whereby the separation between said sheets may be varied to control the stiffness of said diaphragm.

1,860,504. DYNAMIC BRAKE FOR AUTOMOBILES. HENRY D. JAMES, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 16, 1928. Serial No. 270,264. 4 Claims. (Cl. 192—13.)



1. In a self-propelled vehicle having an engine, a clutch lever, a brake pedal, means for electro-dynamically braking the engine upon actuation of the brake pedal when the clutch lever is in one position, and means for preventing electro-dynamic braking when the clutch lever is in a different position.

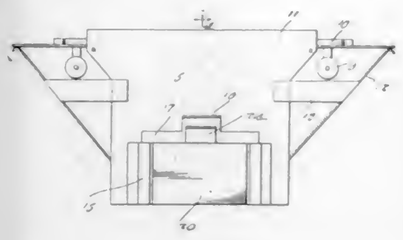
1,860,505. PREPARATION OF SURFACES FOR COATING. ELMER M. JONES, Detroit, Mich., assignor to Parker Rust-Proof Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 2, 1928. Serial No. 316,883. 9 Claims. (Cl. 204—1.)

1. The method which consists in electrolytically depositing a coating of iron upon the surface of an article and treating the iron thus deposited with a solution of phosphates until a coating of insoluble phosphates is formed upon the surface of the article.

1,860,506. NONSTICKY FLAME-PROOFED ELECTRICAL CONDUIT, ETC. JOSEPH A. KENNEDY, Pawtucket, R. I., assignor, by mesne assignments, to Anaconda Wire and Cable Company, a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,596. 10 Claims. (Cl. 247—39.)

1. A flexible insulated electrical conduit, insulated electrical conductor, or the like, enveloped by a non-bituminous coating of material which becomes fluid and sticky with heat, and an outer enveloping coating of dry nonsticky material having the property of remaining in that condition when the conduit or conductor is heated to a temperature sufficient to render the first named coating fluid and sticky.

1,860,507. ANIMAL TRAP. ANDREW LANG, Mobridge, S. Dak. Filed Aug. 3, 1928. Serial No. 297,305. 1 Claim. (Cl. 43—69.)

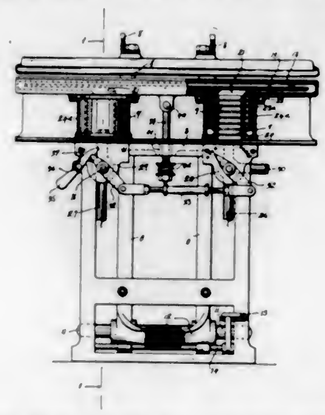


A trap of the class described comprising a casing having an open top with its sides extending above the top and its ends having inwardly extending parts, a shaft extending through the outer portion of each of said parts and supported by the sides of the trap, a pair of platforms supported by said shaft and extending between the extended parts of the sides with their outer ends projecting beyond the ends of the trap, weights suspended from said outer ends and an upwardly and outwardly extending member at each end of the trap, the upper ends of said members forming rests for the outer ends of the platform for limiting the downward movement of said outer ends and for normally holding the platforms in horizontal position.

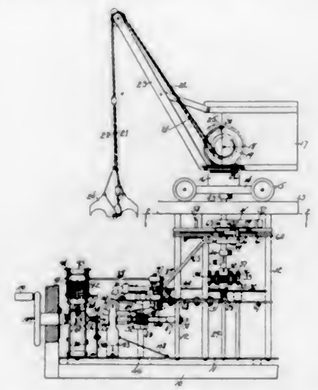
1,860,508. PRESS. JAMES CAMROD LEDBETTER, New York, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Oct. 15, 1928. Serial No. 312,502. 11 Claims. (Cl. 68—9.)

1. In a press, cooperating jaws, one of the jaws being provided with a fluid receiving chamber, and a combination motor means and flexible conduit connected to the last named jaw to move the jaw, a fluid connection between the motor means and the fluid receiving chamber, and valve means to admit fluid under pressure into the motor means.

7. In a press, a frame and cooperating jaws, fluid-pressure actuated bellows mounted on the frame in spaced relation and connected with one of the jaws and being expansible to move said jaw, and stop means placed between the spaced bellows and connected between the frame and that jaw to which the bellows are connected to limit the movement of the jaw.



1,860,509. VENDING MACHINE. LOUIS MAASS, Hartford, Conn. Filed Feb. 24, 1926. Serial No. 90,291. 10 Claims. (Cl. 212—41.)

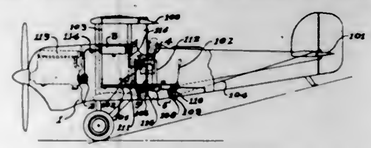


1. In an amusement device a pivotally mounted support, a hoisting shaft mounted in the support and having a drum to receive cables with an attached bucket, a support positioning shaft secured to said support, a cable operating shaft extending through said positioning shaft and connected with said hoisting shaft to rotate it, means for imparting oscillating movement to the cable operating shaft, friction means connecting said operating and positioning shafts for simultaneous movement to position said support, said connection being arranged to permit independent rotation of said hoisting shaft, an arm secured to and projecting from said positioning shaft, and means to engage said arm to limit its swinging movement in opposite directions.

1,860,510. FLUID PRESSURE CONTROL SYSTEM. ERNEST G. MCCAULEY, Dayton, Ohio. Filed Jan. 31, 1928. Serial No. 250,919. 13 Claims. (Cl. 244—29.)

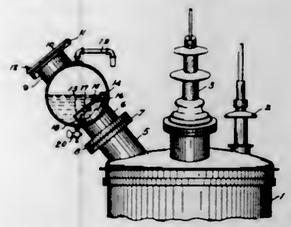
1. In a control system, a source of fluid pressure supply, a member having a movable part, a device to control

said fluid pressure, means for actuating said device so constructed and arranged that said movable part is simultaneously operated by said fluid pressure in synchronous



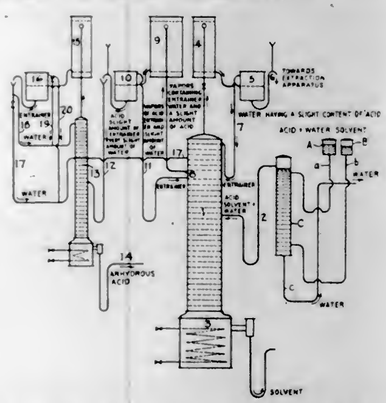
relation to said device and separate means for positively and automatically locking said movable part upon cessation of said device.

1,860,511. TRANSFORMER OR THE LIKE. LOUIS C. NICHOLS, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Original application filed Nov. 19, 1924, Serial No. 750,781. Divided and this application filed Mar. 28, 1929. Serial No. 350,526. 12 Claims. (Cl. 220—85.)



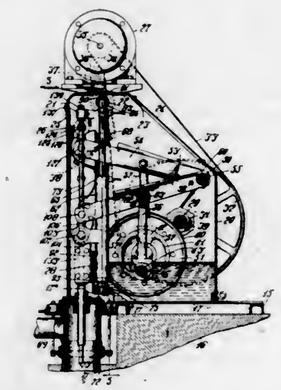
1. The combination with a transformer tank, an oil expansion tank, a pipe of large diameter extending from the top of said transformer tank into said expansion tank and a valve in said expansion tank normally closing the end of said pipe and operating upon a decrease in pressure in said transformer tank to permit oil to enter said transformer tank from said expansion tank.

1,860,512. MANUFACTURE OF ANHYDROUS ACETIC ACID. ELOI RICARD and HENRI MARTIN GUINOT, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed Dec. 31, 1928, Serial No. 329,541, and in France May 19, 1928. 12 Claims. (Cl. 202—42.)



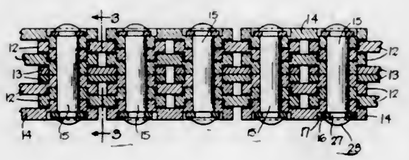
1. A process for continuously concentrating aqueous solutions of acetic acid, wherein the acid is first extracted from the aqueous solution by solvent action and the resulting mixture of acid, solvent and residual water is subjected to fractional distillation in the presence of an entrainer insoluble or sparingly soluble in water and capable of yielding with acetic acid a mixture having a minimum boiling point, the water and acid being obtained as head products and the solvent as a tail product.

1,860,513. PUMPING APPARATUS. JOHN B. SPERRY, Aurora, Ill., assignor to The American Well Works, Aurora, Ill., a Corporation of Illinois. Original application filed Aug. 29, 1925, Serial No. 53,274. Divided and this application filed Nov. 15, 1929. Serial No. 407,361. 9 Claims. (Cl. 74—14.)



1. In a pumping apparatus, the combination with a suitable housing, and driving mechanism mounted therein, of a vertically disposed guide, a cross-head mounted on and embracing said guide to slide vertically thereon, and means operable to adjust the position of said guide and said cross-head.

1,860,514. CHAIN. ANTON PETER STIANSEN, Brooklyn, N. Y. Filed Dec. 2, 1930. Serial No. 499,447. 12 Claims. (Cl. 74—32.)

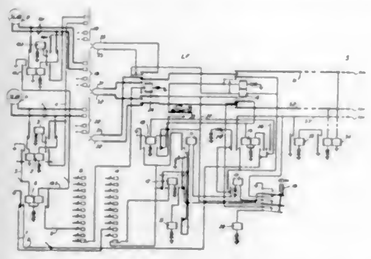


1. A chain comprising a plurality of chain links having lateral protrusions to form bearings interlocked with concentric oppositely disposed cavities formed in adjacent links in like assembled relation outwardly from the center line of the chain, said protrusions extending inwardly on each side of the center line of the chain, and means for holding said links together.

1,860,515. TELEPHONE EXCHANGE SYSTEM. RAY L. STOKELY, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,642. 7 Claims. (Cl. 179—18.)

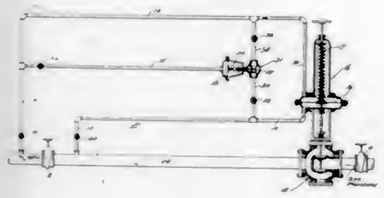
1. The combination in an automatic switch of a bank comprising groups of terminals, a plurality of sets of brushes, means including a commutator for advancing

said brushes in a primary movement to select one of said terminal groups, means including a second commutator and effective at the end of the primary movement



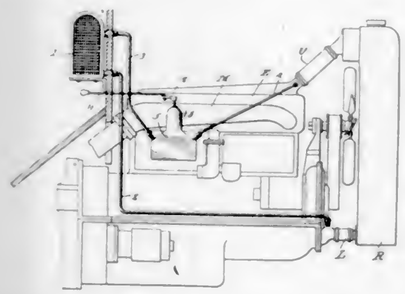
to select one of said brush sets, and means for advancing said brush sets in a secondary movement into engagement with the terminals of the selected group.

1,860,516. FLUID FLOW CONTROL SYSTEM. JOHN V. THOMAS, Pasadena, and BEN DOUGLASS BALTHIS, Los Angeles, Calif. Filed May 10, 1927. Serial No. 190,173. Renewed Apr. 4, 1932. 14 Claims. (Cl. 137—78.)



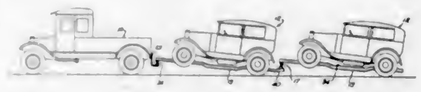
1. The method of controllably feeding a fluid against a varying back pressure, that includes primarily controlling and varying the feed pressure to maintain an even flow, by increasing the feed pressure as the back pressure increases, and vice versa, and secondarily controlling and varying the feed pressure in accordance with the variations of back pressure.

1,860,517. HEATER FOR AUTOMOBILES. WILLIAM J. WADE, Fort Madison, Iowa. Filed Apr. 6, 1931. Serial No. 528,161. 1 Claim. (Cl. 257—241.)



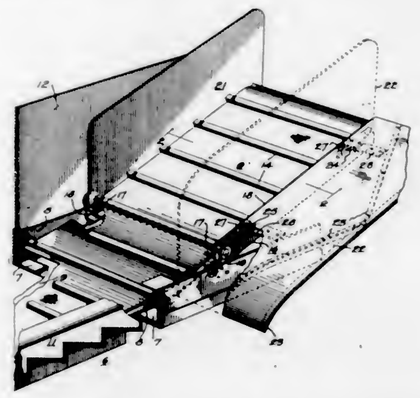
A superheater for the water of the cooling system of a vehicle engine, including a casing having a heating chamber, a neck opening into the chamber for attachment to and communication with the exhaust manifold of the engine, a butterfly valve in and normally projecting beyond the neck, means for actuating the valve to control the flow of hot gases through the neck into the heating chamber, said valve when in normal or full open position constituting means for deflecting hot gases into the neck, and a water jacket extending partly around and integral with the casing and having openings at opposite ends thereof for respectively receiving water from and delivering it to said cooling system.

1,860,518. APPARATUS FOR TRANSPORTING AUTOMOBILES. CHANDLER WELLS, Buffalo, N. Y. Filed May 18, 1931. Serial No. 538,343. 5 Claims. (Cl. 280—33.1.)



5. A tow frame construction comprising a series of rigid frames for supporting vehicles to be towed, detachable pivotal connections for securing the front end of one frame to the rear end of an adjacent frame, said connections also being adapted to secure any of the frames to a towing vehicle, and means for rigidly securing the vehicles to be towed upon the frames with their rear wheels only contacting the roadway.

1,860,519. HARVESTER. ELMER E. WICKERSHAM, San Leandro, Calif., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Nov. 8, 1927. Serial No. 231,975. Renewed June 21, 1930. 3 Claims. (Cl. 198—204.)



1. In a header, a spout framework, a draper arranged to run on said framework, a sheet metal spout side pivoted on said framework to form a coplanar extension of said draper, the leading edge of said spout side being flared, hinges connecting the spout sides with the framework, and resilient means acting on the hinges to position the spout side.

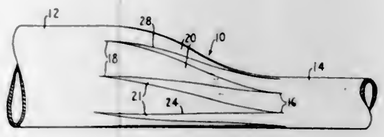
1,860,520. AUTOMOBILE UPHOLSTERY COVER SET. HOWARD E. ZINK, Fremont, Ohio. Filed Oct. 31, 1929. Serial No. 403,851. 2 Claims. (Cl. 45—38.)

1. A covering for the upholstered interior walls of an automobile body, comprising a sheet-like covering, the upper marginal portion of said covering having a sleeve provided therein, rods freely slidable into and from said sleeves, portions of the cover in proximity to portions of said sleeve being cut away, and right-angularly formed fingers having loops formed upon their inner ends snugly engaged with those portions of said rods received in said



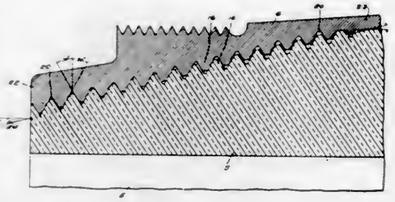
sleeves whereby to effect pivotal mounting of the fingers upon the rods at points adjacent said cut away portions, the outer extremities of the fingers being formed with laterally disposed marginally opening ways therein, adapted to be engaged with anchoring means upon adjacent portions of the automobile body walls.

1,860,521. PIPE JOINT AND METHOD OF MAKING IT. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 14, 1931. Serial No. 508,658. 13 Claims. (Cl. 29—148.2.)



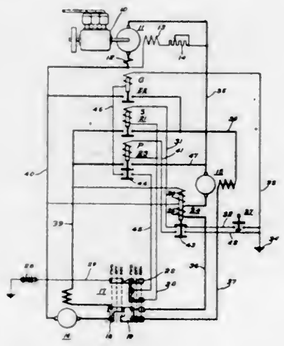
8. A method of connecting a pair of alined pipe or tube sections of unequal diameters, the axes of which are substantially non-intersecting and are disposed in substantially the same plane, which includes: forming an end edge of each section with a plurality of alternate indentations and projections, shaping the projections of each section to interlock with the indentations of the associated sections, arranging the projections in interlocking relation to form a seam consisting of diagonals crossing in alternately angularly disposed relation a plane through said sections at the interlocked projections, and consecutively tacking the sections at intermediate points of pairs of diagonals diametrically opposed and of opposite angular disposition.

1,860,522. PROPELLER. EDWIN E. ARNOLD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 27, 1930. Serial No. 505,064. 10 Claims. (Cl. 170—173.)



1. In a coupling between materials of different moduli of elasticity, means for substantially equally stressing the connections between said coupling materials comprising threads of even pitch so arranged that any horizontal cross section of the coupling will be an axially symmetrical figure.

1,860,523. AUTOMATIC SERIES-PARALLEL CONTROL FOR SELF-PROPELLED VEHICLES. BASCUM O. AUSTIN and NORMAN H. WILLBY, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 31, 1929. Serial No. 382,572. 8 Claims. (Cl. 290—14.)

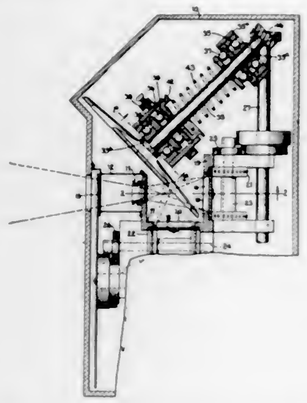


1. In a gas-electric power system for vehicles, in combination, an internal-combustion engine, a generator driven by the engine, a plurality of motors disposed to be connected to the generator, means operable to connect the motors in series and in parallel-circuit relation, and means differentially responsive to the generator current and voltage for controlling the operation of said connecting means to establish predetermined motor connections.

1,860,524. MANUFACTURE OF LEAD AND ZINC ALLOYS. JESSE OATMAN BETTERTON, Omaha, Nebr., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1930. Serial No. 492,640. 12 Claims. (Cl. 75—1.)

1. The process of forming metal alloys having relatively low melting points which comprises forming a bath of one of said metals with a relatively low melting point, applying to said bath a low melting point slag containing a chloride of the other of said metals and introducing to said bath a reagent capable of reacting with said chloride for releasing said other metal and causing the same to enter said bath and form an alloy therewith.

1,860,525. COLOR PHOTOGRAPHY. PERCY D. BREWSTER, East Orange, N. J. Original application filed Mar. 14, 1921, Serial No. 452,160. Divided and this application filed Mar. 27, 1930. Serial No. 439,406. 12 Claims. (Cl. 88—16.4.)



1. A camera for color photography, having in combination, optical means to receive light rays and project the same, rotatable light-splitting mirror arranged in the path of the rays to reflect and pass the same alternately, means for shifting the mirror axially of its axis of rotation to shift laterally the image produced by the reflected rays, and mirror-displacing means for shifting the axis of the mirror radially to vary the angles of incidence and reflection of the reflected rays.

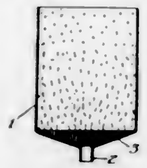
1,860,526. PATTERN MECHANISM FOR CROCHET KNITTING MACHINES. SAMPSON BROADWIN, Brooklyn, N. Y. Filed Oct. 25, 1930. Serial No. 491,144. 1 Claim. (Cl. 66—156.)



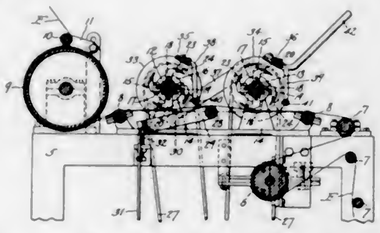
In a pattern mechanism for crochet knitting machines, a link bar having a plurality of perforated lugs, each said lug being provided with a slot and a recess in said bar under each said lug, a spring member for each said recess and a pattern pin for each said perforation, said pin having a cross pin adapted to rest on the face of a lug and a short pin adapted to pass through the slot in each said perforation and to be engaged by the spring in the adjacent recess.

1,860,527. PROCESSING OF SLUDGES AND THE LIKE. CHARLES S. BRYAN, Rumford, R. I., assignor to Rumford Chemical Works, Rumford, R. I., a Corporation of Rhode Island. Filed Apr. 15, 1931. Serial No. 530,219. 5 Claims. (Cl. 210—151.)

1. In the processing of sludges, slurries or the like, of finely divided or crystalline material such as precipitates, those steps consisting in withdrawing the liquor to effect a light, non-compacted deposit of the material having a plastic surface, in maintaining a plasticizing movement of the surface of the deposit while maintaining that portion of the deposit remote from the surface undisturbed, and in washing the deposit while continuing the surface movement thereof and while maintaining the surface of the deposit plastic.

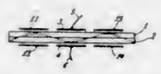


1,860,528. EMBROIDERY THREAD CUTTING MACHINE. FREDERICK BUESSER, Guttenberg, N. J. Filed Aug. 27, 1930. Serial No. 478,021. 6 Claims. (Cl. 26—7.)



1. In a machine of the kind described, horizontally spaced groups of rotary thread cutters, means for supporting embroidered fabric for movement beneath the thread cutters and in a position whereby the individual embroidery thread will be engaged and cut, said means including a fabric supporting member between the groups of cutters, means for rotating said groups of thread cutters in the direction of movement of the fabric, and manually operable means associated with each group of thread cutters for displacing selected parts of the fabric radially from the rotary cutters while the fabric remains in contact with said supporting member.

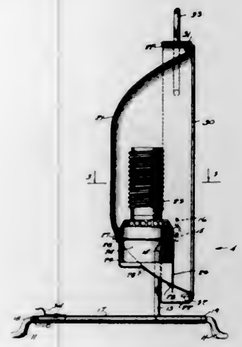
1,860,529. ELECTROMECHANICAL SYSTEM. WALTER G. CADY, Middletown, Conn., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Aug. 1, 1925, Serial No. 47,483. Divided and this application filed Apr. 12, 1930. Serial No. 443,685. 5 Claims. (Cl. 171—327.)



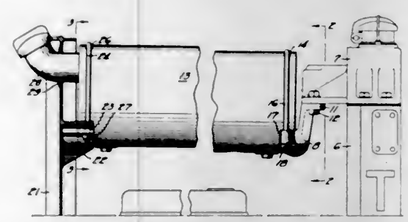
1. An electro-mechanical vibrator comprising two vibrator elements secured together to vibrate as a unit, the elements being adapted to become deformed oppositely under the action of an electric field, and a plurality of pairs of coatings applied to the vibrator and adapted to be energized with alternating current.

1,860,530. ELECTRIC HEATER. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Aug. 8, 1929. Serial No. 384,355. 1 Claim. (Cl. 219—34.)

In an electric heater, a dish-shaped stamping, a sign receptacle secured thereto by a fitter in a position to receive a glow heater, a glow heater in the sign receptacle, a guard over the face of the stamping, a base to which the stamping is pivotally secured to swing about a horizontal axis above the base, and a bail carried by the stamping in a position to engage the base and support the stamping in a horizontal position.



1,860,531. TANK SUPPORT ON MOTOR VEHICLES. HARMON S. EBERHARD, San Leandro, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed May 8, 1929. Serial No. 361,426. 2 Claims. (Cl. 280—5.)



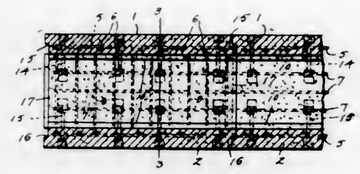
1. A tank support comprising a radiator, a pair of detachable brackets depending from said radiator, a dash, a bracket integral with said dash, a tank having circumferential grooves cradled in said brackets, and rods seated in said grooves and secured to said brackets for constraining said tank and said brackets against relative movement.

1,860,532. NONCHALKING COATING COMPOSITION. GEORGE R. ENSMINGER, New Brunswick, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 15, 1930. Serial No. 502,622. 11 Claims. (Cl. 134—79.)

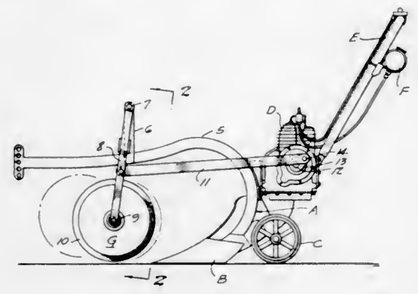
1. A coating composition of improved resistance to chalking containing a cellulose compound and a pigment comprising leaded zinc oxide.

1,860,533. CULVERT. VICTOR B. FREDENHAGEN, Belleville, Kans. Filed Dec. 5, 1930. Serial No. 500,374. 1 Claim. (Cl. 72—52.)

A box culvert composed of a plurality of sections, each comprising corresponding flat re-inforced top and bottom slabs and corresponding re-inforced side slabs, diagonally disposed fastening bolts or pins, arranged at suitable intervals along the barrel of the culvert, to rigidly secure the top, bottom and side slabs together said fastening bolts or pins extending through the side edges of the top and bottom slabs and the adjacent top and bottom edges of the side slabs, offset supporting ribs for the side slabs and offset horizontal and vertical overlapping flanges at the adjacent ends of the culvert sections.

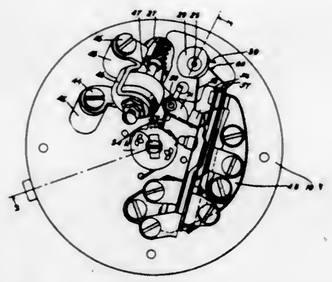


1,860,534. POWER ACTUATED FURROW SLICER. HAROLD H. GLASIER, Los Angeles, Calif. Filed Mar. 9, 1931. Serial No. 521,036. 5 Claims. (Cl. 97—34.)



1. An agricultural tool comprising a plow share, a freely rotatable coulter disk mounted in advance of the plow share to be bodily reciprocated to and from the latter and thereby initially slice the ground and mechanism to reciprocate the coulter.

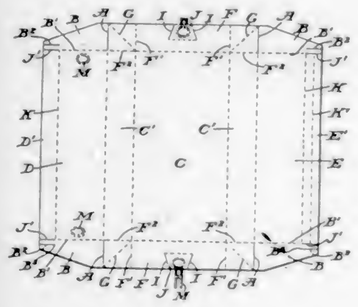
1,860,535. IMPULSE TRANSMITTER. HAROLD W. GOFF, Great Neck, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 9, 1931. Serial No. 543,071. 11 Claims. (Cl. 179—90.)



1. In an impulse transmitter, a pair of normally short-circuited pulsing springs, a pulsing cam for successively

actuating said pulsing springs, means for actuating said pulsing cam and means actuated after the first interruption of said pulsing springs by said cam for removing the short circuit from said pulsing springs.

1,860,536. CARTON. HERMAN L. GREVE, Hollis, N. Y., assignor to International Mailing Tube and Wrapper Company, Brooklyn, N. Y. Filed Feb. 21, 1929. Serial No. 341,595. 2 Claims. (Cl. 229—31.)



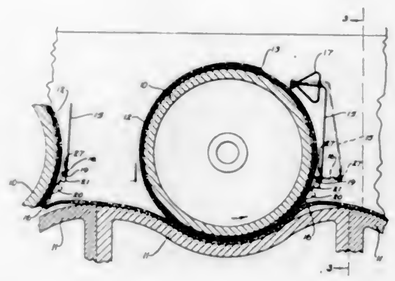
1. A carton made from a single sheet of fibrous material having end portions each of which is provided with a tab formed from a part thereof and extending from a point at a distance from the bottom thereof to its upper edge, side portions having cover portions connected thereto, and connected together by an interfolding joint end flap portions carried by the cover portions and extending under said tabs, said end flap portions being slitted for interfitting assembly to limit movement of the end flap portions toward each other, and means for connecting said tabs to a cover portion.

1,860,537. BRAKE FOR TRUCK TRAILERS. WILLIAM S. GURTON, JOSEPH PLINT, and HERMAN NYBERG, Kitchener, Ontario, Canada, assignors to Dominion Truck Equipment Co. Limited, Kitchener, Ontario, Canada. Filed Mar. 25, 1929. Serial No. 349,669. 6 Claims. (Cl. 188—3.)



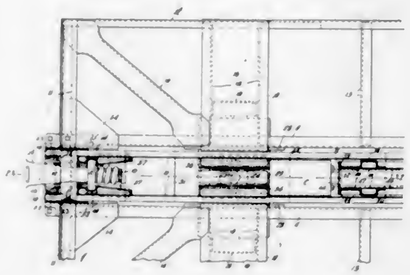
1. In a brake for truck trailers, the combination with a truck and a trailer pivotally connected thereto, of brakes on the trailer, a hydraulic cylinder mounted on the trailer connected with said brakes, said cylinder having an operating lever, mechanical means operating through the pivotal connection between said trailer and truck for actuating the operating lever of said hydraulic cylinder from the truck, and manually operable means mounted on said trailer and operatively connected with said operating lever.

1,860,538. STRIPPER FINGER FOR FLATWORK IRONERS. CHARLES EDWIN HAMILTON, Sr., Hollywood, Calif., assignor to Edwin Lane, Percy Mendelson and Charles Mendelson, New York, N. Y. Filed Apr. 22, 1930. Serial No. 446,208. 6 Claims. (Cl. 68—9.)



1. A member for stripping material from a roll, comprising a narrow resilient finger having means at its inner end enabling it to be rigidly secured to a support, and a tip element hingedly attached to the free outer end of said finger and adapted to bear upon the surface of the roll.

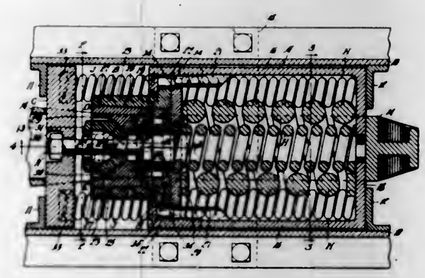
1,860,539. CAR CONSTRUCTION. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 29, 1927. Serial No. 243,288. 26 Claims. (Cl. 213—8.)



22. In a railway draft rigging, the combination with center sills and bolsters at opposite ends of the car rigid with said sills; of a cushioning device adjacent the inner side of one of said bolsters; a floating column load-transmitting element between said cushioning device and the other bolster; a coupler at each end of the car; and means operatively connected to the coupler at the end of the car at which the last named bolster is located for transmitting buffing shocks to the corresponding end of said floating column element.

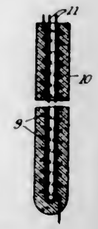
1,860,540. FRICTION SHOCK ABSORBING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 1, 1929. Serial No. 382,771. 4 Claims. (Cl. 213—24.)

4. In a friction shock absorbing mechanism, the combination with relatively movable front and rear followers; of a friction shell movable with respect to said rear follower to an extent less than the full compression stroke of the mechanism, said shell having spring abutment flanges at the inner end thereof; means normally spaced from and actuated by the front follower having frictional engagement with the shell and movable relatively thereto lengthwise of the mechanism; spring resistance means having the rear end thereof buttressed against said rear



follower and the front end buttressed against the friction shell and friction shoes, said spring opposing relative movement of the friction shell and said rear follower, and movement of the friction shoes with respect to the shell; and an additional spring resistance means interposed between and buttressed at opposite ends against said abutment flanges and front follower, respectively, and opposing relative approach of the front follower and frictin shell toward each other lengthwise of the mechanism.

1,860,541. GAS ANALYSIS APPARATUS. WILLIAM O. HERLER, Newark, N. J., assignor to Charles Engelhard, Inc., Newark, N. J., a Corporation of New Jersey. Filed Nov. 8, 1929. Serial No. 405,586. 4 Claims. (Cl. 73—51.)

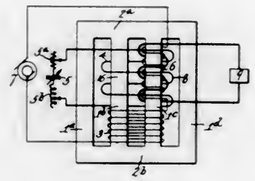


4. In a gas analysis apparatus of the thermal conductivity type, a metal block having a chamber with inlet and outlet passages, a Wheatstone bridge circuit, a coiled resistance element mounted in the chamber and forming a branch of the Wheatstone bridge, and a heating element mounted in the chamber and passing through the coils of and extending the length of the resistance element.

1,860,542. MANUFACTURE OF ACETIC ANHYDRIDE. BERNARD HERSTEIN, Brooklyn, N. Y., assignor to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed May 28, 1930. Serial No. 456,797. 5 Claims. (Cl. 260—123.)

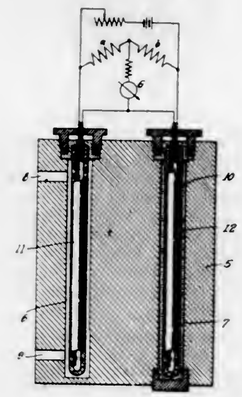
1. A process for the preparation of the anhydride of a lower fatty acid from a salt of the corresponding acid, which comprises reacting the salt with sulfuryl chlorid or its components in liquid sulfur dioxid as the reaction medium.

1,860,543. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Sept. 8, 1930. Serial No. 480,286. 17 Claims. (Cl. 171—119.)



1. Alternating current controlling apparatus comprising a core, an alternating current exciting winding on said core, a second alternating current exciting winding on another portion of said core acting in opposition to said first-named winding, a third winding on said core, and means for broadly tuning the circuit of said third winding.

1,860,544. GAS ANALYSIS APPARATUS. RICHARD H. KRUEGER and JOHN HENRY OETJEN, Newark, N. J., assignors to Charles Engelhard Inc., Newark, N. J., a Corporation of New Jersey. Filed July 26, 1930. Serial No. 470,787. 4 Claims. (Cl. 73—51.)

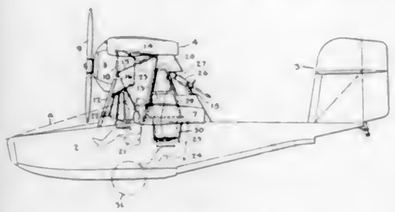


4. A gas analysis apparatus comprising a standard cell, an analysis cell, a Wheatstone bridge, and a resistance heating element in each cell forming branches of the Wheatstone bridge, thereby characterized, that a non-gaseous substance having thermal conductivity properties equivalent to those of a standard gas is used as the standard or reference material in the standard cell.

1,860,545. AIRPLANE. GROVER LOENING, New York, N. Y., assignor to Grover Loening Aircraft Company, Inc., Garden City, Long Island, N. Y., a Corporation of New York. Filed Dec. 27, 1930. Serial No. 505,023. 4 Claims. (Cl. 244—14.)

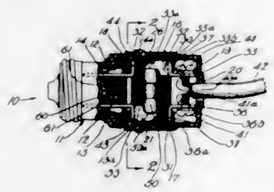
1. A machine of the flying-boat type having an underslung hull and an overhead wing center-section and engine support, said machine having a separately fastened structure serving totally for underslung support of the hull and overhead support of the center-section, an enclosure applied to said structure and extending from the

hull to the center-section to form a short streamline cabin turret, there being a pilot's place in the forward part of the cabin, a place for another occupant behind the pilot's place, and a machine gun mount accommodated within



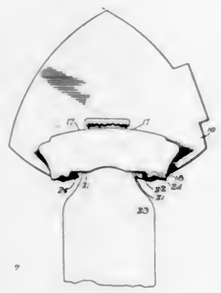
the after part of the turret, together with sufficient room for said occupant to operate the machine gun, and there being an opening in the back of the enclosure through which the gun can be fired.

1,860,546. ELECTRIC FITTING. LEON B. MANSON, Corona, N. Y., assignor to Noma Electric Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 6, 1930. Serial No. 426,239. 10 Claims. (Cl. 200—115.5.)



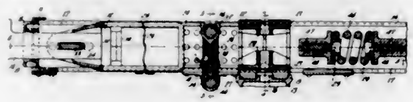
1. An electric fitting comprising a hollow housing made of insulating material and having an internally screw threaded portion, a member made of insulating material and of substantially prismatic shape and having partial screw threads on opposite ends thereof adapted to cooperate with said screw threaded portion for mounting said member within said housing and current carrying parts for said fitting mounted on said member, whereby all of the current carrying parts may be removed as a unit from said housing.

1,860,547. PLACARD. HARRY V. MARSH, Chicago, Ill. Filed Jan. 18, 1929. Serial No. 333,338. 7 Claims. (Cl. 40—4.)



1. A placard comprising a display body, a supporting member having a top section adapted to be horizontally disposed and taken from the material of said display body, a second display section separate from and parallel to said body display section, said second display section being of greater width than the supporting members of the device, and a bottom supporting member depending from said second display section and parallel to said top section, said body engaging said bottom member to interlock therewith, and to maintain said device in an assembled relation.

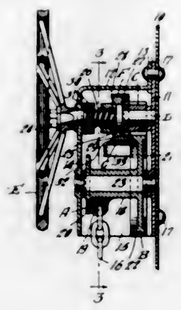
1,860,548. CAR CONSTRUCTION. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 29, 1929. Serial No. 366,782. 10 Claims. (Cl. 105—454.)



1. In car construction, the combination with a pair of spaced, longitudinally disposed sills extending from end to end of the car, said sills being fixed to the truck structure of the car; of coupler means operatively connected to said sills; a pair of spaced sills fixed to the superstructure of the car and forming the entire support for said superstructure, said sills extending from end to end of the car, said first named and second named sills being relatively movable with respect to each other lengthwise of the car; means engaging with said first and second named sills only for supporting said second named sills on said first named sills; and cushioning means opposing movement of the relatively movable sills.

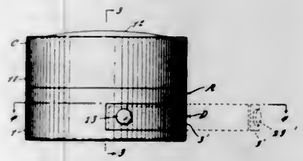
2. In car construction, the combination with sills extending lengthwise of the car and supported and fixed to the truck structure of the car, said sills having coupler means connected thereto; of additional sills fixed to the superstructure of the car and forming the entire support for the same, said last named sills extending from end to end of the car and having movement lengthwise with respect to said first named sills and being supported on the latter; and cushioning means opposing relative movement of said first named and additional sills.

1,860,549. HAND BRAKE. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1930. Serial No. 423,573. 4 Claims. (Cl. 74—112.)



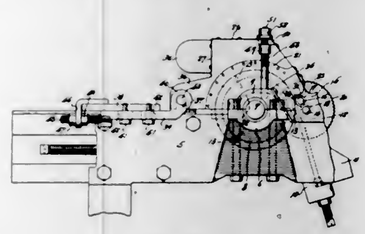
2. In a hand brake mechanism, the combination with a rotary chain winding drum; of a driving gear fixed thereto for rotation in unison therewith; a pinion meshing with said gear; a rotary operating shaft rotatable in reverse directions; cooperating clutch means for connecting said drive shaft and pinion, said clutch means including a member movable on said shaft and having screw threaded connection therewith, whereby the clutch member is advanced on said shaft and engaged with the other clutch member when said shaft is rotated in one direction and withdrawn therefrom when the shaft is rotated in a reverse direction; and a locking dog for preventing rotation of said movable clutch member in a direction corresponding to said reverse direction of rotation of said shaft.

1,860,550. DUPLEX FACE POWDER BOX. GUSTAVUS A. PFEIFFER, New York, N. Y. Filed Aug. 23, 1929. Serial No. 387,827. 5 Claims. (Cl. 229—15.)



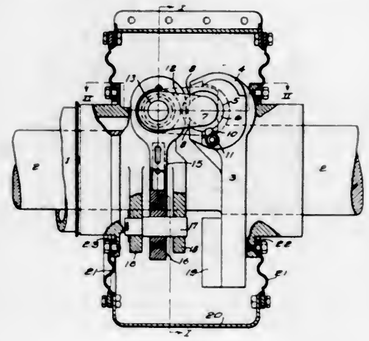
1. In a duplex face powder box, the combination with an inner cylindrical cardboard wall forming the lateral wall of an upper compartment, of a base portion secured to said inner cylindrical wall to form the bottom of said upper compartment, an outer cylindrical cardboard wall secured to said inner cylindrical cardboard wall and extending down below the bottom of said upper compartment, a second base portion secured to the lower end of said outer cylindrical cardboard wall, the outer cylindrical cardboard wall being spaced at its upper edge from the upper edge of said cylindrical cardboard wall to form a cylindrical recess, a cover for the upper compartment, said cover having a cylindrical wall fitting into said cylindrical recess when in closed position, there being an incision formed in the outer cylindrical wall below the base portion of said upper compartment to form an outwardly swinging semi-cylindrical flap, a portion of said flap overlapping said inner cylindrical wall to form a limiting stop therefor, and a cylindrical drawer secured to said flap movable into said lower compartment in closed position, the ends of the incision being spaced apart a distance corresponding to the diameter of the drawer.

1,860,551. FUR CUTTING MACHINE. ROBERT H. PLASS, Upper Montclair, N. J., assignor to The Chapal-Donner Corporation, Newark, N. J., a Corporation of New Jersey. Filed June 20, 1931. Serial No. 545,793. 8 Claims. (Cl. 19—2.)



1. In a fur cutting machine, including a rotatable cutting drum, cooperating bed-knife and pelt feed means; an enclosing hood structure for said cutting drum having a front opening contiguous to said bed-knife and feed means to give access to a pelt fed to the bed-knife by said feed means, means providing an air escape opening in advance of said front opening, and means to deflect air impelled toward said front opening by said cutting drum through said escape opening.

1,860,552. COUPLING FOR SHAFTS. HERMANN RUSHY, Stocksbridge, near Sheffield, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1929. Serial No. 389,398, and in Great Britain Sept. 21, 1928. 2 Claims. (Cl. 64—97.)



1. In a device for coupling rotatable elements, in combination, a shaft carried by one of the elements and disposed in a plane transverse thereto, a plurality of bearings on said element for journaling the shaft, a pair of crank arms on the shaft disposed with a bearing between the arms of each pair, a plurality of pairs of crank arms carried by the other element to be coupled, spherical bearing members carried by, and disposed between, the arms of each pair of crank arms, and link members for connecting the spherical bearing portions and carried by the elements to be coupled.

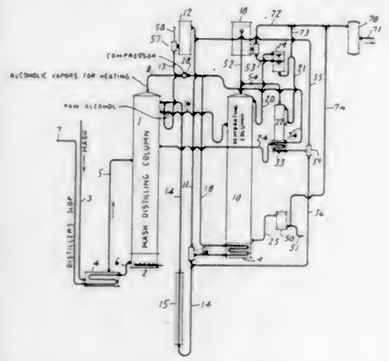
1,860,553. PROCESS FOR THE EXTRACTION IN THE ANHYDROUS STATE OF FATTY ACIDS CONTAINED IN DILUTE AQUEOUS SOLUTIONS. ELOI RICARD and HENRI MARTIN EMMANUEL GUINOT, Melle, France, assignors, by mesne assignments, to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed June 9, 1927, Serial No. 197,763, and in Belgium July 1, 1926. 3 Claims. (Cl. 202—42.)

1. In a process for the removal in the anhydrous state of the lower fatty acids contained in dilute aqueous solutions, the steps which consist in the exhaustion of such solutions with an acetic ester, and distilling the resulting liquids which contain the acid in solution in the acetic ester and a certain amount of water, having present sufficient of the acetic ester to remove the water which is distilled over in the first place, owing to the formation of a binary mixture of water and the ester which has a minimum boiling point.

1,860,554. MANUFACTURE OF ABSOLUTE ALCOHOL. ELOI RICARD, PAUL SAVARIT, and HENRI MARTIN GUINOT, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Original application filed Mar. 28 1929, Serial No. 350,809, and in France Apr. 3, 1928. Divided and this application filed Oct. 24, 1930. Serial No. 490,840. 2 Claims. (Cl. 202—72.)

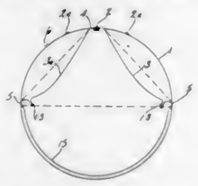
1. A continuous process for the manufacture of absolute alcohol from dilute aqueous alcohol, which comprises distilling the dilute aqueous alcohol in one apparatus, and dehydrating the alcohol thus obtained in another apparatus, and heating the dehydration apparatus by circulating alcoholic vapors from the first distilling apparatus so that they condense in indirect heat-exchange relation with the contents of the dehydration

apparatus and return to the first distilling apparatus, which process is further characterized in that the dehydration apparatus is maintained at least in part un-



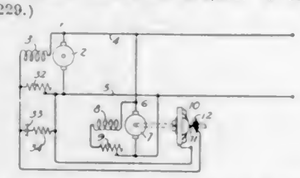
der sub-atmospheric pressure in order to increase the effect of the alcoholic vapors for heating the dehydration apparatus.

1,860,555. AIRSHIP. ARTHUR G. SCHLOSSER, Detroit, Mich., assignor to Aircraft Development Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 11, 1930. Serial No. 467,190. 12 Claims. (Cl. 244—3.)



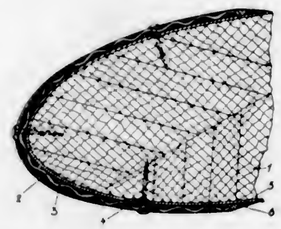
1. In an airship, a buoyant gas compartment having a floating limp curtain spanning a minor sector of the inner surface of the upper half of the gas envelope and sealed thereto around its edges, with an area equal at least to the area of the envelope surface enclosed, and having a one-way valve automatically closing to prevent outward passage of gas or air through the curtain.

1,860,556. REGULATOR. JOHN H. SOLE, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1929. Serial No. 374,601. 6 Claims. (Cl. 171—229.)



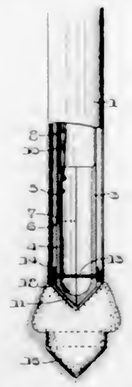
1. In a regulator system, a generator having a regulating field winding, a motor having constant field excitation connected across the terminals of said generator to be operated at a speed depending solely on the generator voltage, a centrifugal governor directly operated by said motor, said governor comprising a vibrating rotating contact member and a stationary contact member both aligned with the axis of rotation of the governor, the rotating contact member being mounted on a spring member having the ends thereof fixedly secured to the governor at points symmetrical with respect to the axis of rotation of the governor, weight members secured to the spring member at opposite sides of the axis of rotation of the governor, the rate of vibration and the periods of engagement between the contact members depending on the angular speed of operation of the governor, and means comprising a resistance element in the field winding circuit controlled directly by said contact members for governing said field winding to maintain the generator voltage constant.

1,860,557. PROPELLER FOR AIRCRAFT. HEINRICH SUKOHL, Berlin-Waldmannslust, Germany, assignor to the Firm Gustav Schwarz G. m. b. H., Berlin-Waldmannslust, Germany. Filed Sept. 8, 1931, Serial No. 561,725, and in Germany Sept. 12, 1930. 8 Claims. (Cl. 170—159.)



1. A non-metallic propeller blade, and a reinforcing strip applied to the leading edge of said blade and having a solid portion covering a part of the leading edge of the blade and a pliable marginal portion covering the marginal portion of one of the side faces.

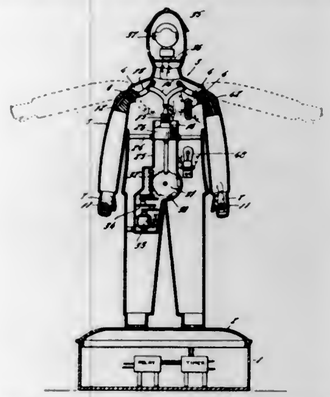
1,860,558. MOLDING DEVICE FOR CONCRETE PILES. RENZO TADA, Toyotama Gun, Tokyo Fu, Japan, assignor to Toyo Compressol Kabushiki Kaisha (The Oriental Compressol Co. Ltd.), Tokyo, Japan, a Corporation of Japan. Filed Oct. 7, 1929. Serial No. 398,070. 10 Claims. (Cl. 61—57.)



1. A molding device for concrete piles or the like, comprising a hollow tamping rod adapted to receive a charge of concrete, said hollow rod having its lower end divided longitudinally providing a movable section at the lower end thereof adapted to be operated to release the concrete into the pile cavity.

1,860,559. SIGNAL. FRANK M. VARNEY, Roanoke, Va. Filed Jan. 26, 1929. Serial No. 335,308. 1 Claim. (Cl. 177—329.)

In a signal, a supporting body, swinging arms pivoted to the body, an electric motor in said body, a guide in said body, a reciprocating operating member mounted in the guide, means operatively connecting the motor with the reciprocating operating member, whereby the member will be operated when the motor is energized, a head having a



pin and slot connection with the arms extending toward the reciprocating operating member, and a releasable electromagnetic latch carried by the head engaging the reciprocating member.

1,860,560. PRODUCTION OF THE ACID SULPHATE AND THE NORMAL SULPHATE OF ALPHA-NAPHTHYLAMINE. THOMAS WARBURTON, Manchester, England. Filed June 1, 1929, Serial No. 367,839, and in Great Britain June 19, 1928. 4 Claims. (Cl. 260—130.5.)

1. Method of preparing sulphate of alpha-naphthylamine which consists in placing a given weight of alpha-naphthylamine in a mixing machine, adding thereto the approximate molecular proportion of sulphuric acid of a strength not exceeding 100% H_2SO_4 and continuously mixing the alpha-naphthylamine as the sulphuric acid is being added thereto without drying and without the addition of external heat.

1,860,561. HANDGRIP. EMERSON ROBERT WARNER, Meriden, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed July 26, 1930. Serial No. 470,901. 1 Claim. (Cl. 145—61.)



A hand grip of the character described, comprising a body member, a binding coat applied thereto, granular material held in place by said binder, and a final exterior coating of binder for further anchoring the granular material in place and which sheathes the asperities of the granular material and increases the size of the projections and recesses due thereto and so provides a very irregular gripping surface with angles or edges.

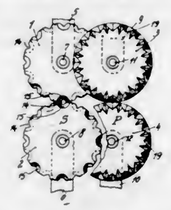
1,860,562. PROCESS OF BREAKING PETROLEUM EMULSIONS. TRUMAN B. WAYNE, Houston, Tex. Filed May 21, 1931. Serial No. 539,126. 13 Claims. (Cl. 196—4.)

10. The process of breaking water-in-oil emulsions which comprises adding thereto a highly colloidal condensation product of dialkyl-naphthalene disulfonic acid and an aromatic amine characterized by having its NH_2 or NH group attached directly to the aromatic nucleus.

1,860,563. METHOD OF RESOLVING PETROLEUM EMULSIONS. TRUMAN B. WAYNE, Houston, Tex. Filed May 21, 1931. Serial No. 539,127. 38 Claims. (Cl. 196—4.)

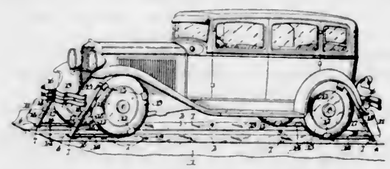
34. The process of resolving water-in-oil emulsions which comprises adding thereto the reaction product of trimethylamine and sulfonated castor oil.

1,860,564. TOOL FOR MANUFACTURING WIRE-TACKS AND NAILS. JAKOB WIKSCHTRÖM, Dusseldorf, Germany. Filed Aug. 18, 1930, Serial No. 475,999, and in Germany Sept. 11, 1929. 2 Claims. (Cl. 10—49.)



1. In a machine for making wire-tacks and nails, a pair of circular chucking and swaging dies, a pair of circular point cutters, means for moving the dies and the cutters in each pair alternately into and out of relative cooperating position, and means for presenting a blank to said cutters after it has been released by said chucking and swaging dies, said chucking and swaging dies having head-forming cavities and said cutters having recesses with cutting edges formed between them, said cavities and recesses being arranged alternately in opposite positions with respect to the end faces of said dies and said cutters.

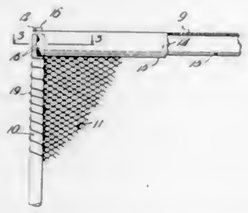
1,860,565. SECURING DEVICE FOR VEHICLES. ALOYSIUS NICHOLAS BERGER and PAUL SEEL, Altoona, Pa. Filed Nov. 21, 1931. Serial No. 576,502. 6 Claims. (Cl. 105—368.)



1. A securing device for use in transporting vehicles comprising tread plates fastened to the platform of a carrier, anchorage members mounted on said tread plates, said anchorage members dropping into depressions in said tread plates when not in use, and wheel securing

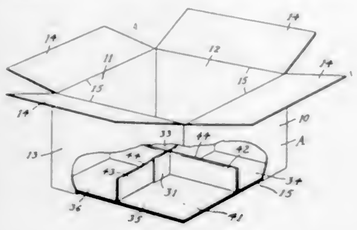
members adapted to pass around front and rear wheels of the vehicle to be transported and to extend in opposite directions to said anchorage members to effect a wheel block.

1,860,566. FIREPLACE SCREEN. FRANK BERTRAM, Roslindale, Mass. Filed Apr. 2, 1931. Serial No. 527,205. 9 Claims. (Cl. 126—202.)



1. A screen panel comprising a rectangular frame having opposite channel shaped members and rod-like members connected to the ends of the respective channel members, at the corners of the frame, the sides of each channel member having inwardly directed bottom flanges offset with respect to each other for clamping opposite ends of the panel screening therebetween.

1,860,567. SEPARATOR. PAUL F. BOEYE, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a Corporation of Minnesota. Filed Oct. 17, 1929. Serial No. 400,303. 3 Claims. (Cl. 229—15.)

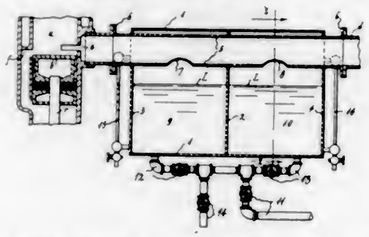


1. A unitary separator for boxes comprising in its ultimate form co-planer base members and upstanding flanges occupying intersecting right angular planes, said separator consisting of a blank scored along three equidistant lines in each of two intersecting zones, said blank being formed with an H-shaped slit, the outer scores in the first zone being in linear continuation of the leg portions of said slit, and the intermediate score traversing the par portion of the slit and being continuous up to said slit, the intermediate score in the second zone being in linear continuation of said bar portion of said slit, and the outer scores in said second zone terminating at their inner ends at the extremities of the leg portions of said slit, the blank being adapted to be doubled upon itself along the scores in the two zones to form the separating flanges, the folds in the first zone being adapted to overlap one another between the ends of the folds in the second zone.

1,860,568. PROCESS FOR MANUFACTURING SHEAR-RESISTING IRON SUCH AS IRON FOR DIE-CASTING NUTS, IRON FOR SCREWS, AND THE LIKE. FRIEDRICH BORGGRÄFE, Weidenau-on-the-Sieg, Germany. Filed July 30, 1929, Serial No. 382,280, and in Germany Aug. 29, 1928. 1 Claim. (Cl. 75—45.)

A process for producing shear-resisting iron containing about 0.25% P; which consists in preparing and melting an initial charge in a cupola type furnace; then adding material such as apatite and vivianite containing phosphorus to the molten charge to an amount equal to the difference between the original and final P content; then transferring the melt into an acid Bessemer; then decarburizing the melt by blowing and finally deoxidizing the decarburized melt by the use of deoxidizing agents.

1,860,569. ENGINE OSCILLATION CONTROLLER. ROLAND B. BOURNE, Hartford, Conn., assignor to The Maxim Silencer Company, Hartford, Conn., a Corporation of Connecticut. Filed May 1, 1929. Serial No. 359,569. 2 Claims. (Cl. 60—32.)

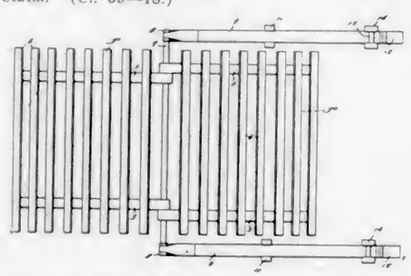


1. A tuned passage for controlling terminal pressure conditions in a gas flow system subject to pressure pulsations, comprising a gas conduit, a water containing chamber having the space above the water acoustically coupled to said conduit as a side branch, and means for varying the water level in said chamber to change the effective acoustic size of said side branch chamber.

1,860,570. MANUFACTURE OF PULP, ETC. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Filed July 2, 1926. Serial No. 120,242. 17 Claims. (Cl. 92—11.)

1. The method of producing wood pulp from wood, which comprises cooking wood in a sodium monosulphite cooking liquor containing sodium thiosulphate, cooking wood in an alkaline cooking liquor comprising sodium sulphide, and recovering sodium compounds from the residual liquor resulting frame each cooking operation and using the same in the formation of the cooking liquor for the other cooking operation.

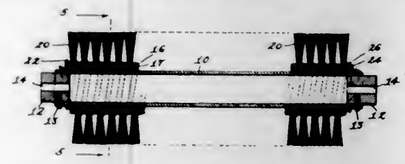
1,860,571. CATTLE GUARD. FRANK BAUER, Ewing, Nebr. Filed Nov. 11, 1931. Serial No. 574,409. 1 Claim. (Cl. 39—18.)



In a cattle guard, a pair of platforms having overlapping portions, a rod extending transversely through the overlapping portion of the platform, hangers pivotally connected to said rod and extending upwardly therefrom, rockers having pivotal connection with the upper portions of said hangers, weights mounted on the outer portions

of said rockers, pairs of standards supporting the rockers for rocking motion intermediate the ends thereof, and pairs of guide plates for guiding the rockers in vertical motion and having means to limit the rocking motion of the same.

1,860,572. BRUSH. GEORGE C. CLEAVES, Wollaston, Mass., assignor to Industrial Brush Company, Quincy, Mass., a Corporation of Massachusetts. Filed Feb. 4, 1930. Serial No. 425,686. 9 Claims. (Cl. 15—182.)



1. A rotary brush comprising a metal supporting tube, a coiled spring wound thereon, a brush material interposed between coils of the spring and secured in operative position upon the supporting tube with the butt ends of the brush material resting against the surface of the tube, said coiled spring being formed of material having only sufficient flexibility to permit it to be shaped into helical form and with the convolutions of the spring spread apart by the interposed brush material whereby the tendency of the convolutions of the spring to return to their normal position exerts a clamping action on the brush material.

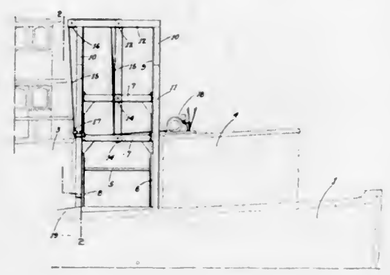
1,860,573. RADIATOR. SIEGFRIED DEUTSCH, Vienna, Austria, assignor to Isidor Mautner, Vienna, Austria. Filed Aug. 22, 1928, Serial No. 301,269, and in Austria Apr. 2, 1926. 10 Claims. (Cl. 257—130.)



4. A cast radiator element for heating buildings and the like, comprising a channel-like hollow member of oblong cross section having a wall providing a heat radiating surface of substantial extent, said wall having a plurality of ribs projecting outwardly and unequally considerably into the room to be heated, and a connecting tube arranged transversely of said member at each end thereof, said tubes constituting connectors for connecting said element to similar elements so as to provide a row of elements arranged side by side with the principal axes of cross section of their hollow members disposed in the same plane and their ribbed surfaces facing broadside into the room to be heated.

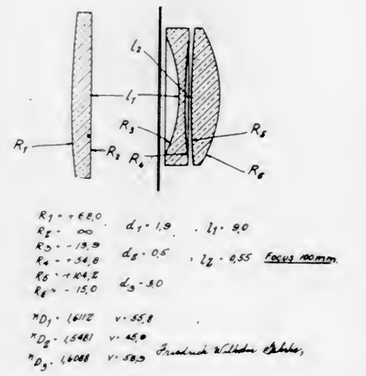
1,860,574. ELEVATOR STRUCTURE FOR BOATS. NAHUM FAY and NORVIN A. FAY, Sacramento, Calif. Filed Sept. 15, 1931. Serial No. 562,908. 4 Claims. (Cl. 114—0.5.)

1. An elevator structure for a boat comprising an elevator platform adapted when in its lowest position to rest on the freight-carrying deck of the vessel and its outer side edge lying adjacent one side of the boat, false decking laid on the boat deck to extend to and lie flush with the platform when in said position, said



decking sloping to a smooth junction with the boat deck some distance beyond the platform, and means mounted on the boat and connected to the platform to raise and lower the same at will.

1,860,575. PHOTOGRAPHIC OBJECTIVE. FRIEDRICH WILHELM GEHRKE, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Apr. 1, 1929, Serial No. 351,771, and in Germany Apr. 4, 1928. 2 Claims. (Cl. 88—57.)

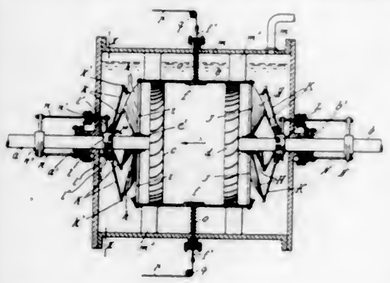


1. A triplet objective comprising a front member consisting of a positive lens, a rear member and a diaphragm separating the front member from the rear member, said rear member consisting of a negative lens adjacent to the diaphragm and of a positive lens, the positive front lens being separated from the negative lens of the rear member by a relatively long air space, the length of which is variable to focus the triplet for exposures at different distances.

1,860,576. FLUID GEAR. FRITZ GRAUPNER, Hanover, Germany. Filed Jan. 18, 1928, Serial No. 247,707, and in Germany Jan. 19, 1927. 3 Claims. (Cl. 60—54.)

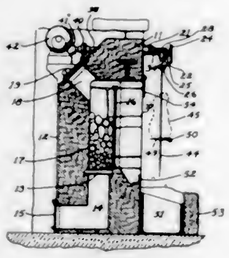
1. A fluid gear comprising a driving and a driven shaft, an impeller on each shaft, an inner casing which is open at both ends and adapted to receive said impellers, an

outer casing surrounding said inner casing and communicating therewith at said open ends, blades in each impeller which are rigidly connected with its respective shaft,



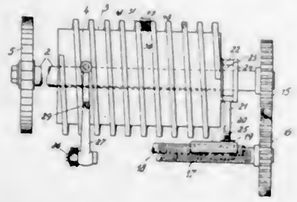
means in said inner casing adapted to connect it to said outer casing, and means at one of the open ends of said inner casing for varying the free area of said open end.

1,860,577. SPIT. ROY HEDGE, Pleasant Ridge, Mich. Filed Sept. 12, 1928. Serial No. 305,590. 5 Claims. (Cl. 126—14.)



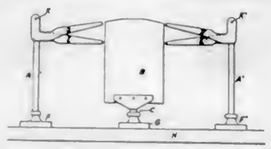
1. In a device of the character described, a fireplace, an upwardly opening channel adapted to be disposed horizontally above and in front of said fireplace, a shaft extended through said channel and journaled therein, a collar fixed to said shaft, a worm wheel rotatably mounted on said shaft, a spring extended between said collar and said worm, and co-acting locking means associated with said collar and worm whereby movement of the shaft in one direction will lock said means together and the spring will normally yieldingly urge said means out of engagement.

1,860,578. ROW COUNTER FOR FLAT KNITTING MACHINES. WOLDEMAR HEINITZ, Chemnitz, Germany, assignor to Schubert & Salzer Maschinenfabrik, Aktiengesellschaft, Chemnitz, Germany. Filed Sept. 6, 1929. Serial No. 390,735, and in Germany Oct. 26, 1928. 1 Claim. (Cl. 66—167.)



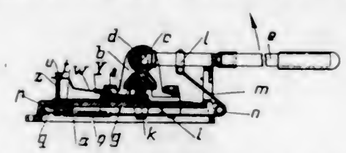
A row-counter for textile machines comprising mechanism operatively connected with the drive of a machine, a shaft adapted to be rotated by said mechanism, a rotary part splined on said shaft, a spider adapted to be displaced in parallel with said shaft, a claw on said spider adapted to engage said rotary part so as to impart axial displacement thereto, a threaded spindle operatively connected with said shaft, a threaded sleeve on said spider adapted to engage with said spindle, means on said spider for disengaging said claw from said rotary part and for disengaging said sleeve from said spindle, and a dog on said rotary part for arresting the drive of said machine.

1,860,579. APPARATUS FOR TAILORING GARMENTS. MAURICE HÉLIOT, Troyes, France. Filed Nov. 19, 1928, Serial No. 320,518, and in France Jan. 7, 1928. 3 Claims. (Cl. 223—17.)



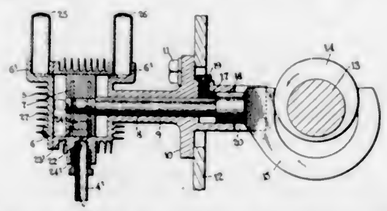
1. Apparatus for tailoring and pressing garments comprising a frame, a pivot on which said frame is adapted to turn, vertical columns disposed symmetrically on each side of said frame and arms mounted on said columns adapted to engage the sleeves of a garment.

1,860,580. HAND STAMPING APPARATUS. JULIUS HEINRICH HOEING, Cologne-on-the-Rhine, Germany, assignor to Hans Bilstein, Altenvoerde, Westfalen, Germany. Filed Aug. 13, 1928, Serial No. 299,415, and in Germany Apr. 20, 1928. 3 Claims. (Cl. 101—3.)



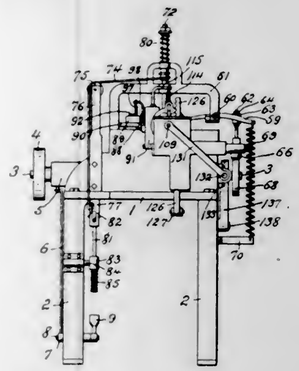
1. Manually operable portable embossing apparatus comprising a flat plate forming a base and having bearing blocks, a cylinder eccentrically mounted on the bearing blocks of the said base plate and provided with means whereby the cylinder may be manually turned in its bearings, said cylinder being continuous along its whole length from bearing to bearing and a stamping bar arranged below the cylinder, of a width substantially equal to the diameter of the cylinder and said bar corresponding in length with the cylinder and in direct contact therewith from end to end and springs to maintain said stamping bar in contact with the cylinder from end to end.

1,860,581. FUEL PUMP. HENRY HUEBER, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed July 2, 1930. Serial No. 465,419. 6 Claims. (Cl. 103—154.)



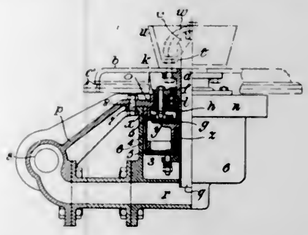
1. A fuel pump for motor vehicles, comprising a chamber having inlet and outlet ports in its side walls, and a piston reciprocable within the chamber and controlling the ports, said piston having a part movable across the inlet port to close the same when the piston is intermediate its limits of movement and acting to uncover the inlet port at each limit of movement to intake a charge of fluid, said piston having spaced delivery passages alternately communicable with the outlet port and one passage opening into the chamber through one end of the piston and the other passage opening into the chamber through the opposite end of the piston, whereby said piston will intake at the rear side and deliver at the advance side on each stroke.

1,860,582. HOOK AND KNOT FORMING MACHINE. CARL KIECHNER, Carthage, Mo., assignor to Leggett and Platt Spring Bed and Manufacturing Company, Carthage, Mo., a Corporation of Missouri. Filed July 11, 1931. Serial No. 550,177. 18 Claims. (Cl. 140—101.)



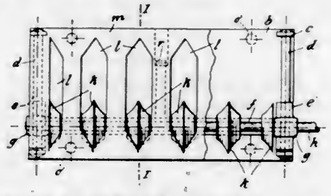
1. In a hook forming machine, the combination with a support for holding a coil, an oscillatory crimping member adapted to engage and crimp said coil, supporting means for said crimping member forwardly and rearwardly adjustable on said support, and means for oscillating said crimping member, of a stop gage adjustable toward and from said crimping member on said supporting means and in the path of said coil.

1,860,583. SEALING OF CONTAINERS UNDER NEGATIVE OR POSITIVE PRESSURE. ARTHUR CYRIL KNIPE, London, England, assignor to Modern Concrete Development Company Limited, London, England. Filed Feb. 13, 1929, Serial No. 339,709, and in Great Britain Feb. 20, 1928. 10 Claims. (Cl. 83—73.)



1. A rotary container having a removable end cover plate, a trunnion associated with said cover plate, a hinged supporting arm for said cover plate, bearing means on the said trunnion for pivotally mounting the cover plate on the supporting arm, and means interposed between the supporting arm and the trunnion bearing, permitting the cover plate to be moved in all directions in a plane at a right angle to the axis of the trunnion.

1,860,584. METHOD OF AND MEANS FOR CLOSING THE ENDS OF THE CHANNELS OF MOLDED HOLLOW CHANNEL BRICKS AND BUILDING BLOCKS. THOMAS KOIDL, Wels, Austria. Filed Sept. 3, 1930, Serial No. 479,436, and in Austria Sept. 4, 1929. 8 Claims. (Cl. 25—1.)



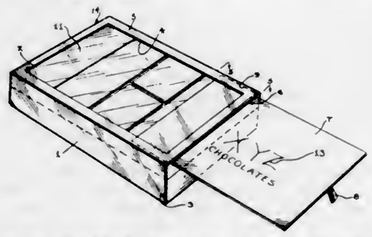
2. Apparatus for closing the open ends of the channels of hollow bricks and building blocks comprising adjustable profile rollers arranged to be rotated at a high speed, means for pressing the said rollers into the end surfaces of the ribs of a brick or block, and means for imparting a regulatable forward movement to the said rollers.

1,860,585. TREATMENT OF SULPHIDE ORES. NILS ERIK LENANDER, Lokken Verk, Norway, assignor to Patentaktiebolaget Grondal-Ramen, Stockholm, Sweden. Filed July 26, 1930. Serial No. 471,097. 21 Claims. (Cl. 23—226.)

1. The process of producing elemental sulphur from a sulphide ore which comprises smelting a charge of the sulphide ore, flux if necessary, and carbonaceous material in a closed blast furnace so as to produce a gaseous product containing elemental sulphur, sulphur dioxide, and other sulphur compounds comprising carbon sulphur compounds capable of reacting with sulphur dioxide to produce elemental sulphur, the amount of sulphur dioxide in said gaseous product being at least sufficient to satisfy the reactive requirements of all of the other sulphur compounds in the gaseous product, subjecting said gaseous product at an elevated temperature to the action of a catalyst adapted to promote the reaction between sulphur dioxide and said other sulphur compounds and thereby liberating in elemental form the sulphur of the so-reacting sulphur dioxide and other sulphur compounds, and recovering the elemental sulphur from the so-treated gaseous product.

17. In the treatment of gases containing sulphur dioxide and other sulphur compounds capable of reacting therewith to form elemental sulphur, the steps of subjecting said gas to electrostatic precipitation for removing finely divided solid matter therefrom, and then subjecting the gas at an elevated temperature to the action of a catalyst adapted to cause said sulphur dioxide and said other sulphur compounds to react to form elemental sulphur.

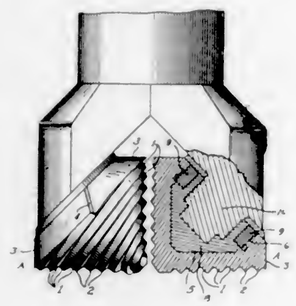
1,860,586. DISPLAY PACKAGE. LOUIS L. MCILHENNEY, Wynnewood, Pa., assignor to Stephen F. Whitman & Son., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 22, 1931. Serial No. 539,394. 1 Claim. (Cl. 206—44.)



Means for packaging candy and the like comprising an open ended tubular member adapted to receive the ar-

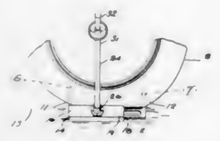
ticles being packaged, a transparent wrapper entirely enclosing said tubular member and its contents, a bottom tray having bottom and side walls in which said wrapped tubular member will seat and a top tray adapted to seat over the wrapped tubular member and comprising side walls and a top member slidable with respect to said walls, whereby said top member can be withdrawn to expose to view the wrapped tubular member and its contents as desired.

1,860,587. CUTTER FOR ROTARY DRILLS. CLAUDE W. METZGER, Houston, Tex., assignor to Haynes Stellite Company, a Corporation of Indiana. Filed Feb. 12, 1930. Serial No. 427,896. 4 Claims. (Cl. 255—71.)



1. A cutter for rotary drills having a conical cutting surface provided with quadruple spiral cutting teeth having a pitch of approximately two inches.

1,860,588. TIRE PRESSURE MEASURING TOOL. LULAN S. MORSE, Ocean Park, Calif. Filed June 13, 1928. Serial No. 284,990. 1 Claim. (Cl. 33—147.)



A tire pressure gage comprising a body portion, a plate slidable longitudinally thereon, a tire-engaging member rigid with said body and a second tire-engaging member rigid with said plate, both of said members extending laterally with respect to said body and plate and being adapted to engage a tire adjacent opposite ends of the area of contact of the tire with its supporting surface with said body resting upon said surface alongside said tire, a tube rigid with said body and extending upwards therefrom, a shaft journaled within said tube and projecting beyond the upper end thereof to provide a handle accessible to a person standing adjacent said tire, a pinion rigid with said shaft, rack teeth on said plate enmeshed by said pinion to move said plate upon rotary movement of said shaft, a dial carried by said tube, and an indicator carried by said shaft in position to be moved over said dial as said shaft is turned.

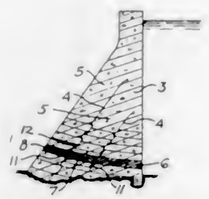
1,860,589. DAM CONSTRUCTION. FRED A. NOETZLI, Los Angeles, Calif. Filed Nov. 14, 1928. Serial No. 319,205. Renewed Mar. 20, 1931. 29 Claims. (Cl. 61—30.)

1. In a concrete dam, a wall of gravity section supporting water pressure by virtue of its weight, there being an inclined joint in the interior of said wall extending from a point near its base upwardly and forwardly to a point



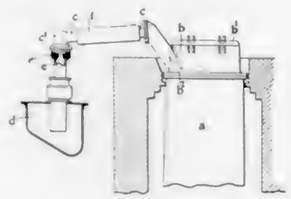
near the upstream face of said wall parallel to the direction of certain principal stresses when said wall is subjected to the full pressure of water in the reservoir.

1,860,590. METHOD OF CONSTRUCTING DAMS. FRED A. NOETZLI, Los Angeles, Calif. Filed Sept. 7, 1929. Serial No. 390,870. 9 Claims. (Cl. 61—30.)



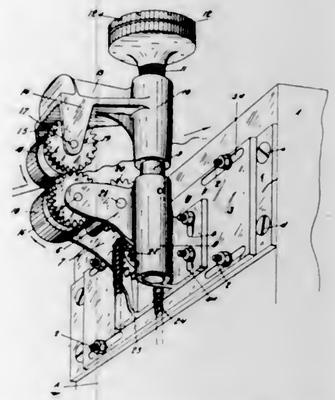
1. The method of constructing a concrete dam by first building a certain up-stream portion of the dam to an elevation lower than the final height of the dam, then building a down-stream portion against the down-stream face of said up-stream portion, the area of contact between said up-stream and said down-stream portion being substantially parallel to the direction of certain first principal stresses when the dam is fully loaded, and further constructing drainage channels along at least some of said key and groove connections.

1,860,591. RETORT FOR THE DISTILLATION OF COAL AND OTHER SOLID CARBONACEOUS SUBSTANCES. CHARLES HENRY PARKER, Codsall, England, assignor to Low Temperature Carbonisation Limited, London, England. Filed June 4, 1927, Serial No. 196,598, and in Great Britain June 7, 1926. 1 Claim. (Cl. 202—259.)



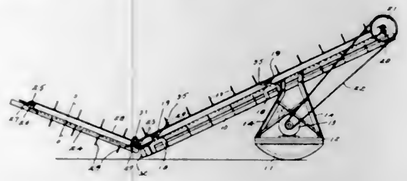
A retort of the kind specified in combination with a charging fitting at the head of the retort, a hydraulic main, a vapor outlet pipe in position between said charging fitting and said hydraulic main, the said vapor outlet pipe being downwardly inclined towards the said hydraulic main from a point immediately adjacent the charging fitting, and a member adapted to contain a liquid seal serving jointedly to connect the downwardly diverted part to a separate lower vertically disposed part of the said vapor outlet pipe entering the hydraulic main, substantially as hereinbefore described.

1,860,592. DEVICE FOR TENSIONING CRIMP LACE IN THE COURSE OF WEAVING. GASTON PERRET, Paris, France. Filed Feb. 27, 1930, Serial No. 431,797, and in France Mar. 2, 1929. 4 Claims. (Cl. 139—304.)



1. A device for tensioning crimped lace of the type set forth in the course of weaving comprising, in combination, a two-part frame having means for adjustably securing it to the loom framework, a pair of parallel cylindrical friction rollers journalled in the respective parts of the frame and adapted to grip the crimped side portion of the lace between them, an adjustable clutch gear interposed between the usual actuating mechanism of the loom and the rollers, and index operating means associated with said frame for accurately adjusting the distance between the rollers.

1,860,593. MANURE LOADER. AXEL ALFRED PETERSON, Benson, Minn. Filed Aug. 26, 1930. Serial No. 477,959. 5 Claims. (Cl. 198—8.)



1. In a manure loader, a trough opening at its lower end and having a discharge opening at its upper end, a rocker supporting and rigidly connected to the trough and disposed intermediate the ends of the trough, the rocker comprising a plurality of laterally spaced arcuate elements rigidly connected to each other, the rocker supporting the trough in an upwardly inclined position, a frame hinged to the lower end of the trough, sprocket wheels mounted upon the trough and frame, an endless element trained over said sprocket wheels and having forks adapted to travel up the trough, and a motor on the rocker operatively connected to certain of the sprocket wheels whereby to drive the endless element.

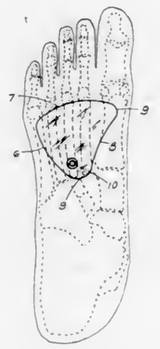
1,860,594. MOSS GATHERER. GEORGE A. PETTIT, New Orleans, La. Filed Nov. 4, 1929. Serial No. 404,831. 5 Claims. (Cl. 47—57.)

1. A moss gathering implement comprising a suitable pole carrying a supporting head, clamping jaws pivoted to said head each having a notch facing the other, a bell crank pivoted to the head having one end in the notches to close and open the jaws, a spring actuated operating rod connected to the other end of the bell crank and a handle pivoted on the pole and connected to the lower end



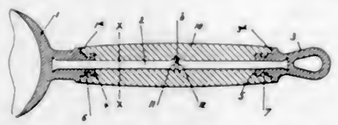
of the operating rod, so that by pressing on the handle, the clamping jaws will be brought together to grip a cluster of moss, and upon being released the jaws will be automatically opened and the moss released.

1,860,595. ARCH SUPPORT AND CALLOUS RELIEVING PAD. DAVID A. REED, Berkeley, Calif. Filed May 3, 1930. Serial No. 449,446. 1 Claim. (Cl. 36—71.)



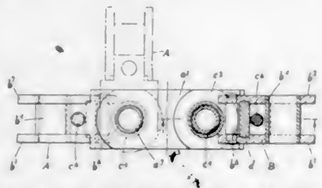
A callous relieving pad consisting of a formed or skived felt or other resilient pad with a substantially flat undersurface provided with the male member of a snap fastener attached therein adjacent the rearward vertex and adapted to cooperate with the female member thereof imbedded in the inner sole of a shoe, said pad having a substantially thick central portion of segmental spheroidal conformation continuing into reverse arcuate conformation to a thin peripheral edge, the peripheral contour of said pad approximately a triangle with convex base and one convex side and one concave side, said convex base and segmental spheroidal section conforming to the metatarsal arch, said convex side conforming to the fifth metatarsal bone and the concave side conforming to the first metatarsal bone to properly support the entire metatarsal section of the foot.

1,860,596. HANDGRIP. LOUIS REINOLD, Tournus, France, assignor to Manufacture Metallugique de Tournus, Tournus, France. Filed Apr. 8, 1930, Serial No. 442,631, and in France Feb. 24, 1930. 3 Claims. (Cl. 53—1.)



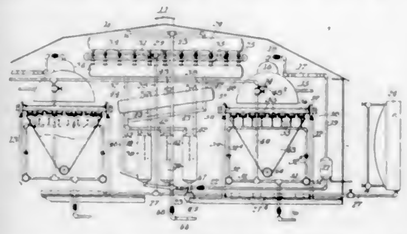
1. An improved grip or handle, for a utensil, having a foot of cast metal, said foot having a shoulder and a circumferential groove at its outer part, said handle having a cast metal end piece and also having a shoulder and a circumferential groove at its inner piece, a cover of shrinkable plastic material fitting against said shoulders and in said grooves, and a core rod consisting of two parts or members, having enlarged ends embedded in said foot and end piece and in said cover.

1,860,597. CONVEYER CHAIN AND THE LIKE. CHARLES GARONNE RENOLD, Didsbury, Manchester, England, assignor to Hans Renold Limited, Manchester, England, a British Company. Filed July 25, 1929, Serial No. 381,030, and in Great Britain Sept. 27, 1928. 11 Claims. (Cl. 74—32.)



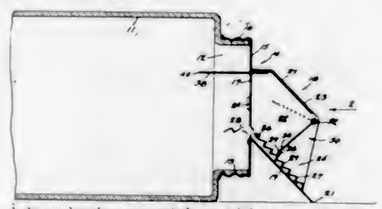
1. In a chain of the kind described, a joint member comprising in combination two pairs of side plates the plates of each pair being disposed parallel to one another, two bushes one secured between each pair of side plates, the two pairs of side plates being rigidly fixed together end-to-end with their planes mutually at right angles and their ends overlapping, and a key member located within the space between the overlapping ends and engaging with all four of said plates in a tension-resisting manner.

1,860,598. APPARATUS FOR TREATING HYDROCARBONS. BRADLEY W. RUMBARGER, Monroe, La., assignor to Imperial Oil & Gas Products Company, Pittsburgh, Pa., a Corporation of West Virginia. Filed Feb. 16, 1928. Serial No. 254,782. 1 Claim. (Cl. 134—60.)



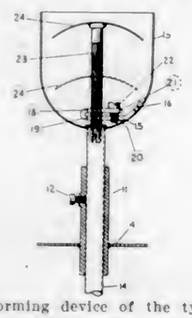
Apparatus for producing carbon black, comprising a chamber, carbon black burners located in said chamber, a heating coil located in a lower portion of said chamber, a coil located in the upper portion of the chamber, means for directing a hydrocarbon liquid through the said coils, means for intermingling a gaseous medium with the liquid and atomizing the same after it leaves the first-named coil and before it enters the second-named coil, and means for directing a portion of the mixture from the second-named coil to said burners in sufficient quantity to maintain a temperature of not substantially less than 600° F. in said chamber.

1,860,599. ANIMAL TRAP. JOHN M. SCHILTZ, Wichita, Kans. Filed Dec. 18, 1930. Serial No. 503,206. 7 Claims. (Cl. 43—66.)



1. A trap having a container with an enclosed passageway having an inclined floor leading thereto, a pivotally mounted runway in one position being substantially parallel to the said floor, said runway having means to tilt same due to the weight of an animal moving through the passage, a pivotally mounted gate, means cooperating with said gate and the runway to limit the outward movement of the gate, the said gate swinging inwardly on the inward passage of an animal, and means on the runway when tilted to engage the gate when in its closed position.

1,860,600. DISPLAY RACK FOR FRUITS, VEGETABLES, AND THE LIKE. ROBERT K. SLAYMAKER, Detroit, Mich., assignor to Slaymaker Electric Welding Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 18, 1930. Serial No. 475,917. 2 Claims. (Cl. 299—58.)

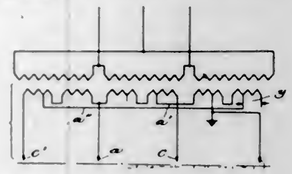


2. In a mist forming device of the type adapted to humidify vegetables on display, the combination of a water feed line terminating in a jet producing orifice, a downwardly curved baffle surface positioned in the path of the said jet for transforming the same into a mist, the said water feed line and baffle surface being relatively adjustable whereby the mist may be directed in a predetermined direction, and a cup surrounding the said baffle, the said baffle being relatively adjustable inwardly and outwardly of the said cup whereby the degree of fineness of the mist which is projected over the vegetables can be varied.

1,860,601. PROCESS FOR REENFORCING MODELS OF FRUIT OR OTHER OBJECTS MADE OF WAX OR SIMILAR FUSIBLE MATERIAL. ROYAL C. STEADMAN, Washington, D. C., dedicated, by assignment, to The Government and The People of The United States of America. Filed Feb. 6, 1930. Serial No. 426,433. 4 Claims. (Cl. 41—13.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).

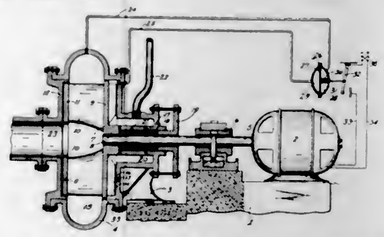
1. A process for reenforcing models of wax fruit which consists in injection of self-hardening non-thermoplastic material.

1,860,602. POLYPHASE TRANSFORMER SYSTEM. WILLIAM THOMAS TAYLOR, East Finchley, England. Filed June 28, 1929. Serial No. 374,562. 10 Claims. (Cl. 172—238.)



1. A three phase transformer system comprising windings connected to form the letter A.

1,860,603. CONTROL MEANS FOR CENTRIFUGAL PUMPS. FRANK B. ALLEN, Lower Merion Township, Montgomery County, Pa., assignor to The Allen-Sherman-Hoff Company, a Corporation of Pennsylvania. Filed May 31, 1929. Serial No. 367,588. 5 Claims. (Cl. 103—25.)



1. The combination with a centrifugal pump having a plurality of communicating chambers, means for driving the pump and means for creating a pressure differential between the said chambers, of means for automatically deenergizing the pump driving means when the said pressure differential drops below a predetermined amount.

1,860,604. METHOD OF MAKING PIPE COUPLINGS OR FITTINGS. JOHN D. BALDWIN, Jr., Cleveland, Ohio, assignor to Albert J. Weatherhead, jr., Cleveland, Ohio. Filed Jan. 4, 1929. Serial No. 330,193. 4 Claims. (Cl. 29—157.)



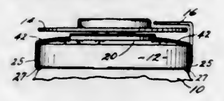
1. A method of producing a pipe coupling or fitting, consisting in machining a bar of irregular configuration in cross section to smaller dimensions at spaced intervals, drilling an opening axially in one end of the bar, severing the machined and drilled portions from the main body of the bar, and subsequently drilling an opening in the severed product at an intersecting angle to the first opening.

1,860,605. METHOD OF PRODUCING TUBE FITTINGS FOR HYDRAULIC BRAKE SYSTEMS. JOHN D. BALDWIN, Jr., Cleveland, Ohio, assignor to Albert J. Weatherhead, jr., Cleveland, Ohio. Filed May 16, 1929. Serial No. 363,678. 6 Claims. (Cl. 29—157.)



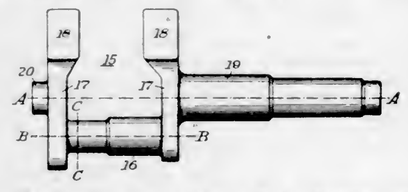
1. A method of producing a tube fitting substantially as herein described, consisting in forming a screw-threaded cavity axially in rotating extruded rod stock, in severing short sections including said cavities from said stock and forming screw-threaded cavities and conical seats and fluid passages within the sides of said sections.

1,860,606. LUMINOUS DIAL COVER. IRENE E. CARROLL, Kansas City, Mo. Filed Nov. 30, 1931. Serial No. 577,914. 9 Claims. (Cl. 40—10.5.)



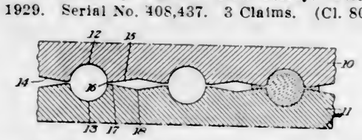
1. A cover for marked telephone dials comprising a pair of hingedly connected top members; luminous indicia corresponding to the dial marking carried by the top members; means to interlock said members in position on said dial with the luminous indicia overlying the indicia of the dial; a depending side wall on each top member; and an inturned flange at the edge of each wall.

1,860,607. METHOD OF MAKING CRANK SHAFTS. EDWARD T. CAUSER, Beaver Falls, Pa., assignor to Union Drawn Steel Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Apr. 15, 1929. Serial No. 355,056. 4 Claims. (Cl. 29—6.)



1. The method of manufacturing a two-piece crank shaft assembly which comprises forming the two parts of the crank shaft having a crank pin disposed between the two parts as a rigid integral forging, machining both parts of the forging as a unit, and then severing the crank pin to provide the separate parts.

1,860,608. DIE ROLLING. PAUL L. COYLE, Coraopolis, Pa., assignor to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Nov. 20, 1929. Serial No. 408,437. 3 Claims. (Cl. 80—60.)

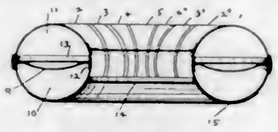


1. The method of renewing die rolls having flash gutters which includes the steps of dressing the roll surface, sinking the die impressions therein to maintain the proper depth of the latter, and leaving the flash gutters of the depth to which they are reduced by the dressing of the surface, whereby to compensate the length of the rolled article for the decrease in the peripheral length of the forming groove resulting from sinking it into the dressed roll.

1,860,609. AIR BOAT. JOHN D. CLARKE, West Haven, Conn. Filed Jan. 30, 1929. Serial No. 336,165. 3 Claims. (Cl. 9—11.)

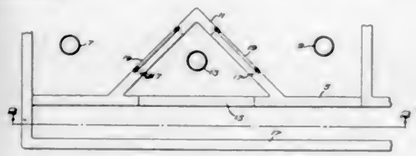
3. An inflatable and collapsible air boat structure having a floor and comprising a float member having an intermediate base portion supporting upwardly inclined bow and stern portions; a flexible endless partition secured within the rim interior and providing throughout said interior, and independent of said floor, lower and upper

air compartments; means through which the compartments are separately and independently inflated and deflated; and the marginal portion of said floor secured to



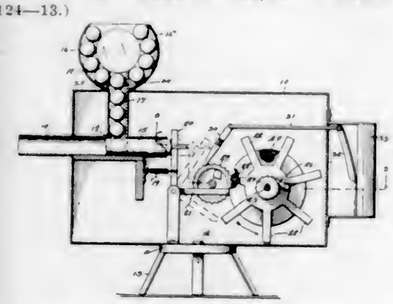
the inwardly facing exterior wall of the rim, an extending marginal portion thereof partially surrounding the lower exterior of the rim as a protecting cover.

1,860,610. SEALPIT STOCK SAVER. HERVEY G. CRAM, Bucksport, Me., assignor to Maine Seaboard Paper Company, Bucksport, Me., a Corporation of Maine. Filed Sept. 24, 1931. Serial No. 564,812. 3 Claims. (Cl. 210—62.)



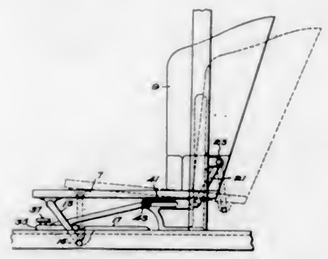
1. In combination with the sealpit and barometric leg discharging thereto, a chamber adjacent to the sealpit having means for maintaining a level of water therein above the bottom of said leg and check-valve means between the chamber and pit opening toward the latter.

1,860,611. TOY RAPID-FIRE GUN. ANTHONY M. DEMINNO and JOSEPH M. PARRELLA, New York, N. Y. Filed June 18, 1931. Serial No. 545,283. 1 Claim. (Cl. 124—13.)



A toy rapid-fire gun of the character described comprising a supporting frame, a barrel carried thereby, the barrel being open at its rear end, a plunger mounted within the rear end of the barrel, a magazine discharging into the barrel just forward of the plunger when the latter is fully retracted, a bell crank lever mounted on the frame and having an upwardly extending arm operatively connected to the plunger, a spring urging the upper end of the bell crank lever forward to project the plunger, a shaft, tappet arms carried thereby and adapted as the shaft is rotated to strike the rearwardly projecting arm of the bell crank lever to thereby retract the plunger and then release it, a spring motor connected to said shaft, means for winding up the spring motor, a toothed wheel driven by the spring motor, a pawl engaging the toothed wheel and normally preventing rotation of the wheel and the actuation of the spring motor, a handle mounted upon the rear end of the frame but spaced therefrom, a resilient trigger mounted upon the inside of the handle, and a connection between said trigger and said pawl.

1,860,612. ADJUSTABLE SEAT. WILLIAM H. EDMOND, Syracuse, N. Y., assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y., a Corporation of New York. Filed Jan. 15, 1929. Serial No. 332,715. 5 Claims. (Cl. 155—14.)



1. An adjustable seat for automobiles comprising a seat proper having a back moving as a rigid unit therewith in its movement by the means hereinafter defined, upstanding pivoted links for supporting the forward portion thereof, depending pivoted links for supporting the rear portion thereof, and means for securing the seat in adjusted position.

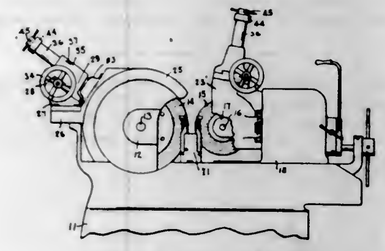
1,860,613. METHOD OF ROLLING METAL SHEETS. FRANK E. FLYNN, Warren, Ohio, assignor to Republic Steel Corporation, Pittsburgh, Pa., a Corporation of New Jersey. Filed Aug. 22, 1929. Serial No. 387,635. 11 Claims. (Cl. 29—18.)

1. In a method of producing steel sheets, the steps which consist in pickling coiled steel strip, passing said strip cold through a single set of rolls a plurality of times, shearing said strip into lengths, normalizing said lengths, pickling the lengths and annealing them in a non-oxidizing atmosphere, lightly pickling and scrubbing said lengths and passing them cold through a second set of rolls.

1,860,614. MECHANISM FOR TRUING AND DRESSING GRINDING WHEELS OF CENTERLESS GRINDERS. FERDINAND J. HOHNHORST, and FERDINAND J. KROEGER, Covington, Ky. Filed Mar. 14, 1930. Serial No. 435,823. 1 Claim. (Cl. 125—11.)

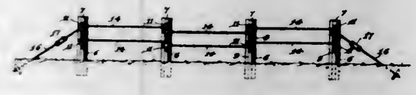
In a machine of the character described, the combination of a grinding wheel, a hood therefor, an abrading wheel operatively located between said hood and said grinding wheel, a mounting for said abrading wheel comprising a fork, a sleeve and a shank; said fork fixed to the inner end of said shank, a guide on said hood, a laterally movable slide on said guide, means on said slide for securing said sleeve thereto, bearing means for said abrading wheel on the inner end of said fork operatively located between said hood and said grinding wheel, said shank located in said sleeve, means holding said shank non-rotative in said sleeve for holding and maintaining said fork and said bearing means for said abrading wheel at an angle to the plane of said grinding wheel, means for adjusting said shank in said sleeve, said hood provided with a slot, and a cover plate for said slot having slide connection with said hood, said cover plate provided with an upwardly extending bulge, the crown portion of said bulge provided with a hole through which said mounting extends, said bulge

forming an enclosure above and about said inner end of said shank, said angularly positioned fork, said bearing means and said abrading wheel, said cover plate movable



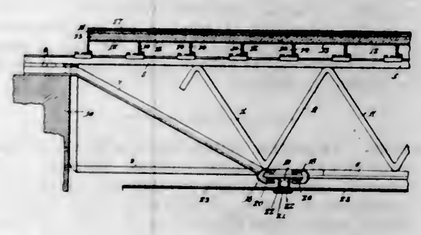
laterally on said hood with said mounting, and said cover plate with its bulge maintaining said slot in closed relation throughout the lateral movements of said abrading wheel.

1,860,615. HIGHWAY GUARD. JULIUS KAHN, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed May 19, 1930. Serial No. 453,564. 4 Claims. (Cl. 256—13.1.)



1. A highway guard comprising a plurality of spaced channeled posts having angular rearwardly disposed light reflecting wing portions, forwardly extending clips rigidly secured to the closed front sides of the posts, and substantially rigid line rods supported in front of the posts by the clips and having threaded ends, and means for tensioning the rods between the posts, said means being applied to the threaded ends of the rods and bearing against the clips.

1,860,616. CEILING AND FLOOR STRUCTURE. JULIUS KAHN, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed June 12, 1930. Serial No. 460,751. 8 Claims. (Cl. 72—70.)



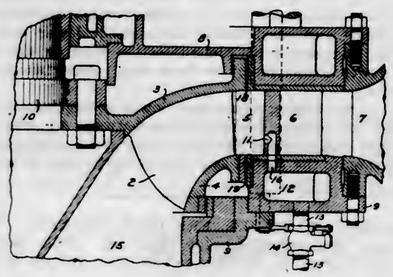
3. A floor-ceiling structure comprising a skeleton joist, a deck mounted on the joist, a layer of sound insulating material on the deck, a layer of wear resisting material overlying the sound insulating material, and a layer of supporting material interposed between the two said layers and denser than the insulating material.

1,860,617. DISH DRYING CABINET. LOUISE R. KRAUSE, St. Louis, Mo. Filed Oct. 10, 1930. Serial No. 487,673. 3 Claims. (Cl. 141—11.)



1. In a drying cabinet having end walls, a horizontal bar attached to the front edges of said end walls, a series of horizontal bars attached to said end walls in the same horizontal plane with said first bar and being spaced from each other and said first bar and having their front edges inclined upwardly and rearwardly, the adjacent edges of said bars being adapted to engage the lower edges of dishes and support said dishes in approximately vertical positions, and doors hinged to said end walls and having their lower ends extended below said first named bar and adapted to engage therewith.

1,860,618. HYDRAULIC TURBINE. FORREST NAGLER, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 8, 1930. Serial No. 474,037. 9 Claims. (Cl. 290—52.)

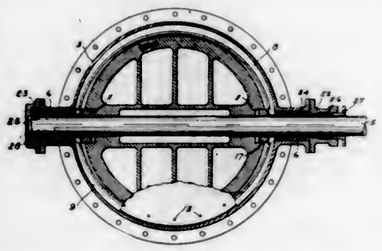


9. In a hydro-electric unit comprising a hydraulic machine direct-connected to a dynamo electric machine, a casing defining an annular passage, a runner rotatable within said casing and located radially within said passage, flow control means in said passage, another flow control means in said passage surrounding and spaced from said former flow control means, and means for draining the spaces between the runner periphery and said latter flow control means when the flow control means are in closed position and the unit is electrically driven by said dynamo electric machine.

1,860,619. VALVE. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 12, 1930. Serial No. 467,455. 8 Claims. (Cl. 251—11.)

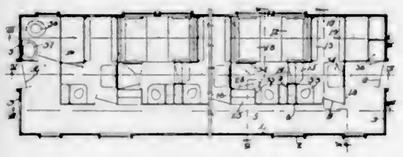
1. In a butterfly valve, a valve body provided with a peripheral groove, a shaft for said valve body, a casing for said valve body, a plurality of packing segments in said groove extending to points spaced from said shaft when said valve body is in closed position and means compris-

ing a plurality of pressure responsive members slidable in said valve body for lapping the joints between said segments and said shaft and for automatically sealing the



joints between the outer faces of the end portions of said packing segments and the adjacent bearing elements of the shaft.

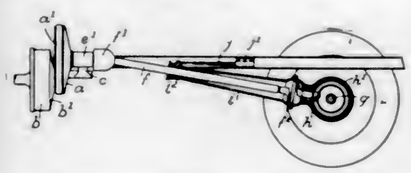
1,860,620. COMPARTMENT CAR. FRANK S. ROBERTS, Detroit, and GUSTAV ANDERSON, Lansing, Mich. Filed June 8, 1929. Serial No. 369,348. 11 Claims. (Cl. 105—315.)



1. In a car, in combination, permanent upper and lower individual compartments, the upper compartments interpositioned and overlapping the adjacent lower compartments, and means of communication between an upper and lower compartment to form said compartments into a suite.

2. A car having upper and lower compartments, and means for private communication between an upper and a lower compartment forming a suite, said compartments extending to the roof of said car for ventilation thereof.

1,860,621. VARIABLE FRICTION GEARING. JOHN HOGG ROBERTSON, London, England. Filed May 24, 1929, Serial No. 365,682, and in Great Britain May 30, 1928. 8 Claims. (Cl. 74—26.)

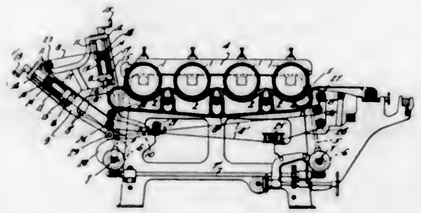


1. A variable friction gearing, comprising a driving member, a driven member, a radius arm supporting said driven member, said radius arm having a fulcrum axis parallel to the axis of said driving member, the movement of said radius arm in one direction about said fulcrum axis causing said driven member to pass from a position coaxial with said driving member to an eccentric position, a rotary part connected to and driven indirectly by said driven member, and means operated by the torque reaction of said indirectly driven part for controlling the movement of said radius arm.

1,860,622. LUBRICANT. RUDOLPH R. ROSENBAUM, Chicago, Ill. Original application filed June 18, 1928, Serial No. 286,492. Divided and this application filed July 14, 1927. Serial No. 205,848. 11 Claims. (Cl. 87—9.)

1. A lubricating compound comprising a mineral oil, miscible castor oil, and water insoluble metallic soap.

1,860,623. APRON TENSION DEVICE. RUSSELL R. SAMUELS, Chicago, Ill., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 3, 1930. Serial No. 499,700. 2 Claims. (Cl. 68—9.)



1. An ironing machine comprising a frame, ironing members carried by said frame including ironing chests and ironing rolls, means for moving said rolls into and out of ironing relation with said chests, a delivery apron, a movable bracket having rollers thereon about which said apron travels, said bracket being movable to release position for relieving the tension of said apron and movable into position to bring said apron into operative relation with said ironing members, means carried by said bracket for adjusting the tension of said apron including two blocks one of which is freely movable relative to the other and is provided with one of said rollers about which said apron passes, resilient means interposed between said blocks tending to move said freely moving block away from said other block, and positve means for moving said other block to vary the force exerted on said freely moving block by said resilient means, said resilient means being effective to permit movement of said freely moving block to vary the tension in said apron automatically in accordance with contraction and expansion of the apron.

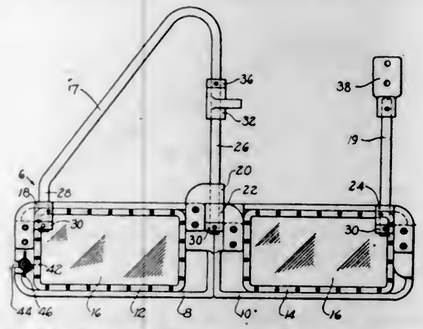
1,860,624. PRODUCTION OF ETHYLENE FROM ACETYLENE. KARL SAUERWEIN, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 3, 1930, Serial No. 418,407, and in Germany Jan. 25, 1929. 4 Claims. (Cl. 260—170.)

1. In the production of ethylene by catalytic hydrogenation of a gas comprising acetylene, the step of adding about 5 to 20 per cent by volume of water vapor to the gas mixture under treatment.

1,860,625. LEATHER WORKING MACHINE. GUSTAV ADOLF SCHETTLER, Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Feb. 1, 1930, Serial No. 425,242, and in Great Britain Feb. 28, 1929. 12 Claims. (Cl. 149—17.)

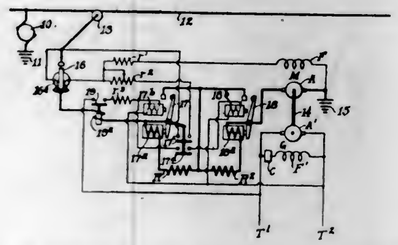
10. In a guard for a leather working machine having a movable tool, a pair of guard plates having windows to furnish light for inspection of a piece of work in the machine and of the moving tool while the guard is in operative position, means for supporting one of the plates stationary with respect to the frame of the machine, a member for hingedly connecting the other plate to the

stationary plate for movement between open and closed positions with respect to the machine tool, said member having a portion for supporting the free end of the mov-



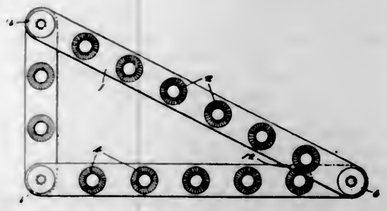
able plate, and said movable plate having a celluloid plate covering the window and of a transparency to permit passage of light to the machine tool and to the work.

1,860,626. SYSTEM OF ELECTRICAL DISTRIBUTION. EDWIN W. SEEGER, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 28, 1930. Serial No. 478,321. 2 Claims. (Cl. 172—288.)



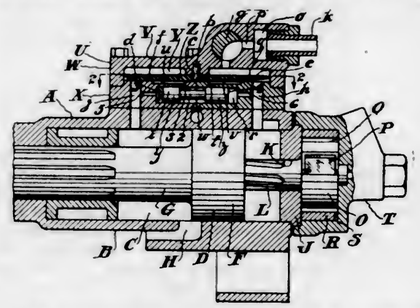
2. The combination with an electric motor having a shunt field winding, of a supply circuit for said motor, a line switch for connecting the armature of said motor to said supply circuit when the voltage of said circuit exceeds a given value, said switch having an operating winding connected to said supply circuit in series relation with the shunt field winding of said motor, an accelerating device for said motor operable upon closure of said line switch, and means associated with said device for reducing the current in the operating winding of said line switch to provide for dropping out of said line switch upon a relatively small predetermined reduction in the voltage of said supply circuit.

1,860,627. TOY. JOHN Q. SHERMAN, Dayton, Ohio. Filed Oct. 6, 1927. Serial No. 224,385. 2 Claims. (Cl. 46—35.)



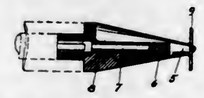
1. Coupling means for detachably interengaging a plurality of reversible perforated elements of a toy building set with each other into various structures, including clutch faces formed on the opposite faces of said members in registry with each other, and concentric with the perforations comprising alternately disposed radial projections and depressions and engageable with like clutch faces of other elements with the perforations of such elements in registry, and a washer having a central perforation and corresponding alternately disposed radial projections and depressions on its opposite sides for interlocking engagement with alternately disposed radial projections and depressions of two such elements to space said elements apart to afford clearance between nonregistering clutch faces.

1,860,628. PNEUMATIC TOOL. FRED M. SLATER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 3, 1931. Serial No. 578,665. 3 Claims. (Cl. 121—19.)



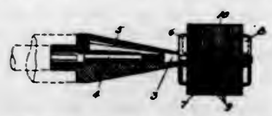
1. In a pneumatic tool, the combination of a cylinder and a piston therein, a valve chest having a valve chamber, seating surfaces in the valve chamber and having recesses therein, a distributing valve in the valve chamber for distributing pressure fluid to the cylinder, passages for communicating the recesses with the atmosphere, and a second valve movable in timed relation with the first said valve for controlling the passage.

1,860,629. MANICURING DISK ABRADER. HARVEY J. STEVENSON and MERRILL KESSLER, Los Angeles, Calif., assignors to National Manicuring Machine Co., Los Angeles, Calif., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,058. 1 Claim. (Cl. 132—74.)



A manicuring abrader, consisting of a metal disk having its outer face formed with an integral abrading or filing surfaces surrounded with a smooth guard rim, and having means for attaching it to a drive shaft, said outer abrading surface being in a plane outside of said guard band.

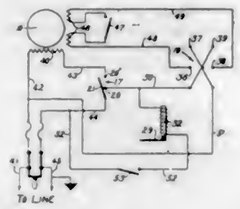
1,860,630. MANICURING BUFFER. HARVEY J. STEVENSON and MERRILL KESSLER, Los Angeles, Calif., assignors to National Manicuring Machine Co., Los Angeles, Calif., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,061. 1 Claim. (Cl. 132—74.)



A manicuring buffer of the character shown and described, comprising a shank portion, with means at one end for attaching it to a driving shaft, and a shaft portion

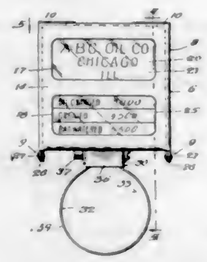
extended from its opposite end, with two cup-like portions thereon, and a series of disks of soft flexible material and slightly larger in diameter than said cup-like portions threaded on said shaft portion and clamped thereon between said cup-like portions, whereby said flexible material can flex into said cup-like portions.

1,860,631. MOTOR CONTROL MECHANISM. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Apr. 7, 1927. Serial No. 181,661. 10 Claims. (Cl. 172—239.)



2. The combination with an electric motor, of a main motor switch, means operable under manual control to cause said switch to be closed whereby to start said motor, automatically operable means to cause said switch to be opened whereby to terminate the operating cycle of said motor after a predetermined period of operation, and means operable to prevent operation of said manual controlled means until after said switch has been operated by said automatically operable means, said last mentioned means including a switch responsive to the speed of the motor and operable by centrifugal action.

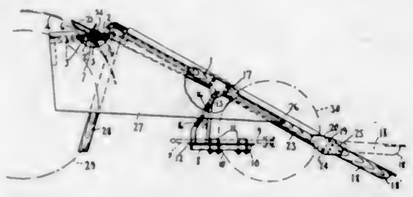
1,860,632. MILEAGE RECORD HOLDER FOR AUTOMOBILES. NATHAN M. STONE, Chicago, Ill. Filed July 8, 1929, Serial No. 376,791. Renewed Oct. 24, 1931. 6 Claims. (Cl. 40—10.)



1. In a mileage record holder for automobiles, a pad holding receptacle adapted to contain a memo pad, and having a cover formed with cardholding means and having two sight openings therein through one of which the pad is visible and through the other of which the card is visible, said receptacle having clamping means adapted to secure the receptacle to the steering post of an automobile.

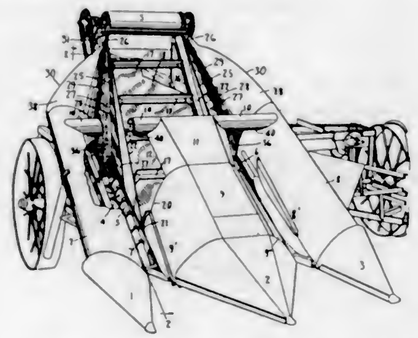
1,860,633. CORN LIFTER. HENRY SYNCK, Coldwater, Ohio, assignor to The New Idea Spreader Company, Coldwater, Ohio, a Corporation of Ohio. Filed Sept. 23, 1929. Serial No. 394,401. 7 Claims. (Cl. 56—119.)

1. In a device of the character described, a rigidly supported immovable plant lifter member arranged at the side of a tractor, a freely movable extension hinged to the forward end of said member, the free end thereof when in operative position extending in proximity to and following the ground line in advance of the front end of the tractor, and means operable from the rear



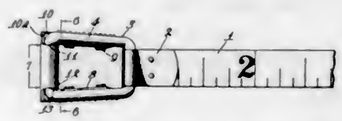
end of the tractor for raising and temporarily holding said extended free end out of contact with the ground line.

1,860,634. CORN PICKING MACHINE. HENRY SYNCK, Coldwater, Ohio, assignor to The New Idea Spreader Company, Coldwater, Ohio, a Corporation of Ohio. Filed July 15, 1931. Serial No. 550,917. 9 Claims. (Cl. 56—105.)



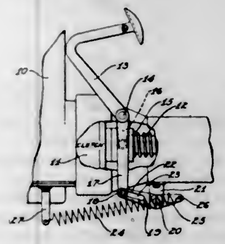
1. In a corn picking machine, a pair of snapping rolls and an inclined chute above said rolls to receive several stalks and feed same by gravity back to said snapping rolls.

1,860,635. TAPE MEASURE HOOK. ROBERT G. THOMPSON, Montclair, N. J., assignor to Lufkin Rule Company, Saginaw, Mich., a Corporation of Michigan. Filed Aug. 25, 1930. Serial No. 477,646. 2 Claims. (Cl. 33—137.)



1. An end ring for a tape, a hook thereon, said ring having side members normally spring-actuated toward each other and bent to present two opposed pintle members spaced apart, said hook including a tubular hinged knuckle receiving said pintle members, an end of said knuckle being formed to present a shoulder stop positioned to come into engagement with the top face of a side member when the hook is extended, and also formed to present two depressions, one of which is positioned to releasably engage said side member when the hook is in its folded position, the other depression positioned to engage the said side member in conjunction with said stop when the hook is extended, said hook having a cam-like projection on the end of the knuckle between said depressions, the side members of the ring being arranged to normally bear against the ends of said knuckle and to override said projection, for the purposes set forth.

1,860,636. CLUTCH OPERATING MECHANISM. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 30, 1928. Serial No. 265,997. 5 Claims. (Cl. 192—99.)



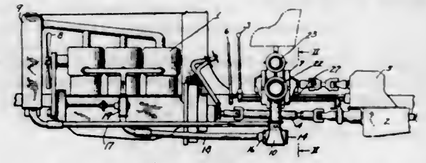
1. In a motor vehicle, in combination, a clutch, a spring exerting a force to normally engage the clutch, a pair of slidably associated levers, one of said levers being connected to operate the clutch, and a coil spring associated with the other lever and arranged to oppose the force exerted by the other spring after initial movement of said levers to disengage the clutch.

1,860,637. CONTAINER FOR CIGARETTE PACKAGES. FREDRICK W. VON MEISTER, New York, N. Y. Filed Mar. 23, 1931. Serial No. 524,420. 11 Claims. (Cl. 206—41.)

1. A container for cigarette packages, comprising a frame structure conforming generally to the shape and size of a package and adapted to receive the entire package, a slidable cover member for the top of the container and of substantially the same size as the package to permit the insertion of a package into snug relationship with the interior of said container, an auxiliary closure member carried by said slidable cover member and movable independently of said slidable closure member for permitting access to the top of the package when the slidable cover member is in closed position with respect to said container, and a cutting knife carried by said slidable cover member and adapted to cut the top portion of the cigarette package while the closure member is sliding into closed position.

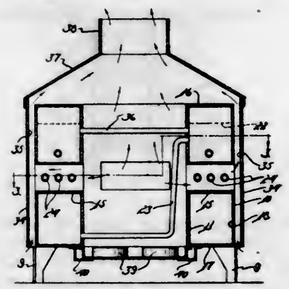
1,860,638. FIRE ENGINE. HUBERT WALKER, Elmira, N. Y., assignor to American La France and Foamite Corporation, a Corporation of New York. Filed Apr. 2, 1930. Serial No. 440,899. 16 Claims. (Cl. 123—175.)

1. The combination with an automotive engine having a cooling-water circuit and a power take-off for driving a fire pump, of a heat exchanger comprising one water passage included in said cooling-water circuit and another adjacent water passage having its two ends con-



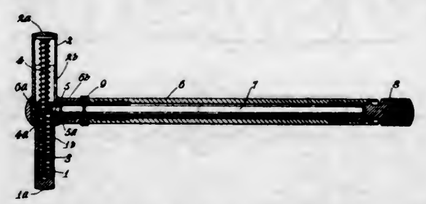
nected to the fire line at points therein, on the same side of the pump and between which there is a pressure difference due to the velocity head in said fire line.

1,860,639. HEATING APPARATUS. MARLIN WARREN, Detroit, Mich. Filed Apr. 20, 1931. Serial No. 531,477. 2 Claims. (Cl. 257—137.)



2. A heater of the class described, comprising: an inner shell; an outer shell spaced from and enclosing said inner shell; a plurality of tubes traversing said inner shell and communicating at opposite ends with the space between said inner shell and said outer shell; conduits extending through the space between said inner shell and said outer shell and communicating with the interior of said inner shell and the exterior of said outer shell; a plurality of pipes communicating with the space between said inner shell and said outer shell and traversing said conduits; means for delivering air into the interior of said inner shell; means for delivering hot water into the space between said shells; a cover for said outer shell and providing therewith a plurality of vertically extended passages; and a hood covering said shells and said passages.

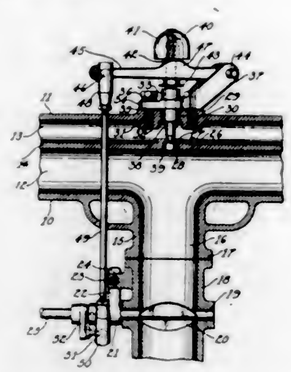
1,860,640. TELESCOPING GAUGE. EUGENE J. WITCHGER, Saginaw, Mich., assignor to Lufkin Rule Co., Saginaw, Mich., a Corporation of Michigan. Filed Feb. 13, 1931. Serial No. 515,449. 7 Claims. (Cl. 33—143.)



1. A gauge comprising telescoping tubes normally spring-actuated outwardly, the inner tube presenting an external longitudinal groove, the outer tube having a slot registering with said groove, an apertured hub slidable on said outer tube, a hollow handle, a gland threaded to the handle and hub, a push-pin slidably received in said

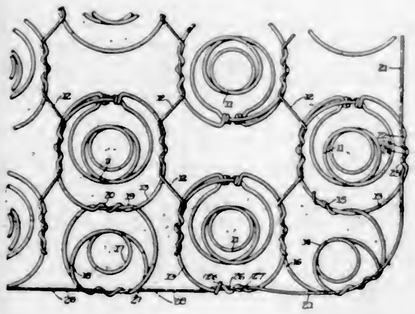
gland and having a shoulder for engagement with the gland, and a rod in the handle arranged to abut against an end of the push pin, said rod having a clamping screw threaded to the handle.

1,860,641. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 24, 1926. Serial No. 137,448. 8 Claims. (Cl. 123—119.)



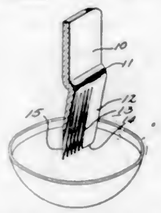
1. A combustible mixture intake manifold having a heating chamber, a valve between the manifold and the heating chamber, a weight upon the valve stem, a flanged sleeve upon the weight and a lever between the weight and flange for raising, lowering and rotating the valve.

1,860,642. SPRING MATTRESS ASSEMBLY. FRED R. ZIMMERMAN, Chicago, Ill., assignor, by mesne assignments, to Burton-Dixie Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 16, 1930. Serial No. 468,317. 4 Claims. (Cl. 5—248.)



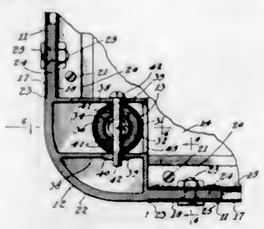
1. In a spring-assembly, the combination of parallel rows of upright spiral-springs with the springs of adjacent rows in staggered relation leaving gaps at corners of the assembly, means tying said springs together, smaller upright spiral-springs occupying said gaps at corners of the assembly, one end wire of each of such corner springs being wrapped around the corresponding terminal coil of the next spring of the same row, the other end wire of each of such corner springs being wound around the corresponding terminal coil of the adjacent spring of the next row, and border-wire means connected to the end coils of the marginal springs of said rows and of said corner springs.

1,860,643. COMB PLATE AND METHOD OF MANUFACTURING THE SAME. MATHEW ANDIS, Racine, Wis. Filed Jan. 26, 1931. Serial No. 511,170. 4 Claims. (Cl. 29—148.)



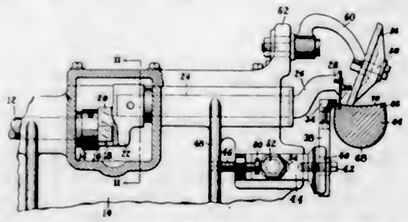
1. A method of forming comb plates for hair clippers consisting in preparing a blank having the general form of the plate, milling one side thereof to form grooves which progressively increase in depth toward one margin, grinding the other side of the blank to remove the ungrooved material from the more deeply grooved marginal portion whereby a blade is formed through which the grooves extend to provide teeth along said margin, and then momentarily and repeatedly dipping the points of the teeth in molten material of relatively low fusibility and cooling them in the intervals between dipping operations to provide the teeth with minute knobs composed of successive layers of material of relatively low fusibility without impairing the temper of the teeth.

1,860,644. FOLDING TABLE AND METHOD OF MAKING THE SAME. JAMES E. BALES and CARL T. CHRISTENSEN, Aurora, Ill., assignors to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Aug. 9, 1929. Serial No. 384,582. 16 Claims. (Cl. 45—31.)



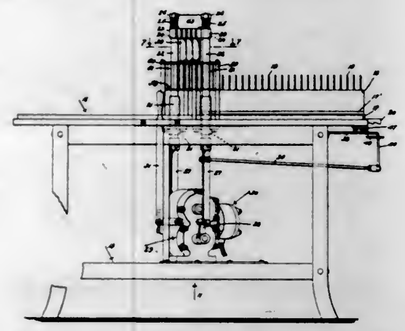
1. A table comprising hollow sheet metal rails having inwardly projecting free edges intermediate the top and bottom of said rails, corner members connected to said rails and having a flange extending in the same plane as said edges, and a top supported by said flanges and edges.

1,860,645. HEEL COVER TUCKING MACHINE. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 4, 1930. Serial No. 418,641. 13 Claims. (Cl. 12—42.)



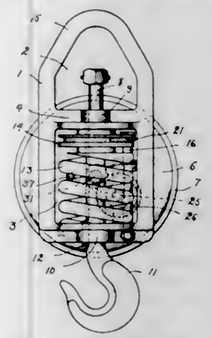
1. In a heel covering machine, the combination of a stepped tucking tool and means for imparting tucking movement to said tool.

1,860,646. ICE CREAM CUTTING DEVICE. HARVEY A. BEILGARD, Hollywood, Calif. Filed Aug. 13, 1928. Serial No. 299,293. 2 Claims. (Cl. 107—21.)



1. For use in cutting an edible brick having a plurality of spaced upstanding sticks inserted in the upper surface thereof, a cutting machine embodying: a table having a guide formed on top thereof; a plate in said guide adapted to support said brick; reciprocable standards oppositely mounted on said table; a head member mounted on said standards; a stepped cutting blade mounted in said head member; means for moving said plate in a plane transverse with the plane of said blades; means for reciprocating said standards so that the lower edge of said blade at its uppermost position clears said sticks; fixed standards on opposite sides of said reciprocating standards; a beam member supported by each pair of fixed standards; a plurality of downwardly projecting legs on said beam members; and scrapers on said legs adapted to engage the stepped sections of said blade and spaced apart so as to permit the passage of said sticks therebetween.

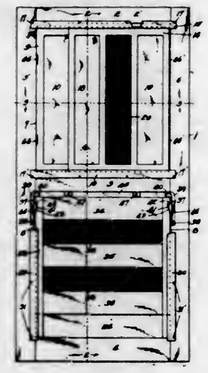
1,860,647. WEIGHT INDICATING SUPPORT. ABRAM M. BEVIER, Duluth, Minn. Filed Nov. 24, 1930. Serial No. 497,831. 2 Claims. (Cl. 265—68.)



1. A weight indicator of the class described comprising a vertically disposed link, a vertically reciprocable spring controlled hook within the link, a housing upon one side of the link, a dial and pointer externally of said housing, mechanism within the housing for imparting motion from the hook to the pointer for the purpose described.

1,860,648. CONVERTIBLE CLOSURE. FRANK BOKAN, St. Louis, Mo. Filed July 28, 1928. Serial No. 295,911. 1 Claim. (Cl. 20—36.)

In a door of the class described, the combination of a door frame having an opening in the upper half thereof, of an outer frame fixed in said opening and provided with two glassed areas, a screened area adjacent one of the glassed areas and an open area intermediate the two glassed areas, a slidable inner frame opposite the outer frame, said inner frame having two glassed areas and a screened area intermediate the two glassed areas, said slidable frame being so arranged relative to the fixed frame that when it is moved in one direction one of the glassed areas thereof registers with the open area of the fixed outer frame and the other glassed area of the sliding frame registers with the screened area of the fixed outer frame and when moved in the opposite direction the screened area of the iner frame registers with the open area of the outer frame and the two glassed areas thereof register with the two glassed areas of the outer frame and means for guiding the sliding movement of said inner frame and permitting removal thereof from the door frame for the purpose of allowing the open area of the outer frame to serve as a service opening thus eliminating the necessity of opening the door.

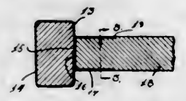


1,860,649. PACKING AND METHOD OF MAKING SAME. FRANK BORTONE, Jersey City, N. J., assignor to The Dorin Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed July 8, 1929. Serial No. 376,527. 11 Claims. (Cl. 18—55.)



1. A method of making packings of predetermined shapes which comprises molding a packing composition and applying a covering thereto which is frangible and easily disrupted in use.

1,860,650. METALLIC CORNER OR JOINT. HARRY BRACE, Detroit, Mich. Filed July 13, 1927. Serial No. 205,293. 3 Claims. (Cl. 113—116.)



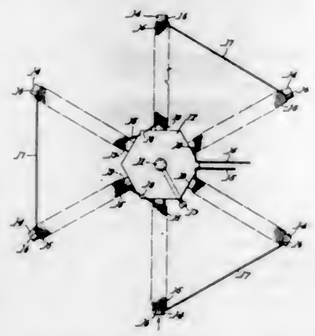
1. The method of constructing a brace joiner for mounting on a supporting member consisting in forming a tubular member from sheet metal and overlapping and fastening its ends and forming a brace receiving member in tubular formation from a single sheet of metal overlapping and securing its edges and attaching one end of said brace receiving member to the periphery of said first mentioned tubular member.

1,860,651. WATERPROOFED LEATHER AND COMPOSITION FOR TREATING SAME. CHARLES E. BRADLEY and CLAUDE D. MASON, Mishawaka, Ind., assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Dec. 3, 1925. Serial No. 73,054. 5 Claims. (Cl. 149—6.)

1. A leather waterproofing penetrating liquid of substantially the following formula: 100 c. c. rubber latex, 100 c. c. gasoline, 25 grams paraffin wax, 10 grams paraffin oil and 50 c. c. of a 10% soap solution.

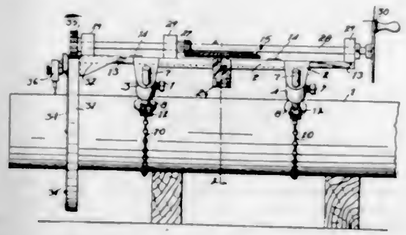
5. The art of treating leather which comprises impregnating unfilled leather with a rubber latex and wax emulsion.

1,860,652. RADIO AERIAL. EDGAR S. BROWN, Worcester, Mass. Filed July 1, 1929. Serial No. 375,094. 2 Claims. (Cl. 250—33.)



1. As an article of manufacture, a receiving aerial for radio purposes comprising a support having a plurality of sides, an insulating rod projecting from each side in a radial direction, an aerial wire wound around said rods in the form of coils and in regular order, every two adjacent coils being wound in opposite directions, the rods having perforations therethrough at each end for receiving the wire and holding it in position on the rod and the central support having an irregular perforation therein through which the wire passes between two of said rods to hold the wire against moving from one rod to the next one, and the wires extending across from the perforations in the extremities of adjacent rods.

1,860,653. PIPE CUTTING MACHINE. HUGH F. BROWN, San Francisco, Calif., assignor to Brown Brothers Welding Company, San Francisco, Calif., a Copartnership composed of Hugh F. Brown and William P. Brown. Filed Aug. 12, 1931. Serial No. 556,603. 10 Claims. (Cl. 266—23.)



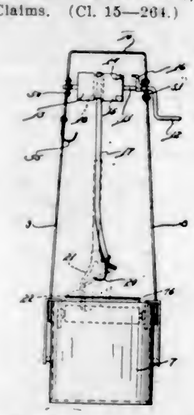
1. A pipe cutting machine of the class described comprising a frame adapted to be clamped to a pipe to be cut off, a plate mounted to slide longitudinally of said pipe in said frame, a ring housing mounted on said plate concentric with said pipe, a rotatable ring in said housing, a cutting torch on said ring, a vertical shaft projecting above and below said plate, and having a bearing in the plate, a bevel gear on the upper end of said shaft, a crank arm on the lower end, a transverse guide bar in said frame, a pin adapted to be guided in transverse motion in said bar, means to adjustably connect said pin to said crank arm, and means to turn said crank arm one revolution while the rotatable ring is turned one revolution.

1,860,654. RUNNING BOARD. GERALD F. CAVANAGH, Cleveland, Ohio, assignor to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 30, 1930. Serial No. 478,968. 4 Claims. (Cl. 280—163.)



1. A running board comprising a metal body having a depending flange along one edge thereof, said flange having an integral reversely bent portion providing a longitudinally extending groove, and non-metallic covering secured to said body with one edge thereof extending into said groove.

1,860,655. MOP LIFTING DEVICE. STEVE CHISMADIA, Highland Park, Mich. Filed Oct. 7, 1929. Serial No. 397,869. 3 Claims. (Cl. 15—264.)



1. A mop lifting device of the class described comprising a liquid receptacle; standards mounted on said receptacle and projecting upwardly therefrom; a rotatable member supported on said standards; means for rotating said member; a flexible member windable on said rotatable member and suspended over said receptacle; and an engagement member carried by said flexible member for engaging a mop.

1,860,656. LAMINATED VEHICLE SPRING. GEORGE W. CRABTREE, Cleveland, Ohio. Filed Jan. 9, 1928. Serial No. 245,384. 12 Claims. (Cl. 267—48.)



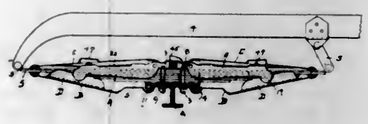
1. A controlling device for a laminated vehicle spring, including a pair of cooperating wedging members for compressing a plural number of spring leaves together during the reflex action of the spring and yielding means to shift one of said wedging members longitudinally with respect to the other wedging member during compression of the spring by a load.

1,860,657. CONTROLLING DEVICE FOR LEAF SPRINGS. GEORGE W. CRABTREE, Cleveland Heights, Ohio. Filed May 2, 1929. Serial No. 359,841. 8 Claims. (Cl. 267—48.)



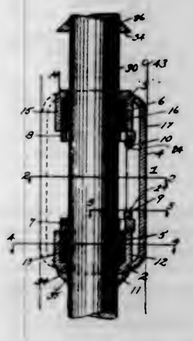
1. A controlling device for leaf springs, including a spacing member for the leaves, a supplemental movable spring leaf interposed between the spaced leaves, and means for producing longitudinal movement of said supplemental leaf with respect to the leaves of the spring enclosing said supplemental leaf, said means being actuated by the flexing movements of the main leaves of the spring.

1,860,658. VEHICLE SPRING. GEORGE W. CRABTREE, Cleveland Heights, Ohio. Filed Dec. 21, 1929. Serial No. 415,647. 20 Claims. (Cl. 267—48.)



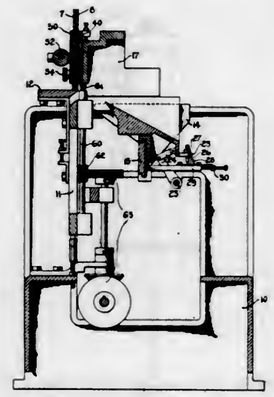
1. A vehicle spring, and a pair of frictionally engaged members supported to swing in different arcs, and means coupling the end of one of said members slidably to the freely movable end of the spring.

1,860,659. ROTARY WELL DRILL GUIDE AND CENTERING DEVICE. WALLACE K. CRILEY, Los Angeles, Calif., assignor, by mesne assignments, of one-half to Carrie Criley, Los Angeles, Calif. Filed Aug. 26, 1929. Serial No. 388,489. 1 Claim. (Cl. 308—4.)



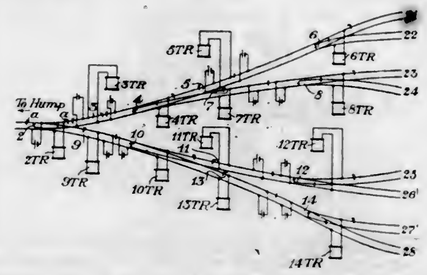
A device as disclosed comprising a cage formed with a bearing socket at its lower end, a bearing socket at its upper end, and guide and centering bars connected at their ends to said sockets respectively, bearings fitted in said sockets, retaining rings for retaining said bearings in said sockets respectively, lugs on said retaining rings, ribs formed on said guide and centering bars between which said lugs project, and locking pins extending into said ribs and over said lugs for detachably locking said retaining rings in retaining position.

1,860,660. DOVETAILING ATTACHMENT. CHARLES B. DART, Grand Rapids, Mich. Filed Sept. 29, 1930. Serial No. 484,986. 11 Claims. (Cl. 144—87.)



1. In a woodworking machine, a base, a table, means to mount the table on the base for movement in any direction in substantially a horizontal plane, cutting means rigidly mounted adjacent said table, clamping means on said table adapted to receive the members to be acted upon and hold them in the plane of the cutting means, manual means for moving the table, a cam follower depending from the table, and a rigid cam cooperably associated therewith, said cam and follower preventing movement of the table in a path smaller than the periphery of the follower.

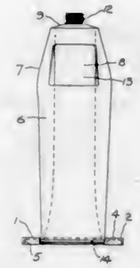
1,860,661. REMOTE CONTROL APPARATUS. HOWELL N. DIXON, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 19, 1931. Serial No. 516,916. 16 Claims. (Cl. 246—134.)



5. A control system including a plurality of routes over which an object may pass, a plurality of registration points located at intervals along said routes, means located at a central point to select a given route for an object, means located at each registration point along the route selected

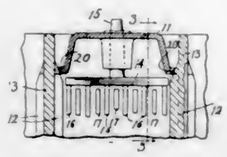
to prevent a change in the route by the means located at the central office, and means responsive to the object passing a registration point to release the route at that point.

1,860,662. COLLAPSIBLE TUBE HOLDER. BERNARD DUNELL, Vancouver, British Columbia, Canada. Filed Apr. 6, 1931. Serial No. 527,865. 3 Claims. (Cl. 221—60.)



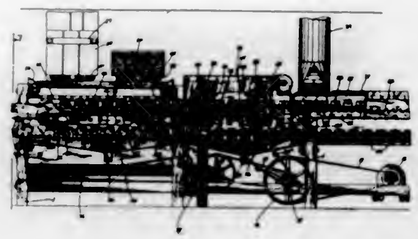
1. A collapsible tube holder comprising a base, an upstanding member and means on the member for supporting a tube adjacent its upper end with one side of said tube in close proximity to said member, said member having an aperture adjacent its upper end affording access to the finger tips whereby the upper end of the tube is accessible to collapsing pressure of the fingers from its exposed side and through the aperture of the upstanding member.

1,860,663. BATTERY CELL. CARL J. DUNZWEILER, Cleveland, and HENRAY W. LORMOR, Cleveland Heights, Ohio, assignors to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Jan. 23, 1930. Serial No. 422,710. 5 Claims. (Cl. 136—170.)



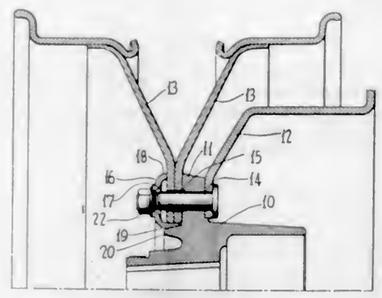
1. In apparatus of the class described, a battery cell having bottom and upright walls, upright internal ribs on said upright walls terminating beneath the top thereof, said ribs being beveled off on their upper extremities in order to guide a plate assembly into position between the said ribs, and a cover adapted to fit within the walls of the cell, said cover being notched out to receive the beveled upper ends of said ribs, whereby the cover is supported upon said ribs.

1,860,664. METHOD OF AND APPARATUS FOR TREATING LIQUID IMPREGNATED MATERIALS AND PRODUCTS RESULTANT THEREFROM. JOHN A. EDGECUMBE and HARVEY L. BISHOP, Minneapolis, Minn., assignors to The Edham Co. Inc., St. Paul, Minn., a Corporation of Delaware. Filed Feb. 17, 1930. Serial No. 429,034. 17 Claims. (Cl. 91—70.)



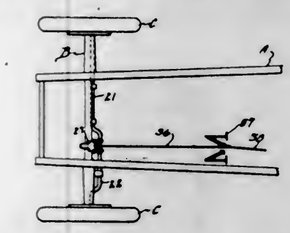
1. A process for staining wooden objects which consists in first applying the stain, and then working the stain into the object by a rubbing action only in a direction transverse to the grain.

1,860,665. VEHICLE WHEEL. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1931. Serial No. 520,193. 3 Claims. (Cl. 301—9.)



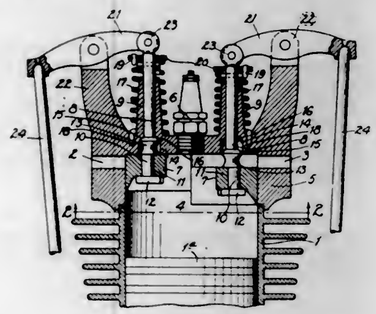
1. A vehicle wheel including, in combination, a hub having a radially extending face, and annularly arranged series of bolts projecting from said face, a wheel body mounted against said face and having openings which receive the bolts projecting from the hub, an annulus having a portion abutting against the outer face of said wheel body to clamp the same to the hub, said annulus being provided with a plurality of openings to receive the bolts and a flange which underlies said wheel body and supports the same radially, and nuts coacting with said bolts and bearing against said annulus to secure the parts in their proper relative positions.

1,860,666. MOTOR VEHICLE BRAKE. EDWIN R. EVANS, Detroit, Mich. Filed May 11, 1925, Serial No. 29,587. Renewed July 30, 1930. 26 Claims. (Cl. 188—204.)



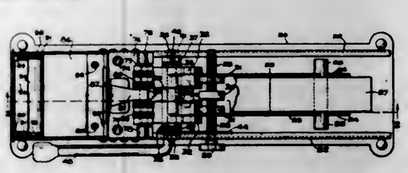
13. In combination with an axle mounting a pair of opposed wheels, a pair of rods connected to apply a braking force to the wheels, each of said rods having a pivoted arm rigidly secured thereto for rockably mounting said rods, and means for rocking said rods.

1,860,667. INTERNAL COMBUSTION ENGINE. CARL FLAKER, Florissant, Mo. Filed June 19, 1929. Serial No. 372,057. 4 Claims. (Cl. 123—188.)



3. A valve assembly for an internal combustion engine comprising a slide valve having an opening extending therethrough, a rotary valve stem having an eccentric portion extending through and freely movable in the opening in said valve, and a spring tending to rotate said valve stem to press the eccentric portion thereof against one side of said opening in said valve to hold the same to its seat, said valve stem being provided with a ross-head adapted to bear against the undersurface of said valve and a shoulder adapted to abut against the upper surface thereof.

1,860,668. PAPER STRIP DISTRIBUTING, CUTTING, AND MOISTENING MACHINE. ALEXIS F. GILLET, Omaha, Nebr., assignor to Jubilee Manufacturing Company, Omaha, Nebr., a Corporation of Nebraska. Filed Sept. 13, 1930. Serial No. 481,688. 1 Claim. (Cl. 242—55.2.)



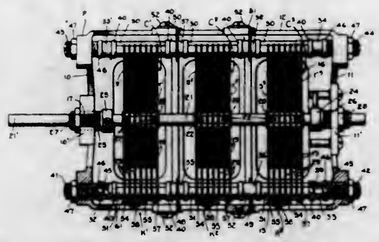
In a strip paper roll holder, a pair of side walls, a pair of frame members disposed between the walls, said frame members having bearing sockets near one end, a cross pin detachably mounted in said bearing sockets and adapted to support a strip paper roll between the members, a screw rotatably mounted at opposite ends in said walls, and having oppositely threaded portions between the walls, nut portions carried by said frame members engaging the opposite ends of said screw, a handle on the outer end of the screw exteriorly of the adjacent wall for turning the screw to move the frame members toward and from each other and accommodate paper strip rolls of different widths, and an intermediate supporting element carried upon the screw intermediate the ends thereof for engaging the paper strip from the roll to support the same over the screw.

1,860,669. METHOD AND APPARATUS FOR CEMENTING WELLS. ERLE PALMER HALLIBURTON, Los Angeles, Calif. Filed Jan. 22, 1932. Serial No. 588,110. 14 Claims. (Cl. 166—21.)



1. In a method of cementing long strings of casing in a well hole, the steps of: alternately introducing predetermined volumes of a cementitious material and hydraulic fluid into a casing; ejecting the lowermost volume of cementitious material from said casing into a well hole while retaining the hydraulic fluid immediately thereabove, and then ejecting the cementitious material next above said ejected volume into the well hole at a point above said retained volume of hydraulic fluid.

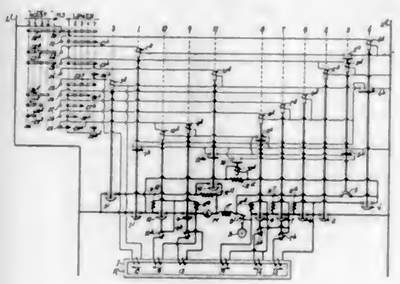
1,860,670. AIR CONDENSER. CHARLES HARDY, New York, N. Y., assignor, by mesne assignments, to Dejur-Amsco Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1927. Serial No. 164,695. 9 Claims. (Cl. 175—41.5.)



1. A multiple variable condenser comprising a frame, a rotor assembly journalled in said frame and having a plurality of axially spaced rotor plate sets, a stator assembly having a plurality of axially disposed stator plate sets, the rotor plate sets being arranged to interleave with

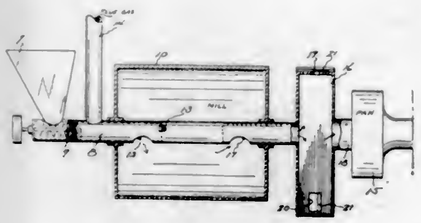
the stator plate sets to form therewith a plurality of condenser units, means for mounting said stator assembly in said frame along at least two lateral lines of support, said mounting means including insulating members interposed between said stator plate sets and mutually supporting one plate set longitudinally on the other, and means for axially adjusting one side of said stator assembly as a unit relative to the other side thereof.

1,860,671. CONTROLLER FOR ELECTRIC MOTORS. PAISLEY B. HARWOOD and JOHN M. NEWMAN, Milwaukee, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,360. 9 Claims. (Cl. 172—179.)



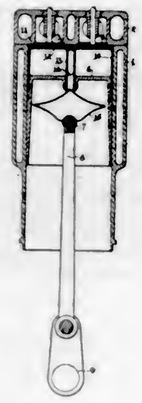
1. In a controller for hoists and the like, the combination with a driving motor, of means for selectively establishing hoisting and lowering connections for said motor, the latter connections providing for dynamic braking of said motor under overhauling load conditions, resistance varying means common to said connections, and control means having an inherently transient effect for arresting the operation of said resistance varying means, said control means including means providing for differentiation of the arresting action thereof during hoisting and lowering operations of said motor.

1,860,672. FUEL FEEDING SYSTEM. FRANK R. HUNTER, Kansas City, Mo., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Apr. 7, 1927. Serial No. 181,737. 3 Claims. (Cl. 110—104.)



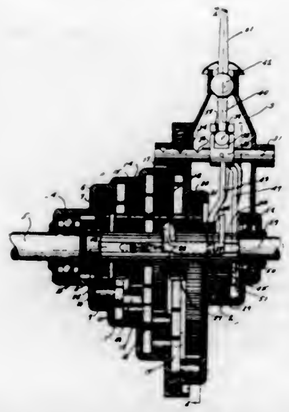
1. In a fuel feeding system the combination with a fuel pulverizing chamber and means for introducing fuel and flue gases thereinto, of means for conveying suspended fuel from said chamber comprising a conduit, an expansion chamber therein having inlets for introducing an air supply into said expansion chamber, a fan for drawing the fuel and air mixture from said expansion chamber, and an air mixing chamber and combustion nozzle connected to the fan to receive the discharge therefrom.

1,860,673. INTERNAL COMBUSTION ENGINE. MAUNSELL B. JACKSON, Toronto, Ontario, Canada, assignor to Albert E. Dyment, James H. Lumbers, and William S. Gray, Toronto, Canada, as trustees. Filed Mar. 18, 1930. Serial No. 436,838. 1 Claim. (Cl. 123—78.)



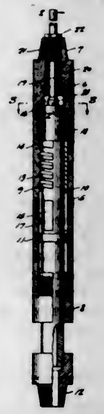
An internal combustion engine including a cylinder; a piston; a combustion chamber; an extension carried by the piston and provided with an inwardly directed flange at its upper end; and a displacement member loosely mounted in the extension to reciprocate relative to the piston to vary the volume of the combustion chamber, the said member being adapted to rest on said flange to close the upper end of the extension.

1,860,674. TRANSMISSION. STEPHEN JENCICK, Chagrin Falls, Ohio. Filed June 6, 1927. Serial No. 196,858. 12 Claims. (Cl. 74—58.)



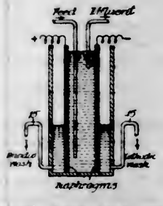
1. A transmission gearing, comprising a housing, a driving shaft and a driven shaft entering said housing in axial alignment, a plurality of internal gears eccentric to the axis of said driving and driven shafts with the gear teeth of all of said internal gears, at the same point in the periphery, in transverse alignment, suitable intermediate gears between said internal gears and the driving shaft, and suitable driving connections between said internal gears and the driven shaft.

1,860,675. ROTARY JAR. JAMES A. KAMMERDINER, Los Angeles, Calif. Filed Nov. 24, 1931. Serial No. 577,015. 5 Claims. (Cl. 255—27.)



1. A jar comprising a bowl section and a hollow mandrel section longitudinally slidable in the bowl for circulation of fluid therethrough, trip means positionable to hold said sections collapsed and to take a tensile strain and positionable to release said sections, said bowl having a chamber at one end in which said mandrel snugly slides longitudinally and a bore of reduced diameter through said end, and a wash pipe on said mandrel extending through said bore to form a slip connection therewith, there being relief ducts opening into said chamber adjacent said mandrel for communication between the bore of said pipe and said chamber.

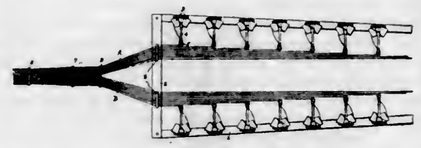
1,860,676. LIQUID PURIFICATION. ROBERT H. KEAN, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 25, 1928. Serial No. 314,959. 17 Claims. (Cl. 204—25.)



2. An electro osmotic apparatus comprising a compartment for the liquid being treated, means permitting passage of the liquid being treated through this compartment, permeable diaphragms forming the walls of said compartment, electrodes outside of said compartment, means for causing a major portion of the liquid being treated to flow out of said compartment without contacting with said electrodes, means for causing a minor portion of said liquid to flow out of said compartment into contact with said electrodes, said electrodes being positioned in contact with said permeable diaphragms and the adjacent faces of such electrodes being provided with depressions forming channels for flow of liquid.

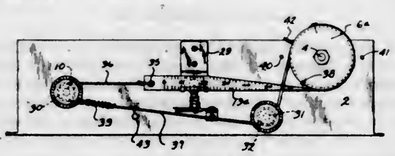
1,860,677. CONDENSER. FREDERICK KLEIN, College Point, N. Y., assignor to Sipp-Eastwood Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 9, 1931. Serial No. 549,701. 4 Claims. (Cl. 28—54.)

1. A multiple strand guide comprising two reeds arranged face to face and each consisting of an open frame and dents connecting opposite sides of such frame, and means connecting said reeds together comprising crotched members on one frame having their crotches open toward each other, said members receiving in their crotches the



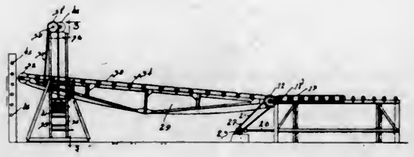
frame of the other reed, and one member being shiftable from the other to admit the other reed to the crotches and toward the other member to engage said other reed in the crotches.

1,860,678. INDICATING DEVICE FOR RADIO SETS. RALPH H. LANGLEY, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 7, 1931. Serial No. 520,992. 9 Claims. (Cl. 116—124.1)



1. In an indicator, a shaft, a drum operatively connected to said shaft, an interspaced drum mounted for rotation, and an endless belt indicator passing over said drums, and arranged to be moved by said first mentioned drum, and means intermediate said drums to twist a portion of said belt into a new plane, said means comprising a bracket having portions engaging said belt, and a window in said bracket through which light may reach said band.

1,860,679. CONVEYER. JAMES LOCKHART and RICHARD C. MOORE, Painesville, Ohio, assignors to The Coe Manufacturing Company, Painesville, Ohio, a Corporation of Ohio. Filed Feb. 16, 1929. Serial No. 340,359. 4 Claims. (Cl. 198—20.)

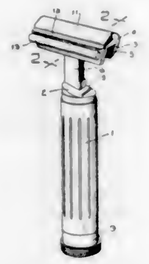


1. In a device of the character described, a conveyer pivoted adjacent one end and adjustably supported adjacent the other end, a motor for raising and lowering the adjustable end of the conveyer, manually controlled means for starting the operation of the motor, automatic means for stopping the operation of the motor and the movement of the conveyer at a plurality of points in one direction, and automatic means for reversing the operation of the motor at the limit of movement of the conveyer in either direction.

1,860,680. SAFETY RAZOR. HENRY J. LUCKE, East Orange, N. J. Filed Sept. 3, 1927. Serial No. 217,416. 10 Claims. (Cl. 30—12.)

1. A safety razor comprising a shaving head having a surface portion for receiving a blade having parallel surfaces provided with oppositely disposed cutting edges pro-

duced by the intersection of two short bevel surfaces, a shield frictionally retaining such a blade upon said surface with the outward sharpened edge exposed for shav-

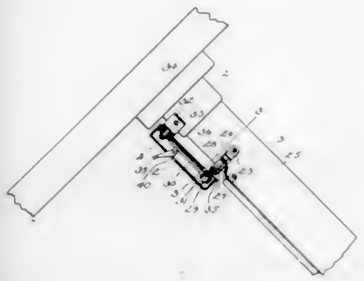


ing, and means yieldably engaging the taper of the inward sharpened edge portion of the blade whereby to position the outward edge.

1,860,681. POLYMERIZATION PRODUCTS OF DIOLEFINES. MARTIN LUTHER, Mannheim, and CLAUS HEUCK, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the Main, Germany, a Corporation of Germany. Filed May. 18, 1929, Serial No. 364,315, and in Germany July 17, 1928. 7 Claims. (Cl. 260—6.)

1. In the production of plastic or elastic products from products obtained by the polymerization of diolefines in the presence of hydrogen peroxide, the step of allowing a substance effecting decomposition of hydrogen peroxide to act on an emulsion of the said products.

1,860,682. SWITCH FOR MOTOR VEHICLE DIRECTION SIGNALS. FRANK C. MCELROY, Columbus, Ohio. Filed Apr. 7, 1926. Serial No. 100,411. 2 Claims. (Cl. 200—59.)



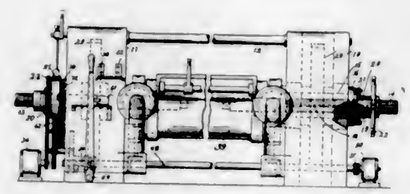
1. A circuit closure for the purpose set forth, comprising a pair of spaced arcuate contact strips insulated from and secured to the steering post column of a motor vehicle, a resilient member having one end thereof secured to the hub of the steering wheel associated with said column, the other end of said member being equipped with a roller adapted to engage with said contacts upon the operation of said steering wheel to turn the vehicle out of the straight-away, straight-ahead position, and a manually operated lever pivotally connected in association with the steering wheel and adapted to flex the resilient member into engagement with said contacts, said lever when in one position permits the disengagement of the roller from said contacts.

1,860,683. METHOD OF MAKING METAL STAMPINGS. WILLIAM J. MEINEL, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 27, 1929. Serial No. 374,047. 3 Claims. (Cl. 113—51.)



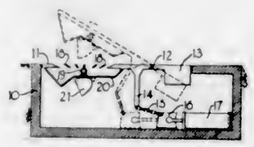
1. The method of die stamping articles from sheet metal which consists in separately fabricating a number of blanks each of sufficient stock to constitute a completed stamping, rigidly connecting said blanks together by their margins in longitudinal series, simultaneously stamping a multiple number of articles from the connected blanks, one from each blank, and thereafter severing the connection between the blanks to remove all irregularities resulting from said connection.

1,860,684. LATHE. RICHARD C. MOORE, Painesville, Ohio, assignor to The Coe Manufacturing Company, Painesville, Ohio, a Corporation of Ohio. Filed Sept. 23, 1929. Serial No. 394,397. 8 Claims. (Cl. 144—209.)



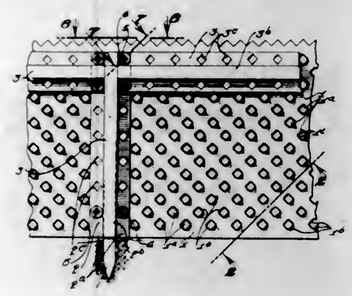
1. In a veneer lathe, means adapted to be moved into engagement with the end of a log, and means for thrusting said means into engagement with a log, including a rotary drive means having an inherent maximum torque characteristic for driving said thrusting means.

1,860,685. LIGHTING MEANS FOR LANDING FIELDS AT AIRPORTS. MELVIN G. MORRIS, Tampa, Fla., assignor, by mesne assignments, to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 22, 1928. Serial No. 314,111. 3 Claims. (Cl. 240—1.2.)



1. In a lighting unit for landing fields, a box, a lamp support comprising a recessed cavity having slots cut in the upper surface thereof and a shield formed upon the lower surface thereof and pivoted relative to the box so as to form a top surface therefor when in lowered position; a light of high illuminating efficiency mounted upon the under surface and a rare gas discharge tube mounted in the recessed cavity; a counterweight means to normally hold the support in a raised position.

1,860,686. FENCE. WILLIAM K. MORRISON, Chula Vista, Calif. Filed Aug. 20, 1930. Serial No. 476,511. 18 Claims. (Cl. 256—45.)



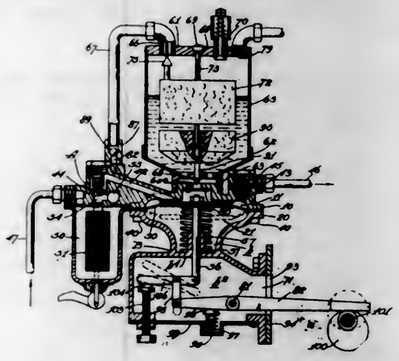
1. In a fence structure, a foraminous fence formed of sheet material, foraminous posts for said fence, portions of said posts arranged to lie contiguous to said fence, and a separate and independent securing means extending through certain alined openings in said posts and said fence.

1,860,687. COATED ARTICLE AND METHOD OF PREPARING THE SAME. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1928. Serial No. 260,255. 16 Claims. (Cl. 91—68.)

1. The method of coating a metallic screen comprising applying a coating composition containing a synthetic resin to the same in quantities insufficient to close the meshes thereof and then applying a coating composition containing an organic derivative of cellulose in quantities sufficient to close said meshes.

7. A flexible glass substitute comprising a metallic screen the meshes of which are coated with a phenol aldehyde resin and having a coating of a composition containing an organic derivative of cellulose sufficient to close the meshes.

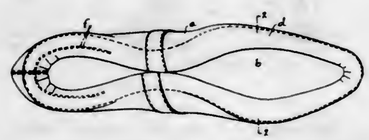
1,860,688. COMBINED VACUUM TANK AND PRESSURE PUMP. WILLIAM H. MUZZY, Evanston, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Mar. 9, 1929. Serial No. 345,786. 6 Claims. (Cl. 103—38.)



2. In combination with an engine-operated pump for pumping fuel from a fuel source to an engine carbureter, a vacuum-operated device constructed for lifting fuel from the source having a vacuum chamber connected for discharge into the pumping chamber of the engine-operated pump; a valve controlling said discharge opening for such discharge and seating against reverse flow, a float in the lower part of the vacuum chamber, and a valve carried by the float for controlling the discharge port leading to the pumping chamber arranged to be seated for closing said port except when lifted by the buoyant effort of the float due to its submergence in the liquid content of the vacuum chamber to a predetermined degree; whereby discharge from the vacuum chamber to the pumping chamber is prevented when the vacuum chamber is not supplied with fuel above said predetermined degree.

4. A pumping apparatus for supplying fuel to the carbureter of an internal combustion engine from a fuel source at a lower level comprising a casing having a pumping chamber with a movable wall member constituting the pumping element; engine driven connections for positively actuating the pumping element for its fuel intake stroke; spring means reacting between a fixed part of the casing and the movable wall member for stressing the latter in the direction of the fuel feeding stroke, the engine-driven connection consisting of a lever fulcrumed in the casing and extending for engagement with an engine cam for positive actuation in one direction in the active phase of such cam; a spring reacting on the lever for causing it to follow the cam in the idle phase of the latter; a second lever in the casing; a stem of the movable wall member to which said second lever is connected; a link connecting said second lever with the first mentioned lever, and an abutment mounted in the casing positively positioned for lodgement and fulcruming thereon of the second lever in the movement derived by said second lever through the first lever from the engine cam in the active phase of the latter, said abutment and said second lever being cooperatively formed and relatively mounted for impassability of the abutment by the lever in the movement of the lever due to the positive actuation of the engine cam.

1,860,689. BOOT AND SHOE. HENRY CHARLES PERCY RANDALL, Northampton, England. Filed Aug. 6, 1930, Serial No. 473,327, and in Great Britain Aug. 30, 1929. 2 Claims. (Cl. 12—142.)

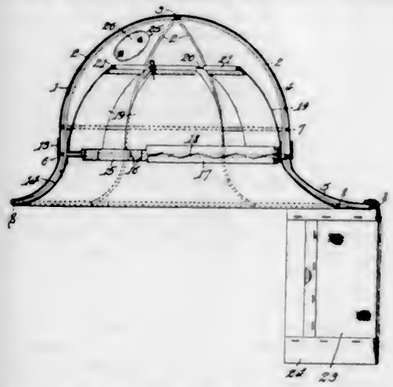


1. A method of manufacturing a boot or shoe which includes the following steps:—(a) lasting an upper and insole so that the edge of the upper overlaps the insole and is secured to the last with the insole by means of tacks, (b) cementing the said edge of the upper to the insole around the whole thereof, and (c) removing the tacks and stitching the said edge of the upper to the insole through the combined substances of the said edge and insole prior to the application of the outer sole and heel for at least that portion of the upper located at the heel seat.

1,860,690. HELMET. HENRY RATEAU, Weirton, W. Va. Filed Apr. 17, 1931. Serial No. 530,846. 2 Claims. (Cl. 2—205.)

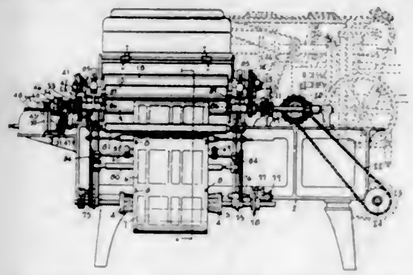
1. A helmet of the character described comprising a semi-rigid skeleton frame including a plurality of radially disposed wire ribs having their upper ends occupying joined relation, said ribs being shaped and relatively disposed to form a unitary crown portion and brim portion, said brim portion being angularly disposed relative to said crown portion, ring-like members rigidly connecting said ribs, one at the outer edge of the brim and an-

other at the junction of the crown and brim portions, a bandeau fixed to the last mentioned of said members, a heat-resisting fabric covering for said frame, the covering



for said brim including a brim underlying portion attached to said bandeau, and a bead-cushioning fabric forming an internal facing for said bandeau.

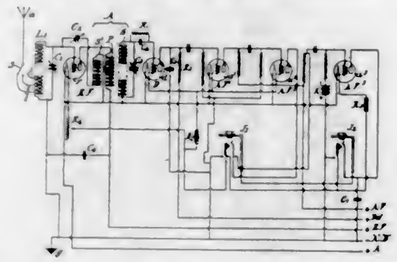
1,860,691. PAPER FEEDING AND CUTTING MECHANISM. CHARLES F. RICHARD, Battle Creek, Mich., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Filed Feb. 5, 1930. Serial No. 426,018. 22 Claims. (Cl. 164—68.)



1. An apparatus for cutting into sheets a rolled web of paper comprising a series of wrapper units and having a longitudinal series of apertures in correspondingly associated relation to the wrapper units, comprising a longitudinally adjustable supporting spindle for said roll of paper, a pair of coacting paper feed rollers, driving means for said rollers including a clutch, a pair of coacting rotary cutter members disposed at the rear of the feed rollers, a clutch control means including a driven clutch engaging cam operatively associated with said cutter members and a detent for holding said clutch in engaged position, a spring acting to disengage said clutch when said detent is released, an electromagnet operatively associated with said detent, and coacting contacts disposed on opposite sides of the path of the web in alinement with the said apertures therein whereby they make contact through said apertures, one of said contacts being electrically connected to said electromagnet.

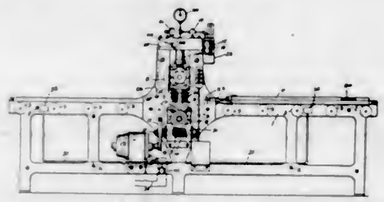
1,860,692. WIRELESS RECEIVING SYSTEM. NEILSON RITTENHOUSE, Lambertville, N. J. Filed Sept. 22, 1926. Serial No. 137,038. 9 Claims. (Cl. 250—20.)

1. In a wireless receiving apparatus employing audions, a stage of tuned radio frequency amplification, a detector stage, a transformer comprising primary and secondary windings inductively coupling said stages together, the said primary and secondary windings being so arranged that the high-potential terminal of the primary winding is of the same polarity as the high-potential terminal of the secondary winding, and an independent stabilizing wind-



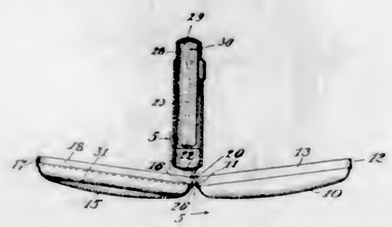
ing in the magnetic field of said transformer, one end of said winding being connected directly to a filament lead of the radio frequency audion and the other end of said winding being connected through a variable condenser to the grid of said audion.

1,860,693. LITHOGRAPHIC TRANSFER PRESS. FRANK T. SHEEDY and LOUIS TRAUNG, San Francisco, Calif., assignors, by direct and mesne assignments, to The Traung Company, San Francisco, Calif., a Copartnership consisting of Louis Traung, Charles F. Traung, L. H. Jackson, H. W. Johnston, Frank T. Sheedy, and H. T. Gardner. Filed Aug. 26, 1930. Serial No. 477,860. 14 Claims. (Cl. 101—33.)



1. A transfer press including a pair of side frames with a flat bed reciprocably mounted thereon, a pressure roll extending across the press above the bed, means for adjusting the pressure of said roll against work on the bed, means for reciprocating the bed under the pressure roll while maintaining the pressure of the roll in contact with the work.

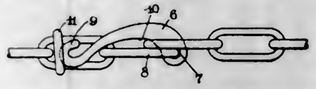
1,860,694. COSMETIC CONTAINER. ANDREW GRAHAM SHIELDS, Attleboro, Mass. Filed Apr. 13, 1931. Serial No. 529,742. 7 Claims. (Cl. 132—88.)



1. In a container, in combination, a top member and a bottom member hingedly attached to each other, a pencil casing pivotally carried at the hinged jointure of

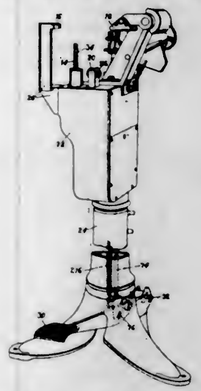
said top member and said bottom member and capable of normal placement within the closed container, a member carried by said pencil casing extending outwardly of the container at the said hinged portion adapted to raise said pencil casing from its normal position within the closed container when said top member and said bottom member are hingedly moved with respect to each other causing an opening of said container.

1,860,695. TIRE CHAIN FASTENER. FRANK E. STAHL, Tonawanda, N. Y., and HARVEY DUDLEY, St. Catherines, Ontario, Canada, assignors to The Columbus-McKinnon Chain Corporation, Tonawanda, N. Y., a Corporation of New York. Filed July 30, 1930. Serial No. 471,817. 1 Claim. (Cl. 24—68.)



A tire chain fastener for the ends of a side chain composed of substantially flat links universally movable with respect to one another, said fastener including a lever pivoted at one end to a link at one end of the side chain and engage the end link of the other end of the side chain, said lever having a hook at its free end lying in the plane of the lever and adapted to be moved in a plane parallel to the face of the next link in the first mentioned end of the chain, and a keeper consisting of a link transversely embracing said next link adapted to be slid onto said hook of the lever to effect engagement therewith when the hook is depressed to lie parallel to and opposite a face of said next link.

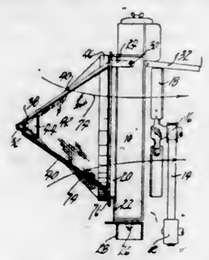
1,860,696. MACHINE FOR OPERATING UPON LASTS. LAURENCE E. TOPHAM, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 20, 1930. Serial No. 476,579. 47 Claims. (Cl. 12—15.1.)



1. In a machine for disassembling the foreparts and heel parts of separable lasts of the type having interengaging bonding elements and means for locking said elements in interengaged relation, relatively movable members for rigidly holding one of the last parts and for releasing said locking means, and means for thereafter relatively moving the last parts to disengage said bonding elements.

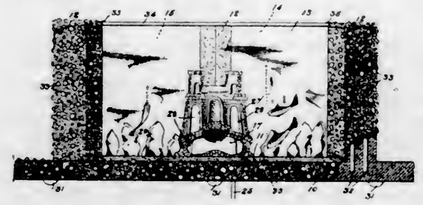
1,860,697. RADIATOR SCREEN STRUCTURE. NORMAN W. TRAVISS, Des Moines, Iowa. Filed May 23, 1930. Serial No. 455,076. 12 Claims. (Cl. 183—53.)

1. A device of the class described comprising a screen member adapted to be located in a column of traveling air to screen foreign matter from such air, a draft shield member comprising a plate closely adjacent said screen member throughout the entire surface of the plate and



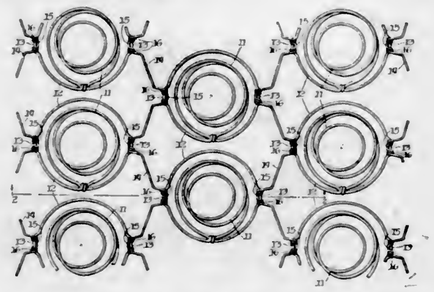
following the contour of said screen member for a substantial radial portion of the surface thereof and means to rotate one member relative to the other one.

1,860,698. AQUARIUM. LARRY VENDITTI, Philadelphia, Pa. Filed June 14, 1930. Serial No. 461,065. 8 Claims. (Cl. 119—5.)



1. An aquarium comprising a monolithic base and upright posts, an illuminating element uprising from the base, and reflecting bodies embedded in, and upstanding from the base, and surrounding the illuminating element.

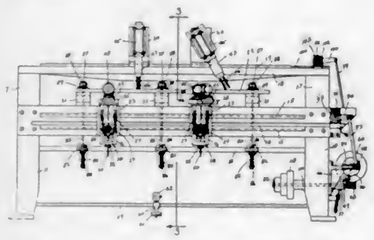
1,860,699. SPRING ASSEMBLY. FRED R. ZIMMERMAN, Chicago, Ill., assignor, by mesne assignments, to Burton-Dixie Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,668. 1 Claim. (Cl. 5—274.)



In a spring-assembly, the combination of a plurality of rows of upright cushion coiled springs with end-coils with the springs of adjacent rows in staggered relation, and tie-wires of general wave form alternately hingedly connected to the end-coils of the springs of adjacent rows in sequence, each such end-coil having two such hinge connections at diametrically opposite points, each such end-coil at such hinge points being deformed to provide substantially straight portions encircled by double-wire laterally offset parts of the tie-wires coiled around said

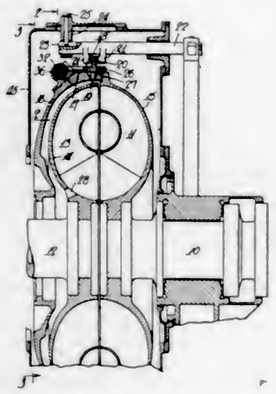
straight portions and providing within the coils practically-round openings of substantially the diameter as the wire of such straight sections to form the hinges, each of said hinges being capable of turning practically-equally freely in either of two opposite directions, such tie-wire coiled portions co-operating with the bends in the spring end-coils at the ends of said straight sections to prevent substantially relative axial shifting of the parts of the hinges.

1,860,700. MACHINE TOOL. WILLIAM H. BAUCH, Shelbyville, Ind., assignor to Indiana Foundry, Machine & Supply Company, Brazil, Ind., a Corporation. Filed Dec. 19, 1929. Serial No. 415,198. 3 Claims. (Cl. 77—24.)



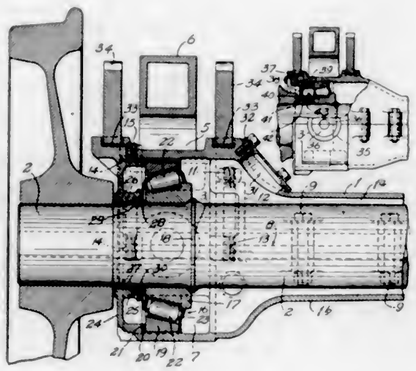
1. In a machine tool, the combination of a frame having a guideway formed thereon, a carriage slidably adjustable upon said guideway, a substantially L-shaped member supported by said carriage and having one of its legs engaging said carriage and slidably adjustable thereon in a direction transverse to the direction of adjustment of the carriage upon the guideway, a member rotatably mounted upon the second leg of said L-shaped member, a motor base slidably mounted upon said rotatably mounted member, a rotary tool and motor unit fastened to said motor base, a movable member mounted upon said frame, and connecting means between said member and said motor base for sliding the latter upon said rotatable member, said means being operable irrespective of the adjusted position of said carriage upon said guideway, and said L-shaped member upon said carriage and irrespective of the rotated position of said rotatable member.

1,860,701. HYDRAULIC POWER TRANSMITTER. GUSTAV BAUER and WALTER BROSE, Hamburg, Germany. Filed June 18, 1930. Serial No. 461,932. 15 Claims. (Cl. 60—54.)



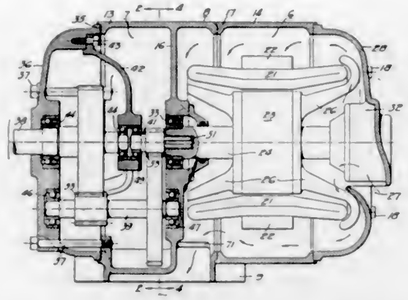
1. A hydraulic power transmitter including a primary rotor, a secondary rotor, a discharge control ring mounted for associated rotation with one of said rotors, means for effecting the relative axial movement of said ring with respect to its associated rotor to discharge liquid from said rotors, and means for yieldably restraining relative rotational movement of said ring and its associated rotor.

1,860,702. AXLE HOUSING. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 3, 1930. Serial No. 499,679. 12 Claims. (Cl. 295—36.)



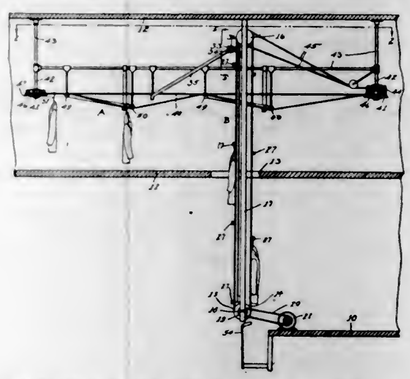
1. A railway car axle housing adapted to enclose roller bearings including an outer bearing member assembled on a solid axle, comprising an upper section, a lower section, and removable fastening means for holding the two sections of said housing together.

1,860,703. ELECTRIC POWER UNIT AND CONSTRUCTION FOR THE SAME. JOSEPH D. CHRISTIAN, San Francisco, Calif. Filed Aug. 9, 1930. Serial No. 474,286. 9 Claims. (Cl. 74—7.)



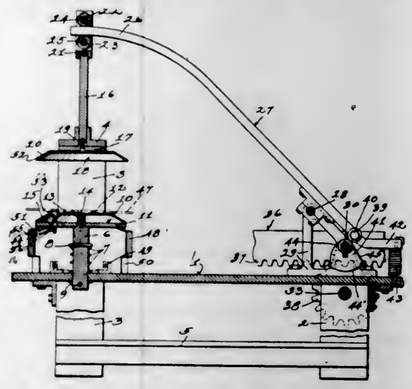
1. In combination, a housing, an electric motor stator fixed in the housing, a rotor cooperatively positioned with respect to the stator, a member provided centrally of the housing for supporting an end of said rotor, a counter shaft in the housing, a driven shaft, a plurality of gears carried by said shafts to transmit rotation of said rotor to said driven shaft, an end bell, means for receiving said end bell on said housing to support an end of the driven shaft and an end of said counter shaft, and a spider carried by said end bell for supporting the driven shaft.

1,860,704. GARMENT CONVEYER. CHARLES E. CONSTABLE, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 25, 1928. Serial No. 308,237. 5 Claims. (Cl. 198—20.)



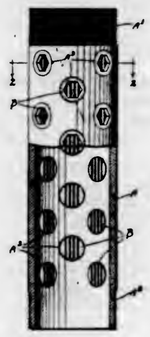
1. In a device of the class described, a continuous and vertically arranged conveyer having a series of laterally projecting bracket members, the upper edge of each of said bracket members being notched for receiving a hanger hook, a second continuous conveyer rope mounted to operate in a horizontal plane, having one of its runs adjacent to the vertical conveyer and below its upper end, an inclined bar having its upper end adjacent to the upper end of one of the runs of said vertical conveyer, and its lower end adjacent to one of the runs of the said horizontal conveyer, means for automatically delivering the hooks of said hangers from said brackets to said inclined bar, where they will be delivered by gravity to said horizontal conveyer, said means comprising a wheel rotatively mounted adjacent to the upper end of said inclined bar, having its periphery provided with radially projecting pins designed to operate adjacent to said brackets, and means for rotating said wheel with its periphery at a speed greater than the speed of said vertical conveyer, whereby the garment hanger hooks will be engaged by said pins and lifted from said bracket to the upper edge of said inclined bar.

1,860,705. PIE CRUST FORMING MACHINE. CHARLES A. COSTIGAN, Los Angeles, Calif. Filed Apr. 6, 1931. Serial No. 527,999. 9 Claims. (Cl. 107—15.)



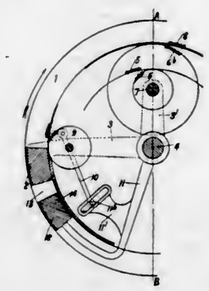
1. A pie crust forming machine comprising a table, a rotatable shaft thereon, a yieldable forming member on said table, a power operated forming member alined with said yieldable member, a cam on said shaft, and means associated with and operable by said cam for moving said power operated member into operative relation with said yieldable member, and for further moving said forming members together, when a crust is held between said members, for forming the crust.

1,860,706. OIL WELL STRAINER. ROBERT T. ENGELBRECHT, Los Angeles, Calif. Filed July 6, 1929. Serial No. 376,414 3 Claims. (Cl. 166—6.)



1. In a well strainer, the combination of a casing and a plug screwed into said casing and provided with an apertured head at its inner end, and a wrench receiving recess outwardly of said head for attaching and detaching the plug.

1,860,707. ROTARY INTERNAL COMBUSTION ENGINE. GEORGES EUGENE EZBELENT, Paris, France. Filed Apr. 27, 1929, Serial No. 358,447, and in Great Britain May 10, 1928. 9 Claims. (Cl. 123—43.)

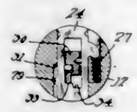


1. In a four-cycle rotary internal combustion engine, a cylinder, a piston, a driving shaft, the cylinder being fixedly connected thereto and the piston being pivotally connected thereto, a slide-guide on said connection, a crank-shaft, a connecting rod extending from said crank-shaft to said slide, and an epicyclic gear-system connected to said crank-shaft for moving the end of said connecting rod in said slide, and means connected thereto to vary the amplitude of the successive cycles and to vary the amplitude of the strokes in any one cycle.

1,860,708. MASTER KEY DISK LOCK. MORRIS FALK, Fitchburg, Mass. Filed Dec. 20, 1928. Serial No. 327,437. 1 Claim. (Cl. 70—46.)

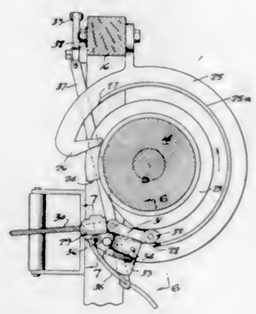
A disk lock having a plug and a series of locking disks carried thereby, each disk having a rigid convex

projection on one side with gently sloping sides and the plug having an undercut in its wall against which said



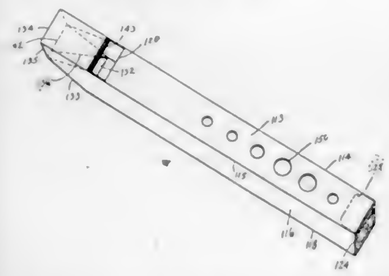
projections are adapted to engage, whereby the disks are not likely to be removed accidentally but can be removed by the application of force.

1,860,709. AUTOMATIC CATHEAD. WALTER L. FOSTER, Whittier, Calif., assignor of one-fourth to Roland R. Crum, Whittier, Calif. Filed May 5, 1930. Serial No. 449,768. 7 Claims. (Cl. 254—187.)



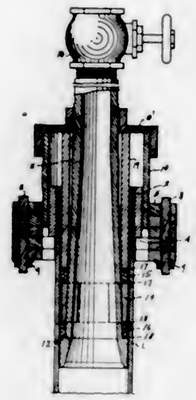
I. A cat head structure comprising a winding member having a winding surface for a line, a coupler abutment on said surface, a line to be wound on said member having a coupler for engagement with said coupler abutment whereby said line may be anchored to said winding member, a release member in the path of said coupler abutment to disengage said coupler from said coupler abutment, retaining means extending along said winding surface and ending at said release member to maintain said coupler in coupling position, and means to initially place said coupler in engagement with said coupler abutment and retaining means.

1,860,710. NOVELTY PACKAGE. CLYDE L. GILBERT, Terre Haute, Ind. Filed Feb. 2, 1931. Serial No. 512,709. 7 Claims. (Cl. 46—46.)



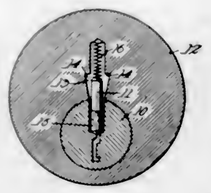
1. A whistle container including a pair of sides, a bottom, a top having an air opening therein near one end, said sides, bottom and top being arranged and secured in polygonally sectioned tubular formation, means for closing the end opposite the first mentioned end, and means for closing the first mentioned end including an enclosed reed forming portion terminating adjacent the air opening and free to vibrate when air is blown into said first mentioned end for whistling purposes, said portion serving as a content retainer when utilized for carton purposes.

1,860,711. WELL CAPPER. HALE GUEDRY, South Houston, Tex., assignor of one-eighth to Rex D. Frazier. Filed Feb. 24, 1930. Serial No. 430,471. 5 Claims. (Cl. 285—22.)



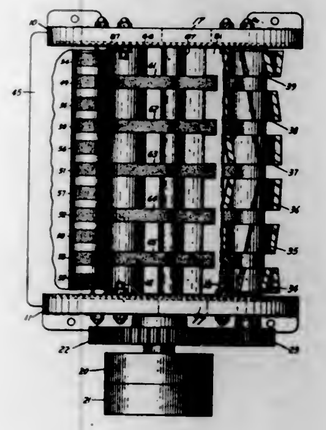
1. The combination with a casing in a well bore, of a tubular mandrel in the upper end thereof, an anchor composed of hinged parts secured around the upper end of the casing, means through which said mandrel is adjustably connected to said anchor, casing engaging means associated with said mandrel, means through which said engaging means may be actuated into engaging relation with the casing when the mandrel is adjusted into one position and into released position when the mandrel is adjusted into another position.

1,860,712. ANTIPICK PIN TUMBLER LOCK. LOUIS C. GUTMAN, Fitchburg, Mass., assignor to Independent Lock Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Jan. 31, 1930. Serial No. 425,000. 3 Claims. (Cl. 70—47.)



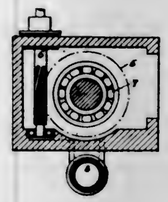
1. As an article of manufacture, a lock comprising a casing with a cylinder rotatable therein and the usual pins and tumblers in the cylinder and casing for locking the cylinder in position, of stops in the casing whereby when the cylinder is turned slightly, and the tumblers projecting into the cylinder raised, said tumblers will pass to one side and their outer ends be positively stopped in position against said stops.

1,860,713. LEATHER WORKING MACHINERY. FRANK S. JONES, Lynn, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed May 27, 1922. Serial No. 564,171. 33 Claims. (Cl. 149—14.)



1. In a leather working machine, means for unhairing hides or skins comprising a plurality of blades, a feed drum, means for continuously feeding the hide or skin around the drum to the starting position during the unhairing operation, and means for operating the blades to effect unhairing operations upon every part of the hair-bearing surface of said hides and skins.

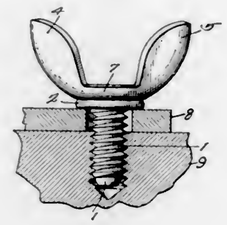
1,860,714. LUBRICATION OF SPINDLE BEAMS OF SPINNING AND TWISTING MACHINES. JOHANN JACOB KEYSER, Aarau, Switzerland. Filed Mar. 13, 1930, Serial No. 435,540, and in Switzerland Mar. 20, 1929. 7 Claims. (Cl. 184—6.)



1. In a machine of the character described a hollow spindle beam supporting a plurality of spaced spindle actuating worm gears and constituting a lubricant duct permitting endwise flow of a lubricant, past the said worm gears under the influence of the worm gear operation and a lubricant conduit communicating with the said lubricant duct and constituting therewith an endless lubricant passage permitting a continuous and uniform lubricant circulation through the spindle beam.

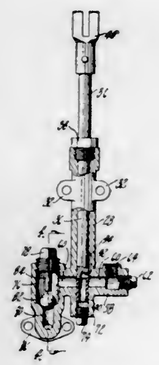
1,860,715. SCREW. HARRY F. KELLOGG, Chicago, Ill. Filed May 22, 1930. Serial No. 454,633. 1 Claim. (Cl. 85—9.)

In a screw adapted to exert clamping pressure, the combination of a threaded shank; a plate-like end portion on said shank forming a flange extending laterally of the shank throughout its circumference; a relatively thin sheet metal head folded to form a central cupped portion having an imperforate flat bottom and thumb and finger wings integral with said bottom, said plate-like portion and said bottom being of substantially equal area and



having opposed faces contacting throughout a surface of equivalent area; and means for intimately and rigidly uniting said opposed faces substantially throughout their area of contact.

1,860,716. GREASE GUN. DOUGLAS J. LOCKWOOD, Onawa, Iowa. Filed Nov. 21, 1930. Serial No. 497,214. 4 Claims. (Cl. 221—47.1.)



3. A dispensing apparatus for grease guns and the like comprising a cylinder, a piston member arranged for reciprocation therein, a cross bore intersecting the cylinder bore at a point spaced from the outer end thereof, inlet means communicating with one end of said cross bore and outlet means communicating with its other end, said piston member being formed with a recess opening to its outer end, restricted means affording communication between said recess and the outlet portion of said cross bore during a portion of the forward travel of said piston member and affording enlarged communication means therebetween during a subsequent portion of such travel, whereby substance is delivered to said outlet portion with a spurting action near the end of the piston travel.

1,860,717. STROP-HANDLE. GEAROLD P. MCCULLOUGH, San Francisco, Calif. Filed Feb. 10, 1931. Serial No. 514,775. 3 Claims. (Cl. 51—200.)

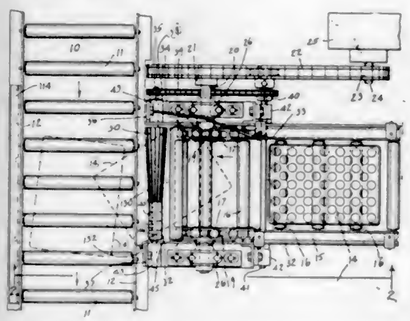
3. A razor strop handle comprising a pair of matching handle members provided with flanged edges, the flanged edge of one member being movable into telescoping relation to the flanged edge of the other; extensions upon the handle members, the extensions of opposite members ex-

tending therefrom in spaced parallel relation to embrace the end of a razor strop therebetween; lips formed upon the ends of the extensions in opposing relation to grip



the strop; and securing members applied through the extensions and the strop therebetween to rigidly clamp the handle members upon the strop.

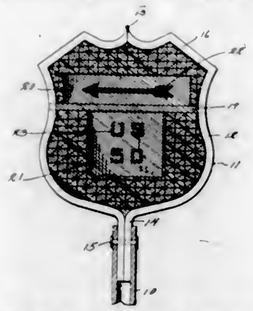
1,860,718. PACKAGE CONVEYING APPARATUS. SAMUEL B. MOTT, Noblesville, Ind., assignor to Indiana Condensed Milk Company, Indianapolis, Ind., a Corporation. Filed July 6, 1931. Serial No. 548,726. 6 Claims. (Cl. 198—25.)



1. A conveyor apparatus including two conveyors, one of which terminates at the side of and at a right angle to the other conveyor, means between said conveyors for engaging a package near one side thereof for retarding the same, and a driven conical roller between said conveyors for simultaneously engaging the package near the opposite side thereof and advancing the package and causing it to make a rectangular turn from one conveyor to the other conveyor.

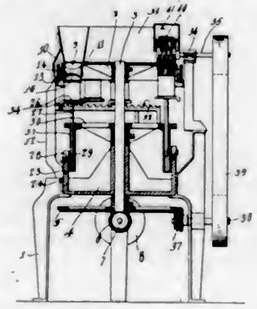
1,860,719. HIGHWAY MARKER. JAMES M. MILLER, Kiowa, Kans. Filed June 11, 1931. Serial No. 543,689. 7 Claims. (Cl. 40—135.)

1. A highway marker of the character described comprising a pair of channeled frame sections, means for hinging one end of each frame section together, complementary stem members formed with the opposite end of each frame section, means for securing said stem in a supporting member, a prismatic plate mounted in the frame sections, indicia positioned on one face of said plate, a reflecting element disposed in the frame and engaging against one face of the plate whereby to reflect light projected against the face of said plate and



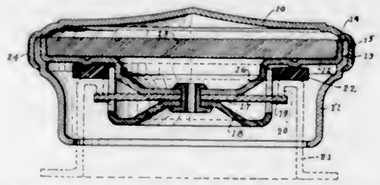
means disposed within the frame and engaging about the plate and element to hold the plate and element in contacting relation.

1,860,720. APPARATUS FOR FILLING CONTAINERS WITH FRUIT AND VEGETABLES. HAL W. NORGAARD, Oakland, Calif., assignor to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed Sept. 30, 1929. Serial No. 396,113. 17 Claims. (Cl. 226—71.)



1. In an apparatus for filling containers with fruits or vegetables, the combination of a filling table including a stationary base, a filling head rotatably mounted on said base, said head being provided with spaced apertures in its periphery, can receiving members positioned beneath said head and in alinement with said apertures, means for rotating the head and can receiving members in unison, means for vibrating said can receiving members during a portion of their travel, pairs of feed rollers carried by said head beneath each of said apertures, means for rotating said rollers during rotation of said head.

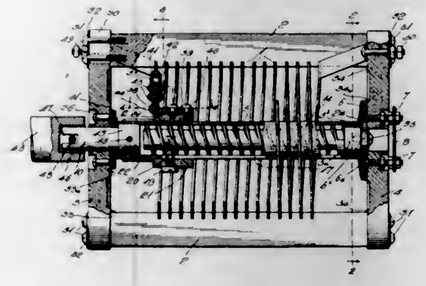
1,860,721. CLOSURE. JAMES S. REID, Cleveland, Ohio, assignor to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 15, 1929. Serial No. 386,130. 3 Claims. (Cl. 220—40.)



1. In a closure for a tubular member, the combination of a body comprising parts secured together by a beading

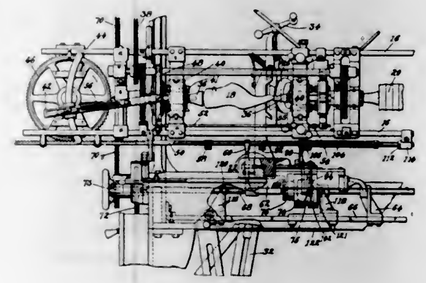
operation, locking means for releasably securing said closure on said tubular member, and a member within said body adapted to form an anvil for said beading operation.

1,860,722. VARIABLE INDUCTANCE COIL. CORRIE F. RUDOLPH, Washington, D. C., and CHARLES O. VERMILLION, East Orange, N. J. Filed Apr. 15, 1930. Serial No. 444,506. 12 Claims. (Cl. 171—242.)



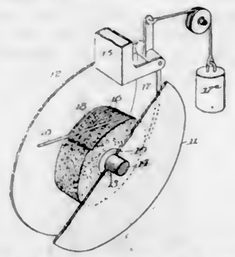
1. A high frequency inductance system comprising an insulated frame, an inductance consisting of a metallic strip spirally wound and disposed within said insulated frame, a shaft member extending through said inductance, a slide adjustable along said shaft member, a resilient contact device extending in a radial direction from said slide and establishing wiping contact with opposite faces of the turns of the inductance, and means for driving said slide longitudinally with respect to said inductance for varying the position of said resilient contact along the inductance.

1,860,723. PATTERN COPYING MACHINE. GEORGE F. RYAN, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 24, 1931. Serial No. 532,566. 45 Claims. (Cl. 142—15.)



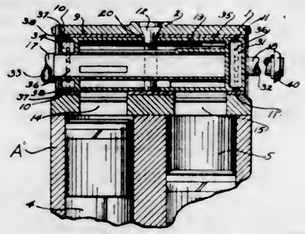
1. That improvement in methods of reproducing solid models which consists in reproducing the model in the work piece, lamina by lamina, and progressively distorting corresponding portions of a selected series of laminæ.

1,860,724. POLISHING AND GRINDING MATERIAL AND PROCESS FOR MAKING SAME. FRANZ A. SCHUMACHER, Evanston, Ill., assignor, by mesne assignments, to trustees of The Security Grinding Wheel Co., Chicago, Ill., a Trust Estate. Filed Mar. 26, 1928. Serial No. 264,721. 11 Claims. (Cl. 51—278.)



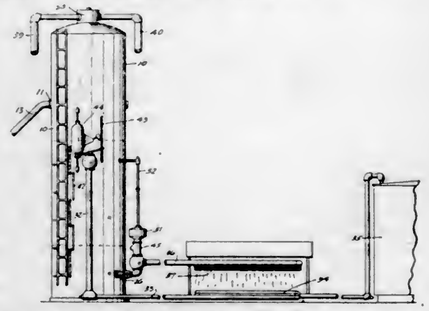
2. A grinding wheel composed of a thread of fibrous material, an abrasive, magnesite, chloride of magnesium and a fluid, the fibrous material being wound circumferentially of and at an incline to the axis of the wheel.

1,860,725. DUAL ROTARY VALVE. FREDERICK B. STONER, Riverside, Calif. Filed Jan. 25, 1930. Serial No. 423,475. 15 Claims. (Cl. 123—190.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



1. In a valve organization adapted for use in engines, a valve casing provided with fuel inlet opening, a hollow valve journalled within the casing, lubricant chambers in the valve, an annular orifice in constant engagement with said opening, a hollow septum constituting an exhaust passage within the valve, passages in the casing and means in said valve for communicating the hollow valve and septum selectively with said passages in the casing.

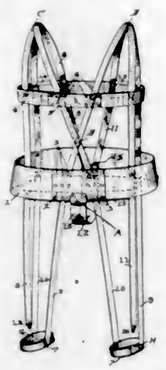
1,860,726. CONSERVATION SEPARATOR SYSTEM. JAY P. WALKER, Tulsa, Okla., assignor of forty per cent to Guy O. Marchant and six per cent to C. G. Wells, Tulsa, Okla. Filed Sept. 18, 1930. Serial No. 482,778. 4 Claims. (Cl. 183—2.7.)



2. In an automatic separating system, a tank having an automatic gas separator and a gravity water separator,

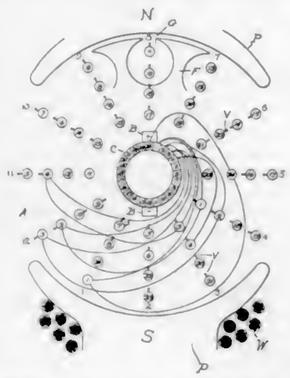
an oil feed connection to said tank, a heater in said water separator, a pipe line for separated oil having a cooling coil, and a pipe line from the water separator discharging upon said coil.

1,860,727. GARMENT SUPPORTER. CHARLOTTE E. ANSLEY, Minneapolis, Minn. Filed Nov. 15, 1928. Serial No. 319,566. 6 Claims. (Cl. 241—4.)



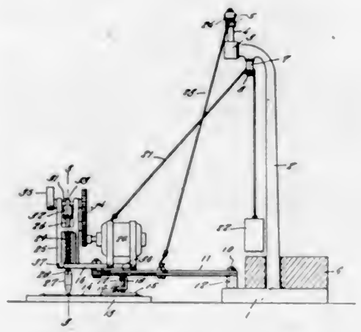
1. A device of the class described comprising; two straps for each shoulder which cross each other intermediately at the uppermost part of each shoulder; and means for detachably connecting said straps at said crossings; the extremities of each strap being led downwardly from said crossings to opposite lateral sides of the device for supporting purposes.

1,860,728. UNIVERSAL MOTOR. THEODORE S. BINDSCHEDLER, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 6, 1925, Serial No. 60,761. Renewed Jan. 18, 1932. 3 Claims. (Cl. 172—276.)



3. A universal, electric motor for use with both direct and alternating currents, comprising a field frame of the direct current type having salient spaced pole pieces with uninterrupted faces, a field winding on said pole pieces, an armature having a commutator, brushes positioned on said commutator, approximately in the neutral commutation zone, and a single winding on said armature connected to said commutator and connected in series with said field winding, the conductors of said armature winding being so connected to said commutator and so positioned on said armature relative to one another and relative to said pole pieces that the currents in certain adjacent conductors that are between the pole pieces and inactive in producing useful torque will flow in opposite directions so that they neutralize one another magnetically to thereby reduce the reactance of the armature with alternating current and decrease the flux generated by direct current to make the speed-torque characteristics of the motor substantially equal for both direct and alternating current.

1,860,729. EMBOSSING MACHINE. JOHN J. BRAUND, Washington, D. C. Filed June 12, 1931. Serial No. 543,926. 9 Claims. (Cl. 101—3.)

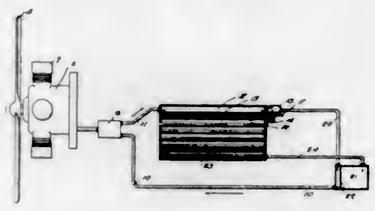


1. An embossing machine comprising a base, a lazytong connected to the base, a plate pivotally mounted on the lazytong, a motor mounted on the plate, a hammer mounted for vertical reciprocation on the plate, and means operatively connecting the hammer to the motor for actuation thereby.

1,860,730. ORGANIC ACID-POLYHYDRIC ALCOHOL RESINS. BENJAMIN T. BROOKS, Greenwich, Conn., and EUGENE J. CARDARELLI, Newark, N. J. Filed June 16, 1930. Serial No. 461,643. 13 Claims. (Cl. 260—8.)

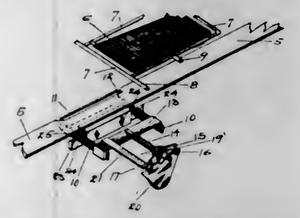
1. A synthetic resin comprising the condensation product of Δ 4 cyclohexene 1—2 dicarboxylic acid and a polyhydric alcohol.

1,860,731. LUBRICATING SYSTEM. CLARENCE H. COLE, Washington, D. C. Filed Apr. 5, 1930. Serial No. 441,960. 5 Claims. (Cl. 184—6.)



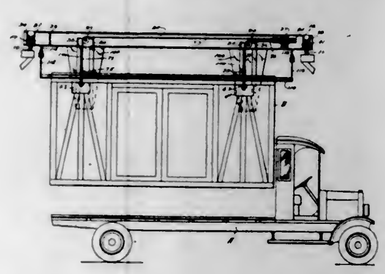
1. In lubricating systems for gas engines and the like comprising a tank, a pump, pipes leading to and from the pump and tank, a radiator in the return pipe, and means for by-passing the oil around the radiator back to the tank while its viscosity is high, said means comprising a perforated member over which the oil is adapted to flow when its viscosity is high.

1,860,732. GRADING MACHINE. FRANK W. CUTLER, Portland, Oreg., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed May 8, 1929. Serial No. 361,351. 7 Claims. (Cl. 265—49.)



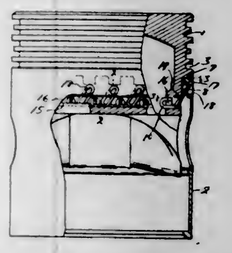
1. In a grading machine: a weighted grading device comprising a pivotally mounted member; an adjustable weight carrying device upon said member; a yieldable weight containing member upon said adjustable carrying device; and yieldable weight material within said containing member.

1,860,733. TRAVELING CRANE. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed June 14, 1929. Serial No. 370,990. 8 Claims. (Cl. 212—77.)



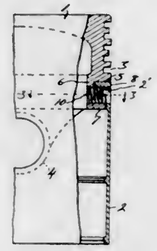
6. In a traveling crane, the combination of a frame, raising mechanism thereon, trolleying mechanism, and fixed shoes depending from the frame into a region below the top of the load when elevated, said shoes having their inwardly facing lower portions beveled outwardly and downwardly and being so located as to engage the sides of the load to resist the swaying of the load in the direction of trolley-travel.

1,860,734. PISTON. PHELPS M. FREER, Detroit, Mich. Filed Sept. 30, 1929. Serial No. 396,342. 12 Claims. (Cl. 74—108.)



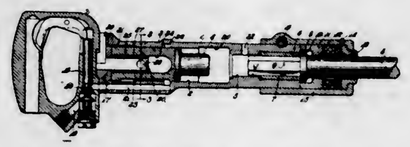
12. In a piston, the combination with head and skirt members having abutting portions, of a plurality of individual locking members between said head and skirt members distributed circumferentially about the same, and bearings arranged in pairs respectively on and formed in said head and skirt members with which bearings said individual locking members cooperate to restrain all relative movement of said head and skirt memebr other than in a radial direction.

1,860,735. PISTON. PHELPS M. FREER, Detroit, Mich. Filed Apr. 14, 1930. Serial No. 444,252. 8 Claims. (Cl. 74—108.)



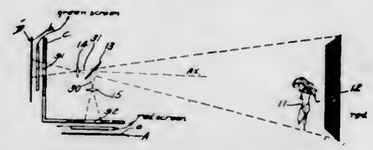
1. In a piston, the combination with head and skirt members, of individual radially extending expansible means under compression engaging said head and skirt members for securing the same together, said individual means extending substantially at right angles to the axis of the piston.

1,860,736. PRESSURE FLUID MOTOR. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Sept. 30, 1929. Serial No. 396,337. 5 Claims. (Cl. 121—17.)



1. In a pressure fluid motor, a cylinder, a piston reciprocable therein and having a bore closed save at its rearward end, piston controlled means for admitting fluid to said cylinder to effect opposite movements of the piston in alternation, and means for exhausting fluid from the cylinder including a tube having a portion providing a lateral surface conforming in shape to and having a working fit with the wall of the bore in the piston and provided with a port opening through said portion within the borders of said surface.

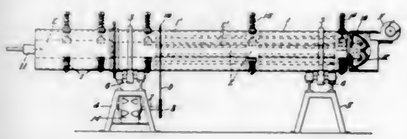
1,860,737. DOUBLE EXPOSURE PROCESS. MAX HANDSCHIEGL, Los Angeles, Calif., assignor to Bessie Handschiegl, Los Angeles, Calif. Filed Sept. 30, 1925. Serial No. 59,587. 11 Claims. (Cl. 88—16.)



1. The herein described photographic method of producing composite motion pictures, which consists in simultaneously exposing two sensitized films to an object

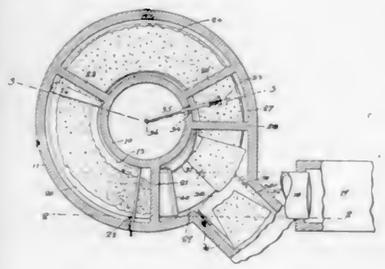
before a colored background and photographing the background "in" on one film through a filter which passes light rays from the background and "out" on the other film through a filter which absorbs light rays from the background, developing the film having the background "in," making an intensified print from the developed film, employing the print as a silhouette to the undeveloped film, and then photographing a background upon the undeveloped film through said silhouette.

1,860,738. ROTARY DRIER. WILLIAM A. HARTY, Buffalo, N. Y., and FRANK W. MOORE, Thorold, Ontario, Canada, assignors, by mesne assignments, to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 23, 1928, Serial No. 272,269. Renewed June 1, 1931. 5 Claims. (Cl. 34—6.)



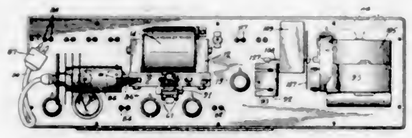
1. A drier comprising spaced inner and outer shells both continuously open from end to end, means for projecting drying heat into one end of said inner shell, and a baffle spaced from the exhaust end of said inner shell and substantially spanning the space between said shells for returning substantially all of the hot gases discharging from the inner shell in counter-current relation through the space between said shells and over the material therein to be dried, said baffle formed to present a forwardly directed central portion alined with the inner shell and an enclosing heat return portion.

1,860,739. KILN FOR THE PRODUCTION OF CELLULAR BUILDING MATERIAL. WARNER HATHAWAY, Madison, Wis., and EDWIN M. WYATT, Cleveland, Ohio, assignors, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed Oct. 28, 1929. Serial No. 402,900. 20 Claims. (Cl. 25—142.)



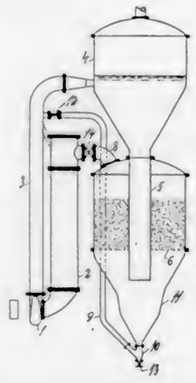
1. A kiln of the class described, provided with a bloating chamber, a turntable mounted to traverse the bloating chamber and to transport material therethrough and deliver such material, when bloated, beyond the bloating chamber, means within the bloating chamber for feeding a layer of granular material to the surface of the turntable, and an annealing chamber extending outwardly at an angle from the turntable and having a supporting surface flush with the turntable and adapted to receive a slab bloated material outwardly displaced therefrom and subject it to an annealing operation.

1,860,740. OSCILLOGRAPH. HARVEY C. HAYES, Washington, D. C. Filed May 15, 1928. Serial No. 277,967. 13 Claims. (Cl. 234—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a device of the class described a plurality of filamentary elements adapted to be set into vibration by electrical impulses, a holder common to said elements, means for projecting a single beam of light across a portion of all of said elements, and means for simultaneously recording the movements of said elements across said beam of light.

1,860,741. CRYSTALLIZATION APPARATUS. FINN JEREMIASSEN, Oslo, Norway. Filed Feb. 9, 1928, Serial No. 253,194, and in England Feb. 14, 1927. 3 Claims. (Cl. 23—273.)

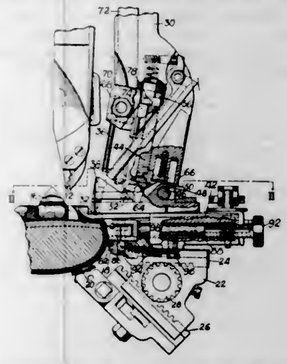


1. Crystallization apparatus of the type having a crystallizing chamber adapted to contain a collection of granules acting as seed crystals, in combination with supersaturation means outside of said crystallizing chamber and with means to produce and convey a flow of solution from the supersaturator and into and through the space occupied by the said collection of granules the said crystallizing chamber having a perforated partition functioning as a means to support the collection of granules, means to convey a downwardly directed main flow of supersaturated solution from the said supersaturator into the space below the said perforated partition and means to supply a minor flow of solution from a point in a channel conveying solution to the supersaturator and into the lower part of the space below the partition, in a direction opposite to that of the incoming main flow of solution.

1,860,742. MACHINE FOR SHAPING UPPERS OVER LASTS. BERNHARDT JORGENSEN, Beverley, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 8, 1931. Serial No. 528,611. 11 Claims. (Cl. 12—4.)

1. In an upper-shaping machine, the combination with means for shaping the upper of a shoe over a last, of upper-fastening mechanism movable transversely of the edge of the shoe bottom into upper-fastening position and constructed to drive a plurality of fastenings spaced apart

along the edge of the shoe bottom, said upper-fastening mechanism being so mounted as to permit it to be turned about an axis extending heightwise of the shoe to position the fastenings in proper relation to the edge of the shoe



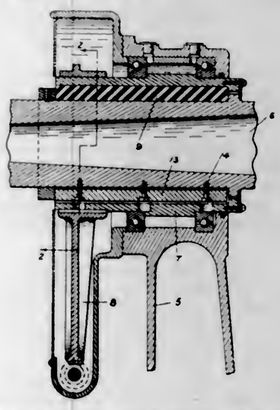
bottom, and means carried by said upper-fastening mechanism for engaging the shoe positively to adjust the mechanism about said axis in accordance with the shape and position of the shoe prior to the driving of the fastenings.

1,860,743. BRIQUETTE AND PROCESS FOR MAKING SAME. GUSTAV KOMAREK, Chicago, Ill., assignor to Berwind Fuel Company of Delaware, Chicago, Ill., a Corporation of Delaware. Filed June 20, 1929. Serial No. 372,545. 6 Claims. (Cl. 44—16.)

1. The method of preparing fuel briquettes which comprises preliminarily drying a carbonaceous material, mixing therewith a binder, adding thereto a deliquescent salt in dry form and in sufficient quantity to be hygroscopically active, and molding the mixture.

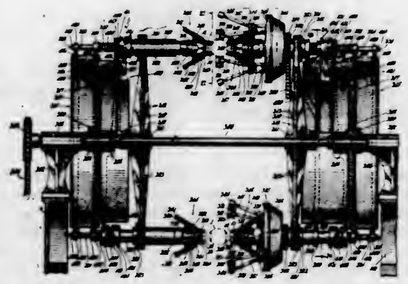
5. A fuel briquette comprising finely divided substantially dry combustible carbonaceous material, a binder, and a deliquescent salt in dry form in sufficient quantity to be hygroscopically active.

1,860,744. INSULATED DRIVING CONNECTION. WALTER E. KROTEE, Philadelphia, Pa. Filed July 26, 1929. Serial No. 381,372. 2 Claims. (Cl. 64—100.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



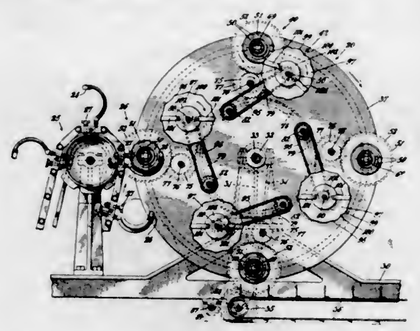
1. In a driving connection, a support, a sleeve mounted in the support and having internal longitudinally extending fins, an acoustic member within the sleeve having external longitudinally extending fins, the fins of the sleeve and member being alternately arranged, a pair of sound damping members between adjacent fins, a wedge separating the sound dampening members, cap screws in each wedge threaded into the acoustic member and means for rotating the sleeve.

1,860,745. ART OF SHELLING COCONUTS. HUGH C. MACDOUGALL, West New York, N. J., assignor to Franklin Baker Company, Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 27, 1929. Serial No. 358,461 44 Claims. (Cl. 146—7.)



1. A method of shelling large hollow nuts such as coconuts, comprising severing and separating the shells into a belt and caps by forming annular grooves in the nut near its ends, supporting the belt by end pressure, bulging the belt to separate it from the meaty portions hammering the belt to crack it, and thereafter removing the caps.

1,860,746. NUT SHELLING MACHINE. HUGH C. MACDOUGALL, West New York, N. J., assignor to Franklin Baker Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 5, 1929. Serial No. 411,711. 27 Claims. (Cl. 146—7.)

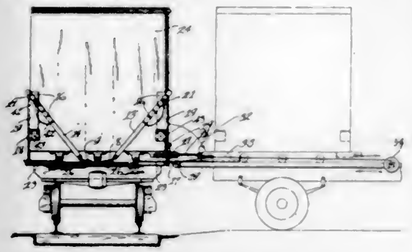


1. Nut shell cracking and removing mechanism comprising convergently movable and revoluble nut shell grippers, means for revolving and convergently moving the grippers, and rotary centrifugal hammering means arranged to hammer and crack a nut shell held by the grippers.

1,860,747. TRANSPORTATION DEVICE. THOMAS L. MCLAUGHLIN, Guadalupe, Calif. Filed Jan. 26, 1931. Serial No. 511,345. 4 Claims. (Cl. 105—366.)

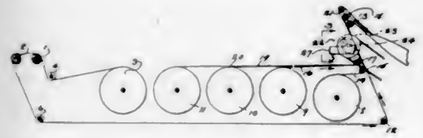
4. In a device of the character described, the combination with a flat car having a flat surface, a plurality of

securing plates secured to said flat surface, said plates being spaced one from the other, means for locking said



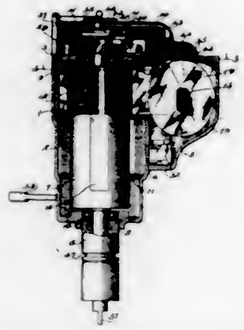
plates in vertical position whereby said flat surface and said vertical plates will position and retain a container mounted on said flat surface.

1,860,748. BAG MAKING MACHINE. ADOLPH POTDEVIN, Garden City, Long Island, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Original application filed Oct. 31, 1928, Serial No. 316,195. Divided and this application filed Oct. 17, 1929. Serial No. 400,174. 6 Claims. (Cl. 93—8.)



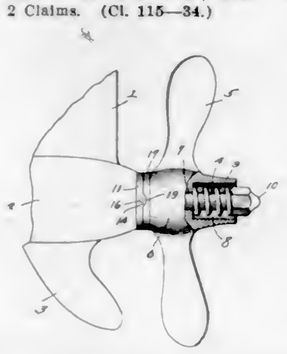
1. In a machine for making multi-wall bags, adhesive applying means comprising a gang of driven discs of a common diameter, supports above and below said discs for supporting a plurality of webs in overlapping position and to bring the webs into position to receive adhesive from said discs, and means for advancing the webs in the opposite direction of travel from that of the discs.

1,860,749. VERTICAL MAGNETO. CURT FREDERICK REIS, Chicago, Ill., assignor to Excel Magneto Co., Chicago, Ill. Filed June 29, 1928. Serial No. 289,096. 3 Claims. (Cl. 123—140.)



1. A magneto unit comprising a housing divided into two compartments, a rotor in one of said compartments, a stator winding in the other compartment and having associated pole pieces in inductive relation to said rotor, a hollow insulating cap secured to the top of said housing and containing current interrupting and distributing mechanism operated from said rotor, said cap extending over both of said compartments, a separate closure for the stator winding compartment, and a shaft extending from the lower end of said rotor through said housing, and means on said shaft adapted to establish a separable driving connection with a distributor drive shaft.

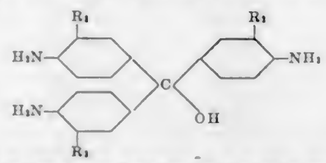
1,860,750. PROPELLER RELEASE. HERVEY M. RIGGS, Emporia, Kans. Filed Dec. 30, 1931. Serial No. 583,979. 2 Claims. (Cl. 115—34.)



1. The combination with a marine propeller shaft, of a propeller having a hub provided with a bore, and with an enlarged recess in its rear end, the bore receiving the shaft, and the propeller thereby being mounted to rotate on the shaft and to slide longitudinally of the shaft; and means for coupling the propeller releasably to the shaft for rotation therewith, said means embodying a first disk having an opening receiving the shaft, the first disk being provided with rearwardly-projecting transverse ribs located on opposite sides of the opening, the ribs having alined holes, a securing means in the holes and engaging the shaft, a second disk secured to the forward end of the propeller hub and having an opening receiving the shaft, the second disk being provided on its forward surface with transverse seats located on opposite sides of the opening of the second disk, and shaped to receive the ribs of the first disk, a retainer on the after end of the shaft, and a compression spring located in the recess, about the shaft, and engaged at its ends by the retainer, and by the hub at the base of the recess.

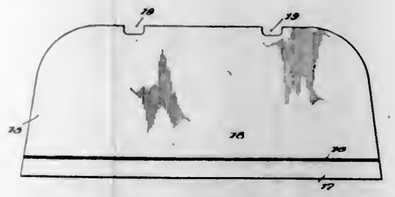
1,860,751. NEW TRIARYLMETHANE DYESTUFFS. ERNEST HARRY RODD and FREDERICK LAWRENCE SHARP, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed Apr. 13, 1929, Serial No. 354,981, and in Great Britain Apr. 18, 1928. 12 Claims. (Cl. 260—67.)

1. A process for the production of new dyes of the triarylmethane series which consists in condensing a magenta body having in the form of the carbinol the probable formula



wherein R_3 represents hydrogen or a methyl group, with an alkoxyaminobenzene and sulphonating the resultant product.

1,860,752. AUTOMOBILE SEAT HEAT INSULATOR. LEICESTER B. SAWYER, Auburn, N. Y., assignor to The Protectahood Corporation, Auburn, N. Y., a Corporation of New York. Filed Aug. 28, 1929. Serial No. 389,005. 2 Claims. (Cl. 155—5.)

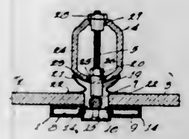


1. An accessory for use directly beneath the seat cushion of an automobile having a conduit for exhaust gases which passes beneath the cushion support and adjacent a compartment accessible by displacing said cushion comprising, a panel of heat insulating material of substantially the same size and shape as the cushion with which it is to be used, said panel having a score or crease formed therein which divides the panel into a narrow strip adapted to be secured to the cushion support along its rear edge, and a body portion integrally hinged at said score to said strip and displaceably covering and insulating said compartment and said conduit from heat transfer to said cushion.

1,860,753. MANUFACTURE OF TRIARYLMETHANE DYES. THOMAS ARTHUR SIMMONS, Huddersfield, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed Dec. 9, 1927, Serial No. 238,996, and in Great Britain Feb. 5, 1927. 4 Claims. (Cl. 260—68.)

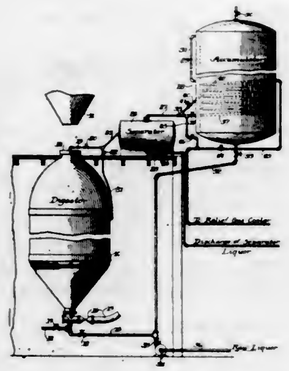
4. In the manufacture of new intermediate compounds capable of conversion into leuco compounds and dyestuffs of the tetralkyldiaminotriarylmethane type, the process which comprises preparing a solution of a tetralkyldiaminobenzhydrol, adding to the said solution an alkali metal salt of naphthalene sulphonic acid, acidifying the so prepared solution with sulphuric acid to render the same slightly acid, filtering off the precipitated crystalline naphthalene disulphonate of tetralkyldiaminobenzhydrol, washing the precipitate with a little water to remove residual impurities and then drying the same.

1,860,754. CORNER AND DIVISION BAR. GROVER C. SMITH, Ogden, Utah. Filed AUG. 26, 1930. Serial No. 477,883. 6 Claims. (Cl. 189—78.)



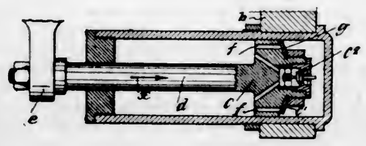
1. An adjustable corner and division bar for plate glass sections comprising a hinge pin, a plurality of pairs of hinge straps pivoted thereto in spaced relation, a pair of channel shaped wings coextensive with the height of the glass sections adapted to be telescoped over the hinge straps so as to aline the same and terminating in confronting grooves, a channel shaped center piece anchored in the grooves and allowing the wings to swing into various angular positions relative to each other, and means for spacing the hinge pin and the center piece whereby the angularity of the hinge straps may be adjusted.

1,860,755. APPARATUS AND PROCESS FOR PRODUCTION OF PULP. JERRY W. STEVENS and WILLIAM H. KENETY, Cloquet, Minn., assignors to Chemipulp Process Inc., Watertown, N. Y., a Corporation of New York. Filed Jan. 27, 1928. Serial No. 249,845. 7 Claims. (Cl. 92—11.)



1. The method of treating cooking liquors for the sulphite process of making pulp which comprises relieving a sulphite digester during its operation, discharging the relief materials under pressure into a confined volume of liquor, subsequently cutting off said discharge, continuing relief of the digester, and transferring heat from the relief material to said volume of liquor.

1,860,756. HYDRAULIC BRAKE. CARL WANINGER, Dusseldorf, Germany, assignor to the Firm Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Filed Oct. 29, 1928, Serial No. 315,845, and in Germany May 16, 1928. 2 Claims. (Cl. 89—43.)

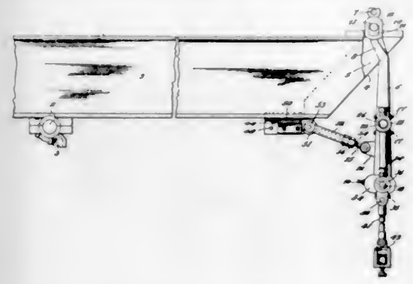


1. A hydraulic brake comprising a brake cylinder, a piston adapted to slide in said cylinder and having a pair of series of fluid passages therein, one series of passages being adapted to convey the fluid during the working stroke of the piston and the other for conveying the fluid during return movement of the piston, and a plate spring valve closing the working stroke series of passages and adapted to open when a specific pressure is applied on the fluid in the cylinder by the piston.

1,860,757. BEAM HANGER. THOMAS FRANK WATSON, Seminole, Okla. Filed Mar. 12, 1931. Serial No. 522,042. 11 Claims. (Cl. 74—5.)

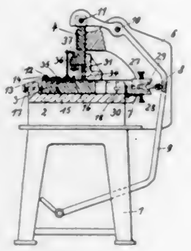
1. A beam hanger comprising pivotally connected upper, lower and intermediate members, the upper member having a bend near its upper end and provided with means whereby it may be pivotally suspended upon a walking beam, the upper ends of the intermediate members being pivotally connected with the sides of the upper member above

the lower end of said upper member, and the lower members being pivotally attached to the lower ends of the intermediate members at the outer sides of the same, the



pivotal connection between the lower and intermediate members extending through a slot in the lower end of the upper member.

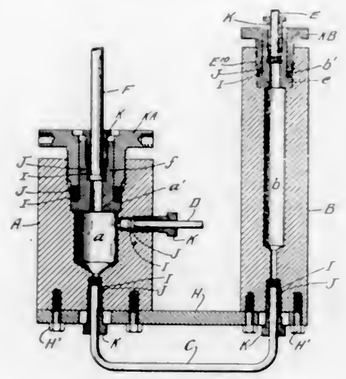
1,860,758. MACHINE FOR FASTENING REEDS WITHOUT RIVETS ON THE SOUND PLATES OF REED INSTRUMENTS. MAX WEIDLICH, Georgenthal, near Klingenthal, Germany. Filed July 28, 1930, Serial No. 471,379, and in Poland July 27, 1929. 5 Claims. (Cl. 29—33.)



1. A machine for fastening the reeds of reed instruments such as accordions by punching and riveting material out of the sound plates and reeds, comprising in combination a sliding carriage, reed moulds mounted on said sliding carriage, a series of centre punches mounted on said carriage, a lever, a disengageable clutch adapted to connect said carriage with said lever, a die adapted to be moved up and down by said lever, rams on said die, a nose, and a stripper adapted to strip off the finished sound plates on said nose during the upward movement of said die, said carriage adapted during its reciprocating movement to first bring said moulds in line with said rams and then to position the assembled reeds and plates over said centre punches.

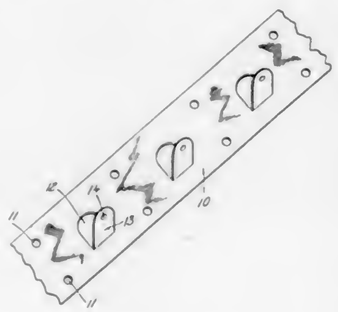
1,860,759. MANOMETER. LEWIS B. WINTON, Greenwich, Conn., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 20, 1929. Serial No. 387,101. 4 Claims. (Cl. 73—31.)

1. A manometer adapted for use with high internal fluid pressures and comprising separate chambered members forming the manometer legs, a U-tube through which the lower ends of the chambers in said legs are in communication, pressure transmitting tubes communicating with said chambers, all of said parts being constructed to withstand internal fluid pressures of several thousand pounds per square inch, and self sealing joint connections by which each of said members is detachably connected to each of the said tubes in communication therewith and



each comprising a pair of cooperating packing rings, one of which is expansible into sealing contact with each pair of connected parts by said other packing ring.

1,860,760. HANGER FOR DRAPERIES. JOHN WITTEMANN, Los Angeles, Calif. Filed July 26, 1930. Serial No. 471,044. 2 Claims. (Cl. 156—22.)



1. A drapery hanger comprising a metal strip having spaced perforations by which the strip may be attached to a window casing and also perforated at points in its length to provide a plurality of tongues attached at one end to the strip and free at the other, the said tongues being deflected at an angle to the plane of the strip and perforated at their free ends for the reception of hooks attached to the draperies.

1,860,761. CORSELET. MARGARET H. WITTENBERG, Worcester, Mass., assignor to The Royal Worcester Corset Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1932. Serial No. 593,131. 3 Claims. (Cl. 2—30.)

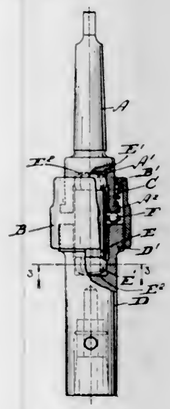
1. A tubular corselet comprising elastic and non-elastic fabric sections and front brassière parts, combined with crossing elastic tapes at the back of the garment, each of said tapes being fastened at one end to the back part of the garment and at its opposite end to a free part

of a brassière part, and loops at the back of the garment through which said crossing tapes may easily slide to accommodate movements of the wearer as also to facilitate



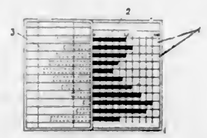
the adjustment of the garment to the figure of the wearer and prevent the brassière parts from working up on the wearer.

1,860,762. UNIVERSAL JOINT DRIVE CONNECTION. CLAYTON E. WYRICK, Detroit, Mich., assignor to Gairing Tool Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 2, 1928. Serial No. 316,718. 3 Claims. (Cl. 64—91.)



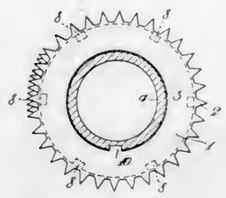
1. In an article of the class described, a shank provided at one end with a driving socket of internal polygonal form in cross-section; a rotatable screw threaded collar loosely sleeved upon the wall of the socket; a tool supporting member having a driving socket at one end of internal polygonal form in cross-section with a screw threaded flange adapted for connection with the screw threaded collar; a drive coupling shaft having at each end a polygonal-shaped driving head respectively seated in the polygonal-shaped driving sockets of the shank and tool supporting members; and a cone-shaped spring located between the socket wall of the shank and the wall of the collar bearing at one end against the shoulder formed by the outwardly directed flange of the socket portion and at the other end against the shoulder formed by the inwardly directed flange of the collar, whereby spring slippage resulting from shifting of the shank socket in relation to the tool supporting member is eliminated.

1,860,763. DEVICE FOR MAKING ORTHOGONAL DIAGRAMS. KAROL ADAMIECKI, Warsaw, Poland. Filed Aug. 25, 1931, Serial No. 559,288, and in Poland Oct. 27, 1930. 9 Claims. (Cl. 116—135.)



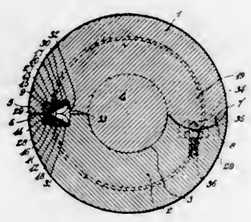
1. A device for making orthogonal diagrams, comprising a base consisting of a series of substantially parallel strips having a scale thereon, the dimension of the base perpendicular to the strips comprising one of the orthogonal magnitudes to be varied relatively to each other, and movable border cursors embracing and overlapping the edges of said strips, the length of the border cursor comprising the other variable orthogonal magnitude.

1,860,764. DRESSING TOOL. RUPERT ANDERSSON, Skarblacka, Sweden. Filed Jan. 12, 1931, Serial No. 508,353, and in Germany Feb. 5, 1930. 3 Claims. (Cl. 125—37.)



2. A tool for dressing worn surfaces of grinding wheels, comprising in combination a supporting bushing, having an axial groove formed in its outer surface, a shell on said bushing having an axial slit, a set of flat toothed disks on said shell, said disks having inwardly extending noses to engage said groove and said slit, means to clamp the set of disks to said bushing in axial direction, and means for retaining said clamping means in place.

1,860,765. PRINTING AND OTHER CYLINDER AND MEANS FOR SECURING SHEETS THERETO. GEORGE THOMAS BALDWIN, Thornton Heath, England, assignor to Rembrandt Intaglio Printing Company Limited, London, England, a Corporation of Great Britain. Filed Dec. 3, 1929, Serial No. 411,351, and in Great Britain Dec. 11, 1928. 23 Claims. (Cl. 101—415.1.)



4. A printing cylinder split longitudinally to form at least two cylinder segments, a pivotal joint on one side of the cylinder axis, a non-pivotal joint on the other side

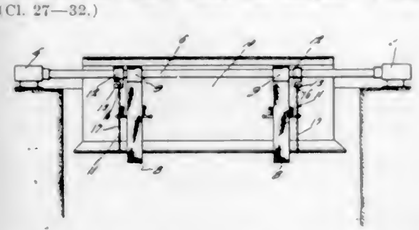
of the cylinder axis, means disposed between the non-pivotal faces of the cylinder segments and adapted to be rocked by butting contact, a design plate superimposed on the cylinder segments as a whole and overlapping the non-pivotal faces of the cylinder segment and engageable by the said rockable means so that on assembly of the cylinder segments tension is applied to the design plate.

1,860,766. SHEET PILING. CAMILLE BEAUJEAN, Brussels, Belgium, assignor to Société Anonyme d'Ougree Marihaye, Ougree, Belgium. Filed May 14, 1930, Serial No. 452,376, and in Belgium Feb. 6, 1930. 4 Claims. (Cl. 61—62.)



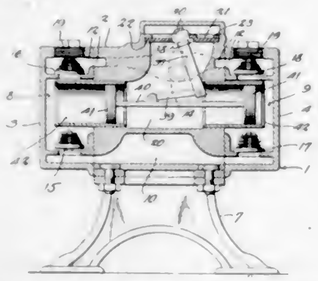
1. For use in the construction of caisson sheet piling by joining before ramming U-shaped members having wings terminating in similar ends in alignment with these wings, a Y-shaped massive connecting member having two recesses opening in diverging directions and comprising between them a part of the said massive member and each adapted to encase one of the wing ends of the U-shaped members thus spaced apart, and a tenon similar to the wing ends, the median plane of this tenon passing through the intersection of the median planes of the two hollows.

1,860,767. CASKET LOWERING DEVICE SAFETY ATTACHMENT. WILLIAM F. BECKETT, Belleville, Ill. Filed Mar. 24, 1931. Serial No. 524,974. 1 Claim. (Cl. 27—32.)



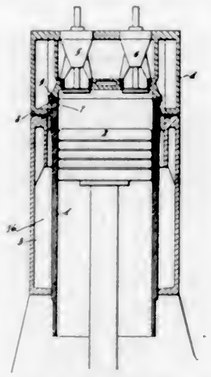
A safety attachment for a casket lowering mechanism having a pair of spaced parallel side bars, comprising spaced pairs of collars mounted upon the side bars, a hook carried by each of said collars, and a pair of spaced chain members extending between the side bars and having their opposite end portions detachably connected to said hooks.

1,860,768. PUMP. ARNOLD BOHNENBLUST, Riley, Kans. Filed June 2, 1930. Serial No. 458,959. 2 Claims. (Cl. 103—171.)



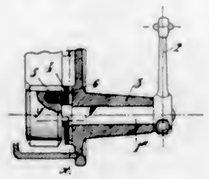
1. A pump comprising a casing and a cylinder carried thereby, the casing having a compartment communicating with one end of the cylinder, a piston slidable in the cylinder, a flexible diaphragm carried by the casing and extended across the compartment, an arm passing through the diaphragm and hermetically mounted therein, means in the compartment, on one side of the diaphragm, for connecting the arm to the piston, means in the compartment, on the opposite side of the diaphragm, for operating the arm, the casing being provided with a duct for conducting away liquid which leaks past the piston into the compartment on the first-specified side of the diaphragm, the intake end of the duct being closed by the diaphragm in the normal operation of the pump, the diaphragm yielding under piston pressure, when the compartment is full of liquid on the first-specified side of the diaphragm, to space the diaphragm from the intake end of the duct and permit liquid which has leaked past the piston to flow away through the duct.

1,860,769. MEANS FOR PACKING CYLINDER LINERS. ALFRED BÜCHI, Winterthur, Switzerland, assignor to Swiss Locomotive and Machine Works, Winterthur, Switzerland, a Corporation of Switzerland. Filed Sept. 24, 1930, Serial No. 484,020, and in Switzerland Sept. 30, 1929. 8 Claims. (Cl. 123—173.)



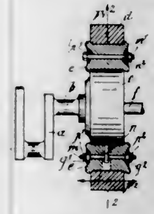
1. In combination, a cylinder head, a cylinder liner, two concentric joints between said cylinder head and said liner, a rigid packing provided on the inner joint, a yielding packing provided on the outer joint, an annular space between said two joints, and a conduit from said annular space to a space with atmospheric pressure.

1,860,770. BRAKE. ETTORE BUGATTI, Molsheim, France. Filed Nov. 13, 1929, Serial No. 406,944, and in France Nov. 13, 1928. 2 Claims. (Cl. 188—79.5.)



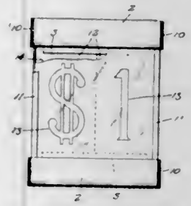
1. An automatic compensating brake of the type described comprising a pair of brake shoes, camming means for spreading said brake shoes, an operating shaft for said camming means, a bearing for said shaft, an annular plate on said shaft having circular slots, resilient means for pressing said plate against said bearing, a series of ratchet teeth on said plate next said bearing, corresponding ratchet teeth on said bearing engaging said first mentioned ratchet teeth, and fingers on said camming means engaging in said circular slots for the purpose described.

1,860,771. VIBRATION DAMPER. ETTORE BUGATTI, Molsheim, France. Filed July 5, 1930, Serial No. 465,798, and in France Nov. 14, 1929. 3 Claims. (Cl. 74—6.)



1. A system of mounting a fly wheel on the clutch drum of a driving shaft which comprises in combination, at least one mass of an elastic material interposed between said drum and said fly wheel for connecting the one to the other, a plurality of radial arms integral with said drum extending into said mass, studs integral with said arms and at right angles thereto so as to extend through said mass in a direction parallel to said shaft, and nuts at either extremity of said studs applied against said mass so as to more or less compress it, whereby the position of the fly wheel with respect to the drum can be adjusted in the axial as well as in the radial direction.

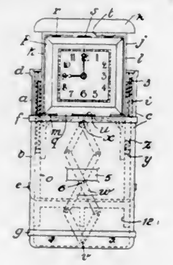
1,860,772. PRICE INDICATOR. MICHAEL DORION, Rumford, Me. Filed Dec. 11, 1931. Serial No. 580,410. 1 Claim. (Cl. 40—86.)



A price indicator comprising a plate having its ends rolled to form cylindrical housings with the extremities of said ends bent to form tongues which extend outwardly from the inner portions of the housings and are parallel to but spaced from the influence of the straight part of the plate, the spaces formed by said tongues and the plate passing through the longitudinal center of the housings, angle shaped flanges formed on the side edges of the straight part of the plate, a transparent member having its side edges placed under the inwardly extending portions of said flanges having its ends resting on the tongues, a pair of rolls in each housing, the inner end of one roll having a socket therein and the inner end of the other roll having a trunnion formed thereon fitting in the socket, a closure for each end of each housing, a disk at each end of each housing having a threaded stud on its inner face passing through the closure into an outer end of a roll whereby turning of the disk will turn the roll and a pair of webs having their ends connected to the rolls, said webs passing through the spaces between the tongues and the straight part of the plate and the transparent member.

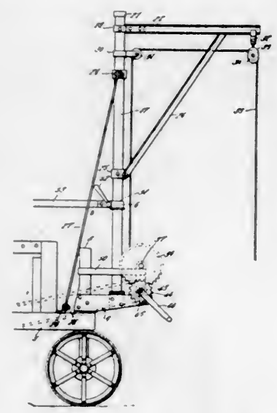
1,860,773. CASE FOR INCLOSING AN OBJECT SUCH AS A WATCH, A LIGHTER, OR OTHERWISE. ROBERT FRÉDÉRIC EGOUVILLON and JEAN ROBERT LAFON, Paris, France. Filed Jan. 21, 1931, Serial No. 510,256, and in France Jan. 25, 1930. 8 Claims. (Cl. 206—37.)

1. A case for inclosing an object such as a watch, lighter and the like, said case comprising a hollow body formed from two shells adapted to slide the one with respect to the other, a slide carrying the object and adapted to be displaced in the body, so that the object can be concealed therein or projected therefrom, means for connecting the body to the slide, such means being operable to project the slide and object carried thereby



from the body, and to retract these parts into the body, said means including means for amplifying the movement imparted to the object, the means for connecting the body to the slide being of such a nature that the movements are imparted to the slide and object carried thereby, by the relative sliding movements of the two shells of the body.

1,860,774. GEARED HOIST FOR USE WITH FARM TRACTORS. MARTIN ERICKSON, Vermilion, S. Dak. Filed Mar. 28, 1930, Serial No. 439,682. Renewed Jan. 30, 1932. 7 Claims. (Cl. 212—65.)

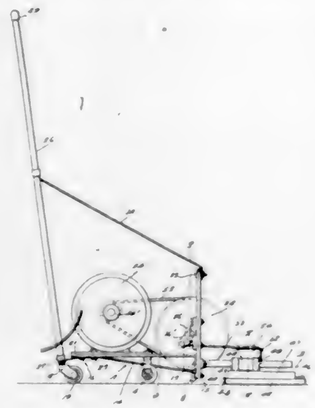


1. A hoisting attachment for tractors comprising a cross plate for attachment to the front end of a tractor frame, a block on the central portion of the cross plate, a U-shaped bracket member having its ends affixed to the plate and straddling the block and fixed thereto and extending forwardly and horizontally therefrom, a plate across the intermediate portion of the bracket member, a pole rising from the plate and rotatably engaged therewith.

1,860,775. FLOOR SANDER. ALFRED E. FORSON, Sr., Reno, Nev., assignor of forty-nine per cent to Charles L. Richards, Reno, Nev. Filed June 25, 1929, Serial No. 373,548. Renewed Apr. 6, 1932. 2 Claims. (Cl. 51—175.)

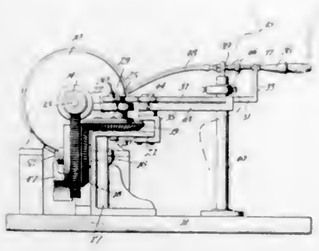
1. A sand papering machine of the class described comprising a wheeled frame, a push handle member extending upwardly and rearwardly from the rear end of said frame,

an inverted U-shaped frame member extending upwardly from the forward end of the first mentioned frame, a rearwardly and upwardly inclined bracket bar connecting said inverted U-shaped frame with said handle member, an electric motor supported on the wheel frame, a crank shaft journaled in the said second mentioned frame, means operatively connecting the crankshaft with the



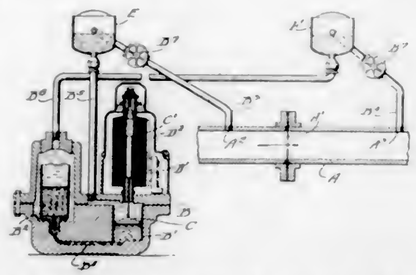
electric motor, a cross member carried by said inverted U-shaped frame at the lower end of said frame, a pair of spaced parallel guide rods extending forwardly from said cross members, a reciprocable abrasive member slidably supported by said guide rods, a connecting rod having one end slidably associated with the crank, of said crank shaft, the opposite end of said connecting rod having operative connection with said abrasive block.

1,860,776. SMOKE AUTOMATON. PAUL A. HAERRY, Scotia, N. Y. Filed Dec. 29, 1931. Serial No. 583,781. 2 Claims. (Cl. 46—40.)



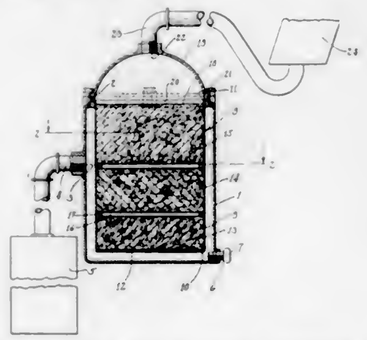
1. A display device of the class described having in combination a figure simulating a human face, a tubular smoke member adjacent the mouth of the figure, a movable cigar holder, a revoluble plate having a slot provided with opened ends, a cam positioned above said plane and rotatable therewith, said holder having a rearwardly extending arm engaging said cam, said arm provided with a pin arranged to move into and out of said slot, whereby to move the holder into and out of alignment with said tubular member, and means when the holder is in alignment with the tubular member for drawing the smoke from the cigar into the tubular member and for forcing it therefrom when the holder is moved away from the tubular member.

1,860,777. MARINE FLOW METER. THOMAS R. HARRISON, Wyncote, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 21, 1927. Serial No. 177,098. 4 Claims. (Cl. 73—167.)



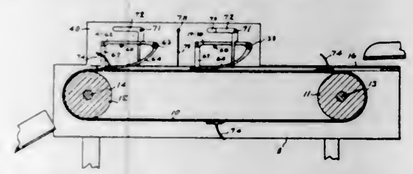
1. A flow meter for measuring the flow of a fluid through a conduit comprising a differential pressure U-tube manometer having high and low pressure chambers connected at their lower ends and partly filled with a sealing liquid of a predetermined density, means responsive to the sealing liquid in one of said chambers, said manometer being rigidly mounted on a base subject to tilting movements about axes parallel and perpendicular to the plane including the longitudinal axes of said chambers, a pair of horizontally spaced reservoirs above said manometer and partly filled with a liquid of less density than said sealing liquid and having separate pipe connections to points of high and low pressure in said fluid conduit, means for maintaining a constant liquid level in each of said reservoirs, two pipe connections crossing one another one of which connects one of said reservoirs to said high pressure chamber and the other of which connects the other of said reservoirs to said low pressure chambers, said two pipe connections containing said liquid of less density and transmitting the fluid pressures in said conduit and the liquid heads in said last mentioned pipe connections to said sealing liquid, said last mentioned pipe connections being arranged and said reservoirs being horizontally spaced in a predetermined manner that on a tilting movement of said base about a perpendicular axis a change is effected in the liquid head of each of said liquid columns proportionate to and neutralizing the force tending to vary the sealing liquid level in the corresponding pressure chamber, the horizontal spacing of said reservoirs being proportionate to the difference in densities of said liquid of less density and said sealing liquid.

1,860,778. AIR FILTER. HAROLD E. HOWARD, Bridgman, Mich. Filed Apr. 27, 1929. Serial No. 358,670. 1 Claim. (Cl. 183—48.)



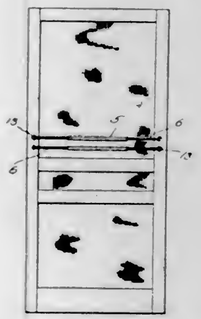
The combination with a housing comprising a body portion and a cover portion, of a filtering cartridge disposed in said housing, said cartridge comprising a tubular casing, a plurality of filtering units disposed in said casing, each of said units comprising a pair of spaced-apart screen elements having filtering substance disposed therebetween, and annular spacing members disposed between said units and adapted for holding the same in spaced-apart positions, one end of said casing being provided with an inwardly extending annular flange adapted for supporting the units within the casing and the other end of said casing being provided with an outwardly extending annular flange receivable between the body portion and the cover portion of said housing and adapted for supporting the casing in fixed position within the housing.

1,860,779. DEVICE FOR CUTTING OFF THE END PORTIONS OF VEGETABLES. JOHN FREEMAN JOHNSON, Blaine, Wash., assignor of one-half to Clifford K. McMillin, Bellingham, Wash. Filed July 30, 1928. Serial No. 296,240. 4 Claims. (Cl. 146—86.)



1. A device of the character described embodying a product conveying belt; a plurality of cutting members disposed side by side and pivotally mounted above said belt, each of said members comprising a cutting means and an integrally formed elevating guard arm and mounting arm for said cutting means; and a locking means for said cutting members normally locking said members in cutting position, each of said locking means comprising a vertically disposed arm extending to a point just above said belt and a horizontally weighted arm, said vertical arm being engageable by the product being prepared to automatically release said locking means in order that when said elevating arm is subsequently contacted, said cutting members are automatically selectively held in non-cutting position by the product.

1,860,780. DOOR GUARD. DANIEL KEES, Beatrice, Nebr., assignor to F. D. Kees Manufacturing Co. Inc., Beatrice, Nebr. Filed July 7, 1930. Serial No. 466,315. 1 Claim. (Cl. 20—71.)

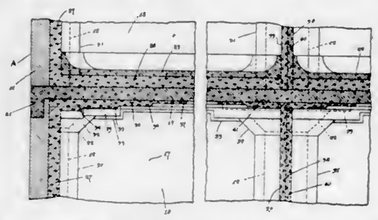


A guard bar comprising a central section and telescoping end sections, said sections being constructed of sheet metal material, parallel longitudinal flanges forming a part of the end sections, parallel longitudinal flanges formed on the central section, the central section being fitted over the end sections, portions of the flanges of the central section extending inwardly and upwardly defining grooves, the longitudinal edges of the flanges of the end sections being fitted in the grooves of the flanges of the central section, said end sections having longitudinal offset portions formed in their outer surfaces, said central section having a longitudinal rib fitted in the offset portions of the end sections to secure the sections against twisting with respect to each other, and means for securing the guard to a supporting surface.

1,860,781. REMOVING SILICA FROM WATER. OTTO LIEBKNECHT, Berlin-Grunewald, Germany, assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed June 1, 1928, Serial No. 282,278, and in Germany June 4, 1927. 6 Claims. (Cl. 210—23.)

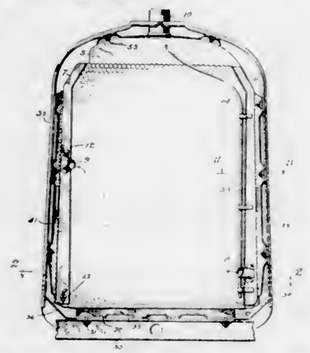
1. In the removal of silica from water containing the same the process which comprises percolating said water through a previous bed of non-siliceous hardened gel iron oxid.

1,860,782. INSULATED BUILDING. CHARLES A. MOORE, Edina, Minn. Filed Apr. 29, 1931. Serial No. 533,619. 13 Claims. (Cl. 72—1.)



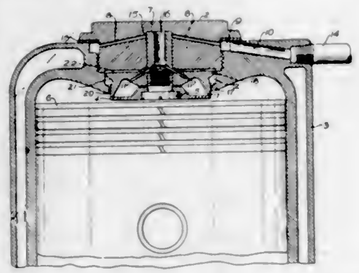
7. In a building having a wall and a floor joining said wall, a lining of insulating material covering said wall below said floor, a lining overlying said floor and extending up to said wall and a ribbon of insulating material extending along said wall and upon the underside of said floor from said insulating lining away from said wall, said ribbon being of a thickness at its edge farthest from said wall less than at the adjoining edge thereof.

1,860,783. RADIATOR SUPPORT. WELLINGTON W. MUIR, Lockport, N. Y., assignor to Harrison Radiator Corporation, Lockport, N. Y., a Corporation of New York. Filed Jan. 26, 1929. Serial No. 335,224. 7 Claims. (Cl. 180—68.)



1. A suspension for a vehicle radiator including two side tanks and a core therebetween, the same comprising an encompassing member spaced from said core and tanks but secured to a supporting vehicle member, and plates obliquely disposed between each tank and said first named member for yieldably supporting the radiator therefrom.

1,860,784. FUEL INJECTION DEVICE. ROBERT E. NELSON, Pasadena, Calif. Filed Oct. 18, 1929. Serial No. 400,556. 4 Claims. (Cl. 123—139.)



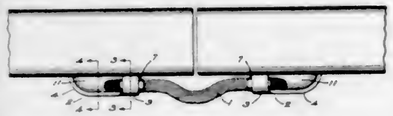
1. In a fuel injection device of the class described, a stepped plunger, and a stepped chamber in which said plunger reciprocates, said plunger clearing the larger portion of said chamber by a small amount, whereby gases may pass around the larger portion of said plunger into that portion of said chamber which is back of the larger portion of said plunger.

1,860,785. SECURITY DEVICE AGAINST ROBBERY OF MOTOR CARS. MARIO PICOLLO, Turin, Italy. Filed Aug. 3, 1929, Serial No. 383,307, and in Italy Aug. 9, 1928. 3 Claims. (Cl. 70—128.)



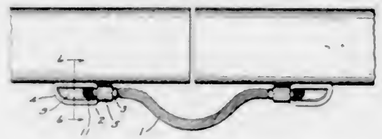
1. In a motor car a rocking lever of the brake operating system, a bar slidable in the plane of movement of said lever, adapted to obstruct the return movement of said lever from its "on" to its "off" position, a rack integral with said bar, a pinion engaging and operating said rack, means for locking said device in its operative position, a spring automatically returning said movable member to its inoperative position, when said member is released by said locking means, and a knob projecting through the floor of said car for operating said pinion.

1,860,786. RAIL BOND. PLINY P. PIPES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 25, 1927, Serial No. 193,978. Renewed Oct. 11, 1929. 4 Claims. (Cl. 173—278.)



1. A rail bond terminal comprising a sleeve portion having a recess therein to receive and grip a conductor, a projecting portion forming with a rail a receptacle having concave shaped bottom and side walls, said receptacle being closed at the end remote from the sleeve and having two open side faces disposed in intersecting planes, the terminal being applicable to a rail surface in two positions, in each of which, one or the other of said open side faces, lies adjacent the rail and in one of which a space exists between the rail surface and the edge of the projecting portion.

1,860,787. RAIL BOND. PLINY P. PIPES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Nov. 9, 1927. Serial No. 232,062. 2 Claims. (Cl. 173—278.)



1. A terminal adapted to be welded to a rail in either of two positions comprising a portion to receive and grip a cable, the axis of the cable being extended longitudinally of the rail in either of said positions, a projecting portion having bent-up edges at all sides thereof except that at which the cable is gripped from the first portion and forming an open top receptacle for molten metal either before the terminal is applied to the rail or during its application to the rail, the said receptacle arranged to catch and support molten attaching metal when the terminal is applied to the rail in one of said positions and the projecting portion forming a shelf upon which the attaching metal can be applied when the terminal is applied to the rail in the other of said positions.

1,860,788. KNITTING NEEDLE. FREDRICK J. POTTER, New Brunswick, N. J., assignor to Fred J. Potter Company, New Brunswick, N. J., a Corporation of New Jersey. Original application filed Apr. 9, 1929, Serial No. 353,871. This application filed June 5, 1930. Serial No. 459,335. 1 Claim. (Cl. 66—119.)

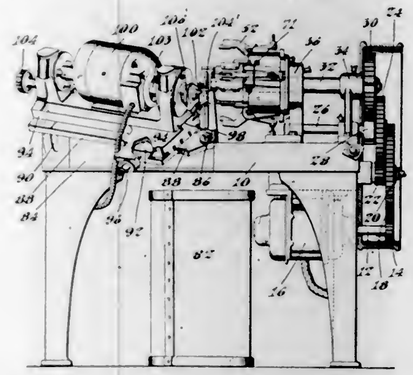


As a new article of manufacture, a knitting machine needle with all its parts formed integrally from flat metallic stock; and having a spring beard at its upper end, a comparatively narrow shank insuring minimum frictional engagement with the needle guide groove, and, in the region of its actuating butt, a wider solid portion extending below as well as above the butt to strengthen it against rocking and flexing, and to resist torsional strains.

1,860,789. WOOD HEEL GROOVING MACHINE. WILLARD N. SAWYER, Winchendon, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 12, 1927. Serial No. 160,622. 42 Claims. (Cl. 12—47.1.)

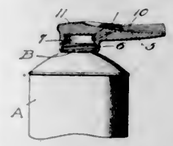
1. In a wood heel machine, a rotary tool constructed and arranged to generate a surface of revolution having

a cross-section corresponding in part to a profile of a heel surface, a heel blank holder, and means for effecting a relative revolution of the heel blank holder and



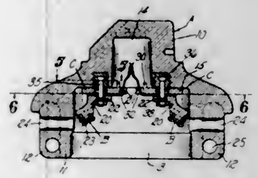
the tool about an axis which is oblique to the axis of rotation of the tool and which is substantially parallel to the attaching face of a heel blank in the holder.

1,860,790. APPLICATOR. HANS SCHULTHEISS, Baltimore, Md. Filed May 8, 1931. Serial No. 535,982. 4 Claims. (Cl. 91—67.4.)



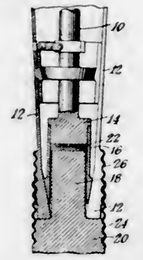
1. An applicator adapted for attachment to the discharge nozzle of a collapsible tube or the like, comprising a spreading plate having a sliding bearing surface adjacent one end thereof for controlling the movement of the plate relative to the surface being coated and said plate having longitudinal side flanges extending from the sides of said bearing surface and projecting above said spreading plate.

1,860,791. LIGHTING FIXTURE. NOAH T. THOMAS, West Hartford, Conn., assignor to The Hartford Faience Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 27, 1931. Serial No. 518,764. 9 Claims. (Cl. 173—338.)



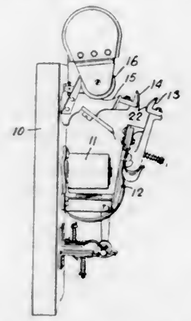
1. An insulator body having a surface with a recess opening thereinto, a seat element having one face engaging said surface and having a portion extending into said recess and adapted to engage the wall thereof whereby the seat element is prevented from rotating, and a terminal secured against the opposite face of said seat element and having a spring contact engaging one edge of said seat element.

1,860,792. COMPOSITE PILE. MAXWELL M. UPSON, Englewood, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 14, 1926. Serial No. 129,143. 7 Claims. (Cl. 61—56.)



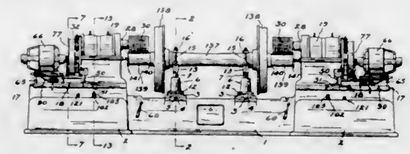
1. A composite pile comprising, in combination, a precast lower section, a cast-in-place upper section and a shell in which said upper section is cast, said shell being locked to the upper end of said lower section by screw threads.

1,860,793. ELECTRICAL CONTACTING ELEMENT. JOSEPH A. WEIGER, Union City, N J.., assignor, by mesne assignments, to P. R. Mallory & Co., Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed July 9, 1927. Serial No. 204,475. 2 Claims. (Cl. 200—166.)



1. A contacting element for electrical contact devices adapted for making and breaking relatively large currents under severe arcing conditions comprising a composite metallic facing having a porous body of hardened tungsten including about .5 per cent carbon and an auxiliary metallic constituent of one or more of the metals silver and copper impregnating said porous body throughout.

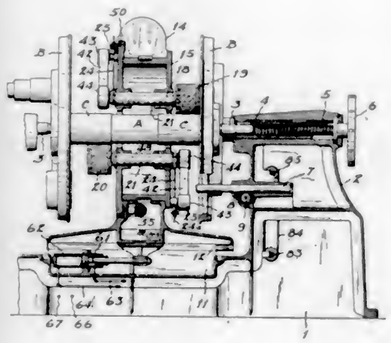
1,860,794. AXLE GRINDER. HENRY H. YERK and WILLIAM J. BAUMBERGER, Davenport, Iowa, assignors to Micro Machine Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Jan. 25, 1928. Serial No. 249,229. 15 Claims. (Cl. 51—90.)



1. In a grinding machine, an elongated supporting frame having work supporting means intermediate the ends thereof, heads at opposite ends of the frame mounted

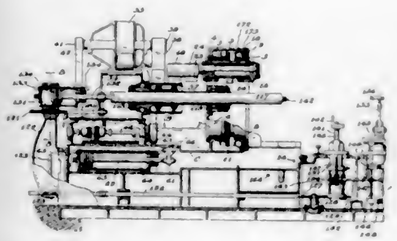
for movement toward and from the work support, a grinding wheel carried by each head, independent means carried by each head for driving the grinding wheel thereon and for simultaneously imparting orbital and radial feed movements to the grinding wheel, and means for simultaneously controlling the feeding means on the two heads.

1,860,795. GRINDING MACHINE. HENRY H. YERK and WILLIAM J. BAUMBERGER, Davenport, Iowa, assignors to Micro Machine Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Feb. 15, 1929. Serial No. 340,271. 33 Claims. (Cl. 51—43.)



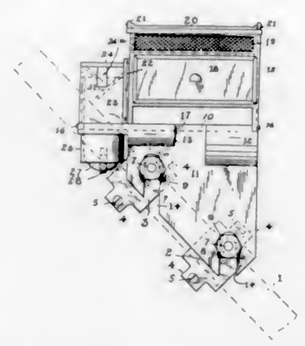
1. In a machine of the character described, a rotatably mounted head having an aperture through which a work piece may extend, means upon opposite sides of the head for supporting a work piece extending through the head and coaxial therewith, a tool spindle mounted in the head outwardly of said aperture, means for rotating said head, means for driving said spindle during rotation of the head, and means for automatically feeding said spindle toward the axis of the head during rotation of the head.

1,860,796. GRINDING MACHINE. HENRY H. YERK and ARTHUR A. KOTTMAN, Davenport, Iowa, assignors to Micro Machine Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Apr. 4, 1930. Serial No. 441,645. 25 Claims. (Cl. 51—43.)



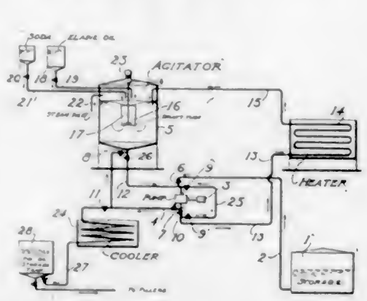
1. In a grinding machine for grinding cylindrical surfaces, a base, a rotatable headstock cylinder mounted thereon, a grinding wheel spindle eccentrically mounted on said headstock cylinder to move in an orbital path about the surface being ground, a non-rotatable work centering shaft extending axially through said headstock cylinder, and means for moving said centering shaft axially relative to said cylinder for engaging the center of the work being ground.

1,860,797. MOTOR VEHICLE CABINET. THOMAS M. ZIMMERMAN, Dawson, Pa. Filed Dec. 27, 1930. Serial No. 505,095. 2 Claims. (Cl. 206—19.5.)



1. A cabinet adapted to be mounted on the steering post of a motor vehicle and comprising a lidded box, a tubular holder vertically disposed with said box and opening through the bottom of the box, a receiving cup arranged to be upwardly inserted in said holder, and spring fingers attached to said cup and arranged to resiliently hold said cup in said holder.

1,860,798. METHOD FOR MAKING SOAP-OIL COMPOSITIONS. FRANK W. AGHAMS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 14, 1926. Serial No. 122,348. 5 Claims. (Cl. 87—5.)

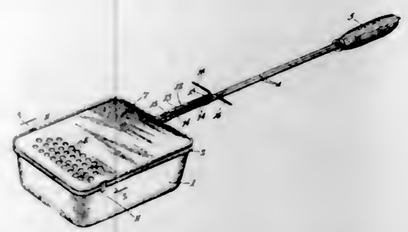


1. Method of manufacturing a hydrocarbon oil composition containing soap, comprising circulating the oil through a cycle including an agitating zone and a heating zone, distributing a soap in the oil, and rapidly cooling the composition through the temperature range in which gel formation would otherwise take place.

1,860,799. UTENSIL FOR POPPING CORN AND THE LIKE. JOHN L. BENNETT, Decatur, Ill., assignor to U. S. Manufacturing Corporation, Decatur, Ill., a Corporation of Illinois. Filed Mar. 8, 1929. Serial No. 345,333. 4 Claims. (Cl. 210—191.)

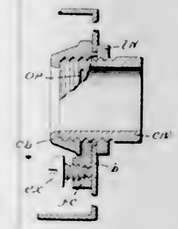
1. A device of the character described including, in combination, a basket or receptacle having a handle member extending therefrom, a lid or cover for said basket or receptacle comprising a wire loop with a handle member extending therefrom and wire netting within the loop, a metallic binding and head member clamped around said loop clamping both sides of said wire netting at its edges

so as to assemble the lid or cover member, said handle members each being composed of a pair of wire members extending in close relation to each other and means



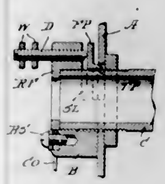
for holding said handle members in associated relation to permit sliding movement thereof relative to each other for opening and closing the lid or cover.

1,860,800. ELECTRICAL BONDING DEVICE. STEPHEN W. BORDEN, Summit, N. J. Filed Jan. 26, 1929. Serial No. 335,369. 5 Claims. (Cl. 247—1.)



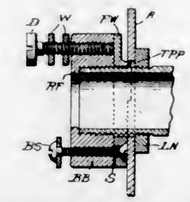
1. An electrical connecting device which includes a portion internally threaded for a conduit and having an internal shoulder overlapping the end of the conduit and which includes a second portion in the form of a flanged ring attached to the first portion at one point, the flanged ring being severed by a radial slot located substantially diametrically opposite the point of attachment between the first and second portions and means in the slot for circumferentially expanding a portion of the flanged ring in a circular opening.

1,860,801. BONDING BUSHING. STEPHEN W. BORDEN, Summit, N. J. Filed Apr. 18, 1929. Serial No. 356,275. 3 Claims. (Cl. 247—1.)



1. A conduit bushing formed with a threaded conduit receiving opening and with an internal shoulder on one end for overlapping the end of the conduit and on the opposite end a tapered projection extending parallel to the axis of the opening and a transverse slot extending part way through the bushing, the portion adjacent the internal shoulder having a threaded screw hole and a screw in the hole and extending therefrom across the slot and against the portion adjacent the tapered member.

1,860,802. CONDUIT BONDING FITTING. STEPHEN W. BORDEN, Summit, N. J. Filed Mar. 1, 1930. Serial No. 432,571. 9 Claims. (Cl. 247—1.)

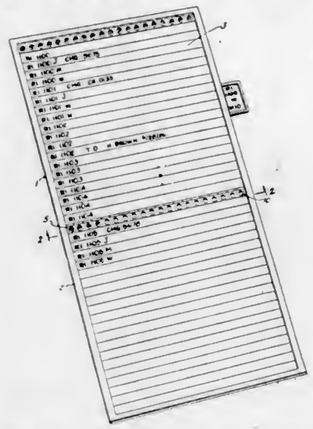


1. A conduit bushing formed with a threaded conduit receiving opening and with a threaded screw hole and including a second portion consisting of an annular washer formed with an integral tapered member extending parallel to the conduit opening and a threaded member in the screw hole, the threaded member projecting therefrom and against the annular washer.

1,860,803. PRODUCTION OF PULP, ETC. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Filed July 3, 1926. Serial No. 120,514. 11 Claims. (Cl. 92—11.)

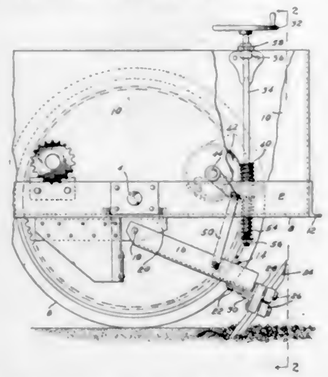
1. The method of producing wood pulp from wood which comprises cooking the wood in a cooking liquor comprising as its three essential chemical reagents sodium hydroxide, sodium sulfid and sodium sulfite, the sodium oxide equivalent of the sulfid being greater in amount than the Na_2O content of either the sodium hydroxide or the sodium sulfite, and the amount of sodium present as sodium sulfite being at least one half but less than the amount of sodium present as sodium sulfid.

1,860,804. SIGNAL HOLDER FOR INDEXES. THOMAS B. CLARK, Hasbrouck Heights, N. J., assignor to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,507. 5 Claims. (Cl. 40—63.)



1. An index having in combination, a supporting panel, a plurality of index strips arranged in said panel in groups, and signal holders arranged in said panel forming dividers between adjacent groups of index strips, each signal holder having a plurality of signal retaining devices arranged in spaced relation thereon and corresponding to each index strip of a group.

1,860,805. SCARIFIER. DAVID B. COOK, Frankfort, N. Y., assignor to Acme Road Machinery Company, Frankfort, N. Y., a Corporation of New York. Filed Jan. 28, 1926, Serial No. 84,300. Renewed Oct. 23, 1931. 3 Claims. (Cl. 262—8.)



1. The combination of a vehicle frame, a support having its forward portion pivotally mounted on said frame, a scarifying device mounted on the rear portion of said support, and means for raising and lowering said scarifying device comprising a worm and a worm wheel, a shaft upon which the worm wheel is mounted, a rearwardly projecting arm secured to the shaft, a link connecting the rear end of said arm with said pivoted support, a second shaft carrying said worm, movement in opposite direction, a hand wheel for operating said worm shaft secured on the upper end thereof, a fixed stop for limiting the axial movement of said worm shaft in a direction to permit the lowering of said scarifying device, abutments on the vehicle frame and worm shaft, and a spring coiled about the shaft and interposed between said abutments for yieldingly holding the worm shaft from axial movement in the opposite direction.

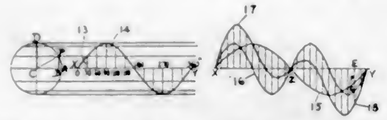
1,860,806. ARTIFICIAL TOOTH MOUNTING. RALPH C. COOLEY, Houston, Tex. Filed Aug. 12, 1929. Serial No. 385,257. 3 Claims. (Cl. 32—9.)



1. An individual porcelain saddle bridgework construction comprising an interchangeable one-piece porcelain tooth having a gingival surface at one end and a biting edge at the other, said tooth being cut out at its lingual side to form two walls intersecting each other at an obtuse angle, the first wall extending from such intersection toward the biting edge, and the second wall extending from such intersection toward the lingual and gingival surfaces of the tooth, relatively wide interlocking means integral with and projecting from said second wall and extending to and integral with said first wall, interlocking groove means carried by the said first wall and of a transverse dimension substantially equal to the width of the first interlocking means, and a metallic backing having complementary walls and interlocking means shaped to snugly engage the corresponding elements of said tooth.

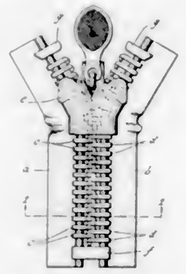
1,860,807. PRODUCTION OF SOUND. JOHN B. FLOWERS, Brooklawn, N. J. Filed June 26, 1925. Serial No. 39,873. 4 Claims. (Cl. 84—1.)

3. A method of producing a tone and a plurality of harmonics thereof by representing each of said harmonics by its sine values at angular increments, mathematically combining the sine values of said harmonics at said points, plotting the resultant values as points along a curve,



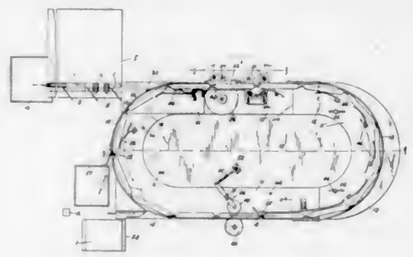
joining said points to form a curve, forming a curve having a series of cycles, arranging said curve on an enlarged drawing, reducing said curve to a master plate, and adapting said master plate for producing said tones.

1,860,808. FLEXIBLE CLOSURE. JOHN B. FREYSINGER, New Britain, Conn., assignor, by mesne assignments, to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed June 15, 1926. Serial No. 116,206. 9 Claims. (Cl. 24—205.)



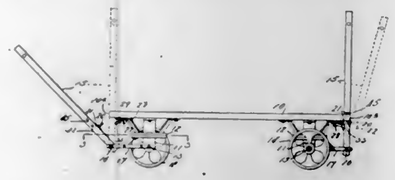
1. A flexible closure of the character described having a pair of flexible stringers, and a series of locking members on each stringer, said locking members being staggeredly arranged and each comprising a body portion having an opening spaced from its free end and closed except on the faces of said member extending transversely of its stringer and a depending lug at its free end, the lug of each member being adapted to engage in the opening of the subjacent one.

1,860,809. MUNTING MACHINE. WILLIAM H. KING and ALVA HUFFMAN, Weed, Calif. Filed Dec. 7, 1931. Serial No. 579,445. 11 Claims. (Cl. 144—3.)



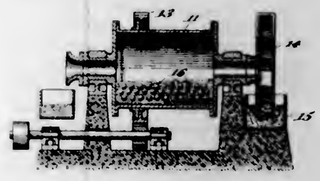
1. Wood working machinery comprising in combination with a sticker, a guide adapted to guide munting blanks toward said sticker, a saw operatively mounted in relation to said guide for sawing off a strip from said blank for passage along said guide to the sticker, and means to insure a guided return of the remainder of said blank back to the guide and to sawing position for repassage past the saw in repetition for cutting off successive strips therefrom.

1,860,810. HAND TRUCK. HENRY G. LANCE, Buffalo, N. Y., assignor to Daniel E. Knowlton, Buffalo, N. Y. Filed Sept. 27, 1929. Serial No. 395,604. 3 Claims. (Cl. 280—108.)



1. In a hand truck having a platform, a handle pivoted below said platform to swing towards and from an upright position, a fixed hook on said handle, and locking mechanism for said handle disposed beneath said platform inwardly of an end wall thereof and in rear of said handle when the same occupies said upright position, whereby said mechanism is protected against blows received against said end of said truck, said mechanism comprising a locking dog, a pivoted weight-actuated part on which said dog is fixed and which permits said dog to move by gravity into locking relation with said hook when said handle is raised to its upright position, interfitting faces on said hook and on said dog, and said platform having a stop face against which said locked handle engages when moved to locking position so as to prevent relative movements between said hook face and said dog face in the movement of the truck from place to place.

1,860,811. TREATMENT OF ORES. JAMES E. LITTLE, Bethlehem, and FRANK O. KICHLINE and AUGUST EHRGOTT, Lebanon, Pa., assignors to Bethlehem Steel Company. Filed May 26, 1926. Serial No. 111,879. 1 Claim. (Cl. 209—6.)



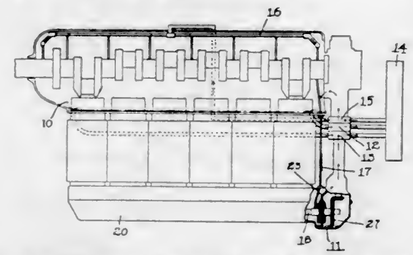
In a process for treating ores comprising limonite and chromite, the steps of subjecting such ores to substantially freely resilient attritive impacts while in substantially free suspension in liquid, said impacts proportioned to disintegrate the limonite but not the chromite and separating the so differentially disintegrated ingredients.

1,860,812. CLOTH PACKAGE AND METHOD OF PRODUCING THE SAME. HAROLD T. MARSHALL, Walpole, Mass., assignor to The Kendall Company, Walpole, Mass., a Corporation of Massachusetts. Filed Feb. 17, 1931. Serial No. 516,369. 4 Claims. (Cl. 206—46.)



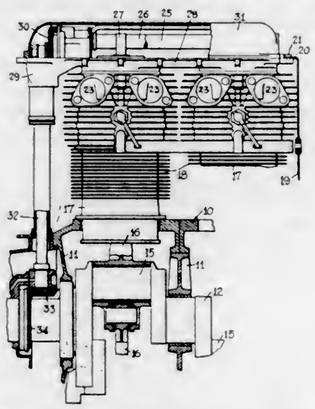
1. A package of flexible sheet material in web like form of substantial length, said material having at least one longitudinally extending fold effective to substantially decrease its width and said folded material having transverse folds effective to divide it into layers conforming to definite predetermined units of measurement indicated by the transverse folds, the layers being arranged compactly one upon the other.

1,860,813. LUBRICATION SYSTEM FOR INVERTED MOTORS. ARTHUR NUTT, Kenmore, N. Y., assignor to Curtiss Aeroplane & Motor Co., Inc., a Corporation of New York. Filed June 3, 1926. Serial No. 113,442. 14 Claims. (Cl. 184—6.)



1. A lubrication system for traveling motors having cylinders including a primary drainage reservoir arranged to receive oil draining from the crank shaft bearings of the motor, a secondary drainage reservoir mounted opposite the motor cylinders from the primary drainage reservoir and arranged to independently receive oil draining from the cam shaft bearings of the motor, said two drainage reservoirs being so relatively arranged that the oil therein contained cannot flow by gravity from one to the other thereof as the angle of inclination of the motor changes in operation, a supply reservoir, a scavenging oil pump operable to withdraw oil from said secondary drainage reservoir and to deliver it to said primary drainage reservoir, a scavenging oil pump operable to withdraw oil from said primary drainage reservoir, and to deliver it to said supply reservoir, and a delivery oil pump operable to withdraw oil from said supply reservoir and to deliver it to both the crank shaft and the cam shaft bearings.

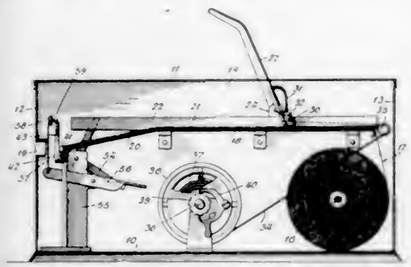
1,860,814. INTERNAL COMBUSTION ENGINE. ARTHUR NUTT, Kenmore, and ARTHUR H. LEAK, Hamburg, N. Y., assignors to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed July 22, 1927. Serial No. 207,603. 11 Claims. (Cl. 123—55.)



1. In an air-cooled internal combustion engine, the combination, of a crank shaft, a plurality of engine cylinders arranged radially about the crank shaft in groups of at

least two cylinders each, the corresponding cylinders of each group being substantially equidistantly circumferentially spaced and the cylinders of each group being aligned longitudinally of the crank shaft axis, a cam shaft for each cylinder group mounted at the outer cylinder ends, the cam shafts, in each instance, having an over-all length sufficient to span the total number of cylinders comprised in a single cylinder group, and a cam shaft driving means extending radially off from said crank shaft in line with the equidistantly spaced cylinder groups.

1,860,815. PAPER-DISPENSING MACHINE. EUGENE LUCKS-OSTEN, JULIUS GREENWALD, and DAVID OSTERN, Weehawken, N. J. Filed May 23, 1931. Serial No. 539,474. 9 Claims. (Cl. 164—42.)



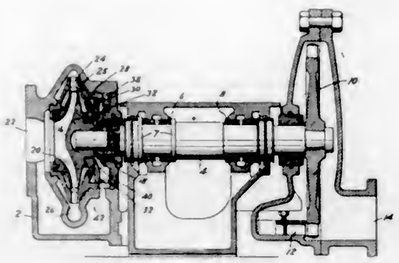
6. In a dispensing machine, a platform constituting a guide for a web of paper, a stationary cutting edge at one end of said platform, a cutter engageable with and movable relative to said edge to sever a length of said web, a track coextensive with said platform, a feeder movable along said track and having a gripper engageable with the web on said platform, a stop member on said track contacted by said gripper to limit the movement of the latter along said track and away from said cutter, and a trip mechanism operated by said feeder to actuate said cutter when a length of said web has been fed thereto by the movement of said feeder toward said cutter.

1,860,816. EXPLOSIVE. GEORGE ST. JOHN PERROTT, Pittsburgh, Pa., and GEORGE BURKLE HOLDERER, Scarsdale, N. Y., assignors, by mesne assignments, to the People of the United States of America. Filed Mar. 23, 1931. Serial No. 524,756. 10 Claims. (Cl. 52—1.)

1. In an explosive adapted for explosion with the aid of a liquefied gas, the combination of finely divided carbon and an incombustible material in a finer state of division than said carbon.

1,860,817. ROTARY PUMP. ARVID PETERSON, Trenton, N. J., assignor to De Laval Steam Turbine Company, Trenton, N. J., a Corporation of New Jersey. Filed Oct. 3, 1928. Serial No. 309,909. 2 Claims. (Cl. 103—112.)

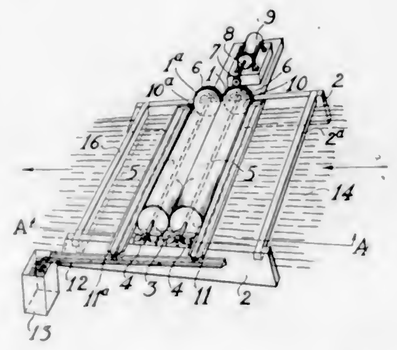
1. A rotary pump including a casing, a shaft, a pump rotor carried by the shaft within the casing, a central intake passage, an annular discharge passage, passages in the rotor extending from the intake passage to the discharge passage, a turbine rotor mounted on the shaft, the thrust incidental to the operation of both the pump and turbine rotors tending to move the shaft towards the intake passage, and means for balancing said combined thrust including a fixed ring member carried by the casing on the side of the pump rotor opposite the intake passage and providing a stationary face facing away from the intake passage, a rotating ring mounted to rotate with the rotor having a face adjacent the face of said fixed ring, the clearance between them communicating with the discharge, and a second annular ring having a face adjacent a face on the opposite side of the rotating ring, the clearance between the last named faces forming a leak-off passage, the second annular ring being threaded in the casing, the threads having a radius greater than the leak off passage, whereby its rotation produces axial movement thereof thereby adjusting the sum of the clearances between the pairs of faces, liquid from the discharge being adapted to pass radially outwardly from the discharge passage between the first pair of faces, around the periphery of the rotating ring, and thence through the leak-off passage.



1,860,818. PRODUCTION OF ALKALI METAL PHOSPHATES. KURT RÖHRE and OTTO HEUSLER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 4, 1928, Serial No. 252,036, and in Germany Feb. 18, 1927. 3 Claims. (Cl. 23—106.)

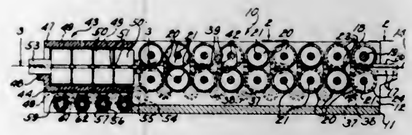
1. A process for the production of alkali metal phosphates which comprises first treating ferrous phosphid with water vapor at a temperature and for a period of time sufficient to cause partial oxidation of the ferrous phosphid, and subsequently heating the reaction product with an alkali metal sulfate to a temperature at which the material sinters.

1,860,819. APPARATUS FOR SEPARATING OIL FROM WATER. JULIUS SCHAMBERGER, Elizabeth, N. J. Filed July 15, 1929. Serial No. 378,260. 3 Claims. (Cl. 210—51.)



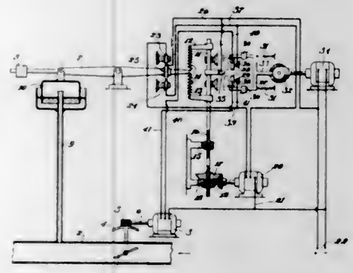
1. Apparatus for removing floating material from a liquid, which comprises a channel for conveying the liquid, a plurality of spaced rolls each extending transversely across the channel in position to dip into the liquid, means for rotating adjoining rolls in opposite directions with the under-surface of the roll upstream rotating in the direction of travel of the stream, and means for removing and collecting material adhering to the rolls.

1,860,820. METHOD OF PRODUCING MAGNETIC CORES. KENNETH LOYAL SCOTT, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,867. 3 Claims. (Cl. 175—21.)



1. The method of producing a laminated magnetic core which consists in rolling a sheet of magnetic material to produce spaced corrugations therein, and further rolling the sheet to close certain of the corrugations one upon the other while the remaining corrugations are maintained apart.

1,860,821. REGULATOR. CHARLES H. SMOOT, Maplewood, N. J. Filed Apr. 10, 1929. Serial No. 355,463. 16 Claims. (Cl. 172—239.)

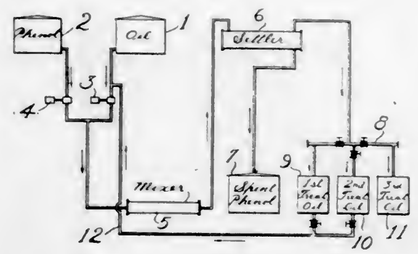


1. In a regulator, a primary regulating member subjected to opposing regulating and regulated forces and causing regulating changes when such forces become unbalanced, and a modifying mechanism brought into operation by the movement of the primary regulating member comprising means for gradually adding and withdrawing a third force to the primary regulating member and means controlled jointly by the primary regulating member and the modifying mechanism for varying the rapidity and direction of the regulation during a regulating change.

1,860,822. SOLVENTS AND THEIR APPLICATIONS. ARTHUR STEVENS, Buffalo, N. Y., assignor to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed July 23, 1929. Serial No. 380,466. 2 Claims. (Cl. 134—79.)

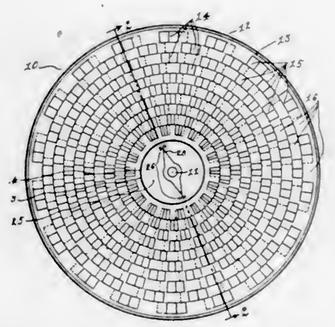
1. A solvent for nitrocellulose comprising a mixture of alcohol, diethyl acetal and dimethyl acetal.

1,860,823. PROCESS FOR TREATING LUBRICATING OILS WITH PHENOL. REGINALD K. STRATFORD, Sarnia, Ontario, Canada, assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 29, 1929. Serial No. 403,182. 7 Claims. (Cl. 196—13.)



1. The process of treating hydrocarbon lubricating oils, which comprises agitating the oil with undiluted liquid phenol below the temperature at which the phenol becomes completely miscible with the oil, and separating the oil layer from the phenol layer.

1,860,824. APPARATUS FOR TREATING LIGHT AND SIMILAR RAYS. ALFRED ORDE TATE, Toronto, Ontario, Canada. Filed Nov. 7, 1928. Serial No. 317,840. 5 Claims. (Cl. 88—1.)

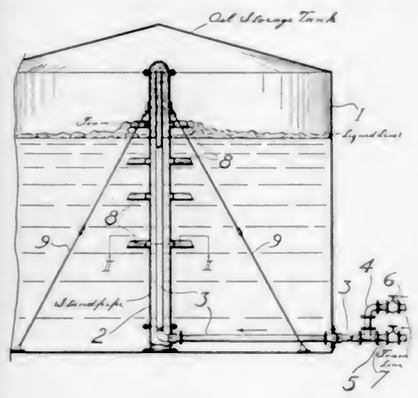


2. A device for revealing an image by sections which comprises a disc having a plurality of apertures therein arranged at varying distances from the center of said disc and spaced circumferentially thereof to intermittently reveal said image, a second disc having apertures similarly arranged, means for mounting said discs for rotation about the same axis, and means for shifting one of said discs relative to the other thereof whereby the effective area of said apertures may be varied.

1,860,825. APPARATUS FOR EXTINGUISHING FIRES IN TANKS. WILLIAM F. THIEDE, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 358,131. 3 Claims. (Cl. 169—4.)

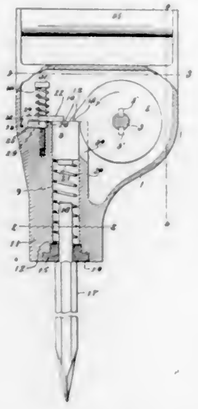
1. In fire prevention apparatus, a standpipe adapted to be disposed in a tank for inflammable liquid with its up-

per end above the normal level of the liquid, and a conduit of relatively small diameter entering the standpipe in close proximity to the lower end thereof and opening into the



upper portion of the standpipe above the normal level of liquid, the standpipe being provided with a plurality of longitudinally spaced outlets.

1,860,826. HAMMER RECTILINEAR RECIPROCATION. ERWIN W. TSCHUDI, Baltimore, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed Aug. 10, 1929. Serial No. 386,816. 2 Claims. (Cl. 125—33.)



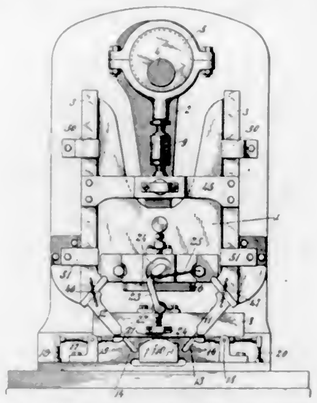
1. The combination in a portable power hammer of a continuously rotating striker having a striking member rigidly mounted thereon, a reciprocating ram with guiding means therefor engaged by the ram in sliding relation only, causing the ram to move on a path which is substantially tangential to the path of the striker member, means for supporting a bit in the path of the ram at one end of its stroke, a resiliently mounted stop means located at the upper end of the ram guide for checking the rebound of the ram at the opposite end of its stroke and in the path of the striker member and resilient means for supporting the ram in contact with the stop, the stroke of the ram, as controlled by said guide, being so placed and of sufficient length to carry the ram entirely out of the path of the striker, permitting the striker to pass the ram on each full reciprocation.

1,860,827. ANGLE INDICATOR FOR VARIABLE PITCH PROPELLERS. WALLACE RUPERT TURNBULL, Rothesay, New Brunswick, Canada. Filed July 30, 1927. Serial No. 209,600. 9 Claims. (Cl. 177—311.)



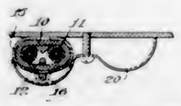
9. In a device of the character described, a variable pitch propeller including a stationary bearing, a shaft mounted in said bearing and carrying a hub member, a propeller blade member, means pivoting the propeller blade member on the hub member to turn on an axis extending radially of the hub means for turning said blade on said pivoting means and means for indicating the angular position of the blade when turned by said means including a resistance mounted on one of said members and a contact on the other, the resistance and contact also including contact means for varying the amount of effective resistance, a suitable measuring instrument, a source of current, a conductor circuit including said resistance and contacts and said measuring instrument and source in a series circuit, the said circuit also including means for conducting current from the resistance and contact means to the stationary portion of the device.

1,860,828. APPARATUS FOR BLANKING AND FORMING JAWS FOR STEEL TRAPS. JOSEPH D. ZAHM, Lititz, Pa., assignor to Animal Trap Company of America, Lititz, Pa., a Corporation of Pennsylvania. Filed May 24, 1929. Serial No. 365,655. 19 Claims. (Cl. 153—3.)



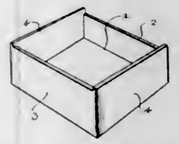
1. A blank-forming machine comprising a movable member, a punch member and finger members thereon, a cutting die operatively associated with said punch member and means for feeding a blank from said cutting die to said finger members.

1,860,829. ELECTRICAL CONNECTER. CHARLES W. ABBOTT, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Sept. 19, 1928. Serial No. 306,813. 4 Claims. (Cl. 173—324.)



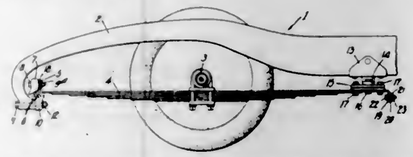
1. In combination, an electrical cable having a non-metallic sheath and a running ground wire provided with a projecting end, a ground connecter of bendable metal attached to said wire and bent around said cable over its sheath, and cable securing means embracing the cable and surrounding connecter.

1,860,830. WRAPPING AND LINING MEANS FOR BOXES. ALLAN A. ADAMSON, Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio, a Corporation of Delaware. Filed Dec. 6, 1928. Serial No. 324,152. 2 Claims. (Cl. 229—6.)



1. Combined wrapping and lining means for the side and end walls of a box in which the end walls project upwardly above the side walls, comprising a blank embodying three wrap sections connected end to end, for covering the end walls and a side wall, each of said sections having a portion for covering the upper edge of the corresponding wall, and the central section having extensions for covering the adjacent upwardly projecting end edges of the end walls, corner flaps at the opposite ends of the blank, for attachment to the outer face of the other side wall, and having extensions for covering the adjacent upwardly projecting end edges of the end walls, a liner extension on each wrap section, for covering the inner face of the corresponding wall, and a second blank embodying a wrap section for covering the outer face of the other side wall between the corner flaps and in lapping relation to said flaps, said last-mentioned section having a portion for covering the upper edge of the corresponding wall, and a liner extension on said last-mentioned section, for covering the inner face of such corresponding wall.

1,860,831. SPRING SUSPENSION. HARVEY W. BELL, Ardsley-on-Hudson, N. Y., assignor to The Beloyt Corporation, New York, N. Y., a Corporation of Delaware. Filed July 20, 1929. Serial No. 379,616. 18 Claims. (Cl. 280—106.5.)

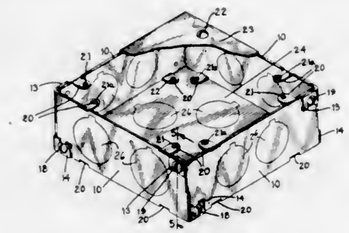


1. In a motor vehicle, the combination with the body and a pair of substantially parallel leaf springs, of means flexibly connecting the spring ends to the vehicle body and a cross-bar connected directly to corresponding ends of said springs and bodily movable with and by the spring ends relative to the body.

1,860,832. TREATMENT OF MOLASSES FOR YEAST GROWTH. WILLIAM GORDON BENNETT, Epsom, and ARTHUR MAURICE PEAKE, London, England, assignors, by mesne assignments, to Standard Brands Incorporated, Dover, Del., a Corporation of Delaware. Filed June 12, 1929, Serial No. 370,455, and in Great Britain June 25, 1928. 17 Claims. (Cl. 195—32.)

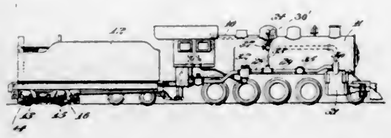
10. A process for the treatment of molasses, which comprises diluting molasses, neutralizing, heating to a temperature below boiling, adding thereto an adsorbent material, cooling to a temperature about normal, acidifying, and then adding a protein precipitant.

1,860,833. KNOCKDOWN BOX. MARTIN M. CLAYTON, Baden, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed June 28, 1929. Serial No. 374,386. 9 Claims. (Cl. 220—4.)



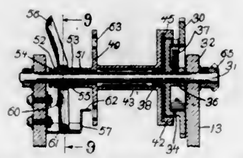
1. A sheet metal box comprising side portions formed of sheet metal with interengaging end portions upon one end thereof which are in complementary relation to the interengaging end portions upon the other end thereof whereby each part is reversible with fastening means adapted for securing sheet metal parts for securing the sheet metal side portions together, said fastening means being identically disposed upon the various parts for interchangeable fastening of said parts.

1,860,834. ENGINE. ROBERT S. A. DOUGHERTY and NEVIL GREENWELL, Bethelehem, Pa., assignors to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed July 12, 1929. Serial No. 377,820. 15 Claims. (Cl. 105—48.)



1. A fluid pressure supply system for an auxiliary engine, comprising a main fluid supply conduit, a main throttle for said conduit, an auxiliary throttle for said conduit, and an auxiliary fluid supply conduit connected to said main fluid conduit intermediate said throttles whereby pressure fluid may be supplied simultaneously from a plurality of sources to the engine under the control of said auxiliary throttle.

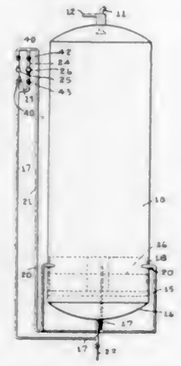
1,860,835. HOISTING APPARATUS. ALFRED C. GILBERT, Hamden, and EDWARD N. ANKETELL, New Haven, Conn., assignors, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Apr. 5, 1928. Serial No. 267,683. 8 Claims (Cl. 254—187.)



1. In a hoisting mechanism, a base, a shaft rotatably mounted on said base, a combined gear and clutch part secured to said shaft, driving means for said gear to rotate said shaft, a combined rope receiving drum and clutch part rotatably and axially slidably mounted on said shaft,

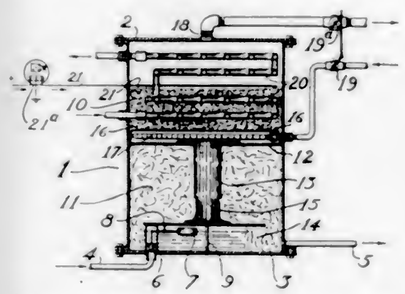
the drum portion of said part having a flange at one end thereof and a shaft embracing sleeve extending from said flange, said sleeve being provided with a pair of opposing shoulders upon the periphery thereof, and an operating sleeve surrounding said shaft embracing sleeve between said shoulders, a lever secured to said operating sleeve and pivoted to said base, means to swing said lever to slide said combined drum and clutch part away from said gear and clutch part, and a member adapted to engage said flange to prevent rotation of said drum portion when the same is in such position.

1,860,836. DIFFUSER. ANTONE GUSTIN, Oconto Falls, Wis., assignor to Continental Paper & Bag Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 1, 1929. Serial No. 396,570. 5 Claims. (Cl. 92—7.)



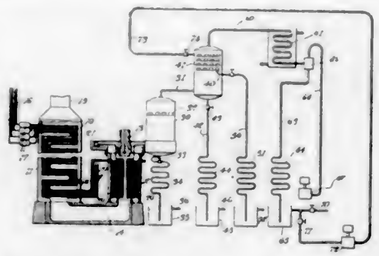
1. A diffuser for draining the digesting liquor from wood pulp and for washing the wood pulp, comprising a closed tank having a lateral drainage zone and a bottom drainage zone, said zones being non-communicative interiorly of the tank, a pair of discharge conduits, and means for draining said zones concurrently through the same conduit or through separate conduits as desired.

1,860,837. APPARATUS FOR CONTROLLING TEMPERATURE OF FLUID. FRANK A. HOWARD, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 24, 1929. Serial No. 380,589. 3 Claims. (Cl. 123—170.)



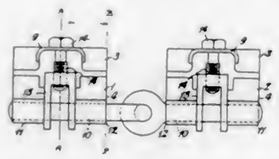
1. A heating system, which comprises an internal combustion engine including passages for cooling fluid and a carburetor, a fuel receptacle communicating with the carburetor, a chamber, a wick holder communicating with the receptacle and chamber, a catalytic body in the chamber, and heat exchange tubing in the chamber communicating with the passages.

1,860,838. METHOD OF PREPARING LUBRICANTS. EUGENE H. LESLIE, Ann Arbor, Mich., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 7, 1928. Serial No. 259,694. 6 Claims. (Cl. 196—82.)



1. The method of preparing lubricant from non-overhead wax-bearing lubricating oil which comprises passing the material under treatment under an initial pressure through a tubular heater, heating said material during its passage through said heater to a temperature above its cracking temperature, the period during which the material is heated above its cracking temperature and the velocity of the material during said period being such that no substantial amount of cracking of the material takes place, subjecting said material to flash vaporization under a low absolute pressure to vaporize a substantial portion thereof and to separate certain wax crystallization inhibitors therefrom, subjecting the resulting vapors to counter-current fractionation, and cutting said lubricants into a relatively light lubricating fraction containing wax in pressable form and a relatively heavy lubricating fraction containing the balance of the wax crystallization inhibitors.

1,860,839. CLAMP FOR SCAFFOLDING FOR BUILDING AND OTHER PURPOSES. ARNOLD CLARENCE MARSHALL, London, England, assignor to The Steel Scaffolding Company Limited, London, England, a Corporation of Great Britain. Filed June 18, 1929, Serial No. 371,929, and in Great Britain July 16, 1928. 10 Claims. (Cl. 189—36.)

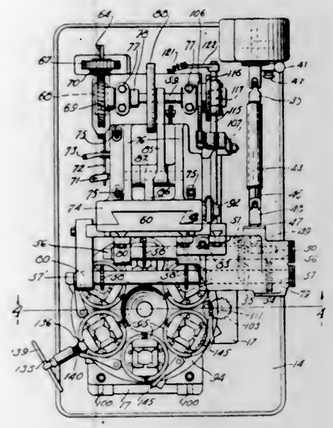


2. A clamp for the purpose specified comprising two gripping elements each comprising two hingedly connected members cooperating to grip a body, means for drawing said members together, a body upon each of said elements provided with an eye, the eye of one body engaging the eye of the second body, each of said bodies being revolubly carried by said elements.

1,860,840. MILLING MACHINE. NEWMAN M. MARSILIUS and OSWALD A. OLSEN, Bridgeport, Conn., assignors, by mesne assignments, to The Producto Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 30, 1927. Serial No. 236,647. 6 Claims. (Cl. 90—15.)

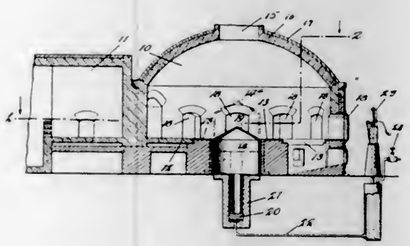
1. In a milling machine, a bed having longitudinally extending slots therein, a turret forwardly on the bed, bolts carried by the turret and entering the slots whereby the turret may be adjusted on the bed a cam shaft rearwardly on the bed, an upright mounting frame on the bed

intermediate the turret and cam shaft, a cutter carrying slide mounted in said upright frame for reciprocation, a cutter and cutter operating means on the turret side of said slide, an exposed rack on the cam shaft side of said



slide, a lever, a toothed segment carried by said lever and in engagement with the rack, means pivoting said lever, and cam means on said cam shaft for moving said lever about its pivot to reciprocate the slide.

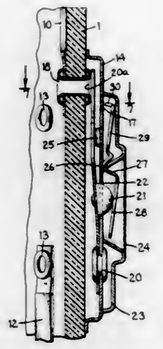
1,860,841. INCINERATOR. WILLIAM L. MCEVER, Albany, Ga. Filed Jan. 3, 1930. Serial No. 418,344. 3 Claims. (Cl. 110—8.)



1. In an incinerator having a floor, a charging door above said floor adapted to charge the material to be burned onto the center of the floor of the furnace chamber and a stoking ram at the center of said floor, in combination with means adapted to raise said ram to distribute the charge over said floor.

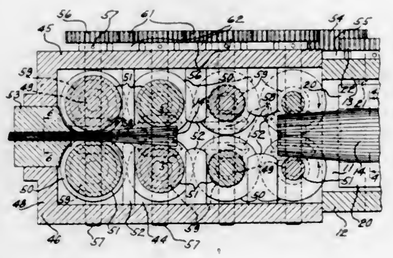
1,860,842. FLASHLIGHT SAFETY SWITCH. GOODRICH B. PRATT, Jersey City, N. J., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,664. 9 Claims. (Cl. 200—60.)

7. A device of the character described comprising a contact box, a resilient contact arm carried thereby, a button on the arm extending through an aperture in the box, a slide on the box, a well in the slide relative larger than the button to permit movement of the well relatively to the button, a lever carried by the slide and having a camming extension engaging the button, a recess in the



box under the slide, and an extension on the lever within the slide to maintain the button depressed when the slide is moved from a normal locked position.

1,860,843. APPARATUS FOR PRODUCING MAGNETIC CORES. KENNETH L. SCOTT, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Mar. 6, 1929, Serial No. 344,867. Divided and this application filed Mar. 1, 1930. Serial No. 432,525. 8 Claims. (Cl. 153—2.)

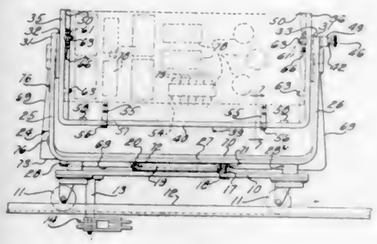


1. In an apparatus for producing magnetic cores, a plurality of forming rollers for producing a plurality of corrugations in a sheet of magnetic material, and a plurality of pressing rollers associated therewith for causing opposite walls of the corrugations to closely abut having grooves for gripping exterior edges of certain corrugations to render the pressing force effective on the remaining corrugations.

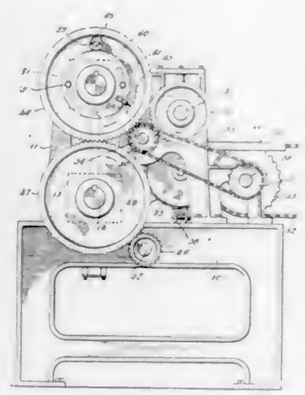
1,860,844. ASSEMBLING APPARATUS. EARL H. SORENSEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1930. Serial No. 481,019. 11 Claims. (Cl. 29—89.)

1. In an assembling apparatus, a base, a member hinged to the base for movement to a plurality of positions, the

member arranged to rest by gravity in each position thereof against a single surface of the base, and a second member movable on the first member for supporting in a plurality of positions a member upon which articles are to be assembled.



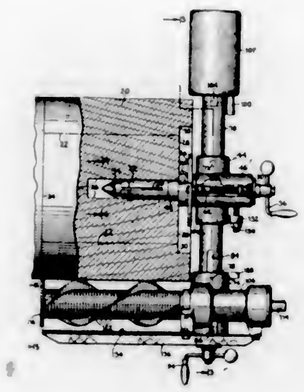
1,860,845. PAPER MACHINE. ISAAC STERN, New York, and JACOB HERTHER, Brooklyn, N. Y., assignors to S. & S. Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 27, 1923. Serial No. 677,227. 17 Claims. (Cl. 93—58.)



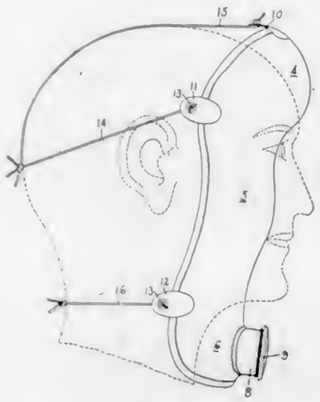
1. In a paper machine, the combination of a pair of shafts, co-operating slotting disks mounted on said shafts, a bracket in fixed relation to the slotting disk carried by one of said shafts and a scoring wheel rotatably mounted on said bracket and maintained thereby in predetermined fixed relation to slotting disks.

1,860,846. PILE TENON TURNING MACHINE. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed June 8, 1931. Serial No. 542,725. 7 Claims. (Cl. 144—205.)

1. Apparatus for turning a tenon on the head of a pile having an axial hole therein, comprising in combination, a member insertable in said hole, a bar supported on said member and extending across the head of the pile and rotatable about said member, a rotary cutting tool supported by said bar at the side of said pile head, means for operating said tool, and means for feeding said tool towards the center of said pile whereby said tool removes wood from said pile until a tenon is formed thereon.



1,860,847. APPLIANCE FOR THE TREATMENT OF COLDS, INFLUENZA AND SIMILAR AILMENTS. STANLEY E. ARMSTRONG, New Haven, Conn. Filed June 18, 1930. Serial No. 461,997. 2 Claims. (Cl. 128—258.)

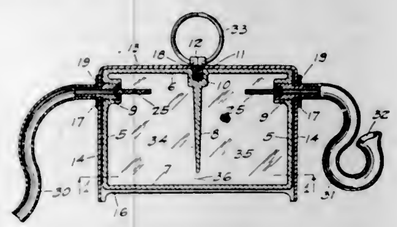


1. An appliance for application to the face of a patient for the treatment of colds and similar conditions, comprising a flexible shallow bag adapted to contain liquid of the required temperature, said bag being of greater length than width and having a top portion adapted to overlie the forehead for the treatment of the frontal sinuses, side portions adapted to lie adjacent the sinuses at the sides of the nose, and a lower portion adapted to lie against the front of the neck so as to treat the patient's throat, said bag being constructed to clear the eyes, nose, mouth and chin of the patient and being provided for that purpose with a vertically elongated opening which extends from the forehead-engaging portion of the bag below the chin, the upper boundary of said neck-engaging lower portion of the bag being shaped to permit free movement of the chin, and means for holding the bag in place on the patient's head.

1,860,848. MANUFACTURE OF PULP, ETC. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Filed July 3, 1926. Serial No. 120,513. 10 Claims. (Cl. 92—11.)

1. The method of producing wood pulp from wood, which comprises cooking wood in a non-acid sodium monosulfite cooking liquor, cooking wood in a cooking liquor containing sodium sulfide as the main cooking constituent, and recovering sodium compounds from the residual liquor from each cooking operation and using the same in the formation of cooking liquor for the other cooking operation.

1,860,849. PORTABLE WATER SOFTENER. HAROLD E. BURCH, Oakland, Calif. Filed Apr. 4, 1930. Serial No. 441,611. 1 Claim. (Cl. 210—24.)



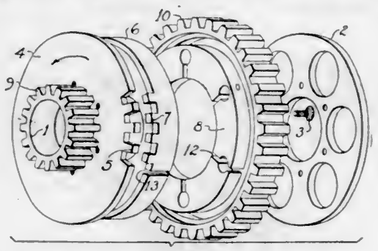
A portable water softener comprising a two compartment container substantially filled with base exchange material, the dividing wall being interrupted adjacent the bottom, a connection at each end of said container adjacent the top, said connections consisting of a threaded body with axial aperture and threaded counterbore internally disposed relative to said container, and having an outwardly flanged cylindrical screen retained therein by a threaded collar and extending into said compartments, and a grooved externally extending tube attaching sleeve integral therewith, an ornamental cover for said container, and fixed to said container by means of a screw, the head of which is provided with apertures diametrically disposed for reception of the ends of a carrying ring.

1,860,850. HETEROCYCLIC NITROGEN COMPOUNDS SOLUBLE IN ALIPHATIC AND AROMATIC HYDROCARBONS AND TO THE PROCESS OF PRODUCING THE SAME. THOMAS A. CASSIDY, Brooklyn, N. Y., assignor, by mesne assignments, to Frank J. Busser, Philadelphia, Pa., and Henry T. Hornidge, New York, N. Y., trustees. Filed Feb. 19, 1930. Serial No. 429,829. 10 Claims. (Cl. 87—9.)

1. The process which consists in heating a mixture of naphthenic acid and acridine orange base and then diluting the same with a petroleum hydrocarbon in the presence of heat and vigorous agitation.

1,860,851. YIELDING CLUTCH. ROLAND CHILTON, Ridgewood, N. J., assignor to Wright Aeronautical Corporation, a Corporation of New York. Filed May 15, 1930. Serial No. 452,595. 16 Claims. (Cl. 192—105.)

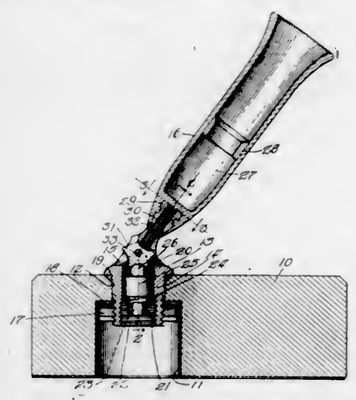
1. A yielding clutch comprising an expansible ring; a second ring concentric with the first and surrounding it; a split ring made up of weighted members positioned within the expansible ring and adapted to be spread by centrifugal force to cause the expansible ring to contact firmly with the outer ring and driving means engaging said expansible ring at one end only.



1,860,852. FERROUS ALLOYS. HENRY L. COLES, Hamilton, Ohio, assignor to Guardian Metals Company, Hamilton, Ohio, a Corporation of Delaware. Filed Mar. 22, 1930. Serial No. 438,232. 4 Claims. (Cl. 75—1.)

1. A hard alloy comprising 14 to about 18% manganese, 7 to 9.03% chrominum, about 2 to 4% carbon and the balance iron.

1,860,853. FOUNTAIN PEN DESK SET. WILLIAM R. CUTHBERT, Fort Madison, Iowa, assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa, a Corporation of Delaware. Filed Oct. 20, 1930. Serial No. 489,824. 12 Claims. (Cl. 120—108.)

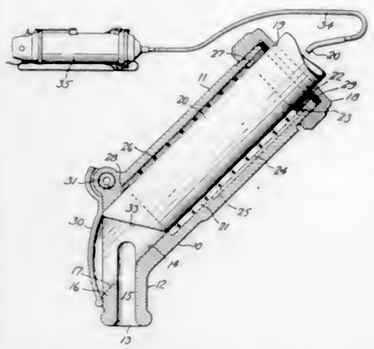


1. A fountain pen desk set comprising a flat base adapted to be placed on the top of a desk, supporting means on said base comprising a member having a recess, a receptacle pivotally mounted on said supporting means for holding a fountain pen, and means for holding said receptacle in various fixed adjusted positions wherein the ink in said pen flows toward the writing point thereof, said holding means being contained wholly within said recess of said supporting means.

1,860,854. SUCTION CLEANER NOZZLE. AXEL OLOF ENGBERG, Stockholm, Sweden, and ERIK BILDE, Berlin-Tempelhof, Germany, assignors, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed Apr. 26, 1927, Serial No. 186,740, and in Germany Sept. 8, 1926. 14 Claims. (Cl. 15—155.)

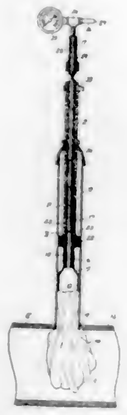
1. In a vacuum cleaner, a nozzle body having a main nozzle opening and an auxiliary nozzle opening therein,

and a tubular member longitudinally movable in said nozzle body to communicate one or both of said nozzle openings with the suction of the vacuum cleaner.



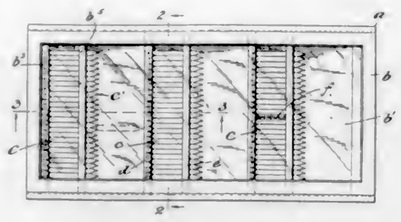
7. In a vacuum cleaner, a nozzle body having a main opening and an auxiliary opening therein and having a cylindrical portion, a tubular member longitudinally slidable in said cylindrical portion, and means for positioning said tubular member in said cylindrical portion in either an advanced position or a retracted position, the side of said tubular member and the inside of said nozzle body comprising a valve for cutting off suction through said main opening, and said tubular member being formed to permit suction through said auxiliary opening in advanced position and to permit suction through said main opening in retracted position.

1,860,855. PNEUMATIC STOPPER FOR GAS MAINS. WILLIS W. GARDNER, Meriden, Conn. Filed Nov. 15, 1930. Serial No. 495,815. 4 Claims. (Cl. 137—76.)



1. A portable pneumatic stopper for gas-mains, having a cylindrical bag-housing threaded at its inner end for direct application to a tapping in a gas-main, a plunger located in the said housing, a plunger-bearing applied to the outer end of the said housing, a packing located at the lower end of the plunger and co-acting with the inner wall of the housing, a flexible bag firmly connected directly with the inner end of the plunger and adapted to be retracted into the housing thereby, and means for causing the inflation of the said bag after the same has been ejected into the gas-main by the plunger.

1,860,856. RATING BOARD. HARRY HENKE, Millburn, N. J. Filed Apr. 24, 1930. Serial No. 446,833. 1 Claim. (Cl. 40—64.)



A rating board for the purpose described having a vertical stop with numerals displayed thereon, rigid name pieces of substantial thickness mounted on the board in a vertical bank, said name pieces comprising separate units adapted to rest on and be supported by one another, respectively, and adapted to engage said stop at their butt ends, and fixed means permanently overlying the name pieces adjacent their free ends to hold them against lateral displacement while permitting their endwise movement for withdrawal, the butt ends of said name pieces being curved and the free ends reversely tapered.

1,860,857. FASTENING DEVICE FOR PINS. ALEXANDER HUREWITZ, Bronx, N. Y. Filed May 20, 1931. Serial No. 538,752. 1 Claim. (Cl. 24—155.)



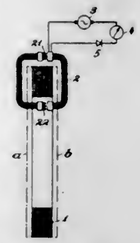
A device of the character described, comprising a body portion having one end reduced and bent upon itself and provided at its extremity with laterally projecting prongs extending in the direction of the opposite end of said body portion, said end further having a groove in its outer surface extending between said prongs, and a pin formed upon the projecting prongs from said opposite end of the body portion and having its free end engageable in said groove and between said prongs.

1,860,858. SNAP FASTENER SOCKET. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 6, 1931. Serial No. 513,853. 5 Claims. (Cl. 24—208.)



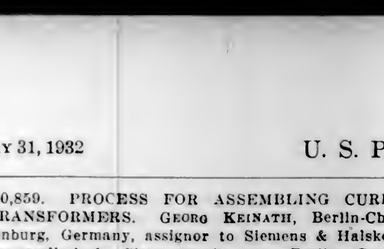
3. A snap fastener socket comprising a casing and a spring contained in said casing, said casing being formed from a single piece of sheet metal and having an imperforate front wall of greater width than the thickness of the material of the spring and surrounding a stud-receiving aperture and being sloped from the outer portion toward the stud-receiving aperture to guide a stud into said aperture.

1,860,859. PROCESS FOR ASSEMBLING CURRENT TRANSFORMERS. GEORG KEINATH, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 6, 1931, Serial No. 520,593, and in Germany Oct. 31, 1929. 1 Claim. (Cl. 175—356.)



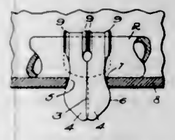
A process for the mass production of current transformers in which the magnetic cores of the transformers are constructed of a number of plates, consisting in stacking a number of the plates so that the lowest values to be expected in such plates with respect to their magnetic properties correspond to a precalculated value, testing the magnetic properties of said stacked plates, and then adding or subtracting plates until the complete core corresponds in its magnetic properties to the core taken as a basis of calculation.

1,860,860. PACKING DEVICE. FRANK W. KENNEDY, Trenton, N. J., assignor to De Laval Steam Turbine Company, Trenton, N. J., a Corporation of New Jersey. Filed Aug. 8, 1930. Serial No. 473,802. 4 Claims. (Cl. 286—11.)



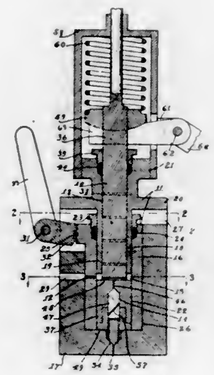
1. A packing device for a casing and a shaft passing into the casing including a flexible annular element supported by one and carrying means bearing on a surface carried by the other, and a rigid tube located between the flexible element and the shaft, and substantially cutting off free communication between the flexible element and the interior of the casing.

1,860,861. SNAP FASTENER SECURED CONDUIT-HOLDING MEMBER. CARL L. KNUTSON, Maywood, Ill., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 14, 1931. Serial No. 562,625. 5 Claims. (Cl. 24—73.)



1. A sheet metal snap fastener device for holding conduits comprising a substantially U-shaped conduit-engaging portion and yieldable socket-engaging means formed as a continuation of one side of said conduit-engaging portion for securing the device to a member to which the conduit is to be clamped.

1,860,862. COMBINATION FUEL PUMP AND FUEL INJECTOR FOR DIESEL ENGINES. HENRY LE PUL, Hempstead, N. Y. Filed Oct. 6, 1930. Serial No. 486,532. 1 Claim. (Cl. 103—154.)

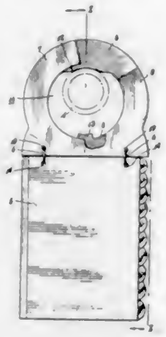


In a combination fuel pump and fuel injector for Diesel engines, a body member comprising a top section with a reduced cylindrical lower end and a central bore, an intermediate tubular section engaged on and extending below said reduced lower end, and an outer section encasing said intermediate section and fixedly connected with the top section and formed with a closed bottom having an axial fuel discharge consisting of a small cylindrical recess with a conical pointed end connecting with a coaxial passage, a plunger slidably mounted in the bore of said top body section and formed at the bottom with an enlarged head slidably mounted in the portion of the intermediate body section below the top body section and normally slightly spaced from the lower end of the top body section for forming an annular fuel compression chamber, a small cylindrical element with a conical point projecting from the bottom of said plunger head and engaging in said cylindrical recess for closing the fuel discharge and of sufficient length so as not to disengage from the recess upon complete upward motion of said plunger, a blow off valve interposed in a passage between said fuel compression chamber and the side of said conical point, and said cylindrical element slidably engaging the cylindrical recess in the bottom of said outer body section so as to limit the size of the chamber beneath the plunger head formed by upward motion of the plunger for forcing fuel from the fuel compression chamber through the passages and the fuel discharge in said closed bottom.

1,860,863. TELEPHONE INDEX. MALVIN LICHTER, New York, N. Y., assignor to The Stickless Corporation, a Corporation of New York. Filed Feb. 26, 1930. Serial No. 431,414. 2 Claims. (Cl. 40—10.5.)

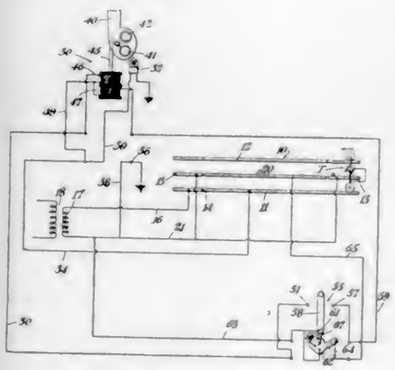
1. In a telephone index, the combination, with index card sheets, and a normally vertically disposed tablet for supporting the same in a vertical position, said tablet having an opening for the mouth piece of the telephone transmitter to pass therethrough, of a substantially resilient spacing foot at the lower end of said opening carried by said tablet and normally extending into said

opening in order normally to engage said mouth piece to prevent accidental disengagement of the tablet from said mouth piece, and means at the upper end of said opening



to support thereon the tablet in position on said mouth piece, said foot and said means being symmetrically disposed with relation to said opening.

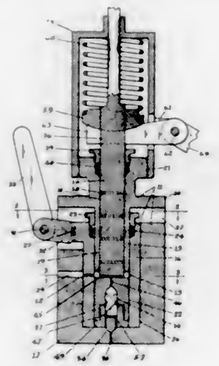
1,860,864. TOY RAILWAY. JOHN C. KOERBER, South Orange, N. J. Filed June 2, 1928. Serial No. 282,481. 8 Claims. (Cl. 246—31.)



1. A switch having a lever and two spaced contacts adapted to be engaged by said lever, a third contact, a switch member adapted to engage said third contact, connections between said lever and member for operating said member to engage or disengage said third contact when said lever is moved into contact with one or the other of said first named contacts, said connections permitting said lever to move out of contacting engagement without moving said member, a source of current connected to said lever and member, a toy railway track having an insulated rail section connected with said third contact and a signaling device having selective controlling means electrically connected to said first named contacts.

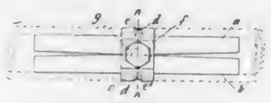
1,860,865. COMBINATION FUEL PUMP AND FUEL INJECTOR FOR DIESEL ENGINES. HENRY LE FUL, Hempstead, N. Y. Filed Nov. 18, 1929. Serial No. 407,802. 3 Claims. (Cl. 103—37.)

1. In a combination fuel pump and fuel injector for Diesel engines, a body member comprising an inner section with a reduced lower end and a central bore, an intermediate section slidably mounted on said reduced end and extending below said reduced end and formed with a fuel inlet passage terminating slightly below the reduced end and in a fuel compression chamber, and an outer section encasing said intermediate section and fixedly connected with the inner section and formed with a fuel passage aligning with said inlet passage, a plunger slidably mounted in the bore of the inner body section and formed with an enlarged head slidably mounted within the portion of the intermediate body section below the inner body section and normally slightly spaced from the



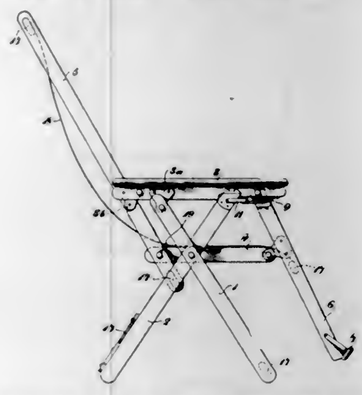
lower end of the inner body section for forming said fuel compression chamber, a valve head on the plunger and engaging with its end against a valve seat on the outer body section communicating with a passage constituting a fuel outlet, a blow-off valve in said plunger interposed in a passage between said fuel compression chamber and the end of said valve head, and means for adjusting the position of the intermediate body section for adjustments of the size of a portion of said fuel compression chamber in which fuel is entrapped upon motion of said plunger to move its valve head from said valve seat.

1,860,866. JOINT OR CONNECTION FOR TUBULAR BODIES. ARNOLD CLARENCE MARSHALL, London, England, assignor to Messrs. Steel Scaffolding Company, Limited, London, England, a Corporation of Great Britain. Filed Sept. 18, 1930, Serial No. 482,729, and in Great Britain May 20, 1930. 4 Claims. (Cl. 287—126.)



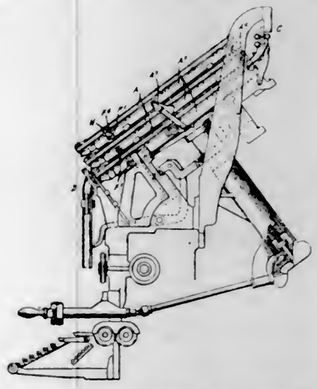
1. A joint pin or connection for tubular bodies comprising; a pin formed longitudinally in two parts; a collar having an internal bore somewhat larger than the transverse dimensions of the middle portion of the pin and surrounding this portion; means for causing said parts to be moved laterally with respect to each other to thereby expand and contract said pin; in combination with means for preventing displacement of said collar in either direction along said pin and such as to permit of the relative angular displacement of said parts in a plane coincident with the plane of their lateral movement comprising pins mounted one upon each of the parts, and slots within said collar with which the respective pins engage.

1,860,867. FOLDING CHAIR AND THE LIKE. JOHN DURHAM MATTHEWS, Newquay, Cornwall, England, assignor to Taylor Bros. (Sandiacre) Limited, Sandiacre, England, a Company of Great Britain. Filed Oct. 8, 1930, Serial No. 487,336, and in Great Britain Nov. 20, 1929. 3 Claims. (Cl. 155—106.)



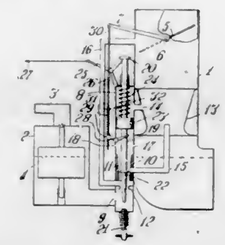
1. A folding chair or the like comprising in combination two pairs of intersecting foldable legs, arm rests connected with and supported by the upper ends of the legs, frame pieces pivotally connected to the arm rests and extending below the same, a seat portion pivotally connected at its ends to the said frame pieces whereby it is adapted to swing to and fro relatively to said legs and arm rest, one leg of each pair being pivotally connected with an arm rest while the remaining leg of each pair is releasably connected with said arm rest, so as to permit of the legs being folded, a back rest adapted to be tilted to varying degrees of inclination and connected with the said frame pieces so as to cause simultaneous movement thereof and of the seat portion with the back rest, one arm rest, at least, being formed with a socket-like recess into which fits the upper end of a leg, the leg being entirely releasable from such recess to permit folding of the chair, and means for guiding and directing the movements of the end of the leg after such release.

1,860,868. TYPOGRAPHICAL MACHINE. RICHARD R. MEAD, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed June 26, 1930. Serial No. 463,896. 10 Claims. (Cl. 199—45.)



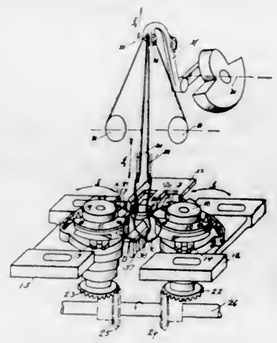
1. In a typographical machine, the combination of a matrix magazine, a base frame upon which it is removably supported, a magazine supporting member adapted to be applied to the base frame in position to receive the magazine therefrom preparatory to its removal or replacement, and means for locking the magazine in position on the base frame, said locking means being under the control of said magazine supporting member.

1,860,869. CARBURETOR. PANTALEON E. MIQUELON, Chicago, Ill. Filed July 5, 1928. Serial No. 290,476. 5 Claims. (Cl. 261—49.)



1. In a carburetor, the combination of a mixing chamber having a main air inlet and a discharge outlet, a throttle valve for controlling said outlet, a fuel nozzle for said mixing chamber, means for supplying fuel to said nozzle, a by-pass communicating with the discharge of said mixing chamber above said throttle valve, means for supplying air and fuel to said by-pass, and a valve for controlling the amount of air and fuel supplied to said by-pass, a piston on said valve, a cylinder for said piston, yielding means for moving said piston and valve in a direction to decrease the amount of fuel and air supplied to said by-pass, and a conduit providing communication between said cylinder and said mixing chamber for moving said piston and valve in a direction to increase the amount of fuel and air supplied to said by-pass in proportion to the amount of suction in said mixing chamber.

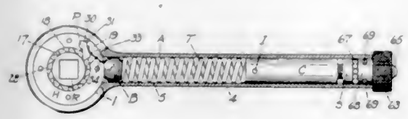
1,860,870. SEWING MACHINE. JACQUES OLLENDORFF, Paris, France, assignor to Anciens Etablissements R. Cornely & Co., Société Anonyme, Paris, France, a Company of France. Filed Feb. 10, 1928, Serial No. 253,377, and in France July 27, 1927. 2 Claims. (Cl. 112—164.)



1. A sewing machine of the type described provided with a needle guide rod comprising in combination two loopers adapted to rotate in opposite directions, a needle plate, and a partition plate mounted on said needle plate between said loopers adjacent said needle guide rod and extending in the direction in which the cloth is moving beyond the point at which the loops formed by the needle

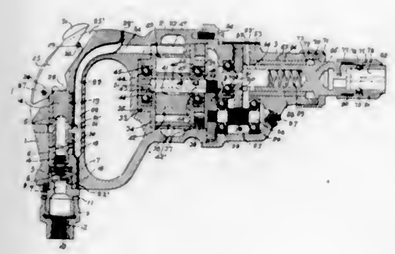
threads tend to make contact with each other when released from the loopers, whereby said loops are prevented from becoming entangled at that point when the machine is working at high speed.

1,860,871. SAFETY WRENCH. WILFRED A. POULIOT, Lowell, Mass. Filed Nov. 6, 1930. Serial No. 493,711. 5 Claims. (Cl. 81—53.)



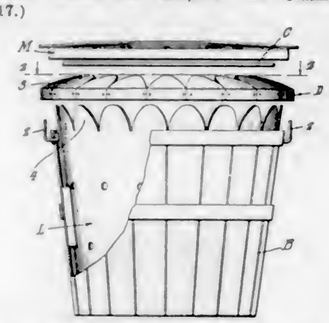
1. The combination in a socket wrench of a head holder having a head bearing from which extends a guide arm through which is a longitudinal passage, said arm having a longitudinal indicating slot; with a disc shaped head revoluble in the head bearing and having in its periphery a plurality of spaced cup shaped depressions and interiorly having a hub bearing, a ratchet teeth recess and a pawl recess; a hub revoluble in the hub bearing said hub having a socket and external ratchet teeth; a spring pressed pawl pivoted in the pawl recess and in engagement with the hub ratchet teeth; a ball positioned in the arm passage in engagement with the periphery of said head; an adjusting screw carrier slidable in the arm passage, said carrier having interior threads; an adjusting screw in engagement with said carrier threads, said screw terminating proximate the open end of the arm passage and including turning means at its outside end; means to allow it to turn to hold the adjusting screw longitudinally in position; an indicator pin which extends from the adjusting screw carrier out through the indicating slot; and a compression spring in said passage between the ball and the end of the adjusting screw carrier.

1,860,872. PNEUMATIC TOOL. WILLIAM W. PRICE and CHARLES W. RIPSCH, Dayton, Ohio, assignors to The Buckeye Portable Tool Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 19, 1928. Serial No. 313,603. 2 Claims. (Cl. 121—35.)



1. In a pneumatic tool, a cylinder, a valve controlled means for admitting air to said cylinder, a longitudinally movable lever for operating said valve, and means effective by the longitudinal movement of the lever for locking said lever in valve operating position including a lip on said lever and a coacting means to engage the lip.

1,860,873. APPARATUS FOR PACKING FRUIT AND THE LIKE. JOHN S. RICE, Biglerville, Pa. Filed May 24, 1930. Serial No. 455,356. 11 Claims. (Cl. 226—17.)



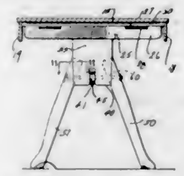
1. A device for bending end flaps of a liner inwardly thereof after the liner has been applied within a package comprising a member adapted to surround the package, and inwardly disposed flaps carried by said member for contact from above with the flaps of the liner.

1,860,874. PATIENT HOLDER. LOUIS B. TRIPLETT, Pasadena, Calif. Filed Oct. 21, 1930. Serial No. 490,148. 10 Claims. (Cl. 128—24.)



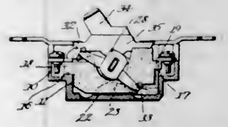
5. A device of the character described for holding the lower portion of the human body during operation of the upper portion of the body while the body is received in seated position on a seat member, including: a pair of anchor means adapted to be secured across the top of said seat member on each side of the limbs and hips of the body seated on said seat member; and a member extending from said anchor means and over the upper ends of the femurs.

1,860,875. TABLE CONSTRUCTION. DOLA TYLER and THOMAS B. MERRILL, Tulsa, Okla. Filed Apr. 20, 1929. Serial No. 356,837. 3 Claims. (Cl. 45—11.)



2. In a table construction the combination of a table top, a substantially T-shaped device including a cross piece and a reduced depending shank in right angled relation between the ends of the cross piece, means pivoting the cross piece to the table top, said depending shank having its opposite sides thereof morticed in a divergent relation, a pair of supporting legs having their proximate ends in said divergently morticed recesses, means securing the adjacent ends of the legs in a rigid relation with the shank so that the legs are divergent from the shank, the cross piece, shank and legs all being of the same thickness and lying in the same plane, and means for supporting the shank in a collapsed substantially flat relation beneath the table top or extended in right angled relation with respect to the table top.

1,860,876. ELECTRICAL SWITCH. NICHOLAS J. WALSH and WILLIAM L. BUTLER, Schenectady, N. Y., assignors to Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed May 1, 1930. Serial No. 448,993. 3 Claims. (Cl. 200—67.)



1. A snap switch mechanism comprising a casing having a cavity, the end walls of said cavity having slots and stationary contacts, a guide member extending longitudinally in said cavity and having its ends received in said slots, said contacts overlapping said slots to prevent vertical displacement of said guide, an oscillatory multiply contact blade loosely mounted for lateral play and having its plies straddling said guide member, said guide member having its diagonally disposed corners removed for the projection of said stationary contacts and for engagement of the plies of said contact blade with the stationary contacts, and operating means for said blade connected therewith.

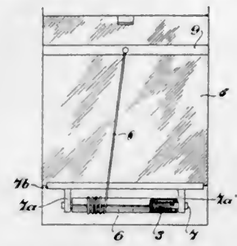
1,860,877. ELECTRICAL SWITCH. NICHOLAS J. WALSH, Schenectady, N. Y., assignor to Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed May 1, 1930. Serial No. 448,994. 5 Claims. (Cl. 200—67.)



5. A snap switch having in combination an oscillatory contact blade, a fulcrumed oscillatory member for moving the blade, a lever having a dependency and shoulders on opposite sides of said dependency, a spring connected to said dependency and pressed against said oscillatory member, an impeller having an opening receiving said dependency, means movably connecting the impeller to said lever, said impeller having portions arranged to alternatively engage said shoulders so as to cause the simultaneous actuation of the impeller upon movement of said lever, said impeller having a pair of projections alternatively engageable with opposite sides of said oscillatory fulcrumed member for unyieldingly shifting the same upon its fulcrum.

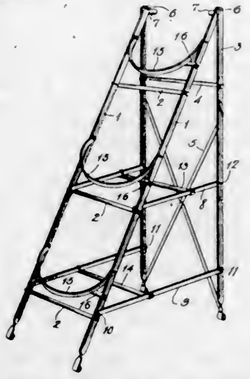
1,860,878. DEVICE FOR BALANCING BODIES CAPABLE OF A RISING AND FALLING MOVEMENT. HARRY RILEY WEBB and HARRY NEWTON WEBB, Grantham, England. Filed June 14, 1930. Serial No. 461,246. 6 Claims. (Cl. 16—198.)

1. A device for balancing bodies adapted for a rising and falling movement by balancing means exerting an inconstant balancing force comprising a rotatable drum of polygonal exterior form and a flexible inextensible connecting member passing over said polygonal drum connected at one end with the balancing means and at the other end with the body to be balanced, the continually varying distance between the line of action of the connecting cord



at its points of contact with the drum and the centre of rotation of the drum causing on rotation of such drum a cyclic variation in the moments of the forces applied to the balancing means by the weight of the body to be balanced and the effective moment of force exerted by the balancing means always lying intermediate the upper and lower limits of such cyclic variation.

1,860,879. DISPLAY STAND. EDWARD B. WESTON, Dayton, Ohio, assignor to The Weston Paper and Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 10, 1928. Serial No. 325,073. 5 Claims. (Cl. 211—85.)

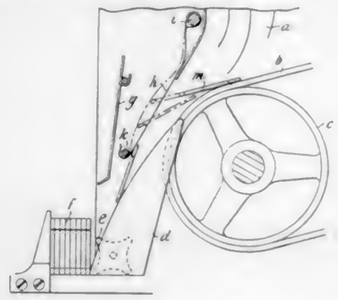


1. A foldable display stand comprising an easel support, a pair of arms pivotally connected thereto adjacent its top for swinging movement to folded and extended positions relative thereto, braces connected between each of said arms and the easel to hold the stand in extended position, a bar mounted between said braces and at a point between the arms and easel when they are extended, and a substantially U-shaped member pivotally connected to the arms and swingable into a position inclined to the plane of the arms with its bottom above and in front of said bar to support the side of a container in inclined position, said bar being positoned on the braces to support the end of the container in said position.

1,860,880. ASSEMBLING MECHANISM FOR TYPOGRAPHICAL LINE-CASTING MACHINES. CHRISTIAN AUGUSTUS ALBRECHT, Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y., a Corporation of New York. Filed May 22, 1931, Serial No. 539,262, and in Germany June 2, 1930. 5 Claims. (Cl. 199—28.)

1. Assembling mechanism for typographical line-casting machines with a spring abutment arranged at the end

of the path followed by the matrices when leaving the assembler belt, characterized by the fact that the spring



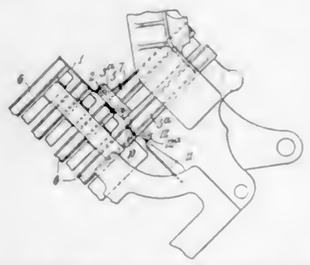
extends between two studs so that said spring is bent between the studs under the weight of the matrices projected against it.

1,860,881. AWNING FIXTURE. FRANK J. ARNDT, Ventnor, N. J. Filed Aug. 18, 1931. Serial No. 557,885. 3 Claims. (Cl. 156—42.)



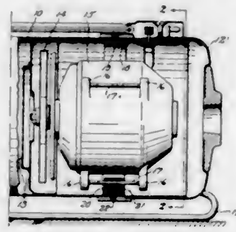
2. As an article of manufacture, an awning fixture, comprising a base having a transversely disposed recess, said base having a keeper ear, a clamp mounted in the transverse recess, pivoting means for the clamp, the pivoting means being countersunk in the under face of the base, between the base and a porch structure, the clamp being detachable when the base is detached, said clamp having a tongue penetrating through the keeper ear, and means mounted on the keeper ear and operatively engaged with the tongue for retaining the same in its penetrated position, whereby the tongue may constitute a fulcrum for an awning rod.

1,860,882. MAGAZINE OF TYPOGRAPHICAL LINE COMPOSING MACHINES. WILLIAM EDGAR AYNOE, London, England, assignor, by mesne assignments, to Mergenthaler Linotype Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 12, 1930, Serial No. 501,835, and in Great Britain Aug. 20, 1930. 12 Claims. (Cl. 199—45.)



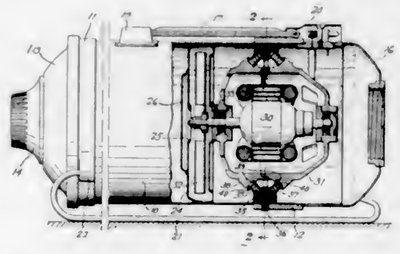
1. In a typographical composing machine, the combination with an adjustable column of magazines, of a shield carried on a stationary part of the machine and movable automatically, by the raising of the magazine column, to cover the upper ends of those of the magazines which are brought into inoperative position by such raising.

1,860,883. VACUUM CLEANER. TORD ERIK DANIEL BILDE, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed Jan. 7, 1930. Serial No. 419,024, and in Germany Jan. 15, 1929. 13 Claims. (Cl. 248—16.)



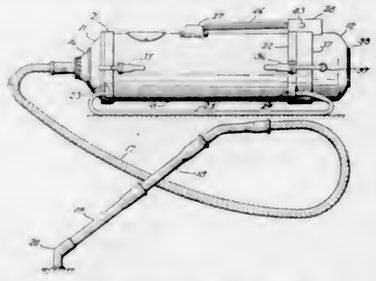
1. In a vacuum cleaner, a cylindrical casing, a motor, and a plurality of resilient metal rods axially disposed with respect to said motor and extending between said motor and said casing for supporting the motor in the casing.

1,860,884. VACUUM CLEANER. TORD ERIK DANIEL BILDE, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed Feb. 25, 1930, Serial No. 431,241, and in Germany Mar. 5, 1929. 8 Claims. (Cl. 248—16.)



1. In a vacuum cleaner having a cylindrical casing member, a motor, a housing therefor and means for mounting said housing in said casing member comprising a ring of insulating material secured to said casing member, and spiral springs interconecting said ring with said housing.

1,860,885. VACUUM CLEANER. TORD ERIK DANIEL BILDE, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed Mar. 1, 1930, Serial No. 432,315, and in Germany Mar. 5, 1929. 42 Claims. (Cl. 15—16.)

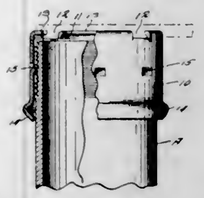


1. In a vacuum cleaner, an extended casing, means for mounting said casing horizontally above a horizontal surface, a motor unit, and means for supporting said motor unit horizontally in said casing comprising axially extending coil springs peripherally displaced about said motor unit and said casing.

23. In a vacuum cleaner, a casing, a centrifugal fan, a driving motor therefor, a shield mounted between said fan and said motor, said shield having an aperture through which air is drawn from said motor to said fan and said shield being spaced from said casing to form an annular air channel therebetween and means to cause air which is discharged from said fan to pass between said shield and said casing and over said motor.

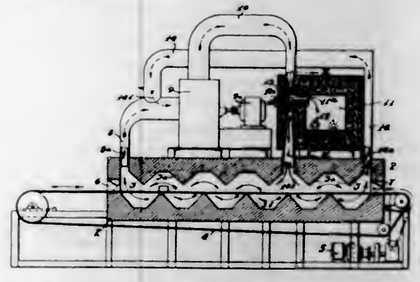
30. In a vacuum cleaner, a casing member, an insulating ring secured to said casing member, a motor-fan assembly mounted on said ring, current control elements carried on said ring, and an end cap supported by said ring independently of said motor-fan assembly whereby said end cap may be removed without disturbing said motor-fan assembly and whereby said motor-fan assembly may be removed from said casing member with said ring as a unit.

1,860,886. PIPE THREAD PROTECTOR. BENJAMIN BROWNSTEIN, Ellwood City, Pa. Filed Sept. 14, 1928. Serial No. 306,020. 3 Claims. (Cl. 137—91.)



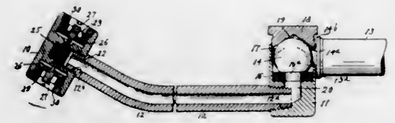
1. A thread protector for pipes formed of a strip of sheet metal bent into a circle and having its ends connected, one end of the protector being transversely slitted to define a plurality of stops extending inward at right angles to the axis of the protector, the metal between said slits extending beyond the stop and then inwardly, the opposite end of the protector being formed with a bead, the body of the protector having inwardly extending pipe engaging lugs.

1,860,887. FURNACE. CHARLES E. BUYSSE, Detroit, Mich. Filed Aug. 19, 1930. Serial No. 476,348. 5 Claims. (Cl. 263—8.)



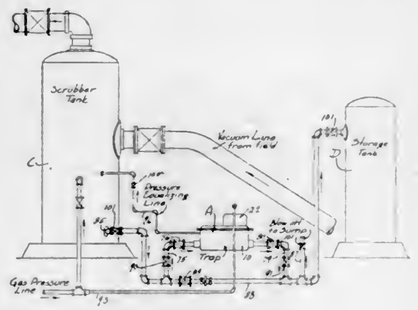
1. In an apparatus of the kind described, the combination of a casing having a passage therein having a loading and a delivery end, a conduit communicating with said passage at a point adjacent to the loading end thereof, and at a point part way to the delivery end of said passage, a fan in said conduit adapted to draw gas from the first mentioned point and deliver the same to the other of said points, means for raising the temperature of the gas passing through said conduit, and a second conduit communicating with said passage between the delivery end of the first named conduit and the delivery end of said passage and with the intake of said fan.

1,860,888. AIR GAUGE EXTENSION. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 12, 1931. Serial No. 508,105. 7 Claims. (Cl. 284—17.)



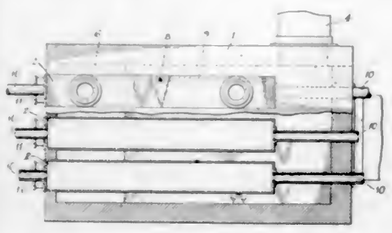
1. A member having a plurality of air chucks associated therewith, a common passage associated with said chucks and communicating therewith, a single means in said passage normally sealing communication between the passage and chucks, and means associated with said chucks and arranged to displace said last named means when either chuck is applied to a valve stem to place the said chuck and said passage in communication.

1,860,889. AUTOMATIC LIQUID EXTRACTOR FOR VACUUM LINES AND TANKS. PAUL S. ENDACOTT and ARTHUR H. RINEY, Bartlesville, Okla. Filed Oct. 17, 1925. Serial No. 63,198. 5 Claims. (Cl. 137—103.)



1. In combination with means having a low pressure chamber therein, a casing having a trap compartment therein, means having a passageway therein communicating with the low pressure chamber and trap compartment, check valve means in said passageway permitting liquids to flow from the low pressure chamber into the trap chamber, means communicating with the trap chamber and low pressure chamber above liquid levels to equalize the pressures therein, check valve means for regulating outlet of liquids from the trap chamber normally seated due to pressures exteriorly of the trap chamber, means providing a high fluid pressure compartment having port communication with the trap chamber, valve means for cooperation on said port to permit closing of the high fluid pressure compartment from the trap chamber, float means operable in the trap chamber for opening said last mentioned valve means at a predetermined liquid level in the trap chamber, and means to supply pressure to the high pressure chamber greater than the pressure which exists in the low pressure chamber, said pressure equalizing means between the trap chamber and low pressure chamber being at all times in open connection between said chambers and being a slow leak means incapable of materially lowering the pressure in the trap chamber at the time when the latter is placed in communication with the high pressure chamber.

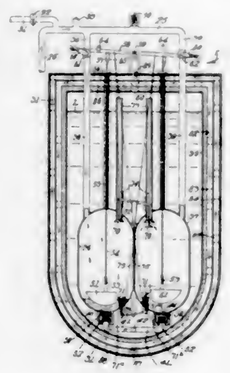
1,860,890. DISTILLING MATERIALS IN CONTACT WITH POROUS SUBSTANCES. BENJAMIN GALLSWORTHY, Bayonne, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 5, 1923. Serial No. 666,710. 6 Claims. (Cl. 44—1.)



1. The process of treating lignite by subjecting it to sufficient heat to drive off its water content and render it porous, then mixing the dried lignite with acid sludge and finally distilling off the vaporizable constituents of the acid sludge to produce a fuel comprising lignite impregnated with the oily residue of the sludge.

6. The herein described new article of manufacture comprising raw dehydrated lump lignite impregnated with a hydrocarbon oil, substantially as described.

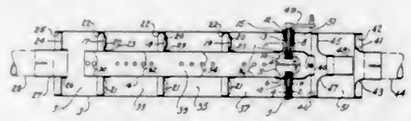
1,860,891. APPARATUS FOR PUMPING LOW TEMPERATURE LIQUIDS. ROBERT H. GODDARD, Worcester, Mass. Filed Apr. 23, 1930. Serial No. 446,757. 16 Claims. (Cl. 103—255.)



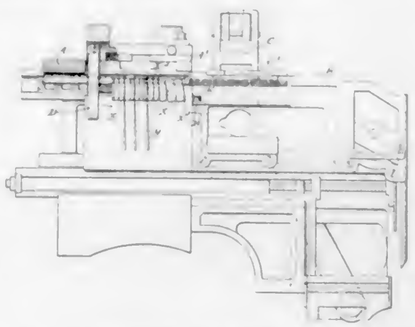
1. Apparatus for pumping low temperature liquids comprising a tank to contain the liquid, a pair of pumping chambers each having an inlet and an outlet for liquid means to provide a continuous supply of vapor under pressure for said chambers, and means to render said vapor effective to force liquid from one of said chambers while the other chamber is being filled with liquid from said tank, said vapor supply means being connected to said liquid outlets.

1,860,892. MUFFLER. EMMET P. GRAY, Detroit, Mich. Filed Apr. 11, 1929. Serial No. 354,232. 4 Claims. (Cl. 137—160.)

1. In a muffler, the combination of a hollow member having an inlet end, a housing in said hollow member, said housing being located at the end opposite to the inlet end of said hollow member, said housing being provided with a discharge nozzle, a valve in said housing, said valve being placed in alignment with the inlet of said hollow member and the discharge nozzle of said housing, a single tubular member extending forwardly from said housing to a point adjacent but unconnected with the inlet end of said hollow member, and a plurality of independently located wall members, each of said wall members being continuous throughout their peripheral length, each of said wall members being provided with means to cause gases to pass therethrough with a whirling motion.

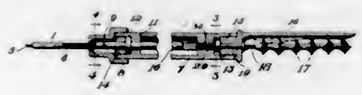


1,860,893. TYPOGRAPHICAL DISTRIBUTING MACHINE. ALFRED W. F. GUEST, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,632. 12 Claims. (Cl. 199—36.)



1. In a typographical distributing machine equipped with matrices formed with projecting ears at their upper upper ends at one side of their center of gravity, the combination of a line transporter having rails upon which the matrices are supported by their upper projecting ears, a second transporter to receive the matrices from the first, means for transferring the matrices from the first to the second transporter, and yielding means arranged in a fixed position to engage the matrices successively during their transfer to maintain them in an erect position.

1,860,894. ELECTRIC TOOTHBRUSH. CLEMENT B. LIEUX, Lafayette, La. Filed Sept. 8, 1930. Serial No. 480,583. 1 Claim. (Cl. 15—23.)



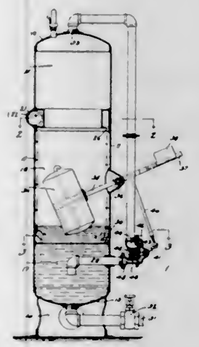
A hollow handle for an electrically driven tooth brush, a shaft journaled therein having one end terminating short of the adjacent end of the handle and provided with a triangular bore, a plug for closing said end of the handle, a sleeve journaled centrally through the plug and held from longitudinal movement therein, said sleeve having a triangular stem to be received in the triangular bore of the shaft, in combination with means for driving the shaft and a tooth brush having a stem to be frictionally received in the bore of the sleeve and a shield for the brush carried by the last-named plug.

1,860,895. EDUCATIONAL APPARATUS. LOUIS MARX, New York, N. Y. Filed May 2, 1928. Serial No. 274,385. 8 Claims. (Cl. 35—12.)



1. An educational apparatus comprising a plate having over its single front face two sets of electrical contacts, a unitary question card applicable to one set of contacts, a unitary answer card applicable to the other set of contacts, a stand support for said plate attached to the lower rear face thereof, a battery of the flash-light type housed by said stand support, electrical circuit means interconnecting the contacts in said two sets of contacts and including contact terminals adapted to be selectively contacted with said sets of contacts for completing an electric circuit between the questions and the corresponding answers associated therewith, and a signal lamp for said circuit means mounted over the front of said plate and extending therethrough and into direct engagement with said battery.

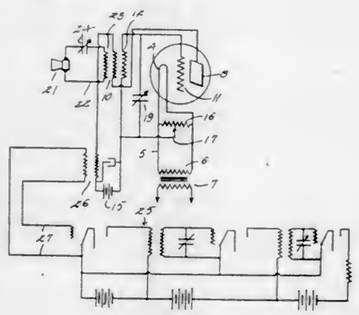
1,860,896. PROCESS AND APPARATUS FOR SEPARATING CRUDE PETROLEUM AND NATURAL GAS. WILLIAM MCGRAW, Los Angeles, and ROYAL C. ADAMS, San Gabriel, Calif., assignors to Trumble Gas Trap Company, a Co-Partnership consisting of Francis M. Townsend, A. J. Gutzler, and Milon J. Trumble. Filed Apr. 11, 1928. Serial No. 269,272. 8 Claims. (Cl. 183—2.7.)



1. An oil and natural gas separator, comprising a receptacle, means for discharging a mixture of oil and gas into said receptacle, means for directing said mixture against the inner wall of said receptacle and causing it to flow downwardly thereover, means for maintaining a body of oil in said receptacle, means for directing the downwardly flowing oil away from the wall of said receptacle below the upper surface of oil therein, and separate outlet means for the separated oil and gas.

8. The method of separating natural gas from mixtures of petroleum oil and natural gas flowing from wells under pressure which consists in: causing the mixture to flow downwardly on the inner wall of a container to effect a gas liberating action; continuing said gas liberating action by causing the downwardly flowing mixture to flow horizontally across the surface of a body of oil; and separately removing from the container separated gas and oil.

1,860,897. MODULATED OSCILLATOR. FRANCIS J. MEADE, Knoxville, Tenn., assignor of one-half to Augustus Gumpert, Washington, D. C. Filed Oct. 3, 1929. Serial No. 397,117. 2 Claims. (Cl. 179—171.)



1. A modulated oscillator and an output circuit therefor, including a three element audion tube, an absorption circuit containing an absorption coil, two coils closely inductively coupled to each other and to said absorption coil, said two coils being oscillator coils connected with the plate and grid elements respectively of the audion tube to provide the oscillation producing circuits, and an inductively coupled output circuit connected with the plate circuit of the tube and remote from the aforesaid oscillator and absorption coils.

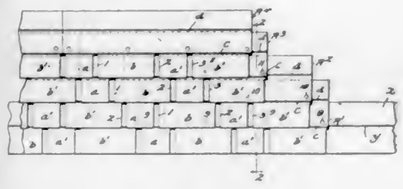
1,860,898. INJECTION AMPUL. FELIX MEYER, Aachen, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 20, 1929, Serial No. 393,989, and in Germany June 13, 1927. 5 Claims. (Cl. 128—218.)



1. In an injection ampul in which the injection needle is completely enclosed by a covering which protects the needle from outside contamination and in which the in-

jection needle is firmly fixed in the ampul a movable elastic partition wall separating the needle from that part of the ampul carrying the liquid to be injected, which elastic partition wall can slide in a piston-like manner in the ampul tube.

1,860,899. SHINGLE. THOMAS DENTON MILLER, Clarksville, Md. Filed May 15, 1928. Serial No. 278,021. 10 Claims. (Cl. 108—7.)

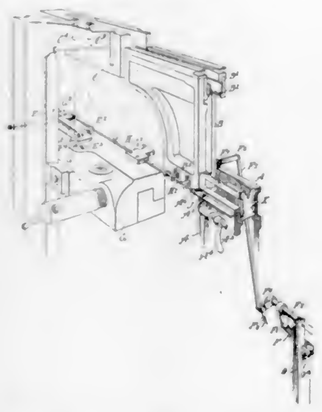


1. A strip shingle having reverse folds dividing the shingle into upper, lower and intermediate panels, the lower panel having transverse slots dividing said latter panel into alternate wide and narrow tabs, the narrow tabs being equal width and the wide tabs being equal width.

9. A strip shingle having transverse slots dividing its exposed portion into alternate wide and narrow tabs, the narrow tabs being of equal length and the wide tabs being of equal width and approximately twice the width of the narrow tabs.

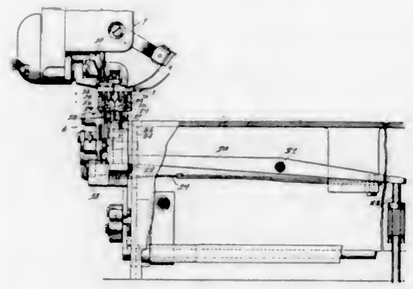
10. A strip shingle having transverse slots dividing its exposed portion into alternate wide and narrow tabs, the narrow tabs being of equal width and the wide tabs being of equal width, a narrow tab being at one end of the shingle and a wide tab being at the opposite end thereof.

1,860,900. TYPOGRAPHICAL COMPOSING AND CASTING MACHINE. LUTHER E. MORRISON, New York, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Sept. 13, 1929. Serial No. 392,359. 20 Claims. (Cl. 199—52.)



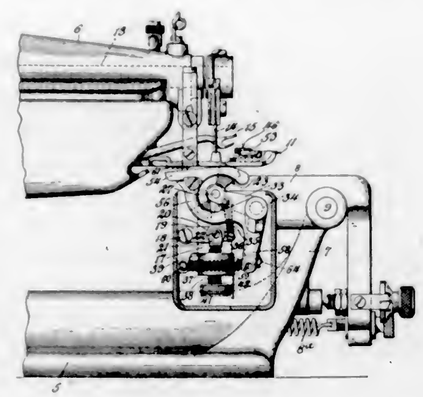
1. In a typographical composing and casting machine, the combination of means for composing matrices at different levels, means for presenting the composed matrices at different levels to the mold, and automatic means for preventing the composition of the matrices except when the first two said means are set in proper cooperative relation to each other.

1,860,901. BLIND STITCH SEWING MACHINE. CHARLES W. MUELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed Sept. 14, 1929. Serial No. 392,639. 9 Claims. (Cl. 112—178.)



1. In a blind stitch sewing machine for stitching together the adjacent faces of body fabrics united by a previously formed seam, the combination of a presser foot and a stitch forming mechanism operating entirely above the work, and a work presenting mechanism disposed below the work and including a seam guide having guide members relatively adjustable laterally to accommodate seams of different widths.

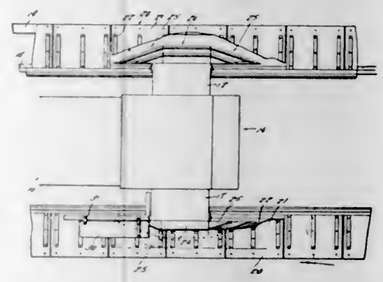
1,860,902. BLIND STITCH SEWING MACHINE. CHARLES W. MUELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed Sept. 21, 1929. Serial No. 394,230. 26 Claims. (Cl. 112—178.)



1. In a sewing machine, the combination of an oscillatory ridge-forming disc, a work support, and spring means for yieldably supporting said disc on said work support for bodily vertical movements.

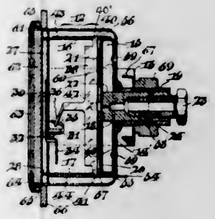
1,860,903. ORE BIN STRUCTURE. HANS ANDRY NELSON, Ajo, Ariz. Filed Nov. 1, 1930. Serial No. 492,818. 1 Claim. (Cl. 214—17.)

In combination with a storage bin having an entrance slot in its top and a closure for said slot formed of sections of flexible material, each section being connected at one edge to a part of the top of the bin adjacent the wall of the slot, reinforced strips connected with each section and spaced apart and extended at right angles from the hinged edge of the section, and spaced from said edge a movable tripper including a hopper having a discharge spout for extending into the slot and a pointed member on each end of the spout, said pointed members and the spout having downwardly and outwardly sloping side walls against which portions of the closure member will rest as said portions of the closure member are lifted by the spout structure as the tripper travels along



whereby the escape of dust through the slot is prevented, and a guard member connected with the tripper and having a downwardly and outwardly extending portion located above one of the pointed ends of the spout with its outer part substantially flat and located beyond the extremity of the pointed end of the spout, said guard member acting to insure the closing movement of the section of the closure member.

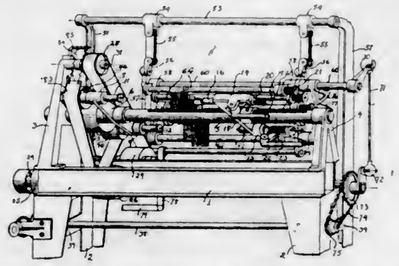
1,860,904. PRESSURE GAUGE. JOSEPH P. REMINGTON, Philadelphia, Pa. Filed Aug. 31, 1927. Serial No. 216,717. 18 Claims. (Cl. 73—110.)



2. A gauge comprising a pivotal pointer, a graduated dial overtravelled by the pointer, an arbor for the pointer having a cranked end portion, an aneroid device with a diaphragm adapted to be influenced by pressure, an actuator having a tongue engageable by the diaphragm and an angle arm co-ordinated with the arbor cranked end portion, and pivotal bearing members affording free journal support for the actuator, one of which is movable to arcuately swing the actuator to or away from the diaphragm center, and the other movable to vary the journal axis of the actuator conoidally with respect thereto.

1,860,905. SANDING MACHINE. GEORGE A. SCHIPPER, Aurora, Ind. Filed July 25, 1928. Serial No. 295,247. 9 Claims. (Cl. 51—57.)

1. In a sanding machine in combination with a shaft, work spindles mounted on said shaft and carried on opposite sides thereof, means for oscillating said shaft so as to bring said work spindles alternately in operative position and means for rotating each spindle while in such operating position, a frame, a pair of shafts mounted in said frame, each of said shafts being provided with sanding brushes, the brushes on each shaft being arranged to operate upon work carried by one of said work spindles, and means for oscillating said shafts so as to cause the



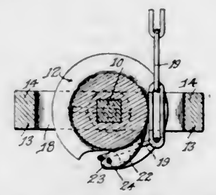
respective brushes successively to contact with the work carried by the respective work spindles when in operative position.

1,860,906. ELECTROMAGNETIC MASSAGER. JOHN SHARP, Cleveland, Ohio. Filed May 5, 1930. Serial No. 449,977. 4 Claims. (Cl. 128—41.)



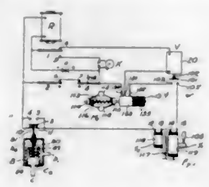
1. In an electromagnetic massaging device, the combination with an electromagnet having a coil and a laminated core therefor, an enclosing cylindrical magnetic shell in contact at its inner end with said core, a disc shaped armature secured to the outer end of said shell, an insulation upon one end of said shell spring contacts thereon for said coil and a switch lever therefor pivoted adjacent to said end of said shell.

1,860,907. FREIGHT CAR HAND BRAKE ATTACHMENT. ALBERT A. SMALLWOOD, Martinsburg, W. Va. Filed Nov. 26, 1929. Serial No. 409,844. 2 Claims. (Cl. 254—150.)



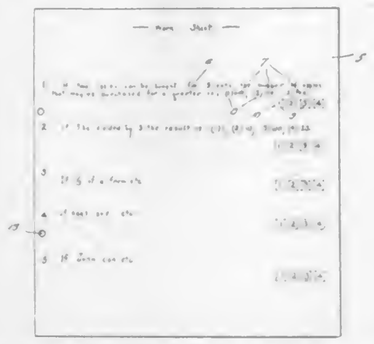
1. In a car hand brake of the kind described, a brake chain pulley formed with a peripheral groove and edge flanges, the latter having registering notches, a curved hook protruding from the groove at the notches to confront the median of said groove and having a bill for the engagement of the link of a brake chain thereover, and a bearing bracket snugly embracing the pulley.

1,860,908. APPARATUS FOR CONTROLLING THE MOVEMENT OF VEHICLES ON RAILROADS. FRANK J. SPRAGUE, New York, N. Y., assignor to Sprague Safety Control & Signal Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Apr. 12, 1927, Serial No. 183,193. Divided and this application filed July 6, 1929. Serial No. 376,400. 10 Claims. (Cl. 246—63.)



1. In a train control system, car carried equipment comprising a manually operable device having two extreme inactive and inoperative positions and a zone of intermediate brake-preventing positions, said device being normally maintained in one of its inactive positions, and when placed in an operative position passes intermediate brake-preventing positions and if maintained in this operative position assumes the second inactive position.

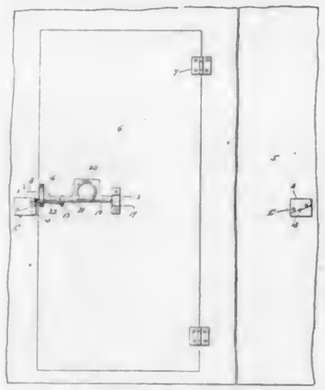
1,860,909. METHOD OF MARKING TEST SHEETS. GEORGE DUEY TAYLOR, Monticello, Ky. Filed Feb. 7, 1930. Serial No. 426,655. 1 Claim. (Cl. 35—12.)



In a method for indicating the absence of a correct answer or answers in a test sheet bearing indicia indicating questions and a set of a plurality of possible answers for each question, one answer of each set being correct and the others incorrect, and wherein the indications for the respective correct answers are to be punched out by the person taking the test, the steps first of aligning one or more sheets after the test has been completed with a template having apertures corresponding to, and aligned with, the respective indications of correct answers and then running an instrument through the apertures of said template and through said sheet or sheets in alignment with said apertures, whereby any correct answer indication not punched out by the pupil may be perforated by said instrument.

1,860,910. DOOR LATCH. WILLIAM H. TAYLOR, Howard, S. Dak. Filed Nov. 5, 1930. Serial No. 493,652. 1 Claim. (Cl. 292—87.)

In combination with a barrier having an opening therein, a supporting plate fastened to the barrier, a rod having one end connected to the supporting plate and an intermediate portion of the rod being bent to form a convolution to impart resiliency to the rod, the opposite end of the rod being bent into a rectangular loop with the free end of the loop forming part extending inwardly through an opening to form an interior handle, a guide member



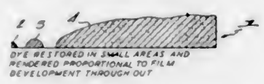
on the barrier through which a part of the rectangular loop passes, the outer part of the rectangular loop forming a keeper engaging member.

1,860,911. TOOTHBRUSH. HOLLIE L. TRIMBLE, Tucson, Ariz. Filed Feb. 4, 1931. Serial No. 513,390. 2 Claims. (Cl. 15—137.)



1. A tooth brush comprising a barrel, a tube rotatably mounted within the barrel, means at one end of the barrel for rotating the tube, an internally threaded nut on the tube, an externally and internally threaded sleeve feedable by the said nut, a follower, a rod extending from the follower and provided with threads to engage with the internal threads of the sleeve, and a brush head at the opposite end of the said barrel.

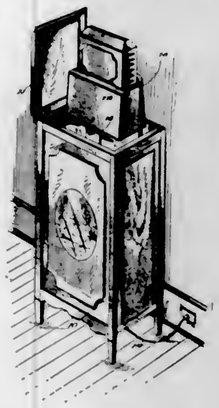
1,860,912. TWO-STAGE METHOD OF DYEING FILMS AND RESULTING PRODUCT. LEONARD T. TROLAND, Cambridge, Mass., assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Filed May 24, 1928. Serial No. 280,289. 16 Claims. (Cl. 101—149.)



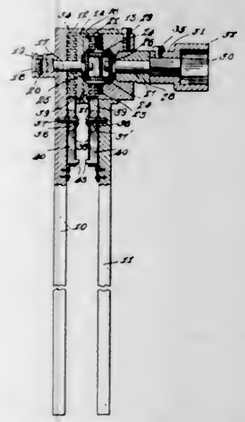
1. Method of coloring cinematographic films having a preferentially absorptive surface, which comprises successively subjecting the same to a plurality of coloring liquids, with intermediate removal of a part of the color substance deposited in the first treatment.

1,860,913. CABINET FOR ARC LAMPS. JAMES H. WAGENHORST, Detroit, Mich. Filed Nov. 15, 1929. Serial No. 407,506. 2 Claims. (Cl. 312—21.)

1. A device for housing and supporting a therapeutic arc lamp in proper operative position for broadside irradiation of the human body comprising an open-top cabinet similar in size and configuration to the conventional phonograph cabinet, a lid hinged to one side of said cabinet and swingable to open or close the top thereof, a casing of somewhat smaller size than said cabinet for housing the electrodes and operating mechanism of the arc lamp, which casing has a light projecting opening in a side thereof, a tubular guide member mounted in said cabinet and extending vertically therein, a post slidably disposed in said tubular guide member and carrying said lamp casing at its upper end, and a supporting device associated with said post and operative to maintain said casing so extended out of and above the top of said cabinet as to preclude the walls of said cabinet from interfering with the projection of light from the light opening in said casing side, said supporting device being yieldable in character whereby said post may be lowered to such an extent in said guide member as to permit disposition of said arc lamp casing wholly within said cabinet and allow the closure of said lid upon the top thereof.

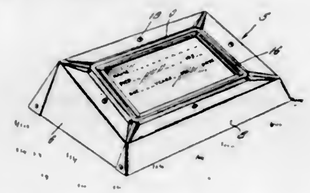


1,860,914. RATCHET WRENCH. HENRY J. WELLMAN, Nolan, W. Va., assignor of one-half to Mabel T. Joseph and one-fourth to William E. Good, Williamson, W. Va. Filed Feb. 19, 1930. Serial No. 429,713. 1 Claim. (Cl. 81—57.)



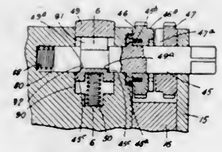
A ratchet tool of the character described comprising multiple handle members having ratchet members revolvably mounted thereon, means connecting said ratchet members to facilitate movement thereof as a unitary structure, pawls for each of the handles, a driving mechanism located within and common to both ratchet members and operable exteriorly thereof by the handles and one of the handles having direct driving connection with the mechanism and selective engagement with one of said ratchet members to impart continuous rotation to the handle.

1,860,915. GRAVE MARKER. RILEY H. WHITMAN, Vincennes, Ind. Filed June 6, 1931. Serial No. 542,611. 2 Claims. (Cl. 40—124.5.)



1. A grave marker comprising a substantially hollow open-bottom body constructed of sheet metal and having its top portion formed with a centralized substantially rectangular opening surrounded by a crimped flange and an upstanding bead, the flange and bead defining an ornamental frame, and the underside of said bead constituting a keeper channel, a clamping device comprising a depressed receptacle underlying the sight opening and a marginal attaching flange, said depressed portion being formed with a card slot and the surrounding marginal portion thereof being bent to form a substantially V-shaped clamping bead, said V-shaped bead being received in the channel.

1,860,916. LOCKING OF STEREO-PLATES OR PRINTING SURFACES TO THE CYLINDERS OF ROTARY PRINTING MACHINES. MATTHIAS LEWIS WILKINSON and ROBERT BRADSHAW, Preston, England. Filed Apr. 10, 1931, Serial No. 529,172, and in Great Britain Mar. 17, 1931. 4 Claims. (Cl. 101—378.)

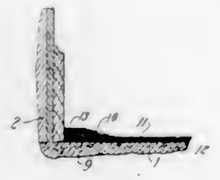


1. In a printing cylinder and in combination, printing surfaces on the cylinder, sets of locking dogs slidable in grooves in the cylinder engaging the printing surfaces, a set of screwed sleeves for operating one set of dogs, a set of screwed rods passing through the sleeves for operating another set of dogs, means on the cylinder end for supporting the rods, a gear wheel on each rod end, a gear wheel on each sleeve end, both wheels being independently rotatable and outside the end of the cylinder, a set of spindles rotatably mounted on the cylinder end one between each pair of screwed rods, two gear wheels on each spindle of the set independently rotatable and gearing with the gear wheels on the adjacent screwed rods and sleeves, the gear wheels on one of the spindles having a clutching action to provide operating mechanism for turning simultaneously all the screwed rods independently of the sleeves or all the rods and sleeves together for the purposes described.

4. In a printing cylinder operating mechanism according to claim 1 and in combination operating mechanism for the geared rods and sleeves carrying dogs wherein the clutching spindle is rotatably mounted in a recess in the printing cylinder and supported in the end plate thereof

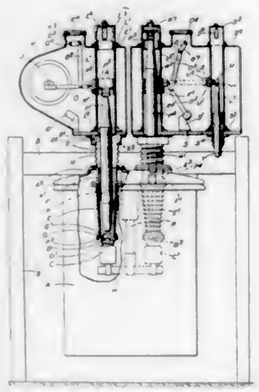
and capable of longitudinal movement, one of the clutching gearing wheels being fixed on the spindle, the companion clutching gear wheel being loose on the spindle, clutch teeth on the opposed faces of the gear wheels, a spring normally pressing the spindle so that the clutch teeth on the two wheels are in engagement, said spindle being formed with an abutment, and a spring-pressed sliding locking piece mounted to engage the abutment to hold the spindle with the gear wheels in the unclutched position, said locking piece being movable in a substantially vertical slot in the cylinder and supported on a spring, the spindle passing freely through the locking piece and having a reduced portion forming said abutment, which abutment is adapted to engage a portion of the locking teeth for the purpose described.

1,860,917. PLASTIC NAILING COMPOSITION. JOHN A. WIRES, Chicago, Ill., assignor to The National Kellastone Company, Chicago, Ill., a Corporation of Delaware. Filed June 8, 1929. Serial No. 369,385. 1 Claim. (Cl. 72—101.)



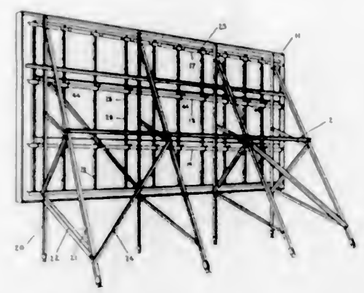
A composition carpet-tacking strip cementitiously adhered to a nail-impenetrable floor and positioned against the wall, and comprising a set mixture of the reaction products of magnesite and magnesium chloride together with bodying material of saw-dust and sand, said composition sealing the joints between the floor and wall.

1,860,918. ELECTRIC SWITCH GEAR. ARCHIBALD ALLAN, Tynemouth, and JOHN CHRISTIE, Sunderland, England, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Registered Company of Great Britain. Filed July 20, 1931, Serial No. 552,010, and in Great Britain Aug. 5, 1930. 19 Claims. (Cl. 175—298.)



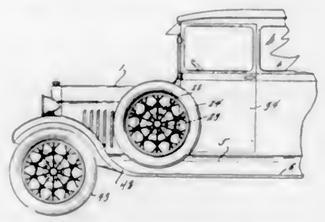
1. In metal-clad electric switchgear, the combination of a busbar, a chamber for the busbar, an electric apparatus forming part of the switchgear, a tank containing such apparatus, a tubular casing passing through the busbar chamber, an insulated conductor movably mounted within the tubular casing and normally projecting into the apparatus tank to make connection with the apparatus, an isolating switch in the busbar chamber controlling a connection from the busbar to the insulated conductor, and means for effecting simultaneous movement of the insulated conductor and the isolating switch whereby the apparatus can be isolated from the busbar at at least two points.

1,860,919. SIGN STRUCTURE. HARRY R. ANSEL, Columbus, Ohio. Filed May 10, 1930. Serial No. 451,433. 7 Claims. (Cl. 40—125.)



1. A panel section comprising a body portion and clips thereon pivoted to swing horizontally for temporarily suspending said body portion from a supporting framework during final connection of said sections to the supporting framework.

1,860,920. RESERVE WHEEL ELEMENT MOUNTING. ENOS V. BARKER, Bellevue, Ohio, assignor to Jacob F. Martin, Bellevue, Ohio. Filed Nov. 10, 1928. Serial No. 318,484. 10 Claims. (Cl. 224—29.)

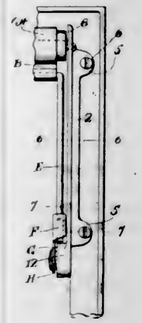


1. A vehicle body, a door therefor, a hinge for the door, a support fixed on the body and provided with a pivot bearing, and a rockable bracket mounted on said pivot bearing and connected to the hinge independently of the door to be actuated by the door movement for shifting the bracket as to the door.

1,860,921. COMBINED SUPPORTING AND RATCHET BRACKET. WILLIAM A. BRACKEN, Eldorado, Kans., assignor of one-half to William B. Jones, Augusta, Kans. Filed Feb. 10, 1928. Serial No. 253,501. 1 Claim. (Cl. 156—44.)

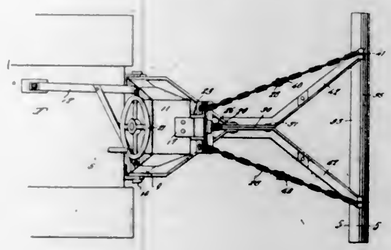
A combined supporting and ratchet bracket for a spring controlled awning body adjusting yoke comprising a flat, narrow, elongated body portion, a flange integral with the inner side face and adjacent the forward edge of said body portion, disposed at right angles with respect thereto and providing in connection with said body portion a shoulder, said flange being formed with laterally disposed spaced apertured ears for the passage of boldfast devices to anchor said body portion in position to have said

shoulder abut the edge of a window opening, a rearwardly directed support integral with one end of said body portion and formed with an opening for the reception of a shade roller pintle, a rearwardly directed extension of circular form integral with the other end of said body portion and formed with an axial opening and a cavity opening at its rear face adapted to receive respectively the pivot



for an arm of the adjusting yoke, and a cotter pin, said extension of greater thickness than the thickness of said body portion and having its outer face spaced from the outer face of the latter, and said extension cut away inwardly of its front and bottom edges to provide an arcuate row of ratchet teeth adapted to latch the arm of the adjusting yoke in selected positions, said teeth of a width less than the thickness of the extension.

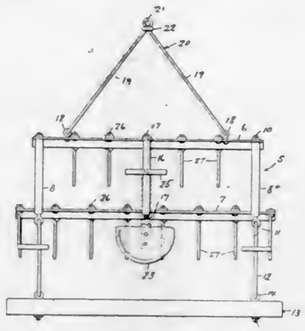
1,860,922. ROAD SHOULDER MAINTAINER. ARCHIBALD B. CALLAWAY, Reatstown, Wis. Filed Aug. 13, 1931. Serial No. 556,906. 1 Claim. (Cl. 37—178.)



In combination, the rear end of a tractor and an apparatus including a pin mounted on the rear end, a plate loosely mounted on the pin, bars secured to the plate and extending rearwardly therefrom in abutment and merging into rear extensions diverging rearwardly from each other, a mold board on the ends of the rear extensions, and means for raising and lowering the mold board comprising uprights from the rear end of the tractor, a shaft, means for rotatably mounting the shaft between the upper ends of the uprights, a member threaded on the shaft, and chains connecting the member with the mold board.

1,860,923. HARROW. ALBERT B. CLEVELAND and SAMUEL W. BAILEY, Hackleburg, Ala. Filed May 19, 1931. Serial No. 538,521. 2 Claims. (Cl. 55—149.)

1. A harrow of the type described, comprising, a frame consisting of a pair of transverse parallelly spaced beams, a plurality of longitudinally disposed flat bars connecting said beams, a seat on one of said bars, draft means on the forward of said beams, and downwardly and rearwardly directed elongated arcuate harrow blades extending from



each of said beams, the blades of the forward beam being disposed to come between the harrow blades of the rearward beam.

1,860,924. TOOTHBRUSH. RUPERT GEORGE COOKE, St. Petersburg, Fla. Filed May 18, 1931. Serial No. 538,357. 4 Claims. (Cl. 15—167.)

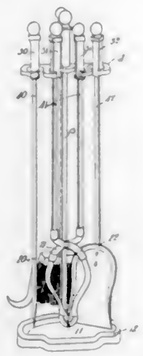


1. A tooth brush comprising a handle, an elongated head on one end of the handle having a series of elongated notches extending transversely thereinto from one of its longitudinal edges, and bristles mounted on the head between the notches.

1,860,925. FIRESET. HAROLD B. CRANSHAW, West Newton, Mass., assignor to Cutter Manufacturing Company, Everett, Mass., a Corporation of Massachusetts. Filed Jan. 27, 1930. Serial No. 423,876. 1 Claim. (Cl. 211—60.)

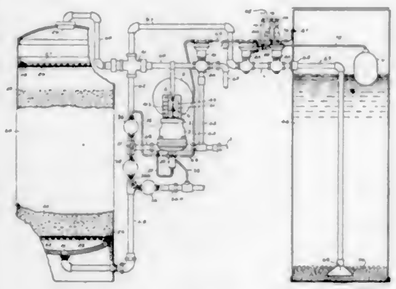
An implement holder for firesets adapted to embrace and removably retain the handles of a plurality of fireplace implements having shank portions of reduced cross-sectional dimensions, said holder comprising four horizontally disposed hook-like elements, two of said elements being laterally spaced from each other on one side of the holder, and the other two of said elements being laterally spaced from each other at the other side of the holder and in reversed position with respect to the first two elements, each of said hook-like elements being inwardly directed, and a rear element integrally conjoining the stems of the hook-like elements and adapted to engage an upright support, each of the outer hook-like elements

cooperating with its adjacent hook-like element to enclose a handle-receiving space having an outlet for the passage of a reduced shank of an implement, and the two



inner hook-like elements cooperating to define a larger partially enclosed space for receiving the handle portion of fireplace tongs.

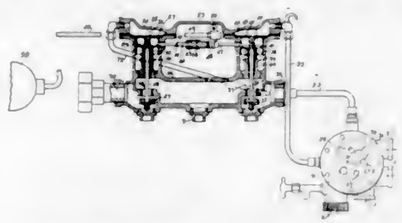
1,860,926. WATER SOFTENING APPARATUS. CHARLES P. EISENHAUER, Dayton, Ohio, assignor to The Duro Company, Dayton, Ohio, a Corporation of Ohio. Filed July 6, 1925. Serial No. 41,580. 32 Claims. (Cl. 210—24.)



1. In an automatic water softener, a tank containing softening material, a hard water inlet line for supplying water to be softened thereto, means actuated by the water passing through the inlet water line for determining the period of softening and regenerating, an exit line from the softening tank, a container for a regenerating chemical, a line leading from the regenerating chemical container to the softening material container, a control valve operated by the means actuated by the inlet water from the hard water inlet line, said control valve being adapted to control a plurality of valves regulating the alternate softening and regenerating operations.

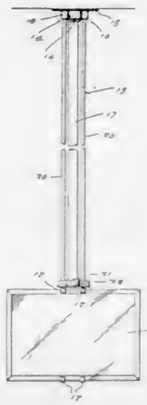
1,860,927. WATER SOFTENER. CHARLES P. EISENHAUER, Dayton, Ohio, assignor to The Duro Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 15, 1928. Serial No. 254,347. 3 Claims. (Cl. 210—24.)

1. In combination in a water softener, a brine and refill control system consisting of a passageway connecting a brine tank and a softening tank, a brine valve and a refill valve adapted to control the passage of fluid through said passageway, yielding means normally closing said valves, hydrostatic diaphragm means for opening said valves, a hydrostatic line leading from said passageway between the refill valve and the softening tank to the hydrostatic means of the brine valve, means for conveying hydrostatic pressure from the softening tank to operate the refill valve, locking means for alternately locking said respective valves, and a common float means in said brine tank adapted to operate said locking means, means to bleed as a



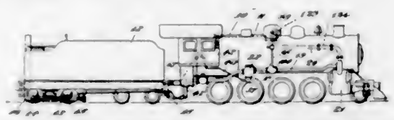
drain the hydrostatic means of the refill valve, the hydrostatic means of the brine valve being drained by induced suction when the brine is flowed through said passageway to the softening tank.

1,860,928. ADJUSTABLE CEILING MIRROR. SAMUEL H. FLANIGAN, Fresno, Calif. Filed Mar. 27, 1929, Serial No. 350,275. Renewed Nov. 3, 1931. 2 Claims. (Cl. 54—97.)



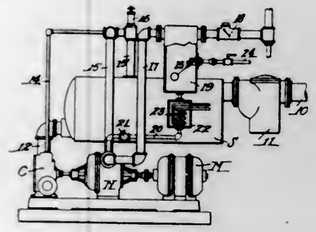
1. In a structure of the class described, upper and lower castings, a centrally disposed guide tube connected at its opposite ends to said castings, a pair of additional guide tubes connected at their opposite ends to said castings, a weight slidable in said first-named tube, pulleys mounted in one of said castings, cords connected with said weight and extending up over said pulleys, and down through said second-named tubes.

1,860,929. CONTROLLING MECHANISM FOR ENGINES. CLARENCE H. FROELICH, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed June 19, 1929. Serial No. 372,087. 33 Claims. (Cl. 105—48.)



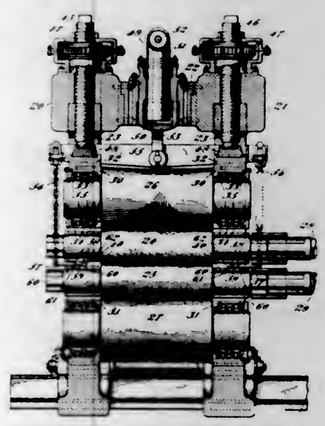
1. In combination with a fluid operated engine and its cylinders, cylinder cocks which are adapted to close when the cylinders are receiving motive fluid, a motor operated throttle for controlling the fluid supply to the cylinders, fluid actuated means for governing the cylinder cocks, and a controlling mechanism for said motor operated throttle and for said fluid actuated means comprising a valve casing having a plurality of bores and ducts therein, a valve plug for each of said bores for governing the operation of said motor operated throttle and said fluid actuated means respectively, said plugs having ports capable of registering with said ducts, controlling means for each of said plugs, and connecting means between said controlling means adapted to simultaneously operate the plugs upon the operation of one of said controlling means.

1,860,930. HEATING APPARATUS. IRVING C. JENNINGS, South Norwalk, Conn. Filed May 17, 1929. Serial No. 363,923. 6 Claims. (Cl. 103—6.)



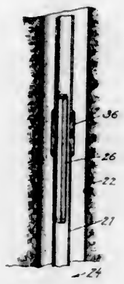
1. In a vacuum steam heating system, the combination of supply and return lines, a separating tank to which the return line is connected, an air or gas pump employing liquid for its pumping action connected to maintain the vacuum in the return line, means for cooling the liquid used in the air or gas pump so that the same will act both as a condenser for steam or vapor as well as to exhaust the air or gas from the system, and a water pump for handling the water of condensation.

1,860,931. ROLLING MILL. ALBERT T. KELLER, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Feb. 23, 1928. Serial No. 256,270. 25 Claims. (Cl. 80.)



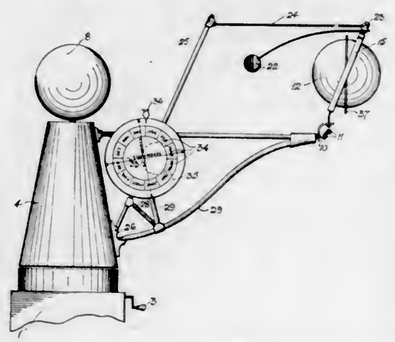
2. In a rolling mill, a housing, a lower working roll, an upper working roll, a backing roll having its surface curved longitudinally for supporting the lower working roll, a backing roll having its surface curved longitudinally for supporting the upper working roll, journal bearings mounted in said housing for engaging said working rolls, anti-friction bearing members mounted in said housing for engaging said backing rolls, each of said bearing members comprising a casing having transversely curved ribs at each side thereof, shoe members having curved faces adapted to engage said ribs, and adjusting screws mounted in said housing for backing up said shoe members.

1,860,932. PLUMBING TOOL FOR OIL-WELLS. CHARLES LAMB, Los Angeles, Calif. Filed Jan. 17, 1930. Serial No. 421,401. 10 Claims. (Cl. 234—1.)



1. As an article of manufacture, a plumbing tool, comprising: a flexible rubber-like body; an indicating device carried by said body and operable to indicate the verticality thereof; and pliable tying means secured by said body for tying together the opposite ends thereof.

1,860,933. TELLURIAN. BOODHUN BAICHUN MAHATHO, Overport, Durban, Union of South Africa. Filed July 27, 1929, Serial No. 381,615, and in the Union of South Africa Aug. 22, 1928. 4 Claims. (Cl. 35—3.)

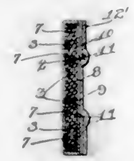


1. A tellurian adapted to demonstrate the movements of the moon in relation to the earth and of both in relation to the sun, comprising a central revolving support, mechanical means consisting of trains of wheels, beveled gears, shafting, and spheres to represent the earth, moon, and sun, attached to and working from said support, cam mechanism to vary the inclination of one of the spheres, and a graduated dial rotated by said shafting to indicate in correct succession certain divisions of time corresponding to the variable relative position of the sun, earth and moon to one another.

1,860,934. ELECTRIC HEATER. JULIAN Y. MALONE, Eau Claire, Wis. Filed Mar. 26, 1930. Serial No. 439,074. 1 Claim. (Cl. 219—38.)

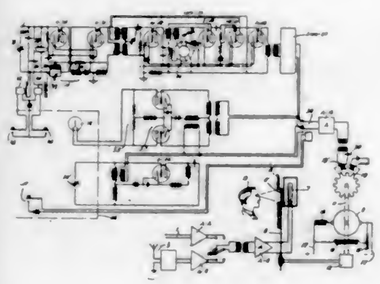
An electric heater comprising a body blank, a layer of mica arranged thereon, a plurality of heating strands ex-

tending longitudinally of the body and arranged in spaced relation and disposed on the layer of mica, means connecting the terminals of the strands at one end to the body blank, a transverse conductor member connecting the opposite terminals of the strands together, a plurality of strips of mica arranged between and upon the outer sides



of said heating strands, a plurality of layers of mica arranged over said strands and mica strips, a metal strip disposed over the outermost layer of mica, the edges of the body blank being extended over onto the metal strip and secured thereto, and means for closing the ends of said body blank after the edges thereof have been extended over the metal strip.

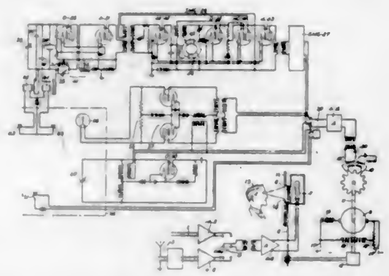
1,860,935. SPEED AND POSITION CONTROL FOR TELEVISION APPARATUS. WARREN A. MARRISON, Orange, and JOSEPH W. HORTON, Millburn, N. J., assignors to Bell Telephone Laboratories Inc., New York, N. Y., a Corporation of New York. Filed Feb. 24, 1928. Serial No. 256,784. 5 Claims. (Cl. 178—69.5.)



1. The method of television which comprises maintaining cyclically moving scanning elements at two stations at substantially the same constant frequency independently of control from the other station by separately generating high frequency waves at said stations, obtaining lower frequency wavs from said high frequency waves and controlling the movement of said elements, respectively, by said low frequency waves, the frequency of each of said high frequency waves being at least several thousand times the frequency of said elements, and bringing said elements into a desired phase relation by temporarily changing the frequency of the high frequency wave by an amount which causes a very slow drift of the image.

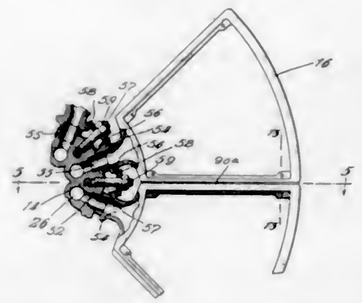
1,860,936. ELECTRICAL CONTROL SYSTEM. WARREN A. MARRISON, Orange, N. J., and JOSEPH W. HORTON, Cambridge, Mass., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Feb. 24, 1928, Serial No. 256,784, and in Canada Dec. 6, 1928. Divided and this application filed May 21, 1930. Serial No. 454,276. 16 Claims. (Cl. 172—293.)

2. In combination, a source of high frequency waves, means for deriving therefrom waves of relatively low frequency, a movable member operated synchronously by said wave of low frequency, and means for making phase



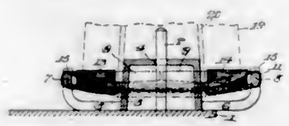
changes in said movable member comprising means for momentarily altering the frequency of said source of high frequency waves.

1,860,937. CONTINUOUS FILTER. JASPER A. MCCASKELL, Salt Lake City, Utah. Filed Sept. 28, 1929. Serial No. 395,798. 16 Claims. (Cl. 210—200.)



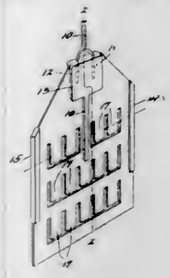
1. In a continuous rotary filter having a filter shaft and filter leaves secured to said shaft, filter segments forming said filter leaves, said segments having neck portions and short bolts limited by said neck portions said short bolts engaging the said filter segments at said neck portions for securing said filter leaves to said filter shaft.

1,860,938. COP HOLDER FOR KNITTING MACHINES. JOHN O. MCKEAN, Westfield, Mass., assignor to Foster Machine Company, Westfield, Mass., a Corporation of Massachusetts. Filed Nov. 29, 1930. Serial No. 498,062. 4 Claims. (Cl. 242—130.)



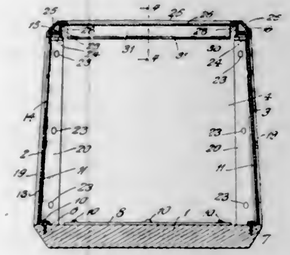
1. A cop holder comprising a skeleton frame having a central cop cone engaging conical plug for carrying the weight of the cop, arms radiating from the plug and having upwardly turned ends, horizontally disposed parallel side bars carried thereby and elastic fabric bands removably mounted on said side bars for lightly engaging and protecting the base of the cop.

1,860,939. FLY SWATTER. ALBERT D. MILLER, Sulphur Well, Ky. Filed Mar. 28, 1930. Serial No. 439,826. 3 Claims. (Cl. 43—137.)



1. In a fly swatter a head or flap made of a rubber-like material in sheet form and provided throughout the main portion of its surface with slits defining secondary flaps within the contour of the head or flap, permitting the escape of air therebetween and the secondary flaps having independent movement of their own in the swatting operation as well as movement as a part of the head or flap.

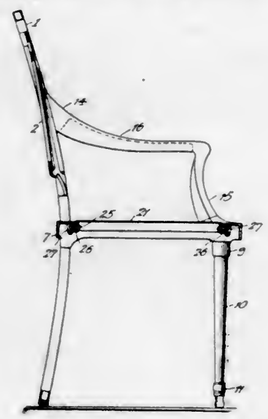
1,860,940. RADIOCABINET. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed Jan. 11, 1929. Serial No. 331,876. 2 Claims. (Cl. 312—7.)



1. In a cabinet, the combination of rigid metallic corner uprights each having its inner face longitudinally channeled, sheet metal panels having their edge portions entering the channel face and shaped and secured thereto, the said corner uprights at their upper ends terminating below the level of the upper edges of the panels, and a top cover closure comprising a rigid metal frame part having an outer lower depending flange which telescopes over the upper margins of the said panels and rests upon so as to be supported by the upper ends of the said corner uprights and, said frame also having an upper horizontally inwardly directed flange, and a sheet metal top panel having its margins firmly secured to the latter flange of the said frame part.

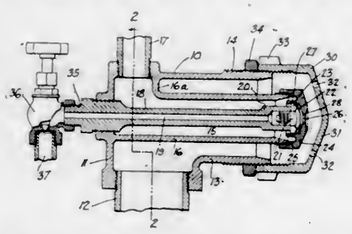
1,860,941. ARMCHAIR. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed Apr. 27, 1929. Serial No. 358,470. 5 Claims. (Cl. 155—194.)

2. In a chair or the like, the combination of a seat member having a flat surrounding depending downwardly terminating flange, and separate inner and outer clamping strips having opposed flat surfaces between which the seat flange is received and clamped with the lower edges of the said strips substantially coterminous with the



lower edge of the seat flange thereby to form a unitary seat panel of which the said clamping strips form a panel frame.

1,860,942. COMBINATION GAS AND OIL BURNER. ALBERT W. MORSE, Forest Hills, N. Y. Filed Mar. 18, 1930. Serial No. 436,707. 8 Claims. (Cl. 158—11.)



1. In a burner of the kind described, a liquid fuel supply pipe extending through the burner, an atomizer plug at the outlet end of the said pipe, an air chamber surrounding the said pipe, and air supply connection to the said chamber, a deflector cap having a central outlet surrounding the said plug and adapted to close the said air chamber when contacting with the said plug, a perforated gas cap at the end of the burner enclosing the said deflector cap, and means to admit gas into the burner around the said chamber to be discharged through the perforations in the said gas cap, the said liquid fuel supply pipe and atomizer plug being externally adjustable longitudinally within the burner.

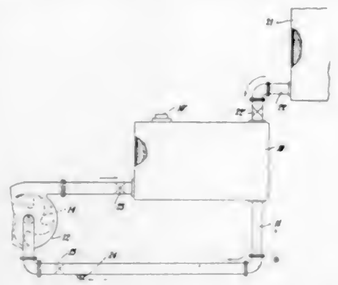
1,860,943. METHOD OF AND APPARATUS FOR MOTION PICTURE PROJECTION. FOREST RAY MOULTON, Chicago, Ill., assignor, by mesne assignments, to Acme Motion Picture Projector Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 13, 1920. Serial No. 365,487. 5 Claims. (Cl. 88—24.)



1. The method of projection of a motion picture series which includes positioning the pictures seriatim at the

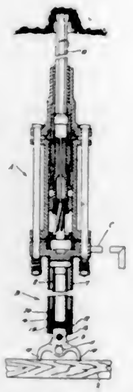
second focus of an ellipsoidal reflector, positioning a source of light at the primary focus thereof, interposing a mirror between said foci and thereby projecting only reflected rays of said light upon the members of the series.

1,860,944. METHOD OF TREATING LIQUIDS. JOHN J. NAUGLE, Brooklyn, N. Y. Substitute for application Serial No. 574,868, filed July 14, 1922. This application filed May 3, 1926. Serial No. 106,379. 9 Claims. (Cl. 210—150.)



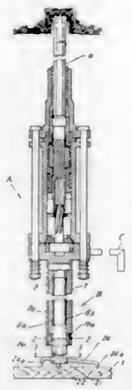
4. The method of treating a liquid containing adsorbable material and an adsorbent, which comprises effecting a smaller concentration of adsorbent in one portion of said liquid than in another portion of the same, and withdrawing from said portion of liquid having the smaller concentration of adsorbent increments of liquid substantially free from adsorbable material.

1,860,945. STOPING DRILL. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 353,209. 3 Claims. (Cl. 121—5.)



1. In combination, a rock drill having a percussive motor, telescoping members forming a pressure feeding device comprising a cylinder and a piston slidable therewithin, one of said members being secured to said motor, means on said other member for engaging a support and for resisting rotative movement, said piston having grooves, said cylinder having a counterbore adjacent its free end, an annular key in said counterbore having splines for slidably engaging the grooves in said piston, a nut for holding said key in place and permitting limited rotative movement of the same, said key having a radial extension and said nut an axial extension, said extensions forming stops for direct engagement.

1,860,946. STOPING MACHINE. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Original application filed Apr. 6, 1929, Serial No. 353,209. Divided and this application filed June 12, 1930. Serial No. 460,622. 14 Claims. (Cl. 121—5.)

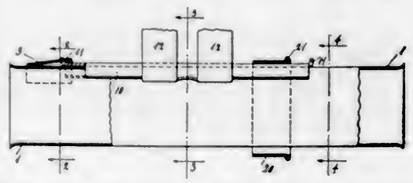


1. In combination, a rock drill having a percussive motor, and a feeding device for advancing the motor to the work comprising an extensible member, an end member on said extensible member arranged to engage a supporting surface in a manner to resist rotative movement, and a connection between said members positively preventing relative movement in a direction axially of said drill but permitting limited relative rotative movement.

1,860,947. ALUMINUM ALLOY CASTING AND PROCESS OF MAKING THE SAME. ALADAR PACZ, Cleveland, Ohio, assignor of one-half to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania, and one-half to Metallgesellschaft Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 24, 1928, Serial No. 256,820, and in Germany Mar. 22, 1927. Renewed Mar. 25, 1932. 3 Claims. (Cl. 148—21.1.)

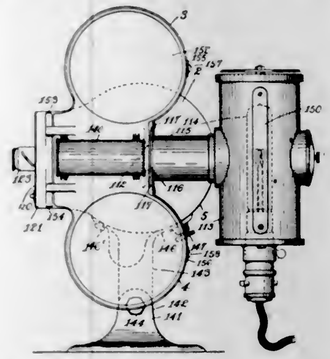
1. Process of producing articles of aluminum-copper alloy, comprising incorporating in the molten alloy at an appropriate stage of its production, titanium in amounts sufficient to accelerate subsequent heat treatment, casting the alloy, and heat-treating the casting under conditions sub-normal for a similar casting of a similar alloy devoid of titanium.

1,860,948. LOCKING PLATE FOR FISH RODS. DOMINIQUE PETRIN, Montague City, Mass. Filed Sept. 18, 1929. Serial No. 393,549. 3 Claims. (Cl. 43—22.)



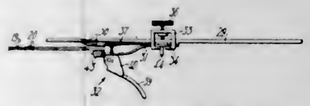
1. In combination with a fishing rod, a tubular reel seat having near one of its ends and partly extending over its circumference a pocket slotted along and near its open edge, a seat-conforming reel base plate with identical pocket-insertable and slot-fitting end portions for insertion of either of them in the pocket with hook-and-eye engagement in its slot, and a resilient ring slidable on said tubular seat of substantially oval form so as to allow, when turned in shoving position, to be shoved without deflection over the non-pocketed end of the assembled base plate and, when thereupon turned in opposite locking position, to tightly clamp the seat and base plate within its deflected contour.

1,860,949. MOTION PICTURE APPARATUS. REINHART W. PITTMAN, New York, N. Y. Filed Feb. 4, 1928. Serial No. 251,832. 5 Claims. (Cl. 88—16.)



1. In a motion picture camera adapted for taking exposures and for projections, the combination with the objective lens arranged in a certain axis, of a pivoted carrier having a projection lens thereon and an exposure lens thereon, the carrier being shiftable to bring each of these lenses to said axis alternately, a shutter rotatably mounted on said carrier arranged to swing past one only of the said lens on the carrier, and means for causing rotation of the shutter when its associated lens is swung into the said axis by the carrier.

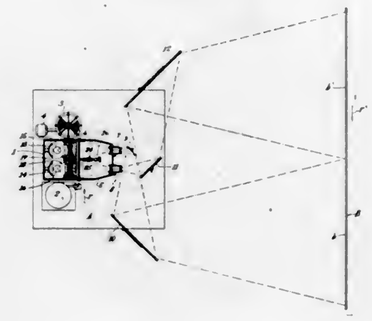
1,860,950. TYPEWRITING MACHINE. NEWELL C. PLATT, Springfield, Mass., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 23, 1928. Serial No. 294,731. 3 Claims. (Cl. 197—126.)



1. In a manifolding continuous billing machine, the combination with a carriage, a platen, a platen-frame, and means for retracting interleaved carbons from a written web-section, of a gage-bar extending upwardly from the front of the platen, means for gaging and holding the leading edge of the web preparatory to retracting the carbons, including a unit of two superposed tongues to receive therebetween the leading edge portion of the web, means whereby to adjust the unit up and down upon said gage-bar, a leading edge-gage in the form of a stud rising from the center portion of the lower tongue to extend through an opening in the upper tongue, and an actuating member pivoted upon the end of said stud and whereby to cause said tongues to grip the paper.

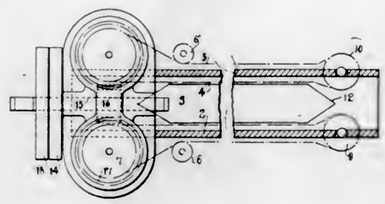
1,860,951. MULTIPLE PROJECTING DEVICE. BARTON A. PROCTOR, Pelham, N. Y., assignor to News Projection Corporation, New York, N. Y., a Corporation of New York. Filed June 21, 1927. Serial No. 200,314. 1 Claim. (Cl. 88—24.)

The combination with a ticker tape, of light projecting means, two adjacent light projecting locations for receiving the light rays from said light projecting means, means for feeding the ticker tape past said light projecting locations, two objective lenses, one of said lenses for each light projecting location for forming images of the successive characters on the tape, a screen, and two pairs of mirrors, one mirror of one pair disposed at an angle of forty-five degrees to the beam of light rays issuing from one of said lenses and receiving the images from said lens and deflecting them at right angles to the other mirror of such pair, disposed to the right of such lens, the other mirror of such pair being disposed at an angle of forty-



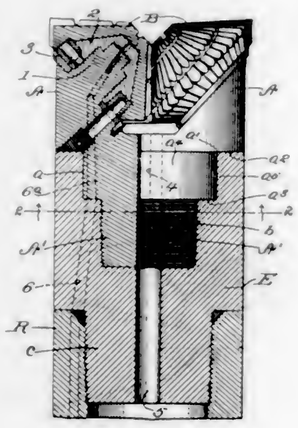
five degrees to said screen and deflecting the images received at right angles to said screen, and one mirror of the other pair of mirrors disposed at an angle of forty-five degrees to the beam of light rays issuing from the other of said lenses and to the left of the second mirror of said first pair and similarly receiving the images from said latter lens and deflecting the same at right angles onto the other mirror of said second pair disposed to the left of the first mirror of said first pair, said other mirror of said second pair being disposed at an angle of forty-five degrees to said screen and similarly deflecting the images received at right angles on to said screen.

1,860,952. CONVEYER. ARNOLD REDLER, Flour Mills, Sharpness Docks, England, assignor to Redler Conveyor Company, Quincy, Mass., a Corporation of Massachusetts. Filed Mar. 18, 1929, Serial No. 347,895, and in Great Britain Mar. 29, 1928. 12 Claims. (Cl. 198—204.)



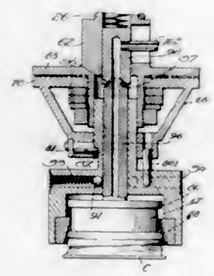
1. A conveying device adapted for conveying comminuted material in bulk, comprising a conveyer conduit having a portion disposed mainly horizontal and formed with sides and a bottom, side sweeping conveying devices within said conduit, said runs being arranged to engage frictionally with the material being transported, and a pyramidal member disposed along said bottom and adapted to increase the frictional engagement between said side sweeping devices and the material being transported.

1,860,953. ROLLER CUTTER BORING DRILL. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 25, 1929. Serial No. 349,773. 3 Claims. (Cl. 255—71.)



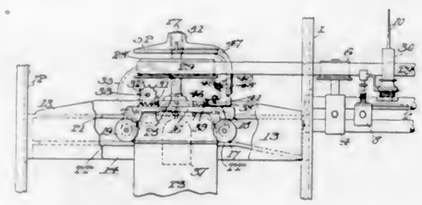
1. In roller cutter boring apparatus for rotary drilling, a bit head made up of sections each carrying a roller cutter, each of said sections having a reduced and stepped extension which jointly form a shouldered stem, the extension beyond the first shoulder of the stem being cylindrical and the second extension beyond the second shoulder being screw threaded, a massive one piece chuck having a recess for receiving said sectional stem with a tight fit, said first shoulder on said stem having a wide flat bearing against the end face of said chuck and said second shoulder abutting the end wall of the counterbore in said chuck which receives the cylindrical part of said sectional stem.

1,860,954. MACHINE FOR APPLYING THREADED BOTTLE CAPS. ARTHUR I. RISSER, Chicago, Ill., assignor to U. S. Bottlers Machinery Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 1, 1930. Serial No. 472,274. 11 Claims. (Cl. 226—88.)



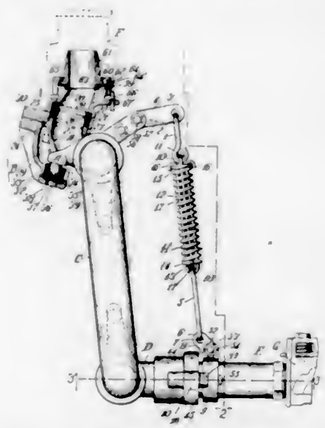
1. In a bottle capping machine, a hollow chuck for applying the cap, a vacuum cup for holding the cap, the cup being slidably mounted in the chuck, yieldable means for holding the cup in positions to which it may be moved in the chuck, and means for producing a vacuum in the cup.

1,860,955. SPINNING AND TWISTING MACHINE. IRVING R. ROWE, Stonington, Conn., assignor to The Atwood Machine Company, Stonington, Conn., a Corporation of New Jersey. Filed Sept. 24, 1931. Serial No. 564,751. 14 Claims. (Cl. 118—48.)



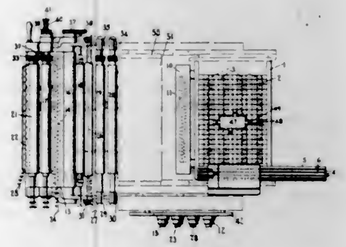
1. The combination of a spinning and twisting machine comprising, a series of spindles, a driving belt therefor, a motor and its shaft having a driving pulley thereon for the belt, and a longitudinally movable carrier for the motor shaft and driving pulley, of means on said carrier for supporting the outer end of the motor shaft.

1,860,956. FLEXIBLE PIPE STRUCTURE. EDWARD A. RUSSELL, Chicago, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed July 25, 1929. Serial No. 380,948. 3 Claims. (Cl. 285—9.)



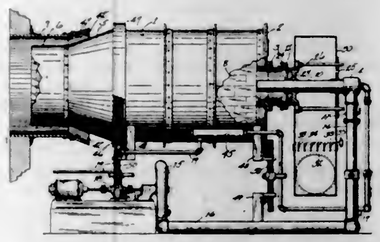
1. In combination with a flexible metallic conduit structure consisting of a plurality of separate conduit sections swiveled together and comprising an upper conduit section having a substantially vertically extending upper open end portion, and a substantially horizontally extending lower conduit section, of means for adjustably supporting the conduit structure comprising an upper adapter member having a threaded upper end to be engaged with a relatively fixed supporting structure, the adapter member having an outwardly extending annular flange adjacent its open lower end, the upper end portion of the upper conduit section being threaded, and a union ring threaded to engage the upper conduit section and having an inwardly extending upper annular flange to clamp over the flange on the adapter and non-rotatably secure the upper conduit section to the adapter, there being an outwardly projecting perforated lug on the upper conduit section and a plurality of notches about the periphery of the union ring, and a detachable locking pin adapted to the engaged in the lug and one of the notches.

1,860,957. APPARATUS FOR PRODUCING WAX CARBON SPOTS ON SHEETS OF PAPER BY IMPRESSION. GEORGE A. RUTKOSKIE, Athens, Ohio, assignor to The McBee Binder Company, Athens, Ohio, a Corporation of Ohio. Filed Apr. 14, 1931. Serial No. 529,907. 20 Claims. (Cl. 101—25.)



1. The combination with a printing press, of a heating element mounted adjacent the ink fountain, wax carbon compound in said fountain, means to maintain said fountain at a predetermined temperature, means to positively rotate the ink fountain roller, the ductor roller, and the vibrator when they contact, electric heating elements to maintain the temperature of said rollers at a predetermined point, electrical means to maintain the ink plate at a predetermined temperature, a lock-up base mounted on the type bed of the press, there being a plurality of spaced drilled and tapped apertures in said base, means to secure a printing plate or plates on said lock-up base, electrical means to maintain the temperature of said lock-up base at a predetermined point.

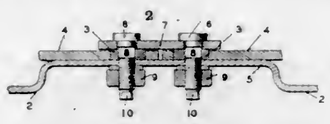
1,860,958. METHOD AND APPARATUS FOR BURNING LIQUID FUELS. WEBSTER I. SALLEE, Cleveland, Ohio. Original application filed Dec. 3, 1929, Serial. No 411,279. Divided and this application filed Feb. 19, 1930. Serial No. 429,519. 5 Claims. (Cl. 158—117.5.)



1. A method of burning liquid fuels which includes the steps of atomizing the fuel and concurrently mixing the fuel with a forced stream of air, discharging the resulting stream of atomized fuel and air into a confined space in the presence of a source of radiant head sufficient to vaporize and ignite said stream, passing a forced blast of secondary air into said confined space and around the burning stream and discharging the burning stream and secondary air from said confined space at high velocity, introducing another stream of air around said stream discharged from said confined space.

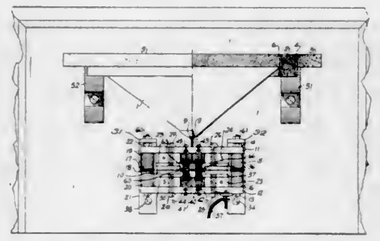
1,860,959. BRAKE MECHANISM. STEVE SCHNELL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Sept. 24, 1930. Serial No. 483,984. 5 Claims. (Cl. 188—79.5.)

1. A brake shoe mounting comprising a supporting plate, a shoe supporting pin carried by said plate, a shoe supporting collar separable from the pin and mounted eccentrically thereon and rotatable therewith, and releasable means for clamping said collar in non-rotative relation



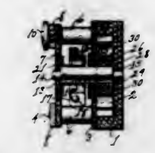
with said plate, said means comprising a retainer member carried by said pin and extending beyond the periphery of said collar to retain the shoe thereon.

1,860,960. TELEPHONE RECEIVER. WILLIAM G. SHULL, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 14, 1927. Serial No. 232,976. 4 Claims. (Cl. 181—31.)



1. In an acoustic device, a frame having a flat circular inner surface, a resilient lining secured to the inner surface of the frame solely through the medium of the surface on its outer circumference, and a cone shaped diaphragm frictionally supported by and freely movable with said lining.

1,860,961. ELECTRIC SWITCH. FRANK W. SLADY and OSCAR KUPFERMAN, Brooklyn, N. Y., assignors to Leviton Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,062. 7 Claims. (Cl. 200—64.)

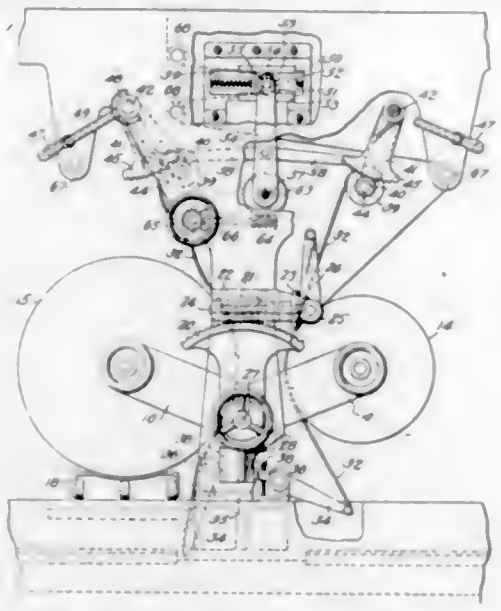


7. In an electric switch, a switch housing, switch contacts within said housing, a contact bridging member within said housing, a shaft extending outside of said housing, switch operating mechanism located on said shaft outside of said housing, a cross member of insulating material spaced from said housing and engaging the outer end of said operating shafts, bolts, terminal members for wires into which said bolts extend, said bolts holding the parts in assembled relation.

1,860,962. WEB CONTROLLING APPARATUS. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, a Corporation of Illinois. Filed Jan. 23, 1930. Serial No. 422,763. 10 Claims. (Cl. 242—75.)

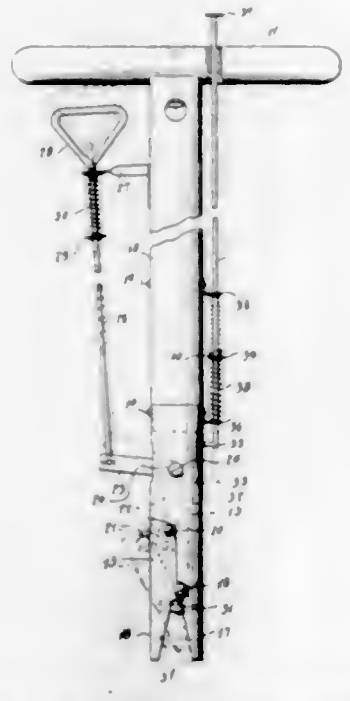
1. Web controlling mechanism including in combination a web roll support, flexible belts for tensioning the

web drawn from the web roll, manually operated means for periodically taking up the slack in the friction belts



as the web roll wears down and a pilot roller for controlling the friction belts and the tension of the web in the intervals between manual operation of the belts.

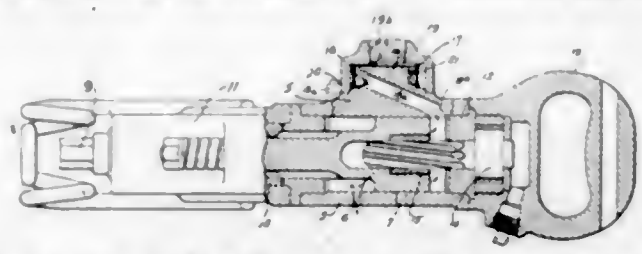
1,860,963. WEEDING AND TRANSPLANTING IMPLEMENT. THOMAS GREEN SMITH, Lake Worth, Fla. Filed July 9, 1931. Serial No. 549,751. 3 Claims. (Cl. 55—68.)



1. A device of the class described comprising a staff provided with a sleeve, a section pivoted to the sleeve, said section and sleeve having jaws provided with cutting edges, a bell crank lever pivoted to the sleeve, a pin and slot connection between one arm of said leer and the section, an operating means connected to the other arm of said lever, an ejector movable in said tube, and means urging and maintaining the ejector adjacent the lower end of the jaws, whereby the engaged earth will enable the jaws to move relatively to the ejector, and the latter will operate automatically upon release of the jaws.

1,860,964. FLUID PRESSURE TOOL. EDWARD W. STEVENS, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed May 16, 1930. Serial No. 452,827. 10 Claims. (Cl. 121—19.)

1. In a fluid pressure percussive tool, a cylinder having a boss on the side thereof, a cap extending over said boss to provide a valve chamber therearound, a ring valve encircling said boss and slidably engaging the base of the same and the interior of said cap, said boss having ports in the peripheral surface thereof for control by said valve



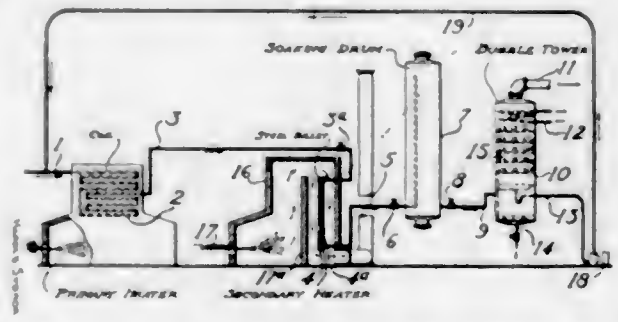
with passages leading therefrom to the opposite ends of said cylinder, and means for admitting motive fluid to said valve chamber.

1,860,965. METHOD OF MAKING OPEN ENDED ENVELOPES. LEO STONE, Brockton, Mass. Filed Feb. 4, 1930. Serial No. 425,878. 1 Claim. (Cl. 93—35.)



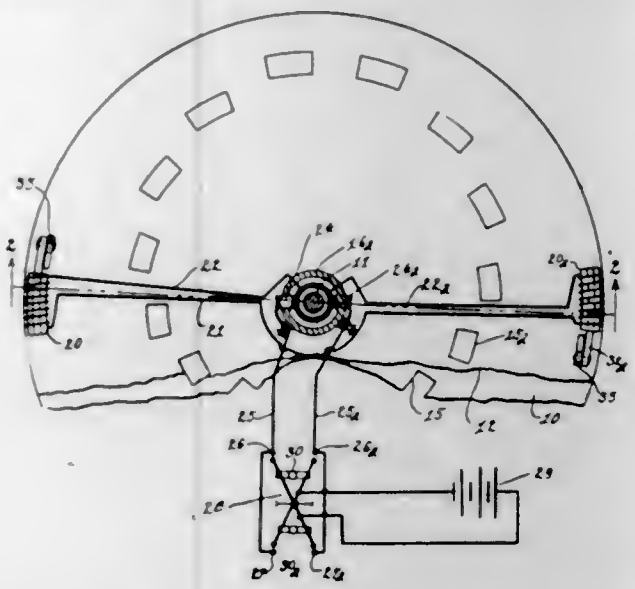
That improvement in the method of making an open ended envelope, which consists in providing a front and a back strip, each of indeterminate length and having parallel longitudinal edges, the front strip being wider than the back strip, and having longitudinal edge portions determining the original width of the front strip, longitudinally folding the front strip to reduce it to the same width as the back strip and convert said edge portions into longitudinal flaps underlapping the inner side of the front strip, transversely severing said strips to detach rectangular front and back envelope members therefrom, the front members having the longitudinal flaps and being shorter than the back members, assembling a front and a back member with their longitudinal edges coinciding and the longitudinal flaps of the front member located between the two members and within the envelope, cementing the said longitudinal flaps to longitudinal edge portions of the back member and at the same time causing transverse end portions of the back member to project from the opposite ends of the front member, transversely folding one of said projecting end portions to cause it to overlap one end of the front member, cementing said folded end portion to close one end of the envelope, and leaving the other transverse end portion projecting from the opposite end of the envelope to facilitate the charging thereof.

1,860,966. PROCESS AND APPARATUS FOR CRACKING HYDROCARBONS, HAROLD SYDNOR, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Sept. 21, 1928. Serial No. 307,375. 4 Claims. (Cl. 196—61.)



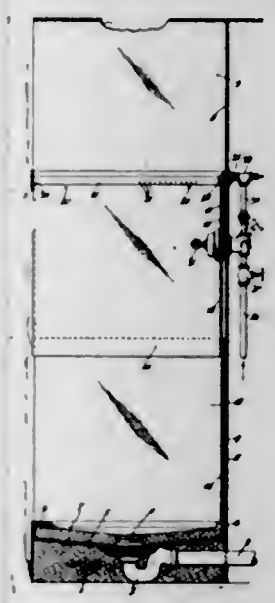
1. The method of cracking hydrocarbon material, which comprises heating said hydrocarbon material to at least partial vaporization, passing such heated material thru a secondary heating zone, under conditions such that it is exposed to a temperature of at least 1000° F. and a pressure of at least 1500 pounds per square inch for a period not exceeding six seconds, and separating the lighter from the heavier constituents.

1,860,967. APPARATUS FOR TREATING LIGHT AND SIMILAR RAYS. ALFRED OADE TATE, Toronto, Ontario, Canada. Filed June 17, 1929. Serial No. 371,428. 7 Claims. (Cl. 88—1.)



2. In visualizing apparatus, a plurality of apertured discs fixedly and adjustably mounted, respectively and having registering apertures, a pair of solenoid coils secured on one of said discs and diametrically opposite each other, armatures reciprocally mounted in said solenoids and secured to the other of said discs, stops to limit the reciprocation of the armatures in said solenoids and means for reversing the flow of energy through said solenoids and a source of electricity for energizing said coils for moving the adjustable discs to reduce or increase the visualizing apertures through the disc.

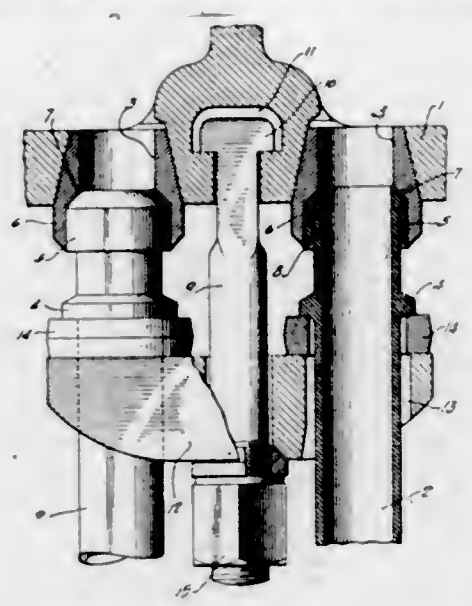
1,860,968. SHOWER BATH CONSTRUCTION. MICHAEL J. TRACY, St. Louis County, Mo. Filed Feb. 6, 1931. Serial No. 513,835. 14 Claims. (Cl. 4—148.)



6. Construction of the character described comprising a rear wall and side walls forming an enclosure, removable wall sections supported by said side walls, pipes supported above said removable wall sections and each having openings for discharging water toward the opposite side wall, and means for preventing water from flowing along the under sides of said pipes to said wall sections.

1,860,969. PIPE AND HEADER JOINT. CHARLES H. TRUE, Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Filed Sept. 10, 1929. Serial No. 391,626. 4 Claims. (Cl. 285—29.)

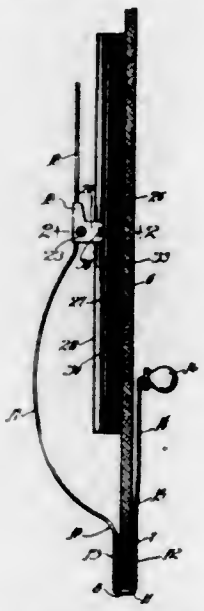
1. In apparatus of the class described the combination of a metal wall having an aperture, a seat encircling one end of said aperture, a collar surrounding the seat and extending outward from the wall, a pipe, a sleeve encircling it, pipe and sleeve being integrally united around their circumference adjacent to their ends, said integrally united portions engaging said seat, the configuration of the parts being such that the outer ends of the collar and the sleeve are juxtaposed, said ends being welded together, and means to force the pipe and ferrule to the seat.



1,860,970. MANUFACTURE OF HOLLOW RUBBER ARTICLES FROM RUBBER OR SIMILAR MATERIALS. DOUGLAS FRANK TWISS and EDWARD ARTHUR MURPHY, Birmingham, England, assignors to Dunlop Rubber Company Limited, a British Company. Filed Oct. 2, 1928, Serial No. 309,889, and in Great Britain Oct. 5, 1927. 3 Claims. (Cl. 18—59.)

3. A method of manufacturing hollow composite articles having bulbous enlargements which consists in forming a roughened surface on a bulbous rubber element, mounting said element with tubular extensions, dipping said bulbous element and extensions into a dispersion of rubber material, dipping said bulbous element and extensions with their coatings into a heated dehydrated setting medium, repeating said dipping until a sufficiently thick deposit has been formed, and subsequently removing the tubular extensions while leaving the bulbous element as an integral part of the finished article.

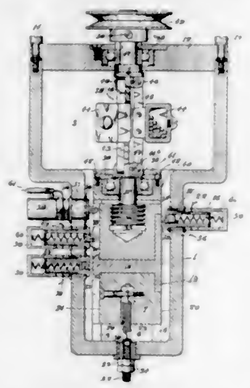
1,860,971. WINDSHIELD WIPER. CHARLES WINTER, Chicago, Ill. Filed Apr. 3, 1930. Serial No. 441,276. 2 Claims. (Cl. 15—255.)



1. In a windshield wiper or the like, a substantially U-shaped clip having a loop formed in its base portion and being adapted to straddle the edge portion of a panel

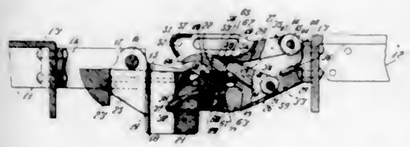
to be wiped and engage the sides of said panel, a rockable frame having a substantially U-shaped intermediate portion of slightly greater width than said U-shaped clip, the base portion of said substantially U-shaped intermediate portion being inserted in said loop, one side of said rockable frame being bent outwardly and inwardly into a substantially elliptical shape and its extreme end being disposed substantially parallel to the uprights of said U-shaped portion and the opposite side of said rockable frame being offset from the other upright of said U-shaped portion and a squeegee mounted on the first of said sides.

1,860,972. AUTOMATIC SIGNAL SWITCH. WILLIAM E. WULFHORST, Cincinnati, Ohio. Filed May 23, 1928. Serial No. 280,018. 2 Claims. (Cl. 200—80.)



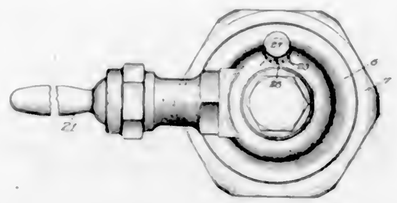
1. In a switch for speed responsive mechanism (having a housing provided with a shaft journaled therein, and means for rotating the shaft), comprising a contact block formed of insulating material and slidably mounted in said housing, a contact carried by said block and extending therethrough, a spring actuated contact member carried by one wall of said housing and in permanent touching engagement with one end of said contact carried by the block, a plurality of spring actuated contact members carried by another wall of said housing, the sliding movement of said block successively engaging said plurality of spring actuated contact members with the single contact member carried by the block.

1,860,973. COUPLER. WALTER C. YEAKEL, Battle Creek, Mich., assignor to Clark Truc-tractor Company, Buchanan, Mich., a Corporation of Michigan. Filed Sept. 20, 1929. Serial No. 393,981. 14 Claims. (Cl. 280—33.15.)



12. The combination with two adjacent vehicles, of a coupling element associated with one of said vehicles, a draw bar having a seat associated with the other of said vehicles, latch means carried by said draw bar, and lock means carried by said draw bar, said coupling elements being adapted to be automatically guided into said seat by successive engagement of said latch means and lock means, the draft force being transmitted through said seat exclusive of either of said means.

1,860,974. FLUSH VALVE. ROY H. ZINKIL, Oak Park, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 27, 1929. Serial No. 410,086. 4 Claims. (Cl. 137—93.)



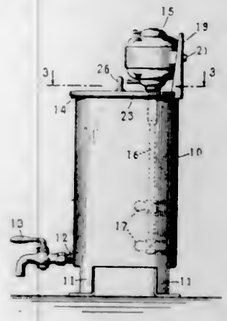
1. A flush valve comprising an inlet, an outlet, automatic valve mechanism including a valve seat disposed therebetween, and means for venting said valve comprising a normally open check valve located above said valve seat and connecting the interior of said valve to the atmosphere to prevent back siphonage therethrough.

1,860,975. ROTARY LOOM FOR THE MANUFACTURE OF TEXTILES OF ALL KINDS IN THE FORM OF A TUBE. FERNANDO ALONSO, Luchana-Baracaldo, Spain, assignor to The Weaving Machines Company Limited, London, England. Filed Nov. 29, 1929, Serial No. 410,335, and in Spain Dec. 5, 1928. 4 Claims. (Cl. 139—13.)



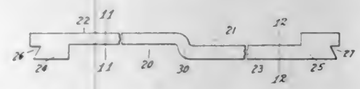
1. A circular loom in which the warp threads pass in a direction substantially parallel with or inclined at a comparatively small angle less than 45° to the central axis of weaving, comprising a substantially reed like annular frame, a plurality of radial cross members therein, each of said cross members having an undercut transverse recess, a shuttle carrier engaging and positively restrained to travel in a path determined by said recessed cross members, a shuttle, a cylindrical grooved cam concentric with a weaving axis, and a plurality of levers pivoted intermediate of their lengths about horizontal axes, said levers extending radially inward from their pivot to engage in the groove of said cam and extending radially outward to pass during movement by said cam through the warp shed and to bear first the points remote from said pivot against said shuttle and/or its carrier to impel the shuttle and to subsequently bear at points nearer said pivot against the weft thread deposited by the shuttle to beat up said thread.

1,860,976. LIQUID MIXER. SAMUEL ALSOP, New York, N. Y. Filed July 10, 1929. Serial No. 377,222. 1 Claim. (Cl. 259—107.)



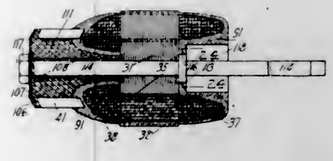
The combination of a portable container, an agitator therein, a reinforcing flange formed on the periphery of said container, a bracket formed integrally with said flange, said bracket including a horizontal portion, a vertical portion and a reinforcing flange portion on each side of said vertical portion, a motor for operating said agitator fixed to said bracket, all of said parts forming a unitary structure, and a removable cover, a portion of said cover being adapted to rest on said horizontal portion when the same is in closed position.

1,860,977. METHOD OF MAKING ARMATURE COILS. VINCENT G. APPLE, Dayton, Ohio. Filed Oct. 26, 1928. Serial No. 315,338. 4 Claims. (Cl. 171—206.)



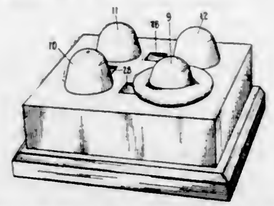
1. The method of making an integral winding loop for a bar wound armature which consists of providing a bar of relatively thin and wide wedge shaped cross section, cutting away the thinner half of the bar from a point somewhat removed from one end to near the middle of the bar, cutting away the thicker half of the bar from a point somewhat removed from the other end to near the middle of the bar, then bending the bar flatwise at its middle to provide two parallel spaced apart bar conductors and near its ends to provide two parallel differently spaced apart commutator segments.

1,860,978. ARMATURE. VINCENT G. APPLE, Dayton, Ohio. Filed May 1, 1930. Serial No. 448,940. 11 Claims. (Cl. 171—206.)



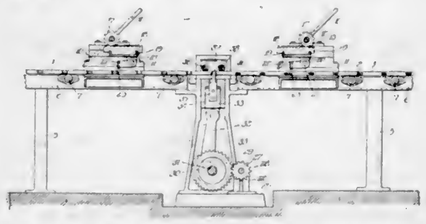
4. Steps in the method of making an armature, which consists of winding the armature, attaching individual commutator segments to the winding at suitable intervals, holding the segments in proper spaced apart relation by their outer ends, molding insulation around their inner ends while so held, hardening said insulation, then molding insulation between their outer ends.

1,860,979. ELECTRICAL DISPLAY DEVICE. CHARLES D. BARKER, Jackson, Mich., assignor to Ira J. Adams, New York, N. Y. Filed Mar. 5, 1931. Serial No. 520,245. 9 Claims. (Cl. 40—126.)



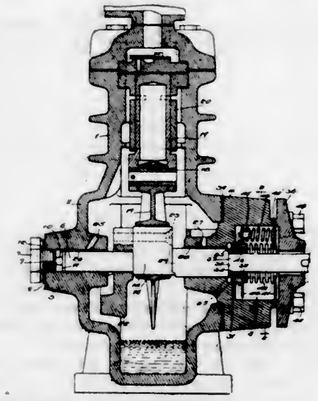
1. In display devices, a primary coil, a device to be moved thereby, a closed secondary coil attached to said device positioned eccentric to the primary coil, and means to energize said primary coil to repel the device and attached secondary coil outside the influence of the primary coil.

1,860,980. GRATING TURNING MACHINE. WALTER A. BATES, Gary, Ind., assignor to Gary Structural Steel Company, Gary, Ind., a Corporation of Delaware. Filed May 15, 1929. Serial No. 363,283. 13 Claims. (Cl. 29—84.)



1. In a machine for forming grating, means for supporting a plurality of longitudinal bars in horizontally spaced edgewise positions and a plurality of transverse bars supported in openings formed in said longitudinal bars in horizontal flat positions and means for turning each of said transverse bars to a vertical edgewise position.

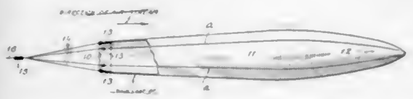
1,860,981. SHAFT SEAL. WILLIAM E. BIHL and AXEL RAMCLAW, Chicago, Ill. Filed Nov. 25, 1927. Serial No. 235,480. 1 Claim. (Cl. 286—11.)



In combination, a bearing having a hollow boss, a shaft mounted in the bearing and projecting through the boss, said boss having a reduced recess at its inner end

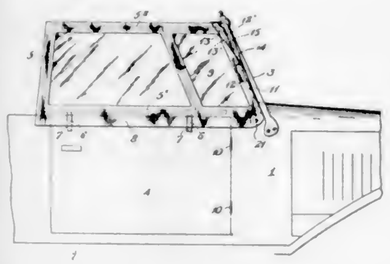
encircling the shaft and the shaft having a shoulder adjacent the inner end of the recess, a ring fitting about the shaft and in fluid tight contact with the shoulder, a second ring fitting about the first ring in fluid tight contact therewith and extending into the outer end of the recess for an appreciable distance, the outer circumferential surface of said second ring being parallel to its axis and in fluid tight contact with the surrounding wall of the recess, a bellows structure extending about the shaft and secured at its inner end to said second ring, a plate encircling the shaft and closing the outer end of the boss, said bellows structure having a flange member at its outer end clamped between the plate and the boss, said second ring having a radially outwardly-extending flange disposed beyond the recess and in the relatively large hollow of the boss, a follower seating on the outer face of said flange, and a plurality of expansion springs disposed outside of the bellows structure and confined between the follower and said flange member, said springs being spaced apart circumferentially of the follower.

1,860,982. AERIAL DEVICE. JOHN A. BINNIE, Philadelphia, Pa. Filed Mar. 27, 1931. Serial No. 525,649. 2 Claims. (Cl. 124—16.)



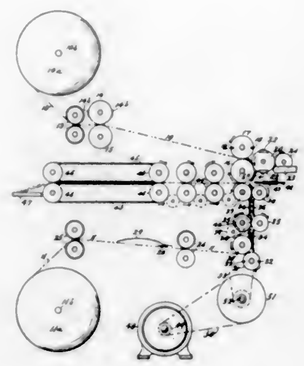
2. A device of the class described, comprising an elongated bag open at one end and made of a porous fabric having an exterior coating of a substance which will reduce the porosity of said fabric while still permitting the passage of a certain amount of air therethrough.

1,860,983. AUTOMOBILE DOOR CURTAIN. GEORGE E. BISHOP, Cleveland Heights, Ohio. Filed July 18, 1930. Serial No. 468,768. 12 Claims. (Cl. 296—139.)



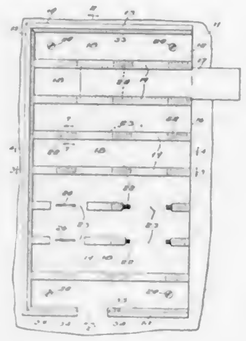
10. An automobile door curtain comprising a fabric curtain body having a portion adapted to extend beyond the hinge line of an automobile door for only a part of the height of the curtain, and a frame including a lower arm attached to the curtain near its lower edge and having means for mounting the curtain on the automobile door, an upper arm attached to the upper portion of the curtain and connected at one end to said lower arm, said upper arm having an extension projecting at an obtuse angle only part way to the lower edge of the curtain, and a stiffening member connecting said upper and lower arms, said extensions extending substantially to the hinge line of the door.

1,860,984. ENVELOPE MACHINE. WILLIAM BODGE, Nutley, N. J., assignor to Leo Stone, Brockton, Mass. Filed May 8, 1931. Serial No. 535,919. 6 Claims. (Cl. 93—63.)



2. In an envelope machine, means for advancing a pair of webs, means for cutting said webs and respectively forming opposite front and back envelope blanks, means for collecting said opposite blanks together, and means for sealing said collected blanks to form envelopes having closed side and bottom portions.

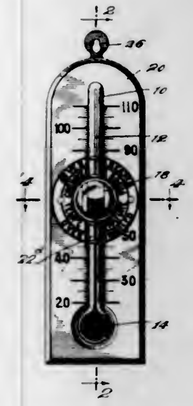
1,860,985. DIRECTORY BOARD. EUGENE M. BORNHOFT, Chicago, Ill. Filed July 9, 1930. Serial No. 466,757. 8 Claims. (Cl. 40—64.)



1. In a device of the kind described the combination of a member providing a base board, a plurality of parallel spaced longitudinally extending elements providing guides, and supports for supporting a member adapted to be inserted between said guides, said supports being arranged at one side of said elements at intervals of the length of said elements to provide passages between said supports.

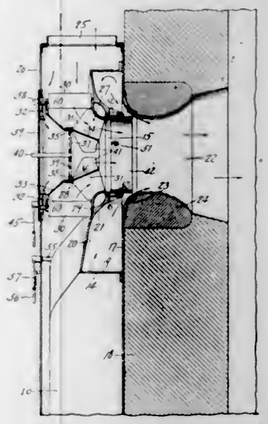
1,860,986. THERMOMETER. HARRISON HURLBERT BOYCE, Jericho, N. Y. Filed July 21, 1927. Serial No. 207,364. 9 Claims. (Cl. 116—114.)

1. In an indicating thermometer of the class described, in combination with a uniform bore and indicating fluid therein, a supporting means calibrated to determine the indicated temperature, means to apparently enlarge certain portions of the fluid column only adjacent the par-



ticular predetermined temperature range and means adjustable over limited ranges cooperating with said supporting means adapted to support said enlarging means.

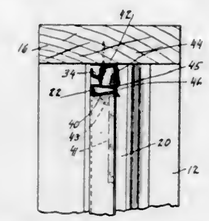
1,860,987. METHOD AND APPARATUS FOR BURNING POWDERED FUEL. DANIEL L. BRAINE, Brooklyn, and DAVID J. IRISH, Richmond, N. Y., assignors, by direct and mesne assignments, to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed June 23, 1926. Serial No. 117,954. 17 Claims. (Cl. 110—104.)



1. Apparatus of the type described which comprises a central passage for supplying a blast of secondary air, a conduit for primary air and suspended fuel particles having a wall provided with an opening forming an annular outlet encircling said central passage and an enclosing wall curved in the form of an involute to form a passage of decreasing width curving about said central passage, an annular surface converging rearwardly from the edge of said opening, and a ring slidable in said central passage towards and from said converging surface.

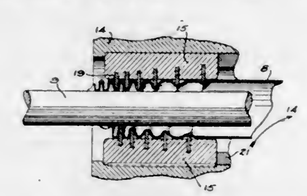
17. A fluid fuel burner which comprises an air passage, a fluid fuel chamber encircling said air passage and having an inlet at a limited part of its periphery, said fuel chamber having an annular opening about said air passage, the dimension of said fuel chamber parallel to the axis of said air passage diminishing from one side of said inlet at progressive angular distances about the circumference of axis of said fuel chamber to the opposite side of said inlet to cause the fuel entering said inlet to flow in the direction of said diminishing dimension.

1,860,988. WINDOW STRUCTURE. ARTHUR T. BRENNAN, Detroit, Mich. Filed May 31, 1930. Serial No. 458,868. 13 Claims. (Cl. 189—76.)



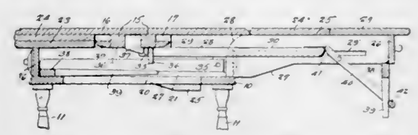
1. In combination with a window sash having a groove extending along the side thereof, a frame, and a substantially V-shaped spring metal guide strip secured along the frame and adapted to seat within said groove.

1,860,989. DIE FOR CORRUGATED TUBES. LOUIS H. BRINKMAN, Glen Ridge, N. J. Filed Aug. 19, 1927. Serial No. 214,006. 4 Claims. (Cl. 153—71.)



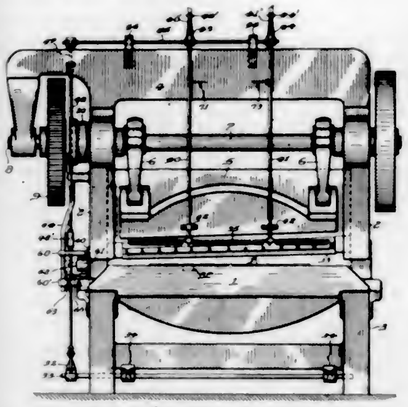
3. A metal working machine having a hollow die and a mandrel passing therethrough, a helical groove arranged in said die, an integral metallic strip in said groove extending toward the mandrel and spaced therefrom, said strip projecting from the surface of said die by progressively increasing amounts and said groove having a progressively decreasing pitch and a progressively decreasing depth.

1,860,990. EXTENSION TABLE. MICHAEL BURG, Baltimore, Md. Filed Aug. 19, 1931. Serial No. 558,001. 9 Claims. (Cl. 45—113.)



1. In an extension table, a main section having a top, an extension section having a top and being normally housed beneath said top and slidable outwardly therefrom to extended position, legs hingedly connected to said extension section to swing between horizontal position beneath the extension section when closed and vertical position therebeneath when the table is extended, means on the extension section operable by initial closing movement of said extension to swing said legs from vertical to horizontal positon, and means to free the last mentioned means upon completion of the initial closing movement.

1,860,991. SAFETY DEVICE FOR SHEARING OR PUNCHING MACHINES OR THE LIKE. CHARLES CARROLL, East Chicago, and JESSIE SHERMAN HOGUE, Hammond, Ind. Filed June 2, 1928. Serial No. 282,428. 9 Claims. (Cl. 192—137.)



1. In combination, a machine having a movable head, a clutch operative to control the movement of the head and a table adapted to receive an article to be operated on by the machine, an electrically conductive article, and a safety device comprising a movable guard, means for moving the guard to a point adjacent the table, and means operative to prevent engagement of the clutch to move the head save when said article is disposed on the table in the path of the guard.

1,860,992. BIRD CAGE. HAROLD CHARLTON, Chicago, Ill. Filed Mar. 1, 1930. Serial No. 432,495. 2 Claims. (Cl. 119—17.)

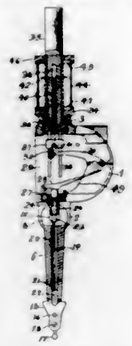


1. In bird cage construction, a one-piece crown disc of circular shape comprising an annular hub portion having a rolled edge and a skirt portion separated therefrom by a grooved portion, and a plurality of wires converging upon said skirt portion and received by the said grooved portion and rolled hub edge.

1,860,993. TEST INDICATOR. CLAUDE B. CLARKSON, Bridgeport, Conn. Filed Mar. 13, 1929. Serial No. 346,548. 3 Claims. (Cl. 33—172.)

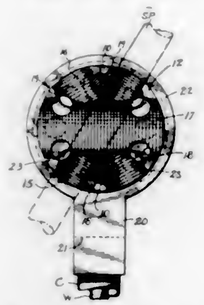
1. A test indicator of the character described having a graduated cylindrical dial, said dial having an axial opening, a pointer encircling the dial having a depending rod in said opening, a body having a chamber, a nut detachably mounted on the body, said dial being detachably mounted on the nut, said nut having an axial opening aligned with the dial opening, a slide in said chamber connected to the pointer rod, a support for the slide carried by the dial supporting nut, two levers, designated as primary and secondary, in said chamber, opposed pivotal supports for the levers, a link pivoted to the slide and to the free end of the primary lever, the free end of the secondary lever being in operative contact with the primary lever.

2. A test indicator of the character described, comprising a body member having a chamber pointer mechanism, comprising a pointer rod and slide primary and secondary levers pivotally mounted in said chamber, the free end of the primary lever pivotally connected to the slide, and the free end of the latter lever in pivotal contact with the primary lever, said body having an opening therethrough, a bushing fixed in said opening, a rod section mounted in said bushing and whose inner end projects into said chamber and normally contacts with said secondary lever, said body having a forked extension, journals mounted thereon, an elongated arm having a forked extension pivotally supported on said journals, said arm having an axial opening therethrough, a cam



member pivotally supported to the outer end of said arm, a work contact member frictionally pivoted to the cam, a rod operatively mounted in the axial opening of the arm whose outer end contacts with said cam, and whose inner end has a ball and socket connection with the outer end of said rod section, said ball and socket connection being located on the axial line of said journals so that the movement of the arm will not actuate the dial mechanism.

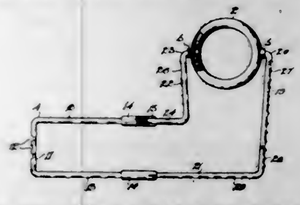
1,860,994. GROUNDING FITTING. LEWIS H. CHURCH, Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed July 25, 1929. Serial No. 380,789. 15 Claims. (Cl. 247—1.)



1. In a grounding fitting, a pipe clamp including a yoke having legs with an arch adapted to straddle a pipe, strap seat means carried on the yoke legs and engaging the pipe, said strap seat means having formed therein a plurality of toothed grooves into which the pipe is seated, said grooves being formed of different sizes in the same face of the pipe seat means, nuts threaded on the yoke legs and tightened against the strap seat means to grip the pipe in the clamp, and ground wire connecter means carried on the fitting.

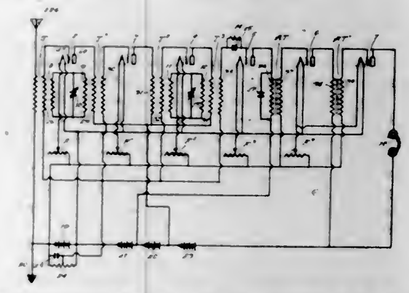
1,860,995. SURGICAL SPLINT FOR THE ARM. KELSEY GORDON FEYNER COLLENDER, Johannesburg, Transvaal, Union of South Africa. Filed Apr. 30, 1929. Serial No. 359,254, and in Great Britain Mar. 14, 1927. 3 Claims. (Cl. 128—87.)

1. A tumbler position arm splint, comprising an arm ring, side rods detachably swivel jointed to the arm ring, both side rods being L-shaped, the inner side rod being shorter than the outer rod and having its end connecting to the ring bent parallel and oppositely to the foot of



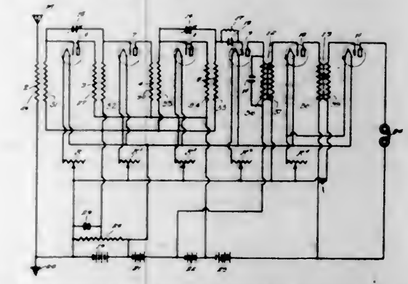
the L, the outer side rod having its similar end bent parallel to and in the same direction as the foot of the L, and a yoke detachably connected to the side rods.

1,860,996. RECEIVING CIRCUIT. HIRAM D. CURRIER, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1925. Serial No. 24,321. 11 Claims. (Cl. 179—171.)



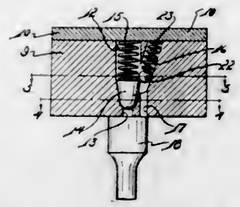
7. A system of the character described including a plurality of stages of tuned radio frequency amplification, transformers for said stages of amplification, and means including a single device having one movable and only one stator portion connected across windings associated with said transformers for simultaneously inductively tuning said transformers, the said last means constituting the sole means for tuning said transformers to a desired predetermined frequency.

1,860,997. RECEIVING CIRCUIT. HIRAM D. CURRIER, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 22, 1925. Serial No. 24,936. 11 Claims. (Cl. 179—171.)



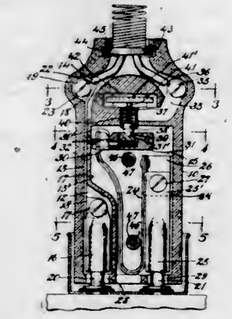
8. A cascade radio frequency amplifier coupled by transformers, one transformer for each stage, and common tuning means comprising a single condenser directly connected between similar points on the respective secondaries of said transformers.

1,860,998. TOOL HOLDER. JOHN DRAZICK, Detroit, Mich. Filed Aug. 21, 1931. Serial No. 558,487. 2 Claims. (Cl. 279—76.)



1. A tool holder of the class described, comprising: a retainer having a tool receiving passage formed therein and communicating intermediate its ends with a passage formed in said retainer inclined to the axis of said tool receiving passage; a locking member movably mounted in said inclined passage and projectable into said tool receiving passage for engaging a tool inserted therein; a spring for normally moving said locking member into operative position, said retainer having a third passage formed therein inclined to the axis of said inclined passage and communicating therewith intermediate its ends; a locking ball positioned in said third passage and engageable with said locking member for resisting movement of the same from inoperative to operative and from operative to inoperative position.

1,860,999. THERMOSTAT SWITCH AND PLUG CONSTRUCTION. HERBERT L. ELLIS, New York, N. Y., assignor to Emil Blair, New York, N. Y. Filed July 17, 1930. Serial No. 468,505. 5 Claims. (Cl. 200—139.)

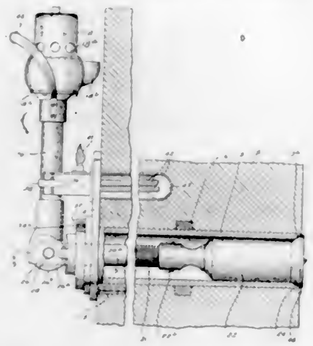


1. A thermostat switch and plug construction comprising a body portion and a cover therefor, a thermostat switch located in said body portion comprising a thermostat having a metal block and a non-conductor carried on its free end by a rod which extends thru the metal and into the non-conductor, said metal block and non-conductor each having a detent therein, a housing, a metal contact member adapted to engage said detents to retard the action of the switch, means for timing the action of the switch and means for clamping said mechanism in said body portion in removable relation thereto.

1,861,000. VAULT VENTILATOR MECHANISM. CLARENCE D. ELLITHORPE, Springfield Gardens, N. Y., assignor to Duplex Electric Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,706. 9 Claims. (Cl. 109—1.)

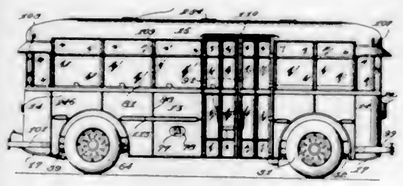
1. In combination with a vault wall, a sleeve projected therethrough, a sealing plug in one end thereof, an intake conduit, a second conduit secured to said seal-

ing plug and in pivotal connection with said intake conduit, said intake conduit adapted to be brought into align-



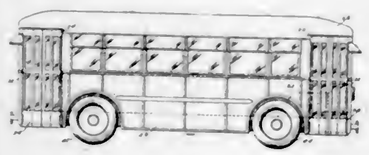
ment with said second conduit to project both conduits through said sleeve and to open an intake communication through said wall.

1,861,001. MOTOR COACH. WILLIAM B. FAGEOL, Kent, Ohio, assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed Oct. 18, 1929. Serial No. 400,689. 15 Claims. (Cl. 180—54.)



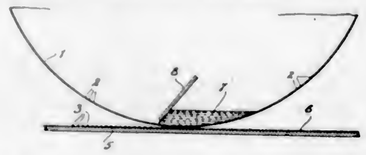
1. A passenger carrying vehicle comprising a body, an internal combustion engine disposed adjacent the forward end of said body and housed thereby, axles beneath said body, springs interconnecting said axles and body, the lower limits of said internal combustion engine being in a substantial horizontal plane passing through the highest point of the forward axle, the casing of said engine above said axle being provided with a recess to permit the axle to oscillate above the lower limits of the engine casing as the springs that connect said axle to the body bend when the vehicle moves over road irregularities.

1,861,002. PASSENGER CARRYING MOTOR VEHICLE. WILLIAM B. FAGEOL, Kent, Ohio, assignor to Twin Coach Company, Kent, Ohio, a Corporation of Delaware. Filed Nov. 8, 1930. Serial No. 494,393. 19 Claims. (Cl. 180—54.)



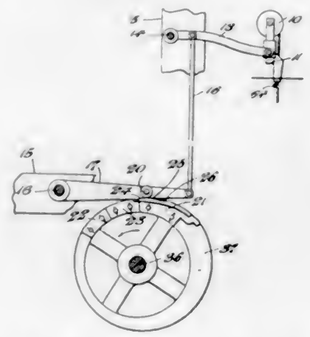
1. A passenger-carrying motor vehicle, comprising a frame; wheel supported axles resiliently connected to said frame; an internal combustion engine supported adjacent the forward end of said frame; a passenger-carrying body housing said engine and said axles and wheels; a door opening in said body on one side of said engine; said engine projecting substantially above the floor level of said body and being disposed laterally of the longitudinal center line of said vehicle toward the side opposite said door opening to provide a passageway between said engine and said door opening, and vehicle control mechanism on the other side of said engine opposite said door opening.

1,861,003. ORNAMENTAL FABRIC AND PROCESS OF MAKING THE SAME. HALLET J. FOSTER, Woodmere, N. Y., assignor to Velveray Corporation of America, New York, N. Y., a Corporation of New York. Filed Oct. 12, 1931. Serial No. 568,296. 2 Claims. (Cl. 41—36.)



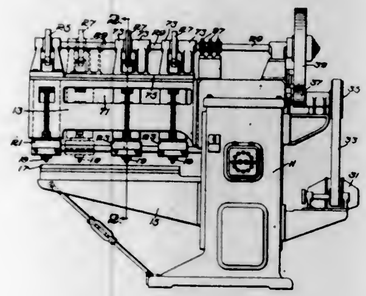
1. In the art of ornamenting textile fabric to simulate pile-figured fabrics, the method of producing the pile simulations which consists in applying to a face of the fabric a plurality of independent adhesive globules within the design field, and thereafter applying nap to the design field while the globules retain the adhesion characteristic, the relative positions of adjacent globules within the field being such that the globules will preserve their independent characteristics during and subsequent to the nap application, and nap applied to one globule will merge with nap applied to an adjacent globule of the field to produce a simulated continuous nap appearance, whereby the field will present the characteristics of a pile-figured fabric with the nap fibers each presenting secured and free portions extending into the nap merging zone, and applying nap fibers to the opposite face of the fabric within the design area to nap-cover fabric portions through which the globule adhesive may seep.

1,861,004. PILE FABRIC LOOM. VICTOR GERO, Glenside, Pa., assignor to Pennsylvania Carpet Corporation, Philadelphia, Pa., a Corporation of New York. Filed May 13, 1931. Serial No. 536,962. 7 Claims. (Cl. 139—8.)



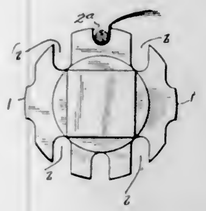
1. In a loom for making tufted pile fabric, a yarn spool, a tube frame carried thereby for passing the yarn ends through the warp, a comb for turning the yarn ends about a shot of weft, means for giving said tube frame two successive lift movements for drawing off lengths of tuft yarn, and means for holding the yarn ends during one of said movements to draw a predetermined length of yarn from said spool.

1,861,005. ELECTRIC WELDING APPARATUS. WILLIAM H. GIBB, Bay City, Mich., assignor to Thomson-Gibb Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed Aug. 7, 1930. Serial No. 473,528. 9 Claims. (Cl. 219—4.)



2. A multiple spot welding machine having a supporting arm, a cam shaft, and a plurality of welding units mounted on said arm, each having a reciprocating electrode-carrier with a cam operatively related to said shaft for imparting movement to the carrier, at least one of said units together with its cam being adjustable on said arm lengthwise said shaft to vary the distance between centers of welded areas.

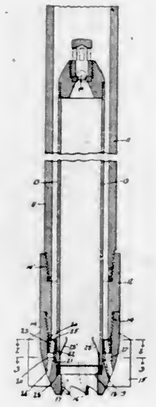
1,861,006. ELECTRICAL CONDENSER. WILLIAM HENRY GOODMAN, London, England, assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 15, 1926, Serial No. 148,487, and in Great Britain June 21, 1926. 2 Claims. (Cl. 175—41.)



1. A former for a wound condenser comprising a member having a plurality of grooves on the periphery thereof, certain of the grooves being adapted to cooperate with a securing means for certain of the condenser elements, and other of the grooves being adapted as a circulating means for a fluid medium.

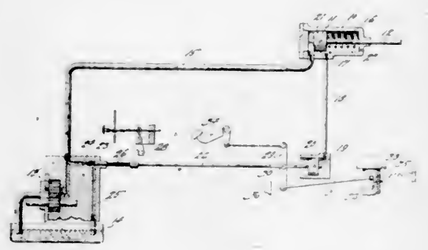
1,861,007. CORE DRILL. REID B. GRAINGER, Redondo Beach, Calif., assignor to Elliott Core Drilling Company, a Corporation of California. Filed Jan. 3, 1931. Serial No. 506,395. 6 Claims. (Cl. 255—72.)

1. In a core drill: a cutter head having a core-receiving opening therethrough, said opening having an annular shoulder therein; a core receiving barrel loosely mounted in said opening and having an external shoulder adapted



to bear upon said annular shoulder; and floating means engageable with said external shoulder for rotatably locking said barrel in said opening.

1,861,008. FRICTION TRANSMISSION CONTROL DEVICE. FRANK A. HAYES, Middletown, N. J. Filed Nov. 10, 1930. Serial No. 494,608. 27 Claims. (Cl. 74—107.)

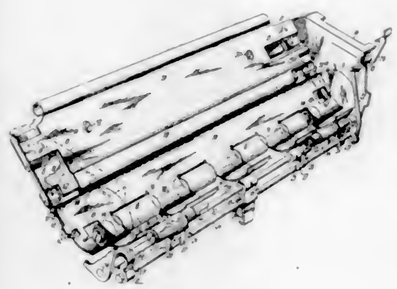


1. In apparatus of the class described, the combination with the speed ratio changing mechanism of a transmission driven by a power means provided with operator-operable speed-control means, of a means responsive to fluid pressure to actuate said mechanism in proportion to such pressure, means to develop the fluid pressure on said actuating means in proportion to the speed of the power means, and a means actuated by the fluid pressure subject to said operator-operable control means to regulate the fluid pressure independently of the speed of the power means.

1,861,009. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 31, 1929. Serial No. 382,327. 4 Claims. (Cl. 197—127.)

3. In a typewriting machine having a revoluble platen and a carriage, including a platen-frame, the combination

of a paper-shelf in the rear of the platen and inclined downwardly and forwardly and terminating with its lower edge about level with the platen-axle, a paper-guiding apron hinged in juxtaposition to said lower edge, and inclined downwardly and forwardly therefrom, and curving around the bottom of the platen and up in front thereof, a spring tending to swing said paper-apron down from the



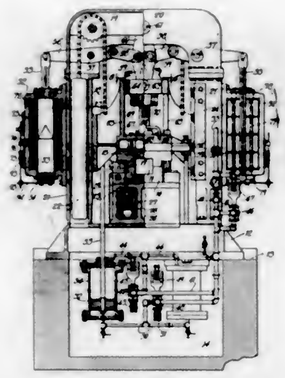
platen, soft pads down against which the paper-apron is pressed by the spring, a set of feed-rolls running upon the under side of the platen, and spring-supported arms carrying said feed-rolls, said soft rubber pads in the form of rings, said rolls mounted upon shafts, each shaft having at each end a collar having a peripheral groove to carry said pad-rings.

1,861,010. DOOR STRUCTURE. CARL H. HOFFSTETTER, Erie, Pa., assignor to Odin Stove Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 21, 1930. Serial No. 454,483. 7 Claims. (Cl. 126—190.)



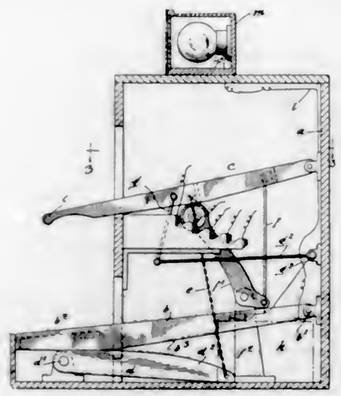
1. In a door structure, the combination of a sheet metal front plate; a sheet metal rear plate, said rear plate forming the seating face of the door; a flange connection between the edges of the plates, the connection being hooked together at one edge through the flange connection; means securing the plates together opposite the interlocked edge; and a handle secured by said means.

1,861,011. APPARATUS FOR ELECTRIC WELDING. HENRY S. HOLMES, Rockville Center, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 28, 1929. Serial No. 343,851. 18 Claims. (Cl. 219—4.)



1. Welding apparatus which comprises a pair of electrodes, means for bringing one electrode toward the other, a solenoid having quick acting and slow acting coils, an armature core in the fields of said solenoids, and means for transmitting power from said armature core to said moving electrode.

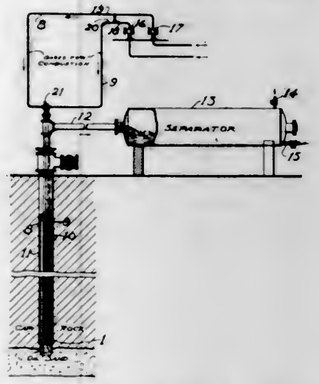
1,861,012. STRENGTH TESTING MACHINE. HENRY S. HORNBECK and HAROLD L. HORNBECK, Hampton Bays, N. Y. Filed June 27, 1930. Serial No. 464,143. 3 Claims. (Cl. 265—20.)



1. A strength testing apparatus comprising a movable platform on which the operator may stand, an operating handle, operating connections between the handle and the platform whereby the operator must lift his own weight, means whereby the leverage of the connections is decreased as the platform is raised, and indicating means connected to the handle to indicate the extent of movement of the handle.

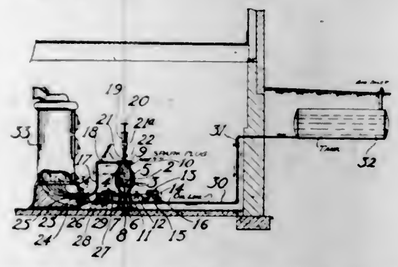
3. A strength testing apparatus comprising a platform on which the operator may stand, a lever on which the platform is supported, a second lever in operative relation with the lever platform and having a cam surface for engagement with the platform lever to cause decreasing leverage between the levers upon the raising of the platform, an operating handle, means connecting said handle to the second lever, and indicating means connected to the handle to indicate the extent of movement of the handle.

1,861,013. PROCESS FOR RECOVERING PETROLEUM AND APPARATUS THEREFOR. FRANK A. HOWARD, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed June 24, 1927. Serial No. 201,066. 3 Claims. (Cl. 103—232.)



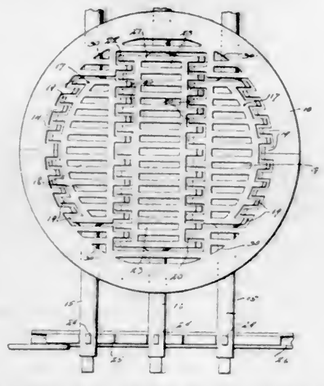
1. The method of lifting oil from oil wells, which comprises bringing together non-combustible mixtures of air and gas in separate non-combustible streams below the surface of the oil to be lifted and in such proportions as to form a combustible mixture, igniting said combustible mixture, continuously maintaining the resulting flame without explosion and commingling the products of combustion with the oil to be lifted to form an ascending column of mixed oil and gas.

1,861,014. APPARATUS FOR BURNING LIQUID FUELS. FRANK A. HOWARD, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 20, 1928. Serial No. 248,205. 2 Claims. (Cl. 158—73.)



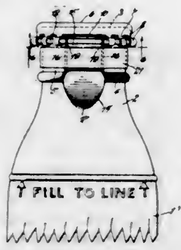
1. A burner mechanism for liquid fuels comprising in combination an explosion chamber, a flapper valve opening inwardly to the said chamber, means for maintaining tension on said flapper valve to hold the same in normally closed position, means for supplying an explosive mixture to said chamber through said flapper valve, ignition means in said chamber, a constricted outlet leading from said chamber, open at the end remote from said chamber, the length and diameter of said outlet being so proportioned that products of combustion passing therethrough acquire sufficient momentum to produce a suction in said chamber sufficient to open said flapper valve and induce a renewed charge of explosive mixture in said chamber, an oil pipe terminating in an open end, which open end is disposed in such relationship to the open end of said constricted outlet that oil issuing from said oil pipe is disseminated by a current of gases issuing from said constricted outlet.

1,861,015. SHAKING GRATE FOR FURNACES. AUGUST J. KOEPSELL, Mayville, Wis. Filed Aug. 28, 1928. Serial No. 302,563. 4 Claims. (Cl. 126—176.)



1. In a grate, a rim formed in two opposed sections, a plurality of grate bars having parallel shafts rotatably mounted upon the rim and extending at right angles to the line of separation between the sections of the rim, the shafts of the lateral grate bars being removable from engagement with the rim and interchangeable whereby the lateral grate bars may be interchanged and reversed when one surface of the lateral section is burned out, the intermediate grate bar being completely reversible in the rim whereby when said grate bars have been burned out, on one face, all the grate bars may be reversed.

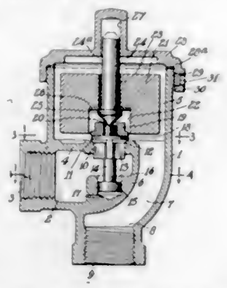
1,861,016. BOTTLE AND CAP THEREFOR. CHARLES M. KRUGER, Litchfield, Ill. Filed Oct. 22, 1931. Serial No. 570,282. 7 Claims. (Cl. 215—45.)



1. The combination with a bottle having a circular bead at the bottle opening forming a shoulder, of a cap comprising a head portion adapted to fit across the bottle opening, an elastic apron connected with the head portion, a binding ring supported by the apron, said binding ring having upwardly and inwardly projecting segments at one side adapted to fit against the shoulder formed by the

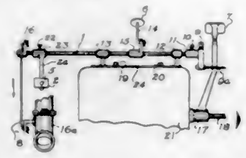
bead, and a lever connected with said binding ring and positioned on the opposite side from said segments and adapted to engage the bead and to expand said ring and seat the cap.

1,861,017. ANTISIPHON VALVE. HARRY E. LAKE, New York, N. Y., assignor to Preferred Utilities Manufacturing Corporation, New York, N. Y., a Corporation of Delaware. Filed May 29, 1929. Serial No. 367,046. 2 Claims. (Cl. 251—147.)



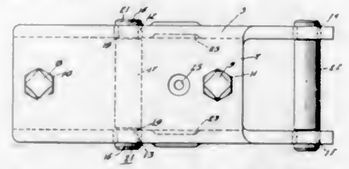
1. An anti-siphon valve comprising a valve casing having a horizontal inlet passage and a vertical outlet passage, said passages being provided with means for connecting pipe sections thereto, to enable the casing to take the place of an elbow, said casing being provided with horizontally and vertically disposed partitions interposed between the inlet and outlet passages, said horizontal partition being provided with an aperture surrounded by a valve seat, and said inlet passage being provided with a recess coaxial with the valve seat and communicating at its lower end with the inlet passage by a vent passage of reduced diameter, a valve for engaging said valve seat having a depending stem provided with a piston engaging said recess, said casing being provided with a weight chamber above the horizontally disposed partition communicating with the outlet passage, a detachable cover for said casing forming the top of the weight chamber, and provided with a guiding recess coaxial with the valve seat, a vertically movable weight stem in said weight chamber having its upper end in guiding engagement with the guiding recess in said cover and its lower end loosely engaging said valve, and a vertically movable weight in said weight chamber supported by said vertically movable weight stem for holding said valve seated against a predetermined siphonic action.

1,861,018. AUTOMATIC POWER CONTROL MECHANISM FOR AUTOMOBILES. EDWARD H. LANGE, Baltimore, Md. Filed Nov. 23, 1931. Serial No. 576,885. 24 Claims. (Cl. 192—.01.)



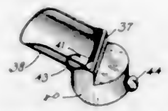
1. In an automobile, the combination of an engine, a first means operable by foot for controlling the power of the engine, a pendulum means for automatically controlling the power of the engine in response to the grade upon which the automobile rests, a third means operable by the brakes for controlling the power of the engine as the brakes are applied or released, and adjustable means for regulating the minimum power desired upon a level plane in excess of the idle power of the engine, said pendulum means increasing the power of the engine upon an up-grade in proportion to the grade, decreasing the power of the engine upon a down-grade to the said idle power, maintaining the power of the engine upon a level plane at the said minimum power desired, and providing minimum power response to vertical motion of the automobile, said third means causing the power of the engine to be decreased as the brakes are applied and to be increased as the brakes are released, the power being decreased to said idle power upon full application of the brakes, and increased to the power which existed before application of the brakes when the grade is the same upon release of the brakes, said first means providing for the selective increase of power by the operator in excess of the power provided by the pendulum means and the adjustable means for regulating the minimum power desired upon a level plane.

1,861,019. ADJUSTABLE SPRING CLIP. FRANK L. MAIN, Jackson, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 17, 1927. Serial No. 213,624. 18 Claims. (Cl. 267—48.)



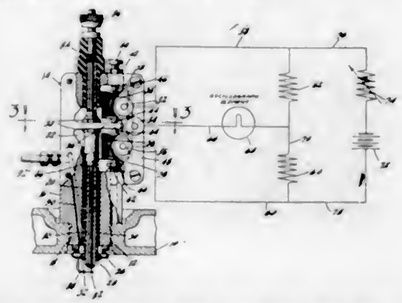
1. The combination of a leaf spring and a clip having contact with the spring at two points on each side thereof, one of said points of contact being relatively fixed with respect to the spring and the other three being movable with respect to the spring.

1,861,020. CHANGE CARRIER. NICHOLAS MARRION, New York, N. Y. Filed July 1, 1931. Serial No. 548,142. 3 Claims. (Cl. 133—1.)



1. A filler for a coin container comprising a coin guiding chute into which a plurality of coins may be placed and said chute being provided with a projection for checking the rush of coins into said container.

1,861,021. ENGINE INDICATOR AND SPARK PLUG. EDWARD J. MARTIN, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,695. 16 Claims. (Cl. 177—351.)



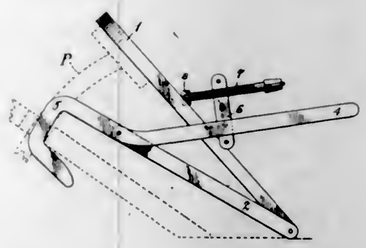
1. A combined spark plug and engine indicator comprising a member provided with a bore therein and with a rigid indicating member intercepting the bore and provided with an aperture aligned with the bore, a diaphragm at one end of the bore, a tubular thrust member rigidly connecting the diaphragm and the rigid member, and an insulated electrode mounted in the bore and extending through the diaphragm, said electrode being provided at its upper end with means adapted for connection with a source of electric current.

1,861,022. SAND PUMP. GEORGE W. MILLER, Sapulpa, Okla. Filed Apr. 2, 1930. Serial No. 441,048. 3 Claims. (Cl. 166—19.)



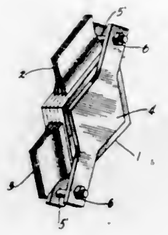
1. In a device of the character described including a member having a rope guide at its upper end, a flexible line extended through said guide, and a plunger, a rod connected to the plunger having a channel to receive said line and provided with a side opening for access to said channel, a locking head on the end of the flexible line located in said channel, and removable means for closing said opening.

1,861,023. BRAKE PEDAL HOLDING DEVICE. CLAUDE H. NABER, Hamburg, N. Y., assignor of one-half to Norman Haas, Hamburg, N. Y. Filed Apr. 16, 1929. Serial No. 355,632. Renewed Oct. 24, 1931. 8 Claims. (Cl. 254—120.)



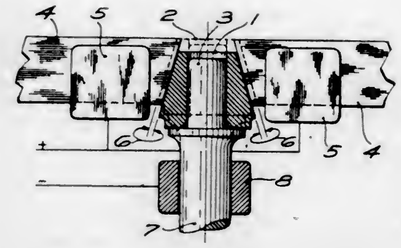
1. A device for holding the foot pedal of a vehicle in a depressed position comprising a pedal engaging member adapted to be rested upon the floor of the vehicle at a point adjacent the pedal thereof for pivotal movement about said point within said limits that its engagement with the pedal substantially throughout the latter's range of movement may be effected, a standard adapted to be arranged substantially parallel to the plane of motion of said member and to extend adjacent and at an angle thereto, and an element mounted for movement along said standard and adapted to engage said member to prevent its movement in a direction reverse to the depressing movement of said pedal whereby said member is effective to hold said pedal in a position along its range of movement to which it may be moved.

1,861,024. CLAMP FOR CONDENSERS. ALEXANDER NYMAN, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1926. Serial No. 94,856. 8 Claims. (Cl. 175—41.)



1. A condenser comprising a stack containing conductive elements of opposite polarity, the elements of one polarity having ends protruding from the stack in proximity to the projecting ends of the elements of opposite polarity and a clamp for the stack extending in the same direction as a line joining the points at which said elements project from the stack.

1,861,025. MANUFACTURE OF FANS. JAN PAVLECKA, Wyandotte, Mich. Filed Aug. 25, 1928. Serial No. 301,964. 6 Claims. (Cl. 219—10.)

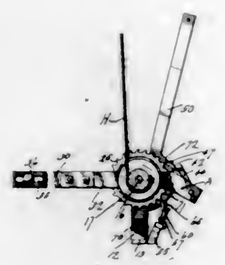


1. The art of producing a fan, and the like comprising, forming a metallic hub with an axially tapering periphery contour, and a plurality of blades having a contour at the roots thereof corresponding to that of said hub, securing at least two of said blades in their proper relation to each other with said hub disposed centrally therebetween, and electrically fusing said hub with the roots of said blades while axially feeding same into the ultimate position thereof with respect to said blades; said hub and said blades constituting opposing polarities in said process of fusion.

1,861,026. TEXTILE MATERIAL AND METHOD OF MAKING SAME. HERBERT PLATT, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 15, 1929. Serial No. 407,570. 15 Claims. (Cl. 28—1.)

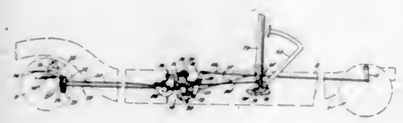
1. In the method of making textile material, the step of applying to yarn containing organic derivatives of cellulose a size containing a bleached drying oil.

1,861,027. AUTOMATIC WINDMILL CONTROL. CLARICE J. POTTS, Winfield, Kans. Filed Sept. 6, 1930. Serial No. 480,254. 2 Claims. (Cl. 74—54.)



1. In apparatus for automatically throwing a windwheel out of the wind, the combination of a supporting frame, a drum rotatable on the supporting frame, a ratchet wheel rotatable with the drum, an oscillating lever freely mounted on a pivot axis aligning with the axes of the drum and ratchet wheel provided with a polish rod engaging end projecting to one side of said axes and a detent carrying end projecting to the other side of said axes, a detent pivoted on said lever at said detent carrying end for causing rotation of the ratchet wheel in one direction upon oscillative movement of the lever in one direction, a releasable detent normally engaging said ratchet wheel for preventing rotation of the drum upon movement of the first mentioned detent over the periphery of the ratchet wheel, and trip means for releasing both of said detents with respect to said ratchet wheel.

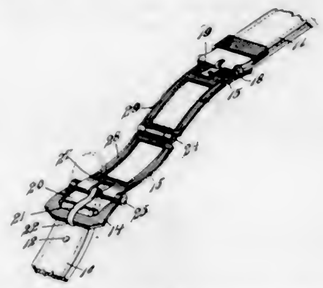
1,861,028. EMERGENCY BRAKE HOOK-UP. JOSEPH N. PRENTIS, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,814. 3 Claims. (Cl. 188—106.)



1. In combination, a vehicle having front wheels and rear wheels, internal brakes associated with each of said wheels, operating means for applying said brakes, other internal brakes associated with said rear wheels, operating mechanism to apply said other brakes, connecting means between said means and mechanism whereby said mechanism applies said other brakes and also applies those of the first mentioned brakes associated with the rear wheels by connections independent of the connection between said mechanism and said other brakes.

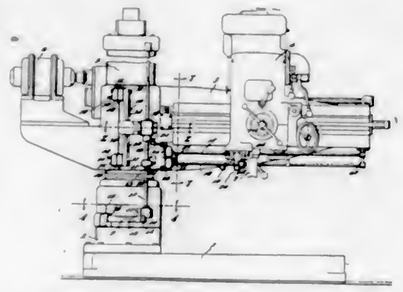
1,861,029. FOLDABLE EXTENSION DEVICE FOR A BRACELET STRAP. JOHN SAND, Newark, N. J., assignor to Gemex Company, a Corporation of New Jersey. Filed Mar. 3, 1932. Serial No. 596,511. 12 Claims. (Cl. 24—71.)

1. A buckle comprising a frame having an opening therethrough to receive a strap part with holes therein, a tongue secured to said frame to extend through any one of the holes in said strap part, said tongue and frame being relatively resilient in a direction extending along the longitudinal axis of the tongue, and said tongue being



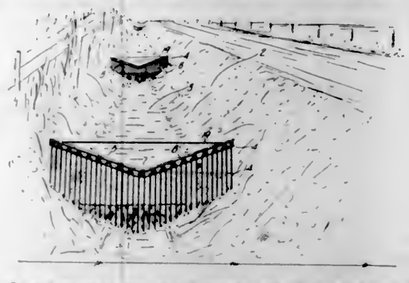
of such a length and being so formed at its end as to snap over a portion of said frame and releasably secure the tongue and frame in frictional engagement.

1,861,030. RADIAL DRILL. WILLIAM L. SCHELLENBACH, Wyoming, Ohio, assignor to The American Tool Works Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 15, 1929. Serial No. 363,323. 1 Claim. (Cl. 77—28.)



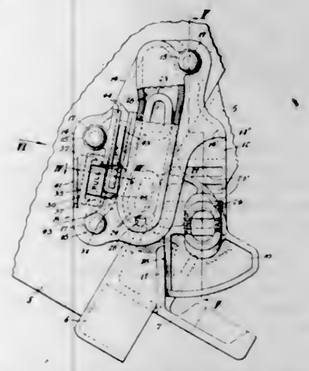
In a radial drill of the type having a column pivotally mounted upon a stump, an arm vertically adjustable on said column, and a drilling head slidably mounted on said arm, mechanism operable from the head for clamping the column to the stump and the arm to the column, said mechanism, comprising, a vertical shaft carried by the column, a crank disposed on the arm and splined to said shaft, a sleeve mounted on the arm above said crank, said sleeve surrounding said shaft and rotatable upon the same axis, a clamp carried by said column and adapted to secure it to said stump, a crank on said vertical shaft near the bottom of the column, mechanical connection between said clamp and said latter crank whereby the rocking of the shaft clamps and unclamps the column, a clamp carried by the arm adapted to clamp it to the column, a cam carried by said sleeve mounted on the arm, mechanical connection between said arm clamp and the cam carried by said sleeve whereby the rocking of said sleeve clamps and unclamps said arm, two horizontal shafts carried by said arm, said shafts traversing the head, two levers mounted in the head, one splined to each shaft, a crank on the end of each horizontal shaft adjacent to the column, a drag link connection between the crank on one horizontal shaft and the crank splined to the vertical shaft carried by the column, so that the rocking of one shaft causes a rocking of the other to operate the column clamp, and a drag link connection between the crank on the other horizontal shaft and the sleeve mounted on the arm, so that rocking of the second shaft rocks the sleeve to operate the arm clamp.

1,861,031. DITCH CHECK. ROY SCHMITT, Fairview, Kans. Filed May 17, 1929, Serial No. 363,825, and in Canada Dec. 15, 1927. 9 Claims. (Cl. 61—3.)



1. In a device of the character described, a head member comprising a channel including a web, a lower flange provided with apertures and an upper flange substantially parallel with the lower flange and having a longitudinal groove at its juncture with the web, and parallel spaced finger members comprising wires bent intermediate their ends to form loops including connecting bar portions having greater length than the spacing of the fingers, said fingers being adapted to pass through the lower flange apertures and the loop being adapted to stand in parallel relation with the web with its bar portion engaged in said groove.

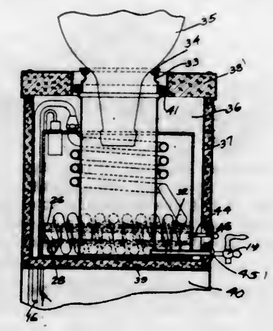
1,861,032. LOCK. JAMES A. SHAFER, East Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 26, 1928. Serial No. 280,668. 17 Claims. (Cl. 105—308.)



1. In a hopper car having a hopper and transversely extending discharge doors, in combination, a transverse spreader connecting the doors and projecting beyond the lateral end thereof, and a lock comprising a housing secured to the outer face of the hopper in spaced relation thereto and a latch in said housing engageable with the projecting end of said spreader bar to lock the door in closed position, said latch and housing being formed respectively with an extension and a series of ledges to be engaged by a pinch bar whereby said latch can be forced to and from locking position, substantially as described.

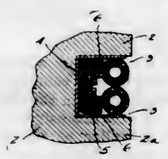
1,861,033. WATER COOLER. CALEB SUNDERN and JAMES G. FULLER, Gardner, Mass., assignors to Iceberg Manufacturing Company, a Corporation of Massachusetts. Filed Sept. 6, 1928. Serial No. 304,226. 23 Claims. (Cl. 62—141.)

1. In a liquid cooler of the inverted bottle type, the combination with a cabinet, a liquid container therein adapted to receive an inverted bottle, a draw-off connection therefor, a brine tank surrounding said container, and a receptacle in said cabinet adapted to receive and contain an ice drawer, of cooling means for said container



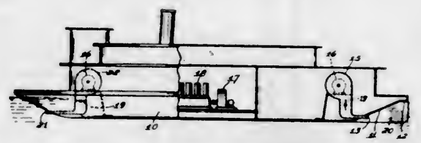
and receptacle comprising an expansion unit of mechanical refrigeration apparatus communicating with said receptacle and brine tank whereby said receptacle is cooled by direct expansion and said liquid container is cooled through the medium of the brine.

1,861,034. WINDOW MOUNTING. EDWARD F. TANNEWITZ, Detroit, Mich., assignor to Detroit Cord Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed June 27, 1928. Serial No. 288,580. 2 Claims. (Cl. 296—44.5.)



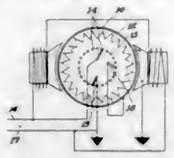
1. In combination with a window casing having a sash groove therein, a channel strip fitting into said groove and having a flexible flange united along one edge to the lower portion of the outer side surface of said strip, extending along and upward and diverging slightly outward from an outer side surface of said strip, whereby the irregularities in the width of said groove and strip are compensated for toward the outer edges of said strip.

1,861,035. PROPULSION OF VESSELS. THOMAS R. TARN, Pittsburgh, Pa. Filed Oct. 25, 1929. Serial No. 402,415. 6 Claims. (Cl. 115—11.)



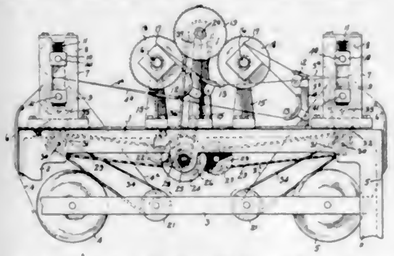
1. A navigable vessel having adjacent inclined and horizontal stern portions, the inclined portion being substantially beneath the water level while the horizontal portion is substantially at the water level, an elongated and narrow fluid orifice mounted in said inclined stern portion and directed oppositely to the direction of propulsion, and means for discharging a fluid through such orifice.

1,861,036. ELECTRICAL MOTOR AND GENERATOR. CHESTER H. THORDARSON, Chicago, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1926. Serial No. 106,696. 20 Claims. (Cl. 171—252.)



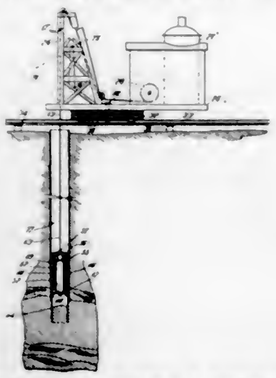
1. In an electrical machine of the class described, a rotating armature, fixed field poles about the periphery of the armature, a cylindrical metallic shield surrounding the armature and insulated from the field poles, and means for maintaining the shield at a predetermined potential.

1,861,037. MECHANISM FOR SLITTING AND WINDING PAPER AND METAL RIBBONS INTO COILS. CHESTER H. THORDARSON, Chicago, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1930. Serial No. 456,869. 5 Claims. (Cl. 164—65.)



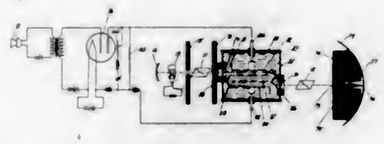
4. In a machine for winding a plurality of coils simultaneously, the combination comprising means for supporting paper and metal stock in the form of strips, means for simultaneously and continuously slitting the paper and metal strips into a plurality of narrower strips, means for winding each narrower paper and metal strip into a coil comprising alternate layers of paper and metal, means for guiding the complementary paper and metal strips, and means for driving all of said means conjointly.

1,861,038. MECHANICAL DIGGING APPARATUS. JOSEPH H. THORNLEY, Evanston, Ill. Filed Nov. 13, 1929. Serial No. 406,760. 31 Claims. (Cl. 255—1.)



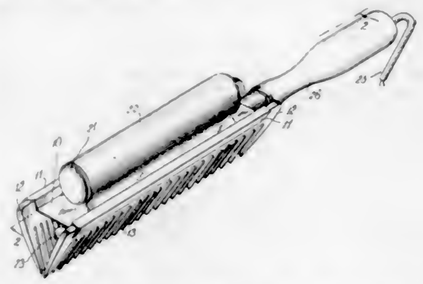
22. A digging device comprising a driving shell, hammer means comprising a cylinder and piston for driving said shell, and a free piston member in said shell for ejecting the soil therefrom.

1,861,039. SOUND RECORDING APPARATUS. DELMAR A. WHITSON, Los Angeles, Calif., assignor to Whitson Photophone Corporation, Los Angeles, Calif., a Corporation of Nevada. Filed May 17, 1928. Serial No. 278,554. 2 Claims. (Cl. 179—100.3.)



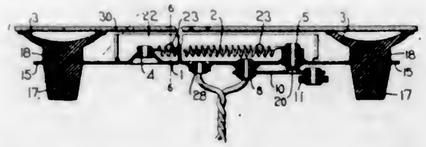
1. In a system for recording sound, means for producing a beam of polarizer radiation, means for creating an electrostatic field for affecting the beam, means in said field for causing the beam to pass a number of times therethrough, an analyzer in the path of the beam, and sound controlled means for varying said field.

1,861,040. HAIR STRAIGHTENING DEVICE. JACQUES E. B. WILLIAMS, New York, N. Y., assignor to Noburn Products, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 3, 1932. Serial No. 596,442. 15 Claims. (Cl. 132—14.)



1. In a hair-straightening device, the combination of a frame, a comb mounted on the frame, and a heating element mounted on the frame in non-heat-conducting relation to the comb and spaced inwardly from the ends of the comb teeth.

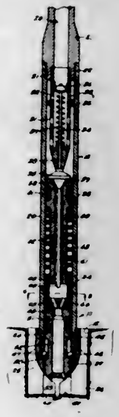
1,861,041. ELECTRIC WINDSHIELD HEATER. MAX ZAIGER, Swampscott, and LOUIS ZAIGER, Lynn, Mass. Filed June 22, 1931. Serial No. 546,006. 6 Claims. (Cl. 219—19.)



1. An electric windshield heater comprising an open-sided, channel shaped housing of conducting material, the flanges of the channel being of relatively different widths, means to attach said housing to the windshield with the wider of the flanges below the narrower flange, and slightly spaced from the windshield, a heating coil in the housing, two attachment terminals by which the coil is connected at its ends to the housing, one terminal being a non-insulated terminal and the other being an insulated terminal by which said end of the coil is insulated from the housing, circuit wires forming part of the circuit by which the coil is connected to a source of electricity, one circuit wire being connected directly to the housing

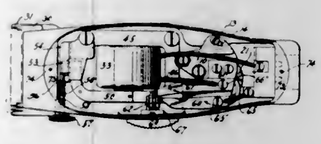
with a non-insulated connection and the other being connected to the housing but insulated therefrom, and a circuit maker and breaker carried by the housing intermediate the upper and lower flanges thereof and adapted to connect the latter wire to the insulated attachment terminal.

1,861,042. ROTARY BIT WITH HAMMERING DEVICE. JOHN A. ZUBLIN, Los Angeles, Calif. Filed Apr. 28, 1930. Serial No. 447,900. 4 Claims. (Cl. 255—4.)



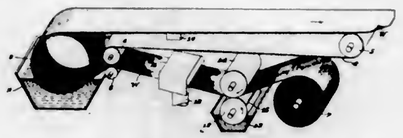
1. A drilling device of the character described, including: a body adapted to be secured to the lower end of a string of drill pipe, said body having passage means for conducting a flow of drilling mud from said drill pipe to the lower portion thereof; a vertically reciprocable cutter mechanism at the lower end of said body; a reciprocable member in said body adapted to engage and disengage said cutter mechanism, said member having a vertically directed opening therethrough, through which the flow of drilling mud passes; means for yieldably forcing said member upwardly; and valve means adapted to periodically close said opening through said member so as to cause said reciprocable member to move downwardly with the flow of drilling mud through said body and forcibly engage said cutter mechanism.

1,861,043. HAIR CLIPPER. MATHEW ANDIS, Racine, Wis. Filed June 16, 1930. Serial No. 461,605. 24 Claims. (Cl. 30—1.)



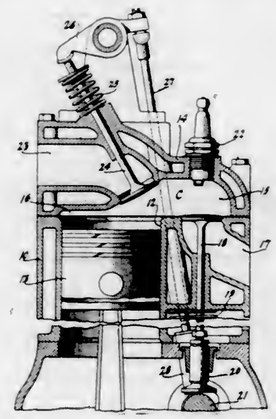
1. In an electro-magnetic hair clipper having a vibratory armature bar and a clipper blade obliquely disposed across the plane of bar vibration, the combination therewith of a driving connection comprising a pair of flat thin sheet metal resilient arms having their respective ends connected with the armature bar and with the blade, and intermediately offset transversely of the oblique plane occupied by the blade, said arms being adapted to yield torsionally and to lengthen and shorten by flexion in said offset portion, whereby to hold the blade under uniformly resilient pressure in a substantially straight line of vibratory movement.

1,861,044. METHOD OF MAKING COMPOSITE FABRICS. JOSEPH W. BALLARD, Greenfield, Mass., assignor to Griswoldville Manufacturing Company, Griswoldville, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1930. Serial No. 490,893. 5 Claims. (Cl. 92—41.)



1. That improvement in methods of making fabrics of the character described which consists in treating a textile fabric with a water resistant sizing, suspending finely divided material in a fluid medium, and passing a current of said medium containing said material through said fabric while the sizing is in a tacky conditon and thereby screening out said material and causing it to adhere to said fabric.

1,861,045. COMBUSTION CHAMBER FOR INTERNAL COMBUSTION ENGINES. OTTO CARTER BERRY, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 447,602. 6 Claims. (Cl. 123—191.)

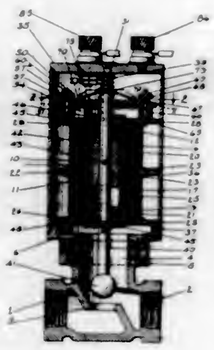


1. In an internal combustion engine comprising a cylinder block having a cylinder bore and a piston therein; a cylinder head forming, with the cylinder block, a combustion chamber extending over and offset to one side of the cylinder bore, the offset portion of the chamber having greater depth than the portion over the bore when the piston is at the end of its compression stroke, the roof of said chamber slanting from the roof over the offset portion to the roof of the portion over the bore, said chamber having a mixture inlet in the offset portion; an ignition device in said offset portion and an outlet for burnt gas in the sloping portion of the roof.

1,861,046. SWITCH FOR MAGNETICALLY OPERABLE DEVICES. GEORGE D. BOWEN, Columbia Heights, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed May 24, 1928. Serial No. 280,220. 10 Claims. (Cl. 200—67.)

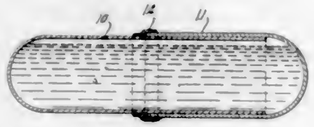
10. A switch mechanism including a member arranged for translation, a pair of posts as stationary contacts, arranged on a diameter passing through the axis of the member, one post at each side of said member, each post

having a circumferential groove crossing a plane which is substantially perpendicular to the axis of the member and located between the motion limits thereof, conducting means rockably connected with the grooves and with



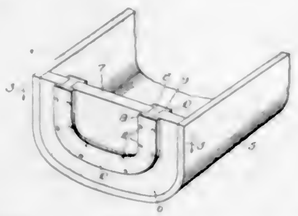
the member and aligned on the aforesaid diameter, and coil springs connected with said conducting means and adapted to act thereon to assist translative motion of the member and yieldably secure it at motion limits respectively at opposite sides of the aforesaid plane.

1,861,047. SEALED CAPSULE. ARTHUR COLTON, Detroit, Mich., assignor, by mesne assignments, to Parke, Davis & Co., Detroit, Mich., a Corporation of Michigan. Filed May 13, 1929. Serial No. 362,554. 3 Claims. (Cl. 167—83.)



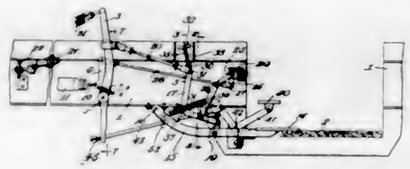
1. As a new article of manufacture, a hardened gelatin capsule comprising telescopically engaged body and cap portions, each of uniform diameter throughout its length with oppositely disposed convex rounded ends and a circular band of hardened gelatin of substantially the same solubility as said capsule gelatin, said band being integrally united to both said body and cap and enveloping the annular edge of said cap.

1,861,048. OUTBOARD MOTOR BOAT. WARREN M. CONOVER, Waukegan, Ill., assignor to Johnson Brothers Engineering Corporation, Waukegan, Ill., a Corporation of Indiana. Filed Jan. 13, 1930. Serial No. 420,566. 13 Claims. (Cl. 115—17.)



1. A yielding bont mounting for a motor comprising a boat section resiliently connected to the remainder of the boat and to which section the motor is attached.

1,861,049. BRAKE AND CLUTCH CONTROL FOR MOTOR VEHICLES. BERNARD C. COOK, De Kalb, Ill., assignor to De Kalb Wagon Company, a Corporation of Illinois. Filed Jan. 28, 1931. Serial No. 511,655. 7 Claims. (Cl. 192—13.)



1. In a motor vehicle, having a brake device and a clutch, mechanism including a foot pedal and parts connected thereto to release the brakes and throw in the clutch when the pedal is down and to set the brakes and release the clutch when the pedal is up, a spring acting on said mechanism and tending constantly to set it in motion to raise the pedal and thus apply the brakes and release the clutch, a second pedal, and a connection between the second pedal and said mechanism to cause the latter to be operated to raise the first pedal and apply the brake and release clutch when the second pedal is depressed.

1,861,050. DOLL. MATTEO DE CESARE, Newark, N. J. Filed Apr. 2, 1931. Serial No. 527,075. 13 Claims. (Cl. 29—84.)



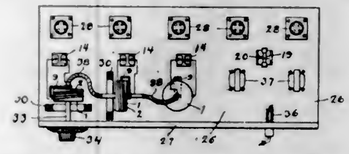
1. For supporting and operating a doll's head, a pair of doll's eyes, and toggle mechanism attachable to said head for mounting said eyes within said head, means for actuating said mechanism to effect the attachment, said means including a member adapted to engage a fixed portion of said mechanism and a member adapted to engage a movable portion of said mechanism and means for moving said second member relative to said first member.

1,861,051. ROLLING EYE SET FOR DOLLS. MATTEO DE CESARE, Newark, N. J. Filed Apr. 2, 1931. Serial No. 527,076. 21 Claims. (Cl. 46—40.)



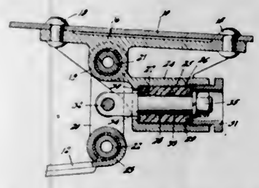
1. In combination with a doll's head having eye sockets, an upwardly extending member having a free downwardly bent over resilient arm, toggle means for attaching said member to said head, a pair of doll's eyes and means for pivotally mounting said eyes on said arm, said arm being adapted to urge said eyes into said eye sockets.

1,861,052. VARIOMETER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 8, 1926. Serial No. 134,293. 4 Claims. (Cl. 250—40.)



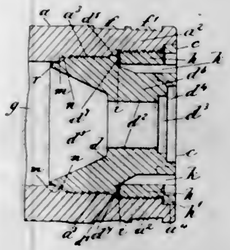
1. The combination with a radio receiving set having appliances for detecting and amplifying oscillations, of a plurality of devices for controlling said appliances, said devices having the form of coils, with means for varying the effective number of turns thereof, all of said coils being mounted so that said means can be operated in unison, said coils being disposed so that the axis of each is perpendicular to the axis of all the rest.

1,861,053. CUSHION SHACKLE. JAMES DYKSTRA, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 29, 1929. Serial No. 366,966. 4 Claims. (Cl. 267—54.)



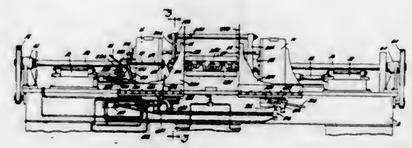
1. In a motor vehicle, a chassis frame, a load-supporting spring, and a driving connection between the spring and frame, including a bracket for attachment to the frame, a swinging link connection between the spring and bracket, a cylindrical casing secured to and formed integral with the bracket, concentric inner and outer sleeves positioned within said housing, a bushing of elastic deformable material interposed between said sleeves, means to secure the outer sleeve in the housing, and means to secure the inner sleeve to the link, whereby movement of the link is cushioned by the elastic deformable material between said sleeves.

1,861,054. ARMOR PIERCING PROJECTILE. ROBERT ABBOTT HADFIELD, Westminster, and AUGUSTUS BASIL HOLT CLERKE, Sheffield, England. Filed Jan. 19, 1931, Serial No. 509,654, and in Great Britain Jan. 22, 1930. 21 Claims. (Cl. 102—29.)



1. An armor piercing projectile the rear end portion of the wall of which is bored out to different diameters and has an annular shoulder arranged between the adjacent ends of the bored out portions and at a substantial distance from the rear end face of said projectile, an adapter screwed into the forward bored out portion of said wall and out of contact with the rearward bored out portion of said wall and means for effecting a gas tight joint between the rear end of the screw threaded portion of said adapter and said shoulder.

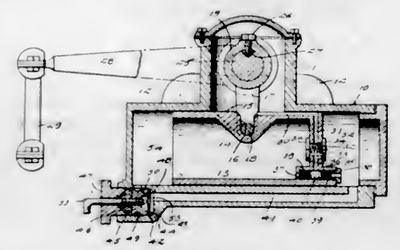
1,861,055. HORIZONTAL DRILLING MACHINE. FRANK W. HAEGER, Saginaw, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,513. 18 Claims. (Cl. 29—38.)



1. In a crankshaft drilling machine comprising, means for mounting a plurality of crankshafts, means for rotating said mounting means, a plurality of heads, means for reciprocating said heads relative to said crankshafts, a plurality of tools operated from each head and adapted to act on the ends of said crankshafts, a plurality of reciprocable drill plates for holding said shafts and guiding said tools when acting on said shafts, means for reciprocating said drill plates, and means for causing the operation of said rotating means coincident with the movement of said heads.

7. In a crankshaft drilling machine, a spool for mounting a plurality of crankshafts, means for journally mounting said spool, a plurality of movable heads on said machine, tools driven from said heads and adapted to operate on the crankshaft ends, a notched wheel rigidly mounted relative to said spool, gearing including a shaft for rotating said spool, a clutch on said shaft, a slidably mounted plunger for engaging the notches of said notched wheel, means on said plunger engaging said clutch, a bar rigidly secured to one of said housings, a trigger attached to said bar and operatively engaging said plunger to withdraw the same and throw in said clutch to cause said gearing to rotate said spool.

1,861,056. HYDRAULIC SHOCK ABSORBER. FLOYD A. HUFF, Mansfield, Ohio. Filed Aug. 22, 1928. Serial No. 301,320. 20 Claims. (Cl. 188—88.)



1. In a hydraulic shock absorber, a chamber, a means reversely movable therein, relief port means connecting opposite ends of the chamber, a tapering valve, and means including a cooperating disk-like member responsive to pressure between the reversely movable means and one end of the chamber reducing the effective area of said relief port means.

1,861,057. METHOD OF AND APPARATUS FOR DETERMINING INCLINATION OF WELL HOLES. MYRON MACY KINLEY, Tulsa, Okla. Filed Apr. 2, 1930. Serial No. 441,051. 11 Claims. (Cl. 234—1.)

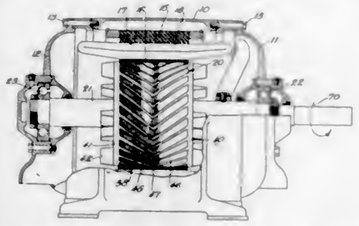


1. The method of determining inclination of a well hole including lowering a receptacle containing marking fluid into a well hole, retaining the receptacle in the hole undisturbed for a period sufficient to permit the marking fluid to act on the receptacle, introducing a drilling fluid into said well hole, and causing the movement of said fluid to open the receptacle in the hole to permit discharge of the fluid.

1,861,058. RECOVERY OF SULPHIDES. ERNST JAENECKE, Heidelberg, and HERMANN KLIPPEL, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 10, 1929, Serial No. 362,124, and in Germany June 15, 1928. 8 Claims. (Cl. 23—134.)

1. The process of recovering water-soluble sulphides in a substantially pure state from mixtures containing the same, which comprises passing steam and mother liquor from a previous charge through said mixture from above.

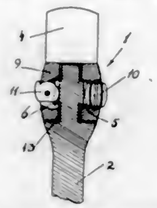
1,861,059. ROTOR FOR SILENT MOTORS. CARL E. JOHNSON, Pasadena, Calif. Filed Apr. 8, 1930. Serial No. 442,514. 8 Claims. (Cl. 172—120.)



1. A rotor for a dynamo-electric machine, comprising: a magnetic body; conductor bars associated with said magnetic body each conductor bar extending helically around the periphery of said magnetic body in a given direction for a portion of its length and in an opposite direction for another portion of its length; and means for electrically connecting the ends of adjacent conductor bars.

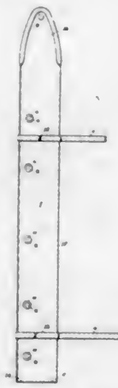
1,861,060. WRENCH. CHARLES L. MAGUIRE, Yreka, Calif., assignor of one-half to Earl G. Schneider, Yreka, Calif. Filed Dec. 13, 1930. Serial No. 502,084. 3 Claims. (Cl. 81—130.)

1. A wrench comprising a handle, a head on the handle, a stationary jaw on the head, a pair of racks on said head, one on either side thereof, a movable jaw, an adjusting rotor journaled in the movable jaw and engaging one of the racks, and locking means in the jaw engaging the second rack, the lower surfaces of said racks being bevelled inwardly and upwardly, said movable jaw fitting



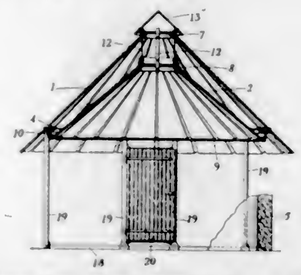
against said tapered surfaces whereby the jaw is held against side spreading, a pair of transversely extending plane surfaces on the head, said movable jaw resting on said plane surfaces.

1,861,061. CONTAINER FOR UMBRELLAS. JOHN A. MAXWELL, Jr., Lancaster, Pa., assignor to Follmer, Clogg & Co., New York, N. Y., a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,686. 3 Claims. (Cl. 135—33.)



1. A container for holding and drying wet umbrellas formed entirely of flexible waterproof material and consisting of a closed sheath of such material of substantially the cross section of the umbrella, fitting snugly over the folded umbrella cover and of substantially equal cross section throughout and open only at the top, and provided with ventilating holes along its length.

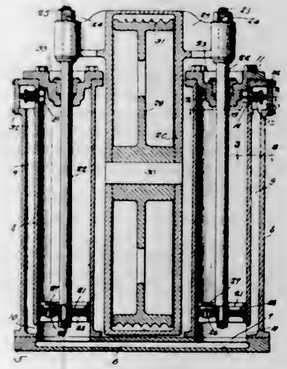
1,861,062. ROOF FOR PORTABLE BUILDINGS. PETER NORMAN NISSEN, Hoddesdon, England. Filed July 8, 1929, Serial No. 376,720, and in Great Britain July 10, 1928. 2 Claims. (Cl. 108—32.)



1. In a roof for circular buildings the combination of a skeleton framework comprising a plurality of vertically

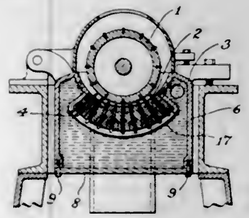
arranged bars, a ring secured to the lower ends of said bars, a second ring secured to the upper ends of said bars, a supplementary ring secured to said bars a short distance below the last named ring, a central support comprising two cone-shaped rings arranged one above the other, means for spacing said rings at a suitable distance apart comprising a plurality of vertically disposed stays, a plurality of sheets of triangular form adapted to be grouped and arranged to form a ceiling the upper ends of said sheets being supported on the lower of the cone-shaped rings forming the central support, means comprising a clamping ring for securing said sheets to the central support, their lower ends resting on the supplementary ring, a plurality of sheets of triangular form adapted to be grouped and arranged to form a roof the upper ends of said sheets being supported on and fixed to the upper of the cone-shaped rings forming the central support, their lower ends being supported by and fixed to the second named ring.

1,861,063. ELEVATOR CONSTRUCTION. BLAKE PALM, Washington, D. C., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 21, 1929. Serial No. 341,692. 7 Claims. (Cl. 187—22.)



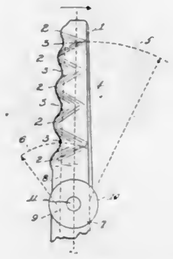
1. A compensating elevator sheave support including a base having a passageway, cylinders in communication with the passageway, said cylinders having longitudinal passageways communicating with the cylinders at their ends, pistons operating in the cylinders, valves for controlling the passage of liquid through the passageways and the pistons, a housing, a sheave operating in the housing, and piston rods connected with the pistons and connected with the sheave housing to control movement of the housing.

1,861,064. ROTARY CUTTER. LOUIS E. PARENT, Claremont, N. H., assignor to Claremont Waste Manufacturing Company, a Corporation of New Hampshire. Filed Sept. 7, 1927. Serial No. 218,009. 28 Claims. (Cl. 83—6.)



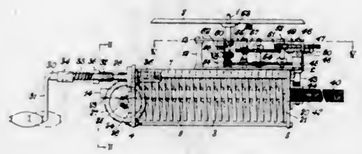
1. In combination, a tool carrying bed, an underlying water tank therefor, supply and discharge connections for said tank, and means in the tank and having portions providing a passageway in the top of the tank extending between said supply and discharge connections, for circulating the water in the top of said tank and insuring a circulation relative to the rest of the water in the tank of said water in the top of the latter which is in contact with the bed.

1,861,065. SCREW-PROPELLER FOR FLYING MACHINES AND OTHER AERODYNAMICS APPARATUS. PHILIPPE POOT, Saventhem, Belgium. Filed June 19, 1931, Serial No. 545,509, and in Belgium Aug. 18, 1930. 1 Claim. (Cl. 170—170.)



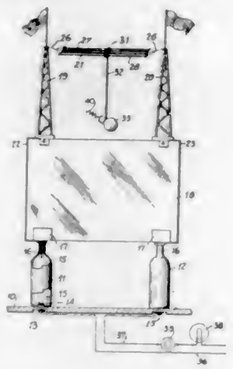
In a screw-propeller for flying machines and other aerodynamics apparatus having a plurality of wings, the combination with each wing body, of undulations or waves formed in said body parallel to the axis of the screw-propeller as well as at right angles thereto, the axes of the inner wave troughs coinciding with a circumference the centre of which is located on the central portion or hub member of the screw-propeller on the extension of the base line of said troughs, whilst the axes of the outer wave troughs coincide with a circumference the centre of which is located on the extension of the front straight edge line of the wing body, substantially as set forth.

1,861,066. SPRING MOTOR FOR GRAMOPHONES AND OTHER PURPOSES. SILAS REES, London, England. Filed Oct. 1, 1930, Serial No. 485,732, and in Great Britain Oct. 3, 1929. 1 Claim. (Cl. 185—37.)



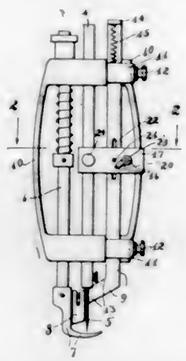
A spring motor for driving gear wheel trains comprising in combination a spring of great strength, a toothed rack disposed longitudinally of said spring, means for connecting said spring and said rack so that the force of the spring is imparted to said rack, means for winding up the spring to its position for giving out the said force and for locking said spring in said position when desired, comprising shaft and gear mounted in the frame of the motor, teeth on said shaft and gear engaging with said rack, further teeth on said shaft and gear, a slidable winding crank, a worm wheel carried by the shaft of said crank and adapted to be slidden by rotary movement into engagement with said further teeth on said shaft and gear for winding the spring, and a stop against which said worm wheel is adapted to abut under the force in said spring whereby the latter is locked in the wound position and may be released when desired, by withdrawing the worm from said further teeth by reverse rotary movement.

1,861,067. ADVERTISING DEVICE. RAFAEL VICENTE RODRIGUEZ, New York, N. Y. Filed Nov. 28, 1931. Serial No. 577,771. 3 Claims. (Cl. 40—126.)



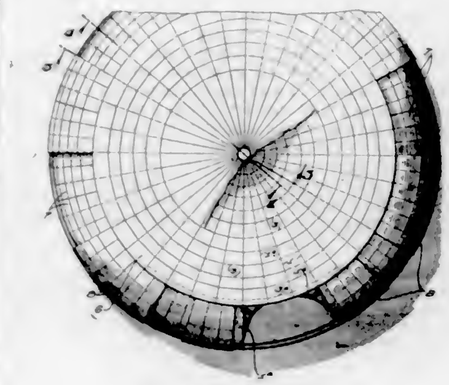
1. A device of the character described comprising a substantially transparent plate, substantially transparent containers supporting said plate and each containing an electrical conducting liquid, an electrically operated device mounted on said plate, means for the connection of current supply wires with the liquid in the containers, and conductors connecting the liquid in the containers with said electrically operable device.

1,861,068. SEWING MACHINE CUTTING-ATTACHMENT. ZACHARIA ROUTTENBERG, Los Angeles, Calif. Filed Jan. 20, 1930. Serial No. 422,049. 2 Claims. (Cl. 112—128.)



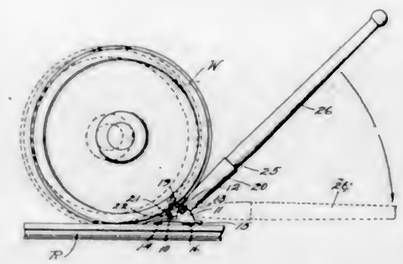
1. In a cutting attachment, in combination with the needle-bar and the head of the arm of a sewing machine, a cutter-bar shiftably mounted on said head with its lower cutting end in operative relation to the lower end of the said needle-bar, means for normally holding the cutter-bar in its uppermost inoperative position, a cross-head adjustably mounted on the said needle-bar extending sidewise to the cutter-bar and having an aperture, the cutter-bar having a slot in alignment with said aperture, and an engagement shiftably and turnably mounted on said cross-head having a pin-portion adapted to extend through the said aperture and slot for operatively engaging the said needle-bar with said cutter-bar and including a tension means for normally pressing the engagement against the cross-head in engaging position as well as in inoperative position.

1,861,069. DIRIGIBLE AIRSHIP HANGAR. WILLIAM H. SMITH, San Diego, Calif. Filed Oct. 15, 1929. Serial No. 390,759. 8 Claims. (Cl. 189—1.5.)



1. In a hangar for airships, an enclosure having a substantially circular base, a plurality of angularly related radially extending arch members supported at their upper inner portions at an elevation below their apexes at the center of said enclosure and at spaced apart points on the periphery thereof, and doorways formed between the outer portions of said arches.

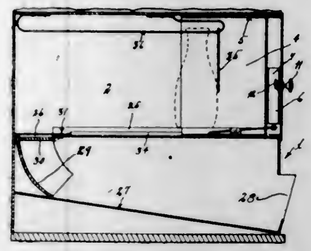
1,861,070. CAR MOVING DEVICE. PAUL B. VERMILLION and ADAM C. KOONTZ, Kansas City, Mo. Filed June 4, 1928. Serial No. 282,601. 3 Claims. (Cl. 254—38.)



1. A railway car moving device comprising a base having spaced apart front and rear downturned bearing portions, a tooth carried by said base intermediate said down turned portions extending below the lower plane of said down turned portions, a lever of the first class pivotally fulcrumed on said base intermediate said down turned portions, a roller carried by one end of said lever positioned entirely intermediate said front and rear bearing portions.

1,861,071. MILK BOTTLE VENDING MACHINE. ROY L. VORHIES, Long Beach, Calif., assignor of fifty per cent to E. J. Warner, Long Beach, Calif. Filed Feb. 5, 1927. Serial No. 166,099. 6 Claims. (Cl. 312—36.)

1. A milk bottle vending machine comprising a cabinet, a plurality of compartments in said cabinet, drawers closing the forward end of said compartments, said compartments having a bottle outlet at the rear thereof, the full bottles in the compartments being adapted to be actuated



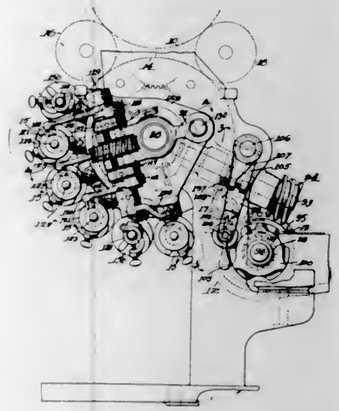
by an empty bottle inserted into said drawer, and means in said compartments whereby the full bottles are prevented from being removed through the drawer.

1,861,072. HIGHWAY SIGN. THEODOR R. WILLWERSCHEID, Lakewood, Ohio, assignor to Western Stamping & Manufacturing Company, Cleveland, Ohio, a Corporation of Minnesota. Filed Apr. 16, 1930. Serial No. 444,682. 6 Claims. (Cl. 40—136.)



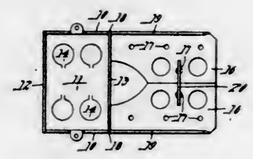
1. A sign comprising a panel to carry the indication, said panel having flanges at its edges, the panel and the flanges being offset adjacent the ends and a pair of end caps made of separate pieces of metal permanently secured to the panel, each end cap having a base portion, a flange portion and two end portions, said base portion overlapping the offset of the panel and the end portions overlapping the offsets of the flanges.

1,861,073. INKING MECHANISM FOR PRINTING PRESSES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 4, 1923. Serial No. 655,777. 12 Claims. (Cl. 101—350.)



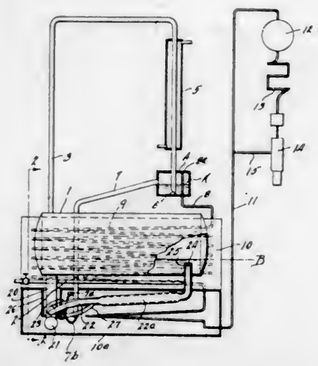
1. In an inking device, the combination with a fountain roll and vibratory ductor roll, of a cam rotatable with the fountain roll, a cam roll connected with the ductor roll to move it and contacting with the cam, said cam having a plurality of controlling surfaces thereon each wider at one end than at the other, and means for adjusting the cam roll along the cam to regulate the duration of contact of the ductor roll with the fountain roll.

1,861,074. JUNCTION BOX. JOHN A. ADELL, Orange, Mass. Filed Mar. 3, 1928, Serial No. 258,934. Renewed Sept. 28, 1931. 5 Claims. (Cl. 247—21.)



1. As an article of manufacture, a junction or outlet box having one side, both ends and bottom pieces integral, said side wall having integral plates projecting therefrom to one side and meeting with their lower surfaces in a plane for attachment to a supporting element.

1,861,075. INTERMITTENT ABSORPTION REFRIGERATING APPARATUS. EDMUND E. ALLYNE, Cleveland Heights, and ALBERT C. SCHICKLER, Cleveland, Ohio, assignors to The Allyne Refrigeration Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 19, 1928. Serial No. 247,951. 8 Claims. (Cl. 62—118.)

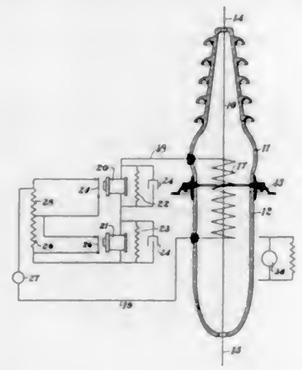


1. Intermittent absorption refrigerating apparatus, including a boiler-absorber, and cooling means for the absorbing agent, comprising a plurality of circulating loops, each having both of its ends connected to the bottom of the boiler-absorber and extending out of the range of the heating device and through which the absorbing agent is circulated in parallel to a cooling medium and means for setting up circulation from the boiler through said loops during the refrigerating cycle.

1,861,076. CURRENT TRANSFORMER. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield Ohio, a Corporation of New Jersey. Filed Nov. 11, 1929. Serial No. 406,284. 20 Claims. (Cl. 171—119.)

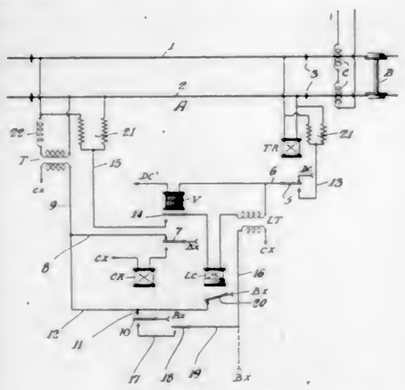
1. The combination with a current transformer, of adjustable means for correcting variations in the ratio be-

tween the current in the primary and secondary of said transformer and means dependent upon the current in the



primary of said transformer for regulating said adjustable means.

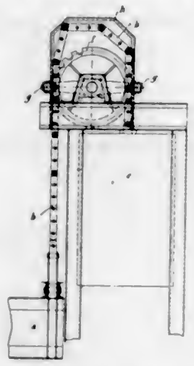
1,861,077. METHOD OF AND MEANS FOR CONTROLLING TRAINS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 29, 1931. Serial No. 547,530. 14 Claims. (Cl. 246—40.)



10. A track circuit system including: a track section composed of traffic rails, a normally closed track circuit supplying current to the rails in series, means governed by traffic conditions to take said current off the rails and to supply to said rails in series current of a character different from that normally supplied and also to supply current to the rails in parallel.

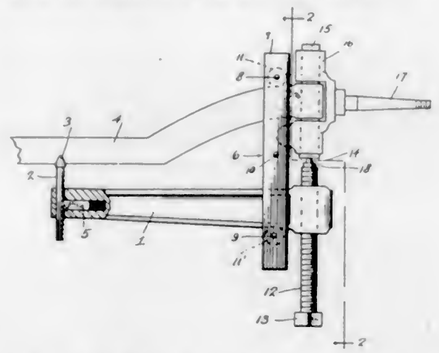
1,861,078. LIFTING DEVICE. HEINRICH BREITWIESER, Griesheim, near Darmstadt, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany, a Corporation of Germany. Filed Oct. 30, 1931, Serial No. 572,053, and in Germany Apr. 24, 1931. 1 Claim. (Cl. 61—28.)

A lifting device, especially for use in connection with sluice-like water closures, comprising, in combination with the closing member proper and a counterweight therefor, a joint rack connected at one end with said closing member proper and at the other end with said counterweight; a cog-wheel located at the place where the direction of the joint rack is reversed and being in engagement with the said rack at two diametrically opposite portions of its circumference; guide rolls located at said portions so



as to maintain the engagement; and a yoke located above said cog-wheel and being so shaped as to enable the rack to form an open loop above the said wheel.

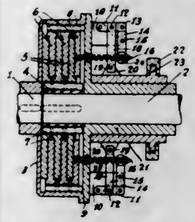
1,861,079. PIN AND BUSHING REMOVING TOOL. PINK T. BYNUM, Callihan, Tex. Filed Apr. 16, 1931. Serial No. 530,675. 3 Claims. (Cl. 29—85.)



1. A pin and bushing removing tool comprising a supporting hanger including a pair of spaced, parallel bars for disposition on opposite sides of a support, removable pins extending between the end portions of the bars, a fixed pin extending between intermediate portions of the bars, substantially conical pairs of rollers journaled on the first named pins, between the bars, the rollers constituting each pair having their small ends disposed adjacent each other, the rollers on the uppermost pin being adapted for rolling contact with the support, a beam slidable between the bars on the lowermost rollers, a jack screw threaded through one end portion of the beam for engagement with the pins and bushings, and means adjustably mounted on the other end portion of the beam and engageable with the support in a manner to retain the beam against swinging movement on the lower rollers when the jack screw is actuated.

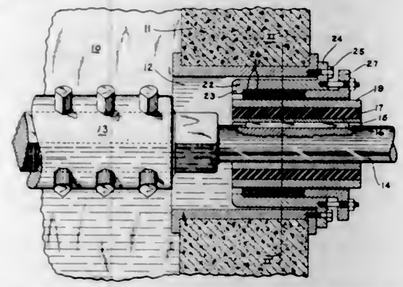
1,861,080. FRICTIONAL-PLATE CLUTCH. FRANK OSCAR LEVI CHORLTON, Bury, England. Filed Apr. 17, 1930, Serial No. 445,098, and in Great Britain Apr. 3, 1930. 2 Claims. (Cl. 192—69.)

1. In frictional-plate clutches employed for transmitting motion from one shaft or revoluble part to another shaft or revoluble part, springs about longitudinally movable rods passing into the clutch casing, said springs in direct contact with the outermost plate of the series in the clutch, and said rods connected to a linkage system



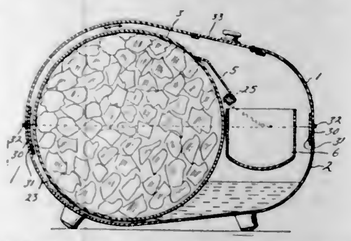
of the toggle class, whereby the rods and spring-pressed plates are locked in position for motion-transmission purposes, as herein set forth.

1,861,081. ASH DISPOSAL APPARATUS. ROBERT A. FORESMAN, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 26, 1930. Serial No. 455,790. 3 Claims. (Cl. 110—165.)



1. In ash disposal apparatus, the combination with a clinker pit including an upright wall having an opening therethrough and a grinder roll disposed within the pit and submerged in water and having a portion thereof extending through the opening in the wall; of an elastic sealing means for the grinder roll comprising a layer of elastic material surrounding the portion of said shaft extending through the opening and rotatable therewith, a metallic sleeve embracing and rotatable with the elastic material, and packing means engaging the outer surface of the metallic sleeve and closing the space between such sleeve and the opening in the wall structure.

1,861,082. ICE CREAM FREEZER. JOHN H. GARDNER and CHARLES A. SAWTELLE, Detroit, Mich., assignors, by direct and mesne assignments, to Gardner Freezer Corporation, Lancaster, Ohio. Filed Dec. 14, 1928. Serial No. 325,996. 10 Claims. (Cl. 257—98.)



2. In a freezer for ice cream and the like, the combination with a rotatable drum, of means for refrigerating one face of said drum, means for forming a frozen layer of liquid upon an opposite face of said drum, means for rotating the drum, a pivotal blade extending parallel to the axis of the drum and engaging the last-named face thereof for scraping off said layer, and a receiver for the scrapings removed by said blade, said blade being movable about its pivot into said receiver to pack the contents thereof.

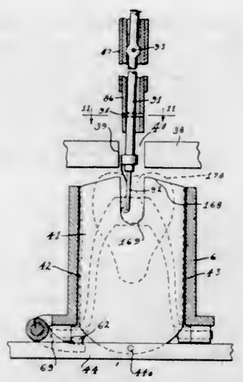
1,861,083. ELECTRICAL RECTIFIER. PAUL H. GEIGER, Wilkinsburg, and CHARLES KENNEDY STROBEL, Pittsburgh, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1929. Serial No. 335,990. 11 Claims. (Cl. 175—366.)



1. The method of making a rectifier for small currents, which consists in forming cuprous oxide on a copper blank, and then removing said oxide from all except a relatively small area of said blank.

7. The method of making a rectifier for small currents, which consists in placing a piece of paper on the oxide surface of a copper oxide rectifier, superposing on said first piece of paper a larger piece of paper soaked with paraffin, attaching the overlapping edges of the second piece of paper to the oxide surface by heating with a tube the inside diameter of which is slightly greater than the diameter of the first piece of paper, and treating the device with a solution which dissolves the exposed copper oxide but does not dissolve paraffin.

1,861,084. FRUIT PEELING MACHINE. HJALMAR GORANSON and DAVID GORANSON, San Jose, Calif., assignors to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed Aug. 25, 1928. Serial No. 302,042. 55 Claims. (Cl. 146—39.)



2. In a fruit peeling machine, the combination of a coring stem, means for advancing the coring stem along its own longitudinal axis, means for holding the fruit with its axis substantially coinciding with the longitudinal axis of said stem, said coring stem having a coring cutter at its forward end to penetrate to the center of the fruit, means for rotating the coring stem on its longitudinal axis, and means for expanding the coring cutter to enlarge the cavity produced by the same at the center of the fruit.

1,861,085. HAY FORK. JOHN N. GRABER, Mineral Point, Wis. Filed Jan. 14, 1931. Serial No. 508,647. 14 Claims. (Cl. 294—107.)



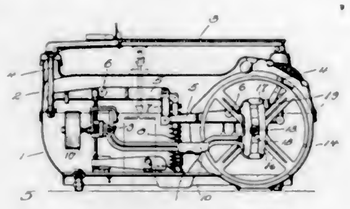
1. A drop-tine hay fork comprising, in combination, a head, a plurality of arms each having a tine pivoted at one end thereof, means latching said tines in transversely extending load-supporting positions on said arms, and means pivotally connecting the other ends of said arms to said head arranged to permit limited rotational movement of said arms about their longitudinal axes.

1,861,086. LOCK. JOHN GUTMANN, Jr., St. Albans, N. Y., assignor, by mesne assignments, to Motor Jack Corporation, New York, N. Y., a Corporation of New York. Filed June 7, 1929. Serial No. 369,111. 10 Claims. (Cl. 70—126.)



1. A locking device for shafts mounted for rotary movement, comprising a recessed disc fixed on each shaft, a lever having lugs to engage the disc, recesses simultaneously, a cam operable to press the lugs therein, and a key actuated lock to transmit motion to said cam.

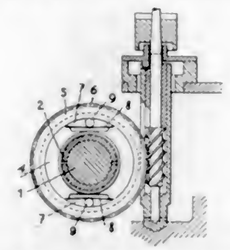
1,861,087. SCALE. NATHAN A. HALLWOOD, Columbus, Ohio. Filed Feb. 7, 1930. Serial No. 426,086. 2 Claims. (Cl. 265—39.)



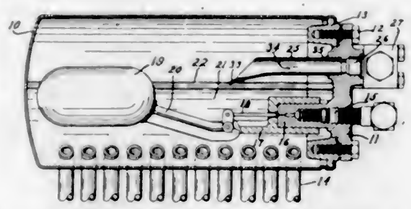
1. In a weighing scale, a housing, a shaft, bearings carried by said housing for the rotatable reception of the outer ends of said shaft, spaced drums carried by said shaft and rotatable in unison therewith, a pinion fixed to said shaft between said drums, a pivotally mounted arm arranged within said housing, an arcuate rack bar carried by said arm and arranged in engagement with the teeth of said pinion, and an arcuate guard member carried by said arm and arranged adjacent to said shaft on the opposite side of the latter as regards said rack bar.

1,861,088. COUPLING DEVICE. HERMANN HAMEL, Dresden, Germany. Filed Aug. 14, 1929, Serial No. 385,909, and in Germany Dec. 19, 1927. 1 Claim. (Cl. 192—44.)

In a coupling device for spindle driving wheels in spinning, twisting and winding machines provided, for each spindle, with a separate driving wheel, in which drive between a rotary driving and driven member is effected by a clamping effect caused by rolls and inclined surfaces, a driving member having a recessed periphery and bridges inserted in a chord-like manner in the recesses of the driving member, the said bridges consisting each of a flat leaf spring and serving as resilient abutments for freely movable coupling rolls rotating thereon.

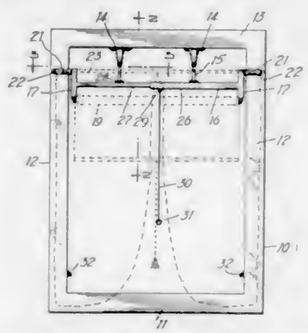


1,861,089. REFRIGERATING APPARATUS. FREDERICK J. HEIDEMAN, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,737. 5 Claims. (Cl. 62—126.)



3. An evaporator comprising a casing adapted to contain a quantity of liquid refrigerant, means for maintaining a substantially constant quantity of said liquid refrigerant in said evaporator, a second liquid adapted to be carried to said evaporator with said refrigerant, said casing having an outlet port for the evaporated refrigerant gas, conducting means extending from said outlet towards the surface of said second liquid and having an opening for the vaporized refrigerant, said opening being formed to provide a restricted area extending to a point adjacent the normal refrigerant level in said evaporator for drawing said second liquid therein by capillary attraction.

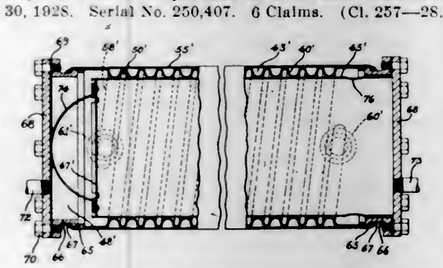
1,861,090. SHADE AND WINDOW BRACKET. HARRY R. HODGES, New York, N. Y. Filed Mar. 9, 1931. Serial No. 521,131. 1 Claim. (Cl. 156—27.)



In a device of the class described, a shade and window bracket comprising a sectional extendible rod adapted to be positioned crosswise between the jambs of a window

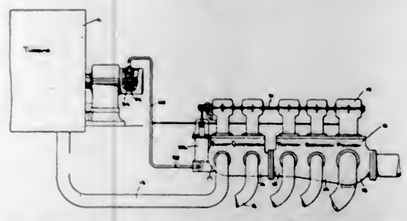
frame behind the plane of the front face of said frame and underlie the top piece of said frame, means adapted to be mounted on the underside of the top piece of the window frame for movably supporting said rod enabling the same to be raised and lowered while carried by said supporting means and with the rod directly below the supporting means so as to hang normally between the frame jambs, means on said rod substantially underlying the same for supporting a shade roller parallel and adjacent to said rod, and T-heads at the ends of the rod, one arm thereof extending forwardly adjacent the inner faces of the jambs and outwardly adjacent the front faces of the jambs and providing means at their further ends for supporting a curtain rod therebetween at a position above and in front of said extendible rod and window shade roller whereby those parts will be hidden by the curtain and the curtain will overlap the window jambs whereas the shade is between the jambs.

1,861,091. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,407. 6 Claims. (Cl. 257—28.)



1. A cooling element for refrigerating systems comprising a liquid reservoir having a helically corrugated wall of uniform thickness, a tubular member cooperating with the wall to form a helical passage for circulating fluid, and a second tubular member surrounding the corrugated shell and providing a second fluid passage.

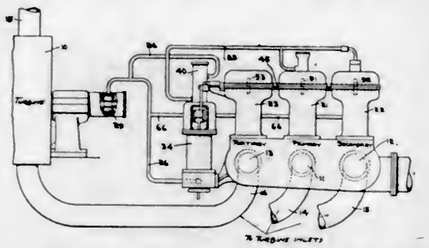
1,861,092. VALVE OPERATING MECHANISM. ANTHONY F. SCHWENDNER, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 28, 1930. Serial No. 498,796. 4 Claims. (Cl. 137—158.)



1. The combination with a plurality of valves, of mechanism for operating the same comprising a fluid pressure relay for each valve, a housing for each relay, a cam shaft extending through said housings and having a cam thereon in each housing controlling the relay therein, and a fluid pressure relay for actuating the cam shaft.

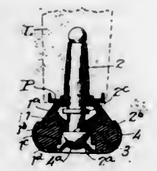
1,861,093. VALVE OPERATING MECHANISM. OZRO N. BRYANT, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 519,085. 5 Claims. (Cl. 137—158.)

1. The combination with a prime mover having a relatively small and a relatively large admission valve, of mechanism for operating said valves comprising a governor responsive to an operating condition of the prime mover, and means for simultaneously placing the large valve under regulation of the governor and closing the small valve upon movement of the governor



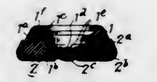
beyond a given point in valve-opening direction, and for simultaneously placing the small valve under regulation of the governor and closing the large valve upon movement of the governor in valve-closing direction a predetermined amount beyond said given point.

1,861,094. SLIDING CASTER. CLIFFORD A. SCHACHT, Huntington, Ind. Filed May 25, 1931. Serial No. 539,936. 5 Claims. (Cl. 16—42.)



1. A sliding caster comprising a body having a bore and a recess at the lower end of the bore; a pintle in said bore having an enlarged head disposed within said recess, a washer interposed between the head of the pintle and the upper end of the recess; and a shell mounted around the body having a seat for the head of the pintle.

1,861,095. SLIDING CASTER CUP. CLIFFORD A. SCHACHT, Huntington, Ind. Filed June 9, 1931. Serial No. 54,191. 11 Claims. (Cl. 45—137.)

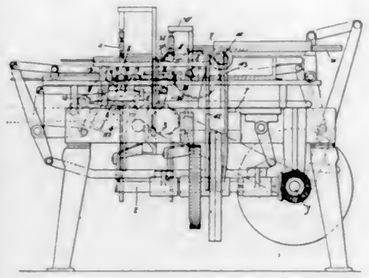


1. A yieldable insert for sliding caster cups comprising a relatively flat rubber body having a relatively shallow recess in its upper portion for loosely receiving a furniture leg and means in the recess for frictionally preventing the leg from sliding out of said recess.

1,861,096. MACHINE FOR WRAPPING AND TYING CYLINDRICAL BODIES. ARNOLD SCHLAEPFER, Neuhausen, near Schaffhausen, Switzerland, assignor to Schweizerische Industrie-Gesellschaft, Neuhausen, near Schaffhausen, Switzerland, and Leclanché S. A., Yverdon, Switzerland. Filed Aug. 31, 1927, Serial No. 216,703, and in Switzerland Sept. 3, 1926. 8 Claims. (Cl. 93—2.)

1. The process of wrapping a cylindrical body having a reduced neck at one end consisting in placing a piece of string across the bottom of the body longitudinally over the side-walls, forming several windings of the string around the said neck and thereby firmly securing one end

of the string making several windings on the mantle portion of the body and making a bond winding near the bottom end of the body, and securing the other end of the string by said bond winding.



2. A machine for wrapping cylindrical bodies with fabric, comprising a slide, means to bring the bodies one by one on said slide, means to bring a piece of fabric above the body on the slide, a second slide cooperating with the first said slide to grip the said body with the fabric thereon, means to cause said slides to lift said body, means to fold over the edges of the piece on the body, means to lead a string on to the body and means to wind a string on the body wrapped in the piece of fabric comprising two prongs adapted to grip the body and to turn and move it in the direction of its axis and relative to the means to lead the string and means to secure the free end of the string to prevent the loosening of the tie, the last said means comprising a hook, adapted to catch the endpiece of the string and to pass it below a binding coil.

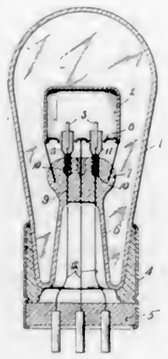
1,861,097. SELF ENGAGING SOCKET FOR RESILIENT STUDS. ERNEST D. SIMONS, Cheshire, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 23, 1931. Serial No. 564,069. 1 Claim. (Cl. 24—220.)



A socket element for separable fasteners, comprising a tubular barrel provided at one end with an outwardly extending flange and at its other end with outwardly extending prongs whereby it may be attached to an article, said prongs normally lying within the diameter of the barrel and deformable out of normal position into engagement with said article, said barrel provided with a constricted portion adjacent to said flange and forming a means for separable engagement with a complemental stud element.

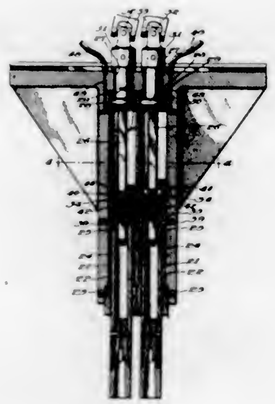
1,861,098. ELECTRIC DISCHARGE APPARATUS. CHARLES G. SMITH, Medford, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed June 13, 1927. Serial No. 198,399. 7 Claims. (Cl. 250—27.5.)

1. A gaseous conduction rectifier having a plurality of electrodes, one of which is a cold cathode, a press of insulating material, conductors sealed therein and extending therethrough, said electrodes connected to said conductors at one end thereof, said press having enlarged openings at the end adjacent the electrodes, each opening surrounding a conductor, a metallic shield embedded



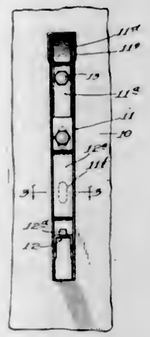
in certain of said openings, said shield extending from said openings up to the electrodes and surrounding the conductor and electrode.

1,861,099. MULTIPLE DRILLING MECHANISM. WALLACE W. SMITH, Chicago, Ill. Filed Jan. 25, 1930. Serial No. 423,439. 2 Claims. (Cl. 77—24.)



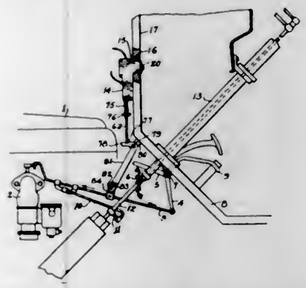
1. In a construction of the character set forth, the combination of a movable holder, a drill-rotating spindle formed of a drive section movable with said holder and a driven section driven by said drive section, said sections being relatively slidable, one of said sections containing an aperture and the other thereof a recess, a clutch member in the form of a ball located in said aperture and in one position of said driven section extending into said recess, and a sleeve slidable on said driven section and containing a recess which in the normal position of said sleeve relative to said driven section registers with said aperture and with the latter receives said ball to render it non-interlocking with said drive section, means for yieldingly holding said sleeve in normal position, said holder containing a recess in which said sections and sleeve are located, and means for directing fluid pressure against said sleeve to move it out of normal position.

1,861,100. SUPPORT. JACQUES STANITZ, Warren, Ohio, assignor to The Youngstown Pressed Steel Company, Warren, Ohio, a Corporation of Ohio. Filed Feb. 2, 1931. Serial No. 513,037. 4 Claims. (Cl. 248—20.)



1. A hanger, including; a vertical bracket adapted for attachment to a wall and provided on its face with a groove, said bracket being provided with side flanges pointed at the top to slant downwardly toward the wall; a cap member covering the upper ends of said flanges, said cap member having downwardly turned edges overlapping the sides of said flanges; an arm having a horizontal portion and a vertical portion adapted to fit in the groove of the bracket; means for attaching the bracket to a wall; and means for locking the vertical portion of the arm in the groove in the bracket.

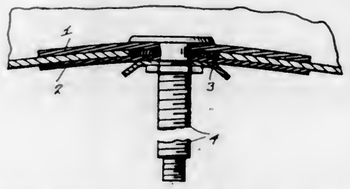
1,861,101. AUTOMOBILE THEFT PREVENTIVE SIGNAL. FRANK ST. GEORGE and FRANK W. CROSS, Boston, Mass. Filed July 22, 1929. Serial No. 380,145. 2 Claims. (Cl. 177—314.)



1. As an article of manufacture, a casing having a key-operated switch mounted on the wall of said casing, a key-hole in the said wall leading to the switch, a second switch and an audible alarm in the casing, means operable by an engine control member extending through the casing for operating the second switch, and outlets in the walls of the casing for said switch operating means, whereby tampering with the parts within the casing is prevented, and a circuit including said switches and alarm which cannot be closed without sounding the alarm when the key-operated switch is closed.

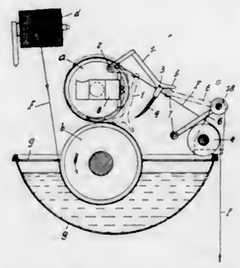
1,861,102. VALVE STEM PATCH FOR INNER TUBES. WILLIAM FRED TEER, Bucklin, Kans. Filed June 13, 1931. Serial No. 544,234. 1 Claim. (Cl. 152—13.)

A patch of the class described comprising an inner member and an outer member for receiving portions of a tube between them, the inner faces of said members having adhesive thereon whereby the inner member will adhere to the inner face of part of the tube and the outer member will adhere to the outer face of part of the tube, and a central disk-shaped member placed between the inner and outer members and of much less diameter than the two members for fitting in a hole in the tube, all of said member being formed of rubber, and said members having



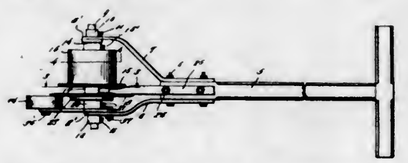
alined holes therein for receiving part of the valve stem, a fabric covering on the inner face of each of the inner and outer members for covering the adhesive thereon each cover having a circular hole therein for the passage of the central disk shaped member and a tongue formed on each cover and connected with a part of the walls of the hole for facilitating removal of the fabric cover from the member.

1,861,103. SPINNING MACHINE. MELCHIOR WILD, Lomazzo, Italy. Filed July 4, 1930. Serial No. 465,795. 2 Claims. (Cl. 117—30.)



1. In a stop motion for spinning machines, in combination with a lower roller having fixed bearings, an upper roller having vertically movable bearings and when lowered arranged to bear on the lower roller and a guide roller, a pivotally mounted guard arm arranged to bear on a thread at a point between the upper roller and the guide roller, and means to lift said guard arm, said guard arm having a pair of tongues between which the thread passes, said tongues being arranged, in the event of the breaking or slackening of the thread, to enter between the lower and upper rollers and thereby stop rotation of the upper roller and without removal of the thread from the upper roller, said guard arm being further provided at its free end with a projection for engagement by the lifting means.

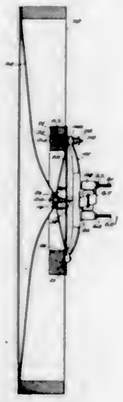
1,861,104. LAWN EDGE TRIMMER. ERNEST H. WOLF, Elgin, Ill. Filed Oct. 12, 1931. Serial No. 568,452. 2 Claims. (Cl. 97—227.)



1. A lawn edge trimmer of the class described including a shaft, a handle, means for rotatably mounting the shaft on the handle, a roller fixed to the shaft, a cutting

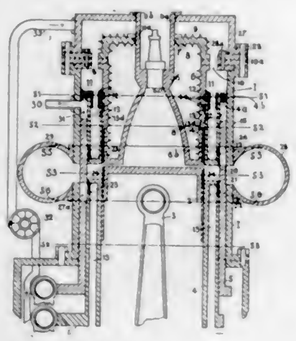
disk fixed to the shaft adjacent the roller, an annular outwardly directed flange on the roller at the side adjacent the disk, a plow shank fixed to the handle and extending forwardly to terminate adjacent the bottom of the disk, and a cleaner element having a shank fixed to the handle and extending forwardly to terminate between the guide flange and disk adjacent their upper portions.

1,861,105. LOUD SPEAKER. PAUL G. ANDRES, La Grange, Ill., assignor to Temple Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,421. 1 Claim. (Cl. 179—115.)



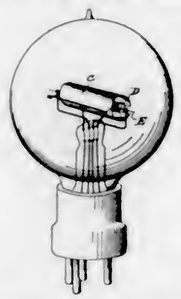
A sound reproducing device comprising a frame, a diaphragm extending across said frame, a second frame mounted on the first mentioned frame, a second diaphragm mounted on said second frame, a bracket having one of its ends secured to said second frame, a bolt secured to said second frame and extending through the other end of said bracket, a spring urging said bracket in one direction, a nut screw-threaded on said bolt and adapted to displace said bracket against the action of said spring, a sound reproducing unit mounted on said bracket intermediate its ends, said sound reproducing unit having an armature and means including a flexible member for operatively connecting said armature to said diaphragms.

1,861,106. INTERNAL COMBUSTION ENGINE. JEAN A. H. BARKEIJ, Los Angeles, Calif. Filed Dec. 26, 1925. Serial No. 77,803. 17 Claims. (Cl. 123—177.)



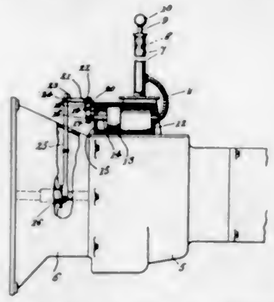
1. In an internal combustion engine, the combination of a cylinder, a detachable head for said cylinder, containing a space for a nonlubricating fluid and a separate space for a lubricating fluid, said spaces adjoining each other in said detachable head, substantially as shown and passages for said lubricating fluid in the cylinder wall.

1,861,107. THREE ELECTRODE VACUUM TUBE. JACQUES BIQUET, Lyon, France, assignor to Radio Corporation of America, of New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1921, Serial No. 496,554, and in France Oct. 23, 1915. 5 Claims. (Cl. 250—27.5.)



1. A three-electrode vacuum tube having a rectilinear filament, a helical grid surrounding said filament and a cylindrical plate surrounding said grid, a conductor arranged entirely outside of said plate for supporting the grid only at each of its extremities, and a lead-in wire connected to said conductor.

1,861,108. INTEGRAL CLUTCH AND TRANSMISSION CONTROL. EUGENE O. BRACE, Mayville, N. Y. Filed Jan. 24, 1930. Serial No. 423,123. 1 Claim. (Cl. 192—85.)



The combination with a gear shift transmission and a clutch operating member, a hollow gear shift lever, a manually operable plunger therein, a cylinder containing fluid, a tube communicating with the hollow gear shift lever and the cylinder, said fluid being controlled by the plunger in said hollow gear shift lever, a piston mounted in said cylinder, said piston being coupled to a piston rod for connection to the clutch operating member, said piston and piston rod being controlled by the movement of the fluid in the cylinder, a lever fulcrumed adjacent said cylinder and coupled loosely to said piston, a link loosely coupled to said lever, and a second elongated lever coupled to said link and to the clutch operating member.

1,861,109. HAIRPIN. JOHN D. CAMPBELL, New Rochelle, N. Y. Filed Oct. 13, 1931. Serial No. 568,599. 4 Claims. (Cl. 132—50.)

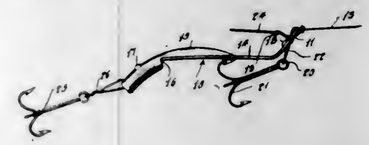
1. A hair pin comprising a pair of cooperating prongs connected at one end to move laterally apart substantially

at the place of connection, means exerting a cushioning stress tending to move the prongs toward each other, and means at the connected end of the prongs for moving the



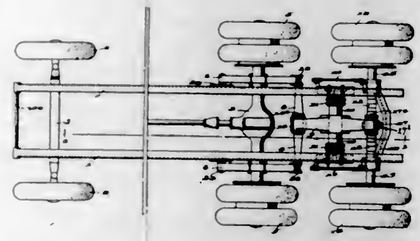
prongs apart against the cushioning stress, one of the prongs being formed with a spoon-shaped terminus located to receive the terminus of the other prong.

1,861,110. ARTIFICIAL FISH BAIT. WILLIAM M. CAMPBELL, Saginaw, Mich. Filed Apr. 25, 1929, Serial No. 358,061. Renewed Oct. 22, 1931. 3 Claims. (Cl. 43—42.)



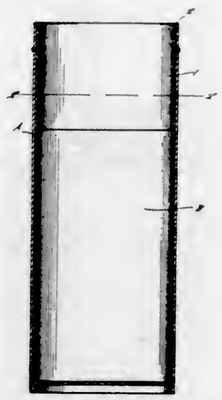
1. A bait of the class described having a body adapted to be drawn through the water, said body having openings therethrough, a wire coiled together intermediate of its ends providing an eyelet, the ends of the wire passed through said openings and again coiled together whereby it is attached to the body, said wire having terminals substantially in diverging relation above the body to form feelers, and a hook supported by said eyelet.

1,861,111. AUXILIARY AXLE ATTACHMENT FOR MOTOR VEHICLES. PAUL B. CASON, New Haven, Conn., assignor to The Cason Six Wheel Attachment Company, New Haven, Conn., a Corporation of Connecticut. Filed July 18, 1930. Serial No. 468,924. 11 Claims. (Cl. 280—104.)



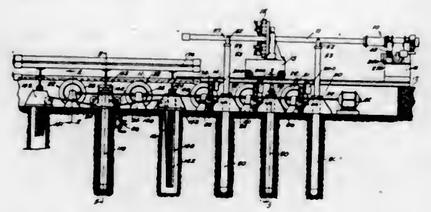
1. In a six-wheel attachment for vehicles, the combination of a frame, a rear axle, parallel side springs between said axle and frame, a longitudinal rocker arm fulcrumed intermediate the longitudinal members of the frame, of a cross member pivotally connected at a point intermediate its ends with the forward end of said rocker, shackles rigidly mounted on the rear ends of said springs and pivotally connected with said cross member, and a yielding connection between the auxiliary axle and the rear end of said rocker.

1,861,112. SANITARY SLEEVE FOR ICE CREAM AND OTHER CONTAINERS. CHARLES M. CHRISTIAN, Fonda, Iowa. Filed Feb. 20, 1931. Serial No. 517,321. 1 Claim. (Cl. 220—85.)



Means for holding the top part of a lining of a container for ice cream and the like in position after some of the contents of the container have been removed, and for preventing the arm of a person removing the contents comprising a split sleeve of resilient and flexible material, fitting in the upper part of the container and within the upper part of the lining, and having a rounded flange at its upper end fitting over the upper end of the lining and the container, said sleeve being of a length sufficient to extend well into the container to protect the arm or sleeve of a person removing the contents from the container.

1,861,113. APPARATUS FOR HANDLING PIPE. CLARENCE J. COBERLY, Los Angeles, Calif., assignor to Kobe, Inc., Huntington Park, Calif., a Corporation of California. Filed Feb. 4, 1930. Serial No. 425,836. 19 Claims. (Cl. 214—1.)

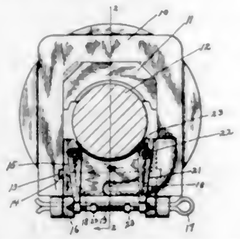


1. In combination with a machine for processing a length of material when positioned at a primary level, the combination of: a plurality of spaced conveyor elements for advancing said length of material toward said machine at a secondary level below said primary level; and a plurality of jacks for raising said length of material from said secondary level to said primary level, each of said jacks being positioned between adjacent conveyor elements.

1,861,114. LUBRICATING DEVICE. HARRY F. CUNNING, Roanoke, Va. Filed Sept. 21, 1927, Serial No. 220,975. Renewed Oct. 4, 1930. 6 Claims. (Cl. 308—88.)

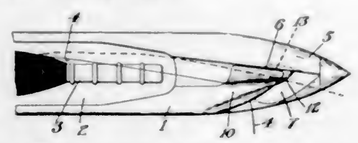
5. In a journal box, a lubricating cellar adapted to receive oil-waste, webs in said cellar forming a plurality of compartments extending along said journal, a pair of substantially vertical members arranged on each side of the journal and supported at each end by the end walls of

said cellar for compressing the waste therebetween whereby it will be held in contact with the journal, and recesses



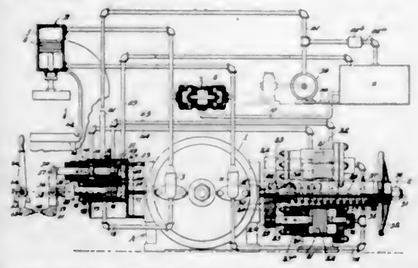
in said vertical members through which said webs pass, whereby said vertical members can extend downwardly into each of said compartments and compress the waste therein.

1,861,115. SHUTTLE. JEAN B. DAUDELIN, Fall River, Mass. Filed Aug. 13, 1929. Serial No. 385,617. 9 Claims. (Cl. 139—223.)



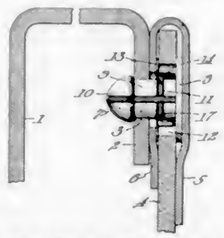
1. In a shuttle having a bobbin chamber and a threading eye and having a threading slot presenting a longitudinal portion extending forwardly of the shuttle from said chamber, and a downwardly and rearwardly extending portion connecting said forwardly extending portion with the outer end of said eye, a guide member lodged in the shuttle body inwardly of said threading eye and having its other end extending as a free bendable portion disposed adjacent the juncture of said slots with each other and in overlying relation thereto and effective in the threading action of the shuttle to deflect the thread from said longitudinal slot into said rearwardly extending slot and effective during the run of the threaded shuttle to prevent improper escape of the thread from said rearwardly extending slot.

1,861,116. CONTROL MECHANISM FOR PUMPS. WALTER ERNST, Mount Gilead, Ohio, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed May 2, 1931. Serial No. 534,626. 12 Claims. (Cl. 103—38.)



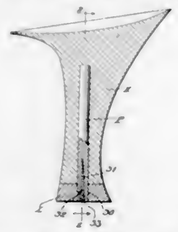
1. A control mechanism for a variable discharge pump of the type including a movable pump discharge control element, said mechanism comprising in combination with said control element; a power operated rod extending in the direction of movement of said control element; a movable abutment on one end of the rod and being positioned on one side of said pump control element, said control element being movable relative to said rod and abutment; a spring carried by said rod and yieldably urging said control element and abutment into engagement; and means for adjusting said spring.

1,861,117. SELF LOCKING FLOATING TRIM STUD. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 14, 1927. Serial No. 233,195. 3 Claims. (Cl. 24—213.)



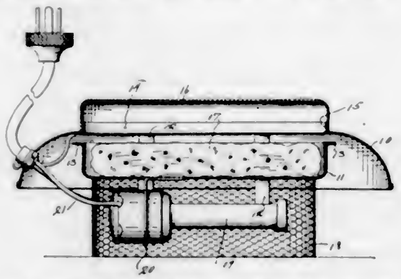
1. A self-locking floating trim stud, for assembly with a supporting element provided with a hole, said stud having a resilient head and shank and a base, the shank provided with a circumferential recess, the stud adapted to be assembled with the supporting element with its shank in said hole and its base and head at opposite sides of said element, the hole being of such diameter as to provide for lateral shifting of the shank therein, and a resilient washer adapted to be passed over the stud head and provided with an inturned lip for engagement with said recess, said base and washer acting in opposition to maintain said stud in laterally shiftable but relatively axially fixed relation to said supporting element.

1,861,118. HEEL LIFT AND ATTACHING MEANS THEREFOR. BENJAMIN GILOWITZ, New York, N. Y., assignor of one-eighth to Samuel Kravitz and one-fourth to Morris Bousel, New York, N. Y. Filed Mar. 28, 1931. Serial No. 526,079. 8 Claims. (Cl. 36—34.)



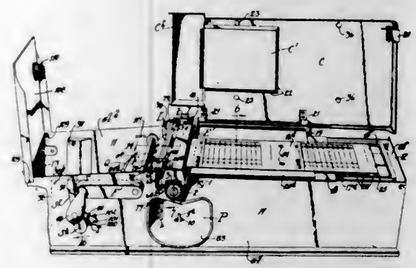
8. A heel-reinforcing metal dowel pin having a longitudinal flat-walled slot in its lower end, said slot opening through the lower extremity of said dowel pin and through opposite sides of the latter.

1,861,119. ELECTRICALLY HEATED BROODER. MORRIS HUNTER, Richmond, Va. Filed Apr. 4, 1931. Serial No. 527,835. 4 Claims. (Cl. 119—33.)



1. A hover of the character described, comprising a hood having downwardly extending side walls, the hood being formed with an opening in its top defined by an upwardly extending wall, a pan supported upon the hood below said opening, the pan having an outwardly extending flange at its upper edge spaced from the hood, the pan being adapted to contain an air moistening element, a cover adapted to fit over said flanges on the hood, an electrically energized heating element disposed immediately below and carried by the pan, and a wall of reticulated material extending downward from the pan and attached thereto, the wall constituting a support for the hover.

1,861,120. DUPLICATING MACHINE. LOUIS JENSEN, Chicago, Ill., assignor to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed July 2, 1928. Serial No. 289,821. 22 Claims. (Cl. 282—16.)



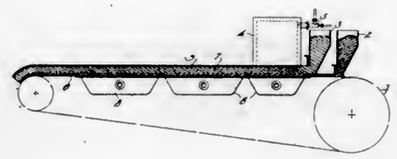
1. In a machine of the character set forth, a casing, a platen, mechanism for feeding punched strips across the platen, a register-finger yieldingly engaging the lower strip and adapted to engage the punch-holes, successively, a lever adapted to retract the register-finger, a hand-lever adjacent the outer surface of a side wall of the casing and having a shaft journalled in said side wall end equipped within the casing with an arm, and a link connecting said arm with said first-mentioned lever.

1,861,121. CLOSING DEVICE FOR ORGANISM CULTURE VESSELS. GERARDUS KAPSENBERG, Groningen, Netherlands. Filed Sept. 26, 1931, Serial No. 565,384, and in the Netherlands Sept. 23, 1930. 11 Claims. (Cl. 23—292.)



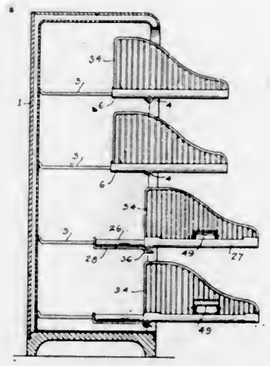
1. Closing device for culture vessels, such as culture tubes and flasks for microbiological research work, comprising a bell-shaped cap, and a spring device within said cap for fixing the cap on the vessel.

1,861,122. PROCESS OF ROASTING AND SINTERING PULVERULENT ORES HAVING A HIGH SULPHUR CONTENT. HANS KLENCKE, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1930, Serial No. 482,377, and in Germany Sept. 28, 1929. 2 Claims. (Cl. 75—60.)



1. In processes of blast roasting sulphide ores involving depositing a layer of the ore on a grate, igniting the surface of the deposited layer of ore and continuing the sintering of the ore by passing a current of air through the deposited layer, the step which consists in igniting the surface of the deposited layer of ore by burning powdered sulfid ore suspended in a blast of air in contact with said layer of ore whereby said powdered ore is deposited on said layer of ore and roasted and sintered.

1,861,123. REFRIGERATOR CONSTRUCTION. HERBERT KUCKEL, New Orleans, La. Filed Aug. 27, 1930. Serial No. 478,253. 9 Claims. (Cl. 312—177.)

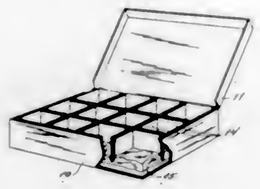


1. The combination, in a cabinet, of walls, rods detachably anchored to one of said walls, rollers under the free ends of said rods and mounted on walls, inner tubes slidably mounted on said rods, outer tubes slidably mounted on said inner tubes and supported on said rollers, and shelf supporting and retaining structures carried by said outer tubes.

1,861,124. BISCUIT PACKAGE. CHARLES LORBER, Louisville, Ky. Filed June 1, 1931. Serial No. 541,457. 1 Claim. (Cl. 99—10.)

A container of the class described having a flat tray like body having upright edges and adapted to contain a sheet of dough, crossing and interlocked partitions removably fitting in said body and of less height than the body and adapted to be inserted in the body with the

lower edges of the partitions forced into the dough sheet and the upper edges of the partitions in the plane of the top of the tray sides, and a cover for said container



engaging the upper edges of the partitions when closed and holding said partitions against rising under the influence of rising dough in said container.

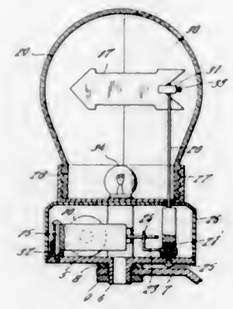
1,861,125. METHOD OF MANUFACTURING SILENT GEARS. ROBERT W. LYTLE, Cincinnati, Ohio, assignor to The Formica Insulation Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 11, 1930. Serial No. 488,123. 6 Claims. (Cl. 154—2.)



1. A process of making a silent gear which comprises: forming a skeleton comprising an annulus consisting of layers of fabric impregnated with a binder; forming a central spider consisting of layers of fabric impregnated with a binder, the spider being disposed within the annulus, with spaces intervening between the spider and annulus; introducing molding compound into said spaces; and molding the assembly under heat and pressure.

1,861,126. AUTOMOBILE DIRECTION INDICATOR. HARRY B. MCCAINE, Atlantic City, N. J. Filed Oct. 1, 1929. Serial No. 396,490. 1 Claim. (Cl. 175—337.)

In a directional signal, a base, a pair of opposed electric magnets clamped upon the base, an armature pivotally connected at one end to the base and extending between the magnet, springs connected with the pivoted end of the armature for holding the same in a central position between the magnets, a U-shaped member having the ends of its limbs fastened to the free end of the armature, a vertically arranged stem having its lower end rotatably supported on the base and an arm connected to the lower part of the stem having an upwardly extending portion

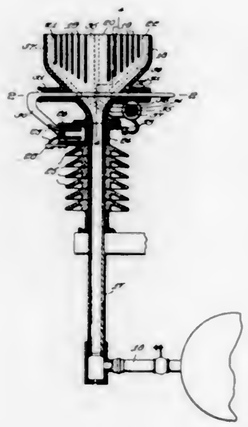


passing through the U-shaped member whereby the stem will be partly rotated and the armature is moved by either magnet.

1,861,127. INSECTICIDE AND LARVACIDE. FORREST B. MCLANE, Rivera, Calif. Filed Mar. 15, 1930. Serial No. 436,249. 3 Claims. (Cl. 167—34.)

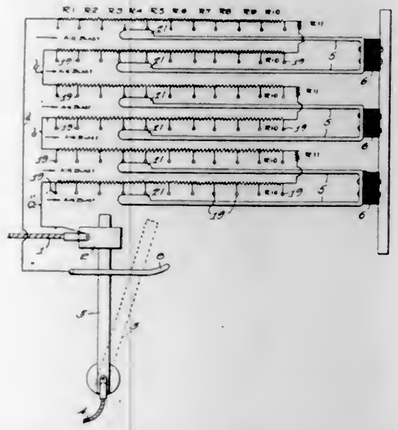
3. A combination insecticide and larvacide comprising nicotine sulphate, 5 to 10 lbs.; sugar, 2 to 5 lbs.; water, 2 to 8 lbs.; and diatomaceous earth, 75 to 100 lbs.

1,861,128. HIGH-POWER CIRCUIT-BREAKER. HUMPHREYS MILLIKEN, Montreal, Quebec, Canada. Filed Dec. 28, 1928. Serial No. 328,909. 2 Claims. (Cl. 200—148.)



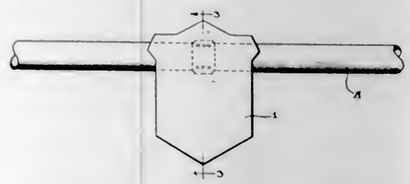
1. In a circuit-breaker, a blast-pipe having an insulator nozzle connected to its exit-end, and a pair of separable contacts whose contacting faces are located in said nozzle so that the arc formed when the contacts are separated shall be subjected to said blast entirely within the nozzle at a point distant from the exit-end of said nozzle, so that the arc will be confined by and attenuated within said nozzle, the side-walls of said insulator nozzle being depressed to bring them close together at one point to form a narrow air-gap within the nozzle, and an electro-magnet included in the circuit and having its pole-pieces extending longitudinally of the nozzle and lying in the aforesaid depressions in the nozzle.

1,861,129. CIRCUIT BREAKER. HUMPHREYS MILLIKEN, Montreal, Quebec, Canada. Filed Aug. 26, 1929. Serial No. 388,566. 4 Claims. (Cl. 200—144.)



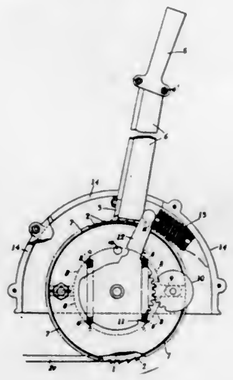
1. In a circuit breaker, a main circuit means including a main switch, a shunt circuit associated therewith and including a plurality of rows of resistors, each resistor having a stationary-contact, an insulating structure having open-ended air channels, one for each row of said stationary contacts, the contacts being located in the channels, the inlet ends of said channels being connected to an air-blast conduit, a conductor-bar adapted to pass into each of said channels and carrying a movable resistor-contact positioned to cooperate with said stationary-contacts as the conductor-bar is withdrawn from the channel to thereby successively cut in the resistors in the shunt circuit, and means whereby all said conductor-bars are quickly withdrawn from said channels in the direction of the air-blast upon the opening of the main switch, whereby a multiplicity of resistors are brought into action almost instantaneously after the opening of said main switch.

1,861,130. NAME PLATE ATTACHMENT. CHARLES F. MITCHEL, Rochester, N. Y., assignor to Bastian Brothers Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 16, 1931. Serial No. 581,430. 6 Claims. (Cl. 40—21.)



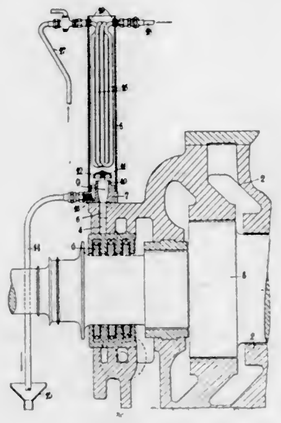
1. An attaching means for an emblem, name plate or the like comprising a clamp including a bendable strap, gripping means arranged between the ends of the strap and projecting from the latter, and means for restraining the ends of the strap in substantial parallel relation to thereby effect gripping means with the part of the support to which the attaching means is secured.

1,861,131. BRAKE FOR TRAILER VEHICLES. REGINALD WILLIAM NEATE, Kingston-on-Thames, England. Filed July 7, 1930, Serial No. 466,284, and in Great Britain July 10, 1929. 10 Claims. (Cl. 192—12.)



1. Brake controlling mechanism including a rotary drum movement of which operates the brake mechanism and means for moving said drum, in which the drum is free to be rotated in a brake applying direction but is normally prevented from rotating in a brake releasing direction by means of a friction brake, said friction brake being freed at will by reverse movement of the member operating the rotary drum.

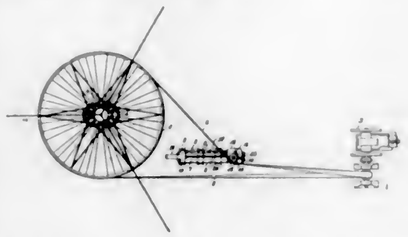
1,861,132. GLAND SUITABLE FOR TURBINE SHAFTS. CHARLES ALGERNON PARSONS, deceased, Newcastle-on-Tyne, England, by Katharine Parsons, Kirkwhelpington, England; Vincent Thompson, Newcastle-on-Tyne, and Frederick Gordon Hay Bedford, Wylam-on-Tyne, England, legal representatives. Filed May 23, 1931, Serial No. 539,622, and in Great Britain May 15, 1930. 3 Claims. (Cl. 286—9.)



1. Packing means for the shaft of a condensable elastic-fluid machine wherein it is desired to prevent waste of the actuating fluid, comprising a casing, a multi-stage gland in the wall thereof, a shaft passing through said gland to atmosphere, said gland reducing the pressure of said actuating fluid to substantially atmospheric pressure at a point intermediate the ends thereof, means for subjecting leakage of elastic fluid along said gland to a convection

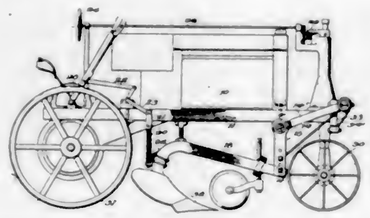
draught, said means including an upwardly extending pipe connected at its lower end to said point intermediate the ends of said gland and open at its upper end, and means for condensing condensable leakage fluid within said pipe.

1,861,133. BELT TIGHTENER AND GUIDE. JOHN REID, Oil City, Pa. Filed Dec. 27, 1929. Serial No. 416,073. 4 Claims. (Cl. 64—5.)



1. In a belt tightener, a guide frame, an idler pulley adapted to bear against the slack side of a driving belt, a feed screw for adjusting said pulley along said frame, spring means for pressing said pulley against said belt, and means for selectively rendering said spring means operative or inoperative.

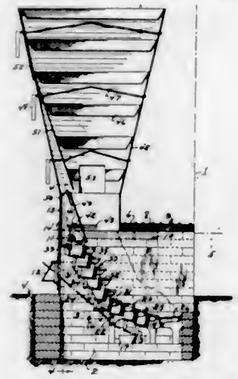
1,861,134. TRACTOR IMPLEMENT ATTACHMENT. CALVIN E. RICH and TYRA F. RICH, El Campo, Tex. Filed Mar. 10, 1931. Serial No. 521,581. 1 Claim. (Cl. 97—47.)



A frame and a pair of lister plows adapted to be applied to, and used with, a three-wheel type row tractor having a pair of rear driving wheels, said frame comprising transversely disposed elements adapted to be secured to the tractor, means adapted to have a swinging movement and connected to said frame, in combination with a pair of plow beams respectively connected to said means and extending in line in the direction of travel with the tread of the respective rear driving wheels of said tractor and in advance of said wheels, a pair of lister plows respectively carried by the respective plow beams, a pair of spacing bars respectively pivotally connected at one end to the respective plow beams and at their other ends to their respective adjacent sides of the tractor frame and functioning to maintain the respective lister plows in proper alignment with their respective driving wheels, and to prevent side slip of said lister plows while permitting said lister plows to be raised and lowered, and means for adjustively raising and lowering said lister plows.

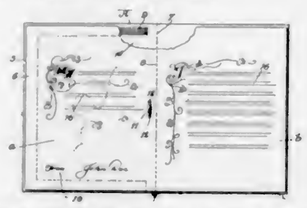
1,861,135. FURNACE CONSTRUCTION. HARRY R. RILEY, Bend, Oreg. Filed Dec. 3, 1928. Serial No. 323,291. 2 Claims. (Cl. 110—33.)

1. A fuel burning structure of the class described comprising a fire box, and an ash pit, upper and lower grate units located, respectively in the fire box and ash pit, each grate unit comprising side irons, the said side irons being inclined upwardly and forwardly, and each formed in its upper edge, with a series of concave recesses, grate bars extending, one behind another, between the side irons, each of said bars being provided, at its ends with trunnions seating in corresponding recesses in the side irons, each grate bar including a depending portion and a rearwardly extending portion at the upper edge of the de-



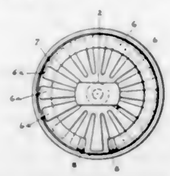
pending portion, the last mentioned portions having slots therein extending forwardly from their rearwardly edges, each of the depending portions having a forwardly extending flange, at its lower edge, and an arm extending downwardly from the flange, an actuating bar, and a pivotal connection between said bar and each of said arms, whereby the grate bars may be tiltably adjusted.

1,861,136. COMBINED GIFT HOLDER AND GREETING CARD. CARL RISTOW and MORITZ LESHEIM, Berlin, Germany, assignors to Robinson & Golluber, New York, N. Y., a Copartnership composed of Herbert Robinson and Otto A. Golluber. Filed Nov. 4, 1931. Serial No. 572,991. 1 Claim. (Cl. 281—31.)



In a device of the indicated character, a folder including two plies folded to form two approximately equal sections, the plies of one section being joined at the free marginal edges and secured together near the fold line to define a pocket therebetween, the outer ply of said pocket having a slit to receive therethrough a gift, a portion of which may be disposed within said pocket.

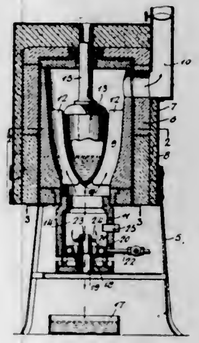
1,861,137. INDICATOR AND REMINDER. HYMAN A. ROSEN, Baltimore, Md. Filed Sept. 9, 1931. Serial No. 561,860. 4 Claims. (Cl. 40—70.)



1. An indicator device of the class described, comprising a body portion, a disk rotatably mounted thereon and having a plurality of relatively movable indicia carrying

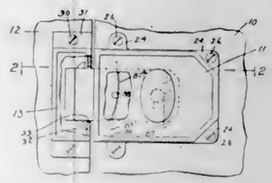
elements, and annular ledge means carried by the body portion adjacent the disk normally concealing the elements, and formed for cooperation with the disk for exposing selected indicia carrying elements above the ledge.

1,861,138. FRITTING FURNACE. JOHN F. RYAN, Woodbridge, and CHARLES STEGMAYER, Sewaren, N. J., assignors to The Mutton Hollow Fire Brick Company, Woodbridge, N. J., a Corporation of New Jersey. Filed Nov. 15, 1929. Serial No. 407,428. 2 Claims. (Cl. 263—14.)



2. A fritting furnace comprising a body, an apertured crucible in said body, a burner element beneath said crucible and having an opening therein through which material from said apertured crucible will flow, and a flame spreader supported by said burner element and also having an opening therein through which said material will flow.

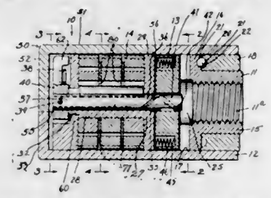
1,861,139. LOCK. MAURICE SAMBURG, Brooklyn, N. Y., assignor to Lock Patents Holding Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 2, 1928. Serial No. 316,746. 5 Claims. (Cl. 70—29.)



2. In a lock, a casing, a latch bolt mounted for reciprocation therein, a relatively strong spring normally maintaining said bolt in locking position, a bolt pivotally mounted on said latch bolt, a relatively light spring pressing against said pivoted bolt normally maintaining the same in locking position and means for successively moving said pivoted bolt and latch bolt to releasing position, said means including a member having a hook portion engaging said pivoted bolt and mounted for limited sliding movement with respect to said latch bolt.

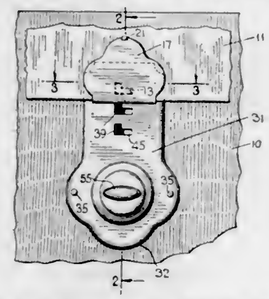
1,861,140. LOCK. MAURICE SAMBURG, Brooklyn, N. Y., assignor to Lock Patents Holding Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 8, 1928. Serial No. 317,940. 15 Claims. (Cl. 70—90.)

4. In a lock, in combination, a casing, a screw threaded nut member mounted on said casing for rotation thereon, said member being provided with a transverse groove, a grooved member secured to said casing, a key member



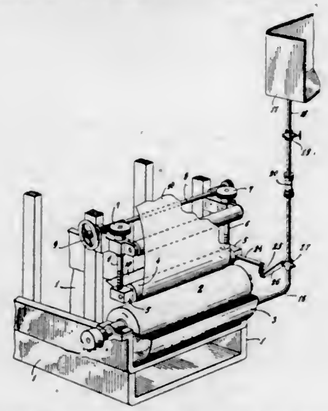
movably received within said grooves, and combination mechanism within said casing for controlling movement of said key member.

1,861,141. LOCK. MAURICE SAMBURG, Brooklyn, N. Y., assignor to Lock Patents Holding Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1929. Serial No. 332,089. 10 Claims. (Cl. 292—304.)



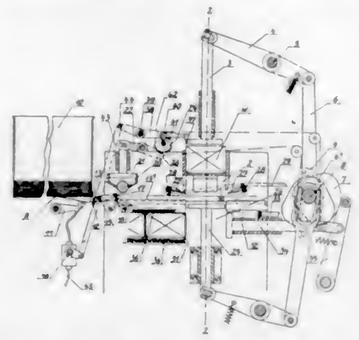
1. In a lock, in combination, a latch bolt, means for engaging said bolt to retain the same in locked condition, means for actuating said engaging means to release said bolt, and means associated with said engaging means for moving the bolt out of locked position.

1,861,142. APPARATUS FOR APPLYING REDUCING AGENTS TO PRINTING FOUNTAINS. PETER SCHERRER, Brooklyn, N. Y. Filed Apr. 14, 1931. Serial No. 529,910. 5 Claims. (Cl. 101—157.)



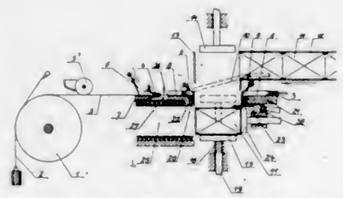
1. In printing presses and in combination with a printing cylinder, of an ink fountain, within which the cylinder projects, a wiper, a reducer tank, a conduit communicating with the reducer tank and the fountain, and means whereby the flow of reducer to the fountain may be controlled.

1,861,143. MACHINE FOR APPLYING EDGING STRIPS TO CARTONS AND THE LIKE. JOHANNES SCHMIEDEL, Dresden, Germany, assignor to the Firm Universelle Cigarettenmaschinen-Fabrik, J. C. Müller & Co., Dresden, Germany. Filed July 7, 1930, Serial No. 465,859, and in Germany July 11, 1929. 8 Claims. (Cl. 216—53.)



1. In a machine for edging cartons and in combination a machine frame, a trough for holding cartons arranged on end, a second trough for holding cartons arranged on end, the open mouths of the two troughs being opposite one another, two passages, one in front of each trough mouth, two magazines for holding edging strips wherein the strips are held at their edges, means for transferring a strip from each magazine, means positioning said strip over one of the said passages and reciprocating plungers for transferring a carton from each trough into the adjacent passage in contact with the strip simultaneously.

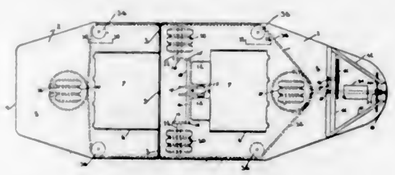
1,861,144. METHOD OF AND APPARATUS FOR APPLYING SEALING STRIPS. JOHANNES SCHMIEDEL, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik, J. C. Müller & Co., Dresden, Germany. Filed July 31, 1930, Serial No. 472,025, and in Germany Aug. 8, 1929. 4 Claims. (Cl. 216—22.)



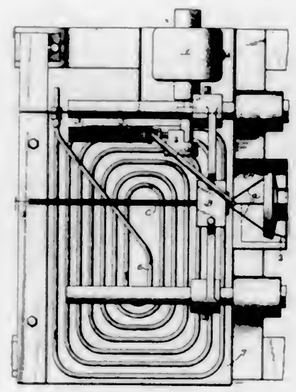
1. In apparatus for applying sealing strips to containers, reciprocating gripping means for seizing the free end of a continuous strip, means for rendering the strip adhesive, a channel into which the strip is drawn by the grippers to a predetermined position, controlled means extending into said channel to hold the strip in a predetermined position, means for pressing a container against the strip in its predetermined position, so that the strip is applied partially round the container, means for severing the strip from the reel after it has been applied partially round the container, a horizontal passage and means for forcing the container with the severed strip adhering thereto into said passage to cause the free ends of the severed strip to adhere to the container.

1,861,145. TRUCK. WILLIAM H. SOMMER, Peoria, Ill. Filed July 19, 1930. Serial No. 469,067. 6 Claims. (Cl. 180—60.)

1. A warehouse truck having a low center of gravity and comprising two sections of unequal length flexibly coupled in close relationship whereby to provide a substantially continuous material supporting surface, the longer section including the propelling and steering means and the shorter section being the trailing section, aligned supporting and propelling wheels located approximately centrally of the length of the truck and below the inner end of said longer section, a supporting and steering wheel below the outer end of each section and aligned centrally longitudinally of the truck, flexible steering connections between said last mentioned wheels, and means located on the longer section for actuating said steering connections, said actuating means including dual elements whereby an operator may handle the truck when facing in opposite directions.



1,861,146. LUBRICATING DEVICE. WILLIAM H. SOMMER, Peoria, Ill. Filed Oct. 13, 1930. Serial No. 488,361. 3 Claims. (Cl. 117—2.)

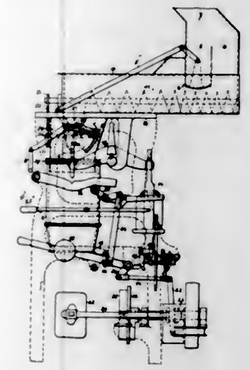


1. An oiling unit for lubricating the wires of stranding and cabling machines, comprising a container for the lubricant, a heating coil on the bottom of the container, a pump within the container disposed above said coil, a strainer connected with the inlet end of the pump, a feeder having a detachable connection with the delivery end of the pump and having its discharge end above and pointing in the direction of the container, and a control valve for regulating the flow of lubricant through the feeder.

1,861,147. AUTOMATIC SACKING BALANCE WITH A CONVEYING AND A PACKING MECHANISM. PETER STEIMEL, Hennef-Sieg, Germany. Filed May 10, 1928, Serial No. 276,789, and in Germany June 16, 1924. 10 Claims. (Cl. 249—60.)

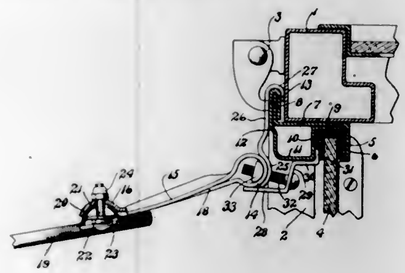
1. An automatic sacking and weighing machine having a conveying and packing attachment, comprising a gate at the receiving end of the conveyor, a second gate operatively connected to the first gate and disposed at the discharge end of the conveyor to reduce the discharge there-

of, and means operatively connecting the weighing mechanism and gates, whereby the second gate is brought into closed position when an approximate balance is attained



and the first gate is opened simultaneously to admit further material to reach the conveyor and sacking mechanism to bring about a perfect balance.

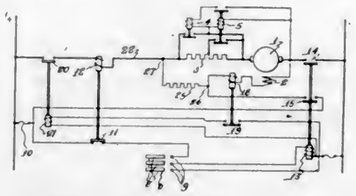
1,861,148. MIRROR BRACKET. FLOYD G. WITHROW, Grand Rapids, Mich. Filed Nov. 11, 1929. Serial No. 406,213. 4 Claims. (Cl. 248—20.)



1. In combination, a supporting arm having a cylindrical portion with a longitudinal opening therethrough, two attaching members located each at one end against the cylindrical portion of the arm and formed at their opposite ends for connection with an automobile door, a bolt passing through said attaching members and through the cylindrical end of said arm, and a bar having a threaded opening therethrough located within the cylindrical portion of said arm and bearing against the inner side thereof through which said bolt threads, for the purpose described.

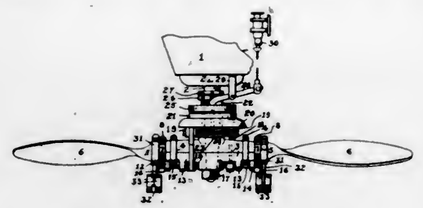
1,861,149. MOTOR CONTROL SYSTEM. CLAUDE O. WOOD, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1929. Serial No. 392,208. 5 Claims. (Cl. 172—179.)

1. In a motor control system, the combination of a source of power, a motor having an armature and a shunt field winding, a main line circuit leading from said source of power to said armature including a positive and negative conductor, a control switch for connecting said shunt field winding to the source of current supply, a low voltage relay having an operating coil connected in series with said shunt field winding, automatic operable means connected with said relay and actuated by said relay for connecting said armature to said source of power when the current in said shunt field winding has reached a certain predetermined normal value, and disconnecting said armature from the source of power supply when the current in said shunt field winding has been reduced below said predetermined normal value, and



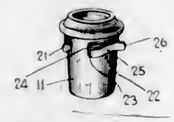
means for absorbing the electrical energy of said shunt field as said armature is disconnected from the source of power comprising an electrical current-absorption means connected from said shunt field winding to the positive conductor of said main line circuit leading to said armature.

1,861,150. VARIABLE PITCH PROPELLER MECHANISM. JOHN RAPP ZIPAY, Pittsburgh, Pa. Filed Apr. 21, 1931. Serial No. 531,711. 14 Claims. (Cl. 170—163.)



1. In a variable pitch propeller mechanism for aeroplanes and like purposes, the combination with the propeller shaft, a propeller bushing fixed on said shaft and disposed transversely thereof, propeller blades having their stems journaled in the bores of said bushing, and a member mounted to slide longitudinally of said propeller shaft but rotating therewith, of operative connection between said member and said propeller blades whereby the movement of the member relative to said shaft causes said blades to rotate on their axes relative to the bushing, said connection consisting of shafts journaled on said bushing and revolving therewith about the axis of the propeller shaft, geared connection between said last mentioned shafts and the stems of the propeller blades, and crank and link connection between said last mentioned shafts and said member whereby the movement of said member relative to the propeller shaft causes said last mentioned shafts to rock and thus rotate the propeller blades on their axes.

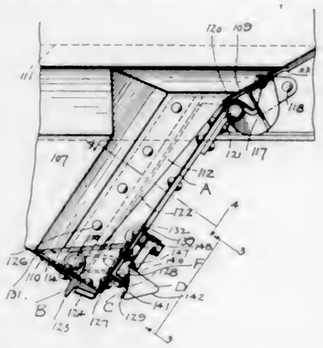
1,861,151. LAMP SOCKET CLIP. ABRAHAM L. BUSCHMAN, New York, N. Y. Filed Oct. 20, 1930. Serial No. 489,825. 4 Claims. (Cl. 24—81.)



4. In combination, a lamp socket and a clip therefor having a split circular portion disposed about said socket, and a bent back portion forming a loop with said circular

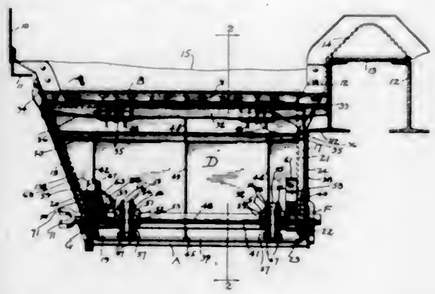
portion, said circular portion having an outwardly curved end portion, said loop having a portion symmetrically disposed relative to said end portion and spaced therefrom, said loop further having a portion contacting said circular portion and terminating in a portion flaring away from said circular portion.

1,861,152. DOOR LOCKING MECHANISM FOR RAILWAY CARS. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1931. Serial No. 550,300. 13 Claims. (Cl. 105—308.)



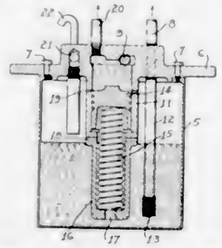
1. In a railway car, the combination of a hopper including side walls and a bottom wall; of a discharge door pivotally mounted adjacent the upper portion of the hopper and having an opening adjacent the free edge thereof; and a shouldered locking member pivotally mounted within the hopper and having a portion extending through the opening in the door, said portion having a shoulder for cooperation with a member on the outer side of the door for maintaining the door in closed position.

1,861,153. DUMP CAR CONSTRUCTION. GEORGE B. DOREY, Evanston, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1930. Serial No. 477,270. 10 Claims. (Cl. 105—308.)



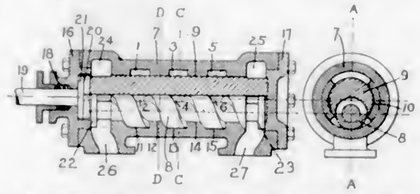
1. In a railway car, the combination of a door movably mounted and adapted to be latched in fixed relation to a retaining bracket mounted independently of the door, said bracket having a shoulder and a beveled approach leading thereto, a bodily movable latch member adapted to assume a normally locked position and having a projecting portion adapted to engage with the beveled approach of the bracket to displace said latch from its normally locked position, said latch member being adapted to be moved by rotation thereof, inner and outer guide walls between which said latch member is mounted, and means for controlling movement of the latch member on rotation thereof, said means including a link pivoted to the latching member and to means disposed in fixed relation to the door, the pivotal points of said link being disposed in such relation to the guides and latch member as to provide substantially for a rolling contact between the latching member and the said guide walls during initial displacement of the latch member from its normally latched position.

1,861,154. FLUID PRESSURE ACCUMULATOR. NEAL W. DORMAN, Toledo, Ohio, assignor to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 2, 1931. Serial No. 527,226. 8 Claims. (Cl. 103—222.)



1. A fluid pressure accumulator comprising a reservoir, a cover for said reservoir formed with a cylinder depending within the reservoir, said cylinder having an inlet and outlet through the cover, a head at the lower end of the cylinder having a vent, a piston within the cylinder, and an expansile spring between the head and the piston.

1,861,155. SCREW PUMP. EDWIN RUST DOUGLAS, Baltimore, Md., assignor of one-half to Harry Barker, Montclair, N. J. Filed June 7, 1929. Serial No. 369,037. 9 Claims. (Cl. 103—143.)

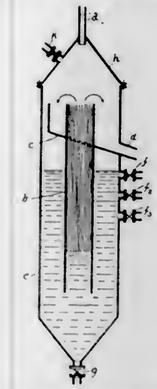


1. A screw pump having a threaded screw member eccentrically positioned within and meshing with an internal thread of an enclosing member having an internal diameter relatively greater than the outer diameter of the screw and in which the space between the screw and the internal thread is filled by a rotor member, characterized in this; that the contours of the intermeshing threads are pairs of curves which are the intersection of a longitudinal axial plane with pairs of intermeshing helical surfaces generated by twisting about their respective axes an internal gear and its intermeshing pinion whose tooth surfaces are of that particular class that make continuous tangential surface contact with each other from their first to their final contacts.

1,861,156. APPARATUS FOR THE SEPARATION OF FINELY DIVIDED SUBSTANCES. RUDOLF FAHR and RUDOLF KEINKE, Neuroessen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 27, 1929, Serial No. 395,718, and in Germany Oct. 20, 1928. 2 Claims. (Cl. 209—168.)

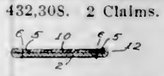
1. An apparatus suitable for the separation of finely divided solid substances from liquids, which comprises a mantle vessel, a pipe the length of which is several times as great as its diameter, vertically arranged in said vessel,

an overflow collector arranged around and near the upper end of said pipe, an injector pipe vertically arranged and ending at some distance above the upper end of said pipe,



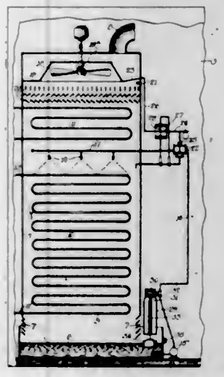
and an overflow in the wall of said vessel at a level substantially below the upper end but above the lower end of said pipe.

1,861,157. BALL. JOHN H. GRADY, St. Louis, Mo., assignor to J. H. Grady Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 1, 1930. Serial No. 432,308. 2 Claims. (Cl. 273—60.)



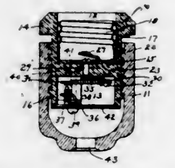
1. A prepared cover blank for a ball comprising a hide blank having its marginal edge folded back upon itself and hemmed to the inner side of the blank and a filler secured to the inner side of said blank, the edge of said filler abutting against the free edge of the folded-back marginal portion of said blank and said filler having a thickness equal to that of the folded-back marginal portion.

1,861,158. AIR CONDITIONING SYSTEM. GEORGE HILGER, Chicago, Ill. Filed Jan. 6, 1930. Serial No. 418,673. 8 Claims. (Cl. 261—11.)



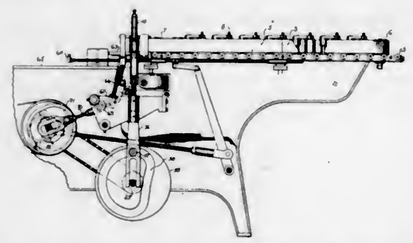
1. In a system of the character described, the combination of a storage compartment, an air conditioning compartment communicating with said storage compartment, means for circulating air through said compartments, means for humidifying the air circulated, and means responsive to humidity changes in the storage compartment for by-passing within said air conditioning compartment and relative to said humidifying means a portion of the air circulated.

1,861,159. ELECTRIC SIGN-SOCKET FLASHER. LOUIS LUDWIG, Brooklyn, N. Y. Filed Jan. 22, 1931. Serial No. 510,456. 5 Claims. (Cl. 200—122.)



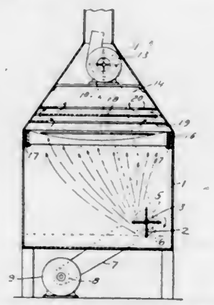
1. In a device of the class described, a socket member having one end adapted to receive an electric lamp and the other end provided with a chamber, a thermostatic switch contained in said chamber for interrupting the current passing through the lamp, a head of enlarged diameter formed on the socket member, a thread provided on the body of the socket member, and an internally threaded cap which in combination with said head forms a means for securing the device to a suitable support.

1,861,160. MACHINE FOR HANDLING BUTTER PRINTS. HOWARD A. MORRIS, Toledo, Ohio, assignor to The Automat Molding & Folding Company, Toledo, Ohio, a Corporation of Ohio. Original application filed July 8, 1930, Serial No. 466,394. Divided and this application filed Sept. 18, 1931. Serial No. 563,602. 3 Claims. (Cl. 31—20.)



1. In a machine of the class described, a feeder for advancing a slab of butter or the like, a device operable intermittently to sever a predetermined amount from said slab, an elevator to receive the severed quantity, and lever means operable to shift said elevator away from said feeder at an angle less than a right angle to the plane of severance in a substantially vertical direction to prevent the severed quantity from adhering to the remainder.

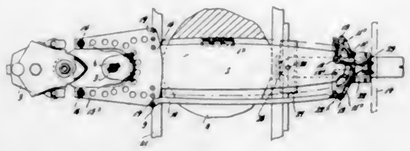
1,861,161. ETCHER SLIDE. FRANK T. POWERS, Douglaston, N. Y. Filed Sept. 4, 1931. Serial No. 561,131. 3 Claims. (Cl. 41—9.)



1. In a machine for etching photo-mechanical printing plates, the combination of a receptacle for the etchant, a spray producing means, a cover to confine the spray, and

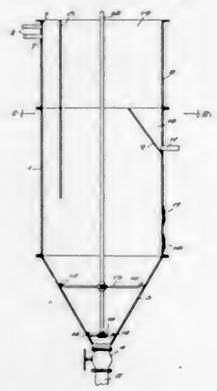
a movable plate supporting member, which is characterized by having a plurality of cross members of thin material positioned with their sides parallel to the planes of travel of the sprayed etchant and having depressed upper edges adapted to support the plates by contacting only with their opposite edges, substantially as described.

1,861,162. PORTABLE LINK SAWING MACHINE. HENRY QUIST, Brooklyn, N. Y. Filed Feb. 17, 1932. Serial No. 593,442. 5 Claims. (Cl. 143—32.)



1. In portable link sawing machines, a motor and motor frame connected thereto, a saw frame, a saw having operative connections with the motor and guided within the frame, a guide plate carried by the motor frame, a bracket carried by the saw frame at the end thereof opposite the motor frame, a bar adjustably supported by the bracket, and a supporting plate for the saw frame carried by the bar and movable therewith to various positions lengthwise of the saw frame.

1,861,163. SEPARATOR. THOMAS RAY and JOSHUA R. RAY, Manistee, Mich. Filed Dec. 19, 1927. Serial No. 241,049. 7 Claims. (Cl. 209—159.)



1. In a device of the class described, a casing having a converging bottom, a conduit extending longitudinally and substantially centrally of said casing, means for separating material adhering to said converging bottom, said means including a plurality of radial jets communicating with said conduit and having upwardly opening outlets adjacent the wall of said converging bottom disposed adjacent the opposite ends of said converging bottom, said casing having an outlet disposed beneath said jets, and valve means for controlling the passage of material through said outlet.

1,861,164. THERMOMETER. CHARLES S. RUCKSTUHL, St. Louis, Mo. Filed Apr. 23, 1927. Serial No. 185,947. 1 Claim. (Cl. 73—32.)

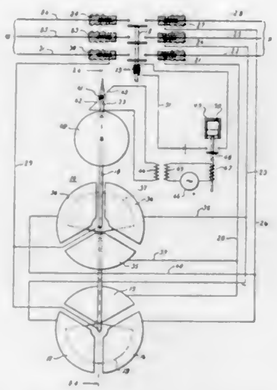
A thermometer comprising a sector shaped stem with its apical edge formed into a lens and have embedded therein narrow flat bands of colored glass which extend substantially parellel with the flat sides of said stem throughout the length of said stem, the front margins of said bands outlining said apical lens and the rear margins located short of lines extending from the mercury thread perpendicularly to the flat sides of said stem, said narrow bands constituting the only obstruction to light through the flat sides of said stem.



1,861,165. MASKING CREAM. EDWARD J. RYAN, St. Louis, Mo., assignor of two-fifths to Frank J. Kuna and one-fifth to Henry J. Lorang, St. Louis, Mo. Filed Sept. 19, 1931. Serial No. 563,901. 1 Claim. (Cl. 134—1.)

A masking cream consisting of the following ingredients combined in substantially the proportions indicated, namely, glycerine, 6 ounces, water, 8 ounces, by measure; and whiting, 32 ounces, salt ½ ounce and ochre, ½ ounce, by weight.

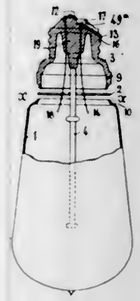
1,861,166. SYSTEM AND APPARATUS FOR SYNCHRONIZING POLYPHASE LINES. FRITZ SIEBER, Baden, Switzerland. Filed Dec. 10, 1928. Serial No. 325,110, and in Germany Dec. 24, 1927. 15 Claims. (Cl. 171—118.)



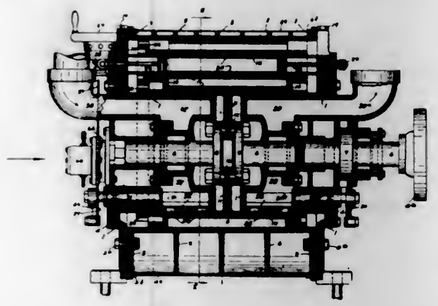
10. In the art of synchronizing polyphase lines, the method which comprises deriving a rotating electostatic field from one of said lines and subjecting to the influence of said field an electrostatic force corresponding to conditions of frequency in another of said lines.

1,861,167. BULB, TUBE, OR OTHER HERMETICALLY CLOSED RECEPTACLE FOR INCANDESCENT ELECTRIC LAMPS AND SIMILAR DEVICES AND PROCESS OF MANUFACTURE OF THE SAME. LEOPOLDO SANCHEZ VELLO, Paris, France. Filed Oct. 21, 1922, Serial No. 596,172, and in Spain Oct. 29, 1921. 6 Claims. (Cl. 176—37.)

1. A process for making an electric hermetically closed vessel, comprising the steps of blowing a glass bulb having one end open, moulding a solid head having socket engaging means and filament supporting means of a single mass of vitreous material, and with leading-in wires and contacts encrusted in the mass, mounting a filament on the filament supporting means of the head, and in electrical connection with said leading-in wires and contacts, and uniting the blown bulb and moulded head by means of a vitreous joint of greater fusibility than either of said parts, and in such manner that said head closes the open end of the bulb, the air content of the device being treated as required.



1,861,168. ROTARY ENGINE. EDWARD C. WARREN, JOSEPH HAY AMIES WARREN, and WOODRUFF WARREN, Annapolis, Md., assignors, by mesne assignments, to Warren Engine Company, Wilmington, Del., a Corporation of Delaware. Filed July 23, 1928, Serial No. 294,840, and in Canada, Great Britain, and Italy July 16, 1928. 5 Claims. (Cl. 121—71.)



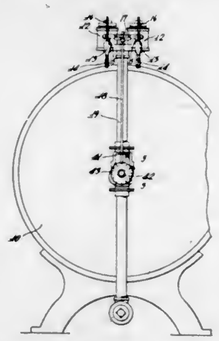
1. In a rotary engine, the combination with a hollow conical fluid pressure chest having pressure ports in its circumference, and a hollow conical fluid exhaust chest having exhaust ports in its circumference; of respective valve means in said chests movable with respect to the ports thereof for controlling said chest ports; of means, including a casing between said chests, rigidly connecting them in axial alinement, with their smaller ends adjoining each other and in spaced relation; the inner surface of said connecting casing member being conical and with its smaller end connected with said exhaust chest; said casing member having a circular series of enlargements extending outwardly from its inner conical surface for housing respective rotary abutments; a rotary shaft comprising two sections respectively journaled in said pressure chest and in said exhaust chest in coaxial relation therewith; a circular rotor having a central web and hub rigidly connected with and between said shaft sections; said rotor having its inner surface oppositely conical at its opposite ends and respectively fitted to said pressure chest and exhaust chest, and having at its opposite ends outwardly extending conical flanges fitted to the inner conical face of said casing member connecting said chests; said rotor having an outer cylindrical surface between its said conical end flanges; a circular series of vanes carried by said rotor in the space between its conical end flanges and fitted at their outer surfaces to the inner conical surface of said casing member; said rotor having pressure ports and exhaust ports upon respectively circumferentially opposite sides of said vanes, adapted to respectively register with the pressure ports in said pressure chest and with the exhaust ports in said exhaust chest; respective abutment shafts fixed in said enlargements; means for adjusting said abutment shafts toward the axis of said rotor; means for preventing rotation of said shafts, including lubricant pipe connections extending in the opposite ends thereof and respectively in communication with the surfaces of said shafts; rotary cylindrical abutments respectively journaled in said casing enlargements on said abutment shafts with their peripheries extending in cooperative relation with the cylindrical outer surface of said rotor between the conical flanges on the latter, and each having a tooth groove for rotary engagement with said vanes; a sun gear rigidly connected with said rotor; planetary gears respectively rigidly connected with said rotary abutments and in mesh with said sun gear; whereby, said abutments are positively rotated, in connection with said rotor, and maintained in cooperative relation with said vanes.

1,861,169. CAMERA ATTACHMENT FOR TITLING PICTURES. WILLIAM M. WHITLOCK, Scarsdale, N. Y. Filed May 21, 1931. Serial No. 538,914. 8 Claims. (Cl. 88—24.)



1. A picture titling device for cameras, comprising a housing adapted to be attached to a camera, an extensible arm having a plurality of telescoping links adapted to be collapsed inside said housing or drawn out in front of the camera, a recess in one of said links, and a card holder hinged to the recessed link and adapted in one position to lie parallel to the plane of the camera lens, and in another position to lie in said recess so as to fit into said housing when the arm is collapsed.

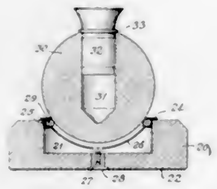
1,861,170. VALVE TRIPPING MECHANISM. THOMAS J. YATES, Salem, Mass., assignor to Yates Machine Company, Salem, Mass., a Corporation of Massachusetts. Filed Mar. 21, 1929, Serial No. 348,968. Renewed Oct. 19, 1931. 2 Claims. (Cl. 221—101.)



1. A mechanism of the class described comprising a fixed shaft, a paddle wheel having paddles loosely mounted on said shaft, a cam shaft, a cam frictionally mounted

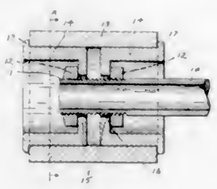
thereon for adjustive rotation relative thereto, gearing operatively connecting said wheel and cam shaft, a follower bearing on the cam surface of said cam, and means for directing a stream of fluid against said paddles to rotate said wheel.

1,861,171. PENHOLDER. OTTO ZIMMERMANN, Hanau, Germany. Filed May 24, 1929. Serial No. 365,623. 1 Claim. (Cl. 120—108.)



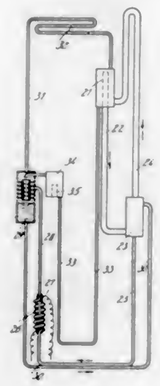
A pen holder comprising a base having an open shallow concavity, substantially less than a semi-sphere, in the upper surface thereof, a metal insert mounted in said concavity and provided with a relatively narrow frictional element fixedly incorporated in the periphery of said metal insert, a relatively large, heavy body of substantially spherical shape seated in said insert, the extent of the surface of said body in contact with the surface of said element being sufficient to retain said body frictionally seated, while permitting practically universal motion of said body, within said insert, the extent of the surface of said body not in contact with the surface of said element being sufficient to permit of the body being grasped by the hands for the purpose of removing the same from said base, and a pen tube embedded in, and frictionally retained within, said body for receiving the head portion of a pen and permitting the remainder of the pen to project outwardly from said body.

1,861,172. PLUG GAUGE. ERIK H. ALDERGRGH, Poughkeepsie, N. Y., assignor to Standard Gage Company, Inc., Poughkeepsie, N. Y., a Corporation of New York. Filed July 6, 1928. Serial No. 290,841. 1 Claim. (Cl. 33—178.)



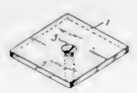
A gauge, comprising a tubular gauging member, a threaded handle for supporting said gauging member, a pair of cup-shaped members mounted on said handle and having flanged lips for engagement with the ends of said tubular member and extending to the substantial center of said tubular member to make a firm connection with the inner wall thereof, and nuts threaded on said handle and engaging the bases of said cup-shaped members for securing said members in position, each of the nuts and each of the cup-shaped members being of identical formation, whereby ready reversal of the parts relative to the tubular member and one another for compensating for wear is accommodated.

1,861,173. ABSORPTION APPARATUS. EDMUND ALTENKIRCH, Neuenhagen, near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Jan. 3, 1929, Serial No. 329,997, and in Germany Jan. 5, 1928. 5 Claims. (Cl. 62—119.5.)



5. In a continuously operating absorption machine the combination with a generator, a device for changing gaseous refrigerant to a contracted fluid phase, an evaporator, an absorber and pipes connecting the generator and absorber and providing a liquid circulating system, of a conduit connecting the evaporator with said liquid circulating system for conducting unevaporated liquid from the evaporator to said liquid circulating system and means for heating a portion of said conduit for the purpose of generating gas therein.

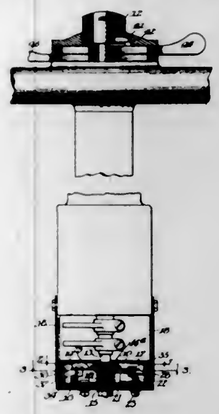
1,861,174. MASON'S AND PLASTERER'S TOOL. ADDISON APPLEGATE, Liberty, N. Y. Filed July 14, 1927. Serial No. 205,555. 3 Claims. (Cl. 306—44.)



1. A mason's or plasterer's tool comprising a face board and a handle therefor, said face board having a tapered opening extending entirely therethrough from its operative face to its rear face, and a fastening means for said handle, said fastening means including a member completely filling, and conforming in shape to said opening, said member being formed of relatively soft metal and having its outer face concaved.

1,861,175. CIRCUIT CONTROL DEVICE FOR AUTOMOBILES. WILLIAM H. COLLIER, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 3, 1927. Serial No. 172,270. 13 Claims. (Cl. 200—44.)

1. In a device of the class described, the combination of a rotatable and reciprocable rod, a contact member fixedly mounted thereon, an element in which said rod is mounted, contacts extending therefrom, said contact member having a plurality of peripheral projections adapted to contact with the contacts of said member in which the rod is mounted, said contact member mounted upon said rod being provided with a plurality of annularly arranged portions forming part of a holding means to hold said member in various positions of rotation, elements extending from said contact member, and a yieldable fixedly



mounted holding element for co-operating with said portions and said elements extending from said contact member.

1,861,176. PROCESS FOR PREVENTING ACCUMULATION OF SOLID MATTER IN OIL WELLS, PIPE LINES AND FLOW LINES. MELVIN DE GROOTE, St. Louis, Mo., assignor, by mesne assignments, to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Dec. 31, 1926. Serial No. 158,413. 1 Claim. (Cl. 166—21.)

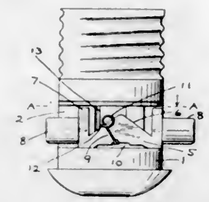
A process for preventing the accumulation of solid matter in an oil well or pipe line, characterized by introducing into a substantially clean producing well or oil flowing line that is producing or which contains liquid comprising non-cutting oil, a minute quantity of a soluble deflocculent agent comprising a material selected from the group consisting of hydrogenated phenol, hydrogenated naphthalene, hydrogenated cresol, methyl-cyclo-hexanol, hexaline, tetralin and tetralin sulfonic acid, for holding the solid material in said liquid in a non-flocculent condition.

1,861,177. PROCESS FOR PREVENTING ACCUMULATION OF SOLID MATTER FROM OIL WELLS, PIPE LINES, AND FLOW LINES. MELVIN DE GROOTE, St. Louis, Mo., assignor, by mesne assignments, to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Jan. 26, 1927. Serial No. 163,845. 1 Claim. (Cl. 166—21.)

A process for preventing the accumulation of solid matter in an oil well or pipe line, characterized by introducing into a substantially clean producing well or flowing oil line that is producing or which contains liquid comprising non-cutting oil, a minute quantity of a soluble deflocculent agent comprising a material selected from the group consisting of mono-chloro-benzene, meta-di-chloro-benzene, para-di-chloro-benzene, chloroform, carbon tetrachloride, ethylene-dichloride, and ortho-chloro-nitro-benzene, for holding the suspended solid material in said liquid in a non-flocculent condition.

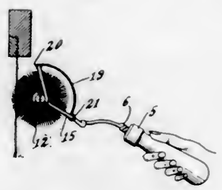
1,861,178. ELECTRIC SWITCH. GEORGE HENRY ELWELL, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 10, 1927. Serial No. 225,194. 4 Claims. (Cl. 173—355.)

1. An electric switch comprising a supporting base of insulation having a transverse cavity interrupted by spaced pairs of abutments, one pair of abutments being provided with spaced contacts; a reciprocating operating member movable within the cavity and between each pair of abutments, said member having a peaked cam; and a wire spring having a coil having at one end an arm pivotally mounted beneath said peaked cam, the coil having



at its other end an arm engageable with said cam for travel thereon to said peak only by tensioning said coil in a winding direction and for a precipitation therefrom and against said contacts to close an electrical circuit upon passing said peak and consequent release of said tension.

1,861,179. WINDOW SCREEN CLEANING DEVICE. MABEL W. GRAY, Birmingham, Ala. Filed Apr. 28, 1930. Serial No. 448,107. 5 Claims. (Cl. 15—27.)



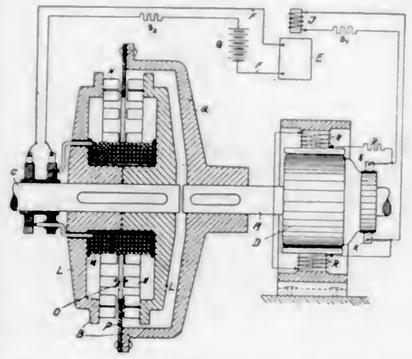
1. A frame for carrying a freely rotatable cylindrical brush having bristles to penetrate deeply through the interstices of a screen, said frame comprising a handle and transversely disposed rigid frame members, an arcuate guard mounted on said members, a fixed and a movable end bearing for the brush on said frame, and means carried by the brush to hold said bearings assembled, said separable bearing member being adapted to engage and interlock with said guard.

4. A window screen cleaning brush, comprising an elongated cylindrical brush formed by stiff radial bristles adapted to penetrate deeply through the screen interstices as the brush is rolled over the screen surface, a handle having its axis spaced a proper distance from the brush axis on the non-working side of the brush to protect the grasping hand from contact with the screen surface under treatment, means to mount said brush in said handle free to rotate in either direction about an axis normal to the axis of said handle and free of any rigid element which would prevent its bristles having an extended sliding movement in and out of the screen interstices to effectually clean same, and an arcuate metal guard substantially co-extensive in length with the brush and rigidly mounted on said handle to project therefrom upwardly over the brush and to subtend an arc substantially less than 180°.

1,861,180. MEANS FOR REGULATING CIRCUMFERENTIAL VELOCITY. HUGO GROB, Berlin, Germany. Filed Dec. 8, 1928, Serial No. 324,767, and in Germany Dec. 14, 1927. 9 Claims. (Cl. 188—180.)

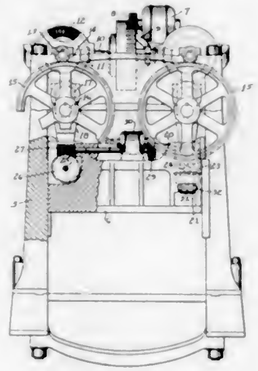
2. A means for regulating circumferential velocity, comprising in combination a shaft, the number of revolutions of which are to be maintained at a constant level, a voltage generator driven by the said shaft, a voltage regulator

by which an exciting magnet coil is connected with the said voltage generator and which automatically varies an electrical resistance for such time until the effective voltage at the said exciting magnet coil has assumed the correct value, a circuit having a voltage source and in-



cluding both the said resistance controlled by the voltage regulator as well as a magnet coil, an eddy current coupling which is excited by the said magnet coil, and a coupling member which couples the one part of the said eddy current coupling with the shaft the number of revolutions of which are to be regulated.

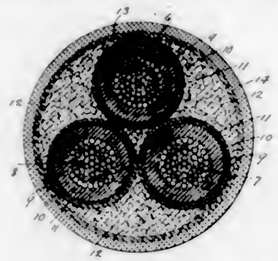
1,861,181. POWER PRESS. MEREDITH R. HATCH and ARTHUR H. SCHLOZ, Toledo, Ohio, assignors to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 2, 1931. Serial No. 527,260. 12 Claims. (Cl. 113—38.)



1. In a power press, the combination with a slide, of four connections therefor, and shafts and gearing including two double crank shafts and a common main drive shaft similarly geared to both ends of both of said crank shafts for operating the slide through said connections, all of said shafts and gearing being symmetrically arranged with reference to the longitudinal and transverse center lines of the press.

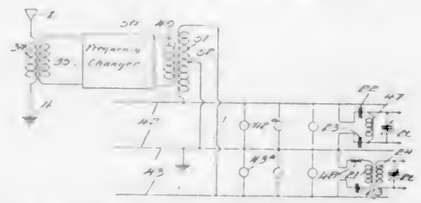
1,861,182. ELECTRIC CONDUCTOR. FRED HENDEY, and JAMES P. MILLWOOD, Passaic, N. J., assignors to The Okonite Company, Passaic, N. J., a Corporation of New Jersey. Filed Jan. 31, 1930. Serial No. 424,762. 1 Claim. (Cl. 173—264.)

A high tension electric cable comprising in combination an electric conductor, insulation about the same, a continuous adherent imperforate conductor coating, to be grounded, on the exterior surface of the insulation, a rubber filled tape about the conductor coating, a conductor coating on one face of said tape, the tape being applied



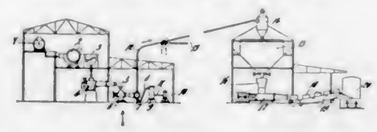
so that said conductor coating is in contact with said first mentioned conductor coating, and a protective coating over said tape.

1,861,183. RADIO RECEPTION SYSTEM. CLINTON W. HOUGH, New York, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 10, 1925, Serial No. 42,691. Renewed May 8, 1931. 6 Claims. (Cl. 250—20.)



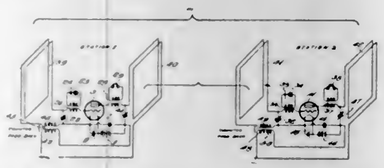
1. In a system for distributing signaling energy over a three wire power distribution network, the combination of an antenna system, a receiving set having its input circuit connected to said antenna system, the output circuit of said receiving set being connected to each of the wires of said three wire power distribution network for the purpose of impressing signaling energy received by said antenna system upon said power distribution network, means connecting a plurality of sound reproducing means to said network whereby the signaling energy impressed upon said network may be reproduced, part of said sound reproducing means being connected to the neutral wire and another wire of said three wire network, and another part of said sound reproducing means being connected to the neutral wire and the other wire of said three wire network.

1,861,184. METHOD FOR CONVERTING LIQUID PAPER PULP INTO A CONSISTENT MASS SUITABLE FOR STORAGE, ETC., OR INTO BALES FOR SHIPMENT. RICHARD T. LANG, Heidenheim-on-the-Brenz, Germany, assignor to American Voith Contact Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Feb. 4, 1927, Serial No. 165,774. Divided and this application filed Nov. 13, 1929. Serial No. 406,786. 2 Claims. (Cl. 92—1.)



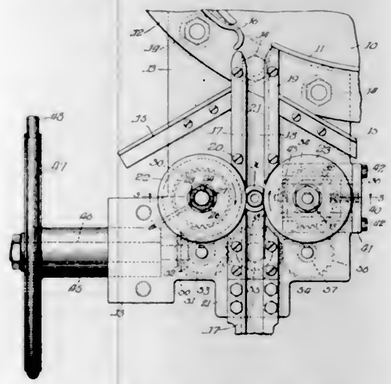
1. In a method of treating paper pulp stock, first denuding loose paper stock of the greater part of its moisture content, then disintegrating the denuded pulp stock and finally subjecting particles of the pulp stock at the point of disintegration to the action of compressed air and conveying the same while in air suspension to a remote point for further treatment.

1,861,185. COMMUNICATION SYSTEM. HAROLD M. LEWIS, Douglaston, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 15, 1927, Serial No. 199,092. Renewed Aug. 1, 1931. 6 Claims. (Cl. 250—9.)



1. In an intercommunication system, transmitting and receiving stations, means at each of said stations for cooperatively generating high frequency oscillations, and means at each station for preventing the generation of oscillations at said stations independently of the cooperative effects of said other station said last named means comprising a coupling arrangement by means of which the output and input circuit of said high frequency oscillation generating means are coupled together to suppress self excited oscillations in said oscillation generating means.

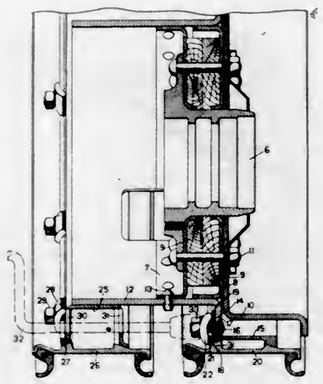
1,861,186. TURNING DEVICE FOR FLAT SIDED RIVETS. FREDERICK M. LITTELL and EDGAR R. MILLER, Chicago, Ill., assignors to F. J. Littell Machine Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 20, 1930. Serial No. 437,412. 8 Claims. (Cl. 218—2.1.)



1. In an article positioning mechanism of the class described, the combination with means for directing articles in a definite path, of rotatable wheels positioned on respective sides of said path, one of said wheels being frictionally driven, said wheels being so spaced as to prevent passage of an article except when aligned in a particular direction.

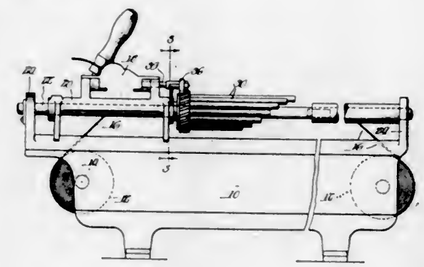
1,861,187. DUAL WHEEL FOR DEMOUNTABLE RIMS. ALFRED M. LOFLAND, Lebanon, Ind., assignor of one-half to Lewis C. Willis, Indianapolis, Ind. Filed Aug. 16, 1927. Serial No. 213,236. 14 Claims. (Cl. 301—13.)

1. In a dual demountable rim wheel, a master felloe band formed with a flange at its axially inward side to receive a felloe band and having a cylindrical felloe receiving surface, in combination with a felloe member of a radial depth equal to the flange and a felloe band.



2. An outboard felloe for a demountable rim wheel comprising two semi-circular sections, interlocking connections between the proximate ends of the sections and means to prevent radial movement of the sections with respect to the wheel.

1,861,188. HECTOGRAPH MACHINE. WILHELM K. MOLL, Chicago, Ill., assignor to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed Oct. 9, 1929. Serial No. 398,326. 14 Claims. (Cl. 101—133.)

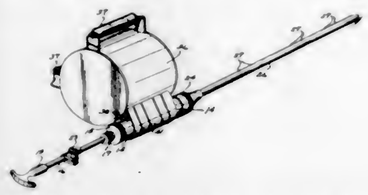


1. In a duplicating machine, in combination, a frame having a printing bed, a platen carriage adapted to travel over said bed in its printing stroke, means for arresting the movement of said carriage to secure a printing stroke of certain length including a bumper secured to said frame, a stop wheel secured to said carriage and adapted for rotation, stop rods secured to said wheel and spaced around the periphery thereof and adapted upon rotation of said wheel to be brought into alignment with said bumper, means for rotating said wheel by the return movement of said carriage and a wedge block for disconnecting said rotating means to maintain a selected rod in alignment with said bumper.

1,861,189. DENTIFRICE. RICHARD PASTERNACK, Brooklyn, N. Y., assignor to Charles Pfizer & Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed Dec. 20, 1929. Serial No. 415,611. 4 Claims. (Cl. 167—93.)

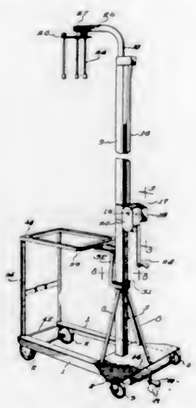
1. A dentifrice comprising a cleansing and polishing agent consisting of a member selected from the group consisting of calcium gluconate and magnesium gluconate.

1,861,190. OIL GUN. HENRY M. ROBERTSON, St. Paul, Minn., assignor of one-sixth to Sigurd W. L. Johnson, Minneapolis, Minn., and one-sixth to Clement Zarembinsky, St. Paul, Minn. Filed Apr. 30, 1930. Serial No. 448,525. 12 Claims. (Cl. 221—47.)



2. A portable self contained device of the class described, comprising a horizontal cylindrical oil supply can, an oil gun fixed on the under side of said can and having a tubular nozzle extending outward of one end of said can substantially parallel to the axis thereof, and provided with a radial discharge orifice that is substantially in a plane extending through the axes of the can and nozzle, means by which the device may be held suspended from a point on either side of said plane, and means for delivering oil from said can to the nozzle under pressure.

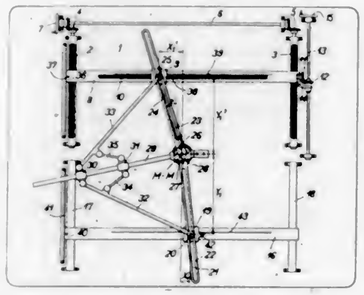
1,861,191. SERVICE TRUCK FOR REFRIGERATORS. BUFORD B. RUSSELL, Chicago, Ill., assignor to Drying Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Jan. 9, 1931. Serial No. 507,643. 3 Claims. (Cl. 212—29.)



1. In a hoisting hand truck comprising a base with supporting wheels thereon, a hollow rectangular post extending upwardly from said base and having a longitudinal slot located in one side, inwardly extending flanges along the edges of said slot, a vertically slidable lifting element mounted within said post and having a horizontally extending arm arranged to project through and travel along said slot, means mounted on said post for adjusting said lifting element therealong, and a collapsible supporting frame hinged to said post at one end and having hinged supporting means at its opposite end.

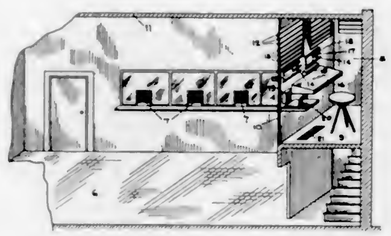
1,861,192. COORDINATE TRANSFORMER. WILLY SANDER, Jena, Germany, assignor to the Firm of Carl Zeiss, Jena, Germany. Filed Apr. 5, 1930, Serial No. 441,996, and in Germany Apr. 9, 1929. 5 Claims. (Cl. 33—76.)

1. A device for transforming co-ordinates, comprising a bed plate, two slides disposed displaceably relatively to this bed plate, two upper slides whereof one each is displaceably mounted on a respective one of the two first named slides for movement perpendicular to the direction of displacement of the appertaining first named slide, and means for connecting the two upper slides, these means, when one of the first named slides and the slide which is mounted on it are set according to the co-ordinates of a



point relatively to the one system of co-ordinates, being adapted to give the two other slides that adjustment which corresponds to the co-ordinates of the same point with respect to a system of co-ordinates turned by a certain angle with respect to the first system, the two systems having a common origin.

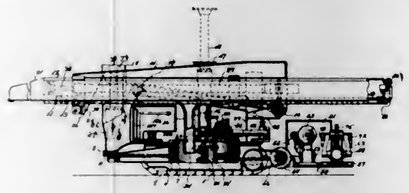
1,861,193. PROTECTIVE TURRET. CHARLES SENISCH, Omaha, Nebr. Filed May 28, 1930. Serial No. 456,594. 2 Claims. (Cl. 89—36.)



1. A protective turret for money handling rooms, comprising an enclosure adapted to be mounted at a point of vantage in a room and having a bullet proof wall exposed to the room, said wall having louvres in its upper part opening inwardly toward the top of the enclosure for lighting and ventilating purposes, said wall having at least one gun receiving aperture therethrough below the louvres and having vertical and horizontal sight slots radiating from the gun aperture.

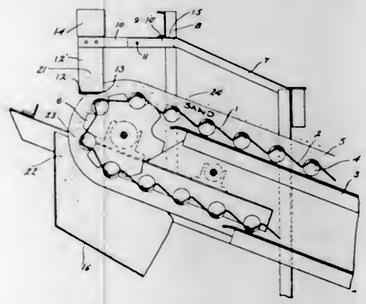
1,861,194. POWER SHOVEL. WILLIAM W. SLOANE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 19, 1927. Serial No. 214,027. 54 Claims. (Cl. 214—132.)

1. In a power shovel, the combination with a base, a turntable on said base and mounted for angular movement in a horizontal plane with respect thereto, a conveyor chute provided with a forwardly facing scoop at its front end and continuing the same, means on said turntable and carrying said chute for longitudinal thrusting and for selective angular and bodily vertical movement throughout a range of generally horizontal positions, manually controlled power means for effecting selectively said horizontal and vertical movement of said chute, and manually controlled power means for effecting automatically longitudinal vibration of said chute for effecting rearward movement of material on the chute for discharge.



54. In a power shovel, the combination with a base, a turntable on said base and mounted for angular movement in a horizontal plane with respect thereto, a conveyor provided with a forwardly facing scoop at its front end and communicating therewith and extending over and forwardly and rearwardly of said turntable and base, means on said turntable and carrying said conveyor for longitudinal generally horizontal thrusting and for vertical movement on a vertically adjustable rearwardly disposed axis from a position inclining downwardly toward its forward end to a relatively horizontal elevated position, power means for effecting elevation of said rearwardly disposed axis, power means independent of said last mentioned power means for effecting vertical movement of the forward portion of said conveyor, power means for effecting horizontal movement of said conveyor, and power means for effecting longitudinal vibration of said chute for effecting rearward movement of material on the chute for discharge.

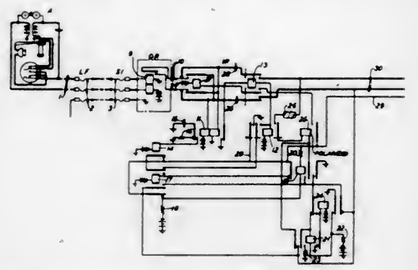
1,861,195. SLICE BAR. FRANK T. SPIKERMAN, Akron, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 5, 1930. Serial No. 493,534. 6 Claims. (Cl. 198—228.)



1. A continuous conveyor, means for directing said conveyor downward at the discharge end, and a flat blade disposed across said conveyor at the discharge end, said blade being substantially horizontal in the longitudinal direction of the conveyor and substantially tangent to the beginning of said downward curvature, and being positioned somewhat above the conveyor bottom but within the path of the conveyor load.

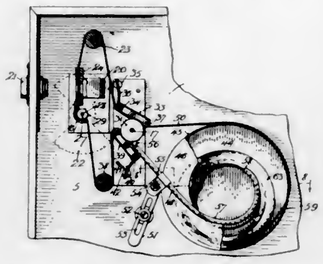
1,861,196. TELEPHONE EXCHANGE SYSTEM. RAY L. STOKELY, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 1, 1930. Serial No. 492,629. 14 Claims. Cl. 179—16.)

1. In combination, a line, a relay for receiving impulses over said line, a circuit, a bridge connected across the conductors of said circuit in consequence of the operation of said relay, means effective in consequence of the release of said relay for opening and holding said bridge



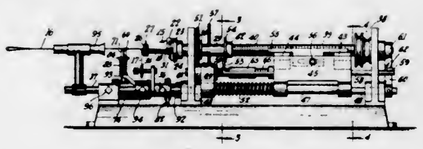
open for a predetermined interval of time, and means for holding said bridge closed for a predetermined interval of time.

1,861,197. MOVING PICTURE PROJECTOR. HERBERT J. TEMPLETON, Brooklyn, N. Y., assignor of one-tenth to Edward C. O'Donnell, New York, N. Y. Filed June 30, 1926, Serial No. 119,601. Renewed Oct. 23, 1931. 6 Claims. (Cl. 88—18.7.)



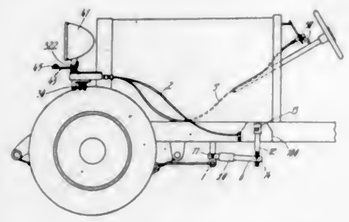
1. In a projecting apparatus the combination of means for projecting pictures from a film, a continuous strip of film arranged in the form of a multi-layer coil, a portion of the film being arranged to be operated on by the projecting means, and a support for the coil comprising a circular coil box arranged in a vertical plane, a coil of film floating within and resting on the circular wall of said coil box and adapted to be revolved by a propelling force acting through the strip of film.

1,861,198. SNELLING MACHINE. WALTER S. TORRENCE, New York, N. Y., assignor to W. H. Meyer & Son, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Sept. 26, 1931. Serial No. 565,365. 24 Claims. (Cl. 117—34.)



1. A hook snelling machine, comprising in combination, relatively rotatable hook holding and strand guiding means for serving a wrapping about overlapped portions of a hook shank and gut, or the like, and means for automatically severing and tying the wrapping at the end of such serving operation.

1,861,199. HEADLIGHTS FOR VEHICLES. FRITZ WACKER, HERMANN BLUM and HANS GREISSINGER, Nuremberg, and FRIEDRICH RICHARD DIETRICH, Pasing, near Munich, Germany. Filed Jan. 7, 1930, Serial No. 419,064, and in Germany Apr. 11, 1929. 21 Claims. (Cl. 240—62.)

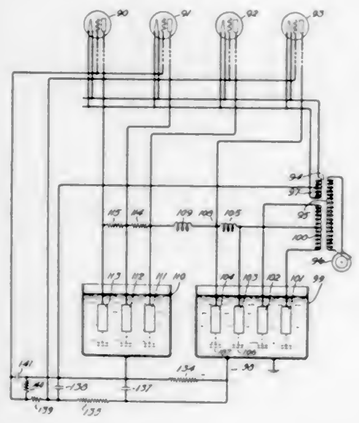


1. In a device of the kind described, at least one turnable headlight mounted on the vehicle, a ratio gear interposed between the headlight and the steering gear of the vehicle, a travel direction indicator movably mounted on the body of the vehicle, means for operating said direction indicator by hand, and means for returning said indicator controlled by a part of the said gear.

1,861,200. PROCESS FOR THE MANUFACTURE OF MIXED ESTERS OF CELLULOSE AND THE PRODUCT THEREOF. CHARLES S. WEBBER and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 2, 1929. Serial No. 383,147. 40 Claims. (Cl. 260—101.)

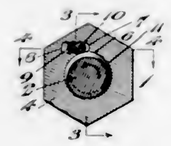
29. Cellulose-aceto-oxalate.

1,861,201. ELECTRON TUBE CIRCUITS. DONALD F. WHITING, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 21, 1924, Serial No. 751,202. Renewed Jan. 22, 1931. 7 Claims. (Cl. 179—171.)



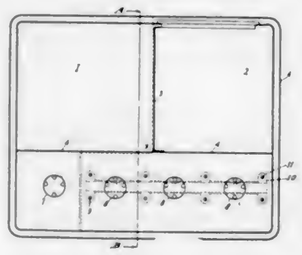
6. In a multi-stage amplifier having a plurality of electron tubes, each having a thermionic cathode, an anode, and a control electrode connected in a plurality of stages, a source of rectified alternating current, a resistance having a terminal connected to the negative terminal of said source and another terminal connected effectively to the cathodes, said resistance lying in the path of the rectified current, a second resistance in shunt to said first resistance and large compared to the first resistance, a connection from the control electrode of one of said stages to a point in said shunt resistance, a connection from the control electrode of a stage subsequent to the first mentioned stage to a point in said shunt resistance intermediate the first mentioned point and the negative end of the resistance whereby the control electrode of the subsequent stage receives a larger negative bias than that of the other stage, and individual condensers connected between the said points of connection to said shunt resistance and the cathodes.

1,861,202. LOCK NUT. KARL GOTTLOB YOUNG and HERMANN VEIT, Philadelphia, Pa. Filed Mar. 30, 1931. Serial No. 526,476. 1 Claim. (Cl. 151—25.)



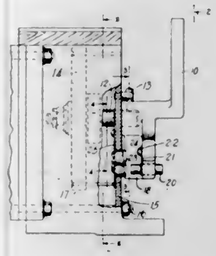
In a nut lock, a nut having a threaded bore and formed with a pocket extending at a tangent to the bore and opening through the outer face of the nut for its entire length, the inner end of said pocket having a side opening for its full depth communicating with the bore of the nut, a pin in said pocket circular in cross section and movable in the pocket towards and away from the inner end of said pocket whereby a side portion of the pin may extend through the side opening of the pocket into the bore for gripping engagement with threads of a bolt, and a spring in the outer end portion of said pocket engaging said pin to urge the pin towards the inner end thereof, edges of the pocket at the outer face of the nut being upset to retain the pin and spring in the pocket.

1,861,203. RADIORECEIVER. GUIDO ANDERS, Berlin-Steglitz, Germany, assignor to Allgemeine Elektrizitats Gesellschaft, Berlin, N. W., Germany, a Corporation of Germany. Filed Aug. 30, 1928, Serial No. 302,916, and in Germany Sept. 2, 1927. 8 Claims. (Cl. 250—14.)



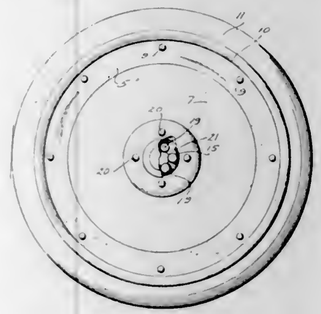
1. In radio apparatus, a cabinet enclosing a radio receiver and battery substitute apparatus therefor, shielding means separating said apparatus from said receiver, a subpanel adapted to carry thermionic tubes for said receiver, a plurality of thermionic tube sockets supported by said panel, and means comprising a metal channel supported by said panel for shielding the plate and grid contacts of said sockets from the filament contacts of said sockets.

1,861,204. ELECTRICAL CONTROLLER SYSTEM. JOHN A. BERRIAN, Dade City, Fla., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 24, 1930. Serial No. 455,445. 3 Claims. (Cl. 74—88.)



1. In a controller, a rotatable arm and hub member arranged to operate said controller, a secondary member connected to said hub member in a different radial position than said arm and rotatable therewith, a spring supported resilient detent mounted in the face of said controller for arresting the rotation of said arm and hub member, a fixed extension on said secondary member arranged to abut said detent, and a push button on said secondary member free to operate at all times but only effective for pushing said detent out of the path of said extension when said member has been rotated to a point where said extension abuts said detent.

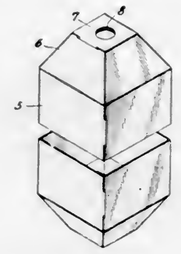
1,861,205. ROLLER BEARING UNIT FOR WHEELS. ROMAN B. BUKOLT, Stevens Point, Wis. Original application filed Oct. 27, 1928, Serial No. 315,581. Divided and this application filed Oct. 12, 1929. Serial No. 399,174. 2 Claims. (Cl. 308—210.)



1. A bearing unit comprising the combination of identical cup-shaped race members having complementary radial flanges shouldered to provide an off-set of the central portions of said flanges from each other, means connecting said flanges beyond their respective shoulders, an apertured plate confined between said flanges within said shoulders and anti-friction rollers operatively disposed within the apertures of said plate in supporting relation to the race members in annular series therein.

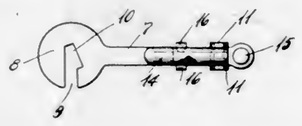
1,861,206. COMBINED CARTON AND LAMP SHADE. JOSEPH E. BURGESS, New York, N. Y., assignor to American Lithographic Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 16, 1929. Serial No. 347,497. 4 Claims. (Cl. 229—37.)

1. As an article of manufacture, a box-like body having four rectangular sides, each side having an extension approximating in length the width of the adjacent side and formed for part of its length with converging sides adapted



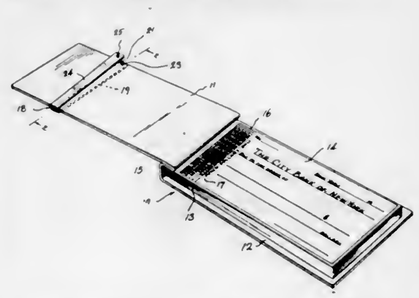
to form a truncated pyramid, and for a further part with straight sides, the straight sided parts being square and circular openings arranged in the centers of the squares.

1,861,207. ROLLER WRENCH. FRED J. BURNS, Saginaw, Mich., assignor to Columbia Mills, Incorporated, Saginaw, Mich., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 519,439. 2 Claims. (Cl. 81—3.)



2. A roller wrench comprising a stamped body member having an enlarged flat head of substantially the same thickness as the body, a slotted jaw in said head and adapted to detachably receive a roller spear, laterally projecting wings on the opposite end of the body and formed integral therewith, a resilient member, ears formed integral with the body and adapted to anchor said resilient member, and a handle pivotally mounted on said wings and engageable by said resilient member in either open or folded position.

1,861,208. CHECK PROTECTOR. EUGENE L. CARMICHAEL, New York, N. Y., assignor of one-half to Edward I. Gersh, New York, N. Y. Filed May 19, 1930. Serial No. 453,757. 3 Claims. (Cl. 164—119.)

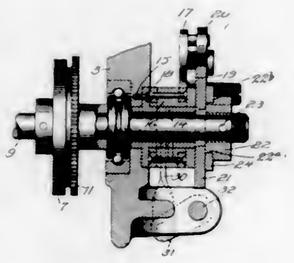


1. A check protector comprising a combination punch and tearing off device including a substantially U-shaped member having an outer portion adapted to be secured to a check book cover, said punch and tearing off device including a punch, and a blade provided with an aperture for alignment with said punch, whereby to punch out a portion of a blank check, said blade including a straight-edge and being adapted to securely hold said blank check beneath said straight-edge while severing a portion of said check.

1,861,209. ACETYLATED CARBOHYDRATE GUM AND THE PROCESS OF MAKING IT. ALEX BROOKING DAVIS, Cincinnati, Ohio, assignor to A. B. Dick Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 21, 1926. Serial No. 156,260. 8 Claims. (Cl. 260—101.)

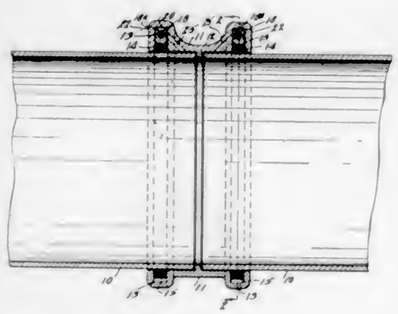
8. As a new product, an acetylated carbohydrate gum.

1,861,210. LINE SPACE MECHANISM FOR TYPEWRITING MACHINES. HARRY A. FOOTHORAP, Harrisburg, Pa., assignor to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed Mar. 25, 1927, Serial No. 178,349. Divided and this application filed Apr. 4, 1929. Serial No. 352,488. 2 Claims. (Cl. 197—124.)



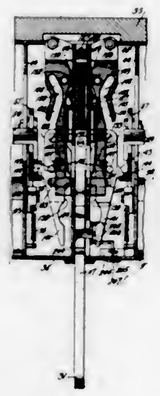
1. The combination with a line space frame, a line space shaft, and a line space wheel fixed to the shaft, of a dog carrier lever, a dog rocker lever, and a mounting for said levers located intermediate the wheel and the frame, said mounting being free from contact with the shaft and supporting the dog carrier lever and the dog rocker lever for movement concentrically about said shaft.

1,861,211. PIPE COUPLING. JOHN R. GAMMETER, Akron, Ohio. Filed July 29, 1929. Serial No. 381,735. 4 Claims. (Cl. 285—193.)



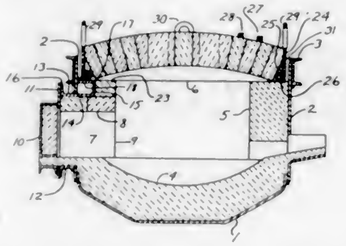
4. A pipe coupling or joint including a sleeve member on one pipe end and having an inner peripheral channel therein for encircling an adjacent pipe end, a resilient gasket in the channel, and means for contracting said gasket comprising a contracting band construction including a pair of opposed band sections and means for drawing the same together, said channel being connected to the interior of the pipe line so that pressure in the line will be effective in the channel about the back of gasket to seal the joint.

1,861,212. VENDING MACHINE. HARVEY GILES, Brooklyn, N. Y., assignor to Artemas Ward Inc., a Corporation of Delaware. Filed Aug. 30, 1929. Serial No. 389,357. 7 Claims. (Cl. 194—91.)



1. In combination with a vending machine having an article delivery means, a coin-controlled mechanism comprising a slidingly mounted plunger adapted to be manipulated, a coin-engaging arm pivotally mounted on the plunger and having a part adapted to engage and actuate the article delivery means, a pin fixed on the arm, a pivotally and yieldingly mounted plate having a cam slot into which the pin projects, movement of the plunger when the arm does not engage with a properly positioned coin causing the pin to be deflected by the cam slot whereby the arm is caused to move past the article delivery means without engaging it.

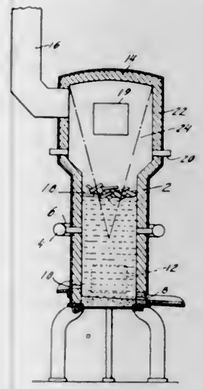
1,861,213. ELECTRIC FURNACE WITH COOLING MEANS. ALBERT E. GREENE, Medina, Wash. Filed Apr. 7, 1931. Serial No. 528,323. 5 Claims. (Cl. 263—44.)



1. In an electric furnace having a plate metal shell with a curved surface through which is a door way into a refractory lined chamber within, a cooler for the brick work above the door way, said cooler comprising a weld-sealed water cavity between the shell plate and the refractory material inside the shell above the door way, and inlet and outlet openings for water cooling this cavity.

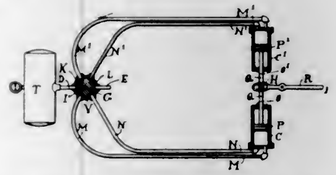
1,861,214. CUPOLA FURNACE AND METHOD OF OPERATING SAME. MARSTON L. HAMLIN, Lynbrook, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 18, 1930. Serial No. 468,828. 13 Claims. (Cl. 263—30.)

4. A cupola furnace for the melting and refining of metals comprising a chamber having a portion adapted to receive a charge of fuel and metal in the lower portion thereof, means for passing air through the charge to burn the fuel, there being an enlarged portion above the charge-receiving portion formed by the lateral walls of the furnace, means for introducing supplemental air into the enlarged portion of the furnace above the charge to burn combustible constituents of the gas produced by



combustion of the fuel, a curved roof for said furnace positioned substantially concentric with the walls of the chamber and having its center of curvature within the furnace to radiate heat onto the charge, and an outlet for the gases located in the lateral wall of the chamber adjacent said roof.

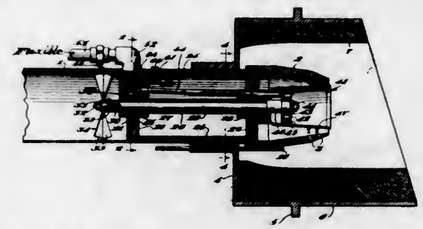
1,861,215. SYSTEM OF AUTOMATIC CONTROL OF VESSELS. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed May 24, 1930. Serial No. 455,187. 2 Claims. (Cl. 114—23.)



2. The combination with a dirigible body arranged to be supported in a natural medium, of a rudder for steering said body, a vane positioned on the exterior of said body and rotatable with respect thereto, a piston rod for actuating said rudder to change the course of said body, a pair of opposed cylinders, a piston in each of said cylinders operatively connected to said piston rods, said cylinders each having an inlet and an exhaust passage, and the control valve operated by said vane and arranged to control said inlet and exhaust passages and to open the exhaust passage of either cylinder slightly in advance of the opening of the inlet passage in the other cylinder.

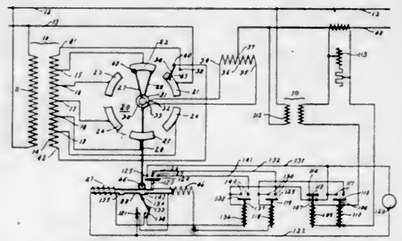
1,861,216. OIL BURNER. SINIUS M. HANSEN, Lynn, Mass., assignor, by mesne assignments, to A T Oil Burner Co., Lynn, Mass., a Corporation of Massachusetts. Filed Aug. 11, 1927. Serial No. 212,236. 14 Claims. (Cl. 158—77.)

1. A burner comprising an air conduit terminating in a nozzle, a fuel pipe within the conduit, rotary means arranged within the conduit, said rotary means including a shaft of restricted diameter, a fuel-receiving cup secured thereto, and a turbine mounted upon the shaft, a frame within the conduit having bearings of self-lubricating material, said bearings having a restricted internal diameter, said shaft being rotatably mounted in said bearings, said frame being longitudinally adjustable within the conduit, means for effecting said adjustment being



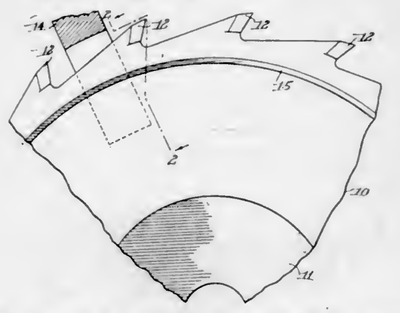
located exteriorly of the conduit and spaced from the nozzle end thereof to permit adjustment of the burner while combustion is occurring.

1,861,217. TAP-CHANGING SYSTEM AND APPARATUS FOR TRANSFORMERS. LELAND H. HILL, Collingswood, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 7, 1929. Serial No. 361,029. 8 Claims. (Cl. 171—119.)



1. In a system of the character described, a transformer winding, switch means operable to render said winding effective to provide for voltage regulation in said system throughout a predetermined voltage range, and second switch means controllable by said first-named switch means during operating movement of the latter, said second switch means being operable under control by said first-named switch means to establish operating connections between the same and different points in said winding.

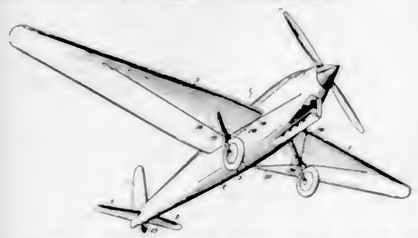
1,861,218. CIRCULAR SAW. WARREN B. HUTHER, Rochester, N. Y., assignor to Huther Brothers Saw Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 20, 1930. Serial No. 503,750. 3 Claims. (Cl. 143—133.)



1. A circular saw comprising teeth spaced relatively far apart, a body inwardly of said teeth and thinner than the kerf cut thereby, and a ridge on said body projecting

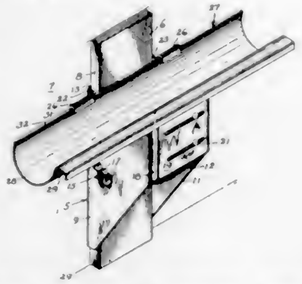
laterally from said body and having a substantially flat face adapted to run substantially in contact with a side of a kerf cut by said teeth to strengthen said saw and to guide and steady said saw whenever said teeth are momentarily out of said kerf.

1,861,219. AIRPLANE CONSTRUCTION. ALBIN K. LONGREN, Topeka, Kans. Filed Apr. 22, 1929. Serial No. 357,071. 15 Claims. (Cl. 244—29.)



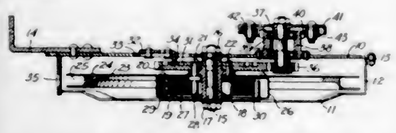
1. In an airplane including a fuselage, wings at opposite sides of the fuselage, spars supporting the wings, bearings for mounting the spars, lever arms attached to the spars, a torque tube mounted in the fuselage, a worm member operably connected with the torque tube having right and left threads, a housing for the worm member, nuts slidable in the housing and engaging the respective threads, means connecting the nuts with the arms, and means for oscillating the torque tube to actuate the arms to effect oscillation of the wings.

1,861,220. BRACKET. EDGAR F. MARQUIS, Oakland, Calif. Filed Nov. 25, 1929. Serial No. 409,499. 3 Claims. (Cl. 211—87.)



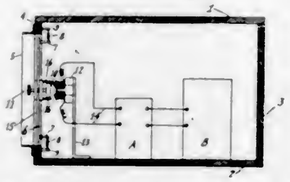
1. A rack for mounting a cylindrical article on an upright wall element having parallel and oppositely directed edge faces, comprising side plate members for a mutually gripping engagement with said element for adjustably supporting said bracket thereon, said members being formed at the top edges thereof with trough portions for directly receiving and retaining the cylindrical article therein and between the elements.

1,861,221. REELING DEVICE. HAROLD T. MARTIN, East Orange, and FREDERICK A. HOYT, Bloomfield, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1929. Serial No. 336,449. 6 Claims. (Cl. 242—108.)



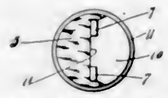
1. A reeling device comprising a casing, a rotatable reel within said casing, a tension spring for said reel, cooperating means on said casing and reel for limiting the tension of said spring, and means on said casing for arresting the rotation of said reel in one direction, said arresting means being in engagement with one of said cooperating means.

1,861,222. LOUD SPEAKER. JOHN P. MINTON, White Plains, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 25, 1925. Serial No. 39,583. 15 Claims. (Cl. 181—31.)



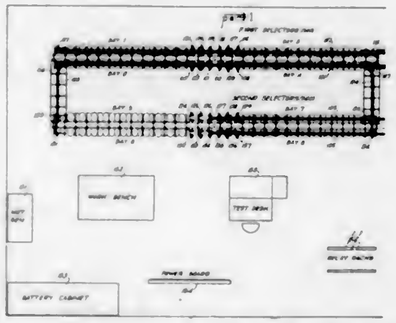
1. In an acoustic device the combination of a vibratile body, means for vibrating said body, a supporting member, and means for suspending said body from said supporting member, said suspending means having the minimum amount of restoring action which will return said body to its position of rest when moved therefrom by the vibrating means.

1,861,223. ATTACHMENT PLUG RECEPTACLE. ADOLPH MUELLERWEISS, Sebewaing, Mich. Filed Mar. 2, 1929. Serial No. 343,857. 3 Claims. (Cl. 173—343.)



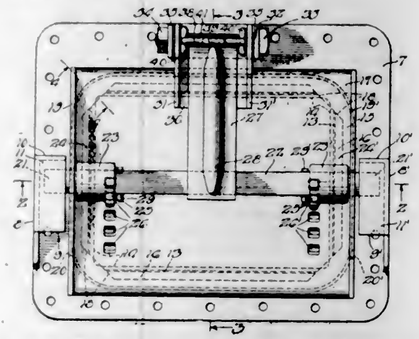
3. In a separable attachment plug, guide means incorporated in the top face of the base for directing the prongs into register with separate openings therein, said guide means consisting of forming said top face of the base into two surfaces separated by an abrupt shoulder that extends from one to another of said openings flush with a wall of each, said shoulder also extending beyond said openings in the manner of an endless enclosure encompassing said openings.

1,861,224. TELEPHONE SYSTEM. EARL R. NEIR, Wilmette, and SAMUEL E. WITT, Geneva, Ill., assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 17, 1930. Serial No. 429,012. 36 Claims. (Cl. 179—91.)



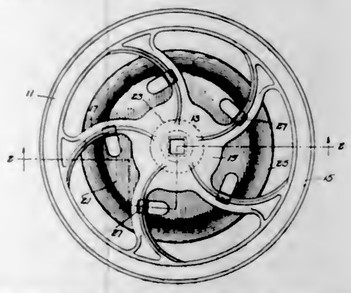
1. In combination, a distributing frame having terminal blocks mounted on both sides thereof, automatic switches mounted in bays, cables directly connecting the switches of a plurality of said bays to terminal blocks on one side of said distributing frame, and facilities for running jumpers between switch-cable blocks and for running jumpers from switch-cable blocks across the frame to the other terminal blocks.

1,861,225. TANK HANDHOLE AND COVER. ARTHUR F. O'CONNOR, Chicago, Ill., assignor to Equipment Specialties Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 17, 1930. Serial No. 436,418. 15 Claims. (Cl. 220—41.)



1. A hand hole cover comprising a base having a hand hole, a gate for closing said hand hole, spaced-apart guideways, on said gate, a pair of cams on the base, a traveling shaft on said gate, a lever for rotating said shaft, means between said shaft and said gate for causing said shaft to travel along said guideways when said shaft is rocked, and extensions on the ends of said shafts in position to co-act with said cams to effect the opening and closing of said gate.

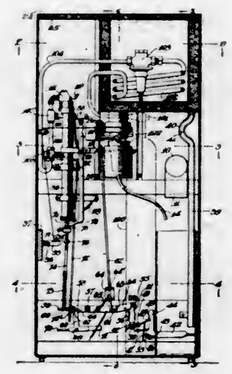
1,861,226. HANDWHEEL AND GUARD ATTACHMENT. ARTHUR F. O'CONNOR, Chicago, Ill., assignor to Equipment Specialties Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 14, 1931. Serial No. 529,971. 15 Claims. (Cl. 74—33.)



1. In combination with a hand wheel having a rim and spaced spokes, an annular guard adapted for attachment to the wheel to substantially cover the openings between the spokes, and fastening means comprising lugs for connecting the guard to the wheel.

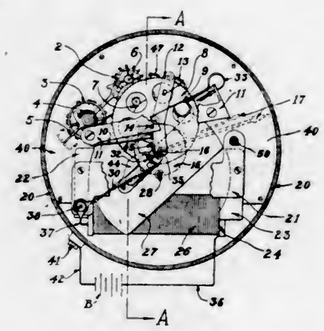
1,861,227. BEVERAGE MIXER AND DISPENSER. THOMAS S. PATTERSON, Malaga, N. J., and PETER G. PRITZ, Germantown, Pa., assignors of one-third to James J. Pritz, Philadelphia, Pa. Filed Sept. 15, 1928. Serial No. 306,240. 15 Claims. (Cl. 225—21.)

1. A beverage mixing device, comprising a mixing chamber, means to convey a syrup to said chamber, means to limit the quantity of syrup admitted thereto, means to convey a diluent under pressure into said chamber, means to limit the quantity of diluent admitted thereto, a valve



to permit the flow of the mixed syrup and diluent from said chamber, and means actuated by the pressure upon the diluent whereby operation of said valve permits said last-named means to force the contents from said chamber.

1,861,228. ELECTRIC RE-WINDER CLOCK. ARTHUR F. POOLE, Ithaca, N. Y., assignor to Poole Manufacturing Co., Inc., Ithaca, N. Y., a Corporation of New York. Filed May 7, 1928. Serial No. 275,785. 7 Claims. (Cl. 58—41.)

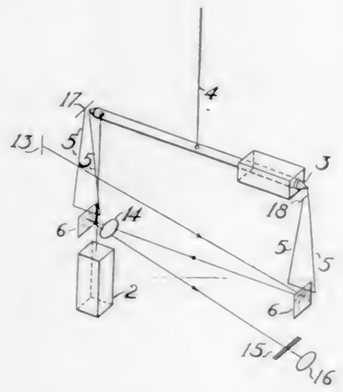


1. In an electric clock, the combination of a substantially cylindrical case, an exciting coil extending transversely within the case in a direction substantially that of a chord to the circular wall of the case, a field structure having pole pieces connected to the coil, the pole pieces being displaced in an axial direction in the cylinder relative to the coil, a vibratory armature mounted between the pole pieces, said armature being long in relation to the field coil and to the diameter of the case, pivoted inwardly toward the center of the case from the field coil and having its outer end overlapping the field coil and adapted to swing in the sector of the field coil so as to fall within the minimum cylindrical case required by the field coil, contact means for actuating said armature and spring means for retracting it, a re-winder mechanism driven by said armature, and a spring driven clock mechanism operated by said rewinder mechanism.

5. In an electric clock, the combination of a clock hand shaft, a ratchet wheel, gearing connecting the clock hand shaft and ratchet wheel, an escapement mechanism, gearing connecting the ratchet wheel and the escapement mechanism, a pivoted arm, said arm and ratchet wheel

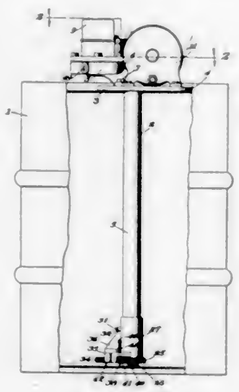
having separate, offset, pivoted supports, a pawl connecting the arm to the ratchet wheel, a driving spring connected to said arm, and an electro-magnetic motor mechanism adapted to actuate said arm and energize said spring.

1,861,229. TORSION BALANCE. LUDWIG W. BLAU, Houston, Tex., assignor to Standard Oil Development Company. Filed Aug. 15, 1929. Serial No. 386,183. 3 Claims. (Cl. 265—1.)



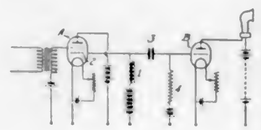
1. In combination with a balance beam of a torsion balance of the type used in gravitational measurements, a support, a suspension mirror, a filament suspending the mirror from the balance beam, a second filament suspending the mirror from said support, whereby the mirror is oscillatorily rotated by the balance beam when said beam is rotated.

1,861,230. PORTABLE GREASE DISPENSING PUMP. CLYDE G. BUTLER, Cincinnati, Ohio, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed May 3, 1928. Serial No. 274,706. Divided and this application filed Mar. 2, 1932. Serial No. 596,256. 1 Claim. (Cl. 221—85.)



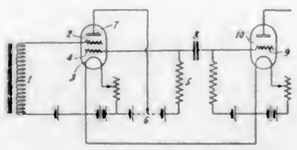
In a lubricant dispensing apparatus, the combination of a casting forming a transmission casing and carrying a base member forming a detachable cover for a lubricant drum, a motor mounted on said detachable cover, a vertical shaft extending through said casting and bearing therein, gear means in said transmission casing connecting said motor and said shaft, a pump adapted to be driven by and connected to the lower end of said shaft, and a tubular support having its upper end secured to said casting and its lower end secured to said pump, said tubular support surrounding and protecting said shaft, whereby said parts may be utilized as a unit to empty lubricant drums.

1,861,231. MEANS FOR PRODUCING MAGNIFICATION WITH A FOUR ELECTRODE VALVE AND CIRCUITS THEREFOR. ERNEST WALTER BRUDENELL GILL, Oxford, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 25, 1925, Serial No. 71,492, and in Great Britain Nov. 27, 1924. 10 Claims. (Cl. 179—171.)



1. In an amplifying system the combination of a four electrode vacuum tube having an anode, a cathode, and two grid electrodes, an input circuit associated with one of said grids and said cathode, a direct current source connected between said anode and cathode, a choke coil associated with the other grid and the cathode of said four electrode vacuum tube, and a three electrode valve having its input circuit capacitively coupled to said last named grid.

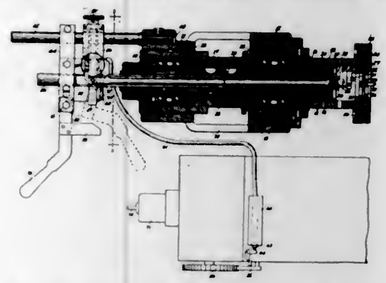
1,861,232. FOUR ELECTRODE VALVE AND THE OPERATION THEREOF. ERNEST WALTER BRUDENELL GILL, Oxford, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 1, 1926, Serial No. 85,355, and in Great Britain Feb. 18, 1925. 11 Claims. (Cl. 179—171.)



1. In radio apparatus the combination of a four electrode valve having an outer grid, inner grid, anode and cathode, means for maintaining the anode potential at a positive value with respect to the cathode, means for applying to the outer grid a potential negative with respect to the cathode, and means for applying a positive potential to the inner grid, the whole arrangement being such that increase in inner grid potential beyond a critical value causes a decrease in inner grid current.

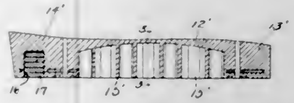
1,861,233. SIZING DEVICE. WALTER L. HUTCHINSON, Hartford, Conn., assignor to The Skayef Ball Bearing Company, Hartford, Conn., a Corporation of Connecticut. Filed June 11, 1930. Serial No. 460,356. 6 Claims. (Cl. 51—165.)

1. In a machining tool having a frame, the combination with a rotary hollow spindle mounted on the frame and a work holder carried at the front end of the spindle, of a feeler disposed within the work holder in position to contact with a work piece located therein, means journalled in and extending through the spindle from its



back end and carrying at the front end the feeler, and means for restraining the feeler from partaking of the rotation of the work piece.

1,861,234. RECOIL PAD FOR GUNSTOCKS. WILLIAM W. KNIGHT, Cicero, Ill., assignor to Roth Rubber Company, Cicero, Ill., a Corporation of Illinois. Filed May 18, 1931. Serial No. 538,079. 14 Claims. (Cl. 42—74.)

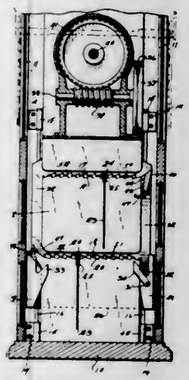


1. A recoil pad for a gun stock, comprising end portions, an intermediate portion having apertures in axial alignment with the gun stock, said apertures being closed by a top wall, and said top wall being of greater thickness toward the end portion than at the center.

9. A recoil pad for a gun stock, comprising a resilient body portion, an end piece having a low coefficient of friction molded into said body portion, said end piece and body having overlapping portions.

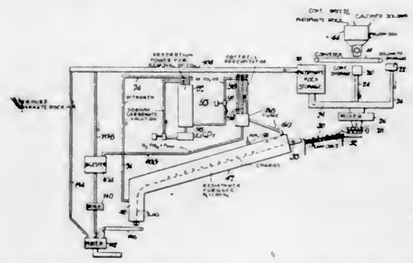
12. A recoil pad for a gun stock, comprising a resilient body portion, pellets of relatively heavy material and means for detachably supporting said pellets in said body portion for balancing the gun when in use.

1,861,235. CARD OR SIGN DISPLAY MECHANISM. CLAUDE E. MARSH, Atlanta, Ga., assignor of one-tenth to Ernest A. Pledger, Atlanta, Ga. Filed July 30, 1931. Serial No. 554,129. 4 Claims. (Cl. 40—36.)



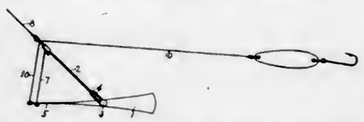
1. An advertising mechanism of the character described including a supporting frame, an upper and a lower pair of oppositively disposed ratchet toothed racks, each pair of racks having teeth inclined in the same direction and opposite to the teeth of the other rack, vertically movable members associated with and disposed in parallel relation to each rack, each of said members having ratchet teeth thereon and inclined in the same direction as the ratchet teeth of the ratchet with which they are associated but disposed out of alinement therewith, means for vertically reciprocating said members, placards having transversely extending supporting rods disposed in series in said racks, and vertically reciprocable means for receiving the supporting rod at one end of the lower pair of racks and carrying it upward and discharging it upon the ends of the upper pair of racks and receiving a placard supporting rod from the other ends of the uppermost pair of racks and lowering it to and discharging it upon the like ends of the lowermost pair of racks.

1,861,236. PROCESS FOR REDUCTION OF PHOSPHATE ROCK. JOHN D. MORGAN, Maplewood, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed May 11, 1928. Serial No. 276,840. 4 Claims. (Cl. 23—165.)



2. The process of reducing a phosphate comprising mixing the phosphate with carbon and a bond containing magnesia and lime, briqueting the mixture and heating the briquets to above 2500° F. in a current of neutral gas.

1,861,237. FISHHOOK SINKER. BURTON G. MORGAN and EDWARD O. KIRKRIET, Tacoma, Wash. Filed Aug. 11, 1930. Serial No. 474,350. 2 Claims. (Cl. 43—49.)

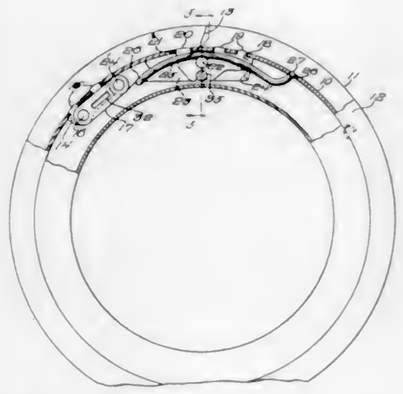


1. A wedge-shaped fish hook sinker for trolling, a trolling line and bail attached thereto by pivotal means in the edges of said sinker and to the rear of its lineal center, means for staying said bail at a desired acute angle with the point end side of said sinker, and a fish hook with line attached, said line passed through a hole in said bail and attached to the front end of said sinker, whereby said front end of said sinker will be drawn to and against said bail by the pull of a fish when caught on said fish hook.

1,861,238. TIRE RIM. EMIL A. NELSON, Detroit, Mich. Filed July 17, 1929. Serial No. 378,836. 23 Claims. (Cl. 301—33.)

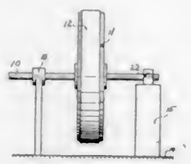
1. In combination, a split tire rim, and means for contracting said rim comprising a link pivotally connected at one end to one of the ends formed by the splitting of said rim, a bracket rigidly connected to the other of the ends of said rim, said bracket having a portion overlying the line of split of said rim and having a lug receivable in an opening in the first mentioned end when said rim is in expanded position, an arm pivotally mounted be-

tween its ends on said bracket and limited in its swinging movement by contact of its ends with said rim, one end of said arm being pivotally connected to the free end



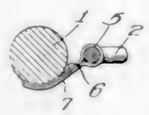
of said link, and spring means co-operating between said arm and said rim constantly urging said arm towards one limit of its pivotal position.

1,861,239. BEARING MEMBER ASSEMBLY. HANS A. NELSON, Exira, Iowa. Filed Feb. 13, 1930. Serial No. 428,042. 4 Claims. (Cl. 308—24.)



1. In a device of the class described, a support having a track formed therein, a bearing member movable in said track in a plane passing thru the member and track, said bearing member being symmetrical about said plane, and means for rigidly securing the member in various positions of its movement in the track.

1,861,240. CONNECTION BETWEEN SPRINGS AND FRAMES. LOUIS E. PITTONI, Jamaica, N. Y., assignor to The Rome Company, Inc., a Corporation of New York. Filed Feb. 10, 1930. Serial No. 427,108. 2 Claims. (Cl. 5—260.)



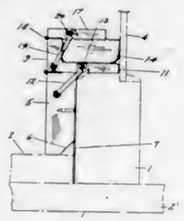
1. In a bed spring, a group of vertical coiled springs, a frame of wire surrounding said group and positioned in about the plane of the upper turns of the spring, individual clips in the form of pieces of sheet metal each bent around and completely enclosing the wire of the upper turn of a spring and having the end portions resting flat against each other, and said end portions extending from the said wires of the upper turns of the springs underneath the frame wire and being welded thereto.

1,861,241. WRITING INSTRUMENT. FRANK O. PUTNAM, Dallas, Tex. Filed Nov. 11, 1930. Serial No. 494,852. 1 Claim. (Cl. 120—102.)



A pen holder having a nib-receiving end and having a substantially flat face which extends downwardly at an incline toward the nib-receiving end of the holder and a thumb end-engaging face at the front terminal of said first named face which extends upwardly therefrom toward the nib end and at an obtuse angle relative to said face and which also extends oblique to the longitudinal axis of the holder.

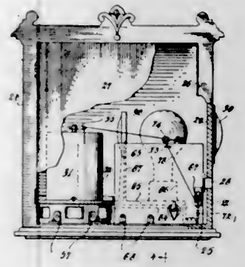
1,861,242. FROST AND MOISTURE ABSORBER FOR WINDOWS. CARL A. RANDOLPH, Rock Island, Ill. Filed July 25, 1929, Serial No. 380,908. Renewed Oct. 5, 1931. 4 Claims. (Cl. 20—40.5.)



1. A device of the class described, comprising a base, adapted for rigid support on the sill of a window, a trough member supported on said base, and absorbent material contained in said trough member.

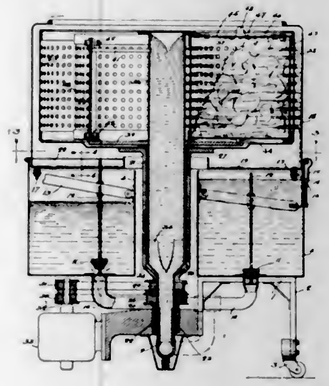
1,861,243. FIRE ALARM AND PHOTOGRAPHIC DEVICE. MORRIS ROTHMAN and ESTELLE TANENBAUM ROTHMAN, Bayonne, N. J. Filed Apr. 15, 1929. Serial No. 355,344. 1 Claim. (Cl. 177—324.)

In combination, a box, an audible signal positioned in said box, an electric motor connected to said signal to operate the latter, a crank having an opening fastened to the armature shaft of said electric motor, an electric light bulb positioned in said box, a camera positioned in said box, a string extending from the lever of the shutter of the camera and passing through the opening of said crank and in frictional engagement with the wall of said opening of said crank, said string pulling up and opening said shutter after said crank has revolved a little less than one half of a revolution, said string of a length to be completely pulled through said opening after said crank has revolved a little less than one half of a revolution to



automatically disconnect the camera from said crank, an electric circuit for the electric appurtenances in said box and means to close said circuit.

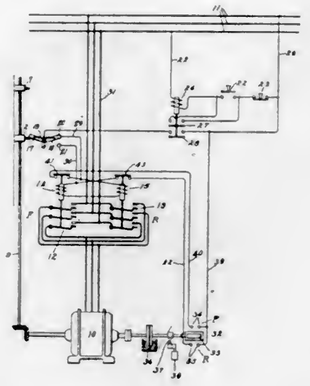
1,861,244. WASHING MACHINE. AUGUST G. SCHWIETERMAN, Dayton, Ohio. Filed July 18, 1927. Serial No. 206,517. 47 Claims. (Cl. 68—18.)



43. In a washing machine, a washing apparatus, a plurality of reservoir compartments for suds and rinse water, a water discharge means for withdrawing water from a selected compartment for circulation through the washing apparatus, an adjustable collecting means for returning the water to the selected compartment after such circulation, adjustable valve means by which the compartment from which water is to be withdrawn is selected, and detent means operating with the valve means for preventing movement of the collecting means out of its adjusted relation with a selected compartment until the valve means is adjusted to disconnect such compartment from the water discharge means.

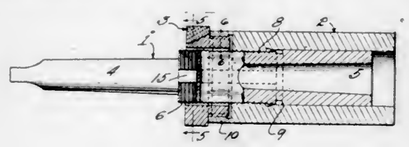
44. In a washing machine, a rotary clothes container, actuating means for rotating the container at high speed so that the clothes therein will be moved outwardly from the axis of rotation by centrifugal force, means for effecting an inward movement of the clothes to a position intermediate the outer position and the axis of rotation simultaneously with their rotation thereabout, from which position they are again moved outwardly by centrifugal force, thereby giving to the clothes a tumbling action simultaneously with their rotation.

1,861,245. SYSTEM OF MOTOR CONTROL. EDWARD B. SMITH, Cleveland, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Sept. 7, 1929. Serial No. 391,053. 2 Claims. (Cl. 172—240.)



1. A reversing motor control system for machine tools and the like, comprising an electric motor, forward and reverse contactors for controlling the direction of rotation of the motor, a switch operated by said motor to operate said contactors at predetermined limits of motor operation to reverse the direction of rotation of the motor, a control circuit including a manually operated stop button for opening said contactors and an auxiliary switch device operable responsively to the direction of rotation of the motor and operation of said stop button for controlling said contactors to plug said motor to rest irrespectively of its direction of rotation when said stop button is operated.

1,861,246. ADJUSTABLE TOOL HOLDER. JOHN HUGO SMITH, Detroit, Mich. Filed Sept. 30, 1929. Serial No. 396,048. 12 Claims. (Cl. 279—100.)

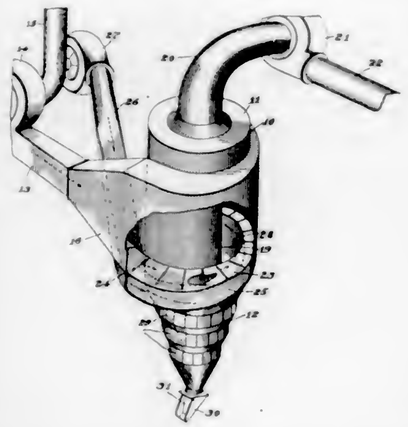


1. A tool holder of the class described, comprising a driving member, a driven member, threaded portions on each member adapted to interengage to effect a relatively longitudinal adjustment between said members for a relatively great distance, and a connecting unit keyed to and longitudinally slidable directly over the threads of one member and adapted in one position to extend between said members and engage the other member for effecting unitary movement between said two members.

1,861,247. AIR CLASSIFIER. ALBERT H. STEBBINS, Los Angeles, Calif. Filed Oct. 29, 1929. Serial No. 403,156. 5 Claims. (Cl. 209—144.)

1. An air classifier comprising in combination, a receptacle having an air discharge conduit, an inlet pipe for supplying material laden air to the receptacle and having the form of an involute curve encircling the receptacle and arranged so that its cross-sectional area gradually decreases in the direction in which the air stream travels to gradually force the stream of air inwardly through an opening in a side of the receptacle, means for advancing the material laden air rapidly along said pipe to cause

it to rotate the air in the receptacle and effect a centrifugal separation of the materials, and an air confining conduit formed along the lower wall of said pipe and pro-



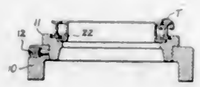
vided with air apertures for directing jets of air upwardly through the lower wall of the pipe to prevent materials from settling in the pipe.

1,861,248. AIR CLASSIFIER. ALBERT H. STEBBINS, Los Angeles, Calif. Filed Jan. 3, 1930. Serial No. 418,227. 3 Claims. (Cl. 209—139.)



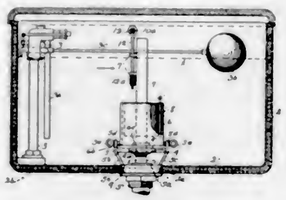
2. An air classifier comprising in combination, an upright receptacle having a material receiving chamber at its lower end and a material settling chamber at its upper end, a zigzag conduit leading from the lower to the upper chamber and provided with continuous zigzag walls disposed in spaced relation to each other to form a continuous tortuous passage constructed to confine both the air and materials being treated within the zigzag passage, an inclined chute for delivering a stream of materials into the upper portion of said conduit and provided with air inlet apertures, means for introducing air from the atmosphere into the zigzag passage so as to produce air streams curving upwardly around the lower end of each zigzag wall, and means for exhausting air from the upper chamber to draw air upwardly within the passage through the falling materials and through the apertures in the inclined chute to promote the flow of materials into the conduit.

1,861,249. SPINNING RING AND SHIELD. HENRY B. STUART, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Dec. 7, 1931. Serial No. 579,618. 3 Claims. (Cl. 118—59.)



1. Spinning or twisting mechanism comprising a reversible flat top ring, a holder therefor, and a shield having an outwardly extended horizontal flange clamped between an upper surface of said holder and a lower surface of said ring, said shield also having a cylindrical portion extending upward substantially to the upper flange of said ring and spaced inwardly therefrom.

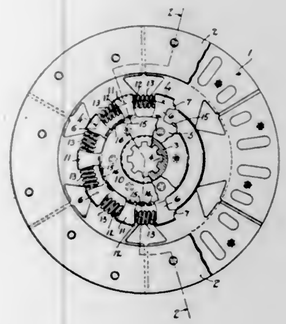
1,861,250. FLUSH VALVE. BERT O. TILDEN, Trenton, N. J., assignor to B. O. T. Manufacturing Company, Trenton, N. J., a Corporation of New Jersey. Filed Nov. 10, 1931. Serial No. 574,053. 7 Claims. (Cl. 4—58.)



5. The combination with a flush tank having a flushing opening in its bottom fitted with a valve seat, of a flushing mechanism comprising a float cylinder having an open top mounted above said seat, a drum float loosely and concentrically disposed in said cylinder, a tube passing concentrically through said cylinder and said drum and being movable with said drum, a valve mounted on the lower end of said tube and coinciding with said seat, said cylinder adapted to be partially filled with the flushing water than envelopes said drum during the filling of the tank, the bottom of said cylinder having an opening through which said tube passes, means to raise said tube and drum for opening the valve to start the flushing action, said raising of the tube effecting the flooding of the cylinder beneath said drum to buoy the drum, said opening being larger than said tube to enable the water to drain from the cylinder and being surrounded by an upstanding flange adapted to create water friction to delay the closing of the valve until the tank is emptied.

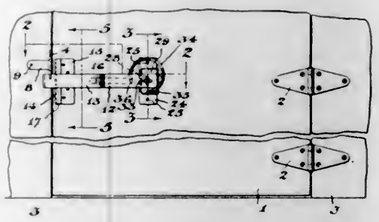
1,861,251. CLUTCH. ERNEST E. WEMP, Detroit, Mich. Filed May 14, 1928. Serial No. 277,471. 13 Claims. (Cl. 192—68.)

2. A device through which power is transmitted for dampening vibrations which may arise from the source of power comprising, a pair of members, one of which drives the other, normally flexed spring means operatively connecting the members which permits relative movement between them, which relative movement may be set up by vibrations, means effecting a braking action



against this movement, said spring connecting means exerting a force by reason of being flexed which acts upon said braking means to effect a braking action.

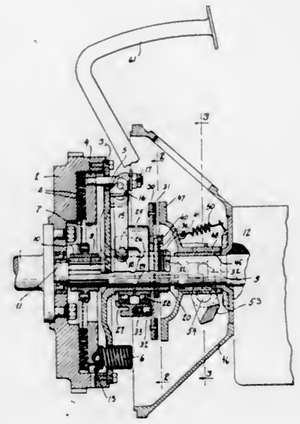
1,861,252. DOOR LATCH. HARRIS M. WHITCOMB, Albany, Wis., assignor to Albany Hardware Specialty Mfg. Co., Albany, Wis., a Corporation of Wisconsin. Filed Sept. 27, 1930. Serial No. 484,806. 4 Claims. (Cl. 292—228.)



1. A door latch comprising an operating handle having a pivot portion adapted to extend through the door, which terminates in a flattened and widened end, a latch bar having a slot in which said flattened end of the handle fits, a bearing member having an opening in which the pivot portion of said handle is rotatably supported, said opening being notched to permit passage of the flattened end of the handle, and means for retaining the latch bar on the flattened end of the handle comprising retaining members secured to the door and engaging the latch bar on opposite sides of said opening, said retaining members permitting limited swinging movement of the latch bar.

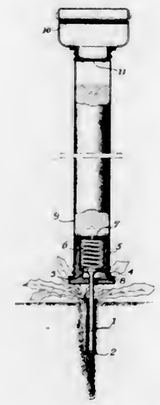
1,861,253. CLUTCH CONSTRUCTION FOR AUTOMOTIVE VEHICLES. ERNEST E. WEMP, Detroit, Mich. Filed Sept. 23, 1929. Serial No. 394,426. 16 Claims. (Cl. 192—99.)

1. In an automotive vehicle, the combination of an engine driven part, a second part for association with traction wheels, a clutch between these two parts, a shiftable gear transmission between these two parts for effecting various gear ratios between the same, said clutch being disengageable to permit shifting of gears, means operable to disengage the clutch to permit demeshing of gears, and means automatically acting independently of



the operable means for engaging and again disengaging the clutch whereby to substantially synchronize certain of the gears to facilitate meshing thereof.

1,861,254. WEED OR VERMIN-KILLING DEVICE. ALBERT C. ARENS, Milwaukee, Wis. Filed Aug. 25, 1930. Serial No. 477,720. 1 Claim. (Cl. 47—49.)



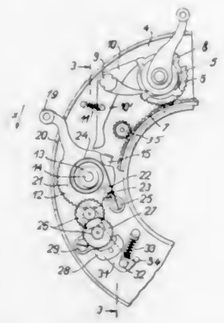
In a plant or vermin-killing device, the combination of a fluid reservoir, a cup-shaped valve body provided with a valve seat and a valve opening forming the bottom of said reservoir and inserted therein, a valve with a downwardly extending stem closing said valve opening, and a spiral compression spring mounted above said valve and urging the same to a closed position, said spring being totally enclosed within said cup-shaped body and supported laterally and externally thereby.

1,861,255. INSTRUMENT BALANCING DEVICE. RALPH G. AREY, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 22, 1931. Serial No. 570,421. 6 Claims. (Cl. 116—129.)



1. Means for balancing a rotatable element comprising a hub co-axial with the axis of rotation of said element, radial projections on such hub, and an adjustable substantially ring-shaped balancing weight surrounding said hub and the axis of rotation of said element and frictionally supported between alternate radial projections of said hub.

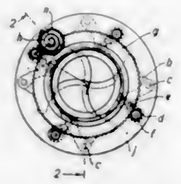
1,861,256. PHOTOGRAPHIC SHUTTER. ÁRPÁD BARÉNYI, Berlin-Lichterfelde, Germany. Filed July 30, 1930, Serial No. 471,704, and in Germany Aug. 7, 1929. 4 Claims. (Cl. 161—26.)



4. In a photographic shutter the combination of a casing, a shutter-operating motor mounted in said casing, a motor-releasing detent mounted in said casing, a detent swinging member rotatably mounted in said casing, a spring engaging the last-named member, adapted to be put under tension by manual rotation of said last-named member and when under tension to rotate said member oppositely, and means for retarding spring-impelled rotation of said member, such means including a pinion structurally united with said member, a frame pivotally mounted in said casing, and a gear-wheel rotatably borne by said frame, the said frame being movable on its pivot between positions of gear-wheel meshing and gear-wheel release with respect to said pinion, and the said frame movable between such positions on the rotation of the said detent-swinging member, through the engagement of the pinion thereof with the gear-wheel borne by the frame.

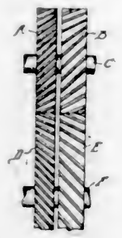
1,861,257. PHOTOGRAPHIC SHUTTER. ÁRPÁD BARÉNYI, Berlin Lichterfelde, Germany. Filed Aug. 13, 1930, Serial No. 474,987, and in Germany Oct. 25, 1929. 6 Claims. (Cl. 95—63.)

1. A photographic shutter comprising an annular support having an orifice, a plurality of blades severally pivoted to and oscillatory upon said support and spaced at intervals around such orifice, such blades in their simultaneous oscillation effecting the alternate closing and opening of such orifice, actuating mechanism for said blades including a corresponding plurality of members



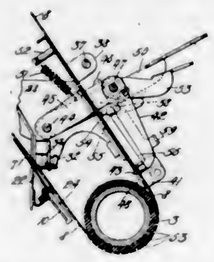
rotatably mounted on said support and a mechanism intermediate each of said members and one of said blades for transforming unidirectional movement of the member into to-and-fro oscillation of the blade, and means for rotating said members simultaneously.

1,861,258. GEARING. JOHN BETHUNE, Rochester, N. Y., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Nov. 17, 1930. Serial No. 496,263. 11 Claims. (Cl. 74—41.)



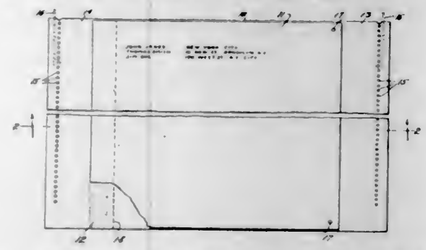
1. The combination with a rotary drive member and a rotary driven member, of a gear train therebetween having a plurality of equal ratio simultaneously loaded gear train portions between said members, said gear train portions having noise-reducing differential characteristics and equal overlap of teeth.

1,861,259. SHEET MANIPULATOR. ERNEST J. BRASSEUR, Chicago, Ill., assignor to A. B. Dick Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 14, 1928. Serial No. 319,224. 15 Claims. (Cl. 197—127.)



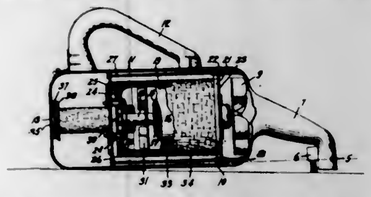
1. A typewriter attachment of the character described, including, in combination, a frame adapted to be secured to the typewriter, sheet-engaging members mounted on the frame for movement into and out of engagement with both sides of a sheet positioned in the typewriter for printing, and movable on the frame along the path of travel of the sheet through the typewriter to advance both sides of an engaged sheet uniformly.

1,861,260. STENCILING MATERIAL. ERNEST J. BRASSEUR, Chicago, Ill., assignors to A. B. Dick Company, Chicago, Ill., a Corporation of Illinois. Original application filed Nov. 14, 1928, Serial No. 319,224. Divided and this application filed Apr. 15, 1930. Serial No. 444,384. 11 Claims. (Cl. 41—3.5.)



1. A stencil comprising a stencil sheet and a backing therefor extending beyond opposite margins of the sheet, said sheet being attached to the backing along one margin thereof, said backing being weakened at a line extending along the inner side of said attached margin so that the central portion and one end portion of the backing may be removed by separating the backing along the weakened line without detaching the stencil sheet from the other end portion of the backing, the free end of the stencil sheet being provided with apertures with which stud elements provided on the duplicating drum are adapted to engage to retain the stencil on the drum.

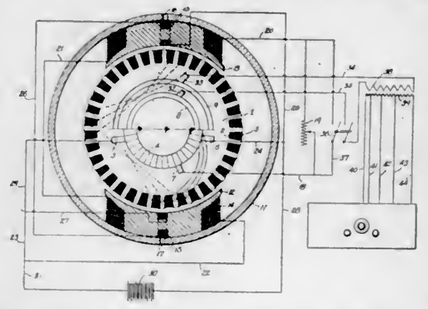
1,861,261. HAND VACUUM CLEANER. JESSE F. CARSON, Cleveland, Ohio, assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio, a Corporation of New York. Filed Jan. 25, 1930. Serial No. 423,526. 7 Claims. (Cl. 15—7.)



1. In a vacuum cleaner, the combination of a nozzle, a suction fan communicating with the nozzle, an annular casing for the fan, an electric motor driving the fan, a tubular enclosure for the motor having a discharge opening in its rear end, a means for releasably clamping the front end of the enclosure to the fan casing, a head for supporting the motor in concentric spaced relation to the fan casing and enclosure and around which dust ladened air is free to pass to the filter, a second head attached to the rear end of the motor for supporting the enclosure in spaced relation to the motor, said head having an opening through which filtered air passes, a tubular filtering means within the enclosure and in spaced concentric relation to it and the motor which extends longitudinally of the motor, a perforated support for the filter held at its ends by said heads, and a conduit means located between the rear head and the rear wall of the enclosure for conveying air to the discharge opening of the enclosure after it has passed through the filter.

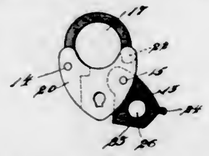
1,861,262. VEHICLE BROADCASTING RECEIVER UNIT AND GENERATOR THEREFOR. CARL E. CHESNEY, Overland Park, Kans., assignor to Roy Thorp, Kansas City, Mo., as Trustee. Filed Oct. 19, 1931. Serial No. 569,775. 7 Claims. (Cl. 250—27.)

1. The combination, with a generator comprising an armature, an alternating current winding on said armature, a direct current winding on said armature, a commutator, collecting rings, a pair of main brushes for collecting direct current from said commutator, a third brush, pole pieces, a main field winding on said pole pieces, a regulating field winding disposed at right angles to said main field, the main field winding being connected across said third brush and one of said main brushes, the regulating field winding being connected across said



main brushes, and a variable resistance in series with said main field circuit; of a transformer, a thermionic tube device using power supplied by said transformer, means for connecting said transformer to the alternating potential generated by said alternating current winding, and means for automatically strengthening said main field of the generator, when said connecting means is actuated.

1,861,263. CLASP. ARTHUR M. COLE, Attleboro, Mass., assignor to General Findings & Supply Co., a Firm composed of Edwin F. Leach and Stephen H. Garner, Attleboro, Mass. Filed Mar. 4, 1930. Serial No. 433,031. 2 Claims. (Cl. 70—105.)

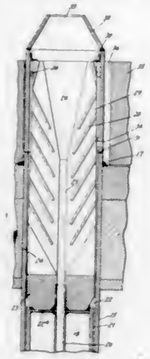


1. In a clasp, a body member comprising spaced complementary front and back plates, a shackle member pivoted between said plates adjacent one side edge thereof and having an arched outer portion to extend beyond the edge of said plates, the outer free end of said arched portion engaging between said plates when in clasped position, an inward extension on said shackle having its outer side edge shaped to conform to the peripheral adjacent section of said front and back plates when the shackle member is clasped, a fastening member pivoted adjacent the opposite side edge of said plates and having its outer edge conforming to the adjacent peripheral shape of said plates, an abutment on said fastening member adapted to engage the free end of said arched portion to limit its position between said plates, and an inwardly extending abutment on said fastening member adapted, when swung to place with its outer edge in line with the edges of said plates, to engage the inward extension of said shackle member to prevent movement of the shackle.

1,861,264. MERCURY BOILER. BEVIS P. COULSON, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 14, 1929. Serial No. 370,995. 5 Claims. (Cl. 122—319.)

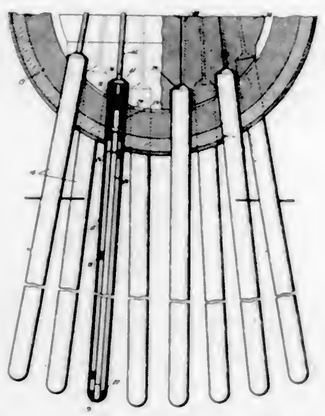
1. In a mercury boiler, the combination of a casing, an outer tube which projects through said casing to a point above the inner surface of the casing wall, a core

in said outer tube in spaced relation thereto to provide an up passage, said core having a passage for the down flow of mercury, means providing vertically extending



slots which connect the up passage to the down passage from a point above the casing wall to a point below the inner surface of the casing wall, and means for supplying mercury from the casing to said down passage.

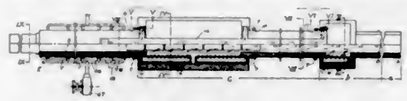
1,861,265. MERCURY BOILER. BEVIS P. COULSON, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 14, 1929. Serial No. 370,096. 2 Claims. (Cl. 122—318.)



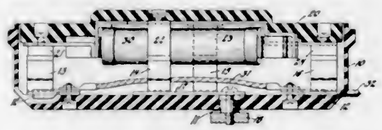
1. In a mercury boiler, a boiler tube comprising an outer tube, a core located within and in spaced relation to the outer tube to provide an annular space for the up flow of mercury and vapor, said core having a down passage, the upper end of said down passage being larger in diameter than the remaining portion, a wall in the upper end of the outer tube, a tube which projects downwardly from said wall into said down passage, means providing a passage for feeding mercury from the side of the outer tube to the space within said last named tube, and means providing a passage of restricted area for the escape of vapor through said wall.

1,861,266. TUNNEL KILN. EDWIN B. FORSE and CHARLES F. GEIGER, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Jan. 16, 1931. Serial No. 509,065. 3 Claims. (Cl. 25—142.)

1. In a cooling zone for a tunnel kiln, a plurality of sections having inner walls adjacent to the tunnel and composed of materials whose thermal conductivity is greater than 0.006 calorie/cm.²/sec./° C., the sectional wall which is nearest the firing zone being composed of a stable and non-oxidizable refractory and the remaining sectional walls being composed of bonded silicon carbide, air ducts in said sectional walls, and means for passing air at a controlled rate through said ducts to regulate the cooling effect of said walls.

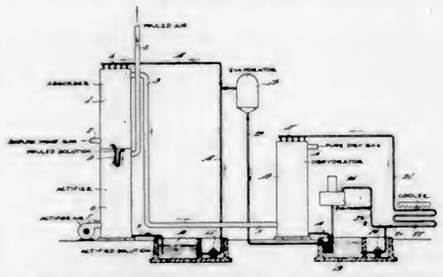


1,861,267. SWITCHING DEVICE. WILLIAM H. FRANK, Detroit, Mich., assignor to Bulldog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed May 31, 1930. Serial No. 458,198. 12 Claims. (Cl. 200—133.)



1. A fused switching device comprising mating sections, each of which is provided with a plurality of contacts adapted to mate with contacts provided on the other, a bus bar, a fuse, and a cable connected to separated contacts on said sections, said bus bar and cable, being of a current carrying capacity at least as large as that of the fuse, said contacts being of a current carrying capacity equal to only a fraction of the capacity of said fuse, and being connected in parallel so that together their capacity is at least as great as that of the fuse and whereby they need carry a current of no larger capacity than that for which they were designed.

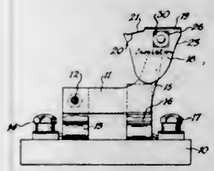
1,861,268. GAS DEHYDRATING PROCESS. HERBERT A. GOLLMAR, East Orange, N. J., assignor to The Koppers Company, a Corporation of Delaware. Filed Sept. 11, 1928. Serial No. 305,333. 8 Claims. (Cl. 23—3.)



1. The process of removing moisture from a gas which comprises washing the gas with a thiocyanate brine of such concentration and at such temperature that the vapor pressure of said brine is lower than the partial pressure of water vapor in the gas to be treated.

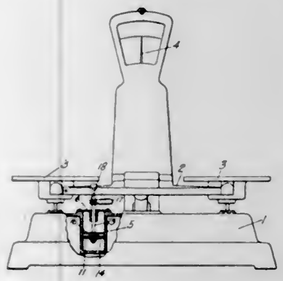
1,861,269. HANDLE FOR ELECTRIC SWITCH BLADES. RICHARD W. GRACE, Canton, Ohio, assignor to The Superior Switchboard & Devices Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 17, 1930. Serial No. 428,989. 4 Claims. (Cl. 200—172.)

1. In combination with a switch blade having an angular free end portion, an insulation handle fixed upon said angular end portion, the insulation handle including a roughened top surface, a roughened end surface angularly



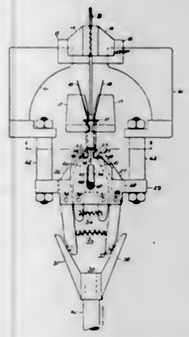
disposed to the top surface, and a projection provided with a recess in its top surface adapted to receive an indicating card.

1,861,270. DASHPOT FOR WEIGHING SCALES. MERVIL HALLEAD and THOMAS B. FLANAGAN, Columbus, Ohio, assignors to The Exact Weight Scale Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 17, 1928. Serial No. 270,752. 4 Claims. (Cl. 188—96.)



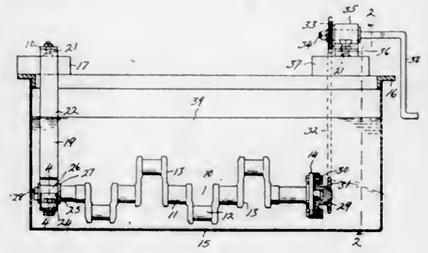
1. In a weighing scale, the combination of a dash pot, elements adjustable with relation to each other for varying the effectiveness of said dash pot, a resilient means for maintaining said elements in proper relation, said resilient means being of such structure and so located as to visibly indicate the position of adjustment of said elements.

1,861,271. STEM MAKING MACHINE. PETER HEBRE, Fichtenau, Kreis Niederbarnim, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 18, 1930, Serial No. 436,877, and in Germany Apr. 6, 1929. 3 Claims. (Cl. 176—3.)



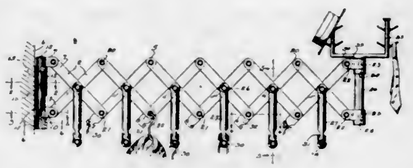
1. In a stem machine, the combination of jaws for supporting an assembly comprising a glass tube and leading-in wires extending longitudinally therefrom of a pair of levers having guide arms extending therefrom between said leading-in wires and shaped to receive portions of said leading-in wires, another pair of levers disposed outside said leading-in wires and having portions thereof shaped to clamp said wires against said guide arms, a pin movably mounted between said first mentioned pair of levers, a cam for moving said pin and a member for moving said second mentioned levers to cause said clamping portions thereof to open or close, said first mentioned levers being shaped so that movement of the aforesaid pin causes said guide arms to approach each other or separate depending on the direction of said movement.

1,861,272. METHOD OF CHROMIUM PLATING CRANK SHAFTS. WALTER G. HILDORF and HAMPSON G. MCINTOSH, Lansing, Mich., assignors to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed Dec. 10, 1928. Serial No. 324,914. 8 Claims. (Cl. 204—1.)



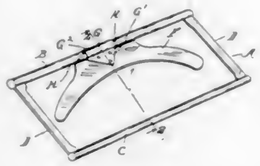
1. The method of obtaining uniformly deposited chromium surfaces on crank shaft bearings which consists in suspending a crank shaft in an electrolyte, mounting the same for rotation about its main axis, protecting the surfaces between the bearings of said crank shaft for electrical contact with said electrolyte whereby exposing only the bearings as cathode surfaces and rotating said crank shaft during the passage of current through said electrolyte.

1,861,273. EXTENSION GARMENT HANGER. THOMAS H. HOOD, Dallas, Tex., assignor to Extension Garment Hanger Company, Inc., Dallas, Tex., a Corporation of Texas. Filed Dec. 14, 1929. Serial No. 414,036. 3 Claims. (Cl. 211—105.)



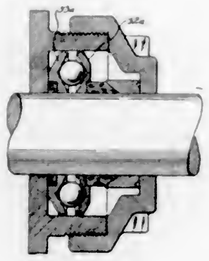
1. A device of the class described including a lazy tongs, supporting means detachably connecting the terminals of the lazy tongs at one end, an adjustable connection between the terminals of the lazy tongs at the other end, the bars of said tongs being perforated to receive pivot members therethrough, metal lined tubular pivot members inserted through the corresponding perforations of said bars for strengthening such pivot connections, and hanger members comprising elongated spaced bars having convex external surfaces throughout their main length and perforated ends, the upper ends of said spaced bars being secured to the opposite ends of said tubular pivot members and the lower perforated ends having metal sleeves secured in said lower perforations to resist wear of inserts therein.

1,861,274. PACKING HOLDER FOR COATS AND OTHER GARMENTS. ALFRED T. HOPKINS, Detroit, Mich. Filed Nov. 24, 1924. Serial No. 751,953. 3 Claims. (Cl. 223—61.)



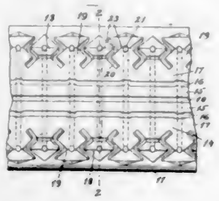
2. A device for compactly folding garments for packing purposes comprising a frame having parallel rounded edge portions spaced apart by a distance less than the transverse dimension of the frame, said frame having a recess intermediate said edge portions, and a fashioned shoulder-engaging member hingedly secured to one of said edge portions and arranged in said recess between said members.

1,861,275. SHAFT PACKING. ROBERT C. HOPKINS, Alliance, Ohio. Filed May 28, 1930. Serial No. 456,409. 5 Claims. (Cl. 286—7.)



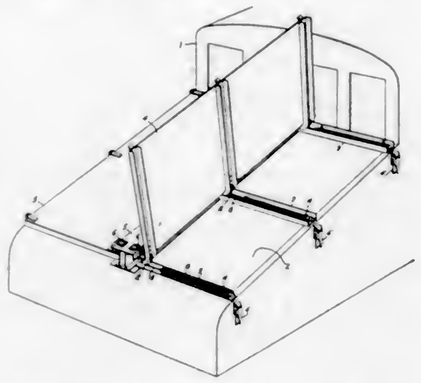
4. In combination with a gland and the like having spaced walls, a rotating shaft journaled through said walls, a wearing ring surrounding the shaft adjacent to one wall, a packing ring surrounding the shaft, and centrifugal means between the other wall and the packing ring for urging the packing ring toward the wearing ring to compress the packing ring around the shaft.

1,861,276. PNEUMATIC TIRE. KARL B. KILBORN, Fairlawn, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed Dec. 26, 1931. Serial No. 583,167. 8 Claims. (Cl. 152—14.)



1. A pneumatic tire casing having a flexible tread wall provided with a rubber tread internally apertured and formed with middle and marginal anti-skid projections having an original wearing contour and relation of said contour to the apertures for developing additional extent of anti-skid projections transversely in the tread margins by wearing away of the latter into the apertures before the original middle projections having worn away.

1,861,277. DOOR COUNTERBALANCING STRUCTURE. OLE K. KJOLSETH, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Sept. 11, 1929. Serial No. 391,950. 2 Claims. (Cl. 16—1.)



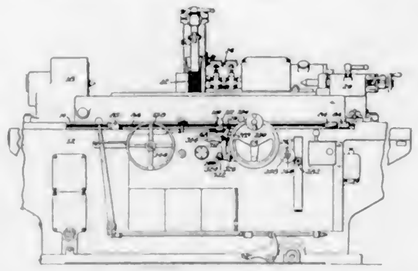
1. A compartment and pivoted cover therefor, means for counterbalancing said cover so as to assist in the opening thereof and to prevent sudden closure comprising a rod arranged beneath said cover and guided for longitudinal movement, a flexible cable connecting said rod to said cover, and a spring coacting with said rod for placing said cable under tension so as to assist opening movement of the cover.

1,861,278. HUB CAP FOR VEHICLE WHEELS. MARTIN KUNIHOLM, Gardner, Mass., assignor to Kuniholm Manufacturing Company, Gardner, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1931. Serial No. 578,732. 6 Claims. (Cl. 301—108.)



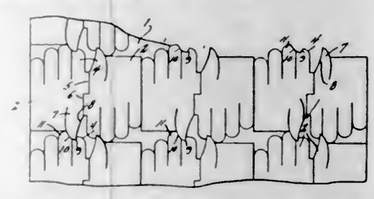
1. A hub cap for vehicle wheels comprising a body portion having diametrically-spaced, circumferentially-slotted attaching ears, and having spoke-receiving notched portions between said slotted ears.

1,861,279. GRINDING MACHINE. MAXWELL I. MATHEWSON, Providence, R. I., assignor to Brown & Sharpe Manufacturing Company, a Corporation of Rhode Island. Original application filed July 19, 1927, Serial No. 206,917. Divided and this application filed Jan. 3, 1930. Serial No. 418,214. 21 Claims. (Cl. 51—165.)



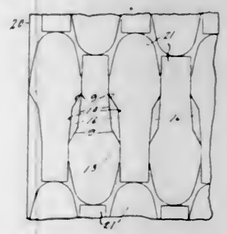
1. A grinding machine having, in combination, a grinding wheel, a longitudinally movable work table, a cross feed for the grinding wheel, automatic means controlled by the longitudinal travel of the work table for driving said cross feed, and a second automatic means acting in timed relation to the rotation of the work independently of the travel of the carriage for driving said cross feed to maintain at a substantially constant ratio the rate of advance of the grinding wheel with relation to the speed of rotation of the work.

1,861,280. COMBINATION GLOVE MANUFACTURE. MELVIN MCKINLEY, Coshocton, Ohio, assignor to Indianapolis Glove Company, Indianapolis, Ind., a Corporation of Indiana. Filed Jan. 15, 1931. Serial No. 508,857. 2 Claims. (Cl. 2—169.)



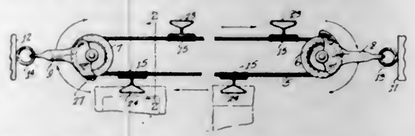
2. A glove blank palm having a thumb digit portion extending from the thumb base, an integral finger digit portion extending from the opposite side of the blank from the thumb, two of said finger digits having a notch formed therebetween, said thumb digit being fractional laterally of its tip and complementally interfitting into said notch.

1,861,281. FABRIC HAND COVERING. MELVIN MCKINLEY, Coshocton, Ohio, assignor to Indianapolis Glove Company, Indianapolis, Ind., a Corporation of Indiana. Filed Jan. 15, 1931. Serial No. 508,858. 2 Claims. (Cl. 2—169.)



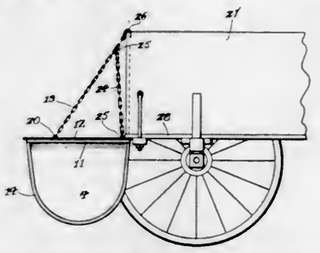
1. A glove blank grouping comprising a series of adjacent blanks oppositely disposed to provide wristward extension portion of one blank spacing the finger portions of the adjacent blank in said series, the fingers of the blanks terminating in abruptly narrowing portions merging in tapering wristward extensions, the abruptly narrowing portions of one blank being spaced from the abruptly narrowing portion of the oppositely disposed adjacent blank transversely of the extent of said series.

1,861,282. CLOTHES HANGING DEVICE. CHRISTINE NELSON, San Francisco, Calif. Filed Dec. 28, 1931. Serial No. 583,447. 2 Claims. (Cl. 68—3.)



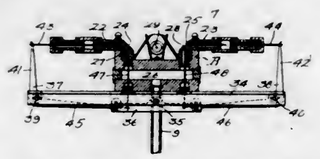
1. In a device of the character described, the combination of a pulley line including a pair of pulleys and hangers therefor, and a line reeved over said pulleys, of a plurality of clips positioned on said line and spaced one from the other, each of said hangers having wings formed thereon, whereby said clips moved into engagement with said wings will be actuated.

1,861,283. GRAIN TANK. STEVEN C. NELSON, Finley, N. Dak. Filed Sept. 16, 1929. Serial No. 393,010. 3 Claims. (Cl. 224—29.)



1. A rectangular tank for the purpose set forth comprising an open top body portion including a rounded bottom and a pair of side and a pair of end walls, said end walls being secured to said side walls and bottom, a pair of end and a pair of side angle shaped members, each formed of a vertical and a horizontal flange, the horizontal flange projecting outwardly from the top of the vertical flange, each vertical flange being secured against the outer face of a wall at the upper marginal portion thereof and having its top flush with the upper edge of the wall, horizontally disposed oppositely inclined bars extended upon and having their inner ends connected with and inwardly of the ends of the horizontal flange of one of the angle shaped side members and extended upon and having their outer ends connected with the horizontal flanges of the angle shaped end members adjacent one end of the latter, coupling means for suspension elements attached to and projecting upwardly from the horizontal flanges of said end members forwardly of the outer ends of said bars, and suspension element coupling means connected to and projecting upwardly from and forwardly of the inner ends of said bars.

1,861,284. OIL BURNER. JOHN L. RICKETTS and CHARLES F. DENGLER, Philadelphia, Pa. Filed Nov. 2, 1928. Serial No. 316,825. 3 Claims. (Cl. 158—120.)



3. In an oil burner, a pair of opposed oil nozzles, a cleaning rod longitudinally shiftable in each nozzle, a rocker arm connected to each cleaning rod, a link connecting the rocker arms and means for rocking said link.

1,861,285. ELONGATED TABLET PACKAGE AND WRAPPINGS. WILLIS JOSEPH RITZEL, Pasadena, Calif. Filed Apr. 3, 1931. Serial No. 527,526. 7 Claims. (Cl. 206—46.)

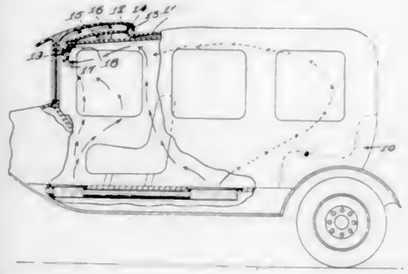
1. A wrapping for a tablet of long, narrow, thin contour, said wrapping comprising two pairs of wrapping sections, each said pair comprising an inner wrapping section and an outer wrapping section, means for securing the sections of each said pair together against relative endwise movement, said pairs of sections being adapted to be disposed about the respective end portions of the tablet

and in assembled relation having their adjacent end portions in interleaved lapping relation, and said inner wrapping sections adapted to be folded longitudinally about the enclosed tablet and to have their folded end portions folded transversely so as to lie flat against their adjacent side faces and being formed with portions adapted to be folded back upon one of said inner sections to form a frictional interlocking engagement between the adjacent end portions of said inner sections to resist endwise separation, in combination with a connecting tab integral with the inner end portion of one of said outer sections and adapted to be folded back against the inner face of said section, adhesive applied to the inner face of the tab as thus folded and serving to secure the same to the op-



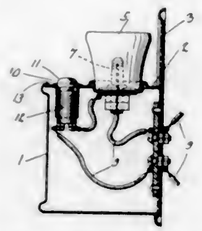
posed face of the inlapped end portion of the other outer wrapping section, and adhesive applied to the inner face of one of the marginal side edge portions of each of said outer wrapping section and serving to secure the marginal edge portions of the respective outer wrapping sections together after the same has been drawn tightly about the inner wrapping sections and contained tablet, said outer sections being formed with projecting pull tabs extending beyond the respective ends of the rest of the package and said outer sections as applied about the inner wrapping sections extending across and sealing the respective end portions thereof and one of said outer wrapping sections extending across the folded interlocking portions of said inner sections to hold them in flat folded yielding interlocking engagement.

1,861,286. AUTOMOBILE VENTILATOR. EDWIN BURTON ROYLE, Eureka, Utah. Filed Feb. 15, 1930. Serial No. 428,767. 1 Claim. (Cl. 98—2.)



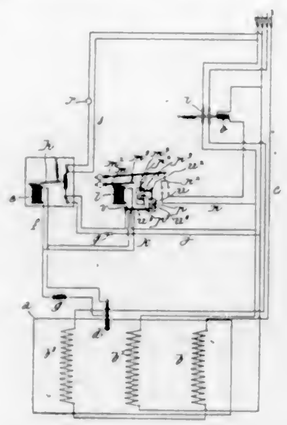
A ventilator construction for motor vehicles and within the tops thereof comprising multiple top sections located at different levels, the adjacent ends of the top sections being oppositely curved to provide channel members having the extreme edges of the channel members disposed in juxtaposition to the median line of each other to define a devious air duct, a sub-base having communication with the curve of the adjacent channel member and spaced at its opposite end from the uppermost of the top sections to define a passage having communication at its ends with said air duct and the interior of the vehicle, and a damper disposed within the vehicle for controlling the ingress and egress of air through the innermost end of said passage.

1,861,287. SMOKING CASE. EMORY GLENN SIMPSON, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 28, 1929. Serial No. 417,060. 4 Claims. (Cl. 219—32.)



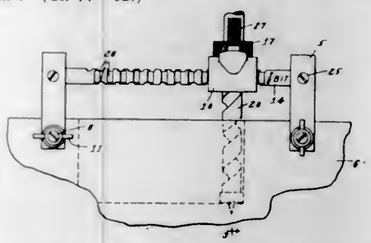
2. A combination lighter and ash receiving smoking case for a vehicle body comprising in combination an outer casing arranged to be secured with its back to a wall of the vehicle body, a lighting unit including an outer shell and a resistance coil carried by the top plate of the said casing and arranged to be connected with a source of electricity, the said outer shell of the lighting unit projecting substantially above and cooperating with the top plate of the casing to form a corner, a switch for making and breaking the circuit between the lighting unit and the source of electricity carried by the top plate in the said corner whereby the said switch is shielded against pressure exerted by the arm of the passenger when the said smoking case is used as an arm rest.

1,861,288. THERMOSTATIC CONTROL. LÉON DAVID WEILL, Paris, France. Filed Oct. 25, 1928, Serial No. 315,087, and in Belgium Oct. 28, 1927. 3 Claims. (Cl. 219—20.)



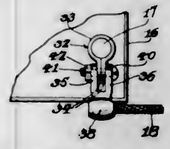
3. A system of the class described comprising a main circuit including a main source of electrical energy and a heater operated by said main source; a switch controlling said main circuit; a secondary circuit connected to said main source and including an electrically responsive device controlling the operation of said switch; an auxiliary circuit including a thermally responsive element; an auxiliary source of energy and another electrically responsive device; means operable by said last mentioned device to control said secondary circuit; a first timing mechanism operable by said first mentioned electrically responsive device to control said switch; and a second timing mechanism operable to electrically connect said first mentioned electrically responsive device to said auxiliary circuit and thereby put the same under the direct control of said thermal element for a predetermined period of time.

1,861,289. PORTABLE MORTISING DEVICE. JOHN HERBERT ABRAMSON, Rockford, Ill., assignor to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed Dec. 8, 1928. Serial No. 324,655. 3 Claims. (Cl. 77—62.)



1. In a device as set forth a pair of supporting end frames, a pair of spaced guide rods extending from one frame to the other one of said guide rods having several series of differently spaced recesses provided in alignment on different portions of the circumference thereof, means for mounting the rod in the end supports permitting the turning thereof to bring any series of recesses into operative position but preventing endwise movement of said rod relative to the supports, a latch on the guide arranged for removably engaging in the recesses of any selected series, said latch being free to turn and having a compression spring normally tending to urge the same toward the recesses, and a pin extending radially from the latch and engaging a surface on the guide to limit inward movement of the latch, the said surface being cam-shaped whereby the latch is arranged for engagement in the recesses when turned to one position but is held out of engagement with the recesses when turned to another position.

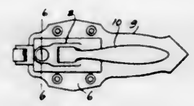
1,861,290. BATTERY TERMINAL CONNECTER. WILL J. AGNEW, Walker, Iowa. Filed Sept. 30, 1929. Serial No. 396,263. 6 Claims. (Cl. 173—259.)



1. The combination with a battery terminal formed with side faces, a portion of one side face being parallel to a portion of the other side face, of a connecter comprising a socket forming part adapted to receive a cable terminal, a yoke-shaped part integral with said socket forming part and straddling said terminal, and means for detachably clamping said yoke-shaped part against the parallel portions of said side faces of said terminal.

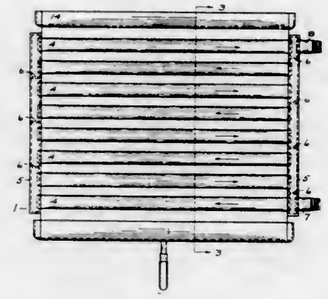
1,861,291. LATCH. THOMAS P. ARCHER and JOHN B. FLYNN, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Mich. Filed Mar. 16, 1929. Serial No. 347,494. 5 Claims. (Cl. 70—29.)

1. In a latch for a refrigerator door, or the like, of the type having a reciprocable bolt, a composite casing for the said bolt consisting of an outer stamped member and an inner die-cast member arranged to fit within the said outer



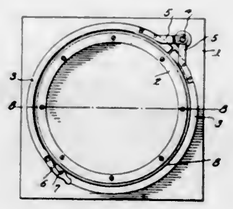
member and to serve as a guide for the said bolt, the said outer member serving to hold the said inner member in position.

1,861,292. LIQUID TEMPERATURE CHANGING DEVICE. WALTER A. BARRETT, Fort Wayne, Ind. Filed Dec. 9, 1930. Serial No. 501,070. 2 Claims. (Cl. 157—187.)



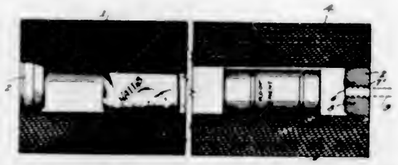
1. In a device of the class described, two transversely corrugated sheets each sheet having substantially flat portions between the corrugations, the lower portion of each section being turned upwardly to form a trough and the upper portion of each section being flared outwardly, the substantially flat portions of the sections being secured together to cause the opposed corrugated portions to form tubes and the upper flared portions to form a trough and means at the opposite ends of the tubes to connect them in series and form a continuous fluid passageway through the tubes.

1,861,293. SETTING UP FORM FOR STAVED CONTAINERS. OSCAR L. BARTLETT, Mound City, Ill. Filed July 24, 1930. Serial No. 470,425. 1 Claim. (Cl. 147—3.)



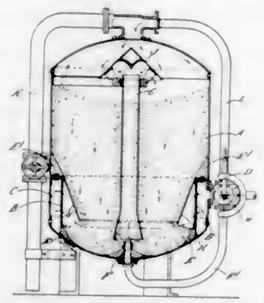
A structure of the character described comprising a platform, an unbroken stationary annular ring mounted upon the platform, a split two-part opening and closing ring member concentrically disposed spaced from the annular ring, a hinge joint connecting the two parts of the split ring and fixed to the platform, and a fastener for detachably latching the two parts of the ring when brought in close relation to the annular ring, said stationary ring being upwardly tapered.

1,861,294. CLOSURE PLUG FOR ROLLS. OSCAR L. BARTLETT, Mound City, Ill. Filed Mar. 20, 1931. Serial No. 524,139. 4 Claims. (Cl. 206—59.)



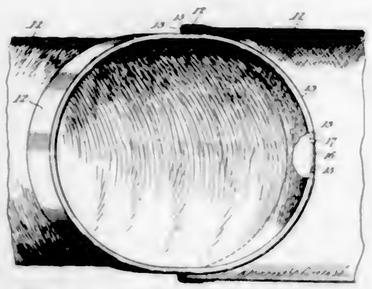
4. A closure for rolls comprising a plug to be inserted in the end of the roll and having an opening therethrough, a fastener engaging one face of the plug for biting into the roll and extending across the opening, and means securing the fastener to said face of the plug, said opening permitting an instrument to be passed through the plug for detaching the fastener therefrom.

1,861,295. FILTER. BALFOUR BRAMWELL, Belfast, Ireland. Filed Jan. 8, 1929, Serial No. 331,133, and in Great Britain Feb. 7, 1928. 3 Claims. (Cl. 210—133.)



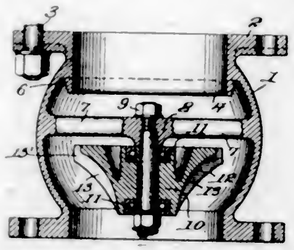
3. A filtering apparatus, comprising a filter chamber to contain a filtering medium and having at its lower end a double wall enclosing an annular collecting chamber, the inner wall or skirt of said chamber being perforated for the passage of water, an injector wash nozzle in the bottom of the filter chamber, an open-ended wash tube within the filter chamber extending vertically above the said wash nozzle, and a filtering medium retaining wall within the perforated inner wall or skirt of the collecting chamber and extending obliquely downward from the latter toward the injector wash nozzle.

1,861,296. HOSE COUPLING. NORMAN B. BRALY, Redwood City, Calif. Filed June 11, 1930. Serial No. 460,433. 9 Claims. (Cl. 285—71.)



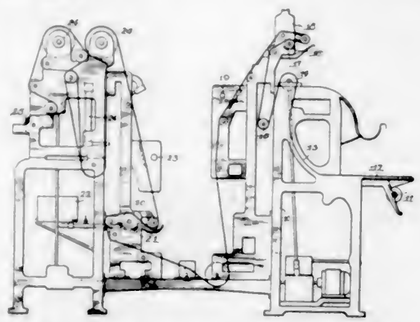
1. A tube coupling of the character set forth, comprising detachably cooperating relatively expansible and contractile rings, one adapted to pass through the other, at least one of said rings comprising a collar member having a bead, a holding member within the bead, and a fabric tube section having its end around the holding member and clamped by and between it and the body member.

1,861,297. COMBUSTION PROMOTING DEVICE. CLAUDE S. BAISTOW, Long Beach, Calif. Filed Sept. 13, 1929. Serial No. 392,400. 2 Claims. (Cl. 48—180.)



1. A device of the class described comprising a substantially spherical-shaped body having its upper and lower ends open, means for connecting the upper end of the device with a manifold of an internal combustion engine and its lower end with the carbureter of the engine and a rotor in the body of substantially frusto-conical shape with its large end uppermost and having blades on its exterior surface whereby the passage of the combustible mixture through the device will rotate the rotor and said rotor will, through the action of centrifugal force, cause the mixture to be thrown against the walls of the body, each blade gradually increasing in width from the lower end of the rotor to a point adjacent the upper end thereof, with the top of the blade straight and vertical.

1,861,298. BLUE PRINT AND PROCESS OF MAKING THE SAME. HAROLD J. BRUNK, Chicago, Ill., assignor to The C. F. Pease Company, a Corporation of Delaware. Filed May 11, 1931. Serial No. 536,378. 9 Claims. (Cl. 95—6.)



1. The method of making non-bleeding photoprints comprising coating a sheet of material with a ferricyanide of an alkali metal and a light sensitive ferric ammonium compound of an organic acid, exposing portions of the coated surface to light, applying to said surface without preliminary watering a developer comprising a ferricyanide of an alkali metal and a ferric ammonium compound of an organic acid, and thereafter washing.

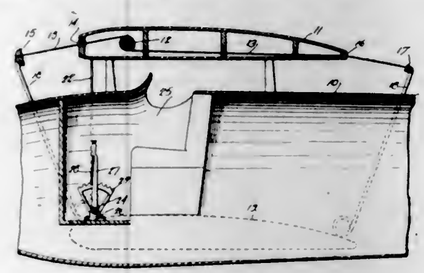
1,861,299. SHOE, SLIPPER, BOOT, AND THE LIKE. PERCY WILLIAM BULLOCK, County of Middlesex, England. Filed Apr. 17, 1930, Serial No. 445,162, and in Great Britain May 2, 1929. 9 Claims. (Cl. 36—50.)

1. A shoe, slipper, boot or the like, which comprises a sole, an upper each side of which is attached to the sole to a position at the rear of the heel, a flexible counter portion of the upper which forms at one end the only continuation of the outer side of the upper beyond the vertical seam at the rear of the heel and is connected at its other



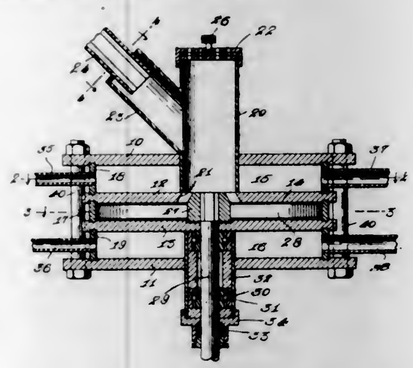
end to the inner side of the upper and being of a size larger than that required for fitting the foot, and means for retaining the counter folded back on itself around the heel of the foot.

1,861,300. AEROPLANE PARACHUTE. ANTON CHMIELEWSKI, Iron River, Mich. Filed Apr. 10, 1931. Serial No. 529,229. 6 Claims. (Cl. 244—21.)



1. The combination with an aeroplane having a wing comprising spaced walls and covering for the walls; of a shaft extending through the wing transversely of the aeroplane, a pair of parachute webs wound on the shaft and normally housed entirely within the wings between the walls, and mechanism attached to the free edges of the webs to withdraw the webs from the wing.

1,861,301. FREEZER. JOHN A. CONGLETON and OSCAR KELLY, Dallas, Tex. Filed Feb. 2, 1931. Serial No. 513,004. 4 Claims. (Cl. 62—114.)



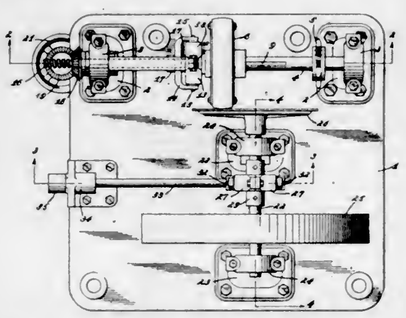
1. In a freezer, a housing, partitions within said housing dividing the latter into a freezing chamber and expansion chambers upon opposite sides of the freezing chamber, means providing for the passage of a refrigerant through the expansion chambers, an agitator movable within the freezing chamber, means to supply material to the freezing chamber to be frozen, and a controllable air inlet for the freezing chamber.

1,861,302. AUTO SANDER. FRANCIS L. DALY, Naugatuck, Conn. Filed Aug. 28, 1931. Serial No. 560,015. 1 Claim. (Cl. 291—34.)



Boxes having apertured bottoms designed to be secured under the running boards of an automobile or like vehicle, an apertured valve plate in each box of a length less than that of the box, each valve plate having a tongue which is received through one end of the box adjacent the bottom thereof, links connected to the tongues, a transversely arranged shaft journaled beneath the body of the vehicle and having a lever which extends into the body of the vehicle and each of the valve plates, in a line and at the opposite sides of the apertures therein, having upstanding sand agitator flanges.

1,861,303. FRICTION DRIVE FOR FEED GRINDER DRAGS. GROVER R. DE YARMAN, Olds, Iowa. Filed Oct. 25, 1930. Serial No. 491,243. 2 Claims. (Cl. 74—26.)

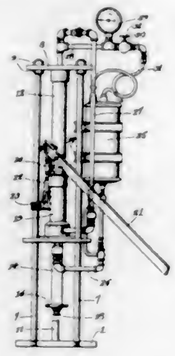


1. The combination of shafts disposed at substantially right angles to each other, a friction disk fixed to the inner end of one shaft, a friction wheel slidably splined to the other shaft and engageable with said disk, collars on said shafts, one collar being adjustably secured to its shaft and the other collar adjustably secured to the friction wheel, two-part housings rotatably receiving said collars, means connected with one of the housings to shift the same, a feed screw, a yoke carried by the feed screw and connected with the other housing, a gear operating said feed screw, and manually operable means operating said gear.

1,861,304. APPARATUS FOR PRESSING REPLACEMENT SLEEVES INTO CYLINDER BLOCKS. GIRARD G. ETHERIDGE, Atlanta, Ga. Filed May 8, 1930. Serial No. 450,765. 3 Claims. (Cl. 29—86.)

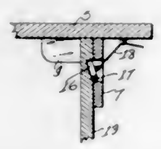
1. In an apparatus for pressing replacement sleeves into cylinder blocks, a base plate for mounting on top of the cylinder block and provided with an opening, a plurality of supporting rods projecting upwardly from the base plate, a head plate supported by and connecting the upper ends of the rods, a platform connected with the supporting rods and arranged above and in spaced relation to the base plate, said platform projecting laterally from said rods, a cylinder extending between the head plate and platform and aligning with said opening,

a ram depending from the lower end of the cylinder, a hydraulic pump mounted on the lateral projecting portion of said platform, a vacuum type supply tank secured to one of the supporting rods above the pump, a conduit



leading from the supply tank to the pump, a conduit leading from the pump to the upper end of the cylinder and having a branch return conduit to the supply tank, and a valve in said branch.

1,861,305. TABLE. ERNST AMON FASCHING, San Francisco, Calif. Filed Mar. 14, 1931. Serial No. 522,628. 1 Claim. (Cl. 45—31.)



In a device of the character described, a table top, a pair of legs secured to said table top, braces secured to said table top and said legs, a second pair of legs spaced one from the other and having their upper extremity engaging said table top and in parallel relation to said first mentioned legs, securing means for detachably securing said first mentioned legs to said second mentioned legs, said detachable means comprising pivoted detents pivotally mounted within the plane of said first mentioned legs and adapted to move into recesses formed in the upper extremities of said second mentioned legs.

1,861,306. AUTOMOBILE SIGNAL. ROY E. FLEEK, Oil City, Pa. Filed Oct. 5, 1928. Serial No. 310,544. 1 Claim. (Cl. 177—327.)

A direction signal comprising a casing having an open front and provided with the ends thereof stepped to form the casing into portions of different lengths, a stencilled plate bearing direction characters closing the casing and having letters "STORNING" for the upper compartment, and letters "RLIGHT" for the lower compartment, a dividing plate in said casing to provide a front chamber, partitions carried by the dividing plate and abutting the stencilled plate to divide the chambers into compartments arranged one above the other and one partition having an opening to establish communication between said chambers, a second dividing plate in the casing providing intermediate and rear chambers, spacing elements between the second dividing plate and the rear wall of the casing, partitions on the second dividing plate bearing against the first dividing plate to provide a plurality of lamp compartments, lamps in said compartments, said first dividing plate having light openings establishing communication between the compartments of the intermediate and front chambers to permit illumination of the characters by the lamps, said



rear chamber extending about one of the ends of the intermediate and front chambers and having one of the characters disposed in front thereof, and a lamp in the rear chamber, whereby the words Turning or Stop may be selectively displayed from the upper compartment and Right or Left from the lower compartment.

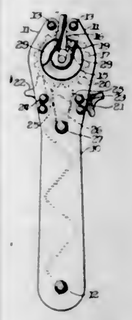
1,861,307. APPARATUS FOR THE AUTOMATIC PRODUCTION OF INSPISSATED SUGAR FRUITS. BERTHOLD GERNHARDT, Berlin, Germany. Filed Aug. 29, 1927, Serial No. 216,311, and in Germany July 25, 1927. 1 Claim. (Cl. 99—2.)

An apparatus for the automatic production of inspissated sugar fruits comprising in combination, a treatment vessel for the fruits, air-tight closure means therefor, and means for automatically and periodically supplying and withdrawing from said vessel the inspissated sugar deposited therein comprising a vacuum creating pump, means for periodically destroying said vacuum and means to return the liquid to the treatment vessel.

1,861,308. WIRE TYING TOOL. ARTHUR L. GOLDENSTAR, Duluth, Minn. Filed Oct. 3, 1929. Serial No. 397,000. 1 Claim. (Cl. 140—119.)

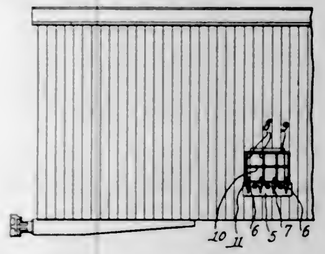
A wire tying tool comprising, in combination, a handle, a bifurcated head, a sprocket wheel disposed centrally of the head and within the bifurcated area, a plurality

of pawls for controlling the movement of the sprocket in opposite directions, said pawls being resiliently held in operative and inoperative position by a single member,



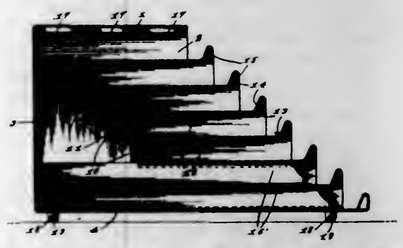
and a plurality of oppositely disposed wire engaging jaws carried by the sprocket wheel, said jaws being recessed to facilitate engagement with the wire.

1,861,309. CARD HOLDER. CLYDE GLENN, Verona, Ill. Filed July 18, 1930. Serial No. 468,912. 1 Claim. (Cl. 40—13.)



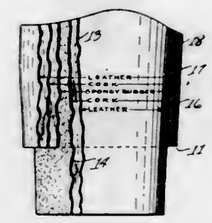
A card holder comprising a supporting plate to be secured to a supporting surface, said plate having openings formed therein near one edge of the plate, said plate having outwardly pressed portions defining grooves terminating at the openings, a body portion including spaced rods having coiled portions lending resiliency to the rods, the ends of the rods near the coiled portions being curved upwardly and downwardly to bind against the plate to securely hold the body portion in position, and said rods adapted to clamp an article against the supporting surface.

1,861,310. COIN WRAPPER AND BILL STRAP CONTAINER. HARVEY L. LIEBENDORFER, Beaver Falls, Pa. Filed Jan. 28, 1931. Serial No. 511,861. 2 Claims. (Cl. 211—55.)



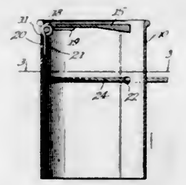
1. A cabinet for the purpose set forth, comprising a top, a back and a bottom, and sides, the edges of the sides being arranged at downward and outward inclinations and the said edges being notched to define outer upstanding fingers, trays, each comprising a plate having a back portion, and having its front formed with an upstanding hook to engage with the fingers of the sides and the said front having the hooked portions thereof notched, the back and edges of the trays being fixedly secured to the sides of the body, and the top of the body having spaced depressions each affording a tray.

1,861,311. SOCKET FOR ARTIFICIAL LIMBS. FRANK H. LOGAN, Los Angeles, Calif. Filed May 20, 1931. Serial No. 538,820. 1 Claim. (Cl. 3—9.)



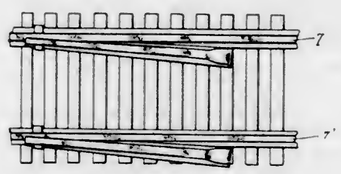
The method of forming a socket for an artificial limb which consists in first covering a form, then adhesively securing a cork layer to said covering, next adhesively connecting a sponge rubber layer to said cork layer, thereafter cementing a cork layer over the sponge rubber layer, and finally, cementing a leather layer over said last mentioned cork layer.

1,861,312. ANIMAL TRAP. FRANK MAGEE and GEORGE WASHINGTON HAVERBECK, Tarrytown, N. Y. Filed July 19, 1930. Serial No. 469,228. 18 Claims. (Cl. 43—77.)



1. An animal trap comprising a housing with an opening therein, a member at least partially closing said opening in normal position but movable inwardly of the housing out of closing relation thereto, and yieldable means tending to maintain said member in normal position.

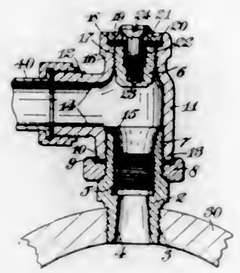
1,861,313. RERAILING DEVICE. GEORGE B. MARABLE, Norwood, Ohio. Filed Nov. 4, 1930. Serial No. 493,313. 5 Claims. (Cl. 104—269.)



1. A re-railer device comprising a rail having a flanged base, a substantially straight-edged crown on said rail

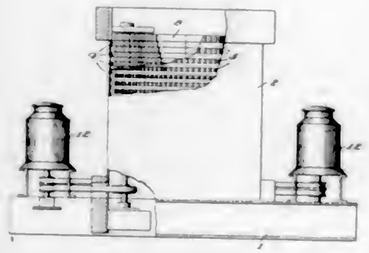
adapted to seat on the top of a track rail and the flanged base adapted to seat on the top of the flange of the track rail, and removable means for holding said rail in seated position on the track rail.

1,861,314. MAIN FERRULE FOR CONNECTING BRANCH PIPES. ROBERT MCANDREW, Coventry, England. Filed May 18, 1931, Serial No. 538,300, and in Great Britain May 30, 1930. 3 Claims. (Cl. 285—105.)



1. A device for connecting a branch pipe to a main comprising a relatively short nipple having a streamline internal bore, a ferrule secured for rotary adjustment upon said nipple and having a lateral outlet for connecting with the branch pipe, the lower portion of said outlet extending in any position of adjustment above the mouth of the nipple, and means between said ferrule and nipple for securing the ferrule in adjusted position.

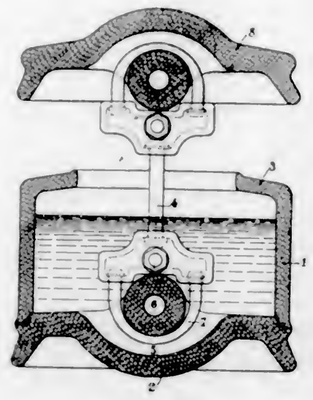
1,861,315. APPARATUS FOR REDUCING ROCK AND OTHER MINERAL SUBSTANCES. JAMES MACDONALD MITCHELL, Flushing, N. Y. Filed Sept. 6, 1927. Serial No. 217,776. 10 Claims. (Cl. 83—93.)



1. A device for reducing rock and other mineral substances, including alternately fixed and movable members, said members being provided with centrally disposed registering apertures for the reception of the material to be reduced.

1,861,316. INSULATOR. ARTHUR MONTANDON, Paris, France, assignor of one-half to Societe Generale d'Entreprises au Maroc, Paris, France. Filed July 9, 1926, Serial No. 121,432, and in France Feb. 17, 1926. 2 Claims. (Cl. 173—366.)

1. In an aerial insulator for high tension electric lines, a hollow body made of an insulating material provided with a bottom, a cylindrical peripheric wall and an inturned edge around the upper periphery of the said wall,



an insulating liquid in the said hollow body and suspending means attached to the center of the bottom of the hollow body.

1,861,317. CEMENT SIZE. WILLIAM PAUL DWIGHT MONOSS, Chattanooga, Tenn., assignor to American Cement Paint Company, Rossville, Ga., a Corporation of Georgia. Filed Mar. 22, 1929. Serial No. 349,277. 3 Claims. (Cl. 134—46.)

1. A size comprising a mixture of amorphous white silica, china clay, talc, pigment, a re-action product of Portland cement, calcium carbonate, alum, lactic casein, sulfuric casein, borax, and hydrated lime.

1,861,318. MEANS FOR CONTROLLING AEROPLANES. FREDERICK HANDLEY PAGE, London, England, assignor to Handley Page Limited, London, England. Filed Dec. 1, 1931, Serial No. 578,367, and in Great Britain Jan. 23, 1931. 6 Claims. (Cl. 244—12.)



1. In aeroplanes, the combination of wings, slats freely and independently movable towards and away from said wings within prescribed limits by the action of the air pressure on said slats, rearwardly located flaps, and means for connecting said slats with said flaps adapted to draw a flap into a high incidence position when its slat moves away from the wing, said means constructed to prevent a flap from moving its slat towards the wing when said slat is in its forward position.

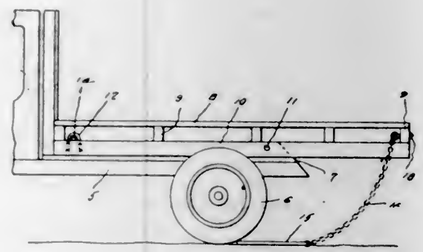
1,861,319. PROCESS FOR THE PREPARATION OF GALL ACIDS. JULIUS PEYER, Basel, Switzerland, assignor to Chemical Works formerly Sandoz, Basel, Switzerland. Filed Apr. 14, 1927, Serial No. 183,909, and in Germany Apr. 24, 1926. 1 Claim. (Cl. 260—108.)

A process for the preparation of gall acids, consisting in first precipitating with acids the gall acids from a saponification product of gall and then treating same with a mixture of a fatty acid solvent, which does not dissolve cholic acid, and an aqueous solution of a salt of a weak acid having an acidity similar to cholic acid and which does not possess an alkaline reaction.

1,861,320. PROCESS FOR THE PREPARATION OF EFFECT THREADS. ALFRED RHEINER, Basel, Switzerland, assignor to the Firm Chemical Works formerly Sandoz, Basel, Switzerland. Filed June 16, 1927, Serial No. 199,415, and in Germany Nov. 13, 1926. 1 Claim. (Cl. 8—20.)

A process for the preparation of effect threads, having no affinity for substantive dyestuffs and consisting of the lower acetylated derivatives of cellulose, by the direct acetylation of cellulosic fibers without altering the physical characteristics of such fibers, the reaction being effected in a single acetylating bath, said process comprising immersing natural cellulosic fibers in a quantity of acetylating mixture containing an amount of acetic anhydride considerably in excess of that theoretically required to form the said derivatives, said mixture consisting of acetic anhydride, glacial acetic acid and an acetylating catalyst, the fibers being entirely covered by and in contact with excess of acetylating mixture throughout the course of the reaction; allowing the acetylating mixture to react on the fibers only until the mono- and diacetyl derivatives of cellulose have formed; and thereupon separating the resultant effect thread from the excess of acetylating mixture.

1,861,321. TRUCK. TRUMAN B. RUNCIMAN, Exeter, Calif. Filed June 12, 1931. Serial No. 543,999. 1 Claim. (Cl. 298—20.)



The combination of a vehicle having a frame, wheels supporting the frame, a body tiltably mounted upon the frame and extending to a point rearward of the wheels, and a flexible element secured to said body rearwardly of said wheels, and having a plate at the free end thereof adapted to be detachably positioned between one of said wheels and the ground whereby subsequent rearward movement of the vehicle will tension the flexible element and tilt the body.

1,861,322. BLIND NAIL CONCEALED STITCH WELT. ROBERT C. SCHEMMEL, Union City, Ind. Filed June 27, 1928. Serial No. 288,748. 1 Claim. (Cl. 155—184.)

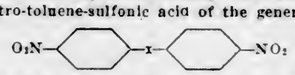
A finishing welt comprising a covering fabric having an upper base ply folded inwardly along its outer edge to provide a bottom bead ply, a top bead ply continuing from the inner edge of the bottom bead ply, extending thence over the outer edge fold common to the upper base and bottom bead plies and having its terminating margin secured to the bottom surface of the upper base ply to form therewith a multi-ply base, a substantially solid core contained between the bottom and the top bead plies, a line of stitching passing through the core and the bottom bead ply near the edge fold common to



the bottom and top bead plies for securing said bottom bead ply and said core together, and another line of stitching passing through said upper base and bottom bead plies only, close to their common edge fold, securing said plies together in hinged relation.

1,861,323. STILBENE DYESTUFFS AND PROCESS OF MAKING SAME. MAX SCHMID, Riehen, near Basel, Switzerland, assignor to Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Mar. 12, 1930, Serial No. 435,354, and in Switzerland Mar. 16, 1929. 19 Claims. (Cl. 260—69.)

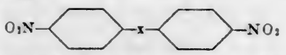
1. Process for the manufacture of dyestuffs of the stilbene series, consisting in condensing conversion products of para-nitro-toluene-sulfonic acid of the general formula



wherein each benzene nucleus contains at least one sulfo group, and x stands for a bridge consisting of two carbon atoms each of which is linked with one of the benzene nuclei, in an alkaline medium in a closed system at 115 to 150° C. and in various stoichiometrical proportions, with aromatic amino-compounds of the benzene and naphthalene series.

1,861,324. DYESTUFFS OF THE STILBENE SERIES AND PROCESS OF MAKING SAME. MAX SCHMID, Riehen, near Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Original application filed Mar. 12, 1930, Serial No. 435,354, and in Switzerland Mar. 16, 1929. Divided and this application filed Mar. 26, 1931. Serial No. 525,589. 18 Claims. (Cl. 260—69.)

1. Process for the manufacture of dyestuffs of the stilbene series, consisting in treating with hypohalites the products which are obtained by condensing the conversion products of para-nitrotoluene-sulfonic acid of the general formula

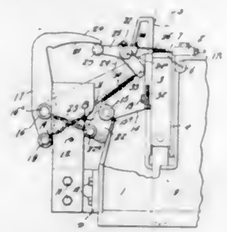


wherein each benzene nucleus contains at least one sulfo group, and x stands for a bridge consisting of two carbon atoms each of which is linked with one of the benzene nuclei, in an alkaline medium, in a closed system, at 115 to 150° C., and in various stoichiometrical proportions, with aromatic amino-compounds of the benzene and naphthalene series.

1,861,325. BOOKBINDING MACHINE. WILLIAM C. SCHMIDT, Oak Park, Ill., assignor, by mesne assignments, to T. W. & C. B. Sheridan Company, New York, N. Y., a Corporation of New York. Filed Jan. 9, 1928. Serial No. 245,429. 11 Claims. (Cl. 154—41.)

1. In a book binding machine, means to cut a lining strip, a binding holding mechanism comprising a flex-

ible spring finger adapted to be brought in contact with and hold a lining strip during the process of cutting



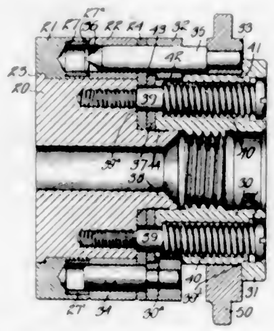
and a cam actuated lever adapted to release said spring finger from said lining strip.

1,861,326. DEVICE FOR OPERATING LIFTING JACKS. DONALD WILFRED SESSIONS, London, England. Filed Aug. 12, 1930, Serial No. 474,795, and in Great Britain Oct. 17, 1929. 4 Claims. (Cl. 81—177.)



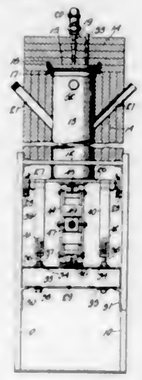
1. Means for operating lifting jacks comprising a jack operating screw, a tapered nose on the end of said screw, and a device for rotating the screw comprising an elongated support having a recess which fits the small end of the nose widthwise so as to prevent rotary displacement of the support about its longitudinal axis when engaged with said nose and which recess is wider than said nose in the direction lengthwise of the support to permit limited horizontal movements of the device, a hollow member for engagement with the large diameter portion of the nose mounted in alignment with said recess at one end of the support and rotatable about an axis at right angles to the length of the support, and means carried by the support whereby said hollow member can be rotated.

1,861,327. DIE HEAD. HARRY T. SHEARER and CHARLES A. REIMSCHISSEL, Waynesboro, Pa., assignors to Landis Machine Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1928. Serial No. 328,634. 11 Claims. (Cl. 10—100.)



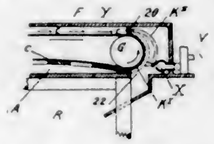
1. A die head comprising a body member, trunnions mounted in the body member, chaser holders mounted on the trunnions, tangential chasers in the holders, a plurality of rings surrounding the said body member, one of said rings being connected to the said chaser holders, means in said rings for opening and adjusting the die head, the said rings being positioned laterally of said body member by a flange on the body member, and a ring plate attached to the said body member, a ring carrying locking pins connected to the said plurality of rings and rotatable about the body member with said plurality of rings, said ring being positioned on a shank slidably connected to said body member, the said ring being limited in its axial movement relative to said shank for locking the die head and pins mounted in the said shank for driving the said body member, substantially as set forth.

1,861,328. CARBON DIOXIDE SNOW MACHINE. NORMAN M. SMALL, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Nov. 30, 1929. Serial No. 410,822. 3 Claims. (Cl. 62—121.)



1. A carbon dioxide snow machine comprising a frame, a drum mounted on said frame, means for expanding carbon dioxide into said drum, means for withdrawing unfrozen carbon dioxide vapors from said drum, a truck mounted on said frame, a plate on said truck, means for moving the truck and the plate vertically to close the lower end of the drum, and means for moving the trucks and the plate laterally of the drum to clear the open end to permit removal of frozen CO_2 from the drum, substantially as set forth.

1,861,329. APPARATUS FOR DEVELOPING LIGHT-SENSITIVE MATERIAL. CARL RUDOLF UHLICH and HANS OTTO HELLMUTH VON STERN, Leipzig, Germany, assignors of one-half to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany, a Corporation of Germany. Filed Oct. 11, 1927, Serial No. 225,589, and in Germany May 2, 1927. 2 Claims. (Cl. 95—89.)

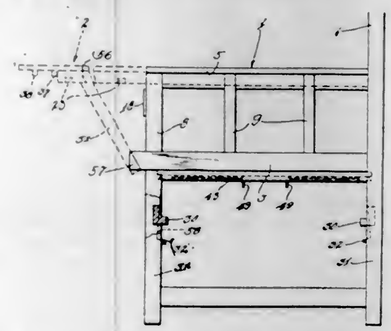


1. Apparatus for developing light-sensitive materials by means of a gaseous developer comprising in combination a perforated plate, an endless gas tight conveying blanket adapted to move the light-sensitive material over said plate, a chamber containing ammonia beneath said plate and communicating therewith, a ventilating chamber and adjustable means at the discharge end of said plate adapted to guide the developed light-sensitive material onto the upper side of said conveying blanket or into said ventilating chamber.

1,861,330. MANUFACTURE OF SENSITIVE DIAZOTYPE LAYERS. LODEWIJK PIETER FRANS VAN DER GRINTEN and KAREL JAN JOSEPH VAN DER GRINTEN, Venlo, Netherlands, assignors to N. V. Chemische Fabriek L. Van Der Grinten, Venlo, Netherlands, a Dutch Company. Filed May 12, 1930, Serial No. 451,837, and in the Netherlands May 15, 1929. 26 Claims. (Cl. 95—7.)

1. The process for preparing a base having a light sensitive diazo type layer thereon which comprises applying a rapidly coupling mixture of a diazo compound and an azo dyestuff component to said base, and drying the base until the moisture content thereof is reduced to a point not exceeding 4% of its dry weight.

1,861,331. CHAIR. THEODORE VON ELMPT, Chicago, Ill. Filed Mar. 23, 1928. Serial No. 263,981. 6 Claims. (Cl. 155—127.)



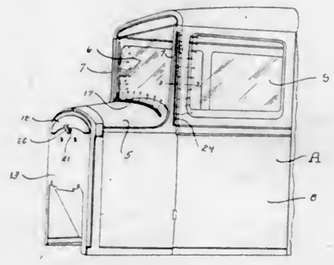
2. A device of the type described comprising a chair portion, a table portion, arms carried by said chair portion, horizontal supports disposed adjacent said arms and arranged to be moved with respect thereto for supporting said table portion, means for locking said horizontal supports in place, said means comprising a movable locking member having projections thereon, said horizontal supports having recesses arranged to receive said projections, and means for moving said locking members for moving said projections into said recesses.

1,861,332. APPARATUS FOR APPLYING PRESSURE TO OIL SANDS. CHARLES A. WAITZ, Erie, Pa. Filed Oct. 28, 1925. Serial No. 65,335. 6 Claims. (Cl. 166—1.)



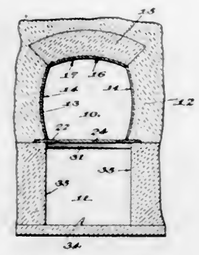
1. In a pressure apparatus for oil sands, the combination of a packer between two sands; a fluid pressure tube leading through the packer; and means delivering fluid pressure to the well and above the packer comprising a pipe within the tube, and a fitting forming a discharge for the pipe and a bypass continuing the tube.

1,861,333. WINDOW HEATER FOR AUTOMOBILES. XANDER Y. ZUHLKE and ROLLIN B. JORDAN, Bancroft, Nebr. Filed Mar. 19, 1930. Serial No. 437,127. 9 Claims. (Cl. 20—40.5.)



1. The combination with a motor vehicle including windshield and side panels, and an engine; heater means embodying a conductor for conveying hot air from the engine and directing the air upwardly over the face side of the windshield, and means communicating with the conductor for directing some of the hot air rearwardly over the side panels.

1,861,334. FURNACE DOOR. HARRY B. ABEL, Macon, Ga., assignor to Nye Odorless Incinerator Corporation, Macon, Ga., a Corporation of Delaware. Original application filed Sept. 30, 1930, Serial No. 485,523. Divided and this application filed Sept. 26, 1931. Serial No. 565,380. 5 Claims. (Cl. 110—181.)

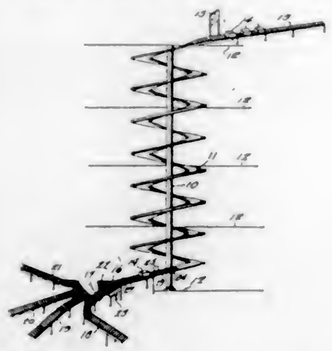


1. In a furnace with masonry walls, a metal lined doorway having concave side jambs, the curvature of said jambs varying from front to rear and the greatest curvature of each such jamb being at its rear edge.

1,861,335. REMOTE CONTROL CONVEYER SWITCH. WILLIAM E. CAIN, Jeffersonville, Ind., and ALLEN E. CRADY, Louisville, Ky., assignors to Logan Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed July 3, 1930. Serial No. 465,765. 15 Claims. (Cl. 193—36.)

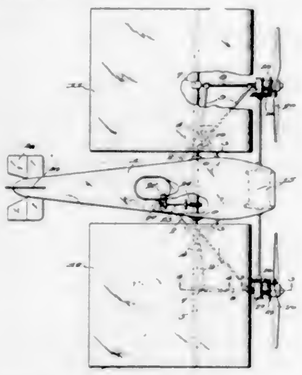
2. Apparatus of the character described comprising a main conveyer, a switch section having one end connected to said main conveyer and the opposite end movable to either of a plurality of predetermined discharge points,

mechanical means including a reversible motor for moving the last named end of said switch section to either of said discharge points, control means for said motor,



and means automatically operative when the last named end of said switch section reaches the selected discharge point for breaking the circuit through the motor.

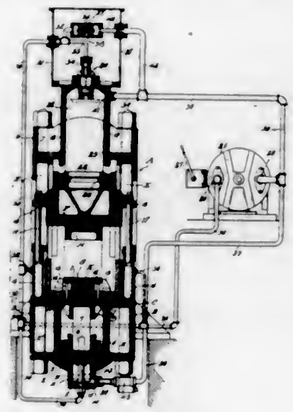
1,861,336. AIRPLANE. PATRICK COX, Lake Worth, Fla. Filed Sept. 3, 1931. Serial No. 561,047. 1 Claim. (Cl. 244—14.)



An airplane construction comprising a fuselage having bearings, a transverse shaft mounted in the bearings of the fuselage, carriage struts on each side of said fuselage, auxiliary bearings for said transverse shaft, a rod secured to each of said auxiliary bearings, brace members connecting said rods and said carriage struts, a transversely disposed drive shaft, means carried at the end of said rods for transmitting movement from said drive shaft, a propeller disposed in front of each of said wings, means for driving said propellers from said drive shaft, and means disposed within the cockpit of the airplane for rotating the transverse shaft whereby the wings may be shifted to various angular positions with respect to the longitudinal axis of the airplane.

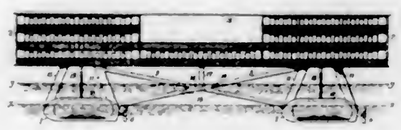
1,861,337. HYDRAULIC METAL DRAWING PRESS. WALTER ERNST, Mount Gilead, Ohio, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed May 25, 1931. Serial No. 539,895. 10 Claims. (Cl. 113—45.)

1. In a drawing press including a movable die and a movable blank holder; the combination with hydraulic actuating means for bringing about relative movement between said die and holder, of a source of fluid pressure connected to said means; hydraulic cushioning means associated with said blank holder for yieldably urging said blank holder towards said die during a drawing opera-



tion; hydraulic connections providing communication between said actuating means during the drawing operation and said cushioning means for maintaining at a constant ratio the hydraulic pressures therein, and means for varying said pressure ratio.

1,861,338. MARINE VESSEL. JOHN G. FAUST, Washington, D. C. Filed July 8, 1927. Serial No. 204,259. 15 Claims. (Cl. 114—0.5.)



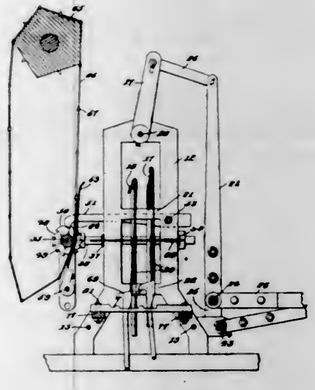
1. A marine vessel comprising a divided submersible base made up of a plurality of cargo carrying floats immersed wholly in the water when the vessel is loaded, a super-structure lying well above the surface of the water, and a framing of skeleton type between the base and the super-structure comprising arched columns between the floats and the super-structure, arched cross girders between transversely alined floats, longitudinally extending girders between longitudinally alined floats and the columns thereof, and arched cross girders between the longitudinally extending girders, said pillars and girders being of streamline form.

7. In a marine vessel, a float comprising a body terminating in tapering bow and stern portions, and fairing shells of ovoid cross-section at each of the body and covering the same between the top and bottom surfaces thereof, said shells being longitudinally curved and merging into the body at the points of intersection of the side walls of the body and the bow and stern portions thereof.

1,861,339. JACQUARD HEAD. CHARLES A. FISHER and CLETUS J. KETNER, Kannapolis, N. C., assignors to Cannon Mills Company, Kannapolis, N. C., a Corporation of North Carolina. Filed June 16, 1930. Serial No. 461,552. 7 Claims. (Cl. 139—59.)

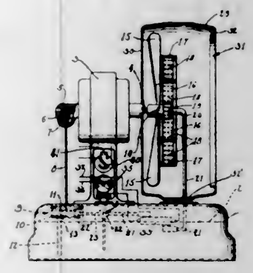
1. In a jacquard head for looms, a reciprocating cylindrical line contact card cylinder having a diameter substantially less than the width of a standard card, means

for rotating said cylinder the distance between adjacent horizontal holes upon a card upon each pick of the loom and means for advancing said cylinder after a card



has been exhausted from the last horizontal row of holes in the exhausted card to the first horizontal row of holes in a new card.

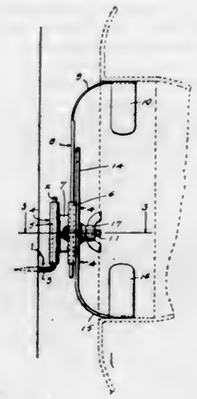
1,861,340. HUMIDIFIER. MERRITT L. FOX, Cedar Rapids, Iowa. Filed July 30, 1928. Serial No. 296,151. 2 Claims. (Cl. 261—29.)



1. A humidifier comprising a liquid-containing receptacle, a source of power, a hood associated with said receptacle and having communication with the interior of the latter, a fan operatively connected with said source of power and being disposed within the hood, spray-forming means associated with said fan, a pumping device operatively connected with said source of power and arranged for moving liquid from the receptacle to said spray-forming device, liquid-conveying means connecting said pumping device with the spray-forming device, and heating means operatively connected with said conveying means for heating liquid passing from the receptacle to said spray-forming device.

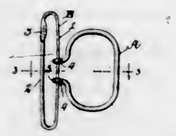
1,861,341. HAT HANGER. BENJAMIN F. GRAME, Naperville, Ill. Filed Mar. 5, 1931. Serial No. 520,387. 5 Claims. (Cl. 211—32.)

5. A hat hanger, comprising a pair of rigid arms arranged in parallel relation, means for mounting said arms in operative position, one of said arms being of reduced weight adjacent one end to provide a flexible portion, a pair of hat engaging members each being carried by one of said arms, one of said members being attached to the flexible portion of its arm and adapted to be swung to a



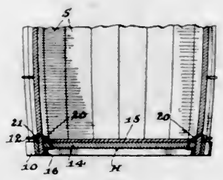
position forwardly thereof by the flexing of said portion, and the other of said members being permanently attached to its arm to extend forwardly therefrom.

1,861,342. CURTAIN HANGER. BEN Z. HAUSNER, New York, N. Y. Filed Oct. 17, 1931. Serial No. 569,512. 3 Claims. (Cl. 156—21.)



1. A curtain hanger comprising a supporting member and a securing member, the securing member having a flat bar and the supporting member composed of a length of metal bent around and clamped to the flat bar of the securing member.

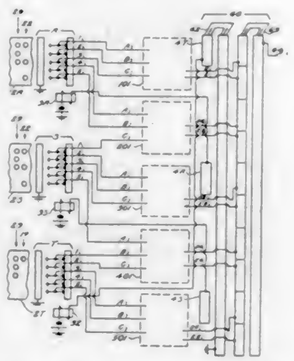
1,861,343. BARREL AND APPARATUS FOR AND METHOD OF FORMING THE SAME. ALFRED B. HOUTZ, Elizabeth City, N. C. Filed July 8, 1931. Serial No. 549,481. 4 Claims. (Cl 217—89.)



3. In a barrel and the like container, a barrel bottom within and closing the lower end of the barrel, the barrel providing an internal seat therearound at the lower end thereof on which said bottom is seated and held against outward displacement from the barrel, a series of driven fastening members extended inwardly through said bottom at intervals therearound in proximity to and sub-

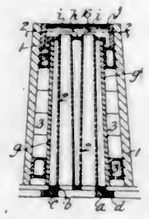
stantially parallel with the barrel wall, said members extended outwardly from the inner side of said bottom through the adjacent barrel wall to the exterior thereof and the outer ends of the fastening members at the exterior of the barrel wall bent back inwardly toward said wall to form portions securing the members in position holding the barrel bottom against inward displacement from said barrel bottom supporting seat.

1,861,344. PRINTING TELEGRAPH SYSTEM. DAVID S. HULFISH, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 20, 1926. Serial No. 136,600. Renewed Oct. 1, 1930. 20 Claims. (Cl. 178—22.)



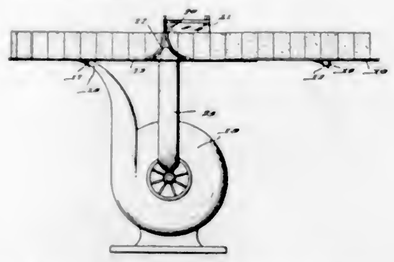
1. In a printing telegraph system, a plurality of senders, each sending signals in letter-groups; a plurality of sets of translating relays; conductors connecting said senders and said sets of relays whereby the signals received from said senders in letter-groups are distributed to said relay sets in re-grouped form as translation-groups, the translation-groups thus formed being smaller in size and greater in number than the letter-groups; and circuits in said relay sets for translating the signals of the translation-groups into another arrangement of signals.

1,861,345. APPARATUS FOR THE MANUFACTURE OF CARBONIZED FUEL. STEWART ROY ILLINGWORTH, Brynfedwen, England, assignor to The Illingworth Carbonization Company, Limited, Manchester, England. Filed Nov. 21, 1929, Serial No. 408,845, and in Great Britain Nov. 23, 1928. 3 Claims. (Cl. 202—114.)



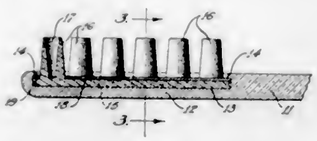
1. In a convertible apparatus for the manufacture of carbonized fuel, the combination of a retort-setting, an upright high-temperature-carbonizing-retort mounted in said retort setting, with a heating space therebetween, a plurality of vertical low-temperature-carbonizing-retorts supported within said high-temperature retort, and end-wisely removable therefrom, and removable means for closing the lower ends of all the carbonizing retorts and for permitting the aforesaid end-wise removal of the low-temperature-carbonizing-retorts to thereby convert the apparatus into a high-temperature carbonizing apparatus and means forming a gas-take-off space at the top of the retort setting communicating with said low temperature carbonizing retorts.

1,861,346. SANDING MACHINE. RUFUS ISENHOUR, New London, N. C. Filed Aug. 5, 1930. Serial No. 473,195. 5 Claims. (Cl. 23—1.)



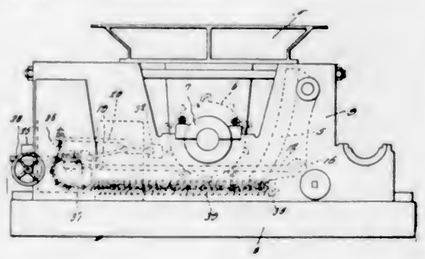
1. In a device of the character described, a supporting plate having vents formed therein, a column of brick adapted to pass over said plate and said vents, and means for supplying liquid spray through one of said vents and a sand blast through the other of said vents, to texture the underface of said column of brick.

1,861,347. TOOTHBRUSH. ERNEST G. JOHNSON, Chicago, Ill. Filed Mar. 4, 1931. Serial No. 520,110. 1 Claim. (Cl. 15—188.)



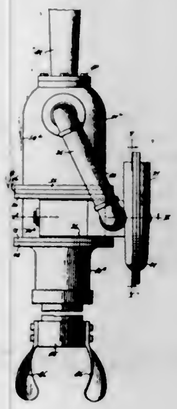
A tooth brush comprising a handle, a head having a recess therein, a head extending around said recess, a base in the recess, a plurality of resilient cup elements mounted in said base, each of said cup elements having a cavity therein, and a retaining plate disposed over said base and held thereon by said bead, said plate having openings therein through which said cup elements are extended.

1,861,348. STONE CRUSHER. GEORGE E. KREIDER, Hollidaysburg, Pa., assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa., a Corporation of Pennsylvania. Filed Aug. 7, 1930. Serial No. 473,700. 2 Claims. (Cl. 83—53.)



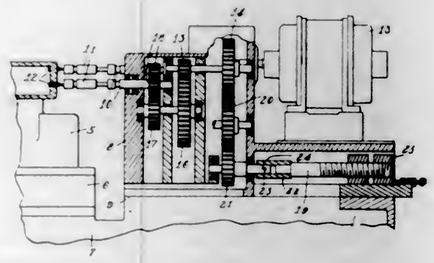
1. In a crushing machine including a crusher roller and a crusher plate pivotally supported at its upper end, a bar having one end pivotally connected to the lower end of the plate, and the other end of the bar having a turned-up part formed with a threaded hole, a screw shaft passing through the hole, a gear mounted on the shaft, means whereby the shaft will rotate with the gear but have sliding movement therethrough, a second shaft, a gear thereon meshing with the first gear, and yieldable means associated with the bar and tending to hold the bar and the crusher plate with the plate in crushing position.

1,861,349. DREDGE. ANDREW M. LOCKETT, New Orleans, La., assignor to A. M. Lockett & Company, Ltd., New Orleans, La., a Corporation of Louisiana. Filed June 8, 1929. Serial No. 369,484. 10 Claims. (Cl. 37—67.)



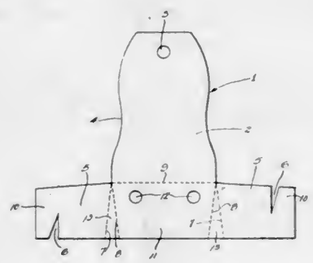
8. In an excavating machine, a casing, a suction tube rotatably mounted in said casing, and provided with cutters at its inlet end, a fluid motor connected to rotate said tube, a source of motive fluid, means for diverting a portion of said motive fluid for driving said motor, and independent means for diverting another portion of said motive fluid to suck material into and discharge the same from said rotatable tube.

1,861,350. TAPPING MACHINE. JUDSON H. MANSFIELD, Rockford, Ill., assignor to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed July 9, 1928. Serial No. 291,155. 3 Claims. (Cl. 10—130.)



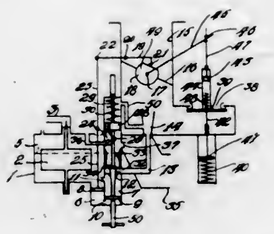
1. In a tapping machine, comprising a bed providing ways thereon, a spindle head movable on said ways, a plurality of spindles carried thereby, taps therefor, a feed screw for communicating feed to the head, a power driven shaft, means provided a driving connection between said shaft and the feed screw, and intermediate gears for driving the spindles driven from said shaft whereby the spindle drive and feed screw drive have a direct relationship to one another, spindle extensions carrying the taps and having a one-way or semi-floating mounting on the spindles permitting the same to lag with respect to the spindle head, and gears driven from the intermediate gears for driving the various spindles, the gear ratios for the separate spindles being different proportionate to the number of threads per inch to be cut by the taps driven thereby whereby to maintain the lead of all of the taps slightly less than the lead of the feed screw.

1,861,351. RECEPTACLE FOR RAZOR BLADES. ROBERT D. MCFADDAN, Chicago, Ill. Filed Mar. 17, 1930. Serial No. 436,560. 8 Claims. (Cl. 206—46.)



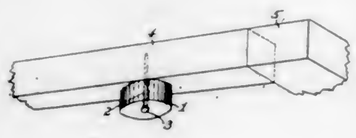
1. A container formed from a single sheet of material and comprising a body portion having an end portion thereof provided with a pair of extending portions, said end portion being folded on a line transverse to the body portion, each of said extending portions in conjunction with the end portion being folded on a pair of lines angularly positioned with respect to each other and converging at an edge of their respective extending portions, said extending portions being provided with slots therein whereby the same may be connected together.

1,861,352. CARBURETOR. PANTALEON E. MIQUELON, Chicago, Ill. Filed Mar. 14, 1927. Serial No. 175,057. 7 Claims. (Cl. 261—51.)



1. In a carburetor, a source of fuel supply, a nozzle communicating therewith including a discharge orifice and a metering pin, a throttle valve and cooperating plungers normally disposed in a plane below that of the fuel level of the source of fuel supply and actuated by opening movement of said throttle valve to move said metering pin in a direction increasing the effective area of said orifice.

1,861,353. DEVICE FOR DESTROYING MITES ON FOWLS. CHARLES E. MUELLER, Cedar Rapids, Iowa. Filed Nov. 29, 1929. Serial No. 410,450. 1 Claim. (Cl. 119—25.)



The combination with a roost-bar, of an apertured cylindrical body containing repellently odoriferous disinfecting material, mounted upon the under face of the bar and not wider than the bar transversely, and a headed nail traversing the aperture of said body and fixed in said bar to retain the body in contact therewith.

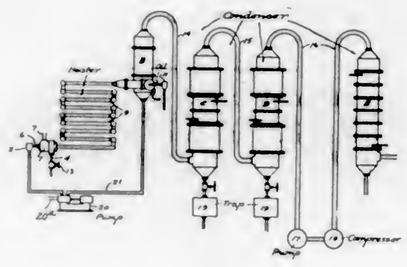
1,861,354. FASTENING DEVICE. JAMES G. NOBLE, New York, N. Y. Filed Jan. 20, 1932. Serial No. 587,803. 4 Claims. (Cl. 24—18.)



1. A fastening means comprising a clip and a flexible member, said clip being formed of sheet metal in three folds, one end of said flexible member being securely held between two adjacent folds, the third fold being joined to the outer of the first two folds and folded about and spaced from the inner of said first two folds, said clip having a recess formed at one end of the joint between the two outer folds, and a recess formed in the other end of one of said outer folds, whereby the free end of said flexible member may be passed about any desired object and secured by passing between the third fold and said inner fold through the recess in the joint between said outer folds and back through said second recess into the space between said third and inner folds.

1,861,355. COAL FRACTIONATING AND OIL REFINING PROCESS. CHARLES OWENS, Chattanooga, Tenn. Filed June 4, 1923, Serial No. 643,464. Renewed Sept. 23, 1930. 2 Claims. (Cl. 196—56.)

1. The hereindescribed process comprising supplying steam and finely divided coal to commingle in advance of a heating zone, inducing flow of said steam by suction applied in rear of said heating zone and acting through said heating zone to convey the steam with the finely divided coal in suspension through said heating zone to be acted on by the heat therein, supplying oil to the hot



vapors leaving the heating zone and inducing atomization and flow of said oil by said hot vapors and recovering the desired product, substantially as described.

1,861,356. PULL MATCH PACKET. DANIEL R. PAYNE, New York, N. Y. Filed Nov. 26, 1929. Serial No. 409,916. 6 Claims. (Cl. 206—29.)



1. A match packet including a container for a plurality of separate matches, said container having spaced side walls and an open end from which the rear ends of the matches protrude, ignition means within the container with which the matches coact to ignite upon the withdrawal of the same from the container and baffle means formed integrally with, projecting respectively inward from the opposite side walls, disposed within said container and located between the match heads and the ignition means for preventing accidental ignition of the remaining matches by sparks from the match being withdrawn and ignited.

1,861,357. NEW PROCESS FOR EXTRACTING PHENOLS FROM PHENOLIC TAR OILS. ETIENNE PERILHOU, Lens, France, assignor to Societe Huiles, Goudrons & Derives, Lens, France. Filed Sept. 10, 1929, Serial No. 391,697, and in France July 22, 1929. 1 Claim. (Cl. 260—154.)

A process for extracting phenols contained in phenolic oils, which consists in causing a solution of an alkali metal carbonate to act on the said oils at a temperature of about 170° C., under a pressure of about 7 to 8 kg., in evacuating the carbon dioxide in proportion as it is produced and in removing the phenols in the state of phenates.

1,861,358. KNITTING NEEDLE. FREDERICK J. POTTER, New Brunswick, N. J., assignor to Fred J. Potter Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Jan. 29, 1930. Serial No. 424,230. 6 Claims. (Cl. 163—5.)

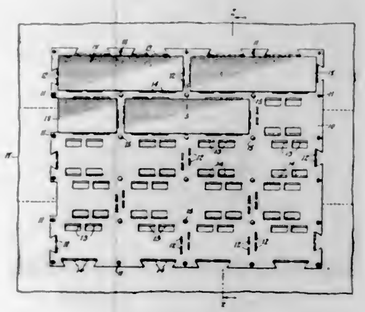
1. The process of manufacturing a spring beard knitting needle which consists in producing a profiled blank

for the same from flat sheet metal stock, and in the course of developing the shank imparting an axial twist thereto,



whereby the formation of the spring beard is accomplished by bending in a plane at right angles to the original sheet of flat stock.

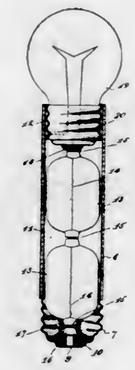
1,861,359. METAL LATH FOR BRICK VENEERS. FRANK PYRON, West New York, N. J. Filed Apr. 21, 1930. Serial No. 446,103. 3 Claims. (Cl. 72—20.)



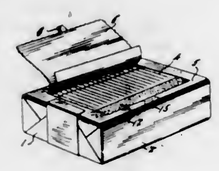
2. The combination with veneer bricks or tiles, of a lath provided with spaced rows of lateral projections which engage the end and upper and lower edges of the bricks or tiles to retain them in place on one face of the lath, and a suitable bond between said bricks or tiles.

1,861,360. LAMP. CARL REBL, Brooklyn, N. Y. Filed July 18, 1930. Serial No. 468,902. 6 Claims. (Cl. 240—52.4.)

1. In a lamp, a hollow translucent member having two contact members spaced apart at one end, and a conductor connecting one of the contact members with the translucent member's other end, a bulb in the translucent member, the bulb having a filament connecting its opposite ends, means connecting the filament with the other contact member, a second bulb having a filament extending beyond the second mentioned end of the translucent member, and means connecting the filament in the second mentioned bulb with the conductor and with the filament in the first mentioned bulb.



1,861,361. COMBINED MATCH AND CIGARETTE PACKAGE. EDWARD L. RICH, Jr., Catonsville, Md. Filed Apr. 15, 1930. Serial No. 444,527. 4 Claims. (Cl. 206—48.)



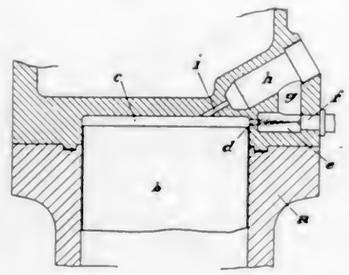
1. In a cigarette package, an inner wrapper adjacent a plurality of cigarettes, an outer wrapper surrounding the inner wrapper and a match strip secured between the two wrappers, the matches of said strip being positioned substantially perpendicular to the lengthwise direction of the cigarettes and the heads thereof lying in a depression formed in the inner wrapper between two adjacent cigarettes.

3. In a cigarette package a plurality of wrappers surrounding a plurality of cigarettes, a match strip secured between two of the wrappers, an integral cover flap formed upon said outer wrapper adjacent said strip, said outer wrapper being provided with perforations so that the flap may be partially separated from the wrapper for swinging movement to uncover the matches, said flap being provided with a tab for maintaining it in closed position after being partially separated from the outer wrapper.

1,861,362. INJECTION COMBUSTION ENGINE HAVING AN AIR GRANARY. WILHELM RIEHM, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Nov. 16, 1931, Serial No. 575,386, and in Germany Nov. 13, 1930. 2 Claims. (Cl. 123—32.)

1. In an internal combustion engine of the character described, a cylinder, a piston movable in the cylinder and forming therewith an engine combustion chamber, an

air storage compartment, a restricted passage providing continuous communication between the air storage compartment and the combustion chamber, a second compartment constituting a preliminary combustion chamber, a second restricted passage, said second compartment being in continuous communication with said engine combustion chamber through said second restricted passage, a fuel nozzle opening into said second compartment, and a pas-



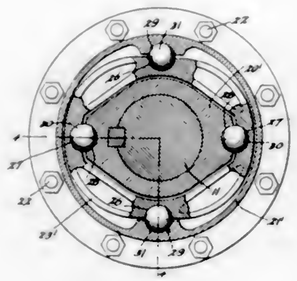
sage independent of the combustion chamber and interconnecting said compartments, whereby the increase in pressure due to preliminary combustion of fuel in said second compartment will act through said passage interconnecting said compartments to force air from said air storage compartment through said first restricted passage into the said engine combustion chamber, independently of any drop in pressure in said engine combustion chamber due to the downward movement of said piston.

1,861,363. QUICK DETACHABLE HANDLE FOR TOOLS. CHARLES SCHEUNER, Chicago, Ill. Filed July 1, 1931. Serial No. 548,241. 3 Claims. (Cl. 306—56.)



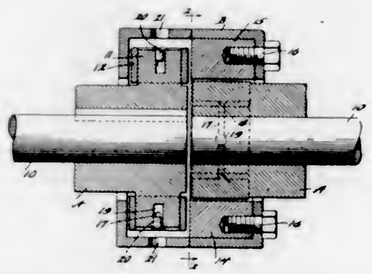
1. In a detachable handle for tools, wherein the tool tang is provided with a perforation, and the tool handle has a longitudinal channel, and a longitudinal strip has sliding engagement with said channel and is provided at one end thereof with opposed spring jaws one of which has a perforation and other of which is provided with a pin engaging the perforations of said tank and of the first named jaw; said jaws having the inner end portions and the perforation and the pin thereof located closely within and covered and protected by the side walls of said channel to hold said pin securely engaged with said perforations and to brace the tool against strain.

1,861,364. UNIVERSAL JOINT. HANS L. SCHRECK, Easton, Pa., assignor to Treadwell Engineering Company, Easton, Pa., a Corporation of Pennsylvania. Filed Dec. 4, 1929. Serial No. 411,598. 1 Claim. (Cl. 64—91.)



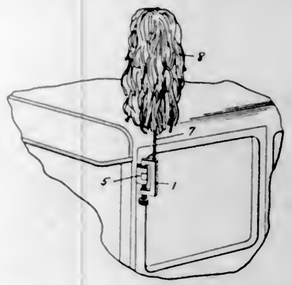
A universal shaft coupling comprising two hubs respectively attached to the opposed ends of a pair of shafts, each of said hubs having one diameter of greater length than the diameter perpendicular thereto, a shell surrounding said hubs, a ring of substantially elliptical form between each of said hubs and said shell, inwardly opening ball seats at opposite ends of the larger diameter of said ring and outwardly opening ball seats at opposite ends of its smaller diameter, outwardly opening seats formed in said hubs at the ends of their longer diameters which are complemental to the inwardly opening seats of said ring and inwardly opening seats formed in said shell which are complemental to the outwardly opening seats of said ring, and balls disposed in said seats, the dimensions of all of said parts being such that all of the balls of said joint are equally spaced from the axis thereof.

1,861,365. FLEXIBLE COUPLING. HANS L. SCHRECK, Easton, Pa., assignor to Treadwell Engineering Company, Easton, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1930. Serial No. 487,539. 2 Claims. (Cl. 64—91.)



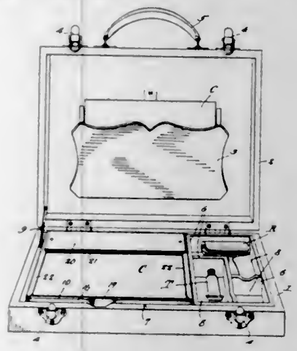
1. A flexible shaft coupling comprising opposed shafts each carrying two diametrical projections formed with parallel bearing surfaces, the projections of one shaft being displaced 90° from those of the other shaft, and a shell enclosing said projections and providing jaws in which the projections have a sliding fit, said projections each being formed with oil ducts opening at the bearing surfaces thereof and with a central reservoir communicating with said ducts and opening through the end face of the projection and provided with valve means normally closing the same, said shell being formed with apertures aligned with said reservoirs for the introduction of lubricant thereto.

1,861,366. FUNERAL MARKER FOR AUTOMOBILES. PHILIP H. SHERWOOD, Norwalk, Conn. Filed Aug. 21, 1931. Serial No. 558,608. 2 Claims. (Cl. 40—129.)



1. In combination with an automobile and its door hinge, a clamp consisting of the U-shaped member including upper and lower horizontal limbs, a set screw passing through the lower limb, the upper limb having a depending projection, the inner end of the screw and the end of the projection having recesses therein for receiving the ends of the hinge pin and a socket in the member opening out through the top thereof for receiving a shaft of a marker.

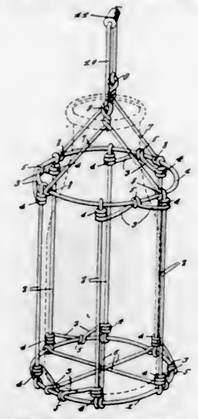
1,861,367. IDENTIFICATION APPARATUS. HERBERT G. SMITH, Rochester, N. Y., and THEODORE BURRICK, Detroit, Mich. Filed Oct. 2, 1931. Serial No. 566,551. 3 Claims. (Cl. 41—4.)



2. In apparatus of the class described, a palette including a board, a platen on one end portion of the board, a card holder on the other end portion of said board, arm engaging strips on the bottom of the board recessed to receive the forearm of the user, and a grip upon the bottom of the board to be grasped by the user.

1,861,368. MILK BOTTLE CARRIER. CHARLES SORRENTINO, Cleveland, Ohio. Filed Sept. 17, 1930. Serial No. 482,609. 1 Claim. (Cl. 244—45.)

A bottle carrier comprising a pair of uniformly sized rings arranged in vertical spaced relation with respect to each other, a plurality of vertical wire members having their ends twisted about the rings at equidistances apart, brace members twisted about adjacent vertical members and said rings for securing the said vertical members to the rings and in spaced relation to each other, cross wires connected with the lowermost ring to form a bottom for a support for a bottle when inserted through the upper ring between the vertical wire members, substantially V-shaped inverted hangers having their ends coiled about the upper ring and spaced one from the other, and an inverted substantially U-shaped bandle loosely hinged to said hangers and adapt-



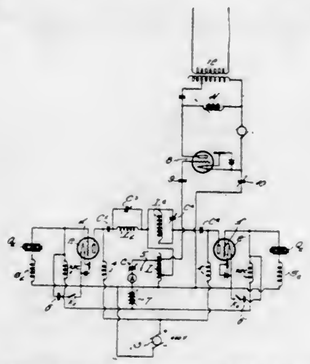
ed to swing onto the hangers at either side of its pivotal connection therewith for permitting free removal of a bottle through the upper ring.

1,861,369. LOW CAPACITY FUSE AND METHOD OF MAKING THE SAME. EDWARD V. SUNDT, Chicago, Ill. Filed Sept. 9, 1929. Serial No. 391,375. 6 Claims. (Cl. 200—131.)



1. A fuse construction comprising a tubular member provided with constricted end portions, a fuse wire disposed in said tubular member, said fuse wire being provided with end formations for gripping the ends of the tubular member whereby the fuse member is held in a suspended position therewithin, cap members disposed over the ends of the tubular member, and fusible solids disposed within the ends of the tubular member, said solids being adapted for being heated whereby the same may be fused for embedding the constricted end portions of the tubular member, the ends of the fuse wire, and the cap members therein.

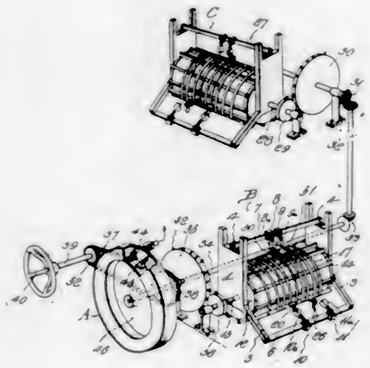
1,861,370. MULTIPLE CHANNEL TRANSMISSION SYSTEM. ALBERT H. TAYLOR, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 24, 1926. Serial No. 131,209. 5 Claims. (Cl. 250—9.)



2. A transmission system comprising a piezo-electric crystal controlled oscillation generator, a keying circuit

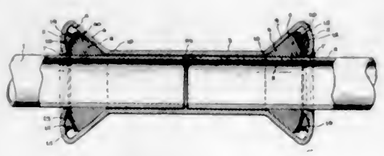
comprising an interrupter and an electrostatic capacity connected in series, and said keying circuit being connected to the input circuit of said oscillation generator.

1,861,371. FREQUENCY CHANGING SYSTEM. ARTHUR M. TROGNER, Takoma Park, Md., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 8, 1926. Serial No. 140,376. 17 Claims. (Cl. 250—17.)



1. A frequency changing system for signal transmitting circuits comprising in combination a variable circuit element arranged to be adjusted to a plurality of positions corresponding to differing frequencies, a plurality of piezo electric crystal elements of differing frequency characteristics, each mechanically shiftable to selected positions corresponding to the settings of said variable circuit element and means for simultaneously selecting a particular piezo electric crystal element for particular positions of said variable circuit element.

1,861,372. PIPE COUPLING. MILLARD F. WATERS, Tulsa, Okla., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Filed Nov. 29, 1930. Serial No. 499,111. 8 Claims. (Cl. 285—196.)

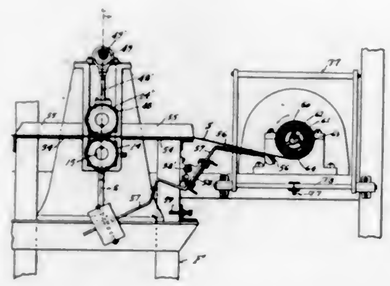


4. A pipe coupling comprising a housing forming an annular chamber, a sealing ring in said chamber, wedge means for moving said ring longitudinally within said chamber into sealing engagement with a section of pipe, and radially contractable means for bringing said wedge means into play.

1,861,373. MERCURY DERIVATIVE OF DI-HALOGENATED RESORCIN - SACCHAREINS. EDWIN C. WHITE, Baltimore, Md., assignor to Hynson, Westcott and Dunning, Inc., a Corporation of Maryland. Filed Dec. 29, 1930. Serial No. 505,469. 16 Claims. (Cl. 260—13.)

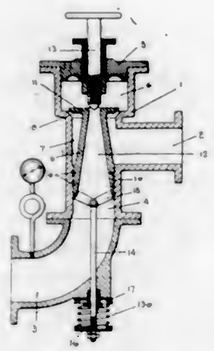
1. Mercury derivatives of dihalogenated resorcin-saccharеins.

1,861,374. WINDING MACHINE FOR ROLLING ROOFING PAPER. HENRY RANDOLPH WOOD, Sierra Madre, Calif., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 10, 1928. Serial No. 311,481. 3 Claims. (Cl. 242—55.)



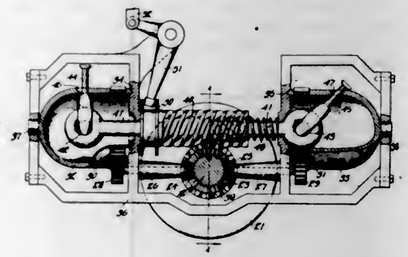
1. In a winding machine, a frame, a fixed center winding mandrel, an angle bar extending lengthwise thereof, a pair of feed rolls, a table having guide flanges disposed on each side of said feed rolls, a guide flap, a plurality of arms pivotally mounted in said frame supporting said guide flap, a counterweight secured to one of said arms, and adjustable stop means carried by said frame engaged by said arms, said flap serving to guide a strip passing through said feed rolls into the angle bar carried by said mandrel when starting the winding of a new roll, said flap assuming an inclined position as the strip is wound on the mandrel, whereby when it is necessary to remove a portion of the strip the end of a strip passing from said feed rolls may be tucked between the convolutions of the strip wound on the mandrel.

1,861,375. PRESSURE REDUCING VALVE. JOHAN THEODOR AHNBERG, Gottenborg, Sweden. Filed Feb. 19, 1930, Serial No. 429,692, and in Sweden Nov. 2, 1928. 3 Claims. (Cl. 50—13.)



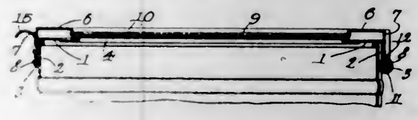
1. A pressure reducing valve comprising a valve box having an inlet and an outlet and formed with a chamber therein, a piston movable within said valve box, a valve disk connected with said piston and controlling the passage between said inlet and chamber in the valve box, a channel passing through said piston and said valve disk and establishing communication between the chamber and the outlet in the valve box, and a screw-threaded spindle projecting into said chamber and adapted to adjustably limit the section of passage of said channel.

1,861,376. AUTOMOBILE TRANSMISSION. WILLIAM WALTER BEALL, Muncie, Ind. Filed Oct. 19, 1931. Serial No. 569,812. 5 Claims. (Cl. 74—34.)



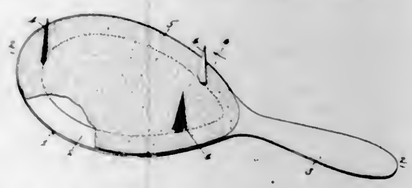
1. A device of the kind described comprising a shaft having a bell formed on one end, a gear mounted on said bell, said gear having external and internal teeth cut thereon, a driven shaft having a gear thereon meshing with the internal teeth of the said gear, a second bell surrounding the said gear, said second bell having internal gear teeth meshing with the external gear teeth of the said gear, a worm on said second bell, a worm gear meshing therewith a gear on said driving shaft, means operable by said last-named gear for operating the said worm gear to rotate the second bell, substantially as set forth.

1,861,377. COVER FOR CONTAINERS. WILLIAM RAYMOND BERTELS, Wilkes-Barre, Pa. Filed Apr. 24, 1931. Serial No. 532,599. 2 Claims. (Cl. 220—82.)



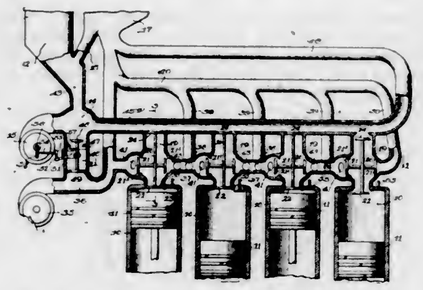
1. A cover for containers including nested lower and lid rings having marginal flanges adapted to frictionally engage, and hinge rings extending loosely through the free edge portions of the flanges of the cover rings constituting means for slidably and hingedly connecting said cover rings, said hinge rings being spaced apart to provide a segment therebetween, that portion of the flange depending from the said segment of the lid ring being movable downwardly past and under the corresponding edge of the flange of the lower ring when the lid ring is swung to open position.

1,861,378. FLY PAPER SUPPORT. JOHN VAN S. BLOODGOOD, Setauket, N. Y. Refiled for abandoned case 163,737, filed Jan. 26, 1927. This application filed Aug. 21, 1931. Serial No. 558,599. 1 Claim. (Cl. 43—136.)



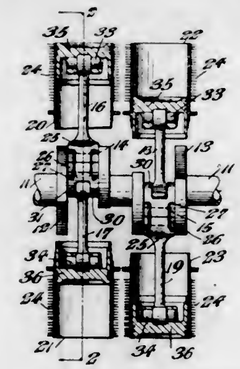
A device of the character described, including a body portion having a central opening, a handle projecting from the body portion, and a plurality of integral upstanding spurs located at the wall of the opening of the body and adapted to receive fly paper thereover, said fly paper adapted to be supported by the body and held thereon by shoulders on the spurs.

1,861,379. PULVERIZED FUEL SUPPLYING MEANS FOR INTERNAL COMBUSTION ENGINES. LAURENCE C. BOWES, Chicago, Ill. assignor, by mesne assignments, to U. S. Oil and Service Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 21, 1929. Serial No. 401,330. 7 Claims. (Cl. 123—23.)



3. The combination with an internal combustion engine of means for supplying pulverized fuel thereto comprising a header, means for forcing air therethrough continuously during the operation of the engine, means for supplying pulverized fuel to the air stream whereby the fuel is carried in suspension thereby, branches from said header affording communication between said header and engine cylinders whereby charges of fuel are drawn from said header upon the suction strokes of said engine, a pair of valves in each of said conduits for closing the fuel inlet and outlet ports thereof simultaneously, means for opening said valves upon the suction stroke of the respective engine pistons and closing said valves during the remainder of the operating cycle, said conduits having air inlet and outlet ports in its side walls, a second pair of valves in each conduit for simultaneously opening or closing said last named ports, means for actuating each of said second pairs of valves to open position when the respective first valves are closed and vice versa, and air blasting means adapted to force air through said second ports when the valves thereof are open for removing fuel entrapped in the conduits upon the closing of the respective first mentioned valves.

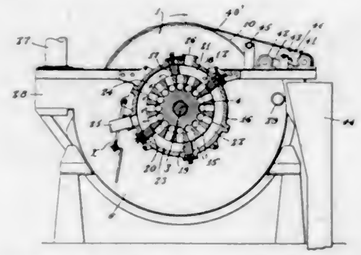
1,861,380. INTERNAL COMBUSTION ENGINE. ROBERT W. A. BREWER, Jenkintown, Pa. Filed May 23, 1930. Serial No. 454,947. 2 Claims. (Cl. 74—38.)



2. A mechanical movement for reducing secondary vibrations in a unit having pairs of opposed cylinders and pistons reciprocating therein and a shaft mounted between said opposed cylinders, comprising cranks disposed approximately 180° apart on said crank shaft, means con-

necting the pistons of one pair of opposed cylinders to its corresponding crank, and means having its parts in reverse relationship to the first mentioned means connecting the pistons of another pair of opposed cylinders to its corresponding crank.

1,861,381. METHOD OF COLLECTING AND CLASSIFYING DIFFERENT KINDS OF SOLIDS SUSPENDED IN A LIQUID. BIGELOW CROCKER, Fitchburg, Mass. Filed Apr. 17, 1930. Serial No. 445,110. 1 Claim. (Cl. 92—13.)



A process for separating particles of impurities from paper stock fibers suspended in water, comprising moving a filter screen into, through and out of the water, and causing, after the entrance of the screen into the water, an initial filter of paper-making fiber to form on the screen; and thereafter applying suction to build up the initial filter with oncoming fibers, and form a resulting filter of fibers, and to draw water and impurities through and away from the resulting filter of fibers, during a period of time subsequent to the entrance of the screen into the water, but prior to the emergence of the screen and resulting fiber from said water.

1,861,382. PRODUCTION AND MANUFACTURE OF STABLE LEUCO-INDIGO PREPARATIONS. ALFRED DAVIDSON, ANTHONY JAMES HAILWOOD, FRED HENESEY, and ARNOLD SHEPHERDSON, Manchester, England, assignors to Imperial Chemical Industrie Limited, Westminster, England. Filed Apr. 11, 1930, Serial No. 443,610, and in Great Britain Apr. 15, 1929. 3 Claims. (Cl. 260—50.)

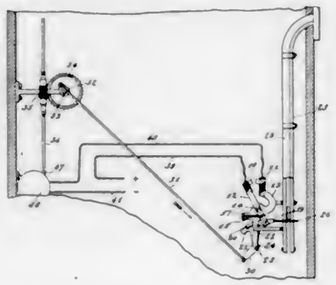
1. In the manufacture of leuco-indigo, the process which comprises peptizing indigo to produce an aqueous dispersion with a particle size of about 3 mu or less and reducing the dispersion by a reducing sugar in the presence of an alkali.

1,861,383. TROUSERS. MARIA FICCIO, Tampa, Fla. Filed June 4, 1930. Serial No. 459,205. 1 Claim. (Cl. 2—227.)



A novelty outer garment comprising a pair of trousers having a large V-shaped opening centrally of the front thereof and extending from the waist band to a point adjacent the crotch portion thereof, a button hole strip extending along both divergent edges of said opening, a triangular insert of approximately the same size as said opening and having rows of buttons secured to the divergent edges thereof for engagement with button holes in said strip whereby to secure said insert in position to completely close said opening and to permit bodily removal thereof at will.

1,861,384. COIN CONTROLLED SWITCH. CHARLES FLEISCHER, Brooklyn, N. Y., assignor to J. Frank Meyer, Chicago, Ill. Filed May 8, 1928. Serial No. 276,088. 5 Claims. (Cl. 200—33.)



1. In a circuit including an electrically operable element, a controlling switch for said circuit comprising a pair of relatively movable contacts, means tending to effect engagement of said contacts constantly, a retaining element adjacent said contacts, a latch on one of said contacts and engaging said retaining element for normally holding said contacts apart, a release arm rigidly secured to said latch, and means operatively connecting said retaining element with said electrically operable element for actuating said retaining element to reestablish operative engagement with said latch to reopen said switch subsequent to the release of said latch from said retaining element.

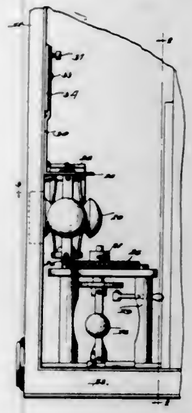
1,861,385. DEVICE FOR FACILITATING THE PUTTING ON AND TAKING OFF OF STOCKINGS. IGNAZ JOSEF GENTIL, Berlin, Germany. Filed Oct. 31, 1930, Serial No. 492,534, and in Germany Nov. 13, 1929. 2 Claims. (Cl. 223—20.2.)



1. A device made of smooth material to facilitate the putting on and taking off of stockings, said device comprising a sole plate and a heel plate positioned at approximately a right angle in relation to said sole plate, said heel plate being curved at its junction with the sole plate to merge into the outline of said sole plate, and said heel plate being also curved inwardly at each side to present a concave surface to the back of the user's heel.

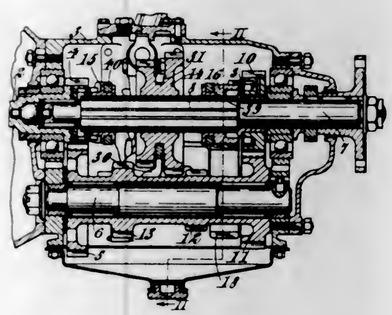
1,861,386. CONTROL MECHANISM FOR PANORAMIC CAMERAS. EUGENE O. GOLDBECK, San Antonio, Tex. Filed Apr. 16, 1929. Serial No. 355,572. 10 Claims. (Cl. 188—187.)

1. The combination of a main speed control governor mechanism of the actuating motor of a panoramic camera, and an auxiliary governor mechanism directly coupled thereto to effect a reduction of the operating speed



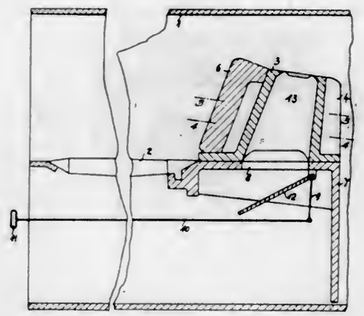
of the motor beyond that of the lowest motor speed obtainable in the use of the main governor mechanism alone.

1,861,387. CHANGE SPEED GEAR MECHANISM. EDWARD GEORGE GRINHAM, Coventry, England, assignor to Humber Limited, Coventry, England. Filed May 9, 1930, Serial No. 451,041, and in Great Britain May 10, 1929. 1 Claim. (Cl. 74—57.)



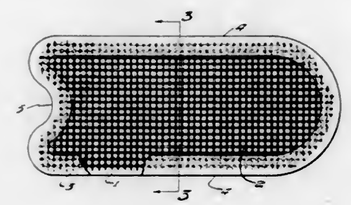
In a change-speed gear mechanism, the combination of coaxial driving and driven shafts, a splined portion on said driven shaft, sliding members on the ends of said splined portion, one of said sliding members acting to directly cluteh said driving shaft to said driven shaft, a gear wheel free on said driven shaft at the other end of said splined portion, the other of said sliding members acting to directly clutch said gear wheel to said driven shaft, means for continuously driving said gear wheel from said driving shaft, said means including a continuously-driven gear wheel, a sliding gear wheel on said splined portion intermediate and independent of said sliding clutch members, said sliding gear wheel being slidable into and out of mesh with said continuously-driven gear wheel, and rigid forked means passing outside said sliding gear wheel and interconnecting said sliding clutch members to ensure movement thereof in unison, said rigid forked means comprising an axially slidable shaft bent downwards intermediate its ends to form a selector jaw.

1,861,388. FIRE BRIDGE. CARL HEINRICH GREVE, Altona-on-Elbe, and WALTER CHRISTIAN DETLEF SCHWARZ, Hamburg, Germany, assignors to the Firm of Rolfs Kohlenoxyd-Verbrenner Gesellschaft mit beschrankter Haftung, Hamburg, Germany. Filed Feb. 2, 1929, Serial No. 336,996, and in Germany Feb. 18, 1928. 3 Claims. (Cl. 110—73.)



1. A fire bridge for furnaces comprising a support having an aperture therethrough, a casting mounted upon said support having passages therethrough oblong in cross-section and communicating with said aperture at their lower ends and opening out at their upper ends approximately at right angles to the direction of the gases of combustion, the walls of said passage being twisted about the approximately vertical center line of the passage.

1,861,389. NONSLIP BATH MAT. JAMES E. GROSJEAN, Lima, Ohio. Filed Mar. 19, 1930. Serial No. 437,144. 2 Claims. (Cl. 4—185.)

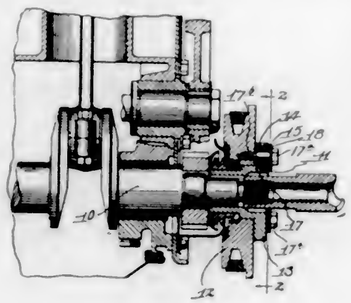


1. A bath mat comprising a body substantially of rubber, an open mesh fabric of fibrous material partly embedded and vulcanized in said body with the remainder of the material exposed at one side of the body for nonslipping contact with an engaged wall of a bath tub, and a border member vulcanized to the said side of said body and overlapping the marginal edge of said open mesh fabric.

1,861,390. VIBRATION DAMPENER FOR CRANK SHAFTS. EARL G. GUNN, Detroit, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 10, 1929, Serial No. 369,761. Renewed Oct. 21, 1931. 5 Claims. (Cl. 74—6.)

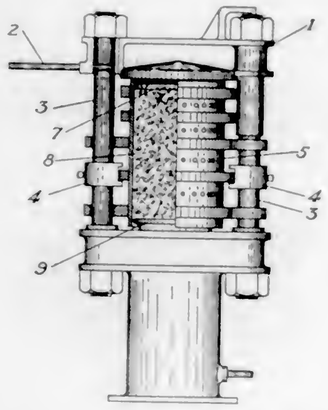
1. A vibration dampener comprising a crank shaft having a hub, a flywheel, said hub having a plurality of countersunk recesses on the side opposite said flywheel,

and connecting apertures extending axially thereof, rubber inserts seated in said recesses, and studs extending through said inserts and apertures and having their inner



ends secured to said flywheel, said studs fitting loosely in said apertures to permit limited relative rotation of said flywheel and hub.

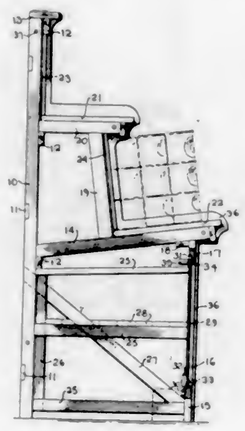
1,861,391. PRESS CONSTRUCTION. ROY BENSON HALL, Hammond, Ind. Filed Aug. 22, 1930. Serial No. 477,141. 2 Claims. (Cl. 100—50.)



1. A press for extracting liquids including a ram construction, a swinging head for said press rotatably mounted and adapted to be swung horizontally above said ram construction, a pair of guide columns connecting said head with said ram construction, and a perforated drum slidably carried by said guide columns between said head and said ram construction, said drum being provided with a flanged top cover plate adapted to seal the upper portion of said drum when said drum is loaded and said material is being pressed.

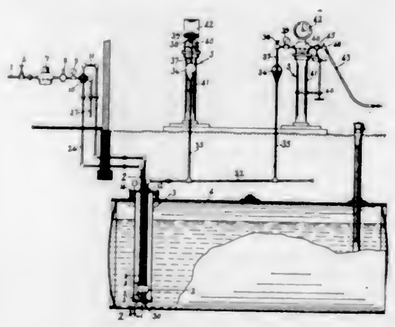
1,861,392. DISPLAY COUNTER. RAY M. HENDERSON, Giddings, Tex. Filed Dec. 18, 1929. Serial No. 415,036. 3 Claims. (Cl. 312—189.)

3. In a display fixture, a cabinet provided with an open front portion, a door closing said portion, a reinforcing strip secured across the inner side of said door near the upper edge thereof, a reinforcing strip secured across said door at the lower edge thereof, said cabinet having upper horizontal braces adapted to engage said first mentioned reinforcing strip, for pivotally and slidably supporting the same when said door is swung outwardly



thru said open front portion, and a supporting strip carried upon the front wall of the cabinet and at the inner side thereof for receiving said second mentioned strip thereagainst to support the door and protect the lower edge thereof.

1,861,393. LIQUID DISPENSING SYSTEM. GEORGE H. HENRIETTA, Torrington, Conn. Filed Apr. 30, 1930. Serial No. 448,573. 23 Claims. (Cl. 221—95.)

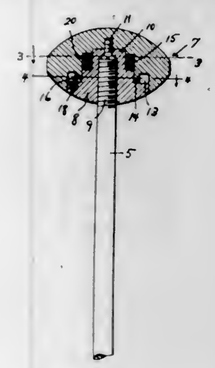


1. In a liquid dispensing system, an hydraulically driven motor, pumping mechanism driven thereby, and means for controlling the pump discharge to control said motor.

1,861,394. GEAR SHIFTING LEVER. HOWARD LAVIER HOOVER, Battle Creek, Mich. Filed Sept. 23, 1931. Serial No. 564,680. 2 Claims. (Cl. 74—39.)

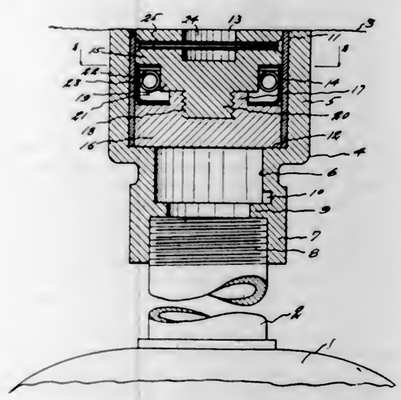
1. An auxiliary control for hand levers comprising a knob structure, said knob structure being divided into a pair of sections, one of said sections being attached to the hand lever, a connection between the other knob

section and the hand lever whereby the last-mentioned section can rotate, a drum-like annular formation on the rotary section, a conduit passing through the first-men-



tioned section on the lever, a control rod extending through the conduit and having one end attached to the said drum-like extension.

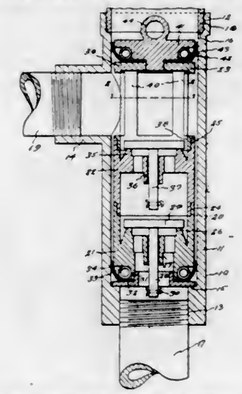
1,861,395. FILL CAP FOR GASOLINE TANKS. GEORGE W. ISBELL, Baltimore, Md. Filed May 29, 1929. Serial No. 366,929. 3 Claims. (Cl. 220—46.)



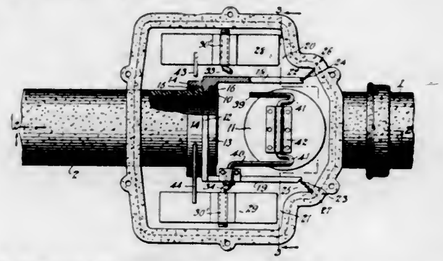
1. A vapor tight closure for hollow cylindrical members, said closure comprising an upper cylindrical member and a lower circular member, a depending extension on said upper member of reduced diameter, a threaded opening in said lower member, a threaded extended portion on said extension of said upper member adapted to be threaded into said threaded opening, a cupped washer positioned in the peripheral recess defined by said upper and lower members, and a circular helical spring disposed between said cup washer and said extension on the upper member adapted to hold said washer in engagement with the hollow cylindrical member.

1,861,396. EXTRACTING CHECK VALVE MECHANISM. GEORGE W. ISBELL, Baltimore, Md. Filed Dec. 16, 1929. Serial No. 414,536. 6 Claims. (Cl. 277—42.)

1. A valve for underground storage tanks comprising a cylindrical housing open at the top and bottom, a cylindrical extension adjacent the top of said housing integral therewith and substantially at right angles thereto, a pipe connected to each of said openings in said housing, a valve mechanism within said housing, a plurality of check valves in series in said valve mechanism, and means whereby said valve mechanism may be readily removed from said housing, said means including an upward projection on the valve mechanism.



1,861,397. SUPERSERVICE FLOOD VALVE. ALBERT M. KHUN, Elizabeth, N. J. Filed Jan. 14, 1931. Serial No. 508,767. 6 Claims. (Cl. 182—26.)



4. A flood valve including a casing having an inlet member and an outlet member, said inlet member being tubular, a metal valve seat arranged against the end of said inlet member, a ring surrounding said inlet member and said seat, said ring being provided with a depending flange and a pair of side plates, a gate positioned between said plates, a float arranged adjacent each of said plates exteriorly thereof and means actuated by said floats for swinging said gate toward and from said seat.

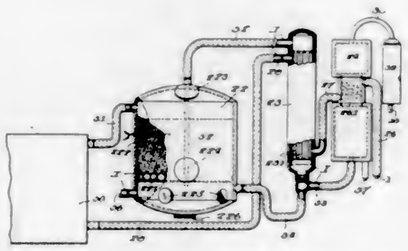
1,861,398. AQUEOUS EMULSIONS OF HYDROCARBON OILS AND PROCESS FOR MANUFACTURING THE SAME. RICHARD LANT, Vienna, Austria. Filed Nov. 13, 1930, Serial No. 495,533, and in Austria Mar. 29, 1930. 3 Claims. (Cl. 252—6.)

1. Aqueous emulsions of hydrocarbon oils comprising a colloidally dispersed system of alkali oleate, glycerine and hydrocarbon oils, in which the glycerine is present in a ratio of at least two parts by weight of glycerine to one part by weight of alkali oleate.

1,861,399. ART OF OIL CONVERSION. WILLIAM G. LEAMON, Newark, Ohio, assignor, by mesne assignments, to The Leamon Process Company, a Corporation of Ohio. Filed Nov. 2, 1923. Serial No. 672,439. 17 Claims. (Cl. 196—52.)

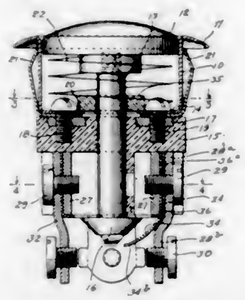
1. The process of oil conversion which comprises establishing an oil cracking or converting zone, including a mass

of porous adsorptive contact material, heated to cracking temperature, passing hot oil vapors into and through said mass, said vapors being supplied at such initial temperature and at such rate as to maintain said mass at cracking temperature substantially without other input of heat into said mass, and to effect substantial cracking of said vapors and separating a desired conversion product of lower boiling point than the vapors introduced into said cracking zone from the vapors leaving said cracking zone.



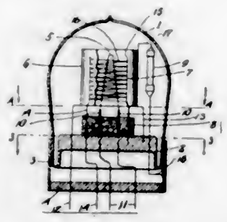
9. Apparatus for oil conversion comprising the combination, with an oil-supply container, a vaporizer, and conduit means connecting said container and vaporizer, a cracking chamber into which vapors pass from said vaporizer and having walls insulated to minimize transmission of heat therethrough, condenser means to which cracked vapors pass from said cracking chamber, and means, comprising a heat exchanger and a dephlegmator which are interposed between said cracking chamber and said condenser means and through which part of said conduit means extend, whereby said cracked vapors going to said condenser are brought into heat-transferring relation to the conduit means aforesaid.

1,861,400. PUSH BUTTON SWITCH CONSTRUCTION. CHRISTIAN MILLER, New York, N. Y., assignor to Edward and Company, Inc., a Corporation of New York. Filed June 17, 1930. Serial No. 461,679. 13 Claims. (Cl. 200—16.)



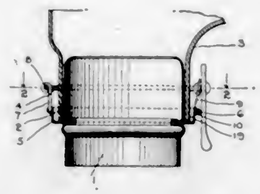
1. In push button switch construction, in combination, a base member made of insulating material and having a plurality of lateral recesses adjacent one end, a plunger extending through said base and having a contact bridging member exposed at said end thereof, a spring-opposed push button for actuating said plunger and adapted to urge said bridging member in a direction toward the end face of said base, a plurality of terminal members each seated in one of said recesses and detachably secured therein, and a plurality of contact members inserted in said recesses and between said base and said terminal members, certain of said contact members extending in line with said bridging member to be contacted by the latter upon depression of said push button and certain of said contact members extending in line to be contacted by said bridging member upon retrograde movement thereof.

1,861,401. VACUUM TUBE. ALEXANDER NYMAN, Dobbs Ferry, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 21, 1924, Serial No. 751,251. Renewed Oct. 22, 1931. 6 Claims. (Cl. 250—27.5.)



5. A vacuum tube comprising an exhausted vessel containing an anode and a coupling resistance also in the tube connected to said anode, and a separate terminal for the anode and resistance respectively.

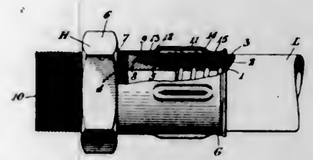
1,861,402. BAG CLAMP FOR SUCTION CLEANERS. LEWIS C. VAN RIPER, Brooklyn, N. Y. Filed Apr. 24, 1931. Serial No. 532,602. 9 Claims. (Cl. 285—71.)



1. In a bag clamp, a tube like neck piece operably attachable to the outlet member of a suction cleaner, a spring band placed around said tube like neck piece having its tension normally outward, spaced therefrom a sufficient distance to admit the neck of a dust bag to be placed between said band and said neck piece when said band is in an expanded position, a supporting member attached to said neck piece, a guide member mounted upon said supporting member to hold said band in longitudinal position, a clamping member rotatably mounted upon said supporting member and substantially in parallel position therewith, the axis of rotation of said clamping member being substantially at right angles to the axis of said tube like neck piece, said clamping member having two cam slots, each adapted to operably receive an end of said band so that when said clamping member is rotated in one direction it will cause said band to contract around said tube like neck piece and when rotated in another direction it will cause said band to expand, each cam slot ending at a point near the periphery of said clamping member and both ends of each cam ending in an arc, the axes of which lie in a longitudinal plane passing through the axis of rotation of said clamping member so that said clamping member may rotate 180 degrees and will lock itself against self movement when said spring band is contracted and a thumb piece upon said clamping member to rotate same.

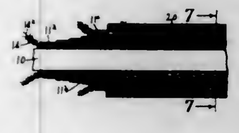
1,861,403. HOSE COUPLING. ARCHIBALD L. WALLACE, Brooklyn, N. Y., assignor to Metal Hose & Tubing Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 25, 1930. Serial No. 431,120. 4 Claims. (Cl. 285—86.)

1. A hose coupling comprising an interiorly threaded sleeve adapted to be connected with the hose by being threaded thereonto, said coupling also comprising a body part having thread engagement with the sleeve and being adapted upon rotation relative to the sleeve to pull upon the sleeve and to thereby force itself into engagement with the hose, said sleeve having a recess formed interiorly thereof adapted to receive a portion of the hose which may expand as a projection of the hose radially



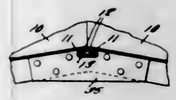
thereinto, said recess being spaced inwardly from the end of the sleeve, and the portion of the sleeve between the recess and the end of the sleeve constituting a band having an uninterrupted thread therein for tightly engaging about the hose at the end of the sleeve removed from the body.

1,861,404. INSULATED ELECTRICAL CONDUCTOR. HERBERT O. ANDERSON, New Haven, Conn., assignor to Rockbestos Products Corporation, New Haven, Conn. Original application filed June 19, 1928, Serial No. 286,637, Patent No. 1,840,282, dated Jan. 5, 1932, and in Canada Sept. 14, 1928. Divided and this application filed Aug. 22, 1930. Serial No. 447,021. 13 Claims. (Cl. 173—264.)



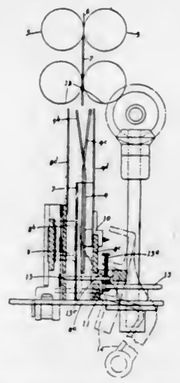
3. In an insulated electrical conductor, the combination of a metallic conductor element, an outer jacket, an inner inelastic high dielectric layer surrounding the metallic element, a flexible yielding felted cushioning layer of fibrous material interposed between the high dielectric layer and the outer jacket, and a second flexible yielding felted cushioning layer of fibrous material interposed between the high dielectric layer and the metallic element, said conductor being adapted to take sharp bends.

1,861,405. NOVELTY LUNCH STAND. ERNEST F. BRANTFERGER, Denver, Colo. Filed Mar. 2, 1931. Serial No. 519,595. 1 Claim. (Cl. 189—1.)



In a device of the character described, a wall of substantially circular shape in cross section and comprising a plurality of separable panels arranged in edge-to-edge relation, and provided at abutting edges with inwardly extending flanges, proximate flanges being arranged in divergent relation, channel members uniting the panels at their contacting edges, each of said channel members having sides or flanges contacting the proximate flanges of said panels, internal reinforcing hoops for the wall, said hoops having recesses therein for receiving the flanges and the chanel members, and reinforcing plates on said hoops adjacent the united edges of the panels and such plates having recesses therein for receiving the flanges and channel members.

1,861,406. MEANS FOR GATHERING AND/OR COLLATING SHEETS OF PAPER, BOOK SIGNATURES, OR THE LIKE. THOMAS COOK, Stalybridge, England, assignor, by mesne assignments, to Camco (Machinery) Limited, London, England, a Company of Great Britain. Filed Sept. 26, 1930, Serial No. 484,533, and in Great Britain Oct. 3, 1929. 3 Claims. (Cl. 270—58.)



1. A device for collating sections of paper comprising means for dividing the paper into sections, a guide channel, means for delivering the paper sections vertically into the guide channel, vertical guide members adapted to engage the edges of the paper sections, said guide members including straight sections and inclined sections adapted to move the contiguous edge of one section transversely relative to the adjacent section, and means for moving the several sections longitudinally of the guide channel into transverse alignment.

1,861,407. BITUMINOUS MIXTURE. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed July 30, 1925. Serial No. 47,178. 5 Claims. (Cl. 106—23.)

1. A composition of matter, comprising road oils and rubber latex, the rubber latex having been previously treated to prevent spontaneous coagulation.

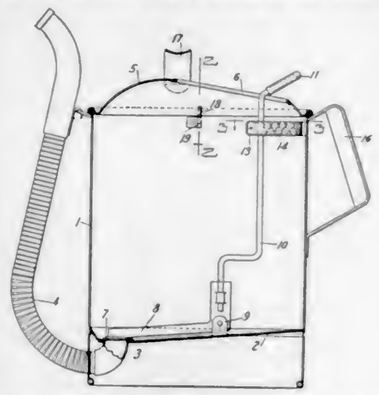
1,861,408. CONSTRUCTIONAL MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Aug. 15, 1927. Serial No. 213,186. 2 Claims. (Cl. 91—68.)

1. Constructional material comprising a vehicle coated with a mixture of dense waterproofing mastic and slow-drying, lastingly adhesive mastic.

1,861,409. MEASURING RECEPTACLE. HORACE M. HUFFMAN, Dayton, Ohio, assignor to The Huffman Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 24, 1929. Serial No. 334,668. 10 Claims. (Cl. 221—16.)

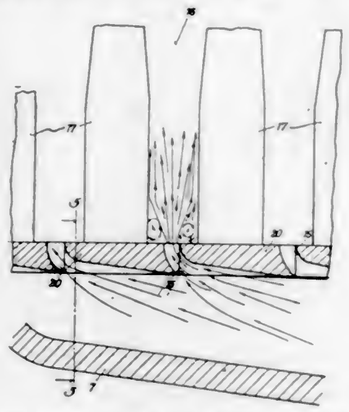
1. In an oil measuring receptacle for filling the crank cases of automobiles and the like, a body portion having an outlet at the bottom thereof, a swinging spout connected with said outlet, a valve to control the flow of oil through said outlet, an actuating device operatively connected with said valve and having an operating part at the top and near the rear side of said body portion, a flange extending inwardly from the upper edge of said body portion and constituting an anti-splash guard, a measuring bar having its ends secured to the vertical wall of said body portion and having its level indicating edge below the lowest portion of said flange, a handle secured

to said flange and arranged above said body portion, and a handle secured to the rear side of said body portion near the top thereof and so arranged that an operator



may grasp said rear handle and operate said valve actuating device with one hand while he grasps the first mentioned handle with his other hand to support said receptacle.

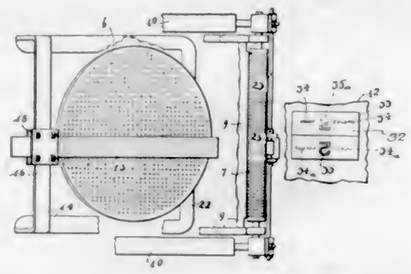
1,861,410. DISTRIBUTOR FOR PULVERULENT FUEL BURNERS AND METHOD OF MAKING SAME. WALTER KLEINOW, Hennigsdorf, near Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 9, 1929, Serial No. 331,342, and in Germany Jan. 13, 1928. 5 Claims. (Cl. 110—28.)



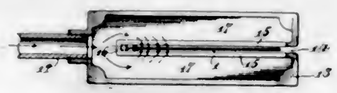
1. A fuel burner comprising a face plate having spaced discharge passages and ribs attached to said face plate intermediate said passages and of less thickness than the width of the face plate portion between said passages.

1,861,411. PRINTING PRESS ATTACHMENT. CHARLES H. MARTIN, Los Angeles, Calif., assignor of one-third to Louis M. Kane and one-third to A. Frediana, Los Angeles, Calif. Filed Feb. 8, 1929, Serial No. 338,414. Renewed Oct. 30, 1931. 6 Claims. (Cl. 101—195.)

1. In a printing press attachment, in combination with an ink-distributing disk and main ink-distributing rollers, an ink-distributing member disposed across the surface of the said disk so that said rollers can be supplied with different inks from said disk and the ink-distributing member when the rollers are passed over the disk and member, and a pick-up roller with secondary ink-distributing rollers mounted for rotating as well as lateral movements back and forth longitudinally over and in certain relation to the first-named rollers and to the said member whereby ink taken up by a certain portion of the first-named rollers is distributed and evened by contacting with the secondary rollers.

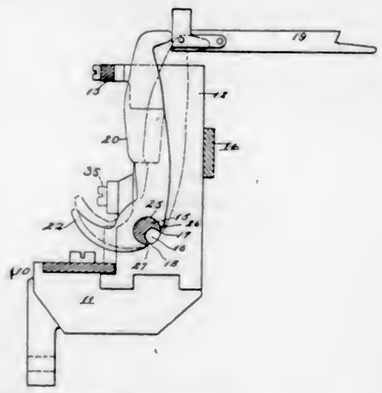


1,861,412. METHOD OF AND APPARATUS FOR CLEANING BAND SAWS. VINCENT OLIVER, Philadelphia, Pa., assignor to John E. Munro, Carlisle, Pa. Filed Sept. 30, 1931. Serial No. 565,983. 10 Claims. (Cl. 143—158.)



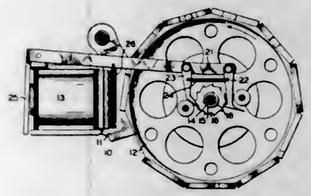
1. The method of cleaning band saws, which consists in injecting air in a sheet form from in front of the band saw towards its teeth, and simultaneously against opposite side walls of the saw.

1,861,413. KNITTING MACHINE. ERNEST A. FEUSTEL, Carlstadt, N. J., assignor to Alfred Hofmann, Incorporated, West New York, N. J., a Corporation of New Jersey. Filed Apr. 14, 1931. Serial No. 529,982. 5 Claims. (Cl. 66—110.)



1. A straight hosiery knitting machine having a series of independent jacks swingable in succession, a jack bed, and a jack supporting axle carried by the bed; each of the jacks being formed with an aperture to engage and fit the axle, such aperture being circular for substantially more than a semicircumference but with an open gap of sufficient width for disengagement from the axle, and the axle being circular to fit the jack aperture for substantially more than a semicircumference but formed with a recess sufficient to permit the jack to be disengaged therefrom, the jack aperture gap and the axle recess being normally located at the same side of the axis so that the intact bearing surfaces of the jack aperture and axle are in substantially uninterrupted bearing contact, and the axle being shiftable from its normal position wherein all of the jacks are confined but swingable thereon to its release position wherein any jack may be independently disengaged from or engaged with the axle.

1,861,414. QUOTATION BOARD PRINTING UNIT. RAY HOOVER and EVAN R. WHEELER, North Plainfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed May 4, 1931. Serial No. 535,067. 23 Claims. (Cl. 178—4.)

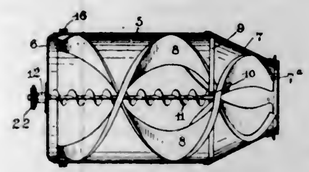


1. In quotation board systems, a printing unit for printing a number of quotations in consecutive order and embodying, in combination, one or more type wheels arranged for printing numerical characters to represent the quantity value of the quotations, and another type wheel carrying one or more special characters and arranged to respond to selective signals designating any desired one of the special characters for printing the same, in connection with certain quotations, to designate a quality value of the quotations.

1,861,415. TREATMENT OF ELECTRODES. RALPH M. HUNTER, LEROY C. STEWART, HOWARD E. HOUSER, and LEE DE PREE, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 28, 1931. Serial No. 540,808. 12 Claims. (Cl. 204—4.)

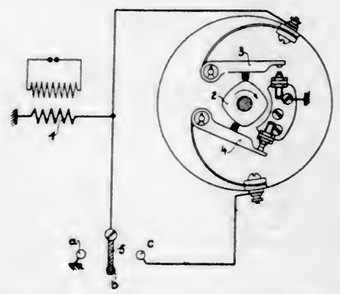
1. In a method of treating a carbon and/or graphite article, the steps which consist in impregnating said article with Chinawood oil and then simultaneously chlorinating and polymerizing said oil by means of a chloride ion containing solution of a strong mineral acid and a polymerizing salt.

1,861,416. TRUCK CONCRETE MIXER. GEBHARD JAEGER, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 30, 1929. Serial No. 410,825. 5 Claims. (Cl. 88—73.)



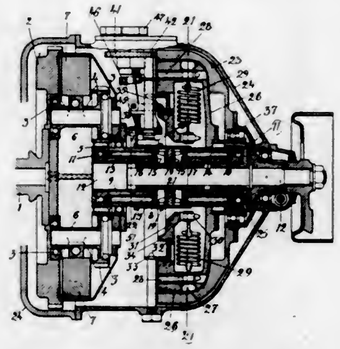
1. In a concrete mixing machine, a mixing drum having a mixing and discharging element including a spiral blade carried thereby, said mixing drum mounted on a substantially horizontal axis, a mixing screw journaled in the drum and cooperating in the mixing operation with the mixing and discharging element, and means for operating said drum and screw in opposite directions.

1,861,417. IGNITION CONTROL APPARATUS FOR INTERNAL COMBUSTION ENGINES. ERICH KLAIBER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 23, 1929, Serial No. 380,404, and in Germany Nov. 5, 1928. 6 Claims. (Cl. 123—148.)



6. Ignition control apparatus for internal combustion engines comprising two contact breakers, a normally operative ignition circuit including one of said contact breakers set to produce advanced ignition in said engine, said second contact breaker being set to produce retarded ignition when connected in said circuit, and means for at will connecting said second circuit breaker in parallel with the first breaker in said circuit.

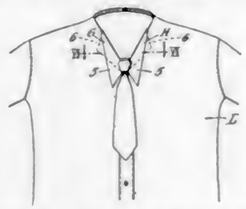
1,861,418. POWER TRANSMISSION. FREDRIK LJUNGSTRÖM, Lidingo, Sweden, assignor, by mesne assignments, to Ped, Incorporated, a Corporation of Delaware. Filed Sept. 8, 1927, Serial No. 218,293, and in Sweden Feb. 16, 1927. 10 Claims. (Cl. 74—14.)



1. A variable-speed power transmission of the type automatically providing synchronous-asynchronous drive through the transmission comprising a driving member, mechanism actuated by the driving member for producing alternate opposite turning moments to effect asynchronous drive and a continuous turning moment to effect synchronous drive, said mechanism including a rotatably mounted intermediate member and an inertia mass rotatably mounted eccentrically with respect to the axis of rotation of the intermediate member, said mass operating to generate centrifugal force upon rotation by the driving

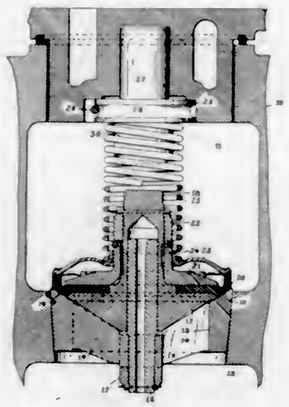
member and to apply a turning moment to the intermediate member due to said force, and means for varying the effective value of the turning moment applied to the intermediate member at a given speed of rotation of said mass.

1,861,419. DETACHABLE SHIRT COLLAR. CHARLES H. MACKIE, Brooklyn, N. Y., assignor of one-half to Augustus L. Merolle, Brooklyn, N. Y. Filed Aug. 8, 1930. Serial No. 473,905. 8 Claims. (Cl. 2—139.)



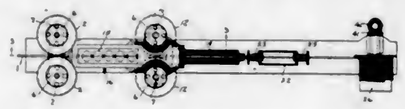
1. A detachable shirt collar device adapted to be worn at the V opening of a shirt, said collar device being made up as a single entity consisting of opposite front flaps adapted to overlie portions of the shirt and opposite rear flaps adapted to underlie said portions, said flaps adapted to receive the portions of the shirt between them to thereby support the device upon the shirt, and the device being shaped to conform to the V shaped opening of the shirt, the rear flaps being connected together at the point of the V but being disconnected from each other at the upper end of the V.

1,861,420. VALVE. JOSEPH R. MAHAN, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 17, 1930. Serial No. 502,885. 2 Claims. (Cl. 251—144.)



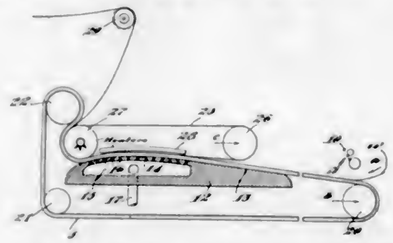
1. In a valve structure, a casing and a valve seat comprising an outer ring seated in an opening in the casing, a central rub, and ribs connecting the ring and the hub, in combination with a valve member adapted to close the seat but not to cover the outer portion thereof, a flexible sealing ring carried by the valve member and having its outer portion adapted to be seated on the said outer portion of the seat, a single hollow central valve stem carried by the valve member, a clamping member to clamp the sealing ring to the valve member, a nut threaded on the valve stem and clamping the clamping member against the sealing ring, an upstanding guide supported by the hub and loosely fitting the hollow in the valve stem, a follower resting on the outer part of the sealing ring and guided by the clamping member, and a spring surrounding the valve stem to press the follower toward the sealing ring.

1,861,421. METHOD OF MAKING TUBING. ANTHONY F. CIBS, Cleveland Heights, Ohio, assignor to Emil Linderme, Sr., Cleveland Heights, Ohio. Filed Jan. 23, 1932. Serial No. 588,338. 3 Claims. (Cl. 219—12.)



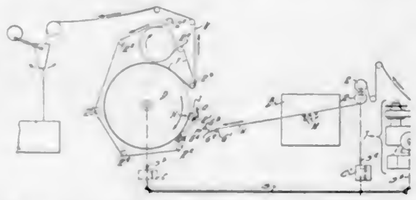
1. The method of fabricating plural ply tubing from a plurality of flat strips, the steps: coating at least one of such strips with bonding material, forming such strips into a plural ply tube, progressively passing electric current longitudinally through successive sections of such tube, and compressing the wall of such tube as the same is brought up to a bonding temperature.

1,861,422. ART OF SHRINKING FABRICS. SANFORD L. CLUETT, Troy, N. Y. Filed Apr. 18, 1930. Serial No. 445,300. 48 Claims. (Cl. 26—38.)



1. Art of treating textile webs comprising causing the said web to adhere to a support while in a moist state, causing said support to decrease in length in one dimension, and fixing in the web the resulting rearrangement of its component strands by drying the web with the aid of heat.

1,861,423. CLOTH-FINISHING. SANFORD L. CLUETT, Troy, N. Y. Filed Feb. 19, 1931. Serial No. 516,972. 27 Claims. (Cl. 26—38.)

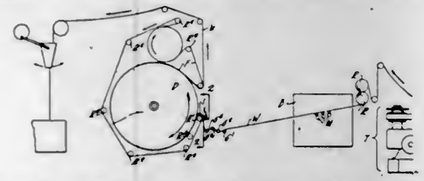


1. Method of treating textile webs comprising stretching one yarn component of the web, in one dimension while allowing take-up of the other yarn component and shrinkage of the web in the other dimension, then causing take-up of the previously stretched yarn component by compression exerted on the web parallel with its surface, and setting the web in its altered state.

1,861,424. CLOTH-FINISHING. SANFORD L. CLUETT, Troy, N. Y. Filed Feb. 19, 1931. Serial No. 516,973. 12 Claims. (Cl. 26—38.)

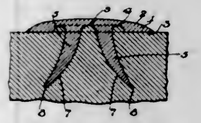
1. A cloth-finishing machine adapted to shrink cloth in length, said machine comprising a flexible band, a member having a convex surface defining a path of travel for said band, means for supplying a textile web to the convex surface of the band on said member, a second

member having a surface movable past said first-named member and defining a subsequent path of travel for the band, said first and second members being disposed to cooperate in nipping the web and band at the point where



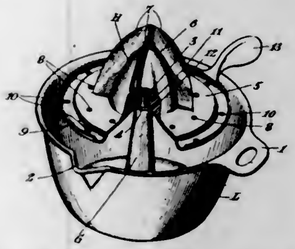
the band passes from one to the other of said members, in combination with means for compressively confining the web against said band by pressure maintained thereon substantially up to the point at which the web and band are nipped by said first and second members.

1,861,425. TRAFFIC AND INDUSTRIAL MARKER. ROBERT FOSTER, Chicago, Ill., assignor to Metal Traffic Marker Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 10, 1927. Serial No. 211,903. 4 Claims. (Cl. 94—1.5.)



1. A surface marker, comprising a head, having a pair of spaced integral prongs extending from the normal underside and spaced from the edges of said head, and separated by a groove adapted to receive material displaced by said prongs when driven into a surface, the transverse extent of said prongs at their union with said head being less than the width of said head.

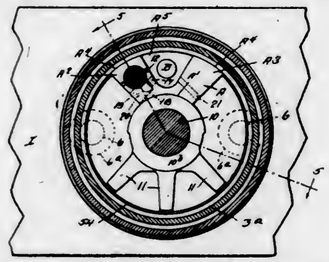
1,861,426. FRUIT JUICE EXTRACTING IMPLEMENT. MANSELL A. DAVIS, Westchester, and JOHN KUNST, New York, N. Y.; said Kunst assignor to said Davis. Filed Nov. 5, 1927. Serial No. 231,205. 9 Claims. (Cl. 146—3.)



1. The combination with a portable container intended to receive fruit juice therein, of a standard made up as a part of said container and projecting upwardly from the bottom wall thereof centrally of the container, said standard having an annular bearing part at its upper end, and a fruit juice extracting device rotatably mounted upon said bearing part and having a handle thereon by which it may be conveniently rotated with respect to the container.

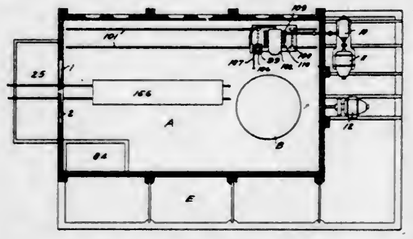
1,861,427. SHOCK ABSORBER. RICHARD J. DICKEY, Cleveland Heights, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 12, 1928. Serial No. 312,000. 12 Claims. (Cl. 188—89.)

1. A shock absorber comprising a liquid-containing casing, a shaft journaled in said casing, a vane on said shaft, and a valve mounting extending between said shaft and the inner wall of the casing, the said mounting comprising a pair of legs extending between the shaft-engaging portion of said mounting and the casing, each of said legs being provided with a port therethrough, a check valve controlling the port in one of said legs and



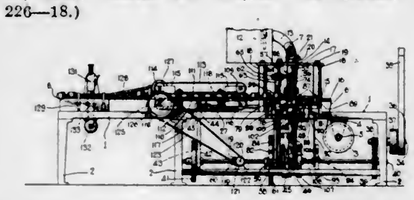
adapted to permit the free flow of liquid therethrough by a movement of the vane in one direction while closing the said port by a movement of the vane in the opposite direction, the leg having such check valve being provided with another port therethrough, and a valve for controlling the effective cross-sectional area of the last-mentioned port.

1,861,428. HYDRAULIC CLEANING PLANT. WILLIAM C. FURNAS, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 16, 1926. Serial No. 129,309. 10 Claims (Cl. 141—1.)



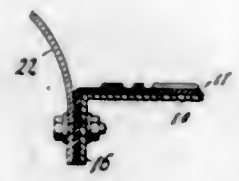
4. Apparatus for hydraulically cleaning castings, comprising, a carrier for movably supporting a casting, a car freely movable on rails in proximity to said carrier, a nozzle supported by said car for directing a jet of water against a casting supported by said carrier and conduit means for supplying water from a stationary source to said nozzle.

1,861,429. MACHINE FOR INCLOSING METALLIC COILED SPRINGS. BERNARD R. SCHNEIDER, Lyndhurst, and KARL KAISER, Ridgefield, N. J. Filed May 17, 1929. Serial No. 363,869. 22 Claims. (Cl. 226—18.)



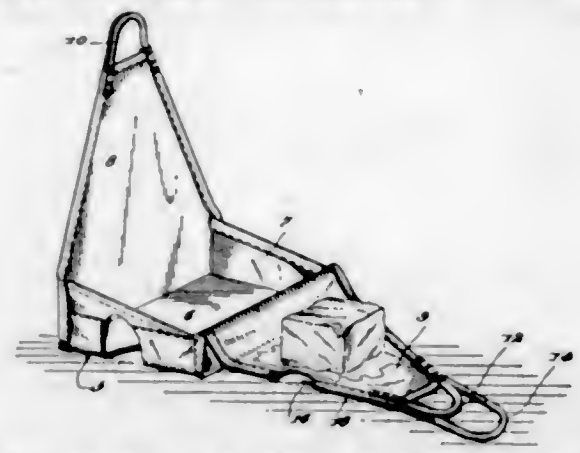
1. A machine for inclosing coil springs within a covering strip comprising means for supplying a covering strip to the machine, and a carrying member for carrying the springs successively into position to be enveloped by said strip and for advancing the covering strip within the machine.

1,861,430. RUNNING BOARD. BUDD BRONSON, Cleveland, Ohio, assignor to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 17, 1930. Serial No. 428,902. 7 Claims. (Cl. 280—163.)



1. The combination with a vehicle having an attaching portion, of a running board comprising a metallic base having an angularly disposed flange for cooperation with said attaching portion, rubber covering attached to said metallic base with a portion thereof extended over and attached to said angularly disposed flange, and means associated with said attaching portion and said angularly disposed flange for clamping the extended portion of the rubber covering therebetween.

1,861,431. CARRIER FOR ICE. WILBUR FRANCIS CRAWFORD, Waco, Tex. Filed May 12, 1931. Serial No. 536,872. 11 Claims. (Cl. 224—45.)



1. In an ice carrier, a bottom, side and end walls extended upward from the bottom to form an ice compartment, said side walls being extended substantial distances above the upper edges of the end walls, said end walls being increased in height toward one of said side walls and being stiffened to assist in holding that side wall in an upright position.

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ERRATA

List of Patentees, page xxvi, second column, Maag, Oscar L., for "Patent No. 1,861,466," read *No. 1,861,446.*
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320250

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Accurate Parts Manufacturing Company, The, Cleveland, Ohio. Screws, bolts, nuts, etc. Serial No. 319,190; June 7. Class 13.

Acme Staple Company, Camden, N. J. Stapling machines, binding machines, and tacking machines using metal staples. Serial No. 325,547; June 7. Class 23.

Air-way Electric Appliance Corporation, Toledo, Ohio. Floor wax applicators. Serial No. 325,206; June 7. Class 23.

Al-Oys, Inc., Chicago, Ill. Asphalt and an alphaltic preparation for the protection of structural surfaces. Serial No. 325,549; June 7. Class 12.

American Chemical Paint Company, Lower Gwynedd Township, Pa. Powdered rust proofing material. Serial No. 324,644; June 7. Class 6.

American Chemical Paint Company, Lower Gwynedd Township, Pa. Oil removing acid neutralizing powder. Serial No. 324,645; June 7. Class 6.

American Oak Preserving Company, The. (See Vorm, Charles.)

American Trust Company, San Francisco, Calif. Fresh vegetables. Serial No. 326,702; June 7. Class 46.

Animal Foods Company. (See Coan, N. C.)

Asiatic Petroleum Company, Limited, The, London, England. Lamp black, chemical substances, solvents, etc. Serial No. 305,601; June 7. Class 6.

Atlas Supply Company, Newark, N. J. Automobile goggles. Serial No. 324,947; June 7. Class 26.

Austral Window Company, Augusta, Me., and New York, N. Y. Doors and sliding and folding partitions. Serial No. 325,133; June 7. Class 12.

B. & B. Shoe Company, Chicago, Ill. Slippers. Serial No. 325,776; June 7. Class 39.

Bach, Valentin, doing business as Peck-O-Egg Mfg. Co., Manhattan Beach, Calif. Bird biscuit. Serial No. 326,075; June 7. Class 46.

Ballowitz, Dr., & Co. Chemisch-pharmaz. Fabrik. G. m. b. H., Berlin-Pankow, Germany. Preparation of hormones. Serial No. 322,787; June 7. Class 6.

Bates, Harry H., Joliet, Ill. Candy coated pop corn confection. Serial No. 326,202; June 7. Class 46.

Battle Creek Food Company, The, Battle Creek, Mich. Vegetable food. Serial No. 326,203; June 7. Class 46.

Bechstein, C. Pianofortefabrik Aktiengesellschaft, Berlin, Germany. Stringed musical instruments. Serial No. 323,983; June 7. Class 36.

Becker, Henry, & Son, Inc., Roseland, N. J. Milk, cream, butter, etc. Serial No. 319,850; June 7. Class 46.

Bell Drug Company. (See East Orange Pharmacy, Inc.)

Benal Hosiery Co., New York, N. Y. Hosiery. Serial No. 326,204; June 7. Class 39.

Best Products Co., The. (See Terry, Walter T., jr.)

Binney & Smith Co., New York, N. Y. Adhesive paste. Serial No. 323,773; June 7. Class 5.

Blanton Citrus Growers, Inc., Blanton, Fla. Fresh citrus fruits. Serial No. 325,510; June 7. Class 46.

Blue Grass-Elmendorf Grain Corporation, Lexington, Ky. Dairy feeds and fattening mash. Serial No. 325,614; June 7. Class 46.

Bon Ami Company, The, New York, N. Y. Tooth paste. Serial No. 325,742; June 7. Class 6.

Borden's Farm Products Co., Inc., Wassaic and New York, N. Y. Fruit juices. Serial No. 312,898; June 7. Class 45.

Boston Fresh Tripe Co., Brighton, Boston, Mass. Pigs' feet, tripe, lambs' tongues, etc. Serial No. 314,551; June 7. Class 46.

Boucher Cork Co., Inc., New York, N. Y. Strips of tipping material to be applied to strips of cigarette paper. Serial No. 320,716; June 7. Class 8.

Bradley, Milton, Company, Springfield, Mass. Toys. Serial No. 313,768; June 7. Class 22.

Brevolite Lacquer Company, North Chicago, Ill. Solutions of cellulose esters or mixtures of the same. Serial No. 298,138; June 7. Class 6.

Brevolite Lacquer Company, North Chicago, Ill. Solutions of cellulose esters or mixtures of the same. Serial No. 298,143; June 7. Class 6.

Burgess Battery Company, Madison, Wis. Electric batteries. Serial No. 326,008; June 7. Class 21.

Burgess Cellulose Company, Madison, Wis. Stereotype mats. Serial No. 326,534; June 7. Class 37.

Cam Syndicate Limited, London, England. Photographic films, cameras, parts thereof, and photographic projectors. Serial No. 326,077; June 7. Class 26.

Campana Corporation, Batavia, Ill. Lotion for the skin. Serial Nos. 325,060–1; June 7. Class 6.

Candler, Walter H., doing business as The Candler System Co., Chicago, Ill. Printed lessons, work sheets, etc. Serial No. 325,319; June 7. Class 38.

Celluloid Corporation, Newark, N. J. Blending and toilet brushes. Serial No. 326,633; June 7. Class 29.

Champion Shoe Manufacturing Corporation, New York, N. Y. Shoes. Serial No. 325,566; June 7. Class 39.

Champion Spark Plug Company, Toledo, Ohio. Spark plugs and parts thereof. Serial No. 325,543; June 7. Class 21.

Chemische Werke vormals H. & E. Albert, Wiesbaden-Biebrich, Germany. Anti-epileptic, sedative, and hypnotic preparation. Serial No. 318,390; June 7. Class 6.

Chernin, Isidor, doing business as Klinzmoth Co., New York, N. Y. Insecticide. Serial No. 325,901; June 7. Class 6.

Coan, N. C., doing business as Animal Foods Company, San Jose, Calif. Canned food for dogs and cats. Serial No. 326,457; June 7. Class 46.

Commonwealths Collieries, Incorporated, Cincinnati, Ohio. Coal. Serial No. 326,460; June 7. Class 1.

Continental Manufacturing Company, Chicago, Ill. Portable power propelled roller equipped vehicle. Serial No. 324,989; June 7. Class 23.

Coules, James D., Boston, Mass. French pastries and ice cream. Serial No. 326,282; June 7. Class 46.

Cracker Jack Co., The, Chicago, Ill. Popcorn confection. Serial No. 326,071; June 7. Class 46.

Creco Company, Inc., Long Island City, N. Y. Liquid soap. Serial No. 318,550; June 7. Class 4.

Crofoot, J. B., Co., Chicago, Ill. Stapling machines. Serial No. 325,983; June 7. Class 23.

Davis, Fred W., New York, N. Y. Astringents, creams, rouges, etc. Serial No. 319,475; June 7. Class 6.

Deland, C. M., New York, N. Y. Cotton, rayon, silk, and woolen piece goods. Serial No. 326,672; June 7. Class 42.

Dick, A. B., Company, Chicago, Ill. Lettering and drafting guides and rulers. Serial No. 325,384; June 7. Class 26.

Digest-O-Rem Company. (See Jackovic, John.)

Domestic Industries, Inc. Mansfield, Ohio. Refrigerating apparatus. Serial No. 326,673; June 7. Class 31.

Domestic Stoker Company, New York, N. Y. Coal burners and stokers. Serial No. 313,333; June 7. Class 34.

Domestic Toiletries, Inc., Cleveland, Ohio. Shaving cream. Serial No. 325,942; June 7. Class 4.

Domestic Toiletries, Inc., Cleveland, Ohio. Tooth paste and dental cream. Serial No. 325,943; June 7. Class 6.

Driver-Harris Company, Harrison, N. J. Wire. Serial No. 326,518; June 7. Class 14.

Drost, H., Box Mfg. Co., The, Manitowoc, Wis. Cigars. Serial No. 326,635; June 7. Class 17.

Durex Abrasives Corporation, Jersey City, N. J. Coated fabric tape and coated cellulose tape. Serial No. 325,323; June 7. Class 50.

Durex Products Inc., New York, N. Y. Antiseptic jelly. Serial Nos. 325,837–40; June 7. Class 6.

Dutch Products Company, Dorchester, Mass. Laxative medicine. Serial No. 325,819; June 7. Class 6.

E. A. Laboratories, Inc., Brooklyn, N. Y. Electrical warning signals of the acoustical type. Serial No. 295,890; June 7. Class 21.

Eagle Pencil Company, New York, N. Y. Lead pencils. Serial No. 326,674; June 7. Class 37.

East Orange Pharmacy, Inc., doing business as Bell Drug Company, East Orange, N. J. Antiseptic solutions and vaginal suppositories. Serial No. 325,820; June 7. Class 6.

Edi-Dict Cylinder Co., New York, N. Y. Dictating machines and cylinders therefor. Serial No. 325,646; June 7. Class 36.

Elimar Company, Inc., New York, N. Y. Knickers, trousers, suits, etc. Serial No. 326,137; June 7. Class 39.

Empire Bloomer Co., New York, N. Y. Underwear. Serial No. 325,748; June 7. Class 39.

Endicott Johnson Corporation, Endicott, N. Y. Sneakers and tennis shoes. Serial No. 319,137; June 7. Class 39.

Ethical Products Company, The, Waco, Tex. Laxative tablets. Serial No. 326,253; June 7. Class 6.

Felton Chemical Company, Inc., Brooklyn, N. Y. Natural vanilla, artificial vanilla, and compounds of the same. Serial No. 326,466; June 7. Class 46.

Ferro Machine & Foundry Company, The, Cleveland, Ohio. Iron castings. Serial No. 305,103; June 7. Class 14.

Field, John, New York, N. Y. Recording reproducing phonographs and records therefor. Serial No. 319,888; June 7. Class 36.

Filter Condenser Corporation, Detroit, Mich. Converters and filters. Serial No. 323,135; June 7. Class 21.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. Serial No. 315,736; June 7. Class 42.

Fox, E., Novelty Co. Inc., New York, N. Y. Teething rings. Serial No. 325,973; June 7. Class 44.

Fraser, Allen, Philadelphia, Pa. Base metal trays. Serial No. 326,467; June 7. Class 13.

Friedland, I. J., doing business as Specialty Sales Company, Atlanta, Ga. Prophylactic rubber articles. Serial No. 326,140; June 7. Class 44.

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Fudo Psyllium Corp. (See Lichtenstein, William.)
Furst-McNess Company, Freeport, Ill. Food flavoring extracts. Serial No. 326,085; June 7. Class 46.
Goldsmith, P., Sons Co., The, Cincinnati, Ohio. Bats, golf clubs, baseballs, etc. Serial No. 326,141; June 7. Class 22.
Goldtree, Llebes & Co., San Salvador, Santa Ana, and Sonsonate, Salvador. Wheat flour. Serial No. 325,908; June 7. Class 46.
Grand Rapids Store Equipment Corporation, Portland, Oreg. Store fixtures. Serial No. 324,887; June 7. Class 32.
Great Atlantic & Pacific Tea Company, The, New York, N. Y. Fresh oysters. Serial No. 326,320; June 7. Class 46.
Greene, Marion, Montclair, N. J. Dolls. Serial No. 326,748; June 7. Class 22.
Hartmann Trunk Company, Racine, Wis. Suitcases and hat boxes. Serial No. 326,183; June 7. Class 3.
Hart's Rejuvenating Cream Co. (See Immich, Mae F.)
Harutunian, Harry, doing business as Middlesex Laboratories, Watertown, Mass. Foot ointment. Serial No. 325,826; June 7. Class 6.
Helbok, Albert, Bronxville, N. Y. Rolls having each a Frankfurter, etc. Serial No. 325,470; June 7. Class 46.
Hercules Novelty Company, Chicago, Ill. Coin-controlled ball-projecting amusement device. Serial No. 326,680; June 7. Class 22.
Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. Serial Nos. 326,587–9; June 7. Class 39.
Hound Packing Company, Chicago, Ill. Metallic machinery packings. Serial No. 312,008; June 7. Class 35.
Hoyt & Worthen Tanning Corporation, Haverhill, Mass. Chamois. Serial No. 326,107; June 7. Class 1.
Hunt, Rodney, Machine Co., Orange, Mass. Mechanical dye kettle. Serial No. 325,172; June 7. Class 23.
Hunton, Logan A., doing business as The Hunton Company, New York, N. Y. Paper sheets used as advertising circulars. Serial No. 310,604; June 7. Class 38.
Hunton, Logan A., doing business as The Hunton Company, New York, N. Y. Paper sheets used as advertising circulars. Serial No. 310,606; June 7. Class 38.
Huyck, F. C., & Sons, Rensselaer and Albany, N. Y. Bed blankets. Serial No. 326,511; June 7. Class 42.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chemical product. Serial No. 325,906; June 7. Class 6.
I-X-L Printing Company, New York, N. Y. Board games. Serial No. 326,639; June 7. Class 22.
Ideal Linen Mesh Company, Poughkeepsie, N. Y. Elastic fabric. Serial No. 326,218; June 7. Class 42.
Ideal Trading Co. (See Lichtenstein, William.)
Immich, Mae F., doing business as Hart's Rejuvenating Cream Co., Los Angeles, Calif. Beauty cream. Serial No. 322,255; June 7. Class 6.
Independent Fireworks Manufacturing Company, Bridgewater, Mass. Fireworks, firecrackers, and explosives. Serial No. 326,244; June 7. Class 9.
Infantamilk Corporation, Rochester, N. Y. Infant food. Serial No. 326,108; June 7. Class 46.
Irso Products Company. (See Smith, Isador A.)
Jackovic, John, doing business as Digest-O-Rem Company, Canonsburg, Pa. Medical preparation. Serial No. 311,504; June 7. Class 6.
Jay Gee Hat Co., Inc., New York, N. Y. Hat linings, and hats. Serial No. 326,146; June 7. Class 39.
Jico Laboratories. (See Lachoff, Joseph.)
Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo. Shoes. Serial No. 320,593; June 7. Class 39.
Karfunkle, Phil, Chicago, Ill. Handkerchiefs. Serial No. 326,070; June 7. Class 42.
Kayon Company, The, Milwaukee, Wis. Shoe presses and parts thereof. Serial No. 326,328; June 7. Class 23.
Keepaway Laboratory, London, England. Veterinary or sanitary preparation. Serial No. 324,711; June 7. Class 6.
Keuffel & Esser Company, Hoboken, N. J. Sensitized positive black print paper and cloth. Serial No. 322,258; June 7. Class 26.
Kimberly-Clark Corporation, Neenah, Wis. Sheet insulating material. Serial No. 325,790; June 7. Class 12.
Kimberly-Clark Corporation, Neenah, Wis. Wood pulp insulating material. Serial No. 325,791; June 7. Class 12.
King Features Syndicate, Inc., New York, N. Y. Comic strips and cartoons. Serial No. 326,330; June 7. Class 38.
Klein, Chas. H., doing business as Thrift-E-Sole Company, Cincinnati, Ohio. Plastic substance for re-soling shoes. Serial No. 314,286; June 7. Class 50.
Klinzmoth Co. (See Chernin, Isidor.)
Knapp-Monarch Company, Belleville, Ill. Electric fans. Serial No. 325,331; June 7. Class 21.
Kocher, Erwin R., Los Angeles, Calif. Water and oil colors. Serial No. 321,431; June 7. Class 16.
Kress, S. H., & Co., New York, N. Y. Dolls. Serial No. 326,750; June 7. Class 22.
Lachoff, Joseph, doing business as Jico Laboratories, Chicago, Ill. Furniture and automobile polish. Serial No. 324,966; June 7. Class 16.
Lamport Mfg. Supply Co., Inc., The, New York, N. Y. Sheets and pillow cases. Serial No. 318,786; June 7. Class 42.
Langer, Friedrich J., Cleveland, Ohio. Musical novelties in the nature of finger tip tappers. Serial No. 324,291; June 7. Class 36.
Lautmann, Alfred J., Detroit, Mich. After-shaving powder. Serial No. 321,074; June 7. Class 6.
Levine Brothers, New York, N. Y. Insecticides. Serial No. 325,874; June 7. Class 6.
Lichtenstein, William, doing business as Ideal Trading Co., and Fudo Psyllium Corp., New York, N. Y. Psyllium seed, lactose, and dextrines. Serial No. 326,151; June 7. Class 6.
Long I Vine Glo, Inc., Brooklyn, N. Y. Grape juice. Serial No. 326,715; June 7. Class 45.
Magnuson Products Corporation, New York, N. Y. Soaps. Serial No. 326,112; June 7. Class 4.
Maiden Form Brassiere Co. Inc., New York, N. Y. Brassières and girdles. Serial No. 326,113; June 7. Class 39.
Marks, Walter K., Inc., New York, N. Y. Hats. Serial No. 326,291; June 7. Class 39.
Marshall Field & Company, Chicago, Ill. Hosiery. Serial No. 326,584; June 7. Class 39.
Marvel Products Co., The, Cleveland, Ohio. Upper motor lubricator. Serial No. 324,107; June 7. Class 23.
Marxuach, Acisclo, San Juan, Porto Rico. Medicinal preparation. Serial Nos. 326,153–4; June 7. Class 6.
Maurer, Martin R., Riverhead, N. Y. Dressed poultry and live ducks. Serial No. 318,066; June 7. Class 46.
Mead Johnson & Company, Evansville, Ind. Cod liver oil and visosterol. Serial No. 325,590; June 7. Class 6.
Meterice of America Co., Ltd., Los Angeles, Calif. Clock and thermostat-operated electric switches. Serial No. 322,797; June 7. Class 21.
Meyers, A., & Sons Corp., New York, N. Y. Pins, snap-fasteners, hooks and eyes. Serial Nos. 321,544–6; June 7. Class 40.
Meza, Albert, doing business as Tia Juana Products, Venice, Calif. Malt syrup. Serial No. 325,478; June 7. Class 46.
Middlesex Laboratories. (See Harutunian, Harry.)
Minit-Rub Corporation, St. Louis, Mo. Lotion. Serial No. 323,302; June 7. Class 6.
Minnesota Chemical Company, Inc., The, Minnesota Transfer, Minn. Laundry sours, chemical eradicators. Serial No. 324,319; June 7. Class 6.
Modern Tissues Corporation, New York, N. Y. Toilet and facial tissue. Serial No. 325,915; June 7. Class 37.
Naamlooze Vennootschap Chemisch-Pharmaceutische Fabriek "Menoline" (Menoline Drug Company), The Hague, Netherlands. Disinfectant toilet preparation. Serial No. 324,228; June 7. Class 6.
Neidich Process Company, Burlington, N. J. Carbon paper and typewriter ribbons. Serial Nos. 325,008–12; June 7. Class 11.
Neptune Meter Company, New York, N. Y. Liquid meters. Serial Nos. 325,853–4; June 7. Class 26.
Nonspi Company, The, New York, N. Y. Toilet preparations. Serial No. 321,389; June 7. Class 6.
Norman, W. Howard, doing business as Walk-N-Joy Chemical Co., Raleigh, N. C. Fluid to be poured in the shoe. Serial No. 324,263; June 7. Class 6.
North Bro's. M'f'g. Co., Philadelphia, Pa. Ice breakers. Serial No. 326,265; June 7. Class 23.
Oberfelder, Eugene A., New Rochelle, N. Y. Silk chiffon in the piece. Serial No. 326,314; June 7. Class 42.
Oneida Community Limited, Oneida, N. Y. Velveteen fabrics. Serial No. 326,024; June 7. Class 42.
Pabst Corporation, Milwaukee, Wis. Malt syrup. Serial No. 326,430; June 7. Class 46.
Peck-O-Egg Mfg. Co. (See Bach, Valentin.)
Pérez, Pascual, New York, N. Y. Necktie pressing and reshaping device. Serial No. 325,268; June 7. Class 50.
Phoenix Hosiery Company, Milwaukee, Wis. Hosiery. Serial No. 324,799; June 7. Class 39.
Pichel Products Co., Inc., New York, N. Y. Flavoring. Serial No. 325,798; June 7. Class 45.
Pierce, Lewis D., doing business as Western Products Company, Eugene, Oreg. Dressing for salads and other foods. Serial No. 325,410; June 7. Class 46.
Prodermatect Company, The, Scottdale, Pa. Shaving cream. Serial No. 324,322; June 7. Class 4.
Protectome Sales Co. (See Smith, Thomas, Company.)
Pure Oil Company, The, Chicago, Ill. Oils and greases. Serial No. 299,083; June 7. Class 15.
Putman, Charles E., Seattle, Wash. Wooden shingles. Serial No. 298,660; June 7. Class 12.
Pyram-Seltzer Co., Los Angeles, Calif., and New York, N. Y. Preparation for nervousness and headache. Serial No. 324,444; June 7. Class 6.
Ramirez, C., & Co., Nogales, Ariz. Fresh vegetable. Serial No. 323,208; June 7. Class 46.
Robinson Engineering Corporation, The, New York, N. Y. Heating radiators. Serial No. 321,617; June 7. Class 34.
Schmid, Julius, New York, N. Y. Prophylactic rubber and membranous articles. Serial No. 326,164; June 7. Class 44.

CARNEGIE LIBRARY OF ATLANTA

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Schnefel Bros., Inc., Newark, N. J. Manicure tweezers, blackhead extractors, etc. Serial No. 325,921; June 7. Class 44.
Sears, Roebuck and Co., Chicago, Ill. Field seeds. Serial No. 325,348; June 7. Class 1.
Sharpe & Dohme, Incorporated, Baltimore, Md. Medicated antiseptic lozenges. Serial No. 326,235; June 7. Class 6
Shell Chemical Company, San Francisco, Calif. Fertilizer. Serial No. 326,001; June 7. Class 10.
Sintering Machinery Corporation, Netcong, N. J., and New York, N. Y. Ore sintering machines, continuous calcining and drying machines, gratebars and pallets for said machines, etc. Serial No. 325,832; June 7. Class 23.
Smith, Isador A., doing business as Irso Products Company, Philadelphia, Pa. Preparation for the finger and water waving of hair. Serial No. 324,889; June 7. Class 6.
Smith, Thomas, Company, doing business as Protectome Sales Co., Worcester, Mass. Electrical fire alarm system apparatus and parts thereof. Serial No. 325,602; June 7. Class 21.
Soilizer Company, The, Cleveland, Ohio. Humus and fertilizers. Serial No. 326,560; June 7. Class 10.
South Western Stone Co. Ltd., London, England. Stone. Serial No. 326,031; June 7. Class 1.
South Western Stone Co. Ltd., London, England. Polished stone. Serial No. 326,032; June 7. Class 12.
Specialty Sales Company. (See Friedland, I. J.)
Squier, George O., Washington, D. C. Empty boxes. Serial No. 323,314; June 7. Class 2.
Stewart, A. L., & Sons, Cherryfield and Calais, Me. Canned berries. Serial No. 326,618; June 7. Class 46.
Stonega Coke & Coal Company, Philadelphia, Pa. Coal. Serial No. 325,894; June 7. Class 1.
Strunz, S., & Son, Inc., Pittsburgh, Pa. Detergent. Serial No. 326,272; June 7. Class 4.
Supreme Golf Ball Co., Chicago, Ill. Golf balls. Serial No. 325,875; June 7. Class 22.
Surface Combustion Corporation, Toledo, Ohio. Furnaces. Serial No. 324,637; June 7. Class 34.
Sussman, Wormser & Company, San Francisco, Calif. Canned fruits, vegetables, berries, etc. Serial No. 323,209; June 7. Class 46.
Terry, Walter T., jr., doing business as The Best Products Co., Kansas City, Mo. Polishing and cleaning preparation. Serial No. 325,198; June 7. Class 16.
Tex-O-Kan Flour Mills Co., Dallas, Tex. Wheat flour. Serial Nos. 326,168–9; June 7. Class 46.
Thompson's Dairy, Washington, D. C. Milk, cream, butter, cheese, and eggs. Serial No. 326,437; June 7. Class 46.
Thrift-E-Sole Company. (See Klein, Chas H.)
Tia Juana Products. (See Meza, Albert.)
Timme, E. F., & Son, New York, N. Y. Pile fabrics in the piece. Serial No. 326,563; June 7. Class 42.
Towns & James Inc., Brooklyn, N. Y. External medicinal preparations. Serial No. 325,926; June 7. Class 6.
Trico Products Corporation, Buffalo, N. Y. Automobile accessories. Serial Nos. 325,895–6; June 7. Class 19.
Triple "XXX" Company, Galveston, Tex. Syrup concentrate and flavor. Serial No. 325,126; June 7. Class 45.
29th Division Association, Inc., The, Newark, N. J. Association emblems, lapel buttons, badges, etc. Serial No. 319,792; June 7. Class 28.
United Publishers Corporation, New York, N. Y. Books. Serial No. 326,062; June 7. Class 38.
United Publishers Corporation, New York, N. Y. Cooperative discount coupons. Serial No. 326,063; June 7. Class 38.
United States Rubber Company, New York, N. Y. Electrical insulating tape. Serial No. 325,304; June 7. Class 21.
Valentine & Company, New York, N. Y. Paint enamels, stains, and varnishes. Serial No. 326,243; June 7. Class 16.
Vallen Electrical Company, Inc., Akron, Ohio. Automatically operated curtains. Serial No. 314,826; June 7. Class 50.
Valligny, L. Pierre, New York, N. Y. Shampoo and hair coloring preparation. Serial No. 324,496; June 7. Class 6.
Vitrefrax Corporation, Los Angeles, Calif. Ceramic batches. Serial No. 323,836; June 7. Class 1.
Vi-Zor-Tenn Company, Kansas City, Mo. Radio antenna in form of automobile windshield visor. Serial No. 324,860; June 7. Class 21.
Vorm, Charles, doing business as The American Oak Preserving Company, North Judson, Ind. Preserved leaves, foliage, grasses, and growths of field and forest. Serial No. 323,879; June 7. Class 1.
W. and M. Stoker Company, The, Denver, Colo. Stokers. Serial No. 311,808; June 7. Class 34.
Walk-N-Joy Chemical Co. (See Norman, W. Howard.)
Washington Laboratories, Inc., New York, N. Y. Razor blades. Serial No. 326,197; June 7. Class 23.
Weber Electric Co., Schenectady, N. Y. Switches and electric light sockets. Serial No. 324,637; June 7. Class 21.
Weissmann, Ludwig N., doing business as L. Weissmann & Co., Palisade, N. J. Lotions. Serial No. 325,887; June 7. Class 6.
Western Clock Company, Peru, Ill. Clocks and watches. Serial No. 326,596; June 7. Class 27.
Western Products Company. (See Pierce, Lewis D.)
Weston, Byron, Company, Dalton, Mass. Ledger and bond paper. Serial No. 322,012; June 7. Class 37.
Winona Mill Company, Winona, Minn. Wheat flour. Serial No. 326,239; June 7. Class 46.
Wolf and Koch, St. Louis, Mo. Beverage and syrups therefor. Serial No. 326,407; June 7. Class 45.
Wood, John, Manufacturing Company, Conshohocken, Pa. Refrigerators and parts thereof. Serial No. 326,567; June 7. Class 31.
Wooderaft Corporation, The, Bay City, Mich. Smoking stands. Serial No. 326,441; June 7. Class 8.

LIST OF REGISTRANTS OF TRADE-MARKS

A C Spark Plug Company, Flint, Mich. Device for injecting carbon remover into internal combustion engines. 294,825; June 7; Serial No. 321,741; published Mar. 22, 1932. Class 23
Abbott Laboratories, North Chicago, Ill. Fish liver oils. 294,692; June 7; Serial No. 323,601; published Mar. 29, 1932. Class 6.
Abbott Laboratories, North Chicago, Ill. Preparation of ergot alkaloids. 294,742; June 7; Serial No. 320,773; published Mar. 15, 1932. Class 6.
Académie Scientifique De Beauté. (See Gay, Georges.)
Acheson Oildag Company, Port Huron, Mich. Colloidal graphite. 294,808; June 7; Serial No. 323,080; published Mar. 15, 1932. Class 6.
Acme Backing Corporation, Brooklyn, N. Y. Processed fabric, backing material used in the manufacture of laminated fabrics. 294,893; June 7; Serial No. 323,602; published Mar. 22, 1932. Class 50.
Adelson, Joseph, & Sons, New York, N. Y. Women's undergarments. 294,724; June 7; Serial No. 323,385; published Mar. 29, 1932. Class 39.
Adlerika Company, The, St. Paul, Minn. Medicine. 294,736; June 7; Serial No. 319,922; published Mar. 8, 1932. Class 6.
Advance Solvents & Chemical Corporation, New York, N. Y. Transparent synthetic resin. 294,746; June 7; Serial No. 322,242; published Mar. 8, 1932. Class 6.
Aetna Chemical Company. (See Leubner, Bernhard O.)
Aller, Annie B., Washington, D. C. Hair grower. 294,799; June 7; Serial No. 324,010; published Mar. 15, 1932. Class 6.
Aktiengesellschaft für Feinmechanik, vormals Jetter & Scheerer, Tuttlingen, Germany. Knives, forks, spoons, scissors, etc. 294,829; June 7; Serial No. 317,996; published Mar. 29, 1932. Class 23.
Alexandria Drug Co., Oklahoma City, Okla. Insecticide compounds. 294,737; June 7; Serial No. 320,070; published Mar. 8, 1932. Class 6.
Alje Laboratories, New York, N. Y. Hair waving lotion. 294,747; June 7; Serial No. 322,443; published Mar. 8, 1932. Class 6.
American Mill and Manufacturing Company, Inc., Dallas, Tex. Ball-projecting amusement device. 294,760; June 7; Serial No. 323,216; published Mar. 22, 1932. Class 22.
American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Materials and solutions for treating printing plates. 294,844; June 7; Serial No. 322,078; published Mar. 1, 1932. Class 6.
American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Materials and solutions for treating printing plates. 294,845; June 7; Serial No. 322,080; published Mar. 1, 1932. Class 6.
American Needlecrafts, Inc., New York, N. Y. Stuffed cloth dolls. 294,761; June 7; Serial No. 323,183; published Mar. 29, 1932. Class 22.
American Vault Company, Brooklyn, N. Y. Burial vaults. 294,891; June 7; Serial No. 323,477; published Mar. 22, 1932. Class 2.
American Window Glass Company, Pittsburgh, Pa. Sheet glass. 294,806; June 7; Serial No. 324,308; published Mar. 29, 1932. Class 33.
American Woolen Company, Boston, Mass., and New York, N. Y. Woolen piece goods. 294,706; June 7; Serial No. 321,194; published Mar. 29, 1932. Class 42.
Amorskin Corporation, Wilmington, Del., and New York, N. Y. Face creams. 294,729; June 7; Serial No. 321,234; published Mar. 29, 1932. Class 6.
Andrus, J. H., Port Barre, La. Eye medicine. 294,697; June 7; Serial No. 322,982; published Mar. 29, 1932. Class 6.

Ansul Chemical Company, Marinette, Wis. Formaldehyde dust. 294,814; June 7; Serial No. 322,723; published Mar. 8, 1932. Class 6.

Antibody Products Limited, Watford, England. Pharmaceutical preparation. 294,745; June 7; Serial No. 321,583; published Mar. 22, 1932. Class 6.

Antidolor Mfg. Co., Inc., The, Springville, N. Y. Dentifrices. 294,689; June 7; Serial No. 323,933; published Mar. 22, 1932. Class 6.

Armstrong Refining Company, as assignee of Armstrong Packing Company, assignor, by mesne assignments, to Armstrong Packing Company, Dallas, Tex. Foods. 87,404; renewed July 16, 1932.

Arrow-Hart & Hegeman Electric Company, The. (See Hart & Hegeman Manufacturing Company, The, assignor.)

Arthur & Lew. (See Bernstein, Louis.)

Associated Features. (See Loscalzo, Dominick.)

Associated Laboratories, Inc., New York, N. Y. Laxative preparation. 294,787; June 7; Serial No. 320,297; published Mar. 29, 1932. Class 6.

Atkins & Durbrow, Inc., New York, N. Y. Moss peat. 294,771; June 7; Serial No. 323,737; published Mar. 15, 1932. Class 1.

Auto Strop Safety Razor Co., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Strops and soaps. 88,048; renewed Aug. 27, 1932.

Auto Strop Safety Razor Co., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Brushes. 88,726 renewed Oct. 22, 1932.

Auttenberry, William R., Bowie, Tex. Preparation for killing cock-roaches. 294,817; June 7; Serial No. 322,440; published Mar. 22, 1932. Class 6.

Baker Perkins Company, Inc., Saginaw, Mich. Goods used in the treatment of rubber and its manufacture into articles. 294,830; June 7; Serial No. 317,267; published Mar. 29, 1932. Class 23.

Beacon Manufacturing Company, New Bedford, Mass. Blankets. 294,722; June 7; Serial No. 323,218; published Mar. 22, 1932. Class 42.

Bell, A. T., Oroville, Calif. Remedy for weak lungs, pneumonia, etc. 294,675; June 14; Serial No. 293,172; published Mar. 29, 1932. Class 6.

Bemberg, J. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany. Thread and yarn. 294,716; June 7; Serial No. 322,986; published Mar. 22, 1932. Class 43.

Bernstein, Louis, doing business as Arthur & Lew, Philadelphia, Pa. Canned malt syrup. 294,719; June 7; Serial No. 323,158; published Mar. 23, 1932. Class 46.

Best Products Corporation, Seattle, Wash. Aspirin tablets, cascara bromide quinine, Epsom salt tablets, etc. 294,831; June 7; Serial No. 319,439; published Mar. 1, 1932. Class 6.

Biltmore Manufacturing Company, The, Cincinnati, Ohio. Golf bags. 294,914; June 7. Class 22.

Boggs Manufacturing Corporation, Atlanta, N. Y. Potato graders, bin loaders, onion graders, etc. 294,646; June 7; Serial No. 310,202 published Mar. 22, 1932. Class 23.

Bolloré, René, Odet, France. Cigarette papers. 294,882; June 7; Serial No. 322,480; published Mar. 22, 1932. Class 8.

Bolloré, René, Odet, France. Cigarette papers. 294,883; June 7; Serial No. 322,542; published Mar. 22, 1932. Class 8.

Bolloré, René, Odet, France. Cigarette papers. 294,884; June 7; Serial No. 322,495; published Mar. 22, 1932. Class 8.

Bonelli, B., Escalon, Calif. Fresh grapes. 294,872; June 7; Serial No. 317,058; published Mar. 22, 1932. Class 46.

Boon, Caswell & Tindel, doing business as Texas Fruit & Vegetable Co., Tyler, Tex. Fresh vegetables and citrus fruits. 294,858; June 7; Serial No. 322,788 published Mar. 22, 1932. Class 46.

Bourjois, Inc., New York, N. Y. Perfume, toilet water, eau de Cologne, etc. 294,614; June 7; Serial No. 323,322; published Mar. 15, 1932. Class 6.

Bourjois, Inc., New York, N. Y. Perfume, toilet water, powder, and cream. 294,620; June 7; Serial No. 322,730; published Mar. 8, 1932. Class 6.

Bourjois, Inc., New York, N. Y. Perfume, toilet water, bath crystals, etc. 294,848; June 7; Serial No. 322,496; published Mar. 1, 1932. Class 6.

Bradford Dyers' Association, Limited, The, Bradford, England. Cotton piece goods. 294,717; June 7; Serial No. 323,024; published Mar. 29, 1932. Class 42.

Bristol-Myers Company, New York, N. Y. Hair tonic. 294,839; June 7; Serial No. 321,132; published Mar. 1, 1932. Class 6.

Bronni A. G., Zurich, Switzerland. Beverages and mineral water. 294,917; June 7. Class 45.

Buckeye Reliner Producing Co., The, Lima, Ohio. Tire repair devices. 294,665; June 7; Serial No. 312,255; published Mar. 22, 1932. Class 35.

Caire. (See Linsley, Mrs. R. Scott.)

California Spray-Chemical Corporation, Wilmington, Del., and Berkeley, Calif. Insecticides, germicides, and fungicides. 294,838; June 7; Serial No. 320,965; published Mar. 1, 1932. Class 6.

Campbell, John, & Co., New York, N. Y. Dyes. 294,849; June 7; Serial No. 322,498; published Mar. 1, 1932. Class 6.

Canadian Remedies, Ltd., Winnipeg, Manitoba, Canada. Foot powder. 294,836; June 7; Serial No. 320,543; published Mar. 1, 1932. Class 6.

Carroll, P. J., & Company Limited, Dundalk, Ireland. Smoking tobaccos, snuffs, and cigarettes. 294,676; June 7; Serial No. 294,620; published Mar. 22, 1932. Class 17.

Cavally, Frederick L., Cincinnati, Ohio. Nasal powder. 294,615; June 7; Serial No. 323,124; published Mar. 15, 1932. Class 6.

Central Distributors, The. (See Greenwell, Hilda O.)

Chadwick-Hoskins Co., Charlotte, N. C. Cotton piece goods. 294,910; June 7. Class 42.

Chein, J., & Company, New York, N. Y., and Harrison, N. J. Mechanical trick match box. 294,656; June 7; Serial No. 322,573; published Mar. 29, 1932. Class 22.

Chemical Catalog Company, Inc., The, New York, N. Y. House organ. 294,640; June 7; Serial No. 324,369; published Mar. 29, 1932. Class 38.

Cincinnati Galvanizing Co., The, Cincinnati, Ohio. Garbage cans. 294,894; June 7; Serial No. 323,651; published Mar. 29, 1932. Class 2.

Citrus City Growers Association, Largo, Fla. Fresh and canned citrus fruits, and juices. 294,864; June 7; Serial No. 321,458; published Mar. 29, 1932. Class 46.

Clark, D. L., Company, The, Pittsburgh, Pa. Candy bars. 294,868; June 7; Serial No. 320,632; published Mar. 29,1932. Class 46.

Clarke Sanding Machine Company, Muskegon, Mich. Floor sanding machines. 294,730; June 7; Serial No. 323,392; published Mar. 22, 1932. Class 23.

Clayton Magazines, Inc., The, New York, N. Y. Periodical. 294,634; June 7; Serial No. 324,062; published Mar. 22, 1932. Class 38.

Clayton Magazines, Inc., The, New York, N. Y. Periodical. 294,638; June 7; Serial No. 324,218; published Mar. 29, 1932. Class 38.

Clover Farm Stores. (See Grocers & Producers Co., The.)

Cluff Cover Company, Inc., New York, N. Y. Table covers. 294,890; June 7; Serial No. 323,564; published Mar. 22, 1932. Class 50.

Cohen & Kappell, Inc., New York, N. Y. Cloaks and suits. 294,684; June 7; Serial No. 314,638; published Mar. 22, 1932. Class 39.

Cohen & Tracy. (See Tracy, Pierre J.)

Collingwood Shoe Company, Inc., Endicott, N. Y. Shoes. 294,857; June 7; Serial No. 322,906; published Mar. 22, 1932. Class 39.

Colorado Poultry and Egg Producers, Inc., The, Denver, Colo. Eggs. 294,651; June 7; Serial No. 321,795; published Mar. 8, 1932. Class 46.

Columbus Coated Fabrics Corporation, Columbus, Ohio. Shade cloth. 294,660; June 7; Serial No. 323,512; published Apr. 5, 1932. Class 50.

Condonis, Angelo, St. Louis, Mo. Preparation for dandruff. 294,618; June 7; Serial No. 322,610; publisher Mar. 22, 1932. Class 6.

Continental Drug Corporation, doing business as Covo Laboratories, Alton, Ill. Tablets for treatment of colds. 294,699; June 7; Serial No. 322,880; published Mar. 29, 1932. Class 6.

Continental Drug Corporation, doing business as Zev Pharmacal Company, Alton, Ill. Antiseptic solution. 294,741; June 7; Serial No. 320,720; published Mar. 8, 1932. Class 6.

Coon, W. B., Co., Rochester, N. Y. Shoes. 294,622; June 7; Serial No. 323,741; published Mar. 29, 1932. Class 39.

Corn Products Refining Company, New York, N. Y. Starch. 294,776; June 7; Serial No. 323,190; published Mar. 15, 1932. Class 6.

Corral, Wodiska y Ca. (See Moreda y Deben, Bernardo, assignor.)

Covo Laboratories. (See Continental Drug Corporation.)

Crane, Z. & W. M., assignor to Z. & W. M. Crane, Inc., Dalton, Mass. Paper and envelops. 39,067; renewed Oct. 21, 1932.

Dallett Company, The, Philadelphia, Pa. Pads for the support of buffing, polishing, and abrading media on machinery. 294,677; June 7; Serial No. 295,330; published Mar. 22, 1932. Class 23.

De Barros, Jose, El Centro, Calif. Hair tonic and straightener. 294,810; June 7; Serial No. 322,993; published Mar. 15, 1932. Class 6.

Deere & Company, Moline, Ill. Potato harvesting machines, diggers, pickers and sorters, and planters. 294,826; June 7; Serial No. 320,582; published Mar. 22, 1932. Class 23.

De Laval Separator Company, The, New York, N. Y. Centrifugal cream separating machines. 294,733; June 7; Serial No. 324,243; published Mar. 29, 1932. Class 23.

Denver Dry Goods Co., Denver, Colo. Complexion powder, creams, skin tonic, etc. 294,672; June 7; Serial No. 316,993; published Mar. 22, 1932. Class 6.

Detroit Soda Products Co., Wyandotte, Mich. Baking soda. 294,821; June 7; Serial No. 322,312; published Mar. 8, 1932. Class 6.

Dexter Portland Cement Co., Nazareth, Pa., assignor to Pennsylvania-Dixie Cement Corporation, New York, N. Y. Portland cement. 38,662; renewed July 22, 1932.

Dixie Mills, Clarksville, Tenn. Whole wheat cereal. 294,650; June 7; Serial No. 321,332; published Mar. 22, 1932. Class 46.

Drug Products Co., Inc., The, Long Island City, N. Y. Liquid hematinic preparation. 294,691; June 7; Serial No. 323,614; published Mar. 29, 1932. Class 6.

Dry Ink Corporation, New York, N. Y. Ink. 294,900; June 7; Serial No. 324,091; published Mar. 29, 1932. Class 11.

Dunkerson & Co., Inc., assignor to Luckett-Wake Tobacco Co., Louisville, Ky. Leaf tobacco. 87,735; renewed Aug. 6, 1932.

Dunn, Dudley, doing business as Health Laboratories, Memphis, Tenn. Medicinal preparation. 294,619; June 7; Serial No. 322,689; published Mar. 22, 1932. Class 6.

E. Z. Walk Arch Corporation, The, New York, N. Y. Medicated corn pads. 294,681; June 7; Serial No. 306,630; published Mar. 22, 1932. Class 6.

Eastern Manufacturing Company. (See Katahdin Pulp and Paper Company.)

Ellis, Bertie, New York, N. Y. Corn removing liquid and plaster. 294,782; June 7; Serial No. 317,390; published Mar. 1, 1932. Class 6.

Endicott Johnson Corporation, Endicott, N. Y. Boots and shoes. 294,854; June 7; Serial No. 323,194; published Mar. 29, 1932. Class 39.

Enkel, Harry, doing business as Sodasal Laboratories, South Bend, Ind. Medicinal preparation. 294,790; June 7; Serial No. 320,923; published Feb. 23, 1932. Class 6.

Evening Herald Publishing Company, Los Angeles, Calif. Newspaper. 294,874; June 7; Serial No. 323,612; published Mar. 22, 1932. Class 38.

Fabrique d'horlogerie "La Champagne" Louis Müller & Cie, S. A., Bienne, Switzerland. Watches and parts thereof. 294,905; June 7; Serial No. 324,210; published Mar. 29, 1932. Class 27.

Faith Mfg. Co., Chicago, Ill. Vehicle radiator caps and ornaments, tank caps, and license plate holders. 294,892; June 7; Serial No. 323,576; published Mar. 22, 1932. Class 19.

Fanlen Products Co. (See Goodman, Sam C.)

Fel Corporation, The. (See Glasgow, Luther E.)

Fillmore Citrus Association, Fillmore, Calif. Fresh citrus fruits. 294,867; June 7; Serial No. 320,674; published Mar. 29, 1932. Class 46.

Firth-Smith Company, Boston, Mass. Cleaning apparatus. 294,647; June 7; Serial No. 311,137; published Mar. 22, 1932. Class 23.

Foley & Company, Chicago, Ill. Laxative chewing gum. 294,777; June 7; Serial No. 323,228; published Mar. 15, 1932. Class 6.

Fortune Tobacco Company, The, New York, N. Y. Cigars and cigarettes. 294,901–2; June 7; Serial Nos. 324,100–101; published Mar. 22, 1932. Class 17.

Foundry Materials, Inc., South Euclid, Ohio. Core binders and binders for molding sand. 294,643; June 7; Serial No. 318,004; published Mar 15, 1932. Class 5.

Franc-Strohmenger & Cowan, Inc., New York, N. Y. Neckties. 294,795; June 7; Serial No. 323,762; published Mar. 22, 1932. Class 39.

Frederics, E., Inc., New York, N. Y. Hair rinse. 294,617; June 7; Serial No. 323,238; published Mar. 15, 1932. Class 6.

Gabilla, Henriette, Paris, France, assignor, by mesne assignments, to Gabilla, Incorporated, New York, N. Y. Toilet preparations. 88,483; renewed Sept. 24, 1932.

Garver Machine Corporation, Union City, Ind. Milk and cream testers. 294,812; June 7; Serial No. 322,910; published Mar. 29, 1932. Class 26.

Gay, Georges, doing business as Académie Scientifique de Beauté, Colombes, France, assignor to Maurice Levy, New York, N. Y. Nail polish. 294,685; June 7; Serial No. 310,761; published Sept. 15, 1931. Class 6.

General-Direktion der österr. Tabakregie, Vienna, Austria. Cigarette tubes, cigarette and cigar holders. 294,906; June 7; Serial No. 324,211; published Mar. 29, 1932. Class 8.

General Electric Company, Schenectady, N. Y. Magazine. 294,630; June 7; Serial No. 323,616; published Mar. 29, 1932. Class 38.

Genting, A. H., Company, Philadelphia, Pa. Boots and shoes, children's wash suits, sweaters, etc. 294,851; June 7; Serial No. 323,657; published Mar. 29, 1932. Class 39.

Gibson, Francis W., Boston, Mass. Game apparatus. 294,661; June 7; Serial No. 323,169; published Mar. 22, 1932. Class 22.

Gillette Safety Razor Company. (See Auto Strop Safety Razor Co., assignor.)

Giraux, Jules, Rouen (Seine Inferieure), France. Perfumery, face powder and creams, rouges, etc. 294,828; June 7; Serial No. 318,138; published Mar. 8, 1932. Class 6.

Glasgow, Luther E., doing business as The Fel Corporation, Pittsburgh, Pa. Hair waving fluid. 294,781; June 7; Serial No. 318,948; published Mar. 29, 1932. Class 6.

Glidden Company, The, Cleveland, Ohio. Synthetic casein. 294,649; June 7; Serial No. 321,277; published Mar. 22, 1932. Class 46.

Godchaux Sugars, Inc., New Orleans, La. Sugar. 294,708; June 7; Serial No. 321,558; published Mar. 22, 1932. Class 46.

Goodall Worsted Co., Sanford, Me. Piece goods. 294,805; June 7; Serial No. 324,315; published Mar. 29, 1932. Class 42.

Goodman, Sam C., doing business as Fanlen Products Co., Baltimore, Md. Pomade, petroleum jelly, aspirin tablets, etc. 294,784; June 7; Serial No. 318,484; published Mar. 8, 1932. Class 6.

Goodrich, B. F. Company, The, New York, N. Y. Rubber vehicle tires. 294,731; June 7; Serial No. 323,532; published Mar. 29, 1932. Class 35.

Gottschalk, John W., Mfg. Co., Philadelphia, Pa. Abradants. 294,913; June 7. Class 4.

Graves, Gladys E., Philadelphia, Pa. Preparation for the treatment of dandruff, bald spots, etc. 294,788; June 7; Serial No. 320,303; published Mar. 29, 1932. Class 6.

Greenwell, Hilda O., doing business as The Central Distributors, St. Louis, Mo. Preparation for athlete's foot and golfer's itch. 294,916; June 7; Serial No. 322,546; published Mar. 22, 1932. Class 6.

Grocers & Producers Co., The, doing business as Clover Farm Stores, Cleveland, Ohio. Prepared cocoanut, cake flour, buckwheat, etc. 294,723; June 7; Serial No. 323,286; published Mar. 22, 1932. Class 46.

Guastavino, R., Company, Boston, Mass. Tiles and masonry. 39,105; renewed Oct. 21, 1932.

Gulf Fertilizer Co., The, Tampa, Fla. Fertilizer. 294,897–8; June 7; Serial Nos. 323,937–8; published Mar. 22, 1932. Class 10.

H. & H. Manufacturing Company, Inc., The, Quidnick, R. I. Hat linings. 294,866; June 7; Serial No. 321,021; published Mar. 29, 1932. Class 39.

Hall, Gardiner, Jr., Company, South Willington, Conn., and New York, N. Y. Thread. 294,712; June 7; Serial No. 322,737; published Mar. 29, 1932. Class 43.

Hall, Gardiner, Jr., Company, South Willington, Conn., and New York, N. Y. Combination package of thread and tape. 294,862; June 7; Serial No. 321,724; published Mar. 29, 1932. Class 40.

Hall, Gardiner, Jr., Company, South Willington, Conn., and New York, N. Y. Combination package of thread and tape. 294,873; June 7; Serial No. 317,635; published Mar. 29, 1932. Class 40.

Hamblin & Russell Manufacturing Company, The, Worcester, Mass. Strainers. 294,885; June 7; Serial No. 322,638; published Mar. 29, 1932. Class 13.

Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. 294,720; June 7; Serial No. 323,196; published Mar. 29, 1932. Class 42.

Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. 294,721; June 7; Serial No. 323,197; published Mar. 22, 1932. Class 42.

Hart Drug Corporation, Miami, Fla. Inhalants. 294,642; June 7; Serial No. 308,625; published Mar. 29, 1932. Class 6.

Hart & Hegeman Manufacturing Company, The, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Electrical apparatus. 88,676; renewed Oct. 15, 1932.

Hawley, Frank, St. Louis, Mo. Medicinal preparation. 294,786; June 7; Serial No. 320,115; published Mar. 29, 1932. Class 6.

Health Laboratories. (See Dunn, Dudley.)

Heighway, George, New York, N. Y. Inflated toy rolling pin. 294,754; June 7; Serial No. 323,817; published Mar. 29, 1932. Class 22.

Hemmoll Co. Inc., The, Newton, Mass. Preparation for the relief of hemorrhoids (piles). 294,832; June 7; Serial No. 319,577; published Mar. 1, 1932. Class 6.

Hilborn, J., & W. E. Reed, Inc., New York, N. Y. Articles made of knitted fabric. 294,916; June 7. Class 39.

Hirsch Laboratories, Inc., Toledo, Ohio. Artificial mineral water. 294,773; June 7; Serial No. 322,823; published Mar. 8, 1932. Class 6.

Hodsbon-Berg, Incorporated, Norwalk, Conn., and New York, N. Y. Felt hats. 294,678; June 7; Serial No. 305,357; published Mar. 29, 1932. Class 39.

Hoffmann-La Roche Chemical Works, The, New York, N. Y., assignor to Hoffmann-La Roche, Inc., Nutley, N. J. Organic iodin preparation for medicinal uses. 87,996; renewed Aug. 20, 1932.

Hollywood, Inc., Dallas, Tex. Astringents, creams, rouges, etc. 294,740; June 7; Serial No. 320,677; published Mar. 22, 1932. Class 6.

Howey-in-the-Hills Juice Co., Howey-in-the-Hills, Fla. Fruit juices for food purposes. 294,653; June 7; Serial No. 322,214; published Mar. 22, 1932. Class 46.

Hubbard, J., & Co., Boston, Mass. Antiseptic, deodorizer, disinfectant, and prophylactic. 294,744; June 7; Serial No. 321,538; published Mar. 8, 1932. Class 6.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Organic arsenical compound. 294,834; June 7; Serial No. 320,050; published Mar. 1, 1932. Class 6.

Idaho Candy Co., Boise, Idaho. Candy. 294,863; June 7; Serial No. 321,467; published Mar. 22, 1932. Class 46.

Ingraham, E., Company, The, Bristol, Conn. Clocks. 294,907; June 7; Serial No. 324,317; published Mar. 29, 1932. Class 27.

International Paint Corporation, East St. Louis, Ill. Chemical product for removing rust and scale from metal surface. 294,701; June 7; Serial No. 322,387; published Mar. 29, 1932. Class 6.

Iowa Can Company, Keokuk, Iowa. Corrugated board containers. 294,688; June 7; Serial No. 309,082; published Mar. 3, 1931. Class 2.

Istituto Biologico Farmaceutico Gazzone, Turin, Italy. Preparation for immunizing tissues against infection. 294,702; June 7; Serial No. 321,953; published Mar. 29, 1932. Class 6.

Johns-Manville, H. W., Company, assignor, by mesne assignments, to Johns-Manville Corporation, New York, N. Y. Fireproof cements for retorts. 38,207–S; renewed Apr. 29, 1932.

Joseph, Barnet, New York, N. Y. Bread. 294,768; June 7; Serial No. 323,944; published Mar. 22, 1932. Class 46.

Josephson Disinfecting Co., Inc., Bronx, N. Y., assignor to X-Ray Insecticide Laboratories, Inc., New York, N. Y. Insect exterminator, disinfectant, deodorant, etc. 294,680; June 7; Serial No. 305,359; published Mar. 29, 1932. Class 6.

Journeyman Shirt Company, The. (See Spaide, Roland L.)

Katahdin Pulp and Paper Company, Lincoln, Me., to Eastern Manufacturing Company, Brewer, Me., successor. Papers. 86,304; renewed Apr. 30, 1932.

Kayser, Julius, & Co., New York, N. Y. Underwear. 294,798; June 7; Serial No. 324,000; published Mar. 22, 1932. Class 39.

Kerfoot, Thomas, & Co., Limited, Bardsley, England. Effervescent aperient preparation. 294,779; June 7; Serial No. 323,298; published Mar. 15, 1932. Class 6.

Kildow, Charles A., Bethesda, Ohio. Cigars. 294,886; June 7; Serial No. 322,763; published Mar. 29, 1932. Class 17.

King Features Syndicate, Inc., New York, N. Y. Cartoon strip. 294,603; June 7; Serial No. 323,201; published Mar. 29, 1932. Class 38.

King Publishing Co., Inc., New York, N. Y. Publication. 294,639; June 7; Serial No. 324,348; published Mar. 29, 1932. Class 38.

Kleinberg, Harry, Pittsburgh, Pa. Shirts. 294,804; June 7; Serial No. 324,289; published Mar. 29, 1932. Class 39.

Knight, B. B., & R., Corporation, Providence, R. I. Cloth of worsted, wool, mohair, etc. 294,725–6; June 7; Serial Nos. 323,459–60; published Mar. 29, 1932. Class 42.

Knothe Brothers Company, Inc., New York, N. Y. Pajamas, underwear, shirts, mufflers, etc. 294,727; June 7; Serial No. 323,535; published Mar. 22, 1932. Class 39.

Kolloyd Laboratories, Inc., Chicago, Ill. Medicinal preparation. 294,911; June 7. Class 6.

Kops Brothers, Inc., New York, N. Y. Corsets, girdles, brassières, etc. 294,626; June 7; Serial No. 324,002; published Mar. 29, 1932. Class 39.

Kresge Department Store Corporation, Newark, N. J. Elastic loom-web, lisle-web, cords and braids. 294,853; June 7; Serial No. 323,300; published Mar. 29, 1932. Class 40.

La Compagnie Fermiere de l'Etablissement Thermal de Vichy, Paris, France. Mineral waters. 88,736; renewed Oct. 22, 1932

Lanman & Kemp-Barclay & Co. Incorporated, New York, N. Y. Laxative pills, liniment, hair tonic, etc. 294,701; June 7; Serial No. 321,109; published Feb. 23, 1932. Class 6.

Lasalle & Koch Co., The, Toledo, Ohio. Underwear, suits, coats, etc. 294,871; June 7; Serial No. 318,004; published Nov. 3, 1931. Class 39.

Lawrence, Geo. H., Limited, Sheffield, England. Cutlery. 294,664; June 7; Serial No. 311,482; published Mar. 29, 1932. Class 23.

Leeds and Northrup Company, Philadelphia, Pa. Recorders of magnitudes of temperature, humidity, etc.; electric controllers and regulators, etc. 294,809; June 7; Serial No. 323,052; published Mar. 22, 1932. Class 26.

Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Hosiery. 294,803; June 7; Serial No. 324,177; published Mar. 29, 1932. Class 39.

Leonard, C. Edgar, Montreal, Quebec, Canada. Antiseptic. 294,682; June 7; Serial No. 315,885; published Mar. 22, 1932. Class 6.

Lesher, Whitman & Co., Inc., New York, N. Y. Water repellent shower curtains. 294,887; June 7; Serial No. 323,093; published Mar. 29, 1932. Class 13.

Leubner, Bernhard O., doing business as Aetna Chemical Company, Detroit, Mich. Laxative tonic. 294,673; June 7; Serial No. 286,492; published Mar. 29, 1932. Class 6.

Levin Brothers Paper Co., Chicago, Ill. Paper bags. 294,895; June 7; Serial No. 323,666; published Mar. 29, 1932. Class 2.

Levy, Maurice. (See Gay, Georges.)

Lexington Mill & Elevator Company, Lexington, Nebr. Wheat flour. 86,916; renewed June 11, 1932.

Libby, McNeill & Libby, assignor to Libby, McNeill & Libby, Chicago, Ill. Packing house products. 38,537; renewed July 1, 1932.

Lily of France Corset Co., New York, N. Y. Corsets. 294,624; June 7; Serial No. 323,949; published Mar. 29, 1932. Class 39.

Linsley, Mrs. R. Scott, doing business as Caire, Greenfield Hill, Fairfield, Conn. Astringents, astringent cerates, bleach and beauty creams, etc. 294,820; June 7; Serial No. 322,321; published Mar. 8, 1932. Class 6.

Llondale Shirt Co. Inc., New York, N. Y. Shirts, pajamas, and textile underwear. 294,709; June 7; Serial No. 322,000; published Feb. 23, 1932. Class 39.

Longmeyer, John, St. Louis, Mo. Cigars. 294,899; June 7; Serial No. 324,073; published Mar. 29, 1932. Class 17.

Longobardi, Neale, Brooklyn, N. Y. Massage lotion. 294,775; June 7; Serial No. 323,139; published Mar. 15, 1932. Class 6.

Loomis, Albert J., Detroit, Mich. Necktie racks. 294,889; June 7; Serial No. 323,413; published Mar. 29, 1932. Class 13.

Los Angeles Brewing Co., Los Angeles, Calif. Beverages, and syrups and extracts for preparing the same. 294,674; June 7; Serial No. 269,412; published Mar. 5, 1929. Class 48.

Loscalzy, Dominick, doing business as Associated Features, Brooklyn, N. Y. Cartoon prints. 294,637; June 7; Serial No. 324,141; published Mar. 22, 1932. Class 38.

Lovett, H. E., Pittsburgh, Pa. Tablets for headaches, pains. 294,621; June 7; Serial No. 322,826; published Mar. 22, 1932. Class 6.

Lowe, Joe, Corporation, Wilmington, Del., and Brooklyn, N. Y. Vegetable pure food colloid ice cream stabilizer standardized. 294,713; June 7; Serial No. 322,796; published Mar. 22, 1932. Class 46.

Lowenbaum, R., Manufacturing Company, St. Louis, Mo. Dresses. 294,918; June 7. Class 39.

Luckett-Wake Tobacco Co. (See Dunkerson & Co., Inc., assignor.)

Lysol, Incorporated, Bloomfield, N. J. Saponified cresol solution. 294,693; June 7; Serial No. 323,582; published Mar. 29, 1932. Class 6.

Mabor Limited. (See Magnesia Syndicate, Ltd., The.)

Maggioni, L. P., & Company, Savannah, Ga. Canned grapefruit and grapefruit juice. 294,667; June 7; Serial No. 313,788; published Mar. 22, 1932. Class 46.

Maggioni, L. P., & Company, Savannah, Ga. Canned grapefruit. 294,668; June 7; Serial No. 313,965; published Mar. 22, 1932. Class 46.

Magnesia Syndicate, Ltd., The, Westminster, England, by change of name to Mabor Limited, London, England. Raw or partly prepared mineral substances. 38,441; renewed June 10, 1932.

Magnolia Petroleum Company, Galveston and Dallas, Tex., assignor, by mesne assignments, to Magnolia Petroleum Company, Dallas, Tex. Gasolene. 85,912; renewed Mar. 26, 1932. Class 15.

Maleckl, Joseph C., Chicago, Ill. Publication. 294,631; June 7; Serial No. 323,898; published Mar. 22, 1932. Class 38.

Manfield & Sons, Limited, Northampton, England. Boots and shoes. 294,909; June 7. Class 39.

Mansfield Veterinary Laboratory, Mansfield, La. Preparation to assist in the treatment of black tongue. 294,670; June 7; Serial No. 314,957; published Mar. 22, 1932. Class 6.

Marcus & Wiesen Inc., New York, N. Y. Ribbon elastic. 294,856; June 7; Serial No. 322,960; published Mar. 22, 1932. Class 40.

"Masta" Patent Pipe Company Limited, The, London, England. Tobacco pipes. 294,896; June 7; Serial No. 323,868; published Mar. 29, 1932. Class 8.

Mauthe, Friedrich, Gesellschaft mit beschränkter Haftung, Schwenningen-on-the-Neckar, Germany. Clocks. 294,880; June 7; Serial No. 321,464; published Mar. 29, 1932. Class 27.

May Hosiery Mills, Inc., Burlington, N. C. Hosiery. 294,797; June 7; Serial No. 323,954; published Mar. 22, 1932. Class 39.

McKesson & Robbins, Incorporated, Bridgeport and Fairfield, Conn. Talcum powder. 294,735; June 7; Serial No. 319,870; published Mar. 8, 1932. Class 6.

McMaster, Arthur H., Lansing, Mich. Sulphur compound, antacid and gas absorbent, an effective compound for pain and indigestion due to gas in the stomach. 294,842; June 7; Serial No. 322,055; published Mar. 1, 1932. Class 6.

Merchandise Manager Publishing Corporation, The, New York, N. Y. Publication. 294,635–6; June 7; Serial Nos. 324,074–5; published May 29, 1932. Class 38.

Merke, Alois, Philadelphia, Pa. Preparation for the scalp. 294,616; June 7; Serial No. 323,263; published Mar. 15, 1932. Class 6.

Metropolitan Refining Co., Inc., Long Island City, N. Y. Rust, scale, and corrosion preventive and eliminating compound. 294,695; June 7; Serial No. 323,414; published Mar. 29, 1932. Class 6.

Millar, E. B., & Company, Chicago, Ill. Coffee. 294,662; June 7; Serial No. 311,151; published Mar. 29, 1932. Class 46.

Mission Bead Company, Los Angeles, Calif. Perfumes. 294,789; June 7; Serial No. 320,732; published Mar. 29, 1932. Class 6.

Mission Dry Corporation, Ltd., Los Angeles, Calif. Dispensers. 294,811; June 7; Serial No. 322,961; published Mar. 29, 1932. Class 23.

Monroe Shirt Company, New York, N. Y. Shirts, pajamas, underwear, etc. 294,915; June 7. Class 39.

Montgomery Ward & Co., Incorporated, Chicago, Ill. Stoves, ranges, heaters, etc. 294,669; June 7; Serial No. 314,420; published Mar. 22, 1932. Class 34.

Moreda y Deben, Bernardo, Habana, Cuba, assignor, by mesne assignments, to Corral, Dodiska y Co., Tampa, Fla. Cigars. 88,169; renewed Sept. 3, 1932. Class 17.

Mulhens, Ferd., Inc. (See Scott, Alex.)

Murray Printing Company, The, Cambridge, Mass. Ink transfer materials. 294,881; June 7; Serial No. 322,136; published Mar. 22, 1932. Class 11.

National Broom Manufacturing Company, Pueblo, Colo. Brooms. 294,903–4; June 7; Serial Nos. 324,109–10; published Mar. 22, 1932. Class 29.

National Company, Inc., Malden, Mass. Roller skates. 294,766; June 7; Serial No. 324,111; published Mar. 22, 1932. Class 22.

National Health Plan, Inc., Providence, R. I. Checks. 294,605; June 7; Serial No. 323,349; published Mar. 22, 1932. Class 37.

National Marking Machine Company, The, Cincinnati, Ohio. Tab affixing machine. 294,732; June 7; Serial No. 323,959; published Mar. 29, 1932. Class 23.

National Yeast Company, Pittsburgh, Pa. Powdered substance for improving bread dough. 294,704; June 7; Serial No. 318,320; published Mar. 22, 1932. Class 46.

Neustadter Bros., San Francisco, Calif. Sweaters, coats, pajamas, etc. 294,861; June 7; Serial No. 322,186; published Mar. 22, 1932. Class 39.

News Projection Corporation, New York, N. Y. Paper tape. 294,876; June 7; Serial No. 323,536; published Mar. 29, 1932. Class 37.

Nickerson & Collins Co., Chicago, Ill. Section of a monthly magazine or periodical publication. 294,641; June 7; Serial No. 324,393; published Mar. 29, 1932. Class 38.

Old Timbers' Lodge. (See Thomson, Alexander.)

Oleothesin Company, Inc., The, Buffalo, N. Y. Anesthetics. 294,748; June 7; Serial No. 322,744; published Mar. 8, 1932. Class 6.

Opipari, Anthony, doing business as Pittsburgh Cleanser Co., Pittsburgh, Pa. Liquid cleaner and bleacher. 294,837; June 7; Serial No. 320,548; published Mar. 1, 1932. Class 6.

Orange-Crush Company, Chicago, Ill. Maltless beverages, and syrups, compounds, etc., for making the same. 294,657; June 7; Serial No. 322,649; published Mar. 22, 1932. Class 45.

Orange-Crush Company, Chicago, Ill. Grape juice. 294,658; June 7; Serial No. 322,803; published Mar. 22, 1932. Class 45.

Orbit Listerated Gum Company, Chicago, Ill. Chewing gum. 294,623; June 7; Serial No. 323,788; published Mar. 29, 1932. Class 46.

Paine Incense Company, Lewiston, Me. Incense. 294,700; June 7; Serial No. 322,704; published Mar. 29, 1932. Class 6.

Palmer Corporation, The, Chicago, Ill. Fresh oranges and grapefruit. 294,865; June 7; Serial No. 321,437; published Mar. 29, 1932. Class 46.

Parents' Publishing Association, Inc., New York, N. Y. Scrap book. 294,632; June 7; Serial No. 324,007; published Mar. 29, 1932. Class 37.

Parke, Davis & Co., Detroit, Mich. Preparation used in the treatment of hypogonadism. 294,824; June 7; Serial No. 321,889; published Mar. 8, 1932. Class 6.

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Floor and table game. 294,753; June 7; Serial No. 323,827; published Mar. 29, 1932. Class 22.

Parsons Paper Company, Holyoke, Mass. Paper. 294,877; June 7; Serial No. 323,463; published Mar. 29, 1932. Class 37.

Pennsylvania-Dixie Cement Corporation. (See Dexter Portland Cement Co., assignor.)

Pep Manufacturing Corporation, Rochester, N. Y. Ball-projecting amusement device. 294,755; June 7; Serial No. 323,627; published Mar. 22, 1932. Class 22.

Phillips, Clarence M., Palestine, Ill. Art stationery. 294,608; June 7; Serial No. 321,395; published Mar. 29, 1932. Class 37.

Pinaud, Inc., New York, N. Y. Perfumes, dentifrices, hair lotion, etc. 294,698; June 7; Serial No. 322,970; published Mar. 29, 1932. Class 6.

Pineoleum Company, The, New York, N. Y. Medicinal tablets, oil and petrolatum sprays, inhalants, and rubs. 294,818; June 7; Serial No. 322,436; published Mar. 22, 1932. Class 6.

Pinetrine Co., Inc., The, New York, N. Y. Antiseptic, prophylactic, and deodorant. 294,819; June 7; Serial No. 322,400; published Mar. 22, 1932. Class 6.

Pittsburgh Cleanser Co. (See Opipari, Anothny.)

Prashker, Sohn & Co., New York, N. Y. Shirts. 294,801; June 7; Serial No. 324,113; published Mar. 22, 1932. Class 39.

Price Flavoring Extract Company, Chicago, Ill. Flavoring extracts for foods. 294,714; June 7; Serial No. 322,860; published Mar. 22, 1932. Class 46.

Proll, Basil R., San Mateo, Calif. Cuticle beautifier. 294,743; June 7; Serial No. 320,967; published Mar. 15, 1932. Class 6.

Pure Carbonic Company of America, New York, N. Y. Solid carbon dioxide. 294,843; June 7; Serial No. 322,964; published Mar. 1, 1932. Class 6.

Purepac Corporation, Newark, N. J. Alum powder, soda, boric acid, etc. 294,666; June 7; Serial No. 312,387; published Mar. 8, 1932. Class 6.

Puritan Mills, Incorporated, Atlanta, Ga. Feeds. 294,648; June 7; Serial No. 319,046; published Mar. 15, 1932. Class 46.

Puritan Mills, Incorporated, Atlanta, Ga. Mixed feeds. 294,652; June 7; Serial No. 321,970; published Mar. 15, 1932. Class 46.

Puritee Products Company, Fredonia, N. Y. Preparation for relief in removal of corns, warts, and callouses. 294,847; June 7; Serial No. 322,187; published Mar. 1, 1932. Class 6.

Racm Products Company, Brooklyn, N. Y. Hair tonic. 294,774; June 7; Serial No. 322,891; published Mar. 8, 1932. Class 6.

Radio Dial Publishing Company, Cincinnati, Ohio. Publication. 294,607; June 7; Serial No. 319,667; published Mar. 29, 1932. Class 38.

Rawdon, Elmer E., Akron, Ohio. Fish lure. 294,762; June 7; Serial No. 324,397; published Mar. 29, 1932. Class 22.

Raymond Manufacturing Co., Stockton, Calif. Men's leather jackets. 294,705; June 7; Serial No. 318,411; published Mar. 29, 1932. Class 39.

Razoo Wonder Glass Company, Los Angeles, Calif. Sharpeners. 294,807; June 7; Serial No. 323,145; published Mar. 29, 1932. Class 23.

Real Detective Tales, Inc., Chicago, Ill. Magazine. 294,606; June 7; Serial No. 320,697; published Mar. 29, 1932. Class 38.

Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 294,822; June 7; Serial No. 322,271; published Mar. 8, 1932. Class 6.

Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Gargles and oral antiseptics. 294,686; June 7; Serial No. 309,151; published Mar. 1, 1932. Class 6.

Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Tooth-paste, tooth-powder. 294,687; June 7; Serial No. 309,146; published Mar. 1, 1932. Class 6.

Renaud et Cie of America, Boston, Mass. Perfumery. 294,738; June 7; Serial No. 320,509; published Mar. 8, 1932. Class 6.

Rice, Chas. W., & Company, Union City, Ind. Window shade rollers. 294,908; June 7. Class 32.

Riegel Textile Corporation, New York, N. Y. Shirts, pajamas, underwear, etc. 294,859; June 7; Serial No. 322,560; published Mar. 22, 1932. Class 39.

Roe, Wm. G., & Company, Inc., Winter Haven, Fla. Fresh citrus fruits. 294,860; June 7; Serial No. 322,438; published Mar. 29, 1932. Class 46.

Rogers-Dede Co., Inc., Boston, Mass. Suits, topcoats, overcoats, etc. 294,794; June 7; Serial No. 323,718; published Mar. 22, 1932. Class 39.

Roseley Perfumery Shoppe, Inc., Newark, N. J. Rouge, lip-stick, eye shadow, etc. 294,833; June 7; Serial No. 319,964; published Mar. 1, 1932. Class 6.

Rossie Velvet Company, Mystic, Conn. Velvets. 294,711; June 7; Serial No. 322,524; published Mar. 22, 1932. Class 42.

Rottino, Nunzio, New York, N. Y. Hair growing and treating ointment. 294,778; June 7; Serial No. 323,254; published Mar. 15, 1932. Class 6.

Royal Baking Powder Company, New York, N. Y. Baking powder. 294,813; June 7; Serial No. 322,753; published Mar. 8. Class 6.

Royal Beauty Parlor Supply Co., Newark, N. J. Rouge, lipstick, eye shadow, etc. 294,644; June 7; Serial No. 316,069; published Mar. 1, 1932. Class 6.

Royal Oriental Rug Corporation, New York, N. Y. Textile rugs. 294,792; June 7; Serial No. 323,589; published Mar. 22, 1932. Class 42.

Royce Chemical Company, Carlton Hill, N. J. Hydrosulphite. 294,610; June 7; Serial No. 323,369; published Mar. 15, 1932. Class 6.

Royce Chemical Company, Carlton Hill, N. J. Printing gum. 294,739; June 7; Serial No. 320,511; published Mar. 8, 1932. Class 6.

Russell Playing Card Company, Jersey City, N. J. Playing cards. 294,765; June 7; Serial No. 324,193; published Mar. 22, 1932. Class 22.

'S Wheat Cereal Food Company. (See Youngs, Henry J.)

Sandoz Chemical Works, Inc., New York, N. Y. Pure glucosides. 294,780; June 7; Serial No. 322,561; published Mar. 1, 1932. Class 6.

Sani-Seal Company, Inc., Knoxville, Tenn. Frozen confections. 294,715; June 7; Serial No. 322,943; published Mar. 8, 1932. Class 46.

Sardou, Anthony P., Albany, N. Y. Scalp preparation. 294,850; June 7; Serial No. 322,525; published Mar. 1, 1932. Class 6.

Savada, Elias, doing business as Savada Brothers, New York, N. Y. Blouses, shirts, and pajamas. 294,800; June 7; Serial No. 324,011; published Mar. 22, 1932. Class 39.

Saxlehner, Andreas, Budapest, Hungary. Bitter salts. 294,663; June 7; Serial No. 311,162; published Mar. 22, 1932. Class 6.

Schering & Glatz, Inc., Bloomfield, N. J. Suppositories. 294,645; June 7; Serial No. 316,218; published Mar. 29, 1932. Class 6.

Schmalz, Clara, Heidelberg, Germany. Hygienic cosmetics. 294,835; June 7; Serial No. 320,373; published Mar. 1, 1932. Class 6.

Schmid, Julius, New York, N. Y. Hard rubber combs. 294,870; June 7; Serial No. 318,617; published Mar. 22, 1932. Class 40.

Schmitt, George P., doing business as Schmitt Laboratory Products, New York, N. Y. Vaginal suppositories. 294,841; June 7; Serial No. 321,930; published Mar. 1, 1932. Class 6.

Scott, Alex., Union City, N. J., assignor to Ferd. Mulhens, Inc., New York, N. Y. Emmenagogue pill. 294,683; June 7; Serial No. 316,175; published Sept. 8, 1931. Class 6.

Scott-Borden, Anaheim, Calif. Fresh citrus fruit. 294,628; June 7; Serial No. 323,467; published Mar. 29, 1932. Class 46.

Seevers, Robert O., Minneapolis, Minn. Whiskey. 294,654; June 7; Serial No. 322,294; published Mar. 22, 1932. Class 49.

Semet-Solvay Company, New York, N. Y. Coke. 294,750–1; June 7; Serial Nos. 323,912–13; published Mar. 15, 1932. Clas 1.

Semet-Solvay Company, New York, N. Y. Coke. 294,752; June 7; Serial No. 323,911; published Mar. 22, 1932. Class 1.

7 Wagner Sisters, The, Wilkinsburg, Pa. Candles. 294,869; June 7; Serial No. 319,263; published Mar. 22, 1932. Class 46.

Sheppard, Ronald W., Montclair, N. J. Table board game. 294,757; June 7; Serial No. 323,501; published Mar. 22, 1932. Class 22.

Singer Manufacturing Co., The, New York, N. Y., to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machines and sewing machine attachments and parts thereof. 39,109; renewed Oct. 21, 1932.

Sleeper Products, Inc., Philadelphia, Pa., and Wilmington, Del. Mattresses. 324,734; June 7; Serial No. 324,274; published Mar. 29, 1932. Class 32.

Sloan, Dr. Earl S., Incorporated, New York, N. Y. Medicinal preparations. 294,827; June 7; Serial No. 320,524; published Mar. 29, 1932. Class 6.

Smith, Lonnie G., doing business at Tulco Laboratories, Tulsa, Okla. Material used as tooth powder and mouth antiseptic. 294,772; June 7; Serial No. 322,807; published Mar. 8, 1932. Class 6.

Societe Anonyme L'Auvergne Laitiere, Aurillac, France. Cheese. 294,758; June 7; Serial No. 323,256; published Mar. 15, 1932. Class 46.

Sodasal Laboratories. (See Enkel, Harry.)

Spalde, Rolland L., doing business as The Journeyman Shirt Company, Butler, Pa. Shirts. 294,718; June 7; Serial No. 323,066; published Mar. 22, 1932. Class 39.

Spokesman Publishing Company, The, Cincinnati, Ohio. Periodical. 294,602; June 7; Serial No. 322,336; published Mar. 29, 1932. Class 38.

Squibb, E. R., & Sons, New York, N. Y. Preparations used in the treatment of loss of hair. 294,694; June 7; Serial No. 323,503; published Mar. 29, 1932. Class 6.

Stahl-Urban Company, Terre Haute, Ind. Coats, vests, blouses, etc. 294,710; June 7; Serial No. 322,404; published Mar. 22, 1932. Class 39.

Staley, Augustus E., Baltimore, Md., assignor to A. E. Staley Manufacturing Company, Decatur, Ill. Starch for food purposes. 39,146; renewed Oct. 28, 1932.

Standard Brands Incorporated, New York, N. Y. Coffee. 294,852; June 7; Serial No. 323,594; published Mar. 22, 1932. Class 46.

Standard Grocery Company, Boston, Mass. Coffee. 294,671; June 7; Serial No. 315,879; published Mar. 22, 1932. Class 46.

Standard Rice Company, Inc., Houston, Tex. Rice flour. 294,639; June 7; Serial No. 322,940; published Mar. 22, 1932. Class 46.

Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Closet tanks and bowls. 294,879; June 7; Serial No. 320,611; published Mar. 22, 1932. Class 13.

Stayung Laboratories, Incorporated, The, Portland, Oreg. Hair tonic. 294,679; June 7; Serial No. 302,131; published Mar. 1, 1932. Class 6.

Stroock, S., & Co. Inc., New York, N. Y. Coats. 294,728; June 7; Serial No. 323,549; published Mar. 22, 1932. Class 39.

Sullivan, P., Shoe Co., The, Cincinnati, Ohio. Shoes. 294,627; June 7; Serial No. 324,050; published Mar. 29, 1932. Class 39.

Surface Combustion Corporation, Toledo, Ohio. Industrial heating furnaces. 294,912; June 7. Class 34.

TNT Co., The, Oakland, Calif. Salves. 294,703; June 7; Serial No. 321,935; published Mar. 29, 1932. Class 6.

Tab Beverage Co., North Merchantville, N. J. Soft drink. 294,763; June 7; Serial No. 324,300; published Mar. 29, 1932. Class 45.

Texas Fruit & Vegetable Co. (See Boon, Caswell & Tindel.)

Thibaut, Richard E., Inc., New York, N. Y. Display book. 294,875; June 7; Serial No. 323,551; published Mar. 29, 1932. Class 38.

Thomson, Alexander, doing business as Old Timbers' Lodge, Holton, Ind. Flour. 294,759; June 7; Serial No. 323,371; published Mar. 22, 1932. Class 46.

Tichnor Brothers, Inc., Cambridge, Mass. Greeting cards, picture folders, etc. 294,604; June 7; Serial No. 323,211; published Mar. 22, 1932. Class 38.

Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. Anti-freeze mixture for radiators. 294,783; June 7; Serial No. 319,795; published Mar. 1, 1932. Class 6.

Tongue, R. E., & Bros. Co., Inc., Philadelphia, Pa. Lamp chimneys of glass. 294,796; June 7; Serial No. 323,920; published Mar. 29, 1932. Class 33.

Tracy, Pierre J., doing business as Cohn & Tracy, Chicago, Ill. Suits, trousers, and slacks. 294,802; June 7; Serial No. 324,134; published Mar. 29, 1932. Class 39.

Traymore Hosiery Co., Inc., Reading, Pa. Hosiery. 294,793; June 7; Serial No. 323,639; published Mar. 22, 192. Class 39.

Tulare Packing Company, Ltd., Tulare, Calif. Canned fruits. 294,629; June 7; Serial No. 324,408; published Mar. 29, 1932. Class 46.

Tulco Laboratories. (See Smith, Lonnie G.)

Unexcelled Mfg. Co. Inc., New York, N. Y. Toy firework novelties. 294,770; June 7; Serial No. 323,921; published Mar. 29, 1932. Class 9.

United Drug Company, Boston, Mass. Medicinal preparation. 294,840; June 7; Serial No. 321,739; published Mar. 1, 1932. Class 6.

Vanadium Corporation of America, Bridgeville, Pa. Periodicals. 294,609; June 7; Serial No. 322,240; published Mar 29, 1932. Class 38.

Van Houten, C. J., & Zoon, Weesp, Netherlands. Cocoa, chocolate, and cocoabutter. 294,707; June 7; Serial No. 321,366; published Mar 15, 1932. Class 46.

Vitokelp Company, The. (See Whitney, Falba F.)

Vogt, P. G., & Sons., Incorporated, Philadelphia, Pa. Sausage. 294,625; June 7; Serial No. 323,967; published Mar. 29, 1932. Class 46.

Vogue Match Company, Chicago, Ill. Matches. 294,764; June 7; Serial No. 324,203; published Mar. 29, 1932. Class 9.

Warfield Chocolate Company, Chicago, Ill. Cocoa. 294,855; June 7; Serial No. 323,179; published Mar. 22, 1932. Class 46.

Waterlox, Inc., Detroit, Mich. Liquid chemical waterproofing compound. 294,696; June 7; Serial No. 323,267; published Mar. 29, 1932. Class 6.

Weber Costello Co., Chicago Heights, Ill. Blackboards. 294,878; June 7; Serial No. 320,173; published Mar. 22, 1932. Class 50.

Wells, Endoxia, New York, N. Y. Hand and face lotion. 294,749; June 7; Serial No. 322,757; published Mar. 8, 1932. Class 6.

Wharton, William, Jr., & Company, Incorporated, Easton, Pa. Cylinder and tank converters. 294,888; June 7; Serial No. 323,106; published Mar. 29, 1932. Class 2.

Wheary Trunk Company, Racine, Wis. Trunks, over-night bags and cases. 294,756; June 7; Serial No. 323,508; published Mar 15, 1932. Class 3.

Whitney, Falba F., doing business as The Vitokelp Company, Los Angeles, Calif. Dehydrated sea-plant. 294,785; June 7; Serial No. 320,064; published Mar. 29, 1932. Class 6.

Williams, J. B., Company, The, Glastonbury, Conn. Face washes and lotions. 294,815; June 7; Serial No. 322,568; published Mar. 22, 1932. Class 6.

Wilson, Shannon H., doing business as Wilson Chemical Co., Pueblo, Colo. Inhalant and external applicant for colds. 294,823; June 7; Serial No. 322,148; published Mar. 8, 1932. Class 6.

Wilson, William E., Philadelphia, Pa. Moth-proofing composition. 294,846; June 7; Serial No. 322,149; published Mar. 1, 1932. Class 6.

Winkler Ice Machine Co., Philadelphia, Pa. Refrigerating and ice making machinery and parts thereof, filters and parts thereof. 294,769; June 7; Serial No. 323,924; published Mar. 29, 1932. Class 31.

Winthrop Chemical Company, Inc., New York, N. Y. Preparation used as a cough sedative and expectorant. 294,690; June 7; Serial No. 323,640; published Mar. 29, 1932. Class 6.

Workman Manufacturing Company, The, Chicago, Ill. Loose leaf binders and devices and accounting forms. 294,633; June 7; Serial No. 323,969; published Mar. 29, 1932. Class 37.

"X" Laboratories. (See Tolfree, Edward R.)

X-Ray Insecticide Laboratories, Inc. (See Josephson Disinfecting Co., Inc., assignor.)

Ybry, Inc., New York, N. Y. Perfume, toilet water, and face powder. 294,611–12; June 7; Serial Nos. 323,380–1; published Mar. 15, 1932. Class 6.

Ybry, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 294,613; June 7; Serial No. 323,383; published Mar. 15, 1932. Class 6.

Young, L. A., Company, The, Detroit, Mich. Golf clubs. 294,767; June 7; Serial No. 323,970; published Mar. 29, 1932. Class 22.

Youngs, Henry J., doing business as 'S Wheat Cereal Food Company, Berkeley, Calif. Whole grains of wheat. 294,655; June 7; Serial No. 322,537; published Mar. 15, 1932. Class 46.

Zev Pharmacal Company. (See Continental Drug Corporation.)

LIST OF REGISTRANTS OF LABELS

Avedisian, Manoog, Highland Park, Mich. Two Angels Hair Restorer. For Liquid Hair Restorer. 40,777; June 7.

Becker's Bakery, Spartanburg, S. C., and Hendersonville, N. C. Milk-N-Honey. For Bread. 40,778; June 7.

Brilliant, Samuel, & Co., Boston, Mass. Ground-Gainer. For Shoes. 40,779; June 7.

Candy Chix, Inc., Des Moines, Iowa. Peanuts 5¢ a Foot. For Peanuts. 40,780; June 7.

Carroccio, T. A. & Sons, New York, N. Y. Carroccio's Grated Cheese. For Grated Cheese. 40,781; June 7.

Conrad Razor Blade Co. Inc., New York and Long Island City, N. Y. All-America Blade. For Double-Edge Blades. 40,782; June 7.

Dougherty Cake Products, Incorporated, Muncie, Ind. Mrs. Riley's Cake. For Cakes. 40,783; June 7.

East Prospect Cigar Co., East Prospect, Pa. Hooey. For Cigars. 40,784; June 7.

First National Laboratories Inc., Lehighton, Pa. Whites Lun-Ge Hai-La. For Medicine for the Relief of Coughs Due to Colds. 40,785; June 7.

First National Laboratories Inc., Lehighton, Pa. White's Lun-Ge Hai-La. For Medicine for the Relief of Coughs Due to Colds. 40,786; June 7.

First National Laboratories Inc., Lehighton, Pa. Dr. White's Pure Norwegian Cod Liver Oil. For Cod Liver Oil. 40,787; June 7.

Frosty Fritter Co., Britton, Okla. Frosty Fritter. For Ice Cream Confection. 40,788; June 7.

Goldenberg, D., Inc., Philadelphia, Pa. Zil. For Chocolate Bars. 40,789; June 7.

Hathaway Bakeries, Inc., Cambridge, Mass. Hathaway's Toastwich Rolls. For Rolls. 40,790; June 7.

Hitt Fireworks Company, also doing business as Hitt Manufacturing Company, Seattle, Wash. Photolumars. For Photographic Time Flares. 40,791; June 7.

Hoague-Sprague Corporation, Lynn, Mass. Sportbilt. For Boxes. 40,792; June 7.

Hoague-Sprague Corporation, Lynn, Mass. Better Shoes. For Boxes. 40,793; June 7.

Hoague-Sprague Corporation, Lynn, Mass. United Shoe Co. For Boxes. 40,794; June 7.

Hoague-Sprague Corporation, Lynn, Mass. Roberts Smart Shoes. For Boxes. 40,795; June 7.

Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel Cheese Wafers. For Cheese Wafers. 40,796; June 7.

Jones, Ira M., Milwaukee, Wis. Polly Pops. For Coating for an Ice Cream Confection. 40,797; June 7.

Kroger Grocery & Baking Company, The, Cincinnati, Ohio. Country Club Thompson Seedless Raisins. For Seedless Raisins. 40,798; June 7.

M. & W. Pure Food Products Company, Stelton, N. J. Vanilla Pudding. For Vanilla Pudding. 40,799; June 7.

Mannings, Inc., San Francisco, Calif. Mannings Tea Refreshing as the Dawn. For Tea. 40,800; June 7.

Mannings, Inc., San Francisco, Calif. Mannings Coffee Fresh as the Dawn. For Coffee. 40,801; June 7.

Mantle & Mantle, Painesville, Ohio. Red Apple Brand Sweet Cider. For Sweet Cider. 40,802; June 7.

Marsh, M., & Son, Wheeling, W. Va. Marsh Original and Genuine Wheeling. For Stogies. 40,803; June 7.

Menasha Products Company, The, Menasha, Wis. Ice Cream. For Ice Cream. 40,804–5; June 7.

National Oil Products Company, Inc., Harrison, N. J. All Spic and Span from 'Nopco-San'. For Germicides, Disinfectants, and Deodorants. 40,806; June 7.

Nestle-Lemur Company, The, New York, N. Y. Nestle's Nestoil Clipless Supply. For Preparation and Pads for Treating Hair and for Use in Waving or Curling Hair. 40,807; June 7.

Pell, John L. E., South Egremont, Mass. Peanut Corn Pop Candy. For Peanut Corn Pop Candy. 40,808; June 7.

Pichel Products Company, Inc., Hartsdale, N. Y. Peeko. For Preparation for Flavoring Confectionery and Soft Drinks. 40,809; June 7.

Real Products Corporation, Brooklyn, N. Y. Goodyear. For Spark Plug Cable Sets. 40,810; June 7.

Schacht Rubber Mfg. Co., Huntington, Ind. Daisy Brand Hose Washers. For Hose Washers. 40,811; June 7.

Schneider, Charles, Baking Company, Washington, D. C. Schneider's Bread. For Bread. 40,812; June 7.

Schwantes, Wm. C., Mfg. Co., Manitowoc, Wis. The Better Trim. For Trim For Doors and Windows and the Like. 40,813; June 7.

Scotmints, Inc., Cleveland, Ohio. Scotmints. For Orange Drops, a Candy. 40,814; June 7.

Scott & Gilbert Co., San Francisco, Calif. Nee-Sha-Lax. For Medicinal Preparation for the Relief of Temporary Constipation. 40,815; June 7.

Scott & Gilbert Co., San Francisco, Calif. Tarro Pyne. For Medicinal Preparation for the Relief of Coughs and Colds. 40,816; June 7.

Scott & Gilbert Co., San Francisco, Calif. Senaco. For Medicinal Preparation of Great Value for the Relief of Temporary Constipation. 40,817; June 7.

Scott & Gilbert Co., San Francisco, Calif. Milmag. For Medicinal Preparation for the Acidity of the Stomach, as a Mild Laxative, as a Mouthwash, and Externally as a Facial Lotion. 40,818; June 7.

Scott & Gilbert Co., San Francisco, Calif. Gil-Ep-Sal. For Laxative Compound. 40,819; June 7.

Scott & Gilbert Co., San Francisco, Calif. Cory-Menth. For Medicine for the Relief of Head Colds. 40,820; June 7.

Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Vacuum Packed Coffee. For Coffee. 40,821; June 7.

Strong, Cobb & Company, Inc., Cleveland, Ohio. Lemon Drops. For Lemon Drops, a Candy. 40,822; June 7.

Union Bag & Paper Corporation, New York, N. Y. Coffee. For Coffee. 40,823; June 7.

LIST OF REGISTRANTS OF PRINTS

Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. Subject Your Face to the Following Examination! For Cleansing Cream, Velva Cream, Orange Skin Food, Etc. 13,738; June 7.

Carroccio, T. A., & Sons, New York, N. Y. Carroccio's Grated Cheese. For Grated Cheese. 13,739; June 7.

Cream of Wheat Corporation, The, Minneapolis, Minn. Solid Food Time Isn't Dangerous. For Wheat Breakfast Food. 13,740; June 7.

Green, Elizabeth L., Edinburg, Tex. Magic Valley Kitchen. For Candies, Marmalades, Spiced Oranges, and Crystallized Fruits. 13,741; June 7.

Jones, Ira M., Milwaukee, Wis. Polly Pops. For Ice Cream Confection. 13,742–3; June 7.

Long, W. E., Co., The, Chicago, Ill. Old Home Has Nothing to Hide! That's Why We Wrap it in Crystal-Clear Cellophane. For Bread. 13,744; June 7.

Long, W. E., Co, The, Chicago, Ill. Made Fresh! Wrapped Fresh! Served Fresh! For Bread. 13,745; June 7.

Long, W. E., Co., The, Chicago, Ill. You See The Rich, Brown Crust, The Perfect Shape Through Cellophane! For Bread. 13,746; June 7.

Long, W. E., Co., The, Chicago, Ill. Fresh! For Bread. 13,747; June 7.

National Paper Napkin Mfg. Company, Chicago, Ill. Napkin Service. For Paper Napkins. 13,748; June 7.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coke. Semet-Solvay Company. 294,750–1; June 7; Serial Nos. 323,912–13; published Mar. 15, 1932.

Coke. Semet-Solvay Company. 294,752; June 7; Serial No. 323,911; published Mar. 22, 1932.

Moss peat. Atkins & Durbrow, Inc. 294,771; June 7; Serial No. 323,737; published Mar. 15, 1932.

CLASS 2

Bags, Paper. Levin Brothers Paper Co. 294,895; June 7; Serial No. 323,666; published Mar. 29, 1932.

Cans, Garbage. Cincinnati Galvanizing Co. 294,894; June 7; Serial No. 323,651; published Mar. 29, 1932.

Containers, Corrugated board. Iowa Can Company. 294,688; June 7; Serial No. 309,082; published Mar. 3, 1931.

Cylinder and tank converters. William Wharton Jr. & Company. 294,888; June 7; Serial No. 323,106; published Mar. 29, 1932.

Vaults, Burial. American Vault Company. 294,891; June 7; Serial No. 323,477; published Mar. 22, 1932.

CLASS 3

Trunks, over-night bags and cases. Wheary Trunk Company. 294,756; June 7; Serial No. 323,508; published Mar. 15, 1932.

CLASS 4

Abradants. John W. Gottschalk Mfg. Co. 294,913; June 7.
Strops and soaps. Auto Strop Safety Razor Co. 88,048; renewed Aug. 27, 1932.

CLASS 5

Binders and binders for molding sand, Core. Foundry Materials, Inc. 294,643; June 7; Serial No. 318,004; published Mar. 15, 1932.

CLASS 6

Alum powder, soda, boric acid, etc. Purepac Corporation. 294,666; June 7; Serial No. 312,387; published Mar. 8, 1932.
Anesthetics. Oleothesin Company. 294,748; June 7; Serial No. 322,744; published Mar. 8, 1932.
Anti-freeze mixture for radiators. E. R. Tolfree. 294,783; June 7; Serial No. 319,795; published Mar. 1, 1932.
Antiseptic. C. E. Leonard. 294,682; June 7; Serial No. 315,885; published Mar. 22, 1932.
Antiseptic, deodorizer, disinfectant, and prophylactic. J. Hubbard & Co. 294,744; June 7; Serial No. 321,538; published Mar. 8, 1932.
Antiseptic, prophylactic, and deodorant. Pinetrine Co. 294,819; June 7; Serial No. 322,400; published Mar. 22, 1932.
Antiseptic solution. Continental Drug Corporation. 294,741; June 7; Serial No. 320,720; published Mar. 8, 1932.
Arsenical compound, Organic. I. G. Farbenindustrie Aktiengesellschaft. 294,834; June 7; Serial No. 320,050; published Mar. 1, 1932.
Aspirin tablets, cascara bromide quinine, Epsom salt tablets, etc. Best Products Corporation. 294,831; June 7; Serial No. 319,439; published Mar. 1, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. Mrs. R. S. Linsley. 294,820; June 7; Serial No. 322,321; published Mar. 8, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. F. C. Reilly. 294,822; June 7; Serial No. 322,271; published Mar. 8, 1932.
Astringents, creams, rouges, etc. Hollywood, Inc. 294,740; June 7; Serial No. 320,677; published Mar. 22, 1932.
Baking powder. Royal Baking Powder Company. 294,813; June 7; Serial No. 322,753; published Mar. 8, 1932.
Carbon dioxide, Solid. Pure Carbonic Company of America. 294,843; June 7; Serial No. 322,064; published Mar. 1, 1932.
Chemical product for removing rust and scale from metal surfaces. International Paint Corporation. 294,701; June 7; Serial No. 322,387; published Mar. 29, 1932.
Composition, Moth-proofing. W. E. Wilson. 294,846; June 7; Serial No. 322,149; published Mar. 1, 1932.
Compound, Rust, scale, and corrosion preventing and eliminating. Metropolitan Refining Co. 294,695; June 7; Serial No. 323,414; published Mar. 29, 1932.
Corn removing liquid and plaster. B. Ellis. 294,782; June 7; Serial No. 317,390; published Mar. 1, 1932.
Cosmetics, Hygienic. C. Schmalz. 294,835; June 7; Serial No. 320,373; published Mar. 1, 1932.
Creams, Face. Amorskin Corporation. 294,729; June 7; Serial No. 321,234; published Mar. 29, 1932.
Cresol solution, Saponified. Lysol, Incorporated. 294,693; June 7; Serial No. 323,582; published Mar. 29, 1932.
Cuticle beautifier. B. R. Proll. 294,743; June 7; Serial No. 320,967; published Mar. 15, 1932.
Dentifrices. Antidolor Mfg. Co. 294,689; June 7; Serial No. 323,933; published Mar. 22, 1932.
Dyes. John Campbell & Co. 294,849; June 7; Serial No. 322,498; published Mar. 1, 1932.
Emmenagogue pill. A. Scott. 294,683; June 7; Serial No. 316,175; published Sept. 8, 1931.
Exterminator, disinfectant, deodorant, etc., Insect. Josephson Disinfecting Co. 294,680; June 7; Serial No. 305,359; published Mar. 29, 1932.
Fluid, Hair waving. L. E. Glasgow. 294,781; June 7; Serial No. 318,948; published Mar. 29, 1932.
Formaldehyde dust. Ansul Chemical Company. 294,814; June 7; Serial No. 322,723; published Mar. 8, 1932.
Gargles and oral antiseptics. Dr. R. Reiss. 294,686; June 7; Serial No. 309,151; published Mar. 1, 1932.
Glucosides, Pure. Sandoz Chemical Works, Inc. 294,780; June 7; Serial No. 322,561; published Mar. 1, 1932.
Graphite, Colloidal. Acheson Oildag Company. 294,808; June 7; Serial No. 323,080; published Mar. 15, 1932.
Gum for textile purposes, Printing. Royce Chemical Company. 294,739; June 7; Serial No. 320,511; published Mar. 8, 1932.
Hair grower. A. B. Aller. 294,799; June 7; Serial No. 324,010; published Mar. 15, 1932.
Hair rinse. E. Frederics, Inc. 294,617; June 7; Serial No. 323,238; published Mar. 15, 1932.
Hair tonic. Bristol-Myers Company. 294,839; June 7; Serial No. 321,132; published Mar. 1, 1932.
Hair tonic. Raem Products Company. 294,774; June 7; Serial No. 322,891; published Mar. 8, 1932.
Hair tonic. Stayung Laboratories, Incorporated. 294,679; June 7; Serial No. 302,131; published Mar. 1, 1932.
Hair tonic and straightener. J. de Barros. 294,810; June 7; Serial No. 322,993; published Mar. 15, 1932.
Hair waving lotion. Alje Laboratories. 294,747; June 7; Serial No. 322,443; published Mar. 8, 1932.
Hydrosulphite. Royce Chemical Company. 294,610; June 7; Serial No. 323,369; published Mar. 15, 1932.
Incense. Paine Incense Company. 294,700; June 7; Serial No. 322,704; published Mar. 29, 1932.
Inhalant and external applicant for colds. S. H. Wilson. 294,823; June 7; Serial No. 322,148; published Mar. 8, 1932.
Inhalants. Hall Drug Corporation. 294,642; June 7; Serial No. 308,625; published Mar. 29, 1932.
Insecticide compounds. Alexandria Drug Co. 294,737; June 7; Serial No. 320,070; published Mar. 8, 1932.
Insecticides, germicides, and fungicides. California Spray-Chemical Corporation. 294,838; June 7; Serial No. 320,665; published Mar. 1, 1932.
Iodin preparation, Organic. Hoffman-La Roche Chemical Works. 87,996; renewed Aug. 20, 1932.
Laxative chewing gum. Foley & Company. 294,777; June 7; Serial No. 323,228; published Mar. 15, 1932.
Laxative pills, liniment, hair dye, etc. Lanman & Kemp-Barclay & Co. Incorporated. 294,791; June 7; Serial No. 321,109; published Feb. 23, 1932.
Laxative preparation. Associated Laboratories, Inc. 294,787; June 7; Serial No. 320,297; published Mar. 29, 1932.
Liquid chemical waterproofing compound. Waterlox, Inc. 294,696; June 7; Serial No. 323,267; published Mar. 29, 1932.
Liquid cleaner and bleacher. A. Opipari. 294,837; June 7; Serial No. 320,548; published Mar. 1, 1932.
Liquid hematinic preparation. Drug Products Co. 294,691; June 7; Serial No. 323,614; published Mar. 29, 1932.
Lotion, Hand and face. E. Wells. 294,749; June 7; Serial No. 322,757; published Mar. 8, 1932.
Lotion, Massage. N. Longobardi. 294,775; June 7; Serial No. 323,139; published Mar. 15, 1932.
Material used as tooth powder and mouth antiseptic. L. G. Smith. 294,772; June 7; Serial No. 322,807; published Mar. 8, 1932.
Materials and solutions for treating printing plates. American Multigraph Co. 294,844; June 7; Serial No. 322,078; published Mar. 1, 1932.
Materials and solutions for treating printing plates. American Multigraph Co. 294,845; June 7; Serial No. 322,080; published Mar. 1, 1932.
Medicated corn pads. E. Z. Walk Arch Corporation. 294,681; June 7; Serial No. 306,630; published Mar. 22, 1932.
Medicinal preparation. D. Dunn. 294,619; June 7; Serial No. 322,689; published Mar. 22, 1932.
Medicinal preparation. H. Enkel. 294,790; June 7; Serial No. 320,923; published Feb. 23, 1932.
Medicinal preparation. F. Hawley. 294,786; June 7; Serial No. 320,115; published Mar. 29, 1932.
Medicinal preparation. Kolloyd Laboratories, Inc. 294,911; June 7.
Medicinal preparation. United Drug Company. 294,840; June 7; Serial No. 321,739; published Mar. 1, 1932.
Medicinal preparations. Dr. Earl S. Sloan, Incorporated. 294,827; June 7; Serial No. 320,524; published Mar. 29, 1932.
Medicinal tablets, oil and petrolatum sprays, inhalants, and rubs. Pineoleum Company. 294,818; June 7; Serial No. 322,436; published Mar. 22, 1932.
Medicine. Adlerika Company. 294,736; June 7; Serial No. 319,922; published Mar. 8, 1932.
Medicine, Eye. J. H. Andrus. 294,697; June 7; Serial No. 322,982; published Mar. 29, 1932.
Mineral water, Artificial. Hirsch Laboratories, Inc. 294,773; June 7; Serial No. 322,823; published Mar. 8, 1932.
Nail polish. G. Gay. 294,685; June 7; Serial No. 310,761; published Sept. 15, 1931.
Oils, Fish liver. Abbott Laboratories. 294,692; June 7; Serial No. 323,601; published Mar. 29, 1932.
Ointment, Hair growing and treating. N. Rottino. 294,778; June 7; Serial No. 323,254; published Mar. 15, 1932.
Perfume, toilet water, and face powder. Ybry, Inc. 294,611–12; June 7; Serial Nos. 323,380–1; published Mar. 15, 1932.
Perfume, toilet water, bath crystals, etc. Bourjois, Inc. 294,848; June 7; Serial No. 322,496; published Mar. 1, 1932.
Perfume, toilet water, eau de Cologne, etc. Bourjois, Inc. 294,614; June 7; Serial No. 323,322; published Mar. 15, 1932.
Perfume, toilet water, face powder, etc. Ybry, Inc. 294,613; June 7; Serial No. 323,383; published Mar. 15, 1932.
Perfume, toilet water, powder, and cream. Bourjois, Inc. 294,620; June 7; Serial No. 322,730; published Mar. 8, 1932.
Perfumery. Renaud et Cie. of America. 294,738; June 7; Serial No. 320,509; published Mar. 8, 1932.
Perfumery, face powder and creams, rouges, etc. J. Giraux. 294,828; June 7; Serial No. 318,138; published Mar. 8, 1932.
Perfumes. Mission Bead Company. 294,789; June 7; Serial No. 320,732; published Mar. 29, 1932.

Perfumes, dentifrices, hair tonic, etc. Pinaud, Inc. 294,698; June 7; Serial No. 322,970; published Mar. 29, 1932.
Pharmaceutical preparation. Antibody Products Limited. 294,745; June 7; Serial No. 321,583; published Mar. 22, 1932.
Pomade, petroleum jelly, aspirin tablets, etc. S. C. Goodman. 294,784; June 7; Serial No. 318,484; published Mar. 8, 1932.
Powder, creams, skin tonic, etc., Complexion. Denver Dry Goods Co. 294,672; June 7; Serial No. 316,993; published Mar. 22, 1932.
Powder, Foot. Canadian Remedies, Ltd. 294,836; June 7; Serial No. 320,543; published Mar. 1, 1932.
Powder, Nasal. F. L. Cavally. 294,615; June 7; Serial No. 323,124; published Mar. 15, 1932.
Powder, Talcum. McKesson & Robbins, Incorporated. 294,735; June 7; Serial No. 319,870; published Mar. 8, 1932.
Preparation, Effervescent aperient. Thomas Kerfoot & Co. 294,779; June 7; Serial No. 323,298; published Mar. 15, 1932.
Preparation for athlete's foot and golfer's itch. H. O. Greenwell. 294,816; June 7; Serial No. 322,546; published Mar. 22, 1932.
Preparation for dandruff. A. Condonis. 294,618; June 7; Serial No. 322,610; published Mar. 22, 1932.
Preparation for immunizing tissues against infection. Instituto Piologico Farmaceutico Gazzone. 294,702; June 7; Serial No. 321,953; published Mar. 29, 1932.
Preparation for killing cock-roaches. W. R. Auttenberry. 294,817; June 7; Serial No. 322,440; published Mar. 22, 1932.
Preparation for relief in removal of corns, warts, and callouses. Puritee Products Company. 294,847; June 7; Serial No. 322,187; published Mar. 1, 1932.
Preparation for the relief of hemorrhoids (piles). Hemmoll Co. Inc. 294,832; June 7; Serial No. 319,577; published Mar. 1, 1932.
Preparation for the scalp. A. Merke. 294,616; June 7; Serial No. 323,263; published Mar. 15, 1932.
Preparation for the treatment of dandruff, bald spots, etc. G. E. Graves. 294,788; June 7; Serial No. 320,303; published Mar. 29, 1932.
Preparation of ergot alkaloids. Abbott Laboratories. 294,742; June 7; Serial No. 320,773; published Mar. 15, 1932.
Preparation to assist in the treatment of black tongue. Mansfield Veterinary Laboratory. 294,670; June 7; Serial No. 314,957; published Mar. 22, 1932.
Preparation used as a cough sedative and expectorant. Winthrop Chemical Company. 294,690; June 7; Serial No. 323,640; published Mar. 29, 1932.
Preparation used in the treatment of hypogonadism. Parke, Davis & Co. 294,824; June 7; Serial No. 321,889; published Mar. 8, 1932.
Preparations used in the treatment of loss of hair. E. R. Squibb & Sons. 294,694; June 7; Serial No. 323,503; published Mar. 29, 1932.
Remedy for weak lungs, pneumonia, etc. A. T Bell. 294,675; June 7; Serial No. 293,172; published Mar. 29, 1932.
Resin, Transparent synthetic. Advance Solvents & Chemical Corporation. 294,746; June 7; Serial No. 322,242; published Mar. 8, 1932.
Rouge, lipstick, eye shadow, etc. Roseley Perfumery Shoppe, Inc. 294,833; June 7; Serial No. 319,964; published Mar. 1, 1932.
Rouge, lipstick, eye shadow, etc. Royal Beauty Parlor Supply Co. 294,644; June 7; Serial No. 316,069; published Mar. 1, 1932.
Salts, Bitter. A. Saxlehner. 294,663; June 7; Serial No. 311,162; published Mar. 22, 1932.
Salves. TNT Co. 294,703; June 7; Serial No. 321,935; published Mar. 29, 1932.
Scalp preparation. A. P. Sardou. 294,850; June 7; Serial No. 322,525; published Mar. 1, 1932.
Sea-plant, Dehydrated. F. F. Whitney. 294,785; June 7; Serial No. 320,064; published Mar. 29, 1932.
Soda, Baking. Detroit Soda Products Co. 294,821; June 7; Serial No. 322,312; published Mar. 8, 1932.
Starch. Corn Products Refining Company. 294,776; June 7; Serial No. 323,190; published Mar. 15, 1932.
Sulphur compound, antacid and gas absorbent, an effective compound for pain and indigestion due to gas in the stomach. A. H. McMaster. 294,842; June 7; Serial No. 322,055; published Mar. 1, 1932.
Suppositories. Schering & Glatz, Inc. 294,645; June 7; Serial No. 316,218; published Mar. 29, 1932.
Suppositories, Vaginal. G. P. Schmitt. 294,841; June 7; Serial No. 321,930; published Mar. 1, 1932.
Tablets for headaches, pains. H. E. Lovett. 294,621; June 7; Serial No. 322,826; published Mar. 22, 1932.
Tablets for treatment of colds. Continental Drug Corporation. 294,699; June 7; Serial No. 322,880; published Mar. 29, 1932.
Toilet preparations. H. Gabilla. 88,483; renewed Sept. 24, 1932.
Tonic, Laxative. B. O. Leubner. 294,673; June 7; Serial No. 286,492; published Mar. 29, 1932.
Tooth-paste, tooth-powder. Dr. Rudolf Reiss Rheumasan- und Lenicet-Fabrik. 294,687; June 7; Serial No. 309,146; published Mar. 1, 1932.
Washes and lotions, Face. J. B. Williams Company. 294,815; June 7; Serial No. 322,568; published Mar. 22, 1932.

CLASS 8

Cigarette papers. R. Bolloré. 294,882; June 7; Serial No. 322,480; published Mar. 22, 1932.
Cigarette papers. R. Bolloré. 294,883; June 7; Serial No. 322,542; published Mar. 22, 1932.
Cigarette papers. R. Bolloré. 294,884; June 7; Serial No. 322,495; published Mar. 22, 1932.
Cigarette tubes, cigarette and cigar holders. General-Direktion der Österr. Tabakregie. 294,906; June 7; Serial No. 324,211; published Mar. 29, 1932.
Pipes, Tobacco. "Masta" Patent Pipe Company Limited. 294,896; June 7; Serial No. 323,868; published Mar. 29, 1932.

CLASS 9

Firework novelties, Toy. Unexcelled Mfg. Co. Inc. 294,770; June 7; Serial No. 323,921; published Mar. 29, 1932.
Matches. Vogue Match Company. 294,764; June 7; Serial No. 324,203; published Mar. 29, 1932.

CLASS 10

Fertilizer. Gulf Fertilizer Co. 294,897–8; June 7; Serial Nos. 323,937–8; published Mar. 22, 1932.

CLASS 11

Ink. Dry Ink Corporation. 294,900; June 7; Serial No. 324,091; published Mar. 29, 1932.
Ink transfer materials. Murray Printing Company. 294,881; June 7; Serial No. 322,136; published Mar. 22, 1932.

CLASS 12

Cement, Portland. Dexter Portland Cement Co. 38,662; renewed July 22, 1932.
Cements for retorts, Fireproof. H. W. Johns-Manville Company. 38,207–8; renewed Apr. 29, 1932.
Mineral substances, Raw or partly prepared. Magnesia Syndicate, Ltd. 38,441; renewed June 10, 1932.
Tiles and masonry. R. Guastavino Company. 39,105; renewed Oct. 21, 1932.

CLASS 13

Racks, Necktie. A. J. Loomis. 294,889; June 7; Serial No. 323,413; published Mar. 29, 1932.
Shower curtains, Water repellent. Lesher, Whitman & Co. 294,887; June 7; Serial No. 323,093; published Mar. 29, 1932.
Strainers. Hamblin & Russell Manufacturing Company. 294,885; June 7; Serial No. 322,638; published Mar. 29, 1932.
Tanks and bowls, Closet. Standard Sanitary Manufacturing Company. 294,879; June 7; Serial No. 320,611; published Mar. 22, 1932.

CLASS 15

Gasolene. Magnolia Petroleum Company. 85,912; renewed Mar. 26, 1932.

CLASS 17

Cigars. C. A. Kildow. 294,886; June 7; Serial No. 322,763; published Mar. 29, 1932.
Cigars. J. Longmeyer. 294,899; June 7; Serial No. 324,073; published Mar. 29, 1932.
Cigars. B. Moreda y Deben. 88,169; renewed Sept. 3, 1932.
Cigars and cigarettes. Fortune Tobacco Company. 294,901–2; June 7; Serial Nos. 324,100–1; published Mar. 22, 1932.
Tobacco, Leaf. Dunkerson & Co. 87,735; renewed Aug. 6, 1932.
Tobaccos, snuffs, and cigarettes, Smoking. P. J. Carroll & Company Limited. 294,676; June 7; Serial No. 294,620; published Mar. 22, 1932.

CLASS 19

Vehicle radiator caps and ornaments, tank caps, and license plate holders. Faith Mfg. Co. 294,892; June 7; Serial No. 323,576; published Mar. 22, 1932.

CLASS 21

Electrical apparatus. Hart & Hegeman Manufacturing Company. 88,676; renewed Oct. 15, 1932.

CLASS 22

Ball-projecting amusement device. American Mill and Manufacturing Company. 294,760; June 7; Serial No. 323,216; published Mar. 22, 1932.
Ball-projecting amusement device, Coin-controlled. Peo Manufacturing Corporation. 294,755; June 7; Serial No. 323,627; published Mar. 22, 1932.
Cards, Playing. Russell Playing Card Company. 294,765; June 7; Serial No. 324,193; published Mar. 22, 1932.
Dolls, Stuffed cloth. American Needlecrafts, Inc. 294,761; June 7; Serial No. 323,183; published Mar. 29, 1932.

Fish lure. E. E. Rawdon. 294,762; June 7; Serial No. 324,397; published Mar. 29, 1932.
Game apparatus. F. W. Gibson. 294,661; June 7; Serial No. 323,169; published Mar. 22, 1932.
Game, Floor and table. Parker Brothers, Inc. 294,753; June 7; Serial No. 323,827; published Mar. 29, 1932.
Game, Table board. R. W. Sheppard. 294,757; June 7; Serial No. 323,501; published Mar. 22, 1932.
Golf bags. Biltmore Manufacturing Company. 294,914; June 7.
Golf clubs. L. A. Young Company. 294,767; June 7; Serial No. 323,970; published Mar. 29, 1932.
Mechanical trick match box. J. Chein & Company. 294,656; June 7; Serial No. 322,573; published Mar. 29, 1932.
Skates, Roller. National Company. 294,766; June 7; Serial No. 324,111; published Mar. 22, 1932.
Toy rolling pin. Inflated. G. Heighway. 294,754; June 7; Serial No. 323,817; published Mar. 29, 1932.

CLASS 23

Cleaning apparatus. Firth-Smith Company. 294,647; June 7; Serial No. 311,137; published Mar. 22, 1932.
Cream separating machines, Centrifugal. De Laval Separator Company. 294,733; June 7; Serial No. 324,243; published Mar. 29, 1932.
Cutlery. Geo. H. Lawrence Limited. 294,664; June 7; Serial No. 311,482; published Mar. 29, 1932.
Device for injecting carbon remover into internal combustion engines. A C Spark Plug Company. 294,825; June 7; Serial No. 321,741; published Mar. 22, 1932.
Dispensers, Mission Dry Corporation, Ltd. 294,811; June 7; Serial No. 322,961; published Mar. 29, 1932.
Goods used in the treatment of rubber and its manufacture into articles. Baker Perkins Company. 294,830; June 7; Serial No. 317,267; published Mar. 29, 1932.
Graders, bin loaders, onion graders, etc., Potato. Boggs Manufacturing Corporation. 294,646; June 7; Serial No. 310,202; published Mar. 22, 1932.
Harvesting machines, diggers, pickers, sorters, and planters, Potato. Deere & Company. 294,826 f June 7; Serial No. 320,582; published Mar. 22, 1932.
Knives, forks, spoons, scissors, etc. Aktiengesellschaft für Feinmechanik, vormals Jetter & Scheerer. 294,829; June 7; Serial No. 317,996; published Mar. 29, 1932.
Pads for the support of buffing, polishing, and abrading media on machinery. Dallett Company. 294,677; June 7; Serial No. 295,330; published Mar. 22, 1932.
Recorders, electric controllers and regulators, etc. Leeds and Northrup Company. 294,809; June 7; Serial No. 323,052; published Mar. 22, 1932.
Sanding machines, Floor. Clarke Sanding Machine Company. 294,730; June 7; Serial No. 323,392; published Mar. 22, 1932.
Sewing machines and sewing machine attachments and parts thereof. Singer Manufacturing Co. 39,109; renewed Oct. 21, 1932.
Sharpeners. Razoo Wonder Glass Company. 294,807; June 7; Serial No. 323,145; published Mar. 29, 1932.
Tab affixing machine. National Marking Machine Company. 294,732; June 7; Serial No. 323,959; published Mar. 29, 1932.

CLASS 26

Testers, Milk and cream. Garver Machine Corporation. 294,812; June 7; Serial No. 322,910; published Mar. 29, 1932.

CLASS 27

Clocks. E. Ingraham Company. 294,907; June 7; Serial No. 324,317; published Mar. 29, 1932.
Clocks. Friedrich Mauthe Gesellschaft mit beschränkter Haftung. 294,880; June 7; Serial No. 321,464; published Mar. 29, 1932.
Watches and parts thereof. Fabrique D'horlogerie "La Champagne" Louis Müller & Cie. S. A. 294,905; June 7; Serial No. 324,210; published Mar. 29, 1932.

CLASS 29

Brooms. National Broom Manufacturing Company. 294,903–4; June 7; Serial Nos. 324,109–10; published Mar. 22, 1932.
Brushes, Auto Strop Safety Razor Co. 88,726; renewed Oct. 22, 1932.

CLASS 31

Refrigerating and ice making machinery and parts thereof, filters and parts thereof. Winkler Ice Machine Co. 294,769; June 7; Serial No. 323,924; published Mar. 29, 1932.

CLASS 32

Mattresses, Sleeper Products, Inc. 294,734; June 7; Serial No. 324,274; published Mar. 29, 1932.
Shade rollers, Window. Chas. W. Rice & Company. 294,908; June 7.

CLASS 33

Glass, Lamp chimneys of. R. E. Tongue & Bros. Co. 294,796; June 7; Serial No. 323,920; published Mar. 29, 1932.
Glass, Sheet. American Window Glass Company. 294,806; June 7; Serial No. 324,308; published Mar. 29, 1932.

CLASS 34

Furnaces, Industrial heating. Surface Combustion Corporation. 294,912; June 7.
Stoves, ranges, heaters, etc. Montgomery Ward & Co. 294,669; June 7; Serial No. 314,420; published Mar. 22, 1932.

CLASS 35

Tire repair devices. Buckeye Reliner Producing Co. 294,665; June 7; Serial No. 312,255; published Mar. 22, 1932.
Tires, Rubber vehicle. B. F. Goodrich Company. 294,731; June 7; Serial No. 323,532; published Mar. 22, 1932.

CLASS 37

Binders and devices and accounting forms, Loose leaf. Workman Manufacturing Company. 294,633; June 7; Serial No. 323,969; published Mar. 29, 1932.
Book, Scrap. Parents' Publishing Association, Inc. 294,632; June 7; Serial No. 324,007; published Mar. 29, 1932.
Checks. National Health Plan, Inc. 294,605; June 7; Serial No. 323,349; published Mar. 22, 1932.
Paper. Parsons Paper Company. 294,877; June 7; Serial No. 323,463; published Mar. 29, 1932.
Paper and envelopes. Z. & W. M. Crane. 39,067; renewed Oct. 21, 1932.
Paper tape. News Projection Corporation. 294,876; June 7; Serial No. 323,536; published Mar. 29, 1932.
Papers. Katahdin Pulp and Paper Company. 86,304; renewed Apr. 30, 1932.
Stationery, Art. C. M. Phillips. 294,608; June 7; Serial No. 321,395; published Mar. 29, 1932.

CLASS 38

Book, Display. Richard E. Thibaut, Inc. 294,875; June 7; Serial No. 323,551; published Mar. 29, 1932.
Cards, picture folders, etc., Greeting. Tichnor Brothers, Inc. 294,604; June 7; Serial No. 323,211; published Mar. 22, 1932.
Cartoon prints. D. Loscalzo. 294,637; June 7; Serial No. 324,141; published Mar. 22, 1932.
Cartoon strip. King Features Syndicate, Inc. 294,603; June 7; Serial No. 323,201; published Mar. 29, 1932.
House organ. Chemical Catalog Company. 294,640; June 7; Serial No. 324,369; published Mar. 29, 1932.
Magazine. General Electric Company. 294,630; June 7; Serial No. 323,616; published Mar. 29, 1932.
Magazine. Real Detective Tales, Inc. 294,606; June 7; Serial No. 320,697; published Mar. 29, 1932.
Newspaper. Evening Herald Publishing Company. 294,874; June 7; Serial No. 323,612; published Mar. 22, 1932.
Periodical. Clayton Magazines, Inc. 294,634; June 7; Serial No. 324,062; published Mar. 22, 1932.
Periodical. Clayton Magazines, Inc. 294,638; June 7; Serial No. 324,218; published Mar. 29, 1932.
Periodical. Spokesman Publishing Company. 294,602; June 7; Serial No. 322,336; published Mar. 29, 1932.
Periodicals. Vanadium Corporation of America. 294,609; June 7; Serial No. 322,240; published Mar 29, 1932.
Publication. King Publishing Co. 294,639; June 7; Serial No. 324,348; published Mar. 29, 1932.
Publication. J. C. Malecki. 294,631; June 7; Serial No. 323,898; published Mar. 22, 1932.
Publication. Merchandise Manager Publishing Corporation. 294,635–6; June 7; Serial Nos. 324,074–5; published Mar. 29, 1932.
Publication. Radio Dial Publishing Company. 294,607; June 7; Serial No. 319,667; published Mar. 29, 1932.
Section of a monthly magazine or periodical publication. Nickerson & Collins Co. 294,641; June 7; Serial No. 324,393; published Mar. 29, 1932.

CLASS 39

Blouses, shirts, and pajamas. E. Savada. 294,800; June 7; Serial No. 324,011; published Mar. 22, 1932.
Boots and shoes. Endicott Johnson Corporation. 294,854; June 7; Serial No. 323,194; published Mar. 29, 1932.
Boots and shoes. Manfield & Sons, Limited. 294,909; June 7.
Boots and shoes, children's wash suits, sweaters, etc. A. H. Geuting Company. 294,851; June 7; Serial No. 323,657; published Mar. 29, 1932.
Cloaks and suits. Cohen & Kappell, Inc. 294,684; June 7; Serial No. 314,638; published Mar. 22, 1932.
Coats. S. Stroock & Co. Inc. 294,728; June 7; Serial No. 323,549; published Mar. 22, 1932.
Coats, vests, blouses, etc. Stahl-Urban Company. 294,710; June 7; Serial No. 322,404; published Mar. 22, 1932.
Corsets. Lily of France Corset Co. 294,624; June 7; Serial No. 323,949; published Mar. 29, 1932.
Corsets, girdles, brassières, etc. Kops Brothers, Inc. 294,626; June 7; Serial No. 324,002; published Mar. 29, 1932.
Dresses. R. Lowenbaum Manufacturing Company. 294,918; June 7.
Garments, Women's under-. Joseph Adelson & Sons. 294,724; June 7; Serial No. 323,385; published Mar. 29, 1932.
Hats, Felt. Hodshon-Berg, Incorporated. 294,678; June 7; Serial No. 305,357; published Mar. 29, 1932.

Hosiery. Lehigh Silk Hosiery Mills, Inc. 294,803; June 7; Serial No. 324,177; published Mar. 29, 1932.
Hosiery. May Hosiery Mills, Inc. 294,797; June 7; Serial No. 323,954; published Mar. 22, 1932.
Hosiery. Traymore Hosiery Co. 294,793; June 7; Serial No. 323,639; published Mar. 22, 1932.
Hosiery and sweaters. J. Hilborn & W. E. Reed, Inc. 294,916; June 7.
Jackets, Men's leather. Raymond Manufacturing Co. 294,705; June 7; Serial No. 318,411; published Mar. 29, 1932.
Linings, Hat. H. & H. Manufacturing Company. 294,866; June 7; Serial No. 321,021; published Mar. 29, 1932.
Neckties. Franc-Strohmenger & Cowan, Inc. 294,795; June 7; Serial No. 323,762; published Mar. 22, 1932.
Pajamas, underwear, shirts, mufflers, etc. Knothe Brothers Company. 294,727; June 7; Serial No. 323,535; published Mar. 22, 1932.
Shirts. H. Kleinberg. 294,804; June 7; Serial No. 324,289; published Mar. 29, 1932.
Shirts. Prashker, Sohn & Co. 294,801; June 7; Serial No. 324,113; published Mar. 22, 1932.
Shirts. R. L. Spaide. 294,718; June 7; Serial No. 323,066; published Mar. 22, 1932.
Shirts, pajamas, and textile underwear. Llondale Shirt Co. Inc. 294,709; June 7; Serial No. 322,000; published Feb. 23, 1932.
Shirts, pajamas, underwear, etc. Monroe Shirt Company. 294,915; June 7.
Shirts, pajamas, underwear, etc. Riegel Textile Corporation. 294,859; June 7; Serial No. 322,560; published Mar. 22, 1932.
Shoes. Collingwood Shoe Company. 294,857; June 7; Serial No. 322,906; published Mar. 22, 1932.
Shoes. W. B. Coon Co. 294,622; June 7; Serial No. 323,741; published Mar. 29, 1932.
Shoes. P. Sullivan Shoe Co. 294,627; June 7; Serial No. 324,050; published Mar. 29, 1932.
Suits, topcoats, overcoats, etc. Rogers-Dede Co. 294,794; June 7; Serial No. 323,718; published Mar. 22, 1932.
Sweaters, coats, pajamas, etc. Neustadter Bros. 294,861; June 7; Serial No. 322,186; published Mar. 22, 1932.
Underwear. Julius Kayser & Co. 294,798; June 7; Serial No. 324,000; published Mar. 22, 1932.
Underwear, coats, suits, etc. Lasalle & Koch Co. 294,871; June 7; Serial No. 318,064; published Nov. 3, 1931.

CLASS 40

Combs, Hard rubber. J. Schmid. 294,870; June 7; Serial No. 318,617; published Mar. 22, 1932.
Elastic, Ribbon. Marcus & Wiesen Inc. 294,856; June 7; Serial No. 322,960; published Mar. 22, 1932.
Loom-web, lisle-web, cords and braids, Elastic. Kresge Department Store Corporation. 294,853; June 7; Serial No. 323,300; published Mar. 29, 1932.
Thread and tape, Combination package of. Gardiner Hall Jr., Company. 294,862; June 7; Serial No. 321,724; published Mar. 29, 1932.
Thread and tape, Combination package of. Gardiner Hall Jr. Company. 294,873; June 7; Serial No. 317,635; published Mar. 29, 1932.

CLASS 42

Blankets. Beacon Manufacturing Company. 294,722; June 7; Serial No. 323,218; published Mar. 22, 1932.
Carpets, Textile. Hardwick & Magee Company. 294,720; June 7; Serial No. 323,196; published Mar. 29, 1932.
Carpets, Textile. Hardwick & Magee Company. 294,721; June 7; Serial No. 323,197; published Mar. 22, 1932.
Cloth in the piece. B. B. & R. Knight Corporation. 294,725–6; June 7; Serial Nos. 323,459–60; published Mar. 29, 1932.
Cotton piece goods. Bradford Dyers' Association, Limited. 294,717; June 7; Serial No. 323,024; published Mar. 29, 1932.
Cotton piece goods. Chadwick-Hoskins Co. 294,910; June 7.
Piece goods. Goodall Worsted Co. 294,805; June 7; Serial No. 324,315; published Mar. 29, 1932.
Rugs, Textile. Royal Oriental Rug Corporation. 294,792; June 7; Serial No. 323,589; published Mar. 22, 1932.
Velvets. Rossie Velvet Company. 294,711; June 7; Serial No. 322,524; published Mar. 22, 1932.
Woolen piece goods. American Woolen Company. 294,706; June 7; Serial No. 321,194; published Mar. 29, 1932.

CLASS 43

Thread. Gardiner Hall Jr., Company. 294,712; June 7; Serial No. 322,737; published Mar. 29, 1932.
Thread and yarn. J. P. Bemberg Aktiengesellschaft. 294,716; June 7; Serial No. 322,896; published Mar. 22, 1932.

CLASS 45

Beverages and mineral water. A. G. Bronni. 294,917; June 7.
Beverages, and syrups, compounds, etc. for making the same. Maltless. Orange-Crush Company. 294,657; June 7; Serial No. 322,649; published Mar. 22, 1932.
Drink, Soft. Tab Beverage Co. 294,763; June 7; Serial No. 324,300; published Mar. 29, 1932.
Grape juice. Orange-Crush Company. 294,658; June 7; Serial No. 322,803; published Mar. 22, 1932.
Waters, Mineral. La Compagnie Fermiere de l'Etablissement Thermal de Vichy. 88,736; renewed Oct. 22, 1932.

CLASS 46

Bread. B. Joseph. 294,768; June 7; Serial No. 323,944; published Mar. 22, 1932.
Candies. 7 Wagner Sisters. 294,869; June 7; Serial No. 319,263; published Mar. 22. 1932.
Candy. Idaho Candy Co. 294,863; June 7; Serial No. 321,467; published Mar. 22, 1932.
Candy bars. D. L. Clark Company. 294,868; June 7; Serial No. 320,632; published Mar. 29, 1932.
Canned fruits. Tulare Packing Company. 294,629; June 7; Serial No. 324,408; published Mar. 29, 1932.
Canned grapefruit. L. P. Maggioni & Company. 294,668; June 7; Serial No. 313,965; published Mar. 22, 1932.
Canned grapefruit and grapefruit juice. L. P. Maggioni & Company. 294,667; June 7; Serial No. 313,788; published Mar. 22, 1932.
Canned malt syrup. L. Bernstein. 294,719; June 7; Serial No. 323,158; published Mar. 22, 1932.
Casein, Synthetic. Glidden Company. 294,649; June 7; Serial No. 321,277; published Mar. 22. 1932.
Cereal, Whole wheat. Dixie Mills. 294,650; June 7; Serial No. 321,332; published Mar. 22, 1932.
Cheese. Societe Anonyme l'Auvergne Laitiere. 294,758; June 7; Serial No. 323,256; published Mar. 15, 1932.
Cocoa. Warfield Chocolate Company. 294,855; June 7; Serial No. 323,179; published Mar. 22, 1932.
Cocoa, chocolate, and cocoabutter. C. J. Van Houten & Zoon. 294,707; June 7; Serial No. 321,366; published Mar. 15, 1932.
Cocoanut, cake flour, buckwheat, etc., Prepared. Grocers & Producers Co. 294,723; June 7; Serial No. 323,286; published Mar. 22, 1932.
Coffee. E. B. Millar & Company. 294,662; June 7; Serial No. 311,151; published Mar. 29, 1932.
Coffee. Standard Brands Incorporated. 294,852; June 7; Serial No. 323,594; published Mar. 22, 1932.
Coffee. Standard Grocery Company. 294,671; June 7; Serial No. 315,879; published Mar. 22, 1932.
Confections, Frozen. Sani-Seal Company. 294,715; June 7; Serial No. 322,943; published Mar. 8, 1932.
Eggs. Colorado Poultry and Egg Producers, Inc. 294,651; June 7; Serial No. 321,795; published Mar. 8, 1932.
Extracts, Flavoring. Price Flavoring Extract Company. 294,714; June 7; Serial No. 322,860; published Mar. 22, 1932.
Feeds. Puritan Mills, Incorporated. 294,648; June 7; Serial No. 319,046; published Mar. 15, 1932.
Feeds, Mixed. Puritan Mills, Incorporated. 294,652; June 7; Serial No. 321,970; published Mar. 15, 1932.
Flour. A. Thomson. 294,759; June 7; Serial No. 323,371; published Mar. 22, 1932.
Flour, Rice. Standard Rice Company. 294,659; June 7; Serial No. 322,940; published Mar. 22, 1932.
Flour, Wheat. Lexington Mill & Elevator Company. 86,916; renewed June 11, 1932.
Foods. Armstrong Refining Company. 87,404; renewed July 16, 1932.
Fruit, Fresh citrus. Scott-Borden. 294,628; June 7; Serial No. 323,467; published Mar. 29, 1932.
Fruit juices for food purposes. Howey-in-the-Hills Juice Co. 294,653; June 7; Serial No. 322,214; published Mar. 22, 1932.
Fruits and juices, Fresh and canned, citrus. Citrus City Growers Association. 294,864; June 7; Serial No. 321,458; published Mar. 29, 1932.
Fruits, Fresh citrus. Fillmore Citrus Association. 294,867; June 7; Serial No. 320,674; published Mar. 29, 1932.
Fruits, Fresh citrus. Wm. G. Roe & Company. 294,860; June 7; Serial No. 322,438; published Mar. 29, 1932.
Grapes, Fresh. R. Bonelli. 294,872; June 7; Serial No. 317,658; published Mar. 22, 1932.
Gum, Chewing. Orbit Listerated Gum Company. 294,623; June 7; Serial No. 323,788; published Mar. 29, 1932.
Oranges and grapefruit, Fresh. Palmer Corporation. 294,865; June 7; Serial No. 321,437; published Mar. 29, 1932.
Packing-house products. Libby, McNeill & Libby. 38,537; renewed July 1, 1932.
Powdered substance for improving bread dough. National Yeast Company. 294,704; June 7; Serial No. 318,320; published Mar. 22, 1932.
Sausage. F. G. Vogt & Sons, Incorporated. 294,625; June 7; Serial No. 323,967; published Mar. 29, 1932.
Starch for food purposes. A. E. Staley. 39,146; renewed Oct. 28, 1932.
Sugar. Godchaux Sugars, Inc. 294,708; June 7; Serial No. 321,558; published Mar. 22, 1932.
Suits, trousers, and slacks. P. J. Tracy. 294,802; June 7; Serial No. 324,134; published Mar. 29, 1932.
Vegetable pure food colloid ice cream stabilizer standardized. Joe Lowe Corporation. 294,713; June 7; Serial No. 322,796; published Mar. 22, 1932.
Vegetables and citrus fruits, Fresh. Boon, Caswell & Tindel. 294,858; June 7; Serial No. 322,788; published Mar. 22, 1932.

Wheat prepared for eating, Whole grains of. H. J. Youngs. 294,655; June 7; Serial No. 322,337; published Mar. 15, 1932.

CLASS 48

Beverages, and syrups and extracts for preparing the same. Los Angeles Brewing Co. 294,674; June 7; Serial No. 269,412; published Mar. 5, 1929.

CLASS 49

Whiskey. R. O. Seevers. 294,654; June 7; Serial No. 322,294; published Mar. 22, 1932.

CLASS 50

Blackboards. Weber Costello Co. 294,878; June 7; Serial No. 320,173; published Mar. 22, 1932.
Covers, Table. Cluff Cover Company. 294,890; June 7; Serial No. 323,504; published Mar. 22, 1932.
Processed fabric, backing material used in the manufacture of laminated fabrics. Acme Backing Corporation. 294,893; June 7; Serial No. 323,602; published Mar. 22, 1932.
Shade cloth. Columbus Coated Fabrics Corporation. 294,660; June 7; Serial No. 323,512; published Apr. 5, 1932.

LIST OF LABELS

All-America Blade. For Double-Edge Blades. Conrad Razor Blade Co. Inc. 40,782; June 7.
All Spic and Span From 'Nopco-San'. For Germicides, Disinfectants and Deodorants. National Oil Products Company. 40,806; June 7.
Better Shoes. For Boxes. Hoague-Sprague Corporation. 40,793; June 7.
Carroccio's Grated Cheese. For Grated Cheese. T. A. Carroccio & Sons. 40,781; June 7.
Chase and Sanborn's Seal Brand Vacuum Packed Coffee. For Coffee. Standard Brands Incorporated. 40,821; June 7.
Coffee. For Coffee. Union Bag & Paper Corporation. 40,823; June 7.
Cory-Menth. For Medicine for the Relief of Head Colds. Scott & Gilbert Co. 40,820; June 7.
Country Club Thompson Seedless Raisins. For Seedless Raisins. The Kroger Grocery & Baking Company. 40,798; June 7.
Daisy Brand Hose Washers. For Hose Washers. Schacht Rubber Mfg. Co. 40,811; June 7.
Dr. White's Pure Norwegian Cod Liver Oil. For Cod Liver Oil. First National Laboratories Inc. 40,787; June 7.
Frosty Fritter. For Ice Cream Confection. Frosty Fritter Co. 40,788; June 7.
Gil-Ep-Sal. For Laxative Compound. Scott & Gilbert Co. 40,819; June 7.
Goodyear. For Spark Plug Cable Sets. Real Products Corporation. 40,810; June 7.
Ground-Gainer. For Shoes. Samuel Brilliant & Co. 40,779; June 7.
Hathaway's Toastwich Rolls. For Rolls. Hathaway Bakeries, Inc. 40,790; June 7.
Hooey. For Cigars. East Prospect Cigar Co. 40,784; June 7.
Ice Cream. For Ice Cream. Menasha Products Company. 40,804–5; June 7.
Jewel Cheese Wafers. For Cheese Wafers. Jewel Tea Co., Inc. 40,796; June 7.
Lemon Drops. For Lemon Drops, a Candy. Strong, Cobb & Company, Inc. 40,822; June 7.
Mannings Coffee Fresh As The Dawn. For Coffee. Mannings, Inc. 40,801; June 7.
Mannings Tea Refreshing As The Dawn. For Tea. Mannings, Inc. 40,800; June 7.
Marsh Original and Genuine Wheeling. For Stogies. M. Marsh & Sons. 40,803; June 7.
Milk-N-Honey. For Bread. Becker's Bakery. 40,778; June 7.
Milmag. For Medicinal Preparation for Acidity of the Stomach, as a Mild Laxative, as a Mouthwash, and Externally as a Facial Lotion. Scott & Gilbert Co. 40,818; June 7.
Mrs. Riley's Cake. For Cakes. Dougherty Cake Products, Incorporated. 40,783; June 7.
Nee-Sha-Lax. For Medicinal Preparation for the Relief of Temporary Constipation. Scott & Gilbert Co. 40,815; June 7.
Nestle's Nestoil Clipless Supply. For Preparation and Pads for Treating Hair and for Use in Waving or Curling Hair. Nestle-Lemur Company. 40,807; June 7.
Peanut Corn Pop Candy. For Peanut Corn Pop Candy. J. L. E. Pell. 40,808; June 7.
Peanuts 5¢ a Foot. For Peanuts. Candy Chix, Inc. 40,780; June 7.
Pecko. For Preparation for Flavoring Confectionery and Soft Drinks. Pichel Products Company. 40,809; June 7.
Photolumars. For Photographic Time Flares. Hitt Fireworks Company. 40,791; June 7.
Polly Pops. For Coating for an Ice Cream Confection. I. M. Jones. 40,797; June 7.
Red Apple Brand Sweet Cider. For Sweet Cider. Mantle & Mantle. 40,802; June 7.
Roberts Smart Shoes. For Boxes. Hoague-Sprague Corporation. 40,795; June 7.
Schneider's Bread. For Bread. Charles Schneider Baking Company. 40,812; June 7.
Scotmints. For Orange Drops, A Candy. Scotmints, Inc. 40,814; June 7.
Senaco. For Medicinal Preparation of Great Value for the Relief of Temporary Constipation. Scott & Gilbert Co. 40,817; June 7.
Sportbilt. For Boxes. Hoague-Sprague Corporation. 40,792; June 7.
Tarro Pyne. For Medicinal Preparation for the Relief of Coughs and Colds. Scott & Gilbert Co. 40,816; June 7.
The Better Trim. For Trim for Doors and Windows and the Like. Wm. C. Schwantes Mfg. Co. 40,813; June 7.
Two Angels Hair Restorer. For Liquid Hair Restorer. M. Avedisian. 40,77; June 7.
United Shoe Co. For Boxes. Hoague-Sprague Corporation. 40,794; June 7.
Vanilla Pudding. For Vanilla Pudding. M. & W. Pure Food Products Company. 40,799; June 7.
Whites Lun-Ge Hai-La. For Medicine for the Relief of Coughs Due to Colds. First National Laboratories Inc. 40,785; June 7.
White's Lun-Ge Hai-La. For Medicine for the Relief of Coughs Due to Colds. First National Laboratories Inc. 40,786; June 7.
Zil. For Chocolate Bars. D. Goldenberg, Inc. 40,789; June 7.

LIST OF PRINTS

Carroccio's Grated Cheese. For Grated Cheese. T. A. Carroccio & Sons. 13,739; June 7.
Fresh! For Bread. W. E. Long Co. 13,747; June 7.
Made Fresh! Wrapped Fresh! Served Fresh! For Bread. W. E. Long Co. 13,745; June 7.
Magic Valley Kitchen. For Candies, Marmalades, Spiced Oranges, and Crystallized Fruits. E. L. Green. 13,741; June 7.
Napkin Service. For Paper Napkins. National Paper Napkin Mfg. Company. 13,748; June 7.
Old Home Has Nothing to Hide! That's Why We Wrap it in Crystal-Clear Cellophane. For Bread. W. E. Long Co. 13,744; June 7.
Polly Pops. For Ice Cream Confection. I. M. Jones. 13,742–3; June 7.
Solid Food Time Isn't Dangerous. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,740; June 7.
Subject Your Face to the Following Examination! For Cleansing Cream, Velva Cream, Orange Skin Food, etc. Elizabeth Arden Inc. 13,738; June 7.
You See The Rich, Brown Crust, the Perfect Shape Through Cellophane. For Bread. W. E. Long Co. 13,746; June 7.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 7TH DAY OF JUNE, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abbott Laboratories. (See Moore, E. E., and Carter, assignors.)
Abel, Walter T. (See Carley, L. R., and Abel.)
Abraham, Herbert, assignor to The Ruberoid Co., New York, N. Y. Shingle. 1,862,500; June 7.
Aceta G. m. b. H. (See Friederich, A., and Schlack.)
Acme Steel Company. (See Ott, J. E., and Close, assignors.)
Adams, Edward T., Phoenix, Ariz., assignor to Fairbanks, Morse & Co., Chicago, Ill. Injection pump. 1,862,132; June 7.
Adams, John F. (See Allen, T. T., and Adams.)
Adams, Stephen S., St. Louis, Mo. Fastening device. 1,861,652; June 7.
Advance Machine Company. (See Richardson, Myron H., assignor.)
Affleck, Gregor S., and A. S. Anderson, Detroit, Mich. Cleaning spray booths. 1,862,392; June 7.
Agoplan, Levon A., Paris, France. Obtaining concentrated vitamine preparations. 1,861,677; June 7.
Ahern, William A., Worcester, Mass. Water heater. 1,861,519; June 7.
Ahnert, Carl, Masnou-Ocata, near Barcelona, Spain. Mercerizing loose cotton. 1,862,208; June 7.
Aikman, Burton S., assignor to National Brake & Electric Company, Milwaukee, Wis. Pump. 1,861,732; June 7.
Ainsworth, Albert A., Ossining, N. Y. Paper file. 1,862,450; June 7.
Ainsworth, Harry C. (See Conner, C. E., and Ainsworth.)
Air Reduction Company. (See Dolley, Paul T., assignor.)
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Mitzlaff, Georg, assignor.)
Albertson & Company. (See Albertson, F., and Olsen, assignors.)
Albertson, Frans O., and G. A. Olsen, assignors to Albertson & Company, Inc., Sioux City, Iowa. Abrasive device. 1,861,773; June 7.
Alexander, L. W. (See Beach, W. B., jr., assignor.)
Allen, Clark W., Big Timber, Mont. Method and apparatus for the artificial incubation of eggs. 1,861,895; June 7.
Allen, Lavont C. (See Jennings, C. S., and Allen.)
Allen, Thomas T., and J. F. Adams, assignors to Sentry Safety Control Corporation, Philadelphia, Pa. Control circuits for fire prevention apparatus. 1,862,342; June 7.
Allison, James F., Providence, R. I., assignor to Freeman-Daughaday Company. Display device. 1,862,353; June 7.
Allison, Leslie R., Wilkinsburg, and F. H. Nicholson, Edgewood, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,861,488; June 7.
Almetal Universal Joint Company. (See Peters, Frederick W., assignor.)
Altice, George F., assignor to Bendix Brake Company, South Bend, Ind. Tongs. 1,862,326; June 7.
American Anode, Inc. (See Newton, Edwin B., assignor.)
American Bitumuls Company. (See Thompson, Lyndon G., assignor.)
American Blower Corporation. (See Anderson, Edward L., assignor.)
American Bottlers of Carbonated Beverages. (See Buchanan, J. H., and Toulouse, assignors.)
American Chemical Company. (See Berlin, Frederick A., assignor.)
American Concrete and Steel Pipe Company. (See Grant, Floyd N., assignor.)
American Engineering Company. (See Lamond, Robert C., assignor.)
American Fibre Corporation. (See Nordstrom, G. E., and Millett, assignors.)
American Fork & Hoe Company, The. (See Schilpp, Charles P., assignor.)
American Gypsum Co., The. (See Taylor, Roy J., assignor.)
American Hammered Piston Ring Company, The. (See Morton, Allen W., assignor.)
American Hammered Piston Ring Company. (See Petre, Alexander P., assignor.)
American Machine and Metals, Inc. (See Henry, Ferdinand G., assignor.)
American Radiator & Standard Sanitary Corporation. (See Muray, Thomas E., assignor.)
American Radiator & Standard Sanitary Corporation. (See Murray, Thomas E., jr., assignor.)
American Stay Company. (See Merrick, Frank W., assignor.)
American Steel Foundries. (See Oelkers, Alfred H., assignor.)
American Telephone and Telegraph Company. (See Barstow, John M., assignor.)
American Telephone and Telegraph Company. (See Coolidge, Oliver H., assignor.)
American Telephone and Telegraph Company. (See Ratta, James A., assignor.)
American Telephone and Telegraph Company. (See Rea, Wilton T., assignor.)
American Telephone and Telegraph Company. (See Shanck, Roy B., assignor.)
American Telephone and Telegraph Company. (See Smith, T. C., and Livermore, assignors.)
American Tobacco Company, The. (See Maxwell, Charles G., assignor.)
American Woodlite Corporation. (See Pagendarm, John F., assignor.)
Anaconda Copper Mining Company. (See Antisell, F. L., and Mullineaux, assignors.)
Andelin, Anton E., Bromarf, Bjorknas, assignor to Finiska Forcit-Dynamit Aktiebolaget, Hango, Finland. Apparatus for wrapping cartridges, etc. 1,862,170; June 7.
Anderau, Walter. (See Straub, F., and Anderau.)
Anderson, Axel S. (See Affleck, G. S., and Anderson.)
Anderson, Charles A., Seattle, Wash. Spray gun. 1,861,996; June 7.
Anderson Company, The. (See Slough, Frank M., assignor.)
Anderson Co., The. (See Smulski, Theodore J., assignor.)
Anderson, Edward L., Grosse Ile, assignor to American Blower Corporation, Detroit, Mich. Apparatus and method of controlling fans. 1,862,289; June 7.
Anderson, Fritz A., assignor to The Burdick Corporation, Milton, Wis. Massage and exercise machine. 1,861,774; June 7.
Anderson, Louis, Easton, Pa. Sampling machine. 1,862,250; June 7.
Anderson, Nels R., Bellingham, Wash. Double can-seamer head. 1,862,290; June 7.
Anderson, Robert G., Harborcreek, Pa., assignor to General Electric Company. Flexible coupling. 1,862,355; June 7.
Angell, Tranquilo. (See Bertoncini, M., and Blatter, assignors.)
Animal Trap Company of America. (See Lehn, John U., assignor.)
Anthracite Separator Company. (See Pardee, Frank, assignor.)
Antisell, Frank L., Perth Amboy, N. J., and C. G. Mullineaux, Ansonia, Conn., assignors to Anaconda Copper Mining Company. Production of copper cakes and sheet bars. 1,862,074; June 7.
Apex Electrical Manufacturing Company, The. (See McCabe, John J., assignor.)
Arcturus Radio Tube Company. (See Krahl, Walter L., assignor.)
Armentrout, Arthur L., Long Beach, Calif. Piston. 1,862,251; June 7.
Armstrong Cork Company. (See McCarthy, J. Clarence, assignor.)
Armstrong, James R., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Gas meter. 1,852,451; June 7.
Arndt, Alvin G., assignor to Independent Stove Company, Owosso, Mich. Disappearing cooking top for table stoves. 1,862,452; June 7.
Arnold, Harold A., Menomonee Falls, Wis. Cabinet. 1,861,520; June 7.
Asch, Erich, Berlin-Sudende, Germany, assignor to Radio Patents Corporation, New York, N. Y. Thermionic amplifying circuits. 1,862,393; June 7.
Asch, Erich, Sudende, near Berlin, Germany, assignor to Radio Patents Corporation, New York, N. Y. Continuous current amplifier. 1,862,394; June 7.
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Muffler for internal combustion engines. 1,861,775; June 7.
Associated Electric Laboratories, Inc. (See Sargisson, Robert L., assignor.)
Associated Electric Laboratories, Inc. (See Sengebusch, Hans, assignor.)
Atwood Machine Company, The. (See Rowe, Irving R., assignor.)
Auto Research Corporation. (See Bijur, Joseph, assignor.)
Auto Research Corporation. (See Kocher, Edward H., assignor.)

Automatic Pearl Button Co. (See Kemlo, Albert F., assignor.)
Ayers, Harrison, assignor of one-half to H. Burnley, Nashville, Tenn. Water purifying apparatus. 1,861,896; June 7.
B. O. T. Manufacturing Company. (See Tilden, Bert O., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Baehr, Justus W., Minneapolis, Minn. Artificial hand. 1,861,678; June 7.
Bafetti, Nicolino, Chicago, Ill. Crayon holder. 1,861,466; June 7.
Bagno, Samuel M., Bronx, N. Y., assignor to Radio Corporation of America. Sound recording. 1,862,327; June 7.
Bailey, Harrison, Mount Carmel, Pa. Foot rest accelerator control. 1,862,453; June 7.
Baker, Bert F. (See Knox, H. A., and Baker.)
Baker Brothers, Inc. (See Hallenbeck, George E., assignor.)
Baker, Harry L. (See Rundell, Raymond R., assignor.)
Baker, Walter J., Wyckoff, N. J. Ladder shoe. 1,862,171; June 7.
Bakhaus, Orville F. (See Fitzgerald, John R., assignor.)
Ball, Birtley A., Milton, Wash. Eye exerciser. 1,861,897; June 7.
Banker, Oscar H., Philadelphia, Pa., assignor to Continental Illinois Bank & Trust Company as trustee, Chicago, Ill. Automatic clutch. 1,861,830; June 7.
Barber, James H., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Attaching fairing to airplane wheels. 1,861,432; June 7.
Barber, Roland B., Wheeler Road, Md. Spring compressor for removing poppet valves. 1,862,454; June 7.
Barco Manufacturing Company. (See Bertram, Clarence C., assignor.)
Barkdoll, Orman R., Ben Avon, Pa. Compression case for playing balls. 1,861,948; June 7.
Barnecut, William J., Highland Park, Mich. Television scanning device. 1,862,455; June 7.
Barnes, Gladeon M., U. S. Army, Hastings, Mich. Gun mount and carriage. 1,861,831; June 7.
Barnes, Stanley H. (See Buccini, H. A., and Barnes.)
Barrel Fitting and Seal Corporation of America. (See Schwartz, Henry, assignor.)
Barrett Company, The. (See Eckert, Clarence R., assignor.)
Barrett Company, The. (See Miller, Stuart P., assignor.)
Barrows, Nealey E., Bangor, Me. Fireplace damper. 1,852,456; June 7.
Barsch, Wilhelm, Paris, France. Device for sharpening the blades of safety razors. 1,862,457; June 7.
Barstow, John M., Mountain Lakes, N. J., assignor to American Telephone and Telegraph Company. Measuring apparatus. 1,862,458; June 7.
Barth, Elmer J., assignor to Brown-Lipe Gear Company, Syracuse, N. Y. Shifting means for transmission mechanism. 1,861,776; June 7.
Bass, Shaller L. (See Britton, E. C., and Bass.)
Bassett, Cyrus W., and H. J. Fear, Montclair, assignors to Elevator Supplies Company, Inc., Hoboken, N. J. System of control for elevators. 1,862,291; June 7.
Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on stitchdown shoes. 1,861,653; June 7.
Battin, William I. (See Busby, J. M., and Battin.)
Baur, Ottmar, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Injection nozzle for internal combustion engines. 1,862,459; June 7.
Bausch & Lomb Optical Company. (See McCabe, Joseph J., assignor.)
Bausch & Lomb Optical Company. (See Patterson, William L., assignor.)
Baxter, William C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon end portions of shoes. 1,861,832; June 7.
Bay State Optical Company. (See Nerney, George E., assignor.)
Bayan, Lawrence M., Edgewood, R. I. Smoker's package. 1,862,133; June 7.
Beach, W. B., jr., assignor to L. W. Alexander, Wichita Falls, Tex. Cleaner. 1,861,899; June 7.
Beanblossom, Walter S., Niagara Falls, assignor to Hooker Electrochemical Company, New York, N. Y. Production of thionyl chloride. 1,861,900; June 7.
Beaumont, Thomas E., and J. N. Waring, London, England. Apparatus for the hydraulic transmission of power. 1,862,045; June 7.
Bechert, Fred J., Stamford, assignor to The Fafnir Bearing Company, New Britain, Conn. Spring end connection. 1,862,501; June 7.
Beck, Adolf, Bitterfeld, Germany. Production of castings of magnesium and magnesium alloys in permanent molds. 1,861,592; June 7.
Beck, Charles J., Philadelphia, Pa. Cutting mechanism for cutting and folding machines. 1,862,460; June 7.
Becker, Karl. (See Piranl, M., Becker, and Reger.)
Bégin, Lucien, Paris, France, assignor of one-half to W. B. Weaver, Birmingham, Ala., and H. F. Wilhelm, New York, N. Y. Electric signaling. 1,862,106; June 7.
Behan, Thomas W., assignor to Nineteen Hundred Corporation, Binghamton, N. Y. Combined washing machine casing and drier. Des. 87,098; June 7.
Behrsin, August, Huntington Park, Calif. Oil burner. 1,861,997; June 7.
Beltman, Albert B., Cleveland Heights, Ohio. Doorcheck. 1,861,679; June 7.
Belden Manufacturing Company. (See Wermine, Hugo H., assignor.)
Bell Punch and Printing Co. Limited, The. (See Webb, Christopher F., assignor.)
Bellanca, Giuseppe M., New Castle, Del. Strut construction. 1,861,901; June 7.
Bellanca, Guiseppe M., New Castle, Del. Strut construction. 1,861,902; June 7.
Bellando, Louis, Warren, Ohio. Shoe finishing machine. 1,861,903; June 7.
Bellmer, William, Brooklyn, N. Y. Milk dispenser. 1,861,619; June 7.
Bemis Industries, Incorporated. (See Frobisher, Ralph S., assignor.)
Benard, Henri L. M. J., and A. J. Marcelin, Paris, France. Device for acoustically detecting and tracing aircraft. 1,861,680; June 7.
Bendix Aviation Corporation. (See Norton, Raymond J., assignor.)
Bendix Brake Company. (See Altive, George F., assignor.)
Bendix Brake Company. (See House, B. E., and Parker, assignor.)
Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Bendix Brake Company. (See Parker, Humphrey F., assignor.)
Bendix Brake Company. (See Sanford, Roy S., assignor.)
Bene, John, & Sons, Inc. (See Kratky, Anton, assignor.)
Benjamin Electric Mfg. Company. (See McIver, William K., assignor.)
Benner, Raymond C., Bayside, and L. C. Werking, New York, N. Y., assignors, by mesne assignments, to Prest-O-Lite Storage Battery Corporation. Storage battery. 1,861,407; June 7.
Bennett, George L., Cleveland Heights, Ohio. Sheet metal roofing. 1,861,998; June 7.
Bennett, George L., Cleveland Heights, Ohio. Roofing. 1,862,292; June 7.
Bennett, Raisley B. M., La Jolla, Calif. Spring expander. 1,862,172; June 7.
Bennett, Thomas A., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Reducing garment and making the same. 1,862,046; June 7.
Benson, Emil M., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Dry pipe exhauster. 1,861,777; June 7.
Berendes, Rudolf, Elberfeld-Sonnborn, and F. Mietzsch, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Double compounds of dinhenol isatins and quinoline or isoquinoline bases. 1,861,904; June 7.
Berg, Charles C., assignor of one-half to M. E. Murray, Detroit, Mich. Increasing the efficiency of gas burners. 1,861,733; June 7.
Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa. Receptacle filling apparatus. 1,861,734; June 7.
Bergmann Packaging Machine Company. (See Bergmann, Christian N., assignor.)
Bergstedt, Sakrie R., Duluth, Minn. Fish lure. 1,861,905; June 7.
Bergstrom, William A., assignor to Nanfeldt Corporation, Ltd., Los Angeles, Calif. Self locking nut. 1,861,833; June 7.
Berkenhoff & Drebes Aktiengesellschaft. (See Diehl, Johannes F., assignor.)
Berlin, Frederick A., Washington, D. C., assignor to American Chemical Company. Varied temperature refrigerator. 1,862,252; June 7.
Berman, Morris, Brooklyn, N. Y. Ventilating fan. Re18,489; June 7.
Bernier, Henry, et al. (See Dufault, Homer D., assignor.)
Bernier, Hiram, et al. (See Dufault, Homer D., assignor.)
Berry, Norman H. (See Lowry, John D., assignor.)
Bersie, Hugh G., Wilmette, Ill., assignor to Haskelite Manufacturing Corporation. Evaporating fumigants. 1,861,736; June 7.
Bertoncini, Michele, Milwaukee, and W. Blatter, Shorewood; said Blatter assignor to T. Angeli, Milwaukee, Wis. Cigarette container. Des. 87,099; June 7.
Bertram, Clarence C., assignor to Barco Manufacturing Company, Chicago, Ill. Reversing gear mechanism. 1,862,173; June 7.
Beryllium Development Corporation. (See Claflin, Harry C., assignor.)
Bethlehem Steel Company. (See Spigelmire, C. E., and Walters, assignors.)
Bigelow, Frank B., assignor to Bigelow-Liptak Corporation, Detroit, Mich. Furnace-wall structure. 1,861,737; June 7.
Bigelow-Liptak Corporation. (See Bigelow, Frank B., assignor.)
Bijur, Joseph, New York, N. Y., assignor, by mesne assignments, to Auto Research Corporation. Chassis lubrication. 1,862,488; June 7.

Bijur, Joseph, New York, N. Y., assignor to Auto Research Corporation. Steering knuckle lubrication. 1,862,513; June 7.
Binggeli, Arnold R., Kansas City, Mo. Article dispenser. 1,861,834; June 7.
Birdsall, Edward T., assignor to The Butler Manufacturing Company, Cleveland, Ohio. Street sweeping apparatus. 1,861,681; June 7.
Birtel, Wilhelm, Dusseldorf-Rath, Germany. Boring and tapping tool. 1,862,461; June 7.
Bitcon, James. (See Wittum, George F., assignor.)
Bixby, Walter. (See Hathaway, E. F., and Bixby.)
Black, James E., assignor to National Pavements, Incorporated, Kansas City, Mo. Paving mixture. 1,862,502; June 7.
Blackhall, John R., Highland Park, and H. S. Pardee, Ravinia, Ill.; said Pardee assignor to said Blackhall. Railway car. 1,861,778; June 7.
Blatter, Walter. (See Bertoncini, M., and Blatter, assignors.)
Blosser, Herman G. (See Nicholson, F. H., and Blosser.)
Blunt, James G., Schenectady, N. Y. Locomotive boiler support. 1,861,949; June 7.
Bobrovsky, Igor S., Rochester, N. Y. Sound reproducer. 1,862,174; June 7.
Boddie, Clarence A. (See Curtis, R. C., and Boddie.)
Bodoglou, Kimon, Chicago, Ill. Display tray. 1,861,835; June 7.
Boggs Plow Company. (See Neufang, Henry J., assignor.)
Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway car retarder. 1,862,209; June 7.
Bonewitz, Clarence, Dayton, Ohio. Increasing the acoustic qualities of violins. 1,861,682; June 7.
Bonney-Floyd Company, The. (See Edmunds, Glenn E., assignor.)
Boosey, Edward W. N., Detroit, Mich. Gutter or roof drain. 1,862,134; June 7.
Booth, Earl C., Indianapolis, assignor to Noblitt-Sparks Industries, Inc., Columbus, Ind. Heater casing. Des. 87,100; June 7.
Bornhauser, Otto E., assignor to Her-Born Engineering and Manufacturing Company, Sandusky, Ohio. Coal pulverizer and feeder. 1,861,779; June 7.
Bosch, Robert, Aktiengesellschaft. (See Baur, Ottmar, assignor.)
Bosch, Robert, Aktiengesellschaft. (See Kazenmaier, August, assignor.)
Boschert, Rufus E., Syracuse, N. Y. Hydraulic baling press. 1,861,468; June 7.
Boston, William, et al. (See Morgan, Toney W., assignor.)
Boucher, Adam, et al. (See Dufault, Homer D., assignor.)
Bouget, Yves A., East Orange, and L. O. Reichelt, Cranford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Supporting arbor. 1,861,562; June 7.
Boulet, Robert L., Scranton, Pa., and W. E. Boulet, Canton, N. Y. Shoe fastening device. 1,862,047; June 7.
Boulet, William E. (See Boulet, Robert L. and W. E.)
Bourgeois, Adelord. (See Sherman, O. L., and Bourgeois.)
Bourgeois, Adelord, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Rounding and channeling machine. 1,861,654; June 7.
Bowers, Edward W., Medina, N. Y. Mooring apparatus for airships. 1,861,780; June 7.
Bowlus, Glenn H., Alhambra, Calif. Mud fluid pressure gauge. 1,861,999; June 7.
Boyd, Arthur S., Topeka, Kans. Golf target. 1,862,462; June 7.
Boyer, Sylvester, Lynn, Mass., assignor to General Electric Company. Marking quartz. 1,862,366; June 7.
Brace, Porter H., Forest Hills, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Induction furnace. 1,862,293; June 7.
Bracke, Robert F., Chicago, assignor to C. B. Camp, trustee, Glencoe, Ill. Carburation and fuel feed system. 1,861,781; June 7.
Bracke, Robert F., Chicago, assignor to C. B. Camp, trustee, Glencoe, Ill. Carburetor. 1,861,782; June 7.
Bradburn, Luman H., Eureka, Mont. Telescopic coach and jack. 1,861,906; June 7.
Brady, Virgil L., et al. (See Stassart, Joseph D., assignor.)
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, South Bend, Ind., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake mechanism for automotive vehicles. 1,862,294; June 7.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Branch, Le Roy P., assignor of one-half to A. G. McCaleb, Evanston, Ill. Knife holder and sharpener. 1,861,683; June 7.
Brandhorst, Alma E., Cincinnati, Ohio. Parking light. Des. 87,101; June 7.
Brandt, Edgar W., Paris, France. Fuse for rotating projectiles. 1,861,521; June 7.
Brandt, Edgar W., Paris, France. Projectile with automatic driving band. 1,861,522; June 7.
Breckman, Beatrice L., executrix. (See Breckman, Samuel and J.)
Breckman, Julius. (See Breckman, Samuel and J.)
Breckman, Samuel, Brondesbury, London, and J. Breckman, London, England; B. L. Breckman executrix of the estate of said Samuel Breckman. Collapsible bed and the like. 1,862,463; June 7.
Brennels Manufacturing Company. (See Furrer, Samuel S., assignor.)
Brenner, Charles M., Shreveport, La. Refrigerator. 1,862,464; June 7.
Bretz, John S. (See Gabel, William J., assignor.)
Brierly, Ralph C. (See Kirtland, F. D., Broshek, Brierly, and Evans.)
Briggs & Stratton Corporation. (See Jacobi, Edward M., assignor.)
Bright, John W., Grand Junction, Colo., assignor to The Colorado Beet Harvester Company. Beet harvester and topping machine. 1,862,048; June 7.
Brinker, Alva. (See Gay, J., and Brinker.)
British-American Tobacco Company Limited. (See Yeomanson, Ralph A., assignor.)
Britton, Edgar C., and S. L. Bass, assignors to The Dow Chemical Company, Midland, Mich. Preparation of para-phenylphenol. 1,862,000; June 7.
Britton, Edgar C., and R. P. Perkins, assignors to The Dow Chemical Company, Midland, Mich. Manufacture of cyclohexylphenols. 1,862,075; June 7.
Brockway, Stanley T., Auburn, Ind. Mechanical toy. 1,861,783; June 7.
Brooke, Frank W., and W. H. Cosgrove, assignors to William Swindell and Brothers, Pittsburgh, Pa. Conveying apparatus. 1,861,489; June 7.
Brooker, Leslie G. S., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic emulsions. 1,861,836; June 7.
Broshek, Joseph J. (See Kirtland, F. D., Broshek, Brierly, and Evans.)
Brosig, Robert, Hollabrunn, Austria. Machine for automatically tamping underneath railway-sleepers during the finishing of the permanent way. 1,861,655; June 7.
Brown, Bert B., The Dalles, Oregon. Valve tool. 1,862,465; June 7.
Brown Lynch Scott Co. (See Flatley, John H., assignor.)
Brown & Sharpe Manufacturing Company. (See Maxfield, Arthur C., assignor.)
Brown, Thomas B., and M. L. Stansell, Dayton, Ohio. Parachute opener. 1,861,784; June 7.
Brown, William S., assignor to Leggett and Platt Spring Bed and Manufacturing Company, Carthage, Mo. Bed bottom hanger mechanism. 1,861,735; June 7.
Browne-Lipe Gear Company. (See Barth, Elmer J., assignor.)
Brueckner, Julius R., Bay City, Mich., assignor to Thomson-Gibb Electric Welding Company, Lynn, Mass. Seam welding machine. 1,862,108; June 7.
Brueckner, Julius R. and W. H. Gibb, Detroit, Mich., assignors to Thomsen-Gibb Electric Welding Company, Lynn, Mass. Machine for preparing metal for electric welding. 1,862,107; June 7.
Brungardt, Alphonse O., Scituate, Mass. Making wrenches. 1,862,001; June 7.
Brungardt, Alphonse O., Brookline, Mass. Pipe wrench. 1,862,002; June 7.
Bruning, Charles, Company. (See Murck, Knud, assignor.)
Bryson, La Vergne T., assignor to Dearborn Chemical Company, Chicago, Ill. Apparatus for treating water for steam boilers. 1,861,785; June 7.
Buccini, Hugh A., Port Jervis, and S. H. Barnes, New Rochelle, assignors to Gleason-Tiebout Glass Company, Brooklyn, N. Y. Shade or similar article. Des. 87,102; June 7.
Buchan, Andrew G., assignor to Leitelt Iron Works, Grand Rapids, Mich. Cutter for woodworking machines. 1,861,787; June 7.
Buchan, Andrew G., and I. J. Lyons, assignors to Leitelt Iron Works, Grand Rapids, Mich. Mortising machine. 1,861,786; June 7.
Buchanan, John H., and J. H. Toulouse, Ames, Iowa, assignors to American Bottlers of Carbonated Beverages, Clarifying and recovering caustic soda content of deteriorated alkaline solutions. 1,861,950; June 7.
Bucknam, James H. (See Jones, G. Q., and Bucknam.)
Bucy, Edmond H., Waukegan, Ill. Rubbing coated surfaces. 1,862,135; June 7.
Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph, assignor.)
Budd, Edward G., Manufacturing Company. (See Meadowcroft, Joseph W., assignor.)
Budd Wheel Company. (See Barber, James H., assignor.)
Buecker, Fred W., jr., Springfield, Ill. Bracket. 1,862,466; June 7.
Bullard Company, The. (See Conley, Kurt H., assignor.)
Bullock, John W., Miami, Fla. Ephedrine solution. 1,862,253; June 7.
Bumstead, Charles W., trustee. (See Langley, Cortlandt, J., assignor.)
Burch Corporation, The. (See Kime, Charles G., assignor.)
Burdick Corporation, The. (See Anderson, Fritz A., assignor.)
Burks, Arthur W., Decatur, Ill. Rotary pump. 1,861,837; June 7.
Burks, Arthur W., Decatur, Ill. Rotary pump. 1,861,838; June 7.
Burks, Arthur W., Decatur, Ill. Centrifugal pump. 1,861,839; June 7.

Burnish, Howard J., Sewickley, assignor to Spang, Chalfant & Company, Inc., Pittsburgh, Pa. Rotary contact roll for electric welding machines. 1,862,296; June 7.
Burnley, Henry. (See Ayers, Harrison, assignor.)
Burns, James E., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Ammunition. 1,862,295; June 7.
Burt, F. N., Company. (See Carle, Harold, assignor.)
Bussler, Louis T., Ashton, Md. Detergent composition and making the same. 1,861,685; June 7.
Butler, Benjamin J., Somerville, Mass., assignor, by mesne assignments, to General Electric Company. Capacitor and forming the same. 1,862,297; June 7.
Butler Manufacturing Company. (See Birdsall, Edward T., assignor.)
Butterworth, H. W., & Sons Company. (See Butterworth, Harry W., jr., assignor.)
Butterworth, Harry W., jr., Philadelphia, Pa., assignor to H. W. Butterworth & Sons Company. Mercerizing. 1,861,490; June 7.
Buttolph, Leroy J., Grantwood, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Oscillator. 1,861,561; June 7.
Buttolph, Leroy J., Grantwood, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Gaseous discharge device. 1,861,620; June 7.
Buttolph, Leroy J., Grantwood, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Combination gap and condenser for high frequency circuits. 1,861,621; June 7.
Buttolph, Leroy J., Grantwood, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Condenser. 1,861,622; June 7.
Bye, Mortimer. (See Merrell, C. G., and Bye.)
Cadieux, Joseph O., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Gas tube transformer and socket. 1,862,503; June 7.
Cahill, Robert B., Upper Macopin, N. J. Liquid motor. 1,861,951; June 7.
Caldwell, Frank W., assignor, by mesne assignments, to Hamilton Standard Propeller Company. Propeller. 1,862,328; June 7.
Calvert, William C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Making viscose-latex coated fabrics. 1,862,504; June 7.
Camp, Curtis B., trustee. (See Bracke, Robert F., assignor.)
Camp, Curtis B., trustee. (See Stokes, Charles L., assignor.)
Camp, Percy B., Maywood, Ill., assignor to Universal Draft Gear Attachment Co. Automatic slack adjuster. 1,861,433; June 7.
Camp, Percy B., Maywood, Ill., assignor to Universal Draft Gear Attachment Company. Automatic slack adjuster. 1,862,136; June 7.
Campbell, Harry E., Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Resistance element. 1,861,434; June 7.
Campbell, Wallace H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Apparatus for making inner tubes. 1,862,210; June 7.
Cao, Manuel, Buenos Aires, Argentina. Orthopedic supporter. 1,862,467; June 7.
Capelis, Socratis H., El Cerrito, Calif. Aircraft. 1,861,491; June 7.
Carborundum Company, The. (See Soley, William G., assignor.)
Carden, John V., Piccadilly, Westminster, assignor to Vickers-Armstrongs Limited, Westminster, England. Endless track vehicle. 1,862,329; June 7.
Cardwell Westinghouse Company. (See Sproul, Donald F., assignor.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carl, Byron E., New York, N. Y. Making aluminum chloride. 1,862,298; June 7.
Carle, Harold, Buffalo, N. Y., assignor to F. N. Burt Company, Limited, Toronto, Ontario, Canada. Machine for making paper boxes. 1,861,952; June 7.
Carley, Leonard R., Watertown, and W. T. Abel, Waterville, assignors to The Patent Button Company, Waterbury, Conn. Button. 1,862,076; June 7.
Carlisle, Paul J., and C. R. Harris, Niagara Falls, assignors, by mesne assignments, to The Roessler & Hasslacher Chemical Company, New York, N. Y. Treating hydrocarbons. 1,862,003; June 7.
Carlson, Hjalmar G. (See Rockwood, G. I., and Carlson.)
Carlson, Oscar, East Providence, assignor to Dolan & Bullock, Providence, R. I. Clasp. 1,862,175; June 7.
Carroll, Fred M., Yonkers, assignor to The Tabulating Machine Company, Endicott, N. Y. Subtracting tabulator. 1,862,004; June 7.
Carter, Edgar B. (See Moore, E. E., and Carter.)
Case Research Laboratory Incorporated. (See Case, Theodore W., assignor.)
Case, Theodore W., assignor to Case Research Laboratory Incorporated, Auburn, N. Y. Cell capable of showing the Kerr effect. 1,861,738; June 7.
Cavanagh, James, Cohasset, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Incorporating sock linings in shoes. 1,861,686; June 7.
Celanese Corporation of America. (See Dickie, W. A., and Hale, assignors.)
Central Union Trust Company, trustees. (See Liddell, Robert P. F., assignor.)
Chadbourne, Joseph H., assignor to E. H. Jacobs Mfg. Co., Danielson, Conn. Reenforced rope or cord construction and making same. 1,862,505; June 7.
Chadwick, Lee S., Shaker Heights Village, M. Resek, Cleveland Heights, and J. A. Dahlstrom, East Cleveland, assignors to Perfection Stove Company, Cleveland, Ohio. Rotary oil burner. 1,861,953; June 7.
Chafee, Earl W., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Target indicator. 1,862,489; June 7.
Chamberlain, George L., and G. H. Gneiss, Chicago, Ill.; said Gneiss assignor to said Chamberlain. Concealed electrical conduit system. 1,861,435; June 7.
Champion Fibre Company, The. (See Murdock, Harold R., assignor.)
Chapin, Edward S., Plainfield, N. J., and A. H. Jacoby, Ashby, Mass., assignors to The Deltex Company. Apparatus for treating and aging fabrics. 1,861,623; June 7.
Chapin, Edward S., Pawtucket, R. I., and A. H. Jacoby, Ashby, Mass., assignors to The Deltex Company. Treating and aging fabrics. 1,861,624; June 7.
Chapin, Philip P., and W. J. Kupec, New York, N. Y. Automatically refrigerating receptacle. 1,862,330; June 7.
Charnaux Patent Corset Company Limited, The. (See Greig, Jeanne F., assignor.)
Chemipulp Process, Inc. (See Strindlund, John, assignor.)
Cherry, George L., La Grange, Ill., and E. R. Troche, Baltimore, Md., assignors to Western Electric Company, Incorporated, New York, N. Y. Apparatus for sheathing cores. 1,862,005; June 7.
Chicago Bridge and Iron Company. (See Horton, George T., assignor.)
Chicago Bridge and Iron Company. (See Larson, Donald E., assignor.)
Chikson Oil Tool Co. (See Kubin, Van J., assignor.)
Chiles, Howard M., Champaign, assignor to Pyro-Pack Products Co., Chicago, Ill. Di-iodo-hydroxy-mercury fluorescein. 1,862,049; June 7.
Chiles, Ralph W. (See Quick, C. G., and Chiles.)
Christensen, Garrett H., assignor of one-half to G. O. Christensen, Clifton, Ill. Battery terminal clamp. 1,862,468; June 7.
Christensen, George O. (See Christensen, Garrett H., assignor.)
Christie, John, Sunderland, assignor to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. Electric switchgear. 1,862,254; June 7.
Christoph, Alfred, Leutersdorf, Germany. Shuttle. 1,861,593; June 7.
Chrysler Corporation. (See Hottel, Ray, assignor.)
Chrysler Corporation. (See Kincaid, Russell M., assignor.)
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chrysler Corporation. (See Skelton, Owen R., assignor.)
Chrysler Corporation. (See Stramitz, Roman, assignor.)
Chrysler Corporation. (See Woolson, Harry T., assignor.)
Chung, Mong Y., administrator. (See Park, Chong S.)
Church, John W., Carnegie, Pa., and H. G. Elledge, Painsville, Ohio, assignors to Pure Calcium Products Company, Pittsburgh, Pa. Making by-product whiting. 1,862,176; June 7.
Ciccone, Pasquale, Ambridge, Pa. Convertible hand truck. 1,862,299; June 7.
Cincinnati Advertising Products Company, The. (See Mattman, Gustave F., assignor.)
Claflin, Harry C., Cleveland, Ohio, assignor to Beryllium Development Corporation, New York, N. Y. Producing beryllium metal. 1,861,656; June 7.
Claghorn, Clarence R., Baltimore, Md. Conveyer. 1,861,840; June 7.
Clark, John M., New York, N. Y. Escape means for a submarine when submerged. 1,861,595; June 7.
Clark, Wendell H., Kenilworth, Ill. Third rail selector for toy railroads. 1,861,523; June 7.
Clarke, Charles M. (See McCracken, Robert C., assignor.)
Clarke, Hans T., New York, and D. F. Othmer, assignors to Eastman Kodak Company, Rochester, N. Y. Dehydrating aqueous acetic acid with carbon tetrachloride. 1,861,841; June 7.
Claude Neon Electrical Products Corporation. (See Hyde, R. C., and Van Wyck, assignors.)
Clean-Be-Tween Toothbrush Corporation, The. (See Herget, Ben J., assignor.)
Clifton, Amert A., Indianapolis, Ind. Front wheel drive unit. 1,861,594; June 7.
Close, William E. (See Ott, J. E., and Close.)
Coffee, Cyrus E. (See Klingler, L. R., and Coffee.)
Coffing, Frederick W., Perrysville, Ind. Automatic reverse ratcheting hoist. 1,862,331; June 7.
Coffman, Alden W., assignor to H. H. Robertson Company, Pittsburgh, Pa. Protected metal article and making the same. 1,862,332; June 7.
Colby, Ora A. (See Woodson, J. C., and Colby.)
Cole, Albert H., assignor, by mesne assignments, to The Muter Company, Chicago, Ill. Multiple winding device. 1,862,333; June 7.
Coleman, Thomas E., assignor to Madison-Kipp Corporation, Madison, Wis. Lubrication. 1,862,255; June 7.
Collins, Douglas, Salisbury, N. C. Throttle and starter control mechanism. 1,862,006; June 7.

Collins, Murray A., Jersey City, N. J., assignor to Johns-Manville Corporation, New York, N. Y. Underground conduit system. 1,861,436; June 7.
Colorado Beet Harvester Company, The. (See Bright, John W., assignor.)
Compagnie Lorraine De Charbons pour L'Electricite. (See Oswald, Marcel, assignor.)
Concrete Engineering Company. (See Ochiltree, Ned A., assignor.)
Condit Electrical Manufacturing Corporation. (See O'Keefe, George W., assignor.)
Condit Electrical Manufacturing Corporation. (See Wood, Morris B., assignor.)
Conley, Kurt H., assignor to The Bullard Company, Bridgeport, Conn. Counterbalancing device for machine tools. 1,861,954; June 7.
Connecticut Telephone & Electric Corporation. (See Cadieux, Joseph O., assignor.)
Connelly, Lawrence E., Cleveland, Ohio, assignor, by mesne assignments, to Foster Wheeler Corporation, New York, N. Y. Steam generator. 1,862,367; June 7.
Conner, Charles E., and H. C. Ainsworth, Torrance, Calif. Window sash construction. 1,862,007; June 7.
Conran, William F., Brooklyn, N. Y. Standpipe system. 1,862,109; June 7.
Conran, William F., Brooklyn, N. Y. Standpipe system. 1,862,110; June 7.
Conran, William F., Brooklyn, N. Y. Regulator device. 1,862,111; June 7.
Consolidated Ashcroft Hancock Company. (See Crocker, Ernest B., assignor.)
Consolidated Machine Tool Corporation of America. (See Harding, Sherman A., assignor.)
Consolidated Machine Tool Corporation of America. (See Leiter, Charles R., assignor.)
Continental Can Company. (See Kronquest, Alfred L., assignor.)
Continental Can Company. (See McDonald, C. D., and Deisch, assignors.)
Continental Illinois Bank & Trust Company, as trustee. (See Banker, Oscar H., assignor.)
Continental Motors Corporation. (See Haltenberger, Jules, assignor.)
Cooley, William B., assignor to Hevi Duty Electric Company, Milwaukee, Wis. Magnetic control system. 1,861,687; June 7.
Coolidge, Oliver H., Bedford Hills, N. Y., assignor to American Telephone and Telegraph Company. System for neutralizing crosstalk between signaling circuits. 1,861,524; June 7.
Cooper-Gee Limited. (See Guggenheim, Constant, assignor.)
Cosgrove, William H. (See Brooke, F. W., and Cosgrove.)
Cotter, Ernest W. (See Neville, H., and Cotter.)
Cottle, Robert L. (See Cottle, William A. and R. L.)
Cottle, William A. and R. L., Tallassee, Ala. Roll stand reamer. 1,861,907; June 7.
Craig, Charles F. (See Moreton, Henry H., assignor.)
Crawford, Carmi R., assignor to A. C. Prince, Chicago, Ill. Fly swatter. 1,861,688; June 7.
Crawley, Joseph T., Fayetteville, N. C. Garage door opener. 1,862,469; June 7.
Creighton, Harry M., East Norwalk, Conn., assignor to R. U. V. Company, New York, N. Y. Inlet fitting. 1,861,842; June 7.
Crocker, Ernest B., Stratford, Conn., assignor to Consolidated Ashcroft Hancock Company, New York, N. Y. Index adjusting means. 1,862,008; June 7.
Crown Cork & Seal Company. (See Lindsay, Carey W., assignor.)
Crown Cork & Seal Company. (See Warth, Albin H., assignor.)
Culbertson, Albert L., deceased, Mount Lebanon Township, Allegheny County, Pa.; L. M. Culbertson and The Union Trust Company of Pgh, executors. Continuous furnace. 1,861,492; June 7.
Culbertson, Laverna M., et al., executors. (See Culbertson, Albert L.)
Culp, George E., Dallas, Tex. Elevator governor cable swivel. 1,861,908; June 7.
Cumfer, Harry A., Chicago, Ill., assignor of one-half to W. J. Mason, Greenwich, Conn. Machine for providing laminated fibrous structures with offset edges. 1,862,256; June 7.
Curtis, Henry E., San Jose, Calif. Power transmission mechanism. 1,861,909; June 7.
Curtis, Homer P., assignor of one-half to J. E. Higson, Denver, Colo. Filter. 1,861,469; June 7.
Curtis, Richard C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. High-frequency supply. 1,861,437; June 7.
Curtis, Richard C., and C. A. Boddie, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Signaling system. 1,862,137; June 7.
Cushing, Adam G., Vancouver, Wash. Vehicle brake. 1,861,788; June 7.
Cuthbertson, John S., assignor of two-thirds to F. H. Deagan, Buffalo, and one-third to J. H. Hifler, Tonawanda, N. Y. Air valve. 1,862,368; June 7.
Cutler-Hammer, Inc. (See Campbell, Harry E., assignor.)
Cutler-Hammer, Inc. (See Meyer, Friedrich W., assignor.)
Cyclo Corporation. (See Honig, Frank, assignor.)
Dague, Byron S., Annapolis, Md. Method and apparatus for testing hollow articles. 1,861,684; June 7.
Dahlstrom, Frank P. (See Sheperdson, J. W., and Dahlstrom.)
Dahlstrom, John A. (See Chadwick, L. S., Resek, and Dahlstrom.)
Dalen, Gustaf, Lidingo, assignor to Svenska Aktiebolaget Gasaccumulator, Stockholm-Lidingo, Sweden. Cooking stove with heat accumulator. 1,862,009; June 7.
Daly, George F., Johnson City, assignor to The Tabulating Machine Company, Endicott, N. Y. Total taking mechanism. 1,861,955; June 7.
Dardelet Threadlock Corporation. (See Hoke, William E., assignor.)
Daughaday, Frank P., Providence, R. I. Clasp for neckties or the like. 1,862,350; June 7.
Davidson, Earl W., Terre Hill, Pa. Radioreceiver. 1,861,739; June 7.
Davidson, Henry W., Lancaster, Ohio. Street light globe. Des. 87,103; June 7.
Davis, Dean W., assignor, by mesne assignments, to T. M. Hardy, Pendleton, and G. A. Schnull, Indianapolis, Ind. Electrolyte control unit. 1,861,789; June 7.
Davis, Durrel H., assignor to Highway Trailer Company, Edgerton, Wis. Automatic fifth wheel for semitrailers. 1,862,112; June 7.
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Unheated lower buck. 1,861,493; June 7.
Dawes, Robert E., Bozeman, Mont. Closure lock. 1,862,257; June 7.
Dayton Scale Company. (See Gilbert, William N., assignor.)
Dayton Scale Company. (See Theis, Henry J., assignor.)
Deagan, Frank H., et al. (See Cuthbertson, John S., assignor.)
Dearborn Chemical Company. (See Bryson, La Vergne T., assignor.)
Dearborn, Richard J., Summit, N. J., and G. W. Gray, assignors, by mesne assignments, to The Texas Company, New York, N. Y. Decomposing organic materials. 1,861,956; June 7.
Deere & Company. (See Huddle, Edwin F., assignor.)
Deere & Company. (See Paradise, L. A., and Huddle, assignors.)
Deisch, Bert A. (See McDonald, C. D., and Deisch.)
De La Roza, Joaquin J., sr., Tuinucu, Cuba. Manufacturing cellulose. 1,862,177; June 7.
Delco Products Corporation. (See Ascltine, Fred E., assignor.)
Delco Products Corporation. (See Rossman, Edwin F., assignor.)
Delco-Remy Corporation. (See Shippy, Leo C., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Deltex Company, The. (See Chapin, E. S., and Jacoby, assignors.)
Demmerle, Louis C., Cranford, N. J., assignor to E. T. Gray, New York, N. Y. Domestic cooking vessel. 1,862,077; June 7.
Demuth, Wm., & Co. (See Shoemaker, Bernard M., assignor.)
Denman, George E., Oakland, Calif. Gas lift pump. 1,861,843; June 7.
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Rubber stock fabricating machine. 1,862,334; June 7.
Dennis, John R., Providence, R. I. Merchandising package. 1,862,335; June 7.
De Remer, Jay G., Greenwich, Conn., assignor, by mesne assignments, to J. G. De Remer Research Corporation, Jersey City, N. J. Artificial refrigeration. 1,861,957; June 7.
De Remer, J. G., Research Corporation. (See De Remer, Jay G., assignor.)
Deutsch, Simon. (See Morris, Simon, assignor.)
Devereux, Arthur M., Castine, Me. Washboard road harrow. 1,861,494; June 7.
Devers, Philip K., Lynn, Mass., assignor to General Electric Company. Method and apparatus for fusing silica and the like. 1,862,358; June 7.
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,861,657; June 7.
Diamond Calk and Horseshoe Co. (See Swanstrom, Arthur R., assignor.)
Diamond Paper and Box Co. (See Dukes, I., and Zieve, assignors.)
Dibble, Claude M., and I. S. Holloway, Joliet, Ill., assignors to Moore Brothers Company, Joliet, Ill. Broiler. 1,861,689; June 7.
Dickie, William A., and F. C. Hale, Spondon, near Derby, England, assignors to Celanese Corporation of America. Loom having stationary weft supplies. 1,862,178; June 7.
Dictaphone Corporation. (See Feyrer, William F., assignor.)
Diebold Safe & Lock Company, The. (See Doherty, Robert K., assignor.)
Diedrich, Paul. (See Dohrn, M., and Diedrich.)
Diehl, Johannes F., Herbron, assignor to Berkenhoff & Drebes Aktiengesellschaft, Asslar near Wetzlar, Germany. Drawing bench. 1,861,563; June 7.
Dixie Machinery Manufacturing Company. (See Frickey, Edward H., assignor.)
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Indirect lighting fixture. 1,862,369; June 7.

Dodge, Milton L., Newburyport, and H. L. J. Duchemin, Haverhill, Mass.; said Duchemin assignor to said Dodge. Slipper and method of making. 1,861,844; June 7.
Doherty, Robert K., Detroit, Mich., assignor to The Diebold Safe & Lock Company, Canton, Ohio. Gas protected lock. 1,862,258; June 7.
Dohrn, Max, Berlin-Charlottenburg, and P. Diedrich, Berlin-Neuflnkenkrug, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Compound of heterocyclic azo derivatives and making them. 1,862,361; June 7.
Dolan & Bullock. (See Carlson, Oscar, assignor.)
Dolley, Paul T., Los Angeles County, Calif., assignor, by mesne assignments, to Air Reduction Company, Incorporated. Apparatus for the production of hydrocyanic acid. 1,862,179; June 7.
Domscheit, Alfred. (See Raven-Rosen-Baum, E., and Domscheit.)
Donaldson, George, Inglewood, Calif. Automatic filtering apparatus. 1,862,050; June 7.
Dorcas, Merrill J., Cleveland, Ohio, assignor to National Carbon Company, Inc. Arc carbon for producing ultra-violet light. 1,862,300; June 7.
Dornier, Claude, assignor of one-half to Dornier-metallbauten G. m. b. H., Friedrichshafen-on-the-Bodensee, Germany. Wing for airplanes. 1,861,596; June 7.
Dornier-Metallbauten G. m. b. H. (See Dornier, Claude, assignor.)
Dow Chemical Company, The. (See Britton, E. C., and Bass, assignors.)
Dow Chemical Company, The. (See Britton, E. C., and Perkins, assignors.)
Dow Chemical Company, The. (See Hunter, R. M., and Heath, assignors.)
Dowling, Philip H. (See Sorensen, A. J., and Dowling.)
Dowling, Philip H., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,862,211; June 7.
Dowling, Philip H., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,862,212; June 7.
Dreckschmidt, Charles F., St. Louis, Mo. Table. 1,862,113; June 7.
Dreffein, Henry A., Chicago, Ill. Apparatus for heating billets or the like. 1,861,790; June 6.
Dresch, Israel J., Toledo, Ohio, assignor to Prosthetic Products, Inc., New York, N. Y. Artificial denture and manufacture thereof. 1,862,336; June 7.
Drexler, Frederick H., assignor to Reynolds Metals Company, Louisville, Ky. Canister. 1,862,301; June 7.
Driggs, Frank H., Bloomfield, and W. C. Lilliendahl, Montclair, N. J., assignors to Westinghouse Lamp Company. Producing rare metals by electrolysis. 1,861,025; June 7.
Dubilier Condenser Corporation. (See Dubilier, William, assignor.)
Dubilier Condenser Corporation. (See Menut, Leroy E., assignor.)
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,862,302; June 7.
Duchemin, Harry L. J. (See Dodge, M. L., and Duchemin.)
Dufault, Homer D., assignor of two-tenths to A. Fugere, two-tenths to E. Fugere, two-tenths to A. Boucher, one-tenth to H. Bernier, and one-tenth to H. Bernier, Easthampton, Mass. Gas burner. 1,862,051; June 7.
Dufford, John R. (See Hough, A., Dufford, and Leonhard.)
Dukes, Israel, and B. M. Zieve, assignors to Diamond Paper and Box Co., Philadelphia, Pa. Collapsible wardrobe box. 1,861,845; June 7.
Dunhill, Vernon, London, England. Mouthpiece for tobacco pipes and cigar and cigarette holders. 1,861,910; June 7.
Dunlap, Charles K., Hartsville, S. C. Thread core for dyeing operations and making same. 1,862,259; June 7.
Dwight & M. H. Jackson. (See Jackson, Marshall H. and W., assignors.)
Dymock, Raymond, Hamburg, N. J., assignor of one-half to C. J. Mehler, Sharon, Pa. Dust cap and quick adjustable nut. 1,861,846; June 7.
Earhuff, J. A., et al. (See Ross, Charles G., assignor.)
Eastman Kodak Company. (See Brooker, Leslie G. S., assignor.)
Eastman Kodak Company. (See Clarke, H. T., and Othmer, assignors.)
Eastman Kodak Company. (See Favour, Paul, assignor.)
Eastman Kodak Company. (See Fuerst, Carl C., assignor.)
Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)
Eastman Kodak Company. (See Hopkins, Roy S., assignor.)
Eastman Kodak Company. (See Murray, Alexander, assignor.)
Eastman Kodak Company. (See Philips, Harlow D., assignor.)
Eastman Kodak Company. (See Ross, Oscar A., assignor.)
Eastman Kodak Company. (See Titus, Robert N., assignor.)
Eastman Kodak Company. (See Wittel, Otto, assignor.)
Eckert, Clarence R., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Shingle roof. Des. 87,104; June 7.
Eclipse Textile Devices, Inc. (See Gere, Ward N., assignor.)
Edmunds, Glenn E., assignor to The Bonney-Floyd Company, Columbus, Ohio. Combination spring bumper and drawbar. 1,861,658; June 7.
Edmunds, Marshall C., Cincinnati, Ohio, assignor of one-half to W. F. Simrall, Covington, Ky. Pneumatic well drilling apparatus. 1,862,260; June 7.
Edstrom, Gus, Merrill, Wis. Screw driver. 1,862,470; June 7.
Edwards, Victor E., West Boylston, assignor to Morgan Construction Company, Worcester, Mass. Rolling metal. 1,861,525; June 7.
Ehrlich, Max, Woodhaven, N. Y. Multiple tray. 1,862,010; June 7.
Elder, Donald, Berkeley, Calif. Revolving sprayer. 1,862,180; June 7.
Electric Machinery Manufacturing Company. (See Swanson, E. W., and Swanstrom, assignors.)
Electrical Development Corporation. (See Guttman, Harry J., assignor.)
Electrolux Corporation. (See Karlström, F. J. R., and Nord, assignors.)
Electro-Matic Mfg. Co. Inc. (See Rowe, Walter T., assignor.)
Elevator Supplies Company. (See Bassett, C. W., and Fear, assignors.)
Elkes, Julius, et al. (See Tuzzo, Nicholas, assignor.)
Elledge, Harvey G. (See Church, J. W., and Elledge.)
Ellis, George H., assignor to The Insulite Company, Minneapolis, Minn. Building construction. 1,861,740; June 7.
Elsey, Howard M., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Carbonized electrode and producing same. 1,862,138; June 7.
Elwell-Parker Electric Company. (See Towson, Morris S., assignor.)
Emerson Electric Manufacturing Co. (See Persons, Laurence M., assignor.)
Emery, Frederick L. (See Van der Pyl, E., and Stimpson, assignors.)
Emisch, Emil, Magdeburg, Germany. Cowl. 1,862,213; June 7.
Emmons, Nelson, jr., et al. (See Emmons, Nelson, 3d, assignor.)
Emmons, Nelson 3d, assignor, by mesne assignments, to N. Emmons, jr., and J. W. Green, Dayton, Ohio. Culinary apparatus. 1,862,181; June 7.
Emrick, George W., Brooklyn, N. Y. Tap, drill, and similar tool. 1,862,337; June 7.
Emrick, George W., Brooklyn, N. Y. Tool adapter. 1,862,352; June 7.
Emrick, George W., Brooklyn, N. Y. Chuck device. 1,862,370; June 7.
Emsco Derrick & Equipment Company. (See Tremolada, Guglielmo, assignor.)
English, O. B., et al. (See Moreton, Henry H., assignor.)
Equitable Powder Manufacturing Company, The. (See Sherman, Harry E., assignor.)
Ernst, J. H., jr., et al. (See Respess, William R., assignor.)
Essex Foundry. (See Klatt, Herman A., assignor.)
Evans, Joseph S. (See Kirtland, F. D., Broshek, Brierly, and Evans.)
Everts, J. M., et al. (See Strosnider, Luther, assignor.)
Evich, Jerie, Santa Barbara, Calif. Automobile signal lamp. Des. 87,105; June 7.
Evich, Jerie, Santa Barbara, Calif. Automobile signal lamp. Des. 87,106; June 7.
Fafnir Bearing Company, The. (See Bechert, Fred J., assignor.)
Fairbanks, Morse & Co. (See Adams, Edward T., assignor.)
Fairbanks, Morse & Co. (See Mahana, C. G., and Gross, assignors.)
Falge, Robert N., assignor to General Motors Research Corporation, Detroit, Mich. Headlamp lens. 1,862,078; June 7.
Farrell, Stephen A., Brooklyn, N. Y. Power and motion transmission mechanism. 1,862,471; June 7.
Favour, Paul, assignor to Eastman Kodak Company, Rochester, N. Y. Color photography. 1,861,911; June 7.
Fear, Harold J. (See Bassett, C. W., and Fear.)
Fenton, Ray M., assignor to The Newton Steel Company, Youngstown, Ohio. Continuous pickling apparatus. 1,862,371; June 7.
Ferragamo, Salvatore, Florence, Italy. Shoe shank stiffener. 1,862,359; June 7.
Ferrer, William F., assignor to Dictaphone Corporation, Bridgeport, Conn. Shaving machine. 1,861,564; June 7.
Finn, George, Newark, N. J. Sadiron. 1,862,338; June 7.
Finska Forcit-Dynamit Aktiebolaget. (See Andelin, Anton E., assignor.)
Firestone Tire & Rubber Company, The. (See Roberts, Eugene A., assignor.)
Firth Sterling Steel Company. (See Meth, Max, assignor.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Expansion joint material. 1,862,506; June 7.
Fischer, Frank F., Omaha, Nebr. Memorial grave marker. Des. 87,107; June 7.

Fisher, Floyd, Forest City, Iowa. Poultry catcher. 1,862,472; June 7.
Fisher, Frank E., Elmira, N. Y. Spring shackle. 1,861,470; June 7.
Fitzgerald, John R., Harlingen, Tex., assignor of one-eighth to O. F. Bakhaus, Castle, Okla. Pressure operated switch. 1,862,473; June 7.
Fitzpatrick, J. D. (See Hoskins, Earl, assignor.)
Flatley, John H., Little York, assignor to Brown Lynch Scott Co., Monmouth, Ill. Wheeled harrow frame. 1,861,626; June 7.
Flexible Steel Lacing Company. (See Purple, George E., assignor.)
Fluharty, William G., Rockville Center, and P. A. Noxon, Jackson Heights, assignors to The Western Union Telegraph Company, New York, N. Y. Synchronizing and phase indicating device. 1,862,474; June 7.
Fonty, Henri, Paris, France. Application of Diesel engines to the drive of locomotives. 1,861,690; June 7.
Ford Motor Company. (See Hicks, Harold A., assignor.)
Ford Motor Company. (See Riemenschneider, Ernest, assignor.)
Ford Motor Company. (See Sheldrick, Lawrence S., assignor.)
Ford Motor Co. (See Stout, William B., assignor.)
Ford Motor Company. (See Wharam, John J., assignor.)
Ford, Richard J., Lawrence, Mass. Inkwell bottle. Des. 87,108; June 7.
Fort Worth National Bank of Fort Worth, Tex. (See Greene, Alonzo H., assignor.)
Forté, Harry P., Newton, assignor to Lever Brothers Company, Cambridge, Mass. Soap cutting machine. 1,862,360; June 7.
Foster Wheeler Corporation. (See Connelly, Lawrence E., assignor.)
Foulds, Charles V., Berkeley, assignor to The Pelton Water Wheel Company, San Francisco, Calif. Automatic hydraulic controller. 1,861,847; June 7.
Foulds, Charles V., Berkeley, assignor to The Pelton Water Wheel Company, San Francisco, Calif. Hydraulic valve system. 1,861,848; June 7.
Fox, John H., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making plate glass. 1,861,627; June 7.
Fox, John H., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Car transfer apparatus. 1,861,659; June 7.
Franklin, John L., Atlanta, Ga. Announcing device. 1,862,475; June 7.
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Fraser Furnace Company. (See Fraser, Richard E., assignor.)
Fraser, Richard E., assignor of one-half to Fraser Furnace Company, Stockton, Calif. Burner assembly for gas furnaces. 1,862,182; June 7.
Freed, A., trustee. (See Roos, A. H., and Riddle, assignors.)
Freeman-Daughaday Company. (See Allison, James F., assignor.)
Fremont, Richard B., Oklahoma City, Okla. Valve. 1,862,214; June 7.
Frick, Chester A., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Bottle refrigerator. 1,862,395; June 7.
Frickey, Edward H., Pasadena Park, assignor to Dixie Machinery Manufacturing Company, St. Louis, Mo. Apparatus for the manufacture of prepared feeds. 1,861,471; June 7.
Fried. Krupp Aktiengesellschaft. (See Herwig, V., and Mustin, assignors.)
Friede, Julian S., Texarkana, Tex. Display stand. Des. 87,109; June 7.
Friederich, Alfred, and P. Schlack, assignors to Aceta G. m. b. H., Berlin, Lichtenberg, Germany. Apparatus for heating air in dry spinning of artificial thread. 1,861,912; June 7.
Frobisher, Ralph S., Portsmouth, N. H., assignor to Bemis Industries, Incorporated, Boston, Mass. Method and apparatus for producing fibrous articles. 1,861,849; June 7.
Fry, Walter L., Scarsdale, assignor, by mesne assignments, to Wil-Fry Corporation, New York, N. Y. Seat cover. 1,862,476; June 7.
Fuerst, Carl C., assignor to Eastman Kodak Company, Rochester, N. Y. Camera construction and assembling same. 1,861,850; June 7.
Fugene, Euclide, et al. (See Dufault, Homer D., assignor.)
Fugere, Alderic, et al. (See Dafault, Homer D., assignor.)
Furrer, Samuel S., assignor to Brennels Manufacturing Company, Oxnard, Calif. Disk harrow. 1,861,741; June 7.
G. K. Syndicate Limited. (See Hutchinson, Harold, assignor.)
Gabel, William J., assignor of fifty per cent to J. S. Bretz, Great Falls, Mont. Automobile bumper. 1,861,691; June 7.
Gage, Robert B., Trenton, N. J. Concrete pavement and its construction. 1,862,011; June 7.
Gagnon, Lawrence J., Cleveland, Ohio. Lamp. Des. 87,110; June 7.
Gall, John F., Evanston, Ill. Combined inkwell and pen support. 1,862,139; June 7.
Galion Iron Works & Mfg. Co., The. (See Macy, Ishmael W., assignor.)
Gallimore, Keith F., Fond du Lac, Wis., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,862,215; June 7.
Gallinant, Raphael C., Ridgefield Park, N. J. Automatic stop and compensating strut for hand propelled vehicles. 1,861,958; June 7.
Galusha, Albert L., Caldwell, N. J. Furnace. 1,862,477; June 7.
Gannon, Irving J., Willoughby, and G. E. Linn, assignors to The Ohio Boxboard Company, Rittman, Ohio. Cutting die for slotting machines. 1,861,913; June 7.
Garno, George E., assignor to The Heald Machine Company, Worcester, Mass. Chuck. 1,862,216; June 7.
Garton, Charles G., Rugby, England, assignor to General Electric Company. Electric circuit controlling device. 1,861,628; June 7.
Gascoin, George W., Jersey City, N. J. Rope-saving sling thimble. 1,862,478; June 7.
Gasper, John, Chicago, Ill., assignor to Liggett & Myers Tobacco Company, New York, N. Y. Automatic can feeder. 1,862,479; June 7.
Gay, Joseph, and A. Brinker, Kinde, Mich. Poultry drinking fountain. 1,862,217; June 7.
Gehm, Eugene H., Stockton, Calif. Amusement device. 1,861,597; June 7.
General Aniline Works, Inc. (See Hentrich, W., and J. Hilger, assignors.)
General Aniline Works, Inc. (See Honold, Ernst, assignor.)
General Aniline Works, Inc. (See Laska, L., and A. Zitscher, assignors.)
General Aniline Works, Inc. (See Schnitzpahn, Karl, assignor.)
General Aniline Works, Inc. (See Tschunkur, E., and Klamroth, assignors.)
General Electric Company. (See Anderson, Robert G., assignor.)
General Electric Company. (See Boyer, Sylvester, assignor.)
General Electric Company. (See Butler, Benjamin J., assignor.)
General Electric Company. (See Devers, Philip K., assignor.)
General Electric Company. (See Garton, Charles G., assignor.)
General Electric Company. (See Hagiwara, Rinzo, assignor.)
General Electric Company. (See Hatay, Charles, assignor.)
General Electric Company. (See Heisler, Charles L., assignor.)
General Electric Company. (See Kressin, Hans, assignor.)
General Electric Company. (See Pirani, Marcello, assignor.)
General Electric Company. (See Pirani, M., Becker, and Reger, assignors.)
General Electric Company. (See Ruder, William E., assignor.)
General Electric Company. (See Sass, Friedrich, assignor.)
General Electric Company. (See Winne, Harry A., assignor.)
General Electric Vapor Lamp Company. (See Buttolph, Leroy J., assignor.)
General Motors Research Corporation. (See Falge, Robert N., assignor.)
General Tire & Rubber Company, The. (See Denmire, Harold A., assignor.)
General Zeolite Company. (See Hodges, Albert B., assignor.)
Gerdes, Carl J. H., Hasbrouck Heights, N. J. Balance indicator for airplanes. 1,861,692; June 7.
Gere, Ward N., Liverpool, assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Apparatus for drying yarn. 1,862,261; June 7.
Gerstein, Frank. (See Wolfson, H., and Gerstein.)
Gerstein, Harry. (See Wolfson, H., and Gerstein.)
Gerstenslager, William H., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine employed in manufacturing belts. 1,862,490; June 7.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Oscillating pivot joint. 1,861,791; June 7.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Steering wheel. 1,861,792; June 7.
Gibb, William H. (See Brueckner, J. R., and Gibb.)
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 87,111; June 7.
Gibson, Preston C., Gillespie, Ill. Receptacle opener. 1,862,480; June 7.
Gilbert, John J., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Submarine signaling cable. 1,861,851; June 7.
Gilbert, William N., Hudson Heights, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Weighing scale. 1,862,012; June 7.
Giles, William R. (See Pasternack, R., and Giles.)
Gilly, Charles G., Wausau, Wis. Airplane engine heater. 1,862,114; June 7.

Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Railway car. 1,861,693; June 7.

Gilstrap, Clarence L., and H. T. Smith, La Grande, Oreg. Scissors. 1,862,079; June 7.

Gindele, Donald F., Cincinnati, Ohio. Carburetor. 1,861,694; June 7.

Glahe, Fred, Chicago, Ill., assignor to A. G. Spalding & Bros., New York, N. Y. Knee and elbow pad. 1,862,303; June 7.

Glascock Brothers Manufacturing Company. (See Frick, Chester A., assignor.)

Glascodine, Richard T., London, England. Central buffing and drawgear. 1,862,080; June 7.

Gleason-Tiebout Glass Company. (See Buccini, H. A., and Barnes, assignors.)

Glenwright, Howard, Wilkes-Barre, Pa. Variable pitch propeller. 1,862,481; June 7.

Glitzke, Ewald C., Kansas City, Mo. Electric furnace and control therefor. 1,861,472; June 7.

Gneiss, Guss H. (See Chamberlain, G. L., and Gneiss.)

Goddard, Rupert, Havre de Grace, Md. Smoke producer. 1,861,852; June 7.

Godoy, Humbert, Philadelphia, Pa. Vehicle. 1,862,013; June 7.

Goldberg, David L., et al. (See Morgan, Toney W., assignor.)

Goodrich, B. F., Company, The. (See Bennett, Thomas A., assignor.)

Goodrich, B. F., Company, The. (See Legullion, Charles W., assignor.)

Goodrich, B. F. Company, The. (See Legullion, C. W., and Warner, assignors.)

Goodrich, B. F., Company, The. (See Small, John O., assignor.)

Goodrich, B. F., Company, The. (See Smith, Wilfred A., assignor.)

Goodyear Tire & Rubber Company, The. (See Calvert, William C., assignor.)

Goodyear Tire & Rubber Company, The. (See Campbell, Wallace H., assignor.)

Goodyear Tire & Rubber Company, The. (See Gerstenslager, William H., assignor.)

Goodyear Tire & Rubber Company, The. (See Handy, George A., assignor.)

Goodyear Tire & Rubber Company, The. (See Mallory, Gerald D., assignor.)

Goodyear Tire & Rubber Company, The. (See Stephens, William W., assignor.)

Gordon, Wallace W., West Concord, Minn. Band knife attachment for pitchforks. 1,861,526; June 7.

Gorie, William E. N., Middle Park, near Melbourne, Australia. Equalizing mechanism for vehicles. 1,862,262; June 7.

Gorton, George, Racine, Wis. Routing, milling, and other machine tool. 1,862,052; June 7.

Goss Printing Press Company, The. (See Smith, Ernest J., assignor.)

Gottschalk, John W., Philadelphia, Pa. Abradant. 1,862,263; June 7.

Gould, George M., Brooklyn, N. Y. Temporary bathtub cover. 1,861,495; June 7.

Graenz, Alfred, Philadelphia, Pa., assignor to Non-Run Fabric and Machine Co., Inc., New York, N. Y. Method and mechanism for making knitted fabric. 1,862,314; June 7.

Graham, James G., Butte, Mont., assignor to Sullivan Machinery Company. Rock drill feeding device. 1,861,853; June 7.

Grans, Wilhelm, Sydowwiese, Germany. Tool support for cultivators. 1,862,304; June 7.

Grant, Floyd N., assignor to American Concrete and Steel Pipe Company, South Gate, Calif. Lifting hook. 1,862,081; June 7.

Grant, Jordan W., Portsmouth, Va. Nozzle and hose holder. 1,862,053; June 7.

Gray, Edwin T. (See Demmerle, Louis C., assignor.)

Gray, George W. (See Dearborn, R. J., and Gray.)

Gray Processes Corporation, The. (See Gray, Thomas T., assignor.)

Gray, Thomas T., Elizabeth, assignor to The Gray Processes Corporation, Newark, N. J. Treatment of hydrocarbons. 1,862,507; June 7.

Gray, Thomas W., J. Lewis, and C. B. LeBon, sr., Library, Pa. Dusting machine. 1,862,396; June 7.

Gray, Walter G., Medford, Mass. Casing for outside steam pipes. 1,862,515; June 7.

Grayson Heat Control, Inc. (See Grayson, John H., assignor.)

Grayson, John H., assignor to Grayson Heat Control, Inc., Lynwood, Calif. Oven regulator. 1,862,183; June 7.

Green, Joseph W., et al. (See Emmons, Nelson, 3d, assignor.)

Greenawalt, William E., Denver, Colo. Copper extraction process. 1,862,343; June 7.

Greenberg, Geza, New York, N. Y. Garment support. 1,861,959; June 7.

Greene, Alonzo H., assignor to Fort Worth National Bank of Fort Worth, Texas, Fort Worth, Tex. Egg meter. 1,861,854; June 7.

Greig, Jeanne F., assignor to The Charnaux Patent Corset Company Limited, London, England. Brassière. Des. 87,112; June 7.

Greig, Jeanne F., assignor to The Charnaux Patent Corset Company Limited, London, England. Corset. Des. 87,113; June 7.

Greutert, Jacques. (See Moser, F. R., and Greutert.)

Gridley, Clarence H., Flournoy, Calif. Sheep brander. 1,861,914; June 7.

Griffing, Lewis E., Montrose, Pa. Fire extinguisher. 1,862,082; June 7.

Grimm, Fred B., San Francisco, Calif. Sizing ring. 1,861,527; June 7.

Grisel, Paul, Long Island City, N. Y. Window construction. 1,861,598; June 7.

Grisko, Joseph I., Cicero, Ill. Can punch. 1,861,438; June 7.

Grondahl, Lars O., Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa. Making thermosensitive resistors. 1,862,014; June 7.

Gronginger, Holmes B. (See Hobart, Joseph N., assignor.)

Gross, Charles. (See Mahana, C. G., and Gross.)

Grueter, William B. (See Langill, R. E., and Grueter.)

Grutzmacher, H. A., et al. (See Strosnider, Luther, assignor.)

Gstalder, Francis P., Lakewood, Ohio. Holder for sign characters. 1,861,599; June 7.

Gudgen, Josephine A. (See Gudgen, R. W. and J. A.)

Gudgen, Royal W. and J. A., Fort Lauderdale, Fla. Doll. Des. 87,114; June 7.

Guggenheim, Constant, assignor to Cooper-Gee Limited, London, England. Cinematograph projector. 1,861,496; June 7.

Guthrie, James M., et al. (See Lee, Leffman H., assignor.)

Guttman, Harry J., Chicago, Ill., assignor to Electrical Development Corporation. Battery terminal grip. 1,861,439; June 7.

Guy, Frederick M., assignor to Guy and Murton, Incorporated, Detroit, Mich. Universal joint. 1,862,140; June 7.

Guy and Murton, Incorporated. (See Guy, Frederick M., assignor.)

Hadden, Lawrence F., Kansas City, Mo. Dispensing device. 1,861,528; June 7.

Haga, Sojiro, Tokyo, Japan. Apparatus for heating feed water for a steam boiler. 1,861,660; June 7.

Hagedorn, Max, and A. Jung, Dessau-in-Anhalt, Germany, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Safety glass. 1,861,915; June 7.

Hagiwara, Rinzo, Tokyo, Japan, assignor to General Electric Company. Feeding device for glass articles. 1,862,351; June 7.

Hagstrom, William, Lindsborg, Kans. Force feed oil can. 1,862,083; June 7.

Hale, Frank C. (See Dickie, W. A., and Hale.)

Hall, Harry A., assignor to The Hoosier Manufacturing Company, Newcastle, Ind. Extension top table. 1,861,565; June 7.

Hall, Robert F., Edgbaston, Birmingham, England. Machine for the manufacture of hollow blown glass articles. 1,862,264; June 7.

Hallenbeck, George E., assignor to Baker Brothers, Inc., Toledo, Ohio. Hydraulic table feed mechanism. 1,861,497; June 7.

Haltenberger, Jules, Indianapolis, Ind., assignor, by mesne assignments, to Continental Motors Corporation, Detroit, Mich. Sleeve valve engine. 1,861,440; June 7.

Haltenberger, Jules, Indianapolis, Ind., assignor, by mesne assignments, to Continental Motors Corporation, Detroit, Mich. Sleeve valve engine. 1,861,441; June 7.

Hamelin, Pierre, Montreal, Quebec, Canada. Window construction. 1,862,397; June 7.

Hamilton, Roy E., assignor to Lock Joint Window Company, Kansas City, Mo. Window pulley. 1,862,305; June 7.

Hamilton, Roy E., assignor to Lock Joint Window Company, Kansas City, Mo. Sash cord ferrule. 1,862,306; June 7.

Hamilton Standard Propeller Company. (See Caldwell, Frank W., assignor.)

Hammerstein, Arthur, New York, N. Y. Self closing stopper for receptacles. 1,861,442; June 7.

Hammett, David M. (See Vance, J. A., and Hammett.)

Hand, Clarence S., assignor to United Engineers & Constructors Inc., Philadelphia, Pa. Automatic timing valve. 1,861,742; June 7.

Hands, Alfred, Annandale, Sydney, New South Wales, Australia. Blocking of hats. 1,862,398; June 7.

Handy, George A., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Dual pneumatic tire. 1,862,218; June 7.

Hannah, James J., Canon City, Colo. Automatic beet harvester. 1,862,399; June 7.

Hanson, Edward C., and J. Soderholm, assignors to O. B. McClintock Company, Incorporated, Minneapolis, Minn. Humidifier for unit heaters. 1,862,184; June 7.

Hanson-Van Winkle-Munning Company. (See Wachter, Joseph, assignor.)

Hanzlik, Henry J., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Turbine blading. 1,861,960; June 7.

Harding, Sherman A., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Wheel boring machine. 1,861,529; June 7.

Hardy, Clement A., Chicago, assignor to Whiting Corporation, Harvey, Ill. Support for cupola buckets. 1,862,185; June 7.

Hardy, Thomas M., et al. (See Davis, Dean W., assignor.)

Harper, Arthur J. C., Chicago, Ill. Garment edge. 1,862,377; June 7.

Harper, William, jr., Port Washington, assignor to Super-Marine Systems, Inc., New York, N. Y. Covering aerofoils. 1,861,855; June 7.

Harris, Charles R. (See Carlisle, P. J., and Harris.)

Harrison, Burt S., Brooklyn, N. Y. Conveying system. 1,861,600; June 7.

Harrison, James M., Cleveland, Ohio. Radiator. 1,862,219; June 7.

Harsem, Peter, Oslo, assignor to Imperator Hestesko Aktieselskap, Tonsberg, Norway. Elastic horseshoe with metal reenforcements. 1,861,695; June 7.

Harth, Philip E., assignor to National Pigments & Chemical Company, St. Louis, Mo. Composition for the taking of X-rays. 1,861,696; June 7.

Hartland, George W., Buffalo, N. Y. Damper. 1,862,084; June 7.

Hartley, Alec R., assignor to Whitin Machine Works, Whitinsville, Mass. Bunch building mechanism. 1,862,054; June 7.

Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,861,629; June 7.

Haskelite Manufacturing Corporation. (See Bersie, Hugh G., assignor.)

Hassler, Gideon G., Stowe Township, Allegheny County, Pa. Diestock. 1,861,793; June 7.

Hatay, Charles, Berlin-Charlottenburg, Germany, assignor to General Electric Company. Switching device. 1,861,566; June 7.

Hatay, Charles, Berlin-Charlottenburg, Germany, assignor to General Electric Company. Mercury switch with plunging core. 1,861,630; June 7.

Hatay, Charles, Berlin-Charlottenburg, Germany, assignor to General Electric Company. Mercury switch. 1,861,631; June 7.

Hathaway, Edgar F., Wellesley, and W. Bixby, Boston, Mass. Suspension hanger for tube frames. 1,861,856; June 7.

Haven, Louis. (See Sims, Frank L., assignor.)

Hawks, Estus J., Cedar Rapids, Iowa. Material spreader. 1,862,347; June 7.

Hayden, Robert P., and F. N. Manley, assignors to Johnson & Johnson, New Brunswick, N. J. Mounting plasters and other adhesive faced articles. 1,861,530; June 7.

Haynie, Harvie W., Monahans, Tex. Boring and drilling device. 1,861,632; June 7.

Heald Machine Company, The. (See Gallimore, Keith F., assignor.)

Heald Machine Company, The. (See Garno, George E., assignor.)

Heath, Sheldon B. (See Hunter, R. M., and Heath.)

Hebern, Edward H., Oakland, Calif., assignor to International Code Machine Company, Reno, Nev. Cryptographic machine. 1,861,857; June 7.

Heintz & Kaufman, Ltd. (See Heintz, Ralph M., assignor.)

Heintz, Ralph M., Palo Alto, assignor to Heintz & Kaufman, Ltd., San Francisco, Calif. Filament support. 1,861,794; June 7.

Heisler, Charles L., Schenectady, N. Y., assignor to General Electric Company. Film gate for motion picture machines. 1,862,364; June 7.

Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,862,015; June 7.

Helms, Harry W., Detroit, Mich., assignor to Highway Trailer Company, Edgerton, Wis. Automatic coupling mechanism for semitrailers. 1,862,115; June 7.

Hempel, William, North Tonawanda, N. Y. Side dressing circular saws. 1,861,531; June 7.

Hemphill Company. (See Lawson, J. and R. H., assignors.)

Henneböble, Frank, Chicago, Ill. Balanced quick operating valve. 1,861,916; June 7.

Henry, Ferdinand G., Philadelphia, Pa., assignor, by mesne assignments, to American Machine and Metals, Inc., New York, N. Y. Cartoning machine. 1,861,567; June 7.

Henry, René A., Brussels, Belgium. Process and device for the preparation of sols and their use for concentrating materials suspended in liquid to be clarified. 1,862,265; June 7.

Hentrich, Winfrid, Leverkusen-on-the-Rhine, and J. Hilger, Köln-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azodyestuffs containing copper. 1,861,917; June 7.

Her-Born Engineering and Manufacturing Company. (See Bornhauser, Otto E., assignor.)

Herget, Ben J., St. Louis, Mo., assignor, by mesne assignments, to The Clean-Be-Tween Toothbrush Corporation. Toothbrush. 1,862,141; June 7.

Herget, Ben J., St. Louis, Mo. Toothbrush. 1,862,142; June 7.

Herman, Fred P., McCamey, Tex. Power take-off mechanism for automobiles. 1,862,400; June 7.

Herrmann, John S., Sharon, Pa. Bottle washing machine. 1,862,307; June 7.

Hersey Manufacturing Company. (See Winton, Henry D., assignor.)

Hertzberg, Harry, Brooklyn, assignor to Hertzberg Patents Inc., New York, N. Y. Squeegee mop. 1,861,795; June 7.

Hertzberg Patents Inc. (See Hertzberg, Harry, assignor.)

Hertzog, John, Loraln, Ohio. Ventilator fan for water closets. 1,862,085; June 7.

Herwig, Valentin, Berlin-Wilmersdorf, and E. Mustin, Mahlow, near Berlin, assignors to Fried. Krupp, Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Railway tie. 1,862,266; June 7.

Hessenbruch, Hermann M., Wynnewood, assignor to Philadelphia Lawn Mower Company Inc., Philadelphia, Pa. Refrigerator. 1,862,491; June 7.

Hevi Duty Electric Company. (See Cooley, William B., assignor.)

Hibbard, Robert L., Bellevue, assignor of one-half to W. K. Stamets, Pittsburgh, Pa. Boring head. 1,861,498; June 7.

Hickey, Artemas S., Los Angeles, Calif. Smoker's pipe stem unit. 1,861,858; June 7.

Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Conditioning photographic films. 1,861,918; June 7.

Hickok, Robert D., and W. H. Rennick, Cleveland, Ohio. Measuring and recording instrument. 1,861,697; June 7.

Hicks, Harold A., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Airplane ignition system. 1,862,116; June 7.

Hicks, Harold A., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Airplane windshield. 1,862,143; June 7.

Hicks, Harold A., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Engine cowling. 1,862,144; June 7.

Hifler, John H., et al. (See Cuthbertson, John S., assignor.)

High Speed Hammer Co. Inc. (See Rockenfield, William A., assignor.)

Highland Body Manufacturing Company, The. (See Morrison, James, assignor.)

Highmark, Joseph H., Duluth, Minn. Earth testing instrument. 1,862,339; June 7.

Highway Trailer Company. (See Davis, Durrel H., assignor.)

Highway Trailer Company. (See Helms, Harry W., assignor.)

Higson, J. Ernest. (See Curtis, Homer P., assignor.)

Hilger, Josef. (See Hentrich, W., and Hilger.)

Hill, Milton C., Charlottesville, Va. Caster construction. 1,861,919; June 7.

Hird, John B., jr., Seattle, assignor to F. R. Pendleton, Everett, Wash. Internal combustion engine. 1,861,743; June 7.

Hladik, Ladislav, Pilsen, assignor to Limited Company formerly the Skoda Works, Pizen, Prague, Czechoslovakia. Device for starting auxiliary engines for locomotives. 1,862,362; June 7.

Hobart, Joseph N., New Cumberland, assignor to H. B. Groninger, Port Royal, Pa. Railroad tie. 1,861,961; June 7.

Hobler, Frank. (See Mindermann, John H.)

Hobler, Frank. (See Mindermann, J. H., and Hobler.)

Hodges, Albert B., assignor to General Zeolite Company, Chicago, Ill. Liquid treatment. 1,861,796; June 7.

Hodson, Frank S., Philadelphia, Pa. Silicon iron castings and making same. 1,861,568; June 7.

Hoe, R., & Co. (See Quick, C. G., and Chiles, assignors.)

Hoeflich, Victor T., New York, N. Y. Convoluted ornament of flexible material. 1,862,340; June 7.

Hoffman, Roscoe C., Detroit, Mich. Gear shift. 1,862,308; June 7.

Hoffoss, John E., assignor to W-K-M Company, Inc., Houston, Tex. Casing elevator. 1,861,473; June 7.

Hoke, William E., Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y. Gauging screw threads. 1,862,145; June 7.

Hoke, William E., Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y. Screw thread gauge. 1,862,146; June 7.

Holloway, Isaiah S. (See Dibble, C. M., and Halloway.)

Holman, Cecil F., Kansas City, Mo. Illuminated sign. 1,861,920; June 7.

Holman, Leslie A., Waltham, Mass. Heel press. 1,861,569; June 7.

Holmes, Christopher C., Los Angeles, Calif. Signal apparatus for automobiles. 1,861,474; June 7.

Holt, Robert W., assignor, by mesne assignments, to F. M. Warden, Chicago, Ill. Welding shield. 1,861,797; June 7.

Holzapfel, Karl E. E., Munster, Germany. Method and apparatus for filling bags. 1,861,443; June 7.

Holzworth, Charles R., Struthers, Ohio. Blast furnace tuyère. 1,862,341; June 7.

Houig, Frank, Oak Park, assignor to Cyclo Corporation, Chicago, Ill. Magnetic slip-clutch and winding mechanism. 1,862,267; June 7.

Honold, Ernest, Frankfort-on-the-Main, Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Brown vat dyestuffs of the benzanthrone acridine series and making the same. 1,861,921; June 7.

Hooker Electrochemical Company. (See Beanblossom, Walter S., assignor.)

Hooker Electrochemical Company. (See Stuart, Kenneth E., assignor.)
Hoosier Manufacturing Company, The. (See Hall, Harry A., assignor.)
Hopkins, Arthur G., Maspeth, assignor to Metal Package Corporation, New York, N. Y. Metal can and closure therefor. 1,861,570; June 7.
Hopkins, Ralph Z., and W. D. Ogden, assignors to Hudson Motor Car Company, Detroit, Mich. Applying lacquer or the like. 1,861,475; June 7.
Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic recording machine. 1,861,859; June 7.
Hormel, Geo. A., Company. (See Hormel, Jay C., assignor.)
Hormel, Jay C., assignor to Geo. A. Hormel Company, Austin, Minn. Food container. Des. 87,115; June 7.
Horton, Erwin C., Hamburg, assignor to Trico Products Corporation, Buffalo, N. Y. Windshield cleaner. 1,861,698; June 7.
Horton, George T., assignor to Chicago Bridge and Iron Company, Chicago, Ill. Hanger for floating roofs. 1,861,860; June 7.
Hoskins, Earl, assignor of one-third to J. D. Fitzpatrick, Phoenix, Ariz. Air cooling system. 1,862,268; June 7.
Hottel, Ray, assignor to Chrysler Corporation, Detroit, Mich. Ventilator. 1,862,147; June 7.
Houck, John A., sr., Bellingham, Wash. Automobile gasoline tank baffle. 1,862,016; June 7.
Hough, Arthur, Passaic, J. R. Dufford, Paterson, W. C. Leonhard, Passaic, N. J. Nitration of shredded and baled cellulose. 1,861,922; June 7.
Houch, William S., Kokomo, Ind. Elevation post. 1,861,532; June 7.
House, Bryan E., and H. F. Parker, assignors to Bendix Brake Company, South Bend, Ind. Brake. 1,862,309; June 7.
House, Frank R., Baldwin Harbor, assignor to Sperry Gyroscope Company, Brooklyn, N. Y. Distant control mechanism. 1,862,017; June 7.
How, Harlan W., assignor to Struthers Wells-Titusville Corporation, Warren, Pa. Heat exchanger. 1,862,310; June 7.
How, Harlan W., assignor to Struthers Wells-Titusville Corporation, Warren, Pa. Petroleum distillation system. 1,862,363; June 7.
Howard, Royal T., Represa, Calif. Skid chain applicator. 1,862,378; June 7.
Howard, Willis G., assignor to The Sterolene Company, Chicago, Ill. Treating eggs. 1,862,508; June 7.
Hoyt, Ernest S., Pepin, Wis. Oil burner. 1,862,401; June 7.
Hubbell, Alfred W., assignor to Phillips Petroleum Company, Bartlesville, Okla. Indicating liquid gravitometer. 1,862,402; June 7.
Huddle, Edwin F. (See Paradise, L. A., and Huddle.)
Huddle, Edwin F., assignor to Deere & Company, Moline, Ill. Extension control for tractor-drawn harvesters. 1,862,186; June 7.
Hudson, Clough D., assignor to Western Pine Mfg. Co., Ltd., Spokane, Wash. Window frame structure. 1,861,861; June 7.
Hudson Motor Car Company. (See Hopkins, R. Z., and Ogden, assignors.)
Hueber, Henry, assignor to Trico Products Corporation, Buffalo, N. Y. Horn. 1,862,086; June 7.
Huerlin, Fred, assignor of one-half to M. L. Huerlin, Spokane, Wash. Child's bouncer. 1,861,661; June 7.
Huerlin, Marion L. (See Huerlin, Fred, assignor.)
Hull, Lewis M. (See Snow, H. A., and Hull.)
Hull, Lewis M., Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Amplifier circuit. 1,861,571; June 7.
Hund, August, Bethesda, Md. Piezo-electric crystal oscillator system. 1,861,862; June 7.
Hunt, William H., National City, Calif. Fishbone removing machine. 1,861,863; June 7.
Hunter, Ralph M., and S. B. Heath, assignors to The Dow Chemical Company, Midland, Mich. Making metallic magnesium. 1,861,798; June 7.
Hupp Motor Car Corporation. (See Ornberg, Ivan, assignor.)
Hutchinson, Harold, assignor to G. K. Syndicate Limited, London, England. Fire extinguishing device. 1,861,53; June 7.
Hyde, Ralph C., and C. Van Wyck, Los Angeles, Calif., assignors to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del. Sign construction. 1,862,087; June 7.
I. G. Farbenindustrie, Aktiengesellschaft. (See Hagedorn, M., and Jung, assignors.)
Imperator Hestesko Aktieselskap. (See Harsem, Peter, assignor.)
Independent Stove Company. (See Arndt, Alvin G., assignor.)
Ingersoll-Rand Company. (See Lear, Earl B., assignor.)
Ingersoll-Rand Company. (See Slater, Fred M., assignor.)
Ingram, Ora W., Cleveland, Ohio. Air gauge. 1,862,403; June 7.
Ingwarson, Hjalmar F., Gerber, Calif. Telltale for automobile headlights. 1,861,699; June 7.
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
Insulite Company, The. (See Ellis, George H., assignor.)
International Code Machine Company. (See Hebern, Edward H., assignor.)
International Glove Process Company. (See Johanson, Carl H., assignor.)
International Industrial and Chemical Company Limited. (See Wittouck, Serge, assignor.)
International Manufacturing Company, The. (See Patterson, Clarence L., assignor.)
International Nickel Company, The. (See Searle, Harold E., assignor.)
Irwin, Grant, administrator. (See Sheer, Henry M., assignor.)
Ischinger, Alfred E., assignor to Textile Machine Works, Wyomissing, Pa. Tension take-up device for knitting machines. 1,861,962; June 7.
Isenberg, Rudolph A., Los Altos, Calif. Antitipping device. 1,861,799; June 7.
Jackson, Charles G., assignor to Multiplex Faucet Company, St. Louis, Mo. Beverage dispensing casing. Des. 87,116; June 7.
Jackson, Marshall H. and W., assignors to Dwight & M. H. Jackson, Chicago, Ill. Documentary seal. 1,861,572; June 7.
Jackson, Warren. (See Jackson, M. H. and W.)
Jacobi, Daniel A., assignor to Milcare Co., Fergus Falls, Minn. Braking attachment for agitators. 1,861,444; June 7.
Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Electric switch. 1,862,117; June 7.
Jacobs, E. H., Mfg. Co. (See Chadbourne, Joseph H., assignor.)
Jacoby, Areli H. (See Chapin, E. S., and Jacoby.)
Janisch, Maximillian P., assignor to Steelstamp Corporation, Milwaukee, Wis. Automatic circuit breaker. 1,861,800; June 7.
Jaxheimer, William H., assignor to Smith, Drum & Company, Philadelphia, Pa. Support for ironing machine rolls. 1,861,499; June 7.
Jayne, Wade H., New York, N. Y. Brush holder. 1,862,404; June 7.
Jeantet, Paul, assignor to Paul Jeantet & Cie, Gennevilliers, France. Pipe stem or similar article. Des. 87,117; June 7.
Jeantet, Paul, & Cie. (See Jeantet, Paul, assignor.)
Jefferson Electric Company. (See Johnson, Chester A., assignor.)
Jennings, Chester S., assignor to The Lamson Company, Syracuse, N. Y. Pneumatic dispatch system. 1,861,964; June 7.
Jennings, Chester S., and L. C. Allen, assignors to The Lamson Company, Syracuse, N. Y. Loading mechanism for conveyors. 1,861,903; June 7.
Johanson, Carl H., Los Angeles, Calif., assignor to International Glove Process Company, Ltd. Glove finger tip construction. 1,861,601; June 7.
Johns-Manville Corporation. (See Collins, Murray A., assignor.)
Johnson Bronze Company. (See Sandler, Louis, assignor.)
Johnson, Chester A., assignor to Jefferson Electric Company, Chicago, Ill. Cartridge fuse. 1,861,744; June 7.
Johnson, Henry, Coventry, England, assignor to The Viscose Company, Marcus Hook, Pa. Spool for yarns or threads. 1,862,405; June 7.
Johnson, J. P., Engineering Company, The. (See Johnson, James P., assignor.)
Johnson, James P., assignor to The J. P. Johnson Engineering Company, Cleveland, Ohio. Coupling. 1,862,220; June 7.
Johnson & Johnson. (See Hayden, R. P., and Manley, assignors.)
Johnson, Philip H., Hounslow, assignor to Roadless Traction, Limited, Hounslow, Middlesex, England. Pneumatic tire. 1,862,269; June 7.
Johnson, Sylvester A., North Providence, assignor to A. E. R. Speidel, Edgewood, R. I. Connecter for bracelets. 1,861,700; June 7.
Jones Gas Process Corporation. (See Jones, Leon B., assignor.)
Jones, George L., and J. H. Bucknam, Buffalo, N. Y., assignors to The Linde Air Products Company. Blowpipe apparatus and method of cutting metal. 1,861,923; June 7.
Jones, James F., and R. W. Nelson, Chicago, Ill. Receptacle seal. 1,862,088; June 7.
Jones, Leon B., San Francisco, Calif., assignor to Jones Gas Process Corporation. Making gas from oil. 1,862,018; June 7.
Jung, Adolf. (See Hagedorn M., and Jung.)
Jury, Albin E., Borger, Tex. Building set. 1,861,801; June 7.
Kallner, Gerhard, Jda- und Marienhutte, near Saarau, assignor to "Silesia" Verein Chemischer Fabriken, Jda-und Marienhutte, near Saarau, Silesia, Germany. Stabilizing natural and artificial types of caoutchouc. 1,862,270; June 7.
Kaminetsky, Max, Passaic, N. J. Forming metal laths. 1,862,221; June 7.
Kantenwein, Oscar E., Oak Park, Ill., assignor to Pressed Steel Car Company, Pittsburgh, Pa. Car construction. 1,861,500; June 7.
Kantor, James, assignor to Liquid Carbonic Corporation, Chicago, Ill. Carbonator. 1,862,089; June 7.

Kantor, James, and C. H. Miller, assignors to The Liquid Carbonic Corporation, Chicago, Ill. Bottle filling machine. 1,862,090; June 7.
Kaplan, Harry, New York, N. Y. Embossing panels on cardboard. 1,862,091; June 7.
Karlström, Fredrik J. R., and J. G. Nord, Stockholm, Sweden, assignors, by mesne assignments, to Electrolux Corporation. Household appliance. 1,861,924; June 7.
Kasten, Walter, assignor to Skinner Motors, Inc., Detroit, Mich. Internal combustion engine valve mechanism. 1,862,222; June 7.
Kazenmaier, August, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Vacuum operated servo brake. 1,861,534; June 7.
Kawaguchi, Nao, Montebello, Calif. Making silk fiber sheet. 1,862,019; June 7.
Keffo, Albert F., assignor to Automatic Pearl Button Co., Muscatine, Iowa. Button blank cutting machine. 1,862,406; June 7.
Kehl, Robert J., Newark, N. J., assignor to Oxweld Acetylene Company. Blowpipe. 1,862,055; June 7.
Keith, Henry M., Harrisburg, Ill. Multiple valve for pumping systems. 1,862,407; June 7.
Kelly, Benjamin F., Houston, Tex. Sash latch. 1,862,056; June 7.
Kelly, John H., Longview, Wash. Combination toilet tank cover and cabinet. 1,861,802; June 7.
Kelsey-Hayes Wheel Corporation. (See White, John W., assignor.)
Kennedy-McCandless Corporation (See Mayette, Edgar, assignor.)
Kennedy, William D., Western Springs, Ill. Bag construction. 1,861,864; June 7.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler. 1,861,965; June 7.
Khanzadian, Avedis S., Syracuse, N. Y. Rug cleaning machine. 1,861,476; June 7.
Kilgore Aircraft Protector, Incorporated. (See Kilgore, John P., assignor.)
Kilgore, John P., assignor to Kilgore Aircraft Protector, Incorporated, New Haven, Conn. Aircraft protector. 1,861,477; June 7.
Kime, Charles G., assignor to The Burch Corporation, Crestline, Ohio. Spreading road material. 1,861,925; June 7.
Kincaid, Russell M., assignor to Chrysler Corporation, Detroit, Mich. Polishing machine. 1,862,148; June 7.
King, C. G., & Co. (See Gibbons, Winifred L., assignor.)
King, Robert H., Cleveland Heights, assignor to The Rotor Air Tool Company, Cleveland, Ohio. Governor controlled fluid pressure tool. 1,862,223; June 7.
Kinnear Manufacturing Company, The. (See McCloud, Edward H.)
Kirkland, Sanford H. (See Mays, H., and Kirkland.)
Kirtland, Fred D., Germantown, J. J. Broshek, Philadelphia, and R. C. Brierly, Narberth, Pa., and J. S. Evans, Schenectady, N. Y., assignors to Peabody Engineering Corporation. Apparatus for distributing pulverized fuel to burners. 1,861,535; June 7.
Klamroth, Albert. (See Tschunkur, E., and Klamroth.)
Klatt, Herman A., Brooklyn, N. Y., assignor to Essex Foundry, Newark, N. J. Clamp. 1,862,149; June 7.
Klecka, John J., assignor to J. R. Wood & Sons, Inc., Brooklyn, N. Y. Finger ring. Des. 87,097; June 7.
Kleffman, John, Hibbing, Minn. Box trap. 1,861,478; June 7.
Kleffman, John, Hibbing, Minn. Animal trap. 1,861,479; June 7.
Klein, John, Brooklyn, N. Y. Tobacco pipe. 1,861,865; June 7.
Kleinman, Jacob L., New York, N. Y. Net holder. 1,862,118; June 7.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Kling, Howard P., Westfield, assignor to Moore and Kling, Inc., Boston, Mass. Filling station apparatus. 1,862,311; June 7.
Klinge, William, Cincinnati, Ohio. Toy. 1,862,150; June 7.
Klingler, Le Roy R., and C. E. Coffee, St. Louis, Mo. Spring compressing tool. 1,861,445; June 7.
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Automatic clamp. 1,861,745; June 7.
Knightstown Funeral Car Company. (See Tipton, Guy S., assignor.)
Knopf, Janet M., New York, N. Y. Riding stick toy. Des. 87,118; June 7.
Knowles, Edwin M., China Company, The. (See McDonald, John B., assignor.)
Knowlton, Norwood H., Rockport, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel and making same. 1,861,662; June 7.
Knox, Harry A., and B. F. Baker, Davenport, Iowa. Suspension for track-laying vehicles. 1,861,866; June 7.
Kocher, Edward H., Boonton, N. J., assignor to Auto Research Corporation. Lubricating installation and apparatus. 1,862,482; June 7.
Koehring Company. (See Russell, Leslie A., assignor.)
Koestlin, Herman F., Detroit, Mich. Grinding machine. 1,862,379; June 7.
Kohlhaas Company, The. (See Thometz, Mathias A., assignor.)
König, Max, Bomlitz, near Walsrode, Germany. Manufacturing films and the like from cellulose solutions. 1,861,701; June 7.
Konigsmark, Victor L., et al. (See Ross, Charles G., assignor.)
Koppers Company, The. (See Lovett, James A. B., assignor.)
Kositzky, Albert L., Escanaba, Mich. Automatically releasing hoisting device. 1,862,312; June 7.
Koze, Carl, Newark, N. J., assignor to Hugo Mock, New York, N. Y. Talcum powder can and sifter therefor. 1,861,602; June 7.
Krantz, Randolph P. (See Schick, A. H., and Kraatz.)
Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Preventing hum due to interelement capacities in vacuum tubes. 1,862,020; June 7.
Kraly, Charles. (See Kraly, J. J. and C.)
Kraly, Joseph J. and C., Pittsburgh, Pa. Nonskid unit. 1,862,408; June 7.
Kratky, Anton, assignor to John Bene & Sons, Inc., Brooklyn, N. Y. Electrolyte for the manufacture of hydrogen peroxide. 1,861,573; June 7.
Kressin, Hans, Berlin-Britz, Germany, assignor to General Electric Company. Gaseous electric discharge device. 1,861,633; June 7.
Kronquest, Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Machine for applying solder to keys for opening containers. 1,861,536; June 7.
Kronquest, Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Easy opening container. 1,862,509; June 7.
Kronquest, Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Easy opening container. 1,862,510; June 7.
Krostewitz, Walter. (See Wagner, J., and Krostewitz.)
Kubin, Van J., Brea, assignor to Chiksan Oil Tool Co., Limited, Fullerton, Calif. Reamer. 1,861,702; June 7.
Kupec, William J. (See Chapin, P. P., and Kupec.)
La Brie, Ludger E., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill. Vehicle wheel. 1,862,313; June 7.
Lageson, Knute J., Minneapolis, Minn. Bait halter. 1,862,187; June 7.
Lahey, Frank T., Monroe, N. Y. Laminated plastic material. 1,861,663; June 7.
Lamond, Robert C., assignor to American Engineering Company, Philadelphia, Pa. Mooring apparatus. 1,862,409; June 7.
Lamson Company, The. (See Jennings, Chester S., assignor.)
Lamson Company, The. (See Jennings, C. S., and Allen, assignors.)
Lancill, Ross E., Menominee, Mich., and W. B. Grueter, Milwaukee, Wis., assignors to The Prescott Company, Menominee, Mich. Sawmill dog. 1,861,867; June 7.
Langley, Cortlandt J., New York, N. Y., assignor to C. W. Bumstead, trustee, Highland Park, N. J. Match package. 1,861,151; June 7.
Langley, Earnest L., Sweetwater, Tex. Apparatus for decomposing water. 1,862,224; June 7.
Larson, Donald E., assignor to Chicago Bridge and Iron Company, Chicago, Ill. Seal for floating roofs. 1,861,868; June 7.
Larson, Homer W., Downers Grove, and R. H. Patchen, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Material working apparatus. 1,861,574; June 7.
Larson Machine Company. (See Larson, Sven P., assignor.)
Larson, Sven P., Berkeley, Calif., assignor to Larson Machine Company, Ltd. Automatic pan spraying machine. 1,862,380; June 7.
Laska, Leopold, and A. Zitscher, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New water insoluble azodyestuffs. 1,861,926; June 7.
Lathrop, Harry D. (See Paulson, Walter H., assignor.)
Lathrop, Harry D. (See McEwan, Charles F., assignor.)
Lathrop, Harry D., Chicago, Ill. Can conveying and dumping apparatus. 1,861,575; June 7.
Lathrop, Harry D., Chicago, Ill. Can dumping mechanism. 1,861,634; June 7.
Laursen, Laurits A., assignor of one-fourth to P. L. Laursen, Akron, Ohio. Forming rubber tires. 1,862,314; June 7.
Laursen, Pearl L. (See Laursen, Laurits A., assignor.)
Lauterhur, Edward J. (See Lauterhur, Frank X., and E. J.)
Lauterhur, Frank K and E. J., Sidney, Ohio. Weighing, blending, conveying, elevating, and sifting machine. 1,861,803; June 7.
Lawson, John and R. H., Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Machine for knitting split fabric. 1,862,021; June 7.
Lawson, Robert H. (See Lawson, J. and R. H.)
Lear, Earl B., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Blowing device for rock drills. 1,861,966; June 7.
Lebon, Charles B., sr. (See Gray, T. W., Lewis, and Lebon.)
Lecarpentier, George H., Chicago, assignor to A. G. McCaleb, Evanston, Ill. Liquid cooling apparatus for internal combustion engines. 1,861,804; June 7.

Lederer, Ernest A. (See Marden, J. W., and Lederer.)
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Rear quarter window construction for vehicle bodies. 1,861,967; June 7.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Vehicle body front construction. 1,862,022; June 7.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Vehicle body window construction. 1,862,023; June 7.
Lee, Leffman H., Bellevue, assignor of one-sixth to W. B. Wharton and one-sixth to J. M. Guthrie, Pittsburgh, Pa. Fastening device. 1,862,152; June 7.
Lee, Roger L., assignor to Chrysler Corporation, Detroit, Mich. Pipe joint. 1,862,153; June 7.
Leek, Albert E., assignor of sixty-five per cent to Wigan Coal & Iron Company, Limited, Wigan, England. Separation of solid and liquid materials from slurries or sludges. 1,861,537; June 7.
Lefkowitz, Emanuel, Carteret, N. J. Hose coupling. 1,861,635; June 7.
Lefkowitz, Samuel, et al. (See Weiner, Morris, assignor.)
Lefranc, Georges, Paris, France. Preparation of emulsions for sizing textile fibers. 1,861,927; June 7.
Legge, Norton, Hexham, England. Power transmission mechanism. 1,862,188; June 7.
Leggett and Platt Spring Bed and Manufacturing Company. (See Brown, William S., assignor.)
Leguillon, Charles W., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Vulcanizer. 1,862,025; June 7.
Leguillon, Charles W., and N. L. Warner, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Tire building apparatus. 1,862,024; June 7.
Lehn, John U., assignor to Animal Trap Company of America, Lititz, Pa. Animal trap. 1,861,968; June 7.
Leighton Heel Co. (See Leighton, Leon J., assignor.)
Leighton, Leon, jr., assignor to Leighton Heel Co., Inc., Lewiston, Me. Heel and its manufacture. 1,861,969; June 7.
Leitelt Iron Works. (See Buchan, A. G., and Lyon, assignors.)
Leiter, Charles R., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Die. 1,861,538; June 7.
Le Moon, Axel R., Chicago, Ill. Sprinkler nozzle. 1,862,381; June 7.
Lentz, Lawrence R., Windsor, Ontario, Canada. Filter. 1,861,805; June 7.
Leonhard, William C. (See Hough, A., Dufford, and Leonhard.)
Lever Brothers Company. (See Forté, Harry P., assignor.)
Levison, Benjamin, San Francisco, Calif. Surgical bandage. 1,862,026; June 7.
Levy, Maurice, Larchmont, N. Y. Container and/or applicator. 1,862,271; June 7.
Lewis, James. (See Gray, T. W., Lewis, and Lebon.)
Lewis, Miles C. T., Calistoga, Calif. Condiment shaker. 1,862,057; June 7.
Liddell, Robert P. F., New York, N. Y., assignor, by mesne assignments, to Central Union Trust Company of New York, trustees. Filter. 1,861,576; June 7.
Liggett & Myers Tobacco Company. (See Gasper, John, assignor.)
Lilleberg, Tideman M., assignor to The Nye Tool & Machine Works, Chicago, Ill. Thread-cutting device. 1,862,225; June 7.
Lilliendahl, William C. (See Driggs, F. H., and Lilliendahl.)
Lilly, Alva L., assignor of one-fourth to H. B. Looman, Burlingame, Calif. Caster. 1,861,539; June 7.
Limited Company formerly the Skoda Works. (See Hladik, Ladislav, assignor.)
Limpert, Alexander S., Bay Shore, N. Y. Heat exchange unit. 1,862,154; June 7.
Linde Air Products Company, The. (See Jones, G. I., and Bucknam, assignors.)
Lindsay, Carey W., Homeland, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Bottle cap. 1,861,603; June 7.
Lingo, William, Pasadena, Calif. Starting device. 1,862,410; June 7.
Link, John H., Merion, Pa., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,861,636; June 7.
Linn, Guy E. (See Gannon, I. J., and Linn.)
Lintern, William, Cleveland, Ohio. Ventilating and/or cooling vehicle bodies. 1,862,058; June 7.
Liquid Carbonic Corporation. (See Kantor, James, assignor.)
Liquid Carbonic Corporation. (See Kantor, J. and Miller, assignors.)
Little, Donald G., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic direction finder. 1,862,119; June 7.
Little, Lonnie E., and H. T. Maib, Grandview, Wash. Bottle handle. 1,861,806; June 7.
Livermore, William T. (See Smith, T. C., and Livermore.)
Lock Joint Window Company. (See Hamilton, Roy E., assignor.)
Loeffelman, Leo J., St. Louis, Mo. Expansion cutter. 1,861,928; June 7.
Lonbeck, William F., Boone, Colo. Bean harvester. 1,862,226; June 7.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble dress. Des. 87,119; June 7.
Long, Thomas H., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Adjustable induction heating device. 1,861,869; June 7.
Long, Thomas H., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Induction furnace. 1,861,870; June 7.
Looman, Hazel B. (See Lilly, Alva L., assignor.)
Lord, Hugh C. (See Lord, T., and Whitehouse, assignors.)
Lord, Hugh C., Erie, Pa. Joint. 1,862,027; June 7.
Lord, Hugh C., Erie, Pa. Automobile engine mounting. 1,862,483; June 7.
Lord, Thomas, and I. P. Whitehouse, assignors to Hugh C. Lord, Erie, Pa. Mounting. 1,862,484; June 7.
Loring, John A., Owego, N. Y. Ornament. 1,861,604; June 7.
Lovett, James A. B., Pittsburgh, Pa., assignor to The Koppers Company. Coke oven apparatus. 1,862,028; June 7.
Lowry, John D., assignor of one-half to N. H. Berry, Detroit, Mich. Control apparatus. 1,861,929; June 7.
Lowther, Jesse P., Spokane, Wash. Foul air exhauster. 1,861,501; June 7.
Ludwig, John E., assignor to Newcomb-David Co., Inc., Detroit, Mich. Automatic stack damper. 1,862,272; June 7.
Ludwig, Stephen E. (See Simpson, Robert D., assignor.)
Lunkenheimer Company, The. (See MacGregor, Hulbert P., assignor.)
Lutton, William H., Company. (See Pratt, Henry W., assignor.)
Lutz, Friedrich, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Looper operating mechanism for sewing machines. 1,861,540; June 7.
Maag, Oscar L., assignor to The Timken Roller Bearing Company, Canton, Ohio. Electroplating. 1,861,466; June 7.
Maass, Ernest C., Great Notch, N. J. Apparatus for and method of feeding sheets. 1,861,605; June 7.
MacGregor, Halbert P., assignor, by mesne assignments, to The Lunkenheimer Company, Cincinnati, Ohio. Closed end cylindrical rotor valve. 1,861,541; June 7.
MacKay, John F., Lancaster, Pa. Incubator. 1,861,746; June 7.
Mackenzie, William, jr., Chicago, Ill. Electric iron attachment. 1,862,411; June 7.
Mackin, Henry J., Kankakee, Ill. Blind. 1,861,606; June 7.
MacLellan, Angus D., Owensboro, Ky. Mixer and sifter. 1,862,412; June 7.
Macy, Ishmael W., assignor to The Gallon Iron Works & Mfg. Co., Gallon, Ohio. Hoisting engine. 1,861,703; June 7.
Madison-Kipp Corporation. (See Coleman, Thomas E., assignor.)
Mahana, Charles G., and C. Gross, Three Rivers, assignors to Fairbanks, Morse & Co., Chicago, Ill. Engine fuel and oil control means. 1,862,155; June 7.
Mahon, R. C., Company, The. (See Mahon, Russell C., assignor.)
Mahon, Russell C., assignor to The R. C. Mahon Company, Detroit, Mich. Deck plate. 1,862,227; June 7.
Mais, Henry T. (See Little, L. E., and Mais.)
Mall, Frank F., New Brighton, Pa., assignor to National Electric Products Corporation. Clamp-positioning device. 1,861,807; June 7.
Mallcay, Leandro, Westwood, Calif. Sack holder. 1,862,413; June 7.
Mallory, Gerald D., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Pneumatic tire and making it. 1,862,492; June 7.
Mallory Hat Company. (See Reynolds, Ralph K., assignor.)
Manley, Frank N. (See Hayden, R. P., and Manley.)
Manning & Co. (See Van Ranst, Cornelius W., assignor.)
Marcelin, Andre J. (See Benard, Henri L. M. J., and Marcelin.)
Marden, John W., and E. A. Lederer, East Orange, N. J., assignor to Westinghouse Lamp Company. Production of alkali metal tubes. 1,861,637; June 7.
Marke, William C., Tracy, Minn. Pants or overall bottom. 1,861,704; June 7.
Marsh, Samuel L., New York, N. Y. Hydraulic shock absorber. 1,862,228; June 7.
Martin, Harry L., Cartierville, Quebec, Canada. Utensil holder. 1,861,808; June 7.
Martin, Jesse C., jr, San Francisco, Calif. Valve. 1,861,747; June 7.
Martin, Verner L., Mount Hope, W. Va. Brake adjusting gauge. 1,861,638; June 7.
Martin, Verner L., Mount Hope, W. Va. Mine track cleaner. 1,861,639; June 7.
Mason, Willard J. (See Cumfer, Harry A., assignor.)
Mathieson Alkali Works, The. (See Taylor, Lorenzo D., assignor.)
Mathis, James C. Ada, Okla. Bench. 1,862,382; June 7.
Mattern, Earl S., Pitman, Pa. Tank closure retaining and locking device. 1,862,229; June 7.
Mattman, Gustave F., assignor to The Cincinnati Advertising Products Company, Cincinnati, Ohio. Preparing glass panels. 1,861,577; June 7.

Maxfield, Arthur C., Cranston, assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Adapter for machine tools. 1,861,504; June 7.
Maxwell, Charles G., Richmond, Va., assignor to The American Tobacco Company, New York, N. Y. Stemming and cleaning tobacco. 1,861,705; June 7.
Mayer-Neville, Ernest. (See Tacchi, Percy G., assignor.)
Mayers, Clayton, & Company. (See Mayers, Eric W., assignor.)
Mayers, Eric W., assignor to Clayton Mayers & Company Limited, London, England. Packing device. 1,861,502; June 7.
Mayette, Edgar, assignor to Kennedy-McCandless Corporation, Rochester, N. Y. Child's knockdown crib construction. 1,862,383; June 7.
Maynard, Charles E., Northampton, Mass. Smoking pipe. 1,861,503; June 7.
Mays, Hubert, and S. H. Kirkland, Tampa, Fla. Artificial bait. Re18,488; June 7.
McAlister, James A., Shreveport, La. Wood bending equipment. 1,862,414; June 7.
McCabe, John J., assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio. Washing machine. 1,861,640; June 7.
McCabe, Joseph J., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Glass crumbling machine. 1,862,194; June 7.
McCaleb, Albert G. (See Branch, Le Roy O., assignor.)
McCaleb, Albert G. (See Lecarpentier, George H., assignor.)
McCaleb, Albert G., Evanston, Ill. Engine circulating system. 1,861,809; June 7.
McCarthy, J. Clarence, assignor to Armstrong Cork Company, Lancaster, Pa. Method and apparatus for decorating flexible surface covering material. 1,862,189; June 7.
McClintock, O. B., Company. (See Hanson, E. C., and Soderholm, assignors.)
McCloud, Edward H., assignor to The Kinnear Manufacturing Company, Columbus, Ohio. Door for hangars and the like. 1,861,748; June 7.
McCowan, David A., Toronto, Ontario, Canada. Automatic photographing machine. 1,862,190; June 7.
McCracken, Robert C., assignor of forty one-hundredths to C. M. Clarke, St. Louis, Mo. Rotary motor. 1,861,706; June 7.
McDaniel, Charles H. (See McDaniel, Howard H. and C. H.)
McDaniel, Howard H. and C. H., Beaumont, Tex. Safety device for hoisting cages. 1,861,930; June 7.
McDermott, John C., Indiana, Pa. Loader. 1,862,230; June 7.
McDonald, Charles D., and B. A. Deisch, Chicago, Ill., assignors, by mesne assignments, to Continental Can Company, Inc., New York, N. Y. Can testing machine. 1,861,542; June 7.
McDonald, John B., assignor to The Edwin M. Knowles China Company, East Liverpool, Ohio. Pitcher or similar article. Des. 87,120; June 7.
McDonald, John B., assignor to The Edwin M. Knowles China Company, East Liverpool, Ohio. Covered dish or similar article. Des. 87,121; June 7.
McDonald, John B., assignor to The Edwin M. Knowles China Company, East Liverpool, Ohio. Plate or similar article. Des. 87,122; June 7.
McDonald, John B., assignor to The Edwin M. Knowles China Company, East Liverpool, Ohio. Cup or similar article. Des. 87,123; June 7.
McDonald, Steve S., Los Angeles, Calif. Vehicle wheel. 1,861,810; June 7.
McEwan, Charles F., assignor to H. D. Lathrop, Chicago, Ill. Rotary conveyer. 1,862,485; June 7.
McFarland, James C., Fort Thomas, assignor to The Wadsworth Watch Case Co., Dayton, Ky. Decorating base metals or alloys of base metals. 1,862,231; June 7.
McGuckin, John J., Passaic, N. J., assignor to Rinck-McIlwaine, Inc., New York, N. Y. Socket clearing and removing tool. 1,862,273; June 7.
McIver, William K., Elgin, assignor to Benjamin Electric Mfg. Company, Chicago, Ill. Radio frequency amplifying system. 1,861,707; June 7.
McLeod, Norman W., Regina, Saskatchewan, Canada. Road spraying and mixing apparatus. 1,862,232; June 7.
McMahon, John S., et al. (See Respess, William R., assignor.)
McMillan Book Company. (See McMillan, John L., assignor.)
McMillan, John L., assignor to McMillan Book Company, Syracuse, N. Y. Visible index binder. 1,861,749; June 7.
Meadowcroft, Joseph W., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Welding. 1,861,970; June 7.
Meadowcroft, Joseph W., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Machine for welding. 1,861,971; June 7.
Mehler, Carl J. (See Dymock, Raymond, assignor.)
Mendelsohn, Samuel, New York, N. Y. Attachment for safety razors and flash lights. 1,862,274; June 7.
Menut, Leroy E., Mount Vernon, assignor to Dubilier Condenser Corporation, New York, N. Y. Terminal. 1,862,275; June 7.
Mercedes Bürömaschinen Werke Aktiengesellschaft. (See Schlüns, Carl, assignor.)
Merrell, Charles G., Wyoming, and M. Bye, assignors to The William S. Merrell Company, Cincinnati, Ohio. Product of castor oil. 1,862,315; June 7.
Merrell, William S., Company, The. (See Merrell, C. G., and Bye, assignors.)
Merrick, Frank W., Dorchester, Mass., assignor to American Stay Company, East Boston, Mass. Apparatus for skiving strip material. 1,862,348; June 7.
Mertz, Walter M. (See Roe, G. R., and Mertz.)
Metal Package Corporation. (See Hopkins, Arthur G., assignor.)
Meth, Max, Pittsburgh, assignor to Firth Sterling Steel Company, McKeesport, Pa. Making refractory articles. 1,862,191; June 7.
Metz, John, Hollis, assignor to The Nestle-LeMur Company, New York, N. Y. Head protector for hair waving. 1,861,972; June 7.
Meyer, Friedrich W., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Dynamo electric machine regulating system. 1,862,233; June 7.
Michaux, William W., jr., Michaux, Va. Method and apparatus for preparing leaf tobacco. 1,862,192; June 7.
Midwest-Fulton Machine Company. (See Phenice, William V., assignor.)
Mietzsch, Fritz. (See Berendes, R., and Mietzsch.)
Miki, Nobuya, Tennoji-Ku, Osaka-Shi, Japan. Rotary pump. 1,861,708; June 7.
Milcare Co. (See Jacobi, Daniel A., assignor.)
Milcor Steel Company. (See Siebenlist, Anthony G., assignor.)
Millar, John R., Oakland, Calif. Bag for cotton picking machines or the like. 1,862,384; June 7.
Miller, Arthur G., Atkinson, Nebr. Program calender. 1,861,811; June 7.
Miller, Charles H. (See Kantor, J., and Miller.)
Miller Company, The. (See Doane, Leroy C., assignor.)
Miller, Edward, et al. (See Strosnider, Luther, assignor.)
Miller, Frank P., Chicago, Ill. Railway crossing guard. 1,862,276; June 7.
Miller, Joseph H., Houston, Tex. Dispensing can. 1,862,193; June 7.
Miller, Oscar E., Stratton, Nebr. Grain handling machine. 1,862,092; June 7.
Miller, Stuart P., Tenafly, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of oil. 1,862,493; June 7.
Miller, Stuart P., Tenafly, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar. 1,862,494; June 7.
Millett, John E. (See Nordstrom, G. E., and Millett.)
Mindermann, John H., Union City, and F. Hobler, West New York, N. J. Valve tool. 1,861,973; June 7.
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Link, John H., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minneapolis-Honeywell Regulator Company. (See Shivers, Paul F., assignor.)
Minneapolis-Moline Power Implement Company. (See Seaholm, John P., assignor.)
Mintz, Issiah, et al. (See Weiner, Morris, assignor.)
Mitchell, John R., Trenton, N. J. Base for thread packages. 1,862,234; June 7.
Mitzlaff, Georg, Mannheim, Germany, assignor to Aktiengesellschaft, Brown Boveri & Cie., Baden, Switzerland. Regulation of ship-propulsion systems. 1,861,750; June 7.
Mock, Hugo. (See Koze, Carl, assignor.)
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating device. 1,861,812; June 7.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Moldenhauer, Erich, Dusseldorf, Germany. Change speed gearing. 1,861,931; June 7.
Moon, Charles R., assignor to Ontario Manufacturing Company, Muncie, Ind. Buffing machine. 1,862,277; June 7.
Moore Brothers Company. (See Dibble, C. M., and Holloway, assignors.)
Moore, Charles A., Edina, Minn. Ventilating, refrigerating, and dehumidifying appliance. 1,861,709; June 7.
Moore, Charles A., Edina, Minn. Refrigerating and ventilating appliance. 1,861,710; June 7.
Moore, Charles A., Edina, Minn. Refrigerating, dehumidifying, and ventilating appliance. 1,861,813; June 7.
Moore, Clarence W., Roslyn, Pa., assignor to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y. Fountain cuspidor. 1,862,029; June 7.
Moore, Edmond E., and E. B. Carter, Indianapolis, Ind., assignors, by mesne assignments, to Abbott Laboratories, Chicago, Ill. Ephedrine salts and oil solutions thereof. 1,861,543; June 7.
Moore and Kling, Inc. (See Kling, Howard P., assignor.)
Moore, Ramsay H., assignor to Zelgeia Products Corporation, Dallas, Tex. Douche apparatus. 1,861,932; June 7.
Morden, Charles W., Portland, Oreg. Clothes drier. 1,861,871; June 7.
Moreton, Henry H., Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to C. F. Craig, Los Angeles, Calif. Material and neutralizing acids in oils. 1,861,711; June 7.
Morey, Worthie W., Columbus, Ohio. Shade supporting structure. 1,862,385; June 7.

CARNEGIE LIBRARY OF ATLANTA

Morgan Construction Company. (See Edwards, Victor E., assignor.)

Morgan Construction Company. (See Sheperdson, J. W., and Dahlstrom, assignors.)

Morgan, Toney W., assignor of one-third to W. Boston and one-third to D. L. Goldberg, St. Louis, Mo. Collapsible demountable tire rim. 1,862,415; June 7.

Morris, Eudor, administratrix. (See Morris, Hugh P.)

Morris, Hugh P., deceased, assignor of one-half to S. Deutsch, Milwaukee, Wis.; E. Morris administratrix of Hugh P. Morris. Propeller. 1,862,235; June 7.

Morrison, James, assignor to The Highland Body Manufacturing Company, Cincinnati, Ohio. Vehicle and mounting bodies on chassis. 1,861,712; June 7.

Morse Products, Inc. (See White, Nelson, assignor.)

Morton, Allen W., assignor to The American Hammered Piston Ring Company, Baltimore, Md. Piston ring. 1,862,059; June 7.

Moser, Franz R., and J. Greutert, Amsterdam, Netherlands, assignors, by mesne assignments, to Shell Development Company, San Francisco, Calif. Treatment of petroleum acid sludges. 1,862,060; June 7.

Mullineaux, Charles G. (See Antisell, F. L., and Mullineaux.)

Multiplex Faucet Company. (See Jackson, Charles G., assignor.)

Munro, Alexander L., assignor to Smith Engineering Works, Milwaukee, Wis. Gravel washer. 1,861,578; June 7.

Murck, Knud, Forest Hills, N. Y., assignor to Charles Bruning Company, Inc. Blueprinting machine. 1,861,607; June 7.

Murdock, Harold R., assignor to The Champion Fibre Company, Canton, N. C. Extracting water-soluble substances from raw fibrous materials containing the same and for simultaneously forming the fibrous materials into a web, and a system of apparatus therefor. 1,861,933; June 7.

Murphy, Howard B., Watsonville, Calif. Cultivator. 1,861,544; June 7.

Murray, Alexander, assignor to Eastman Kodak Company, Rochester, N. Y. Photomechanical reproduction from half-tones or line negatives. 1,861,872; June 7.

Murray Corporation of America, The. (See Vehko, James, assignor.)

Murray, Edward H., Freeport, N. Y. Golf game. 1,862,093; June 7.

Murray, John F., et al., executors. (See Murray, Thomas E.)

Murray, Joseph B., et al., executors. (See Murray, Thomas E.)

Murray, Michael E. (See Berg, Charles C., assignor.)

Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)

Murray, Thomas E., jr., Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator. 1,861,447; June 7.

Murray, Thomas E., deceased, Brooklyn, N. Y., by J. F. Murray, J. B. Murray, and T. E. Murray, jr., Brooklyn, N. Y., executors, assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator. 1,861,448; June 7.

Murray, Thomas E., deceased, Brooklyn, N. Y., by J. F. Murray, J. B. Murray, and T. E. Murray, jr., Brooklyn, N. Y., executors, assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator. 1,861,449; June 7.

Mussey, William H., Chicago, Ill., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation. Railway car truck. 1,862,156; June 7.

Mustin, Ernest. (See Herwig, Y., and Mustin.)

Muter Company, The. (See Cole, Albert H., assignor.)

Naamlooze Vennootschap Vereenigde Nederlandsche Rubberfabrieken. (See Wilhelmi, Dirk F., assignor.)

Nanfeldt Corporation. (See Bergstrom, William A., assignor.)

Nash, Charles J., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Draft rigging for railway cars. 1,861,505; June 7.

National Brake & Electric Company. (See Aikman, Burton S., assignor.)

National Carbon Company. (See Doreas, Merrill J., assignor.)

National Electric Products Corporation. (See Mall, Frank F., assignor.)

National Enameling and Stamping Company. (See Sladky, Joseph and A. C., assignors.)

National Lock Co. (See North, Edwin W., assignor.)

National Machine Products Company. (See Stoll, Albert, assignor.)

National Pavements, Incorporated. (See Black, James E., assignor.)

National Pigment & Chemical Company. (See Harth, Philip E., assignor.)

National Trust Company. (See Stevenson, John L., assignor.)

Nebel, Ernst O., Philadelphia, Pa. Knitting. 1,862,416; June 7.

Nebel, Ernest O., Hatboro, Pa. Knitting. 1,862,417; June 7.

Neebe, Lawrence L., Woodbury, N. J. Safety device for coupler pockets. 1,862,418; June 7.

Neff, Johannes, assignor to Firm "Universelle" Cigarettemaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Apparatus for removing articles from a pile. 1,862,386; June 7.

Nelson, Henry F., La Fayette, Ind. Toy gun. Des. 87,124; June 7.

Nelson, Ira I., Boston, Mass. Valve for hot water systems. 1,861,506; June 7.

Nelson, Robert W. (See Jones, J. F., and Nelson.)

Nerney, George E., assignor to Bay State Optical Company, Attleboro, Mass. Nose bridge for spectacles. Des. 87,125; June 7.

Nestle-LeMur Company, The. (See Metz, John, assignor.)

Neufang, Henry J., assignor to Boggs Plow Company, Inc., Atlanta, N. Y. Lever. 1,861,507; June 7.

Neville, Herbert, Cheam, and E. W. Cotter, London, assignors to J. Stone & Company Limited, Deptford, England. Sliding window. 1,862,236; June 7.

Newcomb-David Co. Inc. (See Ludwig, John E., assignor.)

New Departure Manufacturing Company, The. (See Stevens, Clarence C., assignor.)

Newman, Herman, Garwood, Idaho. Saw gauge. 1,861,508; June 7.

Newschaffer, Rudolph, Jackson Heights, N. Y. Timing mechanism for internal combustion engines. 1,861,545; June 7.

Newton, Edwin B., Akron, Ohio, assignor to American Anode, Inc., New York, N. Y. Purifying aqueous dispersions. 1,862,061; June 7.

Newton, Ralph L., Kansas City, Mo. Automatic pumping mechanism. 1,862,195; June 7.

Newton Steel Company, The. (See Fenton, Ray M., assignor.)

Nichol Manufacturing Company. (See Nichol, Orr T., assignor.)

Nichol, Orr T., assignor to Nichol Manufacturing Company, Omaha, Nebr. Wheel cleaner for tractors. 1,861,873; June 7.

Nicholson, Frank H. (See Allison, L. R., and Nicholson.)

Nicholson, Frank H., Edgewood, and H. G. Blosser, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvale, Pa. Contact device. 1,861,641; June 7.

Nicols, William L., Tuscumbia, Ala. Preformed step. 1,861,751; June 7.

Niemi, Matti, Seattle, Wash. Aeroplane launching device. 1,861,934; June 7.

Nineteen Hundred Corporation. (See Behan, Thomas W., assignor.)

Noblitt-Sparks Industries, Inc. (See Booth, Earl C., assignor.)

Noe, Harold C., East Orange, N. J., assignor to William R. Noe & Sons, Brooklyn, N. Y. Lamp shade. Des. 87,126; June 7.

Noe, William R., & Sons. (See Noe, Harold C., assignor.)

Non-Run Fabric and Machine Co. (See Graenz, Alfred, assignor.)

Nord, John G. (See Karlström, F. J. R., and Nord.)

Nordstrom, Gustaf E., and J. E. Millett, assignors to American Fibre Corporation, Gardner, Mass. Machine for making fiber reed. 1,862,387; June 7.

North, Edwin W., assignor to National Lock Co., Rockford, Ill. Lock. 1,861,579; June 7.

Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, Ewing Township, N. J. Heater for traveling stock. 1,862,120; June 7.

Norton, Raymond J., Washington, D. C., assignor to Bendix Aviation Corporation, South Bend, Ind. Hydrobrake. 1,862,419; June 7.

Norton, Samuel H., Meadville, Pa. Locking device for slide fasteners. 1,862,196; June 7.

Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Coincidental lock. 1,861,713; June 7.

Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Coincidental lock. 1,861,714; June 7.

Noxon, Paul A. (See Fluharty, W. G., and Noxon.)

Nye Tool & Machine Works. (See Lilleberg, Tideman M., assignor.)

O'Brien, Mary B., Chicago, Ill. Broiler. 1,862,420; June 7.

Ochiltree, Ned A., Peoria, Ill., assignor to Concrete Engineering Company, Omaha, Nebr. Tie wire. 1,861,450; June 7.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,861,664; June 7.

O'Donnell, Michael T., Duluth, Minn. Display case. 1,861,935; June 7.

Oelkers, Alfred H., assignor to American Steel Foundries, Chicago, Ill. Wheel. 1,862,157; June 7.

Oertel, Franz, Berlin-Charlottenberg, assignor to Westinghouse Electric & Manufacturing Company. Ring spinning machine. 1,862,030; June 7.

Ogden, William D. (See Hopkins, R. Z., and Ogden.)

Ohio Boxboard Company, The. (See Gannon, I. J., and Linn, assignors.)

Oishei, John R. assignor to Trico Products Corporation, Buffalo, N. Y. All-metal rear view mirror. 1,862,094; June 7.

Oishei, John R., assignor to Trico Products Corporation, Buffalo, N. Y. Mirror and making same. 1,862,095; June 7.

O'Keeffe, George W., Milton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and opening and closing circuits therefor. 1,862,158; June 7.

Oliver, Doctor F., deceased, Oakland; L. F. Oliver, executrix, Oakland, Calif. Vehicle body. 1,861,546; June 7.

Oliver, Lillie F., executrix. (See Oliver, Doctor F.)

Olsen, Gustav A. (See Albertson, Frans O.)

O'Malley, John F., New York, N. Y. Stabilizing device for aircraft. 1,862,421; June 7.

Omara, Edwin H. (See Readeker, W. C., and Omara.)

O'Neill, William, Frankford, Pa. Nonglare headlight lens. 1,861,580; June 7.

Ontario Manufacturing Company. (See Moon, Charles R., assignor.)

Ornberg, Ivan, assignor to Hupp Motor Car Corporation, Detroit, Mich. Fender and hood construction for motor vehicles. 1,862,388; June 7.

Orr, Thomas H., Okmulgee, Okla. Transmission gear. 1,861,480; June 7.

Oswald, Marcel, Nanterre, assignor to Compagnie Lorraine de Charbons pour l'Electricite, Paris, France. Arc lamp electrode. 1,862,422; June 7.

Othmer, Donald F. (See Clarke, H. T., and Othmer.)

Ott, John E., Chicago, Ill., and W. E. Close, Philadelphia, Pa., assignor to Acme Steel Company, Chicago, Ill. Paper roll and guard therefor. 1,861,874; June 7.

Ottinger, Nathan, New York, N. Y. Brief case, portfolio, or similiar container. 1,861,974; June 7.

Otto, Kurt W., Bad Pyrmont, Germany. Playing court. 1,862,423; June 7.

Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Roller runway for sheet glass. 1,861,665; June 7.

Owens Development Corporation. (See Owens, Freeman H., assignor.)

Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Sound reproducing apparatus. 1,862,062; June 7.

Oxweld Acetylene Company. (See Kehl, Robert J., assignor.)

Page, Ralph E., Binghamton, assignor to The Tabulating Machine Company, Endicott, N. Y. Paper feeding device for tabulating machines. 1,861,975; June 7.

Pagendarm, John F., Oakland, assignor to American Woodlite Corporation, San Francisco, Calif. Connecter for electric conductors. 1,862,197; June 7.

Paisley, Dean H., Cambridge, Nebr. Potato sacker. 1,862,424; June 7.

Paradise, Louis A., and E. F. Huddle, assignors to Deere & Company, Moline, Ill. Grain storage tank for threshers. 1,862,159; June 7.

Pardee, Frank, assignor to Anthracite Separator Company, Hazleton, Pa. Combined lowering and withdrawal chute. 1,861,976; June 7.

Pardee, Harvey S. (See Blackhall, J. R., and Pardee.)

Park, Allan J., Lakewood, Ohio. Connecter for batteries and similar devices. 1,861,451; June 7.

Park, Chong S., deceased, by Mong Y. Chung, Sacramento, Calif., administrator. Automobile signal casing. Des. 87,127; June 7.

Parker, Humphrey F. (See House, B. E., and Parker.)

Parker, Humphrey F., assignor to Bendix Brake Company, South Bend, Ind. Brake adjuster. 1,862,278; June 7.

Parker, Walter H., Rochester, Pa., assignor, by mesne assignments, to The Wayne Pump Company, Baltimore, Md. Liquid level indicating means. 1,861,715; June 7.

Parkhurst, Lester I., Little Rock, Iowa. Circuit maker and breaker for safe afarms. 1,861,547; June 7.

Parkin, John G., New York, N. Y. Electrical appliance. 1,862,096; June 7.

Parlato, Peter, New York, N. Y. Lamp torchère with luminous reflector. Des. 87,128; June 7.

Partlow Corporation, The. (See Partlow, Howard W., assignor.)

Partlow, Howard W., Utica, assignor to The Partlow Corporation, New Hartford, N. Y. Temperature control. 1,861,509; June 7.

Pasternack, Richard, Brooklyn, and W. R. Giles, Richmond Hills, assignor to Charles Pfizer & Company, Brooklyn, N. Y. Production of d-glucono-δ-lactone. 1,862,511; June 7.

Patchen, Robert H. (See Larson, H. W., and Patchen.)

Patent Button Company, The. (See Carley, L. R., and Abel, assignors.)

Patterson, Clarence L., assignor to The International Manufacturing Company, Cincinnati, Ohio. Lamp control device. 1,861,752; June 7.

Patterson, William L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Microscope. 1,862,031; June 7.

Paulson, Walter H., assignor to H. D. Lathrop, Chicago, Ill. Chain. 1,861,642; June 7.

Pax, Jacob G., New Weston, Ohio. Harvester. 1,862,101; June 7.

Payne, Marshall J., assignor to The Payne Valve Corporation, Staunton, Va. Tire valve. 1,861,936; June 7.

Payne Valve Corporation, The. (See Payne, Marshall J., assignor.)

Peabody Engineering Corporation. (See Kirtland, F. D., Broshek, Brierly, and Evans, assignors.)

Peck, Okey H., Richwood, W. Va. Tourist house. 1,861,548; June 7.

Peirce, John R., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y. Record analyzing and posting machine. 1,862,032; June 7.

Pelton Water Wheel Company, The. (See Foulds, Charles V., assignor.)

Pendleton, Frank R. (See Hird, John B., jr., assignor.)

Pepler, Thomas, assignor to B. G. Rohret, Iowa City, Iowa. Bed table. 1,862,237; June 7.

Percival, C. L., & Co. (See Percival, Worth H., assignor.)

Percival, Worth H., assignor to C. L. Percival & Co., Des Moines, Iowa. Refrigerator cooling structure. 1,861,875; June 7.

Perfection Stove Company. (See Chadwick, L. S., Resek, and Dahlstrom, assignors.)

Perkins, Ralph P. (See Britton, E. C., and Perkins.)

Perry, Franklin W., Lynnfield Center, Mass. Poultry feeder. 1,862,349; June 7.

Persons, Laurence M., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo. Fan and means for directing the air current therethrough. 1,861,608; June 7.

Peters, Frederick W., assignor to Almetal Universal Joint Company, Cleveland, Ohio. Flexible connection. 1,861,753; June 7.

Peters, Frederick W., assignor to The Almetal Universal Joint Company, Cleveland, Ohio. Connecting rotatable members. 1,861,814; June 7.

Peters, John F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Pipe-welding system. 1,862,316; June 7.

Petre, Alexander P., assignor to The American Hammered Piston Ring Company, Baltimore, Md. Piston ring. 1,861,716; June 7.

Pfeil, Victor A., Buffalo, N. Y. Musical inatrument. 1,861,717; June 7.

Pfizer, Charles, & Company. (See Pasternack, R., and Giles, assignors.)

Phenice, William V., assignor to Midwest-Fulton Machine Company, Dayton, Ohio. Beater roll. 1,862,495; June 7.

Philadelphia Lawn Mower Company Inc. (See Hessenbruch, Hermann M., assignor.)

Philips and Davis, Inc. (See Philips, Erwin B., assignor.)

Philips, Erwin B., assignor to Philips and Davis, Inc., Kenton, Ohio. Sluice gate. 1,862,389; June 7.

Philips, Harlow D., assignor to Eastman Kodak Company, Rochester, N. Y. Presetting dial for photographic printing machines. 1,861,937; June 7.

Phillips Petroleum Company. (See Hubbell, Alfred W., assignor.)

Picco, John, New York, N. Y. Aeroplane. 1,861,977; June 7.

Pilkington Brothers Limited. (See Waldron, Frederic B., assignor.)

Pirani, Marcello, Berlin-Wilmersdorf, Germany, assignor to General Electric Company. Electric discharge device. 1,861,643; June 7.

Pirani, Marcello, Berlin-Wilmersdorf; K. Becker, Berlin-Steglitz, and M. Reger, Berlin, Germany, assignors to General Electric Company. Gaseous electric discharge device. 1,861,581; June 7.

Pittsburgh Equitable Meter Company. (See Armstrong, James R., assignor.)

Pittsburgh Plate Glass Company. (See Fox, John H., assignor.)

Pittsburgh Plate Glass Company. (See Owen, William, assignor.)

Pittsburgh Plate Glass Company. (See Spinasse, Arthur E., assignor.)

Pleasant, Herman E. (See Terry, M. C., and Pleasant.)

Pooch, William B., Racine, Wis. Collapsible and portable lodge. 1,862,425; June 7.

Porter, H. K., Inc. (See Porter, Henry W., assignor.)

Porter, Henry W., Brookline, assignor to H. K. Porter, Inc., Everett, Mass. Cutting tool. 1,862,033; June 7.

Powell, Gomert, Michigan City, Ind., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation. Axle burnishing machine. 1,862,516; June 7.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Call distributing telephone system. 1,861,754; June 7.

Pratt, Henry W., Jersey City, N. J., assignor to William H. Lutton Company. Slat shade. 1,861,718; June 7.

Pratt & Whitney Company. (See Shaw, John C. and R. D., assignors.)

Prescott Company, The. (See Langill, R. E., and Grueter, assignors.)

Pressed Steel Car Company. (See Kantenwein, Oscar E., assignor.)

Prest-O-Lite Storage Battery Corporation. (See Benner, R. C., and Werking, assignors.)

Preston, Clarence S., San Diego, Calif. Tire valve insert. 1,862,160; June 7.

Prielipp, Walther, Dortmund, Germany. Sheet piling. 1,862,426; June 7.

Prince, Arthur C. (See Crawford, Carmi R., assignor.)

Pritchard, William S., Mount Vernon, assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Tape puller. 1,861,582; June 7.

Procter, Edward, London, England. Baker's oven and the like. 1,861,719; June 7.
Prosperity Company, The. (See Davis, Ernest, assignor.)
Prosthetic Products, Inc. (See Dresch, Israel J., assignor.)
Puenlug, Franz, Aspinwall, Pa. Apparatus for carbonizing coal. 1,861,583; June 7.
Puening, Franz, O'Hara Township, Allegheny County, Pa. Low temperature distillation apparatus. 1,861,876; June 7.
Puening, Franz, O'Hara Township, Allegheny County, Pa. Low temperature distillating apparatus and using the same. 1,862,034; June 7.
Pullman Car & Manufacturing Corporation. (See Mussey, William H., assignor.)
Pullman Car & Manufacturing Corporation. (See Powell, Gomert, assignor.)
Pure Calcium Products Company. (See Church, J. W., and Elledge, assignors.)
Purple, George E., La Grange, assignor to Flexible Steel Lacing Company, Chicago, Ill. Holder for belt fastening means. 1,862,121; June 7.
Pyro-Pack Products Co. (See Chiles, Howard M., assignor.)
Quick, Cecil G., Eltham, London, and R. W. Chiles, Forest Hills, London, England, assignors to R. Hoe & Co., Inc., New York, N. Y. Web threading device for rotary printing machines. 1,861,609; June 7.
Quill, Jeremiah J., San Francisco, Calif. Oil preheating device. 1,861,877; June 7.
Quinn, Gilbert F., Beachmont, Mass. Rubber sole. 1,861,879; June 7.
Quiroz, Francisco A., Brooklyn, N. Y. Separating apparatus. 1,861,878; June 7.
R. U. V. Company. (See Creighton, Harry M., assignor.)
Rabjohn, Lloyd E., Eagle Rock, Calif. Water filter. 1,861,481; June 7.
Radford, Douglas R., Los Angeles, Calif. Wear preventer. 1,861,815; June 7.
Radio Corporation of America. (See Bagno, Samuel M., assignor.)
Radio Corporation of America. (See Hull, Lewis M., assignor.)
Radio Corporation of America. (See Roberts, Walter van B., assignor.)
Radio Corporation of America. (See Snow, H. A., and Hull, assignors.)
Radio Patents Corporation. (See Asch, Erich, assignor.)
Ragatz, Edward G., Berkeley, assignor to Union Oil Company of California, Los Angeles, Calif. Distilling oil. 1,862,063; June 7.
Rainwater, Harold, Dayton, Wash. Land clearing and pulverizing machine. 1,862,035; June 7.
Rarig, Walter A., Oakland, Calif. Power device. 1,861,880; June 7.
Rasmussen, Chester A. (See Trout, William A., assignor.)
Rasmussen, Chester A., Long Beach, assignor of one-half to W. A. Trout, Los Angeles, Calif. Blowout preventer and well sealing means. 1,861,755; June 7.
Ratta, James A., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Vehicle chock. 1,861,549; June 7.
Ravenstein-Baum, Eugen, Gut Ravenshorst, and A. Domscheit, Junterbog, Germany. Cooling device for milk receiving containers of vacuum milking machines. 1,861,868; June 7.
Rawls Manufacturing Company. (See Rawls, Silas E., assignor.)
Rawls, Silas E., assignor to Rawls Manufacturing Company, Streator, Ill. Mowing machine. 1,861,810; June 7.
Ray, Eugene J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Coating apparatus. 1,861,666; June 7.
Rea, Wilton T., Flushing, N. Y., assignor to American Telephone and Telegraph Company. Motor-generator regulator system. 1,861,550; June 7.
Reach, A. J. Company. (See Till, Edwin W., assignor.)
Readeker, William C., and E. H. Omara, Chicago, Ill. One-way clutch mechanism for reeling apparatus. 1,861,584; June 7.
Reeves, Paul B., assignor to Reeves Pulley Company, Columbus, Ind. Driving belt. 1,862,198; June 7.
Reeves Pulley Company. (See Reeves, Paul B., assignor.)
Reger, Martin. (See Pirani, M., Becker, and Reger.)
Reichelt, Lester O. (See Bouget, Y. A., and Reichelt.)
Remillard, Albert, Waterville, Me. Pie wrapping machine. 1,861,551; June 7.
Remington Arms Company. (See Burns, James E., assignor.)
Renault, Louis. (See Salves, Léon, assignor.)
Rennick, Warner H. (See Hickok, R. D., and Rennick.)
Rensshler, John D., Findley, Ohio. Automatic locking and fastening device for vaults. 1,862,064; June 7.
Resek, Marc. (See Chadwick, L. S., Resek, and Dahlstrom.)
Respess, William R., St. George, assignor to J. S. McMahon and J. H. Ernst, jr., Brooklyn, N. Y. Printing method and apparatus. 1,861,610; June 7.
Respess, William R., Staten Island, assignor to J. S. McMahon and J. H. Ernst, jr., Brooklyn, N. Y. Stencil printing attachment for vertical bed printing presses. 1,861,611; June 7.
Reynolds, Herman M., Miami, Fla. Weather strip attachment for doors. 1,861,612; June 7.
Reynolds Metals Company. (See Drexler, Frederick H., assignor.)
Reynolds, Ralph K., assignor to Mallory Hat Company, Danbury, Conn. Fitting sweat-bands for hats and apparatus therefor. 1,862,161; June 7.
Reyrolle, A., & Company Limited. (See Christie, John, assignor.)
Richardson, Myron H., assignor to Advance Machine Company, Chicago, Ill. Coin controlled mechanism. 1,862,372; June 7.
Riccia, Angelo D., Brussels, Belgium. Pressure splitting device. 1,862,427; June 7.
Riddle, Harry J. (See Roos, A. H., and Riddle.)
Riemenschneider, Ernest, Detroit, assignor to Ford Motor Company, Dearborn, Mich. Connecting plug. 1,862,097; June 7.
Rinck-Mellwaine, Inc. (See McGuckin, John J., assignor.)
Ringwald, Clarence, South Bend, Ind., assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill. 1,862,317; June 7.
Riotte, Jakob, Nowawes, Germany. Electrical resistance. 1,862,428; June 7.
Ritter Dental Manufacturing Company. (See Moore, Clarence W., assignor.)
Rivkin, Menahem, Philadelphia, Pa. Locomotive drawbar. 1,862,429; June 7.
Roadless Traction, Limited. (See Johnson, Philip H., assignor.)
Robb, Carl O., Colorado Springs, Colo. Painter's striping brush. 1,862,430; June 7.
Robert Boby Limited. (See Soenens, Maurice, assignor.)
Roberts, Eugene, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah. Automatic control for centrifugal machines. 1,861,978; June 7.
Roberts, Eugene A., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Tire. Des. 87,129; June 7.
Roberts, George M., Detroit, Mich. Combined watch and vanity case. 1,861,644; June 7.
Roberts, Walter van B., Princeton, N. J., assignor to Radio Corporation of America. Neutralizing circuit. 1,861,585; June 7.
Robertson, H. H. Company. (See Coffman, Alden W., assignor.)
Rochó, Jean A., Dayton, Ohio. Adjustable seat. 1,861,938; June 7.
Rockenfield, William A., assignor to High Speed Hammer Co., Inc., Rochester, N. Y. Helve operated hammer. 1,862,431; June 7.
Rockwood George I., and H. G. Carlson, assignors to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Air exhauster. 1,861,817; June 7.
Rockwood Sprinkler Company of Massachusetts. (See Benson, Emil M., assignor.)
Rockwood Sprinkler Company of Massachusetts. (See Rockwood, G. I., and Carlson, assignors.)
Roe, George R., Pomona, and W. M. Mertz, Ontario, Calif. Fertilizer applicator. 1,862,238; June 7.
Roe, George R., Pomona, and W. M. Mertz, Ontario, Calif. Fertilizer applicator. 1,862,239; June 7.
Roessler & Hassiacher Chemical Company, The. (See Carlisle, P. J., and Harris, assignors.)
Röhl, Hans, assignor to Schwarzwaldewerke Lanz, G. m. b. H., Mannheim, Germany. Refrigerating apparatus. 1,861,979; June 7.
Rohret, Bennett G. (See Pepler, Thomas, assignor.)
Romain, Burchard P., assignor to Weston Electrical Instrument Corporation, Newark, N. J. Electrical measuring instrument. 1,861,720; June 7.
Roos, Axel H., Chico, and H. J. Riddle, San Leandro, assignor to A. Freed, trustee, San Francisco, Calif. Universal sander and polisher. 1,861,940; June 7.
Root, A. I., Company, The. (See Root, Huber H., assignor.)
Root, Huber H., assignor to The A. I. Root Company, Medina, Ohio. Comb uncapping apparatus. 1,861,939; June 7.
Rose, Alfred G., Lincoln, assignor to Rose Brothers (Gainsborough) Limited, Gainsborough, England. Wrapping machine or the like. 1,861,510; June 7.
Rose, Alonzo N., Yonkers, N. Y. Hinge. 1,862,432; June 7.
Rose Brothers (Gainsborough) Limited. (See Rose, Alfred G., assignor.)
Rosenfeld, Joseph, New York, N. Y. Doll. Des. 87,130; June 7.
Ross, Charles G., assignor of one-fourth to J. A. Earhuff, and one-fourth to V. L. Konigsmark, Los Angeles, Calif. Safety brake. 1,861,881; June 7.
Ross, Oscar A., New York, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y. Motion picture reel. 1,861,882; June 7.
Ross, William L., Jersey City, N. J. Steel framework bracket. 1,862,433; June 7.
Rossman, Edwin F., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,861,818; June 7.
Rotor Air Tool Company, The. (See King, Robert H., assignor.)
Rowe, Irving R., assignor to The Atwood Machine Company, Stonington, Conn. Driving mechanism for spinning and twisting machines. 1,862,162; June 7.
Rowe, Walter T., East Orange, assignor to Electro-Matic Mfg. Co., Inc., Newark, N. J. Electric water heater. 1,862,065; June 7.

Ruberoid Co., The. (See Abraham, Herbert, assignor.)
Ruby, George H. A., Linden, N. J. Plaster board machine. 1,862,318; June 7.
Ruder, William E., Schenectady, N. Y., assignor to General Electric Company. Magnetic material. 1,862,357; June 7.
Ruder, William E., Schenectady, N. Y., assignor to General Electric Company. Magnetic alloys and making same. 1,862,365; June 7.
Rudert, Dale E., Saxonburg, Pa. Storage battery construction. 1,862,319; June 7.
Ruef, August, Freiburg, Germany. Press-button lock. 1,862,320; June 7.
Rundell, Raymond R., Waterbury, Conn., assignor to H. L. Baker, Miami Beach, Fla. Salt shaker. 1,861,980; June 7.
Rundqvist, Thore R. E., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,852,496; June 7.
Rundqvist, Thore R. E., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,862,497; June 7.
Rusby, John M., and W. I. Battin, assignors to The U. G. I. Contracting Company, Philadelphia, Pa. Producing coal gas. 1,861,452; June 7.
Russell, Leslie A., assignor to Koehring Company, Milwaukee, Wis. Control device for shovel cranes. 1,861,511; June 7.
Russell, Rufus A., jr., Daytona Beach, Fla. Automobile headlight. 1,861,883; June 7.
Russell, Samuel G., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,861,819; June 7.
Russell, Zachary E., assignor to C. M. Warren, guardian of estate of C. W. Warren, doing business as Warren Shade Co., Sauk Rapids, Minn. Cord holding mechanism for shades. 1,862,163; June 7.
Ruwitch, Julius, Norway, Mich. Display equipment. 1,861,820; June 7.
Saco-Lowell Shops. (See Shaw, William, assignor.)
Sadenwater, Charles W., assignor to Saginaw Manufacturing Co., Saginaw, Mich. Foldable brace for ironing tables and the like. 1,861,613; June 7.
Safety Mining Company. (See Kneeland, Frank H., assignor.)
Sage, Herbert R., Los Angeles, Calif. Hot-cap. 1,861,981; June 7.
Saginaw Manufacturing Co. (See Sadenwater, Charles W., assignor.)
Salves, Léon, assignor to L. Renault, Billancourt, France. Change speed device. 1,861,884; June 7.
Sandler, Louis, assignor to Johnson Bronze Company, New Castle, Pa. Bearing. 1,862,279; June 7.
Sanford, Roy S., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Aeroplane. 1,862,280; June 7.
Sargent & Company. (See Weller, John H., assignor.)
Sargisson, Robert L., Berwyn, assignor to Associated Electric Laboratories, Inc., Chicago, Ill. Wall telephone. Des. 87,131; June 7.
Sashoff, Stephen P., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Gaseous discharge device. 1,861,453; June 7.
Sass, Friedrich, Charlottenburg, Germany, assignor to General Electric Company. Internal combustion engine. 1,862,321; June 7.
Savery, Benjamin F., Ann Arbor, Mich. Jar and closure therefor. 1,861,552; June 7.
Schaefer, Frederic, Pittsburgh, Pa. Manufacturing brake hangers. 1,862,281; June 7.
Schaelchlin, Walter, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Ship propulsion system. 1,861,454; June 7.
Schaffner, Frederick W., Brooklyn, N. Y. Carburetor. 1,862,434; June 7.
Schane, Edward H., Lakewood, Ohio. Reel. 1,862,199; June 7.
Schaum, Fletcher, Philadelphia, Pa. Suspension for automobiles. 1,861,821; June 7.
Schering-Kahlbaum A. G. (See Dohrn, M., and Diedrich, assignors.)
Schick, Alva H., and R. P. Kraatz, Omaha, Nebr. Clock case. Des. 87,132; June 7.
Schiller, Joseph F., Philadelphia, Pa. Apparatus for agitating liquids. 1,861,982; June 7.
Schilpp, Charles P., Cleveland Heights, assignor to The American Fork and Hoe Company, Cleveland, Ohio. Artificial bait. 1,862,036; June 7.
Schlack, Paul. (See Friederich, A., and Schlack.)
Schlegel, Charles P., assignor to The Schlegel Manufacturing Company, Rochester, N. Y. Upholstery molding. 1,862,517; June 7.
Schlegel Manufacturing Company, The. (See Schlegel, Charles P., assignor.)
Schleicher, Edward E., Providence, R. I. Necklace pendant or other jewelry for personal use. Des. 87,133; June 7.
Schlenker, Ernst, Berlin, Germany. Separation of liquid and solid fatty acids. 1,862,037; June 7.
Schlüns, Carl, Berlin-Steglitz, assignor to Mercedes Büromaschinen-Werke Aktiengesellschaft, Zella-Mehlis, Thuringia, Germany. Calculating typewriting machine. 1,862,240; June 7.
Schmid, Adolf, Vienna, Austria. Device for ascertaining the number of days between any two given dates. 1,862,435; June 7.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser scoop. 1,862,282; June 7.
Schmiedeknecht, Victor E., Louisville, Ky. Continuous mixing machine. 1,862,436; June 7.
Schmiedel, Johannes, assignor to the Firm "Universelle" Cigarettenmaschinen-fabrik J. C. Müller & Co., Dresden, Germany. Forming boxes or box parts with curved bottoms. 1,862,390; June 7.
Schmitt, George P., New York, N. Y. Fortune-telling cord. Des. 87,134; June 7.
Schnitzspahn, Karl, Offenbach-on-the-Main, Germany, assignor to General Aniline Works Inc., New York, N. Y. Solid preparations of aryldiazonium fluoborates yielding concentrated diazo solutions and making same. 1,862,241; June 7.
Schnull, Gustav A., et al. (See Davis, Dean W., assignor.)
Schoenfeld, Gertrude, Astoria, N. Y. Bottle. Des. 87,135; June 7.
Schoetzow, Victor P., Marcellus, Mich. Valve retainer. 1,862,283; June 7.
Schrader, William L., Chicago, Ill. Plaster and package therefor. 1,862,122; June 7.
Schrafft, W. F., & Sons Corporation. (See Steely, Dale G., assignor.)
Schwartz, Henry, assignor to Barrel Fitting and Seal Corporation of America, Chicago, Ill. Bushing structure. 1,861,756; June 7.
Schwartz, Meyer, Springfield, Mass. Seat cover. 1,861,455; June 7.
Schwarzwaldwerke Lanz, G. m. b. H. (See Röbl, Hans, assignor.)
Schweitzer & Conrad, Inc. (See Ringwald, Clarence, assignor.)
Schweitzer, Frank J., assignor to W. D. Shaffer, Brea, Calif. Casing control gate. 1,861,614; June 7.
Schwien, Fritz, Berlin, Germany. Electric switch. 1,862,242; June 7.
Scott, Henry Murray, Sweetwater, Tenn. Cheese treating method and apparatus. 1,861,721; June 7.
Seaholm, John P., assignor to Minneapolis-Moline Power Implement Company, Moline, Ill. Disk cultivator or plow. 1,861,667; June 7.
Searle, Harold E., Jersey City, N. J., assignor, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y. Oil well strainer. 1,861,722; June 7.
Seaverson, Oswald I. (See Williamson, K. T., and Seaverson.)
Seeleke, Heinrich, Bremen, Germany. Braking apparatus for trailer vehicles. 1,861,723; June 7.
Seeligson, Walter M., San Antonio, Tex. Apparatus and system for ginning cotton. 1,861,757; June 7.
Sengebusch, Hans, Villa Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Recording device. 1,862,200; June 7.
Sentry Safety Control Corporation. (See Allen, T. T., and Adams, assignors.)
Session, Oscar, Toppenish, Wash. Animal trap. 1,862,038; June 7.
Shaffer, William D. (See Schweitzer, Frank J., assignor.)
Shakeproof Lock Washer Company. (See Trotter, George C., assignor.)
Shakespeare Company. (See Russell, Samuel G., assignor.)
Shanck, Roy B., Flushing, N. Y., assignor to American Telephone and Telegraph Company. Alarm circuit. 1,861,553; June 7.
Sharples Separator Company, The. (See Wendt, Herman D., assignor.)
Shaw, John C. and R. D., Brooklyn, N. Y., assignors to Pratt & Whitney Company, Hartford, Conn. Formcutter roll. 1,861,456; June 7.
Shaw, Robert D. (See Shaw, John C. and R. D.)
Shaw, William, Needham, assignor to Saco-Lowell Shops, Newton, Mass. Cotton feeding mechanism. 1,861,512; June 7.
Sheer, H. M., Company. (See Sheer, Henry M., assignor.)
Sheer, Henry M., deceased; G. Irwin, administrator, assignor to H. M. Sheer Company, Quincy, Ill. Valve. 1,862,039; June 7.
Sheldrick, Laurence S., assignor to Ford Motor Company, Dearborn, Mich. Transmission. 1,862,098; June 7.
Sheldrick, Laurence S., assignor to Ford Motor Company, Dearborn, Mich. Truck extension coupling shaft. 1,862,099; June 7.
Shell Development Company. (See Moser, F. R., and Greutert, assignors.)
Sheperdson, John W., and F. P. Dahlstrom, assignors to Morgan Construction Company, Worcester, Mass. Controlling the shearing of metal bars while in motion. 1,861,554; June 7.
Sheperdson, John W., and F. P. Dahlstrom, assignors to Morgan Construction Company, Worcester, Mass. Controlling the shearing of metal bars while in motion. 1,861,555; June 7.
Sheppard, Henry B., Derby, England. Pumping lubricants. 1,862,164; June 7.
Sherman, Harry E., Alton, assignor to The Equitable Powder Manufacturing Company, East Alton, Ill. Railway torpedo. 1,861,724; June 7.

Sherman, Oscar L., Medford, and A. Bourgeois, Swampscott, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Rounding and channeling machine. 1,861,822; June 7.

Shipley, Manly H., Rockford, Ill. Steering wheel handle. 1,861,586; June 7.

Shippy, Leo C., assignor to Delco-Remy Corporation, Anderson, Ind. Apparatus for dividing metal. 1,861,758; June 7.

Shivers, Paul F., Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Snap action valve. 1,862,373; June 7.

Shoe Form Co. (See De Witt, William J., assignor.)

Shoemaker, Bernard M., assignor to Wm. Demuth & Co., New York, N. Y. Tobacco pipe. 1,861,457; June 7.

Short, Frank, Newark, N. J. Mooring equipment. 1,861,983; June 7.

Short, Ira, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company. Gear casing. 1,861,941; June 7.

Short, Ira, Prospect Park, Pa., assignor to Westinghouse Electric & Manufacturing Company. Gear casing. 1,861,942; June 7.

Short, Ira, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reduction gear casing. 1,862,512; June 7.

Shuey, Paul F., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Remote control system. 1,862,123; June 7.

Siebenlist, Anthony G., assignor, by mesne assignments, to Milcor Steel Company, Milwaukee, Wis. Storm sash. 1,862,165; June 7.

Sifton, Clifford, Toronto, Ontario, Canada. Transmission mechanism. 1,861,482; June 7.

"Silesia" Verein Chemischer-Fabriken. (See Kallner, Gerhard, assignor.)

Signorini, Luigi, Rome, Italy. Golf ball cleaning device. 1,862,437; June 7.

Silno, Salvador E., Pittsburg, Calif. Marking gauge. 1,862,201; June 7.

Simmons, Oliver G., Lakewood, Ohio. Cutting the teeth of gears. 1,862,202; June 7.

Simonson, Floyd L., Pittsburgh, Pa. Footwear attachment. 1,862,438; June 7.

Simpson, Robert D., assignor of one-half to S. E. Ludwig, Columbus, Ohio. Container and closure device therefor. 1,861,483; June 7.

Simrall, William F. (See Edmunds, Marshall C., assignor.)

Sims, Frank L., assignor of one-fourth to L. Haven, Seattle, Wash. Valve for internal combustion engines. 1,861,885; June 7.

Skelton, Owen R., assignor to Chrysler Corporation, Detroit, Mich. Brake shoe. 1,862,124; June 7.

Skillin, James H., Dalhart, Tex. Wall and forming same. 1,862,066; June 7.

Skinner Motors, Inc. (See Kasten, Walter, assignor.)

Sladky, Joseph, and A. C. Sladky, assignors to National Enameling & Stamping Co., Inc., Milwaukee, Wis. Temperature actuated automatic control valve. 1,862,100; June 7.

Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,861,984; June 7.

Slough, Frank M., Elyria, Ohio, assignor to The Anderson Company. Indicating system and apparatus. 1,861,886; June 7.

Small, John O., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Apparatus for handling strip material. 1,862,040; June 7.

Smith, Drum & Company. (See Jaxheimer, William H., assignor.)

Smith Engineering Works. (See Munro, Alexander L., assignor.)

Smith, Ernest J., London, England, assignor to The Goss Printing Press Company, Chicago, Ill. Printing press and wet renewing mechanism therefor. 1,861,823; June 7.

Smith, Ernest J., London, England, assignor to The Goss Printing Press Company, Chicago, Ill. Printing press. 1,861,824; June 7.

Smith, Ernest J., London, England, assignor to The Goss Printing Press Company. Printing press. 1,861,825; June 7.

Smith, Hiram T. (See Gilstrap, C. L., and Smith.)

Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Coupon folder. 1,861,459; June 7.

Smith, Temple C., and W. T. Livermore, Westfield, N. J., assignors to American Telephone and Telegraph Company. Cable reel trailer. 1,861,556; June 7.

Smith, Wilfred A., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Weather-strip and making the same. 1,861,985; June 7.

Smulski, Theodore J., Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind. Mechanical movement. 1,862,284; June 7.

Snow, Fred K., Lynnfield, Mass. Remote controlled curtain switch. 1,862,041; June 7.

Snow, Harold A., and L. M. Hull, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Audion amplifier circuit. 1,861,587; June 7.

Snyder, William T., Sodus, N. Y. Adjustable seed planter and fertilizer. 1,862,067; June 7.

Sobotka, Harry, New York, N. Y. Dextro-5-phenyl-5'-ethyl hydantoin. 1,861,458; June 7.

Society of Chemical Industry in Basle. (See Straub, F., and Anderau, assignors.)

Soderholm, Joel. (See Hanson, E. C., and Soderholm.)

Soenens, Maurice, Courtrai, Belgium, assignor to Robert Boby Limited, Bury St. Edmunds, England. Machine for scutching, decorticating and softening fibrous materials such as flax, hemp, jute, and ramie. 1,861,986; June 7.

Soley, William G., La Salle, assignor to The Carborundum Company, Niagara Falls, N. Y. Saponaceous emulsion and product containing the same. 1,862,322; June 7.

Solvay Process Company, The. (See Terziev, George N., assignor.)

Soper, George A., jr., Albany, N. Y. Refractory. 1,861,759; June 7.

Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,862,204; June 7.

Sorensen, Andrew J., Pittsburgh, and P. H. Dowling, assignors to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,862,203; June 7.

Spalding, A. G., & Bros. (See Glahe, Fred, assignor.)

Spang, Chalfant & Company. (See Burnish, Howard J., assignor.)

Speidel, Albert E. R. (See Johnson, Sylvester A., assignor.)

Sperry Gyroscope Company. (See Chafee, Earl W., assignor.)

Sperry Gyroscope Company. (See House, Frank R., assignor.)

Spigelmire, Charles E., Sparrows Point, and R. M. Walters, Dundalk, Md., assignors to Bethlehem Steel Company. Removing defects from metal bodies. 1,861,760; June 7.

Spinasse, Arthur E., Mount Vernon, Ohio, assignor to Pittsburgh Plate Glass Company. Method of and apparatus for drawing glass. 1,861,761; June 7.

Sproul, Donald F., Chicago, Ill., assignor to Cardwell Westinghouse Company. Draft gear. 1,861,460; June 7.

Stamets, William K. (See Hibbard, Robert L., assignor.)

Stansell, Marion L. (See Brown, T. B., and Stansell.)

Stassart, Joseph D., Berkeley, assignor to V. L. Brady and M. E. Verge, Oakland, Calif. Automatic latch. 1,861,887; June 7.

Steelstamp Corporation. (See Janisch, Maximillian P., assignor.)

Steely, Dale G., Arlington, assignor to W. F. Schrafft & Sons Corporation, North Boston, Mass. Continuous chocolate making process. 1,862,166; June 7.

Stein, Carl J., New York, N. Y. Dental appliance. 1,861,645; June 7.

Stephens, William W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Apparatus for forming weftless cord fabric. 1,862,498; June 7.

Sterolene Company, The. (See Howard, Willis G., assignor.)

Stevens, Clarence C., assignor to The New Departure Manufacturing Company, Bristol, Conn. Chuck loading mechanism. 1,862,042; June 7.

Stevens, George H., Newark, N. J. Vulcanizing rubber. 1,861,987; June 7.

Stevens, Herbert A., London, England. Spring for doors, gates, and the like. 1,861,888; June 7.

Stevenson, John L., Toronto, Ontario, Canada, assignor to National Trust Company, Limited, Toronto, Canada. Concealed heater. 1,861,484; June 7.

Stimpson, Robert H. (See Van der Pyl, E., and Stimpson.)

Stiner, Herrn Dr., & Lignatwerke, A. G. Grandson. (See Stiner, Otto, assignor.)

Stiner, Otto, assignor to Herrn Dr. Stiner & Lignatwerke A. G., Grandson, Bern, Switzerland. Silicifying fibrous materials. 1,862,167; June 7.

Stokes, Charles L., Los Angeles, Calif., assignor to C. B. Camp, trustee, Glencoe, Ill. Automatic fuel regulator. 1,861,725; June 7.

Stokes, John S., Huntingdon Valley, Pa. Composite box. 1,862,205; June 7.

Stoll, Albert, assignor to National Machine Products Company, Detroit, Mich. Method and apparatus for coupling nuts and washers. 1,861,889; June 7.

Stone, Irving L., Chicago, Ill. Centering chuck for web rolls. 1,861,646; June 7.

Stone, J., & Company, Limited. (See Neville, H., and Cotter, assignors.)

Stout, William B., Detroit, assignor to Ford Motor Co., Highland Park, Mich. Airplane. 1,862,102; June 7.

Stramitz, Roman, Detroit, Mich., assignor, by mesne assignments, to Chrysler Corporation. Welding apparatus. 1,862,125; June 7.

Stratford, Herbert R., assignor to The Stratmore Company, Cleveland, Ohio. Surfacing apparatus. 1,862,103; June 7.

Stratmore Company, The. (See Stratford, Herbert R., assignor.)

Straub, Francis J., New Kensington, Pa. Manufacture of concrete building blocks. 1,862,323; June 7.

Straub, Fritz, and W. Anderau, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Metalliferous dyestuffs and making same. 1,862,439; June 7.

Strindlund, John, Tofte I Hurum, Norway, assignor to Chemipulp Process, Inc. Apparatus for recovering acid and heat units thereof from digesters and for preparing digester liquor. 1,862,243; June 7.

Strnad, Louis, Chicago, Ill. Junction box and cover. 1,862,324; June 7.

Stromberg-Carlson Telephone Manufacturing Company, The. (See Powell, Winfred T., assignor.)

Strosnider, Luther, Onaga, Kans., assignor of one-fourth to J. M. Everts, Centralia, Kans.; one-fourth to Edward Miller, and one-fourth to H. A. Grutzmacher, Onaga, Kans. Earth boring tool. 1,862,068; June 7.

Struthers Wells-Titusville Corporation. (See How, Harlan W., assignor.)

Stuart, Kenneth E., Niagara Falls, assignor to Hooker Electrochemical Company, New York, N. Y. Electrolytic cathode-diaphragm structure. 1,862,244; June 7.

Stuart Kenneth E., Niagara Falls, assignor to Hooker Electrochemical Company, New York, N. Y. Electrolytic cell. 1,862,245; June 7.

Subkow, Philip, assignor to Union Oil Company of California, Los Angeles, Calif. Rectification column. 1,862,069; June 7.

Sullivan Machinery Company. (See Graham, James G., assignor.)

Sullivan Machinery Company. (See Rundqvist, Thore R. E., assignor.)

Summerson, Thomas, Parsons, Pa. Swimming belt. 1,862,070; June 7.

Super-Marine Systems, Inc. (See Harper, William, jr., assignor.)

Superior Safety Furnace Pipe Company. (See Walters, John L., assignor.)

Svenska Aktiebolaget Gasaccumulator. (See Dalén, Gustaf, assignor.)

Swanson, Arthur T., Los Angeles, Calif. "Strike" and "ball" indicator. 1,861,647; June 7.

Swanson, Edwin W., Hopkins, and F. N. Swanstrom, assignors to Electric Machinery Manufacturing Company, Minneapolis, Minn. Control apparatus for electric machines. 1,861,588; June 7.

Swanstrom, Arthur R., assignor to Diamond Calk and Horseshoe Co., Duluth, Minn. Horseshoe calk. 1,862,499; June 7.

Swanstrom, Frank N. (See Swanson, E. W., and Swanstrom.)

Sweasey, Cora F., Denver, Colo. Egg container. 1,861,557; June 7.

Swindell, William, and Brothers. (See Brooke, F. W., and Cosgrove, assignors.)

Tabulating Machine Company. (See Carroll, Fred M., assignor.)

Tabulating Machine Company, The. (See Daly, George F., assignor.)

Tabulating Machine Company. (See Page, Ralph E., assignor.)

Tabulating Machine Company, The. (See Peirce, John R., assignor.)

Tacchi, Percy G., Bracklesham, near Chichester, assignor of one-half to E. Mayer-Neville, London, England. Rotary engine. 1,862,440; June 7.

Tauchmann, Georg, Berlin-Schoneberg, assignor to Telephon Apparat Fabrik E. Zwietusch and Company, Charlottenburg, Berlin, Germany. Ring winding machine. 1,862,206; June 7.

Taylor, Lorenzo D., Niagara Falls, assignor to The Mathieson Alkali Works, New York, N. Y. Bleaching of oils. 1,861,513; June 7.

Taylor, Lorenzo D., Lewiston, assignor to The Mathieson Alkali Works, Inc., New York, N. Y. Chemical manufacture. 1,861,514; June 7.

Taylor, Roy J., Ashtabula, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio. Metal clip for plaster board or lath. 1,862,391; June 7.

Tebbutt, Albert E., Northampton, England. Combined rubber sole and heel. Des. 87,136; June 7.

Telephon-Apparat Fabrik E. Zwietusch and Company. (See Tauchmann, Georg, assignor.)

Tenney, Frank E., Bridgewater, Mass. Pillow. 1,861,668; June 7.

Terhaar, Aloysius S., San Diego, Calif. Fresno. 1,861,762; June 7.

Ternau, Herman H. (See Ternau, John W., assignor.)

Ternau, John W., Gloucester City, N. J., assignor to H. H. Ternau, New London, Conn. Furnace attachment. 1,862,126; June 7.

Terry, Matson C., Mansfield, Ohio, and H. E. Pleasant, Rockford, Ill., assignors to Westinghouse Electric and Manufacturing Company. Rubber door gasket. 1,862,285; June 7.

Terziev, George N., Solvay, assignor to The Solvay Process Company, Syracuse, N. Y. Treating brine. 1,861,763; June 7.

Tevis, Robert, Hoboken, N. J. Printing telegraph receiver. 1,861,988; June 7.

Texas Company, The. (See Dearborn, R. J., and Gray, assignors.)

Textile Machine Works. (See Ischinger, Alfred E., assignor.)

Theis, Henry J., assignor to Dayton Scale Company, Dayton, Ohio. Pointer for scales. 1,861,943; June 7.

Thometz, Mathias A., assignor to The Kohlhaas Company, Chicago, Ill. Document assorting and temporary filing device. 1,861,764; June 7.

Thompson, Lyndon G., Oakland, assignor, by mesne assignments, to American Bitumuls Company, San Francisco, Calif. Aqueous asphalt emulsion and making the same. 1,861,826; June 7.

Thomson-Gibb Electric Welding Company. (See Brueckner, Julius R., assignor.)

Thomson-Gibb Electric Welding Company. (See Brueckner, J. R., and Gibb, assignors.)

Ticehurst, George L., Bakersfield, Calif. Fire brick. 1,862,246; June 7.

Tilden, Bert O., assignor to B. O. T. Manufacturing Company, Trenton, N. J. Water closet flush tank. Des. 87,137; June 7.

Till, Edwin W., assignor to A. J. Reach Company, Philadelphia, Pa. Shoulder pad. 1,862,441; June 7.

Till, Edwin W., assignor to A. J. Reach Company, Philadelphia, Pa. Shoulder pad. 1,862,442; June 7.

Timken Roller Bearing Company, The. (See Maag, Oscar L., assignor.)

Tipton, Guy S., assignor to Knightstown Funeral Car Company, Knightstown, Ind. Vehcile body. 1,862,286; June 7.

Titus, Robert N., assignor to Eastman Kodak Company, Rochester, N. Y. Visibly marked motion picture film and making same. 1,861,827; June 7.

Tompkins, Claude A., Jacksonville, Fla. Turpentine gutter and securing means. 1,862,374; June 7.

Toulouse, Julian H. (See Buchanan, J. H., and Toulouse.)

Towson, Morris S., Shaker Heights, assignor to Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,862,287; June 7.

Trans-Lux Daylight Picture Screen Corporation. (See Pritchard, William S., assignor.)

Traube, Abraham, Brooklyn, N. Y. Structure for storage or accommodation of vehicles. 1,861,461; June 7.

Trebitsch, Bruno, Vienna, Austria. Gas indicating apparatus. 1,861,989; June 7.

Tremolada, Guglielmo, Hollywood, assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Swivel having cooling means. 1,861,485; June 7.

Tretbar, Edward F., jr., Camden, N. J. Block for printing. 1,861,765; June 7.

Tricau, Gabriel, Vanves, France. Parachute. 1,862,247; June 7.

Trico Products Corporation. (See Horton, Erwin C., assignor.)

Trico Products Corporation. (See Hueber, Henry, assignor.)

Trico Products Corporation. (See Oishei, John R., assignor.)

Trimmer, Robert C. (See Wiechert, Frank T., assignor.)

Troche, Ernest R., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for handling strand material. 1,861,990; June 7.

Troche, Ernest R. (See Cherry, G. L., and Troche.)

Tromanhauser, Jesse H., Toronto, Ontario, Canada. Overrunning clutch. 1,861,486; June 7.

Trostel, Willi H., Philadelphia, Pa. Interchangeable letter sign. 1,862,375; June 7.

Trotter, George C., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Tapping fastener. 1,862,486; June 7.

Trouant, Virgil E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio station. 1,861,462; June 7.

Trout, William A. (See Rasmussen, Chester A., assignor.)

Trout, William A., assignor of one-half to C. A. Rasmussen, Long Beach, Calif. Blow-out preventer. 1,861,726; June 7.

Tschunkur, Eduard, and A. Klamroth, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Separation of mixtures of primary aromatic amines. 1,861,890; June 7.

Tsutsumi, Yozo, Ebara Gun, Tokyo Fu, Japan. Clinical thermometer. 1,861,944; June 7.

Tuerck-MacKenzie Company. (See Tuerck, Oscar, assignor.)

Tuerck, Oscar, assignor to Tuerck-MacKenzie Company, Portland, Oreg. Apparatus for making concrete pipe. 1,861,727; June 7.

Tuggle, Edgar C., Sharon, Pa. Pipe. 1,862,443; June 7.

Tuzzo, Nicholas, assignor of one-fourth to S. S. Wallens and one-fourth to J. Elkes, Buffalo, N. Y. Airplane propeller. 1,862,207; June 7.

U. G. I. Contracting Company, The. (See Rusby, J. M., and Battin, assignors.)

Underwood Elliott Fisher Company. (See Helmond, William E., assignor.)

Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)

Ungar, Gustave A., Pelham Manor, N. Y. Manufacture of corrugated paper box blanks. 1,861,991; June 7.

Union Metal Products Company. (See Gilpin, Garth G., assignor.)

Union Oil Company of California. (See Ragatz, Edward G., assignor.)

Union Oil Company of California. (See Subkow, Philip, assignor.)

Union Special Maschinenfabrik, G. m. b. H. (See Lutz, Friedrich, assignor.)

Union Switch & Signal Company, The. (See Allison, L. R., and Nicholson, assignors.)
Union Switch & Signal Company, The. (See Bone, Herbert L., assignor.)
Union Switch & Signal Company, The. (See Dowling, Philip H., assignor.)
Union Switch & Signal Company, The. See Grondahl, Lars O., assignor.)
Union Switch & Signal Company, The. (See Nicholson, F. H., and Blosser, assignors.)
Union Switch & Signal Company, The. (See Sorensen, Andrew J., assignor.)
Union Switch & Signal Company, The. (See Williamson, K. T., and Seaverson, assignors.)
Union Trust Company of Pgh, The, et al., executors. (See Culbertson, Albert L.)
United Engineers & Constructors Inc. (See Hand, Clarence S., assignor.)
United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)
United Shoe Machinery Corporation. (See Baxter, William C., assignor.)
United Shoe Machinery Corporation. (See Bourgeois, Adelord, assignor.)
United Shoe Machinery Corporation. (See Cavanagh, James, assignor.)
United Shoe Machinery Corporation. (See Knowlton, Norwood H., assignor.)
United Shoe Machinery Corporation. (See Ray, Eugene J., assignor.)
United Shoe Machinery Corporation. (See Sherman, O. L., and Bourgeois, assignors.)
Universal Draft Gear Attachment Co. (See Camp, Percy B., assignor.)
Universal Draft Gear Attachment Co. (See Nash, Charles J., assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., the Firm. (See Neff, Johannes, assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., the Firm. (See Schmiedel, Johannes, assignor.)
Vance, Joseph A., and D. M. Hammett, Tulsa, Okla. Sucker rod wrench device. 1,861,728; June 7.
Van der Pyl, Edward, Worcester, Mass., and R. H. Stimpson, Nashua, N. H., assignors, by mesne assignments, to F. L. Emery, Boston, Mass. Carton end gluing and closing means. 1,862,346; June 7.
Van Iderstine, John T., Chicago, Ill. Combination muffler and air heater. 1,862,043; June 7.
Van Ranst, Cornelius W., Auburn, Ind., assignor, by mesne assignments, to Manning & Co., Chicago, Ill. Headlight mounting for automobiles. 1,861,463; June 7.
Van Sickle, Melvin E., Toronto, Ontario, Canada. Head covering. 1,861,669; June 7.
Van Wyck, Cecil. (See Hyde, R. C., and van Wyck.)
Vehko, James, Detroit, Mich., assignor to The Murray Corporation of America. Die and punch. 1,861,648; June 7.
Veltri, Nicolas, New York, N. Y. Resilient wheel. 1,862,288; June 7.
Veltung, Ernest, New York, N. Y. Tile floor covering. 1,861,558; June 7.
Venard, William G., Los Angeles, Calif. Form for building columns and beams. 1,861,766; June 7.
Venzie, Frederick M., Philadelphia, Pa. Suspended ceiling construction. 1,861,615; June 7.
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,862,127; June 7.
Verge, Mark E., et al. (See Stassart, Joseph D., assignor.)
Vickers-Armstrongs Limited. (See Carden, John V., assignor.)
Vickers, William H., Liberal, Kans. Collar device. 1,862,444; June 7.
Vickery, Ralph W. E., Marshfield, Mass. Electric steam generator. 1,862,071; June 7.
Viscose Company, The. (See Johnson, Henry, assignor.)
Virden, John C., Company. (See Wing, Clarence G., assignor.)
W-K-M Company. (See Hoffoss, John E., assignor.)
Wachter, Joseph, Newark, assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J. Toggle switch. 1,861,649; June 7.
Wadsworth Watch Case Company, The. (See McFarland, James C., assignor.)
Wagner, Johannes, Berlin-neu-Tempelhof, and W. Krostewitz, Berlin-Hohenschonhausen, Germany. Device for the working of metal bands especially lines, for typographic purposes. 1,861,670; June 7.
Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Adjustable stationary blade for hair clippers. 1,861,616; June 7.
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Hand clipper. 1,861,617; June 7.
Waldron, Frederic B., Prescot, assignor to Pilkington Brothers Limited, Liverpool, England. Continuous glass grinding and polishing apparatus. 1,862,445; June 7.
Wallens, Sidney S., et al. (See Tuzzo, Nicholas, assignor.)
Walters, John L., Detroit, Mich., assignor to Superior Safety Furnace Pipe Company. Furnace. 1,861,767; June 7.
Walters, Robert M. (See Spigelmire, C. E., and Walters.)
Wangersheim, Edgar A., Chicago, Ill. Lighting fixture. Des. 87,138; June 7.
Wangersheim, Edgar A., Chicago, Ill. Lighting fixture. Des. 87,139; June 7.
Wappler, Frederick C., New York, N. Y. Surgical sterilizer. 1,861,768; June 7.
Wappler, Reinhold H., Yonkers, N. Y. Catheterizing instrument. 1,861,769; June 7.
Ward, Henry L., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Producing composite articles. 1,861,945; June 7.
Warden, Franklin M. (See Holt, Robert W., assignor.)
Waring, John N. (See Beaumont, T. E., and Waring.)
Warner, Arthur P., Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Electric friction brake. 1,861,729; June 7.
Warner Electric Brake Corporation. (See Warner, Arthur P., assignor.)
Warner Electric Brake Corporation. (See Whyte, John, assignor.)
Warner, Noah L. (See Legnillon G. W., and Warner.)
Warren, Christine M., guardian. (See Russell, Zachary E., assignor.)
Warren, Clyde W. (See Russell, Zachary E.)
Warren, Henry E., assignor to Warren Telechron Company, Ashland, Mass. Electric motor. 1,862,356; June 7.
Warren, Henry, E., assignor to Warren Telechron Company, Ashland, Mass. Electric motor. 1,862,376; June 7.
Warren Shade Co. (See Russell, Zachary E.)
Warren Telechron Company. (See Warren, Henry E., assignor.)
Warth, Albin H., Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Bottle closure. 1,861,589; June 7.
Warth, Albin H., Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Bottle closure. 1,861,590; June 7.
Watson, Edward L., Rochester, N. Y. Outdoor sanitary exterminator for house and blow flies. 1,862,325; June 7.
Watts, Charles R., jr., et al. (See Watts, Charles R., assignor.)
Watts, Charles R., assignor of one-third to E. L. Watts, and one-third to C. R. Watts, jr., Berkeley, Calif. Steam radiator trap. 1,861,650; June 7.
Watts, Edward L., et al. (See Watts, Charles R., assignor.)
Wayne Pump Company, The. (See Parker, Walter H., assignor.)
Weaver, William B. (See Bégin, Lucien, assignor.)
Webb, Christopher F., Kenton, Middlesex, assignor, by mesne assignments, to The Bell Punch and Printing Co. Limited, Uxbridge, Middlesex, England. Printing machine. 1,862,446; June 7.
Webb, David W., New York, N. Y. Self service store. 1,861,671; June 7.
Weiner, Morris, assignor one-half to S. Lefkowitz, and one-half to I. Mintz, New York, N. Y. Photographic printing and trimming machine. 1,861,992; June 7.
Weiskotten, William O., San Diego, Calif. Combination boot and shoe tree. 1,862,168; June 7.
Weiss, Charles J., Towanda, Pa. Antiskid tire chain. 1,862,104; June 7.
Weller, John H., assignor to Sargent & Company, New Haven, Conn. Cork extractor and bottle opener. 1,861,993; June 7.
Wendt, Herman D., assignor to The Sharples Separator Company, West Chester, Pa. Obtaining the butter fat from sour milk products. 1,861,559; June 7.
Wensley, Roy J., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Proportional preset dimmer scheme. 1,862,487; June 7.
Werking, Leroy C. (See Benner, R. C., and Werking.)
Wermine, Hugo H., Villa Park, assignor to Belden Manufacturing Company, Chicago, Ill. Connecter for electric conductors. 1,862,128; June 7.
Werner Electric Brake Corporation. (See Whyte, John, assignor.)
Wesnigk, Erwin, Berlin, Germany. Electromotor drive. 1,862,248; June 7.
Western Electric Company. (See Bouget, Y. A., and Reichelt, assignors.)
Western Electric Company. (See Cherry, G. L., and Troche, assignors.)
Western Electric Company. (See Gilbert, John J., assignor.)
Western Electric Company. (See Larson, H. W., and Patchen, assignors.)
Western Electric Company. (See Troche, Ernest R., assignor.)
Western Electric Company. (See Ward, Henry L., assignor.)
Western Pine Mfg. Co. (See Hudson, Clough D., assignor.)
Western States Machine Company, The. (See Roberts, Eugene, assignor.)
Western Union Telegraph Company, The. (See Fluharty, W. G., and Noxon, assignors.)
Westinghouse Electric & Manufacturing Company. (See Brace, Porter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Curtis, Richard C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Curtis, R. C., and Boddie, assignors.)
Westinghouse Electric & Manufacturing Company. (See Elsey, Howard M., assignor.)

Westinghouse Electric & Manufacturing Company. (See Hanzlik, Henry J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Little, Donald G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Long, Thomas H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Oertel, Franz, assignor.)
Westinghouse Electric & Manufacturing Company. (See Peters, John F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sashoff, Stephen P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schaelchlin, Walter, assignor.)
Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Short, Ira, assignor.)
Westinghouse Electric & Manufacturing Company. (See Shuey, Paul F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Terry, M. C., and Pleasant, assignors.)
Westinghouse Electric & Manufacturing Company. (See Trouant, Virgil E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wensley, Roy J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Whittaker, Charles C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wickerham, William R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Woodson, James C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Woodson, J. C., and Colby, assignors.)
Westinghouse Lamp Company. (See Driggs, F. H., and Lilliendahl, assignors.)
Westinghouse Lamp Company. (See Marden, J. W., and Lederer, assignors.)
Weston Electrical Instrument Corporation. (See Romain, Burchard P., assignor.)
Wharam, John J., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Brake operating mechanism. 1,862,105; June 7.
Wharton, William B., et al. (See Lee, Leffman H., assignor.)
Whisner, Sidney H., Los Angeles, Calif. Automobile cooker. 1,861,672; June 7.
White, John W., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Stoplight switch. Re18,487; June 7.
White, Nelson, assignor, by mesne assignments, to Morse Products, Inc., Ithaca, N. Y. Electric drive for adding machines. 1,861,618; June 7.
White, Thomas M., Weed, Calif. Ball practicing device. 1,862,044; June 7.
Whitehouse, Irving P. (See Lord T., and Whitehouse.)
Whitin Machine Works. (See Hartley, Alec R., assignor.)
Whiting Corporation. (See Hardy, Clement A., assignor.)
Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Locomotive control system. 1,862,129; June 7.
Whittaker, John E., St. Louis, Okla. Wrench rack. 1,862,447; June 7.
Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Brake. 1,861,591; June 7.
Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Trailer brake control. 1,861,770; June 7.
Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Friction brake. 1,861,771; June 7.
Wickerham, William R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,861,994; June 7.
Wiekstrum, Cecil M., Omaha, Nebr. Adjustable grave border and liner. 1,861,560; June 7.
Wiechert, Frank T., Lakewood, assignor of one-half to R. C. Trimmer, Cleveland, Ohio. Cooling and dispensing apparatus. 1,862,344; June 7.
Wigan Coal & Iron Company. (See Leek, Albert E., assignor.)
Wilder, John, assignor to Wilder Metal Company, Niles, Ohio. Process and apparatus for coating ferric articles with a metallic protective. 1,862,249; June 7.
Wilder Metal Company. (See Wilder, John, assignor.)
Wil-Fry Corporation. (See Fry, Walter L., assignor.)
Wilhelm, Harold F. (See Bégin, Lucien, assignor.)
Wilhelmi, Alfred, Oberhausen, Germany. Carrier for slag pans, and the like. 1,861,946; June 7.
Wilhelmi, Dirk F., assignor to Naamlooze Vennootschap Vereenigde Nederlandsche Rubberfabrieken, Heveadorp, Netherlands. Molding an india-rubber gas mask. 1,861,673; June 7.
Willett, Walter E., Cortland, N. Y. Lithic composition. 1,862,448; June 7.
Williams, Frank D., Los Angeles, Calif. Printing motion pictures. 1,861,515; June 7.
Williams, Harrison R., New York, N. Y. Valve bag closure. 1,861,995; June 7.
Williamson, Kenneth T., and O. I. Seaverson, Wilkinsburg, assignors to The Union Switch & Signal Company, Swissvale, Pa. Battery charging apparatus. 1,861,516; June 7.
Wilson, Caesar L., Dassel, Minn. Holder for cows' tails. 1,861,651; June 7.
Wine, William E., Toledo, Ohio. Railway car. 1,861,730; June 7.
Wing, Clarence G., Cleveland Heights, assignor to John C. Virden Company, Cleveland, Ohio. Lighting fixture. Des. 87,140; June 7.
Winne, Harry A., Schenectady, N. Y., assignor to General Electric Company. Motor control system. 1,862,354; June 7.
Winterhoff, Adolf, Dusseldorf, Germany. Casing for ball valves. 1,861,674; June 7.
Winthrop Chemical Company. (See Berendes, R., and Mietzsch, assignors.)
Winton, Henry D., Wellesley, assignor to Hersey Manufacturing Company, South Boston, Mass. Meter register. 1,861,517; June 7.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Motion picture film reel. 1,861,891; June 7.
Wittouck, Serge, Paris, France, assignor to International Industrial and Chemical Company Limited, Montreal, Quebec, Canada. Production of barium oxygen compounds. 1,861,892; June 7.
Wittum, George F., assignor to J. Bitcon, Vallejo, Calif. Calculating machine. 1,862,072; June 7.
Wolf, Gustav, Gutersloh, Germany. Apparatus for manufacturing wire ropes and the like. 1,862,345; June 7.
Wolfson, Harry, F. Gerstein, New York, and H. Gerstein, Arverne, N. Y. Flexible electrical molding. 1,861,675; June 7.
Wood, J. R., & Sons, Inc. (See Klecka, John J., assignor.)
Wood, Morris B., Somerville, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch having raising and lowering mechanism therefor. 1,862,169; June 7.
Woodsome, John O., Detroit, Mich. Venturi steam fitting. 1,862,130; June 7.
Woodson, James C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Electric heater. 1,861,464; June 7.
Woodson, James C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Conveyer slot seal. 1,861,465; June 7.
Woodson, James C., and O. A. Colby, Mansfield, Ohio, assignors to Westinghouse Electric and Manufacturing Company. Resistor support. 1,861,947; June 7.
Woolridge, Mack, Los Angeles, Calif. Material moving device. 1,861,731; June 7.
Woolson, Harry O., Altoona, Pa. Grounding clamp. 1,862,073; June 7.
Woolson, Harry T., assignor to Chrysler Corporation, Detroit, Mich. Running board molding. 1,862,131; June 7.
Wright, Edward A., Fresno, Calif. Vehicle body. 1,861,828; June 7.
Wright, Fenton, Kansas City, Mo. Garment fastener. 1,861,829; June 7.
Wright, Leonard K., Long Island, N. Y. Refrigerating apparatus for freight cars. 1,861,518; June 7.
Yamagishi, Hatsutaro, Taihokushi Taiwan, Japan. Firecracker. 1,861,893; June 7.
Yeaman, William F., Monticello, Iowa. Adjustable hayrack clamp. 1,861,487; June 7.
Yeomanson, Ralph A., London, assignor to British-American Tobacco Company Limited, Westminster, England. Sealed can or receptable. 1,862,449; June 7.
Young, Fred M., Racine, Wis. Heat interchanger. 1,861,676; June 7.
Zacharias, Edwin H., Reading, Pa. Garment pressing machine. 1,861,894; June 7.
Zamboni, Lawrence, Pasadena, Calif. Braking device. 1,861,772; June 6.
Zelgela Products Corporation. (See Moore, Ramsay H., assignor.)
Zieve, Benjamin M. (See Dukes, I., and Zieve.)
Zitscher, Arthur. (See Iaska, L., and Zitscher.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 7TH DAY OF JUNE, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abradant. J. W. Gottschalk. 1,862,263; June 7.
Abrasive device. F. O. Albertson and G. A. Olsen. 1,861,773; June 7.
Accelerator control, Foot rest. H. Bailey. 1,862,453; June 7.
Acid and heat units thereof from digesters and for preparing digester liquor, Apparatus for recovering. J. Strindlund. 1,862,243; June 7.
Acid, Apparatus for the production of hydrocyanic. P. T. Dooley. 1,862,179; June 7.
Acid with carbon tetrachloride, Dehydrating aqueous acetic. H. T. Clarke and D. F. Othmer. 1,861,841; June 7.
Acids, Separation of liquid and solid fatty. E. Schlenker. 1,862,037; June 7.
Acoustic qualities of violins, Increasing the. C. Bonewitz. 1,861,682; June 7.
Adapter for machine tools. A. C. Maxfield. 1,861,504; June 7.
Adjustable seat. J. A. Roché. 1,861,938; June 7.
Aerofoils, Covering. W. Harper, jr. 1,861,855; June 7.
Aeroplane. J. Picco. 1,861,977; June 7.
Aeroplane. R. S. Sanford. 1,862,280; June 7.
Aeroplane launching device. M. Niemi. 1,861,934; June 7.
Air cooling system. E. Hoskins. 1,862,268; June 7.
Air gauge. O. W. Ingram. 1,863,403; June 7.
Airplane propeller. N. Tuzzo. 1,862,207; June 7.
Air exhauster. G. I. Rockwood and H. G. Carlson. 1,861,817; June 7.
Air exhauster, Foul. J. P. Lowther. 1,861,501; June 7.
Air in dry spinning of artificial threads, Apparatus for heating. A. Friederich and P. Schlack. 1,861,912; June 7.
Aircraft. S. H. Capells. 1,861,491; June 7.
Aircraft, Device for acoustically detecting and tracing. H. L. M. J. Benard and A. J. Marcelin. 1,861,680; June 7.
Aircraft protector. J. P. Kilgore. 1,861,477; June 7.
Airplane. W. B. Stout. 1,862,102; June 7.
Airplane ignition system. H. A. Hicks. 1,862,116; June 7.
Airplane wing. C. Dornier. 1,861,596; June 7.
Aluminum chloride, Making. B. E. Carl. 1,862,298; June 7.
Ammunition. J. E. Burns. 1,862,295; June 7.
Amplifier, Continuous current. E. Asch. 1,862,394; June 7.
Amusement device. E. H. Gehm. 1,861,597; June 7.
Animal trap. J. Kleffman. 1,861,479; June 7.
Animal trap. J. U. Lehn. 1,861,968; June 7.
Animal trap. O. Session. 1,862,038; June 7.
Announcing device. J. L. Franklin. 1,862,475; June 7.
Antitipping device. R. A. Isenberg. 1,861,799; June 7.
Applicator, Fertilizer. G. R. Roe and W. M. Mertz. 1,862,238–9; June 7.
Aqueous dispersions, Purifying. E. B. Newton. 1,862,061; June 7.
Arbor, Supporting. Y. A. Bouget and L. O. Reichelt. 1,861,562; June 7.
Articles from a pile, Apparatus for removing. J. Neff. 1,862,386; June 7.
Articles, Method and apparatus for producing fibrous. R. S. Frobisher. 1,861,849; June 7.
Articles, Method and apparatus for testing hollow. B. S. Dague. 1,861,684; June 7.
Articles, Producing composite. H. L. Ward. 1,861,945; June 7.
Articles with a metallic protective, Process and apparatus for coating ferric. J. Wilder. 1,862,249; June 7.
Asphalt emulsion and making the same. L. G. Thompson. 1,861,826; June 7.
Automatic clamp. F. H. Kneeland. 1,861,745; June 7.
Axle burnishing machine. G. Powell. 1,862,516; June 7.
Azo derivatives and making them, Compound of heterocyclic. M. Dobrn and P. Diedrich. 1,862,361; June 7.
Azodyestuffs containing copper. W. Hentrich and J. Hilger. 1,861,917; June 7.
Azodyestuffs, New water insoluble. L. Laska and A. Zitscher. 1,861,926; June 7.
Bag construction. W. D. Kennedy. 1,861,864; June 7.
Bag for cotton picking machines or the like. J. R. Millar. 1,862,384; June 7.
Bags, Method and apparatus for filling. K. E. E. Holzapfel. 1,861,443; June 7.
Bait, Artificial. H. Mays and S. H. Kirkland. Des. 87,488; June 7.
Bait, Artificial. C. P. Schlipp. 1,862,036; June 7.
Balance indicator for airplanes. C. J. H. Gerdes. 1,861,692; June 7.
Baling press, Hydraulic. R. E. Boschert. 1,861,468; June 7.
Ball practicing device. T. M. White. 1,862,044; June 7.
Bands for hats and apparatus therefor, Fitting sweat. R. K. Reynolds. 1,862,161; June 7.
Barium oxygen compounds, Production of. S. Wittouck. 1,861,892; June 7.
Base for thread packages. J. R. Mitchell. 1,862,234; June 7.
Battery: *See*—
Storage battery.
Battery charging apparatus. K. T. Williamson and O. I. Seaverson. 1,861,516; June 7.
Battery construction, Storage. D. E. Rudert. 1,862,319; June 7.
Battery terminal clamp. G. H. Christensen. 1,862,468; June 7.
Battery terminal grip. H. J. Guttman. 1,861,439; June 7.
Bearing. L. Sandler. 1,862,279; June 7.
Beater roll. W. V. Phenice. 1,862,495; June 7.
Bed and the like, Collapsible. S. and J. Breckman. 1,862,463; June 7.
Bed bottom hanger mechanism. W. S. Brown. 1,861,735; June 7.
Bed table. T. Pepler. 1,862,237; June 7.
Belt, Driving. P. B. Reeves. 1,862,198; June 7.
Belt, Swimming. T. Summerson. 1,862,070; June 7.
Bench: *See*—
Drawing bench.
Bench. J. C. Mathis. 1,862,382; June 7.
Beryllium metal, Producing. H. C. Claflin. 1,861,656; June 7.
Billets or the like, Apparatus for heating. H. A. Dreffein. 1,861,790; June 7.
Binder, Visible index. J. L. McMillan. 1,861,749; June 7.
Blade for hair clippers, Adjustable stationary. L. J. Wahl. 1,861,616; June 7.
Blind. H. J. Mackin. 1,861,606; June 7.
Block for printing. E. F. Trefbar, jr. 1,861,765; June 7.
Blowout preventer. W. A. Trout. 1,861,726; June 7.
Blowout preventer and well sealing means. C. A. Rasmussen. 1,861,755; June 7.
Blowpipe. R. J. Kehl. 1,862,055; June 7.
Blowpipe apparatus and method of cutting metal. G. I. Jones and J. H. Bucknam. 1,861,923; June 7.
Blowing device for rock drills. E. B. Lear. 1,861,966; June 7.
Blue printing machine. K. Murck. 1,861,607; June 7.
Boiler: *See*—
Steam boiler.
Boot and shoe tree, Combination. W. O. Weiskotten. 1,862,168; June 7.
Boring and drilling device. H. W. Haynie. 1,861,632; June 7.
Boring head. R. L. Hibbard. 1,861,498; June 7.
Bottle. G. Schoenfeld. Des. 87,135; June 7.
Bottle cap. C. W. Lindsay. 1,861,603; June 7.
Bottle closure. A. H. Warth. 1,861,589–90; June 7.
Bottle filling machine. J. Kantor and C. H. Miller. 1,862,090; June 7.
Bottle handle. L. B. Little and H. T. Maib. 1,861,806; June 7.
Bottle, Inkwell. R. J. Ford. Des. 87,108; June 7.
Bottle washing machine. J. S. Herrmann. 1,862,307; June 7.
Bouncer, Child's. F. Huerlin. 1,861,661; June 7.
Box: *See*—
Composite box. Wardrobe box.
Box and cover, Junction. L. Strnad. 1,862,324; June 7.
Box trap. J. Kleffman. 1,861,478; June 7.
Boxes or box parts with curved bottoms, Forming. J. Schmiedel. 1,862,390; June 7.
Brace for ironing tables and the like, Foldable. C. W. Sadenwater. 1,861,613; June 7.
Bracket: *See*—
Steel framework bracket.
Bracket. F. W. Buecker. 1,862,466; June 7.
Brake: *See*—
Electric friction brake. Safety brake.
Friction brake. Servo brake.
Hydro brake. Vehicle brake.
Brake. B. B. House and H. F. Parker. 1,862,309; June 7.
Brake. J. Whyte. 1,861,591; June 7.
Brake adjuster. H. F. Parker. 1,862,278; June 7.
Brake adjusting gauge. V. L. Martin. 1,861,638; June 7.
Brake control, Trailer. J. Whyte. 1,861,770; June 7.
Brake hangers, Manufacturing. F. Schaefer. 1,862,281; June 7.

Brake mechanism for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,862,294; June 7.
Brake operating mechanism. J. J. Wharam. 1,862,105; June 7.
Brake shoe. O. R. Skelton. 1,862,124; June 7.
Braking apparatus for trailer vehicles. H. Seeleke. 1,861,723; June 7.
Braking attachment for agitators. D. A. Jacobi. 1,861,444; June 7.
Braking device. L. Zamboni. 1,861,772; June 7.
Brassière. J. F. Greig. 87,112; June 7.
Brick, Fire. G. L. Ticehurst. 1,862,246; June 7.
Brine, Treating. G. N. Terziev. 1,861,763; June 7.
Broiler. C. M. Dibble and I. S. Holloway. 1,861,689; June 7.
Broiler. M. B. O'Brien. 1,862,420; June 7.
Brush, Painter's striping. C. O. Robb. 1,862,430; June 7.
Buck, Unheated lower. E. Davis. 1,861,493; June 7.
Buckle, Shoe. W. L. Gibbons. 87,111; June 7.
Buffing and drawgear, Central. R. T. Glascodine. 1,862,080; June 7.
Buffing machine. C. R. Moon. 1,862,277; June 7.
Building construction. G. H. Ellis. 1,861,740; June 7.
Building set. A. E. Jury. 1,861,801; June 7.
Building structure. F. M. Venzie. 1,862,127; June 7.
Bumper and drawbar, Combination spring. G. E. Edmunds. 1,861,658; June 7.
Bumper, Automobile. W. J. Gabel. 1,861,691; June 7.
Bunch building mechanism. A. R. Hartley. 1,862,054; June 7.
Burner: *See*—
Gas burner. Oil burner.
Burner assembly for gas furnaces. R. E. Fraser. 1,862,182; June 7.
Burners, Increasing the efficiency of gas. C. C. Berg. 1,861,733; June 7.
Bushing structure. H. Schwartz. 1,861,756; June 7.
Butter fat from sour milk products, Obtaining the. H. D. Wendt. 1,861,559; June 7.
Button. L. R. Carley and W. T. Abel. 1,862,076; June 7.
Button blank cutting machine. A. F. Kemo. 1,862,406; June 7.
Cabinet. H. A. Arnold. 1,861,520; June 7.
Cable reel trailer. T. C. Smith and W. T. Livermore. 1,861,556; June 7.
Cable, Submarine signaling. J. J. Gilbert. 1,861,851; June 7.
Calculating machine. G. F. Wittum. 1,862,072; June 7.
Calculating typewriting machine. C. Schlüns. 1,862,240; June 7.
Camera construction and assembling same. C. C. Fuerst. 1,861,850; June 7.
Can: *See*—
Dispensing can. Oil can.
Can and closure therefor, Metal. A. G. Hopkins. 1,861,570; June 7.
Can and sifter therefor, Talcum powder. C. Koze. 1,861,602; June 7.
Can conveying and dumping apparatus. H. D. Lathrop. 1,861,575; June 7.
Can dumping mechanism. H. D. Lathrop. 1,861,634; June 7.
Can feeder, Automatic. J. Gasper. 1,862,479; June 7.
Can or receptacle, Sealed. R. A. Yeomanson. 1,862,449; June 7.
Can-seamer head, Double. N. B. Anderson. 1,862,290; June 7.
Can testing machine. C. D. McDonald and B. A. Deisch. 1,861,542; June 7.
Canister. F. H. Drexler. 1,862,301; June 7.
Caoutchouc, Stabilizing natural and artificial types of. G. Kallner. 1,862,270; June 7.
Cap and condenser for high frequency circuits, Combination. L. J. Buttolph. 1,861,621; June 7.
Capacitor and forming the same. B. J. Butler. 1,862,297; June 7.
Car construction. O. E. Kantenwein. 1,861,500; June 7.
Car, Railway. J. R. Blackhall and H. S. Pardee. 1,861,778; June 7.
Car, Railway. G. G. Gilpin. 1,861,693; June 7.
Car, Railway. W. E. Wine. 1,861,730; June 7.
Car retarder, Railway. H. L. Bone. 1,862,209; June 7.
Car transfer apparatus. J. H. Fox. 1,861,659; June 7.
Carbon for producing ultra-violet light, Arc. M. J. Dorcas. 1,862,300; June 7.
Carbonator. J. Kantor. 1,862,089; June 7.
Carburation and fuel feed system. R. F. Bracke. 1,861,781; June 7.
Carburetor. R. F. Bracke. 1,861,782; June 7.
Carburetor. D. F. Gindele. 1,861,694; June 7.
Carburetor. F. W. Schaffner. 1,862,434; June 7.
Card, Fortune-telling. G. P. Schmitt. Des. 87,134; June 7.
Carrier for slag pans, and the like. A. Wilhelmi. 1,861,946; June 7.
Carton end gluing and closing means. E. Van der Pyl and R. H. Stimpson. 1,862,346; June 7.
Cartoning machine. F. G. Henry. 1,861,567; June 7.
Cartridges, etc., Apparatus for wrapping. A. E. Andelin. 1,862,170; June 7.
Case: *See*—
Display case. Watch and vanity case.
Case for playing balls, Compression. O. R. Barkdoll. 1,861,948; June 7.
Case, portfolio, or similar container, Brief. N. Ottinger. 1,861,974; June 7.
Casing and drier, Combined washing machine. T. W. Behan. Des. 87,098; June 7.
Casing, Automobile signal. C. S. Park. Des. 87,127; June 7.
Casing, Beverage dispensing. C. G. Jackson. Des. 87,116; June 7.
Casing control gate. F. J. Schweitzer. 1,861,614; June 7.
Casing elevator. J. E. Hoffoss. 1,861,473; June 7.
Casing for ball valves. A. Winterhoff. 1,861,674; June 7.
Casing for outside steam pipes. W. G. Gray. 1,862,515; June 7.
Casing, Heater. E. C. Booth. Des. 87,100; June 7.
Casing, Reduction gear. I. Short. 1,862,512; June 7.
Caster. A. L. Lilly. 1,861,539; June 7.
Caster construction. M. C. Hill. 1,861,919; June 7.
Castings and making the same, Silicon iron. F. S. Hodson. 1,861,568; June 7.
Castings of magnesium and magnesium alloys in permanent molds, Production of. A. Beck. 1,861,592; June 7.
Castor oil, Product of. C. G. Merrell and M. Bye. 1,862,315; June 7.
Catheterizing instrument. R. H. Wappler. 1,861,769; June 7.
Ceiling construction, Suspended. F. M. Venzie. 1,861,615; June 7.
Cell capable of showing the Kerr effect. T. W. Case. 1,861,738; June 7.
Cellulose, Manufacturing. J. J. de la Roza, sr. 1,862,177; June 7.
Chain. W. H. Paulson. 1,861,642; June 7.
Chain, Antiskid tire. C. J. Weiss. 1,862,104; June 7.
Chain applicator, Skid. R. T. Howard. 1,862,378; June 7.
Chassis lubrication. J. Rijur. 1,862,488; June 7.
Cheese treating method and apparatus. H. M. Scott. 1,861,721; June 7.
Chemical manufacture. L. D. Taylor. 1,861,514; June 7.
Chocolate making process, Continuous. D. G. Steely. 1,862,166; June 7.
Chuck. G. E. Garno. 1,862,216; June 7.
Chuck device. G. W. Emrick. 1,862,370; June 7.
Chuck for web rolls, Centering. I. I. Stone. 1,861,646; June 7.
Chuck loading mechanism. C. C. Stevens. 1,862,042; June 7.
Chute, Combined lowering and withdrawal. F. Pardee. 1,861,976; June 7.
Cinematograph projector. C. Guggenheim. 1,861,496; June 7.
Circuit, Alarm. R. B. Shanck. 1,861,553; June 7.
Circuit, Amplifier. L. M. Hull. 1,861,571; June 7.
Circuit, Audion amplifier. H. A. Snow and L. M. Hull. 1,861,587; June 7.
Circuit breaker, Automatic. M. P. Janisch. 1,861,800; June 7.
Circuit controlling device, Electric. C. G. Garton. 1,861,628; June 7.
Circuit maker and breaker for safe alarms. L. I. Parkhurst. 1,861,547; June 7.
Circuit, Neutralizing. W. V. Roberts. 1,861,585; June 7.
Circuits, Thermionic amplifying. E. Asch. 1,862,393; June 7.
Clamp: *See*—
Automatic clamp. Grounding clamp.
Battery terminal clamp. Hayrack clamp.
Clamp. H. A. Klatt. 1,862,149; June 7.
Clamp positioning device. F. F. Mall. 1,861,807; June 7.
Clasp. O. Carlson. 1,862,175; June 7.
Clasp for neckties or the like. F. P. Daughaday. 1,862,350; June 7.
Cleaner: *See*—
Mine track cleaner. Windshield cleaner.
Cleaner. W. B. Beach, jr. 1,861,899; June 7.
Cleaner for tractors, Wheel. O. T. Nichol. 1,861,873; June 7.
Clipper, Hand. L. J. Wahl. 1,861,617; June 7.
Clock case. A. H. Schick and R. P. Kraatz. Des. 87,132; June 7.
Closure lock. R. E. Dawes. 1,862,257; June 7.
Clothes drier. C. W. Morden. 1,861,871; June 7.
Clutch, Automatic. O. H. Banker. 1,861,830; June 7.
Clutch mechanism for reeling apparatus, One-way. W. C. Rendeker and E. H. Omara. 1,861,584; June 7.
Clutch, Overrunning. J. H. Tromanhauser. 1,861,486; June 7.
Coal, Apparatus for carbonizing. F. Puening. 1,861,583; June 7.
Coating apparatus. E. J. Ray. 1,861,666; June 7.
Coin controlled mechanism. M. H. Richardson. 1,862,372; June 7.
Coincidental lock. H. E. Norviel. 1,861,713–14; June 7.
Collar device. W. H. Vickers. 1,862,444; June 7.
Comb uncapping apparatus. H. H. Root. 1,861,939; June 7.
Composite box. J. S. Stokes. 1,862,205; June 7.
Composition for the taking of X-rays. P. E. Harth. 1,861,696; June 7.
Compounds of diphenol isatins and quinoline or isoquinoline bases, Double. R. Berendes and F. Mietzsch. 1,861,904; June 7.
Concealed heater. J. L. Stevenson. 1,861,484; June 7.
Concrete building blocks, Manufacture of. F. J. Straub. 1,862,323; June 7.

Condenser. L. J. Buttolph. 1,861,622; June 7.
Condenser, Electrical. W. Dubilier. 1,862,302; June 7.
Conduit system, Concealed electrical. G. L. Chamberlain and G. H. Gneiss. 1,861,435; June 7.
Conduit system, Underground. M. A. Collins. 1,861,436; June 7.
Connecter for batteries and similar devices. A. J. Park. 1,861,451; June 7.
Connecter for bracelets. S. A. Johnson. 1,861,700; June 7.
Connecter for electric conductors. J. F. Fagendarm. 1,862,197; June 7.
Connecter for electric conductors. H. H. Wermine. 1,862,128; June 7.
Connecting rotatable members. F. W. Peters. 1,861,814; June 7.
Connection, Flexible. F. W. Peters. 1,861,753; June 7.
Connection, Spring end. F. J. Bechert. 1,862,501; June 7.
Contact device. F. H. Nicholson and H. G. Blosser. 1,861,641; June 7.
Container and closure device therefor. R. D. Simpson. 1,861,483; June 7.
Container and/or applicator. M. Levy. 1,862,271; June 7.
Container, Cigarette. M. Bertoncini and W. Blatter. Des. 87,099; June 7.
Container, Easy opening. A. L. Kronquest. 1,862,509–10; June 7.
Container, Egg. C. F. Sweasey. 1,861,557; June 7.
Container, Food. J. C. Hormel. Des. 87,115; June 7.
Continuous furnace. A. L. Culbertson. 1,861,492; June 7.
Control apparatus. J. D. Lowry. 1,861,929; June 7.
Control apparatus for electric machines. E. W. Swanson and F. N. Swanstrom. 1,861,588; June 7.
Control circuits for fire prevention apparatus. T. T. Allen and J. F. Adams. 1,862,342; June 7.
Control device for shovel cranes. L. A. Russell. 1,861,511; June 7.
Control for centrifugal machines, Automatic. E. Roberts. 1,861,978; June 7.
Control for elevators, System of. C. W. Bassett and H. J. Fear. 1,862,291; June 7.
Control mechanism, Distant. F. R. House. 1,862,017; June 7.
Control system. W. R. Wickerham. 1,861,994; June 7.
Controlling the shearing of metal bars while in motion. J. W. Sheperdson and F. P. Dahlstrom. 1,861,554–5; June 7.
Conveyer. C. R. Claghorn. 1,861,840; June 7.
Conveyer, Rotary. C. F. McEwan. 1,862,485; June 7.
Conveying apparatus. F. W. Brooke and W. H. Cosgrove. 1,861,489; June 7.
Conveying system. B. S. Harrison. 1,861,600; June 7.
Cooker, Automobile. S. H. Whisner. 1,861,672; June 7.
Cooling and dispensing apparatus. F. T. Wiechert. 1,862,344; June 7.
Cooling device for milk receiving containers of vacuum milking machines. E. Raven-Rosen-Baum and A. Domschelt. 1,861,898; June 7.
Copper cakes and sheet bars, Production of. F. L. Antisell and C. G. Mullineaux. 1,862,074; June 7.
Copper extension process. W. E. Greenawalt. 1,862,343; June 7.
Cord holding mechanism for shades. Z. E. Russell. 1,862,163; June 7.
Cores, Apparatus for sheathing. G. L. Cherry and E. R. Troche. 1,862,005; June 7.
Corset. J. F. Greig. Des. 87,113; June 7.
Cotton, Apparatus and system for ginning. W. M. Scellgson. 1,861,757; June 7.
Cotton feeding mechanism. W. N. Shaw. 1,861,512; June 7.
Cotton, Mercerizing loose. C. Ahnert. 1,862,208; June 7.
Coupling: *See*—
Flexible coupling. Hose coupling.
Coupling. J. P. Johnson. 1,862,220; June 7.
Coupling mechanism for semitrailers, Automatic. H. W. Helms. 1,862,115; June 7.
Coupling shaft, Truck extension. L. S. Sheldrick. 1,862,099; June 7.
Coupon folder. J. A. B. Smith. 1,861,459; June 7.
Court, Playing. K. W. Otto. 1,862,423; June 7.
Cover, Seat. M. Schwartz. 1,861,455; June 7.
Cover, Seat. W. L. Fry. 1,862,476; June 7.
Cover, Temporary bathtub. G. M. Gould. 1,861,495; June 7.
Covering, Head. M. E. Van Sickle. 1,861,669; June 7.
Covering material, Method and apparatus for decorating flexible surface. J. C. McCarthy. 1,862,189; June 7.
Cowl. E. Emisch. 1,862,213; June 7.
Crib construction, Child's knockdown. E. Mayette. 1,862,383; June 7.
Crosstalk between signaling circuits, System for neutralizing. O. H. Coolidge. 1,861,524; June 7.
Cryptographic machine. E. H. Hebern. 1,861,857; June 7.
Culinary apparatus. N. Emmons, 3d. 1,862,181; June 7.
Cultivator. H. B. Murphy. 1,861,544; June 7.
Cup or similar article. J. B. McDonald. Des. 87,123; June 7.
Curtain switch, Remote controlled. F. K. Snow. 1,862,041; June 7.
Cuspidor, Fountain. C. W. Moore. 1,862,029; June 7.
Cutter: *See*—
Expansion cutter.
Cutter for woodworking machines. A. G. Buchan. 1,861,787; June 7.
Cutting mechanism for cutting and folding machines. C. J. Beck. 1,862,460; June 7.
Cyclohexylphenols, Manufacture of. E. C. Britton and R. P. Perkins. 1,862,075; June 7.
d-glucono-δ-lactone, Production of. R. Pasternack and W. R. Giles. 1,862,511; June 7.
Damper. G. Hartland. 1,862,084; June 7.
Damper, Automatic stack. J. E. Ludwig. 1,862,262; June 7.
Damper, Fireplace. N. E. Barrows. 1,852,456; June 7.
Days between any two given dates, Device for ascertaining the number of. A. Schmid. 1,862,435; June 7.
Deck plate. R. C. Mahon. 1,862,227; June 7.
Dental appliance. C. J. Stein. 1,861,645; June 7.
Denture and manufacture thereof, Artificial. I. J. Dresch. 1,862,336; June 7.
Detergent composition and making the same. L. T. Bussler. 1,861,685; June 7.
Dextro-5-phenyl-5'-ethyl hydantoin. H. Sobotka. 1,861,458; June 7.
Dial for photographic printing machines, Presetting. H. D. Phillips. 1,861,937; June 7.
Die. C. R. Leiter. 1,861,538; June 7.
Die and punch. J. Vehko. 1,861,648; June 7.
Die for slotting machines, Cutting. I. J. Gannon and G. E. Linn. 1,861,913; June 7.
Diestock. G. G. Hassler. 1,861,793; June 7.
Di-iodo-hydroxy mercury fluorescein. H. M. Chiles. 1,862,049; June 7.
Dimmer scheme, Proportional preset. R. J. Wensley. 1,862,487; June 7.
Direction finder, Automatic. D. G. Little. 1,862,119; June 7.
Dish or similar article, Covered. J. B. McDonald. Des. 87,121; June 7.
Disk cultivator or plow. J. P. Seaholm. 1,861,667; June 7.
Disk harrow. S. S. Furrer. 1,861,741; June 7.
Dispenser, Article. A. R. Binggeli. 1,861,834; June 7.
Dispensing can. J. H. Miller. 1,862,193; June 7.
Dispensing device. L. F. Hadden. 1,861,528; June 7.
Display case. M. T. O'Donnell. 1,861,935; June 7.
Display device. J. F. Allison. 1,862,353; June 7.
Display equipment. J. Ruwitch. 1,861,820; June 7.
Display stand. J. S. Friede. Des. 87,109; June 7.
Distillation apparatus and using the same, Low temperature. F. Puening. 1,862,034; June 7.
Distillation apparatus, Low temperature. F. Puening. 1,861,876; June 7.
Document assorting and tempo ary filing device. M. A. Thometz. 1,861,764; June 7.
Doll. R. W. and J. A. Gudgen. Des. 87,114; June 7.
Doll. J. Rosenfeld. Des. 87,130; June 7.
Doorcheck. A. R. Beitman. 1,861,679; June 7.
Door for hangars and the like. E. H. McCloud. 1,861,748; June 7.
Douche apparatus. R. H. Moore. 1,861,932; June 7.
Draft rigging for railway cars. C. J. Nash. 1,861,505; June 7.
Drain, Gutter or roof. E. W. N. Boosey. 1,862,134; June 7.
Drawing bench. J. F. Diehl. 1,861,563; June 7.
Dress, Ensemble. D. Long. Des. 87,119; June 7.
Drier: *See*—
Clothes drier.
Drilling mechanism. T. R. E. Rundqvist. 1,862,496–7; June 7.
Drinking fountain, Poultry. J. Gay and A. Brinker. 1,862,217; June 7.
Drive, Electromotor. E. Wesnigk. 1,862,248; June 7.
Drive for adding machines, Electric. N. White. 1,861,618; June 7.
Drive unit, Front wheel. A. A. Clifton. 1,861,594; June 7.
Driving mechanism for spinning and twisting machines. I. R. Rowe. 1,862,162; June 7.
Dust cap and quick adjustable nut. R. Dymock. 1,861,846; June 7.
Dusting machine. T. W. Gray, J. Lewis, and C. B. Lebon, sr. 1,862,396; June 7.
Dyestuff and making same, Metalliferous. F. Straub and W. Anderau. 1,862,439; June 7.
Dyestuffs of the benzanthrone acridine series and making same, Brown vat. E. Honold. 1,861,921; June 7.
Earth testing instrument. J. H. Highmark. 1,862,339; June 7.
Egg meter. A. H. Greene. 1,861,854; June 7.
Eggs, Method and apparatus for the artificial incubation of. C. W. Allen. 1,861,895; June 7.
Eggs, Treating. W. G. Howard. 1,862,508; June 7.
Electric discharge device. M. Pirani. 1,861,643; June 7.
Electric discharge device, Gaseous. H. Kressin. 1,861,633; June 7.
Electric discharge device, Gaseous. M. Pirani, K. Becker, and M. Reger. 1,861,581; June 7.
Electric friction brake. A. P. Warner. 1,861,729; June 7.

Electric heater. J. C. Woodson. 1,861,464; June 7.
Electric machine regulating system, Dynamo. F. W. Meyer. 1,862,233; June 7.
Electric motor. H. E. Warren. 1,862,356; June 7.
Electric motor. H. E. Warren. 1,862,376; June 7.
Electric signaling. L. Begin. 1,862,106; June 7.
Electric switch. E. N. Jacobi. 1,862,117; June 7.
Electric switch. F. Schwien. 1,862,242; June 7.
Electrical appliance. J. G. Parkin. 1,862,096; June 7.
Electrical measuring instrument. B. P. Romain. 1,861,720; June 7.
Electrical resistance. J. Riotte. 1,862,428; June 7.
Electrical translating apparatus. P. H. Dowling. 1,862,211–12; June 7.
Electrical translating apparatus. A. J. Sorensen and P. H. Dowling. 1,862,203–4; June 7.
Electrode and producing same, Carbonized. H. M. Elsey. 1,862,138; June 7.
Electrode, Arc lamp. M. Oswald. 1,862,422; June 7.
Electrolyte control unit. D. W. Davis. 1,861,789; June 7.
Electrolyte for the manufacture of hydrogen peroxide. A. Kratky. 1,861,573; June 7.
Electrolytic cathode-diaphragm structure. K. E. Stuart. 1,862,244; June 7.
Electrolytic cell. K. E. Stuart. 1,862,245; June 7.
Electroplating. O. L. Maag. 1,861,446; June 7.
Elevation post. W. S. Hough. 1,861,532; June 7.
Elevator: *See*—
Casing elevator.
Elevator governor cable swivel. G. E. Culp. 1,861,908; June 7.
Engine: *See*—
Hoisting engine. Sleeve valve engine.
Rotary engine.
Engine circulating system. A. G. McCaleb. 1,861,809; June 7.
Engine cowling. H. A. Hicks. 1,862,144; June 7.
Engine fuel and oil control means. C. G. Mahana and C. Gross. 1,862,155; June 7.
Engine heater, Airplane. C. G. Gilly. 1,862,114; June 7.
Engines for locomotives, Device for starting auxiliary. L. Hladik. 1,862,362; June 7.
Engines to the drive of locomotives, Application of Diesel. H. Fonty. 1,861,690; June 7.
Ephedrine salts and oil solutions thereof. E. E. Moore and E. B. Carter. 1,861,543; June 7.
Ephedrine solution. J. W. Bullock. 1,862,253; June 7.
Escape means for a submarine when submerged. J. M. Clark. 1,861,595; June 7.
Expansion cutter. L. J. Loeffelman. 1,861,928; June 7.
Extension top table. H. A. Hall. 1,861,565; June 7.
Exterminator for house and blow flies, Outdoor sanitary. E. L. Watson. 1,862,325; June 7.
Extractor and bottle opener, Cork. J. H. Weller. 1,861,993; June 7.
Eye exerciser. B. A. Ball. 1,861,897; June 7.
Fabric, Apparatus for forming weftless cord. W. W. Stephens. 1,862,498; June 7.
Fabric, Method and mechanism for making knitted. A. Graenz. 1,862,514; June 7.
Fabrics, Apparatus for treating and aging. E. S. Chapin and A. H. Jacoby. 1,861,623; June 7.
Fabrics, Making viscose-latex coated. W. C. Calvert. 1,862,504; June 7.
Fabrics, Treating and aging. E. S. Chapin and A. H. Jacoby. 1,861,624; June 7.
Fairing to airplane wheels, Attaching. J. H. Barber. 1,861,432; June 7.
Fan and directing the air current therethrough. L. M. Persons. 1,861,608; June 7.
Fan for water closets, Ventilator. J. Hertzog. 1,862,085; June 7.
Fan, Ventilating. M. Berman. Re18,489; June 7.
Fans, Apparatus and method of controlling. E. L. Anderson. 1,862,289; June 7.
Fastener, Garment. F. Wright. 1,861,829; June 7.
Fastener, Tapping. G. C. Trotter. 1,862,486; June 7.
Fastening device. S. S. Adams. 1,861,652; June 7.
Fastening device. L. H. Lee. 1,862,152; June 7.
Feeder, Poultry. F. W. Perry. 1,862,349; June 7.
Feeding device for glass articles. R. Hagiwara. 1,862,351; June 7.
Feeds, Apparatus for the manufacture of prepared. E. H. Frickey. 1,861,471; June 7.
Fender and hood construction for motor vehicles. I. Ornberg. 1,862,388; June 7.
Ferrule, Sash cord. R. E. Hamilton. 1,862,306; June 7.
Filament support. R. M. Heintz. 1,861,794; June 7.
File, Paper. A. A. Ainsworth. 1,862,450; June 7.
Filling station apparatus. H. P. Kling. 1,862,311; June 7.
Film and making same, Visibly marked motion picture. R. N. Titus. 1,861,827; June 7.
Film gate for motion picture machines. C. L. Heisler. 1,862,364; June 7.
Film reel, Motion picture. O. Wittel. 1,861,891; June 7.
Films and the like from cellulose solutions, Manufacturing. M. König. 1,861,701; June 7.
Films, Conditioning photographic. K. C. D. Hickman. 1,861,918; June 7.
Filter. H. P. Curtis. 1,861,469; June 7.
Filter. L. R. Lentz. 1,861,805; June 7.
Filter. R. P. F. Liddell. 1,861,576; June 7.
Filter, Water. L. E. Rabjohn. 1,861,481; June 7.
Filtering apparatus, Automatic. G. Donaldson. 1,862,050; June 7.
Finger ring. J. J. Klecka. Des. 87,097; June 7.
Fire extinguisher. L. E. Griffing. 1,862,082; June 7.
Fire extinguishing device. H. Hutchinson. 1,861,533; June 7.
Firecracker. H. Yamagishi. 1,861,893; June 7.
Fishbone removing machine. W. H. Hunt. 1,861,863; June 7.
Fish lure. S. R. Bergstedt. 1,861,905; June 7.
Fishing reel. S. G. Russell. 1,861,819; June 7.
Fixture, Indirect lighting. L. C. Doane. 1,862,369; June 7.
Flexible coupling. R. G. Anderson. 1,862,355; June 7.
Flush tank, Water closet. B. O. Tilden. Des. 87,137; June 7.
Footwear attachment. F. L. Simonson. 1,862,438; June 7.
Form-cutter roll. J. C. and R. D. Shaw. 1,861,456; June 7.
Form for building columns and beams. W. G. Venard. 1,861,766; June 7.
Form, Shoe. W. J. De Witt. 1,861,657; June 7.
Fountain: *See*—
Drinking fountain.
Frame: *See*—
Harrow frame.
Frame structure, Window. C. D. Hudson. 1,861,861; June 7.
Fresno. A. S. Terhaar. 1,861,762; June 7.
Friction brake. J. Whyte. 1,861,771; June 7.
Fuel regulator, Automatic. C. L. Stokes. 1,861,725; June 7.
Fuel to burners, Apparatus for distributing pulverized. F. D. Kirtland, J. J. Broshek, R. C. Brierly, and J. S. Evans. 1,861,535; June 7.
Fumigants, Evaporating. H. G. Bersie. 1,861,736; June 7.
Furnace: *See*—
Continuous furnace. Induction furnace.
Furnace. A. L. Galusha. 1,862,477; June 7.
Furnace. J. L. Walters. 1,861,767; June 7.
Furnace and control therefor, Electric. E. C. Glitzke. 1,861,472; June 7.
Furnace attachment. J. W. Ternau. 1,862,126; June 7.
Furnace wall structure. F. B. Bigelow. 1,861,737; June 7.
Fuse. C. Ringwald. 1,862,317; June 7.
Fuse, Cartridge. C. A. Johnson. 1,861,744; June 7.
Fuse for rotating projectiles. E. W. Brandt. 1,861,521; June 7.
Garment and making the same, Reducing. T. A. Bennett. 1,862,046; June 7.
Garment edge. A. J. C. Harper. 1,862,377; June 7.
Garment pressing machine. E. H. Zacharias. 1,861,894; June 7.
Gas burner. H. D. Dufault. 1,862,051; June 7.
Gas from oil, Making. L. B. Jones. 1,862,018; June 7.
Gas indicating apparatus. B. Trebitsch. 1,861,989; June 7.
Gas mask, Molding an india rubber. D. F. Wilhelmi. 1,861,673; June 7.
Gas meter. J. R. Armstrong. 1,852,451; June 7.
Gas, Producing coal. J. M. Rusby and W. I. Battin. 1,861,452; June 7.
Gas protected lock. R. K. Doherty. 1,862,258; June 7.
Gaseous discharge device. L. J. Buttolph. 1,861,620; June 7.
Gaseous discharge device. S. P. Sashoff. 1,861,453; June 7.
Gasket, Rubber door. M. C. Terry and H. E. Pleasant. 1,862,285; June 7.
Gate: *See*—
Casing control gate. Sluice gate.
Gauge: *See*—
Air gauge. Pressure gauge.
Brake adjusting gauge. Saw gauge.
Marking gauge. Screw thread gauge.
Gear casing. I. Short. 1,861,941–2; June 7.
Gear, Draft. D. F. Sproul. 1,861,460; June 7.
Gear mechanism, Reversing. C. C. Bertram. 1,862,173; June 7.
Gear shift. R. C. Hoffman. 1,862,308; June 7.
Gear, Transmission. T. H. Orr. 1,861,480; June 7.
Gearing, Change speed. E. Moldenhauer. 1,861,931; June 7.
Gears, Cutting the teeth of. O. G. Simmons. 1,862,202; June 7.
Generator: *See*—
Steam generator.
Glass: *See*—
Safety glass.
Glass, Apparatus for making plate. J. H. Fox. 1,861,627; June 7.
Glass crumbling machine. J. J. McCabe. 1,862,194; June 7.
Glass grinding and polishing apparatus, Continuous. F. B. Waldron. 1,862,445; June 7.
Glass, Method of and apparatus for drawing. A. E. Spinasse. 1,861,761; June 7.
Glass panels, Preparing. G. F. Mattman. 1,861,577; June 7.
Globe, Street light. H. W. Davidson. Des. 87,103; June 7.
Glove finger tip construction. C. H. Johanson. 1,861,601; June 7.

Golf ball cleaning device. L. Signorini. 1,862,437; June 7.
Golf game. E. H. Murray. 1,862,093; June 7.
Grain handling machine. O. E. Miller. 1,862,092; June 7.
Grave border and liner, Adjustable. C. M. Wickstrum. 1,861,560; June 7.
Gravel washer. A. L. Munro. 1,861,578; June 7.
Gravitometer, Indicating liquid. A. W. Hubbell. 1,862,402; June 7.
Grinding machine. K. F. Gallimore. 1,862,215; June 7.
Grinding machine. H. F. Koestlin. 1,862,379; June 7.
Grounding clamp. H. O. Woolson. 1,862,073; June 7.
Guard, Railway crossing. F. P. Miller. 1,862,276; June 7.
Gun mount and carriage. G. M. Barnes. 1,861,831; June 7.
Halter, Bait. K. J. Lageson. 1,862,187; June 7.
Hammer, Helve operated. W. A. Rockenfield. 1,862,431; June 7.
Hand, Artificial. J. W. Baehr. 1,861,678; June 7.
Handle: *See*—
Bottle handle. Steering wheel handle.
Hanger for floating roofs. G. T. Horton. 1,861,860; June 7.
Harrow frame, Wheeled. J. H. Flatley. 1,861,626; June 7.
Harrow, Washboard road. A. M. Devereux. 1,861,494; June 7.
Harvester. J. G. Pax. 1,862,101; June 7.
Harvester and topping machine, Beet. J. W. Bright. 1,862,048; June 7.
Harvester, Automatic beet. J. J. Hannah. 1,862,390; June 7.
Harvester, Bean. W. F. Lonbeck. 1,862,226; June 7.
Harvesters, Extension control for tractor drawn. E. F. Huddle. 1,862,186; June 7.
Hats, Blocking of. A. Hands. 1,862,398; June 7.
Hayrack clamp, Adjustable. W. F. Yeoman. 1,861,487; June 7.
Headlight, Automobile. R. A. Russell, jr. 1,861,883; June 7.
Headlight mounting for automobiles. C. W. Van Ranst. 1,861,463; June 7.
Heat exchange unit. A. S. Limpert. 1,862,154; June 7.
Heat exchanger. H. W. How. 1,862,310; June 7.
Heat interchanger. F. M. Young. 1,861,676; June 7.
Heater: *See*—
Concealed heater. Engine heater.
Electric heater. Water heater.
Heater for traveling stock. E. F. Northrup. 1,862,120; June 7.
Heating device. A. B. Modine. 1,861,812; June 7.
Heating device, Adjustable induction. T. H. Long. 1,861,869; June 7.
Heel and its manufacture. L. Leighton, jr. 1,861,969; June 7.
Heel and making the same. N. H. Knowlton. 1,861,662; June 7.
Heel press. L. A. Holman. 1,861,569; June 7.
High frequency supply. R. C. Curtis. 1,861,437; June 7.
Hinge. A. N. Rose. 1,862,432; June 7.
Hoist, Automatic reverse ratcheting. F. W. Coffing. 1,862,331; June 7.
Hoisting device, Automatically releasing. A. L. Kositzky. 1,862,312; June 7.
Hoisting engine. I. W. Macy. 1,861,703; June 7.
Holder and sharpener, Knife. L. P. Branch. 1,861,683; June 7.
Holder, Brush. W. H. Jayne. 1,862,404; June 7.
Holder, Crayon. N. Bafetti. 1,861,466; June 7.
Holder for belt fastening means. G. E. Purple. 1,862,121; June 7.
Holder for cows' tails. C. L. Wilson. 1,861,651; June 7.
Holder for sign characters. F. P. Gstalder. 1,861,599; June 7.
Holder, Net. J. L. Kleinman. 1,862,118; June 7.
Holder, Nozzle and hose. J. W. Grant. 1,862,053; June 7.
Holder, Sack. L. Mallcay. 1,862,413; June 7.
Holder, Utensil. H. L. Martin. 1,861,808; June 7.
Hook: *See*—
Lifting hook.
Horn. H. Hueber. 1,862,086; June 7.
Horseshoe calk. A. R. Swanstrom. 1,862,499; June 7.
Horseshoe with metal reenforcement, Elastic. P. Harsem. 1,861,695; June 7.
Hose coupling. E. Lefkowitz. 1,861,635; June 7.
Hot cap. H. R. Sage. 1,861,981; June 7.
House: *See*—
Tourist house.
Household appliance. F. J. R. Karlström and J. G. Nord. 1,861,924; June 7.
Hum due to interelement capacities in vacuum tubes, Preventing. W. L. Krahl. 1,862,020; June 7.
Humidifier for unit heaters. E. C. Hauson and J. Soderholm. 1,862,184; June 7.
Hydraulic controller, Automatic. C. V. Foulds. 1,861,847; June 7.
Hydrobrake. R. J. Norton. 1,862,419; June 7.
Hydrocarbons, Treating. P. J. Carlisle and C. R. Harris. 1,862,003; June 7.
Hydrocarbons, Treatment of. T. T. Gray. 1,862,507; June 7.
Incubator. J. F. MacKay. 1,861,746; June 7.
Index adjusting means. E. B. Crocker. 1,862,008; June 7.
Indicating system and apparatus. F. M. Slough. 1,861,886; June 7.
Indicator: *See*—
Strike and ball indicator. Target indicator.
Induction furnace. P. H. Brace. 1,862,293; June 7.
Induction furnace. T. H. Long. 1,861,870; June 7.
Inkwell and pen support, Combined. J. F. Gall. 1,862,139; June 7.
Inlet fitting. H. M. Creighton. 1,861,842; June 7.
Internal combustion engine. J. B. Hird, jr. 1,861,743; June 7.
Internal combustion engine. F. Sass. 1,862,321; June 7.
Iron attachment, Electric. W. Mackenzie, jr. 1,862,411; June 7.
Jar and closure therefor. B. F. Savery. 1,861,552; June 7.
Joint: *See*—
Pipe joint. Universal joint.
Pivot joint.
Joint. H. C. Lord. 1,862,027; June 7.
Joint material, Expansion. A. C. Fischer. 1,862,506; June 7.
Knee and elbow pad. F. Glahe. 1,862,303; June 7.
Knife attachment for pitchforks, Band. W. W. Gordon. 1,861,526; June 7.
Knitting. E. O. Nebel. 1,862,416–17; June 7.
Lacquer or the like, Applying. R. Z. Hopkins and W. D. Ogden. 1,861,475; June 7.
Lamp. L. J. Gagnon. Des. 87,110; June 7.
Lamp, Automobile signal. J. Evich. Des. 87,105–6; June 7.
Lamp control device. C. L. Patterson. 1,861,752; June 7.
Lamp torchère with luminous reflector. P. Parlato. Des. 87,128; June 7.
Land clearing and pulverizing machine. H. Rainwater. 1,862,035; June 7.
Latch, Automatic. J. D. Stassart. 1,861,887; June 7.
Latch, Sash. B. F. Kelly. 1,862,056; June 7.
Laths, Forming metal. M. Kaminetzky. 1,862,221; June 7.
Lens, Headlamp. R. N. Falge. 1,862,078; June 7.
Lens, Nonglare headlight. W. O'Neill. 1,861,580; June 7.
Lever. H. J. Neufang. 1,861,507; June 7.
Lifting hook. F. N. Grant. 1,862,081; June 7.
Lighting fixture. E. A. Wangersheim. Des. 87,138–9; June 7.
Lighting fixture. C. G. Wing. Des. 87,140; June 7.
Liquid cooling apparatus for internal combustion engines. G. H. Lecarpentier. 1,861,804; June 7.
Liquid level indicating means. W. H. Parker. 1,861,715; June 7.
Liquid motor. R. B. Cahill. 1,861,951; June 7.
Liquid treatment. A. B. Hodges. 1,861,796; June 7.
Liquids, Apparatus for agitating. J. F. Schiller. 1,861,982; June 7.
Lithic composition. W. E. Willett. 1,862,448; June 7.
Loader. J. C. McDermott. 1,862,230; June 7.
Loading mechanism for conveyers. C. S. Jennings and L. C. Allen. 1,861,963; June 7.
Lock: *See*—
Closure lock. Gas protected lock.
Coincidental lock. Press-button-lock.
Lock. E. W. North. 1,861,579; June 7.
Locking and fastening device for vaults, Automatic. J. D. Renshler. 1,862,064; June 7.
Locking device for slide fasteners. S. H. Norton. 1,862,196; June 7.
Locomotive control system. C. C. Whittaker. 1,862,129; June 7.
Locomotive drawbar. M. Rivkin. 1,862,429; June 7.
Lodge, Collapsible and portable. W. B. Pooch. 1,862,425; June 7.
Loom having stationary weft supplies. W. A. Dickie and F. C. Hale. 1,862,178; June 7.
Lubricants, Plumbing. H. B. Sheppard. 1,862,164; June 7.
Lubricating installation and apparatus. E. H. Kocher. 1,862,482; June 7.
Lubrication. T. E. Coleman. 1,862,255; June 7.
Machine employed in manufacturing belts. W. H. Gerstenslager. 1,862,490; June 7.
Machine for applying solder to keys for opening containers. A. L. Kronquest. 1,861,536; June 7.
Machine for automatically tamping underneath railway-sleepers during the finishing of the permanent way. R. Brosig. 1,861,655; June 7.
Machine for knitting split fabric. J. and R. H. Lawson. 1,862,021; June 7.
Machine for making fiber reed. G. E. Nordstrom and J. E. Millett. 1,862,387; June 7.
Machine for making paper boxes. H. Carle. 1,861,952; June 7.
Machine for operating on stitchdown shoes. A. Bates. 1,861,653; June 7.
Machine for operating upon end portions of shoes. W. C. Baxter. 1,861,832; June 7.
Machine for preparing metal for electric welding. J. R. Brueckner and W. H. Gibb. 1,862,107; June 7.
Machine for providing laminated fibrous structures with offset edges. H. A. Cumfer. 1,862,256; June 7.
Machine for scutching, decorticating, and softening fibrous materials such as flax, hemp, jute, and ramie. M. Soenens. 1,861,986; June 7.

Machine for the manufacture of hollow blown glass articles. R. Hall. 1,862,264; June 7.
Machine for welding. J. W. Meadowcroft. 1,861,971; June 7.
Magnesium, Making metallic. R. M. Hunter and S. B. Heath. 1,861,798; June 7.
Magnetic alloys and making the same. W. E. Ruder. 1,862,365; June 7.
Magnetic control system. W. B. Cooley. 1,861,687; June 7.
Magnetic material. W. E. Ruder. 1,862,357; June 7.
Magnetic slip-clutch and winding mechanism. F. Honig. 1,862,267; June 7.
Marker, Memorial grave. F. F. Fischer. Des. 87,107; June 7.
Marking gauge. S. E. Slino. 1,862,201; June 7.
Massage and exercise machine. F. A. Anderson. 1,861,774; June 7.
Match package. C. J. Langley. 1,862,151; June 7.
Material and process for neutralizing acids in oils. H. H. Moreton. 1,861,711; June 7.
Material, Apparatus for handling strip. J. O. Small. 1,862,040; June 7.
Material, Laminated plastic. F. T. Lahey. 1,861,663; June 7.
Material moving device. M. Wooldridge. 1,861,731; June 7.
Material spreader. E. J. Hawks. 1,862,347; June 7.
Material working apparatus. H. W. Larson and R. H. Patchen. 1,861,574; June 7.
Materials, Decomposing organic. R. J. Dearborn and G. W. Gray. 1,861,956; June 7.
Materials from slurries or sludges, Separation of solid and liquid. A. E. Leek. 1,861,537; June 7.
Materials, Silicifying fibrous. O. Stiner. 1,862,167; June 7.
Measuring and recording instrument. R. D. Hickok and W. H. Rennick. 1,861,697; June 7.
Measuring apparatus. J. M. Barstow. 1,862,458; June 7.
Mechanical movement. T. J. Smulski. 1,862,284; June 7.
Mercerizing. H. W. Butterwirth, jr. 1,861,490; June 7.
Mercury switch. C. Hatay. 1,861,631; June 7.
Mercury switch with plunging core. C. Hatay. 1,861,630; June 7.
Metal, Apparatus for dividing. L. C. Shippy. 1,861,758; June 7.
Metal article and making the same, Protected. A. W. Coffman. 1,862,332; June 7.
Metal bands, especially lines, for typographic purposes, Device for the working of. J. Wagner and W. Krostowitz. 1,861,670; June 7.
Metal bodies, Removing defects from. C. E. Spigelmire and R. M. Walters. 1,861,760; June 7.
Metal clip for plaster board or lath. R. J. Taylor. 1,862,391; June 7.
Metal, Rolling. V. E. Edwards. 1,861,525; June 7.
Metals by electrolysis, Producing rare. F. H. Driggs and W. C. Lilliendahl. 1,861,625; June 7.
Metals or alloys of base metals, Decorating base. J. C. McFarland. 1,862,231; June 7.
Meter: *See*—
Egg meter. Gas meter.
Meter register. H. D. Winton. 1,861,517; June 7.
Microscope. W. L. Patterson. 1,862,031; June 7.
Milk dispenser. W. Bellmer. 1,861,619; June 7.
Mine track cleaner. V. L. Martin. 1,861,639; June 7.
Mirror, All-metal rear view. J. R. Olshei. 1,862,094; June 7.
Mirror and making same. J. R. Olshei. 1,862,095; June 7.
Mixer and sifter. A. D. MacLellan. 1,862,412; June 7.
Mixing machine, Continuous. V. E. Schmiedenknecht. 1,862,436; June 7.
Mixtures of primary aromatic amines, Separation of. E. Tschunkur and A. Klamroth. 1,861,890; June 7.
Molding, Flexible electrical. H. and F. Wolfson and H. Gerstein. 1,861,675; June 7.
Molding, Running board. H. T. Woolson. 1,862,131; June 7.
Molding, Upholstery. C. P. Schlegel. 1,862,517; June 7.
Mooring apparatus. R. C. Lamond. 1,862,409; June 7.
Mooring apparatus for airships. E. W. Bowers. 1,861,780; June 7.
Mooring equipment. F. Short. 1,861,983; June 7.
Mop, Squeegee. H. Hertzberg. 1,861,795; June 7.
Mortising machine. A. G. Buchan and I. J. Lyons. 1,861,786; June 7.
Motor: *See*—
Electric motor. Rotary motor.
Liquid motor.
Motor control system. H. A. Winne. 1,862,354; June 7.
Motor-generator regulator system. W. T. Rea. 1,861,550; June 7.
Mounting. T. Lord and I. P. Whitehouse. 1,862,484; June 7.
Mounting, Automobile engine. H. C. Lord. 1,862,483; June 7.
Mouthpiece for tobacco pipes and cigar and cigarette holders. V. Dunhill. 1,861,910; June 7.
Mowing machine. S. E. Rawls. 1,861,816; June 7.
Muffler and air heater, Combination. J. T. Van Iderstine. 1,862,043; June 7.
Muffler for internal combustion engines. F. E. Aseltine. 1,861,775; June 7.
Musical instrument. V. A. Pfeil. 1,861,717; June 7.
Necklace pendant or other jewelry for personal use. E. E. Schleicher. Des. 87,133; June 7.
Nitration of shredded and baled cellulose. A. Hough, J. R. Dufford, and W. C. Leonhard. 1,861,922; June 7.
Nonskid unit. J. J. and C. Kraly. 1,862,408; June 7.
Nose bridge for spectacles. G. E. Nerney. Des. 87,125; June 7.
Nozzle for internal combustion engine, Injection. O. Bauer. 1,862,459; June 7.
Nozzle, Sprinkler. A. R. Le Moon. 1,862,381; June 7.
Nut, Self locking. W. A. Bergstrom. 1,861,833; June 7.
Nuts and washers, Method and apparatus for coupling. A. Stoll. 1,861,889; June 7.
Oil burner. A. Behrsin. 1,861,997; June 7.
Oil burner. E. S. Hoyt. 1,862,401; June 7.
Oil burner, Rotary. L. S. Chadwick, M. Resek, and J. A. Dahlstrom. 1,861,953; June 7.
Oil can, Force feed. W. Hagstrom. 1,862,083; June 7.
Oil distillation. S. P. Miller. 1,862,493; June 7.
Oil, Distilling. E. G. Ragatz. 1,862,063; June 7.
Oil preheating device. J. J. Quill. 1,861,877; June 7.
Oils, Bleaching of. L. D. Taylor. 1,861,513; June 7.
Opener, Garage door. J. T. Crawley. 1,862,469; June 7.
Opener, Parachute. T. B. Brown and M. L. Stansell. 1,861,784; June 7.
Opener, Receptacle. P. C. Gibson. 1,862,480; June 7.
Ornament. J. A. Loring. 1,861,604; June 7.
Ornament of flexible material, Convoluted. V. T. Hoeflich. 1,862,340; June 7.
Orthopedic supporter. M. Cao. 1,862,467; June 7.
Oscillator. L. J. Buttolph. 1,861,561; June 7.
Oven and the like, Baker's. E. Procter. 1,861,719; June 7.
Oven apparatus, Coke. J. A. B. Lovett. 1,862,028; June 7.
Oven regulator. J. H. Grayson. 1,862,183; June 7.
Package, Merchandising. J. R. Dennis. 1,862,335; June 7.
Packing device. E. W. Mayers. 1,861,502; June 7.
Pad: *See*—
Knee and elbow pad. Shoulder pad.
Panels in cardboard, Embossing. H. Kaplan. 1,862,091; June 7.
Pants or overall bottom. W. C. Marke. 1,861,704; June 7.
Paper box blanks, Manufacture of corrugated. G. A. Ungar. 1,861,991; June 7.
Paper roll and guard therefor. J. E. Ott and W. E. Close. 1,861,874; June 7.
Parachute. G. Tricau. 1,862,247; June 7.
Para-phenylphenol, Preparation of. E. C. Britton and S. L. Bass. 1,862,000; June 7.
Parking light. A. E. Brandhorst. Des. 87,101; June 7.
Pavement and its construction, Concrete. R. B. Gage. 1,862,011; June 7.
Paving mixture. J. E. Black. 1,862,502; June 7.
Petroleum acid sludges, Treatment of. F. R. Moser and J. Greutert. 1,862,060; June 7.
Petroleum distillation system. H. W. How. 1,862,363; June 7.
Photographic emulsion. L. G. S. Brooker. 1,861,836; June 7.
Photographic printing and trimming machine. M. Weiner. 1,861,992; June 7.
Photographic recording machine. R. S. Hopkins. 1,861,859; June 7.
Photographing machine, Automatic. D. A. McCowan. 1,862,190; June 7.
Photography, Color. P. Favour. 1,861,911; June 7.
Photomechanical reproduction from half tones or line negatives. A. Murray. 1,861,872; June 7.
Pickling apparatus, Continuous. R. M. Fenton. 1,862,371; June 7.
Picture reel, Motion. O. A. Ross. 1,861,882; June 7.
Pictures, Printing motion. F. D. Williams. 1,861,515; June 7.
Pie wrapping machine. A. Remillard. 1,861,551; June 7.
Piezo-electric crystal oscillator system. A. Hund. 1,861,862; June 7.
Piling, Sheet. W. Prielipp. 1,862,426; June 7.
Pillow. F. E. Tenny. 1,861,608; June 7.
Pipe: *See*—
Smoking pipe. Tobacco pipe.
Pipe. E. C. Tuggle. 1,862,443; June 7.
Pipe, Apparatus for making concrete. O. Tuerck. 1,861,727; June 7.
Pipe exhauster, Dry. E. M. Benson. 1,861,777; June 7.
Pipe joint. R. L. Lee. 1,862,153; June 7.
Pipe stem or similar article. J. Jeantet. Des. 87,117; June 7.
Pipe stem unit, Smoker's. A. S. Hickey. 1,861,858; June 7.
Pipe-welding system. J. F. Peters. 1,862,316; June 7.
Pipe wrench. A. O. Brungardt. 1,862,002; June 7.
Piston. A. L. Armentrout. 1,862,251; June 7.
Piston ring. A. W. Morton. 1,862,059; June 7.
Piston ring. A. P. Petre. 1,861,716; June 7.
Pitch propeller, Variable. H. Glenwright. 1,862,481; June 7.
Pitcher or similar article. J. B. McDonald. Des. 87,120; June 7.
Pivot joint, Oscillating. H. D. Geyer. 1,861,791; June 7.

Planter and fertilizer, Adjustable seed. W. T. Snyder. 1,862,067; June 7.
Plaster and package therefor. W. L. Schrader. 1,862,122; June 7.
Plaster board machine. G. H. A. Ruby. 1,862,318; June 7.
Plasters and other adhesive faced articles, Mounting. R. P. Hayden and F. N. Manley. 1,861,530; June 7.
Plate or similar article. J. B. McDonald. Des. 87,122; June 7.
Plug, Connecting. E. Riemenschneider. 1,862,097; June 7.
Pneumatic dispatch system. C. S. Jennings. 1,861,964; June 7.
Pointer for scales. H. J. Theis. 1,861,943; June 7.
Polishing machine. R. M. Kincaid. 1,862,148; June 7.
Post: *See*—
Elevation post.
Potato sacker. D. H. Paisley. 1,862,424; June 7.
Poultry catcher. F. Fisher. 1,862,472; June 7.
Power and motion transmission mechanism. S. A. Farrell. 1,862,471; June 7.
Power device. W. A. Rarig. 1,861,880; June 7.
Power take-off mechanism for automobiles. F. P. Herman. 1,862,400; June 7.
Power transmission mechanism. H. E. Curtis. 1,861,909; June 7.
Power transmission mechanism. N. Legge. 1,862,188; June 7.
Preparation of emulsions for sizing textile fibers. G. Lefranc. 1,861,927; June 7.
Preparations for aryldiazonium fluoborates yielding concentrated diazo solutions and making same, Solid. K. Schnitzspahn. 1,862,241; June 7.
Press: *See*—
Baling press.
Heel press.
Printing press.
Press-button-lock. A. Ruef. 1,862,320; June 7.
Pressure gauge, Mud fluid. G. H. Bowlus. 1,861,999; June 7.
Pressure operated switch. J. R. Fitzgerald. 1,862,473; June 7.
Pressure splitting device. A. D. Riccia. 1,862,427; June 7.
Printing machine. C. F. Webb. 1,862,446; June 7.
Printing method and apparatus. W. R. Respess. 1,861,610; June 7.
Printing press. E. J. Smith. 1,861,824–5; June 7.
Printing press and wet renewing mechanism therefor. E. J. Smith. 1,861,823; June 7.
Program calendar. A. G. Miller. 1,861,811; June 7.
Projectile with automatic driving band. E. W. Brandt. 1,861,522; June 7.
Propeller. F. W. Caldwell. 1,862,328; June 7.
Propeller. H. P. Morris. 1,862,235; June 7.
Protector for hair waving, Head. J. Metz. 1,861,972; June 7.
Puller: *See*—
Tape puller.
Pulley, Window. R. E. Hamilton. 1,862,305; June 7.
Pulverizer and feeder, Coal. O. E. Bornhauser. 1,861,779; June 7.
Pump. B. S. Aikman. 1,861,732; June 7.
Pump, Centrifugal. A. W. Burke. 1,861,839; June 7.
Pump, Gas lift. G. E. Denman. 1,861,843; June 7.
Pump, Injection. E. T. Adams. 1,862,132; June 7.
Pump, Rotary. A. W. Burks. 1,861,837–8; June 7.
Pump, Rotary. N. Miki. 1,861,708; June 7.
Pumping mechanism, Automatic. R. L. Newton. 1,862,195; June 7.
Punch, Can. J. I. Grisko. 1,861,438; June 7.
Quartz, Marking. S. Boyer. 1,862,366; June 7.
Rack: *See*—
Wrench rack.
Radiator. J. M. Harrison. 1,862,219; June 7.
Radiator. T. E. Murray, jr. 1,861,447–9; June 7.
Radio frequency amplifying system. W. K. McIver. 1,861,707; June 7.
Radioreceiver. E. W. Davidson. 1,861,739; June 7.
Radio station. V. E. Trouant. 1,861,462; June 7.
Railroad tie. J. N. Hobart. 1,861,961; June 7.
Railway draft rigging. S. B. Haseltine. 1,861,629; June 7.
Railway draft rigging. J. H. Link. 1,861,636; June 7.
Railway tie. V. Herwig and E. Mustin. 1,862,266; June 7.
Razors and flashlights, Attachment for safety. S. Mendelsohn. 1,862,274; June 7.
Razors, Device for sharpening the blades of safety. W. Barsch. 1,862,457; June 7.
Reamer. V. J. Kubin. 1,861,702; June 7.
Reamer, Roll stand. W. A. and R. L. Cottle. 1,861,907; June 7.
Receptacle, Automatically refrigerating. P. P. Chapin and W. J. Kupee. 1,862,330; June 7.
Receptacle filling apparatus. C. N. Bergmann. 1,861,734; June 7.
Record analyzing and posting machine. J. R. Peirce. 1,862,032; June 7.
Recording device. H. Sengebusch. 1,862,200; June 7.
Rectification column. P. Subkow. 1,862,069; June 7.
Reel: *See*—
Film reel.
Fishing reel.
Picture reel.
Reel. E. H. Schane. 1,862,199; June 7.
Refractory. G. A. Soper, jr. 1,861,759; June 7.
Refractory articles, Making. M. Meth. 1,862,191; June 7.
Refrigerating and ventilating appliance. C. A. Moore. 1,861,710; June 7.
Refrigerating apparatus. H. Röhl. 1,861,979; June 7.
Refrigerating apparatus for freight cars. L. K. Wright. 1,861,518; June 7.
Refrigerating, dehumidifying, and ventilating appliance. C. A. Moore. 1,861,813; June 7.
Refrigeration, Artificial. J. G. De Remer. 1,861,957; June 7.
Refrigerator. C. M. Brenner. 1,862,464; June 7.
Refrigerator. H. M. Hessenbruch. 1,862,491; June 7.
Refrigerator, Bottle. C. A. Frick. 1,862,395; June 7.
Refrigerator cooling structure. W. H. Percival. 1,861,875; June 7.
Refrigerator, Varied temperature. F. A. Berlin. 1,862,252; June 7.
Register: *See*—
Meter register.
Regulator: *See*—
Fuel regulator.
Oven regulator.
Regulator device. W. F. Conran. 1,862,111; June 7.
Remote control system. P. F. Shuey. 1,862,123; June 7.
Resilient wheel. N. Veltri. 1,862,288; June 7.
Resistance element. H. E. Campbell. 1,861,434; June 7.
Resistors, Making thermosensitive. L. O. Grondahl. 1,862,014; June 7.
Ring: *See*—
Piston ring.
Sizing ring.
Ring spinning machine. F. Oertel. 1,862,030; June 7.
Ring winding machine. G. Tauchmann. 1,862,206; June 7.
Road material, Spreading. C. G. Kime. 1,861,925; June 7.
Road spraying and mixing apparatus. N. W. McLeod. 1,862,232; June 7.
Rock drill feeding device. J. G. Graham. 1,861,853; June 7.
Rod wrench device, Sucker. J. A. Vance and D. M. Hammett. 1,861,728; June 7.
Roll for electric welding machines, Rotary contact. H. J. Burnish. 1,862,296; June 7.
Roller runway for sheet glass. W. Owen. 1,861,665; June 7.
Roof, Shingle. C. R. Eckert. Des. 87,104; June 7.
Roofing. G. L. Bennett. 1,862,292; June 7.
Roofing, Sheet metal. G. L. Bennett. 1,861,998; June 7.
Rope or cord construction and making same, Reinforced. J. H. Chadbourne. 1,862,505; June 7.
Rope-saving sling thimble. G. W. Gascoin. 1,862,478; June 7.
Rotary engine. P. G. Tacchi. 1,862,440; June 7.
Rotary motor. R. C. McCracken. 1,861,706; June 7.
Rounding and channeling machine. A. Bourgeois. 1,861,654; June 7.
Rounding and channeling machine. O. L. Sherman and A. Bourgeois. 1,861,822; June 7.
Rubber stock fabricating machine. H. A. Denmire. 1,862,334; June 7.
Rubber, Vulcanizing. G. H. Stevens. 1,861,987; June 7.
Rug cleaning machine. A. S. Khanzadian. 1,861,476; June 7.
Sadiron. G. Finn. 1,862,338; June 7.
Safety brake. C. G. Ross. 1,861,881; June 7.
Safety device for coupler pockets. L. L. Neebe. 1,862,418; June 7.
Safety device for hoisting cages. H. H. and C. H. McDaniel. 1,861,930; June 7.
Safety glass. M. Hagedorn and A. Jung. 1,861,915; June 7.
Sampling machine. L. Anderson. 1,862,250; June 7.
Sander and polisher, Universal. A. H. Roos and H. J. Riddle. 1,861,940; June 7.
Saponaceous emulsion and product containing the same. W. G. Soley. 1,862,322; June 7.
Sash construction, Window. C. E. Conner and H. C. Ainsworth. 1,862,007; June 7.
Sash, Storm. A. G. Siebenlist. 1,862,165; June 7.
Saw gauge. H. Newman. 1,861,508; June 7.
Saws, Side dressing circular. W. Hempel. 1,861,531; June 7.
Sawmill dog. R. E. Langill and W. B. Grueter. 1,861,867; June 7.
Scale, Weighing. W. N. Gilbert. 1,862,012; June 7.
Scissors. C. L. Gilstrap and H. T. Smith. 1,862,079; June 7.
Scoop, Condenser. H. F. Schmidt. 1,862,282; June 7.
Screw driver. G. Edstrom. 1,862,470; June 7.
Screw thread gauge. W. E. Hoke. 1,862,146; June 7.
Screw threads, Gauging. W. E. Hoke. 1,862,145; June 7.
Seal, Conveyer slot. J. C. Woodson. 1,861,465; June 7.
Seal, Documentary. M. H. and W. Jackson. 1,861,572; June 7.
Seal for floating roofs. D. E. Larson. 1,861,808; June 7.
Seal, Receptacle. J. F. Jones and R. W. Nelson. 1,862,088; June 7.
Seam welding machine. J. R. Brueckner. 1,862,108; June 7.
Seat: *See*—
Adjustable seat.
Separating apparatus. F. A. Quiroz. 1,861,878; June 7.
Servo brake, Vacuum operated. A. Kazenmaier. 1,861,534; June 7.

Sewing machines, Looper operating mechanism for. F. Lutz. 1,861,540; June 7.
Shade, Lamp. H. C. Noe. Des. 87,126; June 7.
Shade or similar article. H. A. Buccini and S. H. Barnes. Des. 87,102; June 7.
Shade, Slat. H. W. Pratt. 1,861,718; June 7.
Shade supporting structure. W. W. Morey. 1,862,385; June 7.
Shaker, Condiment. M. C. T. Lewis. 1,862,057; June 7.
Shaker, Salt. R. R. Rundell. 1,861,980; June 7.
Shaving machine. W. F. Feyrer. 1,861,564; June 7.
Sheep brander. C. H. Gridley. 1,861,914; June 7.
Sheets, Apparatus for and method of feeding. E. C. Maass. 1,861,605; June 7.
Shield, Welding. R. W. Holt. 1,861,797; June 7.
Shingle. H. Abraham. 1,862,500; June 7.
Ship propulsion system. W. Schaelchlin. 1,861,454; June 7.
Ship-propulsion systems, Regulation of. G. M. Mitzlaff. 1,861,750; June 7.
Shock absorber. E. F. Rossman. 1,861,818; June 7.
Shock absorber, Hydraulic. S. L. Marsh. 1,862,228; June 7.
Shock absorbing mechanism, Friction. J. F. O'Connor. 1,861,664; June 7.
Shoe fastening device. R. L. and W. E. Boulet. 1,862,047; June 7.
Shoe finishing machine. L. Bellando. 1,861,903; June 7.
Shoe, Ladder. W. J. Baker. 1,862,171; June 7.
Shoe shank stiffener. S. Ferragamo. 1,862,359; June 7.
Shoulder pad. E. W. Till. 1,862,441–2; June 7.
Shuttle. A. Christoph. 1,861,593; June 7.
Sign construction. R. C. Hyde and C. Van Wyck. 1,862,087; June 7.
Sign, Illuminated. C. F. Holman. 1,861,920; June 7.
Sign, Interchangeable letter. W. H. Trostel. 1,862,375; June 7.
Signal apparatus for automobiles. C. C. Holmes. 1,861,474; June 7.
Signaling system. R. C. Curtis and C. A. Boddie. 1,862,137; June 7.
Silica and the like, Method and apparatus for fusing. P. K. Devers. 1,862,358; June 7.
Silk fiber sheet, Making. N. Kawaguchi. 1,862,019; June 7.
Sizing ring. F. B. Grimm. 1,861,527; June 7.
Slack adjuster, Automatic. P. B. Camp. 1,861,433; June 7.
Slack adjuster, Automatic. P. B. Camp. 1,862,136; June 7.
Sleeve valve engine. J. Haltenberger. 1,861,440–1; June 7.
Slipper and method of making. M. L. Dodge and H. L. J. Duchemin. 1,861,844; June 7.
Sluice gate. E. B. Philips. 1,862,389; June 7.
Smoke producer. R. Goddard. 1,861,852; June 7.
Smoker's package. L. M. Bavan. 1,862,133; June 7.
Smoking pipe. C. E. Maynard. 1,861,503; June 7.
Soap cutting machine. H. P. Forté. 1,862,360; June 7.
Sock linings in shoes, Incorporating. J. Cavanagh. 1,861,686; June 7.
Soda content of deteriorated alkaline solutions, Clarifying and recovering caustic. J. H. Buchanan and J. H. Toulouse. 1,861,950; June 7.
Sole and heel, Combined rubber. A. E. Tebbutt. Des. 87,136; June 7.
Sole, Rubber. G. F. Quinn. 1,861,879; June 7.
Sols and their use for concentrating materials suspended in liquid to be clarified, Process and device for the preparation of. R. A. Henry. 1,862,265; June 7.
Sound recording. S. M. Bagno. 1,862,327; June 7.
Sound reproducer. I. S. Bobrovsky. 1,862,174; June 7.
Sound reproducing apparatus. F. H. Owens. 1,862,062; June 7.
Speed device, Change. L. Saives. 1,861,884; June 7.
Spool for yarns or threads. H. Johnson. 1,862,405; June 7.
Spray booths, Cleaning. G. S. Affleck and A. S. Anderson. 1,862,392; June 7.
Spray gun. C. A. Anderson. 1,861,996; June 7.
Sprayer, Revolving. D. Elder. 1,862,180; June 7.
Spraying machine, Automatic pan. S. P. Larson. 1,862,380; June 7.
Spring compressor for removing poppet valves. R. B. Barber. 1,862,454; June 7.
Spring expander. R. B. M. Bennett. 1,862,172; June 7.
Spring for doors, gates, and the like. H. A. Stevens. 1,861,888; June 7.
Spring shackle. F. E. Fisher. 1,861,470; June 7.
Stabilizing device for aircraft. J. F. O'Malley. 1,862,421; June 7.
Standpipe system. W. F. Conran. 1,862,109–10; June 7.
Starting device. W. Lingo. 1,862,410; June 7.
Steam boiler. H. J. Kerr. 1,861,965; June 7.
Steam generator. L. E. Connelly. 1,862,367; June 7.
Steam generator, Electric. R. W. E. Vickery. 1,862,071; June 7.
Steam radiator trap. C. R. Watts. 1,861,650; June 7.
Steel framework bracket. W. L. Ross. 1,862,433; June 7.
Steering knuckle lubrication. J. Bijur. 1,862,513; June 7.
Steering wheel. H. D. Geyer. 1,861,792; June 7.
Steering wheel handle. M. H. Shipley. 1,861,586; June 7.
Stencil printing attachment for vertical bed printing presses. W. R. Respess. 1,861,611; June 7.
Step, Preformed. W. L. Nicols. 1,861,751; June 7.
Sterilizer, Surgical. F. C. Wappler. 1,861,768; June 7.
Stop and compensating strut for hand propelled vehicles, Automatic. R. C. Gallinant. 1,861,958; June 7.
Stoplight switch. J. W. White. Re18,487; June 7.
Stopper for receptacles, Self closing. A. Hammerstein. 1,861,442; June 7.
Storage battery. R. C. Benner and L. C. Werking. 1,861,467; June 7.
Store, Self service. D. W. Webb. 1,861,671; June 7.
Stove with heat accumulator, Cooking. G. Dalén. 1,862,009; June 7.
Strainer, Oil well. H. E. Searle. 1,861,722; June 7.
Strand material, Apparatus for handling. E. Troche. 1,861,990; June 7.
Street sweeping apparatus. E. T. Birdsall. 1,861,681; June 7.
Strike and ball indicator. A. T. Swanson. 1,861,647; June 7.
Strip material, Apparatus for skiving. F. W. Merrick. 1,862,348; June 7.
Structure for storage or accommodation of vehicles. A. Traube. 1,861,461; June 7.
Strut construction. G. M. Bellanca. 1,861,901–2; June 7.
Substances from raw fibrous materials containing the same, and for simultaneously forming the fibrous materials into a web, and a system of apparatus therefor, Extracting water soluble. H. R. Murdock. 1,861,933; June 7.
Support for cultivators, Tool. W. Grams. 1,862,304; June 7.
Support for cupola buckets. C. A. Hardy. 1,862,185; June 7.
Support for ironing machine rolls. W. H. Jaxheimer. 1,861,499; June 7.
Support, Garment. G. Greenberg. 1,861,959; June 7.
Support, Locomotive boiler. J. G. Blunt. 1,861,949; June 7.
Support, Resistor. J. C. Woodson and O. A. Colby. 1,861,947; June 7.
Surfaces, Rubbing coated. E. H. Bucy. 1,862,135; June 7.
Surfacing apparatus. H. R. Stratford. 1,862,103; June 7.
Surgical bandage. B. Levison. 1,862,026; June 7.
Suspension for automobiles. F. Schaum. 1,861,821; June 7.
Suspension for track-laying vehicles. H. A. Knox and B. F. Baker. 1,861,866; June 7.
Suspension hangers for tube frames. E. F. Hathaway and W. Bixby. 1,861,856; June 7.
Swatter, Fly. C. R. Crawford. 1,861,688; June 7.
Switch: *See*—
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Mercury switch.
Pressure operated switch.
Stoplight switch.
Toggle switch.
Switch and opening and closing circuits therefor, Electric. G. W. O'Keeffe. 1,862,158; June 7.
Switchgear, Electric. J. Christie. 1,862,254; June 7.
Switch having raising and lowering mechanism therefor, Electric. M. B. Wood. 1,862,169; June 7.
Switching device. C. Hatay. 1,861,566; June 7.
Swivel having cooling means. G. Tremolada. 1,861,485; June 7.
Synchronizing and phase indicating device. W. G. Fluharty and P. A. Noxon. 1,862,474; June 7.
Table: *See*—
Bed table.
Extension top table.
Table. C. F. Dreckschmidt. 1,862,113; June 7.
Table feed mechanism, Hydraulic. G. E. Hallenbeck. 1,861,497; June 7.
Tabulating machines, Paper feeding device for. R. E. Page. 1,861,975; June 7.
Tabulator, Subtracting. F. M. Carroll. 1,862,004; June 7.
Tank baffle, Automobile gasoline. J. A. Houck, sr. 1,862,016; June 7.
Tank closure retaining and locking device. E. S. Mattern. 1,862,229; June 7.
Tank for threshers, Grain storage. L. A. Paradise and E. F. Huddle. 1,862,159; June 7.
Tape puller. W. S. Pritchard. 1,861,582; June 7.
Tar distillation. S. P. Miller. 1,862,494; June 7.
Target, Golf. A. S. Boyd. 1,862,462; June 7.
Target indicator. E. W. Chafee. 1,862,489; June 7.
Telegraph receiver, Printing. R. Tevis. 1,861,988; June 7.
Telephone system, Call distributing. W. T. Powell. 1,861,754; June 7.
Telephone, Wall. R. L. Sargisson. Des. 87,131; June 7.
Telescopic coach and jack. L. H. Bradburn. 1,861,906; June 7.
Television scanning device. W. J. Barnecut. 1,862,455; June 7.
Telltale for automobile headlights. H. F. Ingwarson. 1,861,699; June 7.
Temperature control. H. W. Partlow. 1,861,509; June 7.
Tension take-up device for knitting machines. A. E. Ischinger. 1,861,962; June 7.
Terminal. L. E. Menut. 1,862,275; June 7.
Thermometer, Chemical. Y. Tsutsumi. 1,861,944; June 7.
Thionyl chloride, Production of. W. S. Beanblossom. 1,861,900; June 7.

Thread core for dyeing operations and making same. C. K. Dunlap. 1,862,259; June 7.
Thread cutting device. T. M. Lilleberg. 1,862,225; June 7.
Throttle and starter control mechanism. D. Collins. 1,862,006; June 7.
Tie: *See*—
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Tile floor covering. E. Veltung. 1,861,558; June 7.
Timing mechanism for internal combustion engines. R. Newschaffer. 1,861,545; June 7.
Tire. E. A. Roberts. Des. 87,129; June 7.
Tire and making it, Pneumatic. G. D. Mallory. 1,862,492; June 7.
Tire building apparatus. C. W. Leguillon and N. L. Warner. 1,862,024; June 7.
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Tires, Forming rubber. L. A. Laursen. 1,862,314; June 7.
Tobacco, Method and apparatus for preparing leaf. W. W. Michaux, Jr. 1,862,192; June 7.
Tobacco pipe. J. Klein. 1,861,865; June 7.
Tobacco pipe. B. M. Shoemaker. 1,861,457; June 7.
Tobacco, Steaming and cleaning. C. G. Maxwell. 1,861,705; June 7.
Toggle switch. J. Wachter. 1,861,649; June 7.
Toilet tank cover and cabinet, Combination. J. H. Kelly. 1,861,802; June 7.
Tongs. G. F. Altice. 1,862,326; June 7.
Tool adapter. G. W. Emrick. 1,862,352; June 7.
Tool, Boring and tapping. W. Birtel. 1,862,461; June 7.
Tool, Cutting. H. W. Porter. 1,862,033; June 7.
Tool, Earth boring. L. Strosnider. 1,862,068; June 7.
Tool, Governor controlled fluid pressure. R. H. King. 1,862,223; June 7.
Tool, Routing, milling, and other machine. G. Gorton. 1,862,052; June 7.
Tool, Socket clearing and removing. J. J. McGuckin. 1,862,273; June 7.
Tool, Spring compressing. L. R. Klingler and C. E. Coffee. 1,861,445; June 7.
Tool, Tap, drill, and similar. G. W. Emrick. 1,862,337; June 7.
Tool, Valve. B. B. Brown. 1,862,465; June 7.
Tool, Valve. J. H. Mindermann and F. Hobler. 1,861,975; June 7.
Tools, Counterbalancing device for machine. K. H. Conley. 1,861,954; June 7.
Toothbrush. B. J. Herget. 1,862,141–2; June 7.
Top for table stoves, Disappearing cooking. A. G. Arndt. 1,862,452; June 7.
Torpedo, Railway. H. E. Sherman. 1,861,724; June 7.
Total taking mechanism. G. F. Daly. 1,861,955; June 7.
Tourist house. O. H. Peck. 1,861,548; June 7.
Toy. W. Klinge. 1,862,150; June 7.
Toy gun. H. F. Nelson. Des. 87,124; June 7.
Toy, Mechanical. S. T. Brockway. 1,861,783; June 7.
Toy railroads, Third rail selector for. W. H. Clark. 1,861,523; June 7.
Toy, Riding stick. J. M. Knopf. Des. 87,118; June 7.
Traffic controlling apparatus, Railway. L. R. Allison and F. H. Nicholson. 1,861,488; June 7.
Transformer and socket, Gas tube. J. O. Cadieux. 1,862,503; June 7.
Transmission. L. S. Sheldrick. 1,862,098; June 7.
Transmission mechanism. C. Sifton. 1,861,482; June 7.
Transmission mechanism, Shifting means for. E. J. Barth. 1,861,776; June 7.
Transmission of power, Apparatus for the hydraulic. T. E. Beaumont and J. N. Waring. 1,862,045; June 7.
Trap: *See*—
Animal trap. Steam radiator trap.
Box trap.
Tray, Display. K. Bodoglou. 1,861,835; June 7.
Tray, Multiple. M. Ehrlich. 1,862,010; June 7.
Truck, Convertible hand. P. Ciccone. 1,862,299; June 7.
Truck, Industrial. N. S. Towson. 1,862,287; June 7.
Truck, Railway car. W. H. Mussey. 1,862,156; June 7.
Tubes, Apparatus for making inner. W. H. Campbell. 1,862,210; June 7.
Tubes, Production of alkali metal. J. W. Marden and E. A. Lederer. 1,861,637; June 7.
Turbine blading. H. J. Hanzlik. 1,861,960; June 7.
Turpentine gutter and securing means. C. A. Tompkins. 1,862,374; June 7.
Tuyère, Blast furnace. C. R. Holzworth. 1,862,341; June 7.
Typewriting machine. W. F. Helmond. 1,862,015; June 7.
Universal joint. F. M. Guy. 1,862,140; June 7.
Valve. R. B. Fremont. 1,862,214; June 7.
Valve. J. C. Martin, Jr. 1,861,747; June 7.
Valve. H. M. Sheer. 1,862,039; June 7.
Valve, Air. J. S. Cuthbertson. 1,862,368; June 7.
Valve, Automatic timing. C. S. Hand. 1,861,742; June 7.
Valve bag closure. H. R. William. 1,861,595; June 7.
Valve, Balanced quick operating. F. Henneböble. 1,861,916; June 7.
Valve, Closed and cylindrical rotor. H. P. MacGregor. 1,861,541; June 7.
Valve for hot water systems. I. I. Nelson. 1,861,506; June 7.
Valve for internal combustion engines. F. L. Sims. 1,861,885; June 7.
Valve for pumping systems, Multiple. H. M. Keith. 1,862,407; June 7.
Valve for rock drills. F. M. Slater. 1,861,984; June 7.
Valve insert, Time. C. S. Preston. 1,862,160; June 7.
Valve mechanism, Internal combustion engine. W. Kasten. 1,862,222; June 7.
Valve retainer. V. P. Schoetzow. 1,862,283; June 7.
Valve, Snap action. P. F. Shivers. 1,862,373; June 7.
Valve systems, Hydraulic. C. V. Foulds. 1,861,848; June 7.
Valve, Temperature actuated automatic control. J. and A. C. Sladky. 1,862,100; June 7.
Valve, Time. M. J. Payne. 1,861,936; June 7.
Vehicle. H. Godoy. 1,862,013; June 7.
Vehicle and method of mounting bodies on chassis. J. Morrison. 1,861,712; June 7.
Vehicle body. D. F. Oliver. 1,861,546; June 7.
Vehicle body. G. S. Tipton. 1,862,286; June 7.
Vehicle body. E. A. Wright. 1,861,828; June 7.
Vehicle body front construction. J. Ledwinka. 1,862,022; June 7.
Vehicle bodies, Ventilating and/or cooling. W. Lintern. 1,862,058; June 7.
Vehicle brake. A. G. Cushing. 1,861,788; June 7.
Vehicle chock. J. A. Ratta. 1,861,549; June 7.
Vehicle, Endless track. J. V. Carden. 1,862,329; June 7.
Vehicle wheel. L. E. La Brie. 1,862,313; June 7.
Vehicle wheel. S. S. McDonald. 1,861,810; June 7.
Vehicles, Equalizing mechanism for. W. E. N. Gorrie. 1,862,262; June 7.
Ventilating, refrigerating and dehumidifying appliance. C. A. Moore. 1,861,709; June 7.
Ventilator. R. Hottel. 1,862,147; June 7.
Venturi steam fitting. J. O. Woodsome. 1,862,130; June 7.
Vessel, Domestic cooking. L. C. Demmerle. 1,862,077; June 7.
Vitamine preparations, Obtaining concentrated. L. A. Agoplan. 1,861,677; June 7.
Vulcanizer. C. W. Legullion. 1,862,025; June 7.
Wall and forming same. J. H. Skillin. 1,862,066; June 7.
Wardrobe box, Collapsible. I. Dukes and B. M. Zieve. 1,861,845; June 7.
Washer: *See*—
Gravel washer.
Washing machine. J. J. McCabe. 1,861,640; June 7.
Watch and vanity case, Combined. G. M. Roberts. 1,861,644; June 7.
Water, Apparatus for decomposing. E. L. Langley. 1,862,224; June 7.
Water for a steam boiler, Apparatus for heating feed. S. Haga. 1,861,660; June 7.
Water for steam boilers, Apparatus for treating. L. T. Bryson. 1,861,785; June 7.
Water heater. W. A. Ahern. 1,861,519; June 7.
Water heater, Electric. W. T. Rowe. 1,862,065; June 7.
Water purifying apparatus. H. Ayers. 1,861,896; June 7.
Wear preventer. D. R. Radford. 1,861,815; June 7.
Weather strip and making the same. W. A. Smith. 1,861,985; June 7.
Weatherstrip attachment for doors. H. M. Reynold. 1,861,612; June 7.
Web threading device for rotary printing machines. C. G. Quick and R. W. Chiles. 1,861,609; June 7.
Weighing, blending, conveying, elevating, and sifting machine. F. X. and E. J. Lauterbur. 1,861,803; June 7.
Welding. J. W. Meadowcroft. 1,861,970; June 7.
Welding apparatus. R. Stramitz. 1,862,125; June 7.
Well drilling apparatus, Pneumatic. M. C. Edmunds. 1,862,260; June 7.
Wheel: *See*—
Resilient wheel. Vehicle wheel.
Steering wheel.
Wheel. A. H. Oelkers. 1,862,157; June 7.
Wheel boring machine. S. A. Harding. 1,861,529; June 7.
Wheel for semitrailers, Automatic fifth. D. H. Davis. 1,862,112; June 7.
Whiting, Making by-product. J. W. Church. 1,862,176; June 7.
Winding device, Multiple. A. H. Cole. 1,862,333; June 7.
Window construction. P. Grisel. 1,861,598; June 7.
Window construction. P. Hamelin. 1,862,397; June 7.
Window construction for vehicle bodies, Rear quarter. J. Ledwinka. 1,861,967; June 7.
Window construction, Vehicle body. J. Ledwinka. 1,862,023; June 7.
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Windshield, Airplane. H. A. Hicks. 1,862,143; June 7.
Windshield cleaner. E. C. Horton. 1,861,698; June 7.
Wire ropes and the like, Apparatus for manufacturing. G. Wolf. 1,862,345; June 7.
Wire, Tie. N. A. Ochiltree. 1,861,450; June 7.
Wood bending equipment. J. A. McAllister. 1,862,414; June 7.
Wrapping machine or the like. A. G. Rose. 1,861,510; June 7.
Wrench: *See*—
Pipe wrench.
Wrench rack. J. E. Whittaker. 1,862,447; June 7.
Wrenches, Making. A. O. Brungardt. 1,862,001; June 7.
Yarn, Apparatus for drying. W. N. Gere. 1,862,261; June 7.

CLASSIFICATION OF PATENTS

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NOTE.—First number = class, second number = subclass, third number = patent number

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LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Akron Equipment Company, The, Akron, Ohio. Ice cream cutting machines. Serial No. 326,881; June 14. Class 23.

Alabastine Company, Grand Rapids, Mich. Base for a water-proof cement wall coating or covering. Serial No. 325,841; June 14. Class 16.

Alabastine Company, Grand Rapids, Mich. Dry colors in the nature of a paint. Serial No. 325,843; June 14. Class 16.

Allbestos Corporation, Philadelphia, Pa. Brake linings. Serial No. 326,450; June 14. Class 35.

Allbestos Corporation, Philadelphia, Pa. Brake linings. Serial No. 326,701; June 14. Class 35.

American Bleached Goods Company, Inc., New York, N. Y. Cotton piece goods. Serial No. 326,883; June 14. Class 42.

American Felt Company, New York, N. Y. Wool felt. Serial No. 326,319; June 14. Class 50.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Insulated electric cord. Serial No. 325,976; June 14. Class 21.

Arechabala, José, S. A., Cardenas, Cuba. Sugar, vinegar, table syrups, and molasses. Serial No. 320,567; June 14. Class 46.

Athelene Chemical Corporation, New York, N. Y. Preparation for athlete's foot. Serial No. 325,978; June 14. Class 6.

B. V. D. Company, Inc., The, Baltimore, Md. Trunks worn as outer garments. Serial No. 326,703; June 14. Class 39.

Bame, Harry A., New York, N. Y. Chemical composition. Serial No. 326,201; June 14. Class 6.

Baron, Leon, doing business as N. C. Goodwin's Laboratory, Inc., Brooklyn, N. Y. Jelly for foot odor and perspiration. Serial No. 325,555; June 14. Class 6.

Bear Brand Hosiery Co., Kankakee and Chicago, Ill. Hosiery. Serial No. 326,452; June 14. Class 39.

Beeman, George W., Detroit, Mich. Face creams, powders, and lotions. Serial No. 325,703; June 14. Class 6.

Belmont Hosiery Company, Belmont, N. H. Hosiery. Serial No. 326,973; June 14. Class 39.

Best Products Co. (See Terry, Walter T., jr.)

Biggs Boiler Works Company, The, Akron, Ohio. Steel pipe. Serial No. 320,714; June 14. Class 13.

Blackfords, Inc., New York, N. Y. Fish. Serial No. 326,453; June 14. Class 46.

Bloom & Jaffin, New York, N. Y. Underwear and slips, dresses, etc. Serial No. 324,982; June 14. Class 39.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 316,802; June 14. Class 42.

Boynton, E. L., doing business as California Cleaning Products Co., Los Angeles, Calif. Powder for dry cleaning. Serial No. 326,576; June 14. Class 4.

Brighton Ladies Hat Co. Inc., New York, N. Y. Hats. Serial No. 325,282; June 14. Class 39.

Brighton Ladies Hat Co. Inc., New York, N. Y. Hats. Serial No. 326,516; June 14. Class 39.

Brown, Boveri & Cie., Baden, Switzerland. Heating tubes and tube couplings. Serial No. 326,805; June 14. Class 13.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Billiard cue tips. Serial No. 326,975; June 14. Class 22.

Burke, Charles, & Sons, Detroit, Mich. Copper polish. Serial No. 325,383; June 14. Class 4.

Calavo Growers of California, Los Angeles, Calif. Avocado pulp. Serial No. 306,592; June 14. Class 46.

California Cleaning Products Co. (See Boynton, E. L.)

Carter-Venable Co., Inc., The, Richmond, Va. Poultry and dairy feeds. Serial No. 325,564; June 14. Class 46.

Celanese Corporation of America, New York, N. Y. Fabrics made of silk and cellulose derivatives. Serial Nos. 317,157–8; June 14. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. Serial No. 322,418; June 14. Class 42.

Chase Brass & Copper Co., Incorporated, Waterbury, Conn. Flash lights. Serial No. 326,321; June 14. Class 21.

Chicago Flexible Shaft Company, Chicago, Ill. Electric sadirons. Serial No. 326,537; June 14. Class 21.

Climax Rubber Company. (See Stein, Jacob.)

Collins-Kirk, Inc., Chicago, Ill. Paper dolls. Serial No. 326,459; June 14. Class 22.

Compo-Board Co., The, Minneapolis, Minn. Artificial lumber. Serial No. 324,584; June 14. Class 12.

Conkey, G. E., Company, The, Cleveland, Ohio. Vermifuge (worm tablets for poultry). Serial No. 326,009; June 14. Class 6.

Consolidated Wire & Associated Corporations, Chicago, Ill. Bare, insulated wire, cord, and cable, etc. Serial No. 319,511; June 14. Class 21.

Continental Oil Company, Ponca City, Okla. Lubricating oil. Serial No. 326,360; June 14. Class 15.

Cordes, Henry A., doing business as The H-B Co., Jersey City, N. J. Medicine. Serial No. 324,032; June 14. Class 6.

Cuthbert, P. T. & Co., Inc., New York, N. Y. Hosiery. Serial No. 325,568; June 14. Class 39.

Cutler-Hammer, Inc., Milwaukee, Wis. Enclosed switches of the fuse type. Serial No. 324,093; June 14. Class 21.

Di Lorenzo, Ralph, doing business as Meadville Malt Co., Meadville, Pa. Malt syrups. Serial No. 317,426; June 14. Class 46.

Dixie Mills Company, East St. Louis, Ill. Pig and hog feed. Serial No. 323,860; June 14. Class 46.

Dixie Mills Company, East St. Louis, Ill. Dairy feeds. Serial No. 323,861; June 14. Class 46.

Ducharne, F., Silk Co. Inc., New York, N. Y. Piece goods of silk, rayon, cotton, and wool. Serial No. 326,808; June 14. Class 42.

Dynamit-Actien-Gesellschaft vormals Alfred Nobel & Co., Hamburg, Troisdorf, Germany. Partly prepared cellulose acetate material. Serial No. 326,707; June 14. Class 1.

Economy Macaroni Co. (See Scotland, Bayard S.)

Edison Storage Battery Company, West Orange, N. J. Coating and protecting compound of the nature of a paint and varnish. Serial No. 321,753; June 14. Class 16.

Electroblacks, Incorporated, Culver City, Calif. Carbon-black. Serial No. 325,972; June 14. Class 6.

Elgin National Watch Company, Chicago and Elgin, Ill. Watches, watch movements, and cases. Serial Nos. 326,708–9; June 14. Class 27.

Eternit, Inc., St. Louis, Mo., and New York, N. Y. Asbestos-cement siding strips. Serial No. 321,490; June 14. Class 12.

Evans, B. P., doing business as Wonder Hoe Co., Fort Worth, Tex. Hoes. Serial No. 326,522; June 14. Class 23.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. Serial No. 326,810; June 14. Class 39.

Fink, Isidore, doing business as Reischwuhr Malt Products, Astoria, Long Island, N. Y. Barley malt syrup. Serial No. 321,994; June 14. Class 46.

Florsheim Shoe Company, The, Chicago, Ill. Shoes. Serial No. 326,210; June 14. Class 39.

Fort Defiance Mills. (See Grove, William I.)

Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels and napkins, etc. Serial No. 326,852; June 14. Class 37.

Foxboro Company, The, Foxboro, Mass. Combined thermometer and liquid level gage. Serial No. 326,538; June 14. Class 26.

France Corset Company, New York, N. Y. Corsets, corselettes, etc. Serial No. 323,239; June 14. Class 39.

Franklin Simon & Co. Inc., New York, N. Y. Riding suits, coats, habits, hats, and boots. Serial No. 326,254; June 14. Class 39.

French, R. T., Company, The, Rochester, N. Y. Bird seed, gravel, biscuit, and food. Serial No. 324,663; June 14. Class 46.

Fries, Harold H., doing business as Fries Bros., New York, N. Y. Emulsifying agent in the nature of a wax. Serial No. 325,465; June 14. Class 6.

Fullsong Products Co. (See McGraw, Harvey B.)

Gane, Eustace H., doing business as R-Tex Laboratories, New York, N. Y. Medicinal preparation. Serial No. 325,400; June 14. Class 6.

Garrett County Maple Products Association, Oakland, Md. Maple syrup. Serial No. 325,946; June 14. Class 46.

Geier, P. A. Company, The, Cleveland, Ohio. Electrically operated suction cleaners. Serial No. 324,664; June 14. Class 21.

General American Tank Car Corporation, Chicago, Ill. Tank cars. Serial No. 326,286; June 14. Class 19.

General Electric Company, Schenectady, N. Y. Capacitor. Serial No. 322,633; June 14. Class 21.

Getz Exterminators, Inc., St. Louis, Mo. Preparations for exterminating insects. Serial No. 322,635; June 14. Class 6.

Gilmore, James A., Spokane, Wash. Hair treating compound. Serial No. 325,140; June 14. Class 6.

Gimbel Brothers, Inc., New York, N. Y., Philadelphia, Pa., Milwaukee, Wis., and Pittsburgh, Pa. Handkerchiefs. Serial No. 326,678; June 14. Class 42.

Goldbaum, Samuel, doing business as Lily Hat Company, New York, N. Y. Hats. Serial No. 325,381; June 14. Class 39.

Goodwin's, N. C., Laboratory, Inc. (See Baron, Leon.)

Gould, Fred, Newfield, N. J. Pigeon grit. Serial No. 326,712; June 14. Class 1.

Goulds Pumps, Incorporated, Seneca Falls, N. Y. Piston pumps. Serial No. 326,711; June 14. Class 23.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Greene, Edward, doing business as E. Green & Company, Newark, N. J. Printed paper caution signals for index systems. Serial No. 325,578; June 14. Class 37.
Greenhall, Leonard D., doing business as Greenhall Bros., Brooklyn, N. Y. Suspenders, garters, and apparel belts. Serial No. 325,469; June 14. Class 39.
Grosche, Frederick W., Baltimore, Md. Storage batteries. Serial No. 326,323; June 14. Class 21.
Grove, William L., doing business as Fort Defiance Mills, Fort Defiance, Va. Flour. Serial No. 326,783; June 14. Class 46.
Growers' Co-Operative Grape Juice Company, Inc., Westfield, N. Y. Grape juice. Serial No. 326,939; June 14. Class 45.
Gumpert, S., Co. Inc., Brooklyn, N. Y. Chocolate nut cakes, cookies, and pastries. Serial No. 326,472; June 14. Class 46.
H-B Co., The. (See Cordes, Henry A.)
H. & L. Products Co., Linden, N. J. Compound for general cleaning purposes. Serial No. 321,628; June 14. Class 4.
Harris Manufacturing Company, Johnson City, Tenn. Wooden flooring. Serial No. 326,423; June 14. Class 12.
Harzfeld's, Inc., Kansas City, Mo. Hosiery. Serial No. 326,857; June 14. Class 39.
Helps to Health, Inc., New York, N. Y. Psyllium seeds. Serial No. 326,819; June 14. Class 6.
Herbert, Beaucle J., Spokane, Wash. Dresses. Serial No. 326,051; June 14. Class 39.
Hibbard, Spencer, Bartlett & Co., Chicago, Ill. Bit braces, expansive bits, auger bits, etc. Serial No. 325,949; June 14. Class 23.
Hollingshead, R. M., Co., The, Camden, N. J. Polish and polishing preparations. Serial No. 314,695; June 14. Class 16.
Hoover Conditioner, Inc., New York, N. Y. Rowing machines. Serial No. 326,859; June 14. Class 22.
Huff, Frederic J., Binghamton, N. Y. Beverage, and syrups, concentrates, and extracts for making the same. Serial No. 325,876; June 14. Class 45.
Huston, Tom, Corporation, Columbus, Ga. Aspirin. Serial No. 326,590; June 14. Class 6.
Hygeia Products, Inc., Brooklyn, N. Y. Tooth dentifrice. Serial No. 326,714; June 14. Class 6.
Hy'ne Co., The, Chicago, Ill. Vaginal suppositories. Serial No. 325,580; June 14. Class 6.
India Rubber, Gutta Percha & Telegraph Works Company, Limited, The, London, England. Golf balls. Serial No. 327,017; June 14. Class 22.
International Milling Company, Minneapolis, Minn. Wheat flour. Serial No. 326,785; June 14. Class 46.
Jackson, William C., Tulsa, Okla. Medicinal compound. Serial No. 324,745; June 14. Class 6.
Jay Vee Studio. (See Littig, John V.)
Jenkins, Walter L., Cleveland, Ohio. Bridge-score table guide. Serial No. 326,370; June 14. Class 37.
Jones, John W., doing business as John Wiley Jones Co., Le Roy, N. Y. Chemical preparation. Serial No. 326,425; June 14. Class 6.
Kalamazoo Vegetable Parchment Company, Parchment, Mich. Writing paper. Serial No. 326,902; June 14. Class 37.
Kayon Company, The, Milwaukee, Wis. Adhesive cement. Serial No. 326,327; June 14. Class 5.
Kellogg Company, Battle Creek, Mich. Coffee-like beverage. Serial No. 323,438; June 14. Class 46.
Kress, S. H., & Co., New York, N. Y. Thread and yarn. Serial No. 326,823; June 14. Class 43.
Ladies Garment Manufacturing Company, Minneapolis, Minn. Dresses. Serial No. 252,157; June 14. Class 39.
Lambert, Louis F., doing business as Pennsylvania Mushroom Co., Coatesville, Pa. Canned mushrooms. Serial No. 326,551; June 14. Class 46.
Larabee Flour Mills Company, Kansas City, Kans., and Kansas City, Mo. Wheat flour. Serial No. 326,483; June 14. Class 46.
Larus & Brother Company, Incorporated, Richmond, Va. Smoking tobacco. Serial No. 319,897; June 14. Class 17.
Lehman, Louis H., doing business as Lehman Sprayshield Company, Philadelphia, Pa. Glass shower stall doors, shower bath shields, and bath enclosures. Serial No. 320,505; June 14. Class 13.
Levie, Irving, Brooklyn, N. Y. Effervescent tablets. Serial No. 325,585; June 14. Class 6.
Lily Hat Company. (See Goldbaum, Samuel.)
Littig, John V., doing business as Jay Vee Studio, Washington, D. C. Tables. Serial No. 326,427; June 14. Class 32.
Looschen, John W., Paterson, N. J. Boat hoists. Serial No. 314,505; June 14. Class 23.
Lowe, Joe, Corporation, Brooklyn, N. Y. Food products. Serial No. 293,587; June 14. Class 46.
Lowe, Joe, Corporation, Brooklyn, N. Y. Insect powders, baking powder, etc. Serial No. 324,898; June 14. Class 6.
Madison Woolen Company, Madison, Me. Woolen piece goods. Serial No. 326,722; June 14. Class 42.
Malt-Diastase Company, Brooklyn, N. Y. Malt extracts and malt syrups. Serial No. 306,320; June 14. Class 46.
Manahan Chemical Co., Inc., New York, N. Y. Dyestuffs. Serial No. 325,986; June 14. Class 6.
Marathon Razor Blade Co., Inc., Irvington, N. J. Safety razor blades. Serial Nos. 326,751–4; June 14. Class 23.
Marcus & Wiesen Inc., New York, N. Y. Girdles and garter belts, etc. Serial No. 323,751; June 14. Class 39.
McGraw, Harvey B., doing business as Fullsong Products Co., Cortland, N. Y. Animal preparations. Serial No. 324,318; June 14. Class 6.
McNeil, Robert, Philadelphia, Pa. Tampons. Serial No. 326,389; June 14. Class 44.
Meadville Malt Co. (See Di Lorenzo, Ralph.)
Merck & Co., Inc., Rahway, N. J. Silver copper alloy mirroring solution. Serial No. 325,954; June 14. Class 6.
Meredith Publishing Company, Des Moines, Iowa. Lists and specifications for house plans and architectural plans. Serial No. 324,826; June 14. Class 38.
Merit Clothing Company, Inc., Mayfield, Ky. Coats, vests, pants, etc. Serial No. 326,155; June 14. Class 39.
Merrell, Wm. S., Company, The, Cincinnati, Ohio. Anæsthetic. Serial No. 326,983; June 14. Class 6
Minute Safety Razor Corp., Newark, N. J. Safety razor blades. Serial No. 326,716; June 14. Class 23.
Mitchell, G. F., & Sons Company, The, Cleveland, Ohio. Boxes. Serial No. 325,043; June 14. Class 2.
Mt. Signal Produce Co., Calexico, Calif. Fresh lettuce, strawberries, and melons. Serial No. 312,447; June 14. Class 46.
National Hellopore Floor Corporation, Boston, Mass. Cementitious floor construction material. Serial No. 321,625; June 14. Class 12.
National Sales Promotion Institute, Inc., Philadelphia, Pa. Magazine. Serial No. 326,756; June 14. Class 38.
National Traffic Guard Co., Atlanta, Ga. Road guards. Serial No. 325,044; June 14. Class 12.
Neiman-Marcus Co., Dallas, Tex. Panties, bloomers, drawers, etc. Serial No. 323,557; June 14. Class 39.
Nolon, A. H., & Son, Inc., Lauderdale, Miss. Coffee. Serial No. 307,170; June 14. Class 46.
Palmyra Springs, Inc., Palmyra, Wis. Maltless beverages. Serial No. 326,870; June 14. Class 45.
Pan-Pacific Piling & Construction Co., Wilmington, Calif. Impregnated concrete pipe and wall structures. Serial No. 326,528; June 14. Class 12.
Papier Poudré, Limited, London, England. Nail polish. Serial No. 325,110; June 14. Class 6.
Parker-Kalon Corporation, New York, N. Y. Nails, drive screws, screws, rivets, etc. Serial No. 326,554; June 14. Class 13.
Pennsylvania Mushroom Co. (See Lambert, Louis F.)
Pennsylvania Petroleum Products Co., Philadelphia, Pa. Oils and lubricants. Serial No. 325,797; June 14. Class 15.
Peoples Drug Stores, Inc., Washington, D. C. Antiseptic and astringent preparation. Serial No. 325,958; June 14. Class 6.
Pepperell Manufacturing Company, Boston, Mass. Publication. Serial No. 326,616; June 14. Class 38.
Perfect Manufacturing Co., The, Cincinnati, Ohio. Shoe resoling and repairing compound. Serial No. 323,872; June 14. Class 6.
Perfection Twine Company, Camas, Wash. Cellulose twine and tying ribbon and the like. Serial No. 325,996; June 14. Class 7.
Phillips Petroleum Company, Bartlesville, Okla. Motor fuel and lubricating oils. Serial No. 323,697; June 14. Class 15.
Pink Supply Company, Minneapolis, Minn. Plain absorbent cheesecloth. Serial No. 325,183; June 14. Class 42.
Playskool Institute, Inc., Milwaukee, Wis. Toy construction outfits. Serial No. 324,971; June 14. Class 22.
Poirier and Lindeman Company, New York, N. Y. Narrow webbing and braids. Serial No. 325,482; June 14. Class 40.
Pond's Extract Company, New York, N. Y. Tissue paper. Serial No. 326,758; June 14. Class 37.
R-Tex Laboratories. (See Gane, Eustace H.)
Red Coral Products Corporation, The, New York, N. Y. Polish. Serial No. 325,375; June 14. Class 16.
Reischwuhr Malt Products. (See Fink, Isidore.)
Rosen, E., Company, Providence, R. I. Candy. Serial No. 325,974; June 14. Class 46.
Rossie Velvet Company, Mystic, Conn. Velvets. Serial No. 326,721; June 14. Class 42.
Rossie Velvet Company, Mystic, Conn. Velvets. Serial No. 326,760; June 14. Class 42.
S. M. Laboratories, Inc., Seattle, Wash. Vaginal suppositories. Serial No. 326,231; June 14. Class 6.
Sabel, Isadore, Philadelphia, Pa. Corrective shoes. Serial No. 318,431; June 14. Class 44.
Salfelts, New York, N. Y. Hats. Serial No. 325,858; June 14. Class 39.
Sbisa, Paul J., doing business as P. J. Sbisa Coffee Company, New Orleans, La. Coffee. Serial No. 322,713; June 14. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Schneiderman Bros, New York, N. Y. Slider controlled fasteners. Serial No. 326,303; June 14. Class 13.
Scotland, Bayard S., doing business as Economy Macaroni Co., Joliet, Ill. Macaroni, spaghetti, and noodles. Serial No. 326,833; June 14. Class 46.
Scott & Turner, Limited, Newcastle-upon-Tyne, England. Effervescent medicinal salt. Serial No. 317,873; June 14. Class 6.
Sears, Roebuck and Co., Chicago, Ill. Footwear. Serial No. 324,298; June 14. Class 39.
Sears, Roebuck and Co., Chicago, Ill. Corsets, brassières, girdles, etc. Serial No. 325,485; June 14. Class 39.
Selders-Mather Corporation, Chicago, Ill. Implement. Serial No. 326,165; June 14. Class 23.
Simon Ackerman Clothes, Inc., New York, N. Y. Coats, vests, trousers, etc. Serial No. 298,558; June 14. Class 39.
Smidler, Herman L., doing business as Tricasco Laboratories, Chicago, Ill. Reconstructive tonic. Serial No. 326,117; June 14. Class 6.
Snyder, Howard E., Chicago, Ill. Cooked sausages and sandwiches. Serial No. 326,559; June 14. Class 46.
Solvay Process Company, The, Geddes, N. Y. Cleansing and scouring compound and for a cleaning compound. Serial No. 325,697; June 14. Class 4.
Sotirlades, George, doing business as Sotirlon Remedies, Pittsburgh, Pa. Preparation for the treatment of leucorrhea, arthritis, etc. Serial No. 326,002; June 14. Class 6.
Sotirlon Remedies. (See Sotirlades, George.)
Steelcote Manufacturing Company, St. Louis, Mo. Paint and varnish remover, putty, etc. Serial No. 288,624; June 14. Class 16.
Stein, Jacob, doing business as Climax Rubber Company, New York and Brooklyn, N. Y. Pants, diapers, bibs, etc. Serial No. 320,703; June 14. Class 39.
Studebaker Chemical Company, Elyria, Ohio. Protective primer coatings. Serial No. 326,118; June 14. Class 16.
Sun-Maid Raisin Growers of California, Fresno, Calif. Dried raisins and fruits. Serial No. 323,727; June 14. Class 46.
Swift and Company, Chicago, Ill. Lard. Serial No. 325,932; June 14. Class 46.
Terry, Walter T., jr., doing business as The Best Products Co., Kansas City, Mo. Wax and polish. Serial No. 325,200; June 14. Class 16.
Tex-O-Kan Flour Mills Co., Dallas, Tex. Wheat flour. Serial No. 321,831; June 14. Class 46.
Toledo Plate & Window Glass Company, The, Toledo, Ohio. Plate and window glass. Serial No. 326,765; June 14. Class 33.
Tourner, Chester F., Bloomington, Ind. Thrift books. Serial No. 326,170; June 14. Class 38.
Tricasco Laboratories. (See Smidler, Herman L.)
Trico Fuse Mfg. Co., Milwaukee, Wis. Flexible take-up cords used with electrical appliances. Serial No. 326,652; June 14. Class 21.
Union Oil Company of California, Los Angeles, Calif. Medicinal petroleum oil, radiator glycerine, cleanser, etc. Serial No. 324,858; June 14. Class 6.
U. S. Flame Company, Buffalo, N. Y. Go-carts. Serial No. 326,119; June 14. Class 19.
U. S. Oil Company, East Providence, R. I. Lubricating oils and greases. Serial No. 325,927; June 14. Class 15.
United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. Serial No. 326,874; June 14. Class 22.
United States Rubber Company, New York, N. Y. Rubber covered wire. Serial No. 325,303; June 14. Class 21.
Vanity Fair Silk Mills, Reading, Pa. Underwear and hosiery. Serial No. 326,237; June 14. Class 39.
Vidrio Products Corporation, Cicero, Ill. Electric alarm clocks. Serial No. 326,653; June 14. Class 27.
Vimola Sales Company, New York, N. Y. Maltless beverages, and syrups and extracts therefor. Serial No. 326,404; June 14. Class 45.
Wall & Ochs, Incorporated, Philadelphia, Pa. Lenses. Serial No. 321,509; June 14. Class 26.
Ward-Love Pump Corporation, Rockford, Ill. Apparatus for purifying, filtering, and softening of water, etc. Serial No. 320,770; June 14. Class 31.
Warner, William R., & Co., Inc., New York, N. Y. Medicinal preparations. Serial No. 326,198; June 14. Class 6.
Warren Featherbone Company, The, Three Oaks, Mich. Bias fold tape. Serial No 323,260; June 14. Class 40.
Washington Petroleum Products, Inc., South Washington, Va. Motor lubricating oils. Serial No. 325,626; June 14. Class 15.
West Virginia State Medical Association, Charleston, W. Va. Periodical. Serial No. 326,505; June 14. Class 38.
White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental alloys. Serial No. 325,770; June 14. Class 44.
White, Wilbur, Chemical Company, The, Owego, N. Y. Wax emulsion for fruit and other edibles. Serial No. 326,699; June 14. Class 6.
Wilbar Photo Engraving Co., Inc., New York, N. Y. Photo engraving plates. Serial No. 325,309; June 14. Class 50.
Wolverine-Empire Refining Company, Wilmington, Del., and New York, N. Y. Light oil. Serial No. 326,654; June 14. Class 15.
Wonder Hoe Co. (See Evans, B. P.)
Wood, C. D., Electric Company, Inc., New York, N. Y. Attachment plugs. Serial No. 326,598; June 14. Class 21.
Yardley & Co. Limited, London, England. Soaps and shaving powder. Serial No. 326,408; June 14. Class 4.

LIST OF REGISTRANTS OF TRADE-MARKS

Air-Way Electric Appliance Corporation, Toledo, Ohio. Portable electric suction cleaners and parts thereof. 295,085; June 14. Class 23.
Alnar Company. (See Ouellette, C. A.)
Altman, B., & Co., New York, N. Y. Corsets. 88,722; renewed Oct. 22, 1932.
Aluminum Seal Company, Arnold, Pa. Caps and closure seals. 294,932; June 14; Serial No. 322,814; published Apr. 5, 1932. Class 50.
American Ammonc Company, Buffalo and New York, N. Y., to American Ammonc Company, New York, N. Y. Medicated antiseptic soluble toilet powders. 88,824; renewed Oct. 29, 1932.
American Bemberg Corporation. (See Bemberg, J. P., Aktiengesellschaft, assignor.)
American Chicle Company, Long Island City, N. Y. Chewing gum. 295,097–8; June 14. Class 46.
American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Wire rope. 295,030; June 14; Serial No. 324,646; published Apr. 5, 1932. Class 7.
American Window Glass Company, Pittsburgh, Pa. Sheet glass. 294,989–90; June 14; Serial No. 324,421–2; published Apr. 5, 1932. Class 33.
American Wood Products Company, Minneapolis, Minn. Blower type air conditioning, humidifying, and ventilating units. 295,066; June 14; Serial No. 322,621; published Apr. 5, 1932. Class 34.
Amity Leather Products Co., West Bend, Wis. Leather products. 294,980; June 14; Serial No. 323,881; published Mar. 29, 1932. Class 3.
Antrim, C. W., & Sons, Richmond, Va. Foods. 88,827; renewed Oct. 29, 1932.
Arrowsmith Manufacturing Company, New York, N. Y. Corn, callous and bunion pads. 295,049; June 14; Serial No. 309,115; published Mar. 29, 1932. Class 44.
Aseptic Products Company, Long Island City and New York, N. Y. Corn and bunion plasters. 88,825; renewed Oct. 29, 1932.
Atlantic Seafood Packers, Inc., Darien, Ga. Canned seafoods. 294,965; June 14; Serial No. 324,094; published Apr. 5, 1932. Class 46.
Atlas Supply Company, Wilmington, Del., and Newark, N. J. Show cases and racks. 295,005; June 14; Serial No. 322,676; published Apr. 5, 1932. Class 32.
Bainbridge, Kimpton & Haupt, Inc. (See Myers, M., & Son, assignor.)
Bancroft, Joseph, & Sons Co., Wilmington, Del. Bookcloths. 88,727; renewed Oct. 22, 1932.
Bancroft, Joseph, & Sons Co., Wilmington, Del. Window shade fabric. 88,728; renewed Oct. 22, 1932.
Bass, Ratcliff & Gretton, Limited, Burton-on-Trent, England. Stouts, beer, porter, etc. 88,264–5; renewed Sept. 10, 1932.
Bass, Ratcliff & Gretton, Limited, Burton-on-Trent, England. Pale ale and beer. 88,266; renewed Sept. 10, 1932.
Bass, Ratcliff & Gretton, Limited, Burton-on-Trent, England. Stouts, beer, porter, etc. 88,267; renewed Sept. 10, 1932.
Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic mountings and parts therefor. 295,001; June 14; Serial No. 323,604; published Apr. 5, 1932. Class 26.
Beanetts Mfg. Co., Seattle, Wash. Confection of large whole beans. 295,041; June 14; Serial No. 312,357; published Apr. 5, 1932. Class 46.
Bemberg, J. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filaments, threads, and yarn. 295,010; June 14; Serial No. 322,988; published Apr. 5, 1932. Class 43.
Blaul's, John, Sons Company, Burlington, Iowa. Foods. 88,998; renewed Nov. 5, 1932.

Blue Ribbon Rubber Company, Baltimore, Md. Prophylactic rubber articles. 294,953; June 14; Serial No. 323,774; published Mar. 29, 1932. Class 44.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 295,011; June 14; Serial No. 323,122; published Apr. 5, 1932. Class 42.
Bosch & Co., Badalona, near Barcelona, Spain. Anisettes. 86,271; renewed Apr. 30, 1932.
Breyer Ice Cream Co., Philadelphia, Pa. Ice cream. 86,676; renewed May 21, 1932.
Brody, Herman, Inc., New York, N. Y. Dresses. 295,091; June 14. Class 39.
Brooklyn Home Supply Company, Cleveland, Ohio. Barley malt syrup. 295,075; June 14; Serial No. 320,327; published Mar. 29, 1932. Class 46.
Brown, Boveri & Cie., Baden, Switzerland. Steam generators and accessories. 295,063; June 14; Serial No. 321,704; published Apr. 5, 1932. Class 34.
Brown Company. (See Burgess Sulphite Fibre Company.)
Brown Paper Goods Company, Chicago, Ill. Paper board display stands. 295,021; Jan. 14; Serial No. 323,524; published Apr. 5, 1932. Class 2.
Brueck, Herman S. (See Schuler Vineyard Co., assignor.)
Brunswick Radio Corporation, New York, N. Y. Records for use in connection with phonographs. 295,044; June 14; Serial No. 310,710; published Mar. 29, 1932. Class 36.
Burgess Sulphite Fibre Company, Berlin, N. H., to Brown Company, Portland, Me., and Berlin, N. H. Caustic soda. 84,725; renewed Jan. 2, 1932.
Butterfield, Fred, & Co., Inc., New York, N. Y. Silk, rayon, cotton, and/or combinations thereof in the piece, etc. 295,007; June 14; Serial No. 322,819; published Mar. 29, 1932. Class 42.
Cammeyer, to Cammeyer Inc., New York, N. Y., successor. White liquid preparations. 87,849; renewed Aug. 13, 1932.
Cammeyer, to Cammeyer Inc., New York, N. Y., successor. Preparations for cleaning all sorts of white goods. 88,057; renewed Aug. 27, 1932.
Cargill Elevator Co., assignor to Minneapolis Seed Co., Minneapolis, Minn. Raw or partly prepared materials. 87,422; renewed July 16, 1932.
Carstens Packing Company, Tacoma and Seattle, Wash. Hams, bacon, and lard. 88,842; renewed Oct. 29, 1932.
Century Electric Co., St. Louis, Mo. Electrical apparatus. 294,940; June 14; Serial No. 323,279; published Mar. 29, 1932. Class 21.
Chase Bag Company, The, Cleveland, Ohio. Temporary coverings for window openings, etc. 294,968; June 14; Serial No. 324,368; published Apr. 5, 1932. Class 12.
Choice Foods, Inc., Detroit, Mich. Chocolate flavored syrup or powder. 295,006; June 14; Serial No. 322,685; published Mar. 29, 1932. Class 46.
Cincinnati Mailing Device Company, The, Cincinnati, Ohio. Cans, boxes, tubes, containers, etc. 294,940; June 14; Serial No. 323,609; published Apr. 5, 1932. Class 2.
Citrolac Products Co. (See Petersen, Peter.)
Close & Company. (See Urban, Frank.)
Cohn-Hall-Marx Co., New York, N. Y. Silk piece goods. 294,981; June 14; Serial No. 323,885; published Apr. 5, 1932. Class 42.
Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 295,107; June 14. Class 4.
Collins Company, The, Collinsville, Conn. Hardware articles. 89,008; renewed Nov. 5, 1932.
Columbian Enameling & Stamping Co., Terre Haute, Ind. Enameled ware. 295,023; June 14; Serial No. 323,480; published Apr. 5, 1932. Class 13.
Columbus Show Case Company, The, Columbus, Ohio. Display cases, counters, shelving, etc. 295,017; June 14; Serial No. 323,565; published Apr. 5, 1932. Class 32.
Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Pistols. 295,029; June 14; Serial No. 324,698; published Apr. 5, 1932. Class 9.
Continental Oil Company, Chicago, Ill. Lubricating oil and greases, gasoline, etc. 295,048; June 14; Serial No. 309,967; published Mar. 22, 1932. Class 15.
Cook, Philip, New York, N. Y. Pop-gun game. 295,061; June 14; Serial No. 321,529; published Apr. 5, 1932. Class 22.
Courtaulds, Limited, London, England. Yarns. 295,003; June 14; Serial No. 312,177; published Mar. 29, 1932. Class 43.
Crossett Chemical Company, The, Crossett, Ark. Charcoal. 294,978; June 14; Serial No. 323,777; published Mar. 29, 1932. Class 1.
Crystal Chemical Company, Inc., The, New York, N. Y., now by change of name Crystal Corporation. Face powders, rouges, face creams, and lipstick. 295,086; June 14. Class 6.
Dalton and Snyder, Pittsburgh, Pa. Razor blade sharpeners. 295,000; June 14; Serial No. 309,847; published Apr. 5, 1932. Class 23.
Day, Katherine C., doing business as K. C. Day Company, Coral Gables, Fla. Medicinal preparation. 294,939; June 14; Serial No. 323,226; published Mar. 15, 1932. Class 6.
De Land, C. M., Garden City, N. Y. Cotton, rayon, silk, and woolen piece goods. 295,012; June 14; Serial No. 323,128; published Apr. 5, 1932. Class 42.
De Laval Separator Company, The, New York, N. Y. Cream. 294,987; June 14; Serial No. 324,244; published Mar. 29, 1932. Class 46.
Denver Macaroni & Noodle Co., The, Denver, Colo., to Kansas City Macaroni & Importing Company, Kansas City, Mo., successor. Macaroni, spaghetti, etc. 88,250; renewed Sept. 10, 1932.
Devoe & Raynolds Company, Inc., New York, N. Y. Calcimine wall finish. 295,035; June 14; Serial No. 324,245; published Apr. 5, 1932. Class 16.
Dextoro Company, Indianapolis, Ind. Malt syrup and a chocolate malt powder. 294,994; June 14; Serial No. 316,085; published Mar. 29, 1932. Class 46.
Dilling & Company, Indianapolis, Ind. Chewing gum and candy. 295,019; June 14; Serial No. 315,389; published Apr. 5, 1932. Class 46.
Diplomat Products, Inc., New York, N. Y. Chicken cream of potato soup, old fashioned chicken fricassee, etc. pudding, etc. 295,004; June 14; Serial No. 321,992; published Mar. 29, 1932. Class 46.
Diplomat Products, Inc., New York, N. Y. Chicken cream of potato soup, cream of asparagus soup, corned beef hash, etc. 295,068; June 14; Serial No. 321,991; published Mar. 29, 1932. Class 46.
Diplomat Products, Inc., New York, N. Y. Chicken cream of potato soup, old fashioned chicken fricassee, etc. 295,082; June 14; Serial No. 321,990; published Mar. 29, 1932. Class 46.
Dodge, M. Hartley, Passaic, N. J., and New York, N. Y., assignor, by mesne assignments, to Remington Arms Company, Inc., Bridgeport, Conn.; Ilion and New York, N. Y. Explosives, firearms, equipments, etc. 87,177; renewed July 2, 1932.
Dodson, James G., Americus, Ga., assignor, by mesne assignments, to Sterling Products (Incorporated), Wheeling, W. Va. Remedy for diseases of the liver. 88,254; renewed Sept. 10, 1932.
Dubon Company, Inc. (See Fraering Brokerage Co., (Inc.)
Eastman Kodak Company, Rochester, N. Y. Fixing boxes (tanks used in the fluid treatment of plates and films). 295,014; June 14; Serial No. 323,192; published Apr. 5, 1932. Class 26.
Eckart, Fred, Packing Co., Fort Wayne, Ind. Smoked sugar cured ham. 295,083; June 14; Serial No. 323,000; published Apr. 5, 1932. Class 46.
Edwards and Company, Inc., New York, N. Y. Electrical goods and apparatus. 294,934; June 14; Serial No. 323,048; published Mar. 29, 1932. Class 21.
Edwards, Godfrey, Liverpool, England, to Gripolin Co., Chester, England, successor. Toilet preparations. 85,094; renewed Jan. 30, 1932.
Edwards, Homer A., Chicago, Ill. Sausage machines. 295,099; June 14. Class 23.
Egyptian Mothproofing Co. (See Haljean, Lucy C.)
Electro Lamp Co., assignor to Union Carbide Company, New York, N. Y. Calcium carbid. 38,629; renewed July 15, 1932.
Electro Lamp Co., assignor to Union Carbide Company, New York, N. Y. Lamps for burning acetylene gas. 38,937; renewed Sept. 23, 1932.
Emlenton Refining Company, Emlenton, Pa. Lubricating motor oils, kerosene, gasoline, etc. 295,046; June 14; Serial No. 310,558; published Mar. 29, 1932. Class 15.
Empire Bottling Works. (See Halleman, William.)
Englinger, Louis J., Detroit, Mich. Games, toys, etc. 88,174; renewed Sept. 3, 1932.
Faber, A. W., Stein Germany, assignor, by mesne assignments, to A. W. Faber, Inc., Newark, N. J. Stationery supplies. 86,522; renewed May 14, 1932.
Fertig, Max & Co. Inc., New York, N. Y. Bed blankets. 295,072; June 14; Serial No. 318,908; published Apr. 5, 1932. Class 42.
Fisher Flouring Mills Company, Seattle, Wash., to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash. Wheat flour. 88,863; renewed Oct. 29, 1932.
Foley & Company, Chicago, Ill. Remedies for diseases of the kidney and bladder and rheumatism. 88,620; renewed Oct. 8, 1932.
Follman, Louis, New York, N. Y. Paint, varnish, prepared shellac, and paint enamels. 295,054; June 14; Serial No. 319,773; published Apr. 5, 1932. Class 16.
Foltz Grocery & Baking Company, The, to The Kroger Grocery & Baking Co., Cincinnati, Ohio, successor. Wheat flour. 88,865; renewed Oct. 29, 1932.
Fox, Ernest C., doing business as Independent Register & Manufacturing Company, Cleveland, Ohio. Heating and ventilating registers, register faces and grills. 295,108; June 14. Class 34.
Fox, M. Ewing, & Co., New York, N. Y., assignor, by mesne assignments, to The Glidden Company, Cleveland, Ohio. Calcimines. 87,062; renewed June 25, 1932.
Fraering Brokerage Co., Inc., doing business as Dubon Company, Inc., New Orleans, La. Dried fruits, canned vegetables, tomato paste and sauce. 295,013; June 14; Serial No. 323,168; published Mar. 29, 1932. Class 46.
Frank and Company, Milwaukee, Wis. Prepared food products. 295,088; June 14. Class 46.
Franklin Railway Oil Corporation, Franklin, Pa. Lubricating oils and greases. 294,925; June 14; Serial No. 319,287; published Mar. 22, 1932. Class 15.
Fritzsche Brothers, Inc., New York, N. Y. Chemical compounds and preparations. 295,077; June 14; Serial No. 321,204; published Mar. 29, 1932. Class 46.

Gabilla, Henriette, Paris, France, assignor to Gabilla, Incorporated, New York, N. Y. Toilet cosmetics. 87,743; renewed Aug. 6, 1932.
Galena-Signal Oil Company, Franklin, Pa., assignor, by mesne assignments, to Valvoline Oil Company, Edgewater, N. J. Lubricating oils. 38,631; renewed July 15, 1932.
General Naval Stores Company, Inc., New York, N. Y. Gloss oils. 295,055; June 14; Serial No. 320,164; published Apr. 5, 1932. Class 16.
Gerson-Stewart Corporation, The, Cleveland, Ohio. Polishes. 295,062; June 14; Serial No. 321,654; published Mar. 29, 1932. Class 16.
Gilbert, Alfred C., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Toys and trick apparatus. 88,078; renewed Aug. 27, 1932.
Glidden Company, The. (See Fox, M. Ewing, & Co., assignor.)
Godchaux Sugars, Inc., New Orleans, La. Sugar. 295,079; June 14; Serial No. 321,559; published Mar. 29, 1932. Class 46.
Grand Rapids Store Equipment Corporation, Grand Rapids, Mich. Refrigerated display and storage cases. 295,031; June 13; Serial No. 324,602; published Apr. 5, 1932. Class 31.
Grange Silo Company. (See Mott, Maurice W.)
Griffin, H., & Sons Company, The, New York, N. Y. Fabricated metallic leaf for lettering, decorating, and numbering books, papers, etc. 294,919; June 14; Serial No. 304,686; published Apr. 5, 1932. Class 14.
Grigsby-Grunow Company. (See Majestic Household Utilities Corporation, assignor.)
Gripolin Co. (See Edwards, Godfrey.)
Gross, A., Candle Company, Inc., Baltimore, Md. Candles and ceremonial lights. 295,092; June 14. Class 15.
Gross, A., Candle Company, Inc., Baltimore, Md. Candles. 295,093; June 14. Class 15.
Gudebrod Brothers Silk Company, Philadelphia, Pa. Threads. 295,078; June 14; Serial No. 321,318; published Apr. 5, 1932. Class 43.
Hague, Horace, Huntington Bay Hills, Huntington, N. Y. Games. 295,022; June 14; Serial No. 323,491; published Apr. 5, 1932. Class 22.
Hahn Department Store, Inc., Wilmington, Del. Coats, dresses, suits, etc. 295,103; June 14. Class 39.
Halferty, G. P., Inc., Seattle, Wash. Canned fish. 294,945; June 14; Serial No. 323,455; published Apr. 5, 1932. Class 46.
Haljean, Lucy C., doing business as Egyptian Mothproofing Co., Hollywood, Calif. Chemical solution. 294,921; June 14; Serial No. 318,275; published Mar. 22, 1932. Class 6.
Hall, Gardiner, jr., Company, The, South Willington, Conn., and New York, N. Y. Thread. 294,991; June 14; Serial No. 324,462; published Apr. 5, 1932. Class 43.
Halleman, William, to Empire Bottling Works, Newark, N. J., successor. Stove polish. 39,043; renewed Oct. 14, 1932.
Hardwick & Magee Company, Philadelphia, Pa. Woven carpets and rugs. 87,336; renewed July 9, 1932.
Harris, Estella, Rocky Mount, N. C. Pile salve. 294,931; June 14; Serial No. 322,586; published Mar. 29, 1932. Class 6.
Hassler, Robert H., doing business as Ro-To-Flex Mfg. Co., Indianapolis, Ind. Massage devices. 295,036; June 14; Serial No. 324,165; published Apr. 5, 1932. Class 44.
Hatfield Campbell Creek Coal Company, The, Cincinnati, Ohio. Coal. 295,100; June 14. Class 1.
Health Developing Apparatus Co., Inc., New York, N. Y. Athletic appliances. 294,954; June 14; Serial No. 323,782; published Apr. 5, 1932. Class 22.
Health Wheat Corporation, The, Chicago, Ill. Ground food. 295,016; June 14; Serial No. 323,405; published Mar. 29, 1932. Class 46.
Hudnut, Richard, New York, N. Y. Soap. 87,889; renewed Aug. 13, 1932.
Hudnut, Richard, New York, N. Y. Hair tonic. 88,087; renewed Aug. 27, 1932.
Huntington Laboratories, Inc., Huntington, Ind. Mixture of varnish and wax for wood floors. 294,950; June 14; Serial No. 323,618; published Mar. 29, 1932. Class 16.
Huntington Laboratories, Inc., Huntington, Ind. Varnish. 294,951; June 14; Serial No. 323,619; published Mar. 29, 1932. Class 16.
Huron Milling Company, The, Harbor Beach, Mich. Toasted muffins. 295,090; June 14. Class 46.
Idaho Candy Co., Boise, Idaho. Candy. 294,928; June 14; Serial No. 321,649; published Apr. 5, 1932. Class 46.
Ideal Novelty & Toy Co., Brooklyn, N. Y. Dolls. 295,032; June 14; Serial No. 324,561; published Apr. 5, 1932. Class 22.
Ideal Ventilator Co., Boston, Mass., and Providence, R. I., assignor to Ideal Ventilator Co., Providence, R. I. Ventilators. 87,765; renewed Aug. 6, 1932.
Illinois Moulding Company, The, Chicago, Ill. Refrigerators. 295,094; June 14. Class 31.
Independent Register & Manufacturing Company. (See Fox, Ernest C.)
Indiana Film Company, Incorporated, New Albany, Ind. Glue or adhesive substance. 294,986; June 14; Serial No. 324,169; published Mar. 29, 1932. Class 5.
Indian River Fruit Growers, Wabasso, Fla. Fresh or raw citrus fruits, tomatoes, cucumbers, etc. 294,936; June 14; Serial No. 323,134; published Apr. 5, 1932. Class 46.
International Radio Corporation, Ann Arbor, Mich. Radio receiving sets and parts thereof. 294,922; June 14; Serial No. 318,558; published Mar. 29, 1932. Class 21.
Jaeger, Oswald, Baking Co., Milwaukee, Wis. Cakes. 295,074; June 14; Serial No. 319,413; published Mar. 29, 1932. Class 46.
Jefferson, Glenn V., Swissvale, Pa. Table game. 294,955; June 14; Serial No. 323,783; published Apr. 5, 1932. Class 22.
Johnson-Allen Coffee Co., assignor to Norwine Coffee Company, St. Louis, Mo. Coffee. 88,891; renewed Oct. 29, 1932.
Juvenile Graphic Productions, New York, N. Y. Tracing and drawing game or book. 295,056; June 14; Serial No. 320,340; published Apr. 5, 1932. Class 22.
Knas, Louis A., Newark, N. J. Roach-powder. 86,809; renewed June 4, 1932.
Kansas City Macaroni & Importing Company. (See Denver Macaroni & Noodle Co., The.)
Kantro, Albert M., Chicago, Ill. Lamp shades. 295,065; June 14; Serial No. 322,613; published Apr. 5, 1932. Class 34.
Kassel, Samuel, doing business as Union Products Co., Philadelphia, Pa. Malt syrup. 294,993; June 14; Serial No. 316,533; published Aug. 18, 1931. Class 46.
Kellogg, William H., Battle Creek, Mich. Popped corn, crystallized pop corn, chocolate treated pop corn. 294,927; June 14; Serial No. 321,598; published Apr. 5, 1932. Class 46.
Kenmore Engineering Co., Inc., Boston, Mass. Range oil burners and parts therefor. 295,064; June 14; Serial No. 322,177; published Mar. 29, 1932. Class 34.
Kenney Manufacturing Company, Cranston, R. I. Drapery holdbacks. 294,957; June 14; Serial No. 323,818; published Apr. 5, 1932. Class 13.
Koenigkramer, F. & F., Cincinnati, Ohio. Chairs and tables. 295,071; June 14; Serial No. 318,597; published Apr. 5, 1932. Class 32.
Kress, S. H. & Co., New York, N. Y. Manicure sets, nail files, cuticle knives, etc. 295,026; June 14; Serial No. 323,336; published Apr. 5, 1932. Class 44.
Kroger Grocery & Baking Co., The. (See Foltz Grocery & Baking Co., The.)
Kuehnert, Albin, doing business as A. Kuehnert & Co., New York, N. Y. Underwear. 86,307; renewed Apr. 30, 1932.
La Compagnie Fermiere de L'Etablissement Thermal de Vichy, Paris, France. Natural mineral waters. 86,208–9; renewed Apr. 23, 1932.
La Compagnie Fermiere de L'Etablissement Thermal de Vichy, Paris, France. Natural mineral waters. 86,576; renewed May 21, 1932.
La Compagnie Fermiere de L'Etablissement Thermal de Vichy, Paris, France. Natural mineral waters. 88,244; renewed Sept. 10, 1932.
Lakhovsky, Georges, Paris, France. Medical necklaces. 295,058; June 14; Serial No. 321,166; published Apr. 5, 1932. Class 44.
Landis & Gyr A.-G., Zug, Switzerland. Clocks and clock mechanisms. 294,926; June 14; Serial No. 320,438; published Jan. 19, 1932. Class 27.
Land O'Lakes Creameries, Inc., Minneapolis, Minn. Milk, cream, butter oil, etc. 295,002; June 14; Serial No. 300,354; published Mar. 29, 1932. Class 46.
Lefort, Robert, & Company, Inc., Philadelphia, Pa. Textile net goods. 294,995; June 14; Serial No. 315,314; published Apr. 5, 1932. Class 42.
Lestrade Bros., New York, N. Y., to Viking Butter Co., Inc., New York, N. Y., successor. Butter. 38,335; renewed May 27, 1932.
Lever Brothers Company, Cambridge, Mass. Vegetable shortening. 294,973–4; June 14; Serial Nos. 324,534–5; published Apr. 5, 1932. Class 46.
Lever Brothers Company, Cambridge, Mass. Vegetable shortening. 294,975; June 14; Serial No. 324,614; published Apr. 5, 1932. Class 46.
Lever Brothers Company, Cambridge, Mass. Vegetable shortening. 294,976–7; June 14; Serial Nos. 324,616–17; published Apr. 5, 1932. Class 46.
Libby, McNeill & Libby, Chicago, Ill. Canned pineapple. 294,969–70; July 14; Serial Nos. 324,385–6; published Apr. 5, 1932. Class 46.
Liverpool China & Indies Tea Co. Ltd., The, Liverpool, England. Coffee, a compound of coffee and chicory, cocoa, and chocolate. 89,042; renewed Nov. 5, 1932.
Lowry-Rodgers Company, doing business as Alfred Lowry & Brother, Philadelphia, Pa. Canned fruits, vegetables, and berries, maple syrup, tea, etc. 294,998; June 14; Serial No. 311,689; published Mar. 1, 1932. Class 46.
Ludlow Manufacturing Associates, Boston, Mass. Linen thread. 295,096; June 14. Class 43.
Maculette Garment Co. Inc., Buffalo, N. Y. Combined sanitary garment and holder. 295,037; June 14; Serial No. 322,828; published Apr. 5, 1932. Class 44.
Mahler Textiles, Inc., New York, N. Y. Cotton piece goods. 295,102; June 14. Class 42.
Maine Steel Products Co., South Portland, Me. Snow plows and parts thereof. 295,106; June 14. Class 23.

Majestic Household Utilities Corporation, assignor to Grigsby-Grunow Company, Chicago, Ill. Electric vacuum cleaners and parts thereof. 295,043; June 14; Serial No. 310,831; published Mar. 22, 1932. Class 21.
McDuffie, William C., as receiver for Richfield Oil Company of California. (See Richfield Oil Company, assignor.)
Mente & Co., Inc., New Orleans, La. Textile bagging material in the piece. 294,992; June 14; Serial No. 324,479; published Apr. 5, 1932. Class 42.
Michiana Products Corporation, Michigan City, Ind. Heat treating and copper billet heating furnace parts. 295,039; June 14; Serial No. 314,708; published Mar. 29, 1932. Class 34.
Miley, L. J. Company, Chicago, Ill. Brake lining. 295,081; June 14; Serial No. 321,792; published Apr. 5, 1932. Class 35.
Minervini, John, Inc., Hoboken, N. J. Alimentary paste products. 295,080; June 14; Serial No. 321,572; published Mar. 29, 1932. Class 46.
Minneapolis Seed Co. (See Cargill Elevator Co., assignor.)
Mott, Maurice W., doing business as Grange Silo Company, Red Creek, N. Y. Silos. 294,963; June 14; Serial No. 323,957; published Apr. 5, 1932. Class 2.
Munson, Luther S., Washington, D. C. Building tiles. 295,045; June 14; Serial No. 310,609; published Apr. 5, 1932. Class 12.
Mupu Citrus Assn., Santa Paula, Calif. Fresh citrus fruit. 295,105; June 14. Class 46.
Myers, M., & Son, Birmingham, England, assignor, by mesne assignments, to Bainbridge, Kimpton & Haupt, Inc., New York, N. Y. Steel pens. 38,240; renewed May 13, 1932.
Myrzelle Company, Minneapolis, Minn. Emollients. 294,964; July 14; Serial No. 323,958; published Mar. 22, 1932. Class 6.
National Metal Edge Box Company, Philadelphia, Pa. Machines for making and applying metal stays to paper boxes. 294,990; June 14; Serial No. 311,304; published Apr. 5, 1932. Class 23.
National Union Radio Corporation, Newark, N. J. Radio electron tubes. 294,923; June 14; Serial No. 318,758; published Mar. 29, 1932. Class 21.
Naumkeag Steam Cotton Co., Salem, Mass. Sheets and pillow-cases. 89,052; renewed Nov. 5, 1932.
Nehi, Inc., Columbus, Ga. Beverages and concentrates. 294,961–2; June 14; Serial Nos. 323,903–4; published Apr. 5, 1932. Class 45.
Newall Manufacturing Company, The, Chicago, Ill. Mainsprings for watches. 294,972; June 14; Serial No. 324,481; published Apr. 5, 1932. Class 27.
New Home Sewing Machine Company, The, Rockford, Ill. Sewing machines. 295,073; June 14; Serial No. 319,215; published Apr. 5, 1932. Class 23.
Newton Junior Corporation, New Haven, Conn. Toy casting or molding machines and parts thereof. 295,089; June 14. Class 22.
Nichols-Beazley Airplane Company, Inc., Marshall, Mo. Airplane propellers. 295,067; June 14; Serial No. 322,702; published Apr. 5, 1932. Class 19.
Nickles, Alfred, doing business as Nickles Bakery, Navarre, Ohio. Bread. 294,985; June 14; Serial No. 324,046; published Mar. 29, 1932. Class 46.
North Carolina Granite Corporation, The, Mount Airy, N. C. Building stone. 295,104; June 14. Class 1.
Norwine Coffee Company. (See Johnson-Allen Coffee Co. assignor.)
O'Connor, James J., doing business as Jas. J. O'Connor Coffee Co., St. Louis, Mo. Roasted coffee. 294,944; June 14; Serial No. 323,419; published Apr. 5, 1932. Class 46.
Oullette, C. A., doing business as Alnar Company, Seattle, Wash. Chemical preparation. 294,966; June 14; Serial No. 324,186; published Mar. 29, 1932. Class 6.
Parke, Davis & Co., Detroit, Mich. Vaccine. 88,699; renewed Oct. 15, 1932.
Patch, E. L., Company, The, Stoneham, Mass. Preparation for treating corns. 294,967; June 14; Serial No. 324,187; published Mar. 22, 1932. Class 6.
Patrick Farms, Inc., Chular, Calif. Fresh vegetables. 295,020; June 14; Serial No. 315,922; published Apr. 5, 1932. Class 46.
Pennsylvania Baking Company, Inc., Scranton, Pa. Soda crackers. 294,988; June 14; Serial No. 324,266; published Mar. 29, 1932. Class 46.
Petersen, Peter, doing business as Citrolac Products Co., Chicago, Ill. Culture for making buttermilk, fermented milk, etc. 295,069; June 14; Serial No. 317,614; published Mar. 29, 1932. Class 46.
Petty Shoe Company, Pittsburgh, Pa. Shoes. 295,070; June 14; Serial No. 317,902; published Mar. 22, 1932. Class 39.
Pfaltzgraff Pottery Company, The, York, Pa. Stone jars and jugs. 295,076; June 14; Serial No. 321,080; published Apr. 5, 1932. Class 30.
Phila. Equipment & Supply Co., Philadelphia, Pa. Chemical paint preparation. 294,948; June 14; Serial No. 323,587; published Apr. 5, 1932. Class 16.
Pichou, Edmond, Salon, Bouches-du-Rhone, France. Motor fuel oil. 295,101; June 14. Class 15.
Plywood Products Company, Louisville, Ky. Plank and block flooring. 295,047; June 14; Serial No. 316,349; published Mar. 22, 1932. Class 12.
Pratt, Owen E., doing business as Pratt Manufacturing Company, Armington, Ill. Folding or camp stoves. 295,059; June 14; Serial No. 321,297; published Apr. 5, 1932. Class 34.
Pratt & Whitney Company, Hartford, Conn. Dimensional gages. 295,015; June 14; Serial No. 323,276; published Apr. 5, 1932. Class 26.
Ravel, Maxwell C., Clearwater, Fla. Beverages, syrups, and extracts. 295,034; June 14; Serial No. 324,268; published Apr. 5, 1932. Class 45.
Raymond Bag Company, The, Middletown, Ohio. Paper bags. 295,025; June 14; Serial No. 323,421; published Apr. 5, 1932. Class 2.
Red Arrow Products, Inc., Oradell, N. J. Operating room necessities. 295,060; June 14; Serial No. 321,442; published Mar. 29, 1932. Class 44.
Remington Arms Company, Inc. (See Dodge, M. Hartley, assignor.)
Rice Bros. Packing Company, Apalachicola, Fla. Canned oysters. 86,453; renewed May 7, 1932.
Richfield Oil Company, assignor to William C. McDuffie, as receiver for Richfield Oil Company of California, Los Angeles, Calif. Gasoline. 294,941; June 14; Serial No. 323,362; published Mar. 22, 1932. Class 15.
Richfield Oil Company, assignor to William C. McDuffie, as receiver for Richfield Oil Company of California, Los Angeles, Calif. Gasoline. 294,942; June 14; Serial No. 323,363; published Mar. 15, 1932. Class 15.
Richfield Oil Company, assignor to William C. McDuffie, as receiver for Richfield Oil Company of California, Los Angeles, Calif. Gasoline. 294,943; June 14; Serial No. 323,365; published Mar. 15, 1932. Class 15.
Robinson, Mrs. R., doing business as Robinson Remedies, Hanover, Ill. Medicinal salve. 295,040; June 14; Serial No. 312,589; published Jan. 5, 1932. Class 6.
Robinson, Wm. C., & Son, Co., Baltimore, Md., and Conaopolis, Pa., to Wm. C. Robinson & Son, Co., Baltimore, Md. Cylinder-oil. 86,618; renewed May 21, 1932.
Roos, H. W., Company, The, Cincinnati, Ohio. Removable metal pans, forms, and adjustable shores. 295,038; June 14; Serial No. 315,380; published Mar. 29, 1932. Class 12.
Ro-To-Flex Mfg. Co. (See Hassler, Robert H.)
Scheidt, Adam, Brewing Company, Norristown, Pa. Malt beverages. 295,095; June 14. Class 48.
Schein Baking Co., Inc., New York, N. Y. Bread. 294,983; June 14; Serial No. 324,012; published Mar. 29, 1932. Class 46.
Schmid, Julius, New York, N. Y. Hard rubber douche syringes. 294,956; June 14; Serial No. 323,790; published Apr. 5, 1932. Class 44.
Schmid, Julius, New York, N. Y. Prophylactic rubber and membranous articles. 295,024; June 14; Serial No. 323,473; published Apr. 5, 1932. Class 44.
Schreiber Products Corporation, Buffalo, N. Y. Malt extract syrup. 294,979; June 14; Serial No. 323,791; published Mar. 29, 1932. Class 46.
Schuh, Dominic J., Cincinnati, Ohio. Furniture polish. 294,952; June 14; Serial No. 323,721; published Mar. 29, 1932. Class 16.
Schuler Vineyard Co., of Stockton, Calif., assignor to Herman S. Brueck, Lodi, Calif. Fresh grapes. 295,084; June 14. Class 46.
Schultz Die Casting Company, Toledo, Ohio. Metal castings, die castings, and forgings. 294,946; June 14; Serial No. 323,702; published Apr. 5, 1932. Class 14.
Seligman Distillery Company, The, Cincinnati, Ohio, to Standard Brands Incorporated, New York, N. Y., successor. Rye whisky. 86,624; renewed May 21, 1932.
Shrader Bros., Louisville, Ky. Dry cleaning plants or systems. 295,051; June 14; Serial No. 319,083; published Nov. 24, 1931. Class 24.
Siebel, J. E., Sons' Company, Inc., Chicago, Ill. Bread. 294,982; June 14; Serial No. 323,914; published Mar. 29, 1932. Class 46.
Silver-Marshall, Inc., Chicago, Ill. Radio receiving sets, kits for radio receiving sets, etc. 294,947; June 14; Serial No. 323,849; published Mar. 29, 1932. Class 21.
Snia-Viscosa, Società Nnzionale Industria Applicazioni Viscosa, Milan, Italy. Artificial silk spun, thrown, sewing or knitting twist, yarn, and thread. 294,996; June 14; Serial No. 314,217; published Apr. 5, 1932. Class 43.
Société Anonyme pour la Décoration Intérieure Moderne, Paris, France. Electric floor, table, and bridge lamps; electric lamp stands and parts thereof, etc. 295,087; June 14. Class 21.
Société des Usines Chimiques Rhone-Poulenc, Paris, France. Medicinal preparation. 294,924; June 14; Serial No. 318,925; published Mar. 29, 1932. Class 6.
Standard Brands Incorporated. (See Seligman Distillery Company, The.)
Standard Oil Company, Bayonne, N. J., assignor to Standard Oil Company of New Jersey, Wilmington, Del. Refined oil. 86,951; renewed June 11, 1932.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Gas, petroleum gas, and petroleum gas butane. 295,042; June 14; Serial No. 311,400; published Mar. 22, 1932. Class 6.
Sterling Products Company, Evansville, Ind. Malt extract. 295,018; June 14; Serial No. 323,726; published Mar. 20, 1932. Class 46.
Sterling Products (Incorporated). (See Dodson, James G., assignor.)

Stock-King Mfg. Co., St. Louis, Mo. Autoglare shields. 295,050; June 14; Serial No. 318,182; published Apr. 5, 1932. Class 19.
Sutro, E., and Son Company, assignor, by mesne assignments, to E. Sutro & Son Co., Inc., Philadelphia, Pa. Hosiery. 88,802; renewed Oct. 22, 1932.
Tampax, Inc., The, Denver, Colo. Sanitary absorbent tampons. 294,959; June 14; Serial No. 323,876; published Mar. 29, 1932. Class 44.
Tapscott, Georgina L., Inglewood, Calif. Stuffed toy animals. 295,028; June 14; Serial No. 323,075; published Apr. 5, 1932. Class 22.
Tetley, Joseph, & Co., Inc., New York, N. Y. Tea, coffee, cocoa, etc. 294,997; June 14; Serial No. 314,179; published Mar. 29, 1932. Class 46.
Texas Company, The, New York, N. Y. Petroleum products. 294,935; June 14; Serial No. 323,100; published Mar. 29, 1932. Class 15.
Texas Company, The, Houston, and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 87,283; renewed July 2, 1932.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oils. 88,032; renewed Aug. 20, 1932.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Lubricating oil. 88,712; renewed Oct. 15, 1932.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Kerosene. 88,713; renewed Oct. 15, 1932.
Texas Company, The, Houston and Port Arthur, Tex., and New York, N. Y., assignor to The Texas Company, New York, N. Y. Kerosene. 88,806; renewed Oct. 22, 1932.
Thornton, John, jr., to John Thornton & Co., New York, N. Y., successor. Sewing-needles. 87,498; renewed July 16, 1932.
Tri-State Refining Company, Ashland, Ky. Lubricating oils. 294,930; June 14; Serial No. 322,567; published Mar. 22, 1932. Class 15.
Trumbull Electric Manufacturing Company, The, Plainville, Conn. Metallic conduits or housings. 294,933; June 14; Serial No. 322,898; published Mar. 29, 1932. Class 21.
Trupar Manufacturing Company, Dayton, Ohio. Electric refrigerators. 295,057; June 14; Serial No. 321,084; published Apr. 5, 1932. Class 31.
Tulare Packing Company, Ltd., Tulare, Calif. Canned fruits. 294,971; June 14; Serial No. 324,409; published Apr. 5, 1932. Class 46.
Tyler, W. S., Company, The, Cleveland, Ohio. Classifying machines for grading materials. 294,984; June 14; Serial No. 324,019; published Apr. 5, 1932. Class 26.
Ulticur Co. Inc., The, Chicago, Ill. Mineral oil and medicinal compound. 294,929; June 14; Serial No. 322,527; published Mar. 29, 1932. Class 6.
Union Carbide Company. (See Electro Lamp Co., assignor.)
Union Products Co. (See Kasser, Samuel.)
Urban, Frank, doing business as Close & Company, Chicago, Ill. Beverages, powders, extracts, etc. 295,033; June 14; Serial No. 324,494; published Apr. 5, 1932. Class 45.
Valvoline Oil Company. (See Galena-Signal Oil Company, assignor.)
Vanity Fair Silk Mills, Reading, Pa. Piece goods. 295,008; June 14; Serial No. 322,869; published Apr. 5, 1932. Class 42.
Vereinigte Chemische Fabriken Kreidl, Heller & Co., Vienna, Austria. Opaquing agents. 295,052–3; June 14; Serial Nos. 319,269–70; published Mar. 29, 1932. Class 16.
Viking Butter Co., Inc. (See Lestrade Bros.)
Waterman, L. E., Company, New York, N. Y. Fountain-pens. 39,128; renewed Oct. 28, 1932.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electric welders. 294,920; June 14; Serial No. 317,836; published Mar. 29, 1932. Class 21.
White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental supplies. 294,960; June 14; Serial No. 323,880; published Apr. 5, 1932. Class 44.
White, Wilbur, Chemical Company, The, Owego, N. Y. Waxing and polishing compositions. 295,027; June 14; Serial No. 323,262; published Apr. 5, 1932. Class 16.
Whitlock Cordage Co., New York, N. Y. Rope. 294,958; June 14; Serial No. 323,837; published Apr. 5, 1932. Class 7.
Will & Baumer Candle Co., Inc., Syracuse, N. Y. Candles. 294,937–8; June 14; Serial Nos. 323,155–6; published Mar. 22, 1932. Class 15.
Williams, J. B., Company, The Glastonbury, Conn. Shaving soap. 39,132; renewed Oct. 28, 1932.
Williams, J. B., Company, The, Glastonbury, Conn. Soaps. 86,854; renewed June 4, 1932.
Yeasties Products, Inc., Irwin, Pa. Cereal food for dogs, cats, etc. 295,009; June 14; Serial No. 322,870; published Mar. 29, 1932. Class 46.

LIST OF REGISTRANTS OF LABELS

Bake Rite Baking Powder Co. (See Sterkx, Jos.)
Berkoff, Louis, doing business as The Mortemoth Company, Milwaukee, Wis. Mortemoth Kills Moths. For Preparation for Killing Moths. 40,824; June 14.
Blatz Brewing Company, Milwaukee, Wis. Old Heidelberg. For Beverage Containing Less Than One-Half of One Per Cent Alcohol By Volume. 40,825; June 14.
Bruckmann Co., The, Cincinnati, Ohio. Kentucky Pride Dixie. For Brew. 40,826; June 14.
Burton, M. L., Los Angeles, Calif. Sanlplate, The Dental Plate Cleanser. For Dental Plate Cleanser. 40,827; June 14.
Butcher, Byron S., Nogales, Ariz. Bamoa. For Fresh Tomatoes. 40,828; June 14.
Crichton, Alexander, Castleton, Canada. It Reaches the Right Spot. For Medicine. 11,215; renewed July 5, 1932.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel T J B Coffee. For Coffee. 40,829; June 14.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel T J C Coffee. For Coffee. 40,830; June 14.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel T J S Coffee. For Coffee. 40,831; June 14.
Kane, Benjamin, Philadelphia, Pa. Wynwood Hall. For Cigars. 40,832; June 14.
King Features Syndicate, Inc., New York, N. Y. Popeye Sparkler. For Toy Sparklers. 40,833; June 14.
Los Angeles Paper Box Factory, Los Angeles, Calif. Silhouette Chocolates by Beaudry, Los Angeles. For Chocolates. 40,834; June 14.
Markel, Emerick J., New Haven, Conn. Sulpholene Fungicide. For Fungicide. 40,835; June 14.
Mortemoth Company, The. (See Berkoff, Louis.)
Mechling Brothers Chemical Company, Camden, N. J. Mechling's Pyrote. For Insecticide. 40,836; June 14.
National Enameling & Stamping Company, Milwaukee, Wis. Preserve Pans. For Pans. 40,837; June 14.
Newark Paraffine & Parchment Paper Co., Newark, N. J. Old Timer Bread. For Bread. 40,838; June 14.
Oesterling, Peter J. & Son, Inc., Butler, Pa. Chikloh Tonic. For Tonic for Poultry, Birds, and Baby Chicks. 40,839; June 14.
Orbit Gum Company, Chicago, Ill. Honeyeast. For Chewing Gum. 40,840; June 14.
Pensky, Sam, doing business as The Plaza Cigar Co., Brooklyn, N. Y. Entré. For Cigars. 40,841; June 14.
Plaza Cigar Co., The. (See Pensky, Sam.)
Postal Advertising Service, Long Island City, N. Y. Stamp Service. For Postage Stamps. 40,842; June 14.
Real Products Corporation, Brooklyn, N. Y. Champion. For Spark Plug Cable Sets. 40,843; June 14.
Sacks-Sons Carton Co., Inc., Brooklyn, N. Y. Blume Knitwear. For Knitted Outerwear. 40,844; June 14.
Sterkx, Jos., doing business as Bake Rite Baking Powder Co., Alexandria, La. Bake Rite Baking Powder. For Baking Powder. 40,845; June 14.
Ward Baking Company, New York, N. Y. Ward's Soft Bun Bread. For Bread. 40,846; June 14.
Waxide Paper Company, Kansas City, Mo. Better Bread. For Bread. 40,847; June 14.
White & Wyckoff Mfg. Co., Holyoke, Mass. Memory Jogger. For Memo Pads. 40,848; June 14.

LIST OF REGISTRANTS OF PRINTS

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Made of Lively Wool That Springs Back Underfoot. For Rugs. 13,749; June 14.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Look For This Symbol of Quality. For Rugs. 13,750; June 14.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. It Springs Back Underfoot. For Rugs. 13,751; June 14.
Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Lively Wool That Springs Back Underfoot. For Rugs. 13,752; June 14.
Ojrzynski, John, Brooklyn, N. Y. Ask For J. Ojrzynski's Pure Rye Bread, Rolls & Cakes, 191 Grand St., 172 N. 1st St., Brooklyn, N. Y. For Bread, Rolls and Cakes. 13,753; June 14.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Charcoal. Crossett Chemical Company. 294,978; June 14; Serial No. 323,777; published Mar. 29, 1932.
Coal. Hatfield Campbell Creek Coal Company. 295,100; June 14.
Raw or partly prepared materials. Cargill Elevator Co. 87,422; renewed July 16, 1932.
Stone, Building. North Carolina Granite Corporation. 295,104; June 14.

CLASS 2

Bags, Paper. Raymond Bag Company. 295,025; June 14; Serial No. 323,421; published Apr. 5, 1932.
Cans, boxes, tubes, containers, etc. Cincinnati Mailing Device Company. 294,949; June 14; Serial No. 323,609; published Apr. 5, 1932.
Silos. M. W. Mott. 294,963; June 14; Serial No. 323,057; published Apr. 5, 1932.
Stands, Paper board display. Brown Paper Goods Company. 295,021; June 14; Serial No. 323,524; published Apr. 5, 1932.

CLASS 3

Leather products. Amity Leather Products Co. 294,980; June 14; Serial No. 323,881; published Mar. 29, 1932.

CLASS 4

Liquid preparations, White. Cammeyer. 87,849; renewed Aug. 13, 1932.
Polish, Stove. W. Halleman. 39,043; renewed Oct. 14, 1932.
Preparation for cleaning all sorts of white goods. Cammeyer. 88,057; renewed Aug. 27, 1932.
Soap. Colgate-Palmolive-Peet Company. 295,107; June 14.
Soap. R. Hudnut. 87,889; renewed Aug. 13, 1932.
Soap, Shaving. J. B. Williams Company. 39,132; renewed Oct. 28, 1932.
Soaps. J. B. Williams Company. 86,851; renewed June 4, 1932.

CLASS 5

Glue or adhesive substance. Indiana Film Company. 294,986; June 14; Serial No. 324,169; published Mar. 29, 1932.

CLASS 6

Antiseptic soluble toilet powders, Medicated. American Ammone Company. 88,824; renewed Oct. 29, 1932.
Calcium carbid. Electro Lamp Co. 38,629; renewed July 15, 1932.
Caustic soda. Burgess Sulphite Fibre Company. 84,725; renewed Jan. 2, 1932.
Chemical preparation. C. A. Ouellette. 294,966; June 14; Serial No. 324,186; published Mar. 29, 1932.
Chemical solution. L. C. Haljean. 294,921; June 14; Serial No. 318,275; published Mar. 22, 1932.
Cosmetics, Toilet. H. Gabilla. 87,743; renewed Aug. 6, 1932.
Emollients. Myrzelle Company. 294,964; July 14; Serial No. 323,958; published Mar. 22, 1932.
Gas, petroleum gas, and petroleum gas butane. Standard Oil Company of California. 295,042; June 14; Serial No. 311,400; published Mar. 22, 1932.
Hair-tonic. R. Hudnut. 88,087; renewed Aug. 27, 1932.
Medicinal preparation. K. C. Day. 294,939; June 14; Serial No. 323,226; published Mar. 15, 1932.
Medicinal preparation. Société des Usines Chimiques Rhone-Poulenc. 294,924; June 14; Serial No. 318,925; published Mar. 29, 1932.
Oil and medicinal compound, Mineral. Ulticur Co. Inc. 294,929; June 14; Serial No. 322,527; published Mar. 29, 1932.
Plasters, Corn and bunion. Aseptic Products Company. 88,825; renewed Oct. 29, 1932.
Powder, Roach. L. A. Kaas. 86,809; renewed June 4, 1932.
Powders, rouges, face creams, and lipstick, Face. Crystal Chemical Company. 295,086; June 14.
Preparation for treating corns. E. L. Patch Company. 294,967; June 14; Serial No. 324,187; published Mar. 22, 1932.
Remedies for diseases of the kidney and bladder and rheumatism. Foley & Company. 88,620; renewed Oct. 8, 1932.
Remedy for diseases of the liver. J. G. Dodson. 88,254; renewed Sept. 10, 1932.
Salve, Medicinal. Mrs. R. Robinson. 295,040; June 14; Serial No. 312,589; published Jan. 5, 1932.
Salve, Pile. E. Harris. 294,931; June 14; Serial No. 322,586; published Mar. 29, 1932.
Toilet preparations. G. Edwards. 85,094; renewed Jan. 30, 1932.
Vaccine. Parke, Davis & Co. 88,699; renewed Oct. 15, 1932.

CLASS 7

Rope. Whitlock Cordage Co. 294,958; June 14; Serial No. 323,837; published Apr. 5, 1932.

Rope, Wire. American Steel and Wire Company of New Jersey. 295,030; June 14; Serial No. 324,640; published Apr. 5, 1932.

CLASS 9

Explosives, firearms, equipments, etc. M. H. Dodge. 87,177; renewed July 2, 1932.
Pistols. Colt's Patent Fire Arms Manufacturing Co. 295,029; June 14; Serial No. 324,698; published Apr. 5, 1932.
Tiles, Building. L. S. Munson. 295,045; June 14; Serial No. 310,609; published Apr. 5, 1932.

CLASS 12

Coverings for window openings, etc., Temporary. Chase Bag Company. 294,968; June 14; Serial No. 324,368; published Apr. 5, 1932.
Metal pans, forms, and adjustable shores, Removable. H. W. Roos Company. 295,038; June 14; Serial No. 315,380; published Mar. 29, 1932.
Plank and block flooring. Plywood Products Company. 295,047; June 14; Serial No. 310,349; published Mar. 22, 1932.

Class 13

Holdbacks, Drapery. Kenney Manufacturing Company. 294,957; June 14; Serial No. 323,818; published Apr. 5, 1932.
Ware, Enameled. Columbian Enameling & Stamping Co. 295,023; June 14; Serial No. 323,480; published Apr. 5, 1932.

Class 14

Castings, and forgings, Metal and die. Schultz Die Casting Company. 294,946; June 14; Serial No. 323,792; published Apr. 5, 1932.
Metallic leaf for lettering, decorating, and numbering books, etc., Fabricated. H. Griffin & Sons Company. 294,919; June 14; Serial No. 304,686; published Apr. 5, 1932.

CLASS 15

Candles. A. Gross Candle Company. 295,093; June 14.
Candles. Will & Baumer Candle Co. 294,937–8; June 14; Serial Nos. 323,155–6; published Mar. 22, 1932.
Candles and ceremonial lights. A. Gross Candle Company. 295,092; June 14.
Gasoline. Richfield Oil Company. 294,941; June 14; Serial No. 323,362; published Mar. 22, 1932.
Gasoline. Richfield Oil Company. 294,942; June 14; Serial No. 323,363; published Mar. 15, 1932.
Gasoline. Richfield Oil Company. 294,943; June 14; Serial No. 323,365; published Mar. 15, 1932.
Kerosene. Texas Company. 88,713; renewed Oct. 15, 1932.
Kerosene. Texas Company. 88,806; renewed Oct. 22, 1932.
Oil and greases, gasoline, kerosene, etc., Lubricating. Continental Oil Company. 295,048; June 14; Serial No. 309,967; published Mar. 22, 1932.
Oil, Cylinder. Wm. C. Robinson & Son Co. 86,618; renewed May 21, 1932.
Oil, Lubricating. Texas Company. 88,712; renewed Oct. 15, 1932.
Oil, Motor fuel. E. Pichou. 295,101; June 14.
Oil, Refined. Standard Oil Company. 86,951; renewed June 11, 1932.
Oils and greases, Lubricating. Franklin Railway Oil Corporation. 294,925; June 14; Serial No. 319,287; published Mar. 22, 1932.
Oils, kerosene, gasoline, etc., Lubricating motor. Emlenton Refining Company. 295,046; June 14; Serial No. 310,558; published Mar. 29, 1932.
Oils, Lubricating. Galena-Signal Oil Company. 38,031; renewed July 15, 1932.
Oils, Lubricating. Texas Company. 87,283; renewed July 2, 1932.
Oils, Lubricating. Texas Company. 88,032; renewed Aug. 20, 1932.
Oils, Lubricating. Tri-State Refining Company. 294,930; June 14; Serial No. 322,567; published Mar. 22, 1932.
Petroleum products. Texas Company. 294,935; June 14; Serial No. 323,100; published Mar. 29, 1932.

CLASS 16

Calcimines. M. Ewing Fox & Co. 87,062; renewed June 25, 1932.
Finish, Calcimine wall. Devoe & Reynolds Company. 295,035; June 14; Serial No. 324,245; published Apr. 5, 1932.
Oils, Gloss. General Naval Stores Company. 295,055; June 14; Serial No. 320,164; published Apr. 5, 1932.
Opaquing agents. Vereinigte Chemische Fabriken Kreidl, Heller & Co. 295,052–3; June 14; Serial Nos. 319,269–70; published Mar. 29, 1932.
Paint preparation, Chemical. Phila. Equipment & Supply Co. 294,948; June 14; Serial No. 323,587; published Apr. 5, 1932.

Paint, varnish, prepared shellac, and paint enamels, Mixed. L. Follman. 295,054; June 14; Serial No. 319,773; published Apr. 5, 1932.
Polish, Furniture. D. J. Schuh. 294,952; June 14; Serial No. 323,721; published Mar. 29, 1932.
Polishes. Gerson-Stewart Corporation. 295,062; June 14; Serial No. 321,654; published Mar. 29, 1932.
Varnish. Huntington Laboratories, Inc. 294,951; June 14; Serial No. 323,619; published Mar. 29, 1932.
Varnish and wax for wood floors, Mixture of. Huntington Laboratories, Inc. 294,950; June 14; Serial No. 323,618; published Mar. 29, 1932.
Waxing and polishing compositions. Wilbur White Chemical Company. 295,027; June 14; Serial No. 323,262; published Apr. 5, 1932.

CLASS 19

Airplane propellers. Nicholas-Beazley Airplane Company. 295,067; June 14; Serial No. 322,702; published Apr. 5, 1932.
Shields, Auto glare. Stock-King Mfg. Co. 295,050; June 14; Serial No. 318,182; published Apr. 5, 1932.

CLASS 21

Conduits or housings, Metallic. Trumbull Electric Manufacturing Company. 294,933; June 14; Serial No. 322,898; published Mar. 29, 1932.
Electric vacuum cleaners and parts thereof. Majestic Household Utilities Corporation. 295,043; June 14; Serial No. 310,831; published Mar. 22, 1932.
Electric welders. Westinghouse Electric & Manufacturing Company. 294,920; June 14; Serial No. 317,836; published Mar. 29, 1932.
Electrical apparatus. Century Electric Co. 294,940; June 14; Serial No. 323,279; published Mar. 29, 1932.
Lamps, electric lamp stands and parts thereof, etc., Electric floor, table, and bridge. Société Anonyme pour la Décoration Intérieure Moderne. 295,087; June 14.
Radio electron tubes. National Union Radio Corporation. 294,923; June 14; Serial No. 318,758; published Mar. 29, 1932.
Radio receiving sets and parts thereof. International Radio Corporation. 294,922; June 14; Serial No. 318,558; published Mar. 29, 1932.
Radio receiving sets, kits for radio receiving sets, etc. Silver-Marshall, Inc. 294,947; June 14; Serial No. 323,849; published Mar. 29, 1932.

CLASS 22

Athletic appliances. Health Developing Apparatus Co. 294,954; June 14; Serial No. 323,782; published Apr. 5, 1932.
Dolls. Ideal Novelty & Toy Co. 295,032; June 14; Serial No. 324,561; published Apr. 5, 1932.
Game or book, Tracing and drawing. Juvenile Graphic Productions. 295,056; June 14; Serial No. 320,340; published Apr. 5, 1932.
Game, Pop-gun. P. Cook. 295,061; June 14; Serial No. 321,529; published Apr. 5, 1932.
Game, Table. G. V. Jefferson. 294,955; June 14; Serial No. 323,783; published Apr. 5, 1932.
Games. H. Hague. 295,022; June 14; Serial No. 323,491; published Apr. 5, 1932.
Games, toys, etc. L. J. Eppinger. 88,174; renewed Sept. 3, 1932.
Toy animals, Stuffed. G. L. Tapscott. 295,028; June 14; Serial No. 323,075; published Apr. 5, 1932.
Toy casting or molding machines and parts thereof. Newton Junior Corporation. 295,089; June 14.
Toys and trick apparatus. A. C. Gilbert. 88,078; renewed Aug. 27, 1932.

CLASS 23

Hardware articles. Collins Company. 89,008; renewed Nov. 5, 1932.
Machines for making and applying metal stays to paper boxes. National Metal Edge Box Company. 294,999; June 14; Serial No. 311,304; published Apr. 5, 1932.
Sausage machines. H. A. Edwards. 295,099; June 14.
Sewing machines. New Home Sewing Machine Company. 295,073; June 14; Serial No. 319,215; published Apr. 5, 1932.
Sharpener, Razor blade. Dalton and Snyder. 295,000; June 14; Serial No. 309,847; published Apr. 5, 1932.
Snow plows and parts thereof. Maine Steel Products Co. 295,106; June 14.
Suction cleaners and parts thereof. Portable electric Air-Way Electric Appliance Corporation. 295,085; June 14.

CLASS 24

Dry cleaning plants or systems. Shrader Bros. 295,051; June 14; Serial No. 319,083; published Nov. 24, 1931.

CLASS 26

Classifying machines for grading materials. W. S. Tyler Company. 294,984; June 14; Serial No. 324,019; published Apr. 5, 1932.
Fixing boxes, (tanks used in the treatment of plates and films). Eastman Kodak Company. 295,014; June 14; Serial No. 323,192; published Apr. 5, 1932.
Gages, Dimensional. Pratt & Whitney Company. 295,015; June 14; Serial No. 323,276; published Apr. 5, 1932.
Ophthalmic mountings and parts therefor. Bausch & Lomb Optical Company. 295,001; June 14; Serial No. 323,604; published Apr. 5, 1932.

CLASS 27

Clocks and clock mechanisms. Landis & Gyr A.-G. 294,926; June 14; Serial No. 320,438; published Jan. 19, 1932.
Mainsprings for watches. Newall Manufacturing Company. 294,972; June 14; Serial No. 324,481; published Apr. 5, 1932.

CLASS 30

Jars and jugs, Stone. Pfaltzgraff Pottery Company. 295,076; June 14; Serial No. 321,080; published Apr. 5, 1932.

CLASS 31

Refrigerated display and storage cases. Grand Rapids Store Equipment Corporation. 295,031; June 14; Serial No. 324,602; published Apr. 5, 1932.
Refrigerators. Illinois Moulding Company. 295,094; June 14.
Refrigerators, Electric. Trupar Manufacturing Company. 295,057; June 14; Serial No. 321,084; published Apr. 5, 1932.

CLASS 32

Cases, counters, shelving, etc., Display. Columbus Show Case Company. 295,017; June 14; Serial No. 323,565; published Apr. 5, 1932.
Chairs and tables. F. & F. Koenigkramer. 295,071; June 14; Serial No. 318,597; published Apr. 5, 1932.
Show cases and racks. Atlas Supply Company. 295,005; June 14; Serial No. 322,076; published Apr. 5, 1932.

CLASS 33

Glass, Sheet. American Window Glass Company. 294,989–90; June 14; Serial Nos. 324,421–2; published Apr. 5, 1932.

CLASS 34

Air conditioning, humidifying, and ventilating units, Blower type. American Wood Products Company. 295,066; June 14; Serial No. 322,621; published Apr. 5, 1932.
Burners and parts therefor, Range oil. Kenmore Engineering Co. 295,064; June 14; Serial No. 322,177; published Mar. 29, 1932.
Furnace parts, Heat treating and copper billet heating. Michiana Products Corporation. 295,039; June 14; Serial No. 314,708; published Mar. 29, 1932.
Lamp shades. A. M. Kantro. 295,065; June 14; Serial No. 322,613; published Apr. 5, 1932.
Lamps for burning acetylene gas. Electro Lamp Co. 38,937; renewed Sept. 23, 1932.
Registers, register faces, and grills, Heating and ventilating. E. C. Fox. 295,108; June 14.
Steam generators and accessories. Brown, Boveri & Cie. 295,063; June 14; Serial No. 321,704; published Apr. 5, 1932.
Stoves, Folding or camp. O. E. Pratt. 295,059; June 14; Serial No. 321,297; published Apr. 5, 1932.
Ventilators. Ideal Ventilator Co. 87,765; renewed Aug. 6, 1932.

CLASS 35

Brake lining. L. J. Miley Company. 295,081; June 14; Serial No. 321,792; published Apr. 5, 1932.

CLASS 36

Records for use in connection with phonographs. Brunswick Radio Corporation. 295,044; June 14; Serial No. 310,710; published Mar. 29, 1932.

CLASS 37

Fountain-pens. L. E. Waterman Company. 39,128; renewed Oct. 28, 1932.
Pens, Steel. M. Myers & Son. 38,240; renewed May 13, 1932.
Stationery supplies. A. W. Faber. 86,522; renewed May 14, 1932.

CLASS 38

Electrical goods and apparatus. Edwards and Company. 294,934; June 14; Serial No. 323,038; published Mar. 29, 1932.

CLASS 39

Coats, dresses, suits, etc. Hahn Department Store, Inc. 295,103; June 14.
Corsets. B. Altman & Co. 88,722; renewed Oct. 22, 1932.
Dresses. Herman Brody, Inc. 295,091; June 14.
Hosiery. E. Sutro and Son Company. 88,802; renewed Oct. 22, 1932.
Shoes. Petty Shoe Company. 295,070; June 14; Serial No. 317,902; published Mar. 22, 1932.
Underwear. A. Kuehnert. 86,307; renewed Apr. 30, 1932.

CLASS 40

Needles, Sewing. J. Thornton, jr. 87,498; renewed July 16, 1932.

CLASS 42

Blankets, Bed. Max Fertig & Co. Inc. 295,072; June 14; Serial No. 318,908; published Apr. 5, 1932.
Carpets and rugs, Woven. Hardwick & Magee Company. 87,336; renewed July 9, 1932.
Cloths, Book. Joseph Bancroft & Sons Co. 88,727; renewed Oct. 22, 1932.
Cotton piece goods. Mahler Textiles, Inc. 295,102; June 14.
Cotton, rayon, silk, and woolen piece goods. C. M. De Land. 295,012; June 14; Serial No. 323,128; published Apr. 5, 1932.
Fabric, Window shade. Joseph Bancroft & Sons Co. 88,728; renewed Oct. 22, 1932.
Piece goods. Vanity Fair Silk Mills. 295,008; June 14; Serial No. 322,869; published Apr. 5, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 295,011; June 14; Serial No. 323,122; published Apr. 5, 1932.
Sheets and pillow-cases. Naumkeag Steam Cotton Co. 89,052; renewed Nov. 5, 1932.
Silk piece goods. Cohn-Hall-Marx Co. 294,981; June 14; Serial No. 323,885; published Apr. 5, 1932.
Silk, rayon, cotton, and/or combinations thereof in the piece, etc. Fred Butterfield & Co. 295,007; June 14; Serial No. 322,819; published Mar. 29, 1932.
Textile bagging material in the piece. Mente & Co. 294,992; June 14; Serial No. 324,479; published Apr. 5, 1932.
Textile net piece goods. Robert Lefort & Company. 294,995; June 14; Serial No. 315,314; published Apr. 5, 1932.
Yarns. Courtaulds, Limited. 295,003; June 14; Serial No. 312,177; published Mar. 29, 1932.

CLASS 43

Filaments, thread, and yarn. J. P. Bemberg Aktiengesellschaft. 295,010; June 14; Serial No. 322,988; published Apr. 5, 1932.
Silk, spun, thrown, sewing or knitting, twist, yarn, and thread, Artificial. Snia-Viscosa Società Nazionale Industria Applicazioni Viscosa. 294,996; June 14; Serial No. 314,217; published Apr. 5, 1932.
Thread. Gardiner Hall Jr. Company. 294,991; June 14; Serial No. 324,462; published Apr. 5, 1932.
Thread, Linen. Ludlow Manufacturing Associates. 295,096; June 14.
Threads. Gudebrod Brothers Silk Company. 295,078; June 14; Serial No. 321,318; published Apr. 5, 1932.

CLASS 44

Dental supplies. S. S. White Dental Manufacturing Company. 294,960; June 14; Serial No. 323,880; published Apr. 5, 1932.
Manicure sets, nail files, cuticle knives, etc. S. H. Kress & Co. 295,026; June 14; Serial No. 323,336; published Apr. 5, 1932.
Massage devices. R. H. Hassler. 295,036; June 14; Serial No. 324,165; published Apr. 5, 1932.
Medical necklaces. G. Lakhovsky. 295,058; June 14; Serial No. 321,166; published Apr. 5, 1932.
Operating room necessities. Red Arrow Products, Inc. 295,060; June 14; Serial No. 321,442; published Mar. 29, 1932.
Pads, Corn, callous, and bunion. Arrowsmith Manufacturing Company. 295,049; June 14; Serial No. 309,115; published Mar. 29, 1932.
Prophylactic rubber and membranous articles. J. Schmid. 295,024; June 14; Serial No. 323,473; published Apr. 5, 1932.
Prophylactic rubber articles. Blue Ribbon Rubber Company. 294,953; June 14; Serial No. 323,774; published Mar. 29, 1932.
Sanitary garment and holder, Combined. Maculette Garment Co. Inc. 295,037; June 14; Serial No. 322,828; published Apr. 5, 1932.
Syringes, Hard rubber douche. J. Schmid. 294,956; June 14; Serial No. 323,790; published Apr. 5, 1932.
Tampons, Sanitary absorbent. Tampax, Inc. 294,959; June 14; Serial No. 323,876; published Mar. 29, 1932.

CLASS 45

Beverages and concentrates. Nehi, Inc. 294,961–2; June 14; Serial Nos. 323,903–4; published Apr. 5, 1932.
Beverages, powders, extracts, etc. F. Urban. 295,033; June 14; Serial No. 324,494; published Apr. 5, 1932.
Beverages, syrups, and extracts. M. C. Ravel. 295,034; June 14; Serial No. 324,268; published Apr. 5, 1932.
Waters, Natural mineral. La Compagnie Fermiere de L'Etablissement Thermal de Vichy. 86,208–9; renewed Apr. 23, 1932.
Waters, Natural mineral. La Compagnie Fermiere de L'Etablissement Thermal de Vichy. 86,576; renewed May 21, 1932.
Waters, Natural mineral. La Compagnie Fermiere de L'Etablissement Thermal de Vichy. 88,244; renewed Sept. 10, 1932.

CLASS 46

Butter. Lestrade Bros. 38,335; renewed May 27, 1932.
Bread. A. Nickles. 294,985; June 14; Serial No. 324,046; published Mar. 29, 1932.
Bread. Scheln Baking Co. 294,983; June 14; Serial No. 324,012; published Mar. 29, 1932.
Bread. J. E. Siebel Son's Company. 294,982; June 14; Serial No. 323,914; published Mar. 29, 1932.
Cakes. Oswald Jaeger Baking Co. 295,074; June 14; Serial No. 319,413; published Mar. 29, 1932.
Candy. Idaho Candy Co. 294,928; June 14; Serial No. 321,649; published Apr. 5, 1932.
Canned fish. G. P. Halferty & Co. 294,945; June 14; Serial No. 323,455; published Apr. 5, 1932.
Canned fruits. Tulare Packing Company. 294,971; June 14; Serial No. 324,409; published Apr. 5, 1932.
Canned fruits, vegetables and berries, maple syrup, tea, etc. Lowry Rodgers Company. 294,998; June 14; Serial No. 311,689; published Mar. 1, 1932.
Canned oysters. Rice Bros. Packing Co. 86,453; renewed May 7, 1932.
Canned pineapple. Libby, McNeill & Libby. 294,969–70; June 14; Serial Nos. 324,385–6; published Apr. 5, 1932.
Canned seafoods. Atlantic Seafood Packers, Inc. 294,965; June 14; Serial No. 324,094; published Apr. 5, 1932.
Cereal food for dogs, cats, etc. Yeasties Products, Inc. 295,009; June 14; Serial No. 322,870; published Mar. 29, 1932.
Chicken cream of potato soup, cream of asparagus soup, corned beef hash, etc. Diplomat Products, Inc. 295,068; June 14; Serial No. 321,991; published Mar. 29, 1932.
Chicken cream of potato soup, old fashioned chicken fricassee, etc. Diplomat Products, Inc. 295,082; June 14; Serial No. 321,990; published Mar. 29, 1932.
Chicken cream of potato soup, old fashioned chicken fricassee, plum pudding, etc. Diplomat Products, Inc. 295,004; June 14; Serial No. 321,992; published Mar. 29, 1932.
Coffee. Johnson-Allen Coffee Co. 88,891; renewed Oct. 29, 1932.
Coffee, a compound of coffee and chicory, cocoa, and chocolate. Liverpool China & Indies Tea Co. Ltd. 89,042; renewed Nov. 5, 1932.
Coffee, Roasted. J. J. O'Connor. 294,944; June 14; Serial No. 323,419; published Apr. 5, 1932.
Compounds, Chemical. Fritsche Brothers, Inc. 295,077; June 14; Serial No. 321,204; published Mar. 29, 1932.
Confection of large whole beans. Bennetts Mfg. Co. 295,041; June 14; Serial No. 312,357; published Apr. 5, 1932.
Corn, crystallized pop corn, chocolate treated pop corn. Popped. W. H. Kellogg. 294,927; June 14; Serial No. 321,598; published Apr. 5, 1932.
Crackers, Soda. Pennsylvania Baking Company. 294,988; June 14; Serial No. 324,266; published Mar. 29, 1932.
Cream. De Laval Separator Company. 294,987; June 14; Serial No. 324,244; published Mar. 29, 1932.
Culture for making buttermilk, fermented milk, etc. P. Petersen. 295,069; June 14; Serial No. 317,614; published Mar. 29, 1932.
Extract, Malt. Sterling Products Company. 295,018; June 14; Serial No. 323,726; published Mar. 29, 1932.
Flour, Wheat. Fisher Flouring Mills Company. 88,863; renewed Oct. 29, 1932.
Flour, Wheat. Foltz Grocery & Baking Company. 88,865; renewed Oct. 29, 1932.
Food, Ground. Health Wheat Corporation. 295,016; June 14; Serial No. 323,405; published Mar. 29, 1932.
Food products, Prepared. Frank and Company. 295,088; June 14.
Foods. C. W. Antrim & Sons. 88,827; renewed Oct. 29, 1932.
Foods. John Blaul's Sons Company. 88,998; renewed Nov. 5, 1932.
Fruit, Fresh citrus. Mupu Citrus Assn. 295,105; June 14.
Fruits, canned vegetables, tomato paste and sauce, Dried. Fraering Brokerage Co. 295,013; June 14; Serial No. 323,168; published Mar. 29, 1932.
Fruits, tomatoes, cucumbers, etc., Fresh or raw citrus. Indian River Fruit Growers. 294,936; June 14; Serial No. 323,134; published Apr. 5, 1932.
Grapes, Fresh. Schuler Vineyard Co. 295,084; June 14.
Gum and candy, Chewing. Dilling & Company. 295,019; June 14; Serial No. 315,389; published Apr. 5, 1932.
Gum, Chewing. American Chicle Company. 295,097–8; June 14.
Ham, Smoked sugar cured. Fred Eckart Packing Co. 295,083; June 14; Serial No. 323,000; published Apr. 5, 1932.
Hams, bacon and lard. Carstens Packing Company. 88,842; renewed Oct. 29, 1932.
Ice cream. Breyer Ice Cream Co. 86,676; renewed May 21, 1932.
Macaroni, Spaghetti, etc. Denver Macaroni & Noodle Co. 88,250; renewed Sept. 10, 1932.
Milk, cream, butter oil, etc. Land O'Lakes Creameries, Inc. 295,002; June 14; Serial No. 300,354; published Mar. 29, 1932.
Muffins, Toasted. Huron Milling Company. 295,090; June 14.

Paste products, Alimentary. John Minervini, Inc. 295,080; June 14; Serial No. 321,572; published Mar. 29, 1932.
Sugar. Godchaux Sugars, Inc. 295,079; June 14; Serial No. 321,559; published Mar. 29, 1932.
Syrup and a chocolate malt powder, Malt. Dextoro Company. 294,994; June 14; Serial No. 316,085; published Mar. 29, 1932.
Syrup, Barley malt. Brooklyn Home Supply Company. 295,075; June 14; Serial No. 320,327; published Mar. 29, 1932.
Syrup, Malt. S. Kasser. 294,993; June 14; Serial No. 316,533; published Aug. 18, 1931.
Syrup, Malt extract. Schreiber Products Corporation. 294,979; June 14; Serial No. 323,791; published Mar. 29, 1932.
Syrup or powder, Chocolate flavored. Choice Foods, Inc. 295,006; June 14; Serial No. 322,685; published Mar. 29, 1932.
Tea, coffee, cocoa, etc. Joseph Tetley & Co. 294,997; June 14; Serial No. 314,179; published Mar. 29, 1932.
Vegetable shortening. Lever Brothers Company. 294,973–4; June 14; Serial Nos. 324,534–5; published Apr. 5, 1932.
Vegetable shortening. Lever Brothers Company. 294,975; June 14; Serial No. 324,614; published Apr. 5, 1932.
Vegetable shortening. Lever Brothers Company. 294,976–7; June 14; Serial Nos. 324,616–17; published Apr. 5, 1932.
Vegetables, Fresh. Patrick Farms, Inc. 295,020; June 14; Serial No. 315,922; published Apr. 5, 1932.

CLASS 48

Ale and beer, Pale. Bass, Ratcliff & Gretton, Limited. 88,266; renewed Sept. 10, 1932.
Malt beverages. Adam Scheidt Brewing Company. 295,095; June 14.
Stouts, beer, porter, etc. Bass, Ratcliff & Gretton, Limited. 88,264–5; renewed Sept. 10, 1932.
Stouts, beer, porter, etc. Bass, Ratcliff & Gretton, Limited. 88,267; renewed Sept. 10, 1932.

CLASS 49

Anisettes. Bosch & Co. 86,271; renewed Apr. 30, 1932.
Rye whisky. Seligman Distillery Company. 86,624; renewed May 21, 1932.

CLASS 50

Caps and closure seals. Aluminum Seal Company. 294,932; June 14; Serial No. 322,814; published Apr. 5, 1932.

LIST OF LABELS

Bake Rite Baking Powder. For Baking Powder. J. Sterkx. 40,845; June 14.
Bamon. For Fresh Tomatoes. B. S. Butcher. 40,828; June 14.
Better Bread. For Bread. Waxide Paper Company. 40,847; June 14.
Blume Knitwear. For Knitted Outerwear. Socks-Sons Carton Co. 40,844; June 14.
Champion. For Spark Plug Cable Sets. Real Products Corporation. 40,843; June 14.
Chikloh Tonic. For Tonic for Poultry, Birds, and Baby Chicks. Peter J. Oesterling & Son, Inc. 40,839; June 14.
Entré. For Cigars. S. Pensky. 40,841; June 14.
Honeyeast. For Chewing Gum. Orbit Gum Company. 40,840; June 14.
It Reaches the Right Spot. For Medicine. A. Crichton. 11,215; renewed July 5, 1932.
Jewel T J B Coffee. For Coffee. Jewel Tea Co. 40,829; June 14.
Jewel T J C Coffee. For Coffee. Jewel Tea Co. 40,830; June 14.
Jewel T J S Coffee. For Coffee. Jewel Tea Co. 40,831; June 14.
Kentucky Pride Dixie. For Brew. Bruckmann Co. 40,826; June 14.
Mechling's Pyrote. For Insecticide. Mechling Brothers Chemical Company. 40,836; June 14.
Memory Jogger. For Memo Pads. White & Wyckoff Mfg. Co. 40,848; June 14.
Mortemoth Kills Moths. For Preparation for Killing Moths. L. Berkoff. 40,824; June 14.
Old Heidelberg. For Beverage Containing Less Than One-Half of One Per Cent Alcohol By Volume. Blatz Brewing Company. 40,825; June 14.
Old Timer Bread. For Bread. Newark Paraffine & Parchment Paper Co. 40,838; June 14.
Popeye Sparkler. For Toy Sparklers. King Features Syndicate, Inc. 40,833; June 14.
Preservo Pans. For Pans. National Enameling & Stamping Company. 40,837; June 14.
Saniplate, The Dental Plate Cleanser. For Dental Plate Cleanser. M. L. Burton. 40,827; June 14.
Silhouette Chocolates by Beaudry, Los Angeles. For Chocolates. Los Angeles Paper Box Factory. 40,834; June 14.
Stamp Service. For Postage Stamps. Postal Advertising Service. 40,842; June 14.
Sulpholene Fungicide. For Fungicide. E. J. Markel. 40,835; June 14.
Ward's Soft Bun Bread. For Bread. Ward Baking Company. 40,846; June 14.
Wynwood Hall. For Cigars. B. Kane. 40,832; June 14.

LIST OF PRINTS

Ask for J. Ojrzynski's Pure Rye Bread, Rolls & Cakes, 191 Grand St., 172 N. 1st St., Brooklyn, N. Y. For Bread, Rolls and Cakes. J. Ojrzynski. 13,753; June 14.

It Springs Back Underfoot. For Rugs. Bigelow-Sanford Carpet Co. 13,751; June 14.

Lively Wool That Springs Back Underfoot. For Rugs. Bigelow-Sanford Carpet Co. 13,752; June 14.
Look For This Symbol of Quality. For Rugs. Bigelow-Sanford Carpet Co. 13,750; June 14.
Made of Lively Wool That Springs Back Underfoot. For Rugs. Bigelow-Sanford Carpet Co. 13,749; June 14.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 14TH DAY OF JUNE, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Bacon, Elbridge F., assignor.)
A C Spark Plug Company. (See Kamrath, Herbert G., assignor.)
A C Spark Plug Company. (See McDougal, Taine G., assignor.)
A C Spark Plug Company. (See Rabezzana, Hector, assignor.)
A C Spark Plug Company. (See Zubaty, J., and Eshbaugh, assignors.)
A. P. W. Paper Co. (See Brecht, Andrew J., assignor.)
Abramson, Nathan, Brooklyn, assignor to Presto Products Co., New York, N. Y. Circuit interrupter. 1,862,648; June 14.
Acme Steel Company. (See Wilson, Allen B., assignor.)
Adams, Francis E., Oneida, assignor to Triumph Trap Company, Inc., New York, N. Y. Game trap. 1,862,561; June 14.
Adams, Norman W., assignor of forty one-hundredths to H. P. Marsh, Syracuse, N. Y. Direction indicator. 1,863,459; June 14.
Adler, Robert, St. Paul, Minn. Expansion joint for roadways. 1,863,180; June 14.
Adt, Albert W., et al. (See Zeun, Louis H., assignor.)
Adt, John B., et al. (See Zeun, Louis H., assignor.)
Air Reduction Company. (See Metzger, Floyd J., assignor.)
Akron Standard Mold Company, The. (See Bostwick, Henry C., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Courvoisier, Georges, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Keller, Robert, assignor.)
Aktiengesellschaft Brown, Boveri and Cie. (See Meyerhans, August, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Widmer, Stefan, assignor.)
Al, Jan, Amsterdam, assignor to De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Manufacturing nickel catalysts. 1,862,949; June 14.
Albersheim, Walter J., and H. S. Konheim, New York, N. Y. Measuring the viscosity of lubricating oils and other liquids. 1,863,090; June 14.
Aldeen, Gedor W., and A. A. Carlson, assignors to The Skandia Furniture Company, Rockford, Ill. Bookstand. 1,862,562; June 14.
Aldrich Pump Company, The. (See Holveck, Joseph E., assignor.)
Alloth, Manfred, assignor to Durand & Huguenin S. A., Basel, Switzerland. Manufacture of red-orange to brown-red basic dyestuffs of the acridine series and the products. 1,863,233; June 14.
Alland, Maurice, Atlantic City, N. J. Closure for cigarette and similar packages. 1,862,518; June 14.
Allegro Machine Co. (See Barsch, Wilhelm, assignor.)
Allen, Edward M. (See Lynn, G., Allen, and Beecher.)
Allen, Eugenie H., New York, N. Y. Hand bag, pocketbook, and similar article of luggage. 1,863,150; June 14.
Allen, Frank B., Lower Merion Township, Philadelphia County, assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Method of and apparatus for handling ash. 1,863,218; June 14.
Allen-Sherman-Hoff Company, The. (See Allen, Frank B., assignor.)
Allis-Chalmers Manufacturing Company. (See Nichols, Louis C., assignor.)
Allred, Archie M., High Point, N. C. Drawing instrument. 1,863,091; June 14.
Allyne, Edmund E., Cleveland Heights, Ohio. Absorption refrigerating apparatus. 1,862,646; June 14.
Allyne, Edmund E., Cleveland Heights, Ohio. Absorption refrigerating apparatus. 1,862,647; June 14.
Almquist, Milton L., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Signaling arrangement for telephone systems. 1,862,587; June 14.
Alox Chemical Corporation. (See Burwell, Arthur W., assignor.)
Altmayer, Jean A., surnamed Altmayer-Delaruelle, Paris, France. Device with retarded release. 1,863,092; June 14.
Altz, Arthur J. (See Geistert, A. G., and Altz.)
Aluminum Company of America. (See Ennor, William T., assignor.)
Aluminum Company of America. (See Gingerich, Earl McK., assignor.)
Aluminum Company of America. (See Willmore, Charles B., assignor.)
Ambursen Construction Company. (See Noetzli, Fred A., assignor.)
American Blower Corporation. (See Anderson, Edward L., assignor.)
American Electric Fusion Corporation. (See Von Henke, Edmund J., assignor.)
American Encaustic Tiling Company. (See Prouty, Theodore C. and W. O., assignors.)
American Fluid Motors Company. (See Landenberger, H. W., and Link, assignors.)
American Flyer Mfg. Co. (See Cuff, James E., assignor.)
American Freight Service, Inc. (See Perin, Donald W., assignor.)
American Glanzstoff Corporation. (See Stöckly, J. J., and Bartunek, assignors.)
American Heating Company. (See Hamilton, George H., assignor.)
American La France and Foamite Corporation. (See Boulface, Addison O., assignor.)
American Laundry Machinery Company, The. (See Balzer, Fritz, assignor.)
American Pulverizer Company. (See Elzemeyer, E. E., and Griesedieck, assignors.)
American Radiator Company. (See Meloche, Daniel H., assignor.)
American Radiator Company. (See Sjoden, Eric, assignor.)
American Sheet and Tin Plate Company. (See Taylor, Irwin R., assignor.)
American Slicing Machine Company. (See Campbell, William J., assignor.)
American Slicing Machine Company. (See Wolff, Wallace B., assignor.)
American Telephone and Telegraph Company. (See Almquist, Milton L., assignor.)
American Telephone and Telegraph Company. (See Fisher, Donald, assignor.)
American Telephone and Telegraph Company. (See Holden, William H. T., assignor.)
American Telephone and Telegraph Company. (See Livermore, William T., assignor.)
American Telephone and Telegraph Company. (See Schimming, Harold H., assignor.)
American Throttle Company. (See Marble, Jarvis C., assignor.)
American Throttle Company, Inc. (See Pippy, George F., assignor.)
American Trust Co., trustee. (See Roberts, George H., assignor.)
American Wilderman Porous Ebonite Company, The. (See Wilderman, Meyer, assignor.)
Amoroso, Nicholas, Providence, R. I. Knife handle construction. 1,862,649; June 14.
Amoss, Walter, Buffalo, N. Y., assignor to Structural Gypsum Corporation, Linden, N. J. Calcium gypsum. 1,863,318; June 14.
Anchor Cap & Closure Corporation. (See Mullen, George W., assignor.)
Andersen, Andrew C. (See Field, H. C., and Andersen.)
Andersen, August; H. Andersen, administrator of said A. Andersen, deceased, assignor to P. Andersen, Des Moines, Iowa. Marble gun game apparatus. 1,862,877; June 14.
Andersen, Harry, administrator. (See Andersen, August.)
Andersen, Peder. (See Andersen, August, assignor.)
Anderson, Edward L., Grosse Ile, assignor to American Blower Corporation, Detroit, Mich. Induction flow inlet fan. 1,862,523; June 14.
Anderson, Edwin, Los Angeles, Calif. Venetian blind bracket. 1,863,093; June 14.
Anderson, Harry T., Butler, Pa. Post pocket. 1,863,364; June 14.
Anderson, James, Birmingham, England. Electric switch or circuit breaker. 1,862,782; June 14.
Anderson, Lossie E., assignor to Standard Oil Company, Chicago, Ill. Wicking machine. 1,863,389; June 14.
Anderson, Martin S., Seattle, Wash. Fishing spoon. 1,862,917; June 14.
Angel Novelty Company. (See Mastrangelo, Frank and A., assignors.)
Angell, Robert C., Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company. Head rest. 1,863,319; June 14.
Angus, Alexander M., Groveland, Mass. Holdfast for ropes. 1,862,650; June 14.
Anibal, Benjamin H., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Engine lubricating system. 1,862,995; June 14.
Anketell, Edward N., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Toy. 1,863,320; June 14.
Anthracite Separator Company. (See Pardee, Frank, jr., assignor.)

Appleton Machine Company. (See Brazeau, G. S., and Madsen, assignors.)
Arbuckle, Samuel F., assignor to Monogram Lens Corporation, Detroit, Mich. Illuminating device. 1,863,547; June 14.
Archbold, Charles A., assignor to Salt Lake Stamp Company, Salt Lake City, Utah. 1,863,037; June 14.
Armington, Arthur P., Willoughby, assignor to The Euclid Road Machinery Company, Euclid, Ohio. Tread link. 1,862,617; June 14.
Arnold, Carl, Nuremberg, Germany. Illuminated ball. 1,862,996; June 14.
Aspirin Machine Company, The. (See Barok, G. D., and Slater, assignors.)
Associated Telephone and Telegraph Company. (See Kessler, F., and Woodland, assignors.)
Aster, Stanley, Philadelphia, Pa. Combination lock. 1,863,537; June 14.
Atlantic Refining Company, The. (See Smith, L. B., and Ten Broeck, assignors.)
August, Andrew A., Chicago, and B. J. Victor, Oak Park, assignors to Victor Manufacturing and Gasket Company, Chicago, Ill. Protecting device. 1,862,651; June 14.
Auringer, George, New Rockford, N. Dak. Pipe cleaner. 1,863,460; June 14.
Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Protection of wood poles by an interrupted or shunt path. 1,863,080; June 14.
Austin, Ralph W., Weymouth, Mass. Fire extinguisher charge. 1,863,321; June 14.
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)
Babcock & Wilcox Company, The. (See Ramsthaler, Louis, assignor.)
Bacon, Elbridge F., assignor to A C Spark Plug Company, Flint, Mich. Tachometer jewel frame and drive shaft retainer. 1,862,897; June 14.
Bacon, Joseph B., Macomb, Ill. Surgical apparatus. 1,863,234; June 14.
Bagnall, Edwin, Toronto, Ontario, Canada, assignor, by mesne assignments, to Cooper Spring Service Company, Detroit, Mich. Leaf spring. 1,863,094; June 14.
Bailey, Ervin G., Easton, assignor to Fuller Lehigh Company, Fullerton, Pa. Furnace. 1,863,181; June 14.
Bailey, Guy D., Narberth, Pa., assignor to Mergenthaler Linotype Company. Printing galley. 1,862,998; June 14.
Bailey, Joseph E., Dayton, Ohio. Automobile hood lock. 1,863,461; June 14.
Ball, Charles F., assignor to Chain Belt Company, Milwaukee, Wis. Apparatus for starting internal combustion engines. 1,862,999; June 14.
Ball, Joseph A., Los Angeles, Calif., assignor to Technicolor Motion Picture Corporation, Boston, Mass. Optical apparatus. 1,862,950; June 14.
Ballard, Arthur H., Incorporated. (See Goodridge, George E., assignor.)
Balzer, Fritz, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Washing machine. 1,862,652; June 14.
Bancroft, Albert F., West Newton, Mass. Shoe. Des. 87,141; June 14.
Barber, George H., New Rochelle, N. Y., assignor to Bond Electric Corporation, Jersey City, N. J. Flash light bottom cap with hanger. 1,863,151; June 14.
Barbiers, Ferdinand S., Lancaster, Ohio, assignor, by mesne assignments, to Marion Lambert, Inc., St. Louis, Mo. Bottle or similar container. Des. 87,142; June 14.
Barkey, Isaac H., Brooklyn, assignor to General Talking Pictures Corporation, New York, N. Y. Exciter lamp. 1,863,152; June 14.
Barlow, Horace J. A., Fendalton, and R. D. Cargill, Christchurch, New Zealand. Apparatus for recording and reproducing disk records for talking machines. 1,862,524; June 14.
Barnard, Florence, Brookline, assignor to Milton Bradley Company, Springfield, Mass. Game board or the like. Des. 87,143; June 14.
Barnes, George D., Penn Yan, N. Y. Cigarette extinguisher. 1,863,000; June 14.
Barnes, Gladeon M., Hastings, Mich. System of fire control. 1,862,918; June 14.
Barok, George D., and B. H. Slater, assignors to The Aspirin Machine Company, Inc., Columbus, Ohio. Container for vending machine goods. 1,863,001; June 14.
Barsch, Wilhelm, assignor to Allegro Machine Co., Paris, France. Device for sharpening the blades of safety razors. 1,863,431; June 14.
Bartels, Reinhard B., Melrose, Mass. Shoe and shank stiffener therefor. 1,862,734; June 14.
Bartunek, Richard. (See Stöckly, J. J., and Bartunek.)
Batchell, George W., Toledo, Ohio. Feeding molten glass. 1,863,095; June 14.
Bates, Dorr R. (See Moelter, E. J., and Bates.)
Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel and heel covering and making the same. 1,862,878; June 14.
Bean, Ivan L. (See Bean, Louis A., assignor.)
Bean, Louis A., assignor to I. L. Bean, Denver, Colo. Electric soldering means. 1,862,653; June 14.
Beard, Lawrence O., Lancaster, Pa. Chuck. 1,863,096; June 14.
Beck, Adolf, and W. Schmidt, Bitterfeld, and H. Dibelka, Dusseldorf-Oberkassel, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Grinding etching plates made of magnesium alloys for phonographic printing. 1,863,002; June 14.
Beckert, Frank R., Schenectady, N. Y., assignor to General Electric Company. Electric discharge device. 1,863,390; June 14.
Bedford, Frederick G., et al., legal representatives. (See Parsons, C. A., Carnegie, and Gardner.)
Beecher, Brazier K. (See Lynn, G., Allen, and Beecher.)
Beling, Earl H., assignor to The Herman Nelson Corporation, Moline, Ill. Radiator. 1,862,735; June 14.
Bell, Arthur W., assignor, by mesne assignments, to Kraft-Phenix Cheese Corporation, Chicago, Ill. Apparatus for treating cheese. 1,862,563; June 14.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Bennett, Arthur F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Brown, Horatio G. W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Curley, Thomas V., assignor.)
Bell Telephone Laboratories, Incorporated. (See Ferguson, James G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Field, Joseph C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gargan, John O., assignor.)
Bell Telephone Laboratories, Incorporated. (See Given, Frederick J., assignor.)
Bell Telephone Laboratories Incorporated. (See Goff, Harold W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hayford, Walter S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hovland, Henry, assignor.)
Bell Telephone Laboratories, Incorporated. (See Jones, Warren C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Keckler, C. W., and Hague, assignors.)
Bell Telephone Laboratories, Incorporated. (See Kitts, Howard L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Massonneau, Robert F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Murphy, Paul B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Prince, William B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Raymond, R., and Scully, assignors.)
Bell Telephone Laboratories, Incorporated. (See Schlenker, Vesper A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Smythe, Edwin H., assignor.)
Bell Telephone Laboratories, Incorporated. (See Terry, Roy V., assignor.)
Bell Telephone Laboratories, Incorporated. (See White, J. H., and Wahl, assignors.)
Bell Telephone Laboratories, Incorporated. (See Whitney, Wiley, assignor.)
Bellows, Earl S., assignor to Huntington Rubber Mills, Portland, Oreg. Bottle cap. 1,863,081; June 14.
Belt, Joseph S., Amarillo, Tex. Producing solid carbon dioxide. 1,863,263; June 14.
Benderson, Nathan. (See Bobbin, L., Simon, and Benderson.)
Benedetto, Giuseppe, Novara, Italy, assignor to Omes Holding Company Limited, London, England. Transformer for use in electric welding and like operations. 1,863,462; June 14.
Benjamin Air Rifle Company. (See Mihalyi, Frank, assignor.)
Bennett, Arthur F., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone pay station. 1,863,322; June 14.
Benson, Thomas J., Melcher, Iowa. Wheel lock. 1,863,235; June 14.
Berg, Alfred J., Portsmouth, N. H. Securing metal fins to tubes or cylinders. 1,863,552; June 14.
Berg, Alfred J., Portsmouth, N. H., assignor of one-third to P. F. Foster, U. S. N., and one-third to J. O. Huse, Baltimore, Md. Apparatus for securing metal fins to tubes or cylinders. 1,863,553; June 14.
Bergmann, Jean. (See Martin, Rudolf, assignor.)
Bern, Harry A., Chicago, Ill. Thermostatic mixing valve. 1,862,564; June 14.
Berne, Celestin, Bridgeport, Conn., assignor of one-half to M. Daniells, Milford, Conn. Detachable spring hinge. 1,863,323; June 14.
Bernitz Furnace Appliance Company. (See Smith, Arthur E., assignor.)
Beskind, Morris M., and J. Mayper, Brooklyn, assignors to Washington Garter Corp., New York, N. Y. Stitchless garter clasp. 1,863,324; June 14.
Bethel, Albert R., Huntington Park, Calif. Gas burner. 1,863,003; June 14.
Bethlehem Steel Company. (See Faunce, B. F., and Statler, assignors.)
Bigelow-Sanford Carpet Co. (See Stone, E. W., and Grennor, assignors.)

Bigelow-Sanford Carpet Co. (See Wicke, Carl, assignor.)
Bignand, Pierre, Paris, assignor to Societe Industrielle de Mecanique Automobile et de Radio-Electricite, Levallois-Perret, France. Clutch. 1,862,951; June 14.
Birdsboro Steel Foundry & Machine Company. (See Martin, Mark H., assignor.)
Bixby, Leo A., assignor to Unit Corporation of America, Milwaukee, Wis. Disk clutch. 1,863,182; June 14.
Black & Decker Manufacturing Company, The. (See Schouten, Frank, assignor.)
Blackburn, Guy W., assignor to F. W. Gusie, Elgin, Ill. Cigarette case. 1,863,082; June 14.
Blair, Robert S. (See Dieterich, Ludwig M., assignor.)
Blake, Eli J., Buffalo, assignor, by mesne assignments, to Simplix Equipment Company, Inc., New York, N. Y. Turbine generator set. 1,862,919; June 14.
Bleecker, Warren F., Boulder, Colo. Treating petroleum. 1,862,952; June 14.
Bloch, Leon, Cleveland, Ohio, assignor, by mesne assignments, to Speakman Company, Wilmington, Del. Shower bath head. 1,863,548; June 14.
Bluemel, Gustave, assignor to Drying Systems, Inc., Chicago, Ill. Heater. 1,863,391; June 14.
Bobbin, Louis, A. Simon, and N. Benderson, Troy, N. Y. Baking oven. 1,863,432; June 14.
Boecking, Ewald. (See Frappier, L. S., and Boecking.)
Bogia, Louis F., assignor of one-third to W. A. Weaver and one-third to W. Pincus, Philadelphia, Pa. Electric motor. 1,863,294; June 14.
Bohn, Gebhard C., St. Paul, Minn. Refrigerator. 1,863,219; June 14.
Bolinger, Judd A., Kingsport, Tenn. Advertising novelty. 1,863,463; June 14.
Bond Electric Corporation. (See Barber, George H., assignor.)
Boniface, Addison O., Utica, N. Y., assignor, by mesne assignments, to American La France and Foamite Corporation. Fire extinguisher. 1,862,879; June 14.
Bonney, Lynn F. (See Wright, J. C., and Bonney.)
Booth, Margaret, New York, N. Y. Cabinet bar. 1,862,654; June 14.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Tire carrying rim. 1,863,464; June 14.
Borden Company, The. (See Lockwood, Edwin J., assignor.)
Borden Company, The. (See Schibsted, Helge, assignor.)
Borel, Charles, Chene-Bougeries, near Geneva, Switzerland. Installation for registering data by perforation by manual and automatic means. 1,863,097; June 14.
Borel, Charles, Geneva, Switzerland. Apparatus for computing statistical data. 1,863,098; June 14.
Borrowdale, Russell W., Chicago, Ill., assignor, by mesne assignments, to The Jogger Manufacturing Company. Automatic jogger. 1,863,465; June 14.
Bostwick, Henry C., assignor to The Akron Standard Mold Company, Akron, Ohio. Tire core. 1,862,655; June 14.
Bowen, Lester W., Larchmont, assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Projection system and projection lens system therefor. 1,863,099; June 14.
Boyd, Robert H. (See Faries, R., and Boyd.)
Boyd, Sholts H., Venice, Calif. Door and window frame construction. 1,862,880; June 14.
Boye Needle Company, The. (See Carlson, Gustav A., assignor.)
Boyer, Sylvester, Portland, Me., assignor to S. D. Warren Company, Boston, Mass. Manufacture of transparent paper. 1,862,656; June 14.
Boynton, Alexander, San Antonio, Tex. Casing head. 1,862,920; June 14.
Braden Copper Company. (See Engblom, Emil, assignor.)
Bradford, John B., assignor of one-half to C. J. Heyler, Los Angeles, Calif. Lawn mower sharpener. 1,863,038; June 14.
Bradley, Franklin F., Chicago, Ill. Molding device. 1,862,525; June 14.
Bradley, Milton, Company. (See Barnard, Florence, assignor.)
Bradley, Theodore F., Westfield, N. J. Compositions containing nitrocellulose. 1,863,264; June 14.
Bradley, William, London, R. J. Loveluck, and R. F. Thomson, Grangemouth, England, assignors to Imperial Chemical Industries Limited. Production of anthraquinone derivatives. 1,863,265; June 14.
Bradt, Merritt B. (See Schneider, E. J., and Bradt.)
Brady, Thomas, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Lubricating mechanism. 1,863,183; June 14.
Braeutigam, Henry P., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,862,816; June 14.
Brand, Frederick F., and J. X. Mathieu, Pittsfield, Mass., assignor to General Electric Company. Electric switch. 1,863,392; June 14.
Braun, Philip N., assignor to The Prosperity Company, Inc., Syracuse, N. Y. Cuff holder for garment presses. 1,863,530; June 14.
Brazeau, Guy S., and H. P. Madsen, assignors to Appleton Machine Company, Appleton, Wis. Paper-stock-refining engine. 1,863,184; June 14.
Brazier, Leslie G., and J. Urmston, London, England. Core for electric induction coils. 1,863,325; June 14.
Brecht, Andrew J., assignor to A. P. W. Paper Co., Albany, N. Y. Dispensing apparatus. 1,863,083; June 14.
Breidenthal, Charles H., Barrington, assignor to General Fire Extinguisher Company, Providence, R. I. Refrigerating system and apparatus therefor. 1,862,657; June 14.
Brelsford, Harry E., Detroit, Mich., and N. L. Snow, New Canaan, Conn., assignors to Diamond Power Specialty Corporation, Detroit, Mich. Apparatus for separating dust from gases. 1,862,839; June 14.
Brennan, John J., Lansing, Mich. Hobbyhorse. 1,863,393; June 14.
Brienza, Joseph, Cincinnati, Ohio. Shoulder measuring instrument. 1,863,236; June 14.
Brockway, Carl P., Patterson, N. J., assignor to Industrial Research Corporation, Toledo, Ohio. Electric starter. 1,862,921; June 14.
Brokaw, Edward A. (See Noelting, W. H., and Brokaw.)
Brooks, Marion L., Rainier, Oreg. Scissors honing and corrugating device. 1,863,433; June 14.
Brower, John M., Grand Rapids, Mich. Chair. Des. 87,144; June 14.
Brown Company. (See Hill, R. B., and Fogarty, assignors.)
Brown, Horatio G. W., Valley Stream, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Time of day announcing system. 1,862,519; June 14.
Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)
Brown, William, Ossining, N. Y. Cold storage box. 1,863,434; June 14.
Buckeye Steel Castings Company, The. (See McPherson, John S., assignor.)
Buckeye Steel Castings Company, The. (See Pierce, G. S., and Chittum, assignors.)
Bukovitz, Joseph J., Chicago, Ill. Toilet seat appliance. 1,863,295; June 14.
Budd Wheel Company. (See Reed, George B., assignor.)
Buddenbrock, Charles V., Trinidad, Colo. Theftproof gasoline tank. 1,862,815; June 14.
Builders' Patent Scaffolding Company. (See Kingston, T. H., and Norman.)
Bullock, Edward W., and R. Webster, assignors to Gleason Works, Rochester, N. Y. Machine for sharpening cutters. 1,862,840; June 14.
Bunce, Earl H., C. J. Lentz and G. T. Mahler, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y. Metallurgical furnace. 1,863,185; June 14.
Bungay, George W., Plainfield, N. J., assignor to Bungay-Wolf Corporation, New York, N. Y. Can opener. 1,863,531; June 14.
Bungay-Wolf Corporation. (See Bungay, George W., assignor.)
Burgess, C. F., Laboratories, Inc. (See Schorger, Arlie W., assignor.)
Burke, Charles E., and W. E. Lawson, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Waterproofing composition and articles treated therewith. 1,862,565; June 14.
Burns, John E., Ambridge, assignor to H. H. Robertson Company, Pittsburgh, Pa. Protected metal article. 1,863,186; June 14.
Burt Machine Company. (See Wild, Charles H., assignor.)
Burton, Charles S. (See Edwards, William A., assignor.)
Burvenick, Benjamin, Woodhaven, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Container closure securing device. 1,862,783; June 14.
Burwell, Arthur W., Niagara Falls, assignor to Alox Chemical Corporation, New York, N. Y. Lubricant and making the same. 1,863,004; June 14.
Butler, George, and W. F. Zurcher, Niles, Ohio. Roll polisher for sheet tin and jobbing mills. 1,863,237; June 14.
Calco Chemical Company, Inc., The. (See Laury, Napoleon A., assignor.)
Callahan, Joseph J., Cornwells Heights, Pa. Propeller. 1,863,238; June 14.
Camacho, Lugardo T., Armstead, Mont. Leveling device. 1,862,841; June 14.
Camerota, Louis A., Burlington, N. J., assignor to W. Wood, Philadelphia, Pa. Roller conveyer. 1,863,520; June 14.
Camp, Clifford B., assignor to The Woodcraft Corporation, Bay City, Mich. Smoking stand. Des. 87,145; June 14.
Campbell, Acheson M., assignor to The Mosler Safe Company, Hamilton, Ohio. Device for measuring and submitting material to machines. 1,863,005; June 14.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,863,326; June 14.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Pusher plate for slicing machines. 1,863,327; June 14.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Guard plate and guard plate support for slicing machines. 1,863,328; June 14.
Carey, Orville, Valley Center, Kans. Mud hook. 1,863,187; June 14.
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)

Cargill, Robert D. (See Barlow, H. J. A., and Cargill.)
Carlson, Alfred A. (See Aldeen, G. W., and Carlson.)
Carlson, Gustav A., assignor to The Boye Needle Company, Chicago, Ill. Loop forming needle. 1,863,466; June 14.
Carmichael, Edford, Warrington, assignor of one-half to The United Velvet Cutters Association, Limited, Manchester, England. Machine for cutting the pile of weft-pile fabrics. 1,863,006; June 14.
Carnegie, Alfred Q. (See Parsons, C. A., Carnegie, and Gardner.)
Carson, William H., Norman, Okla. Machine for hermetically sealing packages. 1,862,881; June 14.
Carter, Roscoe H., Washington, D. C. Manufacture of insecticides and making same. 1,863,266; June 14.
Carter, Roscoe H., Washington, D. C. Manufacture of insecticides and making same. 1,863,519; June 14.
Case, James W., Schenectady, N. Y., assignor to General Electric Company. Cathode for electric discharge devices. 1,863,394; June 14.
Cash, A. W., Company. (See Terry, Charles M., assignor.)
Caster, John E., assignor to The Cincinnati Grinders, Incorporated, Cincinnati, Ohio. Grinding machinery. 1,862,882; June 14.
Caterpillar Tractor Co. (See Thoen, Lowell H., assignor.)
Chain Belt Company. (See Ball, Charles F., assignor.)
Chain Belt Company. (See Shafer, Samuel, jr., assignor.)
Chambers, Ira L., assignor to Garber Tool Company, bankrupt, Garber, Okla.; E. A. Reed, trustee. Cutter bearing structure. 1,863,084; June 14.
Chandler, Homer P., assignor to The Ohio Brass Company, Mansfield, Ohio. Clamp. 1,863,039; June 14.
Chapatte, Albert, Brighton Beach, N. Y. Watch pendent construction. 1,862,526; June 14.
Charlestream, William A., Eagle Bridge, N. Y. Window bolt. 1,863,467; June 14.
Chason, Daniel H., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Graduated tension device for sewing machines. 1,862,658; June 14.
Cheney, Clay R., Los Angeles, Calif. Mayonnaise dispenser. 1,862,883; June 14.
Cheney Company, The. (See Friedrich, Edmund H., assignor.)
Chenicek, George W. (See Moore, J. E., and Chenicek.)
Chicago Flexible Shaft Company. (See Wright, Horace C., assignor.)
Chicago Forging & Manufacturing Co. (See Hynes, Dibrell P., assignor.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chicago Pump Company. (See Durdin, Augustus C., jr., assignor.)
Chittum, Everett S. (See Pierce, G. S., and Chittum.)
Choate, Roy E., Cedar Rapids, Iowa. Tracklaying belt. 1,862,784; June 14.
Chrisman, Horace. (See Weymouth, H. G., and Chrisman.)
Christie, Hugh W., Tulsa, Okla. Gas burner. 1,863,468; June 14.
Christofferson, Charles, Duluth, Minn. Filter. 1,862,659; June 14.
Christopherson, Gautier A., Chicago, Ill. Paper-hanger's knife and attachment. 1,863,153; June 14.
Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,863,296; June 14.
Churchward, Alexander, New York, N. Y., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J. Welding generator. 1,862,922; June 14.
Cinch Manufacturing Corporation. (See Knutson, Carl L., assignor.)
Cincinnati Grinders, Incorporated, The. (See Caster, John E., assignor.)
Cincinnati Grinders Incorporated, The. (See Fritschi, Hans, assignor.)
Cincinnati Grinders Incorporated. (See Haas, Frederick S., assignor.)
Cincinnati Grinders Incorporated. (See Trudeau, Max D., assignor.)
Cisor, Benjamin F., Los Angeles, Calif. Thermostatically controlled receding fireproof safe. 1,863,040; June 14.
Clash, Harwood G., Toledo, Ohio. Surgical appliance. 1,863,188; June 14.
Cleveland Rock Drill Company. (See Slatcher, Alfred G., assignor.)
Cleveland Twist Drill Company, The. (See Githens, T. F., and Emmons, assignors.)
Cleveland Twist Drill Company, The. (See Randall, N., and Dillard, assignors.)
Clifford, James J., Reading, Mass., assignor, by mesne assignments, to Stedfast Rubber Company, Inc. Leather substitute, base sheet material therefor and making the same. 1,863,469; June 14.
Clynch, Edward J., Dowagiac, Mich. Gas furnace. 1,862,660; June 14.
Cochrane, John D., jr., assignor to The Formica Insulation Company, Cincinnati, Ohio. Decorated laminated product and manufacture. 1,863,239; June 14.
Cohen, Joseph H., Bridgeport, Conn. Ash receiver for motor vehicles. 1,862,661; June 14.
Colabresse, Francesco, Albert, W. Va. Combined gasket and protector for carbide lamps. 1,863,470; June 14.
Colalizzi, John, Pittsburgh, Pa. Sanitary cleaning medium container. 1,863,471; June 14.
Coleman, Thomas A., Carbondale, Pa. Gas burner. 1,863,100; June 14.
Collier, William H., Jackson, Tenn. Antifreeze radiator for automobiles. 1,863,437; June 14.
Collier, William R., Houston, Tex. Cotton gin. 1,862,884; June 14.
Collins, Arthur E., Cuyahoga Falls, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del. Apparatus for making and applying ruching. 1,863,189; June 14.
Colson Company, The. (See Pehrsson, Sven J., assignor.)
Columbia Phonograph Company. (See Mitchell, Frank A., assignor.)
Combination Selector Company. (See Rainey, Paul M., assignor.)
Combs, Scott W., Topeka, Kans. Sanitary garbage container. 1,863,101; June 14.
Comer, Harris, Cynwyd, Pa. Supporting means for fermentation tubes and the like. 1,863,297; June 14.
Commerce Guardian Trust & Savings Bank, The. (See Replogle, Daniel B., assignor.)
Communication Patents, Inc. (See Micolson, Alexander M., assignor.)
Conley, Marion E., Miami, Fla. Facial mask. 1,862,588; June 14.
Connely, Charles B., Ballston, N. Y., assignor to General Electric Company. Control system. 1,863,395; June 14.
Conrade, Harold G. (See Payne, L. T., and Conrade.)
Consor, Herbert A., assignor to The Wels Manufacturing Company, Monroe, Mich. Visible record and leaf holder. 1,862,842; June 14.
Constantine, Maurice. (See Silverman, W., and Constantine.)
Continental Can Company. (See Kronquest, Alfred L., assignor.)
Cook, A. D., Inc. (See Willers, George E., assignor.)
Cooper Spring Service Company. (See Bagnall, Edwin, assignor.)
Cordier, Georges, Calais, France. Lace. Des. 87,146; June 14.
Cornwell, Artemus O. (See Prouse, Marge V., assignor.)
Costello, Francis J., Newton, Mass. Cap for collapsible tubes. 1,862,662; June 14.
Couch, Jean D., East Point, Ga. Seat suspension. 1,862,953; June 14.
Coulapides, Anthony, New York, N. Y. Cigarette and cigar box. 1,863,190; June 14.
Courvoisier, Georges, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Electric generator regulating system. 1,863,298; June 14.
Covitch, Jacob, Edensburg, Pa. Tag holder for garments. 1,863,472; June 14.
Cox, John W., assignor to The Glichrist Company, Newark, N. J. Disher. 1,862,527; June 14.
Crabtree, Charles H., Leeds, England. Inking mechanism for printing machines. 1,862,785; June 14.
Crane, John T., Maywood, assignor to Felt Products Manufacturing Co., Chicago, Ill. Gasket and packing material. 1,863,521; June 14.
Crawford, George M., Ingomar, and J. M. London, Butler, Pa. Conveyer. 1,863,085; June 14.
Creter, Richard, New York, N. Y. Electric railroad system. 1,862,736; June 14.
Crisanti, Joseph, Manasquan, N. J. Auxiliary vehicle wheel. 1,863,473; June 14.
Cross Parking Systems, Inc. (See Dinkelberg, Frederick P., assignor.)
Cuff James E., assignor to American Flyer Mfg. Co., Chicago, Ill. Transformer-rheostat control device. 1,863,267; June 14.
Curley, Thomas V., Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,863,086; June 14.
Curtis, Guy H., Strome, Alberta, Canada. Snowplow. 1,863,474; June 14.
Curtis, Thomas J., Venice, assignor, by mesne assignments, to E. G. Hooper, Beverly Hills, Calif. Electrolytic water purifier. 1,862,663; June 14.
Curtiss Candy Company. (See Schnering, Otto Y., assignor.)
Dahlen, Miles A., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Solid diazo salts. 1,863,154; June 14.
Dahlstrom, Emil. (See Sandwick, R., and Dahlstrom.)
Dallett Company, The. (See Michel, John, assignor.)
Dallura, Rosario. (See Maiti, S., and Melita, assignors.)
Daniells, Maurice (See Berne, Celestin, assignor.)
Daniels, Joseph S., assignor to Daniels Manufacturing Company, Rhinelander, Wis. Napkin dispenser. 1,863,240; June 14.
Daniels Manufacturing Company. (See Daniels, Joseph S., assignor.)
Danielson, Ernest G., assignor to Gray & Danielson Manufacturing Company, San Francisco, Calif. Variable tuning device. 1,862,819; June 14.
Darling, Frank L., Long Beach, Calif. Bottle, jar, and other similar vessel. 1,863,102; June 14.
Darrow, Burgess, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tire. Des. 87,147; June 14.
Daspit, Walter, Chicago, Ill. Toy machine gun. 1,863,438; June 14.

Davidson, William D., and E. W. Goeser, assignors to Emsco Derrick & Equipment Company, Los Angeles, Calif. Sheave assembly for crown blocks. 1,862,885; June 14.
Davis, Charles H., jr., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition device. 1,863,299; June 14.
Davis, Donald F., Houston, assignor of four and one-half per cent to B. H. Johnston, four and one-half per cent to H. M. Duncan, six and one-half per cent to J. H. Dreher, Harris County, Tex., two and one-half per cent to L. J. Rashbaum, Kansas City, Mo., and one and one-half per cent to H. Gustine, and two and one-half per cent to W. D. C. Lucy, Harris County, Tex. Lock. 1,863,396; June 14.
Davis, Frank T., Habana, Cuba. Gravity system for measuring the contents of tanks. 1,863,435; June 14.
Davis, Lewis N., Santa Monica, Calif. Adjustable bed lamp shade. 1,862,664; June 14.
Davis, R. B., Company. (See Hirsch, L., and Harriss, assignors.)
Davis, Cedric A. V. (See Fuller, G. P., and Davis.)
Dean, John N. (See Smith, W. S., Garnett, and Dean.)
De Back, William, San Leandro, Calif., assignor to Sprague-Sells Corporation. Hoopeston, Ill. Filling valve. 1,862,923; June 14.
De Bataafsche Petroleum Maatschappij. (See Al, Jan, assignor.)
De Bergue and Company Limited. (See Jackson, Arthur N., assignor.)
Decker, George, assignor to The Philad Company, Cleveland, Ohio. Hair waving apparatus. 1,863,220; June 14.
De Florez, Luis, Pomfret, Conn., assignor to The Texas Company. Operating furnaces. 1,862,737; June 14.
Deinet Joseph, Milwaukee, R. J. Goodrich, and O. Stallmann, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Halogenated indanthrones and preparing the same. 1,862,843; June 14.
Deiner, Joseph, Milwaukee, R. J. Goodrich, and O. Stallmann, South Milwaukee Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Halogenated indanthrone complex and process of preparing the same. 1,862,844; June 14.
Deisler, Harry W., assignor to W. A. Riddell Company, Bucyrus, Ohio. Road grader and the like. 1,862,924; June 14.
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco Products Corporation. (See Kunkle, B. D., and Rossman, assignors.)
Delco Products Corporation. (See Rossman, Edwin F., assignor.)
Delco-Remy Corporation. (See Davis, Charles H., jr., assignor.)
Delco-Remy Corporation. (See Goad, Louis C., assignor.)
Delco-Remy Corporation. (See Martzell, Herman L., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Norviel, H. E., and Ecoff, assignors.)
Delco-Remy Corporation. (See Phelps, A. W., and Penn, assignors.)
Dellaree, Frank H., Detroit, Mich. Spindle for screw driving machines. 1,862,845; June 14.
Dellinger, Martin C. (See Kulp, H. W., and Dellinger.)
Delvicar, Inc. (See Genaille, Georges, assignor.)
De Paniagua, Ysabel M.-L., Paris, France. Iron clad relay magnet. 1,863,436; June 14.
De Ridder, Cornelius. (See Solliday, F. K., and De Ridder.)
Deschamps Eleanor M., ancillary executrix. (See Deschamps, Roger P.)
Deschamps, Roger P., deceased, Brussels, Belgium, E. M. Deschamps, New York, N. Y., ancillary executrix. Universal joint. 1,863,365; June 14.
De Smet, Llevin L., Hawthorne, N. J. Grinding machine. 1,863,538; June 14.
Dessauer, Norman, assignor to The International Seal & Knot Protector Co., New York, N. Y. Seal. 1,863,041; June 14.
Detroit Dental Manufacturing Company. (See Kerr, Robert M., assignor.)
Detroit Lubricator Company. (See Norris, Harry B., assignor.)
Detroit Steel Products Company. (See Kelly, Clyde W., assignor.)
De Vriendt, Charles, Paris, France, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone exchange system. 1,863,330; June 14.
De Wit, Leonard, Chicago, assignor to Moore Brothers Company, Joliet, Ill. Circulating heater. Des. 87,148; June 14.
De Wolf, Roger D., Rochester, N. Y. Combustion chamber and draft system therefor. 1,863,397; June 14.
Diamond Power Specialty Corporation. (See Brelsford, H. E., and Snow, assignors.)
Dibelka, Hugh. (See Beck, A., Schmidt, and Dibelka.)
Dickman, Joseph J., Brooklyn, N. Y. Article for use with library book charging systems. 1,862,530; June 14.
Dickman, Joseph J., Brooklyn, assignor to Library Efficiency Corporation, New York, N. Y. Apparatus for recording transactions. 1,862,528; June 14.
Dickman, Joseph J., Brooklyn, assignor to Library Efficiency Corporation, New York, N. Y. Apparatus for recording transactions. 1,862,529; June 14.
Dicks, Thomas A., assignor to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa. Propeller. 1,862,846; June 14.
Dieterich, Ludwig M., Newark, N. J., assignor of one-third to R. S. Blair, Stamford, Conn. Unidirectional mechanism. 1,863,191; June 14.
Dillard, James B. (See Randall, N., and Dillard.)
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Support and adjustment for speaking movie exciter lamps. 1,863,300; June 14.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Adjustable aperture for motion picture projection machines. 1,863,366; June 14.
Dinkelberg, Frederick P., Evanston, Ill., assignor, by mesne assignments, to Cross Parking Systems, Inc., Chicago, Ill. Apparatus and method for handling and storing automobiles. Re18,493; June 14.
Direct Control Valve Company. (See Fina, Valentine, assignor.)
Ditto, Incorporated. (See Williams, William E., assignor.)
Doble, William A. jr., Berkeley, Calif. Fuel supply system. 1,863,192; June 14.
Dodge, Sherwood O. (See Newton, R. C., and Dodge.)
Doheny-Stone Drill Co. (See Stone, Frederick, assignor.)
Doherty Research Company. (See Merley, Sylvan R., assignor.)
Dorr Company, The. (See Finney, John H. V., assignor.)
Dougherty, Robert H., Scotia, N. Y., assignor to General Electric Company. Electric discharge apparatus. 1,863,398; June 14.
Douglas, Harry A. (See Watts, Felix J., assignor.)
Douglas, Harry A., Bronson, Mich. Signaling system for automotive vehicles. 1,862,738; June 14.
Douglas, Harry A., Bronson, Mich. Signaling system for automotive vehicles. 1,862,739; June 14.
Dow Chemical Company, The. (See Heath, Sheldon B., assignor.)
Dow Chemical Company, The. (See Jones, Coulter W., assignor.)
Dow Chemical Company, The. (See Stewart, Leroy C., assignor.)
Dow Chemical Company, The. (See Ward, L. E., and Hunter, assignors.)
Dowins, Richard G., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Combined strainer and regulator for gas refrigerating apparatus. 1,863,103; June 14.
Doze, John C., Wichita, Kans. Spring attaching means. 1,863,193; June 14.
Drake, Robert Z., Omaha, Nebr. Handling lumber. 1,863,087; June 14.
Draper, Ernest E., Scarsdale, assignor to The Perser Corporation, New York, N. Y. Making stereoscopic pictures. 1,862,847; June 14.
Dreher, James H. (See Davis, Donald P., assignor.)
Drescher, Hugh A. E., W. Smith, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Production of anthraquinone derivatives. 1,862,786; June 14.
Dreyfus, Henry, London, England. Manufacture of cellulose esters. 1,862,589; June 14.
Dryice Corporation of America. (See Jones, C. L., and Kuehnle, assignors.)
Drying Systems, Inc. (See Bluemel, Gustave, assignor.)
Dublin, Reagan C., assignor of one-half to Underwood Drilling Company, Wichita Falls, Tex. Pull rod slip clamp. 1,862,886; June 14.
Duignan, Patrick J., Kankakee, Ill. Poultry car. 1,863,367; June 14.
Duncan, H. M., et al. (See Davis, Donald P., assignor.)
Duncan, James W., Wichita Falls, Tex. Poison distributing machine. 1,862,666; June 14.
Dunlap Rubber Company Limited et al. (See Stuart, Thomas, assignor.)
Dunning, Fitzgerald, Baltimore, Md. Hydroxy mercuri derivatives of resorcin iodinated sulphone phthaleins. 1,863,268; June 14.
Dunning, Fitzgerald, and A. E. Stickels, assignors to Hynson, Westcott & Dunning, Inc., Baltimore, Md. Mercury derivatives of halogenated sulphone phthaleins. 1,863,241; June 14.
Du Pont, E. I. de Nemours & Company. (See Burke, C. E., and Lawson, assignors.)
Du Pont, E. I., de Nemours & Company. (See Dahlen, Miles A., assignor.)
Du Pont, E. I., de Nemours & Company. (See Deinet, J., Goodrich, and Stallmann, assignors.)
Du Pont, E. I., de Nemours & Company. (See Stallmann, Otto, assignor.)
Du Pont Viscoloid Company. (See Person, Earl R., assignor.)
Durand & Huguenin, S. A. (See Alioth, Manfred, assignor.)
Durdin, jr., Augustus C., assignor to Chicago Pump Company, Chicago, Ill. Seal for shafts. 1,862,887; June 14.

Dutt, Roller E., Tiffin, Ohio. Stirring machine. 1,862,590; June 14.
Dützmann, Wilhelm, Neustadt, Germany. Horizontal alkali-cellulose press. 1,863,399; June 14.
Duvall, William J., assignor to Smith & Davis Manufacturing Company, St. Louis, Mo. Hospital bed. 1,862,820; June 14.
Dvorak, Joseph J., Chicago, Ill. Pocketbook. 1,862,665; June 14.
Eagle Woodenware Manufacturing Company, The. (See Fritsch, Frank M., assignor.)
Eclipse Machine Company. (See Lansing, Raymond P., assignor.)
Eclipse Machine Company. (See Ringwald, Clarence, assignor.)
Ecoff, Vance. (See Norviel, H. E., and Ecoff.)
Edahl, Knute, Chicago, Ill. Railway car construction. 1,863,400; June 14.
Edison, Thomas A., Incorporated. (See Edison, Thomas A., assignor.)
Edison, Thomas A., West Orange, assignor to T. A. Edison, Incorporated, West Orange, N. J. Production of molded articles. 1,862,740; June 14.
Edwards and Company. (See Miller, Christian, assignor.)
Edwards, William A., Chicago, Ill., assignor of one-half to C. S. Burton. Vacuum fuel feeding device. 1,862,667; June 14.
Eifel, Joseph, Chicago, Ill. Wrench. 1,862,817; June 14.
Ellersgaard, Asger, assignor to Link-Belt Company, Chicago, Ill. Overload release. 1,862,888; June 14.
Eldredge, Fayette R., Providence, G. W. Newman, Norwood, and J. B. Phillips, Riverview, R. I.; M. C. Newman, administratrix of said G. W. Newman, deceased; assignors to General Fire Extinguisher Company, Providence, R. I. Metal cutting machine. 1,862,668; June 14.
Electric Service Supplies Company. (See Graham, Herbert J., assignor.)
Electrical Engineers Equipment Co. (See Hoye, Peder B., assignor.)
Elevator Supplies Company. (See Shonnard, Harold W., assignor.)
Elkins, William M., Winchester, Ind. Lathe attachment. 1,863,007; June 14.
Ellsworth, Ross J., Woodstock, Ill. Recess bed mounting. 1,863,194; June 14.
Elzemeyer, Edwin E., and H. C. Griesedieck, Webster Groves, assignor to American Pulverizer Company, St. Louis, Mo. Pulverizing or crushing machine. 1,862,889; June 14.
Emerson Electric Manufacturing Company. (See Persons, Laurence M., assignor.)
Emmons, Joseph V. (See Githens, T. F., and Emmons.)
Empire Oil and Refining Company. (See Walker, John C., assignor.)
Emsco Derrick & Equipment Company. (See Davidson, W. D., and Goeser, assignors.)
Emsco Derrick & Equipment Company. (See Tremolada, Guglielmo, assignor.)
Engblom, Emil, Caletones, Chile, assignor to Braden Copper Company, New York, N. Y. Smelting of metalliferous material. 1,862,741; June 14.
Engblom, Emil, Caletones, Chile, assignor to Braden Copper Company, New York, N. Y. Smelting of metalliferous material. 1,862,742; June 14.
Engelhardt, Victor. (See Schönfeldt, N., Reichmann, and Engelhardt.)
Englund, Anders J., Milner, British Columbia, Canada. Saw gauge. 1,862,531; June 14.
Ennor, William T., Massena, N. Y., assignor to Aluminum Company of America, Pittsburgh, Pa. Pouring trough. 1,862,787; June 14.
Ensign Carburetor Co. Ltd. (See Ensign, Paul W., assignor.)
Ensign, Paul W., San Marino, assignor to Ensign Carburetor Co. Ltd., Huntington Park, Calif. Carburetor. 1,863,195; June 14.
Enslin, Herbert E., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Preparing and assembling parts of shoe uppers. 1,862,890; June 14.
Epstein, Benjamin. (See Muchnick, Arthur J., assignor.)
Eshbaugh, Jesse E. (See Zubaty, J., and Eshbaugh.)
Ethyl Gasoline Corporation. (See Proffitt, D. K., and Sharron, assignors.)
Euclid Road Machinery Company, The. (See Armington, Arthur P., assignor.)
Everson, Franklin E., Scarsdale, N. Y. Display card. 1,862,566; June 14.
Eyston, George E. T., London, assignor to Powerplus (1927) Limited, London, England. Rotary pump machine. 1,862,954; June 14.
Fahrney, Callo D., Cambridge, Mass. Television. 1,862,743; June 14.
Fairbairn, George C., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Viscosimeter. 1,863,522; June 14.
Fankboner, Harland, Chicago, Ill., assignor to The Goss Printing Press Company. Inking mechanism. 1,862,744; June 14.
Faries, Robert, St. Davids, Pa. Railroad tie plate. 1,862,520; June 14.
Faries, Robert, St. Davids, and R. H. Boyd, Philadelphia, Pa. Rail retaining member. 1,862,521; June 14.
Faries, Robert, St. Davids, and C. D. Young, Haverford, Pa. Rail. 1,862,669; June 14.
Faries, Robert, St. Davids, and C. D. Young, Haverford, Pa. Rail retaining key. 1,863,196; June 14.
Faries, Robert, St. Davids, and C. D. Young, Haverford, Pa. Rail retaining key. 1,863,197; June 14.
Farrington, James C., La Fayette, Ind. Container for milk bottles and the like. 1,863,301; June 14.
Faulkner, David S., and E. Timbs, Los Angeles, Calif., assignors to The National Supply Company of Delaware, New York, N. Y. Rotary drawworks. 1,863,401; June 14.
Faultless Caster Company. (See Noelting, W. H., and Brokaw, assignors.)
Faunce, Benjamin F., Westmont, Johnstown, and W. H. Statler, Johnstown, Pa., assignors to Bethlehem Steel Company. Mine car. 1,862,670; June 14.
Fausek, Arthur J., and I. F. Fausek, Clayton, Mo. Cutting machine. 1,862,848; June 14.
Fausek, Irwing F. (See Fausek, Arthur J. and I. F.)
Fedderman, George C., Detroit, Mich. Buttoned hold-down. 1,863,088; June 14.
Fehn, John G., Des Moines, Iowa. Laundry appliance. 1,862,618; June 14.
Fekkes, Fekko. (See Van Eck, J., and Fekkes.)
Fekkes, Hendrik. (See Van Eck, J., and Fekkes, assignors.)
Felt Products Manufacturing Co. (See Crane, John T., assignor.)
Ferguson, James G., Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,862,532; June 14.
Field, Herbert C., Windsor, Ontario, Canada, and A. C. Andersen, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Seat regulator. 1,863,439; June 14.
Field, Joseph C., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Remote control system. 1,863,089; June 14.
Field, Samuel B., Holbrook, assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass. Grinding or polishing machine. 1,862,671; June 14.
Fina, Valentine, Milwaukee, Wis., assignor to Direct Control Valve Company, Chicago, Ill. Thermostatic control for valves. 1,862,567; June 14.
Financial Press Companies of America, The. (See Vischer, Alfred, jr., assignor.)
Finney, John H. V., Denver Colo, assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Safety device. 1,863,155; June 14.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Constructional material. 1,863,104; June 14.
Fish, Charles R., jr., Providence, R. I. Cup and saucer. 1,862,533; June 14.
Fisher, Donald, Elizabeth, N. J., assignor to American Telephone and Telegraph Company. Conduit threader. 1,862,591; June 14.
Fix, William S., Finley, Wash. Drawbar. 1,862,956; June 14.
Flaherty, John, St. Louis, Mo., Ventilating system. 1,863,198; June 14.
Fleischmann, Frederick A., Drexel Hill, and A. L. Marsh, Philadelphia, Pa. Clutch shifting mechanism for dynamometer cars. 1,863,440; June 14.
Fleming, Thomas, East St. Louis, Ill. Doorlock. 1,862,672; June 14.
Florence Pottery Company, The. (See Haserodt, Grant H., assignor.)
Floss, Carl W., Detroit, Mich. Grinding device. 1,863,042; June 14.
Fogarty, John A. (See Hill, R. B., and Fogarty.)
Folberth, Gustav C., New York, N. Y. Novelty jumping accessory for sleds or the like. 1,863,441; June 14.
Folmer-Chapin Corporation. (See Folmer, William F., assignor.)
Folmer, William F., assignor to Folmer-Chapin Corporation, Rochester, N. Y. Folding table for automobiles. 1,863,368; June 14.
Ford, T. B., Limited. (See Vivian, George S., assignor.)
Formica Insulation Company, The. (See Cochrane, John D., jr., assignor.)
Forsberg Frederick, Dauphin, Manitoba, Canada. Sieve cleaner. 1,862,818; June 14.
Foster, Paul F., et al. (See Berg, Alfred J., assignor.)
Foster, William H., Ypsilanti, assignor to Thermal Engineering Corporation, Detroit, Mich. Gas burner. 1,862,673; June 14.
Fowler, Fred D., Newton, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Press. 1,863,199; June 14.
Fox, Gordon, assignor to Freyn Engineering Company, Chicago, Ill. Stock indicator. 1,862,619; June 14.
Fox, Harry, Lowell, Mass. Upholstery edge. 1,863,269; June 14.
Fox, Philip, Brooklyn, N. Y. Motor vehicle fender and running board. 1,863,475; June 14.
Frame, Augustus J., Columbus, Ohio. Gas pilot for oil burners. 1,862,849; June 14.
Franzheim, George W., Cleveland, Ohio. Boiler. 1,863,476; June 14.
Frappier, Louis S., and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Adjustable support for motion picture projection machines. 1,863,369; June 14.

Freedman, Samuel, and J. Gilbert, York, Pa. Gravity switch. 1,863,242; June 14.
Frehse, Albert W., assignor to General Motors Corporation, Detroit, Mich. Internal brake. 1,863,008; June 14.
Freund, Louis. (See Schmidt, Lambert, jr., assignor.)
Frey, Elmer E., Los Angeles, Calif., assignor to E. F. Leonard and J. P. Meehan, Los Angeles, Calif. Umbrella. 1,862,674; June 14.
Freyn Engineering Company. (See Fox, Gordon, assignor.)
Frick Company. (See Small, Normal M., assignor.)
Friedrich, Edmund H., Holyoke, assignor to The Cheney Company, Winchester, Mass. Metal flashing. Re18,492; June 14.
Frigidaire Corporation. (See Braeutigam, Henry P., assignor.)
Frigidaire Corporation. (See Henney, Charles F., assignor.)
Frink, Robert L., Lancaster, Ohio. Method and apparatus for melting glass. 1,863,156; June 14.
Fritsch, Frank M., assignor to The Eagle Woodenware Manufacturing Company, Hamilton, Ohio. Mop wringing unit. 1,862,891; June 14.
Fritsch, Hans, assignor to The Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,862,850; June 14.
Froesch, Charles, Teaneck, N. J., and W. B. Jupp, assignors to International Motor Company, New York, N. Y. International combustion engine cooling system. 1,862,675; June 14.
Fuller, George P., Niagara Falls, N. Y., and C. A. V. Daviss, Niagara Falls, Ontario, Canada, assignors, by mesne assignments, of one-half to said Fuller and one-half to Edward Michael, Buffalo, N. Y. Electrodepositing iron. 1,862,745; June 14.
Fuller Lehigh Company. (See Bailey, Ervin G., assignor.)
Funke, Rudolf, Dusseldorf, Germany. Drill for dental purposes. 1,862,955; June 14.
Garbe, Lowry, Ozone Park, N. Y. Window lock. 1,862,568; June 14.
Garber Tool Company, bankrupt. (See Chambers, Ira L., assignor.)
Gardner, Francis W. (See Parsons, C. A., Carnegie, and Gardner.)
Gardner, John R. (See Swanson, A. J., and Gardner.)
Gardner Machine Company. (See Hughes, Davydd C., assignor.)
Gargan, John O., Brooklyn, assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Remote control device. 1,862,569; June 14.
Garnett, Henry J. (See Smith, W. S., Garnett, and Dean.)
Garnier, Abel J. M., Saint-Ouen, assignor to A. Vallet, Paris, France. Supporting device for vehicles. 1,863,105; June 14.
Garrett, W. F. (See Garrett, William L., assignor.)
Garrett, William L., Los Angeles, assignor of one-fourth to W. F. Garrett, Oakland, Calif. Collapsible crate. 1,862,927; June 14.
Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Tool mounting. 1,862,925; June 14.
Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock drill. 1,862,926; June 14.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Radio transmitter. 1,862,928; June 14.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Temperature control apparatus for frequency control devices. 1,862,929; June 14.
Gebhard, Louis A., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Filament supply transformer for radio transmitters. 1,863,477; June 14.
Gebhard, Louis A., and C. F. Rudolph, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Condenser system. 1,862,930; June 14.
Geere, Ernest W., Beckenham, England. Treatment of chemical substances to prevent their deterioration or interaction with other bodies. 1,863,157; June 14.
Geiselman, Ralph A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,863,302; June 14.
Geistert, Albert G., and A. J. Altz, assignors to General Motors Corporation, Detroit, Mich. Radiator cap. 1,863,009; June 14.
Gemmer Manufacturing Company. (See Marles, Henry, assignor.)
Genaille, Georges, Ridgefield Park, N. J., assignor to Delvicar, Inc., New York, N. Y. Clock case. Des. 87,149; June 14.
General American Tank Car Corporation. (See Pierce, Raymond C., assignor.)
General Aniline Works, Inc. (See Herz, R., Steiger, and Schulte, assignors.)
General Aniline Works, Inc. (See Keller, K., and Münz, assignors.)
General Cable Corporation. (See Murphy, Daniel H., assignor.)
General Cable Corporation. (See Schneider, E. J., and Bradt, assignors.)
General Chemical Company. (See Gillett, Lowry, assignor.)
General Chemical Company. (See Ingraham, Harold O. C., assignor.)
General Chemical Company. (See Merriam, Henry F., assignor.)
General Electric Company. (See Beckert, Frank R., assignor.)
General Electric Company. (See Brand, F. F., and Mathieu, assignors.)
General Electric Company. (See Case, James W., assignor.)
General Electric Company. (See Connely, Charles B., assignor.)
General Electric Company. (See Dougherty, Robert H., assignor.)
General Electric Company. (See Hardesty, Llewellyn C., assignor.)
General Electric Company. (See Hudson, Max B., assignor.)
General Electric Company. (See Hull, Albert W., assignor.)
General Electric Company. (See Hull, John I., assignor.)
General Electric Company. (See Hurst, Ira A., assignor.)
General Electric Company. (See Kinman, Thomas H., assignor.)
General Electric Company. (See Pateau, Marcel, assignor.)
General Electric Company. (See Pratt, William H., assignor.)
General Electric Company. (See Rieber, Frank, assignor.)
General Electric Company. (See Tear, James D., assignor.)
General Electric Company. (See Woods, William J., assignor.)
General Fire Extinguisher Company. (See Breidenthal, Charles H., assignor.)
General Fire Extinguisher Company. (See Eldredge, F. R., Newman, and Phillips, assignors.)
General Fire Extinguisher Company. (See Knight, Ira W., assignor.)
General Motors Corporation. (See Anibal, Benjamin H., assignor.)
General Motors Corporation. (See Frehse, Albert W., assignor.)
General Motors Corporation. (See Geistert, A. G., and Altz, assignors.)
General Motors Corporation. (See Summers, Caleb E., assignor.)
General Motors Corporation. (See Vargha, Andrew L., assignor.)
General Motors Corporation. (See Wallbillich, J. J., and Potter, assignors.)
General Paint Corporation. (See Wieland, C. F., assignor, and Hubbell.)
General Talking Pictures Corporation. (See Barkey, Isaac H., assignor.)
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Resilient connection. 1,863,370; June 14.
Gilbert, A. C., Company, The. (See Anketell, Edward N., assignor.)
Gilbert, John. (See Freedman, S., and Gilbert.)
Gilchrist Company, The. (See Cox, John W., assignor.)
Gillett, Lowry, Syossett, assignor to General Chemical Company, New York, N. Y. Drying tower. 1,862,746; June 14.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Drop door for railway cars. 1,862,522; June 14.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Drop door for railway cars. 1,863,134; June 14.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Drop door for railway cars. 1,863,135; June 14.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Car construction. 1,863,243; June 14.
Gimonet, Alexandre, Arrochar, Staten Island, N. Y. Lip stick holder. 1,863,106; June 14.
Gingerich, Earl McK., Cleveland, Ohio, assignor to Aluminum Company of America, Pittsburgh, Pa. Aluminum alloy. 1,862,788; June 14.
Githens, Thomas F., Cleveland Heights, and J. V. Emmons, Shaker Heights, assignors to The Cleveland Twist Drill Company, Cleveland, Ohio. Extractor. 1,863,046; June 14.
Gitzendanner, Fred, New York, N. Y. Automatic feeder. 1,862,676; June 14.
Given, Frederick J., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical condenser. 1,862,570; June 14.
Gleason Works. (See Bullock, E. W., and Webster, assignors.)
Glenzer, John C., Detroit, Mich. Tool driver. 1,863,107; June 14.
Glenzer, John C., Detroit, Mich. Tool holder. 1,863,108; June 14.
Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)
Globe Oil Tools Company. (See Wright, J. C., and Bonney, assignors.)
Globe-Union Mfg. Co. (See Graves, John, assignor.)
Gnirs, Wilhelm, and A. Urban, Basel, Switzerland. Centering prop. 1,863,010; June 14.

Goad, Louis C., Muncie, assignor to Delco-Remy Corporation, Anderson, Ind. Apparatus for trimming flat parts. 1,863,303; June 14.
Goddard, Paul B., Detroit, assignor to The Universal Products Co., Inc., Dearborn, Mich. Bearing for balls of universal joints, etc. 1,863,244; June 14.
Goeser, Edwin W. (See Davidson, W. D., and Goeser.)
Goff, Harold W., Great Neck, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Terminal strip. 1,862,571; June 14.
Goldsmith, Samuel R., Brooklyn, N. Y. Handbag. 1,863,270; June 14.
Goodman, Elizabeth A., administrators. (See Goodman, Patrick.)
Goodman, Mary, et al., administrators. (See Goodman, Patrick.)
Goodman, Patrick, deceased, Brooklyn, N. Y.; M. and E. A. Goodman, administrators. Portable safety signal. 1,863,442; June 14.
Goodrich, B. F., Company, The. (See Fowler, Fred D., assignor.)
Goodrich B. F., Company, The. (See Schippel, Henry F., assignor.)
Goodrich, B. F., Company, The. (See Shank, McConnell, assignor.)
Goodrich, Robert J. (See Deinet, J., Goodrich, and Stallmann.)
Goodridge, George E., Reading, Mass., assignor to Arthur H. Ballard, Incorporated, Boston, Mass. Regulating combustion. 1,863,443; June 14.
Goodyear Tire & Rubber Company, The. (See Darrow, Burgess, assignor.)
Goost, Theodor. (See Lommel, W., and Goost.)
Goss Printing Press Company, The. (See Fankboner, Harland, assignor.)
Goth, Erich, Elberfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Maine, Germany. Manufacturing viscose. 1,862,592; June 14.
Graf, Hubert M., Kansas City, Mo. Aeroplane propelling means. 1,862,789; June 14.
Graham, Herbert J., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lamp. 1,862,572; June 14.
Graham, Matthew P. (See Hufferd, G. H., and Graham.)
Graham, Ralph A., Kansas City, Mo. Bottle cap. 1,862,620; June 14.
Grand Rapids Brass Company. (See Roedding, Gordon E., assignor.)
Graner, Hans. (See Ossanna, J., Graner, and Hoffmann.)
Grant, Jordan W., Portsmouth, Va. Nozzle. 1,862,957; June 14.
Graves, John, assignor to Globe-Union Mfg. Co., Milwaukee, Wis. Mold. 1,863,304; June 14.
Graves, Roy R., Kensington, Md. Manufacture of highly digestible feed. 1,863,109; June 14.
Gray & Danielson Manufacturing Company. (See Danielson, Ernest G., assignor.)
Green, McRee, St. Louis, Mo. Weatherstrip structure. 1,862,534; June 14.
Greene, Albert E., Medina, Wash. Apparatus for casting. 1,863,371; June 14.
Greene, Irving H., New York, N. Y. Spray stopper. 1,863,158; June 14.
Grennor, Frank V. (See Stone, E. W., and Grennor.)
Greve, Edgar E., Bellevue, assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa. Oil and gas separator. 1,863,111; June 14.
Griesedieck, Henry C. (See Elzemeyer, E. E., and Griesedieck.)
Griffin, William M., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 87,150; June 14.
Griffin, William M., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 87,151; June 14.
Grimsley, Harry C., Vincennes, Ind., assignor to Indian Refining Company, Lawrenceville, Ill. Exhibitor. 1,863,047; June 14.
Grosz, Karoly, New York, N. Y. Bookmark. 1,862,573; June 14.
Guaranteed Parts, Inc. (See Newton, R. C., and Dodge, assignors.)
Guinot, Henri M. (See Ricard, E., and Guinot.)
Gumpert, S., Co. Inc. (See Janover, Daniel W., assignor.)
Gunn, Ross, Washington, D. C. Temperature responsive condenser. 1,862,931; June 14.
Gurney, Erving R. (See Josephs, L. C., and Gurney.)
Gusle, Fred W. (See Blackburn, Guy W., assignor.)
Gustine, Harry, et al. (See Davis, Donald P., assignor.)
Guzman, Adriana. (See Sologaistoa, Manuel H. P., assignor.)
Haas, Frederick S., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,862,851; June 14.
Haas, Joseph, Newport, Ky. Poultry band. 1,862,747; June 14.
Hach, Henry J., Louisville, Ky. Pipe vise. 1,863,011; June 14.
Hadfield, Robert A., Westminster, England. Alloys. 1,863,159; June 14.
Hafleigh, Gerald E. (See Hafleigh, Norman B., assignor.)
Hafleigh, Norman B., Philadelphia, Pa., assignor to G. E. Hafleigh, Buchanan, Va. Multiple button machine. 1,863,478; June 14.
Hague, Alfred E. (See Keckler, C. W., and Hague.)
Hahs, James O., Sikeston, Mo. Mechanical bobbyhorse. 1,863,012; June 14.
Hallwood, Anthony J., A. Shepherdson, and A. Stewart, Blackley, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Making colloidal dispersions of insoluble colors in organic materials. 1,863,331; June 14.
Hallwood, Anthony J., A. Shepherdson, and A. Stewart, Manchester, assignors to Imperial Chemical Industries Limited, Westminster, England. Making colloidal dispersions of insoluble colors. 1,863,332; June 14.
Hall, Akos J., Cleveland, Ohio. Stairway. 1,862,958; June 14.
Hall, Carlyle, Seattle, Wash. Egg yolk separator. Des. 87,152; June 14.
Halm, Otto, Dresden-Loschwitz, assignor to Director Heinrich Hofmann, Leipzig, Germany. Carburetor. 1,863,402; June 14.
Hamilton Beach Manufacturing Company. (See Mross, Edward R., assignor.)
Hamilton, George H., assignor to American Heating Company, Grand Rapids, Mich. Box. 1,862,535; June 14.
Hammerly, Herman J., Wallingford, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Inclosed switch. 1,863,523; June 14.
Hammond, Lillian L., et al., executors. (See Hammond, William P.)
Hammond, Thomas E., et al., executors. (See Hammond, William P.)
Hammond, William P. jr., et al. (See Hammond, William P., assignor.)
Hammond, William P., deceased, East Orange, N. J.; L. L. Hammond, T. E. Hammond, and Irving Trust Company, formerly Irving Bank Columbia Trust Company, executors, assignors to L. L. Hammond and W. P. Hammond, jr. Automatic lubrication. 1,863,200; June 14.
Hanan, Herbert W., Brooklyn, N. Y. Sulky. 1,863,112; June 14.
Handley, Edgar G. (See Handley, George B. and E. G.)
Handley, George B. and E. G., Harrogate, England. Checkstrap or the like and picker stick for under-pick or automatic looms. 1,863,271; June 14.
Hansen, Mahlin S., assignor to P. C. Reilly, Indianapolis, Ind. Flotation process. 1,863,013; June 14.
Hanstad, Knare, Lillehammer, Norway. Potato harvesting machine. 1,863,113; June 14.
Harbison, Clarence B., assignor to The Ohio Steel Foundry Company, Lima, Ohio. Return bend. 1,862,748; June 14.
Harbison, James W., Youngstown, Ohio. Display shelf. 1,862,593; June 14.
Hardesty, Llewellyn C., Scotia, N. Y., assignor to General Electric Company. Motor control system. 1,863,403; June 14.
Hardy, Peter S., Stratford, Conn., assignor to Health Developing Apparatus Company, Inc., New York, N. Y. Front frame member for rowing machines. Des. 87,153; June 14.
Hardy, Peter S., Stratford, Conn., assignor to Health Developing Apparatus Company, Inc., New York, N. Y. Rear frame member for rowing machines. Des. 87,154; June 14.
Harrington, Ferris T., assignor to Whitman & Barnes, Incorporated, Detroit, Mich. Tool holder. 1,862,623; June 14.
Harris, William A. (See Ralstin, William E., assignor.)
Harrison, Jamison R., Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y. Multi-electrode tube oscillator circuits. 1,863,372; June 14.
Harrison, Thomas R., assignor to The Brown Instrument Company, Philadelphia, Pa. Control method and apparatus. 1,863,373; June 14.
Harriss, Edwin A. (See Hirsch, L., and Harriss.)
Harshberger, Norman P., Scarsdale, N. Y. Roofing and siding element. 1,862,852; June 14.
Hart, Harry S., and D. Hindahl, assignors to Harry S. Hart, Chicago, Ill. Car construction. 1,862,677; June 14.
Hartford-Empire Company. (See Peller, Karl E., assignor.)
Hartley, George C., and E. P. G. Wright, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y. Tandem trunk circuits. 1,862,536; June 14.
Hartman, Jacob W., jr., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 87,155; June 14.
Hartman, William H. (See Jones, F. A., and Hartman.)
Hartmann Trunk Company. (See Ritter, Julius, jr., assignor.)
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,863,305; June 14.
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,863,306; June 14.
Haserodt, Grant H., assignor to The Florence Pottery Company, Mount Gilead, Ohio. Molding machine. 1,863,114; June 14.
Haskell, Willis G., jr., Cedar Rapids, Iowa. Heat radiating device for gas furnaces. 1,862,892; June 14.

Hatton, William, Paris, France, and K. M. Sano, Antwerp, Belgium, assignors to Western Electric Company, Incorporated, New York, N. Y. Time measuring device. 1,862,537; June 14.
Haupt, Frank J. (See Hoover, R., and Haupt.)
Hauser, Herman J., Los Angeles, Calif. Match box construction. 1,862,853; June 14.
Hawley, Kent A., assignor to Locke Insulator Corporation, Baltimore, Md. Pole top pin. 1,863,539; June 14.
Hayford, Walter S., Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Joining wires. 1,863,048; June 14.
Heald Machine Company, The. (See Turner, Albert, assignor.)
Health Developing Apparatus Company. (See Hardy, Peter S., assignor.)
Heath, Sheldon B., assignor to The Dow Chemical Company, Midland, Mich. Making metallic magnesium. 1,863,221; June 14.
Heil Co., The. (See Kuhlman, George W., assignor.)
Heilmann, William A., Orange, assignor to Newark Rivet Works, Newark, N. J. Bag frame side catch. 1,862,621; June 14.
Heitmeyer, Winifred C., Appleton, Wis., assignor, by mesne assignments, to International Cellucotton Products Company, Chicago, Ill. Absorbent pad. 1,863,333; June 14.
Heltzel, John N., Warren, Ohio. Concrete road building structure. 1,863,115; June 14.
Henderson, Edward E., assignor to Nips Patent Corporation, New York, N. Y. Apparatus for producing liquid packages. 1,862,821; June 14.
Hendrick Manufacturing Company. (See Ramsay, Allan, assignor.)
Henig, Henry, Brooklyn, N. Y. Automatic spout for fluid containers. 1,863,272; June 14.
Henney, Charles F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,862,854; June 14.
Hermann, Jacob, Newton, N. J. Machine for making pile fabrics. 1,863,049; June 14.
Herndon, Laney D., Columbus, Ga. Window screen. 1,863,014; June 14.
Herring, Ernest W., Maywood, Calif. Illuminated novelty. 1,862,678; June 14.
Herz, Richard, N. Steiger, and F. Schulte, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacturing halogen aryl-thioglycollic acids. 1,862,594; June 14.
Hess, Joseph J., assignor to International Printing Company, Indianapolis, Ind. Open bottom ventilated paper tray and making the same. 1,863,334; June 14.
Hess, Raymond W. (See Leaper, J. M. F., and Hess.)
Hewitt, Roy L., Colorado Springs, Colo. Toggle fastening appliance for doors. 1,863,524; June 14.
Heyler, Charles J. (See Bradford, John B., assignor.)
Heymann, George H., Louisville, Ky. Tooth paste. 1,863,116; June 14.
Heywood-Wakefield Company. (See Larsen, Lewis, assignor.)
Hill Compressor & Pump Company, The. (See Hill, Ebenezer, assignor.)
Hill, Ebenezer, South Norwalk, Conn., assignor to The Hill Compressor & Pump Company, New York, N. Y. Rotary pump. 1,863,335; June 14.
Hill, Ernest E., assignor to Rite-Rite Mfg. Co., Chicago, Ill. Clip for pencils. 1,862,822; June 14.
Hill, Roger B., Berlin, N. H., and J. A. Fogarty, Portland, Me., assignors to Brown Company, Berlin, N. H. Treatment of artificial leather sheetings and product of same. 1,862,749; June 14.
Hindahl, David. (See Hart, H. S., and Hindahl.)
Hines, James F., Lakewood, Ohio. Flask. 1,863,404; June 14.
Hirsch, Leonard, Lyndhurst, and E. A. Harriss, Orange, assignors to R. B. Davis Company, Hoboken, N. J. Can closure. 1,863,336; June 14.
Hirsch, Leonard, Lyndhurst, and E. A. Harriss, Orange, N. J., assignors to R. B. Davis Company, Hoboken, N. J. Manufacturing can closures. 1,863,337; June 14.
Hoe, R., & Co. (See Huck, William E., assignor.)
Hoermann, Frederik E., Hastings, assignor of one-fourth to H. M. Robertson and one-fourth to J. M. Santo, St. Paul, Minn. Treating food and other products with high frequency oscillations. 1,863,222; June 14.
Hofferbert, Orrin, Beaver Dam, Wis., assignor to Malleable Iron Range Company. Water heater. 1,863,273; June 14.
Hoffman, Albert F., assignor to Hoffman Beverage Company, Newark, N. J. Foil remover. 1,863,338; June 14.
Hoffman Beverage Company. (See Hoffman, Albert F., assignor.)
Hoffman, Samuel O., San Francisco, Calif. Translating device. 1,862,622; June 14.
Hofmann, Director Heinrich. (See Halm, Otto, assignor.)
Hofmann, Fritz. (See Ossanna, J., Graner, and Hofmann.)
Holden, William H. T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Voltage regulator. 1,862,595; June 14.
Holman, Arthur J., Brookline, Mass. Automatic variable friction drive. 1,862,750; June 14.
Holsman, John A., Des Moines, Iowa. Cigarette jacket. 1,862,679; June 14.
Holtzclaw, Earl G., Portland, Oreg. Attractor for game fish. 1,862,893; June 14.
Holveck, Joseph E., Pittsburgh, Pa., assignor to The Aldrich Pump Company. Pump. 1,862,823; June 14.
Home, Alexander S., Tampashores, Fla. Freight car door. 1,862,932; June 14.
Hood, John V., Racine, Wis. Collapsible box. 1,862,855; June 14.
Hood, Robert A., and J. J. Shickluna, Buffalo, N. Y. Milk bottle carrier. 1,863,136; June 14.
Hooper, Effie G. (See Curtis, Thomas J., assignor.)
Hoopes, Penrose R. (See Van Veen, Anton, assignor.)
Hoopes, Penrose R., Hartford, Conn. Trimming machine. 1,862,538; June 14.
Hoover, Ray, North Plainfield, and F. J. Haupt, Bergenfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Rub out signal deleter for tape transmitters. 1,863,479; June 14.
Hotopp, Alfred H., jr., Caldwell, N. J., assignor to Wired Radio, Inc., New York, N. Y. Radio filter apparatus. 1,863,050; June 14.
Hotstream Heater Company, The. (See Morrow, Clarence H., assignor.)
Hottel, Louis W., Indianapolis, Ind. Molding press for hollow articles. 1,863,117; June 14.
Hough, Clinton W., Boonville, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Transmitting system. 1,863,374; June 14.
Hovland, Henry, Williston Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,863,307; June 14.
Howard, Clifton P., Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts. Fusible link. 1,863,245; June 14.
Howard, Clifton P., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Locking member for sprinkler heads. 1,863,246; June 14.
Howard, Russell G., & Associates, Inc. (See Howard, Russell G., assignor.)
Howard, Russell G., Du Bois, assignor to Russell G. Howard & Associates, Inc. Convertible wall bleacher. 1,862,824; June 14.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Photographic printing machine. 1,863,051; June 14.
Hoye, Peder B., Maywood, assignor to Electrical Engineers Equipment Co., Melrose Park, Ill. Rocking insulator. 1,863,405; June 14.
Hubbell, Russell H. (See Wieland, C. F., and Hubbell.)
Huck, William F., assignor to R. Hoe & Co., Inc., New York, N. Y. Mold for casting sterotype printing plates. 1,863,480; June 14.
Hudson, Max B., Philadelphia, Pa., assignor to General Electric Company. Governing mechanism for turbine driven pumps. 1,863,406; June 14.
Hufferd, George H., and M. P. Graham, assignors to Thompson Products, Incorporated, Detroit, Mich. Tie rod end. 1,862,933; June 14.
Hughes, Davydd C., assignor to Gardner Machine Company, Beloit, Wis. Work feeding device. 1,862,894; June 14.
Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Hot cathode device. 1,863,407; June 14.
Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Speed control. 1,863,408; June 14.
Humphrey, Walter E., Jeannette, Pa., assignor to Pennsylvania Rubber Company. Apparatus for producing hollow rubber articles. 1,863,339; June 14.
Humphries, Alfred. (See McConnel, F. W., and Humphries.)
Hund, August, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Pick-up amplifier. 1,863,052; June 14.
Hunter, James, Machine Company, The. (See Rundlett, William D., assignor.)
Hunter, Percy E., Pittsburgh, Pa. Annealing apparatus. 1,863,053; June 14.
Hunter, Ralph M. (See Ward, Louis E., and Hunter.)
Huntington Rubber Mills. (See Bellows, Earl S., assignor.)
Hürlimann, Hans, Kirchberg, Switzerland. Tedder. 1,863,444; June 14.
Hürlimann, Hans, Wil, Switzerland. Tread device for vehicle wheels. 1,863,481; June 14.
Hurst, Ira A., Schenectady, N. Y., assignor to General Electric Company. Moldable composition and molded products obtained therefrom. 1,863,540; June 14.
Huse, John O., et al. (See Berg, Alfred J., assignor.)
Hutchison, Thomas S., Chicago, Ill. Removable handle. 1,862,680; June 14.
Hutton, Alfred, and S. Miller, Schenectady, N. Y. Fire door apparatus. 1,863,054; June 14.
Hynes, Dibrell P., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,863,340; June 14.
Hynson, Westcott & Dunning, Inc. (See Dunning, F., and Stickels, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Beck, A., Schmidt, and Dibelka, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Goth, Erich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lommel, W., and Goost, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Walter, George, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Winkler, Karl, assignor.)
Imperial Chemical Industries Limited. (See Bradley, W., Loveluck, and Thomson, assignors.)
Imperial Chemical Industries Limited. (See Hallwood, A. J., Shepherdson, and Stewart, assignors.)
Imperial Chemical Industries Limited. (See Rodley, Frank, assignor.)
Indian Refining Company. (See Grimsley, Harry C., assignor.)
Industrial Research Corporation. (See Brockway, Carl P., assignor.)
Ingraham, Harold O. C., Greenwich, Conn., assignor to General Chemical Company, New York, N. Y. Ore roasting furnace. 1,862,751; June 14.
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
Inland Steel Company. (See Vitelli, Frank, assignor.)
Innes, George A., Philadelphia, Pa. Surgical drain. 1,863,057; June 14.
International Cellucotton Products Company. (See Heitmeyer, Winifred C., assignor.)
International Fire Equipment Corporation. (See Stokes, Harlow T., assignor.)
International Folding Paper Box Co. (See Philippi, Carl A., assignor.)
International Motor Company. (See Froesch, C., and Jupp, assignors.)
International Motor Company. (See Josephs, L. C., and Gurney, assignors.)
International Motor Company. (See Masury, Alfred F., assignor.)
International Precipitation Company. (See Lissman, Marcel A., assignor.)
International Printing Company. (See Hess, Joseph J., assignor.)
International Projector Corporation. (See Dina, Augusto, assignor.)
International Projector Corporation. (See Frappier, L. S., and Boecking, assignors.)
International Seal & Knot Protector Co., The. (See Dessauer, Norman, assignor.)
Irving Trust Company et al., executors. (See Hammond, William P.)
Isaacs, Harry Z., Baltimore, Md. Breeches. 1,863,482; June 14.
Jackson, Arthur N., assignor to De Bergue and Company Limited, Manchester, England. Production of riveted joints and in apparatus therefor. 1,862,895; June 14.
Jackson, Glenn L., Chicago, Ill. Can opener. 1,863,483; June 14.
Jaffé, William E. B., Chelsea, England. Stringing of lawn tennis and like rackets. 1,863,059; June 14.
Janover, Daniel W., assignor to S. Gumpert Co. Inc., Brooklyn, N. Y. Cup or similar container. Des. 87,156; June 14.
Jarvis, W. B., Company. (See Ruppel, Frederick C., assignor.)
Javick, Michel, Plains, Pa. Wall ornament. Des. 87,157; June 14.
Jefsen, William A. (See Meyer, W. H., and Jefsen.)
Jensen, Amos V., assignor to Viking Pump Company, Cedar Falls, Iowa. Rotary pump. 1,863,160; June 14.
Jensen, William, Chicago, Ill. Reel for detachable conduits. 1,863,341; June 14.
Jochum, jr., J. H. (See Weber, John J., assignor.)
Jogger Manufacturing Company, The. (See Borrowdale, Russell W., assignor.)
Johnson, Arthur B., Minneapolis, Minn. Tool for surfacing and forming fibrous material. 1,862,681; June 14.
Johnson, Carl E., Pasadena, Calif. Motor support for ventilating fans. 1,863,043; June 14.
Johnson, Chester F., Detroit, Mich. Carburetor. 1,863,161; June 14.
Johnson, Delbert O., and W. W. Webster, Bloomington, Calif. Pendulum bank and climb indicator for aeroplanes. 1,863,044; June 14.
Johnson, Frank L., Akron, Ohio. Vulcanizer. 1,863,201; June 14.
Johnson, Leonard W., Batavia, Ill. Chuck. 1,862,856; June 14.
Johnson, Malcolm S., assignor to Transery Corporation, Chicago, Ill. Buffer-stem wear plate adjuster. 1,862,857; June 14.
Johnson, William M., Mobile, Ala. Deep sea tong. 1,862,539; June 14.
Johnston, Ben H., et al. (See Davis, Donald P., assignor.)
Jones, Charles L., Pelham, and W. L. Kuehnle, Garden City, assignors to Drylce Corporation of America, New York, N. Y. Storage house. 1,863,484; June 14.
Jones, Coulter W., McDade, La., assignor to The Dow Chemical Company, Midland, Mich. Making bromides. 1,863,375; June 14.
Jones, Fred A., and W. H. Hartman, assignors to Jones and Hartman, Inc., Canton, Ohio. Pulverized coal feeder. 1,862,752; June 14.
Jones and Hartman, Inc. (See Jones, F. A., and Hartman, assignors.)
Jones, Warren C., Flushing, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Receiver. 1,863,308; June 14.
Josephs, jr., Lyman C., and E. R. Gurney, Allentown, Pa., assignors to International Motor Company, New York, N. Y. Dual wheel mounting and drive. 1,862,753; June 14.
Judd, Irving H., Detroit, assignor to Whitehead & Kales Company, River Rouge, Mich. Transporting vehicles and the like. 1,862,682; June 14.
Judelshon, Oscar I., Park Ridge, N. J. Winding machine. 1,863,058; June 14.
Jupp, William B. (See Froesch, C., and Jupp.)
Kabushiki Kaisha Yokogawa Denki Seisakusho. (See Tomoda, Miyaji, assignor.)
Kals, Achille, Detroit, Mich. Furnace. 1,862,624; June 14.
Kalish, Ralph, et al. (See Stern, Sadie, assignor.)
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Air filter. 1,863,015; June 14.
Kantor, James, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Bottle crowning machine. 1,863,223; June 14.
Kauffman, Thomas J., Grosse Pointe Village, and J. A. Widmer, assignors to Square D Company, Detroit, Mich. Electrical switch. 1,863,224; June 14.
Kautzky, Joe, jr., Fort Dodge, Iowa. Level-wind fishing reel. 1,862,683; June 14.
Kearney & Trecker Corporation. (See Mirzejewski, John A., assignor.)
Keckler, Charles W., Summit, and A. E. Hague, West Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Time of day announcing system. 1,863,137; June 14.
Keller, Karl, and F. Münz, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Polyhalogenated fatty acids and making same. 1,862,596; June 14.
Keller, Robert, Ennetbaden, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Rectifier system. 1,863,162; June 14.
Kelley, Frank J., Milwaukee, Wis., assignor to Panther Rubber Manufacturing Company, Stoughton, Mass. Shoe heel. Des. 87,158; June 14.
Kellogg, Harry O. (See Sprague, Elmer A., assignor.)
Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Removable radiator shield. 1,862 684; June 14.
Kelly, Clyde W., assignor to Detroit Steel Products Company, Detroit, Mich. Operator for window. 1,863,485; June 14.
Kelly, Clyde W., assignor to Detroit Steel Products Company, Detroit, Mich. Window operating mechanism. 1,863,486; June 14.
Kelly, Mervin J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electron discharge device. 1,863,342; June 14.
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Coupler lock controlling device. 1,862,790; June 14.
Kelso, William, assignor to The McConway & Torley Company, Pittsburgh, Pa. Coupler release mechanism. 1,862,791; June 14.
Kelvinator Corporation. (See Replogle, John R., assignor.)
Kelvinator Corporation. (See Spreen, Charles C., assignor.)
Kemp, C. M., Manufacturing Company, The. (See Kemp, William W., assignor.)
Kemp, William W., assignor to The C. M. Kemp Manufacturing Company, Baltimore, Md. Singeing. 1,862,959; June 14.
Kemp, William W., assignor to The C. M. Kemp Manufacturing Company, Baltimore, Md. Singeing. 1,862,960; June 14.
Kennett, Frank, Kalamazoo, Mich. Shipping and display carton. 1,863,685; June 14.
Kenward Barrel Company Limited, The. (See Matthews, Matthew H., assignor.)
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Superheater boiler. 1,863,055; June 14.
Kerr, Robert M., assignor to Detroit Dental Manufacturing Company, Detroit, Mich. Tongs. 1,862,625; June 14.
Kerr, Robert M., assignor to Detroit Dental Manufacturing Company, Detroit, Mich. Device for removing forms from molds. 1,863,445; June 14.
Kessler, Frank, and C. R. Woodland, Liverpool, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Mounting arrangement for electrical apparatus. 1,863,376; June 14.
Kharasch, Morris S., Chicago, Ill. Stabilized bactericide and process of stabilizing it. 1,862,986; June 14.
Killefer Manufacturing Company. (See Olinger, Alvin P., assignor.)
King, George A., assignor to Scovill Manufacturing Company, Waterbury, Conn. Tack fastened button. 1,862,597; June 14.
Kingston, A. Roy, et al. (See Kingston, T. H., and Norman, assignors.)
Kingston, Frank G., et al. (See Kingston, T. H., and Norman, assignors.)
Kingston, Thomas H., and J. H. Norman, West Somerville, Mass., assignors to F. G. Kingston, A. R. Kingston, C. C. Pimm, and M. G. Kitchen, doing business as Builders' Patent Scaffolding Company. Pole splice clamp. 1,863,247; June 14.

Kinman, Thomas H., Bilton, near Rugby, England, assignor to General Electric Company. Radio receiving circuits. 1,863,409; June 14.
Kirkpatrick, Russell W., assignor of one-half to H. V. Meyer, Atlanta, Ga. Lock protecting device. 1,863,487; June 14.
Kitchen, Mabel G., et al. (See Kingston, T. H., and Norman, assignors.)
Kitts, Howard L., Grant City, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Motion picture projector. 1,863,309; June 14.
Klle, Frank H., Chicago, Ill. Method and blank for producing frames. 1,862,897; June 14.
Kling, Calvin E., Laclede, Mo. Corn husking hook. 1,863,488; June 14.
Knight, Donald B., Brooklyn, N. Y. Refrigeration. Re18,494; June 14.
Knight, Ira W., assignor to General Fire Extinguisher Company, Providence, R. I. Coupling unit. 1,862,686; June 14.
Knight, J. B. C., executor. (See Morse, C. W., and McKenzie.)
Knight, Ralph F., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon heel blanks. 1,862,898; June 14.
Knox, Harry A., Davenport, Iowa. Suspension for tracklaying vehicles. 1,862,934; June 14.
Knutson, Carl L., Maywood, assignor to Cinch Manufacturing Corporation, Chicago, Ill. Mirror supporting device. 1,863,060; June 14.
Kochankoff, Theodore, Brooklyn, N. Y. Finger ring. Des. 87,159; June 14.
Koehring Company. (See Piispanen, Vaino, assignor.)
Koll, Henry M., Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Carrier. 1,862,540; June 14.
Konheim, Harvey S. (See Albersheim, W. J., and Konheim.)
Kraft, Phenix Cheese Corporation. (See Bell, Arthur W., assignor.)
Krage, Elmer C., Elmhurst, assignor of one-half to E. F. Stuenkel, Highland Park, Ill. Railroad crossing gate. 1,863,310; June 14.
Kratz, Edouard M., Chicago, Ill., assignor, by mesne assignments, to Marsene Products Co. Machine for making transparent papers. 1,862,541; June 14.
Krause, Henry, Little Neck, N. Y. Clip for fountain-pen caps, pencils and the like. 1,863,016; June 14.
Krohn, Walter A. J., Milwaukee, Wis. Power unit. 1,863,202; June 14.
Kronquest Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Forming and storing cylindrical can bodies. 1,863,446; June 14.
Kronquest, Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Sterilizing food products in containers. 1,863,447; June 14.
Krum, Howard L., Kenilworth, assignor to Teletype Corporation, Chicago, Ill. Electric selector mechanism. 1,863,225; June 14.
Kuchins, Harry L., Normandy, Mo. Kitchen cabinet. Des. 87,160; June 14.
Kuehnle, William L. (See Jones, C. L., and Kuehnle.)
Kuenstler, Walter E., New York, N. Y. Radiator. 1,863,056; June 14.
Kuhlman, George W., Long Island City, N. Y., assignor to The Heil Co., Milwaukee, Wis. Truck trailer hoist and support. 1,862,574; June 14.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Valve-spring lifter. 1,862,792; June 14.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Valve-spring lifter. 1,862,793; June 14.
Kunkle, Bayard D., and E. F. Rossman, assignors to Delco Products Corporation, Dayton, Ohio. Link for shock absorbers. 1,863,343; June 14.
Lacoste, Jean R., et al. (See Stuart, Thomas, assignor.)
Lalance & Grosjean Manufacturing Company. (See Burvenick, Benjamin, assignor.)
Lamb, Porter P., Detroit, Mich. Collapsible tube closure. 1,862,794; June 14.
Lambert, Marion, Inc. (See Barbiers, Ferdinand S., assignor.)
Lamborn, George H., Chicago, Ill., assignor to Louisville Frog, Switch & Signal Company. Switch point rail. 1,863,489; June 14.
Lamborn, George H., Chicago, Ill., assignor to Louisville Frog, Switch & Signal Company. Switch point rail. 1,863,490; June 14.
Lamborn, George H., Chicago, Ill., assignor to Louisville Frog, Switch & Signal Company. Switch point rail. 1,863,491; June 14.
Lampl, Alfred, Berlin-Halensee, Germany, assignor to Noma Electric Corporation of New York, New York, N. Y. Supplemental resistance for serially-mounted lamps. Re18,495; June 14.
Landau, Jacob, Jersey City, N. J. Bracket device. Re18,490; June 14.
Landenberger, Henry W., and H. W. Link, assignors to American Fluid Motors Company, Philadelphia, Pa. Control system for rams. 1,863,448; June 14.
Lange, William L., New York, N. Y. Resonating guitar. 1,863,344; June 14.
Langley, John E., U. S. Army, Kansas City, Mo. Current meter indicating device. 1,862,935; June 14.
Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. Re18,496; June 14.
Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Receptacle for pen points provided with dark bands. 1,863,061; June 14.
Larsen, Lewis, Menominee, Mich., assignor to Haywood-Wakefield Company, Boston, Mass. Making a fabric. 1,862,687; June 14.
Larsson, Ernst A., assignor to The Ohio Brass Company, Mansfield, Ohio. Coupling device. 1,863,017; June 14.
Lasater, Joseph D., assignor of one-third to J. D. Williams, Sulphur Springs, Tex. Register for liquid-dispensing apparatus. 1,862,961; June 14.
Laurency, Guillaume C., La Hulpe, Belgium. Carding engine. 1,862,542; June 14.
Laury, Napoleon A., Rockville Center, N. Y., assignor, by mesne assignments, to The Calco Chemical Company, Inc. Making sulphur trioxide and catalyst for use in said method. 1,862,825; June 14.
Lawson, Walter E. (See Burke, C. E., and Lawson.)
Leap, Earl J., Madley, Pa. Stone crusher. 1,863,492; June 14.
Leaper, Joseph M. F., and R. W. Hess, Buffalo, assignors to National Aniline & Chemical Company, Inc., New York, N. Y. Making sulphur dyes. 1,862,575; June 14.
Leavens, J. G. (See Vincent, L. H., assignor.)
Lecocq Maurice C. H. O. Cambrai France. Weaving apparatus. 1,862,962; June 14.
Lees, Everard A., Central Falls, R. I. Toilet implement. 1,863,449; June 14.
Lenander, Nils E., Lokken Verk, Norway, assignor to Patentaktiebolaget Grondal-Ramen, Stockholm, Sweden. Treatment of finely divided sulphide ores. 1,862,899; June 14.
Lentz, Clarence J. (See Bunce, E. H., Lentz, and Mahler.)
Leo, Joseph C., Oelwein, Iowa. Sterilizer. 1,862,963; June 14.
Leonard, Edward F., et al. (See Frey, Elmer E., assignor.)
Le Sauvage, George R., and L. E. Padelford, assignors to Republic Metalware Company, Buffalo, N. Y. Pail. 1,863,138; June 14.
Lewis, Bert C., Chicago, Ill. Water supply device for batteries. 1,863,203; June 14.
Lewis, Claude A., Medford, Mass. Desk ornament. Des. 87,161; June 14.
Library Efficiency Corporation. (See Dickman, Joseph J., assignor.)
Liebel-Flarsheim Company, The. (See Liebel, John G. H., assignor.)
Liebel, John G. H., assignor to The Liebel-Flarsheim Company, Cincinnati, Ohio. Surgeon's instrument. 1,863,118; June 14.
Lilligren, Jonathan M., Enid, Okla. Combined shift lever knob and container. 1,862,964; June 14.
Lindh, Frank C., Chicago, Ill. Coil machine. 1,862,626; June 14.
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Lines, Howard N., Sabetha, Kans. Display case. 1,863,493; June 14.
Link-Belt Company. (See Ellersgaard Asger, assignor.)
Link, Forest, Cincinnati, Ohio, assignor to Remington Rand Inc., Tonawanda, N. Y. Automatic shuttle mechanism for adding machines. 1,862,754; June 14.)
Link, Harry W. (See Landenberger, H. W., and Link.)
Lion Fastener, Inc. (See Poux, Noel J., assignor.)
Liquid Carbonic Corporation, The. (See Kantor, James, assignor.)
Lissman, Marcel A., assignor to International Precipitation Company, Los Angeles, Calif. Rectifying apparatus. 1,862,936; June 14.
Littlefield, Edgar E., Los Angeles, Calif. Valve and its operation. 1,862,937; June 14.
Livermore, William T., Westfield, N. J., assignor to American Telephone and Telegraph Company. Reeling device. 1,862,598; June 14.
Locke Insulator Corporation. (See Hawley, Kent A., assignor.)
Lockwood, Edwin J., Peekskill, assignor, by mesne assignments, to The Borden Company, New York, N. Y. Device for solidifying liquids and gases. 1,863,377; June 14.
Lockwood, Ernest H., Pasadena, Calif. Method of and apparatus for casting in position architraves and the like upon faced concrete walls. 1,863,549; June 14.
Loetscher, Emil C., Dubuque, Iowa. Making a fibrous building material. 1,862,688; June 14.
Logan, Cyrus F., Washington, D. C., and C. F. Mahnke, Moose Lake, Minn.; said Logan assignor to Sedge Products Company, Packwaukee, Wis. Insulating product and producing same. 1,863,329; June 14.
Lommel, Wilhelm, Wiesdorf-on-the-Rhine, and T. Goost, Leverkusen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Catalytic manufacture of hexa hydro aniline. 1,862,599; June 14.
London, Jacob M. (See Crawford, G. M., and London.)
Long, Fred R., Catawissa, Pa. Shoe easing device. 1,862,600; June 14.
Long, George A., assignor to The Long Security Lock Company, Hartford, Conn. Lock. 1,863,525; June 14.
Long Security Lock Company, The. (See Long, George A., assignor.)
Louisville Frog, Switch & Signal Company. (See Lamborn, George H., assignor.)

Loveluck, Rhys J. (See Bradley, W., Loveluck, and Thomson.)
Lovrich, Frank A., Damsite, Mo. Curtain and adjustable shade support. 1,862,971; June 14.
Lubberger, Fritz, and G. Rothert, Berlin, assignors to Siemens & Halske Aktiengesellschaft, Siemenstadt, near Berlin, Germany. Telephone system. 1,862,689; June 14.
Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler and firing it. 1,863,541; June 14.
Lucy, W. D. C., et al. (See Davis, Donald P., assignor.)
Ludlam, Malcolm C., Woodbury, N. J. Sprinkler. 1,862,576; June 14.
Lynn, George, Wadsworth, and E. M. Allen and B. K. Beecher, Barberton, Ohio, assignors to Pittsburgh Plate Glass Company, Pittsburgh, Pa. Producing hydrogen sulphide. 1,862,900; June 14.
Lyon, Jesse D., Cincinnati, Ohio. Golf ball marking machine or the like. 1,862,858; June 14.
Lyons, George H. E., Dayton, Ohio. Switch. 1,863,494; June 14.
Mac Ad Company. (See MacLachlan, John D., assignor.)
Macadie, Donald, London, England. Impulse sender for use in automatic telephone systems and the like. 1,862,601; June 14.
MacCutcheon, Alexander M., Shaker Heights, assignor to The Reliance Electric and Engineering Company, Cleveland, Ohio. Brush holder for dynamo electric machines. 1,863,018; June 14.
MacDonald, John W., Wilkinsburg, Pa. Toy cannon. 1,863,062; June 14.
MacLachlan, John D., assignor to Mac Ad Company, Kansas City, Mo. Card holder for rotary card display devices. 1,863,226; June 14.
Maclean, Robert, Franklin, Ohio. Surface covering for buildings. 1,862,627; June 14.
Macrae, James N., and R. S. Thoresen, Stamford, Conn., assignors to Petroleum Heat and Power Company, New York, N. Y. Oil burning apparatus. 1,862,690; June 14.
Madsen, Henry P. (See Brazeau, G. S., and Madsen.)
Madsen, Peter, Los Angeles, Calif. Lunch counter stool. 1,862,755; June 14.
Mahler, George T. (See Bunce, E. H., Lentz, and Mahler.)
Mahnke, Charles F. (See Logan, C. F., and Mahnke.)
Maier, Carl J., Aurora, Ill. Can opener. 1,862,972; June 14.
Majors, Walter L., St. Louis, Mo. Oil burner. 1,862,691; June 14.
Malik, Joseph S., Cleveland, Ohio. Flower stand. Des. 87,162; June 14.
Malleable Iron Range Company. (See Hofferbert, Orrin, assignor.)
Malti, Samuel, and S. Melita, assignors of one-third to R. Dallura, Philadelphia, Pa. Bottle support. 1,863,163; June 14.
Maumen, Lawrence W., Chicago, Ill. Movable sections in wings for aircraft. 1,862,795; June 14.
Mangione, John, and S. Terranova, Auburn, N. Y. Submarine distress signal. 1,863,019; June 14.
Manley, Edward B., New York, N. Y. Safety razor head and blade. 1,863,495; June 14.
Manning & Co. (See Snow, Herbert C., assignor.)
Maragos, Alexander, Omaha, Nebr. Automatic sandwich toaster. 1,862,965; June 14.
Marble, Jarvis C., Mount Vernon, assignor to American Throttle Company, Inc., New York, N. Y. Valve. 1,863,020; June 14.
Marles, Henry, assignor to Gemmer Manufacturing Company, Detroit, Mich. Steering control. 1,862,692; June 14.
Marlowe, Emory C. (See Prather, T. P., and Marlowe.)
Marquart, Edwin E., Findlay, Ohio. Cooking utensil. 1,862,602; June 14.
Marren, James F. L., Philadelphia, Pa. Pneumatic locking inflating tube for inflatable bodies. 1,863,119; June 14.
Marsene Products Co. (See Kratz, Edouard M., assignor.)
Marsh, Alpha L. (See Fleischmann, F. A., and Marsh.)
Marsh, Homer P. (See Adams, Norman W., assignor.)
Martin, Charles H., West Springfield, Mass. Fifth wheel apparatus. 1,863,120; June 14.
Martin, James V., Garden City, N. Y. Tire. 1,862,693; June 14.
Martin, Jesse C., jr., Los Angeles, Calif. Flange and connection for tubular heating elements. 1,862,796; June 14.
Martin, Mark H., Reading, assignor to Birdsboro Steel Foundry & Machine Company, Birdsboro, Pa. Railway car truck. 1,863,063; June 14.
Martin, Mark H., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Cast steel underframe for railway cars. 1,863,311; June 14.
Martin, Mark H., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Depending bearing element mounting. 1,863,121; June 14.
Martin, Rudolf, Berlin-Charlottenburg, assignor to Jean Bergmann, Berlin-Wannsee, Germany. Calculating machine. 1,862,901; June 14.
Mason, Ruric C., Princeton, N. J., assignor to Westinghouse Electric and Manufacturing Company. Transfer contact. 1,863,312; June 14.
Massonneau, Robert F., Scarsdale, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Time of day announcing system. 1,863,139; June 14.
Mastrangelo, Alphonso. (See Mastrangelo, Frank and A.)
Mastrangelo, Frank and A., assignors to Angel Novelty Company, Fitchburg, Mass. Chair or similar article of furniture. Des. 87,163; June 14.
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Refuse disposal truck. 1,862,756; June 14.
Mathieu, Joseph X. (See Brand, F. F., and Mathieu.)
Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Cable connecter. 1,863,021; June 14.
Matthews, Harry G., London, England, assignor to Sky Projection Corporation, New York, N. Y. Optical projection. 1,862,577; June 14.
Matthews, Louis L., assignor to C. B. Maxson, and J. W. Maxson, Westerly, R. I. Counting and marking machine. 1,862,797; June 14.
Matthews, Matthew H., assignor to The Kenward Barrel Company Limited, London, England. Nesting barrels or containers. 1,863,122; June 14.
Maxson, Charles B., et al. (See Matthews, Louis L., assignor.)
Maxson, Julian W., et al. (See Matthews, Louis L., assignor.)
May, Harold W., Cowichan, British Columbia, Canada. Portable stand for golf bags. 1,863,022; June 14.
Maynord Joseph A., Boston, Mass. Relief valve fitting. 1,863,227; June 14.
Mayper, Jack. (See Beskind, M. M., and Mayper.)
Maytag Company, The. (See Snyder, Howard F., assignor.)
McAdam, William M., New Brunswick, N. J. Receptacle. 1,863,228; June 14.
McCarty, Robert L., jr., Edgewood, Pa. Finger ring. Des. 87,164; June 14.
McConnel, Frederic W., Martley, and A. Humphries, Worcester, England. Bobbin. 1,862,694; June 14.
McConway & Torley Company, The. (See Kelso, William, assignor.)
McConway & Torley Company, The. (See Miller, Howard F., assignor.)
McDonald, Joseph J., Lansford, Pa. Dispensing cap. 1,862,973; June 14.
McDonnell, James S., jr., Chicago, Ill. Airplane. 1,862,902; June 14.
McDonough, Joseph G., deceased, New Orleans, La.; Louise A. McDonough, administratrix. Lumber grade marking machine. 1,863,229; June 14.
McDonough, Louise A., administratrix. (See McDonough, Joseph G.)
McDougal, Taine G., assignor to A C Spark Plug Company, Flint, Mich. Ceramic wares and method of manufacture. 1,862,074; June 14.
McDowell, Thomas E., assignor to The Tyle-National Company, Chicago, Ill. Electric machine. 1,862,543; June 14.
McGrew, John A., Albany, N. Y. Railway track construction. 1,863,248; June 14.
McGrew, John A., Albany, N. Y. Tie plate and rail fastener. 1,863,274; June 14.
McGrew, John A., Albany, N. Y. Rail joint. 1,863,275; June 14.
McGrew, John A., Albany, N. Y. Rail joint. 1,863,276; June 14.
McGroarty, William J., assignor to National Foods Limited, Toronto, Ontario, Canada. Making bread, cakes, and other products of a similar nature. 1,863,277; June 14.
McKenzie, Kenneth. (See Morse, C. W., and McKenzie.)
McNally, Edward D., assignor to Reynolds Spring Company, Jackson, Mich. Spring structure. 1,863,450; June 14.
McNaught, Robert P., San Francisco, Calif. Load compensator for automatic elevators for making more perfect landings. 1,862,603; June 14.
McPherson, John S., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Interlocking car truck parts. 1,862,966; June 14.
McWane, Robert C., Ridgewood, N. J. Concrete wall and making it. 1,862,544; June 14.
Medoff, William, assignor to National Cellulose Corporation, New York, N. Y. Folding paper box. Des. 87,165; June 14.
Meehan, John P., et al. (See Frey, Elmer E., assignor.)
Meeks, William C., Wichita, Kans. Wrench. 1,863,378; June 14.
Melita, Sebastiano. (See Malti, S., and Melita.)
Meloche, Daniel H., assignor to American Radiator Company, New York, N. Y. Pipe casting apparatus. 1,862,975; June 14.
Menns, Albert W., Malden, assignor, by direct and mesne assignments, to Menns Window Corporation, Boston, Mass. Window construction. 1,862,757; June 14.
Menns Window Corporation. (See Menns, Albert W., assignor.)
Merco Nordstrom Valve Company. (See Nordstrom, Sven J., assignor.)
Mergenthaler Linotype Company. (See Bailey, Guy D., assignor.)
Merley, Sylvan R., Dover, N. J., assignor to Doherty Research Company, New York, N. Y. Rectification. 1,862,758; June 14.
Merneck, John K., Hammond, Ind. Glass extracting device. 1,862,976; June 14.

Merriam, Henry F., West Orange, N. J., assignor to General Chemical Company, New York, N. Y. Treating waste gases. 1,862,695; June 14.
Merritt Engineering & Sales Company. (See Raettig, Alfred W., assignor.)
Metzger, Floyd J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Generation and application of ammonia and composition therefor. 1,862,696; June 14.
Meyer, Hugo C. (See Kirkpatrick, Russell W., assignor.)
Meyer, William H., and W. A. Jefsen, Newark, N. J. Box labeling and edging. 1,863,023; June 14.
Meyer, William H., and W. A. Jefsen, Newark, N. J. Box labeling and edging. 1,863,024; June 14.
Meyerhans, August, Ennetbaden, assignor to Aktiengesellschaft Brown, Boveri and Cie, Baden, Switzerland. High tension transformer. 1,862,798; June 14.
Michael, Edward, et al. (See Fuller, G. P., and Davies, assignors.)
Michel, John, Conshohocken, assignor to The Dallett Company, Philadelphia, Pa. Locking device for pneumatic tools. 1,862,859; June 14.
Mihalyi, Frank, assignor to Benjamin Air Rifle Company, St. Louis, Mo. Air rifle. 1,862,697; June 14.
Mihalyi, Frank, University City, assignor to Benjamin Air Rifle Company, St. Louis, Mo. Air rifle. 1,862,698; June 14.
Miller, Christian, New York, N. Y., assignor to Edwards and Company, Inc. Signaling device. 1,863,532; June 14.
Miller Combination Bailer and Pump Company. (See Miller, George W., assignor.)
Miller, Ernest B., assignor to The Silica Gel Corporation, Baltimore, Md. Refrigeration car. 1,862,004; June 14.
Miller, George W., assignor to Miller Combination Bailer and Pump Company, Sapulpa, Okla. Bailer. 1,862,628; June 14.
Miller, Howard F., assignor to The McConway & Torley Company, Pittsburgh, Pa. Car coupler mechanism. 1,862,799; June 14.
Miller, Leroy, Oxford, Ind. Automobile screen. 1,862,605; June 14.
Miller, Robert E., Bronxville, N. Y. Shoe rack. 1,863,204; June 14.
Miller, Roland M., Cleveland, Ohio. Flask for manufacturing artificial dentures. 1,862,699; June 14.
Miller Rubber Company Inc. (See Collins, Arthur E., assignor.)
Miller, Sherman. (See Hutton, A., and Miller.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Minters, Barnet S., Great Neck, N. Y. Automatic control device. 1,863,164; June 14.
Mirzejewski, John A., assignor to Kearney & Trecker Corporation, West Allis, Wis. Furnace. 1,863,379; June 14.
Mischler, H. (See Yelli, Ralph A., assignor.)
Mitchell, Courtney M., Cleveland Heights, Ohio. Apparatus for welding tubing. 1,863,313; June 14.
Mitchell, Frank A., London, England, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Talking machine and the like. 1,862,700; June 14.
Moelter, Edward J., and D. R. Bates, Lansing, Mich. Ladder bracket for paint pots. 1,862,701; June 14.
Molloy, David J., Company. (See Persons, Ernest L., assignor.)
Monogram Lens Corporation. (See Arbuckle, Samuel F., assignor.)
Mooney, Richard, Henryetta, Okla. Vehicle wheel bolt. 1,863,496; June 14.
Moore Brothers Company. (See De Wit, Leonard, assignor.)
Moore, John E., Chicago, Ill., and G. W. Chenicek, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill. Automatic engler distillation apparatus. 1,863,346; June 14.
Moriarty, Albert F., S. F. Witten and O. Schopp, Phoenix, Ariz. Water cooler. 1,863,249; June 14.
Morin, Israel, Toronto, Ontario, Canada. Drinking fountain for poultry. 1,863,410; June 14.
Morrison, James D., Reinbeck, Iowa. Well drill. 1,862,629; June 14.
Morrison, John A., Warren, Ohio. Double lift single screw jack. 1,862,759; June 14.
Morrow, Clarence H., assignor to The Hotstream Heater Company, Cleveland, Ohio. Domestic hot water heater. 1,862,630; June 14.
Morse, Charles W., and K. McKenzie, deceased, J. B. C. Knight, Anaconda, Mont., executor. Device for feeding liquids. 1,863,250; June 14.
Morse, Frank L., Ithaca, N. Y. Door operating mechanism. 1,862,860; June 14.
Mosler Safe Company, The. (See Campbell, Acheson M., assignor.)
Motor Products Corporation. (See Kellogg, Homer G., assignor.)
Mross, Edward R., assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Adjustable support for food mixers. 1,862,826; June 14.
Muchnick, Arthur J., Elizabeth, N. J., assignor of one-half to B. Epstein, Brooklyn, N. Y. Clock display advertising unit. Des. 87,166; June 14.
Muffett, Robert B., Ridgefield, Wash. Automobile attachment. 1,862,977; June 14.
Mullen, George W., Flushing, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Sealed package and sealing. 1,863,025; June 14.
Mulvaney, Lewis J., New York, N. Y. Golf teeing machine. 1,863,140; June 14.
Municipal Street Sign Co. (See Sprung, Abraham, assignor.)
Münz, Ferdinand. (See Keller, K. and Münz.)
Murphy, Daniel H., West Hartford, Conn., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y. Electrical cable. 1,863,347; June 14.
Murphy, P. H., Company. (See Small, Arthur E., assignor.)
Murphy, Paul B., Nyack, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,862,578; June 14.
Nabors, William C., Mansfield, La. Trailer. 1,863,348; June 14.
Nachod & United States Signal Company. (See Stolp, Samuel S., assignor.)
Nachumsohn, Irving, assignor to Teletype Corporation, Chicago, Ill. Remote control selective mechanism. 1,863,411; June 14.
Nanfeldt, William, assignor to World Bestos Corporation, Paterson, N. J. Friction fabric and making the same. 1,862,760; June 14.
Nast, Paul H., Michigan City, Ind., assignor to Sullivan Machinery Company. Transport truck. 1,862,938; June 14.
National Aniline & Chemical Company. (See Leaper, J. M. F., and Hess, assignors.)
National Aniline & Chemical Co. Inc. (See Wendler, Adolph F., assignor.)
National Brass Company. (See Solliday, Foster K., assignor.)
National Brass Company. (See Solliday, F. K., and De Ridder, assignors.)
National Cellulose Corporation. (See Medoff, William, assignor.)
National Foods Limited. (See McGroarty, William J., assignor.)
National Supply Company of Delaware. (See Faulkner, D. S., and Timbs, assignors.)
Naugle, John J. (See Wickenden, L., and Okell, assignors.)
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Drill chuck. 1,862,761; June 14.
Nelson, Andy P., Hurley, S. Dak. Automatic door. 1,863,497; June 14.
Nelson, Herman, Corporation, The. (See Beling, Earl H., assignor.)
Nester, Samuel K. (See Weckbaugh, J. V., and Nester.)
Newark Rivet Works. (See Heilmann, William A., assignor.)
New Jersey Zinc Company, The. (See Bunce, E. H., Lentz, and Mahler, assignors.)
Newman, George W. (See Eldredge, F. R., Newman, and Phillips.)
Newman, Mildred C., administratrix. (See Eldredge, F. R., Newman, and Phillips.)
Newton, Robert C., Needham Heights, and S. O. Dodge, Medford, assignors to Guaranteed Parts, Inc., Allston, Mass. Electric feeler mechanism for looms. 1,862,762; June 14.
Nichols, Charles R., and S. H. Williston, Dallas, Tex. Electrical prospecting. 1,863,542; June 14.
Nichols, Louis C., Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Temperature indicator. 1,862,763; June 14.
Nicolson Alexander McL., assignor to Communication Patents, Inc., New York, N. Y. System and apparatus for the electrical production of images. 1,863,278; June 14.
Nicolson, Alexander M., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Multiple piezo-electric transformer. 1,863,345; June 14.
Nigro, Michel, assignor to Sleeper & Hartley, Inc., Worcester, Mass. Attachment for machines for coiling metal. 1,863,064; June 14.
Nips Patent Corporation. (See Henderson, Edward E., assignor.)
Noble, Olbert C., assignor to Tygart Valley Glass Company, Washington, Pa. Jar or similar article. Des. 87,167; June 14.
Noelting, William H., and E. A. Brokaw, assignors to Faultless Caster Company, Evansville, Ind. Brake caster. 1,863,349; June 14.
Noetzli, Fred A., Los Angeles, Calif., assignor to Amburgen Construction Company, Incorporated, New York, N. Y. Buttress type dam. 1,863,205; June 14.
Nolan, Dorothy M. Los Angeles, Calif. Novelty toy. Des. 87,168; June 14.
Noma Electric Corporation of New York. (See Lampl, Alfred, assignor.)
Nordberg Manufacturing Company. (See Symons, Edgar B., assignor.)
Nordstrom, Sven J., Oakland, assignor to Merco Nordstrom Valve Company, San Francisco, Calif. Valve. 1,863,380; June 14.
Norman, Joseph H. (See Kingston, T. H., and Norman.)
Norris, Harry B., assignor to Detroit Lubricator Company, Detroit, Mich. Carburetor. 1,862,978; June 14.

Norviel Harry E., deceased, by Delco-Remy Corporation, Anderson, Ind., assignee. Ignition coil and lock switch. Re18,497; June 14.
Norviel, Harry E., deceased, by Delco-Remy Corporation, Anderson, Ind., assignee. Ignition apparatus. Re18,498; June 14.
Norviel, Harry E., and V. Ecoff, assignors to Delco-Remy Corporation, Anderson, Ind. Switch. 1,863,350; June 14.
Nowak, John, Brooklyn, N. Y. Collapsible boat. 1,863,498; June 14.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,862,764; June 14.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Anti-friction bearing. 1,862,765; June 14.
O'Connor John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,862,766; June 14.
Odell, Carl L. executor. (See Odell, Earl H.)
Odell, Earl H., Chicago, Ill., deceased, Carl L. Odell, executor. Thermal treatment applicator. 1,863,533; June 14.
Odell Earl H., deceased, Chicago, Ill.; Carl L. Odell, executor. Vacuum cup. 1,863,534; June 14.
O'Dowd, Henry W., Jersey City, N. J., assignor to Standard Gas Equipment Corporation. Gas stove casing. Des. 87,169; June 14.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Brass Company, The. (See Chandler, Homer P., assignor.)
Ohio Brass Company, The. (See Larsson, Ernst A., assignor.)
Ohio Brass Company, The. (See Matthes, Samuel S., assignor.)
Ohio Steel Foundry Company, The. (See Harbison, Clarence B., assignor.)
Oil Well Supply Company. (See Greve, Edgar E., assignor.)
Okell, Stanley A. W. (See Wickenden, L., and Okell.)
Olinger, Alvin P., Wichita, Kans., assignor to Killefer Manufacturing Company, Los Angeles, Calif. Control for scrapers. 1,862,903; June 14.
Olm, Oscar J., assignor to Quality Park Envelope Company, St. Paul, Minn. Envelope. 1,863,279; June 14.
Olson, Ingeborg, R., Brooklyn N. Y. Valve. 1,862,545; June 14.
Omes Holding Company, Limited. (See Benedetto, Giuseppe, assignor.)
Orthwine, Rudolph, New York, N. Y. Partition base. 1,863,351; June 14.
Orthwine, Rudolph, New York, N. Y. Fastener. 1,863,381; June 14.
Ossanna, Johann, and H. Graner, Munich, and F. Hofmann, Munich-Talkirchen, assignors to Siemens-Schuckertwerke Aktiengeselischaft, Berlin-Siemensstadt, Germany. Compensating the reactance of inductive windings. 1,863,065; June 14.
Oswalt, George L., Forest Park, Ill. Insulating building material. 1,862,702; June 14.
Otis Elevator Company. (See Brady, Thomas, assignor.)
Otten, Wilhelm, Stuttgart, Germany. Gramophone. 1,862,800; June 14.
Oven, Frank J., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,862,703; June 14.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Film magazine. 1,863,066; June 14.
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Padelford, Lester E. (See Le Sauvage, G. R., and Padelford.)
Palmer, Alden J., assignor to Republic Fireproofing Company, Inc., New York, N. Y. Building construction. 1,863,543; June 14.
Palmer, Oscar C., Phoenix, Ariz. Radiator construction. 1,863,026; June 14.
Panther Rubber Manufacturing Company. (See Kelley, Frank J., assignor.)
Paper and Textile Machinery Company, The. (See Russell, Andrew N., assignor.)
Pardee, Frank, assignor to Anthracite Separator Company, Hazleton, Pa. Separator. 1,863,027; June 14.
Pardee, Frank, jr., assignor to Anthracite Separator Company, Hazleton, Pa. Loading chute. 1,863,028; June 14.
Parker, Allen, Waterloo, N. Y. Aeroplane safety wing construction. 1,862,939; June 14.
Parker, George E., Fonda, N. Y. Combination window awning and ventilator. 1,862,967; June 14.
Parks, Edward F., Providence, R. I., assignor to Universal Winding Company, Boston, Mass. Traversing-means for winding machines. 1,863,280; June 14.
Parsons, Charles A., deceased, A. Q. Carnegie, and F. W. Gardner, Newcastle-on-Tyne, England; said Carnegie and said Gardner assignors to said Parsons; K. Parsons, V. Thompson, and F. G. H. Bedford, legal representatives. Elastic fluid turbine. 1,862,579; June 14.
Parsons, Charles A., A. Q. Carnegie, and F. W. Gardner, Newcastle-on-Tyne, England; said Carnegie and said Gardner, assignors to said Parsons; K. Parsons, V. Thompson, and F. G. H. Bedford, legal representatives of C. A. Parsons, deceased. Steam turbine. 1,862,827; June 14.
Parsons, Katharine, et al., legal representatives. (See Parsons, C. A., Carnegie, and Gardner.)
Pateau, Marcel, Seine, France, assignor to General Electric Company. Speed responsive means. 1,863,412; June 14.
Patent and Licensing Corporation, The. (See Wood, Henry F., assignor.)
Patentaktiebolaget Grondal-Ramen. (See Lenander, Nils E., assignor.)
Payne, Lawrence T., and H. G. Conrade, Birmingham, England. Apparatus for delivering measured quantities of liquid by volume from bottles or similar vessels. 1,862,801; June 14.
Pearson, Henry C., Pasadena, Calif. Ball and projector therefor. 1,862,904; June 14.
Peerless Pump Company. (See Wintroath, John A., assignor.)
Peglar, Don C., Chattanooga, Tenn. Grave marker. 1,862,968; June 14.
Pehrsson, Sven J., assignor to The Colson Company, Elyria, Ohio. Detachable carrier for hand trucks. 1,862,546; June 14.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glass severing apparatus. 1,862,979; June 14.
Penn, Albert, assignor to Penn Electric Switch Co., Des Moines, Iowa. Switch structure. 1,862,631; June 14.
Penn Electric Switch Co. (See Penn, Albert, assignor.)
Penn, Norman L. (See Phelps, A. W., and Penn.)
Pennsylvania Rubber Company. (See Humphrey, Walter E., assignor.)
Perdue, Whittier, Chicago, Ill., assignor to Ramapo Ajax Corporation, New York, N. Y. Frog. 1,862,547; June 14.
Perin, Donald W., Brookline, Mass., assignor to American Freight Service, Inc., New York, N. Y. Removable container. 1,862,632; June 14.
Perry, Claude B., San Jose, Calif. Pipe threading device. 1,863,067; June 14.
Perser Corporation, The. (See Draper, Ernest E., assignor.)
Person, Earl R., Leominster, Mass., assignor to Du Pont Viscoloid Company, Wilmington, Del. Edge shaping machine. 1,863,251; June 14.
Persons, Ernest L., Chicago, Ill., assignor to David J. Molloy Company. Feeding attachment for bookbinder presses. 1,863,165; June 14.
Persons, Laurence M., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo. Centrifugal clutch for motors. 1,863,382; June 14.
Pertot, Frank, Brooklyn, N. Y. Hat form. 1,863,123; June 14.
Peterson, Adolphe C., Minneapolis, Minn. Dirigible construction. 1,862,600; June 14.
Petroleum Heat and Power Company. (See Macrae, J. N., and Thoresen, assignors.)
Pettit, William F., Alton, England. Record for gramophones and the like and manufacturing same. 1,862,969; June 14.
Phelps, Alva W., and N. L. Penn, assignors to Delco-Remy Corporation, Anderson, Ind. Assembling apparatus. 1,863,314; June 14.
Philad Company, The. (See Decker, George, assignor.)
Philadelphia Drying Machinery Company, The. (See Sibson, W. W., and Wigglesworth, assignors.)
Phillippi, Carl A., New York, N. Y., assignor to International Folding Paper Box Co. Inc., North Bergen, N. J. Display stand or similar article. Des. 87,170; June 14.
Phillippi, Carl A., New York, N. Y., assignor to International Folding Paper Box Co. Inc., North Bergen, N. J. Display stand or similar article. Des. 87,171; June 14.
Phillips, John B. (See Eldredge, F. R., Newman, and Phillips.)
Phillips, Marguerite T., Lansing, Mich. Sanitary toilet seat protector. 1,863,499; June 14.
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Cook stove. 1,862,767; June 14.
Pierce, Fred I., Niagara Falls, N. Y. Cooking utensil. 1,863,413; June 14.
Pierce, Glen S., and E. S. Chittum, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Device for utilizing waste heat. 1,863,352; June 14.
Pierce, Raymond C., Chicago, Ill., assignor to General American Tank Car Corporation. Outlet valve. 1,863,252; June 14.
Piersimoni, Giovanni, Akron, Ohio. Incandescant lamp. 1,863,500; June 14.
Pilspanen, Valno, Helsinki, Finland, assignor to Koehring Company, Milwaukee, Wis. Concrete mixer. 1,863,029; June 14.
Pimm, Charles C., et al. (See Kingston, T. H., and Norman, assignors.)
Pincus, Walter, et al. (See Bogia, Louis F., assignor.)
Pippy, George F., East Orange, N. J., assignor to American Throttle Company Inc., New York, N. Y. Throttle. 1,863,068; June 14.
Pittsburgh Coal Company. (See Taber, William P., assignor.)
Pittsburgh Equitable Meter Company. (See Dowins, Richard G., assignor.)
Pittsburgh Equitable Meter Company. (See Weymouth, H. G., and Chrisman, assignors.)
Pittsburgh Plate Glass Company. (See Lynn, G., Allen, and Beecher, assignors.)
Pittsburgh Screw & Bolt Corporation. (See Dicks, Thomas A., assignor.)

Platt, James B., Baltimore, Md., assignor to Stone Straw Corporation, Washington, D. C. Cut-off mechanism for tube machines. 1,863,124; June 14.
Platt, M., Inc. (See Sorrick, Elmer, assignor.)
Playskool Institute, Inc. (See Wetzel, Harry C., assignor.)
Pneuman, James I., Oneida, assignor to Triumph Trap Company, Inc., New York, N. Y. Game trap. 1,862,580; June 14.
Pneumatic Scale Corporation. (See Field, Samuel B., assignor.)
Polin, Herbert S., San Francisco, Calif., assignor to Polin, Inc., New York, N. Y. Electro-chemical current interrupter. 1,863,253; June 14.
Polin, Herbert S., San Francisco, Calif., assignor to Polin, Inc., New York, N. Y. Forming an amalgam and product thereof. 1,863,254; June 14.
Polin, Inc. (See Polin, Herbert S., assignor.)
Pope, Alton I., Fort Worth, Tex. Speed control mechanism. 1,862,802; June 14.
Porter, James R., Wantage, England. Aeronautical machine. 1,862,803; June 14.
Potter, Floyd J. (See Wallbillich, J. J., and Potter.)
Poux, Noel J., assignor to Lion Fastener, Inc., Meadville, Pa. Separable fastener. 1,863,535; June 14.
Powell, Alvin, Cuthbert, Ga. Fish lure. 1,863,125; June 14.
Powell, John, Kokomo, Ind. Frame bracing and adjusting means. 1,862,607; June 14.
Powerplus (1927) Limited. (See Eyston, George E. T., assignor.)
Powers, George G., Winnetka, and L. J. Sieger, Cicero, assignors to Union Bed and Spring Company, Chicago, Ill. Bedspring. 1,862,905; June 14.
Powyszynski, Frank, Chicago, Ill. Shoe heel clamp. 1,863,166; June 14.
Prather, Thomas P., and E. C. Marlowe, Lexington, Ky. Box. 1,862,980; June 14.
Pratt, William H., Lynn, Mass., assignor to General Electric Company. Demand meter. 1,863,414; June 14.
Preleuthner, Julius, New York, N. Y. Mechanical stirrer. 1,862,906; June 14.
Presto Products Co. (See Abramson, Nathan, assignor.)
Prince, William B., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Time of day announcing system. 1,863,141; June 14.
Proffitt, Don K., and J. G. Sharron, assignors, by mesne assignments, to Ethyl Gasoline Corporation. Manufacture of alkyl metal compounds. 1,863,451; June 14.
Prosperity Company, The. (See Braun, Philip N., assignor.)
Prouse, Marge V., assignor of forty-nine one-hundredths to A. O. Cornwell, Minneapolis, Minn. Attachment for fishhooks. 1,863,544; June 14.
Prouty, Theodore C. and W. O., Hermosa Beach, Calif., assignors to American Encaustic Tiling Company, Ltd., New York, N. Y. Method of and tunnel kiln for the treatment of ceramic ware. 1,862,548; June 14.
Prouty, Theodore C. and W. O., Hermosa Beach, Calif., assignors to American Encaustic Tiling Company, Ltd., New York, N. Y. Tile grinding machine. 1,862,704; June 14.
Prouty, Willis O. (See Prouty, Theodore C. and W. O.)
Pugh, John V., Meriden, England. Vehicle wheel. 1,862,804; June 14.
Pugh, John V., Meriden, England. Vehicle wheel. 1,862,805; June 14.
Purucker, George J., Fort Atkinson, Wis. Filing container. 1,862,861; June 14.
Pyle-National Company, The. (See McDowell, Thomas E., assignor.)
Quality Park Envelope Company. (See Olm, Oscar J., assignor.)
Quinn, John P., Sioux City, Iowa. Collapsible and transportable housing structure. 1,863,206; June 14.
Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Equatorially sealed spark plug and making the same. 1,862,981; June 14.
Radcliffe, Fred, Scranton, Pa. Car journal lubricator. 1,863,281; June 14.
Radiant Combustion Engineering Co., The. (See Schutz, Joseph M., assignor.)
Radio Corporation of America. (See Wright, G. M., and Smith, assignors.)
Raettig, Alfred W., Ann Arbor, Mich., assignor to Merritt Engineering & Sales Company, Inc., Lockport, N. Y. Glue spreading machine. 1,863,545; June 14.
Ragan, Frederick H., Cleveland, Ohio. Brake operating mechanism. 1,863,282; June 14.
Rainey, Paul M., assignor to Combination Selector Company, Incorporated, Montclair, N. J. Record-selecting system. 1,863,353; June 14.
Ralston, William E., assignor of one-half to W. A. Harris, Fort Worth, Tex. Shoe stretching device. 1,862,940; June 14.
Ramapo Ajax Corporation. (See Perdue, Whittier, assignor.)
Ramsay, Allan, assignor to Hendrick Manufacturing Company, Carbondale, Pa. Perforating sheet rubber. 1,862,633; June 14.
Ramsthaler, Louis, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Ferrule for tubes. 1,863,069; June 14.
Randall, Norman, Cleveland, and J. B. Dillard, Cleveland Heights, assignors to The Cleveland Twist Drill Company, Cleveland, Ohio. Extractor for screws and the like. 1,863,045; June 14.
Rashbaum, L. J., et al. (See Davis, Donald P., assignor.)
Rasmussen, Robert P., Glen Ellyn, Ill. Cooling products. 1,863,207; June 14.
Rawlings Manufacturing Company. (See Scudder, Mason, assignor.)
Raymond, Arthur B., Montclair, N. J. Cylinder for internal combustion engines. 1,862,970; June 14.
Raymond, Ralph, Nyack, and W. J. Scully, Hastings-upon-Hudson, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,862,549; June 14.
Rector, Orland B., Eaton, Colo. Device to retain moisture in land. 1,862,550; June 14.
Redmann, Robert G., Bristol, Conn. Open-joint mold. 1,862,982; June 14.
Reed, E. A., trustee of Garber Tool Company, bankrupt. (See Chambers, Ira L.)
Reed, George B., assignor to Budd Wheel Company, Philadelphia, Pa. Wheel construction. 1,863,126; June 14.
Reeves Manufacturing Company, The. (See Wendle, Virgil P., assignor.)
Reichmann, Reinhold. (See Schönfeldt, N., Reichmann, and Engelhardt.)
Reid, James S., Shaker Heights, assignor to The Reid Products Company, Cleveland, Ohio. Fluted channel. 1,862,705; June 14.
Reid Products Company, The. (See Reid, James S., assignor.)
Reilly, Peter C. (See Hansen, Mahlin S., assignor.)
Reliance Electric and Engineering Company, The. (See MacCutcheon, Alexander M., assignor.)
Remington Rand Inc. (See Link, Forest, assignor.)
Renault, Louis. (See Saives, Léon, assignor.)
Replogle, Daniel B., Berkeley, Calif., assignor to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, trustee. Adjustable roller support for airway cleaners. 1,862,941; June 14.
Replogle, John R., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerator. 1,862,634; June 14.
Replogle, John R., assignor to Kelvinator Corporation, Detroit, Mich. Controlling mechanism for refrigerating apparatus. 1,862,635; June 14.
Republic Fireproofing Company. (See Palmer, Alden J., assignor.)
Republic Metalware Company. (See Le Sauvage, G. R., and Padelford, assignors.)
Reschke, William F., Wichita, Kans. Feed grinding mill. 1,862,907; June 14.
Reynolds Spring Company. (See McNally, Edward D., assignor.)
Ricard, Eloi, and H. M. Guinot, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y. Continuous process for separating organic liquids. 1,862,706; June 14.
Rice, Edward E., North Quincy, Mass. Machine for hooking rugs and the like. 1,862,768; June 14.
Richardson, Arthur T., Geneva, Ill. Core. 1,862,908; June 14.
Riddell, W. A., Company. (See Deisler, Harry W., assignor.)
Rieber, Frank, San Francisco, Calif., assignor to General Electric Company. Magnetometer. 1,863,415; June 14.
Rifenberick, William L., and C. O. Sandstrom, Los Angeles, Calif. Heat exchanger unit. 1,862,707; June 14.
Ringwald, Clarence, South Bend, Ind., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Starter drive. 1,862,806; June 14.
Rite-Rite Mfg. Co. (See Hill, Ernest E., assignor.)
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Wardrobe case. Re18,499; June 14.
Robbins, Alvin, Douglas, Wyo. Floating water wheel. 1,863,550; June 14.
Roberts, George H., Rock Island, Ill., assignor to American Trust Co., trustee, Davenport, Iowa. Piston ring. 1,862,983; June 14.
Robertson, H. H., Company. (See Burns, John E., assignor.)
Robertson, H. H., Company. (See Young, James H., assignor.)
Robertson, Henry M., et al. (See Hoermann, Frederik E., assignor.)
Robinson, Roy H., Chicago, Ill. Tennis racket. 1,862,581; June 14.
Robson, Stanley, Avonmouth, England. Roasting of zinc sulphide ores. 1,862,828; June 14.
Rockwood Sprinkler Company of Massachusetts. (See Howard, Clifton P., assignor.)
Rode, Alfred B., assignor to Rode & Brand, New York, N. Y. Toy. 1,863,167; June 14.
Rode & Brand. (See Rode, Alfred B., assignor.)
Rodgers, John D., Griffin, Ga. Atomizer. 1,862,636; June 14.
Roedding, Gordon E., assignor to Grand Rapids Brass Company, Grand Rapids, Mich. Latch. 1,863,536; June 14.
Roempler, Frederick, Chicago, Ill. Garment shipping container. 1,862,829; June 14.
Roffey, Frank, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited. Storing acetylene. 1,863,501; June 14.
Rogers, Almerin E., Arlington, Calif. Nursing bottle. 1,863,283; June 14.

Rogers, Wilford, Logan, Utah. Roller screen for automobiles. 1,863,255; June 14.
Rollman, Michael A., Mount Joy, Pa. Electric sadiron. 1,863,284; June 14.
Root, A. I., Company, The. (See Root, Huber H., assignor.)
Root, Huber H., assignor to The A. I. Root Company, Medina, Ohio. Candle and method relating thereto. 1,863,416; June 14.
Rosander, Albert P., Forest Park, and F. P. Tikalsky, La Grange, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Apparatus for actuating the cores of a die casting machine. 1,862,551; June 14.
Rosenberg, Gordon W., Philadelphia, Pa. Breeches. 1,863,502; June 14.
Rosenberg, Louis F., Providence, R. I. Practice golf ball. 1,862,708; June 14.
Rossman, Edwin F. (See Kunkle, B. D., and Rossman.)
Rossman, Edwin F., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,863,315; June 14.
Rothert, Gerhard. (See Lubberger, F., and Rothert.)
Rowe, Raymond N., Plainville, assignor to The States Company, Hartford, Conn. Automatic series cut-out. 1,862,830; June 14.
Rowland, Tully C., Ferris, Tex. Butter machine. 1,863,452; June 14.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Dry pipe valve. 1,863,453; June 14.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Exhauster. 1,863,454; June 14.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Sealing and release device. 1,863,455; June 14.
Ruddock, William, Whittier, Calif. Hoisting apparatus for power operated shovels. 1,862,862; June 14.
Rudolph, Corrie F. (See Gebhard, L. A., and Rudolph.)
Rundlett, William D., assignor to The James Hunter Machine Company, North Adams, Mass. Lapping machine. 1,862,984; June 14.
Ruppel, Frederick C., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Radiator for motor vehicles. 1,862,769; June 14.
Russell, Andrew N., Lachine, Quebec, Canada, assignor to The Paper and Textile Machinery Company, Sandusky, Ohio. Suction roller. 1,862,909; June 14.
Ruwitch, Julius, Norway, Mich. Hanger for rugs and the like. 1,863,030; June 14.
Ryan, James H., St. Louis, Mo. Tile partition. 1,862,831; June 14.
Ryan, Thomas J., Burnett, Calif. Distilling crude oil. 1,862,942; June 14.
Safety Grinding Wheel & Machine Company, The. (See Vance, George E., assignor.)
Sailer, Rudolph J., Townley, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine attachment. 1,863,168; June 14.
Salves, Léon, assignor to L. Renault, Billancourt, France. Suspension spring connection. 1,862,943; June 14.
Sakamoto, Kyugoro, Hamamatsu, Japan. Adjusting stopping-position of shuttles of power looms. 1,863,127; June 14.
Salem Pottery Co., The. (See Stanway, John G., assignor.)
Salerni, Piero M., Westminster, England. Power transmission mechanism. 1,863,110; June 14.
Salerni, Piero M., Westminster, England. Power transmission mechanism. 1,863,128; June 14.
Salt Lake Stamp Company. (See Archbold, Charles A., assignor.)
Samson-United Corporation. (See Samuels, Abe O., assignor.)
Samuels, Abe O., assignor to Samson-United Corporation, Rochester, N. Y. Electric toaster. Des. 87,172; June 14.
Sandstrom, Charles O. (See Rifenberick, W. L., and Sandstrom.)
Sandwick, Robert, Scobey, Mont., and E. Dahlstrom, Jamestown, N. Dak. Air humidifying furnace. 1,862,985; June 14.
Sano, Karel M. (See Hatton, W., and Sano.)
Sano, Tomitaro, Fresno, Calif. Match safe. 1,862,944; June 14.
Santo, Joseph M., et al. (See Hoermann, Frederik E., assignor.)
Sargent, William D., Newark, N. J. Wheel drive. 1,862,770; June 14.
Schenberg, Oscar. (See Ziedins, Jahnis, assignor.)
Schibsted, Helge, Syracuse, assignor, by mesne assignments, to The Borden Company, New York, N. Y. Treating milk powder. 1,863,355; June 14.
Schimming, Harold H., Minneapolis, Minn., assignor to American Telephone and Telegraph Company. Arrangement for producing modulated currents. 1,862,608; June 14.
Schippel, Henry F., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Cushion tire. 1,863,031; June 14.
Schlenker, Vesper A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,862,552; June 14.
Schlenker, Vesper A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,862,582; June 14.
Schlitz, John, Leavenworth, Kans. Combination lock. 1,863,503; June 14.
Schlotterhose, Conrad, Wesermunde-Wulsdorf, Germany. Extraction from substances containing oils, fats, etc. 1,862,945; June 14.
Schmid, Stephen, jr., Jersey City, N. J. Electric drive tractor. 1,863,504; June 14.
Schmidt, Lambert, jr., Brooklyn, assignor to himself and L. Freund, New York, N. Y. Fuse plug and socket. 1,863,383; June 14.
Schmidt, Walter. (See Beck, A., Schmidt, and Dibelka.)
Schneider, Edwin J., Jamaica, N. Y. Armored cable. 1,863,169; June 14.
Schneider, Edwin J., Jamaica, and M. B. Bradt, Brooklyn, assignors, by mesne assignments, to General Cable Corporation, New York, N. Y. Electric conductor. 1,863,354; June 14.
Schnering, Otto Y., assignor to Curtiss Candy Company, Chicago, Ill. Display container. 1,862,863; June 14.
Schon, David, Red Oak, Iowa. Hay loader. 1,863,505; June 14.
Schönfeldt, Nikolaus, Berlin-Charlottenburg, R. Reichmann, Berlin, and V. Engelhardt, Berlin-Charlottenburg, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Making porous bodies. 1,863,070; June 14.
Schopp, Otto. (See Morairity, A. F., Witten, and Schopp.)
Schorger, Arlie W., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Manufacture of ether derivatives of carbohydrates like cellulose. 1,863,208; June 14.
Schouten, Frank, Glen Arm, assignor to The Black & Decker Manufacturing Company, Towson, Md. Centrifugal flexible coupling. 1,862,864; June 14.
Schulte, Fritz. (See Herz, R., Steiger, and Schulte.)
Schultz, Alfred W., Waterloo, Iowa., assignor to Zeidler Concrete Products Machinery Company, St. Joseph, Mo. Machine for constructing concrete pipe. 1,862,709; June 14.
Schutz, Joseph M., assignor to The Radiant Combustion Engineering Co., Nashville, Tenn. Apparatus for burning fuel. 1,862,910; June 14.
Scottish Dyes, Limited. (See Drescher, H. A. E., Smith, and Thomas, assignors.)
Scovill Manufacturing Company. (See King, George A., assignor.)
Scudder, Mason, Clayton, assignor to Rawlings Manufacturing Company, St. Louis, Mo. Football, basket ball, and the like. 1,863,170; June 14.
Scully, Walter J. (See Raymond, R., and Scully.)
Sedge Products Company. (See Logan, C. F., assignor, and Mahnke.)
Seelinger, William J., Detroit, Mich. Combined auto door-lock and dovetail. 1,863,032; June 14.
Sevoy, John E., Seattle, Wash. Container. 1,862,553; June 14.
Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Timing and recording mechanism. 1,862,946; June 14.
Shank, McConnell, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Making molded articles. 1,863,209; June 14.
Shannon, Ellwood M., Bala, Pa. Six-wheel tender truck. 1,863,506; June 14.
Shapiro, Jack L., New York, N. Y. Dental bridgework attachment device. 1,863,230; June 14.
Sharron, Joel G. (See Proffitt, D. K., and Sharron.)
Shaw, Daniel T., Portland, Me. Signal transmitter. 1,863,285; June 14.
Shaw, Thomas, Woonsocket, R. I. Nesting bin. 1,862,609; June 14.
Shepherdson, Arnold. (See Hallwood, A. J., Shepherdson, and Stewart.)
Sheppard, Henry, Derby, England. Hydraulic cartridge for use in mining, quarrying and like operations. 1,863,286; June 14.
Sherick, Chester D. (See Sherick, Willis H., assignor.)
Sherick, Willis H., Philadelphia, assignor to C. D. Sherick, Washington Borough, Pa. Combination house number and mail chute. 1,863,526; June 14.
Shickluna, Joseph J. (See Hood, R. A., and Shickluna.)
Shimer, John M., Wilkinsburg, Pa., assignor to Wilson-Snyder Manufacturing Company. Driving mechanism. 1,862,807; June 14.
Shonnard, Harold W., Montclair, assignor to Elevator Supplies Company, Inc., Hoboken, N. J. Electric door operator. 1,863,417; June 14.
Sibson, Walter W. and H. H. Wigglesworth, assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Automatic drying machine. 1,862,771; June 14.
Sieger, Lawrence J. (See Powers, G. G., and Sieger.)
Sieling, Edward H., Chicago, Ill. Ring for urn bags. 1,863,418; June 14.
Siemens & Halske Aktiengesellschaft. (See Lubberger, F., and Rothert, assignors.)
Siemens & Halske, Aktiengesellschaft. (See Schönfeldt, N., Reichmann and Engelhardt, assignors.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Ossanna J., Graner and Hofmann, assignors.)
Silex Company, The. (See Wolcott, Frank E., assignor.)
Silica Gel Corporation, The. (See Miller, Ernest B., assignor.)

Silverman, Edward L., New York, N. Y. Reflector. 1,863,171; June 14.
Silverman, William, and M. Constantine, Providence, R. I. Jewelry construction. 1,862,710; June 14.
Simon, Abram. (See Bobbin, L., Simon and Benderson.)
Simplex Equipment Company. (See Blake, Eli J., assignor.)
Singer Manufacturing Company, The. (See Chason, Daniel H., assignor.)
Singer Manufacturing Company, The. (See Sailer, Rudolph J., assignor.)
Singer Manufacturing Company, The. (See Waterman, Max L., assignor.)
Sisson, Vinton E., Chicago, Ill. Bracket support for coupler release rods. 1,863,142; June 14.
Sjoden, Eric, Buffalo, assignor to American Radiator Company, New York, N. Y. Core apparatus. 1,862,986; June 14.
Skandria Furniture Company, The. (See Aldeen, G. W. and Carlson, assignors.)
Skriba, Rudolph A., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Abrading apparatus. 1,862,583; June 14.
Sky Projector Corporation. (See Matthews, Harry G., assignor.)
Sky Specialties Corporation. (See Stover, Frank B., assignor.)
Slatcher, Alfred G., Cleveland, Ohio. Fluid actuated tool. 1,862,637; June 14.
Slatcher, Alfred G., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Air line lubricator. 1,863,551; June 14.
Slater, Burr H. (See Barok, G. D., and Slater.)
Sleeper & Hartley, Inc. (See Nigro, Michel, assignor.)
Sleicher, Charles A. (See Willcutt, W. B., and Sleicher.)
Slepian, B., Company. (See Slepian, Joseph, assignor.)
Slepian, Joseph, Pittsburgh, Pa., assignor to B. Slepian Company. Shoe tap. 1,863,356; June 14.
Small, Arthur E., Chicago, Ill., assignor to P. H. Murphy Company, New Kensington, Pa. Load lifting device for railway cars. 1,862,711; June 14.
Small, Arthur E., Chicago, Ill., assignor to P. H. Murphy Company, New Kensington, Pa. Load lifting arrangement for railway cars. 1,862,712; June 14.
Small, Norman M., assignor to Frick Company, Waynesboro, Pa. Carbon dioxide ice machine. 1,863,287; June 14.
Smith, Arthur E., Newton, Mass., assignor to Bernitz Furnace Appliance Company, Boston, Mass. Furnace wall. 1,862,713; June 14.
Smith & Davis Manufacturing Company. (See Duvall, William J., assignor.)
Smith, Frank, Elland, England. Air filter. 1,863,456; June 14.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,862,772; June 14.
Smith, Lloyd B., Moorestown, N. J., and E. H. Ten Broeck, assignors to The Atlantic Refining Company, Philadelphia, Pa. Filter press. 1,863,071; June 14.
Smith, Sidney B. (See Wright, G. M., and Smith.)
Smith and Wesson, Inc. (See Wesson, Harold, assignor.)
Smith, William. (See Drescher, H. A. E., Smith, and Thomas.)
Smith, Willoughby S., Newton Poppleford, H. J. Garnett, Solefields, Seven Oaks, and J. N. Dean, Orpington, England. Manufacture of articles from thermoplastic materials. 1,862,947; June 14.
Smythe, Edwin H., Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,862,554; June 14.
Smythe, Edwin H., Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound radiator and making the same. 1,863,072; June 14.
Smythe, Edwin H., Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Tensioning and for mounting diaphragms. 1,863,073; June 14.
Snelling, Walter O., Allentown, Pa. Refining of copper. 1,863,419; June 14.
Snelling, Walter O., Allentown, Pa. Refining of copper. 1,863,420; June 14.
Snoddy, Edward C., Winston-Salem, N. C. Baby blanket. 1,863,256; June 14.
Snow, Herbert C., Auburn, Ind., assignor to Manning & Co., Chicago, Ill. Battery mounting for automobiles. 1,862,714; June 14.
Snow, Norman L. (See Brelsford, H. E., and Snow.)
Snyder, Howard F., assignor, by mesne assignments, to The Maytag Company, Newton, Iowa. Washing machine and gyratator. 1,863,546; June 14.
Snyder, William A., Los Angeles, Calif. Camp table. 1,862,911; June 14.
Societe Industrielle de Mecanique Automobile et de Radio-Electricite. (See Bignand, Pierre, assignor.)
Solheim, Peter, Gjelthus, Modum, Norway. Checking apparatus. 1,862,808; June 14.
Solliday, Foster K., and C. De Ridder, assignors to National Brass Company, Grand Rapids, Mich. Right and left hand latch. 1,862,715; June 14.
Solliday, Foster K., assignor to National Brass Company, Grand Rapids, Mich. Latch bolt operating means. 1,862,716; June 14.
Sologaistoa, Manuel H. P., San Pedro Sula, Honduras, assignor to A. Guzman, New York, N. Y. Combined electric iron and electric stove. 1,862,912; June 14.
Sorrick, Elmer, Newark, assignor to M. Platt, Inc., Bayonne, N. J. Device for forming wire fasteners. 1,862,717; June 14.
Southgate, George T., Forest Hills, N. Y. Agglomerating and reducing ores. 1,863,507; June 14.
Speakman Company. (See Bloch, Leon, assignor.)
Sperry, Elmer A., jr., assignor to Sperry Gyroscope Company, Brooklyn, N. Y. Aircraft level indicating device. Des. 87,173; June 14.
Sperry Gyroscope Company. (See Sperry, Elmer A., jr., assignor.)
Spiller, William R., assignor to The White Motor Company, Cleveland, Ohio. Force amplifying means. 1,862,718; June 14.
Sprague, Elmer A., assignor of one-half to H. O. Kellogg, Caldwell, Idaho. Sash putty remover and glazing table. 1,863,508; June 14.
Sprague, Sidney, Boston, Mass. Cigarette case and lighter. 1,862,913; June 14.
Sprague-Sells Corporation. (See De Back, William, assignor.)
Spreckels, Claus A., New York, N. Y. Refining sugar. 1,862,719; June 14.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Refrigerating apparatus for bottled goods. 1,862,638; June 14.
Sproles, William V., La Feria, Tex. Self-weighing bin. 1,863,288; June 14.
Sprung, Abraham, assignor to Municipal Street Sign Co. Inc., New York, N. Y. Street sign. 1,863,357; June 14.
Square D Company. (See Kauffman, T. J., and Widmer, assignors.)
Stahl, Charles R., Stotesbury, W. Va. Material loading machine. 1,862,610; June 14.
Stallmann, Otto. (See Deinet, J., Goodrich, and Stallmann.)
Stallmann, Otto, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Mono-bromo-mono-chloro indanthrone and preparing the same. 1,862,865; June 14.
Standard Gas Equipment Corporation. (See O'Dowd, Henry W., assignor.)
Standard Oil Company. (See Anderson, Lossie E., assignor.)
Standard Oil Company. (See Moore, J. E., and Chenicek, assignors.)
Standard Oil Company. (See Voorhees, V., assignor.)
Standard Stoker Company, The. (See Turner, Edwin A., assignor.)
Stanway, John G., Wheeling, W. Va., assignor to The Salem Pottery Co., doing business as The Salem China Company, Salem, Ohio. Plate. Des. 87,175; June 14.
States Company, The. (See Rowe, Raymond N., assignor.)
Statler, Walter H. (See Faunce, B. F., and Statler.)
Stedfast Rubber Stamp Company. (See Clifford, James J., assignor.)
Stehli, Henry J., Cedar Grove, N. J. Sintering machine. 1,862,832; June 14.
Steiger, Norbert. (See Herz, R., Steiger, and Schulte.)
Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Housing for electrical devices. 1,862,720; June 14.
Sterling, Bernard A., Chicago, Ill. Hair waver. 1,862,721; June 14.
Sterling, Bernard A., Chicago, Ill. Hair waver. 1,862,722; June 14.
Stern, Sadie, assignor of one-third to M. Weil, St. Louis, and one-third to R. Kalish, University City, Mo. Kitchen-apron. 1,863,527; June 14.
Stevens, Harry D., Stoke, Coventry, England. Walking stick seat. 1,863,457; June 14.
Stewart, Alexander. (See Hallwood, A. J., Shepherdson, and Stewart.)
Stewart, Leroy C., assignor to The Dow Chemical Company, Midland, Mich. Magnesia cement composition. 1,863,528; June 14.
Stickels, Arthur E. (See Dunning, F., and Stickels.)
Stöckly, Jahann J., and R. Bartunek, Teltow, near Berlin, assignors, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Maintaining the composition of viscose precipitating baths containing magnesium sulphate. 1,863,172; June 14.
Stokes, Harlow T., Brooklyn, assignor to International Fire Equipment Corporation, West New Brighton, N. Y. Fire extinguisher. 1,862,584; June 14.
Stolp, Samuel S., assignor to Nachod & United States Signal Company, Inc., Louisville, Ky. Railway signaling flasher. 1,862,773; June 14.
Stooe, Edwin W., Longmeadow, and F. V. Grennor, Chicopee, Mass., assignors to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Shuttle replenishing loom. 1,862,987; June 14.
Stone, Frederick, assignor to Doheny-Stone Drill Co., Los Angeles, Calif. Core drill. Re18,500; June 14.
Stone, Nathaniel B., Washington, D. C. Resurfacing tool. 1,862,810; June 14.
Stone Straw Corporation. (See Platt, James B., assignor.)
Stonebridge, William E., New York, N. Y. Anti-panic lock mechanism. 1,863,129; June 14.
Storm, Adolph, assignor to Storm Manufacturing Co., Inc., Minneapolis, Minn. Boring machine. 1,862,866; June 14.

Storm Manufacturing Co. (See Storm, Adolph, assignor.)
Stover, Frank B., assignor to Sky Specialties Corporation, Detroit, Mich. Coupling for rubber covered tubing. 1,862,833; June 14.
Strauss, Joseph B., Chicago, Ill. Wheel. 1,862,807; June 14.
Strock, Joseph H., Los Angeles, Calif. Reamer and reamer chuck for pipe threading devices. 1,863,034; June 14.
Strong, Arthur J., Detroit, Mich. Grinding machine. 1,862,809; June 14.
Strong, Arthur J., Detroit, Mich. Junction box. 1,862,811; June 14.
Structural Gypsum Corporation. (See Amoss, Walter, assignor.)
Stuart, Thomas, Erdington, Birmingham, assignor of one-half to Dunlop Rubber Company Limited, Birmingham, England, and one-half to Jean R. Lacoste, Sylvestere Courlevale, Seine, France. Propelling apparatus applicable particularly to the propelling of lawn tennis balls and other game missiles and the like. 1,863,035; June 14.
Stuenkel, Edward F. (See Krage, Elmer C., assignor.)
Sukoff, Morris, Brooklyn, N. Y. Container. 1,862,808; June 14.
Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)
Sullivan Machinery Company. (See Nast, Paul H., assignor.)
Sulzer Frères Societe Anonyme. (See Treschsel, Max, assignor.)
Summers, Caleb E., Pontiac, assignor to General Motors Corporation, Detroit, Mich. V-type engine. 1,862,723; June 14.
Summers, Caleb E., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Lubricating system. 1,862,724; June 14.
Sun Oil Company. (See Thomas, Henry, assignor.)
Superheater Company, The. (See True, Charles H., assignor.)
Swaim, William R., Haskell, Tex. Typewriter cover. 1,863,130; June 14.
Swan, Harry, New York, N. Y. Razor blade container. 1,863,074; June 14.
Swanson, Albert J., Maywood, and J. R. Gardner, Bellewood, Ill. Garage door. 1,863,509; June 14.
Swartling, Hugo L., Berlin, Germany. Electromechanical change speed gearing. 1,862,774; June 14.
Swearingen, Oscar E., Mattoon, Ill. Hand reel. 1,862,611; June 14.
Symington, T. H., & Son, Inc. (See Martin, Mark H., assignor.)
Symons, Edgar B., Hollywood, Calif., assignor, by mesne assignments, to Nordberg Manufacturing Company, Milwaukee, Wis. Crushing apparatus. 1,863,529; June 14.
Szulczewski, Phillip, Milwaukee, Wis. Doughnut cooker and tripper. 1,863,210; June 14.
Taber, William P., Adena, Ohio, assignor, by mesne assignments, to Pittsburgh Coal Company, Pittsburgh, Pa. Supporting roof strata during the mining of minerals. Re18,491; June 14.
Tainton, Urlyn C., St. Louis, Mo. Roasting ores and concentrates. 1,862,869; June 14.
Tamburo, Giuseppe S. (See Tamburo, Salvatore S. and G. S.)
Tamburo, Salvatore S. and G. S., New Kensington, Pa. Combined penholder and inkwell. 1,862,988; June 14.
Tashjian, Armen H., Cleveland, Ohio. Combination steel joist and decking for floor construction. 1,863,257; June 14.
Tashjian, Armen H., Cleveland, Ohio. Light floor construction for skyscrapers. 1,863,258; June 14.
Taylor, Harry, Burlington, N. J. Tool holder. 1,863,131; June 14.
Taylor, Irwin R., Gary, Ind., assignor to American Sheet and Tin Plate Company. Catcher. 1,863,510; June 14.
Tear, James D., Schenectady, N. Y., assignor to General Electric Company. Electromagnetic compass. 1,863,421; June 14.
Technicolor Motion Picture Corporation. (See Ball, Joseph A., assignor.)
Teletype Corporation. (See Krum, Howard L., assignor.)
Teletype Corporation. (See Nachumsohn, Irving, assignor.)
Ten Broeck, Edward H. (See Smith, L. B., and Ten Broeck.)
Terasaka, Yasomatsu, Jackson Heights, N. Y. Game. 1,863,358; June 14.
Ternstedt Manufacturing Company. (See Field, H. C., and Andersen, assignors.)
Terranova, Salvatore. (See Mangione, J., and Terranova.)
Terry, Charles M., assignor to A. W. Cash Company, Decatur, Ill. Valve. 1,863,075; June 14.
Terry, Roy V., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Lens tube adjusting appliance. 1,863,384; June 14.
Texas Company, The. (See De Florez, Luis, assignor.)
Texas Company, The. (See Fairbairn, George C., assignor.)
Thalhammer, Karl W., Los Angeles, Calif. Prepayment telephone. 1,862,639; June 13.
Thermal Engineering Corporation. (See Foster, William H., assignor.)
Thoen, Lowell H., Stockton, assignor to Caterpillar Tractor Company, San Leandro, Calif. Pick-up guard adapter. 1,862,775; June 14.
Thomas, Henry, Ridley Park, assignor to Sun Oil Company, Philadelphia, Pa. Oil cracking apparatus. 1,863,173; June 14.
Thomas, John. (See Drescher, H. A. E., Smith, and Thomas.)
Thomas, Robert, and W. Thomas, Philadelphia, Pa. Dilator. 1,862,725; June 14.
Thomas, William. (See Thomas, Robert and W.)
Thomasson, Robert C., Alderwood Manor, Wash. Expansion joint groove forming device. 1,862,612; June 14.
Thompson Manufacturing Company. (See Thompson, Walter V. E., assignor.)
Thompson Products, Incorporated. (See Hufferd, G. H., and Graham, assignors.)
Thompson, Vincent, et al, legal representatives. (See Parsons, C. A., Carnegie, and Gardner.)
Thompson, Walter V. E., assignor to Thompson Manufacturing Company, Los Angeles, Calif. Spray adjustment means for sprinkler heads. 1,862,812; June 14.
Thompson, William L., Starkville, Miss. Bucket. 1,863,458; June 14.
Thomsen, Alfred M., San Francisco, Calif. Rotary ore furnace. 1,862,726; June 14.
Thomson, Robert F. (See Bradley, W. Loveluck, and Thomson.)
Thordarson, Chester H., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Mechanism for winding copper ribbon with taps into multiple coils. 1,862,727; June 14.
Thordarson Electric Manufacturing Company. (See Thordarson, Chester H., assignor.)
Thoresen, Ralph S. (See Macrae, J. N., and Thoresen.)
Thorne, Carl B., Hawkesbury, Ontario, Canada. Separating particles from free water. 1,863,422; June 14.
Thorne, William H., Grove City, Pa. Closure organization for collapsible tubes and like containers. 1,862,555; June 14.
Thune, Anton, Minneapolis, Minn. Weather stripping for freight car sidings. 1,863,231; June 14.
Tikalsky, Francis P. (See Rosander, A. P., and Tikalsky.)
Timberlake, Paul J., Jackson, Mich. Display card holder. 1,862,776; June 14.
Timbs, Edward. (See Faulkner, D. S., and Timbs.)
Timian, Harold H., assignor to Wheeler-Schebler Carburetor Company, Indianapolis, Ind. Carburetor. 1,862,585; June 14.
Timken Roller Bearing Company, The. (See Turner, Gilbert H., assignor.)
Tiscornia, James A., San Jose, Calif. Paste dispensing tube. 1,862,870; June 14.
Tomoda, Miyaji, Kichishoji, assignor to Kabushiki Kaisha Yokogawa Denki Seisakusho, Shibuya-Machi, Tokyo, Japan. Split core current transformer. 1,862,613; June 14.
Townsley, Frederick A., St. Albans, N. Y. Safety appliance for aircraft. 1,862,989; June 14.
Transery Corporation. (See Johnson, Malcolm S., assignor.)
Trans-Lux Daylight Picture Screen Corporation. (See Bowen, Lester W., assignor.)
Travis, Roscoe C., Bowling Green, Va. Moth eradicator. 1,863,511; June 14.
Trbojevich, Nikola, Detroit, Mich. Worm hob. 1,863,512; June 14.
Trechsel, Max, assignor to the Firm of Sulzer Frères Societe Anonyme, Winterthur, Switzerland. Double-acting two-stroke internal combustion engine. 1,862,640; June 14.
Trelber, Theodore R., Chicago, Ill. Burial record container. Des. 87,176; June 14.
Tremolada, Guglielmo, assignor of one-half to Emsco Derrick & Equipment Company, Los Angeles, Calif. Reverse gear mechanism. 1,862,871; June 14.
Triumph Trap Company. (See Adams, Francis E., assignor.)
Triumph Trap Company. (See Pneuman, James I., assignor.)
Trudeau, Max O., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,862,834; June 14.
True, Charles H., Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Manufacture of return bends and similar structures. 1,863,033; June 14.
Trumbull Electric Manufacturing Company, The. (See Hammerly, Herman J., assignor.)
Tschiya, Kousuke, Sausalito, Calif. Container and making same. 1,862,835; June 14.
Turano, Adolphus F., New York, N. Y. Golf ball carrier. 1,862,614; June 14.
Turner, Albert, Shrewsbury, Mass., assignor to The Heald Machine Company, Worcester, Mass. Fluid pressure actuating mechanism. 1,863,076; June 14.
Turner, Charles S., Detroit, Mich. Single header multiple-pass superheater. 1,863,174; June 14.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive stoker. 1,863,289; June 14.
Turner, Gilbert H., assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing. 1,862,641; June 14.

Tygart Valley Glass Company. (See Noble, Gilbert C., assignor.)
Underwood Drilling Company. (See Dublin, Reagan C., assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)
Union Bed and Spring Company. (See Powers, G. G., and Sieger, assignors.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Unit Corporation of America. (See Bixby, Leo A., assignor.)
United Shoe Machinery Corporation. (See Bassoni, Lewis J., assignor.)
United Shoe Machinery Corporation. (See Enslin, Herbert E., assignor.)
United Shoe Machinery Corporation. (See Knight, Ralph F., assignor.)
U. S. Industrial Alcohol Co. (See Ricard, E., and Guinot, assignors.)
United Velvet Cutters Association, Limited, The. (See Carmichael, Edford, assignor.)
Universal Battery Company. (See Watkins, Ray O., assignor.)
Universal Products Co., The. (See Goddard, Paul B., assignor.)
Universal Winding Company. (See Parks, Edward F., assignor.)
Urban, Adolph. (See Gnirs, W., and Urban.)
Urmston, James. (See Brazier, L. G., and Urmston.)
Vacuum Seal Company. (See Willcutt, W. B., and Sleicher, assignors.)
Vallet, Arsene. (See Garnier, Abel J. M., assignor.)
Van Buren, John, Brooklyn, N. Y. Container. 1,863,259; June 14.
Van Buren, John, Brooklyn, N. Y. Container. 1,863,260; June 14.
Van Buren, John, Brooklyn, N. Y. Container. 1,863,261; June 14.
Vance, George E., assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio. Apparatus for applying bushings. 1,862,813; June 14.
Vance, John S., Chicago, Ill. Drapery supporting device. 1,862,836; June 14.
Van Eck, Jacob, and F. Fekkes, Rotterdam, Netherlands; said Fekkes assignor to H. Fekkes. Electric incandescent lamp. 1,863,423; June 14.
Van Veen, Anton, West Hartford, Conn., assignor, by mesne assignments, to P. R. Hoopes, Hartford, Conn. Trimming machine. 1,862,990; June 14.
Vargha, Andrew L., assignor to General Motors Corporation, Detroit, Mich. Disk clutch. 1,862,991; June 14.
Vargha, Andrew L., assignor to General Motors Corporation, Detroit, Mich. Coil spring. 1,862,992; June 14.
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,862,728; June 14.
Victor, Benjamin J. (See August, A. A., and Victor.)
Victor Manufacturing and Gasket Company. (See August, A. A., and Victor, assignors.)
Victor Manufacturing & Gasket Company. (See Oven, Frank J., assignor.)
Vlita, Iver, Cle Elum, Wash. Clam digger. 1,862,777; June 14.
Viking Pump Company. (See Jensen, Amos V., assignor.)
Vincent, Louis H., assignor of one-half to J. C. Leavens, Santa Paula, Calif. Educational apparatus. 1,862,872; June 14.
Vinnick, William, Whitestone, Flushing, N. Y. Cutting implement. 1,863,424; June 14.
Vischer, Alfred, jr., Ridgewood, N. J., assignor to The Financial Press Companies of America, Boston, Mass. News ticker casing or stand. Des. 87,174; June 14.
Vischer, Alfred, jr., Ridgewood, N. J., assignor, by mesne assignments, to The Financial Press Companies of America, Boston, Mass. Type wheel mounting for printing telegraphs. 1,863,359; June 14.
Vitelli, Frank, Chicago Heights, assignor to Inland Steel Company, Chicago, Ill. Bending machine. 1,863,513; June 14.
Vivian, George S., London, assignor of one-half to T. B. Ford Limited, High Wycombe, Buckinghamshire, England. Fountain pen. 1,862,566; June 14.
Volz, Gottlieb W., Long Beach, Calif. Compound valve motion for steam pumping engines. 1,862,873; June 14.
Von Henke, Edmund J., assignor to American Electric Fusion Corporation, Chicago, Ill. Transformer. 1,862,642; June 14.
Voorhees, Vanderveer, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill. Separating wax from oil. 1,862,874; June 14.
Vought, Arthur L., Sparta, N. J. Combination frying pan and cooking oven. 1,862,778; June 14.
Wagner, William E., Alton, assignor to Western Cartridge Company, East Alton, Ill. Propellant powder and making the same. 1,862,914; June 14.
Wagner, William E., Alton, assignor to Western Cartridge Company, East Alton, Ill. Propellant powder and making the same. 1,862,915; June 14.
Wahl, Charles V. (See White, J. H., and Wahl.)
Wainwright, Joseph E., Brooklyn, N. Y. Valve spring compressor. 1,862,948; June 14.
Walker, Henry E., Portland, Oreg. Processing reel. 1,862,615; June 14.
Walker, John C., Eldorado, Kans., assignor, by mesne assignments, to Empire Oil and Refining Company, Dover, Del. Treating wet oils. 1,863,143; June 14.
Walker, John E., Cedar City, Utah. Removable bed or body for wheeled vehicles. 1,863,514; June 14.
Wallace & Sons Manufacturing Company, R. (See Warren, William S., assignor.)
Wallbillich, John J., and F. J. Potter, assignors to General Motors Corporation, Detroit, Mich. Control mechanism for presses. 1,863,425; June 14.
Walter, Georg, Vienna, Austria, assignor to I. J. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of artificial masses. 1,863,426; June 14.
Ward, Louis E., and R. M. Hunter, assignors to The Dow Chemical Company, Midland, Mich. Electrolytic apparatus. 1,863,885; June 14.
Warren, S. D., Company. (See Boyer, Sylvester, assignor.)
Warren, Virgil P., Atlanta, Ga. Defrosting refrigeration system. 1,863,427; June 14.
Warren, William S., Meriden, assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or similar article. Des. 87,177; June 14.
Washington Garter Corp. (See Beskind, M. M., and Mayper, assignors.)
Waterman, L. E., Company. (See Larsen, Gabriel, assignor.)
Waterman, Max L., Fairfield, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine loop-taker. 1,863,077; June 14.
Watkins, Ray O., assignor to Universal Battery Company, Chicago, Ill. Grid pasting machine. 1,863,175; June 14.
Watts, Felix J., assignor to H. A. Douglas, Bronson, Mich. Assembling device. 1,862,729; June 14.
Wayne Company. (See Griffin, William M., assignor.)
Wayne Company. (See Hartman, Jacob W., jr., assignor.)
Weatherhead, Albert J., jr., Cleveland, Ohio. Pipe and tube coupling. 1,863,360; June 14.
Weatherly, Adele G., Minneapolis, Minn. Slip. 1,863,290; June 14.
Weaver, William A., et al. (See Bogia, Louis F., assignor.)
Weber, John J., Wilmette, assignor to J. H. Jochum, jr., Chicago, Ill. Surface ornamentation and producing same. 1,862,875; June 14.
Webster, Raymond. (See Bullock, E. W., and Webster.)
Webster, Towner K., jr., Winnetka, Ill. Traction mat. 1,863,316; June 14.
Webster, Walter W. (See Johnson, D. O., and Webster.)
Weckbaugh, Joseph V., New York, and S. K. Nester, Geneva, N. Y.; said Weckbaugh assignor to said Nester. Machine for disintegrating, mixing, and emulsifying materials. 1,863,515; June 14.
Wehrle Company, The. (See Pickup, George E., assignor.)
Weil, Maurice, et al. (See Stern, Sadie, assignor.)
Weis Manufacturing Company, The. (See Consor, Herbert A., assignor.)
Welhaven, Edward, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Tool. 1,862,556; June 14.
Wells, Harold D., Glens Falls, N. Y. Proportioning and metering apparatus. 1,862,643; June 14.
Wells, Wilton I., New Albany, Ind. Display device. 1,863,516; June 14.
Wendle, Virgil P., assignor to The Reeves Manufacturing Company, Dover, Ohio. Cover lock for pails. 1,862,730; June 14.
Wendler, Adolph F., Buffalo, assignor to National Aniline & Chemical Co. Inc., New York, N. Y. Ball mill. 1,862,557; June 14.
Wesson, Harold, assignor to Smith and Wesson, Inc., Springfield, Mass. Siphon-break for flush valves, etc. 1,862,731; June 14.
Westcott, Clyde M., Los Angeles, Calif. Seeder. 1,862,732; June 14.
Western Cartridge Company. (See Wagner, William E., assignor.)
Western Electric Company. (See de Vriendt, Charles, assignor.)
Western Electric Company. (See Hartley, G. C., and Wright, assignors.)
Western Electric Company. (See Hatton, W., and Sano, assignors.)
Western Electric Company. (See Kelly, Mervin J., assignor.)
Western Electric Company. (See Koll, Henry M., assignor.)
Western Electric Company. (See Rosander, A. P., and Tikalsky, assignors.)
Western Electric Company. (See Skriba, Rudolph A., assignor.)
Western Electric Company. (See Welhaven, Edward, assignor.)
Western Union Telegraph Company, The. (See Hoover, R., and Haupt, assignors.)
Westinghouse Electric & Manufacturing Company. (See Geiselman, Ralph A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Mason, Ruric C., assignor.)

Westinghouse Electric & Manufacturing Company. (See Zworykin, Vladimir K., assignor.)
Weston, William S., Columbia, S. C. Testing screen. 1,863,291; June 14.
Westrick, Harry A., Saline, Mich. Window screen for motor vehicles. 1,863,428; June 14.
Wetzel, Harry C., assignor, by mesne assignments, to Playskool Institute, Inc., Milwaukee, Wis. Constructional toy. 1,862,558; June 14.
Weymouth, Harry G., and H. Chrisman, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Strainer for mechanical refrigeration. 1,862,916; June 14.
Wheeler-Schebler Carbureter Company. (See Timian, Harold H., assignor.)
White, John H., Cranford, N. J., and C. V. Wahl, assignors to Bell Telephone Laboratories Incorporated, New York, N. Y. Workable magnetic compositions containing principally iron and cobalt. 1,862,559; June 14.
White Motor Company, The. (See Spiller, William R., assignor.)
White, S. S. Dental Manufacturing Company, The. (See Angell, Robert C., assignor.)
White, William D., Ocala, Fla. Smudge brick. 1,863,517; June 14.
Whitehead & Kales Company. (See Judd, Irving H., assignor.)
Whitman & Barnes, Incorporated. (See Harrington, Ferris T., assignor.)
Whitney, Wiley, Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,863,292; June 14.
Wicke, Carl, Amsterdam, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Ledger blade grinder. 1,863,036; June 14.
Wickenden, Leonard, Manhasset, N. Y., and S. A. W. Okell, Cranford, N. J., assignor to J. J. Naugle, Rye, N. Y. Preparing decolorizing carbon and the like. 1,863,361; June 14.
Widmer, Jules A. (See Kauffman, T. J., and Widmer.)
Widmer, Stefan, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electric current rectifying control system. 1,863,293; June 14.
Wieden, Erich, Obligs, Germany. Pocket cigar lighter. 1,862,779; June 14.
Wieland, Charles F., and R. H. Hubbell, San Francisco, Calif.; said Wieland assignor to General Paint Corporation. Coating machine. 1,862,837; June 14.
Wieneke, George R., Chicago, Ill. Clothes drier. 1,862,644; June 14.
Wigglesworth, Harry H. (See Sibson, W. W., and Wigglesworth.)
Wild, Charles H., assignor to Burt Machine Company, Incorporated, Baltimore, Md. Machine for labeling bottles and the like. 1,863,176; June 14.
Wilderman, Meyer, Hampstead, London, England, assignor, by mesne assignments, to The American Wilderman Porous Ebonite Company, Inc., Philadelphia, Pa. Production of separators, diaphragms, filters, and the like, consisting of porous as well as of porous and non-porous ebonite and the like. 1,862,645; June 14.
Wile, Benjamin H., Louisville, Ky. Shock absorber. 1,863,144; June 14.
Wilhelm, Arthur M., Randolph, N. Y. Landing indicator for airports. Des. 87,178; June 14.
Willcutt, William B., New York, and C. A. Sleicher, Troy, assignors to Vacuum Seal Company, Inc., New York, N. Y. Vacuum jar. 1,862,560; June 14.
Willers, George E., assignor to A. D. Cook, Inc., Lawrenceburg, Ind. Deep well strainer. 1,862,838; June 14.
Williams, John D. (See Lasater, Joseph D., assignor.)
Williams, Walter J., Woodhaven, N. Y. Apparatus for and method of handling photographic prints or negatives. 1,863,132; June 14.
Williams, William E., San Francisco, Calif., assignor to Ditto, Incorporated, Chicago, Ill. Gelatin pad copying machine. 1,862,616; June 14.
Williston, Samuel H. (See Nichols, C. R., and Williston.)
Willmore, Charles B., Massena, N. Y., assignor to Aluminum Company of America, Pittsburgh, Pa. Bus bar joint. 1,863,429; June 14.
Wilson, Allen B., assignor to Acme Steel Company, Chicago, Ill. Concrete form clamp. 1,863,177; June 14.
Wilson-Snyder Manufacturing Company. (See Shimer, John M., assignor.)
Wilson Welder & Metals Company. (See Churchward, Alexander, assignor.)
Wimmer, Edward J., Manhattan, Kans. Drip pan for toilet tanks. 1,863,211; June 14.
Wine, William E., Toledo, Ohio. Railway hopper car. 1,862,781; June 14.
Wine, William E., Toledo, Ohio. Railway hopper car. 1,863,262; June 14.
Winkler, Karl, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of liquid hydrocarbons. 1,863,212; June 14.
Wintroath, John A., assignor to Peerless Pump Company, Los Angeles, Calif. Adjustable spider for deep well turbine pumps. 1,863,213; June 14.
Wintroath, John A., Los Angeles, assignor to Wintroath Pumps, Ltd., Alhambra, Calif. Improved impeller positioning device. 1,863,214; June 14.
Wintroath, John A., Los Angeles, Calif. Impeller-positioning device. 1,863,215; June 14.
Wintroath Pumps, Ltd. (See Wintroath, John A., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Gebhard, L. A., and Rudolph, assignors.)
Wired Radio, Inc. (See Harrison, Jamison R., assignor.)
Wired Radio, Inc. (See Hotopp, Alfred H., jr., assignor.)
Wired Radio, Inc. (See Hough, Clinton W., assignor.)
Wired Radio, Inc. (See Hund, August, assignor.)
Wired Radio, Inc. (See Nicolson, Alexander M., assignor.)
Wired Radio, Inc. (See Young, Leo C., assignor.)
Wise Patent and Development Company. (See Wise, Roy T., assignor.)
Wise, Roy T., Berkeley, Calif., assignor to Wise Patent and Development Company, New York, N. Y. Change speed gear. 1,862,993; June 14.
Witten, Samuel F. (See Moriarity, A. F., Witten, and Schopp.)
Woerner, Adolph, jr., Chicago, Ill. Art corner. 1,863,430; June 14.
Wolcott, Frank E., West Hartford, Conn., assignor to The Silex Company. Upper bowl cover for coffee makers. Des. 87,179; June 14.
Wolcott, Frank E., West Hartford, Conn., assignor to The Silex Company. Coffee maker. Des. 87,180; June 14.
Wolcott, Frank E., West Hartford, Conn., assignor to The Silex Company. Lower bowl cover for coffee makers. Des. 87,181; June 14.
Wolcott, Frank E., West Hartford, Conn., assignor to The Silex Company. Heater stand for coffee makers. Des. 87,182; June 14.
Wolcott, Frank E., West Hartford, Conn., assignor to The Silex Company. Coffee maker. Des. 87,183; June 14.
Wolff, Wallace B., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,863,317; June 14.
Wood, Henry R., Sierra Madre, Calif., assignor to The Patent and Licensing Corporation Boston, Mass. Shingle strip and making same. 1,863,178; June 14.
Wood, Walter. (See Camerota, Louis A., assignor.)
Woodcraft Corporation, The. (See Camp, Clifford B., assignor.)
Woodings, Robert T., Oakmont, assignor to Woodings-Verona Tool Works, Verona, Pa. Loop rail anchor. 1,862,780; June 14.
Woodings-Verona Tool Works. (See Woodings, Robert T., assignor.)
Woodland, Cecil R. (See Kessler, F., and Woodland.)
Woodland, John E., Richmond Hill, N. Y. Matting device for motion picture projectors. 1,863,078; June 14.
Woods, William J., Schenectady, N. Y., assignor to General Electric Company. Quick release hydraulic operator. 1,863,386; June 14.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal-combustion engine. 1,863,232; June 14.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Propeller attachment. 1,863,387; June 14.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Propeller. 1,863,388; June 14.
Wordingham, George, Milwaukee, Wis. Wrapper. 1,863,216; June 14.
World Bestos Corporation. (See Nanfeldt, William, assignor.)
Worms, Clarence, St. Louis, Mo. Radiator ornament. 1,863,179; June 14.
Wright, Dexter M., New York, N. Y. Baton. 1,863,079; June 14.
Wright, Esmond P. G. (See Hartley, G. C., and Wright.)
Wright, George M., Great Baddow, Chelmsford, and S. B. Smith, Gordonville, Chelmsford, England, assignor to Radio Corporation of America. Connecter housing. 1,862,876; June 14.
Wright, Horace C., Oak Park, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Electric toaster. 1,862,733; June 14.
Wright, Jesse C., Huntington Park, and L. F. Bonney, Los Angeles, assignors, by mesne assignments, to Globe Oil Tools Company, Los Nietos, Calif. Well drill. 1,862,814; June 14.
Wurdack, William, jr., assignor to Wm. Wurdack Electric Manufacturing Company, St. Louis, Mo. Bus-bar connecter. 1,863,362; June 14.
Wurdack, Wm., Electric Manufacturing Company. (See Wurdack, William, jr., assignor.)
Yelli, Ralph A., assignor of one-fifth to H. Mischler, Los Angeles, Calif. Airship. 1,863,217; June 14.
Young, Charles D. (See Farles, R., and Young.)
Young, Charles D., Haverford, Pa. Rail retaining key. 1,863,145; June 14.
Young, Charles D., Haverford, Pa. Rail retaining key. 1,863,146; June 14.
Young, James H., assignor to H. H. Robertson Company, Pittsburgh, Pa. Insulated electric conductor. 1,863,147; June 14.

Young, Leo C., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. System for reducing fading effects in radio communication. 1,863,518; June 14.
Zeidler Concrete Products Machinery Company. (See Schultz, Alfred W., assignor.)
Zell, David H., Brooklyn, N. Y. Coin bank. 1,863,148; June 14.
Zeun, Louis H., Catonsville, assignor of one-third to A. W. Adt and one-third to J. B. Adt, Baltimore, Md. Leaf feeding attachment for tobacco stemming machines. 1,863,149; June 14.
Ziedins, Jahnis, Riga, Latvia, assignor to Oscar Schenberg, New York, N. Y. Measuring apparatus. 1,863,133; June 14.
Zubaty, Joseph, and J. E. Eshbaugh, assignors to A C Spark Plug Company, Flint, Mich. Heat indicator. 1,862,994; June 14.
Zurcher, William F. (See Butler, G., and Zurcher.)
Zworykin, Vladimir K., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. View transmission system. 1,863,363; June 14.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 14TH DAY OF JUNE, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abrading apparatus. R. A. Skriba. 1,862,583; June 14.
Absorbent pad. W. C. Heitmeyer. 1,863,333; June 14.
Acetylene, Storing. F. Roffey. 1,863,501; June 14.
Acids and making same, Polyhalogenated fatty. K. Keller and F. Münz. 1,862,596; June 14.
Acids, Manufacturing halogen aryl-thiogly collic. R. Herz, N. Steiger, and F. Schulte. 1,862,504; June 14.
Acoustic device. V. A. Schlenker. 1,862,552; June 14.
Acoustic device. V. A. Schlenker. 1,862,582; June 14.
Acoustic device. E. H. Smythe. 1,862,554; June 14.
Adding machines, Automatic shuttle mechanism for. F. Link. 1,862,754. June 14.
Advertising novelty. J. A. Bolinger. 1,863,463; June 14.
Aeronautical machine. J. R. Porter. 1,862,803; June 14.
Aeroplane propelling means. H. M. Graf. 1,862,789; June 14.
Aeroplane safety wing construction. A. Parker. 1,862,939; June 14.
Aircraft level indicating device. E. A. Sperry, jr. Des. 87,173; June 14.
Aircraft, Movable sections in wings for. L. W. Mammen. 1,862,795; June 14.
Air humidifying furnace. R. Sandwick and E. Dahlstrom. 1,862,985; June 14.
Airplane. J. S. McDonnell, jr. 1,862,902; June 14.
Airship. R. A. Yelil. 1,863,217; June 14.
Alkali-cellulose press, Horizontal. W. Dützmann. 1,863,309; June 14.
Alloy. R. A. Hadfield. 1,863,159; June 14.
Aluminum alloy. E. M. Gingerich. 1,862,788; June 14.
Amalgam and product thereof, Forming an. H. S. Polin. 1,863,254; June 14.
Ammonia and composition therefor, Generation and application of. F. J. Metzger. 1,862,696; June 14.
Amplifier, Pick-up. A. Hund. 1,863,052; June 14.
Anchor, Loop rail. R. T. Woodings. 1,862,780; June 14.
Aniline, Catalytic manufacture of hexa hydro. W. Lommel and T. Goost. 1,862,599; June 14.
Annealing apparatus. P. E. Hunter. 1,863,053; June 14.
Anthraquinone derivatives, Production of. H. A. E. Drescher, W. Smith and J. Thomas. 1,862,786; June 14.
Anthraquinone derivatives, Production of. W. Bradley, R. J. Loveluck, and R. F. Thomson. 1,863,265; June 14.
Applicator, Thermal treatment. E. H. Odell. 1,863,533; June 14.
Apron, Kitchen. S. Stern. 1,863,527; June 14.
Architraves and the like upon faced concrete walls, Method of and apparatus for casting in position. E. H. Lockwood. 1,863,549; June 14.
Art corner. A. Woerner, jr. 1,863,430; June 14.
Article for use with library book charging system. J. J. Dickman. 1,862,530; June 14.
Articles from thermoplastic materials, Manufacture of. W. S. Smith, H. J. Garnett, and J. N. Dean. 1,862,947; June 14.
Articles, Making molded. M. Shank. 1,863,209; June 14.
Articles, Production of molded. T. A. Edison. 1,862,740; June 14.
Ash, Method of and apparatus for handling. F. B. Allen. 1,863,218; June 14.
Ash receiver for motor vehicles. J. H. Cohen. 1,862,661; June 14.
Assembling apparatus. A. W. Phelps and N. L. Penn. 1,863,314; June 14.
Assembling device. F. J. Watts. 1,862,720; June 14.
Atomizer. J. D. Rodgers. 1,862,636; June 14.
Attractor for game fish. E. G. Holtzclaw. 1,862,893; June 14.
Automobile attachment. R. B. Muffett. 1,862,977; June 14.
Automobile screen. L. Miller. 1,862,605; June 14.
Automobile hood lock. J. E. Bailey. 1,863,461; June 14.
Automobiles, Apparatus and method for handling and storing. F. P. Dinkelberg. Re18,493; June 14.
Awning and ventilator, Combination window. G. E. Parker. 1,862,967; June 14.
Bactericide and stabilizing it, Stabilized. M. S. Kharasch. 1,862,896; June 14.
Bag, pocketbook, and similar article of luggage, Hand. E. H. Allen. 1,863,150; June 14.
Bailer. G. W. Miller. 1,862,628; June 14.
Ball: *See*—
Golf ball. Illuminated ball.
Ball and projector therefor. H. C. Pearson. 1,862,904; June 14.
Ball mill. A. F. Wendler. 1,862,557; June 14.
Band, Poultry. J. Haas. 1,862,747; June 14.
Bank, Coin. D. H. Zell. 1,863,148; June 14.
Bar: *See*—
Cabinet bar.
Barrels or containers, Nesting. M. H. Matthews. 1,863,122; June 14.
Bath head, Shower. L. Bloch. 1,863,548; June 14.
Baths containing magnesium sulphate, Maintaining the composition of viscose precipitating. J. J. Stockly and R. Bartunek. 1,863,172; June 14.
Baton. D. M. Wright. 1,863,079; June 14.
Bearing, Antifriction. J. F. O'Connor. 1,862,765; June 14.
Bearing for balls of universal joints, etc. P. B. Goddard. 1,863,244; June 14.
Bearing, Roller. G. H. Turner. 1,862,641; June 14.
Bed, Hospital. W. J. Duvall. 1,862,820; June 14.
Bed or body for wheeled vehicles, Removable. J. E. Walker. 1,863,514; June 14.
Bedspring. G. G. Powers and L. J. Sieger. 1,862,905; June 14.
Belt, Tracklaying. R. E. Choate. 1,862,784; June 14.
Bend, Return. C. B. Harbison. 1,862,748; June 14.
Bending machine. F. Vitelli. 1,863,513; June 14.
Bends and similar structures, Manufacture of return. C. H. True. 1,863,033; June 14.
Bin: *See*—
Nesting bin. Self weighing bin.
Blades of safety razors, Device for sharpening the. W. Barsch. 1,863,431; June 14.
Blanket, Baby. E. C. Snoddy. 1,863,256; June 14.
Boat, Collapsible. J. Nowak. 1,863,498; June 14.
Bobbin. F. W. McConnel and A. Humphries. 1,862,694; June 14.
Boiler: *See*—
Superheater boiler.
Boiler. G. W. Franzheim. 1,863,476; June 14.
Boiler and firing it, Steam. C. E. Lucke. 1,863,541; June 14.
Bolt: *See*—
Wheel bolt. Window bolt.
Bookmark. K. Grosz. 1,862,573; June 14.
Bookstand. G. W. Aldeen and A. A. Carlson. 1,862,562; June 14.
Boring machine. A. Storm. 1,862,866; June 14.
Bottle cap. E. S. Bellows. 1,863,081; June 14.
Bottle cap. R. A. Graham. 1,862,620; June 14.
Bottle carrier, Milk. R. A. Hood and J. J. Shickluna. 1,863,136; June 14.
Bottle crowning machine. J. Kantor. 1,863,223; June 14.
Bottle, jar, and other similar vessels. F. L. Darling. 1,863,102; June 14.
Bottle, Nursing. A. E. Rogers. 1,863,283; June 14.
Bottle or similar container. F. S. Barbiers. Des. 87,142; June 14.
Box: *See*—
Cigarette and cigar box. Collapsible box.
Cold storage box. Junction box.
Box. G. H. Hamilton. 1,862,535; June 14.
Box. T. P. Prather and E. C. Marlowe. 1,862,980; June 14.
Box construction, Match. H. J. Hauser. 1,862,853; June 14.
Box labeling and edging. W. H. Meyer and W. A. Jelsen. 1,863,023–4; June 14.
Bracket: *See*—
Venetian blind bracket.
Bracket device. J. Landau. Re18,490; June 14.
Bracket for paint pots, Ladder. E. J. Moelter and D. R. Bates. 1,862,701; June 14.
Bracket support for coupler release rods. V. E. Sisson. 1,863,142; June 14.
Brake: *See*—
Internal brake.
Brake caster. W. H. Noelting and E. A. Brokaw. 1,863,349; June 14.
Brake operating mechanism. F. H. Ragan. 1,863,282; June 14.
Bread, cakes, and other products of a similar nature, Making. W. J. McGroarty. 1,863,277; June 14.
Breeches. H. Z. Isaacs. 1,863,482; June 14.
Breeches. G. W. Rosenberg. 1,863,502; June 14.
Brick, Smudge. W. D. White. 1,863,517; June 14.
Bromides, Making. C. W. Jones. 1,863,375; June 14.
Bucket. W. L. Thompson. 1,863,458; June 14.
Buffer-stem wear plate adjuster. M. S. Johnson. 1,862,857; June 14.
Building construction. A. J. Palmer. 1,863,543; June 14.

Building material, Insulating. G. L. Oswalt. 1,862,702; June 14.
Building material, Making a fibrous. E. C. Loetscher. 1,862,888; June 14.
Building structure. F. M. Venzie. 1,862,728; June 14.
Burner: *See*—
Gas burner. Oil burner.
Bus bar joint. C. B. Willmore. 1,863,429; June 14.
Bushings, Apparatus for applying. G. E. Vance. 1,862,813; June 14.
Butter machine. T. C. Rowland. 1,863,452; June 14.
Button machine, Multiple. N. B. Hafleigh. 1,863,478; June 14.
Button, Tack fastened. G. A. King. 1,862,597; June 14.
Cabinet bar. M. Booth. 1,862,654; June 14.
Cabinet, Kitchen. H. L. Kuchins. Des. 87,160; June 14.
Cable, Armored. E. J. Schneider. 1,863,169; June 14.
Cable connecter. S. B. Matthes. 1,863,021; June 14.
Cable, Electrical. D. H. Murphy. 1,863,347; June 14.
Calculating machine. R. Martin. 1,862,901; June 14.
Camp table. W. A. Snyder. 1,862,911; June 14.
Can bodies, Forming and storing cylindrical. A. L. Kronquest. 1,863,446; June 14.
Can closure. L. Hirsch and E. A. Harriss. 1,863,336; June 14.
Can closures, Manufacturing. L. Hirsch and E. A. Harriss. 1,863,337; June 14.
Candle and method relating thereto. H. H. Root. 1,863,416; June 14.
Cap, Dispensing. J. J. McDonald. 1,862,973; June 14.
Cap for collapsible tubes. F. J. Costello. 1,862,662; June 14.
Car construction. G. G. Gilpin. 1,863,243; June 14.
Car construction. H. S. Hart and D. Hindahl. 1,862,677; June 14.
Car construction, Railway. K. Edahl. 1,863,400; June 14.
Car, Mine. B. F. Faunce and W. H. Statler. 1,862,670; June 14.
Car, Poultry. P. J. Dulgnan. 1,863,367; June 14.
Car, Railway hopper. W. E. Wine. 1,862,781; June 14.
Car, Railway hopper. W. E. Wine. 1,863,262; June 14.
Car, Refrigeration. E. B. Miller. 1,862,604; June 14.
Carbon and the like, Preparing decolorizing. L. Wickenden and A. W. Okell. 1,863,361; June 14.
Carbon dioxide, Producing solid. J. S. Belt. 1,863,263; June 14.
Carburetor. P. W. Ensign. 1,863,195; June 14.
Carburetor. O. Halm. 1,863,402; June 14.
Carburetor. C. F. Johnson. 1,863,161; June 14.
Carburetor. H. B. Norris. 1,862,978; June 14.
Carburetor. H. H. Timian. 1,862,585; June 14.
Card, Display. F. E. Exerson. 1,862,566; June 14.
Carding engine. G. C. Laurency. 1,862,542; June 14.
Carrier: *See*—
Bottle carrier. Golf ball carrier.
Carrier. H. M. Koll. 1,862,540; June 14.
Carrier for hand trucks, Detachable. S. J. Pehrsson. 1,862,546; June 14.
Carton, Shipping and display. F. Kennett. 1,862,685; June 14.
Cartridge for use in mining, quarrying, and like operations, Hydraulic. B. Sheppard. 1,863,286; June 14.
Case: *See*—
Cigarette case. Wardrobe case.
Display case.
Case and lighter, Cigarette. S. Sprague. 1,862,913; June 14.
Casing head. A. Boynton. 1,862,920; June 14.
Casing or stand, News ticker. A. Vischer, jr. Des. 87,174; June 14.
Casting, Apparatus for. A. E. Greene. 1,863,371; June 14.
Catch, Bag frame side. W. A. Hellmann. 1,862,621; June 14.
Catcher. I. R. Taylor. 1,863,510; June 14.
Cathode device, Hot. A. W. Hull. 1,863,407; June 14.
Cathode for electric discharge devices. J. W. Case. 1,863,394; June 14.
Cellulose esters, Manufacture of. H. Dreyfus. 1,862,589; June 14.
Chair. J. M. Brower. Des. 87,144; June 14.
Chair or similar article of furniture. F. Mastrangelo and A. Mastrangelo. Des. 87,163; June 14.
Channel, Fluted. J. S. Reid. 1,862,705; June 14.
Checkstrap or the like and picker stick for underpick or automatic looms. G. B. Handley and E. G. Handley. 1,863,271; June 14.
Checking apparatus. P. Solheim. 1,862,808; June 14.
Cheese, Apparatus for treating. A. W. Bell. 1,862,563; June 14.
Chemical substances to prevent their deterioration or interaction with other bodies, Treatment of. E. W. Geere. 1,863,157; June 14.
Chuck. L. O. Beard. 1,863,096; June 14.
Chuck. L. W. Johnson. 1,862,656; June 14.
Chute, Loading. F. Pardee, jr. 1,863,028; June 14.
Cigarette and cigar box. A. Coulapides. 1,863,190; June 14.
Cigarette case. G. W. Blackburn. 1,863,082; June 14.
Cigarette extinguisher. G. D. Barnes. 1,863,000; June 14.
Cigarette jacket. J. A. Holsman. 1,862,679; June 14.
Circuit interrupter. N. Abramson. 1,862,648; June 14.
Circuits, Multielectrode tube oscillator. J. R. Harrison. 1,863,372; June 14.
Circuits, Radio receiving. T. H. Kinman. 1,863,409; June 14.
Circuits, Tandem trunk. G. C. Hartley and E. P. G. Wright. 1,862,536; June 14.
Circulating heater. L. De Wit. Des. 87,148; June 14.
Clam digger. I. Vilta. 1,862,777; June 14.
Clamp: *See*—
Concrete form clamp. Pull rod slip clamp.
Pole splice clamp. Shoe heel clamp.
Clamp. H. P. Chandler. 1,863,039; June 14.
Clasp: *See*—
Garter clasp.
Cleaner: *See*—
Pipe cleaner. Sieve cleaner.
Cleaners, Adjustable roller support for airway. D. B. Replogle. 1,862,941; June 14.
Clip for fountain-pen caps, pencils and the like. H. Krause. 1,863,016; June 14.
Clip for pencils. E. E. Hill. 1,862,822; June 14.
Clock case. G. Genaille. Des. 87,149; June 14.
Clock display advertising unit. A. J. Muchnick. Des. 87,166; June 14.
Closure for cigarette and similar packages. M. Alland. 1,862,518; June 14.
Closure organization for collapsible tubes and like containers. W. H. Thorne. 1,862,555; June 14.
Clothes drier. G. R. Wieneke. 1,862,644; June 14.
Clutch. P. Bignand. 1,862,951; June 14.
Clutch, Disk. L. A. Bixby. 1,863,182; June 14.
Clutch, Disk. A. L. Vargha. 1,862,991; June 14.
Clutch for motors, Centrifugal. L. M. Persons. 1,863,382; June 14.
Clutch shifting mechanism for dynamometer cars. F. A. Fleischmann and A. L. Marsh. 1,863,440; June 14.
Coal feeder, Pulverized. F. A. Jones and W. H. Hartman. 1,862,752; June 14.
Coating machine. C. F. Wieland and R. H. Hubbell. 1,862,887; June 14.
Coffee maker. F. E. Wolcott. Des. 87,180; June 14.
Coffee maker. F. E. Wolcott. Des. 87,183; June 14.
Coil machine. F. C. Lindh. 1,862,626; June 14.
Coil spring. A. L. Vargha. 1,862,992; June 14.
Collapsible box. J. V. Hood. 1,862,855; June 14.
Combustion chamber and draft system therefor. R. D. De Wolf. 1,863,397; June 14.
Compass, Electromagnetic. J. D. Tear. 1,863,421; June 14.
Cold storage box. W. Brown. 1,863,434; June 14.
Colloidal dispersions of insoluble colors in organic materials, Making. A. J. Hallwood, A. Shepherdson, and A. Stewart. 1,863,331; June 14.
Colloidal dispersions of insoluble colors, Making. A. J. Hallwood, A. Shepherdson, and A. Stewart. 1,863,332; June 14.
Combination lock. S. Aster. 1,863,537; June 14.
Combination lock. J. Schlitz. 1,863,503; June 14.
Combustion, Regulating. G. E. Goodridge. 1,863,443; June 14.
Compensating the reactance of inductive windings. J. Ossanna, H. Graner, and F. Hofmann. 1,863,065; June 14.
Composition and molded product obtained therefrom, Moldable. I. A. Hurst. 1,863,540; June 14.
Compositions containing nitrocellulose. T. F. Bradley. 1,863,264; June 14.
Compressor, Valve spring. J. E. Wainwright. 1,862,948; June 14.
Concrete form clamp. A. B. Wilson. 1,863,177; June 14.
Concrete mixer. V. Pilapanen. 1,863,029; June 14.
Condenser, Electrical. F. J. Given. 1,862,570; June 14.
Condenser system. L. A. Gebhard and C. F. Rudolph. 1,862,930; June 14.
Condenser, Temperature responsive. R. Gunn. 1,862,931; June 14.
Conductor, Electric. E. J. Schneider and M. B. Bradt. 1,863,354; June 14.
Conductor, Insulated electric. J. H. Young. 1,863,147; June 14.
Conduit threader. D. Fisher. 1,862,591; June 14.
Connecter, Bus-bar. W. Wurdack, jr. 1,863,362; June 14.
Connection, Resilient. H. D. Geyer. 1,863,370; June 14.
Connection, Suspension spring. L. Saives. 1,862,943; June 14.
Container. J. E. Sevoy. 1,862,553; June 14.
Container. M. Sukoff. 1,862,868; June 14.
Container. J. VanBuren. 1,863,259–61; June 14.
Container and making same. K. Tsuchiya. 1,862,835; June 14.
Container, Burial record. T. R. Treiber. Des. 87,176; June 14.
Container closure securing device. B. Burvenick. 1,862,783; June 14.
Container, Display. O. Y. Schnering. 1,862,863; June 14.
Container, Filling. G. J. Purucker. 1,862,861; June 14.
Container for milk bottles and the like. J. C. Farrington. 1,863,301; June 14.
Container for vending machine goods. G. D. Barok and B. H. Slater. 1,863,001; June 14.
Container, Garment shipping. F. Roempler. 1,862,829; June 14.
Container, Razor blade. H. Swan. 1,863,074; June 14.
Container, Removable. D. W. Perin. 1,862,632; June 14.
Container, Sanitary cleaning medium. J. Colaizzi. 1,863,471; June 14.

Container, Sanitary garbage. S. W. Combs. 1,863,101; June 14.
Control device, Automatic. B. S. Minters. 1,863,164; June 14.
Control device, Remote. J. O. Gargan. 1,862,569; June 14.
Control for scrapers. A. P. Olinger. 1,862,903; June 14.
Control for valves, Thermostatic. V. Fina. 1,862,567; June 14.
Control mechanism for presses. J. J. Wallbillich and F. J. Potter. 1,863,425; June 14.
Control method and apparatus. T. R. Harrison. 1,863,373; June 14.
Control system. C. B. Connely. 1,863,395; June 14.
Control system for rams. H. W. Landenberger and H. W. Link. 1,863,448; June 14.
Controlling mechanism for refrigerating apparatus. J. R. Replogle. 1,862,635; June 14.
Conveyer. G. M. Crawford and J. M. London. 1,863,085; June 14.
Conveyer, Roller. L. A. Camerota. 1,863,520; June 14.
Cooker and tripper, Doughnut. P. Szulczewski. 1,863,210; June 14.
Cooler: *See*—
Water cooler.
Copper refining. W. O. Snelling. 1,863,419–20; June 14.
Copper ribbon with taps into multiple coils, Mechanism for winding. C. H. Thordarson. 1,862,727; June 14.
Core. A. T. Richardson. 1,862,908; June 14.
Core apparatus. E. Sjoden. 1,862,986; June 14.
Core drill. F. Stone. Re18,500; June 14.
Core for electric induction coils. L. G. Brazier and J. Urmston. 1,863,325; June 14.
Cores of a die casting machine, Apparatus for actuating the. A. P. Rosander and F. P. Tikalsky. 1,862,551; June 14.
Corn husking hook. C. E. Kling. 1,863,488; June 14.
Cotton gin. W. R. Collier. 1,862,884; June 14.
Counting and marking machine. L. L. Matthews. 1,862,797; June 14.
Coupler mechanism, Car. H. F. Miller. 1,862,799; June 14.
Coupler release mechanism. W. Kelso. 1,862,791; June 14.
Coupling: *See*—
Flexible coupling. Pipe and tube coupling.
Coupling device. E. A. Larsson. 1,863,017; June 14.
Coupling for rubber covered tubing. F. B. Stover. 1,862,833; June 14.
Coupling unit. I. W. Knight. 1,862,686; June 14.
Cover for coffee makers, Lower bowl. F. E. Wolcott. Des. 87,181; June 14.
Cover for coffee makers, Upper bowl. F. E. Wolcott. Des. 87,179; June 14.
Cover, Typewriter. W. R. Swaim. 1,863,130; June 14.
Covering for buildings, Surface. R. Maclean. 1,862,627; June 14.
Crate, Collapsible. W. L. Garrett. 1,862,027; June 14.
Crossing gate, Railroad. E. C. Krage. 1,863,310; June 14.
Crusher: *See*—
Stone crusher.
Crushing apparatus. E. B. Symons. 1,863,529; June 14.
Cup: *See*—
Vacuum cup.
Cup and saucer. C. R. Fish, jr. 1,862,533; June 14.
Cup or similar container. D. W. Janover. Des. 87,156; June 14.
Current interrupter, Electro-chemical. H. S. Polin. 1,863,253; June 14.
Current meter indicating device. J. E. Langley. 1,862,935; June 14.
Current rectifying control system, Electric. S. Widmer. 1,863,293; June 14.
Current transformer, Split core. M. Tomoda. 1,862,613; June 14.
Currents, Arrangement for producing modulated. H. H. Schimming. 1,862,608; June 14.
Cutter bearing structure. I. L. Chambers. 1,863,084; June 14.
Cutting implement. W. Vinnick. 1,863,424; June 14.
Cutting machine. A. J. and I. F. Fausek. 1,862,848; June 14.
Cylinder for internal combustion engines. A. B. Raymond. 1,862,970; June 14.
Dam, Buttress type. F. A. Noetzli. 1,863,205; June 14.
Data, Apparatus for computing statistical. C. Borel. 1,863,098; June 14.
Demand meter. W. H. Pratt. 1,863,414; June 14.
Dental bridgework attachment device. J. L. Shapiro. 1,863,230; June 14.
Device with retarded release. J. A. Altmayer. 1,863,092; June 14.
Diaphragms, Tensioning and for mounting. E. H. Smythe. 1,863,073; June 14.
Digger: *See*—
Clam digger.
Dilator. R. and W. Thomas. 1,862,725; June 14.
Direction indicator. N. W. Adams. 1,863,459; June 14.
Dirigible construction. A. C. Peterson. 1,862,606; June 14.
Disher. J. W. Cox. 1,862,527; June 14.
Dispenser, Napkin. J. S. Daniels. 1,863,240; June 14.
Dispensing apparatus. A. J. Brecht. 1,863,083; June 14.
Dispensing apparatus, Fluid. W. M. Griffin. Des. 87,150–1; June 14.
Dispensing apparatus, Fluid. J. W. Hartman. Des. 87,155; June 14.
Display case. H. N. Lines. 1,863,493; June 14.
Display device. W. I. Wells. 1,863,516; June 14.
Door and window frame construction. S. H. Boyd. 1,862,880; June 14.
Door apparatus, Fire. A. Hutton and S. Miller. 1,863,054; June 14.
Door, Automatic. A. P. Nelson. 1,863,497; June 14.
Door for railway cars, Drop. G. G. Gilpin. 1,862,522; June 14.
Door for railway cars, Drop. G. G. Gilpin. 1,863,134–5; June 14.
Door, Freight car. A. S. Home. 1,862,932; June 14.
Door, garage. A. J. Swanson and J. R. Gardner. 1,863,509; June 14.
Doorlock. T. Fleming. 1,862,672; June 14.
Doorlock and dovetail, Combined auto. W. J. Seelinger. 1,863,032; June 14.
Door operating mechanism. F. L. Morse. 1,862,860; June 14.
Door operator, Electric. H. W. Shennard. 1,863,417; June 14.
Drawbar. W. S. Fix. 1,862,956; June 14.
Drawing instrument. A. M. Allred. 1,863,091; June 14.
Drawworks, Rotary. D. S. Faulkner and E. Timbs. 1,863,401; June 14.
Drier: *See*—
Clothes drier.
Drill: *See*—
Core drill. Well drill.
Rock drill.
Drill chuck. G. M. Nell. 1,862,761; June 14.
Drill for dental purposes. R. Funke. 1,862,955; June 14.
Drive, Automatic variable friction. A. J. Holman. 1,862,750; June 14.
Drive, Starter. C. Ringwald. 1,862,806; June 14.
Drive Wheel. W. D. Sargent. 1,862,770; June 14.
Driver Tool. J. C. Glenzer. 1,863,107; June 14.
Driving mechanism. J. M. Shimer. 1,862,807; June 14.
Drying machine, Automatic. W. W. Sibson and H. H. Wigglesworth. 1,862,771; June 14.
Dust from gases, Apparatus for separating. H. E. Breisford and N. L. Snow. 1,862,839; June 14.
Dyes, Making sulphur. J. M. F. Leaper and R. W. Hess. 1,862,575; June 14.
Dyestuffs of the acridine series and the products, Manufacture of red-orange to brown-red basic. M. Alloth. 1,863,233; June 14.
Edge shaping machine. E. R. Person. 1,863,251; June 14.
Educational apparatus. L. H. Vincent. 1,862,872; June 14.
Egg yoke separator. C. Hall. Des. 87,152; June 14
Electric discharge apparatus. R. H. Dougherty. 1,863,398; June 14.
Electric discharge device. F. R. Beckert. 1,863,390; June 14.
Electric machine. T. E. McDowell. 1,862,543. June 14.
Electric motor. L. F. Bogin. 1,863,294. June 14.
Electric selector mechanism. H. L. Krum. 1,863,225; June 14.
Electric switch. F. F. Rand and J. X. Mathieu. 1,863,542; June 14.
Electrical prospecting. C. R. Nichols and S. H. Williston. 1,863,542; June 14.
Electrical switch. T. J. Kauffman and J. A. Widmer. 1,863,224; June 14.
Electrolytic apparatus. L. E. Ward and R. M. Hunter. 1,863,385; June 14.
Electron discharge device. M. J. Kelly. 1,863,342; June 14.
Engine: *See*—
Carding engine. Paper-stock-refining engine.
Internal combustion engine. V-type engine.
Engine cooling system, Internal combustion. C. Froesch and W. B. Jupp. 1,862,675; June 14.
Engine lubricating system. B. H. Anibal. 1,862,995; June 14.
Engines, Compound valve motion for steam pumping. G. W. Volz. 1,862,873; June 14.
Engler distillation apparatus, Automatic. J. E. Moore and G. W. Chenicek. 1,863,346; June 14.
Envelope. O. J. Olm. 1,863,279; June 14.
Etching plates made of magnesium alloys for phonograph printing, Grinding. A. Beck, W. Schmidt, and H. Dibelka. 1,863,002; June 14.
Ether derivatives of carbohydrates like cellulose, Manufacture of. A. W. Schroger. 1,863,208; June 14.
Exhauster. A. C. Rowley. 1,863,454; June 14.
Exhibitor. H. C. Grimsley. 1,863,047; June 14.
Extractor. T. F. Gibbens and J. V. Emmons. 1,863,046; June 14.
Extractor for screws and the like. N. Randall and J. B. Dillard. 1,863,045; June 14.
Fabric, Making a fiber. L. Larsen. 1,862,687; June 14.
Fan, Induction flow inlet. E. L. Anderson. 1,862,523; June 14.
Fastener. R. Orthwine. 1,863,381; June 14.
Fastener, Separable. N. J. Poux. 1,863,535; June 14.

Fasteners, Device for forming wire. E. Sorrick. 1,862,717; June 14.
Feed grinding mill. W. F. Reschke. 1,862,907; June 14.
Feed, Manufacture of highly digestible. R. R. Graves. 1,863,109; June 14.
Feeder, Automatic. F. Gitzendanner. 1,862,676; June 14.
Fender and running board, Motor vehicle. P. Fox. 1,863,475; June 14.
Ferrule for tubes. L. Ramsthaler. 1,863,069; June 14.
Filter. C. Christofferson. 1,862,659; June 14.
Filter, Air. H. C. Kamrath. 1,863,015; June 14.
Filter, Air. F. Smith. 1,863,456; June 14.
Filter press. L. B. Smith and H. Ten Broeck. 1,863,071; June 14.
Finger ring. T. Kochankoff. Des. 87,159; June 14.
Finger ring. R. L. McCarty, jr. Des. 87,164; June 14.
Fire control, System of. G. M. Barnes. 1,862,918; June 14.
Fire extinguisher. A. O. Boniface. 1,862,879; June 14.
Fire extinguisher. H. T. Stokes. 1,862,584; June 14.
Fire extinguisher charge. R. W. Austin. 1,863,321; June 14.
Fishhooks, Attachment for. M. V. Prouse. 1,863,544; June 14.
Fish lure. A. Powell. 1,863,125; June 14.
Fishing reel, Level-wind. J. Kautzky, jr. 1,862,683; June 14.
Flange and connection for tubular heating elements. J. C. Martin, jr. 1,862,796; June 14.
Flashing, Metal. E. H. Friedrich. Re18,492; June 14.
Flashlight bottom cap with hanger. G. H. Barber. 1,863,151; June 14.
Flask. J. F. Hines. 1,863,404; June 14.
Flask for manufacturing artificial dentures. R. M. Miller. 1,862,699; June 14.
Flexible coupling, Centrifugal. F. Schouten. 1,862,864; June 14.
Floor construction for sky scrapers, Light. A. H. Tashjian. 1,863,258; June 14.
Flotation process. M. S. Hansen. 1,863,013; June 14.
Flower stand. J. S. Malik. Des. 87,162; June 14.
Fluid pressure actuating mechanism. A. Turner. 1,863,076; June 14.
Foil remover. A. F. Hoffman. 1,863,338; June 14.
Food and other products with high frequency oscillations, Treating. F. E. Hoermann. 1,863,222; June 14.
Food products in containers, Sterilizing. A. L. Kronquest. 1,863,447; June 14.
Football, basket ball, and the like. M. Scudder. 1,863,170; June 14.
Force amplifying means. W. R. Spiller. 1,862,718; June 14.
Form, Hat. F. Pertot. 1,863,123; June 14.
Forms from molds, Device for removing. R. M. Kerr. 1,863,445; June 14.
Fountain for poultry, Drinking. L. Morin. 1,863,410; June 14.
Frame bracing and adjusting means. J. Powell. 1,862,607; June 14.
Frame member for rowing machines, Front. P. S. Hardy. Des. 87,153; June 14.
Frame member for rowing machines, Rear. P. S. Hardy. Des. 87,154; June 14.
Frames, Method and blank for producing. F. H. Klie. 1,862,897; June 14.
Frog. W. Perdue. 1,862,547; June 14.
Fuel, Apparatus for burning. J. M. Schutz. 1,862,910; June 14.
Fuel feeding device, Vacuum. W. A. Edwards. 1,862,667; June 14.
Fuel supply system. W. A. Doble, jr. 1,863,192; June 14.
Furnace: *See*—
Air humidifying furnace. Ore furnace.
Gas furnace. Ore roasting furnace.
Metallurgical furnace.
Furnace. E. G. Bailey. 1,863,181; June 14.
Furnace. A. Kais. 1,862,624; June 14.
Furnace. J. A. Mirzejewski. 1,863,379; June 14.
Furnace wall. A. E. Smith. 1,862,713; June 14.
Furnaces, Operating. L. de Florez. 1,862,737; June 14.
Galley, Printing. G. D. Bailey. 1,862,998; June 14.
Game. Y. Terasaka. 1,863,358; June 14.
Game apparatus, Marble gun. A. Andersen. 1,862,877; June 14.
Game board or the like. F. Barnard. Des. 87,143; June 14.
Game trap. F. E. Adams. 1,862,561; June 14.
Game trap. J. I. Pneuman. 1,862,580; June 14.
Garter clasp, Stitchless. M. M. Beskind and J. Mayper. 1,863,324; June 14.
Gas burner. A. R. Bethel. 1,863,003; June 14.
Gas burner. H. W. Christie. 1,863,468; June 14.
Gas burner. T. A. Coleman. 1,863,100; June 14.
Gas burner. W. H. Foster. 1,862,673; June 14.
Gas furnace. E. J. Clynch. 1,862,660; June 14.
Gases, Treating waste. H. F. Merriam. 1,862,695; June 14.
Gasket. F. J. Oven. 1,862,703; June 14.
Gasket and packing material. J. T. Crane. 1,863,521; June 14.
Gasket and protector for carbide lamps, Combined. F. Colabrese. 1,863,470; June 14.
Gasoline tank, Theftproof. C. V. Buddenbrock. 1,862,815; June 14.
Gate: *See*—
Crossing gate.
Gear, Change speed. R. T. Wise. 1,862,993; June 14.
Gear mechanism, Reverse. G. Tremolada. 1,862,871; June 14.
Gearing, Electromechanical change speed. H. L. Swartling. 1,862,774; June 14.
Gelatin pad copying machine. W. E. Williams. 1,862,616; June 14.
Generator: *See*—
Welding generator.
Generator regulating system, Electric. G. Courvoisier. 1,863,298; June 14.
Glass extracting device. J. K. Merneck. 1,862,976; June 14.
Glass, Feeding molten. G. W. Batchell. 1,863,095; June 14.
Glass, Method and apparatus for melting. R. L. Frink. 1,863,156; June 14.
Glass severing apparatus. K. E. Peiler. 1,862,979; June 14.
Glue spreading machine. A. W. Raettig. 1,863,545; June 14.
Golf ball carrier. A. F. Turano. 1,862,614; June 14.
Golf ball marking machine or the like. J. D. Lyon. 1,862,858; June 14.
Golf ball, Practice. L. F. Rosenberg. 1,862,708; June 14.
Golf teeing machine. L. J. Mulvaney. 1,863,140; June 14.
Grader and the like, Road. H. W. Deisler. 1,862,924; June 14.
Gramophone. W. Otten. 1,862,800; June 14.
Gravity switch. S. Freedman and J. Gilbert. 1,863,242; June 14.
Gravity system for measuring the contents of tanks. F. T. Davis. 1,863,435; June 14.
Grid pasting machine. R. O. Watkins. 1,863,175; June 14.
Grinder, Ledger blade. C. Wicke. 1,863,036; June 14.
Grinding device. C. W. Floss. 1,863,042; June 14.
Grinding machine. L. L. De Smet. 1,863,538; June 14.
Grinding machine. A. J. Strong. 1,862,809; June 14.
Grinding machine. M. O. Trudeau. 1,862,834; June 14.
Grinding machinery. J. E. Caster. 1,862,882; June 14.
Grinding machinery. H. Fritschi. 1,862,850; June 14.
Grinding machinery. F. S. Haas. 1,862,851; June 14.
Grinding or polishing machine. S. B. Field. 1,862,671; June 14.
Guard adapter, Pick-up. L. H. Thoen. 1,862,775; June 14.
Guitar, Resonating. W. L. Lange. 1,863,344; June 14.
Gypsum, Calcining. W. Amoss. 1,863,318; June 14.
Hair waver. B. A. Sterling. 1,862,721–2; June 14.
Hair waving apparatus. G. Decker. 1,863,220; June 14.
Handbag. S. R. Goldsmith. 1,863,270; June 14.
Hand reel. O. E. Swearingen. 1,862,611; June 14.
Handle: *See*—
Removable handle.
Handle construction, Knife. N. Amoroso. 1,862,649; June 14.
Hanger for rugs and the like. J. Ruwitch. 1,863,030; June 14.
Hay loader. D. Schon. 1,863,505; June 14.
Head rest. R. C. Angell. 1,863,319; June 14.
Heat, Device for utilizing waste. G. S. Pierce and E. S. Chittum. 1,863,352; June 14.
Heat exchanger unit. W. L. Rifenberick and C. O. Sandstrom. 1,862,707; June 14.
Heat indicator. J. Zubaty and J. E. Eshbaugh. 1,862,994; June 14.
Heat radiating device for gas furnaces. W. G. Haskell, jr. 1,862,892; June 14.
Heater: *See*—
Water heater.
Heater. G. Bluemel. 1,863,391; June 14.
Heel and heel covering and making the same. L. J. Bazzoni. 1,862,878; June 14.
Heel, Shoe. F. J. Kelley. Des. 87,158; June 14.
Hinge, Detachable spring. C. Berne. 1,863,323; June 14.
Hobbyhorse. J. J. Brennan. 1,863,393; June 14.
Hobbyhorse, Mechanical. J. O. Hahs. 1,863,012; June 14.
Hoist and support, Truck trailer. G. W. Kuhlman. 1,862,574; June 14.
Hoisting apparatus for power operated shovels. W. Ruddock. 1,862,862; June 14.
Holddown, Buttoned. G. C. Fedderman. 1,863,088; June 14.
Holder, Display card. P. J. Timberlake. 1,862,776; June 14.
Holder for dynamo electric machines, Brush. A. M. MacCutcheon. 1,863,018; June 14.
Holder for garment presses, Cuff. P. N. Braun. 1,863,530; June 14.
Holder for garments, Tag. J. Covitch. 1,863,472; June 14.
Holder for rotary card display devices, Card. J. D. MacLachlan. 1,863,226; June 14.
Holder, Lip stick. A. Gimonet. 1,863,106; June 14.
Holder, Tool. J. C. Glenzer. 1,863,108; June 14.
Holder, Tool. F. T. Harrington. 1,862,623; June 14.
Holder, Tool. H. Taylor. 1,863,131; June 14.
Holder, Visible record and leaf. H. A. Consor. 1,862,842; June 14.

Holdfast for ropes. A. M. Angus. 1,862,650; June 14.
Hook: *See*—
Corn husking hook. Mud hook.
House: *See*—
Storage house.
House number and mail chute, Combination. W. H. Sherick. 1,863,526; June 14.
Housing, Connecter. G. M. Wright and S. B. Smith. 1,862,876; June 14.
Housing for electrical devices. A. G. Steinmayer. 1,862,720; June 14.
Housing structure, Collapsible and transportable. J. P. Quinn. 1,863,206; June 14.
Hydraulic operator, Quick release. W. J. Woods. 1,863,386; June 14.
Hydrocarbons, Manufacture of liquid. K. Winkler. 1,863,212; June 14.
Ice machine, Carbon dioxide. N. M. Small. 1,863,287; June 14.
Ignition apparatus. H. L. Hartzell. 1,863,305–6; June 14.
Ignition apparatus. H. E. Norviel. Re18,498; June 14.
Ignition coil and lock switch. H. E. Norviel. Re18,497; June 14.
Ignition device. C. H. Davis, jr. 1,863,299; June 14.
Illuminated ball. C. Arnold. 1,862,996; June 14.
Illuminating device. S. F. Arbuckle. 1,863,547; June 14.
Images, System and apparatus for the electrical production of. A. McL. Nicholson. 1,863,278; June 14.
Impeller-positioning device. J. A. Wintroath. 1,863,214–15; June 14.
Impulse sender for use in automatic telephone systems and the like. D. Macadie. 1,862,801; June 14.
Inclosed switch. H. J. Hammerly. 1,863,523; June 14.
Indanthrone and preparing the same, Mono-bromo-monochloro. O. Stallmann. 1,862,865; June 14.
Indanthrone complex and preparing the same, Halogenated. J. Deinet, R. J. Goodrich, and O. Stallmann. 1,862,844; June 14.
Indanthrones and preparing the same, Halogenated. J. Deniet, R. J. Goodrich, and O. Stallmann. 1,862,843; June 14.
Indicator: *See*—
Direction indicator. Stock indicator.
Heat indicator. Temperature indicator.
Inking mechanism. H. Fankboner. 1,862,744; June 14.
Inking mechanism for printing machines. C. H. Crabtree. 1,862,785; June 14.
Insecticides and making same, Manufacture of. R. H. Carter. 1,863,266; June 14.
Insecticides and making same, Manufacture of. R. H. Carter. 1,863,519; June 14.
Installation for registering data by perforation by manual and automatic means. C. Borel. 1,863,097; June 14.
Insulating products and producing same. C. F. Logan and C. F. Mahnke. 1,863,329; June 14.
Insulator, Rocking. P. B. Hoye. 1,863,405; June 14.
Internal brake. A. W. Frehse. 1,863,008; June 14.
Internal-combustion engine. L. M. Woolson. 1,863,232; June 14.
Internal combustion engine, Double-acting two-stroke. M. Trechsel. 1,862,640; June 14.
Iron and electric stove, Combined electric. M. H. P. Sologaistoa. 1,862,912; June 4.
Iron, Electrodepositing. G. P. Fuller and C. A. V. Daviss. 1,862,745; June 14.
Jack: *See*—
Screw jack.
Jar: *See*—
Vacuum jar.
Jar or similar article. O. C. Noble. Des. 87,167; June 14.
Jewelry construction. W. Silverman and M. Constantine. 1,862,710; June 14.
Jogger, Automatic. R. W. Borrowdale. 1,863,465; June 14.
Joint: *See*—
Bus bar joint. Universal joint.
Rail joint.
Joint for roadways, Expansion. R. Adler. 1,863,180; June 14.
Joint groove forming device, Expansion. R. C. Thomasson. 1,862,612; June 14.
Joints and in apparatus therefor, Production of riveted. A. N. Jackson. 1,862,895; June 14.
Joist and decking for floor construction, Combination steel. A. H. Tashjian. 1,863,257; June 14.
Junction box. A. J. Strong. 1,862,811; June 14.
Key: *See*—
Rail retaining key.
Kiln for the treatment of ceramic ware, Method of and tunnel. T. C. and W. O. Prouty. 1,862,748; June 14.
Knife and attachment, Paper-hanger's. G. A. Christopherson. 1,863,153; June 14.
Knob and container, Combined shift lever. J. M. Lillgren. 1,862,964; June 14.
Lace. G. Cordier. Des. 87,146; June 14.
Laminated products and manufacture, Decorated. J. D. Cochrane, jr. 1,863,239; June 14.
Lamp. H. J. Graham. 1,862,572; June 14.
Lamp, Electric incandescent. J. Van Eck and F. Fekkes. 1,863,423; June 14.
Lamp, Exciter. I. H. Barkey. 1,863,152; June 14.
Lamp, Incandescent. G. Piersimoni. 1,863,152; June 14.
Lamps, Supplemental resistance for serially mounted. A. Lampl. Re18,495; June 14.
Landing indicator for airports. A. M. Wilhelm. Des. 87,178; June 14.
Lapping machine. W. D. Rundlett. 1,862,984; June 14.
Latch. G. E. Roedding. 1,863,536; June 14.
Latch bolt operating means. F. K. Solliday. 1,862,716; June 14.
Latch, Hood. D. P. Hynes. 1,863,340; June 14.
Latch, Right and left hand. F. K. Solliday and C. De Ridder. 1,862,715; June 14.
Lathe attachment. W. M. Elkins. 1,863,007; June 14.
Laundry appliance. J. G. Fehn. 1,862,618; June 14.
Leaf spring. E. Bagnall. 1,863,094; June 14.
Leather sheetings and product of same, Treatment of artificial. R. B. Hill and J. A. Fogarty. 1,862,749; June 14.
Leather substitute base sheet material therefor and making the same. J. J. Clifford. 1,863,456; June 14.
Lens tube adjusting appliance. R. V. Terry. 1,863,384; June 14.
Leveling device. L. T. Camacho. 1,862,841; June 14.
Lifter: *See*—
Valve spring lifter.
Lighter, Pocket cigar. E. Wieden. 1,862,779; June 14.
Link for shock absorbers. B. D. Kunkle and E. F. Rossman. 1,863,343; June 14.
Link, Fusible. C. P. Howard. 1,863,245; June 14.
Link, Tread. A. P. Armington. 1,862,617; June 14.
Liquid by volume from bottles or similar vessels, Apparatus for delivering measured quantities of. L. T. Layne and H. G. Conrade. 1,862,801; June 14.
Liquids and gases, Device for solidifying. E. J. Lockwood. 1,863,377; June 14.
Liquids, Continuous process for separating organic. E. Ricard and H. M. Guinot. 1,862,706; June 14.
Liquids, Device for feeding. C. W. Morse and K. McKenzie. 1,863,250; June 14.
Load compensator for automatic elevators for making more perfect landings. R. P. McNaught. 1,862,603; June 14.
Load lifting arrangement for railway cars. A. E. Small. 1,862,712; June 14.
Load lifting device for railway cars. A. E. Small. 1,862,711; June 14.
Lock: *See*—
Automobile hood lock. Wheel lock.
Combination lock. Window lock.
Lock. D. P. Davis. 1,863,396; June 14.
Lock. G. A. Long. 1,863,525; June 14.
Lock controlling device, Coupler. W. Kelso. 1,862,790; June 14.
Lock for pails, Cover. V. P. Wendle. 1,862,730; June 14.
Lock mechanism, Anti-panic. W. E. Stonebridge. 1,863,129; June 14.
Lock protecting device. R. W. Kirkpatrick. 1,863,487; June 14.
Locking device for pneumatic tools. J. Michel. 1,862,859; June 14.
Locking member for sprinkler heads. C. P. Howard. 1,863,246; June 14.
Loom, Shuttle replenishing. E. W. Stone and F. V. Grennor. 1,862,957; June 14.
Looms, Electric feeler mechanism for. R. C. Newton and S. O. Dodge. 1,862,762; June 14.
Lubricant and making the same. A. W. Burwell. 1,863,004; June 14.
Lubricating mechanism. T. Brady. 1,863,183; June 14.
Lubricating system. C. E. Summers. 1,862,724; June 14.
Lubrication, Automatic. W. P. Hammond. 1,863,200; June 14.
Lubricator, Air line. A. G. Slatcher. 1,863,551; June 14.
Lubricator, Car journal. F. Radcliffe. 1,863,281; June 14.
Lumber grade marking machine. J. G. McDonough. 1,863,229; June 14.
Lumber, Handling. R. Z. Drake. 1,863,087; June 14.
Machine for constructing concrete pipe. A. W. Schultz. 1,862,709; June 14.
Machine for cutting the pile of weft-pile fabrics. E. Carmichael. 1,863,006; June 14.
Machine for disintegrating, mixing, and emulsifying materials. J. V. Weckbaugh and S. K. Nester. 1,863,515; June 14.
Machine for hermetically sealing packages. W. H. Carson. 1,862,881; June 14.
Machine for hooking rugs and the like. E. E. Rice. 1,862,768; June 14.
Machine for labeling bottles and the like. C. H. Wild. 1,863,176; June 14.
Machine for making pile fabrics. J. Hermann. 1,863,049; June 14.
Machine for making transparent papers. E. M. Kratz. 1,862,541; June 14.
Machine for operating upon heel blanks. R. F. Knight. 1,862,898; June 14.
Machine for sharpening cutters. E. W. Bullock and R. Webster. 1,862,840; June 14.
Machines for coiling metal, Attachment for. M. Nigro. 1,863,064; June 14.
Magazine, Film. F. H. Owens. 1,863,066; June 14.
Magnesia cement composition. L. C. Stewart. 1,863,528; June 14.
Magnesium, Making metallic. S. B. Heath. 1,863,221; June 14.

Magnet, Iron clad relay. Y. M.-L. de Paniagua. 1,863,436; June 14.
Magnetic compositions containing principally iron and cobalt, Workable. J. H. White and C. V. Wahl. 1,862,559; June 14.
Magnetometer. F. Rieber. 1,862,415; June 14.
Marker, Grave. D. C. Peglar. 1,862,968; June 14.
Mask, Facial. M. E. Conley. 1,862,588; June 14.
Masses, Production of artificial. G. Walter. 1,863,426; June 14.
Mat: *See*—
Traction mat.
Material, Constructional. A. C. Fischer. 1,863,104; June 14.
Material loading machine. C. R. Stahl. 1,862,610; June 14.
Material, Smelting of metalliferous. E. Engblom. 1,862,741–2; June 14.
Material to machines, Device for measuring and submitting. A. M. Campbell. 1,863,005; June 14.
Matting device for motion picture projectors. J. E. Woodland. 1,863,078; June 14.
Mayonnaise dispenser. C. R. Cheney. 1,862,883; June 14.
Measuring apparatus. J. Ziedins. 1,863,133; June 14.
Measuring instrument, Shoulder. J. Brienza. 1,863,286; June 14.
Mercuri derivatives of resorcin iodinated sulphone phthaleins, Hydroxy. F. Dunning. 1,863,268; June 14.
Mercury derivatives of halogenated sulphone phthaleins. F. Dunning and A. E. Stickels. 1,863,241; June 14.
Metal article, Protected. J. E. Burns. 1,863,186; June 14.
Metal compounds, Manufacture of alkyl. D. K. Proffitt and J. G. Sharron. 1,863,451; June 14.
Metal cutting machine. F. R. Eldredge, G. W. Newman, and J. B. Phillips. 1,862,668; June 14.
Metal fins to tubes or cylinders, Apparatus for securing. A. J. Berg. 1,863,553; June 14.
Metal fins to tubes or cylinders, Securing. A. J. Berg. 1,863,552; June 14.
Metallurgical furnace. E. H. Bunce, C. J. Lentz, and G. T. Mahler. 1,863,185; June 14.
Meter: *See*—
Demand meter.
Milk powder, Treating. H. Schibsted. 1,863,355; June 14.
Mill: *See*—
Ball mill. Feed grinding mill.
Mixer: *See*—
Concrete mixer.
Moisture in land, Device to retain. O. B. Rector. 1,862,550; June 14.
Mold: *See*—
Open joint mold.
Mold. J. Graves. 1,863,304; June 14.
Mold for casting stereotype printing plates. W. F. Huck. 1,863,480; June 14.
Molding device. F. F. Bradley. 1,862,525; June 14.
Molding machine. G. H. Haserodt. 1,863,114; June 14.
Molding press for hollow articles. L. W. Hottel. 1,863,117; June 14.
Mop wringing unit. F. M. Fritsch. 1,862,891; June 14.
Moth eradicator. R. C. Travis. 1,863,511; June 14.
Motor: *See*—
Electric motor.
Motor control system. L. C. Hardesty. 1,863,403; June 14.
Motor support for ventilating fans. C. E. Johnson. 1,863,043; June 14.
Mounting and drive, Dual wheel. L. C. Josephs, jr., and E. R. Gurney. 1,862,753; June 14.
Mounting arrangement for electrical apparatus. F. Kessler and C. R. Woodland. 1,863,376; June 14.
Mounting, Depending bearing element. M. H. Martin. 1,863,121; June 14.
Mounting for automobiles, Battery. H. C. Snow. 1,862,714; June 14.
Mounting for printing telegraphs, Type wheel. A. Vischer, jr. 1,863,359; June 14.
Mounting, Recess bed. R. J. Ellsworth. 1,863,194; June 14.
Mounting, Tool. E. G. Gartin. 1,862,925; June 14.
Mud hook. O. Carey. 1,863,187; June 14.
Needle, Loop forming. G. A. Carlson. 1,863,466; June 14.
Nesting bin. T. Shaw. 1,862,609; June 14.
Nickel catalysts, Manufacturing. J. Al. 1,862,949; June 14.
Novelty, Illuminated. E. W. Herring. 1,862,678; June 14.
Novelty jumping accessory for sleds or the like. G. C. Folberth. 1,863,441; June 14.
Nozzle. J. W. Grant. 1,862,957; June 14.
Oil and gas separator. E. E. Greve. 1,863,111; June 14.
Oil burner. W. L. Majors. 1,862,691; June 14.
Oil burning apparatus. J. N. Macrae and R. S. Thoresen. 1,862,690; June 14.
Oil cracking apparatus. H. Thomas. 1,863,173; June 14.
Oil, Distilling crude. T. J. Ryan. 1,862,942; June 14.
Oils and other liquids, Measuring the viscosity of lubricating. W. J. Albersheim and H. S. Konheim. 1,863,090; June 14.
Oils, Treating wet. J. C. Walker. 1,863,143; June 14.
Open joint mold. R. G. Redmann. 1,862,982; June 14.
Opener, Can. G. W. Bungay. 1,863,531; June 14.
Opener, Can. G. L. Jackson. 1,863,483; June 14.
Opener, Can. C. J. Maier. 1,862,972; June 14.
Operator for windows. C. W. Kelly. 1,863,485; June 14.
Optical apparatus. J. A. Ball. 1,862,950; June 14.
Optical projection. H. G. Matthews. 1,862,577; June 14.
Ore furnace, Rotary. A. M. Thomsen. 1,862,726; June 14.
Ore roasting furnace. H. O. C. Ingraham. 1,862,751; June 14.
Ores, Agglomerating and reducing. G. T. Southgate. 1,863,507; June 14.
Ores and concentrates, Roasting. U. C. Tainton. 1,862,889; June 14.
Ores, Treatment of finely divided sulphide. N. E. Lenander. 1,862,890; June 14.
Ornament, Desk. C. A. Lewis. Des. 87,161; June 14.
Ornament, Radiator. C. Worms. 1,863,179; June 14.
Ornament, Wall. M. Javick. Des. 87,157; June 14.
Oven, Baking. L. Bobbin, A. Simon, and N. Benderson. 1,863,432; June 14.
Overload release. A. Ellersgaard. 1,862,888; June 14.
Package and sealing, Sealed. G. W. Mullen. 1,863,025; June 14.
Packages, Apparatus for producing liquid. E. E. Henderson. 1,862,821; June 14.
Pad: *See*—
Absorbent pad.
Pail. G. R. Le Sauvage and L. E. Padelford. 1,863,138; June 14.
Pan and cooking oven, Combination frying. A. L. Vought. 1,862,778; June 14.
Pan for toilet tanks, Drip. E. J. Wimmer. 1,863,211; June 14.
Paper box, Folding. W. Medoff. Des. 87,165; June 14.
Paper, Manufacture of transparent. S. Boyer. 1,862,656; June 14.
Paper-stock-refining engine. G. S. Brazeau and H. P. Madsen. 1,863,184; June 14.
Particles from free water, Separating. C. B. Thorne. 1,863,422; June 14.
Partition base. R. Orthwine. 1,863,351; June 14.
Paste dispensing tube. J. A. Tiscornia. 1,862,870; June 14.
Pen, Fountain. G. S. Vivian. 1,862,586; June 14.
Penholder and inkwell, Combined. S. S. and G. S. Tamburo. 1,862,988; June 14.
Pendulum bank and climb indicator for aeroplanes. D. O. Johnson and W. W. Webster. 1,863,044; June 14.
Petroleum, Treating. W. F. Bleecker. 1,862,952; June 14.
Photographic printing machine. A. S. Howell. 1,863,051; June 14.
Photographic prints or negatives, Apparatus for and method of handling. W. J. Williams. 1,863,132; June 14.
Picture projection machines, Adjustable aperture formation. A. Dina. 1,863,386; June 14.
Picture projector, Motion. H. L. Kitts. 1,863,309; June 14.
Pictures, Making stereoscopic. E. E. Draper. 1,862,847; June 14.
Pilot for oil burners, Gas. A. J. Frame. 1,862,849; June 14.
Pin: *See*—
Pole top pin.
Pipe and tube coupling. A. J. Weatherhead, jr. 1,863,360; June 14.
Pipe casting apparatus. D. H. Meloche. 1,862,975; June 14.
Pipe cleaner. G. Auringer. 1,863,460; June 14.
Pipe threading device. C. B. Perry. 1,863,067; June 14.
Pipe vise. H. J. Hach. 1,863,011; June 14.
Piston ring. G. H. Roberts. 1,862,983; June 14.
Plate. J. G. Stanway. Des. 87,175; June 14.
Pliers. C. A. Archbold. 1,863,037; June 14.
Plug and making the same, Equatorially sealed spark. H. Rabezzana. 1,862,981; June 14.
Plug and socket, Fuse. L. Schmidt, jr. 1,863,383; June 14.
Pocketbook. J. J. Dvorak. 1,862,665; June 14.
Poison distributing machine. J. W. Duncan. 1,862,666; June 14.
Pole splice clamp. T. H. Kingston and J. H. Norman. 1,863,247; June 14.
Pole top pin. K. A. Hawley. 1,863,539; June 14.
Poles by an interrupted or shunt path, Protection of wood. A. O. Austin. 1,863,080; June 14.
Porous bodies, Making. N. Schönfeldt, R. Reichmann, and V. Engelhardt. 1,863,070; June 14.
Post pocket. H. T. Anderson. 1,863,364; June 14.
Potato harvesting machine. K. Hanstad. 1,863,113; June 14.
Powder and making the same, Propellant. W. E. Wagner. 1,862,914–15; June 14.
Power transmission mechanism. P. M. Salerni. 1,863,110; June 14.
Power transmission mechanism. P. M. Salerni. 1,863,128; June 14.
Power unit. W. A. J. Krohn. 1,863,202; June 14.
Press: *See*—
Alkali-cellulose press. Filter press.
Press. F. D. Fowler. 1,863,199; June 14.
Presses, Feeding attachment for bookbinder. E. L. Persons. 1,863,165; June 14.
Processing reel. H. E. Walker. 1,862,615; June 14.
Products, Cooling. R. P. Rasmussen. 1,863,207; June 14.

Projection system and projection lens system therefor. L. W. Bowen. 1,863,099; June 14.
Prop, Centering. W. Gnirs and A. Urban. 1,863,010; June 14.
Propeller. J. J. Callahan. 1,863,238; June 14.
Propeller. T. A. Dicks. 1,862,846; June 14.
Propeller. L. M. Woolson. 1,863,388; June 14.
Propeller attachment. L. M. Woolson. 1,863,387; June 14.
Propelling apparatus applicable particularly to the propelling of lawn tennis balls and other game missiles and the like. T. Stuart. 1,863,035; June 14.
Proportioning and metering apparatus. H. D. Wells. 1,862,643; June 14.
Protecting device. A. A. August and B. J. Victor. 1,862,651; June 14.
Protector, Sanitary toilet seat. M. T. Phillips. 1,863,499; June 14.
Pull rod slip clamp. R. C. Dublin. 1,862,886; June 14.
Pulverizing or crushing machine. E. E. Elzemeyer and H. C. Griesedieck. 1,862,889; June 14.
Pump. J. E. Holveck. 1,862,823; June 14.
Pump machine, Rotary. G. E. T. Eyston. 1,862,954; June 14.
Pump, Rotary. E. Hill. 1,863,335; June 14.
Pump, Rotary. A. V. Jensen. 1,863,160; June 14.
Pumps, Governing mechanism for turbine driven. M. B. Hudson. 1,863,406; June 14.
Putty remover and glazing table, Sash. E. A. Sprague. 1,863,508; June 14.
Rack: *See*—
Shoe rack.
Racket, Tennis. R. H. Robinson. 1,862,581; June 14.
Rackets, Stringing of lawn tennis and like. W. E. B. Jaffé. 1,863,059; June 14.
Radiator. E. H. Beling. 1,862,735; June 14.
Radiator. W. E. Kuenstler. 1,863,056; June 14.
Radiator and making the same, Sound. E. H. Smythe. 1,863,072; June 14.
Radiator cap. A. G. Geistert and A. J. Altz. 1,863,009; June 14.
Radiator construction. O. C. Palmer. 1,863,026; June 14.
Radiator for automobiles, Antifreeze. W. H. Collier. 1,863,437; June 14.
Radiator for motor vehicles. F. C. Ruppel. 1,862,769; June 14.
Radio communication, System for reducing fading effects in. L. C. Young. 1,863,518; June 14.
Radio filter apparatus. A. H. Hotopp, jr. 1,863,050; June 14.
Radio transmitter. L. A. Gebhard. 1,862,928; June 14.
Rail. R. Faries and C. D. Young. 1,862,669; June 14.
Rail joint. J. A. McGrew. 1,863,275–6; June 14.
Rail retaining key. R. Faries and C. D. Young. 1,831,196–7; June 14.
Rail retaining key. C. D. Young. 1,863,145–6; June 14.
Rail retaining member. R. Faries and R. H. Boyd. 1,862,521; June 14.
Railroad system, Electric. R. Creter. 1,862,736; June 14.
Railroad tie plate. R. Faries. 1,862,520; June 14.
Rail, Switch point. G. H. Lamhorn. 1,863,489–91; June 14.
Razor head and blade, Safety. E. B. Manley. 1,863,495; June 14.
Reamer and reamer chuck for pipe threading devices. J. H. Strock. 1,863,034; June 14.
Receiver. W. C. Jones. 1,863,308; June 14.
Receptacle. W. W. McAdam. 1,863,228; June 14.
Receptacle for pen points provided with dark bands. G. Larsen. 1,863,061; June 14.
Record for gramophones and the like and manufacturing same. W. F. Pettie. 1,862,969; June 14.
Record selecting system. P. M. Rainey. 1,863,353; June 14.
Records for talking machines, Apparatus for recording and reproducing disk. H. J. A. Barlow and R. D. Cargill. 1,862,524; June 14.
Rectification. S. R. Merley. 1,862,758; June 14.
Rectifier system. R. Keller. 1,863,162; June 14.
Rectifying apparatus. M. A. Lissman. 1,862,936; June 14.
Reel: *See*—
Fishing reel. Processing reel.
Hand reel.
Reel for detachable conduits. W. Jensen. 1,863,341; June 14.
Reeling device. W. T. Livermore. 1,862,598; June 14.
Reflector. E. L. Silverman. 1,863,171; June 14.
Refrigerating apparatus. H. P. Braeutigam. 1,862,816; June 14.
Refrigerating apparatus. C. F. Henney. 1,862,854; June 14.
Refrigerating apparatus, Absorption. E. E. Allyne. 1,862,646–7; June 14.
Refrigerating apparatus for bottled goods. C. C. Spreen. 1,862,638; June 14.
Refrigerating system and apparatus therefor. C. H. Breidenthal. 1,862,657; June 14.
Refrigerating system, Defrosting. V. P. Warren. 1,863,427; June 14.
Refrigeration. D. B. Knight. Re18,404; June 14.
Refrigerator. G. C. Bohn. 1,863,219; June 14.
Refrigerator. J. R. Replogle. 1,862,634; June 14.
Register for liquid-dispensing apparatus. J. D. Lasater. 1,862,961; June 14.
Regulator: *See*—
Seat regulator. Voltage regulator.
Regulator system. R. A. Kelselman. 1,863,302; June 14.
Remote control selective mechanism. I. Nachumsohn. 1,863,411; June 14.
Remote control system. J. C. Field. 1,863,089; June 14.
Removable handle. T. S. Hutchison. 1,862,680; June 14.
Rifle, Air. F. Mihalyi. 1,862,697–8; June 14.
Rim, Tire carrying. W. N. Booth. 1,863,464; June 14.
Ring: *See*—
Piston ring.
Ring for urn bags. E. H. Sieling. 1,863,418; June 14.
Road building structure, Concrete. J. N. Heltzel. 1,863,115; June 14.
Rock drill. E. G. Gartin. 1,862,926; June 14.
Roll polisher for sheet tin and jobbing mills. G. Butler and W. F. Zurcher. 1,863,237; June 14.
Roofing and siding element. N. P. Harshberger. 1,862,852; June 14.
Rubber articles, Apparatus for producing hollow. W. E. Humphrey. 1,863,339; June 14.
Rubber, Perforating sheet. A. Ramsay. 1,862,633; June 14.
Ruching, Apparatus for making and applying. A. E. Collins. 1,863,189; June 14.
Sadiron, Electric. M. A. Rollman. 1,863,284; June 14.
Safe, Match. T. Sano. 1,862,944; June 14.
Safe, Thermostatically controlled receding fireproof. B. F. Cisor. 1,863,040; June 14.
Safety appliance for aircraft. F. A. Townsley. 1,862,989; June 14.
Safety device. J. H. V. Finney. 1,863,155; June 14.
Safety signal, Portable. P. Goodman. 1,863,442; June 14.
Salts, Solid diazo. M. A. Dahlen. 1,863,154; June 14.
Saw gauge. A. J. Englund. 1,862,531; June 14.
Scissor honing and corrugating device. M. L. Brooks. 1,863,433; June 14.
Screen: *See*—
Automobile screen. Window screen.
Testing screen.
Screen for automobiles, Roller. W. Rogers. 1,863,355; June 14.
Screen for motor vehicles, Window. H. A. Westrick. 1,863,428; June 14.
Screw jack, Double lift single. J. A. Morrison. 1,862,759; June 14.
Seal. N. Dessauer. 1,863,041; June 14.
Seal for shafts. A. C. Durdin, jr. 1,862,887; June 14.
Sealing and release device. A. C. Rowley. 1,863,455; June 14.
Seat: *See*—
Walking stick seat.
Seat appliance, Toilet. J. J. Bukovitz. 1,863,295; June 14.
Seat regulator. H. C. Field and A. C. Andersen. 1,863,430; June 14.
Seat suspension. J. D. Couth. 1,862,953; June 14.
Seeder. C. M. Westcott. 1,862,732; June 14.
Self weighing bin. W. V. Sproles. 1,863,288; June 14.
Separator. F. Pardee. 1,863,027; June 14.
Separators, diaphragms, filters, and the like, consisting of porous as well as porous and nonporous ebonite and the like, Production of. M. Wilderman. 1,862,645; June 14.
Series cut-out, Automatic. R. N. Rowe. 1,862,830; June 14.
Sewing machine attachment. R. J. Sailer. 1,863,168; June 14.
Sewing machine loop-taker. M. L. Waterman. 1,863,077; June 14.
Sewing machines, Graduated tension device for. D. H. Chason. 1,862,658; June 14.
Shade, Adjustable bed lamp. L. N. Davis. 1,862,664; June 14.
Sharpener, Lawn mower. J. B. Bradford. 1,863,038; June 14.
Sheave assembly for crown blocks. W. D. Davidson and E. W. Gooser. 1,862,885; June 14.
Shelf, Display. J. W. Harbison. 1,862,593; June 14.
Shield, Removable radiator. H. G. Kellogg. 1,862,684; June 14.
Shingle strip and making same. H. R. Wood. 1,863,178; June 14.
Shock absorber. W. A. Chryst. 1,863,296; June 14.
Shock absorber. E. F. Rossman. 1,863,315; June 14.
Shock absorber. B. H. Wile. 1,863,144; June 14.
Shock absorbing mechanism, Friction. J. F. O'Connor. 1,862,764; June 14.
Shock absorbing mechanism, Friction. J. F. O'Connor. 1,862,766; June 14.
Shoe. A. F. Bancroft. Des. 87,141; June 14.
Shoe and shank stiffener therefor. R. B. Bartels. 1,862,734; June 14.
Shoe easing device. F. R. Long. 1,862,600; June 14.
Shoe heel clamp. F. Powyszynski. 1,863,166; June 14.
Shoe rack. R. E. Miller. 1,863,204; June 14.
Shoe stretching device. W. E. Ralstin. 1,862,940; June 14.
Shoe tap. J. Slepian. 1,863,356; June 14.
Shoe uppers, Preparing and assembling parts of. H. E. Enslin. 1,862,890; June 14.

Shuttles of power looms, Adjusting stopping-position of. K. Sakamoto. 1,863,127; June 14.
Sieve cleaner. F. Forseberg. 1,862,818; June 14.
Sign, Street. A. Sprung. 1,863,357; June 14.
Signal: *See*—
Safety signal. Submarine distress signal.
Signal deleter for tape transmitters, Rub out. R. Hoover and F. J. Haupt. 1,863,479; June 14.
Signal transmitter. D. T. Shaw. 1,863,285; June 14.
Signaling arrangement for telephone systems. M. L. Almquist. 1,862,587; June 14.
Signaling device. C. Miller. 1,863,532; June 14.
Signaling flasher, Railway. S. S. Stolp. 1,862,773; June 14.
Signaling system. P. B. Murphy. 1,862,578; June 14.
Signaling system for automotive vehicles. H. A. Douglas. 1,862,738–9; June 14.
Singeing. W. W. Kemp. 1,862,959–60; June 14.
Sintering machine. H. J. Stehli. 1,862,832; June 14.
Siphon-break for flush valves, etc. H. Wesson. 1,862,731; June 14.
Slicing machine. W. J. Campbell. 1,863,326; June 14.
Slicing machine. W. B. Wolff. 1,863,317; June 14.
Slicing machines, Guard plate and guard plate support for. W. J. Campbell. 1,863,328; June 14.
Slicing machines, Pusher plate for. W. J. Campbell. 1,863,327; June 14.
Slip. A. G. Weatherly. 1,863,290; June 14.
Smoking stand. C. B. Camp. Des. 87,145; June 14.
Snowplow. G. H. Curtis. 1,863,474; June 14.
Soldering means, Electric. L. A. Bean. 1,862,653; June 14.
Speed control. J. I. Hull. 1,863,408; June 14.
Speed control mechanism. A. I. Pope. 1,862,802; June 14.
Speed responsive means. M. Pateau. 1,863,412; June 14.
Spider for deep well turbine pumps, Adjustable. J. A. Wintroath. 1,863,213; June 14.
Spindle for screw driving machines. F. H. Dellaree. 1,862,845; June 14.
Spoon, Fishing. M. S. Anderson. 1,862,917; June 14.
Spoon or similar article. W. S. Warren. Des. 87,177; June 14.
Spout for fluid containers, Automatic. H. Henig. 1,863,272; June 14.
Spray adjustment means for sprinkler heads. W. V. E. Thompson. 1,862,812; June 14.
Spray stopper. I. H. Greene. 1,863,158; June 14.
Spring: *See*—
Coil spring. Leaf spring.
Spring attaching means. J. C. Doze. 1,863,193; June 14.
Spring structure. E. D. McNally. 1,863,450; June 14.
Sprinkler. M. C. Ludlam. 1,862,576; June 14.
Stairway. A. J. Hall. 1,862,958; June 14.
Stand for coffee makers, Heater. F. E. Wolcott. Des. 87,182; June 14.
Stand for golf bags, Portable. H. W. May. 1,863,022; June 14.
Stand or similar article, Display. C. A. Philippi. Des. 87,170–1; June 14.
Starter, Electric. C. P. Brockway. 1,862,921; June 14.
Starter, Engine. R. P. Lansing. Re18,496; June 14.
Starting internal combustion engines, Apparatus for. C. F. Ball. 1,862,999; June 14.
Steering control. H. Marles. 1,862,692; June 14.
Sterilizer. J. C. Leo. 1,862,963; June 14.
Stirrer, Mechanical. J. Preleuthner. 1,862,906; June 14.
Stirring machine. R. E. Dutt. 1,862,590; June 14.
Stock indicator. G. Fox. 1,862,619; June 14.
Stoker, Locomotive. E. A. Turner. 1,863,289; June 14.
Stone crusher. E. J. Leap. 1,863,492; June 14.
Stool, Lunch counter. P. Madsen. 1,862,755; June 14.
Stopper: *See*—
Spray stopper.
Storage house. C. L. Jones and W. L. Kuehnle. 1,863,484; June 14.
Stove casing, Gas. H. W. O'Dowd. Des. 87,169; June 14.
Stove, Cook. G. E. Pickup. 1,862,767; June 14.
Strainer and regulator for gas refrigerating apparatus, Combined. R. G. Dowins. 1,863,103; June 14.
Strainer, Deep well. G. E. Willers. 1,862,838; June 14.
Strainer for mechanical refrigeration. H. G. Weymouth and H. Chrisman. 1,862,916; June 14.
Submarine distress signal. J. Mangione and S. Terranova. 1,863,019; June 14.
Substances containing oils, fats, etc., Extraction from. C. Schlotterhose. 1,862,945; June 14.
Suction roll. A. N. Russell. 1,862,909; June 14.
Sugar, Refining. C. A. Spreckels. 1,862,719; June 14.
Sulky. H. W. Hann. 1,863,112; June 14.
Sulphide, Producing hydrogen. G. Lynn, E. M. Allen, and B. K. Beecher. 1,862,900; June 14.
Sulphur trioxide and catalyst for use in said method, Making. N. A. Laury. 1,862,825; June 14.
Superheater boiler. H. J. Kerr. 1,863,055; June 14.
Superheater, Single header multiple-pass. C. S. Turner. 1,863,174; June 14.
Support and adjustment for speaking movie exciter lamps. A. Dina. 1,863,300; June 14.
Support, Bottle. S. Malti and S. Melita. 1,863,163; June 14.
Support, Curtain and adjustable shade. F. A. Lovrich. 1,862,271; June 14.
Support for food mixers, Adjustable. E. R. Mross. 1,862,826; June 14.
Support for motion picture projection machines, Adjustable. L. S. Frappier and E. Boecking. 1,863,369; June 14.
Supporting device, Drapery. J. S. Vance. 1,862,836; June 14.
Supporting device for vehicles. A. J. M. Garnier. 1,863,105; June 14.
Supporting device, Mirror. C. L. Knutson. 1,863,060; June 14.
Supporting means for fermentation tubes and the like. H. Comer. 1,863,297; June 14.
Supporting roof strata during the mining of minerals. W. P. Taber. Re18,491; June 14.
Surface ornamentation and producing same. J. J. Weber. 1,862,875; June 14.
Surgeon's instrument. J. G. H. Liebel. 1,863,118; June 14.
Surgical apparatus. J. B. Bacon. 1,863,234; June 14.
Surgical appliance. H. G. Clash. 1,863,188; June 14.
Surgical drain. G. A. Innes. 1,863,057; June 14.
Suspension for track laying vehicles. H. A. Knox. 1,862,934; June 14.
Switch: *See*—
Electric switch. Inclosed switch.
Gravity switch.
Switch. G. H. E. Lyons. 1,863,494; June 14.
Switch. H. E. Norviel and V. Ecoff. 1,863,350; June 14.
Switch or circuit breaker, Electric. J. Anderson. 1,862,782; June 14.
Switch structure. A. Penn. 1,862,631; June 14.
Table: *See*—
Camp table. Putty remover and glazing table.
Table for automobiles, Folding. W. F. Folmer. 1,863,368; June 14.
Tachometer jewel frame and drive shaft retainer. E. F. Bacon. 1,862,997; June 14.
Talking machine and the like. F. A. Mitchell. 1,862,700; June 14.
Tank: *See*—
Gasoline tank.
Tedder. H. Hurlimann. 1,863,444; June 14.
Telephone exchange system. C. De Vriendt. 1,863,330; June 14.
Telephone exchange system. H. Hovland. 1,863,307; June 14.
Telephone pay station. A. F. Bennett. 1,863,322; June 14.
Telephone, Prepayment. K. W. Thalhammer. 1,,862,639; June 14.
Telephone system. T. V. Curley. 1,863,086; June 14.
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Telephone system. F. Lubberger and G. Rothert. 1,862,689; June 14.
Telephone system. R. Raymond and W. J. Scully. 1,862,549; June 14.
Telephone system. W. Whitney. 1,863,292; June 14.
Television. C. D. Fahrney. 1,862,743; June 14.
Temperature control apparatus for frequency control devices. L. A. Gebhard. 1,862,929; June 14.
Temperature indicator. L. C. Nichols. 1,862,763; June 14.
Terminal strip. H. W. Goff. 1,862,571; June 14.
Testing screen. W. S. Weston. 1,863,291; June 14.
Throttle. G. F. Pippy. 1,863,608; June 14.
Tie plate and rail fastener. J. A. McGrew. 1,863,274; June 14.
Tie rod end. G. H. Hufferd and M. P. Graham. 1,862,933; June 14.
Tile grinding machine. T. C. and W. O. Prouty. 1,862,704; June 14.
Tile partition. J. H. Ryan. 1,862,831; June 14.
Time measuring device. W. Hatton and K. M. Sano. 1,862,537; June 14.
Time of day announcing system. H. G. W. Brown. 1,862,519; June 14.
Time of day announcing system. C. W. Keckler and A. E. Hague. 1,863,137; June 14.
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Timing and recording mechanism. S. Shafer, jr., 1,862,946; June 14.
Tire. B. Darrow. Des. 87,147; June 14.
Tire. J. V. Martin. 1,862,693; June 14.
Tire core. H. C. Bostwick. 1,862,655; June 14.
Tire, Cushion. H. F. Schippel. 1,863,031; June 14.
Toaster, Automatic sandwich. A. Maragos. 1,862,965; June 14.
Toaster, Electric. A. O. Samuels. Des. 87,172; June 14.
Toaster, Electric. H. C. Wright. 1,862,733; June 14.
Tobacco stemming machines, Leaf feeding attachment for. L. H. Zeun. 1,863,149; June 14.
Toggle fastening appliance for doors. R. L. Hewitt. 1,863,524; June 14.
Toilet implement. E. A. Lees. 1,863,449; June 14.
Tongs. R. M. Kerr. 1,862,625; June 14.
Tongs, Deep sea. W. M. Johnson. 1,862,539; June 14.
Tool. E. Welhaven. 1,862,556; June 14.
Tool, Fluid actuated. A. G. Slatcher. 1,862,637; June 14.
Tool for surfacing and forming fibrous material. A. B. Johnson. 1,862,681; June 14.
Tool, Resurfacing. N. B. Stone. 1,862,810; June 14.
Tooth paste. G. H. Heymann. 1,863,116; June 14.

Tower, Drying. L. Gillett. 1,862,746; June 14.
Toy. E. N. Anketell. 1,863,320; June 14.
Toy. A. B. Rode. 1,863,167; June 14.
Toy cannon. J. W. MacDonald. 1,863,062; June 14.
Toy, Constructional. H. C. Wetzel. 1,862,558; June 14.
Toy machine gun. W. Daspit. 1,863,438; June 14.
Toy, Novelty. D. M. Nolan. Des. 87,168; June 14.
Track construction, Railway. J. A. McGrew. 1,863,248; June 14.
Traction mat. T. K. Webster, jr. 1,863,310; June 14.
Tractor, Electric drive. S. Schmid, jr. 1,863,504; June 14.
Trailer. W. C. Nabors. 1,863,348; June 14.
Transactions, Apparatus for recording. J. J. Dickman. 1,862,528–9; June 14.
Transfer contact. R. C. Mason. 1,863,312; June 14.
Transformer. E. J. von Henke. 1,862,642; June 14.
Transformer for radio transmitters, Filament supply. L. A. Gebhard. 1,863,477; June 14.
Transformer for use in electric welding and like operations. G. Benedetto. 1,863,462; June 14.
Transformer, High tension. A. Meyerhans. 1,862,798; June 14.
Transformer, Multiple piezo-electric. A. McL. Nicolson. 1,863,345; June 14.
Transformer-rheostat control device. J. E. Cuff. 1,863,267; June 14.
Translating device. S. O. Hoffman. 1,862,622; June 14.
Transmitting system. C. W. Hough. 1,863,374; June 14.
Trap: *See*—
Game trap.
Tray and making the same, Open bottom ventilated paper. J. J. Hess. 1,863,334; June 14.
Tread: device for vehicle wheels. H. Hürlimann. 1,863,481; June 14.
Trimming flat parts, Apparatus for. L. C. Goad. 1,863,303; June 14.
Trimming machine. P. R. Hoopes. 1,862,538; June 14.
Trimming machine. A. Van Veen. 1,862,990; June 14.
Trough, Pouring. W. T. Ennor. 1,862,787; June 14.
Truck parts, Interlocking car. J. S. McPherson. 1,862,966; June 14.
Truck, Railway car. M. H. Martin. 1,863,063; June 14.
Truck, Refuse disposal. A. E. Masury. 1,862,756; June 14.
Truck, Six-wheel tender. E. M. Shannon. 1,863,506; June 14.
Truck, Transport. P. H. Nast. 1,862,938; June 14.
Tube: *See*—
Paste dispensing tube.
Tube closure, Collapsible. P. P. Lamb. 1,862,794; June 14.
Tube for inflatable bodies, Pneumatic locking inflating. J. F. L. Marren. 1,863,119; June 14.
Tube machines, Cut-off mechanism for. J. B. Platt. 1,863,124; June 14.
Tubing, Apparatus for welding. C. M. Mitchell. 1,863,313; June 14.
Tuning device, Variable. E. G. Danielson. 1,862,819; June 14.
Turbine, Elastic fluid. C. A. Parsons, A. Q. Carnegie, and F. W. Gardner. 1,862,579; June 14.
Turbine generator set. E. J. Blake. 1,862,919; June 14.
Turbine, Steam. C. A. Parsons, A. Q. Carnegie, and F. W. Gardner. 1,862,827; June 14.
Typewriting machine. J. A. B. Smith. 1,862,772; June 14.
Umbrella. E. E. Frey. 1,862,674; June 14.
Underframe for railway cars, Cast steel. M. H. Martin. 1,863,311; June 14.
Unidirectional mechanism. L. M. Dieterich. 1,863,101; June 14.
Universal joint. R. P. Deschamps. 1,863,365; June 14.
Upholstery edge. H. Fox. 1,863,269; June 14.
Utensil, Cooking. E. E. Marquart. 1,862,602; June 14.
Utensil, Cooking. F. I. Pierce. 1,863,413; June 14.
V-type engine. C. E. Summers. 1,862,723; June 14.
Vacuum cup. E. H. Odell. 1,863,534; June 14.
Vacuum jar. W. B. Willcutt and C. A. Sleicher. 1,862,560; June 14.
Valve. J. C. Marble. 1,863,020; June 14.
Valve. S. J. Nordstrom. 1,863,380; June 14.
Valve. J. R. Olson. 1,862,545; June 14.
Valve. C. M. Terry. 1,863,075; June 14.
Valve and its operation. E. E. Littlefield. 1,862,937; June 14.
Valve, Dry pipe. A. C. Rowley. 1,863,458; June 14.
Valve, Filling. W. de Back. 1,862,923; June 14.
Valve fitting, Relief. J. A. Maynard. 1,863,227; June 14.
Valve, Outlet. R. C. Pierce. 1,863,252; June 14.
Valve spring lifter. H. W. Kulp and M. C. Dellinger. 1,862,792–3; June 14.
Valve, Thermostatic mixing. H. A. Bern. 1,862,564; June 14.
Vehicle wheel. J. V. Pugh. 1,862,804–5; June 14.
Vehicle wheel, Auxiliary. J. Crisanti. 1,863,473; June 14.
Vehicles and the like, Transporting. I. H. Judd. 1,862,682; June 14.
Venetian blind bracket. E. Anderson. 1,863,093; June 14.
Ventilating system. J. Flaherty. 1,863,198; June 14.
View transmission system. V. K. Zworykin. 1,863,363; June 14.
Viscose, Manufacturing. E. Goth. 1,862,592; June 14.
Viscosimeter. G. C. Fairbairn. 1,863,522; June 14.
Voltage regulator. W. H. T. Holden. 1,862,595; June 14.
Vulcanizer. F. L. Johnson. 1,863,201; June 14.
Walking stick seat. H. D. Stevens. 1,863,457; June 14.
Wall and making it, Concrete. R. C. McWane. 1,862,544; June 14.
Wall bleacher, Convertible. R. G. Howard. 1,862,824; June 14.
Wardrobe case. J. Ritter, jr. Re18,499; June 14.
Wares and method of manufacture, Ceramic. T. G. McDougal. 1,862,974; June 14.
Washing machine. F. Balzer. 1,862,652; June 14.
Washing machine and gyratator. H. F. Snyder. 1,863,546; June 14.
Watch pendant construction. A. Chapatte. 1,862,526; June 14.
Water cooler. A. F. Moriarity, S. F. Witten, and O. Schopp. 1,863,240; June 14.
Water heater. O. Hofferbert. 1,863,273; June 14.
Water heater, Domestic hot. C. H. Morrow. 1,862,630; June 14.
Waterproofing composition and articles treated therewith. C. E. Burke and W. E. Lawson. 1,862,505; June 14.
Water purifier, Electrolytic. T. J. Curtis. 1,862,663; June 14.
Water supply device for batteries. B. C. Lewis. 1,863,203; June 14.
Water wheel, Floating. A. Robbins. 1,863,550; June 14.
Wax from oil, Separating. V. Voorhees. 1,862,874; June 14.
Weatherstrip structure. McR. Green. 1,862,534; June 14.
Weather stripping for freight car sidings. A. Thune. 1,863,231; June 14.
Weaving apparatus. M. C. H. O. Lecoco. 1,862,962; June 14.
Welding generator. A. Churchward. 1,862,922; June 14.
Well drill. J. D. Morrison. 1,862,629; June 14.
Well drill. J. C. Wright and L. F. Bonney. 1,862,814; June 14.
Wheel: *See*—
Vehicle wheel. Water wheel.
Wheel. J. B. Strauss. 1,862,867; June 14.
Wheel apparatus, Fifth. C. H. Martin. 1,863,120; June 14.
Wheel bolt, Vehicle. R. Mooney. 1,863,496; June 14.
Wheel construction. G. B. Reed. 1,863,126; June 14.
Wheel lock. T. J. Benson. 1,863,235; June 14.
Wicking machine. L. E. Anderson. 1,863,389; June 14.
Winding machine. O. I. Judelshon. 1,863,058; June 14.
Winding machines, Traversing means for. E. F. Parks. 1,863,280; June 14.
Window bolt. W. A. Charlestream. 1,863,467; June 14.
Window construction. A. W. Menns. 1,862,757; June 14.
Window lock. L. Garbe. 1,862,568; June 14.
Window operating mechanism. C. W. Kelly. 1,863,486; June 14.
Window screen. L. D. Herndon. 1,863,014; June 14.
Wires, Joining. W. S. Hayford. 1,863,048; June 14.
Work feeding device. D. C. Hughes. 1,862,894; June 14.
Worm hob. N. Trbojevich. 1,863,512; June 14.
Wrapper. G. Wordingham. 1,863,216; June 14.
Wrench. J. Elfel. 1,862,817; June 14.
Wrench. W. C. Meeks. 1,863,378; June 14.
Zinc sulphide ores, Roasting of. S. Robson. 1,862,828; June 14.

CLASSIFICATION OF PATENTS

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NOTE.—First number = class, second number = subclass, third number = patent number

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33: 1,863,235
34: 1,863,464
44: 1,863,481
55: 1,862,804
70: 1,863,126
304— 40: 1,863,247
305— 8: 1,862,934
10: 1,862,617
1,862,784
308— 59: 1,862,885
74: 1,863,142
81: 1,863,281
212: 1,862,641
224: 1,863,121
226: 1,862,765
312— 61: 1,863,240
73: 1,862,944
140: 1,863,351
1,863,381
1,863,516
169: 1,862,654

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abbott Company, The, Wilton, Me. Boots, shoes, slippers, etc. Serial No. 326,073; June 21. Class 39.

Ad-Ez Company, The, Cleveland, Ohio. Skin lubricating preparation. Serial No. 319,054; June 21. Class 6.

Allen Chemical Company, Toledo, Ohio. Nose and throat sprays. Serial No. 326,880; Feb. 21. Class 6.

Allied Research Laboratories, Inc., Glendale, Calif. Solder. Serial No. 326,930; June 21. Class 14.

Alpha Epsilon Pi Fraternity, Inc., New York, N. Y. Fraternity badges, lapel buttons, pins, etc. Serial No. 299,243; June 21. Class 28.

American College of Life Underwriters, The, Washington, D. C., and Baltimore, Md. Watch charms. Serial No. 317,417; June 21. Class 28.

American Flyer Mfg. Co., Chicago, Ill. Transformers. Serial No. 326,629; June 21. Class 21.

American Proprietaries. (See Kaltz, Abraham H.)

Ash, Maurice L., jr., doing business as Wagir Chemical Company, Chicago, Ill. Chemicals. Serial No. 325,890; June 21. Class 6.

Auberger, Thomas, Paris, France. Massaging apparatus. Serial No. 326,513; June 21. Class 44.

Automatic Electric Company, Chicago, Ill. Communicating and signaling systems. Serial No. 325,675; June 21. Class 21.

Ballantine, P., & Sons, Newark, N. J. Malt syrup. Serial No. 327,039; June 21. Class 46.

Bamberger, L., & Co., Newark, N. J. Children's furniture. Serial No. 309,957; June 21. Class 32.

Banning, Roger F., doing business as The Modern Life Publishing Co., St. Paul, Minn. Magazine. Serial No. 327,088; June 21. Class 38.

Bendix Aviation Corporation, Chicago, Ill., and South Bend, Ind. Brakes and brake systems and parts thereof. Serial Nos. 325,935–7; June 21. Class 19.

Benrose Silk Mfg. Corp., New York, N. Y. Silk and rayon crepes in the piece. Serial No. 324,423; June 21. Class 42.

Biltrite Motor Equipment Co. Inc., New York, N. Y. Oils and greases. Serial No. 325,250; June 21. Class 15.

Borst Engineering, Inc., Buffalo, N. Y. Coin-operated dispensing apparatus. Serial No. 320,629; June 21. Class 23.

Byron Jackson Co., Los Angeles, Calif. Centrifugal pumps. Serial No. 326,729; June 21. Class 23.

Celolac Products Company, Minneapolis, Minn. Polish. Serial No. 310,432; June 21. Class 16.

Chemische und Pharmazeutische Fabrik Dr. Georg Henning, Berlin-Tempelhof, Germany. Extract of skeletonmuscles, etc. Serial No. 323,776; June 21. Class 6.

City Mills Company, Columbus, Ga. Wheat flour. Serial No. 322,355; June 21. Class 46.

Clap, Harvey, & Company, Attlesboro, Mass. Metal articles of jewelry. Serial No. 326,079; June 21. Class 28.

Clapp, Otis, & Son, Inc., Boston, Mass. Sedative. Serial Nos. 327,184–5; June 21. Class 6.

Clayton, Joseph, doing business as Clayton Products Compani, Corona, N. Y. Mechanisms for controlling the tension in the winding of material and apparatus, etc. Serial No. 320,159; June 21. Class 23.

Colgate-Palmolive-Peet Company, Chicago, Ill. Toilet soap. Serial No. 326,842; June 21. Class 4.

Columbia Plush & Puff Co., Inc., Brooklyn, N. Y. Woven elastics, hairpins, combs, etc. Serial No. 325,981; June 21. Class 40.

Craddock-Terry Company, Lynchburg, Va. Shoes. Serial No. 326,252; June 21. Class 39.

Creco Company Inc., Long Island City, N. Y. Floor scrubbing soap. Serial No. 318,549; June 21. Class 4.

Crown Pharmacal Company. (See Lauricella, Joseph F.)

Crystal Shoe Polish Mfg. Co., The. (See Vassilatos, William T.)

Ducharne, F., Silk Co. Inc., New York, N. Y. Piece goods of silk, rayon, cotton and wool. Serial No. 327,049; June 21. Class 42.

Ducharne, F., Silk Co. Inc., New York, N. Y. Piece goods of silk and rayon. Serial No. 327,050; June 21. Class 42.

Dunn, Struthers, Inc., Philadelphia, Pa. Selenium, thallium, etc., cells, units, and systems. Serial No. 325,860; June 21. Class 21.

E-Z Tite Rubber Company, Renton, Wash. Bottle stoppers. Serial No. 326,465; June 21. Class 50.

Emporia Machine Co. Inc., Emporia, Va. Plows. Serial Nos. 326,743–4; June 21. Class 23.

Fabrica Nacional de Toledo, Toledo, Spain. Razor blades. Serial No. 325,065; June 21. Class 23.

Falls, J. G., doing business as J. G. Falls Co., Brooklyn, N. Y. Dietetic flour. Serial No. 313,654; June 21. Class 46.

Faulds, T. A., Co., Inc., Boston, Mass. Powdered baking flavor. Serial No. 326,050; June 21. Class 46.

Fergusson, Alex. C., Co., Philadelphia, Pa. Cleaning compounds. Serial No. 325,255; June 21. Class 4.

Ferry-Hanly Advertising Company, New York, N. Y.; Chicago, Ill.; and Kansas City, Mo. Cartoons. Serial No. 327,239; June 21. Class 38.

Finley, Nellie A., Waco, Tex. Preparation for circulating in the water cooling system of an automobile, etc. Serial No. 323,992; June 21. Class 6.

Fischmann, Nettie, St. Louis, Mo. Dresses and suits. Serial No. 326,209; June 21. Class 39.

Fitchburg Yarn Company, Fitchburg, Mass. Yarns. Serial Nos. 321,272–3; June 21. Class 48.

Floriorange Canneries, Inc., Mount Dora, Fla. Canned citrus fruits and juices. Serial No. 321,333; June 21. Class 46.

Ford, Barbara, Houston, Tex. Dresses, coats, suits, etc. Serial No. 326,623; June 21. Class 39.

Fudo Psyllium Corp. (See Lichtenstein, William.)

Fur Protective Seal Corp., New York, N. Y. Identification tags. Serial No. 326,585; June 21. Class 50.

Gallagher, Walter J., New York, N. Y. Printed folders. Serial No. 326,781; June 21. Class 38.

Gesteira, Dr. Jeronymo, Detroit, Mich. Medicine. Serial No. 325,038; June 21. Class 6.

Gesteira, Dr. Jeronymo, Detroit, Mich. Laxative. Serial No. 325,039; published June 21. Class 6.

Gilbert Products Co., St. Paul, Minn. Composition for softening water and for use as a soap saver and cleaner. Serial No. 325,850; June 21. Class 6.

Godissart's Parfum Classique Francais Inc. Ltd., Wilmington, Del., and Los Angeles, Calif. Perfume. Serial No. 325,521; June 21. Class 6.

Goedrich Chemical Company, New York, N. Y. Bactericidal and fungicidal preparations. Serial No. 326,609; June 21. Class 6.

Golden Valley Produce Co. Ltd., El Centro, Calif. Fresh vegetables. Serial No. 323,454; June 21. Class 46.

Griswoldville Manufacturing Company, Griswoldville, Mass. Cotton cloth. Serial No. 327,141; June 21. Class 42.

Griswoldville Manufacturing Company, Griswoldville, Mass. Cottou cloth. Serial No. 327,143; June 21. Class 42.

Gudebrod Brothers Silk Company, Philadelphia, Pa. Thread. Serial No. 326,443; June 21. Class 43.

Gunn Furniture Company, The, Grand Rapids, Mich Cleaner and preservative for linoleum. Serial No 324,604; June 21. Class 4.

Haba Laboratories, Savanna, Ill. Liquid styptic. Serial No. 325,686; June 21. Class 6.

Hanfling, K., & Son, Chicago, Ill. Leather. Serial No 326,611; June 21. Class 1.

Heating Journals, Inc., New York, N. Y. Publications. Serial No. 327,096; June 21. Class 38.

Henry & Close Co., Boston, Mass. Fresh fish fillets. Serial No. 327,013; June 21. Class 46.

Hildebrand, Walter H., Chicago, Ill. Cotton cloth in the piece. Serial No. 325,687; June 21. Class 42.

Hirschberg-Schwadron & Co. Inc., New York, N. Y. Dresses. Serial No. 325,712; June 21. Class 39.

Hitchcock Laboratories, Sebring, Ohio. Liquid preparation for coughs, colds, etc. Serial No. 325,471; June 21. Class 6.

Hudson Manufacturing Co., The, Chicago, Ill. Food flavoring extracts. Serial No. 323,049; June 21. Class 46.

Humble Oil & Refining Company, Houston, Tex. Lubricating oils and greases. Serial No. 322,044; June 21. Class 15.

Huntington Laboratories, Inc., Huntington, Ind. Disinfectant. Serial No. 327,153; June 21. Class 6.

Hyde Park Foundry & Machine Company, Hyde Park, Pa. Rolling mill rolls, etc. Serial No. 326,369; June 21. Class 23.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerized vinyl esters. Serial No. 324,738; June 21. Class 6.

I. G. Farbenindustrie Aktiengesellschaft, Frankford-on-the-Main, Germany. Antimalarial preparation. Serial No. 326,638; June 21. Class 6.

Ideal Trading Co. (See Lichtenstein, William.)

Innovine Company, Fairhaven, Mass. Antiseptic and mouth, throat, and dental lotion. Serial No. 326,640; June 21. Class 6.

Ipswich Mills, Inc., Gloucester, Mass. Hosiery. Serial No. 327,055; June 21. Class 39.

Iron Fireman Manufacturing Company, Portland, Oreg. Automatic coal burners. Serial No. 298,331; June 21. Class 34.

Isaacs, S. Willard, doing business as Matta Grosso Turtle Oil Products Company, Los Angeles, Calif. Cosmetic. Serial No. 324,824; June 21. Class 6.

Jico Laboratories. (See Lachoff, Joseph.)

Jones, Dabney Company, Inc., Louisville, Ky. Lacquers, varnishes, paint enamels and paints. Serial No. 326,479; June 21. Class 16.

CARNEGIE LIBRARY OF ATLANTA

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Kaitz, Abraham H., doing business as American Proprietaries, Philadelphia, Pa. Preparation for the scalp and hair. Serial No. 293,433; June 21. Class 6

Karry Kart, Incorporated. (See Montgomery, Letty M., assignor.)

Kaumagraph Company, New York, N. Y. Ink solvents. Serial No. 326,289; June 21. Class 11.

Keystone Laboratories, Memphis, Tenn. Hair dressing. Serial No. 326,599; June 21. Class 6.

Kidd Products Corporation, Chicago, Ill. Chewing gum. Serial No. 317,520; June 21. Class 46.

Kitchenette Cookie Company, Louisville, Ky. Cookie dough. Serial No. 326,982; June 21. Class 46.

Kotex Company, Chicago, Ill. Toilet paper. Serial No. 327,097; June 21. Class 37.

Kress, S. H., & Co., New York, N. Y. Cravats, hosiery, nightgowns, etc. Serial No. 323,337; June 21. Class 39.

Kulla and Valente, New York, N. Y. Confection for the decorating of cakes, etc. Serial No. 324,892; June 21. Class 46.

Lachoff, Joseph, doing business as Jico Laboratories, Chicago, Ill. Shoe polish. Serial No. 326,943; June 21. Class 4.

Lakeview Manufacturing Company, Chicago, Ill. Dresses. Serial No. 327,061; June 21. Class 39.

Lamont, Corliss & Company, New York, N. Y. Chocolate. Serial No. 318,628; June 21. Class 46.

Lanair Company, Chicago, Ill. Insecticides. Serial No. 325,754; June 21. Class 6.

Landers Corporation, The, Toledo, Ohio. Glove cuff material. Serial No. 323,268; June 21. Class 50.

Lauricella, Joseph F., doing business as Crown Pharmacal Company, Long Beach, Calif. Liquid preparation for the treatment of sunburn. Serial No. 326,484; June 21. Class 6

Ledyard, Haury Company, Elyria, Ohio. Battery fillers. Serial No. 323,948; June 21. Class 2.

Lee Hardware Company, The, Salina, Kans. General adhesive. Serial No. 322,515; June 21. Class 5.

Lehman, Louis H., doing business as Lehman Sprayshield Company, Philadelphia, Pa. Glass shower stall doors, glass bath enclosures, etc. Serial No. 320,504; June 21. Class 13.

Le Roy Laboratories. (See Wright, H. Le Roy.)

Levay Bros., Inc., New York, N. Y. Silk and rayon goods in the piece. Serial No. 326,018; June 21. Class 42.

Levy, Chas. B., New Orleans, La. Bed springs, mattresses, and pillows. Serial No. 326,110; June 21. Class 32.

Lichtenstein, William, doing business as Ideal Trading Co., and Fudo Psyllium Corp., New York, N. Y. Bird seed. Serial No. 326,152; June 21. Class 46.

Linda Mineral Sales Company, Oakland, Calif. Fertilizers and poultry litter. Serial No. 325,635; June 21. Class 10.

Lyndell, Birger C., Somerville, Mass. Graham bread. Serial No. 323,345; June 21. Class 46.

Macy, R. H., & Co., Inc., New York, N. Y. Dresses, suits, and coats. Serial No. 327,022; June 21. Class 39.

Marcus & Wiesen, Inc., New York, N. Y. Sanitary belts. Serial No. 326,903; June 21. Class 44.

Martie, R. B., Inc., New York, N. Y. Powdered soap compound. Serial No. 326,755; June 21. Class 4.

Matta Grosso Turtle Oil Products Company. (See Isaacs, S. Willard.)

McNeil, Robert, Philadelphia, Pa. Cholagogue, biliary antifermentative, and laxative. Serial No. 326,385; June 21. Class 6.

McNeil, Robert, Philadelphia, Pa. Preparation for cleansing wounds, ulcers, and the like. Serial No. 326,388; June 21. Class 6.

McNeil, Robert, Philadelphia, Pa. Preparation used in the treatment of staphylococcic infections. Serial No. 326,390; June 21. Class 6.

Merck & Co. Inc., Rahway, N. J. Anæsthetic. Serial No. 325,955; June 21. Class 6.

Mercury Mills, Limited, Hamilton, Ontario, Canada. Clothing. Serial No. 321,730; June 21. Class 39.

Metex Company, Incorporated, The, Wilmington, Del.; Lock Haven, Pa.; and New York, N. Y. Papers and paper boards. Serial No. 326,225; June 21. Class 37.

Meyer, N. S., Inc., New York, N. Y. Metal polish. Serial No. 302,469; June 21. Class 4.

Midvale Company, The, Nicetown, Philadelphia, Pa. Tool steel. Serial Nos. 297,316–17; June 21. Class 14.

Miller Company, The, Meriden, Conn. Electric lighting fixtures and lamps. Serial No. 313,381; June 21. Class 21.

Modern Life Publishing Co., The. (See Banning, Roger F.)

Montgomery, Letty M., assignor to Karry Kart, Incorporated, New York, N. Y. Perambulator. Serial No. 319,701; June 21. Class 19.

Morgan Construction Company, Worcester, Mass. Rolling mill apparatus. Serial No. 326,114; June 21. Class 23.

Muehlelsen, Alfons, New York, N. Y. Surgical bandages. Serial No. 326,905; June 21. Class 44

Naamlooze Vennootschap Amsterdamsche Superfosfaatfabriek, Utrecht, Holland. Fertilizers. Serial No. 326,527; June 21. Class 10.

Namm, A. I. & Son, doing business as The Namm Store, Brooklyn, N. Y. Liquid antiseptics and disinfectants, bath salts, talcum powder, etc. Serial No. 326,296; June 21. Class 6.

National Carbide Corporation, Wytheville, Va.; New York, N. Y.; and Ivanhoe, Va. Calcium carbide. Serial No. 326,336; June 21. Class 6.

National Devices Corporation, Philadelphia, Pa. Kitchen mixing device. Serial No. 326,446; June 21. Class 21.

National Fruit Product Company, Inc., Washington, D. C. Apple products. Serial No. 325,720; June 21. Class 46.

National Remedy Company, New York, N. Y. Coloring preparation for the hair. Serial No. 326,951; June 21. Class 6.

National Shirt Shops, Inc., New York, N. Y. Shirts, underwear, and pajamas. Serial No. 322,643; June 21. Class 39.

Naumkeag Steam Cotton Company, Salem, Mass. Bedspreads, curtains, draperies, etc. Serial No. 326,718; June 21. Class 42.

Neumann, C. J., Coffee Co. Inc., Brooklyn, N. Y. Tea and coffee. Serial No. 326,829; June 21. Class 46.

Oat Snaps Company. (See Purity Oats Company.)

Odorono Company, Inc., The, New York, N. Y. Deodorants and preparations. Serial No. 322,265; June 21. Class 6.

Odorono Company, Inc., The, New York, N. Y. Deodorant and perspiration corrective. Serial No. 324,296; June 21. Class 6.

Old mission Packing Corp., Ltd., North San Diego, Calif. Canned olives, olive oil, etc. Serial No. 325,596; June 21. Class 46.

Oppenheim, Oberndorf & Co., Inc., Baltimore, Md. Shorts, shirts, union suits, etc. Serial No. 325,405; June 21. Class 39.

Paine Drug Company, The, Rochester, N. Y. Medicinal preparation. Serial No. 326,868; June 21. Class 6.

Par Laboratories. (See Rime, Fred.)

Penna, Edilio, Brooklyn, N. Y. Olive oil, canned tuna fish, etc. Serial No. 323,207; June 21. Class 46.

Peoria Metal Specialty Co., Peoria, Ill. Metal bread boxes, canister sets, etc. Serial Nos. 324,362–3; June 21. Class 2.

Perry, Saul H., doing business as Pickwick Ice Cream Company, Stamford, Conn. Ice cream. Serial No. 314,960; June 21. Class 46.

Philco Trading Co., Inc., Philadelphia, Pa., and New York, N. Y. Shirts, hosiery, socks, etc. Serial No. 326,393; June 21. Class 39.

Phillips-Jones Corporation, New York, N. Y. Shirts and pajamas. Serial No. 326,988; June 21. Class 39.

Pickwick Ice Cream Company. (See Perry, Saul H.)

Prym, William, of America, Inc., New York and Long Island City, N. Y. Common and toilet pins and safety pins. Serial No. 326,830; June 21. Class 40.

Purity Oats Company, doing business as Oat Snaps Company, Keokuk, Iowa. Breakfast foods. Serial No. 326,759; June 21. Class 46.

Radio Carbon Company, Dallas, Tex. Carbon paper and typewriter ribbons. Serial No. 319,185; June 21. Class 11.

Radio Research Laboratories, Tacoma, Wash. Radio tube testers. Serial No. 317,536; June 21. Class 26.

Ray-Mac Sales Co., Wood Ridge, N. J. Preparation for increasing the efficiency of gasoline, etc. Serial No. 322,922; June 21. Class 6.

Reeves, B. M. Co., Inc., Brooklyn, N. Y. Bottled olives, cherries, and package dates. Serial No. 325,016; June 21. Class 46.

Rime, Fred, doing business as Par Laboratories, Los Angeles, Calif. Medical inhalant. Serial No. 320,552; June 21. Class 6.

Robico Biscuit Company, New York, N. Y. Biscuits and wafers. Serial No. 327,027; June 21. Class 46.

Russell Box Company, Medford, Mass. Paper-board. Serial No. 325,152; June 21. Class 37.

Sächsische Porzellanfabrik zu Potschappel von Carl Thieme, Potschappel-Dresden, now Freital, and Dresden, Germany. Porcelain. Serial No. 325,448; June 21. Class 30.

Sandoz Chemical Works, Inc., New York, N. Y. Products recommended to relieve spasm and to treat affections. Serial No. 326,408; June 21. Class 6.

Sante' Institute, Ltd., Los Angeles, Calif. Eggs and dressed poultry. Serial No. 326,193; June 21. Class 46.

Sasco Sugar Corporation, Dover, Del. Sugar. Serial No. 325,019; June 21. Class 46.

Schlitz, Jos., Beverage Company, Milwaukee, Wis. Canned malt syrup. Serial No. 310,305; June 21. Class 46.

Scott, Cashlus M., doing business as Scott's Scalp Preparation Company, Chicago, Ill. Hair grower, dressing, and pressing oil. Serial No. 317,407; June 21. Class 6.

Service Products, Incorporated, Greenville, Pa. Chemical preparation. Serial No. 326,342; June 21. Class 6.

1632 Indiana Corporation. (See Wyle Hat Corporation.)

Societa Anonima Lucchese Olii E Vini, Lucca, Italy. Olive oil. Serial No. 320,010; June 21. Class 46.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Sound Engineering Corporation, New York, N. Y. Phonographic machines and parts thereof. Serial No. 326,270; June 21. Class 36.

Southern Chemical Cotton Company, Chattanooga, Tenn. Chemical cotton. Serial No. 327,070; June 21. Class 1.

Southland Coffee Company, Macon, Ga. Coffee. Serial No. 312,462; June 21. Class 46.

Spooner, Inc., New York, N. Y. Rouge, talcum, powder, hair tonic, etc. Serial No. 326,167; June 21. Class 6.

Squibb, E. R. & Sons, New York, N. Y. Medicinal diaminoazo-benzols. Serial No. 326,305; June 21. Class 6.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. Serial Nos. 327,120–1; June 21. Class 43.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. Serial No. 327,123; June 21. Class 43.

States Batteries, Ltd., Los Angeles, Calif. Storage batteries. Serial No. 313,021; June 21. Class 21.

Stenover, Inc., East Orange, N. J. Insecticides. Serial No. 323,916; June 21. Class 6.

Sumergrade, N., & Sons, Inc., New York, N. Y. Pillows, mattresses, and box springs. Serial No. 326,061; June 21. Class 32.

Sunshine Magic. (See Terry, Marion S.)

Supreme Products Company, St. Louis, Mo. Metal cleaners and polishes. Serial No. 326,399; June 21. Class 4.

Sussberg & Feinberg, Inc., New York, N. Y. Slips. Serial No. 326,919; June 21. Class 39.

Swett, Frank H., doing business as F. H. Swett & Co., Chicago, Ill. Canned fruits and vegetables. Serial No. 326,561; June 21. Class 46.

Taylor, T. R., & Co., York, Pa. Furniture. Serial No. 320,381; June 21. Class 32.

Terry, Marion S., doing business as Sunshine Magic, Scituate, Mass. Child's blue printing set. Serial No. 321,262; June 21. Class 22.

Truesdail, Roger W., Los Angeles, Calif. Article of food. Serial No. 322,897; June 21. Class 46.

U-Zit Manufacturing Company. (See Wolff, George M.)

United Drug Company, Boston, Mass. Powder puffs. Serial No. 327,033; June 21. Class 29.

Upson, Ralph H., Ann Arbor, Mich. Horizon indicators. Serial Nos. 325,764–5; June 21. Class 26.

Van Raalte Company, New York, N. Y. Hosiery. Serial No. 323,598; June 21. Class 39.

Van Sickle, Amanda, Ashland, Pa. Compound. Serial No. 320,997; June 21. Class 6.

Vassilatos, William T., doing business as The Crystal Shoe Polish Mfg. Co., Chicago, Ill. Shoe cleaning and polishing compounds. Serial No. 326,510; June 21. Class 4.

Vitamineral Products Company, Peoria, Ill. Compound. Serial No. 313,722; June 21. Class 6.

Vitamineral Products Company, Peoria, Ill. Compound. Serial No. 313,724; June 21. Class 6.

Volunteer Stores, Inc., doing business as Volunteer Food Stores, Chattanooga, Tenn. Canned fruits, vegetables, sauer kraut, etc. Serial No. 322,344; June 21. Class 46.

Vuitton & Vuitton, Societe a Responsabilite Limitee, Paris, France. Trunks, valises, satchels, etc. Serial No. 313,983; June 21. Class 3.

Wagir Chemical Company. (See Ash, Maurice L., jr.)

Ward-Love Pump Corporation, Rockford, Ill. Mechanical water softening apparatus and parts therefor. Serial No. 320,771; June 21. Class 23.

Webb, James T., jr., Macon, Ga. Grease for reducing friction on surgical gloves, etc. Serial No. 325,699; June 21. Class 6.

Wolff, George M., doing business as U-Zit Manufacturing Company, Chicago, Ill. Polish. Serial No. 326,767; June 21. Class 4.

Wright, H. Le Roy, doing business as LeRoy Laboratories, Orange, N. J. Salves, ointments, cream, and lotions. Serial Nos. 325,379–80; June 21. Class 6.

Wrigley, Wm., Jr. Company, Chicago, Ill. Chewing gum. Serial Nos. 325,538–9; June 21. Class 46.

Wurtele, G. F., doing business as G. F. Wurtele Company, Philadelphia, Pa. Medicinal preparations. Serial No. 319,129; June 21. Class 6.

Wyle Hat Corporation, now by change of name 1632 Indiana Corporation, Chicago, Ill. Hats. Serial No. 322,477; June 21. Class 39.

LIST OF REGISTRANTS OF TRADE-MARKS

A. P. W. Paper Company, Inc., Albany, N. Y. Toilet paper. 295,241; June 21. Class 37.

Adams, William M. (See McGee, William H.)

Air-Way Electric Appliance Corporation, Toledo, Ohio. Protective polish. 295,228; June 21; Serial No. 324,057; published Apr. 12, 1932. Class 16.

Akos Company. (See Frosyth, Charles B.)

Alaska Fish Co., assignor to Peril Straits Packing Co., Inc., Seattle, Wash. Canned salmon. 88,821; renewed Oct. 29, 1932.

Allison Do-X Company, Indianapolis, Ind. Anti-knock compound. 295,110; June 21; Serial No. 320,535; published Apr. 5, 1932. Class 6.

American Candy Mfg. Co., to American Candy Manufacturing Co., Inc., Selma, Ala., successor. Candy. 88,226; renewed Sept. 10, 1932.

American Crayon Company, The, Sandusky, Ohio. Liquid wax. 295,223; June 21; Serial No. 323,603; published Apr. 12, 1932. Class 16.

American Kitchen Products Company, New York, N. Y. Beef-broth preparations. 88,823; renewed Oct. 29, 1932.

American Optical Company, assignor to American Optical Company, Southbridge, Mass. Lens examining and testing instruments. 86,567; renewed May 21, 1932.

Ammon & Person, assignor, by mesne assignments, to Eckerson Company, Jersey City, N. J. Oleomargarin. 87,839; renewed Aug. 13, 1932.

Arena, Frank, Mount Kisco, N. Y. Stomach tonic. 295,248; June 21. Class 6.

Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Hosiery. 295,151; June 21; Serial No. 324,335; published Apr. 5, 1932. Class 39.

Atlantic Macaroni Co., assignor to The Atlantic Macaroni Co. Inc., Long Island City, N. Y. Macaroni. 89,081; renewed Nov. 12, 1932.

Atlas Mineral Products Company, The, Mertztown, Pa. Jointing compound for pipe connections. 295,253; June 21. Class 12.

Atlas Supply Company, Newark, N. J. Chemically treated automobile polishing cloths, nickel polish, chromium polish, etc. 295,109; June 21; Serial No. 320,345; published Apr. 5, 1932. Class 4.

Bakers Service Bureau, Inc., New York, N. Y. Bread, cake, and pies. 295,182; June 21; Serial No. 315,177; published Apr. 5, 1932. Class 46.

Bakers Service Bureau, Inc., New York, N. Y. Bread, cake, and pies. 295,183–4; June 21; Serial Nos. 315,180–1; published Apr. 5, 1932. Class 46.

Ballard, James F., to James F. Ballard, Inc., St. Louis, Mo., successor. Medicines and pharmaceutical preparations. 87,035; renewed June 25, 1932.

Ballard, James F., to James F. Ballard, Inc., St. Louis, Mo., successor. Preparation for the treatment of affections of the eye. 87,713; renewed Aug. 6, 1932.

Baron Brothers, Inc., Madison, Wis. Frocks, dresses, and hosiery. 295,118; June 21; Serial No. 322,764; published Apr. 5, 1932. Class 39.

Barzso, Stephen J., Hazel Crest, Ill. Salves and ointments. 295,124; June 21; Serial No. 323,021; published Apr. 5, 1932. Class 6.

Beacon Falls Rubber Shoe Company, The, assignor to The Beacon Falls Rubber Shoe Company, Beacon Falls, Conn. Rubber boots, shoes, artics, etc. 87,407; renewed July 16, 1932.

Beckwith, Paul, doing business as Paul Beckwith Coal Co., Newark, N. J. Fuel. 295,126; June 21; Serial No. 323,186; published Apr. 5, 1932. Class 1.

Belle Knitting Mills, Lebanon, Pa. Underwear. 295,210; June 21; Serial No. 318,581; published Apr. 5, 1932. Class 39.

Bendix Aviation Corporation, Chicago, Ill., and South Bend, Ind. Carburetors. 295,259–60; June 21. Class 23.

Benjon Co., New York, N. Y. Chemical mixtures in paste, cream, and liquid forms. 295,120; June 21; Serial No. 322,816; published Mar. 29, 1932. Class 4.

Berlinger, Jacob, doing business as The Diamond Heart Co., New York, N. Y. Finger rings. 295,178; June 21; Serial No. 311,255; published Mar. 31, 1931. Class 28.

Bessac Laboratories. (See Sachs, Abe.)

Bau Laboratories. (See Morrill, Wilbur N.)

Binney & Smith Co., New York, N. Y. Crayons. 295,167–8; June 21; Serial Nos. 324,426–7; published Apr. 5, 1932. Class 37.

Blossom Products, Inc., New York, N. Y. Dresses and suits, coats, capes, etc. 295,175; June 21; Serial No. 310,713; published Apr. 5, 1932. Class 39.

Borden's Milk Products Company, Inc. (See Merrell-Soule Co., assignor.)

Boren, Wallace R., San Francisco, Calif. Canned fish. 295,220; June 21; Serial No. 323,161; published Apr. 12, 1932. Class 46.

Bradley, David C., Co. (See Trout, Herbert B.)

Burton Brothers & Co., Inc., New York, N. Y. Nurses' and maids' uniforms, ladies' dresses, aprons, children's wash suits, etc. 295,157; June 21; Serial No. 324,505; published Apr. 5, 1932. Class 39.

Bushnell, Alvah, to Alvah Bushnell Company, Philadelphia, Pa., successor. Substitute for paper. 37,984; renewed Mar. 25, 1932.

Bushnell, Alvah, Company, Philadelphia, Pa. Substitute for paper. 87,316; renewed July 9, 1932.

Butterick Publishing Company, The, New York, N. Y. Periodical. 295,161; June 21; Serial No. 319,441; published Apr. 5, 1932. Class 38.
Carnation Company. (See Sheboygan Evaporated Milk Co., The, assignor.)
Case, W. A., and Son Manufacturing Company, Buffalo, N. Y. Pottery. 295,251; June 21. Class 13.
Caulk, L. D., Company, The, Milford, Del. Wax for making dental impressions. 295,185; June 21; Serial No. 324,637; published Apr. 12, 1932. Class 44.
Ceylon Spice Company, Inc., Philadelphia, Pa. Tapioca. 295,202; June 21; Serial No. 323,857; published Apr. 5, 1932. Class 46.
Challoner Company, by change of name to Giant Grip Mfg. Co., Oshkosh, Wis. Horseshoe-calks. 88,467; renewed Sept. 24, 1932.
Cheris, Jacob, doing business as Paramount Pharmacal Products, Inc., Albany, N. Y. Expectorant cough sedative. 295,215; June 21; Serial No. 321,377; published Feb. 2, 1932. Class 6.
Chetta & Purpe, Incorporated, New Orleans, La. Canned spaghetti gravy. 295,244; June 21. Class 46.
Chocolat Suchard Societe Anonyme, Neuchatel, Switzerland. Sweet chocolate. 295,214; June 21; Serial No. 318,392; Published Apr. 12, 1932. Class 46.
Choshi Shoya Kabushiki Kaisha. (See Tanaka, Genba, assignor.)
Clapp, George W., doing business as Clapp & Clapp, New York, N. Y.; Orlando, Fla.; and Reading, Pa. Fresh oranges and grapefruit. 295,258; June 21. Class 46.
Cohen, Samuel, Shoe Stores, Inc., doing business as The New Shoe Store, Hempstead, N. Y. Shoes. 295,195; June 21; Serial No. 324,219; published Apr. 5, 1932. Class 39.
Colgate & Co., New York, N. Y., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill. Soaps and soap powders. 88,666; renewed Oct. 15, 1932. Class 4.
Compania De Jarcia De Matanzas S. A., Matanzas, Cuba. Sisal fibre. 295,153–4; June 21; Serial Nos. 324,430–1; published Apr. 5, 1932. Class 1.
Condition Air Sales, Ltd., Los Angeles, Calif. Air purifying and cooling machines. 295,239; June 21. Class 34.
Consolidated Ashcroft Hancock Company, Inc. (See United Injector Company, assignor.)
Copal Varnish Company, Limited, The, assignor to Paripan Limited, London, England. Varnishes and paints. 87,605; renewed July 30, 1932.
Copal Varnish Company, Limited, The, assignor to Paripan Limited, London, England. Enamel. 88,067; renewed Aug. 27, 1932.
Davies-Young Soap Company, The, Dayton, Ohio. Dry cleaning soap. 295,142; June 21; Serial No. 324,151; published Apr. 5, 1932. Class 4.
Davies-Young Soap Company, The, Dayton, Ohio. Liquid dry cleaning soap; 295,143–4; June 21; Serial Nos. 324,152–3; published Apr. 5, 1932. Class 4.
Deats Sash & Door Company, Los Angeles, Calif. Screen doors. 295,250; June 21. Class 12.
Decker, Alfred, & Cohn, Inc., Chicago, Ill. Overcoats and topcoats. 295,122; June 21; Serial No. 322,994; published Apr. 5, 1932. Class 39.
Decker, Alfred, & Cohn, Inc., Chicago, Ill. Overcoats and topcoats and coats. 295,123; June 21; Serial No. 322,997; published Apr. 5, 1932. Class 39.
De Met's, Inc., Chicago, Ill. Candy. 295,226; June 21; Serial No. 323,888; published Apr. 12, 1932. Class 46.
Detex Watchclock Corporation. (See Hardinge Brothers, assignor.)
Devine, Dennis, jr., doing business as Sepsan Products Co., New London, Conn. Cleansing preparation, disinfectant, and deodorant. 295,136; June 21; Serial No. 323,892; published Apr. 5, 1932. Class 6.
Diamond Heart Co., The. (See Berlinger, Jacob.)
Dominican Fathers Province of St. Joseph, New York, N. Y. Magazines. 295,165; June 21; Serial No. 323,842; published Apr. 5, 1932. Class 38.
Douglis-Mack, Chas., Co. Inc., New York, N. Y. Clothing. 295,180; June 21; Serial No. 313,364; published Apr. 5, 1932. Class 39.
Eckerson Company. (See Ammon & Person, assignor.)
Eloesser & Heynemann Co., San Francisco, Calif. Overalls. 88,743; renewed Oct. 22, 1932.
Faber, A. W., Inc., Newark, N. J. Elastic or rubber bands. 295,163; June 21; Serial No. 322,505; published Apr. 5, 1932. Class 37.
Farbenfabriken of Elberfeld Co., assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Local antirheumatic. 39,017; renewed Oct. 14, 1932.
Farbenfabriken of Elberfeld Co., assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Diureticum. 39,135; renewed Oct. 28, 1932.
Flynn, Dennis, Lowell, Mass. Medicinal preparation. 39,197; renewed Nov. 4, 1932.
Fly-War Laboratory, The, Greenfield, Ind. Liquid spray. 295,189; June 21; Serial No. 324,252; published Apr. 5, 1932. Class 6.
Forsyth, Charles B., to Akos Company, Alexandria Bay, N. Y., successor. Paste. 38,341; renewed May 27, 1932.
Fortuna Machine Co., New York, N. Y. Annular knives. 86,798; renewed June 4, 1932.
Foster Packing Company, Chicago, Ill. Condensed skimmed milk. 87,617; renewed July 30, 1932.
Fountain Bakery, The. (See Limbacher, J. E.)
Gabilla, Henriette, Paris, France, assignor, by mesne assignments, to Gabilla, Incorporated, New York, N. Y. Toilet cosmetics. 87,745; renewed Aug. 6, 1932.
Gabriel Kart-Keen Company, The, Sioux City, Iowa. Luggage carriers. 295,119; June 21; Serial No. 322,771; published Apr. 5, 1932. Class 3.
Gianduja Importing Co., Inc., New York and Bronx, N. Y. Food products. 295,176; June 21; Serial No. 311,141; published Apr. 5, 1932. Class 46.
Giant Grip Mfg. Co. (See Challoner Company.)
Gilman Paper Co., Gilman, Vt. Kraft paper and gummed tape. 295,179; June 21; Serial No. 312,757; published Apr. 5, 1932. Class 37.
Glass, Sam, Wauwatosa, Wis. Shaving cream and soap. 295,130; June 21; Serial No. 323,490; published Mar. 29, 1932. Class 4.
Glidden Company, The, Cleveland, Ohio. Synthetic casein. 295,171; June 21; Serial No. 321,278; published Apr. 5, 1932. Class 5.
Glo Manufacturing Co. Inc., The, Niagara Falls, N. Y. Javelle water. 295,117; June 21; Serial No. 322,364; published Apr. 5, 1932. Class 6.
Goudard, M., and Mennesson, Paris, France, to Societe Anonyme Solex, Neuilly-sur-Seine, France, successor. Carburetors, explosion-motor radiators, pumps, etc. 85,655; renewed Mar. 5, 1932.
Gow & Benyes, Buffalo, N. Y. Adhesive cement. 295,254; June 21. Class 5.
Greif Bris. Co. The, assignor to The Greif Bros. Cooperage Company, Cleveland, Ohio. Casks and barrels. 86,529–30; renewed May 14, 1932.
Gundlach, T. J., Machine Company. (See Little Giant Punch & Shear Co.)
Gundlach, Theodore J. (See Little Giant Punch & Shear Co., assignor.)
Hahn Department Stores, Inc., Wilmington, Del. Toilet preparations and drugs. 295,115; June 21; Serial No. 322,101; published Apr. 5, 1932. Class 6.
Hahn Department Stores, Inc., Wilmington, Del. Toilet preparations and drugs. 295,116; June 21; Serial No. 322,103; published Apr. 5, 1932. Class 6.
Hardings Brothers, Chicago, Ill., assignor to Detex Watchclock Corporation, New York, N. Y. Watchmen's clocks. 86,587; renewed May 21, 1932.
Harrington & Waring, New York, N. Y. Hosiery. 295,127; June 21; Serial No. 323,242; published Apr. 5, 1932. Class 39.
Hassler, Robert H., Long Island City, N. Y., doing business as Ro-To-Flex Mfg. Co., Indianapolis, Ind. Massage devices. 295,232; June 21; Serial No. 324,464; published Apr. 12, 1932. Class 44.
Hat Trade Publishing Company, The, New York, N. Y. Publication. 295,164; June 21; Serial No. 323,244; published Apr. 5, 1932. Class 38.
Heard, Joseph, doing business as Trenchodine Laboratories, Miami, Fla. Liquid used in treatment of gum infections. 295,112; June 21; Serial No. 321,492; published Apr. 5, 1932. Class 6.
Herzog, Moses, New York, N. Y. Hair pins and clips. 295,190; June 21; Serial No. 324,346; published Apr. 5, 1932. Class 40.
Heyden Chemical Corporation, New York, N. Y. Medicinal preparation. 295,134–5; June 21; Serial Nos. 323,863–4; published Apr. 5, 1932. Class 6.
Hoffmann-La Roche, Inc., Nutley, N. J. General tonic. 295,234; June 21; Serial No. 324,287; published Apr. 12, 1932. Class 6.
Holbrook Hat Company, Inc., Perth Amboy, N. J. Men's hats. 295,191; June 21; Serial No. 324,223; published Apr. 5, 1932. Class 39.
Hood, C. I., Co., Lowell, Mass., assignor, by mesne assignments, to Pfeiffer Chemical Company, St. Louis, Mo. Tonic for the stomach. 88,294; renewed Sept. 10, 1932.
Houghton, E. F., & Co., Philadelphia, Pa. Industrial paints. 295,227; June 21; Serial No. 323,998; published Apr. 12, 1932. Class 16.
Hudnut, Richard, New York, N. Y. Perfumes, toilet waters, and sachets. 88,183; renewed Sept. 3, 1932.
Huebel, Harold R., doing business as Sanol Laboratories, Ampere, N. J. Chemicals for destroying insects. 295,233; June 21; Serial No. 284,180; published June 25, 1929. Class 6.
Hull & Dillon Pkg. Co., The, Pittsburg, Kans., assignor to The Iowa Packing Company, Des Moines, Iowa. Ham, bacon, and lard. 87,452; renewed July 16, 1932.
Huntington Laboratories, Inc., Huntington, Ind. Wax polish for asphalt, tile, etc. 295,230; June 21; Serial No. 324,168; published Apr. 12, 1932. Class 16.
Hutchinson-Kansas Salt Company, The, Hutchinson, Kans., assignor to Morton Salt Company, Chicago, Ill. Salt. 86,991; renewed June 18, 1932.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial plastic masses and masses of resinous character. 295,170; June 21; Serial No. 321,880; published Apr. 5, 1932. Class 1.
Ideal Bath Robe Co., Inc., Brooklyn, N. Y. Babies' robes and buntings. 295,173; June 21; Serial No. 310,338; published Apr. 5, 1932. Class 39.
International Fruit Corporation, Orlando, Fla. Fresh citrus fruits. 295,187; June 21; Serial No. 313,238; published Apr. 12, 1932. Class 46.

Iowa Packing Company, The. (See Hull & Dillon Pkg. Co., The, assignor.)
Kendall Company, The, Walpole, Mass. Gauze, muslins and cotton, and rayon piece goods. 295,235; June 21. Class 42.
Kildall Fish Company, Inc., The, doing business as The Kildall Company, Minneapolis, Minn. Fish. 295,219; June 21; Serial No. 323,092; published Apr. 12, 1932. Class 46.
King Kullen Grocery Co., Inc., Queens, Long Island, N. Y. Coffee, tea, candy, sugar, etc. 295,209; June 21; Serial No. 320,362; published Apr. 5, 1932. Class 46.
Kirk, James S., & Company, Chicago, Ill., assignor to The Procter & Gamble Company, Cincinnati, Ohio. Toilet soap. 88,091; renewed Aug. 27, 1932.
Klein, Milton H., Cleveland, Ohio. Soap. 295,257; June 21. Class 4.
Klipstein, A., & Company, New York, N. Y. Soya bean oil, corn oil, etc. 295,159; June 21; Serial No. 276,191; published Apr. 5, 1932. Class 46.
Knight Products, Inc., Cincinnati, Ohio. Coal. 295,148; June 21; Serial No. 324,273; published Apr. 5, 1932. Class 1.
Kops Brothers, Inc., New York, N. Y. Corsets, girdles, brassières, etc. 295,200; June 21; Serial No. 324,001; published Apr. 5, 1932. Class 39.
Kroger Grocery & Baking Co., The, doing business as Wesco Foods Co., Cincinnati, Ohio. Spices. 295,205; June 21; Serial No. 323,051; published Apr. 5, 1932. Class 46.
Layton Pure Food Company, East St. Louis, Ill., assignor to Rumford Chemical Works, Rumford, R. I. Baking-powder and baking-soda. 87,224; renewed July 2, 1932. Class 6.
Leghorn Trading Co. Inc., New York, N. Y. Edible oils. 295,208; June 21; Serial No. 321,772; published Apr. 5, 1932. Class 46.
Legrand, Oriza L., Inc., Wilmington, Del., and New York, N. Y. Perfumes, toilet waters. 295,221; June 21; Serial No. 323,341; published Mar. 15, 1932. Class 6.
Lenwells, Inc., Chicago, Ill. Olive oil shampoo. 295,188; June 21; Serial No. 314,919; published Aug. 18, 1931. Class 6.
Le Tressage Elastique S. A. R. L., Lille, France. Shoe laces. 295,192; June 21; Serial No. 323,246; published Apr. 5, 1932. Class 40.
Lewis Bolt & Nut Company, Minneapolis, Minn. Bolts. 295,256; June 21. Class 13.
Limbacher, J. E., doing business as The Fountain Bakery, St. Marys, Ohio. Bread. 295,181; June 21; Serial No. 314,062; published Apr. 5, 1932. Class 46.
Little Giant Punch & Shear Co., Sparta, Ill., assignor to Theodore J. Gundlach, doing business as T. J. Gundlach Machine Company, Belleville, Ill. Machines for punching and shearing iron. 85,823; renewed Mar. 19, 1932.
Maatschappij tot Exploitatie van Rademaker's Koninklijke Cacao & Chocoladefabrieken, The Hague, Netherlands. Coffee flavored candies. 295,128; June 21; Serial No. 323,301; published Apr. 5, 1932. Class 46.
Marshall Field & Company, Chicago, Ill. Cotton dress goods. 86,900; renewed June 11, 1932.
Marshall Field & Company, Chicago, Ill. Kid and fabric gloves. 87,189; renewed July 2, 1932.
Masury, John W., & Son, Brooklyn, N. Y. Paints, varnishes, and paint enamels. 295,224; June 21; Serial No. 323,769; published Apr. 12, 1932. Class 16.
Masury, John W., & Son, Brooklyn, N. Y. Lacquers or dopes. 295,225; June 21; Serial No. 323,770; published Apr. 12, 1932. Class 16.
McGee, William H., to William M. Adams, Baltimore, Md., successor. Oysters. 86,145; renewed Apr. 16, 1932.
McLaurin-Jones Co., Brookfield, Mass. Paper, cloth, and tape. 295,177; June 21; Serial No. 311,243; published Apr. 5, 1932. Class 37.
Meillier Company, Perfumer. (See Wright, Alfred, Perfumer Inc., assignor.)
Merrell-Soule Co., Syracuse, N. Y., assignor, by mesne assignments, to Borden's Milk Products Company, Inc., New York, N. Y. Mince-meat, infant food, and preserved eggs. 87,089; renewed June 25, 1932. Class 46.
Merrell-Soule Company, Syracuse, N. Y., assignor, by mesne assignments, to Borden's Milk Products Company, Inc., New York, N. Y. Dried milk, dried eggs, and mince-meat. 87,233; renewed July 2, 1932.
Minerva Motors, Berchem, near Antwerp, Belgium. Transmission apparatus and explosion-motors. 89,131; renewed Nov. 12, 1932.
Moffett, Phyllis, Inc., New York, N. Y. Cosmetics. 295,111; June 21; Serial No. 320,694; published Apr. 5, 1932. Class 6.
Monticello Drug Company. (See Roberts, T. S.)
Morgan, Albert C. F., assignor to Morgan Brothers (London) Limited, London, England. Port-wine. 86,999; renewed June 18, 1932.
Morgan, Albert C. F., assignor to Morgan Brothers (London) Limited, London, England. Port-wine. 87,905; renewed Aug. 13, 1932.
Morrill, Wilbur N., doing business as Beu Laboratories, Louisville, Ky. Medicated wax stick. 295,149; June 21; Serial No. 324,294; published Apr. 5, 1932. Class 6.
Morrill, Wilbur N., doing business as Beu Laboratories, Louisville, Ky. Tincture for the skin. 295,150; June 21; Serial No. 324,295; published Apr. 5, 1932. Class 6.
Morton Salt Company. (See Hutchinson-Kansas Salt Company, The, assignor.)
Nally's, Inc., Tacoma, Wash. Mayonnaise, salad dressing, tomato ketchup, etc. 295,211; June 21; Serial No. 317,216; published Apr. 5, 1932. Class 46.
Nally's, Inc., Tacoma, Wash. Mayonnaise and French dressing. 295,212; June 21; Serial No. 317,215; published Apr. 5, 1932. Class 46.
Nashua Gummed & Coated Paper Company, Nashua, N. H. Textile material for use as mounting material, covering or lining for suit cases; etc. 295,238; June 21. Class 50.
National Biscuit Company. (See Shredded Wheat Company, The, assignor.)
National Carbon Company, Cleveland, Ohio, assignor to National Carbon Company, Inc., New York, N. Y. Dry cells. 87,470; renewed July 16, 1932.
National Carbon Company, Cleveland, Ohio, assignor to National Carbon Company, Inc., New York, N. Y. Dry cells. 87,651; renewed July 30, 1932.
National Carbon Company, Cleveland, Ohio, assignor to National Carbon Company, Inc., New York, N. Y. Dry cells. 88,016; renewed Aug. 20, 1932.
National Carbon Company, Cleveland, Ohio, assignor to National Carbon Company, Inc., New York, N. Y. Dry cells. 88,195; renewed Sept. 3, 1932.
National Carbon Company, Cleveland, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., New York, N. Y. Dry cells. 88,341; renewed Sept. 10, 1932.
National Carbon Company, Cleveland, Ohio, assignor to National Carbon Company, Inc., New York, N. Y. Dry cells. 88,635; renewed Oct. 8, 1932.
National Carbon Company, Cleveland, Ohio, assignor to National Carbon Company, Inc., New York, N. Y. Dry cells. 89,050; renewed Nov. 5, 1932.
Nations, Rose B., doing business as Naturo Mfg. Co., Los Angeles, Calif. Embalming fluid. 295,152; June 21; Serial No. 324,392; published Apr. 5, 1932. Class 6.
Naturo Mfg. Co. (See Nations, Rose B.)
Nelson, Mathews, Tulsa, Okla. Insecticide. 295,158; June 21; Serial No. 324,624; published Apr. 5, 1932. Class 6.
New Era Manufacturing Co. (See Regina Company, The.)
Newport Chemical Corporation, Carrollville, Wis. Oxidizing agent. 295,174; June 21; Serial No. 310,526; published Apr. 5, 1932. Class 6.
New Shoe Store, The. (See Cohen, Samuel, Shoe Stores, Inc.)
Novocol Chemical Mfg. Co. Inc., Brooklyn, N. Y. Anesthetic solution. 295,218; June 21; Serial No. 322,969; published Apr. 5, 1932. Class 6.
Oakes Manufacturing Company, Long Island City, N. Y., and Boston, Mass., to Oakes Manufacturing Company, New York, N. Y., successor. Chemical preparation. 86,824; renewed June 4, 1932.
Oriental Oil Company, Dallas, Tex. Lubricating oils and greases and illuminating oils. 89,137; renewed Nov. 12, 1932.
Paramount Pharmacal Products, Inc. (See Cheris, Jacob.)
Paripan Limited. (See Copal Varnish Company, Limited, The, assignor.)
Penney, J. C., Company, Wilmington Del., and New York, N. Y. Sweaters, coats, leggings, etc. 295,206; June 21; Serial No. 323,014; published Apr. 5, 1932. Class 39.
Perfection Biscuit Company, Fort Wayne, Ind. Crackers and biscuits. 88,945; renewed Oct. 29, 1932.
Per-Fit Hat Lining Corporation, New York, N. Y. Hat linings. 295,207; June 21; Serial No. 322,907; published Apr. 5, 1932. Class 39.
Peril Straits Packing Co., Inc. (See Alaska Fish Co., assignor.)
Pfeiffer Chemical Company. (See Hood, C. I., Co., assignor.)
Pineoleum Company, The, New York, N. Y. Nebulizing or atomizing appliances for dental, medical, etc., use. 295,231; June 21; Serial No. 324,267; published Apr. 12, 1932. Class 44.
Poeter, E., & Co. Inc., Irvington, N. J. Hand bag frames and parts thereof. 295,125; June 21; Serial No. 323,095; published Apr. 5, 1932. Class 3.
Polivy, B., & Sons, Inc., New York, N. Y. Paints, paint enamels, varnishes, etc. 295,186; June 21; Serial No. 315,366; published Apr. 12, 1932. Class 16.
Polk Miller Products Corp., Richmond, Va. Soap. 295,145; June 21; Serial No. 324,188; published Apr. 5, 1932. Class 4.
Pose, Chas. H., Cedar Rapids, Iowa. Dressed poultry. 295,243; June 21. Class 46.
Proctor & Gamble Company, The. (See Kirk, James S., & Company, assignor.)
R. C. A. Institutes, Inc., New York, N. Y. Loose leaf binders. 295,166; June 21; Serial No. 324,079; published Apr. 5, 1932. Class 37.
RCA Victor Company, Inc., Camden, N. J. Television receiving sets, kits for television receiving sets, etc. 295,204; June 21; Serial No. 323,629; published Mar. 29, 1932. Class 21.

Rapisardi, Samuel, & Bros., Philadelphia, Pa. Medicinal preparation for burns. 295,160; June 21; Serial No. 295,441; published Dec. 1, 1931. Class 6.
Regina Company, The, Rahway, N. J., to New Era Manufacturing Co., Paterson, N. J., successor. Printing-presses. 87,006; renewed June 18, 1932.
Reilly, Frank C., New York, N. Y. Shaving creams. 295,132; June 21; Serial No. 323,716; published Apr. 5, 1932. Class 4.
Residori, Albino, Carbon Hill, Ill., to Residori and Sons, Joliet, Ill., successor. Hair tonic. 86,451; renewed May 7, 1932. Class 6.
Riedel, J. D., Actiengesellschaft, Berlin, Germany, assignor, by mesne assignments, to Riedel & Co. Inc., Brooklyn, N. Y. Chemicals, medicine, and pharmaceutical preparations. 88,204; renewed Sept. 3, 1932.
Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Paper. 295,245; June 21. Class 37.
Rimmel, Inc., West Orange, N. J. Astringents, astringent cerates, bleach and beauty creams, etc. 295,213; June 21; Serial No. 317,830; published Mar. 8, 1932. Class 6.
Ritter, P. J. Company, Philadelphia, Pa. Canned beans. 295,246; June 21. Class 46.
Roberts, T. S., Monticello, Fla., to Monticello Drug Company, Jacksonville, Fla., successor. Chill and fever tonic. 38,957; renewed Sept. 30, 1932.
Robot Razor Blade Corp., New York, N. Y. Shaving cream. 295,113; June 21; Serial No. 321,667; published Mar. 29, 1932. Class 4.
Ro-To-Flex Mfg. Co. (See Hassler, Robert H.)
Rumford Chemical Works. (See Layton Pure Food Company, assignor.)
Russo, Joseph A., Newark, N. J. Liniments. 295,129; June 21; Serial No. 323,312; published Apr. 5, 1932. Class 6.
Sabbe, Emil N., Baltimore, Md. Paints, varnishes, lacquers, etc. 295,216; June 21; Serial No. 322,114; published Apr. 12, 1932. Class 16.
Sachs, Abe, doing business as Bessac Laboratories, Bayonne, N. J. Anti-fat preparation. 295,121; June 21; Serial No. 322,985; published Apr. 5, 1932. Class 6.
St. Louis Braid Co., St. Louis, Mo. Shoe laces. 295,193; June 21; Serial No. 323,720; published Apr. 5, 1932. Class 40.
Sanol Laboratories. (See Huebel, Harold R.)
Saville, J. J., and Co. Limited, Sheffield, England. Tool steel. 85,920; renewed Mar. 26, 1932.
Schullst, Samuel, Cleveland, Ohio. Cigarette and pipe smoking tobacco. 295,194; June 21; Serial No. 324,445; published Apr. 5, 1932. Class 17.
Schwartz, B., & Company, Philadelphia, Pa. Boys' trousers and wash suits. 295,155; June 21; Serial No. 324,446; published Apr. 5, 1932. Class 39.
Segerstrom, Emil B., doing business as Segerstrom Soap Company, Anaheim, Calif. Soap. 295,255; June 21. Class 4.
Sepan Products Co. (See Devine, Dennis, jr.)
Sheboygan Evaporated Milk Co., The, Sheboygan, Wis., assignor, by mesne assignments, to Carnation Company, Milwaukee, Wis.; Chicago, Ill.; and Seattle, Wash. Evaporated milk. 84,136; renewed Nov. 7, 1931.
Sherwin-Williams Company, The, Cleveland, Ohio. Paints, lacquers, varnishes, etc. 295,252; June 21. Class 16.
Sherwood Shoe Co., Rochester, N. Y. Boots and shoes. 295,199; June 21; Serial No. 324,014; published Apr. 5, 1932. Class 39.
Shredded Wheat Company, The, Niagara Falls, N. Y., assignor to National Biscuit Company, New York, N. Y. Shredded wheat. 89,071; renewed Nov. 5, 1932.
Societe Anonyme Solex. (See Goudard, M., and Mennesson.)
Soennecken, F., Bonn, Germany. Stationery material. 87,673; renewed July 30, 1932.
Speare's, Alden, Sons Co., The, Cambridge, Mass. Ironing wax. 295,156; June 21; Serial No. 324,501; published Apr. 5, 1932. Class 6.
Staedtler, J. S., Nuremberg, Germany. Stationery. 38,525; renewed July 1, 1932.
Star Pin Company, The, Shelton, Conn. Toilet and safety pins. 295,197; June 21; Serial No. 324,048; published Apr. 5, 1932. Class 40.
Sterling Products Company, Evansville, Ind. Malt extract. 295,203; June 21; Serial No. 323,723; published Apr. 5, 1932. Class 46.
Sullivan, Hugh C., doing business as H. C. Sullivan Cannery, Frostproof, Fla. Canned grapefruit and canned citrus fruit juices. 295,237; June 21. Class 46.
Superior Metal Products Company, St. Paul, Minn. Strainers. 295,261; June 21. Class 13.
Swanstrom, Henry N., Bellingham, Wash. Poultry shell and grit. 295,133; June 21; Serial No. 323,767; published Apr. 5, 1932. Class 1.
Swift and Company, Chicago, Ill. Packing house products. 38,399; renewed June 3, 1932.
Swift and Company, Chicago, Ill. Packing house products. 38,538; renewed July 1, 1932.
Tanaka, Genba, Kaljogori, Chiba-Ken, assignor, by mesne assignments, to Choshi Shoyu Kabushiki Kaisha, Choshi, Chiba-Ken, Japan. Sauce (Soy). 86,674; renewed May 21, 1932.
Tasty Jell Mfg. Corporation, Green Island, N. Y. Gelatin dessert powders. 295,242; June 21. Class 46.
Tenore, Giuseppe, New York, N. Y. Canned olive oil. 295,196; June 21; Serial No. 324,121; published Apr. 5, 1932. Class 46.
Tetlow, Joseph, assignor, by mesne assignments, to Henry Tetlow Company, Philadelphia, Pa. Perfume. 87,823; renewed Aug. 6, 1932.
Texas Farm Products Company, Nacogdoches, Tex. Stock, chicken, and dairy feed. 295,169; June 21; Serial No. 321,576; published Mar. 22, 1932. Class 46.
Toddy, Inc., New York, N. Y. Food preparation. 295,201; June 21; Serial No. 323,878; published Apr. 5, 1932. Class 46.
Trenchodine Laboratories. (See Heard, Joseph.)
Trout, Herbert B., doing business as David C. Bradley Co., Philadelphia, Pa. Fresh and smoked beef, bacon, dressed turkeys, etc. 295,236; June 21. Class 46.
Truax-Traer Coal Company, Chicago, Ill. Coal. 295,146–7; June 21; Serial Nos. 324,198–9; published Apr. 5, 1932. Class 1.
United Injector Company, The, assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y. Ejectors. 88,644; renewed Oct. 8, 1932.
United Shoe Machinery Company, assignor to United Shoe Machinery Corporation, Paterson, N. J. Protectors adapted to be inserted in the heels and soles of boots and shoes. 88,035; renewed Aug. 20, 1932.
Van Dyk, James, Company, New York, N. Y., to James Van Dyk Company, Brooklyn, N. Y. Coffee. 88,434; renewed Sept. 17, 1932.
Van Raalte Company, New York, N. Y. Hosiery. 295,114; June 21; Serial No. 321,673; published Apr. 5, 1932. Class 39.
Van Raalte Company, New York, N. Y. Hosiery. 295,138; June 21; Serial No. 324,021; published Apr. 5, 1932. Class 39.
Van Raalte Company, New York, N. Y. Hosiery. 295,139–41; June 21; Serial Nos. 324,084–6; published Apr. 5, 1932. Class 39.
Visco-Meter Corporation, Buffalo, N. Y. Apparatus for measuring the viscosity of fluids. 295,247; June 21. Class 26.
Wabash Products Company, Terre Haute, Ind. Nitrocellulose lacquer. 295,229; June 21; Serial No. 324,120; published Apr. 12, 1932. Class 16.
Wadsworth, Howland & Co., Incorporated, Boston, Mass. Fluid or semi-fluid finishing material. 295,249; June 21. Class 16.
Walsh, Deleon, Long Island City, N. Y. Swedish bread, knäckebröd, rye, etc. 295,172; June 21; Serial No. 309,540; published Apr. 5, 1932. Class 46.
Washington Mills Emery Manufacturing Company, North Grafton, Mass. Artificial granular abrasives. 295,137; June 21; Serial No. 323,968; published Apr. 5, 1932. Class 4.
Webster, William A., Co., The, Memphis, Tenn. Tooth paste. 295,240; June 21. Class 6.
Weiss, Jacob, doing business as K. Weiss & Son, Perth Amboy, N. J. Sole leather. 295,131; June 21; Serial No. 323,507; published Apr. 5, 1932. Class 1.
Wesco Foods Co. (See Kroger Grocery & Baking Co.)
White's Quaint Shop, Westfield, Mass. Paper tags, seals, etc. 295,162; June 21; Serial No. 320,574; published Apr. 5, 1932. Class 37.
Wilkins John H., Company, Washington, D. C. Coffee. 295,217; June 21; Serial No. 322,808; published Apr. 12, 1932. Class 46.
Williams, J. H., & Co., New York, to J. H. Williams & Co., Buffalo, N. Y. Tools. 88,987; renewed Oct. 29, 1932.
Winthrop Chemical Company, Inc. (See Farbenfabriken of Elberfeld Co., assignor.)
Wright, Alfred, Perfumer Inc., Philadelphia, Pa., assignor to Mellier Company, Perfumer, St. Louis, Mo. Perfumery. 88,545; renewed Sept. 24, 1932.
York, Joseph W., New York, N. Y. Prophylactic rubber articles. 295,222; June 21; Serial No. 323,432; published Apr. 12, 1932. Class 44.
Young Brothers, New York, N. Y. Hats. 295,198; June 21; Serial No. 324,025; published Apr. 5, 1932. Class 39.

LIST OF REGISTRANTS OF LABELS

American Hair Net Co., New York, N. Y. Wave Set. For Hair Nets. 40,849; June 21.
Armstrong Paint & Varnish Works, Chicago, Ill. Big Ten. For Prepared Paints. 40,850; June 21.
Armstrong Paint & Varnish Works, Chicago, Ill. Bos-Painter. For Prepared Paints. 40,851; June 21.
Bradley, Milton, Company, Springfield, Mass. Rainbow Fishing, The New Flycasting Game With Giant Fish. For Indoor Game. 40,852; June 21.
Bradley, Milton, Co., Springfield, Mass. Smiling Faces, The Happiness Game. For Indoor Game. 40,853; June 21.

Continental Works Co., Chicago, Ill. Masterpiece. For Preparation for Repairing Leaks in Auto Water Cooling Systems. 40,854; June 21.
Crichton, Alexander, Castleton, Canada. It Reaches the Right Spot. For Medicine. 11,355; renewed Aug. 30, 1932.
Fitzpatrick Bros. Inc., Chicago, Ill. Kitchen Klenzer. For Cleaning and Scouring Compound in Finely Divided Form for Household Use. 40,855; June 21.
Foertmeyer, Charles G., Cincinnati, Ohio. Magic Cold Tablets. For Cold Tablets. 40,856; June 21.
Fullerton Lumber Company, Minneapolis, Minn. Hi-Way Paint. For Paint. 40,857; June 21.
Hallahan, C. W., doing business as The Solvene Company, Alexandria Bay, N. Y. Solvene. For a Preparation for Treating Tired Aching Muscles and Tired Burning, Aching, and Swollen Feet. 40,858; June 21.
Kent, Thomas L., Boston, Mass. Funny Farm Folks. For Candy. 40,859; June 21.
Morath, Theodore O., St. Louis, Mo. Taste-Tested Tea. For Tea. 40,860; June 21.
National Biscuit Company, New York, N. Y. Wheatsworth Crackers. For Crackers. 40,861; June 21.
Park, Philip R., Inc., San Pedro, Calif. Parkelp. For Food Supplement. 40,862; June 21.
Shulman Chemical Company, Philadelphia, Pa. Lustrol Creme. For Furniture Cream, for Cleaning and Polishing. 40,863; June 21.
Silk, Fred J., doing business as Silk Packing Company, Los Angeles, Calif. Silk's Supreme Prepared Spanish Style Rice. For Prepared Spanish Style Rice. 40,864; June 21.
Solidhed Company, Hoboken, N. J. Solidhed Long Pin Drape Tacks. For Long Pin Drape Tacks. 40,865; June 21.
Solvene Company, The. (See Hallahan, C. W.)
Standard Solophone Mfg. Co. Inc., New York, N. Y. Little Artist Crayon Set. For Crayon Set. 40,866; June 21.
Texas Crystal Co., Dallas, Tex. Genuine Mineralwells Crystals. For Crystals Made from Mineral Water. 40,867; June 21.
Tobacco By-Products & Chemical Corporation, Louisville, Ky. "Black Leaf 40" Nicotine Sulphate 50 Pounds. For Nicotine Sulphate. 40,868; June 21.
Wanzer, Sidney, & Sons, Inc., Chicago, Ill. Wanzer's Certified Vitamin Eggs. For Eggs. 40,869; June 21.

LIST OF REGISTRANTS OF PRINTS

Bradley Knitting Company, Delavan, Wis. Much Ado About Practically Nothing. For Clothing. 13,754; June 21.
Bradley Knitting Company, Delavan, Wis. Somewhere The Sun is Shining! For Clothing. 13,755; June 21.
Bradley Knitting Company, Delavan, Wis. A Sailor's Life For Me. For Clothing. 13,756; June 21.
Bradley Knitting Company, Delavan, Wis. The Fashions That Bloom in the Spring, Tra La! For Clothing. 13,757; June 21.
Long, W. E., Co., The, Chicago, Ill. Cellophane Hides Nothing. For Bread. 13,758; June 21.
Long, W. E., Co., The, Chicago, Ill. Old Home Bread in its Cellophane Wrapper is My Proof of Absolute Freshness. For Bread. 13,759; June 21.
Long, W. E., Co., The, Chicago, Ill. You Can See The Freshness—Through Crystal-Clear Cellophane. For Bread. 13,760; June 21.
Long, W. E., Co., The, Chicago, Ill. "See For Yourself—" For Bread. 13,761; June 21.
McCormick and Company, Baltimore, Md. Just a Cup Picks You Up. For Tea. 13,762; June 21.
Opitz, John, Inc., New York, N. Y. J. O. Fly Spray. For Fly Spray. 13,763; June 21.
Strong, Cobb & Company, Inc., Cleveland, Ohio. Pioneer Candy Drops. For Candy Drops. 13,764; June 21.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Knight Products, Inc. 295,148; June 21; Serial No. 324,273; published Apr. 5, 1932.
Coal. Truax-Traer Coal Company. 295,146–7; June 21; Serial Nos. 324,198–9; published Apr. 5, 1932.
Fuel. P. Beckwith. 295,126; June 21; Serial No. 323,186; published Apr. 5, 1932.
Leather, Sole. J. Weiss. 295,131; June 21; Serial No. 323,507; published Apr. 5, 1932.
Plastic masses and masses of resinous character, Artificial. I. G. Farbenindustrie Aktiengesellschaft. 295,170; June 21; Serial No. 321,880; published Apr. 5, 1932.
Shell and grit, Poultry. H. N. Swanstrom. 295,133; June 21; Serial No. 323,767; published Apr. 5, 1932.
Sisal fibre. Compania De Jarcia De Matanzas S. A. 295,153–4; June 21; Serial Nos. 324,430–1; published Apr. 5, 1932.

CLASS 2

Casks and barrels. Greif Bros. Co. 86,529–30; renewed May 14, 1932.

CLASS 3

Bag frames and parts thereof, Hand. E. Poeter & Co. Inc. 295,125; June 21; Serial No. 323,095; published Apr. 5, 1932.
Horseshoe-calks. Challoner Company. 88,467; renewed Sept. 24, 1932.
Luggage carriers. Gabriel Kari-Keen Company. 295,119; June 21; Serial No. 322,771; published Apr. 5, 1932.

CLASS 4

Abrasives, Artificial granular. Washington Mills Emery Manufacturing Company. 295,137; June 21; Serial No. 323,968; published Apr. 5, 1932.
Chemical mixtures in paste, cream, and liquid forms. Benjon Co. 295,120; June 21; Serial No. 322,816; published Mar. 29, 1932.
Cream and soap, Shaving, S. Glass. 295,130; June 21; Serial No. 323,490; published Mar. 29, 1932.
Cream, Shaving. Robot Razor Blade Corp. 295,113; June 21; Serial No. 321,667; published Mar. 29, 1932.
Creams, Shaving. F. C. Reilly. 295,132; June 21; Serial No. 323,716; published Apr. 5, 1932.
Polishing cloths, nickel polish, chromium polish, etc., Chemically treated automobile. Atlas Supply Company. 295,109; June 21; Serial No. 320,345; published Apr. 5, 1932.
Soap. M. H. Klein. 295,257; June 21.
Soap. Polk Miller Products Corp. 295,145; June 21; Serial No. 324,188; published Apr. 5, 1932.
Soap. E. B. Segerstrom. 295,255; June 21.
Soap, Dry cleaning. Davies-Young Soap Company. 295,142; June 21; Serial No. 324,151; published Apr. 5, 1932.
Soap, Liquid dry cleaning. Davies-Young Soap Company. 295,143–4; June 21; Serial Nos. 324,152–3; published Apr. 5, 1932.
Soap, Toilet. James S. Kirk & Company. 88,091; renewed Aug. 27, 1932.
Soaps and soap powders. Colgate & Co. 88,666; renewed Oct. 15, 1932.

CLASS 5

Adhesive cement. Gow & Benyes. 295,254; June 21.
Casein sold as an adhesive. Glidden Company. 295,171; June 21; Serial No. 321,278; published Apr. 5, 1932.
Paste. C. B. Forsythe. 38,341; renewed May 27, 1932.

CLASS 6

Anesthetic solution. Novocol Chemical Mfg. Co. Inc. 295,218; June 21; Serial No. 322,969; published Apr. 5, 1932.
Anti-fat preparation. A. Sachs. 295,121; June 21; Serial No. 322,985; published Apr. 5, 1932.
Antirheumatic, Local. Farbenfabriken of Elberfeld Co. 39,017; renewed Oct. 14, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. Rimmel, Inc. 295,213; June 21; Serial No. 317,830; published Mar. 8, 1932.
Baking-powder and baking-soda. Layton Pure Food Company. 87,224; renewed July 2, 1932.
Chemical preparation. Oakes Manufacturing Company. 86,824; renewed June 4, 1932.
Chemicals. H. R. Huebel. 295,233; June 21; Serial No. 284,180; published June 25, 1929.
Chemicals, medicine, and pharmaceutical preparations. J. D. Riedel, Actiengesellschaft. 88,204; renewed Sept. 3, 1932.
Cleansing preparation, disinfectant, and deodorant. D. Devine, jr. 295,136; June 21; Serial No. 323,892; published Apr. 5, 1932.
Compound, Anti-knock. Allison Do-X Company. 295,110; June 21; Serial No. 320,575; published Apr. 5, 1932.
Cosmetics. Phyllis Moffett, Inc. 295,111; June 21; Serial No. 320,694; published Apr. 5, 1932.
Diureticum. Farbenfabriken of Elberfeld Co. 39,135; renewed Oct. 28, 1932.
Fluid, Embalming. R. B. Nations. 295,152; June 21; Serial No. 324,392; published Apr. 5, 1932.
Insecticide. M. Nelson. 295,158; June 21; Serial No. 324,624; published Apr. 5, 1932.
Javelle water. Glo Manufacturing Co. Inc. 295,117; June 21; Serial No. 322,364; published Apr. 5, 1932.

Liniments. J. A. Russo. 295,129; June 21; Serial No. 323,312; published Apr. 5, 1932.
Liquid used in treatment of gum infections. J. Heard. 295,112; June 21; Serial No. 321,492; published Apr. 5, 1932.
Medicated wax stick. W. N. Morrill. 295,149; June 21; Serial No. 324,294; published Apr. 5, 1932.
Medicinal preparation. D. Flynn. 39,197; renewed Nov. 4, 1932.
Medicinal preparation. Heyden Chemical Corporation. 295,134–5; June 21; Serial Nos. 323,863–4; published Apr. 5, 1932.
Medicinal preparation for burns. Samuel Rapisardi & Bros. 295,160; June 21; Serial No. 295,441; published Dec. 1, 1931.
Medicines and pharmaceutical preparations. J. F. Ballard. 87,035; renewed June 25, 1932.
Oxidizing agent. Newport Chemical Corporation. 295,174; June 21; Serial No. 310,526; published Apr. 5, 1932.
Perfume. J. Tetlow. 87,823; renewed Aug. 6, 1932.
Perfumes, toilet waters. Oriza L. Legrand, Inc. 295,221; June 21; Serial No. 323,341; published Mar. 15, 1932.
Perfumes, toilet waters, and sachets. R. Hudnut. 88,183; renewed Sept. 3, 1932.
Perfumery. Alfred Wright Perfumer Inc. 88,545; renewed Sept. 24, 1932.
Preparation for the treatment of affections of the eye. J. F. Ballard. 87,713; renewed Aug. 6, 1932.
Salt. Hutchinson-Kansas Salt Company. 86,091; renewed June 18, 1932.
Salves and ointments. S. J. Barzso. 295,124; June 21; Serial No. 323,021; published Apr. 5, 1932.
Sedative, Expectorant cough. J. Cheris. 295,215; June 21; Serial No. 321,377; published Feb. 2, 1932.
Spray, Liquid. Fly-War Laboratory. 295,189; June 21; Serial No. 324,252; published Apr. 5, 1932.
Tincture for the skin. W. N. Morrill. 295,150; June 21; Serial No. 324,295; published Apr. 5, 1932.
Toilet cosmetics. H. Gabilla. 87,745; renewed Aug. 6, 1932.
Toilet preparations and drugs. Hahn Department Stores, Inc. 295,115; June 21; Serial No. 322,101; published Apr. 5, 1932.
Toilet preparations and drugs. Hahn Department Stores, Inc. 295,116; June 21; Serial No. 322,103; published Apr. 5, 1932.
Tonic, Chill and fever. T. S. Roberts. 38,957; renewed Sept. 30, 1932.
Tonic for the stomach. C. I. Hood Co. 88,294; renewed Sept. 10, 1932.
Tonic, General. Hoffmann-La Roche, Inc. 295,234; June 21; Serial No. 324,287; published Apr. 12, 1932.
Tonic, Hair. A. Residori. 86,451; renewed May 7, 1932.
Tonic, Stomach. F. Arena. 295,248; June 21.
Tooth paste. William A. Webster Co. 295,240; June 21.
Wax, Ironing. Alden Speare's Sons Co. 295,156; June 21; Serial No. 324,501; published Apr. 5, 1932.

CLASS 12

Doors, Screen. Deats Sash & Door Company. 295,250; June 21.
Jointing compound for pipe connections. Atlas Mineral Products Company. 295,253; June 21.

CLASS 13

Bolts. Lewis Bolt & Nut Company. 295,256; June 21.
Pottery. W. A. Case and Son Manufacturing Company. 295,251; June 21.
Protectors adapted to be inserted in the heels and soles of boots and shoes. United Shoe Machinery Company. 88,035; renewed Aug. 20, 1932.
Strainers. Superior Metal Products Company. 295,261; June 21.

CLASS 14

Steel, Tool. J. J. Saville and Co. Limited. 85,920; renewed Mar. 26, 1932.

CLASS 15

Oils and greases and illuminating-oils, Lubricating. Oriental Oil Company. 89,137; renewed Nov. 12, 1932.

CLASS 16

Enamel. Copal Varnish Company. 88,067; renewed Aug. 27, 1932.
Finishing material, Fluid or semi-fluid. Wadsworth, Howland & Co. 295,249; June 21.
Lacquer, Nitrocellulose. Wabash Products Company. 295,229; June 21; Serial No. 324,120; published Apr. 12, 1932.
Lacquers or dopes. John W. Masury & Son. 295,225; June 21; Serial No. 323,770; published Apr. 12, 1932.
Paints, Industrial. E. F. Houghton & Co. 295,227; June 21; Serial No. 323,998; published Apr. 12, 1932.
Paints, lacquers, varnishes, etc. Sherwin-Williams Company. 295,252; June 21.
Paints, paint enamels, varnishes, etc. B. Polivy & Sons, Inc. 295,186; June 21; Serial No. 315,366; published Apr. 12, 1932.
Paints, varnishes, and paint enamels. John W. Masury & Son. 295,224; June 21; Serial No. 323,769; published Apr. 12, 1932.
Paints, varnishes, lacquers, etc. E. N Sabbe. 295,216; June 21; Serial No. 322,114; published Apr. 12, 1932.
Polish, Protective. Air-Way Electric Appliance Corporation. 295,228; June 21; Serial No. 324,057; published Apr. 12, 1932.
Varnishes and paints. Copal Varnish Company. 87,605; renewed July 30, 1932.
Wax, Liquid. American Crayon Company. 295,223; June 21; Serial No. 323,603; published Apr. 12, 1932.
Wax polish for asphalt, tile, etc. Huntington Laboratories, Inc. 295,230; June 21; Serial No. 324,168; published Apr. 12, 1932.

CLASS 17

Tobacco. S. Schulist. 295,194; June 21; Serial No. 324,445; published Apr. 5, 1932.

CLASS 21

Cells, Dry. National Carbon Company. 87,470; renewed July 16, 1932.
Cells, Dry. National Carbon Company. 87,651; renewed July 30, 1932.
Cells, Dry. National Carbon Company. 88,016; renewed Aug. 20, 1932.
Cells, Dry. National Carbon Company. 88,195; renewed Sept. 3, 1932.
Cells, Dry. National Carbon Company. 88,341; renewed Sept. 10, 1932.
Cells, Dry. National Carbon Company. 88,635; renewed Oct. 8, 1932.
Cells, Dry. National Carbon Company. 89,050; renewed Nov. 5, 1932.
Television receiving sets, kits for television receiving sets, etc. RCA Victor Company. 295,204; June 21; Serial No. 323,629; published Mar. 29, 1932.

CLASS 23

Carburetors. Bendix Aviation Corporation. 295,259–60; June 21.
Carburetors, explosion-motor radiators, etc. M. Goudard and Mennesson. 85,655; renewed Mar. 5, 1932.
Ejectors. United Injector Company. 88,644; renewed Oct. 8, 1932.
Knives, Annular. Fortuna Machine Co. 86,798; renewed June 4, 1932.
Machines for punching and shearing iron. Little Giant Punch & Shear Co. 85,823; renewed Mar. 19, 1932.
Printing-presses. Regina Company. 87,006; renewed June 18, 1932.
Tools. J. H. Williams & Co. 88,987; renewed Oct. 29, 1932
Transmission apparatus and explosion-motors. Minerva Motors. 89,131; renewed Nov. 12, 1932.

CLASS 26

Apparatus for measuring the viscosity of fluids. Visco-Meter Corporation. 295,247; June 21.
Lens examining and testing instruments. American Optical Company. 86,567; renewed May 21, 1932.

CLASS 27

Clocks, Watchmen's. Hardinge Brothers. 86,587; renewed May 21, 1932.

CLASS 28

Rings, Finger. J. Berlinger. 295,178; June 21; Serial No. 311,255; published Mar. 31, 1931.

CLASS 34

Air purifying and cooling machines. Condition Air Sales, Ltd. 295,239; June 21.

CLASS 37

Binders, Loose leaf. R. C. A. Institutes, Inc. 295,166; June 21; Serial No. 324,079; published Apr. 5, 1932.
Crayons. Binney & Smith Co. 295,167–8; June 21; Serial Nos. 324,426–7; published Apr. 5, 1932.
Elastic or rubber bands. A. W. Faber, Inc. 295,163; June 21; Serial No. 322,505; published Apr. 5, 1932.
Paper. Riegel Paper Corporation. 295,245; June 21.
Paper and gummed tape, Kraft. Gilman Paper Co. 295,179; June 21; Serial No. 312,757; published Apr. 5, 1932.
Paper, cloth, and tape, Gummed. McLaurin-Jones Co. 295,177; June 21; Serial No. 311,243; published Apr. 5, 1932.
Paper, Substitute for. A. Bushnell. 37,984; renewed Mar. 25, 1932.
Paper, Substitute for. Alvah Bushnell Company. 87,316; renewed July 9, 1932.
Paper tags, seals etc. White's Quaint Shop. 295,162; June 21; Serial No. 320,574; published Apr. 5, 1932.
Paper, Toilet. A. P. W. Paper Company. 295,241; June 21.
Stationery. J. S. Staedtler. 38,525; renewed July 1, 1932.
Stationery material. F. Soennecken. 87,673; renewed July 30, 1932.

CLASS 38

Magazines. Dominican Fathers Province of St. Joseph 295,165; June 21; Serial No. 323,842; published Apr. 5, 1932.
Periodical. Butterick Publishing Company. 295,161; June 21; Serial No. 319,441; published Apr. 5, 1932

Publication. Hat Trade Publishing Company. 295,164; June 21; Serial No. 323,244; published Apr. 5, 1932.

CLASS 39

Boots and shoes. Sherwood Shoe Co. 295,199; June 21; Serial No. 324,014; published Apr. 5, 1932.
Boots, shoes, arctics, etc., Rubber. Beacon Falls Rubber Shoe Company. 87,407; renewed July 16, 1932.
Clothing. Chas. Douglis-Mack Co. Inc. 295,180; June 21; Serial No. 313,364; published Apr. 5, 1932.
Corsets, girdles, brassières, etc. Kopa Brothers, Inc. 295,200; June 21; Serial No. 324,001; published Apr. 5, 1932.
Dresses and suits, coats, capes, etc. Blossom Products, Inc. 295,175; June 21; Serial No. 310,713; published Apr. 5, 1932.
Frocks, dresses, and hosiery. Baron Brothers, Inc. 295,118; June 21; Serial No. 322,764; published Apr. 5, 1932.
Gloves, Kid and fabric. Marshall Field & Company. 87,189; renewed July 2, 1932.
Hat linings. Per-Fit Hat Lining Corporation. 295,207; June 21; Serial No. 322,907; published Apr. 5, 1932.
Hats. Young Brothers. 295,198; June 21; Serial No. 324,025; published Apr. 5, 1932.
Hats, Men's. Holbrook Hat Company. 295,191; June 21; Serial No. 324,223; published Apr. 5, 1932.
Hosiery. Artcraft Silk Hosiery Mills, Inc. 295,151; June 21; Serial No. 324,335; published Apr. 5, 1932.
Hosiery. Harrington & Waring. 295,127; June 21; Serial No. 323,242; published Apr. 5, 1932.
Hosiery. Van Raalte Company. 295,114; June 21; Serial No. 321,673; published Apr. 5, 1932.
Hosiery. Van Raalte Company. 295,138; June 21; Serial No. 324,021; published Apr. 5, 1932.
Hosiery. Van Raalte Company. 295,139–41; June 21; Serial Nos. 324,084–6; published Apr. 5, 1932.
Overalls. Eloesser-Heynemann Co. 88,743; renewed Oct. 22, 1932.
Overcoats and topcoats. Alfred Decker & Cohn, Inc. 295,122; June 21; Serial No. 322,994; published Apr. 5, 1932.
Overcoats and topcoats and coats. Alfred Decker & Cohn, Inc. 295,123; June 21; Serial No. 322,997; published Apr. 5, 1932.
Robes and buntings; Babies'. Ideal Bath Robe Co. Inc. 295,173; June 21; Serial No. 310,338; published Apr. 5, 1932.
Shoes. Samuel Cohen Shoe Stores, Inc. 295,195; June 21; Serial No. 324,219; published Apr. 5, 1932.
Sweaters, coats, leggings, etc. J. C. Penney Company. 295,206; June 21; Serial No. 323,014; published Apr. 5, 1932.
Trousers and wash suits. B. Schwartz & Company. 295,155; June 21; Serial No. 324,446; published Apr. 5, 1932.
Underwear. Belle Knitting Mills. 295,210; June 21; Serial No. 318,581; published Apr. 5, 1932.
Uniforms, ladies' dresses, children's wash suits, etc., Nurses' and maids', Burton Brothers & Co. 295,157; June 21; Serial No. 324,505; published Apr. 5, 1932.

CLASS 40

Pins and clips, Hair. M. Herzog. 295,190; June 21; Serial No. 324,346; published Apr. 5, 1932.
Pins, Toilet and safety. Star Pin Company. 295,197; June 21; Serial No. 324,048; published Apr. 5, 1932.
Shoe laces. Le Tressage Elastique S. A. R. L. 295,192; June 21; Serial No. 323,246; published Apr. 5, 1932.
Shoe laces. St. Louis Braid Co. 295,193; June 21; Serial No. 323,720; published Apr. 5, 1932.

CLASS 42

Cotton dress goods. Marshall Field & Company. 86,900; renewed June 11, 1932.
Gauze, muslins and cotton and rayon piece goods. Kendall Company. 295,235; June 21.

CLASS 44

Massage devices. R. H. Hassler. 295,232; June 21; Serial No. 324,464; published Apr. 12, 1932.
Nebulizing or atomizing appliances for dental, medical, etc. use. Pineoleum Company. 295,231; June 21; Serial No. 324,267; published Apr. 12, 1932.
Rubber articles, Prophylactic. J. W. York. 295,222; June 21; Serial No. 323,432; published Apr. 12, 1932.
Wax for making dental impressions. L. D. Caulk Company. 295,185; June 21; Serial No. 324,657; published Apr. 12, 1932.

CLASS 46

Beef, bacon, dressed turkeys, etc., Fresh and smoked, H. B. Trout. 295,236; June 21.
Beef-broth preparations. American Kitchen Products Company. 88,823; renewed Oct. 29, 1932
Bread. J. E. Limbacher. 295,181; June 21; Serial No. 314,062; published Apr. 5, 1932.
Bread, cake, and pies. Bakers Service Bureau, Inc. 295,182; June 21; Serial No. 315,177; published Apr. 5, 1932.
Bread, cake, and pies. Bakers Service Bureau, Inc. 295,183–4; June 21; Serial Nos. 315,180–1; published Apr. 5, 1932.
Bread, knäckebröd, rye, etc., Swedish. D. Walsh. 295,172; June 21; Serial No. 309,540; published Apr. 5, 1932.
Candies, Coffee flavored. Maatschappij tot Exploitatie van Rademaker's Koninklijke Cacao & Chocoladefabrieken. 295,128; June 21; Serial No. 323,301; published Apr. 5, 1932.
Candy. American Candy Mfg. Co. 88,226; renewed Sept. 10, 1932.
Candy. De Met's, Inc. 295,226; June 21; Serial No. 323,888; published Apr. 12, 1932.
Canned beans. P. J. Ritter Company. 295,246; June 21.
Canned fish. W. R. Boren. 295,220; June 21; Serial No. 323,161; published Apr. 12, 1932.
Canned grapefruit and canned citrus fruit juices. H. C. Sullivan 295,237; June 21.
Canned olive oil. G. Tenore. 295,196; June 21; Serial No. 324,121; published Apr. 5, 1932.
Canned salmon. Alaska Fish Co. 88,821; renewed Oct. 29, 1932.
Canned spaghetti gravy. Chetta & Purpe, Incorporated. 295,244; June 21.
Chocolate, Sweet. Chocolat Suchard Societe Anonyme. 295,214; June 21; Serial No. 318,392; published Apr. 12, 1932.
Coffee. James Van Dyk Company. 88,434; renewed Sept. 17, 1932.
Coffee. John H. Wilkins Company. 295,217; June 21; Serial No. 322,808; published Apr. 12, 1932.
Coffee, tea, candy, sugar, etc. King Kullen Grocery Co. 295,209; June 21; Serial No. 320,362; published Apr. 5, 1932.
Crackers and biscuits. Perfection Biscuit Company. 88,945; renewed Oct. 29, 1932.
Feed, Stock, chicken, and dairy. Texas Farm Products Company. 295,169; June 21; Serial No. 321,576; published Mar. 22, 1932.
Fish. Kildall Fish Company. 295,219; June 21; Serial No. 323,092; published Apr. 12, 1932.
Food preparation. Toddy, Inc. 295,201; June 21; Serial No. 323,878; published Apr. 5, 1932.
Food products. Gianduja Importing Co. 295,176; June 21; Serial No. 311,141; published Apr. 5, 1932.
Fruits, Fresh citrus. International Fruit Corporation. 295,187; June 21; Serial No. 313,238; published Apr. 12, 1932.
Gelatin dessert powders. Tasty Jell Mfg. Corporation. 295,242; June 21.
Ham, bacon, and lard. Hull & Dillon Pkg. Co. 87,452; renewed July 16, 1932.
Macaroni. Atlantic Macaroni Co. 89,081; renewed Nov. 12, 1932.
Malt extract. Sterling Products Company. 295,203; June 21; Serial No. 323,723; published Apr. 5, 1932.
Mayonnaise and French dressing. Nally's, Inc. 295,212; June 21; Serial No. 317,215; published Apr. 5, 1932.
Mayonnaise, salad dressing, tomato ketchup, etc. Nally's, Inc. 295,211; June 21; Serial No. 317,216; published Apr. 5, 1932.
Milk, Condensed skimmed. Foster Packing Company. 87,617; renewed July 30, 1932.
Milk, dried eggs, and mince-meat, Dried. Merrell-Soule Company. 87,223; renewed July 2, 1932.
Milk, Evaporated. Sheboygan Evaporated Milk Co. 84,136; renewed Nov. 7, 1931.
Mince-meat, infant food, and preserved eggs. Merrell-Soule Co. 87,089; renewed June 25, 1932.
Oil, corn oil, etc., Soya bean. A. Klipstein & Company. 295,159; June 21; Serial No. 276,191; published Apr. 5, 1932.
Oils, Edible. Leghorn Trading Co. Inc. 295,208; June 21; Serial No. 321,772; published Apr. 5, 1932.
Oleomargarin. Ammon & Person. 87,889; renewed Aug. 13, 1932.
Oranges and grapefruit, Fresh. G. W. Clapp. 295,258; June 21.
Oysters. W. H. McGee. 86,145; renewed Apr. 16, 1932.
Packing house products. Swift and Company. 38,399; renewed June 3, 1932.
Packing house products. Swift and Company. 38,538; renewed July 1, 1932.
Poultry, Dressed. C. H. Pose. 295,243; June 21.
Sauce (Soy). G. Tanaka. 86,674; renewed May 21, 1932.
Shampoo, Olive oil. Lonwells, Inc. 295,188; June 21; Serial No. 314,919; published Aug. 18, 1931.
Spices. Kroger Grocery & Baking Co. 295,205; June 21; Serial No. 323,051; published Apr. 5, 1932.
Tapioca. Ceylon Spice Company. 295,202; June 21; Serial No. 323,857; published Apr. 5, 1932.
Wheat, Shredded. Shredded Wheat Company. 89,071; renewed Nov. 5, 1932.

CLASS 47

Wine, Port. A. C. F. Morgan. 86,999; renewed June 18, 1932.
Wine, Port. A. C. F. Morgan. 87,905; renewed Aug. 13, 1932.

CLASS 50

Textile material for use as mounting material, covering or lining for suit cases, etc. Nashua Gummed & Coated Paper Company. 295,238; June 21.

LIST OF LABELS

Big Ten. For Prepared Paints. Armstrong Paint & Varnish Works. 40,850; June 21.

"Black Leaf 40" Nicotine Sulphate 50 Pounds. For Nicotine Sulphate. Tobacco By-Products & Chemical Corporation. '40,868; June 21.

Boss Painter. For Prepared Paints. Armstrong Paint & Varnish Works. 40,851; June 21.

Funny Farm Folks. For Candy. T. I. Kent. 40,859; June 21.

Genuine Mineralwells Crystals. For Crystals Made From Mineral Water. Texas Crystal Co. 40,867; June 21.

Hi-Way Paint. For Paint. Fullerton Lumber Company. 40,857; June 21.

It Reaches the Right Spot. For Medicine. A. Crichton. 11,355; renewed Aug. 30, 1932.

Kitchen Klenzer. For Cleaning and Scouring Compound in Finely Divided Form For Household Use. Fitzpatrick Bros. Inc. 40,855; June 21.

Little Artist Crayon Set. For Crayon Set. Standard Solophone Mfg. Co. Inc. 40,866; June 21.

Lustrol Creme. For Furniture Cream For Cleaning and Polishing. Shulman Chemical Company. 40,863; June 21.

Magic Cold Tablets. For Cold Tablets. C. G. Foertmeyer. 40,856; June 21.

Masterpiece. For Preparation for Repairing Leaks in Auto Water Cooling Systems. Continental Works Co. 40,854; June 21.

Parkelp. For Food Supplement. Philip R. Park, Inc. 40,862; June 21.

Rainbow Fishing, The New Flycasting Game With Giant Fish. For Indoor Game. Milton Bradley Company. 40,852; June 21.

Silk's Supreme Prepared Spanish Style Rice. For Prepared Spanish Style Rice. F. J. Silk. 40,864; June 21.

Smiling Faces, The Happiness Game. For Indoor Game. Milton Bradley Co. 40,853; June 21.

Solidhed Long Pin Drape Tacks. For Long Pin Drape Tacks. Solidhed Company. 40,865; June 21.

Solvene. For a Preparation For Treating Tired, Aching Muscles and Tired, Burning, Aching, and Swollen Feet. C. W. Hallahan. 40,858; June 21.

Taste-Tested Tea. For Tea. T. O. Morath. 40,860; June 21.

Wanzer's Certified Vitamin Eggs. For Eggs. Sidney Wanzer & Sons, Inc. 40,869; June 21.

Wave Set. For Hair Nets. American Hair Net Co. 40,849; June 21.

Wheatsworth Crackers. For Crackers. National Biscuit Company. 40,861; June 21.

LIST OF PRINTS

A Sailor's Life For Me. For Clothing. Bradley Knitting Company. 13,756; June 21.

Cellophane Hides Nothing. For Bread. W. E. Long Co. 13,758; June 21.

J. O. Fly Spray. For Fly Spray. John Opitz, Inc. 13,763; June 21.

Just A Cup Picks You Up. For Tea. McCormick and Company. 13,762; June 21.

Much Ado About Practically Nothing. For Clothing. Bradley Knitting Company. 13,754; June 21.

Old Home Bread In its Cellophane Wrapper Is My Proof of Absolute Freshness. For Bread. W. E. Long Co. 13,759; June 21.

Pioneer Candy Drops. For Candy Drops. Strong, Cobb & Company. 13,764; June 21.

"See For Yourself—". For Bread. W. E. Long Co 13,761; June 21.

Somewhere The Sun is Shining! For Clothing. Bradley Knitting Company. 13,755; June 21.

The Fashions That Bloom in the Spring, Tra La! For Clothing. Bradley Knitting Company. 13,757; June 21.

You Can See The Freshness—Through Crystal—Clear Cellophane. For Bread. W. E. Long Co. 13,760; June 21.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 21ST DAY OF JUNE, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A C Spark Plug Company. (See Montgomery, Earle T., assignor.)

A C Spark Plug Company. (See Pineau, Auguste, assignor.)

A C Spark Plug Company. (See Wedin, Ivar, assignor.)

A C Spark Plug Company. (See Zubaty, J., and Smith, assignors.)

Adams, Arthur H., Yonkers, assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Spring pad. 1,863,738; June 21.

Ainsworth, George, New Hyde Park, N. Y. Lighting fixture. Des. 87,184; June 21.

Ainsworth, George, New Hyde Park, N. Y. Lighting fixture. Des. 87,185; June 21.

Air-Way Electric Appliance Corporation, The. (See Tracy, Pratt E., assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Eisenhut, O., Bass, and Meier, assignors.)

Al, Jan, Amsterdam, assignor to Naamlooze Vennootschap De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Manufacture of hydrogen. 1,863,681; June 21.

Alberts, Harry C., Chicago, Ill. Heat radiator. 1,863,554; June 21.

Alberts, Samuel, Los Angeles, Calif. Toilet bowl. 1,863,682; June 21.

Aldeen, Gedor W., assignor to American Cabinet Hardware Corp., Rockford, Ill. Hinge. 1,864,163; June 21.

Aldeen, Gedor W., assignor to American Cabinet Hardware Corporation, Rockford, Ill. Hinge. 1,864,164; June 21.

Alden, Gardner R., Framingham, and T. Nelson, assignors to Dennison Manufacturing Company, Framingham, Mass. Making nonbleeding crepe paper. 1,863,813; June 21.

Aldrich, Herbert B., Baltimore, Md., assignor to The Peerless Heater Company, Boyertown, Pa. Heat insulating furnace panel. 1,864,333; June 21.

Allan Manufacturing and Welding Company. (See Hebeler, Edward S., assignor.)

Allen-Bradley Company. (See Bradley, Harry L., assignor.)

Allen, Edward B., Newtown, Conn. Sewing machine. 1,864,165; June 21.

Allen, Frank B., Lower Merion Township, Montgomery County, Pa., assignor to The Allen-Sherman-Hoff Company. Apparatus for handling solids. 1,864,009; June 21.

Allen-Sherman-Hoff Company. (See Allen, Frank B., assignor.)

Aluminum Company of America. (See Guyot, Marius, assignor.)

Aluminum Goods Manufacturing Co. (See Johnson, Lloyd E., assignor.)

American Blower Corporation. (See Morse, C. T., and Hogan, assignors.)

American Buckle Company, The. (See Salisbury, Jessup, assignor.)

American Cabinet Hardware Corp. (See Aldeen, Gedor W., assignor.)

American Cable Company. (See Burd, Gorman C., assignor.)

American Can Company. (See Holloway, Joseph C., assignor.)

American Creosoting Company. (See Cook, Jesse C., assignor.)

American Cyanamid Company. (See Christmann, L. J., and Jayne, assignors.)

American Cyanamid Company. (See Swainson, S. J., and Anderson, assignors.)

American Encaustic Tiling Company. (See Solon, Paul H., assignor.)

American Exchange National Bank of St. Louis, The. (See Baumann, A., and Horlacher, assignors.)

American Fabrics Company, The. (See Page, Samuel H., assignor.)

American Fire Prevention Bureau. (See Derby, J. H., and Leach, assignors.)

American Injector Company. (See Souder, V. G., and Trix, assignors.)

American Lurgi Corporation. (See Pantenburg, Vitalis, assignor.)

American Manganese Steel Company. (See Meyer, Daniel H., assignor.)

American Optical Company. (See Baker, Nelson M., assignor.)

American Safety Razor Corporation. (See Behrman, Marcus B., assignor.)

American Telephone and Telegraph Company. (See Chapman, Arthur G., assignor.)

American Telephone and Telegraph Company. (See Hamilton, Baxter P., assignor.)

American Telephone & Telegraph Company. (See Oswald, Arthur A., assignor.)

American Telephone and Telegraph Company. (See Pitts, F. B., Garlinger, and Smith, assignors.)

American Telephone and Telegraph Company. (See Thorp, Vaughn P., assignor.)

American Throttle Company. (See Williams, Arthur, assignor.)

Ameriacn Tool and Machine Company. (See Williams, Frank L., assignor.)

Amis, D. D. (See Russell, Robert, assignor.)

Amphibions, Inc. (See Leaman, Thomas P., assignor.)

Anchor Fireproofing Company. (See Martin, Charles A., assignor.)

Andersen, Carl A. J., Salt Lake City, Utah. Beet blocker. 1,863,959; June 21.

Anderson, Alexander, Fullerton, Calif. Apparatus and method of taking core samples of rock in bore holes. 1,864,113; June 21.

Anderson, Arvid E. (See Swainson, S. J., and Anderson.)

Anderson, Frohman, Detroit, Mich. Toy. 1,864,227; June 21.

Angerpointner, Matthias, Djuron, near Norrkoping, Sweden. Holding device for piece goods in suspended lines. 1,864,114; June 21.

Anglemyer, Herman B., Pomona, Calif., and R. Chaney, Fort Wayne, Ind., assignors to International Harvester Company. Air cleaner. 1,864,289; June 21.

Anthony, Benjamin F. (See Eurich, R. H., and Anthony.)

Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Front wheel brake actuating mechanism. 1,863,644; June 21.

Archer, George B., et al. (See Cavert, Edward N., assignor.)

Arnold, Arthur A., assignor to The A. C. Gilbert Company, New Haven, Conn. Humidifier casing. Des. 87,186; June 21.

Arnold, Arthur A., assignor to The A. C. Gilbert Company, New Haven, Conn. Heating pad. Des. 87,187; June 21.

Arnold, Carl, Nuremberg, Germany. Mechanical toy. 1,863,587; June 21.

Aron, William P., assignor of one-half to J. E. Knott, Dallas, Tex. Fan. Des. 87,188; June 21.

Aronson, Alexander H., Newark, N. J. Finger and hand protector. 1,863,960; June 21.

Art Marble Company of America. (See Welch, Lon E., assignor.)

Arvidson, Carl. (See Bigney, S. O., and Arvidson.)

Asch, Abraham B. (See Laughlin, W. C., and Asch.)

Assmann, Peter, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chemically resistant silver alloy. 1,863,612; June 21.

Assmann, Peter, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chemically resistant silver alloy. 1,863,645; June 21.

Associated Ice & Dairies Limited. (See Ware, Herbert M., assignor.)

Atkins, Don C., Los Angeles, Calif. Apparatus for removing gases from petroleum. 1,864,037; June 21.

Atlantic Coast Fisheries Company. (See Cooke, Alexander H., assignor.)

Atlantic Coast Fisheries Company, The. (See Taylor, Harden F., assignor.)

Austin, Harry M., Chestnut Hill, assignor to Charles Blum, Philadelphia, Pa. Coin-controlled drink dispensing apparatus. 1,864,175; June 21.

Automatic Food Machinery Corporation. (See Hall, Charles G., assignor.)

Avilla, Philip, Daly City, assignor of two-fifths to T. E. Himle, Burlingame, Calif. Band saw pulley drive. 1,863,822; June 21.

Baars, Ernst S. H., assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Cooling and ice tank coils. 1,863,892; June 21.

Bacon, Raymond F., Bronxville, and H. T. Hotchkiss, jr.; New Rochelle, N. Y.; said Hotchkiss, jr., assignor to said Bacon. Recovery of sulphur. 1,864,290; June 21.

Bacon, Raymond F., Bronxville, and H. T. Hotchkiss, jr., New Rochelle, N. Y.; said Hotchkiss, jr., assignor to said Bacon. Recovery of sulphur. 1,864,480; June 21.

Bailey, Claude B., Wyandotte, assignor to McCord Radiator & Mfg. Co., Detroit, Mich. All-metal gasket. 1,863,893; June 21.

Bally, Thaddeus F., Alliance, assignor to The Electric Furnace Company, Salem, Ohio. Metallic resistor for electric furnaces. 1,864,334; June 21.
Baker, Edward C. et al. (See Baker, George B., assignor.)
Baker, Edward C. (See Baker, George B., H. B., and E. C.)
Baker, George B., et al. (See Baker, George B., assignor.)
Baker, George B., assignor, by mesne assignments, to E. C. and G. B. Baker, Brockton, Mass., as surviving joint tenants. Tack machine. 1,864,269; June 21.
Baker, George B., H. B., and E. C., assignors, by mesne assignments, to G. B. and E. C. Baker, Brockton, Mass., as surviving joint tenants. Tack machine. 1,864,266; June 21.
Baker, George B., H. B., and E. C., assignors, by mesne assignments, to G. B. and E. C. Baker, Brockton, Mass., as surviving joint tenants. Tack machine. 1,864,267; June 21.
Baker, George B., H. B., and E. C., assignors, by mesne assignments, to G. B. and E. C. Baker, Brockton, Mass., as surviving joint tenants. Tack machine. 1,864,268; June 21.
Baker, Herbert B. (See Baker, George B., H. B., and E. C.)
Baker, Herbert H., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for the manufacture of laminated glass. 1,864,176; June 21.
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. Des. 81,189; June 21.
Baker Oil Tools, Inc. (See Baker, Reuben, assignor.)
Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Floating and cementing device for well casings. 1,863,613; June 21.
Baker, Roy E., Reading, Mass. Railway traffic controlling apparatus. 1,864,481; June 21.
Bakeries Service Corporation. (See Marr, William S., assignor.)
Ball, Halleck C., C. R. Jackson, W. B. Keller, and J. Z. Winder, assignors to Richmond Fireproof Door Company, Richmond, Ind. Safety device for suspended doors. 1,863,961; June 21.
Ball, Ralph L., South Berwick, Me. Clothespin. 1,863,588; June 21.
Balle, Gerhard. (See Ernst, Otto, Spensel, and Balle.)
Banner Rock Corporation. (See Powell, Edward R., assignor.)
Bannister, William J. (See Simms, C. W., Bannister, and Swallen.)
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Web printing rotary press. 1,864,166; June 21.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Web printing rotary press. 1,864,167; June 21.
Barberon, Pierre, Le Fayet, France, assignor to Pencil Mechanism Corporation, New York, N. Y. Mechanical pencil. 1,864,038; June 21.
Barclay, Edward P., Los Angeles, Calif. Coupler. 1,863,823; June 21.
Barnes, Hyrum K., Ogden, Utah. Vehicle brake. 1,864,115; June 21.
Barnett, Louis, Brooklyn, N. Y. Fused attachment plug fitting. 1,863,824; June 21.
Barrett Company, The. (See Moses, F. G., Hess, and Perkins, assignors.)
Bass, Alfred. (See Eisenhut, O., Bass, and Meier.)
Batina, Charles C., Chicago, Ill. Latch. 1,864,177; June 21.
Baum, Erich. (See Herrmann, W. O., and Baum.)
Baumann, Adolf, and C. P. Horlacher, St. Louis, Mo., assignor, by mesne assignments, to The American Exchange National Bank of St. Louis. Driving mechanism for calculating machines. 1,863,646; June 21.
Baumbach, Emil A., Chicago, Ill. Packing die sets. 1,863,894; June 21.
Bausch, Viktor, Berlin, and A. Schroth, Mecklenburg-Schwerin, assignors to Felix Schoeller & Bausch, Neu-Kaliss/Mecklenburg, Germany. Production of papers for security purposes. 1,864,116; June 21.
Beach, Richard W., Noblesville, Ind. Paper napkin or similar article. Des. 87,190; June 21.
Beach, Richard W., Noblesville, Ind. Paper napkin or similar article. Des. 87,191; June 21.
Beall, Clifford S., Raymond, Wash. Paper folding machine. 1,863,709; June 21.
Beardsley Chandelier Manufacturing Company. (See Ohm, Albert J. D., assignor.)
Beck, Elmer E., Lititz, Pa. Convertible stool steps. 1,863,614; June 21.
Becker, Harry G., Albany, N. Y. Rail lubricating device. 1,864,000; June 21.
Becket, Alan L., East Orange, N. J. Electric iron. 1,864,010; June 21.
Behrman, Marcus B., assignor to American Safety Razor Corporation, Brooklyn, N. Y. Razor. Des. 87,192; June 21.
Belanger, Albert P. D., Chicago, Ill. Drier for food products. 1,864,178; June 21.
Bell, Charles W., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of highway crossing signals. 1,864,179; June 21.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell & Howell Company. (See Zuber, John G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gooderham, John W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Legg, Victor E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Massonneau, Robert F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Parsons, Ian H., assignor.)
Benda, Louis, Mainkur, near Frankfort-on-the-Main, and O. Sievers, Hohe Tanne, near Hanau-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Production of alkoxy acridinium compounds, and the products. 1,863,647; June 21.
Bendix Aviation Corporation. (See Lorenzen, Christian, assignor.)
Bendix Aviation Corporation. (See Semmes, Harry H., assignor.)
Bendix Brake Company. (See Apple, Vincent G., assignor.)
Benjamin, Bert R., Oak Park, Ill., assignor to International Harvester Company. Tractor harvester. 1,864,291; June 21.
Berg, Charles, and C. F. Cookson, Lyndhurst, N. J., assignor to Counter Cooking Machine Corporation, New York, N. Y. Coffee machine. 1,863,710; June 21.
Berger, David, Philadelphia, Pa. Smoker's appliance. 1,864,400; June 21.
Berger, Friedrich W. F., Berlin, Germany, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,864,228; June 21.
Bernard, Charles E., Beaverton, Oreg. Hay press discharge apparatus. 1,863,648; June 21.
Bernlöhr, Eugen, Dolau/Halle, Germany. Machine for dividing and working dough. 1,864,401; June 21.
Berry, James W., Marine City, Mich., and R. McKnight, Sarnia, Ontario, Canada. Switch throwing means. 1,864,117; June 21.
Berthold, Erich. (See Kunz, M. A., Koeberle, and Berthold.)
Berthon, Rodolphe, Neuilly, France, assignor to Kislyn Corporation, New York, N. Y. Apparatus for photography and cinematography in natural colors. 1,863,739; June 21.
Bettis, William I., Los Angeles, Calif. Casing protector. 1,863,740; June 21.
Bierlich, J. H., et al. (See Bierlich, Kenneth G., assignor.)
Bierlich, Kenneth G., assignor of one-fourth to J. H. Bierlich, Bennington, Vt., and one-half to C. E. Dooley, Philmont, N. Y. Solidified alcoholic fuel. 1,863,962; June 21.
Bigney, S. O., & Co. (See Bigney, S. O., and Arvidson, Bigney, Sidney O., and C. Arvidson, Attleboro, Mass., assignors.) assignors to S. O. Bigney & Company. Bracelet buckle. 1,863,917; June 21.
Bing, Joseph M., New York, N. Y. Photometric calculator. 1,864,180; June 21.
Bishop, Nathaniel, Bridgeport, Conn. Amplitude limiting device for amplifying systems. 1,863,895; June 21.
Black Diamond Steamship Corporation. (See Hanlon, Michael J., assignor.)
Black, Julia, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 87,193; June 21.
Black, Julia, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 87,194; June 21.
Black, Robert S., Highland Park, assignor to Pfanstiehl Chemical Company, Waukegan, Ill. Production of galactonic acid and its lactone. 1,864,229; June 21.
Blackmore, Lloyd, Highland Park, assignor to General Motors Corporation, Detroit, Mich. Booster brake. 1,863,825; June 21.
Blair, William M. (See North, R. B., Hough, and Miller, assignors.)
Bliss, Harry G., Richfield Springs, N. Y. Garment hanger attachment. 1,863,649; June 21.
Blum, Charles. (See Austin, Harry M., assignor.)
Blydenburgh, Harold L., assignor to The Moto-Mower Company, Detroit, Mich. Bearing construction. 1,863,615; June 21.
Bob, Herman D., Brooklyn, N. Y. Soft collar. 1,864,181; June 21.
Bodemuller, Robert, Nederland, Tex., assignor to The Texas Company, New York, N. Y. Automatic liquid-level regulator. 1,864,402; June 21.
Bohne, William A., assignor to E. F. Houghton & Company, Philadelphia, Pa. Testing machine. 1,864,413; June 21.
Bolton, Edgar A., and T. F. Gray, assignors to Victory Valves Limited, Adswood, Stockport, England. Parallel slide valve. 1,863,650; June 21.
Bolz, George, Brooklyn, N. Y. Window seat. 1,864,118; June 21.
Bonnet, James H., Champaign, Ill. Fabric canopy support. 1,863,963; June 21.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Apparatus for the assembly of wire wheels. 1,864,335; June 21.

Borchers, Wilhelm. (See Stimson, R. W., and Borchers.)
Bosch, Henry, jr., San Francisco, Calif. Combination pencil pointer and refuse receptacle. 1,863,616; June 21.
Bosch, Robert, Aktiengesellschaft. (See Kazenmaier, August, assignor.)
Bostwick Steel Latch Company. (See Purser, William J., assignor.)
Bouthillon, Léon, assignor to Compagnie Generale de Telegraphie Sans Fil, Paris, France. Directional antenna system. 1,863,741; June 21.
Bowles, Edward L., Wellesley Farms, Mass. Phonograph record. 1,863,683; June 21.
Boyer, Harold H., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,864,182; June 21.
Bradley, Charles B., Cleveland, Ohio. House anchor. 1,864,403; June 21.
Bradley, Harry L., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Resistor unit. 1,864,336; June 21.
Bradner, H. T. (See Lees, Ernest J., assignor.)
Bradshaw, David J., Elwood, Victoria, Australia. Machine for the retail marketing of block cheese and the like. 1,864,404; June 21.
Braun, Rudolf M., Vienna, Austria. Call-answering device for telephone stations. 1,864,119; June 21.
Brauning, Karl A., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Coincidental lock. 1,863,742; June 21.
Bremer, William S., Chicago, Ill. Cooking utensil thermometer. 1,863,918; June 21.
Brenaman, Harry A. (See Schmidt, V. P., and Brenaman.)
Brenner, Guillermo E., Dusseldorf-Oberkassel, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany. Rubbish cart. 1,863,964; June 21.
Brewer, Robert E., Valley Falls, Kans. Sickle blade remover. 1,864,405; June 21.
Brewer-Titchener Corporation, The. (See Stannard, Bruce M., assignor.)
Bridge, Ellis H., Akron, Ohio, assignor to The Electric Storage Battery Company, Philadelphia, Pa. Storage battery handle. 1,864,168; June 21.
Bridgeman, Frank J., assignor to The Lake Erie Chemical Company, Cleveland, Ohio. Mechanical system for gas and smoke protection. 1,863,965; June 21.
Bridges, Noah, Mulvane, and T. T. Moore, Cassoday, Kans. Ballast liner. 1,864,183; June 21.
Briechle, Ambrosius. (See Lutz, F. W., and Briechle.)
Briel, Conrad G., assignor to Cinema Development Company, Chicago, Ill. Producing composite pictures. 1,863,826; June 21.
Briel, Conrad G., assignor to Cinema Development Company, Chicago, Ill. Producing composite pictures. 1,863,827; June 21.
Briggs, Alfred A., assignor of one-half to J. A. Briggs, New York, N. Y. Flush tank fixture. 1,863,589; June 21.
Briggs, Josiah A. (See Briggs, Alfred A., assignor.)
Brinker, Casper J. (See Brinker, Richard J. and C. J.)
Brinker, Richard J., Pittsburgh, Pa., and C. J. Brinker, Cumberland, Md. Snow guard. 1,863,561; June 21.
Brogan, Byard F., Philadelphia, Pa. Ring. 1,863,617; June 21.
Brogan, Byard F., Philadelphia, Pa. Making a ring. 1,863,618; June 21.
Broman, Charles E., Sparta, and W. H. Nowak, Grand Rapids, Mich. Golf ball marking machine. 1,863,828; June 21.
Brooks, John A., Detroit, Mich. Spraying system. 1,863,919; June 21.
Brosche, Alexander, Gruiten, assignor to Rheinische-Westfalische Kalwerke, Dornay, Germany. Extracting magnesia from dolomite. 1,863,966; June 21.
Brown & Bigelow. (See Fischer, H. L., and Ward, assignors.)
Brown, Robert E., Olean, N. Y. Pocketknife. 1,864,011; June 21.
Brownson, De Witt M., Syracuse, N. Y. Utensil holder. 1,864,039; June 21.
Brückell, Waldemar, Berlin, Germany, assignor to General Electric Company. Multiplex signaling system. 1,863,829; June 21.
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding clamp. 1,864,292; June 21.
Buchanan, Vita, New York, N. Y. Bust-supporting garment. 1,863,830; June 21.
Bucklus, Albert O., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Roller bearing journal box. 1,864,337; June 21.
Bullard Company, The. (See Johnson, Ernest H., assignor.)
Buma, Yukio, assignor to Morimura Bros, Inc., New York, N. Y. Plate or similar article. Des. 87,195; June 21.
Buma, Yukio, assignor to Morimura Bros, Inc., New York, N. Y. Plate or similar article. Des. 87,196; June 21.
Buma, Yukio, assignor to Morimura Bros, Inc., New York, N. Y. Plate or similar article. Des. 87,197; June 21.
Buma, Yukio, assignor to Morimura Bros, Inc., New York, N. Y. Plate or similar article. Des. 87,198; June 21.
Buma, Yukio, assignor to Morimura Bros, Inc., New York, N. Y. Plate or similar article. Des. 87,199; June 21.
Bunce, Earl H., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Reducing zinciferous materials. 1,863,711; June 21.
Bundy Tubing Company. (See Quarnstrom, Bert L., assignor.)
Bunker, Carl D., North Haven, Me. Smoker's stand. Des. 87,200; June 21.
Burd, Gorman C., Newark, N. J., assignor to American Cable Company, Inc. Cutting and binding stranded structures. 1,864,169; June 21.
Burd, Gorman C., Brooklyn, N. Y., assignor to American Cable Company, Inc. Apparatus for treating wire rope. 1,864,293; June 21.
Burd, Gorman C., Akron, Ohio, assignor to American Cable Company, Inc. Treating wire rope. 1,864,338; June 21.
Burgess Cellulose Company. (See Schorger, Arlie W., assignor.)
Burns, Joseph, assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Meat hanging method. 1,863,743; June 21.
Burroughs Adding Machine Company. (See Muller, Robert L., assignor.)
Burruss, George H., assignor to Col-Tex Refining Company, Colorado, Tex. Treating oil and reagents. 1,863,967; June 21.
Burt Machine Company. (See Wild, Charles H., assignor.)
Burton, Carroll, Johnstown, Pa. Guard rail. 1,863,783; June 21.
Busch Manufacturing Company. (See Busch, Vern W., assignor.)
Busch, Vern W., assignor to Busch Manufacturing Company, Detroit, Mich. Bird cage bath. 1,864,230; June 21.
Byfield, Albert H., Chicago, Ill. Heating system. 1,863,712; June 21.
Byrd, William H., New Orleans, La. Ink rolling mill. 1,863,831; June 21.
Cady, Sherman W., Perry, N. Y., and G. M. Kriegbaum, Richmond, Ind., assignors to International Harvester Company. Knockdown grain drill hopper. 1,864,294; June 21.
Cameron, James A., assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting means. 1,863,619; June 21.
Cameron Machine Company. (See Cameron, James A., assignor.)
Campbell, Philip S., Houston, assignor of one-half to M. Culmore, Harris County, Tex. Container. 1,864,040; June 21.
Campbell, William W., et al., executors and trustees. (See Harrison, Herbert C.)
Canadian Atlas Steels Limited. (See Norley, Harry C., assignor.)
Canfield, Lewis T. (See Nash, C. J., and Canfield.)
Canning, Joseph N., Tampa, Fla. Printing press attachment. 1,864,231; June 21.
Cannon, James P., Elizabeth, assignor to Structural Gypsum Corporation, Linden, N. J. Belt construction and method of use. 1,863,562; June 21.
Carey, Philip, Manufacturing Company, The. (See Greider, Harold W., assignor.)
Carlson, Axel A., Brooklyn, N. Y. Water heater. 1,864,120; June 21.
Carlson, Oscar F., Company. (See Carlson, Oscar F., assignor.)
Carlson, Oscar F., assignor to O. F. Carlson Company, Chicago, Ill. Valve. 1,863,590; June 21.
Carlstrom, Elmer, Chicago, Ill. Concealed weapon. 1,863,563; June 21.
Carouso, Victor H., Oakland, assignor to Duart Manufacturing Co. Ltd., San Francisco, Calif. Reel. 1,863,620; June 21.
Carpenter, Glenn W., Schenectady, N. Y., assignor to General Electric Company. Electric apparatus. 1,864,482; June 21.
Carroll, Ellsworth W., San Francisco, Calif. Autoplane. Des. 87,201; June 21.
Carvalho, Leslie R. N., assignor to The Closure Service Company, Toledo, Ohio. Jar closure. 1,863,896; June 21.
Castiaux, Rupert, Bordeaux, France. Sheet metal radiator. 1,863,555; June 21.
Cavert, Edward N., assignor of one-third to Samuel Petersen, and one-third to G. B. Archer, Chicago, Ill. Sink positioning mechanism. 1,864,184; June 21.
Centaur Tractor Corporation. (See Stedman, Charles C., assignor.)
Chalman, John E., assignor to Union Special Machine Company, Chicago, Ill. Rug tufting machine. 1,864,414; June 21.
Champion Coated Paper Co., The. (See Lauderman, Vincent A., assignor.)
Champion Porcelain Company. (See Jeffery, Benjamin A., assignor.)
Chaney, Ray. (See Anglemyer, H. B., and Chaney.)
Chapman, Arthur G., Butler, N. J., assignor to American Telephone and Telegraph Company. Apparatus and method for remedying cross talk. 1,863,651; June 21.
Chapman, William H., Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich. Centerless grinder. 1,863,832; June 21.
Chapuis, Maxime, Chicago, Ill. Smoker's stand. Des. 87,202; June 21.

Cheney Brothers. (See Black, Julia, assignor.)
Cherry-Burrell Corporation. (See Feldmeier, H., and Wightman, assignors.)
Cherry-Burrell Corporation. (See Rosenfeld, Louis, assignor.)
Chicago Cinema Equipment Company. (See Goldberg, Joseph H., assignor.)
Chicago Railway Equipment Company. (See Graham, Herman E., assignor.)
Chilton, Roland, Ridgewood, N. J. Gear mechanism. 1,864,170; June 21.
Chretien, Lucien, Paris, France. Method and apparatus for changing frequency for radiosignaling. 1,863,564; June 21.
Christ, Charles W., Kansas City, Mo. Rotary engine. 1,864,406; June 21.
Christensen, Norman V., C. F. Rubel, and F. F. Zeier, assignors to Union Special Machine Company, Chicago, Ill. Thread controller for sewing machines. 1,864,407; June 21.
Christian, L. C. (See Denny, William P., assignor.)
Christmann, Ludwig J., Jersey City, and D. W. Jayne, jr., Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y. Method of and composition for preserving substances. 1,864,185; June 21.
Chrysler Corporation. (See McCain, G. L., and Pfeiffer, assignors.)
Church, Lewis H., Roselle, assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding fitting. 1,864,295; June 21.
Church, Lewis H., Westfield, assignor to The Thomas & Betts Co., Elizabeth, N. J. Pipe coupler. 1,864,339; June 21.
Churchward, Alexander, New York, N. Y., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J. Welding apparatus. 1,863,833; June 21.
Cincinnati Grinders Incorporated. (See Einstein, Sol, assignor.)
Cincinnati Grinders Incorporated. (See Fritschi, Hans, assignor.)
Cinema Development Company. (See Briel, Conrad G., assignor.)
Clapham, Francis J. (See Wolfe, Clifford E., assignor.)
Clapper, Walter J. (See Eberlein, Edwin S., assignor.)
Clark, Bennett F., assignor to John Waldron Corporation, New Brunswick, N. J. Conveyer for sheet driers. 1,864,415; June 21.
Clark, Ralph O., Memphis, Tenn. Serving tray. Des. 87,203; June 21.
Clayton Aniline Company Limited, The. (See Fritzsche, Hermann, assignor.)
Cleveland-Browning Company. (See James, Robert B., assignor.)
Cleveland Graphite Bronze Company. (See Hopkins, B. F., and Palm, assignors.)
Cleveland Heater Company, The. (See Te Pas, Edmund, assignor.)
Cleveland Rock Drill Company. (See Richardson, Led L., assignor.)
Cloppert, Ralph, Dayton, Ohio. Renewing windshield glasses and an implement used in the practice of the method. 1,863,897; June 21.
Closure Service Company. (See Carvalho, Leslie R. N., assignor.)
Cocks, Harry, Cardiff, Wales. Ship's hatch cover. 1,864,232; June 21.
Cohn-Byk, Walter, Berlin, and A. von Pap, Charlottenburg, Germany, assignors to General Electric Company. Bimetallic thermostat. 1,864,483; June 21.
Cole, Eugene M., Charlotte, N. C. Cultivator attachment for tractors. 1,864,121; June 21.
Cole, Eugene M., Charlotte, N. C. Guano distributing attachment for tractor cultivators. 1,864,122; June 21.
Col-Tex Refining Company. (See Burruss, George H., assignor.)
Combridge, George A., San Francisco, Calif. Indicator. 1,863,684; June 21.
Combridge, George A., San Francisco, Calif. Control mechanism. 1,864,172; June 21.
Combridge, George A., Los Angeles, Calif. Indicator. 1,864,171; June 21.
Commercial Furniture Company. (See Hameetman, Jacob P., assignor.)
Commercial Solvents Corporation. (See Simms, C. W., Bannister, and Swallen, assignors.)
Compagnie Generale de Telegraphie Sans Fil. (See Bouthillon, Leon, assignor.)
Compagnie Internationale des Freins Automatiques Societe Anonyme. (See Pieper, Henri, assignor.)
Conley, Otto M. (See Conley, Roy E. and O. M.)
Conley, Roy E. and O. M., Fostoria, Ohio. Electric jiffy creaser. 1,864,408; June 21.
Connor, Robert A., Fort Wayne, Ind., assignor, by mesne assignments, to National Electric Products Corporation, New York, N. Y. Coil and making same. 1,863,713; June 21.
Conover, Garrett E., Verona, N. J. Indicator. 1,864,416; June 21.
Conrad, William B., Casper, Wyo. Eyeglass attachment. 1,864,123; June 21.
Consortium fur Elektrochemische Industrie. (See Herrmann, W. O., and Baum, assignors.)
Continental Can Company. (See Engelman, Joseph J., assignor.)
Continental Can Company. (See Flook, George, assignor.)
Cook, Jesse C., Jeffersonville, Ind., assignor to American Creosoting Company, Louisville, Ky. Adzing machine. 1,864,297; June 21.
Cooke, Alexander H., assignor to The Atlantic Coast Fisheries Company, New York, N. Y. Brining apparatus. 1,863,898; June 21.
Cooke, Allen B., assignor to E. E. Fairchild Corporation, Rochester, N. Y. Game board. Des. 87,204; June 21.
Cookson, Clarence F. (See Berg, C., and Cookson.)
Coolidge, Cole, and H. S. Holt, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Noncaking pigmented coating compositions and making same. 1,863,834; June 21.
Cooper, Maxey C., Detroit, Mich. Wall papering machine. 1,864,409; June 21.
Cope, Edge T., R. D. Parkinson, and F. M. Price, Detroit, Mich., assignors to Elliott Fisher Company. Power operating mechanism for typewriters. 1,863,744; June 21.
Copell, Daniel, Atlantic City, N. J. Smoking pipe. 1,864,410; June 21.
Corner, Douglas C., Webster Groves, assignor of one-half to St. Louis Power Shovel Company, St. Louis, Mo., and one-half to L. Eaton, Ishpeming, Mich. Winding device. 1,863,621; June 21.
Corsalli, Friedrich W., Berlin, Germany. Device for the refining, mixing, and purifying of molten metals and metal alloys. 1,863,686; June 21.
Costa, Charles, Lodi, Calif. Air blast fire extinguisher. 1,863,920; June 21.
Cottrell, C. B., & Sons, Company. (See Barber, Howard M., assignor.)
Cottrell, Herbert T., Vancouver, British Columbia, Canada. Self-engaging reverse motion brake. 1,863,556; June 21.
Counter Cooking Machine Corporation. (See Berg, C., and Cookson, assignors.)
Covey, Chester C., Clarks Summit, Pa. Spraying nozzle. 1,863,685; June 21.
Cox, James N., et al. (See Smith, Larry L., assignor.)
Cramer, Albert N., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware annealing leer. 1,863,687; June 21.
Crane, Herbert W., Oak Park, Ill. Motor reversing switch for door openers. 1,863,922; June 21.
Creed & Company Limited. (See Creed, F. G., Storey, and Salmon, assignors.)
Creed, Frederick G., W. H. Storey, and R. D. Salmon, Croydon, England, assignors to Creed & Company Limited. Electromagnetic switch. 1,864,296; June 21.
Creuels, Stefan, Baesweiler-Aachen, Germany. Device for controlling internal-combustion engines. 1,864,173; June 21.
Crompton & Knowles Loom Works. (See Holmes, Elbridge R., assignor.)
Crompton & Knowles Loom Works. (See King, William H., assignor.)
Crompton & Knowles Loom Works. (See Lundgren, William E., assignor.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)
Crompton & Knowles Loom Works. (See Turner, Richard G., assignor.)
Cross, Howard C. (See Gillett, H. W., and Cross.)
Crotty, George D., Chicago, Ill. Marking device 1,864,411; June 21.
Crowell, Walter S., Melrose Park, Pa., assignor to The S. S. White Dental Manufacturing Company. Dental plastic composition. 1,863,591; June 21.
Crown Stove Works. (See Rogers, Walter F., assignor.)
Culmore, Marsh. (See Campbell, Philip S., assignor.)
Cummings, James D. and L. J. Hewitt, Houston, Tex. Hoisting bucket. 1,863,899; June 21.
Cunningham-Jacques Company et al. (See Cunningham, Matthew A., assignor.)
Cunningham, Lewis L., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Regulating system. Re18,503; June 21.
Cunningham, Matthew A., Stoughton, Mass., assignor, by mesne assignments, to Cunningham-Jacques Company, and Russell Supply Company. Ink distributing device for printing presses. 1,864,340; June 21.
Currie, Augusta C., executrix. (See Currie, George O.)
Currie, George O., Skowhegan, Me., deceased, A. C. Currie, executrix. Potato digging machine. 1,864,484; June 21.
Curtis Companies. (See Madsen, Sern, assignor.)
Curtis, Edma H., jr., Cincinnati, assignor, by mesne assignments, to General Glass Corporation, Lancaster, Ohio. Apparatus for feeding molten glass. 1,864,186; June 21.
Curtis, Edma H., jr., Cincinnati, assignor, by mesne assignments, to General Glass Corporation, Lancaster, Ohio. Cam and its mounting for a glass feeder. 1,864,187; June 21.
Curtis Manufacturing Company. (See Steedman, Edwin H., assignor.)
Daimler-Benz Aktiengesellschaft. (See Brenner, Guillermo E., assignor.)
Dampney Company of America, The. (See Stubbs, Charles H., assignor.)
Darrah, Paul H., Los Gatos, Calif. Water wheel. 1,863,784; June 21.
Davie, Alexander, Bridgeport, Conn. Draftsman's vernier protractor. 1,864,341; June 21.

Davis, Clarke F., Westfield, and E. R. Saunders, Cranford, assignors to Structural Gypsum Corporation, Linden, N. J. Slab ceiling construction and means for hanging the slabs. 1,863,565; June 31.
Davis, Dean W., Pendleton, Ind. Ozone generator. 1,864,174; June 21.
Davis, Edward W., Minneapolis, Minn., assignor to Davis Steel Process Corporation. Producing iron or steel directly from the ore and controlling the sulphur content thereof. 1,863,622; June 21.
Davis, Elton A., Padroni, Colo. Pump. 1,864,412; June 21.
Davis Steel Process Corporation. (See Davis, Edward W., assignor.)
Dawes, Robert T., Hudson, Mass. Footwear. 1,863,592; June 21.
Dayton Malleable Iron Company, The. (See Lucker, Millard B., assignor.)
Dearing, Clarence W., Watsonville, Calif. Gravel spreader. 1,863,968; June 21.
Deere & Company. (See Silver, Walter H., assignor.)
Deere & Company. (See Strandlund, Carl G., assignor.)
Delaize, Paul C., New York, assignor to O'Orsay Perfumeries Corporation, New York, N. Y. Bottle. Des. 87,205; June 21.
De Lancey, Warren H., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing system. 1,864,233; June 21.
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delmas, Pierre, Paris, France. Automatic signaling device for motor vehicles. 1,863,688; June 21.
De Mattia, Peter, Passaic, N. J., assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio. Vulcanizing mold. 1,863,604; June 21.
Demay, Gabriel, West New York, N. J. Ring or similar article. Des. 87,206; June 21.
Dennison Manufacturing Company. (See Alden, G. R., and Nelson, assignors.)
Denny, William P., assignor of one-half to L. C. Christian, Houston, Tex. Combined elevator and water seal. 1,863,835; June 21.
Derby, John H., Scarsdale, N. Y., and H. G. Leach, Red Bank, N. J., assignors to American Fire Prevention Bureau, New York, N. Y. Relay. 1,863,836; June 21.
Detroit Gasket & Manufacturing Company. (See Tannewitz, Edward F., assignor.)
Detroit Steel Products Company. (See Kelly, Clyde W., assignor.)
Deutsch, Simon, assignor, by mesne assignments, to The Electric Sprayit Company, South Bend, Ind. Spraying device. 1,864,188; June 21.
Devereaux, William C., Detroit, Mich. Door lock handle anchoring means. 1,864,342; June 21.
De Witt, Jennings K., New York, N. Y. Parachute opening device. 1,864,298; June 21.
Dickens Auto Transmission Hoist Company Inc. (See Dickens, Charles A., assignor.)
Dickens, Charles A., assignor to Dickens Auto Transmission Hoist Company Inc., Hagerstown, Md. Hoist. 1,864,124; June 21.
Dickinson, Fairleigh S., Rutherford, N. J. Syringe. 1,863,785; June 21.
Diehl, Harry L. (See Matthews, Guy L., assignor.)
Diggins, Thomas L., Milton, Oreg., assignor of one-third to Ernest Harris, Seattle, Wash., and two-thirds to R. Gunzel, Freewater, Oreg. Operating means for closures. 1,863,923; June 21.
Ditchfield, Frank, assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Door construction. 1,863,969; June 21.
Doe, Thomas B., New York, N. Y. Fuse for projectiles. 1,863,837; June 21.
Doe, Thomas B., New York, N. Y. Fuse for antiaircraft projectiles. 1,863,838; June 21.
Doering, Charles J., and W. M. Doering, Cincinnati, Ohio. Tire stand. 1,864,234; June 21.
Doering, William M. (See Doering, Charles J., and W. M.)
Dole Refrigerating Machine Company. (See Kleist, Herman W., assignor.)
Dolmage, Nihran M., Washington, D. C. Negative resistance. 1,863,566; June 21.
Donald, Forrest V., Marshalltown, Iowa, assignor to Gilson Manufacturing Company, Port Washington, Wis. Adjustable connecter. 1,863,970; June 21.
Donnellan, Edward P., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y. Stop mechanism for coin counting machines. 1,863,971; June 21.
Dooley, C. E., et al. (See Bierlich, Kenneth G., assignor.)
D'Orsay Perfumeries Corporation. (See Delaize, Paul C., assignor.)
Dovercraft Company. (See Masselin, Francis E., assignor.)
Dow Chemical Company, The. (See Ward, Louis E., assignor.)
Dowd, Bernard J., Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y. Typewriter cabinet. 1,864,125; June 21.
Doyle, Edgar D., assignor to Leeds & Northrup Company, Philadelphia, Pa. Method and apparatus for controlling the load-speed characteristics of moving systems. 1,864,189; June 21.
Draftogen Company. (See Morelock, Albert E., assignor.)
Drew, Frank L., Edgewood Arsenal, Md. Valve. 1,863,652; June 21.
Dring, Thomas A., Poulner, Ringwood, England. Flying machine. 1,864,012; June 21.
Dryden, William W., Louisville, Ky., assignor to W. F. Stimpson, Detroit, Mich. Meat grinder. 1,864,343; June 21.
Dryice Equipment Corporation. (See Small, John D., assignor.)
Duart Manufacturing Co. Ltd. (See Carouso, Victor H., assignor.)
Dudley Lock Corporation. (See Hope, Samuel N., assignor.)
Duff, Verson C., Washington, D. C. Machine for manufacturing hollow concrete bricks. 1,863,839; June 21.
Duluth Refrigerator Corporation. (See Ophuls, F., and Nuss, assignors.)
Dunham, George W., assignor to The Whirldry Corporation, New Haven, Conn. Tank for laundry machines. 1,864,190; June 21.
Dunlop Tire and Rubber Corporation. (See McChesney, Cuyler S., assignor.)
Dunmire, Russell P. (See Rodman, C. J., and Dunmire.)
Dunn, Harry E., assignor to W. E. Dunn Manufacturing Company, Holland, Mich. Spraying device. 1,863,924; June 21.
Dunn, W. E., Manufacturing Company. (See Dunn, Harry E., assignor.)
Dunn, Wendell, Marshalltown, Iowa. Motor vehicle breather pipe attachment. 1,864,417; June 21.
Du Pont, E. I., de Nemours & Company. (See Coolidge, C., and Holt, assignors.)
Du Pont Viscoloid Company. (See Kahn, Julius, assignor.)
Durard & Huguenin S. A. (See Werdenberg, Heinrich, assignor.)
Dye, Glen M., Minneapolis, Minn. Film developing and progressing machine. 1,863,689; June 21.
Dykeman, Reuben G., Dayton, and D. W. Watkins, Fairfield, Ohio, assignors to United Aircraft Products, Inc., Dayton, Ohio. Oil temperature regulator. 1,864,052; June 21.
Eastburg, Clifford L., assignor to The Timken Roller Bearing Company, Canton, Ohio. Truck frame construction. 1,864,508; June 21.
Eastman Kodak Company. (See Stephenson, Paul A., assignor.)
Easy-Drive Garage Corp. (See Le Quornik, H., and Salvati, assignors.)
Eaton, Lucien, et al. (See Corner, Douglas C., assignor.)
Eaton Manufacturing Company. (See Machonis, Peter J., assignor.)
Eaton Manufacturing Company, The. (See Shertzer, Leavitt A., assignor.)
Eberlein, Edwin S., assignor of one-half to W. J. Clapper, Pittsburgh, Pa. Stair for railroad coaches and the like. 1,864,053; June 21.
Eckland Bros. Company. (See Eckland, P. S., and Ryden, assignors.)
Eckland, Peter S., and G. Ryden, assignors to Eckland Bros. Company, Minneapolis, Minn. Dual transmission shifting device. 1,863,972; June 21.
Eclipse Aviation Corporation. (See Nardone, Romeo M., assignor.)
Edison General Electric Appliance Company. (See Patten, Raymond E., assignor.)
Ehlers, George R., Holly Oak, assignor of one-half to H. Hinger, Wilmington, Del. Automobile headlight. 1,864,418; June 21.
Ehrlich, Rose, assignor to Lapin Specialty Mfg. Co., Inc., New York, N. Y. Waver. 1,863,593; June 21.
Eidam, Adam, Hazleton, Pa. Chuck. 1,864,191; June 21.
Eight-Wheel Motor Vehicle Company. (See Fageol, Rollie B., assignor.)
Einstein, Sol, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding. 1,864,486; June 21.
Eisenhut, Otto, Heidelberg, A. Bass, Ludwigshafen-on-the-Rhine, and J. A. Meier, Heidelberg, Germany, assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electric furnace installation. 1,864,485; June 21.
Electric Furnace Company, The. (See Baily, Thaddeus F., assignor.)
Electric Household Utilities Corporation. (See Hume, John T., assignor.)
Electric Sprayit Company, The. (See Deutsch, Simon, assignor.)
Electric Storage Battery Company, The. (See Bridge, Ellis H., assignor.)
Electroacustic Gesellschaft mit beschrankter Haftung. (See Hecht, H., and Rudolph, assignors.)
Elite Manufacturing Company, The. (See Prentice, William G., assignor.)
Elliott Brothers (London) Limited. (See Griffith, A. A., Kerr, and Meredith, assignors.)
Elliott Fisher Company. (See Cope, E. T., Parkinson, and Price, assignors.)
Ellis, William H., jr., Glendale, Ohio. Indented paper. 1,863,973; June 21.
Ellison, Harry C., Lakewood, Ohio, assignor, by mesne assignments, to Republic Steel Corporation. Machine for threading bolts and the like objects. 1,864,235; June 21.
Elmen, Gustaf W., Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Magnetic material. 1,864,054; June 21.

Emigh, Harold E., Walden, Colo. Motor driven sleigh. 1,864,041; June 21.

Engelman, Joseph J., Chicago, Ill., assignor to Continental Can Company, Inc., New York, N. Y. Machine for soldering side seams of can bodies. 1,864,419; June 21.

Enterprise Manufacturing Company, The. (See Pfueger, Charles T., assignor.)

Ernst, Otto, K. Sponsel, and G. Balle, Hochst-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing cellulose derivatives from alkali-cellulose in the form of pulp boards by means of esterifying and etherifying agents in the gaseous state. 1,863,745; June 21.

Eschenbach, Gustavus W., Los Angeles, Calif. Pictorial display apparatus. 1,863,623; June 21.

Estes, James W., Birmingham, Ala. Amusement apparatus. 1,863,653; June 21.

Eurich, Richard H., and B. F. Anthony, assignors to The Youngstown Sheet and Tube Company, Youngstown, Ohio. Continuous centrifugal casting. 1,864,270; June 21.

Evans, Galen, Shelton, Nebr. Well. 1,864,420; June 21.

Evans, William H., Bridgeport, Conn. Flexible ventilating hose. 1,863,624; June 21.

Evich, Jerle, Santa Barbara, Calif. Automobile signal lamp. Des. 87,207; June 21.

Evrard, Alphonse H., Wilmington, Del. Fluid control device for aircraft. 1,864,236; June 21.

Ewing, Dwight T., East Lansing, Mich. Electrolytic deposition of metallic chromium. 1,864,013; June 21.

Ewing, Dwight T., East Lansing, Mich. Chromium plating process. 1,864,014; June 21.

Fageol, Rollie B., Los Angeles, Calif., assignor to Eight-Wheel Motor Vehicle Company. Road vehicle. 1,863,974; June 21.

Fairchild Aerial Camera Corporation. (See Lutz, F. W., and Brieschle, assignors.)

Fairchild, E. E., Corporation. (See Cooke, Allen B., assignor.)

Färber, Eduard, assignor to Holzhydrolyse Aktiengesellschaft, Heidelberg, Germany. Purification of wood sugar. 1,863,654; June 21.

Fauser, Giacomo, Novara, assignor to Montecatini, Societa Generale Per L'Industria Mineraria Ed Agricola, Milan, Italy. Electrolyzer for the production of hydrogen and oxygen. 1,864,344; June 21.

Fauth, Philipp L., Wiesbaden, Germany. Extracting and filtering apparatus. 1,864,237; June 21.

Fawell, Joseph E., assignor to Industrial Methods Company, Pittsburgh, Pa. Rolling mill. 1,864,299; June 21.

Fay, Arthur M. (See Walker, Clarence P., assignor.)

Federal Telegraph Company. (See Kolster, F. A., and Sollie, assignors.)

Feild, Bert D., Forest Gate, London, and T. C. Standbrook, Ilford, assignors to Stanfield Radio Company Limited, London, England. Electric buzzer, interrupter, and like vibratory device. 1,863,975; June 21.

Feldmeier, Harvey, and R. J. Wightman, assignors to Cherry-Burrell Corporation, Little Falls, N. Y. Process and apparatus for heating liquids. 1,863,786; June 21.

Fenstermaker, Lloyd H., Milwaukee, Wis. Metal shelving. 1,863,625; June 21.

Ferrabino, Edoardo, Turin, Italy. Wheel for pneumatic tires. 1,864,421; June 21.

Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Clutch. 1,864,120; June 21.

Ferro-Arc Welding Company Limited. (See Turner, Bertrand, assignor.)

Fessenden, Reginald A., Chestnut Hills, Mass., assignor to Submarine Signal Company, Portland, Me. Loud speaker apparatus and method. 1,863,840; June 21.

Fessenden, Reginald A., Chestnut Hills, Mass., assignor to Submarine Signal Company, Portland, Me. Method and apparatus for coordinating radio and phonograph reproduction. 1,863,841; June 21.

Fillod, Ferdinand, St.-Amour, France. Portable metallic structure. 1,863,746; June 21.

Filtration Equipment Corporation. (See Laughlin, W. C., and Asch, assignors.)

Finkelday, William H., New Rochelle, assignor to Singmaster & Breyer, Inc., New York, N. Y. Roofing material. 1,864,055; June 21.

Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Foxing applying machines. 1,863,747; June 21.

Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Foxing cementing machine. 1,863,900; June 21.

Firestone Tire & Rubber Company, The. (See Shields, Jesse W., assignor.)

Firestone Tire & Rubber Company, The. (See Stevens, Horace D., assignor.)

Fischer, Ferdinand, Berlin, Germany. Lithographic or offset printing plate. 1,863,976; June 21.

Fischer, Franz J., assignor to the Firm Koch & Sterzel Aktiengesellschaft, Dresden, Germany. Disconnecting switch. 1,863,626; June 21.

Fischer, Hans, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany. Rotagravure printing machine. 1,864,102; June 21.

Fischer, Howard L., and C. A. Ward, assignors to Brown & Bigelow, St. Paul, Minn. Fountain pen. 1,863,925; June 21.

Fisher, Frank E., Detroit, Mich. Electrical steering device. 1,863,567; June 21.

Fisher, William E., Compton, Calif. Land leveler. 1,864,042; June 21.

Flanders, Warren B., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Governing mechanism. 1,864,127; June 21.

Flarsheim, Edwin S., assignor to The Leibel-Flarsheim Company, Cincinnati, Ohio. Time switch. 1,864,487; June 21.

Flint, Asher, A. Zimmerman, and J. G. Leo, assignors to Fox Film Corporation, New York, N. Y. Film printing machine. 1,864,238; June 21.

Flook, George, Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Feed for covers or ends for containers. 1,864,422; June 21.

Floorola Corporation, The. (See Newcomer, Ernest J., assignor.)

Flour City Specialty Manufacturing Company. (See Welsh, Richard E., assignor.)

Flynn, John B. (See Schnell, W., and Flynn.)

Foley, John R. (See Hart, Marjorie, assignor.)

Food Machinery Corporation. (See Moe, Andrew O., assignor.)

Forde, Thomas H., and N. M. Mellars, assignors to Formell Corporation, Ltd., San Francisco, Calif. Combination vibrator and mixer unit. 1,863,977; June 21.

Forkardt, Paul, Dusseldorf, Germany. Chuck. 1,864,423; June 21.

Formell Corporation, Ltd. (See Forde, T. H., and Mellars, assignors.)

Forrest, Elbert E., Gary, Ind., assignor to Line Material Company, South Milwaukee, Wis. Anchor device. 1,864,300; June 21.

Fotakis, John, Detroit, Mich. Combination rear view mirror set for automobiles. 1,864,015; June 21.

Foucault, Jacques, Myslowice, Poland. Coupling for pipes with threaded ends. 1,863,978; June 21.

Fox Film Corporation. (See Flint, A., Zimmerman, and Leo, assignors.)

Fox, William J., assignor to J. R. Kendrick Co., Inc., Philadelphia, Pa. Elastic strand. 1,864,345; June 21.

Fraizer, Frank L., assignor of one-half to J. R. Marshall, Troy, Ohio. Tractor hitch. 1,864,128; June 21.

Francis, Oliver T., Quantico, Va. Radio. 1,863,568; June 21.

Frankel, Edward T., New York, N. Y. Calculating device. 1,864,056; June 21.

Franklin, Robert B., Mount Vernon, Wash. Cotter pin. 1,864,424; June 21.

Franklin Simon & Company. (See Long, Dorothy, assignor.)

Frantz, Virgil F., Roanoke, Va., and G. H. Knauff, West St. Paul, Minn., assignors to Graham-White Sander Corporation, Roanoke, Va. Locomotive sanding trap. 1,864,057; June 21.

Franzen, Hans, and M. Luther, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Recovery of organic acids. 1,864,058; June 21.

Fraser, Howard S., New York, N. Y., assignor to The Swartwout Company, Cleveland, Ohio. Feed water regulator. 1,864,239; June 21.

Frederickson, Otto A., Wethersfield, Conn., assignor to The Wiremold Company, Hartford, Conn. Electrical cable. 1,864,346; June 21.

Frenkel, Samuel M., assignor to Superset Brush Co., Inc., New York, N. Y. Self-sealing one-piece drip collector. 1,864,059; June 21.

Frick Company. (See Zumbro, Frank R., assignor.)

Fried. Krupp Aktiengesellschaft. (See Lehmann, K. A., and Varren, assignors.)

Fried. Krupp Aktiengesellschaft. (See Schraven, Alexander, assignor.)

Friedrich, Hermann. (See Lommel, W., Goost, and Friedrich.)

Frigidaire Corporation. (See King, Jesse G., assignor.)

Fritschi, Hans, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Machine tool structure. 1,864,129; June 21.

Fritzsche, Henry A. (See Inman, W. H., and Fritzsche.)

Fritzsche, Hermann, West Didsbury, assignor to the Firm, The Clayton Aniline Company Limited, Clayton, Great Britain. Condensation products of aliphatic aldehyde bisulphite compounds with primary aromatic amines and making same. 1,864,425; June 21.

Frost, Myron O., Richmond Heights, assignor to Johnson, Stephens and Shinkle Shoe Company, St. Louis, Mo. System of manufacturing shoes. 1,863,557; June 21.

Fuerst Edwin W. assignor to Owens-Illinois Glass Company, Toledo, Ohio. Jar. Des. 87,208; June 21.

Fullman, James M. G., Sewickley, and L. J. Rittelmann, Baden, Pa., assignors to National Electric Products Corporation. Manufacture of electrical conductors. 1,863,979; June 21.

Gaisman, Henry J., New York, and C. Schumacher, Lynbrook, N. Y., assignors, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Blade making machine. 1,864,488; June 21.

Garber, Harry D., Cuyahoga Falls, and W. W. Meier, assignors to The Van Dorn Iron Works Company, Cleveland, Ohio. Jail door control device. 1,864,347; June 21.

Gardner, Clyde (deceased), by E. B. Gardner, administratrix, assignor, by mesne assignments, to Gardner Company, Ebensburg, Pa. Calculating machine. 1,864,193; June 21.

Gardner Company. (See Gardner, Clyde, assignor.)

Gardner, Edna B., administratrix. (See Gardner, Clyde.)

Gardner, Henry A., Washington, D. C. Delustered regenerated cellulose. 1,864,426; June 21.

Gardner, Henry A., Washington, D. C. Regenerated cellulose films and sheets. 1,864,427; June 21.

Gardner, Henry A., Washington, D. C. Manufacture of cellulosic materials. 1,864,428; June 21.

Garlinger, Marshall T. (See Pitts, F. B., Garlinger and Smith.)

Geiger, Ernst, Irvington, N. J. Mechanical parking garage. 1,863,748; June 21.

Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Meat rack. 1,863,714; June 21.

Geller, Frederick C. (See Weinrich, W. H., and Geller.)

Geist, William J., Maplewood, Mo. Spout. 1,863,787; June 21.

General Aniline Works, Inc. (See Hentrich, W., and Hilger, assignors.)

General Aniline Works, Inc. (See Kunz, M. A., Koeberle, and Berthold, assignors.)

General Aniline Works, Inc. (See Nawiasky, Paul, assignor.)

General Aniline Works, Inc. (See Wahl, Ottmar, assignor.)

General Electric Company. (See Brückel, Waldemar, assignor.)

General Electric Company. (See Carpenter, Glenn W., assignor.)

General Electric Company. (See Cohn-Byk, W., and von Pap, assignors.)

General Electric Company. (See Given, Ralph D., assignor.)

General Electric Company. (See Hilgers, Nino, assignor.)

General Electric Company. (See Ipsen, C. L., and Otis, assignors.)

General Electric Company. (See McCreary, Harold J., assignor.)

General Electric Company. (See Mittag, Albert H., assignor.)

General Electric Company. (See Whitesmith, Isaac N., assignor.)

General Glass Corporation. (See Curtis, Edma H., jr., assignor.)

General Motors Corporation. (See Blackmore, Lloyd, assignor.)

General Motors Corporation. (See Chapman, William H., assignor.)

General Motors Corporation. (See Milner, Wilfred R., assignor.)

General Motors Corporation. (See Seaholm, Ernest W., assignor.)

General Steel Castings Corporation. (See Kell, Clement W., assignor.)

General Steel Castings Corporation. (See Sheehan, William M., assignor.)

Gennrich, Paul, Maple Shade, N. J. Wick cleaner. 1,864,489; June 21.

Gerencser, Stephen. (See Young, A., and Gerencser.)

Gesellschaft für Drahtlose Telegraphie m. b. H. (See Kummerer, Wilhelm, assignor.)

Geuting, Anthony H., Merion, Pa. Sweater or analogous article. Des. 87,209; June 21.

Gherassimoff, Nicolas, Bois, Colombes, assignor to Societe d'Avertisseur Ferrovoie, Paris, France. Automatic signaling device operated by the oscillations of the rails. 1,864,016; June 21.

Gibbons, Willis A., Montclair, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treating rubber latex and product. 1,864,060; June 21.

Gibian, Eric H., Chicago, Ill., assignor to The Vitrolite Company. Securing device for panels or the like. 1,864,130; June 21.

Gibson Refrigerator Company. (See Smith, Russell T., assignor.)

Gilbert, A. C., Company, The. (See Arnold, Arthur A., assignor.)

Gilbert & Barker Manufacturing Company. (See De Lancey, Warren H., assignor.)

Gilchrist, Benjamin W. (See McCullough, J. F. K., and Gilchrist.)

Gillett, Horace W., and H. C. Cross, Columbus, Ohio. Bearing alloys. 1,864,240; June 21.

Gillette Safety Razor Company. (See Gaisman, H. J., and Schumacher, assignors.)

Gilson Manufacturing Company. (See Donald, Forrest V., assignor.)

Given, Ralph D., Leamington, England, assignor to General Electric Company. Apparatus for transmitting rotary motion. 1,864,348; June 21.

Gleaner Combine Harvester Corporation. (See Hanson, Perren J., assignor.)

Glende, Earl H., assignor, by mesne assignments, to H. J. Stephens, Chicago, Ill. Display easel. 1,863,594; June 21.

Globe-Wernicke Company, The. (See Smiley, Samuel, jr., assignor.)

Goldberg, Joseph H., assignor to Chicago Cinema Equipment Company, Chicago, Ill. Apparatus for rewinding films. 1,863,980; June 21.

Golo Slipper Company. (See Meyer, Minnie, assignor.)

Gooderham, John W., Larchmont, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone ringing system. 1,864,061; June 21.

Goodin, Bruce B., Farmer City, Ill. Movable traffic signal. 1,864,062; June 21.

Goodman, Lazure L., Indianapolis, Ind. Hosiery. 1,864,017; June 21.

Goost, Theodor. (See Lommel, W., Goost, and Friedrich.)

Gormley, John B., Boston, Mass. Punch. 1,863,901; June 21.

Goroshko, Will, Maspeth, and G. Laput, Brooklyn, N. Y. Lock. 1,864,429; June 21.

Goudie, Peter L., Johnson County, Kans. Awning sheet. Des. 87,210; June 21.

Govers, Francis X., assignor to Indian Refining Company, Lawrenceville, Ill. Evaporating liquids. 1,864,349; June 21.

Graham, Herman E., Marion, Ind., assignor to Chicago Railway Equipment Company, Chicago, Ill. Annealing pot. 1,863,749; June 21.

Graham-Paige Motors Corporation. (See Sanger, Harry G., assignor.)

Graham-White Sander Corporation. (See Frantz, V. L., and Knauff, assignors.)

Graham, William S., Canton, Ill., assignor to International Harvester Company. Wide type rotary harrow. 1,864,301; June 21.

Grant, John. (See Santiago, James J., assignor.)

Grasselli Chemical Company, The. (See Schulze, John F. W., assignor.)

Grasselli Chemical Company, The. (See Seguine, William, jr., assignor.)

Grasselli Chemical Company, The. (See Seguine, W., jr., and Mertes, assignors.)

Grasselli Chemical Company, The. (See Weinberg, Walter H., assignor.)

Grasselli Chemical Company, The. (See Wood, Charles D., sr., assignor.)

Graton & Knight Company. (See Griffith, Winfred S., assignor.)

Gray, Presley, Birmingham, Ala., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa. Circuit control system. 1,863,627; June 21.

Gray, Tom F. (See Bolton, E. A., and Gray.)

Greider, Harold W., Plymouth Meeting, Pa., assignor to The Philip Carey Manufacturing Company. Magnesia process and magnesium values recovery. 1,864,063; June 21.

Griffith, Allan A., Kensington, London, P. S. Kerr and F. W. Meredith, South Farnborough, assignors to Elliott Brothers (London) Limited, London, England. Flowmeter. 1,864,430; June 21.

Griffith, Ronald G., Croydon, England, assignor to International Communications Laboratories, Incorporated, New York, N. Y. Telegraph printing and like apparatus. 1,864,302; June 21.

Griffith, Winfred S., assignor to Graton & Knight Company, Worcester, Mass. Machine for cementing belting. 1,863,595; June 21.

Griffith, Winfred S., assignor to Graton & Knight Company, Worcester, Mass. Making double belts. 1,863,596; June 21.

Grigsby-Grunow Company. (See Maurer, Russell L., assignor.)

Grigsby, Owen E., Park Ridge, assignor, by mesne assignments, to Porcelain Tile Corporation, Chicago, Ill. Tiled wall or the like. 1,863,842; June 21.

Grigsby, Russell C., Stockton, Calif. Wave motor driving mechanism. 1,864,499; June 21.

Gronbeck, Hans C., Chicago, Ill. Internal combustion engine. 1,864,241; June 21.

Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Preparing metal for use in unidirectional current carrying devices. 1,863,843; June 21.

Grout, Martin B., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Winding machine. 1,864,194; June 21.

Grover, William A., Bristol, Vt. Trap for catching wild bees. 1,864,431; June 21.

Groves, James S., San Diego, Calif. Concrete building construction. 1,863,981; June 21.

Gruber, Clarence E., assignor to The Macomber Steel Company, Canton, Ohio. Form for making fireproof floor constructions. 1,864,043; June 21.

Gruschka, Theodor. (See Kohn, K., and Gruschka.)

Gumaer, Pierre L., Long Beach, Calif., assignor to The Texas Company, New York, N. Y. Drum brake. 1,864,509; June 21.

Gunnarson, Enoch C., Brooklyn, N. Y. Smoking pipe. 1,864,432; June 21.

Gunzel, R., et al. (See Diggins, Thomas L., assignor.)

Gutteridge, Joseph. (See Muhlfeld, J. E., and Gutteridge.)

Guy, Ira D. (See Guy, William H., I. D., and R. E.)

Guy, Robert E. (See Guy, William H., I. D., and R. E.)

Guy, William H., I. D., and R. E., Stockton, Calif. Auxiliary loading wing for scrapers. 1,863,844; June 21.

Guyot, Marius, Cleveland, Ohio, assignor to Aluminum Company of America, Pittsburgh, Pa. Permanent mold. 1,864,242; June 21.

Hadaway, John B., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shank stiffener. 1,863,690; June 21.

Hageman, Aaron M., Bloomfield, and A. F. Lindstrom, Nutley, N. J., assignors to Westinghouse Lamp Company. Inside coated lamp bulb. 1,864,271; June 21.
Hague, Morton, Chicago, Ill. Shrine. Des. 87,211; June 21.
Hale, William J., Midland, Mich. Preparation of organic acid anhydrides. 1,863,788; June 21.
Hall, Charles G., assignor to Automatic Food Machinery Corporation, Boise, Idaho. Dishwashing machine. 1,864,064; June 21.
Hall, George W., Wilkinsburg, Pa. Lubricator. 1,864,195; June 21.
Hall, Samuel H., Toms River, N. J., assignor of one-half to J. A. Ryerson, jr., Brooklyn, N. Y. Radio program exhibitor. 1,863,789; June 21.
Haildon, Frederick G., Jamaica, assignor to Postal Telegraph-Cable Company, New York, N. Y. Radio printing telegraph system. 1,864,303; June 21.
Halleck Frank A., Chicago, Ill., assignor to Sullivan Machinery Company. Compressor system. 1,864,132; June 21.
Halvorsen, Halbert B., Michigan City, Ind., assignor to Sullivan Machinery Company. Fluid compressor. 1,863,845; June 21.
Halvorsen, Halbert B., Michigan City, Ind., assignor to Sullivan Machinery Company. Compressor unloading mechanism. 1,864,131; June 21.
Halvorsen, Oscar, assignor to Sterling Die Casting Co., Inc., Brooklyn, N. Y. Bottle opener. Des. 87,212; June 21.
Hamant, Edward W. (See Von Webern, G., and Hamant.)
Hameetman, Jacob P., assignor to Commercial Furniture Company, Chicago, Ill. Desk. 1,864,243; June 21.
Hamilton, Baxter P., River Edge, N. J., assignor to American Telephone and Telegraph Company. Reducing lightning interference in carrier telegraph systems. 1,863,655; June 21.
Hamilton-Wade Company. (See Lyon, Harry, assignor.)
Hammer, Thorvald F., Branford, Conn. Soap powder dispenser. 1,864,133; June 21.
Hanchett Manufacturing Co. (See Morey, Carl, assignor.)
Handelan, Daniel, Minneapolis, Minn. Device for displaying and keeping harvested vegetation fresh. 1,863,597; June 21.
Hanley Company. (See Hanley, W. L., jr., Hendryx, and Holbrook, assignors.)
Hanley, William L., jr., and D. B. Hendryx, Bradford, Pa., and G. W. Holbrook, Hartford, Conn., assignors to Hanley Company, Bradford, Pa. Plant for the manufacture of ceramic products. 1,863,628; June 21.
Hanlon, Michael J., Weehawken, N. J., assignor to Black Diamond Steamship Corporation, New York, N. Y. Remodeling the stern structure of ships. 1,864,433; June 21.
Hannum, Byron F., assignor to Hunt & Dorman Manufacturing Company, Cleveland, Ohio. Fireproof filing container. 1,864,350; June 21.
Hanson, C. H. Company, The. (See Hanson, Henry S., assignor.)
Hanson, Henry S., assignor to The C. H. Hanson Company, Chicago, Ill. Clip. 1,863,902; June 21.
Hanson, Perren J., assignor to Gleaner Combine Harvester Corporation, Independence, Mo. Combine harvester. 1,863,691; June 21.
Harris, Ernest. (See Diggins, Thomas L., assignor.)
Harris, Henry H., assignor to Noble & Harris, Detroit, Mich. Landing gear. 1,864,134; June 21.
Harrison, Arthur B. B., et al., executors and trustees. (See Harrison, Herbert C.)
Harrison, Florence M., et al., executors and trustees. (See Harrison, Herbert C.)
Harrison, Herbert C., deceased, Lockport, N. Y., F. M. Harrison, A. B. B. Harrison, and W. W. Campbell, executors and trustees. Electrolytic apparatus. 1,864,490; June 21.
Hart, Marjorie, Vancouver, assignor of one-half to J. R. Foley, Kelso, Wash. Hospital pad and ring. 1,864,434; June 21.
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford-Empire Company. (See Reeves, W. A., and Tucker, assignors.)
Hartford-Empire Company. (See Tucker, O. M., and Reeves, assignors.)
Hartford-Empire Company. (See Waugh, Thomas, jr., assignor.)
Hartman, Harry B., Buffalo, N. Y. Air dehydrator. 1,863,656; June 21.
Harvey, Leo M., Los Angeles, Calif. Windshield for closed motor cars. 1,863,629; June 21.
Hatch, Charles T., assignor to Union Steel Products Company, Albion, Mich. Poultry coop or crate. 1,863,982; June 21.
Hazel-Atlas Glass Co. (See Peregoy, Frederick N., assignor.)
Hazell, Eardley, New York, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Manufacturing rubber articles. 1,864,044; June 21.
Hebeler, Edward S., Williamsville, assignor to Allan Manufacturing and Welding Company Inc., Buffalo, N. Y. Electric heating apparatus. 1,864,435; June 21.
Hecht, Heinrich, and W. Rudolph, assignors to Electro-acustic Gesellschaft mit beschrankter Haftung, Kiel, Germany. Apparatus for the reception and transmission of wave energy in space. 1,863,716; June 21.
Heemsoth, Henry. (See Wells, Nathaniel C., assignor.)
Heise, George W., Lakewood, Ohio, assignor to National Carbon Co., Inc. Electric cell. 1,863,791; June 21.
Heltzer, Frank H., Flint, Mich. Carburetor. 1,863,715; June 21.
Heltzel, John N., Warren, Ohio. Joint member and reenforcing rod support. 1,863,846; June 21.
Hemphill Company. (See Lawson, R. H., and Smith, assignors.)
Hendee, Lem E., assignor to Line Material Company, South Milwaukee, Wis. Insulated joint structure. 1,864,351; June 21.
Henderson, Myles, et al. (See Pitcher, Elmer, assignor.)
Henderson, William F., assignor to The Visking Corporation, Chicago, Ill. Dehydrated cellulose bung, tube, etc. 1,864,244; June 21.
Henderson, William F., assignor to The Visking Corporation, Chicago, Ill. Imitation sausages for display. 1,864,245; June 21.
Hendrickson, Ira E., Tulsa, Okla., assignor to Wico Electric Company, Springfield, Mass. Impulse coupling. 1,864,246; June 21.
Hendrickson, Victor, assignor to The Orford Soap Company, Inc., Manchester, Conn. Machine for forming composite can bodies. 1,863,770; June 21.
Hendryx, Dwight B. (See Hanley, W. L., jr., Hendryx, and Holbrook.)
Hentrich, Winfred, Wiesdorf-on-the-Rhine, and J. Hilger, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Poly-azo dyestuffs. 1,863,792; June 21.
Hermani, Henry, assignor to The Tin Decorating Company of Baltimore, Baltimore, Md. Cake safe. 1,863,790; June 21.
Hermani, Henry, assignor to The Tin Decorating Company of Baltimore, Baltimore, Md. Provision safe. 1,863,793; June 21.
Herrmann, Willy O., and E. Baum, assignor to Consortium fur Elektrochemische Industrie, Munich, Germany. Preparation of acetylene and ethylene. 1,864,196; June 21.
Hess, Peter P., Drewrys Bluff, Va. Chicken feeder. 1,863,983; June 21.
Hess, Raymond W. (See Moses, F. G., Hess, and Perkins.)
Hewitt, Lee J. (See Cummings, J. D., and Hewitt.)
Hicks, Earl M., Lebanon, Ind. Stop signal. 1,864,018; June 21.
Hilger, Joseph. (See Hentrich, W., and Hilger.)
Hilgers, Nino, Berlin-Westend, Germany, assignor to General Electric Company. Avoiding damage through moisture in the low pressure part of steam turbines. 1,864,352; June 21.
Hill, Frederick, Urmston, England. Apparatus for use in scalding animal offals. 1,864,135; June 21.
Himle, T. E. (See Avilla, Philip, assignor.)
Hinger, Henry. (See Ehlers, George R., assignor.)
Hobart Manufacturing Company, The. (See Meeker, David A., assignor.)
Hoe, Robert, Hyde Park, N. Y. Power unit. 1,864,304; June 21.
Hoeleng, A. S. (See Hoelfeldt-Lund, Cristopher H., assignor.)
Hoelfeldt-Lund, Cristopher H., Steinkjer, assignor to A/S Hoeleng, Trondhjem, Norway. Working and loading platform for gallery work in tunnels. 1,863,984; June 21.
Hoffman, John R., assignor to Madison-Kipp Corporation, Madison, Wis. Portable tool. 1,864,019; June 21.
Hoffman, Roscoe C., Detroit, Mich. Spring suspension. 1,864,247; June 21.
Hoffmann, Wolfgang, New York, N. Y., assignor to Luminator Inc., Chicago, Ill. Lamp. Des. 87,213; June 21.
Hogan, Edward L. (See Morse, C. T., and Hogan.)
Holbrook, George W. (See Hanley, W. L., jr., Hendryx, and Holbrook.)
Holden, John W. W., Providence, R. I. Threading device. 1,863,717; June 21.
Holder, Lawrence, Los Angeles, Calif. Binocular photographic device. 1,863,558; June 21.
Hollander, Aladar, Pasadena, assignor to Byron Jackson Co., San Francisco, Calif. Turbine pump. 1,863,849; June 21.
Holloway, Joseph C., New Orleans, La., assignor to American Can Company, New York, N. Y. Welding keys to can ends. 1,863,850; June 21.
Holmes, Edgar R., assignor of one-half to H. M. Little, Denver, Colo. Automatic transmission. 1,863,985; June 21.
Holmes, Elbridge R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Dobby finger for looms. 1,863,847; June 21.
Holmes, Frederick J., Detroit, Mich. Engine. 1,864,248; June 21.
Holmes, John S., Chicago, Ill., assignor to International Harvester Company. Valve facing machine. 1,864,305; June 21.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,863,848; June 21.
Holt, Harold S. (See Coolidge, C., and Holt.)

Holtzman, John, New York, N. Y. Razor blade sharpener. 1,864,065; June 21.
Holzhydrolyse Aktiengesellschaft. (See Farber, Eduard, assignor.)
Holzman, Paul A. (See Miller, Henry R., assignor.)
Hoover Company, The. (See Boyer, Harold H., assignor.)
Hope, Samuel N., Wauwatosa, Wis., assignor to Dudley Lock Corporation, Chicago, Ill. Locker latch. 1,864,306; June 21.
Hopkins, Benjamin F., and J. V. O. Palm, Cleveland Heights, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Bearing. 1,863,809; June 21.
Hopp, Phillip, New York, N. Y. Price ticket holder. 1,864,491; June 21.
Horlacher, Carl P. (See Baumann, A., and Horlacher.)
Horn, Guido, Weissensee, near Berlin, Germany. Round braiding machine. 1,864,249; June 21.
Hotchkiss, Henry T., jr., assignor. (See Bacon, R. F., and Hotchkiss, jr.)
Hough, Frank G. (See North, R. B., Hough, and Miller.)
House, Frank R., Baldwin Harbor, assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Landing field light. 1,864,436; June 21.
House, Horace, Oroville, Calif. Illuminated chart reading device. 1,863,569; June 21.
Houghton, E. F., & Company. (See Bohne, William A., assignor.)
Howard, Bloomfield H., Washington, D. C. Feeder for ingot molds. 1,863,559; June 21.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Photographic printing machine. 1,863,657; June 21.
Howenstein, George H., Detroit, Mich. Window construction. 1,864,066; June 21.
Howland, Louis H., Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of rubber. 1,864,067; June 21.
Hubbell, Harvey, jr., Bridgeport, Conn. Attachment plug cap. 1,864,353; June 21.
Hudson Motor Car Company. (See Keenan, W. J., and Sather, assignors.)
Hughes, William E., Chicago, Ill., assignor to Sullivan Machinery Company. Automatic compressor control system. 1,863,851; June 21.
Hume, John T., Chicago, assignor to Electric Household Utilities Corporation, Cicero, Ill. Washing and ironing machine. 1,863,852; June 21.
Hunt & Dorman Manufacturing Company. (See Hannum, Byron F., assignor.)
Huntley, Alton K., Cleveland, Ohio, assignor to National Carbon Company, Inc. Dry cell battery. 1,863,794; June 21.
Hupp Motor Car Corporation. (See Punke, John J., assignor.)
Hutchinson, Robert P., Bethlehem, Pa. Metal building construction. 1,863,692; June 21.
I. G. Farbenindustrie Aktiengesellschaft. (See Assmann, Peter, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Ernst, Otto, Sponsel, and Balle, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Franzen, H., and Luther, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Krekeler, Heinz, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lommel, W., Goost, and Friedrich, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Heuck, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pier, M., and Muller-Cunradi, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pier, M., and Wissel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Rosenthal, Leo, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Steimmig, Gerhard, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Wilke, Ernst, assignor.)
I-T-E Circuit Breaker Company. (See Gray, Presley, assignor.)
Indian Refining Company. (See Govers, Francis X., assignor.)
Industrial Methods Company. (See Fawell, Joseph E., assignor.)
Industrial Patents Corporation. (See Burns, Joseph, assignor.)
Industrial Patents Corporation. (See Vanderkloot, Marinus, assignor.)
Ingersoll, Homer H., assignor to Williamson Manufacturing Company, Chicago, Ill. Motor. 1,863,795; June 21.
Ingham, Mark, Lowell, Mass. Double ring cap frame. 1,864,020; June 21.
Inman, William H., Keokuk, and H. A. Fritzsche, Burlington, Iowa. Protective booth for banks. 1,864,437; June 21.
Intermetal Corporation. (See Jenness, Leslie G. assignor.)
International Communications Laboratories. (See Griffith, Ronald G., assignor.)
International Glove Process Company. (See Johanson, Carl H., assignor.)
International Harvester Company. (See Anglemyer, H. B., and Chaney, assignors.)
International Harvester Company. (See Benjamin, Bert R., assignor.)
International Harvester Company. (See Cady, S. W., and Kriegbaum, assignors.)
International Harvester Company. (See Graham, William S., assignor.)
International Harvester Company. (See Holmes, John S., assignor.)
International Harvester Company. (See Kriegbaum, G. M., and Morris, assignors.)
International Harvester Company. (See Merwin, George M., assignor.)
International Harvester Company. (See Morrill, Lewis H., assignor.)
International Harvester Company. (See Scarlett, Arthur A., assignor.)
International Harvester Company. (See Sperry, Leonard B., assignor.)
International Harvester Company. (See Walker, Earl C., assignor.)
Intertype Corporation. (See Willis, Le Roy W., assignor.)
Ipsen, Carl L., and A. N. Otis, Schenectady, N. Y., assignor to General Electric Company. Furnace. 1,864,354; June 21.
Jack, Douglas G., Auckland, New Zealand. Apparatus for evaporating and distilling liquids. 1,864,021; June 21.
Jackson, Byron, Co. (See Hollander, Aladar, assignor.)
Jackson, Clayton R. (See Ball, H. C., Jackson, Keller and Winder.)
Jackson, Herbert D., and F. White, Walsall, Staffordshire, England. Closure for bottles, jars, and other containers. 1,863,796; June 21.
Jackson, Lora B., Green Bay, Wis. Can perforating and pouring attachment. 1,863,853; June 21.
Jacobsohn, Emanuel H., assignor to W. A. Taylor & Co., New York, N. Y. Bottle or similar container. Des. 87,214; June 21.
James, Mildred L., Brooklyn, N. Y. Dress. Des 87,215; June 21.
James, Robert B, assignor of one-half to Cleveland-Browning Company, Atlanta, Ga. Switch mechanism for signal and other electrical circuits. 1,863,658; June 21.
Janson, Frederick L., Port Chester, N. Y. Aeroplane. 1,864,438; June 21.
Jarmann, Alfred, Ballston Spa, N. Y. Variable transmission. 1,863,598; June 21.
Jayne, David W., jr. (See Christmann, L. J., and Jayne.)
Jeffery, Benjamin A., assignor to Champion Porcelain Company, Detroit, Mich. Method of and apparatus for shaping articles. 1,863,854; June 21.
Jenkins, Earl G., Pittsburgh, Pa. Hermetically sealed casket. 1,863,855; June 21.
Jenness, Leslie G., Brooklyn, assignor to Intermetal Corporation, New York, N. Y. Recovery of metals from their ores. 1,863,599; June 21.
Jennings, Oliver S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,863,999; June 21.
Jensen, James A., Philadelphia, Pa. Grave vault. Des. 87,216; June 21.
Jewell, Mildred, Miami, Fla. Educational device. 1,864,022; June 21.
Johanson, Carl H., Los Angeles, Calif., assignor to International Glove Process Company, Ltd. Glove and method of making. 1,864,439; June 21.
Johenning, Franz, assignor to Naamlooze Vennootschap; Hollandsche Industrie en Handelmaatschappij, The Hague, Netherlands. Machine adjusting the timing of a fuse for a projectile. 1,863,659; June 21.
Johns, Roy W., assignor to Swift and Company, Chicago, Ill. Branding edible animal carcasses. 1,863,903; June 21.
Johnson Bronze Company. (See Sandler, Louis, assignor.)
Johnson, Clarence G., Hartford City, Ind. Window sealing construction. 1,864,355; June 21.
Johnson, Ernest H., assignor to The Bullard Company, Bridgeport, Conn. Chip remover and water and dust seal for machine tools. 1,864,307; June 21.
Johnson, Lloyd E., assignor to Aluminum Goods Manufacturing Co., Manitowoc, Wis. Kite. 1,864,197; June 21.
Johnson, Stephens and Shinkle Shoe Company. (See Frost, Myron O., assignor.)
Johnson, Sylvester A., North Providence, assignor to A. E. R. Speidel, Edgewood, R. I. Clasp. 1,864,356; June 21.
Johnson, Thomas W., Mountain View, Calif. Apparatus for treating fruit trees. 1,864,198; June 21.
Jones, Charles L., Pittsburgh, Pa. Manufacture of carbon dioxide. 1,864,068; June 21.
Jones, Frederick G., Clifton Bristol, England. Tellurian. 1,863,600; June 21.
Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Method and apparatus for separating immiscible substance. 1,864,511; June 21.
Jones, Yess, New York, N. Y. Container. 1,864,069; June 21.
Joos, Bernard. (See Tisza, E. T., and Joos.)
Josinsky, John, Bayside, N. Y. Match box. 1,864,440; June 21.
Jourdan, Félix, Rome, Italy. Treatment of Leucitic rocks with nitrous vapors in a continuous cycle. 1,863,986; June 21.

Kable, Ernest A., Chicago, Ill. Box for confectionery and other merchandise. Des. 87,217; June 21.
Kahn, Julius, Jersey City, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del. Barrette. 1,864,199; June 21.
Kaiser, Emil, Brooklyn, N. Y. Combination electrical switch. 1,864,070; June 21.
Karrier Motors Limited. (See Moncrieff, A. H. D., and Shearman, assignors.)
Kasdan, Nathan, R. F. Landwehr, New York, and D. Pollack, Brooklyn, assignors to Majestic Metal Specialties, Inc., New York, N. Y. Powder dispenser. 1,863,856; June 21.
Kaufman, Henry L., Newton, Mass. Pail protector. 1,864,200; June 21.
Kaufmann, Frederick C. (See Lindmark, E. S., and Kaufmann.)
Kazenmaier, August, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Automatic ignition control for internal combustion engines. 1,863,857; June 21.
Keen, John S., Philadelphia, and E. M. Shannon, Bala, Pa. Trailer truck. 1,864,441; June 21.
Keenan, William J., and G. Sather, assignor to Hudson Motor Car Company, Detroit, Mich. Safety mechanism for cranes. 1,863,630; June 21.
Kegerreis, Claude S., and J. B. Lindecker, assignors to The Tillotson Manufacturing Company, Toledo, Ohio. Air cleaner. 1,864,201; June 21.
Keith, William G., and J. A. Manarik, Chicago, Ill., assignors to Welsbach Traffic Signal Company, Philadelphia, Pa. Bulkhead signal. Des. 87,218; June 21.
Keith, William G., and J. A. Manarik, Chicago, Ill., assignors to Welsbach Traffic Signal Company, Philadelphia, Pa. Traffic light device. Des. 87,219; June 21.
Keith, William G., and J. A. Manarik, Chicago, Ill., assignors to Welsbach Traffic Signal Company, Philadelphia, Pa. Loading zone signal platform. Des. 87,220; June 21.
Kell, Clement W., Ridley Park, Pa., assignor to General Steel Castings Corporation, Granite City, Ill. Locomotive structure. 1,864,202; June 21.
Keller, Walter B. (See Ball, H. C., Jackson, Keller, and Winder.)
Kellogg, Bert F., and F. M. Kent, Spokane, Wash. Variable speed propeller. 1,864,045; June 21.
Kellogg Switchboard and Supply Company. (See Grout, Martin B., assignor.)
Kellogg Switchboard and Supply Company. (See Zettek, Frank, assignor.)
Kelly, Clyde W., assignor to Detroit Steel Products Company, Detroit, Mich. Thermostatic releasing means for self-closing ventilators. 1,864,357; June 21.
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kendrick, James R., Co. (See Fox, William J., assignor.)
Kent, Forrest M. (See Kellogg, B. F., and Kent.)
Kent, William J., Brooklyn, N. Y., assignor to The Mechanical Rubber Company. Grinding machine. 1,864,071; June 21.
Kerr, Paul S., et al. (See Griffith, A. A., Kerr, and Meredith.)
Kerwin, William J., jr., Pawtucket, R. I. Latch locking device. 1,864,358; June 21.
Khun, Albert M., Elizabeth, N. J. Flood-tide and backwater valve. 1,864,443; June 21.
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating system. 1,863,750; June 21.
King, William H., Clinton, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Bobbin release for weft replenishing looms. 1,863,904; June 21.
Kinsey, Bevey A., Dalton, Ga. Indicator for photographic devices. 1,864,442; June 21.
Kipper, Herman B., New York, N. Y. Recovering sodium, potassium and magnesium chlorides from natural brines. 1,863,751; June 21.
Kislyn Corporation. (See Berthon, Rudolphe, assignor.)
Klein, Fred, Hollywood, Calif. Vehicle running board mat. 1,863,660; June 21.
Klein, Hans. (See Luther, M., and Klein.)
Kleine, William O., Cincinnati, Ohio. Perpetual calendar. 1,863,926; June 21.
Kleinfeld, Moses H., New York, N. Y. Coin-operated spark-plug cleaner. 1,864,072; June 21.
Kleist, Herman W., assignor to Dole Refrigerating Machine Company, Chicago, Ill. Refrigerating apparatus. 1,863,718; June 21.
Klemm, Hans, Dresden, assignor to the Firm: Koch & Sterzel Aktiengesellschaft, Dresden, Saxony, Germany. Insulator for electric systems. 1,863,631; June 21.
Klie, Frank H., Chicago, Ill. Frame for pictures, mottoes, and the like. Des. 87,221; June 21.
Kling Bros. Engineering Works. (See Schmidt, John E., assignor.)
Knauff, George H. (See Frantz, V. L., and Knauff.)
Knight, B. B. & R., Corporation. (See Picard, Stanislas, assignor.)
Knott, John E. (See Aron, William P., assignor.)
Knox, Harry A., Davenport, Iowa. Track for tracklaying vehicles. 1,863,858; June 21.
Knox, John A., New York, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine. 1,864,136; June 21.
Koch & Sterzel Aktiengesellschaft. (See Fischer, Franz J., assignor.)
Koch & Sterzel Aktiengesellschaft. (See Klemm, Hans, assignor.)
Koeberle, Karl. (See Kunz, M. A., Koeberle, and Berthold.)
Koehring Company. (See Lichtenberg, Erich H., assignor.)
Kohn, Kamill, Bokau, and T. Gruschka, Aussig, Czechoslovakia. Production of bactericide surfaces. 1,864,073; June 21.
Koller, Robert, Baden, Switzerland. Self-acting display system. 1,863,797; June 21.
Kolster, Frederick A., and S. A. Sollie, Palo Alto, assignors to Federal Telegraph Company, San Francisco, Calif. Loud-speaker. 1,864,308; June 21.
Könemann, Heinrich, Munster, Germany. Apparatus for recording electric alternating current by means of a voltaic arc. 1,863,560; June 21.
Konno, Kane Y., Chicago, Ill. Calculating device. 1,863,927; June 21.
Koss, Anton J. (See Krasnodmsky, John, assignor.)
Kraeft, Herman L., assignor to Murray-Ohio Mfg. Company, Cleveland, Ohio. Cycle construction and packing. 1,863,859; June 21.
Krasnodmsky, John, assignor of fifteen per cent to A. J. Koss, Milwaukee, Wis. Aeroplane propeller. 1,864,492; June 21.
Krebs Pigment and Color Corporation. (See O'Brien, William J.)
Kreidel, Hans, Wiesbaden, Germany. Liquid atomizer. 1,863,601; June 21.
Krekeler, Heinz, Berlin, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of fluorine. 1,863,661; June 21.
Kriegbaum, George M. (See Cady, S. W., and Kriegbaum.)
Kriegbaum, George M., and D. M. Morris, Richmond, Ind., assignors to International Harvester Company. Drive control for planters. 1,864,309; June 21.
Kronen, Balthasar H., Tarentum, Pa. Apparatus for molding walls. 1,864,444; June 21.
Krum, Howard L., assignor to Teletype Corporation, Chicago, Ill. Telegraph signaling system. 1,864,074; June 21.
Kummerer, Wilhelm, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Circuit arrangement for transmitter tubes. 1,863,798; June 21.
Kunz, Max A., Mannheim, K. Koeberle, and E. Berthold, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Derivatives of monoaminodibenzopyrenequinone. 1,863,662; June 21.
Kunz, Max A., Mannheim, K. Koeberle, and E. Berthold, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Substitution products of pyranthrone. 1,863,987; June 21.
Kupfer, Theodore W., Rochester, N. Y. Ash tray for automobiles. 1,863,988; June 21.
Kuzell, Charles R., assignor to United Verde Copper Company, Clarkdale, Ariz. Distributing and feeding apparatus. 1,863,905; June 21.
La Bleu, Charles, Los Angeles, Calif. Scraper and leveler. 1,863,861; June 21.
La Bombard, Leon E., Waltham, and M. H. Sidebotham, Newtonville, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass. Wrapped sliced bread and making the same. 1,864,493; June 21.
La Chapelle, Euclid I., Brockton, Mass. Lasting shoes. 1,863,752; June 21.
Lake Erie Chemical Company, The. (See Bridgeman, Frank J., assignor.)
Lalle, Helen, Brooklyn, N. Y. Shampoo board. 1,863,860; June 21.
Lamson Company, The. (See Talsey, Fred R., assignor.)
Lancaster Asphalt, Inc. (See Robinson, Thomas, assignor.)
Landwehr, Richard F. (See Kasdan, N., Landwehr, and Pollack.)
Lange, Max F., assignor to The Warner & Swasey Company, Cleveland, Ohio. Work support for machine tools. 1,864,046; June 21.
Lapidus, Morris, Long Island City, N. Y., assignor, by mesne assignments, to Charles Miller, Esq., trustee. Sock lining. 1,864,204; June 21.
Lapin Specialty Mfg. Co. (See Ehrlich, Rose, assignor.)
Laput, Gregory. (See Goroshko, W., and Laput.)
Larson, Andrew, Seattle, Wash. Pipe joint filler. 1,863,906; June 21.
Larson, Oscar J., assignor to Wright Metal Incorporated, Jamestown, N. Y. Partition frame. 1,864,205; June 21.
Larson, Oscar J., assignor to Wright Metal Incorporated, Jamestown, N. Y. Partition post or pilaster. 1,864,206; June 21.
Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Card-box controlled nonfeed device. 1,864,075; June 21.
Lauderman, Vincent A., assignor to The Champion Coated Paper Co., Hamilton, Ohio. Pigment for coated paper. 1,863,663; June 21.
Laughlin, William C., Kew Gardens, and A. B. Asch, Brooklyn, assignors to Filtration Equipment Corporation, New York, N. Y. Self-cleaning screen conveyer. 1,864,359; June 21.

Lawhorne, Roy E., Santa Barbara, Calif. Expanding coach. 1,864,047; June 21.
Lawson, Robert H., and W. L. Smith, jr., Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Stocking or half hose and making the same. 1,863,719; June 21.
Lawson, Robert H., and W. L. Smith, jr., Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Knitting machine and method of knitting. 1,863,720; June 21.
Lazarus, Peter L., St. Louis, Mo. Clothes hanger. 1,863,664; June 21.
Lea Fabrics Inc. (See Ward, Ernest H., assignor.)
Leach, Henry G. (See Derby, J. H., and Leach.)
Leaman, Thomas P., Hempstead, assignor to Amphibions, Inc., Garden City, N. Y. Airplane construction. 1,863,602; June 21.
Le Barbier, Emile P. L., Nice, France. Stereoscopic cinematography. 1,864,445; June 21.
Ledig, Willy, assignor to Patent-Treuhand-Gesellschaft Fuer Elektrische Gluhlampen m. b. H., Berlin, Germany. Ampul machine. 1,864,023; June 21.
Leeds & Northrup Company. (See Doyle, Edgar D., assignor.)
Lees-Bradner Company, The. (See Lees, Ernest J., assignor.)
Lees, Ernest J., assignor to The Lees-Bradner Company, Cleveland, Ohio. Machine for cutting threads and cutting teeth in bodies. 1,863,570; June 21.
Lees, Ernest J., assignor to H. T. Bradner, Cleveland, Ohio. Machine and process for generating gears. 1,863,571; June 21.
Le Fevre, Edwin K., assignor to Whitfield Engineering Company, Washington, D. C. Air craft of the autorotor type. 1,864,137; June 21.
Legg, Victor E., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. High frequency furnace. 1,864,076; June 21.
Lehmann, Karl A., and A. Varren, Essen, assignors to Fred. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Issuing vouchers in cash registers. 1,864,446; June 21.
Lemaire, Jean H., Rousies, France. Plant for the manufacture of sheets of glass. 1,864,360; June 21.
Leo, Jack G. Y. (See Flint, A., Zimmerman, and Leo.)
Le Quornik, Herman, Richmond Hill, and D. Salvati, assignors to Easy-Drive Garage Corp., Brooklyn, N. Y. Floor construction. 1,863,753; June 21.
Ley, Arthur, Bronx, N. Y. Safety ring guard. 1,864,447; June 21.
Levene, Louis L., Merrick, N. Y. Stiffening partition walls. 1,863,721; June 21.
Levene, Louis L., Merrick, N. Y. Panel frame construction. 1,863,722; June 21.
Levene, Louis L., Merrick, N. Y. Partition wall construction. 1,863,723; June 21.
Leveque, Bernard T., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for lasting stitchdown shoes. 1,864,510; June 21.
Lewis, George P., Forest Hills, and R. E. Sabin, Flushing, N. Y. Portable motion picture screen. 1,864,077; June 21.
Libbey-Owens-Ford Glass Company. (See Baker, Herbert H., assignor.)
Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Flexible dipper stick. 1,863,632; June 21.
Liebel-Flarsheim Company, The. (See Flarsheim, Edwin S., assignor.)
Liisanantti, Evert, Portland, Oreg. Boat. 1,863,989; June 21.
Lillich, Frederick, Philadelphia, Pa. Vehicle body. Des. 87,222; June 21.
Lindecker, Joseph B. (See Kegerreis, C. S., and Lindecker.)
Lindmark, Elmer S., and F. C. Kaufmann, Brooklyn, N. Y.; said Kaufmann assignor to said Lindmark. Match container. 1,863,724; June 21.
Lindstrom, Albert F. (See Hageman, A. M., and Lindstrom.)
Line Material Company. (See Forrest, Elbert E., assignor.)
Line Material Company. (See Hendee, Lem E., assignor.)
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Lipetz, Alphonse, Saratoga Springs, N. Y. Steam boiler. 1,864,310; June 21.
Lissauer, Adolph W., and S. Vermilye, Louisville, Ky. Sirup pump. 1,863,754; June 21.
Lissauer, M. & Cie. (See Witter, Wilhelm, assignor.)
Listerman, John W., Pueblo, Colo. Shock absorber. 1,863,665; June 21.
Little, Horace M. (See Holmes, Edgar R., assignor.)
Livingston, Elizabeth, and L. Livingston, Washington, D. C. Game. 1,864,500; June 21.
Livingston, John W., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway car retarder. 1,864,361; June 21.
Livingston, Louis. (See Livingston, Elizabeth and L.)
Lodde, Herbert, New York, N. Y. Pipe cleaning method. 1,863,755; June 21.
Loetscher, Emil C., Dubuque, Iowa. Making coated articles. 1,863,799; June 21.
Loetscher, Emil C., Dubuque, Iowa. Making veneered doors, panels, and the like. 1,863,800; June 21.
Lommel, Wilhelm, Wiesdorf-on-the-Rhine, T. Goost, Leverkusen-on-the-Rhine, and H. Friedrich, Wiesdorf-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. N-substituted dithiocarbamic acids and the salts thereof. 1,863,572; June 21.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 87,223; June 21.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 87,224; June 21.
Lorber, Charles, Louisville, Ky. Ice pick. 1,863,801; June 21.
Lorentz, Valentin, assignor to United Cigarette Machine Company Aktiengesellschaft, Dresden, Germany. Method of and apparatus for loosening tobacco particles and freeing them from dust. 1,863,666; June 21.
Lorenzen, Christian, Berlin, Germany, assignor, by mesne assignments, to Bendix Aviation Corporation, Chicago, Ill. Method and apparatus for utilizing waste heat. 1,864,448; June 21.
Lower, Claude M., Sturgis, Mich. Egg turning and tray holder. 1,864,449; June 21.
Lowery, Lillymay, Los Angeles, Calif. Automobile radiator ornament or similar article. Des. 87,225; June 21.
Löwy, Heinrich, Vienna, Austria. Exploring ground. 1,864,024; June 21.
Lozier, William V., Elmira, N. Y., assignor to The Willys-Overland Company, Toledo, Ohio. Machine for manipulating bolt blanks. 1,864,450; June 21.
Lucas, Reese H., Washington, D. C. Disposing of dangerous fluids. 1,864,250; June 21.
Lucker, Millard B., Benton Harbor, Mich., assignor, by mesne assignments, to The Dayton Malleable Iron Company, Dayton, Ohio. Lifting jack. 1,864,207; June 21.
Luers, John M., Detroit, Mich. Tool holder and blade protector. 1,863,907; June 21.
Lufkin, John L., New York, N. Y. Portable stand. 1,863,756; June 21.
Luminator Inc. (See Hoffman, Wolfgang, assignor.)
Lundberg, John R., Minneapolis, Minn. Ice cutter for windshields. 1,864,208; June 21.
Lundgren, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loose reed loom. 1,863,862; June 21.
Lüngen, Robert, Erkrath, near Dusseldorf, Germany. Core. 1,864,451; June 21.
Lustgarten, Bernard, New York, N. Y. Securing tapes to garments. 1,863,725; June 21.
Luther, Martin. (See Franzen, H., and Luther.)
Luther, Martin, Mannheim, and C. Heuck, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Products of latex character and producing the same. 1,864,078; June 21.
Luther, Martin, and H. Klein, Mannheim, Germany. Oxidation of liquid hydrocarbons. 1,864,079; June 21.
Lutz, Frederick W., Floral Park, and A. Briechle, Brooklyn, assignors to Fairchild Aerial Camera Corporation, New York, N. Y. Camera mechanism. 1,863,573; June 21.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Feeding mechanism for sewing machines. 1,864,452; June 21.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Feeding mechanism for sewing machines. 1,864,453; June 21.
Lyon, Harry, Holbrook, assignor to Hamilton-Wade Company, Brockton, Mass. Welt for boots or shoes. 1,864,311; June 21.
MacDonald, Etta, Iron Mountain, Mich. Cap. 1,864,251; June 21.
MacDonell, James A., Lima, Ohio. Combination percussion and rotary drill. 1,863,928; June 21.
MacDougall, Howard C., New York, N. Y. Ambulance bed rest. 1,864,454; June 21.
Machonis, Peter J., assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio. Closure and gauge structure. 1,864,138; June 21.
MacKenzie, George W., Beaver, Pa. Robot for signaling devices. 1,864,203; June 21.
Macomber Steel Company, The. (See Gruber, Clarence E., assignor.)
Madge, Norman G., Providence, R. I., assignor to The Mechanical Rubber Company, Cleveland, Ohio. Nonmetallic connection. 1,864,080; June 21.
Madison-Kipp Corporation. (See Hoffman, John R., assignor.)
Madison-Kipp Corporation. (See Pedersen, Axel, assignor.)
Madsen, Sorn, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Automatic gluing and assembling machine. 1,863,908; June 21.
Maier, Karl, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Fabric guide support for sewing machines. 1,864,501; June 21.
Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Feeding mechanism for sewing machines. 1,864,502; June 21.
Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Combination hemmer and strip guide. 1,864,503; June 21.
Majestic Metal Specialties, Inc. (See Kasdan, N., Landwehr, and Pollack, assignors.)
Malkind, Ben L., Long Island City, N. Y. Knitting needle. 1,864,362; June 21.

Malleable Iron Fittings Company. (See Williams, Rolland G., assignor.)
Manarik, Joseph A. (See Keith, W. G., and Manarik.)
Manson Chemical Company. (See Maze, Augustus R., assignor.)
Marathon Paper Mills Company. (See Willauer, William R., assignor.)
Marbach, Edward R., Cleveland, Ohio. Inner latch for auto hoods. 1,863,863 June 21.
Mark, Clayton, & Company. (See Mark, Clayton, jr., assignor.)
Mark, Clayton, jr., assignor, by mesne assignments, to Clayton Mark & Company, Chicago, Ill. Apparatus for butt welding. 1,864,139; June 21.
Marr, William S., Nutley, N. J., assignor to Bakeries Service Corporation, New York, N. Y. Blank and collapsible box formed therefrom. 1,864,081; June 21.
Marshall, Charles D., jr., Pottstown, Pa. Dairy equipment. 1,863,603; June 21.
Marshall, John R. (See Fraizer, Frank L., assignor.)
Marshall, Walter C., Milwaukee, Wis. Refrigerator. 1,864,140; June 21.
Martin, Charles A., assignor to Anchor Fireproofing Company, Detroit, Mich. Roof and floor construction. 1,864,025; June 21.
Maschinenfabrik Augsburg-Nurnberg A. G. (See Fischer, Hans, assignor.)
Masselin, Francis E., assignor to Dovercraft Company, Inc., Providence, R. I. Curtain support. Des. 87,226; June 21.
Masselin, Francis E., assignor to Dovercraft Company, Inc., Providence, R. I. Curtain supporting structure. Des. 87,227; June 21.
Massonneau, Robert F., Scarsdale, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,864,082; June 21.
Matthews, Guy L., assignor to H. L. Diehl, Chicago, Ill. Hook for a gut string polishing machine. 1,863,864; June 21.
Maurer, Russell L., assignor to Grigsby-Grunow Company, Chicago, Ill. Radio apparatus. 1,863,909; June 21.
Maxson, Louis A., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,863,865; June 21.
Maxson, Louis A., Claremont, N. H., assignor to Sullivan Machinery Company, Claremont, N. H. Compressor controlling mechanism. 1,863,866; June 21.
Maze, Augustus E., Orange, assignor, by mesne assignments, to Manson Chemical Company, Montclair, N. J. Paper size and making same. 1,863,867; June 21.
Mazzle, Dominic, East Hartford, Conn. Thermostatic control apparatus. 1,864,455; June 21.
McArdle, Michael W., Chicago, Ill. Bowl for a fruit juice extractor. Des. 87,228; June 21.
McCain, George L., Detroit, and K. Pfeiffer, Highland Park, assignors to Chrysler Corporation, Detroit, Mich. Clutch disk. 1,864,252; June 21.
McChesney, Cuyler S., Kenmore, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Thickness gauge for film on calender rolls. 1,863,757; June 21.
McClaughry, Richard S., and R. Skowronski, assignors to Standard Oil Company, Whiting, Ind. Ornamental candle. 1,863,758; June 21.
McCloud, Don B., Duquoin, Ill. Explosive cartridge. 1,863,921; June 21.
McCollum, William, assignor to Tingley Reliance Rubber Corporation, Rahway, N. J. Splash guard. 1,864,456; June 21.
McCord Radiator & Mfg. Co. (See Bailey, Claud B., assignor.)
McCormick, Charles P., Baltimore, Md. Spraying apparatus. 1,864,505; June 21.
McCreary, Harold J., Chicago, Ill., assignor to General Electric Company. Recording apparatus. 1,864,363; June 21.
McCullough, John F., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Chromium stripping bath. 1,863,868; June 21.
McCullough, John F. K., and B. W. Gilchrist, East Orange, N. J., assignors to Ternstedt Manufacturing Company, Detroit, Mich. Electroplating bath. 1,863,869; June 21.
McGowen, William R., assignor to The McKay Company, Pittsburgh, Pa. Foot stool. Des. 87,229; June 21.
McGowen, William R., assignor to The McKay Company, Pittsburgh, Pa. Foot stool. Des. 87,230; June 21.
McGraw, William, and R. Woodward, Los Angeles, Calif., assignors to Trumble Gas Trap Company. Sliding closure unit and gas trap control system. 1,863,759; June 21.
McIntire, Benjamin E., Westerly, R. I. Window sash operating device. 1,864,253; June 21.
McKay Company, The. (See McGowen, William R., assignor.)
McKay, H. V., Proprietary Limited. (See Taylor, Headlie S., assignor.)
McKesson, Elmer I., Toledo, Ohio. Basal metabolism factor. 1,863,929; June 21.
McKesson, Elmer I., Toledo, Ohio. Surgical equipment. 1,863,930; June 21.
McKnight, Robert. (See Berry, J. W., and McKnight.)
McNutt, Ralph, Bay View, Wash. Auto window control. 1,864,048; June 21.
Mead Research Engineering Company, The. (See Ruff, Harold T., assignor.)
Mechanical Rubber Company. (See Kent, William J., assignor.)
Mechanical Rubber Company. (See Madge, Norman G., assignor.)
Meeker, David A., assignor to The Hobart Manufacturing Company, Troy, Ohio. Food handling apparatus. 1,864,209; June 21.
Meier, John A. (See Eisenbut, O., Bass, and Meier.)
Meier, Walter W. (See Garber, H. D., and Meier.)
Melhsner, Frederick, Manitowoc, Wis. Skiving machine. 1,864,141; June 21.
Melind, Louis, Chicago, Ill. Name plate. 1,863,633; June 21.
Mellars, Newton W. (See Forde, T. H., and Mellars.)
Meredith, Frederick W., et al. (See Griffith, A. A., Kerr, and Meredith.)
Merten, William J., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Annealing nitrided steel. 1,864,083; June 21.
Mertes, Albert T. (See Seguine, W., jr., and Mertes.)
Merwin, George M., Berwyn, Ill., assignor to International Harvester Company. Safety device for corn shredders. 1,864,312; June 21.
Messler, Eugene L., Pittsburgh, Pa. Support for hot tops. 1,863,574; June 21.
Metlox Corporation, Ltd. (See Prout, Willis O., assignor.)
Metropolitan Engineering Company. (See Murray, Thomas E., assignor.)
Meyer, Daniel H., Elkville, assignor to American Manganese Steel Company, Chicago, Ill. Turtle back reenforcing casting for dipper doors. 1,864,210; June 21.
Meyer, Irving G., Milwaukee, Wis. Reverse lock for driving gears. 1,864,142; June 21.
Meyer, Minnie, assignor to Golo Slipper Company, Inc., New York, N. Y. Sandal. 1,864,254; June 21.
Miller, Charles, esq., trustee. (See Lapidus, Morris, assignor.)
Miller, Charles H., et al. (See Pitcher, Elmer, assignor.)
Miller, Henry, assignor to New Process Metals Corporation, Newark, N. J. Removing gases from inclosed spaces. 1,864,084; June 21.
Miller, Henry R., Bernville, Pa., assignor of one-half to P. A. Holzman, Tulpehocken, Pa. Selective control mechanism for radio sets. 1,863,931; June 21.
Miller, Royal R. (See North, R. B., Hough, and Miller.)
Millison, Dwight J., Maywood, Ill. Automatic time interval controlling device. 1,864,255; June 21.
Mills, Bert E., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Selector mechanism. 1,864,143; June 21.
Mills, Bert E., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Circuit breaking device. 1,864,144; June 21.
Mills Novelty Company. (See Mills, Bert E., assignor.)
Milner, Wilfred R., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Radiator cap. Des. 87,231; June 21.
Milwaukee Air Power Pump Company. (See Rogers, Homer S., assignor.)
Miner, W. H., Inc. (See Geiger, William A., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Mingori, César, Paris, France. Machine for bending metal tubes in the cold state. 1,863,693; June 21.
Minneapolis-Honeywell Regulator Company. (See Cunningham, Lewis L., assignor.)
Miranda, Juan Da C., Buenos Aires, Argentina. Crankshaft and connecting rod for internal combustion engines. 1,863,667; June 21.
Mitchell, Albert E., Stamford, Conn. Portable mortise and tenon machine. 1,863,605; June 21.
Mittag, Albert H., Schenectady, N. Y., assignor to General Electric Company. System of distribution. 1,864,364; June 21.
Moe, Andrew O., Toppenish, Wash., assignor to Food Machinery Corporation, San Jose, Calif. Fruit washing apparatus. 1,864,085; June 21.
Moellner, George S., Los Angeles, Calif. Fuse block for automobiles. 1,863,932; June 21.
Monerieff, Allstar H. D., Westminster, London, and J. Shearman, Hampstead, London, assignors to Karrier Motors Limited, Huddersfield, England. Road and rail transport. 1,863,575; June 21.
Monomelt Company, The. (See Orlander, Leonard G., assignor.)
Monroe, Horace, Scipio, Utah. Stovepipe fastener. 1,864,086; June 21.
Monson, Helmer W., Portsmouth, Ohio, assignor to Wheeling Steel Corporation, Wheeling, W. Va. Metal shipping container. 1,864,313; June 21.
Montecatini, Societa Generale Per L'Industrie Mineraria Ed Agricola. (See Fauser, Giacomo, assignor.)
Montgomery, Earle T., Franklin, Ohio, assignor of one-half to A C Spark Plug Company, Flint, Mich. Process and apparatus for forming ceramic bodies. 1,864,365; June 21.
Moody, Christopher V. (See Wulff, R. G., and Moody.)
Moomaw, George D., Syracuse, N. Y. Recuperator. 1,864,087; June 21.
Moore, Bruce A., Ashland, Ky. Coupling. 1,863,870; June 21.

Moore, Charles H., et al. (See Smith, Larry L., assignor.)
Moore, Edgar D., assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley head. 1,864,026; June 21.
Moore, J. L., et al. (See Pitcher, Elmer, assignor.)
Moore, Theodore T. (See Bridges, N., and Moore.)
Morelock, Albert E., assignor to Draftogen Company, St. Louis, Mo. Furnace construction. 1,863,634; June 21.
Morey, Carl, assignor to Hanchett Manufacturing Co., Big Rapids, Mich. Saw swage. 1,863,910; June 21.
Morimura Bros. Inc. (See Buma, Yukio, assignor.)
Morrill, Lewis H., Fort Wayne, Ind., assignor to International Harvester Company. Valve tappet oiling mechanism. 1,864,314; June 21.
Morris, David M. (See Kriegbaum, G. M., and Morris.)
Morrow, Emmet H., assignor of one-half to J. C. Morrow, Chicago, Ill. High pressure oiler. 1,863,911; June 21.
Morrow, John. (See Morrow, Emmet H., assignor.)
Morse Chain Company. (See Perry, David B., assignor.)
Morse, Clark T., and E. L. Hogan, assignors to American Blower Corporation, Detroit, Mich. Apparatus and method of air conditioning. 1,863,576; June 21.
Morse, Clark T., and E. L. Hogan, assignors to American Blower Corporation, Detroit, Mich. Apparatus and method of air conditioning. 1,863,577; June 21.
Morse, Clark T., and E. L. Hogan, assignors to American Blower Corporation, Detroit, Mich. Apparatus and method of air conditioning. 1,863,578; June 21.
Morse, Clark T., and E. L. Hogan, assignors to American Blower Corporation, Detroit, Mich. Method and apparatus of air conditioning. 1,863,579; June 21.
Morton, Sterling, assignor to Teletype Corporation, Chicago, Ill. Selecting mechanism. 1,864,088; June 21.
Moses, Frederick G., New York, R. W. Hess, Buffalo, and R. L. Perkins, East Aurora, assignors to The Barrett Company, New York, N. Y. Separation of minerals by flotation. 1,863,760; June 21.
Moto-Mower Company, The. (See Blydenburgh, Harold L., assignor.)
Motor Wheel Corporation. (See Valjean, Ben, assignor.)
Motor Wheel Corporation. (See Wilson, Moses W. H., assignor.)
Muhfeld, John E., Scarsdale, N. Y., and J. Gutteridge, Pittsburg, Kans. Duplex compound draft gear. 1,864,272; June 21.
Müller-Cunradi, Martin. (See Pier, M., and Müller-Cunradi.)
Muller, Oscar, Hempstead, N. Y. Spring suspension for vehicles. 1,864,089; June 21.
Müller, Paul, assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany. Drive mechanism for the rolls of rolling mills. 1,864,090; June 21.
Muller, Robert L., assignor to Burroughs Adding Machine Company, Detroit, Mich. Accounting machine. 1,864,273; June 21.
Mulvany, Harry A., Berkeley, Calif. Method and apparatus for controlling electric circuits. 1,864,049; June 21.
Municipal Street Sign Co. (See Sprung, Abraham, assignor.)
Murray, John F., et al., executors. (See Murray, Thomas E.)
Murray, Joseph B., et al., executors. (See Murray, Thomas E.)
Murray-Ohio Mfg. Company. (See Kraeft, Herman L., assignor.)
Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., deceased, Brooklyn, N. Y.; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors, assignors to Metropolitan Engineering Company. Boiler. 1,864,366; June 21.
Myers, Hubert A., Toledo, Ohio. Fountain pen. 1,864,050; June 21.
Myers, L. A., Jr., Inc. (See Myers, William L., assignor.)
Myers, William L., assignor to L. A. Myers, Jr. Inc., Newark, N. J. Securing ornaments to wearing apparel. 1,863,580; June 21.
N. U. Heat Company. (See Zornes, Roy C., assignor.)
Naamlooze Vennootschap De Bataafsche Petroleum Maatschappij. (See Al, Jan, assignor.)
Naamlooze Vennootschap Gebrs. van den Bergh's Industrie en Handelmaatschappij. (See van den Berg, Jacob, assignor.)
Naamlooze Vennootschap Hollandsche Industrie en Handelmaatschappij. (See Johenning, Franz, assignor.)
Nagle, M. T., et al. (See Pitcher, Elmer, assignor.)
Nardone, Romeo M., Orange, assignor to Eclipse Aviation Corporation, East Orange, N. J. Engine starting apparatus. 1,864,256; June 21.
Nash, Charles J., and L. T. Canfield, assignor to Universal Draft Gear Attachment Co., Chicago, Ill. Buffer for railway cars. 1,864,315; June 21.
National Aniline & Chemical Co. (See Wait, Justin F., assignor.)
National Carbon Co. (See Heise, George W., assignor.)
National Carbon Company. (See Huntley, Alton K., assignor.)
National Cash Register Company, The. (See Berger, Friedrich W. F., assignor.)
National Electric Products Corporation. (See Connor, Robert A., assignor.)
National Electric Products Corporation. (See Fullman, J. M. G., and Rittelmann, assignors.)
National Malleable and Steel Castings Company. (See Bucklus, Albert O., assignor.)
National Oil Products Company. (See Wolfson, J., and Potter, assignors.)
National Rubber Machinery Company. (See De Mattia, Peter, assignor.)
National Supply Company, The. (See Young, Forrest J., assignor.)
Naugatuck Chemical Company, The. (See Gibbons, Willis A., assignor.)
Naugatuck Chemical Company, The. (See Hazell, Eardley, assignor.)
Naugatuck Chemical Company, The. (See Howland, Louis H., assignor.)
Nawinsky, Paul, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs. 1,863,668; June 21.
Nelson, Alfred O., Marshalltown, Iowa. Adjustable roof scaffold support. 1,864,457; June 21.
Nelson, Crescent F., New Dorp, assignor to The Western Union Telegraph Company, New York, N. Y. Operating a channel of differential cable code over a channel of a multiplex circuit. 1,864,404; June 21.
Nelson, Thomas. (See Alden, G. R., and Nelson.)
Nelson, William K., assignor to Universal Gypsum & Lime Co., Chicago, Ill. Composition construction or insulating material. 1,863,990; June 21.
Nesbitt Fruit Products, Inc. (See Wagner, Paul G., assignor.)
Nester, Howard W., assignor to Parker Wire Goods Company, Worcester, Mass. Road chair. 1,863,581; June 21.
Neuwirth, Herman, New York, N. Y. Portable supporting device. 1,863,761; June 21.
Newcomer, Ernest J., assignor to The Floorola Corporation, York, Pa. Brush holder. 1,863,991; June 21.
New Haven Clock Co., The. (See Whitehead, R. H., and Porter.)
Newhouse, Marrietta, et al. (See Smith, Clarence K., assignor.)
Newhouse, S. O., et al. (See Smith, Clarence K., assignor.)
New Jersey Zinc Company, The. (See Bunce, Earl H., assignor.)
New Process Metals Corporation. (See Miller, Henry, assignor.)
Nichols, Thomas W., London, England. Rotary pump. 1,864,458; June 21.
Nicholson, Alexander M., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Electrical oscillation generator. 1,864,368; June 21.
Nicholson, Frank H., and H. A. Thompson, Edgewood, assignors to The Union Switch & Signal Company, Swissvale, Pa. Signaling system. 1,864,367; June 21.
Nilsson, Nils E., Aspabruk, Sweden. Liquid filtering apparatus. 1,863,992; June 21.
Noble, F. H., & Company. (See Shields, John M., assignor.)
Noble & Harris. (See Harris, Henry H., assignor.)
Nordeutsch Affinerie. (See Schopper, Walter, assignor.)
Norley, Harry C., North Bay, assignor to Canadian Atlas Steels Limited, Welland, Ontario, Canada. Drill. 1,863,802; June 21.
North Carolina Finishing Co., Inc. (See Robertson, Julian, assignor.)
North City Trust Company. (See Riley, George J., assignor.)
North, Russell B., F. G. Hough, and R. R. Miller, assignors to William Mitchell Blair, Chicago, Ill. Hydraulic digger and loader. 1,863,696; June 21.
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Switch. 1,864,459; June 21.
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Switch and coil unit. 1,864,460; June 21.
Nowak, Walter H. (See Broman, C. E., and Nowak.)
Nuss, Charles C., Washington, Pa. Automobile heating system. 1,863,726; June 21.
Nuss, George K. (See Ophuls, F., and Nuss.)
O. K. Tool Company, The. (See Severson, Ole, assignor.)
O'Brien, William J., Baltimore, Md., assignor, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J. Composite pigment. 1,864,504; June 21.
O'Bryan, William G., Seaside, assignor to D. M. Rogers, Pacific Grove, Calif. Revoluble step bearing. 1,864,461; June 21.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Car construction. 1,863,762; June 21.
Ohio Brass Company, The. (See Moore, Edgar D., assignor.)
Ohm, Albert J., D., Oak Park, assignor to Beardsley Chandelier Manufacturing Company, Chicago, Ill. Lighting fixture. 1,864,145; June 21.
Oilgear Company, The. (See Ferris, Walter, assignor.)
Olander, Leonard G., assignor to The Monomelt Company, Minneapolis, Minn. Casting machine with metal feeder. 1,863,993; June 21
Olsen, Morris, Revelstoke, British Columbia, Canada. Bake-oven ejector. 1,864,462; June 21.
Olson, Olaf E., St. Paul, Minn. Bolt. 1,864,211; June 21.
Ophuls, Fred, New York, N. Y., and G. K. Nuss, assignors to Duluth Refrigerator Corporation, Duluth, Minn. Ice rack for refrigerators. 1,864,212; June 21.

Orford Soap Company, The. (See Hendrickson, Victor, assignor.)
Orford Soap Company, The. (See Snow, George E., assignor.)
Ostro Products Corporation of America. (See Ostromislensky, Iwan, assignor.)
Ostromislensky, Iwan, assignor to Ostro Products Corporation of America, New York, N. Y. Hydrazo compounds and method of preparation. 1,863,763; June 21.
Oswald, Arthur A., East Orange, N. J., assignor, by mesne assignments, to American Telephone & Telegraph Company. System including space discharge device. Re18,501; June 21.
Oswego Falls Corporation. (See Wright, W. L., and Pierce, assignors.)
Otis, Albert N. (See Ipsen, C. L., and Otis.)
Otis Elevator Company. (See Prince, Arthur E., assignor.)
Owen, Edward A., Carta Valley, Tex. Automatic valve coupling. 1,864,463; June 21.
Owen, William B., Las Vegas, Nev. Automobile signaling device. 1,864,464; June 21.
Owens-Illinois Glass Company. (See Cramer, Albert N., assignor.)
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Oxford Varnish Corporation. (See von Webern, G., and Hamant, assignors.)
Packwood, G. H., Manufacturing Company. (See Packwood, George H., jr., assignor.)
Packwood, George H., jr., assignor to G. H. Packwood Manufacturing Company, St. Louis, Mo. Dispenser. 1,863,871; June 21.
Padmore, Bertram R., Newport, Victoria, Australia, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Relay mechanism. 1,863,694; June 21.
Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 87,232; June 21.
Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 87,233; June 21.
Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 87,234; June 21.
Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 87,235; June 21.
Palm, John V. O. (See Hopkins, B. F., and Palm.)
Pamler, Cassius C., New York, N. Y. Refrigerating apparatus. 1,863,635; June 21.
Pancoast, Donald F., Cleveland, Ohio. Electric welding apparatus. 1,863,933; June 21.
Pantenburg, Vitalis, Hesse Nassau, Germany, assignor to American Lurgi Corporation, New York, N. Y. Apparatus for the regeneration of adsorption material. 1,863,803; June 21.
Paratex Corporation, The. (See Robertson, James B. and G., assignors.)
Parletti, Jose D., Paysandu, Uruguay. Apparatus for the transfusion of blood. 1,863,994; June 21.
Paris, Robert Edward, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Perforated card controlled machine. 1,864,051; June 21.
Park, Gene J., New York, N. Y. Airship propeller. 1,863,582; June 21.
Parker Wire Goods Company. (See Nester, Howard W., assignor.)
Parkinson, Ralph D. (See Cope, E. T., Parkinson, and Price.)
Parlante, Frank, Brooklyn, N. Y. Shoe. 1,864,506; June 21.
Parsons, Ian H., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Testing photographic developers. 1,864,091; June 21.
Parsons, John, Coventry, England. Preventing wear of socks and stockings. 1,864,465; June 21.
Patent-Treuhand-Gesellschaft Fuer Elektrische Gluehlampen m. b. H. (See Ledig, Willy, assignor.)
Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc. Coffee maker or similar article. Des. 87,236; June 21.
Patten, Raymond E., Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc. Coffee maker or similar article. Des. 87,237; June 21.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detecting mechanism. 1,863,872; June 21.
Pearson, Frederick A., Great Barrington, Mass. Method and apparatus for electrical measurement. 1,864,092; June 21.
Pedersen, Axel, assignor to Madison-Kipp Corporation, Madison, Wis. Pressure fluid tool. 1,864,027; June 21.
Peerless Heater Company, The. (See Aldrich, Herbert B., assignor.)
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Gathering pool. 1,864,495; June 21.
Pencil Mechanism Corporation. (See Barberon, Pierre, assignor.)
Pepper, Byron J., assignor to Tokheim Oil Tank and Pump Company, Fort Wayne, Ind. Electrical switch. 1,864,369; June 21.
Percy, William W., Seattle, Wash. Reducing iron oxide ore to its metallic form. 1,863,804; June 21.
Pereira, Antonio. (See Silva, Francisco, assignor.)
Peregoy, Frederick N., Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Bottle. Des. 87,238; June 21.
Perkins, Robert L. (See Moses, F. G., Hess, and Perkins.)
Perry, David B., assignor to Morse Chain Company, Ithaca, N. Y. Drive chain. 1,863,606; June 21.
Petersen, Samuel, et al. (See Cavert, Edward N., assignor.)
Peterson, Harold O., Riverhead, N. Y., assignor to Radio Corporation of America. Elimination of fading by diversity factor. 1,863,695; June 21.
Peterson, John N., Milwaukie, Oreg. Tool holder. 1,864,466; June 21.
Petty, Dabney E., and O. S., San Antonio, Tex. Recording apparatus. 1,864,213; June 21.
Petty, Olive S. (See Petty, Dabney E., and O. S.)
Petty, Olive S., San Antonio, Tex. Instrument for detecting vibrations. 1,864,214; June 21.
Pfanstiehl Chemical Company. (See Black, Robert S., assignor.)
Pfeiffer, Karl. (See McCain, G. L., and Pfeiffer.)
Pflueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Fishing reel. 1,864,146; June 21.
Phillips, Bernard, New York, N. Y. Clothes washing device. 1,864,467; June 21.
Picard, Stanislas, assignor to B. B. & R. Knight Corporation, Providence, R. I. Indicating attachment for sewing machines. 1,864,370; June 21.
Pieper, Henri, Brussels, assignor to Compagnie Internationale des Freins Automatiques, Societe Anonyme, Liege, Belgium. Control device for vehicle doors. 1,864,468; June 21.
Pier, Mathias, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Production of viscous oils and hydrocarbon products of low boiling point. 1,863,670; June 21.
Pier, Mathias, Heidelberg, and M. Müller-Cunradi, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing motor fuels by destructive hydrogenation of carbonaceous material. 1,863,669; June 21.
Pier, Mathias, Heidelberg, and K. Wissel, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of nonknocking motor fuels. 1,864,496; June 21.
Pierce, Lee D. (See Wright, W. L., and Pierce.)
Pierson, Charles A., assignor to The Standard Electric Stove Co., Toledo, Ohio. Electric cook stove. Des. 87,239; June 21.
Pikulski, Frank E., Jeannette, Pa. Igniting device for cigars and cigarettes. 1,864,470; June 21.
Pineau, Auguste, assignor to A C Spark Plug Company, Flint, Mich. Tip for flexible drive shafts. 1,864,507; June 21.
Pippin, John W., Corpus Christi, Tex. Pump plunger and standing valve. 1,864,469; June 21.
Pitcher, Elmer, et al. (See Pitcher, Elmer, assignor.)
Pitcher, Elmer, Minneapolis, assignor, by mesne assignments, to M. T. Nagle, St. Paul, J. R. Schoffman, St. James, Minn., C. H. Miller, Portland, Oreg., E. Pitcher, Minneapolis, Minn., J. L. Moore, Wimbledon, N. Dak., A. Running, St. James, Minn., and M. Henderson, Crosby, N. Dak. Snowplow. 1,864,215; June 21.
Pitts, Frederick B., Oklahoma City, Okla., T. Garlinger, East Orange, and T. C. Smith, Westfield, N. J., assignors to American Telephone and Telegraph Company. Cable-laying apparatus. 1,863,671; June 21.
Plass, Robert H., Upper Montclair, N. J. Fur breaking machine. 1,863,727; June 21.
Podell, Louis N., Milwaukee, Wis. Teething device. Des. 87,240; June 21.
Pollack, Daniel. (See Kasdan, N., Landwehr, and Pollack.)
Poniatowski, Joseph, Huntington Park, Calif. Airplane propeller. 1,864,316; June 21.
Ponstingl, Frank, Milwaukee, Wis. Toy building brick. 1,863,995; June 21.
Porcelain Tile Corporation. (See Grigsby, Owen E., assignor.)
Porter, Harry T., Riverside, Ill., assignor to S. Morgan Smith Company, York, Pa. Surge tank for water pipe lines. 1,863,728; June 21.
Porter, Wilson E. (See Whitehead, R. H., and Porter.)
Postal Telegraph-Cable Company. (See Halliden, Frederick G., assignor.)
Potter, Dorothy L. (See Wolfson, J., and Potter.)
Powell, Edward R., assignor to Banner Rock Corporation, Alexandria, Ind. Continuous predetermined characteristic strip apparatus. 1,864,317; June 21.
Powell, Leonard E., Kalamazoo, Mich. Ring. 1,864,318; June 21.
Poyner, Howard H., Oklahoma City, Okla. Apparatus for holding coil springs while lacing. 1,864,216; June 21.
Prentice, William G., Indianapolis, Ind., assignor to The Elite Manufacturing Company, Ashland, Ohio. Tire machine. 1,863,764; June 21.
Preston, Frank W., Butler, Pa. Apparatus for shaping plastic material. 1,864,319; June 21.
Price, Frederick M. (See Cope, E. T., Parkinson, and Price.)

Prince, Arthur E., Merrick, assignor to Otis Elevator Company, New York, N. Y. Elevator construction. 1,864,093; June 21.
Prouty, Willis O., Hermosa Beach, assignor, by mesne assignments, to Metlox Corporation, Ltd., Manhattan Beach, Calif. Luminous tube. 1,863,996; June 21.
Prussian, George, Newark, N. J. Interchangeable stone setting for ring tops and the like. 1,864,371; June 21.
Punke, John J., assignor to Hupp Motor Car Corporation, Detroit, Mich. Body apron. 1,864,372; June 21.
Purser, William J., Mineral Ridge, assignor to Bostwick Steel Lath Company, Niles, Ohio. Removing lubricating compound from perforated sheet metal. 1,864,257; June 21.
Pyridium Corporation, The. (See Tisza, E. T., and Joos, assignors.)
Quarnstrom, Bert L., Grosse Pointe Park, assignor to Bundy Tubing Company, Detroit, Mich. Making tubes. 1,863,873; June 21.
Quarnstrom, Bert L., Grosse Pointe Park, assignor to Bundy Tubing Company, Detroit, Mich. Tubular control. 1,863,874; June 21.
Quelch, George C., Oakmont, Pa., assignor, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc., New York, N. Y. Gaseous fuel mixture. 1,863,636; June 21.
Rabezzana, Hector, Flint, Mich. Internal combustion engine. 1,863,875; June 21.
Rademacher, Charles E. C., St. Albans, N. Y. Submarine escape. 1,864,471; June 21.
Radio Corporation of America. (See Peterson, Harold O., assignor.)
Rafter, Albert, assignor to Rafter Machine Company, Belleville, N. J. Die holder. 1,863,729; June 21.
Rafter Machine Company. (See Rafter, Albert, assignor.)
Ranke, Gisbert, Maspeth, N. Y. Propelling and steering boats. 1,863,940; June 21.
Rantine, Daniel W., Brooklyn, N. Y. Vegetable cutter. 1,864,147; June 21.
Rasmussen, Arnold R., Sharon, N. Dak. Hanging clothes. 1,864,028; June 21.
Rathbun, John P., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Dual drive mechanism. 1,864,217; June 21.
Raule, Clifford T., Brookline, Pa. External grinder. 1,864,320; June 21.
Raytheon Inc. (See Smith, Charles G., assignor.)
Reach, A. J., Company. (See Till, Edwin W., assignor.)
Reece Button Hole Machine Company, The. (See Reece, Franklin A., assignor.)
Reece, Franklin A., Brookline, assignor to The Reece Button Hole Machine Company, Boston, Mass. Looper-adjusting means for buttonhole sewing machines. 1,864,218; June 21.
Rees, William H., Berkeley, Calif. Weighing apparatus. 1,864,029; June 21.
Reeves, William A. (See Tucker, O. M., and Reeves.)
Reeves, William A., and O. M. Tucker, Columbus, Ohio, assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Getting and delivering preformed charges of viscous glass. 1,864,276; June 21.
Remington Rand Inc. (See Lasker, William W., assignor.)
Remington Rand Inc. (See Paris, Robert E., assignor.)
Renfrow, Homer E., Flora, Oreg. Fuel box. 1,863,765; June 21.
Renn, Bennie F., Jefferson City, Mo. Rim tire tool. 1,863,876; June 21.
Repp, Albert T., Glassboro, N. J. Insect barrier for trees. 1,863,672; June 21.
Republic Steel Corporation. (See Ellison, Harry C., assignor.)
Rheinische Metallwaaren-und Maschinenfabrik. (See Romberg, H., and Schuler, assignors.)
Rheinische-Westfalische Kalkwerke. (See Brosche, Alexander, assignor.)
Richardson, Emmitt D., Cawker City, Kans. Pick-up mechanism for combines and the like. 1,863,637; June 21.
Richardson, Led L., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Hole cleaner. 1,864,148; June 21.
Richmond Fireproof Door Company. (See Ball, H. C., Jackson, Keller, and Winder, assignors.)
Richter, Alfred, Chicago, Ill. Detachable plait hook. 1,863,638; June 21.
Riebeling, Henry G., Pendleton, Ind. Measuring instrument or gauge. 1,864,472; June 21.
Rigby, John, New Bedford, Mass. Nozzle. 1,864,473; June 21.
Rightenour, Asa L., Chicago, Ill. Internal combustion engine. 1,863,877; June 21.
Rikkonen Uuno I., Helsinki, Finland. Ink blotter. 1,864,094; June 21.
Riley, George J., Elkins Park, assignor to North City Trust Company, Philadelphia, Pa. Bouquet holder. 1,863,878; June 21.
Riley, George J., Elkins Park, Pa. Bouquet holder. 1,863,879; June 21.
Rittelmann, Louis J. (See Fullman, J. M. G., and Rittelmann.)
Riva, Evaristo, Buenos Aires, Argentina. Pliable fan. 1,863,997; June 21.
Robertson, George. (See Robertson, James B. and G.)
Robertson, James B., Paterson, and G. Robertson, Ridgewood, N. J., assignors to The Paratex Corporation. Carpet and rug making machine. 1,863,912; June 21.
Robertson, Julian, assignor to North Carolina Finishing Co. Inc., Salisbury, N. C. Finishing of fabric. 1,864,373; June 21.
Robinson, Frank W., assignor to Schuylkill Hosiery Mills, Reading, Pa. Striping attachment for circular knitting machines. 1,864,321; June 21.
Robinson, Harold H., Opalocka, Fla. Motor vehicle. Des. 87,241; June 21.
Robinson, Thomas, assignor to Lancaster Asphalt, Inc., New York, N. Y. Apparatus for making prepared building products. 1,863,880; June 21.
Rockwell, Edward A., Long Island City, N. Y. Engine operated fuel pump. 1,864,219; June 21.
Rockwell, Stanley P., Company, The. (See Rockwell, Stanley P., assignor.)
Rockwell, Stanley P., West Hartford, assignor to The Stanley P. Rockwell Company, Hartford, Conn. Agitator for hardening baths. 1,864,149; June 21.
Rodman, Clarence J., and R. P. Dunmire, assignors to The Buckeye Twist Drill Company, Alliance, Ohio. Oil reclaiming and purifying system. 1,864,095; June 21.
Rogers, Dexter M. (See O'Bryan, William G., assignor.)
Rogers, Homer S., assignor to Milwaukee Air Power Pump Company, Milwaukee, Wis. Pneumatic pump. 1,863,941; June 21.
Rogers, Walter F., assignor to Crown Stove Works, Cicero, Ill. Gas stove. 1,863,942; June 21.
Romberg, Heinrich, and H. Schuler, Dusseldorf, assignors to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Firearm. 1,864,374; June 21.
Roos, Alphonse, Los Angeles, Calif. Self massage apparatus. 1,864,258; June 21.
Root, Carl H., Detroit, Mich. Automatic air temperature control 1,864,375; June 21.
Rosenbaum, Wilhelm, Kiel, Germany. Electric lock. 1,864,474; June 21.
Rosenfeld, Louis, Baltimore, Md., assignor to Cherry-Burrell Corporation, Wilmington, Del. Antisplash device for liquid strainers. 1,863,805; June 21.
Rosenthal, Leo, Leverkusen-Wiesdorf-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellshaft, Frankfort-on-the-Main, Germany. Synthetic resins. 1,863,814; June 21.
Rosenthal, Leo, Vohwinkel, near Elberfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Synthetic resin. 1,863,881; June 21.
Rosenthal, Matthew A., Brooklyn, N. Y. Soda fountain refrigerator. Des. 87,242; June 21.
Ross, Chester W., Medford, Mass. Practice device for golf. 1,864,030; June 21.
Ross, Oscar A., New York, N. Y. Building construction. 1,863,730; June 21.
Ross, Oscar A., New York, N. Y. Demolition bomb. 1,863,766; June 21.
Royal Typewriter Company. (See Dowd, Bernard J., assignor.)
Rubel, Charles F. (See Christensen, N. V., Rubel, and Zeier.)
Rubel, Charles F. (See Zeier, F. F., and Rubel.)
Rubin, Frederick W., assignor, by mesne assignments, to The Utility Manufacturing and Sales Company, Indianapolis, Ind. Process and apparatus for drying lumber. 1,863,943; June 21.
Rudd, Harry B., Douglaston, N. Y., assignor to Rudd Patents Corporation. Producing containers. 1,864,475; June 21.
Rudd Patents Corporation. (See Rudd, Harry B., assignor.)
Rudolph, Wilhelm. (See Hecht, H., and Rudolph.)
Ruff, Harold T., Chillicothe, assignor to The Mead Research Engineering Company, Dayton, Ohio. Paper manufacture. 1,864,220; June 21.
Runkle, Ella, administratrix. (See Runkle, John F.)
Runkle, John F., deceased, New York, N. Y.; E. Runkle, New York, N. Y., administratrix. Transmission device for automotive vehicles. 1,863,639; June 21.
Running, Albert, et al. (See Pitcher, Elmer, assignor.)
Russell, Robert, Otis, assignor of one-fourth to D. D. Amis, Los Animas, Colo. Disk grinder and polisher. 1,864,376; June 21.
Russell Supply Company, et al. (See Cunningham, Matthew A., assignor.)
Rutledge, George E., assignor to Vassar Swiss Underwear Company, Chicago, Ill. Brassière. 1,863,697; June 21.
Rutledge, George E., assignor to Vassar Swiss Underwear Company, Chicago, Ill. Bathing suit. 1,864,476; June 21.
Ryden, Gunnar. (See Eckland, P., and Ryden, assignors.)
Ryerson, James A., jr. (See Hall, Samuel H., assignor.)
Sabath, Albert, Chicago, Ill. Lamp. 1,863,607; June 21.
Sabin, Raymond E. (See Lewis, G. P., and Sabin.)
St. Louis Power Shovel Company et al. (See Corner, Douglas C., assignor.)
Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Prong buckle. 1,864,221; June 21.
Salmon, Reginald D. (See Creed, F. G., Storey, and Salmon.)
Salvati, Dominick. (See Le Quornik, H., and Salvati.)

Saudler, Louis, assignor to Johnson Bronze Company, New Castle, Pa. Feed mechanism for broaching machines. 1,864,322; June 21.

Sanger, Harry G., Detroit, Mich., assignor to Graham-Paige Motors Corporation. Manifold construction. 1,863,934; June 21.

Santiago, James J., assignor to J. Grant, Los Angeles, Calif. Collapsible hole straightener. 1,864,274; June 21.

Sarsfield, Myron W., Graham, Tex. Gas attachment. 1,863,806; June 21.

Sather, Guerdon. (See Keenan, W. J., and Sather.)

Saunders, Edward R. (See Davis, C. F., and Saunders.)

Scarlett, Arthur A., Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill. Planter attachment for cultivators. 1,864,280; June 21.

Scene-In-Action Corporation. (See Zeledon, Alfred H., assignor.)

Scharf, Frank W., Sioux City, Iowa. Automobile heater. 1,863,882; June 21.

Schenkeln, Samuel M., Newark, N. J. Ruler. 1,864,096; June 21.

Schimpf, Robert, Berlin-Schlachtensee, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Ground detector. 1,863,583; June 21.

Schloemann Aktiengesellschaft. (See Müller, Paul, assignor.)

Schmidt, John E., assignor to Kling Bros. Engineering Works, Chicago, Ill. Interchangeable structure. 1,863,913; June 21.

Schmidt, Victor P., and H. A. Brenaman, Altoona, Pa. Mold for nonferrous castings. 1,863,935; June 21.

Schneider, Frank M., Mount Healthy, Ohio. Suction cleaner germ destroying device. 1,863,883; June 21.

Schnell, William, and J. B. Flynn, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Smoking case. 1,863,884; June 21.

Schoeller, Felix, & Bausch. (See Bausch, V., and Schroth, assignors.)

Schoffman. J. R., et al. (See Pitcher, Elmer, assignor.)

Schopper, Walter, assignor to Norddeutsche Affinerie, Hamburg, Germany. Treatment of materials containing nickel and/or cobalt, together with copper, iron, lead, and precious metals. 1,863,807; June 21.

Schorger, Arlie W., Madison, Wis., assignor to Burgess Cellulose Company, Freeport, Ill. Coated paper and making the same. 1,863,731; June 21.

Schraven, Alexander, Essen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Indicator jaw gauge. 1,863,673; June 21.

Schroth, Adolf. (See Bausch, V., and Schroth.)

Schuler, Hermann. (See Romberg, H., and Schuler.)

Schulze, John F. W., Shaker Heights, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Purifying and concentrating acetic acid. 1,863,698; June 21.

Schumacher, Conrad. (See Gaisman, H. J., and Schumacher.)

Schuylkill Hosiery Mills. (See Robinson, Frank W., assignor.)

Schwager, August C., San Francisco, Calif. Transformer system and apparatus. 1,863,936; June 21.

Schwager, Sebastian, Chicago, Ill. System of and raising submerged vessels. 1,863,732; June 21.

Schweyer, Daniel H., Easton, Pa. Train control inductor. 1,863,640; June 21.

Seaholm, Ernest W., assignor to General Motors Corporation, Detroit, Mich. Vehicle having brakes. 1,863,885; June 21.

Seelinger, Glenn H., Greeley, Colo. Beet topping attachment for beet pullers. 1,864,031; June 21.

Seguine, William, jr., Newport, Del., assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Preparation of blanc fixe. 1,863,699; June 21.

Seguine, William, jr., and A. T. Mertes, Newport, Del., assignors to The Grasselli Chemical Company, Cleveland, Ohio. Manufacture of hydrated zinc oxide. 1,863,700; June 21.

Seidel, Walter F., Chicago, Ill. Cake ornament or similar article. Des. 87,243; June 21.

Semmes, Harry H., Chevy Chase, Md., assignor to Bendix Aviation Corporation, South Bend, Ind. Seaplane. 1,863,944; June 21.

Severson, Ole, Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y. Forge-welding stellite. 1,864,497; June 21.

Shannon, Elwood M. (See Keen, J. S., and Shannon.)

Shapiro, Benjamin H., Lawrence, Mass. Lamp shade and lamp. 1,863,707; June 21.

Sharples Specialty Company, The. (See Jones, Leo D., assignor.)

Shearman, John. (See Moncrieff, A. H. D., and Shearman.)

Sheehan, William M., Merion, Pa., assignor to General Steel Castings Corporation, Granite City, Ill. Center plate structure. 1,864,154; June 21.

Sheridan, Frederick R., Detroit, Mich. Elevated railway system. 1,864,323; June 21.

Sherman, John Q., Dayton, Ohio. Manifolding material. 1,864,097; June 21.

Shertzer, Leavitt A., Massillon, assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Wire coiling and forming machine. 1,864,032; June 21.

Sherwood, Walter N., North Hoosick, N. Y. Method of and apparatus for beating paper pulp. 1,863,808; June 21.

Shields, Jesse W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Motor insulator. 1,864,150; June 21.

Shields, John M., assignor to F. H. Noble & Company, Chicago, Ill. Jewelry box. 1,863,937; June 21.

Shiraishi, Tsuneji, Tatsuta Mura, Inben Gun, Miye Ken, Japan. Manufacturing colloidal carbonate of alkali earths. 1,863,945; June 21.

Shore, James, Camden, N. J. Clip for paper napkins. 1,864,281; June 21.

Sickmann, Carl. (See Sickmann, Hermann and C.)

Sickmann, Hermann and C., Chicago, Ill. Ash receiver. 1,863,998; June 21.

Sidebotham, Melvin H. (See La Bombard, L. E., and Sidebotham.)

Sieffert, Ralph W., Aliquippa, Pa. Rivet. 1,864,377; June 21.

Siemens & Halske, Aktiengesellschaft. (See Steiner, Otto, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Schimpf, Robert, assignor.)

Sievers, Otto. (See Benda, L., and Sievers.)

Silva, Francisco, assignor of one-half to Antonio Pereira, San Francisco, Calif. Rat trap. 1,863,768; June 21.

Silver, Walter H., assignor to Deere & Company, Moline, Ill. Disk tiller. 1,863,641; June 21.

Simms, Carson W., W. J. Bannister, and L. C. Swallen, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Nitrocellulose plasticizer and pigment grinding composition. 1,864,151; June 21.

Simms, Carson W., W. J. Bannister, and L. C. Swallen, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Nitrocellulose plasticizer and pigment grinding composition. 1,864,152; June 21.

Singer Manufacturing Company, The. (See Knox, John A., assignor.)

Singmaster & Breyer, Inc. (See Finkeldey, William H., assignor.)

Sisson, Eugene, Hudson, N. Y. Oarlock. 1,864,098; June 21.

Skowronski, Rose. (See McClaughry, R. S., and Skowronski.)

Small, George B., assignor of three-fourths to Tidal Oil Company, Tulsa, Okla. Pneumatic pumping apparatus. 1,863,701; June 21.

Small, John D., assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerator car and detachable unit therefor. 1,864,259; June 21.

Smiley, Samuel, jr., assignor to The Globe-Wernicke Company, Cincinnati, Ohio. Filing tray. 1,863,946; June 21.

Smith, A. O., Corporation. (See Stresau, Richard, assignor.)

Smith, Charles G., Medford, assignor to Raytheon Inc., Cambridge, Mass. Gaseous conduction method and apparatus. 1,863,702; June 21.

Smith, Charles G., Medford, assignor to Raytheon Inc., Cambridge, Mass. Electron device. 1,864,378; June 21.

Smith, Clarence K., Hermosa Beach, assignor of one-third to M. Newhouse and one-third to S. O. Newhouse, Long Beach, Calif. Water purifier. 1,863,947; June 21.

Smith, Frank D., jr. (See Zubaty, J., and Smith.)

Smith, Larry L., Monticello, Ky., assignor of one-fourth to J. N. Cox, Cookeville, Tenn., one-fourth to C. H. Moore, Glasgow, Ky., and one-tenth to E. C. Warner, Cookeville, Tenn. Two-way radio signaling system. 1,864,498; June 21.

Smith, Russell T., assignor to Gibson Refrigerator Company, Greenville, Mich. Evaporating unit. 1,863,938; June 21.

Smith, S. Morgan, Company. (See Porter, Harry T., assignor.)

Smith, Temple C. (See Pitts, F. B., Garlinger, and Smith.)

Smith, William L., jr. (See Lawson, R. H., and Smith.)

Snow, George E., assignor to Orford Soap Company, Inc., Manchester, Conn. Machine for forming seaming strips. 1,863,771; June 21.

Snow, John R., Charlotte, Mich. Ice scoring machine. 1,863,886; June 21.

Societe Anonyme de Fabrication des Tapis a Points Noues "Saftan". (See Venail, Paul, assignor.)

Societe d'Avertisseur Ferrovoie. (See Gherassimoff, Nicolas, assignor.)

Sollie, Sigurd A. (See Kolster, F. A., and Sollie.)

Solon, Paul H., Scarsdale, N. Y., assignor to American Encaustic Tiling Company, Ltd., New York, N. Y. Tile. 1,864,153; June 21.

Souder, Vernon G., and H. B. Trix, assignors to American Injector Company, Detroit, Mich. Wing mounting clamp. 1,863,939; June 21.

Späth, Wilhelm, Baren, Germany. Converting electrical energy into rotary oscillation of a mass. 1,863,948; June 21.

Specialty Automatic Machine Company. (See La Bombard, L. E., and Sidebotham, assignors.)

Speidel, Albert E. R. (See Johnson, Sylvester A., assignor.)

Spencer, Lorillard, New York, N. Y. Boat engine. 1,863,810; June 21.

Sperry Gyroscope Company. (See House, Frank R., assignor.)

Sperry, Leonard B., Western Springs, Ill., assignor to International Harvester Company. Seat support. 1,864,282; June 21.

Spicer, Delphin H., Lakewood, Ohio. Sealing means for tire valves. 1,864,001; June 21.

Sponsel, Kurt. (See Ernst, Otto, Sponsel, and Balle.)

Springorum, Kurt, Berlin-Dahlen, Germany. Manufacturing spoons and similar articles. 1,864,003; June 21.

Sprung, Abraham, assignor to Municipal Street Sign Co., Inc., New York, N. Y. Combined sign frame and holder. Des. 87,244; June 21.

Squires, John, Detroit, Mich. Airplane propeller. 1,864,260; June 21.

Stabler, Reuben A., Endicott, N. Y. Demountable automobile wheel. 1,864,261; June 21.

Stair, Jacob L., Chicago, Ill. Luminair for corridors, etc. 1,863,703; June 21.

Standard Electric Stove Co., The. (See Pierson, Charles A., assignor.)

Standard-I. G. Company. (See Pier, Mathias, assignor.)

Standard-Johnson Company. (See Donnellan, Edward P., assignor.)

Standard Oil Company. (See McClaughry, R. S., and Skowronski, assignors.)

Standbrook, Theodore C. (See Feild, B. D., and Standbrook.)

Stanfield Radio Company Limited. (See Feild, B. D., and Standbrook, assignors.)

Stannard, Bruce M., Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Method and machine for assembling upholstery. 1,864,477; June 21.

Stedman, Charles C., Cleveland Heights, assignor to Centaur Tractor Corporation, Greenwich, Ohio. Tractor steering attachment. 1,864,324; June 21.

Steedman, Edwin H., St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Supply conduit for piston machines. 1,864,325; June 21.

Steimmig, Gerhard, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cellulose ester lacquers. 1,864,099; June 21.

Steiner, Otto, Berlin-Spandau, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Film guide for photographic cameras. 1,864,100; June 21.

Steinmayer, Alwin G., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Contact clip. 1,864,283; June 21.

Stephens, Henry J. (See Glende, Earl H., assignor.)

Stephenson, Paul A., Leonia, N. J., assignor to Eastman Kodak Company, Rochester, N. Y. Motor operated motion picture camera. Re18,502; June 21.

Sterling Die Casting Co. (See Halvorsen, Oscar, assignor.)

Stevens, Clement Henry, Farnham Common, England. Engine frame. 1,864,004; June 21.

Stevens, Horace D., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Method and apparatus for reenforcing tire beads. 1,864,155; June 21.

Stewart, Alexander W., Glasgow, Scotland. Air circulating apparatus. 1,863,811; June 21.

Stewart, Alexander W., Glasgow, Scotland. Ventilating apparatus. 1,863,949; June 21.

Stewart, Carson R., Burghill, Ohio. Garden marker. 1,863,608; June 21.

Stimpson, Walter F. (See Dryden, William W., assignor.)

Stimson, Robert W., New York, N. Y., and W. Borchers, Aachen, Germany. Manufacture of alloys. 1,863,642; June 21.

Stoffel, Simon H., Delft, Netherlands. Washing machine. 1,864,002; June 21.

Storey, William H. (See Creed, F. G., Storey, and Salmon.)

Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Plow. 1,863,812; June 21.

Stresau, Richard, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Manufacturing thick walled pressure vessels by electrical welding. 1,864,156; June 21.

Stroup, Harry B., Alamosa, Colo. Bacon press. 1,864,101; June 21.

Structural Gypsum Corporation. (See Cannon, James P., assignor.)

Structural Gypsum Corporation. (See Davis, C. F., and Saunders, assignors.)

Stubbs, Charles H., assignor to The Dempsey Company of America, Boston, Mass. Tube coating brush. 1,863,950; June 21.

Stumpf, Walter C., Los Angeles, Calif. Soil changing plow. 1,864,262; June 21.

Submarine Signal Company. (See Fessenden, Reginald A., assignor.)

Sueper, Mary T., Lindsay, Nebr. Device for applying rubber rings to hot fruit jars. 1,863,704; June 21.

Sullivan Machinery Company. (See Halleck, Frank A., assignor.)

Sullivan Machinery Company. (See Halvorsen, Halbert B., assignor.)

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Sullivan Machinery Company. (See Hughes, William E., assignor.)

Sullivan Machinery Company. (See Maxson, Louis A., assignor.)

Superset Brush Co. (See Frenkel, Samuel M., assignor.)

Swainson, Swain J., Westfield, and A. E. Anderson, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y. Treatment of precious metal bearing ores. 1,864,222; June 21.

Swallen, Lloyd C. (See Simms, C. W., Bannister, and Swallen.)

Swanson, Ernest R., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Tension-device. 1,863,951; June 21.

Swartwout Company, The. (See Fraser, Howard S., assignor.)

Swift and Company. (See Johns, Roy W., assignor.)

Tailor, Huming, assignor of one-half to L. Timourian, Los Angeles, Calif. Bath brush. 1,864,379; June 21.

Taisey, Fred R., Lowell, Mass., assinor to The Lamson Company, Syracuse, N. Y. Pneumatic dispatch system. 1,864,157; June 21.

Taunewitz, Edward F., assignor, by mesne assignments, to Detroit Gasket & Manufacturing Company, Detroit, Mich. Antisqueak and finish strip. 1,864,326; June 21.

Taylor, Harden F., Scarsdale, assignor to The Atlantic Coast Fisheries Company, New York, N. Y. Steak and method of producing same. 1,864,284; June 21.

Taylor, Harden F., Scarsdale, assignor to The Atlantic Coast Fisheries Company, New York, N. Y. Steak and method of producing same. 1,864,285; June 21.

Taylor, Headlie S., assignor to H. V. McKay Proprietary Limited, Sunshine, Victoria, Australia. Straw walker. 1,864,005; June 21.

Taylor, W. A., & Co. (See Jacobsohn, Emanuel H., assignor.)

Telefonaktiebolaget L. M. Ericsson. (See Trechcinski, Roman, assignor.)

Teletype Corporation. (See Krum, Howard L., assignor.)

Teletype Corporation. (See Morton, Sterling, assignor.)

Telfer, Edmund V., Newcastle-upon-Tyne, England. Bilge keel or the like anti-rolling device for ships. 1,864,102; June 21.

Temple, Floyd L., Terre Haute, Ind. Burial vault. 1,863,887; June 21.

Tenbrook, Jesse S., Oakland, Calif. Automatic gear shift. 1,864,103; June 21.

Te Pas, Edmund J., Lakewood, assignor to The Cleveland Heater Company, Cleveland, Ohio. Safety relief valve. 1,864,380; June 21.

Ternstedt Manufacturing Company. (See McCullough, John F., assignor.)

Ternstedt Manufacturing Company. (See McCullough, J. F. K., and Gilchrist, assignors.)

Ternstedt Manufacturing Company. (See Schnell, W., and Flynn, assignors.)

Texas Company, The. (See Bodemuller, Robert, assignor.)

Texas Company, The. (See Gumaer, Pierre L., assignor.)

Textile Machine Works. (See Zwicky, Melchior, assignor.)

Tharrington, Bruce A., Roswell, Idaho. Inkwell. 1,864,263; June 21.

Thewes, William O., North Ridgeville, Ohio. Pipe threading die housing. Des. 87,245; June 21.

Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)

Thomas & Betts Co., The. (See Church, Lewis H., assignor.)

Thompson, Howard A. (See Nicholson, F. H., and Thompson.)

Thordarson, Chester H., Chicago, Ill. Window structure and assembly thereof. 1,863,733; June 21.

Thorp, Vaughn P., River Edge, N. J., assignor to American Telephone and Telegraph Company. Reducing lightning interference in carrier telegraph circuits. 1,863,674; June 21.

Thorp, Vaughn P., River Edge, N. J., assignor to American Telegraph and Telegraph Company. Reducing lightning interference in carrier telegraph circuits. 1,863,675; June 21.

Tidal Oil Company. (See Small, George B., assignor.)

Till, Edwin W., assignor to A. J. Reach Company, Philadelphia, Pa. Helmet. 1,864,104; June 21.

Tillotson Manufacturing Company, The. (See Kegerreis, C. S., and Lindecker, assignors.)

Timken Roller Bearing Company. (See Eastburg, Clifford L., assignor.)

Timourian, Leon. (See Tailor, Humiag, assignor.)

Tin Decorating Company of Baltimore, The. (See Hermani, Henry, assignor.)

Tingley Reliance Rubber Corporation. (See McCollum, William, assignor.)

Tisza, Edmond T., New York, and B. Joos, Yonkers, assignors to The Pyridium Corporation, Nepera Park, N. Y. Amino-hydroxy pyridine and preparing the same. 1,863,676; June 21.

Tokheim Oil Tank and Pump Company. (See Pepper, Byron J., assignor.)

Tracy, Pratt E., assignor to The Air-Way Electric Appliance Corporation, Toledo, Ohio. Apparatus for exterminating insects. 1,863,584; June 21.

Trechcinski, Roman, Warsaw, Poland, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Circuit arrangement for sending of current impulses over telephone lines. 1,864,381; June 21.

Trix, Herbert B. (See Souder, V. G., and Trix.)
Troy Laundry Machinery Company. (See Adams, Arthur H., assignor.)
Trumble Gas Trap Company. (See McGraw, W., and Woodward, assignors.)
Trupar Manufacturing Company. (See Weinrich, W. H., and Geller, assignors.)
Trutch, Charles J. H., Rugby, England. System of electric motor control. 1,864,327; June 21.
Tucker, Oliver M. (See Reeves, W. A., and Tucker.)
Tucker, Oliver M., and W. A. Reeves, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Method and apparatus for separating quantities of molten glass from mass. 1,864,275; June 21.
Tucker, Oliver M., and W. A. Reeves, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Shear structure for glass machinery. 1,864,277; June 21.
Tucker, Oliver M. and W. A. Reeves, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company Hartford Conn. Getting and delivering formed charges of viscous glass. 1864,278; June 21.
Tucker, Oliver M., and W. A. Reeves, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Getting and delivering formed charges of viscous glass. 1,864,279; June 21.
Turner, Bertrand, assignor to Ferro-Arc Welding Company Limited, London, England. Coated electrode for electric arc welding. 1,863,772; June 21.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Cop for weft shuttles. 1,863,815; June 21.
Twentyman, James L., Cortland, N. Y. Potato digger. 1,864,382; June 21.
Tyler, Jerry, Muskegon Heights, Mich. Vegetable spraying device. 1,863,914; June 21.
Union Carbide and Carbon Research Laboratories, Inc. (See Quelch, George C., assignor.)
Union Special Machine Company. (See Chalman, John E., assignor.)
Union Special Machine Company. (See Christensen, N. V., Rubel, and Zeier, assignors.)
Union Special Machine Company. (See Zeier, Frederick F., assignor.)
Union Special Machine Company. (See Zeier, F. F., and Rubel, assignors.)
Union Special Machinenfabrik G. m. b. H. (See Lutz, Friedrich, assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, Karl, assignor.)
Union Steel Products Company. (See Hatch, Charles T., assignor.)
Union Switch & Signal Company, The. (See Bell, Charles W., assignor.)
Union Switch & Signal Company, The. (See Grondahl, Lars O., assignor.)
Union Switch & Signal Company, The. (See Livingston, John W., assignor.)
Union Switch & Signal Company, The. (See Nicholson, F. H., and Thompson, assignors.)
Union Switch & Signal Company, The. (See Padmore, Bertram R., assignor.)
Union Switch & Signal Company, The. (See Wells, Wesley B., assignor.)
United Aircraft Products, Inc. (See Dykemann, R. G., and Watkins, assignors.)
United Cigarette Machine Company. (See Lorentz, Valentin, assignor.)
United Shoe Machinery Corporation. (See Finn, Sidney J., assignor.)
United Shoe Machinery Corporation. (See Hadaway, John B., assignor.)
United Shoe Machinery Corporation. (See Leveque, Bernard T., assignor.)
U. S. Oil and Service Corporation. (See Wanamaker, Ernest, assignor.)
United Verde Copper Company. (See Kuzell, Charles R., assignor.)
Universal Draft Gear Attachment Company. (See Nash, C. J., and Canfield, assignors.)
Universal Gypsum & Lime Co. (See Nelson, William K., assignor.)
Universal Winding Company. (See Swanson, Ernest R., assignor.)
Utility Manufacturing and Sales Company, The. (See Rubin, Frederick W., assignor.)
Valjean, Ben, assignor to Motor Wheel Corporation, Lansing, Mich. Automatic draft control. 1,864,223; June 21.
Van den Bergh, Jacob, Nijmegen, assignor to Naamlooze Vennootschap Gebrs. van den Bergh's Industrie en Handelmaatschappij, North Brabant, Netherlands. Manufacture of curtain and similar woven stuff. 1,864,105; June 21.
Vanderkloot, Marinus, assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Meat mold. 1,863,609; June 21.
Van Dorn Iron Works Company, The. (See Garber, H. D., and Meier, assignors.)
Varaud, André, Geneva, Switzerland. Fuse for artillery projectiles. 1,863,888; June 21.
Varren, Alexander. (See Lehmann, K. A., and Varren.)
Vassar Swiss Underwear Company. (See Rutledge, George E., assignor.)
Velkover, John, North Chicago, Ill. Rake cleaner. 1,864,264; June 21.
Venail, Paul, assignor to Societe Anonyme de Fabrication des Tapis a Points Noues "Saftan", Paris, France. Loom for the manufacture of pile fabrics. 1,864,106; June 21.
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,863,734; June 21.
Ve Relle, William H., Philadelphia, Pa. Tie. 1,864,265; June 21.
Vermilye, Sherwood. (See Lessauer, A. W., and Vermilye.)
Victor, John H., Evanston, assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,864,328; June 21.
Victor Manufacturing & Gasket Company. (See Victor, John H., assignor.)
Victory Valves Limited. (See Bolton, E. A., and Gray, assignors.)
Villinger, William E., Williamsport, Pa. Hair waving device. 1,864,383; June 21.
Vilter Manufacturing Company, The. (See Baars, Ernst S. H., assignor.)
Visking Corporation, The. (See Henderson, William F., assignor.)
Vitrolite Company. (See Gibian, Eric H., assignor.)
Vock, William A., Long Beach, and C. E. Wood, Los Angeles, Calif. Brake construction. 1,863,773; June 21.
Vodoz, Frederick W., Wilmette, Ill. Automatic stoking device. 1,863,677; June 21.
Vogel, Henry R., Arcadia, Wis. Motor. 1,863,769; June 21.
Volk, Conrad, Brighton, England. Control mechanism. 1,864,329; June 21.
Von Pap, Alexander. (See Cohn-Byk, W., and von Pap.)
Von Webern, Guido, and E. W. Hamant, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich. Work supporting and decorating method and apparatus. 1,863,816; June 21.
Wagar, Fred L., Wagar, Ala. Heat exchanger. 1,863,678; June 21.
Wagner, Paul G., assignor to Nesbitt Fruit Products, Inc., Los Angeles, Calif. Dispenser. Des. 87,246; June 21.
Wahl, Ottmar, Leverkusen-on-the-Rhine, Germany, assignor of General Aniline Works, Inc., New York, N. Y. Polymethine dyestuffs. 1,863,679; June 21.
Walt, Justin F., New York, N. Y., assignor to National Aniline & Chemical Co., Inc. Treating phenylglycine and product thereof. 1,863,735; June 21.
Waldron, John, Corporation. (See Clark, Bennett F., assignor.)
Walker, Clarence P., Duluth, Minn., assignor to A. M. Fay, Chicago, Ill. Holder. 1,863,585; June 21.
Walker, Earl C., Chicago, Ill., assignor to International Harvester Company. Condenser system for rail cars. 1,864,286; June 21.
Walter, William H., Cynwyd, Pa. Making cores. 1,864,107; June 21.
Wanamaker, Ernest, Chicago, Ill., assignor to U. S. Oil and Service Corporation, New York, N. Y. Bushing for rotary members. 1,863,774; June 21.
Ward, Charles A. (See Fischer, H. L., and Ward, assignors.)
Ward, Ernest H., East Orange, assignor to Lea Fabrics, Inc., Newark, N. J. Method and apparatus for making pile fabrics. 1,864,478; June 21.
Ward, Louis E., assignor to The Dow Chemical Company, Midland, Mich. Opening bags. 1,863,775; June 21.
Ware, Herbert M., South Croydon, assignor to Associated Ice & Dairies Limited, Manchester, England. Forming cardboard and similar cartons or containers. 1,864,479; June 21.
Ware, Raymond, Brookline, Mass. Piston. 1,864,384; June 21.
Warner, Edward C., et al. (See Smith, Larry L., assignor.)
Warner & Swasey Company, The. (See Lange, Max E., assignor.)
Wass, Josephus, Kettering, England. Grinding, crushing, and mixing mill. 1,864,385; June 21.
Watkins, Dudley W. (See Dykeman, R. G., and Watkins.)
Watkins, Harold F., Oakland, assignor to Watkins Intermitting Pumping Co., San Francisco, Calif. Oil well pump. 1,863,643; June 21.
Watkins Intermitting Pumping Co. (See Watkins, Harold F., assignor.)
Watson, Frank C., Chester, Pa. Attachment for bolt action rifles. 1,863,776; June 21.
Waugh, Thomas, jr., assignor to Hartford-Empire Company, Hartford, Conn. Manufacture of blown glassware. 1,863,915; June 21.
Wayland, Frank, Salem, Mass. Leather shaving machine. 1,863,777; June 21.
Wedin, Ivar, assignor to A C Spark Plug Company, Flint, Mich. Odometer reset mechanism. 1,864,330; June 14.
Weinberg, Walter H., West Toledo, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Producing a burner gas supply of uniform sulphur dioxide content. 1,863,705; June 21.
Weingand, Richard, Bornlits, near Walsrode, Germany. Apparatus for manufacturing seamless flexible tubes from cellulose solutions. 1,864,006; June 21.

Weinrich, Walter H., and F. C. Geller, assignors to Trupar Manufacturing Company, Dayton, Ohio. Quick-acting mechanism for electric switches and the like. 1,864,158; June 21.
Weiss, Ernst, Wethmar, near Lunen, Germany. Rotary furnace. 1,863,952; June 21.
Welch, Lon E., assignor to Art Marble Company of America, Jackson, Miss. Manufacture of building material. 1,864,287; June 21.
Wells, Frederick, Toledo, Ohio. Structural steel truss joist. 1,863,817; June 21.
Wells, Nathaniel C., assignor of one-half to H. Heemsoth, Toledo, Ohio. Hinge. 1,863,889; June 21.
Wells, Wesley B., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Light signal. 1,864,224; June 21.
Welsbach Traffic Signal Company. (See Keith, W. G., and Manarik, assignors.)
Welsh, Richard E., assignor to Flour City Specialty Manufacturing Company, Minneapolis, Minn. Bathing implement. 1,863,778; June 21.
Welts, Daniel E., Pasadena, Calif. Toughening sheep castings. 1,863,818; June 21.
Werdenberg, Heinrich, Neu-Allschwil, near Basel, assignor to Firm Durand & Huguenin S. A., Basel, Switzerland. Production of colored discharge effects. 1,864,007; June 21.
Western Electric Company. (See Elmen, Gustaf W., assignor.)
Western Union Telegraph Company, The. (See Nelson, Crescent F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Flanders, Warren B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jennings, Oliver S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Merten, William J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rathbun, John P., assignor.)
Westinghouse Lamp Company. (See Hageman, A. M., and Lindstrom, assignors.)
Wetlaufer, George, Saginaw, Mich. Threshing machine. 1,864,033; June 21.
Wetmore, Charles A., Glenfield, N. Y. Snowplow. 1,863,610; June 21.
Wheeler, John L. (See Wyner, L., and Wheeler.)
Wheeling Steel Corporation. (See Monson, Helmer, assignor.)
Whirldry Corporation, The. (See Dunham, George W., assignor.)
White, Frank. (See Jackson, H. D., and White.)
White, S. S., Dental Manufacturing Company, The. (See Crowell, Walter S., assignor.)
Whitehead, Richard H., and W. E. Porter, assignors to The New Haven Clock Co., New Haven, Conn. Synchronous motor. 1,864,108; June 21.
Whitesmith, Isaac N., Vrmston, England, assignor to General Electric Company. Electrical coil. 1,864,331; June 21.
Whitfield Engineering Company. (See Le Fevre, Edwin K., assignor.)
Whitley, Wyatt Y., Fremont, N. C. Display counter case. 1,864,109; June 21.
Wico Electric Company. (See Hendrickson, Ira E., assignor.)
Wiesenfeld, Bertha, New York, N. Y. Garment bag. 1,864,386; June 21.
Wightman, Rolan J. (See Feldmeier, H., and Wightman.)
Wigle, Wilson B., Compton, Calif. Combination casing head and casing support. 1,863,890; June 21.
Wilband, John T., Vancouver, British Columbia, Canada. Log barge loading device. 1,863,953; June 21.
Wilcox Company, The. (See Wilcox, Joseph S., assignor.)
Wilcox, Joseph S., assignor to The Wilcox Company, Athol, Mass. Toilet brush or similar article. Des. 87,247; June 21.
Wild, Charles H., assignor to Burt Machine Company, Incorporated, Baltimore, Md. Can labelling machine. 1,864,288; June 21.
Wilhelmi, Dirk F., Oosterbeek, Netherlands. Production of hot vulcanized footwear. 1,863,954; June 21.
Wilke, Ernst, Heidelberg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Heat exchanger. 1,863,586; June 21.
Willauer, William R., Philadelphia, Pa., assignor to Marathon Paper Mills Company, Rothschild, Wis. Receptacle for frozen products. 1,863,736; June 21.
Williams, Arthur, assignor to American Throttle Company, Inc., New York, N. Y. Throttle valve operating means. 1,864,225; June 21.
Williams, Frank L., assignor to American Tool and Machine Company, Hyde Park, Mass. Brake. 1,863,779; June 21.
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Highway guard fence. 1,864,159; June 21.
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Highway guard fence. 1,864,160; June 21.
Williamson Manufacturing Company. (See Ingersoll, Homer H., assignor.)
Willig, Bruno W., deceased; M. Willig, executrix, San Angelo, Tex. Scarifier. 1,863,780; June 21.
Willig, Mary, executrix. (See Willig, Bruno W.)
Willis, Le Roy W., Stamford, Conn., assignor to Intertype Corporation, Brooklyn, N. Y. Keyboard for typographical machines. 1,864,387; June 21.
Willwerscheid, Theodor R., Cleveland, Ohio. Reflecting button for sign. 1,863,819; June 21.
Willwerscheid, Theodor R., Cleveland, Ohio. Sign. 1,863,955; June 21.
Willys-Overland Company, The. (See Lozier, William V., assignor.)
Wilson, Charles A., Euclid, Ohio. Bushing remover and replacer. 1,863,956; June 21.
Wilson, Moses W. H., East Lansing, assignor to Motor Wheel Corporation, Lansing, Mich. Variable speed surfacing machine. 1,864,226; June 21.
Wilson Welder & Metals Company. (See Churchward, Alexander, assignor.)
Wilson, William D., Memphis, Tenn. Distributor for cotton gins. 1,864,388; June 21.
Wilson, William W., Los Angeles, Calif. Pipe rotating apparatus. 1,864,389; June 21.
Winder, Joseph Z. (See Ball, H. C., Jackson, Keller, and Winder.)
Winthrop Chemical Company. (See Benda, L., and Siever, assignors.)
Wired Radio, Inc. (See Nicolson, Alexander McL., assignor.)
Wiremold Company, The. (See Frederickson, Otto A., assignor.)
Wissel, Kurt. (See Pier, M., and Wissel.)
Witte, Otto, Philadelphia, Pa. Button drilling machine. 1,863,737; June 21.
Witter, Wilhelm, Halle, assignor to the Firma M. Liassauer & Cie., Cologne-on-the-Rhine, Germany. Separating and recovering nonferrous metals from metallic initial materials. 1,864,161; June 21.
Wolfe, Clifford E., assignor of one-half to F. J. Clapham, Berkeley, Calif. Bracket clamp. 1,863,820; June 21.
Wolfson, Jacob, Brooklyn, N. Y., and D. L. Potter, Hackensack, assignors to National Oil Products Company, Harrison, N. J. Treatment of textile fibers. 1,864,110; June 21.
Wood, Charles D., sr., Lakewood, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Corrugated paper board. 1,863,706; June 21.
Wood, Charles D., sr., Lakewood, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Multiply paper sheet. 1,863,707; June 21.
Wood, Charles E. (See Vock, W. A., and Wood.)
Woodward, Richard. (See McGraw, W., and Woodward.)
Woolcott Convertible Top Company. (See Woolcott, William, assignor.)
Woolcott, William, assignor to Woolcott Convertible Top Company, Winchester, Ky. Cover for land vehicles. 1,863,957; June 21.
Wright, Kirk K., Kenmore, N. Y., assignor to R. G. Wright & Company, Buffalo, N. Y. Heater. 1,863,781; June 21.
Wright Metal Incorporated. (See Iarson, Oscar J., assignor.)
Wright, R. G., & Company. (See Wright, Kirk K., assignor.)
Wright, Walter W., Umtali, Southern Rhodesia, Africa. Ax, pick, and like hand tools. 1,863,821; June 21.
Wright, Wilbur L., and L. D. Pierce, assignors to Oswego Falls Corporation, Fulton, N. Y. Transferring or dispensing skirted paper disks or caps and the like. 1,864,008; June 21.
Wulff, Robert G., Los Angeles, and C. V. Moody, Huntington Park, Calif. Container for compressed or liquefied gas. 1,863,958; June 21.
Wyland, William C., San Gabriel, Calif. Egg candling machine. 1,864,034; June 21.
Wyner, Louis, University City, and J. L. Wheeler, St. Louis, Mo. Electric water heating device. 1,864,035; June 21.
Yale & Towne Manufacturing Company, The. (See Brauning, Karl A., assignor.)
Young, Andrew, and S. Gerencser, Windber, Pa. Bank protective apparatus. 1,863,680; June 21.
Young, Forrest J., Torrance, Calif., assignor, by mesne assignments, to The National Supply Company, Toledo, Ohio. Pipe slip. 1,864,111; June 21.
Young, Harvey L., Pacific Grove, Calif. Multicolor attachment for spray guns. 1,863,782; June 21.
Young, L. A. Spring & Wire Corporation. (See Ziler, Corban H., assignor.)
Youngstown Sheet and Tube Company, The. (See Eurich, R. H., and Anthony, assignors.)
Youngstown Steel Door Company, The. (See Ditchfield, Frank, assignor.)
Zeier, Frederick F. (See Christensen, N. V., Rubel, and Zeier.)
Zeier, Frederick F., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,864,390; June 21.
Zeier, Frederick F., assignor to Union Special Machine Company, Chicago, Ill. Overedge stitch forming mechanism for sewing machines. 1,864,391; June 21.
Zeier, Frederick F., and C. F. Rubel, assignors to Union Special Machine Company, Chicago, Ill. Thread controller for sewing machines. 1,864,392; June 21.
Zeier, Frederick F., and C. F. Rubel, assignors to Union Special Machine Company, Chicago, Ill. Overedge stitch forming mechanism. 1,864,393; June 21.

Zeledon, Alfred H., assignor to Scene-In-Action Corporation, Chicago, Ill. Display device. 1,863,611; June 21.
Zettek, Frank, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Cordage machine. 1,864,162; June 21.
Zetzman, William, Post, Tex. Cultivator attachment. 1,864,394; June 21.
Zller, Corban H., assgnor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Wire spring making machine. 1,863,916; June 21.
Zimmerman, August. (See Flint, A., Zimmerman, and Leo.)
Zimmermann, Raul F., Buenos Aires, Argentina. Thermic interrupter for electrical current. 1,864,395; June 21.
Zornes, Roy C., Los Angeles, Calif., assignor, by mesne assignments, to N-U-Heat Company, Inc. Fireplace construction. 1,864,036; June 21.
Zotos, George, Berlin, Germany. Melting glass and the like. 1,863,708; June 21.
Zubaty, Joseph, Flint, Mich., and F. D. Smith, jr., Washington, D. C., assignors to A C Spark Plug Company, Flint, Mich. Filter and rectifying system. 1,864,332; June 21.
Zuber, John G., assignor to Bell & Howell Company, Chicago, Ill. Photographic camera support. 1,863,891; June 21.
Zumbro, Frank R., assignor to Frick Company, Waynesboro, Pa. Method and apparatus for manufacturing carbon dioxide ice from liquid carbon dioxide. 1,864,396; June 21.
Zumbro, Frank R., assignor to Frick Company, Waynesboro, Pa. Liquid cooler. 1,864,397; June 21.
Zumbro, Frank R., assignor to Frick Company, Waynesboro, Pa. Carbon dioxide snow machine. 1,864,398; June 21.
Zumbro, Frank R., assignor to Frick Company, Waynesboro, Pa. Making carbon dioxide snow. 1,864,399; June 21.
Zwicky, Melchior, Berkshire Heights, assignor to Textile Machine Works, Wyomissing, Pa. Lace-clock mechanism for full-fashioned knitting machines. 1,864,112; June 21.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 21ST DAY OF JUNE, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Accounting machine. R. L. Muller. 1,864,273; June 21.
Acetylene and ethylene, Preparation of. W. O. Herrmann and E. Baum. 1,864,196; June 21.
Acid and its lactone, Production of galactonic. R. S. Black. 1,864,229; June 21.
Acid anhydrides, Preparation of organic. W. J. Hale. 1,863,788; June 21.
Acid, Purifying and concentrating acetic. J. F. W. Schulze. 1,863,698; June 21.
Acids and the salts thereof, N-substituted dithiocarbamic. W. Lommel, T. Goost, and H. Friedrich. 1,863,572; June 21.
Acids, Recovery of organic. H. Franzen and M. Luther. 1,864,058; June 21.
Adzing machine. J. C. Cook. 1,864,297; June 21.
Aeroplane. F. L. Janson. 1,864,438; June 21.
Aeroplane propeller. J. Krasnodmsky. 1,864,492; June 21.
Agitator for hardening baths. S. P. Rockwell. 1,864,149; June 21.
Air circulating apparatus. A. W. Stewart. 1,863,811; June 21.
Air cleaner. H. B. Anglemyer and R. Chaney. 1,864,289; June 21.
Air cleaner. C. S. Kegerreis and J. B. Lindecker. 1,864,201; June 21.
Air conditioning, Apparatus and method of. C. T. Morse and E. L. Hogan. 1,863,576-9; June 21.
Aircraft of the auto-rotor type. E. K. LeFevre. 1,864,137; June 21.
Airplane construction. T. P. Leaman. 1,863,602; June 21.
Airplane propeller. J. Poniatowski. 1,864,316; June 21.
Airplane propeller. J. Squires. 1,864,260; June 21.
Airship propeller. G. J. Park. 1,863,582; June 21.
Air temperature control, Automatic. C. H. Root. 1,864,375; June 21.
Alkoxy acridinium compounds and the products, Production of. L. Benda and O. Sievers. 1,863,647; June 21.
Alloys, Bearing. H. W. Gillett and H. C. Cross. 1,864,240; June 21.
Alloys, Manufacture of. R. W. Stimson and W. Borchers. 1,863,642; June 21.
Amino-hydroxy pyridine and preparing the same. E. T. Tisza and B. Joos. 1,863,676; June 21.
Amplitude limiting device for amplifying systems. N. Bishop. 1,863,895; June 21.
Ampul machine. W. Ledig. 1,864,023; June 21.
Amusement apparatus. J. W. Estes. 1,863,653; June 21.
Anchor device. E. E. Forrest. 1,864,300; June 21.
Anchor, House. C. B. Bradley. 1,864,403; June 21.
Animal carcasses, Branding edible. R. W. Johns. 1,863,903; June 21.
Animal offals, Apparatus for use in scalding. F. Hill. 1,864,135; June 21.
Annealing pot. H. E. Graham. 1,863,749; June 21.
Antenna system, Directional. L. Bouthillon. 1,863,741; June 21.
Apparatus for rewinding films. J. H. Goldberg. 1,863,980; June 21.
Apron, Body. J. J. Punke. 1,864,372; June 21.
Articles, Making coated. E. C. Loetscher. 1,863,799; June 21.
Articles, Method of and apparatus for shaping. B. A. Jeffery. 1,863,854; June 21.
Ash receiver. H. and C. Sickmann. 1,863,998; June 21.
Atomizer, Liquid. H. Kreidel. 1,863,601; June 21.
Automobile heater. F. W. Scharf. 1,863,882; June 21.
Automobile wheel, Demountable. R. A. Stabler. 1,864,261; June 21.
Autoplane. E. W. Carroll. Des. 87,201; June 21.
Awning sheet. P. L. Goulle. Des. 87,210; June 21.
Ax, pick, and like hand tools. W. W. Wright. 1,863,821; June 21.
Bacon press. H. E. Stroup. 1,864,101; June 21.
Bactericide surfaces, Production of. K. Kohn and T. Gruschka. 1,864,073; June 21.
Bag: *See*—
Garment bag.
Bags, Opening. L. E. Ward. 1,863,775; June 21.
Ballast liner. N. Bridges and T. T. Moore. 1,864,183; June 21.
Bank protective apparatus. A. Young and S. Gerencser. 1,863,680; June 21.
Barrette. J. Kahn. 1,864,199; June 21.
Bath: *See*—
Bird cage bath.
Chromium stripping bath.
Bathing implement. R. E. Welsh. 1,863,778; June 21.
Battery: *See*—
Dry cell battery.
Bearing. B. F. Hopkins and J. V. O. Palm. 1,863,809; June 21.
Bearing construction. H. L. Blydenburgh. 1,863,615; June 21.
Bearing, Revoluble step. W. G. O'Bryan. 1,864,461; June 21.
Bed rest, Ambulance. H. C. MacDougall. 1,864,454; June 21.
Beet blocker. C. A. J. Andersen. 1,863,959; June 21.
Beet topping attachment for beet pullers. G. H. Seelinger. 1,864,031; June 21.
Belt construction and method of use. J. P. Cannon. 1,863,562; June 21.
Belts, Making double. W. S. Griffith. 1,863,596; June 21.
Bilge keel or the like antirolling device for ships. E. V. Telfer. 1,864,102; June 21.
Binocular photographic device. L. Holder. 1,863,558; June 21.
Bird cage bath. V. W. Busch. 1,864,230; June 21.
Blade making machine. H. J. Gaisman and C. Schumacher. 1,864,488; June 21.
Blanc fixe, Preparation of. W. Seguine, jr. 1,863,699; June 21.
Blank and collapsible box formed therefrom. W. S. Marr. 1,864,081; June 21.
Blotter, Ink. U. I. Rikkonen. 1,864,094; June 21.
Board: *See*—
Paper board.
Shampoo board.
Boat. E. Lilsananttl. 1,863,989; June 21.
Boat engine. L. Spencer. 1,863,810; June 21.
Boats, Propelling and steering. G. Ranke. 1,863,940; June 21.
Bobbin release for weft replenishing looms. W. H. King. 1,863,904; June 21.
Boiler: *See*—
Steam boiler.
Boiler. T. E. Murray. 1,864,366; June 21.
Bolt. O. E. Olson. 1,864,211; June 21.
Bomb, Demolition. O. A. Ross. 1,863,766; June 21.
Booster brake. L. Blackmore. 1,863,825; June 21.
Booth for banks, Protective. W. H. Inman and H. A. Fritzsche. 1,864,437; June 21.
Bottle. P. C. Delaize. Des. 87,205; June 21.
Bottle. F. N. Peregoy. Des. 87,238; June 21.
Bottle opener. O. Halvorsen. Des. 87,212; June 21.
Bottle or similar container. E. H. Jacobsohn. Des. 87,214; June 21.
Bowl for a fruit juice extractor. M. W. McArdle. Des. 87,228; June 21.
Bowl, Toilet, S. Alberts. 1,863,682; June 21.
Box: *See*—
Fuel box.
Journal box.
Jewelry box.
Match box.
Box for confectionery and other merchandise. E. A. Kable. Des. 87,217; June 21.
Bracelet buckle. S. O. Bigney and C. Arvidson. 1,863,917; June 21.
Bracket clamp. C. E. Wolfe. 1,863,820; June 21.
Braiding machine, Round. G. Horn. 1,864,249; June 21.
Brake: *See*—
Booster brake.
Reverse motion brake.
Drum brake.
Vehicle brake.
Brake. F. I. Williams. 1,863,779; June 21.
Brake actuating mechanism, Front wheel. V. G. Apple. 1,863,644; June 21.
Brake construction. W. A. Vock and C. E. Wood. 1,863,773; June 21.
Brassière. G. E. Rutledge. 1,863,697; June 21.
Bread and making the same, Wrapper sliced. L. E. La Bombard and M. H. Sidebotham. 1,864,493; June 21.
Brining apparatus. A. H. Cooke. 1,863,898; June 21.
Broaching machines, Feed mechanism for. L. Sandler. 1,864,322; June 21.
Brush, Bath. H. Tallor. 1,864,379; June 21.
Brush or similar article, Toilet. J. S. Wilcox. Des. 87,247; June 21.
Brush, Tube coating. C. H. Stubbs. 1,863,950; June 21.
Bucket, Hoisting. J. D. Cummings and L. J. Hewitt. 1,863,899; June 21.
Buckle, Prong. J. Salisbury. 1,864,221; June 21.
Buffer for railway cars. C. J. Nash and L. T. Canfield. 1,864,315; June 21.
Building construction. O. A. Ross. 1,863,730; June 21.
Building construction, Concrete. J. S. Groves. 1,863,981; June 21.
Building products, Apparatus for making prepared. T. Robinson. 1,863,880; June 21.
Building structure. F. M. Venzie. 1,863,734; June 21.
Bulkhead signal. W. G. Keith and J. A. Manarik. Des. 87,218; June 21.
Bung, tube, etc., Dehydrated cellulose. W. F. Henderson. 1,864,244; June 21.

Burner gas supply of uniform sulphur dioxide content, Producing a. W. H. Weinberg. 1,863,705; June 21.
Bushing for rotary member. E. Wanamaker. 1,863,774; June 21.
Bushing remover and replacer. C. A. Wilson. 1,863,956; June 21.
Butt welding, Apparatus for. C. Mark, jr. 1,864,139; June 21.
Button drilling machine. O. Witte. 1,863,737; June 21.
Button for sign, Reflecting. T. R. Willwerscheid. 1,863,819; June 21.
Cabinet, Typewriter. B. J. Dowd. 1,864,125; June 21.
Cable code over a channel of a multiplex circuit, Operating a channel of differential. C. F. Nelson. 1,864,494; June 21.
Cable, Electrical. O. A. Frederickson. 1,864,346; June 21.
Cable-laying apparatus. F. B. Pitts, M. T. Garlinger, and T. C. Smith. 1,863,671; June 21.
Calculating device. E. T. Frankel. 1,864,056; June 21.
Calculating device. K. Y. Konno. 1,863,927; June 21.
Calculating machine. C. Gardner. 1,864,193; June 21.
Calculator, Photometric. J. M. Bing. 1,864,180; June 21.
Calendar, Perpetual. W. O. Kleine. 1,863,926; June 21.
Call answering device for telephone stations. R. M. Braun. 1,864,119; June 21.
Cam and its mounting for a glass feeder. E. H. Curtis, jr. 1,864,187; June 21.
Camera mechanism. F. W. Lutz and A. Briechle. 1,863,573; June 21.
Camera, Motor operated motion picture. P. A. Stephenson. Re18,502; June 21.
Can labeling machine. C. H. Wild. 1,864,288; June 21.
Can perforating and pouring attachment. L. B. Jackson. 1,863,853; June 21.
Candle, Ornamental. R. S. McClaughry and R. Skowronski. 1,863,758; June 21.
Cap. E. MacDonald. 1,864,251; June 21.
Cap frame, Double ring. M. Ingham. 1,864,020; June 21.
Car and detachable unit therefor, Refrigerator. J. D. Small. 1,864,259; June 21.
Car construction. J. F. O'Connor. 1,863,762; June 21.
Car retarder, Railway. J. W. Livingston. 1,864,361; June 21.
Carbon dioxide, Manufacture of. C. L. Jones. 1,864,068; June 21.
Carbon dioxide snow machine. F. R. Zumbro. 1,864,398; June 21.
Carbonate of alkali earths, Manufacturing colloidal. T. Shiraishi. 1,863,945; June 21.
Carburetor. F. H. Heltger. 1,863,715; June 21.
Card-box controlled non-feed device. W. W. Lasker. 1,864,075; June 21.
Card controlled machine, Perforated. R. E. Paris. 1,864,051; June 21.
Carpet and rug making machine. J. B. Robertson and G. Robertson. 1,863,912; June 21.
Cart, Rubbish. G. E. Brenner. 1,863,964; June 21.
Cartons or containers, Forming cardboard and similar. H. M. Ware. 1,864,479; June 21.
Cartridge, Explosive. D. B. McCloud. 1,863,921; June 21.
Case: *See*—
Counter case. Smoking case.
Cash register. F. W. F. Berger. 1,864,228; June 21.
Casing head and casing support, Combination. W. B. Wigle. 1,863,890; June 21.
Casing, Humidifier. A. A. Arnold. Des. 87,186; June 21.
Casings, Toughening sheep. D. E. Welts. 1,863,818; June 21.
Casket, Hermetically sealed. E. G. Jenkins. 1,863,855; June 21.
Casting, Continuous centrifugal. R. H. Eurich and B. F. Anthony. 1,864,270; June 21.
Casting for dipper doors, Turtle back reenforcing. D. H. Meyer. 1,864,210; June 21.
Casting machine with metal feeder. L. G. Olander. 1,863,993; June 21.
Cellulose, Delustered regenerated. H. A. Gardner, 1,864,426; June 21.
Cellulose derivatives from alkali-cellulose in the form of pulp boards by means of esterifying and etherifying agents in the gaseous state, Preparing. O. Ernst, K. Sponsel, and G. Balle. 1,863,745; June 21.
Cellulose films and sheets, Regenerated. H. A. Gardner. 1,864,427; June 21.
Cellulosic materials, Manufacture of. H. A. Gardner. 1,864,428; June 21.
Ceramic bodies, Process and apparatus for forming. E. T. Montgomery. 1,864,365; June 21.
Chain, Drive. D. B. Perry. 1,863,606; June 21.
Chair: *See*—
Road chair.
Chart reading device, Illuminated. H. House. 1,863,569; June 21.
Chromium, Electrolytic deposition of metallic. D. T. Ewing. 1,864,013; June 21.
Chromium plating process. D. T. Ewing. 1,864,014; June 21.
Chromium stripping bath. J. F. McCullough. 1,863,868; June 21.
Chuck. A. Eidam. 1,864,191; June 21.
Chuck. P. Forkardt. 1,864,423; June 21.
Circuit arrangement for sending of current impulses over telephone lines. R. Trecheinski. 1,864,381; June 21.
Circuit arrangement for transmitter tubes. W. Kummerer. 1,863,798; June 21.
Circuit breaking device. B. E. Mills. 1,864,144; June 21.
Circuit control system. P. Gray. 1,863,627; June 21.
Circuits, Method and apparatus for controlling electric. H. A. Mulvany. 1,864,049; June 21.
Clamp: *See*—
Bracket clamp. Mounting clamp.
Grounding clamp.
Clasp. S. A. Johnson. 1,864,356; June 21.
Cleaner: *See*—
Air cleaner. Spark plug cleaner.
Hole cleaner. Suction cleaner.
Rake cleaner. Wick cleaner.
Clip: *See*—
Contact clip.
Clip. H. S. Hanson. 1,863,902; June 21.
Clip for paper napkins. J. Short. 1,864,281; June 21.
Closure and gauge structure. P. J. Machonis. 1,864,138; June 21.
Closure for bottles, jars, and other containers. H. D. Jackson and F. White. 1,863,796; June 21.
Closure unit and gas trap control system, Sliding. W. McGraw and R. Woodward. 1,863,759; June 21.
Closures, Operating means for. T. L. Diggins. 1,863,923; June 21.
Clothes hanger. P. L. Lazarus. 1,863,664; June 21.
Clothes, Hanging. A. R. Rasmussen. 1,864,028; June 21.
Clothespin. R. L. Ball. 1,863,588; June 21.
Clothes washing device. B. Phillips. 1,864,467; June 21.
Clutch. W. Ferris. 1,864,126; June 21.
Clutch disk. G. L. McCain and K. Pfeiffer. 1,864,252; June 21.
Coach, Expanding. R. E. Lawhorne. 1,864,047; June 21.
Coffee machine. C. Berg and C. F. Cookson. 1,863,710; June 21.
Coffee maker or similar article. R. E. Patten. Des. 87,236–7; June 21.
Coil and making same. R. A. Connor. 1,863,713; June 21.
Coil, Electrical. I. N. Whitesmith. 1,864,331; June 21.
Coils, Cooling and ice tank. E. S. H. Baars. 1,863,892; June 21.
Coincidental lock. K. A. Brauning. 1,863,742; June 21.
Collar, Soft. H. D. Bob. 1,864,181; June 21.
Colored discharge effects, Production of. H. Werdenberg. 1,864,007; June 21.
Composition construction or insulating material. W. K. Nelson. 1,863,990; June 21.
Compressor control system, Automatic. W. E. Hughes. 1,863,851; June 21.
Compressor controlling mechanism. L. A. Maxson. 1,863,866; June 21.
Compressor system. F. A. Halleck. 1,864,132; June 21.
Compressor unloading mechanism. H. B. Halvorsen. 1,864,131; June 21.
Condensation products of aliphatic aldehyde bisulphite compounds with primary aromatic amines and making same. H. Fritzsche. 1,864,425; June 21.
Condenser system for rail cars. E. C. Walker. 1,864,286; June 21.
Conduction method and apparatus, Gaseous. C. G. Smith. 1,863,702; June 21.
Conductors, Manufacture of electrical. J. M. G. Fullman and L. J. Rittelmann. 1,863,979; June 21.
Conduit for piston machines, Supply. E. H. Steedman. 1,864,325; June 21.
Connecter, Adjustable. F. V. Donald. 1,863,970; June 21.
Connection, Nonmetallic. N. G. Madge. 1,864,080; June 21.
Contact clip. A. G. Steinmayer. 1,864,283; June 21.
Container. P. S. Campbell. 1,864,040; June 21.
Container. V. Jones. 1,864,069; June 21.
Container, Fireproof filing. B. F. Hannum. 1,864,350; June 21.
Container for compressed or liquefied gas. R. G. Wulff and C. V. Moody. 1,863,958; June 21.
Container, Match. E. S. Lindmark and F. C. Kaufmann. 1,863,724; June 21.
Container, Metal shipping. H. W. Monson. 1,864,313; June 21.
Containers, Producing. H. B. Rudd. 1,864,475; June 21.
Control device for vehicle doors. H. Pieper. 1,864,468; June 21.
Control mechanism. G. A. Combridge. 1,864,172; June 21.
Control mechanism. C. Volk. 1,864,329; June 21.
Controlling the load-speed characteristics of moving systems, Method and apparatus for. E. D. Doyle. 1,864,189; June 21.
Conveyer for sheet driers. B. F. Clark. 1,864,415; June 21.
Conveyer, Self-cleaning screen. W. C. Laughlin and A. B. Asch. 1,864,359; June 21.
Cooler: *See*—
Liquid cooler.
Coop or crate, Poultry. C. T. Hatch. 1,863,982; June 21.
Cop for weft shuttles. R. G. Turner. 1,863,815; June 21.
Cordage machine. F. Zettek. 1,864,162; June 21.
Core. R. Lüngen. 1,864,451; June 21.
Core samples of rock in bore holes, Apparatus and method of taking. A. Anderson. 1,864,113; June 21.
Cores, Making. W. H. Walter. 1,864,107; June 21.
Cotter pin. R. B. Franklin. 1,864,424; June 21.

Counter case, Display. W. Y. Whitley. 1,864,109; June 21.
Coupler. E. P. Barclay. 1,863,823; June 21.
Coupling: *See*—
Impulse coupling. Valve coupling.
Coupling. B. A. Moore. 1,863,870; June 21.
Coupling for pipes with threaded ends. J. Foucault. 1,863,978; June 21.
Cover for land vehicles. W. Woolcott. 1,863,957; June 21.
Cover, Ship's hatch. H. Cocks. 1,864,232; June 21.
Crankshaft and connecting rod for internal combustion engines. J. D. Miranda. 1,863,667; June 21.
Crosstalk, Apparatus and method for remedying. A. G. Chapman. 1,863,651; June 21.
Cultivator attachment. W. Zetzman. 1,864,394; June 21.
Cultivator attachment for tractors. E. M. Cole. 1,864,121; June 21.
Currents by means of a voltaic arc, Apparatus for recording electric alternating. H. Konemann. 1,863,560; June 21.
Curtain and similar woven stuff, Manufacture of. J. van den Bergh. 1,864,105; June 21.
Cutter: *See*—
Vegetable cutter.
Cutter for windshields, Ice. J. R. Lundberg. 1,864,208; June 21.
Cycle construction and packing. H. L. Kraeft. 1,863,859; June 21.
Dairy equipment. C. D. Marshall, jr. 1,863,603; June 21.
Dehydrator, Air. H. B. Hartman. 1,863,656; June 21.
Dental plastic composition. W. S. Crowell. 1,863,591; June 21.
Desk. J. P. Hameetman. 1,864,243; June 21.
Detachable plait hook. A. Richter. 1,863,638; June 21.
Detector: *See*—
Ground detector.
Die sets, Packing. E. A. Baumbach. 1,863,894; June 21.
Digger: *See*—
Potato digger.
Digger and loader, Hydraulic. R. B. North, F. G. Hough, and R. R. Miller. 1,863,696; June 21.
Dipper stick, Flexible. E. H. Lichtenberg. 1,863,632; June 21.
Disconnecting switch. F. J. Fischer. 1,863,626; June 21.
Dish washing machine. C. G. Hall. 1,864,004; June 21.
Disk tiller. W. H. Silver. 1,863,641; June 21.
Disks or caps and the like, Transferring or dispensing skirted paper. W. L. Wright and L. D. Pierce. 1,864,008; June 21.
Dispatch system, Pneumatic. F. R. Talsey. 1,864,157; June 21.
Dispenser. G. H. Packwood, jr. 1,863,871; June 21.
Dispenser. P. G. Wagner. Des. 87,246; June 21.
Dispenser, Powder. N. Kasdan, R. F. Landwehr, and D. Pollack. 1,863,856; June 21.
Dispenser, Soap powder. T. F. Hammer. 1,864,133; June 21.
Display device. A. H. Zeledon. 1,863,611; June 21.
Display system, Self-acting. R. Koller. 1,863,797; June 21.
Distributing and feeding apparatus. C. R. Kuzell. 1,863,905; June 21.
Distribution system. A. H. Mittag. 1,864,364; June 21.
Distributor for cotton gins. W. D. Wilson. 1,864,388; June 21.
Door construction. F. Ditchfield. 1,863,969; June 21.
Door control device, Jail. H. D. Garber and W. W. Meier. 1,864,347; June 21.
Doors, panels, and the like, Making veneered. E. C. Loetscher. 1,863,800; June 21.
Draft control, Automatic. B. Valjean. 1,864,223; June 21.
Draftsman's vernier protractor. A. Davie. 1,864,341; June 21.
Dress. M. L. James. Des. 87,215; June 21.
Dress. D. Long. Des. 87,223–4; June 21.
Drier for food products. A. P. D. Belanger. 1,864,178; June 21.
Drill. H. C. Norley. 1,863,802; June 21.
Drink dispensing apparatus, Coin-controlled. H. M. Austin. 1,864,175; June 21.
Drip collector, Self-sealing one-piece. S. M. Frenkel. 1,864,059; June 21.
Drive, Band saw pulley. P. Avilla. 1,863,822; June 21.
Drive control for planters. G. M. Kriegbaum and D. M. Morris. 1,864,309; June 21.
Drive mechanism, Dual. J. P. Rathbun. 1,864,217; June 21.
Drive mechanism for the rolls of rolling mills. P. Müller. 1,864,090; June 21.
Driving mechanism for calculating machines. A. Baumann and C. P. Horlacher. 1,863,646; June 21.
Drum brake. P. L. Gumaer. 1,864,500; June 21.
Dry cell battery. A. K. Huntley. 1,863,794; June 21.
Dyestuffs, Poly-azo. W. Hentrich and J. Hilger. 1,863,792; June 21.
Dyestuffs, Polymethine. O. Wahl. 1,863,679; June 21.
Dyestuffs, Vat. P. Nawiasky. 1,863,668; June 21.
Easel, Display. E. H. Glende. 1,863,594; June 21.
Educational device. M. Jewell. 1,864,022; June 21.
Egg candling machine. W. C. Wyland. 1,864,034; June 21.
Egg turning and tray holder. C. M. Lower. 1,864,449; June 21.
Elastic strand. W. J. Fox. 1,864,345; June 21.
Electric apparatus. G. W. Carpenter. 1,864,482; June 21.
Electric buzzer, Interrupter, and like vibratory device. B. D. Feild and T. C. Standbrook. 1,863,975; June 21.
Electric cell. G. W. Heise. 1,863,791; June 21.
Electric heating apparatus. E. S. Hebeler. 1,864,435; June 21.
Electric iron. A. L. Becket. 1,864,010; June 21.
Electric jiffy creaser. R. E. and O. M. Conley. 1,864,408; June 21.
Electric lock. W. Rosenbaum. 1,864,474; June 21.
Electric plating bath. J. F. K. McCullough and B. W. Gilchrist. 1,863,869; June 21.
Electric water heating device. L. Wyner and J. L. Wheeler. 1,864,035; June 21.
Electric welding apparatus. D. F. Pancoast. 1,863,933; June 21.
Electrical energy into rotary oscillation of a mass, Converting. W. Späth. 1,863,948; June 21.
Electrical measurement, Method and apparatus for. F. A. Pearson. 1,864,092; June 21.
Electrical steering device. F. E. Fisher. 1,863,567; June 21.
Electrical switch. B. J. Pepper. 1,864,369; June 21.
Electrical switch, Combination. E. Kaiser. 1,864,070; June 21.
Electrode for electric arc welding, Coated. B. Turner. 1,863,772; June 21.
Electrolytic apparatus. H. C. Harrison. 1,864,490; June 21.
Electrolyzer for the production of hydrogen and oxygen. G. Fauser. 1,864,344; June 21.
Electromagnetic switch. F. G. Creed, W. H. Storey, and R. D. Salman. 1,864,296; June 21.
Electron device. C. G. Smith. 1,864,378; June 21.
Elevator and water seal, Combined. W. P. Denny. 1,863,835; June 21.
Elevator construction. A. E. Prince. 1,864,093; June 21.
Engine: *See*—
Boat engine. Rotary engine.
Internal combustion engine.
Engine. F. J. Holmes. 1,864,248; June 21.
Engine frame. C. H. Stevens. 1,864,004; June 21.
Engines, Device for controlling internal-combustion. S. Creuels. 1,864,173; June 21.
Evaporating unit. R. T. Smith. 1,863,938; June 21.
Extracting and filtering apparatus. P. L. Fauth. 1,864,237; June 21.
Eyeglass attachment. W. B. Conrad. 1,864,123; June 21.
Fabric finishing. J. Robertson. 1,864,373; June 21.
Fabrics, Method and apparatus for making pile. E. H. Ward. 1,864,478; June 21.
Fading by diversity factor, Elimination of. H. O. Peterson. 1,863,695; June 21.
Fan. W. P. Aron. Des. 87,188; June 21.
Fan, Pliable. E. Riva. 1,863,997; June 21.
Fastener, Stovepipe. H. Monroe. 1,864,086; June 21.
Feed for covers or ends for containers. G. Flook. 1,864,422; June 21.
Feed water regulator. H. S. Fraser. 1,864,239; June 21.
Feeder, Chicken. P. P. Hess. 1,863,983; June 21.
Feeder for ingot molds. B. H. Howard. 1,863,559; June 21.
Fence, Highway guard. R. G. Williams. 1,864,159–60; June 21.
Film developing and progressing machine. G. M. Dye. 1,863,689; June 21.
Film guide for photographic cameras. O. Steiner. 1,864,100; June 21.
Film printing machine. A. Flint, A. Zimmerman, and J. G. Leo. 1,864,238; June 21.
Filter and rectifying system. J. Zubaty and F. D. Smith, jr. 1,864,332; June 21.
Firearm. H. Romberg and H. Schuler. 1,864,374; June 21.
Fire extinguisher, Air blast. C. Costa. 1,863,920; June 21.
Fireplace construction. R. C. Zornes. 1,864,036; June 21.
Fishing reel. C. T. Pflueger. 1,864,146; June 21.
Fitting, Fused attachment plug. L. Barnett. 1,863,824; June 21.
Fitting, Grounding. L. H. Church. 1,864,295; June 21.
Fixture, Lighting. G. Ainsworth. Des. 87,184–5; June 21.
Floating and cementing device for well casings. R. C. Baker. 1,863,613; June 21.
Floor construction. H. Le Quornik and D. Salvati. 1,863,753; June 21.
Flowmeter. A. A. Griffith, P. S. Kerr, and F. W. Meredith. 1,864,430; June 21.
Fluid compressor. H. B. Halvorsen. 1,863,845; June 21.
Fluid control device for aircraft. A. H. Evrard. 1,864,236; June 21.
Fluids, Disposing of dangerous. R. H. Lucas. 1,864,250; June 21.
Fluorine, Manufacture of. H. Krekeler. 1,863,661; June 21.
Flying machine. T. A. Dring. 1,864,012; June 21.
Food handling apparatus. D. A. Meeker. 1,864,209; June 21.
Footwear. R. T. Dawes. 1,863,592; June 21.
Footwear, Production of hot vulcanized. D. F. Wilhelmi. 1,863,954; June 21.
Form for making fireproof floor constructions. C. E. Gruber. 1,864,043; June 21.

Foxing applying machine. S. J. Finn. 1,863,747; June 21.
Foxing cementing machine. S. J. Finn. 1,863,900; June 21.
Frame: *See*—
Cap frame. Partition frame.
Engine frame.
Frame and holder, Combined sign. A. Sprung. Des. 87,244; June 21.
Frame for pictures, mottoes, and the like. F. H. Klie. Des. 87,221; June 21.
Frequency for radiosignaling, Method and apparatus for changing. L. Chretien. 1,863,564; June 21.
Fruit washing apparatus. A. O. Moe. 1,864,085; June 21.
Fuel box. H. E. Renfrow. 1,863,765; June 21.
Fuel mixture, Gaseous. G. C. Queich. 1,863,636; June 21.
Fuel, Solidified alcoholic. K. G. Bierlich. 1,863,962; June 21.
Fuels by destructive hydrogenation of carbonaceous material, Producing motor. M. Pier and M. Müller-Cunradi. 1,863,669; June 21.
Fuels, Production of nonknocking motor. M. Pier and K. Wissel. 1,864,496; June 21.
Fur breaking machine. R. H. Plass. 1,863,727; June 21.
Furnace: *See*—
High frequency furnace.
Furnace. C. L. Ipsen and A. N. Otis. 1,864,354; June 21.
Furnace construction. A. E. Morelock. 1,863,634; June 21.
Furnace installation, Electric. O. Eisenhut, A. Bass, and J. A. Meier. 1,864,485; June 21.
Furnace panel, Heat insulating. H. B. Aldrich. 1,864,333; June 21.
Furnaces, Metallic resistor for electric. T. F. Baily. 1,864,334; June 21.
Fuse block for automobiles. G. S. Mogliner. 1,863,932; June 21.
Fuse for antiaircraft projectiles. T. B. Doe. 1,863,838; June 21.
Fuse for artillery projectiles. A. Varaud. 1,863,888; June 21.
Fuse for projectiles. T. B. Doe. 1,863,837; June 21.
Game. E. and L. Livingston. 1,864,500; June 21.
Game board. A. B. Cooke. Des. 87,204; June 21.
Garage, Mechanical parking. E. Geiger. 1,863,748; June 21.
Garment bag. B. Wiesenfeld. 1,864,386; June 21.
Garment, Bust-supporting. V. Buchanan. 1,863,830; June 21.
Gas and smoke protection, Mechanical system for. F. J. Bridgeman. 1,863,965; June 21.
Gas attachment. M. W. Sarsfield. 1,863,806; June 21.
Gases from inclosed spaces, Removing. H. Miller. 1,864,084; June 21.
Gases from petroleum, Apparatus for removing. D. C. Atkins. 1,864,037; June 21.
Gasket. J. H. Victor. 1,864,328; June 21.
Gasket, All-metal. C. B. Bailey. 1,863,893; June 21.
Gathering pool. K. E. Peller. 1,864,495; June 21.
Gauge: *See*—
Indicator jaw gauge.
Gauge for film on calender rolls, Thickness. C. S. McChesney. 1,863,757; June 21.
Gear, Duplex compound draft. J. E. Muhfeld and J. Gutteridge. 1,864,272; June 21.
Gear, Landing. H. H. Harris. 1,864,134; June 21.
Gear mechanism. R. Chilton. 1,864,170; June 21.
Gear shift, Automatic. J. S. Tenbrook. 1,864,103; June 21.
Generator: *See*—
Oscillation generator. Ozone generator.
Germ destroying device, Suction cleaner. F. M. Schneider. 1,863,883; June 21.
Glass and the like, Melting. G. Zotos. 1,863,708; June 21.
Glass, Apparatus for feeding molten. E. H. Curtis, jr. 1,864,186; June 21.
Glass from mass, Method and apparatus for separating quantities of molten. O. M. Tucker and W. A. Reeves. 1,864,275; June 21.
Glass, Getting and delivering preformed charges of viscous. W. A. Reeves and O. M. Tucker. 1,864,276; June 21.
Glass, Getting and delivering formed charges of viscous. O. M. Tucker and W. A. Reeves. 1,864,278–9; June 21.
Glass, Process and apparatus for the manufacture of laminated. H. H. Baker. 1,864,176; June 21.
Glassware annealing leer. A. N. Cramer. 1,863,687; June 21.
Glassware, Manufacture of blown. T. Waugh, jr. 1,863,915; June 21.
Glove and method of making. C. H. Johanson. 1,864,439; June 21.
Gluing and assembling machine, Automatic. S. Madsen. 1,863,908; June 21.
Golf ball marking machine. C. E. Broman and W. H. Nowak. 1,863,828; June 21.
Golf, Practice device for. C. W. Ross. 1,864,030; June 21.
Governing mechanism. W. B. Flanders. 1,864,127; June 21.
Gravel spreader. C. W. Dearing. 1,863,968; June 21.
Grinder and polisher, Disk. R. Russell. 1,864,376; June 21.
Grinder, Centerless. W. H. Chapman. 1,863,832; June 21.
Grinder, External. C. T. Raule. 1,864,320; June 21.
Grinder, Meat. W. W. Dryden. 1,864,343; June 21.
Grinding. S. Einstein. 1,864,486; June 21.
Grinding, crushing, and mixing mill. J. Wass. 1,864,385; June 21.
Grinding machine. W. J. Kent. 1,864,071; June 21.
Ground detector. R. Schimpf. 1,863,583; June 21.
Ground, Exploring H. Löwy. 1,864,024; June 21.
Grounding clamp. S. N. Buchanan. 1,864,292; June 21.
Guard, Safety ring. A. Lev. 1,864,447; June 21.
Guard, Snow. R. J. Brinker and C. J. Brinker. 1,863,561; June 21.
Guard, Splash. W. McCollum. 1,864,456; June 21.
Hair waving device. W. E. Villinger. 1,864,383; June 21.
Handle: *See*—
Storage battery handle.
Handle anchoring means, Door lock. W. C. Devereaux. 1,864,342; June 21.
Hanger: *See*—
Clothes hanger.
Hanger attachment, Garment. H. G. Bliss. 1,863,649; June 21.
Harrow, Wide type rotary. W. S. Graham. 1,864,301; June 21.
Harvester, Combine. P. J. Hanson. 1,863,691; June 21.
Hay press discharge apparatus. C. E. Bernard. 1,863,648; June 21.
Headlight, Automobile. G. H. Ehlers. 1,864,418; June 21.
Heat exchanger. F. L. Wagar. 1,863,678; June 21.
Heat exchanger. E. Wilke. 1,863,586; June 21.
Heat, Method and apparatus for utilizing waste. C. Lorenzen. 1,864,448; June 21.
Heater: *See*—
Automatic heater. Water heater.
Heater. K. K. Wright. 1,863,781; June 21.
Heating pad. A. A. Arnold. Des. 87,187; June 21.
Heating system. A. H. Byfield. 1,863,712; June 21.
Heating system, Automobile. C. C. Nuss. 1,863,726; June 21.
Helmet. E. W. Till. 1,864,104; June 21.
Hemmer and strip guide, Combination. K. Maier. 1,864,503; June 21.
High frequency furnace. V. E. Legg. 1,864,076; June 21.
Hinge. G. W. Aldeen. 1,864,163–4; June 21.
Hinge. N. C. Wells. 1,863,889; June 21.
Hoist. C. A. Dickens. 1,864,124; June 21.
Holder. C. P. Walker. 1,863,585; June 21.
Holder and blade protector, Tool. J. M. Luers. 1,863,907; June 21.
Holder, Bouquet. G. J. Riley. 1,863,878–9; June 21.
Holder, Brush. E. J. Newcomer. 1,863,991; June 21.
Holder, Die. A. Rafter. 1,863,729; June 21.
Holder, Price ticket. P. Hopp. 1,864,491; June 21.
Holder, Tool. J. N. Peterson. 1,864,466; June 21.
Holder, Utensil. D. M. Brownson. 1,864,039; June 21.
Holding device for piece goods in suspended lines. M. Angerpointner. 1,864,114; June 21.
Hole cleaner. L. L. Richardson. 1,864,148; June 21.
Hole straightener, Collapsible. J. J. Santiago. 1,864,274; June 21.
Hook: *See*—
Detachable plait hook.
Hook for a gut string polishing machine. G. L. Matthews. 1,863,864; June 21.
Hopper, Knockdown grain drill. S. W. Cady and G. M. Kriegbaum. 1,864,294; June 21.
Hose, Flexible ventilating. W. H. Evans. 1,863,624; June 21.
Hosiery. L. L. Goodman. 1,864,017; June 21.
Housing, Pipe threading die. W. O. Thewes. Des. 87,245; June 21.
Hydrazo compounds and method of preparation. I. Ostromislensky. 1,863,763; June 21.
Hydrocarbons, Oxidation of liquid. M. Luther and H. Klein. 1,864,079; June 21.
Hydrogen, Manufacture of. J. Al. 1,863,681; June 21.
Ice from liquid carbon dioxide, Method and apparatus for manufacturing carbon dioxide. F. R. Zumbro. 1,864,396; June 21.
Ice scoring machine. J. R. Snow. 1,863,886; June 21.
Igniting device for cigars and cigarettes. F. E. Pikulski. 1,864,470; June 21.
Ignition control for internal combustion engines, Automatic. A. Kazenmaier. 1,863,857; June 21.
Immiscible substances, Method and apparatus for separating. L. D. Jones. 1,864,511; June 21.
Impulse coupling. I. E. Hendrickson. 1,864,246; June 21.
Indicator. G. A. Combridge. 1,863,684; June 21.
Indicator. G. A. Combridge. 1,864,171; June 21.
Indicator. G. E. Conover. 1,864,416; June 21.
Indicator for photographic devices. B. A. Kinsey. 1,864,442; June 21.
Indicator jaw gauge. A. Schraven. 1,863,673; June 21.
Inductor, Train control. D. H. Schweyer. 1,863,640; June 21.
Ink distributing device for printing presses. M. A. Cunningham. 1,864,340; June 21.
Ink rolling mill. W. H. Byrd. 1,863,831; June 21.
Inkwell. B. A. Tharrington. 1,864,263; June 21.
Insect barrier for trees. A. T. Repp. 1,863,672; June 21.
Insects, Apparatus for exterminating. P. E. Tracy. 1,863,584; June 21.
Instrument for detecting vibrations. O. S. Petty. 1,864,214; June 21.

Insulator for electric systems. H. Klemm. 1,863,631; June 21.
Insulator, Motor. J. W. Shields. 1,864,150; June 21.
Internal combustion engine. H. C. Gronbeck. 1,864,241; June 21.
Internal combustion engine. H. Rabezzana. 1,863,875; June 21.
Internal combustion engine. A. L. Rightenour. 1,863,877; June 21.
Iron: *See*—
Electric iron.
Iron or steel directly from the ore and controlling the sulphur content thereof, Producing. E. W. Davis. 1,863,622; June 21.
Iron oxide ore to its metallic form, Reducing. W. W. Percy. 1,863,804; June 21.
Jack: *See*—
Lifting jack.
Jar. E. W. Fuerst. Des. 87,208; June 21.
Jar closure. L. R. N. Carvalho. 1,863,896; June 21.
Jewelry box. J. M. Shields. 1,863,937; June 21.
Joint: *See*—
Steel truss joint.
Joint member and reenforcing rod support. J. N. Heitzel. 1,863,846; June 21.
Joint structure, Insulated. L. E. Hendee. 1,864,351; June 21.
Journal box, Roller bearing. A. O. Bucklus. 1,864,337; June 21.
Keyboard for typographical machines. L. W. Willis. 1,864,387; June 21.
Keys to can ends, Welding. J. C. Holloway. 1,863,850; June 21.
Kite. L. E. Johnson. 1,864,197; June 21.
Knitting machine and method of knitting. R. H. Lawson and W. L. Smith, jr. 1,863,720; June 21.
Knitting machines, Lace-clock mechanism for full-fashioned. M. Zwicky. 1,864,112; June 21.
Knitting machines, Striping attachment for circular. F. W. Robinson. 1,864,321; June 21.
Lace. S. H. Page. Des. 87,232–5; June 21.
Lacquers, Cellulose ester. G. Steimmig. 1,864,099; June 21.
Lamp. W. Hoffmann. Des. 87,213; June 21.
Lamp. A. Sabath. 1,863,607; June 21.
Lamp, Automobile signal. J. Evich. Des. 87,207; June 21.
Lamp bulb, Inside coated. A. M. Hageman and A. F. Lindstrom. 1,864,271; June 21.
Land leveler. W. E. Fisher. 1,864,042; June 21.
Landing field light. F. R. House. 1,864,436; June 21.
Latch. C. C. Batina. 1,864,177; June 21.
Latch for auto hoods, Inner. E. R. Marbach. 1,863,863; June 21.
Latch, Locker. S. N. Hope. 1,864,306; June 21.
Latch locking device. W. J. Kerwin. 1,864,358; June 21.
Leather shaving machine. F. Wayland. 1,863,777; June 21.
Lifting jack. M. B. Lucker. 1,864,207; June 21.
Light: *See*—
Landing field light.
Light device, Traffic. W. G. Keith and J. A. Manarik. Des. 87,219; June 21.
Light signal. W. B. Wells. 1,864,224; June 21.
Lighting fixture. A. J. D. Ohm. 1,864,145; June 21.
Lining, Sock. M. Lapidus. 1,864,204; June 21.
Liquid cooler. F. R. Zumbro. 1,864,397; June 21.
Liquid dispensing system. W. H. De Lancey. 1,864,233; June 21.
Liquid filtering apparatus. N. E. Nilsson. 1,863,992; June 21.
Liquid-level-regulator, Automatic. R. Bodemuller. 1,864,402; June 21.
Liquids, Apparatus for evaporating and distilling. D. G. Jack. 1,864,021; June 21.
Liquids, Evaporating. F. X. Govers. 1,864,349; June 21.
Liquids, Process and apparatus for heating. H. Feldmeier and R. J. Wightman. 1,863,786; June 21.
Loading device, Log barge. J. T. Wilband. 1,863,953; June 21.
Lock: *See*—
Coincidental lock. Electric lock.
Lock. W. Goroshko and G. Laput. 1,864,429; June 21.
Lock for driving gears, Reverse. I. G. Meyer. 1,864,142; June 21.
Locomotive sanding trap. V. F. Frantz and G. H. Knauff. 1,864,057; June 21.
Locomotive structure. C. W. Kell. 1,864,202; June 21.
Loom for the manufacture of pile fabrics. P. Venall. 1,864,106; June 21.
Loom, Loose reed. W. E. Lundgren. 1,863,862; June 21.
Looms, Dobby finger for. E. R. Holmes. 1,863,847; June 21.
Looper-adjusting means for buttonhole sewing machines. F. A. Reece. 1,864,218; June 21.
Loud-speaker. F. A. Kolster and S. A. Solle. 1,864,308; June 21.
Loud speaker apparatus and methods. R. A. Fessenden. 1,863,840; June 21.
Lubricating compound from perforated sheet metal, Removing. W. J. Purser. 1,864,257; June 21.
Lubricating device, Rail. H. G. Becker. 1,864,000; June 21.
Lubricator. G. W. Hall. 1,864,195; June 21.
Lumber, Process and apparatus for drying. F. W. Rubin. 1,863,943; June 21.
Luminair for corridors, etc. J. L. Stair. 1,863,703; June 21.
Luminous tube. W. O. Prouty. 1,863,996; June 21.
Machine adjusting the timing of a fuse for a projectile. F. Johenning. 1,863,659; June 21.
Machine and process for generating gears. E. J. Lees. 1,863,571; June 21.
Machine for bending metal tubes in the cold state. C. Mingori. 1,863,693; June 21.
Machine for cementing belting. W. S. Griffith. 1,863,595; June 21.
Machine for cutting threads and cutting teeth in bodies. E. J. Lees. 1,863,570; June 21.
Machine for dividing and working dough. E. Bernlöhr. 1,864,401; June 21.
Machine for forming composite can bodies. V. Hendrickson. 1,863,770; June 21.
Machine for forming seaming strips. G. E. Snow. 1,863,771; June 21.
Machine for lasting stitchdown shoes. B. T. Leveque. 1,864,510; June 21.
Machine for manufacturing bolt blanks. W. Z. Lozier. 1,864,450; June 21.
Machine for manufacturing hollow concrete bricks. V. C. Duff. 1,863,839; June 21.
Machine for soldering side seams of can bodies. J. J. Engelman. 1,864,419; June 21.
Machine for the retail marketing of block cheese and the like. D. J. Bradshaw. 1,864,404; June 21.
Machine for threading bolts and the like objects. H. C. Ellison. 1,864,235; June 21.
Magnesia from dolomite, Extracting. A. Brosche. 1,863,966; June 21.
Magnesia process and magnesium values recovery. H. W. Greider. 1,864,063; June 21.
Magnetic material. G. W. Elmen. 1,864,054; June 21.
Manifold construction. H. G. Sanger. 1,863,934; June 21.
Manifolding material. J. Q. Sherman. 1,864,097; June 21.
Marker, Garden. C. R. Stewart. 1,863,608; June 21.
Marking device. G. D. Crotty. 1,864,411; June 21.
Massage apparatus, Self. A. Roos. 1,864,258; June 21.
Mat: *See*—
Running board mat.
Match box. J. Josinsky. 1,864,440; June 21.
Material, Apparatus for the regeneration of adsorption. V. Pantenburg. 1,863,803; June 21.
Material, Manufacture of building. L. E. Welch. 1,864,287; June 21.
Materials containing nickel and/or cobalt, together with copper, iron, lead, and precious metals, Treatment of. W. Schopper. 1,863,807; June 21.
Materials, Reducing zinciferous. E. H. Bunce. 1,863,711; June 21.
Measuring instrument or gauge. H. G. Riebeling. 1,864,472; June 21.
Meat hanging method. J. Burns. 1,863,743; June 21.
Meat mold. M. Vanderkloot. 1,863,609; June 21.
Meat rack. W. A. Geiger. 1,863,714; June 21.
Metabolism factor, Basal. E. I. McKesson. 1,863,929; June 21.
Metal building construction. R. P. Hutchinson. 1,863,692; June 21.
Metal for use in unidirectional current carrying devices, Preparing. L. O. Grondahl. 1,863,843; June 21.
Metallic structure. F. Fillod. 1,863,746; June 21.
Metals and metal alloys, Device for the refining, mixing, and purifying of molten. F. W. Corsalli. 1,863,686; June 21.
Metals from metallic initial materials, Separating and recovering nonferrous. W. Witter. 1,864,161; June 21.
Metals from their ores, Recovery of. L. G. Jenness. 1,863,599; June 21.
Mill: *See*—
Grinding, crushing and mixing mill. Ink rolling mill.
Rolling mill.
Minerals by flotation, Separation of. F. G. Moses, R. W. Hess, and R. L. Perkins. 1,863,760; June 21.
Mining machine. M. P. Holmes. 1,863,848; June 21.
Mining machine. L. A. Maxson. 1,863,865; June 21.
Mirror set for automobiles, Combination rear view. J. Fotakis. 1,864,015; June 21.
Mold: *See*—
Meat mold. Vulcanizing mold.
Permanent mold.
Mold for nonferrous castings. V. P. Schmidt and H. A. Brenaman. 1,863,935; June 21.
Monoaminodibenzopyrenequinone, Derivatives of. M. A. Kunz, K. Koeberle, and E. Berthold. 1,863,662; June 21.
Mortise and tenon machine, Portable. A. E. Mitchell. 1,863,605; June 21.
Motion, Apparatus for transmitting rotary. R. D. Given. 1,864,348; June 21.
Motion picture screen, Portable. G. P. Lewis and R. E. Sabin. 1,864,077; June 21.
Motor: *See*—
Synchronous motor.
Motor. H. H. Ingersoll. 1,863,795; June 21.
Motor. H. R. Vogel. 1,863,769; June 21.
Motor control, System of electric. C. J. H. Trutch. 1,864,327; June 21.

Motor driving mechanism, Wave. R. C. Grigsby. 1,864,499; June 21.
Mounting clamp, Wing. V. G. Souder and H. B. Trix. 1,863,939; June 21.
Mounting, Ophthalmic. N. M. Baker. Des. 87,189; June 21.
Name plate. L. Melind. 1,863,633; June 21.
Napkin or similar article, Paper. R. W. Beach. Des. 87,190–1; June 21.
Needle, Knitting. B. L. Malkind. 1,864,362; June 21.
Negative resistance. M. M. Dolmage. 1,863,566; June 21.
Nitrocellulose plasticizer and pigment grinding composition. C. W. Simms, W. J. Bannister, and L. C. Swallen. 1,864,151–2; June 21.
Nozzle. J. Rigby. 1,864,473; June 21.
Nozzle, Spraying. C. C. Covey. 1,863,085; June 21.
Oarlock. E. Sisson. 1,864,098; June 21.
Odometer reset mechanism. I. Wedin. 1,864,330; June 21.
Oil and reagents, Treating. G. H. Burruss. 1,863,967; June 21.
Oil reclaiming and purifying system. C. J. Rodman and R. F. Dunmire. 1,864,095; June 21.
Oil temperature regulator. R. G. Dykeman and D. W. Watkins. 1,864,052; June 21.
Oiler, High pressure. E. H. Morrow. 1,863,911; June 21.
Oiling mechanism, Valve tappet. L. H. Morrill. 1,864,314; June 21.
Oils and hydrocarbon products of low boiling point, Production of viscous. M. Pier. 1,863,670; June 21.
Ores, Treatment of precious metal bearing. S. J. Swainson and A. E. Anderson. 1,864,222; June 21.
Ornament or similar article, Automobile radiator. L. Lowery. Des. 87,225; June 21.
Ornament or similar article, Cake. W. F. Seidel. Des. 87,243; June 21.
Ornaments to wearing apparel, Securing. W. L. Myers. 1,863,580; June 21.
Oscillation generator, Electrical. A. M. Nicolson. 1,864,368; June 21.
Oven ejector, Bake. M. Olsen. 1,864,462; June 21.
Ozone generator. D. W. Davis. 1,864,174; June 21.
Pad: *See*—
Spring pad.
Pad and ring, Hospital. M. Hart. 1,864,434; June 21.
Panel frame construction. L. L. Levene. 1,863,722; June 21.
Paper and making the same, Coated. A. W. Schorger. 1,863,731; June 21.
Paper board, Corrugated. C. DeL. Wood, sr. 1,863,706; June 21.
Paper folding machine. C. S. Beall. 1,863,709; June 21.
Paper, Indented. W. H. Ellis, jr. 1,863,973; June 21.
Paper, Making nonbleeding crepe. G. R. Alden and T. Nelson. 1,863,813; June 21.
Paper manufacture. H. T. Ruff. 1,864,220; June 21.
Paper pulp, Method of and apparatus for beating. W. N. Sherwood. 1,863,808; June 21.
Paper sheet, Multiply. C. DeL. Wood, sr. 1,863,707; June 21.
Paper size and making same. A. E. Maze. 1,863,867; June 21.
Papers for security purposes, Production of. V. Bausch and A. Schroth. 1,864,116; June 21.
Parachute opening device. J. K. De Witt. 1,864,298; June 21.
Partition frame. O. J. Larson. 1,864,205; June 21.
Partition post or pilaster. O. J. Larson. 1,864,206; June 21.
Partition wall construction. L. L. Levene. 1,863,723; June 21.
Partition walls, Stiffening. L. L. Levene. 1,863,721; June 21.
Pen, Fountain. H. L. Fischer and C. A. Ward. 1,863,925; June 21.
Pen, Fountain. H. A. Myers. 1,864,050; June 21
Pencil, Mechanical. P. Barberon. 1,864,038; June 21.
Pencil pointer and refuse receptacle, Combination. H. Bosch, jr. 1,863,616; June 21.
Percussion and rotary drill, Combination. J. A. MacDonell. 1,863,928; June 21.
Permanent mold. M. Guyot. 1,864,242; June 21.
Phenylglycine and product thereof, Treating. J. F. Walt. 1,863,735; June 21.
Phonograph record. E. L. Bowles. 1,863,683; June 21.
Photographic developers, Testing. I. H. Parsons. 1,864,091; June 21.
Photographic printing machine. A. S. Howell. 1,863,657; June 21.
Photography and cinematography in natural colors, Apparatus for. R. Berthon. 1,863,739; June 21.
Pick, Ice. C. Lorber. 1,863,801; June 21.
Pick-up mechanism for combines and the like. E. D. Richardson. 1,863,637; June 21.
Pictorial display apparatus. G. W. Eschenbach. 1,863,623; June 21.
Pictures, Producing composite. C. G. Briel. 1,863,826–7; June 21.
Pigment, Composite. W. J. O'Brien. 1,864,504; June 21.
Pigment for coated paper. V. A. Lauderman. 1,863,663; June 21.
Pigmented coating compositions and making same, Noncaking. C. Coolidge and H. S. Holt. 1,863,834; June 21.
Pin: *See*—
Cotter pin.
Pipe: *See*—
Smoking pipe.
Pipe cleaning method. H. Lodde. 1,863,755; June 21.
Pipe coupler. L. H. Church. 1,864,339; June 21.
Pipe joint filler. A. Larsen. 1,863,906; June 21.
Pipe rotating apparatus. W. W. Wilson. 1,864,389; June 21.
Pipe slip. F. J. Young. 1,864,111; June 21.
Piston. R. Ware. 1,864,384; June 21.
Plant for the manufacture of ceramic products. W. L. Hanley, jr., D. B. Hendryx, and G. W. Holbrook. 1,863,628; June 21.
Planter attachment for cultivators. A. A. Scarlett. 1,864,280; June 21.
Plants for the manufacture of sheets of glass. J. H. LeMaire. 1,864,360; June 21.
Plastic material, Apparatus for shaping. F. W. Preston. 1,864,319; June 21.
Plate or similar article. Y. Buma. Des. 87,195–9; June 21.
Plate, Lithographic or offset printing. F. Fischer. 1,863,976; June 21.
Plate structure, Center. W. M. Sheehan. 1,864,154; June 21.
Platform for gallery work in tunnels, Working and loading. C. H. Hoelfeldt-Lund. 1,863,984; June 21.
Platform, Loading zone signal. W. G. Keith and J. A. Manarfik. Des. 87,220; June 21.
Plow. C. G. Strandlund. 1,863,812; June 21.
Plow, Soil changing. W. C. Stumpf. 1,864,262; June 21.
Plug cap, Attachment. H. Hubbell, jr. 1,864,353; June 21.
Pocketknife. R. E. Brown. 1,844,011; June 21.
Portable stand. J. L. Lufkin. 1,863,756; June 21.
Pot: *See*—
Annealing pot.
Potato digger. J. L. Twentyman. 1,864,382; June 21.
Potato digging machine. G. O. Currie. 1,864,484; June 21.
Power operating mechanism for typewriters. E. T. Cope, R. D. Parkinson, and F. M. Price. 1,863,744; June 21.
Power unit. R. Hoe. 1,864,304; June 31.
Press: *See*—
Bacon press. Rotary press.
Press attachment, Printing. J. N. Canning. 1,864,231; June 21.
Products of latex character and producing the same. M. Luther and C. Heuck. 1,864,078; June 21.
Protector, Casing. W. I. Bettls. 1,863,740; June 21.
Protector, Finger and hand. A. H. Aronson. 1,863,960; June 21.
Protector, Pail. H. L. Kaufman. 1,864,200; June 21.
Pump. E. A. Davis. 1,864,412; June 21.
Pump, Engine operated fuel. E. A. Rockwell. 1,864,219; June 21.
Pump, Oil well. H. F. Watkins. 1,863,643; June 21.
Pump plunger and standing valve. J. W. Pippin. 1,864,469; June 21.
Pump, Pneumatic. H. S. Rogers. 1,863,941; June 21.
Pump, Rotary. T. W. Nichols. 1,864,458; June 21.
Pump, Turbine. A. Hollander. 1,863,849; June 21.
Pump, Sirup. A. W. Lissauer and S. Vermilye. 1,863,754; June 21.
Pumping apparatus, Pneumatic. G. B. Small. 1,863,701; June 21.
Punch. J. B. Gormley. 1,863,901; June 21.
Pyranthrone, Substitution products of. M. A. Kunz, K. Koeberle, and E. Berthold. 1,863,987; June 21.
Rack: *See*—
Meat rack.
Rack for refrigerators, Ice. F. Ophuls and G. K. Nuss. 1,864,212; June 21.
Radiator cap. W. R. Milner. Des. 87,231; June 21.
Radiator, Heat. H. C. Alberts. 1,863,554; June 21.
Radiator, Sheet metal. R. Castlaux. 1,863,555; June 21.
Radio. O. T. Francis. 1,863,568; June 21.
Radio and phonograph reproduction, Method and apparatus for coordinating. R. A. Fessenden. 1,863,841; June 21.
Radio apparatus. R. L. Maurer. 1,863,909; June 21.
Radio program exhibitor. S. H. Hall. 1,863,789; June 21.
Radio sets, Selective control mechanism for. H. R. Miller. 1,863,931; June 21.
Radio signaling system, Two-way. L. L. Smith. 1,864,498; June 21.
Rail, Guard. C. Burton. 1,863,783; June 21.
Railway system, Elevated. F. R. Sheridan. 1,864,323; June 21.
Rake cleaner. J. Velkover. 1,864,264; June 21.
Rat trap. F. Silva. 1,863,768; June 21.
Razor. M. B. Behrman. Des. 87,192; June 21.
Receptacle for frozen products. W. R. Willauer. 1,863,736; June 21.
Recording apparatus. H. J. McCreary. 1,864,363; June 21.
Recording apparatus. D. E. and O. S. Petty. 1,864,213; June 21.
Recuperator. G. D. Moomaw. 1,864,087; June 21.
Reel: *See*—
Fishing reel.
Reel. V. H. Carouso. 1,863,620; June 21.

Refrigerating apparatus. H. W. Kleist. 1,863,718; June 21.
Refrigerating apparatus. C. C. Palmer. 1,863,635; June 21.
Refrigerating system. J. G. King. 1,863,750; June 21.
Refrigerator. W. C. Marshall. 1,864,140; June 21.
Refrigerator, Soda fountain. M. A. Rosenthal. Des. 87,242; June 21.
Register: *See*—
Cash register.
Regulating system. L. L. Cunningham. Re18,503; June 21.
Regulator: *See*—
Feed water regulator. Oil temperature regulator.
Liquid-level regulator.
Relay. J. H. Derby and H. G. Leach. 1,863,836; June 21.
Relay mechanism. B. R. Padmore. 1,863,694; June 21.
Resin, Synthetic. L. Rosenthal. 1,863,881; June 21.
Resins, Synthetic. L. Rosenthal. 1,863,814; June 21.
Resistor unit. H. L. Bradley. 1,864,336; June 21.
Reverse motion brake, Self-engaging. H. T. Cottrell. 1,863,556; June 21.
Rifles, Attachment for bolt action. F. C. Watson. 1,863,776; June 21.
Ring. B. F. Brogan. 1,863,617; June 21.
Ring. L. E. Powell. 1,864,318; June 21.
Ring, Making a. B. F. Brogan. 1,863,618; June 21.
Ring or similar article. G. Demay. Des. 87,206; June 21.
Rivet. R. W. Sieffert. 1,864,377; June 21.
Road and rail transport. A. H. O. Moncrieff and J. Shearman. 1,863,575; June 21.
Road chair. H. W. Nester. 1,863,581; June 21.
Robot for signaling devices. G. W. MacKenzie. 1,864,203; June 21.
Rocks with nitrous vapors in a continuous cycle, Treatment of leucitic. F. Jourdan. 1,863,986; June 21.
Rolling mill. J. E. Fawell. 1,864,299; June 21.
Roof and floor construction. C. A. Martin. 1,864,025; June 21.
Roofing material. W. H. Finkeldey. 1,864,055; June 21.
Rope, Apparatus for treating wire. G. C. Burd. 1,864,293; June 21.
Rope, Treating wire. G. C. Burd. 1,864,338; June 21.
Rotary engine. C. W. Christ. 1,864,406; June 21.
Rotary furnace. E. Weiss. 1,863,952; June 21.
Rotary press, Web printing. H. M. Barber. 1,864,166–7; June 21.
Rotogravure printing machine. H. Fischer. 1,864,192; June 21.
Rubber articles, Manufacturing. E. Hazell. 1,864,044; June 21.
Rubber latex and product, Treating. W. A. Gibbons. 1,864,060; June 21.
Rubber rings to hot fruit jars, Device for applying. M. T. Sueper. 1,863,704; June 21.
Rubber, Treatment of. L. H. Howland. 1,864,067; June 21.
Rug tufting machine. J. E. Chalman. 1,864,414; June 21.
Ruler. S. M. Schenkein. 1,864,096; June 21.
Running board mat, Vehicle. F. Klein. 1,863,660; June 21.
Safe, Cake. H. Hermani. 1,863,790; June 21.
Safe, Provision. H. Hermani. 1,863,793; June 21.
Safety device for corn shredders. G. M. Merwin. 1,864,312; June 21.
Safety device for suspended doors. H. C. Ball, C. R. Jackson, W. B. Keller, and J. Z. Winder. 1,863,961; June 21.
Safety mechanism for cranes. W. J. Keenan and G. Sather. 1,863,630; June 21.
Sandal. M. Meyer. 1,864,254; June 21.
Sash operating device, Window. B. E. McIntyre. 1,864,253; June 21.
Sausages for display, Imitation. W. F. Henderson. 1,864,245; June 21.
Saw swage. C. Morey. 1,863,910; June 21.
Scarifier. R. W. Willig. 1,863,780; June 21.
Scraper and leveler. C. Le Bleu. 1,863,861; June 21.
Scrapers, Auxiliary loading wing for. W. H., I. D., and R. E. Guy. 1,863,844; June 21.
Sealing means for tire valves. D. H. Spicer. 1,864,001; June 21.
Screen: *See*—
Motion picture screen.
Seaplane. H. H. Semmes. 1,863,944; June 21.
Seat: *See*—
Window seat.
Securing device for panels or the like. E. H. Giblan. 1,864,130; June 21.
Selecting mechanism. S. Morton. 1,864,088; June 21.
Selector mechanism. B. E. Mills. 1,864,143; June 21.
Sewing machine. E. B. Allen. 1,864,165; June 21.
Sewing machine. J. A. Knox. 1,864,136; June 21.
Sewing machines, Fabric guide support for. K. Maier. 1,864,501; June 21.
Sewing machines, Feeding mechanism for. F. Lutz. 1,864,452–3; June 21.
Sewing machines, Feeding mechanism for. K. Maier. 1,864,502; June 21.
Sewing machines, Feeding mechanism for. F. F. Zeier. 1,864,390; June 21.
Sewing machines, Indicating attachment for. S. Picard. 1,864,370; June 21.
Sewing machines, Overedge stitch forming mechanism for. F. F. Zeier. 1,864,391; June 21.
Sewing machines, Thread controller for. N. V. Christensen, C. F. Rubel, and F. F. Zeier. 1,864,407; June 21.
Sewing machines, Thread controller for. F. F. Zeier and C. F. Rubel. 1,864,392; June 21.
Shade and lamp, Lamp. B. H. Shapiro. 1,863,767; June 21.
Shampoo board. H. Lalic. 1,863,860; June 21.
Shank stiffener. J. B. Hadaway. 1,863,690; June 21.
Sharpener, Razor blade. J. Holtzman. 1,864,065; June 21.
Shear structure for glass machinery. O. M. Tucker and W. A. Reeves. 1,864,277; June 21.
Shelving, Metal. L. H. Fenstermaker. 1,863,625; June 21.
Ships, Remodeling the stern structure of. M. J. Hanlon. 1,864,433; June 21.
Shock absorber. J. W. Listerman. 1,863,665; June 21.
Shoe. F. Parlante. 1,864,506; June 21.
Shoes, Lasting. E. I. La Chapelle. 1,863,752; June 21.
Shoes, System of manufacturing. M. O. Frost. 1,863,557; June 21.
Shrine. M. Hague. Des. 87,211; June 21.
Sickle blade remover. R. E. Brewer. 1,864,405; June 21.
Sign. T. R. Willwerscheid. 1,863,955; June 21.
Signal: *See*—
Light signal. Traffic signal.
Stop signal.
Signaling device, Automobile. W. B. Owen. 1,864,464; June 21.
Signaling device for motor vehicles, Automatic. P. Delmas. 1,863,688; June 21.
Signaling device operated by the oscillations of the rails, Automatic. N. Gherassimoff. 1,864,016; June 21.
Signaling system. F. H. Nicholson and H. A. Thompson. 1,864,367; June 21.
Signaling system, Multiplex. W. Bruckell. 1,863,829; June 21.
Signals, Apparatus for the control of highway crossing. C. W. Bell. 1,864,179; June 21.
Silver alloy, Chemically resistant. P. Assmann. 1,863,612; June 21.
Silver alloy, Chemically resistant. P. Assmann. 1,863,645; June 21.
Sink positioning mechanism. E. N. Cavert. 1,864,184; June 21.
Skiving machine. F. Meihsner. 1,864,141; June 21.
Slab ceiling construction and means for hanging the slabs. C. F. Davis and E. R. Saunders. 1,863,565; June 21.
Sleigh, Motor driven. H. B. Emigh. 1,864,041; June 21.
Slitting means. J. A. Cameron. 1,863,619; June 21.
Smoker's appliance. D. Berger. 1,864,400; June 21.
Smoker's stand. C. D. Bunker. Des. 87,200; June 21.
Smoker's stand. M. Chapuis. Des. 87,202; June 21.
Smoking case. W. Schnell and J. B. Flynn. 1,863,884; June 21.
Smoking pipe. D. Copell. 1,864,410; June 21.
Smoking pipe. E. C. Gunnarson. 1,864,432; June 21.
Snow, Making carbon dioxide. F. R. Zumbro. 1,864,399; June 21.
Snowplow. E. Pitcher. 1,864,215; June 21.
Snowplow. C. A. Wetmore. 1,863,610; June 21.
Socks and stockings, Preventing wear of. J. Parsons. 1,864,465; June 21.
Sodium, potassium, and magnesium chlorides from natural brines, Recovering. H. B. Kipper. 1,863,751; June 21.
Solids, Apparatus for handling. F. B. Allen. 1,864,009; June 21.
Spark-plug cleaner, Coin-operated. M. H. Kleinfeld. 1,864,072; June 21.
Speed propeller, Variable. B. F. Kellogg and F. M. Kent. 1,864,045; June 21.
Speed surfacing machine, Variable. M. W. H. Wilson. 1,864,226; June 21.
Spoons and similar articles, Manufacturing. K. Springorum. 1,864,003; June 21.
Spout. W. J. Geist. 1,863,787; June 21.
Spray guns, Multicolor attachment for. H. L. Young. 1,863,782; June 21.
Spraying apparatus. C. P. McCormick. 1,864,505; June 21.
Spraying device. S. Deutsch. 1,864,188; June 21.
Spraying device. H. E. Dunn. 1,863,924; June 21.
Spraying device, Vegetable. J. Tyler. 1,863,914; June 21.
Spraying system. J. A. Brooks. 1,863,919; June 21.
Spring pad. A. H. Adams. 1,863,738; June 21.
Spring suspension. R. C. Hoffman. 1,864,247; June 21.
Spring suspension for vehicles. O. Muller. 1,864,089; June 21.
Springs while lacing, Apparatus for holding coil. H. H. Poyner. 1,864,216; June 21.
Stair for railroad coaches and the like. E. S. Eberlein. 1,864,053; June 21.
Stand: *See*—
Portable stand. Tire stand.
Starting apparatus, Engine. R. M. Nardone. 1,864,256; June 21.
Steak and method of producing same. H. F. Taylor. 1,864,284–5; June 21.
Steam boiler. A. Lipetz. 1,864,310; June 21.
Steel, Annealing nitrided. W. J. Merten. 1,864,083; June 21.
Steel truss joist, Structural. F. Wells. 1,863,817; June 21.
Stellite, Forge-welding. O. Severson. 1,864,497; June 21.

Stereoscopic cinematography. E. P. L. Le Barbier. 1,864,445; June 21.
Stitch forming mechanism, Overedge. F. F. Zeier and C. F. Rubel. 1,864,393; June 21.
Stocking or half hose and making the same. R. H. Lawson and W. L. Smith, jr. 1,863,719; June 21.
Stoking device, Automatic. F. W. Vodoz. 1,863,677; June 21.
Stone setting for ring tops and the like, Interchangeable. G. Prussian. 1,864,371; June 21.
Stool, Foot. W. R. McGowen. Des. 87,229–30; June 21.
Stool steps, Convertible. E. E. Beck. 1,863,614; June 21.
Stop mechanism for coin counting machines. E. P. Donnellan. 1,863,971; June 21.
Stop signal. E. M. Hicks. 1,864,018; June 21.
Storage battery handle. E. H. Bridge. 1,864,168; June 21.
Stove, Electric cook. C. A. Pierson. Des. 87,239; June 21.
Stove, Gas. W. F. Rogers. 1,863,942; June 21.
Strainers, Antisplash device for liquid. L. Rosenfeld. 1,863,805; June 21.
Straw walker. H. S. Taylor. 1,864,005; June 21.
Strip, Antisqueak and finish. E. F. Tannewitz. 1,864,326; June 21.
Strip apparatus, Continuous predetermined characteristic. E. R. Powell. 1,864,317; June 21.
Structure, Interchangeable. J. E. Schmidt. 1,863,913; June 21.
Structures, Cutting and binding stranded. G. C. Burd. 1,864,169; June 21.
Submarine escape. C. E. C. Rademacher. 1,864,471; June 21.
Substances, Method of and composition for preserving. L. J. Christmann and D. W. Jayne, jr. 1,864,185; June 21.
Suction cleaner. H. H. Boyer. 1,864,182; June 21.
Sugar, Purification of wood. E. Färber. 1,863,654; June 21.
Suit, Bathing. G. E. Rutledge. 1,864,476; June 21.
Sulphur, Recovery of. R. F. Bacon and H. T. Hotchkiss, jr. 1,864,290; June 21.
Sulphur, Recovery of. R. F. Bacon and H. T. Hotchkiss, jr. 1,864,480; June 21.
Support, Adjustable roof scaffold. A. O. Nelson. 1,864,457; June 21.
Support, Curtain. F. E. Masselin. Des. 87,226; June 21.
Support, Fabric canopy. J. H. Bonnet. 1,863,963; June 21.
Support for hot tops. E. L. Messler. 1,863,574; June 21.
Support, Photographic camera. J. G. Zuber. 1,863,891; June 21.
Support, Seat. L. B. Sperry. 1,864,282; June 21.
Supporting device, Portable. H. Neuwirth. 1,863,761; June 21.
Supporting structure, Curtain. F. E. Masselin. Des. 87,227; June 21.
Surgical equipment. E. I. McKesson. 1,863,930; June 21.
Sweater or analogous article. A. H. Geuting. Des. 87,209; June 21.
Switch: *See*—
Disconnecting switch. Electromagnetic switch.
Electrical switch. Time switch.
Switch. H. E. Norviel. 1,864,459; June 21.
Switch and coil unit. H. E. Norviel. 1,864,460; June 21.
Switch for door openers, Motor reversing. H. W. Crane. 1,863,922; June 21.
Switch mechanism. O. S. Jennings. 1,863,999; June 21.
Switch mechanism for signal and other electrical circuits. R. B. James. 1,863,658; June 21.
Switch throwing means. J. W. Berry and R. McKnight. 1,864,117; June 21.
Switches and the like, Quick-acting mechanism for electric. W. H. Weinrich and F. C. Geiler. 1,864,158; June 21.
Synchronous motor. R. H. Whitehead and W. E. Porter. 1,864,108; June 21.
Syringe. F. S. Dickinson. 1,863,785; June 21.
System including space discharge device. A. A. Oswald. Re18,501; June 21.
Tack machine. G. B., H. B., and E. C. Baker. 1,864,266–8; June 21.
Tack machine. G. B. Baker. 1,864,269; June 21.
Tank fixture, Flush. A. A. Briggs. 1,863,589; June 21.
Tank for laundry machines. G. W. Dunham. 1,864,190; June 21.
Tank for water pipe lines, Surge. H. T. Porter. 1,863,728; June 21.
Tapes to garments, Securing. B. Lustgarten. 1,863,725; June 21.
Teething device. L. N. Podell. Des. 87,240; June 21.
Telegraph circuits, Reducing lightning interference in carrier. V. P. Thorp. 1,863,674–5; June 21.
Telegraph signaling system. H. L. Krun. 1,864,074; June 21.
Telegraph printing and like apparatus. R. G. Griffith. 1,864,302; June 21.
Telegraph system, Radio printing. F. G. Halliden. 1,864,303; June 21.
Telegraph systems, Reducing lightning interference in carrier. B. P. Hamilton. 1,863,655; June 21.
Telephone exchange system. R. F. Massonneau. 1,864,082; June 21.
Telephone ringing system. J. W. Goodenham. 1,864,061; June 21.
Tellurian. F. G. Jones. 1,863,600; June 21.
Tension-device. E. R. Swanson. 1,863,951; June 21.
Testing machine. W. A. Bohne. 1,864,413 June 21.
Textile fabric. J. Black. Des. 87,193–4; June 21.
Textile fibers, Treatment of. J. Wolfson and D. L. Potter. 1,864,110; June 21.
Thermic interrupter for electrical current. R. F. Zimmermann. 1,864,395; June 21.
Thermometer, Cooking utensil. W. S. Bremer. 1,863,918; June 21.
Thermostat, Bimetallic. W. Cohn-Byk and A. von Pap. 1,864,483; June 21.
Thermostatic control apparatus. D. Mazzie. 1,864,455; June 21.
Threading device. J. W. W. Holden. 1,863,717; June 21.
Threshing machine. G. Wetlaufer. 1,864,033; June 21.
Throttle valve operating means. A. Williams. 1,864,225; June 21.
Tie. W. H. Ve Relle. 1,864,265; June 21.
Tile. P. H. Solon. 1,864,153; June 21.
Time interval controlling device, Automatic. D. J. Millison. 1,864,255; June 21.
Time switch. E. S. Flarsheim. 1,864,487; June 21.
Tip for flexible drive shafts. A. Pineau. 1,864,507; June 21.
Tire beads, Method and apparatus for reenforcing. H. D. Stevens. 1,864,155; June 21.
Tire machine. W. G. Prentice. 1,863,764; June 21.
Tire stand. C. J. and W. M. Doering. 1,864,234; June 21.
Tobacco particles and freeing them from dust, Method of and apparatus for loosening. V. Lorentz. 1,863,666; June 21.
Tool, Portable. J. R. Hoffman. 1,864,019; June 21.
Tool, Pressure fluid. A. Pendersen. 1,864,027; June 21.
Tool, Rim tire. B. F. Renn. 1,863,876; June 21.
Tool structure, Machine. H. Fritschi. 1,864,129; June 21.
Tools, Chip remover and water and dust seal for machine. E. H. Johnson. 1,864,307; June 21.
Toy. F. Anderson. 1,864,227; June 21.
Toy building brick. F. Ponstingl. 1,864,995; June 21.
Toy, Mechanical. C. Arnold. 1,863,587; June 21.
Track for tracklaying vehicles. H. A. Knox. 1,863,858; June 21.
Tractor cultivators, Guano distributing attachment for. E. M. Cole. 1,864,122; June 21.
Tractor-harvester. B. R. Benjamin. 1,864,291; June 21.
Tractor hitch. F. L. Fraizer. 1,864,128; June 21.
Tractor steering attachment. C. C. Stedman. 1,864,324; June 21.
Traffic controlling apparatus, Railway. R. E. Baker. 1,864,481; June 21.
Traffic signal, Movable. B. B. Goodin. 1,864,062; June 21.
Transformer system and apparatus. A. C. Schwager. 1,863,936; June 21.
Transfusion of blood, Apparatus for the. J. D. Parletti. 1,863,904; June 21.
Transmission, Automatic. E. R. Holmes. 1,863,985; June 21.
Transmission device for automotive vehicles. J. F. Runkle. 1,863,639; June 21.
Transmission shifting device, Dual. P. S. Eckland and G. Ryden. 1,863,972; June 21.
Transmission, Variable. A. Jarmann. 1,863,598; June 21.
Trap: *See*—
Locomotive sanding trap. Rat trap.
Trap for catching wild bees. W. A. Grover. 1,864,431; June 21.
Tray, Filing. S. Smiley, jr. 1,863,946; June 21.
Tray for automobiles, Ash. T. W. Kupfer. 1,863,988; June 21.
Tray, Serving. R. O. Clark. Des. 87,203; June 21.
Trees, Apparatus for treating fruit. T. W. Johnson. 1,864,198; June 21.
Trolley head. E. D. Moore. 1,864,026; June 21.
Truck frame construction. C. L. Eastburg. 1,864,508; June 21.
Truck, Trailer. J. S. Keen and E. M. Shannon. 1,864,441; June 21.
Tube: *See*—
Luminous tube.
Tubes from cellulose solutions, Apparatus for manufacturing seamless flexible. R. Weingand. 1,864,006; June 21.
Tubes, Making. B. L. Quarnstrom. 1,863,873; June 21.
Tubular control. B. L. Quarnstrom. 1,863,874; June 21.
Turbines, Avoiding damage through moisture in the low pressure part of steam. N. Hilgers. 1,864,352; June 21.
Upholstery, Method and machine for assembling. B. M. Stannard. 1,864,477; June 21.
Valve. O. F. Carlson. 1,863,590; June 21.
Valve. F. L. Drew. 1,863,652; June 21.
Valve coupling, Automatic. E. A. Owen. 1,864,463; June 21.
Valve facing machine. J. S. Holmes. 1,864,305; June 21.
Valve, Flood-tide and backwater. A. M. Khun. 1,864,443; June 21.
Valve, Parallel slide. E. A. Bolton and T. F. Gray. 1,863,650; June 21.
Valve, Safety relief. E. J. Te Pas. 1,864,380; June 21.
Vault, Burial. F. L. Temple. 1,863,887; June 21.
Vault, Grave. J. A. Jensen. Des. 87,216; June 21.
Vegetable cutter. D. W. Rantine. 1,864,147; June 21.

Vegetation fresh, Device for displaying and keeping harvested. D. Handelan. 1,863,597; June 21.
Vehicle body. F. Lillich. Des. 87,222; June 21.
Vehicle brake. H. K. Barnes. 1,864,115; June 21.
Vehicle breather pipe attachment, Motor. W. Dunn. 1,864,417; June 21.
Vehicle having brakes. E. W. Senholm. 1,863,885; June 21.
Vehicle, Motor. H. H. Robinson. Des. 87,241; June 21.
Vehicle, Road. R. B. Fageol. 1,863,974; June 21.
Ventilating apparatus. A. W. Stewart. 1,863,949; June 21.
Ventilators, Thermostatic releasing means for self-closing. C. W. Kelly. 1,864,357; June 21.
Vessels, System of and means for raising submerged. S. Schwager. 1,863,732; June 21.
Vessels by electrical welding, Manufacturing thick walled pressure. R. Stresau. 1,864,156; June 21.
Vibrator and mixer unit, Combination. T. H. Forde and N. M. Mellars. 1,863,977; June 21.
Vouchers in cash registers, Issuing. K. A. Lehmann and A. Varren. 1,864,446; June 21.
Vulcanizing mold. P. De Mattia. 1,863,604; June 21.
Wall or the like, Tiled. O. E. Grigsby. 1,863,842; June 21.
Wall papering mechanism. M. C. Cooper. 1,864,409; June 21.
Walls, Apparatus for molding. B. H. Kronen. 1,864,444; June 21.
Washing and ironing machine. J. T. Hume. 1,863,852; June 21.
Washing machine. S. H. Stoffel. 1,864,002; June 21.
Water heater. A. A. Carlson. 1,864,120; June 21.
Water purifier. C. K. Smith. 1,863,947; June 21.
Water wheel. P. H. Darrah. 1,863,784; June 21.
Wave energy in space, Apparatus for the reception and transmission of. H. Hecht and W. Rudolph. 1,863,716; June 21.
Waver. R. Ehrlich. 1,863,593; June 21.
Weapon, Concealed. E. Carlstrom. 1,863,563; June 21.
Weft detecting mechanism. O. V. Payne. 1,863,872; June 21.
Weighing apparatus. W. H. Rees. 1,864,029; June 21.
Welding apparatus. A. Churchward. 1,863,833; June 21.
Well. G. Evans. 1,864,420; June 21.
Welt for boots or shoes. H. Lyon. 1,864,311; June 21.
Wheel: *See*—
Automobile wheel. Water wheel.
Wheel for pneumatic tires. E. Ferrabino. 1,864,421; June 21.
Wheels, Apparatus for the assembly of wire. W. N. Booth. 1,864,335; June 21.
Wick cleaner. P. Gennrich. 1,864,489; June 21.
Winding device. D. C. Corner. 1,863,621; June 21.
Winding machine. M. B. Grout. 1,864,194; June 21.
Window construction. G. H. Howenstein. 1,864,066; June 21.
Window control, Auto. R. McNutt. 1,864,048; June 21.
Window sealing construction. C. G. Johnson. 1,864,355; June 21.
Window seat. G. Bolz. 1,864,118; June 21.
Window structure and assembly thereof. C. H. Thordarson. 1,863,733; June 21.
Windshield for closed motor cars. L. M. Harvey. 1,863,629; June 21.
Windshield glasses and an implement used in the practice of the method, Renewing. R. Cloppert. 1,863,897; June 21.
Wire coiling and forming machine. L. A. Shertzer. 1,864,032; June 21.
Wire spring making machine. C. H. Ziler. 1,863,916; June 21.
Work support for machine tools. M. F. Lange. 1,864,046; June 21.
Work supporting and decorating method and apparatus. G. von Webern and E. W. Hamant. 1,863,816; June 21.
Zinc oxide, Manufacture of hydrated. W. Seguine, jr., and A. T. Mertes. 1,863,700; June 21.

CLASSIFICATION OF PATENTS

ISSUED JUNE 21, 1932

NOTE.—First number=class, second number=subclass, third number=patent number

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209— 110: 1,864,075
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U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Allen, Claude S., doing business as Enzer Remedy Company, Coral Gables, Fla. Medicinal preparation. Serial No. 324,815; June 28. Class 6.

American Hard Rubber Company, Hempstead and New York, N. Y. Plastic or moldable material. Serial No. 325,636; June 28. Class 1.

American Nicoton Corporation, New York, N. Y. Liquid preparation. Serial No. 313,900; June 28. Class 6.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Wire fencing and particularly barbed wire. Serial No. 319,467; June 28. Class 13.

Anderson, Chester M., and Clarence Q. Graham (a partnership), doing business as The Distribution Systems Company, Washington, D. C. Blank books. Serial No. 327,135; June 28. Class 37.

Armstrong & Martin, Inc. (See Brite-Beam Lamp Corp., assignor.)

Assembled Products Company, Inc., New York, N. Y. Spools of thread. Serial No. 327,181; June 28. Class 43.

Austral Window Company, Augusta, Me., and New York, N. Y. Wardrobes, coat racks, shelving, etc. Serial No. 325,132; June 28. Class 32.

"Automatic" Sprinkler Corporation of America, Cleveland, Ohio. Automatic sprinkler systems and parts thereof. Serial No. 326,735; June 28. Class 13.

Barengo Bros., Reno, Nev. Fresh grapes. Serial No. 325,507; June 28. Class 46.

Barrell, Charles, Tampa, Fla. Kalsomine. Serial No. 316,627; June 28. Class 16.

Bausch & Lomb Optical Company, Rochester, N. Y. Projection and photographic lenses. Serial No. 326,931; June 28. Class 26.

Bay State Milling Co., Minona, Minn. Wheat flour. Serial No. 326,776; June 28. Class 46.

Best Products Co., The. (See Terry, Walter T., jr.)

Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet sweepers. Serial No. 326,887; June 28. Class 23.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 314,319; June 28. Class 42.

"Bridgeco." (See Wellis, William.)

Brite-Beam Lamp Corp., assignor to Armstrong & Martin, Inc., Chicago, Ill. Electric light bulbs. Serial No. 323,522; June 28. Class 21.

Broadway Products Corporation, Buffalo, N. Y. Malt syrup. Serial No. 326,359; June 28. Class 46.

Brothers Corporation, Brooklyn, N. Y. Bland non-narcotic suppository for piles. Serial No. 326,668; June 28. Class 6.

Buell, C. E., Inc., Boston, Mass. Agricultural fertilizers. Serial No. 327,244; June 28. Class 10.

Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y. Dietary material. Serial No. 324,817; June 28. Class 46.

Calabro, Fortunator, Berwick, Pa. Liniment. Serial No. 327,338; June 28. Class 6.

California Packing Corporation, San Francisco, Calif. Fruit juices. Serial No. 307,256; June 28. Class 45.

Celebrity Productions, Inc., New York, N. Y. Toy books. Serial No. 320,157; June 28. Class 22.

Cement-Gun Company, Inc., Wilmington, Del., and Allentown, Pa. Cementitious material, etc. Serial No. 318,126; June 28. Class 12.

Chicago Flexible Shaft Company, Chicago, Ill. Electric animal shears and parts therefor. Serial No. 326,889; June 28. Class 23.

Commercial Merchandising Corporation, Cincinnati, Ohio. Food products. Serial Nos. 324,459–60; June 28. Class 46.

Continental Car-Na-Var Corporation, Brazil, Ind. Liquid polish. Serial No. 326,621; June 28. Class 16.

Cosby-Hodges Milling Co. Inc., Birmingham, Ala. Wheat flour. Serial No. 326,850; June 28. Class 46.

Dalsbo, Oluf, doing business as Kleereeze Company, Rochester, Minn. Liquid preparation for abnormal conditions of the skin. Serial No. 325,941; June 28. Class 6.

Darboven, Arthur, doing business as J. J. Darboven, Hamburg, Germany. Coffee. Serial No. 324,701; June 28. Class 46.

Davies & Sullivan Company, New York, N. Y. Coffee. Serial No. 304,856; June 28. Class 46.

Davis, Joanna F., doing business as Sanitas Fundoshi Company, Cleveland, Ohio. Suspensory bandages. Serial No. 326,892; June 28. Class 44.

Dee-Hy Products Company. (See Liquid Dehydration Corporation, assignor.)

Diamond Mfg. Co. (See Shapeleigh Hardware Company.)

Di Santo, Joseph, doing business as Di Santo & Company, Duluth, Minn. Food flavors, canned asparagus, canned oysters, etc. Serial No. 326,807; June 28. Class 46.

Distribution Systems Company, The. (See Anderson, Chester M., and Clarence Q. Graham (a partnership)).

Dolge, C. B., Company Inc., Westport, Conn. Insecticides, rodenticides, etc. Serial No. 325,846; June 28. Class 6.

Driver-Harris Company, Harrison, N. J. Nickel-iron alloys. Serial No. 324,956; June 28. Class 14.

Dryolet Mfg. Co., St. Louis, Mo. Shampoo. Serial No. 327,272; June 28. Class 6.

Eisemann-Werke Aktiengesellschaft, Stuttgart, Germany. Electric vibrators, permanent hair waving machines, etc. Serial No. 284,725; June 28. Class 44.

Enzer Remedy Company. (See Allen, Claude S.)

Fashion Brassiere Co., Inc., New York, N. Y. Corsets, brassières, etc. Serial No. 327,052; June 28. Class 39.

Federal Cigar Company, Red Lion, Pa. Cigars. Serial No. 327,309; June 28. Class 17.

Felder Bros., New York, N. Y. Stationery supplies. Serial No. 327,352; June 28. Class 37.

Feltyberger, Samuel, Pittsburgh, Pa. Portable and stationary golf games. Serial No. 309,339; June 28. Class 22.

Flour Mill Products Co. (See Meyers, Percy E.)

Fruit-Sno Co. (See Lahman, S. J.)

Fudo Psyllium Corp. (See Lichtenstein, William.)

Gaines, Clarence F., doing business as Gaines Food Company, Sherburne, N. Y. Puppy and cat food. Serial No. 326,468; June 28. Class 46.

Galahad Beverage Co. (See Power, John R.)

Garber Baking Company, The, Frederick, Md. Bread, rolls, cakes, and pies. Serial No. 327,249; June 28. Class 46.

Grainger, W. B., Packing Company, Salinas, Calif. Fresh vegetables. Serial No. 327,395; June 28. Class 46.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Stock and dairy feed. Serial No. 327,387; June 28. Class 46.

Griswoldville Manufacturing Company, Griswoldville, Mass. Dusting, wiping, and polishing cloths. Serial No. 327,145; June 28. Class 39.

Gumpert, S., Co., Inc., Brooklyn, N. Y. Cakes and cake preparations. Serial No. 327,251; June 28. Class 46.

Halliwell-Shelton Electric Corporation, New York, N. Y. Pads for use in permanent hair waving. Serial No. 326,854; June 28. Class 44.

Hamblin-Metcalfe, Limited, Kitchener, Ontario, Canada. Chocolate bars. Serial No. 314,115; June 28. Class 46.

Happy Dream Beauty Preparation Co., New York, N. Y. Powder, nail polish, astringent lotion, etc. Serial No. 323,493; June 28. Class 6.

Harris, Louis S., doing business as Omeco Sales Products, Brooklyn, N. Y. Beverages, syrups, and concentrates. Serial No. 326,770; June 28. Class 45.

Henckels, J. A., Solingen, Germany. Steel, iron, lead, etc. Serial Nos. 323,332–3; June 28. Class 14.

Hercules Powder Company, Wilmington, Del. Ester of rosin. Serial Nos. 326,186–7; June 28. Class 6.

Honen, W. R., Co. (See Kodani, M.)

Hormel, Geo. A., & Company, Austin, Minn. Salt pork. Serial No. 321,382; June 28. Class 46.

Horton Manufacturing Company, Fort Wayne, Ind. Laundry washing machines. Serial Nos. 327,150–1; June 28.

Hubinger Company, The, Keokuk, Iowa. Corn starch. Serial No. 314,563; June 28. Class 46.

Hunter, Wirlie M., Gold Beach, Calif. Preparation for the treatment of pyorrhea. Serial No. 323,663; June 28. Class 6.

Intelligencer Publishing Company, Edwardsville, Ill. Newspaper. Serial No. 326,612; June 28. Class 38.

International Stamping & Enameling Corporation, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Hospital and sick room enameled ware and rubber products. Serial No. 318,365; June 28. Class 44.

Jell Products Company, South Milwaukee, Wis. Preparation of gelatine. Serial No. 326,325; June 28. Class 46.

K. & S. Sales Company, Inc., Chicago, Ill. Ball projecting amusement games. Serial No. 326,371; June 28. Class 22.

Kaylene, Limited, London, England. Medicinal preparations. Serial No. 326,684; June 28. Class 6.

Kent, Thomas I., Boston, Mass. Candy. Serial No. 327,314; June 28. Class 46.

Keuffel & Esser Company, Hoboken, N. J. Sensitized black print cloth. Serial No. 327,315; June 28. Class 26.

Killmer, Earl C., doing business as Killmer's Northern Nurseries, St. Paul, Minn. Plant packages. Serial No. 320,935; June 28. Class 1.

Kleereeze Company. (See Dalsbo, Oluf.)

Klein, L., Inc., Chicago, Ill. Radio receiving sets. Serial No. 326,372; June 28. Class 21.

Kodani, M., doing business as W. R. Honen Co., New York, N. Y. Aprons. Serial No. 326,822; June 28. Class 39.

Lahman, S. J., doing business as Fruit-Sno Co., Oklahoma City, Okla. Frozen confections and flavoring extracts therefor. Serial No. 318,902; June 28. Class 46.
Lee, Barbara, Maplewood, Mo. Skin or tissue cream. Serial No. 326,613; June 28. Class 6.
Lichtenstein, William, doing business as Tinklebell Products Co. and Fudo Psyllium Corp., New York, N. Y. Bird gravel. Serial No. 327,365; June 28. Class L.
Liquid Dehydration Corporation, by mesne assignments, to Dee-Hy Products Company, Chicago, Ill. Soda ash, tannin extracts, etc. Serial No. 285,573; June 28. Class 6.
Louisiana State Rice Milling Company, Ins., Abbeville, La. Rice. Serial No. 325,661; June 28. Class 46.
Love-Me Ice Cream Company, Milwaukee, Wis. Frozen confection. Serial No. 326,381; June 28. Class 46.
Lowe, Joe, Corporation, Brooklyn, N. Y. Standardizers for measuring ingredients in ice cream. Serial No. 324,895; June 28. Class 26.
Maison Jeurelle, Inc., Jersey City, N. J. Toilet soap. Serial No. 326,945; June 28. Class 4.
Marney, Floyd L., doing business as Marney Animal Food Co., Huntington Park, Calif. Dog and cat food. Serial No. 327,193; June 28. Class 46.
Marshall Field & Company, Chicago, Ill. Drapery fabrics. Serial No. 324,846; June 28. Class 42.
Master Bridge Institute, Inc., New York, N. Y. Playing cards and playing card dealing accessories. Serial No. 326,947; June 28. Class 22.
McNeil, Robert, Philadelphia, Pa. Preparation for promoting the granulation and healing of wounds. Serial No. 326,391; June 28. Class 6.
Menderth, Inc., Boston, Mass. Plant food. Serial Nos. 325,987–8; June 28. Class 10.
Meyers, Percy E., doing business as Flour Mill Products Co., Philadelphia, Pa. Wheat flour. Serial No. 327,102; June 28. Class 46.
Mezquita, Augustin T., Valencia, Spain. Beverage. Serial No. 322,553; June 28. Class 45.
Mission Dry Corporation, Ltd., Los Angeles, Calif. Measuring glasses. Serial No. 327,368; June 28. Class 26.
Montee Publishing Co., Inc., Baltimore, Md. Magazine. Serial No. 326,628; June 28. Class 38.
Moore, Edward J., Sons, Inc., Long Island City, N. Y. Preparation for the treatment of inflammation, pelvic congestions, etc. Serial No. 325,592; June 28. Class 6.
Morrell, John, & Co., Ottumwa, Iowa. Canned foods for dogs, cats, foxes, and other carnivorous animals. Serial No. 327,195; June 28. Class 46.
Mosbacher, Walter Lee, Corporation, New York, N. Y. Tanned reptile skins. Serial No. 326,293; June 28. Class 1.
Mountain Varnish & Color Works, Inc., The, Toledo, Ohio. Preparation for use in protecting the skin from paint, varnish, etc. Serial No. 326,723; June 28. Class 6.
Namm, A. I., & Son, doing business as The Namm Store, Brooklyn, N. Y. Mattresses and box springs. Serial No. 326,295; June 28. Class 32.
National Bank Note Company, Cleveland, Ohio. Paper and envelopes. Serial No. 326,490; June 28. Class 37.
National Washboard Company, Chicago, Ill. Ironing tables. Serial No. 326,428; June 28. Class 24.
Neighbor Products Company, Chicago, Ill. Dog food. Serial No. 327,404; June 28. Class 46.
Nelson-Columbia, Hugh, Carpet Mills, Philadelphia, Pa. Textile rugs and carpets. Serial No. 327,256; June 28. Class 42.
New York Extract Co., Inc., Philadelphia, Pa. Syrups and extracts. Serial No. 326,491; June 28. Class 45.
Nutting, K. R., doing business as K. R. Nutting Co., Salinas, Calif. Lettuce. Serial No. 323,671; June 28. Class 46.
Nyal Company, Detroit, Mich. Tooth powder. Serial No. 326,689; June 28. Class 6.
Oldmill Paper Products Corp., Brooklyn, N. Y. Paper towels, napkins, etc. Serial No. 326,298; June 28. Class 37.
Omeco Sales Products. (See Harris, Louis S.)
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Board game. Serial No. 327,023; June 28. Class 22.
Philadelphia Seed Company, The, Philadelphia, Pa. Grass seed. Serial No. 327,413; June 28. Class 1.
Pierre, Dr., Chemical Company, doing business as Spaz Mineral Company, Chicago, Ill. Reducing bath salts. Serial No. 311,828; June 28. Class 6.
Piggly Wiggly Corporation, Cincinnati, Ohio. Canned vegetables and fish. Serial No. 285,880; June 28. Class 46.
Pitts, J. O., Atlanta, Ga. Fresh eggs. Serial No. 323,269; June 28. Class 46.
Polar Ware Company, Sheboygan, Wis. Vitreous enamel pots, pans, etc. Serial No. 327,199; June 28. Class 13.
Powdrell & Alexander, Inc., Danielson, Conn. Piece goods and curtains. Serial No. 326,790; June 28. Class 42.
Power, John R., doing business as Galahad Beverage Co., Allston, Mass. Soda water, syrups, and extracts. Serial No. 326,616; June 28. Class 45.
Professional Laboratories, Incorporated, Richmond, Va. Medicinal preparation. Serial No. 326,191; June 28. Class 6.
Prospect Island Farming Company, San Francisco and Rio Vista, Calif. Fresh vegetables. Serial No 326,394; June 28. Class 46.
Quaker State Oil Refining Co., Oil City, Pa. Mechanical device to record oil servicing. Serial No. 326,300; June 28. Class 19.
Reed & Bell, Inc., Berkeley, Calif. Root beer and root beer concentrate or syrup. Serial No. 326,954; June 28. Class 45.
Renova Co., The, St. Petersburg, Fla. Metal-less garters and hose supporters. Serial No. 327,232; June 28. Class 39.
Roth, Otto, Inc., Newark, N. J. Safety razor blades. Serial No. 327,289; June 28. Class 23.
Rynveld, F., & Sons, New York, N. Y. Seeds, bulbs, and flowers. Serial No. 326,433; June 28. Class 1.
Salato, Frank, St. James, N. Y. Preparation for treating dandruff and falling hair. Serial No. 326,649; June 28. Class 6.
Sanitas Fundoshi Company. (See Davis, Joanna F.)
Sawyer Engineering Company, The, Milford, Conn. Refrigerating units. Serial No. 326,595; June 28. Class 31.
Schering Corporation, New York, N. Y. Preparation for the purpose of facilitating the taking of X-ray pictures of internal organs. Serial No. 320,942; June 28. Class 6.
Shapleigh Hardware Company, doing business as Diamond Mfg. Co., St. Louis, Mo. Fish lines. Serial No. 324,628; June 28. Class 22.
Shellbuilder, Inc., Houston, Tex. Crushed oyster shell. Serial No. 326,500; June 28. Class 1.
Shell Eastern Petroleum Products, Inc., New York, N. Y. Maps or bulletins. Serial No. 322,233; June 28. Class 38.
Shell Oil Company, San Francisco, Calif. Turpentine substitute and paint thinner. Serial No. 326,991; June 28. Class 16.
Slenderdress Laboratories, Dallas, Tex. Flesh reducing composition. Serial No. 326,196; June 28. Class 6.
Spaz Mineral Company. (See Pierre, Dr., Chemical Company.)
Special Libraries Association, New York, N. Y. Publication. Serial No. 324,125; June 28. Class 38.
Steel-Wedeles Company, Chicago, Ill. Canned fruits, vegetables, fish, etc. Serial No. 302,079; June 28. Class 46.
Stern Brothers, New York, N. Y. Textile rugs. Serial No. 326,306; June 28. Class 42.
Stewart, Donald F., New York, N. Y. Cartoons. Serial No. 326,648; June 28. Class 38.
Stonega Coke & Coal Company, Philadelphia, Pa. Coal. Serial No. 327,324; June 28. Class 1.
Sulforall Products Ltd., Hollywood, Calif. Preparation for preparing sulphur baths. Serial No. 326,060; June 28. Class 6.
Swift and Company, Chicago, Ill. Shortening made from lard and vegetable fats. Serial No. 327,291; June 28. Class 46.
Taleb, Gaston, Philadelphia, Pa. Creams, powders, lipsticks, etc. Serial No. 285,901; June 28. Class 6.
Terry, Walter T., jr., doing business as The Best Products Co., Kansas City, Mo. Wax and polish. Serial No. 325,199; June 28. Class 16.
Thoresen, William, doing business as Wm. Thoresen Co., Chicago, Ill. Metal decorations. Serial No. 327,113; June 28. Class 13.
Tinklebell Products Co. (See Lichtenstein, William.)
Tonkin Distributing Company, San Francisco, Calif. Malt syrup. Serial No. 326,402; June 28. Class 46.
Tower Magazines Inc., Wilkes-Barre, Pa., and New York, N. Y. Periodical. Serial No. 324,912; June 28. Class 38.
Turcott, David, doing business as Turcott & Company, Beloit, Wis. Candy confections. Serial No. 326,836; June 28. Class 46.
Twentieth Century Manufacturing Co., Cedar Rapids, Iowa. Cleaner. Serial No. 325,834; June 28. Class 4.
Union Wadding Company, Pawtucket, R. I. Cotton milk-strainers. Serial No. 327,076; June 28. Class 31.
Vineyard Products Co., Chicago, Ill. Grape juices and compounds. Serial No. 322,529; June 28. Class 45.
Washtien, Louis, Brooklyn, N. Y. Skin salve. Serial No. 325,961; June 28. Class 6.
Wecoline Products Inc., New York, N. Y. Fatty acids from tallow, fish oil, whale oil, and vegetable oils. Serial No. 319,793; June 28. Class 6.
Wellis, William, doing business as "Bridgeco", New York, N. Y. Card game accessory. Serial No. 326,405; June 28. Class 22.
West Disinfecting Company, Long Island City, N. Y. Cleaning preparations, dry cleaner, floor cleaner, etc. Serial No. 311,633; June 28. Class 4.
Western Garment Mfg. Co., Wichita Falls, Tex. Overalls and jumpers, shirts, etc. Serial No. 300,385; June 28. Class 39.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Laundry washing machines. Serial No. 326,726; June 28. Class 24.
Weyenburg Shoe Mfg. Co., Milwaukee, Wis. Shoes. Serial No. 326,570; June 28. Class 39.
White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Base plates. Serial No. 326,921; June 28. Class 44.
White Tar Company of New Jersey, Inc., The, Kearny, N. J. Insecticides. Serial No. 326,121; June 28. Class 6.
Wieboldt Stores, Inc., Chicago, Ill. Cod liver oil. Serial No. 322,667; June 28. Class 6.
Williams, J. B., Company, The, Glastonbury, Conn. Soaps. Serial No. 327,206; June 28. Class 4.
Wilson, Lon E., doing business as Lon E. Wilson Bottling Company, Washington, D. C. Beverages. Serial No. 326,727; June 28. Class 45.

LIST OF REGISTRANTS OF TRADE-MARKS

Ace Art Company, Reading, Mass. Corner mounts. 295,372; June 28; Serial No. 324,813; published Apr. 12, 1932. Class 37.
Air-Way Electric Appliance Corporation, Toledo, Ohio. Electric suction cleaners and parts thereof, dust collectors, suction nozzles, etc. 295,381; June 28; Serial No. 293,295; published Apr. 12, 1932. Class 21.
American Bemberg Corporation. (See Bemberg, J. P., Aktiengesellschaft, assignor.)
American Builder Publishing Corporation, New York, N. Y. Periodical. 295,346; June 28; Serial No. 324,420; published Apr. 12, 1932. Class 38.
American Sales Book Company, Limited, Toronto, Canada, and Niagara Falls and Elmira, N. Y. Sales-books. 86,689; renewed May 28, 1932.
Association for the Study of Negro Life and History, Inc., The, Washington, D. C. Publication. 295,352; June 28; Serial No. 324,580; published Apr. 12, 1932. Class 38.
Astoria & Puget Sound Canning Co., Bellingham, Wash., to Astoria & Puget Sound Canning Co., South Bellingham, Wash. Canned salmon. 88,826; renewed Oct. 29, 1932.
Atlas Portland Cement Company, The, Northampton, Pa., assignors, by mesne assignments, to Universal Atlas Cement Company, Chicago, Ill. Portland cement. 86,973; renewed June 18, 1932.
Atwater Manufacturing Company, The, Plantsville, Conn. Forgings. 295,334; June 28; Serial No. 324,279; published Apr. 12, 1932. Class 14.
Austin Company, The, East Cleveland, Ohio. Structural steel, lumber, doors, etc. 295,393; June 28; Serial No. 317,064; published Apr. 12, 1932. Class 12.
Auto Strop Safety Razor Co., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Strops and soaps. 89,082; renewed Nov. 12, 1932.
Becton, Dickinson & Co., New York, N. Y., assignor to Becton, Dickinson & Co., Rutherford, N. J. Thermometers, surgical glassware and instruments. 38,310; renewed May 20, 1932.
Bemberg, J. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. 295,297; June 28; Serial No. 322,987; published Apr. 12, 1932. Class 43.
Bemberg, J. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. 295,298; June 28; Serial No. 322,989; published Apr. 12, 1932. Class 43.
Benrose Silk Mfg. Corp., New York, N. Y. Crepes in the piece. 295,347; June 28; Serial No. 324,424; published Apr. 12, 1932. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 295,384; June 28; Serial No. 297,296; published Apr. 12, 1932. Class 42.
Bowersock, Justin D., assignor, by mesne assignments, to The Lawrence Paper Company, Lawrence, Kans. Straw, chip, and jute wrapping-paper and box-board. 88,836; renewed Oct. 29, 1932.
Boyer, Ralph, Washington, D. C. Periodical publication. 295,363; June 28; Serial No. 324,695; published Apr. 12, 1932. Class 38.
Brighton Ladies Hat Co. Inc., New York, N. Y. Hats. 295,336–8; June 28; Serial Nos. 324,304–6; published Apr. 12, 1932. Class 39.
Broslus, Hans, Frankfort-on-the-Main, Germany. Stone-protecting preparations. 295,378; June 28; Serial No. 280,469; published Sept. 17, 1929. Class 12.
Buckley & Cohen, New York, N. Y. Woolen piece goods. 295,358–60; June 28; Serial Nos. 324,052–4; published Apr. 12, 1932. Class 42.
C & H Sugar Refining Corporation. (See California & Hawaiian Sugar Refining Corporation, Limited.)
California & Hawaiian Sugar Refining Corporation, Limited, doing business as C & H Sugar Refining Corporation, San Francisco, Calif. Sugar. 295,423; June 28; Serial No. 323,389; published Apr. 12, 1932. Class 46.
Carter's Ink Company, The, Cambridge, Mass. Writing inks. 295,364; June 28; Serial No. 324,696; published Apr. 12, 1932. Class 11.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 295,367; June 28; Serial No. 324,732; published Apr. 12, 1932. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 295,369; June 28; Serial No. 324,776; published Apr. 12, 1932. Class 42.
Certain-teed Products Corporation. (See General Roofing Manufacturing Company, assignor.)
Champion Hardware Company, The, as assignee of The Champion Safety Lock Company, assignor to The Champion Hardware Company, Geneva, Ohio. Hardware. 87,601; renewed July 30, 1932.
Channell Chemical Company, by change of name to O-Cedar Corp'n, Chicago, Ill. Mops. 87,163; renewed July 2, 1932.
Chapin & Company, Hammond, Ind. Prepared rabbit feed. 295,265; June 28; Serial No. 314,395; published Apr. 12, 1932. Class 46.
Cleveland Tractor Company, The, Cleveland, Ohio. Tractors. 295,379; June 28; Serial No. 281,195; published Apr. 12, 1932. Class 23.
Coleman Lamp and Stove Company, The, Wichita, Kans. Lamps, lanterns, heaters, etc. 295,262; June 28; Serial No. 311,366; published Apr. 12, 1932. Class 34.
Cooper, Michael, New York, N. Y. Pajama sets, robes. 295,422; June 28; Serial No. 323,280; published Apr. 12, 1932. Class 39.
Dana, Charles A., et al., receivers. (See Federal Rubber Manufacturing Co., assignor.)
Dawson, William M., jr., Madison, Wis. Newspaper. 295,353; June 28; Serial No. 324,594; published Apr. 12, 1932. Class 38.
De Bardeleben Coal Corporation, Birmingham, Ala. Coal. 295,365; June 28; Serial No. 324,702; published Apr. 12, 1932. Class 1.
Dental Survey, Inc., Minneapolis, Minn. Periodical. 295,341; June 28; Serial No. 324,371; published Apr. 12, 1932. Class 38.
Doehler Die Casting Co., New York, N. Y. Castings of brass alloy. 295,304; June 28; Serial No. 323,484; published Apr. 12, 1932. Class 14.
Drug Markets, Inc., New York, N. Y. Publication. 295,361; June 28; Serial No. 324,662; published Apr. 12, 1932. Class 38.
Duluth-Superior Milling Company, Duluth, Minn. Wheat flour. 88,858; renewed Oct. 29, 1932.
Duluth-Superior Milling Company, Duluth, Minn. Wheat flour. 89,016–17; renewed Nov. 5, 1932.
Eastern Rolling Mill Company, The, Baltimore, Md. Galvanized steel sheets. 295,339; June 28; Serial No. 324,310; published Apr. 12, 1932. Class 14.
Eastern Rolling Mill Company, Baltimore, Md. Copper bearing galvanized steel sheets. 295,340; June 28; Serial No. 324,311; published Apr. 12, 1932. Class 14.
Eaton, A. N., doing business as Eaton Metal Products Company, Omaha, Nebr.; Denver, Colo.; and Billings, Mont. Bins, troughs, tanks, etc. 295,330; June 28; Serial No. 323,990; published Apr. 12, 1932. Class 2.
Elco Shoe Manufacturers, Inc., Brooklyn, N. Y. Shoes. 295,305; June 28; Serial No. 323,573; published Apr. 12, 1932. Class 39.
Electric Auto-Lite Company, The, Toledo, Ohio. Clocks, watches, chronometers, etc. 295,331; June 28; Serial No. 324,067; published Apr. 12, 1932. Class 27.
Endicott Johnson Corporation, Endicott, N. Y. Boots and shoes. 295,328; June 28; Serial No. 323,813; published Apr. 12, 1932. Class 39.
Etablissements André Gillier, Societe Anonyme, Troyes, France. Sweaters, pull-overs, dresses, etc. 295,389; June 28; Serial No. 309,637; published Apr. 12, 1932. Class 39.
Faber, A. W., Stein, Germany, assignor, by mesne assignments, to A. W. Faber, Inc., Newark, N. J. Stationery supplies. 86,582; renewed May 21, 1932.
Fedden Brothers Company, Inc., New York, N. Y. Hosiery. 295,420; June 28; Serial No. 322,843; published Apr. 12, 1932. Class 39.
Federal Motor Truck Company, Detroit, Mich. Machinery bearings. 295,416; June 28; Serial No. 320,405; published Apr. 12, 1932. Class 23.
Federal Rubber Manufacturing Co., Cudahy, Wis., assignor, by mesne assignments, to Charles A. Dana and John B. Pierce, receivers of The Fisk Rubber Company, Chicopee Falls, Mass. Belting, hose, etc. 86,795; renewed June 4, 1932.
Felters Company, The, Boston, Mass. Felt. 295,333; June 28; Serial No. 324,250; published Apr. 12, 1932. Class 50.
Fiberloid Corporation, The, Indian Orchard, Mass. Cellulose acetate material. 295,405; June 28; Serial No. 324,251; published Apr. 12, 1932. Class 1.
Fifth Avenue Modes, Inc., New York, N. Y. Dresses. 295,387; June 28; Serial No. 307,316; published Apr. 12, 1932. Class 39.
Fisher Flouring Mills Company, West Waterway, Harbor Island, Seattle, Wash. Flour. 295,370; June 28; Serial No. 324,786; published Apr. 12, 1932. Class 46.

Florsheim Shoe Company, The, assignor to The Florsheim Shoe Company, Chicago, Ill. Cloth and leather boots and shoes. 88,745; renewed Oct. 22, 1932.
Fownes Brothers & Co. Inc., Gloversville, Amsterdam, and New York, N. Y. Gloves. 295,335; June 28; Serial No. 324,284; published Apr. 12, 1932. Class 39.
Gehlert, R., & Co. (See Royal Valley Coffee Co., assignor.)
General Baking Company, New York, N. Y. Bread. 295,266–8; June 28; Serial Nos. 314,803–5; published Apr. 12, 1932. Class 46.
General Baking Company, New York, N. Y. Bread. 295,269–71; June 28; Serial Nos. 314,807–9; published Apr. 12, 1932. Class 46.
General Mills, Inc., Minneapolis, Minn. Biscuit flour. 295,354; June 28; Serial No. 324,601; published Apr. 12, 1932. Class 46.
General Mills, Inc., Minneapolis, Minn. Pancake flour. 295,373; June 28; Serial No. 324,842; published Apr. 12, 1932. Class 46.
General Mills, Inc., Minneapolis, Minn. Biscuit flour. 295,409; June 28; Serial No. 324,599; published Apr. 12, 1932. Class 46.
General Rooting Manufacturing Company, East St. Louis, Ill., assignor to Certain-teed Products Corporation, New York, N. Y. Roofing-felt, deadening-felt, etc. 87,202; renewed July 2, 1932.
Gilbert, H. Stanley, New York, N. Y. Hosiery. 295,426, June 28; Serial No. 324,036; published Apr. 12, 1932. Class 39.
Gillette Safety Razor Company. (See Auto Strop Safety Razor Co., assignor.)
Goodall Worsted Co., Sanford, Me. Coats, pants, knickerbockers, etc. 295,429; June 28; Serial No. 324,316; published Apr. 12, 1932. Class 39.
Goodman, A., & Son, assignor to A. Goodman & Sons, Inc., New York, N. Y. Foods. 86,901; renewed June 11, 1932.
Goodyear Tire & Rubber Company, The, Akron, Ohio. Tires. 39,007; renewed Oct. 7, 1932.
Grant, W. T., Company, New York, N. Y., and Lynn, Mass. Sheets and pillow cases. 295,371; June 28; Serial No. 324,788; published Apr. 12, 1932. Class 42.
Groves Thread Company, Inc., Gastonia, N. C. Cotton thread and yarns. 295,374; June 28; Serial No. 324,929; published Apr. 12, 1932. Class 43.
Groves Thread Company, Inc., Gastonia, N. C. Cotton thread and yarns. 295,375; June 28; Serial No. 324,932; published Apr. 12, 1932. Class 43.
Groves Thread Company, Inc., Gastonia, N. C. Cotton thread and yarns. 295,376; June 28; Serial No. 324,934; published Apr. 12, 1932. Class 43.
Haft, Morris W., & Brothers, Inc., New York, N. Y. Suits, coats, dresses, and hats. 295,351; June 28; Serial No. 324,557; published Apr. 12, 1932. Class 39.
Hankey Baking Company, McKees Rocks, Pa. Bread and cake. 295,395; June 28; Serial No. 321,407; published Apr. 12, 1932. Class 46
Harris, W. H., Grocery Company, Richmond, Va. Canned fruits and vegetables. 88,280; renewed Sept. 10, 1932.
Haussmann, Otto G., Philadelphia, Pa. Ophthalmic lenses. 295,431; June 28; Serial No. 324,435; published Apr. 12, 1932. Class 26.
Heglin, Anna T., doing business as Ye Olde Tavern Sandwich Inn., Sioux City, Iowa. Sandwiches. 295,399; June 28; Serial No. 323,331; published Apr. 12, 1932. Class 46.
Henderson, John G., Charlottesville, Va., assignor to Robert H. Henderson, East Orange, N. J. Boring-machine. 86,706; renewed May 28, 1932.
Hercules Powder Company, Wilmington, Del. Detergent compound. 295,403; June 28; Serial No. 324,069; published Apr. 12, 1932. Class 4.
Household Journal Company, Batavia, Ill. Periodical. 295,355; June 28; Serial No. 324,605; published Apr. 12, 1932. Class 38.
Huenefeld Company, The, Cincinnati, Ohio. Oil burners. 295,390; June 28; Serial No. 310,808; published Apr. 12, 1932. Class 34.
Hy-Hat Millinery, Inc., New York, N. Y. Hats. 295,264; June 28; Serial No. 313,604; published Apr. 12, 1932. Class 39.
Indiana Film Company, Incorporated, New Albany, Ind. Plywood panels and veneer. 295,406; June 28; Serial No. 324,403; published Apr. 12, 1932. Class 12.
International Milling Company. (See New Prague Flouring Mills Company, assignor.)
International Projector Corporation, The. (See Precision Machine Company, The, assignor.)
International Shoe Co., St. Louis, Mo. Boots and shoes. 295,329; June 28; Serial No. 323,941; published Apr. 12, 1932. Class 39.
Interstate Commerce Co., Inc., assignor to The C. F. Sauer Company, Richmond, Va. Root-beer and cherry-punch. 88,000; renewed Aug. 20, 1932.
Ives, H. B., Company, The, New Haven, Conn. Sash fasteners, locks, etc. 39,106; renewed Oct. 21, 1932.
Kalfus, I., Co., New York, N. Y. Prepared flour, syrup flavors, spices, etc. 295,385; June 28; Serial No. 304,821; published Apr. 12, 1932. Class 46.
Kaufmann, K., & Co., Inc., Newark, N. J. Bags and cases 295,408; June 28; Serial No. 324,564; published Apr. 12, 1932. Class 3.
Killarney Smokeless Coal Company, Incorporated, Lynchburg, Va. Coal. 295,377; June 28; Serial No. 324,965; published Apr. 12, 1932. Class 1.
King Features Syndicate, Inc., New York, N. Y. Comic section. 295,348; June 28; Serial No. 324,471; published Apr. 12, 1932. Class 38.
Knecht, Stanley, Flour & Grain Co. Inc., Birmingham, Ala. Flour. 295,362; June 28; Serial No. 324,667; published Apr. 12, 1932. Class 46.
Kress, S. H., & Co., New York, N. Y. Tapes, hooks and eyes, straps, etc. 295,299; June 28; Serial No. 323,009; published Apr. 12, 1932. Class 40.
Kress, S. H., & Co., New York, N. Y. Straps, braids, tapes, etc. 295,302; June 28; Serial No. 323,335; published Apr. 12, 1932. Class 40.
Kress, S. H., & Co., New York, N. Y. Powder puffs, dusting mittens, mops, etc. 295,303; June 28; Serial No. 323,338; published Mar. 15, 1932. Class 29.
Kurlash Company, Inc., The, Rochester, N. Y. Strips of rubber used for eyelash curlers. 295,307; June 28; Serial No. 323,623; published Apr. 12, 1932. Class 40.
Lammert Furniture Co., The, doing business as Service Dealers Association, St. Louis, Mo. Publication. 295,349; June 28; Serial No. 324,533; published Apr. 12, 1932. Class 38.
Lawrence Paper Company, The. (See Bowersock, Justin D., assignor.)
Lehmann, Ernst P., to Ernst P. Lehmann, Patentwerk, Brandenburg-on-the-Havel, Germany, successor. Toys. 85,972; renewed Apr. 2, 1932.
Levy, Nat, & Company Inc., New York, N. Y. Jewelry novelties. 295,296; June 28; Serial No. 322,593; published Apr. 5, 1932. Class 28.
Libbey, W. S., Company, Inc., Lewiston, Me. Blankets. 295,273; June 28; Serial No. 315,772; published Apr. 12, 1932. Class 42.
Liebig Extract Company, assignor, by mesne assignments, to Liebig Products Co. Inc., New York, N. Y. Beef extracts. 37,660; renewed Jan. 21, 1932.
Linde Air Products Company, The, New York, N. Y. Welding rods. 295,306; June 28; Serial No. 323,581; published Apr. 12, 1932. Class 14.
Louisiana Pine Products Company, Inc., Shreveport, La. Pine tar. 295,397; June 28; Serial No. 322,847; published Apr. 12, 1932. Class 1.
Lubri-Graph Corporation, The, Cleveland, Ohio. Lubricating oils and greases. 295,342; June 28; Serial No. 324,387; published Apr. 12, 1932. Class 15.
Mallinson, H. R., & Co., Inc., New York, N. Y. Silk piece goods. 295,308; June 28; Serial No. 324,751; published Apr. 12, 1932. Class 42.
Manhattan Shirt Co., The, New York, N. Y. Shirts, pajamas, and underwear. 295,412; June 28; Serial No. 324,845; published Apr. 12, 1932. Class 39.
Maplewood Blade Company, Maplewood and Irvington, N. J. Safety razors and razor blades. 295,410; June 28; Serial No. 324,670; published Apr. 12, 1932. Class 23.
McQuay-Norris Manufacturing Company, St. Louis, Mo. Piston rings. 295,413; June 28; Serial No. 318,156; published Apr. 12, 1932. Class 35.
Megill, Alfred L., doing business as The Edward L. Megill Co., Brooklyn, N. Y. Gage pins, feed guides, registry apparatus, etc. 295,425; June 28; Serial No. 323,824; published Apr. 12, 1932. Class 23.
Mellier Company, Perfumer. (See Wright, Alfred, Perfumer Inc., assignor.)
Miller High Life Company, Milwaukee, Wis. Concentrated malt syrup. 295,263; June 28; Serial No. 313,088; published June 9, 1931. Class 46.
Millstadt Milling Co., Millstadt, Ill. Self-rising wheat flour. 87,354; renewed July 9, 1932.
Monark Battery Company, Inc., Chicago, Ill. Storage batteries. 295,332; June 28; Serial No. 324,131; published Apr. 12, 1932. Class 21.
Mosinee Paper Mills Company, Mosinee, Wis. Paper. 295,356; June 28; Serial No. 324,620; published Apr. 12, 1932. Class 37.
Multi-Speed Shutter Company. (See Precision Machine Company, The, assignor.)
National Duroc Record Association, Peoria, Ill. Magazine. 295,357; June 28; Serial No. 324,621; published Apr. 12, 1932. Class 38.
National Musical String Co., New Brunswick, N. J. Strings for musical instruments. 88,511; renewed Sept. 24, 1932.
National Poultry Research Laboratories Ltd., San Francisco, Calif. Eggs. 295,398; June 28; Serial No. 323,204; published Apr. 12, 1932. Class 46.
Newaygo Portland Cement Company, Newaygo, Mich. Portland cement. 295,402; June 28; Serial No. 324,045; published Apr. 12, 1932. Class 12.
New Prague Flouring Mills Company, New Prague, Minn., assignor to International Milling Company, Minneapolis, Minn. Wheat-flour. 39,185; renewed Nov. 4, 1932.
Noble, M., & Co., Hartford, Conn. Olive oil. 295,419; June 28; Serial No. 321,814; published Apr. 12, 1929. Class 46.
O-Cedar Corp'n. (See Channell Chemical Company.)
O'Connor & Goldberg, Chicago, Ill. Shoes. 295,345; June 28; Serial No. 324,417; published Apr. 12, 1932. Class 39.

Ohio Match Company, The, Wadsworth, Ohio. Razor blades. 295,430; June 28; Serial No. 324,394; published Apr. 12, 1932. Class 23.
Palmer House Company, Chicago, Ill. Coffee and olives. 295,386; June 28; Serial No. 305,789; published Dec. 2, 1930. Class 46.
Paramount Wedding Ring Co. (See Sager, Abraham.)
Parks, Alfred M., doing business as Parks Equipment Company, Philadelphia, Pa. Scientific laboratory apparatus. 295,414; June 28; Serial No. 319,074; published Apr. 12, 1932. Class 26.
Pastry Pygmy Corporation, Brooklyn, N. Y. Cakes, pastries, and macaroons. 295,366; June 28; Serial No. 324,756; published Apr. 12, 1932. Class 46.
Phillips Petroleum Company, Bartlesville, Okla. Oils. 295,309–17; June 28; Serial Nos. 323,674–82; published Apr. 12, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Oils. 295,318–20; June 28; Serial Nos. 323,684–6; published Apr. 12, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Oils. 295,321; June 28; Serial No. 323,688; published Apr. 12, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Oils. 295,322–3; June 28; Serial Nos. 323,690–1; published Apr. 12, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Oils. 295,324; June 28; Serial No. 323,696; published Apr. 12, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Oils. 295,325; June 28; Serial No. 323,698; published Apr. 12, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Wearing apparel. 295,326; June 28; Serial No. 323,705; published Apr. 12, 1932. Class 39.
Pierce, John B., et al., receivers. (See Federal Rubber Manufacturing Co., assignor.)
Pleasants, Henry, jr., West Chester, Pa. Sheet units. 295,308; June 28; Serial No. 323,628; published Apr. 12, 1932. Class 37.
Polk Miller Products Corp., Richmond, Va. Food for puppies and dogs. 295,404; June 28; Serial No. 324,190; published Apr. 12, 1932. Class 46.
Pope Machinery Corporation, Haverhill, Mass. Shoe machinery. 295,432; June 28; Serial No. 324,625; published Apr. 12, 1932. Class 23.
Precision Machine Company, The, as assignee of Multi-Speed Shutter Company, assignor, by mesne assignments, to The International Projector Corporation, New York, N. Y. Moving-picture apparatus, and supplies. 88,633; renewed Oct. 8, 1932.
Prym, William, of America, Inc., New York and Long Island City, N. Y. Pins. 295,294; June 28; Serial No. 322,113; published Apr. 12, 1932. Class 40.
R. B. Manufacturing Company, New York, N. Y. Cloaks and outer suits, skirts, and dresses. 88,787; renewed Oct. 22, 1932.
Rambo & Regar, assignor to Rambo & Regar, Incorporated, Norristown, Pa. Hosiery. 39,307; renewed Nov. 18, 1932.
Reiner's Rotaprint, Inc., New York, N. Y. Writing paper sheets. 295,380; June 28; Serial No. 287,597; published Apr. 12, 1932. Class 37.
Remington Rand Inc., Buffalo, N. Y. Cabinets, drawers, trays, etc. 295,427–8; June 28; Serial Nos. 324,081–2; published Apr. 12, 1932. Class 32.
Rhode Island Welding Company, Inc., Providence, R. I. Oil burners. 295,292; June 28; Serial No. 321,298; published Apr. 12, 1932. Class 34.
Rhode Island Welding Company, Inc., Providence, R. I. Oil burners. 295,293; June 28; Serial No. 321,474; published Apr. 12, 1932. Class 34.
Riva Hermanos, Malaga, Spain. Olive oil. 295,415; June 28; Serial No. 319,537; published Apr. 12, 1932. Class 46.
Roethlisberger & Sohn, Langnau, Switzerland. Cheese. 295,394; June 28; Serial No. 320,553; published Apr. 12, 1932. Class 46.
Rosen, J., & Sons, Paterson, N. J., and New York, N. Y. Ribbons. 295,327; June 28; Serial No. 323,719; published Apr. 12, 1932. Class 42.
Royal Valley Coffee Co., assignor, by mesne assignments, to R. S. Gehlert & Co., Detroit, Mich. Coffees. 89,063; renewed Nov. 5, 1932.
Ruberoid Co., The, New York, N. Y., and Bound Brook, N. J. Roofing compound. 295,276; June 28; Serial No. 316,509; published Apr. 12, 1932. Class 12.
Saba Corporation, The, Los Angeles, Calif. Dresses, frocks, aprons, etc. 295,417; June 28; Serial No. 320,572; published Apr. 12, 1932. Class 39.
Sager, Abraham, doing business as Paramount Wedding Ring Co., Chicago, Ill. Finger and wedding rings. 295,343; June 28; Serial No. 324,400; published Apr. 12, 1932. Class 28.
Sauer, C. F., Company, The. (See Interstate Commerce Co., Inc., assignor.)
Seacoast Canning Co., Eastport, Me., to Seacoast Canning Company, Lubec, Me. Sardines. 88,122; renewed Aug. 27, 1932.
Seacoast Canning Company, Eastport, Me., to Seacoast Canning Company, Lubec, Me. Canned sardines. 89,149; renewed Nov. 12, 1932.
Seacoast Canning Company, Eastport, Me., to Seacoast Canning Company, Lubec, Me. Canned sardines. 89,151; renewed Nov. 12, 1932.
Service Dealers Association. (See Lammert Furniture Co., The.)
Shellabarger Grain Products Company, Decatur, Ill. Soy bean flour. 295,396; June 28; Serial No. 322,869; published Apr. 12, 1932. Class 46.
Società Anonima Cooperativa Latteria Soresinese, Soresina, Italy. Cheese, butter, and milk products. 295,272; June 28; Serial No. 315,163; published Apr. 12, 1932. Class 46.
Southern Cleanser Mfg. Co., Dallas, Tex. Powdered cleansing compound. 295,400; June 28; Serial No. 323,875; published Apr. 12, 1932. Class 4.
Sprich, Emil M., St. Louis, Mo. Smokers' pipes. 295,392; June 28; Serial No. 311,249; published Apr. 12, 1932. Class 8.
Square D Company, Detroit, Mich. Electric panelboards and electric control boards. 295,344; June 28; Serial No. 324,405; published Apr. 12, 1932. Class 21.
Standard Oil Company of New Jersey, Wilmington, Del. Caps, work shirts, sweaters, etc. 295,352; June 28; Serial No. 293,561; published Apr. 12, 1932. Class 39.
Standard Varnish Works, New York, N. Y. Paints and painters' supplies. 39,287; renewed Nov. 18, 1932.
Standard Varnish Works, New York, N. Y. Paints and painters' supplies. 39,319; renewed Nov. 18, 1932.
Stetson, John B., Company, Philadelphia, Pa. Soft and stiff felt hats and caps. 295,388; June 28; Serial No. 308,136; published Feb. 17, 1931. Class 39.
Stevenson & Son, Ltd., Dungannon, Ireland. Linen goods in the piece. 87,122; renewed June 25, 1932.
Storyk Bros., New York, N. Y. Dresses and blouses. 295,411; June 28; Serial No. 324,805; published Apr. 12, 1932. Class 39.
Swann Chemical Company, Birmingham, Ala. Fertilizer. 295,278; June 28; Serial No. 317,691; published Apr. 12, 1932. Class 10.
Swanson, Alvin J., doing business as Sweet-Hot, Inc., Jamestown, N. Y. Electrical food cooking apparatus. 295,279; June 28; Serial No. 319,788; published Apr. 12, 1932. Class 21.
Sweet-Hot, Inc. (See Swanson, Alvin J.)
Syndicate Publishing Company, Inc., New York, N. Y. Magazine. 295,391; June 28; Serial No. 311,166; published Mar. 31, 1931. Class 38.
Thayer, McNeil & Hodgkins, to Thayer McNeil Company, Boston, Mass., successor. Boots and shoes. 88,973; renewed Oct. 29, 1932.
Tokheim, John J., as assignee of The Tokheim Manufacturing Company, assignor to John J. Tokheim, doing business as The Tokheim Co., Cedar Rapids, Iowa. Liquid measuring and dispensing machines. 86,639; renewed May 21, 1932.
Tornello, C., doing business as C. Tornello & Co., Youngstown, Ohio. Edible vegetable oils. 295,418; June 28; Serial No. 321,450; published Apr. 12, 1932. Class 46.
Tower Magazines, Incorporated, Wilkes-Barre, Pa., and New York, N. Y. Magazine or periodical. 295,383; June 28; Serial No. 296,209; published May 13, 1930. Class 38.
Traphagen, Ethel, New York, N. Y. Pads of charts. 295,421; June 28; Serial No. 323,099; published Mar. 8, 1932. Class 23.
U. S. Slicing Machine Company, Chicago, Ill., assignor to U. S. Slicing Machine Company, La Porte, Ind. Meat-slicing machines and meat-slicers. 87,290–1; renewed July 2, 1932.
U. S. Slicing Machine Company, Chicago, Ill., assignor to U. S Slicing Machine Company, La Porte, Ind. Meat-slicing machines and slicers. 88,220; renewed Sept. 3, 1932.
Universal Atlas Cement Company. (See Atlas Portland Cement Company, The, assignor.)
Van Raalte Company, New York, N. Y. Laces. 295 350; June 28; Serial No. 324,544; published Apr. 12, 1932. Class 42.
Viloco Railway Equipment Co., Chicago, Ill. Brake steps for railway cars and locomotives and attachment devices for uncoupling railway cars. 295,274; June 28; Serial No. 316,388; published Apr. 12, 1932. Class 19.
Viloco Railway Equipment Co., Chicago, Ill. Sand driers. 295,275; June 28; Serial No. 316,390; published Apr. 12, 1932. Class 34.
Vogel, Joseph A., Wilmington, Del. Cards. 295,280–8; June 28; Serial Nos. 321,047–55; published Apr. 12, 1932. Class 37.
Vogel, Joseph A., Wilmington, Del. Cards. 295,289–91; June 28; Serial Nos. 321,124–6; published Apr. 12, 1932. Class 37.
Vogue Brassiere Mfg. Co., Newark, N. J. Corset and brassière in combination. 295,277; June 28; Serial No. 317,413; published Oct. 6, 1931. Class 39.
Von Damm, Henry W., doing business as F. H. Von Damm, Brooklyn, N. Y. Lawn seed. 295,401; June 28; Serial No. 324,023; published Apr. 12, 1932. Class 1.
Walters, Ernest E., Caldwell, Ohio. Jewelry polish. 295,407; June 28; Serial No. 324,499; published Apr. 12, 1932. Class 4.
Warner, William R., and Company, Philadelphia, Pa., assignor, by mesne assignments, to William R. Warner & Co., Inc., New York, N. Y. Antiseptic tablets. 88,605; renewed Oct. 1, 1932.
Warner, William R., and Company, Philadelphia, Pa., assignor, by mesne assignments, to William R. Warner & Co., Inc., New York, N. Y. Alterative, diuretic, and antacid. 88,606; renewed Oct. 1, 1932.

West India Oil Company, Bayonne, N. J. Gasolene, benzin, etc. 87,696; renewed July 30, 1932.

West India Oil Company, Bayonne, N. J. Gasolene and refined oil. 87,954; renewed Aug. 13, 1932.

Widow's Mite Corporation, Geneva, N. Y. Creole spiced sauce. 295,424; June 28; Serial No. 323,733; published Apr. 12, 1932. Class 46.

Willis, W. P., & Company, New York, N. Y. Open-weave cloth. 86,972; renewed June 11, 1932.

Wire Novelty Manufacturing Company, The, West Haven, Conn. Buckles and button loops. 295,300–1; June 28; Serial Nos. 323,078–9; published Apr. 12, 1932. Class 40.

Wolford, Edgar W., San Jose, Calif. Pipes and hose couplings, nozzles, and hydrants. 295,295; June 28; Serial No. 322,489; published Apr. 12. 1932. Class 13.

Wright, Alfred, Perfumer Inc., Philadelphia, Pa., assignor to Meilier Company, Perfumer, St. Louis, Mo. Perfumery. 88,544; renewed Sept. 24, 1932.

Ye Olde Tavern Sandwich Inn. (See Heglin, Anna T.)

LIST OF REGISTRANTS OF LABELS

Burgess Battery Company, Madison, Wis. Burgess Focusing Electric Lantern. For Hand Lanterns Operated By Means of Dry Batteries. 40,870; June 28.

Clay Cough Drop Co., not Inc. (See Haeseler, Loren M.)

Davidson Biscuit Company, Mt. Vernon, Ill. Toy House Graham Wafers. For Graham Wafers. 40,871; June 28.

Doering, Charles, doing business as The Pure Cheese Corporation, Chicago, Ill. Pure Cheese. For Pasteurized Cheese. 40,872; June 28.

Fort Howard Paper Company, Green Bay, Wis. Fort Howard. For Toilet Paper. 40,873; June 28.

Frozen Fruit Co. (See Stone, Simon B.)

Gantner & Mattern Co., San Francisco, Calif. Gantner Wikies. For Swimming Suits. 40,874; June 28.

Golden State Company, Ltd., San Francisco, Calif. Buddy Brown. For Frozen Confections. 40,875; June 28.

Haesler, Loren M., doing business as The Clay Cough Drop Co., not Inc., Chicago, Ill. Clay's Double Strength Cough Drops. For Cough Drops. 40,876; June 28.

Hoague-Sprague Corporation, Lynn, Mass. The Cadillac Shoe. For Boxes. 40,877; June 28.

Kollner's, Inc., Jamaica, L. I., N. Y. Grade A. For Eggs. 40,878; June 28.

Kollner's, Inc., Jamaica, L. I., N. Y. Grade A. For Lard. 40,879; June 28.

Luber, Philip, Philadelphia, Pa. Normello. For Cigars. 40,880; June 28.

Mechling Brothers Chemical Company, Camden, N. J. Mechling's Pyrote. For Insecticide. 40,881; June 28.

Nestle-Lemur Company, The, New York, N. Y. Nestle's Waving Emulsion for Nestoil Clipless Supply. For Preparation For Treating Hair and For Use in Waving and Curling Hair. 40,882; June 28.

Pure Cheese Corporation, The. (See Doering, Charles.)

Skinner Manufacturing Company, Omaha, Nebr. Skinner's. For Prepared Cooky Dough. 40,883; June 28.

Stone, Simon B., doing business as Frozen Fruit Co., Chicago, Ill. Frosted Pineapple. For Chocolate Coated Frosted Pineapple. 40,884; June 28.

Sussman, Wormser & Company, San Francisco, Calif. S and W. For Rice. 40,885; June 28.

Sutherland Paper Company, Kalamazoo, Mich. Creamery Butter. For Butter. 40,886; June 28.

Tobacco By-Products & Chemical Corporation, Louisville, Ky. "Nico-Fume" Tobacco Powder 10 Pounds Net. For Tobacco Powder for Fumigating Purposes. 40,887; June 28.

Wesco Foods Company, Cincinnati, Ohio. Guest Brand Malt Syrup. For Malt Syrup. 40,888; June 28.

LIST OF REGISTRANTS OF PRINTS

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. The Symbol of Rug Value. For Rugs. 13,765; June 28.

Checker Jack Coke Co. (See Halverson, Orris H.)

Eisenlohr, Webster, Inc., New York, N. Y. Eisenlohr's Cinco Cigars. For Cigars. 13,766; June 28.

Glenn Confections, Inc., Buffalo, N. Y. The Cat's Whiskers. For Chewing Gum. 13,767; June 28.

Halverson, Orris H., doing business as Checker Jack Coke Co., Milwaukee, Wis. The Taste Lingers. For Punches, Sodas, and Sundaes. 13,768; June 28.

Long, W. E. Co., The, Chicago, Ill. The Bread In the Show Case Wrapper. For Bread. 13,769; June 28.

Upsher-Smith, Frederick A., doing business as Upsher Smith Co., Minneapolis, Minn. Upsher Smith Digitalis. For Digitalis. 13,770; June 28.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cellulose acetate material. Fiberloid Corporation. 295,405; June 28; Serial No. 324,251; published Apr. 12, 1932.

Coal. De Bardeleben Coal Corporation. 295,365; June 28; Serial No. 324,702; published Apr. 12, 1932.

Coal. Killarney Smokeless Coal Company. 295,377; June 28; Serial No. 324,965; published Apr. 12, 1932.

Pine tar. Louisiana Pine Products Company. 295,397; June 28; Serial No. 322,847; published Apr. 12, 1932.

Seed, Lawn. H. W. Von Damm. 295,401; June 28; Serial No. 324,023; published Apr. 12, 1932.

CLASS 2

Bins, troughs, tanks, etc. A. N. Eaton. 295,330; June 28; Serial No. 323,990; published Apr. 12, 1932.

CLASS 3

Bags and cases. K. Kaufmann & Co. 295,408; June 28; Serial No. 324,564; published Apr. 12, 1932.

CLASS 4

Cleansing compound, Powdered. Southern Cleanser Mfg. Co. 295,400; June 28; Serial No. 323,875; published Apr. 12, 1932.

Detergent compound. Hercules Powder Company. 295,403; June 28; Serial No. 324,069; published Apr. 12, 1932.

Polish, Jewelry. E. E. Walters. 295,407; June 28; Serial No. 324,490; published Apr. 12, 1932.

Strops and soaps. Auto Strop Safety Razor Co. 89,082; renewed Nov. 12, 1932.

CLASS 6

Alterative, diuretic, and antacid. William R. Warner and Company. 88,606; renewed Oct. 1, 1932.

Antiseptic tablets. William R. Warner and Company. 88,605; renewed Oct. 1, 1932.

Perfumery. Alfred Wright Perfumer Inc. 88,544; renewed Sept. 24, 1932.

CLASS 8

Pipes, Smokers'. E. M. Sprich. 295,392; June 28; Serial No. 311,249; published Apr. 12, 1932.

CLASS 10

Fertilizers. Swann Chemical Company. 295,278; June 28; Serial No. 317,691; published Apr. 12, 1932.

CLASS 11

Inks, Writing. Carter's Ink Company. 295,364; June 28; Serial No. 324,696; published Apr. 12, 1932.

CLASS 12

Cement, Portland. Atlas Portland Cement Company. 86,973; renewed June 18, 1932.

Cement, Portland. Newayzo Portland Cement Company. 295,402; June 28; Serial No. 324,045; published Apr. 12, 1932.

Plywood panels and veneer. Indiana Film Company. 295,406; June 28; Serial No. 324,466; published Apr. 12, 1932.

Roofing compound. Ruberoid Co. 295,276; June 28; Serial No. 316,509; published Apr. 12, 1932.

Roofing-felt, deadening-felt, etc. General Roofing Manufacturing Company. 87,202; renewed July 2, 1932.

Steel, lumber, doors, etc., Structural. Austin Company. 295,393; June 28; Serial No. 317,084; published Apr. 12, 1932.

Stone Protecting Preparations. Hans Brosius. 295,378; June 28; Serial No. 280,469; published Sept. 17, 1929.

Fasteners, locks, etc., Sash. H. B. Ives Company. 39,106; renewed Oct. 21, 1932.

CLASS 13

Hardware. Champion Hardware Company. 87,601; renewed July 30, 1932.

Pipes and hose couplings, nozzles, and hydrants. E. W. Wolford. 295,295; June 28; Serial No. 322,489; published Apr. 12, 1932.

CLASS 14

Castings of brass alloy. Doehler Die Casting Co. 295,304; June 28; Serial No. 323,484; published Apr. 12, 1932.

Forgings. Atwater Manufacturing Company. 295,334; June 28; Serial No. 324,279; published Apr. 12, 1932.

Steel sheets, Copper bearing galvanized. Eastern Rolling Mill Company. 295,340; June 28; Serial No. 324,311; published Apr. 12, 1932.

Steel sheets, Galvanized. Eastern Rolling Mill Company. 295,339; June 28; Serial No. 324,310; published Apr. 12, 1932.

Welding rods. Linde Air Products Company. 295,306; June 28; Serial No. 323,581; published Apr. 12, 1932.

CLASS 15

Gasolene and refined oil. West India Oil Company. 87,954; renewed Aug. 13, 1932.

Gasolene, benzin, etc. West India Oil Company. 87,696; renewed July 30, 1932.

Oils. Phillips Petroleum Company. 295,309–17; June 28; Serial Nos. 323,674–82; published Apr. 12, 1932.

Oils. Phillips Petroleum Company. 295,318–20; June 28; Serial Nos. 323,684–6; published Apr. 12, 1932.

Oils. Phillips Petroleum Company. 295,321; June 28; Serial No. 323,688; published Apr. 12, 1932.

Oils. Phillips Petroleum Company. 295,322–3; June 28; Serial Nos. 323,690–1; published Apr. 12, 1932.

Oils. Phillips Petroleum Company. 295,324; June 28; Serial No. 323,696; published Apr. 12, 1932.

Oils. Phillips Petroleum Company. 295,325; June 28; Serial No. 323,698; published Apr. 12, 1932.

Oils and greases, Lubricating. Lubri-Graph Corporation. 295,342; June 28; Serial No. 324,387; published Apr. 12, 1932.

CLASS 16

Paints and painters' supplies. Standard Varnish Works. 39,287; renewed Nov. 18, 1932.

Paints and painters' supplies. Standard Varnish Works. 39,319; renewed Nov. 18, 1932.

CLASS 19

Brake steps for railway cars and locomotives, and attachment devices for uncoupling railway cars. Vilioco Railway Equipment Co. 295,274; June 28; Serial No. 316,388; published Apr. 12, 1932.

CLASS 21

Batteries, Storage. Monark Battery Company. 295,332; June 28; Serial No. 324,131; published Apr. 12, 1932.

Electric panelboards and electric control boards. Square D Company. 295,344; June 28; Serial No. 324,405; published Apr. 12, 1932.

Electric suction cleaners and parts thereof, dust collectors, suction nozzles, etc. Air-Way Electric Appliance Corporation. 295,381; June 28; Serial No. 293,205; published Apr. 12, 1932.

Electrical food cooking apparatus. A. J. Swanson. 295,279; June 28; Serial No. 319,788; published Apr. 12, 1932.

CLASS 22

Toys. E. P. Lehmann. 85,972; renewed Apr. 2, 1932.

CLASS 23

Blades, Razor. Ohio Match Company. 295,430; June 28; Serial No. 324,394; published Apr. 12, 1932.

Boring-machine. J. G. Henderson. 86,706; renewed May 28, 1932.

Gage pins, feed guides, registry apparatus, etc. A. L. Megill. 295,425; June 28; Serial No. 323,824; published Apr. 12, 1932.

Machinery bearings. Federal Motor Truck Company. 295,416; June 28; Serial No. 320,405; published Apr. 12, 1932.

Machinery, Shoe. Pope Machinery Corporation. 295,432; June 28; Serial No. 324,625; published Apr. 12, 1932.

Meat-slicing machines and meat-slicers. U. S. Slicing Machine Company. 87,290–1; renewed July 2, 1932.

Meat-slicing machines and meat-slicers. U. S. Slicing Machine Company. 88,220; renewed Sept. 3, 1932.

Razors and safety razor blades, Safety. Maplewood Blade Company. 295,410; June 28; Serial No. 324,670; published Apr. 12, 1932.

Tractors. Cleveland Tractor Company. 295,379; June 28; Serial No. 281,195; published Apr. 12, 1932.

CLASS 26

Charts, Pads of. E. Tranbagen. 295,421; June 28; Serial No. 323,099; published Apr. 12, 1932.

Lenses, Ophthalmic. O. G. Haussmann. 295,431; June 28; Serial No. 324,435; published Apr. 12, 1932.

Measuring and dispensing machines, Liquid. J. J. Tokheim. 86,639; renewed May 21, 1932.

Picture apparatus, and supplies, Moving. Precision Machine Company. 88,633; renewed Oct. 8, 1932.

Scientific laboratory apparatus. A. M. Parks. 295,414; June 28; Serial No. 319,074; published Apr. 12, 1932.

CLASS 27

Clocks, watches, chronometers, etc. Electric Auto-Lite Company. 295,331; June 28; Serial No. 324,067; published Apr. 12, 1932.

CLASS 28

Jewelry novelties. Nat Levy & Company Inc. 295,296; June 28; Serial No. 322,593; published Apr. 5, 1932.

Rings and wedding rings, Finger. A. Sager. 295,343; June 28; Serial No. 324,400; published Apr. 12, 1932.

CLASS 29

Mops. Channell Chemical Company. 87,163; renewed July 2, 1932.

Powder puffs, dusting mittens, mops, etc. S. H. Kress & Co. 295,303; June 28; Serial No. 323,338; published Mar. 15, 1932.

CLASS 32

Cabinets, drawers, trays, etc. Remington Rand Inc. 295,427–8; June 28; Serial Nos. 324,081–2; published Apr. 12, 1932.

CLASS 34

Burners, Oil. Huenefeld Company. 295,390; June 28; Serial No. 310,868; published Apr. 12, 1932.

Burners, Oil. Rhode Island Welding Company. 295,292; June 28; Serial No. 321,298; published Apr. 12, 1932.

Burners, Oil. Rhode Island Welding Company. 295,293; June 28; Serial No. 321,474; published Apr. 12, 1932.

Driers, Sand. Vilioco Railway Equipment Co. 295,275; June 28; Serial No. 316,390; published Apr. 12, 1932.

Lamps, lanterns, heaters, etc. Coleman Lamp and Stove Company. 295,262; June 28; Serial No. 311,366; published Apr. 12, 1932.

CLASS 35

Belting, hose, etc. Federal Rubber Manufacturing Co. 86,795; renewed June 4, 1932.

Rings, Piston. McQuay-Norris Manufacturing Company. 295,413; June 28; Serial No. 318,156; published Apr. 12, 1932.

Tires, Solid rubber. Goodyear Tire & Rubber Company. 39,007; renewed Oct. 7, 1932.

CLASS 36

Strings for musical instruments. National Musical String Co. 88,511; renewed Sept. 24, 1932.

CLASS 37

Books, Sales. American Sales Book Company. 86,689; renewed May 28, 1932.

Cards. J. A. Vogel. 295,280–8; June 28; Serial Nos. 321,047–55; published Apr. 12, 1932.

Cards. J. A. Vogel. 295,289–91; June 28; Serial Nos. 321,124–6; published Apr. 12, 1932.

Mounts, Corner. Ace Art Company. 295,372; June 28; Serial No. 324,813; published Apr. 12, 1932.

Paper. Mosinee Paper Mills Company. 295,356; June 28; Serial No. 324,620; published Apr. 12, 1932.

Paper and box-board, Wrapping. J. D. Bowersock. 88,836; renewed Oct. 29, 1932.

Paper sheets, Writing. Reiner's Rotaprint, Inc. 295,380; June 28; Serial No. 287,597; published Apr. 12, 1932.

Sheet units. H. Pleasants, jr. 295,308; June 28; Serial No. 323,628; published Apr. 12, 1932.

Stationery supplies. A. W. Faber. 86,582; renewed May 21, 1932.

CLASS 38

Comic section. King Features Syndicate, Inc. 295,348; June 28; Serial No. 324,471; published Apr. 12, 1932.

Magazine. National Duroc Record Association. 295,357; June 28; Serial No. 324,621; published Apr. 12, 1932.

Magazine. Syndicate Publishing Company. 295,391; June 28; Serial No. 311,166; published Mar. 31, 1931.

Magazine or periodical. Tower Magazines, Incorporated. 295,383; June 28; Serial No. 296,209; published May 13, 1930.

Newspaper. W. M. Dawson, jr. 295,353; June 28; Serial No. 324,594; published Apr. 12, 1932.

Periodical. American Builder Publishing Corporation. 295,346; June 28; Serial No. 324,420; published Apr. 12, 1932.

Periodical. Dental Survey, Inc. 295,341; June 28; Serial No. 324,371; published Apr. 12, 1932.

Periodical. Household Journal Company. 295,355; June 28; Serial No. 324,605; published Apr. 12, 1932.

Publication. Association for the Study of Negro Life and History, Inc. 295,357; June 28; Serial No. 324,580; published Apr. 12, 1932.

Publication. R. Boyer. 295,363; June 28; Serial No. 324,695; published Apr. 12, 1932.

Publication. Drug Markets, Inc. 295,361; June 28; Serial No. 324,662; published Apr. 12, 1932.

Publication. Lammert Furniture Co. 295,349; June 28; Serial No. 324,533; published Apr. 12, 1932.

CLASS 39

Apparel, Wearing. Phillips Petroleum Company. 295,326; June 28; Serial No. 323,705; published Apr. 12, 1932.

Boots and shoes. Endicott Johnson Corporation. 295,328; June 28; Serial No. 323,813; published Apr. 12, 1932.
Boots and shoes. Florsheim Shoe Company. 88,745; renewed Oct. 22, 1932.
Boots and shoes. International Shoe Co. 295,329; June 28; Serial No. 323,941; published Apr. 12, 1932.
Boots and shoes. Thayer, McNeil & Hodgkins. 88,973; renewed Oct. 29, 1932.
Caps, shirts, sweaters, etc. Standard Oil Company of New Jersey. 295,382; June 28; Serial No. 293,561; published Apr. 12, 1932.
Cloaks and outer suits, skirts, and dresses, Outer. R. B. Manufacturing Company. 88,787; renewed Oct. 22, 1932.
Coats, pants, knickerbockers, etc. Goodall Worsted Co. 295,429; June 28; Serial No. 324,316; published Apr. 12, 1932.
Corsets and brassières in combination. Vogue Brassiere Mfg. Co. 295,277; June 28; Serial No. 317,413; published Oct. 6, 1931.
Dresses. Fifth Avenue Modes, Inc. 295,387; June 28; Serial No. 307,316; published Apr. 12, 1932.
Dresses and blouses. Storyk Bros. 295,411; June 28; Serial No. 324,805; published Apr. 12, 1932.
Dresses, frocks, aprons, etc. Saba Corporation. 295,417; June 28; Serial No. 320,572; published Apr. 12, 1932.
Gloves. Fownes Brothers & Co. Inc. 295,335; June 28; Serial No. 324,284; published Apr. 12, 1932.
Hats. Brighten Ladies Hat Co. Inc. 295,336–8; June 28; Serial Nos. 324,304–6; published Apr. 12, 1932.
Hats. Hy-Hat Millinery, Inc. 295,264; June 28; Serial No. 313,694; published Apr. 12, 1932.
Hats and caps, Soft and stiff felt. John B. Stetson Company. 295,388; June 28; Serial No. 308,136; published Feb. 17, 1931.
Hosiery. Fedden Brothers Company. 295,420; June 28; Serial No. 322,843; published Apr. 12, 1932.
Hosiery. H. S. Gilbert. 295,426; June 28; Serial No. 324,036; published Apr. 12, 1932.
Hosiery. Rambo & Regar. 39,307; renewed Nov. 18, 1932.
Pajama sets, robes. M. Cooper. 295,422; June 28; Serial No. 323,280; published Apr. 12, 1932.
Shirts, pajamas, and underwear. Manhattan Shirt Co. 295,412; June 28; Serial No. 324,845; published Apr. 12, 1932.
Shoes. Elco Shoe Manufacturers, Inc. 295,305; June 23; Serial No. 323,573; published Apr. 12, 1932.
Shoes. O'Connor & Goldberg. 295,345; June 28; Serial No. 324,417; published Apr. 12, 1932.
Suits, coats, dresses and hats. Morris W. Haft & Brothers, Inc. 295,351; June 28; Serial No. 324,557; published Apr. 12, 1932.
Sweaters, pull-overs, dresses, etc. Etablissements André Gillier, Societe Anonyme. 295,389; June 28; Serial No. 309,637; published Apr. 12, 1932.

CLASS 40

Buckles and button loops. Wire Novelty Manufacturing Company. 295,300–1; June 28; Serial Nos. 323,078–9; published Apr. 12, 1932.
Pins. William Prym of America, Inc. 295,294; June 28; Serial No. 322,113; published Apr. 12, 1932.
Rubber used for eyelash curlers, Strips of. Kurlash Company. 295,307; June 28; Serial No. 323,623; published Apr. 12, 1932.
Straps, braids, tapes, etc. S. H. Kress & Co. 295,302; June 28; Serial No. 323,335; published Apr. 12, 1932.
Tapes, hooks and eyes, straps, etc. S. H. Kress & Co. 295,299; June 28; Serial No. 323,009; published Apr. 12, 1932.

CLASS 42

Blankets. W. S. Libbey Company. 295,273; June 28; Serial No. 315,772; published Apr. 12, 1932.
Cloth, Open-weave. W. P. Willis & Company. 86,972; renewed June 11, 1932.
Crepes in the piece. Benrose Silk Mfg. Corp. 295,347; June 28; Serial No. 324,424; published Apr. 12, 1932.
Fabrics of cellulose derivatives. Celanese Corporation of America. 295,367; June 28; Serial No. 324,732; published Apr. 12, 1932.
Fabrics of cellulose derivatives. Celanese Corporation of America. 295,367; June 28; Serial No. 324,732; published Apr. 12, 1932.
Fabrics, Pile. Sidney Blumenthal & Co. Inc. 295,384; June 28; Serial No. 297,296; published Apr. 12, 1932.
Laces. Van Raalte Company. 295,350; June 28; Serial No. 324,544; published Apr. 12, 1932.
Linen goods in the piece. Stevenson & Son, Ltd. 87,122; renewed June 25, 1932.
Ribbons. J. Rosen & Sons. 295,327; June 28; Serial No. 323,719; published Apr. 12, 1932.
Sheets and pillow cases. W. T. Grant Company. 295,371; June 28; Serial No. 324,788; published Apr. 12, 1932.
Silk piece goods. H. R. Mallinson & Co. 295,368; June 28; Serial No. 324,751; published Apr. 12, 1932.
Woolen piece goods. Buckley & Cohen. 295,358–60; June 28; Serial Nos. 324,652–4; published Apr. 12, 1932.

CLASS 43

Thread and yarn. J. P. Bemberg Aktiengesellschaft. 295,297; June 28; Serial No. 322,987; published Apr. 12, 1932.
Thread and yarn. J. P. Bemberg Aktiengesellschaft. 295,298; June 28; Serial No. 322,989; published Apr. 12, 1932.
Thread and yarns, Cotton. Groves Thread Company. 295,374; June 28; Serial No. 324,929; published Apr. 12, 1932.
Thread and yarns, Cotton. Groves Thread Company. 295,375; June 28; Serial No. 324,932; published Apr. 12, 1932.
Thread and yarns, Cotton. Groves Thread Company. 295,376; June 28; Serial No. 324,934; published Apr. 12, 1932.

CLASS 44

Thermometers, surgical glassware and instruments. Becton, Dickinson & Co. 38,310; renewed May 20, 1932.

CLASS 45

Root-beer and cherry-punch. Interstate Commerce Co. 88,000; renewed Aug. 20, 1932.

CLASS 46

Beef extracts. Liebig Extract Company. 37,660; renewed Jan. 21, 1932.
Bread. General Baking Company. 295,266–8; June 28; Serial Nos. 314,803–5; published Apr. 12, 1932.
Bread. General Baking Company. 295,269–71; June 28; Serial Nos. 314,807–9; published Apr. 12, 1932.
Bread and cake. Hankey Baking Company. 295,395; June 28; Serial No. 321,407; published Apr. 12, 1932.
Cakes, pastries, and macaroons. Pastry Pygmy Corporation. 295,366; June 28; Serial No. 324,756; published Apr. 12, 1932.
Canned fruits and vegetables. W. H. Harris Grocery Company. 88,280; renewed Sept. 10, 1932.
Canned salmon. Astoria & Puget Sound Canning Co. 88,826; renewed Oct. 29, 1932.
Canned sardines. Seacoast Canning Company. 89,149; renewed Nov. 12, 1932.
Canned sardines. Seacoast Canning Company. 89,151; renewed Nov. 12, 1932.
Cheese. Roethlisberger & Sohn. 295,394; June 28; Serial No. 320,553; published Apr. 12, 1932.
Cheese, butter, and milk products. Societa Anonima Cooperativa Latteria Soresinese. 295,272; June 28; Serial No. 315,163; published Apr. 12, 1932.
Coffee and olives. Palmer House Company. 295,386; June 28; Serial No. 305,789; published Dec. 2, 1930.
Coffees. Royal Valley Coffee Co. 89,063; renewed Nov. 5, 1932.
Eggs. National Poultry Research Laboratories Ltd. 295,398; June 28; Serial No. 323,204; published Apr. 12, 1932.
Feed, Prepared rabbit. Chapin & Company. 295,265; June 28; Serial No. 314,395; published Apr. 12, 1932.
Flour. Fisher Flouring Mills Company. 295,370; June 28; Serial No. 324,786; published Apr. 12, 1932.
Flour. Stanley Knecht Flour & Grain Co. Inc. 295,362; June 28; Serial No. 324,667; published Apr. 12, 1932.
Flour, Biscuit. General Mills, Inc. 295,354; June 28; Serial No. 324,601; published Apr. 12, 1932.
Flour, Biscuit. General Mills, Inc. 295,409; June 28; Serial No. 324,599; published Apr. 12, 1932.
Flour, Pancake. General Mills, Inc. 295,373; June 28; Serial No. 324,842; published Apr. 12, 1932.
Flour, Self-rising wheat. Millstadt Milling Co. 87,354; renewed July 9, 1932.
Flour, Soy bean. Shellabarger Grain Products Company. 295,396; June 28; Serial No. 322,809; published Apr. 12, 1932.
Flour, syrup flavors, spices, etc., Prepared. I. Kalfus Co. 295,385; June 28; Serial No. 304,821; published Apr. 12, 1932.
Flour, Wheat. Duluth-Superior Milling Company. 88,858; renewed Oct. 29, 1932.
Flour, Wheat. Duluth-Superior Milling Company. 89,016–17; renewed Nov. 5, 1932.
Flour, Wheat. New Prague Flouring Mills Company. 39,185; renewed Nov. 4, 1932.
Food for puppies and dogs. Polk Miller Products Corp. 295,404; June 28; Serial No. 324,190; published Apr. 12, 1932.
Foods. A. Goodman & Son. 86,901; renewed June 11, 1932.
Olive oil. Riva Hermanos. 295,415; June 28; Serial No. 319,537; published Apr. 12, 1932.
Olive oil. M. Nobile & Co. 295,419; June 28; Serial No. 321,814; published Apr. 12, 1932.
Sandwiches. A. T. Heglin. 295,399; June 28; Serial No. 323,331; published Apr. 12, 1932.
Sardines. Seacoast Canning Co. 88,122; renewed Aug. 27, 1932.
Sauce, Creole spiced. Widow's Mite Corporation. 295,424; June 28; Serial No. 323,733; published Apr. 12, 1932.

Sugar. California & Hawaiian Sugar Refining Corporation. 95,423; June 28; Serial No. 323,389; published Apr. 12, 1932.
Syrup, Concentrated malt. Miller High Life Company. 295,263; June 28; Serial No. 313,088; published June 9, 1931.
Vegetable oils, Edible. C. Tornello. 295,418; June 28; Serial No. 321,450; published Apr. 12, 1932.

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Felt. Felters Company. 295,333; June 28; Serial No. 323,250; published Apr. 12, 1932.

LIST OF LABELS

Buddy Brown. For Frozen Confections. Golden State Company, Ltd. 40,875; June 28.
Burgess Focusing Electric Lantern. For Hand Lanterns Operated By Means of Dry Batteries. Burgess Battery Company. 40,870; June 28.
Clay's Double Strength Cough Drops. For Cough Drops. L. M. Haeseler. 40,876; June 28.
Creamery Butter. For Butter. Sutherland Paper Company. 40,886; June 28.
Fort Howard. For Toilet Paper. Fort Howard Paper Company. 40,873; June 28.
Frosted Pineapple. For Chocolate Coated Frosted Pineapple. S. B. Stone. 40,884; June 28.
Gantner Wikies. For Swimming Suits. Gantner & Mattern Co. 40,874; June 28.
Grade A. For Eggs. Kollner's, Inc. 40,878; June 28.
Grade A. For Lard. Kollner's, Inc. 40,879; June 28.
Guest Brand Malt Syrup. For Malt Syrup. Wesco Foods Company. 40,888; June 28.
Mechling's Pyrote. For Insecticide. Mechling Brothers Chemical Company. 40,881; June 28.
Nestle's Waving Emulsion For Nestoil Clipless Supply. For Preparation For Treating Hair and For Use in Waving and Curling Hair. Nestle-Lemur Company. 40,882; June 28.
"Nico-Fume" Tobacco Powder 10 Pounds Net. For Tobacco Powder for Fumigating Purposes. Tobacco By-Products & Chemical Corporation. 40,887; June 28.
Normello. For Cigars. P. Luber. 40,880; June 28.
Pure Cheese. For Pasteurized Cheese. C. Doering. 40,872; June 28.
S and W. For Rice. Sussman, Wormser & Company. 40,885; June 28.
Skinner's. For Prepared Cooky Dough. Skinner Manufacturing Company. 40,883; June 28.
The Cadillac Shoe. For Boxes. Hoague-Sprague Corporation. 40,877; June 28.
Toy House Graham Wafers. For Graham Wafers. Davidson Biscuit Company. 40,871; June 28.

LIST OF PRINTS

Eisenlohr's Cinco Cigars. For Cigars. Webster Eisenlohr, Inc. 13,766; June 28.
The Bread in the Show Case Wrapper. For Bread. W. E. Long Co. 13,769; June 28.
The Cat's Whiskers. For Chewing Gum. Glenn Confections, Inc. 13,767; June 28.
The Symbol of Rug Value. For Rugs. Bigelow-Sanford Carpet Co. 13,765; June 28.
The Taste Lingers. For Punches, Sodas, and Sundaes. O. H. Halverson. 13,768; June 28.
Upsher Smith Digitalis. For Digitalis. F. A. Upsher-Long Co. 13,769; June 28.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 28TH DAY OF JUNE, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abbott, Charles W., Rome, assignor, by mesne assignments, to General Cable Corporation, New York, N. Y. Electrical conductor. 1,864,512; June 28.
Abel, Alf J., Richmond Hill, N. Y. Automatically controlling the accelerator pedal of a motor vehicle. 1,864,881; June 28.
Abel, Frank J., Massapequa, assignor to Henry Hyman, Brooklyn, N. Y. Clock case. Des. 87,248; June 28.
Acierno, Rocco, Newark, N. J. Windshield wiper. 1,865,158; June 28.
Adamson, Allan A., Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio. Manufacture of cigar boxes and the like. 1,865,159; June 28.
Agfa Ansco Corporation. (See Lowkrantz, G., and Lessler, assignors.)
Allearn, Frank M., and E. F. Richardson, Greenville, Pa. Driving box. 1,865,292; June 28.
Ahern, William A., Worcester, Mass. Automatic control of water heaters. 1,865,225; June 28.
Airlte Corporation. (See Braemer, William G. R., assignor.)
Aktiebalaget Lifingstroms Angturbin. (See Forssblad, Nils R., assignor.)
Aktiengesellschaft fur Stickstoffdunger. (See Winter, E., and Grimm, assignors.)
Albaugh, Ellis, and H. F. Hildebrandt, assignors to Dixie Cotton Machinery Company, San Antonio, Tex. Cotton chopping machine. 1,865,351; June 28.
Albright, Edward C., assignor to Indiana Lamp Corporation, Connersville, Ind. Lamp structure. 1,864,706; June 28.
Alco Products Incorporated. (See Jacocks, George T., assignor.)
Alden, Carroll R., assignor to Ex-Cell-O Aircraft & Tool Corporation, Detroit, Mich. Slip bushing. 1,864,707; June 28.
Alexander, William, Glasgow, Scotland. Oil pump. 1,865,350; June 28.
Allen, Harold, New York, N. Y. Take-up device for telephone, floor lamp, and other wires. 1,865,069; June 28.
Allen, Horace R. (See Taylor, William M., assignor.)
Allgrunn, Carl G. (See Knapp, E., and Allgrunn.)
Aluminum Company of America. (See Dix, Edgar H., jr., assignor.)
Aluminum Company of America. (See Kappes, Walter R., assignor.)
Amburson Construction Company. (See Burroughs, Edgar H., assignor.)
Ament, Lucy C., New York, N. Y., now by judicial change of name, L. C. Thomas. Container. 1,865,063; June 28.
American Air Filter Company. (See Goodloe, Alfred M., assignor.)
American Anode Incorporated. (See Sprunger, Vernon J., assignor.)
American Assembling Machine Company. (See Kleinberg, Paul E., assignor.)
American Can Company. (See Thornburgh, Ivan D., assignor.)
American Car and Foundry Company. (See Clarke, Allin W., assignor.)
American Car and Foundry Company. (See Clarke, A. W., and Griffin, assignors.)
American Car and Foundry Company. (See Dendler, Ralph E., assignor.)
American Car and Foundry Company. (See McBride, John J., assignor.)
American Car and Foundry Company. (See Thompson, John B. D., assignor.)
American Car and Foundry Company. (See Willoughby, Victor, assignor.)
American Car and Foundry Company. (See Wood, Joseph L., assignor.)
American Chain Company, Inc. (See Reyburn, John R., assignor.)
American Electric Motor Company. (See Daun, C. L., and Keller, assignors.)
American Face Brick Research Corporation. (See Slidell, Kemper, assignor.)
American Fork & Hoe Company, The. (See Cowdery, Robert H., assignor.)
American Fork & Hoe Company, The. (See Fifield, Albert F., assignor.)
American Lurgi Corporatoon. (See Klencke, Hans, assignor.)
American Machine & Foundry Company. (See Hawkins, W. J., and Wiener, assignors.)
American Machine & Foundry Company. (See Podmore, Arthur, assignor.)
American Machine & Foundry Company. (See Rundell, Rupert E., assignor.)
American Machine & Foundry Company. (See Wickman, Samuel A., assignor.)
American Radiator Company. (See Maier, George M., assignor.)
American Sheet and Tin Plate Company. (See Landon, Lee B., assignor.)
American Sheet and Tin Plate Company. (See Moore, Carl E., assignor.)
Amerilan Slicing Machine Company. (See Campbell, William J., assignor.)
American Solvents and Chemical Corporation, The. (See Crowell, R. B., and Ebe, assignors.)
American Steel and Wire Company of New Jersey. (See Davies, David, assignor.)
American Swiss Company, The. (See Grund, Fletcher D., assignor.)
American Telephone and Telegraph Company. (See Edwards, William H., assignor.)
American Telephone and Telegraph Company. (See Reynolds, Frederick W., assignor.)
American Telephone and Telegraph Company. (See Smith, T. C., Freeman, and Livermore, assignors.)
American Temperature Indicating Company, The. (See Kuhlman, Carl H., assignor.)
American Thermos Bottle Company, The. (See Wetmore, Miner P., assignor.)
American Thread Company, The. (See Baker, Dickerson G., assignor.)
American Tobacco Company, The. (See Schneider, B. R., and Kaiser, assignors.)
American Window Glass Company. (See Pierce, L. J., and Bishop, assignors.)
American Wringer Co. (See Keltie, George R., assignor.)
Amsler, Alfred J., Schaffhausen, Switzerland. Universal testing machine. 1,865,070; June 28.
Anderson, Alexander G., Whiteland, Ind. Static and interference eliminator control unit for guard-drain circuits. 1,864,882; June 28.
Anderson, Church, Los Angeles, Calif. Check protector for pocket check books. 1,865,071; June 28.
Anderson, Edward, Chicago, Ill. Temporary locking device. 1,864,883; June 28.
Andrews, Franklin O., Willoughby, and L. Steinfurth, East Cleveland, assignors to The Economy Engineering Company, Willoughy, Ohio. Feeding mechanism. 1,865,293; June 28.
Angel, Harry K., et al. (See Tumminello, Charles E., assignor.)
Aoki, Ray M., Kona, Territory of Hawaii. Dirigible light. 1,865,294; June 28.
Appleford Paper Products Limited. (See Smith, E., and Powell, assignors.)
Appleman, Winfield O., and F. N. Bay, Albia, Iowa. Hand rest for steering wheels. 1,865,072; June 28.
Arbuckle, Samuel F., Highland Park, assignor to Monogram Lens Corporation, Detroit, Mich. Bulb adapter. 1,865,073; June 28.
Arentsen, Arie H., Amsterdam, Netherlands. Manufacture of continuous sheets or corrugated plates of asbestos cement with insertion or insertions of iron wire netting. 1,864,626; June 28.
Arenz, John A., Mount Vernon, N. Y., assignor to International Screw Company, Wilmington, Del. Screw machine for cutting single point double thread screws. 1,865,226; June 28.
Aronoff, Samuel, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company. Meter testing device. 1,864,627; June 28.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Penholder. 1,864,708; June 28.
Aronson, Louis V., assignor to Art Metal Works, Inc., Newark, N. J. Calendar mechanism and associated penholder. 1,864,709; June 28.
Arper, Albert D., Tacoma, Wash., assignor of one-half to Clarence T. Arper. Furnace draft control device. 1,865,295; June 28.
Arper, Clarence T. (See Arper, Albert D., assignor.)
Art Metal Works, Inc. (See Aronson, Louis V., assignor.)
Arzino, August P., San Jose, Calif. Filling valve for syrupers. 1,865,227; June 28.
Atlas Powder Company. (See Hill, Roy L., assignor.)
Atti, Ralph, Union City, N. J., assignor to C. T. Rice, New York, N. Y. Typewriter. 1,864,521; June 28.
Austin, Dwight E., Los Angeles, Calif. Vehicle and sleeping berth construction. 1,864,710; June 28.
Auto Specialties Mfg. Co. (See Lucker, Millard B., assignor.)

Autocraft Box Corporation. (See Adamson, Allan A., assignor.)
Autographic Register Company. (See Schultz, Frank, assignor.)
Babcock & Wilcox Company, The. (See Jones, William A., assignor.)
Baber Company. (See Baber, John L., jr., assignor.)
Baber, John L., jr., New York, N. Y., assignor to Baber Company, Boston, Mass. Article handling mechanism. 1,865,074; June 28.
Bäckström, Sigurd M. (See Munters, C. G., and Bäckström.)
Bader, Walter. (See Dreyfus, H., and Bader.)
Baker, Dickerson G., Holyoke, Mass., assignor to The American Thread Company, New York, N. Y. Winding machine. 1,865,075; June 28.
Baker, William T., Louisville, Ky. Safety device for banks, etc. 1,865,296; June 28.
Balch, Jack H., Chicago, Ill. Fabricated golf club head. 1,864,513; June 28.
Ball, Alfred J. (See Gourley, G. T., and Ball.)
Ball, Thomas F., Kansas City, Mo. Meat and food grinders. 1,864,575; June 28.
Ballard, Arthur H., Incorporated. (See Ballard, Arthur H., assignor.)
Ballard, Arthur H., assignor to A. H. Ballard, Incorporated, Boston, Mass. Liquid fuel burner. 1,865,390; June 28.
Ballman, Edwin C., St. Louis, Mo. Alternating current motor. 1,865,160; June 28.
Bank, Albert M., assignor to S. Bank, Jersey City, N. J. Upholstery construction. 1,864,514; June 28.
Bank, Sylvia. (See Bank, Albert M., assignor.)
Banks, Charles G. (See Hirsch, Frank G., assignor.)
Barclay, Earle H., Hamilton, Ohio, assignor to The Silica Gel Corporation, Baltimore, Md. Adsorbent and/or catalytic gels and making same. 1,864,628; June 28.
Barényl, Árpád, Berlin-Lichterfelde, Germany. Photographic shutter. 1,865,078; June 28.
Barker, David J., Seattle, Wash. Casement window swinging means. 1,864,790; June 28.
Barker, Norris. (See Manners, W. H., and Barker.)
Barr and Stroud, Limited. (See French, James W., assignor.)
Barrett Company. (See Miller, S. P., and Ellms.)
Barry, Manley, Orono, Me. Gas economizer for internal combustion engines. 1,865,076; June 28.
Barstow, Edwin O., assignor to The Dow Chemical Company, Midland, Mich. Preparing anhydrous magnesium chloride from magnesium oxychloride cement mixtures. 1,865,228; June 28.
Bartel, Rudolph F., New York, N. Y. Buckle. 1,865,077; June 28.
Bartelme, Ferdinand M., Glencoe, Ill. Transmission mechanism for motor vehicles. 1,864,522; June 28.
Bartlett Hayward Company, The. (See Meyer, Henry C. A., assignor.)
Batcheldor, Charles A., St. Albans, Me. Hosiery form. 1,864,788; June 28.
Bateman, Errol L., Gulfport, Miss. Railroad crossing gate. 1,865,297; June 28.
Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Manufacture of shoes. 1,864,629; June 28.
Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for shaping shoe uppers. 1,864,630; June 28.
Bauer, Walter, assignor to Rohm & Haas Aktiengesellschaft, Darmstadt, Germany. Producing acrylic acid esters. 1,864,884; June 28.
Bauersfeld, Walther, assignor to the Firm Carl Zeiss, Jena, Germany. Coordinate transformer. 1,864,576; June 28.
Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Ascertaining the integrity of two line conductors. 1,864,789; June 28.
Baum, Erich. (See Herrmann, W. O., and Baum.)
Baum, Isaac A., Chicago, Ill. Doorstop. 1,864,577; June 28.
Bausch & Lomb Optical Company. (See Teague, Walter D., assignor.)
Baxter, William C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sole slashing machine. 1,864,631; June 28.
Bay, Frank N. (See Appleman, W. O., and Bay.)
Bayuk Cigars Incorporated. (See Touton, Rush D., assignor.)
Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon shoes. 1,864,791; June 28.
Beach, Harry L., Coshocton, Ohio. Display rack. 1,865,298; June 28.
Beadle, Lynn C., N. Sutterfield, and J. A. Wilson, assignors, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich. Gas ignition means for liquid fuel burners. 1,864,515; June 28.
Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Coking retort oven. 1,865,161; June 28.
Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Operating a coke oven battery. 1,865,162; June 28.
Becket, Alan L., East Orange, N. J. Golf tee and making the same. 1,864,516; June 28.
Bedell, Theodore, Freeport, N. Y. Folding anchor. 1,865,163; June 28.
Bedford, Frederick G. H., et al., legal representatives. (See Parsons, C. A., and Duncan.)
Bedworth, Robert E. (See Pilling, N. B., and Bedworth.)
Belkoff, Michael A., et al. (See Bihler, Rober, assignor.)
Bell, Henry G., Brisbin, Pa. Ornament. 1,864,792; June 28.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Bescherer, E. A., and Zitzmann, assignors.)
Bell Telephone Laboratories, Incorporated. (See Björnson, Björn G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Bragg, Herbert E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Castner, Theodore G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Crawford, A. I., and Glass, assignor.)
Bell Telephone Laboratories, Incorporated. (See Curtis, Austen M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Haring, Horace E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mallina, Rudolph F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Morton, E. R., and Stoller, assignors.)
Bell Telephone Laboratories, Incorporated. (See Potts, Louis M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Quass, Ralph L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stokeley, Ray L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Vadersen, Herbert, assignor.)
Bellis, Arthur E., Branford, Conn. Electric furnace. 1,864,885; June 28.
Bemis, Kenneth E., Glendale, Calif. Paste tube cap. Des. 87,249; June 28.
Bendix Brake Company. (See Goepfrich, R. A., and Taylor, assignors.)
Bendix Brake Company. (See Peterson, John W., assignor.)
Bendix Brake Company. (See White, D'Orsay M., assignor.)
Benson, Edwin P., New York, N. Y. Safety paper. Des. 87,250; June 28.
Bergen, Gustav, F. Engelhardt, and R. Steckhan, assignors to "Miac" Muhlenbau und Industrie Aktiengesellschaft, Brunswick, Germany. Manufacturing white Portland cement, etc. 1,865,418; June 28.
Bergstein, Samuel, assignor to The Interstate Folding Box Company, Middletown, Ohio. Machine for making paper boxes or the like. 1,864,632; June 28.
Berkander, George F. (See Biber, Mary E., assignor.)
Berman, Louis, New York, N. Y. Preparing parathyrin. 1,865,164; June 28.
Berry, Otto C., Flint, Mich. Piston for internal combustion engines. 1,865,299; June 28.
Bescherer, Edwin A., Brooklyn, and A. Zitzmann, Ozone Park, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Combined table and cover for telegraph printer. Des. 87,286; June 28.
Bessent, John S., Bigfork, Mont. Combination vacuum cleaner and burner. 1,864,633; June 28.
Bethlehem Steel Company. (See McCarty, Richard J., jr., assignor.)
Bethlehem Steel Company. (See Parker, H. E., and Stewart, assignors.)
Beutner, Richard, and A. Hille, Neugersdorf, Germany. Driving mechanism for the roughing rolls of a card roughing machine. 1,864,635; June 28.
Beveridge Paper Company. (See Ross, Harry M., assignor.)
Biber, Mary E., assignor to G. F. Berkander, Providence, R. I. Ornament. 1,864,523; June 28.
Bickford, Den A., assignor to Ideal School Supply Company, Chicago, Ill. Easel. 1,864,972; June 28.
Blenert, Berthold. (See Gassner, S., and Blenert.)
Bigelow-Sanford Carpet Co. (See Stone, Edwin W., assignor.)
Bihler, Roger, assignor to M. A. Belkoff, College Point, and A. A. Slade, Rye, N. Y. Powder puff and making the same. 1,864,886; June 28.
Billhorn, Paul G., Manchester, Iowa. Gate. 1,865,079; June 28.
Binns, George W., assignor to The Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,864,578; June 28.
Birgbauer, Conrad F., Detroit, Mich. Lapping device. 1,865,229; June 28.
Biro, Carl G., Marblehead, Ohio. Band-saw meat cutter construction. 1,864,517; June 28
Bishop, Edwin B. (See Jenksins, C. W., and Bishop.)
Bishop, Frederic L. (See Pierce, L. J., and Bishop.)
Björnson, Björn G., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission control circuits. 1,865,165; June 28.
Blair, Arthur G., Yonkers, N. Y., assignor to Westinghouse Electric Elevator Company, Chicago, Ill. Signaling system for elevators. 1,865,166; June 28.
Blaw-Knox Company. (See Robinson, George L., assignor.)
Bodenstab, John A. C., Detroit, Mich. Instantaneous electric water heater. 1,864,887; June 28.

Boehne, Eugene W., Scotia, N. Y., assignor to General Electric Company. Protective apparatus. 1,865,409; June 28.
Boelter, August D., Appleton, Wis. Cake pan. 1,864,888; June 28.
Bongera, Miguel, Mieres, Spain. Separating device. 1,865,167; June 28.
Boock, Alfred C., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Shaft-mounting means. 1,864,518; June 28.
Boorum & Pease Company. (See Finley, Charles A., assignor.)
Bostock, Edgar H., Nutley, N. J. Mine car. 1,865,352; June 28.
Boswell, Fox M., et al. (See Smith, William A., assignor.)
Botten, Henry W., Lakewood, assignor to The Owen Bucket Company, Cleveland, Ohio. Clamshell bucket. 1,864,793; June 28.
Boularan, Jacques D., otherwise known as Jacques Deval, and P. A. Digeon, Paris, France. Apparatus for synchronous cinematographic projection and phonographic audition. 1,864,519; June 28.
Bowen, Adna G., Medina, N. Y. Universal joint. 1,865,300; June 28.
Bowers, Frank, assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich. Soot blower. 1,865,080; June 28.
Bowers, Frank, and N. L. Snow, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,865,419; June 28.
Bowker, William, Newark, and J. F. Walsh, East Orange, N. J., assignors to Celluloid Corporation. Decorative material. 1,864,794; June 28.
Boyd, George W., Edinburgh, Scotland. Liquid fuel burner. 1,864,795; June 28.
Boykin, Charles V., et al. (See Smith, Richard F., assignor.)
Bradford, Edward S., jr., Longmeadow, assignor of one-half to Springfield Wire & Tinsel Co., Springfield, Mass., and one-half to Metal Textile Corporation Orange, N. J. Scouring utensil. 1,864,579; June 28.
Bradford, Thomas J., assignor of two-fifths to E. Sharp, Cottage Grove, Oreg. Saw gauge. 1,864,634; June 28.
Brady, Thomas, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Gate operating mechanism. 1,864,796; June 28.
Braemer, William G. R., Haddonfield, N. J., assignor, by mesne assignments, to Airite Corporation, Dover, Del. Portable humidifier. 1,864,797; June 28.
Bragg, Herbert E., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,864,524; June 28.
Brannan, Homer H., Parks, Tex., assignor to The Texas Company, New York, N. Y. Well pumping apparatus. 1,865,054; June 28.
Braun, Philip N., assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing machine. 1,864,525; June 28.
Brawn, Roy E., assignor to Brown Company, Berlin, N. H. Making fiber webs and wet-machine therefor. 1,864,580; June 28.
Brenn, Carl W., Montclair, N. J. Manifolding book. Re18,509; June 28.
Brewer-Titchener Corporation, The. (See Winans, Daniel M., assignor.)
Brewster, Jack A., Redlands, Calif. Harness for picking sacks and the like. 1,865,353; June 28.
Briant Specialty Company. (See Sando, B., and George, assignors.)
Bronson, Budd, assignor to The Ohio Rubber Company, Cleveland, Ohio. Making composite articles. 1,865,230; June 28.
Brooks, Eugene D. (See Stubbs, C. E., and Brooks.)
Browall, Bert H., assignor to Svenska Aktiebolaget Bromsregulator, Malmo, Sweden. Brake leverage adjuster. 1,864,636; June 28.
Brown Company. (See Brawn, Roy E., assignor.)
Brown Company. (See Parker, Howard, assignor.)
Brown Company. (See Richter, George A., assignor.)
Brown Company. (See Schur, Milton O., assignor.)
Brown Company. (See Vogel, F. W., and Meglitz, assignors.)
Brown, John L., Catonsville, and W. W. Varney, Baltimore, Md. Process and products in the art of forming, machining, and the recovery of the products thereof, of metals. 1,864,889; June 28.
Brown, Robert R., Upper Montclair, N. J., assignor to Outserts, Inc., New York, N. Y. Device for attachment to containers. 1,864,526; June 28.
Brown, Sephus F., Amarillo, Tex. Pump valve. 1,864,520; June 28.
Browning, John B., Camden, N. J. Radio telephonograph. 1,865,895; June 28.
Bruehl, Arthur R. (See Dempster, G., and Bruehl.)
Brunner, Charles C., Forest Hills, assignor to H. Noreck Co., Inc., Port Chester, N. Y. Cooking device. 1,865,354; June 28.
Bryden, William L., Cleveland, Ohio. Adjustable reclining chair. 1,864,798; June 28.
Bub, Leopold. (See Otto, M., and Bub.)
Buchanan, Frank L., San Francisco, assignor to A. A. Hobe, Alameda, Calif. Rock breaker. 1,864,973; June 28.
Buck, Russell E., Vicksburg, Mich. Tire valve stem. 1,865,231; June 28.
Buckley, John A., Portland, Oreg., assignor of one-half to M. Marchwicke, Lake Geneva, Wis. Choker hook. 1,864,974; June 28.
Buckner, William A., Fresno, Calif. Vibration creating means. 1,864,975; June 28.
Budd, Edward S., Manufacturing Company. (See Ragsdale, Earl J. W., assignor.)
Buell, Frank L., assignor to The Carborundum Company, Niagara Falls, N. Y. Roll scouring block. 1,864,581; June 28.
Buettell, Samuel E., assignor to Cross Parking Systems, Inc., Chicago, Ill. Vehicle storage system. 1,864,711; June 28.
Buffalo Steam Pump Company. (See Klosson, Michael M., assignor.)
Buggeln & Smith. (See Smith, Carlton H., assignor.)
Buhr, Victor, Larchmont, assignor to Equity Construction Company, Inc., New York, N. Y. Refrigerating method and apparatus. 1,865,168; June 28.
Bunker, H. M., & Co. (See Bunker, Horace M., assignor.)
Bunker, Horace M., assignor to H. M. Bunker & Co., Inc., New York, N. Y. Bias cutting machine. 1,865,301; June 28.
Burnitol Manufacturing Company. (See Cranshaw, Harold B., assignor.)
Burroughs, Edgar H., Scarsdale, assignor to Ambursen Construction Company, Inc., New York, N. Y. Dam. 1,864,976; June 28.
Burt, Harold A., St. Albans, N. Y., assignors to Mergenthaler Linotype Company. Typographical machines. 1,864,799; June 28.
Burton, William A. (See Langwell H., and Burton.)
Butler, Noble C., Anderson, Ind. Article dispensing package. 1,865,232; June 28.
Byles, Frank A., Scotia, N. Y., assignor to General Electric Company. Electrical regulating system. 1,865,410; June 28.
Byrne, Ralph, Kansas City, Mo. Extension rack for truck beds. 1,864,637; June 28.
Byrod, Frederick R., Sunbury, Pa., assignor to Susquehanna Silk Mills. Color discharge printing. 1,864,582; June 28.
Byron Jackson Co. (See Smith, Nelson K., assignor.)
Cafiero, Michael J., Brooklyn, N. Y. Insulating bushing. 1,864,712; June 28.
Camel Company. (See Goodwin, George S., assignor.)
Camel Company. (See Tobin, K. J., and Darrow, assignors.)
Camel Company. (See Tobin, K. J., Madland, and Treptow, assignors.)
Cameron, James A., assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting webs of flexible material. 1,865,302; June 28.
Cameron Machine Company. (See Cameron, James A., assignor.)
Campbell, Leon J., Buchanan, Mich. Closure for collapsible tubes. 1,865,233; June 28.
Campbell, William J., Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill. Slicing machine. 1,865,411; June 28.
Candy, Albert M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Welding electrode. 1,865,169; June 28.
Carbide & Carbon Chemicals Corporation. (See Graham, Robert N., assignor.)
Carborundum Company, The. (See Buell, Frank L., assignor.)
Carborundum Company, The. (See Rayner, George R., assignor.)
Carew Manufacturing Company. (See Griffin, Courtlandt B., assignor.)
Carpenter, Ose F., Brightwood, Va. Attachment for mailing machines. Re18,505; June 28.
Carpenter, Webster L., Norfolk, Va. Fluid dispensing nozzle. 1,865,355; June 28.
Carter, Sidney T., Parnassus, assignor jointly to T. Carter and R. E. Lankford, trustees, Pittsburgh, Pa. Propeller hub. 1,865,170; June 28.
Case Research Laboratory Inc. (See Case, Theodore W., assignor.)
Case, Theodore W., assignor to Case Research Laboratory Inc., Auburn, N. Y. Photographic apparatus. 1,865,055; June 28.
Castner, Theodore G., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Measuring apparatus. 1,864,527; June 28.
Celanese Corporation of America. (See Dreyfus, H., and Bader, assignors.)
Celanese Corporation of America. (See Miles, George W., assignor.)
Celluloid Corporation. (See Bowker, W., and Walsh.)
Central Radio Laboratories. (See Osmun, H. E., Rubinstein, and Stockle, assignors.)
Chadeloid Chemical Company. (See Root, Frank R., assignor.)
Chamberlain, George H., jr., Elyria, Ohio. Steam generating device. 1,864,800; June 28.
Chaplin, Edwin D., New York, assignor to H. D. Penney, Pelham, N. Y. Gyroscopic compass. 1,864,801; June 28.
Chapman Valve Manufacturing Company. (See Jones, John E., assignor.)
Chappell, Marvin L., Watson, and T. H. Dowlen, assignors to Richfield Oil Company of California, Los Angeles, Calif. Oxidizing oils. 1,865,081; June 28.

Charleston Dry Dock & Machine Company et al. (See Smith, Richard F., assignor.)
Charlotte Chemical Laboratories Inc. (See Jarrell, C. S., and Webb, assignors.)
Charrier, Henri, assignor to Societe Anonyme; Appareils et Evaporateurs Kestner, Lille, France. Production of nitrate of lime. 1,865,303; June 28.
"Chemical Works formerly Sandoz". (See Rothlin, Ernst, assignor.)
Chemische Fabrik von Heyden, A. G. (See Feibelmann, Richard, assignor.)
Cheshire, William, Bristol, R. I., assignor to Collins & Aikman Corporation. Method of and apparatus for treating mohair, wool, and the like. 1,865,234; June 28.
Chicago Pneumatic Tool Company. (See Meunier, Leon F., assignor.)
Chilowsky, Constantin, Paris, France. Observation and measurement of the speed of a vessel by directed beams of ultra-audible waves. 1,864,638; June 28.
Chipman, Andrew L. (See Chipman, Harry E., assignor.)
Chipman, Harry E., Springfield, Mass., assignor, by direct and mesne assignments, to Andrew LeRoy Chipman, New York, N. Y. Apparatus for recording and reproducing sound. 1,865,171; June 28.
Chrisman, Horace, Edgewood, assignor, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Pressure indicator. 1,865,082; June 28.
Christensen, Leo M. (See Legg, D. A., and Christensen.)
Christian, Frank M., Los Angeles, Calif. Awning. 1,865,083; June 28.
Cincinnati Ball Crank Co., The. (See Munday, Richard B., assignor.)
Cincinnati Grinders Incorporated, The. (See Binns, George W., assignor.)
Cincinnati Grinders Incorporated. (See Ernst, Hans, assignor.)
Clungan, Michael, et al. (See Loga, Alexander, assignor.)
Clark, Florence B. (See Clark, Harry E., assignor.)
Clark, Harry E., Huntington Park, assignor of one-third to E. K. Potter, Los Angeles Calif., one-third to L. A. Friedman, Lovelock, Nev., and one-third to F. B. Clark. Line lift. 1,864,802; June 28.
Clark, John M., Whitestone, N. Y. Marine and aeroplane propeller. 1,864,803; June 28.
Clark, LeRoy V. (See Holderer, G. B., and Clark.)
Clark, Roy P., Brownstown, Ind. Instrument for obtaining condyle-cast records. 1,864,804; June 28.
Clark, Sheldon. (See Vaile, Pembroke A., assignor.)
Clark, Will A., St. Louis, Mo. Bottle. Des. 87,287; June 28.
Clark, William T., Milwaukee, Wis. Detachable self-centering cleats for athletic shoes. 1,864,713; June 28.
Clarke, Allen W., Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,865,407; June 28.
Clarke, Allen W., Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,865,408; June 28.
Clarke, Allen W., Ridgewood, and W. Griffin, Rutherford, N. J., assignors to American Car and Foundry Company, New York, N. Y. Articulated car. 1,865,406; June 28.
Clarke, Harold E., West Somerville, Mass. Hinged last. 1,864,977; June 28.
Claypool, Wallace L., assignor to Westco-Chippewa Pump Company, Davenport, Iowa. Rotary pump. 1,865,396; June 28.
Cleveland Rock Drill Company, The. (See Slagher, Alfred G., assignor.)
Cloud, Raymond T., assignor to Orchestraphone Company, Chicago, Ill. Electrical reproducer. 1,864,890; June 28.
Coberly, Clarence J. and E. S. Croasdale, Los Angeles, assignors to Kobe Inc., Huntington Park Calif. Take-up device for flexible conductors. 1,864,891; June 28.
Cochrane Corporation. (See Wagner, F., and Mitchell, assignors.)
Coe, George B., Waterbury, Conn., assignor, by mesne assignments, to Tube Reducing Corporation, Wilmington, Del. Apparatus for reducing metal stock. 1,865,304; June 28.
Coles, Walter H., and B. J. Nelson, assignors to The Skinner Irrigation Company, Troy, Ohio. Sprinkler. 1,864,892; June 28.
Collection Equipment Corporation. (See Howard, William S., assignor.)
Collins & Aikman Corporation. (See Cheshire, William, assignor.)
Columbia Phonograph Company. (See Purser, William S., assignor.)
Columbia School Supply Company. (See Moore, Jesse C., assignor.)
Columbus Auto Parts Company, The. (See Milligan, John B., assignor.)
Commercial Solvents Corporation. (See Langwell, H., and Burton, assignors.)
Commercial Solvents Corporation. (See Langwell, H., and Ricard, assignors.)
Commercial Solvents Corporation. (See Legg, D. A., and Christensen, assignors.)
Commercial Solvents Corporation. (See Woodruff, John C., assignor.)
Communication Patents, Inc. (See Nicolson, Alexander M., assignor.)
Compagnie des Forges et Acieries de la Marine et d'Homecourt, et al. (See Daum, Leon, assignor.)
Compound Gas Power Company. (See Smith, David J., assignor.)
Congoleum-Nairn, Inc. (See Veit, Walter, assignor.)
Conley, Brooks L. (See Kingston, F. S., and Conley.)
Consortium fur Elektrochemische Industrie. (See Herrmann, W. O., and Baum, assignors.)
Continental Can Company. (See Kronquest, Alfred L., assignor.)
Continental Can Company. (See O'Neil, James H., assignor.)
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cook, Ralph C., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for cracking hydrocarbon oils. 1,865,172; June 28.
Cool, Henry R., assignor to The Service Recorder Company, Cleveland, Ohio. Service recorder. 1,865,060; June 28.
Cooper, Simon, Brooklyn, N. Y. Wrapping machine. 1,865,084; June 28.
Copperweld Steel Company. (See Frank, Robert J., assignor.)
Cornell, Viola. (See Reddy, David W., assignor.)
Corning Glass Works. (See Rising, Walter H., assignor.)
Cottrell, Frederick E., Modesto, Calif. Combination filler hose and automatic valve. 1,864,978; June 28.
Coubrough, George B., Long Beach, Calif., assignor, by mesne assignments, to The Lummus Company. Purifying oil vapors. 1,864,583; June 28.
Cowdery, Robert H., Geneva, assignor to American Fork & Hoe Company, Cleveland, Ohio. Method and mechanism for grinding rods. 1,864,584; June 28.
Crago, Paul H., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of highway crossing signals. 1,864,805; June 28.
Craig, John F., Upper Montclair, N. J., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Foot controlled brake equipment. 1,865,085; June 28.
Craise, Frederick L. (See Osmer, J. H., and Craise.)
Cranshaw, Harold B., Newton, assignor to Burnitol Manufacturing Company, Charlestown, Mass. Receptacle. 1,864,979; June 28.
Crawford, Allan I., New York, N. Y., and M. S. Glass, East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vacuum bulb mounting. 1,864,528; June 28.
Crezée, Pieter, Zevenbergen, Netherlands, assignor to E. Printz, Kettwig-on-the-Ruhr, Germany. Operating cultivators. 1,864,639; June 28.
Cronsdale, Ernest S. (See Coberly, C. J., and Croasdale.)
Cross Development Corporation. (See Cross, Roy, assignor.)
Cross Parking Systems, Inc. (See Buettell, Samuel E., assignor.)
Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del. Treating process for hydrocarbon oils. 1,865,235; June 28.
Crowell, Russell B., and S. R. Ebe, Agnew, Calif., assignors to The American Solvents and Chemical Corporation, New York, N. Y. Making esters of butyl alcohol. 1,864,893; June 28.
Crowell, William J., jr. (See Pullen, R. S., and Crowell.)
Crown Stove Works. (See Rogers, Walter F. and J. C., assignors.)
Cumfer, Donald A., Nutley, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and apparatus for producing roofing. 1,864,806; June 28.
Curran, Francis J., Chicago, Ill. Insecticide and deodorizing tablet. Re18,504; June 28.
Curran, Francis J., Chicago, Ill. Vaporizer. 1,864,980; June 28.
Curtis, Austen M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Circuit breaker for motors in signaling systems. 1,864,981; June 28.
Cutler, Frank W., Portland, Oreg., assignor to Food Machinery Corporation, San Jose, Calif. Conveying and aligning mechanism. 1,865,086; June 28.
Dahlgren, Allan G. (See Soderberg, A. W., and Dahlgren.)
Dahlgren, Bror E., Chicago, Ill. Book support. 1,864,807; June 28.
Dallas, Weaver, Thomaston, Ga. Puppet doll. 1,865,305; June 28.
Dalrymple, William P., assignor of one-half to Cameron A. Whitsett, Chicago, Ill. Rotary compressor and pump. 1,864,640; June 28.
Daniel, John, assignor to Koehring Company, Milwaukee, Wis. Multiplane adjusting and adjustment securing means. 1,865,087; June 28.
Daniels, Leon C., Pittsfield, Mass., assignor to General Electric Company. Coil winding machine. 1,865,236; June 28.
Danuff, Irving R., Bronx, N. Y. Three circuit foot switch. 1,865,237; June 28.
Darrow, William W. (See Tobin, K. J., and Darrow.)
Daum, Leon, assignor of one-half to Schneider & Cie., and one-half to Compagnie des Forges et Acieres de la Marine et d'Homecourt, Paris, France. Slipping coupling, more particularly for gunlaying mechanism. 1,865,356; June 28.

Daun, Carl L., and P. E. Keller, assignors, by mesne assignments, to American Electric Motor Company, Milwaukee, Wis. Bearing structure. 1,865,088; June 28.
Davies, David, Cleveland, Ohio, assignor to The American Steel and Wire Company of New Jersey. Lifting hook. 1,865,357; June 28.
Davis Emergency Equipment Company. (See Downs, Charles R., assignor.)
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Tandem controlling mechanism for pressing machines. 1,864,808; June 28.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Garment or ironing press. 1,865,238; June 28.
Davis, Frank K., Washington, D. C., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting, bookkeeping and card-perforating machine. 1,864,714; June 28.
Davis, Irving J., Syracuse, N. Y. License plate holder. 1,864,641; June 28.
Davis, William C., London, England. Safety glass. 1,864,983; June 28.
Davison, James H., assignor to Wilson-Jones Company, Chicago, Ill. Chain post binder. 1,864,982; June 28.
Dawson, Hallie H. (See Freese, I. H., and Dawson.)
Dawson, James W. and F. A. Garrigan, assignors to National Sewing Machine Company, Belvidere, Ill. Electrically lighted sewing machine. 1,864,984; June 28.
Dawson, Lula P., executrix. (See Freese, I. H., and Dawson.)
Daynes, Harold A., and J. R. Scott, assignors to The Research Association of British Rubber Manufacturers, Croydon, England. Device for measuring the thickness of objects. 1,865,306; June 28.
Dayton Steel Foundry Company, The. (See Walther, George, assignor.)
Deacon, John H., Genoa, and C. H. Hartman, Toledo, Ohio, assignors, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Material discharging device. 1,864,529; June 28.
De Baufre, William L., New York, N. Y. Rectifying mixed gases. 1,864,585; June 28.
Deere & Company. (See Strandlund, Carl G., assignor.)
De Ferranti, Sebastian Z., assignor to Ferranti Limited, Hollinwood, England. Induction electricity meter. 1,864,586; June 28.
De la Roza, Joaquin J. sr., Tuinucu, Cuba. Manufacturing cellulose. 1,864,985; June 28.
De Leeuw, Adolph L., Plainfield, N. J. Screw cutting method and means. 1,865,239; June 28.
Delman, Inc. (See Ellington, Ferdinand W., assignor.)
Delman, Inc. (See Morall, Charles, assignor.)
Delta-Star Electric Company, The. (See Nordhem, Eric, assignor.)
Dempster, Burgess, and A. R. Bruehl, Berkeley, assignors to The Magnavox Company, Oakland, Calif. Loud speaker. 1,864,809; June 28.
Dendler, Ralph E., Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y. Mine car. 1,864,685; June 28.
Desmond, James J., South Norwalk, Conn. Hat. 1,865,240; June 28.
Desmond-Stephan Mfg. Co., The. (See McConnell, Robert S.)
Detwiler, Forest V., Chicago, Ill. Heat distributor plate. 1,864,715; June 28.
Deval, Jacques. (See Boularan, J. D. (Deval), and Digeon.)
Diamond Power Specialty Corporation. (See Bowers, Frank, assignor.)
Diamond Power Specialty Corporation. (See Bowers, F., and Snow, assignors.)
Dicaire, Joseph G., Flint, Mich. License plate holder. 1,864,986; June 28.
Dickerman, John A., Reno, Nev., assignor to Western Cartridge Company, East Alton, Ill. Target thrower. 1,865,173; June 28.
Diescher, August P., assignor to S. Diescher & Sons, Pittsburgh, Pa. Machine for straightening round stock. 1,865,174; June 28.
Diescher, S., & Sons. (See Diescher, August P., assignor.)
Digeon, Pierre A. (See Boularan, J. D., and Digeon.)
Dinkel, Andrew J., assignor of one-third to R. Smith, Yuma, Ariz. Retaining device for removable vehicle seat cushions. 1,865,175; June 28.
Directaplate Corporation. (See Koppe, Alexander T., assignor.)
Dix, Edgar H., jr., Oakmont, assignor to Aluminum Company of America, Pittsburgh, Pa. Corrosion-resistant aluminum alloy articles and making the same. 1,865,089; June 28.
Dixie Cotton Machinery Company. (See Albaugh, E., and Hildebrandt, assignors.)
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Health lamp socket. 1,864,810; June 28.
Dock, Harvey E., Detroit, Mich. Memorandum support. 1,865,241; June 28.
Doherty Research Company. (See Goldsborough, Winder E., assignor.)
Doherty Research Company. (See Taylor, Robert H., assignor.)
Doino, Carmine, New Haven, Conn. Automatic timer for photo-timing machines. 1,865,397; June 28.
Donnell, Lawrence E. (See Whiteford, T., and Donnell.)
Donovan, Patrick H., Chicago, Ill., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Vehicle brake equipment. 1,865,090; June 28.
Dooley Brothers. (See Dooley, Edward J., assignor.)
Dooley, Catherine L., administratrix. (See Dooley, Edward J.)
Dooley, Edward J., deceased, K. L. Dooley, administratrix, assignor to Dooley Brothers, Peoria, Ill. Mining drill. 1,864,987; June 28.
Doremus, Edward P., Weeks Island, La. Propeller. 1,864,716; June 28.
Dorman, Neal W., assignor to The Toledo Machine & Tool Company, Toledo, Ohio. Hydraulic control mechanism. 1,864,530; June 28.
Dorne, Peter P. (See Reynolds, Hugh D., assignor.)
Douglas, Harry A., Bronson, Mich. Reflecting electric lamp. 1,864,642; June 28.
Douglass, Henry. (See Krueger, F., and Douglass.)
Dow Chemical Company, The. (See Barstow, Edwin O., assignor.)
Dow Chemical Company, The. (See Dow, Herbert H., assignor.)
Dow Chemical Company, The. (See Smith, Albert K., assignor.)
Dow Chemical Company, The. (See Winston, A. W., and Kenaga, assignors.)
Dow, Herbert H., assignor to The Dow Chemical Company, Midland, Mich. Vaporizing liquids. 1,864,587; June 28.
Dowlen, Tom H. (See Chappell, M. L., and Dowlen.)
Downs, Charles R., South Beach, Conn., assignor to Davis Emergency Equipment Company, Incorporated, New York, N. Y. Ammonia absorbent and making the same. 1,864,988; June 28.
Draper Corporation. (See Lindsjo, Verner, assignor.)
Dreibuss, Harry C., and P. J. McCullough, assignors to Scullin Steel Co., St. Louis, Mo. Fence post. 1,865,176; June 28.
Dreyfus, Henry, London, England. Manufacture of aliphatic anhydrides. 1,865,177; June 28.
Dreyfus, Henry, London, England. Manufacture of artificial silk, artificial horsehair and like products. 1,865,358; June 28.
Dreyfus, Henry, London, and W. Bader, Spondon, near Derby, England, assignor to Celanese Corporation of America. Manufacture of acetic acid and methyl acetate. 1,864,531; June 28.
Dreyfus, Henry, London, and W. Bader, Spondon, near Derby, England, assignors to Celanese Corporation of America. Manufacture of aliphatic acids and esters. 1,864,643; June 28.
Dryon, Paul, Auvelais, Belgium. Grinding, smoothing, and polishing apparatus. 1,864,894; June 28.
Dubbs, Carbon P., assignor to Universal Oil Products Company, Chicago, Ill. Treating hydrocarbon oils. 1,865,178; June 28.
Duftschmid, Franz. (See Schlecht, L., and Duftschmid.)
Duncan, H. M. (See Stukes, Horace A.)
Duncan, Hugh M. (See Parsons, C. A., and Duncan.)
Dunkelberger, Harry E., Weirton, W. Va. Clamshell bucket. 1,865,091; June 28.
Dunlop, James, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company. Automatic reset safety device. 1,864,588; June 28.
Du Pont, E. I. de Nemours & Co. (See Naoum, Phokion, assignor.)
Du Pont, E. I., de Nemours & Company. (See Reid, Ebenezer E., assignor.)
Durnell, Harold G., and S. T. Steel, Bartlesville, Okla. Air chamber for well pumping. 1,865,307; June 28.
E-Z Reach Paper Cutter Corporation. (See McClintock, James W., assignor.)
Eakins, Herbert W., Springfield, Ohio. Machine for making confections. Des. 87,251; June 28.
Ebe, Samuel R. (See Crowell, R. B., and Ebe.)
Eckels, Parl O., Cleveland, Ohio. Combination cigarette dispenser and ash tray. 1,864,811; June 28.
Eckland Bros. Company. (See Eckland, P. S., and Ryden, assignors.)
Eckland, Peter S., and G. Ryden, assignors to Eckland Bros. Company, Minneapolis, Minn. Transmission shifting device for vehicles having two engines. 1,864,644; June 28.
Economy Engineering Company, The. (See Andrews, F. O., and Steinfurth, assignors.)
"Edeleanu" Gesellschaft m. beschränkter Haftung. (See Jodeck, Paul, assignor.)
Edwards, Herbert C., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,865,092; June 28.
Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Telephone signaling system. 1,864,645; June 28.
Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Telephone signaling arrangement. 1,864,646; June 28.
Eger, William F., Bartow, Fla. Fish bait. 1,865,359; June 28.
Eger, William F., Bartow, Fla. Fish bait. 1,865,360; June 28.
Egli, Constant A., Weehawken, N. J. Lamp stand. 1,865,179; June 28.

Egy, Willard L., assignor to W. & L. E. Gurley, Troy, N. Y. Vernier. 1,864,895; June 28.
Egy, Willard L., assignor to W. & L. E. Gurley, Troy, N. Y. Vernier for reading graduated circles. 1,864,896; June 28.
Ehrenfeld, Day. (See Oglesby, N. E., and Ehrenfeld.)
Ehrenhardt, Fred, Lockport, N. Y. Produce basket filling device. 1,865,361; June 28.
Eldredge, Murray C., Chicago, Ill. Cutting or marking tool. 1,865,242; June 28.
Electrolux Servel Corporation. (See von Platen, B. C., and Munters, assignors.)
Elgin National Watch Co. (See Malvern, Lewis K., assignor.)
Ellington, Ferdinand W., Jamaica, assignor to Delman, Inc., New York, N. Y. Shoe. Des. 87,252; June 28.
Elliott-Fisher Company. (See Davis, Frank K., assignor.)
Elliott, Harold E. (See Ricks, F., and Elliott.)
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Making synthetic ammonia from petroleum refinery by-products. 1,864,717; June 28.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellms, Edward H. (See Miller, S. P., and Ellms.)
Elmendorf, Armin, Chicago, Ill., assignor to The Flexwood Company. Gluing wet veneers to backings and drying them. 1,864,812; June 28.
Elton, Alvin K. (See Evans, J. D., and Elton.)
Emmons, William J. (See Gallagher, B. S., and Emmons.)
Endsley, Louis E., Pittsburgh, Pa. Tank car structure. 1,864,990; June 28.
Engelhardt, Felix. (See Bergen, G., Engelhardt, and Steckhan.)
Equity Construction Company. (See Buhr, Victor, assignor.)
Erb-Joyce Foundry Company. (See Frantz, Clair E., assignor.)
Erie City Iron Works. (See Lord, Hugh C., assignor.)
Ernst, Hans, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,864,589; June 28.
Erwin, Mason P. (See Jeffries, Charles W., assignor.)
Evans, Archibald D., and J. K. Lamoree, Newcastle, Pa., assignors to American Sheet and Tin Plate Company. Sheet handling mechanism. 1,865,308; June 28.
Evans, James D., Haverford, and A. K. Elton, Upper Darby, assignors to Powell Evans, Philadelphia, Pa. Machine for placing ripping wires in can tops. 1,865,309; June 28.
Evans, Joseph E., Bedford, Ind. Die for compressing the strands of wire rope. 1,865,362; June 28.
Evans, Powell. (See Evans, J. D., and Elton, assignor.)
Everwear Manufacturing Company, The. (See Hoppes, Charles E. and E. F., assignors.)
Everwear Manufacturing Company, The. (See Hoppes, Edwin F., assignor.)
Ewald, Arno A., assignor to Romort Manufacturing Company, Oakfield Wis. Combined illuminated indicator dial and casing therefor. Des. 87,253; June 28.
Ewing, Wylie B., Wheeling, W. Va. Nipple threading apparatus. 1,864,897; June 28.
Ex-Cell-O Aircraft & Tool Corporation. (See Alden, Carroll R., assignor.)
Externit Inc. (See Kunz, Robert, assignor.)
Eynon, Thomas M., Philadelphia, Pa. Liquid level indicator. 1,864,991; June 28.
Fairbanks, Morse & Co. (See Boock, Alfred C., assignor.)
Fairbanks, Morse & Co. (See Goldberg, Morris J., assignor.)
Fairbanks, Morse & Co. (See Snyder, James O., assignor.)
Faragher, Warren F., Woodbury, N. J., assignor to Universal Oil Products Company, Chicago, Ill. Producing catalysts. 1,865,180; June 28.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake and signal system. 1,865,093; June 28.
Fatland, Harold E., Chicago, Ill. Speed changing gear. 1,864,992; June 28.
Federal Laboratories, Inc. (See Ogelsby, N. E., and Ehrenfeld, assignors.)
Fehn, John G., Des Moines, Iowa. Laundry appliance with rotatable tubs. 1,864,993; June 28.
Fehrle, Alfred. (See Streitwolf, K., Fehrle, Herrmann, and Fritzsche.)
Feibelmann, Richard, assignor to Chemisch Fabrik von Heyden, A. G., Radebeul-Dresden, Germany. Treating animal fibers. 1,864,718; June 28.
Ferranti Limited. (See de Ferranti, Sebastian Z., assignor.)
Feyens, Alfred, Brussels, Belgium. Rotary distributor for internal combustion engines. 1,865,363; June 28.
Fiat Società Anonima. (See Rosatelli, Celestino, assignor.)
Fields, John D., Los Angeles, Calif. Process of cracking and coking. 1,864,686; June 28.
Fields, John D., Los Angeles, Calif. Treatment of petroleum materials. 1,864,687; June 28.
Fields, John D., Los Angeles, Calif. Refining distillates. 1,864,719; June 28.
Fields, John D., Los Angeles, Calif. Distilling hydrocarbons and producing coke and product therefor. 1,864,720; June 28.
Fifield, Albert F., St. Catherines, Ontario, Canada, assignor to The American Fork & Hoe Company, Cleveland, Ohio. Preparing wearing surfaces for tools, dies, and the like, and resultant product. 1,864,590; June 28.
Finley, Charles A., Rutherford, N. J., assignor to Boorum & Pease Company, Brooklyn, N. Y. Loose-leaf binder. 1,865,364; June 28.
Finnegan, Kathleen. (See Kosterman, Henry T., assignor.)
Finney, David P., Wilson, Pa. Conveyer belt. 1,865,310; June 28.
Fisher, Harmon F., Long Beach, assignor to Petroleum Rectifying Company of California, San Francisco, Calif. Dehydrating emulsions. 1,864,721; June 28.
Fisher, Harmon F., Long Beach, assignor to Petroleum Rectifying Company of California, Los Angeles, Calif. Synchronous gap potential control for treaters. 1,864,722; June 28.
Fisher, Harmon F., Long Beach, assignor to Petroleum Rectifying Company of California, Los Angeles, Calif. Treater using high tension reactance. 1,864,723; June 28.
Fisher, Teddy B., assignor to Universal Oil Products Company, Chicago, Ill. Stream line return header for tubes. 1,865,181; June 28.
Flanagan, John E. (See Lidseen, G., and Flanagan.)
Fleming, Norman O., Pasadena, Calif. Dual element cooling tower. 1,864,898; June 28.
Flexwood Company, The. (See Elmendorf, Armin, assignor.)
Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Power drive for slicing machines. 1,865,243; June 28.
Food Machinery Corporation. (See Cutler, Frank W., assignor.)
Foote, Theodore, Pilger, Nebr. Adjustable tractor platform. 1,865,365; June 28.
Foresman, Harry B., Enid, Okla., assignor to Lock Joint Window Company, Kansas City, Mo. Weatherstrip for sliding closures. 1,864,994; June 28.
Forss, Frithiof P., Aurora, assignor to Independent Pneumatic Tool Company, Chicago, Ill. Switch device. 1,864,532; June 28.
Forssblad, Nils R., Vasteras, assignor to Aktiebalaget Ljungstroms Angturbin, Lidingo-Brevik, Sweden. Regenerative heating device. 1,864,724; June 28.
Foster, Harry C., assignor to Indiana Lamp Corporation, Connersville, Ind. Lamp construction. 1,864,725; June 28.
Foster, Julius E., Pittsburgh, Pa., assignor to Radio Corporation of America. Thermionic device. 1,864,591; June 28.
Fourchy, Richard, Washington, D. C. Locking device. 1,865,366; June 28.
Fox, De Witt, New York, N. Y. Suspenders. Des. 87,254; June 28.
Fraise, Christopher C., Eldorado Springs, Mo. Tractor cab. 1,864,813; June 28.
Frank, Laura F. (See Geer, Paul L., assignor.)
Frank, Robert J., Pittsburgh, assignor to Copperweld Steel Company, Rankin, Pa. Ground rod clamp. 1,864,688; June 28.
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frantz, Clair E., assignor, by mesne assignments, to Erb-Joyce Foundry Company, Detroit, Mich. Molding machine. 1,865,244; June 28.
Fredeen, Frank, Minneapolis, Minn. Washing and classifying aggregates in one continuous operation. 1,865,094; June 28.
Freeman, Albert E. (See Smith, T. C., Freeman, and Livermore.)
Freeman, Hubert M., East Pittsburgh, Pa., and W. G. Wade, New York, N. Y., assignors to Westinghouse Electric & Manufacturing Company. Hot cathode electron discharge tube. 1,865,421; June 28.
Freese, Ira H., and H. H. Dawson, deceased, Clarksburg, L. P. Dawson, executrix, assignors to Hazel-Atlas Glass Co., Wheeling, W. Va. Glass forming machine. 1,864,689; June 28.
Frei, Rudolf, Berneck, Switzerland. Amusement apparatus. 1,865,095; June 28.
French, James W., assignor to Barr and Stroud, Limited, Anniesland, Glasgow, Scotland. Reference and subsidiary marks in stereoscopic observing instruments. 1,864,899; June 28.
Fried. Krupp Grusonwerk A. G. (See Holzapfel, Karl E. E., assignor.)
Friedman, L. A., et al. (See Clark, Harry E., assignor.)
Frigidaire Corporation. (See Stout, Elmer O., assignor.)
Fritzsche, Paul. (See Streitwolf, K., Fehrle, Herrmann, and Fritzsche, assignors.)
Frost, Thomas H., Boston, Mass. Razor. 1,864,995; June 28.
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle. Des. 87,255; June 28.
Futch, Jefferson D., Baltimore, Md. Window display device. 1,865,182; June 28.
Gachassin-Lafite, Marcel G., Brussels, Belgium. Visible shot concentrating projectile for sporting guns. 1,864,916; June 28.
Gaddini, Norman, Winters, Calif. Reel. 1,864,900; June 28.
Gallagher, Bernard S., Piedmont, and W. J. Emmons, Alameda, Calif. Support. 1,864,814; June 28.

Gardner Broom Company. (See Mahoney, John P., assignor.)
Gardner, Prince A., jr., St. Louis, Mo. Bill fold. Des. 87,256; June 28.
Garman, William. (See Liberman, Charles, assignor.)
Garrard Engineering & Manufacturing Company, The. (See Offen, James H., assignor.)
Garrigan, Frank A. (See Dawson, J. W., and Garrigan.)
Gassner, Sebastian, Leverkusen-on-the-Rhine, and B. Bienert, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of alkoxybenzophenone di- or tricarboxylic acids. 1,865,096; June 28.
Gaus, Wilhelm, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for treating solid and liquid materials. 1,865,183; June 28.
Geddes, James. (See Moss, S. A., and Geddes.)
Geer, Paul L., Oakland, assignor of three-tenths to W. M. Wooten, San Francisco, and three-tenths to L. F. Frank, Oakland, Calif. Mixing nozzle. 1,864,647; June 28.
Geist, Floyd N., and F. W. Lorenz, Cleveland Heights, Ohio. Spoke making apparatus. 1,865,412; June 28.
General Aniline Works, Inc. (See Gassner, S., and Bienert, assignors.)
General Aniline Works, Inc. (See Meiser, Wilhelm, assignor.)
General Aniline Works, Inc. (See Schirmacher, K., and Stenger, assignors.)
General Cable Corporation. (See Abbott, Charles W., assignor.)
General Cable Corporation. (See Wodtke, Hans V., assignor.)
General Electric Company. (See Boehne, Eugene W., assignor.)
General Electric Company. (See Byles, Frank A., assignor.)
General Electric Company. (See Daniels, Leon C., assignor.)
General Electric Company. (See Hull, John I., assignor.)
General Electric Company. (See Johannesen, Svend E., assignor.)
General Electric Company. (See Junggren, Oscar, assignor.)
General Electric Company. (See Palueff, Konstantin K., assignor.)
General Electric Company. (See Priess, William H., assignor.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Steenstrup, Christian, assignor.)
General Fireproofing Company, The. (See Gourley, G. T., and Ball, assignors.)
General Motors Corporation. (See Spencer, Louis M., assignor.)
General Plate Company. (See Spencer, John A., assignor.)
General Steel Castings Corporation. (See Howard, K. S., and Hallquist, assignors.)
George, Thomas E. (See Sando, B., and George.)
Gerhardt, William F., Ann Arbor, Mich. Airplane. 1,864,996; June 28.
Ghirardi, Luigi, Genoa, Italy. Hull. 1,864,997; June 28.
Gilbert, Fred, Oswego, Oreg. Automobile heating apparatus. 1,864,901; June 28.
Gilham, Dilman C., Schuylkill Haven, Pa. Molding process. 1,865,097; June 28.
Gilmer, L. H., Company. (See Haines, George E., assignor.)
Giorgio, Peppino, East Chicago, Ind. Draft motor. 1,864,998; June 28.
Givaudan, Victor E., Mexico City, Mex. Printing machine for multicolor work. 1,865,184; June 28.
Glass, Myron S. (See Crawford, A. I., and Glass.)
Gleason Works. (See Slade, Leon D., assignor.)
Gluckman, Harry J., assignor of one-half to William Gluckman, Brooklyn, N. Y. Foot appliance. 1,864,999; June 28.
Gluckman, William. (See Gluckman, Harry J., assignor.)
Gmeindl, Joseph, Milwaukee, Wis. Lamp. Des. 87,257; June 28.
Geopfrich, Rudolph A., South Bend, Ind., and C. H. Taylor, Detroit, Mich., assignors to Bendix Brake Company, South Bend, Ind. Slack adjusting operating mechanism. 1,864,902; June 28.
Goldberg, Morris J., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Pumping means. 1,865,000; June 28.
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. Flambeau type of burner. 1,865,056; June 28.
Goldschmidt, Hans, deceased, Berlin-Grunewald, and O. Neuss, Berlin-Charlottenburg, Germany, Mrs. M. I. Goldschmidt, administratrix, assignors, by mesne assignments, to Synthetic Plastics Company, Incorporated, New York, N. Y. Making resins. 1,865,398; June 28.
Goldschmidt, Mrs. Marie I., administratrix. (See Goldschmidt, H., and Neuss.)
Golo Slipper Company. (See Meyer, M., and Heilbrunn, assignors.)
Goodloe, Alfred M., Bradford, Pa., assignor to American Air Filter Company, Inc., Louisville, Ky. Apparatus for cleaning and charging air filters. 1,865,245; June 28.
Goodman Manufacturing Company. (See Lindgren, Frank A., assignor.)
Goodman Manufacturing Company. (See Wilhelmi, Charles F., assignor.)
Goodwin, George S., assignor to Camel Company, Chicago, Ill. House car end construction. 1,865,246; June 28.
Goodwin, Ralph T., Elizabeth, N. J., assignor to Standard Oil Development Company. Treatment of hydrocarbon residues containing inorganic substances and product obtained thereby. 1,865,001; June 28.
Goostray, Joseph, East Milton, assignor to Hunt-Spiller Manufacturing Corporation, Boston, Mass. Brake drum. 1,865,311; June 28.
Goostray, Joseph, East Milton, assignor to Hunt-Spiller Manufacturing Corporation, Boston, Mass. Brake drum. 1,865,312; June 28.
Gora, Henry, Bridgeport, Conn., assignor to Jenkins Bros., New York, N. Y. Machine for cutting rings. 1,864,903; June 28.
Gorr, Walter B., assignor to Skinner Engine Company, Erie, Pa. Valve gear. 1,865,247; June 28.
Gorsuch, Ralph, Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Method and apparatus for simultaneously emptying glass tanks and reducing the molten glass to granules. 1,865,367; June 28.
Gould, David, assignor to The Stanley Works, New Britain, Conn. Door latch. 1,865,391; June 28.
Gourley, Glenn T., and A. J. Ball, assignors to The General Fireproofing Company, Youngstown, Ohio. Chair seat. 1,865,313; June 28.
Graham, Robert N., South Charleston, W. Va., assignor to Carbide & Carbon Chemicals Corporation. Chlorine meter. 1,864,815; June 28.
Granat, Joseph, San Francisco, Calif. Finger ring. Des. 87,258; June 28.
Granat, Joseph, San Francisco, Calif. Finger ring. Des. 87,259; June 28.
Grant, Helen A., Prescott, Ariz. Pastry perforator. 1,865,368; June 28.
Grant, Rudolph R., Dayton, Ohio. Piston. 1,865,248; June 28.
Green, Amos J., Mount Horeb, Wis. Binder. 1,865,098; June 28.
Greenberg, Samuel A., et al. (See Tumminello, Charles E., assignor.)
Greene, Frederick, New Eagle, Pa. Lock cap. 1,865,369; June 28.
Greenstein, Morris W., New York, N. Y. Printed chintz. Des. 87,260; June 28.
Greenwald, Harold A., assignor to Whitehead & Kales Company, River Rouge, Mich. Making disk wheels. 1,865,185; June 28.
Griffin, Buel D., Fort Worth, Tex. Gasoline serving apparatus. 1,865,002; June 28.
Griffin, Charles W., Lynwood, D. Schmid, Pasadena, and L. P. Sinz, Los Angeles, Calif., assignors to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Removing foil from bottles. 1,864,592; June 28.
Griffin, Courtlandt B., Longmeadow, assignor to Carew Manufacturing Company, South Hadley Falls, Mass. Air deckling. 1,864,726; June 28.
Griffin, William. (See Clarke, A. W., and Griffin.)
Grimm, Albert. (See Winter, E., and Grimm.)
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,864,904; June 28.
Grob, Armin R., Hamburg, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Nutsch filtration. 1,865,061; June 28.
Groff, Joseph C., New York, N. Y. Airless fuel supplying and injecting system for Diesel and other like forms of compression ignition internal combustion engines. 1,865,099; June 28.
Groove Lock Co. Inc. (See Poeter, Edward, assignor.)
Gruber, Karl, Gladbach-Rheydt, Germany. Chuck for holding a mandrel stem. 1,865,314; June 28.
Grund, Fletcher D., Weston, assignor to The American Swiss Company, Toledo, Ohio. Door latch. 1,864,533; June 28.
Gruver, Perry F., Gruver, Tex. Bearing. 1,865,100; June 28.
Guibeaud, Georges, Perpignan, France. Stringed musical instrument. 1,864,690; June 28.
Guiberson Corporation, The. (See Standlee, Harvey R., assignor.)
Guilds, Samuel A., et al. (See Smith, Richard F., assignor.)
Gulesian, Selden J., Revere, Mass. Adjustable rail fitting. 1,864,534; June 28.
Gurley, W. & L. E. (See Egy, Willard L., assignor.)
Gustafson, David H., Evanston, Ill. Can opener. 1,865,413; June 28.
Gustafsson, Emil G. T., Stockholm, Sweden. Producing metal sponge. 1,864,593 June 28.
Haase, Firm Theodor. (See Malin, Richard, assignor.)
Hach, Clarence A., Oak Park, and F. A. Sanborn, Berwyn, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Chair. 1,864,535; June 28.
Hagquist, Gustaf E. (See Rundell, R. E., and Hagquist.)

Haines, George E., Philadelphia, Pa., assignor to L. H. Gilmer Company. Combination bathing suit bag, air pillow, and air float or buoy. 1,864,648; June 28.
Hall, Carlos E., Red Mountain, Calif. Electric welding tong. 1,865,003; June 28.
Hallquist, Einar G. (See Howard, K. S., and Hallquist.)
Halstead, John F., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Stogie heading device. 1,864,727; June 28.
Halter, Edward et al. (See King, Frank M., assignor.)
Hamer, Leland S., Long Beach, Calif. Fluid conduit. 1,864,816; June 28.
Hamerly, Frank B., Aurora, assignor to Independent Pneumatic Tool Company, Chicago, Ill. Lubricating device for pneumatic tools. 1,864,536; June 28.
Hammond, John H., jr., Gloucester, Mass. Tail torpedo. 1,865,101; June 28.
Handford, John A., New Bedford, Mass. Electric switch. 1,865,315; June 28.
Hanrahan, Richard, and G. Lacasse, Missoula, Mont. Revolving needle valve stem and governor. 1,865,316; June 28.
Hans, Philip, Company. (See Lacroix, George U., assignor.)
Hansen, Julius W., assignor to Hansen Manufacturing Company, Inc., Princeton, Ind. Coin control circuit closing apparatus. 1,864,649; June 28.
Hansen, Julius W., W. L. Hansen, and I. N. Hurst, assignors to Hansen Manufacturing Company, Inc., Princeton, Ind. Synchronous self-starting motor. 1,864,650; June 28.
Hansen Manufacturing Company. (See Hansen, Julius W., assignor.)
Hansen Manufacturing Company. (See Hansen, Julius W. and W. L., and Hurst, assignors.)
Hansen, William L. (See Hansen, Julius W. and W. L., and Hurst.)
Hanson, Louis S., Cleveland, Ohio. Stop washer for wrist watches. 1,865,249; June 28.
Hapgood, Clarence H., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,864,537; June 28.
Hardway, E. V., trustee. (See Stukes, Horace A., assignor.)
Hardy, Peter S., Stratford, Conn., and T. Smith, Chicago, Ill., assignors to United Health Equipment Company, Chicago, Ill. Exercising apparatus. Des. 87,261; June 28.
Haring, Horace E., Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Reference electrode. 1,865,004; June 28.
Harmon, John B. (See Wiener, J. A., and Harmon.)
Harris, ellnry K., London, England. Advertising device, publicity telegraph, and the like. 1,865,371; June 28.
Harris, Joseph B., jr., Los Angeles, Calif. Color photography. 1,865,186; June 28.
Harrison, Henry C., Port Washington, assignor to Western Electric Company, Incorporated, New York, N. Y. Power transmitting mechanism. 1,865,005; June 28.
Hart, Roy R., San Jose, Calif. Back fixture. 1,864,817; June 28.
Hartman, Carl H. (See Deacon, J. H., and Hartman.)
Haubold, C. G., A. G. (See Tandel, Fritz, assignor.)
Haug, Anton J., Nashua, N. H. Pulp screening machine and process. 1,864,818; June 28.
Haungs, George M., assignor to U S L Battery Corporation, Niagara Falls, N. Y. Specific gravity indicating means. 1,865,250; June 28.
Hauser, George D., assignor to Utica Products, Inc., Utica, N. Y. Receptacle. 1,864,538; June 28.
Hauton, Paul S., Atlanta, Ga. Mechanical pencil. Des. 87,262; June 28.
Hawkins, Wilford J., Claiborne, Md., and A. E. Wiener, Brooklyn, N. Y., assignors to American Machine & Foundry Company. Automatic tobacco feed control. 1,864,728; June 28.
Hawley, Kent A., assignor to Locke Insulator Corporation, Baltimore, Md. Ground wire clamp mounting. 1,864,651; June 28.
Hayes, Frank A., Middletown, N. J. Variable speed transmission mechanism. 1,865,102; June 28.
Hayes, Stanley W., assignor to Hayes Track Appliance Company, Richmond, Ind. Scotch block. 1,864,539; June 28.
Hayes Track Appliance Company. (See Hayes, Stanley W., assignor.)
Hazel-Atlas Glass Co. (See Freese, I. H., and Dawson, assignors.)
Hazel-Atlas Glass Co. (See Gursuch, Ralph, assignor.)
Heald Machine Company, The. (See Warsow, Franz, assignor.)
Heath, Harry C., San Francisco, Calif. Suction horn. 1,865,006; June 28.
Heilbrunn, Adolf. (See Meyer, M., and Heilbrunn.)
Heise, George W., Lakewood, Ohio, assignor to National Carbon Company, Inc. Primary cell and electrolyte therefor. 1,864,652; June 28.
Heitner, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,864,729; June 28.
Heller & Brightly, Inc. (See Kegelman, George, assignor.)
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,864,540; June 28.
Heritage, Clark C. (See Jewett, J. E., Heritage, and Riegler.)
Hermann, Frederick L., Pittsburgh, Pa. Collar. 1,865,317; June 28.
Herr, Henry C., assignor to Herr Manufacturing Company, Inc., Buffalo, N. Y. Flyer for spinning machines and the like. 1,864,819; June 28.
Herr Manufacturing Company. (See Herr, Henry C., assignor.)
Herrmann, Walter. (See Streitwolf, K. Fehrle, Herrmann, and Fritzsche.)
Herrmann, Willy O., and E. Baum, assignors to Consortium fur Elektrochemische Industrie, Munich, Germany. Oxidizing organic substances. 1,864,541; June 28.
Hervig, Richard, Battle Creek, Mich., assignor to Wilcox-Rich Corporation. Grinding machine. 1,865,251; June 28.
Heuze, Charles, Auvelais, Belgium. Power stop. 1,864,820; June 28.
Heuze, Charles, Auvelais, Belgium. Device for cleaning traveling tables. 1,864,821; June 28.
Heuze, Charles, Auvelais, Belgium. Grinding, smoothing, and polishing apparatus. 1,864,822; June 28.
Heuze, Charles, Auvelais, Belgium. Grinding, smoothing, and polishing apparatus. 1,864,823; June 28.
Hicks, John N., Los Angeles, and C. Severns, Long Beach, Calif. Oil saver. 1,865,007; June 28.
Highway Trailer Company. (See Menhall, James W., assignor.)
Hildebrandt, Henry F. (See Albaugh, E., and Hildebrandt.)
Hill, Albert, Stourbridge, England. Apparatus for drying and airing gloves. 1,865,103; June 28.
Hill, Roy L., assignor to Atlas Powder Company, Wilmington, Del. Waterproof cartridging for explosives. 1,864,905; June 28.
Hill, William H. (See Rose, H. J., and Hill.)
Hille, Alwin. (See Beutner, R., and Hille.)
Hines, William, Washington, D. C. Line, column, and word indicator. 1,864,730; June 28.
Hirsch, Frank G., assignor to C. G. Banks, Los Angeles, Calif. Gauge protector. 1,864,906; June 28.
Hobbs, Howard F., Paradise, South Australia, Australia, Automatically variable transmission gear, particularly for motor vehicles. 1,864,824; June 28.
Hobe, Arthur A. (See Buchanan, Frank L., assignor.)
Hochschwender, Ernst. (See Pier, M., Hochschwender, and Wenzel.)
Hogin, James L. (See Smith, Robert N., assignor.)
Hojnowski, Jakob, Nekoosa, Wis. Aeroplane. 1,865,252; June 28.
Hokanson, Otto A., and J. F. Koca, assignors to Woodstock Typewriter Company, Woodstock, Ill. Typewriter. 1,864,594; June 28.
Holcomb, Lucia M., San Jose, Calif. Prune harvester. 1,865,372; June 28.
Holderer, George B., Scarsdale, N. Y., and L. V. Clark, Pittsburgh, Pa. Explosive. 1,865,104; June 28.
Holm, Melvin M., Berkeley, assignor to Standard Oil Company of California, San Francisco, Calif. Manufacture of aluminum chloride. 1,865,008; June 28.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,864,731; June 28.
Holtzman, John, New York, N. Y. Lighter. 1,864,732; June 28.
Holzapfel, Karl E. E., Munster, assignor to Fried. Krupp Grusonwerk A. G., Magdeburg-Buckau, Germany. Grinding body. 1,864,542; June 28.
Hon, Hattie, and H. H., Shumaker, Memphis, Tenn. Attachment for piano keyboards. 1,865,370; June 28.
Hood, Charles E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon shoes. 1,865,009; June 28.
Hooker Electrochemical Company. (See Stuart, Kenneth E., assignor.)
Hoosier Lamp and Stamping Corporation. (See Moll, Walter, assignor.)
Hoover Company, The. (See White, Harry B., assignor.)
Hoppes, Charles E., and E. F. Hoppes, assignors to The Everwear Manufacturing Company, Springfield, Ohio. Merry-go-round. 1,864,733; June 28.
Hoppes, Edwin F. (See Hoppes, Charles E., and E. F.)
Hoppes, Edwin F., assignor to The Everwear Manufacturing Company, Springfield, Ohio. Playground apparatus. 1,864,734; June 28.
Horn, Ernst, Berlin, assignor to Siemens & Halske Aktiengesellschaft of Siemenstadt near Berlin, Germany. Telephone system. 1,865,187; June 28.
Horn, Ernst, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telephone system. 1,865,188; June 28.
Horton, Joseph W., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Frequency measuring circuit. 1,864,543; June 28.
Hotchner, Fred, Los Angeles, Calif. Flat tubeless ionization conductor sign. 1,865,253; June 28.
Houbigant, Inc. (See Manoha, Jacques, assignor.)
Houplain, Georges, assignor to Société des Freins Houplain, Paris, France. Fluid driving device for actuating mechanisms having an initial idle stroke. 1,865,105; June 28.
Howard, Horace J., Southport, England. Valve operating mechanism for internal combustion engines. 1,864,735; June 28.

Howard, Karl S., St. Louis, Mo., and E. G. Hallquist, Edwardsville, Ill., assignors to General Steel Castings Corporation, Granite City, Ill. Locomotive cylinder saddle structure. 1,864,736; June 28.
Howard, William R., Washington, D. C., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating hydrocarbons. 1,865,189; June 28
Howard, William S., assignor to Collection Equipment Corporation, New York, N. Y. Self-loading vehicle. 1,865,318; June 28.
Howe Folding Furniture, Inc. (See Howe, Harold, assignor.)
Howe, Harold, assignor to Howe Folding Furniture, Inc., New York, N. Y. Serving table. 1,865,254; June 28.
Howell, Aaron W., Cumming, Iowa. Collapsible awning. 1,865,106; June 28.
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Perforated strip feed mechanism. 1,865,107; June 28.
Howson, Charles T., assignor to Huntley Manufacturing Co., Silver Creek, N. Y. Coffee grinder. 1,864,595; June 28.
Hronek, Rudolph, Dodge, Nebr. Automatic hill drop for planters and listers. 1,864,691; June 28.
Hull, John I., Schenectady, N. Y., assignor to General Electric Company. Load control. 1,865,414; June 28.
Hulshizer, George W., Stewartsville, assignor to Ingersoll-Rand Company, Jersey City, N. J. Cleansing device for rock drills. 1,865,010; June 28.
Huntley Manufacturing Co. (See Howson, Charles T., assignor.)
Hunt-Spiller Manufacturing Corporation. (See Goostray, Joseph, assignor.)
Hupp, Charles A., Indianapolis, assignor of one-half to W. M. Wilt, Syracuse, Ind. Rubber table cover. 1,865,011; June 28.
Hurst, Ira N. (See Hansen, Julius W., and W. L., and Hurst.)
Hutchings, Le Roi E., Buffalo, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Articulated index device. 1,864,692; June 28.
Hutchings, Le Roi E., Tonowanda, assignor to Remington Rand Inc., Buffalo, N. Y. Index device. 1,865,057; June 28.
Hutchinson, Roland V., Lansing, assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Crank shaft balancer. 1,865,108; June 28.
Hutchinson, Walter L., Hartford, Conn., and R. F. Runge, Forest Hills Gardens, N. Y., assignors to The Skayef Ball Bearing Company, Hartford, Conn. Form grinding. 1,865,392; June 28.
Hyams, Herbert B., St. Paul, Minn. Shelf. 1,864,907; June 28.
Hyman, Henry. (See Abel, Frank J., assignor.)
Hyman, Henry. (See Muldoon, Bernard F., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Gaus, Wilhelm, assignor.)
I. G. Farbenindustrie, Aktiengesellschaft. (See Jordan, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Loehr, Oskar, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Otto, M., and Bub, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pier, M., and Müller-Cunradi, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schlecht, L., and Duftschmid, assignors.)
Ideal School Supply Company. (See Bickford, Den A., assignor.)
Idrac, Jean M. P., Paris, France. Apparatus for recording the direction and speed of fluid currents. 1,865,373; June 28.
Independent Pneumatic Tool Company. (See Forss, Frithiof P., assignor.)
Independent Pneumatic Tool Company. (See Hamerly, Frank B., assignor.)
Indiana Lamp Corporation. (See Albright, Edward C., assignor.)
Indiana Lamp Corporation. (See Foster, Harry C., assignor.)
Industral Research Company. (See Joffé, Abraham, assignor.)
Ingersoll-Rand Company. (See Hulshizer, George W., assignor.)
International Cigar Machinery Company. (See Halstead, John F., assignor.)
International Cigar Machinery Company. (See Rundell, R. E., and Hagquist, assignors.)
International Screw Company. (See Aranz, John A., assignor.)
International Shoe Company. (See Krive, James D., assignor.)
Interstate Folding Box Company, The. (See Bergstein, Samuel, assignor.)
Intertype Corporation. (See Willis, LeRoy W., assignor.)
Jackson, Clyde E., assignor of one-half to A. Nowak, Tracy, Calif. Adjustable nozzle tip. 1,865,012; June 28.
Jackson, Harry, assignor to M. Jackson, Harrisburg, Pa. Advertising apparatus. 1,865,374; June 28.
Jackson, Mary. (See Jackson, Harry, assignor.)
Jacobs Bros. Co., Inc., The. (See Walker, George, assignor.)
Jacobs Bros. Co., Inc., The. (See Walker, Harold L., assignor.)
Jacobson, David L., Pittsburgh, Pa., assignor to The Kopper Company. Manufacturing nitrates and other products. 1,864,826; June 28.
Jacocks, George T., Brooklyn, assignor, by mesne assignments, to Alco Products Incorporated, New York, N. Y. Condenser. 1,865,255; June 28.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic molecular association of aldehydes. 1,864,908; June 28.
Jaeger, Alphons O., Mount Lebanon, assignor to The Selden Company, Pittsburgh, Pa. Synthetic resin. 1,864,909; June 28.
Jarrell, Charles S., and A. M. Webb, assignors to Charlotte Chemical Laboratories Inc., Charlotte, N. C. Electrical controlled valve. 1,865,058; June 28.
Jeannette Steel Corporation. (See Stough, Turney H., assignor.)
Jeffries, Charles W., assignor of one-fourth to M. P. Erwin, Lake Charles, La. Synchronizing system for television apparatus. 1,865,190; June 28.
Jenkins Bros. (See Gora, Henry, assignor.)
Jenkins, Clifford W., and E. B. Bishop, Sacramento, Calif. Sanitary toilet flush. 1,864,827; June 28.
Jenkins, Paul W. (See Young, J. H., and Jenkins.)
Jensen, John K., Blackfoot, Idaho. Breather pipe cap. 1,865,319; June 28.
Jewell, Harold D., Detroit, Mich. Telephone signal light. 1,864,910; June 28.
Jewett, Joseph E., C. E. Heritage and R. Riegler, Buffalo, assignors to National Aniline & Chemical Co., Inc., New York, N. Y. Agitated apparatus. 1,864,825; June 28.
Jodeck, Paul, New York, N. Y., assignor to "Edeleanu" Gesellschaft m. beschränkter Haftung, Berlin, Germany. Apparatus for refining heavy mineral oils. 1,864,911; June 28.
Joffé, Abraham, Leningrad, Russia, assignor to Industrial Research Company, Cambridge, Mass. Electrical condenser and the like. 1,864,828; June 28.
Johannesen, Svend E., Pittsfield, Mass., assignor to General Electric Company. Electrical winding. 1,865,256; June 28.
Johnson, Algot F., Minneapolis, Minn., assignor to Koehring Company, Milwaukee, Wis. Sprinkling system for use with concrete paving machine. 1,865,109; June 28.
Johnson, Charles F., Ventura, Calif. Aircraft. 1,864,912; June 28.
Johnson, Eads, Morristown, N. J. Marine tractor. Des. 87,263; June 28.
Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Multiple operated fastener. 1,865,393; June 28.
Johnson, Stephen, jr., Pittsburgh, Pa., R. L. Morrison and A. R. Leukhardt, Detroit, Mich., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa. Tire inflation device. 1,865,110; June 28.
Johnson, Thomas N., Rome, N. Y. Envelope opener. 1,864,830; June 28.
Johnston, Ben H. (See Stukes, Horace A.)
Johnston, Robert N., Lindsborg, Kans. Article exchange mechanism. 1,864,913; June 28.
Joksch, Rudolf, Vienna, Austria. Weighing apparatus with a load balancing lever. 1,864,831; June 28.
Jones, Charles E., Bradford, England. Power operated valve opening and closing apparatus. 1,864,653; June 28.
Jones, John E., Springfield, assignor to Chapman Valve Manufacturing Company, Indian Orchard, Mass. Valve. 1,864,596; June 28.
Jones, William A., Westerleigh, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Mercury condenser water tube steam boiler. 1,864,737; June 28.
Jordan, Otto, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cellulose nitrate lacquer. 1,865,191; June 28.
Jordan, O. F., Company. (See Protzeller, Harry W., assignor.)
Joslyn Manufacturing and Supply Co. (See Smalley, Burton M., assignor.)
Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Elastic fluid turbine. 1,865,257; June 28.
Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Turbine generator installation. 1,865,258; June 28.
Kahle, Heinrich. (See Pollitzer, F., and Kahle.)
Kaiser, Karl. (See Schneider, B. R., and Kaiser.)
Kalman Steel Company. (See Kessler, Harry A., assignor.)
Kappes, Walter R., Oakmont, assignor to Aluminum Company of America, Pittsburgh, Pa. Making structural material. 1,865,192; June 28.
Karl, Heinrich, Jersey City, N. J. Internal combustion motor. 1,865,013; June 28.
Karl, Heinrich, Jersey City, N. J. Automatic device for horseless vehicles for the protection of pedestrians and the vehicle itself. 1,865,014; June 28.
Kaufmann, Hans, Jena, Germany. Preparing compounds of alkaline earth metal nitrites with methyl xanthines and the products. 1,865,111; June 28.

Kegelman, George, assignor to Heller & Brightly, Inc., Philadelphia, Pa. Combined level and transit. 1,864,832; June 28.
Keller, John M., Lakewood, Ohio. Window support. 1,865,259; June 28.
Keller, Paul E. (See Daun, C. L., and Keller.)
Kelley, Leonard O., assignor to The Standard Computing Scale Company, Detroit, Mich. Scale mechanism. 1,865,015; June 28.
Kelley, Peter, Winsted, Conn. Hook and eye holder. 1,865,112; June 28.
Keltie, George R., assignor to American Wringer Co., Woonsocket, R. I. Squeeze roll. 1,865,260; June 28.
Kelvinator Corporation. (See McGuffey, Orton S., assignor.)
Kempe, Irwin T. (See Kennedy, D. S., and Kempe.)
Kenaga, Ivan A. (See Winston, A. W., and Kenaga.)
Kennedy, Donald S., and I. T. Kempe, Longparish, England. Spare tire carrier for road vehicles. 1,864,829; June 28.
Kessler, Harry A., Buffalo, N. Y., assignor to Kalman Steel Company, Inc., Chicago, Ill. Production of expanded metal. 1,864,507; June 28.
Kick, Lawrence B., Pine Lawn, Mo. Hub puller. 1,865,420; June 28.
Kiesel, 3d, William F., New York, N. Y. Cable pulling device. 1,865,113; June 28.
King, Frank M., Oak Park, assignor of one-third to J. C. Morrell, River Forest, and one-third to E. Halter, Chicago, Ill. Laundering machine. 1,864,738; June 28.
Kinghorn, jr., Archibald H., Oakmont, Pa. Traffic controlling device. 1,865,193; June 28.
Kingsbury, Edward J., Keene, N. H. Drilling machine. 1,865,375; June 28.
Kingston, Frederick S., and B. L. Conley, assignors to The Sunlight Electrical & Manufacturing Company, Warren, Ohio. Electric switch. 1,864,654; June 28.
Kirkpatrick, William E., Springfield, Ohio. Return bend. 1,865,016; June 28.
Kissinger, George B., Takoma Park, Md. Brick. 1,865,114; June 28.
Kleineberg, Paul E., Easton, Pa., assignor to American Assembling Machine Company. Bookbinder stitcher. 1,864,739; June 28.
Klencke, Hans, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y. Production of ore coke. 1,864,655; June 28.
Klosson, Michael M., Kenmore, assignor to Buffalo Steam Pump Company, Buffalo, N. Y. Centrifugal pump impeller. 1,864,834; June 28.
Knapp, Edgar, and C. G. Allgrunn, assignors to Niagara Sprayer Company, Middleport, N. Y. Brush feed for dusting machines. 1,864,740; June 28.
Knight, Howard, assignor to Livermore and Knight Company, Providence, R. I. Advertising device. 1,865,261; June 28.
Kniss, Frank C., and R. N. Vickers, Smackover, Ark. Deep well pump. 1,864,914; June 28.
Knowles, Albert, assignor to Transit Mixers, Inc., San Francisco, Calif. Apparatus for mixing concrete. 1,865,017; June 28.
Kobe, Inc. (See Coberly, C. J., and Croasdale, assignors.)
Koca, James F. (See Hokanson, O. A., and Koca.)
Koch, Charles N., Kane, Pa. Combustion turbine and method of feeding and burning fuel. 1,864,741; June 28.
Koch, Charles N., Kane, Pa. Combustion turbine and method of burning fuel. 1,864,742; June 28.
Koehring Company. (See Daniel, John, assignor.)
Koehring Company. (See Johnson, Algot F., assignor.)
Koehring Company. (See Osman, Ralph T., assignor.)
Koehring Company. (See Russell, Leslie A., assignor.)
Kohler, Robert W., Tekamah, Nebr. Planter and disker. 1,865,376; June 28.
Koppe, Alexander T., assignor to Directoplate Corporation, Chicago, Ill. Photocomposing machine. 1,865,262; June 28.
Koppers Company, The. (See Becker, Joseph, assignor.)
Koppers Company, The. (See Jacobson, David L., assignor.)
Koppers Company, The. (See Rose, H. J., and Hill, assignors.)
Korney, Roman, Chicago, Ill., assignor of one-half to The Rome Company, Inc. Roll edge for mattresses or cushions. 1,865,018; June 28.
Kosterman, Henry T., Burlingame, assignor to himself and K. Finnegan, San Mateo, Calif. Muffler. 1,864,915; June 28.
Krive, James D., assignor to International Shoe Company, St. Louis, Mo. Treeing jack. 1,865,019; June 28.
Kronquest, Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Apparatus for closing cans and vacuumizing the cans prior to sealing. 1,865,320; June 28.
Krueger, Frank, and H. Douglass, assignors to Pacific Can Co., San Francisco, Calif. Apparatus for drying can ends containing a sealing compound. 1,865,020; June 28.
Kuckuck, Heinrich, Bremen, Germany. Ventilator. 1,864,743; June 28.
Kuhlman, Carl H., assignor to The American Temperature Indicating Company, Toledo, Ohio. Humidity affected telethermometer. 1,864,744; June 28.
Kunz, Robert, Fischlham, Austria, assignor to Firm of Eternit Inc., St. Louis, Mo. Manufacturing artificial stone plates of fibrous materials and hydraulic cement. 1,864,833; June 28.
L. C. L. Corporation, The. (See Woodruff, Graham C., assignor.)
Lacasse, George. (See Hanrahan, R., and Lacasse.)
Lackner, Alexander J., Flushing, N. Y. Paper receptacle. 1,864,835; June 28.
Lackner, Alexander J., Whitestone, N. Y. Paper receptacle. 1,864,836; June 28.
Lacroix, George U., assignor to Philip Hans Company, Inc., Holyoke, Mass. Carbon copying system. 1,865,115; June 28.
Lake, Simon, Milford, Conn. Submarine or submersible boat. 1,864,837; June 28.
Lamb, Arthur B., Cambridge, Mass. Device for detecting methyl chloride. 1,864,544; June 28.
Lambert, Fred, jr. (See Smith, William A., assignor.)
Lamoree, James K. (See Evans, A. D., and Lamoree.)
Landon, Lee B., Elwood, Ind., assignor to American Sheet and Tin Plate Company. Counting mechanism. 1,865,321; June 28.
Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Rail joint bar. 1,865,194; June 28.
Langwell, Herbert, Epsom, and W. A. Burton, Aldwych, London, England, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Fermentation of cellulosic materials. 1,864,839; June 28.
Langwell, Herbert, Epsom, England, and E. Ricard, Melle, France, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Fermentation of cellulosic materials. 1,864,838; June 28.
Lankford, Robert E. (See Carter, Sidney T., assignor.)
Larmour, Harry McC., and S. C. Pierce, jr., assignors to Yosemite Portland Cement Corporation, Merced, Calif. Cement and making. 1,865,021; June 28.
Larson, Albert G., Piedmont, Calif. Driving mechanism. 1,865,022; June 28.
Larson, Algot, Elmhurst, assignor to Unique Balance Co., Chicago, Ill. Window sash balance. 1,864,745; June 28.
Latimer, William J., Washington, D. C., H. A. Stahl, West Falls Church, Va., and G. J. Maldonado, Washington, D. C.; said Stahl and said Maldonado assignors to said Latimer. Hillside catch basin. 1,865,322; June 28.
Leavy, Nathan J., Los Angeles, Calif. Bottle closure and sediment trap. 1,865,023; June 28.
Le Beaumont, Roland W., Syracuse, N. Y. Label holder. 1,864,656; June 28.
Lebo, Robert B., Elizabeth, N. J., assignor to Standard Oil Development Company. Apparatus for counter current treatment. 1,865,024; June 28.
Lee, Roger K., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Counteracting torsional vibrations. 1,865,116; June 28.
Legg, David A., and L. M. Christensen, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Production of organic acids from cellulosic material. 1,864,746; June 28.
Legge, Alfred G., Brockton, Mass. Shoe form. 1,865,117; June 28.
Lehigh Silk Hosiery Mills, Inc. (See Mosser, Edward B., assignor.)
Lehner, Louis, Bay City, Mich. Adjustable stock support bracket. 1,864,840; June 28.
Lemmerman, Howard E., assignor to Simmons Mfg. Co., Cleveland, Ohio. Breather cap. 1,864,604; June 28.
Lenktis, Adolph, Brooklyn, N. Y. Gas valve. 1,864,917; June 28.
Lessler, Lew W. (See Lowkrantz, G., and Lessler.)
Leukhardt, Arthur R. (See Johnson, S. jr., Morrison, and Leukhardt.)
Levine, Morris, Woodcliff, N. J. Chair. Des. 87,264; June 28.
Levine, Morris, Woodcliff, N. J. Chair. Des. 87,265; June 28.
Levine, Morris, Woodcliff, N. J. Chair. Des. 87,266; June 28.
Levine, Morris, Woodcliff, N. J. Chair. Des. 87,267; June 28.
Levy, Abraham, Brooklyn, N. Y. Combination clock case and lamp or similar article. Des. 87,268; June 28.
Lewis, Mary A. (See Reddy, David W., assignor.)
Lewis, Samuel, Astoria, N. Y. Swatch device. 1,865,377; June 28.
Lewis, Warren K., Newton, Mass., assignor to Standard Oil Development Company. Cracking hydrocarbons by contact with hot gases. 1,865,195; June 28.
Liberman, Charles, Brooklyn, assignor of one-half to W. Garman, New York, N. Y. Folding chair. 1,865,323; June 28.
Lidseen, Gustave, and J. E. Flanagan, Chicago, Ill. Hydraulic pipe bending machine. 1,865,025; June 28.
Linder, Oscar J., Omaha, Nebr. Telephone cabinet. 1,864,590; June 28.
Lindgren, Frank A., Western Springs, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,864,841; June 28.
Lindsjo, Verner, assignor to Draper Corporation, Hopedale, Mass. Cloth take-up mechanism for looms. 1,865,118; June 28.

Lindsjo, Verner, assignor to Draper Corporation, Hopedale, Mass. Let-off mechanism for looms. 1,865,119; June 28.
Link-Belt Company. (See Tark, Marcus B., assignor.)
Linn, Robert E. (See McCormick, T. J., and Linn.)
Lion Fastener Inc. (See Poux, Noel J., assignor.)
Little, George W., Newport, R. I. Fishhook. 1,865,120; June 28.
Livermore and Knight Company. (See Knight, Howard, assignor.)
Livermore, William T. (See Smith, T. C., Freeman, and Livermore.)
Livingston, John W., Kirkwood, and M. Luthy, assignors to Monsanto Chemical Works, St. Louis, Mo. Producing caffein. 1,865,378; June 28.
Lock Joint Window Company. (See Foresman, Harry B., assignor.)
Locke Insulator Corporation. (See Hawley, Kent A., assignor.)
Locke Insulator Corporation. (See Plimpton, Bentley A., assignor.)
Loehr, Oskar, Uerdingen-Niederrhein, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of a new composition of matter with a base of cellulose esters. 1,865,196; June 28.
Loga, Alexander; Dearborn, assignor, by direct and mesne assignments, of one-fourth to M. Clungan, Detroit, and one-fourth to J. Pavel, Dearborn, Mich. Adjustable saw frame. 1,865,026; June 28.
Logan, John W., Cambridge, Mass. Attachment for hospital beds. 1,865,324; June 28.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 87,269; June 28.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 87,270; June 28.
Long, William R. (See McFarland, F. W., and Long.)
Loomis, Nathaniel E., Westfield, N. J., assignor to Standard Oil Development Company. Apparatus for cracking reduced crudes and the like. 1,865,027; June 28.
Lord, Hugh C., assignor to Erie City Iron Works, Erie, Pa. Forming wall plate structures for furnaces. 1,864,600; June 28.
Lord, Hugh C., assignor to Erie City Iron Works, Erie, Pa. Wall plate structure for furnaces. 1,864,601; June 28.
Lorenz, Frederick W. (See Geist, F. N., and Lorenz.)
Lotton, John, Los Angeles, Calif. Well casing head. 1,865,121; June 28.
Lounsbury, Harvey J., Glen Ellyn, Ill., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,864,842; June 28.
Lowkrantz, Gunne, Binghamton, and L. W. Lessler, Johnson City, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Combined shutter and film moving mechanism. 1,864,657; June 28.
Lucker, Millard B., Benton Harbor, Mich., assignor to Auto Specialties Mfg. Co., San Francisco, Calif. Lifting jack. 1,864,602; June 28.
Lucker, Millard B., Benton Harbor, Mich., assignor to Auto Specialties Mfg. Co., San Francisco, Calif. Lifting jack. 1,864,603; June 28.
Lummus Company, The. (See Coubrough, George B., assignor.)
Luthy, Max. (See Livingston, J. W., and Luthy.)
Lynn, Harry E., et al. (See Smith, William A., assignor.)
M. & S. Carburettor Manufacturing and Finance Corporation. (See Manners, W. H., and Barker.)
Maag-Eckenfelder, Gottfried M., Zurich, Switzerland. Contact pin for electric plugs. 1,864,989; June 28.
Macallum, James, jr., St. Louis, Mo. Quantity indicating device for liquids. 1,865,263; June 28.
MacCoy, Andrew T., Boston, Mass. Printing telegraph. 1,865,264; June 28.
MacLeod, Malcolm, Roosevelt, N. Y. Fountain pen. 1,865,325; June 28.
Madland, Gabriel. (See Tobin, K. J., Madland, and Treptow.)
Magnavax Company, The. (See Dempster, B., and Bruehl, assignors.)
Magoun, George L., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Vulcanization accelerator. 1,865,265; June 28.
Mahoney, John P., assignor to Gardner Broom Company, Amsterdam, N. Y. Combination broom holder and dust pan. 1,864,918; June 28.
Maier, George M., Pelham, assignor to American Radiator Company, New York, N. Y. Casing for a hot water heater or similar article. Des. 87,271; June 28.
Maldonado, Gustavo J. (See Latimer, W. J., Stahl, and Maldonado.)
Malin, Richard, assignor of one-half to Firm Theodor Haase, Chemnitz, Germany. Carburetor. 1,865,266; June 28.
Mallina, Rudolph F., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Film editing system. 1,865,028; June 28.
Malvern, Lewis K., Elgin, assignor to Elgin National Watch Co., Chicago, Ill. Power-wound watch or clock movement. 1,865,379; June 28.
Mandel, Ambrose J., deceased, by E. Mandel, Forest Hills, Long Island, N. Y., administrator. Making porous objects. 18,506; June 28.
Mandel, Edward, administrator. (See Mandel, Ambrose J.)
Manners, William H., Krugersdorp, and N. Barker, Johannesburg, Transvaal, assignors to M. & S. Carburettor Manufacturing and Finance Corporation, Limited, Johannesburg, South Africa. Carburetor. 1,865,122; June 28.
Manoha, Jacques, assignor to Houbigant, Inc., New York, N. Y. Holder for toilet articles. 1,865,267; June 28.
Manxi, Adam J., Chicago, Ill. Hat cleaning machine. 1,865,197; June 28.
Marangoni, Luigi, Pavia, Italy. Machine for transplanting edible grain plants. 1,865,123; June 28.
Marchwicke, Margaret. (See Buckley, John A., assignor.)
Marsh, Esli A., Oswego, assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Apparatus for filling valve bags. 1,864,545; June 28.
Marshall, Charles O., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,865,326; June 28.
Marsilius, Newman M., assignor, by mesne assignments, to The Producto Machine Company, Bridgeport, Conn. Milling machine. 1,865,198; June 28.
Martel, Gustave J., New York, N. Y. Cigar and cigarette lighter. 1,865,199; June 28.
Martin, Harold. (See Steele, L. J., and Martin.)
Martin, Rachel M. (See Muhleisen, Henry W., assignor.)
Martlin, Robert F., assignor to J. H. Pickett, Hamilton, Ontario, Canada. Machine for making molded pulp articles. 1,864,919; June 28.
Martz, Nicholas L., assignor to The Munsingwear Corporation, Minneapolis, Minn. Bathing suit. 1,865,029; June 28.
Mason Box Company, The. (See Weller, Arthur A., assignor.)
Masters, Harry B., Keokuk, Iowa. 1,864,920; June 28.
Mathias, Maximilian, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telephone system. 1,865,200; June 28.
Mathias, Maximilian, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Automatic telephone system. 1,865,201; June 28.
Mayer, Roland H., San Antonio, Tex. Apparatus for cutting wheels of cheese. 1,864,921; June 28.
McAniff, Robert J., Brooklyn, N. Y. Cigarette holder. 1,864,747; June 28.
McBeth, Raymond L., Fruita, Colo. Clothes basket carrier. 1,864,922; June 28.
McBride, John J., Bayonne, N. J., assignor to American Car and Foundry Company, New York, N. Y. Car tank. 1,864,606; June 28.
McCain, George L., and K. Pfeiffer, Detroit, Mich. Clutch disk. 1,865,327; June 28.
McCall, William W., Kansas City, Mo. Spinning top. 1,864,843; June 28.
McCarty, Richard J., jr., Bethlehem, Pa., assignor to Bethlehem Steel Company. Valve. 1,864,605; June 28.
McCauley, William T., Fallowfield, Ontario, Canada. Back rest. 1,865,030; June 28.
McClintock, James W., assignor to E-Z Reach Paper Cutter Corporation, Ltd., Los Angeles, Calif. Roll paper cutter. 1,865,399; June 28.
McConnell, Elliott B., Shaker Heights, assignor to The Standard Oil Company, Cleveland, Ohio. Fractionating column equipment. 1,865,400; June 28.
McConnell, George. (See McConnell, Robert S., assignor.)
McConnell, Robert S., assignor to G. McConnell, doing business as The Desmond-Stephan Mfg. Co., Urbana, Ohio. Grinding wheel dresser. 1,864,658; June 28.
McCormick, Thomas J., and R. E. Linn, Detroit, Mich.; said Linn assignor to said McCormick. Tire cover. 1,865,031; June 28.
McCullough, Paul J. (See Dreibuss, H. C., and McCullough.)
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake device. 1,865,124; June 28.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake regulator. 1,865,125; June 28.
McCune, Joseph C., Edgewood, assignor to Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,865,126; June 28.
McEachern, John A., Homer, La. Road machine. 1,865,328; June 28.
McFarland, Francis W., Martinez, and W. R. Long, Bay Point, Calif. Gate for railroad crossings and pedestrian crossings. 1,864,748; June 28.
McGee, William L., Media, Pa. Electric floor polishing machine. 1,865,032; June 28.
McGuffey, Orton S., assignor to Kelvinator Corporation, Detroit, Mich. Drinking water cooler. Des. 87,272; June 28.
McGuffey, Orton S., assignor to Kelvinator Corporation, Detroit, Mich. Drinking water cooler. Des. 87,273; June 28.
McHorter, Evelyn, New York, N. Y. Bed clothing. 1,865,329; June 28.
McKeen, Clarence W., Kapuskasing, Ontario, Canada. Gun sighting. 1,865,127; June 28.
McKenna Process Company. (See Langford, George, assignor.)
McKinney, James P., jr., assignor to McKinney Manufacturing Company, Pittsburgh, Pa. Latch mechanism. 1,865,128; June 28.

McKinney Manufacturing Company. (See McKinney, James P., jr., assignor.)
McKinney Manufacturing Company. (See Woernle, Harry E., assignor.)
McLeod, Robert J., West Drayton, England. Flexible coupling. 1,865,330; June 28.
Meglitz, William B. (See Vogel, F. W., and Meglitz.)
Meiser, Wilhelm, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Leuco sulphuric acid esters of the ureas of beta-leuco-aminoanthraquinones. 1,864,659; June 28.
Menhall, James W., assignor to Highway Trailer Company, Edgerton, Wis. Clutch brake. 1,865,129; June 28.
Mergenthaler Linotype Company. (See Burt, Harold A., assignor.)
Mesmer, Alois J., Huntington Park, Calif. Making pipe insulation. 1,864,923; June 28.
Metal Textile Corporation et al. (See Bradford, Edward S., jr., assignor.)
Metals Production of North America Incorporated. (See Taplin, Thomas J., assignor.)
Meunier, Leon F., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Transmission apparatus. 1,864,844; June 28.
Meyer, Geo. J., Manufacturing Company. (See Griffin, C. W., Schmid and Sinz, assignors.)
Meyer, Henry C. A., assignor to The Bartlett Hayward Company, Baltimore, Md. Waterless gas holder. 1,864,924; June 28.
Meyer, Minnie, and A. Hellbrunn, assignors to Golo Slipper Company, Inc., New York, N. Y. Sandal. 87,274; June 28.
"Miag" Muhlenbau und Industrie Aktiengesellschaft. (See Bergen, G., Engelhardt, and Steckhan, assignors.)
Micor Steel Company. (See Siebenlist, Anthony G., assignor.)
Miles, George W., Boston, Mass., assignor to Celanese Corporation of America. Preparing cellulose ethers. 1,864,546; June 28.
Miller Company, The. (See Doane, Leroy C., assignor.)
Miller, Elmer O., Beloit, Kans. End gate. 1,864,660; June 28.
Miller, Ernest B., assignor to Silica Gel Corporation, Baltimore, Md. Refrigeration method and apparatus. 1,864,661; June 28.
Miller, Ernest B., assignor to The Silica Gel Corporation, Baltimore, Md. Plastic composition. 1,864,662; June 28.
Miller, Frank S., St. Louis, Mo. Automobile running board carrier. 1,864,607; June 28.
Miller, Stuart P., Englewood, and E. H. Elms, Morsemere, N. J., assignors to The Barrett Company, New York, N. Y. Recovery of light oils. 1,864,749; June 28.
Milligan, John B., Columbus, Ohio, assignor to The Columbus Auto Parts Company. Adjustable king pin bearing. 1,865,202; June 28.
Miner, W. H., Inc. (See Heitner, William A., assignor.)
Miner, W. H., Inc. (See Lounsbury, Harvey J., assignor.)
Mitchell, Courtney N. Cleveland, Ohio. Shock absorber. 1,864,845; June 28.
Mitchell, Howard C. (See Wagner, F., and Mitchell.)
Molins, Walter E., London, England. Package for cigarettes and like articles. 1,864,925; June 28.
Moll, Walter, assignor to Hoosier Lamp and Stamping Corporation, Evansville, Ind. Catch for oven doors. 1,865,331; June 28.
Monogram Lens Corporation. (See Arbuckle, Samuel F., assignor.)
Monsanto Chemical Works. (See Livingston, J. W., and Luthy, assignors.)
Moon, Charles R., assignor to Ontario Manufacturing Company, Muncie, Ind. Apparatus for securing together the blades and handles of hollow handled knives. 1,864,846; June 28.
Moore, Carl E., Gary, Ind., assignor to American Sheet and Tin Plate Company. Lifting grapple. 1,865,380; June 28.
Moore, Jesse C., assignor to Columbia School Supply Company, Indianapolis, Ind. Universal folding chair. 1,864,750; June 28.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Steering column setting. 1,865,130; June 28.
Morall, Charles, assignor to Delman, Inc., New York, N. Y. Shoe. Des. 87,275; June 28.
Moran, Patrick J., Newark, N. J., assignor to Irving Rosner, New York, N. Y. Brassière. 1,865,381; June 28.
Morral, William W., Morral, Ohio. Corn butting machine. 1,864,663; June 28.
Morrell, Jacque C., et al. (See King, Frank M., assignor.)
Morris, Howard I., Lakewood, assignor to The Yoder-Morris Company, Cleveland, Ohio. Switch means. Re18,507; June 28.
Morris, Warren A., Wyoming, assignor to The Richardson Company, Lockland, Ohio. Carton for fragile objects. 1,865,268; June 28.
Morrison, George, Poughkeepsie, N. Y. Coin controlled locking means for vending machines. 1,874,847; June 28.
Morrison, Raymond L. (See Johnson, S. jr., Morrison, and Leukhardt.)
Morton, Edmund R., New York, N. Y., and H. M. Stoller, Mountain Lakes, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Incandescent lamp. 1,864,547; June 28.
Moss, Samuel A., Alameda, and J. Geddes, Sacramento, Calif. Producing from natural gravel deposits a gravel aggregate for use in concrete. 1,864,926; June 28.
Mosser, Edward B., Philadelphia, Pa., assignor to Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Des. 87,276; June 28.
Mott, Chester, and G. G. Spencer, Denver, Colo., assignors by mesne assignments, to Union Carbide and Carbon Laboratories, Inc., New York, N. Y. Preventing popping of torches. 1,865,033; June 28.
Muhleisen, Henry W., assignor of one-half to R. M. Martin, Los Angeles, Calif. Animal trap. 1,864,664; June 28.
Muir, Wellington W., Lockport, N. Y. Radiator core for automobile cooling systems. 1,864,751; June 28.
Muldoon, Bernard F., Mountainview, N. J., assignor to H. Hyman, Brooklyn, N. Y. Electric light socket. Des. 87,277; June 28.
Müller-Cunradi, Martin. (See Pier, M., and Müller-Cunradi.)
Munday, Richard B., Dayton, assignor, by mesne assignments, to The Cincinnati Ball Crank Co., Cincinnati, Ohio. Liquid dispensing container. 1,865,269; June 28.
Munk, Max M., Washington, D. C. Aircraft propeller. 1,864,848; June 28.
Munsingwear Corporation, The. (See Martz, Nicholas L., assignor.)
Munters, Carl G. (See von Platen, B. C., and Munters.)
Munters, Carl G., and S. M. Bäckström, assignors to Platen-Munters Refrigerating System Aktiebolag, Stockholm, Sweden. Refrigeration. 1,864,608; June 28.
Murphy, Daniel F., Galveston, Tex. Signal. 1,864,752; June 28.
Murray, Henry L., Auckland, assignor to The Te Aroha Dairy Company Limited, Te Aroha, New Zealand. Method of and apparatus for deodorizing and dehydrating fluids. 1,864,849; June 28.
Musolf, Herbert G., Long Beach, Calif. Pump. 1,864,609; June 28.
Mutual Engineering Corporation. (See Palmquist, Carl E., assignor.)
Myers, Thomas G., assignor to United States Electrical Manufacturing Company, Los Angeles, Calif. Storage tank construction. 1,864,927; June 28.
Naatz, Charles H., St. Johnsbury, Vt. Milk weight gauge and feeding guide. 1,865,034; June 28.
Naoum, Phokion, Cologne, Germany, assignor, by mesne assignments, to E. I. du Pont de Nemours & Co., Wilmington, Del. Explosive. 1,865,382; June 28.
National Aniline & Chemical Co. (See Grob, Armin R., assignor.)
National Aniline & Chemical Co. (See Jewett, J. E., Hertinge, and Riegler, assignors.)
National Aniline & Chemical Company. (See Pletzsch, Kurt F., assignor.)
National Carbon Company. (See Heise, George W., assignor.)
National Cash Register Company, The. (See Robertson, William H., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National-Helfrich Potteries Company. (See Weaver, Harry F., assignor.)
National Sewing Machine Company. (See Dawson, J. W., and Garrigan, assignors.)
Neale, Lincoln C., Flemington, Australia. Manufacture of printer's ink. 1,865,035; June 28.
Nelson, Bert J. (See Coles, W. H., and Nelson.)
Nelson, Franklin C., Elizabeth, N. J., assignor to Standard Oil Development Company. Sprayer. 1,865,203; June 28.
Neuss, Oskar. (See Goldschmidt, H., and Neuss.)
Niagara Sprayer Company. (See Knapp, E., and Allgruna, assignors.)
Nicholas, George, assignor to Rhinelander Paper Company, Rhinelander, Wis. Paper machine. 1,865,270; June 28.
Nicolson, Alexander M., assignor to Communication Patents, Inc., New York, N. Y. High frequency synchroscope. 1,864,753; June 28.
Nicosia, David A., and H. Sippel, Chicago, Ill. Radio circuit and apparatus. 1,865,036; June 28.
Noble, Bert, San Diego, assignor to Roads Construction Company, Ltd., Los Angeles, Calif. Leveling device for hoppers, etc. 1,864,851; June 28.
Nordberg, Bruno V. E., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Engine governor. 1,864,850; June 28.
Nordberg Manufacturing Company. (See Nordberg, Bruno V. E., assignor.)
Nordhem, Eric, assignor to The Delta-Star Electric Company, Chicago, Ill. Switch lock. 1,864,548; June 28.
Noreck Co. (See Bruuner, Charles C., assignor.)
Northern Studios, Inc., The. (See Schilling, Louis, assignor.)
Northey, John P. and R. V., Toronto, Ontario, Canada. Rail clip. 1,864,665; June 28.
Northey, Rodney V. (See Northey, John P. and R. V.)
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Making window envelopes. 1,865,037; June 28.

Nowak, Alexander. (See Jackson, Clyde E., assignor.)
Ober, Beverly, and E. H. Wight, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Manufacturing acid phosphate. 1,865,383; June 28.
Oberphos Company, The. (See Ober, B., and Wight, assignors.)
Oblinger, Daniel B., assignor to Union Mills Paper Manufacturing Company, New Hope, Pa. Process of producing paper. 1,864,852; June 28.
Offen, James H., assignor to The Garrard Engineering & Manufacturing Company Limited, Swindon, England. Centrifugal governor. 1,864,853; June 28.
Oglesby, Nicholas E., and D. Ehrenfeld, Edgewood, Md., assignors, by mesne assignments, to Federal Laboratories, Inc., Pittsburgh, Pa. Making a composition for producing irritating gas. 1,864,754; June 28.
Ohio Rubber Company, The. (See Bronson, Budd, assignor.)
Oldham, George, Denton, near Manchester, England. Bearing for felting rolls. 1,865,038; June 28.
Olsen, Anders C., Mineola, N. Y. Metallic ceiling construction. 1,863,131; June 28.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock washer for countersunk screws. 1,865,132; June 28.
O'Neil, James H., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Automatic can testing machine. 1,865,384; June 28.
Ontario Manufacturing Company. (See Moon, Charles R., assignor.)
Orchestraphone Company. (See Cloud, Raymond T., assignor.)
Osborne, John F., Upper Darby, Pa. Electric mold. 1,864,666; June 28.
Osman, Ralph T., assignor to Koehring Company, Milwaukee, Wis. Traction vehicle. 1,865,133; June 28.
Osmer, James H., Berkeley, and F. L. Craise, El Segundo, assignors to Standard Oil Company of California, San Francisco, Calif. Method and apparatus for treating oils. 1,864,755; June 28.
Osmun, Horace E., H. W. Rubinstein, and E. R. Stoekle, assignors to Central Radio Laboratories, Milwaukee, Wis. Radioreceiver. 1,865,271; June 28.
Osterheld, Clark M., Stoughton, Wis., assignor, by mesne assignments, to Waters-Genter Company, Minneapolis, Minn. Control device. 1,865,332; June 28.
Oswego Falls Corporation. (See Swentor, August W., assignor.)
Otis Elevator Company. (See Brady, Thomas, assignor.)
Otto, Albert T., & Sons, Inc. (See Spalding, John, assignor.)
Otto, Michael, Ludwigshafen-on-the-Rhine, and L. Bub, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of volatile fluorides. 1,865,204; June 28.
Outserts, Inc. (See Brown, Robert R., assignor.)
Oven, Frank J., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,864,854; June 28.
Owen Bucket Company, The. (See Botten, Henry W., assignor.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Film magazine for motion picture cameras. 1,865,272; June 28.
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Pabst Corporation. (See Stoll, Julius E., assignor.)
Pacific Can Co. (See Krueger, F., and Douglass, assignors.)
Packard Motor Car Company. (See Edwards, Herbert C., assignor.)
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Packard Motor Car Company. (See Hutchinson, Roland V., assignor.)
Packard Motor Car Company. (See Lee, Roger K., assignor.)
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Packard, Wilson H., Erie, Pa. Curtain hanger. 1,865,039; June 28.
Page, Frank R., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Process and machine for producing knitted fabric. 1,865,385; June 28.
Palmquist, Carl E., Olean, N. Y., assignor to Mutual Engineering Corporation. Fastener for automobile truck doors. 1,865,205; June 28.
Palueff, Konstantin K., Pittsfield, Mass., assignor to General Electric Company. Protective arrangement. 1,865,273; June 28.
Parker, Alice E., Venice, Calif. Lingerie clasp. 1,865,040; June 28.
Parker, Arthur H. (See Sebell, Harry, assignor.)
Parker, Harry E., and S. M. Stewart, Quincy, Mass., assignors to Bethlehem Steel Company. Electric welding system. 1,864,610; June 28.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Multiple conduit and tie element therefor. 1,864,611; June 28.
Parsons, Charles A., deceased, and H. M. Duncan, Newcastle-on-Tyne, England; said Duncan assignor to said Parsons, K. Parsons, V. Thompson, and F. G. H. Bedford, legal representatives. Casting of ingots. 1,865,041; June 28.
Parsons, Katharine, et al., legal representatives. (See Parsons, C. A., and Duncan.)
Patent and Licensing Corporation, The. (See Cumfer, Donald A., assignor.)
Patterson, Henry M., Richmond, Va. Cooking apparatus. 1,864,928; June 28.
Paul, Floyd O., Yeadon, Pa. Portable power driven tool and power converting attachment therefor. 1,864,549; June 28.
Pavel, John, et al. (See Loga, Alexander, assignor.)
Pearson, George E., and H. E. Petrilli, Boston, Mass. Road surfacing equipment. 1,864,612; June 28.
Pearson, Raymond. (See Stukes, Horace A.)
Peelle Company, The. (See Peelle, Robert S., assignor.)
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Operator for counterbalanced elevator doors. 1,864,667; June 28.
Pellissier, George E., Holyoke, Mass. Brake for motor vehicles. 1,865,042; June 28.
Pelzer, Harry L., Highland, Ind., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,865,206; June 28.
Pendry, William R., Cleveland, Ohio. Automatic control mechanism. 1,865,333; June 28.
Penn, Oscar S., Malew, England, assignor to Roadless Traction, Limited, Hounslow, Middlesex, England. Joints of chain or like members. 1,865,334; June 28.
Penney, Harold D. (See Chaplin, Edwin D., assignor.)
Pennsylvania Wire Glass Company. (See Shuman, Arno, assignor.)
Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Conductor clip. 1,865,207; June 28.
Peters, Ralph H. (See Ree, Peter O., assignor.)
Peterson, John W., assignor to Bendix Brake Company, South Bend, Ind. Manufacture of brake shoes. 1,864,929; June 28.
Peterson, William R., Oswego, assignor to St. Regis Paper Company, New York, N. Y. Closing device for bag filling machines. 1,864,550; June 28.
Petrilli, Harry E. (See Pearson, G. E., and Petrilli.)
Petroleum Rectifying Company. (See Fisher, Harmon F., assignor.)
Peyinghaus, Walter, Bezirk Hagen, Germany. Two-part axle bearing block or casing for railway vehicles. 1,865,335; June 28.
Pfeiffer, Karl. (See McCain, G. L., and Pfeiffer.)
Pfous, Frank, Coshocton, Ohio. Display stand. 1,865,386; June 28.
Philips, Herman B., New York, N. Y. Automobile transmission. 1,864,613; June 28.
Picken, William J. (See Round, H. J., and Picken.)
Pickett, John H. (See Martlin, Robert F., assignor.)
Pictola Camera Co. Ltd. (See Seeling, Charles R., assignor.)
Pieper, Alphonse F., Rochester, N. Y. Light bracket. 1,864,756; June 28.
Pier, Mathias, Heidelberg, and M. Müller-Cunradi, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing motor fuel by destructive hydrogenation of carbonaceous materials. 1,864,855; June 28.
Pier, Mathias, Heidelberg, E. Hochschwender, Ludwigshafen-on-the-Rhine, and K. Wenzel, Mannheim, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Separation from solid residues, of oils obtained in the destructive hydrogenation of carbonaceous materials. 1,864,856; June 28.
Pierce, Lonnie J., and F. L. Bishop, assignors to American Window Glass Company, Pittsburgh, Pa. Glass drawing apparatus. 1,864,930; June 28.
Pierce, Stephen C., jr. (See Larmour, H. M., and Pierce.)
Pietzsch, Kurt F., Pittsburgh, Pa., assignor, by mesne assignments, to National Aniline & Chemical Company, Inc., New York, N. Y. Filter. 1,864,757; June 28.
Pilling, Norman B., Wilkensburg, and R. E. Bedworth, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company. Producing a temperature-sensitive element. 1,865,208; June 28.
Pittoni, Louis E., Jamaica, N. Y., assignor to The Rome Company, Inc. Spring filled mattress. 1,865,043; June 28.
Pittsburgh Equitable Meter Company. (See Chrisman, Horace, assignor.)
Platen-Munters Refrigerating system Aktiebolag. (See Munters, C. G., and Bäckström, assignors.)
Plimpton, Bentley A., assignor to Locke Insulator Corporation, Baltimore, Md. Pole top bracket. 1,865,134; June 28.
Podmore, Arthur, London, England, assignor to American Machine & Foundry Company. Tobacco-feed belt for cigarette machines. 1,864,758; June 28.
Poeter, Edward, Irvington, N. J., assignor to Groove Lock Co. Inc., New York, N. Y. Fastening device. 1,864,551; June 28.
Polaire, Zero, Salem, Oreg. Trap. 1,865,044; June 28.
Polilitzer, Franz, Grosshesselohe, near Munich, and H. Kahle, Hollriegelskreuth, near Munich, Germany. Apparatus for the separation of gas mixtures. 1,865,135; June 28.
Posthumus, Klaas. (See van der Pol, B., and Posthumus.)
Potter, E. K., et al. (See Clark, Harry E., assignor.)

Potts, Louis M., Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Synchronizing system. 1,865,136; June 28.
Poux, Noel J., assignor to Lion Fastener Inc., Meadville, Pa. Separable fastener. 1,864,614; June 28.
Powell, Benjamin F., assignor to Thompson Mfg. Company, Denver, Colo. Convertible gas furnace construction. 1,865,045; June 28.
Powell, William B. (See Smith, E., and Powell.)
Pretsch, Frank, Philadelphia, Pa. Filter. 1,865,209; June 28.
Priess, William H., Upper Montclair, N. J., assignor, by mesne assignments, to General Electric Company. Electrical condenser. 1,865,046; June 28.
Priess, William H., Upper Montclair, N. J., assignor, by mesne assignments, to General Electric Company. High tension electrical apparatus including electrical condensers. 1,865,137; June 28.
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Circuit interrupter. 1,865,274; June 28.
Printz, Ernst. (See Crezée, Pieter, assignor.)
Pritchard, Clifford M., Tulsa, Okla. Storage tank or container. 1,864,759; June 28.
Pritchard, Clifford M., Tulsa, Okla. Tank construction. 1,864,931; June 28.
Probst, Edward A., Ogden, Utah. Slack burner. 1,864,932; June 28.
Products Machine Company, The. (See Marsilius, Newman M., assignor.)
Propper, Louis J., Chicago, Ill. Machine for making stick candy. 1,864,668; June 28.
Prosperity Company, Inc., The. (See Braun, Philip N., assignor.)
Prosperity Company, Inc., The. (See Davis, Ernest, assignor.)
Protzeller, Harry W., assignor to O. F. Jordan Company, East Chicago, Ind. Excavator car. 1,864,552; June 28.
Protzmann, Charles, Milwaukee, Wis. Fuel economizer and smoke reducer. 1,865,138; June 28.
Pulford, William H., Lima, assignor to The Schaaf & Good Company, Fremont, Ohio. Handle for tweezers or the like. Des. 87,278; June 28.
Pullen, Rodney S., Philadelphia, and W. J. Crowell, jr., Wyncote, assignors to Pullenlite Company, Philadelphia, Pa. Feed for match packaging machines. 1,864,760; June 28.
Pullenlite Company. (See Pullen, R. S., and Crowell, assignors.)
Purser, William S., London, England, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Electrical apparatus. 1,865,210; June 28.
Pym, Arthur F., Swampscott, and W. E. Scarlett, East Lynn, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on shoes. 1,864,669; June 28.
Pynynski, Edward, New Britain, Conn. Double purpose caster. 1,864,933; June 28.
Quass, Ralph L., Hawthorne, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,864,553; June 28.
Quinby, Edwin J., Yonkers, N. Y., assignor to Radio Corporation of America. Sound reproducing apparatus. 1,864,615; June 28.
Rabkin, William, New York, N. Y. Coin controlled mechanism. 1,865,211; June 28.
Radio Corporation of America. (See Foster, Julius E., assignor.)
Radio Corporation of America. (See Quinby, Edwin J., assignor.)
Radio Corporation of America. (See Round, H. J., and Picken, assignors.)
Radio Corporation of America. (See Smith, Theodore A., assignor.)
Radio Corporation of America. (See van der Pol, B., and Posthumus, assignors.)
Radonski, Valerian A., Refugio, Tex. Automatic shut-off for tanks. 1,865,387; June 28.
Ragsdale, Earl J. W., Norristown, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Girder construction. 1,865,059; June 28.
Ralph, Francis P., Butte, Mont. Piston ring gauge. 1,865,388; June 28.
Ranke, Gisbert, Maspeth, N. Y. Boat propelling device. 1,864,857; June 28.
Rastetter, William C., Fort Wayne, Ind. Folding structure. 1,865,139; June 28.
Ray, Joshua R. (See Ray, Thomas, and Ray.)
Ray, Thomas, and J. R. Ray, Manistee, Mich. Tester. 1,865,047; June 28.
Rayner, George R., Lewiston Heights, assignor to The Carborundum Company, Niagara Falls, N. Y. Abrasive stone. 1,864,616; June 28.
Reber, James W., London, England. Apparatus for cooling coke. 1,865,336; June 28.
Reddy, David W., assignor of one-fourth to M. A. Lewis, one-fourth to Viola Cornell and one-fourth to Max Silverman, New York, N. Y. Remote control apparatus. 1,865,389; June 28.
Ree, Peter O., assignor of one-half to R. H. Peters, Austin, Minn. Sewer cleaner. 1,864,617; June 28.
Reece Button Hole Machine Company, The. (See Reece, Franklin A., assignor.)
Reece, Franklin A., Brookline, assignor to The Reece Button Hole Machine Company, Boston, Mass. Buttonhole sewing machine. 1,865,140; June 28.
Reeves, Oliver H., Jamaica Plain, Mass. Derrick scaffold. 1,864,934; June 28.
Reid, Ebenezer E., Baltimore, Md., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Reducing the viscosity of cellulose ethers. 1,864,554; June 28.
Reineking, Frederick C., Inglewood, Calif. Dispensing can. 1,864,936; June 28.
Remington Arms Company. (See Woodford, Watson H., assignor.)
Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)
Remington Rand Inc. (See Wolters, Carl F., assignor.)
Research Association of British Rubber Manufacturers, The. (See Daynes, H. A., and Scott, assignors.)
Respats Inc. (See Respess, Roland B., assignor.)
Respess, Roland B., Wickford, assignor, by mesne assignments, to Respats Inc., Cranston, R. I. Manufacture of tread element for vehicle tires. 1,864,937; June 28.
Respess, Roland B., Wickford, assignor, by mesne assignments, to Respats Inc., Cranston, R. I. Traction member for automobile tires and the like. 1,864,938; June 28.
Respess, Roland B., Wickford, assignor, by mesne assignments, to Respats Inc., Cranston, R. I. Nonskid tire. 1,864,939; June 28.
Reyburn, John R., Fairfield, Conn., assignor to American Chain Company, Inc. Process and apparatus for reenforcing cross-chains and the like. 1,865,275; June 28.
Reynolds, Frederick W., Grantwood, N. J., assignor to American Telephone and Telegraph Company. Electro-optical system. 1,864,670; June 28.
Reynolds, Hugh D., assignor of forty-nine per cent to P. P. Dorne, Cincinnati, Ohio. Windshield wiper. 1,864,618; June 28.
Reynolds, Morley P., assignor to The W. S. Tyler Company, Cleveland, Ohio. Apparatus for screening materials. 1,864,940; June 28.
Rhinelander Paper Company. (See Nicholas, George, assignor.)
Rial, Wirt D., Watson, assignor, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif. Color coat for cemented surfaces. 1,864,942; June 28.
Ricard, Eiol. (See Langwell, H., and Ricard.)
Ricca, Fedele, Ron Bank, N. J. Container and preparing same. 1,864,693; June 28.
Rice, Claude T. (See Atti, Ralph, assignor.)
Rice, Edward W., Santa Cruz, assignor to Santa Cruz Portland Cement Company, San Francisco, Calif. Making Portland cement. 1,864,935; June 28.
Richardson Company, The. (See Morris, Warren A., assignor.)
Richardson, Edwin F. (See A'Hearn, F. M., and Richardson.)
Richfield Oil Company of California. (See Chappell, M. L., and Dowlen, assignors.)
Richfield Oil Company of California. (See Rial, Wirt D., assignor.)
Richter, George A., assignor to Brown Company, Berlin, N. H. Cyclic process of fiber liberation. 1,864,619; June 28.
Richter, George A., assignor to Brown Company, Berlin, N. H. Liberating pulp from raw cellulosic materials. 1,864,620; June 28.
Ricks, Fred, and H. E. Elliott, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for treating shoe portions. 1,864,671; June 28.
Riddle, William T., Nevada City, Calif. Glare shield mounting. 1,864,943; June 28.
Riegler, Riewen. (See Jewett, J. E., Heritage, and Riegler.)
Riemann, Ferdinand, Neuss, assignor of one-half to the Firm Wilhelm Schmidding, Koln-Mannsfeld, Germany. Device for working wood oil into lacquer. 1,864,941; June 28.
Ringer, Luther, Union Springs, N. Y., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y. Ironer. 1,865,048; June 28.
Rising, Walter H., Painted Post, assignor to Corning Glass Works, Corning, N. Y. Cadmium containing glass and tubing made therefrom. 1,864,858; June 28.
Risley, Allan P., Indianapolis, Ind. Garment. 1,865,280; June 28.
Roadless Traction, Limited. (See Penn, Oscar S., assignor.)
Roads Construction Company. (See Noble, Bert, assignor.)
Robertson, H. H., Company. (See Young, J. H., and Jenkins, assignors.)
Robertson, William H., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,864,761; June 28.
Robinson, George L., Pittsburgh, assignor to Blaw-Knox Company, Blawnox, Pa. Water cooler for furnaces. 1,864,762; June 28.
Rodgers, John S., Charleroi, Pa. Harrow. 1,864,859; June 28.
Rogers, John C. (See Rogers, W. F. and J. C.)

Rogers, Walter F. and J. C., assignors to Crown Stove Works, Cicero, Ill. Drawer construction for stoves. 1,865,212; June 28.
Rohm & Haas Aktiengesellschaft. (See Bauer, Walter, assignor.)
Rome Company, The. (See Korney, Roman, assignor.)
Rome Company, The. (See Pittoni, Louis E., assignor.)
Romort Manufacturing Company. (See Ewald, Arno A., assignor.)
Root, Frank B., East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Ornamental finish. 1,864,763; June 28.
Rosatelli, Celestino, assignor to Fiat Società Anonima, Turin, Italy. Antilocking brake for aeroplane wheels. 1,864,694; June 28.
Rose, George H., Cleveland Heights, Ohio. Conveyer. 1,865,337; June 28.
Rose, Harold J., Penn Township, Allegheny County, Pa., and W. H. Hill, New York, N. Y., assignors to The Koppers Company. Soil treatment. 1,864,672; June 28.
Rosebrook, Guy L., Oakland, Calif., assignor, by direct and mesne assignments, to Standard Oil Development Company. Servicing apparatus for wheeled vehicles. 1,864,944; June 28.
Rosenblum, Marcus, Los Angeles, Calif. Direction indicator for vehicles. 1,865,338; June 28.
Rosenthal, Leon W., New York, N. Y. System of control for toy electric railways. 1,865,276; June 28.
Rosenthal, Leon W., New York, N. Y. Track for toy railways. 1,865,277; June 28.
Rosenthal, Leon W., New York, N. Y. Toy electric railway and apparatus therefor. 1,865,278; June 28.
Rosner, Irving. (See Moran, Patrick J., assignor.)
Ross, Harry M., assignor of one-half to Beveridge Paper Company, Indianapolis, Ind. Auxiliary reel for paper making machines. 1,865,279; June 28.
Rostek, Vinzent R., Philadelphia, Pa. Ventilator. 1,864,555; June 28.
Rothlin, Ernst, assignor to Firm of Chemical Works formerly Sandoz, Basel, Switzerland. Manufacture of therapeutic calcium preparations. 1,865,141; June 28.
Round, Henry J., London, and W. J. Picken, Southend-on-Sea, England, assignors to Radio Corporation of America. Supporting the electrodes of thermionic devices. 1,865,142; June 28.
Rubber Service Laboratories Company, The. (See Magoun, George L., assignor.)
Ruben Rectifier Corporation. (See Ruben, Samuel, assignor.)
Ruben, Samuel, New York, N. Y., assignor, by mesne assignments, to Ruben Rectifier Corporation. Electric current rectifier. 1,865,213; June 28.
Rubinstein, Harry W. (See Osmun, H. E., Rubinstein, and Stoekle.)
Rumpel, Harvey H., assignor to Smith Engineering Works, Milwaukee, Wis. Crusher mill driving means. 1,864,556; June 28.
Rundell, Rupert E., Rockville Center, N. Y., assignor to American Machine & Foundry Company. Cork-tipper for cigarette machines. 1,864,764; June 28.
Rundell, Rupert E., Rockville Center, and G. E. Hagquist, Brooklyn, N. Y., assignors to International Cigar Machinery Company. Leaf stemming machine. 1,864,765; June 28.
Runge, Robert F. (See Hutchinson, W. L., and Runge.)
Russell, Leslie A., assignor to Koehring Company, Milwaukee, Wis. Dipper trip and tag line drum mechanism for cranes. 1,865,143; June 28.
Ryden, Gunnar. (See Eckland, P. S., and Ryden.)
S-W Hydraulic Laboratories. (See Wentworth, Jesse S., assignor.)
Sabath, Albert, Chicago, Ill. Lamp. Des. 87,279; June 28.
Sadtler, Helena S., Erdenheim, Pa. Transfer. 1,865,215; June 28.
St. Regis Paper Company. (See Deacon, J. H., and Hartman, assignors.)
St. Regis Paper Company. (See Marsh, Esil A., assignor.)
St. Regis Paper Company. (See Peterson, William R., assignor.)
Saladino, C., & Sons, Inc. (See Saladino, Joseph and S., assignors.)
Saladino, Joseph and S., assignors to C. Saladino & Sons, Inc., Chelsea, Mass. String. 1,865,214; June 28.
Saladino, Salvatore. (See Saladino, Joseph and S.)
Salisbury, Carl D., assignor to Winton Engine Corporation, Cleveland, Ohio. Fuel injection means. 1,864,860; June 28.
Sanborn, Francis A. (See Hach, C. A., and Sanborn.)
Sando, Briant, and T. E. George, assignors to Briant Specialty Company, Incorporated, Indianapolis, Ind. Game ball release. 1,864,945; June 28.
Santa Cruz Portland Cement Company. (See Rice, Edward W., assignor.)
Scarlett, William E. (See Pym, A. F., and Scarlett.)
Schaaf & Good Company, The. (See Pulford, William H., assignor.)
Schaller, Alfred, New York, N. Y. Hose coupling. 1,64,861; June 28.
Schilling, Louis, Valley Stream, assignor to The Northern Studios, Inc., Astoria, N. Y. Hinge. 1,865,339; June 28.
Schirmacher, Karl, Frankfort-on-the-Main, Hochst, and K. Stenger, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuff and acetate silk dyed therewith. 1,865,062; June 28.
Schlecht, Leo, Ludwigshafen-on-the-Rhine, and F. Duftschmid, Heidelberg, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of pure metals. 1,864,673; June 28.
Schmid, Daniel, et al. (See Griffin, C. W., Schmid, and Sinz.)
Schmid, Louis F., Winnebago, Nebr. Brooder. 1,864,862; June 28.
Schmidding, Firm Wilhelm. (See Riemann, Ferdinand, assignor.)
Schmidt, Norman W., Clayton, Ohio. Rain protector. 1,864,948; June 28.
Schmidt, William C., Chicago, Ill., assignor, by mesne assignments, to T. W. & C. B. Sheridan Company, New York, N. Y. Bookbinding machinery. 1,864,766; June 28.
Schneider, Bernard R., Lyndhurst, N. J., and K. Kaiser, assignors, by mesne assignments, to The American Tobacco Company, New York, N. Y. Coupon feeding mechanism. 1,864,695; June 28.
Schneider & Cie, et al. (See Daum, Leon, assignor.)
Schneiderwirth, Herman J., New York, N. Y. Purification apparatus. 1,864,767; June 28.
Scholl, William M., Chicago, Ill. Foot supporting means. 1,864,949; June 28.
Schrago, Samuel, Los Angeles, Calif. Movable projection screen. 1,864,946; June 28.
Schramm, Carl, West Hartford, assignor to The Smyth Manufacturing Company, Hartford, Conn. Machine for shaping the backs of unbound books. 1,864,557; June 28.
Schultz, Frank, Cliffside Park, assignor to Autographic Register Company, Hoboken, N. J. Manifolding machine. 1,865,394; June 28.
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Manufacture of impregnated articles. 1,864,674; June 28.
Schweitzer, Louis P., New York, N. Y. Condenser paper and making the same. 1,864,950; June 28.
Scott, John R. (See Daynes, H. A., and Scott.)
Scott & Williams, Incorporated. (See Page, Frank R., assignor.)
Scullin Steel Co. (See Dreibuss, H. C., and McCullough, assignors.)
Sebell, Harry, Boston, assignor of one-half to A. H. Parker, Lexington, Mass. Method of and tool for applying a ball ear to sheet metal. 1,865,144; June 28.
Security Fire Door Company. (See Talen, Mauritz W., assignor.)
Seeley, George A., Irvington, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Strand supplying and distributing apparatus. 1,864,558; June 28.
Seeling, Charles R., Burbank, assignor to Pictola Camera Co. Ltd., Los Angeles, Calif. Roll-film camera. 1,864,768; June 28.
Seidemann, Wilhelm, Dresden, Germany. Sand distributor for filling molding boxes and the like with molding sand. 1,865,145; June 28.
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Selfridge, Wilber C., Fullerton, Calif. Device for mixing fertilizer with water for irrigation. 1,864,947; June 28.
Service Recorder Company, The. (See Cool, Henry R., assignor.)
Severns, Clayton. (See Hicks, J. N., and Severns.)
Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)
Sharp, Emmitt. (See Bradford, Thomas J., assignor.)
Shaver, George D., Kalamazoo, Mich., assignor to Therminsul Corporation of America, Boston, Mass. Producing felted mineral wool insulator. 1,865,049; June 28.
Sheridan, T. W., & C. B., Company. (See Schmidt, William C., assignor.)
Sherman, James M., Ithaca, assignor to The Wilbur White Chemical Company, Oswego, N. Y. Propionic acid fermentation by the use of mixed strains of propionic-bacteria. 1,865,146; June 28.
Sherwen, Joseph W., Erith, England. Apparatus for vibrating screens, shaking tables, and other apparatus. 1,864,863; June 28.
Shipley, Bernis M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,865,147; June 28.
Shuford, Hurndon F., La Grange, Ga. Loop selvage device. 1,864,675; June 28.
Shumaker, Howard H. (See Hon, H., and Shumaker.)
Shuman, Arno, assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa. Drainage for roofs and skylights. 1,865,401; June 28.
Siebenlist, Anthony G., assignor, by mesne assignments, to Milcor Steel Company, Milwaukee, Wis. Metal window structure. 1,864,559; June 28.
Siemens & Halske Aktiengesellschaft. (See Horn, Ernst, assignor.)
Siemens & Halske Aktiengesellschaft. (See Mathias, Maximilian, assignor.)
Siemens & Halske Aktiengesellschaft. (See Wolf, Fritz, assignor.)
Silica Gel Corporation, The. (See Barclay, Earle H., assignor.)

Silica Gel Corporation, The. (See Miller, Ernest B., assignor.)
Silverman, Max. (See Reddy, David W., assignor.)
Simmons Mfg. Co. (See Lemmerman, Howard E., assignor.)
Sinclair Refining Company. (See Pelzer, Harry L., assignor.)
Sinz, Lawrence P., et al. (See Griffin, C. W., Schmid, and Sinz.)
Sippel, Harry. (See Nicosia, D., and Sippel.)
Skayef Ball Bearing Company, The. (See Hutchinson, W. L., and Runge, assignors.)
Skinner Engine Company. (See Gorr, Walter B., assignor.)
Skinner Irrigation Company, The. (See Coles, W. H., and Nelson, assignors.)
Slade, Allen A., et al. (See Bibler, Roger, assignor.)
Slade, Leon D., assignor to Gleason Works, Rochester, N. Y. Gear cutting tool. 1,865,148; June 28.
Slatcher, Alfred G., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Steel retainer. 1,865,340; June 28.
Slatis, Abraham, Chicago, Ill. Ring or similar article. Des. 87,280; June 28.
Slidell, Kemper, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Kiln for the manufacture of bloated clay products. 1,864,769; June 28.
Slidell, Kemper, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Producing cellular material. 1,864,770; June 28.
Smalley, Burton M., assignor to Joslyn Manufacturing and Supply Co., Chicago, Ill. Strain insulator. 1,864,951; June 28.
Smith, Albert K., Cleveland, Ohio, assignor to The Dow Chemical Company, Midland, Mich. Separating caustic soda and sodium chloride. 1,865,281; June 28.
Smith, Carlton H., assignor to Buggeln & Smith, New York, N. Y. Pad. 1,865,140; June 28.
Smith, David J., Mapledurham, assignor to Compound Gas Power Company, Limited, Reading, Berkshire, England. Gas producer. 1,865,341; June 28.
Smith Engineering Works. (See Rumpel, Harvey H., assignor.)
Smith, Ernest, and W. B. Powell, Hamilton, Ontario, assignors to Appleford Paper Products Limited, Hamilton, Canada. Jogger for printing presses. 1,865,282; June 28.
Smith, George A. (See Smith, William R., assignor.)
Smith, James A., Minneapolis, Minn. Automobile. Des. 87,281; June 28.
Smith, James N., Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Electrode construction. 1,865,216; June 28.
Smith, Nelson K., assignor to Byron Jackson Co., Los Angeles, Calif. Friction grip elevator. 1,864,864; June 28.
Smith, Richard. (See Dinkel, Andrew J., assignor.)
Smith, Richard F., New York, N. Y., assignors of one-half to Charleston Dry Dock & Machine Company, one-fourth to C. V. Boykin and S. A. Gullds, Charleston, S. C., and one-fourth to R. D. Sullivan, Savannah, Ga. Metal plate construction and forming the same. 1,865,284; June 28.
Smith, Robert N., Kansas City, Mo., assignor to J. L. Hogin, Kansas City, Kans. Door lock. 1,865,217; June 28.
Smith, Temple C., Westfield, A. E. Freeman, East Orange, and W. T. Livermore, Westfield, N. J., assignors to American Telephone and Telegraph Company. Cable reel trailer. 1,864,676; June 28.
Smith, Theodore. (See Hardy, P. S., and Smith.)
Smith, Theodore A., Ridgewood, N. J., assignor to Radio Corporation of America. Synchronizing system. 1,864,560; June 28.
Smith, William A., assignor of eighteen and one-fourth per cent to W. A. Vock, eighteen and one-fourth per cent to F. M. Boswell, Long Beach, eighteen and one-fourth per cent to H. E. Lynn, Maywood, and eighteen and one-fourth per cent to F. Lambert, jr., Eagle Park, Calif. Kelly bushing. 1,864,952; June 28.
Smith, William R., Goldsboro, N. C., assignor of fifty-two one hundredths to G. A. Smith, Portsmouth, Va. Box shook splicing machine. 1,864,865; June 28.
Smithe Machine Co. (See Novick, Abraham.)
Smyth Manufacturing Company, The. (See Schramm, Carl, assignor.)
Snow, Barton S., Wheaton, assignor to T. W. Snow Construction Co., Chicago, Ill. Water treating and storage apparatus. 1,864,866; June 28.
Snow, Norman L. (See Bowers, F., and Snow.)
Snow, T. W., Construction Co. (See Snow, Barton S., assignor.)
Snyder, James O., Indianapolis, Ind., assignor to Fairbanks, Morse & Co., Chicago, Ill. Protecting and cooling means for dynamo-electric machines. 1,864,867; June 28.
Societe Anonyme: Appareils et Evaporateurs Kestner. (See Charrier, Henri, assignor.)
Société des Freins Houplain. (See Houplain, Georges, assignor.)
Sodenberg, Andrew W., Munhall, and A. G. Dahlgren, Pittsburgh, Pa. Universal rolling mill. 1,865,286; June 28.
Soderberg, Casper J. W., Aberdeen, Wash. Automobile wind wing. 1,864,868; June 28.
Sohnle, Fredrick, Newark, N. J. Brush holder. 1,865,283; June 28.
Solary, John, Chicago, Ill. Machine for making artificial stones. 1,865,287; June 28.
Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for electric control systems. 1,865,150; June 28.
Spalding, John, Stamford, Conn., assignor to Albert T. Otto & Sons, Inc., New York, N. Y. Apparatus for treating rolled fabric. 1,865,218; June 28.
Sparkes, Harry P., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Stroboscopic watthour meter. 1,864,677; June 28.
Sparkes, Harry P., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Method and apparatus for calibrating electrical instruments. 1,864,771; June 28.
Spencer, Gerald G. (See Mott, C., and Spencer.)
Spencer, John A., Newtonville, assignor to General Plate Company, Attleboro, Mass. Thermostat. 1,865,219; June 28.
Spencer, Louis M., assignor to General Motors Corporation, Detroit, Mich. Oil gauge rod. 1,865,285; June 28.
Sprague, Frank N., Holyoke, Colo. Grain separator for threshing machines or combines. 1,864,772; June 28.
Springfield Wire & Tinsel Co. et al. (See Bradford, Edward S., jr., assignor.)
Sprunger, Vernon J., assignor to American Anode Incorporated, Akron, Ohio. Manufacture of rubber goods. 1,864,621; June 28.
Squier, Arthur H., Reno, Pa. Antiskid device. 1,864,869; June 28.
Stahl, Hugo A. (See Latimer, W. J., Stahl, and Maldonado.)
Standard Computing Scale Company, The. (See Kelley, Leonard O., assignor.)
Standard-I. G. Company. (See Pier, M., Hochschwender, and Wenzel, assignors.)
Standard Oil Company, The. (See McConnell, Elliott B., assignor.)
Standard Oil Company of California. (See Holm, Melvin M., assignor.)
Standard Oil Company of California. (See Osmer, J. H., and Craise, assignors.)
Standard Oil Development Company. (See Goodwin, Ralph T., assignor.)
Standard Oil Development Company. (See Lebo, Robert B., assignor.)
Standard Oil Development Company. (See Lewis, Warren K., assignor.)
Standard Oil Development Company. (See Loomis, Nathaniel E., assignor.)
Standard Oil Development Company. (See Nelson, Franklin C., assignor.)
Standard Oil Development Company. (See Rosebrook, Guy L., assignor.)
Standlee, Harvey R., Tulsa, Okla., assignor to The Gulbertson Corporation, Dallas, Tex. Slip. 1,864,953; June 28.
Stanford, George L., Milford, Conn., assignor to The Universal Pipe and Radiator Company, New York, N. Y. Reenforcing members for concrete. 1,864,773; June 28.
Stanley Works, The. (See Gould, David.)
Starbuck, George F., Waltham, Mass. Railroad truck. 1,865,220; June 28.
Steckhan, Richard. (See Bergen, G., Engelhardt, and Steckhan.)
Steel, Samuel T. (See Durnell, H. G., and Steel.)
Steele, Louis J., and H. Martin, Portsmouth, England. Projection of light. 1,864,696; June 28.
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Compressor for refrigerating machines. 1,864,678; June 28.
Steinfurth, Louis. (See Andrews, F. O., and Steinfurth.)
Stenger, Konrad. (See Schirmacher, K., and Stenger.)
Stewart, Simon M. (See Parker, H. E., and Stewart.)
Stoekle, Erwin R. (See Osmun, H. E., Rubinstein, and Stoekle.)
Stokeley, Ray L., Floral Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,864,955; June 28.
Stoker, Albert E., Detroit, Mich. Selective ratio clutch. 1,864,870; June 28.
Stoll, Julius E., assignor to Pabst Corporation, Milwaukee, Wis. Marking apparatus. 1,864,954; June 28.
Stoller, Hugh M. (See Morton, E. R., and Stoller.)
Stone, Edwin W., Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Tuft pile fabric loom. 1,865,221; June 28.
Stone, Harry S., New York, N. Y. Fastening means for bags and the like. 1,864,956; June 28.
Storm, Raymond W., Pelham Manor, N. Y. Sound and heat insulated flooring. 1,864,774; June 28.
Stough, Turney H., assignor to Jeannette Steel Corporation, Jeannette, Pa. Cooking pan. 1,865,342; June 28.
Stout, Elmer O., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,864,957; June 28.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Two-way plow. 1,864,958; June 28.
Straubel, Ernest T., Green Bay, Wis. Bundle wrapping device. 1,864,775; June 28.

Straus, Harry H., New York, N. Y. Cigarette package. 1,864,871; June 28.
Straus, Harry H., New York, N. Y. Cigarette package. 1,864,872; June 28.
Straus, Harry H., New York, N. Y. Cigarette package. 1,864,873; June 28.
Streitwolf, Karl, Frankfort-on-the-Main, A. Fehrle, Bad Soden-on-the-Taunus, W. Herrmann and P. Fritzsche, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Bismuth-dithioglycollic acid and the salts thereof and preparing them. 1,864,679; June 28.
Strobridge, William, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y. Garment press. 1,864,680; June 28.
Strobridge, William, Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Press. 1,865,151; June 28.
Stuart, Kenneth E., Niagara Falls, assignor to Hooker Electrochemical Company, New York, N. Y. Production of electrolytic cathode-diaphragm structures. 1,865,152; June 28.
Stubbs, Cless E., and E. D. Brooks, Riverside, Calif. Shook arranger. 1,864,776; June 28.
Stukes, Horace A., San Antonio, assignor to E. V. Hardway, Harris County, Tex., as trustee for H. M. Duncan, R. Pearson, and B. H. Johnston. Fuel feeding device. Re18,508; June 28.
Sullivan Machinery Company. (See Holmes, Morris P., assignor.)
Sullivan, Raymond D., et al. (See Smith, Richard F., assignor.)
Sunlight Electrical & Manufacturing Company, The. (See Kingston, F. S., and Conley, assignors.)
Susquehanna Silk Mills. (See Byrod, Frederick R., assignor.)
Sutherland, Alfred W., Swampscott, Mass. Apparatus for cleaning vacuum cleaner bags. 1,864,622; June 28.
Sutterfield, Noel. (See Beadle, L. C., Sutterfield, and Wilson.)
Svenska Aktiebolaget Bromsregulator. (See Browall, Bert H., assignor.)
Swentor, August W., Kansas City, Mo., assignor, by mesne assignments, to Oswego Falls Corporation, Fulton, N. Y. Capping head. 1,865,402; June 28.
Synthetic Plastics Company. (See Goldschmidt, H., and Neuss, assignors.)
Syracuse Washing Machine Corporation. (See Ringer, Luther, assignor.)
Tainton, Urlyn C., St. Louis, Mo. Recovery of metals from zinc plant residue. 1,864,777; June 28.
Talen, Mauritz W., assignor to Security Fire Door Company, St. Louis, Mo. Elevator door operating mechanism. 1,864,959; June 28.
Tandel, Fritz, assignor to C. G. Haubold A. G., Chemnitz, Germany. Apparatus for feeding knitted goods made from rayon or artificial silk to tentering machines. 1,864,681; June 28.
Tapiin, Thomas J., Kew, England, assignor to Metals Production of North America Incorporated, New York, N. Y. Heat treatment of copper ores or the like. 1,865,153; June 28.
Tark, Marcus B., assignor to Link-Belt Company, Philadelphia, Pa. Settling system for separating solids from fluids. 1,864,778; June 28.
Taylor, Cecil H. (See Goepfrich, R. A., and Taylor.)
Taylor, Robert H., Denver, Colo., assignor to Doherty Research Company, New York, N. Y. Fluid metering apparatus. 1,865,050; June 28.
Taylor, William M., assignor to H. R. Allen, Indianapolis, Ind. Oil well heater. 1,864,960; June 28.
Teague, Walter D., Forest Hills, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Reading glass. Des. 87,282; June 28.
Te Aroha Dairy Company Limited, The. (See Murray, Henry L., assignor.)
Texas Company, The. (See Brannan, Homer H., assignor.)
Therminsul Corporation of America. (See Shaver, George D., assignor.)
Thomas, Lucy C. (See Ament, Lucy C.)
Thomas, William D., Lynnfield, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Safety device. 1,864,697; June 28.
Thompson, John B. D., Union City, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,864,623; June 28.
Thompson, John B. D., Union City, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,864,682; June 28.
Thompson Mfg. Company. (See Powell, Benjamin F., assignor.)
Thompson, Samuel A., New York, N. Y. Toy typewriter. 1,865,288; June 28.
Thompson, Vincent, et al., legal representatives. (See Parsons, C. A., and Duncan.)
Thornburgh, Ivan D., Leonia, N. J., assignor to American Can Company, New York, N. Y. Combined hermetic and hinged closure container. 1,864,698; June 28.
Timken Silent Automatic Company. (See Beadle, L. C., Sutterfield, and Wilson, assignors.)
Titus, Paul M., Binghamton, N. Y. Method and apparatus for broadcasting sound. 1,864,961; June 28.
Tobin, Kenneth J., and W. W. Darrow, assignors to Camel Company, Chicago, Ill. Car door construction. 1,865,222; June 28.
Tobin, Kenneth J., G. Madland, and G. R. Treptow, assignors to Camel Company, Chicago, Ill. House car end construction. 1,865,223; June 28.
Toledo Machine & Tool Company, The. (See Dorman, Neal W., assignor.)
Toledo Scale Manufacturing Company. (See Hapgood, Clarence H., assignor.)
Toledo Scale Manufacturing Company. (See Marshall, Charles O., assignor.)
Toledo Scale Manufacturing Company. (See Williams, Lawrence S., assignor.)
Touton, Rush D., assignor to Bayuk Cigars Incorporated, Philadelphia, Pa. Conditioning tobacco. 1,865,154; June 28.
Trane, Reuben N., La Crosse, Wis. Radiator. 1,865,051; June 28.
Transit Mixers, Inc. (See Knowles, Albert, assignor.)
Trowbridge, Lloyd J., Camden, N. J. Radiator cleaner. 1,865,289; June 28.
Tube Reducing Corporation. (See Coe, George B., assignor.)
Tumminello, Charles E., assignor of one-fourth to S. A. Greenberg, and one-fourth to H. K. Angel, Pittsburgh, Pa. Indexed card finding or selecting apparatus. 1,865,343; June 28.
Tyler, W. S., Company, The. (See Reynolds, Morley P., assignor.)
U S L Battery Corporation. (See Haungs, George M., assignor.)
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)
Union Carbide and Carbon Research Laboratories, Inc. (See Mott, C., and Spencer, assignors.)
Union Mills Paper Manufacturing Company. (See Oblinger, Daniel B., assignor.)
Union Switch & Signal Company, The. (See Baughman, George W., assignor.)
Union Switch & Signal Company, The. (See Crago, Paul H., assignor.)
Union Switch & Signal Company, The. (See Sorensen, Andrew J., assignor.)
Unique Balance Co. (See Larson, Algot, assignor.)
United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)
United Health Equipment Company. (See Hardy, P. S., and Smith, assignors.)
United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)
United Shoe Machinery Corporation. (See Baxter, William C., assignor.)
United Shoe Machinery Corporation. (See Bazzoni, Lewis J., assignor.)
United Shoe Machinery Corporation. (See Hood, Charles E., assignor.)
United Shoe Machinery Corporation. (See Pym, A. F., and Scarlett, assignors.)
United Shoe Machinery Corporation. (See Ricks, F., and Elliott, assignors.)
United Shoe Machinery Corporation. (See Thomas, William D., assignor.)
United States Electrical Manufacturing Company. (See Myers, Thomas G., assignor.)
United States Hoffman Machinery Corporation. (See Strobridge, William, assignor.)
U. S. Slicing Machine Company. (See Folk, Joseph, assignor.)
Universal Oil Products Company. (See Cook, Ralph C., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Faragher, Warren F., assignor.)
Universal Oil Products Company. (See Fisher, Teddy B., assignor.)
Universal Oil Products Company. (See Howard, William R., assignor.)
Universal Pipe and Radiator Company, The. (See Stanford, George L., assignor.)
Universal Window Company. (See Wiley, Esmond F., assignor.)
Upson, Ralph H., Ann Arbor, Mich. Airplane brake and rudder control. 1,864,962; June 28.
Urban, Rudolf, Podbrezova, Czechoslovakia. Apparatus for rolling seamless pipes. 1,865,344; June 28.
Utica Products, Inc. (See Hauser, George D., assignor.)
Vadersen, Herbert, Elizabeth, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electron discharge device. 1,864,963; June 28.
Valle, Pembroke A., assignor of one-half to S. Clark, Chicago, Ill. Sail, parachute, airplane wings, and the like. 1,864,964; June 28.
Valensi, Georges, Paris, France. Ionic relay system. 1,865,064; June 28.
Van der Pol, Balthasar, and K. Posthumus, Eindhoven, Netherlands, assignors to Radio Corporation of America. Screen grid tube. 1,865,065; June 28.
Van Laam, Gerrit, Buffalo, N. Y. Windshield cleaner and protector. 1,864,561; June 28.
Varden, John T., Los Angeles, Calif. Seal for shafts. 1,864,683; June 28.
Varney, William W. (See Brown, J. L., and Varney.)

Varnley, Cromwell H., Corton, near Lowestoft, England. Rotary engine, pump, and the like. 1,864,699; June 28.
Vaughn, Wallace B., assignor of one-third to J. G. Wellep, Two Rivers, Wis. Pump jack. 1,865,290; June 28.
Veit, Walter, East Orange, N. J., assignor to Congoleum-Nairn, Inc. Construction of cylindrical packages. 1,864,779; June 28.
Venzie, Frederick M., Philadelphia, Pa. Ceiling construction. 1,864,965; June 28.
Vickers, Richard N. (See Kniss, F. C., and Vickers.)
Victor Manufacturing & Gasket Company. (See Oven, Frank J., assignor.)
Vieser, Albert, Dallas, Tex. Gas producer. 1,864,966; June 28.
Vock, William A., et al. (See Smith, William A., assignor.)
Vogel, Frederick W., and W. B. Meglitz, assignors to Brown Company, Berlin, N. H. Manufacture of pulp rovings. 1,864,624; June 28.
Voight, George F., Oakland, Calif. Toothbrush holder. 1,864,874; June 28.
Von Platen, Baltzar C., and C. G. Munters, Stockholm, Sweden, assignors to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,864,562; June 28.
Wade, John H., St. Petersburg, Fla. Venom extraction pump. 1,864,700; June 28.
Wade, Wallace G. (See Freeman, H. M., and Wade.)
Wagner, Fredrick, Atco, N. J., and H. C. Mitchell, assignors to Cochrane Corporation, Philadelphia, Pa. Measuring apparatus. 1,864,967; June 28.
Walberg, Gerrit C., Buffalo, N. Y. Fishing reel. 1,865,066; June 28.
Walker, George, assignor to The Jacobs Bros. Co. Inc., Brooklyn, N. Y. Scale. 1,864,563; June 28.
Walker, Harold L., assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y. Over and under weight scale. 1,864,564; June 28.
Walker, Harold L., Brooklyn, N. Y., assignor to The Jacobs Bros. Co. Inc. Scale. 1,864,565; June 28.
Walsh, James F. (See Bowker, W., and Walsh.)
Walter, George F., Maplewood, N. J. Multiple recording unit. 1,864,566; June 28.
Walter, Richard R., Starnberg, Germany. Alloy of azotized character. 1,864,567; June 28.
Walther, George, Montgomery County, near Dayton, assignor to The Dayton Steel Foundry Company, Dayton, Ohio. Metal wheel. 1,864,701; June 28.
Warren, Joseph J., Pittsburgh, Pa. Tuning dial for radios. 1,864,875; June 28.
Warsow, Franz, Pankow, near Berlin, Germany, assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,865,067; June 28.
Waters-Genter Company. (See Osterheld, Clark M., assignor.)
Weaver, Harry F., assignor to National-Helfrich Potteries Company, Evansville, Ind. Flush tank for toilets. Des. 87,283; June 28.
Webb, Adolphus M. (See Jarrell, C. S., and Webb.)
Weesner, Lehn (Max), Cincinnati, Ohio. Sign. 1,864,702; June 28.
Weigel, Joseph A., La Crosse, Wis. Banana knife. Des. 87,284; June 28.
Wellep, John G. (See Vaughn, Wallace B., assignor.)
Weiner, Harry, Philadelphia, Pa. Merchandising carton. 1,864,968; June 28.
Weilkes, Anthony, Rochester, N. Y. Steering gear brace. 1,865,291; June 28.
Weller, Arthur A., Providence, R. I., assignor to The Mason Box Company, Attleboro Falls, Mass. Fastener for boxes or the like. 1,864,780; June 28.
Wells, Chandler, Buffalo, N. Y. Method and apparatus for transporting automobiles. 1,864,781; June 28.
Wells, Rex E., Detroit, Mich. Vehicle construction. 1,864,625; June 28.
Wells, William E., Birdseye, Ind. Nut. 1,865,346; June 28.
Wentworth, Jesse S., Norwood, assignor to S-W Hydraulic Laboratories, Hamilton, Ohio. Hydraulic transmission. 1,864,568; June 28.
Wenzel, Kurt. (See Pier, M., Hochschwender, and Wenzel.)
West, Ruth, New York, N. Y. Educational block. 1,864,703; June 28.
Westco-Chippewa Pump Company. (See Claypool, Wallace L., assignor.)
Western Cartridge Company. (See Dickerman, John A., assignor.)
Western Electric Company. (See Hach, C. A., and Sanborn, assignors.)
Western Electric Company. (See Harrison, Henry C., assignor.)
Western Electric Company. (See Horton, Joseph W., assignor.)
Western Electric Company. (See Seeley, George A., assignor.)
Westinghouse Air Brake Company, The. (See Craig, John F., assignor.)
Westinghouse Air Brake Company, The. (See Donovan, Patrick H., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company. (See Johnson, S., jr., Morrison, and Leukhardt, assignors.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Whitaker, Uncas A., assignor.)
Westinghouse Electric Elevator Company. (See Blair, Arthur G., assignor.)
Westinghouse Electric Elevator Company. (See Dunlop, James, assignor.)
Westinghouse Electric & Manufacturing Company. (See Aronoff, Samuel, assignor.)
Westinghouse Electric & Manufacturing Company. (See Candy, Albert M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Freeman, H. M., and Wade, assignors.)
Westinghouse Electric & Manufacturing Company. (See Pilling, N. B., and Bedworth, assignors.)
Westinghouse Electric & Manufacturing Company. (See Smith, James N., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sparkes, Harry P., assignor.)
Westrum, Eldon N., Ames, Iowa. Load indicating gauge for vehicles. 1,864,876; June 28.
Wetmore, Miner P., assignor to The American Thermos Bottle Company, Norwich, Conn. Refrigerating device. 1,865,155; June 28.
Wheatley, George H., Oak Park, Ill. Covering. 1,865,345; June 28.
Whitaker, Uncas A., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Variable load brake. 1,865,068; June 28.
White, D'Orsay M., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill. Disk wheel. 1,864,969; June 28.
White, Harry B., Canton, Ohio, assignor to The Hoover Company. Suction cleaner. 1,864,782; June 28.
White, Leon L., assignor of one-fourth to M. R. White, Tampa, Fla. Combined spool and container for adhesive tapes. 1,864,877; June 28.
White, Marie R. (See White, Leon L., assignor.)
Whiteford, Thomas, Chelsea, and L. E. Donnell, Everett, Mass. Thermostatic circuit breaker. 1,864,783; June 28.
Whitehead & Kales Company. (See Greenwald, Harold A., assignor.)
Whitsett, Cameron A. (See Dalrymple, William P., assignor.)
Wickman, Samuel A., St. Albans, N. Y., assignor to American Machine & Foundry Company. Pusher device for extra long loaves. 1,864,704; June 28.
Wiener, Alfred E. (See Hawkins, W. J., and Wiener.)
Wiener, John A., and J. B. Harmon, Oswego, N. Y. Wet machine for insulating board. 1,864,784; June 28.
Wight, Edward H. (See Ober, B., and Wight.)
Wilbur White Chemical Company, The. (See Sherman, James M., assignor.)
Wilcox-Rich Corporation. (See Hervig, Richard, assignor.)
Wiley, Esmond F., San Francisco, assignor to Universal Window Company, Oakland, Calif. Awning type window operator. 1,864,970; June 28.
Wilhelmi, Charles F., Huntington, W. Va., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,864,785; June 28.
Wilkins, Artemas O., Saugus, Mass. Collet chuck. 1,864,786; June 28.
Wilkinson, Tom B., Blackston, Arnside, England. Jigging conveyer. 1,865,403; June 28.
Willauer, Charles H., Richland Township, Bucks County, Pa. Feeder. 1,864,569; June 28.
Williams, Lawrence S., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Total load recording scale. 1,864,570; June 28.
Williams, Lawrence S., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Dashpot for weighing scales. 1,864,787; June 28.
Williams, Thomas H., Cicero, Ill. Lamp socket. 1,865,347; June 28.
Willis, Le Roy W., Stamford, Conn., assignor to Intertype Corporation, Brooklyn, N. Y. Matrix assembler. 1,865,348; June 28.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,864,571; June 28.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,864,572; June 28.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Articulated car. 1,864,573; June 28.
Wilson, John A. (See Beadle, L. C., Sutterfield, and Wilson.)
Wilson-Jones Company. (See Davison, James H., assignor.)
Wilson, William H., Chicago, Ill. Necktie stretcher. 1,864,705; June 28.
Wilt, Wakfield M. (See Hupp, Charles A., assignor.)
Winans, Daniel M., Binghamton, assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Door buffer and retainer. 1,865,404; June 28.
Winston, Arthur W., and I. A. Kenaga, assignors to The Dow Chemical Company, Midland, Mich. Making magnesium sulphate. 1,865,224; June 28.
Winter, Ernst, Cologne-on-the-Rhine-Braunsfeld, and A. Grimm, assignors to Aktiengesellschaft fur Stickstoffdunger, Knapsack, near Cologne-on-the-Rhine, Germany. Preparing acetic anhydride. 1,865,405; June 28.

Winthrop Chemical Company. (See Streitwolf, K., Fehrle, Herrmann, and Fritzsche, assignors.)
Winton Engine Corporation. (See Salisbury, Carl D., assignor.)
Wodtke, Hans V., Buffalo, assignor, by mesne assignments, to General Cable Corporation, New York, N. Y. Electrical cable and manufacturing the same. 1,865,415; June 28.
Wodtke, Hans V., Buffalo, assignor, by mesne assignments, to General Cable Corporation, New York, N. Y. Apparatus for and method of vulcanizing. 1,865,416; June 28.
Woernle, Harry E., assignor to McKinney Manufacturing Company, Pittsburgh, Pa. Handle structure. 1,864,878; June 28.
Wolf, Fritz, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telephone system. 1,865,156; June 28.
Wolters, Carl F., Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Safe hinge. 1,865,052; June 28.
Wood, Joseph L., Atlantic Highlands, N. J., assignor to American Car and Foundry Company, New York, N. Y. Portable refrigerating container. 1,864,574; June 28.
Woodford, Watson H., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Lubricant. 1,865,157; June 28.
Woodruff, Graham C., Bronxville, N. Y., assignor to The L. C. L. Corporation. Air and moisture proof container for container cars. 1,864,684; June 28.
Woodruff, John C., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Carbon monoxide process. 1,865,053; June 28.
Woodstock Typewriter Company. (See Hokanson, O. A., and Koca, assignors.)
Wooten, Wesley M., et al. (See Geer, Paul L., assignor.)
Wright, Leonard K., Jackson Heights, N. Y. Refrigerating apparatus. 1,865,349; June 28.
Yoder-Morris Company, The. (See Morris, Howard I., assignor.)
Yosemite Portland Cement Corporation. (See Larmour, H. McC., and Pierce, assignors.)
Youker, Malcolm P., Bartlesville, Okla. Return bend assembly. 1,864,879; June 28.
Young, James H., and P. W. Jenkins, assignors to H. H. Robertson Company, Pittsburgh, Pa. Protected metal article. 1,864,971; June 28.
Ziegler, Elias, New York, N. Y. Combination tray and lamp standard. Des. 87,285; June 28.
Zeiss, Firm Carl. (See Bauersfeld, Walther, assignor.)
Zimmerman, George F., Bristol, Va. Reloading tool. 1,864,880; June 28.
Zimmerman, Rufus E., Pittsburgh, Pa. Wet cleaning tinplate. 1,865,417; June 28.
Zitzmann, Arthur. (See Bescherer, E. A., and Zitzmann.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 28TH DAY OF JUNE, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Acid and methyl acetate, Manufacture of acetic. H. Dreyfus and W. Bader. 1,864,531; June 28.
Acid and salts thereof and /preparing them, Bismuth-dithioglycolic. K. Streitwolf, A. Fehrle, W. Herrmann, and P. Fritzsche. 1,864,679; June 28.
Acid esters of the ureas of beta-leucoaminoanthraquinones, Leuco sulphuric. W. Meiser. 1,864,659; June 28.
Acid esters, Producing acrylic. W. Bauer. 1,864,884; June 28.
Acid fermentation by the use of mixed strains of propionic bacteria, Propionic. J. M. Sherman. 1,865,146; June 28.
Acid phosphate, Manufacturing. B. Ober and E. H. Wight. 1,865,383; June 28.
Acids and esters, Manufacture of aliphatic. H. Dreyfus and W. Bader. 1,864,643; June 28.
Acids from cellulosic material, Production of organic. D. A. Legg and L. M. Christensen. 1,864,746; June 28.
Acids, Manufacture of alkoxybenzophenone di- or tricarboxylic. S. Gassner and B. Bienert. 1,865,096; June 28.
Adjustable reclining chair. W. L. Bryden. 1,864,798; June 28.
Advertising apparatus. H. Jackson. 1,865,374; June 28.
Advertising device. H. Knight. 1,865,261; June 28.
Advertising device, publicity telegraph, and the like. H. K. Harris. 1,865,371; June 28.
Aeroplane. J. Hojnowski. 1,865,252; June 28.
Aggregates in one continuous operation, Washing and classifying. F. Fredeen. 1,865,094; June 28.
Agitated apparatus. J. B. Jewett, C. E. Heritage, and R. Riegler. 1,864,825; June 28.
Air chamber for well pumping. H. G. Durnell and S. T. Steel. 1,865,307; June 28.
Aircraft. C. F. Johnson. 1,864,912; June 28.
Aircraft propeller. M. M. Munk. 1,864,848; June 28.
Air decking. C. B. Griffin. 1,864,726; June 28.
Airplane. W. F. Gerhardt. 1,864,996; June 28.
Aldehydes, Catalytic molecular association of. A. O. Jaeger. 1,864,908; June 28.
Aliphatic anhydrides, Manufacture of. H. Dreyfus. 1,865,177; June 28.
Alloy of azotized character. R. R. Walter. 1,864,567; June 28.
Aluminum alloy articles and making the same, Corrosion-resistant. E. H. Dix, jr. 1,865,089; June 28.
Aluminum chloride, Manufacture of. M. M. Holm. 1,865,008; June 28.
Ammonia absorbent and making the same. C. R. Downs. 1,864,988; June 28.
Ammonia from petroleum refinery by-products, Making synthetic. C. Ellis. 1,864,717; June 28.
Amusement apparatus. R. Frei. 1,865,095; June 28.
Anchor, Folding. T. Bedell. 1,865,163; June 28.
Anhydride, Preparing acetic. E. Winter and A. Grimm. 1,865,405; June 28.
Animal fibers, Treating. R. Feibelmann. 1,864,718; June 28.
Animal trap. H. W. Muhleisen. 1,864,664; June 28.
Antiskid device. A. H. Squier. 1,864,869; June 28.
Apparatus for reducing metal stock. G. B. Coe. 1,865,304; June 28.
Article exchange mechanism. R. N. Johnston. 1,864,913; June 28.
Article handling mechanism. J. L. Baber, jr. 1,865,074; June 28.
Article, Protected metal. J. H. Young and P. W. Jenkins. 1,864,971; June 28.
Articles, Making composite. B. Bronson. 1,865,230; June 28.
Articles, Manufacture of impregnated. M. O. Schur. 1,864,674; June 28.
Asbestos cement with insertion or insertions of iron wire netting, Manufacture of continuous sheets or corrugated plates of. A. H. Arentsen. 1,864,626; June 28.
Automobile. J. A. Smith. Des. 87,281; June 28.
Automobile transmission. H. B. Phillips. 1,864,613; June 28.
Automobile wind wing. C. J. W. Soderberg. 1,864,868; June 28.
Automobiles, Method and apparatus for transporting. C. Wells. 1,864,781; June 28.
Awning. F. M. Christian. 1,865,083; June 28.
Awning, Collapsible. A. W. Howell. 1,865,106; June 28.
Axle bearing block or casing for railway vehicles, Two-part. W. Peyinghaus. 1,865,335; June 28.
Back rest. W. T. McCauley. 1,865,030; June 28.
Bag, air pillow, and air float or buoy, Combination bathing suit. G. E. Haines. 1,864,648; June 28.
Bags, Cleaning vacuum cleaner. A. W. Sutherland. 1,864,622; June 28.
Bail ears to sheet metal, Method of and tool for applying. H. Sebell. 1,865,144; June 28.
Bail release, Game. B. Sando and T. E. George. 1,864,945; June 28.
Band-saw meat cutter construction. C. G. Biro. 1,864,517; June 28.
Bar: *See*—
  Rail joint bar.
Basin, Hillside catch. W. J. Latimer, H. A. Stahl, and G. J. Maldonado. 1,865,322; June 28.
Basket carrier, Clothes. R. L. McBeth. 1,864,922; June 28.
Basket filling device, Produce. F. Ehrenhardt. 1,865,361; June 28.
Battery, Operating a coke oven. J. Becker. 1,865,162; June 28.
Bearing. P. F. Gruver. 1,865,100; June 28.
Bearing, Adjustable king pin. J. B. Milligan. 1,865,202; June 28.
Bearing for felting rolls. G. Oldham. 1,865,038; June 28.
Bearing structure. C. L. Daun and P. E. Keller. 1,865,088; June 28.
Beds, Attachment for hospital. J. W. Logan. 1,865,324; June 28.
Belt, Conveyer. D. P. Finney. 1,865,310; June 28.
Bend assemblies, Return. M. P. Youker. 1,864,879; June 28.
Bend, Return. W. S. Kirkpatrick. 1,865,016; June 28.
Bias cutting machine. H. M. Bunker. 1,865,301; June 28.
Bill fold. P. A. Gardner, jr. Des. 87,256; June 28.
Binder. A. J. Green. 1,865,098; June 28.
Binder, Chain post. J. H. Davison. 1,864,982; June 28.
Binder, Loose leaf. C. A. Finley. 1,865,364; June 28.
Blades and handles of hollow handled knives, Apparatus for securing together the. C. R. Moon. 1,864,846; June 28.
Block: *See*—
  Educational block. Scotch block.
  Roll scouring block.
Blower, Soot. F. Bowers. 1,865,080; June 28.
Boat propelling device. G. Ranke. 1,864,857; June 28.
Boiler: *See*—
  Steam boiler.
Boiler cleaner. F. Bowers and N. L. Snow. 1,865,419; June 28.
Bookbinder stitcher. P. E. Kleineberg. 1,864,739; June 28.
Book binding machinery. W. C. Schmidt. 1,864,766; June 28.
Book, Manifolding. C. W. Brenn. Re18,509; June 28.
Bottle. W. A. Clark. Des. 87,287; June 28.
Bottle. E. W. Fuerst. Des. 87,255; June 28.
Bottle closure and sediment trap. N. J. Leavy. 1,865,023; June 28.
Box: *See*—
  Driving box.
Box shook splicing machine. W. R. Smith. 1,864,865; June 28.
Boxes and the like, Manufacture of cigar. A. A. Adamson. 1,865,159; June 28.
Brace: *See*—
  Steering gear brace.
Bracket: *See*—
  Light bracket. Stock support bracket.
  Pole top bracket.
Brake: *See*—
  Clutch brake. Hand brake.
  Fluid pressure brake. Variable load brake.
Brake and rudder control, Airplane. R. H. Upson. 1,864,962; June 28.
Brake and signal system, Fluid pressure. C. C. Farmer. 1,865,093; June 28.
Brake device. J. C. McCune. 1,865,124; June 28.
Brake drum. J. Goostray. 1,865,311–12; June 28.
Brake equipment, Foot controlled. J. F. Craig. 1,865,085; June 28.
Brake equipment, Vehicle. P. H. Donovan. 1,865,090; June 28.
Brake for aeroplane wheels, Antilocking. C. Rosatelli. 1,864,694; June 28.
Brake for motor vehicles. G. E. Pellissier. 1,865,042; June 28.
Brake leverage adjuster. B. H. Browall. 1,864,636; June 28.
Brake regulator. J. C. McCune. 1,865,125; June 28.

Brake shoes, Manufacture of. J. W. Peterson. 1,864,929; June 28.
Brassière. P. J. Moran. 1,865,381; June 28.
Breather cap. H. E. Lemmerman. 1,864,604; June 28.
Brick. G. B. Kissinger. 1,865,114; June 28.
Brooder. L. F. Schmid. 1,864,862; June 28.
Bucket, Clamshell. H. W. Botten. 1,864,793; June 28.
Bucket, Clamshell. H. E. Dunkelberger. 1,865,091; June 28.
Buckle. R. F. Bartel. 1,865,077; June 28.
Buffer and retainer, Door. D. M. Winans. 1,865,404; June 28.
Bulb adapter. S. F. Arbuckle. 1,865,073; June 28.
Bundle wrapping device. E. T. Straubel. 1,864,775; June 28.
Burner: *See*—
  Fuel burner. Slack burner.
  Liquid fuel burner.
Bushing, Insulating. M. J. Cafiero. 1,864,712; June 28.
Bushing, Kelly. W. A. Smith. 1,864,952; June 28.
Bushing, Slip. C. R. Alden. 1,864,707; June 28.
Cab, Tractor. C. C. Fraise. 1,864,813; June 28.
Cabinet, Telephone. O. J. Linder. 1,864,599; June 28.
Cable and manufacturing same, Electrical. H. V. Wodtke. 1,865,415; June 28.
Cable pulling device. W. F. Kiesel, 3d. 1,865,113; June 28.
Cable reel trailer. T. C. Smith, A. E. Freeman, and W. T. Livermore. 1,864,676; June 28.
Cadmium containing glass and tubing made therefrom. W. H. Rising. 1,864,858; June 28.
Caffein, Producing. J. W. Livingston and M. Luthy. 1,865,378; June 28.
Cake pan. A. D. Boelter. 1,864,888; June 28.
Calcium preparations, Manufacture of therapeutic. E. Rothlin. 1,865,141; June 28.
Calendar mechanism and associated penholder. L. V. Aronson. 1,864,709; June 28.
Camera, Roll-film. C. R. Seeling. 1,864,768; June 28.
Can: *See*—
  Dispensing can.
Can ends containing a sealing compound, Apparatus for drying. F. Krueger and H. Douglass. 1,865,020; June 28.
Can testing machine, Automatic. J. H. O'Neil. 1,865,384; June 28.
Cans and vacuumizing the cans prior to sealing, Apparatus for closing. A. L. Kronquest. 1,865,320; June 28.
Cap, Paste tube. K. E. Bemis. Des. 87,249; June 28.
Capping head. A. W. Swentor. 1,865,402; June 28.
Car, Articulated. A. W. Clarke. 1,865,407–8; June 28.
Car, Articulated. A. W. Clarke and W. Griffin. 1,865,406; June 28.
Car, Articulated. J. B. D. Thompson. 1,864,623; June 28.
Car, Articulated. J. B. D. Thompson. 1,864,682; June 28.
Car, Articulated. V. Willoughby. 1,864,571–3; June 28.
Car end construction, House. G. S. Goodwin. 1,865,246; June 28.
Car end construction, House. K. J. Tobin, G. Madland, and G. R. Treptow. 1,865,223; June 28.
Car, Excavator. H. W. Pretzeller. 1,864,552; June 28.
Car, Mine. E. H. Bostock. 1,865,352; June 28.
Car, Mine. R. E. Dendler. 1,864,685; June 28.
Car structure, Tank. L. E. Endsley. 1,864,990; June 28.
Car tank. J. J. McBride. 1,864,606; June 28.
Carbon copying system. G. U. Lacroix. 1,865,115; June 28.
Carbon monoxide process. J. C. Woodruff. 1,865,053; June 28.
Carburetor. R. Malin. 1,865,266; June 28.
Carburetor. W. H. Manners and N. Barker. 1,865,122; June 28.
Card finding or selecting apparatus, Indexed. C. E. Tumminello. 1,865,343; June 28.
Carrier: *See*—
  Basket carrier. Running board carrier.
Carrier for road vehicles, Spare tire. D. S. Kennedy and I. T. Kempe. 1,864,829; June 28.
Carton for fragile objects. W. A. Morris. 1,865,268; June 28.
Carton, Merchandising. H. Weiner. 1,864,968; June 28.
Case and lamp or similar article, Combination clock. A. Levy. Des. 87,268; June 28.
Cash register. W. H. Robertson. 1,864,761; June 28.
Cash register. B. M. Shipley. 1,865,147; June 28.
Casing for a hot water heater or similar article. G. M. Maier. Des. 87,271; June 28.
Casing head, Well. J. Lotton. 1,865,121; June 28.
Caster, Double purpose. E. Pynynski. 1,864,933; June 28.
Catalysts, Producing. W. F. Faragher. 1,865,180; June 28.
Catch for oven doors. W. Moll. 1,865,331; June 28.
Cathode-diaphragm structures, Production of electrolytic. K. E. Stuart. 1,865,152; June 28.
Ceiling construction. F. M. Venzie. 1,864,965; June 28.
Ceiling construction, Metallic. A. C. Olsen. 1,865,131; June 28.
Cellulose ethers, Reducing the viscosity of. E. E. Reid. 1,864,554; June 28.
Cellulose, Manufacturing. J. J. de la Roza, sr. 1,864,985; June 28.
Cement and process of making. H. McC. Larmour and S. C. Pierce, jr. 1,865,021; June 28.
Cement, etc., Manufacturing white Portland. G. Bergen, F. Engelhardt, and R. Steckhan. 1,865,418; June 28.
Cement, Making Portland. E. W. Rice. 1,864,935; June 28.
Chair: *See*—
  Adjustable reclining chair. Folding chair.
Chair. C. A. Hach and F. A. Sanborn. 1,864,535; June 28.
Chair. M. Levine. Des. 87,264–7; June 28.
Chair seat. G. T. Gourley and A. J. Ball. 1,865,313; June 28.
Cheese, Apparatus for cutting wheels of. R. H. Mayer. 1,864,921; June 28.
Chintz, Printed. M. W. Greenstein. Des. 87,260; June 28.
Chlorine meter. R. N. Graham. 1,864,815; June 28.
Choker hook. J. A. Buckley. 1,864,974; June 28.
Chuck for holding a mandrel stem. K. Gruber. 1,865,314; June 28.
Cigarette machines, Cork-tipper for. R. E. Rundell. 1,864,764; June 28.
Cigarette package. H. H. Straus. 1,864,871–3; June 28.
Cinematographic projection and phonographic audition, Apparatus for synchronous. J. D. Boularan, J. Deval, and P. A. Digeon. 1,864,519; June 28.
Circuit breaker for motors in signaling systems. A. M. Curtis. 1,864,981; June 28.
Circuit breaker, Thermostatic. T. Whiteford and L. E. Donnell. 1,864,783; June 28.
Circuit closing apparatus, Coin control. J. W. Hansen. 1,864,649; June 28.
Circuit interrupter. D. C. Prince. 1,865,274; June 28.
Circuits, Frequency measuring. J. W. Horton. 1,864,543; June 28.
Circuits, Transmission control. B. G. Björnson. 1,865,165; June 28.
Clamp: *See*—
  Ground rod clamp.
Clasp: *See*—
  Lingerie clasp.
Cleaner: *See*—
  Boiler cleaner. Sewer cleaner.
  Radiator cleaner. Suction cleaner.
Cleaner and protector, Windshield. G. Van Daam. 1,864,561; June 28.
Cleansing device for rock drills. G. W. Hulshizer. 1,865,010; June 28.
Cleats for athletic shoes, Detachable self-centering. W. T. Clark. 1,864,713; June 28.
Clip: *See*—
  Conductor clip. Rail clip.
Clock case. F. J. Abel. Des. 87,248; June 28.
Closing device for bag filling machines. W. R. Peterson. 1,864,550; June 28.
Closure for collapsible tubes. L. J. Campbell. 1,865,233; June 28.
Clothing, Bed. E. McHorter. 1,865,329; June 28.
Clutch brake. J. W. Menhall. 1,865,129; June 28.
Clutch disk. G. L. McCain and K. Pfeiffer. 1,865,327; June 28.
Clutch, Selective ratio. A. E. Stoker. 1,864,870; June 28.
Coil winding machine. L. C. Daniels. 1,865,236; June 28.
Coin controlled mechanism. W. Rabkin. 1,865,211; June 28.
Coke, Apparatus for cooling. J. W. Reber. 1,865,336; June 28.
Collar. F. L. Hermann. 1,865,317; June 28.
Collet chuck. A. O. Wilkins. 1,864,786; June 28.
Color coat for cemented surfaces. W. D. Rial. 1,864,942; June 28.
Column equipment, Fractionating. E. B. McConnell. 1,865,400; June 28.
Compass, Gyroscopic. 1,864,801; June 28.
Composition for producing irritating gas, Making a. N. E. Oglesby and D. Ehrenfeld. 1,864,754; June 28.
Composition of matter with a base of cellulose esters, Manufacture of a new. O. Loehr. 1,865,196; June 28.
Compounds of alkaline earth metal nitrites with methyl xanthines and the products, Preparing. H. Kaufmann. 1,865,111; June 28.
Compressor and pump, Rotary. W. P. Dalrymple. 1,864,640; June 28.
Compressor for refrigerating machines. C. Steenstrup. 1,864,678; June 28.
Concrete, Apparatus for mixing. A. Knowles. 1,865,017; June 28.
Concrete, Reenforcing members for. G. I. Stanford. 1,864,773; June 28.
Condenser. G. T. Jacocks. 1,865,255; June 28.
Condenser and the like, Electrical. A. Joffé. 1,864,828; June 28.
Condenser, Electrical. W. H. Priess. 1,865,046; June 28.
Conductor clip. L. M. Persons. 1,865,207; June 28.
Conductor, Electrical. C. W. Abbott. 1,864,512; June 28.
Conductors, Ascertaining the integrity of two line. G. W. Baughman. 1,864,789; June 28.
Conduit and tie element therefor, Multiple. H. Parker. 1,864,611; June 28.
Conduit, Fluid. L. S. Hamer. 1,864,816; June 28.
Container. L. C. Ament, now by judicial change of name Lucy C. Thomas. 1,865,063; June 28.
Container and preparing same. F. Ricca. 1,864,693; June 28.

Container, Combined hermetic and hinged closure. I. D. Thornburgh. 1,864,698; June 28.
Container for container cars, Air and moisture proof. G. C. Woodruff. 1,864,684; June 28.
Container, Liquid dispensing. R. B. Munday. 1,865,269; June 28.
Container, Portable refrigerating. J. L. Wood. 1,864,574; June 28.
Containers, Device for attachment to. R. R. Brown. 1,864,526; June 28.
Control device. C. M. Osterheld. 1,865,332; June 28.
Control device, Furnace draft. A. D. Arper. 1,865,295; June 28.
Control for treaters, Synchronous gap potential. H. F. Fisher. 1,864,722; June 28.
Control mechanism, Automatic. W. R. Pendry. 1,865,333; June 28.
Control mechanism, Hydraulic. N. W. Dorman. 1,864,530; June 28.
Control of highway crossing signals, Apparatus for the. P. H. Crago. 1,864,805; June 28.
Control of water heaters, Automatic. W. A. Ahern. 1,865,225; June 28.
Controlling the accelerator pedal of a motor vehicle, Automatically. A. J. Abel. 1,864,881; June 28.
Conveyer. G. H. Rose. 1,865,337; June 28.
Conveyer, Jigging. T. B. Wilkinson. 1,865,403; June 28.
Conveying and aligning mechanism. F. W. Cutler. 1,865,086; June 28.
Cooking apparatus. H. M. Patterson. 1,864,928; June 28.
Cooking device. C. C. Brunner. 1,865,354; June 28.
Cooking pan. T. H. Stough. 1,865,342; June 28.
Cooler for furnaces, Water. G. L. Robinson. 1,864,762; June 28.
Corn butting machine. W. W. Morral. 1,864,663; June 28.
Cotton chopping machine. E. Albaugh and H. F. Hildebrandt. 1,865,351; June 28.
Counting mechanism. L. B. Landon. 1,865,321; June 28.
Coupling: *See*—
Flexible coupling. Hose coupling.
Coupling, more particularly for gun laying mechanism, Slipping. L. Daun. 1,865,350; June 28.
Coupon feeding mechanism. B. R. Schneider and K. Kaiser. 1,864,695; June 28.
Cover, Rubber table. C. A. Hupp. 1,865,011; June 28.
Cover, Tire. T. J. McCormick and R. E. Linn. 1,865,031; June 28.
Covering. G. H. Wheatley. 1,865,345; June 28.
Cracking and coking, Process of. J. D. Fields. 1,864,686; June 28.
Crankshaft balancer. R. V. Hutchinson. 1,865,108; June 28.
Cross-chains and the like, Process and apparatus for reenforcing. J. R. Reyburn. 1,865,275; June 28.
Crudes and the like, Apparatus for cracking reduced. N. E. Loomis. 1,865,027; June 28.
Crusher mill driving means. H. H. Rumpel. 1,864,556; June 28.
Cultivators, Operating. P. Creezée. 1,864,639; June 28.
Current motor, Alternating. E. C. Ballman. 1,865,160; June 28.
Current rectifier, Electric. S. Ruben. 1,865,213; June 28.
Current treatment, Apparatus for counter. R. B. Lebo. 1,865,024; June 28.
Curtain hanger. W. H. Packard. 1,865,030; June 28.
Cutter: *See*—
Paper cutter.
Dam. E. H. Burroughs. 1,864,976; June 28.
Dashpot for weighing scales. L. S. Williams. 1,864,787; June 28.
Device for measuring the thickness of objects. H. A. Daynes and J. R. Scott. 1,865,306; June 28.
Dial and casing therefor, Combined illuminated indicator. A. A. Ewald. Des. 87,253; June 28.
Dial for radios, Tuning. J. J. Warren. 1,864,875; June 28.
Die for compressing the strands of wire rope. J. E. Evans. 1,865,362; June 28.
Dipper trip and tagline drum mechanism for cranes. L. A. Russell. 1,865,143; June 28.
Direction indicator for vehicles. M. Rosenblum. 1,865,338; June 28.
Dirigible light. R. M. Aoki. 1,865,294; June 28.
Discharge tube, Hot cathode electron. H. H. Freeman and W. G. Wade. 1,865,421; June 28.
Disk wheel. D. M. White. 1,864,969; June 28.
Dispenser and ash tray, Combination cigarette. P. O. Eckels. 1,864,811; June 28.
Dispensing can. F. C. Reineking. 1,864,936; June 28.
Display rack. H. L. Beach. 1,865,298; June 28.
Display stand. F. Pfous. 1,865,386; June 28.
Distillates, Refining. J. D. Fields. 1,864,719; June 28.
Distributor for internal combustion engines, Rotary. A. Feyens. 1,865,363; June 28.
Doll, Puppet. W. Dallas. 1,865,305; June 28.
Door construction, Car. K. J. Tobin and W. W. Darrow. 1,865,222; June 28.
Door lock. R. N. Smith. 1,865,217; June 28.
Door operating mechanism, Elevator. M. W. Talen. 1,864,959; June 28.
Door stop. I. A. Baum. 1,864,577; June 28.
Draft motor. P. Giorgio. 1,864,998; June 28.
Drainage for roofs and skylights. A. Shuman. 1,865,401; June 28.
Drawer construction for stoves. W. F. and J. C. Rogers. 1,865,212; June 28.
Dress. D. Long. Des. 87,269–70; June 28.
Drill: *See*—
Mining drill.
Drilling machine. E. J. Kingsbury. 1,865,375; June 28.
Drive for slicing machines, Power. J. Folk. 1,865,243; June 28.
Driving box. F. M. A'Hearn and E. F. Richardson. 1,865,292; June 28.
Driving mechanism. A. G. Larson. 1,865,022; June 28.
Driving mechanism for the roughing rolls of a card roughing machine. R. Beutner and A. Hille. 1,864,635; June 28.
Dusting machines, Brush feed for. E. Knapp and C. G. Allgrunn. 1,864,740; June 28.
Dyestuff and acetate silk dyed therewith, Azo. K. Schirmacher and K. Stenger. 1,865,062; June 28.
Easel. D. A. Bickford. 1,864,972; June 28.
Educational block. R. West. 1,864,703; June 28.
Electric control systems, Apparatus for. A. J. Sorensen. 1,865,150; June 28.
Electric furnace. A. E. Bellis. 1,864,885; June 28.
Electric mold. J. F. Osborne. 1,864,666; June 28.
Electric switch. J. A. Handford. 1,865,315; June 28.
Electric switch. F. S. Kingston and B. L. Conley. 1,864,654; June 28.
Electric welding system. H. E. Parker and S. M. Stewart. 1,864,610; June 28.
Electrical apparatus. W. S. Purser. 1,865,210; June 28.
Electrical apparatus including electrical condensers, High tension. W. H. Priess. 1,865,137; June 28.
Electrical instruments, Method and apparatus for calibrating. H. P. Sparkes. 1,864,771; June 28.
Electrical regulating system. F. A. Byles. 1,865,410; June 28.
Electrical reproducer. R. T. Cloud. 1,864,890; June 28.
Electrical winding. S. E. Johannesen. 1,865,256; June 28.
Electricity meter, Induction. S. Z. de Ferranti. 1,864,586; June 28.
Electrode construction. J. N. Smith. 1,865,216; June 28.
Electrode, Reference. H. E. Haring. 1,865,004; June 28.
Electrode, Welding. A. M. Candy. 1,865,169; June 28.
Electrodes of thermionic devices, Supporting the. H. J. Round and W. J. Picken. 1,865,142; June 28.
Electron discharge device. H. Vadersen. 1,864,963; June 28.
Electrooptical system. F. W. Reynolds. 1,864,670; June 28.
Elevator: *See*—
Friction grip elevator.
Emulsions, Dehydrating. H. F. Fisher. 1,864,721; June 28.
End gate. E. O. Miller. 1,864,660; June 28.
Engine: *See*—
Internal combustion engine.
Engine, pump, and the like, Rotary. C. H. Varley. 1,864,699; June 28.
Envelopes, Making window. A. Novick. 1,865,037; June 28.
Esters of butyl alcohol, Making. R. B. Crowell and S. R. Ebe. 1,864,893; June 28.
Ethers, Preparing cellulose. G. W. Miles. 1,864,546; June 28.
Exercising apparatus. P. S. Hardy and T. Smith. Des. 87,261; June 28.
Explosive. G. B. Holderer. 1,865,104; June 28.
Explosive. P. Naoum. 1,865,382; June 28.
Fabric, Apparatus for treating rolled. J. Spalding. 1,865,218; June 28.
Fabric, Process and machine for producing knitted. F. R. Page. 1,865,385; June 28.
Fastener for automobile truck doors. C. E. Palmquist. 1,865,205; June 28.
Fastener for boxes or the like. A. A. Weller. 1,864,780; June 28.
Fastener, Multiple operated. G. Johnson. 1,865,393; June 28.
Fastener, Separable. N. J. Poux. 1,864,614; June 28.
Fastening device. E. Poeter. 1,864,551; June 28.
Fastening means for bags and the like. H. S. Stone. 1,864,956; June 28.
Feeder. C. H. Willauer. 1,864,569; June 28.
Feeding mechanism. F. O. Andrews and L. Steinfurth. 1,865,293; June 28.
Fence post. H. C. Dreibuss and P. J. McCullough. 1,865,176; June 28.
Fermentation of cellulosic materials. H. Langwell and E. Ricard. 1,864,838; June 28.
Fermentation of cellulosic materials. H. Langwell and W. A. Burton. 1,864,839; June 28.
Fertilizer with water for irrigation, Device for mixing. W. C. Selfridge. 1,864,947; June 28.
Fiber liberation, Cyclic process of. G. A. Richter. 1,864,619; June 28.
Fiber webs and wet-machine therefor, Making. R. E. Brawn. 1,864,580; June 28.
Film editing system. R. F. Mallina. 1,865,028; June 28.
Film magazine for motion picture cameras. F. H. Owens. 1,865,272; June 28.
Filter. K. F. Pietzsch. 1,864,757; June 28.
Filter. F. Pretsch. 1,865,209; June 28.

Filters, Apparatus for cleaning and charging air. A. M. Goodloe. 1,865,245; June 28.
Finger ring. J. Granat. Des. 87,258–9; June 28.
Finish, Ornamental. F. B. Root. 1,864,763; June 28.
Fish bait. W. F. Eger. 1,865,359–60; June 28.
Fish hook. G. W. Little. 1,865,120; June 28.
Fishing reel. G. C. Walberg. 1,865,066; June 28.
Flambeau type of burner. W. E. Goldsborough. 1,865,056; June 28.
Flexible coupling. R. J. McLeod. 1,865,330; June 28.
Flooring, Sound and heat insulating. R. W. Storm. 1,864,774; June 28.
Fluid currents, Apparatus for recording the direction and speed of. J. M. P. Idrac. 1,865,373; June 28.
Fluid driving device for actuating mechanisms having an initial idle stroke. G. Houplain. 1,865,105; June 28.
Fluid metering apparatus. R. H. Taylor. 1,865,050; June 28.
Fluid pressure brake. J. C. McCune. 1,865,126; June 28.
Fluids, Method of and apparatus for deodorizing and dehydrating. H. L. Murray. 1,864,849; June 28.
Fluorides, Production of volatile. M. Otto and L. Bub. 1,865,204; June 28.
Flyer for spinning machines and the like. H. C. Herr. 1,864,819; June 28.
Foil from bottles, Removing. C. W. Griffin, D. Schmid, and L. P. Sinz. 1,864,592; June 28.
Folding chair. C. Liberman. 1,865,323; June 28.
Folding chair, Universal. J. C. Moore. 1,864,750; June 28.
Folding structure. W. C. Rastetter. 1,865,139; June 28.
Foot appliance. H. J. Gluckman. 1,864,999; June 28.
Foot supporting means. W. M. Scholl. 1,864,949; June 28.
Form, Hosiery. C. A. Batchelder. 1,864,788; June 28.
Form, Shoe. A. G. Legge. 1,865,117; June 28.
Frame: *See*—
Saw frame.
Friction grip elevator. N. K. Smith. 1,864,864; June 28.
Fuel burner, Liquid. G. W. Boyd. 1,864,795; June 28.
Fuel by destructive hydrogenation of carbonaceous materials, Producing motor. M. Pier and M. Müller-Cunradi. 1,864,855; June 28.
Fuel economizer and smoke reducer. C. Protzmann. 1,865,138; June 28.
Fuel feeding device. H. A. Stukes. Re18,508; June 28.
Fuel injection means. C. D. Salisbury. 1,864,860; June 28.
Fuel supplying and injecting system for Diesel and other like forms of compression ignition internal combustion engines, Airless. J. C. Groff. 1,865,099; June 28.
Furnace: *See*—
Electric furnace.
Furnace construction, Convertible gas. B. F. Powell. 1,865,045; June 28.
Garment. A. P. Risley. 1,865,280; June 28.
Garment or ironing press. E. Davis. 1,865,238; June 28.
Garment press. W. Strobridge. 1,864,680; June 28.
Gas economizer for internal combustion engines. M. Barry. 1,865,076; June 28.
Gas ignition means for liquid fuel burners. L. C. Beadle, N. Sutterfield, and J. A. Wilson. 1,864,515; June 28.
Gas mixtures, Apparatus for the separation of. F. Pollitzer and H. Kable. 1,865,135; June 28.
Gas producer. D. J. Smith. 1,865,341; June 28.
Gas producer. A. Vieser. 1,864,966; June 28.
Gases, Rectifying mixed. W. L. De Baufre. 1,864,585; June 28.
Gasket. F. J. Oven. 1,864,854; June 28.
Gasoline serving apparatus. B. D. Griffin. 1,865,002; June 28.
Gate: *See*—
End gate. Railroad crossing gate.
Gate. P. G. Billborn. 1,865,079; June 28.
Gate for railroad crossings and pedestrian crossings. F. W. McFarland and W. R. Long. 1,864,748; June 28.
Gate operating mechanism. T. Brady. 1,864,796; June 28.
Gauge: *See*—
Piston ring gauge. Saw gauge.
Gauge and feeding guide, Milk weight. C. H. Naatz. 1,865,034; June 28.
Gauge for vehicles, Load indicating. E. N. Westrum. 1,864,876; June 28.
Gear, particularly for motor vehicles, Automatically variable transmission. H. F. Hobbs. 1,864,824; June 28.
Gear, Speed changing. H. E. Fatland. 1,864,992; June 28.
Gear, Valve. W. B. Gorr. 1,865,247; June 28.
Gels and making same, Adsorbent and/or catalytic. E. H. Barclay. 1,864,628; June 28.
Girder construction. E. J. W. Ragsdale. 1,865,059; June 28.
Glass: *See*—
Safety glass.
Glass drawing apparatus. L. J. Pierce and F. L. Bishop. 1,864,930; June 28.
Glass forming machine. I. H. Freese and H. H. Dawson. 1,864,689; June 28.
Gloves, Apparatus for drying and airing. A. Hill. 1,865,103; June 28.
Golf club head, Fabricated. J. H. Balch. 1,864,513; June 28.
Golf tee and making the same. A. L. Becket. 1,864,516; June 28.
Goods made from rayon or artificial silk to entering machines, Apparatus for feeding knitted. F. Tandel. 1,864,681; June 28.
Governor, Centrifugal. J. H. Offen. 1,864,853; June 28.
Governor, Engine. B. V. E. Nordberg. 1,864,850; June 28.
Grain separator for threshing machines or combines. F. N. Sprague. 1,864,772; June 28.
Grapple, Lifting. C. E. Moore. 1,865,380; June 28.
Gravel deposits a gravel aggregate for use in concrete, Producing from natural. S. A. Moss and J. Geddes. 1,864,926; June 28.
Gravity indicating means, Specific. G. M. Haungs. 1,865,250; June 28.
Grinder, Coffee. C. T. Howson. 1,864,595; June 28.
Grinder, Meat and food. T. F. Ball. 1,864,575; June 28.
Grinding body. K. E. E. Holzapfel. 1,864,542; June 28.
Grinding, Form. W. L. Hutchinson and R. F. Runge. 1,865,392; June 28.
Grinding machine. G. W. Binns. 1,864,578; June 28.
Grinding machine. R. Hervig. 1,865,251; June 28.
Grinding machine. F. Warsow. 1,865,067; June 28.
Grinding machinery. H. Ernst. 1,864,589; June 28.
Grinding, smoothing, and polishing apparatus. P. Dryon. 1,864,894; June 28.
Grinding, smoothing, and polishing apparatus. C. Heuze. 1,864,822–3; June 28.
Ground rod clamp. R. J. Frank. 1,864,688; June 28.
Gun sighting. C. W. McKeen. 1,865,127; June 28.
Hand brake. W. A. Heitner. 1,864,729; June 28.
Hand rest for steering wheels. W. O. Appleman and F. N. Bay. 1,865,072; June 28.
Handle for tweezers or the like. W. H. Pulford. Des. 87,278; June 28.
Handle structure. H. E. Woernle. 1,864,878; June 28.
Hanger: *See*—
Curtain hanger.
Harness for picking sacks and the like. J. A. Brewster. 1,865,353; June 28.
Harrow. J. S. Rodgers. 1,864,859; June 28.
Harvester, Prune. L. M. Holcomb. 1,865,372; June 28.
Hat. J. J. Desmond. 1,865,240; June 28.
Hat cleaning machine. A. J. Manxi. 1,865,197; June 28.
Heat distributor plate. F. V. Detwiler. 1,864,715; June 28.
Heat treatment of copper ores or the like. T. J. Taplin. 1,865,153; June 28.
Heater: *See*—
Oil well heater. Water heater.
Heating apparatus, Automobile. F. Gilbert. 1,864,901; June 28.
Heating device, Regenerative. N. R. Forssblad. 1,864,724; June 28.
Hinge. L. Schilling. 1,865,339; June 28.
Hinge, Safe. C. F. Wolters. 1,865,052; June 28.
Holder and dust pan, Combination broom. J. P. Mahoney. 1,864,918; June 28.
Holder, Brush. F. Sohnle. 1,865,283; June 28.
Holder, Cigarette. R. J. McAniff. 1,864,747; June 28.
Holder for toilet articles. J. Manoha. 1,865,267; June 28.
Holder, Hook and eye. P. Kelley. 1,865,112; June 28.
Holder, Label. R. W. Le Beaumont. 1,864,656; June 28.
Holder, License plate. I. J. Davis. 1,864,641; June 28.
Holder, License plate. J. G. Dicaire. 1,864,986; June 28.
Holder, Toothbrush. G. F. Voight. 1,864,874; June 28.
Holder, Waterless gas. H. C. A. Meyer. 1,864,924; June 28.
Hook: *See*—
Choker hook. Lifting hook.
Horn, Suction. H. C. Heath. 1,865,006; June 28.
Hose and automatic valve, Combination filler. F. E. Cottrell. 1,864,978; June 28.
Hose coupling. A. Schaller. 1,864,861; June 28.
Hub, Propeller. S. T. Carter. 1,865,170; June 28.
Hub puller. L. B. Kick. 1,865,420; June 28.
Hull. L. Ghirardi. 1,864,997; June 28.
Humidifier, Portable. W. G. R. Braemer. 1,864,797; June 28.
Hydrocarbon residues containing inorganic substances and product obtained thereby, Treatment of. R. T. Goodwin. 1,865,001; June 28.
Hydrocarbons and producing coke and product thereof, Distilling. J. D. Fields. 1,864,720; June 28.
Hydrocarbons by contact with hot gases, Cracking. W. K. Lewis. 1,865,195; June 28.
Hydrocarbons, Cracking. H. L. Pelzer. 1,865,206; June 28.
Hydrocarbons, Process and apparatus for treating. W. R. Howard. 1,865,189; June 28.
Index device. L. E. Hutchings. 1,865,057; June 28.
Index device, Articulated. L. E. Hutchings. 1,864,692; June 28.
Indicator: *See*—
Line, column and word indicator. Liquid level indicator.
Pressure indicator.
Ingots, Casting of. C. A. Parsons and H. M. Duncan. 1,865,041; June 28.
Ink, Manufacture of printer's. L. C. Neale. 1,865,035; June 28.

Insecticide and deodorizing tablet. F. J. Curran. Re18,504; June 28.
Instrument for obtaining condyle-cast records. R. P. Clark. 1,864,804; June 28.
Insulation, Producing felted mineral wool. G. D. Shaver. 1,865,049; June 28.
Insulator, Strain. B. M. Smalley. 1,864,951; June 28.
Internal combustion engine. H. C. Edwards. 1,865,092; June 28.
Internal combustion engine. W. R. Griswold. 1,864,904; June 28.
Internal combustion motor. H. Karl. 1,865,013; June 28.
Ionic relay system. G. Valensi. 1,865,064; June 28.
Ironer. L. Ringer. 1,865,048; June 28.
Jack: *See*—
Lifting jack. Treeing jack.
Pump jack.
Jogger for printing presses. E. Smith and W. B. Powell. 1,865,282; June 28.
Joint: *See*—
Universal joint.
Joints of chain or like members. O. S. Penn. 1,865,334; June 28.
Kiln for the manufacture of bloated clay products. K. Slidell. 1,864,769; June 28.
Knife, Banana. J. A. Weigel. Des. 87,284; June 28.
Lacquer, Cellulose nitrate. O. Jordan. 1,865,191; June 28.
Lamp. J. Gmeindl. Des. 87,257; June 28.
Lamp. A. Sabath. Des. 87,279; June 28.
Lamp construction. H. C. Foster. 1,864,725; June 28.
Lamp, Incandescent. E. R. Morton and H. M. Stoller. 1,864,547; June 28.
Lamp, Reflecting electric. H. A. Douglas. 1,864,642; June 28.
Lamp stand. C. A. Egll. 1,865,170; June 28.
Lamp structure. E. C. Albright. 1,864,706; June 28.
Lapping device. C. F. Birgbauer. 1,865,229; June 28.
Last, Hinged. H. E. Clarke. 1,864,977; June 28.
Latch, Door. D. Gould. 1,865,391; June 28.
Latch, Door. F. D. Grund. 1,864,533; June 28.
Latch mechanism. J. P. McKinney, jr. 1,865,128; June 28.
Laundering machine. F. M. King. 1,864,738; June 28.
Laundry appliance with rotatable tubs. J. G. Fehn. 1,864,903; June 28.
Leaf stemming machine. R. E. Rundell and G. E. Hagquist. 1,864,765; June 28.
Level and transit, Combined. G. Kegelman. 1,864,832; June 28.
Leveling device for hoppers, etc. B. Noble. 1,864,851; June 28.
Lifting hook. D. Davies. 1,865,357; June 28.
Lifting jack. M. B. Lucker. 1,864,602–3; June 28.
Light: *See*—
Dirigible light. Signal light.
Light bracket. A. F. Pieper. 1,864,756; June 28.
Light projection. L. J. Steele and H. Martin. 1,864,696; June 28.
Lighter. J. Holtzman. 1,864,732; June 28.
Lighter, Cigar and cigarette. G. J. Martel. 1,865,199; June 28.
Lime, Production of nitrate of. H. Charrier. 1,865,303; June 28.
Line, column, and word indicator. W. Hines. 1,864,730; June 28.
Line lift. H. E. Clark. 1,864,802; June 28.
Lingerie clasp. A. E. Parker. 1,865,040; June 28.
Liquid fuel burner. A. H. Ballard. 1,865,300; June 28.
Liquid level indicator. T. M. Eynon. 1,864,991; June 28.
Liquids, Quantity indicating device for. J. Macallum, jr. 1,865,263; June 28.
Liquids, Vaporizing. H. H. Dow. 1,864,587; June 28.
Load control. J. I. Hull. 1,865,414; June 28.
Lock: *See*—
Door lock. Switch block.
Lock cap. F. Greene. 1,865,369; June 28.
Locking device. R. Fourchy. 1,865,366; June 28.
Locking device, Temporary. E. Anderson. 1,864,883; June 28.
Locking means for vending machines, Coin. G. Morrison. 1,874,847; June 28.
Locomotive cylinder saddle structure. K. S. Howard and E. G. Hallquist. 1,864,736; June 28.
Loom, Tuft pile fabric. E. W. Stone. 1,865,221; June 28.
Looms, Cloth take-up mechanism for. V. Lindsjo. 1,865,118; June 28.
Looms, Let-off mechanism for. V. Lindsjo. 1,865,119; June 28.
Loop selvage device. H. F. Shuford. 1,864,675; June 28.
Loud speaker. B. Dempster and A. R. Bruehl. 1,864,809; June 28.
Lubricant. W. H. Woodford. 1,865,157; June 28.
Lubricating device for pneumatic tools. F. B. Hamerly. 1,864,536; June 28.
Machine for cutting rings. H. Gora. 1,864,903; June 28.
Machine for making artificial stones. J. Solary. 1,865,287; June 28.
Machine for making confections. H. W. Eakins. Des. 87,251; June 28.
Machine for making molded pulp articles. R. F. Martlin. 1,864,919; June 28.
Machine for making paper boxes or the like. S. Bergstein. 1,864,632; June 28.
Machine for making stick candy. L. J. Propper. 1,864,668; June 28.
Machine for operating on shoes. A. F. Pym and W. E. Scarlett. 1,864,669; June 28.
Machine for operating upon shoes. L. J. Bazzoni. 1,864,791; June 28.
Machine for operating upon shoes. C. E. Hood. 1,865,009; June 28.
Machine for placing ripping wires in can tops. J. D. Evans and A. K. Elton. 1,865,309; June 28.
Machine for shaping shoe uppers. A. Bates. 1,864,630; June 28.
Machine for shaping the backs of unbound books. C. Schramm. 1,864,557; June 28.
Machine for straightening round stock. A. P. Diescher. 1,865,174; June 28.
Machine for the production of expanded metal. H. A. Kessler. 1,864,598; June 28.
Machine for transplanting edible grain plants. L. Marangoni. 1,865,123; June 28.
Magnesium chloride from magnesium oxychloride cement mixtures, Preparing anhydrous. E. O. Barstow. 1,865,228; June 28.
Magnesium sulphate, Making. A. W. Winston and I. A. Kenaga. 1,865,224; June 28.
Mailing machines, Attachment for. O. F. Carpenter. Re18,505; June 28.
Manifolding machine. F. Schultz. 1,865,394; June 28.
Marking apparatus. J. E. Stoll. 1,864,954; June 28.
Match packaging machines, Feed for. R. S. Pullen and W. J. Crowell, jr. 1,864,760; June 28.
Material, Decorative. W. Bowker and J. F. Walsh. 1,864,794; June 28.
Material discharging device. J. H. Deacon and C. H. Hartman. 1,864,529; June 28.
Material, Making structural. W. R. Kappes. 1,865,192; June 28.
Material, Producing cellular. K. Slidell. 1,864,770; June 28.
Materials, Apparatus for screening. M. P. Reynolds. 1,864,940; June 28.
Materials, Apparatus for treating solid and liquid. W. Gaus. 1,865,183; June 28.
Matrix assembler. Le R. W. Willis. 1,865,348; June 28.
Mattress, Spring filled. L. E. Pittoni. 1,865,043; June 28.
Measuring apparatus. T. G. Castner. 1,864,527; June 28.
Measuring apparatus. F. Wagner and H. C. Mitchell. 1,864,967; June 28.
Merry-go-round. C. E. and E. F. Hoppes. 1,864,733; June 28.
Metal plate construction and forming the same. R. F. Smith. 1,865,284; June 28.
Metal, Production of expanded. H. A. Kessler. 1,864,597; June 28.
Metal wheel. G. Walther. 1,864,701; June 28.
Metals from zinc plant residue, Recovery of. U. C. Tainton. 1,864,777; June 28.
Metals, Process and products in the art of forming, machining, and the recovery of the products thereof, of. J. L. Brown and W. W. Varney. 1,864,889; June 28.
Metals, Production of pure. L. Schlecht and F. Duftschmid. 1,864,673; June 28.
Meter: *See*—
Chlorine meter. Watthour meter.
Electricity meter.
Meter testing device. S. Aronoff. 1,864,627; June 28.
Methyl chloride, Device for detecting. A. B. Lamb. 1,864,544; June 28.
Mill: *See*—
Rolling mill.
Mill. H. B. Masters. 1,864,920; June 28.
Milling machine. N. M. Marsilius. 1,865,198; June 28.
Mining drill. E. J. Dooley. 1,864,987; June 28.
Mining machine. M. P. Holmes. 1,864,731; June 28.
Mining machine. F. A. Lindgren. 1,864,841; June 28.
Mining machine. C. F. Wilhelmi. 1,864,785; June 28.
Mohair, wool, and the like, Method of and apparatus for treating. W. Cheshire. 1,865,234; June 28.
Mold: *See*—
Electric mold.
Molding machine. C. E. Frantz. 1,865,244; June 28.
Molding process. D. C. Gilham. 1,865,097; June 28.
Motor: *See*—
Current motor. Internal combustion motor.
Draft motor. Self-starting motor.
Mounting, Glare shield. W. T. Riddle. 1,864,943; June 28.
Mounting, Ground wire clamp. K. A. Hawley. 1,864,651; June 28.
Mounting, Vacuum bulb. A. I. Crawford and M. S. Glass. 1,864,528; June 28.
Muffler. H. T. Kosterman. 1,864,915; June 28.
Multiplane adjusting and adjustment securing means. J. Daniel. 1,865,087; June 28.
Musical instrument, Stringed. G. Guibeaud. 1,864,690; June 28.
Needle valve stem and governor, Revolving. R. Hanrahan and G. Lacasse. 1,865,316; June 28.
Nipple threading apparatus. W. B. Ewing. 1,864,897; June 28.

Nitrates and other products, Manufacturing. D. L. Jacobson. 1,864,826; June 28.
Nozzle, Fluid dispensing. W. I. Carpenter. 1,865,355; June 28.
Nozzle, Mixing. P. L. Geer. 1,864,647; June 28.
Nozzle tip, Adjustable. C. E. Jackson. 1,865,012; June 28.
Nut. W. E. Wells. 1,865,346; June 28.
Nutsch filtration. A. R. Grob. 1,865,061; June 28.
Oil gauge rod. L. M. Spencer. 1,865,285; June 28.
Oil into lacquer, Device for working wood. F. Riemann. 1,864,941; June 28.
Oil saver. J. N. Hicks and C. Severns. 1,865,007; June 28.
Oil vapors, Purifying. G. B. Coubrough. 1,864,583; June 28.
Oil well heater. W. M. Taylor. 1,864,960; June 28.
Oils, Apparatus for refining heavy mineral. P. Jodeck. 1,864,911; June 28.
Oils, Method and apparatus for treating. J. H. Osmer and F. L. Craise. 1,864,755; June 28.
Oils, Oxidizing. M. L. Chappell and T. H. Dowlen. 1,865,081; June 28.
Oils, Process and apparatus for cracking hydrocarbon. R. C. Cook. 1,865,172; June 28.
Oils, Recovery of light. S. P. Miller and E. H. Ellms. 1,864,749; June 28.
Oils, Treating hydrocarbon. C. P. Dubbs. 1,865,178; June 28.
Oils, Treating process for hydrocarbon. R. Cross. 1,865,235; June 28.
Opener, Can. D. H. Gustafson. 1,865,413; June 28.
Opener, Envelope. T. N. Johnson. 1,864,830; June 28.
Operator for counterbalanced elevator doors. R. S. Peelle. 1,864,667; June 28.
Ore coke, Production of. H. Klencke. 1,864,655; June 28.
Organic substances, Oxidizing. W. O. Herrmann and E. Baum. 1,864,541; June 28.
Ornament. H. G. Bell. 1,864,792; June 28.
Ornament. M. E. Biber. 1,864,523; June 28.
Oven, Coking retort. J. Becker. 1,865,161; June 28.
Package, Article dispensing. N. C. Butler. 1,865,232; June 28.
Package for cigarettes and like articles. W. E. Molins. 1,864,925; June 28.
Packages, Construction of cylindrical. W. Veit. 1,864,779; June 28.
Pad. C. H. Smith. 1,865,149; June 28.
Pan: *See*—
Cake pan. Cooking pan.
Paper and making the same, Condenser. L. P. Schweitzer. 1,864,950; June 28.
Paper cutter, Roll. J. W. McClintock. 1,865,399; June 28.
Paper machine. G. Nicholas. 1,865,270; June 28.
Paper, Producing. D. B. Oblinger. 1,864,852; June 28.
Paper, Safety. E. P. Benson. Des. 87,250; June 28.
Parathyrin, Preparing. L. Berman. 1,865,164; June 28.
Pastry perforator. H. A. Grant. 1,865,368; June 28.
Pen, Fountain. M. MacLeod. 1,865,325; June 28.
Penholder. L. V. Aronson. 1,864,708; June 28.
Pencil, Mechanical. P. S. Hauton. Des. 87,262; June 28.
Petroleum material, Treatment of. J. D. Fields. 1,864,687; June 28.
Photocomposing machine. A. T. Koppe. 1,865,262; June 28.
Photographic apparatus. T. W. Case. 1,865,055; June 28.
Photographic shutter. Á. Barényi. 1,865,078; June 28.
Photography, Color. J. B. Harris, jr. 1,865,186; June 28.
Piano keyboards, Attachment for. H. Hon and H. H. Shumaker. 1,865,370; June 28.
Pin for electric plugs, Contact. G. Maag-Eckenfelder. 1,864,989; June 28.
Pipe bending machine, Hydraulic. G. Lidseen and J. E. Flanagan. 1,865,025; June 28.
Pipe cap, Breather. J. K. Jensen. 1,865,319; June 28.
Pipe insulation, Making. A. J. Mesmer. 1,864,923; June 28.
Pipes, Apparatus for rolling seamless. R. Urban. 1,865,344; June 28.
Piston. R. R. Grant. 1,865,248; June 28.
Piston for internal combustion engines. O. C. Berry. 1,865,299; June 28.
Piston ring gauge. F. P. Ralph. 1,865,388; June 28.
Planter and disker. R. W. Kobler. 1,865,376; June 28.
Planters and listers, Automatic hill drop for. R. Hronek. 1,864,691; June 28.
Plastic composition. E. B. Miller. 1,864,662; June 28.
Platform, Adjustable tractor. T. Foote. 1,865,365; June 28.
Playground apparatus. E. F. Hoppes. 1,864,734; June 28.
Plow, Two-way. C. G. Strandlund. 1,864,958; June 28.
Pole top bracket. B. A. Plimpton. 1,865,134; June 28.
Polishing machine, Electric floor. W. L. McGee. 1,865,032; June 28.
Porous objects, Making. A. J. Mendel. Re18,506; June 28.
Post: *See*—
Fence post.
Powder puff and making the same. R. Bihler. 1,864,886; June 28.
Power transmitting mechanism. H. C. Harrison. 1,865,005; June 28.
Press: *See*—
Garment or ironing press. Garment press.
Press. W. Strobridge. 1,865,151; June 28.
Pressing machine. P. N. Braun. 1,864,525; June 28.
Pressing machines, Tandem controlling mechanism for. E. Davis. 1,864,808; June 28.
Pressure indicator. H. Christman. 1,865,082; June 28.
Primary cell and electrolyte therefor. G. W. Heise. 1,864,652; June 28.
Printing, Color discharge. F. R. Byrod. 1,864,582; June 28.
Printing machine for multicolor work. V. E. Givaudan. 1,865,184; June 28.
Projection screen, Movable. S. Schrago. 1,864,946; June 28.
Propeller. E. P. Doremus. 1,864,716; June 28.
Propeller, Marine and aeroplane. J. M. Clark. 1,864,803; June 28.
Protecting and cooling means for dynamo-electric machines. J. O. Snyder. 1,864,867; June 28.
Protective apparatus. E. W. Boehne. 1,865,409; June 28.
Protective arrangement. K. K. Palueff. 1,865,273; June 28.
Protector for pocket check books, Check. C. Anderson. 1,865,071; June 28.
Protector, Gauge. F. G. Hirsch. 1,864,906; June 28.
Protector, Rain. N. W. Schmidt. 1,864,948; June 28.
Puller: *See*—
Hub puller.
Pulp from raw cellulosic materials, Liberating. G. A. Richter. 1,864,620; June 28.
Pulp rovings, Manufacture of. F. W. Vogel and W. B. Meglitz. 1,864,624; June 28.
Pulp screening machine and process. A. J. Haug. 1,864,818; June 28.
Pump. H. G. Musolf. 1,864,609; June 28.
Pump, Deep well. F. C. Kniss and R. N. Vickers. 1,864,914; June 28.
Pump impeller, Centrifugal. M. M. Klosson. 1,844,834; June 28.
Pump jack. W. B. Vaughn. 1,865,290; June 28.
Pump, Oil. W. Alexander. 1,865,350; June 28.
Pump, Rotary. W. L. Claypool. 1,865,396; June 28.
Pump, Venom extraction. J. H. Wade. 1,864,700; June 28.
Pumping apparatus, Well. H. H. Brannan. 1,865,054; June 28.
Pumping means. M. J. Goldberg. 1,865,000; June 28.
Purification apparatus. H. J. Schneiderwirth. 1,864,767; June 28.
Pusher device for extra long loaves. S. A. Wickman. 1,864,704; June 28.
Rack: *See*—
Display rack.
Rack fixture. R. R. Hart. 1,864,817; June 28.
Rack for truck beds, Extension. R. Byrne. 1,864,637; June 28.
Radiator. R. N. Trane. 1,865,051; June 28.
Radiator cleaner. L. J. Trowbridge. 1,865,289; June 28.
Radiator core for automobile cooling systems. W. W. Muir. 1,864,751; June 28.
Radio circuit and apparatus. D. A. Nicosia and H. Sippel. 1,865,038; June 28.
Radioreceiver. H. E. Osmun, H. W. Rubinstein, and E. R. Stoekle. 1,865,271; June 28.
Radio telephonograph. J. B. Browning. 1,865,395; June 28.
Rail clip. J. P. Northey and R. V. Northey. 1,864,665; June 28.
Rail fitting, Adjustable. S. J. Gulesian. 1,864,534; June 28.
Rail joint bar. G. Langford. 1,865,194; June 28.
Railroad crossing gate. E. I. Bateman. 1,865,297; June 28.
Railway draft rigging. H. J. Lounsbury. 1,864,842; June 28.
Razor. T. H. Frost. 1,864,995; June 28.
Reading glass. W. D. Teague. Des. 87,282; June 28.
Receptacle. H. B. Cranshaw. 1,864,979; June 28.
Receptacle. G. D. Hauser. 1,864,538; June 28.
Receptacle, Paper. A. J. Lackner. 1,864,835–6; June 28.
Recorder: *See*—
Service recorder.
Recording unit, Multiple. G. F. Walter. 1,864,566; June 28.
Reel: *See*—
Fishing reel.
Reel. N. Gaddini. 1,864,900; June 28.
Reel for paper making machines, Auxiliary. H. M. Ross. 1,865,279; June 28.
Refrigerating apparatus. E. O. Stout. 1,864,957; June 28.
Refrigerating apparatus. L. K. Wright. 1,865,349; June 28.
Refrigerating device. M. P. Wetmore. 1,865,155; June 28.
Refrigerating method and apparatus. V. Buhr. 1,865,168; June 28.
Refrigeration. C. G. Munters and S. M. Bäckström. 1,864,608; June 28.
Refrigeration. B. C. von Platen and C. G. Munters. 1,864,562; June 28.
Refrigeration method and apparatus. E. B. Miller. 1,864,661; June 28.

Register: *See*—
Cash register.
Regulator: *See*—
Brake regulator.
Remote control apparatus. D. W. Reddy. 1,865,389; June 28.
Resin, Synthetic. A. O. Jaeger. 1,864,909; June 28.
Resins, Making. H. Goldschmidt and O. Neuss. 1,865,398; June 28.
Retaining device for removable vehicle seat cushions. A. J. Dinkel. 1,865,175; June 28.
Ring or similar article. A. Slatis. Des. 87,280; June 28.
Road machine. J. A. McEachern. 1,865,328; June 28.
Road surfacing equipment. G. E. Pearson and H. E. Petrilli. 1,864,612; June 28.
Rock breaker. F. L. Buchanan. 1,864,973; June 28.
Rod: *See*—
Oil gauge rod.
Rods, Method and mechanism for grinding. R. H. Cowdery. 1,864,584; June 28.
Roll edge for mattresses or cushions. R. Korney. 1,865,018; June 28.
Roll scouring block. F. L. Buell. 1,864,581; June 28.
Rolling mill, Universal. A. W. Sodenberg and A. G. Dahlgren. 1,865,286; June 28.
Roofing, Method of and apparatus for producing. D. A. Cumfer. 1,864,806; June 28.
Rubber goods, Manufacture of. V. J. Sprunger. 1,864,621; June 28.
Running board carrier, Automobile. F. S. Miller 1,864,607; June 28.
Safety device. W. D. Thomas. 1,864,697; June 28.
Safety device, Automatic reset. J. Dunlop. 1,864,588; June 28.
Safety device for banks, etc. W. T. Baker. 1,865,296; June 28.
Safety glass. W. C. Davis. 1,864,983; June 28.
Sail, parachute, airplane wing and the like. P. A. Valle. 1,864,964; June 28.
Sand distributor for filling molding boxes and the like with molding sand. W. Seidemann. 1,865,145; June 28.
Sandal. M. Meyer and A. Heilbrunn. Des. 87,274; June 28.
Sash balance, Window. A. Larson. 1,864,745; June 28.
Saw frame, Adjustable. A. Loga. 1,865,026; June 28.
Saw gauge. T. J. Bradford. 1,864,634; June 28.
Scaffold, Derrick. O. H. Reeves. 1,864,934; June 28.
Scale. G. Walker. 1,864,563; June 28.
Scale. H. L. Walker. 1,864,565; June 28.
Scale mechanism. L. O. Kelley. 1,865,015; June 28.
Scale, Over and under weight. H. L. Walker. 1,864,564; June 28.
Scale, Total load recording. L. S. Williams. 1,864,570; June 28.
Scale, Weighing. C. H. Hapgood. 1,864,537; June 28.
Scale, Weighing. C. O. Marshall. 1,865,326; June 28.
Scotch block. S. W. Hayes. 1,864,539; June 28.
Screen: *See*—
Projection screen.
Screen grid tube. B. van der Pol and K. Posthumus. 1,865,065; June 28.
Screens, shaking tables, and other apparatus, Apparatus for vibrating. J. W. Sherwen. 1,864,863; June 28.
Screw cutting method and means. A. L. De Leeuw. 1,865,239; June 28.
Screw machine for cutting single point double thread screws. J. A. Arenz. 1,865,226; June 28.
Seal for shafts. J. T. Varden. 1,864,683; June 28.
Seat: *See*—
Chair seat.
Self-starting motor, Synchronous. J. W. Hansen, W. L. Hansen, and I. N. Hurst. 1,864,650; June 28.
Separating device. M. Bongera. 1,865,167; June 28.
Separation, from solid residues, of oils obtained in the destructive hydrogenation of carbonaceous materials. M. Pier, E. Hochschwender and K. Wenzel. 1,864,856; June 28.
Service recorder. H. R. Cool. 1,865,060; June 28.
Servicing apparatus for wheeled vehicles. G. L. Rosebrook. 1,864,944; June 28.
Serving table. H. Howe. 1,865,254; June 28.
Settling system for separating solids from fluids. M. B. Tark. 1,864,778; June 28.
Sewer cleaner. P. O. Rec. 1,864,617; June 28.
Sewing machine, Buttonhole. F. A. Reece. 1,865,140; June 28.
Sewing machine, Electrically lighted. J. W. Dawson and F. A. Garrigan. 1,864,984; June 28.
Shaft-mounting means. A. C. Boock. 1,864,518; June 28.
Sheet handling mechanism. A. D. Evans and J. K. Lamoree. 1,865,308; June 28.
Shelf. H. B. Hyams. 1,864,907; June 28.
Shock absorber. C. N. Mitchell. 1,864,845; June 28.
Shoe. F. W. Ellington. Des. 87,252; June 28.
Shoe. C. Morall. Des. 87,275; June 28.
Shoe portions, Apparatus for treating. F. Ricks and H. E. Elliott. 1,864,671; June 28.
Shoes, Manufacture of. A. Bates. 1,864,629; June 28.
Shook arranger. C. E. Stubbs and E. D. Brooks. 1,864,776; June 28.
Shot concentrating projectile for sporting guns, Visible. M. Gachassin-Lafite. 1,864,916; June 28.
Shutter and film moving mechanism, Combined. G. Lowkrantz and L. W. Lessler. 1,864,657; June 28.
Sign. L. (Max) Weesner. 1,864,702; June 28.
Sign, Flat tubeless ionization conductor. F. Hotchner. 1,865,253; June 28.
Signal. D. F. Murphy. 1,864,752; June 28.
Signal light, Telephone. H. D. Jewell. 1,864,910; June 28.
Signaling system for elevators. A. G. Blair. 1,865,166; June 28.
Silk, artificial horsehair and like products, Manufacture of artificial. H. Dreyfus. 1,865,358; June 28.
Slack adjusting operating mechanism. R. A. Goepfrich and C. H. Taylor. 1,864,902; June 28.
Slack burner. E. A. Probst. 1,864,932; June 28.
Slicing machine. W. J. Campbell. 1,865,411; June 28.
Slip. H. R. Standlee. 1,864,953; June 28.
Socket, Electric light. B. F. Muldoon. Des. 87,277; June 28.
Socket, Health lamp. L. C. Doane. 1,864,810; June 28.
Socket, Lamp. T. H. Williams. 1,865,347; June 28.
Soda and sodium chloride, Separating caustic. A. K. Smith. 1,865,281; June 28.
Soil treatment. H. J. Rose and W. H. Hill. 1,864,672; June 28.
Sole slashing machine. W. C. Baxter. 1,864,631; June 28.
Sound, Apparatus for recording and reproducing. H. E. Chipman. 1,865,171; June 28.
Sound, Method and apparatus for broadcasting. P. M. Titus. 1,864,961; June 28.
Sound reproducing apparatus. E. J. Quinby. 1,864,615; June 28.
Speed of a vessel by directed beams of ultra-audible waves, Observation and measurement of the. C. Chilowsky. 1,864,638; June 28.
Speed transmission mechanism, Variable. F. A. Hayes. 1,865,102; June 28.
Spoke making apparatus. F. N. Geist and F. W. Lorenz 1,865,412; June 28.
Sponge, Producing metal. E. G. T. Gustafsson. 1,864,593; June 28.
Spool and container for adhesive tapes, Combined. L. L. White. 1,864,877; June 28.
Sprayer. F. C. Nelson. 1,865,203; June 28.
Sprinkler. W. H. Coles and B. J. Nelson. 1,864,892; June 28.
Sprinkling system for use with concrete paving machines. A. F. Johnson. 1,865,109; June 28.
Squeeze roll. G. R. Keltie. 1,865,260; June 28.
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Static and interference eliminator control unit for guard-drain circuits. A. G. Anderson. 1,864,882; June 28.
Steam boiler, Mercury condenser water tube. W. A. Jones. 1,864,737; June 28.
Steam generating device. G. H. Chamberlain, jr. 1,864,800; June 28.
Steel retainer. A. G. Slatcher. 1,865,340; June 28.
Steering column setting. A. Moorhouse. 1,865,130; June 28.
Steering gear brace. A. Welikes. 1,865,291; June 28.
Stereoscopic observing instruments, Reference and subsidiary marks in. J. W. French. 1,864,899; June 28.
Stock support bracket, Adjustable. L. Lehner. 1,864,840; June 28.
Stocking. E. B. Mosser. Des. 87,276; June 28.
Stogie beading device. J. F. Halstead. 1,864,727; June 28.
Stone, Abrasive. G. R. Rayner. 1,864,616; June 28.
Stone plates of fibrous materials and hydraulic cement, Manufacturing artificial. R. Kunz. 1,864,833; June 28.
Stop, Power. C. Heuze. 1,864,820; June 28.
Storage system, Vehicle. S. E. Buettell. 1,864,711; June 28.
Strand supplying and distributing apparatus. G. A. Seeley. 1,864,558; June 28.
Stream line return header for tubes. T. B. Fisher. 1,865,181; June 28.
Stretcher, Necktie. W. H. Wilson. 1,864,705; June 28.
String. J. and S. Saladino. 1,865,214; June 28.
Strip feed mechanism, Perforated. A. S. Howell. 1,865,107; June 28.
Submarine or submersible boat. S. Lake. 1,864,837; June 28.
Suction cleaner. H. B. White. 1,864,782; June 28.
Suit, Bathing. N. L. Martz. 1,865,029; June 28.
Support. B. S. Gallagher and W. J. Emmons. 1,864,814; June 28.
Support, Book. B. E. Dahlgren. 1,864,807; June 28.
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Swatch device. S. Lewis. 1,865,377; June 28.
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Switch device. F. P. Forss. 1,864,532; June 28.
Switch lock. E. Nordhem. 1,864,548; June 28.
Switch means. H. I. Morris. Re18,507; June 28.
Synchronizing system. L. M. Potts. 1,865,136; June 28.
Synchronizing system. T. A. Smith. 1,864,560; June 28.
Synchronizing system for television apparatus. C. W. Jeffries. 1,865,190; June 28.
Synchroscope, High frequency. A. M. Nicolson. 1,864,753; June 28.

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Tables, Device for cleaning traveling. C. Heuze. 1,864,821; June 28.
Take-up device for flexible conductors. C. J. Coberly and E. S. Croasdale. 1,864,891; June 28.
Take-up device for telephone, floor lamp, and other wires. H. Allen. 1,865,069; June 28.
Tank: *See*—
Car tank.
Tank construction. C. M. Pritchard. 1,864,931; June 28.
Tank construction, Storage. T. G. Myers. 1,864,927; June 28.
Tank for toilets, Flush. H. F. Weaver. Des. 87,283; June 28.
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Tanks and reducing the molten glass to granules, Method and apparatus for simultaneously emptying glass. R. Gorsuch. 1,865,367; June 28.
Tanks, Automatic shut-off for. V. A. Radomski. 1,865,387; June 28.
Target thrower. J. A. Dickerman. 1,865,173; June 28.
Telegraph, Printing. A. T. MacCoy. 1,865,264; June 28.
Telephone exchange system. R. L. Stokeley. 1,864,955; June 28.
Telephone signaling arrangement. W. H. Edwards. 1,864,646; June 28.
Telephone signaling systems. W. H. Edwards. 1,864,645; June 28.
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Telephone system. E. Horn. 1,865,187–8; June 28.
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Telephone system. F. Wolf. 1,865,156; June 28.
Telephone system, Automatic. M. Mathias. 1,865,201; June 28.
Telethermometer, Humidity affected. C. H. Kuhlman. 1,864,744; June 28.
Temperature-sensitive element, Producing a. N. B. Pilling and R. E. Bedworth. 1,865,208; June 28.
Tester. T. and J. R. Ray. 1,865,047; June 28.
Testing machine, Universal. A. J. Amsler. 1,865,070; June 28.
Thermionic device. J. E. Foster. 1,864,591; June 28.
Thermostat. J. A. Spencer. 1,865,219; June 28.
Three circuit foot switch. I. R. Danuff. 1,865,237; June 28.
Timer for photo-timing machines, Automatic. C. Doino. 1,865,397; June 28.
Tin-plate, Wet cleaning. R. E. Zimmerman. 1,865,417; June 28.
Tire inflation device. S. Johnson, jr., R. L. Morrison, and A. R. Leukhardt. 1,865,110; June 28.
Tire, Nonskid. R. B. Respess. 1,864,939; June 28.
Tobacco, Conditioning. R. D. Touton. 1,865,154; June 28.
Tobacco feed belt for cigarette machines. A. Podmore. 1,864,758; June 28.
Tobacco feed control, Automatic. W. J. Hawkins and A. E. Wiener. 1,864,728; June 28.
Toilet flush, Sanitary. C. W. Jenkins and E. B. Bishop. 1,864,827; June 28.
Tong, Electric welding. C. E. Hall. 1,865,003; June 28.
Tool and power converting attachment therefor, Portable power driven. F. O. Paul. 1,864,549; June 28.
Tool, Cutting or marking. M. C. Eldredge. 1,865,242; June 28.
Tool, Gear cutting. L. D. Slade. 1,865,148; June 28.
Tool, Re-loading. G. F. Zimmerman. 1,864,880; June 28.
Tools, dies, and the like and resultant product, Preparing wearing surfaces for. A. F. Fifield. 1,864,590; June 28.
Top, Spinning. W. W. McCall. 1,864,843; June 28.
Torches, Preventing popping of. C. Mott and G. G. Spencer. 1,865,033; June 28.
Torpedo, Tail. J. H. Hammond, jr. 1,865,101; June 28.
Tower, Dual element cooling. N. O. Fleming. 1,864,898; June 28.
Toy electric railway and apparatus therefor. L. W. Rosenthal. 1,865,278; June 28.
Toy electric railways, System of control for. L. W. Rosenthal. 1,865,276; June 28.
Toy railways, Track for. L. W. Rosenthal. 1,865,277; June 28.
Toy typewriter. S. A. Thompson. 1,865,288; June 28.
Traction member for automobile tires and the like. R. B. Respess. 1,864,938; June 28.
Tractor, Marine. E. Johnson. Des. 87,263; June 28.
Traffic controlling device. A. H. Kinghorn, jr. 1,865,193; June 28.
Transfer. H. S. Sadtler. 1,865,215; June 28.
Transformer, Coordinate. W. Bauersfeld. 1,864,576; June 28.
Transmission apparatus. L. F. Meunier. 1,864,844; June 28.
Transmission, Hydraulic. J. S. Wentworth. 1,864,568; June 28.
Transmission mechanism for motor vehicles. F. M. Bartelme. 1,864,522; June 28.
Transmission shifting device for vehicles having two engines. P. S. Eckland and G. Ryden. 1,864,644; June 28.
Trap. Z. Polaire. 1,865,044; June 28.
Tray and lamp standard, Combination. E. Ziegler. Des. 87,285; June 28.
Tread elements for vehicle tires, Manufacture of. R. B. Respess. 1,864,937; June 28.
Treater using high tension reactance. H. F. Fisher. 1,864,723; June 28.
Treeing jack. J. D. Krive. 1,865,019; June 28.
Truck, Railroad. G. F. Starbuck. 1,865,220; June 28.
Tube: *See*—
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Turbine and method of burning fuel, Combustion. C. N. Koch. 1,864,742; June 28.
Turbine and method of feeding and burning fuel, Combustion. C. N. Koch. 1,864,741; June 28.
Turbine, Elastic fluid. O. Junggren. 1,865,257; June 28.
Turbine generator installation. O. Junggren. 1,865,258; June 28.
Typewriter. R. Attl. 1,864,521; June 28.
Typewriter. O. A. Hokanson and J. F. Koca. 1,864,594; June 28.
Typewriting, bookkeeping and card-perforating machine, Combined. F. K. Davis. 1,864,714; June 28.
Typewriting machine. W. F. Helmond. 1,864,540; June 28.
Typographical machine. H. A. Burt. 1,864,799; June 28.
Universal joint. A. G. Bowen. 1,865,300; June 28.
Upholstery construction. A. M. Bank. 1,864,514; June 28.
Utensil, Scouring. E. S. Bradford, jr. 1,864,579; June 28.
Vacuum cleaner and burner, Combination. J. S. Bessent. 1,864,633; June 28.
Valve. J. E. Jones. 1,864,596; June 28.
Valve. R. J. McCarty, jr. 1,864,605; June 28.
Valve bags, Apparatus for filling. E. A. Marsh. 1,864,545; June 28.
Valve, Electrical controlled. C. S. Jarrell and A. M. Webb. 1,865,058; June 28.
Valve for syrupers, Filling. A. P. Arzino. 1,865,227; June 28.
Valve, Gas. A. Lenktis. 1,864,917; June 28.
Valve opening and closing apparatus, Power operated. C. E. Jones. 1,864,653; June 28.
Valve operating mechanism for internal combustion engines. H. J. Howard. 1,864,735; June 28.
Valve, Pump. S. F. Brown. 1,864,520; June 28.
Valve stem, Tire. R. E. Buck. 1,865,231; June 28.
Vaporizer. F. J. Curran. 1,864,980; June 28.
Variable load brake. U. A. Whitaker. 1,865,068; June 28.
Vehicle and sleeping berth construction. D. E. Austin. 1,864,710; June 28.
Vehicle construction. R. E. Wells. 1,864,625; June 28.
Vehicle, Self loading. W. S. Howard. 1,865,318; June 28.
Vehicle, Traction. R. T. Osman. 1,865,133; June 28.
Vehicles for the protection of pedestrians and the vehicle itself, Automatic device for horseless. H. Karl. 1,865,014; June 28.
Veneers to backings and drying them, Gluing wet. A. Elmendorf. 1,864,812; June 28.
Ventilator. H. Kuckuck. 1,864,743; June 28.
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Vernier. W. L. Egy. 1,864,895; June 28.
Vernier for reading graduated circles. W. L. Egy. 1,864,896; June 28.
Vibration creating means. W. A. Buckner. 1,864,975; June 28.
Vibrations, Counteracting torsional. R. K. Lee. 1,865,116; June 28.
Vulcanization accelerator. G. L. Magoun. 1,865,265; June 28.
Vulcanizing, Apparatus for and method of. H. V. Wodtke. 1,865,416; June 28.
Wall plate structure for furnaces. H. C. Lord. 1,864,601; June 28.
Wall plate structures for furnaces, Forming. H. C. Lord. 1,864,600; June 28.
Washer for countersunk screws, Lock. C. G. Olson. 1,865,132; June 28.
Washer for wrist watches, Stop. L. S. Hanson. 1,865,249; June 28.
Watch or clock movement, Power-wound. L. K. Malvern. 1,865,379; June 28.
Water cooler, Drinking. O. S. McGaffey. 87,272–3; June 28.
Water heater, Instantaneous electric. J. A. C. Bodenstab. 1,864,887; June 28.
Waterproof cartridging for explosives. R. L. Hill. 1,864,905; June 28.
Water treating and storage apparatus. B. S. Snow. 1,864,866; June 28.
Watthour meter, Stroboscopic. H. P. Sparkes. 1,864,677; June 28.
Weatherstrip for sliding closures. H. B. Foresman. 1,864,994; June 28.

Webs or flexible material, Slitting. J. A. Cameron, 1,865,302; June 28.
Weighing apparatus with a load balancing lever. R. Joksch. 1,864,831; June 28.
Wet machine for insulating board. J. A. Wiener and J. B. Harmon. 1,864,784; June 28.
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Wheel dresser, Grinding. R. S. McConnell. 1,864,658; June 28.
Wheels, Making disk. H. A. Greenwald. 1,865,185; June 28.
Winding machine. D. G. Baker. 1,865,075; June 28.
Window display device. J. D. Futch. 1,865,182; June 28.
Window operator, Awning type. E. F. Wiley. 1,864,970; June 28.
Window structure, Metal. A. G. Siebenlist. 1,864,559; June 28.
Window swinging means, Casement. D. J. Barker. 1,864,790; June 28.
Wiper, Windshield. R. Acierno. 1,865,158; June 28.
Wiper, Windshield. H. D. Reynolds. 1,864,618; June 28.
Wrapping machine. S. Cooper. 1,865,084; June 28.

CLASSIFICATION OF PATENTS

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Notices of Cancellation

U. S. PATENT OFFICE, *Washington, D. C., May 21, 1932,*

The Dryzol Chemical Co., their assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Lysol, Incorporated, of Bloomfield, N. J., to effect the cancellation of the trade-mark registration of The Dryzol Chemical Co., of 544 Broadway Buffalo, N. Y., No. 140,368, dated March 15, 1921, and the notice of such proceeding sent by registered mail to The Dryzol Chemical Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless The Dryzol Chemical Co., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 24, 1932.*

Dr. J. A. Walsh Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Gladys V. McCune, of Hotel Ambassador, 51st Street and Park Avenue, New York, N. Y., to effect the cancellation of the trade-mark registration of Dr. J. A. Walsh Co., of 2414 Washington Street, Boston, Mass., No. 96,760, dated April 28, 1914, and the notice of such proceeding sent by registered mail to the said Dr. J. A. Walsh Co. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Dr. J. A. Walsh Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 16, 1932.*

Paul G. Lewis, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the Haller Baking Company, of North Denniston Avenue, Pittsburgh, Pa., to effect the cancellation of the trade-mark registration of Paul G. Lewis, of 1635 La Brea Avenue, Los Angeles, Calif., No. 183,932, dated May 13, 1924, and the notice of such proceeding sent by registered mail to the said Lewis at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Lewis, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Adjudicated Patents

(C. C. A. Ohio.) Towers patent, No. 1,322,975, for automobile side and door curtain, claims 5–13 *Held* invalid. *Ford Motor Co.* v. *Ohio Stamping & Engineering Co.*, 56 F.(2d) 807.

(C. C. A. Ohio.) Clasen patent, No. 1,351,326, for railway side frame, *Held* invalid. *Bettendorf Co.* v. *Ohio Steel Foundry Co.*, 56 F.(2d) 777.

(C. C. A. Ohio.) Blackmore patent, No. 1,437,390, for lock for automobiles and the like, claims 1–10, 22–29 *Held* invalid. *Blackmore* v. *Ford Motor Co.*, 56 F.(2d) 806.

(D. C. Calif.) Petzoldt patent, No. 1,584,644, for power lift implement, *Held* valid and infringed. *Dinuba Steel Products Corporation* v. *Killefer Mfg. Corporation*, 56 F.(2d) 848.

(D. C. Calif.) Parker reissue patent, No. 16,297, for control for electric elevators, claims 3, 22, 29, 37, 40, 41, and 65 *Held* not infringed. *Otis Elevator Co.* v. *Pacific Finance Corporation*, 56 F.(2d) 850.

Condition of Applications Under Examination at Close of Business May 21, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 76,494; Trade-Mark Division, 945. Oldest new case, Oct. 21, 1931; oldest amended, Oct. 23, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
5624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	†Feb. 8	†Feb. 19	530
5708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Dec. 21	†Jan. 2	1,088
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Feb. 5	†Feb. 5	753
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Feb. 19	†Feb. 25	574
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 31	Dec. 31	410
4898 C	6. LEWERS, A. M., Carbon Chemistry	Nov. 9	Nov. 11	1,949
5725	7. JARBOE, C. O., Optics; Photography	Dec. 16	Dec. 16	1,534
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 10	Dec. 12	1,251
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Feb. 13	†Feb. 12	858
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Dec. 7	Dec. 15	958
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Jan. 15	†Jan. 26	609
7701	12. HENRY, C. C., Machine Elements	†Jan. 28	†Jan. 28	634
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 2	†Jan. 2	1,164
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Feb. 5	†Feb. 8	774
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 12	Dec. 12	2,050
5612	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 23	†Jan. 26	899
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Nov. 21	Nov. 25	1,371
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 26	Dec. 26	838
4006	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Nov. 2	Nov. 6	1,752
5613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 29	†Feb. 1	655
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	†Jan. 12	†Jan. 13	935
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Jan. 19	†Feb. 15	613
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 30	Nov. 6	953
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 31	Dec. 28	732
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators, Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 30	Dec. 1	1,576
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Nov. 27	Nov. 25	946
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	†Jan. 5	†Jan. 5	965
4628	28. BENSON, A. R., Internal-Combustion Engines	Nov. 21	Nov. 21	1,403
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Oct. 23	Oct. 23	995
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 25	†Jan. 22	886
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Nov. 16	Nov. 16	1,558
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 20	†Jan. 16	1,006
5096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Nov. 21	Nov. 21	2,399
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Dec. 21	Dec. 21	907
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Apr. 1	†Apr. 5	447
7528	36. MORTON, O. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Nov. 23	Nov. 21	1,783
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 30	Dec. 3	1,375
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 8	†Mar. 4	304
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 23	Nov. 23	1,535
7880	40. OBERLIN, J. J., Receptacles	Dec. 14	Dec. 17	2,004
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	†Feb. 4	†Feb. 15	795
5882	42. CUTTING, H. O., Electric Signaling	Nov. 17	Nov. 13	1,462
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 22	Dec. 22	1,450
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 21	Oct. 31	1,836
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Jan. 7	†Jan. 7	1,239
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	†Jan. 2	†Jan. 8	736
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Dec. 21	Dec. 21	2,116
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Dec. 4	Dec. 3	974
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 2	Nov. 4	1,575
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Nov. 10	Nov. 18	2,121
5628	51. BACKUS, C. D., Radiant Energy	Dec. 16	Dec. 16	1,280
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Feb. 4	†Feb. 15	814
5897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 23	†Feb. 26	595
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Nov. 11	Nov. 11	1,148
6883	55. BOWEN, S. T. {Bread, Pastry, and Confection Making; Cutlery	†Apr. 7	†Apr. 7	230
	{Designs	†Apr. 27	†May 6	170
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 3	Dec. 5	1,483
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 24	†Jan. 2	677
5605	58. DOWELL, E. F., Abrading; Typewriting	Nov. 16	Nov. 16	1,377
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 17	Nov. 21	1,615
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Nov. 12	Nov. 13	1,526
5724	61. PARKS, O. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 30	Nov. 17	1,521
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Nov. 21	Nov. 21	1,769
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Nov. 20	Nov. 20	1,474
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Dec. 21	Dec. 22	719
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Nov. 2	Nov. 2	1,819
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND {Trade-Marks	†Apr. 25	†May 11	811
	{Labels and Prints	†Apr. 21	†May 7	1134

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Humphreys

No. 2,798. Decided February 8, 1932

Patentability—Wood-Planing Machines.

Certain claims for a wood-planing machine *Held* unpatentable over the prior art.

Appeal from the Patent Office. Affirmed.

Hatfield, *J.*, dissenting.

Mr. Frank E. Liverance, jr., for Humphreys.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Graham, *P. J.*:

The appellant filed an application in the United States Patent Office on June 30, 1924, for a patent on improvements in wood-planing machines. Several claims were allowed by the Examiner, but claims 14, 15, and 16 were finally rejected by him, and by the Board of Appeals, on appeal. These rejected claims are as follows:

14. A machine of the class described comprising an upper and lower cutter head and means for feeding a distorted board past both cutter heads without changing its distortion or position from the plane in which it enters the machine.

15. A machine of the class described comprising a lower cutter head and an upper cutter head, one arranged in advance of the other in the machine in the order named, an infeed mechanism designed to yieldably grip a distorted board and feed it over the lower cutter head without changing its distortion or position from the plane in which it enters the machine, and means for moving the board under the upper cutter head.

16. A machine of the class described comprising a lower cutter head and an upper cutter head, one arranged ahead of the other in the machine in the order named, a bed located behind the lower cutter head and under the upper cutter head, means for feeding a distorted board over the lower cutter head without changing its distortion or position from the plane in which it enters the machine, and means for pressing the lower surface of the board after it has been planed against the said bed and for feeding said board under the upper cutter head.

The claims were rejected upon a large number of references, it being only necessary to refer specifically to some of them herein.

The alleged invention is a wood-planing machine, which is sufficiently described for the purposes of this decision by the claims above quoted.

The elements of the upper and lower cutter heads, one arranged ahead of the other, and sustaining beds, are shown in the references Hayes of September 28, 1897, No. 590,836, and Luther of June 25, 1901, No. 677,243, and possibly other of the references.

The only novel feature which is claimed is that of feeding a warped or distorted board through between these cutter heads by such means as will hold the board continuously during the planing operation, in the same plane as that in which it enters the machine. This is accomplished in appellant's device by an endless chain of approximately the same width as the bed, the chain being made up of a plurality of links arranged in a mat formation. Each link is provided with a feed finger inclined outwardly from the chain toward the direction of travel. The free ends of the fingers are thrust outward by yieldable springs and the surfaces of the fingers which engage the board are corrugated to provide a better gripping surface for the board. By these means it is claimed the board will go through between the cutter heads without change of position.

On reference to Smith of December 11, 1917, No. 1,249,533, we find that the applicant's feed and flexible fingers are fully anticipated. In fact, the feed fingers are identical. The board of appeals states in its decision that applicant "admits that he uses the Smith flexible feed." The references Billstrom of July 27, 1909, No. 928,930, and Herzog of April 27, 1909, No. 919,351, also show similar flexible feed mechanisms.

It is quite apparent that any of these cited references will feed a distorted board between the cutter heads in exactly the same way that appellant's device will do it. That the conception of such a use was also present is evidenced by the specification of Herzog, where it is said:

> It is a further object to provide mechanism which will feed the strips with a slight pressure thereon which would not tend to bend or spring the board from its natural shape, so that when completed the planed surface will be perfectly straight.
>
> * * * * * * *
>
> * * * The tension of these springs is only sufficient to engage the points of the fingers P with the upper surface of the board to be fitted without in any way springing the board from its natural shape. At the same time, the large number of fingers that are simultaneously engaged with the same board will exert a sufficient driving force to feed the work across the bed of the jointer.

The rejected claims are broad and must be broadly construed. As so construed, we find every element therein anticipated by the references. The appellant admits in his brief that all the elements in his device are old. The combination of these elements constitutes merely an aggregation, in which each element performs its function, heretofore known to the art.

It is argued that this device will produce a board with completely planed, parallel surfaces, and will *complete* its work with a *single* passage of the board through the machine. No such element is included in the rejected claims and we have no way of knowing, even if such knowledge might be used, whether appellant's device would operate any differently in this respect than the elements described in the cited references, as, for instance, if the Smith flexible feed were applied to the double cutter head of Luther.

The decision of the Board of Appeals is affirmed.

Affirmed.

Hatfield, *J.*, (dissenting):

It appears from the decision of the Board of Appeals of the United States Patent Office that the Primary Examiner allowed 10 specific claims for the precise combination claimed by appellant. Those claims do not appear in the record. However, it was agreed by counsel for the parties, at the time of the oral arguments in this court, that claim 6, quoted in appellant's brief, was one of the allowed claims.

The claim reads as follows:

> A machine of the class described comprising a lower and upper cutter head, one arranged ahead of the other in

the machine in the order named, a bed in front of the lower cutter head, an infeed mechanism comprising an endless chain, with yielding fingers projecting therefrom, said mechanism extending over the first named bed, and the forward end of the second named bed, and a feed roller over the second named bed between the said infeed mechanism and upper cutter head.

The only distinction between the involved claims and claim 6, allowed by the Primary Examiner, is that the latter claim describes appellant's alleged invention more specifically than do those involved in this appeal.

No contention was made by the Patent Office tribunals, nor by the Solicitor for the Patent Office, that the involved claims do not define the invention claimed by appellant. On the contrary, each of the tribunals below held that, although appellant's combination of old elements was different from those shown in the references, he had done nothing more than to substitute "one well known feed for another," and that the substitution of the feed disclosed in the patent to Smith "in the machine of Luther or the machines of the other references showing upper and lower cutters will produce applicant's result." I am of opinion that if these statements are true as to the appealed claims, they are applicable to the claims allowed by Primary Examiner.

It is claimed by counsel for appellant that a distorted board may, in appellant's combination, be fed "over the lower cutter head without changing its distortion from the plane in which it enters the machine," and is planed on both sides with only one passage through the machine; and that, therefore, appellant has obtained a new and useful result which could not be obtained by any of the devices shown in the references.

It is conceded by the Solicitor for the Patent Office that appellant's machine planes a distorted board on both sides with only one passage through the machine. The Solicitor contends, however, that, if the—

planing mechanism of Herzog * * * for planing the undersurface of a distorted board be substituted for the first or undersurface planing mechanism of the doublesurface planer of Luther to the left of Luther's rolls A B' of Fig. 2,

the same results would be obtained, and that such a substitution is obvious to one skilled in the art.

The question of whether a new and useful combination of old elements is suggested by the prior art and obvious to one skilled therein, is largely a matter of opinion, concerning which minds may differ.

The Primary Examiner, a technical expert in the art, was of opinion that appellant's combination was a new and useful improvement and required the exercise of inventive genius to perfect it, and, accordingly, allowed 10 claims, which specifically described the invention. It is not contended that the involved claims do not define appellant's invention, nor that they are sufficiently broad to read on any one reference. The sole contention is that appellant's combination, admittedly a new and useful improvement, is suggested by the references and is obvious to one skilled in the art.

I am unable to concur in that contention. Furthermore, the allowance by the Primary Examiner of the specific claims is sufficient, at least, to raise a doubt as to the applicability of the references, and this doubt should be resolved in the applicant's favor. See *In re Englehardt*, 17 C. C. P. A. (Patents) 1244, 40 F.(2d) 760; 400 O. G. 678; *In re Kirschbraun*, 18 C. C. P. A. (Patents) 735, 44 F.(2d) 675, 402 O. G. 8. I am not unmindful of the fact that there may be many cases where broad claims would be unpatentable over a combination of prior art references, although the patentability of specific claims would not be negatived by them. But where, as here, the specific claims include only the same features which are found in the combination of references relied upon by the Patent Office to negative patentability of the broad claims, it seems to me that all of the claims, broad and specific, should either have been allowed or rejected.

Having found that appellant's combination involved invention, and specific claims having been allowed appellant, I am unable to understand why broader claims *defining his invention* should not be allowed.

U. S. Court of Customs and Patent Appeals

IN RE RUNDELL

No. 2,821. Decided February 8, 1932

1. PATENTABILITY—BOTTLE CAPPING MACHINE.

Certain claims for a bottle capping machine *Held* unpatentable over the prior art since the elements thereof are found in such art where they perform exactly the same functions as they perform in appellant's device.

2. SAME—SAME.

A claim for a bottle capping machine *Held* patentable over the prior art since certain elements of the claim are not disclosed therein.

3. APPLICATION—DIVISION.

Division between claims for a bottle capping machine and claims for the crimping head which constitutes an essential element of the machine *Held* improperly required.

APPEAL from the Patent Office. Modified.

LENROOT, *J.*, dissenting.

Mr. Sydney I. Prescott and *Mr. George S. Hastings* for Rundell.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

The appellant filed his application in the United States Patent Office for a patent on certain improvements in a machine for crimping plastic caps on bottles. A large number of claims were attached to the application, many of which were allowed by the Examiner, and claims 1 to 5, 8, 10 to 24, 29, 32 to 35, 37, 39 to 48, 51, 53, 54, and 80 were rejected. The Examiner also required division between claims 55 to 64, inclusive, and 72 to 79, inclusive, and the remaining claims.

On appeal, the Board of Appeals affirmed the decision of the Examiner as to his rejection of all claims except claim 22, which was allowed. The requirement for division was affirmed as to claims 62, 63, and 64, but reversed as to claims 55 to 61, inclusive, and 72 to 79, inclusive. The claims which were rejected were rejected upon the following references: Vause, 599,205, Feb. 15, 1898; Schell, 708,083, Sept. 2, 1902; Brewington, 860,787, July 23, 1907; Valerius, 888,770, May 26, 1908; Thompson, 890,250, June 9, 1908; Westlake, 1,137,820, May 4, 1915; Bradley, 1,160,369, Nov. 16, 1915; Hood, 1,249,399, Dec. 11, 1917; Westlake, 1,252,377, Jan. 1, 1918; Kryzanowsky, 1,447,389; Mar. 6, 1923.

Appellant's device is a machine for successively heating plastic caps for bottles, and applying these caps to the bottles. The novelty which he claims in his device is the fact that in the prior art, as best represented by the reference Westlake, the application of plastic caps to bottles of milk was a slow process, and it is contended that no one up until the time the appellant invented his device had ever disclosed the method of heating a plurality of such plastic caps at the same time, so that the work of capping the bottles could be more speedily accomplished; that Westlake, for example, heated his cap, applied it to the bottle, and then began the process of heating another cap. The appellant's device makes it possible to have a series of caps heating at the same time, so that no time is lost in waiting for another heated cap. It is claimed that by appellant's device he is enabled to increase the speed with which such bottles may be capped, 800 per cent. This seems to be borne out by the disclosures in the record.

The purposes of this decision will be served by quoting the language of claims 1, 21, 47, and 62:

1. The combination with means for progressively heating a plurality of plastic caps, of means for progressively crimping a plurality of heated caps on bottles, and means whereby caps are successively presented to said heating means and said crimping means.

21. The combination with means for progressively heating a plurality of plastic caps, of means for progressively crimpling a plurality of heated caps on bottles, and means whereby caps are successively presented to said heating means and said crimping means, said crimping means including a turret, series of bottle supports and crimping devices carried by said turret, said crimping devices each having a crimping head provided with a series of crimping fingers pivoted thereto and having projecting prongs, means for normally pressing said fingers toward a common center, a ring surrounding said fingers and adapted to engage said prongs to spread said fingers apart when a cap has been crimped on a bottle, means for rotating said turret, and means for actuating said support and fingers during turret rotation.

47. Means for progressively heating plastic caps for bottles, comprising a turret having a series of peripheral slots for supporting a plurality of caps, turret heating means, turret rotating means, and means for successively presenting caps to said slots.

62. A crimping device for plastic bottle caps comprising a crimping head in two parts and provided with a series of radially arranged crimping fingers pivoted between the parts of said head, and an endless spring engaging all the fingers to normally press them toward a common center, and actuating means for said head.

[1] Without going into details more than is thought necessary for the decision of the matter, it is sufficient to say that we have carefully examined the references referred to in connection with the claims in issue, and are satisfied of the correctness of the decision of the Board of Appeals as to all rejected claims, except claim 21, which will be hereinafter more specifically referred to. The basic principles of appellant's combination, as detailed in the said rejected claims, are all found in the references. As it appears to us, all that the appellant has done is to combine elements which were already known to the art. By the combination of these elements he has produced a machine which is a commercial success. However, each element, including the turret heater with peripheral slots, the progressive heating of caps, the progressive capping of bottles, the process of conducting the bottles to the capper and away therefrom, and the transfer of the heated caps from the heater to the capping machine, are all found in the references, and where they are thus found they perform exactly the same functions that they perform in appellant's device. Therefore, according to the clear weight of authority, having assembled elements already known, which do nothing more than perform their formerly known functions, no invention lies in the combination. *In re Bayer*, 17 C. C. P. A. (Patents) 614, 35 F.(2d) 66, 390 O. G. 4; *In re Appleburg*, 17 C. C. P. A. (Patents) 820, 37 F.(2d) 620, 394 O. G. 7; *In re Isherwood*, 17 C. C. P. A. (Patents) 1187, 40 F.(2d) 987, 400 O. G. 225; *In re Whitaker*, 18 C. C. P. A. (Patents) 1011, 47 F.(2d) 380, 408 O. G. 288; *In re Armbruster*, 18 C. C. P. A. (Patents) 1039, 47 F.(2d) 815, 409 O. G. 4.

[2] As to claim 21, however, we are unable to find, in the references cited by the Board of Appeals, a complete anticipation. This claim, as will be seen, includes the element,

a ring surrounding said fingers and adapted to engage said prongs to spread said fingers apart when a cap has been crimped on a bottle.

This claim was rejected by the Board by reference to Brewington, Hood, and Kryzanowsky, in view of Westlake. We are unable to find in the references cited the ring and prong elements referred to in the claim. As these seem to be essential parts of the mechanism, no reason appears why appellant should not have this claim allowed.

[3] Referring now to the requirement to divide claims 62, 63, and 64, this is justified by the solicitor for the Patent Office upon the theory that rules 41 and 42 of said office, having the force and effect of law, permit a discretion in the office as to such divisions. In this connection *In re Butler*, 17 C. C. P. A. (Patents) 810, 37 F.(2d) 623, 394 O. G. 276, and *In re Wellman*, 18 C. C. P. A. (Patents) 1214, 48 F.(2d) 926, 410 O. G. 1057, are cited.

Claims 62, 63 and 64 are framed upon one element only of the appellant's device, namely, the crimping head. This crimping head, however, constitutes an essential element of his combination, or bottle-capping machine. It is minutely described in the specification and is figured in the drawings. It is described in claim 22, allowed by the Board, and in claim 21, herein allowed. While the language used in said claims 21 and 22 is not exactly that which appears in said claims 62, 63, and 64, there is sufficient to show that this crimping head referred to in said claims 62, 63, and 64, is an essential element of a part, at least, of appellant's combination claims. Whether these claims state a patentable subject matter is not now the object of our inquiry. Assuming that they do, if included in a separate application, was a division properly required?

The argument is quite appealing to the court that in all such cases, if the various classes of inventions described in claims filed in the Patent Office, necessarily, in the organization of that Office, must pass

through departments especially set up and equipped with specialists in the lines of said investigations, the work of the Patent Office and of this court would be greatly facilitated by giving to the Office complete discretion in matters of division. However, in view of the authorities, we are not justified in holding this to be the law.

In *Gill* v. *Wells*, 22 Wall. 1, 24, the Supreme Court said:

> Cases arise where a patentee, having invented a new and useful combination consisting of several ingredients which in combination compose an organized machine, also claims to have invented new and useful combinations of fewer numbers of the ingredients, and in such cases the law is well settled that if the several combinations are new and useful, and will severally produce new and useful results, the inventor is entitled to a patent for the several combinations, provided that he complies with the requirement of the Patent Act and files in the Patent Office a written description of each of the alleged new and useful combinations, and of the manner of making, constructing, and using the same.
>
> He may give the description of the several combinations in one specification, and in that event he can secure the full benefit of the exclusive right to each of the several inventions by separate claims referring back to the description in the specification; and if by inadvertence, accident, or mistake, he should fail to claim any one of the described combinations, he may surrender the original patent and have a reissue not only for the combination or combinations claimed in the original, but for any which were so omitted in the claims of the original patent.

In *Steinmetz* v. *Allen*, 192 U. S. 543, 109 O. G. 549, the validity of old rule 41 of the Patent Office, prohibiting the inclusion of two separate patentable matters in one application, was before the court. The rule was held invalid, and while the court held that the right to require a division in the Patent Office was discretionary, it was held that an applicant might describe two inventions in which there was unity, in one application. This case was commented upon by us in *In re Wellman*, supra.

In *Leeds and Catlin Co.* v. *Victor Talking Machine Co.*, 213 U. S. 301, 144 O. G. 1095, an infringement suit, the court said:

> • • • Besides, a patent may embrace more than one invention. *Steinmetz* v. *Allen*, 192 U. S. 543. A process and an apparatus by which it is performed are distinct things. They may be found in one patent; they may be made the subject of different patents. So may other dependent and related inventions. If patented separately a foreign patent for either would not affect the other. Why would such effect follow if they are embraced in the same patent? What policy of the law would be subserved by it? The purpose of §4887 of the Revised Statutes is very clear. It is that whenever an invention is made free to the public of a foreign country it shall be free in this. The statute has no other purpose. It is not intended to confound rights and to make one invention free because another is made so. This will even more distinctly appear in case of a patent for a combination, such as claim 35 is of the patent in suit.
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> A combination is a union of elements, which may be partly old and partly new, or wholly old or wholly new. But whether new or old, the combination is a means—an invention—distinct from them. They, if new, may be inventions and the proper subjects of patents, or they may be covered by claims in the same patent with the combination.

The Circuit Court of Appeals for the Eighth Circuit, in discussing this matter in *Cent. Electric Co.* v. *Westinghouse Elec. & Mfg. Co.*, 191 Fed. 350, said:

> But one who makes several patentable inventions that result in a new and useful machine or process, or both, may have as many separate valid patents as he makes patentable inventions. His is the option to secure all these inventions by a single patent, or by many patents, and the fact that he described all of them in his application or specification for an earlier patent to secure one or more of them, does not invalidate a subsequent patent to him for those inventions there described but not claimed. Robinson on Patents, §465; *Expanded Metal Co.* v. *Bradford*, 214, U. S. 366, 383, 385, 28 Sup. Ct. 652, 53 L. Ed. 1034; *Badische Anilin & Soda Fabrik* v. *A. Klipstein & Co.*, (C. C.) 125 Fed. 543, 544; *Westinghouse Elec. Co.* v. *Dayton Fan & Motor Co.* (C. C.) 106 Fed. 724, 726; *Westinghouse Elec. & Mfg. Co.* v. *Electric Appliance Co.* (C. C.) 142 Fed. 545, 551.

It quite plainly appears here that the element described in claims 62, 63, and 64, namely, the crimping device, is but one element of his combination bottle capping machine and that the appellant is here insisting upon his right to have the inventive character of this element passed upon on this application. No reason is apparent, so long as the inventions are co-related and in unity, why he may not do so. Whether the claims are patentable to the appellant is another matter, and one which, in this case, we feel should be first determined on its merits, by the Patent Office. The mere fact, however, that claims 62, 63, and 64 describe separate inventions from the other claims, does not, in our opinion, justify an involuntary division of them.

It would seem, in view of the references cited below, and of our observations herein, that said claims 62 and 63 might well be rejected and said claim 64 be held to be allowable. However, inasmuch as these claims were not rejected as to this application on these grounds, but by an order requiring a division, we think it the better practice that these claims be referred back to the Patent Office for decision as to their patentability, consistent with the views expressed herein.

The decision of the Board of Appeals is affirmed as to claims 1 to 5, inclusive, 8, 10 to 24, inclusive (except claim 21), 29, 32, 33, 34, 35, 37, 39 to 48, inclusive, 51, 53, 54, and 80, and reversed as to claim 21. The decision of the Board of Appeals in requiring division of claims 62, 63, and 64, is reversed, and the matter is remanded to the United States Patent Office for further proceedings in conformity herewith.

Modified.

LENROOT, *J.*, dissenting:

I am compelled to dissent from that part of the decision of the majority which treats the issue of division as to claims 62, 63 and 64 as an interlocutory order subject to review by this court, and while I agree with the majority that there was error in requiring a division, I cannot do so upon the grounds stated in the opinion for such conclusion.

I agree that combination claims and a claim for a specific element may be included in one application, and that division is not proper where such specific element is an essential element in the combination claims; but I cannot agree that claims 62 and 63 are stated to be, or are in fact, essential elements of claims 21 and 22, as held by the majority. In neither of said claims are the elements described in claims 62 and 63 stated generally or specifically, and it is clear that crimping heads responding to the requirements of combination claims 21 and 22 could be used which do not embody the structure claimed in claims 62 and 63. Therefore, the elements of said last named claims are not essential elements of said claims 21 and 22, and, if nothing more were involved, there would be no abuse of discretion by the tribunals of the Patent Office in requiring a division. However, claim 21, allowed by the majority, does specifically include an element comprising the essential element of claim 64; in fact, the latter part of claim 21 is almost literally the same as claim 64.

As to claims 62 and 63, the elements therein described are stated in almost identical language in claim 18, which claim the majority finds unpatentable.

For these reasons, I agree that there was error by the Board of Appeals affirming the requirement for division as to claims 62, 63 and 64.

The majority opinion, however, seems to treat the requirement for division as an interlocutory order, for it is stated in the opinion, with reference to claims 62, 63 and 64, that "Whether these claims state a patentable subject matter is not now the object of our inquiry", and again "Whether the claims are patentable to the appellant, is another matter, and one which, in this case, we feel should be first determined on its merits, by the Patent Office."

If the order requiring division is an interlocutory order, the rule is well established that we have no jurisdiction to entertain an appeal from it. This rule is so well established that it needs no citation of authority to support it. If the object of our inquiry is not to ascertain whether these claims "state a patentable subject matter", it must be because the majority regards the order requiring division as interlocutory.

Whether an order requiring division of an application is an interlocutory order was considered by the Court of Appeals of the District of Columbia in the case of *In re Frasch*, 20 App. D. C. 298; 100 O. G. 1977 where it was held that it was such an order, from which an appeal would not lie to that court. However, in the case of *Steinmetz* v. *Allen*, 192 U. S. 543, it was held that a requirement for division of an application constituted a final rejection by the Primary Examiner of the claims there involved, from which an appeal to the Board of Examiners in Chief could be taken. It is proper to observe that in this case the Supreme Court referred to the case of *In re Frasch* supra, but did not disapprove it.

Assuming that we may, for the purpose of establishing our jurisdiction to entertain this appeal, regard the decision of the Board of Appeals and that of the Primary Examiner as a final rejection of claims 62, 63 and 64, then it must follow that the claims are before us for action upon their merits, and if the record before us is sufficient for that purpose it is our duty to pass upon the merits. I think the record is sufficient for that purpose, and that, in fact, the majority opinion does in effect pass upon the patentability of the subject matter of claims 62, 63 and 64. Therefore, if this is not an interlocutory order, there is no reason for remanding the case to the Patent Office for further consideration, as the majority decision requires.

Furthermore, appellant in his brief contends that said claims are patentable and states his reasons therefor.

It will be observed that, in allowing claim 21, the majority does so wholly upon the ground that the feature of the ring element is not found in any of the references, and the opinion states: "As these seem to be essential parts of the mechanism, no reason appears why appellant should not have this claim allowed." Therefore, as this element constitutes the essential part of claim 64, and as it or its equivalent is not found in any reference, and this element makes the combination claim 21 patentable, by the same course of reasoning claim 64 is patentable and should be allowed. While I have some misgiving as to the correctness of the conclusion of the majority as to claim 21, I do feel clear that, upon the reasoning of the majority as to the patentability of claim 21, claim 64 should likewise be allowed.

With regard to claims 62 and 63, the structural elements of these claims are specifically described in claim 18, disallowed by the majority. With respect to said claim 18, which is considered in the majority opinion together with certain other claims, the majority state: "As it appears to us, all that appellant has done is to combine elements *which were already known to the art*" and again, "having assembled elements *already known*, which do nothing more than perform their formerly known functions, no invention lies in the combination." (Italics mine.)

If the majority finds all the structural elements described in claim 18 in the references, it must also find the structural elements described in claims 62 and 63 in the references, and therefore said claims are not patentable.

I see no escape from this conclusion. If the structural elements described in claims 62 and 63 are not found in the references, then of course they cannot be found when the same elements are considered in said claim 18.

I therefore come to the conclusion that claims 62 and 63 should be disallowed; if I be wrong in this conclusion, then clearly the majority is in error in disallowing claim 18.

I do not question the power of the court to remand a case to the Patent Office for consideration where the record before us is insufficient for us to make a final determination of the questions within our jurisdiction arising upon the appeal; and in the case at bar, if the record before us was not sufficient to determine the patentability of claims 62, 63 and 64, I should have no objection to the case being remanded for a further consideration of that question by the tribunals of the Patent Office.

My objection to the remand is that a majority of the court has necessarily passed upon the patentability of these claims in affirming the rejection of claim 18 and reversing the Board of Appeals as to claim 21. As heretofore pointed out, if the decision of the majority is right as to claim 18, it is necessarily so because claims 62 and 63 are not

patentable. In order for the majority to arrive at the conclusion that it did, it necessarily found that the elements of claims 62 and 63 were found in the references; otherwise, the claim should have been allowed. As to claim 21, the majority finds this claim allowable solely because of elements found in claim 64, and if claim 21 is allowable for that reason it necessarily follows that claim 64 is also allowable.

While it may be said that the Patent Office should have opportunity to cite further references as anticipating claim 64, the presumption is that in passing upon claim 21 it did cite all of the references which were applicable thereto, and, not having cited any that, in the opinion of the majority, included the elements of claim 64, the inference is that there are none such. Furthermore, I would observe that if upon the remand additional references should be cited establishing the anticipation of claim 64, the same references would render unpatentable claim 21, which the majority allows, because claim 21 is allowed by the majority solely upon the ground that the element claimed in claim 64 is not found in the references cited. With respect to claims 62 and 63 there could, of course, be no occasion for citing further references because the majority agrees with the Patent Office tribunals that the references cited contain all of the elements found in said claims 62 and 63. Under the majority opinion, if this case is remanded, the Patent Office must reject claims 62 and 63 because this court has found, in rejecting claim 18, that all of the elements included in said claims 62 and 63 are old in the prior art, and, unless it can find some new references with respect to claim 64, the Patent Office must allow this claim because this court has found, in allowing claim 21, that the elements of this claim are patentable.

U. S. Court of Customs and Patent Appeals

RIT PRODUCTS CORPORATION *v.* PARK & TILFORD

No. 2,858. Decided February 8, 1932

TRADE-MARKS—DESCRIPTIVENESS.

A mark consisting of the pictorial representation of a woman holding up in her hands a piece of colored clothing and the representation of the same woman holding up in her hands the same garment with the color removed, with the words "Before" and "After" above the respective representations used as a trade-mark for a product for removing color from dyed materials, *Held* not registrable, under the act of 1905, since it is merely descriptive of the goods.

APPEAL from the Patent Office. Reversed.

Mr. George E. Mueller, Mr. Calvin T. Milans, Mr. Joseph Milans, Mr. John J. McLaughlin, Mr. Edward S. Rogers, Mr. Allen M. Reed, and *Mr. William T. Woodson* for Rit Products Corporation.

Mr. Henry M. Wise for Park & Tilford.

HATFIELD, *J.*, dissenting.

GRAHAM, *P. J.:*

On April 27, 1928, the appellee, Park & Tilford, filed its application in the United States Patent Office for registration of a trade-mark used by it in connection with the sale of a product for removing color from dyed materials, which product was sold under the trade-name of "Tintex." The mark proposed to be so registered consisted of a sketch showing a woman holding up in her hands a piece of colored clothing, and immediately to the right the same woman holding up in her hands the same garment, with the color removed. Each figure was inclosed by a border, square with scalloped corners, the right square slightly overlapping the left. Above the first figure was the word "Before" and above the other the word "After." The words "Before" and "After" were disclaimed by applicant, in the Patent Office, apart from the mark.

The appellant, Rit Products Corporation, filed notice of opposition, claiming to be a manufacturer of goods of the same descriptive properties, and that it had used and was using figures of a similar character in advertising its product, and that it would be damaged by the proposed registration.

The Examiner of Interferences dismissed the notice of opposition, which decision, upon appeal, was affirmed by the Commissioner.

The error principally relied upon by appellant is that the mark proposed to be registered is descriptive and not subject to registration under the language of section 5 of the Trade-Mark Act of February 20, 1905 (33 Stat. 724 [15 U. S. C. A. sec. 85]), as follows:

> Provided, That no mark which consists merely • • • in words or devices which are descriptive of the goods with which they are used, or of the character or quality of such goods, • • • shall be registered under the terms of this subdivision.

As early as *Canal Company* v. *Clark*, 13 Wall. 311, 322, 20 L. Ed. 581, the Supreme Court discussed the general subject of trade-mark rights and indicated some, at least, of said rights which might be protected in equity. There it was said:

> • • • The office of a trade-mark is to point out distinctively the origin, or ownership of the article to which it is affixed; or, in other words, to give notice who was the producer. This may, in many cases be done by a name, a mark, or a device well known, but not previously applied to the same article. • • •
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> And there are two rules which are not to be overlooked. No one can claim protection for the exclusive use of a trade-mark or trade-name which would practically give him a monopoly in the sale of any goods other than those produced or made by himself. If he could, the public would be injured rather than protected, for competition would be destroyed. Nor can a generic name, or a name merely descriptive of an article of trade, of its qualities, ingredients, or characteristics, be employed as a trade-mark and the exclusive use of it be entitled to legal protection. • • • He has no right to appropriate a sign or a symbol, which, from the nature of the fact it is used to signify, others may employ with equal truth, and therefore have an equal right to employ for the same purpose.

This doctrine was reiterated in *Beckwith* v. *Com'r*, 252 U. S. 538, 40 S. Ct. 414, 64 L. Ed. 705.

The United States Circuit Court of Appeals of the Eighth Circuit, in *Brennon* v. *Emery-Bird, Etc.*, 108 F. 624, 627, gave this lucid interpretation of the rule:

> • • • It is one of the fundamental rules of the law of trade-mark that words, and even symbols, which are descriptive of the kind, quality, nature, properties, or place of manufacture of an article to which the words are applied cannot be appropriated as a trade-mark, as respects that article, because other persons who manufacture or produce the same article may have occasion to make use of the same words or symbols to describe their own products, and they are entitled to the free use of apt language and symbols for that purpose. No person or corporation can acquire, even by long-continued use, a monopoly of words or signs which are essentially descriptive of the article to which they are applied. If a manufacturer desires to obtain an exclusive right to the use of words or symbols to indicate the origin of his goods, and to identify them, he must choose words or symbols which, as respects the article to which he applies them, are arbitrary or fanciful in the sense that they do not describe its kind, quality, properties, or the place where it is manufactured.

A very illuminating discussion of the equitable rights involved in such matters will be found in *Liggett & Myers Tob Co.* v. *Reid*, 104 Mo. 53, 15 S. W. 843, 24 Am. St. Rep. 313.

Less the words disclaimed, the mark here proposed to be registered discloses to the person who observes it the operation of removing color from a garment. Even to the mere child, or to the person who could not read, this would be the idea conveyed. The mark is, therefore, descriptive "of the character or quality" of the color remover with which the mark is used, just as fully and completely as if the words had been used: "It removes the color." In no respects does this mark distinguish appellee's mark from other goods of the same descriptive properties, for they also will perform a like function.

Some cases decided under the said statute of 1905 strongly suggest the descriptiveness of the mark in question here.

In re Schweinfurter, Etc., 38 App. D. C. 279, 177 O. G. 243 involved a proposed trade-mark consisting of a figure representing an annular ball bearing, interwined with the letters "F & S," which mark was used on ball bearings and similar goods. The court of appeals held the mark to be descriptive.

In *In re Motz Tire & Rubber Co.*, 40 App. D. C. 487, 193 O. G. 513, the proposed mark was a view of a clincher rim with a tire thereon, the word "Cushion," and a perspective view of a portion of an automobile wheel with a tire thereon, passing over an obstruction, with an arrow indicating direction. Disclaimer was filed as to the word "Cushion," the representation of the tire, the arrow, the obstruction, and the ground, apart from the mark. The mark was held to be descriptive.

In re Scholl Mfg. Co., 50 App. D. C. 46, 267 F. 348, 276 O. G. 599, involved the proposed registration of a mark for instep supports, which consisted of a representation of a human hand holding up a foot resting upon an arch support. Disclaimer was filed as to the arch support. The mark was held to be merely descriptive.

While it may be said that these cases do not meet the issue presented, in that the marks in the various cases cited were representations of the goods themselves, still the statute makes no distinction between such cases and those where the quality or characteristics of the goods are described. It would be surely going beyond the legislative intent, when this helpful statute was enacted, to so construe it that one manufacture of a product might, by a registration of a mark under it, prevents all other manufacturers of this product from advertising and making known to the trade, by illustration or otherwise, the qualities, characteristics, and uses of their goods.

The decision of the Commissioner of Patents is reversed, and the opposition will be sustained.

Reversed.

HATFIELD, *J*, dissents.

U. S. Court of Customs and Patent Appeals

WILDHABER *v.* ZIMMERMANN

No. 2,866. Decided February 8, 1932

INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Evidence reviewed and *Held* that Z., who copied the claim in issue from the patent of W., has no right to make that claim and priority should have been awarded to W.

APPEAL from the Patent Office. Reversed.

Mr. Bernard E. Shlesinger for Wildhaber.

Mr. Elmer R. Helferich, Messrs. Nathan, Bowman & Helferich, Mr. Albert F. Nathan, and *Mr. Border Bowman* for Zimmermann.

BLAND, *J.:*

Certain claims of Wildhaber Patent No. 1,653,686, were copied into the application of Zimmermann and became the counts in the interference which was declared. The Law Examiner overruled a motion to dissolve which was made by Wildhaber.

The Examiner of Interferences, after the ruling of the Law Examiner, resumed proceedings in interference, and since the junior party Wildhaber took no testimony and "failed to make sufficient showing why judgment on the record should not be entered against him," granted priority of invention of the subject matter of the counts to Zimmermann.

From the decision of the Examiner of Interferences, Wildhaber appealed to the Board of Appeals of the United States Patent Office, which affirmed the action of the Examiner of Interferences and approved the finding of the Law Examiner.

From the decision of the Board, Wildhaber has appealed to this court.

The two counts in the interference are as follows:

> 1. The method of cutting gears which consists in providing a tool, having a plurality of curved cutting edges arranged in a thread, at least one of which is so shaped as to finish the whole length of a tooth profile, and in rotating said tool in continuous engagement with a gear blank so that a plurality of its cutting edges pass through each tooth space of the blank in each revolution of the blank, while simultaneously imparting a relative feed movement between the tool and blank across the face of the blank.
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> 2. The method of cutting gears which consists in providing a tool having a plurality of cutting portions arranged in a thread, said cutting portions being provided with curved cutting edges, at least two of said cutting edges being so shaped as to finish the whole length of the profiles of the two sides of the teeth of the blank and in rotating said tool in continuous engagement with the blank so that a plurality of its cutting portions pass through a tooth space in each revolution of the blank, while simultaneously imparting a relative feed movement between the tool and blank across the face of the blank.

Concerning the subject matter of the invention and the issue involved, the Board said:

> The counts of the issue relate to a method of cutting gears by the hobbing process wherein the tool or hob and the blank to form the gear are rotated on their axes while a relative feed movement is imparted between the tool and the blank. The method of cutting gears by using a hob is old. The novel feature of the counts is the idea of using a tool at least one of whose cutting edges is "so shaped as to finish the whole length of a tooth profile." On page 4 of his brief Wildhaber states that the only point at issue is whether "Zimmermann uses a tool which has a cutting edge so shaped as to finish the whole length of a tooth profile."

Wildhaber discloses the invention applied to the production of a helical gear and shows a single cutting hob tooth for finishing the cut of a gear tooth profile. He shows other finishing teeth but they operate on other gear teeth profiles. The counts of the issue, however, are not limited to either of these features but are broad in character.

Zimmermann illustrates the cutting of a worm gear. He shows four finishing teeth, F16, F17, F18 and F19, closely positioned and which pass successively through the same groove of the gear being cut.

Wildhaber contends that each of Zimmermann's finishing teeth will cut a facet, that the profile of the gear blank will consist of a series of facets and that it will be impossible for any one of Zimmermann's cutting edges to finish the whole length of a tooth profile.

In the Wildhaber hob there is but one finishing tooth as is shown by the drawings and by the physical exhibits in the case, while in the Zimmermann hob there are four finishing teeth.

It is the contention of Wildhaber that the four finishing teeth of Zimmermann make four cuts in finishing the whole of the tooth profile. Wildhaber says:

We have shown that Zimmermann states that his four identical finishing teeth are arranged in a true helical path and that, as is clear from the experience of men skilled in the art, it is impossible to arranged a number of identical finishing teeth in a helix without having each of these teeth cut a facet on the tooth profile and envelope the tooth profile shape by their composite action.

Zimmermann, in turn, contends in this court (and evidently made the same contention before the Board) that only one of the four finishing teeth makes any cut and that the other three, as long as the first finishing tooth retains its cutting edge, would make no cut whatever and would follow through the groove made by the first finishing tooth. From this standpoint, Zimmermann argues that he has a structure which reads upon the counts, that is to say, that in his structure one finishing tooth is capable of finishing the whole tooth profile.

This is the sole issue. If more than one of Zimmermann's finishing teeth actually cut in the finishing process, then the interference should have been dissolved.

The Examiner, when he declared the interference, evidently believed that for some reason Zimmermann could make the counts. The Law Examiner affirmatively so held and the Board took the same position.

It seems that the Board in deciding that a single finishing tooth of Zimmermann might finish the entire profile, relied upon a statement which it quotes from the Zimmermann specification as follows:

leaving the ultimate cuts to be made, as before, by the finally-acting undistorted tooth or teeth employed solely for finishing cuts as distinguished from roughing cuts.

After the Board had rendered its decision, Wildhaber filed a very long and persuasive petition for rehearing in which he states he has clearly shown to the Board that Zimmermann's hob does not respond to the language of the counts. He submitted, in his petition for rehearing, drawings of the structures, and the petition recounts that he submitted an affidavit by Mr. Allen H. Candee, the holder of several patents on gear hobbing and the author of numerous treatises on this subject, which show that Zimmermann's hob having four finishing cutting teeth, formed the worm thread profile by a series or aggregation of cuts made by the four teeth.

In appellant's petition is found the following:

If the Board remains still unconvinced after consideration of this showing, we ask that this petition be considered a motion to restore jurisdiction to the Examiner of Interferences that an opportunity may be afforded Wildhaber to show by models, as well as sketches and drawings and the testimony of experts that the process illustrated in Zimmermann's drawings does not conform to the invention of this interference. • • •

The Board of Appeals, in overruling the motion and petition for a rehearing, stated:

It is well settled that a party to an interference may not prosecute the interference to a final adverse decision on priority and then have the case remanded and reopened for the introduction of evidence except under extraordinary circumstances and in accordance with the rules governing the introduction of newly discovered evidence. This does not appear to be such a case and the evidence is not alleged to be newly discovered. • • •

We are not satisfied that our decision is in error or that a different conclusion would result if a rehearing were granted.

No error is assigned by appellant on the action of the Board in refusing to grant the motion and petition for rehearing or in refusing to consider the showing made in such petition. The affidavit referred to in the petition is not in the record before us.

The Board of Appeals, in its decision denying the motion and petition for rehearing, further said:

• • • Moreover, such evidence, if it established petitioner's contention that the various tribunals of this Office are in error regarding the operation of a plurality of finishing teeth, would not be decisive of the case *since we have held that Zimmermann's specification discloses the use of either a single finishing "tooth" or a plurality of finishing "teeth."* [Italics ours.]

As we understand the contention of appellee in this court, it is to the effect that Zimmermann taught the use of more than one finishing tooth, but he contends that the first tooth would do all the finishing until it became dull, and that the other finishing teeth would merely follow through the space made by the first tooth and would not function until the first tooth had for some reason ceased to operate. We do not understand that appellee contends here that Zimmermann has disclosed the use of a single finishing tooth in any other way than is above indicated. This being true, it seems to us, as we have hereinbefore stated, that the determination of the issue in the case here depends upon whether or not more than one of the Zimmermann finishing teeth actually cut in the finishing operation. If they do, Zimmermann did not disclose or teach that a single tooth could do the work of finishing.

The case was very earnestly and ably argued in this court and much time was devoted to explaining special drawings emphasizing the operation not only of the devices in controversy but other related ones as well. Appellant's counsel, in great detail, pointed out and demonstrated that the four cutting teeth of Zimmermann could operate in no other way than for each to take out a small portion of the metal when it revolved.

Appellee's counsel here conceded that this was the issue, and reiterated the statement that the first finishing tooth would do the finishing and that the other three would follow through and take no cut as long as the first finishing tooth maintained its cutting edge. The statement carries with it no convincing force. It was not persuasive when made and is no more so now, after much consideration of it. It is merely the assertion of a claimed fact not supported by any convincing proof or argument. Certainly appellee's counsel pointed out nothing in the nature or arrangement of these teeth that would cause them to so perform. It seems to us that appellee's statement of the manner of the operation of the teeth is fundamentally wrong. We cannot see how it would be possible to use a hob having four identical teeth arranged in the same thread and rotating in engagement with a rotating gear blank, having the feed movement it is conceded to have, without each of the teeth performing part of the function of making the finishing cuts, and it would furthermore seem to us that the tooth profile, thus produced, would result from the successive finishing cuts of all the finishing teeth of the tool. We think the fundamental character of the device requires that it so perform and that it is on account of this fact that appellee's counsel was unable to convincingly explain how and why it would otherwise perform.

With the Board's conclusion that Zimmermann taught the use of but one tooth (which is the teaching of Wildhaber) we must disagree. We do not think the quoted portion of the Zimmermann specification means to suggest that one tooth could completely finish the profile. He does point out that a "tooth" takes a cut in finishing, but this is not saying that this tooth completely finished it or that no other tooth performed part of the finishing cutting operation. If Zimmermann intended to have one active finishing tooth and three dormant accessory finishing teeth, which latter teeth merely followed through and were only to perform a function when the first one failed, and if they were so provided for the purpose of extending the life of the hob, it seems strange that he would not have so explained it in his specification. It seems unlikely that he would have shown these teeth in the drawings and referred to them in the specification without pointing out this new and unusual feature. Furthermore, the discussion of the operation of his device as a whole in his specification leads us to the conclusion that he at no time intended to teach the use of a single tooth for making all the cuts required for finishing the profile. In Zimmermann's specification he says:

the last four teeth F19, F18, F17, F16, (the ones last acting to cut) need no deformation but may be preserved intact in the hob and used as finishing teeth.

Appellant has pointed out that if Zimmermann had meant by the phrase quoted by the Board, and set out earlier herein, that he might only use one "tooth," in his hob and shape it so that it would finish the whole length of the tooth profile, he would have used the phrase "cut or cuts" in each instance where he used the word "cuts" so as to give the meaning contended for of his phrase "tooth or teeth." This seems plausible to us and especially in view of Zimmermann's use of the word "tooth" in other portions of his specification.

In the decision of this case we have not found it necessary to refer to the prior art as shown by several patents contained in the record.

We conclude that the Board erred in affirming the action of the Examiner of Interferences in awarding priority of the counts in issue to the appellee herein. The interference should have been dissolved. The decision of the Board of Appeals is reversed.

Reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,089,405, W. S. Ferguson, Reenforced-concrete dock or pier, C. C. A., 6th Cir., Doc. 5866, *Wabash Rwy. Co.* v. *The Dock & Terminal Engineering Co. et al.* Patent held not infringed Mar. 11, 1932.

1,128,292. (See 1,231,764.)

1,130,614, F. Kohnle, Price tag; 1,197,037, same, Printing and severing device for ticketing machine, filed Feb. 23, 1932, D. C., E. D. Pa., Doc. 6987, *The Monarch Marking System Co.* v. *Soabar Co.*

1,141,402 (a), R. D. Mershon, Electrolytic apparatus employing filmed electrodes; 1,784,674, same, Film formation and operation of electrolytic condensers, etc., filed Apr. 5, 1932, D. C., S. D. N. Y., Doc. E 66/295, *R. D. Mershon et al.* v. *Polymet Mfg. Corp.*

1,141,402 (b), R. D. Mershon, Electrolytic apparatus employing filmed electrodes, filed Apr. 6, 1932, D. C., S. D. N. Y., Doc. E 66/298, *R. D. Mershon et al.* v. *Condenser Corp. of America.*

1,197,037. (See 1,130,614.)

1,220,416, J. J. Gray, jr., Process of making ferrophosphorus, C. C. A., 6th Cir., Doc. 5851, *J. Warner* v. *Tennessee Products Corp.* Decree modified Apr. 5, 1932.

1,231,764, F. Lowenstein, Telephone relay; 1,426,754, R. C. Mathes, Circuits for electron discharge devices; 1,128,292, E. H. Colpitts, Electric wave amplifier; 1,504,537, H. D. Arnold, Power limiting amplify device, appeal filed Apr. 31, 1932, C. C. A., 2d Cir., Doc. —, *Western Electric Co., Inc.*, v. *S. Wallerstein.*

1,277,600, 1,625,414, G. Kammerer, Tool for cutting and removing pipe from wells; 1,625,391, Reilly and Stone, same, filed Mar. 23, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E W-65-M, *Kammerer Corp et al.* v. *Allen-Oliver Co., Inc.*

1,283,109. (See 1,644,496.)

1,320,384, Godbold and Fletcher, Drill cutter, D. C., S. D. Calif. (Los Angeles), Doc. E T-54-C, *Hughes Tool Co.* v. *Abegg & Reinbold Co.* Dismissed without prejudice Feb. 10, 1932.

1,334,560. (See 1,644,496.)

1,351,326, C. J. Clasen, Railway side frame, C. C. A., 6th Cir., Doc. 5808, *The Bettendorf Co.* v. *Ohio Steel Foundry Co.* Patent held invalid Mar. 11, 1932.

1,379,008. (See 1,644,496.)

1,383,035, C. R. Short, Bearing shims, appeal filed Mar. 31, 1932, C. C. A., 2d Cir., Doc. —, *General Motors Corp. et al.* v. *Lehr Auto Supply Co., Inc.*

1,402,685, 1,406,913, P. J. Timberlake, Holders for electric lights, filed Apr. 7, 1932, D. C., S. D. N. Y., Doc. E 66/313, *Eagle Electric Mfg. Co., Inc.*, v. *Rodale Mfg. Co., Inc.*

1,406,913. (See 1,402,685.) 1,416,478. (See 1,614,167.)

1,416,876, D. B. Replogle, Dust collection for pneumatic cleaner, filed Apr. 7, 1932, D. C., N. D. Ohio, W. Div., Doc. E 1261, *Air-Way Electric Appliance Corp* v. *The Lasalle & Koch Co. et al.*

1,426,754. (See 1,231,764.) 1,441,888. (See 1,644,496.)

1,476,804, M. G. de Simone, Denominator and adding machine, C. C. A., 2d Cir., Doc. 11801, *M. G. de Simone* v. *R. H. Macy & Co., Inc.* Decree reversed (notice Apr. 5, 1932).

1,504,537. (See 1,231,764.) 1,579,497. (See 1,644,496.)

1,583,564. (See 1,644,496.)

1,587,428, R. W. Scott, Seamless stocking; Re. 16,795, same, Stocking and the manufacture thereof, filed Apr. 7, 1932, D. C., S. D. N. Y., Doc. E 66/312, *Scott & Williams, Inc.*, v. *R. H. Macy & Co., Inc.*

1,593,302, E. B. Hiatt, Basket liner, D. C., M. D. Pa., Doc. E 660, *Carpenter-Hiatt Sales Co.* v. *Rice, Trew & Rice.* Dismissed (notice Apr. 7, 1932).

1,614,167, G. D. Wilkinson, Broiler oven; 1,416,478, J. F. Lamb, Range, filed Apr. 4, 1932, D. C., M. D. Tenn. (Nashville), Doc. E 503, *Cribben & Sexton Co. et al.* v. *Phillips & Buttorff Mfg. Co.*

1,618,541, J. A. Long, Method of and apparatus for manufacturing chamfered pipe and nipple blanks, filed Jan. 15, 1932, D. C., E. D. Pa., Doc. 6919, *J. A. Long* v. *S. S. Fretz, Jr. & Co.*

1,625,391. (See 1,277,600.) 1,625,414. (See 1,277,600.)

1,640,729. (See 1,644,496.)

1,644,496, L. L. Scott. Oil burner; Re. 17,405, 1,640,729, same, Oil burning heating system; 1,334,560, same, Combustion system; 1,283,109, A. Doble, System of automatic regulation for steam driven automobiles; 1,379,008, A. B. Frenier, Temperature producing mechanism and controlling means therefor; 1,441,888, Scott and Staley, Combustion system; 1,579,497, L. I. Aldrich, Safety control mechanism for electrically controlled fuel burning device; 1,583,564, same, Liquid fuel atomizer, filed Apr. 7, 1932, D. C., N. D. Ohio, E. Div., Doc. 4220, *The Cleveland Trust Co.* v. *H. B. Gove.*

1,720,301, 1,720,302, E. F. Suter, Hair drying, D. C., S. D. N. Y., Doc. E 56/118, *Eugene, Ltd.*, v. *The Chas. Arnao Co., Inc.* Dismissed (notice Apr. 6, 1932).

1,720,302. (See 1,720,301.)

1,725,500, V. P. Writer, Tam pressing machine, C. C. A., 2d Cir., Doc. 11924, *Anderson & Writer Corp.* v. *Hanky Beret, Inc. & et al.* Decree affirmed (notice Apr. 5, 1932).

1,733,451, A. E. Dixon, Lamp shade and process of making same, filed Feb. 29, 1932, D. C., E. D. Pa., Doc. 6995, *Rembrandt Lamp Corp.* v. *A. Sherer (Patent Lamp Shade Co.).*

1,748,836, M. Falkovitz, Pocket construction for trousers, filed Mar. 2, 1932, D. C., E. D. Pa., Doc. 7707, *M. Falkovitz* v. *Perfect Trouser Co.*

1,752,331, F. C. Fantz, Return bend, filed Apr. 6, 1932, D. C., S. D. Ohio (Dayton), Doc. E 327, *Stockham Pipe Co. et al.* v. *The Ohio Steel Foundry Co.*

1,770,865, T. M. Royal, Method of manufacturing bags, filed Apr. 4, 1932, D. C., E. D. N. Y., Doc. E 6197, *Royal Allen-Mair, Inc.*, v. *Continental Paper & Bag Corp.*

1,782,366, W. Palmer, Method of and apparatus for producing fire-extinguishing foam, filed Jan. 23, 1932, D. C., E. D. Pa., Doc. 6925, *Amdyco Corp.* v. *National Foam System, Inc.*

1,784,674. (See 1,141,402 (a).)

1,796,093, I. Fiorman, Rear view mirror for automobiles; Des. 81,345, F. N. Mariani, Mirror stand, filed Apr. 7, 1932, D. C., S. D. N. Y., Doc. E 66/311, *E. A. Laboratories, Inc.*, v. *Yankee Metal Products Corp.*

1,827,598, A. G. Merriman, Moving picture cabinet, filed Apr. 7, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4219, *A. G. Merriman* v. *The Sparks Withington Co.*

1,839,871, S. Fisher, Display construction, filed Apr. 7, 1932, D. C., E. D. Ill. (Danville), Doc. 387–D, *L. Cohn et al. (Display Products Co.)* v. *E. W. Gasthoff et al.*

1,843,699, A. E. Sierad, Closure for containers, filed Apr. 6, 1932, D. C., S. D. N. Y., Doc. E 66/297, *G. W. Button Corp.* v. *Park & Tilford.*

1,850,902, R. E. Thompson, Safety razor blades, filed Apr. 2, 1932, D. C., S. D. N. Y., Doc. E 66/266, *Gillette Safety Razor Co.* v. *Segal Lock & Hardware Co., Inc.*

Re. 16,074, A. Wahle, Rotary pump, appeal filed Nov. 27, 1931, C. C. A., 3d Cir., Doc. 4779, *Westco-Chippewa Pump Co.* v. *Delaware Electric & Supply Co. et al.*

Re. 16,795. (See 1,587,428.)

Re. 16,865, L. R. Smith, Oil refining still and method of making same by electric welding, D. C., N. D. Ohio, E. Div., Doc. 2992, *A. O. Smith Corp.* v. *The Petroleum Iron Works Co.* Claims 3, 5, 6, 14, and 16 held invalid Apr. 4, 1932.

Re. 17,342, A. Penn, Automatic air volume controlling device for water storage tanks, appeal filed Apr. 5, 1932, C. C. A., 8th Cir. (St. Louis), Doc. 9490, *Penn Electric Switch Co.* v. *Luthe Hardware Co. et al.*

Re. 17,405. (See 1,644,496.) Des. 81,345. (See 1,796,093.)

Disclaimer

1,770,205.—*Alfred N. Goldsmith* and *Julius Weinberger*, New York, N. Y. TELEVISION SYSTEM. Patent dated July 8, 1930. Disclaimer filed May 18, 1932, by the patentees, assignee, *Radio Corporation of America*, assenting.

Disclaim from the scope of claim 10 in the above named patent all television sound transmission systems except those systems wherein the sound signals related to the television signals occupy a relatively small, single and continuous portion of the entire continuous frequency band for both television and sound signals, and wherein the sound frequency signals are adjacent to, or adjoin, the television signals on one side only.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,707,859, A. R. Johnson, Amusement apparatus, decided April 22, 1932, claims 1, 2, 3, 4, 5, 6, 7, and 8.

Pat. 1,758,771, R. E. Westbrook, Method of packing fruit, decided April 8, 1932, claim 1.

Pat. 1,774,046, L. J. Wahl, Clipper blade construction, decided April 19, 1932, claims 4, 5, and 7.

Pat. 1,779,833, L. L. Torrey, Refrigerating apparatus, decided May 9, 1932, claims 1, 11, and 12.

CARNEGIE LIBRARY OF ATLANTA

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 7, 1932

[VOL. 419. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 323,836. VITREFRAX CORPORATION, Los Angeles, Calif. Filed Feb. 4, 1932.

VITROLON

For Ceramic Batches.
Claims use since Jan. 16, 1932.

Ser. No. 323,879. CHARLES VOHM, doing business as The American Oak Preserving Company, North Judson, Ind. Filed Feb. 5, 1932.



Applicant disclaims all wording except the name "American Oak Preserving Company" apart from the mark as shown on the drawing. The lining on the drawing indicates color, the vertical lines indicating red and the oblique lines green.

For Preserved Leaves, Foliage, Grasses, and Growths of Field and Forest.
Claims use since May 1, 1931.

Ser. No. 325,348. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Mar. 21, 1932.

FAIRACRES

The drawing is lined to indicate the colors red and green.

For Field Seeds.
Claims use since Jan. 9, 1932.

Ser. No. 325,894. STONEGA COKE & COAL COMPANY, Philadelphia, Pa. Filed Apr. 7, 1932.

PREMIX STOKER

No claim being made to the word "Stoker" apart from the mark as shown.

For Coal.
Claims use since Mar. 19, 1932.

Ser. No. 326,031. SOUTH WESTERN STONE CO. LTD., London, England. Filed Apr. 12, 1932.

PERRYCOT

For Raw or Partly Worked Stone.
Claims use since Dec. 14, 1931.

Ser. No. 326,107. HOYT & WORTHEN TANNING CORPORATION, Haverhill, Mass. Filed Apr. 14, 1932.

SUNSHINE

For Chamois.
Claims use since spring of 1932.

Ser. No. 326,460. COMMONWEALTHS COLLIERIES, INCORPORATED, Cincinnati, Ohio. Filed Apr. 25, 1932.

K-J

For Coal.
Claims use since Dec. 15, 1930.

CLASS 2

Receptacles

Ser. No. 323,314. GEORGE O. SQUIER, Washington, D. C. Filed Jan. 22, 1932.

QUICAID

For Empty Boxes Attachable to the Person Adaptable to Contain Antiseptics, Medicaments, Surgical Supplies or Appliances, Etc., Such Boxes to be of Appropriate Size and Designed to be Strapped to a Limb.
Claims use since May 1, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 326,183. HARTMANN TRUNK COMPANY, Racine, Wis. Filed Apr. 16, 1932.

SKY-ROBE

For Suitcases, Hat Boxes for Luggage Purposes, and Wardrobe Hand Luggage.
Claims use since Feb. 2, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 318,550. CRECO COMPANY, INC., Long Island City, N. Y. Filed Aug. 29, 1931.

CRECO KLEENWELL

No claim is made to the word "Kleenwell" apart from the mark shown in the drawing.
For Liquid Soap for Washing Purposes.
Claims use since August, 1927.

Ser. No. 324,322. THE PRODERMATECT COMPANY, Scottdale, Pa. Filed Feb. 19, 1932.

PRODERMATECT

For Shaving Cream.
Claims use since Nov. 5, 1931.

Ser. No. 325,942. DOMESTIC TOILETRIES, INC., Cleveland, Ohio. Filed Apr. 9, 1932.

BLADEZE

For Shaving Cream and the Like.
Claims use since Oct. 17, 1931.

Ser. No. 326,112. MAGNUSON PRODUCTS CORPORATION, New York, N. Y. Filed Apr. 14, 1932.



No claim to the exclusive appropriation of the words shown on the drawing, "For Quality—Plus" and "Cleaners Lead" is made except in the association as shown in the drawing.
For Soaps.
Claims use since July 11, 1931.

Ser. No. 326,272. S. STRUNZ & SON, INC., Pittsburgh, Pa. Filed Apr. 19, 1932.

DU-KANE

For Detergent—Namely, a Cleaning, Scouring, and Polishing Compound for General Household Use and a Laundry Soap.
Claims use since Mar. 15, 1932.

CLASS 5

Adhesives

Ser. No. 323,773. BINNEY & SMITH CO., New York, N. Y. Filed Feb. 3, 1932.

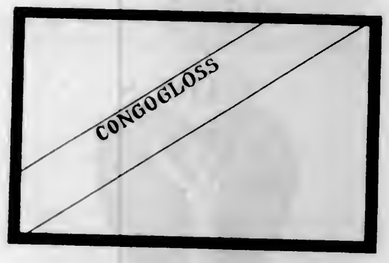
FIRMA-GRIP

The word "Grip" is disclaimed apart from the mark shown in the drawing.
For Adhesive Paste Which is Sold to the Stationery Trade.
Claims use since Jan. 27, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 298,138. BREVOLITE LACQUER COMPANY, North Chicago, Ill. Filed Mar. 31, 1930.



For Solutions of Cellulose Esters or Mixtures of the Same.
Claims use since Apr. 16, 1920.

Ser. No. 298,143. BREVOLITE LACQUER COMPANY, North Chicago, Ill. Filed Mar. 31, 1930.



For Solutions of Cellulose Esters or Mixtures of the Same.
Claims use since Aug. 20, 1919.

Ser. No. 305,601. THE ASIATIC PETROLEUM COMPANY, LIMITED, London, England. Filed Sept. 12, 1930.



SHELL BRAND

No claim is made herein to the word "Brand" apart from the trade-mark shown.
For Lamp Black for general Use in the Industrial Arts, Anti-Corrosives, Chemical Substances in the Nature of Rust Preventatives, Gasoline Energizers, Solvents for Use in the Manufacture of Cellulose and Cellulose Material; Solvents for Use in the Extraction of Edible Oils, Fish Oils, and the like; Solvents for Use in the Dyeing and Textile Industry, Solvents for Use in the Manufacture of Leather, Solvents for Use in the Manufacture of Perfumery and Pharmaceutical Preparations, Solvents for Use in the Manufacture of Rubber Products; Preparations for Use as Diluents in the Manufacture of Agricultural, Horticultural, and Disinfectant Sprays; Preparations for Use as Diluents and Fluxes for Rubber Products, and Chemical Petroleum Solvents and Diluents.
Claims use since April, 1930.

Ser. No. 311,504. JOHN JACKOVIC, doing business as Digest-O-Rem Company, Canonsburg, Pa. Filed Feb. 28, 1931.



All wording with the exception of the word "Digest-O-Rem" is disclaimed apart from the mark as shown on the drawing.
For Medical Preparation for the Stomach.
Claims use since Jan. 20, 1931.

Ser. No. 318,390. CHEMISCHE WERKE VORMALS H. & E. ALBERT, Wiesbaden-Biebrich, Germany. Filed Aug. 25, 1931.

Lubrokal

For Anti-Epileptic, Sedative, and Hypnotic Preparation.
Claims use since Apr. 10, 1931.

Ser. No. 319,475. FRED W. DAVIS, New York, N. Y. Filed Sept. 28, 1931.



For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Astringents, Refreshing Creams, Obesity Creams, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eyebrow Pencils, Eyelash and Eyebrow Darkener, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Oils, Hair Tonics, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentrifices, Tooth Pastes, Nail Powders, Nail Polishes, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Aug. 15, 1931.

Ser. No. 321,074. ALFRED J. LAUTMANN, Detroit, Mich. Filed Nov. 12, 1931.



The drawing is cross-hatched in green and black.
For After-Shaving Powder.
Claims use since Oct. 1, 1931.

Ser. No. 321,889. THE NONSPI COMPANY, New York, N. Y. Filed Nov. 21, 1931.



The lining on the drawing is intended to denote the colors yellow and green. No claim is made to the words "The Safe Deodorant-Stops Perspiration."
For Toilet Preparations for Preventing Excessive Perspiration and Toilet Deodorants.
Claims use since Sept. 3, 1931.

Ser. No. 322,255. MAE F. IMMICH, doing business as Hart's Rejuvenating Cream Co., Los Angeles, Calif. Filed Dec. 18, 1931.



The name "Hart's" is disclaimed apart from the other features of the mark as shown on the drawing.
For Beauty Cream.
Claims use since Nov. 2, 1926.

Ser. No. 322,787. DR. BALLOWITZ & CO. CHEMISCH-PHARMAZ. FABRIK, G. M. B. H., Berlin-Pankow, Germany. Filed Jan. 7, 1932.



For A Preparation Consisting of Hormones for Smoothing, Renewing, and Rejuvenating the Skin and Purifying Same from Beauty Defects Through Internal Action.
Claims use since Aug. 8, 1930.

Ser. No. 323,302. MINIT-RUB CORPORATION, St. Louis, Mo. Filed Jan. 22, 1932.

MINIT-RUB

No claim is made to the word "Rub" apart from the mark as shown.
For Healing and Rubbing Lotion.
Claims use since Nov. 2, 1931.

Ser. No. 324,228. NAAMLOOZE VENNOOTSCHAP CHEMISCH-PHARMACEUTISCHE FABRIEK "MENOLINE" (Menoline Drug Company), The Hague, Netherlands. Filed Feb. 16, 1932.

MIL-SAN

For Disinfectant Toilet Preparation.
Claims use since July 1, 1931.

Ser. No. 324,263. W. HOWARD NORMAN, doing business as Walk-N-Joy Chemical Co., Raleigh, N. C. Filed Feb. 17, 1932.



The representation of the bottle appearing on the drawing is disclaimed except in the association shown.
For Fluid to be Poured in the Shoe, which is Recommended for Athlete's Foot, Soft Corns, Perspiring, Burning, Odorous, and Galled Feet.
Claims use since Dec. 1, 1931.

Ser. No. 324,319. THE MINNESOTA CHEMICAL COMPANY, INC., Minnesota Transfer, Minn. Filed Feb. 19, 1932.

MINCO

For Laundry Sours, Chemical Eradicators.
Claims use since Feb. 1, 1929.

Ser. No. 324,444. PYRAM-SELTZER CO., Los Angeles Calif., and New York, N. Y. Filed Feb. 24, 1932.



All wording appearing on the drawing with the exception of "Pyram" and "Pyram Seltzer Co.," are hereby disclaimed by the applicant herein.
For Preparation for the Treatment of Nervousness and Headache.
Claims use since February, 1928.

Ser. No. 324,496. L. PIERRE VALLIGNY, New York, N. Y. Filed Feb. 25, 1932.

L. PIERRE VALLIGNY'S
AMERICA'S MIRACLE
SHAMPO-KOLOR

Applicant disclaims the use of the words "Shampo-Kolor" apart from the mark as shown.
For Shampoo and Hair Coloring Preparation.
Claims use since October, 1930.

Ser. No. 324,644. AMERICAN CHEMICAL PAINT COMPANY, Lower Gwynedd Township, Pa. Filed Mar. 1, 1932.

GRANODINE

For Powdered Rust Proofing Material.
Claims use since Feb. 20, 1932.

Ser. No. 324,645. AMERICAN CHEMICAL PAINT COMPANY, Lower Gwynedd Township, Pa. Filed Mar. 1, 1932.

RIDOLINE

For Oil Removing Acid Neutralizing Powder.
Claims use since Apr. 27, 1931.

Ser. No. 324,711. KEEPAWAY LABORATORY, London, England. Filed Mar. 2, 1932.

KEEPAWAY



No claim is made herein to the exclusive use of the word "Keepaway" apart from the mark shown in the drawing.
For Veterinary or Sanitary Preparation for the External Treatment of Animals While in Season.
Claims use since July 15, 1931.

Ser. No. 324,880. ISADOR A. SMITH, doing business as Irso Products Company, Philadelphia, Pa. Filed Mar. 8, 1932.



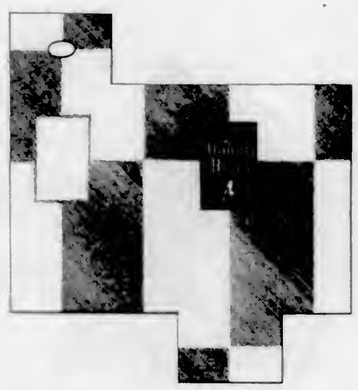
The representation of the female figure is not the portrait of a living individual and is only fanciful in character. The applicant herein disclaims as part of the trademark the representation of the label per se. The applicant herein disclaims as part of the trade-mark the words "For Finger and Water Waving."
For a Preparation for the Finger and Water Waving of the Hair.
Claims use since Feb. 1, 1931.

Ser. No. 325,060. CAMPANA CORPORATION, Batavia, Ill. Filed Mar. 12, 1932.



The applicant is the owner of Trade-Mark registration No. 234,573 for the words "Italian Balm" granted under the 10-year proviso. The lining indicates a bluish-green color and this is an essential feature of the mark.
For Lotion for the Skin.
Claims use since Feb. 10, 1932.

Ser. No. 325,061. CAMPANA CORPORATION, Batavia, Ill. Filed Mar. 12, 1932.



The applicant is the owner of Trade-Mark registration No. 234,573 for the words "Italian Balm" granted under the 10-year proviso. The lining indicates a bluish-green color and this is an essential feature of the mark.
For Lotion for the Skin.
Claims use since Feb. 10, 1932.

Ser. No. 325,590. MEAD JOHNSON & COMPANY, Evansville, Ind. Filed Mar. 28, 1932.

SERVAMUS
MEADS
FIDEM

For Cod Liver Oil and Visosterol—Namely, Activated Ergosterol in Oil.
Claims use since Feb. 1, 1932.

Ser. No. 325,742. THE BON AMI COMPANY, New York, N. Y. Filed Apr. 2, 1932.



For Tooth Paste.
Claims use since Mar. 4, 1932.

Ser. No. 325,819. DUTCH PRODUCTS COMPANY, Dorchester, Mass. Filed Apr. 5, 1932.

DUPROCOL

For Laxative Medicine Composed of a Palatable Emulsion of Mineral Oil and Cascara.
Claims use since Feb. 10, 1930.

Ser. No. 325,820. EAST ORANGE PHARMACY, INC., doing business as Bell Drug Company, East Orange, N. J. Filed Apr. 5, 1932.

BELASEPTINE

For Antiseptic Solutions and Vaginal Suppositories.
Claims use since June 15, 1922.

Ser. No. 325,826. HARRY HARUTUNIAN, doing business as Middlesex Laboratories, Watertown, Mass. Filed Apr. 5, 1932.

ATHLEX

For Foot Ointment for Treatment of Ringworm, Epidermophytosis, and Like Infections Caused by Fungi and Parasites.
Claims use since Feb. 15, 1932.

Ser. No. 325,837. DUREX PRODUCTS INC., New York, N. Y. Filed Apr. 6, 1932.

TARTRIKOL

For Antiseptic Jelly.
Claims use since Mar. 1, 1932.

Ser. No. 325,838. DUREX PRODUCTS INC., New York, N. Y. Filed Apr. 6, 1932.

Acetikol

For Antiseptic Jelly.
Claims use since Mar. 1, 1932.

Ser. No. 325,839. DUREX PRODUCTS INC., New York, N. Y. Filed Apr. 6, 1932.

Hexykol

For Antiseptic Jelly.
Claims use since Mar. 1, 1932.

Ser. No. 325,840. DUREX PRODUCTS INC., New York, N. Y. Filed Apr. 6, 1932.

Cellikol

For Antiseptic Jelly.
Claims use since Mar. 1, 1932.

Ser. No. 325,874. LEVINE BROTHERS, New York, N. Y. Filed Apr. 7, 1932.

MOTH-ROON

For Insecticides.
Claims use since May, 1931.

Ser. No. 325,887. LUDWIG N. WEISSMANN, doing business as L. Weissmann & Co., Palisade, N. J. Filed Apr. 7, 1932.

RETREVO

For Lotions for Treating Hair.
Claims use since Mar. 21, 1932.

Ser. No. 325,901. ISIDOR CHERNIN, doing business as Klinzmoth Co., New York, N. Y. Filed Apr. 8, 1932.

KLINZMOTH

For Insecticide.
Claims use since Apr. 1, 1931.

Ser. No. 325,906. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Apr. 8, 1932.

Niwelka

For Chemical Product for Keeping Cut Flowers Fresh and Promoting Early Budding in Plants.
Claims use since Mar. 9, 1932.

Ser. No. 325,926. TOWNS & JAMES INC., Brooklyn, N. Y. Filed Apr. 8, 1932.



The drawing is not lined for color, the shading thereon being merely to accentuate the superimposed figure "7." The word "Oils" apart from the mark shown on the drawing is hereby disclaimed.
For External Medicinal Preparations Used in the Treatment of Sprains, Rheumatism, Lumbago, Sciatica, Neuralgia, Sore Throat, and Other Muscular and Glandular Inflammations.
Claims use since 1914.

Ser. No. 325,943. DOMESTIC TOILETRIES, INC., Cleveland, Ohio. Filed Apr. 9, 1932.

FLORIDENT

For Tooth Paste and Dental Cream.
Claims use since Oct. 17, 1931.

Ser. No. 326,151. WILLIAM LICHTENSTEIN, doing business as Ideal Trading Co., and Fudo Psyllium Corp., New York, N. Y. Filed Apr. 15, 1932.

FUDO

For Psyllium Seed, Lactose, and Dextrins.
Claims use since June 29, 1931.

Ser. No. 326,153. ACISCLO MARXUACH, San Juan, P. R. Filed Apr. 15, 1932.

ARSEQUININA

For Medicinal Preparation for the Treatment of Malaria and Other Intermittent Fevers.
Claims use since January, 1928.

Ser. No. 326,154. ACISCLO MARXUACH, San Juan, P. R. Filed Apr. 15, 1932.

GANOCRINE

For Medicinal Preparation for Intravenous Injection for the Treatment of Gonorrhea.
Claims use since January, 1928.

Ser. No. 326,235. SHARP & DOHME, INCORPORATED, Baltimore, Md. Filed Apr. 18, 1932.

SUCRETS

For Medicated Antiseptic Lozenges for Oral Use.
Claims use since Mar. 18, 1932.

Ser. No. 326,253. THE ETHICAL PRODUCTS COMPANY, Waco, Tex. Filed Apr. 19, 1932.

BOVEX

For Laxative Tablets.
Claims use since Apr. 2, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 320,716. BOUCHER CORK CO., INC., New York, N. Y. Filed Nov. 2, 1931.

Pearl-o-tip

The words "Pearl" and "Tip" are disclaimed apart from the mark shown.
For Strips of Tipping Material to be Applied to Strips of Cigarette Paper Serving as the Container of the Tobacco Filler for Cigarettes.
Claims use since Aug. 10, 1931.

Ser. No. 326,441. THE WOODCRAFT CORPORATION, Bay City, Mich. Filed Apr. 23, 1932.

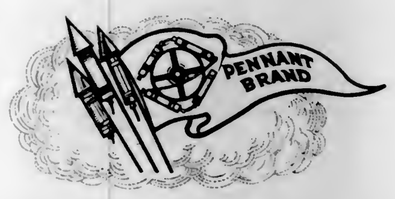
HOLLYWOOD TOM

For Smoking Stands.
Claims use since Apr. 7, 1932.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 326,244. INDEPENDENT FIREWORKS MANUFACTURING COMPANY, Bridgewater, Mass. Filed Apr. 16, 1932.



No claim is made to the word "Brand" nor to the representation of the fireworks apart from the particular combination and arrangement shown.
For Fireworks for Pyrotechnic Displays, Firecrackers, and Explosives for Bombs.
Claims use since Feb. 1, 1932.

CLASS 10

Fertilizers

Ser. No. 326,001. SHELL CHEMICAL COMPANY, San Francisco, Calif. Filed Apr. 11, 1932.



For Fertilizer.
Claims use since Sept. 29, 1931.

Ser. No. 326,560. THE SOILIZER COMPANY, Cleveland, Ohio. Filed Apr. 27, 1932.

SOILIZER

For Humus and Fertilizers.
Claims use since Mar. 28, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 325,008. NEIDICH PROCESS COMPANY, Burlington, N. J. Filed Mar. 10, 1932.

Mani-foldo

For Carbon Paper and Typewriter Ribbons.
Claims use since 1905.

Ser. No. 325,009. NEIDICH PROCESS COMPANY, Burlington, N. J. Filed Mar. 10, 1932.



For Carbon Paper and Typewriter Ribbons.
Claims use since 1911.

Ser. No. 325,010. NEIDICH PROCESS COMPANY, Burlington, N. J. Filed Mar. 10, 1932.



All of the wording which appears on the drawing with the exception of the words "The Progress" is disclaimed apart from the mark shown, and the representation of the box which appears on the drawing is disclaimed per se.

For Carbon Paper and Typewriter Ribbons.
Claims use since 1905.

Ser. No. 325,011. NEIDICH PROCESS COMPANY, Burlington, N. J. Filed Mar. 10, 1932.

Superba



For Carbon Paper and Typewriter Ribbons.
Claims use since 1905.

Ser. No. 325,012. NEIDICH PROCESS COMPANY, Burlington, N. J. Filed Mar. 10, 1932.



No claim is made to the words "Type Tape" which appear on the drawing apart from the mark shown. No claim is made per se to the representation of the box which appears on the drawing, and the vertical lines which appear on the drawing are for shading only.

For Carbon Paper and Typewriter Ribbons.
Claims use since 1905.

CLASS 12

Construction Materials

Ser. No. 298,660. CHARLES E. PUTMAN, Seattle, Wash. Filed Apr. 10, 1930.

PREMIERS

For Wooden Shingles.
Claims use since Apr. 10, 1928.

Ser. No. 325,133. AUSTRAL WINDOW COMPANY, Augusta, Me., and New York, N. Y. Filed Mar. 15, 1932.

AUSTRAL

For Doors and Sliding and Folding Partitions.
Claims use since January, 1930.

Ser. No. 325,549. AL-OYS, INC., Chicago, Ill. Filed Mar. 28, 1932.

NaTaz

For Asphalt and an Asphaltic Preparation for the Waterproofing, Insulation, and Protection of Structural Surfaces.
Claims use since Nov. 1, 1931.

Ser. No. 325,790. KIMBERLY-CLARK CORPORATION, Neenah, Wis. Filed Apr. 4, 1932.

Kimfelt

For Sheet Insulating Material Made of Paper Stock and for Thermal Insulating Purposes.
Claims use since Dec. 30, 1931.

Ser. No. 325,791. KIMBERLY-CLARK CORPORATION, Neenah, Wis. Filed Apr. 4, 1932.

Kimsul

For Wood Pulp Insulating Material in Panels for Thermal Insulating Purposes.
Claims use since Oct. 26, 1931.

Ser. No. 326,032. SOUTH WESTERN STONE CO. LTD., London, England. Filed Apr. 12, 1932.

PERRYCOT

For Polished Stone for Building or Decoration.
Claims use since Dec. 14, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 319,190. THE ACCURATE PARTS MANUFACTURING COMPANY, Cleveland, Ohio. Filed Sept. 19, 1931.



For Screws, Bolts, Nuts, Metal Washers, Lock Washers, and Coil Springs for General Use.
Claims use since Oct. 1, 1926.

Ser. No. 326,467. ALLEN FRASER, Philadelphia, Pa. Filed Apr. 25, 1932.

ACCESSO

For Base Metal Trays.
Claims use since Apr. 14, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 305,103. THE FERRO MACHINE & FOUNDRY COMPANY, Cleveland, Ohio. Filed Aug. 28, 1930.

FERRO

Applicant is the owner of registrations Nos. 62,901, 280,635, and 280,802.
For Iron Castings.
Claims use since March, 1906.

Ser. No. 326,518. DRIVER-HARRIS COMPANY, Harrison, N. J. Filed Apr. 26, 1932.

Radiohm

For Wire.
Claims use since Feb. 26, 1932.

CLASS 15

Oils and Greases

Ser. No. 299,083. THE PURE OIL COMPANY, Chicago, Ill. Filed Apr. 18, 1930.



The lining or shading shown in the drawing is employed for the purposes of illustration and not to indicate any particular color or colors. No claim is made to the letters "U. S. A." and the word "Pure" apart from the mark as shown.

For Illuminating Oils, Motor Fuel Oils, Lubricating Oils, Lubricating Greases, and Fuel Oils.
Claims use since Apr. 1, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 321,431. ERWIN R. KOCHER, Los Angeles, Calif. Filed Nov. 23, 1931.

VELVA

For Water and Oil Colors for Artists.
Claims use since May 5, 1925.

Ser. No. 324,966. JOSEPH LACHOFF, doing business as Jlco Laboratories, Chicago, Ill. Filed Mar. 9, 1932.

JLCO

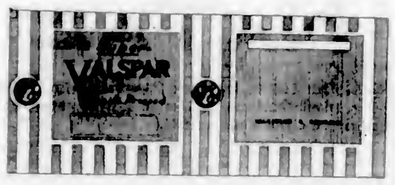
For Furniture and Automobile Polish.
Claims use since Feb. 1, 1924.

Ser. No. 325,198. WALTER T. TERRY, Jr., doing business as The Best Products Co., Kansas City, Mo. Filed Mar. 14, 1932.



All the wording appearing on the drawing is hereby disclaimed, apart from the features of the mark as shown.
For Polishing and Cleaning Preparation for Automobiles and Painted, Varnished, or Lacquered Surfaces.
Claims use since June 1, 1928.

Ser. No. 326,243. VALENTINE & COMPANY, New York, N. Y. Filed Apr. 14, 1932.



No claim being made to the exclusive use of the word "Process" apart from the mark shown on the drawing.
The drawing is lined to indicate the colors blue, gold, red and black, which are claimed as features of the mark.
For Paint Enamels, Stains, and Varnishes.
Claims use since Mar. 23, 1932.

CLASS 17

Tobacco Products

Ser. No. 326,635. THE H. DROST BOX MFG. CO., Manitowoc, Wis. Filed Apr. 30, 1932.

WHITE BIRCH

For Cigars.
Claims use since Jan. 5, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 325,895. TRICO PRODUCTS CORPORATION, Buffalo, N. Y. Filed Apr. 7, 1932.

RESERVAC

For Automobile Accessories—Namely, Pressure Retainer and Governor for Fluid Pressure Accessory Systems of Motor Vehicles.
Claims use since Feb. 24, 1932.

Ser. No. 325,896. TRICO PRODUCTS CORPORATION, Buffalo, N. Y. Filed Apr. 7, 1932.

TRICO
RESERVAC

For Automobile Accessories—Namely, Pressure Retainer and Governor for Fluid Pressure Accessory Systems of Motor Vehicles.
Claims use since Feb. 24, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 295,890. E. A. LABORATORIES, INC., Brooklyn, N. Y. Filed Feb. 11, 1930.

MILE-AWAY

For Electrical Warning Signals of the Acoustical Type.
Claims use since November, 1912.

Ser. No. 322,797. METERICE OF AMERICA CO., LTD., Los Angeles, Calif. Filed Jan. 7, 1932.

FREEZO-METER

No claim is made for the word "Meter" apart from the mark shown in the drawing.
For Clock and Thermostat-Operated Electric Switches for Controlling the Electric Elements of Electric Refrigerators and the Like, Such Switches Being Either Manually or Coin Actuated.
Claims use since Jan. 5, 1932.

Ser. No. 323,135. FILTER CONDENSER CORPORATION, Detroit, Mich. Filed Jan. 18, 1932.



The drawing is lined to indicate the color red. The words "Trade Mark" are hereby disclaimed and the symbols indicating alternating and direct current are disclaimed apart from the mark shown in the drawing.
For Converters and Filters for Modifying Fluctuations in Electric Current.
Claims use since Aug. 8, 1931.

Ser. No. 324,637. WEBER ELECTRIC COMPANY, Schenectady, N. Y. Filed Feb. 20, 1932.

RUGBY

For Switches and Electric Light Sockets.
Claims use since Jan. 15, 1932.

Ser. No. 324,860. VI-ZOR-TENA COMPANY, Kansas City, Mo. Filed Mar. 7, 1932.



No claim is made to the representation of the goods and the words "Trade-Mark" apart from the mark shown in the drawing.
For Radio Antenna in Form of Automobile Windshield Visor.
Claims use since Mar. 4, 1932.

Ser. No. 325,304. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Mar. 19, 1932.

RELIO

For Electrical Insulating Tape.
Claims use since 1918.

Ser. No. 325,331. KNAPP-MONARCH COMPANY, Belleville, Ill. Filed Mar. 21, 1932.

KOLDAIR

For Electric Fans.
Claims use since Jan. 7, 1926.

Ser. No. 325,543. CHAMPION SPARK PLUG COMPANY, Toledo, Ohio. Filed Mar. 25, 1932.

Reliance

For Spark Plugs and Parts Thereof.
Claims use since Feb. 20, 1907.

Ser. No. 325,602. THOMAS SMITH COMPANY, doing business as Protectome Sales Co., Worcester, Mass. Filed Mar 28, 1932.

PROTECTOME

For Electrical Fire Alarm System Apparatus and Parts Thereof.
Claims use since July 1, 1931.

Ser. No. 326,008. BURGESS BATTERY COMPANY, Madison, Wis. Filed Apr. 12, 1932.

BUGLE

For Electric Batteries.
Claims use since Feb. 25, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 313,768. MILTON BRADLEY COMPANY, Springfield, Mass. Filed Apr. 25, 1931.

BUMPA

For Toys, Particularly on Toy Animal Figures on Wheels and Toy Vehicles.
Claims use since July, 1930.

Ser. No. 325,975. SUPREME GOLF BALL CO., Chicago, Ill. Filed Apr. 9, 1932.



No claim is made to the wording appearing on the drawing with the exception of the word "Royce" nor to the representation of a golf ball nor to the representation of a label per se.

For Golf Balls.
Claims use since Mar. 15, 1931.

Ser. No. 326,141. THE P. GOLDSMITH SONS CO., Cincinnati, Ohio. Filed Apr. 15, 1932.

REG'LAR FELLERS



For Bats, Golf Clubs, Golb Balls, Striking Bags, Baseballs, Field Balls, Volley Balls, Playground Basketballs, Playground Indoor Baseballs, Soccer Balls, Tennis Balls, Basketballs, Boxing Gloves, Striking Bag Gloves, Baseball Gloves, Diamond Ball Gloves, Hand Ball Gloves, Baseball Masks, Diamond Ball Masks, Catcher Mitts, Baseman Mitts, Baseball Body Protectors, Tennis Rackets, Hockey Gloves, Hockey Sticks and Speed Balls.
Claims use since Mar. 10, 1932.

Ser. No. 326,639. I-X-L PRINTING COMPANY, New York, N. Y. Filed Apr. 30, 1932.

Type-O-gram

For Board Games Played by Assembling Pieces Constituting Letters.
Claims use since Apr. 27, 1932.

Ser. No. 326,680. HERCULES NOVELTY COMPANY, Chicago, Ill. Filed May 2, 1932.

BIG SHOT

For Coin-Controlled Ball-Projecting Amusement Device.
Claims use since Feb. 1, 1932.

Ser. No. 326,748. MARION GREENE, Montclair, N. J. Filed May 4, 1932.

Knit-Wit

For Dolls.
Claims use since Feb. 1, 1932.

Ser. No. 326,750. S. H. KRESS & CO., New York, N. Y. Filed May 4, 1932.

-Janet-

For Dolls.
Claims use since Apr. 15, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 324,107. THE MARVEL PRODUCTS CO., Cleveland, Ohio. Filed Feb. 12, 1932.



For Upper Motor Lubricator for Use as an Accessory for an Internal Combustion Motor.
Claims use since Dec. 20, 1930.

Ser. No. 324,989. CONTINENTAL MANUFACTURING COMPANY, Chicago, Ill. Filed Mar. 10, 1932.



The word "Roller" is disclaimed apart from the other features of the mark shown on the drawing.

For Portable Power Propelled Roller Equipped Vehicle Especially Designed for Rolling and Conditioning the Surface of Paved Highways and the Like.
Claims use since Sept. 1, 1931.

Ser. No. 325,172. RODNEY HUNT MACHINE CO., Orange, Mass. Filed Mar. 16, 1932.

TRU—SHADE

For Mechanical Dye Kettle for Use in Dyeing Cloth and the Like.
Claims use since July 31, 1931.

Ser. No. 325,206. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed Mar. 17, 1932.

Air-Way

For Floor Wax Applicators.
Claims use since Nov. 1, 1931.

Ser. No. 325,547. ACME STAPLE COMPANY, Camden, N. J. Filed Mar. 28, 1932.

Acme

For Stapling Machines, Binding Machines Using Metal Staples, and Tacking Machines Using Metal Staples.
Claims use since Nov. 30, 1894.

Ser. No. 325,832. SINTERING MACHINERY CORPORATION, Netcong, N. J., and New York, N. Y. Filed Apr. 5, 1932.

SINTERITE

For Ore Sintering Machines, Continuous Calcining Machines, Continuous Drying Machines, Gratebars and Pallets for Said Machines, Special Sintering Exhaust Fans and Blowers, Automatic Endless Belt Feeders, Sintering Ignition Burners, Drum Type Pugmill Mixers, Paddles for Said Mixers, and Centrifugal Dust Collectors.
Claims use since June, 1929, on all save continuous drying machines and on these since January, 1932.

Ser. No. 325,983. J. B. CROFOOT CO., Chicago, Ill. Filed Apr. 11, 1932.

TACK-O-MATIC

For Stapling Machines for Fastening Papers, for Tacking Shades on Rollers, for Tacking Screens on Frames, and for Fastening Tags on Boxes.
Claims use since Mar. 9, 1932.

Ser. No. 326,197. WASHINGTON LABORATORIES, INC., New York, N. Y. Filed Apr. 16, 1932.

WHITE CROSS

For Razor Blades.
Claims use since Mar. 1, 1932.

Ser. No. 326,265. NORTH BRO'S M'F'G CO., Philadelphia, Pa. Filed Apr. 19, 1932.

LIGHTNING

For Ice Breakers for Household Use.
Claims use since Aug. 1, 1931.

Ser. No. 326,328. THE KAYON COMPANY, Milwaukee, Wis. Filed Apr. 21, 1932.

KAYON

For Shoe Presses, Used More Particularly for Causing the Adhesion of Soles and Heels to Shoe Bottoms and Parts Thereof.
Claims use since Jan. 27, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 322,258. KEUFFEL & ESSER COMPANY, Hoboken, N. J. Filed Dec. 18, 1931.

Neupos

For Sensitized Positive Black Print Paper and Cloth.
Claims use since Jan. 2, 1931.

Ser. No. 324,947. ATLAS SUPPLY COMPANY, Newark, N. J. Filed Mar. 9, 1932.

AcTo

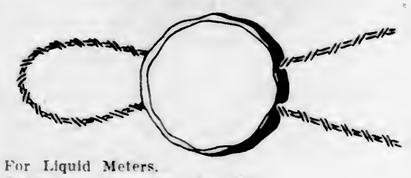
For Automobile Goggles.
Claims use since Feb. 18, 1932.

Ser. No. 325,384. A. B. DICK COMPANY, Chicago, Ill. Filed Mar. 21, 1932.

MIMEOSTYLE

For Lettering and Drafting Guides and Rulers.
Claims use since Feb. 26, 1932.

Ser. No. 325,853. NEPTUNE METER COMPANY, New York, N. Y. Filed Apr. 6, 1932.



For Liquid Meters.
Claims use since Jan. 1, 1931.

Ser. No. 325,854. NEPTUNE METER COMPANY, New York, N. Y. Filed Apr. 6, 1932.

RED SEAL

For Liquid Meters.
Claims use since Jan. 1, 1931.

Ser. No. 326,077. CAM SYNDICATE LIMITED, London, England. Filed Apr. 14, 1932.

MIDAS

For Photographic Films, Photographic Cameras, and Parts Thereof and Photographic Projectors.
Claims use since Aug. 17, 1931.

CLASS 27

Horological Instruments

Ser. No. 326,596. WESTERN CLOCK COMPANY, Peru, Ill. Filed Apr. 28, 1932.

Black Knight

For Clocks and Watches.
Claims use since Apr. 19, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 319,792. THE 29TH DIVISION ASSOCIATION, INC., Newark, N. J. Filed Oct. 6, 1931.



The drawing is lined to indicate the colors blue and gray.
For Association Emblems, Lapel Buttons, Badges, Medals, Finger Rings, and Emblematic Ornaments All Made of or Plated with Precious Metal.
Claims use since Jan. 1, 1921.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 326,633. CELLULOID CORPORATION, Newark, N. J. Filed Apr. 30, 1932.



For Blending Brushes and Toilet Brushes.
Claims use since Apr. 13, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 326,567. JOHN WOOD MANUFACTURING COMPANY, Conshohocken, Pa. Filed Apr. 27, 1932.

HOSTESS

For Refrigerators and Parts Thereof.
Claims use since Apr. 19, 1932.

Ser. No. 326,673. DOMESTIC INDUSTRIES, INC., Mansfield, Ohio. Filed May 2, 1932.

Modern Hostess

For Refrigerating Apparatus, Particularly Domestic Refrigerators of the Electric Type.
Claims use since Apr. 25, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 324,887. GRAND RAPIDS STORE EQUIPMENT CORPORATION, Portland, Oreg. Filed Mar. 8, 1932.

DURO-WOOD

No claim is made to the word "Wood" apart from the mark as shown on the drawing.
For Store Fixtures—Namely, Show Cases, Wall Cases, Counters, Tables, Chairs, and Shelving.
Claims use since July 6, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 311,808. THE W. AND M. STOKER COMPANY, Denver, Colo. Filed Mar. 5, 1931.



Applicant makes no claim herein to the exclusive right to use the representation of the goods and to the words "Coal Fueler" and "Denver" apart from the other features of the mark shown in the drawing.
For Stokers.
Claims use since Jan. 15, 1931.

Ser. No. 313,333. DOMESTIC STOKER COMPANY, New York, N. Y. Filed Apr. 14, 1931.



The representation of a stoker, apart from the mark as shown, is disclaimed.
For Coal Burners and Stokers.
Claims use since 1928.

Ser. No. 321,617. THE ROBINSON ENGINEERING CORPORATION, New York, N. Y. Filed Nov. 30, 1931.

RECO RADS

For Heating Radiators.
Claims use since Aug. 25, 1931.

Ser. No. 323,637. SURFACE COMBUSTION CORPORATION, Toledo, Ohio. Filed Jan. 30, 1932.

COLUMBUS
HEATMASTER

For Gas-Fired Warm Air Furnaces for Domestic Use.
Claims use since November, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 312,008. HOUND PACKING COMPANY, Chicago, Ill. Filed Mar. 11, 1931.



For Metallic Machinery Packings.
Claims use since Jan. 1, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 319,888. JOHN FIELD, New York, N. Y. Filed Oct. 9, 1931.



No claim is made for the words "Voice Record" apart from the mark shown in the drawing.
For Recording Reproducing Phonographs and Records Therefor.
Claims use since Sept. 29, 1931.

Ser. No. 323,983. C. BECHSTEIN PIANOFORTEFABRIK AKTIENGESELLSCHAFT, Berlin, Germany. Filed Feb. 9, 1932.

NEO-BECHSTEIN

The word "Bechstein" is hereby disclaimed apart from the mark shown in the drawing.
For Stringed Musical Instruments of the Electric Relay Operation Type.
Claims use since September, 1931.

Ser. No. 324,291. FRIEDRICH J. LANGER, Cleveland, Ohio. Filed Feb. 18, 1932.

Rhythm-a-Jigs

For Musical Novelties in the Nature of Finger Tip Tappers.
Claims use since July, 1931.

Ser. No. 325,646. EDI-DICT CYLINDER CO., New York, N. Y. Filed Mar. 30, 1932.

Edi-dict.

For Dictating Machines and Cylinders Therefor.
Claims use since Mar. 1, 1932.

CLASS 37

Paper and Stationery

Ser. No. 322,012. BYRON WESTON COMPANY, Dalton, Mass. Filed Dec. 11, 1931.

CHANDOS BOND

No claim is made to the word "Bond" apart from the mark shown.
For Ledger and Bond Paper.
Claims use since Nov. 15, 1931.

Ser. No. 325,915. MODERN TISSUES CORPORATION, New York, N. Y. Filed Apr. 8, 1932.



The words "Tufted Tissue" are disclaimed when used apart from the mark shown in the drawing.
For Toilet Tissue and Facial Tissue.
Claims use since Jan. 1, 1932.

Ser. No. 326,534. BURGESS CELLULOSE COMPANY, Madison, Wis. Filed Apr. 27, 1932.

CAST-TEX

For Stereotype Mats.
Claims use since Apr. 6, 1932.

Ser. No. 326,674. EAGLE PENCIL COMPANY, New York, N. Y. Filed May 2, 1932.

POLYWHITE

For Lead Pencils.
Claims use since March, 1932.

CLASS 38

Prints and Publications

Ser. No. 310,604. LOGAN A. HUNTON, doing business as The Hunton Company, New York, N. Y. Filed Jan. 31, 1931.

AD-GRAM

For Paper Sheets Used as Advertising Circulars.
Claims use since Jan. 2, 1931.

Ser. No. 310,606. LOGAN A. HUNTON, doing business as The Hunton Company, New York, N. Y. Filed Jan. 31, 1931.

TEL-E-PHOTOGRAM

For Paper Sheets Used as Advertising Circulars.
Claims use since Mar. 26, 1929.

Ser. No. 325,319. WALTER H. CANDLER, doing business as The Candler System Co., Chicago, Ill. Filed Mar. 21, 1932.

SPEEDHAND

For Printed Lessons, Work Sheets, Examination Papers, and Printed Instruction Sheets.
Claims use since July 9, 1924.

Ser. No. 326,062. UNITED PUBLISHERS CORPORATION, New York, N. Y. Filed Apr. 13, 1932.



Applicant disclaims the words "Profit-Sharing Book" apart from the mark.
For Books for Cooperative Discount Coupons.
Claims use since December, 1931.

Ser. No. 326,063. UNITED PUBLISHERS CORPORATION, New York, N. Y. Filed Apr. 13, 1932.



Applicant disclaims the word "Store" apart from the mark.
For Cooperative Discount Coupons.
Claims use since December, 1931.

Ser. No. 326,330. KING FEATURES SYNDICATE, INC., New York, N. Y. Filed Apr. 21, 1932.

AND HER NAME WAS
MAUD!

For Comic Strips and Cartoons.
Claims use since May 23, 1926.

CLASS 39

Clothing

Ser. No. 319,137. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Sept. 17, 1931.



For Sneakers and Tennis Shoes Made of Canvas and Rubber.
Claims use since Nov. 23, 1927.

Ser. No. 320,593. JOHNSON-STEPHENS & SHINKLE SHOE COMPANY, St. Louis, Mo. Filed Oct. 29, 1931.



No claim, however, is made to the word "Shoe" except in connection with the mark as shown in the drawing.
For Leather, Rubber, and Fabric Shoes for Men, Women, and Children.
Claims use since Aug. 1, 1916.

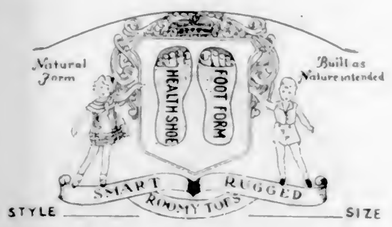
Ser. No. 324,799. PHOENIX HOSIERY COMPANY, Milwaukee, Wis. Filed Mar. 4, 1932.

PHOENIX SUEDE

No claim is made to the word "Suede" apart from the mark shown in the drawing.
For Hosiery.
Claims use since Jan. 11, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 325,566. CHAMPION SHOE MANUFACTURING CORPORATION, New York, N. Y. Filed Mar. 28, 1932.



No claim being made to the wording appearing on the drawing apart from the mark shown thereon.
For Children's Shoes of Leather, Rubber, and Fabric, and Combinations of Those Materials.
Claims use since Mar. 1, 1931.

Ser. No. 325,748. EMPIRE BLOOMER CO., New York, N. Y. Filed Apr. 2, 1932.

Emp-Ray
UNDERWEAR

No claim is made for the word "Underwear" apart from the trade-mark as shown on the drawing.
For Underwear for Women and Children.
Claims use since Jan. 1, 1932.

Ser. No. 325,776. B. & B. SHOE COMPANY, Chicago, Ill. Filed Apr. 4, 1932.

Woolee Mulees
FULL of EASE

The words "Full of Ease" and "Woolee" are disclaimed apart from the mark as shown.
For Slippers Made of Sheep Skin.
Claims use since June 15, 1931.

Ser. No. 326,113. MAIDEN FORM BRASSIERE CO. INC., New York, N. Y. Filed Apr. 14, 1932.

TRIC-O-LASTIC

For Brassières and Girdles.
Claims use since Mar. 15, 1931.

Ser. No. 326,137. ELLMAR COMPANY, INC., New York, N. Y. Filed Apr. 15, 1932.

Speedress

For Boys' Knickers, Trousers, Boys' Suits, Long Pants, and English Shorts.
Claims use since Mar. 1, 1931.

Ser. No. 326,146. JAY GEE HAT CO., INC., New York, N. Y. Filed Apr. 15, 1932.

Viscora

For Hat Linings, Straw Hats, Felt Hats, Velour Hats, Cloth Hats, and Velvet Hats for Ladies, Misses, and Children.
Claims use since Apr. 12, 1932.

Ser. No. 326,204. BENAL HOSIERY CO., New York, N. Y. Filed Apr. 18, 1932.

RICHCRAFT

For Hosiery.
Claims use since July 27, 1931.

Ser. No. 326,291. WALTER K. MARKS, INC., New York, N. Y. Filed Apr. 20, 1932.

SAN TROPEZ

For Ladies' Hats.
Claims use since November, 1929.

Ser. No. 326,584. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Apr. 28, 1932.

VAPORETTES

For Hosiery.
Claims use since Nov. 23, 1931.

Ser. No. 326,587. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Filed Apr. 28, 1932.

Reflection

For Hosiery.
Claims use since Mar. 31, 1932.

Ser. No. 326,588. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Filed Apr. 28, 1932.

Ariel

For Hosiery.
Claims use since Mar. 31, 1932.

Ser. No. 326,589. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Filed Apr. 28, 1932.

Delicacy

For Hosiery.
Claims use since Mar. 31, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 321,544. A. MEYERS & SONS CORP., New York, N. Y. Filed Nov. 27, 1931.



Pearl

The portrait shown on the drawing is that of Pearl Meyers.
For Pins Not Made of Precious Metal, Safety Pins Not Made of Precious Metal, Snap-Fasteners, Hooks and Eyes.
Claims use since Feb. 1, 1926.

Ser. No. 321,545. A. MEYERS & SONS CORP., New York, N. Y. Filed Nov. 27, 1931.



The portrait appearing on the drawing is that of Esther Meyers.
For Pins Not Made of Precious Metal, Safety-Pins Not Made of Precious Metal, Snap-Fasteners, Hooks and Eyes.
Claims use since Feb. 1, 1926.

Ser. No. 321,546. A. MEYERS & SONS CORP., New York, N. Y. Filed Nov. 27, 1931.



The portrait appearing on the drawing is that of Ruth Meyers.
For Pins Not Made of Precious Metal, Safety Pins Not Made of Precious Metal, Snap-Fasteners, Hooks and Eyes.
Claims use since Feb. 1, 1926.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 315,736. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed June 12, 1931.

Diagra

For Woolen Piece Goods.
Claims use since May 1, 1931.

Ser. No. 318,786. THE LAMPORT MFG. SUPPLY CO., INC., New York, N. Y. Filed Sept. 5, 1931.



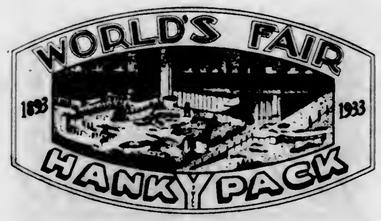
No claim is made to the words "Three-Year Sheets" apart from the mark shown on the drawing.
For Bleached and Unbleached Piece Goods for Sheets and Pillow Cases, Made of Linen and Cotton Fabrics.
Claims use since Aug. 14, 1931.

Ser. No. 326,024. ONEIDA COMMUNITY LIMITED, Oneida, N. Y. Filed Apr. 12, 1932.

SIL-VEL TA

For Velveteen Fabrics Used for Lining Chests and Other Containers for Silverware, Cutlery, Etc., and Rolls and Other Containers Made of Such Fabrics for Silverware, Cutlery, Etc.
Claims use since Mar. 9, 1932.

Ser. No. 326,070. PHIL KARFUNKLE, Chicago, Ill. Filed Apr. 11, 1932.



Applicant hereby disclaims the word "Hankypack" apart from the mark shown.
For Handkerchiefs.
Claims use since Mar. 1, 1932.

Ser. No. 326,218. IDEAL LINEN MESH COMPANY, Poughkeepsie, N. Y. Filed Apr. 18, 1932.

BEAURAY

For Elastic Fabric Composed of Cut Rubber Combined with Cotton Yarns, Rayon, and Other Textile Fabrics.
Claims use since Mar. 5, 1932.

Ser. No. 326,314. EUGENE A. OBERFELDER, New Rochelle, N. Y. Filed Apr. 19, 1932.

TRANSPARO

For Silk Chiffon in the Piece.
Claims use since Apr. 4, 1932.

Ser. No. 326,511. F. C. HUYCK & SONS, Rensselaer and Albany, N. Y. Filed Apr. 25, 1932.

Kenmede

For Bed Blankets of Textile Fabric.
Claims use since Feb. 15, 1932.

Ser. No. 326,563. E. F. TIMMIE & SON, New York, N. Y. Filed Apr. 27, 1932.

Timmeho

For Pile Fabrics in the Piece.
Claims use since Apr. 18, 1932.

Ser. No. 326,672. C. M. DELAND, New York, N. Y. Filed May 2, 1932.

Tally-Rand

For Cotton, Rayon, Silk, and Woolen Piece Goods.
Claims use since Nov. 12, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 325,921. SCHNEFEL BROS., INC., Newark, N. J. Filed Apr. 8, 1932.

A La Cross Product

No claim is made to the word "Product" apart from the mark shown in the drawing.
For Manicure Tweezers, Blackhead Extractors, Finger and Toe Nail Clips and Nippers.
Claims use since Jan. 1, 1924.

Ser. No. 325,973. E. FOX NOVELTY CO. INC., New York, N. Y. Filed Apr. 9, 1932.

TOO-TH-UM RING

The representation of a baby appearing on the drawing is a fanciful one and not a portrait. The applicant disclaims the word "Ring" apart from the mark as shown on the drawing.
For Teething Rings for Infants.
Claims use since Jan. 10, 1931.

Ser. No. 326,140. I. J. FRIEDLAND, doing business as Specialty Sales Company, Atlanta, Ga. Filed Apr. 15, 1932.

DRED-NOT

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Oct. 1, 1930.

Ser. No. 326,164. JULIUS SCHMID, New York, N. Y. Filed Apr. 15, 1932.

ANCHOR

For Prophylactic Rubber and Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since February, 1930.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 312,898. BORDEN'S FARM PRODUCTS CO., INC., Wassaic and New York, N. Y. Filed Apr. 3, 1931. Under section 5b of the act of 1905 as amended in 1920.

Borden's

For Nonalcoholic, Maltless Fruit Juices Sold as Soft Drinks.
Claims use since Mar. 19, 1931.

Ser. No. 325,126. TRIPLE "XXX" COMPANY, Galveston, Tex. Filed Mar. 14, 1932.

TRI-X

For Non-Alcoholic, Maltless Syrup Concentrate and Flavor for Making Soft Drinks.
Claims use since Jan. 5, 1932.

Ser. No. 325,798. PICHEL PRODUCTS CO., INC., New York, N. Y. Filed Apr. 4, 1932.

PEEKO A GOOD MIXER

The words "A Good Mixer" are disclaimed except in the association shown in the drawing.
For Non-Alcoholic, Maltless Flavoring for Soft Drinks.
Claims use since July 1, 1930.

Ser. No. 326,407. WOLF AND KOCH, St. Louis, Mo. Filed Apr. 22, 1932.

OHONEY

For Nonalcoholic Maltless Beverage Sold as a Soft Drink and Syrups Therefor.
Claims use since Apr. 16, 1932.

Ser. No. 326,715. LUNG I VINE GLO, INC., Brooklyn, N. Y. Filed May 3, 1932.

Old Master

For Grape Juice.
Claims use since Jan. 21, 1932.

CLASS 46

Foods and Ingredients of Foods

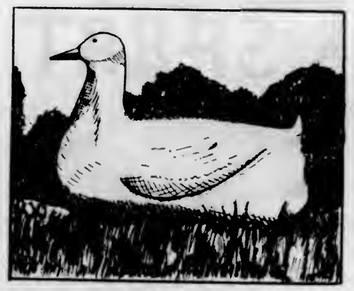
Ser. No. 314,551. BOSTON FRESH TRIPE CO., Brighton, Boston, Mass. Filed May 14, 1931. Under 10-year proviso.

BOSTON FRESH TRIPE CO.

For Pig's Feet (Salt and Soused), Tripe (Fresh, Pickled, and Soused), Lamb's Tongues (Salt and Spiced and Pickled), and Lunch Tongues (Corned or "Cured," Cooked, and Put Up in Kegs).
Claims use since 1888.

Ser. No. 318,066. MARTIN R. MAURER, Riverhead, N. Y. Filed Aug. 17, 1931.

The Big Duck Ranch



The picture of the goods is disclaimed.
For Dressed Poultry and Live Ducks.
Claims use since Apr. 1, 1931.

Ser. No. 319,850. HENRY BECKER & SON, INC., Roseland, N. J. Filed Oct. 8, 1931. Under 10-year proviso.

ROSELAND DAIRY FARMS PRODUCTS

For Milk, Cream, Butter, Eggs, Lard, and Cheese.
Claims use since 1880.

Ser. No. 323,208. C. RAMIREZ & CO., Nogales, Ariz. Filed Jan. 20, 1932.

BURRIONCITO

For Fresh Vegetables.
Claims use since Dec. 17, 1931.

Ser. No. 323,209. SUSSMAN, WORMSER & COMPANY, San Francisco, Calif. Filed Jan. 20, 1932.

Palmdale

For Canned Fruits, Canned Vegetables, Canned Berries, Dried Fruits, Fruit Preserves.
Claims use since 1918 on canned fruit and fruit preserves; since December, 1931, on canned vegetables and fish; and since August, 1926, on dried fruits.

Ser. No. 325,410. LEWIS D. PIERCE, doing business as Western Products Company, Eugene, Oreg. Filed Mar. 23, 1932.

TART-A-NAZE

For Dressing for Salads and Other Foods.
Claims use since Jan. 1, 1931.

Ser. No. 325,470. ALBERT HELBOK, Bronxville, N. Y. Filed Mar. 25, 1932.



For the Following Articles—Namely, Rolls Having Each a Frankfurter Contained and Entirely Enclosed Therein, the Roll Being Formed by Wrapping the Raw Dough About the Raw Frankfurter, the Whole Then Being Baked; Rolls Having Each a Frankfurter and a Portion of Sauerkraut Contained and Entirely Enclosed Therein, the Roll Being Formed by Wrapping the Raw Dough About the Raw Frankfurter and the Raw Sauerkraut, the Whole Then Being Baked; Also Similarly Processed Rolls in Which Mustard Is Contained Within the Roll Beside the Frankfurter; Also Similarly Processed Rolls in Which Mustard Is Contained Within the Roll Beside the Frankfurter and Sauerkraut.
Claims use since Feb. 1, 1932.

Ser. No. 325,478. ALBERT MEZA, doing business as Tia Juana Products, Venice, Calif. Filed Mar. 25, 1932.

TIA JUANA

For Malt Syrup.
Claims use since Jan. 20, 1932.

Ser. No. 325,510. BLANTON CITRUS GROWERS, INC., Blanton, Fla. Filed Mar. 26, 1932.

CRACKER BOY

For Fresh Citrus Fruits.
Claims use since Nov. 15, 1931.

Ser. No. 325,614. BLUE GRASS-ELMENDORF GRAIN CORPORATION, Lexington, Ky. Filed Mar. 29, 1932.

TUCKY

For Dairy Feeds and Fattening Mash.
Claims use since Sept. 4, 1931.

Ser. No. 325,908. GOLDTREE, LIEBES & Co., San Salvador, Santa Ana, and Sonsonate, Salvador. Filed Apr. 8, 1932.



For Wheat Flour.
Claims use since June, 1911.

Ser. No. 326,071. THE CRACKER JACK CO., Chicago, Ill. Filed Apr. 13, 1932.

lik-rish Jacks

No claim is made to the term "Lik-rish" apart from the mark shown.
For Popcorn Confection.
Claims use since Feb. 15, 1932.

Ser. No. 326,075. VALENTIN BACH, doing business as Peck-O-Egg Mfg. Co., Manhattan Beach, Calif. Filed Apr. 14, 1932.



PECK-O-EGG

No claim is made to the exclusive use of the word "Egg" apart from the mark as shown in the drawing.
For Bird Biscuit for Canaries and the Like.
Claims use since Feb. 1, 1932.

Ser. No. 326,085. FURST-MCNESS COMPANY, Freeport, Ill. Filed Apr. 14, 1932.



The expression "Brand" is disclaimed apart from the other features of the mark shown in the drawing.
For Food Flavoring Extracts—Namely, an Extract Composed of Bourbon Vanilla Extract, Vanillin, Coumarin, Glycerin, and Sugar Syrup; Extract of Lemon, and Extract of Orange.
Claims use since Mar. 1, 1931.

Ser. No. 326,108. INFANTAMILK CORPORATION, Rochester, N. Y. Filed Apr. 14, 1932.

MOL-KIN

For Infant Food.
Claims use since Feb. 22, 1932.

Ser. No. 326,168. TEX-O-KAN FLOUR MILLS CO., Dallas, Tex. Filed Apr. 15, 1932.



The pictorial representation of a bathing girl shown on the drawing is fanciful.
For Wheat Flour.
Claims use since Oct. 15, 1931.

Ser. No. 326,169. TEX-O-KAN FLOUR MILLS CO., Dallas, Tex. Filed Apr. 15, 1932.



No claim is made to the word "Texas" disassociated from the word "Sunny" as shown on the drawing.
For Wheat Flour.
Claims use since Nov. 1, 1931.

Ser. No. 326,202. HARRY H. BATES, Joliet, Ill. Filed Apr. 18, 1932.

CARAMEL-PEP

No claim is made to the word "Caramel" apart from the mark shown in the drawing.
For Candy Coated Pop Corn Confection.
Claims use since Feb. 27, 1932.

Ser. No. 326,203. THE BATTLE CREEK FOOD COMPANY, Battle Creek, Mich. Filed Apr. 18, 1932.

SAUCETTES

For Vegetable Food Composed Principally of Soy Beans, Simulating Meat in Appearance, Taste, and Nutritive Properties.
Claims use since Dec. 15, 1931.

Ser. No. 326,239. WINONA MILL COMPANY, Winona, Minn. Filed Apr. 18, 1932.



The picture of the girl in the drawing is fanciful, the lining indicating shading only.
For Wheat Flour.
Claims use since Feb. 15, 1932.

Ser. No. 326,282. JAMES D. COULES, Boston, Mass. Filed Apr. 20, 1932.



For French Pastries and Ice Cream.
Claims use since Feb. 6, 1932.

Ser. No. 326,320. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y. Filed Apr. 21, 1932.



The figure in the drawing is fanciful, no claim being made to the exclusive use of the words "Fresh Raw Oysters" apart from the mark as shown in the drawing.
For Fresh Oysters.
Claims use since Mar. 28, 1932.

Ser. No. 326,430. PABST CORPORATION, Milwaukee, Wis. Filed Apr. 23, 1932.

"O" HIGH "O"

For Malt Syrup.
Claims use since March, 1930.

Ser. No. 326,437. THOMPSON'S DAIRY, Washington, D. C. Filed Apr. 23, 1932.



No claim is made to the representation of the bottle apart from the mark as shown in the drawing.
For Milk, Cream, Butter, Cheese, and Eggs.
Claims use since Apr. 18, 1932.

Ser. No. 326,457. N. C. COAN, doing business as Animal Foods Company, San Jose, Calif. Filed Apr. 25, 1932.

Favorite

For Canned Food for Dogs and Cats and Other Carnivorous Animals.
Claims use since Mar. 10, 1932.

Ser. No. 326,466. FELTON CHEMICAL COMPANY, INC., Brooklyn, N. Y. Filed Apr. 25, 1932.

BOURBOVAN

For Natural Vanilla, Artificial Vanilla, and Compounds of the Same for Food-Flavoring Purposes.
Claims use since Apr. 20, 1932.

Ser. No. 326,618. A. L. STEWART & SONS, Cherryfield and Calais, Me. Filed Apr. 29, 1932. Under 10-year proviso.

Stewart's

For Canned Berries.
Claims use since 1868.

Ser. No. 326,702. AMERICAN TRUST COMPANY, San Francisco, Calif. Filed May 3, 1932.

GREEN CAP

For Fresh Vegetables.
Claims use since Feb. 24, 1932.

CLASS 50

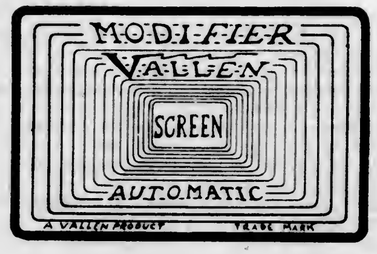
Merchandise Not Otherwise Classified

Ser. No. 314,286. CHAS. H. KLEIN, doing business as Thrift-E-Sole Company, Cincinnati, Ohio. Filed May 7, 1931.

THRIFT-E-SOLE

The applicant disclaims any exclusive rights in the word "Sole" except in the connection shown.
For Plastic Substance for Re-Soling Shoes.
Claims use since Apr. 22, 1931.

Ser. No. 314,826. VALLEN ELECTRICAL COMPANY, INC., Akron, Ohio. Filed May 20, 1931.



Applicant hereby disclaims the words "Screen," "Automatic," "Modifier," "Trade Mark" and "Product" apart from the mark as shown in the drawings.
For Automatically Operated Curtains for Use with Screens for Photoplays or the Like.
Claims use since June 16, 1930.

Ser. No. 325,268. PASCUAL PÉREZ, New York, N. Y. Filed Mar. 18, 1932.

TIEMASTER

No claim is made to the representation of the goods apart from the mark shown on the drawing.
For Necktie Pressing and Reshaping Device.
Claims use since Mar. 1, 1932.

Ser. No. 325,323. DUREX ABRASIVES CORPORATION, Jersey City, N. J. Filed Mar. 21, 1932.



For Coated Fabric Tape and Coated Cellulose Tape for Masking and for General Industrial and Utility Purposes.
Claims use since July 25, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 7, 1932

294,602. PERIODICAL. THE SPOKESMAN PUBLISHING COMPANY, Cincinnati, Ohio.
Filed December 21, 1931. Serial No. 322,336. PUBLISHED MARCH 29, 1932. Class 38.

294,603. CARTOON STRIP. KING FEATURES SYNDICATE, INC., New York, N. Y.
Filed January 20, 1932. Serial No. 323,201. PUBLISHED MARCH 29, 1932. Class 38.

294,604. GREETING CARDS, PICTURE FOLDERS, CHRISTMAS CARDS, ILLUSTRATED CARDS, ILLUMINATED CARDS. TICHNOR BROTHERS, INC., Cambridge, Mass.
Filed January 20, 1932. Serial No. 323,211. PUBLISHED MARCH 22, 1932. Class 38.

294,605. CHECKS. NATIONAL HEALTH PLAN, INC., Providence, R. I.
Filed January 23, 1932. Serial No. 323,340. PUBLISHED MARCH 22, 1932. Class 37.

294,606. MONTHLY FICTION AND NEWS DETECTIVE STORY MAGAZINE. REAL DETECTIVE TALES, INC., Chicago, Ill.
Filed October 31, 1931. Serial No. 320,697. PUBLISHED MARCH 29, 1932. Class 38.

294,607. PERIODICALLY PUBLISHED PUBLICATION. RADIO DIAL PUBLISHING COMPANY, Cincinnati, Ohio.
Filed October 2, 1931. Serial No. 319,607. PUBLISHED MARCH 29, 1932. Class 38.

294,608. ART STATIONERY—NAMELY, LETTERHEADS AND ENVELOPES. CLARENCE M. PHILLIPS, Palestine, Ill.
Filed November 21, 1931. Serial No. 321,395. PUBLISHED MARCH 29, 1932. Class 37.

294,609. PERIODICALS. VANADIUM CORPORATION OF AMERICA, Bridgeville, Pa.
Filed December 17, 1931. Serial No. 322,240. PUBLISHED MARCH 29, 1932. Class 38.

294,610. HYDROSULPHITE FOR TEXTILE PURPOSES. ROYCE CHEMICAL COMPANY, Carlton Hill, N. J.
Filed January 23, 1932. Serial No. 323,369. PUBLISHED MARCH 15, 1932. Class 6.

294,611. PERFUME, TOILET WATER, AND FACE POWDER. YBRY, INC., New York, N. Y.
Filed January 23, 1932. Serial No. 323,380. PUBLISHED MARCH 15, 1932. Class 6.

294,612. PERFUME, TOILET WATER, AND FACE POWDER. YBRY, INC., New York, N. Y.
Filed January 23, 1932. Serial No. 323,381. PUBLISHED MARCH 15, 1932. Class 6.

294,613. PERFUME, TOILET WATER, FACE POWDER, LIPSTICKS, ROUGE, AND COMPACTS, SOLD EITHER SEPARATELY OR IN VANITIES. YBRY, INC., New York, N. Y.
Filed January 23, 1932. Serial No. 323,383. PUBLISHED MARCH 15, 1932. Class 6.

294,614. TOILET PREPARATIONS—NAMELY, PERFUME, TOILET WATER, FACE POWDER, ETC. BOURJOIS, INC., New York, N. Y.
Filed January 23, 1932. Serial No. 323,322. PUBLISHED MARCH 15, 1932. Class 6.

294,615. NASAL POWDER, WITH ASTRINGENT PROPERTIES FOR HAY FEVER, CATARRH, ROSE FEVER, AND SINUS DISCOMFORTS. FREDERICK L. CAVALLY, Cincinnati, Ohio.
Filed January 18, 1932. Serial No. 323,124. PUBLISHED MARCH 15, 1932. Class 6

294,616. PREPARATION FOR THE TREATMENT OF THE SCALP. ALOIS MERKE, Philadelphia, Pa.
Filed January 14, 1932. Serial No. 323,263. PUBLISHED MARCH 15, 1932. Class 6.

294,617. HAIR RINSE. E. FREDERICS, INC., New York, N. Y.
Filed January 21, 1932. Serial No. 323,238. PUBLISHED MARCH 15, 1932. Class 6.

294,618. A PREPARATION FOR USE IN THE REMOVAL OF DANDRUFF. ANGELO CONDONIS, St. Louis, Mo.
Filed December 30, 1931. Serial No. 322,610. PUBLISHED MARCH 22, 1932. Class 6.

294,619. MEDICINAL PREPARATION FOR USE IN THE TREATMENT OF GENERAL WEAKNESS, NERVOUSNESS, AND RUN DOWN CONDITION IN HUMAN BEINGS. DUDLEY DUNN, doing business as Health Laboratories, Memphis, Tenn.
Filed January 4, 1932. Serial No. 322,689. PUBLISHED MARCH 22, 1932. Class 6.

294,620. PERFUME, TOILET WATER, TOILET POWDER, AND TOILET CREAM. BOURJOIS, INC., New York, N. Y.
Filed January 5, 1932. Serial No. 322,730. PUBLISHED MARCH 8, 1932. Class 6.

294,621. TABLETS USED FOR TREATMENT OF HEADACHES, PAINS. H. E. LOVETT, Pittsburgh, Pa.
Filed January 8, 1932. Serial No. 322,826. PUBLISHED MARCH 22, 1932. Class 6.

294,622. WOMEN'S LEATHER SHOES. W. B. COON CO., Rochester, N. Y.
Filed February 2, 1932. Serial No. 323,741. PUBLISHED MARCH 29, 1932. Class 39.

294,623. CHEWING GUM. ORBIT LISTERATED GUM COMPANY, Chicago, Ill.
Filed February 3, 1932. Serial No. 323,788. PUBLISHED MARCH 29, 1932. Class 46.

294,624. CORSETS. LILY OF FRANCE CORSET CO., New York, N. Y.
Filed February 8, 1932. Serial No. 323,949. PUBLISHED MARCH 29, 1932. Class 39.

294,625. SAUSAGE. F. G. VOGT & SONS, INCORPORATED, Philadelphia, Pa.
Filed February 8, 1932. Serial No. 323,967. PUBLISHED MARCH 29, 1932. Class 46.

294,626. CORSETS, GIRDLES, BRASSIÈRES AND COMBINATIONS OF GIRDLES AND BRASSIÈRES. KOPS BROTHERS, INC., New York, N. Y.
Filed February 9, 1932. Serial No. 324,002. PUBLISHED MARCH 29, 1932. Class 39.

294,627. SHOES OF LEATHER, RUBBER, FABRIC, OR COMBINATIONS OF THESE MATERIALS. THE P. SULLIVAN SHOE CO., Cincinnati, Ohio.
Filed February 10, 1932. Serial No. 324,050. PUBLISHED MARCH 29, 1932. Class 39.

294,628. FRESH CITRUS FRUIT. SCOTT-BORDEN, Anaheim, Calif.
Filed January 26, 1932. Serial No. 323,467. PUBLISHED MARCH 29, 1932. Class 46.

294,629. CANNED FRUITS. TULARE PACKING COMPANY, LTD., Tulare, Calif.
Filed February 23, 1932. Serial No. 324,408. PUBLISHED MARCH 29, 1932. Class 46.

294,630. MAGAZINE. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed January 30, 1932. Serial No. 323,616. PUBLISHED MARCH 29, 1932. Class 38.

294,631. DAILY PUBLICATION. JOSEPH C. MALECKI, Chicago, Ill.
Filed February 6, 1932. Serial No. 323,898. PUBLISHED MARCH 22, 1932. Class 38.

294,632. SCRAP BOOK PUBLISHED FROM TIME TO TIME. PARENTS' PUBLISHING ASSOCIATION, INC., New York, N. Y.
Filed February 9, 1932. Serial No. 324,007. PUBLISHED MARCH 29, 1932. Class 37.

294,633. LOOSE LEAF BINDERS AND DEVICES AND RULED AND/OR PRINTED ACCOUNTING FORMS. THE WORKMAN MANUFACTURING COMPANY, Chicago, Ill.
Filed February 8, 1932. Serial No. 323,969. PUBLISHED MARCH 29, 1932. Class 37.

294,634. PERIODICAL. THE CLAYTON MAGAZINES, INC., New York, N. Y.
Filed February 11, 1932. Serial No. 324,062. PUBLISHED MARCH 22, 1932. Class 38.

294,635. MONTHLY PUBLICATION. THE MERCHANDISE MANAGER PUBLISHING CORPORATION, New York, N. Y.
Filed February 11, 1932. Serial No. 324,074. PUBLISHED MARCH 29, 1932. Class 38.

294,636. MONTHLY PUBLICATION. THE MERCHANDISE MANAGER PUBLISHING CORPORATION, New York, N. Y.
Filed February 11, 1932. Serial No. 324,075. PUBLISHED MARCH 29, 1932. Class 38.

294,637. PRINTS—NAMELY, CARTOON PRINTS. DOMINICK LOSCALZO, doing business as Associated Features, Brooklyn, N. Y.
Filed February 12, 1932. Serial No. 324,141. PUBLISHED MARCH 22, 1932. Class 38.

294,638. PERIODICAL. THE CLAYTON MAGAZINES, INC., New York, N. Y.
Filed February 16, 1932. Serial No. 324,218. PUBLISHED MARCH 29, 1932. Class 38.

294,639. PERIODICAL PUBLICATION. KING PUBLISHING CO., INC., New York, N. Y.
Filed February 20, 1932. Serial No. 324,348. PUBLISHED MARCH 29, 1932. Class 38.

294,640. HOUSE ORGAN. THE CHEMICAL CATALOG COMPANY, INC., New York, N. Y.
Filed February 23, 1932. Serial No. 324,369. PUBLISHED MARCH 29, 1932. Class 38.

294,641. SECTION OF A MONTHLY MAGAZINE OR PERIODICAL PUBLICATION. NICKERSON & COLLINS CO., Chicago, Ill.
Filed February 23, 1932. Serial No. 324,393. PUBLISHED MARCH 29, 1932. Class 38.

294,642. INHALANTS FOR THE RELIEF OF INFECTIONS OF THE NASAL CAVITY. HART DRUG CORPORATION, Miami, Fla.
Filed December 5, 1930. Serial No. 308,625. PUBLISHED MARCH 29, 1932. Class 6.

294,643. CORE BINDERS AND BINDERS FOR MOLDING SAND. FOUNDRY MATERIALS, INC., South Euclid, Ohio.
Filed August 15, 1931. Serial No. 318,004. PUBLISHED MARCH 15, 1932. Class 5.

294,644. BEAUTY SUPPLIES AND COSMETICS. ROYAL BEAUTY PARLOR SUPPLY CO., Newark, N. J.
Filed June 17, 1931. Serial No. 316,069. PUBLISHED MARCH 1, 1932. Class 6.

294,645. SUPPOSITORIES RECOMMENDED FOR THE TREATMENT OF INFLAMMATORY PROCESSES OF THE RECTUM AND OF THE ADJACENT ORGANS. SCHERING & GLATZ, INC., Bloomfield, N. J.
Filed June 24, 1931. Serial No. 316,218. PUBLISHED MARCH 29, 1932. Class 6.

294,646. POTATO GRADERS, POTATO SEED TREATING MACHINES, BIN LOADERS, ONION GRADERS, BELT CONVEYORS, PICKING TABLES, SACK ELEVATORS, BELT ELEVATORS. BOGGS MANUFACTURING CORPORATION, Atlanta, N. Y.
Filed January 21, 1931. Serial No. 310,202. PUBLISHED MARCH 22, 1932. Class 23.

294,647. CLEANING APPARATUS. FIRTH-SMITH COMPANY, Boston, Mass.
Filed February 17, 1931. Serial No. 311,137. PUBLISHED MARCH 22, 1932. Class 23.

294,648. HORSE AND MULE FEEDS, POULTRY FEEDS, DAIRY FEEDS, AND STOCK FEEDS. PURITAN MILLS, INCORPORATED, Atlanta, Ga.
Filed August 24, 1931. Serial No. 319,046. PUBLISHED MARCH 15, 1932. Class 46.

294,649. SYNTHETIC CASEIN SOLD AS A FOOD INGREDIENT. THE GLIDDEN COMPANY, Cleveland, Ohio.
Filed November 19, 1931. Serial No. 321,277. PUBLISHED MARCH 22, 1932. Class 46.

294,650. WHOLE WHEAT CEREAL. DIXIE MILLS, Clarksville, Tenn.
Filed November 20, 1931. Serial No. 321,332. PUBLISHED MARCH 22, 1932. Class 46.

294,651. EGGS. THE COLORADO POULTRY AND EGG PRODUCERS, INC., Denver, Colo.
Filed December 4, 1931. Serial No. 321,795. PUBLISHED MARCH 8, 1932. Class 46.

294,652. MIXED FEEDS FOR POULTRY. PURITAN MILLS, INCORPORATED, Atlanta, Ga.
Filed December 9, 1931. Serial No. 321,970. PUBLISHED MARCH 15, 1932. Class 46.

294,653. FRUIT JUICES FOR FOOD PURPOSES. HOWEY-IN-THE-HILLS JUICE CO., Howey in the Hills, Fla.
Filed December 17, 1931. Serial No. 322,214. PUBLISHED MARCH 22, 1932. Class 46.

294,654. WHISKEY. ROBERT O. SEEVERS, Minneapolis, Minn.
Filed December 19, 1931. Serial No. 322,294. PUBLISHED MARCH 22, 1932. Class 49.

294,655. WHOLE GRAINS OF WHEAT PREPARED FOR EATING. HENRY J. YOUNGS, doing business as 'S Wheat Cereal Food Company, Berkeley, Calif.
Filed December 28, 1931. Serial No. 322,537. PUBLISHED MARCH 15, 1932. Class 46.

294,656. MECHANICAL TRICK MATCH BOX. J. CHEIN & COMPANY, New York, N. Y., and Harrison, N. J.
Filed December 31, 1931. Serial No. 322,573. PUBLISHED MARCH 29, 1932. Class 22.

294,657. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS, COMPOUNDS, FLAVORS, AND CONCENTRATES FOR MAKING THE SAME. ORANGE-CRUSH COMPANY, Chicago, Ill.
Filed January 2, 1932. Serial No. 322,649. PUBLISHED MARCH 22, 1932. Class 45.

294,658. GRAPE JUICE. ORANGE-CRUSH COMPANY, Chicago, Ill.
Filed January 7, 1932. Serial No. 322,803. PUBLISHED MARCH 22, 1932. Class 45.

294,659. RICE FLOUR. STANDARD RICE COMPANY, INC., Houston, Tex.
Filed January 12, 1932. Serial No. 322,940. PUBLISHED MARCH 22, 1932. Class 46.

294,660. SHADE CLOTH MADE OF PYROXYLIN COATED FABRICS. COLUMBUS COATED FABRICS CORPORATION, Columbus, Ohio.
Filed January 27, 1932. Serial No. 323,512. PUBLISHED APRIL 5, 1932. Class 50.

294,661. GAME APPARATUS, INCLUDING COURTS, WICKETS, BALLS, AND MALLETS. FRANCIS W. GIBSON, Boston, Mass.
Filed January 19, 1932. Serial No. 323,169. PUBLISHED MARCH 22, 1932. Class 22.

294,662. COFFEE. E. B. MILLAR & COMPANY, Chicago, Ill.
Filed February 17, 1931. Serial No. 311,151. PUBLISHED MARCH 29, 1932. Class 46.

294,663. BITTER SALTS OBTAINED FROM NATURAL MINERAL WATER. ANDREAS SAXLEHNER, Budapest, Hungary.
Filed February 17, 1931. Serial No. 311,162. PUBLISHED MARCH 22, 1932. Class 6.

294,664. CUTLERY—NAMELY, RAZORS, SAFETY RAZORS, AND SAFETY RAZOR BLADES. GEO. H. LAWRENCE LIMITED, Sheffield, England.
Filed February 26, 1931. Serial No. 311,482. PUBLISHED MARCH 29, 1932. Class 23.

294,665. RUBBER GOODS, INCLUDING AUTOMOBILE ACCESSORIES. THE BUCKEYE RELINER PRODUCING CO., Lima, Ohio.
Filed March 18, 1931. Serial No. 312,255. PUBLISHED MARCH 22, 1932. Class 35.

294,666. ALUM POWDER, SODA, BORIC ACID, ETC. PUREPAC CORPORATION, Newark, N. J.
Filed March 21, 1931. Serial No. 312,387. PUBLISHED MARCH 8, 1932. Class 6.

294,667. CANNED GRAPEFRUIT AND CANNED GRAPEFRUIT JUICE FOR FOOD PURPOSES. L. P. MAGGIONI & COMPANY, Savannah, Ga.
Filed April 25, 1931. Serial No. 313,788. PUBLISHED MARCH 22, 1932. Class 46.

294,668. CANNED GRAPEFRUIT. L. P. MAGGIONI & COMPANY, Savannah, Ga.
Filed April 29, 1931. Serial No. 313,965. PUBLISHED MARCH 22, 1932. Class 46.

294,669. COAL, GAS, AND OIL STOVES, RANGES, HEATERS, AND OVENS; AND ON FURNACES, BOTH PIPE AND PIPELESS; AND ON BOILERS, BOTH STEAM AND HOT WATER. MONTGOMERY WARD & CO., INCORPORATED, Chicago, Ill.
Filed May 11, 1931. Serial No. 314,420. PUBLISHED MARCH 22, 1932. Class 34.

294,670. PREPARATION TO ASSIST IN THE TREATMENT OF BLACK TONGUE. MANSFIELD VETERINARY LABORATORY, Mansfield, La.
Filed May 23, 1931. Serial No. 314,957. PUBLISHED MARCH 22, 1932. Class 6.

294,671. COFFEE. STANDARD GROCERY COMPANY, Boston, Mass.
Filed June 15, 1931. Serial No. 315,879. PUBLISHED MARCH 22, 1932. Class 46.

294,672. COMPLEXION POWDER, CLEANSING CREAM, TISSUE CREAM, ETC. DENVER DRY GOODS CO., Denver, Colo.
Filed July 16, 1931. Serial No. 316,993. PUBLISHED MARCH 22, 1932. Class 6.

294,673. LAXATIVE TONIC. BERNHARD O. LEUBNER, doing business as Aetna Chemical Company, Detroit, Mich.
Filed July 2, 1929. Serial No. 286,492. PUBLISHED MARCH 29, 1932. Class 6.

294,674. NONALCOHOLIC, CEREAL, MALT BEVERAGES AND SYRUPS AND EXTRACTS FOR PREPARING THE SAME. LOS ANGELES BREWING CO., Los Angeles, Calif.
Filed July 11, 1928. Serial No. 269,412. PUBLISHED MARCH 5, 1929. Class 48.

294,675. REMEDY, FOR WEAK LUNGS, SORE SPOTS, PNEUMONIA, RHEUMATISM, TUBERCULOSIS OF THE THROAT AND LUNGS AND ACHES AND PAINS. A. T. BELL, Oroville, Calif.
Filed December 3, 1929. Serial No. 293,172. PUBLISHED MARCH 29, 1932. Class 6.

294,676. SMOKING TOBACCOS, SNUFFS, AND CIGARETTES. P. J. CARROLL & COMPANY LIMITED, Dundalk, Ireland.
Filed January 10, 1930. Serial No. 294,620. PUBLISHED MARCH 22, 1932. Class 17.

294,677. PADS FOR THE SUPPORT OF BUFFING, POLISHING, AND ABRADING MEDIA ON MACHINERY. THE DALLETT COMPANY, Philadelphia, Pa.
Filed January 29, 1930. Serial No. 295,330. PUBLISHED MARCH 22, 1932. Class 23.

294,678. FELT HATS FOR MEN AND WOMEN. HODSHON-BERG, INCORPORATED, Norwalk, Conn., and New York, N. Y.
Filed September 5, 1930. Serial No. 305,357. PUBLISHED MARCH 29, 1932. Class 39.

294,679. HAIR TONIC. THE STAYUNG LABORATORIES, INCORPORATED, Portland, Oreg.
Filed May 29, 1930. Serial No. 302,131. PUBLISHED MARCH 1, 1932. Class 6.

294,680. INSECT EXTERMINATOR, DISINFECTANT, DEODORANT, AND INSECTICIDE IN POWDER OR LIQUID FORM. JOSEPHSON DISINFECTING CO., INC., Bronx, N. Y., assignor to X-Ray Insecticide Laboratories, Inc., New York, N. Y., a Corporation of New York.
Filed September 5, 1930. Serial No. 305,359. PUBLISHED MARCH 29, 1932. Class 6.

294,681. MEDICATED CORN PADS. THE E. Z. WALK ARCH CORPORATION, New York, N. Y.
Filed October 10, 1930. Serial No. 306,630. PUBLISHED MARCH 22, 1932. Class 6.

294,682. ANTISEPTIC PARTICULARLY ADAPTED FOR THE TREATMENT OF THE EYES FOR MEDICAL PURPOSES. C. EDGAR LEONARD, Montreal, Quebec, Canada.
Filed June 15, 1931. Serial No. 315,885. PUBLISHED MARCH 22, 1932. Class 6.

294,683. EMMENAGOGUE PILL FOR FEMALE USAGE. ALEX SCOTT, Union City, N. J., assignor to Ferd. Mulhens, Inc., New York, N. Y., a Corporation of New York.
Filed June 23, 1931. Serial No. 316,175. PUBLISHED SEPTEMBER 8, 1931. Class 6.

294,684. JUNIOR, MISSES', AND LADIES' CLOAKS AND SUITS. COHEN & KAPPELL, INC., New York, N. Y.
Filed May 16, 1931. Serial No. 314,638. PUBLISHED MARCH 22, 1932. Class 39.

294,685. NAIL POLISH. GEORGES GAY, doing business as Académie Scientifique de Beauté, Colombes, France, assignor to Maurice Levy, New York, N. Y.
Filed February 5, 1931. Serial No. 310,761. PUBLISHED SEPTEMBER 15, 1931. Class 6.

294,686. GARGLES AND ORAL ANTISEPTICS. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany.
Filed December 18, 1930. Serial No. 309,151. PUBLISHED MARCH 1, 1932. Class 6.

294,687. TOOTH-PASTE, TOOTH-POWDER, MOUTH-WASH. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany.
Filed December 18, 1930. Serial No. 309,146. PUBLISHED MARCH 1, 1932. Class 6.

294,688. CORRUGATED BOARD CONTAINERS FOR ICE CREAM PACKAGES AND THE LIKE. IOWA CAN COMPANY, Keokuk, Iowa.
Filed December 17, 1930. Serial No. 309,082. PUBLISHED MARCH 3, 1931. Class 2.

294,689. DENTIFRICES. THE ANTIDOLOR MFG. CO., INC., Springville, N. Y.
Filed February 8, 1932. Serial No. 323,933. PUBLISHED MARCH 22, 1932. Class 6.

294,690. PREPARATION FOR USE AS A COUGH SEDATIVE AND EXPECTORANT. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed January 30, 1932. Serial No. 323,640. PUBLISHED MARCH 29, 1932. Class 6.

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294,691. LIQUID HEMATINIC PREPARATION. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y.
Filed January 30, 1932. Serial No. 323,614. PUBLISHED MARCH 29, 1932. Class 6.

294,692. FISH LIVER OILS USED AS ACCESSORY NUTRITIONAL FACTORS. ABBOTT LABORATORIES, North Chicago, Ill.
Filed January 30, 1932. Serial No. 323,601. PUBLISHED MARCH 29, 1932. Class 6.

294,693. SAPONIFIED CRESOL SOLUTION. LYSOL, INCORPORATED, Bloomfield, N. J.
Filed January 29, 1932. Serial No. 323,582. PUBLISHED MARCH 29, 1932. Class 6.

294,694. PREPARATIONS USED IN THE TREATMENT OF LOSS OF HAIR. E. R. SQUIBB & SONS, New York, N. Y.
Filed January 27, 1932. Serial No. 323,503. PUBLISHED MARCH 29, 1932. Class 6.

294,695. RUST, SCALE, AND CORROSION PREVENTIVE AND ELIMINATING COMPOUND. METROPOLITAN REFINING CO., INC., Long Island City, N. Y.
Filed January 25, 1932. Serial No. 323,414. PUBLISHED MARCH 29, 1932. Class 6.

294,696. TRANSPARENT LIQUID COATING FOR STEEL, LINOLEUM, RUBBER, ETC. WATERLOX, INC., Detroit, Mich.
Filed January 14, 1932. Serial No. 323,267. PUBLISHED MARCH 29, 1932. Class 6.

294,697. EYE MEDICINE. J. H. ANDRUS, Port Barre, La.
Filed January 14, 1932. Serial No. 322,982. PUBLISHED MARCH 29, 1932. Class 6.

294,698. TOILET ARTICLE. PINAUD, INC., New York, N. Y.
Filed January 13, 1932. Serial No. 322,970. PUBLISHED MARCH 29, 1932. Class 6.

294,699. TABLETS FOR THE TREATMENT OF COLDS. CONTINENTAL DRUG CORPORATION, doing business as Covo Laboratories, Alton, Ill.
Filed January 11, 1932. Serial No. 322,880. PUBLISHED MARCH 29, 1932. Class 6.

294,700. INCENSE. PAINE INCENSE COMPANY, Lewiston, Me.
Filed January 4, 1932. Serial No. 322,704. PUBLISHED MARCH 29, 1932. Class 6.

294,701. CHEMICAL PRODUCT FOR REMOVING RUST AND SCALE FROM METAL SURFACES. INTERNATIONAL PAINT CORPORATION, East St. Louis, Ill.
Filed December 23, 1931. Serial No. 322,387. PUBLISHED MARCH 29, 1932. Class 6.

294,702. PREPARATION FOR IMMUNIZING TISSUES AGAINST INFECTIONS. ISTITUTO BIOLOGICO FARMACEUTICO GAZZONE, Turin, Italy.
Filed December 9, 1931. Serial No. 321,953. PUBLISHED MARCH 29, 1932. Class 6.

294,703. SALVE TO BE USED IN THE TREATMENT OF FELONS, ABSCESSES, CARBUNCLES, PROUD FLESH, PILES, ECZEMA, BOILS, STYS, SKIN DISEASES, IVY POISONING, AND ALL MINOR CUTS AND INFECTIONS. THE TNT CO., Oakland, Calif.
Filed December 7, 1931. Serial No. 321,935. PUBLISHED MARCH 29, 1932. Class 6.

294,704. POWDERED SUBSTANCE CONSISTING OF FLOUR AND VARIOUS CHEMICALS FOR IMPROVING BREAD DOUGH. NATIONAL YEAST COMPANY, Pittsburgh, Pa.
Filed August 22, 1931. Serial No. 318,320. PUBLISHED MARCH 22, 1932. Class 46.

294,705. MEN'S LEATHER JACKETS. RAYMOND MANUFACTURING CO., Stockton, Calif.
Filed August 25, 1931. Serial No. 318,411. PUBLISHED MARCH 29, 1932. Class 39.

294,706. WOOLEN PIECE GOODS. AMERICAN WOOLEN COMPANY, Boston, Mass., and New York, N. Y.
Filed November 17, 1931. Serial No. 321,194. PUBLISHED MARCH 29, 1932. Class 42.

294,707. COCOA, CHOCOLATE, AND COCOABUTTER FOR FOOD PURPOSES. C. J. VAN HOUTEN & ZOON, Weesp, Netherlands.
Filed November 20, 1931. Serial No. 321,366. PUBLISHED MARCH 15, 1932. Class 46.

294,708. SUGAR. GODCHAUX SUGARS, INC., New Orleans, La.
Filed November 28, 1931. Serial No. 321,558. PUBLISHED MARCH 22, 1932. Class 46.

294,709. MEN'S AND BOYS' DRESS AND NEGLIGEE SHIRTS, PAJAMAS AND TEXTILE UNDERWEAR. LIONDALE SHIRT CO. INC., New York, N. Y.
Filed December 10, 1931. Serial No. 322,000. PUBLISHED FEBRUARY 23, 1932. Class 39.

294,710. SPORT CLOTHING CONSISTING OF COATS, VESTS, BLOUSES, AND PANTS FOR MEN, BOYS, AND WOMEN, AND WORK CLOTHING CONSISTING OF OVERALLS, COATS, PANTS FOR MEN AND BOYS. STAHL-URBAN COMPANY, Terre Haute, Ind.
Filed December 23, 1931. Serial No. 322,404. PUBLISHED MARCH 22, 1932. Class 39.

294,711. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed December 29, 1931. Serial No. 322,524. PUBLISHED MARCH 22, 1932. Class 42.

294,712. THREAD. THE GARDINER HALL JR. COMPANY, South Willington, Conn., and New York, N. Y.
Filed January 5, 1932. Serial No. 322,737. PUBLISHED MARCH 29, 1932. Class 43.

294,713. VEGETABLE PURE FOOD COLLOID ICE CREAM STABILIZER STANDARDIZED. JOE LOWE CORPORATION, Wilmington, Del., and Brooklyn, N. Y.
Filed January 7, 1932. Serial No. 322,796. PUBLISHED MARCH 22, 1932. Class 46.

294,714. FLAVORING EXTRACTS FOR FOODS. PRICE FLAVORING EXTRACT COMPANY, Chicago, Ill.
Filed January 9, 1932. Serial No. 322,860. PUBLISHED MARCH 22, 1932. Class 46.

294,715. FROZEN CONFECTIONS. SANI-SEAL COMPANY, INC., Knoxville, Tenn.
Filed January 12, 1932. Serial No. 322,943. PUBLISHED MARCH 8, 1932. Class 46.

294,716. THREAD AND YARN. J. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed January 14, 1932. Serial No. 322,986. PUBLISHED MARCH 22, 1932. Class 43.

294,717. COTTON PIECE GOODS. THE BRADFORD DYERS' ASSOCIATION, LIMITED, Bradford, England.
Filed January 15, 1932. Serial No. 323,024. PUBLISHED MARCH 29, 1932. Class 42.

294,718. WORK SHIRTS. ROLLAND LEE SPAIDE, doing business as The Journeyman Shirt Company, Butler, Pa.
Filed January 15, 1932. Serial No. 323,066. PUBLISHED MARCH 22, 1932. Class 39.

294,719. CANNED MALT SYRUP. LOUIS BERNSTEIN, doing business as Arthur & Lew, Philadelphia, Pa.
Filed January 19, 1932. Serial No. 323,158. PUBLISHED MARCH 22, 1932. Class 46.

294,720. TEXTILE CARPETS. HARDWICK & MAGEE COMPANY, Philadelphia, Pa.
Filed January 20, 1932. Serial No. 323,196. PUBLISHED MARCH 29, 1932. Class 42.

294,721. TEXTILE CARPETS. HARDWICK & MAGEE COMPANY, Philadelphia, Pa.
Filed January 20, 1932. Serial No. 323,197. PUBLISHED MARCH 22, 1932. Class 42.

294,722. BLANKETS MADE OF COTTON AND WOOL. BEACON MANUFACTURING COMPANY, New Bedford, Mass.
Filed January 21, 1932. Serial No. 323,218. PUBLISHED MARCH 22, 1932. Class 42.

294,723. PREPARED COCOANUT, CAKE FLOUR, PANCAKE FLOUR, ETC. THE GROCERS & PRODUCERS CO., doing business as Clover Farm Stores, Cleveland, Ohio.
Filed January 22, 1932. Serial No. 323,286. PUBLISHED MARCH 22, 1932. Class 46.

294,724. WOMEN'S UNDER-GARMENTS—NAMELY, NIGHTGOWNS, CHEMISES, STEP-INS, SLIPS, DANCE SETS, PANTIES, PAJAMAS, AND PETTICOATS. JOSEPH ADELSON & SONS, New York, N. Y.
Filed January 25, 1932. Serial No. 323,385. PUBLISHED MARCH 29, 1932. Class 39.

294,725. CLOTH IN THE PIECE, MADE ALL OR IN PART OF WORSTED, WOOL, MOHAIR, CAMELS' HAIR, ALPACA, SILK, RAYON, COTTON. B. B. & R. KNIGHT CORPORATION, Providence, R. I.
Filed January 26, 1932. Serial No. 323,459. PUBLISHED MARCH 29, 1932. Class 42.

294,726. CLOTH IN THE PIECE, MADE ALL OR IN PART OF WORSTED, WOOL, MOHAIR, CAMEL'S HAIR, ALPACA, SILK, RAYON, COTTON. B. B. & R. KNIGHT CORPORATION, Providence, R. I.
Filed January 26, 1932. Serial No. 323,460. PUBLISHED MARCH 29, 1932. Class 42.

294,727. MEN'S PAJAMAS, MEN'S UNDERWEAR, MEN'S DRESS AND NEGLIGEE SHIRTS, MUFFLERS, AND DRESSING GOWNS. KNOTHE BROTHERS COMPANY, INC., New York, N. Y.
Filed January 28, 1932. Serial No. 323,535. PUBLISHED MARCH 22, 1932. Class 39.

294,728. LADIES' AND MISSES' COATS MADE OF TEXTILE FABRICS. S. STROOCK & CO. INC., New York, N. Y.
Filed January 28, 1932. Serial No. 323,540. PUBLISHED MARCH 22, 1932. Class 39.

294,729. FACE CREAMS. AMORSKIN CORPORATION, Wilmington, Del., and New York, N. Y.
Filed November 18, 1931. Serial No. 321,234. PUBLISHED MARCH 29, 1932. Class 6.

294,730. FLOOR SANDING MACHINES. CLARKE SANDING MACHINE COMPANY, Muskegon, Mich.
Filed January 25, 1932. Serial No. 323,392. PUBLISHED MARCH 22, 1932. Class 23.

294,731. RUBBER VEHICLE TIRES. THE B. F. GOODRICH COMPANY, New York, N. Y.
Filed January 28, 1932. Serial No. 323,532. PUBLISHED MARCH 22, 1932. Class 35.

294,732. TAB AFFIXING MACHINE. THE NATIONAL MARKING MACHINE COMPANY, Cincinnati, Ohio.
Filed February 8, 1932. Serial No. 323,959. PUBLISHED MARCH 29, 1932. Class 23.

294,733. CENTRIFUGAL CREAM SEPARATING MACHINES. THE DE LAVAL SEPARATOR COMPANY, New York, N. Y.
Filed February 17, 1932. Serial No. 324,243. PUBLISHED MARCH 29, 1932. Class 23.

294,734. MATTRESSES. SLEEPER PRODUCTS, INC., Philadelphia, Pa., and Wilmington, Del.
Filed February 16, 1932. Serial No. 324,274. PUBLISHED MARCH 29, 1932. Class 32.

294,735. TALCUM POWDER. MCKESSON & ROBBINS, INCORPORATED, Bridgeport and Fairfield, Conn.
Filed October 8, 1931. Serial No. 319,870. PUBLISHED MARCH 8, 1932. Class 6.

294,736. STOMACH AND BOWEL MEDICINE. THE ADLERIKA COMPANY, St. Paul, Minn.
Filed October 10, 1931. Serial No. 319,922. PUBLISHED MARCH 8, 1932. Class 6.

294,737. INSECTICIDE COMPOUNDS—NAMELY, FLY, INSECT, AND VERMIN EXTERMINATORS AND REPELLENTS—FOR HOUSEHOLD USE AND ALSO FOR CATTLE AND STOCK USE. ALEXANDER DRUG CO., Oklahoma City, Okla.
Filed October 15, 1931. Serial No. 320,070. PUBLISHED MARCH 8, 1932. Class 6.

294,738. TOILET PREPARATIONS—NAMELY, PERFUMERY. RENAUD ET CIE OF AMERICA, Boston, Mass.
Filed October 27, 1931. Serial No. 320,509. PUBLISHED MARCH 8, 1932. Class 6.

294,739. PRINTING GUM FOR TEXTILE PURPOSES. ROYCE CHEMICAL COMPANY, Carlton Hill, N. J.
Filed October 27, 1931. Serial No. 320,511. PUBLISHED MARCH 8, 1932. Class 6.

294,740. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. HOLLYWOOD, INC., Dallas, Tex.
Filed October 31, 1931. Serial No. 320,677. PUBLISHED MARCH 22, 1932. Class 6.

294,741. ANTISEPTIC SOLUTION. CONTINENTAL DRUG CORPORATION, doing business as Zev Pharmacal Company, Alton, Ill.
Filed November 2, 1931. Serial No. 320,720. PUBLISHED MARCH 8, 1932. Class 6.

294,742. PREPARATIONS OF ERGOT ALKALOIDS FOR ORAL USE, AS A UTERINE STIMULANT, A HEMOSTATIC AND AN EMMENAGOGUE. ABBOTT LABORATORIES, North Chicago, Ill.
Filed November 4, 1931. Serial No. 320,773. PUBLISHED MARCH 15, 1932. Class 6.

294,743. CUTICLE BEAUTIFIER. BASIL R. PROLL, San Mateo, Calif.
Filed November 7, 1931. Serial No. 320,967. PUBLISHED MARCH 15, 1932. Class 6.

294,744. AN ANTISEPTIC, DEODORIZER, DISINFECTANT, AND PROPHYLACTIC. J. HUBBARD & CO., Boston, Mass.
Filed November 27, 1931. Serial No. 321,538. PUBLISHED MARCH 8, 1932. Class 6.

294,745. PHARMACEUTICAL PREPARATION FOR HUMAN USE AND ANIMAL USE. ANTIBODY PRODUCTS LIMITED, Watford, England.
Filed November 30, 1931. Serial No. 321,583. PUBLISHED MARCH 22, 1932. Class 6.

294,746. TRANSPARENT SYNTHETIC RESINS IN THE FORM OF POWDERS, CHIPS, PLATES, RIBBONS, AND SOLUTIONS. ADVANCE SOLVENTS & CHEMICAL CORPORATION, New York, N. Y.
Filed December 18, 1931. Serial No. 322,242. PUBLISHED MARCH 8, 1932. Class 6.

294,747. HAIR WAVING LOTION. ALJE LABORATORIES, New York, N. Y.
Filed December 26, 1931. Serial No. 322,443. PUBLISHED MARCH 8, 1932. Class 6.

294,748. ANESTHETICS. THE OLEOTHESIN COMPANY, INC., Buffalo, N. Y.
Filed January 5, 1932. Serial No. 322,744. PUBLISHED MARCH 8, 1932. Class 6.

294,749. HAND AND FACE LOTION. EUDOXIA WELLS, New York, N. Y.
Filed January 5, 1932. Serial No. 322,757. PUBLISHED MARCH 8, 1932. Class 6.

294,750. COKE. SEMET-SOLVAY COMPANY, New York, N. Y.
Filed February 6, 1932. Serial No. 323,913. PUBLISHED MARCH 15, 1932. Class 1.

294,751. COKE. SEMET-SOLVAY COMPANY, New York, N. Y.
Filed February 6, 1932. Serial No. 323,912. PUBLISHED MARCH 15, 1932. Class 1.

294,752. COKE. SEMET-SOLVAY COMPANY, New York, N. Y.
Filed February 6, 1932. Serial No. 323,911. PUBLISHED MARCH 22, 1932. Class 1.

294,753. FLOOR AND TABLE GAME PLAYED WITH BALLS. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed February 4, 1932. Serial No. 323,827. PUBLISHED MARCH 29, 1932. Class 22.

294,754. INFLATED TOY ROLLING PIN. GEORGE HEIGHWAY, New York, N. Y.
Filed February 4, 1932. Serial No. 323,817. PUBLISHED MARCH 29, 1932. Class 22.

294,755. COIN-CONTROLLED BALL-PROJECTING AMUSEMENT DEVICE. PEO MANUFACTURING CORPORATION, Rochester, N. Y.
Filed January 30, 1932. Serial No. 323,627. PUBLISHED MARCH 22, 1932. Class 22.

294,756. WARDROBE TRUNKS, TAXI AND STEAMER TRUNKS, ETC. WHEARY TRUNK COMPANY, Racine, Wis.
Filed January 27, 1932. Serial No. 323,508. PUBLISHED MARCH 15, 1932. Class 3.

294,757. TABLE BOARD GAME PLAYED COOPERATIVELY WITH A DECK OF CARDS AND SUITABLE COUNTERS SUCH AS CHIPS OR THE LIKE. RONALD W. SHEPPARD, Montclair, N. J.
Filed January 27, 1932. Serial No. 323,501. PUBLISHED MARCH 22, 1932. Class 22.

294,758. CHEESE. SOCIETE ANONYME L'AUVERGNE LAITIERE, Aurillac, France.
Filed January 21, 1932. Serial No. 323,256. PUBLISHED MARCH 15, 1932. Class 46.

294,759. FLOUR — NAMELY, BUCKWHEAT FLOUR. ALEXANDER THOMSON, doing business as Old Timbers' Lodge, Holton, Ind.
Filed January 23, 1932. Serial No. 323,371. PUBLISHED MARCH 22, 1932. Class 46.

294,760. BALL-PROJECTING AMUSEMENT DEVICE WITH OR WITHOUT A COIN CONTROLLED MEANS. AMERICAN MILL AND MANUFACTURING COMPANY, INC., Dallas, Tex.
Filed January 21, 1932. Serial No. 323,216. PUBLISHED MARCH 22, 1932. Class 22.

294,761. STUFFED CLOTH DOLLS. AMERICAN NEEDLECRAFTS, INC., New York, N. Y.
Filed January 20, 1932. Serial No. 323,183. PUBLISHED MARCH 29, 1932. Class 22.

294,762. FISH LURE. ELMER E. RAWDON, Akron, Ohio.
Filed February 23, 1932. Serial No. 324,397. PUBLISHED MARCH 29, 1932. Class 22.

294,763. NON-ALCOHOLIC, MALTLESS SOFT DRINK FOR FOUNTAIN AND HOME USE. TAB BEVERAGE CO., North Merchantville, N. J.
Filed February 18, 1932. Serial No. 324,300. PUBLISHED MARCH 29, 1932. Class 45.

294,764. MATCHES. VOGUE MATCH COMPANY, Chicago, Ill.
Filed February 15, 1932. Serial No. 324,203. PUBLISHED MARCH 29, 1932. Class 9.

294,765. PLAYING CARDS. RUSSELL PLAYING CARD COMPANY, Jersey City, N. J.
Filed February 15, 1932. Serial No. 324,193. PUBLISHED MARCH 22, 1932. Class 22.

294,766. ROLLER SKATES. NATIONAL COMPANY, INC., Malden, Mass.
Filed February 12, 1932. Serial No. 324,111. PUBLISHED MARCH 22, 1932. Class 22.

294,767. WOOD AND METAL GOLF CLUBS. THE L. A. YOUNG COMPANY, Detroit, Mich.
Filed February 8, 1932. Serial No. 323,970. PUBLISHED MARCH 29, 1932. Class 22.

294,768. BREAD. BARNET JOSEPH, New York, N. Y.
Filed February 8, 1932. Serial No. 323,944. PUBLISHED MARCH 22, 1932. Class 46.

294,769. REFRIGERATING AND ICE MAKING MACHINERY AND PARTS THEREOF, WATER AND OIL FILTERS AND PARTS THEREOF. WINKLER ICE MACHINE CO., Philadelphia, Pa.
Filed February 6, 1932. Serial No. 323,924. PUBLISHED MARCH 29, 1932. Class 31.

294,770. TOY FIREWORK NOVELTIES. UNEXCELLED MFG. CO. INC., New York, N. Y.
Filed February 6, 1932. Serial No. 323,921. PUBLISHED MARCH 29, 1932. Class 9.

294,771. MOSS PEAT USED FOR HORTICULTURAL PURPOSES. ATKINS & DURBROW, INC., New York, N. Y.
Filed February 2, 1932. Serial No. 323,737. PUBLISHED MARCH 15, 1932. Class 1.

294,772. MATERIAL USED AS TOOTH POWDER AND MOUTH ANTISEPTIC. LONNIE G. SMITH, doing business as Tulco Laboratories, Tulsa, Okla.
Filed January 7, 1932. Serial No. 322,807. PUBLISHED MARCH 8, 1932. Class 6.

294,773. ARTIFICIAL MINERAL WATER. HIRSCH LABORATORIES, INC., Toledo, Ohio.
Filed January 8, 1932. Serial No. 322,823. PUBLISHED MARCH 8, 1932. Class 6.

294,774. HAIR TONIC. RACM PRODUCTS COMPANY, Brooklyn, N. Y.
Filed January 11, 1932. Serial No. 322,891. PUBLISHED MARCH 8, 1932. Class 6.

294,775. MASSAGE LOTION TO BE APPLIED EXTERNALLY FOR RELIEVING PAINS DUE TO RHEUMATISM, SCIATICA, ETC. NEALE LONGOBARDI, Brooklyn, N. Y.
Filed January 18, 1932. Serial No. 323,139. PUBLISHED MARCH 15, 1932. Class 6.

294,776. LAUNDRY STARCH AND STARCH FOR MANUFACTURING PURPOSES. CORN PRODUCTS REFINING COMPANY, New York, N. Y.
Filed January 20, 1932. Serial No. 323,190. PUBLISHED MARCH 15, 1932. Class 6.

294,777. LAXATIVE IN CHEWING GUM FORM. FOLEY & COMPANY, Chicago, Ill.
Filed January 21, 1932. Serial No. 323,228. PUBLISHED MARCH 15, 1932. Class 6.

294,778. HAIR GROWING AND TREATING OINTMENT. NUNZIO ROTTINO, New York, N. Y.
Filed January 21, 1932. Serial No. 323,254. PUBLISHED MARCH 15, 1932. Class 6.

294,779. EFFERVESCENT APERIENT PREPARATION FOR HUMAN USE. THOMAS KERFOOT & CO., LIMITED, Bardsley, England.
Filed January 22, 1932. Serial No. 323,298. PUBLISHED MARCH 15, 1932. Class 6.

294,780. PURE GLUCOSIDES FROM DIGITALIS LANATA AND RECOMMENDED FOR THE TREATMENT OF CARDIO-RENAL DISEASE. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed December 30, 1931. Serial No. 322,561. PUBLISHED MARCH 1, 1932. Class 6.

294,781. HAIR WAVING FLUID. LUTHER ELLIS GLASGOW, doing business as The Fel Corporation, Pittsburgh, Pa.
Filed September 11, 1931. Serial No. 318,948. PUBLISHED MARCH 29, 1932. Class 6.

294,782. CORN REMOVING LIQUID AND PLASTER. BERTIE ELLIS, New York, N. Y.
Filed July 28, 1931. Serial No. 317,390. PUBLISHED MARCH 1, 1932. Class 6.

294,783. ANTI-FREEZE MIXTURE FOR RADIATORS. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y.
Filed October 6, 1931. Serial No. 319,795. PUBLISHED MARCH 1, 1932. Class 6.

294,784. POMADE, PETROLEUM JELLY, ASPIRIN TABLETS, EPSOM SALT TABLETS, AND LAXATIVES. SAM C. GOODMAN, doing business as Fanlen Products Co., Baltimore, Md.
Filed August 27, 1931. Serial No. 318,484. PUBLISHED MARCH 8, 1932. Class 6.

294,785. DEHYDRATED SEA-PLANT USED IN THE TREATMENT OF DEFICIENCY CONDITIONS IN ITS NATURAL STATE. FALBA FOOTE WHITNEY, doing business as The Vitokelp Company, Los Angeles, Calif.
Filed October 14, 1931. Serial No. 320,064. PUBLISHED MARCH 29, 1932. Class 6.

294,786. MEDICINAL PREPARATION FOR USE IN ELIMINATING EXCESS WEIGHT AND AS A BLOOD PURIFIER AND BODY REJUVENATOR. FRANK HAWLEY, St. Louis, Mo.
Filed October 15, 1931. Serial No. 320,115. PUBLISHED MARCH 29, 1932. Class 6.

294,787. LAXATIVE PREPARATION. ASSOCIATED LABORATORIES, INC., New York, N. Y.
Filed October 22, 1931. Serial No. 320,297. PUBLISHED MARCH 29, 1932. Class 6.

294,788. PREPARATION FOR THE TREATMENT OF DANDRUFF, FALLING HAIR, BALD SPOTS, AND FOR USE IN PROMOTING THE GROWTH OF HAIR AND IMPARTING LIFE AND BEAUTY TO THE HAIR. GLADYS ELAINE GRAVES, Philadelphia, Pa.
Filed October 22, 1931. Serial No. 320,303. PUBLISHED MARCH 29, 1932. Class 6.

294,789. PERFUMES. MISSION BEAD COMPANY, Los Angeles, Calif.
Filed November 2, 1931. Serial No. 320,732. PUBLISHED MARCH 29, 1932. Class 6.

294,790. MEDICINAL PREPARATION FOR THE TREATMENT OF JOINT AND MUSCULAR RHEUMATISM, MUSCULAR BACK ACHES, ACUTE RHEUMATIC FEVER, AND MUSCULAR PAINS. HARRY ENKEL, doing business as Sodasal Laboratories, South Bend, Ind.
Filed November 9, 1931. Serial No. 320,923. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,791. LAXATIVE PILLS, LINIMENT, HAIR TONIC, HAIR DYE, TOOTH POWDER, FACE LOTION, AND PERFUMERY. LANMAN & KEMP-BARCLAY & CO. INCORPORATED, New York, N. Y.
Filed November 13, 1931. Serial No. 321,109. PUBLISHED FEBRUARY 23, 1932. Class 6.

294,792. TEXTILE RUGS. ROYAL ORIENTAL RUG CORPORATION, New York, N. Y.
Filed January 29, 1932. Serial No. 323,589. PUBLISHED MARCH 22, 1932. Class 42.

294,793. HOSIERY. TRAYMORE HOSIERY CO., INC., Reading, Pa.
Filed January 30, 1932. Serial No. 323,639. PUBLISHED MARCH 22, 1932. Class 39.

294,794. MEN'S AND YOUNG MEN'S SUITS, TOPCOATS, OVERCOATS, SPORT SUITS, AND TUXEDOS. ROGERS-DEDE CO., INC., Boston, Mass.
Filed February 1, 1932. Serial No. 323,718. PUBLISHED MARCH 22, 1932. Class 39.

294,795. NECKTIES. FRANC-STROHMENGER & COWAN, INC., New York, N. Y.
Filed January 29, 1932. Serial No. 323,762. PUBLISHED MARCH 22, 1932. Class 39.

294,796. LAMP CHIMNEYS MADE OF GLASS. R. E. TONGUE & BROS. CO., INC., Philadelphia, Pa.
Filed February 6, 1932. Serial No. 323,920. PUBLISHED MARCH 29, 1932. Class 33.

294,797. HOSIERY. MAY HOSIERY MILLS, INC., Burlington, N. C.
Filed February 8, 1932. Serial No. 323,954. PUBLISHED MARCH 22, 1932. Class 39.

294,798. LADIES' UNDERWEAR. JULIUS KAYSER & CO., New York, N. Y.
Filed February 9, 1932. Serial No. 324,000. PUBLISHED MARCH 22, 1932. Class 39.

294,799. HAIR GROWER. ANNIE B. AILER, Washington, D. C.
Filed February 9, 1932. Serial No. 324,010. PUBLISHED MARCH 15, 1932. Class 6.

294,800. BOYS' BLOUSES, SHIRTS, AND PAJAMAS. ELIAS SAVADA, doing business as Savada Brothers, New York, N. Y.
Filed February 9, 1932. Serial No. 324,011. PUBLISHED MARCH 22, 1932. Class 39.

294,801. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS. PRASHKER, SONS & CO., New York, N. Y.
Filed February 12, 1932. Serial No. 324,113. PUBLISHED MARCH 22, 1932. Class 39.

294,802. MEN'S SUITS, TROUSERS, AND SLACKS. PIERRE J. TRACY, doing business as Colm & Tracy, Chicago, Ill.
Filed February 13, 1932. Serial No. 324,134. PUBLISHED MARCH 29, 1932. Class 39.

294,803. HOSIERY. LEHIGH SILK HOSIERY MILLS, INC., New York, N. Y.
Filed February 15, 1932. Serial No. 324,177. PUBLISHED MARCH 29, 1932. Class 39.

294,804. MEN'S NEGLIGEE SHIRTS. HARRY KLEINBERG, Pittsburgh, Pa.
Filed February 18, 1932. Serial No. 324,289. PUBLISHED MARCH 29, 1932. Class 39.

294,805. PIECE GOODS. GOODALL WORSTED CO., Sanford, Me.
Filed February 19, 1932. Serial No. 324,315. PUBLISHED MARCH 29, 1932. Class 42.

294,806. SHEET GLASS. AMERICAN WINDOW GLASS COMPANY, Pittsburgh, Pa.
Filed February 19, 1932. Serial No. 324,308. PUBLISHED MARCH 29, 1932. Class 33.

294,807. RAZOR SHARPENERS AND RAZOR BLADE SHARPENERS MADE OF GLASS. RAZOO WONDER GLASS COMPANY, Los Angeles, Calif.
Filed January 18, 1932. Serial No. 323,145. PUBLISHED MARCH 29, 1932. Class 23.

294,808. COLLOIDAL GRAPHITE IN VARIOUS MEDIUMS FOR VARIOUS USES IN THE INDUSTRIAL ARTS. ACHESON OILDAG COMPANY, Port Huron, Mich.
Filed January 16, 1932. Serial No. 323,080. PUBLISHED MARCH 15, 1932. Class 6.

294,809. HIGH SENSITIVITY HIGH SPEED RECORDERS OF MAGNITUDES OF TEMPERATURE, HUMIDITY, FREQUENCY, ETC. LEEDS & NORTHRUP COMPANY, Philadelphia, Pa.
Filed January 15, 1932. Serial No. 323,052. PUBLISHED MARCH 22, 1932. Class 26.

294,810. HAIR TONIC AND STRAIGHTENER IN THE FORM OF A LIQUID. JOSE DE BARROS, El Centro, Calif.
Filed January 14, 1932. Serial No. 322,993. PUBLISHED MARCH 15, 1932. Class 6.

294,811. FRUIT JUICE DISPENSERS AND COMBINATION SODA FOUNTAIN AND FRUIT JUICE DISPENSERS. MISSION DRY CORPORATION, LTD., Los Angeles, Calif.
Filed January 13, 1932. Serial No. 322,961. PUBLISHED MARCH 29, 1932. Class 23.

294,812. MILK AND CREAM TESTERS. GARVER MACHINE CORPORATION, Union City, Ind.
Filed January 9, 1932. Serial No. 322,910. PUBLISHED MARCH 29, 1932. Class 26.

294,813. BAKING POWDER. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed January 5, 1932. Serial No. 322,753. PUBLISHED MARCH 8, 1932. Class 6.

294,814. FORMALDEHYDE DUST. ANSUL CHEMICAL COMPANY, Marinette, Wis.
Filed January 2, 1932. Serial No. 322,723. PUBLISHED MARCH 8, 1932. Class 6.

294,815. FACE WASHES AND LOTIONS, INCLUDING AFTER-SHAVING PREPARATIONS. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn.
Filed December 30, 1931. Serial No. 322,568. PUBLISHED MARCH 22, 1932. Class 6.

294,816. PREPARATION FOR THE TREATMENT OF ATHLETE'S FOOT AND GOLFER'S ITCH. HILDA O. GREENWELL, doing business as The Central Distributors, St. Louis, Mo.
Filed December 30, 1931. Serial No. 322,546. PUBLISHED MARCH 22, 1932. Class 6.

294,817. PREPARATION FOR KILLING COCKROACHES. WILLIAM RANSOM AUTTENBERRY, Bowie, Tex.
Filed December 24, 1931. Serial No. 322,440. PUBLISHED MARCH 22, 1932. Class 6.

294,818. MEDICINAL TABLETS, OIL AND PETROLATUM SPRAYS, INHALANTS, AND RUBS. THE PINEOLEUM COMPANY, New York, N. Y.
Filed December 24, 1931. Serial No. 322,436. PUBLISHED MARCH 22, 1932. Class 6.

294,819. ANTISEPTIC, PROPHYLACTIC, AND DEODORANT. THE PINETRINE CO., INC., New York, N. Y.
Filed December 23, 1931. Serial No. 322,400. PUBLISHED MARCH 22, 1932. Class 6.

294,820. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. MRS. R. SCOTT LINSLEY, doing business as Calre, Greenfield Hill, Fairfield, Conn.
Filed December 21, 1931. Serial No. 322,321. PUBLISHED MARCH 8, 1932. Class 6.

294,821. BAKING SODA (BICARBONATE OF SODA). DETROIT SODA PRODUCTS CO., Wyandotte, Mich.
Filed December 21, 1931. Serial No. 322,312. PUBLISHED MARCH 8, 1932. Class 6.

294,822. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. FRANK C. REILLY, New York, N. Y.
Filed December 18, 1931. Serial No. 322,271. PUBLISHED MARCH 8, 1932. Class 6.

294,823. INHALANT AND EXTERNAL APPLICANT, INCLUDING AN OILY CONSTITUENT FOR TREATMENT OF COLDS. SHANNON H. WILSON, doing business as Wilson Chemical Co., Pueblo, Colo.
Filed December 15, 1931. Serial No. 322,148. PUBLISHED MARCH 8, 1932. Class 6.

294,824. PREPARATION USED IN THE TREATMENT OF HYPOGONADISM IN ITS VARIOUS MANIFESTATIONS AND OF UNDER-ENERGIZED CONDITIONS IN GENERAL. PARKE, DAVIS & CO., Detroit, Mich.
Filed December 7, 1931. Serial No. 321,889. PUBLISHED MARCH 8, 1932. Class 6.

294,825. DEVICE FOR INJECTING CARBON REMOVER INTO INTERNAL COMBUSTION ENGINES. A C SPARK PLUG COMPANY, Flint, Mich.
Filed December 4, 1931. Serial No. 321,741. PUBLISHED MARCH 22, 1932. Class 23.

294,826. POTATO-HARVESTING MACHINES; POTATO DIGGERS, PICKERS AND SORTERS, AND POTATO PLANTERS. DEERE & COMPANY, Moline, Ill.
Filed October 29, 1931. Serial No. 320,582. PUBLISHED MARCH 22, 1932. Class 23.

294,827. MEDICINAL PREPARATIONS. DR. EARL S. SLOAN INCORPORATED, New York, N. Y.
Filed October 27, 1931. Serial No. 320,524. PUBLISHED MARCH 29, 1932. Class 6.

294,828. PERFUMERY, FACE-POWDER, FACE CREAMS, TOILET WATERS, ROUGES, LIP STICKS, PERFUMES, DEODORIZING PREPARATIONS, TALCUM POWDERS, SACHETS, NAIL VARNISH, DENTIFRICES. JULES GIRAUX, Rouen (Seine Inferieure), France.
Filed August 19, 1931. Serial No. 318,138. PUBLISHED MARCH 8, 1932. Class 6.

294,829. CUTLERY, MACHINERY AND TOOLS AND PARTS THEREOF. AKTIENGESELLSCHAFT FÜR FEINMECHANIK, VORMALS JETTER & SCHEERER, Tuttlingen, Germany.
Filed August 15, 1931. Serial No. 317,996. PUBLISHED MARCH 29, 1932. Class 23.

294,830. GOODS USED IN THE TREATMENT OF RUBBER AND ITS MANUFACTURED ARTICLES. BAKER PERKINS COMPANY, INC., Saginaw, Mich.
Filed July 24, 1931. Serial No. 317,267. PUBLISHED MARCH 29, 1932. Class 23.

294,831. ASPIRIN TABLETS, CASCARA BROMIDE QUININE, CHEWING GUM LAXATIVE, EPSOM SALT TABLETS, MEDICATED THROAT DISCS, AND SODA MINT TABLETS. BEST PRODUCTS CORPORATION, Seattle, Wash.
Filed September 26, 1931. Serial No. 319,439. PUBLISHED MARCH 7, 1932. Class 6.

294,832. PREPARATION FOR THE RELIEF OF HEMORRHOIDS (PILES). THE HEMMOLL CO. INC., Newton, Mass.
Filed September 30, 1931. Serial No. 319,577. PUBLISHED MARCH 1, 1932. Class 6.

294,833. ROUGE, LIPSTICK, FACE POWDER, ETC. ROSELEY PERFUMERY SHOPPE, INC., Newark, N. J.
Filed October 9, 1931. Serial No. 319,964. PUBLISHED MARCH 1, 1932. Class 6.

294,834. ORGANIC ARSENICAL COMPOUND IN A READY TO USE SOLUTION FOR INTRAMUSCULAR INJECTIONS IN THE TREATMENT OF SYPHILIS IN VARIOUS FORMS, AND TROPICAL INFECTIOUS DISEASES. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed October 14, 1931. Serial No. 320,050. PUBLISHED MARCH 1, 1932. Class 6.

294,835. HYGIENIC COSMETICS—VIZ, SKIN-ACTION OIL. CLARA SCHMALZ, Heidelberg, Germany.
Filed October 23, 1931. Serial No. 320,373. PUBLISHED MARCH 1, 1932. Class 6.

294,836. FOOT POWDER. CANADIAN REMEDIES, LTD., Winnipeg, Manitoba, Canada.
Filed October 28, 1931. Serial No. 320,543. PUBLISHED MARCH 1, 1932. Class 6.

294,837. LIQUID CLEANER AND BLEACHER USED IN WASHING CLOTHES—NAMELY, A DILUTE SOLUTION OF AN ALKALI METAL HYPOCHLORITE. ANTHONY OPIPARI, doing business as Pittsburgh Cleanser Co., Pittsburgh, Pa.
Filed October 28, 1931. Serial No. 320,548. PUBLISHED MARCH 1, 1932. Class 6.

294,838. INSECTICIDES, GERMICIDES, AND FUNGICIDES. CALIFORNIA SPRAY-CHEMICAL CORPORATION, Wilmington, Del., and Berkeley, Calif.
Filed November 7, 1931. Serial No. 320,965. PUBLISHED MARCH 1, 1932. Class 6.

294,839. HAIR TONIC. BRISTOL-MYERS COMPANY, New York, N. Y.
Filed November 14, 1931. Serial No. 321,132. PUBLISHED MARCH 1, 1932. Class 6.

294,840. MEDICINAL PREPARATION CONSISTING OF A COMPOUND OF COD LIVER OIL AND MALT EXTRACT (SUITABLY FLAVORED). UNITED DRUG COMPANY, Boston, Mass.
Filed December 3, 1931. Serial No. 321,739. PUBLISHED MARCH 1, 1932. Class 6.

294,841. VAGINAL SUPPOSITORIES. GEORGE PHILIP SCHMITT, doing business as Schmitt Laboratory Products, New York, N. Y.
Filed December 5, 1931. Serial No. 321,930. PUBLISHED MARCH 1, 1932. Class 6.

294,842. SULPHUR COMPOUND, ANTACID AND GAS ABSORBENT, AN EFFECTIVE COMPOUND FOR THE RELIEF OF PAIN AND INDIGESTION DUE TO GAS IN THE STOMACH. ARTHUR H. MCMASTER, Lansing, Mich.
Filed December 12, 1931. Serial No. 322,055. PUBLISHED MARCH 1, 1932. Class 6.

294,843. SOLID CARBON DIOXIDE. PURE CARBONIC COMPANY OF AMERICA, New York, N. Y.
Filed December 12, 1931. Serial No. 322,064. PUBLISHED MARCH 1, 1932. Class 6.

294,844. MATERIALS AND SOLUTIONS FOR TREATING PRINTING PLATES TO PROTECT THE SURFACE THEREOF FROM OXIDATION OR DETERIORATION. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio.
Filed December 14, 1931. Serial No. 322,078. PUBLISHED MARCH 1, 1932. Class 6.

294,845. MATERIALS AND SOLUTIONS FOR TREATING PRINTING PLATES TO RENDER THEM REPELLENT TO GREASE, INK, ETC. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio.
Filed December 14, 1931. Serial No. 322,080. PUBLISHED MARCH 1, 1932. Class 6.

294,846. MOTH-PROOFING COMPOSITION IN LIQUID FORM. WILLIAM E. WILSON, Philadelphia, Pa.
Filed December 15, 1931. Serial No. 322,149. PUBLISHED MARCH 1, 1932. Class 6.

294,847. PREPARATION FOR RELIEF IN REMOVAL OF CORNS, WARTS, AND CALLOUSES. PURITEX PRODUCTS COMPANY, Fredonia, N. Y.
Filed December 16, 1931. Serial No. 322,187. PUBLISHED MARCH 1, 1932. Class 6.

294,848. PERFUME, TOILET WATER, FACE POWDER, DUSTING POWDER, BATH CRYSTALS, SKIN FRESHENER IN THE NATURE OF AN ASTRINGENT SKIN LOTION, CLEANSING CREAM, TISSUE CREAM, FINISHING CREAM, AND HAIR TONIC. BOURJOIS, INC., New York, N. Y.
Filed December 29, 1931. Serial No. 322,496. PUBLISHED MARCH 1, 1932. Class 6.

294,849. DYES USED IN THE DYEING OF ACETATE SILKS. JOHN CAMPBELL & CO., New York, N. Y.
Filed December 29, 1931. Serial No. 322,498. PUBLISHED MARCH 1, 1932. Class 6.

294,850. SCALP PREPARATION. ANTHONY P. SARDOU, Albany, N. Y.
Filed December 29, 1931. Serial No. 322,525. PUBLISHED MARCH 1, 1932. Class 6.

294,851. CERTAIN NAMED WEARING APPAREL. A. H. GEUTING COMPANY, Philadelphia, Pa.
Filed February 1, 1932. Serial No. 323,657. PUBLISHED MARCH 29, 1932. Class 39.

294,852. COFFEE. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed January 29, 1932. Serial No. 323,504. PUBLISHED MARCH 22, 1932. Class 46.

294,853. ELASTIC LOOM-WEB AND ELASTIC LISLE-WEB IN NARROW STRIP OR RIBBON FORM AND ELASTIC CORDS AND BRAIDS. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed January 22, 1932. Serial No. 323,300. PUBLISHED MARCH 29, 1932. Class 40.

294,854. BOOTS AND SHOES CONSTRUCTED OF LEATHER, RUBBER, OR FABRIC, OR ANY COMBINATION OF SUCH MATERIALS. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y.
Filed January 20, 1932. Serial No. 323,194. PUBLISHED MARCH 29, 1932. Class 39.

294,855. COCOA. WARFIELD CHOCOLATE COMPANY, Chicago, Ill.
Filed January 19, 1932. Serial No. 323,179. PUBLISHED MARCH 22, 1932. Class 46.

294,856. SHIRRED RIBBON ELASTIC FOR GARTERS AND SHOULDER STRAPS. MARCUS & WIESEN INC., New York, N. Y.
Filed January 13, 1932. Serial No. 322,960. PUBLISHED MARCH 22, 1932. Class 40.

294,857. SHOES MADE OF LEATHER, FABRIC, RUBBER, AND/OR COMBINATIONS THEREOF. COLLINGWOOD SHOE COMPANY, INC., Endicott, N. Y.
Filed January 7, 1932. Serial No. 322,906. PUBLISHED MARCH 22, 1932. Class 39.

294,858. FRESH VEGETABLES AND FRESH CITRUS FRUITS. BOON, CASWELL & TINDEL, doing business as Texas Fruit & Vegetable Co., Tyler, Tex.
Filed January 7, 1932. Serial No. 322,788. PUBLISHED MARCH 22, 1932. Class 46.

294,859. DRESS, NEGLIGEE, AND WORK SHIRTS; PAJAMAS, TEXTILE UNDERWEAR, AND WORK GLOVES. RIEGEL TEXTILE CORPORATION, New York, N. Y.
Filed December 30, 1931. Serial No. 322,560. PUBLISHED MARCH 22, 1932. Class 39.

294,860. FRESH CITRUS FRUITS. WM. G. ROE & COMPANY, INC., Winter Haven, Fla.
Filed December 24, 1931. Serial No. 322,438. PUBLISHED MARCH 29, 1932. Class 46.

294,861. KNITTED PULL-OVER SWEATERS, COATS, LOUNGING AND BEACH PAJAMAS, BATH ROBES, LOUNGING JACKETS, POLO SHIRTS, AND BERETS FOR MEN, WOMEN, BOYS, AND GIRLS. NEUSTADTER BROS., San Francisco, Calif.
Filed December 16, 1931. Serial No. 322,180. PUBLISHED MARCH 22, 1932. Class 39.

294,862. COMBINATION PACKAGE OF THREAD AND TAPE SOLD AS A UNIT. THE GARDINER HALL JR. COMPANY, South Willington, Conn., and New York, N. Y.
Filed December 3, 1931. Serial No. 321,724. PUBLISHED MARCH 29, 1932. Class 40.

294,863. CANDY. IDAHO CANDY CO., Boise, Idaho.
Filed November 24, 1931. Serial No. 321,467. PUBLISHED MARCH 22, 1932. Class 46.

294,864. FRESH CITRUS FRUITS, CANNED CITRUS FRUITS, AND JUICES FOR FOOD PURPOSES. CITRUS CITY GROWERS ASSOCIATION, Largo, Fla.
Filed November 24, 1931. Serial No. 321,458. PUBLISHED MARCH 29, 1932. Class 46.

294,865. FRESH ORANGES AND FRESH GRAPEFRUIT. THE PALMER CORPORATION, Chicago, Ill.
Filed November 23, 1931. Serial No. 321,437. PUBLISHED MARCH 29, 1932. Class 46.

294,866. HAT LININGS. THE H. & H. MANUFACTURING COMPANY, INC., Quidnick, R. I.
Filed November 11, 1931. Serial No. 321,021. PUBLISHED MARCH 29, 1932. Class 39.

294,867. FRESH CITRUS FRUITS. FILLMORE CITRUS ASSOCIATION, Fillmore, Calif.
Filed October 31, 1931. Serial No. 320,674. PUBLISHED MARCH 29, 1932. Class 46.

294,868. CANDY BARS. THE D. L. CLARK COMPANY, Pittsburgh, Pa.
Filed October 30, 1931. Serial No. 320,632. PUBLISHED MARCH 29, 1932. Class 46.

294,869. CANDIES. THE 7 WAGNER SISTERS, Wilkinsburg, Pa.
Filed September 21, 1931. Serial No. 319,263. PUBLISHED MARCH 22, 1932. Class 46.

294,870. HARD RUBBER COMBS. JULIUS SCHMID, New York, N. Y.
Filed August 29, 1931. Serial No. 318,617. PUBLISHED MARCH 22, 1932. Class 40.

294,871. CERTAIN NAMED WEARING APPAREL. THE LASALLE & KOCH CO., Toledo, Ohio.
Filed August 17, 1931. Serial No. 318,064. PUBLISHED NOVEMBER 3, 1931. Class 39.

294,872. FRESH GRAPES. B. BONELLI, Escalon, Calif.
Filed August 4, 1931. Serial No. 317,658. PUBLISHED MARCH 22, 1932. Class 46.

294,873. COMBINATION PACKAGE OF THREAD AND TAPE SOLD AS A UNIT. THE GARDINER HALL JR. COMPANY, South Willington, Conn., and New York, N. Y.
Filed August 4, 1931. Serial No. 317,635. PUBLISHED MARCH 29, 1932. Class 40.

294,874. NEWSPAPER PUBLISHED DAILY. EVENING HERALD PUBLISHING COMPANY, Los Angeles, Calif.
Filed January 30, 1932. Serial No. 323,612. PUBLISHED MARCH 22, 1932. Class 38.

294,875. DISPLAY BOOK ISSUED PERIODICALLY. RICHARD E. THIBAUT, INC., New York, N. Y.
Filed January 28, 1932. Serial No. 323,551. PUBLISHED MARCH 29, 1932. Class 38.

294,876. PAPER TAPE FOR TELEGRAPH PRINTERS. NEWS PROJECTION CORPORATION, New York, N. Y.
Filed January 28, 1932. Serial No. 323,536. PUBLISHED MARCH 29, 1932. Class 37.

294,877. BOND AND LEDGER PAPERS. PARSONS PAPER COMPANY, Holyoke, Mass.
Filed January 26, 1932. Serial No. 323,463. PUBLISHED MARCH 29, 1932. Class 37.

294,878. BLACKBOARDS. WEBER COSTELLO CO., Chicago, Ill.
Filed October 17, 1931. Serial No. 320,173. PUBLISHED MARCH 22, 1932. Class 50.

294,879. CLOSET TANKS AND BOWLS SEPARATELY AND AS TANK-BOWL UNITS. STANDARD SANITARY MANUFACTURING COMPANY, Pittsburgh, Pa.
Filed October 29, 1931. Serial No. 320,611. PUBLISHED MARCH 22, 1932. Class 13.

294,880. CLOCKS. FRIEDRICH MAUTHE GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Schwenningen-on-the-Neckar, Germany.
Filed November 24, 1931. Serial No. 321,464. PUBLISHED MARCH 29, 1932. Class 27.

294,881. INK TRANSFER MATERIALS. THE MURRAY PRINTING COMPANY, Cambridge, Mass.
Filed December 15, 1931. Serial No. 322,136. PUBLISHED MARCH 22, 1932. Class 11.

294,882. CIGARETTE PAPERS. RENÉ BOLLORÉ, Odet, France.
Filed December 28, 1931. Serial No. 322,480. PUBLISHED MARCH 22, 1932. Class 8.

294,883. CIGARETTE PAPERS. RENÉ BOLLORÉ, Odet, France.
Filed December 30, 1931. Serial No. 322,542. PUBLISHED MARCH 22, 1932. Class 8.

294,884. CIGARETTE PAPERS. RENÉ BOLLORÉ, Odet, France.
Filed December 29, 1931. Serial No. 322,495. PUBLISHED MARCH 22, 1932. Class 8.

294,885. STRAINERS. HAMBLIN & RUSSELL MANUFACTURING COMPANY, Worcester, Mass.
Filed January 2, 1932. Serial No. 322,688. PUBLISHED MARCH 29, 1932. Class 13.

294,886. CIGARS. CHARLES A. KILDOW, Bethesda, Ohio.
Filed December 10, 1931. Serial No. 322,763. PUBLISHED MARCH 29, 1932. Class 17.

294,887. WATER REPELLENT SHOWER CURTAINS. LESHER, WHITMAN & CO., INC., New York, N. Y.
Filed January 16, 1932. Serial No. 323,093. PUBLISHED MARCH 29, 1932. Class 13.

294,888. CYLINDER AND TANK CONVERTERS FOR SOLID CARBON DIOXIDE. WILLIAM WHARTON JR. & COMPANY, INCORPORATED, Easton, Pa.
Filed January 16, 1932. Serial No. 323,106. PUBLISHED MARCH 29, 1932. Class 2.

294,889. NECKTIE RACKS. ALBERT J. LOOMIS, Detroit, Mich.
Filed January 25, 1932. Serial No. 323,413. PUBLISHED MARCH 29, 1932. Class 13.

294,890. TABLE COVERS MADE OF LEATHER, IMITATION LEATHER, AND WATERPROOF FABRIC. CLUFF COVER COMPANY, INC., New York, N. Y.
Filed January 29, 1932. Serial No. 323,564. PUBLISHED MARCH 22, 1932. Class 50.

294,891. BURIAL VAULTS. AMERICAN VAULT COMPANY, Brooklyn, N. Y.
Filed January 27, 1932. Serial No. 323,477. PUBLISHED MARCH 22, 1932. Class 2.

294,892. VEHICLE RADIATOR CAPS AND ORNAMENTS, TANK CAPS, AND LICENSE PLATE HOLDERS. FAITH MFG. CO., Chicago, Ill.
Filed January 29, 1932. Serial No. 323,576. PUBLISHED MARCH 22, 1932. Class 19.

294,893. PROCESSED FABRIC, BACKING MATERIAL USED IN THE MANUFACTURE OF LAMINATED FABRICS. ACME BACKING CORPORATION, Brooklyn, N. Y.
Filed January 30, 1932. Serial No. 323,602. PUBLISHED MARCH 22, 1932. Class 50.

294,894. GARBAGE CANS. THE CINCINNATI GALVANIZING CO., Cincinnati, Ohio.
Filed February 1, 1932. Serial No. 323,651. PUBLISHED MARCH 29, 1932. Class 2.

294,895. PAPER BAGS. LEVIN BROTHERS PAPER CO., Chicago, Ill.
Filed February 1, 1932. Serial No. 323,666. PUBLISHED MARCH 29, 1932. Class 2.

294,896. TOBACCO PIPES. THE "MASTA" PATENT PIPE COMPANY LIMITED, London, England.
Filed February 5, 1932. Serial No. 323,868. PUBLISHED MARCH 29, 1932. Class 8.

294,897. FERTILIZER. THE GULF FERTILIZER CO., Tampa, Fla.
Filed February 8, 1932. Serial No. 323,937. PUBLISHED MARCH 22, 1932. Class 10.

294,898. FERTILIZER. THE GULF FERTILIZER CO., Tampa, Fla.
Filed February 8, 1932. Serial No. 323,938. PUBLISHED MARCH 22, 1932. Class 10.

294,899. CIGARS. JOHN LONGMEYER, St. Louis, Mo.
Filed February 11, 1932. Serial No. 324,073. PUBLISHED MARCH 29, 1932. Class 17.

294,900. WRITING INK. DRY INK CORPORATION, New York, N. Y.
Filed February 12, 1932. Serial No. 324,091. PUBLISHED MARCH 29, 1932. Class 11.

294,901. CIGARS AND CIGARETTES. THE FORTUNE TOBACCO COMPANY, New York, N. Y.
Filed February 12, 1932. Serial No. 324,100. PUBLISHED MARCH 22, 1932. Class 17.

294,902. CIGARS AND CIGARETTES. THE FORTUNE TOBACCO COMPANY, New York, N. Y.
Filed February 12, 1932. Serial No. 324,101. PUBLISHED MARCH 22, 1932. Class 17.

294,903. BROOMS. NATIONAL BROOM MANUFACTURING COMPANY, Pueblo, Colo.
Filed February 12, 1932. Serial No. 324,109. PUBLISHED MARCH 22, 1932. Class 29.

294,904. BROOMS. NATIONAL BROOM MANUFACTURING COMPANY, Pueblo, Colo.
Filed February 12, 1932. Serial No. 324,110. PUBLISHED MARCH 22, 1932. Class 29.

294,905. WATCHES AND PARTS THEREOF. FABRIQUE D'HORLOGERIE "LA CHAMPAGNE" LOUIS MÜLLER & CIE. S. A., Bienne, Switzerland.
Filed February 15, 1932. Serial No. 324,210. PUBLISHED MARCH 29, 1932. Class 27.

294,906. CIGARETTE TUBES, CIGARETTE AND CIGAR HOLDERS. GENERAL-DIREKTION DER ÖSTERR. TABAKREGIE, Vienna, Austria.
Filed February 15, 1932. Serial No. 324,211. PUBLISHED MARCH 29, 1932. Class 8.

294,907. CLOCKS. THE E. INGRAHAM COMPANY, Bristol, Conn.
Filed February 19, 1932. Serial No. 324,317. PUBLISHED MARCH 29, 1932. Class 27.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

294,908. (CLASS 32. FURNITURE AND UPHOLSTERY.) CHAS. W. RICE & COMPANY, Union City, Ind. Filed Aug. 28, 1931. Serial No. 318,532.

HOLD-FAST

For Window Shade Rollers.
Claims use since Apr. 13, 1931.

294,909. (CLASS 39. CLOTHING.) MANFIELD & SONS, LIMITED, Northampton, England. Filed Sept. 2, 1931. Serial No. 318,668.

MANFIELD

For Boots and Shoes Made Principally of Leather, Rubber, or Fabric and/or Combinations of Those Materials.
Claims use since 1845.

294,910. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CHADWICK-HOSKINS CO., Charlotte, N. C. Filed Feb. 3, 1932. Serial No. 323,775.

CHADWICK

For Cotton Piece Goods.
Claims use since June 20, 1926.

294,911. (CLASS 6 CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KOLLOYD LABORATORIES, INC., Chicago, Ill. Filed Feb. 26, 1932. Serial No. 324,532.

KOLLOYD

For Medicinal Preparation Consisting of Colloidal Hydroxide of Aluminum Used as a Gastric Antacid and as an Alkaline for Stomach Acidity.
Claims use since Jan. 2, 1931.

294,912. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) SURFACE COMBUSTION CORPORATION, Toledo, Ohio. Filed Jan. 2, 1931. Serial No. 309,575.

DIFFUSION COMBUSTION

For Industrial Heating Furnaces Fired by Gas Burners Adapted for the Production of a Substantially Non-Turbulent Flame.
Claims use since Dec. 22, 1930.

294,913. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JOHN W. GOTTSCHALK MFG. CO., Philadelphia, Pa. Filed Mar. 20, 1931. Serial No. 312,341.

Stainless Steel Sponge

For Abradants—Namely, a Metallic Wire Which Has Been Flattened and Subjected to a Coiling Action While Under Tension and Then Formed into a Bunch.
Claims use since Sept. 19, 1929.

294,914. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE BILTMORE MANUFACTURING COMPANY, Cincinnati, Ohio. Filed Apr. 22, 1931. Serial No. 313,642.

STANSUP

For Golf Bags.
Claims use since Jan. 31, 1931.

294,915. (CLASS 39. CLOTHING.) MONROE SHIRT COMPANY, New York, N. Y. Filed Apr. 27, 1931. Serial No. 313,863.

Mattawan

For Men's and Boys' Dress, Negligee, and Work Shirts; Pajamas; Underwear—Namely, Shirts, Drawers, Union Suits, Running Pants and Drawers Known as Shorts, Made of Textile and Knitted Materials; and Boys' Blouses.
Claims use since Apr. 1, 1931.

294,916. (CLASS 39. CLOTHING.) J. HILBORN & W. E. REED, INC., New York, N. Y. Filed May 12, 1931. Serial No. 314,527.

STAY-UP

For Hosiery and Sweaters Made of Woolen Yarn.
Claims use since Mar. 1, 1931.

294,917. (CLASS 45. BEVERAGES, NONALCOHOLIC.) BRONNI A. G., Zurich, Switzerland. Filed Sept. 20, 1930. Serial No. 305,895.

BRONNI

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Mineral Water.
Claims use since Dec. 23, 1929.

294,918. (CLASS 39. CLOTHING.) R. LOWENBAUM MANUFACTURING COMPANY, St. Louis, Mo. Filed Apr. 1, 1930. Serial No. 298,248.

Cut-A-Way FROCKS

For Ladies' Dresses.
Claims use since Feb. 10, 1930.

TRADE-MARK REGISTRATIONS RENEWED

38,207. FIREPROOF CEMENTS FOR RETORTS. Registered April 29, 1902. H. W. JOHNS-MANVILLE COMPANY. Renewed April 29, 1932, to Johns-Manville Corporation, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

38,208. FIREPROOF CEMENTS FOR FURNACES. Registered April 29, 1902. H. W. JOHNS-MANVILLE COMPANY. Renewed April 29, 1932, to Johns-Manville Corporation, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

38,441. CERTAIN NAMED RAW OR PARTLY PREPARED MINERAL SUBSTANCES USED IN MANUFACTURES. Registered June 10, 1902. THE MAGNESIA SYNDICATE, LTD., Westminster, England. Renewed June 10, 1932, to Mabor Limited, London, England, a Corporation of Great Britain, by change of name.

38,537. CERTAIN NAMED PACKING-HOUSE PRODUCTS. Registered July 1, 1902. LIBBY, MCNEILL & LIBBY. Renewed July 1, 1932, to Libby, McNeill & Libby, Chicago, Ill., a Corporation of Maine, assignee.

38,662. PORTLAND CEMENT. Registered July 22, 1902. DEXTER PORTLAND CEMENT CO., Nazareth, Pa. Renewed July 22, 1932, to Pennsylvania-Dixie Cement Corporation, New York, N. Y., a Corporation of Delaware, assignee.

39,067. WRITING PAPER AND ENVELOPS. Registered October 21, 1902. Z. & W. M. CRANE. Renewed October 21, 1932, to Z. & W. M. Crane, Inc., Dalton, Mass., a Corporation of Massachusetts, assignee.

39,105. TILES AND MASONRY. Registered October 21, 1902. R. GUASTAVINO COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed October 21, 1932.

39,109. SEWING MACHINES AND SEWING MACHINE ATTACHMENTS AND PARTS THEREOF. Registered October 21, 1902. THE SINGER MANUFACTURING CO., New York, N. Y. Renewed October 21, 1932, to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey.

39,146. STARCH FOR FOOD PURPOSES. Registered October 28, 1902. AUGUSTUS E. STALEY, Baltimore, Md. Renewed October 28, 1932, to A. E. Staley Manufacturing Company, Decatur, Ill., a Corporation of Delaware, assignee.

85,912. GASOLENE. Registered March 26, 1912. MAGNOLIA PETROLEUM COMPANY, Galveston and Dallas, Tex. Renewed March 26, 1932, to Magnolia Petroleum Company, Dallas, Tex., a Corporation of Texas, assignee by mesne assignments.

86,304. LINING, WRAPPING, PRINTING, AND WRITING PAPERS. Registered April 30, 1912. KATAHDIN PULP AND PAPER COMPANY, Lincoln, Me. Renewed April 30, 1932, to Eastern Manufacturing Company, Brewer, Me., a Corporation of Maine, successor.

86,916. WHEAT-FLOUR. Registered June 11, 1912. LEXINGTON MILL & ELEVATOR COMPANY, Lexington, Nebr., a Corporation of Nebraska. Renewed June 11, 1932.

87,404. CERTAIN FOODS. Registered July 16, 1912. ARMSTRONG REFINING COMPANY, as assignee of Armstrong Packing Company. Renewed July 16, 1932, to Armstrong Packing Company, Dallas, Tex., a Corporation of Texas, assignee by mesne assignments.

87,735. LEAF-TOBACCO. Registered August 6, 1912. DUNKERSON & CO., INC. Renewed August 6, 1932, to LUCKETT-WAKE TOBACCO CO., Louisville, Ky., a Corporation of Arizona, assignee.

87,996. AN ORGANIC IODIN PREPARATION FOR MEDICINAL USES. Registered August 20, 1912. THE HOFFMANN-LA ROCHE CHEMICAL WORKS, New York, N. Y. Renewed August 20, 1932, to Hoffmann-La Roche, Inc., Nutley, N. J., a Corporation of New Jersey, assignee.

88,048. STROPS AND SOAPS. Registered August 27, 1912. AUTO STROP SAFETY RAZOR CO., New York, N. Y. Renewed August 27, 1932, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

88,169. CIGARS. Registered September 3, 1912. BERNARDO MOREDA Y DEBEN, Habana, Cuba. Renewed September 3, 1932, to Corral, Wodiska y Ca., Tampa, Fla., a Corporation of Florida, assignee by mesne assignments.

88,483. CERTAIN NAMED TOILET PREPARATIONS. Registered September 24, 1912. HENRIETTE GABILLA, Paris, France. Renewed September 24, 1932, to Gabilla, Incorporated, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

88,676. CERTAIN ELECTRICAL APPARATUS. Registered October 15, 1912. THE HART & HEGEMAN MANUFACTURING COMPANY. Renewed October 15, 1932, to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut, assignee.

88,726. BRUSHES. Registered October 22, 1912. AUTO STROP SAFETY RAZOR CO., New York, N. Y. Renewed October 22, 1932, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

88,736. NATURAL MINERAL WATERS. Registered October 22, 1912. LA COMPAGNIE FERMIERE DE L'ETABLISSEMENT THERMAL DE VICHY, Paris, France, a Corporation of France. Renewed October 22, 1932.

LABELS

REGISTERED JUNE 7, 1932

40,777.—*Title:* TWO ANGELS HAIR RESTORER. For Liquid Hair Restorer. MANOOG AVEDISIAN, Highland Park, Mich. Published January 27, 1932.

40,778.—*Title:* MILK-N-HONEY. For Bread. BECKER'S BAKERY, Spartanburg, S. C., and Hendersonville, N. C. Published November 1, 1931.

40,779.—*Title:* GROUND-GAINER. For Shoes. SAMUEL BRILLIANT & CO., Boston, Mass. Published January 26, 1932.

40,780.—*Title:* PEANUTS 5¢ A FOOT. For Peanuts. CANDY CHIX, INC., Des Moines, Iowa. Published January 21, 1932.

40,781.—*Title:* CARROCCIO'S GRATED CHEESE. For Grated Cheese. T. A. CARROCCIO & SONS, New York, N. Y. Published March 25, 1932.

40,782.—*Title:* ALL-AMERICAN BLADE. For Double-Edge Blades. CONRAD RAZOR BLADE CO. INC., New York, N. Y., and Long Island City, N. Y. Published October 23, 1931.

40,783.—*Title:* MRS. RILEY'S CAKE. For Cakes. DOUGHERTY CAKE PRODUCTS, INCORPORATED, Muncie, Ind. Published February 15, 1932.

40,784.—*Title:* HOOEY. For Cigars. EAST PROSPECT CIGAR CO., East Prospect, Pa. Published March 15, 1932.

40,785.—*Title:* WHITES LUN-GE HAI-LA. For Medicine for the Relief of Coughs Due to Colds. FIRST NATIONAL LABORATORIES INC., Lehighton, Pa. Published April 25, 1929.

40,786.—*Title:* WHITE'S LUN-GE HAI-LA. For Medicine for the Relief of Coughs Due to Colds. FIRST NATIONAL LABORATORIES INC., Lehighton, Pa. Published April 25, 1929.

40,787.—*Title:* DR. WHITE'S PURE NORWEGIAN COD LIVER OIL. For Cod Liver Oil. FIRST NATIONAL LABORATORIES INC., Lehighton, Pa. Published February 15, 1932.

40,788.—*Title:* FROSTY FRITTER. For Ice Cream Confection. FROSTY FRITTER CO., Britton, Okla. Published April 4, 1932.

40,789.—*Title:* ZIL. For Chocolate Bars. D. GOLDENBERG, INC., Philadelphia, Pa. Published March 30, 1932.

40,790.—*Title:* HATHAWAY'S TOASTWICH ROLLS. For Rolls. HATHAWAY BAKERIES, INC., Cambridge, Mass. Published March 4, 1932.

40,791.—*Title:* PHOTOLUMARS. For Photographic Time Flares. HITT FIREWORKS COMPANY, also doing business as Hitt Manufacturing Company, Seattle, Wash. Published March 12, 1932.

40,792.—*Title:* SPORTBILT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 12, 1932.

40,793.—*Title:* BETTER SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 21, 1932.

40,794.—*Title:* UNITED SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 29, 1932.

40,795.—*Title:* ROBERTS SMART SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 2, 1932.

40,796.—*Title:* JEWEL CHEESE WAFERS. For Cheese Wafers. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published January 15, 1932.

40,797.—*Title:* POLLY POPS. For Coating for an Ice Cream Confection. IRA MILTON JONES, Milwaukee, Wis. Published March 25, 1932.

40,798.—*Title:* COUNTRY CLUB THOMPSON SEEDLESS RAISINS. For Seedless Raisins. THE KROGER GROCERY & BAKING COMPANY, Cincinnati, Ohio. Published May 1, 1932.

40,799.—*Title:* VANILLA PUDDING. For Vanilla Pudding. M. & W. PURE FOOD PRODUCTS COMPANY, Stelton, N. J. Published March 14, 1932.

40,800.—*Title:* MANNINGS TEA REFRESHING AS THE DAWN. For Tea. MANNINGS, INC., San Francisco, Calif. Published April 1, 1932.

40,801.—*Title:* MANNINGS COFFEE FRESH AS THE DAWN. For Coffee. MANNINGS, INC., San Francisco, Calif. Published April 20, 1932.

40,802.—*Title:* RED APPLE BRAND SWEET CIDER. For Sweet Cider. MANTLE & MANTLE, Painesville, Ohio. Published February 20, 1932.

40,803.—*Title:* MARCH ORIGINAL AND GENUINE WHEELING. For Stogies. M. MARSH & SON, Wheeling, W. Va. Published December 1, 1931.

40,804.—*Title:* ICE CREAM. For Ice Cream. THE MENASHA PRODUCTS COMPANY, Menasha, Wis. Published December 1, 1931.

40,805.—*Title:* ICE CREAM. For Ice Cream. THE MENASHA PRODUCTS COMPANY, Menasha, Wis. Published December 1, 1931.

40,806.—*Title:* ALL SPIC AND SPAN FROM 'NOPCO-SAN'. For Germicides, Disinfectants, and Deodorants. NATIONAL OIL PRODUCTS COMPANY, INC., Harrison, N. J. Published April 23, 1932.

40,807.—*Title:* NESTLE'S NESTOIL CLIPLESS SUPPLY. For Preparation and Pads for Treating Hair and for Use in Waving or Curling Hair. THE NESTLE-LEMUR COMPANY, New York, N. Y. Published November 19, 1931.

40,808.—*Title:* PEANUT CORN POP CANDY. For Peanut Corn Pop Candy. JOHN L. E. PELL, South Egremont, Mass. Published January 25, 1932.

40,809.—*Title:* PEEKO. For Preparation for Flavoring Confectionery and Soft Drinks. PICHEL PRODUCTS COMPANY, INC., Hartsdale, N. Y. Published January 15, 1932.

40,810.—*Title:* GOODYEAR. For Spark Plug Cable Sets. REAL PRODUCTS CORPORATION, Brooklyn, N. Y. Published February 3, 1932.

40,811.—*Title:* DAISY BRAND HOSE WASHERS. For Hose Washers. SCHACHT RUBBER MFG. CO., Huntington, Ind. Published April 5, 1932.

40,812.—*Title:* SCHNEIDER'S BREAD. For Bread. CHARLES SCHNEIDER BAKING COMPANY, Washington, D. C. Published May 3, 1932.

40,813.—*Title:* THE BETTER TRIM. For Trim for Doors and Windows, and the Like. WM. C. SCHWANTES MFG. CO., Manitowoc, Wis. Published May 4, 1932.

40,814.—*Title:* SCOTMINTS. For Orange Drops, a Candy. SCOTMINTS, INC., Cleveland, Ohio. Published March 19, 1932.

40,815.—*Title:* NEE-SHA-LAX. For Medicinal Preparation for the Relief of Temporary Constipation. SCOTT & GILBERT CO., San Francisco, Calif. Published May 4, 1932.

40,816.—*Title:* TARRO PYNE. For Medicinal Preparation for the Relief of Coughs and Colds. SCOTT & GILBERT CO., San Francisco, Calif. Published May 4, 1932.

40,817.—*Title:* SENACO. For Medicinal Preparation of Great Value for the Relief of Temporary Constipation. SCOTT & GILBERT CO., San Francisco, Calif. Published May 4, 1932.

40,818.—*Title:* MILMAG. For Medicinal Preparation for Acidity of the Stomach, as a Mild Laxative, as a Mouthwash, and Externally as a Facial Lotion. SCOTT & GILBERT CO., San Francisco, Calif. Published May 4, 1932.

40,819.—*Title:* GIL-EP-SAL. For Laxative Compound. SCOTT & GILBERT CO., San Francisco, Calif. Published May 4, 1932.

40,820.—*Title:* CORY-MENTH. For Medicine for the Relief of Head Colds. SCOTT & GILBERT CO., San Francisco, Calif. Published May 4, 1932.

40,821.—*Title:* CHASE AND SANBORN'S SEAL BRAND VACUUM PACKED COFFEE. For Coffee. STANDARD BRANDS INCORPORATED, New York, N. Y. Published December 30, 1931.

40,822.—*Title:* LEMON DROPS. For Lemon Drops, a Candy. STRONG, COBB & COMPANY, INC., Cleveland, Ohio. Published March 16, 1932.

40,823.—*Title:* COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published May 9, 1932.

PRINTS

REGISTERED JUNE 7, 1932

13,738.—*Title:* SUBJECT YOUR FACE TO THE FOLLOWING EXAMINATION! For Cleansing Cream, Velva Cream, Orange Skin Food, Etc. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published April 25, 1932.

13,739.—*Title:* CARROCCIO'S GRATED CHEESE. For Grated Cheese. T. A. CARROCCIO & SONS, New York, N. Y. Published March 25, 1932.

13,740.—*Title:* SOLID FOOD TIME ISN'T DANGEROUS. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published May 5, 1932.

13,741.—*Title:* MAGIC VALLEY KITCHEN. For Candies, Marmalades, Spiced Oranges, and Crystallized Fruits. ELIZABETH L. GREEN, Edinburg, Tex. Published March 26, 1932.

13,742.—*Title:* POLLY POPS. For Ice Cream Confection. IRA MILTON JONES, Milwaukee, Wis. Published March 25, 1932.

13,743.—*Title:* POLLY POPS. For Ice Cream Confection. IRA MILTON JONES, Milwaukee, Wis. Published March 25, 1932.

13,744.—*Title:* OLD HOME HAS NOTHING TO HIDE! THAT'S WHY WE WRAP IT IN CRYSTAL-CLEAR CELLOPHANE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 28, 1932.

13,745.—*Title:* MADE FRESH! WRAPPED FRESH! SERVED FRESH! For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 18, 1932.

13,746.—*Title:* YOU SEE THE RICH, BROWN CRUST, THE PERFECT SHAPE THROUGH CELLOPHANE! For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 25, 1932.

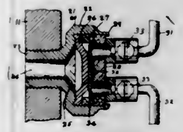
13,747.—Title: FRESH! For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 15, 1932.

13,748.—*Title:* NAPKIN SERVICE. For Paper Napkins. NATIONAL PAPER NAPKIN MFG. COMPANY, Chicago, Ill. Published April 1, 1932.

REISSUES

JUNE 7, 1932

18,487. STOPLIGHT SWITCH. JOHN W. WHITE, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Original No. 1,744,940, dated Jan. 28, 1930, Serial No. 102,701, filed Apr. 17, 1926. Application for reissue filed June 29, 1931. Serial No. 547,759. 5 Claims. (Cl. 200—83.)



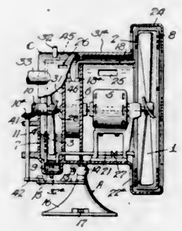
1. A fluid operated switch comprising a cup like casing having a passage leading into the interior thereof, and adapted to contain fluid, a diaphragm in said casing extending across and sealing said passage, a ring bearing against the periphery of said diaphragm to secure it in place, a disc resting upon said ring and fixed in said casing by peening over the edge of said casing, a metal plate in said ring resting freely against said diaphragm, a spring carried by said disc and holding said plate in position against said diaphragm, and terminals projecting through said disc into said casing, into contact with the projecting ends of which said terminals said plate is brought by the flexing of said diaphragm under the influence of fluid in said passage.

18,488. ARTIFICIAL BAIT. HUBERT MAYS and SANFORD HOLMES KIRKLAND, Tampa, Fla. Original No. 1,820,670, dated Aug. 25, 1931, Serial No. 518,400, filed Feb. 26, 1931. Application for reissue filed Apr. 8, 1932. Serial No. 604,130. 8 Claims. (Cl. 43—42.)



1. An artificial bait comprising a strip of pork rind or the like having an opening for the passage of a hook, and a hook having a barbed end extending through the opening and a shank secured to the central portion of the strip whereby both ends of the strip are left freely flexible.

18,489. VENTILATING FAN. MORRIS BERMAN, Brooklyn, N. Y. Original No. 1,838,609, dated Dec. 29, 1931, Serial No. 297,922, filed Aug. 7, 1928. Application for reissue filed Feb. 2, 1932. Serial No. 591,633. 17 Claims. (Cl. 62—129.)

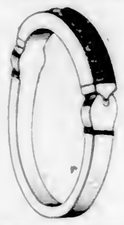


1. Apparatus of the character described, comprising a motor, a fan operated by the motor for directing an air current and means for cooling said air current including a compressor mounted coaxially with said motor, and an evaporating coil having a plurality of turns therein, part of the turns being arranged in front of the fan and part of the turns behind the fan.

DESIGNS

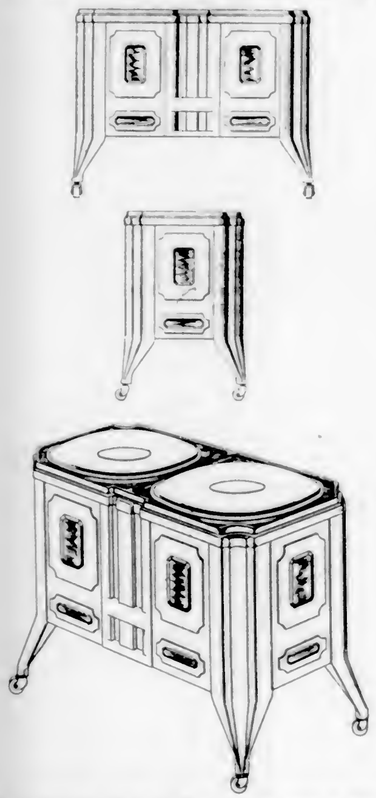
JUNE 7, 1932

87,097. FINGER RING. JOHN J. KLECKA, Brooklyn, N. Y., assignor to J. R. Wood & Sons, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 13, 1932. Serial No. 43,487. Term of patent 14 years.



The ornamental design for a finger ring, as shown and described.

87,098. COMBINED WASHING MACHINE CASING AND DRIER. THOMAS W. BEHAN, Binghamton, N. Y., assignor to Nineteen Hundred Corporation, Binghamton, N. Y., a Corporation of New York. Filed Aug. 5, 1931. Serial No. 40,785. Term of patent 14 years.



The ornamental design for a combined washing machine casing and drier as shown and described.

87,099. 87,099. CIGARETTE CONTAINER. MICHELE BERTONCINI, Milwaukee, and WALTER BLATTER, Shorewood, Wis.; said Blatter assignor to Tranquillo Angell, Milwaukee, Wis. Filed Apr. 4, 1932. Serial No. 43,396. Term of patent 3½ years.



The ornamental design for a cigarette container, substantially as shown.

87,100. HEATER CASING. EARL C. BOOTH, Indianapolis, Ind., assignor to Noblitt-Sparks Industries, Inc., Columbus, Ind., a Corporation of Indiana. Filed Mar. 26, 1932. Serial No. 43,299. Term of patent 7 years.



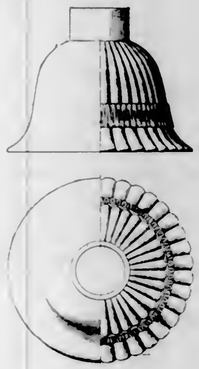
The ornamental design for a heater casing, as shown.

87,101. PARKING LIGHT. ALMA E. BRANDHORST, Cincinnati, Ohio. Filed Mar. 28, 1932. Serial No. 43,314. Term of patent 7 years.



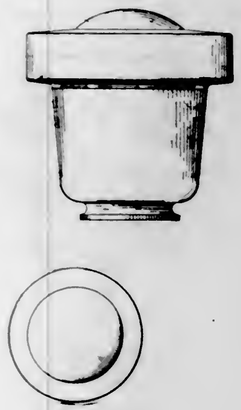
The ornamental design for a parking light, as shown.

87,102. SHADE OR SIMILAR ARTICLE. HUGH ALBERT BUCCINI, Port Jervis, and STANLEY H. BARNES, New Rochelle, N. Y., assignors to Gleason-Tiebout Glass Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 8, 1931. Serial No. 41,344. Term of patent 3½ years.



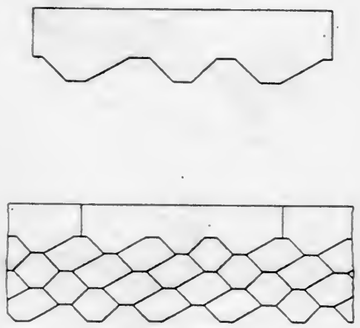
The ornamental design for a shade or similar article, substantially as shown.

87,103. STREET LIGHT GLOBE. HENRY W. DAVIDSON, Lancaster, Ohio. Filed July 7, 1931. Serial No. 40,443. Term of patent 3½ years.



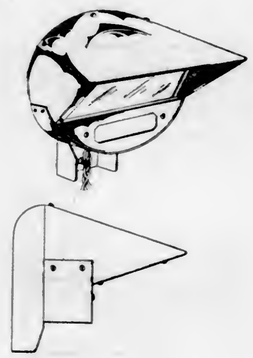
The ornamental design for a street light globe as shown.

87,104. SHINGLE ROOF. CLARENCE R. ECKERT, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 38,164. Term of patent 14 years.



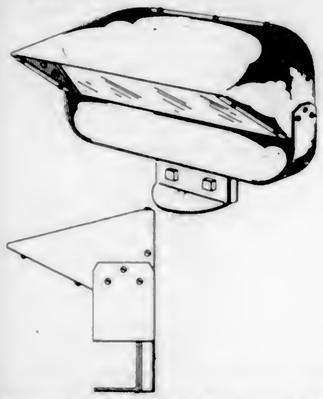
The ornamental design for a shingle roof substantially as shown and described.

87,105. AUTOMOBILE SIGNAL LAMP. JERIE EVICH, Santa Barbara, Calif. Filed Mar. 9, 1932. Serial No. 43,135. Term of patent 14 years.



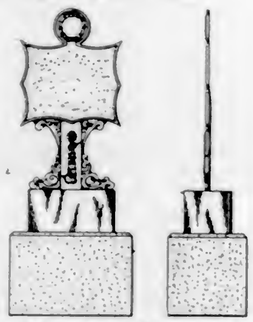
The ornamental design for an automobile signal lamp substantially as shown and described.

87,106. AUTOMOBILE SIGNAL LAMP. JESSIE EVICH, Santa Barbara, Calif. Filed Mar. 9, 1932. Serial No. 43,137. Term of patent 14 years.



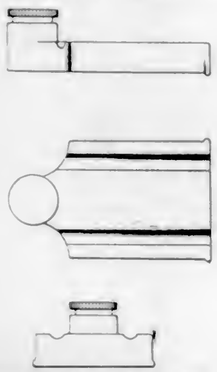
The ornamental design for an automobile signal lamp substantially as shown and described.

87,107. MEMORIAL GRAVE MARKER. FRANK F. FISCHER, Omaha, Nebr. Filed Apr. 18, 1932. Serial No. 43,533. Term of patent 7 years.



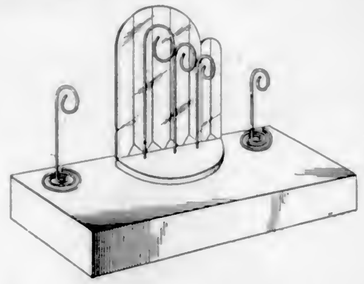
The ornamental design for a memorial grave marker, as shown.

87,108. INKWELL BOTTLE. RICHARD J. FORD, Lawrence, Mass. Filed Apr. 12, 1932. Serial No. 43,473. Term of patent 14 years.



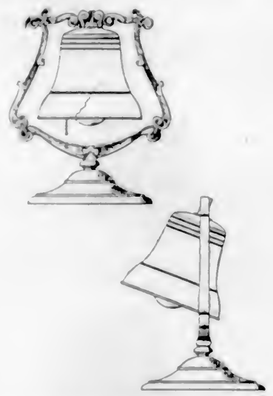
The ornamental design for an inkwell bottle as shown.

87,109. DISPLAY STAND. JULIAN S. FRIEDE, Texarkana, Tex. Filed Apr. 11, 1932. Serial No. 43,455. Term of patent 3½ years.



The ornamental design for a display stand as shown.

87,110. LAMP. LAWRENCE J. GAGNON, Cleveland, Ohio. Filed Apr. 13, 1932. Serial No. 43,489. Term of patent 3½ years.



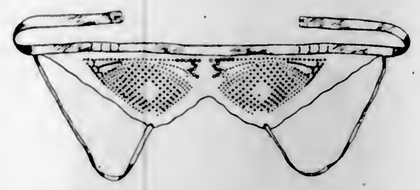
The ornamental design for a lamp as shown and described.

87,111. SHOE BUCKLE. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Mar. 14, 1932. Serial No. 43,179. Term of patent 7 years.



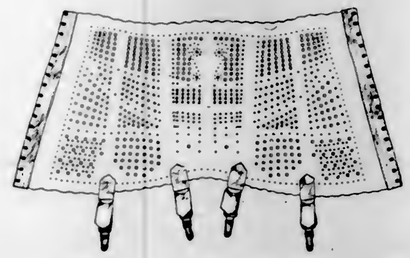
The ornamental design for a shoe buckle as shown.

87,112. BRASSIÈRE. JEANNE F. GREIG, London, England, assignor to The Charnaux Patent Corset Company Limited, London, England. Filed Dec. 17, 1931, Serial No. 42,112, and in Great Britain Nov. 21, 1931. Term of patent 14 years.



The ornamental design for a brassière, as shown.

87,113. CORSET. JEANNE F. GREIG, London, England, assignor to The Charnaux Patent Corset Company Limited, London, England. Filed Dec. 17, 1931. Serial No. 42,113. Term of patent 14 years.



The ornamental design for a corset, as shown.

87,114. DOLL. ROYAL W. GUDGEN and JOSEPHINE A. GUDGEN, Fort Lauderdale, Fla. Filed Apr. 16, 1932. Serial No. 43,523. Term of patent 7 years.



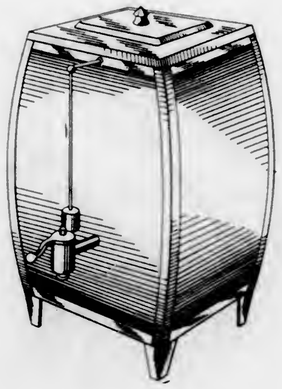
The ornamental design for a doll, as shown.

87,115. FOOD CONTAINER. JAY C. HORMEL, Austin, Minn., assignor to Geo. A. Hormel Company, Austin, Minn., a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 30,166. Term of patent 14 years.



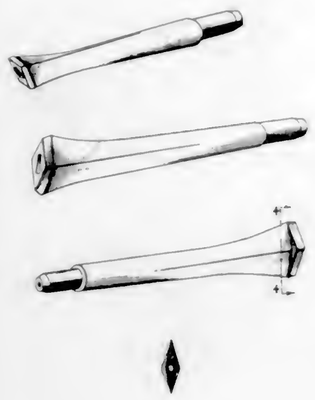
The ornamental design for a food container substantially as shown.

87,116. BEVERAGE DISPENSING CASING. CHARLES G. JACKSON, St. Louis, Mo., assignor to Multiplex Faucet Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 31, 1931. Serial No. 42,324. Term of patent 14 years.



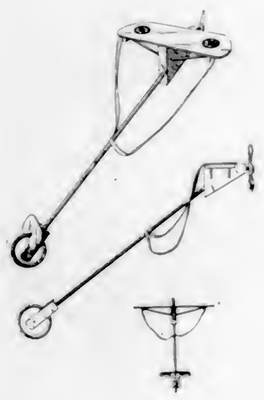
The ornamental design for a beverage dispensing casing, as shown.

87,117. PIPE STEM OR SIMILAR ARTICLE. PAUL JEANTET, Gennevilliers, France, assignor to Paul Jeantet & Cie, Gennevilliers, France, a Joint-Stock Company. Filed Feb. 14, 1931, Serial No. 38,664, and in France Oct. 14, 1930. Term of patent 7 years.



The ornamental design for a pipe stem or similar article, as shown.

87,118. RIDING STICK TOY. JANET M. KNOPF, New York, N. Y. Filed Mar. 4, 1932. Serial No. 43,081. Term of patent 7 years.



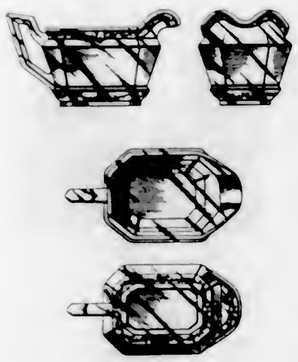
The ornamental design for a riding stick toy as shown.

87,119. ENSEMBLE DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 3, 1932. Serial No. 43,066. Term of patent 3½ years.



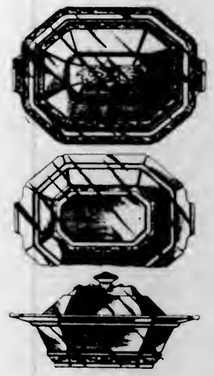
The ornamental design for an ensemble dress substantially as shown and described.

87,120. PITCHER OR SIMILAR ARTICLE. JOHN B. MCDONALD, East Liverpool, Ohio, assignor to The Edwin M. Knowles China Company, East Liverpool, Ohio, a Corporation of West Virginia. Filed Apr. 16, 1932. Serial No. 43,510. Term of patent 7 years.



The ornamental design for a pitcher or similar article, as shown.

87,121. COVERED DISH OR SIMILAR ARTICLE. JOHN B. MCDONALD, East Liverpool, Ohio, assignor to The Edwin M. Knowles China Company, East Liverpool, Ohio, a Corporation of West Virginia. Filed Apr. 16, 1932. Serial No. 43,511. Term of patent 7 years.



The ornamental design for a covered dish or similar article, as shown.

87,122. PLATE OR SIMILAR ARTICLE. JOHN B. MCDONALD, East Liverpool, Ohio, assignor to The Edwin M. Knowles China Company, East Liverpool, Ohio, a Corporation of West Virginia. Filed Apr. 16, 1932. Serial No. 43,512. Term of patent 7 years.



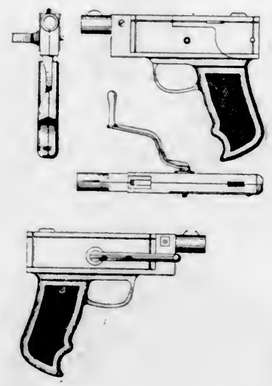
The ornamental design for a plate or similar article, as shown and described.

87,123. CUP OR SIMILAR ARTICLE. JOHN B. MCDONALD, East Liverpool, Ohio, assignor to The Edwin M. Knowles China Company, East Liverpool, Ohio, a Corporation of West Virginia. Filed Apr. 16, 1932. Serial No. 43,513. Term of patent 7 years.



The ornamental design for a cup or similar article, as shown.

87,124. TOY GUN. HENRY F. NELSON, La Fayette, Ind. Filed Mar. 14, 1932. Serial No. 43,193. Term of patent 14 years.



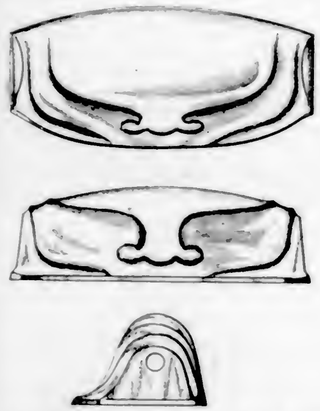
The ornamental design for a toy gun as shown.

87,125. NOSE BRIDGE FOR SPECTACLES. GEORGE E. NERNEY, Attleboro, Mass., assignor to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed Jan. 15, 1932. Serial No. 42,486. Term of patent 7 years.



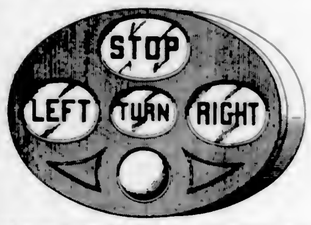
The ornamental design for a nose bridge for spectacles substantially as shown.

87,126. LAMP SHADE. HAROLD C. NOE, East Orange, N. J., assignor to William R. Noe & Sons, Brooklyn, N. Y., a Copartnership composed of William R. Noe, Charles E. Noe, and Harold C. Noe. Filed Apr. 8, 1932. Serial No. 43,427. Term of patent 14 years.



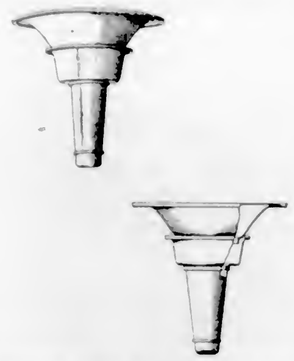
The ornamental design for a lamp shade substantially as shown and described.

87,127. AUTOMOBILE SIGNAL CASING. CHONG SUK PARK, deceased, Sacramento, Calif., by Mong Y. Chung, administrator, Sacramento, Calif. Refiled for abandoned application Serial No. 37,264, filed Oct. 15, 1930. This application filed Jan. 26, 1932. Serial No. 42,628. Term of patent 7 years.



The ornamental design for an automobile signal casing as shown.

87,128. LAMP TORCHIERE WITH LUMINOUS REFLECTOR. PETER PARLATO, New York, N. Y. Filed Apr. 11, 1932. Serial No. 43,457. Term of patent 3½ years.



The ornamental design for a lamp torchiere with luminous reflector as shown and described.

87,129. TIRE. EUGENE A. ROBERTS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 8, 1931. Serial No. 40,462. Term of patent 14 years.



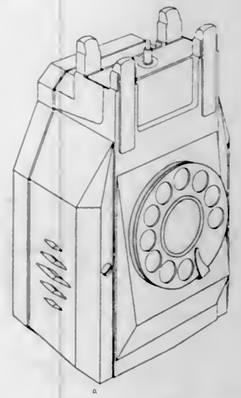
The ornamental design for a tire as shown and described.

87,130. DOLL. JOSEPH ROSENFELD, New York, N. Y. Filed Mar. 8, 1932. Serial No. 43,130. Term of patent 7 years.



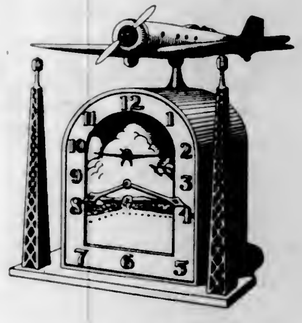
The ornamental design for a doll, as shown.

87,131. WALL TELEPHONE. ROBERT L. SARGISSON, Berwyn, Ill., assignor to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 2, 1931. Serial No. 41,600. Term of patent 14 years.



The ornamental design for a wall telephone as shown and described.

87,132. CLOCK CASE. ALVA H. SCHICK and RANDOLPH P. KRAATZ, Omaha, Nebr. Filed Apr. 18, 1932. Serial No. 43,536. Term of patent 7 years.



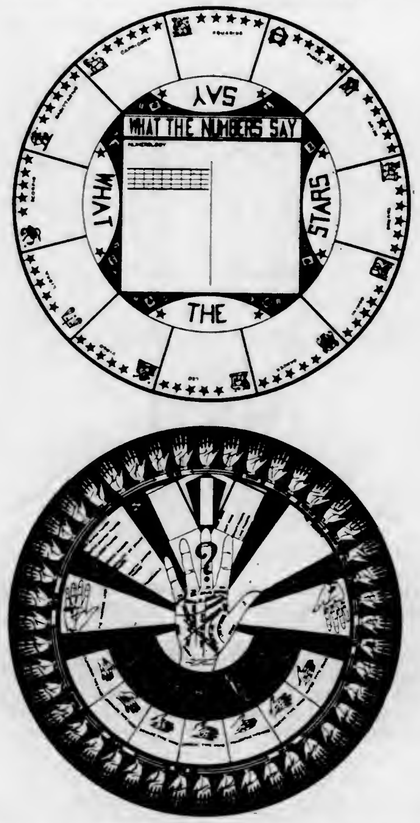
The ornamental design for a clock case, as shown.

87,133. NECKLACE PENDANT OR OTHER JEWELRY FOR PERSONAL USE. EDWARD E. SCHLEICHER, Providence, R. I. Filed Mar. 17, 1931. Serial No. 39,128. Term of patent 3½ years.



The ornamental design for a necklace pendant or other jewelry for personal use, substantially as shown and described.

87,134. FORTUNE-TELLING CARD. GEORGE PHILIP SCHMITT, New York, N. Y. Filed Jan. 29, 1932. Serial No. 42,658. Term of patent 14 years.



The ornamental design for a fortune-telling card as shown and described.

87,135. BOTTLE. GERTRUDE SCHOENFELD, Astoria, N. Y. Filed Apr. 8, 1932. Serial No. 43,424. Term of patent 14 years.



The ornamental design for a bottle substantially as shown.

87,136. COMBINED RUBBER SOLE AND HEEL. ALBERT EDWARD TEBBUTT, Northampton, England. Filed Nov. 17, 1931, Serial No. 41,756, and in Great Britain Sept. 7, 1931. Term of patent 7 years.



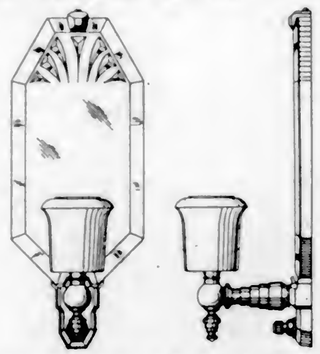
The ornamental design for a combined rubber sole and heel, as shown.

87,137. WATER CLOSET FLUSH TANK. BERT O. TILDEN, Trenton, N. J., assignor to B. O. T. Manufacturing Company, Trenton, N. J., a Corporation of New Jersey. Filed May 26, 1931. Serial No. 39,997. Term of patent 3½ years.



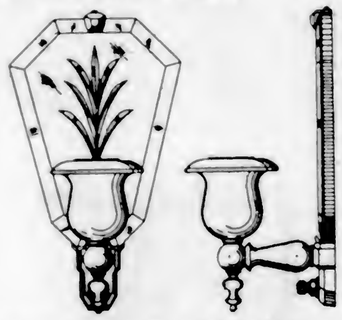
The ornamental design for a water closet flush tank, as shown.

87,138. LIGHTING FIXTURE. EDGAR A. WANGERSHEIM, Chicago, Ill. Filed Feb. 16, 1932. Serial No. 42,884. Term of patent 3½ years.



The ornamental design for a lighting fixture, as shown.

87,139. LIGHTING FIXTURE. EDGAR A. WANGERSHEIM, Chicago, Ill. Filed Feb. 16, 1932. Serial No. 42,885. Term of patent 3½ years.



The ornamental design for a lighting fixture, as shown.

87,140. LIGHTING FIXTURE. CLARENCE G. WING, Cleveland Heights, Ohio, assignor to John C. Virden Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 15, 1932. Serial No. 43,500. Term of patent 3½ years.

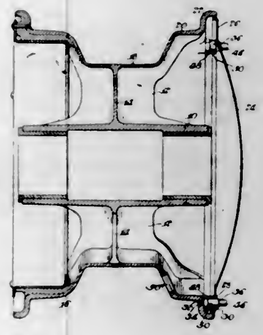


The ornamental design for a lighting fixture, substantially as shown.

PATENTS

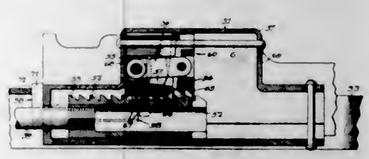
GRANTED JUNE 7, 1932

1,861,432. METHOD OF ATTACHING FAIRING TO AIRPLANE WHEELS. JAMES H. BARBER, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 24, 1930. Serial No. 463,395. 3 Claims. (Cl. 301—37.)



3. The combination of a wheel member and an end cover therefor, a snap-on fastener to secure the cover against axial displacement, and resilient means held in compression between the wheel and the cover, taking up all lost motion between the cover and the snap-on fastener.

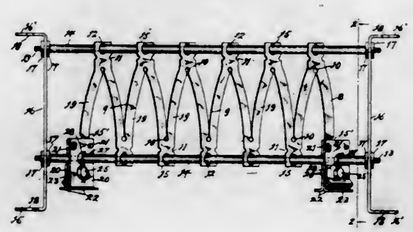
1,861,433. AUTOMATIC SLACK ADJUSTER. PERCY B. CAMP, Maywood, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed May 18, 1928. Serial No. 278,869. 12 Claims. (Cl. 188—200.)



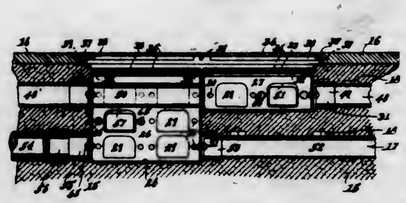
1. In a braking system for railway cars, a system of links and levers, means for operating said system by compressed air, means for manually operating said mechanism, and means for automatically adjusting said manually operated means to either increase or decrease slack.

1,861,434. RESISTANCE ELEMENT. HARRY E. CAMPBELL, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed May 4, 1927. Serial No. 188,785. 7 Claims. (Cl. 201—69.)

3. As an article of manufacture, a resistance element formed from a sheet metal plate having parallel slits extending inwardly from opposite sides in staggered relation to each other to provide strips and connecting portions at the outer ends of the strips, said plate being provided with relatively large openings within each of said connecting portions and with relatively smaller openings coincident with the respective slits at the inner ends of the latter and on opposite sides of the respective connecting portions, said connecting portions being alined in parallel planes displaced in like directions substantially less than ninety degrees from the initial plane thereof, whereby said element is expanded with said strips arranged in laterally zigzagged relation to each other, a pair of insulating supporting elements penetrating said relatively large openings within said connecting portions, the walls of said openings being normally biased into frictional engagement with said insulating supporting elements to retain said resistance element in expanded condition, and means comprising individual flanged thimbles of wear-resisting material interposed between the walls of certain of said openings and said supporting elements.

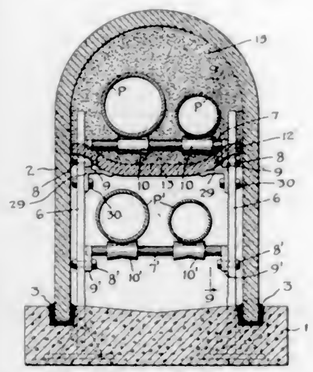


1,861,435. CONCEALED ELECTRICAL CONDUIT SYSTEM. GEORGE L. CHAMBERLAIN and GUSS H. GNEISS, Chicago, Ill.; said Gneiss assignor to said Chamberlain. Filed July 8, 1929. Serial No. 376,768. 7 Claims. (Cl. 247—3.)



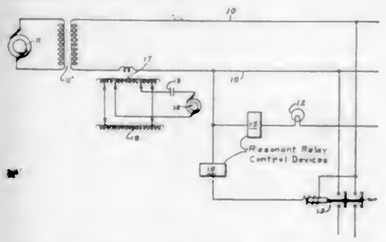
1. A concealed wiring system for concrete building structures, the same comprising duct tubes embedded within the body of the structure beneath the surface thereof, and junction boxes likewise embedded and having openings in the walls thereof with means adjacent for the attachment of said duct tubes terminally to said boxes at the openings thereof for direct communication with the interior of said boxes, said duct tubes also being capable of continuation completely across said boxes through the wall openings thereof without communication between said ducts and the interior of said boxes.

1,861,436. UNDERGROUND CONDUIT SYSTEM. MURRAY ALVIN COLLINS, Jersey City, N. J., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 5, 1928. Serial No. 310,615. 12 Claims. (Cl. 137—73.)



1. In an underground conduit system comprising a base, domes disposed on said base in an end-to-end relation, and a removable partition dividing the space in said domes into continuous upper and lower chambers, a pipe in the upper chamber surrounded with insulating material, and a pipe in the lower chamber.

1,861,437. HIGH-FREQUENCY SUPPLY. RICHARD C. CURTIS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,359. 8 Claims. (Cl. 171—97.)

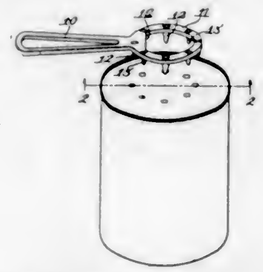


1. The combination with a main power circuit, of a series transformer having a primary winding connected therein for introducing a control current thereto, a shunting reactor variably connected across the secondary winding of said transformer, and an auxiliary, high-frequency generator and a blocking condenser variably connected in series across a portion of said secondary winding to provide a generator circuit which may be tuned to series resonance with the main power circuit.

7. In combination, a transformer having primary and secondary windings, a generator and a condenser connected in series across the secondary winding, of the transformer, and a variable inductance also connected across the secondary winding, whereby the generator circuit may be tuned to series resonance with a power circuit in which the primary winding of the transformer is disposed to be connected.

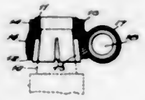
1,861,438. CAN PUNCH. JOSEPH I. GRISKO, Cicero, Ill. Filed Oct. 19, 1931. Serial No. 569,689. 3 Claims. (Cl. 164—119.)

3. A tool for punching in the series of scored areas on standard cleaner can tops, comprising a flat head having a handle extending from one edge thereof, and a series of spaced prongs projecting from one side of the head in



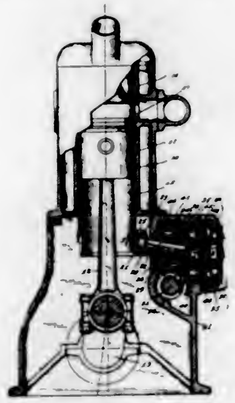
position to register with the scored areas on such can tops, one or more of said prongs being longer than the other prongs in the series.

1,861,439. BATTERY TERMINAL GRIP. HARRY J. GUTTMAN, Chicago, Ill., assignor to Electrical Development Corporation. Filed Feb. 20, 1929. Serial No. 341,372. 9 Claims. (Cl. 173—259.)



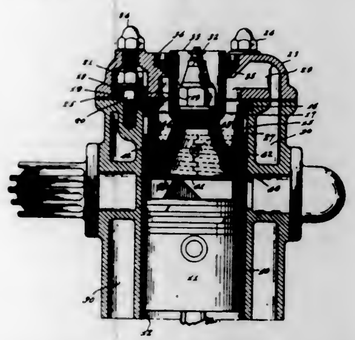
9. A device of the character described, comprising a sleeve whose upper portion is circumferentially continuous and is exteriorly screw-threaded and whose lower portion is slotted, in combination with a collar encircling said sleeve, said collar and sleeve being adapted for attachment to a tapered post, and a nut co-operating with the screw-threaded portion of said sleeve to force said collar downwardly along the slotted portion of said sleeve to thereby bring about a firm union of said parts upon said post.

1,861,440. SLEEVE VALVE ENGINE. JULES HALTENBERGER, Indianapolis, Ind., assignor, by mesne assignments, to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Apr. 16, 1926. Serial No. 102,453. 4 Claims. (Cl. 123—81.)



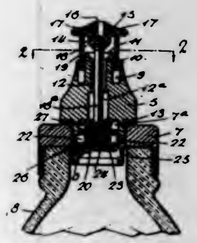
1. In an internal combustion engine, the combination of a cylinder, a piston, a sleeve-valve arranged to have both axial reciprocation and circumferential oscillation, a rotatable member having its axis transverse to the axis of the sleeve-valve, a pin having an eccentric slidable and rotatable mounting in said rotatable member, and a universal joint connection between said pin and said sleeve-valve, the axis of said pin being oblique to that of said rotatable member.

1,861,441. SLEEVE VALVE ENGINE. JULES HALTENBERGER, Indianapolis, Ind., assignor, by mesne assignments, to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Feb. 17, 1927, Serial No. 168,881. Renewed Nov. 18, 1931. 2 Claims. (Cl. 123—80.)



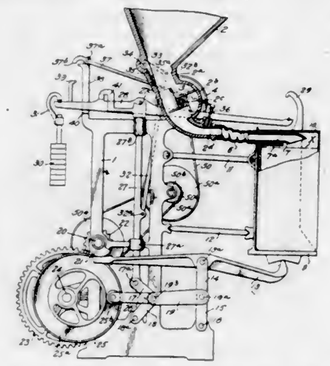
1. In an internal combustion engine, the combination of a cylinder, a piston reciprocable therein, a sleeve valve located between said piston and the inner surface of said cylinder, a plug for closing the upper end of said cylinder, said plug having within said cylinder a diameter less than the cylinder bore to provide an annular space into which the upper end of said sleeve valve may enter, and a junk ring screw-threadedly mounted on said plug and bearing against the inner surface of said sleeve, said junk ring being adjustable on its screw-thread mounting to vary the height of its lower edge.

1,861,442. SELF CLOSING STOPPER FOR RECEPTACLES. ARTHUR HAMMERSTEIN, New York, N. Y. Filed Aug. 28, 1929. Serial No. 388,867. 5 Claims. (Cl. 215—74.)



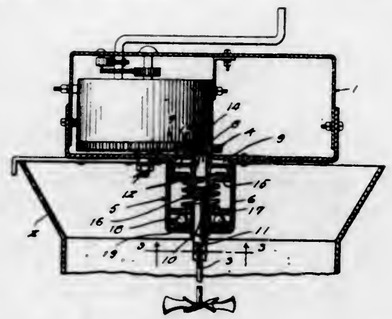
1. A stopper of the kind described, comprising a body arranged to be attached to the exit end of a receptacle in communication with the interior thereof, a valve seat combined with said body, a valve movable toward and away from said seat to close and open said receptacle, and detent means located on said body, cooperating detent means carried by said valve and movable therewith, one of said detent means being yieldable for yieldingly fixing said valve in both its closed and open positions respectively.

1,861,443. METHOD AND APPARATUS FOR FILLING BAGS. KARL ERNST EBERHARDT HOLZAPFEL, Munster, Germany. Filed Apr. 1, 1930, Serial No. 440,678, and in Germany Aug. 15, 1928. 17 Claims. (Cl. 249—60.)



1. An apparatus of the kind described comprising a standard provided with jogging mechanism and weighing mechanism at an elevation above the jogging mechanism, a frame connected with the standard for vertical movement and adapted to rest upon the jogging mechanism to be given jogging movement thereby, said weighing mechanism being mounted for elevating movement and arranged to weigh the frame and to lift the same from the jogging mechanism and into position in which to be weighed free of the jogging mechanism.

1,861,444. BRAKING ATTACHMENT FOR AGITATORS. DANIEL A. JACOBI, Fergus Falls, Minn., assignor to Milcare Co., Fergus Falls, Minn., a Corporation of Minnesota. Filed Aug. 8, 1929. Serial No. 384,384. 5 Claims. (Cl. 188—68.)

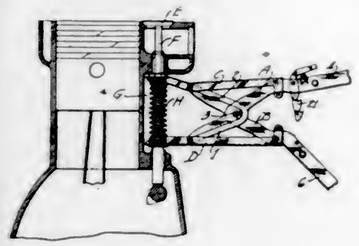


2. A braking mechanism for use in connection with a power driven agitating device having a depending shaft, comprising a depending stub shaft, means for establishing a sliding drive connection between said stub shaft and the driven shaft, resilient means normally urging the stub shaft toward the driven shaft, and a clutching mechanism designed to act upon the movement of the stub shaft toward the driven shaft to hold the shafts against rotation, said stub shaft being designed to have an agitating element suspended therefrom.

1,861,445. SPRING COMPRESSING TOOL. LE ROY R. KLINGLER and CYRUS E. COFFEE, St. Louis, Mo. Filed July 17, 1930. Serial No. 468,579. 2 Claims. (Cl. 29—86.3.)

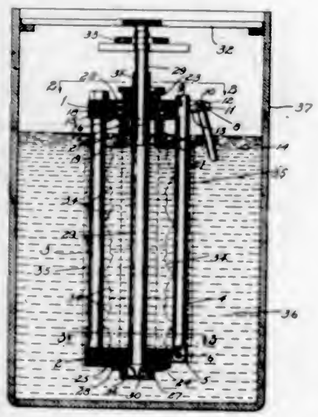
1. In a tool of the class described, in combination, a first member including a jaw-supporting end-portion, a

handle-providing opposed end-portion, and an intermediate connecting-portion camwise rounded on its upper and under faces, a second member including a jaw-supporting end-portion, a handle-providing opposed end-portion, and an intermediate connecting portion angularly disposed with relation to said handle-end-portion and having flat upper and under faces, said members being pivotally connected intermediate their jaw-supporting and intermediate portions in crosswise relation for scissor-like movement, a first jaw pivoted intermediate its ends to said



second jaw-supporting portion, a second jaw pivoted intermediate its ends to said first jaw-supporting portion, and pairs of spaced connected flanges on the respective rear ends of said jaws having loose embracing relation with said intermediate portion for jaw-shifting actuation, said jaws having bifurcated approximately parallel work-engaging opposed ends projecting cooperable forwardly beyond said fulcrums and being movable in opposed relation in an approximately straight path for spring compression on pivoted actuation of said members.

1,861,446. PROCESS OF ELECTROPLATING. OSCAR L. MAAG, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Apr. 4, 1927. Serial No. 180,828. 2 Claims. (Cl. 204—5.)



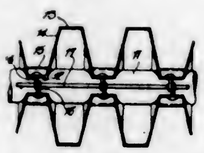
1. The improvement in the process of electroplating the interior of short tubular articles which consists in assembling such articles into a continuous tube and submerging such tube in the electrolyte with its axis vertical and with the anode extending entirely therethrough at the axis thereof and separated therefrom by an unobstructed annular passageway, the electrolyte having free ingress to the interior of said tube at the bottom thereof and not elsewhere and having free egress at the top of said tube to the main electrolyte bath and applying electric current entirely through said anode, whereby bubbles are formed at the inner surface of the article with consequent circulation of the electrolyte due to the difference in specific gravity between the electrolyte outside of said article and the bubble column inside thereof.

1,861,447. RADIATOR. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Dec. 7, 1929. Serial No. 412,317. 3 Claims. (Cl. 257—149.)



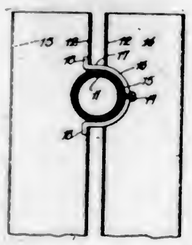
3. A radiator consisting of a heating element and sheet metal fins in heat conducting contact therewith and forming passages for the heated air, said fins being of aluminous metal, and straps on the outside of portions of the fins at opposite sides of the heating element fastened together so as to hold the fins in contact with the heating element, said straps being of ferrous metal fastened to each other by welded connections.

1,861,448. RADIATOR. THOMAS E. MURRAY, deceased, Brooklyn, N. Y., by John F. Murray, Joseph B. Murray, and Thomas E. Murray, jr., executors, Brooklyn, N. Y., assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Feb. 4, 1930. Serial No. 425,752. 5 Claims. (Cl. 257—139.)



3. A radiator including a heating element, an extended area structure comprising opposite portions embracing the heating element, and pins engaging the said opposite portions and secured together between such portions by longitudinal rods engaging the ends of said pins.

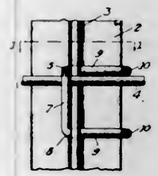
1,861,449. RADIATOR. THOMAS E. MURRAY, deceased, Brooklyn, N. Y., by John F. Murray, Joseph B. Murray, and Thomas E. Murray, jr., executors, Brooklyn, N. Y., assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Feb. 4, 1930. Serial No. 425,754. 8 Claims. (Cl. 257—141.)



4. A radiator including a heating element, an extended area structure comprising recessed portions embracing the heating element, straps fitting the outside

of said recessed portions at one side of the heating element and passing through the extended area structure at the opposite side and bent over against the same to fasten the parts together and screws for clamping the bent-over portions in fastening position.

1,861,450. TIE WIRE. NED A. OCHILTREE, Peoria, Ill., assignor to Concrete Engineering Company, Omaha, Nebr., a Corporation of Nebraska. Filed Sept. 14, 1931. Serial No. 562,623. 2 Claims. (Cl. 256—57.)



1. A fence tie wire comprising a length of wire bent intermediate its ends to form an open V-shaped loop through which a fence wire may pass, the apex of the loop being off center with respect to the legs of the loop the latter having their end portions bent at substantially right angles to the loop.

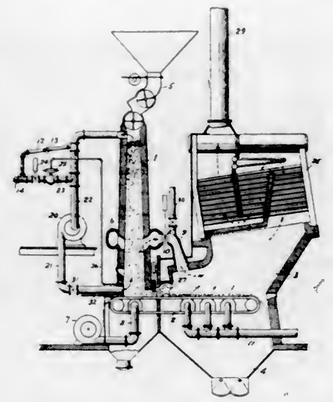
1,861,451. CONNECTER FOR BATTERIES AND SIMILAR DEVICES. ALLAN J. PARK, Lakewood, Ohio. Filed Apr. 4, 1928. Serial No. 267,187. 4 Claims. (Cl. 173—259.)



1. A terminal connecter comprising a clamping socket having relatively movable spaced jaws, a body rigid with one of the jaws, a portion of the body being positioned opposite the outer surface of and in spaced relation to the other jaw, and means adapted to bear against the said portion and the last mentioned jaw to lock the jaw in position.

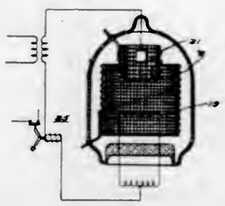
1,861,452. PROCESS OF PRODUCING COAL GAS. JOHN M. RUSBY and WILLIAM I. BATTIN, Philadelphia, Pa., assignors to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 5, 1927. Serial No. 237,800. 3 Claims. (Cl. 48—210.)

1. The process of the production of coal gas and utilization of heat of combustion; which consists in establishing and maintaining a continuous mass of ignited fuel comprising as continuous parts thereof a descending column and a unilaterally spreading bed by feeding bituminous fuel to the top of the column and by passing hot carbonized coal from the bottom of the column to the bed and by discharging ashes from the bed, burning the carbonized fuel and producing utilizable heat by air blasting the bed, intermittently air blasting the lower portion of the column and leading off the blast gases from the top of said lower portion to the combustion gases from the burning fuel bed to augment the utilizable heat thereof and collecting coal gas generated in the column above said point, alternately recirculating coal gas through the column to transfer heat from the lower portion to the



top thereby carbonizing raw coal and generating coal gas, and leading off the coal gas so generated in excess of that required for recirculation.

1,861,453. GASEOUS DISCHARGE DEVICE. STEPHEN P. SASHOFF, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,608. 1 Claim. (Cl. 250—27.5.)

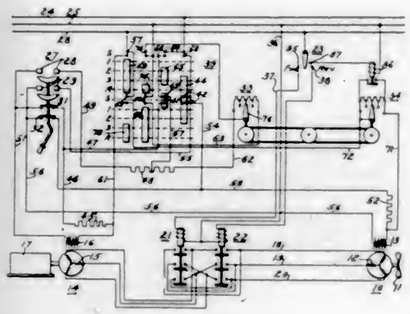


A gaseous conduction discharge device comprising a container, a gas in said container, an anode, a cathode and a grid in operative relationship in said container and means in said container for controlling the electric field between said electrodes comprising a screen spaced from the walls of said container and enclosing the major portion of the distance between said anode and said cathode.

1,861,454. SHIP PROPULSION SYSTEM. WALTER SCHAELCHLIN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 6, 1929. Serial No. 337,983. 11 Claims. (Cl. 172—8.)

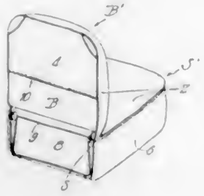
1. In a marine drive, in combination, a synchronous-propulsion motor, a synchronous generator for supplying power to the motor, means for driving the generator at a variable speed to control the speed of the propulsion motor, said motor and generator being provided with separately-excited field windings, and having substantially the same short-circuit characteristics, means for controlling the excitation of the machines, said means comprising a plurality of field rheostats independently operable to establish unity power factor conditions in the system, and means for effecting simultaneous operation of the

rheostats while maintaining their original relative positions for unity power factor operation, whereby different degrees of excitation, in the same ratio, may be obtained



to establish different degrees of system stability in accordance with the load imposed upon the motor and generator.

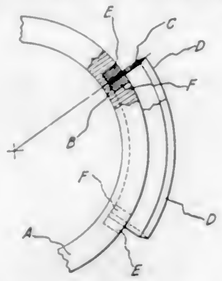
1,861,455. SEAT COVER. MEYER SCHWARTZ, Springfield, Mass. Filed Jan. 30, 1930. Serial No. 424,684. 2 Claims. (Cl. 155—182.)



1. A seat cover comprising in combination, a main body portion, a panel at the upper end thereof secured at its upper and side edges to the upper and side edges of the main body portion to form a pocket for embracing a back for a seat, side panels at the lower end of said body portion which are secured to said body portion to leave free marginal edges and provide a pocket for embracing a seat, certain of said free marginal edges being plaited and provided with a yieldable tape so as to be extensible and tie means for drawing the certain edges together and extending them under tension whereby a seat may be snugly embraced by the last-named pocket and a flap secured along one edge to said body portion between said pockets for overlying a rear side of a seat and means carried by said flap for cooperating with said tie means whereby the flap may be held against the said rear side of a seat.

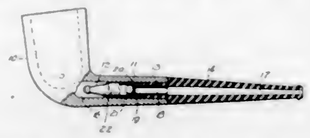
1,861,456. FORM-CUTTER ROLL. JOHN C. SHAW and ROBERT D. SHAW, Brooklyn, N. Y., assignors to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed Apr. 29, 1930. Serial No. 448,338. 3 Claims. (Cl. 164—28.)

2. A form-cutter roll comprising a roll having a groove on its cylindrical face, the center line of which follows the contour of the form to be cut, said center line being in a plane extending radially of the roll, a knife located in said groove and having its cutting edge in said central plane of the groove, a backing strip between one wall of the groove and the knife for maintaining the cutting



edge thereof in said central radial plane of the groove and metal caulking material between the knife and the other wall of the groove for securing the knife in the roll.

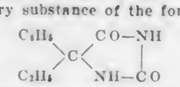
1,861,457. TOBACCO PIPE. BERNARD M. SHOEMAKER, New York, N. Y., assignor to Wm. Demuth & Co., New York, N. Y., a Corporation of New York. Filed Aug. 19, 1931. Serial No. 558,092. 3 Claims. (Cl. 43—12.)



1. A tobacco pipe comprising a bowl having a stem communicating therewith, a mouthpiece engaged in the free end of the stem, and a receptacle conduit at the end of the mouthpiece extending into the stem and providing an elongated chamber with an interrupted seat at one end for an element which is received in the receptacle and free to move through the chamber.

1,861,458. DEXTRO-5-PHENYL-5'-ETHYL HYDANTOIN. HARRY SOBOTKA, New York, N. Y. Filed Sept. 8, 1930. Serial No. 480,617. 1 Claim. (Cl. 260—44.)

A dextro-rotatory substance of the formula



called dextro-5-phenyl-5'-ethyl-hydantoin, having soporiferous, sedative, hypnotic and narcotic properties and essentially free from its optical antipode.

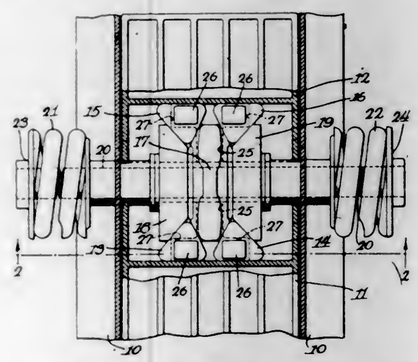
1,861,459. COUPON FOLDER. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 24, 1929. Serial No. 380,512. 2 Claims. (Cl. 281—15.)

1. A coupon-book for receiving typed data including a cover, having a head-member arranged for receiving indicia individual to said book, and a lower member integrally joined to said head-member along a fold-line, a flexible coupon-fastening piece fixed to said lower member below said fold-line, and a plurality of superposed, carbon-interleaved coupon-strips longitudinally separated and fixed at one end to said fastening piece, said coupon-strips each including a succession of detachable coupons adapted to fit within the cover-members when the coupon-strip is folded, each coupon arranged for receiving said indicia individual to said coupon-book, said cover and said coupon-strips being sufficiently flexible whereby said coupon-book may be inserted in a typewriting machine, said top member leading, to have said indicia typed on said top member, and on each succeeding group of superposed carbon-interleaved coupons, said lower cover-member be-



ing separable from said cover along a weakened line below said fastening piece, adapted to bear indicia connecting it with said coupon-book, whereby it may serve as a re-order slip for a like coupon-book.

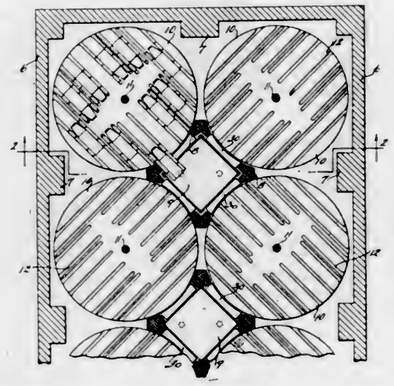
1,861,460. DRAFT GEAR. DONALD F. SPROUL, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed Nov. 2, 1929, Serial No. 404,221. Renewed Oct. 29, 1931. 7 Claims. (Cl. 213—38.)



1. A draft gear comprising, in combination, a chambered follower, a pair of triangular wedge-blocks slidably engaging the vertical face of the follower, the exposed sides of the blocks being of unequal length, the follower having one of its horizontal walls provided with a central guide channel extending inwardly from its margin and laterally at its inner end, and each of the blocks having an angular boss on one end for engaging the channel.

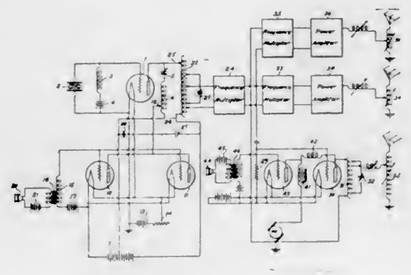
1,861,461. STRUCTURE FOR STORAGE OR ACCOMMODATION OF VEHICLES. ABRAHAM TRAUBE, Brooklyn, N. Y. Filed Aug. 23, 1930. Serial No. 477,339. 7 Claims. (Cl. 214—16.1.)

1. A structure for the accommodation of vehicles, comprising an elevator for the vehicles, a series of tiers of horizontal turntables grouped uniformly around the elevator with the turntables of each tier arranged to rotate about a common axis, and means for rotating the turn-



tables of each tier independently of each other to bring any point in the peripheral edge of any of the turntables into position to receive a vehicle from the elevator.

1,861,462. RADIO STATION. VIRGIL E. TROUANT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1928. Serial No. 274,792. 2 Claims. (Cl. 250—9.)

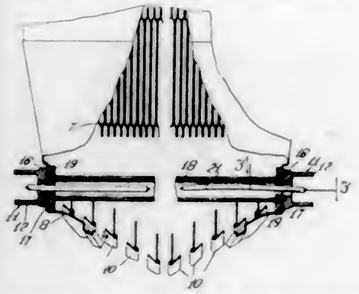


1. In combination, a plurality of sending circuits, a common master oscillator therefor, different frequency-multiplying means between said master oscillator and said sending circuits, whereby the frequencies impressed on said circuits, respectively, are different multiples of the frequency of the master oscillator, means for varying the master-oscillator frequency in accordance with a signal and signal-controlled means for varying the amplitude in at least one of said sending circuits.

1,861,463. HEADLIGHT MOUNTING FOR AUTOMOBILES. CORNELIUS W. VAN RANST, Auburn, Ind., assignor, by mesne assignments, to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed May 31, 1929. Serial No. 367,409. 3 Claims. (Cl. 280—152.)

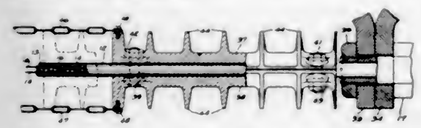
1. An automobile embodying therein front fenders, a radiator between said fenders comprising a core and a shell, a member extending transversely through said shell

in front of said core and engaged at its ends with side portions of said shell, brackets arranged between said shell and fenders and secured at one end to the latter and



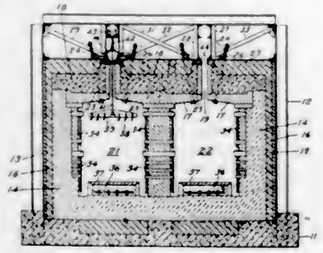
means connecting the other end of said brackets to the ends of said member and also to said side portions of said shell.

1,861,464. ELECTRIC HEATER. JAMES C. WOODSON, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,280. 3 Claims. (Cl. 219—19.)



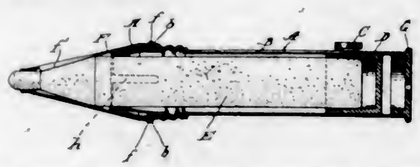
1. A portable electric heater including a straight tubular heating unit, a terminal box secured to one end of the tubular heating unit, a control switch for the heating unit in said terminal box, carrying means secured to the terminal box, cooling means for a part of the heating unit adjustably securable thereon and means operatively connecting the carrying means and the cooling means for limiting the adjustable movement of the cooling means in one direction.

1,861,465. CONVEYER SLOT SEAL. JAMES C. WOODSON, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 518,929. 4 Claims. (Cl. 263—8.)



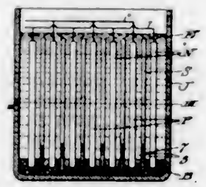
1. In combination with a heated furnace having a slot in the roof, a conveyer chain travelling above the roof having spaced material-supporting rods depending therefrom and moving in said slot, and bars extending horizontally between said depending rods and pivotally connected thereto, of stationary resilient plates in end-to-end relation at each side of the slot with their upper edges frictionally engaging the rods and horizontally extending bars, and resilient supporting means for the lower edges of the plates cooperating therewith to prevent escape of heat through the slot.

1,861,466. CRAYON HOLDER. NICOLINO BAFETTI, Chicago, Ill. Filed Nov. 8, 1930. Serial No. 494,272. 1 Claim. (Cl. 120—13.)



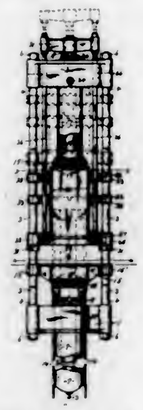
A holder for marking crayons, comprising a tubular body having a slot made therein, a cup follower conically bored to receive a marking crayon, slidably mounted in the said tubular body, a thumb-piece passed through said slot of the body into the aforesaid cup follower, said tubular body having a threaded portion to receive a clamping thimble for the crayon, and lugs provided on said thimble for engaging and retaining a conical-shaped crayon sharpening tool mounted for rotation on said clamping thimble, substantially as set forth.

1,861,467. STORAGE BATTERY. RAYMOND C. BENNER, Bayside, and LEROY C. WERKING, New York, N. Y., assignors, by mesne assignments, to Prest-O-Lite Storage Battery Corporation, a Corporation of Indiana. Filed Sept. 18, 1924. Serial No. 738,446. 7 Claims. (Cl. 136—147.)



1. A storage cell assembly comprising electrodes, and a separator spaced therefrom and having its lateral margins coated with a thermoplastic material, said coating connecting said marginal portions with the lateral marginal portions of the adjacent electrodes.

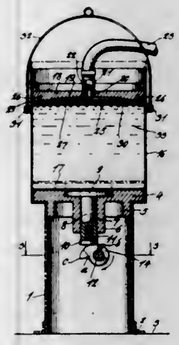
1,861,468. HYDRAULIC BALING PRESS. RUFUS E. BOSCHERT, Syracuse, N. Y. Filed Feb. 4, 1929. Serial No. 337,399. 3 Claims. (Cl. 100—19.)



1. In a baling press, an upright baling box for receiving compressible material, a floor plate below the lower end of the box having an opening in vertical alinement with

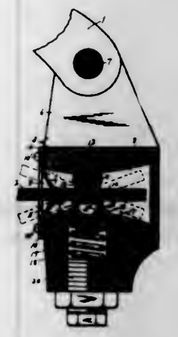
and of substantially the same cross sectional form and area as that of the interior of the box for receiving and alining a preformed bale with the interior of the box, a lower pressing element movable in said opening and normally below the upper face thereof for supporting said preformed bale in the opening, an upper pressing element alined with the upper end of the box, means for elevating the lower pressing element with the pre-formed bale thereon into the box and against the upper pressing element for compressing the bale, and means for withdrawing the box upwardly from the compressed bale, said box being continuous from end to end and having its sides rigidly united to each other.

1,861,469. FILTER. HOMER P. CURTIS, Denver, Colo., assignor of one-half to J. Ernest Higson, Denver, Colo. Filed May 28, 1931. Serial No. 540,521. 8 Claims. (Cl. 210—185.)



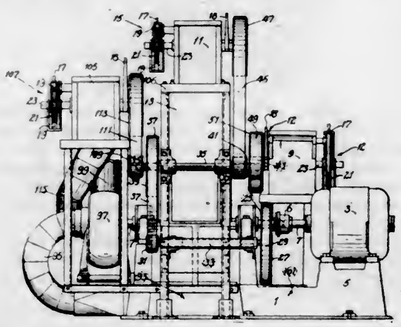
1. A filter comprising, in combination, a container having an imperforate bottom and adapted to contain a liquid containing solid particles in suspension, means for gradually raising the container and for releasing the same so that it may fall by the action of gravity and a stop for bringing the container to a sudden stop whereby the solid particles of the liquid will continue to move downwardly in the liquid by the combined action of their inertia and the action of gravity.

1,861,470. SPRING SHACKLE. FRANK E. FISHER, Elmira, N. Y. Filed July 3, 1931. Serial No. 548,608. 3 Claims. (Cl. 267—56.)



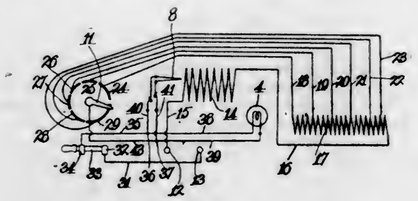
1. A device for connecting the end of a leaf spring to the chassis frame of a vehicle, comprising a hanger secured to the frame and provided with a lengthwise socket into which the end of the leaf-spring extends, the upper wall of the socket having a transversely extending semi-cylindrical bearing, a rock-shaft journaled in said bearing and having its lower side flattened and engaged with the upper flat face of the adjacent end of the spring to cause said shaft to rock about its axis as the longitudinal angular relation between the frame and spring varies, a bearing member in the lower wall of said socket having a hemi-spherical recess in its upper side, and a supporting member for the end of the spring having a convex hemi-spherical boss seated in said recess to permit relative angular movement of the hanger and spring in all directions while the flat side of rock-shaft and spring maintain flat contact with each other.

1,861,471. APPARATUS FOR THE MANUFACTURE OF PREPARED FEEDS. EDWARD H. FRICKEY, Pasadena Park, Mo., assignor to Dixie Machinery Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 6, 1930. Serial No. 493,716. 6 Claims. (Cl. 83—11.)



1. In apparatus of the class described, the provision of a grinder provided with an inlet and a discharge passage, a plurality of hoppers into which separate quantities of ingredients for a prepared feed may be introduced, said hoppers being provided with discharge passages communicating with the inlet passage of said grinder, a feeding mechanism associated with at least one of said hoppers, said feeding mechanism regulating the amount of the ingredient entering said grinder from said hopper, at least one hopper separate from said first-named hoppers, said hopper receiving an ingredient and being provided with a discharge passage communicating with the discharge passage of said grinder, said last-named ingredient being mixed with said first-named ingredients after said first-named ingredients are ground to a predetermined fineness by said grinder.

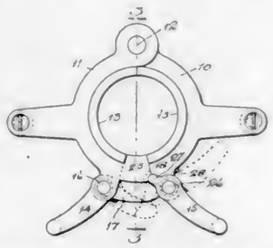
1,861,472. ELECTRIC FURNACE AND CONTROL THEREFOR. EWALD C. GLITZKE, Kansas City, Mo. Filed Nov. 8, 1928. Serial No. 317,982. 3 Claims. (Cl. 219—35.)



1. An automatic control assembly for electric furnaces, constituting a three-unit construction comprising a muffle, a resistance element and a timing mechanism, a rheo-

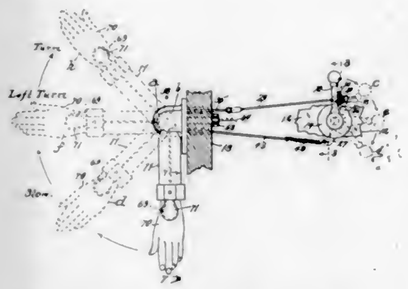
stat functioned by the timing mechanism adapted to periodically increase the current and heat supplied to the muffle, and fusible means in the muffle adapted to break the circuit when the temperature in the muffle reaches a predetermined maximum point.

1,861,473. CASING ELEVATOR. JOHN E. HOFFOSS, Houston, Tex., assignor to W-K-M Company, Inc., Houston, Tex., a Corporation of Texas. Filed Dec. 26, 1930. Serial No. 504,702. 5 Claims. (Cl. 294—90.)



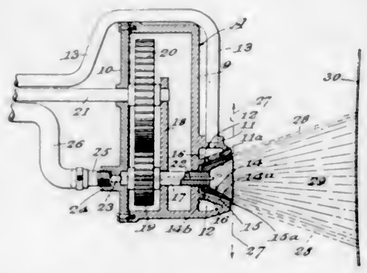
1. In a device of the class described, the combination of a plurality of members pivotally connected, one of the members being provided with a keeper and the other member being provided with a loop-shaped latch adapted to engage the keeper when closed, a U-shaped handle pivoted on the member which carries the keeper, said handle being provided on its inner end with a member normally underlying the free end of said loop-shaped latch and adapted when the handle is swung to swing the latch outwardly and disengage the same from the keeper, and a fixed U-shaped handle secured to the latch carrying member and between the legs of which said latch is pivoted, a spring for normally holding the free end of the latch inwardly, and a spring for normally holding the latch engaging member inwardly.

1,861,474. SIGNAL APPARATUS FOR AUTOMOBILES. CHRISTOPHER C. HOLMES, Los Angeles, Calif. Filed Apr. 22, 1930. Serial No. 446,260. 3 Claims. (Cl. 116—51.)



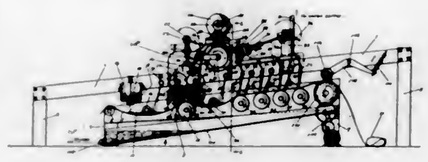
1. The combination with a signal arm secured to a pulley pivotally mounted on the outside of a closed car, of a sleeve extended through the dash board of a closed automobile, a control lever on the inside of the automobile, a shank having one end integral with said lever and rotatably and slidably mounted in said sleeve so it extends from the inside to the outside of the automobile and beyond the outer end of said sleeve, and flexible means connecting the outer end of said shank with the pulley on which said signal arm is mounted, whereby said lever can be actuated by a driver to indicate his intentions to stop or turn right or left.

1,861,475. METHOD OF APPLYING LACQUER OR THE LIKE. RALPH Z. HOPKINS and WILLIAM D. OGDEN, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 27, 1929. Serial No. 358,564. 3 Claims. (Cl. 91—68.)



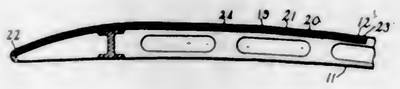
1. The hereindescribed method of applying lacquer or the like to a surface to be coated thereby which consists in atomizing the liquid lacquer mechanically and directing a spray of the atomized lacquer against said surface by enclosing the same in an envelope or hollow jet of compressed air while so controlling the form of said jet as to avoid substantial admixture of the air with the atomized lacquer.

1,861,476. RUG CLEANING MACHINE. AVEDIS SARKIS KHANZADIAN, Syracuse, N. Y. Filed Apr. 17, 1929. Serial No. 355,696. 4 Claims. (Cl. 15—40.)



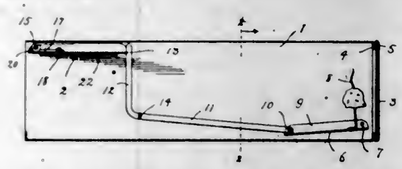
1. A rug cleaning machine comprising a series of rollers, means for moving a rug over said rollers, rotatable brushes on said machine for scrubbing said rug, certain of said rollers being spaced apart, guide rollers under which said rug is positioned to form a pair of pockets in said rug, means for feeding a cleaning solution into one of said pockets and rinse water in the other of said pockets, said brushes acting on said rug between said pockets.

1,861,477. AIRCRAFT PROTECTOR. JOHN P. KILGORE, New Haven, Conn., assignor to Kilgore Aircraft Protector, Incorporated, New Haven, Conn. Filed Apr. 5, 1929. Serial No. 352,645. 3 Claims. (Cl. 244—31.)



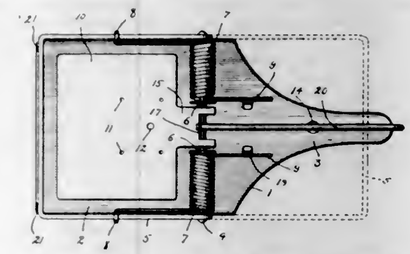
1. Means for preventing the formation of ice or the like on aeroplane wings, comprising an envelope disposed below and adjacent the upper surface of the wing, said envelope having a metal upper surface, an interior heat element, and a lower sheet of insulating material, said envelope being disposed adjacent the front edge of the wing and extending rearwardly therefrom.

1,861,478. BOX TRAP. JOHN KLEFFMAN, Hibbing, Minn. Filed Nov. 17, 1930. Serial No. 496,139. 8 Claims. (Cl. 43—61.)



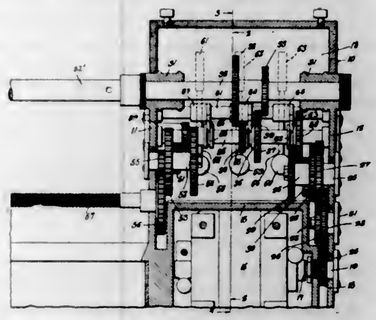
1. A box trap comprising an elongated rectangularly shaped body portion open only at one end, a trigger platform adjacent the closed end, a hinged door adjacent the open end, for closing same, and a single trip bar one end of which is attached to the platform and the other end engageable with the door, said bar being pivotally attached to one side of the trap intermediate of its ends.

1,861,479. ANIMAL TRAP. JOHN KLEFFMAN, Hibbing, Minn. Filed May 14, 1931. Serial No. 537,230. 2 Claims. (Cl. 43—81.)



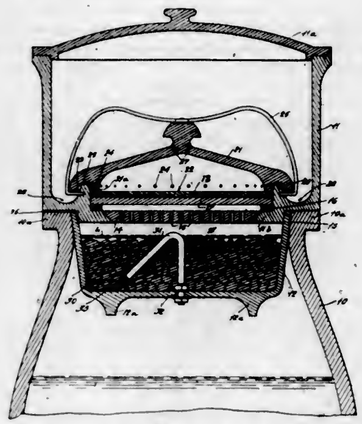
1. An animal trap comprising a base portion having an upstanding flange about one end and the sides thereof, a transverse bar pivotally mounted in said flange and extending therethrough, a U-shaped killing bar mounted upon said transverse bar externally of said flanges and engageable with said end flange when sprung, springs upon said transverse bar one end engaging the killing bar and the other the base, a bait pan pivotally mounted upon said transverse bar, and means for setting the trap.

1,861,480. TRANSMISSION GEAR. THOMAS H. OER, Okmulgee, Okla. Filed May 13, 1930. Serial No. 452,005. 2 Claims. (Cl. 74—58.)



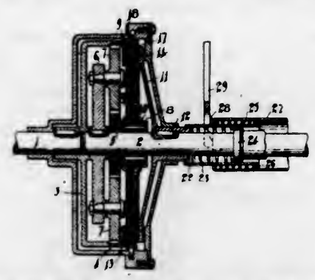
1. In a gear drive, a pair of shafts to be driven, a motor, a gear train associated with the motor, a countershaft, a gear train associated with one of the driven shafts, gears on the other of the driven shafts, a shiftable transmission means on the countershaft for engagement with the first gear train, a shiftable transmission means on the countershaft for engagement with the gears of the said other driven shaft, and a shiftable transmission means on the countershaft for engagement with the second gear train.

1,861,481. WATER FILTER. LLOYD E. RABJOHN, Eagle Rock, Calif. Filed June 19, 1929. Serial No. 371,975. 8 Claims. (Cl. 210—105.)



1. In a filtering device of the character described, a container for material adapted to adsorb gases from the liquid, means for supplying liquid to said container, and means for automatically discharging the treated liquid from said container at predetermined intervals said container being vented to the atmosphere.

1,861,482. TRANSMISSION MECHANISM. CLIFFORD SIFTON, Toronto, Ontario, Canada. Filed June 23, 1930. Serial No. 463,083. 13 Claims. (Cl. 74—34.)

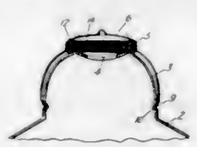


1. In transmission mechanism, the combination of a driving and a driven shaft; an epicyclic gear train interposed between the shafts including a loose sun pinion; means for applying a variable frictional resistance to the rotation of the sun pinion relative to the shafts; a stationary part; means engaging said part for applying resistance to the rotation of the sun pinion relative to said part; and means for simultaneously varying both resistances.

1,861,483. CONTAINER AND CLOSURE DEVICE THEREFOR. ROBERT D. SIMPSON, Columbus, Ohio, assignor of one-half to Stephen E. Ludwig, Columbus, Ohio. Filed Mar. 31, 1928. Serial No. 266,183. 5 Claims. (Cl. 221—60.)

1. In combination, a container having a discharge neck provided with an aperture, an oscillatable closure device

pivoted to said neck, said discharge neck having a ridge thereon surrounding such aperture and enclosing a sunken



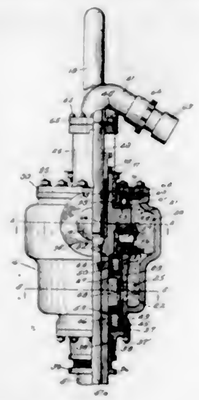
area, said oscillatable closure device having a yieldable interior surface designed to be impressed by the ridge on said discharge neck.

1,861,484. CONCEALED HEATER. JOHN L. STEVENSON, Toronto, Ontario, Canada, assignor to National Trust Company, Limited, Toronto, Canada. Filed May 25, 1931. Serial No. 539,763. 4 Claims. (Cl. 257—136.)



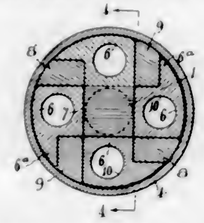
3. Heat exchange apparatus comprising a vertical flue; a baffle located therein extending from one side adjacent the bottom to a higher position part way towards the opposite side; a convector situated in the flue below the baffle; and a convector situated in the flue above the baffle and shielded thereby from the lower convector, openings being formed in the flue above and below the baffle to supply cool air to and below each convector, each comprising a waterway and spaced vertical fins extending therefrom.

1,861,485. SWIVEL HAVING COOLING MEANS. GUGLIELMO TREMOLADA, Hollywood, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 25, 1929. Serial No. 342,637. 6 Claims. (Cl. 255—25.)



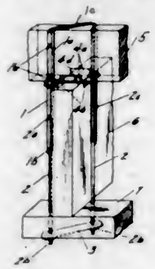
1. In a swivel, the combination of: a body providing a lubricant chamber; a sleeve rotatable in said chamber; bearing means in said chamber below the normal lubricant level; sealing means for preventing a leakage of lubricant around said sleeve; and means providing a vapor chamber above said lubricant chamber and above the normal lubricant level, into which vapor from said lubricant chamber may rise.

1,861,486. OVERRUNNING CLUTCH. JESSE H. TROMANHAUSER, Toronto, Ontario, Canada. Filed Aug. 19, 1931. Serial No. 558,097. 1 Claim. (Cl. 192—41.)



In a friction clutch, the combination of a driven shaft; a drum secured thereto formed with an annular internal friction surface; a drive shaft; a hub concentric with the driven shaft; guides on said hub projecting within the drum; clutch shoes supported at their front and rear sides by said guides and slidable radially of the drum; a cam on the drive shaft adapted, when the said shaft is driving, to move said clutch shoes outwardly into frictional engagement with the internal friction surface of the drum, each of said clutch shoes being provided with a rearward extension of the drum engaging surface extending over the guide at the rear of the shoe.

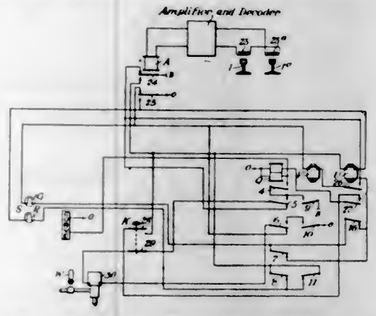
1,861,487. ADJUSTABLE HAYRACK CLAMP. WILLIAM F. YEOMAN, Monticello, Iowa. Filed Jan. 23, 1931. Serial No. 510,701. 1 Claim. (Cl. 296—9.)



A rack-clamp comprising an inverted U-shaped body having channeled arms, a plurality of spaced openings in the arms, a bolt adapted to seat in each arm, a lateral extension with a head thereon formed upon each bolt and extending through one of the openings in the adjacent arm, the opposite end of each bolt being threaded, a rectangular flanged plate slidably mounted upon the arms, oppositely turned flanges formed upon alternate edges of the flanged plate, said flanges extending obliquely of the clamp, a tie-plate slidingly mounted upon the bolts and nuts threaded upon the threaded ends of the bolts.

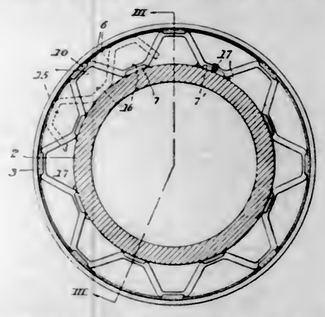
1,861,488. RAILWAY TRAFFIC CONTROLLING APPARATUS. LESLIE R. ALLISON, Wilkinsburg, and FRANK H. NICHOLSON, Edgewood, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 1, 1931. Serial No. 534,294. 10 Claims. (Cl. 246—63.)

1. Railway traffic controlling apparatus comprising means for supplying train governing current to the track rails, means for at times periodically interrupting the supply of such current to the rails, a train carried main relay controlled by such current and arranged to be energized continuously or intermittently according as the current is supplied continuously or is periodically interrupted, two signals controlled by said relay and one or



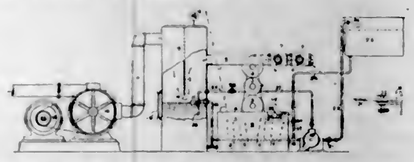
the other of which is displayed according as the relay is energized or deenergized, and means including a manually operable member effective when and only when said relay is intermittently energized to prevent the display of either of said signals and to cause the display of a third signal.

1,861,489. CONVEYING APPARATUS. FRANK W. BROOKE and WILLIAM H. COSGROVE, Pittsburgh, Pa., assignors to William Swindell and Brothers, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 17, 1930. Serial No. 429,042. 10 Claims. (Cl. 263—6.)



5. Conveying apparatus comprising a roll, a plurality of narrow non-metallic refractory rims spaced axially of the roll and radially thereof, and a resilient refractory metallic spider connecting each rim to the roll.

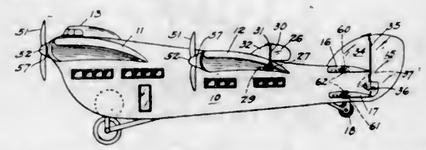
1,861,490. METHOD AND MEANS FOR MERCERIZING. HARRY W. BUTTERWORTH, Jr., Philadelphia, Pa., assignor to H. W. Butterworth & Sons Company, a Corporation of Pennsylvania. Filed Feb. 8, 1929. Serial No. 338,342. 6 Claims. (Cl. 8—20.)



1. The herein described method of mercerizing and caustic alkali recovery as part thereof, which comprises subjecting a fabric to a mercerizing treatment with a strong caustic alkali solution and then subjecting the mercerized fabric to pressure in a continuous manner along its length for removing the excess of caustic alkali, causing the fabric thus treated to be subjected to suction in the presence of air for removing from it a large further portion of the strong caustic alkali solution, thereafter mechanically treating the mercerized fabric and its reduced caustic alkali content to a washing treatment with water and producing thereby a weak caustic alkali solution suitable for use in a kier for preparing a fabric for bleaching and dyeing, and mixing the recovered strong caustic alkali solution with other similar solutions in further mercerizing treatment of fabrics.

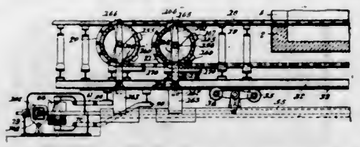
4. Apparatus of the character stated, comprising means for feeding and guiding a textile fabric under tension through a caustic alkali solution vat and squeezing out the surplus solution from the saturated fabric, suction means over which the caustic alkali saturated fabric is moved and by which a further portion of the caustic alkali solution may be recovered from the saturated fabric while exposed to atmospheric conditions, vacuum creating means for providing a suction through the suction means over which the fabric is moved, means for returning the recovered caustic alkali solution to the vat, means for receiving and stretching the fabric after the recovery of caustic solution by the suction means, and means for washing the caustic alkali from the fabric while in the stretching means and greatly diluting the strength of said caustic alkali.

1,861,491. AIRCRAFT. SOCRATIS H. CAPELIS, El Cerrito, Calif. Filed Oct. 13, 1930. Serial No. 488,239. 10 Claims. (Cl. 244—14.)



1. A tandem monoplane comprising a fuselage provided with a plurality of wings in series and spacedly related, the forward wings having ailerons at the trailing edge thereof, power units mounted in said wings adjacent the leading edge, propellers driven by said power units and capable of being angularly adjusted relative to said power units.

1,861,492. CONTINUOUS FURNACE. ALBERT L. CULBERTSON, Mount Lebanon Township, Allegheny County, Pa.; Laverna M. Culbertson and The Union Trust Company of Pgh, executors of said Albert L. Culbertson, deceased. Filed Aug. 24, 1931. Serial No. 558,858. 21 Claims. (Cl. 263—8.)

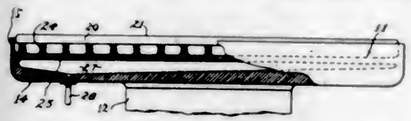


20. In combination with a walking beam furnace, material engaging means carried by a beam, and means other than the beam movement for imparting a supplemental movement to said material engaging means for moving said engaging means to a cleaning position.

1,861,493. UNHEATED LOWER BUCK. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 21, 1930. Serial No. 497,192. 5 Claims. (Cl. 68—9.)

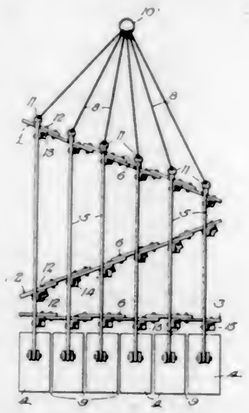
1. A garment or laundry pressing machine buck including in combination a pressing face member; resilient

means to support the pressing face member; a rigid perforated base plate supporting the resilient means; a chamber, below the perforations of the base plate, formed



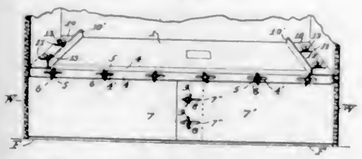
with a sloping bottom; and a conduit communicating with the lowest part of the sloping bottom to drain liquid from the chamber.

1,861,494. WASHBOARD ROAD HARROW. ARTHUR M. DEVEREUX, Castine, Me. Filed Aug. 8, 1929. Serial No. 384,318. 2 Claims. (Cl. 37—145.)



2. A washboard road harrow comprising a plurality of scraper blades each composed of a plurality of loosely connected sections, said blades being angularly disposed with respect to each other, a plurality of longitudinally extending parallel bars connected to said blades, draft means connected to the forward ends of said bars, and a plurality of smoothing plates loosely connected to the rear ends of said bars.

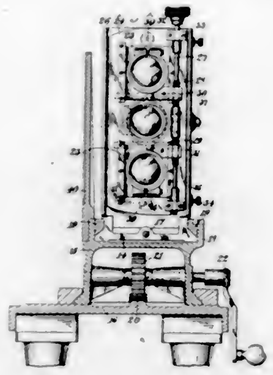
1,861,495. TEMPORARY BATHTUB COVER. GEORGE M. GOULD, Brooklyn, N. Y. Filed Feb. 21, 1931. Serial No. 517,541. 3 Claims. (Cl. 4—173.)



1. A cover for a bath tube comprising a relatively light elongated flat body, guide plates adjustably secured at each end thereof and an apron adjustably secured to and suspended from said body whereby a bath tub is completely enclosed.

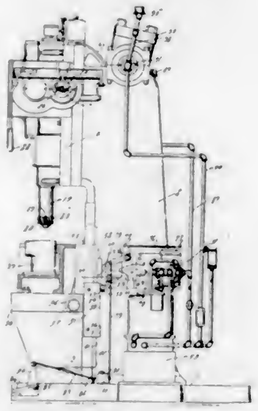
1,861,496. CINEMATOGRAPH PROJECTOR. CONSTANT GEGGENHEIM, London, England, assignor to Cooper-Gee Limited, London, England, a British Company. Filed Aug. 21, 1928, Serial No. 300,986, and in Great Britain Sept. 17, 1927. 10 Claims. (Cl. 88—16.4.)

1. In a multi-lens cinematograph projector of the character specified, the combination of three lenses, a carrier for one of the lenses, which carrier is within small limits adjustable relatively to the other two lenses transversely to the plane in which the lenses lie, and means for swing-



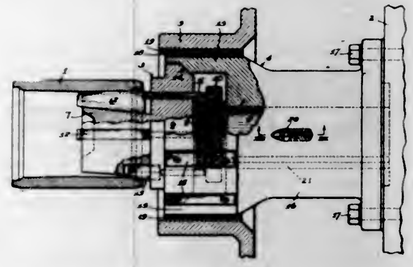
ing said other two lenses as a unit around the transversely adjustable lens to set the optical centres of the lens system along a line parallel to the centre line of the film.

1,861,497. HYDRAULIC TABLE FEED MECHANISM. GEORGE E. HALLENBECK, Toledo, Ohio, assignor to Baker Brothers, Inc., Toledo, Ohio, a Corporation of Ohio. Filed June 23, 1926. Serial No. 118,045. 1 Claim. (Cl. 77—32.)



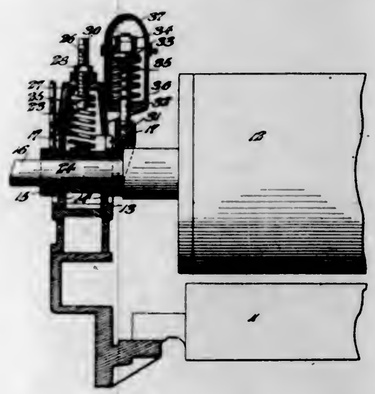
In a vertical boring machine; a frame provided near the base thereof with a guideway extending in a vertical plane, an outwardly projecting boring head on the upper end of said frame, a work table slidable on and projecting forwardly from said guideway and adapted to carry work pieces into engagement with said boring head, and table feeding mechanism comprising a cylinder pivotally mounted in the upper end of said frame and rearwardly from the plane of said guideway, a piston on said cylinder, a rigid piston rod pivoted to the upper end of said table at a point outwardly from said guideway, and intersecting the said plane of the guideway at a small acute angle, a source of fluid pressure and valve means controlling the movement of said table.

1,861,498. BORING HEAD. ROBERT L. HIBBARD, Bellevue, Pa., assignor of one-half to William K. Stamets, Pittsburgh, Pa. Filed Mar. 16, 1931. Serial No. 522,857. 2 Claims. (Cl. 77—58.)



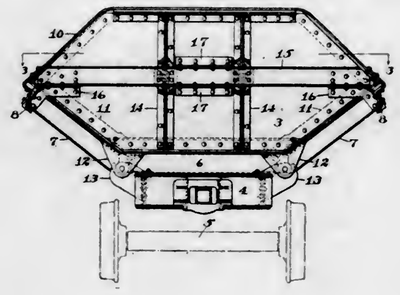
1. In combination in a machine tool, a steadying sleeve rigidly mounted adjacent the work, a cutting tool comprising a cutter head provided with cutters, a shank and a centering flange intermediate the cutter head and shank provided on its rear side with a conical surface lying at an angle approximately 45 degrees to the center line of the cutter, a pilot member comprising a cylindrical shank into which the shank of the tool is adapted to fit snugly having means at its rear end for securing it to a reciprocating carriage, and having a guide sleeve on its interior with a conical surface in opposition to said conical surface on said flange adapted to fit over the flange, said guide sleeve being formed on its exterior to fit slidingly into the steadying sleeve, and cooperating means between the pilot member for forcing said conical surfaces into tight contact and securing the cutting tool against movement with respect to the pilot member.

1,861,499. SUPPORT FOR IRONING MACHINE ROLLS. WILLIAM H. JAXHEIMER, Philadelphia, Pa., assignor to Smith, Drum & Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 23, 1929. Serial No. 334,390. 3 Claims. (Cl. 68—9.)



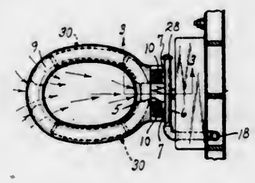
1. A floating support for an end of an ironing roll comprising a bearing for receiving an end of the roll shaft, a support in which said bearing is free to slide vertically, a shank fixed to and rising vertically from said bearing, a housing attached to said support and forming two spring receiving chambers, one of said chambers encircling said shank, said shank being movable relative thereto, means including a spring in said one chamber coacting with said housing to press said shank to move said bearing in one direction, and a spring in the other of said chambers and coacting with said housing to press said bearing in the opposite direction whereby said ironing roll is held in a predetermined floating position.

1,861,500. CAR CONSTRUCTION. OSCAR E. KANTENWEIN, Oak Park, Ill., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 6, 1930. Serial No. 493,751. 5 Claims. (Cl. 105—411.)



1. A bracing for the ends of a car body comprising a vertically disposed member and a transversely disposed member, said members being secured to the end of the body and to each other, said transverse member being disposed intermediate the vertical limits of the end and adjacent the upper edges of the side of the body.

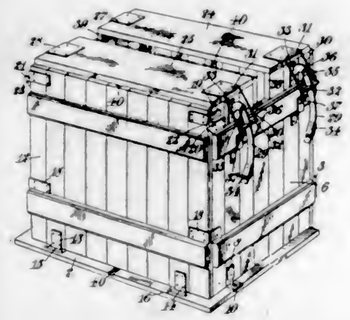
1,861,501. FOUL AIR EXHAUSTER. JESSE P. LOWTHER, Spokane, Wash. Filed Apr. 27, 1931. Serial No. 533,054. 1 Claim. (Cl. 4—213.)



The combination with a toilet bowl and seat therefor of a foul air exhauster comprising a rectangular casing detachably installed between the rear portions of said bowl and seat, a tubular member fixed transversely to the rear end of said casing in open communication therewith, a door hinged to the front end of the casing, a spring adapted to retain said door in a normally closed position, a bell crank lever with its upper end disposed in engagement with the toilet seat, a link member connecting the lower end of the bell crank with said door whereby the door is opened when pressure is applied to the seat, a vent pipe connected to one end of the tubular member and extending upwardly to the open air, a motor, a fan for the motor interposed in the vent pipe whereby air is drawn from the toilet bowl and discharged through the vent pipe when the motor is running, circuit wires extending from a connection with the motor through the vent pipe, tubular member, and into the rectangular casing, a normally open spring contact switch connected to the terminals of the circuit wires within the rectangular

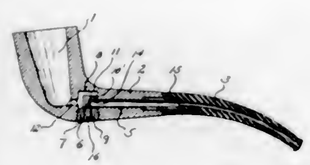
casing and adapted to be closed by pressure upon the toilet seat, a switch adapted for manual operation mounted on an end of the tubular member and connected in circuit with the main circuit wires, and spring means for retaining the toilet seat in a normally raised position whereby the motor is shut off and the door of the rectangular casing is closed.

1,861,502. PACKING DEVICE. ERIC WILLIAM MAYERS, London, England, assignor to Clayton Mayers & Company Limited, London, England, a British Company. Filed June 13, 1931, Serial No. 544,125, and in Great Britain Jan. 31, 1931. 6 Claims. (Cl. 93—2.)



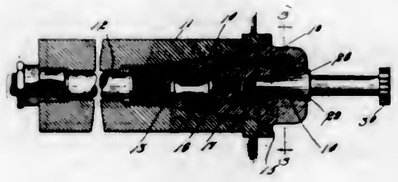
1. A packing device for bolding and closing a flexible-walled container during the operation of packing, which comprises a rigid base, a fixed back wall extending perpendicular to said base, a pair of side walls hinged to said back wall one at either end thereof, means for limiting the movement of said hinged side-walls, a front wall detachably mounted on the base and adapted to be secured to the side walls when the latter are at right angles to the back wall and closing gear comprising at least one closing member temporarily hinged at one end thereof to one of a pair of opposite vertical walls and means secured between the other end of the said closing member and the opposite side wall of the pair adapted forcibly to bring said closing member into its closed position.

1,861,503. SMOKING PIPE. CHARLES EDGAR MAYNARD, Northampton, Mass. Filed Dec. 7, 1929. Serial No. 412,351. 1 Claim. (Cl. 131—12.)



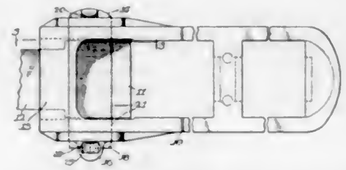
A smoking pipe having a bowl provided on its under side with a recess and having a passage connecting the recess with the bowl, a movable mouthpiece, a plug removably positioned in said recess, said plug being provided with a duct registering with the passage to the bowl and with a duct leading to the outside of the plug, a stem carried by the mouthpiece and adapted to be selectively connected directly with the duct leading to the bowl or with the duct leading to the outside of the plug upon rotation of the mouthpiece.

1,861,504. ADAPTER FOR MACHINE TOOLS. ARTHUR C. MAXFIELD, Cranston, R. I., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed July 11, 1929, Serial No. 377,428. Renewed Apr. 23, 1932. 9 Claims. (Cl. 279—77.)



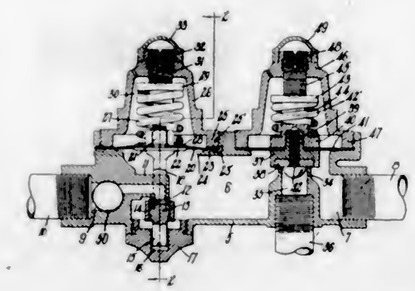
1. An adapter for machine tools having a tapered conical tool shank receiving socket, a spring seat forming the base of said socket, and a locking and driving element rotatably mounted and having a projection movable into said socket.

1,861,505. DRAFT RIGGING FOR RAILWAY CARS. CHARLES J. NASH, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed June 17, 1927. Serial No. 199,483. 3 Claims. (Cl. 213—71.)



1. In combination, a drawbar, a yoke adapted to receive the butt of the drawbar between its top and bottom members, a longitudinally ribbed key for securing the drawbar and yoke together, such elements being provided with registering vertical apertures corresponding in shape with the key, the apertures in the yoke being larger than the aperture in the drawbar, whereby lateral swaying of the drawbar is permitted.

1,861,506. VALVE FOR HOT WATER SYSTEMS. IRA I. NELSON, Boston, Mass. Filed Mar. 29, 1930. Serial No. 439,062. 4 Claims. (Cl. 50—23.)



1. A valve having, in combination, a casing provided with a chamber and with an outlet passage at one end thereof and an inlet passage at the other end thereof

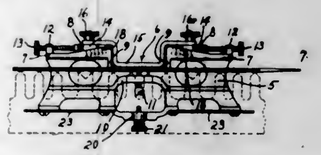
adapted to be connected to a source of water under pressure and terminating in an inlet valve seat within said chamber, an inlet valve member adapted to engage said inlet valve seat and close said inlet passage, an inlet valve stem extending upwardly from said inlet valve member, a diaphragm fast to the upper end of said inlet valve stem and acting as a closure to an opening out of said chamber, a cap having screw-threaded engagement with said casing and constituting a clamp whereby said diaphragm may be clamped to said casing, a spring positioned in said cap and bearing against said diaphragm, a disc positioned on the upper end of said spring, a pressure-adjusting screw having screw-threaded engagement with the upper end of said cap and bearing against said disc, and another screw having screw-threaded engagement with said cap and bearing against said first-named screw, one of said screws having a right-handed thread and the other of said screws having a left-handed thread, whereby when the pressure of water in said chamber descends below a predetermined amount said inlet valve will be opened by said spring and water enter said chamber until said pressure of predetermined amount is restored whereupon said inlet valve will be closed by said diaphragm.

1,861,507. LEVER. HENRY J. NEUFANG, Atlanta, N. Y., assignor to Boggs Plow Company, Inc., Atlanta, N. Y., a Corporation of New York. Filed Feb. 28, 1930. Serial No. 432,246. 6 Claims. (Cl. 74—39.)



1. An extensible lever comprising a plurality of sections mounted for adjustment one longitudinally upon another, one of the sections having a plurality of spaced abutments and another having means for engaging said abutments to secure the sections in different adjusted positions one upon another whereby to vary the length of the lever, latching means for the lever movable upon one of the sections, an operating member pivoted upon another section and a pair of extensible connections between the operating member and the latching means for actuating the latter, one of said connections having a plurality of abutments thereon spaced to correspond to the spacings of the abutments on said lever section and also having a guide portion through which the other connection projects and the latter having an offset portion arranged to detachably engage the different abutments of the connection having the guide portion whereby said connections are held in proper adjusted relation in the different adjusted positions of the lever sections.

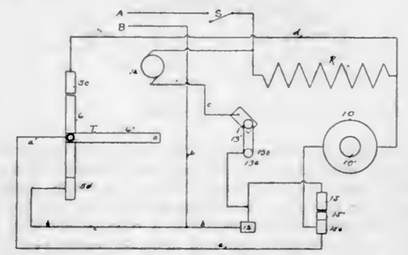
1,861,508. SAW GAUGE. HERMAN NEWMAN, Garwood, Idaho. Filed Aug. 6, 1929. Serial No. 383,898. 1 Claim. (Cl. 33—202.)



A saw gauge having in combination an upright frame with a central cut-away portion, said frame having inwardly and upwardly slanting top portions on either side of the cut away portion with equal depending fingers, a slotted yoke arranged to straddle the cut-away opening with its ends projecting over the slanting top frame portions, wedges interposed between the ends of the yoke and the slanting top frame portions, clamp means for

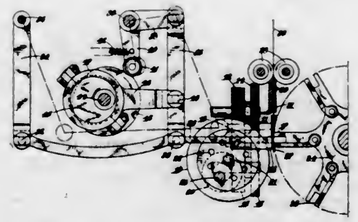
the wedges, said wedges having corresponding index marks adapted to register with corresponding graduations on the sides of the slanting top frame portions, screws threadedly connected to the frame and having their ends swiveled to said wedges whereby the wedges are moved back and forth aligned base plates secured to the bottom edges of the frame, said frame having a lug formed on its lower rear edge portion, a thumb screw threaded upwardly through said lug and having graduations adapted to register with an index mark on the lug, said graduations being arranged to show a corresponding reading with the graduations on the inclined frame portions when the upper end of said thumb screw is in horizontal alignment with said base plates and when at the same time the top surface of the depressed yoke portion is in horizontal alignment with the undersides of the slanting top frame portions.

1,861,509. TEMPERATURE CONTROL. HOWARD W. PARTLOW, Utica, N. Y., assignor to The Partlow Corporation, New Hartford, N. Y., a Corporation of New York. Filed Sept. 3, 1930. Serial No. 479,563. 3 Claims. (Cl. 236—78.)



1. In a temperature control, the combination with a motor, a source of current supply for said motor, a switch for energizing said motor, a movable temperature predetermining gauge, and a pair of independent shunt circuits having terminals, of a contactor comprising a member connected at one end to said gauge and having its opposite end adapted to oscillate between terminals of said pair of independent shunt circuits, said contactor being normally in circuit with an electro-magnet for operating said motor switch through one of said shunt circuits to start the motor, and thermally controlled means connected to said gauge to shift said contactor into engagement with the other of said shunt circuits for short circuiting said electro-magnet to effect stopping of the motor.

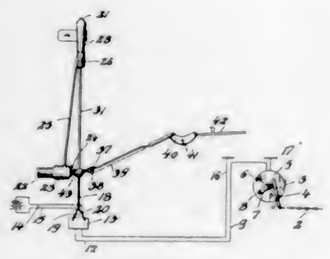
1,861,510. WRAPPING MACHINE OR THE LIKE. ALFRED GERMAN ROSE, Lincoln, England, assignor to Rose Brothers (Gainsborough) Limited, Gainsborough, England, a British Company. Filed July 23, 1931, Serial No. 552,787, and in Great Britain Aug. 1, 1930. 13 Claims. (Cl. 93—2.)



1. In a packing or wrapping machine, the combination of a support platform, a mould-box and means for presenting it at intervals opposite said platform, feeding mecha-

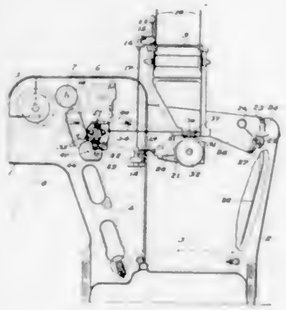
nism for feeding the end of a bar of stock intermittently up to the platform, a knife for severing pieces from the end of the bar, a charging plunger, and means for moving it along one path during the charging stroke to push a piece from the platform into the mould-box and for returning it along a path which is spaced away from the charging path.

1,861,511. CONTROL DEVICE FOR SHOVEL CRANES. LESLIE A. RUSSELL, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed June 28, 1929. Serial No. 374,500. 4 Claims. (Cl. 74—107.)



2. A control member of the class described, comprising a tubular pivotally mounted shaft rotatable on its longitudinal axis, an electrical conducting cable passing through the shaft, sleeve bearing members for the shaft, a sleeve over the bearing members, a lever supporting the sleeve, a grip member mounted upon the sleeve and comprising a finger abutment member for facilitating manually grasping the member for rotation of the shaft, and circuit closing means upon the handle for controlling a flow of current through the cable without necessitating the handle being released.

1,861,512. COTTON FEEDING MECHANISM. WILLIAM SHAW, Needham, Mass., assignor to Saco-Lowell Shops, Newton, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1930. Serial No. 431,535. 14 Claims. (Cl. 19—69.)



1. In a cotton handling mechanism, the combination of a hopper, mechanism for feeding cotton from said hopper, means for supplying cotton to said hopper, mechanism for automatically controlling the delivery of cotton to said hopper by said means in response to changes in the quantity of cotton in the hopper, and additional means under the control of said feeding mechanism for automatically causing the delivery of cotton to the hopper to be stopped when said feeding mechanism is stopped.

1,861,513. BLEACHING OF OILS. LORENZO D. TAYLOR, Niagara Falls, N. Y., assignor to The Mathieson Alkali Works, New York, N. Y., a Corporation of Virginia. Filed Oct. 22, 1930. Serial No. 490,543. 7 Claims. (Cl. 87—12.)

1. In the bleaching of vegetable and animal oils and fats of the class comprising cottonseed oil, corn oil, linseed oil and tallow, the improvement which comprises mixing a dry calcium hypochlorite containing upwards of 50% available chlorine with the oil or fat and heating the mixture to a temperatu e upwards of about 65° C.

1,861,514. CHEMICAL MANUFACTURE. LORENZO D. TAYLOR, Lewiston, N. Y., assignor to The Mathieson Alkali Works, Inc., New York, N. Y., a Corporation of Virginia. Filed Mar. 20, 1931. Serial No. 524,211. 12 Claims. (Cl. 87—12.)

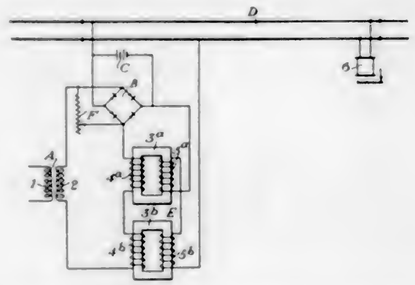
1. In the treatment of oils of the kinds described, the steps of mixing dry calcium hypochlorite containing approximately 60% available chlorine with the oil, and maintaining the temperature of the mixture at upwards of approximately 60° C. for a period of approximately five to six hours.

1,861,515. PROCESS OF PRINTING MOTION PICTURES. FRANK D. WILLIAMS, Los Angeles, Calif. Filed Apr. 18, 1927. Serial No. 184,622. 2 Claims. (Cl. 95—73.)



1. The herein described method of printing pictures, which consists in making a transparency of a scene, projecting the images of said transparency upon a light transmissive screen, varying the transmissivity thereof at different portions of the field, placing said transparency over a sensitized plate, and light impressing said plate by light transmitted through said screen and transparency.

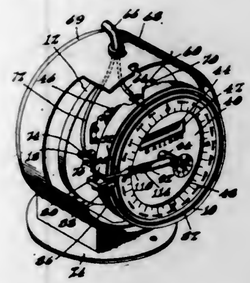
1,861,516. BATTERY CHARGING APPARATUS. KENNETH T. WILLIAMSON and OSWALD I. SEAVERSON, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1930. Serial No. 500,288. 1 Claim. (Cl. 171—314.)



In combination, a source of alternating current, a rectifier receiving current from said source, a battery and a load receiving current from said rectifier, a regulating reactor having a primary interposed between said source and the rectifier and a secondary interposed between the rectifier and said load, and an impedance separate from and independent of said reactor and connected across the input terminals of said rectifier.

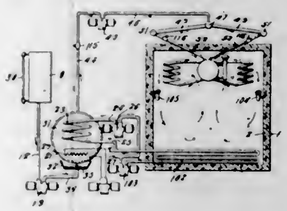
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1,861,517. METER REGISTER. HENRY D. WINTON, Wellesley, Mass., assignor to Hersey Manufacturing Company, South Boston, Mass., a Corporation of Massachusetts. Filed Mar. 17, 1927. Serial No. 176,235. 12 Claims. (Cl. 235—91.)



3. In a meter register, a driven shaft, and an indicator on said shaft and rotatable about said shaft, said indicator comprising an arm constructed and arranged for turning movement about its own axis thereby to connect the indicator to the shaft to turn therewith or to release it from the shaft so that it may be moved independently to a reset position.

1,861,518. REFRIGERATING APPARATUS FOR FREIGHT CARS. LEONARD KAY WRIGHT, Long Island, N. Y. Filed July 19, 1928. Serial No. 293,860. 5 Claims. (Cl. 257—7.)

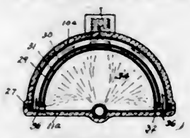


1. In combination with a railroad car, means for heating in the lower part of said car and means for cooling said car including coils in the upper part of said car, said cooling means comprising a refrigerating cycle operated by heat, a single source of heating fluid and means intermediate said heating means and said coils responsive to temperature changes within said car for selectively admitting a heating fluid from said source to said heating means or to a part of said refrigerating cycle.

2. In a car, a flooring perforated at least beneath the cargo-carrying portion of the car, heating means beneath said flooring whereby air may be heated and thence circulated by convection directly upwardly through the floor to the cargo-carrying portion of the car, inclined baffling means within and adjacent the upper portion of said car, and cooling means above said baffling means.

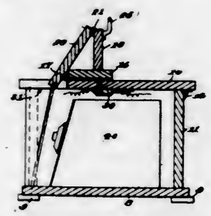
1,861,519. WATER HEATER. WILLIAM ALBERT AHERN, Worcester, Mass. Filed Nov. 21, 1928. Serial No. 320,883. 1 Claim. (Cl. 122—135.)

A water heater comprising a semi-cylindrical housing, a burner extending along the central longitudinal axis of said housing, a semi-cylindrical water chamber symmetrically disposed within said housing with respect to said burner, said water chamber being defined by closely spaced walls of thin conducting material and means for admitting and discharging water at opposite ends of said chamber, the space between said burner and the inner wall of said water chamber being entirely clear whereby heated gases from said burner spread radially and impinge directly upon the inner chamber wall and the water chamber being spaced from said housing to permit



the passage of heated gases around the ends of the chamber and upwardly between the housing and the outer chamber wall.

1,861,520. CABINET. HAROLD A. ARNOLD, Menomonee Falls, Wis. Filed Sept. 29, 1928. Serial No. 309,164. 4 Claims. (Cl. 312—189.)



1. A cabinet of the class described comprising a body portion, a top having a section removed therefrom, a panel hinged to the front edge of the top, a second panel rigidly secured to the first-named panel and projecting at an angle thereto, a third panel hinged to the free edge of the second panel, and means for positively guiding the third panel into position whereby said panels form a cover for the front of the cabinet.

1,861,521. FUSE FOR ROTATING PROJECTILES. EDGAR WILLIAM BRANDT, Paris, France. Filed May 22, 1931, Serial No. 539,382, and in France June 4, 1930. 13 Claims. (Cl. 102—39.)



5. Fuse for rotative projectiles comprising a body, a primer, a firing pin, safety means including balls adapted to be moved outwardly by centrifugal force after the projectile has begun its flight, a resilient element for holding said balls in safety position and for returning said balls to safety position when the speed of rotation of the projectile has dropped below a predetermined value, the said resilient element also serving for retaining the firing pin and primer apart when the safety device is in firing position.

1,861,522. PROJECTILE WITH AUTOMATIC DRIVING BAND. EDGAR WILLIAM BRANDT, Paris, France. Filed May 28, 1931, Serial No. 540,783, and in France June 16, 1930. 11 Claims. (Cl. 102—40.)

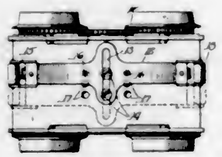
1. A projectile intended to be fired from a smooth bore gun, comprising a body portion of lesser diameter than

the bore whereby it is adapted to slide freely therein, said body portion having a peripheral groove and a ring of deformable material of lesser external diameter than the external diameter of said body portion and located in said groove, said ring being of lesser cross-section than



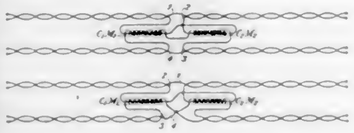
said groove and located away from the rear wall thereof to provide a space in which the powder gases may act on said ring to expand it outwardly into engagement between the projectile and gun walls to form a driving band.

1,861,523. THIRD RAIL SELECTOR FOR TOY RAILROADS. WENDELL H. CLARK, Kenilworth, Ill. Filed Dec. 26, 1929. Serial No. 416,313. 3 Claims. (Cl. 191—49.)



1. In a toy electric railroad, the combination of a plurality of third rails, an engine, a shoe, means for adjustably securing the shoe to the engine for contact with any of said third rails, and means on the engine for determining the position of said shoe to engage said shoe with a selected one of said third rails.

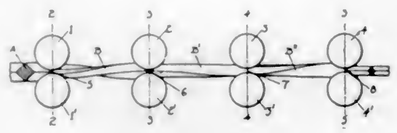
1,861,524. SYSTEM FOR NEUTRALIZING CROSSTALK BETWEEN SIGNALING CIRCUITS. OLIVER H. COOLIDGE, Bedford Hills, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 6, 1931. Serial No. 506,964. 8 Claims. (Cl. 179—78.)



1. In combination, two conductor pairs between which compensation is to be effected for crosstalk and two lengths of twisted pair with the two conductors of each twisted pair interposed in conductors of the respective pairs to be balanced.

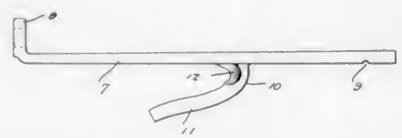
1,861,525. ART OF ROLLING METAL. VICTOR E. EDWARDS, West Boyiston, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 22, 1929. Serial No. 380,233. 4 Claims. (Cl. 80—63.)

3. In the twisting of rolled material in the process of reducing the same by successive passes through cylindrical rolls, the improvement which consists in offsetting the centers of pressure of the cooperating pass-grooves



of said rolls while maintaining the terminal edges of said grooves at the tangent plane of the rolls' cylindrical surfaces.

1,861,526. BAND KNIFE ATTACHMENT FOR PITCHFORKS. WALLACE W. GORDON, West Concord, Minn. Filed Aug. 4, 1931. Serial No. 555,091. 2 Claims. (Cl. 30—14.)



1. A band cutter attachment for pitch forks comprising a relatively elongated semi-cylindrical member adapted to receive in the channel thereof the handle of the fork, said member at one end provided with an apertured angular projection through which a tine of the pitch fork is passed, and said member having a lateral projection extending from the convex side thereof intermediate the ends of the member, said lateral projection being provided with a cutting edge.

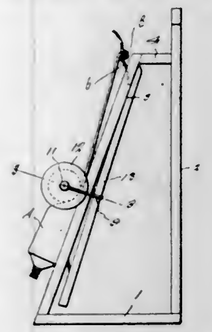
1,861,527. SIZING RING. FRED BUTLER GRIMM, San Francisco, Calif. Filed June 29, 1927, Serial No. 202,291. Renewed Apr. 9, 1932. 3 Claims. (Cl. 33—179.)



3. A sizing ring comprising a hollow setting having a portion bearable against a finger, and an adjustable band adapted to encircle the finger, one end of said band being secured to said setting, and the other end being slidably disposed in the hollow portion of said setting and extending above the setting.

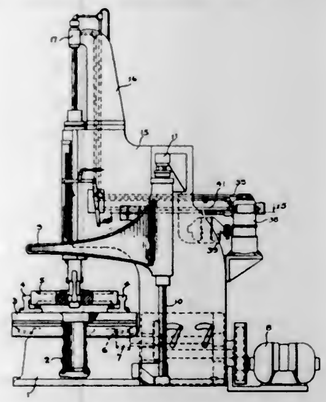
1,861,528. DISPENSING DEVICE. LAWRENCE F. HADDEN, Kansas City, Mo. Filed Oct. 14, 1931. Serial No. 568,813. 3 Claims. (Cl. 221—60.)

1. A device of the class described comprising a plate for supporting a tube of paste or the like, means at one end of the plate for engaging the closed end of the tube, a yoke-shaped member embracing the plate and slidably arranged thereon, a roller journalled in the ends of the yoke-shaped member for pressing the tube between itself and the plate as the yoke-shape member is moved along the plate, a second plate on the first plate and over which



the yoke member passes, and a spring between the two plates for pressing the second plate away from the first plate.

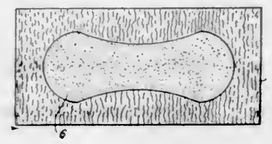
1,861,529. WHEEL BORING MACHINE. SHERMAN A. HARDING, Rochester, N. Y., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,525. 4 Claims. (Cl. 77—4.)



1. The combination with a rotary work table, of a fixed piston above the work table and concentric therewith, a fluid pressure operated cylinder on said piston, a housing mounted on the cylinder, a tool carrier on the housing, fluid pressure means for moving the cylinder on the piston, devices adapted to control said fluid pressure means comprising a follower, a plurality of guiding members adjustable on said housing, and a guide adjustable in each of said guiding members, each guide and its associated guiding member forming a continuous extensible guiding surface for the follower and said guiding surfaces being arranged to be successively engaged by the follower for controlling the operation of the fluid pressure means.

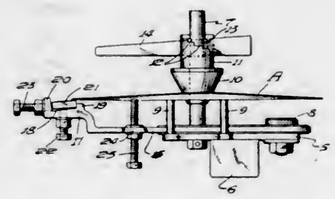
1,861,530. MOUNTING PLASTERS AND OTHER ADHESIVE FACED ARTICLES. ROBERT P. HAYDEN and FRANK N. MANLEY, New Brunswick, N. J., assignors to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 505,951. 2 Claims. (Cl. 128—268.)

1. A plaster or other adhesive faced article combined with a sheet of relatively tough paper constituting a temporary mounting or facing for the adhesive face of the article, said paper being crinkled or fluted substantially at right angles to the major dimension of the article,



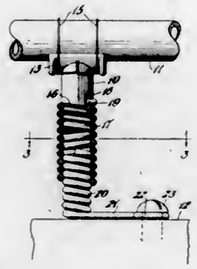
whereby in response to exerted stress tending to flatten the paper, the associated article is released with facility and dispatch.

1,861,531. MEANS FOR SIDE DRESSING CIRCULAR SAWS. WILLIAM HEMPEL, North Tonawanda, N. Y. Filed Aug. 21, 1929. Serial No. 387,491. 8 Claims. (Cl. 76—48.)



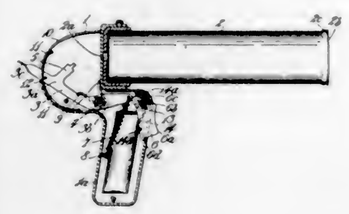
1. In apparatus for the purposes set forth, the combination with a base, of a saw holding arbor projecting therefrom, a clamping bolt on the base at one side of the arbor and substantially parallel thereto, an arm mounted on the base and slotted to receive the arbor and bolt, said base and arm being relatively reversible to reverse the positions of the arbor and both in the slot, and a tool holder carried by the arm, said reversibility permitting the arbor being placed different distances from the tool.

1,861,532. ELEVATION POST. WILLIAM S. HOUGH, Kokomo, Ind. Filed Jan. 14, 1932. Serial No. 586,686. 5 Claims. (Cl. 248—30.)



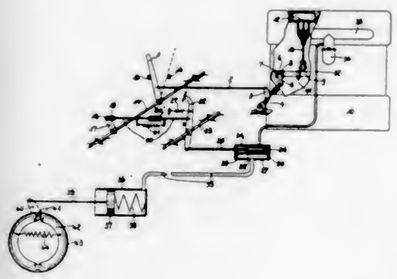
1. A unitary elevation post for Neon tubes comprising, in combination, an insulating post; a coil spring secured to said post and having a portion thereof projecting beyond one end of the post; and another coil spring whose convolutions are resiliently gripped by the convolutions of the first coil spring, so that when turned it is advanced or retracted, as by a screw-threaded connection.

1,861,533. FIRE EXTINGUISHING DEVICE. HAROLD HUTCHINSON, London, England, assignor to G. K. Syndicate Limited, London, England, a British Organization. Filed Jan. 29, 1931, Serial No. 512,171, and in Great Britain Feb. 18, 1930. 3 Claims. (Cl. 42—1.)



1. Fire extinguishing pistol with striker mechanism disposed in a casing and operative to strike a detonator cap to propel a fire extinguishing composition, the said mechanism comprising a two-armed lever pivoted in the casing, the tip of one arm projecting through the casing, a weak spring fitted to said pivot to normally hold the lever in a predetermined position, and a spiral main spring operating on the lower arm of the two-armed lever with a substantially straight pull when the lever is cocked.

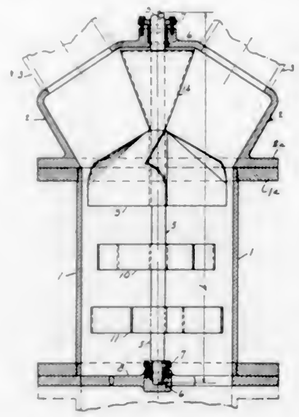
1,861,534. VACUUM OPERATED SERVO BRAKE. AUGUST KAZENMAIER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 3, 1930, Serial No. 465,723, and in Germany July 10, 1929. 7 Claims. (Cl. 188—152.)



1. A vacuum operated servo brake mechanism which includes a motor adapted itself to serve as a brake or to produce vacuum for operation of said servo brake, control means governing the operation of the motor as a brake and control means for said servo brake, in combination with means for ensuring that the motor brake is inoperative when the control means of the servo brake is operated to apply the servo brake.

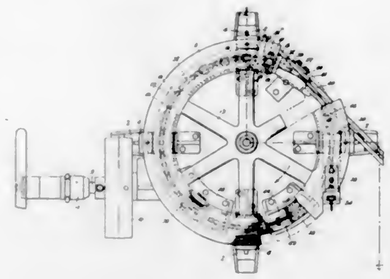
1,861,535. APPARATUS FOR DISTRIBUTING PULVERIZED FUEL TO BURNERS. FRED D. KIRTLAND, Germantown, JOSEPH J. BROSHEK, Philadelphia, and RALPH C. BRIERLY, Narberth, Pa., and JOSEPH S. EVANS, Schenectady, N. Y., assignors to Peabody Engineering Corporation, a Corporation of New York. Filed Jan. 23, 1929. Serial No. 334,468. 5 Claims. (Cl. 302—28.)

1. In combination with a conduit for air laden with pulverized fuel, a distributor including a shaft provided with a plurality of sets of blades, the sets being spaced apart from each other longitudinally of the shaft, whereby the blades of each set complement the blades of the other sets, the blades of the last set bent to impart an accelerated



spiral motion to the air, means to rotate said shaft, a chamber connected with the outer end of the conduit, and a plurality of branch lines leading from said chamber.

1,861,536. MACHINE FOR APPLYING SOLDER TO KEYS FOR OPENING CONTAINERS. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 14, 1930. Serial No. 467,916. 15 Claims. (Cl. 113—64.)

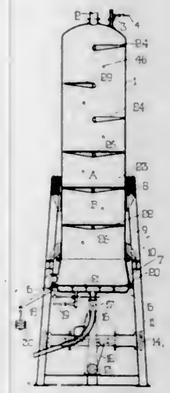


1. A machine for applying solder to keys for containers comprising a plurality of traveling carriers having means for supporting a key, automatic means for placing a key on the supporting means of the carrier, means for applying solder to the key on the traveling carrier, and means for removing the key from the supporting means on the carrier after the solder has been applied thereto.

1,861,537. SEPARATION OF SOLID AND LIQUID MATERIALS FROM SLURRIES OR SLUDGES. ALBERT EDWARD LEEK, Wigan, England, assignor of sixty-five per cent to Wigan Coal & Iron Company Limited, Wigan, England, a British Company. Filed Mar. 30, 1927, Serial No. 179,685, and in Great Britain Apr. 22, 1926. 1 Claim. (Cl. 210—177.)

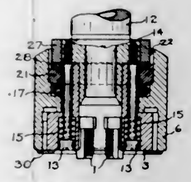
A filter for slurries comprising in combination a container, slurry inlet means, vertically spaced filter trays

of substantially lesser area than the internal cross section of the container, pivotal axes for said trays spaced apart at a greater distance than the distance from each pivot to



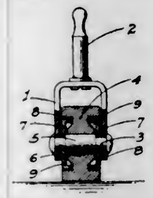
the edge of the tray, means to draw off liquor from the trays and means to discharge solid material from said trays towards the base of the container.

1,861,538. DIE. CHARLES R. LEITER, Rochester, N. Y., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed June 28, 1929. Serial No. 374,466. 4 Claims. (Cl. 10—96.)



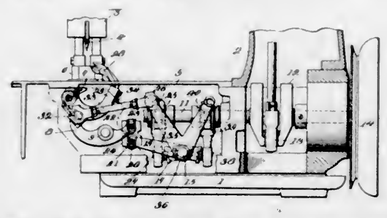
1. A die comprising a head, a block movable in the head, a chaser mounted on the block and movable therewith to and from operative position, a ring movably mounted on the head, a cam on the ring for moving the chaser to operative position when the ring is moved in one direction, a spring for moving the ring in another direction, and a second cam on the ring for moving the chaser from operative position when the ring moves under the action of its spring, said cams being so arranged relatively to each other that the second cam engages the chaser to retract it only after the ring has acquired momentum under the action of its spring.

1,861,539. CASTER. ALVA L. LILLY, Burlingame, Calif., assignor of one-fourth to Hazel B. Looman, Burlingame, Calif. Filed Nov. 10, 1930. Serial No. 494,499. 3 Claims. (Cl. 16—18.)



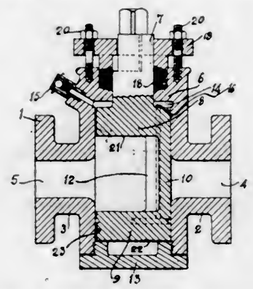
1. A caster comprising a supporting frame having spaced side plates, a spindle fixed in and extending between the plates, a caster wheel having a hub narrower than the tread of the wheel turnably engaging the spindle, and bends on and fixed with the spindle disposed between the plates and hub and countersunk in the wheel.

1,861,540. LOOPER OPERATING MECHANISM FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Sept. 18, 1929, Serial No. 393,528, and in Germany Dec. 27, 1928. 6 Claims. (Cl. 112—162.)



1. The combination of a supporting bed, a work support carried thereby, a main actuating shaft between the bed and work support, bearings carried by said supporting bed, a cross shaft mounted in said bearings, means for oscillating said cross shaft from said actuating shaft, a yoke mounted for free oscillating movement on said shaft between said supporting bearings, means for oscillating said yoke from said actuating shaft, an under looper, an overedge looper, devices for connecting one of said loopers to said yoke, and devices for connecting the other looper to said cross shaft.

1,861,541. CLOSED END CYLINDRICAL ROTOR VALVE. HALBERT P. MACGREGOR, Cincinnati, Ohio, assignor, by mesne assignments, to The Lunkenheimer Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 20, 1929. Serial No. 364,350. 11 Claims. (Cl. 251—93.)

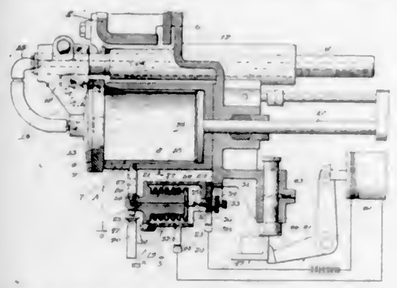


1. In a valve, a casing, a rotor plug having an aperture therethrough registering with inlet and exit apertures in the casing, said aperture being formed by a top, bottom and single side wall adapted to close one of the casing apertures there being a space between one end of said plug and said casing to form a lubricant chamber, said plug fitting in said casing in such a manner that the line pressure will engage all sides of the plug except that forming one wall of the lubricant chamber whereby the plug moves bodily toward the lubricant chamber and the line pressure presses the side wall of the plug adjacent the casing surrounding the exit aperture therein.

1,861,542. CAN TESTING MACHINE. CHARLES D. MCDONALD and BERT A. DEITSCH, Chicago, Ill., assignors, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 21, 1929. Serial No. 401,313. 8 Claims. (Cl. 75—51.)

1. In a machine of the character described, the combination with a can testing cylinder having a chamber adapt-

ed to receive a can therein, means for closing and sealing the chamber and can from the outer atmosphere, there being a restricted space on one side of the can body separated by its wall from the space on the other side thereof, and an expansible and contractible pneumatically

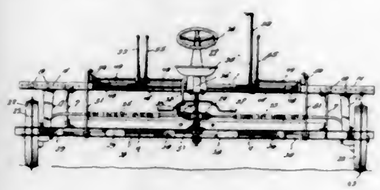


operated circuit closing element having a movable wall and a wall in close proximity thereto providing a restricted air space on one side of its movable wall in communication with the restricted space at the can and operated by a change of pressure from atmosphere pressure to close an electric circuit.

1,861,543. EPHEDRINE SALTS AND OIL SOLUTIONS THEREOF. EDMOND E. MOORE and EDGAR B. CARTER, Indianapolis, Ind., assignors, by mesne assignments, to Abbott Laboratories, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1930. Serial No. 440,152. 5 Claims. (Cl. 260—25.)

1. An ephedrine salt consisting of ephedrine combined with a fatty acid having more than eight carbon atoms.

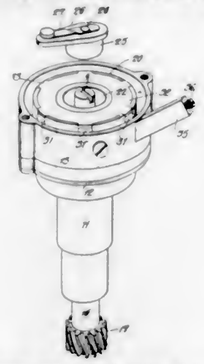
1,861,544. CULTIVATOR. HOWARD BENJAMIN MURPHY, Watsonville, Calif. Filed July 9, 1929. Serial No. 376,970. 2 Claims. (Cl. 97—157.)



1. In a cultivator, the combination of a frame, a main rock shaft mounted on the frame, main rocker arms carried by the main rock shaft, auxiliary rock shafts carried by respective pairs of main rocker arms, auxiliary rocker arms carried by each auxiliary rock shaft, a plurality of cultivator devices mounted for swinging movement on the frame, means operatively connecting each auxiliary rocker arm with the respective cultivating device, a main lever for actuating the main rock shaft whereby all of the cultivating devices may be raised or lowered simultaneously, auxiliary levers operatively connected with the respective auxiliary rock shafts whereby the cultivating devices may be raised independently, and means for maintaining the levers in any adjusted position.

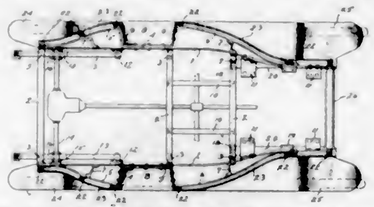
1,861,545. TIMING MECHANISM FOR INTERNAL COMBUSTION ENGINES. RUDOLPH NEWSCHAFFER, Jackson Heights, N. Y. Filed Mar. 21, 1931. Serial No. 524,352. 3 Claims. (Cl. 200—20.)

1. In a distributor, an annular cup shaped metal body having equi-distantly spaced slots in the outer peripheral wall thereof, blocks of insulating material carried by said body and extending through said slots and terminating



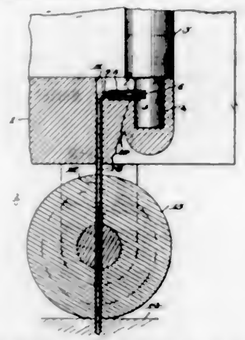
flush with the outer peripheral wall of said body, and a cover plate overlying said blocks and closing the open top of said body.

1,861,546. VEHICLE BODY. DOCTOR FRANKLIN OLIVER, deceased, Oakland, Calif., by Lillie F. Oliver, executrix, Oakland, Calif. Filed Apr. 19, 1926, Serial No. 103,071. Renewed Oct. 15, 1931. 14 Claims. (Cl. 296—28.)



2. In a vehicle body, inner side sills, crossbars connecting said sills, U-shaped door brackets having their bases connected to said sills and extending outwardly therefrom, outer side sills connected at their inner ends to the free ends of the sides of the door brackets and having their outer ends secured to the adjacent ends of the inner sills, and step members arranged in said brackets and having outwardly extending marginal flanges secured to the brackets.

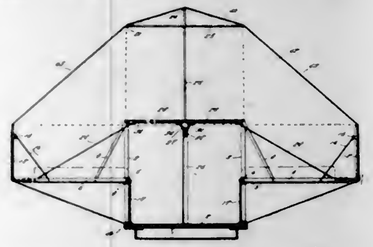
1,861,547. CIRCUIT MAKER AND BREAKER FOR SAFE ALARMS. LESTER I. PARKHURST, Little Rock, Iowa. Filed Mar. 13, 1929. Serial No. 346,793. 3 Claims. (Cl. 200—54.)



1. In a burglar alarm for safes, a circuit closer comprising a safe door formed with a hinge having a reduced

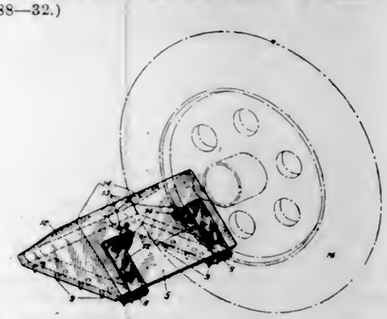
lower end portion, a recess formed in the lower end portion of the safe for the reception of said reduced portion, a recess formed in one side of the reduced portion, filled with insulating material, a recess formed in the lower portion of the safe adjacent to and in horizontal alinement with the second-named recess, and a metallic contact pin disposed in the last-named recess adapted to contact with said reduced end portion and the insulating material disposed in the end portion.

1,861,548. TOURIST HOUSE. OKEY H. PECK, Richwood, W. Va. Filed Nov. 11, 1930. Serial No. 494,949. 3 Claims. (Cl. 20—2.)



1. A portable house for the purpose specified comprising in combination four corner posts arranged in rectangular formation, a bed frame rotatably supported between a pair of said corner posts, there being two of such bed frames, a sleeve slidable on each of said corner posts, means for pivotally connecting one end of the bed frames with a sleeve on an adjacent corner post, a roof frame, means for slidably mounting said roof frame for movement vertically relative to said corner posts, and flexible means operatively connecting said bed frame with said roof frames for effecting a raising and lowering of said roof frame upon swinging movement of said bed frames about their pivots, and a flexible roofing and wall structure draped over said roof frame.

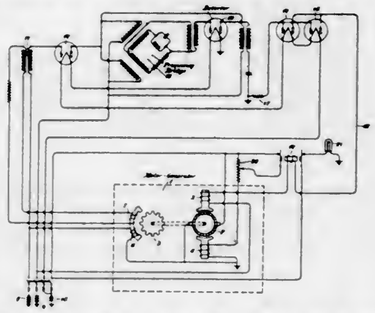
1,861,549. VEHICLE CHOCK. JAMES A. RATTA, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 24, 1931. Serial No. 546,646. 5 Claims. (Cl. 188—32.)



1. A vehicle chock including a support, a frame member detachably mounted on said support, and calk members carried by the frame member for engaging road surfaces.

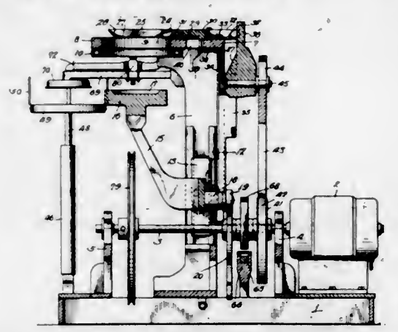
1,861,550. MOTOR-GENERATOR REGULATOR SYSTEM. WILTON T. REA, Flushing, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 25, 1929. Serial No. 373,663. 4 Claims. (Cl. 171—119.)

1. In a speed regulator system, a motor having a regulating field winding and a shunt field winding, a regulator circuit for controlling the excitation of said regulating field winding to maintain the motor speed constant, and means responsive to a failure of said speed regulator



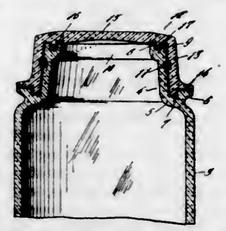
circuit for causing the magnetic effect of said shunt field winding to be approximately equal to the added effects of the shunt field and regulating field windings when said regulator circuit was in operation.

1,861,551. PIE WRAPPING MACHINE. ALBERT REMILLARD, Waterville, Me. Filed Aug. 29, 1930. Serial No. 478,704. 13 Claims. (Cl. 93—2.)



1. A wrapping machine including a heating element, reciprocating means for elevating therethrough an article to be wrapped, means for supplying a sheet of wrapping material to said article for upward movement therewith through the heating element, and means for engaging the wrapping material after leaving the heating element and when the article reaches the upper limit of its movement for crimping the wrapping material about said article.

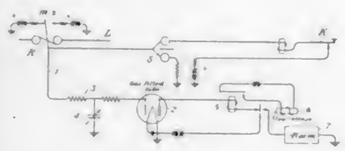
1,861,552. JAR AND CLOSURE THEREFOR. BENJAMIN F. SAVERY, Ann Arbor, Mich. Filed June 3, 1930. Serial No. 459,055. 3 Claims. (Cl. 215—80.)



1. As a new product of manufacture, a jar comprising a body open at its top and having a reduced portion defining a neck, the juncture between the neck and body defining

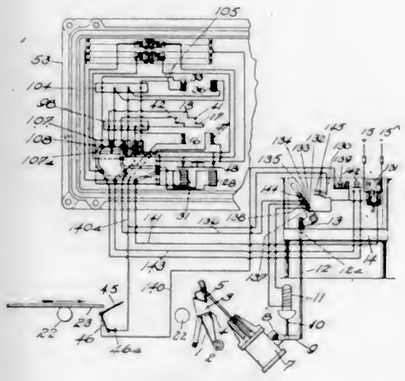
a shoulder and having a primary annular channel formed therein and an outwardly projecting annular ledge therewith, the terminal upper edge of said neck being thickened and formed with a secondary channel and a cover fitting over the neck and having a depending rib on the underface of its top portion, fitting in the secondary channel with its lower edge fitting in the primary channel, and said cover having an outwardly extending flange adjacent its lower edge for engaging the annular ledge and sealing material in both channels, between the flange and the ledge and between the cover and the neck.

1,861,553. ALARM CIRCUIT. ROY B. SHANCK, Flushing, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 29, 1931. Serial No. 533,804. 9 Claims. (Cl. 178—69.)



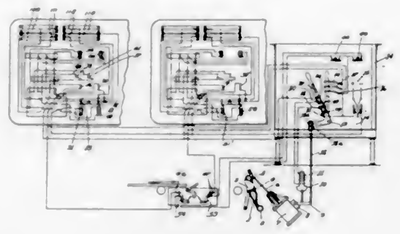
1. A circuit having an electrical contact connected to a source of potential, and another contact with an alarm circuit and a load impedance connected thereto in parallel, said alarm circuit being normally maintained in an inoperative condition when said two electrical contacts are closed and being operated when said contacts are separated.

1,861,554. CONTROLLING THE SHEARING OF METAL BARS WHILE IN MOTION. JOHN W. SHEPEARDSON and FRANK P. DAHLSTROM, Worcester, Mass., assignors to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 19, 1927. Serial No. 206,088. 22 Claims. (Cl. 164—49.)



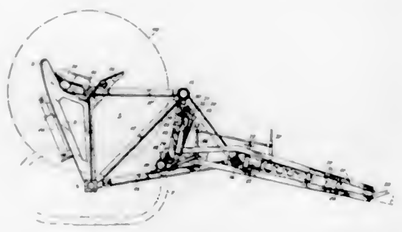
1. The combination with conveying means for the progressive advancement of material to be sheared, of an intermittently operated shearing device for producing an initial crop cut and one or more subsequent dividing cuts on each piece of said material arriving therent, and a control mechanism for said shear, rotatable in synchronism with said material-conveying means, and means for inaugurating the rotation of said mechanism, to control the shearing operations on each piece, simultaneously with the arrival of that piece at a predetermined point, thereby to procure equal-length crop cuts by said shear on successive pieces of material.

1,861,555. CONTROLLING THE SHEARING OF METAL BARS WHILE IN MOTION. JOHN W. SHEPEARDSON and FRANK P. DAHLSTROM, Worcester, Mass., assignors to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 28, 1929. Serial No. 343,428. 28 Claims. (Cl. 164—49.)



1. In apparatus for shearing metal bars while in motion, the combination with a shearing device and means for conveying metal bars to said shearing device, of a pair of shear-control mechanisms, each adapted to produce a succession of shear operations in timed relation to the movement of a bar, said mechanisms adapted to be alternately set in operation by movement of successive metal bars towards said shearing device.

1,861,556. CABLE REEL TRAILER. TEMPLE C. SMITH and WILLIAM T. LIVERMORE, Westfield, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 29, 1931. Serial No. 512,154. 11 Claims. (Cl. 214—65.)

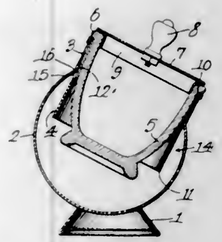


1. A trailer including an axle and mobile supporting members therefor, a main frame member and saddle member rigidly connected together and rotatively mounted on said axle, a rigid tongue structure pivotally connected with the frame member so that the tongue structure and frame member may be moved from an extended position to a collapsed position and back to an extended position, means connecting the tongue and main frame member so arranged that when said tongue structure is bodily rotated about said pivotal connection in one direction the frame member and saddle member will rotate about said axle in a direction opposite to the direction of rotation of the tongue structure, and means for locking the tongue structure and frame member in their extended position and also in their collapsed position.

1,861,557. EGG CONTAINER. CORA FAY SWEASEY, Denver, Colo. Filed Mar. 21, 1931. Serial No. 524,369. 2 Claims. (Cl. 65—22.)

1. A device for retaining heat in eggs and similar cooked viands, comprising a hot-water tank, a tube in the top of

the tank, and a cup removably seated in the tube, the tube being inclined to present the mouth of the cup conveniently to the user, the lower end of the tube projecting into



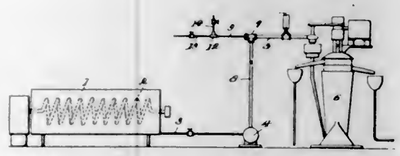
the tank to a point closely adjacent to the bottom of the tank, thereby to check the movement of the water in the tank, as the tank is moved about.

1,861,558. TILE FLOOR COVERING. ERNEST VELTUNG, New York, N. Y. Filed Sept. 9, 1930. Serial No. 480,790. 5 Claims. (Cl. 94—15.)



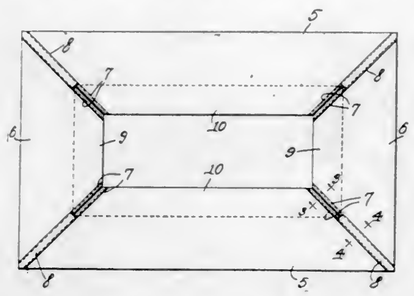
1. In combination in a linoleum or like tile construction, a unit having a recess and an opening in its bottom, a filler in the recess and a filler in the opening bonded together, and a base plate secured to the bottom of said unit and covering the said filler in the opening.

1,861,559. PROCESS OF OBTAINING THE BUTTER FAT FROM SOUR MILK PRODUCTS. HERMAN D. WENDT, West Chester, Pa., assignor to The Sharples Separator Company, West Chester, Pa., a Corporation of Pennsylvania. Filed Dec. 11, 1929. Serial No. 413,279. 3 Claims. (Cl. 99—11.)



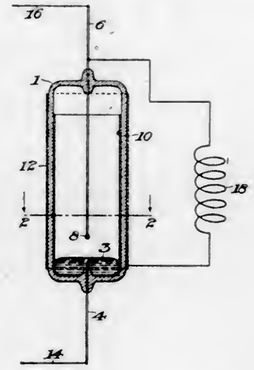
1. The process of obtaining the butter fat in the form of cream from sour milk products consisting in adding an acid neutralizing and curd dispersing agent to the milk product, passing the conditioned milk product in a continuous stream through a centrifugal separator, and introducing a heat carrying medium into the flowing stream of conditioned milk product at a point adjacent the centrifugal separator for promoting the fluidity of the conditioned sour milk product passing through the separator and increasing the efficiency of the separation.

1,861,560. ADJUSTABLE GRAVE BORDER AND LINER. CECIL M. WICKSTRUM, Omaha, Nebr. Filed Dec. 27, 1930. Serial No. 505,132. 1 Claim. (Cl. 27—30.)



A combined grave border and liner comprising a body portion formed of side and end sections, the side and end sections having their ends cut at oblique angles, means for connecting the side and end sections at the adjacent ends thereof, binding members secured along the ends of the side and end sections, and portions of the side and end sections being constructed to bend downwardly to engage the side and end walls of the grave with which the device is used.

1,861,561. OSCILLATOR. LEROY J. BUTTOLPH, Grantwood, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Original application filed Dec. 11, 1926, Serial No. 154,065. Divided and this application filed Dec. 7, 1928. Serial No. 324,567. 1 Claim. (Cl. 250—38.)

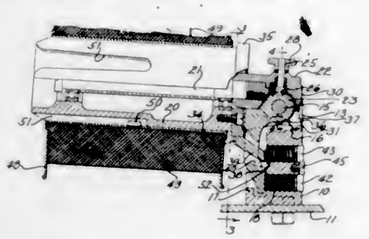


An oscillator comprising a vitreous envelope, leads sealed into said envelope, each of said leads terminating in an electrode of a spark gap, a spark quenching material in said envelope, an electrostatic condensing surface within said envelope and connected to one of said leads, and an inductance connected between the other of said leads and an electrostatic condensing surface mounted outside said envelope in cooperative relation with the first said surface.

1,861,562. SUPPORTING ARBOR. YVES ANDRÉ BOUGET, East Orange, and LESTER OSWALD REICHELT, Cranford, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 8, 1929. Serial No. 369,456. 9 Claims. (Cl. 242—156.)

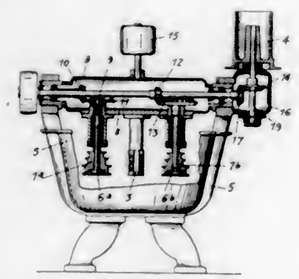
4. In a device for supporting a material supply, an arbor for rotatably supporting the supply, means for

pivotally supporting the arbor upon a pivotal axis transverse to the axis of rotation of the supply, a frictional brake member for retarding the rotation of the supply



as material is withdrawn therefrom, and an adjustable means co-acting with the weight of the supply for controlling the retarding effectiveness of the brake member.

1,861,563. DRAWING BENCH. JOHANNES FRIEDRICH DIEHL, Herborn, Germany, assignor to Berkenhoff & Drebes Aktiengesellschaft, Asslar, near Wetzlar, Germany. Filed Apr. 7, 1928, Serial No. 268,319, and in Germany Apr. 21, 1927. 9 Claims. (Cl. 205—19.)

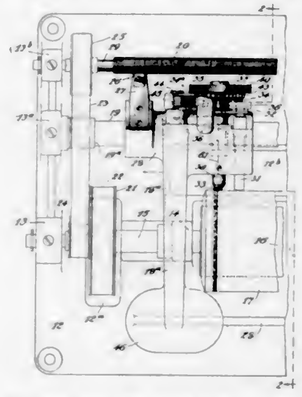


1. A wire-drawing machine comprising a lubricant-containing tank, a frame mounted to rock with respect to said tank, a main shaft journalled in said frame, means for rotating said main shaft, dies on said frame, a winding shaft operatively connected to said main shaft and journalled in said frame, means on said winding shaft for moving wire through said dies, said winding means being so positioned as to enter said tank in certain positions of said frame with respect to said tank, and means for rocking said frame so as to alternately dip said winding means into the lubricant in said tank, and to extract it therefrom.

1,861,564. SHAVING MACHINE. WILLIAM F. FRYBER, Bridgeport, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Nov. 9, 1928. Serial No. 318,165. 18 Claims. (Cl. 82—1.1.)

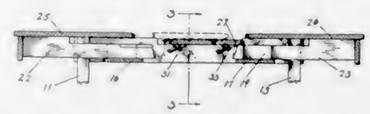
1. In a machine for shaving sound-record tablets, the combination of a knife controlling means comprising a carriage, a knife holder slidably mounted on said carriage, yielding means normally tending to move the knife holder in one direction, cam means associated with said knife holder to move the knife holder against the yielding means, means tending at all times to move said cam means to release said knife holder and releasable means for maintaining the cam means in an adjusted position.

16. The combination in a record-resurfacing machine of the slidably mounted knife bar 30, the spring 38 normally tending to retract said knife bar, the face cam 34 adapted to advance said knife bar, the spring 36 normally tending to move said cam to an inoperative position, ratchet wheel 43 and stop pawl 41 for preventing movement of



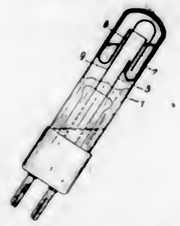
said cam by said spring 36, the feed pawl 47 for moving said cam in opposition to said spring 36, and means for actuating said feed pawl.

1,861,565. EXTENSION TOP TABLE. HARRY A. HALL, Newcastle, Ind., assignor to The Hoosier Manufacturing Company, Newcastle, Ind., a Corporation. Filed Dec. 3, 1930. Serial No. 499,766. 7 Claims. (Cl. 45—112.)



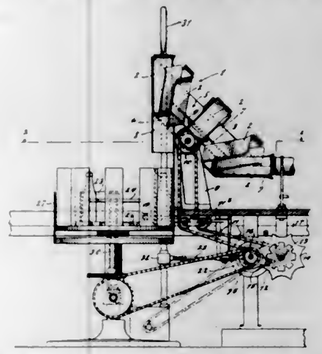
2. In a table, a pair of relatively fixed skirt members notched from their upper edges, a leaf adapted to rest across the skirt members within said notches, a top section adapted to be moved over the skirt members and over said leaf when resting in said notches, and means hinging said leaf to said skirt members permitting the leaf to be raised in parallel relation to said top section to within the plane of the top section, and said means also causing the leaf to be shifted to have one edge to rest across the top edges of said skirt members when moved to the raised position.

1,861,566. SWITCHING DEVICE. CHARLES HATAY, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 1, 1929, Serial No. 359,651, and in Germany May 7, 1928. 2 Claims. (Cl. 200—152.)



1. A mercury switch comprising a sealed tube containing mercury, electrodes sealed into said tube, and a lining of highly resistive material within said tube, said lining having a pocket therein which cooperates with the remainder of said lining to retain a pool of mercury in said lining at all positions of said switch, one of said electrodes terminating in said mercury pool at all operative positions of said switch.

1,861,567. CARTONING MACHINE. FERDINAND G. HENRY, Philadelphia, Pa., assignor, by mesne assignments, to American Machine and Metals, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 11, 1929. Serial No. 331,806. 8 Claims. (Cl. 93—7.)

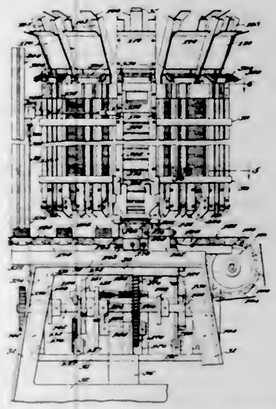


1. In a cartoning machine, means for moving bottles past a station, means for dropping cartons on said bottles and means for blowing a jet of air through the carton around the bottle during the dropping operation.

1,861,568. SILICON IRON CASTINGS AND METHOD OF MAKING THE SAME. FRANK S. HODSON, Philadelphia, Pa. Filed May 10, 1929. Serial No. 362,123. 3 Claims. (Cl. 75—1.)

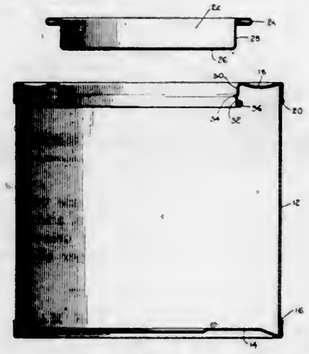
2. A machinable, high silicon iron casting containing silicon 8.0 to 20.0%, manganese 0.25 to 2.50%, sulphur traces to 0.15%, phosphorus traces to 0.20%, total carbon 0.20 to 3.50%, and antimony 0.0003125 to 0.1%.

1,861,569. HEEL PRESS. LESLIE A. HOLMAN, Waltham, Mass. Filed May 6, 1926. Serial No. 107,157. 63 Claims. (Cl. 12—50.)



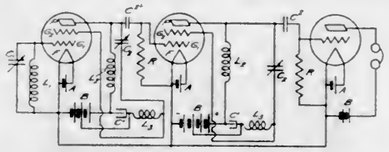
1. In a heel press, the combination of a rotatable frame, a plurality of vertical heel pressing units fixed on said frame, reciprocating means for moving heels one at a time onto a plunger, means for reciprocating said plunger to force said heels into said units and means for rotating said frame to bring said units successively into register with said plunger to receive a heel.

1,861,570. METAL CAN AND CLOSURE THEREFOR. ARTHUR G. HOPKINS, Maspeth, N. Y., assignor to Metal Package Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 25, 1930. Serial No. 498,006. 6 Claims. (Cl. 220—42.)



1. A can comprising a flange defining a can opening for cooperation with a straight-walled plug or closure, said flange having at its upper end a straight centering portion of large dimension to readily receive said closure, and having at its lower end a straight sealing portion of small dimension for receiving said closure with a force or friction fit, and having a transition portion interconnecting the upper and lower portions.

1,861,571. AMPLIFIER CIRCUIT. LEWIS M. HULL, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1926. Serial No. 156,677. 3 Claims. (Cl. 179—171.)

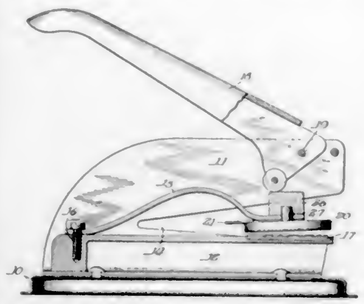


1. An electrical amplifier circuit comprising a four-electrode vacuum tube including a plate, a cathode, and two grid electrodes; an input circuit connected between said cathode and one of said grid electrodes; an output circuit connected between said plate and said cathode and including a plate coil; a source of plate potential, an auxiliary coil connected between said cathode and the second of said grid electrodes, whereby a compensating voltage is impressed upon said control grid through the interelectrode capacity between said grids; a capacity of little impedance to alternating current between said plate and auxiliary coils and a tuning condenser connected between said plate and said second grid electrode.

1,861,572. DOCUMENTARY SEAL. MARSHALL H. JACKSON and WARREN JACKSON, Chicago, Ill., assignors to Dwight & M. H. Jackson, Chicago, Ill., a Corporation of Illinois. Filed Aug. 25, 1930. Serial No. 477,590. 14 Claims. (Cl. 101—3.)

1. A documentary seal comprising, in combination, a press frame, counterpart upper and lower die members

mounted thereon and provided with a seal design having its top-to-bottom axis disposed diagonally with respect to the longitudinal axis of the frame, means for moving

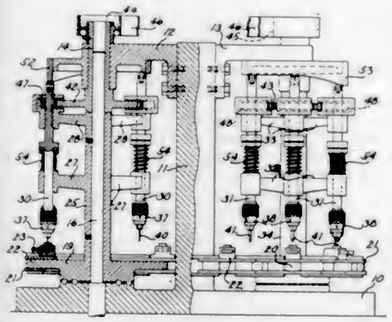


one of the die members to effect pressure contact with a sheet of paper between the die members, and a guide associated with the upper die member for orienting the seal design with respect to the sheet of paper therebelow.

1,861,573. ELECTROLYTE FOR THE MANUFACTURE OF HYDROGEN PEROXIDE. ANTON KRATKY, Brooklyn, N. Y., assignor to John Bene & Sons, Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 12, 1928. Serial No. 284,697. 14 Claims. (Cl. 204—9.)

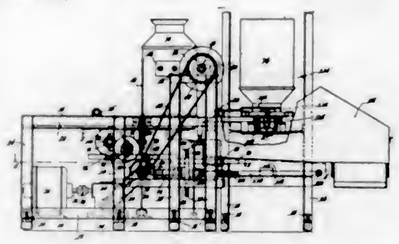
1. An electrolyte for the preparation of an alkali persulphate, comprising, in water solution, sulphuric acid, together with a sulphuric acid salt of an alkali metal, an ammonium salt, cerium, and an alkali metal salt containing chromium.

1,861,574. MATERIAL WORKING APPARATUS. HOMER WALDO LARSON, Downers Grove, and ROBERT HAND PATCHEN, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 16, 1928. Serial No. 319,985. 3 Claims. (Cl. 29—38.)



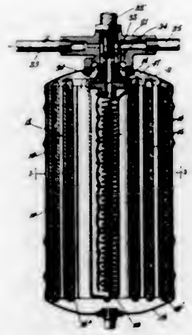
1. In an apparatus for operating upon parts, a plurality of rotatable sprockets, an endless conveyor chain movable around said sprockets, means carried by the conveyor chain for supporting parts to be operated upon, means for driving the conveyor chain to continuously advance the parts, operating tools supported by the sprockets for performing work upon the continuously advancing parts, and a rotatable member coaxial with each of the sprockets for driving the tools associated therewith.

1,861,575. CAN CONVEYING AND DUMPING APPARATUS. HARRY D. LATHROP, Chicago, Ill. Filed Apr. 19, 1930. Serial No. 445,812. 12 Claims. (Cl. 214—1.1.)



1. Apparatus of the class described comprising, in combination, can engaging and dumping means, and a flexible reciprocating delivery carriage working in an arcuate guideway and operatively connected for actuation and control by the actuating and controlling means of said dumping means and adapted to successively convey filled cans in relatively timed sequence into position for engagement by said dumping means.

1,861,576. FILTER. ROBERT P. F. LIDDELL, New York, N. Y., assignor, by mesne assignments, to Central Union Trust Company of New York, Trustee. Filed Mar. 13, 1926. Serial No. 94,395. 3 Claims. (Cl. 210—164.)



1. In a filter, a casing, a spiral filtering member comprising a drainage member and an enclosing envelope of filter cloth, a conduit leading from said unit through an aperture in the casing, a collar on said conduit, a second collar supported by said casing between which collars is gripped a portion of the filtering cloth, and means to exert pressure to force said collars into clamping relation.

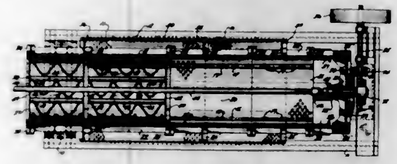
1,861,577. METHOD OF PREPARING GLASS PANELS. GUSTAVE F. MATTMAN, Cincinnati, Ohio, assignor to The Cincinnati Advertising Products Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 25, 1930. Serial No. 431,314. 8 Claims. (Cl. 41—43.)



1. The method of treating glass objects having opposite faces, said method consisting of spraying finely atomized acid resist upon one of the faces whereby to provide

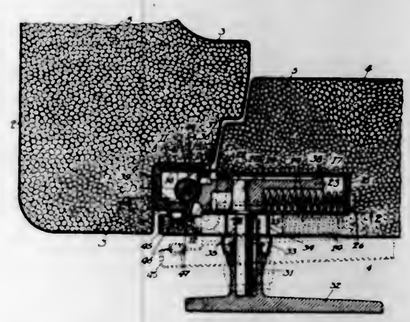
on said face numerous minute particles for resisting acid action, immersing the coated object in an etching acid bath capable of attacking glass surfaces, removing the etched object from the bath, and applying decorative matter to the other face thereof.

1,861,578. GRAVEL WASHER. ALEXANDER L. MUNRO, Milwaukee, Wis., assignor to Smith Engineering Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 10, 1929. Serial No. 369,735. 4 Claims. (Cl. 209—270.)



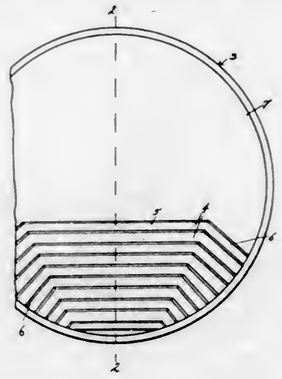
1. In combination, a frame, an inclined drum rotatably supported upon said frame, the upper charging portion of said drum being imperforate and a lower portion thereof being perforated, a partition within said drum between said imperforate and perforated portions for retarding the flow of material from one of said portions to the other, loosely suspended relatively short chain loops secured to the interior of said drum and movable thereby to agitate the passing material and to impinge against both the imperforate and perforated drum portions on opposite sides of said partition, and a second perforated drum surrounding the perforated portion of said inclined drum.

1,861,579. LOCK. EDWIN W. NORTH, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed June 24, 1929. Serial No. 373,097. 4 Claims. (Cl. 292—335.)



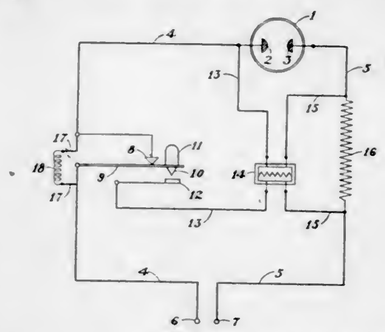
1. In combination with a door frame providing an opening and a door adjacent said frame for closing said opening, a bolt casing secured to said door, a keeper secured to said frame, a bolt slidably mounted in said casing, a spring normally urging said bolt toward keeper engaging position, means for disengaging said bolt from said keeper, means for securing said bolt in disengaged position, a rotatable element mounted upon said bolt for engagement with and disengagement from said keeper, means on said keeper in the normal path of said element as said door is closed for striking said element and releasing said bolt securing means, and means including an inclined surface on said bolt adapted to engage a portion of said keeper for retracting said bolt when the door is being closed and said securing means is inoperative.

1,861,580. NONGLARE HEADLIGHT LENS. WILLIAM O'NEILL, Frankford, Pa. Filed Oct. 13, 1930. Serial No. 488,290. 2 Claims. (Cl. 240—41.4.)



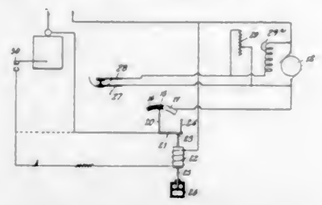
1. A lens for a head light comprising an upper light intercepting portion and a lower transparent portion, the upper portion being formed of translucent glass for intercepting the passage of light rays through said upper portion of the lens, and extending into the lower half a substantial distance to form a major upper portion and a minor lower portion and also to form pendent strips at opposite sides of the lens as parts of the light intercepting or translucent portion, the minor transparent portion being formed of transparent glass and provided with light depressing prisms having central horizontal portions and downwardly extending oblique ends, the said central portions and the oblique ends decreasing in length toward the bottom of the lens.

1,861,581. GASEOUS ELECTRIC DISCHARGE DEVICE. MARCELLO PIRANI, Berlin-Wilmersdorf, KARL BECKER, Berlin-Steglitz, and MARTIN REGER, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed July 24, 1930, Serial No. 470,347, and in Germany Aug. 29, 1929. 3 Claims. (Cl. 176—124.)



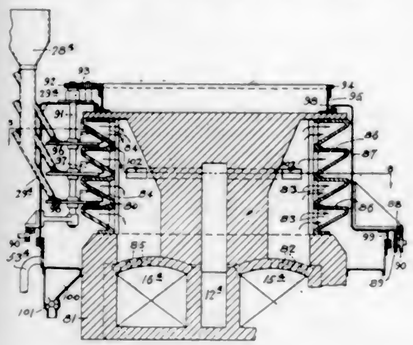
1. In combination, an electric discharge device comprising a container, electrodes sealed therein, a main source of current connected to said electrodes, and a starting circuit for said device comprising a high frequency generator connected across the terminals of said main source and in operative relation to the terminals of said device, means in said circuit during starting for preventing oscillations therein passing to the said main source and means for connecting and disconnecting simultaneously said generator and said first mentioned means to and from said main source.

1,861,582. TAPE PULLER. WILLIAM S. PAITCHARD, Mount Vernon, N. Y., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 7, 1928. Serial No. 268,162. 9 Claims. (Cl. 178—42.)



1. In combination, a data-recording device adapted to eject a tape therefrom, a tape pulling mechanism for feeding said ejected tape through a projection system, said mechanism comprising a pulling roll, means for rotating said roll, said means including a motor mechanism, means having conductive and non-conductive portions, a bell-crank lever, said bell-crank lever having one arm normally in contact with the non-conductive means, and a solenoid operating on the other arm of said lever and controlled by the data-recording device, whereby the first-mentioned arm will be advanced on to the conductive portion and the motor operated.

1,861,583. APPARATUS FOR CARBONIZING COAL. FRANZ PUENING, Aspinwall, Pa. Filed Aug. 13, 1925. Serial No. 50,011. 16 Claims. (Cl. 202—102.)

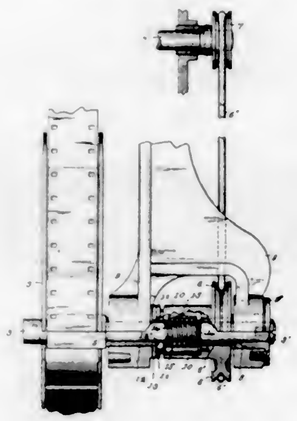


1. A carbonizing retort comprising in combination a set of alternately superposed annular carbonizing recesses and heating walls, the former being closed at one circumference of their annular contour and being wholly independent of each other and separated by the heating walls, said set of alternately superposed annular recesses and heating walls forming a structural unit, and a casing surrounding said superposed recesses and heating walls and forming a second structural unit, one of the structural units being rotatable relatively to the other.

4. In apparatus for carbonizing coal, a plurality of superposed trays, heating walls for heating said trays, means for continuously moving a stream of coal past said trays, and means for withdrawing a portion only thereof to fill the trays.

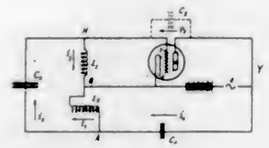
1,861,584. ONE-WAY CLUTCH MECHANISM FOR REELING APPARATUS. WILLIAM C. READEKER and EDWIN H. OMARA, Chicago, Ill. Filed Sept. 18, 1930. Serial No. 482,682. 5 Claims. (Cl. 192—41.)

1. In a clutch mechanism of the type described, the combination of a fixed support, a shaft journalled in said support, a revoluble driving member journalled on said support in concentric relation to said shaft, a loose friction member encircling said shaft in spaced relation to said driving member and adapted for frictional retarded contact with the fixed support aforesaid, and a resilient



clutch member attached at one end to said driving member and at the other end to said loose friction member, and having driving engagement with said shaft in one direction only, said clutch member when not in engagement with said shaft acting to maintain frictional engagement between the loose friction member and the fixed support.

1,861,585. NEUTRALIZING CIRCUIT. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 3, 1927. Serial No. 217,368. 9 Claims. (Cl. 179—171.)

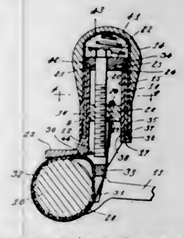


1. A neutralizing bridge circuit for a thermionic tube amplifier comprising a constant capacity in one of the arms of the bridge and between the anode and cathode of the tube, and inductances in other arms of the bridge and in the input circuit of the tube having zero coupling between them whereby regenerative blocking is maintained perfect at all frequencies of oscillations impressed upon the input circuit of the amplifier.

1,861,586. STEERING WHEEL HANDLE. MANLY H SHIPLEY, Rockford, Ill. Filed June 10, 1929, Serial No. 369,657. Renewed May 25, 1931. 23 Claims. (Cl. 74—33.)

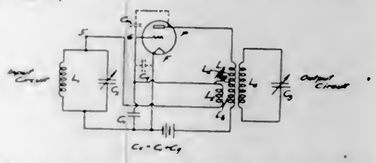
1. A device of the character described comprising a base arranged to be set on the rim or other part of a steering wheel and formed to provide two portions to engage the same on two adjacent sides, a flexible element permanently fastened at one end to the one portion of the base and extending therefrom around the rim and over the outside of an abutment on the other portion of said base,

means carried by the base having connection with the free end of said flexible element for placing the same under tension, the abutment being so located that the pressure



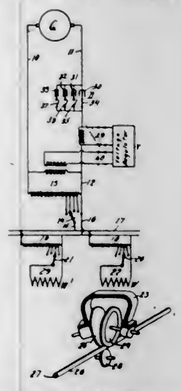
of the flexible element against the same causes the said portion of the base to be forced inwardly against the side of the rim, and a knob on said base.

1,861,587. AUDION AMPLIFIER CIRCUIT. HAROLD A. SNOW and LEWIS M. HULL, Boonton, N. J., assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Aug. 13, 1925. Serial No. 50,114. 9 Claims. (Cl. 179—171.)



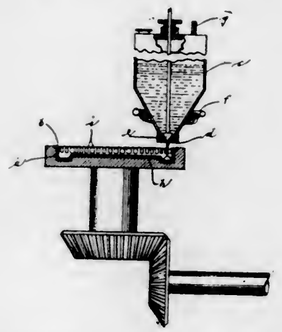
5. An anti-regenerative audion amplifier stage of the type in which the impedance net work is arranged in the form of a Wheatstone bridge circuit having as conjugate arms thereof the input and the output circuits of said stage, characterized by the fact that one input terminal of the amplifier stage is directly connected to the filament of the tube, and that the other input terminal of the stage is connected to the grid of the tube through a coil in inducive relation with the output circuit of the tube.

1,861,588. CONTROL APPARATUS FOR ELECTRIC MACHINES. EDWIN W. SWANSON, Hopkins, and FRANK N. SWANSTROM, Minneapolis, Minn., assignors to Electric Machinery Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed July 12, 1930. Serial No. 467,470. 15 Claims. (Cl. 219—4.)



1. The combination with a variable current load and a source of alternating current, the voltage of which varies with the load current and power factor, of a condensive reactance responsive to the load current for preventing any substantial change in the load voltage.

1,861,589. BOTTLE CLOSURE. ALBIN H. WARTH, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,430. 4 Claims. (Cl. 215—40.)



1. A closure of the type herein referred to, consisting of a skirted metallic shell having adjacent the skirt thereof an annular gasket formed of a semi-resilient and semi-plastic compound composed of latex and a filler, said gasket being self-adherent to the metal of the shell and having sufficient thickness to permit it to conform to irregularities in the surface of the neck of a bottle or jar.

1,861,590. BOTTLE CLOSURE. ALBIN H. WARTH, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,097. 4 Claims. (Cl. 215—39.)

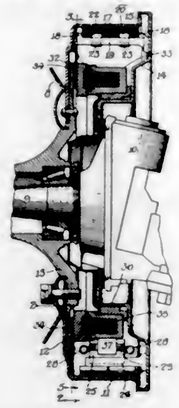


1. A bottle closure embodying therein a disc of fibrous material of substantially the same diameter as the top of the neck of a bottle, a metal shell having an opening therethrough exposing a portion of said disc, and means whereby said shell may be held upon a bottle, and a fibrous lining cemented to the portion of said shell about said opening and to the means holding said shell upon the bottle and having an opening therethrough registering with the opening in said shell.

1,861,591. BRAKE. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed May 25, 1929. Serial No. 365,833. 11 Claims. (Cl. 188—140.)

1. A friction brake combining means providing a cylindrical friction surface which rotates with the part whose motion is to be controlled, a pair of bands disposed side by side adjacent each other and extending circumferentially around said surface so as to be adapted for gripping engagement with different axially spaced zones of the rotatable surface, the opposite ends of each band being disposed adjacent each other and each adapted for movement away from a normal brake-released position to engage said rotatable surface, a pair of equalizing bars each associated with one end of each band, means for applying an actuating force to one or the other of said bars and thereby move one end of both of said bands away from a normal brake-released position, said applying means comprising a device arranged to move in either direction away from a normal brake-released position and about the axis of said rotational surface, said device

having radially disposed surfaces adapted to contact one or the other of said bars intermediate its ends to apply a tangentially directed force thereto which applies the



bands to said rotatable surface with equalized pressure, and means for anchoring one end of both bands when the opposite ends are actuated.

1,861,592. PRODUCTION OF CASTINGS OF MAGNESIUM AND MAGNESIUM ALLOYS IN PERMANENT MOLDS. ADOLF BECK, Bitterfeld, Germany. Filed July 11, 1930, Serial No. 467,390, and in Germany Aug. 10, 1929. 7 Claims. (Cl. 22—189.)

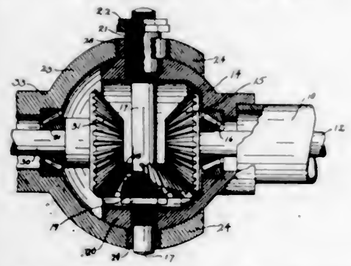
1. In a process of casting magnesium and magnesium alloys into permanent molds the step which consists in applying a black-wash comprising boracic acid and a substance promoting the adherence of boracic acid to the metallic inner surface of the mold.

1,861,593. SHUTTLE. ALFRED CHRISTOPH, Leutersdorf, Germany. Filed Apr. 7, 1930, Serial No. 442,293, and in Germany Apr. 13, 1929. 1 Claim. (Cl. 139—196.)



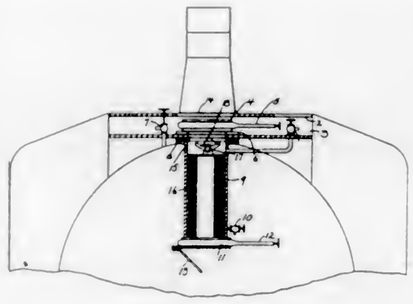
The method of producing shuttles comprising securing on a solid wooden blank a skin consisting of fibrous material impregnated with a soluble artificial resin, subjecting the whole to the combined action of heat and pressure to render the resin insoluble and removing part of the wood by mechanical action.

1,861,594. FRONT WHEEL DRIVE UNIT. AMERT A. CLIFTON, Indianapolis, Ind. Filed Aug. 22, 1930. Serial No. 477,045. 4 Claims. (Cl. 180—43.)



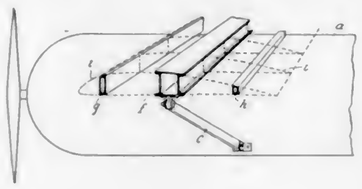
1. In a front wheel drive, an axle, a wheel spindle pivoted to the axle, a shaft carried by the spindle, an axle drive shaft, gears in mesh between the two shafts, a differential, a differential housing, a propeller shaft in two parts, a pair of bevel gears one on adjacent ends of said two parts, a counter shaft between the two propeller shaft parts, a bevel gear on the last shaft meshing with the two gears on the propeller shaft, an annular recess in the differential housing and an annular flange on the adjacent propeller shaft part assembled in said recess.

1,861,595. ESCAPE MEANS FOR A SUBMARINE WHEN SUBMERGED. JOHN M. CLARK, New York, N. Y. Filed Jan. 31, 1930. Serial No. 424,750. 2 Claims. (Cl. 114—16.6.)



1. An escape means for a submarine comprising a cylindrical casing, a cylinder contained therein means for sealing said cylinder from the interior or exterior thereof, one said means comprising a plurality of chains having lever operated hooks therein for securing certain parts of each said chain.

1,861,596. WING FOR AIRPLANES. CLAUDE DORNIER, Friedrichshafen-on-the-Bodensee, Germany, assignor of one-half to Dornier-Metallbauten G. m. b. H., Friedrichshafen-on-the-Bodensee, Germany. Filed May 6, 1931, Serial No. 535,313, and in Germany May 23, 1930. 5 Claims. (Cl. 244—12.)

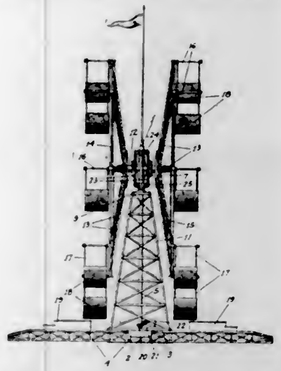


1. An airplane having a fuselage and a wing, three spars forming part of the wing structure extending transversely to the direction of flight and an only bracing member connecting the middle spar with said fuselage.

1,861,597. AMUSEMENT DEVICE. EUGENE H. GEHM, Stockton, Calif. Filed July 7, 1930. Serial No. 465,809. 3 Claims. (Cl. 272—36.)

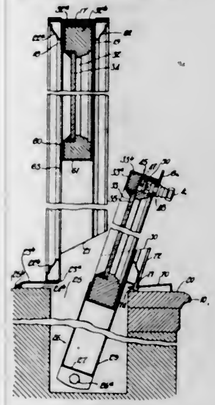
1. In an amusement device, a base, a post upstanding therefrom, a sleeve turnably mounted on the post and extending from the base to adjacent the upper end of the post, horizontal spindles extending radially of the post toward its upper end, a member on the sleeve supporting the spindles, a support for the lower end of the

member independent of the sleeve, means for driving the sleeve from adjacent the base, passenger carrying devices



mounted on the spindles, and driving connections between the devices and post to rotate the former with the rotation of the sleeve.

1,861,598. WINDOW CONSTRUCTION. PAUL GRISEL, Long Island City, N. Y. Filed Mar. 25, 1931. Serial No. 525,080. 15 Claims. (Cl. 189—64.)



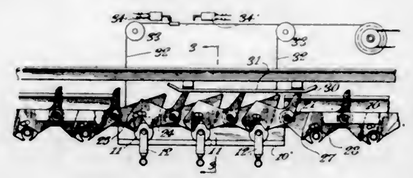
2. A building wall having a window opening and a recess disposed below said window opening, a window frame portion fixed to said wall within said window opening and a complementary window frame portion mounted within said recess and movable into alignment with said first window frame portion.

1,861,599. HOLDER FOR SIGN CHARACTERS. FRANCIS P. GSTALDER, Lakewood, Ohio. Filed Mar. 28, 1931, Serial No. 524,600. Renewed Nov. 16, 1931. 9 Claims. (Cl. 40—142.)



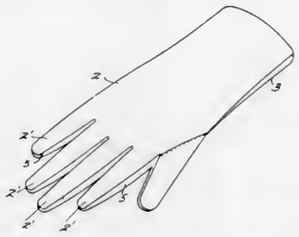
1. A character holder for signs comprising an elongated bar having parallel side walls of different width and spaced apart to form a guide space, the edge of the wider wall being bent toward the outer wall to cover said guide space, and means for detachably clamping said walls together.

1,861,600. CONVEYING SYSTEM. BURT S. HARRISON, Brooklyn, N. Y. Filed May 27, 1930. Serial No. 456,032. 12 Claims. (Cl. 198—179.)



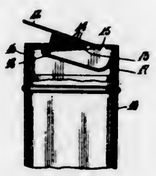
1. A structure of the kind described, comprising a drive chain, a goods hanger extending transversely of the drive chain, jaws on the drive chain engaging the goods hanger, means for releasing the jaws at a definite point, and an elevator acting at the opening of the jaws to lower the hanger.

1,861,601. GLOVE FINGER TIP CONSTRUCTION. CARL HUGO JOHANSON, Los Angeles, Calif., assignor to International Glove Process Company, Ltd., a Corporation of California. Filed June 1, 1931. Serial No. 541,253. 6 Claims. (Cl. 2—169.)



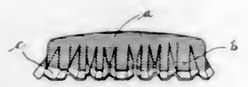
1. The method of making a two-ply finger tip in a glove which consists of continuously laying and stitching a connector tape along the edges of finger parts of a glove blank and doubling the tape on itself about the tips of the fingers to produce multiple layers from back to palm finger tip parts of the glove.

1,861,602. TALCUM POWDER CAN AND SIFTER THEREFOR. CARL KOZE, Newark, N. J., assignor to Hugo Mock, New York, N. Y. Filed Oct. 24, 1930. Serial No. 490,886. 4 Claims. (Cl. 221—62.)



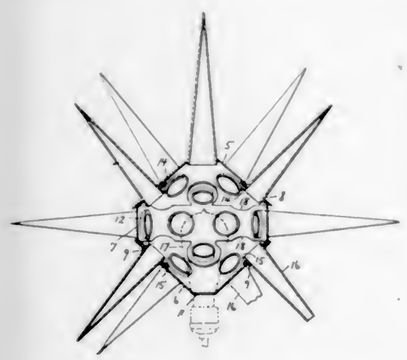
1. In a sifter top, a closing member at the top of the can, side members attached to said closing member, having sifting openings therein from which powder may be extruded and spring securing and yielding retaining means for keeping the sifting openings in closed position.

1,861,603. BOTTLE CAP. CAREY W. LINDSAY, Homeland, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 17, 1929. Serial No. 414,624. 2 Claims. (Cl. 215—39.)



1. As an article of manufacture, a bottle cap of the type which is secured to a bottle by having its skirt closed upon the neck of a bottle by mechanisms having rubbing contact with the skirt, embodying therein a metallic shell having a skirt, the exterior of the top and the skirt having a hardened lithographic decorative coating thereon, excepting throughout that portion of the skirt adjacent the lower edge thereof, said portion being free of any coating whereby mutilation of the decoration adjacent the edge of the skirt is avoided during the formation of the shell, the assembly of the cap and the application of the cap to a bottle.

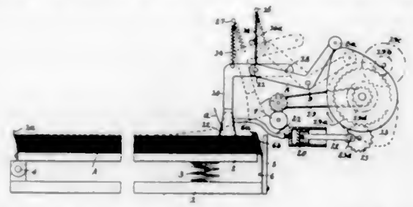
1,861,604. ORNAMENT. JOHN A. LORING, Owego, N. Y. Filed Feb. 20, 1931. Serial No. 517,366. 8 Claims. (Cl. 41—10.)



6. An ornamental device of the character described comprising an upper section, a lower section, an intermediate section, said upper and lower sections being apertured, a series of rings secured to said intermediate sections for registry with certain of the apertures of said upper section, a second series of rings secured to said intermediate section for registry with certain of the apertures of said lower section, and a plurality of cones extending through the apertures of said upper and lower sections and the rings registering with said apertures for retaining the sections and cones in assembled relation, and additional cones projecting from each of said sections.

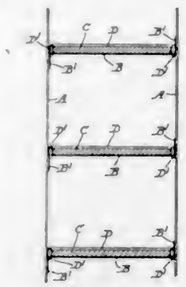
1,861,605. APPARATUS FOR AND METHOD OF FEEDING SHEETS. ERNEST C. MAASS, Great Notch, N. J. Filed Oct. 29, 1929. Serial No. 403,150. 9 Claims. (Cl. 271—28.)

1. In combination, means to support a stack of sheets with one end face exposed, a lever having its fulcrum axis extending substantially parallel with the sheets, an adhesion device movable on the lever crosswise of said axis and also with and by the lever against and adapted to adhere to the sheet of the stack affording said exposed face and also with and by the lever from the stack, means to oscillate the lever on its fulcrum, and means



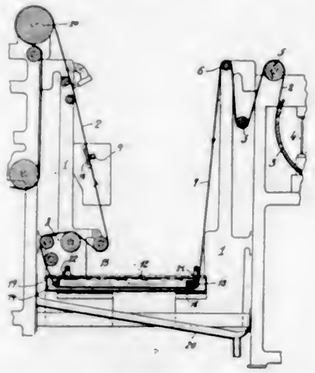
to move said device on the lever first in one direction and then in the other on the movements, respectively, of the lever first in one direction and then in the other.

1,861,606. BLIND. HENRY J. MACKIN, Kankakee, Ill. Filed Oct. 12, 1931. Serial No. 568,239. 17 Claims. (Cl. 156—17.)



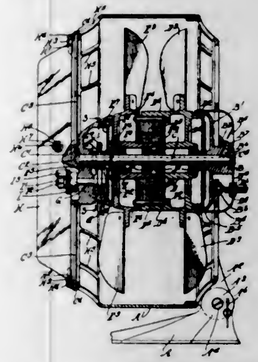
4. In combination in a Venetian blind, a plurality of cross tapes, slats resting upon said cross tapes and means for fastening said slats against relative movement with respect thereto, said means including a spring clip member carrying a plurality of spring hooks, one adapted to engage a cross tape adjacent each of its ends.

1,861,607. BLUE PRINTING MACHINE. KNUD MURCK, Forest Hills, N. Y., assignor to Charles Bruning Company, Inc., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,809. 1 Claim. (Cl. 95—89.)



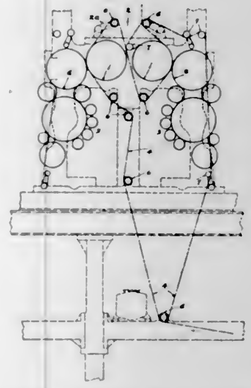
In a blue printing machine means for developing the paper comprising a water bath through which the paper passes, water supplying means in said bath for producing a steady gentle flow of water therein parallel to and away from the paper from one side of the bath to the other side thereof and a final washing unit comprising a water supply pipe mounted closely adjacent to the path of the paper and provided with a plurality of closely spaced fine water exit holes whereby to provide a practically laterally unbroken sheet of water running parallel to the paper and in a direction opposite to the travel thereof.

1,861,608. FAN AND MEANS FOR DIRECTING THE AIR CURRENT THERETHROUGH. LAURENCE M. PERSONS, St. Louis, Mo., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed Dec. 21, 1929. Serial No. 415,747. 7 Claims. (Cl. 230—74.)



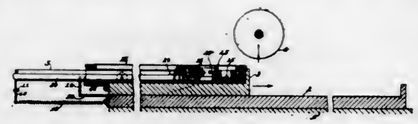
1. In a fan structure, a rotary fan element, a motor adapted to rotate said fan element, means for actuating said motor, an air deflecting vane positioned in the line of delivery of said fan, and means for oscillating said vane progressively step by step in either direction in response to rotation of said motor.

1,861,609. WEB THREADING DEVICE FOR ROTARY PRINTING MACHINES. CECIL GEORGE QUICK, Eltham, London, and RALPH WILLIAM CHILES, Forest Hills, London, England, assignors to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 6, 1930, Serial No. 418,898, and in Great Britain July 11, 1929. 7 Claims. (Cl. 271—2.1.)



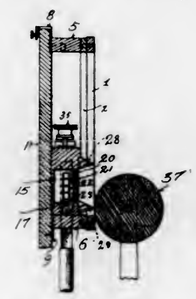
1. In a web threading device for a rotary printing machine, a tape to which the web may be secured, pulleys to guide the tape through the machine and a driving connection whereby one of the pulleys may be connected to a rotating element of the machine; said connection being disconnectible to prevent driving the tape during normal operation of the machine.

1,861,610. PRINTING METHOD AND APPARATUS. WILLIAM R. RESPESS, St. George, N. Y., assignor to John S. McMahon and J. H. Ernst, jr., Brooklyn, N. Y. Filed May 2, 1930. Serial No. 449,168. 42 Claims. (Cl. 101—123.)



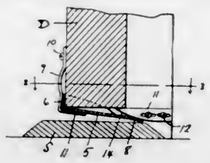
1. The method of printing which comprises supplying a flowable printing medium beneath a printing blank and forcing said medium through said blank onto a receiving surface in successive linear strips.

1,861,611. STENCIL PRINTING ATTACHMENT FOR VERTICAL BED PRINTING PRESSES. WILLIAM R. RESPESS, St. George, N. Y., assignor to John S. McMahon and J. H. Ernst, jr., Brooklyn, N. Y. Filed Sept. 13, 1930. Serial No. 481,609. 14 Claims. (Cl. 101—123.)



1. In a machine of the character described a printing stencil and a printing platen adapted to be moved relatively thereto in printing, and a reservoir for printing medium movable with said platen, means for moving the platen with the reservoir together as a unit during a portion of the platen movement, and means for uncoupling the reservoir from the platen during another portion of the platen movement.

1,861,612. WEATHER STRIP ATTACHMENT FOR DOORS. HERMAN M. REYNOLDS, Miami, Fla. Filed May 16, 1930. Serial No. 452,968. 2 Claims. (Cl. 20—67.)



1. A weather strip attachment for doors comprising in combination a plurality of angular resilient leaf spring straps mounted on one side of the door and having end

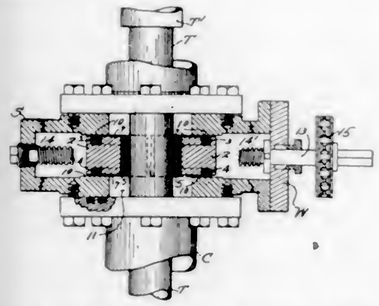
portions extending inwardly in parallelism to the lower edge of the door, and a relatively elongated plate disposed between said end portions of said straps and said lower edge of the door, and said straps normally urging said plate into flat contact with the lower edge of said door.

1,861,613. FOLDABLE BRACE FOR IRONING TABLES AND THE LIKE. CHARLES W. SADENWATER, Saginaw, Mich., assignor to Saginaw Manufacturing Co., Saginaw, Mich., a Corporation of Michigan. Filed Dec. 10, 1930. Serial No. 501,334. 2 Claims. (Cl. 287—101.)



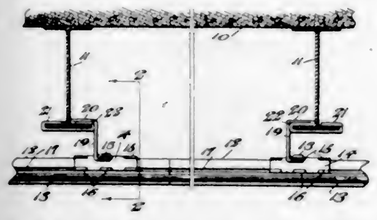
1. A foldable brace comprising bars pivoted together, one of said bars formed on one edge near its end with a tongue whose free end is laterally offset from the face of the bar and is positioned to present a stop that abuts against an end of the complemental bar when the bars are extended, the offset part of said tongue being located so that when the bars are folded upon each other the side wall of the tongue engages by outward wedging action against a side wall of the complemental bar.

1,861,614. CASING CONTROL GATE. FRANK J. SCHWEITZER, Brea, Calif., assignor to William D. Shaffer, Brea, Calif. Filed Oct. 14, 1930. Serial No. 488,572. 5 Claims. (Cl. 251—159.)



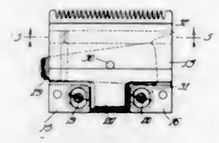
1. In a casing shut-off control, a rubber packing body including a diametrical portion with an obverse face to set against an opposed part and from which portion integrally extend lateral, parallel half-ring laps in spaced relation and adapted to be snapped into corresponding ring grooves in a complementary ram element, the said laps extending uni-directionally from the reverse face of said portion.

1,861,615. SUSPENDED CEILING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Apr. 18, 1931. Serial No. 531,071. 2 Claims. (Cl. 72—118.)



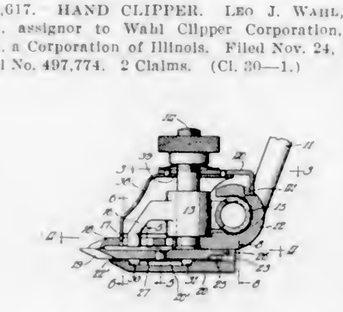
1. A metal clip of the character stated comprising an integral structure formed from a single blank consisting of a split vertical body the lower end of which is provided with oppositely disposed split horizontal fingers for ceiling slab clip engagement, and the upper end of which is provided with a flat horizontal plate doubled under upon itself and terminating in a pair of elongated fingers for floor beam flange engagement, there being a grooved portion between said plate and elongated fingers.

1,861,616. ADJUSTABLE STATIONARY BLADE FOR HAIR CLIPPERS. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed May 9, 1930. Serial No. 450,978. 10 Claims. (Cl. 30—1.)



1. In a clipper, a stationary blade, a movable blade, mounting means on which said stationary blade is movable to vary its projection beyond the point of the movable blade, inclined bearing surfaces guiding said blade in its movement, and means yieldingly pressing said bearing surfaces together whereby to prevent vibrations of said stationary blade, and a lever pivoted on the surface of said stationary blade opposite the movable blade contacting surface for adjusting the same.

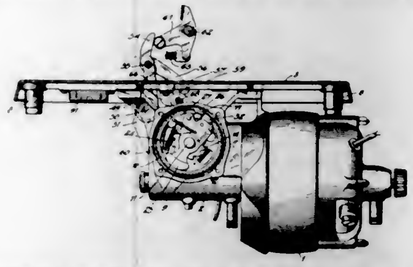
1,861,617. HAND CLIPPER. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed Nov. 24, 1930. Serial No. 497,774. 2 Claims. (Cl. 30—1.)



1. A hand clipper having a frame, a stationary blade and a reciprocable blade, a guiding handle fixed to said frame, a movable blade operating handle pivoted to said frame and having means engaging said movable blade, and means slidably supporting said stationary blade for adjustment on said frame to vary its extension beyond the front edge of the movable blade, said last named means comprising a base plate having guides upon which the stationary blade rests and a lever interposed between said blade and base and having a finger piece at one side thereof for moving the blade along the guides, said lever being reversible to place the finger piece at either side for right or left hand operation.

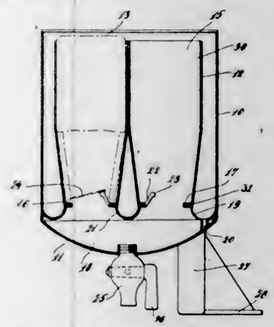
1,861,618. ELECTRIC DRIVE FOR ADDING MACHINES. NELSON WHITE, Ithaca, N. Y., assignor, by mesne assignments, to Morse Products, Inc., Ithaca, N. Y., a Corporation of New York. Filed June 17, 1924. Serial No. 720,602. 5 Claims. (Cl. 235—62.)

1. In a drive for adding machines and the like, the combination with a motor, of a shaft driven by the motor, means on said shaft connected to operate the adding machine, a shock-absorbing clutch including a dog for connecting and disconnecting the motor and shaft, a cam on said shaft, a second shaft, an arm on said second shaft



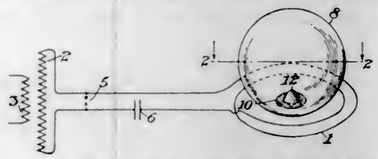
to directly engage said dog, and a second arm on said second shaft directly engaged and operated by the said cam to throw out the clutch.

1,861,619. MILK DISPENSER. WILLIAM BELLMER, Brooklyn, N. Y. Filed Dec. 10, 1930. Serial No. 501,201. 2 Claims. (Cl. 221—69.)



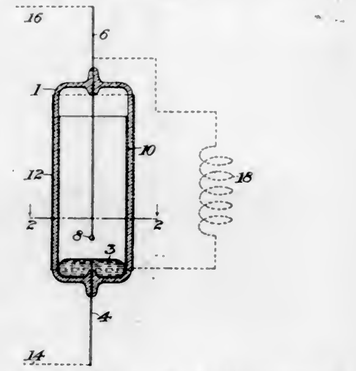
1. A device of the class described comprising a walled chamber of the same substantial conformation as an inverted milk bottle, said chamber having a mouth at the bottom and being adapted to receive an inverted milk bottle therein, an internal flange around said mouth providing an annular shoulder upon which the mouth of the milk bottle is adapted to seat, a rigid deflector arm secured to said flange and extending angularly upward into said chamber from said flange, said arm being adapted to dislodge the paper cap of the milk bottle upon contact of said arm with said cap as the mouth of the inserted milk bottle nears said flange, said arm having an enlarged end thereon adapted to push one side of said cap toward the inside of the bottle without damaging said cap.

1,861,620. GASEOUS DISCHARGE DEVICE. LEROY J. BUTTOLPH, Grantwood, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed May 1, 1926. Serial No. 105,951. 18 Claims. (Cl. 176—124.)



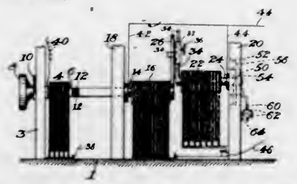
1. In an inductive vapor discharge device, a closed path comprising a vaporizable electrically conductive liquid, said liquid being present in such amount that under normal operating conditions there will have become evaporated an amount thereof sufficient to open said path.

1,861,621. COMBINATION GAP AND CONDENSER FOR HIGH FREQUENCY CIRCUITS. LEROY J. BUTTOLPH, Grantwood, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 11, 1926. Serial No. 154,065. 2 Claims. (Cl. 250—27.5.)



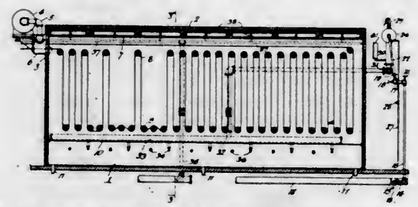
1. A combined condenser and spark gap comprising a sealed envelope containing a mercury pool, two inleads sealed through the wall of said envelope, one of said inleads terminating in said pool and the other terminating in a spark terminal spaced therefrom, a metallic conductor covering the major portion of the inner surface of said envelope, said conductor being electrically connected to one of said inleads, and another metallic conductor on the exterior surface of said envelope in substantial registration with said first mentioned conductor.

1,861,622. CONDENSER. LEROY J. BUTTOLPH, Grantwood, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 31, 1926. Serial No. 158,191. 9 Claims. (Cl. 175—41.5.)



1. In combination two variable condensers mounted on a common adjusting shaft and an auxiliary variable condenser mounted with its controlling shaft parallel to and off the center of said first shaft and mechanically connected therewith through a slide crank connection.

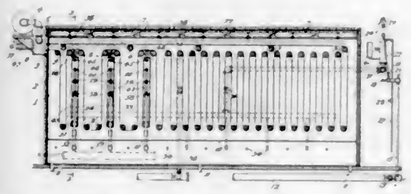
1,861,623. APPARATUS FOR TREATING AND AGING FABRICS. EDWARD S. CHAPIN, Plainfield, N. J., and ARELI H. JACOBY, Ashby, Mass., assignors to The Deltex Company, a Corporation of Massachusetts. Filed Apr. 29, 1929. Serial No. 359,156. 7 Claims. (Cl. 8—15.)



2. In combination with apparatus for treating or aging fabric, including an aging box or casing, and a steam

supply pipe therefor, the improvement which comprises, an expansion and mixing chamber, means for introducing water into the steam entering said chamber, and pipes between said chamber and said aging box whereby steam is supplied to the latter at the desired temperature and pressure and with the desired moisture content.

1,861,624. PROCESS FOR TREATING AND AGING FABRICS. EDWARD S. CHAPIN, Pawtucket, R. I., and ARELI H. JACOBY, Ashby, Mass., assignors to The Deltex Company, a Corporation of Massachusetts. Filed June 18, 1930. Serial No. 462,047. 15 Claims. (Cl. 8—15.)

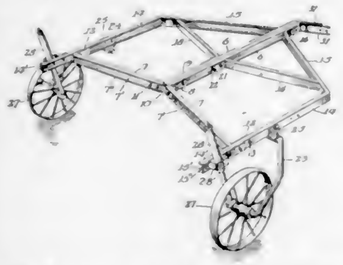


1. The process of aging fabric having thereon vat color prints or dyes, which comprises, producing by adjustment of the flow of the incoming steam and the moisture within the ager, an atmosphere of steam vapors at the necessary minimum temperature and required moisture content at successive points in the progress of the aging action, respectively, whereby there results a substantially uniform and complete reduction and absorption of the dyes upon and within the fibres of the fabric to conserve the dyes and produce maximum color values.

1,861,625. METHOD OF PRODUCING RARE METALS BY ELECTROLYSIS. FRANK H. DRIGGS, Bloomfield, and WILLIAM C. LILLIENDAHL, Montclair, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Mar. 30, 1929. Serial No. 351,451. 13 Claims. (Cl. 204—19.)

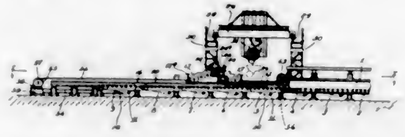
1. The method of producing uranium which comprises electrolytically depositing the metal from a fused bath of alkali halides containing a quadrivalent uranium halide.

1,861,626. WHEELED HARROW FRAME. JOHN H. FLATLEY, Little York, Ill., assignor to Brown Lynch Scott Co., Monmouth, Ill., a Corporation of Illinois. Filed Jan. 26, 1928. Serial No. 249,581. 7 Claims. (Cl. 97—233.)



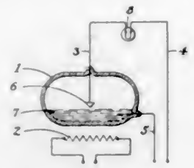
1. A rigid frame for wheeled harrows comprising two channeled center bars, two rear bars, two channeled side bars, and two channeled front bars, the rear bars having their ends bent to engage between the flanges of the center bars and the side bars, the front bars being integral with the side bars and having their inner ends bent to engage the flanges thereof with the flanges of the center bars, means securing the center bars and the adjacent bent ends of the rear bars together, means securing each side bar to the adjacent bent end of a rear bar, and means securing the center bars and the adjacent bent ends of the front bars.

1,861,627. APPARATUS FOR MAKING PLATE GLASS. JOHN H. FOX, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Aug. 15, 1928. Serial No. 299,751. 6 Claims. (Cl. 49—3.)



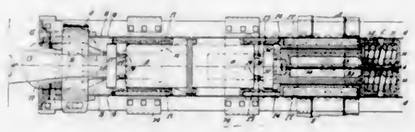
6. Apparatus for making a sheet of glass, comprising a leer having continuously operating forwarding means, a runway at the entrance end of the leer also having continuous operating forwarding means constituting an extension of the forwarding means in the leer, a car mounted for movement back and forth along the runway, means for moving the car, a pair of sizing rolls carried by the car above the runway, means for rotating the sizing rolls as the car is moved back along the runway, a roller at the end of the leer, and a flexible cover of refractory material attached at one end to the car and secured to the roller at its other end, and adapted to be rolled thereon when the car moves toward the leer.

1,861,628. ELECTRIC CIRCUIT CONTROLLING DEVICE. CHARLES G. GARTON, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed May 20, 1930, Serial No. 454,104, and in Great Britain June 14, 1929. 6 Claims. (Cl. 200—122.)



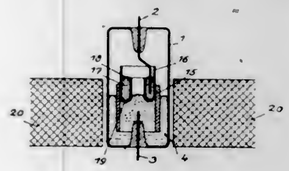
1. In an electric circuit breaker, a container, a plurality of electrodes sealed therein, a quantity of liquid conducting material therein, at least one of said electrodes being in close proximity to the surface of said liquid material to make momentary contact therewith when said liquid is boiling, and means for boiling said liquid to bring about the aforesaid momentary contacts.

1,861,629. RAILWAY DRAFT RIGGING. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Apr. 14, 1928. Serial No. 269,957. 15 Claims. (Cl. 213—8.)



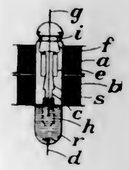
4. In a draft rigging for railway cars, the combination with shock absorbing means at opposite ends of the car, each of said means including two shock absorbing mechanisms, one of which is actuated in both buff and draft, and actuates the other shock absorbing mechanism in buff only; and column means interposed between the shock absorbing means at opposite ends of the car, said column means being yieldable.

1,861,630. MERCURY SWITCH WITH PLUNGING CORE. CHARLES HATAY, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 1, 1929, Serial No. 359,653, and in Germany May 8, 1928. 6 Claims. (Cl. 200—112.)



1. A mercury switch comprising a container, a body of mercury in said container, a core floating on said body, a vessel on said core, said vessel having a continuous horizontal rim, another body of mercury in said vessel, said bodies of mercury merging and separating on said rim upon appropriate movement of said core, and an electrode extending into each body of mercury.

1,861,631. MERCURY SWITCH. CHARLES HATAY, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 14, 1931, Serial No. 557,147, and in Germany Sept. 12, 1930. 5 Claims. (Cl. 200—112.)



1. A mercury switch comprising a container, electrodes sealed therein, a body of mercury therein, a plunger in said container, a support member for said plunger, said plunger being adapted on successive movements thereof to make and break the electrical connection between said electrodes, said support member being adapted to maintain said plunger in each of its operating positions.

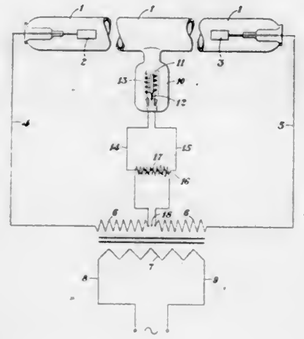
1,861,632. BORING AND DRILLING DEVICE. HARVIE W. HAYNIE, Monahans, Tex. Filed Nov. 9, 1928. Serial No. 318,267. 1 Claim. (Cl. 255—61.)

In a drilling head the combination of a body having a plurality of relatively spaced downwardly convergent elongated blades integrally connected at the lower ends thereof and having a downwardly facing screw threaded socket, and a detachable drilling tip having a screw threaded shank for seating in said socket, the blades being relatively spiralled about the axis of the body and each having a chiselshape cross section providing a sharp leading edge, the drilling tip when fully connected in the screw



threaded socket having spirally disposed cutting edges aligning respectively with the cutting edges of the respective blades.

1,861,633. GASEOUS ELECTRIC DISCHARGE DEVICE. HANS KRESSIN, Berlin-Britz, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 21, 1931, Serial No. 552,260, and in Germany Aug. 15, 1930. 3 Claims. (Cl. 175—125.)

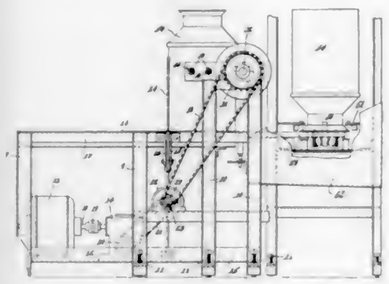


1. In an electric discharge device, a filling of gas supporting an electric discharge, a material for supplying the desired gas to the discharge device and a heating means for causing liberation of gas from said material to replenish the gas filling of said discharge device, said heating means being connected to the low voltage part of the high voltage side of a high reactance transformer for the discharge device, to diminish the effect on the heating means of potential changes in the supply circuit of said discharge device.

1,861,634. CAN DUMPING MECHANISM. HARRY D. LATHROP, Chicago, Ill. Filed Apr. 19, 1930. Serial No. 445,813. 5 Claims. (Cl. 214—1.1.)

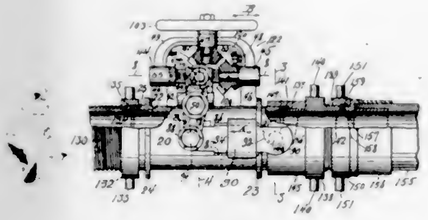
1. Milk can dumping apparatus of the character described comprising, in combination, a pair of revolvably

mounted can engaging and transporting members, a pair of cylindrically curved can gripping shoes mounted upon said members and arranged to engage and grip a can on opposite sides, cam means for forcing said members toward each other into can engaging position, cam means



for maintaining said engagement throughout the can dumping travel of said members, cam means for releasing said members at the conclusion of said can dumping travel and operation, and spring means for normally maintaining said members in contact with said respective cam means.

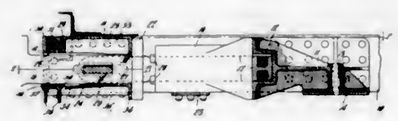
1,861,635. HOSE COUPLING. EMANUEL LEFKOWITZ, Carteret, N. J. Filed Apr. 24, 1929. Serial No. 357,711. 6 Claims. (Cl. 285—173.)



1. In a coupling the combination of a shell, a pair of clamping bars each having a clamping claw slidably supported on opposite sides of the shell, a screw having cylindrical shanks at its ends journaled above the shell, an adjusting nut in engagement with said screw, a pair of journal pins rotatively supported on the opposite sides of the shell, an upper lever fastened to each of said journal pins with its swinging end in connection with said nut, a lower lever fastened to each of said journal pins, the lower ends of said lower levers pinned to said clamping bars, means to turn the screw, an adapter axially in line with the shell and locking pins extending from the adapter disposed to be engaged by said clamping claws.

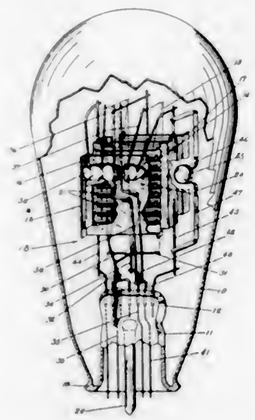
1,861,636. RAILWAY DRAFT RIGGING. JOHN H. LINK, Merion, Pa., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,664. 1 Claim. (Cl. 213—50.)

In a draft rigging for railway cars, the combination with spaced draft sills having horizontally disposed, laterally outstanding bottom flanges; of an integral one-piece combined front stop and striking casting including spaced top and bottom, and spaced side walls, said top and bottom walls connecting the side walls, said top and bottom walls having downturned transverse flanges at the rear ends forming front stop means cooperating with the usual front follower of the draft rigging, said side walls being riveted to the sills, said side walls having integral, laterally outwardly projecting bottom flanges engaging beneath said bottom flanges of the draft sills and riveted thereto, said top wall having at the forward end portion thereof a horizontally disposed, downwardly offset section, said offset section being connected at the inner end to the top wall proper by a transversely extending vertical web, said offset section being provided at the outer end with an upstanding transverse vertical flange forming the



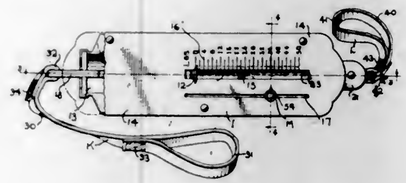
striking plate proper of the casting, said casting being reinforced by intergral, longitudinally extending ribs spaced from the side walls and formed integral with said top wall, rear flange of the top wall, and said transversely extending web at the forward end portion of the top wall, and said striking plate proper being reinforced by longitudinal ribs in alignment with said first named ribs and formed integral with said downward offset section of the top wall, transverse vertical web, and transverse vertical flange of said offset section.

1,861,637. PRODUCTION OF ALKALI METAL TUBES. JOHN W. MARDEN and ERNEST A. LEDERER, East Orange, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 27, 1927. Serial No. 228,994. 6 Claims. (Cl. 250—27.5.)



1. The method of producing a thermionic discharge device employing an alkali metal as the active electron-emitting material which comprises cleaning and degasifying the electrodes by heating in hydrogen, assembling the electrodes upon a mount, baking the assembled electrodes for a period of several minutes under oxidizing conditions, flashing the filament in an inert environment to degasify the same, sealing the mount into an envelope, heating the electrodes in vacuum to a high temperature to drive the gases therefrom, heating the filament in an atmosphere of oxygen introducing an alkali metal into the envelope and heating said filament in the presence of said alkali metal vapor to cause said alkali metal to adhere thereto.

1,861,638. BRAKE ADJUSTING GAUGE. VERNER L. MARTIN, Mount Hope, W. Va. Filed Dec. 22, 1930. Serial No. 504,144. 5 Claims. (Cl. 265—63.)



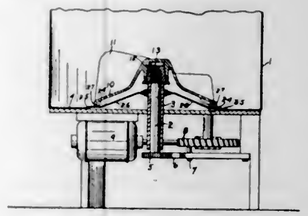
1. A brake testing device comprising a gauge including a main body portion, a movable portion and an indicator operable by relative movement of the two said portions, a strap-like flexible element secured to one of said portions, said flexible element provided at its free end with a loop, and a pull element secured to the other of said portions.

1,861,639. MINE TRACK CLEANER. VERNER L. MARTIN, Mount Hope, W. Va. Filed Feb. 18, 1931. Serial No. 516,738. 4 Claims. (Cl. 198—7.)



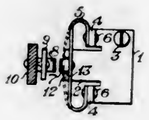
2. In a track cleaner, front and rear track wheels, axles for the wheels, side beams connecting the axles, a post supported upright upon the front axle, an inclined shovel pivotally mounted at its rear portion upon the rear axle, a bracket secured to the rear portion of the shovel including side arms, a tie member including a rest bar pivotally connected at its forward end to said post and rearwardly diverging arms pivotally connected at their rear ends one to each of said bracket side arms, a lever pivotally mounted at its forward end to the upper end of said post in overlying relation to said rest bar, a yoke pivotally connected to the forward portion of the shovel, a hanger bar connected to the yoke and extending upwardly for connection to said lever, and means for retaining the lever in vertically adjusted positions.

1,861,640. WASHING MACHINE. JOHN J. MCCABE, Cleveland, Ohio, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 8, 1927. Serial No. 204,178. 9 Claims. (Cl. 259—101.)



1. In mechanism the combination with a vertical shaft and means for moving the same about its axis, of a driving element detachably mounted on the upper end thereof, said shaft and element having a head and socket connection, the walls of which are formed with plural interfitting ribs and channels which flare circumferentially with increase of the distance therealong said ribs and channels having circumferentially facing driving surfaces which also support the weight of said element.

1,861,641. CONTACT DEVICE. FRANK H. NICHOLSON, Edgewood, and HERMAN G. BLOSSER, Pittsburgh, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 17, 1930. Serial No. 496,154. 2 Claims. (Cl. 200—166.)



1. A contact device comprising a spring having a relatively high frequency of vibration, a first contact element carried thereby, a second contact element mounted for successive engagement with said first contact element and having a relatively low frequency of vibration, and a stop for confining said spring under stress within its natural range of movement in one direction, whereby the vibration of said spring is completely damped during the interval when said second contact element is out of engagement with said first contact element.

1,861,642. CHAIN. WALTER H. PAULSON, Chicago, Ill., assignor to Harry D. Lathrop, Chicago, Ill. Filed Mar. 11, 1930. Serial No. 434,998. 6 Claims. (Cl. 74—32.)



1. A chain construction of the character described, comprising a plurality of links, each link having a main link block portion, a spherical head member, a shank portion joining said head member to said main link block portion, said main block portion provided with a tooth engaging and receiving aperture, said main block portion also provided with a concave semi-spherical socket portion for the engagement of the head member on an adjoining link to provide for flexing in a plurality of planes, a transverse wall formed in said main block portion and separating said tooth engaging and receiving aperture and said concave socket portion, and said socket portion provided with an inwardly spaced enlarged opening adjacent said transverse wall for the reception and disengagement of a head member on an adjoining link.

1,861,643. ELECTRIC DISCHARGE DEVICE. MARCELLO PIRANI, Berlin-Wilmersdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 22, 1929, Serial No. 373,065, and in Germany July 16, 1928. 5 Claims. (Cl. 176—125.)

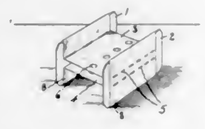
1. The method of maintaining constant pressure in a gaseous electric discharge device which consists in utilizing increase in temperature in the discharge gas path to cause the liberation of the desired gas from a gas evolving compound and availing of the reaction between the by-products of the decomposition of the gas supplying compound and materials reactive therewith and inert with respect to the discharge gas to keep said impurities from the discharge path.

1,861,644. COMBINED WATCH AND VANITY CASE. GEORGE M. ROBERTS, Detroit, Mich. Filed Jan. 10, 1929. Serial No. 331,635. 1 Claim. (Cl. 63—1.)



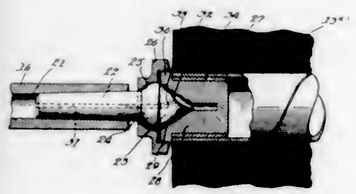
The combination of a watch, and a vanity case, so connected together that the watch shall constitute the lid for the vanity case, said parts being so formed and connected together that they together form a unit of an ornamental appearance, adapted to the purpose specified and means for securing said unit upon the arm.

1,861,645. DENTAL APPLIANCE. CARL J. STEIN, New York, N. Y. Filed July 9, 1931. Serial No. 549,680. 5 Claims. (Cl. 32—6.)



1. In a device of the class described, a holder for dental impression wax comprising two side plates held in separated and parallel relation by two thin flexible diaphragms, also arranged in parallel relation and symmetrically disposed on either side of the horizontal axes of said side plates and at right angles to said side plates.

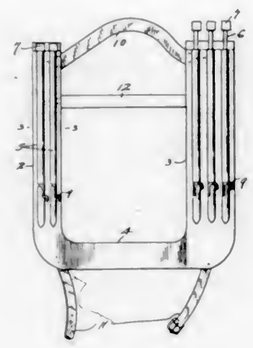
1,861,646. CENTERING CHUCK FOR WEB ROLLS. IRVING I. STONE, Chicago, Ill. Filed Dec. 22, 1927. Serial No. 241,783. 8 Claims. (Cl. 242—68.)



3. A device for rigidly supporting the end of a web roll for newspaper printing presses comprising a shank adapted to enter the spool of said web roll and having a depression on the outer end thereof, a supporting center for engaging said depression, and a cap surrounding and supporting said supporting center and secured to said shank.

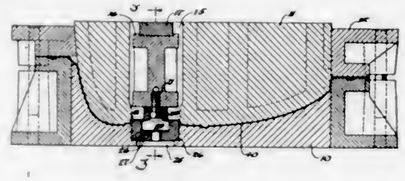
1,861,647. STRIKE AND BALL INDICATOR. ARTHUR T. SWANSON, Los Angeles, Calif. Filed May 14, 1930. Serial No. 452,311. 1 Claim. (Cl. 235—90.)

A breast plate for a base-ball umpire including a cross-strip having strap parts to meet and fasten at the back, a pair of spaced upright panels at opposite ends of the cross-strip and connected by a top, front cross-member, back straps at the upper ends of the panels; one of the panels having a set of three individually settable rods



with respective projective signal heads to indicate a "ball" count, and the other panel having a set of two, headed rods separately operative to show "strike" counts.

1,861,648. DIE AND PUNCH. JAMES VEHKO, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed Dec. 15, 1927. Serial No. 240,128. 13 Claims. (Cl. 113—42.)

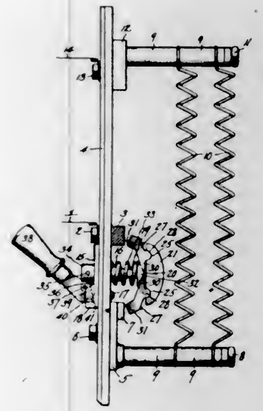


1. In combination with a pair of dies adapted to bend and flow sheet metal to shape under pressure, piercing means carried by one of said dies, said piercing means being positioned to engage said sheet metal in the region of flow and having relieved cutting edges adapted to shear through succeeding high tension areas in said sheet metal during the drawing interval to relieve deforming tension therein during advance of said dies.

2. A metal drawing process suitable for use in the production of non-circular offsets, such as those of parallel-edged reveals for windows in panels of vehicle bodies, characterized by the fact that during the drawing of said offsets, a plurality of cuts are progressively formed within the area defined by said offsets but spaced therefrom.

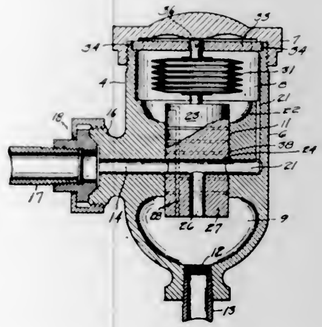
1,861,649. TOGGLE SWITCH. JOSEPH WACHTER, Newark, N. J., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J., a Corporation of New Jersey. Filed Aug. 8, 1930. Serial No. 473,876. 20 Claims. (Cl. 200—163.)

1. In a toggle switch, the combination with a switchboard and a rod reciprocably mounted therein on an axis normal thereto, of a pair of spaced contacts arranged on opposite sides of the reciprocatory axis of said rod, contact levers pivotally mounted on said rod, said contact levers comprising contact arms movable into and out of contact with said spaced contacts respectively, and pressure arms, means interposed between said switchboard and the pressure arms for yieldably holding said contact



levers away from said spaced contacts, and means including said yieldable holding means for reciprocating said rod.

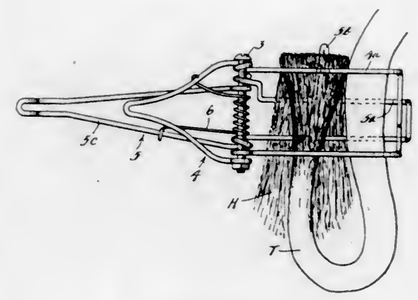
1,861,650. STEAM RADIATOR TRAP. CHARLES R. WATTS, Berkeley, Calif., assignor of one-third to Edward L. Watts and one-third to Charles R. Watts, jr., Berkeley, Calif. Filed Apr. 23, 1928. Serial No. 272,101. 4 Claims. (Cl. 236—56.)



1. In a trap for condensate of a steam radiator or the like, a body providing a passage for the flow of the condensate through and from the trap and a by-pass of said passage arranged to receive steam from the radiator, a piston valve interposed in said passage and by-pass, the piston having openings providing portions of said passage and by-pass, and temperature operated means in said by-pass for controlling the fluid flow through the passage and by-pass.

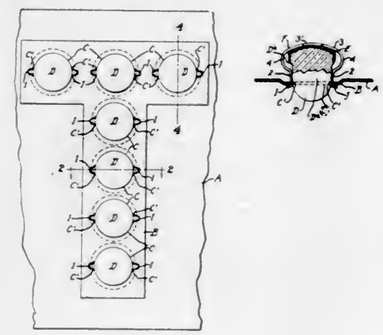
1,861,651. HOLDER FOR COWS' TAILS. CAESAR L. WILSON, Dassel, Minn. Filed May 7, 1931. Serial No. 535,579. 4 Claims. (Cl. 119—105.)

1. A holder for cows' tails comprising, a pair of jaw members pivoted together, resilient means urging said jaw members toward each other and an upwardly projecting spike formed on one of said jaw members whereby



a cow's tail may be looped and placed between said jaw members with the fringe of the cow's tail forced over said spike.

1,861,652. FASTENING DEVICE. STEPHEN S. ADAMS, St. Louis, Mo. Filed Jan. 10, 1931. Serial No. 507,806. 7 Claims. (Cl. 40—130.)

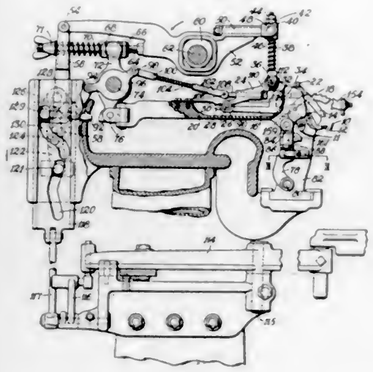


1. A device for fastening a light-reflecting element in place at an opening in a wall of a sign comprising a yoke-like element including leg portions and a bridge portion, and outwardly extended gripping portions arranged at the outer ends of said leg portions, said leg portions being adapted to be extended through said opening in said wall of said sign in a manner to cause said outwardly extended gripping portions to contact with the face of said wall of said sign, and said bridge portion being adapted to engage said light-reflecting element in a manner to secure same in place.

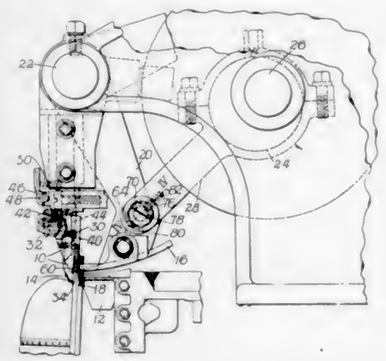
1,861,653. MACHINE FOR OPERATING ON STITCH-DOWN SHOES. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 1, 1931, Serial No. 541,234, and in Great Britain June 17, 1930. 29 Claims. (Cl. 12—6.)

1. In a machine for operating on stitch-down shoes, the combination of means for crowding the upper into the angle between the side of the last and the projecting mar-

gin of the sole, a member for engaging the upper in said angle, means for operating said member to force it toward the upper and to move it rearwardly to tension the upper outwardly of the shoe, and means for securing the upper and sole together while the upper is so tensioned.



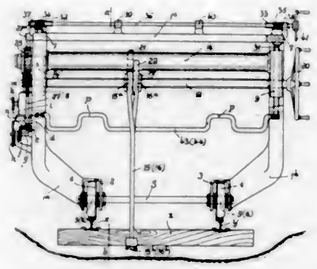
1,861,654. ROUNDING AND CHANNELING MACHINE. ADELORD BOURGEOIS, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 19, 1930. Serial No. 483,034. 13 Claims. (Cl. 12—18.)



1. In a machine for trimming the soles of shoes, in combination, a movable trimming knife, a cutting block, and a second cutting block movable to and from a position between the first cutting block and the knife to co-operate with said knife in lieu of the first cutting block, said knife being adjustable to cut against one cutting block when operating upon one class of work and to cut against the other cutting block when operating upon another class of work.

1,861,655. MACHINE FOR AUTOMATICALLY TAMPING UNDERNEATH RAILWAY-SLEEPERS DURING THE FINISHING OF THE PERMANENT WAY. ROBERT BROSIG, Hollabrunn, Austria. Filed Oct. 2, 1930, Serial No. 485,898, and in Austria Oct. 23, 1929. 7 Claims. (Cl. 104—12.)

1. Machine for automatically tamping underneath railway-sleepers during the finishing of the permanent way, comprising in combination a frame, slides vertically movable in said frame, a screw-threaded adjusting shaft and a flat operating bar mounted in said slides, a screw-threaded sleeve on said shaft, and tampers engaging said sleeve, for the purpose specified.



1,861,656. PROCESS FOR PRODUCING BERYLLIUM METAL. HARRY C. CLAFLIN, Cleveland, Ohio, assignor to Beryllium Development Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 3, 1931. Serial No. 506,498. 16 Claims. (Cl. 204—19.)

1. The process of preparing a bath for the electrolytic isolation of beryllium comprising condensing beryllium chloride vapor by passing it into a molten bath.

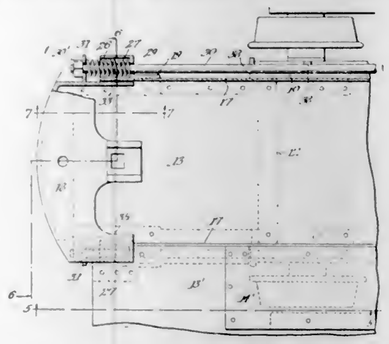
1,861,657. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed July 7, 1931. Serial No. 549,185. 13 Claims. (Cl. 12—128.4.)



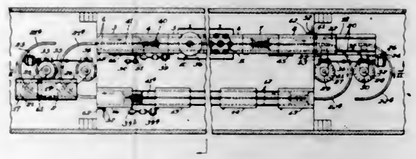
1. A shoe form comprising a toe form having a hollow body portion, the side walls of which terminate in ball flanges, a cross brace, one end of which is pivotally secured to one of said flanges while the other end is movable relative to the other flange to expand or contract the body portion, and spring means carried by the cross brace and engaging the edge of a ball flange to hold the cross brace normally in a predetermined position.

1,861,658. COMBINATION SPRING BUMPER AND DRAWBAR. GLENN E. EDMUNDS, Columbus, Ohio, assignor to The Bonney-Floyd Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 21, 1928. Serial No. 271,842. 4 Claims. (Cl. 213—221.)

1. In a mine car, a pair of end bumpers, a bumper supporting bracket fixedly positioned on the car adjacent each end of and adapted to directly support a bumper, said brackets and bumper having slidably interfitting parts adapted to guide the bumper, spring interposed between fixed parts of the bumper and brackets for limiting movement of the bumper toward the brackets, spring means for limiting movement of the bumper away from the brackets, rigid stop means operative upon over-compression of either of said spring means to limit positively movement of the bumper, each of said brackets comprising a casting having an integral spring housing and top and bottom floor supporting webs laterally directed and connected by a body web, said bumpers and brackets being disposed at both ends of the car and bars extending longitudinally of the car connecting the bumpers.



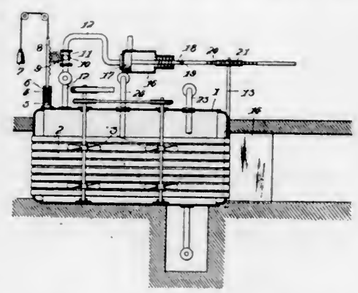
1,861,659. CAR TRANSFER APPARATUS. JOHN H. FOX, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Jan. 21, 1930. Serial No. 422,432. 8 Claims. (Cl. 104—18.)



1. The combination with a pair of parallel tracks adapted to carry a series of cars or tables, a transfer car at the ends of said tracks provided with a track and mounted for movement transversely of said parallel tracks, so that in one position the track on the transfer car is in alignment with one of said parallel tracks and in another position is in alignement with the other of said parallel tracks, an electric motor for moving the transfer car back and forth between said positions, a shifting member on the transfer car track, an electric motor for moving the shifting member back and forth, means for moving the cars on one of said parallel tracks continuously toward the end thereof adjacent the transfer car, and control means, including a control motor, a rotating switch device operated thereby, and a switch for starting the control motor when the end member of the moving cars approaches the end of its track, for automatically transferring said end car from the end of its track to the end of the other parallel track, said transfer including the forward movement of the shifting member to coupling engagement with the end car, the reverse movement of the shifting member to carry said end car onto the track of the transfer car, the movement of the transfer car to position with its track in alignment with the other parallel track, and the movement of the shifting member forward to push the end car onto such other track.

1,861,660. APPARATUS FOR HEATING FEED WATER FOR A STEAM BOILER. SOJIRO HAGA, Tokyo, Japan. Filed July 27, 1926, Serial No. 125,279, and in Japan Dec. 23, 1925. 1 Claim. (Cl. 122—421.)

An apparatus for heating feed water for steam boiler, comprising a vessel having a number of fire tubes adapted to be disposed in the off-take flue to a boiler, pressure regulating means for maintaining such a pressure in the vessel that the waste gases passing through the vessel will cause the water substantially to boil and stirring mean to cause the heat absorbed from the waste gases to be uniformly distributed through the water contained by the vessel, said means comprising a spring-actuated piston opposing the steam pressure in the vessel, a steam discharge conduit from the vessel, a valve normally closing the conduit, gearing between said valve and said piston, a damper in the waste gas passage and a second piston in said conduit having gearing connection with the damper.

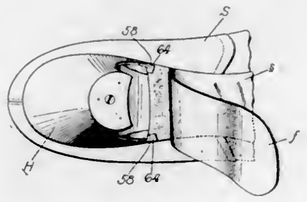


1,861,661. CHILD'S BOUNCER. FRED HUERLIN, Spokane, Wash., assignor of one-half to Marion L. Huerlin, Spokane, Wash. Filed July 27, 1929. Serial No. 381,576. 2 Claims. (Cl. 155—17.)



1. In a child's platform bouncer, a platform of sufficient area to permit the user to sit or dispose his body lengthwise thereupon and having all its lateral edge portions free and accessible therefor, base members adapted to rest upon the floor, and supporting springs interposed between said members and platform and floatingly sustaining said platform at a low elevation from the floor for unrestrained tilting and yielding movement either vertically or in any lateral direction.

1,861,662. HEEL AND METHOD OF MAKING THE SAME. NORWOOD H. KNOWLTON, Rockport, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 25, 1930. Serial No. 470,664. 25 Claims. (Cl. 36—24.5.)



24. A shoe comprising a sole, a heel having marginal grooves extending one along each lateral margin of its breast face at the upper portion only of the heel and having relieved breast surfaces adjacent to the inner side

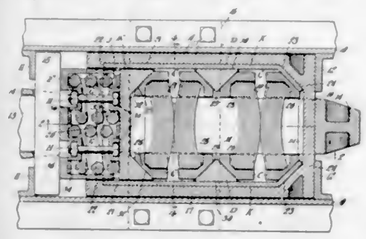
walls of the grooves, a covering for the rear and sides of the heel having lateral margins tucked into said breast grooves, and a flap formed integral with the sole of the shoe and covering the portion of the heel breast between said grooves, said flap having marginal portions countersunk upon said relieved breast surfaces.

1,861,663. LAMINATED PLASTIC MATERIAL. FRANK T. LAHEY, Monroe, N. Y. Filed Aug. 27, 1929. Serial No. 388,715. 4 Claims. (Cl. 154—2.)



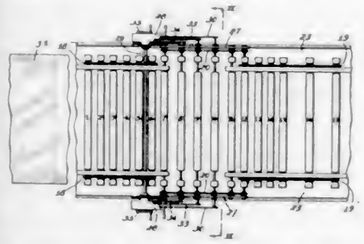
1. An article of manufacture comprising in combination a plurality of superposed plies of differently colored fiber and rubber composition, the material of each ply extending through perforations of another, said plies being bonded together and vulcanized in place.

1,861,664. FRICTION SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 7, 1929, Serial No. 397,846. Renewed Nov. 6, 1931. 5 Claims. (Cl. 213—24.)



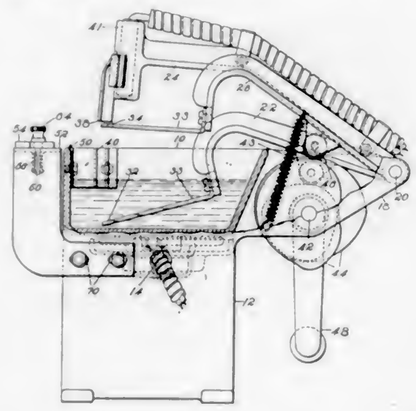
1. In a friction shock absorbing mechanism, the combination with a casing; of combined cushioning and friction means in the casing including a movable follower element; a second follower element adapted to receive the actuating force; a spring interposed between said first and second named follower elements; means for anchoring said follower elements to each other to limit relative separation thereof; and removable retaining elements having shouldered engagement with the casing and said second named follower element for connecting the latter to the casing and limiting outward movement thereof.

1,861,665. ROLLER RUNWAY FOR SHEET GLASS. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Sept. 12, 1930. Serial No. 481,430. 4 Claims. (Cl. 198—127.)



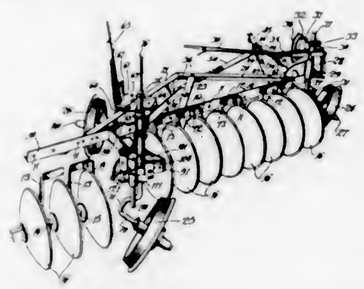
2. In combination in a roller runway, a plurality of spaced rolls fixed against longitudinal movement, a plurality of adjustable rolls disposed therebetween and means for adjusting the rolls to provide a greater space at one side thereof than the other.

1,861,666. COATING APPARATUS. EUGENE J. RAY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 9, 1930. Serial No. 451,151. 25 Claims. (Cl. 91—47.)



1. A coating apparatus comprising a receptacle for a coating substance, a pair of applying members movable into and out of said receptacle and arranged for contact with opposite sides of the work, and means for moving the members into and out of the substance constructed and arranged to hold the members separated from each other while within the coating substance in the receptacle and in the position out of the receptacle then to move them into contact with an interposed piece of work.

1,861,667. DISK CULTIVATOR OR PLOW. JOHN P. SEAHOLM, Moline, Ill., assignor to Minneapolis-Moline Power Implement Company, Moline, Ill., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,081. 4 Claims. (Cl. 97—53.)

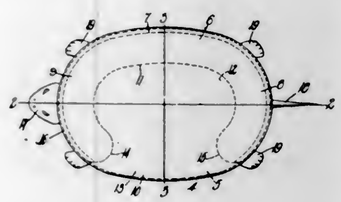


1. A plow having a frame, a plurality of disks mounted on said frame to rotate in unison about a common axis, a front furrow wheel, a hand wheel and a rear furrow wheel for said frame, said rear furrow wheel being journaled on an axle having a vertical portion swiveled in a bearing, and a frame member having an arcuate portion on which said bearing is adjustably mounted.

1,861,668. PILLOW. FRANK E. TENNEY, Bridgewater, Mass. Filed Mar. 30, 1931. Serial No. 526,165. 2 Claims. (Cl. 5—337.)

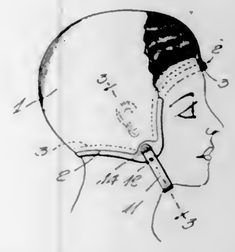
1. A pillow having, in combination, an elliptical base of stiff material, an upwardly and inwardly projecting arcuate flange extending around one side and the opposite

ends of said base, the upper inner edge of said flange forming an elliptical aperture with an opening at one side thereof extending outwardly and downwardly there-



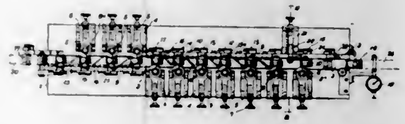
from to said base, and a covering of flexible sheet material enclosing said base, flange aperture and opening and forming an air chamber therewithin.

1,861,669. HEAD COVERING. MELVIN E. VAN SICKLE, Toronto, Ontario, Canada. Filed Apr. 1, 1931. Serial No. 526,931. 1 Claim. (Cl. 2—68.)



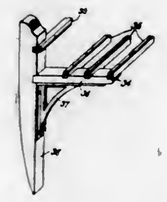
A head covering comprising a hood of flexible rubber having its margins externally thickened to form a reinforcing bead, and a strip of sponge rubber extending about marginal portions of said hood and firmly secured in close watertight engagement with the inner face thereof, said strip being of greater width than thickness and extending from the margin of the hood to a point well above the upper edge of said bead and being rectangular in cross section and having its edge faces and exposed side face glazed to provide a smooth imperforate waterproof surface.

1,861,670. DEVICE FOR THE WORKING OF METAL BANDS, ESPECIALLY LINES, FOR TYPOGRAPHIC PURPOSES. JOHANNES WAGNER, Berlin-neu-Tempelhof, and WALTER KROSTEWITZ, Berlin-Hohenschonhausen, Germany. Filed Aug. 27, 1930, Serial No. 478,268, and in Germany Sept. 3, 1929. 5 Claims. (Cl. 90—24.)



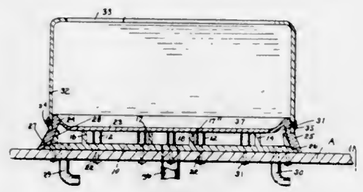
1. A device of the character and for the purpose described, comprising, in combination with two lateral members and base guide ledges forming together a guide path for a metal band, and with knives extending into said path at both sides thereof, yielding means so arranged as to be adapted to hold said band in the said path, means for exerting a pulling action on said band, and transmitting members inserted between the last-mentioned means and the front end of the said band.

1,861,671. SELF SERVICE STORE. DAVID W. WEBB, New York, N. Y. Filed Sept. 26, 1928. Serial No. 308,893. 3 Claims. (Cl. 20—1.7.)



1. A basket slide for self-service stores comprising a plurality of base members each having mounted thereon a bracket, and a rail support secured to said bracket, a plurality of slide rails secured to said rail support, and a guide rail secured to said base members above said rail supports.

1,861,672. AUTOMOBILE COOKER. SIDNEY H. WHISNER, Los Angeles, Calif. Filed Oct. 25, 1930. Serial No. 491,177. 7 Claims. (Cl. 126—20.)

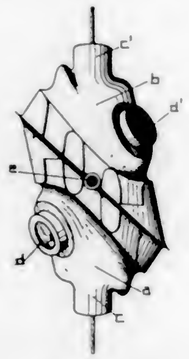


1. As a new article of manufacture, a cooker consisting of a hot plate, an air chamber and cover extending therearound and thereabove, and open at its top, a base supporting the hot plate and providing an intervening chamber, a cruciform-shaped hot-gas diffuser arranged centrally in the intervening chamber and contacting the hot plate, means conducting hot gases centrally of and into the diffuser, means whereby the hot gases escape from the diffuser, externally thereof, there being a marginal free path for the conveyance of the escaping gases to a point of discharge at the ends of the intervening chamber.

1,861,673. PROCESS FOR MOLDING AN INDIA RUBBER GAS MASK. DIRK FRANS WILHELMI, Heveadorp, the Netherlands, assignor to Naamlooze Vennootschap Vereenigde Nederlandsche Rubberfabrieken, Heveadorp, the Netherlands, a Company of the Netherlands. Filed June 23, 1927, Serial No. 200,955, and in France Aug. 11, 1926. 1 Claim. (Cl. 18—56.)

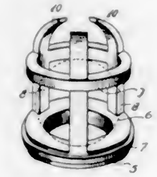
A process for molding and vulcanizing gas masks and the like articles having protruding parts with non-parallel axes, characterized by the following steps, first, forming the material to be vulcanized over a flexible core, the outer form of which corresponds with the inner profile of the article slightly diminished; second, placing the combined core and material into a stiff outer mold, the inner profile of which corresponds with the outer profile of the article; third, applying pressure to the inside, thereby causing the flexible core to be dilated, so that the core with its material is pressed with all the non-parallel and non-coaxial protruding parts into the corresponding

recesses of the outer mold; fourth, vulcanizing the material while distended in the mold by using the necessary temperature; fifth, diminishing the pressure, thereby



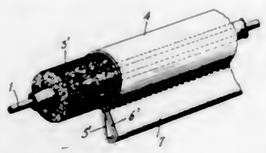
causing the core to draw back out of the outer mold permitting its removal, and finally removing the now vulcanized article from the outer mold.

1,861,674. CASING FOR BALL VALVES. ADOLF WINTERHOFF, Dusseldorf, Germany. Filed Jan. 23, 1929, Serial No. 334,481, and in Germany Feb. 1, 1928. 4 Claims. (Cl. 251—121.)



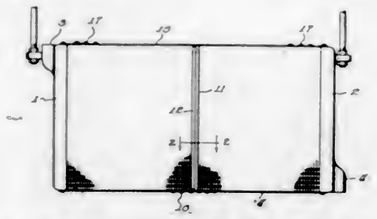
1. A casing for ball valves, comprising a number of ribs arranged round the ball, a valve seat, a ring connecting the ribs with one another at about three-quarters of their height, and claw-shaped parts of the ribs projecting beyond the ring and being bent inwards to a radius of curvature less than that of the ball, all these parts consisting of indiarubber.

1,861,675. FLEXIBLE ELECTRICAL MOLDING. HARRY WOLFSON and FRANK GERSTEIN, New York, and HARRY GERSTEIN, Arverne, N. Y. Filed Nov. 6, 1926. Serial No. 146,758. 1 Claim. (Cl. 173—264.)



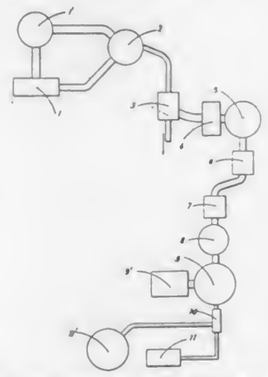
In an article of manufacture comprising a wire, an insulating hair covering surrounding said wire, said hair covering forming a core, a fabric cover surrounding the hair core and terminating in flaps, said flaps being stitched together to retain said fabric covering around the insulated hair core and wire and to form a flap portion, said flap portion being flexible to permit of folding upon itself when said body portion is bent around a corner.

1,861,676. HEAT INTERCHANGER. FRED M. YOUNG, Racine, Wis. Filed June 1, 1931. Serial No. 541,153. 7 Claims. (Cl. 257—137.)



1. A heat interchanger comprising a plurality of core sections arranged in series for circulation of a fluid from one section to another, each of said core sections having header plates at their ends, and means for connecting together adjacent plates to provide an intermediate compartment whereby a sealed communication is provided between core sections, header tanks at the distant ends of said core sections, and side plates connecting said header tanks, each of said side plates comprising separate elements having an expansion joint therebetween.

1,861,677. PROCESS FOR OBTAINING CONCENTRATED VITAMIN PREPARATIONS. LEVON ARAKEL AGOPIAN, Paris, France. Filed Mar. 1, 1927, Serial No. 171,881, and in France Sept. 20, 1926. 1 Claim. (Cl. 167—81.)

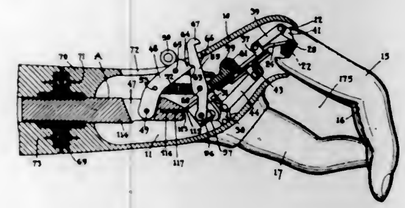


The process of obtaining vitamine A, the antixerophthalmic or lipo-soluble factor, which comprises mechanically separating the juices of green vegetables, finely crushing the residue from said mechanical separation mixing said crushed residue with said juices, precipitating the mixture of residue and juices by the addition thereto of a reagent containing lead acetate, drying the precipitated material in vacuo at the temperature of about 50° C., crushing the dried material into the form of powder, extracting said material by repeated washing with petroleum ether, concentrating the extract in vacuo, filtrating said concentrated extract, evaporating the petroleum ether from the filtrate, and finally rectifying the product resulting from this evaporation by means of methyl alcohol, all of said operations being carried out in the absence of oxygen.

1,861,678. ARTIFICIAL HAND. JUSTUS WILHELM BAEHR, Minneapolis, Minn. Filed Sept. 26, 1929. Serial No. 395,373. 6 Claims. (Cl. 3—12.)

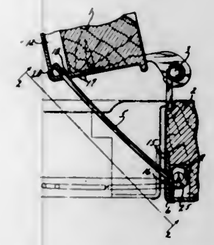
1. An artificial hand comprising a frame, fingers articulated thereon, an actuating member for moving said

fingers, a lever pivoted to said frame and engaging said actuating member for moving the same, an arm pivoted to said frame and having a draw cord attached thereto,



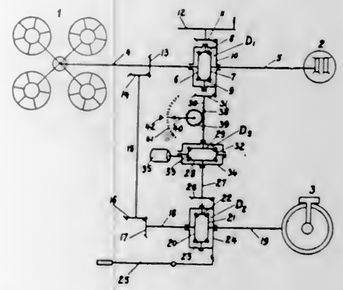
means on said arm for locking said member from movement, and means on said arm for engaging said lever to move the same to operate said actuating member.

1,861,679. DOORCHECK. ALBERT B. BEITMAN, Cleveland Heights, Ohio. Filed Sept. 19, 1930. Serial No. 482,998. 3 Claims. (Cl. 16—82.)



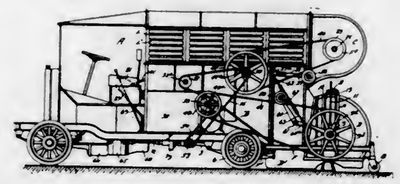
1. A door check for limiting the swinging movement of a door relative to the door frame to which it is hinged, comprising a wire member having one of its ends adapted for connection to said door and the other of its ends adapted for connection to the door frame, one of said ends being coiled to provide resiliency for cushioning purposes, and a cover of yielding material for said cushioning coil.

1,861,680. DEVICE FOR ACOUSTICALLY DETECTING AND TRACING AIRCRAFT. HENRI LUGLIEN MARIE JOSEPH BENARD and ANDRÉ JULES MARCELIN, Paris, France. Filed July 24, 1930, Serial No. 470,487, and in France Apr. 17, 1930. 5 Claims. (Cl. 235—61.5.)



1. A combined optical and acoustic detecting device comprising a listening-in device, an optic detecting device, a receiver shaft, a connection whereby the listening in device controls the optic detecting device, means for actuating the optic device independently of the listening-in device, a resistant device against which the said independent actuation is effected and adapted to store energy up thereby, means whereby the data given out by the optic device are transmitted through this resistant device to the receiver shaft, means for synchronizing when desired the receiver shaft with the listener-in device and means for returning the whole arrangement to its original position.

1,861,681. STREET SWEEPING APPARATUS. EDWARD T. BIRDSALL, Cleveland, Ohio, assignor to The Butler Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 26, 1924, Serial No. 715,881. Renewed Apr. 6, 1931. 10 Claims. (Cl. 15—11.)



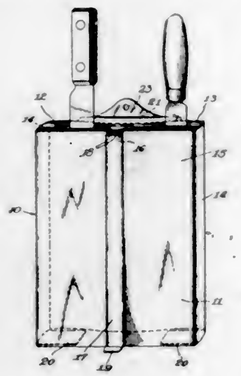
1. In a street-sweeping machine, the combination, with a chassis having driving wheels, of an engine on said chassis, a shaft driven by said engine, means including a clutch and transmission gearing for operating the driving wheels from the said shaft, a housing on said chassis, a broom carried by the chassis and arranged to sweep refuse into said housing, air-moving means in said housing, a shaft additional to the first shaft, driving connections between the second shaft and the said broom and air-moving means, and connections for driving the second shaft from the first shaft, the said connections being arranged in front of the clutch and transmission gearing whereby the broom and the air-moving means may be operated irrespective of the movements of the said machine.

1,861,682. MEANS FOR INCREASING THE ACOUSTIC QUALITIES OF VIOLINS. CLARENCE BONEWITZ, Dayton, Ohio. Filed Dec. 31, 1931. Serial No. 584,073. 3 Claims. (Cl. 84—271.)



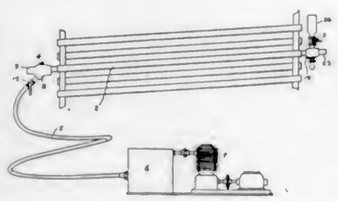
1. In a violin comprising a case having a top, strings stretched over the latter, said top formed with a longitudinal opening in its waist portion, beneath the strings, an inverted vibratory channel rib secured in said opening, and a bridge piece for the strings, having a recessed middle portion to straddle the rib whose sides are free to yield in response to the vibrations of the strings.

1,861,683. KNIFE HOLDER AND SHARPENER. LE ROY P. BRANCH, Evanston, Ill., assignor of one-half to Albert G. McCaleb, Evanston, Ill. Filed May 25, 1928. Serial No. 280,524. 6 Claims. (Cl. 51—211.)



1. In a knife holder, the combination of a metal container of substantially rectangular cross-section having open ends and a pair of flanges extending into one end, with a plurality of sheets of non-abrading material resting on said flanges, one of the walls of said container being bowed inwardly to resiliently engage said sheets, said container having a slit and means for releasably securing said container about said sheets.

1,861,684. METHOD AND APPARATUS FOR TESTING HOLLOW ARTICLES. BYRON S. DAGUE, Annapolis, Md. Filed Nov. 29, 1927. Serial No. 236,489. 22 Claims. (Cl. 70—51.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In the method of testing hollow articles the steps of placing an impact medium in such article in an amount proportionate to, but less than, the volume of the cavity in said article; sealing said article; and subjecting said medium to an impact.

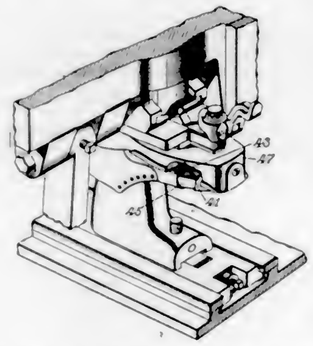
1,861,685. DETERGENT COMPOSITION AND PROCESS OF MAKING THE SAME. LOUIS T. BUSSLER, Ashton, Md. Filed Oct. 6, 1926. Serial No. 139,955. 34 Claims. (Cl. 87—5.)

4. A detergent composition comprising amino-fatty acids and gelatinous material including the reaction products of acetin on cellulose.

13. A detergent composition comprising amino-fatty acids, gelatinous material including gelatinized cellulose, gelatinized starch and the reaction products of an alkali metal sesqui-carbonate and a tri-alkali metal phosphate on a fatty acid glycerid.

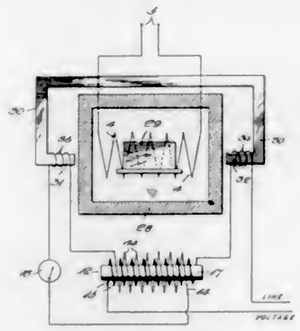
29. The herein described process of preparing a detergent comprising subjecting a cellulose and protein containing vegetable seed material to the action of a cellulose gelatinizing agent, adding protein matter thereto, reacting upon the material to transform the protein matter into amino-fatty acids and mixing the resulting mass with the reaction product resulting from the reaction of a fatty acid glycerid with an alkali metal sesqui-carbonate and a tri-alkali metal phosphate.

1,861,686. METHOD OF INCORPORATING SOCK LININGS IN SHOES. JAMES CAVANAGH, Cohasset, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Oct. 14, 1925, Serial No. 62,487. Divided and this application filed Feb. 14, 1930. Serial No. 428,542. 2 Claims. (Cl. 12—142.)



1. The method of incorporating sock linings in shoes which comprises coating the inner face of an insole with rubber latex cement, allowing the coating to dry until it is non-tacky, employing the insole in the manufacture of a shoe in any suitable manner, coating the under face of a sock lining with rubber latex cement, allowing the coating to dry until it is non-tacky, inserting the sock lining in the shoe with its coated face in contact with the coated face of the insole, and pressing it into place.

1,861,687. MAGNETIC CONTROL SYSTEM. WILLIAM B. COOLEY, Milwaukee, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Sept. 3, 1929, Serial No. 390,162. Divided and this application filed Dec. 3, 1930. Serial No. 505,862. 5 Claims. (Cl. 13—20.)



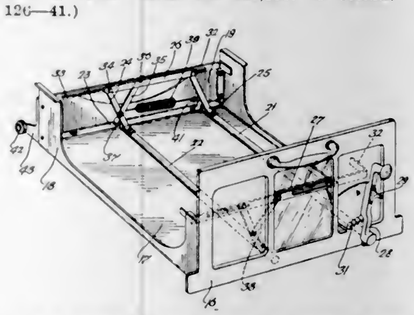
1. A furnace comprising a chamber adapted to receive a charge, a heating element in said chamber, a source of electric current, a primary and secondary coil having a common core of material of high permeability, an air gap in the magnetic circuit so disposed that the lines of force pass through the charge within said chamber, and means responsive to inductive effects of the primary coil and connected with said secondary coil for indicating the magnetic properties of said charge during the heating process.

1,861,688. FLY SWATTER. CARMI R. CRAWFORD, Chicago, Ill., assignor to Arthur C. Prince, Chicago, Ill. Filed Jan. 7, 1929. Serial No. 330,822. 9 Claims. (Cl. 43—135.)



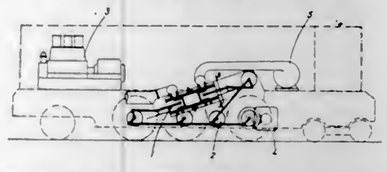
9. In combination in a fly swatter, a handle including a loop of resilient wire, a striking element pivotally mounted on said handle, motive means for driving the striking element, and a lug carried by the striking element having a shoulder engageable with the loop of said handle to restrain the striking element against movement, said loop being deformable under the grasping pressure of the operator to release the striking element for movement under the influence of the motive means.

1,861,689. BROILER. CLAUDE M. DIBBLE and ISAIAH S. HOLLOWAY, Joliet, Ill., assignors to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Nov. 3, 1930. Serial No. 492,888. 5 Claims. (Cl. 126—41.)



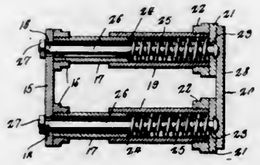
1. In a broiler, a pan supporting member, a pair of arcuately swinging arms swinging in the same direction and having pin and slot connection to said pan supporting member and adapted to raise and lower the same, and a compensating device associated with said arms for confining the movement of said pan supporting member to a straight vertical line.

1,861,690. APPLICATION OF DIESEL ENGINES TO THE DRIVE OF LOCOMOTIVES. HENRI FONTY, Paris, France. Filed May 5, 1930, Serial No. 450,003, and in France Mar. 29, 1930. 2 Claims. (Cl. 105—62.)



1. The application of Diesel engines with pistons working in opposite directions, to the direct drive of the axles of locomotives, the engine cylinders being located obliquely with respect to the plane of the engine axles and attached to the longitudinal girders of the engine frame, one of the oppositely moving pistons operating directly on a cranked axle of the locomotive, and the other on a crank-shaft jointed to a connecting-rod, which drives a loose axle coupled to the driving axles of the locomotive.

1,861,691. AUTOMOBILE BUMPER. WILLIAM J. GABEL, Great Falls, Mont., assignor of fifty per cent to John S. Bretz, Great Falls, Mont. Filed June 12, 1931. Serial No. 543,985. 2 Claims. (Cl. 293—55.)



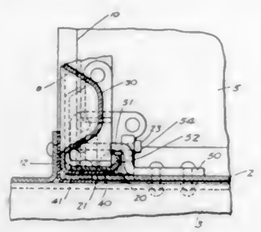
1. An automobile bumper comprising an attaching plate having openings therein and threaded socket members surrounding said openings, a bumper bar spaced from the attaching plate and having openings corresponding in position to the openings of said plate, threaded socket members surrounding the bumper bar openings, telescoped tubular members disposed between the plate and bar and threaded respectively into the sockets of said plate and bar, springs within the tubular members, and bolts disposed through the tubular members and springs, one end of each of the bolts being held by the bumper bar while the other end is slidably disposed through the plate opening.

1,861,692. BALANCE INDICATOR FOR AIRPLANES. CARL JOHN HENRY GERDES, Hasbrouck Heights, N. J. Filed Feb. 14, 1928. Serial No. 254,279. 7 Claims. (Cl. 33—220.)



3. An inclinometer for airplanes comprising a circular casing having a tangential air funnel opening thereinto and having an air outlet, a spindle extending into the casing and carrying a windwheel formed with peripheral blades against which the wind from said funnel strikes, an anti-friction support for the spindle holding the spindle at right angles to the windwheel, and a pendulum operatively connected to the lower end of the spindle for rotation therewith, said pendulum being adapted to swing in a plurality of planes with relation to the spindle, and a dial over which said pendulum moves.

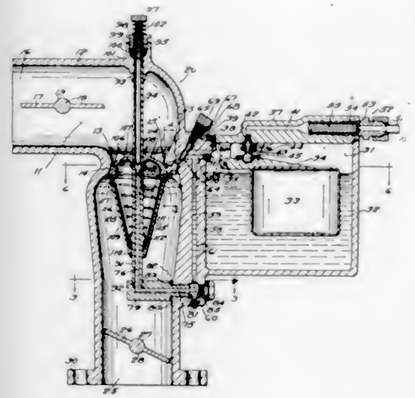
1,861,693. RAILWAY CAR. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 3, 1931. Serial No. 560,892. 9 Claims. (Cl. 105—406.)



1. In a railway car, the combination of a drop end gate pivotally attached to the car adjacent its lower margin, and a member secured to the car body which is positioned above a part of said gate so as to restrict the upward movement of the gate when in upright position.

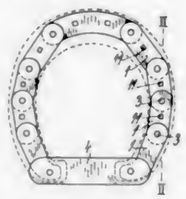
2. In a railway car, the combination of a drop end gate pivotally attached to the car adjacent its lower margin, a car part engageable with said gate when in upright position to restrict the forward movement of the gate, and a member secured to the car body which is positioned above a part of said gate so as to restrict the upward movement of the gate when in upright position.

1,861,694. CARBURETOR. DONALD F. GINDELE, Cincinnati, Ohio. Filed May 1, 1931. Serial No. 534,318. 5 Claims. (Cl. 261—44.)



1. In a carburetor, the combination of an air passage having a constricted portion, the wall of said air passage at said constricted portion provided with a valve seat, a by-pass air passage at the side of said valve seat, a fuel feed tube in said first-named air passage, an automatic air valve surrounding said fuel feed tube and co-acting with said valve seat, a fuel feed port in said by-pass air passage at the side of said valve seat and a fuel feed port in said fuel feed tube, said last-named fuel feed port being in said constricted portion of said first-named air passage and normally closed by said automatic air valve, said automatic air valve controlling the feed of fuel through both said fuel feed ports by its relatively open and closed positions with relation to said valve seat, and said automatic air valve arranged to be automatically opened by suction in said first-named air passage.

1,861,695. ELASTIC HORSESHOE WITH METAL REENFORCEMENTS. PETER HARSEM, Oslo, Norway, assignor to Imperator Hestesko Aktieselskap, Tonsberg, Norway. Filed May 11, 1931, Serial No. 536,606, and in Norway Dec. 24, 1930. 1 Claim. (Cl. 168—12.)

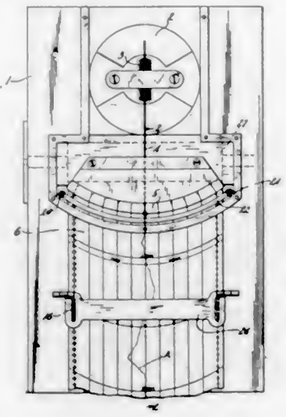


A metal reinforcement construction for horseshoes of elastic material, comprising a number of channel-formed sections linked to other sections by means allowing transverse but not vertical bending of the shoe, said channel members being molded into the rubber and being provided with apertures in the lower web adapted to receive the head of the horseshoe nail, and smaller corresponding apertures in the upper web serving to guide and support the shank of the said nail.

1,861,696. COMPOSITION FOR THE TAKING OF X-RAYS. PHILIP E. HARTH, St. Louis, Mo., assignor to National Pigments & Chemical Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 29, 1929. Serial No. 359,178. 2 Claims. (Cl. 167—50.)

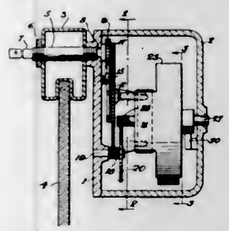
1. A composition for the taking of X-rays, comprising, barium sulphate and a small percentage of a concentrated colloidal clay containing a high percentage of colloidal material.

1,861,697. MEASURING AND RECORDING INSTRUMENT. ROBERT D. HICKOK and WARNER H. RENNICK, Cleveland, Ohio. Filed May 29, 1929. Serial No. 366,938. 1 Claim. (Cl. 234—5.5.)



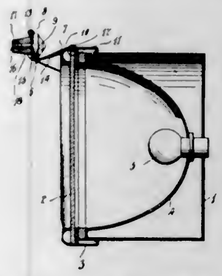
In a delicate measuring and recording instrument, including means for moving a record sheet and a movable indicating and recording pointer of relatively light weight and slightly resilient; operating means for said pointer including a source of power arranged to apply thereto a moving effect no more than sufficient to move it freely through a gaseous medium, said pointer having a stylus portion freely movable in the air, said record sheet being out of contact with the stylus and having a surface which is removable to produce a legible trace, and means normally out of contact with the pointer and arranged to yieldably engage the same at intervals to lightly apply the stylus to the record sheet to abrade its surface and produce a legible trace thereon.

1,861,698. WINDSHIELD CLEANER. ERWIN C. HORTON, Hamburg, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Aug. 24, 1926. Serial No. 131,190. 4 Claims. (Cl. 172—36.)



2. An electric windshield cleaner comprising a supporting body member having spaced brackets, a transmission mechanism arranged on said body member, an electric motor comprising a stator provided with a bearing and supported by the said brackets, a rotor mounted at one end in said bearing and having a pinion integral therewith, removably connected to and driving said transmission mechanism, and a housing provided with a bearing for journaling the other end of the rotor, said housing enclosing both the motor and transmission mechanism and being removably mounted on said supporting body.

1,861,699. TELLTALE FOR AUTOMOBILE HEADLIGHTS. HJALMAR F. INGWARSON, Gerber, Calif. Filed Feb. 7, 1931. Serial No. 514,296. 1 Claim. (Cl. 240—8.4.)



A telltale for an automobile headlight, comprising a member adapted to be secured to the upper side of the headlight with a portion thereof extending forwardly from the headlight and provided with an opening located to permit some of the rays of the headlight to pass therethrough, a second member extending upwardly from the front end of said first member in advance of said opening, a prismatic member carried by the rear side of said second member and forwardly of said opening for illumination by the headlight rays passing through said opening, and means carried by said prismatic member and extending through said second member for removably securing said prismatic member to said second member.

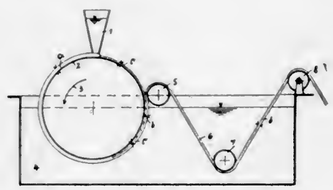
1,861,700. CONNECTER FOR BRACELETS. SYLVESTER A. JOHNSON, North Providence, R. I., assignor to Albert E. R. Speidel, Edgewood, R. I. Filed Dec. 17, 1930. Serial No. 503,023. 4 Claims. (Cl. 24—71.)

1. In a flexible bracelet, two flexible strap parts, a rigid section hingedly related at its ends to the strap parts to permit folding over one strap part and under another strap part, and a hook member hingedly mounted on one of said flexible strap parts spaced from the hinge



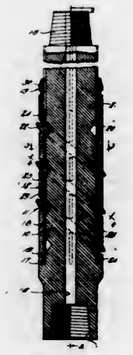
connection and adjacent the end of said section when in folded position to swing thereover and hold the same in folded position.

1,861,701. MANUFACTURING FILMS AND THE LIKE FROM CELLULOSE SOLUTIONS. MAX KÖNIG, Bomlitz, near Walsrode, Germany. Filed July 17, 1930, Serial No. 468,708, and in Germany July 22, 1929. 5 Claims. (Cl. 18—57.)



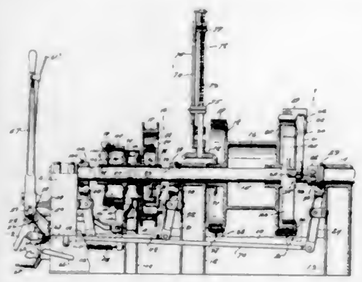
1. The method of manufacturing films and other sheet-like materials from cellulose compounds and other coagulable liquids which comprises applying a layer of a solution of said compounds and liquids onto a carrier, superficially coagulating said layer to a certain thickness, detaching the coagulated portion from the uncoagulated portion of the layer and applying fresh quantities of the solution and liquids to the uncongulated portion and congulating and solidifying additional superficial portions of the resulting ribbon-like layer.

1,861,702. REAMER. VAN J. KUBIN, Brea, Calif., assignor to Chiksan Oil Tool Co., Limited, Fullerton, Calif., a Corporation of Nevada. Filed Aug. 25, 1930. Serial No. 477,628. 13 Claims. (Cl. 255—73.)



4. A well tool of the character described including, a body having a plurality of contiguous spherically rounded parts, and cutters mounted on the rounded parts to rotate in planes tilted relative to the axis of the body.

1,861,703. HOISTING ENGINE. ISHMAEL W. MACY, Gallon, Ohio, assignor to The Gallon Iron Works & Mfg. Co., Gallon, Ohio, a Corporation of Ohio. Filed May 1, 1928. Serial No. 274,320. 12 Claims. (Cl. 254—185.)



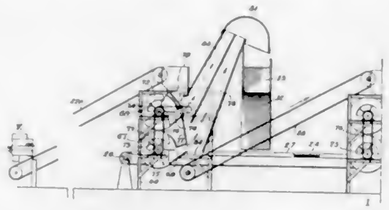
1. A hoisting mechanism including a power operated shaft, a hoisting drum loose thereon, a brake urged into braking engagement with the drum, a clutch for operatively connecting the drum to the shaft and including a member shiftable into or out of clutching position, and resilient means urging the brake to applied position and the clutch to release position, a single manually controlled means for shifting the clutch member into operative position and simultaneously releasing the brake against the action of the resilient means, a latch adapted to hold the clutch in its clutching position against the action of the brake urging means, said latch being manually releasable, and means for automatically releasing the latch to permit the application of the brake by the urging means when the object being hoisted has reached a predetermined position.

1,861,704. PANTS OR OVERALL BOTTOM. WILLIAM C. MANKE, Tracy, Minn. Filed May 5, 1931. Serial No. 535,235. 1 Claim. (Cl. 2—227.)



A bifurcated garment of the character described having an opening cut in the bottoms thereof in the form of an inverted V having the apex at the front and extending, when viewing the garment in side elevation, beyond the longitudinal center thereof, fastening means extending throughout the edges of said opening for drawing the said edges together to close the opening tightly about the ankle of a wearer, and tabs constituting extensions of portions of said means, projecting beyond the bottom edges of said opening for facilitating manually holding of the edges while said fastening means is being operated.

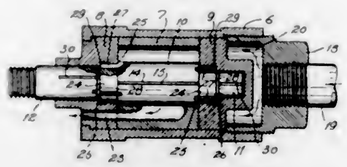
1,861,705. METHOD OF STEMMING AND CLEANING TOBACCO. CHARLES GREEN MAXWELL, Richmond, Va., assignor to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 2, 1928. Serial No. 309,761. 19 Claims. (Cl. 131—57.)



1. The method of stripping tobacco, which comprises subjecting the leaves to the successive action of a series of disintegrators, dropping the disintegrated leaves from a higher to a lower level between each successive disintegrator, and directing a blast of air from below, through the falling leaves in a generally upward direction to directly remove the detached lamina from the circulation immediately following each distintegrating operation.

3. Apparatus for stripping tobacco, comprising a series of alternating and successively operating disintegrators and blowers, the blowers having means to discharge the lighter particles directly from the circulation by a blast of air directed from beneath said particles, said blowers being arranged in pairs between at least two of the successively operating disintegrators, each blower being double, each including a pair of fans one above the other, a chute for each fan spaced apart from the outlet thereof, each blower having an inlet for directing the falling leaves between the fan outlets and the chutes and across the path of the blasts of air.

1,861,706. ROTARY MOTOR. ROBERT C. MCCRACKEN, St. Louis, Mo., assignor of forty one-hundredths to Charles M. Clarke, St. Louis, Mo. Filed Oct. 8, 1927. Serial No. 224,833. 5 Claims. (Cl. 121—84.)



1. A rotary motor comprising a cylinder provided with inlet and exhaust ports and axially alined bearings, a rotor journaled in said bearings, and a vane carried by said rotor and engaging the interior wall of said cylinder, the peripheral surfaces of the journal portions of said rotor being provided with circumferentially spaced longitudinally extending grooves which extend inwardly beyond the inner ends of said bearings far enough to communicate directly with the chamber of said cylinder.

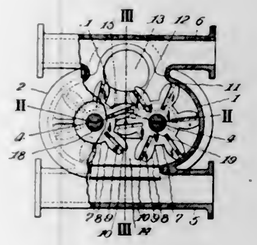
1,861,707. RADIOFREQUENCY AMPLIFYING SYSTEM. WILLIAM K. MCIVER, Elgin, Ill., assignor to Benjamin Electric Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 20, 1927. Serial No. 162,275. 2 Claims. (Cl. 179—171.)

1. A tuned radio frequency amplifying system comprising means for coupling the plate circuit of one tube with the grid circuit of a suceeding tube and equalizing the transfer of energy between said circuits at all frequencies, said grid circuit having manually adjustable tuning means, said equalizing means comprising a condenser having adjusting means for varying the overlap of the opposing plates and having adjusting means for varying the distance between opposing plates, and means whereby



manual adjustment of said tuning means will automatically cause adjustment of one of the adjusting means of the equalizing condenser to equalize the transfer of energy at all frequencies.

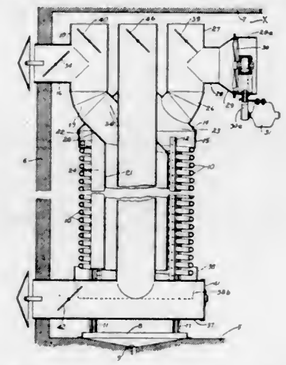
1,861,708. ROTARY PUMP. NOBUYA MIKI, Tennoji-Ku, Osaka-Shi, Japan. Filed Nov. 19, 1930, Serial No. 496,727, and in Japan Dec. 19, 1929. 3 Claims. (Cl. 103—126.)



1. A rotary pump of a kind in which a pair of similar parallel rotors having intermeshing tooth blades are mounted in a casing having covers in its opposite ends, the walls of which cooperate to confine the pumping fluid to the spaces between the tooth blades of the rotors, in which each tooth blade of the rotors is formed at its end faces with radial grooves extending inwardly from its apex to points a little beyond its base, and on the apex with an axial groove extending through its length to establish a communication between the radial grooves, and each cover is formed at its inner wall with a cavity which is arranged independently between delivery space of the pump and the plane including axes of the rotors and near the said plane, with its wings extending around substantially a half part of the circumference of shafts of the rotors at the delivery space side up to points a little beyond the said plane towards suction space side of the pump, so as to communicate with the inner end portion of the radial grooves of tooth blades opposite the cavity.

1,861,709. VENTILATING, REFRIGERATING, AND DEHUMIDIFYING APPLIANCE. CHARLES A. MOORE, Edina, Minn. Filed Aug. 9, 1930. Serial No. 474,284. 7 Claims. (Cl. 257—18.)

1. The combination with a structure forming a chamber, of an appliance therein comprising an upright refrigerated conduit, a second upright conduit within the first conduit, partition means between said conduits forming therebetween two upright passageways communicating at their upper ends with the upper portion of the chamber, the second conduit being in communication at its upper end with the outer atmosphere, a third upright conduit within said first conduit opening at its upper end into the upper portion of the chamber and at the lower end thereof into the outer atmosphere, and means for impelling air upwardly through one of the passageways into the upper portion of the chamber, the action of such air



impelling means serving to draw air into the said passageway from the lower end of said second conduit and similarly from the other passageway.

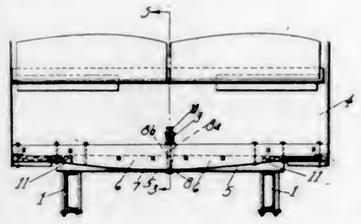
1,861,710. REFRIGERATING AND VENTILATING APPLIANCE. CHARLES A. MOORE, Edina, Minn. Filed Sept. 12, 1930, Serial No. 481,427. Renewed Oct. 24, 1931. 18 Claims. (Cl. 62—134.)

1. The combination with a structure forming a chamber, of an upright appliance located at one end of said chamber medially thereof, said appliance comprising three concentric conduits, each consisting of a refrigerant conducting pipe coiled closely turn upon turn, the inner conduit communicating at its lower end with the lower portion of the intermediate conduit, the outer conduit communicating at its lower end with the lower portion of the chamber, means for forcing air from the outer atmosphere downwardly through said inner conduit, and means for drawing air upwardly through the intermediate and outer conduits and mixing and blowing it into the upper portion of the chamber longitudinally medially thereof.

1,861,711. MATERIAL AND PROCESS FOR NEUTRALIZING ACIDS IN OILS. HENRY H. MORETON, Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to Charles F. Craig, Los Angeles, Calif. Filed Oct. 8, 1928. Serial No. 311,245. 7 Claims. (Cl. 196—41.)

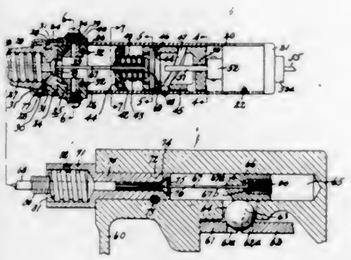
1. A material for neutralizing acid in oil which has been subjected to acid treatment comprising powdered non-absorbent silica, the particles of which are coated with caustic soda.

1,861,712. VEHICLE AND METHOD OF MOUNTING BODIES ON CHASSIS. JAMES MORRISON, Cincinnati, Ohio, assignor to The Highland Body Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 5, 1927. Serial No. 189,138. 2 Claims. (Cl. 296—35.)



1. In combination with the chassis of a motor truck, the front and rear pairs of wheels supporting said chassis, a cab for the truck having its front end rigidly mounted on the chassis close to the front pair of wheels where twisting of the chassis due to variations of its support by said wheels is negligible, a rocker mounting for the back of said cab on a part of said chassis intermediate of said front and rear pairs of wheels where said twisting of said chassis is appreciable, said rocker mounting comprising a transverse element on the chassis and a transverse element on the lower part of the back of said cab having a longitudinally convex lower surface bearing against the upper surface of the element on the chassis, whereby said elements have a rolling contact with each other, so that upon said twisting of the chassis the structure of the cab is relieved of strain with a minimum of vibration of said cab relative to said chassis.

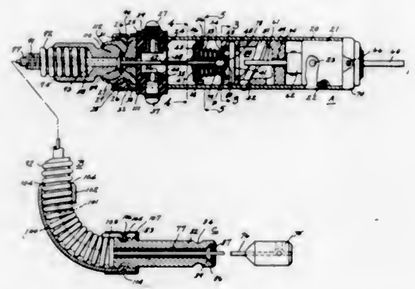
1,861,713. COINCIDENTAL LOCK. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,136. 10 Claims. (Cl. 70—127.)



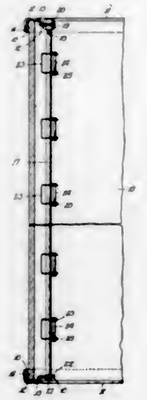
1. In a coincidental lock for automotive vehicles, the combination of a tubular case, a key controlled device movable endwise within the case, stationary switch contacts insulatingly supported within the case, a bridging contact moved into and out of engagement with the stationary contacts by the key controlled device, and a spring transmitting pressure from the device for yieldingly maintaining the bridging contact in engagement with the other contacts.

1,861,714. COINCIDENTAL LOCK. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 5, 1929. Serial No. 330,668. 9 Claims. (Cl. 70—127.)

1. In a coincidental lock for automotive vehicles, the combination of a tubular case, a key controlled device movable endwise within the case, stationary switch contacts insulatingly supported within the case, a bridging contact moved into and out of engagement with the stationary contacts by the key controlled device, and a spring transmitting pressure from the device for yieldingly maintaining the bridging contact in engagement with the other contacts, while in engagement therewith.



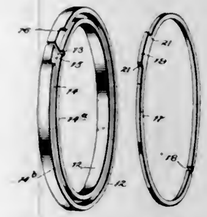
1,861,715. LIQUID LEVEL INDICATING MEANS. WALTER HERBERT PARKER, Rochester, Pa., assignor, by mesne assignments, to The Wayne Pump Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 27, 1926. Serial No. 137,936. 9 Claims. (Cl. 73—166.)



4. In a device of the character described, the combination of a measuring chamber having at least a part thereof transparent, a supporting member, fixed with respect to said chamber, measuring means visibly associated within said chamber, said means having spaced markers secured to said member, said markers having aligned indicating means and independent apertures for receiving fluid, said apertures being aligned with said indicating means for determining the fluid level.

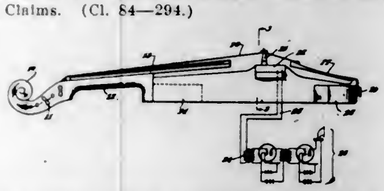
1,861,716. PISTON RING. ALEXANDER P. PETRE, Baltimore, Md., assignor to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 20, 1930. Serial No. 503,843. 6 Claims. (Cl. 74—109.)

1. A piston ring comprising a split ring having a groove between its inner and outer faces, and extending entirely around the ring, the outer wall of said groove being cut away at the ring joint; and a split insert ring seated



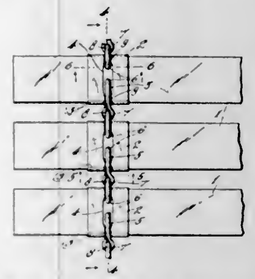
in said groove, and having a peripheral lug projecting into the cut-away portion of the wall of said groove, said lug bridging the joint in the grooved ring.

1,861,717. MUSICAL INSTRUMENT. VICTOR A. PFEIL, Buffalo, N. Y. Filed Oct. 22, 1928. Serial No. 313,978. 12 Claims. (Cl. 84—294.)



1. A stringed musical instrument comprising a plurality of strings, means at either end of the strings for securing the same, means for tensioning the strings, a bridge adapted to contact with the strings intermediate the securing means, an electro-magnetic pick-up disposed beneath the bridge, and an armature mounted upon the bridge and operably associated with said pick-up.

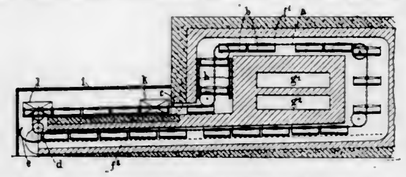
1,861,718. SLAT SHADE. HENRY W. PRATT, Jersey City, N. J., assignor to William H. Lutton Company, a Corporation of New Jersey. Filed Aug. 22, 1931. Serial No. 558,711. 7 Claims. (Cl. 156—16.)



1. A slat shade comprising a plurality of parallel wooden slats, links for hingedly connecting adjacent slats, and a protective sheath secured to said slats at the areas where said links engage the slats to shield the slats against injury from said links.

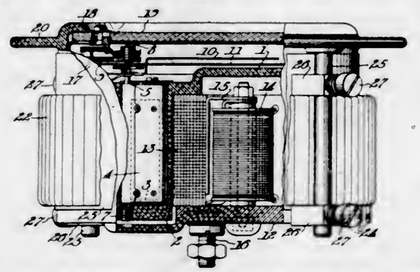
1,861,719. BAKER'S OVEN AND THE LIKE. EDWARD PROCTER, London, England. Filed Oct. 25, 1928. Serial No. 315,080, and in Great Britain Nov. 14, 1927. 3 Claims. (Cl. 107—57.)

1. A baker's oven comprising a structure having a main part and a lateral extension thereof with an inlet doorway to the main part and an outlet doorway from the extension, a flexible conveyor carrying a plurality of trays arranged thereon in separate groups said main part and lateral extension enclosing all of the conveyor with the exception of a portion corresponding in length to that occupied by a group of trays whereby one group may always be disposed outside the oven between the outlet and inlet doorways while the other groups are



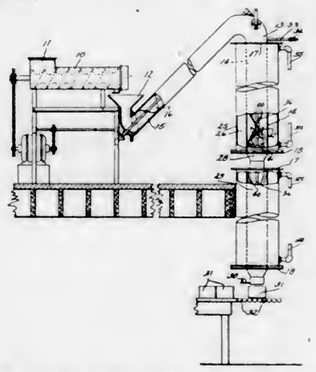
disposed within the oven and said extension, and means for intermittently moving the conveyor whereby at each movement the newly loaded group of trays is caused to enter the oven and the group of trays within the extension is caused to take the place of the last mentioned group.

1,861,720. ELECTRICAL MEASURING INSTRUMENT. BURCHARD P. ROMAIN, Newark, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed May 19, 1931. Serial No. 538,563. 7 Claims. (Cl. 171—95.)



3. In an electrical measuring instrument, the combination with a non-metallic casing and a moving system of the iron vane type within said casing, of a field winding within and a field winding outside of said casing for cooperation with said moving system.

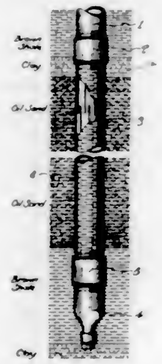
1,861,721. CHEESE TREATING METHOD AND APPARATUS. HENRY MURRAY SCOTT, Sweetwater, Tenn. Filed Aug. 9, 1929. Serial No. 384,578. 6 Claims. (Cl. 99—2.)



1. Cheese treating apparatus, comprising the combination of a vertically disposed receiving chamber having an open lower end and means for feeding cheese into its

upper end in finely divided form, said chamber being provided with downwardly feeding means, upwardly feeding means and inwardly feeding means, each means cooperative with the others for mixing and regulating the flow of the cheese through the chamber, and a jacket for said chamber, spaced therefrom and provided with valved connections for delivering heating fluid therethrough.

1,861,722. OIL WELL STRAINER. HAROLD EDWIN SEARLE, Jersey City, N. J., assignor, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 24, 1927. Serial No. 228,242. 9 Claims. (Cl. 166—5.)



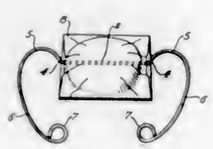
1. In a device for separating liquids from solids, the combination of a tube of relatively thick metal having elongated slots therein, and a cylindrical sheath of relatively thin metal having a smooth inner surface contiguous with and fitting about said tube and having elongated perforations at an acute angle to and in overlapping relation with the slots in said tube, one side of said perforations being wider than the other side thereof, said perforations and said slots being adapted to overlap irrespective of the relative positions of the sheath and tube.

1,861,723. BRAKING APPARATUS FOR TRAILER VEHICLES. HEINRICH SEELEKE, Bremen, Germany. Filed Oct. 24, 1928. Serial No. 314,835, and in Germany Sept. 9, 1927. 6 Claims. (Cl. 188—112.)



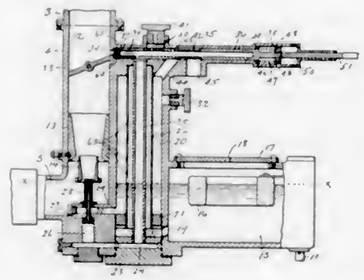
2. Braking apparatus for trailer vehicles, consisting of braking elements on the wheels of the trailer, a turntable for the front axle of the trailer, a forked, double-armed lever pivoted to two different points on the turntable, a forked pole pivotally connected with one end of the forked lever, a second lever pivoted to the other end of the forked lever, tensile members connecting the said second lever with the braking elements of the wheels, and a cable attached to the free end of the lever and leading to a vehicle in front of the trailer.

1,861,724. RAILWAY TORPEDO. HARRY E. SHERMAN, Alton, Ill., assignor to The Equitable Powder Manufacturing Company, East Alton, Ill., a Corporation of Delaware. Filed Jan. 18, 1932. Serial No. 587,205. (5 Claims. (Cl. 246—487.)



1. A railway signal torpedo, comprising, an explosive tablet, and means for securing the same to a rail including a pair of spring arms outwardly bowed and having blunt ends engageable with the under side of the rail head, said arms being formed to force said ends upwardly against the rail head.

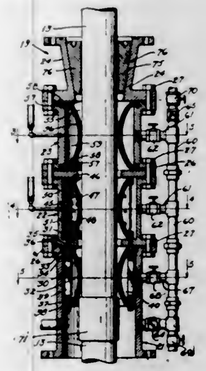
1,861,725. AUTOMATIC FUEL REGULATOR. CHARLES LAWRENCE STOKES, Los Angeles, Calif., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed Oct. 19, 1926. Serial No. 142,761. 8 Claims. (Cl. 123—125.)



1. In a carburetor, a mixing chamber, a throttle controlling the outlet from the mixing chamber, a liquid fuel reservoir, a well between the mixing chamber and reservoir divided into two parts and supplied with liquid fuel from the reservoir, a liquid feed passage supplied from the well having its ends discharging into the mixing chamber one on each side of said throttle and a second liquid feed passage supplied from the upper part of the well and discharging into the mixing chamber.

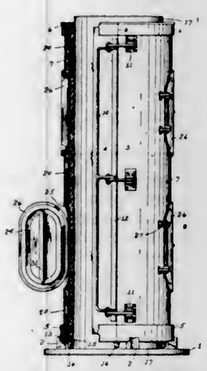
1,861,726. BLOW-OUT PREVENTER. WILLIAM A. TROUT, Los Angeles, Calif., assignor of one-half to Chester A. Rasmussen, Long Beach, Calif. Filed Feb. 16, 1927. Serial No. 168,547. Renewed Nov. 18, 1931. 11 Claims. (Cl. 166—14.)

3. A blowout preventer for use on an oil well in which subterranean pressure exists, for maintaining a seal between an outer casing and an inner casing having couplings of larger diameter than the inner casing sections and for permitting the removal or installation of the inner casing without losing control of the well, said blowout preventer comprising: a body adapted to be connected to said outer casing, said body providing a passage through which said inner casing extends, said passage being large enough to allow said couplings of said inner casing to pass therethrough; and sealing means including a resilient annular packer member extending into said passage and forming a seal around said inner casing, said annular packer member having both the upper and lower ends thereof sealed against subterranean pressure passing upwardly between the inner and outer casing, said annular



packer member communicating with a source of pressure whereby to cause the inner surface thereof to be resiliently and automatically engaged with the inner casing.

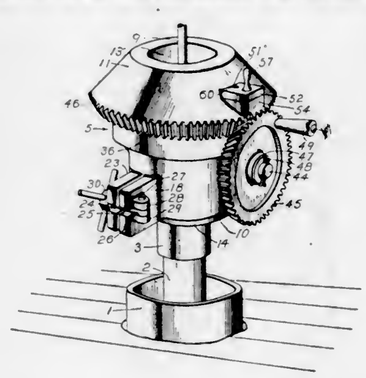
1,861,727. APPARATUS FOR MAKING CONCRETE PIPE. OSCAR TUERCK, Portland, Oreg., assignor to Tuerck-MacKenzie Company, Portland, Oreg., a Corporation of Oregon. Filed Oct. 22, 1928. Serial No. 314,071. 2 Claims. (Cl. 25—126.)



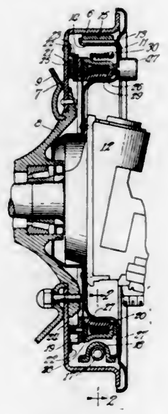
2. In apparatus for forming concrete pipe, a cylindrical mold-jacket having an opening in its side wall, a core in said jacket providing a mold-space therebetween, a longitudinally directed ridge upon the interior surface of the jacket extending into said mold-space, a door closing said opening, and a substantially elliptical ridge upon said door arranged symmetrically with respect to said longitudinal ridge extending into said mold-space.

1,861,728. SUCKER ROD WRENCH DEVICE. JOSEPH A. VANCE and DAVID M. HAMMETT, Tulsa, Okla. Filed May 21, 1928. Serial No. 279,554. 6 Claims. (Cl. 255—35.)

1. In a wrench device for support by well tubing having a coupling, a nipple screw-threadedly engaging with the coupling and forming a shoulder therewith, a split bushing engageable with the nipple for support from the shoulder, a tubular body member having a semi-circular depending skirt supported on the bushing, a clamp hingedly engaged with the body member for cooperation with the skirt to clamp the body member to the bushing and engage the bushing with the nipple, a rotatable member, means rotatably supporting the rotatable member from the body member, wrench-retaining means in each of said members, and means for rotating the rotatable member to move the wrench retained thereby in relation to the wrench retained by the other member.



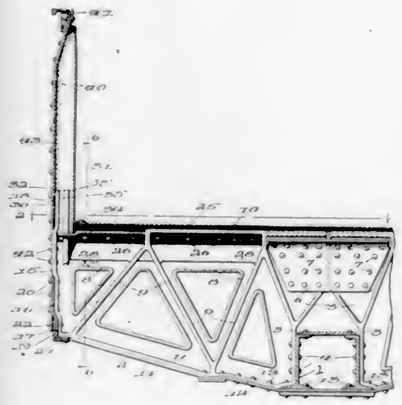
1,861,729. ELECTRIC FRICTION BRAKE. ARTHUR P. WARNER, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Feb. 17, 1930. Serial No. 428,904. 10 Claims. (Cl. 188—140.)



1. In an electric vehicle brake, the combination of a drum rotatable with a wheel of the vehicle, a non-rotatable plate closing the open end of said drum, a pair of annular magnetic rings arranged for axial gripping engagement to determine the degree of braking action applied to said wheel, one of said elements being rotatable with said drum, the other being mounted on said plate for floating axial movement relative to said plate, a magnet winding carried by one of said elements and adapted when energized to produce gripping engagement between the coacting surfaces of the elements, spring means acting on said last mentioned element and normally holding the same out of mechanical contact with said other element, a solenoid magnet mounted exteriorly of said plate and having an armature plunger movable in a direction parallel to the drum axis, said plunger, upon energization of said solenoid, being projected against said

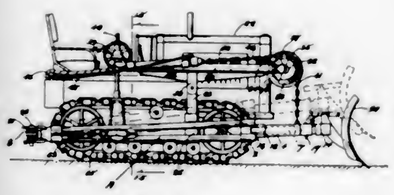
last mentioned magnetic element and acting to move the same into mechanical contact with the rotatable element, and manually operable means for applying energizing current to said winding and said solenoid.

1,861,730. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Mar. 1, 1929, Serial No. 343,698. Renewed Oct. 22, 1931. 13 Claims. (Cl. 105—230.)



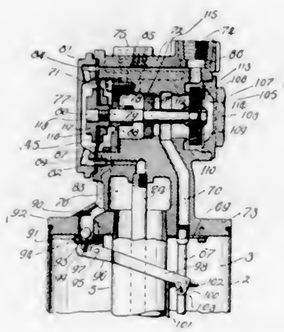
1. A railway car having a cast body bolster integrally formed with a web portion, an inclined top flange and end flanges, each of said end flanges being provided with an inwardly projecting reinforcing rib disposed above said top flange substantially in the plane of said web, the inner edges of said ribs being enlarged and said enlarged portions extending on opposite sides of the said top flange, and side stakes respectively overlappingly secured to the inner face of said end flanges.

1,861,731. MATERIAL MOVING DEVICE. MACK WOOLDRIDGE, Los Angeles, Calif. Filed Apr. 15, 1930. Serial No. 444,424. 12 Claims. (Cl. 37—144.)



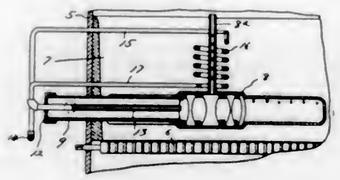
1. In a device of the character disclosed, in combination with a vehicle, a frame surrounding said vehicle and connected with the rear of said vehicle to have a pivotal and tilting movement, a blade connected with the frame, means to elevate the front of the frame and means to tilt the frame transversely.

1,861,732. PUMP. BURTON S. AIKMAN, Milwaukee, Wis., assignor to National Brake & Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 23, 1928. Serial No. 294,912. 22 Claims. (Cl. 103—246.)



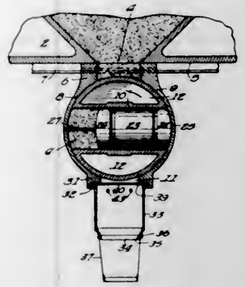
1. In a pneumatic displacement pump having an air discharge passage, the method of preventing the deposit of frost adjacent the air discharge passage of said pump which comprises passing water through said air discharge passage.

1,861,733. MEANS FOR INCREASING THE EFFICIENCY OF GAS BURNERS. CHARLES C. BERG, Detroit, Mich., assigpor of one-half to Michael E. Murray, Detroit, Mich. Filed Feb. 20, 1928. Serial No. 255,531. 9 Claims. (Cl. 158—99.)



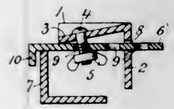
1. In a device of the character described, a gas burner, an inlet pipe for feeding illuminating gas thereto, a nozzle having one extremity extending into said inlet pipe, a tubular coil so arranged above said burner as to be subjected to direct radiant heat therefrom, and connected with the opposite extremity of said nozzle, and means for supplying water to the coil.

1,861,734. RECEPTACLE FILLING APPARATUS. CHRISTIAN N. BERGMANN, Pittsburgh, Pa., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,511. 17 Claims. (Cl. 226—103.)



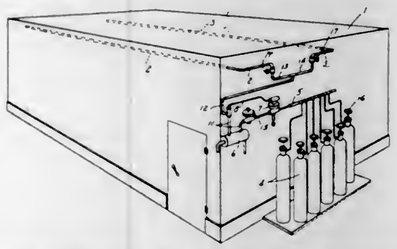
1. In a cup filler, the combination with a unit measuring device having a terminal drip preventing disk, of a surrounding enlarged delivery shell therefor having a lower terminal provided with an annular inwardly tapered lip for engagement within the rim of a receiving receptacle.

1,861,735. BED BOTTOM HANGER MECHANISM. WILLIAM S. BROWN, Carthage, Mo., assignor to Leggett and Platt Spring Bed and Manufacturing Company, Carthage, Mo., a Corporation of Missouri. Original application filed Sept. 24, 1930, Serial No. 484,068. Divided and this application filed Oct. 12, 1931. Serial No. 568,324. 2 Claims. (Cl. 5—209.)



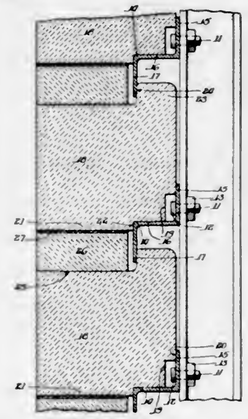
1. In a bed bottom hanger mechanism, a bed bottom angle side bar having a horizontal flange provided with a downwardly extending pin threaded at its lower end, said side bar having a vertical flange having a slot therethrough, a hanger bar adapted to rest on a bed frame and extending through said slot and bearing against the under side of said horizontal flange and having a hole through which said pin is adapted to extend, and a nut mounted on said threaded end below said bar.

1,861,736. MEANS FOR EVAPORATING FUMIGANTS. HUGH G. BERSIE, Wilmette, Ill., assignor to Haskelite Manufacturing Corporation, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,813. 7 Claims. (Cl. 167—3.)



5. The combination with a chamber to be fumigated and a conduit extending into the same to distribute therein a fluid fumigant, of a receptacle for a liquid fumigant whose boiling point is below the dew point of the atmosphere in the chamber and which liquid is under great pressure, a connection between said conduit and said receptacle, two pressure regulating valves in said connection, a heater for the conduit, and means controlled by the temperature of the fluid flowing through said conduit to control one of said valves.

1,861,737. FURNACE WALL STRUCTURE. FRANK B. BIGELOW, Detroit, Mich., assignor to Bigelow-Liptak Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 2, 1931. Serial No. 572,525. 4 Claims. (Cl. 72—101.)



1. In a furnace-wall structure or the like, the combination of upright columns, horizontal rolled metal Z-bars secured to said columns in vertically spaced relation with their upstanding flanges against said columns and their depending flanges spaced inwardly away from said columns, a row of bricks resting on the horizontal web of each of said Z-bars, each such brick having a top projection accommodated back of and bearing against the inner flange of the next Z-bar above, and rows of filler-bricks between and resting on said rows of bricks and positioned in front of the inner flanges of said Z-bars.

1,861,738. CELL CAPABLE OF SHOWING THE KERR EFFECT. THEODORE WILLARD CASE, Auburn, N. Y., assignor to Case Research Laboratory Incorporated, Auburn, N. Y., a Corporation of New York. Filed Mar. 26, 1928. Serial No. 264,622. 6 Claims. (Cl. 88—61.)

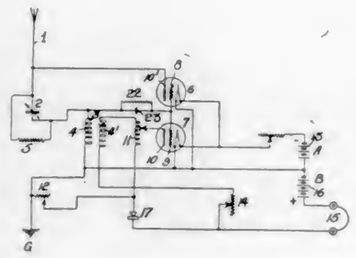


1. In a cell of the Kerr effect type, an electrode member comprising an insulating tube having an enlarged flattened end, a wire sealed in the tube and exposed at the enlarged flattened end, and a thin layer of conductive material secured to the forward flattened end of the tube.

1,861,739. RADIORECEIVER. EARL W. DAVIDSON, Terre Hill, Pa. Filed Jan. 12, 1928. Serial No. 246,160. 5 Claims. (Cl. 250—20.)

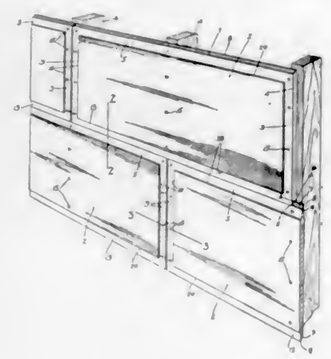
1. A radio receiving circuit comprising the combination with an aerial, a coupler, and an inductance, of a

plurality of electron tubes having the grids thereof connected to one side of the coupler, the plate of one tube connected to the aerial and the plate of the other tube



connected to a tap in said inductance said inductance being connected at one end to the secondary of said coupler and at the other end to the ground and to the output.

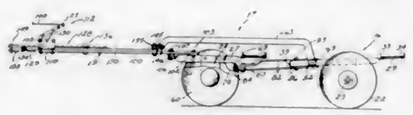
1,861,740. BUILDING CONSTRUCTION. GEORGE H. ELLIS, Minneapolis, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 4, 1931. Serial No. 534,828. 3 Claims. (Cl. 72—124.)



1. A composition board having opposite marginal edge portions recessed from the same face side of the board to reduce said edge portions in thickness and to provide marginal recesses, the width of each recess being relatively greater than its depth, and the marginal recesses of the adjoining edges of contiguous boards cooperating to provide elongated depressions in the surface of the wall so that when plaster is applied, it will be thicker in the regions of the joints between boards, to thereby strengthen the plaster at said joints.

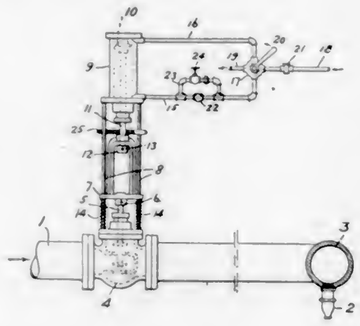
1,861,741. DISK HARROW. SAMUEL S. FURBER, Oxnard, Calif., assignor to Brenneis Manufacturing Company, Oxnard, Calif., a Corporation of California. Filed Apr. 20, 1929. Serial No. 356,832. 15 Claims. (Cl. 55—83.)

1. In an offset disk harrow, the combination: a front frame, disks carried by said frame, a rear frame, disks carried by said frame, means pivotally connecting said frames together, and draft means adapted to be secured to a tractor; said draft means including a linkage con-



nected to one part of the front frame and to the rear frame, and a bar of adjustable length connecting another part of the front frame to said linkage.

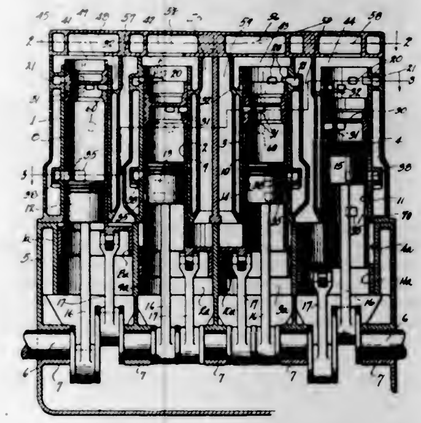
1,861,742. AUTOMATIC TIMING VALVE. CLARENCE S. HAND, Philadelphia, Pa., assignor to United Engineers & Constructors Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 6, 1929. Serial No. 412,108. 2 Claims. (Cl. 137—139.)



1. An automatic timing valve including, in combination, a valve, a pair of guide rods mounted on said valve, a stem in said valve, a member mounted on said stem and guided by said guide rods, a piston, a connection between said piston and said member adapted to afford the piston a range of movement in respect to the member, a cylinder cooperating with said piston, a means for supplying pressure, a means for permitting exhaust of pressure, a control valve connected to said pressure supply means and said exhaust means, an unobstructed connection between said control valve and said cylinder on one side of said piston, and a connection between said control valve and said cylinder on the other side of said piston including a check valve and a by-pass around said check valve including a valve.

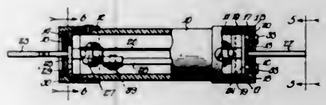
1,861,743. INTERNAL COMBUSTION ENGINE. JOHN B. HIRD, Jr., Seattle, Wash., assignor to Frank R. Pendleton, Everett, Wash. Filed Aug. 26, 1929. Serial No. 388,485. 6 Claims. (Cl. 123—50.)

2. In an engine of the character described, a plurality of power cylinders each with an exhaust port, a compression chamber opening into the upper end of each cylinder and having a fuel inlet port and having a fuel delivery port therefrom into the cylinder, a pump cylinder at the lower end of each power cylinder with a passage connecting it with the compression chamber of another cylinder, a valve piston in each power piston having a closed upper end and an open lower end and formed about its lower end with a pump piston fitted in the corresponding pump cylinder, a combustion chamber in each valve piston having inlet and exhaust ports adapted to register with the fuel delivery and exhaust ports of the power cylinder when the valve piston is at the upper end of its stroke, a crank shaft, a power piston in each valve piston, rods connecting the power pistons with the crank shaft to drive the latter, rods connecting the crank shaft with the valve piston to reciprocate the latter to control the intaking and exhaustion of the fuel charges



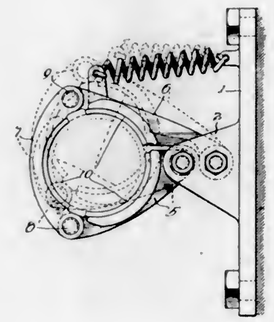
from the cylinder and in such synchronization that the action of each valve piston for the intaking and compression of its fuel charges is augmented by the action of a pump piston of another cylinder and whereby the pump pistons operate to maintain the compression during the delivery of a charge into the combustion chamber.

1,861,744. CARTRIDGE FUSE. CHESTER A. JOHNSON, Chicago, Ill., assignor to Jefferson Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 26, 1927. Serial No. 228,713. 11 Claims. (Cl. 200—131.)



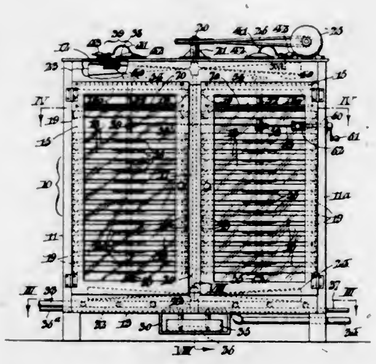
1. A two part renewable cartridge fuse having, in combination, a casing, a head closing one end of said casing provided with a diametrical slot and an eccentric aperture, a rotatable end cap carried by said head having a diametrical slot and a key-hole slot arranged to register with said slot and aperture in said head, an externally screw threaded head on the other end of said casing having a substantially rectangular opening therein, and a terminal blade unit adapted to be mounted in said casing comprising a pair of terminal blades, a fusible link detachably secured therebetween, an insulating bridge section spacing one blade from the other and providing with said blades a substantially rigid unit, a pair of headed pins carried by one blade adapted to engage said aperture and keyhole slot when said blade is inserted in the registering slots in said head and end cap and to be held thereon by engagement between said pins and key hole slots upon rotation of said end cap, an angular ledge on the other blade, an internally screw threaded end cap permanently mounted for rotation on said blade, and a disk slidable on said blade between said ledge and said end cap on said blade, said ledge being adapted to fit snugly within the rectangular opening in said last mentioned head with said disk in abutting relation thereto when said end cap on the blade is screwed onto the externally threaded head.

1,861,745. AUTOMATIC CLAMP. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Oct. 21, 1929. Serial No. 401,157. 3 Claims. (Cl. 81—19.)



1. A clamp comprising a support, a plurality of articulated links having complemental arcuate gripping surfaces and so arranged that in one position they form a substantially complete circle, means for normally moving said links to expand the circle and said links being responsive to the weight of a body positioned therein to move in opposition to said means and contract the circle.

1,861,746. INCUBATOR. JOHN F. MACKAY, Lancaster, Pa. Filed Jan. 7, 1928. Serial No. 245,077. 16 Claims. (Cl. 119—42.)

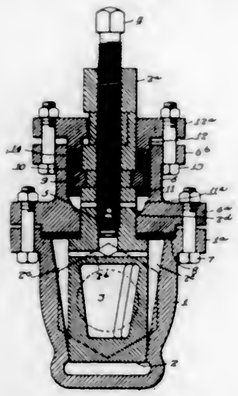


1. An incubator embodying an enclosure to house a multiplicity of egg trays in symmetrically-arranged stationary columns, and reversely-pitched fans operative in planes above and below said columns to gently agitate the air within the enclosure for passage through and about the egg trays to the avoidance of forming air-pockets at the corners of the enclosure.

1,861,747. VALVE. JESSE C. MARTIN, Jr., San Francisco, Calif. Filed Dec. 31, 1927. Serial No. 243,996. 8 Claims. (Cl. 251—93.)

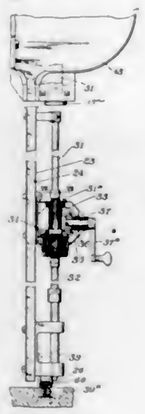
1. In a valve structure the combination of a valve housing and a valve element therefor having an operating

stem, means for normally holding said valve on its seat, a cylinder mounted upon said housing and surrounding



said stem, a piston within said cylinder and secured to said stem, adapted to be acted upon by fluid pressure to lift said valve element from its seat.

1,861,748. DOOR FOR HANGARS AND THE LIKE. EDWARD HARRISON MCCLOUD, Columbus, Ohio, assignor to The Kinnear Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed May 31, 1928. Serial No. 281,702. 5 Claims. (Cl. 20—19.)



1. Means for latching a laterally movable post in door guiding position said means including a shaft composed of two parts vertically alined and having their adjacent ends reversely threaded, a threaded sleeve coupling the adjacent ends of said shaft parts and engaging the threads thereof, means for turning said sleeve to raise or lower the upper shaft part, said upper shaft part adapted to engage a fixed part to prevent lateral movement of said post.

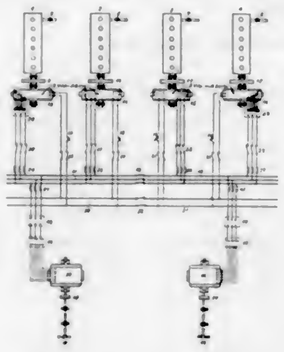
1,861,749. VISIBLE INDEX BINDER. JOHN L. MCMILLAN, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed June 11, 1928. Serial No. 284,448. 7 Claims. (Cl. 129—17.)

5. In a shift binder of the character described having a pair of back members hinged together, and having provisions whereby one back member may shift relative to the other thereof, the combination therewith of means for holding the back members releasably in a selected one



of a plurality of relative hinged positions in all shifted positions of one back member relative to the other thereof, and means under control of the operator for releasing said holding means.

1,861,750. METHOD OF REGULATION OF SHIP-PROPULSION SYSTEMS. GEORG MITZLAFF, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Dec. 13, 1929, Serial No. 413,915, and in Germany Dec. 10, 1928. 2 Claims. (Cl. 172—8.)



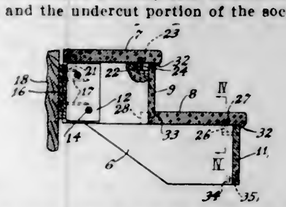
1. The method of speed regulation in a ship-propulsion system comprising a motor supplied with operating power by a plurality of power units each including a prime mover and a generator driven thereby, said method comprising setting the operating units with the respective prime movers thereof fed constantly at substantially their maximum rated fuel supply, and putting the units into and out of operation as required to regulate the speed of operation of the motor.

2. The method of speed regulation in a ship-propulsion system comprising a plurality of power units supplying a motor and each including a prime mover and a generator driven thereby, said method comprising setting the operating units with the respective prime movers thereof fed constantly at substantially their maximum rated fuel supply, putting the units into and out of operation as required for regulation of the speed of operation of the motor in the higher speed range, and changing the pole connections of certain of said generators for regulation of the speed of operation of the motor in the lower speed range.

1,861,751. PREFORMED STEP. WILLIAM LEWELLYN NICOLS, Tuscumbia, Ala. Filed Oct. 5, 1929. Serial No. 397,683. 4 Claims. (Cl. 72—96.)

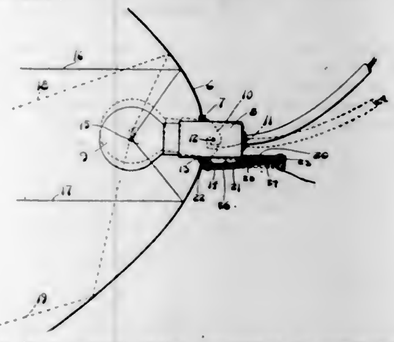
1. Steps comprising stringers molded of fire and weather resistant material and provided with undercut sockets opening through both horizontal and vertical faces of trend supports, and a tread having depending comple-

mental attachment elements adapted to slidably interfit and interlock in said sockets, said attachment elements being bolts and the undercut portion of the socket opening



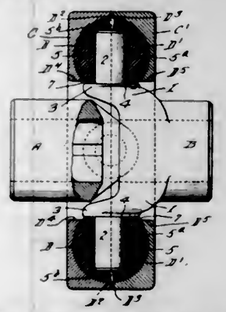
through the front edge of the stringer and enlarged to receive a tool by which the bolts can be engaged and tightened to assemble the treads on the stringers.

1,861,752. LAMP CONTROL DEVICE. CLARENCE L. PATTERSON, Cincinnati, Ohio, assignor to The International Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 14, 1930, Serial No. 444,103. Renewed Apr. 23, 1932. 3 Claims. (Cl. 240—44.2.)



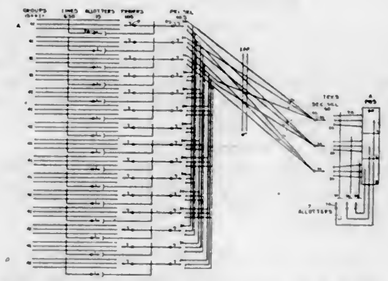
1. A lamp control device comprising in combination with a lamp containing a reflector, and a lamp bulb therein movable to positions into or out of the focal zone of the reflector, a thermostat mounted on a relatively fixed element of the lamp and connected with the bulb, adapted when heated to move the bulb from one of its positions to the other, and means controlling the application of heat to the thermostat, adapted to cause the bulb to be moved when desired.

1,861,753. FLEXIBLE CONNECTION. FREDERICK W. PETERS, Cleveland, Ohio, assignor to The Almetal Universal Joint Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 15, 1928. Serial No. 312,426. 11 Claims. (Cl. 64—102.)



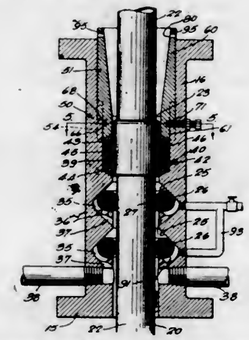
1. A flexible connection comprising driving and driven members each having yoke arms, and trunnions carried by said arms, a connecting ring comprising a pair of annular sections each having partial seats therein adapted, when the said sections are connected, to form complete seats each comprising a chamber closed at its outer end, a bearing block of deformable resilient material surrounding each trunnion and shaped to substantially fit a seat provided therefor in said ring, and means for securing the ring sections together, the parts of said blocks which are so fitted within the seats being normally larger than said seats whereby they are held under compression by the said seats and in tight engagement with their respective trunnions.

1,861,754. CALL DISTRIBUTING TELEPHONE SYSTEM. WINFRED T. POWELL, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 10, 1929. Serial No. 384,943. 22 Claims. (Cl. 179—27.)



1. The method of handling telephone calls which consists in automatically distributing each of a predetermined number of simultaneous calls individually to certain operators and extending each call exceeding said predetermined number to a plurality of operators.

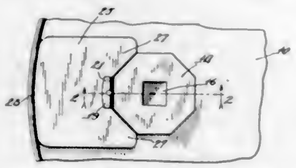
1,861,755. BLOWOUT PREVENTER AND WELL SEALING MEANS. CHESTER A. RASMUSSEN, Long Beach, Calif., assignor of one-half to William A. Trout, Los Angeles, Calif. Filed Jan. 7, 1931. Serial No. 507,104. 10 Claims. (Cl. 166—14.)



1. In a blowout preventer of the character described the combination of: a body connected to the upper end of a well casing; walls forming an opening in said body through which a sectional member connected by couplings is freely passable; a plurality of elastic sealing members contacting said sectional member within said opening, said sealing members being capable of stretching to allow the passage of said couplings therethrough; means for directing the fluid pressure within said casing against said sealing members to force said sealing members into pressural contact with said sectional member; a packing element surrounding said sectional member within said opening and being operable by the weight of

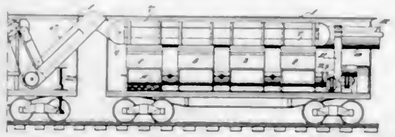
said sectional member thereon to distend into engagement with said sectional member; and means for suspending the weight of said sectional member on said packing element.

1,861,756. BUSHING STRUCTURE. HENRY SCHWARTZ, Chicago, Ill., assignor to Barrel Fitting and Seal Corporation of America, Chicago, Ill., a Corporation of Illinois. Filed June 25, 1928. Serial No. 287,981. 25 Claims. (Cl. 220—39.)



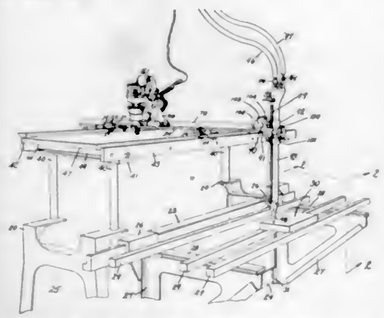
1. The combination with a container having an opening therein, of closure means for said opening, said closure means being characterized thereby that it has an integrally formed weakened portion engaging a removable stop at which a fracture or break occurs upon a displacement of said means.

1,861,757. APPARATUS AND SYSTEM FOR GINNING COTTON. WALTER M. SEELIGSON, San Antonio, Tex. Filed Mar. 10, 1930. Serial No. 434,657. 1 Claim. (Cl. 19—39.)



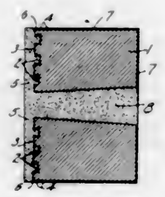
In a railway cotton ginning apparatus, a railway car having cotton cleaning mechanism therein, a second railway car having ginning mechanism therein, and a third railway car having baling mechanism therein, detachable means to connect the cleaning mechanism of the first car to the ginning mechanism of the second car, other detachable means to connect the ginning mechanism of the second car to the baling mechanism of the third car whereby to effect the ginning operations by the successive mechanisms in the successive cars in the recited sequence of steps, a power railway car, and means to operate the cleaning, ginning, and baling mechanisms from the power car.

1,861,758. APPARATUS FOR DIVIDING METAL. LEO C. SHIPPY, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Jan. 24, 1931. Serial No. 510,976. 11 Claims. (Cl. 263—3.)



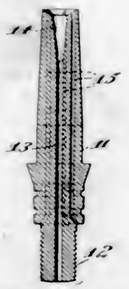
1. Apparatus for dividing metal comprising in combination, a work piece support, a torch for melting the metal along the line of intended separation, a carriage for supporting the torch, a plane table for receiving a template or drawing denoting the manner of dividing the work piece, and means for moving the carriage at a uniform rate relative to a line on the plane table, said means comprising a motor driven wheel for tracking with the drawing or template on the table and a bracket pivotally attached to the carriage and supported by means including also the wheel.

1,861,759. REFRACTORY. GEORGE A. SOPER, Jr., Albany, N. Y. Filed Oct. 29, 1928. Serial No. 315,779. 4 Claims. (Cl. 72—36.)



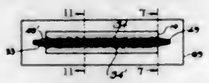
1. A refractory block comprising a body portion of fire clay having a facing of silicon carbide substantially integral therewith; said facing being of substantial thickness over one face of the block but comparatively thin on the faces adjacent the first mentioned face.

1,861,760. PROCESS FOR REMOVING DEFECTS FROM METAL BODIES. CHARLES E. SPIGELMIRE, Sparrows Point, and ROBERT M. WALTERS, Dundalk, Md., assignors to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Dec. 12, 1930. Serial No. 501,898. 3 Claims. (Cl. 148—9.)



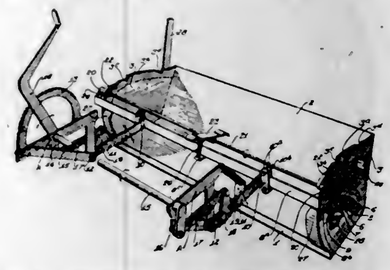
3. In a process for removing seams and like defects from metal, the steps of heating the metal to a kindling temperature and directing oxygen in a flaring stream on to the surface of the heated metal at an inclination to the surface of the metal and in the general direction of the seam.

1,861,761. METHOD OF AND APPARATUS FOR DRAWING GLASS. ARTHUR E. SPINASSE, Mount Vernon, Ohio, assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed May 4, 1922. Serial No. 558,547. 20 Claims. (Cl. 49—17.)



20. In apparatus for drawing sheet glass from a bath of molten glass, a float having long substantially parallel walls forming a slot immersed in the bath for segregating a layer of glass from which to draw the sheet, the walls forming the intermediate portion of the slot being disposed remote from direct shaping contact with the base of the sheet, and the end portions of said walls at the border portions of the sheet being more closely spaced to each other to define an acute angle and contacting with the border faces of the forming sheet above the bath.

1,861,762. FRESNO. ALOYSIUS S. TERHAAR, San Diego, Calif. Filed Aug. 20, 1930. Serial No. 476,627. 9 Claims. (Cl. 37—140.)

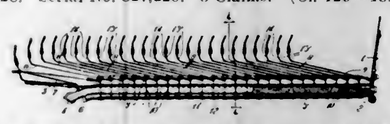


1. In an implement of the class described, a fresno open at its normally upper and forward sides, a yoke means connected to the ends of said fresno, said fresno arcuately shiftable about its points of connection with said yoke means, means for locking said fresno in various positions relative to said yoke means, a draw bar extending forwardly from said yoke means, and mechanism for pivoting said draw bar about its forward end whereby said fresno is elevated or lowered.

1,861,763. PROCESS OF TREATING BRINE. GEORGE N. TERZIEV, Solvay, N. Y., assignor to The Solvay Process Company, Syracuse, N. Y., a Corporation of New York. Filed May 13, 1931. Serial No. 537,223. 14 Claims. (Cl. 23—45.)

1. In a process of purifying brine containing ammonia, the step which comprises treating the brine with a halogen to decompose substantially all the ammonia present therein.

1,861,764. DOCUMENT ASSORTING AND TEMPORARY FILING DEVICE. MATHIAS ANTHONY THOMETZ, Chicago, Ill., assignor to The Kohlhaas Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 20, 1928. Serial No. 327,225. 3 Claims. (Cl. 129—15.)



1. A device of the kind specified, including a series of overlapping flat plates each hinged along its rear edge and having its front and rear edges spaced from the corresponding edges of the plate overlapped thereby, said plates being gravity-held in overlapped relation and surface contact with each other, and an upstanding index-carrying member on the front edge of each plate presenting a cam surface extending upwardly and forwardly of the front edge of the plate and engageable by a finger as the latter is moved in a direction to effect its insertion underneath said plate for effecting raising of the latter.

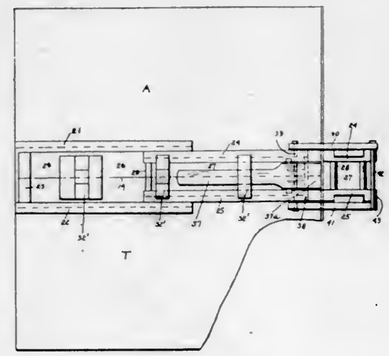
1,861,765. BLOCK FOR PRINTING. EDWARD F. TRETBAR, Jr., Camden, N. J. Filed Aug. 1, 1931. Serial No. 554,528. 5 Claims. (Cl. 101—395.)

1. A laminated printing block comprising a core having fixed to the opposite faces thereof plies of such relative thicknesses and characteristics that when the thicker of such plies is cut and kerfed for printing there will



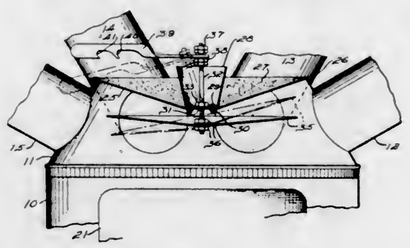
remain an uncut layer having substantially the proportions characteristics, coefficients of expansion and absorption of the other of said plies.

1,861,766. FORM FOR BUILDING COLUMNS AND BEAMS. WILLIAM G. VENARD, Los Angeles, Calif. Filed Aug. 6, 1930. Serial No. 473,380. 5 Claims. (Cl. 25—131.)



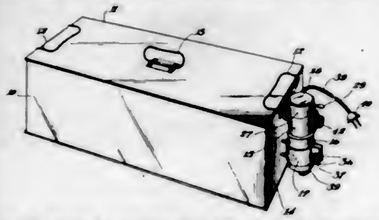
1. A form as described consisting of a series of right-angular corner plates, arranged in adjustable relation and in overlapping position one against the other to provide a rectangular enclosure, a plurality of similar enclosures being superimposed one upon the other so that their edges coincide, a series of rigid telescoping brace members arranged upon all sides of the enclosures in a manner to partly overlap the coinciding edges of the superposed plates, and manually operated locks controlled to connect the pairs of rightangularly disposed brace members at the corners of each enclosure to hold all brace members in place.

1,861,767. FURNACE. JOHN L. WALTERS, Detroit, Mich., assignor to Superior Safety Furnace Pipe Company, a Corporation of Michigan. Filed July 1, 1930. Serial No. 465,153. 16 Claims. (Cl. 126—105.)



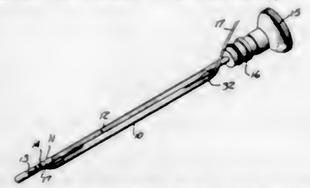
1. In a hot air furnace, in combination, a dome, a crown sheet for said dome, a heating element under said dome, and a deflector tiltably supported between said crown sheet and said element for movement in more than one plane.

1,861,768. SURGICAL STERILIZER. FREDERICK CHARLES WAPPLER, New York, N. Y. Filed Oct. 26, 1929. Serial No. 402,600. 6 Claims. (Cl. 167—3.)



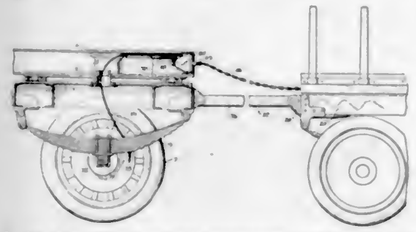
3. In a surgical-instrument sterilizer, a substantially rectangular box adapted to receive the instruments to be sterilized, a substantially cylindrical chamber on the exterior of a side wall of said box and adapted to receive a solid vaporizable fumigant, said chamber having a depending skirt portion and being provided with a removable transparent cover, a hollow bolt securing said chamber in axially-vertical position to said side wall and serving also as a fume conduit, and an electric heating unit detachably secured to the exterior of said side wall beneath said chamber, said heating unit being accommodated in said skirt portion.

1,861,769. CATHETERIZING INSTRUMENT. REINHOLD H. WAPPLER, Yonkers, N. Y. Filed June 27, 1930. Serial No. 464,150. 14 Claims. (Cl. 128—349.)



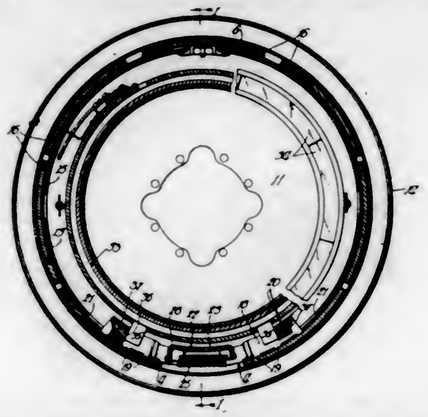
5. A catheter tube provided with a guide roller at the edge of one wall at the outlet end, and means for yieldably urging said roller in the direction of the opposite wall, whereby a catheter pushed through the tube will be yieldably pressed against said opposite wall.

1,861,770. TRAILER BRAKE CONTROL. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Sept. 1, 1928. Serial No. 303,409. 2 Claims. (Cl. 188—3.)



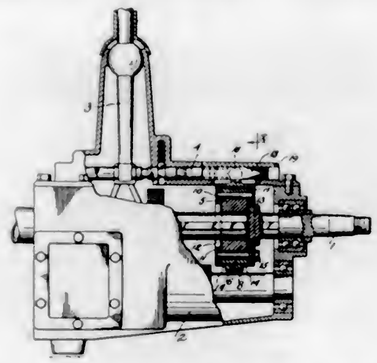
1. In a combined vehicle comprising a tractor, a trailer and a coupling mechanism providing a draft connection between said tractor and trailer, the combination of a brake for said trailer, electromagnetic means controlling the setting of said brake, a battery on said trailer, a switch on said trailer controlling a circuit through said battery and said electromagnetic means and having a pair of contacts yieldably urged toward each other, an insulating member normally separating said contacts and mechanically connected to said tractor so as to be withdrawn from between said contacts upon separation of the tractor and trailer.

1,861,771. FRICTION BRAKE. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Feb. 17, 1930. Serial No. 428,870. 13 Claims. (Cl. 188—140.)



4. A brake of the character described combining a rotatable drum, anchoring means having oppositely facing stop surfaces, a friction braking element extending around the internal cylindrical surface of said drum with its adjacent end portions normally abutting against said surfaces, an annular actuating member concentric with said element and arranged for limited movement about the drum axis and in opposite directions from a normal brake-released position, a pair of opposed shoulders on opposite ends of said element, and a pair of oppositely facing abutments on said member spaced circumferentially from said stop surfaces and each adapted upon movement of the member in one direction to engage one of said shoulders and move its end of the braking element away from said anchoring means, said stop surfaces and said abutments being substantially equidistant from the drum axis and overlapping each other so as to increase the radial compactness of the brake and actuating unit.

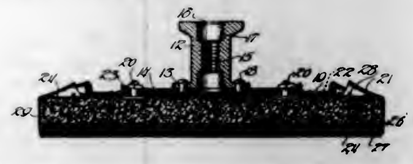
1,861,772. BRAKING DEVICE. LAWRENCE ZAMBONI, Pasadena, Calif. Filed June 16, 1930. Serial No. 461,566. 2 Claims. (Cl. 192—4.)



1. A device for checking the rearward movement of a motor vehicle comprising, in combination with the drive shaft of such vehicle, a drum secured thereon, a stationary ring surrounding and spaced from said drum and provided with recesses, a pair of plates rotatably mounted

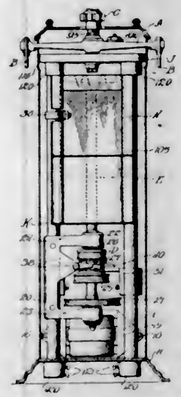
on said ring and carrying rolling means which cooperate normally with said recesses and drum to check the rearward motion of said shaft, a lever on said plates, a slide having a cam slot into which said lever extends, and means on said slide to exert a yielding pressure upon said lever and thereby maintain said rolling means in position to wedge immediately and prevent the rearward movement of the shaft, said slide being operable by the movement of the gear shift lever into reverse to rotate said plates and thereby cause said rolling means to be moved and held in inoperative position.

1,861,773. ABRASIVE DEVICE. FRANS O. ALBERTSON and GUSTAV A. OLSEN, Sioux City, Iowa, assignors to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed Dec. 31, 1928. Serial No. 329,410. 1 Claim. (Cl. 51—197.)



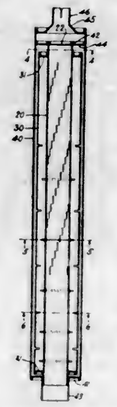
An abrasive device, comprising a supporting hub, a resilient and flexible pad carried by said hub and adapted to flex relative to said hub, a plurality of thin and flexible discs located on the face of said pad for providing said pad with a predetermined degree of flexibility an local resiliency, a covering for said pad and discs comprising an abrasive member enclosing said discs and pad, and means for securing said covering to said pad adjacent the outer edge of said pad to permit said pad to flex freely under pressure applied to said abrasive device.

1,861,774. MASSAGE AND EXERCISE MACHINE. FRITZ A. ANDERSON, Milton, Wis., assignor to The Burdick Corporation, Milton, Wis., a Corporation of Delaware. Filed Oct. 1, 1928. Serial No. 309,561. 3 Claims. (Cl. 128—63.)



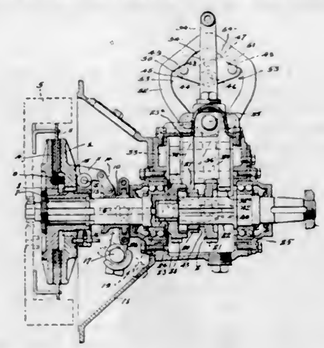
2. In a massage and exercise machine, a base, a plurality of upright pillars adjustably supported upon the base, a top plate carried by the upper ends of said pillars, an applicator supporting arm movably mounted upon the top plate, a motor mounted upon the pillars, speed changing mechanism disposed between the pillars and mounted upon brackets carried by said pillars, other means associated with the speed changing mechanism and said motor for translating rotational movement to vibratory movement of said arm, a casing entirely surrounding said pillars and said top plate, said casing being formed with an inwardly extending compartment for supporting applicators therein and a speed changing control lever for said speed change mechanism disposed within said compartment.

1,861,775. MUFFLER FOR INTERNAL COMMBUSTION ENGINES. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 8, 1929. Serial No. 345,492. 11 Claims. (Cl. 137—160.)



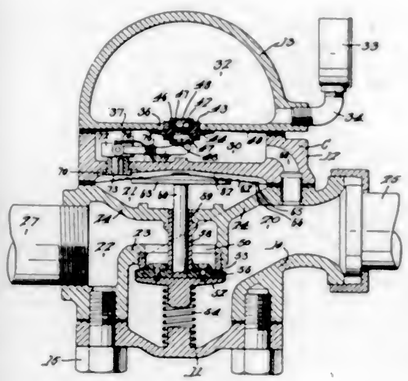
1. A muffler for an internal combustion engine, comprising in combination, a casing, tubular members within said casing, one having longitudinally arranged slots, the other having slots arranged circumferentially thereof.

1,861,776. SHIFTING MEANS FOR TRANSMISSION MECHANISM. ELMER J. BARTH, Syracuse, N. Y., assignor to Brown-Lipe Gear Company, Syracuse, N. Y., a Corporation of New York. Filed July 11, 1928. Serial No. 291,902. 16 Claims. (Cl. 74—58.)



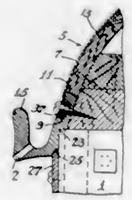
1. In an operating mechanism, the combination of an operating part and a second operating part connected respectively to elements to be shifted, a coupling normally connecting said parts whereby the parts act as a unit, the coupling comprising a member associated with the second part and shiftable relatively to said part and a member associated with the first part and interlocking with the former member to shift the same out of interlocking engagement, and means for holding the coupling member from relative shifting during the initial portion of the movement of the operating part and releasing the shiftable coupling member during the latter portion of the movement of the operating part from starting position.

1,861,777. DRY PIPE EXHAUSTER. EMIL M. BENSON, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 13, 1931. Serial No. 529,598. 8 Claims. (Cl. 169—17.)



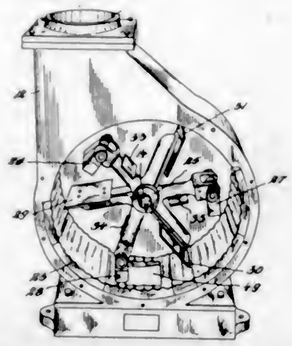
1. An air exhauster comprising a pressure chamber continuously open to the sprinkler system, a vented exhaust chamber, a partition separating said chambers and having a relatively large exhaust port opening therethrough, an exhaust valve normally closing said opening, a spring assisting to close said exhaust valve, a relay chamber having a diaphragm mounted therein which separates said chamber into two parts continuously connected through a bleed opening, both parts of said relay chamber being normally at atmospheric pressure, a connection from said diaphragm to said exhaust valve, an intermediate air chamber in free communication with said pressure chamber, a normally closed relay valve between said intermediate chamber and one part of said relay chamber and opening toward said intermediate chamber, and means to open said relay valve upon a predetermined abrupt drop in air pressure in said sprinkler system, thereby depressing said diaphragm and opening said exhaust valve.

1,861,778. RAILWAY CAR. JOHN ROBERT BLACKHALL, Highland Park, and HARVEY S. PARDEE, Ravinia, Ill.; said Pardee assignor to said Blackhall. Original application filed May 1, 1929, Serial No. 359,480. Divided and this application filed May 29, 1930. Serial No. 456,867. 2 Claims. (Cl. 108—5.)



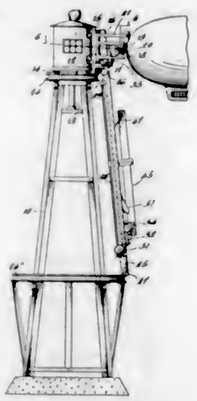
2. A drip rail for cars and the like comprising a length of material having a groove therein for conveying water, means associated with said drip rail adapted to receive roof covering therein, means above said first-named means adapted to abut said roof, and said drip rail also having means formed beneath said rail for support on body members of the car, and a receiving means adapted to lap the sides of the car to form an eave therefor.

1,861,779. COAL PULVERIZER AND FEEDER. OTTO E. BORNHAUSER, Sandusky, Ohio, assignor to Her-Born Engineering and Manufacturing Company, Sandusky, Ohio, a Corporation. Filed Aug. 1, 1930. Serial No. 472,479. 2 Claims. (Cl. 83—11.)



1. In a device of the character described, a pulverizer comprising a spider adapted to be rotated at relatively high velocities and provided with a plurality of arms, pulverizing hammers pivotally mounted on certain of the arms, relatively large flat fan blades carried by the other arms adapted to continuously blow pulverized material from the pulverizer, and relatively small auxiliary flat fan blades mounted upon the pulverizing arms to augment the blowing action of the large blades.

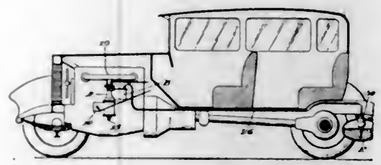
1,861,780. MOORING APPARATUS FOR AIRSHIPS. EDWARD W. BOWERS, Medina, N. Y. Filed Feb. 16, 1931. Serial No. 515,996. 10 Claims. (Cl. 244—2.)



1. A mooring apparatus for airships, comprising a mast, a revolving turret mounted on the upper end of said mast and including a shiftable element for coupling an airship thereto, a carrier revolvably mounted on the mast below said turret and including a guideway, and an elevating element movable in said guideway and adapted for operative engagement with said shiftable coupling element.

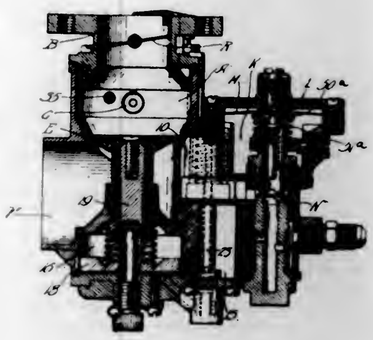
1,861,781. CARBURATION AND FUEL FEED SYSTEM. ROBERT F. BRACKE, Chicago, Ill., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed Sept. 17, 1928. Serial No. 306,593. 3 Claims. (Cl. 261—72.)

1. In combination an induction chamber adapted for direct connection to the intake manifold of an internal combustion engine, a main fuel supply tank, a primary air passage communicating with the induction chamber at one end and extending to the main fuel tank, a suction multiplying Venturi tube associated with the primary air passage at the fuel tank for lifting fuel from the tank into the passage, means for maintaining a predetermined



depression in the induction chamber, a constant level fuel chamber and means therein for variably restricting the primary air passage outlet at said one end and a fuel nozzle communicating with the chamber for supplying additional fuel to the induction chamber and for supplying all of the fuel to the induction chamber at idle throttle position.

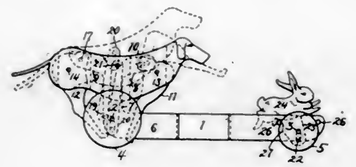
1,861,782. CARBURETOR. ROBERT F. BRACKE, Chicago, Ill., assignor to Curtis B. Camp, Glencoe, Ill., trustee. Filed July 25, 1929. Serial No. 380,791. 10 Claims. (Cl. 261—69.)



1. In a carburetor, an induction passage adapted for communication at one end with the intake manifold of an internal combustion engine and having its opposite end open to atmosphere, a spring-pressed air valve disposed in said passage for maintaining a substantially constant depression in that portion of the passage anterior thereto, a fuel nozzle discharging into said induction passage by virtue of said depression therein, means operable at will from a point remote from the carburetor for augmenting the tendency of said spring-pressed valve to close, and spring means associated with said operable means for yieldingly holding said operable means in adjusted position relative to said air valve, whereby the richness of the fuel mixture may be controlled.

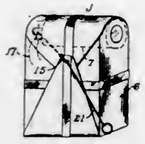
1,861,783. MECHANICAL TOY. STANLEY T. BROCKWAY, Auburn, Ind. Filed May 2, 1930. Serial No. 449,179. 6 Claims. (Cl. 46—45.)

2. In a mechanical toy, a wheeled frame; a configuration having a body and fore and rear legs pivoted therein; pivotal connections between said rear legs and the frame at points spaced from the pivot connecting said rear legs and said body; shoulders on said frame having momentary engagement with the pivot connecting said rear legs and body; pivotal connections between said forelegs and said frame at points spaced from the pivot connecting said forelegs and body, there being elongated slots in the frame in which said connections have sliding movement; and means operatively relating the wheels with the frame and said body.



6. In a mechanical toy, a wheeled frame; a configuration related with the wheels of said frame so as to receive movement therefrom; a pair of spaced pins in the frame adapted to limit movement of said configuration; and a surface carried by said configuration and having engagement with one of said pins whereby movement of said configuration is accentuated.

1,861,784. PARACHUTE OPENER. THOMAS B. BROWN and MARION L. STANSELL, Dayton, Ohio. Filed Oct. 1, 1930. Serial No. 485,068. 2 Claims. (Cl. 244—21.)

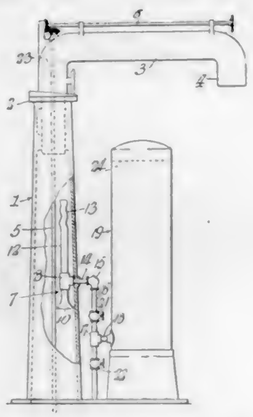


2. The combination with a parachute, of a flexible receptacle secured to the canopy thereof, a gas tank carried by said parachute in communication with said flexible receptacle, a valve for admitting gas to the latter from the tank, a closure member in said valve, a pack for containing said parachute and tank, a rip cord for opening said pack, and means for holding said valve closure member in a closed position, said means being secured to the rip cord and adapted to be drawn by it to open the valve when the rip cord is pulled to open the pack.

1,861,785. APPARATUS FOR TREATING WATER FOR STEAM BOILERS. LA VERGNE THOMAS BRYSON, Chicago, Ill., assignor to Dearborn Chemical Company, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1928, Serial No. 295,582, and in British India Aug. 18, 1927. 1 Claim. (Cl. 210—40.)

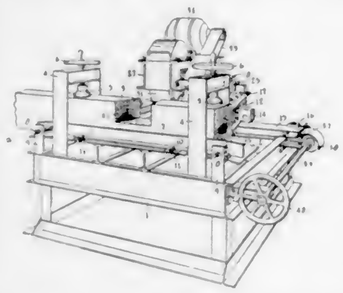
In combination with an upright railway water column having a swingable discharge spout, a fluid chemical tank adjacent the column, a conduit having one end in communication with the interior of said column, means providing a nozzle chamber in said conduit, a pipe opening

at an end into said chamber and having a check valve therein, a branch pipe connecting said tank with said first mentioned pipe, and shut off valves in said pipe,



one on each side said branch pipe, the other end of said conduit being arranged in a manner to discharge into water discharged by the said spout.

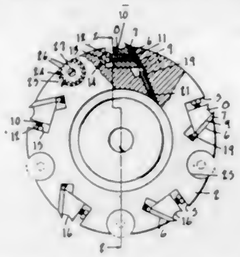
1,861,786. MORTISING MACHINE. ANDREW G. BUCHAN and IRA J. LYONS, Grand Rapids, Mich., assignors to Leitelt Iron Works, Grand Rapids, Mich. Filed Oct. 9, 1930. Serial No. 487,550. 10 Claims. (Cl. 144—133.)



9. In a machine of the class described, the combination of a frame, a work table mounted on said frame transversely thereof, yokes on said frame embracing said work table, work clamps on said yokes, an adjustable side gage operatively associated with said table, a cutter carriage bed pivotally mounted at its forward end adjacent said table, said frame being provided with a transverse way on which the rear end of said bed is supported for oscillating movement, means for adjusting said bed, a cutter holder mounted on said carriage, and a cutter mounted on said cutter holder.

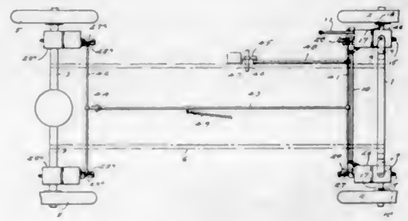
1,861,787. CUTTER FOR WOODWORKING MACHINES. ANDREW G. BUCHAN, Grand Rapids, Mich., assignor to Leitelt Iron Works, Grand Rapids, Mich. Filed Oct. 9, 1930. Serial No. 487,552. 8 Claims. (Cl. 144—230.)

1. In a cutter, the combination of a rotary head provided with a plurality of blades and having a plurality of circular recesses in one end thereof opening to the periphery of the head, and disk-like circular cutters having a peripheral series of teeth adjustably mounted in said recesses so that a plurality of the teeth project



beyond the periphery of the cutter head and said end cutters may be rotatively adjusted to present selected teeth.

1,861,788. VEHICLE BRAKE. ADAM G. CUSHING, Vancouver, Wash. Filed June 28, 1930. Serial No. 464,642. 6 Claims. (Cl. 188—89.)

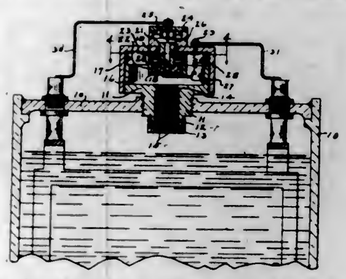


1. In combination, a front axle, casings pivoted to the front axle and constituting liquid reservoirs, secondary axles journaled in the casings and provided with cranks, wheels fixed to the secondary axles, cylinders fixed to the casings and each communicating at both ends with its casing, pistons reciprocable in the cylinders and connected to the cranks, a valve controlling communication between one end of each cylinder and its casing, and valve operating means.

3. In combination, a front axle, casings pivoted to the front axle and constituting liquid reservoirs, secondary axles journaled in the casings and provided with cranks, wheels fixed to the secondary axles, cylinders fixed to the casings and each communicating at both ends with its casing, pistons reciprocable in the cylinders and connected to the cranks, a valve controlling communication between one end of each cylinder and its casing, rear axles provided with cranks, housings in which the rear axles are mounted, casings carried by the housing and constituting fluid reservoirs and in which said second cranks are located, cylinders fixed to said second casings and each communicating at both ends with its casing, pistons reciprocable in said second cylinders and connected to said second cranks, a valve for controlling communication between one end of each of said second cylinders and its casing, and valve operating means.

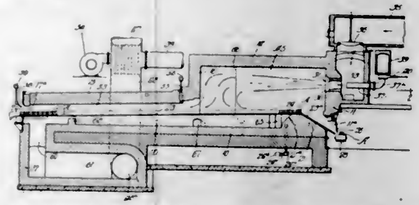
1,861,789. ELECTROLYTE CONTROL UNIT. DEAN W. DAVIS, Pendleton, Ind., assignor, by mesne assignments, to Thomas M. Hardy, Pendleton, Ind., and Gustav A. Schnull, Indianapolis, Ind. Filed Feb. 4, 1929. Serial No. 337,233. 2 Claims. (Cl. 136—179.)

1. In an electrolyte container level control, a cover having a down-turned flange, a base having an upturned flange cooperating with the flange of the cover to form a gas holder, said base having a receptacle therein filled with a material like spun glass, said base having restricted inlets and having restricted discharges into the gas holder, a container in the gas holder supplied with a conducting liquid and having a gas space above the liquid communicating with the interior of the gas holder, a cover screw-threadedly engaging the container, an overflow cup on top of the gas holder cover, a tube screw-threadedly engaging the container cover and cup and compressively



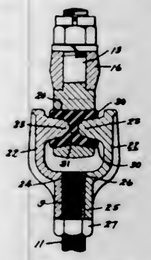
engaging the gas holder cover therebetween, said tube having its end submerged in the liquid in the container, said cup having a vent to atmosphere, an electrode projecting into the cup to be contacted by the liquid when the liquid is raised by gas pressure, a conductor having a terminal in constant contact with the conducting liquid in the container and a gas ignition means within the gas holder in electric circuit with the last conductor.

1,861,790. APPARATUS FOR HEATING BILLETS OR THE LIKE. HENRY A. DREFFEIN, Chicago, Ill. Filed Dec. 19, 1927. Serial No. 240,990. 6 Claims. (Cl. 263—6.)



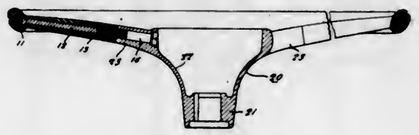
6. A furnace having a relatively large laboratory chamber and a relatively restricted portion leading therefrom, means to supply fuel to said laboratory, and means to supply additional air in said furnace in the restricted portion thereof in such wise as to resist flow of gases through said restricted portion from said laboratory chamber.

1,861,791. OSCILLATING PIVOT JOINT. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,776. 5 Claims. (Cl. 287—100.)



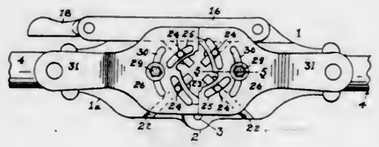
1. An oscillating universal joint for connecting two relatively movable parts comprising: an eye fixed to one of said parts, an elastic non-metallic member within said eye, two inwardly projecting closed end lug members forced axially of said eye toward each other so as to embed themselves in opposite sides of said elastic member but leaving a portion thereof between said lugs and thereby cause substantial axial elongation of same, and means for fixing said lug members to the other of said connecting parts.

1,861,792. STEERING WHEEL. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 15, 1930. Serial No. 502,414. 6 Claims. (Cl. 74—33.)



1. A steering wheel comprising: a metal rim ring having radially inwardly projecting metal arms rigidly fixed to said ring, a molded composition body encasing said rim ring and arms and forming a well-appearing molded portion of a steering wheel, a separate metal casting comprising a sleeve adapted to be fixed to a shaft and a central cup having radially extending therefrom several spoke portions which register with said inwardly projecting arms, and separate pins extending radially outward through said spoke portions and into said metal arms; for fixing the outer ends of said spoke portions to the inner ends of said arms after said molded portion is completed.

1,861,793. DIESTOCK. GIDEON GARFIELD HASSLER, Stowe Township, Allegheny County, Pa. Original application filed June 4, 1928, Serial No. 282,520. Divided and this application filed June 11, 1931. Serial No. 543,587. 7 Claims. (Cl. 10—127.)



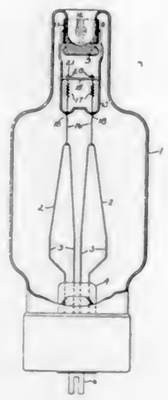
3. In a partible die-stock, the combination with the stock-parts in hinged relation to each other, said parts being provided with slideways which are radially disposed relative to the axis of the closed stock, work-centering members movable in said slideways, a lever on each of said stock-parts arranged for rotary movement, and eccentrically disposed slots in said levers engaged by portions of said members whereby when said levers are swung said members are adjusted relative to the axis of the stock.

1,861,794. FILAMENT SUPPORT. RALPH M. HEINTZ, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed Jan. 26, 1931. Serial No. 511,277. 1 Claim. (Cl 250—27.5.)

In combination with a filament mounted within an evacuated envelope, a stud projecting into said envelope, a clamp encircling said stud, a metal frame comprising a bar arched over said stud and having its ends secured to said clamp and a guide hole formed in the arched

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portion, a transverse bar extending across said frame, and a filament support secured to said transverse bar and comprising a continuous wire formed with a helical spring



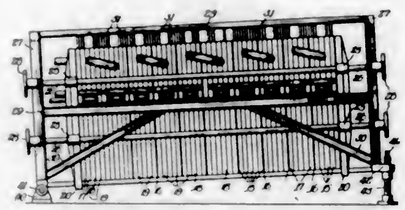
portion positioned between the bar and the frame and a tie portion extending through the guide hole and secured to the filament.

1,861,795. SQUEEGEE MOP. HARRY HERTZBERG, Brooklyn, N. Y., assignor to Hertzberg Patents Inc., New York, N. Y., a Corporation of New York. Filed Sept. 5, 1929. Serial No. 390,609. 7 Claims. (Cl. 15—228.)



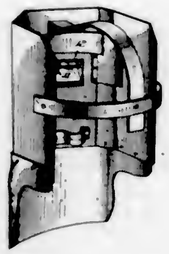
3. A mop comprising, a mop handle, a flexible squeegee plate fixed to the end of said handle, said squeegee plate having parallel working edges at opposite sides of said handle, and mop material having a portion thereof interposed between said squeegee plate and the end of said mop handle.

1,861,796. LIQUID TREATMENT. ALBERT B. HODGES, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 6, 1928. Serial No. 304,217. 6 Claims. (Cl. 204—25.)



1. In an electro-osmotic apparatus, a series of U members clamped together, said members being formed of channel beams with their legs directed outwardly and permeable diaphragms and insulating partitions clamped between said U members so as to form a series of electro-osmotic cells.

1,861,797. WELDING SHIELD. ROBERT W. HOLT, Chicago, Ill., assignor, by mesne assignments, to Franklin M. Warden, Chicago, Ill. Filed Oct. 17, 1929. Serial No. 400,219. 3 Claims. (Cl. 2—8.)

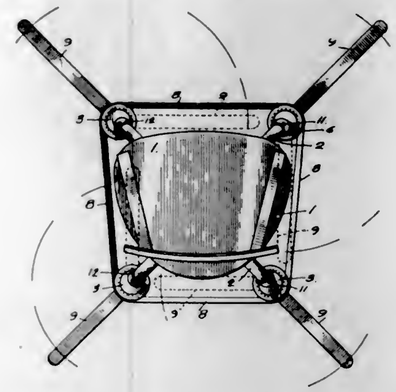


1. In a face shield for use in welding a relatively small stationary upper window through which the work being welded may be observed in the absence of an intense light at the location of the work, and a relatively large stationary window through which the work may be observed without light-ray injury to the observer even when an intense light is present at the work, and a stationary outwardly projecting visor between said windows for shadowing the upper window from an intense light at the work in the position of the shield in which the same is normally placed when the work is being observed through the lower window.

1,861,798. METHOD OF MAKING METALLIC MAGNESIUM. RALPH M. HUNTER and SHELDON B. HEATH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 27, 1929. Serial No. 366,518. 1 Claim. (Cl. 204—19.)

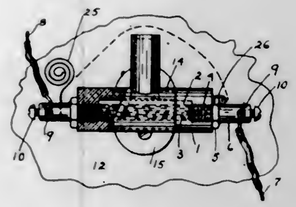
In the production of metallic magnesium by electrolyzing a molten bath containing magnesium chloride, wherein the raw material fed to said bath consists of magnesium chloride containing some water or basic chloride, the improvement which consists in feeding such raw material to said bath adjacent the anode at a plurality of points distributed with reference to the anode surface.

1,861,799. ANTITIPPING DEVICE. RUDOLF A. ISENBERG, Los Altos, Calif. Filed Oct. 6, 1930. Serial No. 486,822. 6 Claims. (Cl. 155—188.)



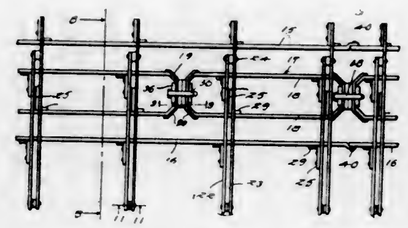
1. An anti-tipping device for high chairs and the like comprising arms rotatably mounted upon the bottoms of the legs of said chairs and movable to extended positions beyond said legs to increase the supporting base of said chair to prevent tipping of the same; and means connecting all of said arms whereby movement of any one arm will move the remaining arms to similar extended positions.

1,861,800. AUTOMATIC CIRCUIT BREAKER. MAXIMILLIAN P. JANISCH, Milwaukee, Wis., assignor to Steelstamp Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 7, 1928. Serial No. 324,469. 2 Claims. (Cl. 200—52.)



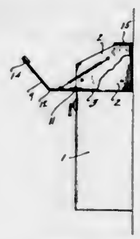
1. A circuit breaker for the ignition circuits of motor driven vehicles comprising an elongated chamber composed of non-conductive material, means for supporting said chamber transversely of the vehicle with its longitudinal axis horizontally disposed, ignition circuit conductors having terminal plugs at the respective ends of said chamber, a body of conductive liquid within the chamber normally electrically connecting said terminal plugs and in sufficient quantity to maintain continuous contact with said plugs under normal variations in any position of said liquid under the conditions of roadway travel, and an upwardly extending receiver for said liquid in communication with the central portion of the top of said chamber and adapted to receive said liquid, when the vehicle is inverted, in such quantity as to break the electrical connection between the plugs.

1,861,801. BUILDING SET. ALBIN E. JURY, Borger, Tex. Filed June 15, 1929. Serial No. 371,187. 9 Claims. (Cl. 25—131.)



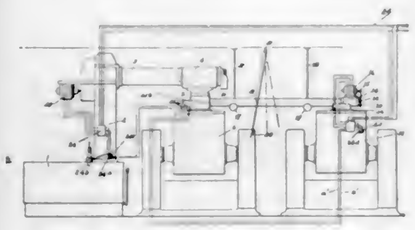
8. A mold form for walls, comprising an inner and outer mold wall, core members disposed between said inner and outer walls, in spaced relation permitting the formation of webs between the sections of the wall molded between the outer wall and the cores and between the inner wall and the cores, each of said cores comprising a pair of spaced side walls and end walls of stretchable material permanently connected to and between the adjacent ends of the side walls, holding elements between the adjacent end walls of the cores, each comprising a pair of elongated bodies extending vertically through a core along the inner face of a resilient end wall, a hinge connection between the lower ends of said members and a latch connection between the upper ends of said members, and means connecting and holding the inner and outer walls and the core walls in a predetermined spaced relation.

1,861,802. COMBINATION TOILET TANK COVER AND CABINET. JOHN HENRY KELLY, Longview, Wash. Filed Jan. 14, 1931. Serial No. 508,594. 1 Claim. (Cl. 312—107.)



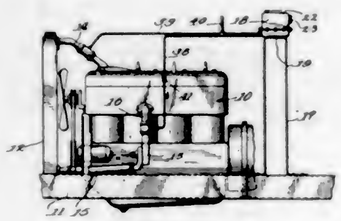
A cabinet adapted to be used as a closure for the open top of a flush tank comprising a body element having its base removably disposed upon the top of the flush tank and forming the top thereof, rear and side walls extending upwardly from the base, said rear wall having a flange formed forwardly, and said side walls downwardly sloping from the front edge of the flange, a closure hingedly secured to the front edge of the base, said closure adapted to form the front wall and sloping top wall of the cabinet, thereby to prevent the placing of articles upon the cabinet, and springs secured to the side walls and to the closure adapted to normally maintain the closure in closed position.

1,861,803. WEIGHING, BLENDING, CONVEYING, ELEVATING, AND SIFTING MACHINE. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed Oct. 18, 1929. Serial No. 400,657. 12 Claims. (Cl. 107—4.)



1. In combination with flour sifting apparatus and two dough mixers, one of which is arranged to receive a gravity discharge of flour from said sifter, means for diverting said gravity discharge into said other dough mixer.

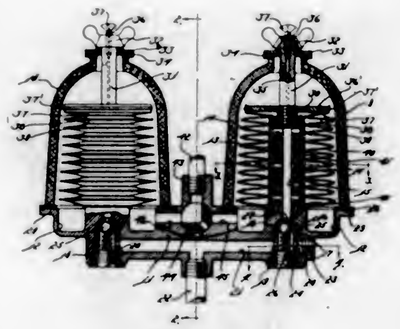
1,861,804. LIQUID COOLING APPARATUS FOR INTERNAL COMBUSTION ENGINES. GEORGE H. LECARPENTIER, Chicago, Ill., assignor, by direct and mesne assignments, to Albert G. McCaleb, Evanston, Ill. Filed Apr. 20, 1931. Serial No. 531,337. 12 Claims. (Cl. 123—174.)



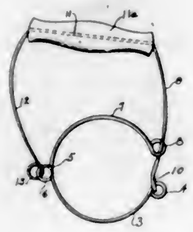
1. An internal combustion engine, comprising cooling liquid circulatory apparatus, a container for anti-freeze material, means responsive to variation of specific gravity of the cooling fluid, means responsive to temperature, and means actuated conjointly by the means responsive to specific gravity, and the means responsive to temperature to control the supply of anti-freeze to the circulating cooling fluid.

1,861,805. FILTER. LAWRENCE R. LENTZ, Windsor, Ontario, Canada. Filed Feb. 1, 1930. Serial No. 425,127. 1 Claim. (Cl. 210—168.)

A filter of the class described, comprising: a base; tubular posts projecting upwardly from said base and having a central opening in communication with an outlet passage formed in said base; a filtering element positioned about said post and in communication with the interior thereof; an inverted bell shaped container embracing said filtering element; a cap for the upper end of said container for serving as a closure therefor; a stem projected through said cap and provided with a central longitudinally extending bore communicating with said central opening and by a lateral passage with the interior of said container; and a threaded member threaded in the outer end of said stem and serving as a closure for the outer end of said bore.



1,861,806. BOTTLE HANDLE. LONNIE E. LITTLE and HENRY T. MAIB, Grandview, Wash. Filed Apr. 9, 1930. Serial No. 442,961. 1 Claim. (Cl. 215—100.)



A removable handle structure including an open ring inherently influenced to spread its ends, an eyelet formed intermediate its length, other eyelets formed at its extremities, a handle member having one end secured to said intermediate eyelet, the other end passed through one of the eyelets formed on the extremities of the ring and secured to the other eyelet, whereby sliding connection is made with one end of the ring and when the handle is in a vertical position the eyelets formed on the extremities of the ring are superimposed and the ring contracted.

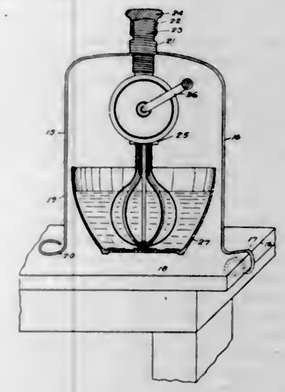
1,861,807. CLAMP-POSITIONING DEVICE. FRANK F. MALI, New Brighton, Pa., assignor to National Electric Products Corporation, a Corporation of Delaware. Filed Sept. 4, 1930. Serial No. 479,644. 5 Claims. (Cl. 247—25.)

1. In an electrical fixture including one clamping element which is movable relatively to a cooperating clamping element for securing between them a cable or conduit, and a screw which is associated with said clamping elements for effecting their relative movement, the combination of a collapsible spacer which temporarily retains said clamping elements in separated, cable-receiving



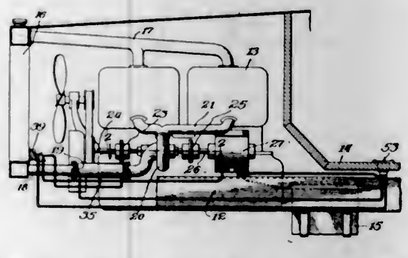
position, which spacer is adapted to buckle upon the rotation of said screw to bring said elements into cable-clamping position.

1,861,808. UTENSIL HOLDER. HARRY LIONELL MARTIN, Cartierville, Quebec, Canada. Filed May 26, 1930. Serial No. 455,624. 2 Claims. (Cl. 248—41.)



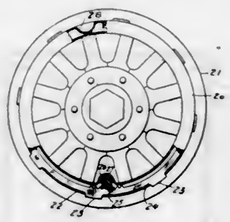
2. In a utensil holder, an inverted U-shaped wire stand terminating at its lower ends in a foot on one leg and a table grip on the other and at the upper end forming in the middle a recess adapted to grip a handle.

1,861,809. ENGINE CIRCULATING SYSTEM. ALBERT G. MCCALEB, Evanston, Ill. Filed Feb. 4, 1929. Serial No. 337,227. 6 Claims. (Cl. 123—174.)



1. In an engine, a circulating system comprising a liquid circulating pump, an electric motor, thermostatically controlled means for causing operation of the pump by the electric motor when with the engine at rest the temperature to which the liquid is subjected falls below a predetermined point, means for driving said pump independently of said electric motor when the engine is in operation, and automatic clutches connecting last said means and the electric motor to the pump.

1,861,810. VEHICLE WHEEL. STEVE S. MCDONALD, Los Angeles, Calif. Filed Jan. 24, 1930. Serial No. 423,086. 2 Claims. (Cl. 301—26.)



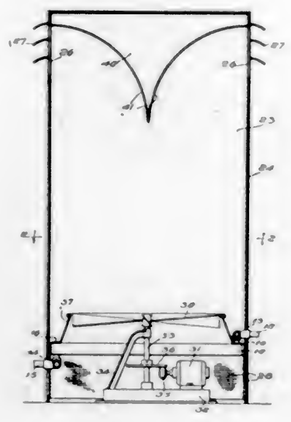
1. A wheel having an annular tubular felly comprising, an inner peripheral wall, an outer peripheral wall terminating on one side in an annular flange and integral side walls, an annular member within the felly and provided with cam projections seated in apertures of the outer wall for engaging rim cams, and means for rotating said member to engage such cams to lock a rim in position on the wheel, there being in the outer felly wall, diametrally opposite said rotating means, a pocket of a size to receive a rim projection for the purpose of rim alinement.

1,861,811. PROGRAM CALENDAR. ARTHUR G. MILLER, Atkinson, Nebr. Filed Feb. 18, 1931. Serial No. 516,793. 1 Claim. (Cl. 40—63.)



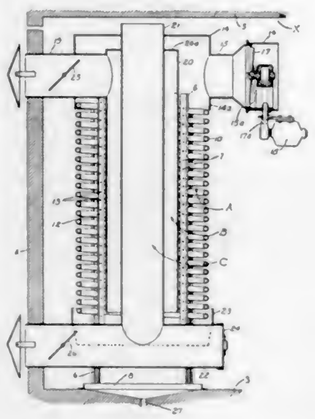
An advertising sign comprising a flat base board, an easel support for said board for holding the same in upright position, said board having an outer face divided into a central panel and a plurality of border panels surrounding the central panel, said base board also provided at the upper end of said central panel with a transverse slot extending throughout the width of the central panel, and a pad of sheets conforming in length, and width substantially to that of the central panel removably fitting thereagainst, said pad of sheets having securing means at their upper ends for holding said sheets together in suspended relation, said securing means provided with a depending tongue of substantially the width of the pad of sheets extending downwardly at the rear side thereof and spaced from the rear-most sheet a distance sufficient to engage through said slot of the base board, said tongue adapted to engage against the rear side of the base board for securing the pad of sheets detachably in the said central panel of the base board.

1,861,812. HEATING DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 15, 1928. Serial No. 319,583. 2 Claims. (Cl. 257—137.)



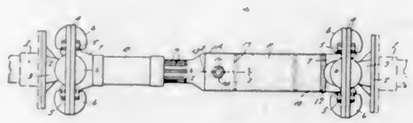
2. A heating device comprising a cabinet containing a radiator unit, a fan providing means for causing movement of air vertically through said unit, a member cooperating with the fan and radiator unit providing means facilitating said movement, a plurality of openings forming an outlet for the heated air, said openings forming a substantially continuous grille in the perimeter of the cabinet above said member, and an instrumentality adapted to discharge the air horizontally through said openings.

1,861,813. REFRIGERATING, DEHUMIDIFYING, AND VENTILATING APPLIANCE. CHARLES A. MOORE, Edina, Minn. Filed Aug. 9, 1930. Serial No. 474,285. 11 Claims. (Cl. 257—18.)



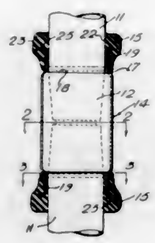
2. The combination with a structure forming a chamber, of an upright refrigerated conduit communicating at its upper end with the upper portion of the chamber, and a second conduit within said first conduit communicating at its upper end with the outer air, both conduits communicating at their lower ends with the lower portion of the chamber.

1,861,814. MEANS FOR CONNECTING ROTATABLE MEMBERS. FREDERICK W. PETERS, Cleveland, Ohio, assignor to The Almetal Universal Joint Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 1, 1930. Serial No. 448,854. 3 Claims. (Cl. 287—109.)



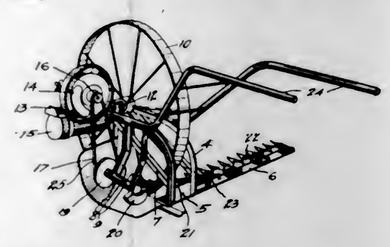
1. The combination, with a hollow hub-like member having openings therethrough, each opening having an outwardly flaring wall extending to the outer surface thereof, of a rotatable sleeve-like member applied to the exterior surface of the said hub-like member and having openings therethrough adapted to register with the openings in the hub-like member, the openings in the sleeve-like member being each of materially less diameter than the diameter of the outer end of the corresponding opening in the hub-like member, and a bolt extending through the said openings and having at one end a head having an outwardly flaring portion complementary to the outwardly flaring portion of the corresponding opening in the hub-like member and at its opposite end a nut having an outwardly flaring portion complementary to the outwardly flaring portion of the corresponding opening in the hub-like member, whereby, on setting up the nut, the metal surrounding each of the openings in the sleeve-like member will be pressed inwardly into engagement with the outwardly flaring surfaces of the corresponding openings in the hub-like member and the bolt will serve as a driving key between the sleeve-like member and the hub-like member.

1,861,815. WEAR PREVENTER. DOUGLAS R. RADFORD, Los Angeles, Calif. Filed Feb. 9, 1931. Serial No. 514,647. 2 Claims. (Cl. 308—4.)



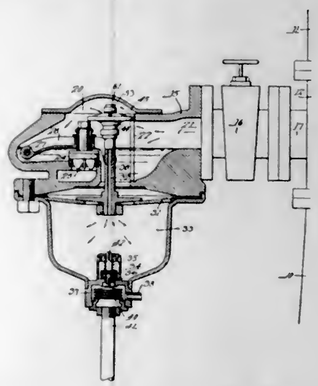
1. In an apparatus of the class described, the combination of: a column having an enlargement; a pair of wear-preventing means, one being placed on said column on each side of said enlargement; holding means connected to both of said wear-preventing means, and engaging said enlargement for holding said wear-preventing means from longitudinal movement; and securing means for securing said wear-preventing means and said holding means in place.

1,861,816. MOWING MACHINE. SILAS E. RAWLS, Streator, Ill., assignor to Rawls Manufacturing Company, Streator, Ill., a Corporation of Illinois. Filed Sept. 6, 1930. Serial No. 480,255. 10 Claims. (Cl. 56—25.)



1. A mowing machine comprising a medial traction wheel, a frame receiving the latter, a power plant carried by the frame forwardly of the wheel center, and a mowing element carried by the frame rearwardly of the same.

1,861,817. AIR EXHAUSTER. GEORGE I. ROCKWOOD and HJALMAR G. CARLSON, Worcester, Mass., assignors to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed May 26, 1930. Serial No. 455,618. 8 Claims. (Cl. 169—17.)

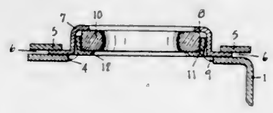


1. In an air exhauster for a dry pipe system, a yielding member exposed at one side to dry pipe pressure, a vent valve controlled by said yielding member and effective to relieve the dry pipe pressure, a chamber at the opposite side of said member adapted to contain air under pressure, a passage normally open to connect the dry pipe system to said chamber and to thereby equalize the pressures on opposite sides of said yielding member, a second valve controlling said connecting passage to the dry pipe system, a cooperating port member for said second valve, a second yielding member on which said port member is mounted said port member being movable by said second yielding member to open or close the passage to said chamber past said second valve, and said second yielding member being exposed at one side to dry pipe pressure and at the other side to the pressure in said chamber.

1,861,818. SHOCK ABSORBER. EDWIN F. ROSSMAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 29, 1929. Serial No. 381,771. 6 Claims. (Cl. 188—88.)

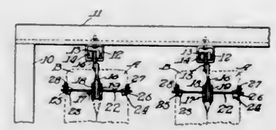
1. A shock absorber comprising in combination, a casing presenting a cylinder portion; a piston in said cylinder forming two compression chambers therein; a single duct providing communication between said chambers; a recess in the casing transversely of the duct; a plug insertable into said recess to divide the duct into two portions, said plug providing two valve chambers; and a pressure release valve in each of said valve chambers, one valve being adapted to establish a flow of fluid through the duct in one direction only, the other in the other direction only, in response to proper fluid pressures in said duct.

1,861,819. FISHING REEL. SAMUEL G. RUSSELL, Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Mar. 6, 1930. Serial No. 433,542. 5 Claims. (Cl. 242—84.1.)



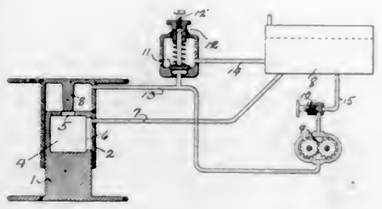
5. In a fishing reel, the combination of a frame, a spool, said frame being provided with slideways disposed transversely relative to the axis of the spool, an annular line guide eye housing slidably mounted in said slideways, a line guide eye, and a line guide eye holder frictionally telescoped within said housing.

1,861,820. DISPLAY EQUIPMENT. JULIUS RUWITCH, Norway, Mich. Filed Feb. 18, 1929. Serial No. 340,778. 4 Claims. (Cl. 211—28.)



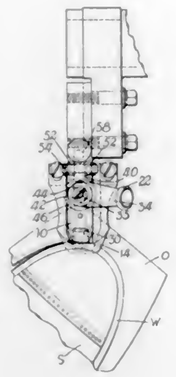
1. The combination with a track and wheeled carriage, of a vertical arm depending from the carriage, a horizontal supporting frame consisting of two oppositely bowed side pieces joined at their ends, the frame being fixed to the arm and of a length greater than the width of a mattress, cross pieces fixed in the respective ends of the frame member, and bars adapted to slide on and be removably fixed to the cross pieces whereby two mattresses may be clamped and supported, one on each side of said arm.

1,861,821. SUSPENSION FOR AUTOMOBILES. FLETCHER SCHAUM, Philadelphia, Pa. Filed Nov. 29, 1929. Serial No. 410,417. 8 Claims. (Cl. 267—2.)



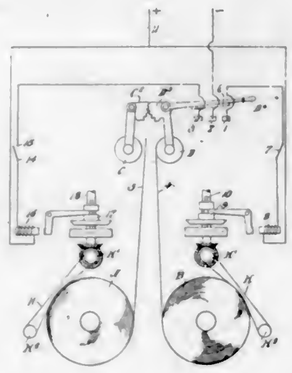
1. In a suspension for automobiles, a piston, a cylinder, a fluid reservoir or tank, said piston being provided with a chamber communicating with said reservoir, said piston being provided with a port for placing the pressure chamber of the cylinder in communication with the said piston chamber, a connection between the presssure chamber and said reservoir, and a valve carried by said cylinder and controlling said port to regulate the circulation of fluid from the reservoir through the cylinder and piston and back to the reservoir in a closed circuit.

1,861,822. ROUNDING AND CHANNELING MACHINE. OSCAR L. SHERMAN, Medford, and ADELORD BOURGEOIS, Swampscott, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 26, 1930. Serial No. 447,701. 15 Claims. (Cl. 12—18.)



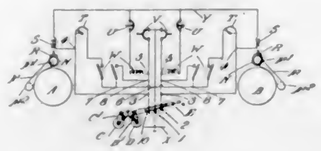
1. In a machine having means for operating upon the sole of a shoe as the shoe is fed to advance its sole margin progressively past said means, in combination, an edge gage movable into and out of position to guide the shoe by engagement with the edge of a shoe bottom member while the shoe is being fed and operated upon, and an upper gage movable into and out of position to guide a shoe by engagement with the shoe upper as the shoe is being fed and operated upon, said gages being so connected together and so arranged relatively to each other that when either of the gages is operatively positioned the other gage will be inoperatively positioned.

1,861,823. PRINTING PRESS AND WEB RENEWING MECHANISM THEREFOR. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 15, 1925, Serial No. 75,513, and in Great Britain July 23, 1925. 32 Claims. (Cl. 242—58.)



5. A printing press including in combination means for supplying a running web to the press, means for moving the lead end of a fresh web supply roll into contact with the running web to unite the webs, and means automatically actuated by the movement of said web-moving means to rotate the fresh web roll.

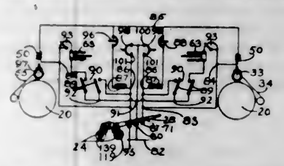
1,861,824. PRINTING PRESS. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 10, 1926, Serial No. 93,569, and in Great Britain Nov. 4, 1925. Renewed Jan. 19, 1932. 23 Claims. (Cl. 242—58.)



10. In combination in a printing press, means for rotatably supporting a web supply roll which is being unwound by the running press, means for varying the speed of rotation of the web roll including means engaging the periphery of the web supply roll, a driving device and an electro-magnetic control therefor and a resistance settable by an attendant in circuit with said electro-magnetic control.

1,861,825. PRINTING PRESS. ERNEST JAMES SMITH, London, England, assignor to The Goss Printing Press Company, a Corporation of Illinois. Original application filed Mar. 10, 1926, Serial No. 93,569. Divided and this application filed Mar. 1, 1929. Serial No. 343,643. 12 Claims. (Cl. 242—75.)

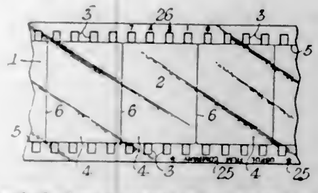
2. A printing press including in combination means for supporting a web roll, means frictionally engaging said web roll, differential gearing connecting said web roll-engaging means with a source of power, a brake operating on said differential gearing, and means controlled by the web in passing from the roll to the press for controlling said brake whereby said gearing causes the web roll-engaging means to drive or retard the rotation of said web roll.



1,861,826. AQUEOUS ASPHALT EMULSION AND METHOD OF MAKING THE SAME. LYNDON G. THOMPSON, Oakland, Calif., assignor, by mesne assignments, to American Bitumuls Company, San Francisco, Calif., a Corporation of Delaware. Filed July 11, 1928, Serial No. 292,035, and in Australia Aug. 30, 1927. 5 Claims. (Cl. 134—1.)

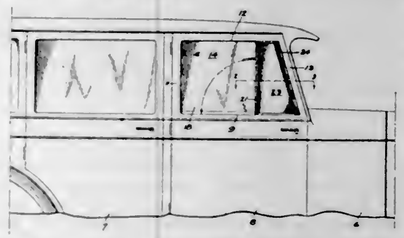
1. A method of producing an asphaltic emulsion in water which consists in forming a hot caustic soda solution containing less than about 1% caustic soda, adding a minor quantity of melted asphalt thereto, stirring the contents of the vessel in which the mixture is being formed, introducing a substance capable of saponifying with the caustic soda, adding the remaining and major quantity of the asphaltic content, maintaining the temperature at about 200° F., and continuing the stirring until the emulsification is completed.

1,861,827. VISIBLY MARKED MOTION PICTURE FILM AND METHOD OF MAKING SAME. ROBERT N. TITUS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 1, 1929. Serial No. 343,762. 7 Claims. (Cl. 41—41.)



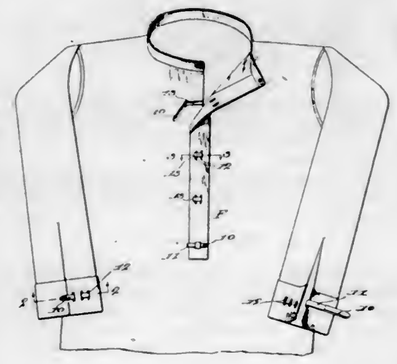
5. A method of producing instantly visible markings on a film coated with a gelatino silver halide emulsion comprising marking said emulsion with a soluble sulfide.

1,861,828. VEHICLE BODY. EDWARD A. WRIGHT, Fresno, Calif. Filed Aug. 2, 1926. Serial No. 126,576. 8 Claims. (Cl. 296—44.)



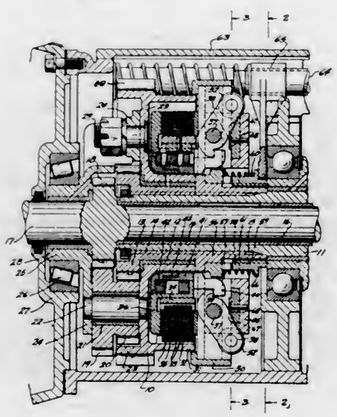
1. In a vehicle body, a door forming a part of the body and having a unitary window frame, a guide extending across said frame, a window slidable in said door along one side of said frame and slidable in said guide, and a second window hinged to said door on the opposite side of said frame and adapted to close the opening between said opposite side and said guide.

1,861,829. GARMENT FASTENER. FENTON WRIGHT, Kansas City, Mo. Filed July 2, 1930. Serial No. 465,424. 2 Claims. (Cl. 2—128.)



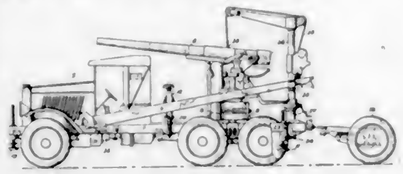
1. The combination with a garment having a placket with a plurality of spaced button holes at one side and a stiffened tongue connected with the other side and adapted to be threaded through said button holes, said tongue having a longitudinal projection at one end to engage the button hole and hold the device securely in locked position.

1,861,830. AUTOMATIC CLUTCH. OSCAR H. BANKER, Philadelphia, Pa., assignor to Continental Illinois Bank & Trust Company, Chicago, Ill., a Corporation of Illinois, as trustee. Original application filed Oct. 21, 1927, Serial No. 227,828. Divided and this application filed Apr. 23, 1930. Serial No. 446,680. 7 Claims. (Cl. 192—105.)



1. The combination of a driving and a driven shaft and a governor-controlled unit operatively connecting said shafts including a clutch, means for controlling said clutch including levers, and speed-responsive, governor weights having inclined faces and dwells cooperating with said levers.

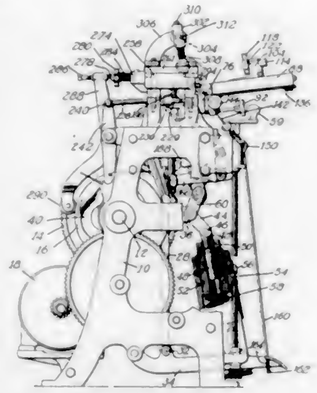
1,861,831. GUN MOUNT AND CARRIAGE. GLADEON M. BARNES, U. S. Army, Hastings, Mich. Filed Apr. 16, 1931. Serial No. 530,585. 11 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



8. A gun platform, a socket member fixed to the platform, an outrigger receivable in the socket member and a tie-rod connecting the socket member and the under side of the outrigger.

11. In a gun carriage, a support comprising a standard and a pair of arms having slidably interlocked half-bearings engageable with the standard.

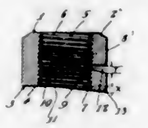
1,861,832. MACHINE FOR OPERATING UPON END PORTIONS OF SHOES. WILLIAM C. BAXTER, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 17, 1929. Serial No. 371,493. 95 Claims. (Cl. 12—14.)



1. In a machine for shaping the end portion of a stitch-down shoe to its last, the combination of end embracing wipers constructed and arranged for advancing and closing movements, a shoe support adapted to support the projecting margin of a sole upon the last, means for effecting relative movement of the wipers and the support heightwise of the shoe to shape the upper to the last, and means operative to effect advancing and closing movements of the wipers, said last-named means being constructed and arranged to initiate said advancing and closing movements substantially at the termination of said relative heightwise movement to force the upper in the angle between the side of the last and the projecting margin of the sole under the last bottom while the outturned margin of the upper lies against the projecting margin of the sole.

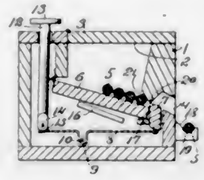
1,861,833. SELF LOCKING NUT. WILLIAM A. BERGSTROM, Los Angeles, Calif., assignor to Nanfeldt Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed Feb. 6, 1931. Serial No. 513,877. 2 Claims. (Cl. 151—21.)

2. A self locking nut comprising a nut body formed of a single piece of resilient material having a lateral slot of predetermined width extending partially therethrough and spaced a substantial distance from the lower face of said body to form a body portion and a relatively heavy leaf spring portion normally deflected downwardly a distance equal to said predetermined width, a bore extending longitudinally through said body and leaf portions, a thread in said bore extending in continuous alinement through both said body portion and said leaf portion to engage a



threaded element of a work piece to which the nut is to be applied, said leaf portion being distortable by abutment against said work piece when said nut is applied through a distance equal to said predetermined width to disaline the threads of said body portion and said leaf portion respectively and removable by its spring action to substantially its initial position to realine the threads when said nut is moved out of said abutting relation.

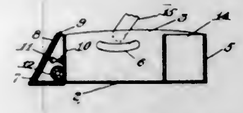
1,861,834. ARTICLE DISPENSER. ARNOLD R. BINGGELI, Kansas City, Mo. Filed Apr. 7, 1930. Serial No. 442,269. 1 Claim. (Cl. 312—78.)



In an article dispenser, the combination of a receptacle having a body provided with an outlet in one side for articles to be dispensed, and having at the inner side of said side a wedge portion at the rear of said outlet, said wedge portion at its rear side inclining upwardly and rearwardly, and the inner side of said side of said body inclining upwardly and forwardly from said inclined part of said wedge portion, an article supporting member adapted to support articles to be dispensed and pivoted on a horizontal axis and inclining forwardly and downwardly toward said outlet and said wedge portion, an ejecting member vertically movable between said outlet and said supporting member from a position at the rear of and below said outlet, in which position it is adapted to receive thereon from said supporting member and lift to a delivery position at the rear of said outlet the foremost of said articles, and having means for engaging and swinging upwardly said supporting member after said ejecting member has moved upwardly in front of the next succeeding member, said wedge portion being so disposed as to enter between said foremost article and the article next succeeding to engage and force the latter rearwardly and upwardly on said supporting member, when said supporting member and said ejecting member move upwardly, and means for moving said ejecting member upwardly.

1,861,835. DISPLAY TRAY. KIMON BODOGLOU, Chicago, Ill. Filed Oct. 28, 1930. Serial No. 491,744. 1 Claim. (Cl. 40—132.)

In combination with a rectangular vending tray having forwardly directed extended bottom and sides, said sides being cut obliquely upwardly and rearwardly from the forward edge of the extended bottom, angular plates having one arm of each of said plates secured to the edges of the extended bottom and sides and having the other arm of each of said plates spaced from the front edges of the sides and bottom to form an upwardly inclined slideway, a translucent panel bearing advertising matter disposed in the slide-



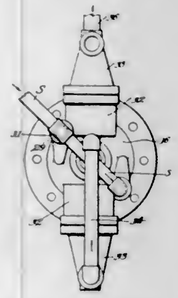
way, a vertical partition extending between the sides of the tray to form a closed triangular compartment with said panel and sides of the tray, and manually actuated means disposed in said compartment for illuminating said translucent panel.

1,861,836. PHOTOGRAPHIC EMULSION. LESLIE G. S. BROOKER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 437,017. 22 Claims. (Cl. 95—7.)



1. A photographic gelatino-silver-halide emulsion containing a cyanine dye which contains a naphthothiazole nucleus and a quinaline nucleus.

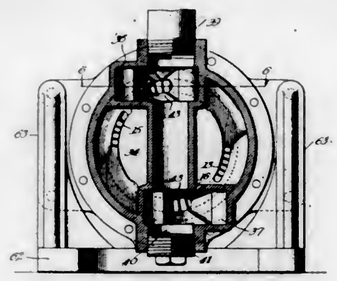
1,861,837. ROTARY PUMP. ARTHUR W. BURKS, Decatur, Ill. Filed July 12, 1926, Serial No. 121,961. Renewed July 30, 1929. 22 Claims. (Cl. 103—96.)



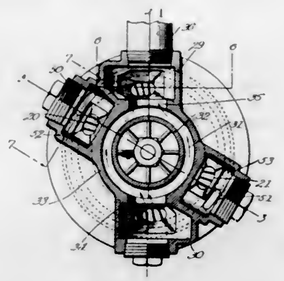
1. In a pump of the class described, a rotor having an annular series of blades, said rotor closing the spaces between said blades at their inner ends to provide a series of buckets and a casing having a plurality of curved fluid raceways each associated with said series of blades and adapted to have fluid impelled therethrough by the blades and an outlet for each of said raceways adapted to discharge fluid from the pump.

1,861,838. ROTARY PUMP. ARTHUR W. BURKS, Decatur, Ill. Filed June 26, 1930. Serial No. 464,001. 11 Claims. (Cl. 103—93.)

1. In a pump of the class described, a rotor having an annular series of buckets, a plurality of longitudinally arcuate fluid raceways associated with said buckets, each raceway having an inlet and an outlet, a pump section carrying said raceways, a supply chamber having an inlet connection and opening into said raceways through said inlets, and an outlet chamber at each outlet having a discharge connection, said outlet and supply chambers being located in a common pump section and the outlet chambers being connected to one another whereby fluid from one chamber passes through the other to said discharge connection.

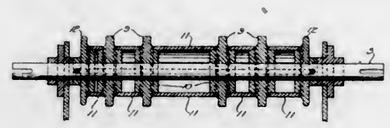


1,861,839. CENTRIFUGAL PUMP. ARTHUR W. BURKS, Decatur, Ill. Filed June 26, 1930. Serial No. 464,002. 16 Claims. (Cl. 103—96.)



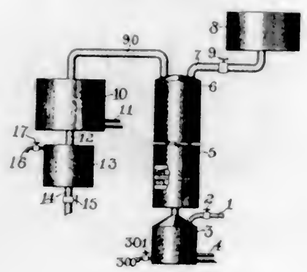
1. In a pump of the class described, a plurality of longitudinally arcuate raceways each having an inlet opening and an outlet opening, a radially spaced raceway having openings leading therefrom to said inlet openings, a rotor having a series of buckets adapted to traverse said arcuate raceways and having a series of peripherally directed and centrifugally discharging passages independent of said buckets emptying into said last-mentioned raceway, means for introducing liquid into said rotor passages, and means for discharging from the pump liquid which passes through the outlet openings of said first-mentioned raceways.

1,861,840. CONVEYER. CLARENCE R. CLAGHORN, Baltimore, Md. Filed Aug. 10, 1928. Serial No. 298,832. 9 Claims. (Cl. 198—203.)



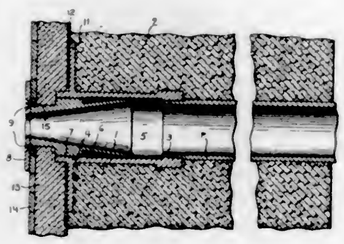
8. In a conveyer, a mesh conveying element, and transversely disposed sprockets engaging the meshes of the conveying element for driving it, such sprockets being transversely adjustable to accommodate themselves to the meshes of the conveying element.

1,861,841. PROCESS OF DEHYDRATING AQUEOUS ACETIC ACID WITH CARBON TETRACHLORIDE. HANS T. CLARKE, New York, and DONALD F. OTHMER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,642. 8 Claims. (Cl. 202—42.)



1. In the process of removing water from aqueous acetic acid, the steps of mixing therewith carbon tetrachloride and distilling water and carbon tetrachloride from the mixture.

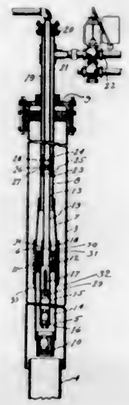
1,861,842. INLET FITTING. HARRY M. CREIGHTON, East Norwalk, Conn., assignor to R. U. V. Company, New York, N. Y., a Corporation of New York. Filed Aug. 30, 1928. Serial No. 303,009. 8 Claims. (Cl. 137—21.)



1. An inlet fitting for fluid containers having walls lined with a facing at a fluid inlet comprising a fixed fluid conducting member adapted to be embedded in the wall of the container and connected to a source of fluid supply and a tapered nozzle projecting beyond the fixed member and carried by and adjustable with respect to the member to adjust its end in predetermined relation with the wall facing.

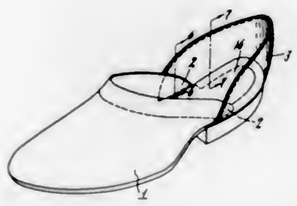
1,861,843. GAS LIFT PUMP. GEORGE E. DENMAN, Oakland, Calif. Filed Jan. 30, 1929, Serial No. 336,098. Renewed Nov. 13, 1931. 4 Claims. (Cl. 103—231.)

1. In an air or gas lift displacement pump, the combination with an outer casing adapted to extend from top to the bottom of a well and to enclose a pressure chamber, a closure cap at the top of the outer casing, and a check-valve at the bottom of the outer casing, of a removable inner outlet conduit extending within the outer casing, a check-valve at the lower extremity of the inner outlet conduit and adjacent to the first-named check-valve within the outer casing, a pressure nozzle within and concentric with the lower portion of the inner outlet conduit, means for admitting air or gas pressure to the chamber



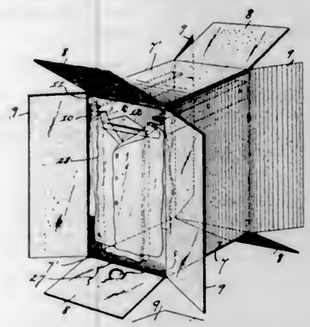
formed by the outer casing and inner conduit, and booster valves disposed along the inner outlet conduit for admitting a boosting pressure therein.

1,861,844. SLIPPER AND METHOD OF MAKING. MILTON L. DODGE, Newburyport, and HARRY L. J. DUCHEMIN, Haverhill, Mass.; said Duchemin assignor to said Dodge. Filed Apr. 19, 1930. Serial No. 445,583. 12 Claims. (Cl. 12—142.)



1. The method of making a slipper which comprises lasting the slipper wrong side out with the sole in temper and with the rear ends of the vamp overlapping the forward ends of the counter portion and unattached thereto away from the sole and the counter lining unattached to the sole, withdrawing the last, turning the shoe, pulling the counter lining up, inserting and securing a pre-formed counter stiffener within the counter portion of the upper, said stiffener having a sole-attaching flange terminating approximately at the rear edges of the vamp and having side wall portions extending forwardly to the forward edges of the counter portion and outwardly of the lapping portions of the vamp, and then tucking in the counter lining and securing it to the inner face of the stiffener.

1,861,845. COLLAPSIBLE WARDROBE BOX. ISRAEL DUKES and BENJAMIN M. ZIEVE, Philadelphia, Pa, assignors to Diamond Paper and Box Co., Philadelphia, Pa., a Partnership composed of Israel Dukes and Benjamin M. Zieve. Filed June 4, 1929. Serial No. 368,320. 4 Claims. (Cl. 206—7.)



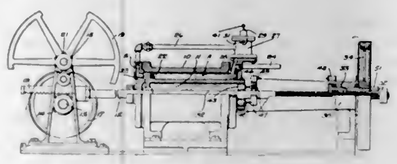
1. In a collapsible garment packing device having rigid sides, angle members mounted on opposite sides, said members being foldable to lie flat against the sides when the packing device is collapsed.

1,861,846. DUST CAP AND QUICK ADJUSTABLE NUT. RAYMOND DYMOCK, Hamburg, N. J., assignor of one-half to Carl J. Mehler, Sharon, Pa. Filed Feb. 14, 1929. Serial No. 339,763. 1 Claim. (Cl. 85—33.)



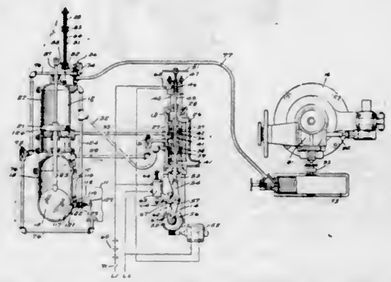
A device of the class described, comprising a double deck collapsible nut, consisting of two substantially congruent halves, the upper deck having a smaller circumference than the lower, intermediate sleeve members integrally connecting said deck portions, respectively, the said upper deck and sleeve portions being formed with facing reduced parts forming a channel therebetween, the lower deck portions being hinged together by means of overlapping sections, pins for securing the latter pivotally together, threads formed upon the inner sides of said upper deck and sleeve portions, the lower deck portions being formed upon their inner sides with outwardly beveled surfaces extending to the bottom thereof, substantially as shown and described.

1,861,847. AUTOMATIC HYDRAULIC CONTROLLER. CHARLES V. FOULDS, Berkeley, Calif., assignor to The Pelton Water Wheel Company, San Francisco, Calif., a Corporation of California. Filed July 11, 1927. Serial No. 204,903. 10 Claims. (Cl. 137—158.)



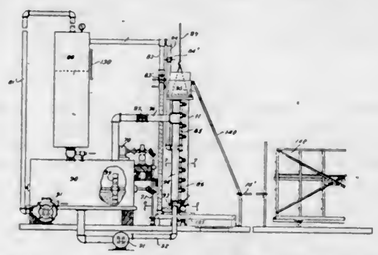
1. In a system of control for a hydraulic turbine, a piston movable to control the supply of water to the turbine, fluid means for moving said piston to a position to interrupt supply of water to the turbine in the event of abnormal operating conditions, said fluid means under normal conditions serving to constantly urge the piston in a direction to increase the supplying of water to turbine, a stop serving to limit movement of the piston in said directions, and means for adjusting the position of said stop to accommodate for normal operating conditions.

1,861,848. HYDRAULIC VALVE SYSTEM. CHARLES V. FOULDS, Berkeley, Calif., assignor to The Pelton Water Wheel Company, San Francisco, Calif., a Corporation of California. Original application filed Aug. 22, 1927, Serial No. 214,548. Divided and this application filed Mar. 12, 1929. Serial No. 346,473. 11 Claims. (Cl. 137—78.)



1. In a system of the character described, a valve for controlling admission of fluid to an outflow portion of a conduit from an inflow portion, means for by-passing fluid about said valve, means for controlling said valve, and means controlling the bypass means in accordance with operation of the control means and with fluid pressure in the conduit.

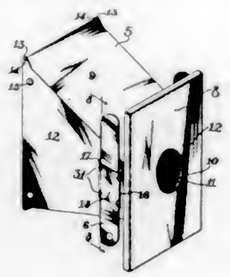
1,861,849. METHOD AND APPARATUS FOR PRODUCING FIBROUS ARTICLES. RALPH S. FROBISHER, Portsmouth N. H., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed May 20, 1930. Serial No. 453,993. 24 Claims. (Cl. 92—54.)



1. The art of forming hollow non-circular fibrous articles by means of a form having an inner perforated core and outer meshed walls which comprises introducing pulp into the form under a hydraulic head with a concomitant difference in pneumatic pressure tending to convey pulp particles from the perforated core toward the foraminous walls of the form.

7. Apparatus comprising a form having an outer wall of foraminous material affording numerous relatively fine interstices, and a movable core disposed within the form and having a plurality of perforations, means for admitting pulp to the interior of the core whereby it may pass through the perforations in the same toward the foraminous walls of the form, and means for subjecting the core and form to a substantial difference in pneumatic pressure, whereby flow of pulp from the core toward the foraminous walls of the form is induced.

1,861,850. CAMERA CONSTRUCTION AND METHOD OF ASSEMBLING SAME. CARL C. FUERST, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 14, 1930. Serial No. 443,965. 9 Claims. (Cl. 95—11.)



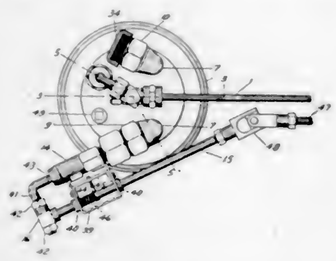
1. A method of attaching a support to a photographic roll holder which comprises slotting the side plate of said roll holder, forming up a portion between said slots, inserting the support provided with notches beneath the formed up portion, and then depressing areas of the formed up portion into the notches in the support.

1,861,851. SUBMARINE SIGNALING CABLE. JOHN J. GILBERT, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 1, 1922. Serial No. 585,619. 7 Claims. (Cl. 173—264.)



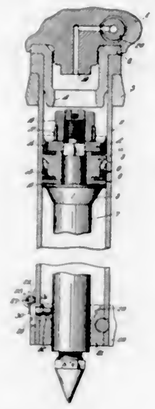
7. Submarine signaling cable armored with wire having a central core and a covering therefor in which the central core is made of steel and the covering is composed principally of copper.

1,861,852. SMOKE PRODUCER. RUPERT GODDARD, Havre de Grace, Md. Filed Nov. 13, 1928. Serial No. 319,175. 7 Claims. (Cl. 173—264.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



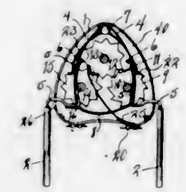
1. In a smoke producer, the combination of a pressure chamber and a cylinder adapted to contain a smoke agent, a conduit for conveying a pressure agant from said chamber to said cylinder, a second conduit for conducting smoke from said cylinder, a control valve in said first mentioned conduit for controlling and shutting off the flow of fluid from said pressure chamber, a disk of predetermined breaking strength positioned in said first mentioned conduit between said control valve and said cylinder; said first mentioned conduit being provided with a vent between the control valve and the disk and means for automatically closing the vent on substantial flow of pressure fluid from the pressure chamber.

1,861,853. ROCK DRILL FEEDING DEVICE. JAMES G. GRAHAM, Butte, Mont., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Aug. 14, 1930. Serial No. 475,328. 14 Claims. (Cl. 116—124.)



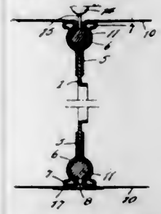
1. In a feeding mechanism, relatively movable feeding elements and a signal device mechanically actuated upon a predetermined relative movement of said feeding elements for warning the operator that the limit of feed is approached.

1,861,854. EGG METER. ALONZO H. GREENE, Fort Worth, Tex., assignor to Fort Worth National Bank of Fort Worth, Texas, Fort Worth, Tex., a Corporation, as trustee. Filed Feb. 11, 1929. Serial No. 339,137. 11 Claims. (Cl. 235—91.)



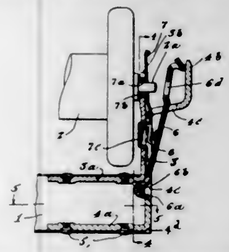
7. In an egg meter adapted to be positioned adjacent the egg vent of a bird, a register comprising a registering mechanism, and actuating means for said register comprising a laterally movable egg displaceable arm extending from said register in position to lie adjacent one side of said vent when said meter is positioned, a second movable egg contactable arm extending from said register in position to lie adjacent the opposite side of said vent, relatively light spring means resisting displacement of said first arm, relatively heavy spring means resisting movement of said second arm, and means for causing said registering mechanism to register the lateral displacements of said first arm, substantially as and for the purposes described.

1,861,855. COVERING AEROFOILS. WILLIAM HARPER, Jr., Port Washington, N. Y., assignor to Super-Marine Systems, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1930. Serial No. 436,169. 11 Claims. (Cl. 244—31.)



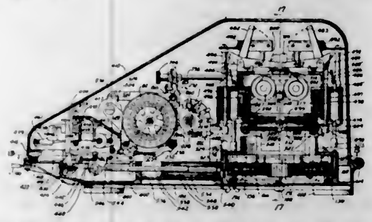
1. A skeleton body for aerofoils having a channel-shaped edge with a narrow longitudinal opening, a pliable cover having a portion folded inside said channel, and a strand threaded through the fold of the cover to lock it in the channel.

1,861,856. SUSPENSION HANGER FOR TUBE FRAMES. EDGAR F. HATHAWAY, Wellesley, and WALTER BIXBY, Boston, Mass. Filed Aug. 13, 1930. Serial No. 475,019. 6 Claims. (Cl. 139—10.)



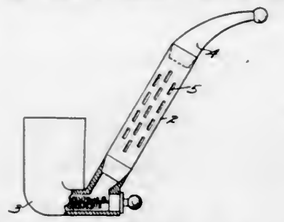
1. A suspension hanger for a tube frame embracing in its construction, a rigid chain-blade bracket having at its lower end an integral attaching foot dimensioned for insertion into the end of a tube frame carrier bar and being provided with external integral lugs arranged to abut against and overlap the end edge of the lower wall of the carrier bar, an angular spool bracket integrally secured to said chain-blade bracket having an angle foot adapted to telescope inside the carrier bar, means for fastening said angle feet to the lower and upper walls of the carrier bar respectively, and means supported by said brackets affording releasable chain-engaging suspension means, and journal bearing and retaining means for the yarn spool of a tube frame.

1,861,857. CRYPTOGRAPHIC MACHINE. EDWARD H. HEBERN, Oakland, Calif., assignor to International Code Machine Company, Reno, Nev., a Corporation of Nevada. Filed May 17, 1927. Serial No. 192,074. 61 Claims. (Cl. 197—4.)



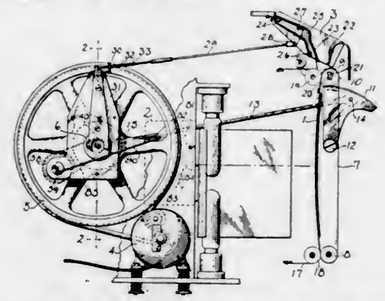
9. In a cryptographic machine, a plurality of code-changing code wheels, means for revolving one of said code wheels, cam means adapted to revolve with said one code wheel, means controlled by said cam for revolving a second code wheel in determined relation to said one code wheel, cam means adapted to revolve with said second code wheel, means controlled by said last cam for revolving a third code wheel in determined relation to said second code wheel, and so on, for as many code wheels as may be provided.

1,861,858. SMOKER'S PIPE STEM UNIT. ARTEMAS S. HICKEY, Los Angeles, Calif. Filed Feb. 9, 1931. Serial No. 514,542. 2 Claims. (Cl. 131—12.)



1. A stem unit for a smoker's pipe, consisting of a shell with ends to which are attachable a mouth piece and a bowl, a set of sealing headers in the shell and spaced inwardly from its ends to form chambers for absorbent pads, and a system of straight, parallel, spaced conduits whose ends are sealed in the headers and open into the said end chambers; said shell being perforated for free flow of air to the space between the system of conduits to carry off heat from the smoke.

1,861,859. PHOTOGRAPHIC RECORDING MACHINE. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 18, 1929. Serial No. 393,427. 4 Claims. (Cl. 271—8.)

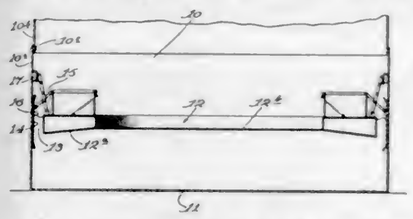


1. In a photographic recording device, the combination with movable mechanism for positioning documents, of a document conveyor, means for directing documents to said conveyor including a smooth walled chute, front side and rear walls included in the chute, the rear wall being mounted to move a limited distance with respect to the other of said walls and projecting above the front wall, a power drive, a clutch, and connections between the power drive and document conveyor through said clutch, connections between the movable chute wall and said clutch for operating the clutch, whereby movement of said movable chute wall may actuate said clutch and cause a document to be moved by the document conveyor.

1,861,860. HANGER FOR FLOATING ROOFS. GEORGE T. HORTON, Chicago, Ill., assignor to Chicago Bridge and Iron Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 12, 1931. Serial No. 508,279. 2 Claims. (Cl. 220—26.)

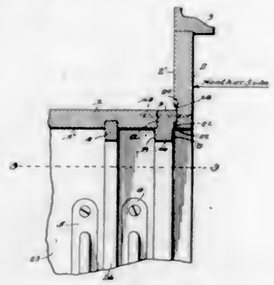
1. In combination with a tank and a floating roof therefor having sealing means including parts adapted to slide

vertically along the inner wall of the tank, a hanger for said roof including relatively thin wide socket members fastened to the inner wall of the tank and hooks flexibly attached to the floating roof adapted for engagement



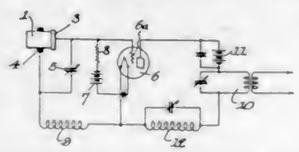
with the said socket members, said socket members being thin enough so that the aforementioned parts of the sealing means adapted to slide along the inner wall of the tank will slide over said socket members without substantially impeding the vertical movements of the floating roof.

1,861,861. WINDOW FRAME STRUCTURE. CLOUGH D. HUDSON, Spokane, Wash., assignor to Western Pine Mfg. Co., Ltd., Spokane, Wash., a Corporation of Washington. Filed Mar. 4, 1930. Serial No. 433,046. 4 Claims. (Cl. 20—11.)



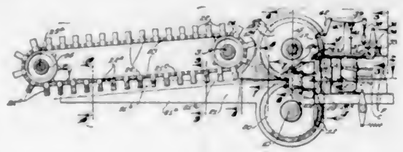
1. In a window frame structure, a stile having a uniform cross section and a flat outer edge, a casing, and a blind stop interposed between and secured to the flat outer edges of said stile and casing and having flat unbroken side faces, said blind stop having broad flat plain faced tenons one projecting from each flat unbroken side face of said blind stop and said tenons being disposed in staggered relation, one of said tenons being in concealed lap joint relation with the rear face of said casing and the remaining tenon forming a sash stop and being in overlapping shouldered engagement against said stile.

1,861,862. PIEZO-ELECTRIC CRYSTAL OSCILLATOR SYSTEM. AUGUST HUND, Bethesda, Md. Filed June 7, 1929. Serial No. 369,237. 9 Claims. (Cl. 250—36.)



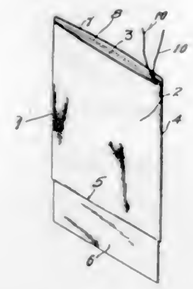
1. In a piezo-electric oscillator system, a piezo-electric crystal element, electrodes encircling said element adjacent opposite ends thereof, and an electrode encircling said element intermediate the opposite ends thereof, for establishing oscillatory paths through said element remote from the optical axis of said element.

1,861,863. FISHBONE REMOVING MACHINE. WILLIAM H. HUNT, National City, Calif. Filed July 29, 1929. Serial No. 381,833. 10 Claims. (Cl. 17—4.)



1. In a fish bone removing machine, the combination with a fish tail and fin centering means, of gashing members mounted at one end of said centering means, gashing means mounted above said gashing members, said gashing means and members adapted to slit a fish substantially to its backbone along its back and belly on either side of and adjacent to the tail and fins thereof, and scraping and severing means adapted to sever meat from the backbone of said fish and scrape said meat from the ribs thereof.

1,861,864. BAG CONSTRUCTION. WILLIAM D. KENNEDY, Western Springs, Ill. Filed Jan. 23, 1930. Serial No. 422,744. 10 Claims. (Cl. 150—11.)



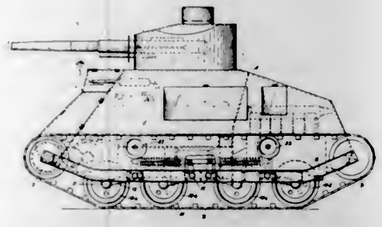
1. A blank for making a bag with a draw string around the mouth, said blank consisting of a piece of fabric having a pocket along one edge and a draw string puckered in the pocket to occupy a length thereof substantially less than the length of the draw string and providing extra length substantially in excess of the length of the pocket.

1,861,865. TOBACCO PIPE. JOHN KLEIN, Brooklyn, N. Y. Filed Apr. 6, 1931. Serial No. 527,924. 2 Claims. (Cl. 131—12.)



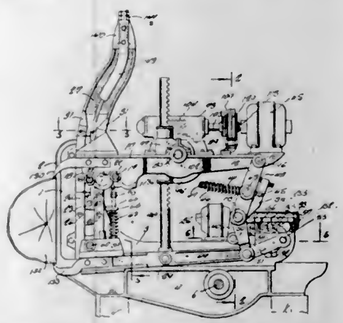
1. A smoking pipe including its bowl having a vertical recess formed in its wall, a cover having a plurality of recesses formed in its margin, a pivot stem on said cover entering the vertical recess to removably and turnably hold said cover to the bowl, a pin in the upper margin of the bowl diametrically opposite to the pivot stem to engage one of the recesses in said cover, a finger on said bowl near the pivot stem engaging the other of said recesses for securely holding the cover in its bowl closing position preventing accidental displacement.

1,861,866. SUSPENSION FOR TRACK-LAYING VEHICLES. HARRY A. KNOX and BERT F. BAKER, Davenport, Iowa. Filed Mar. 1, 1930. Serial No. 432,453. 6 Claims. (Cl. 305—9.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A suspension for vehicles embodying a load member, a plurality of pairs of traction units on each side of the load member, the units of each pair positioned on opposite sides of the longitudinal center of ground contact, and in alternate relation to the units of another pair, levers fulcrumed on the load member and each carrying a traction unit, the levers of each pair of traction units being in horizontally reversed relation and a resilient connection between the levers of each pair of traction units.

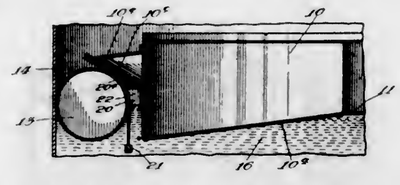
1,861,867. SAWMILL DOG. ROSS E. LANGILL, Menominee, Mich., and WILLIAM B. GRUETER, Milwaukee, Wis., assignors to The Prescott Company, Menominee, Mich., a Corporation of Michigan. Original application filed Sept. 16, 1925, Serial No. 56,590. Divided and this application filed Aug. 1, 1931. Serial No. 554,520. 9 Claims. (Cl. 143—125.)



1. In a sawmill dog, a knee having a face and provided with a channel arranged parallel thereto, upper and lower log-holding arms associated with said knee and mounted for movement toward and away from each other and for movement transverse to the face of said knee, and means for effecting said movements of said arms, said mounting including a plurality of pins carried by one of said arms and adapted and arranged for movement in said channel, and means for selectively positioning said pins in said channel for movement therein whereby the position of said last-mentioned arm relative to said knee may be changed in a direction transverse to face of the latter.

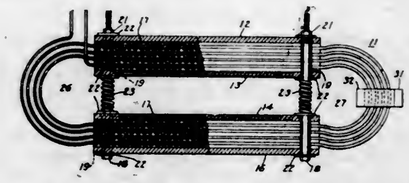
1,861,868. SEAL FOR FLOATING ROOFS. DONALD E. LARSON, Chicago, Ill., assignor to Chicago Bridge and Iron Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1931. Serial No. 514,050. 4 Claims. (Cl. 220—26.)

1. A floating roof and means for sealing the space between the wall of a cylindrical tank and the periphery of said roof, said means including a plurality of buoyant sealing members floating on liquid in the tank and a weighted curtain supported from the periphery of the roof,



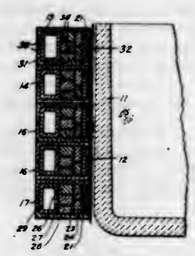
said curtain lying inside of the sealing members and urging them outwardly into contact with the wall of the tank.

1,861,869. ADJUSTABLE INDUCTION HEATING DEVICE. THOMAS H. LONG, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 20, 1930. Serial No. 483,243. 8 Claims. (Cl. 219—11.)



1. In an electric induction heater, a coil having a plurality of turns, each of said turns including two substantially straight portions and two arcuate portions, and means operatively associated with said straight portions to vary the separation thereof.

1,861,870. INDUCTION FURNACE. THOMAS H. LONG, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 6, 1930. Serial No. 486,582. 13 Claims. (Cl. 219—47.)

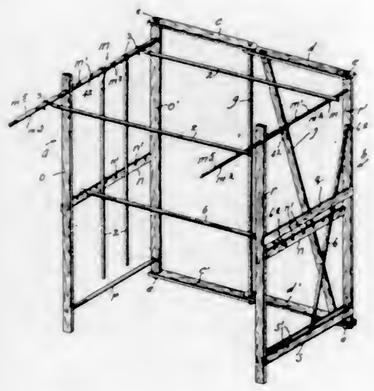


1. In an electric-induction heating device, a plural-layer energizing coil including conductors, the radial thickness of which increases with the distance between the respective layers and that layer in which there exists the maximum flux density.

1,861,871. CLOTHES DRIER. CHARLES W. MORDEN, Portland, Oreg. Filed Feb. 23, 1928. Serial No. 256,416. 7 Claims. (Cl. 211—178.)

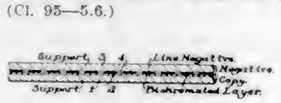
1. In a clothes drier, a frame comprising uprights and cross-bars, certain of the latter divided longitudinally into fixed and movable complementary sections relatively slidable one on the other, and a clip connecting the end of the movable section to the fixed section of said longi-

tudinally divided cross-bar between said uprights, said clip having a semi-circular portion terminating at one end in an inturned radial tongue bearing in a longitudinal



groove provided in the fixed section of said cross-bar, the said semi-circular portion of said clip encompassing only the lower portion of the fixed section of said cross-bar.

1,861,872. PHOTOMECHANICAL REPRODUCTION FROM HALF TONES OR LINE NEGATIVES. ALEXANDER MURRAY, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 12, 1930. Serial No. 435,077. 9 Claims. (Cl. 95—5.6.)



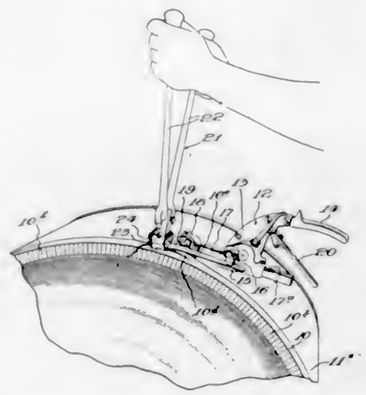
1. A process for making a copy of a printing image that comprises forming by photographic steps a layer having a relief image in which the relief is composed of portions which are repellent to stain and the other portions of which are receptive of stain, applying to the layer a stain which is contrastive in appearance with the repellent portions, and then transforming the stain repellant portions into non-repellant portions which are also contrastive with the stain.

1,861,873. WHEEL CLEANER FOR TRACTORS. ORR T. NICHOL, Omaha, Nebr., assignor to Nichol Manufacturing Company, Omaha, Nebr., a Corporation of Nebraska. Filed Aug. 19, 1929. Serial No. 386,961. 4 Claims. (Cl. 280—158.)



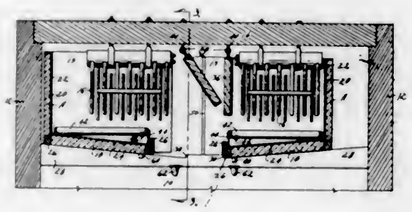
2. A wheel cleaner comprising a bracket having a segment shaped arm, a scraper blade having a curved face for coaction with the curved face thereof and a clamping bolt through said arm and blade and through the curved faces thereof, one of said curved faces having a slot for the clamping bolt to extend through.

1,861,874. PAPER ROLL AND GUARD THEREFOR. JOHN EKERN OTT, Chicago, Ill., and WILLIAM E. CLOSE, Philadelphia, Pa., assignors to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed July 17, 1929. Serial No. 378,872. 4 Claims. (Cl. 206—59.)



1. The combination with a paper roll, of an annular metallic band engaging the peripheral surface of the roll at the end thereof and having an annular flange extending inwardly adjacent the end surface of the roll, said band being provided at one end with a longitudinal slit forming a tongue and having at the other end a projecting tongue similar to said first named tongue, said tongue being superimposed upon each other when said band is applied to the roll, and means engaging said tongues for securing the ends of said band together.

1,861,875. REFRIGERATOR COOLING STRUCTURE. WORTH H. PERCIVAL, Des Moines, Iowa, assignor to C. L. Percival & Co., Des Moines, Iowa. Filed Mar. 31, 1930. Serial No. 440,317. 9 Claims. (Cl. 62—89.)

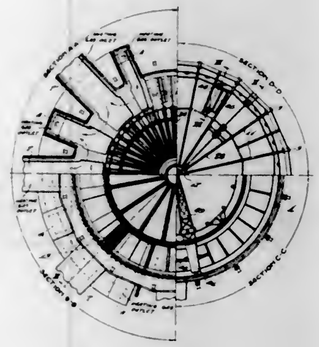


9. In a cooling structure of the kind described, a casing, a cooling chamber unit mounted therein having a bottom, end walls, a side wall and an open side, a movable partition for coacting with the open side having its lower edge spaced from the bottom of the cooling chamber unit, said cooling chamber unit being mounted for sliding movement toward and from said partition.

1,861,876. LOW TEMPERATURE DISTILLATION APPARATUS. FRANZ PUENING, O'Hara Township, Allegheny County, Pa. Filed Jan. 7, 1929. Serial No. 330,714. 27 Claims. (Cl. 202—117.)

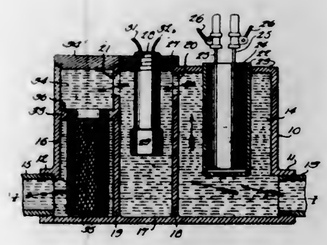
1. Coking apparatus comprising a series of movable vertical heat-storage members horizontally spaced to provide

coking chambers therebetween, said series of members having a gap therein, means for advancing certain of said



members simultaneously across said gap and means for removing coke from said members while they are being so advanced.

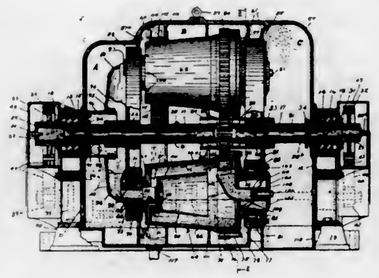
1,861,877. OIL PREHEATING DEVICE. JEREMIAH J. QUILL, San Francisco, Calif. Filed Apr. 1, 1930. Serial No. 440,839. 4 Claims. (Cl. 219—39.)



1. A device of the character described comprising a vertical heating chamber having an inlet opening in one side near the bottom thereof and adapted for connection with a source of oil supply, a casing projecting downwardly into said heating chamber through the top thereof, a heating element arranged in said casing, a thermostat chamber communicating at its upper end with the upper end of said heating chamber, a top closing said thermostat chamber, said thermostat chamber being provided with outlet connections for supplying oil therefrom to a burner, and a thermostat carried by said top and projecting downwardly into said thermostat chamber to control said heating element to determine the temperature of the oil supplied to the burner.

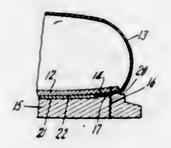
1,861,878. SEPARATING APPARATUS. FRANCISCO A. QUIROZ, Brooklyn, N. Y. Filed Dec. 6, 1928. Serial No. 324,188. 29 Claims. (Cl. 233—25.)

1. In apparatus of the character described, in combination, a plurality of rotatable containers, means mounting said containers for rotation about their respective axes and for rotation about an axis extraneous of said first-mentioned axes, said means including a rotatable member in which said containers are mounted for rotation, means for rotating said rotatable member and for rotating said containers about their respective axes, each of said containers having a hollow trunnion-like member rotatably



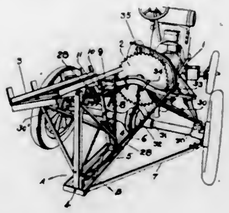
supported by said rotatable member, and means for supplying material to be treated to said containers and through said hollow trunnion-like member.

1,861,879. RUBBER SOLE. GILBERT F. QUINN, Beachmont, Mass. Filed Dec. 26, 1930. Serial No. 504,728. 4 Claims. (Cl. 36—32.)



1. A rubber outer sole for a shoe which includes an inner sole and an upper whose marginal portion constitutes an inwardly projecting flange, said outer sole having on its inner face a resilient sealing zone, formed to bear yieldingly on said flange and including a continuous resilient ridge having an acute angled apex contacting with the outer side of said flange and distortable by pressure of the outer sole against the flange, so that the ridge constitutes a dam whose apex is sufficiently flexible to conform closely to folds or puckers at the toe and heel portions of the flanges, and prevent entrance of moisture between the outer sole and all portions of the flange.

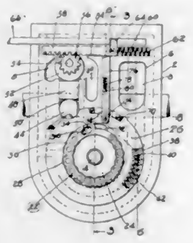
1,861,880. POWER DEVICE. WALTER A. RARIG, Oakland, Calif. Filed Dec. 9, 1929. Serial No. 412,820. 1 Claim. (Cl. 143—43.)



The combination of a motor driven sawing machine providing a work table movable from a rest position toward and from the saw of said machine, and a fuel

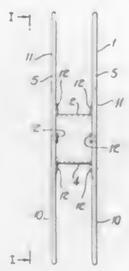
valve having an oscillating throttle lever adapted to admit fuel to the motor of said machine, a fuel regulating device consisting of an adjustable stop member adapted to limit the opening travel movement of said lever, a spring or an elastic member connected to said lever and adapted to automatically hold said valve open to a normal "work speed" position independently of the table, and to yieldingly allow said valve to close to an "idling speed" of the motor, suitable connecting gear attached at one extremity to said lever and adapted at its other extremity to operatively engage with said table when the table is moved from the saw and is near its rest position, whereby said valve is automatically actuated to an "idling speed" by the motion of said table acting against the pressure of said spring, and to operatively disengage from the table when said table is advanced toward the saw, whereby said valve is automatically actuated to a "work speed" position by the tension of said spring.

1,861,881. SAFETY BRAKE. CHARLES G. ROSS, Los Angeles, Calif., assignor of one-fourth to J. A. Earhuff, Los Angeles, Calif., and one-fourth to Victor L. Konigsmark, Los Angeles, Calif. Filed Feb. 7, 1930. Serial No. 426,557. 19 Claims. (Cl. 192—4.)



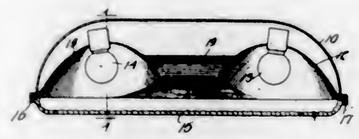
1. An automatic safety brake and release mechanism comprising a drive shaft adapted to be reversed by gravity, a combined brake shifting and brake release means on said shaft, a brake shaft, a combined shiftable braking and brake release means on said brake shaft, and a brake including rollers of progressively increased diameters associated with said brake shaft for braking said drive shaft when said drive shaft is reversed.

1,861,882. MOTION PICTURE REEL. OSCAR A. ROSS, New York, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 9, 1928. Serial No. 299,446. 18 Claims. (Cl. 242—74.)



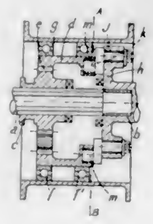
9. A reel designed for use with motion picture film of a standard, predetermined width and comprising a core and flanges thereon, the flanges being spaced by a distance greater than said standard width, and projections restricting the space adjacent the core to a width less than said standard width.

1,861,883. AUTOMOBILE HEADLIGHT. RUFUS A. RUSSELL, Jr., Daytona Beach, Fla. Filed July 10, 1930. Serial No. 467,022. 1 Claim. (Cl. 240—7.1.)



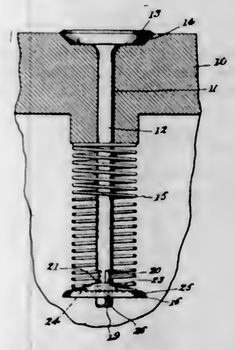
A vehicle light comprising a transversely elongated casing having a reflector mounted therein, said reflector comprising a pair of hemi-spherical portions joined by a trough, said trough being concaved at the center and continuous from both sides of the concaved center into surfaces to the top and bottom edges of said hemi-spherical portions adapted to direct light in a narrow strip in front of the vehicle, light bulbs mounted in said hemi-spherical reflector portions, said reflector portions being positioned with their axes to lie in lines converging to a point in advance of the vehicle and a prismatic lens mounted on the front side of said casing, substantially as set forth.

1,861,884. CHANGE SPEED DEVICE. LÉON SAIVES, Billancourt, France, assignor to Louis Renault, Billancourt, France. Filed Nov. 19, 1931, Serial No. 576,155, and in France Dec. 6, 1930. 1 Claim. (Cl. 74—57.)



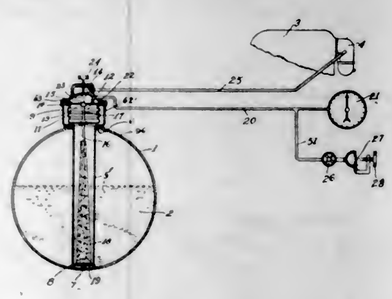
A transmission mechanism for speed changing in automotive vehicles comprising a casing, an elongated member rotatably mounted in said casing and having an internal gear adjacent to one end thereof, a driving shaft and a driven shaft extending coaxially and longitudinally of each other from said casing and eccentric with respect to said elongated member, a pinion for cooperating with the internal gear on said elongated member slidingly mounted on one of said shafts and provided with laterally extending clutch dogs, a disk mounted on the other shaft having corresponding clutch dogs for cooperating with the clutch dogs on said sliding pinion when said pinion is moved inward in said elongated member and out of engagement with the internal gear thereof, and cranks the length of which are equal to the distance between the axis of the driving and driven shafts and the axis of the elongated member pivotally connected to said disk and to the end of said elongated member remote from said internal gear.

1,861,885. VALVE FOR INTERNAL COMBUSTION ENGINES. FRANK L. SIMS, Seattle, Wash., assignor of one-fourth to Louis Haven, Seattle, Wash. Filed Apr. 21, 1931. Serial No. 531,770. 2 Claims. (Cl. 251—144.)



1. An improved valve for internal combustion and other motors, including a valve stem having a locking groove, a coil spring surrounding said stem, and a reversible concavo-convex washer having means for interlocking in either position with said groove and for confining the end of the spring in place.

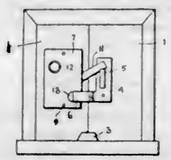
1,861,886. INDICATING SYSTEM AND APPARATUS. FRANK M. SLOUGH, Elyria, Ohio, assignor to The Anderson Company. Filed Apr. 24, 1925. Serial No. 25,673. 9 Claims. (Cl. 73—82.)



3. The method of measuring the amount of liquid in a tank, comprising suspending a weight in the liquid of such a nature that upon approximately a full tank condition, the effect of gravity upon the weight will be approximately counter-balanced by the buoyant effect of the liquid upon the weight, and then lifting the weight to a predetermined elevation by effecting a movement thereof commensurably to subtracted amounts of liquid, to hold the weight in substantial equipoise at said predetermined elevation, and measuring the lifting effort.

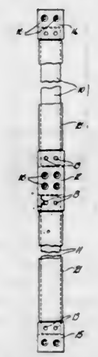
1,861,887. AUTOMATIC LATCH. JOSEPH D. STASSART, Berkeley, Calif., assignor to Virgil L. Brady and Mark E. Verge, Oakland, Calif. Filed Nov. 22, 1929. Serial No. 409,080. 5 Claims. (Cl. 292—334.)

5. In a door latch of the character described, a casing, a latch bolt adapted to be extended and retracted with relation to the casing, resilient means urging the the bolt to an extended position, handle means for retracting the bolt, an extension member formed integrally with the latch bolt and having an aperture formed therein, a resiliently mounted stud disposed within the casing and



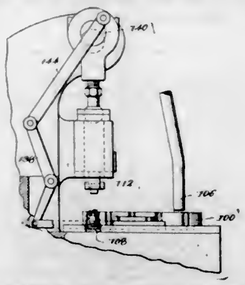
engageable with said aperture to maintain the latch bolt in a retracted position, and means operable from the exterior of the casing for releasing the latch bolt.

1,861,888. SPRING FOR DOORS, GATES, AND THE LIKE. HERBERT ALFRED STEVENS, London, England. Filed Mar. 3, 1931, Serial No. 519,829, and in Great Britain Mar. 25, 1930. 2 Claims. (Cl. 16—75.)



1. A torsion spring for application to a swinging element and its support comprising thin resilient strips arranged end to end, an attaching plate secured to the adjacent ends of the strips, and similar attaching plates secured to the opposite ends of the strips.

1,861,889. METHOD AND APPARATUS FOR COUPLING NUTS AND WASHERS. ALBERT STOLL, Detroit, Mich., assignor to National Machine Products Company, Detroit, Mich., a Corporation of Michigan. Filed June 6, 1930. Serial No. 459,468. 7 Claims. (Cl. 29—84.)



1. In a mechanism for coupling washers and nuts through the medium of protuberances of the nuts, a rotary index table having an annular series of openings adapted for the reception of nuts and washers, work supporting means movable endwise in said openings, means to feed nuts to said openings, means to furnish washers to the protuberances of the nuts, and a ram to force the washers over the protuberances.

1,861,890. SEPARATION OF MIXTURES OF PRIMARY AROMATIC AMINES. EDUARD TSCHUNKUR and ALBERT KLAMROTH, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 16, 1929, Serial No. 414,565, and in Germany Dec. 17, 1928. 5 Claims. (Cl. 260—130.5.)

1. The new process which comprises passing a current of dry hydrochloric acid gas through a liquefied mixture of primary amines of the aromatic series which are capable of forming salts with hydrochloric acid, separating the precipitating hydrochloric acid salt of the stronger base, and further subjecting the mother liquor to the same treatment until the individual bases are separated successively according to their basicity.

1,861,891. MOTION PICTURE FILM REEL. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 26, 1927. Serial No. 215,618. 5 Claims. (Cl. 242—74.)

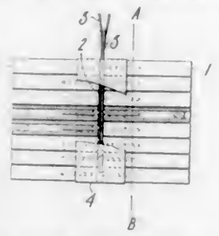


1. A reel for use with motion picture film and comprising a core, flanges rigidly secured to the ends of the core and forming a space therebetween into which a film strip may be wound, and a spider-like structure carried at one end of the reel, and having resilient portions extending along said flanges within said space and constituting projections adapted to engage and clamp the end of a film when inserted into the space.

1,861,892. PRODUCTION OF BARIUM OXYGEN COMPOUNDS. SERGE WITTOUCK, Paris, France, assignor to International Industrial and Chemical Company Limited, Montreal, Quebec, Canada. Filed Apr. 20, 1931, Serial No. 531,621, and in Germany Feb. 17, 1930. 4 Claims. (Cl. 23—186.)

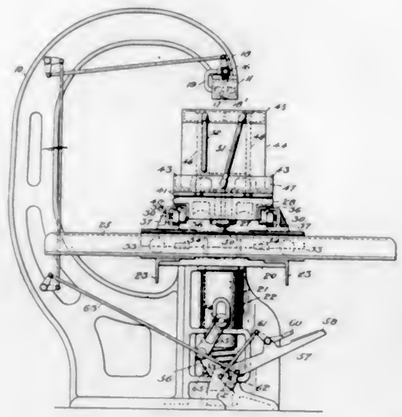
1. A process for the continuous production of barium hydroxide or hydrate by calcining a mixture comprising carbon, barium carbonate and one of the materials selected from the group consisting of silicic acid and barium silicate, and hydrolizing the smelt.

1,861,893. FIRECRACKER. HATSUTARO YAMAGISHI, Taihokushi Taiwan, Japan. Filed Apr. 25, 1930. Serial No. 447,328. 3 Claims. (Cl. 102—22.)



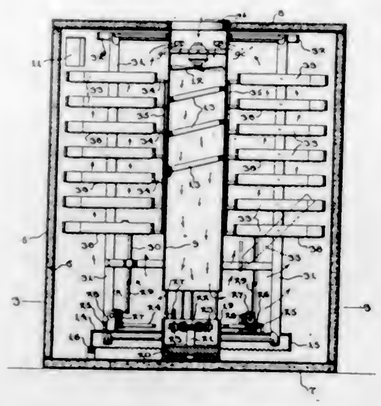
2. Improvement in fire crackers comprising two series of crackers arranged with the crackers of the respective series in axial alinement with their fuses opposite one another, the fuses being separate and independent of one another and situated in a space between the ends of the fire crackers and a strip extending around the fuse ends of the two series of crackers and closing said space, any desired number of crackers being removable from the package thus formed.

1,861,894. GARMENT PRESSING MACHINE. EDWIN H. ZACHARIAS, Reading, Pa. Filed Apr. 7, 1921. Serial No. 459,286. 9 Claims. (Cl. 68—9.)



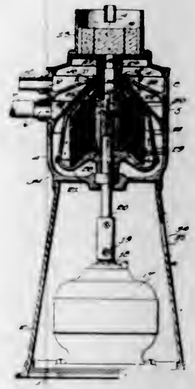
1. In a pressing machine, a stationary pressing iron, an ironing board mounted to have free movement in any direction in a horizontal plane and be freely rotatable in any such position, and means for raising and lowering said ironing board.

1,861,895. METHOD AND APPARATUS FOR THE ARTIFICIAL INCUBATION OF EGGS. CLARK W. ALLEN, Big Timber, Mont. Filed Mar. 22, 1928. Serial No. 263,744. 5 Claims. (Cl. 119—35.)



1. The method of hatching eggs by revolving a plurality of eggs through a current of heated air in an incubating chamber, and frequently changing the direction of the air current by frequent movement of the eggs therein in a plane at an angle to the direction of revolution.

1,861,896. WATER PURIFYING APPARATUS. HARRISON AYERS, Nashville, Tenn., assignor of one-half to Henry Burnley, Nashville, Tenn. Filed May 11, 1931. Serial No. 536,619. 2 Claims. (Cl. 233—29.)



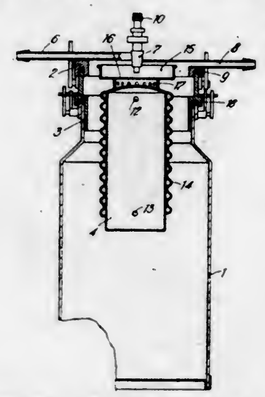
1. A water purifying apparatus, comprising a liquid supply tank, a dirty water chamber having an outlet, a clean water chamber having an outlet, an agitator casing comprising an upper dome shaped portion having its top cone shaped or inclined, a cup shaped base portion having a post of uniform size rising therefrom and extending throughout the machine to the base of the supply tank, said post having a shoulder at its base, a series of side water outlets, a water receiving chamber in its upper end and exterior screw threads at its upper end, a cage surrounding said post with its lower portion resting on the shoulder of said post, an agitator fitting on said post and engaging said cage, said agitator comprising a series of cone shaped members having projections and a ring for retaining said members in spaced parallel relation and the upper member of said series having a raised ring and a series of ribs bearing against the inclined inner wall of the top of the dome of the casing, a clamping nut on the threaded end of said post to retain the dome and agitator in place, a lock nut on said threaded end of the post to lock said clamping nut, and a motor connected with the lower cup shaped portion of the agitator casing for rotating said casing and agitator.

1,861,897. EYE EXERCISER. BIRTLEY A. BALL, Milton, Wash. Filed Mar. 21, 1930. Serial No. 437,715. 7 Claims. (Cl. 128—25.)



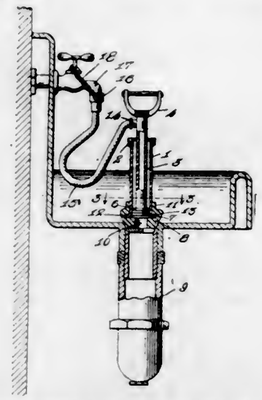
5. In an eye exerciser, the combination of a container; a hollow shaft mounted therein and extending therefrom; an arm secured to said hollow shaft outside of said container; a second shaft mounted centrally in said hollow shaft and extending therefrom; a second arm rotatably mounted on the end of said first arm; means connecting said second shaft with said second arm, whereby said second arm turns through twice the angle through which said second shaft turns; means for driving said hollow shaft; a visible object on said second arm; and means for driving said second shaft, whereby said visible object is caused to move on a curved line across the field of operation with each half-rotation of said first arm.

1,861,898. COOLING DEVICE FOR MILK RECEIVING CONTAINERS OF VACUUM MILKING MACHINES. EUGEN RAVEN-ROSEN-BAUM, Gut Ravenhorst, and ALFRED DOMSCHEIT, Junterbog, Germany. Filed Dec. 11, 1930, Serial No. 501,644, and in Germany Dec. 12, 1929. 2 Claims. (Cl. 31—58.)



1. A cooling device for milk receiving containers of vacuum milking machines, comprising in combination with the milk receiving container a lid for said container, a milk supply tube on said lid, an intermediate element of a suitable shape adapted to be air-tightly inserted between said container and said lid for equalizing the level of the milk in the container, and a cooling device of known type fixed on said lid.

1,861,899. CLEANER. W. B. BEACH, Jr., Wichita Falls, Tex., assignor to L. W. Alexander, Wichita Falls, Tex. Filed Jan. 12, 1931. Serial No. 508,282. 1 Claim. (Cl. 4—256.)



A cleaner comprising a cylinder having one end flanged and its opposite end threaded, an apertured cap threaded to said threaded end of the cylinder, an apertured cushioned head for engagement with a drain pipe mounted on the flanged end of the cylinder, a hollow stem reciprocally mounted in the cylinder and extending through the apertured cap with a tight sliding fit therewith, a handle on the outer end of the stem whereby the latter may be reciprocated, means for connecting the stem adjacent the handle to a water supply, a flange on the stem, and a washer secured to the flange and engaging the walls of the cylinder to provide a piston to the stem for forcing water into the drain pipe at a pressure in excess of the pressure of the water from the source.

1,861,900. PROCESS FOR THE PRODUCTION OF THIONYL CHLORIDE. WALTER S. BEANBLOSSOM, Niagara Falls, N. Y., assignor to Hooker Electrochemical Company, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1930. Serial No. 443,247. 7 Claims. (Cl. 23—203.)

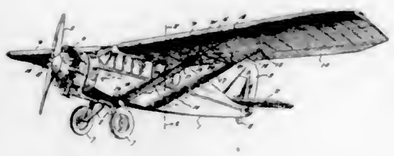
1. Process of producing thionyl chloride, which comprises treating sulfuric acid with sulfur dichloride and chlorine, and separating the so-formed thionyl chloride from the resulting reaction mixture by distillation.

1,861,901. STRUT CONSTRUCTION. GIUSEPPE M. BELLANCA, New Castle, Del. Filed Nov. 8, 1930. Serial No. 494,360. 1 Claim. (Cl. 244—12.)



In an airplane, a wing supporting strut having a triangular lifting surface of airfoil section, the base of the triangle being secured to the fuselage, and the vertex of the triangle being secured to the wing adjacent its trailing edge, and an auxiliary bracing member secured at one end to the leading edge of said strut at a point below the vertex of the triangle, and at its other end to the leading edge of said wing.

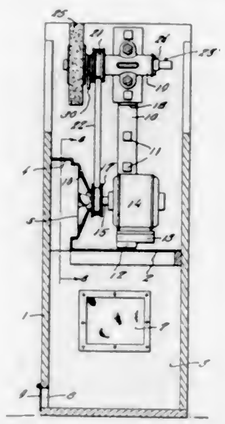
1,861,902. STRUT CONSTRUCTION. GIUSEPPE M. BELLANCA, New Castle, Del. Filed Nov. 8, 1930. Serial No. 494,361. 12 Claims. (Cl. 244—12.)



1. In an airplane, a plurality of wing supporting struts at least one of said struts having an airfoil surface permanently arranged with a negative angle of incidence.

1,861,903. SHOE FINISHING MACHINE. LOUIS BELLANDO, Warren, Ohio. Filed June 5, 1931. Serial No. 542,434. 2 Claims. (Cl. 12—1.)

1. A shoe finishing machine comprising a cabinet open at its top and closed at its bottom, said cabinet including front, rear and side walls, a partition mounted in an intermediate portion of the cabinet and including a horizontally disposed portion and a vertically disposed portion, said partition providing a refuse collecting chamber in the lower portion of the cabinet, the vertical portion of the partition having an opening therein providing an inlet to the refuse chamber, a vertically disposed bracket mounted in the cabinet above the refuse chamber, an electric motor supported on the lower portion of the bracket in spaced opposed relation to the opening, a bearing mounted on the upper end portion of the bracket, a shaft journalled in the bearing and having its ends projecting beyond the ends of said bearing, tools detachably mounted on the projecting end portions of the shaft, means operatively connecting the shaft to the motor for



actuation thereby, and a fan mounted on the motor and disposed adjacent the opening for impelling refuse into the chamber.

1,861,904. DOUBLE COMPOUNDS OF DIPHENOL ISATINS AND QUINOLINE OR ISOQUINOLINE BASES. RUDOLF BERENDES, Elberfeld-Sonnborn, and FRITZ MIETZSCH, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 30, 1928, Serial No. 322,963, and in Germany Dec. 2, 1927. 8 Claims. (Cl. 260—25.)

1. The process which comprises reacting with an alkali metal salt of a 3.3-diphenolisatin, upon a salt of a base of the group consisting of alkoxy-quinolines and alkoxy-iso-quinolines and the alkoxybenzyl and veratryl-substitution products thereof in the presence of water.

1,861,905. FISH LURE. SAKRIE R. BERGSTEDT, Duluth, Minn. Filed Oct. 23, 1930. Serial No. 490,685. 3 Claims. (Cl. 43—45.)

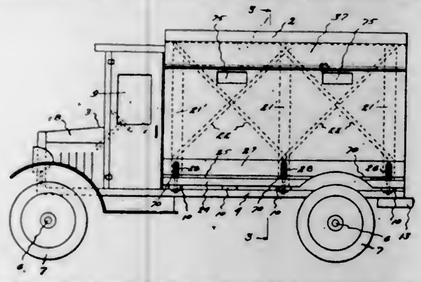


1. A trolling spoon characterized by being of concavo-convex curvature both transversely and longitudinally, the radius of said longitudinal curvature being graduated.

1,861,906. TELESCOPIC COACH AND JACK. LUMAN H. BRADBURN, Eureka, Mont. Filed May 31, 1929. Serial No. 367,438. 1 Claim. (Cl. 296—26.)

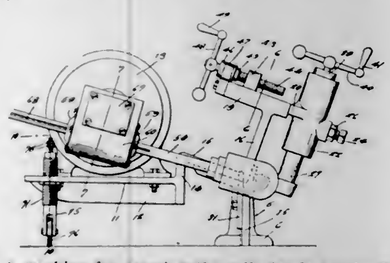
In a vehicle, a rigid body, a telescopic body to slide over said rigid body, a roof on said rigid body, hollow posts along the sides of said rigid body, rods supporting said roof telescoping vertically in said hollow posts, similar hollow posts on said telescopic body, a roof for said telescopic body, rods supporting the roof of said telescoping body, said rods telescoping vertically in the hollow posts of

said telescopic body, said second roof being supported over the roof of the rigid body when the bodies are in retracted position, means for slidably supporting the walls of said



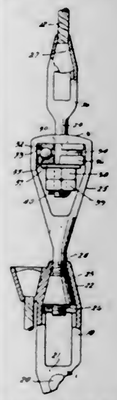
telescopic body outside the walls of said rigid body, whereby said vehicle body may be extended both rearwardly and vertically, or vertically or rearwardly alone.

1,861,907. ROLL STAND REAMER. WILLIAM ARCHIE COTTLE and ROBERT L. COTTLE, Tallassee, Ala. Filed July 31, 1929. Serial No. 382,464. 5 Claims. (Cl. 90—12.)



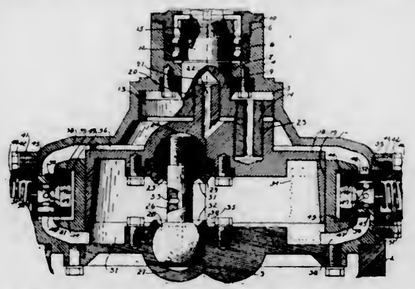
1. A machine for reaming the roll stands on the frame of a cotton mill comprising a bracket adapted to be seated in the angle of a roll stand formed by the roll bearing and shelf portion of the stand, a platform at one end of the bracket for supporting a motor, a reamer, a carrier for the reamer at the other end of the bracket, means for feeding the reamer into the roll bearing of the said stand, and means for limiting the cutting depth of the reamer.

1,861,908. ELEVATOR GOVERNOR CABLE SWIVEL. GEORGE E. CULP, Dallas, Tex. Filed May 31, 1930. Serial No. 458,136. 4 Claims. (Cl. 187—1.)



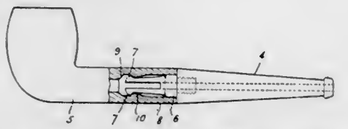
1. In an elevator governor cable swivel, a lower member for attachment to one end of the cable as well as to an elevator car, a yoke having its shank secured to said member, a hanger having a socket at its upper end for receiving the elevator cable, and a stem extending from the hanger and rotatably confined in the yoke.

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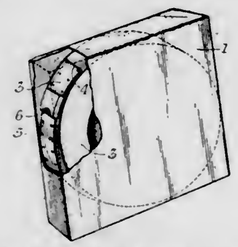
1. In mechanism of the character described, a rotatable driving member and a rotatable and reciprocating driven member, a connecting rod inserted between the members and having universal joint connections therewith, the members being disposed in axial alinement with each other and the connecting rod being disposed in eccentric relation to said members, whereby rotation of the driving member will impart rectilinear movement to the driven member in a direction axially of the driving member.

1,861,910. MOUTHPIECE FOR TOBACCO PIPES AND CIGAR AND CIGARETTE HOLDERS. VERNON DUNHILL, London, England. Filed May 29, 1931, Serial No. 541,037, and in Great Britain Apr. 7, 1931. 7 Claims. (Cl. 131—12.)



1. In a tobacco pipe, cigar or cigarette holder, a stem, a mouthpiece separable from the stem, a spigot on the mouthpiece insertable in the stem and being split longitudinally to render same resilient, an abutment within said stem, said spigot and abutment having cooperating means thereon for interlocking when the spigot is pushed home within the stem.

1,861,911. COLOR PHOTOGRAPHY. PAUL FAVOUR, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 31, 1928. Serial No. 303,285. 3 Claims. (Cl. 206—47.)



1. As an article of manufacture, a photographic roll film package including a film sensitive to a plurality of colored light rays and adapted to be used with a multi-

1,861,900. PROCESS FOR THE PRODUCTION OF THIONYL CHLORIDE. WALTER S. BRANBLOSSOM, Niagara Falls, N. Y., assignor to Hooker Electrochemical Company, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1930. Serial No. 443,247. 7 Claims. (Cl. 23—203.)

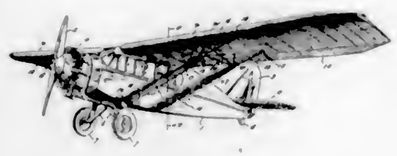
1. Process of producing thionyl chloride, which comprises treating sulfuric acid with sulfur dichloride and chlorine, and separating the so-formed thionyl chloride from the resulting reaction mixture by distillation.

1,861,901. STRUT CONSTRUCTION. GIUSEPPE M. BELLANCA, New Castle, Del. Filed Nov. 8, 1930. Serial No. 494,360. 1 Claim. (Cl. 244—12.)



In an airplane, a wing supporting strut having a triangular lifting surface of airfoil section, the base of the triangle being secured to the fuselage, and the vertex of the triangle being secured to the wing adjacent its trailing edge, and an auxiliary bracing member secured at one end to the leading edge of said strut at a point below the vertex of the triangle, and at its other end to the leading edge of said wing.

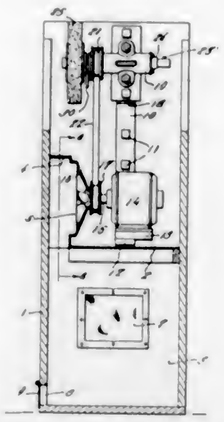
1,861,902. STRUT CONSTRUCTION. GIUSEPPE M. BELLANCA, New Castle, Del. Filed Nov. 8, 1930. Serial No. 494,361. 12 Claims. (Cl. 244—12.)



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actuation thereby, and a fan mounted on the motor and disposed adjacent the opening for impelling refuse into the chamber.

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1. The process which comprises reacting with an alkali metal salt of a 3.3-diphenolisatin, upon a salt of a base of the group consisting of alkoxy-quinolines and alkoxy-iso-quinolines and the alkoxybenzyl and veratryl-substitution products thereof in the presence of water.

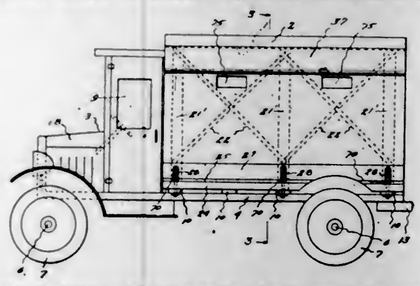
1,861,905. FISH LURE. SAKRIE R. BERGSTEDT, Duluth, Minn. Filed Oct. 23, 1930. Serial No. 490,685. 3 Claims. (Cl. 43—45.)



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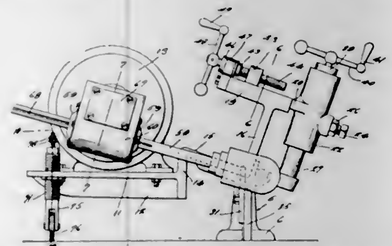
1,861,906. TELESCOPIC COACH AND JACK. LUMAN H. BRADBURN, Eureka, Mont. Filed May 31, 1929. Serial No. 367,438. 1 Claim. (Cl. 296—26.)

In a vehicle, a rigid body, a telescopic body to slide over said rigid body, a roof on said rigid body, hollow posts along the sides of said rigid body, rods supporting said roof telescoping vertically in said hollow posts, similar hollow posts on said telescopic body, a roof for said telescopic body, rods supporting the roof of said telescoping body, said rods telescoping vertically in the hollow posts of said telescopic body, said second roof being supported over the roof of the rigid body when the bodies are in retracted position, means for slidably supporting the walls of said



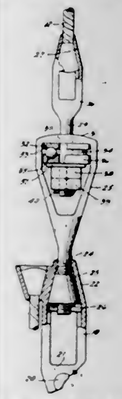
telescopic body outside the walls of said rigid body, whereby said vehicle body may be extended both rearwardly and vertically, or vertically or rearwardly alone.

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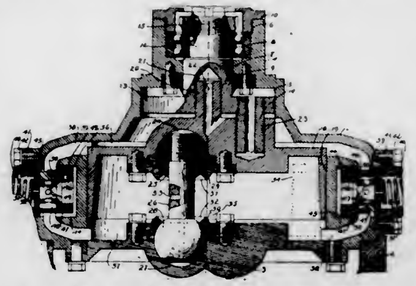
1. A machine for reaming the roll stands on the frame of a cotton mill comprising a bracket adapted to be seated in the angle of a roll stand formed by the roll bearing and shelf portion of the stand, a platform at one end of the bracket for supporting a motor, a reamer, a carrier for the reamer at the other end of the bracket, means for feeding the reamer into the roll bearing of the said stand, and means for limiting the cutting depth of the reamer.

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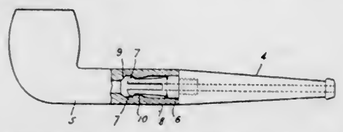
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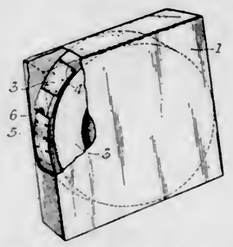
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1. In a tobacco pipe, cigar or cigarette holder, a stem, a mouthpiece separable from the stem, a spigot on the mouthpiece insertable in the stem and being split longitudinally to render same resilient, an abutment within said stem, said spigot and abutment having cooperating means thereon for interlocking when the spigot is pushed home within the stem.

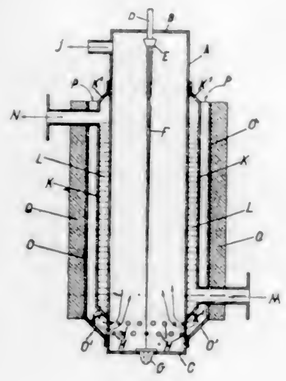
1,861,911. COLOR PHOTOGRAPHY. PAUL FAVOUR, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 31, 1928. Serial No. 303,285. 3 Claims. (Cl. 206—47.)



1. As an article of manufacture, a photographic roll film package including a film sensitive to a plurality of colored light rays and adapted to be used with a multi-

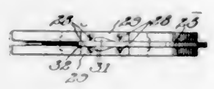
colored filter, a leader strip for the film, a color ratio controller removably attached to the leader strip, said controller having light transmitting areas adapted to alter light rays passing through said filter to the film in accordance with the color sensitivity of said film.

1,861,912. APPARATUS FOR HEATING AIR IN DRY SPINNING OF ARTIFICIAL THREADS. ALFRED FRIEDERICH and PAUL SCHLACK, Berlin, Germany, assignors to Aceta G. m. b. H., Berlin-Lichtenberg, Germany, a Corporation of Germany. Filed Mar. 14, 1929, Serial No. 347,135, and in Germany Mar. 22, 1928. 2 Claims. (Cl. 18—8.)



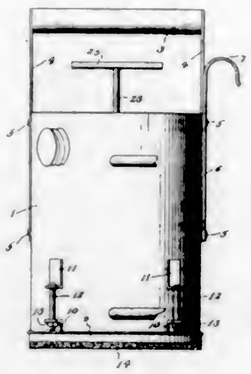
1. In an apparatus for spinning artificial silk according to the dry spinning process in combination, a tubular spinning cell provided at its top with means to supply the spinning solution in form of threads and at its bottom with an opening for discharging the threads formed, means for admitting uniformly the drying air at the lower part and an outlet for the air at the upper part of the spinning cell, heating means surrounding the cell and a casing external to the said heating means, open at the top and in connection with the inlet openings of the spinning cell traversed by the drying air.

1,861,913. CUTTING DIE FOR SLOTTING MACHINES. IRVING J. GANNON, Willoughby, and GUY E. LINN, Rittman, Ohio, assignors to The Ohio Boxboard Company, Rittman, Ohio, a Corporation of Ohio. Filed Oct. 28, 1930. Serial No. 491,784. 8 Claims. (Cl. 164—28.)



1. A cutting die for partition slotting machines, having cutting means for forming a notch at the edge of the partition, and cutting means for forming a slot in continuation of such notch, said cutting means being relatively adjustable to vary the depth of said slot.

1,861,914. SHEEP BRANDER. CLARENCE H. GRIDLEY, Flournoy, Calif. Filed Aug. 30, 1930. Serial No. 478,970. 8 Claims. (Cl. 101—114.)



1. A branding device comprising a hollow cylindrical body open at its lower end, a head for closing the open end of said body, a pad of absorbent material having the outline of a character, flanges carried by said head and extending downwardly therefrom to grip the pad from sides thereof and hold the pad in engagement with the head, said head having openings formed therein above the pad whereby marking fluid may flow from the body and saturate the pad, a valve in said body slidable therein into and out of position to engage the head and interrupt flow of fluid through the openings, and actuating means for the valve.

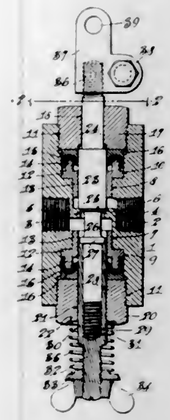
1,861,915. SAFETY GLASS. MAX HAGEDORN and ADOLF JUNO, Dessau-in-Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 12, 1929, Serial No. 377,818, and in Germany July 14, 1928. 4 Claims. (Cl. 49—81.)



4. In a safety glass consisting of a plurality of glass plates and of a sheet of a cellulose derivative containing in its molecule the radical of an aliphatic acid with more than 3 carbon atoms, as an adhesive stratum cellulose naphthenate.

1,861,916. BALANCED QUICK OPERATING VALVE. FRANK HENNEBÖHLE, Chicago, Ill. Filed May 18, 1931. Serial No. 538,374. 8 Claims. (Cl. 251—155.)

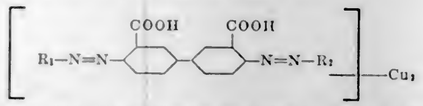
1. In valves, a valve body having oppositely disposed inlet and outlet openings, and a web having a fluid passage, the axis of which is at right angles to the axis of said openings, said body having aligning bores entering from opposite ends, the axes of which bores coincide with that of said fluid passage, a stem guide in each bore, a substantially rod-like valve unit passing through said



guides and bores and having a seating surface, said web having a valve seat cooperating with said surface, and packing devices in said bores around said valve unit.

1,861,917. AZODYESTUFFS CONTAINING COPPER. WINFRID HENTRICH, Leverkusen-on-the-Rhine, and JOSEF HILGER, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 29, 1930, Serial No. 457,526, and in Germany June 3, 1929. 4 Claims. (Cl. 260—12.)

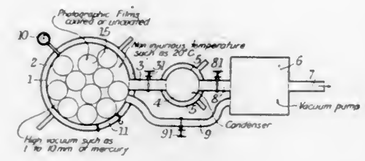
1. As new products ortho-carboxy azodyestuffs containing copper of the probable general formula:



wherein "R_1" and "R_2" stand for naphthalene nuclei which are substituted by hydroxy groups in ortho-position to the azo groups, each of the naphthalene nuclei "R_1" and "R_2" being further substituted by an amino group and two sulfonic acid groups, and wherein the amino groups may be further substituted by alkyl or acyl groups, being generally dark, metallic lustrous powders, insoluble in water, soluble in dilute aqueous alkalies dyeing vegetable fibers blue to bluish-grey clear shades of good fasteness properties.

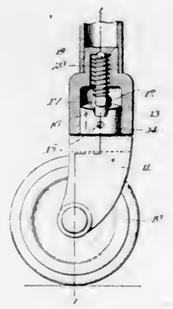
1,861,918. PROCESS OF CONDITIONING PHOTOGRAPHIC FILMS. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 30, 1928. Serial No. 250,653. 12 Claims. (Cl. 34—24.)

1. In the process of conditioning film having at least a layer of colloidized cellulosic compound, said layer containing residual volatile solvent, the step of submitting said film to a vacuum to remove solvent, said film being maintained at a temperature at which it remains unimpaired during said removal, and the pressure in said vacuum being at least as low as the vapor pressure of water at said temperature.



11. A conditioned photographic film comprising a layer of colloidized cellulosic compound prepared with a volatile solvent and capable of retaining a residuum of said solvent, and a light-sensitive photographic colloid layer capable of retaining moisture, said first-named layer being reduced in volatile solvent content to make it preshrunk with respect to a like layer containing said residuum of said volatile solvent, and said last-named layer being reduced in moisture content to make it keep unfogged longer than a like layer containing more moisture.

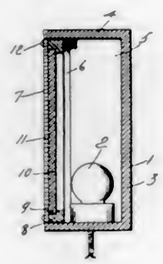
1,861,919. CASTER CONSTRUCTION. MILTON C. HILL, Charlottesville, Va. Filed Sept. 18, 1929. Serial No. 393,482. 15 Claims. (Cl. 16—34.)



1. A caster construction including a socket, a spindle rotatable therein, and automatically operative means associated with the socket for locking the spindle in a predetermined position.

1,861,920. ILLUMINATED SIGN. CECIL F. HOLMAN, Kansas City, Mo. Filed July 19, 1930. Serial No. 469,104. 2 Claims. (Cl. 40—133.)

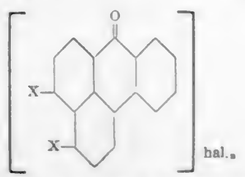
1. In an illuminated device, a housing having a detachable front closure, said closure comprising a frame having a shoulder portion extending around the inner sides and ends of the frame, a plate of transparent substance supported by the shoulder on the frame, a series of individual stencil plates detachably secured on said frame above said transparent plate and having individual openings describing digits and collectively describing a number, and



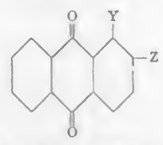
and having interconnecting means extending through the stencil plates and into said frame whereby to support the transparent substance therebetween.

1,861,921. BROWN VAT DYESTUFFS OF THE BENZANTHRONE ACRIDINE SERIES AND PROCESS OF MAKING SAME. ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 26, 1928, Serial No. 322,093, and in Germany Nov. 30, 1927. 7 Claims. (Cl. 260—36.)

1. A process which comprises condensing at elevated temperatures halogenated benzanthrone compounds of the general formula:



wherein *n* means the number 1 or 2 and the benzanthrone residue may contain a further halogen atom, or a nitro or substituted amino group, and wherein in one of the positions signified by X the same benzanthrone residue may be attached with a compound corresponding to the formula:



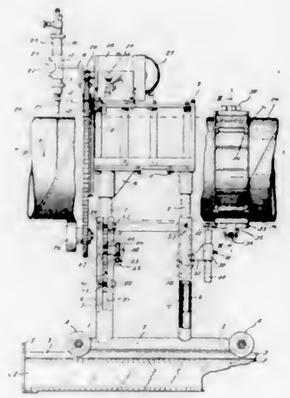
wherein Y means $-NH_2$, Z means $-CHO$, or $-CH=N$-phenyl, or Y and Z stand jointly for the group



1,861,922. NITRATION OF SHREDDED AND BALED CELLULOSE. ARTHUR HOUGH, Passaic, JOHN ROY DUFFORD, Paterson, and WILLIAM CLELLAND LEONHARD, Passaic, N. J. Filed Mar. 29, 1930. Serial No. 440,150. 8 Claims. (Cl. 260—145.)

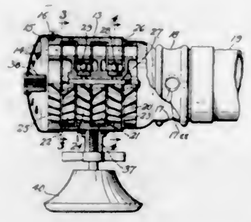
1. The process of nitrating cellulose which comprises subjecting the cellulose in the form of sheets of paper-like thickness to a shredding operation to give a mass of long strips, baling the mass of such shredded material, and nitrating the latter, substantially as described.

23.)



1. A machine for cutting off sections of an advancing shape of metal comprising in combination a blowpipe; means for supporting said blowpipe independently of said shape, a means for advancing said blowpipe in the direction of and at the same rate of advancement as the shape, and means for moving said blowpipe along a path transverse to the direction of advancement of the shape.

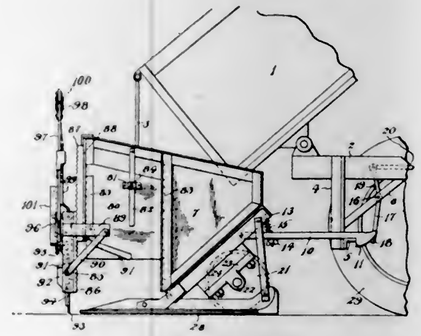
1,861,924. HOUSEHOLD APPLIANCE. FREDRIK JOHAN ROBERT KARLSTRÖM and JOHAN GUNNAR NORD, Stockholm, Sweden, assignors, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed May 14, 1930, Serial No. 452,150, and in Sweden May 16, 1929. 7 Claims. (Cl. 128—37.)



5. In a device of the character described, in combination, a vacuum cleaner having a suction inlet, a turbine, and a conduit connecting said turbine with said inlet, said turbine comprising a stationary guide having a plurality of oblique vanes, a shaft, a turbine runner mounted on said shaft and having oblique vanes and an eccentric weight, and a bearing for said shaft carried by said stationary guide.

1,861,925. MEANS FOR SPREADING ROAD MATERIAL. CHARLES G. KIME, Crestline, Ohio, assignor to The Burch Corporation, Crestline, Ohio, a Corporation of Ohio. Filed May 19, 1930, Serial No. 453,727. Renewed Mar. 7, 1932. 6 Claims. (Cl. 94—44.)

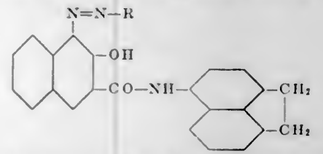
1. The combination with a hopper to be drawn over a road at the rear of a dumping vehicle and receive road



on, a supplemental blade carried directly by the gate, and means mounted on the gate above the blade for vertically adjusting the blade.

1,861,926. NEW WATER INSOLUBLE AZODYESTUFFS. LEOPOLD LASKA and ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1929, Serial No. 388,850, and in Germany Sept. 8, 1928. 6 Claims. (Cl. 260—95.)

1. As new compounds water-insoluble azodyestuffs corresponding probably to the general formula:



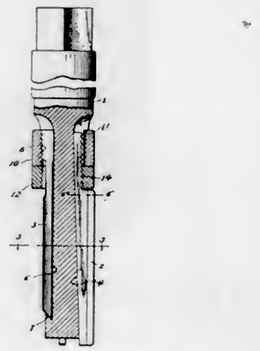
wherein R means a radical of the benzene (including azobenzene), naphthalene or anthracene series, which dyestuffs are distinguished by the dark garnet- to claret-red shade of the color lakes, dyeings and printings obtainable therewith.

1,861,927. PREPARATION OF EMULSIONS FOR SIZING TEXTILE FIBERS. GEORGES LEFRANC, Paris, France. Filed Feb. 21, 1930, Serial No. 430,461, and in France Jan. 11, 1930. 3 Claims. (Cl. 134—20.)

1. A size for sizing textile fibers, comprising a mixture of 24 to 60 parts gum resin, 24 to 60 parts drying oils, casein in quantity varying from 8 to 10 parts dispersed in suitable quantity of borax and water, and 5 to 10 parts water-glass diluted in 500 parts of water, the whole homogenized into a stable dispersion.

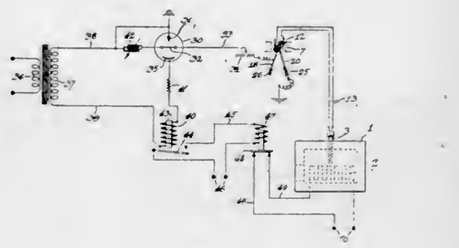
1,861,928. EXPANSION CUTTER. LEO J. LOEFFELMAN, St. Louis, Mo. Filed Jan. 30, 1930. Serial No. 424,670. 3 Claims. (Cl. 77—75.)

2. An expansion tool comprising a body provided near one end with an annular shoulder inclined inwardly toward said end and provided at a point remote from said



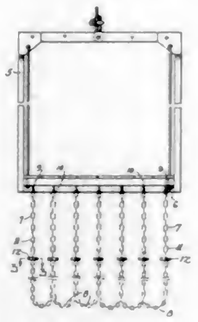
beveled to engage under the inclined shoulder on the body and its opposite end externally threaded, and an internally threaded adjusting ring abutting the radial shoulder on the body and engaging the threaded ends of the clamps.

1,861,929. CONTROL APPARATUS. JOHN D. LOWRY, Detroit, Mich., assignor of one-half to Norman H. Berry, Detroit, Mich. Filed Jan. 14, 1930. Serial No. 420,805. 6 Claims. (Cl. 236—69.)



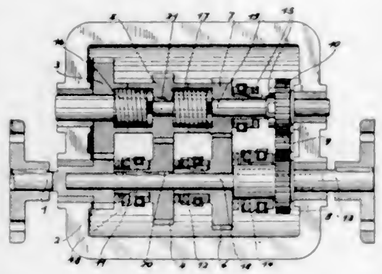
1. A control apparatus comprising a movable element adapted to respond to changes in the condition to be indicated, a fixed element, cooperating condenser plates carried by said elements and adapted to assume a condenser relation to each other, a radio-active condenser-controlled circuit maker and breaker electrically connected to said elements, means for producing conditions affecting said movable element, and means in circuit with said circuit maker and breaker for governing the first named means.

1,861,930. SAFETY DEVICE FOR HOISTING CAGES. HOWARD HAYES MCDANIEL and CHARLES HANSON MCDANIEL, Beaumont, Tex. Filed Apr. 22, 1931. Serial No. 532,072. 7 Claims. (Cl. 116—68.)



1. In combination with an open framework, a hoist slidably mounted therein, elongated strips of material secured to the outer edge of said hoist adjacent the open framework and extending downwardly from said hoist and adapted to give warning of the movement of said hoist.

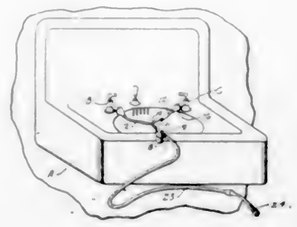
1,861,931. CHANGE SPEED GEARING. ERICH MOLDENHAUER, Dusseldorf, Germany. Filed May 29, 1929, Serial No. 366,783, and in Germany Jan. 14, 1929. 6 Claims. (Cl. 74—59.)



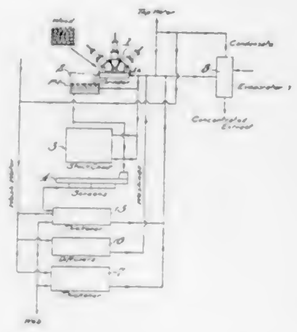
1. In a change speed gearing, a drive shaft, a driven shaft alined with the drive shaft, a jack shaft parallel to the drive and driven shafts, two sets of toothed gear wheels mounted on the shafts, each set consisting of a plurality of gear wheels of different diameters, the gear wheels of the sets meshing with each other in pairs and a terminal gear wheel of one of the sets being fixed on the drive shaft, means for driving the driven shaft by another wheel of the same set, coupling members for connecting and disconnecting adjacent gear wheels of said set, and one-way clutch members for gear wheels of the other set adapted to automatically connect the said gear wheels with the driving part upon relative rotation in one direction and to disconnect the same upon relative rotation in the other direction.

1,861,932. DOUCHE APPARATUS. RAMSAY H. MOORE, Dallas, Tex., assignor to Zelgela Products Corporation, Dallas, Tex., a Corporation of Texas. Filed May 28, 1931. Serial No. 540,571. 5 Claims. (Cl. 128—229.)

1. In an apparatus of the character described, a container including a cup and a cap, the cap of the container having a transverse passage extending therethrough and a single small inlet and a single outlet between the passage and the cup for by-passing a portion of the liquid from said passage both being of considerably less capacity than the passage so as to discharge a comparatively smaller stream of liquid from the cup into the stream of liquid flowing through the passage.

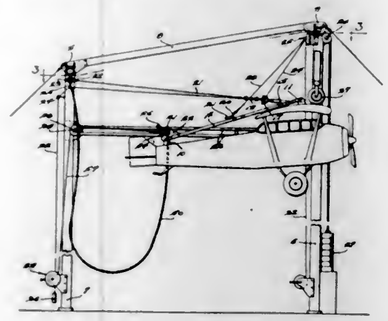


1,861,933. PROCESS FOR EXTRACTING WATER-SOLUBLE SUBSTANCES FROM RAW FIBROUS MATERIALS CONTAINING THE SAME, AND FOR SIMULTANEOUSLY FORMING THE FIBROUS MATERIALS INTO A WEB, AND SYSTEM OF APPARATUS THEREFOR. HAROLD R. MURDOCK, Canton, N. C., assignor to The Champion Fibre Company, Canton, N. C., a Corporation of Ohio. Filed Sept. 26, 1930. Serial No. 484,688. 2 Claims. (Cl. 92—2.)



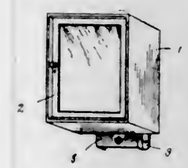
1. Process for recovering water-soluble substances from raw fibrous material containing the same and for simultaneously preparing said material in the form of a paper web, which includes the following steps: (*a*) grinding the raw fibrous material in the presence of aqueous liquid, (*b*) subjecting the resulting fibrillated material to prolonged contact with said aqueous liquid whereby to promote solution in the liquid of the water-soluble substances contained in the material, (*c*) at least partially separating the resulting aqueous solution from the fibrillated material, (*d*) subjecting the separated fibrillated material to prolonged treatment with an aqueous liquid, (*e*) separating the treated fibrillated material from the resulting aqueous solution and simultaneously forming said fibrillated material into a paper web and washing the latter while retaining the separated aqueous solution and the washings, (*f*) using a portion of the retained aqueous solution from the steps (*c*) and (*e*) as aqueous liquid in one of the steps (*a*) and (*b*) and from the remaining portion of the retained aqueous solution from steps (*c*) and (*d*) separating water thereby to yield a concentrated extract of the aforesaid water-soluble substances, and (*g*) using the water separated in step (*f*) as at least a part of the aqueous liquid in one of the steps (*b*) and (*d*).

1,861,934. AEROPLANE LAUNCHING DEVICE. MATTI NIEMI, Seattle, Wash. Filed Aug. 24, 1931. Serial No. 559,023. 15 Claims. (Cl. 244—2.)



1. In aeroplane launching devices, the combination of means for elevating a plane, means to release the plane from its elevated disposition, and means for imparting an initial thrust to the released plane to impel the same outwardly.

1,861,935. DISPLAY CASE. MICHAEL T. O'DONNELL, Duluth, Minn. Filed Oct. 3, 1930. Serial No. 486,125. 2 Claims. (Cl. 248—20.)

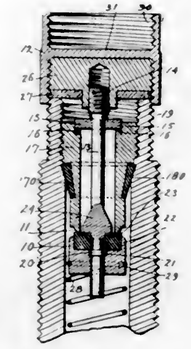


1. In combination, a receptacle having fixed adjacent the upper edge of the back thereof a depending strip spaced therefrom, and a channel like support for cooperative engagement with said strip the latter slidably extending within the channel, and means accessible beneath the receptacle for automatically locking the support and receptacle together.

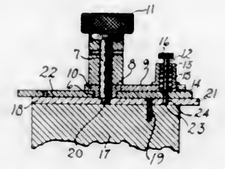
1,861,936. TIRE VALVE. MARSHALL J. PAYNE, Staunton, Va., assignor to The Payne Valve Corporation, Staunton, Va., a Corporation of Virginia. Filed Feb. 21, 1925, Serial No. 10,946. Renewed Oct. 30, 1931. 4 Claims. (Cl. 152—12.)

1. A tire valve having a stem of wire provided at different points along its length with enlargements which are integral therewith and a member around and made separate from the stem and secured thereon by radial compression, the radially engaged portion of the stem being substantially unchanged in diameter, said member being cup-shape and having a recess in which is seated one of said enlargements and a gasket within the cup lying upon the bottom thereof and engaging on opposite sides said enlargements.

4. A valve insides for pneumatic tire valves or the like comprising a valve pin having an enlargement with a substantially flat shoulder at the top thereof and a valve packing support having a tubular portion and a flat portion at the top thereof, said valve packing support being immovably mounted on said pin with the tubular portion engaging over the enlargement and the flat portion lying substantially flush with the shoulder at the top of the enlargement.

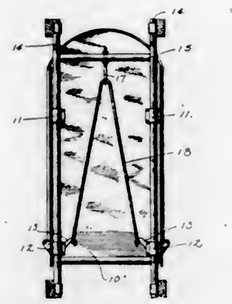


1,861,937. PRESETTING DIAL FOR PHOTOGRAPHIC PRINTING MACHINES. HARLOW D. PHILIPS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 4, 1930. Serial No. 418,549. 9 Claims. (Cl. 74—39.)



2. A presetting dial comprising a dial, an arm movable over the dial into a plurality of predetermined positions, cooperating parts on the arm and dial including guideways and a plunger adapted to be positioned by any one of the guideways, said plunger being carried on the arm, a controlling member, and means for moving the controlling member into a position predetermined by said plunger.

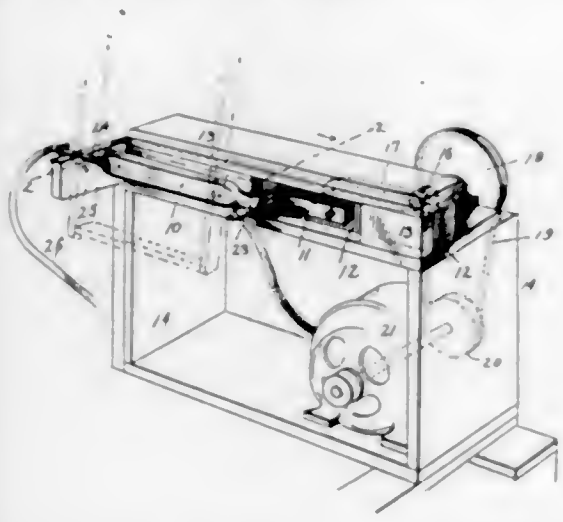
1,861,938. ADJUSTABLE SEAT. JEAN ALFRED ROCHÉ, Dayton, Ohio. Filed Jan. 18, 1926. Serial No. 82,102. 7 Claims. (Cl. 155—5.)



4. An adjustable seat for use by a pilot in an aircraft having upright supporting members and a seat slidably mounted on said uprights, resilient means for suspending

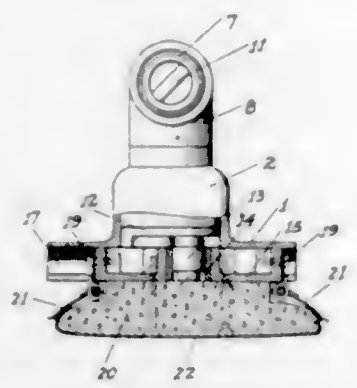
said seat and operative to elevate said seat and pilot along said uprights to substantially its uppermost position on said supporting members, tensioning devices whereby tension of said resilient means may be adjusted, and releasable means for locking said seat to said uprights in various positions of adjustment.

1,861,939. COMB UNCAPPING APPARATUS. HUBER H. ROOT, Medina, Ohio, assignor to The A. I. Root Company, Medina, Ohio, a Corporation. Filed Nov. 5, 1924. Serial No. 747,957. 10 Claims. (Cl. 6—12.)



8. A honey comb uncapping machine comprising a movably supported knife and means to cause movement of the knife while in contact with the comb in short reciprocations, and means for heating the knife while in action.

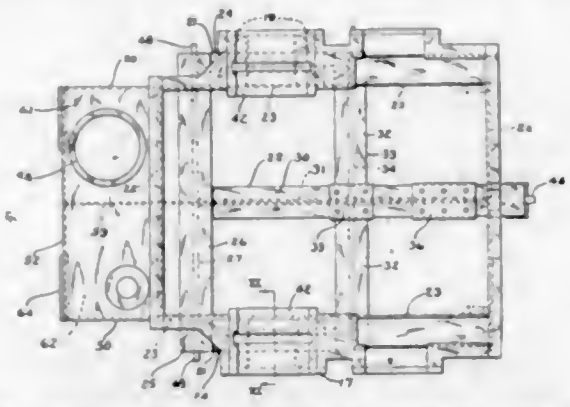
1,861,940. UNIVERSAL SANDER AND POLISHER. AXEL H. ROOS, Chico, and HARRY J. RIDDLE, San Leandro, Calif., assignors to A. Freed, trustee, San Francisco, Calif. Filed Dec. 26, 1928. Serial No. 328,427. 1 Claim. (Cl. 51—170.)



A rubbing implement comprising a supporting plate having depending side flanges grooved along their inner faces, a slide block movable between the flanges and having side grooves matching with the grooves in the flanges, anti-friction bearings in the matching grooves, plates secured to the ends of the slide block and projecting beyond the edges thereof into a running fit in the grooves of the flanges to act as retainers for the bearings therein and as scrapers for the side walls of such grooves, and a rubbing element on the face of the block.

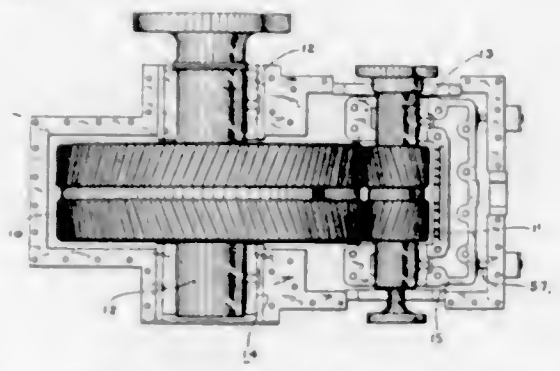
1,861,941. GEAR CASING. IRA SHORT, Essington, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 5, 1930. Serial No. 426,143. 13 Claims. (Cl. 74—56.)

6. In a supporting construction for a reduction gear embodying meshing pinion and gear members, the combination of a fabricated bed construction including parallel central and end beams with the central beam extending beyond the ends of the end beams at the pinion member end, means carried by the central beam for support-



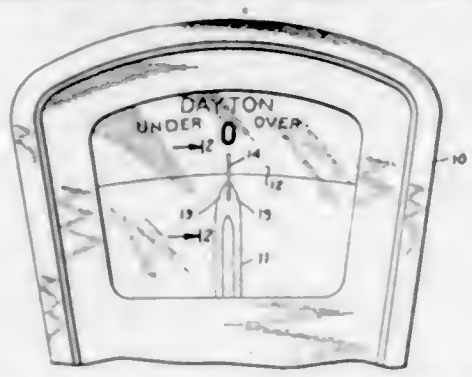
ing the pinion member, bearing constructions for the gear member, and supports for the bearing constructions carried by said end beams.

1,861,942. GEAR CASING. IRA SHORT, Prospect Park, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 21, 1930, Serial No. 437,826. Renewed Feb. 13, 1932. 6 Claims. (Cl. 74—56.)



1. The combination with meshing pinion and gear members and the gear member having journal portions of a supporting construction for the pinion and gear members comprising a supporting bed construction including a transversely-extending supporting side member, a transversely-extending side beam, and a pair of parallel end beams having like terminal portions welded to terminal portons of the transversely-extending side beam and having opposed flanges thereof cut away at the other end portions so that the ends of the cut-away flanges and webs of the end beams may be welded to the transversely-extending side member; bearing constructions cooperating with the journal portions of the gear member; means carried by the end beams and supporting the bearing constructions; and means carried by said transversely-extending side member for supporting the pinion.

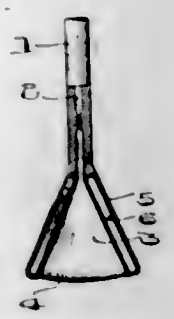
1,861,943. POINTER FOR SCALES. HENRY J. THEIS, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed May 5, 1931. Serial No. 535,178. 8 Claims. (Cl. 116—129.)



1. A tip for a scale pointer having a slot adapted to embrace the scale pointer and provided with a narrow portion adapted to be received by a slot in the end of the

pointer, said narrow portion being constructed to permit pressing the pronge formed by the slot in the pointer against the narrow portion whereby to retain the tip on the end of the pointer.

1,861,944. CLINICAL THERMOMETER. Yozo TSUTSUMI, Ebara Gun, Tokyo Fu, Japan. Filed June 30, 1931, Serial No. 547,906, and in Japan July 16, 1930. 2 Claims. (Cl. 73—52.)

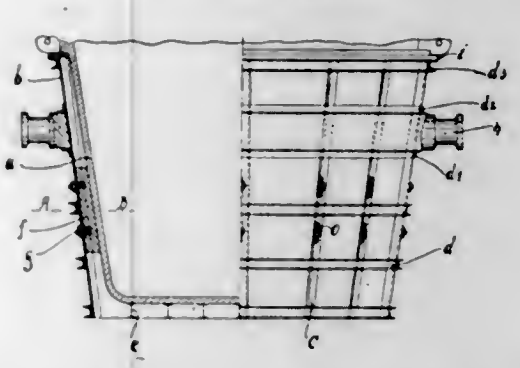


2. A clinical thermometer, characterized by having a liquid-containing bulb having a flat bottom serving as a heat receiver and providing a hollow vacuum heatproof wall at the outer periphery of the remaining portion of said bulb, the inner surface of said vacuum heatproof wall being covered with a mercury coating.

1,861,945. METHOD OF PRODUCING COMPOSITE ARTICLES. HENRY L. WARD, Chicago, Ill., assignor to Western Electric Company, Incorpoated, New York, N. Y., a Corporation of New York. Filed Aug. 9, 1924. Serial No. 731,041. 2 Claims. (Cl. 154—2.6.)

1. The method of producing a composite insulator which consists in impregnating highly absorbent paper sheets free from electricity conducting materials with rubber and a vulcanizing agent, heating the impregnated sheets to vulcanize partially the rubber therein, assembling a plurality of impregnated sheets, and subjecting the assembled sheets to heat and pressure until the rubber therein is completely vulcanized.

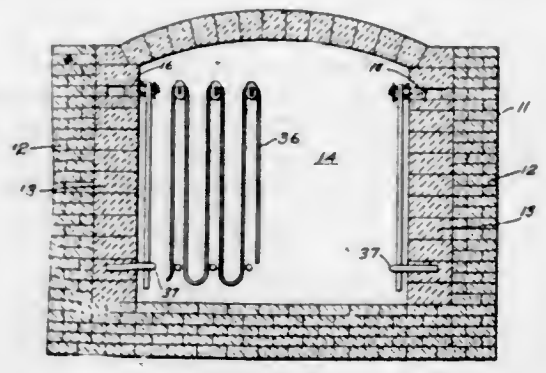
1,861,946. CARRIER FOR SLAG PANS AND THE LIKE. ALFRED WILHELMI, Oberhausen, Germany. Filed June 25, 1931, Serial No. 546,813, and in Germany July 11, 1929. 6 Claims. (Cl. 266—39.)



1. In combination, a pan, a carrier for said pan, said carrier having the form of a basket at the lateral walls as well as at its bottom, said pan being adapted, when inserted into said carrier, to rest on the bottom of the latter.

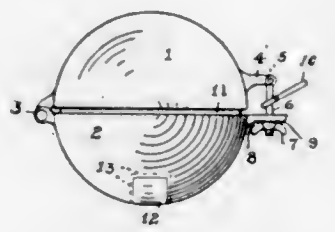
1,861,947. RESISTOR SUPPORT. JAMES C. WOODSON and ORA A. COLBY, Mansfield, Ohio, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 7, 1931. Serial No. 514,222. 3 Claims. (Cl. 13—25.)

1. A support for a side-wall furnace resistor, including a recessed refractory block in a side wall of a furnace, an elongated metal hook having one end portion located in the recess of the block and having its other end portion extending forwardly of the block, a bushing of refractory electric-insulating material on the projecting end ot the



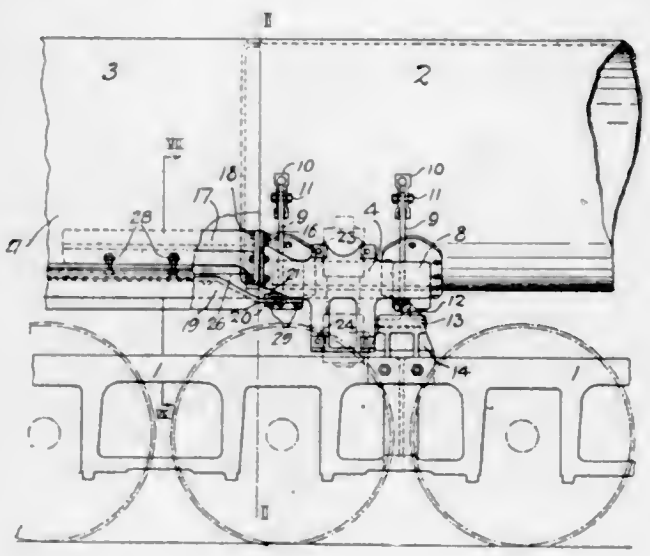
hook for supporting a resistor, and a lug on said block extending forwardly of its front face and below the hook to provide a hook support inside of the bushing.

1,861,948. COMPRESSION CASE FOR PLAYING BALLS. ORMAN R. BARKDOLL, Ben Avon, Pa. Filed Oct. 30, 1930. Serial No. 492,164. 3 Claims. (Cl. 206—1.)



1. A play ball case forming an inclosure for the ball and said case being provided with an aperture in its wall through which the ball may be inflated and its outer casing laced.

1,861,949. LOCOMOTIVE BOILER SUPPORT. JAMES G. BLUNT, Schenectady, N. Y. Filed Sept. 29, 1930. Serial No. 485,119. 16 Claims. (Cl. 105—44.)

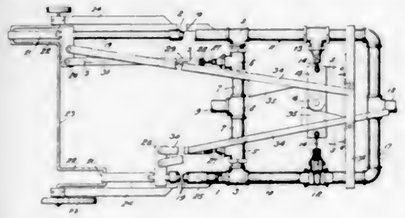


1. A supporting saddle for locomotive boilers comprising a plurality of tubular sections transversely disposed beneath the boiler shaped to correspond with the curvature of the boiler shell and having the portion of their upper sides adjacent the same open and formed with flanges adapted to embrace the said boiler shell, and tubular connecting sections integrally formed at the adjacent ends of said transverse sections.

1,861,950. PROCESS OF CLARIFYING AND RECOVERING CAUSTIC SODA CONTENT OF DETERIORATED ALKALINE SOLUTIONS. JOHN H. BUCHANAN, and JULIAN H. TOULOUSE, Ames, Iowa, assignors to American Bottlers of Carbonated Beverages, a Corporation of the District of Columbia. Filed Sept. 6, 1928. Serial No. 304,386. 8 Claims. (Cl. 23—185.)

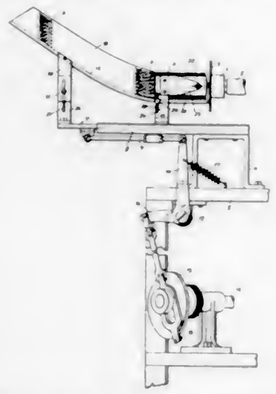
3. The process of causticizing and clarifying alkaline solutions containing acid, sugar, and refuse matter comprising concurrent heating and agitation of the solution by injecting steam thereto, adding lime to the heated solution, and allowing precipitation of the solids.

1,861,951. LIQUID MOTOR. ROBERT B. CAHILL, Upper Macopin, N. J. Filed Oct. 1, 1927. Serial No. 223,312. 2 Claims. (Cl. 121—124.)



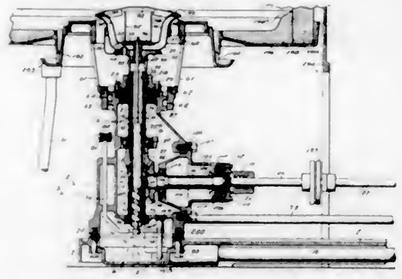
1. A motor of the class described comprising a pair of cylinders, pistons reciprocable therein, exhaust valves communicating with the cylinders, a pipe assembly communicating with the cylinders, valves in the assembly, a pressure fluid inlet for the assembly, bars connected with the pistons for controlling the valves of the pipe assembly straps connected with the pistons for controlling the exhaust valves, the parts comprising a double unit and said bars and straps being arranged to operate simultaneously to open the inlet valve and to close the outlet valve at one side and also simultaneously to close the inlet valve and open the outlet valve at the opposite side, and a crank shaft connected with the pistons.

1,861,952. MACHINE FOR MAKING PAPER BOXES. HAROLD CARLE, Buffalo, N. Y., assignor to F. N. Burt Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Original application filed Apr. 27, 1923, Serial No. 635,078. Divided and this application filed July 19, 1928. Serial No. 293,898. Renewed Oct. 23, 1931. 14 Claims. (Cl. 271—33.)



1. In a device of the character described, in combination, a reciprocally shiftable blank magazine having front and rear blank slideways inclined to each other.

1,861,953. ROTARY OIL BURNER. LEE S. CHADWICK, Shaker Heights Village, MARC RESEK, Cleveland Heights, and JOHN ALGER DAHLSTROM, East Cleveland, Ohio, assignors to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1928. Serial No. 281,946. 30 Claims. (Cl. 158—77.)



1. In a burner of the class described, the combination of a housing containing a liquid fuel chamber, a cylindrical burner tube supported with its lower end in said chamber, a cylindrical liquid fuel feeding screw disposed within said tube, the tube and screw cooperating to lift the liquid fuel from said chamber upon relative rotation of the screw and tube, means for creating relative rotation between the screw and tube, and means for effecting a relative longitudinal adjustment between tube and screw to regulate the quantity of fuel lifted.

10. In apparatus of the class described, the combination of a burner cup having a hollow hub through which liquid fuel is fed to the cup, and a member disposed within the cup and having a stem fitting into the hollow hub, there being a passageway about said stem for the passage of liquid fuel.

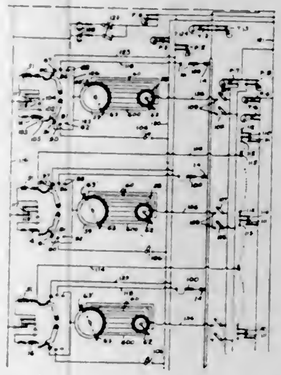
1,861,954. COUNTERBALANCING DEVICE FOR MACHINE TOOLS. KURT H. CONLEY, Bridgeport, Conn., assignor to The Bullard Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 27, 1930. Serial No. 478,053. 12 Claims. (Cl. 29—29.)



1. In a counterbalancing device for machine tools, the combination with a supporting member, a member slidably mounted therein and carrying a rack, power means for operating the rack and slidable member longitudinally in the supporting member, counterbalancing springs within the supporting member, a yoke and bar supported by the springs, said bar carrying a rack, a gear to engage the rack, operative connections intermediate said gear and rack of the movable member.

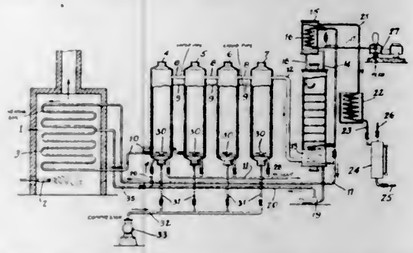
7. In a counterbalancing device for machine tools, the combination with a swivel member having guide-ways, a tool slide mounted to slide in said guide-ways and carrying a rack, power means for operating the rack and slidable member in the guide-ways of the supporting member, including a gear to engage the rack, a second gear upon the shaft of said gear, a worm, a power shaft, and gear connection with the said worm, a second gear in engagement with the rack, an eccentric gear, operative connection between said second gear and the eccentric gear, a movable bar having an inclined rack connection with said eccentric gear, and spring means for supporting the bar with respect to the swivel member.

1,861,955. TOTAL TAKING MECHANISM. GEORGE F. DALY, Johnson City, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1927. Serial No. 232,223. 10 Claims. (Cl. 235—58.)



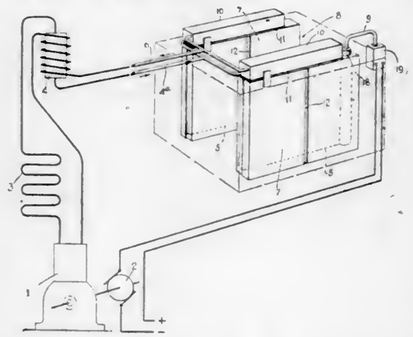
1. A total taking and reset device for an accounting machine which includes a rotatable counter element, said device comprising a pair of commutators each with segments corresponding to the different registering positions of the counter element, a rotatable brush driven concurrently with the counter element and a rotatable brush with means for driving the same during reset operations, each of said brushes coacting with outer surfaces of a commutator.

1,861,956. PROCESS FOR DECOMPOSING ORGANIC MATERIALS. RICHARD J. DEARBORN, Summit, N. J., and GEORGE W. GRAY, New York, N. Y., assignors, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 20, 1926. Serial No. 103,252. 10 Claims. (Cl. 196—65.)



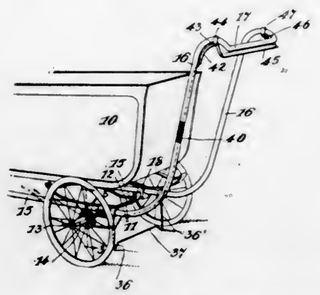
1. The process of decomposing hydrocarbon materials in a substantially liquid state, which comprises heating a flowing stream of the liquid to a temperature of about 300 to 700° F., passing the heated liquid into a converting vessel under substantial super-atmospheric pressure, introducing a free oxygen containing gas into the body of the liquid, preventing loss of heat from the vessel to maintain temperature of about 750° F. or higher therein, removing the generated vapors and condensing therefrom the less volatile constituents, returning the hot condensate without further heating to the vessel to undergo further decomposition, and withdrawing residual liquid from the bottom of the vessel.

1,861,957. ARTIFICIAL REFRIGERATION. JAY G. DE REMER, Greenwich, Conn., assignor, by mesne assignments, to J. G. De Remer Research Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 22, 1925, Serial No. 76,961. Renewed Oct. 24, 1930. 9 Claims. (Cl. 62—172.)



1. The process of refrigeration which includes repeatedly freezing a saturated salt solution while maintaining precipitated salt in a suspended condition in the liquid.

1,861,958. AUTOMATIC STOP AND COMPENSATING STRUT FOR HAND PROPELLED VEHICLES. RAPHAEL C. GALLINANT, Ridgefield Park, N. J. Filed Aug. 27, 1930. Serial No. 478,077. 6 Claims. (Cl. 188—20.)

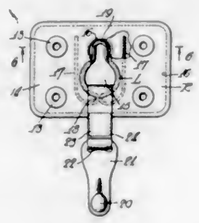


1. A safety device for push carts having a handle bar, comprising a toothed disc fixed on one of the cart wheels, a pivoted detent engageable with the teeth of said disc, a compensating strut rearward of the cart wheels to contact the ground surface during engagement of said detent, said strut being integral therewith and movable by gravity, a release bar pivoted to swing upwardly against said handle bar and away therefrom, and means actuated by raising said release bar to move said detent out of engagement with said disc and raise said strut from the ground surface.

1,861,959. GARMENT SUPPORT. GEZA GREENBERG, New York, N. Y. Filed July 2, 1930. Serial No. 465,286. 7 Claims. (Cl. 241—7.)

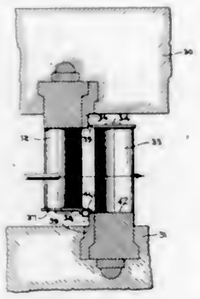
1. As a new article of manufacture, a garment support embodying an apertured holster, a fastening loop en-

closed by the holster and associated with the aperture thereof, and a limber tab flexibly supported from the holster, including a button receivable through the loop



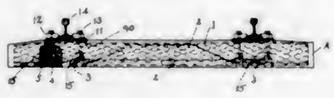
for engaging a shirt between the loop and button, the button lying within said aperture when received within the loop.

1,861,960. TURBINE BLADING. HENRY J. HANZLIK, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 28, 1930. Serial No. 498,830. 8 Claims. (Cl. 253—77.)



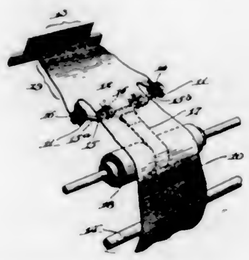
1. In an axial flow turbine, the combination of two relatively rotatable blade-carrying members, two rows of cooperating blades carried by said members, respectively, and through which the motive fluid flows successively, the pressure of the motive fluid being decreased in flowing through the first row, shrouding fixed on the free ends of the blades in the first row, packing means for restricting leakage of motive fluid from the outer side of the shrouding to the space between the blade rows and means for deflecting the fluid leaking through the packing means into and parallel to the path of the motive fluid.

1,861,961. RAILROAD TIE. JOSEPH N. HOBART, New Cumberland, Pa., assignor to Holmes B. Groninger, Port Royal, Pa. Original application filed Nov. 25, 1930, Serial No. 497,968, now Patent No. 1,824,778, dated Sept. 29, 1931. Divided and this application filed July 3, 1931. Serial No. 548,515. 3 Claims. (Cl. 238—93.)



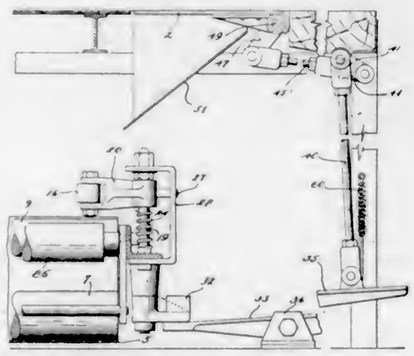
1. A sleeper comprising a monolithic body of concrete having a metallic reinforcement which includes strips of metal lattice cut to size and disposed to extend in the planes of their reaches with the length and height of said monolithic body, which strips are disposed at intervals transversely of said body.

1,861,962. TENSION TAKE-UP DEVICE FOR KNITTING MACHINES. ALFRED E. ISCHINGER, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed July 18, 1929. Serial No. 379,084. 3 Claims. (Cl. 66—149.)



1. Fabric tensioning means for knitting machines, including a movable support, and cooperating rotatable gripping devices rotated by the fabric in one direction to grip the same, and in a reverse direction to grip the same, and in a reverse direction to free the fabric.

1,861,963. LOADING MECHANISM FOR CONVEYERS. CHESTER S. JENNINGS and LAVONT C. ALLEN, Syracuse, N. Y., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Mar. 14, 1929. Serial No. 347,028. 20 Claims. (Cl. 226—99.)

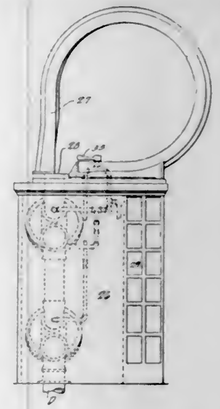


11. Apparatus of the class described comprising a conveyer, freely rotatable rolls in one section thereof defining a load receiving station upon which rolls the carrier is supported during the loading operation, means checking the carrier at the loading position, a roller normally positioned below the rolls, and means for releasing the checking means and for raising the roller, thereby causing the carrier to move from the loading position.

1,861,964. PNEUMATIC DISPATCH SYSTEM. CHESTER S. JENNINGS, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Aug. 2, 1930. Serial No. 472,509. 10 Claims. (Cl. 243—8.)

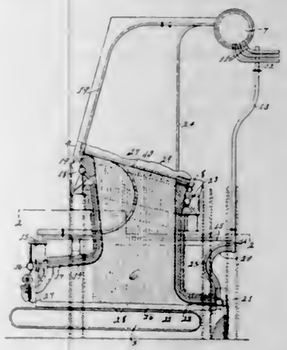
1. In a pneumatic carrier system of the single transit tube type, a station comprising a pair of valve units spaced

along the transit tube, a tube through which air is supplied to the transit tube to cause carriers to travel away from said station, and connections between said air supply



tube and said units through which the units are actuated by the air, whereby a plurality of carriers may be fed seriatim to the transit tube.

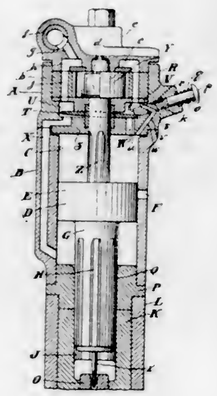
1,861,965. STEAM BOILER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. Y., a Corporation of New Jersey. Filed Apr. 26, 1928. Serial No. 272,932. 4 Claims. (Cl. 122—235.)



1. In a boiler having vertically disposed headers, a furnace, furnace wall cooling tubes, side wall water boxes inclined to the horizontal, and located at the lower portion of said furnace, said tubes being connected directly to said boxes, and connections from the lower portion of some of said headers to the upper ends of said water boxes.

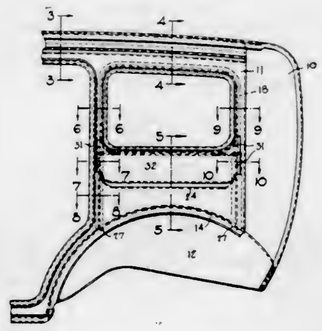
1,861,966. BLOWING DEVICE FOR ROCK DRILLS. EARL B. LEAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 16, 1931. Serial No. 551,149. 5 Claims. (Cl. 121—6.)

1. A fluid actuated rock drill comprising a casing having a piston chamber and an exhaust port, a hammer piston in the piston chamber controlling the exhaust port and having a blower passage, an automatic valve for distributing pressure fluid to the piston chamber, and means for holding the valve in position to supply pressure fluid to only one end of the piston chamber and to the blower passage and having a passage admitting pressure fluid to the



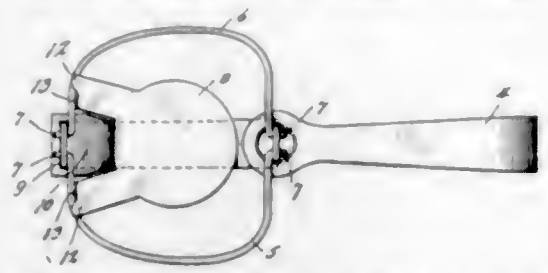
other end of the piston chamber to prevent the piston from communicating the first said end of the piston chamber with the exhaust port.

1,861,967. REAR QUARTER WINDOW CONSTRUCTION FOR VEHICLE BODIES. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1927. Serial No. 241,693. 10 Claims. (Cl. 296—44.)



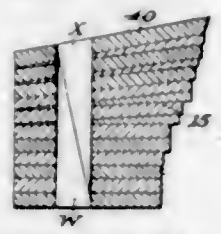
1. In a vehicle body construction having a vertically sliding rear quarter window independent of outer and inner paneling, a frame unit for said window and outer and inner paneling comprising a closed one-piece stamping surrounding the window opening and having its sides and top forming in cross section the outer side wall and the bottom of a glass run channel and connecting the outer and inner paneling.

1,861,968. ANIMAL TRAP. JOHN U. LEHN, Lititz, Pa., assignor to Animal Trap Company of America, Lititz, Pa., a Corporation of Pennsylvania. Filed June 30, 1930. Serial No. 464,777. 4 Claims. (Cl. 43—93.)



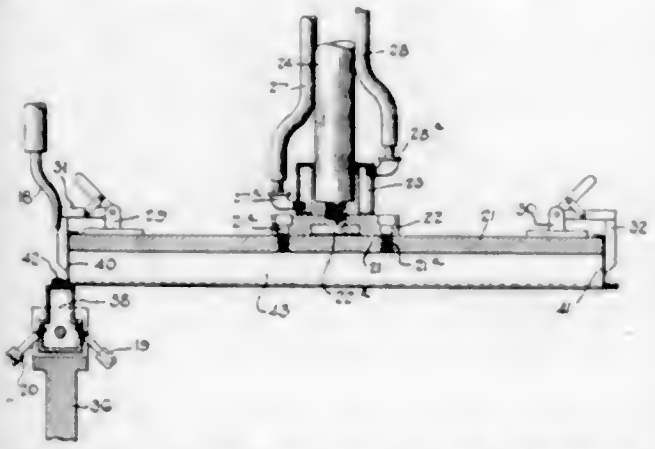
1. An animal trap comprising spring means, jaw members and a bait-pan, extensions on and substantially coplanar with said bait-pan to contact with and hold said jaws in open position, and sensitivity control means on said pan.

1,861,969. HEEL AND METHOD OF ITS MANUFACTURE. LEON LEIGHTON, Jr., Lewiston, Me., assignor to Leighton Heel Co., Inc., Lewiston, Me., a Corporation of Maine. Filed Jan. 2, 1931. Serial No. 506,021. 19 Claims. (Cl. 12—147.)



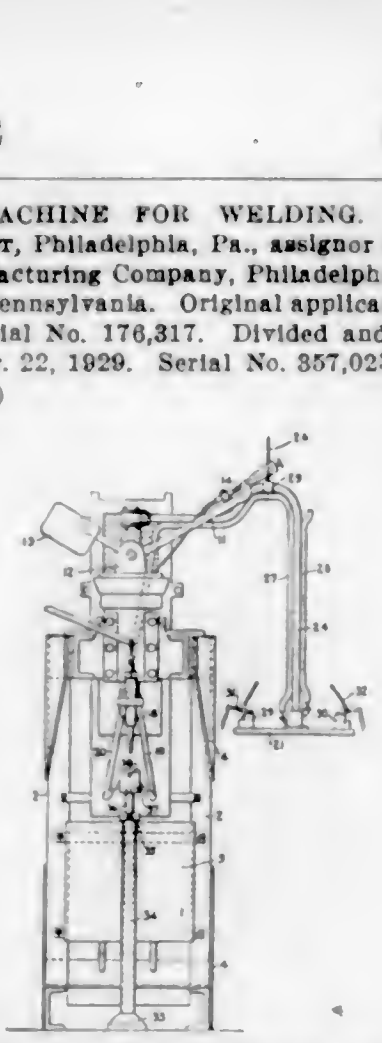
1. The method of making heels which includes preparing a plurality of perforated heel lifts sufficient in number and of such kinds as required for the heel to be built, said perforations being so located in the lifts that when said lifts are assembled in a pile the perforations form an aperture from top to bottom thereof, cementing and assembling said lifts in a pile, partially seating a cemented two-section wedging dowel in said aperture the length of said dowel when both sections are fully seated being substantially the height of the completed heel blank, and applying pressure to the heel pile to reduce it to final height and simultaneously completely seating the dowel in said aperture.

1,861,970. METHOD OF WELDING. JOSEPH W. MEADOWCROFT, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1927, Serial No. 176,317. Renewed Oct. 2, 1928. 4 Claims. (Cl. 219—10.)



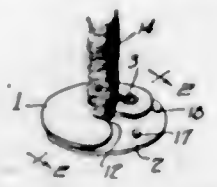
1. A method of welding the inturned flange of the outer panel of an automobile door or the like to the overlap flange of the door rail consisting in clamping one side of the welding circuit to the door so as to be in electrical connection with the door rail, and completing said welding circuit through a localized pressure contact with the inturned flange of the outer panel, the while supporting said door at a point opposite said pressure contact by a support having high thermal conductivity.

1,861,971. MACHINE FOR WELDING. JOSEPH W. MEADOWCROFT, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Mar. 18, 1927, Serial No. 176,317. Divided and this application filed Apr. 22, 1929. Serial No. 357,023. 14 Claims. (Cl. 219—4.)



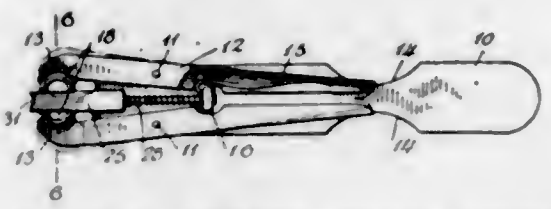
1. A spot welding machine adapted for welding together two adjacent sheets of three or more overlapped sheets of metal comprising an electrode having clamping means for securing the electrode in electrical connection with one of the sheets to be welded, a conventional rectilinearly movable electrode adapted to be brought into pressure engagement selectively at different points with the other sheet to be welded, and supporting means engaging the under side of the sheets in line with the path of movement of the last namd electrode so as to resist the pressure exerted thereby.

1,861,972. HEAD PROTECTOR FOR HAIR WAVING. JOHN METZ, Hollis, N. Y., assignor to The Nestle-Le-Mur Company, New York, N. Y., a Corporation of Ohio. Filed Dec. 26, 1931. Serial No. 583,247. 11 Claims. (Cl. 132—36.1.)



1. A head protecting clip comprising superimposed members connected together and relatively movable edgewise so as to close and open with respect to each other to grip and release an interposed object, and interior spring-actuated means tending normally to close said members into gripping positions and located between the opposing faces of said members and housed thereby.

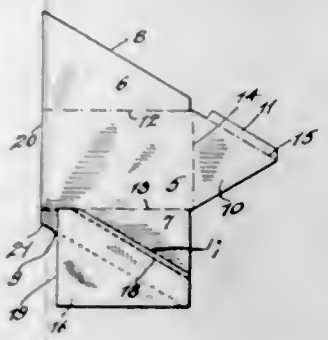
1,861,973. VALVE TOOL. JOHN H. MINDERMANN, Union City, and FRANK HOBLER, West New York, N. J. Filed Apr. 8, 1931. Serial No. 528,570. 5 Claims. (Cl. 81—3.)



1. A tool of the character described, comprising cooperating jaws upon which sections of a split key are capable of being supported in opposed relation, means

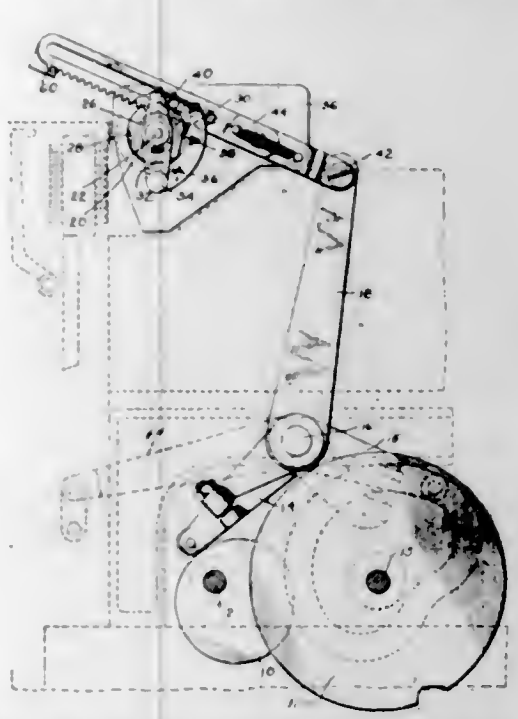
to maintain said jaws and sections separated while adjusting the latter to positions on opposite sides of a valve stem, said means being movable out of engagement with said sections to allow the same to embrace said stem, and means to prevent engagement of the last-named means with said sections when the latter are in stem-embracing position.

1,861,974. BRIEF CASE, PORTFOLIO OR SIMILAR CONTAINER. NATHAN OTTINGER, New York, N. Y. Filed Mar. 21, 1931. Serial No. 524,251. 4 Claims. (Cl. 150—52.)



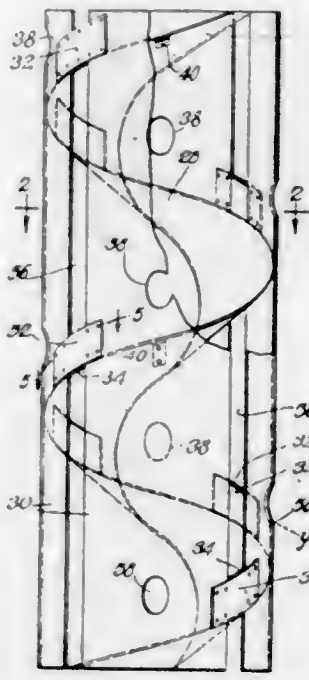
1. A container having a body wall, a wall extending over a part of one side of said body wall and in conjunction therewith forming a pocket-like retainer, said latter wall having a free edge at the open side of the pocket extending across said body wall, and closure means for the container pocket including a part movably connected to the body wall along one edge thereof and a member connected with said part in spaced relation to one of its free edges, said part being adapted to overlie the remaining area of said body wall when in closed position and the free edge of said part and said member extending beyond the free edge of said second named wall and upon the inner and outer surfaces thereof, and an end closure for the pocket movably connected with another edge of said body wall foldable into superimposed relation upon the part closing the open side of the pocket and having means for releasable interlocking engagement with the element extending from said part upon the outer side of said second named wall.

1,861,975. PAPER FEEDING DEVICE FOR TABULATING MACHINES. RALPH E. PAGE, Binghamton, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Dec. 24, 1925. Serial No. 77,643. 8 Claims. (Cl. 197—114.)



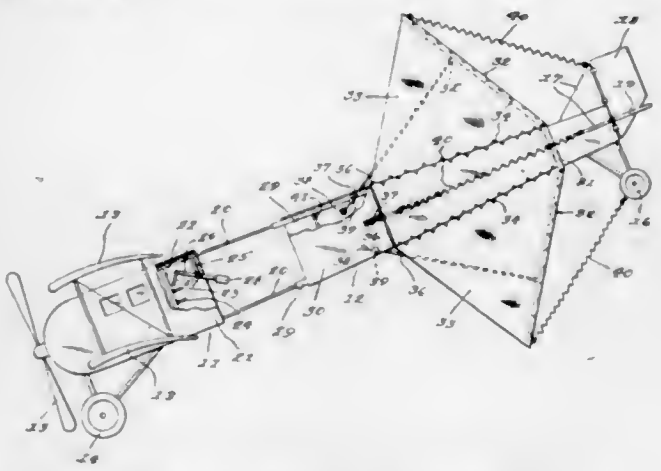
1. In a machine of the class described, a platen, a mechanism for effecting printing operations, means operable as an incident to printing operations to automatically rotate said platen a complete revolution in a single continuous operation after printing operations, said means comprising a single notched element, a pawl cooperating therewith and a high ratio driving connection to rotate said notched element and thereby the platen at comparatively high speed with respect to the driving mechanism.

1,861,976. COMBINED LOWERING AND WITHDRAWAL CHUTE. FRANK PARDEE, Hazleton, Pa., assignor to Anthracite Separator Company, Hazleton, Pa., a Corporation of Pennsylvania. Filed July 8, 1931. Serial No. 549,374. 9 Claims. (Cl. 193—12.)



1. A combined loading and withdrawal chute comprising an upright spiral-like runway, and a plurality of plate-like enclosure members coextensive with and secured to the runway in spaced relationship to form restricted longitudinal extending passages for the flow of material to and from the runway.

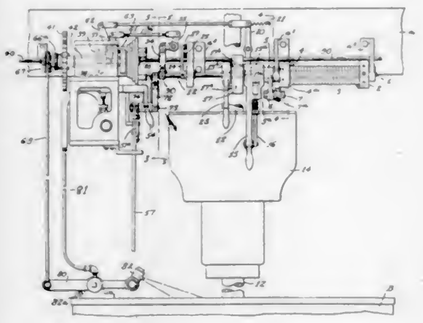
1,861,977. AEROPLANE. JOHN PICCO, New York, N. Y. Filed Nov. 2, 1929. Serial No. 404,343. 2 Claims. (Cl. 244—21.)



1. An aeroplane comprising a forward section having rearwardly directed rod-like flexible frame members, a pivoted lever borne by said forward section, a pair of spaced eyes positioned within said section, a rear section having tubular frame members adapted to telescopically engage said rod-like frame members, a parachute arrangement including non-flexible members each being hingedly carried by said rear section, flexible elements leading from said non-flexible members and extending into said rear section, means carried by said elements and adapted to be positioned between said spaced eyes and locked thereto by said lever thereby locking the sections together and maintaining said parachute in closed position about said

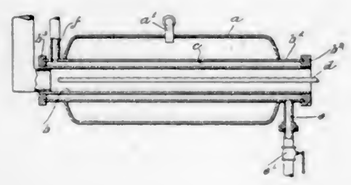
rear section, said lever being susceptible of operation to free said elements and to permit separation of said sections simultaneously with the opening of the parachute arrangement.

1,861,978. AUTOMATIC CONTROL FOR CENTRIFUGAL MACHINES. EUGENE ROBERTS, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed Apr. 23, 1929. Serial No. 357,501. 8 Claims. (Cl. 210—71.)



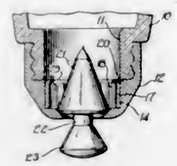
6. Centrifugal apparatus embracing in combination with a gyratory suspended centrifugal provided with driving and braking mechanism at its upper end, an overhead manually controllable rock shaft mounted adjacent to the driving and braking mechanism and operatively connected therewith, a continuously running horizontal drive shaft arranged adjacent said rock shaft, a timer actuating shaft arranged adjacent said continuously running shaft and having intermittent driven connection therewith, a cut-off valve for controlling the admission of spray liquid to the centrifugal mounted adjacent said timer, and timer members secured to said countershaft and operatively associated with said rock shaft and said cut-off valve to open and close said valve, cut off the driving mechanism and set the brake at predetermined but variable intervals after the starting of the centrifugal.

1,861,979. REFRIGERATING APPARATUS. HANS RÖHL, Mannheim, Germany, assignor to Schwarzwaldwerke Lanz, G. m. b. H., Mannheim, Germany. Filed Nov. 20, 1929, Serial No. 408,466, and in Germany Nov. 30, 1928. 3 Claims. (Cl. 62—118.)



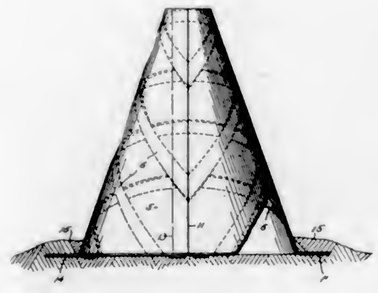
3. In refrigerating apparatus of the absorption-expulsion type, the combination of a vessel containing the absorption material, a heating element arranged within and extending in spaced relationship therewith, a fluid cooling medium, and means for alternately effecting the activation of the heating element and a flow of the cooling medium through the vessel in an annular body surrounding the heating element, said means being operative, while the heating element is activated, to stop the flow of the cooling medium and by the heat generated to effect the expulsion of the body of the cooling medium surrounding the heating element.

1,861,980. SALT SHAKER. RAYMOND R. RUNDELL, Waterbury, Conn., assignor to Harry L. Baker, Miami Beach, Fla. Filed Sept. 20, 1929. Serial No. 393,878. 1 Claim. (Cl. 65—45.)



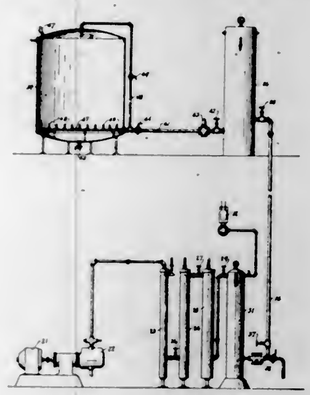
A receptacle for dispensing comminuted material, comprising a container having a reduced neck portion, a cap member fitted upon the neck portion and formed with a recess communicating with said neck and with a thin edged restricted discharge orifice communicating with said recess, a bushing fitted in the recess and formed with a fluted inner wall, each fluting being restricted at the inner end thereof, and a closure member comprising two substantially cone shaped portions whose bases are incapable of passing through said orifice, the base of one cone being exterior to the receptacle with its apex within the orifice when the container is in upright position, and the base of the other cone being adapted to seat in the orifice when the receptacle is inverted.

1,861,981. HOT CAP. HERBERT R. SAGE, Los Angeles, Calif. Filed May 4, 1931. Serial No. 534,855. 3 Claims. (Cl. 47—28.)



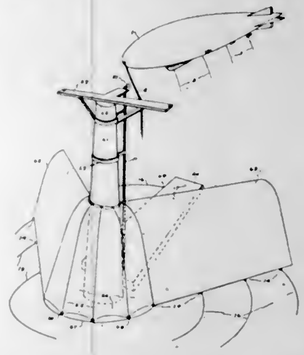
1. A hot-cap comprising, a hollow conical body with spaced encircling reinforcing strips on its surface; said strips being substantially in planes that intersect the axis of the body obliquely.

1,861,982. APPARATUS FOR AGITATING LIQUIDS. JOSEPH F. SCHILLER, Philadelphia, Pa. Filed Mar. 5, 1929. Serial No. 344,344. 8 Claims. (Cl. 261—124.)



1. A device for gently agitating liquid in a vessel, comprising an air compressor, means for successively expanding the compressed air to sterilize the same, means for reducing the pressure of the compressed air following its sterilization, and means for distributing the reduced compressed air in the liquid body.

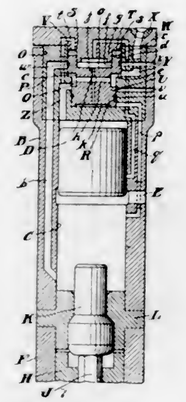
1,861,983. MOORING EQUIPMENT. FRANK SHORT, Newark, N. J. Filed June 18, 1930. Serial No. 461,949. 4 Claims. (Cl. 244—2.)



4. In a mooring equipment, an upright member, an orientable cross-platform substantially at the top thereof, an orientable landing platform at a lower level and means for securing an airship to said upright member.

1,861,984. VALVE FOR ROCK DRILLS. FRED M. SLATER, Easton, Pa., assignor to Ingersol-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 5, 1931. Serial No. 579,193. 3 Claims. (Cl. 121—18.)

1. In a fluid actuated rock drill, the combination of a cylinder having a piston chamber and a piston in the piston chamber, a valve chest having a valve chamber, a valve in the valve chamber to distribute pressure fluid to the piston chamber, a pair of opposed pressure surfaces constantly exposed to pressure fluid for throwing the valve, passages controlled by the piston for intermittently relieving the pressure fluid acting against the pressure surfaces, an actuating surface constantly exposed to pressure fluid to assist in throwing the valve in one direction,



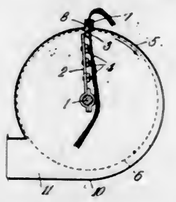
and an opposed actuating surface on the valve intermittently exposed to pressure fluid to assist in throwing the valve in the opposite direction.

1,861,985. WEATHER STRIP AND METHOD OF MAKING THE SAME. WILFRED A. SMITH, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 4, 1930. Serial No. 425,800. 7 Claims. (Cl. 20—69.)



1. A weather-strip comprising a generally cylindrical member, a flat resilient member of a different material extending longitudinally thereof and united directly therewith in a unitary structure, and an ornamental cover secured to both members.

1,861,986. MACHINE FOR SCUTCHING, DECORTICATING AND SOFTENING FIBROUS MATERIALS SUCH AS FLAX, HEMP, JUTE, AND RAMIE. MAURICE SOENENS, Courtrai, Belgium, assignor to Robert Boby Limited, Bury St. Edmunds, England, a British Company. Filed Feb. 12, 1931, Serial No. 515,187, and in Belgium Apr. 14, 1930. 3 Claims. (Cl. 19—16.)



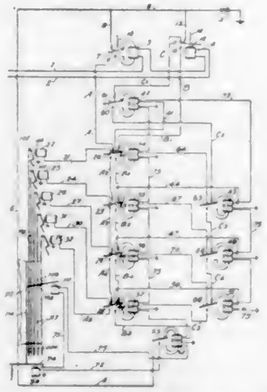
1. In a machine for scutching, a decorticating and softening textile fibres, a mill comprising a rotary shaft and a single scutching blade carried by said shaft to strike

said fibres once in each revolution, and a screen arranged between said blade and said shaft, whereby in the rotation of said screen a current of air is produced to return the fibres to their initial position after each scutching blow.

1,861,987. VULCANIZING RUBBER. GEORGE H. STEVENS, Newark, N. J. Original application filed July 16, 1923, Serial No. 651,968. Divided and this application filed Aug. 25, 1927. Serial No. 215,511. 4 Claims. (Cl. 18—53.)

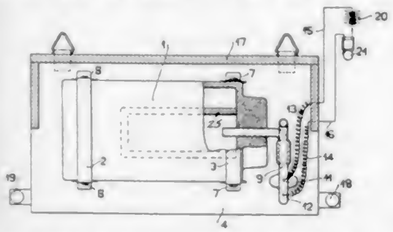
1. A process of vulcanizing rubber which consists in, incorporating into compounded rubber an accelerator, comprising a mono-phenyl substituted guanidine combined with a mono-phenyl substituted carbodiimide, then heating the resultant rubber mixture with a vulcanizing agent to effect vulcanization.

1,861,988. PRINTING TELEGRAPH RECEIVER. ROBERT TEVIS, Hoboken, N. J. Filed Nov. 8, 1930. Serial No. 494,335. 12 Claims. (Cl. 178—33.)



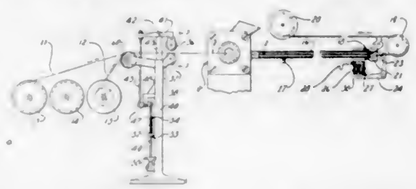
1. In a printing telegraph apparatus for received signals each composed of a plurality of impulses variable as to polarity, a main relay responsive only to signal impulses of a predetermined polarity, a neutral relay responsive to all signal impulses, a local power line controlled by said main relay, a plurality of electrically operable selective means, and means controlled by the neutral relay for connecting said selective means sequentially to said line.

1,861,989. GAS INDICATING APPARATUS. BRUNO TREAITSCH, Vienna, Austria. Filed Apr. 21, 1928, Serial No. 271,745, and in Austria Jan. 19, 1928. Renewed Apr. 21, 1932. 4 Claims. (Cl. 200—52.)



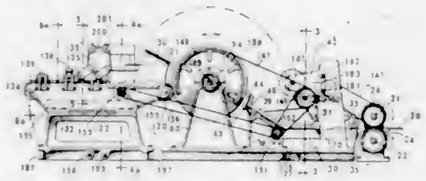
1. An apparatus for indicating the presence of combustible, explosive or poisonous gases, comprising a porous vessel having double porous walls, and a pressure indicating means connected with said vessel so as to indicate the pressure within the inner porous wall.

1,861,990. APPARATUS FOR HANDLING STRAND MATERIAL. ERNEST R. TROCHE, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1930. Serial No. 451,501. 7 Claims. (Cl. 140—128.)



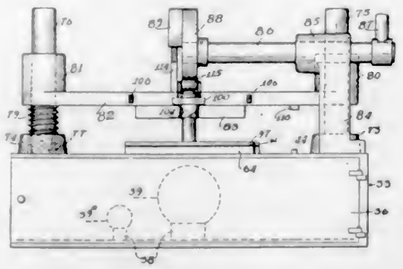
1. In an apparatus for handling strand material, a plurality of strand supplies, means for advancing a strand from one of the supplies, and means movable into engagement with the advancing strand for advancing a strand from another of the supplies in parallel spaced relationship with the advancing strand.

1,861,991. MANUFACTURE OF CORRUGATED PAPER BOX BLANKS. GUSTAVE A. UNGAR, Pelham Manor, N. Y. Filed Apr. 1, 1930. Serial No. 440,716. 20 Claims. (Cl. 93—58.)



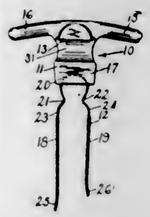
1. In a corrugated paper machine cutters for slotting a blank, jaws for creasing the blanks as they leave the cutters and means for automatically folding the creased blanks, means for automatically transferring the blanks from each element to the next and means for continuously moving the creasing jaws.

1,861,992. PHOTOGRAPHIC PRINTING AND TRIMMING MACHINE. MORRIS WEINER, New York, N. Y., assignor of one-half to Samuel Lefkowitz, New York, N. Y., and one-half to Isaiah Mintz, New York, N. Y. Filed July 3, 1929. Serial No. 375,853. 8 Claims. (Cl. 95—73.)



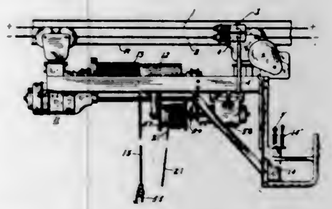
1. In a photographic printing and trimming device in combination with a work supporting surface provided with two printing stations, each of which is provided with complementary light pervious and light impervious portions, the light pervious portion of one station corresponding to the field of a photographic negative and the light pervious portion of the other station corresponding to a border, two printing frames each mounted for selective vertical alinement with one or the other of the said printing stations and each adapted to support printing paper, means for pressing the printing paper in the first printing frame against a photographic negative positioned at the first printing station to print the field thereon, means for pressing the printing paper in the second printing frame against the second printing station to print the border thereon, and for simultaneously trimming the same and means under the control of the last mentioned means for reversing the position of the two printing frames with respect to said printing stations.

1,861,993. CORK EXTRACTOR AND BOTTLE OPENER. JOHN H. WELLER, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed May 10, 1929. Serial No. 361,938. 2 Claims. (Cl. 65—47.)



2. In a device for withdrawing corks from the necks of bottles or the like, a solid handle having a shank and integrally formed laterally extending arms, and a pair of cork gripping fingers extending downwardly from the shank and adapted to engage a cork seated in the neck of a bottle by insertion into the bottle between the neck and cork, said fingers being made out of a single strip of resilient material looped intermediate its ends, the looped part being embedded in the shank, said fingers curving inwardly toward one another adjacent the shank and then immediately outwardly away from one another, said fingers being relatively flat in cross-section at their ends and adjacent the shank and of curved cross-section between the inwardly curved parts and their ends.

1,861,994. CONTROL SYSTEM. WILLIAM R. WICKERHAM, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 19, 1930. Serial No. 462,222. 9 Claims. (Cl. 37—184.)



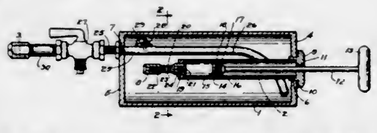
1. A motor control system for an electrically operated grasping device, a grasping device, electrical devices mounted on the grasping device and including a motor for operating the grasping device, a contactor for connecting the motor to cause opening of the grasping device, a limit switch for causing the interruption of the connections established by the contactor when the grasping device fails to open in response to the normal torque of the motor and a magnetic brake for holding the operated parts of the grasping device in the position to which they were moved by the motor at the instant of the operation of the limit switch.

1,861,995. VALVE BAG CLOSURE. HARRISON R. WILLIAMS, New York, N. Y. Filed June 20, 1929. Serial No. 372,276. 11 Claims. (Cl. 150—9.)



1. A bag provided with a gusset having an aperture therein, a dihedral valve member straddling the gusset, and a control element for said valve slidable longitudinally of the gusset.

1,861,996. SPRAY GUN. CHARLES A. ANDERSON, Seattle, Wash. Filed Nov. 3, 1928. Serial No. 316,912. 1 Claim. (Cl. 299—96.)

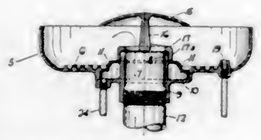


In a spray gun of the type having a cylindrical casing that may be held in the left hand with a plunger handle extending from one end that may be pushed inward and outward to create a pressure within the said casing, a cylinder extending into the casing from one end, a piston in the said cylinder with the stem extending beyond the end of the casing and upon which the handle which may be gripped by the right hand is mounted, a valve at the inner end of the said cylinder resembling a tire valve and which will open as the pressure is produced in the cylinder, a nozzle extending from the end of the casing opposite to that from which the said handle extends and eccentrically positioned in the said casing end, a valve between the said casing and nozzle, a connection extending from the said nozzle through the interior of the said casing around the said cylinder and to a point at the opposite end and diagonally opposite said nozzle connection, and a valve in the said connection adjacent the point where it is connected to said nozzle adapted to close when the casing is held in such a position that the nozzle is in the upper side thereof, and open when the nozzle is located in the lower side.

1,861,997. OIL BURNER. AUGUST BEHRSIN, Huntington Park, Calif. Filed May 23, 1930. Serial No. 454,993. 5 Claims. (Cl. 158—91.)

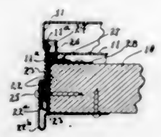
1. In an oil burner, a burner bowl having a substantially flat spirally ribbed bottom portion, an annular fuel-preheating chamber surrounding the center of the bottom of said bowl, an air supply conduit leading up thru the space enclosed by said annular chamber, a deflector mounted above said conduit to deflect toward the bottom of the bowl air supplied from said conduit, there being outwardly inclined fuel vents leading thru the wall of

said annular chamber to discharge a circularly arranged series of oil streams upwardly around said deflector in order that air directed outwardly and downwardly by said



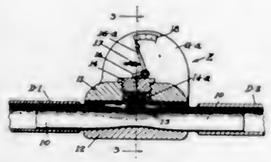
deflector may strike laterally upon and scatter oil thus supplied to the burner bowl over the bottom portion of said bowl.

1,861,998. SHEET METAL ROOFING. GEORGE L. BENNETT, Cleveland Heights, Ohio. Filed Feb. 7, 1929. Serial No. 338,121. 4 Claims. (Cl. 108—17.)



1. A roofing of the class formed of flanged sheet metal tiles arranged in parallel courses, each tile having a depending butt flange and side flanges of progressively increasing depth from the top of the tile toward said butt flange embodying therein a metallic gable cover secured to the gable end of the roof decking and projecting upwardly to within the depending side flange of a metal tile adjacent said gable end, the top edge of said cover conforming to the varying depth of the side flange of the tile with which it cooperates.

1,861,999. MUD FLUID PRESSURE GAUGE. GLENN H. BOWLUS, Alhambra, Calif. Filed Apr. 10, 1931. Serial No. 529,098. 3 Claims. (Cl. 73—110.)

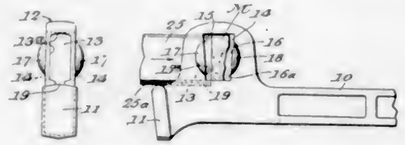


1. Improvements of the character disclosed in a mud fluid pressure indicator, including a normally round metallic pipe capable of lateral deformation fastened in a mud fluid flow line; resilient means for applying exterior pressure to produce a deformation; a movable plunger in contact with the outer wall of said pipe at its point of maximum deformation, and a movable pointer coacting with said plunger to indicate variations in said deformation following variations in the pressure within said pipe.

1,862,000. PREPARATION OF PARA-PHENYLPHENOL. EDGAR C. BRITTON and SHAILER L. BASS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 16, 1930. Serial No. 468,448. 11 Claims. (Cl. 260—154.)

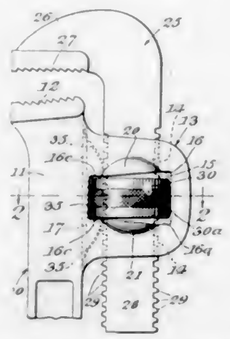
1. The method of making para-phenylphenol and homologues thereof which comprises heating the corresponding para-cyclohexylphenol at a temperature between 185° and 350° C. in the presence of a metallic dehydrogenation catalyst, whereby hydrogen is eliminated from the cyclohexyl group.

1,862,001. PROCESS OF MAKING WRENCHES. ALPHONSE O. BRUNGARDT, Scituate, Mass. Filed June 13, 1930. Serial No. 460,890. 9 Claims. (Cl. 76—114.)



1. The hereindescribed process of making wrenches having a bar or handle and a frame or housing forged integrally therewith, said frame or housing having a channel and a window intercepting one another and also having pairs of ears or projections adjacent the front and rear walls of said window, which consists in forging the bar and frame and one pair of ears in a single operation, and by separate operations punching out the window in said frame, piercing a longitudinal channel part way through the frame and simultaneously forming the other pair of ears, removing surplus metal from within said window, and completing the piercing operation to extend the channel entirely through the frame.

1,862,002. PIPE WRENCH. ALPHONSE O. BRUNGARDT, Brookline, Mass. Continuation of application Serial No. 461,062, filed June 14, 1930. This application filed Mar. 10, 1932. Serial No. 598,083. 5 Claims. (Cl. 81—101.)

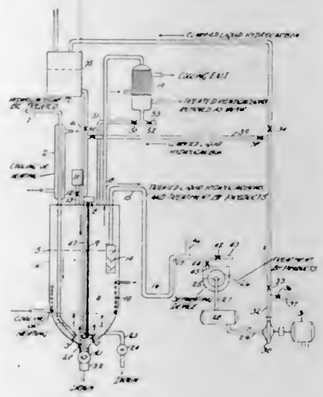


1. A pipe wrench comprising a bar having a jaw and a frame, said frame having a longitudinal channel therein, a movable jaw having a shank extending through the channel, said channel being wider throughout its length than the shank sufficiently to permit both bodily and angular movements of the shank, and a spring normally tending to hold the shank bodily against the far side of the channel to insure a relative positioning of the shank and bar to maintain the normal predetermined desired angle between the jaws and yieldable to permit movement of the shank away from said side toward the other side of the channel but tending to prevent any angular shift of the shank during such movement.

1,862,003. PROCESS FOR TREATING HYDROCARBONS. PAUL JOHNSON CARLISLE and CHARLES ROBERTS HARRIS, Niagara Falls, N. Y., assignors, by mesne assignments, to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 25, 1927. Serial No. 235,502. 36 Claims. (Cl. 196—28.)

1. Process comprising contacting hydrocarbons liquid at the reaction temperature with a treating medium comprising an alkali metal suspended in liquid hydrocarbon,

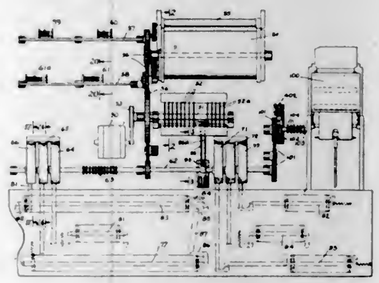
washing contaminating by-products from said alkali metal by agitation with the suspending medium, and removing treated hydrocarbon from the treating medium as liquid effluent, after separating substantially all unreacted alkali metal from said effluent.



3. Process comprising passing hydrocarbons substantially as vapors into a treating medium comprising sodium suspended in liquid hydrocarbon, washing contaminating by-products from said sodium by agitation with the suspending medium, and removing treated hydrocarbon from the treating medium as liquid effluent.

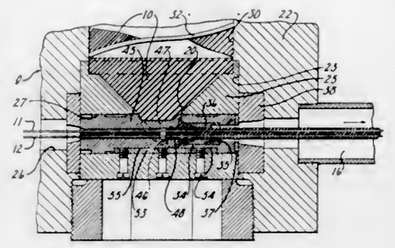
36. Process consisting in maintaining a liquid substantially inert to sodium containing finely divided sodium at a predetermined temperature, passing hydrocarbons having a boiling point curve below said temperature into said liquid and flowing out a portion of said liquid carrying treatment by-products from the treating zone after separating substantially all unreacted sodium from this effluent and recovering treated hydrocarbons.

1,862,004. SUBTRACTING TABULATOR. FRED M. CARROLL, Yonkers, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Feb. 4, 1927. Serial No. 165,818. 35 Claims. (Cl. 235—58.)



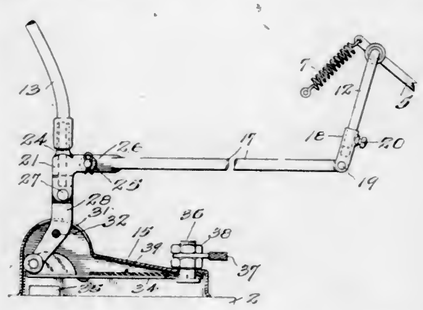
1. In an accounting machine, a plurality of accumulators, each provided with individual data entering mechanism, means for controlling said several entering mechanisms for entering data of different classifications into the several accumulators and means controlled by said accumulators for effecting a subtracting operation between data standing on different accumulators said means comprising mechanism for operating one of said accumulators solely in an additive direction for the subtracting operation.

1,862,005. APPARATUS FOR SHEATHING CORES. GEORGE L. CHERRY, La Grange, Ill., and ERNEST R. TROCHE, Baltimore, Md., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 7, 1930. Serial No. 459,650. 6 Claims. (Cl. 18—13.)



3. In an apparatus for applying a common covering upon a plurality of cores, means for applying a plastic covering material to the cores, a die for imparting the desired ultimate configuration to the outer surface of the covering, a plurality of core centering tubes cooperating with the die and having complementary flat sides and transverse slots in their opposite sides, a holder for the core tubes, and means engaging the slots in the core tubes for securing the tubes in parallel relationship within the holder with their flat sides interengaging.

1,862,006. THROTTLE AND STARTER CONTROL MECHANISM. DOUGLAS COLLINS, Salisbury, N. C. Filed Jan. 15, 1931. Serial No. 508,977. 5 Claims. (Cl. 123—119.)



1. In starting mechanism for internal combustion engines, the combination with the fuel control mechanism and starter switch, of a flexible control lever for the switch and connections from said lever to the fuel control mechanism, and means under control of suction from the engine to permit flexing of the lever when the engine is running.

1,862,007. WINDOW SASH CONSTRUCTION. CHARLES E. CONNER and HARRY C. AINSWORTH, Torrance, Calif. Filed May 20, 1930. Serial No. 453,949. 2 Claims. (Cl. 20—49.)

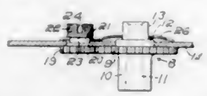
1. In a window construction, an outer sash, an inner sash hinged at their lower edges to said outer sash, a link

having one end pivotally secured to said outer sash, said link having a deflected portion at its free end, there being



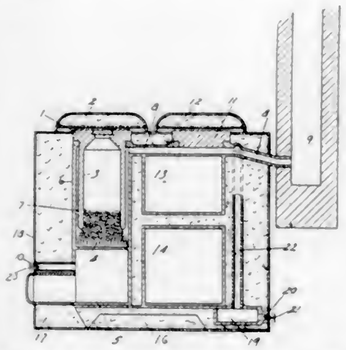
a series of seats provided along an inner edge of said outer sash to cooperate with said deflected portion of said link to maintain the inner sash open to the extent desired.

1,862,008. INDEX ADJUSTING MEANS. ERNEST B. CROCKER, Stratford, Conn., assignor to Consolidated Ashcroft Hancock Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1931. Serial No. 557,084. 9 Claims. (Cl. 116—129.)



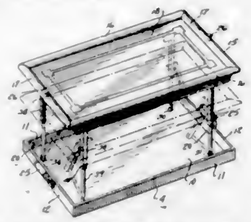
1. The combination with an index staff and an index, of intermeshing gear members for angularly adjusting the index relatively to the staff, and a friction member tending at all times to prevent relative movement of the gear members.

1,862,009. COOKING STOVE WITH HEAT ACCUMULATOR. GUSTAF DALÉN, Lidingo, Sweden, assignor to Svenska Aktiebolaget Gasaccumulator, Stockholm-Lidingo, Sweden. Filed Sept. 18, 1929, Serial No. 393,512, and in Sweden Oct. 11, 1929. 23 Claims. (Cl. 126—1.)



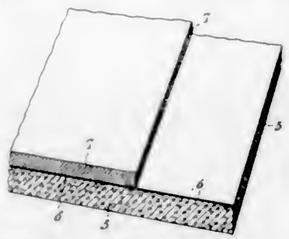
1. The method of maintaining draft in a cook stove provided with heat accumulating mass which comprises burning fuel at such rate as to produce relatively heavy combustion gases, absorbing usable heat from said gases and reducing the temperature thereof to a relatively low value, accumulating absorbed heat in the stove, heating a fluid with a portion of said absorbed heat to produce a gaseous medium having a lower specific gravity than that of the combustion gases and mingling the heated gaseous medium with the combustion gases after substantially all of the usable heat has been withdrawn therefrom into the stove.

1,862,010. MULTIPLE TRAY. MAX EHRLICH, Woodhaven, N. Y. Filed Mar. 13, 1930. Serial No. 435,488. 3 Claims. (Cl. 65—53.)



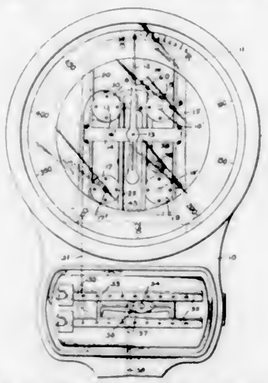
3. A device of the character described, comprising, in combination, a plurality of trays, collapsible means for maintaining the trays in spaced relation, said means when collapsed permitting the trays to assume a nested relation, said trays when nested providing a space between the bottoms thereof within which said means can be received.

1,862,011. CONCRETE PAVEMENT AND ITS CONSTRUCTION. ROBERT B. GAGE, Trenton, N. J. Filed Jan. 3, 1928. Serial No. 244,134. 3 Claims. (Cl. 94—24.)



1. A method of constructing a pavement of the character described which comprises laying down a concrete foundation layer; coating the same, while still fresh, with bituminous cement emulsion; and while this bituminous emulsion is still fresh, laying down thereon a concrete wearing surface; so that after setting the concrete, the bituminous cement will adhere firmly to both foundation and wearing surface, thus bonding them together as one slab.

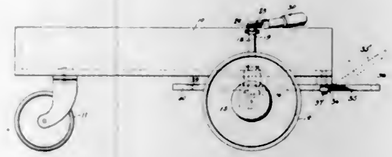
1,862,012. WEIGHING SCALE. WILLIAM N. GILBERT, Hudson Heights, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Apr. 8, 1929. Serial No. 353,349. 30 Claims. (Cl. 265—70.)



1. In a scale, a stationary frame, a counterbalancing system movable along said frame, a movable frame guided for movement through free, slidable engagement with the

counterbalancing system and actuated by said counterbalancing system, an indicator driven by said movable frame, and means for actuating said counterbalancing system.

1,862,013. VEHICLE. HUMBERT GODOY, Philadelphia, Pa. Filed Feb. 26, 1931. Serial No. 518,336. 10 Claims. (Cl. 208—41.)



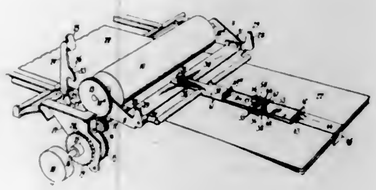
1. A vehicle comprising a body, propelling and supporting wheels, levers fulcrumed above the body to oscillate independently about fixed axes substantially in a horizontal plane, and transmitting means from said levers to said propelling wheels.

1,862,014. METHOD OF MAKING THERMOSENSITIVE RESISTORS. LARS O. GRONDAHL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Jan. 8, 1923, Serial No. 611,286, Patent No. 1,741,231, dated Dec. 31, 1929. Divided and this application filed Apr. 25, 1929. Serial No. 357,993. 5 Claims. (Cl. 201—63.)



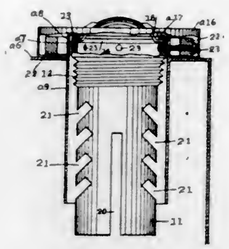
2. The method of constructing a thermosensitive device, which consists in twisting two copper wires together so that the turns of one wire alternate with the turns of the other, and then heating them to form a layer of copper oxide between the wires.

1,862,015. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 19, 1929. Serial No. 379,435. 11 Claims. (Cl. 197—140.)



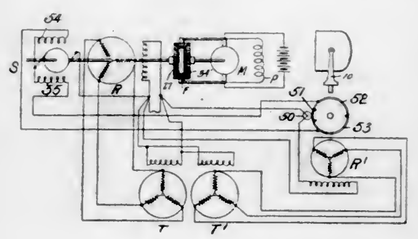
1. In a typewriting machine, the combination of a web support, a member rigid with said support, a guide on said member, a slide to pass through said guide, an adjustable stop on said member, means on said stop to further guide the slide, and means on the slide to limit its sliding movement by engaging the stop.

1,862,016. AUTOMOBILE GASOLINE TANK BAFFLE. JOHN A. HOUCK, Sr., Bellingham, Wash. Filed June 1, 1931. Serial No. 541,291. 1 Claim. (Cl. 220—86.)



In a tank inlet baffle, an open-top hollow body having perforated side and bottom walls disposable within the inlet casing of an automobile gasoline tank, a ring having radial openings therethrough disposed around the outer ends of said inlet casing and baffle with said radial holes aligned with holes through said casing and tapped holes through said baffle, screws extended through said holes in said ring and casing and engaged in said tapped baffle holes, and a cap fitting over said open top of the baffle engaged therewith.

1,862,017. DISTANT CONTROL MECHANISM. FRANK R. HOUSE, Baldwin Harbor, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 26, 1929. Serial No. 358,209. 6 Claims. (Cl. 172—239.)

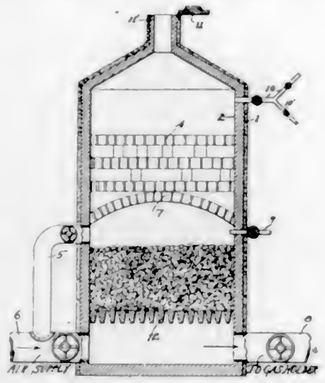


5. In combination, a power motor for driving an object, said motor having field poles, an armature, a commutator, and brushes rotatably adjustable on said commutator to control the speed, torque, and direction thereof, means for controlling said motor from a distance, said last-named means comprising fine and coarse transmitters, fine and coarse repeater motors actuated by said transmitters, means for normally actuating said brushes from said fine repeater motor, an auxiliary power motor adapted to be controlled from said coarse motor and connected to said brushes, and means for bringing said auxiliary power motor into action when said brushes fall out of synchronism with the sending transmitters more than a predetermined degree.

1,862,018. PROCESS FOR MAKING GAS FROM OIL. LEON B. JONES, San Francisco, Calif., assignor to Jones Gas Process Corporation, a Corporation of California. Filed July 15, 1925. Serial No. 43,667. 4 Claims. (Cl. 48—214.)

2. An oil gas making process which comprises: air blasting a bed of oil gas residuum to heat said residuum and

form producer gas; burning the producer gas to heat checker brick; passing steam through the bed of residuum and thereby producing water gas and cooling the fuel bed; ad-

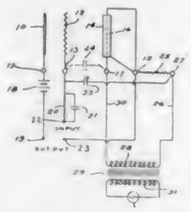


mitting oil to the heated checker brick to produce oil gas; separating entrained residuum from the oil gas by passing the gas through said cooled bed of residuum.

1,862,019. PROCESS OF MAKING SILK FIBER SHEET. NAO KAWAGUCHI, Montebello, Calif. Filed Sept. 9, 1931. Serial No. 561,987. 3 Claims. (Cl. 92—14.)

1. The process of making silk fiber sheet, consisting of soaking a quantity of dried silk cocoons in cold water for a time, then in removing the cocoons from the water, placing them in a bag of cloth fabric and then draining off the water from the cocoons, then in boiling a quantity of water and mixing bicarbonate of sodium therewith, then in tying up the opening in the bag so that the cocoons are retained therein without destroying their shape, and then dipping the bag into the boiling water leaving the bag with cocoons therein in the boiling water for about two hours, then in removing the bag filled with cocoons and turning the cocoons into clean cold water and washing them, then in removing the cocoons and squeezing them to remove surplus water, then in picking the cocoons, one by one, and tearing them at the weak part of the surface, turning the cocoon inside out and removing all foreign material, then piling them in a sheet of suitable thickness and making the sheet of even thickness, then in applying tincture of benzoin to the sheet to moisten it all over, and finally in smoothing the surface with a brush.

1,862,020. MEANS FOR PREVENTING HUM DUE TO INTERELEMENT CAPACITIES IN VACUUM TUBES. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Dec. 7, 1928. Serial No. 324,517. 10 Claims. (Cl. 179—171.)



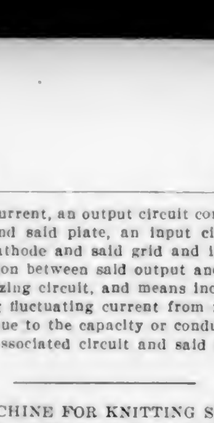
1. In a radio set, a vacuum tube, plate and grid elements within said tube, a cathode within said tube, a circuit associated with said cathode for energizing said cathode by fluctuating current, an output circuit connected between said cathode and said plate, an input circuit connected between said cathode and said grid and including a grid leak, a connection between said output and input circuits and said energizing circuit, and means including a resistance preventing fluctuating current from flowing through said grid leak due to the capacity or conductance between said grid and associated circuit and said fluctuating current circuit.

1,862,021. MACHINE FOR KNITTING SPLIT FABRIC. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Jan. 8, 1929. Serial No. 330,996. 7 Claims. (Cl. 66—43.)



1. Mechanism for knitting so-called split fabric having opposite suture seams upon a circular knitting machine including a primary set of knitting cams, an auxiliary set of knitting cams, the lowermost of the knitting cams at the auxiliary side being slightly higher than the level of the bottom of the corresponding cams at the primary side whereby over strain is prevented of loops or stitches formed at the primary knitting side.

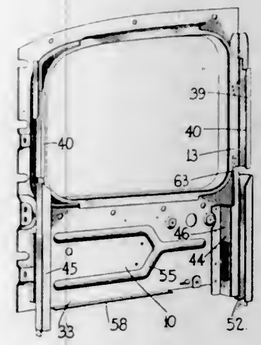
1,862,022. VEHICLE BODY FRONT CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 9, 1929. Serial No. 376,905. 8 Claims. (Cl. 296—28.)



1. Vehicle body front in which the windshield opening is formed by inner and outer stampings extending entirely around said opening, and joined together in the opening, the inner panel being formed at its sides to provide the outer side and bottom of a glass run channel, and further having a downward extension closing the space between the windshield opening and a baffle plate, said downward extension being provided with ventilating openings.

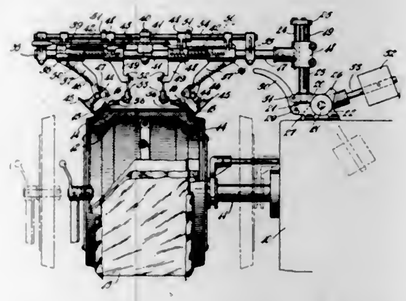
1,862,023. VEHICLE BODY WINDOW CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1929. Serial No. 416,991. 9 Claims. (Cl. 296—44.)

1. An inner removable panel unit for a vehicle body window construction comprising an integral panel stamping forming the regulator board and extending around the window opening, said panel stamping being laterally extended around the window opening to provide the moulding for the inner side of said opening, and formed further at the sides of said opening with a glass run channel, and sep-



arate glass run channel stampings below the window opening secured to the regulator panel portion of said stamping, whereby the window glass and regulator mechanism may all be assembled or dis-assembled with said stamping as a unit.

1,862,024. TIRE BUILDING APPARATUS. CHARLES W. LEGUILLON and NOAH L. WARNER, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Nov. 14, 1928. Serial No. 319,310. 16 Claims. (Cl. 154—10.)

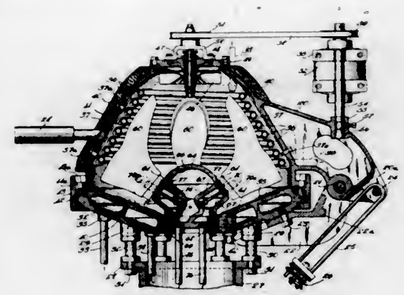


1. Tire-building apparatus comprising a rotatable tire-building form, a pair of tools mounted adjacent thereto and adapted to engage opposite faces of a tire-component thereon, and means for moving said tools in the same direction, laterally of said tire-component, to apply the same to an underlying tire carcass.

3. Tire-building apparatus comprising a rotatable tire form, a pair of tools mounted adjacent thereto and adapted to engage a portion of a tire structure thereon, and means for moving one of said tools toward the other a determinate distance and thereafter moving both tools in unison.

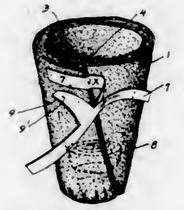
1,862,025. VULCANIZER. CHARLES W. LEGUILLON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,739. 8 Claims. (Cl. 18—6.)

8. Vulcanizing apparatus comprising a stationary, chamber-defining base member, a hood member mounted in hinged relation to said base member and adapted to mate therewith to define a vulcanizing chamber, a manifold mounted on the inner face of the said base member and



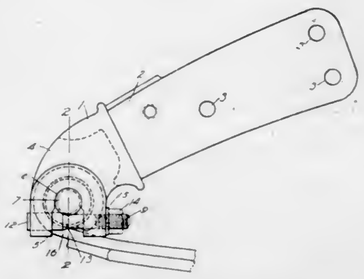
adapted to support and conduct a fluid into the articles to be vulcanized, and means carried by the hood member for supplying heat to the articles.

1,862,026. SURGICAL BANDAGE. BENJAMIN LEVISON, San Francisco, Calif. Filed May 5, 1930. Serial No. 449,757. 5 Claims. (Cl. 128—157.)



1. A device of the character described comprising a cup of soft bibulous paper stock with its bottom formed of inwardly and upwardly turned portions of the side walls, and an adhesive securing strip at the upper edge of the cup.

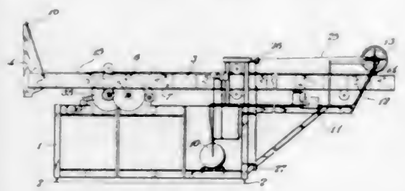
1,862,027. JOINT. HUGH C. LORD, Erie, Pa. Filed Mar. 1, 1929. Serial No. 343,740. 4 Claims. (Cl. 287—100.)



1. In a joint, the combination of a joint member comprising a joint pin extending axially from the member; a support having an open slot terminating in a seat for receiving the joint pin, said slot extending to the edge of the support with a width equal to the diameter of the joint pin and adapted to receive the joint pin by a crosswise

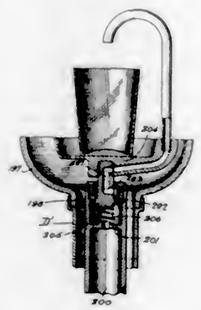
movement of the joint pin; and a cross pin bridging and closing the slot engaging the joint pin and locking it on its seat and against turning, said cross pin connecting the walls at the sides of the slot.

1,862,028. COKE OVEN APPARATUS. JAMES A. B. LOVETT, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Feb. 12, 1927. Serial No. 167,611. 11 Claims. (Cl. 202—262.)



1. The combination with a coke oven, of means reciprocable therein for applying fluid under pressure to portions of the interior walls thereof.

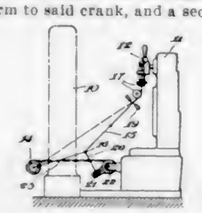
1,862,029. FOUNTAIN CUSPIDOR. CLARENCE W. MOORE, Roslyn, Pa., assignor to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y., a Corporation of Delaware. Original application filed Nov. 30, 1926, Serial No. 151,736. Divided and this application filed Sept. 5, 1929. Serial No. 390,490. 4 Claims. (Cl. 251—116.)



2. In a cuspidor, the combination with a water supply pipe, a support in which said pipe is housed, a bowl mounted on the support, the bowl and support having drainage passages in communication, a valve chamber mounted on the pipe in the drainage passage, a valve in the chamber normally closing said pipe and axially movable for unseating to admit water through the pipe, a tumbler support and associated nozzle connected to the valve and responsive to actuation from a tumbler to unseat the valve and admit water to said nozzle.

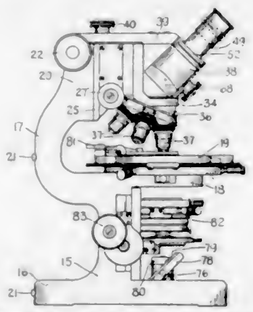
1,862,030. RING SPINNING MACHINE. FRANZ OERTEL, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 13, 1929, Serial No. 370,527, and in Germany June 16, 1928. 7 Claims. (Cl. 118—32.)

1. In a ring spinning machine, in combination, a driving motor, a speed-controlling device for said motor, a builder arm, a transmitting member secured at one end to said builder arm and at the other end to said motor-speed-controlling device, a sheave mounted on said builder arm, a rotatably movable combined crank and sheave, a member adapted to transmit the movement of said sheave on the builder arm to said crank, and a second transmitting



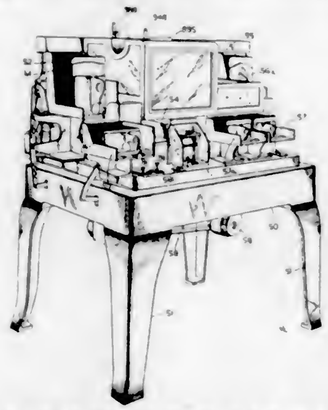
member secured at one end to said crank and at the other end to the transmitting member that extends from said builder arm to said motor-speed-controlling device.

1,862,031. MICROSCOPE. WILLIAM L. PATTERSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 391,046. 24 Claims. (Cl. 88—39.)



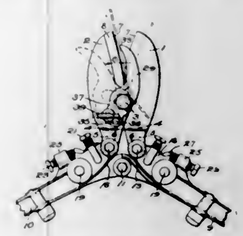
1. A microscope comprising a base, two spaced pillars extending vertically from said base thence rearwardly, upwardly and forwardly to a point where they are joined together to form a supporting bracket, a lens system mounted on said bracket and reflecting means positioned on said base to direct into said lens system light rays which pass between said spaced pillars.

1,862,032. RECORD ANALYZING AND POSTING MACHINE. JOHN ROYDEN PEIRCE, New York, N. Y., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 28, 1926. Serial No. 144,661. 134 Claims. (Cl. 101—19.)



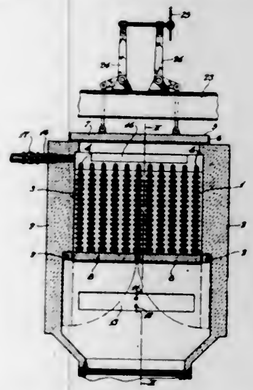
1. In a posting machine, means for analyzing a plurality of record sheets, means controlled in accordance with the analysis of the sheets for effecting an entry upon one of the sheets and means also controlled in accordance with the analysis of the records for printing items upon a separate record.

1,862,033. CUTTING TOOL. HENRY W. PORTER, Brookline, Mass., assignor to H. K. Porter, Inc., Everett, Mass., a Corporation of Massachusetts. Filed July 12, 1928. Serial No. 292,089. 11 Claims. (Cl. 30—13.)



11. A shears comprising a pair of blades pivoted together to move past one another in parallel planes, said blades being formed with cutting edges following curved lines which are mutually convex and make constant angles with the work, pivotally connected handle members, said blades having extensions pivoted to said handle members at such points adjacent the pivotal connection thereof that upon impression of a constant blade closing force on said handle members said blades will, in conjunction with the angle at which said cutting edges are presented to the work, maintain the cutting pressure substantially constant throughout the cutting stroke.

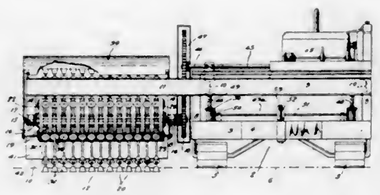
1,862,034. LOW TEMPERATURE DISTILLING APPARATUS AND METHOD OF USING THE SAME. FRANZ PUENING, O'Hara Township, Allegheny County, Pa. Filed Jan. 28, 1927. Serial No. 164,166. 18 Claims. (Cl. 202—36.)



1. In distilling apparatus, a heating wall that is suspended from one edge thereof, said heating wall being of such reduced horizontal cross-sectional area proceeding progressively from said edge and of metal that is flexible when heated whereby it retains its vertical alinement when subjected to varying temperatures.

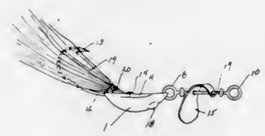
7. The method of operating distilling apparatus having horizontally spaced members disposed side-by-side having recesses for supporting the material to be treated which comprises filling the spaces between said members with said material to insure a supply thereof for the supporting members and then relieving said spaces of any excess or unsupported material.

1,862,035. LAND CLEARING AND PULVERIZING MACHINE. HAROLD RAINWATER, Dayton, Wash. Filed Sept. 29, 1930. Serial No. 485,112. 3 Claims. (Cl. 97—40.)



1. In a land clearing and pulverizing machine, the combination of a vehicle structure, an engine frame mounted thereon and extended to provide a cantilever structure, a high speed rotor rotatably supported by said cantilever structure and provided with a multiplicity of laterally adjacent and normally radially extending hammers, hingedly attached to said rotor, and depending upon centrifugal force by the speed of the rotor to maintain the radial position thereof, an operating means carried on said engine frame and disposed with said frame to counterbalance said rotor on said vehicle structure, means operatively connecting said rotor and said operating means, and means mounted on said vehicle structure to vertically adjust said rotor.

1,862,036. ARTIFICIAL BAIT. CHARLES P. SCHILPF, Cleveland Heights, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 20, 1929. Serial No. 7,205. 4 Claims. (Cl. 43—42.)

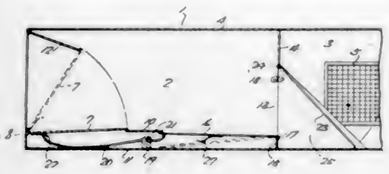


1. In an artificial bait for fish lines, a metallic body of substantially concavo-convex form thickened in all directions toward its medial longitudinal portion and convexly rounded on its outer surface, means whereby a line may be attached to the body to draw it through the water with the convex surface downward, and vanes integrally formed with the body extending laterally from the upper side edge portions, said vanes being of substantial area and having upwardly forwardly sloping under surfaces to effect a substantial buoying effort on the body when the body is drawn through the water during the retrieving portion of a casting operation.

1,862,037. PROCESS FOR THE SEPARATION OF LIQUID AND SOLID FATTY ACIDS. ERNST SCHLENKER, Berlin, Germany. Filed Dec. 16, 1930, Serial No. 502,846, and in Germany Dec. 4, 1929. 1 Claim. (Cl. 87—12.)

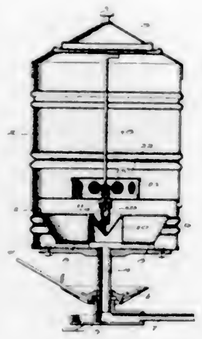
Process for the separation of liquid and solid fatty acids by filtration, consisting in treating fats, or their fatty acids, dissolved in a solvent (such as acetone, alcohol or the like) with two different saponifying agents one furnishing respectively a salt insoluble and a salt soluble in said medium, separating the insoluble and soluble soaps jointly produced in said medium, and retransforming them into the fatty acids by decomposition with mineral acids.

1,862,038. ANIMAL TRAP. OSCAR SESSION, Toppenish, Wash. Filed Oct. 14, 1931. Serial No. 568,654. 2 Claims. (Cl. 43—67.)



1. In a device of the kind described, a housing having an entrance chamber and trap chamber and entrance openings into the said chambers, an entrance door hinged adjacent the lower edge of the opening into the entrance chamber, a trip pan hinged adjacent the entrance into the trap chamber, a bearing ear mounted between the said entrance door and trip pan, a trip lever pivoted intermediate its ends to the said bearing ear and engaging the said entrance door and trip pan at its ends, and a door hinged in the said opening into the trap chamber and extended angularly and downwardly into the said chamber.

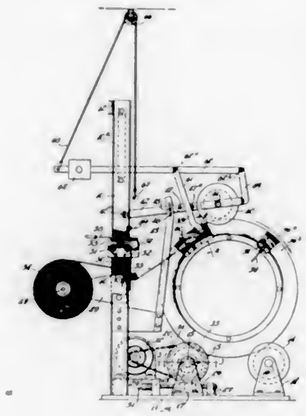
1,862,039. VALVE. HENRY M. SHEER, deceased, Quincy, Ill., by Grant Irwin, administrator, Quincy, Ill., assignor to H. M. Sheer Company, Quincy, Ill., a Corporation of Illinois. Original application filed Nov. 17, 1923, Serial No. 675,386. Divided and this application filed Oct. 6, 1927. Serial No. 224,485. 6 Claims. (Cl. 137—68.)



1. A valve including a valve-stem guide formed of sections screwed together, each of said sections having radial openings therein, one of said sections having an opening therethrough and oppositely disposed valve-seats, a manually controlled valve extending into position to engage one of said valve-seats, and a needle valve carried by and having slidable connection with the other section and in position to engage the other valve-seat.

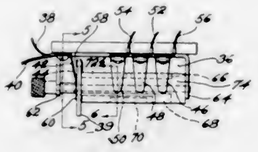
1,862,040. APPARATUS FOR HANDLING STRIP MATERIAL. JOHN O. SMALL, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 26, 1928. Serial No. 315,221. 8 Claims. (Cl. 154—9.)

1. Strip-shaping and winding apparatus comprising a circular member having a laterally-curved outer peripheral surface, cushion surfaced cradle means for rotating the said member, and laterally-curved yielding means adapted to automatically press in a substantially radial direction against the said laterally-curved outer peripheral surface



of the circular member, said circular member being provided with means for securing the leading end of the strip.

1,862,041. REMOTE CONTROLLED CURTAIN SWITCH. FRED K. SNOW, Lynnfield, Mass. Filed Dec. 1, 1930. Serial No. 499,345. 1 Claim. (Cl. 200—7.)

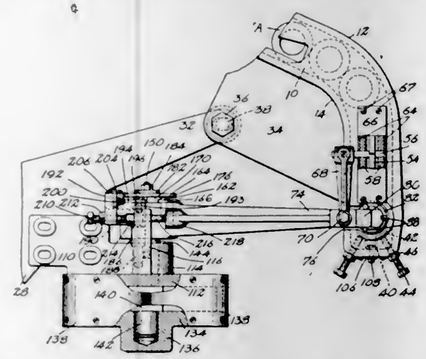


A switch comprising a bracket, a rotor mounted on the bracket, contacts on the periphery of the rotor, stationary contacts on the bracket for engagement with the peripheral contacts of the rotor, a current supply line, a pair of leaf spring contacts on the bracket, a pair of contacts on one end of the rotor, one of said last mentioned contacts being adjacent the longitudinal axis of the rotor, while the other contact is adjacent the periphery of the rotor, one of said leaf springs being engageable with the contact adjacent the longitudinal axis of the rotor, and the other leaf spring being bent to avoid the other leaf spring and is engageable with the outermost contact at the end of the rotor, said current supply line being interrupted by the contact at the end of the rotor, and connections between the contact at the end of the rotor and the contact on the periphery of the rotor.

1,862,042. CHUCK LOADING MECHANISM. CLARENCE C. STEVENS, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Mar. 29, 1929. Serial No. 351,087. 21 Claims. (Cl. 51—215.)

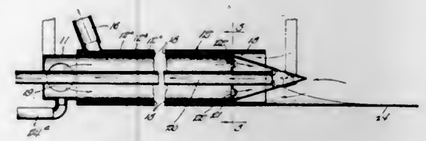
1. In a machine having a work head with a chuck for clamping a work-piece, a chute for receiving a series of work-pieces and feeding them by gravity, a loading arm having a work carrier entering the chute, escapement

mechanism actuated by abnormal movement of the loading arm for delivering work-pieces successively into the path of the work carrier, a cylinder and vane for moving the



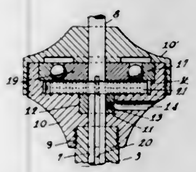
loading arm, and means for limiting the movement of the arm by the vane on alternate actuations of the arm; substantially as described.

1,862,043. COMBINATION MUFFLER AND AIR HEATER. JOHN T. VAN IDERSTINE, Chicago, Ill. Filed May 26, 1926, Serial No. 111,687. Renewed Sept. 29, 1931. 4 Claims. (Cl. 137—160.)



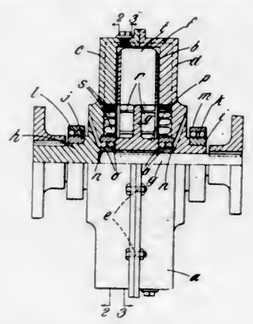
1. In combination with the exhaust pipe of an internal combustion engine of an elongated cylinder having a cone shaped forward end and an inlet in the rear end thereof connected to said exhaust pipe, an outlet pipe entering said cylinder at the rear end thereof and continuing therethrough to a point adjacent the apex of said cone shaped forward end so that the area between the periphery of the inner end of said outlet pipe and the closest wall of said cone shaped forward end is not greater than the cross sectional area of said outlet pipe, said cone shaped forward end being adapted to gradually compress and center the exhaust gases in said cylinder and thereby facilitate the introduction of said exhaust gases into said outlet pipe.

1,862,044. BALL PRACTICING DEVICE. THOMAS M. WHITE, Weed, Calif. Filed Mar. 5, 1929. Serial No. 344,485. 5 Claims. (Cl. 273—26.)



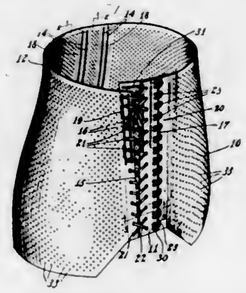
1. A ball-practicing device comprising a standard, a rotatable member secured thereto, a ball, means connecting said ball to said rotatable member, said ball being swingable around said standard when caused to move, and means for returning said ball to its original position.

1,862,045. APPARATUS FOR THE HYDRAULIC TRANSMISSION OF POWER. THOMAS EDGAR BEAUMONT and JOHN NOEL WARING, London, England. Filed Feb. 23, 1929, Serial No. 342,163, and in Great Britain Apr. 25, 1928. 2 Claims. (Cl. 192—58.)



1. Apparatus of the type described for the transmission of power comprising two rotary coaxial members arranged one within the other, the outer, driving member including two recessed parts secured together to form a cavity in which the inner, driven member rotates, the opposed walls of said cavity being both provided with a series of radially extending grooves, and the inner, driven member having a body provided with a central chamber, that communicates with said grooves in the outer member, and a series of conduits leading from said chamber through the periphery of the body of the inner member into the aforesaid cavity in the outer member, each of said conduits being curved in the direction of its length.

1,862,046. REDUCING GARMENT AND METHOD OF MAKING THE SAME. THOMAS A. BENNETT, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 6, 1925. Serial No. 821. 2 Claims. (Cl. 2—36.)



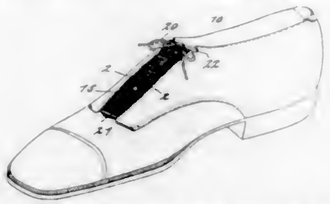
1. In the art of reinforcing elastic reducing garments, the method which comprises superimposing upon a curable rubber sheet of requisite size and shape reinforcing structures including strips of rubberized fabric and stiff, flexible stays, the stays being covered by fabric strips, and press-curing the construction thus assembled to give thereto a substantially uniform thickness throughout.

1,862,047. SHOE FASTENING DEVICE. ROBERT L. BOULET, Scranton, Pa., and WILLIAM E. BOULET, Canton, N. Y. Filed July 8, 1930. Serial No. 466,609. 1 Claim. (Cl. 24—207.)

In a device of the character specified, a plurality of cylindrical members of elongated form having the end portions thereof tapered, the adjacent end portions of said cylindrical members being disposed in abutting relation,

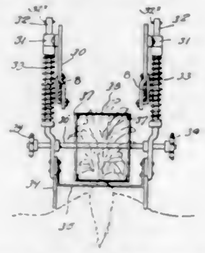
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said elongated cylindrical members being provided with laterally projecting attaching flanges, a plurality of tubular members having the end portions thereof open and flared to define gradually restricted entrance openings for the tapered reduced terminal portions of said cylindrical



members, said tubular members being provided with longitudinal slots extending for the full length thereof for the reception of said flanges of the cylindrical members and a flexible element connected to said cylindrical members for operating the same.

1,862,048. BEET HARVESTER AND TOPPING MACHINE. JOHN W. BRIGHT, Grand Junction, Colo., assignor to The Colorado Beet Harvester Company, a Corporation of Colorado. Filed Mar. 23, 1928. Serial No. 264,239. 9 Claims. (Cl. 55—107.)

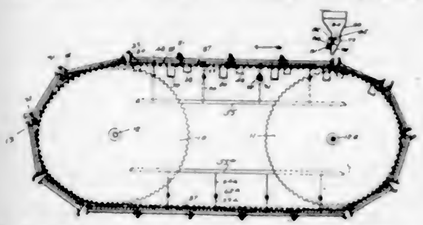


2. In a machine of the kind described, a topping mechanism comprising a pair of slipper plows with a knife extending therebetween, a topper wheel rotatably mounted above the slipper plows, a pair of shanks rising therefrom, a frame, means for slidably receiving the shanks on the frame, and springs associated with the shanks for urging the same downwardly.

1,862,049. DI-IODO-HYDROXY MERCURY FLUORESCEIN. HOWARD M. CHILES, Champaign, Ill., assignor to Pyro-Pack Products Co., Chicago, Ill. Filed Apr. 9, 1925. Serial No. 21,765. 3 Claims. (Cl. 260—13.)

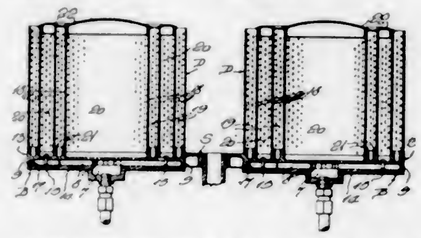
1. The herein described compound consisting of di-iodo-hydroxy-mercury fluorescein which corresponds to the chemical formula $C_{20}H_{10}O_6HgI_2$, substantially as described.

1,862,050. AUTOMATIC FILTERING APPARATUS. GEORGE DONALDSON, Inglewood, Calif. Filed Nov. 12, 1928. Serial No. 318,984. 2 Claims. (Cl. 210—197.)



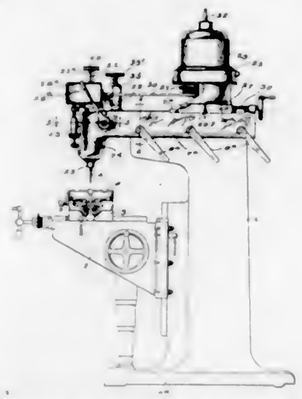
1. A device as described consisting of an endless band, means setting said band in motion, a series of straight pans arranged in a connected series upon said band and moving therewith, a fixed platform over which a plurality of pans move rectilinearly progressively, said pans and said platform having a series of registerable ports, a suction device having outlet pipes connected to the platform ports, screens on the several pans, valves carried by said suction device, and means controlled by said pans severally for opening and closing said valves automatically to time the operation of the suction device.

1,862,051. GAS BURNER. HOMER D. DUFAULT, Easthampton, Mass., assignor, by direct and mesne assignments, of two-tenths to Alderic Fugere, two-tenths to to Henry Bernier, and one-tenth to Hiram Bernier, Easthampton, Mass. Filed Dec. 30, 1930. Serial No. 505,603. 2 Claims. (Cl. 158—116.)



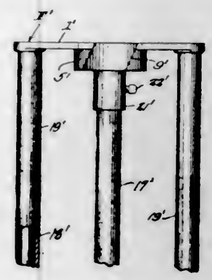
1. A gas burner comprising a base having a central gas-receiving chamber and a plurality of tubular gas-conducting tunnels radiating from and communicating at their inner ends with said chamber, said tunnels extending uninterruptedly to the periphery of the base and having closed outer ends, said base being provided with arcuate concentric air channels and with arcuate upwardly opening gas channels between said tunnels, said air and gas channels having their ends closed by the walls of said tunnels, said base having an imperforate bottom for each upwardly opening gas channel while each air channel is open both upwardly and downwardly, side walls of said tubular tunnels having gas discharge orifices opening horizontally into ends of said gas channels to direct the discharged gas longitudinally throughout the lengths of said gas channels, and a perforated air and gas mixing drum upon said base having chambers communicating with said air and gas channels.

1,862,052. ROUTING, MILLING, AND OTHER MACHINE TOOL. GEORGE GORTON, Racine, Wis. Filed May 15, 1929. Serial No. 363,152. 11 Claims. (Cl. 90—14.)



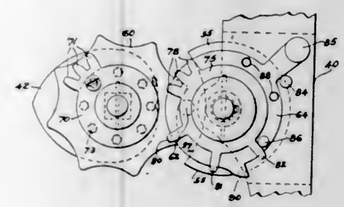
1. In a machine tool, in combination; a pedestal having a horizontally disposed guideway; a forwardly-extending slide adjustable longitudinally of said guideway; means whereby said slide is normally operatively fixed with respect to said pedestal; the front end of said slide forming a cutter head housing with a bore extending vertically therethrough; a hub in the upper end of said bore and normally fixed with respect to said housing and provided with an upstanding rigid guard above said housing and open at the top and rear; a vertical rotary cutter spindle extending upwardly through said hub and mounted in and extending above and below said bore of the housing; a concentric drive pulley for said spindle, said pulley arranged within said guard and above said housing; and a rotary motor for driving said pulley by a belt drive extending through the open rear of said guard, said motor being carried by said slide.

1,862,053. NOZZLE AND HOSE HOLDER. JORDAN W. GRANT, Portsmouth, Va. Filed Nov. 3, 1931. Serial No. 572,885. 2 Claims. (Cl. 248—29.)



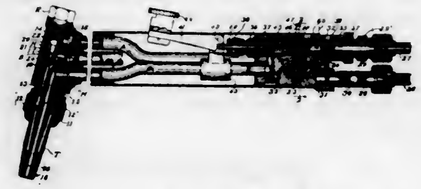
1. A nozzle and hose holder comprising a frame made up of a head and a foot connected by top bars and a bottom bar, the head and the foot having hose-receiving openings, and there being slots in the top of the head and the foot, which are wide enough to admit a hose when deflated, and narrow enough to prevent the escape of the hose when inflated, the slots being arranged at an acute angle to the length of the holder, thereby to prevent the escape of the hose saving when the hose is deflated and flexed at two places into parallelism with the slots.

1,862,054. BUNCH BUILDING MECHANISM. ALEC R. HARTLEY, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Jan. 22, 1931. Serial No. 510,522. 5 Claims. (Cl. 242—43.3.)



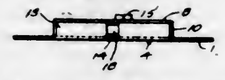
1. In a builder mechanism, a cam shaft, means to continuously rotate said shaft, a builder cam and an auxiliary cam mounted to rotate with said cam shaft, a cam lever, a cam follower mounted on said lever and comprising a rotatable member having a portion cooperating with said builder cam and a second portion cooperating with said auxiliary cam, and means rotatable with said builder cam and intermittently engaging said rotatable member to shift the angular position thereof until the cam follower is operatively positioned with reference to the builder cam.

1,862,055. BLOWPIPE. ROBERT J. KEHL, Newark, N. J., assignor to Oxweld Acetylene Company, a Corporation of West Virginia. Filed July 22, 1926. Serial No. 124,259. 8 Claims. (Cl. 251—134.)



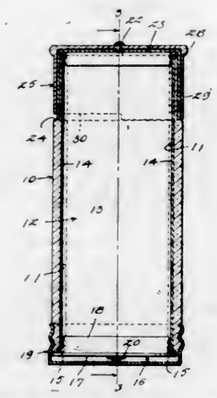
3. The combination of a valve chamber having an outlet, and a valve in said chamber normally closing said outlet and having a seating member cooperating with said outlet, said valve having a reduced section adjacent said member and passage means around its body and through its body opening into said reduced section.

1,862,056. SASH LATCH. BENJAMIN F. KELLY, Houston, Tex. Filed July 16, 1931. Serial No. 551,255. 2 Claims. (Cl. 292—189.)



1. A latch of the character described, comprising a relatively flat casing having an edge opening to receive a keeper staple and an opening in one side thereof, an elongated body in the casing, pivot means oscillatably supporting the body at one end, a latch bolt comprising an extension from said body at right angles to the length thereof and at the pivoted end and a hook at the end of the extension, the end of the body remote from the pivot operating as a weight to oscillate the body to normally maintain the latch bolt hook across said edge opening, and an arm extending from the end of the body adjacent the pivot and upon the side of the pivot opposite the latch bolt and further extending longitudinally of the body and normally disposed across the side opening of the casing to be engaged and depressed by a member inserted into the said side opening to effect the oscillation of the body.

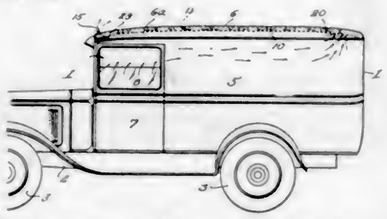
1,862,057. CONDIMENT SHAKER. MILES C. T. LEWIS, Calistoga, Calif. Filed Mar. 10, 1931. Serial No. 521,531. 2 Claims. (Cl. 65—45.)



1. A condiment shaker comprising a receptacle, a partition dividing the receptacle into a plurality of chambers, means carried by one end of the receptacle for re-

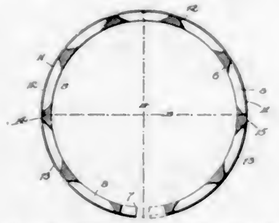
moving the contents from a selected chamber, an inner closure member on the opposite end of the receptacle, an outer closure disposed about said inner closure, and resilient means interposed between the inner and outer closures whereby to resiliently hold said inner closure against the end of the receptacle.

1,862,058. VENTILATING AND/OR COOLING VEHICLE BODIES. WILLIAM LINTERN, Cleveland, Ohio. Filed June 30, 1931. Serial No. 547,938. 7 Claims. (Cl. 98—2.)



1. In a vehicle body, a front vehicle body wall, top and side vehicle body walls merging with said front vehicle body wall and extending rearwardly therefrom, whereby upon forward movement of the body a low air pressure area is created extraneously of the body closely adjacent and behind the effective upper limit of the front vehicle body wall by air caused to flow upwardly from said front vehicle body wall and to turn rearwardly behind the effective upper limit thereof, and means having an outlet disposed at the upper surface of the top wall and communicating with the low pressure area and an inlet communicating with the interior of the body.

1,862,059. PISTON RING. ALLEN W. MORTON, Baltimore, Md., assignor to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed Apr. 17, 1931. Serial No. 530,963. 5 Claims. (Cl. 74—109.)



1. A piston ring comprising a one-piece split ring containing two sets of parallel radial slots extending through it and dividing its outer face into two outer lands, and a center land, the center land being of substantially less axial thickness than the outer lands; and a plurality of arcuate grooves in the outer face of the ring and extending circumferentially around it, said grooves relieving said center land through a substantial portion of the ring circumference, and being separated from one another at points substantially 90° removed from a diametral plane passing through the ring joint.

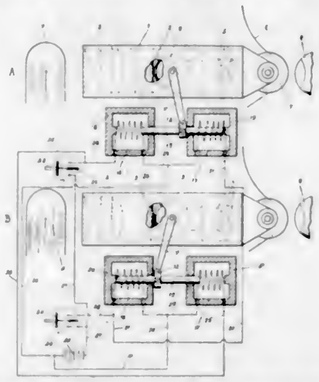
1,862,060. TREATMENT OF PETROLEUM ACID SLUDGES. FRANZ RUDOLF MOSER and JACQUES GREUTERT, Amsterdam, The Netherlands, assignors, by mesne assignments, to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 8, 1928. Serial No. 298,396. 1 Claim. (Cl. 196—148.)

The process of converting acid sludge resulting from the treatment of lubricating oil with sulfuric acid, into a homogeneous neutral asphalt like product, consisting of: heating a petroleum asphalt to a temperature not under 120° C. adding under agitation about an equal amount of acid sludge, further slowly heating the mixture under agitation to a temperature not over 250° C. continuing the heating for a time sufficient to cause substantially complete decomposition of the acid compounds of the sludge, while removing the gaseous reaction products.

1,862,061. METHOD OF PURIFYING AQUEOUS DISPERSIONS. EDWIN B. NEWTON, Akron, Ohio, assignor to American Anode, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1928. Serial No. 307,789. 8 Claims. (Cl. 18—50.)

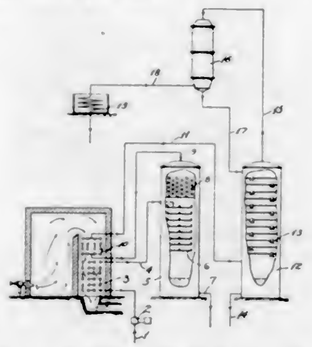
6. The method of purifying an aqueous dispersion which comprises heating the dispersion, and blowing a neutral gas therethrough in the presence of a non-volatile base.

1,862,062. SOUND REPRODUCING APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,379. 8 Claims. (Cl. 179—100.3.)



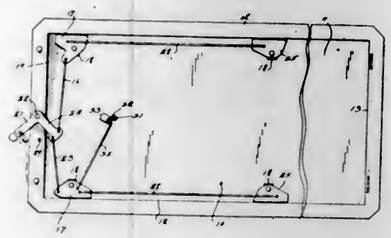
1. A sound reproducing apparatus, comprising in combination, a pair of photographic sound reproducing units each having a light station and a sound record carrying film adapted to travel past said light station, and means controlling the passage of light through said stations for simultaneously fading in the record in one unit and fading out of the sound record in the other unit.

1,862,063. PROCESS FOR DISTILLING OIL. EDWARD G. RAGATZ, Berkeley, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed Dec. 31, 1928. Serial No. 329,374. 3 Claims. (Cl. 196—139.)



1. A process of distilling oil which comprises vaporizing oil, separately super-heating said oil vapors above the temperature of distillation, but not sufficiently to cause any material cracking thereof, and subsequently rectifying said vapors by introducing said vapors into a rectification column to cause it to contact with the condensate generated in said rectification column whereby the condensate is re-boiled and the vapors are rectified.

1,862,064. AUTOMATIC LOCKING AND FASTENING DEVICE FOR VAULTS. JOHN D. RENSHLER, Findlay, Ohio. Filed May 19, 1931. Serial No. 538,511. 4 Claims. (Cl. 292—48.)



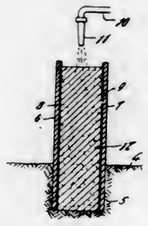
1. A locking and fastening device of the character described comprising in combination with a vault including a base and a cover, a plurality of locking members, means for pivotally mounting said locking members on the base, said base having openings therethrough whereby to permit the projection of the locking members through the base, said cover having registering openings adapted to receive the projected ends of the locking members, operating means for said locking members, means for pivotally mounting said operating means on a marginal edge of said base, a fastening member, means for pivotally mounting said fastening member on the base, said base having an opening therethrough whereby to permit the projection of the fastening member upwardly therethrough, and connecting means whereby to permit the rocking of said fastening member coactive with the rocking of said locking members.

1,862,065. ELECTRIC WATER HEATER. WALTER T. ROWE, East Orange, N. J., assignor to Electro-Matic Mfg. Co. Inc., Newark, N. J., a Corporation of New Jersey. Filed July 9, 1930. Serial No. 466,822. 13 Claims. (Cl. 219—38.)



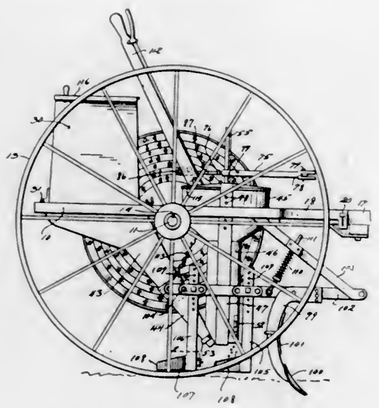
1. An electric water heater, including a boiler adapted to contain water, a substantially T-shaped oil-carrying container arranged within said boiler with the crosshead extending transversely of the boiler with one end of the crosshead extending through the boiler and a central post extending longitudinally of the boiler; an electric heating element arranged in the head of the T-shaped member, a removable cover by that part of the cross head that extends to the boiler, said cover being adapted to be removed for permitting insertion and removal of said heating element and means for turning on and off current to said heating element.

1,862,066. WALL AND PROCESS OF FORMING SAME. JAMES HARLEY SKILLIN, Dalhart, Tex. Filed July 5, 1929. Serial No. 376,216. 5 Claims. (Cl. 18—47.5.)



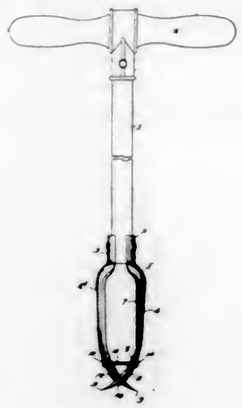
3. A process for forming wall structures comprising depositing layers of suitable thickness of sand and mineral coloring matter and producing an incipient fusing of the sand particles by suitable heating means and thereafter fusing the weather surface of the walls by suitable heat to form a glazed weather proof surface.

1,862,067. ADJUSTABLE SEED PLANTER AND FERTILIZER. WILLIAM T. SNYDER, Sodus, N. Y. Filed Mar. 20, 1930. Serial No. 437,483. 6 Claims. (Cl. 111—16.)



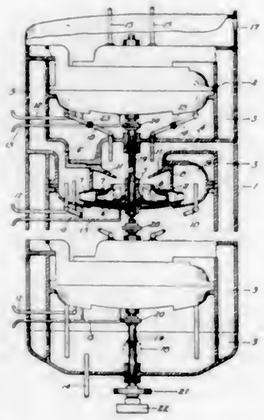
1. In a seed planter of the character described, a planting mechanism, seed dropping mechanism therefor, and means for actuating the seed dropping mechanism at selected intervals including a wheel having a plurality of concentric series of alternate elevations and depressions, the elevations of one series being spaced from each other a different distance than the elevations of any other series, and means adjustable into engagement with any one of said series, said means being operatively connected to the seed dropping mechanism.

1,862,068. EARTH BORING TOOL. LUTHER STROSNIDER, Onaga, Kans., assignor of one-fourth to J. M. Everts, Centralia, Kans, one-fourth to Edward Miller, Onaga, Kans., and one-fourth to H. A. Grutzmacher, Onaga, Kans. Filed Nov. 17, 1930. Serial No. 496,221. 1 Claim. (Cl. 255—66.)



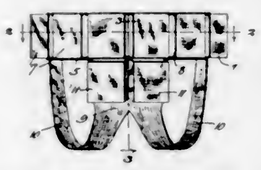
A boring tool of the class described including a rotatable shank, separate opposed elongated blades secured thereto, each blade being bowed transversely and having its free end portion extending to a point, said blades being crossed and in contact adjacent to their points and converging gradually to their point of crossing, the free ends of the blades diverging from their point of crossing, all portions of the advancing edge of each blade from the point to the shank being disposed in the same plane, the planes occupied by the advancing edges of the two blades diverging from the shank, and a tie pin connecting the blades above and binding them together at their point of crossing.

1,862,069. RECTIFICATION COLUMN. PHILIP SUBKOW, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed Sept. 6, 1927. Serial No. 217,789. 6 Claims. (Cl. 261—28.)



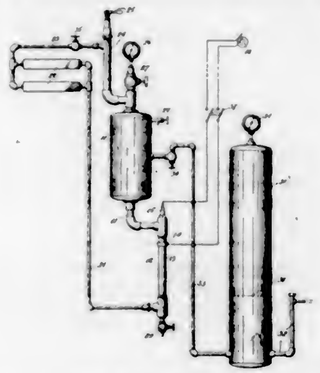
1. A rectification device comprising a plurality of centrifugal jet pumps, means for maintaining a plurality of bodies of liquid, means including said jet pumps for passing liquid from one body to a subsequent body and means including said jet pumps for passing vapors to establish a counter-current flow of vapors and liquid through said rectification device.

1,862,070. SWIMMING BELT. THOMAS SUMMERSON, Parsons, Pa. Filed Nov. 2, 1931. Serial No. 572,639. 5 Claims. (Cl. 9—17.)



1. A swimming belt comprising a body portion, a plurality of pockets arranged on the body portion, said pockets having open sides, air chambers removably supported within the pockets, and a lower supporting strap secured to the belt and extended under the legs of the wearer.

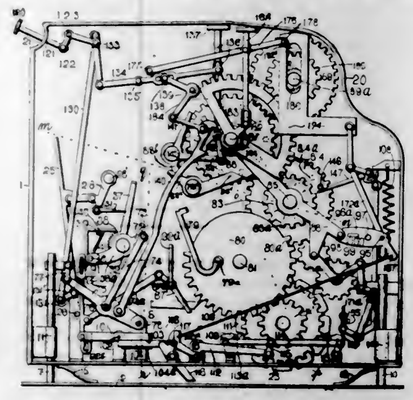
1,862,071. ELECTRIC STEAM GENERATOR. RALPH W. E. VICKERY, Marshfield, Mass. Filed Nov. 29, 1930. Serial No. 498,945. 15 Claims. (Cl. 219—40.)



1. An electric steam-generator comprising in combination a liquid reservoir tank, a tubular electrode, a connection from the lower end of said reservoir to the upper end of said tubular electrode, an electrode disposed within and insulated from said tubular electrode, a connection from the lower end of said tubular electrode to the upper end of said reservoir tank whereby there is a fluid circulation from said tubular electrode upwardly through said reservoir tank and back to the lower end of said tubular electrode, means for supplying liquid to said reservoir tank, and a source of electrical energy electrically connected to said electrodes.

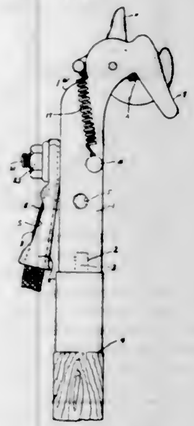
1,862,072. CALCULATING MACHINE. GEORGE F. WITTUM, Vallejo, Calif., assignor to James Bitcon, Vallejo, Calif. Substitute for application Serial No. 680,221, filed Dec. 12, 1923. This application filed Nov. 21, 1930. Serial No. 497,228. 20 Claims. (Cl. 235—60.)

1. The combination of a case enclosing a calculating mechanism including digit starting members, computing members and recording members, the latter two arranged in a series of sets of operative members, each set having a total wheel, an accumulating wheel, a pawl gear, a ratchet gear, the latter two comprising a pair with ratchet and pawl between to carry the former into rotation, a sector gear, a determinate gear and a figure wheel, the aggregate representing an order of enumeration positioned in the same plane, the digit starting members having digit keys to move transversely, one at a time, into operative position, the several digit levers mounted in a digit carriage, and, by means of a ratchet anchored to the latter, movable longitudinally step by step past said orders, concurrently with said transverse movement, to the range determined, upon which said case is mount-



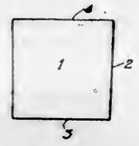
ed for movement in recessive and approach directions relative to said base, guide rods fastened to said base and tracks therefor provided in said case to hold them in position for said movement, lever connections between said case and said base to actuate said mechanism by said movement, equalizing levers and springs to effect the recessive movement thereof, and a series of rest springs fastened to said base to hold said case in normal position relative to said base.

1,862,073. GROUNDING CLAMP. HARRY O. WOOLSON, Altoona, Pa. Filed Aug. 27, 1930. Serial No. 478,224. 4 Claims. (Cl. 173—273.)



1. A ground clamp comprising a shank having an offset head at one end thereof, said head at its free end merging into an angularly disposed fixed jaw, said head and said jaw provided with a plurality of slots, a movable jaw comprising a plurality of jaw members pivotally mounted in the slots of said head, said jaw members including gripping portions adapted for movement through the slots in said fixed jaw for movement into and out of clamping relation with said fixed jaw.

1,862,074. PRODUCTION OF COPPER CAKES AND SHEET BARS. FRANK L. ANTISELL, Perth Amboy, N. J., and CHARLES G. MULLINEAUX, Ansonia, Conn., assignors to Anaconda Copper Mining Company, a Corporation of Montana. Filed July 9, 1924. Serial No. 724,983. 4 Claims. (Cl. 80—60.)



4. The method of producing a copper sheet bar which includes in combination the following steps,—casting a cake with certain faces and edges in contact with the sides of a one-piece copper mold having its inner faces formed by a tapered plunger so as to produce smooth surfaces on said faces and edges and rolling said cake out into a bar with rolls engaging said smooth surfaces.

1,862,075. MANUFACTURE OF CYCLOHEXYLPHENOLS. EDGAR C. BRITTON and RALPH P. PERKINS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 25, 1930. Serial No. 463,826. 9 Claims. (Cl. 260—154.)

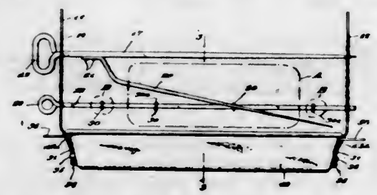
1. The method of making an alicyclic substituted phenolic compound, which comprises reacting a phenol with a cyclohexyl compound, containing a nuclear halogen substituent, at a temperature between 150° and 350° C.

1,862,076. BUTTON. LEONARD R. CARLEY, Watertown, and WALTER T. ABEL, Waterville, Conn., assignors to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 2, 1931. Serial No. 560,796. 6 Claims. (Cl. 24—95.)



1. A button comprising a shell having an integral hollow hub, a hollow die within said shell, said die having a shoulder in its upper portion resting on the upper edge of the hub of said shell, the said die having a central arcuate portion adapted to curl a fastener down within said die and a cap on said shell and bearing against the arcuate portion only of said die.

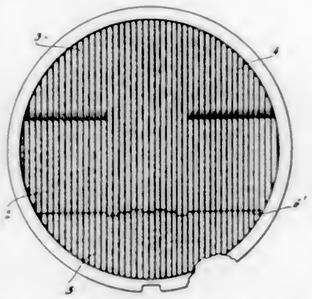
1,862,077. DOMESTIC COOKING VESSEL. LOUIS C. DEMMERLE, Cranford, N. J., assignor to Edwin T. Gray, New York, N. Y. Filed July 18, 1930, Serial No. 468,925. Renewed Oct. 30, 1931. 3 Claims. (Cl. 53—6.)



1. An article of the class described comprising a receptacle presenting an inturned flange at the rim thereof, oppositely disposed standards borne by said receptacle, an

arm extending laterally from said standards, each of said arms having their extremities notched and article-supporting means removably mounted in the notches of said arms.

1,862,078. HEADLAMP LENS. ROBERT N. FALGE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 2, 1929. Serial No. 411,039. 6 Claims. (Cl. 240—41.4.)



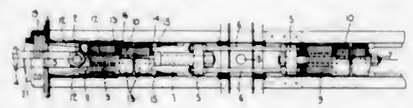
4. A lens provided with vertical flutes wherein the end portion of each flute is unsymmetrically formed, one half of the surface thereof constituting substantially a segment of a cylinder and the other half constituting substantially a segment of a cone.

1,862,079. SCISSORS. CLARENCE LEE GILSTRAP and HIRAM TRIMBLE SMITH, La Grande, Oreg. Filed Mar. 30, 1931. Serial No. 526,306. 3 Claims. (Cl. 30—13.)



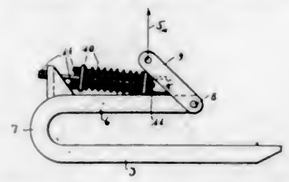
1. In a device of the class described, the combination of a pair of scissor elements having a pair of holding members, removable blade members adapted to fit the holding members, an arcuate slot disposed through each of the holding members and relative to the center of rotation of the scissor elements, a teat inwardly extending from each of the removable blades, each of said teats being adapted to engage within the arcuate slots, a pin secured to each of the holding members, the pin of one holding member adapted to ride within the slot of the other holding member said pins adapted for engaging and raising the teats clear of the arcuate slot when the scissors are opened to their maximum extent about their common center of rotation.

1,862,080. CENTRAL BUFFING AND DRAWGEAR. RICHARD THOMSON GLASCODINE, London, England. Filed Nov. 29, 1929, Serial No. 410,558, and in Great Britain May 14, 1929. 5 Claims. (Cl. 213—11.)



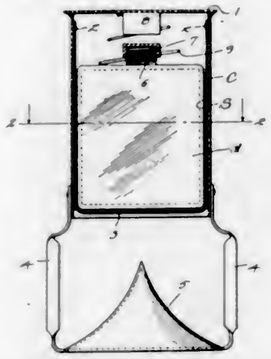
3. Central buffing and draw gear for railway vehicles carried upon bogie trucks, comprising a draw rod, pivoted to the coupler head shank, india-rubber springs mounted on said draw rod at the rear of the vehicle headstock and in front of the bogie centre pivot, fixed front and rear abutments for said springs secured to the vehicle centre sills, a second draw rod at the rear of said bogie centre pivot, india-rubber springs on said second draw rod, fixed front and rear abutments for said springs secured to the vehicle centre sills, and tie rods bridging said bogie centre pivot and connecting said draw rods to ensure the simultaneous operation of said front and rear springs when either buffing or drawing.

1,862,081. LIFTING HOOK. FLOYD N. GRANT, South Gate, Calif., assignor to American Concrete and Steel Pipe Company, South Gate, Calif. Filed Jan. 22, 1932. Serial No. 588,106. 2 Claims. (Cl. 294—82.)



1. In a lifting hook, a supporting member bent upon itself forming a lower shank adapted to slip into a pipe and an upper shank comparatively shorter than the lower shank and having a pivot at its end, and a spring-controlled link with one end pivotally connected to said pivot and a free end adapted to swing into alignment with the center of gravity of the hook when unloaded and also adapted to swing into alignment with the combined center of gravity of the hook and a pipe supported by the hook.

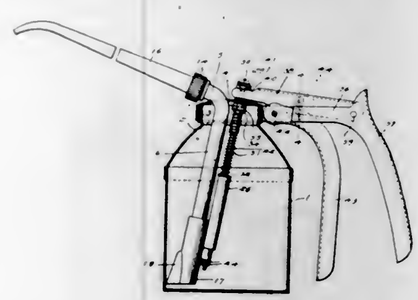
1,862,082. FIRE EXTINGUISHER. LEWIS E. GRIFFING, Montrose, Pa. Filed Apr. 19, 1930. Serial No. 445,740. 6 Claims. (Cl. 169—26.)



2. A fire extinguisher comprising, in combination, a casing open at one end, an inflammable saddle within the casing, a container for fire extinguishing fluid within the casing and resting upon the saddle, the casing below the saddle being open, the walls of the container being fragile, and means positioned below the opening of the casing so as to be engaged by the container when released for breaking the container.

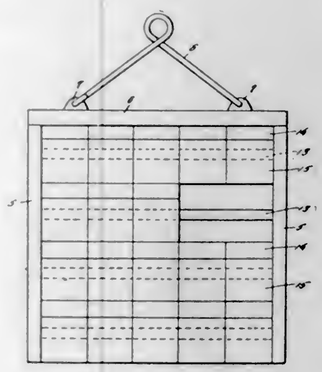
1,862,083. FORCE FEED OIL CAN. WILLIAM HAGSTROM, Lindsborg, Kans. Filed Jan. 2, 1930. Serial No. 418,082. 9 Claims. (Cl. 221—51.)

1. In an oil can of the character described, a receptacle, a lead-off tube extending into the receptacle and having an opening through the inner end thereof, a spring pressed valve closing the opening in said tube, a cylinder reciprocable on the said end of the tube and having an inlet aperture through the wall thereof, said aperture being adjacent the end of the tube when the cylinder is projected therefrom to the limit of its movement off of the tube, a hood carried by the cylinder and covering said aperture and extending downwardly to and opening only at the bottom of the cylinder, the open end of the hood being relatively close to the bottom of the receptacle when the cylinder is projected to the limit of its movement off of the tube,



a reciprocable element operatively connected to the cylinder and extending to the exterior of the receptacle, resilient means surrounding the element and normally acting to urge the cylinder from the tube, and means exteriorly of the receptacle for shifting said member against the tension of said resilient means.

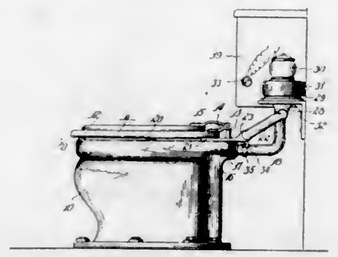
1,862,084. DAMPER. GEORGE WILLIAM HARTLAND, Buffalo, N. Y. Filed June 9, 1930. Serial No. 460,065. 2 Claims. (Cl. 126—285.)



1. A device of the class described comprising a frame having T-shaped slots in its side members, cross bars having their ends of T-shape for fitting in the said slots, a plurality of blocks having hooks at their upper ends for fitting over the cross bars, other blocks to rest upon the ends of the first mentioned blocks and filling the spaces between the rows of blocks first mentioned and the top row on the top of the frame.

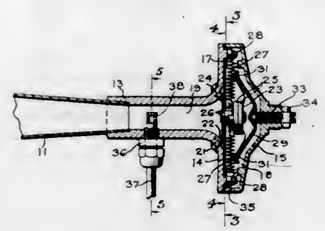
1,862,085. VENTILATOR FAN FOR WATER CLOSETS. JOHN HERTZOG, Lorain, Ohio. Filed Jan. 29, 1931. Serial No. 512,190. 2 Claims. (Cl. 4—213.)

1. A suction chamber for ventilating apparatus for water closets, to fit across the rear end of the seat at the under side thereof around the hinge posts, comprising a plate bent upon itself to provide a tubular portion at the rear end of the chamber for connecting a fan at either end thereof, the members of the plate being extended forward and separated at opposite ends by strips to form a flat shallow passage communicating with the tubular portion and open at its forward end with the front ends of



the members cut back and having cut-outs near the opposite ends thereof to receive the hinge posts, and strips reinforcing the cut-outs around the edges thereof, said strips providing central and side inlet openings to the aforesaid passage.

1,862,086. HORN. HENRY HUEBER, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Mar. 18, 1931. Serial No. 523,622. 9 Claims. (Cl. 116—142.)

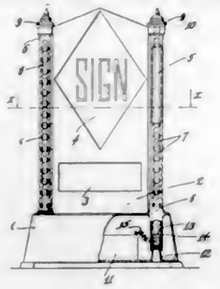


1. In combination with a source of fluid pressure greater than atmospheric pressure, a hollow casing having a chamber with an exhaust opening communicating with the atmosphere, said casing having an inlet opening establishing communication between the atmosphere and the chamber, a seat formed in said chamber about the inlet opening, a sound wave generator normally engaging the seat to close the passage therebetween, a trumpet connected to the chamber inlet opening, means for resiliently supporting the sound wave generator against the seat whereby the generator may be seated and unseated, and means in communication with said source of greater than atmospheric pressure for directing a stream of air under pressure through said inlet opening and against said sound wave generator, whereby the latter may be caused to seat and unseat and whereby sound waves may be set up within said inlet opening and said trumpet.

1,862,087. SIGN CONSTRUCTION. RALPH C. HYDE and CECIL VAN WYCK, Los Angeles, Calif., assignors to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del., a Corporation of Delaware. Filed Mar. 11, 1931. Serial No. 521,666. 2 Claims. (Cl. 40—130.)

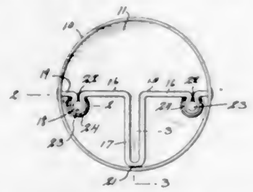
1. In a sign construction, a relatively flat sign body, a base supporting said sign body, a pair of tubular lamps communicating with said base and extending along

the borders of said sign body, a tubular enclosing housing for said lamp having perforations therethrough permitting illumination from said lamp to pass through said housing,



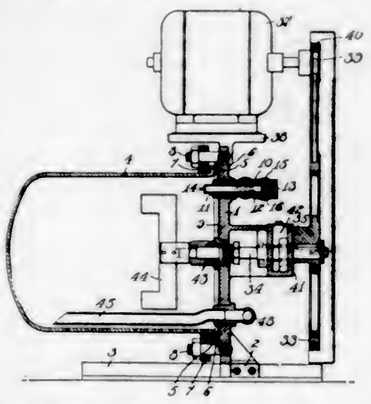
and electric terminals formed in said base and in the remote ends of said housing for passing the electric current from said base to said lamps.

1,862,088. RECEPTACLE SEAL. JAMES F. JONES and ROBERT W. NELSON, Chicago, Ill. Filed May 21, 1931. Serial No. 539,080. 4 Claims. (Cl. 221—2.)



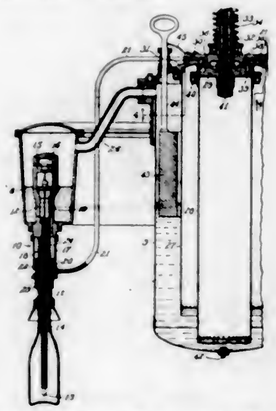
1. A sealing device of the character described comprising the combination with a closed receptacle having flanges and a plurality of openings in one end thereof, of a rockable operating member pivotally carried by flanges on one end of the receptacle, and sealing members carried by said operating member and adapted to overlie said openings for sealing thereof upon rocking of said operating member toward said receptacle.

1,862,089. CARBONATOR. JAMES KANTOR, Chicago, Ill., assignor to Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,696. 11 Claims. (Cl. 261—27.)



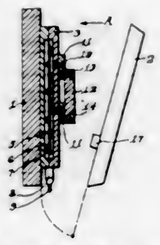
1. In a carbonator, the combination with a vertically disposed closure plate having a supporting base, of a horizontally disposed carbonator body secured to one face of said plate and supported thereby, gas and water supply nozzles extending through said plate into said body, and a pump for supplying water to said water nozzle mounted on the opposite face of said plate and supported thereby.

1,862,090. BOTTLE FILLING MACHINE. JAMES KANTOR and CHARLES HERMAN MILLER, Chicago, Ill., assignors to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 25, 1930. Serial No. 470,580. 7 Claims. (Cl. 226—115.)



1. In a machine of the class described, the combination with a liquid tank, of a filler valve associated with said tank, a liquid tank, pressure tanks communicating with said liquid tank at different elevations, and means for initially connecting said filler valve with one of said pressure tanks, then with another of said pressure tanks and then with the first pressure tank.

1,862,091. MEANS FOR EMBOSSING PANELS ON CARDBOARD. HARRY KAPLAN, New York, N. Y. Filed Jan. 2, 1931. Serial No. 506,259. 1 Claim. (Cl. 101—31.)

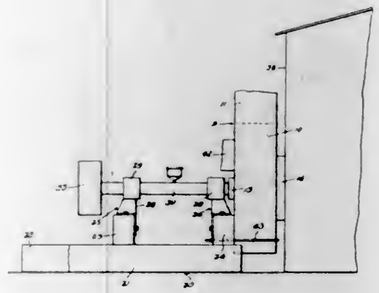


In a die of the class described, the combination of a plate split in half and provided with a hollowed out interior, a heating element in said interior, one face of said plate provided with a series of holes, a set of blocks provided with screws which fit in said holes, a male die attached to said blocks, and a female die adapted to cooperate with said male die.

1,862,092. GRAIN HANDLING MACHINE. OSCAR E. MILLER, Stratton, Nebr. Filed July 22, 1930. Serial No. 469,790. 1 Claim. (Cl. 302—37.)

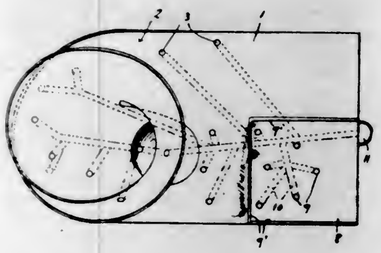
A blower apparatus of the class described comprising a circular casing having flat sides with a concentric opening in one side, a cylindrical part attached to said side of the casing and surrounding the opening, a shaft extending into the casing from the opposite side with the opening

concentric to the shaft and said opposite side of the casing having a small air opening therein arranged above the shaft and having its center located slightly to one side of a plane passing vertically through the center of the casing and said casing having a tangentially arranged outlet opening, the upper wall of which is arranged in front of the air opening, blades carried by the shaft and arranged



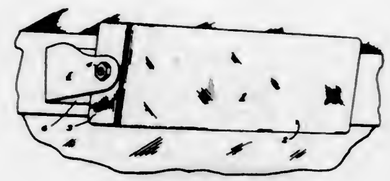
in the casing, a base, a pair of uprights carried by the base and having bearings at their upper ends, a tubular shaft supported for sliding and rotary movement in the bearing, bearings in the tubular shaft for the first mentioned shaft which passes through the tubular shaft and means for connecting one end of the tubular shaft to the casing and means for connecting the casing with one of the uprights.

1,862,093. GOLF GAME. EDWARD HENRY MURRAY, Freeport, N. Y. Filed Sept. 18, 1930. Serial No. 482,861. 1 Claim. (Cl. 273—32.)



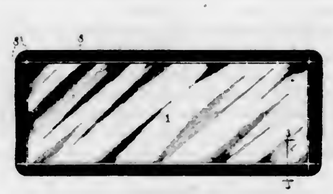
A game apparatus comprising a guideway surface sloping upwardly from the front to the rear, and a vertically arranged spiral surface of open construction with its lower end merging into the rear end of the inclined surface and with its convolutions sloping downwardly and inwardly, a bowl forming part located under the front part of the top spiral and spaced from said front part with the side and rear bottom walls of the top convolutions connected with the top wall at the rear of the bowl and pocket openings in the inclined surface, in the convolutions of the spiral and in the bottom of the bowl to which pocket openings return pipes are connected.

1,862,094. ALL-METAL REAR VIEW MIRROR. JOHN R. OISHEI, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Feb. 7, 1929. Serial No. 338,262. 6 Claims. (Cl. 88—1.)



2. An all-metal rear view mirror comprising a reflector body struck up from sheet metal and having its front face polished to constitute a reflective surface, the marginal portions of said body being deflected rearwardly to constitute a peripheral flange, and means engaging said flange for mounting the reflector body on an automobile.

1,862,095. MIRROR AND METHOD OF MAKING SAME. JOHN R. OISHEI, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Feb. 24, 1930. Serial No. 430,939. 8 Claims. (Cl. 88—1.)



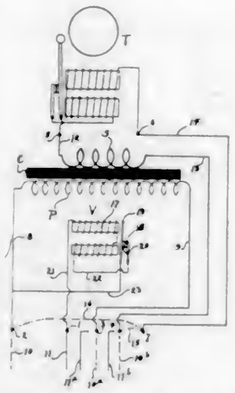
1. The method of forming mirrors consisting in defining a reflective field with a groove in the back surface of the glass body, applying a reflective coating to the field and groove and framing the marginal portions of the glass body outside of the defining groove by applying a colored coating thereto.

5. A glass mirror having a reflective field bordered by a groove formed in the back surface of the glass, the wall portions of the groove possessing a rough finish and coated with the reflective coating of the field, said rough finish of the groove wall portions rendering that portion of the coating within the groove non-reflective in contrast with the reflective field whereby the latter is given a raised defining border.

1,862,096. ELECTRICAL APPLIANCE. JOHN G. PARKIN, New York, N. Y. Filed Feb. 12, 1930. Serial No. 427,972. 2 Claims. (Cl. 177—7.)

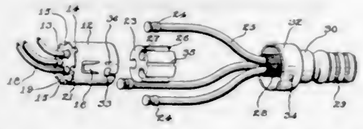
2. An electrical appliance embodying therein a step-down static transformer consisting of a core, a primary winding and a secondary winding, an electric vibrator including an electro-magnet, a contact carrying armature, and a fixed contact cooperating therewith, a plurality of input terminal devices, direct electrical connections between the terminals of the primary of said transformer and two of said terminal devices, and electrical connections including said vibrator contacts and the winding of said electro-magnet, between a third terminal device and one of the terminals of said primary winding, output terminal devices, additional terminal devices, electrical connections between one of said additional terminal devices and one

of said output terminal devices, and electrical connections between the other of said additional terminal devices and one terminal of said secondary winding, whereby electrical connections between said additional terminal devices will close the secondary circuit of said transformer, and an electrical source may be connected with additional devices



in electrical connection with the secondary winding of the transformer, and the other of said additional devices may be connected with the input terminal device connected directly with the primary winding of said transformer, and the resistance of both windings of said transformer be included in series in a circuit.

1,862,097. CONNECTING PLUG. ERNEST RIEMENSCHNEIDER, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Sept. 18, 1929. Serial No. 393,548. 8 Claims. (Cl. 173—328.)

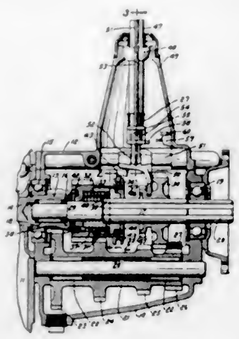


1. A connector comprising a housing having a sleeve extending therefrom, an opening in said sleeve, a socket adapted to be received by said sleeve, an insulating cap secured to said socket having a projection extending therefrom adapted to co-act with the end of said sleeve to form a stop for movement of the socket in one direction, and a tongue resiliently extended from said sleeve adapted to co-act with said opening to form a stop for movement of the socket in the opposite direction.

2. A connector comprising a socket having a cap secured in one end thereof said cap having a wire terminal reciprocally mounted therein, a cylinder of insulating material secured in the other end of said socket, said cylinder having a peripheral slot therein aligned with said terminal and having a counterbore therein adjacent to said terminal and aligned with said slot and a wire in said slot having a second wire terminal secured thereto and disposed in said counterbore to be thereby held aligned with the first mentioned terminal.

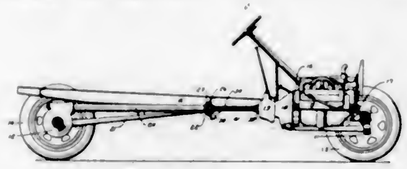
1,862,098. TRANSMISSION. LAURENCE S. SHELDRICK, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Original application filed Mar. 22, 1930, Serial No. 437,988. Divided and this application filed Oct. 27, 1930. Serial No. 491,395. 1 Claim. (Cl. 74—39.)

A shift lever having a spherical portion formed thereon intermediate of its ends by means of which it is universally mounted in a transmission, said lever having a longitudinal groove therein extending from above the spherical portion down along the lever to position adjacent to the lever actuated elements of the transmission, a rod reciprocally mounted in said groove so that it lies substantially within the lines of the lever, said lever having a portion at its actuated end of reduced diameter so that the adjacent portion of the rod projects outwardly therefrom, said



adjacent rod portion having a notch therein substantially aligned with the surface of said reduced portion, a U shaped clip reciprocally mounted on said reduced portion with one arm thereof extending into said notch so as to be actuated by said rod, a spring disposed around said reduced portion and rod resiliently urging the clip to its inoperative position, and a means associated with the other end of said rod whereby it may be manually reciprocated.

1,862,099. TRUCK EXTENSION COUPLING SHAFT. LAURENCE S. SHELDRICK, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Jan. 2, 1931. Serial No. 506,269. 7 Claims. (Cl. 180—70.)

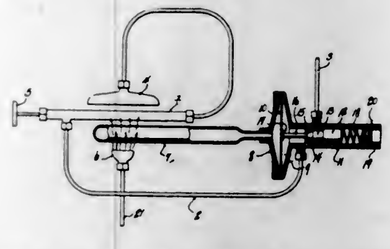


1. In a device for coupling the forward end of a vehicle drive shaft to the rear end of an engine unit, a coupling shaft universally connected to both said drive shaft and engine thereby transmitting the engine torque to the drive shaft, a pair of resilient housing supporting members one secured to said vehicle frame and the other to said engine unit, and a tubular housing enclosing said coupling shaft supported entirely by said resilient members whereby water, dirt and the like are excluded from said shaft and universal connections and whereby a limited universal movement is permitted between said vehicle and said housing.

1,862,100. TEMPERATURE ACTUATED AUTOMATIC CONTROL VALVE. JOSEPH SLADKY and ALEXANDER C. SLADKY, Milwaukee, Wis., assignors to National Enameling & Stamping Co., Inc., Milwaukee, Wis. Filed Oct. 8, 1928. Serial No. 311,229. 1 Claim. (Cl. 158—42.4.)

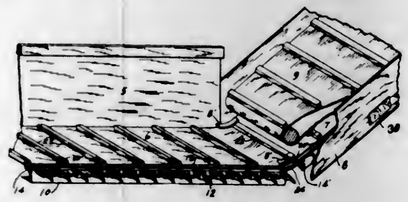
The combination with a burner, a priming cup, and a generator arranged intermediate the burner and priming cup communicating with the burner at one end, of a cylindrical casing disposed at one side of the burner and priming cup having a partition provided with a bore

defining a valve seat, inlet and outlet nipples communicating with the cylindrical casing on opposite sides of the partition, means connecting the end of the generator tube opposite the end connected with the burner to the outlet nipple, a flared casing on the end of the cylindrical casing adjacent to the outlet, a diaphragm, a head clamping the diaphragm in the flared casing having a central



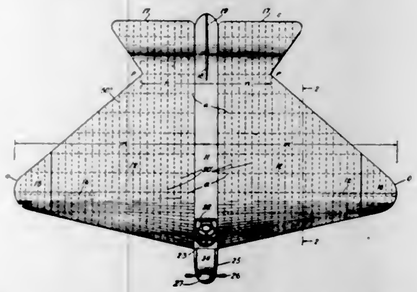
opening, a tube having an expansible medium therein carried by the head and communicating with the opening, a valve stem slidable in the cylindrical casing through the bore having a valve thereon for the valve seat, one end of the stem engaging the diaphragm and an expansion spring confined in the cylindrical casing engaging the opposite end of the stem.

1,862,101. HARVESTER. JACOB G. PAX, New Weston, Ohio. Filed May 2, 1931. Serial No. 534,507. 12 Claims. (Cl. 56—207.)



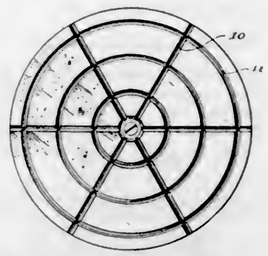
1. A header conveyer having a guide and an endless carrier traveling therein and means associated with the guide in transverse relation thereto for discharging material therefrom forwardly in relation to the header.

1,862,102. AIRPLANE. WILLIAM B. STOUT, Detroit, Mich., assignor to Ford Motor Co., Highland Park, Mich. Filed Mar. 29, 1919, Serial No. 285,951. Renewed Apr. 6, 1932. 10 Claims. (Cl. 244—12.)



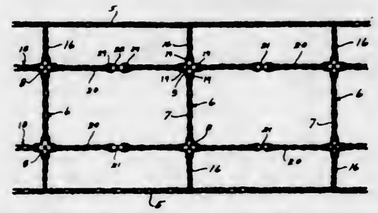
1. An airplane comprising a body portion and provided with a plurality of sockets, a pair of wing sections cooperative with said sockets, and tie rods for holding the wing sections alongside the body section.

1,862,103. SURFACING APPARATUS. HERBERT R. STRATFORD, Cleveland, Ohio, assignor to The Stratmore Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 9, 1929. Serial No. 331,355. 3 Claims. (Cl. 51—195.)



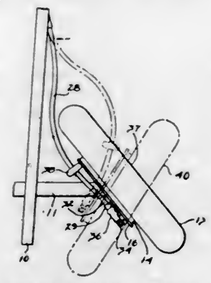
2. A composite abrasive element consisting of a compressible supporting pad provided with a narrow annular weakened area concentric with the axis of the element and spaced from the periphery of the element to increase the flexibility of the element along the line of the weakened area, said pad having abrasive properties for an appreciable depth.

1,862,104. ANTISKID TIRE CHAIN. CHARLES J. WEISS, Towanda, Pa. Filed Nov. 6, 1930. Serial No. 493,842. 4 Claims. (Cl. 152—14.)



1. In an anti-skid device, the combination with a pair of side chains, of cross chains connecting the side chains comprising a central tread section, a spurred cross link detachably connected to each end of the tread section, and end chain sections detachably connected at one end of the cross links and at their opposite ends to the side chains; and connecting chain sections detachably connected between the cross links of adjacent cross chains and each having a spurred bar link detachably connected intermediate its ends.

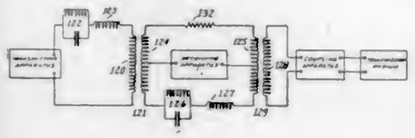
1,862,105. BRAKE OPERATING MECHANISM. JOHN J. WHARAM, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed May 28, 1931. Serial No. 540,679. 6 Claims. (Cl. 188—194.)



1. In a vehicle brake operating mechanism, a steerable front wheel having a brake anchor plate associated therewith, a flexible conduit extending from the vehicle frame

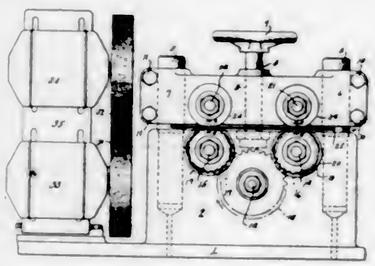
to said anchor plate having a brake actuating cable reciprocally mounted therein, and a protecting ring secured on the intermediate portion of said conduit in position to bear against the anchor plate and deflect the conduit clear of the rear portion of the front wheel when said portion is pivoted inwardly.

1,862,106. ELECTRIC SIGNALING. LUCIEN BÉGIN, Paris, France, assignor of one-half to William B. Weaver, Birmingham, Ala., and Harold F. Wilhelm, New York, N. Y. Filed July 7, 1926, Serial No. 120,917, and in France July 18, 1925. 2 Claims. (Cl. 178—44.)



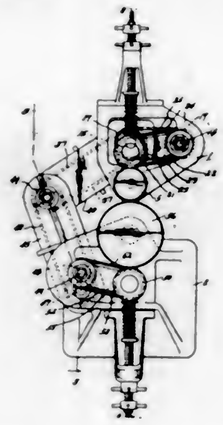
1. In a communication system for simultaneously sending messages in opposite directions, a communication channel, transmitting apparatus transmitting on a first given frequency and receiving apparatus receiving on a second given frequency connected to the same end of said channel as said transmitter, means whereby said receiving apparatus is connected across equipotential points with respect to said transmitting frequency and said transmitting apparatus is connected across equipotential points with respect to the receiving frequency sent over said channel to said receiving apparatus from a distant station.

1,862,107. MACHINE FOR PREPARING METAL FOR ELECTRIC WELDING. JULIUS R. BRUECKNER and WILLIAM H. GIBB, Detroit, Mich., assignors to Thomson-Gibb Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed Oct. 23, 1926. Serial No. 143,553. 3 Claims. (Cl. 80—31.1.)



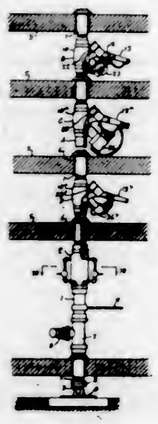
1. In a machine for treating metal while in the cold state preparatory to electric welding similarly prepared sheets comprising a base member, a pair of scarifying rollers upon one side thereof, the face of one roller having cutting teeth to cut into the surface of a sheet to form parallel lines thereon and the other roller having teeth adapted to cut into the said lines at an angle, a head adjustable relative to the base, a series of scarifying rollers each in vertical alignment respectively with a roller of said first pair and likewise adapted to cut into the surface of the sheet forming crossed lines therein, means for applying pressure to the rollers, guide means limiting the extent to which the sheet is introduced to between the rollers longitudinally of their axes, and a pair of rotating wire brushes for brushing the opposite sides of the sheet, subsequent to passing the rollers.

1,862,108. SEAM WELDING MACHINE. JULIUS R. BRUECKNER, Bay City, Mich., assignor, by mesne assignments, to Thomson-Gibb Electric Welding Company, a Corporation of Massachusetts. Filed Oct. 16, 1929. Serial No. 399,889. 14 Claims. (Cl. 219—4.)



1. In a welding machine, a pair of base members, a welding roller rotatably mounted in each base member, a knurling roller engaging the periphery of each welding roller, a pivoted arm in which each knurling roller is rotatably mounted, variable means for placing a pressure on each knurling roller to hold it in contact with its welding roller, a pair of pivoted housings connecting the base members, a series of sprockets and chains in the said housings and sprockets and a chain for each knurling roller drivingly connected with the first named series of sprockets and chains, the housings being movable on their pivots by relative movement of the base members.

1,862,109. STANDPIPE SYSTEM. WILLIAM F. CONRAN, Brooklyn, N. Y. Filed May 8, 1928. Serial No. 276,061. 25 Claims. (Cl. 169—16.)



1. A rotary standpipe comprising a pivoted discharge nozzle and a control station remote from the nozzle, a connection adapted to supply fluid under pressure to the standpipe, means at the control station for rotating the standpipe to vary the lateral direction of the discharge from the nozzle, means actuated by fluid under pressure

from the standpipe for moving the nozzle about its pivot to vary the vertical direction of the discharge therefrom, and means at the control station for controlling the last-named means.

2. A rotary standpipe comprising a plurality of pivoted discharge nozzles, a central control station, a connection adapted to supply fluid under pressure to the standpipe, means at said station for rotating the standpipe to vary the lateral direction of the discharge from the nozzles, fluid actuated means for separately moving each of said nozzles about its pivot to vary the vertical direction of the discharge therefrom, and means located at the control station for separately controlling each of said second named means.

19. A rotary standpipe comprising a plurality of pivoted discharge nozzles, a connection adapted to supply fluid under pressure to the standpipe, means for rotating the standpipe to vary the lateral direction of the discharge from the nozzles, fluid-pressure-actuated means associated with each nozzle for reciprocating it about its pivot, and means for selectively controlling the admission of fluid to each nozzle and its associated reciprocating means.

1,862,110. STANDPIPE SYSTEM. WILLIAM F. CONRAN, Brooklyn, N. Y. Filed May 8, 1928. Serial No. 276,063. 20 Claims. (Cl. 169—16.)



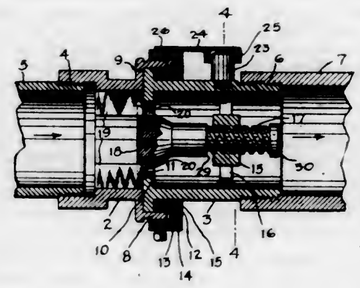
1. In apparatus of the class described, the combination of a vertically movable standpipe, fluid pressure actuated means for lifting the standpipe, a manually operable valve mounted to move with the standpipe for controlling said means, and means adapted to close said valve when said standpipe is lifted to a predetermined height.

7. In apparatus of the class described, the combination with a vertically movable standpipe and means for moving it, of supporting means adapted to engage said standpipe to hold it in a position intermediate the extreme positions to which it can be moved.

11. In apparatus of the class described, the combination with a standpipe having an operating station and means for supplying fluid under pressure to the standpipe, of a plurality of discharge nozzles located at different elevations other than that of the operating station, and separate means for indicating at the operating station the throw of each of the streams delivered by said nozzles from given positions thereof.

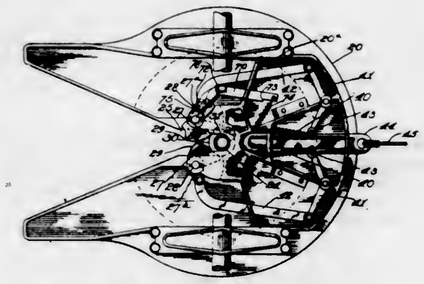
16. In apparatus of the class described, the combination with a standpipe having an operating station and means for supplying fluid under pressure to the standpipe, of a plurality of discharge nozzles located at different elevations other than that of the operating station, and a set of indicators located at the operating station, said indicators being connected to the interior of the standpipe and each having two dials, one of which is adapted to indicate the pressures at the nozzles and the other of which is adapted to indicate the lengths of the streams thrown from the nozzles.

1,862,111. REGULATOR DEVICE. WILLIAM F. CONRAN, Brooklyn, N. Y. Filed July 26, 1928. Serial No. 295,494. 6 Claims. (Cl. 137—75.)



2. In a regulating device for determining the pressure adjacent the outlet of a piping system, comprising inlet and outlet waterway members constructed for connection in the system and coupled so as to permit of relative rotation, and internal means whereby through relative rotation of the members the passageway therethrough may be adjusted, a projection on one of said members for turning the same to adjust said internal means, and a frangible locking piece projecting over said member and having a portion engaging said projection so as to prevent turning of the member, said locking means having a virtually fixed connection with the other of said members.

1,862,112. AUTOMATIC FIFTH WHEEL FOR SEMI-TRAILERS. DURREL H. DAVIS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Mar. 6, 1931. Serial No. 520,504. 10 Claims. (Cl. 280—33.1.)



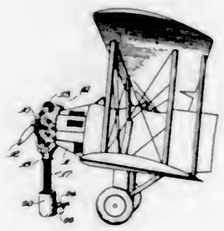
1. A fifth wheel structure for coupling two vehicles and comprising separable upper and lower sections, one having a movably mounted projecting king pin and the other an opening to receive the king pin, said opening extending radially outward to the periphery of the section, retaining means normally closing said opening intermediate its ends to form a socket for said pin, mechanism on one of the vehicles, means connected with said movable king pin for actuating said mechanism as a part of the coupling cycle, a detent associated with the king pin arranged to prevent such actuation until the king pin is seated in the socket, and a trip device for holding said retaining means locked open to avoid actuation of the detent thereby, said trip device being positioned to be released by the passage of the king pin as it enters the socket.

1,862,113. TABLE. CHARLES F. DRECKSCHMIDT, St. Louis, Mo. Filed Mar. 31, 1930. Serial No. 440,229. 7 Claims. (Cl. 45—112.)



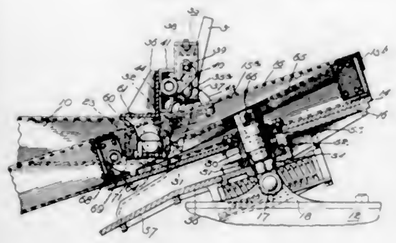
1. In an extension table, end sections movable toward and away from each other, a vertically movable center section, a rigid base below said center section, blocks rigid on said base having therein grooves that are horizontal for a part of their length and inclined for a part of their length, a movable element located between said blocks, projections from the ends of said movable element engaging in said grooves, means for operating said movable element to raise said center section to position in alinement with said end sections, and means in connection with said center section engaging said blocks and holding said center section from lateral movement in either direction.

1,862,114. AIRPLANE ENGINE HEATER. CHARLES G. GILLY, Wausau, Wis. Filed July 7, 1930. Serial No. 466,092. 6 Claims. (Cl. 126—93.)



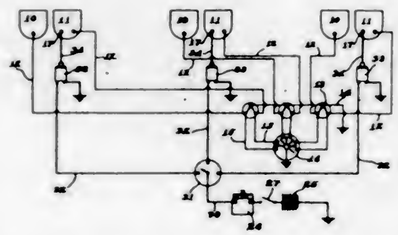
1. A portable heater for the purpose described comprising an open ended casing having removable end closures and draft vents thereinto adjacent the bottom thereof, a heating coil in said casing the discharge end of which coil discharges the spent gases into the casing to mix with the heated air flowing therethrough, a blow torch discharging into the entrance end of said heating coil, and an extensible outlet connection connected to the casing and which is adapted to be nested within the upper part of the casing when not in use.

1,862,115. AUTOMATIC COUPLING MECHANISM FOR SEMITRAILERS. HARRY W. HELMS, Detroit, Mich., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed May 31, 1930. Serial No. 457,779. 12 Claims. (Cl. 280—33.1.)



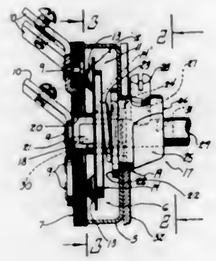
1. In combination, a tractor, a semi-trailer having a main frame, a connection including an upper fifth wheel member carried on the trailer and a lower fifth wheel member mounted on the tractor, said lower member having a rearwardly oven V-shaped slot terminating adjacent the center of said lower member in a swivel bearing having an undercut groove, and a flanged swivel member carried on the upper fifth wheel member and adapted to be guided in said V-slot into the swivel bearing with its flange portion engaged in said undercut groove for preventing vertical separation of said fifth wheel members.

1,862,116. AIRPLANE IGNITION SYSTEM. HAROLD A. HICKS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Mar. 22, 1930. Serial No. 438,055. 1 Claim. (Cl. 123—148.)



An ignition system for internal-combustion engines especially adapted for use with an airplane propelled by a plurality of such engines comprising, a pair of high-tension magnetos mounted upon each of said engines, each pair of said magnetos being gear driven by its respective engine and each of said magnetos supplying ignition current at normal operating speeds, a centrally located switch mechanism operable by the airplane pilot for selectively and concurrently grounding each of said magnetos to stop each or all of said engines, a plurality of spark coils one for each of said engines, each of said coils being mounted directly upon its respective engine, a battery, a centrally located starting switch operable by the airplane pilot for selectively energizing each of said coils by means of said battery, and high-tension conductors extending from the spark coil associated with each of said engines to the distributor rotor of one of the adjacent pair of magnetos, whereby energizing any one of said coils will supply a high-voltage current to one of the adjacent magnetos which current will be distributed by said magneto to the individual cylinders of the adjacent engine and thus supply ignition current for operating said engine upon starting.

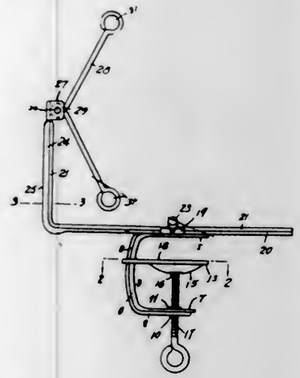
1,862,117. ELECTRIC SWITCH. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 1, 1930. Serial No. 499,138. 6 Claims. (Cl. 200—11.)



1. In an electric switch mechanism of the character described including a movable contactor, means for moving the contactor comprising a driver having a substantially elliptical opening, a cylindrical actuator disposed in said opening and having a diameter equal to the minimum diameter of said ellipse, and means for deforming the actuator within said opening to secure the driver against movement with respect to the actuator.

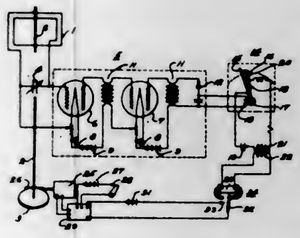
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1,862,118. NET HOLDER. JACOB L. KLEINMAN, New York, N. Y. Filed Apr. 26, 1932. Serial No. 607,560. 14 Claims. (Cl. 273—30.)



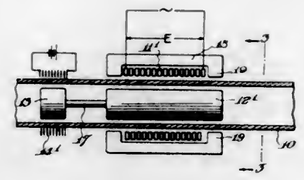
1. A net holder for table tennis and similar games, comprising a substantially U-shaped member one of whose arms is adapted to engage the top surface of a table, a screw threaded through the other arm, a plate guided by said member and engaged by said screw, said plate adapted to engage the underside of a table, a net anchoring element movably disposed on the first mentioned arm, both said member and element made of sheet metal and at least a portion of said member and said element being corrugated to increase the strength thereof and in such manner that the corrugation in said element interfits with the corrugation in said first mentioned arm, whereby said element is guided in its adjusting movements on such arm by said interfitting corrugations, and means for securing said element in adjusted position.

1,862,119. AUTOMATIC DIRECTION FINDER. DONALD G. LITTLE, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 2, 1926. Serial No. 133,180. 4 Claims. (Cl. 250—11.)



1. In a radio system, movable radiant-energy-receiving means comprising a single loop, means for driving a control current from received signals, contact making and breaking means actuated by said current, a polarized relay controlled by said contact-breaking means, means for causing said relay to respond to the operation of said make and break device in one direction only, means for moving the radiant-energy-receiving means, means for controlling the moving means, the last mentioned means being actuated by said polarized relay.

1,862,120. HEATER FOR TRAVELING STOCK. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, Ewing Township, N. J., a Corporation of New Jersey. Filed Sept. 3, 1929. Serial No. 389,889. 12 Claims. (Cl. 219—13.)



1. In inductive heating, an inductor coil adapted to heat a tubular article within it, in combination with an iron core, adapted to lie within the article and coil, an armature secured to the core and a solenoid for anchoring the core to permit movement of the tubular article without disturbing the core.

1,862,121. HOLDER FOR BELT FASTENING MEANS. GEORGE E. PURPLE, La Grange, Ill., assignor to Flexible Steel Lacing Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1928. Serial No. 278,676. 2 Claims. (Cl. 1—49.4.)



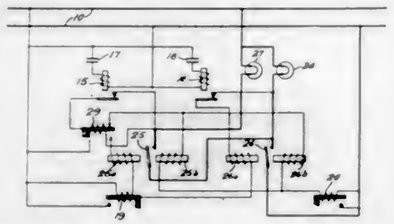
1. A holding device for belt hooks comprising: a holder proper having series of alternating recesses and partitions in one face thereof, said recesses having flat bottoms and diverging sides and said partitions being provided with alined recesses to receive a retaining bar; and a retaining bar adapted to be positioned in said partition recesses, said retaining bar having a flat bottom surface and beveled corners.

1,862,122. PLASTER AND PACKAGE THEREFOR. WILLIAM L. SCHRADER, Chicago, Ill. Filed Oct. 3, 1928. Serial No. 310,163. 3 Claims. (Cl. 128—268.)



3. A plaster pad package comprising an antiseptic sheet having a plurality of tongues extending outwardly therefrom, pellets of medicament secured to the ends of each of said tongues, said tongues being folded inwardly over said sheet, and a plurality of plaster pads, each having a recessed adhesive covered face adhering to said sheet, the recesses in said pads lying over the ends of said tongues so that said pellets lie within the recesses and adhere to the plaster pads at the bottoms of the recesses.

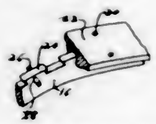
1,862,123. REMOTE CONTROL SYSTEM. PAUL F. SHUEY, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1928. Serial No. 316,039. 9 Claims. (Cl. 175—320.)



3. A remote-control system for a plurality of electrical devices comprising tuned relays, electromagnetic switches for said devices and a changeover switch actuated by the closing of said switches for setting up a circuit to open one of said switches in response to the next operation of one of said relays.

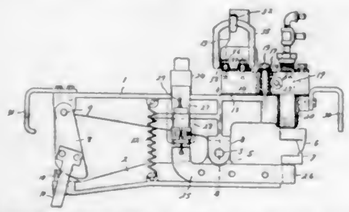
9. In a control system, in combination, a main supply circuit, electrical devices disposed to be connected to the supply circuit, switches provided with opening and closing coils for connecting the electrical devices to the supply circuit, a plurality of tuned relays for controlling the operation of the control switches, said relays being responsive to alternating currents of predetermined frequencies superimposed upon the supply circuit, means responsive to the operation of one control switch by one of the tuned relays for rendering the other tuned relay effective when operated and maintained in the closed position for a predetermined time to cause said control switch to open, and means rendered effective in response to the opening of said control switch to cause the other control switch to be opened in response to a second operation of the tuned relay to the closed position for a different time period.

1,862,124. BRAKE SHOE. OWEN R. SKELTON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 29, 1928. Serial No. 315,744. 2 Claims. (Cl. 188—251.)



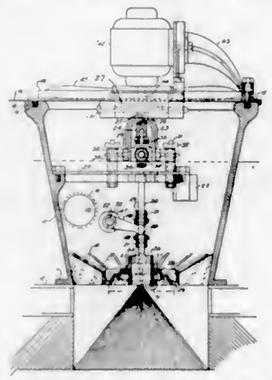
1. A brake shoe having a generally cylindrical part and a flat web provided with lateral pin like projections; said cylindrical part being moulded to the outer edge of said radial flange and embracing said lateral projections.

1,862,125. WELDING APPARATUS. ROMAN STRAMITZ, Detroit, Mich., assignor, by mesne assignments, to Chrysler Corporation, a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 163,279. 3 Claims. (Cl. 219—4.)



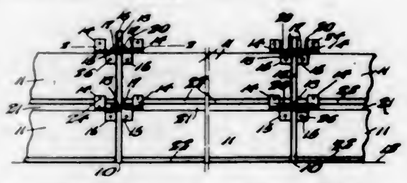
1. In welding apparatus, a welder having an upper arm and a lower arm pivotally connected to said upper arm, a conductor member mounted upon said lower arm, an electrode mounted directly upon said conductor member, a conductor member mounted upon and insulated from said upper arm and an electrode directly mounted upon said last-mentioned conductor member and adapted to cooperate with said first mentioned electrode.

1,862,126. FURNACE ATTACHMENT. JOHN WILLIAM TERNAU, Gloucester City, N. J., assignor to Herman H. Ternau, New London, Conn. Filed Dec. 14, 1929. Serial No. 414,025. 5 Claims. (Cl. 158—1.5.)



1. In a furnace or boiler attachment of the class described, a frusto-conically shaped casing open at one end, a motor operated fan on the open end of said casing, the opposite end adapted to be attached to a furnace or boiler, a protecting screen for said fan, a hinge for allowing an opening of said fan screen to give access to said fan, a snap-lock for holding the screen casing closed over said fan to protect the operator against injury, a plurality of air deflector vanes, and means for raising and lowering said deflector vanes.

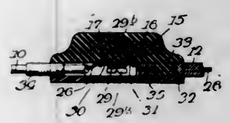
1,862,127. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Aug. 28, 1930. Serial No. 478,381. 6 Claims. (Cl. 72—46.)



1. In combination, vertically disposed spaced channel irons, a plurality of superimposed plaster-blocks arranged between said channel irons, each of said plaster-blocks having an upper, flat, horizontal surface with two parallel vertical faces, and a clip arranged between adjacent faces of said plaster-blocks which clip has a cut-away portion for engaging around a channel iron, said clip being provided with means to space said plaster-blocks so as to accept cementitious material to create a bond of said plaster-blocks.

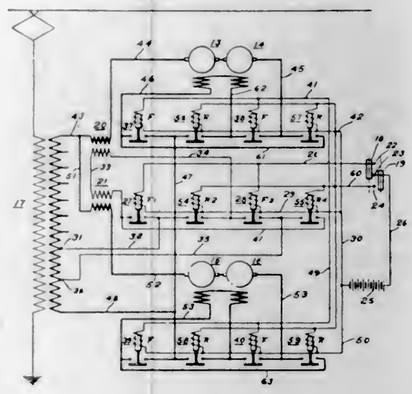
1,862,128. CONNECTER FOR ELECTRIC CONDUCTORS. HUGO H. WERMINE, Villa Park, Ill., assignor to Belden Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1928. Serial No. 259,864. 3 Claims. (Cl. 173—324.)

1. In a connecter for electrically connecting the respective conductors of a substantially round duplex conductor to the respective conductors of a substantially flat duplex conductor member, the combination of a main body member having a recessed bottom portion provided with a pair of offset surface portions, a centrally disposed rib disposed between said offset portions and depending from said recessed bottom surface, said rib extending lengthwise of the conductors and being effective to separate the individual conductors of each duplex conductor, metal clamping plates having offset portions overlying said offset bottom surface portions, screw means for forcing said



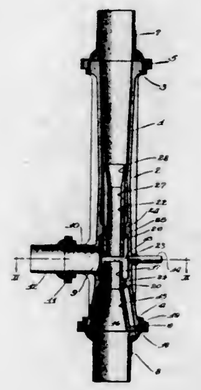
plates towards said bottom surface so as to cause the offset portions of the clamping plates to cooperate with the respective offset bottom surface portions whereby conductor portions interposed between the plate and bottom surface are interlocked with the body member and electrically connected through the metallic clamping plate, a bottom cover member for enclosing said recessed bottom portion and clamping plates, and means for locking said cover member on said body member.

1,862,129. LOCOMOTIVE CONTROL SYSTEM. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 31, 1929. Serial No. 382,457. 9 Claims. (Cl. 105—61.)



1. In a motor driven vehicle provided with a plurality of driving axles and a propelling motor for rotating each driving axle, in combination, a power source for operating the motors, means for controlling the operation of the motors, and means disposed to be actuated in conjunction with said control means for varying the voltage applied to the motors from the power source for effecting the application of a higher voltage to the motor on the trailing axle than to the motor on the leading axle.

1,862,130. VENTURI STEAM FITTING. JOHN O. WOODSOME, Detroit, Mich. Filed Mar. 12, 1928. Serial No. 261,041. 4 Claims. (Cl. 230—95.)



1. In a Venturi fitting, a throat member and a diffuser member in alinement therewith but spaced therefrom said diffuser having a cylindrical bore the length of which is from three to seven times the inside diameter of said throat.

1,862,131. RUNNING BOARD MOLDING. HARRY T. WOOLSON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 10, 1928. Serial No. 260,707. 10 Claims. (Cl. 280—163.)

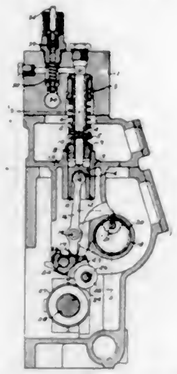


1. In a device of the class described comprising, in combination, a running board having a plurality of openings adjacent the upper outer edge thereof, a downwardly extending flange on said running board, a metallic molding, a plurality of tongues at one edge of said molding adapted to be bent around the lower edge of said downwardly extending flange, and means having a plurality of tongues carried by said molding between its opposite edges adapted to be received in the openings in said running board.

1,862,132. INJECTION PUMP. EDWARD T. ADAMS, Phoenix, Ariz., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 20, 1928. Serial No. 313,864. 3 Claims. (Cl. 103—38.)

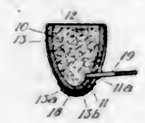
1. In an assembly including an injection pump and a pushrod actuated mechanism therefor, an actuating cam, a pump plunger arranged to be actuated in one direction responsively to rotation of said cam, a spring arranged to actuate the plunger in the opposite direction, a rocker

operated by the cam, a pushrod mounted for swinging movement with respect to said rocker, and operatively associating said pump plunger and cam, a crosshead pivotally engaging the pushrod, and a threaded stop for



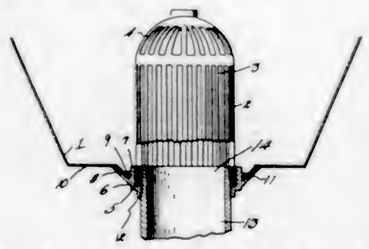
said plunger, forming a guiding member for said crosshead, said rocker having a fixed pivot and an arcuate pushrod seat extending across and on each side of said pivot.

1,862,133. SMOKER'S PACKAGE. LAWRENCE M. BAYAN, Edgewood, R. I. Filed Aug. 16, 1929. Serial No. 386,455. 5 Claims. (Cl. 131—52.)



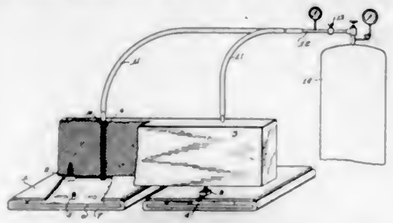
1. A smoker's article, comprising a container of substantially fireproof material, open at the top, having a reduced closed bottom, resembling and adapted to be used as a pipe bowl, and having a hole for a stem near its bottom; a filling of tobacco in said container, and a weatherproof, thin, light sealing cover therearound.

1,862,134. GUTTER OR ROOF DRAIN. EDWARD W. N. BOOSEY, Detroit, Mich. Filed Aug. 22, 1929. Serial No. 387,574. 4 Claims. (Cl. 285—31.)



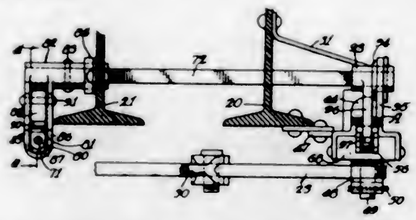
1. In a gutter or roof drain in which a screen member is associated with a conduit for the discharge of waste fluid material, a hub positioned on the waste conduit in a manner to provide a cylindrical recess about the end of the conduit, a tubular screen member having a lower open end secured in the recess and extending vertically above the conduit end, the edge of the roof or gutter bottom being secured to the hub in watertight relation, the said hub end being practically flush with the end of the waste conduit and the cylindrical recess being concentric therewith into which the screen member may be introduced.

1,862,135. MEANS FOR RUBBING COATED SURFACES. EDMOND H. BUCY, Waukegan, Ill. Filed Feb. 24, 1928. Serial No. 256,578. 1 Claim. (Cl. 51—27.)



In a device for rubbing down coated surfaces, the combination of a handle portion and a flat head plate secured thereto, of a metallic cooling plate spaced from said head plate and detachably secured thereto, a felt pad extending in contact with the bottom of said cooling plate and having its opposite ends extending inwardly a slight distance between said head plate and cooling plate and clamped therebetween, the space between said plates forming an expansion chamber having oppositely disposed gas discharging nozzle slots adapted to discharge a cooling gas directly upon the coated surface being rubbed down, and a source of carbonic acid gas having a direct connection through the handle portion of the device and terminating in a discharge nozzle immediately above the surface of the cooling plate, whereby the plate and felt pad will be cooled when the gas is liberated, and a flow of the gas will be discharged directly upon the work from the opposed nozzle slots to effect the setting of the coating upon the surface of the work.

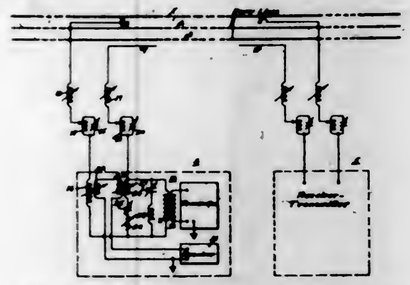
1,862,136. AUTOMATIC SLACK ADJUSTER. PERCY B. CAMP, Maywood, Ill., assignor to Universal Draft Gear Attachment Company, a Corporation of Illinois. Filed Apr. 24, 1931. Serial No. 532,573. 9 Claims. (Cl. 188—200.)



1. In a brake system for railway cars including a live cylinder lever receiving power at one end from a brake cylinder push rod and a dead cylinder lever diagonally fulcrumed with respect to said end to the underframe of the car, the combination of means to adjust said dead cylinder lever fulcrum to regulate the system comprising a support for the dead cylinder lever fulcrum, and means for selectively anchoring the said lever fulcrum to the support, said last named means including a rock shaft, an actuating rod moving with the brake cylinder push rod, and a rocker arm on the shaft provided with a lost motion connection with the actuating rod.

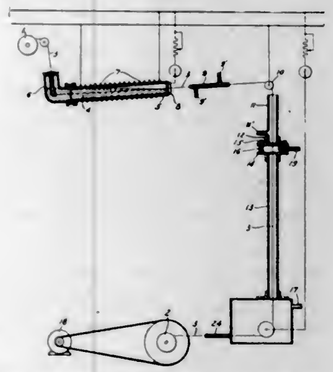
1,862,137. SIGNALING SYSTEM. RICHARD C. CURTIS and CLARENCE A. BODDIE, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1928. Serial No. 296,163. 2 Claims. (Cl. 250—9.)

1. In a system for the simultaneous transmission and reception of signals, a signal source, means for coupling said source to an energy-conveying channel, said means comprising a plurality of antenna circuits in series relationship to each other, a receiving device, means including a circuit having the same time constant as the combined antenna circuits for differentially coupling said



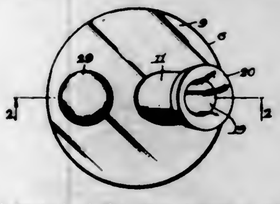
receiving device to said antenna circuits and means for by-passing energy at a reception frequency around said circuit.

1,862,138. CARBONIZED ELECTRODE AND METHOD OF PRODUCING SAME. HOWARD M. ELSEY, Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1928. Serial No. 274,784. 6 Claims. (Cl. 250—27.5.)



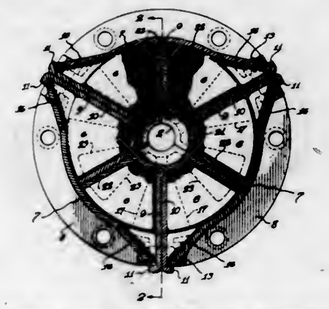
3. In the process of producing electrodes for vacuum tubes the steps which comprise continuously plating wire with an electro-deposited layer of another metal and continuously oxidizing and carbonizing the electrode-posited layer.

1,862,139. COMBINED INKWELL AND PEN SUPPORT. JOHN F. GAIL, Evanston, Ill. Filed Nov. 22, 1928. Serial No. 321,116. 13 Claims. (Cl. 120—63.)



1. In an inkstand of the class described, the combination of a main reservoir, an auxiliary ink receptacle within said reservoir and arranged to overflow thereinto, means for supplying ink from said reservoir to said receptacle, and means for normally supporting a pen in upright position with the pen-point immersed in said auxiliary receptacle, said means comprising a part having an opening permitting only the pen-point to pass therethrough and into said auxiliary receptacle, said opening being of such size that the surrounding portion thereof engages a part of the penholder to prevent the same from passing through said opening and into said ink, said part being thereby effective to normally support said pen with its pen point submerged in the ink in said auxiliary receptacle to a predetermined limited depth.

1,862,140. UNIVERSAL JOINT. FREDERICK M. GUY, Detroit, Mich., assignor, by direct and mesne assignments, to Guy and Murton, Incorporated, Detroit, Mich., a Corporation of Michigan. Filed Mar. 21, 1928. Serial No. 263,262. 3 Claims. (Cl. 64—96.)



1. A universal joint including an outer cylindrical casing formed of a plurality of segmental members and inwardly extending abutments secured between the adjacent ends of said segments, an inner member having abutments interposed between the abutments on the casing, and non-metallic resilient blocks interposed between adjacent abutments.

1,862,141. TOOTHBRUSH. BEN J. HERGET, St. Louis, Mo., assignor, by mesne assignments, to The Clean-Be-Tween Toothbrush Corporation, a Corporation of Delaware. Filed Aug. 10, 1928. Serial No. 298,763. 3 Claims. (Cl. 15—172.)

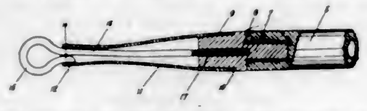


1. A tooth brush structure including a brush head and a unitary handle therefor, provided with an internally threaded, axial, open end bore, a brush holding element including a substantially circular loop portion pivotally engaging a portion of the brush head, a pair of resilient arms, disposed in tapered relation and coacting to provide a smooth portion of circular section operable within and constituting a closure for the open end of the bore, one of said arms terminating inwardly of and adjacent to the open end of the bore, the other arm having a threaded portion extending a substantial distance within the bore of the handle, adapted for threadedly connecting it to the brush, the threaded portions of the handle and last named arm adapted to coact upon rotational movement of the handle to permit an angular adjustment of the brush head and to permit removal and replacement thereof.

1,862,142. TOOTHBRUSH. BEN J. HERGET, St. Louis, Mo. Filed Sept. 1, 1928. Serial No. 303,403. 7 Claims. (Cl. 15—172.)

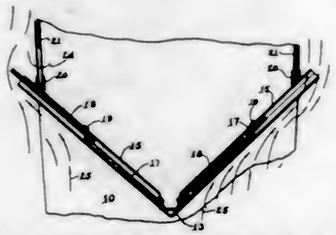
1. In a tooth brush structure, a handle, a brush holding element carried thereby, and having an open, partly circular loop adapted to receive a brush element in relatively rotatable relation, and having an elongate threaded leg extended toward the handle, a tubular spacing member mounted for rotation relative to the handle and disposed between the loop portion of said holding element,

and said handle, coacting portions including a free, resilient leg adjacent the loop on said holding element, a flared end portion on the spacer member and an internally



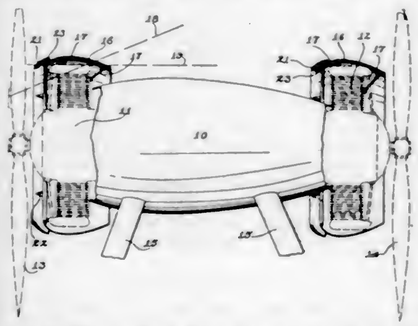
threaded portion on the handle, said portions adapted, upon relative rotation of the spacing member and handle, to permit an adjustable detachable engagement of a brush, by said holding element.

1,862,143. AIRPLANE WINDSHIELD. HAROLD A. HICKS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Dec. 7, 1929. Serial No. 412,523. 2 Claims. (Cl. 244—30.)



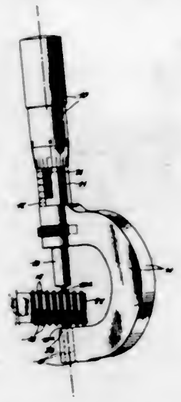
1. In a cabin type airplane, parallel window glass runs extending along each side of the fuselage and spaced vertically from each other, said glass runs having overlapping glass windows longitudinally slidable therebetween, and parallel pairs of windshield glass runs extending from the forward center portion of the fuselage diagonally and rearwardly to each side thereof and spaced vertically from each other, each pair of said windshield runs having a pair of overlapping windshield glass sections diagonally slidable therebetween so as to intersect the plane of said windows, whereby said windshield sections and windows may be adjusted to provide an opening at either side of the fuselage adjacent to the apex of the angle at said intersection for the purpose described.

1,862,144. ENGINE COWLING. HAROLD A. HICKS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 25, 1930. Serial No. 463,675. 19 Claims. (Cl. 244—31.)



1. In an air cooled airplane engine cowling, an annular main ring encircling the outer ends of the engine cylinders, and an auxiliary ring spaced forwardly from said main ring preventing turbulence in the wake thereof, the angle of attack of said main ring and the spacing of said auxiliary ring being so disposed that a greater flow deviation in the rear of the main ring is produced than would be possible with only the main ring.

1,862,145. MEANS FOR AND METHOD OF GAUGING SCREW THREADS. WILLIAM E. HOKE, Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,078. 17 Claims. (Cl. 33—199.)



1. A micrometer caliper having a spindle, the contact end portion of which is reduced in diameter, and an anvil having a plane top contact face opposed to the contact end of the spindle and lying in a plane inclined to the axial line of the spindle and two opposite side plane faces diverging from opposite edges of its top contact face and lying in planes inclined to the axial line of the spindle, the width of the top face of the anvil being such that said face is not overhung by the bottom contact face of the spindle, and that side face of the anvil which merges with the edge of the top face of the anvil nearest the spindle making a greater angle with the axial line of the spindle than the other side face.

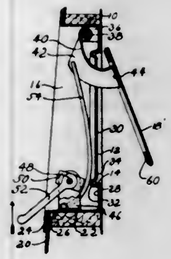
16. The method of measuring the root diameter of a screw thread which comprises measuring the thread root with a caliper in a plane oblique to the thread axis between two points on the root spaced one-half of one turn of the thread and deducting from the calipered dimension the excess over the root cylinder diameter due to the angle at which the root cylinder was calipered.

1,862,146. SCREW-THREAD GAUGE. WILLIAM E. HOKE, Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,079. 9 Claims. (Cl. 33—199.)



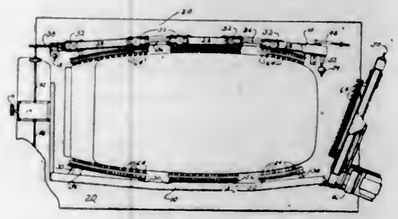
5. A minor diameter gauge for external Dardelet screw threads, comprising a dial indicator having a movable actuating element provided with an end portion for engaging in the groove of a thread to be gauged, an anvil having a pair of parallel thread groove entering ribs each having a plane top face, said faces being arranged in parallel planes for simultaneously contacting the root surface of a Dardelet thread throughout their width, and means supporting the dial indicator and anvil with said rib top faces in planes making an angle of twelve degrees with a perpendicular to the path of movement of the actuating element of the indicator.

1,862,147. VENTILATOR. RAY HOTTEL, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,336. 10 Claims. (Cl. 98—2.)



6. In a ventilator, the combination of a frame formed from a single stamping, said frame comprising a face plate having an openings therein and a perimetric flange at right angles to said face plate, a portion of said frame face plate being depressed and extending into the opening, a cover for the opening adapted to engage the depressed portion of said frame, and means for moving said cover, said means and said cover being carried by said frame.

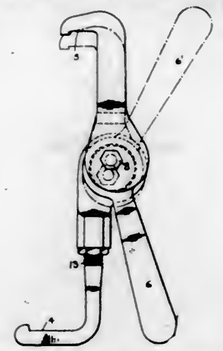
1,862,148. POLISHING MACHINE. RUSSELL M. KINCAID, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 27, 1929. Serial No. 381,622. 8 Claims. (Cl. 51—57.)



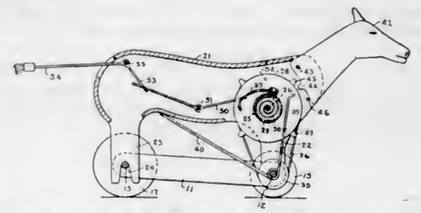
1. A machine of the class described, comprising a frame construction having side portions spaced to receive a vehicle body therebetween, a plurality of interconnected movable members on each side portion and a plurality of abrasive members on said movable members.

1,862,149. CLAMP. HERMAN A. KLATT, Brooklyn, N. Y., assignor to Essex Foundry, Newark, N. J., a Corporation of New Jersey. Filed Nov. 15, 1929. Serial No. 407,859. 2 Claims. (Cl. 144—239.)

1. In a clamp of the class described, a pair of jaws one of which has a bifurcated bearing at the inner end, and the other of which has a ring bearing adapted to turn within said bifurcated bearing at the inner end, a handle having a laterally projecting cam member adapted to engage said ring bearing, and a pin through said bearings and cam member whereby when said handle is operated said jaws are adjusted.

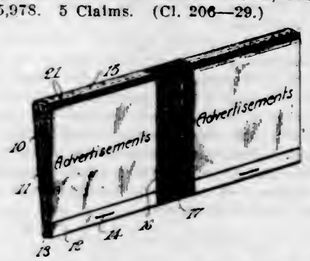


1,862,150. TOY. WILLIAM KLINGE, Cincinnati, Ohio. Filed Feb. 6, 1931. Serial No. 513,870. 4 Claims. (Cl. 46—45.)



3. In a wheeled toy, the combination of a body member, pairs of legs extending from said body member, a frame below said body-member, wheels mounted on said frame, one pair of legs pivoted to said frame, the other pair of legs resting on said frame, a spring motor mounted within said body member, means connecting said motor to said wheels, connected arms pivoted co-axial with said pivoted legs, a cam on said motor for coaction with one of said arms for imparting movement to the other arm for raising the rear part of the body member, a head pivoted to said body member and means for imparting motion to said head.

1,862,151. MATCH PACKAGE. CORTLANDT J. LANGLEY, New York, N. Y., assignor to Charles W. Bumstead, trustee, Highland Park, N. J. Filed Jan. 29, 1929. Serial No. 335,978. 5 Claims. (Cl. 206—29.)



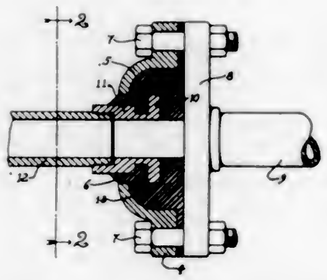
5. A match package comprising match cards, and a cover in the form of a single fold extending over the match heads and at its folding portion having a weakened breakable part with the ends of the cover terminating at and attached to the bases of the match cards.

1,862,152. FASTENING DEVICE. LEFFMAN H. LEE, Bellevue, Pa., assignor of one-sixth to William B. Wharton and one-sixth to James M. Guthrie, Pittsburgh, Pa. Filed May 6, 1930. Serial No. 450,144. 4 Claims. (Cl. 20—92.)



4. In a device to permit the nailing or screwing of construction material to a steel frame member which is provided with an orifice, the combination of a plug-receiving member adapted to be inserted in said orifice and provided at one terminal with means which upon the insertion of the plug-receiving member of said orifice, abuts the outer peripheral edge of said orifice, said plug-receiving member having capacity of expansibility in at least so much of its extent as lies within said orifice, and a nailable plug adapted to be permanently inserted in said plug-receiving member, means included in the last-mentioned member for limiting the extent of such insertion of said nailable plug, and an indentation in the wall of said plug receiving member which is adapted upon the insertion of said plug to cause the wall of said member to bulge outward over the peripheral edge of said orifice.

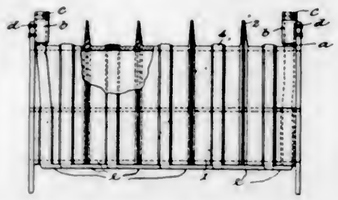
1,862,153. PIPE JOINT. ROGER K. LEE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 20, 1929. Serial No. 393,913. 6 Claims. (Cl. 285—90.)



1. The combination of a pair of opposed members having a liquid passage therethrough, a joint connecting said members comprising an inner metal joint member connected to one of said opposed members and having a liquid passage communicating with the passage of the latter member, an outer joint member spaced from said inner joint member having a liquid passage therein and connected to the other of said opposed members and rubber in the space between said joint members having a liquid passage communicating with the passages of said inner and outer joint members, said rubber being vulcanized to the adjacent surfaces of said joint members and forming a liquid tight seal therebetween.

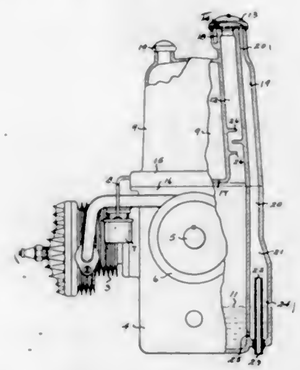
1,862,154. HEAT EXCHANGE UNIT. ALEXANDER S. LIMPERT, Bay Shore, N. Y. Filed Dec. 19, 1929. Serial No. 415,181. 7 Claims. (Cl. 62—126.)

1. In a heat exchanger, the combination comprising a metal body having a chamber therein and a coil of flattened tubing wound around said body, said coil throughout the greater portion of its length having extended line con-



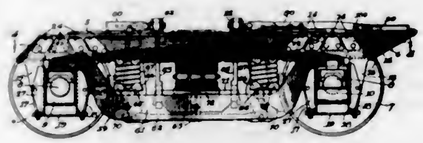
tact throughout the greater portion of its periphery and in planes extending transversely of its longitudinal axis, with the exterior of said shell.

1,862,155. ENGINE FUEL AND OIL CONTROL MEANS. CHARLES G. MAHANA and CHARLES GROSS, Three Rivers, Mich., assignors to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 17, 1930. Serial No. 429,061. 18 Claims. (Cl. 123—195.)



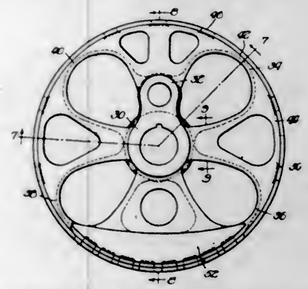
1. In an internal combustion engine, a crankcase substantially enclosing a crank chamber, and a fuel tank for said engine having a wall portion common to the fuel tank and crank case, a conduit for fluid communication between the crank chamber and the atmosphere, and means for cooling and entrapping fluid in said conduit.

1,862,156. RAILWAY CAR TRUCK. WILLIAM H. MUSSEY, Chicago, Ill., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation, a Corporation of Delaware. Filed Apr. 26, 1929. Serial No. 358,226. 20 Claims. (Cl. 105—194.)



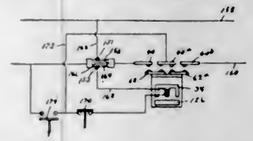
1. In a railway truck, a pair of wheel pieces, a pair of transoms rigidly connected to said wheel pieces, a pair of gusset plates secured to the top portions of said wheel pieces and transoms, said plates having lapped portions on said wheel pieces for reinforcing the same.

1,862,157. WHEEL. ALFRED H. OELKERS, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed July 16, 1931. Serial No. 551,099. 22 Claims. (Cl. 295—2.)



1. A car wheel comprising a hub portion, a rim portion, and channel-shaped spokes extending therebetween.

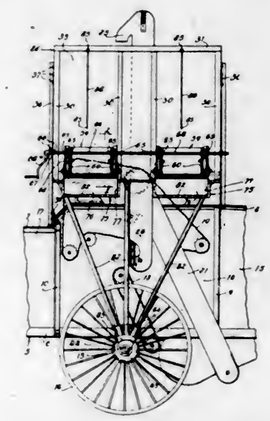
1,862,158. ELECTRIC SWITCH AND OPENING AND CLOSING CIRCUITS THEREFOR. GEORGE W. O'KEEFFE, Milton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 17, 1930. Serial No. 428,909. 5 Claims. (Cl. 175—375.)



1. The combination of a switch having two outer and an intermediate insulated contact member which control the power current traversing the switch, two movable insulated contact members both engageable with said intermediate and a separate outer stationary contact member, switch operating mechanism including an actuating coil, means for initially energizing said coil to close the switch, and a circuit including said intermediate stationary contact member to hold said coil energized after the switch has closed.

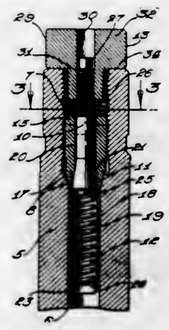
3. The combination of a switch for connecting portions of power circuit conductors having cooperating stationary and movable contact members for connecting portions of one power conductor and three insulated stationary contact members and two insulated movable contact members for connecting portions of the other conductor, said three stationary contact members consisting of an intermediate insulated contact member and two outer contact members which are connected to the portions of their respective power conductor, said two movable contact members both engaging the intermediate contact member and a separate outer contact member, switch operating mechanism including an electromagnet having an actuating winding which is adapted to be energized to close the switch and to remain energized to hold the switch closed, and control apparatus therefor including a control circuit which is connected between said intermediate contact member and the first conductor and includes said actuating winding and a normally-closed circuit-opening controller for de-energizing said winding and opening the switch when it is closed, and a second circuit which is in series with said winding and circuit-opening controller and is connected with said second conductor and includes a normally-open circuit-closing controller which shunts said intermediate contact member and its co-operating movable contact member and energizes said winding for closing the switch when it is open, the closing of the circuit through said intermediate contact member thus subsequently maintaining the switch closed.

1,862,159. GRAIN STORAGE TANK FOR THRESHERS. LOUIS A. PARADISE and EDWIN FREDERICK HUDDLE, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Original application filed May 9, 1928, Serial No. 276,238. Divided and this application filed July 31, 1929. Serial No. 382,342. 11 Claims. (Cl. 214—1.)



11. The combination with a grain thresher having a main frame, of a grain tank positioned above said main frame, discharge means for said tank comprising a vertically slidable door, guide means receiving the sides of said slidable door, and means mounted on the tank and positioned between said guide means for contacting with the lower edge of said door and holding the same against outward bulging between the sides of the door when the door is in closed position.

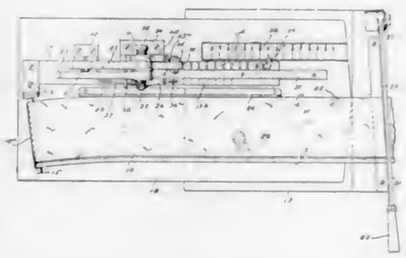
1,862,160. TIRE VALVE INSERT. CLARENCE S. PRESTON, San Diego, Calif. Filed Nov. 8, 1928. Serial No. 317,926. 5 Claims. (Cl. 152—12.)



1. In a device of the class described, the combination with a rigid, metallic valve body which is open from end to end and providing a bore having internal threads adjacent the outer end of the body and providing a tapered, metallic seating surface inwardly of the threads, of a tubular core body provided with external threads adjacent its outer end and further provided with an internal valve seat, said core body being screw threaded into said valve body so that its outer end is disposed some distance inwardly of the threaded bore of said valve body and in air tight engagement with said seating surface, a tapered valve member disposed inwardly of said seat and movable

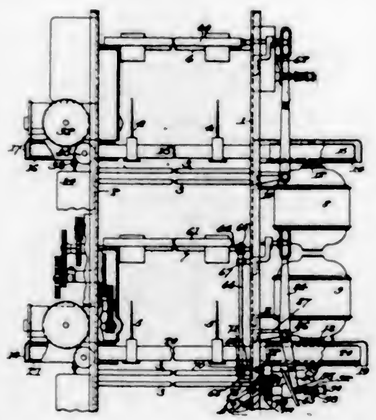
outwardly into air tight connection with said valve seat, a threaded stem on said valve member and a nut screw threaded on said stem and shiftable laterally on the outer end of said valve body.

1,862,161. ART OF FITTING SWEATBANDS FOR HATS AND APPARATUS THEREFOR. RALPH K. REYNOLDS, Danbury, Conn., assignor to Mallory Hat Company, Danbury, Conn., a Corporation of Connecticut. Filed Jan. 12, 1927. Serial No. 160,589. 16 Claims. (Cl. 223—34.)



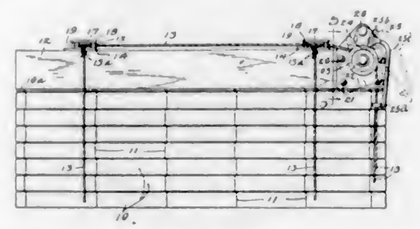
1. In apparatus of the class described, in combination, a cutting tool, means for supporting a sweat-band with its end portion in operative relation to said tool, means for adjusting said support with respect to said tool to adjust angularly the position of said sweatband with respect to said tool, means for moving said support bodily toward and away from said tool, and means for operating said tool to cut off the end of said sweat-band.

1,862,162. DRIVING MECHANISM FOR SPINNING AND TWISTING MACHINES. IRVING R. ROWE, Stonington, Conn., assignor to The Atwood Machine Company, Stonington, Conn., a Corporation of New Jersey. Filed Jan. 28, 1931. Serial No. 511,786. 5 Claims. (Cl. 118—48.)



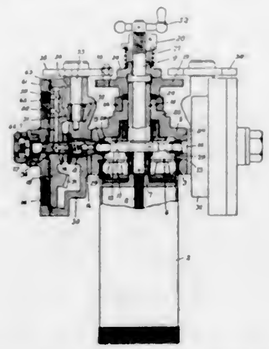
1. In a spinning and twisting machine, a belt driving motor and a traverse cam both carried by the front end frame, a belt tension pulley, its shaft, a longitudinal reciprocating support therefor, a winding roll shaft extending between the end frames, a gear connection between the tension pulley and winding roll shaft at the rear end frame, and a gear connection between the winding roll shaft and traverse cam shaft at the front end frame.

1,862,163. CORD HOLDING MECHANISM FOR SHADES. ZACHARY E. RUSSELL, Sauk Rapids, Minn., assignor to Christine M. Warren, guardian of the estate of Clyde W. Warren, doing business as The Warren Shade Co., Sauk Rapids, Minn. Filed June 17, 1929. Serial No. 371,472. 1 Claim. (Cl. 188—64.)



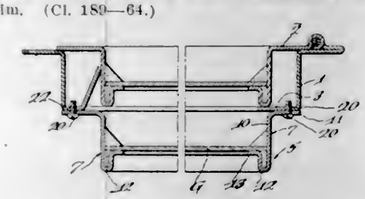
The combination with a rollable shade and a supporting member upon which the shade is supported, of a bracket secured to said supporting member at one end of the same, a pulley mounted on said bracket for rotation about a horizontal axis, a pair of pulleys mounted on said member in spaced relation, a pair of cords secured respectively to said member at spaced points, projecting downwardly and around the shade then upwardly and over said last mentioned pulleys, both of said cords extending substantially horizontally at one side of said first mentioned pulley and over the top of said pulley and then extending substantially vertically downwardly at the other side of said first mentioned pulley, a lever pivoted for swinging movement on a horizontal axis over said first mentioned pulley and having a single jaw extending downwardly over the top of said first mentioned pulley and adapted to clamp said cords against said first mentioned pulley, said lever having a downwardly projecting arm extending substantially vertically and at the last mentioned side of said first mentioned pulley, said arm having apertures in its lower end through which the vertically extending portions of said cords project, whereby the vertically extending portions of said cords may be swung substantially horizontally to positively swing said lever and clamp and release said jaw from both of said cords simultaneously.

1,862,164. MEANS FOR PUMPING LUBRICANTS. HENRY BERNARD SHEPPARD, Derby, England. Filed Nov. 6, 1929, Serial No. 405,072, and in Great Britain Nov. 16, 1928. 2 Claims. (Cl. 184—35.)



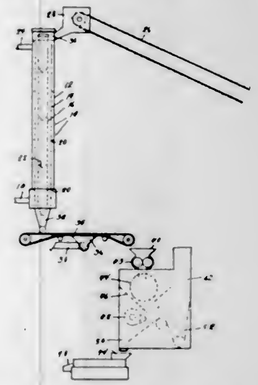
1. Apparatus for mechanically supplying or delivering lubricant comprising a member formed with an open mouthed chamber having a non-return valve, an open ended container for storing lubricant detachably secured to the mouth of said chamber, a lubricant compressing piston in said container for traversing lubricant therein bodily under pressure to the chamber, a pump located in said chamber and operable in a compressed mass of lubricant therein for ejecting lubricant in a radial direction from the chamber past said non-return valve, said non-return valve being arranged co-axial with the pump, a housing secured to the member and accommodating the non-return valve, a stationary lubricant delivery member secured exteriorly to said housing, a rotatable lubricant receiving and distributing disc mounted interiorly of the housing and adapted to feed lubricant in a forward direction continuous with the direction of entry of said lubricant to said distributing disc and to convey it selectively to outlets in the lubricant delivery member for discharge therefrom still in a forward direction, means for operating the pump, frictional means associated with said pump operating means for operating the lubricant compressing piston in relation to a load on said frictional means, and means associated with the pump operating means for operating the lubricant receiving and distributing disc.

1,862,165. STORM SASH. ANTHONY G. SIEBENLIST, Milwaukee, Wis., assignor, by mesne assignments, to Milcor Steel Company, Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 6, 1930. Serial No. 418,717. 1 Claim. (Cl. 189—64.)



A storm sash for use with metal window frames and comprising a storm sash frame including side frame members and end frame members constructed of a single piece of metal and having integral outwardly directed marginal flanges designed to stiffen the storm sash frame and to provide attaching and substantially weather tight engaging members adapted to cooperate with the frame of the window and releasable fastening means for securing the flanges properly engaged with the frame of the window.

1,862,166. CONTINUOUS CHOCOLATE MAKING PROCESS. DALE G. STEELY, Arlington, Mass., assignor to W. F. Schrafft & Sons Corporation, North Boston, Mass., a Corporation of Massachusetts. Filed June 10, 1927. Serial No. 197,959. 2 Claims. (Cl. 99—11.)



1. The method of making chocolate in a continuous manner which consists in roasting a continuously moving stream of raw cacao beans, cracking the roasted beans of the moving stream while preserving the movement of the stream and also while preserving the oil in the beans, abstracting the shell from the moving cracked beans, additionally roasting the stream of cracked shell-free beans, and grinding the re-roasted beans to form a continuous fluid stream of chocolate liquor.

1,862,167. METHOD OF SILICIFYING FIBROUS MATERIALS. OTTO STINER, Berne, Switzerland, assignor to Herrn Dr. Stiner & Lignatwerke A. G., Grandson, Berne, Switzerland, a Corporation of Switzerland. Filed July 29, 1930, Serial No. 471,605, and in Switzerland Aug. 6, 1929. 3 Claims. (Cl. 91—68.)

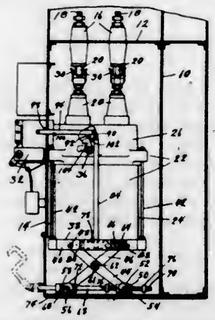
1. In the method of sicilifying fibrous materials the steps of treating the fibrous material with acid-forming bacteria and the acids produced by the same, arresting the growth of bacteria by heat, and saturating the fibrous material with water glass.

1,862,168. COMBINATION BOOT AND SHOE TREE. WILLIAM O. WEISKOTTEN, San Diego, Calif. Filed Jan. 12, 1931. Serial No. 508,091. 22 Claims. (Cl. 12—115.)



1. A boot tree attachment comprising a wirelooped standard the free ends of which are inturned and adapted to be engaged with a shoe tree whereby to convert it into a boot tree, and a vertically adjustable friction clip carried by said standard to releasably hold said inturned ends in engagement with said shoe tree.

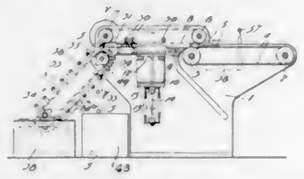
1,862,169. ELECTRIC SWITCH HAVING RAISING AND LOWERING MECHANISM THEREFOR. MORRIS B. WOOD, Somerville, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 28, 1928. Serial No. 281,151. 13 Claims. (Cl. 175—298.)



1. The combination of a circuit interrupter and its enclosing casing, raising and lowering means for the interrupter comprising sets of crossed bars of which one set

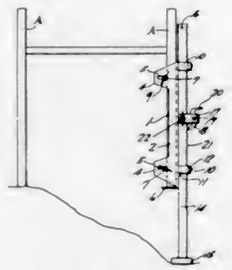
has a pivotal connection and the other set a movable connection with the bottom of said casing, interrupter supporting wheels carried by said bars, and means to move said bars toward and away from each other.

1,862,170. APPARATUS FOR WRAPPING CARTRIDGES, ETC. ANTON ERIK ANDELIN, Bromarf, Bjorknas, Finland, assignor to Finska Forcit-Dynamit Aktiebolaget, Hango, Finland, a Corporation of Finland. Filed Dec. 31, 1928, Serial No. 329,625, and in Sweden Jan. 4, 1928. 5 Claims. (Cl. 93—2.)



1. Apparatus for wrapping cartridges of plastic explosive material, comprising means for feeding the cartridges in supported position, means for applying adhesive to said cartridges during their movement, a supporting table, said table having thereon a stack of sheets of wrapping material of greater width than the length of said cartridges arranged with its upper surface substantially on a level with said table, means for rolling said cartridges in succession and in spaced relation over said table and over the surface of said stack, whereby each of said cartridges is wrapped up in one of said sheets, means on said table for progressively folding the marginal portions of said wrappers around the edges of said cartridges, means for pressing said folded portions in place, and means for conveying said wrapped cartridges from said table, said last named means comprising an endless chain provided with spaced resilient U shaped members adapted to engage and support said cartridges at their ends and being operated by the same means as operate the feeding means.

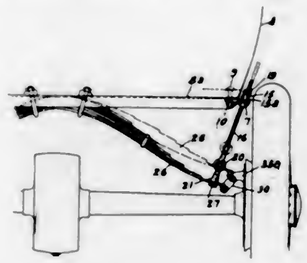
1,862,171. LADDER SHOE. WALTER JAMES BAKER, Wyckoff, N. J. Filed June 4, 1931. Serial No. 541,985. 2 Claims. (Cl. 228—63.)



1. In a device of the kind described, a bracket L-shaped in cross section and including front and side webs, ears formed on the webs, the said ears having elongated slots, L-shaped bolts having their ends extended through the slots, nuts threaded on the ends of the bolts, a ladder rest formed on one end of the bracket, an extension leg slidably mounted on the bracket, and means for securing the extension leg in an adjusted position.

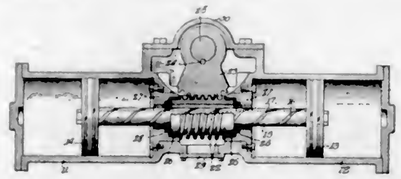
1,862,172. SPRING EXPANDER. RAISLEY B. M. BENNETT, La Jolla, Calif. Filed June 10, 1931. Serial No. 543,373. 5 Claims. (Cl. 29—87.1.)

1. In a device of the kind described, a saddle bracket, means to attach said bracket to the rear cross member of an automobile chassis, and a hanger member comprising a saddle portion adapted to seat upon said saddle bracket and a hook member adapted to couple on to an end portion



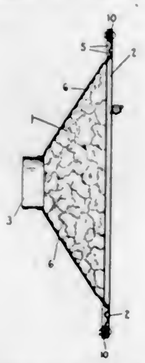
of the rear spring of the automobile, said hanger member comprising screw threaded parts adapted to contract its length in opposition to the vehicle spring.

1,862,173. REVERSING GEAR MECHANISM. CLARENCE C. BERTRAM, Chicago, Ill., assignor to Barco Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 31, 1920. Serial No. 400,502. 7 Claims. (Cl. 74—14.)



1. In a reversing gear mechanism, in combination, a toothed segment, a worm operably connected to said segment, a reciprocating member for rotating said worm, a cylinder, a piston in said cylinder operatively connected to said member, said worm adapted to act as a seal and gland at the portion where it engages said reciprocating member, and a fluid tight casing enclosing said worm and segment for containing lubricant which is adapted to be agitated by fluid pressure set up upon operation of said piston in said cylinder.

1,862,174. SOUND REPRODUCER. IGOR S. BOBROVSKY, Rochester, N. Y. Filed Nov. 15, 1929. Serial No. 407,327. 6 Claims. (Cl. 181—32.)



1. In a sound radiating device, a direct-acting conical sound radiator of laminated, fibrous material, the active surface of which is deformed in an irregular manner.

1,862,175. CLASP. OSCAR CARLSON, East Providence, R. I., assignor to Dolan & Bullock, Providence, R. I., a Firm composed of Arthur F. Dolan, Fred A. Bullock, Attleboro, Mass., and William G. Bennett, Providence, R. I. Filed Dec. 21, 1931. Serial No. 582,408. 8 Claims. (Cl. 24—255.)



1. A clasp comprising a pair of jaws, one of said jaws having a plurality of portions with their ends in adjacency, and a cup member receiving the end portions and holding them in fixed relation, said cup member being flattened and deflected inwardly to closely embrace and frictionally contact with said end portions.

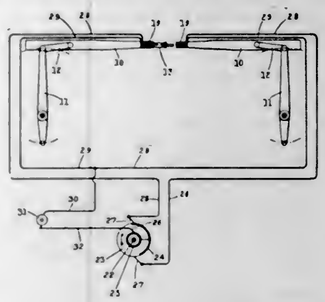
1,862,176. METHOD OF MAKING BY-PRODUCT WHITING. JOHN W. CHURCH, Carnegie, Pa., and HARVEY G. ELLEDGE, Painesville, Ohio, assignors to Pure Calcium Products Company, Pittsburgh, Pa., a Corporation of Ohio. Filed June 12, 1929. Serial No. 370,456. 5 Claims. (Cl. 23—66.)

3. In the process of treating by-product whiting containing a free alkali, the steps comprising forming a slurry of the whiting, treating the slurry with carbon dioxide to convert the alkali into a salt containing alkali metal and carbonate radicals, adding calcium chloride to form alkali metal chloride, and washing out the alkali metal chloride.

1,862,177. METHOD OF MANUFACTURING CELLULOSE. JOAQUIN JULIO DE LA ROZA, Sr., Tuinucu, Cuba. Filed May 26, 1928. Serial No. 280,966. 2 Claims. (Cl. 92—11.)

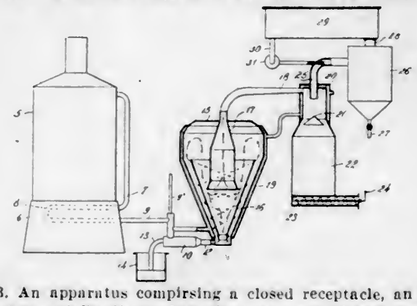
1. A method of treating sugar cane fiber to produce cellulose, which includes, treating the fiber with a dilute sulphurous acid solution, storing the fiber, withdrawing the fiber from storage, washing the fiber, and treating the fiber with an alkaline solution.

1,862,178. LOOM HAVING STATIONARY WEFT SUPPLIES. WILLIAM ALEXANDER DICKIE and FRANK CORBYN HALE, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 30, 1929, Serial No. 410,765, and in Great Britain Dec. 4, 1928. 3 Claims. (Cl. 139—125.)



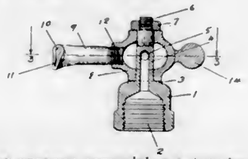
1. In a loom having a stationary weft supply, the combination with two socket members and means for reciprocating said socket members simultaneously towards and from the center of the shed, of a carrier for receiving weft from the supply, extensions on said carrier adapted to be received in said socket members, said extensions having means therein for allowing air trapped in the socket member to escape and means for transferring the carrier from one of said socket members to the other.

1,862,179. APPARATUS FOR THE PRODUCTION OF HYDROCYANIC ACID. PAUL T. DOLLEY, Los Angeles County, Calif., assignor, by mesne assignments, to Air Reduction Company, Incorporated, a Corporation of New York. Original application filed Oct. 19, 1927, Serial No. 227,164. Divided and this application filed Jan. 13, 1930. Serial No. 420,502. 3 Claims. (Cl. 23—281.)



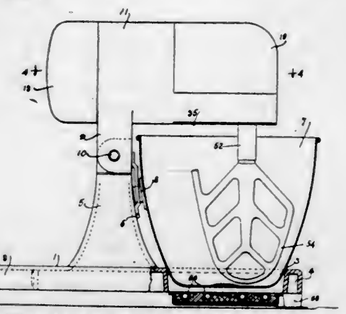
3. An apparatus comprising a closed receptacle, an inlet tangentially disposed at the lower end of said receptacle, an outlet extending through the upper end of and into said receptacle, a baffle member concentrically disposed within said receptacle and spaced therefrom, the bottom of said interior member being open and disposed adjacent to and discharging into the lower end of the receptacle and the top being open and extending around and beyond the end of said outlet member.

1,862,180. REVOLVING SPRAYER. DONALD ELDER, Berkeley, Calif. Filed Dec. 28, 1929. Serial No. 417,089. 1 Claim. (Cl. 299—69.)



A revolving sprayer comprising a tubular vertically disposed standard, a hollow body revolvably mounted on the standard, a pipe nozzle extending out of one side of the body curved at its outer end to throw a reaction jet and provided with a vertically arranged elongated orifice formed relatively large on top and restricted into a narrow slot at its lower end, and the outer end of the pipe beveled off at an angle with its trailing edge lowermost.

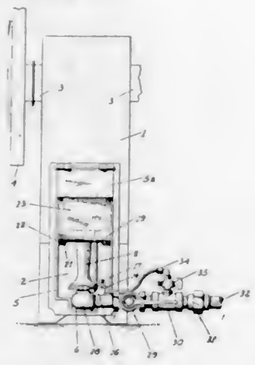
1,862,181. CULINARY APPARATUS. NELSON EMMONS, 3d, Dayton, Ohio, assignor, by mesne assignments, to Nelson Emmons, jr., and Joseph W. Green, Dayton, Ohio. Filed Mar. 22, 1929. Serial No. 349,241. 19 Claims. (Cl. 259—102.)



1. In a mixing apparatus, in combination with a base having a circular seat and a standard having a slotted bracket thereon, a bowl having a bracket and resting on

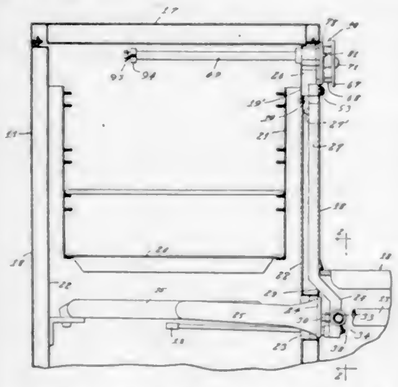
said seat in the base and held in place by its bracket fitting in said slotted bracket on the standard, a head supported by said standard, a stirrer extending from said head into said bowl, and means for operating the stirrer.

1,862,182. BURNER ASSEMBLY FOR GAS FURNACES. RICHARD E. FRASER, Stockton, Calif., assignor of one-half to Fraser Furnace Company, Stockton, Calif., a Corporation. Filed Mar. 8, 1930. Serial No. 434,337. 11 Claims. (Cl. 158—7)



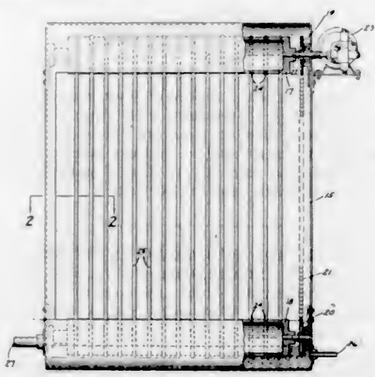
1. A gas burner assembly for a furnace firebox comprising a gas supply manifold, a plurality of burners separately mounted on and along said manifold, means for slidably and removably supporting the manifold in the firebox, and a gas supply line extending in a plane at right angles to the plane of sliding movement of the manifold outside the firebox and connected to the outer end of the manifold, said line including a union fitting.

1,862,183. OVEN REGULATOR. JOHN H. GRAYSON, Lynwood, Calif., assignor to Grayson Heat Control, Inc., Lynwood, Calif., a Corporation of California. Filed May 19, 1930. Serial No. 453,682. 27 Claims. (Cl. 236—15.)



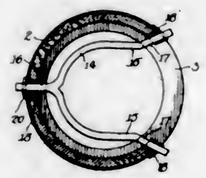
1. In a fuel control system, an oven having fuel conducting means concealed therein, heat responsive means within the oven, and a control casing for said heat responsive means having a valve therein for controlling the flow of fuel through the fuel conducting means, said casing being also concealed in said oven and having direct connection therein with the fuel conducting means, and said valve being removable from said casing from the outside of the oven with said casing in position therein.

1,862,184. HUMIDIFIER FOR UNIT HEATERS. EDWARD C. HANSON and JOEL SODERHOLM, Minneapolis, Minn., assignors to O. B. McClintock Company, Incorporated, Minneapolis, Minn., a Corporation of Minnesota. Filed June 23, 1930. Serial No. 463,136. 3 Claims. (Cl. 257—138.)



1. A humidifier for unit heaters comprising a casing, rollers journaled therein, and a reticulated moisture-carrying device trained about said rollers, said device comprising a plurality of coiled springs.

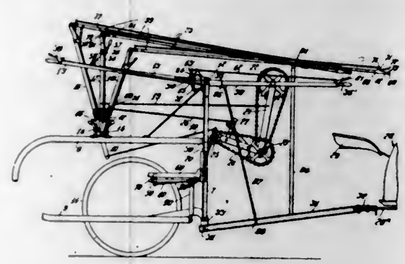
1,862,185. SUPPORT FOR CUPOLA BUCKETS. CLEMENT A. HARDY, Chicago, Ill., assignor to Whiting Corporation, Harvey, Ill., a Corporation of Illinois. Filed May 26, 1928. Serial No. 280,743. 16 Claims. (Cl. 266—27.)



1. A support for a cupola bucket having side supporting members with diverging portions adapted to permit the ready entrance between them of the body of the bucket and also adapted to engage horizontal side projecting or shoulder portions on the bucket body for supporting said body.

1,862,186. EXTENSION CONTROL FOR TRACTOR-DRAWN HARVESTERS. EDWIN FREDERICK HUDDLE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 8, 1927. Serial No. 204,218. 12 Claims. (Cl. 74—39.)

1. In combination, a harvester comprising a plurality of adjusting levers for adjusting different operating parts of said harvester, latches on said levers, latch release levers pivotally mounted on said adjusting levers and operatively connected to said latches, an extension control rod adapted to extend forwardly from each of said levers for actuation from an operator's seat on a tractor pulling said harvester, pivot means connecting the rear end of each of said control rods with its associated lever, handles on the forward ends of said rods adapted to have push-pull movement imparted thereto for reciprocating said rods and thereby swinging said levers, a latch releasing lever pivotally supported on each rod adjacent its handle, a bell crank lever pivotally supported on said rod adjacent to the rear end thereof, a link connecting said bell crank lever with said second named latch release lever, and a link connecting said bell crank lever with said first named latch release lever, the pivotal connection between said second named link and said



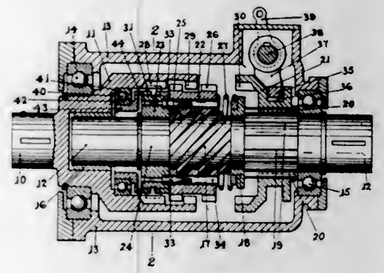
bell crank lever being disposed in close proximity to the axis of the pivotal connection between said adjusting lever and its associated control rod.

1,862,187. BAIT HALTER. KNUTE J. LAGESON, Minneapolis, Minn. Filed Apr. 13, 1931. Serial No. 529,581. 6 Claims. (Cl. 43—40.)



1. A live bait halter for fishing, comprising a pair of oppositely disposed cage members, between which the head of a live bait may be placed, a spring member having an eye to which a line may be attached and having oppositely disposed arms normally projecting laterally outwardly and rearwardly from said eye, said arms having portions crossing each other and respectively joining forward ends of said cage members, said cage members having open portions in their sides adjacent their rear ends through which projecting portions of a live bait may be extended, and a hook having connection with said eye and projecting rearwardly from said cage members.

1,862,188. POWER TRANSMISSION MECHANISM. NORTON LEGGE, Hexham, England. Filed Apr. 30, 1931, Serial No. 533,998, and in Great Britain May 6, 1930. 9 Claims. (Cl. 192—48.)



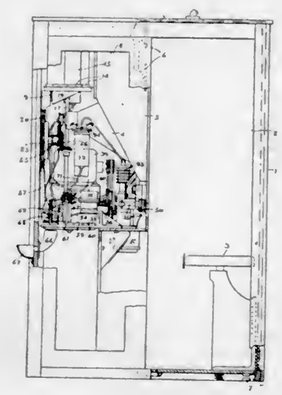
1. An overrunning and synchronizing device comprising a rotary driving member, teeth therearound, a rotary driven member, a helical thread thereon, an axially-travelling internally-threaded intermediate member on said thread, teeth around said intermediate member co-operating with said driving teeth, a controlling member on said driven member adjacent to said thread, a subsidiary unidirectional drive between said driving member and said controlling member, and means for coupling said controlling member and said intermediate member together.

1,862,189. METHOD AND APPARATUS FOR DECORATING FLEXIBLE SURFACE COVERING MATERIAL. J CLARENCE MCCARTHY, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Sept. 25, 1928. Serial No. 308,207. 16 Claims. (Cl. 41—29.)



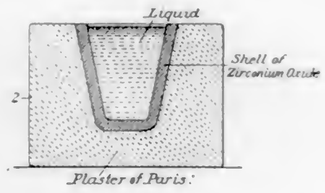
1. The method of decorating long strips of surface covering material with a quick drying decorative coating which comprises the steps of progressively printing the goods to be decorated with a masking material of a character adaptable for application by printing blocks, thereafter spraying the entire surface of the goods with a quick drying decorative coating, and thereafter progressively scrubbing the goods to remove substantially all of the masking material.

1,862,190. AUTOMATIC PHOTOGRAPHING MACHINE. DAVID A. MCCOWAN, Toronto, Ontario, Canada. Filed Jan. 3, 1928. Serial No. 244,267. 28 Claims. (Cl. 95—14.)



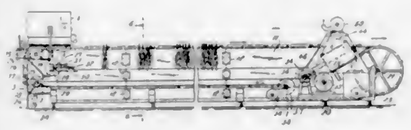
1. In an automatic photographing machine, the combination with a lens, a storage magazine, and means for releasing sensitized members from said magazine, of means operating in a fixed plane for receiving said members and supporting the same in alignment with said lens, means for exposing the sensitized member through said lens, said operating means being adapted following the exposure of said sensitized member to carry same beyond the lens, means for developing and drying the sensitized surface of the exposed sensitized member, and means for discharging said developed sensitized member from said machine.

1,862,191. METHOD OF MAKING REFRACTORY ARTICLES. MAX METH, Pittsburgh, Pa., assignor to Firth Sterling Steel Company, McKeesport, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1928. Serial No. 262,169. 3 Claims. (Cl. 25—156.)



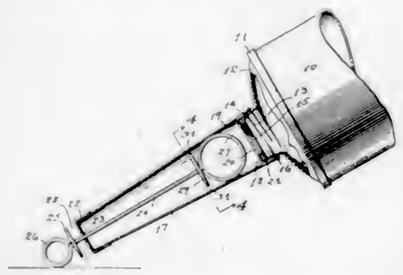
1. In the method of making refractory articles, the steps comprising mixing zirconium oxide in the presence of hydrochloric acid, shaping the mass, and subjecting the same to a sintering temperature.

1,862,192. METHOD AND APPARATUS FOR PREPARING LEAF TOBACCO. WILLIAM W. MICHAUX, Jr., Michaux, Va. Filed Sept. 11, 1930. Serial No. 481,176. 10 Claims. (Cl. 131—60.)



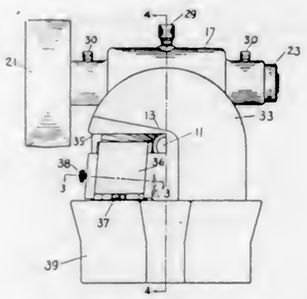
1. Apparatus for preparing tobacco, comprising an endless conveyor, means for feeding hanger-sticks thereon, and means for moving said conveyor continuously with said sticks in position for successively receiving bundles of tobacco.

1,862,193. DISPENSING CAN. JOSEPH H. MILLER, Houston, Tex. Filed July 17, 1931. Serial No. 551,382. 5 Claims. (Cl. 221—56.)



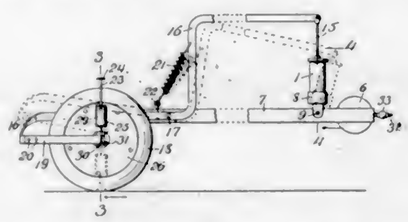
1. In a dispensing can the combination with a can-body, of a tapered nozzle projecting from the can and having a discharge-port at the smaller end thereof, a stem extending freely through said nozzle-port and having a valve-plate which seats over said port and pendantly sustains the stem in the nozzle and means on the stem within the nozzle against which fluid in the can may impinge to move the stem and unseat the valve.

1,862,194. GLASS CRUMBLING MACHINE. JOSEPH J. MCCABE, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 1, 1928. Serial No. 316,577. 4 Claims. (Cl. 49—14.)



1. A glass crumbling machine comprising a rotatable crumbling tool having teeth radially disposed with respect to the axis of rotation of said tool, the operating faces of said teeth varying in area from the center to the periphery of said tool, said faces lying in planes which include the axis of rotation of said tool.

1,862,195. AUTOMATIC PUMPING MECHANISM. RALPH L. NEWTON, Kansas City, Mo. Filed Mar. 12, 1930. Serial No. 435,092. 11 Claims. (Cl. 230—33.)



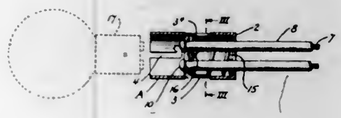
1. In an automatic pumping mechanism, the combination with a vehicle having a supporting wheel, of a pump carried by said vehicle apart from and not revoluble with said wheel, an actuating member carried by said wheel and arranged, when said wheel travels along the ground to strike the ground and to be moved thereby in one direction, yielding means for retracting said member, a lever fulcrumed on said vehicle and connected to and arranged, when oscillated, to operate said pump and movable by said member in one direction, and means for retracting said lever.

1,862,196. LOCKING DEVICE FOR SLIDE FASTENERS. SAMUEL H. NORTON, Meadville, Pa. Filed May 31, 1930. Serial No. 457,847. 4 Claims. (Cl. 24—205.)



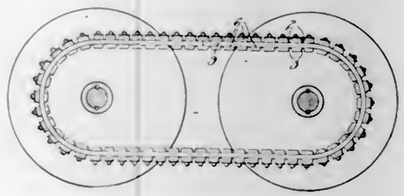
1. In a slide fastener, cooperating series of fastener elements, a slider for engaging and releasing said elements, a slider locking device to prevent unintended movement of the slider relative to the stringers, a member pivoted to the slider connected to said locking device for controlling the same, and a spring tongue on said pivoted member which cooperates with said slider to retain said pivoted member in locking position against accidental displacement.

1,862,197. CONNECTER FOR ELECTRIC CONDUCTORS. JOHN F. PAGENDARM, Oakland, Calif., assignor to American Woodlite Corporation, San Francisco, Calif., a Corporation of California. Filed Feb. 6, 1929. Serial No. 337,767. 10 Claims. (Cl. 173—328.)



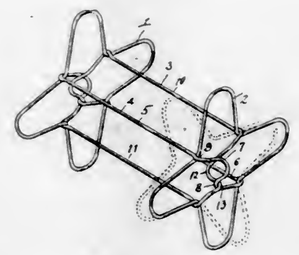
1. In a device of the character described a housing, a wire conductor entering one end of the housing, said conductor terminating in a contact member, an insulating washer mounted within the housing, said wire conductor extending through the washer with the contact member projecting from one face of the washer, means securing the washer with relation to the conductor and the contact member, means limiting movement of the washer in one direction within the housing, a spring interposed between the washer and one end of the housing and normally retaining the washer in engagement with the limiting means, said washer being releasable with relation to the limiting means by tilting the washer and thereby permitting removal of the washer and the conductor attached thereto with relation to the housing.

1,862,198. DRIVING BELT. PAUL B. REEVES, Columbus, Ind., assignor to Reeves Pulley Company, Columbus, Ind., a Corporation of Indiana. Filed Nov. 16, 1931. Serial No. 575,265. 2 Claims. (Cl. 74—64.)



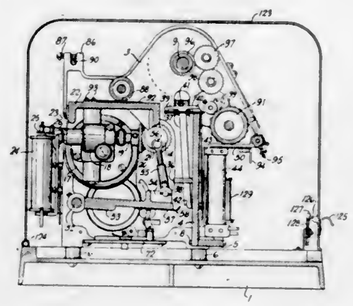
1. An edge drive belt comprising a relatively thin main web, spaced transverse blocks secured to said web, and two strips of friction material secured to the opposite ends of the transverse blocks and bridging therebetween, said friction strips having a relatively small dimension in the plane of the web and a dimension transversely of the web substantially greater than the thickness of the web.

1,862,199. REEL. EDWARD H. SCHANE, Lakewood, Ohio. Filed June 28, 1928. Serial No. 289,007. 5 Claims. (Cl. 242—77.)



4. A reel comprising head members and two diagonally disposed barrel members, the end portions of each of said barrel members being provided with preformed loops adapted to interlock to prevent said barrel members from spreading.

1,862,200. RECORDING DEVICE. HANS SENGEBUSCH, Villa Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 30, 1929. Serial No. 417,280. 15 Claims. (Cl. 234—37.5.)

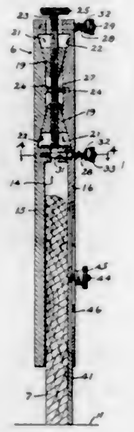


1. In a recording device, a periodically operated electric motor, a type wheel, a printing lever having a normal position and adapted to move to a pick-up position, an inked tape and a record sheet between said lever and said type wheel, means for holding said lever in its normal position, means for operating said holding means to allow said lever to move to said pick-up position, and means operated by said motor for thereafter operating said lever to press said tape and record sheet against said type wheel to cause a record to be printed on said sheet.

1,862,201. MARKING GAUGE. SALVADOR E. SIINO, Pittsburg, Calif. Filed June 25, 1930. Serial No. 463,651. 4 Claims. (Cl. 33—83.)

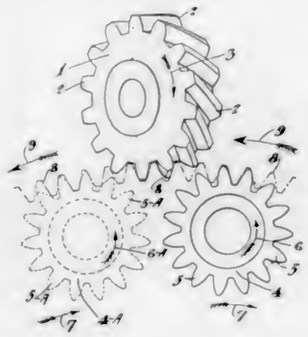
1. A marked gauge comprising a pair of members formed with opposed cam surfaces and connected to straddle a board and present a pair of like, parallel and co-planar edges, one on each side of the board, wedge means positioned between said members, means to move said wedge

means against the cam surfaces formed on said members to separate the members, pins carried by one of said members and extending through holes in the other member



to maintain them in a parallel position, and resilient means carried by said pins and urging the said members toward each other.

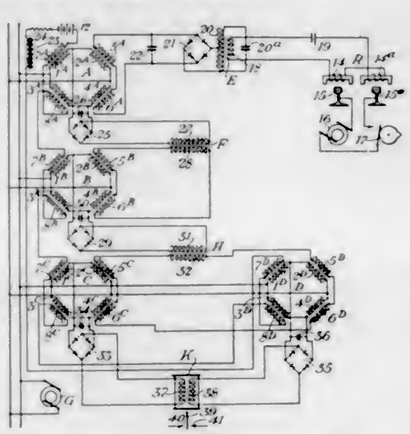
1,862,202. METHOD OF CUTTING THE TEETH OF GEARS. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Nov. 20, 1929. Serial No. 408,526. 20 Claims. (Cl. 90—9.)



1. A method of cutting helical gear teeth in a gear blank by rotating a gear shaped cutter in one direction and reciprocating the cutter across the face of the gear blank, one stroke of which reciprocating movement is in effect a cutting stroke in cutting contact with the gear blank, while the other stroke is non-effective, that is non-cutting, it being a return of the cutter to the original position, and at the beginning of this last strake, giving the cutter an additional movement to withdraw it from contact with the gear blank, to be again moved into position to effect contact during the cutting stroke, simultaneously moving the cutter or gear blank along a curvilinear line to bring the cutter and gear blank closer together and of continuing this movement along the said curvilinear line in the same direction to move said cutter and blank apart, the gear blank meanwhile rotating on an axis disposed at an angle to the axis of the cutter corresponding to the helical angle of the teeth desired in the gear blank, the rotary motion of said cutter and said gear blank being of such velocity as would result if the teeth of said cutter and the resultant generated teeth of the gear blank were constantly in mesh with a continuously moving imaginary rack having a curvilinear pitch line.

18. The herein described method of cutting helical teeth in a gear blank with a gear shaped cutter having longitudinally straight teeth which comprises positioning the cutter with its axis at an angle to the axis of the blank corresponding to the angle of the helix of the teeth to be cut, rotating the cutter and blank in intermeshing relation to each other, moving the cutter and blank relatively to each other along a common curvilinear line tangent to a pitch circle of the cutter and a pitch circle of the gear to be cut from a position in which the cutter is clear of the blank to a position in which said pitch circles are tangent, separating the cutter and blank by continuing said movement in the same direction, relatively reciprocating the cutter and blank transversely of their faces during such movement, and rotating the cutter and blank at such relative speeds that the relative curvilinear movement corresponds to the relative movement which the cutter and gear would have if simultaneously meshing with the imaginary moving curvilinear rack common to the gear and cutter.

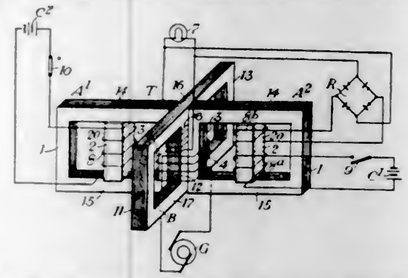
1,862,203. ELECTRICAL TRANSLATING APPARATUS. ANDREW J. SORENSEN, Pittsburgh, and PHILIP H. DOWLING, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 1, 1930. Serial No. 492,746. 7 Claims. (Cl. 246—63.)



1. In combination, two magnetic amplifiers each having an input circuit and an output circuit, means for controlling the energization of the input circuit of one said amplifier, a rectifier, a transformer having its primary connected with the output circuit of said one amplifier through said rectifier, the secondary of said transformer being connected with the input circuit of the other said amplifier, and an electro-responsive device receiving energy from the output circuit of said other amplifier.

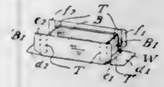
1,862,204. ELECTRICAL TRANSLATING APPARATUS. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 6, 1930. Serial No. 500,509. 3 Claims. (Cl. 171—119.)

1. In combination, three magnetizable cores each having three legs connected in parallel, a primary supplied with alternating current and embracing the middle leg of the first core and an end leg of each of the other cores, an output winding on the middle leg of the first core, a direct current control winding on the middle leg of the second core, means for controlling the circuit of said control winding, a second control winding located on the middle leg of the third core and comprising two sections, means



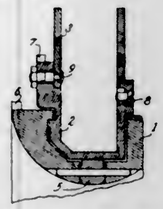
for at times supplying one of said sections with direct current, and means including a rectifier for supplying the other section with direct current from said output winding.

1,862,205. COMPOSITE BOX. JOHN S. STOKES, Huntingdon Valley, Pa. Filed Mar. 10, 1930. Serial No. 434,654. 18 Claims. (Cl. 229—23.)



1. A box comprising a component forming the box bottom, separate components forming vertical walls, and a wrapper comprising the sole means for uniting said components in box-forming position having panels joining said box bottom to said separate components.

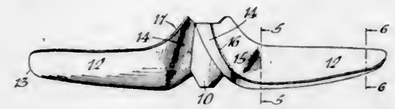
1,862,206. RING WINDING MACHINE. GEORG TAUCHMANN, Berlin-Schoneberg, Germany, assignor to Telephon-Apparat Fabrik E. Zwietusch and Company, Charlottenburg, Berlin, Germany. Filed May 12, 1928, Serial No. 277,186, and in Germany May 23, 1927. 2 Claims. (Cl. 242—4.)



1. In a winding machine for winding closed ring-shaped bodies, a winding ring, a material storage ring movably mounted about the periphery of said winding ring, and an auxiliary storage ring mounted on said material storage ring to form a larger capacity material carrier, said rings inserted in the open part of the body to be wound and said auxiliary ring removable from the material storage ring to decrease the size of the material carries as the open space of the body being wound decreases without severing the material.

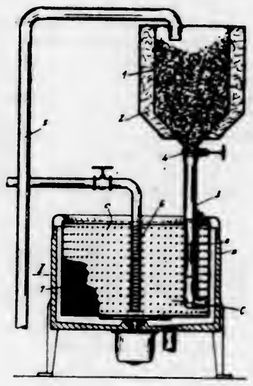
1,862,207. AIRPLANE PROPELLER. NICHOLAS TUZZO, Buffalo, N. Y., assignor of one-fourth to Sidney S. Wallens and one-fourth to Julius Elkes, Buffalo, N. Y. Filed Sept. 4, 1929. Serial No. 390,283. 5 Claims. (Cl. 170—159.)

1. An airplane propeller, comprising a hub and radially disposed blades of opposing pitch and of gradually increasing width from the outer to their inner ends, the inner portions of the blades about the hub being convexly-curved on their front sides in opposing relation and



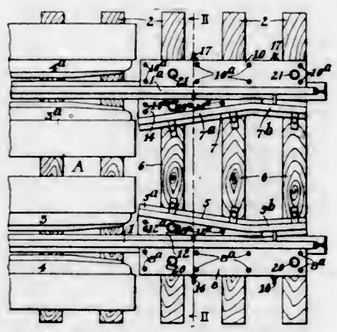
concavely-curved on their rear sides in opposing relation to provide air-compressing pockets of a depth approximately equal to that of the length of said hub.

1,862,208. PROCESS OF MERCERIZING LOOSE COTTON. CARL AHNERT, Masnou-Ocata, near Barcelona, Spain. Filed July 10, 1928, Serial No. 291,522, and in Germany Aug. 5, 1927. 4 Claims. (Cl. 8—20.)



1. The process of producing mercerized cotton which consists in saturating loose unspun cotton fibres with a mercerizing solution and then placing the saturated fibres under uniform tensioning strain maintained during lixiviation thereof.

1,862,209. RAILWAY CAR RETARDER. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Swith & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,304. 9 Claims. (Cl. 188—62.)



1. The combination with a railway car retarder comprising braking bars located in the trackway adjacent the track rails and movable into engagement with the wheels

of a car for retarding the motion of the car, of a rigidly fixed guide rail inclined toward one track rail from a point adjacent the leaving end of a braking bar which is associated with said one track rail.

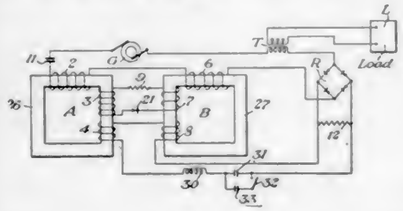
1,862,210. APPARATUS FOR MAKING INNER TUBES. WALLACE H. CAMPBELL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 14, 1928. Serial No. 246,737. 9 Claims. (Cl. 154—5.)



1. An apparatus for rolling rubber tubes comprising an endless conveyor operable intermittently for delivering successive blanks of sheet rubber to a tube rolling station, a spaced pair of cutters adjacent the conveyor and means for transporting the tubes, rolled at the station, transversely to the conveyor in rolling engagement with the spaced pair of cutters for trimming the ends thereof.

7. Apparatus for making inner tubes comprising means for producing sheet rubber, a series of conveyors for handling the sheet rubber after it leaves the producing means and operable in the same direction, means for driving an adjacent pair of the conveyors a predetermined distance and means for driving one of the pair and a different adjacent conveyor of the series a distance substantially greater than the first distance.

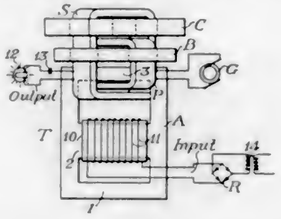
1,862,211. ELECTRICAL TRANSLATING APPARATUS. PHILIP H. DOWLING, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 20, 1928. Serial No. 286,085. 6 Claims. (Cl. 172—281.)



1. In combination, a magnetizable core provided with two magnetic paths having a bridging member in common, two windings one on each said path, a first circuit including a source of alternating current and said two windings in series in such manner that the alternating fluxes created in said two paths are in opposition in said bridging member, a second circuit inductively related with said bridging member and including an impedance element for determining the time constant of such second circuit, and means including said second circuit for creating in said bridging member a flux which varies at a rate depending upon the time constant of such circuit and which flux is sufficient at times to give said two windings such impedance that said first circuit is tuned to resonance at the frequency of said source.

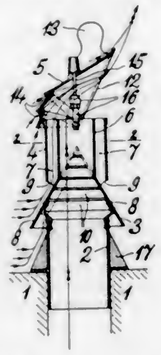
1,862,212. ELECTRICAL TRANSLATING APPARATUS. PHILIP H. DOWLING, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 23, 1930. Serial No. 463,020. 16 Claims. (Cl. 171—119.)

1. In combination, a secondary winding, a magnetizable core linking said secondary winding, a primary winding supplied with periodic current and inductively related with said secondary winding, means for varying the coupling between said primary and secondary windings, a load, and means for connecting said load with said secondary winding in such manner that the current through the load assumes a comparatively high value in response



to increases above a definite value in the electromotive force induced in said secondary winding and returns to a comparatively low value only when the electromotive force induced in said secondary winding is decreased to an amount substantially below said definite value.

1,862,213. COWL. EMIL EMISCH, Magdeburg, Germany. Filed May 5, 1930, Serial No. 449,986, and in Germany June 26, 1929. 1 Claim. (Cl. 98—78.)

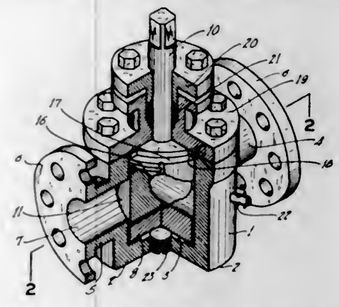


A cowl, comprising in combination with the smoke discharge pipe, a gable-roof-shaped cap on the upper end of said pipe, end walls on said cap having gaps communicating directly with the atmosphere adapted to guide the wind into the interior of said cap, a cylindrical tube on and forming an extension of said cap; lateral wind channels of comparatively small cross-section extending the entire length of and partitioned off from the interior of said cylindrical tube, and a rotatable hood on and covering the upper end of said tube composed of a plurality of overlapping parts inclined relative to the chimney axis and arranged with intervening gaps adapted to allow the passage of air, the upper edge of the upper part of said hood being bent upwards, and a vane on the upper side of the upper part of said hood for steering said hood.

1,862,214. VALVE. RICHARD B. FREMONT, Oklahoma City, Okla. Filed Dec. 26, 1930. Serial No. 504,833. 8 Claims. (Cl. 251—102.)

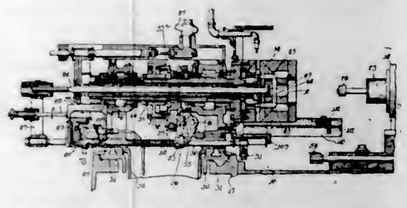
1. A valve, embodying a cylindrical housing having a transverse bore and a closed bottom, said housing adapted to be attached within a flow line so that said bore forms a continuation of said line, a core rotatably disposed snugly within said housing, said core having a first transverse bore of a diameter equal to that of said transverse bore in said housing and adapted to form a continuation thereof when said core is in a desired radial position, said core also having a second transverse bore slightly

larger in diameter than said first bore therein and intercepting said first bore, a solid sealing plug slidable longitudinally within said second bore, said plug having a transverse through bore adapted to form a continuation



of said first bore, said plug adapted to close the bore in said housing when the core is positioned radially to bring said plug in longitudinal alinement with the bore in said housing, a closure for said housing, and means for partially rotating said core from the exterior of said housing.

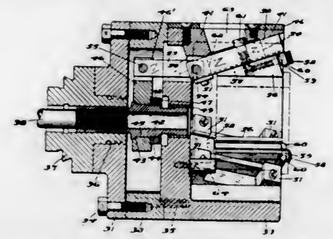
1,862,215. GRINDING MACHINE. KEITH F. GALLIMORE, Fond du Lac, Wis., assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 22, 1925, Serial No. 45,164. Renewed Nov. 23, 1929. 12 Claims. (Cl. 51—165.)



1. A grinding machine having, in combination, a headstock for supporting the work, means supporting a grinding wheel, control means governed by the progress of the grinding operation, operating means under the control of said control means for moving the work and said grinding wheel relatively to each other to bring said grinding wheel from an inoperative position remote from said work into operative position, to reciprocate said grinding wheel across the work in said operative position, to effect a temporary axial separation of the work and said grinding wheel at an intermediate stage in the grinding operation, and a final axial separation therebetween at the completion of said grinding operation, a truing device mounted in fixed relation to said headstock and having a dressing tool positioned to engage and dress said grinding wheel upon said temporary separation, and means under the control of said control means for effecting a lateral separation of the ground work surface and said grinding wheel when the grinding operation has been completed to cause said grinding wheel to clear said surface and said dressing tool on said final separation.

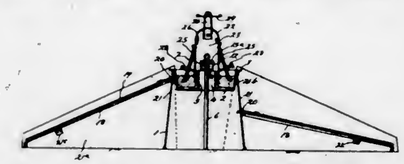
12. A grinding machine having, in combination, a headstock for supporting the work, means supporting a grinding wheel, a truing tool mounted on said headstock and positioned in substantial alinement with the surface to be ground, means for automatically reciprocating the grinding wheel relatively across the work surface and said truing tool, and means automatically operable at the completion of the grinding operation to effect a lateral separation of the finished work surface and said grinding wheel to cause said grinding wheel to clear said finished surface and said truing tool on further reciprocatory movement.

1,862,216. CHUCK. GEORGE E. GARNO, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Original application filed Dec. 27, 1926, Serial No. 157,175, Patent No. 1,783,420. Divided and this application filed Jan. 27, 1930. Serial No. 423,728. 4 Claims. (Cl. 279—60.)



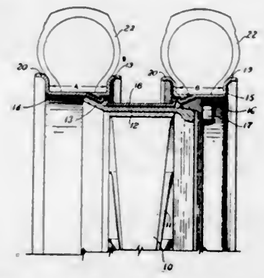
1. In a chuck, a plurality of slidably mounted jaw holding members, a plurality of jaws slidably mounted on said members, and means to adjust said jaws on said members and means to lock them in place thereon.

1,862,217. POULTRY DRINKING FOUNTAIN. JOSEPH GAY and ALVA BRINKER, Kinde, Mich. Filed July 18, 1930. Serial No. 468,781. 15 Claims. (Cl. 119—73.)



1. In a poultry drinking fountain, a trough, a base elevating said trough above a supporting surface, and a ramp, forming an approach to said trough, connected to and vertically adjustable on said base.

1,862,218. DUAL PNEUMATIC TIRE. GEORGE A. HANDY, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 9, 1931. Serial No. 514,400. 4 Claims. (Cl. 301—13.)

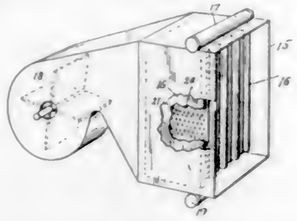


1. A pneumatic tired wheel comprising a plurality of rims which vary in width between tire-engaging flanges and tires of approximately the same molded size mounted on the rims.

1,862,219. RADIATOR. JAMES M. HARRISON, Cleveland, Ohio. Filed Mar. 2, 1929. Serial No. 344,038. 5 Claims. (Cl. 257—137.)

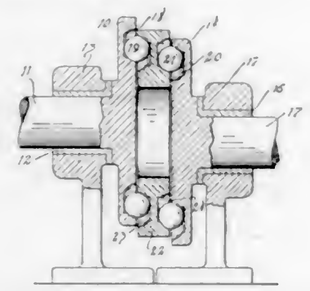
4. In a heat exchanger, the combination of prime heating surfaces having a passage therebetween for fluid to be heated, and a screen interposed between and spaced

from adjacent prime surfaces for deflecting said fluid against the latter and also forming an auxiliary heating surface adapted to receive heat radiated from said prime



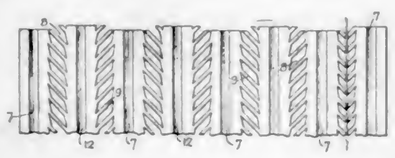
surfaces and to transfer said heat to said fluid, said screen comprising a metallic sheet having oppositely inclined deflecting portions outstanding from the surfaces thereof.

1,862,220. COUPLING. JAMES P. JOHNSON, Cleveland, Ohio, assignor to The J. P. Johnson Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Jan. 5, 1928, Serial No. 244,610. Divided and this application filed Dec. 5, 1928. Serial No. 323,999. 3 Claims. (Cl. 64—91.)



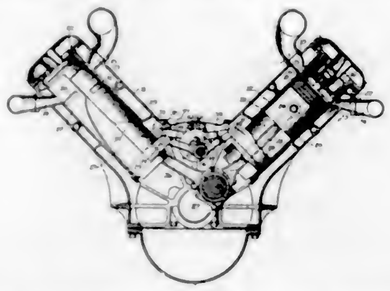
1. In a coupling, a driving element, a driven element rotatable eccentrically with respect to said driving element, a floating member disposed between said driving element and said driven element, and means connecting said elements with said floating member comprising rolling members moving in relatively eccentric circular paths in the adjacent faces of said elements and members.

1,862,221. METHOD OF FORMING METAL LATHS. MAX KAMINETSKY, Passaic, N. J. Filed Feb. 26, 1929. Serial No. 342,771. 1 Claim. (Cl. 164—6.6.)



The process of producing a sheet of material of the character described which consists in providing a sheet with rows of slits therein, then indenting the sheet with parallel grooves disposed between alternate rows of slits to slightly open the slits and then indenting the ungrooved spaces between the rows of slits with parallel grooves to complete the expansion of the sheet.

1,862,222. INTERNAL COMBUSTION ENGINE VALVE MECHANISM. WALTER KASTEN, Detroit, Mich., assignor to Skinner Motors, Inc., Detroit, Mich., a Corporation of Delaware. Filed Nov. 21, 1930. Serial No. 497,186. 9 Claims. (Cl. 123—75.)



1. In an internal-combustion engine, the combination of a ported outer cylinder, an inner cylinder inside of and spaced inwardly away from said outer cylinder, a head for said outer cylinder, a piston slidable in said inner cylinder, a crank-shaft to which said piston is operatively connected, a pair of substantially semi-circular valves unitedly forming a practically complete circle cooperating with the ports of said outer cylinder and located between and slidable lengthwise of said cylinders, means to seal the gas pressures in said cylinders, a rotary shaft revolved by said crank-shaft, and means operatively connecting said rotary shaft to both of said valves to effect their reciprocations.

1,862,223. GOVERNOR CONTROLLED FLUID PRESSURE TOOL. ROBERT H. KING, Cleveland Heights, Ohio, assignor to The Rotor Air Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 5, 1930. Serial No. 426,024. 2 Claims. (Cl. 121—34.)

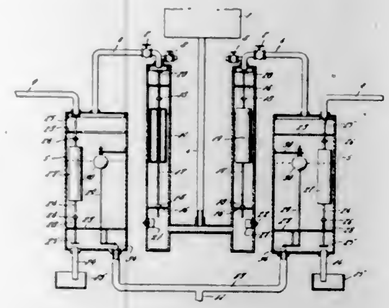


1. A portable fluid pressure tool comprising a motor having a rotatable spindle, a handle attached to one end of the motor and having an enlarged portion adjacent said motor which portion is provided with a fluid chamber and a passageway leading from said chamber to said motor, a support arranged in said chamber and detachably carried by said handle, a slidable governor valve in said support for controlling the flow of motive fluid to the motor, and detachable centrifugally operated means on said spindle and located in said chamber for actuating said governor valve.

2. In a portable pressure tool, a motor having a rotatable spindle, a handle attached to said motor and having an enlarged portion adjacent said motor, said enlarged portion being provided with a pair of fluid chambers spaced longitudinally of the handle one of which has an annular groove in the end wall thereof adjacent to the other chamber and the other of which is provided with a plurality of circumferentially spaced passages in its corresponding end wall and communicating with said annular groove, a threaded opening extending between the chambers and surrounded by said passages and said groove, a support arranged in said first mentioned chamber and having a threaded extension screwed into said opening and being provided with a valve receiving bore and a plurality of

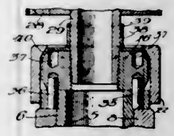
passages leading from said bore and communicating with said annular groove, said support also having ports communicating with said first mentioned chamber, a slidable governor valve arranged in said bore of said support for controlling the size of the openings of said last named ports, and detachable centrifugally operated means arranged on the motor spindle within said first mentioned chamber for actuating said valve, said enlarged portion of the handle having a passage leading from said first mentioned chamber to the motor.

1,862,224. APPARATUS FOR DECOMPOSING WATER. EARNEST LEE LANGLEY, Sweetwater, Tex. Filed Feb. 11, 1929. Serial No. 339,157. 1 Claim. (Cl. 204—5.)



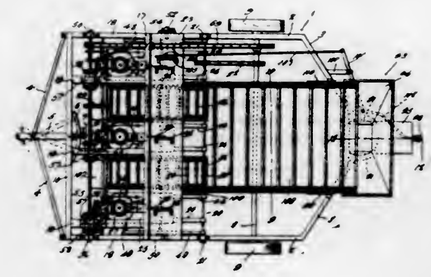
In apparatus of the class described, an electrolyte supply tank, a discharge pipe leading therefrom, a plurality of branches leading from said discharge pipe, a generating chamber connected to each of said branch pipes and having communication therethrough with the electrolyte discharge pipe whereby the generating chambers are supplied with electrolyte, means in the generating chambers for decomposing the electrolyte therein to produce gas, and a valved outlet for each of said generating chambers, the valve of said outlet being opened and closed by a float riding upon the electrolyte level in the generating chambers, said valves being normally maintained in closed position whereby to trap the generated gases in the generating chambers until sufficient pressure is built up to displace the electrolyte from the generating chambers through the branch pipes and electrolyte discharge pipe and thereby lower the electrolyte level in the generating chambers.

1,862,225. THREAD CUTTING DEVICE. TIDEMAN M. LILLEBERG, Chicago, Ill., assignor to The Nye Tool & Machine Works, Chicago, Ill., a Corporation of Illinois. Filed Jan. 11, 1930. Serial No. 420,192. 6 Claims. (Cl. 10—123.)



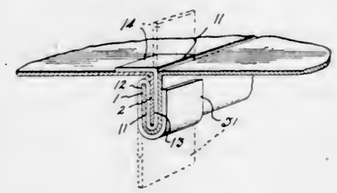
2. In a thread-cutting device, the combination of an apertured member, a die-block positioned on said member, means holding said die-block in place, and a guide member in the form of a tube having a flanged, enlarged inner end at which said guide member is clamped between said die block and said means and adapted at its outer end for journal support on a pipe.

1,862,226. BEAN HARVESTER. WILLIAM FRED LONBECK, Boone, Colo. Filed Nov. 28, 1930. Serial No. 498,801. 5 Claims. (Cl. 56—23.)



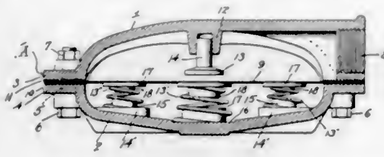
1. A harvesting machine comprising a frame, an axle journaled in the frame, supporting wheels mounted on the axle and operatively connected thereto for driving said axle, a shaft journaled transversely in the frame, means operatively connecting the shaft to the axle for actuation thereby, a plurality of cutting units mounted for swinging adjustment in a vertical plane on the shaft, inclined conveyors operatively connected with the shaft for actuation thereby, said conveyors extending between the cutting units, means operatively connecting the cutting units to the axle for actuation by said axle, reels rotatably mounted forwardly of the cutting units and adapted to throw the cut plants laterally on to the conveyors, and means operatively connecting the reels to the axle for actuation by said axle.

1,862,227. DECK PLATE. RUSSELL C. MAHON, Detroit, Mich., assignor to The R. C. Mahon Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 14, 1928. Serial No. 305,889. 1 Claim. (Cl. 189—35.)



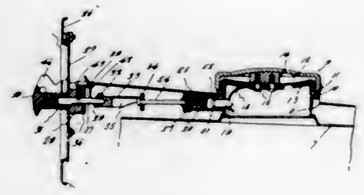
A clip for locking the flanges of deck plates in interengaged relation to prevent relative movement of such deck plates at joints lying between and unsupported by supporting joists or purlins, said clip being formed in substantial S-shape of a single piece of material and comprising top and bottom members connected by an intermediate member, said top and bottom members lying on opposite sides of and being substantially parallel to said intermediate member, said top member having an extension lying in the same plane therewith and projecting beyond one end of said intermediate member, and said bottom member having an extension lying in the same plane therewith and projecting beyond the opposite end of said intermediate member, said extensions being adapted to be bent over the flanges of said deck plates in the assembly thereof.

1,862,228. HYDRAULIC SHOCK ABSORBER. SAMUEL L. MARSH, New York, N. Y. Filed May 11, 1929. Serial No. 362,249. 4 Claims. (Cl. 137—71.)



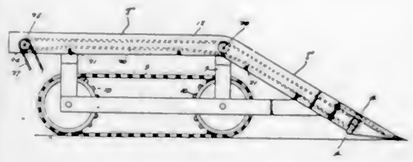
1. A device for preventing water hammer and the like, comprising a casing having an inlet, a spring metal diaphragm in said casing providing a fluid receiving chamber, and a stop on said casing against which the diaphragm contacts during vibration thereof.

1,862,229. TANK CLOSURE RETAINING AND LOCKING DEVICE. EARL S. MATTERN, Pitman, Pa. Filed Aug. 24, 1931. Serial No. 559,086. 1 Claim. (Cl. 70—90.)



In a structure of the class described, a support, a shaft movable longitudinally through the support and having a knob, an expansion spring confined between the knob and the support, a collar on the shaft, said collar and said shaft being provided with transverse registering notches, a lever pivoted intermediate the ends thereof to one side wall of the notch in said said collar and adapted to extend into the notch in said shaft to move the same against endwise movement, a spring anchored at one end to said lever and at the other end to said support, and means to actuate said lever, and a connecting element secured to said shaft.

1,862,230. LOADER. JOHN C. MCDERMOTT, Indiana, Pa. Filed Nov. 5, 1929. Serial No. 404,933. 1 Claim. (Cl. 198—9.)



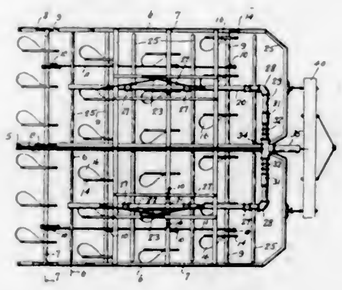
In a loader, the combination comprising a frame, said frame including longitudinal side members and substantially inverted U-shaped cross-members having their ends secured in the side members, supporting wheels journaled between the ends of the cross members, a trough mounted longitudinally on the cross members and having a downwardly inclined forward end portion terminating in a flared mouth portion for the reception of the material to be loaded, the forward end portions of the side members converging toward the inclined portion of the trough and secured thereto at the point of mergence of the mouth therewith, and a conveyor operable in the trough and the mouth portion.

1,862,231. DECORATING BASE METALS OR ALLOYS OF BASE METALS. JAMES C. MCFARLAND, Fort Thomas, Ky., assignor to The Wadsworth Watch Case Co., Dayton, Ky., a Corporation of Kentucky. Filed June 22, 1928. Serial No. 287,536. 4 Claims. (Cl. 41—43.)



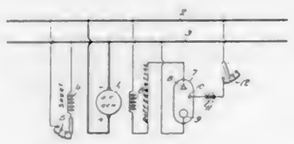
1. The method of treating a base metal surface, which comprises: applying to the surface a suitable resist design; applying a chromium plating design to the exposed areas of the metal surface; removing the resist design, thus leaving areas of the original surface exposed and other areas covered by the chromium plating; etching the exposed areas of the original surface; and plating with precious metal said etched areas while the chromium serves as a resist.

1,862,232. ROAD SPRAYING AND MIXING APPARATUS. NORMAN WILLIAM MCLEOD, Regina, Saskatchewan, Canada. Filed Mar. 10, 1931. Serial No. 521,605. 5 Claims. (Cl. 94—44.)



1. An apparatus of the class described including a frame, ground engaging elements on the frame and spray bars on the frame, said spray bars being arranged between rows of the ground engaging elements transversely of the apparatus, means for adjusting the spray bars longitudinally of the frame.

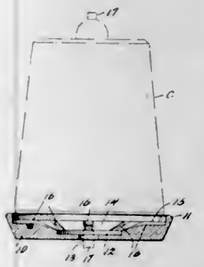
1,862,283. DYNAMO ELECTRIC MACHINE REGULATING SYSTEM. FRIEDRICH WILHELM MEYER, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 8, 1918. Serial No. 227,337. 18 Claims. (Cl. 171—312.)



1. A dynamo electric machine regulating system comprising a dynamo electric machine, an electronic valve arranged in its field circuit to regulate its field excitation,

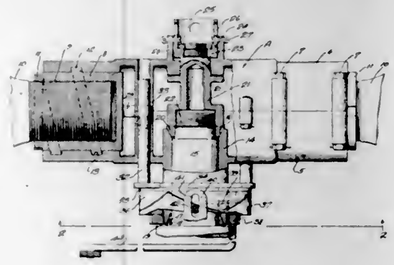
and means to vary the action of said valve in substantial coincidence and accordance with variations in the condition to be regulated.

1,862,234. BASE FOR THREAD PACKAGES. JOHN ROBERTS MITCHELL, Trenton, N. J. Filed Jan. 21, 1930. Serial No. 422,471. 6 Claims. (Cl. 242—130.)



2. A base of vitreous material adapted to be placed under a damp thread package in a textile machine, said base being provided with grooves adapted to drain off the moisture which collects thereon.

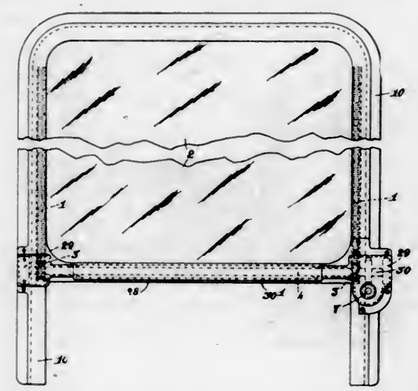
1,862,235. PROPELLER. HUGH PAUL MORRIS, Milwaukee, Wis., assignor of one-half to Simon Deutsch, Milwaukee, Wis.; Eudora Morris administratrix of said Hugh Paul Morris, deceased. Filed July 25, 1930. Serial No. 470,665. 2 Claims. (Cl. 170—163.)



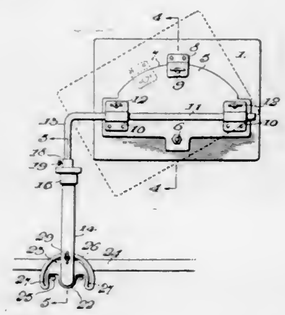
1. A propeller comprising a hub, propeller blades rotatably mounted in the hub, radially extending arms carried by the inner ends of the blades, push pins slidable in the hub having means engaging the arms, a pusher ring connected with said pins, a pair of facing cam members rotatably mounted relative to the hub, means for holding one of said cam members against rotation, and means for turning the other cam member relative to the first mentioned cam member.

1,862,236. SLIDING WINDOW. HERBERT NEVILLE, Cheam, and ERNEST WILLIAM COTTER, London, England, assignors to J. Stone & Company Limited, Deptford, England, a Corporation of Great Britain. Filed Aug. 18, 1931, Serial No. 557,868, and in Great Britain July 8, 1931. 5 Claims. (Cl. 114—177.)

1. Window for ships and other structures, comprising a frameless glass light, toothed racks secured directly to said light at a short distance from the edges thereof, vertical marginal strips of the light being left free, pinions engaging said racks, operating mechanism for rotating said pinions, and a frame provided with guide grooves wherein said marginal strips of the light are guided.



1,862,237. BED TABLE. THOMAS PEPLER, Iowa City, Iowa, assignor to Bennett G. Rohret, Iowa City, Iowa. Filed June 17, 1931. Serial No. 545,112. 2 Claims. (Cl. 45—82.)

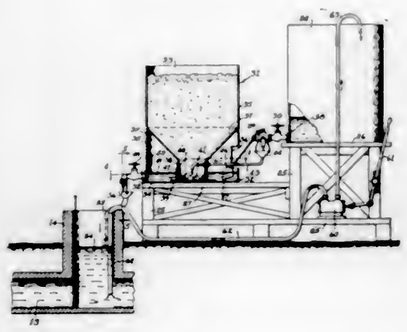


1. In a bed table, a mounting rod including a vertical portion and a horizontal portion, a supporting plate having an arcuate edge, spaced bracket plates secured to said supporting plate and forming bearings for receiving the horizontal portion of said rod, means for clamping one of said bracket plates against said rod portion whereby said supporting plate may be locked in various positions of adjustment about the axis of the horizontal rod portion, a table proper supported on said supporting plate, a pintle located in the axis of said arcuate edge and connecting said table proper and said supporting plate for pivotal movement substantially in the plane of said horizontal rod portion, and means for locking said table proper against movement about said pintle.

1,862,238. FERTILIZER APPLICATOR. GEORGE R. ROE, Pomona, and WALTER M. MERTZ, Ontario, Calif. Filed Dec. 24, 1930. Serial No. 504,488. 25 Claims. (Cl. 61—12.)

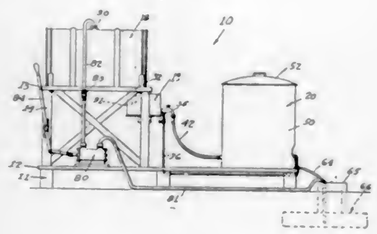
1. In a fertilizer applicator, the combination of: a water reservoir; a float valve connecting with said reservoir; a fertilizer hopper, the lower end of which extends

below said valve; a solution sump connected with a lower portion of said hopper; means for causing water released from said valve to be discharged in the lower end of said



hopper; a float extending into said solution for operating said valve; and a feed control valve for feeding solution from said tank into an irrigation system.

1,862,239. FERTILIZER APPLICATOR. GEORGE R. ROE, Pomona, and WALTER M. MERTZ, Ontario, Calif. Filed Sept. 8, 1931. Serial No. 561,522. 14 Claims. (Cl. 61—12.)

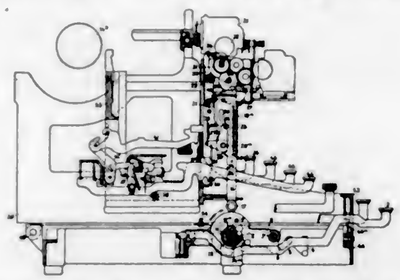


1. In a fertilizer applicator, the combination of: a water reservoir; a chemical container disposed at a lower level than said reservoir; constant pressure means for feeding water from said reservoir by gravity to said chemical container at a uniform rate of flow; and means for conducting the solution thus formed from said chemical container into an irrigation system by gravity.

1,862,240. CALCULATING TYPEWRITING MACHINE. CARL SCHLÖNS, Berlin-Steglitz, Germany, assignor to Mercedes Büro-Maschinen-Werke Aktiengesellschaft, Zella-Mehlis, Thuringia, Germany. Filed Apr. 16, 1923, Serial No. 632,480, and in Germany Apr. 20, 1922. 27 Claims. (Cl. 235—62.)

15. In a calculating typewriting machine, a calculating mechanism, a power drive therefor, a set of calculating keys for controlling said power drive, a set of figure type bars, type keys therefor, and connections between members of said power drive and said type keys, adapted to become effective only after the transmission of a value to said calculating mechanism, for actuating said type keys.

23. In a calculating typewriting machine; two separable frames, one mounted upon the other; typewriting and calculating mechanism in the upper frame; driving means comprising a series of cams in the lower frame; transmission members in the upper frame for driving said calculating mechanisms, said transmission members abutting against said cams, springs urging said transmission



members toward said cams, and locking devices on the upper frame whereby said transmission members may be held in elevated position when the frames are separated.

1,862,241. SOLID PREPARATIONS OF ARYLDIAZONIUM FLUOBORATES YIELDING CONCENTRATED DIAZOSOLUTIONS AND PROCESS OF MAKING SAME. KARL SCHNITZSPAHN, Offenbach-on-the-Main, Germany, assignor to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 5, 1929, Serial No. 352,896, and in Germany Apr. 3, 1928. 6 Claims. (Cl. 8—6.)

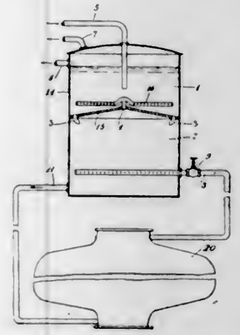
1. New preparations consisting of a mixture of a solid aryl diazonium fluoborate of the benzene series with diluting salts, dyeing assistants and with a solid salt of a metal of the first group of the periodic system the metal of which has a greater affinity for the hydrofluoboric acid than for the acid residue of the salt.

1,862,242. ELECTRIC SWITCH. FRITZ SCHWIEN, Berlin, Germany. Filed Aug. 27, 1929, Serial No. 388,835, and in Germany June 27, 1929. 1 Claim. (Cl. 200—58.)



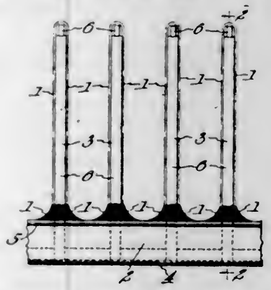
In an electric indicator for tire deflation comprising in combination, a tubular rubber sheath closed at both ends to form a dust, air and water-tight closure, a base body in said sheath, a contact rod of spiral spring formation screwed into said base body, and a metal ring on the outer side of said sheath in surrounding relation to the base member adapted to hold the adjacent portion of the sheath in binding engagement with the base member, said ring being shiftable out of surrounding relation to the base member to permit adjustment of the latter and the spiral spring contact carried thereby.

1,862,243. APPARATUS FOR RECOVERING ACID AND HEAT UNITS THEREOF FROM DIGESTERS AND FOR PREPARING DIGESTER LIQUOR. JOHN STRINDLUND, Tofte I Hurum, Norway, assignor to Chemipulp Process, Inc., a Corporation of New York. Filed Mar. 28, 1927, Serial No. 178,969, and in Sweden Mar. 31, 1926. Renewed June 15, 1931. 6 Claims. (Cl. 23—283.)



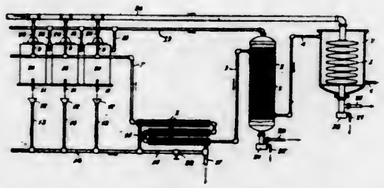
2. Apparatus for recovering acid and the heat units thereof and for preparing cooking liquor, comprising a single closed receptacle, a partition in the receptacle dividing the same into superposed compartments, a pipe leading into the uppermost compartment for discharging fresh cold acid liquor into that compartment, a pipe connected to the lower portion of the receptacle for passing fluid into the lowermost compartment of the receptacle, an outlet pipe connected to the lowermost compartment of the receptacle, a first passageway in the partition for leading gas from the upper portion of the lowermost compartment into the lower portion of the uppermost compartment, and a second passageway in the partition for leading liquor from the lower portion of the uppermost compartment into the upper portion of the lowermost compartment, said passageways being so arranged that acid liquor introduced into the uppermost compartment can completely fill the lowermost compartment and at least partially fill the uppermost compartment, whereby a relatively tall column of liquor is provided.

1,862,244. ELECTROLYTIC CATHODE-DIAPHRAGM STRUCTURE. KENNETH E. STUART, Niagara Falls, N. Y., assignor to Hooker Electrochemical Company, New York, N. Y., a Corporation of New York. Original application filed May 7, 1928, Serial No. 275,860. Divided and this application filed Jan. 7, 1930. Serial No. 419,157. 6 Claims. (Cl. 204—28.)



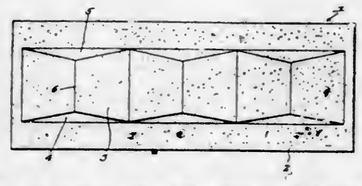
1. An electrolytic cathode-diaphragm structure comprising an electrolytic cathode having a warped or non-developable active perforated surface, said surface being covered by a substantially uniform seamless layer of asbestos fiber.

1,862,245. ELECTROLYTIC CELL. KENNETH E. STUART, Niagara Falls, N. Y., assignor to Hooker Electrochemical Company, New York, N. Y., a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,318. 11 Claims. (Cl. 204—58.)



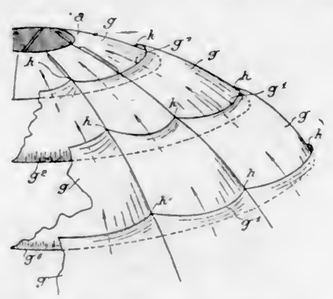
1. A system comprising an electrolytic cell adapted to be supplied with a fluid electrolyte and to produce both a gaseous product and a liquid product, means for discharging said products from the cell and means external to the cell for effecting a heat transfer between at least one of said products and said electrolyte.

1,862,246. FIRE BRICK. GEORGE L. TICEHURST, Bakersfield, Calif. Filed Sept. 14, 1928. Serial No. 306,026. 1 Claim. (Cl. 72—37.)



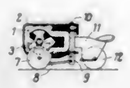
In a fire brick of the class described, a substantially elongated rectangular body, teeth-like projections formed on the upper face thereof inwardly from the opposite longitudinal edges of the body, said projections being of triangular shape in side elevation, the opposite side faces of each projection tapering gradually towards the apex, said projections being arranged on said body in longitudinal alinement, the endmost of said projections being disposed inwardly from the adjacent end edges of said body.

1,862,247. PARACHUTE. GABRIEL TRICAU, Vanves, France. Filed May 8, 1930, Serial No. 450,792, and in Luxemburg Sept. 20, 1929. 1 Claim. (Cl. 244—21.)



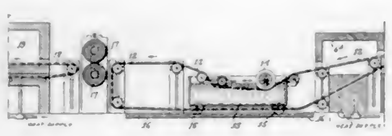
In a parachute, a plurality of spherical rings of fabric forming the suspensory cover, said rings being wrinkled at their lower edge (that of greater diameter), the upper edge being left at its full length, said upper edge of the lower ring overlapping the lower edge of the upper ring and said rings being secured together only at certain points so as to provide openings in the cover directed towards the pole of the cover.

1,862,248. ELECTROMOTOR DRIVE. ERWIN WESNIOK, Berlin, Germany. Filed Feb. 10, 1930, Serial No. 427,351, and in Germany Feb. 18, 1929. 7 Claims. (Cl. 105—54.)



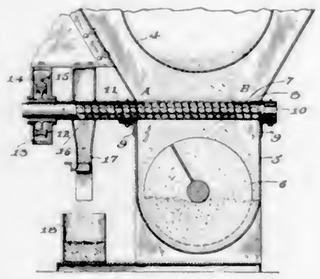
1. An electromotor vehicle, comprising in combination a vehicle frame, an electromotor rotor, a current conducting friction drive including a collector operatively connected to said rotor for driving the vehicle, and an electromotor stator, the lowest portions of said frame, rotor and stator being arranged above the lowest point of said friction drive.

1,862,249. PROCESS AND APPARATUS FOR COATING FERRIC ARTICLES WITH A METALLIC PROTECTIVE. JOHN WILDER, Niles, Ohio, assignor to Wilder Metal Company, Niles, Ohio, a Corporation of Delaware. Filed June 28, 1930. Serial No. 464,681. 8 Claims. (Cl. 91—702.)



1. In the method of coating metallic plates, wherein the plates are subjected to the action of molten coating compound and directly thereafter to a cooling medium for the purpose of setting said compound on the plates, the step of providing a variable control of the time interval elapsing between the subjection of the plates to the coating compound and the subjection to the cooling medium.

1,862,250. SAMPLING MACHINE. LOUIS ANDERSON, Easton, Pa. Filed Feb. 20, 1929. Serial No. 341,515. 10 Claims. (Cl. 73—21.)



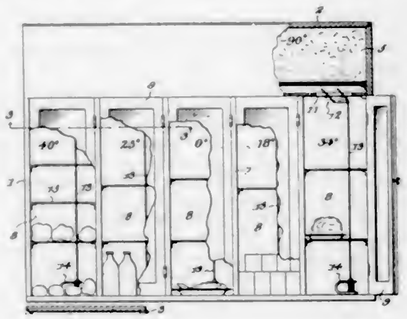
5. Sampling mechanism for powdered material or the like, including a relatively wide conduit through which the material flows, a stationary tube extending across said conduit and provided on its upper side with an elongated slot of a length substantially equal to the width of the conduit to admit material to the tube, a screw conveyor arranged within the tube, and means for continuously rotating said conveyor.

1,862,251. PISTON. ARTHUR L. ARMENTROUT, Long Beach, Calif. Filed Jan. 13, 1930. Serial No. 420,447. 6 Claims. (Cl. 74—108.)



1. A piston of the character described including, a body, a head, a detachable annular part screw-threaded on the periphery of the head, and a flange on the part seated in a recess in the head.

1,862,252. VARIED TEMPERATURE REFRIGERATOR. FREDERICK A. BERLIN, Washington, D. C., assignor to American Chemical Company, a Common-Law Trust of Massachusetts. Filed May 29, 1930. Serial No. 457,363. 4 Claims. (Cl. 62—2.)



1. A refrigerating container comprising a casing having a refrigerant containing compartment formed therein, a plurality of storage compartments located below said refrigerant containing compartment, valve means located between said storage compartments and said refrigerant containing compartment, and thermostatic means for opening and closing said valves.

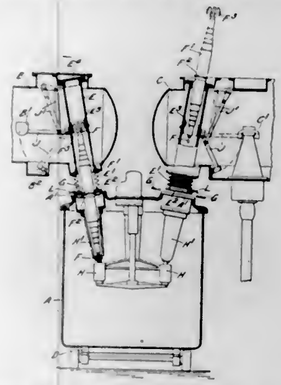
1,862,253. EPHEDRINE SOLUTION. JOHN W. BULLOCK, Miami, Fla. Filed Mar. 10, 1930. Serial No. 434,809. 1 Claim. (Cl. 167—58.)

An aqueous solution consisting of substantially 1 to 5% of an ephedrine compound soluble in water, substantially ⅛% sodium chloride, substantially ¾% chlorobutanol, substantially ¼% eucalyptol, substantially 1/16% phenol, substantially ¼% menthol, and ⅛% to 1% of a vegetable gum selected from a group consisting of gum tragacanth, gum acacia, Irish moss and agar agar.

1,862,254. ELECTRIC SWITCH GEAR. JOHN CHRISTIE, Sunderland, England, assignor to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed Jan. 15, 1931, Serial No. 508,988, and in Great Britain Feb. 21, 1930. 10 Claims. (Cl. 175—298.)

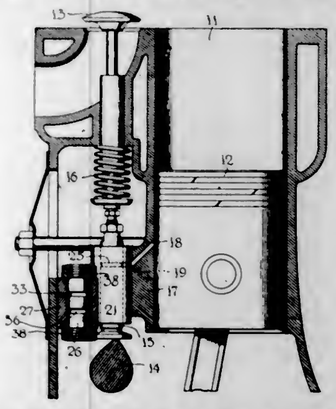
1. In metal-clad electric switchgear, the combination of a circuit-breaker, a tank containing the circuit-breaker, a conductor of the circuit controlled by the circuit-breaker, a lead-in chamber for such conductor, a tubular casing

passing through the lead-in chamber in such a manner as to form a separate compartment therein, means for detachably connecting such casing to the circuit-breaker tank round an orifice therein, and an insulated conductor so



mounted within the tubular casing that it can be moved longitudinally therein to project into the circuit-breaker tank and constitute part of the connection from the main conductor to the circuit-breaker or can be withdrawn from the tank through the top of the tubular casing.

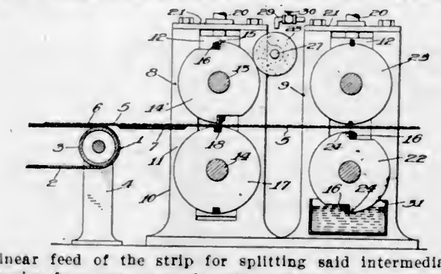
1,862,255. LUBRICATION. THOMAS E. COLEMAN, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Oct. 26, 1929. Serial No. 402,721. 4 Claims. (Cl. 184—6.)



1. In an internal combustion engine, a cylinder having an oil duct in the wall thereof; a control valve for said cylinder; means for opening said valve, including a reciprocable tappet; an oil supply line; and valve means in said tappet to connect said oil line and said duct, said last mentioned valve being opened by the means for opening said first mentioned valve.

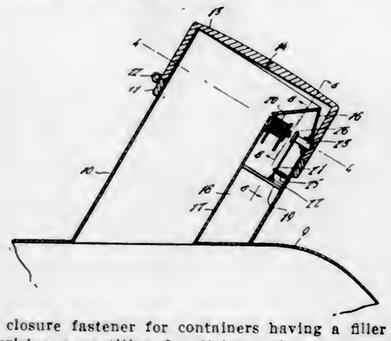
1,862,256. MACHINE FOR PROVIDING LAMINATED FIBROUS STRUCTURES WITH OFFSET EDGES. HARRY A. CUMPER, Chicago, Ill., assignor of one-half to Willard J. Mason, Greenwich, Conn. Filed Mar. 12, 1930. Serial No. 435,103. 7 Claims. (Cl. 164—68.)

1. A mechanism for cutting and severing a continuously moving laminated fibrous structure to produce oppositely disposed offset edges thereon, comprising in combination means for feeding a continuous laminated strip, rotary cutting means acting on said laminated strip to cut from spaced points on both surfaces of said strip to a common intermediate lamina, and means for driving one of said cutting means at a peripheral speed in excess of the



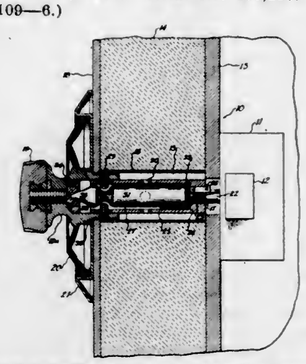
linear feed of the strip for splitting said intermediate lamina from one cut to the other cut and thus completely severing a unit from said continuous strip.

1,862,257. CLOSURE LOCK. ROBERT EARL DAWES, Bozeman, Mont. Filed Nov. 1, 1929. Serial No. 404,055. 1 Claim. (Cl. 220—55.)



A closure fastener for containers having a filler neck comprising a partition for dividing the interior of the filler neck, said partition being shaped to provide a closed compartment in the filler neck, a closure engageable bolt slidable through the side of the neck from the compartment, a swingable arm for carrying the bolt at its free end, said arm being mounted and operative in the compartment, a spring in the compartment for normally maintaining the bolt projected toward the closure, and means in the compartment for retracting the bolt when desired.

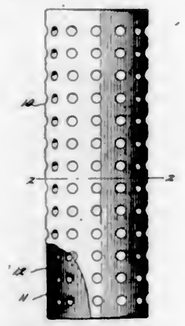
1,862,258. GAS PROTECTED LOCK. ROBERT K. DOHERTY, Detroit, Mich., assignor to The Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed Jan. 11, 1930. Serial No. 420,110. 10 Claims. (Cl. 109—6.)



1. A lock including an operating spindle extending therefrom, supporting means on the spindle, a frangible gas

container carried by the supporting means, there being a neck groove formed in the container, and members extending from the spindle into the neck groove.

1,862,259. THREAD CORE FOR DYEING OPERATIONS AND METHOD OF MAKING SAME. CHARLES K. DUNLAP, Hartsville, S. C. Filed May 3, 1928. Serial No. 276,492. 1 Claim. (Cl. 93—1.)



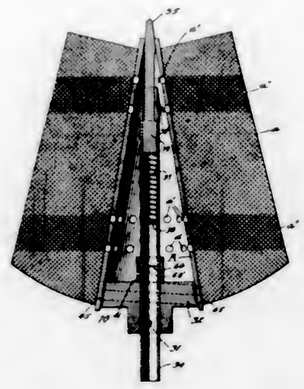
The method of manufacturing paper cores adapted to support thread packages or windings during dyeing and other operations in the textile industry, which comprises coating the surfaces of a paper sheet with a latex containing paste, winding the sheet into a tube, the wall of which is several plies in thickness, the plies being secured together by the latex containing paste, drying the tube thus formed, perforating the tube to provide openings for the passage of fluids, passing molten sulphur into said perforations so that the sulphur has contact with the edges of the plies of paper at each perforation, and maintaining the molten sulphur in contact with the unprotected edges of the paper plies for a length of time sufficient to insure substantial impregnation of the paper with sulphur.

1,862,260. PNEUMATIC WELL DRILLING APPARATUS. MARSHALL C. EDMUNDS, Cincinnati, Ohio, assignor of one-half to William F. Simrall, Covington, Ky. Filed Nov. 10, 1930. Serial No. 494,590. 13 Claims. (Cl. 255—4.)



1. In pneumatic well drilling apparatus, a well drop pipe comprising an outer casing, concentric inner pipe casings retained permanently within said outer casing, and reinforcing members permanently secured at the ends of the drop pipe provided with means for forming packed joints between the several casing sections forming said drop pipe.

1,862,261. APPARATUS FOR DRYING YARN. WARD N. GERE, Liverpool, N. Y., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Filed Aug. 31, 1929. Serial No. 389,747. 4 Claims. (Cl. 34—26.)



3. A cone-holder for yarn driers, comprising a fixed member adapted to support and close the large end of a yarn cone against the escape of drying air, and a yieldable member supported from said fixed member and adapted to support and close the small end of the cone.

1,862,262. EQUALIZING MECHANISM FOR VEHICLES. WILLIAM EDWARD NICKOLS GORRIE, Middle Park, near Melbourne, Victoria, Australia. Filed Sept. 20, 1928, Serial No. 307,234, and in Australia May 22, 1928. 5 Claims. (Cl. 267—11.)



1. In a vehicle, an axle bar, standards rigidly secured to the said axle bar, spaced parallel bars pivoted to the said standards, bolts engaging with the chassis of the vehicle, one end of each of the said bars being turned at right angles to receive a corresponding one of the said bolts, a spring about each of the said bolts and mounted between the bars and the chassis, normally vertical link members mounted on the axle bar, and arms pivotally engaging with their inner ends the said spaced parallel bars, the upper ends of the said link members pivotally engaging with the said last mentioned arms, the said arms being provided with right angled portions, the edges of which are in sliding contact with the upper edge of the axle bar.

1,862,263. ABRADANT. JOHN W. GOTTSCHALK, Philadelphia, Pa. Filed Oct. 17, 1930. Serial No. 489,245. 3 Claims. (Cl. 29—180.)



1. An abradant comprising a flattened wire having coiled and uncoiled portions alternately throughout its length.

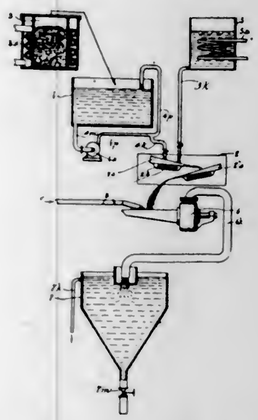
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1,862,264. MACHINE FOR THE MANUFACTURE OF HOLLOW BLOWN GLASS ARTICLES. ROBERT FREDERICK HALL, Edgbaston, Birmingham, England. Filed Jan. 16, 1930, Serial No. 421,283, and in Great Britain Jan. 28, 1929. 9 Claims. (Cl. 49—18.)



1. A machine for the manufacture of hollow blown glass articles, comprising a relatively fixed element, a plurality of blowing units movable in a path about the said fixed element, a blowing valve in each unit for regulating the supply of blowing air, a cam device individual to each of said units and movable with the respective units for operating the blowing valve thereof, and means for driving the said cam device synchronously with the relative movement of the unit and the fixed element for the purposes set forth.

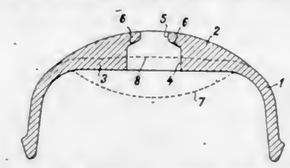
1,862,265. PROCESS AND DEVICE FOR THE PREPARATION OF SOLS AND THEIR USE FOR CONCENTRATING MATERIALS SUSPENDED IN LIQUID TO BE CLARIFIED. RENÉ AUGUSTE HENRY, Brussels, Belgium. Filed Aug. 15, 1928, Serial No. 299,862, and in Belgium June 9, 1928. 20 Claims. (Cl. 210—1.)



1. A process for the preparation of coagulating sols in which an amylaceous substance is placed in the presence of a basic salt comprising regulating the temperature of a basic solution so as to maintain the temperature thereof at a point slightly above the freezing point thereof, regulating the temperature of said amylaceous substance in suspension so as to maintain the temperature thereof lower than the freezing temperature of said basic solution, then bringing said basic solution into contact with said amylaceous substance and then terminating the reaction between them.

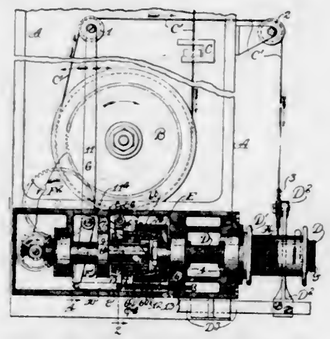
1,862,266. RAILWAY TIE. VALENTIN HERWIG, Berlin-Wilmersdorf, and ERNST MUSTIN, Mahlow, near Berlin, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Oct. 30, 1931, Serial No. 572,393, and in Germany Oct. 30, 1929. 12 Claims. (Cl. 238—59.)

1. A railway cross tie having transverse ribs at the top thereof adapted to guide the foot of a rail on both sides, said ribs being integral with the tie and extending continuously across the entire width thereof, each of said



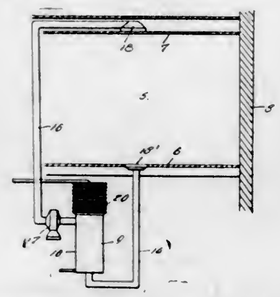
ribs furthermore defining a chamber comprising a lateral continuous wall facing the foot of the rail, said chamber adapted to receive a rail fixing member.

1,862,267. MAGNETIC SLIP-CLUTCH AND WINDING MECHANISM. FRANK HONIG, Oak Park, Ill., assignor to Cyclo Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1927. Serial No. 175,375. 6 Claims. (Cl. 172—284.)



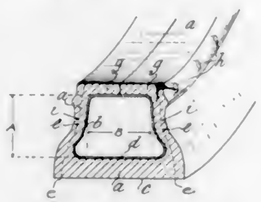
1. In means of the character set forth, a rotary driving-member, a rotary driven-member, a series of permanent ring magnets carried by one of said rotary members, co-acting magnetic members carried by the other rotary member, and means for regulating the number of magnets which co-act effectively with the magnetic members.

1,862,268. AIR COOLING SYSTEM. EARL HOSKINS, Phoenix, Ariz., assignor of one-third to J. D. Fitzpatrick, Phoenix, Ariz. Filed Sept. 13, 1930. Serial No. 481,783. 3 Claims. (Cl. 62—133.)



1. An air cooling apparatus comprising a container, a double wall structure arranged within the container and in spaced relation thereto, a by-pass communicating the interior of the container with the interior of the double wall construction, a feed line for discharging a cooling medium on to the double wall construction, an air inlet for the double wall construction and an outlet for the double wall construction.

1,862,269. PNEUMATIC TIRE. PHILIP HENRY JOHNSON, Hounslow, England, assignor to Roadless Traction, Limited, Hounslow, Middlesex, England. Filed Mar. 14, 1929, Serial No. 347,003, and in Great Britain Mar. 15, 1928. 4 Claims. (Cl. 152—13.)

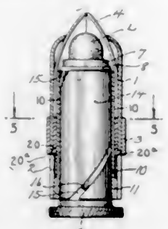


3. A pneumatic tire having a casing provided with a rim engaging wall, a substantially flat tread wall wider than said rim-engaging wall, and side walls connecting said first and second walls, said side walls substantially throughout their length being inwardly concave, and an inner tube reinforcing said side walls and urging them toward a flattened position.

1,862,270. PROCESS FOR STABILIZING NATURAL AND ARTIFICIAL TYPES OF CAOUTCHOUC. GERHARD KÄLLNER, Jda- und Marienhutte, near Saarau, Germany, assignor to "Silesia" Verein Chemischer Fabriken, Jda- und Marienhutte, near Saarau, Silesia, Germany. Filed May 16, 1928, Serial No. 278,345, and in Germany June 2, 1927. 1 Claim. (Cl. 18—50.)

A method for preventing the ageing of vulcanized rubber comprising the addition to the rubber compound of the reaction product of glucose and alpha-naphthylamine and then vulcanizing the said compound.

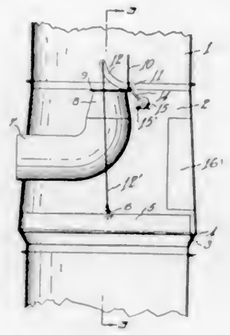
1,862,271. CONTAINER AND/OR APPLICATOR. MAURICE LEVY, Larchmont, N. Y. Filed Dec. 4, 1929. Serial No. 411,462. 8 Claims. (Cl. 206—56.)



3. A container comprising an outer shell and an inner shell, said outer shell having an outer open end whose wall is inwardly and laterally directed, and a slidable member located intermediate said shells and having a closure which consists of plurality of separate bendable members adapted to be bent towards each other when they are outwardly moved to contact with said outer end wall of said outer shell, said bendable members then forming the closure for said open end.

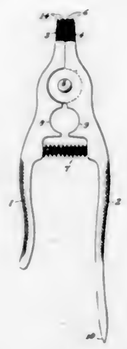
1,862,272. AUTOMATIC STACK DAMPER. JOHN E. LUDWIG, Detroit, Mich., assignor to Newcomb-David Co. Inc., Detroit, Mich., a Corporation of Michigan. Filed Aug. 31, 1928. Serial No. 303,135. 4 Claims. (Cl. 98—43.)

3. In combination, a ventilator stack having the discharge end of a pressure conducting conduit extended therein for creating a flow of air through the stack, a plate pivoted on the discharge end and normally urged to a position to overlie the discharge end and raised to a perpendicular position by the passage of pressure through the conduit, an arm attached to the plate, a



damper in the stack, and an operative connection between the arm and damper whereby to control the latter incident to the movement of the plate on its axis.

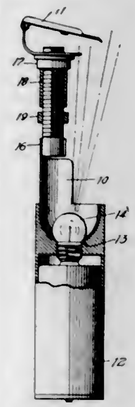
1,862,273. SOCKET CLEARING AND REMOVING TOOL. JOHN J. MCGUCKIN, Passaic, N. J., assignor to Rinck-McIlwaine, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 28, 1930. Serial No. 447,857. 4 Claims. (Cl. 81—5.1.)



1. In a tool of the character described, a pair of cooperating shanks pivoted together, each shank being provided with a finger having a blunt end disposed substantially at right angles to the longitudinal axis of the tool and provided with serrations radiating outwardly from a central point on the inner edge of the end, the fingers being separable but normally closed against each other.

1,862,274. ATTACHMENT FOR SAFETY RAZORS AND FLASH LIGHTS. SAMUEL MENDELSOHN, New York, N. Y. Filed May 16, 1930. Serial No. 452,843. 1 Claim. (Cl. 240—6.46.)

A device as characterized comprising an attachment for flashlights having a hollowed surface and bulb attaching means at the bottom thereof, a curvilinear portion on said device adapted to fit into and be held against an extensive portion of the said hollowed surface, said curvilinear portion having an opening in juxtaposition to the bulb attaching means enabling the said device to be frictionally secured rigidly to the flashlight with the curvilinear portion functioning as a reflector, and razor securing means carried by said curvilinear



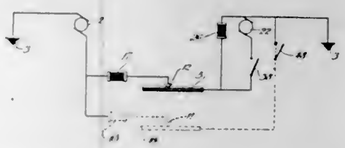
portion whereby the curvilinear portion acts both as a support and as a reflector for directing the light from the bulb properly to the razor.

1,862,275. TERMINAL. LEROY E. MENUT, Mount Vernon, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed May 11, 1927. Serial No. 190,485. 4 Claims. (Cl. 173—259.)



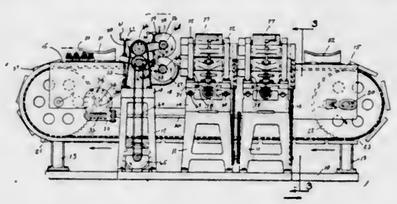
1. A binding post assembly comprising a mounting strip and a terminal passing therethrough, means for securing said terminal in position comprising a deformable washer bearing against one side of the mounting strip and surrounding said terminal and having spurs embedded therein, said spurs also being embedded in the mounting strip, whereby the washer prevents both longitudinal and rotary movement of said terminal.

1,862,276. RAILWAY CROSSING GUARD. FRANK P. MILLER, Chicago, Ill. Filed Apr. 15, 1929. Serial No. 355,047. 3 Claims. (Cl. 246—125.)



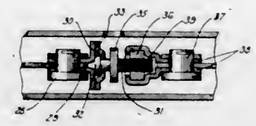
1. In combination with a railway crossing signal actuated by mechanism operated by the approach and departure of a train, of means carried by the train for positively indicating after the train has passed a crossing that the signal has been rendered inoperative comprising an electrically operated indicator carried by the train, means remotely disposed from said crossing and electrically connecting said signal mechanism and the indicator, said connection being completed when said signal is rendered inoperative.

1,862,277. BUFFING MACHINE. CHARLES R. MOON, Muncie, Ind., assignor to Ontario Manufacturing Company, Muncie, Ind., a Corporation. Filed Sept. 29, 1930. Serial No. 485,087. 4 Claims. (Cl. 51—40.)



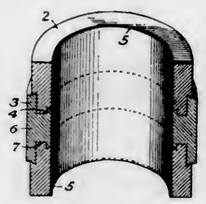
4. In a buffing machine for knives, the combination of a conveyor, a plurality of rests carried by said conveyor for supporting articles to be buffed, said rests each having a portion adapted to engage a knife between the bead and the handle and a portion adapted to engage a knife between the bead and the handle and a portion adapted to engage the handle near its end, grasping members adapted to engage the opposite sides of said handles between said rest portions, yielding means for maintaining said members in grasping position, one or more buffing rolls adapted to engage said articles for buffing the same during their travel, and a cam adapted to engage said grasping members at one point in their travel for moving the same into non-grasping position.

1,862,278. BRAKE ADJUSTER. HUMPHREY F. PARKER, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 17, 1930. Serial No. 453,388. 8 Claims. (Cl. 188—79.5.)



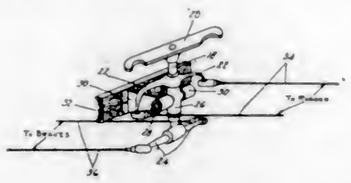
1. A brake comprising a plurality of braking elements, a screw mounted for rotation on one of the braking elements and a member secured against rotation on another braking element adapted to travel on the screw.

1,862,279. BEARING. LOUIS SANDLER, New Castle, Pa., assignor to Johnson Bronze Company, New Castle, Pa., a Corporation of Pennsylvania. Filed July 3, 1929. Serial No. 375,824. 3 Claims. (Cl. 308—239.)



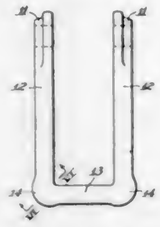
1. A bearing comprising a shell having recesses in its outer and inner surfaces, the shell having spaced openings extending therethrough and communicating with the recesses, and outer and inner sections of bearing metal in the recesses, said outer and inner sections being connected to each other and locked to the shell.

1,862,280. AEROPLANE. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1926. Serial No. 124,309. 9 Claims. (Cl. 244—2.)



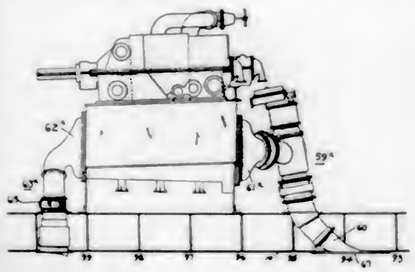
6. Steering and braking mechanism comprising, in combination, an operating shaft, a bearing for said shaft pivotally mounted for movement about an axis crosswise of the shaft, two pairs of oppositely-extending arms on the shaft, steering means connected to one pair of arms, and braking means connected to the other pair of arms.

1,862,281. METHOD OF MANUFACTURING BRAKE HANGERS. FREDERIC SCHAEFER, Pittsburgh, Pa. Filed Aug. 30, 1930. Serial No. 479,073. 1 Claim. Cl. 29—164.)



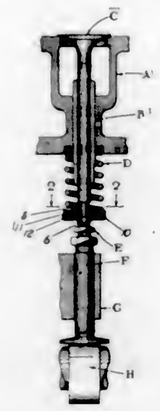
The method of manufacturing a brake hanger having legs and a straight transverse yoke connected between said legs by means of curved corner portions, which consists in bending a bar to produce legs spaced apart by a distance less than the distance to separate the legs of the finished hanger, said legs being joined by an arcuate portion of a medial length substantially equal to the medial length to be had by the straight yoke and curved corner portions of the finished hanger, and then forcing said legs apart and straightening the center part of said arcuate portion.

1,862,282. CONDENSER SCOOP. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 28, 1931. Serial No. 583,525. 12 Claims. (Cl. 257—26.)



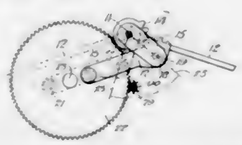
1. The combination with a ship's condenser, of means for circulating water through the condenser by movement of the ship relative to water and including inlet and discharge conduit means, said inlet conduit means having its after end portion connecting with the condenser and including the inlet water box of the latter and having its forward end portion communicating with the exterior of the ship's hull, said forward end portion providing an entrance for water and said inlet conduit means so increasing in flow area in the direction of flow of the water as to effect velocity-pressure conversion of the water passing through the inlet conduit, said discharge conduit having its entrant end portion connecting with the condenser and its exit end portion communicating with the exterior of the ship's hull and the exit area of said discharge conduit means being larger than the entrant area of said inlet conduit means to provide the static head, resulting from velocity-pressure conversion in the inlet conduit means, available for overcoming resistance to flow.

1,862,283. VALVE RETAINER. VICTOR P. SCHOETZOW, Marcellus, Mich. Filed Mar. 30, 1931. Serial No. 526,381. 8 Claims. (Cl. 251—144.)



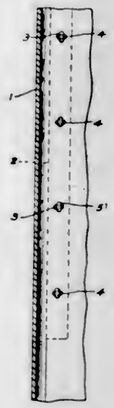
2. A valve spring retainer comprising, two mating disks each disk having an aperture eccentrically formed therein, a portion of one of said disks being telescopically insertable in a portion of the other of said disks, said apertures being in axial alignment in one relative position of said disks and being partly over-lapped in another position of said disks when said disks are telescopically associated.

1,862,284. MECHANICAL MOVEMENT. THEODORE J. SMULSKI, Lake Zurich, Ill., assignor to The Anderson Co., Gary, Ind., a Corporation of Indiana. Original application filed Apr. 24, 1925, Serial No. 25,532. Divided and this application filed Aug. 1, 1925. Serial No. 47,598. 6 Claims. (Cl. 74—14.)



1. In a windshield cleaner actuating mechanism, a rotatable element, a pivoted element, means for positively connecting the rotatable element with the pivoted element, a gear having an axis of rotation coincident with the pivotal axis of said pivoted element, teeth constrained to move with said connecting means and meshing with said gear, and an arm pivoted coaxially with said gear and constrained to move therewith.

1,862,285. RUBBER DOOR GASKET. MATSON C. TERRY, Mansfield, Ohio, and HERMAN E. PLEASANT, Rockford, Ill., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 6, 1930. Serial No. 480,098. 4 Claims. (Cl. 20—69.)



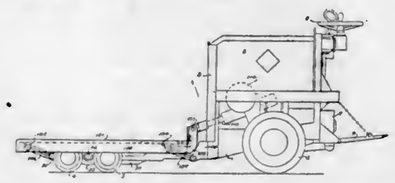
1. A gasket, adapted to be applied to a carrying member provided with non-circular perforations, said gasket having a body portion and a plurality of securing portions, each securing portion having substantially the same shape as its corresponding perforation and extending, when applied to the carrying members, in a direction transverse to said perforations.

1,862,286. VEHICLE BODY. GUY S. TIPTON, Knightstown, Ind., assignor to Knightstown Funeral Car Company, Knightstown, Ind., a Corporation. Filed Aug. 30, 1928, Serial No. 302,928. Renewed Apr. 8, 1932. 1 Claim. (Cl. 296—16.)



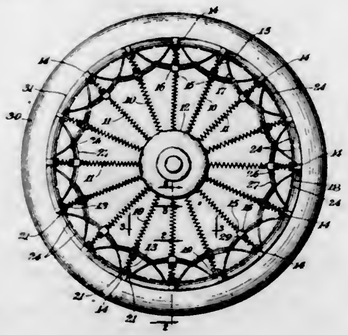
In a hearse having a casket compartment, with a pair of door openings on opposite sides and near the forward portion of the compartment which extends rearwardly therefrom, and a door for each opening, the combination of a plurality of substantially vertically positioned anti-friction rollers at each side of and adjacent each door opening, the axis of the rollers adjacent each opening lying in a vertical plane at an angle to a vertical plane including the longitudinal axis of the compartment, the rollers upon opposite sides co-operating to turn the casket rearwardly into the compartment, a plurality of elongated floor rollers for casket support purposes mounted upon horizontal axes and transverse to the longitudinal axes of the compartment and upon opposite sides thereof and at the rear of the compartment, a plurality of anti-friction floor balls positioned immediately adjacent and along each door opening, other floor balls interposed centrally between the opening positioned balls and arranged in substantially triangular relation with the same and with a substantially centrally positioned apex ball for permitting universal turning of the casket into longitudinal alignment without interference following lateral insertion and a plurality of short floor rollers positioned forwardly of the elongated rollers and rearwardly of the balls and arranged in spaced relation and in a plurality of rows in transverse alignment to the longitudinal axis of the compartment for co-operation with the vertically positioned guide rollers for casket guidance in the insertion and withdrawal of the casket, as well as supporting the same, said short rollers being triangularly arranged upon opposite sides of the compartment axis and with the apexes rearwardly of the base.

1,862,287. INDUSTRIAL TRUCK. MORRIS S. TOWSON, Shaker Heights, Ohio, assignor to Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,205. 2 Claims. (Cl. 280—91.)



1. In a multiple dirigible wheel mounting for an industrial truck, load carrying mechanism adapted to carry a load at low elevation, the combination of a plurality of pairs of relatively small dirigible wheels, steering knuckles and steering arms therefor, said arms extending inwardly from the wheels toward the truck center, certain of the arms being longer than others to permit all the wheels to swing about a common turning center for steering, a central frame member over which all the arms extend, individual links connecting the arms and lying on respective sides of the member, rocking means pivotally connected to the member, and supporting connections therefrom to the wheels, said member having a web and upwardly directed edge flanges at the portion thereof underlying the longer steering arm, and a web and downwardly directed flanges at the portion thereof underlying the shorter arm, whereby a general flange cross section may be preserved substantially throughout the length of the member while preserving the necessary and length clearance for steering.

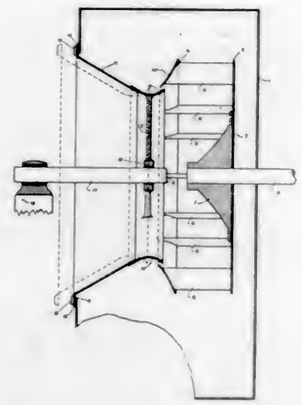
1,862,288. RESILIENT WHEEL. NICOLAS VELTRI, New York, N. Y. Filed Jan. 27, 1931. Serial No. 511,456. 6 Claims. (Cl. 152—29.)



1. A vehicle wheel comprising a hub, a plurality of jointed full elliptical springs arranged with a substantially circular exterior about said hub, a continuous flexible rim fitting over said circularly arranged jointed full elliptical springs, and radially resilient spokes attached

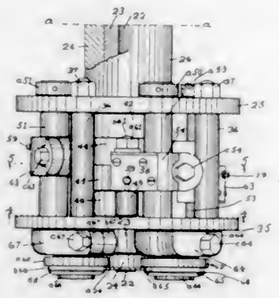
to their inner ends to said hub and attached at their outer ends alternately at the mid portions of said full elliptical springs and at points of jointure between said full elliptical springs.

1,862,289. APPARATUS AND METHOD OF CONTROLLING FANS. EDWARD L. ANDERSON, Grosse Ile, Mich., assignor to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 29, 1929. Serial No. 351,080. 10 Claims. (Cl. 230—114.)



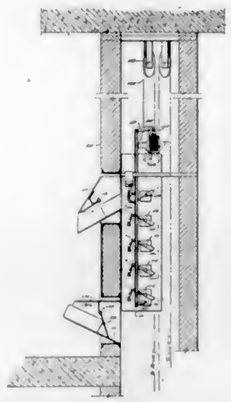
1. In a fan having a scroll housing with a circular inlet, a shaft extending through said inlet into said housing, and a cone-shaped inlet passage in said inlet supported by said shaft for movement to and away from said housing, said cone-shaped member having an inner outwardly flared end projecting into the fan, and a fan having a spaced overlapping shroud.

1,862,290. DOUBLE CAN-SEAMER HEAD. NELS B. ANDERSON, Bellingham, Wash. Filed Nov. 10, 1930. Serial No. 494,491. 3 Claims. (Cl. 113—24.)



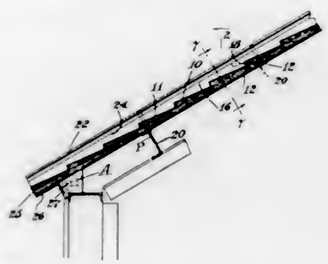
1. A double can-seamer head including a head frame mounted for revolution, a stationary chuck disc disposed concentric with the axis of revolution of said head frame, four circular-disc eccentrics mounted eccentric to said head frame axis for revolution on said head frame axis, four seaming rollers each mounted for revolution on an axis central thereto and also mounted for oscillation on said head frame in the plane of said chuck disc, four eccentric straps, one mounted for revolution on each of said eccentrics also mounted on mechanical connections with said head frame for reciprocative oscillation, said mechanical connections from each of said eccentric straps to each of said rollers causing said rollers in pairs simultaneously to oscillate and bear on any can on said chuck, simultaneously to withdraw from said can also alternately to bear in close succession on said can and simultaneously to withdraw therefrom, means to revolve said eccentrics, and means to revolve said head frame.

1,862,291. SYSTEM OF CONTROL FOR ELEVATORS. CYRUS W. BASSETT and HAROLD J. FEAR, Montclair, N. J., assignors to Elevator Supplies Company, Inc., Hoboken, N. J., a Corporation of New Jersey. Original application filed Apr. 15, 1927, Serial No. 184,082. Divided and this application filed July 25, 1928. Serial No. 295,187. 10 Claims. (Cl. 214—96.)



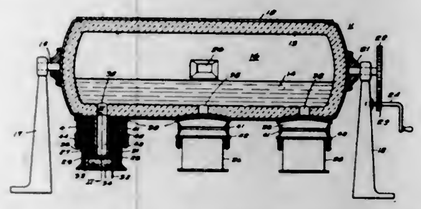
1. In a control system for elevators, an elevator having a plurality of shelves, means for starting said elevator and stopping it successively at a plurality of predetermined landings, and means for loading a predetermined shelf in said elevator at each of said landings.

1,862,292. ROOFING. GEORGE L. BENNETT, Cleveland Heights, Ohio. Filed Sept. 21, 1926. Serial No. 136,741. 15 Claims. (Cl. 108—6.)



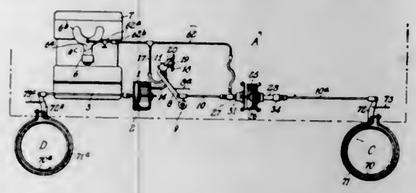
1. Roofing embodying therein a unit consisting of a sheet metal facing having side webs extending outwardly thereof, end plates secured thereto and extending inwardly thereof, a backing of heat insulating material, metallic reinforcement means secured in relation to said facing by attachment to said end plates and imbedded in said backing, and means co-operating with said side webs and with the purlins for holding said unit in position.

1,862,293. INDUCTION FURNACE. PORTER H. BRACE, Forest Hills, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 6, 1931. Serial No. 506,920. 10 Claims. (Cl. 13—26.)



1. An electric induction furnace including a material-holding chamber of relatively large capacity, a pot-type material-melting chamber of relatively small capacity connected thereto and an inductive energizing coil surrounding said material-melting chamber.

1,862,294. BRAKE MECHANISM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, South Bend, Ind., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Original application filed July 29, 1926, Serial No. 125,615. Divided and this application filed Aug. 3, 1929, Serial No. 383,220. Renewed Nov. 9, 1931. 9 Claims. (Cl. 188—152.)



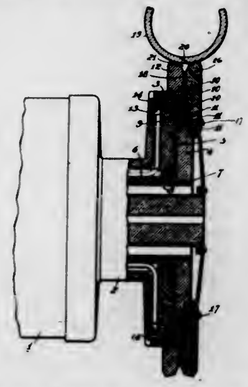
1. In a brake system for automotive vehicles provided with an internal combustion engine having a throttle controlled suction passage, the combination with a plurality of power actuators, each provided with a cylinder, a piston therein, provided with means for connecting it with brake mechanisms, certain of said actuators having the piston thereof submerged in vacuum, and certain of said actuators having the piston thereof submerged in higher pressure fluid when in the released position, means including valve mechanisms for connecting said actuator cylinders with said suction passage and with a source of higher fluid pressure, and operator operated means connected with said valve mechanisms for effecting the simultaneous operation of said actuators to produce power strokes thereof.

1,862,295. AMMUNITION. JAMES E. BURNS, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,295. 6 Claims. (Cl. 52—4.)

1. A priming mixture comprising an admixture of guanylnitrosaminoguanyltetracene and diazodinitrophenol.

1,862,296. ROTARY CONTACT ROLL FOR ELECTRIC WELDING MACHINES. HOWARD J. BURNISH, Sewickley, Pa., assignor to Spang Chalfant & Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1931. Serial No. 562,079. 5 Claims. (Cl. 219—4.)

1. In an electric welding apparatus, a rotary element, two cores rotatable therewith and arranged in axial alinement therewith and insulated from each other, and an annular welding ring, carried by each core and concentric



therewith, the axial opening in one ring being sufficiently large to permit it to pass to its core by lateral movement over the core for the other welding ring.

1,862,297. CAPACITOR AND METHOD FORMING THE SAME. BENJAMIN J. BUTLER, Somerville, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Mar. 15, 1929. Serial No. 347,271. 13 Claims. (Cl. 175—41.)

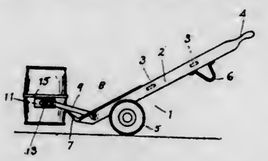


1. A method of forming a capacitor, which consists in laying a terminal tab having flat surface broken in one part, between a continuous foil and a continuous dielectric to form part of a capacitor, and subjecting the capacitor to sufficient pressure to cause the said foil and dielectric to be displaced into close engagement with the interior of the break in the surface, and impregnating the displaced parts to hold them in position to lock the tab.

1,862,298. PROCESS OF MAKING ALUMINUM CHLORIDE. BYRON ELLSWORTH CARL, New York, N. Y. Filed May 2, 1925, Serial No. 27,344. Renewed Feb. 3, 1931. 12 Claims. (Cl. 23—95.)

1. The process of making anhydrous aluminum chloride ($AlCl_3$) in a revolving externally heated fused silica reaction chamber by passing into the chamber from separate sources a regulated supply of chlorine and an intimate mixture of alumina (Al_2O_3) and carbon, and collecting and condensing the vapors of aluminum chloride ($AlCl_3$) evolved.

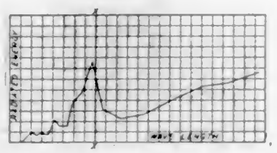
1,862,299. CONVERTIBLE HAND TRUCK. PASQUALE CICCONE, Ambridge, Pa. Filed Feb. 25, 1930. Serial No. 431,261. 3 Claims. (Cl. 280—53.)



1. A convertible hand truck comprising a truck body, arms extensible at will forwardly of said truck body, curved keg engaging plates pivotally mounted in said arms, re-

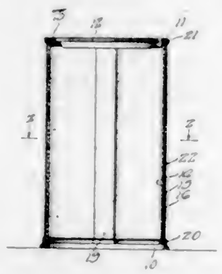
silient means arranged to act adjacent the rear ends of said plates for urging the rear ends of the plates toward each other, and a stop member mounted at the forward end of the truck in position to support the arms when extended and to contact a keg engaged by the plates on said arms.

1,862,300. ARC CARBON FOR PRODUCING ULTRA-VIOLET LIGHT. MERRILL J. DORCAS, Cleveland, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed Sept. 29, 1927. Serial No. 222,854. 4 Claims. (Cl. 176—135.)



3. An electrode for arc lamps comprising a relatively hard carbonaceous shell and a relatively soft core, said core consisting of iron, aluminum, nickel, carbon, and a binder, the combined weight of the three metals being substantially 50% of the entire core.

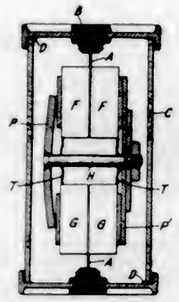
1,862,301. CANISTER. FREDERICK H. DREXLER, Louisville, Ky., assignor to Reynolds Metals Company, Louisville, Ky., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,519. 1 Claim. (Cl. 229—4.5.)



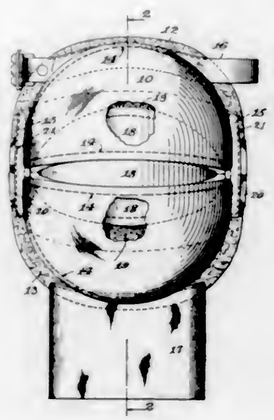
As an improved article of manufacture, a container or carton having a body of relatively stiff paper material with inner and outer walls of metal foil secured thereto by adhesive, a metal strip for uniting the ends of said material and to reenforce said body, and thin metal caps fitting over the ends of the body, said caps being of metal and having depending flanges of metal, the flanges of each cap overlying and being crimped upon the metal portions of the body of the carton and of said reenforcing strip with the metallic layers of the body and of said strip in intimate contact with the metallic flanges of the cap portions.

1,862,302. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 21, 1929. Serial No. 394,295. 9 Claims. (Cl. 175—41.)

1. An electrical condenser comprising a plurality of pairs of oppositely disposed stacks of interleaved armature and dielectric elements enclosed in a container, the said stacks being held together and maintained under compression by common clamping means within the container and terminals for the condenser clamped between different pairs of oppositely disposed stacks.



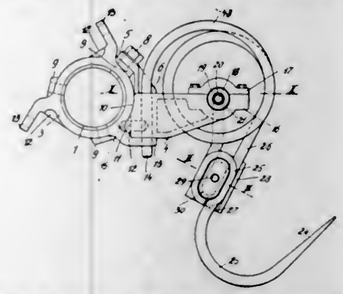
1,862,303. KNEE AND ELBOW PAD. FRED GLABE, Chicago, Ill., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Dec. 29, 1930. Serial No. 505,307. 2 Claims. (Cl. 2—24.)



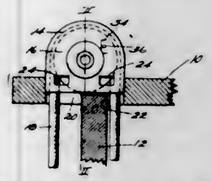
1. A protective pad comprising a plurality of portions curved on equal radii, means to hinge the portions together adjacent the sides thereof, an auxiliary portion curved on a different radius than that of the first portions, and means to secure the auxiliary portion within the first portions and below the adjacent edges thereof.

1,862,304. TOOL SUPPORT FOR CULTIVATORS. WILHELM GRAMS, Sydowwiese, Germany. Filed Feb. 13, 1930, Serial No. 428,129, and in Germany Nov. 10, 1927. 6 Claims. (Cl. 97—216.)

1. A tool support for cultivators having rotary cutting tools or tines and comprising a tine shaft, a spring wound in space and in a single direction only, said spring being anchored to said tine shaft at one end and being so designed and arranged with respect to adjacent parts as to eliminate frictional contact with such parts, a loop at the other end of said spring, an extension on said loop which is re-bent longitudinally into said spring, a bearing for said extension on said tine shaft, and a tool adapted to be attached to said loop.

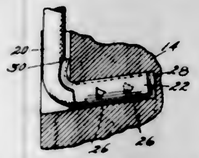


1,862,305. WINDOW PULLEY. ROY E. HAMILTON, Kansas City, Mo., assignor to Lock Joint Window Company, Kansas City, Mo., a Corporation of Delaware. Filed May 12, 1930. Serial No. 451,806. 1 Claim. (Cl. 16—210.)



As a new article of manufacture, a window pulley casing having a series of lug groups formed on each side respectively thereof, said lugs being bendable to the operative position as the same are needed, one of said groups positioned on one side of said casing having lugs disposed in a plane at right angles to the plane of the lugs of the other group on said side.

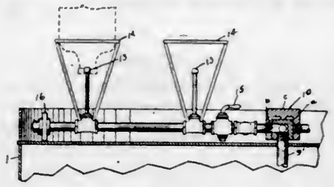
1,862,306. SASH CORD FERRULE. ROY E. HAMILTON, Kansas City, Mo., assignor to Lock Joint Window Company, Kansas City, Mo., a Corporation of Delaware. Filed Sept. 8, 1930. Serial No. 480,390. 4 Claims. (Cl. 16—205.)



1. A sash cord ferrule comprising a collar, a plurality of spurs pressed from the collar and a lip integral with the collar at one end thereof extending laterally therefrom, said lip being convexo-concave in both longitudinal and transverse cross section.

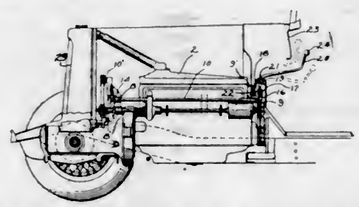
1,862,307. BOTTLE WASHING MACHINE. JOHN S. HERRMANN, Sharon, Pa. Filed Jan. 20, 1931. Serial No. 510,045. 4 Claims. (Cl. 141—7.)

1. In a bottle washing machine, the combination of a liquid tank, a rotary valve mounted on top thereof comprising a valve casing rotatably mounted on a stationary valve plug, said plug having a port, lateral ports in said valve casing adapted to be placed successively in communication with the first named port upon rotation of the valve casing, means for forcing liquid from said tank through said valve, sprayer supply pipes laterally connected to said ports in said valve casing, cocks placed on



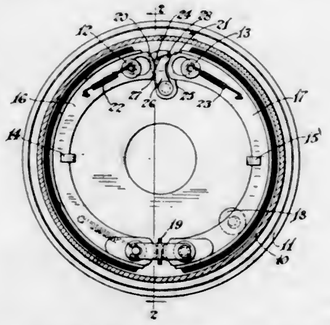
and regulating the flow of liquid through each of said sprayer supply pipes, a plurality of spray nozzles connected to said sprayer supply pipes, and means for holding bottles over said spray nozzles.

1,862,308. GEAR SHIFT. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Apr. 8, 1930. Serial No. 442,646. 2 Claims. (Cl. 74—39.)



1. In a vehicle, an engine at the forward end thereof, a radiator spaced forwardly from said engine, gear transmission substantially in longitudinal alignment with said engine disposed beneath said radiator and including gear shift bars having external ends located between said engine and radiator, a support in the passenger compartment of said vehicle having a socket therein, a gear shift lever having a ball portion swivelled in said socket and a crank member shiftably mounted on the side of said engine having an arm on its rear end flexibly connected with said lever and an arm on its front end registering with the external ends of said gear shift bars, the forward arm of said crank being selectively engageable with said bars and movable in synchronism with said gear shift lever.

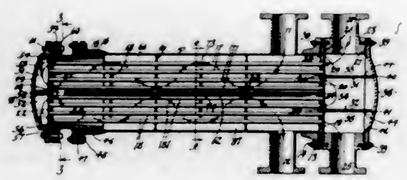
1,862,309. BRAKE. BRYAN E. HOUSE and HUMPHREY F. PARKER, South Bend, Ind., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 21, 1930. Serial No. 454,249. 2 Claims. (Cl. 188—78.)



1. A brake comprising a rotatable drum, a fixed support, friction members movable on the support, rounded shoulders on the friction member, an operating shaft rotatably

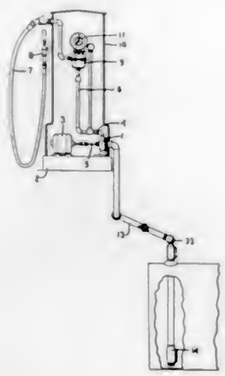
mounted on the support, an arm carried by the shaft, a cam pivotally connected to the free end of the arm and lobes on the cam having line contact with the rounded shoulders on the friction members.

1,862,310.. HEAT EXCHANGER. HARLAN W. HOW, Warren, Pa., assignor to Struthers Wells-Titusville Corporation, Warren, Pa., a Corporation of Delaware. Filed Sept. 5, 1930. Serial No. 479,954. 6 Claims. (Cl. 257—239.)



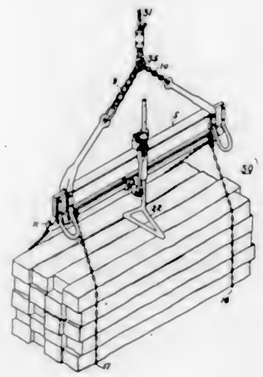
1. A heat exchanger, comprising a shell having a fluid inlet and a fluid outlet, a front tube sheet connected with the front end of the shell, a stuffing box arranged on the rear end of the shell, a rear tube sheet having a forwardly projecting sleeve which slides in said stuffing box, a single bundle of tubes arranged in said shell and secured at their front and rear ends to said front and rear tube sheets, a front manifold connected with the front tube sheet and communicating with the front ends of said tubes and having a fluid inlet and a fluid outlet, a rear manifold connected with the rear tube sheet and communicating with the rear ends of said tubes, and a detachable cover applied to the outer side of said rear manifold externally of said shell.

1,862,311. FILLING STATION APPARATUS. HOWARD P. KLING, Westfield, Mass., assignor to Moore and Kling, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Jan. 29, 1930. Serial No. 424,366. 2 Claims. (Cl. 221—95.)



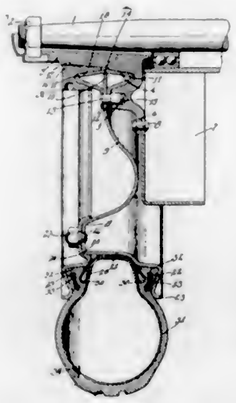
1. A check valve for liquid dispensing systems adapted to be connected in series with the suction line thereof comprising a casing, an automatically closing valve therein acting to prevent back flow of liquid, chambers above and below said valve, a by-pass connecting said chambers, and a relief valve in said by-pass opened at a predetermined pressure to by-pass the liquid from the upper to the lower chamber.

1,862,312. AUTOMATICALLY RELEASING HOISTING DEVICE. ALBERT L. KOSITZKY, Escanaba, Mich. Filed Mar. 9, 1932. Serial No. 597,762. 9 Claims. (Cl. 294—75.)



1. Means for hoisting and automatically releasing a load comprising sling elements adapted to encircle said load, a spreader member, means carried by said spreader member for detachably holding said sling members, and means actuated upon decrease in the distance between said spreader member and said load for causing said detachably holding means to release said sling elements.

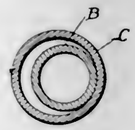
1,862,313. VEHICLE WHEEL. LUDGER ELIZE LA BRIE, Chicago, Ill., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 30, 1923, Serial No. 677,809. Renewed Aug. 22, 1925. 2 Claims. (Cl. 152—21.)



1. In a vehicle wheel, a pneumatic tire casing, an inflatable tube therefor, a rim provided with a medial tube-receiving depression and further provided with tire engaging flanges, said rim adapted to support said tire, and a supplemental rim nesting within said depression

provided at its edges with outwardly extending return bent bead engaging flanges spaced from said rim flanges, said supplemental rim adapted to retain said casing in substantially locked engagement with said channeled rim and flanges.

1,862,314. METHOD FOR FORMING RUBBER TIRES. LAURITS A. LAURSEN, Akron, Ohio, assignor of one-fourth to Pearl Lucile Laursen, Akron, Ohio. Original application filed Apr. 3, 1924, Serial No. 704,042. Divided and this application filed June 30, 1928. Serial No. 289,499. 6 Claims. (Cl. 18—56.)

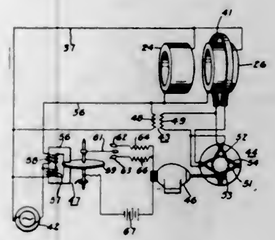


1. The process of making inner tubes for rubber tires, which consists in taking a strip of uncured rubber stock, such as commonly employed for making rubber inner tubes and forming said strip into a long tubular shape, causing this uncured long tubular shaped article to be applied to a curved mandrel and its walls deformed by expansion to enlarge its cross sectional area to the size of the final tubular article which is to be made therefrom, using the mandrel to control the maximum stretching action aforesaid, and thereafter subjecting the tubular article thus stretched to proper diameter to vulcanizing temperature to produce the finished curved article.

1,862,315. PRODUCT OF CASTOR OIL. CHARLES G. MERRELL, Wyoming, and MORTIMER BYE, Cincinnati, Ohio, assignors to The William S. Merrell Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 9, 1928, Serial No. 260,542, and in Canada Feb. 17, 1928. 10 Claims. (Cl. 167—56.)

1. An emulsion consisting solely of castor-oil and an alkaline material, the proportions of the alkaline material being approximately seven one hundredths of 1% and the castor-oil more than 35% of the product.

1,862,316. PIPE-WELDING SYSTEM. JOHN F. PETERS, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 17, 1931. Serial No. 530,770. 8 Claims. (Cl. 219—6.)



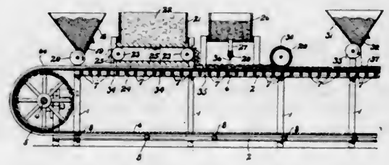
1. In an inductive heating system, including a main energizing coil and an auxiliary energizing coil for inductively heating a moving piece of material, means controlled by the moving piece of material for maintaining the energy input into the system substantially constant.

1,862,317. FUSE. CLARENCE RINGWALD, South Bend, Ind., assignor, by mesne assignments, to Schweitzer & Conrad, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 23, 1927. Serial No. 242,137. 13 Claims. (Cl. 200—120.)



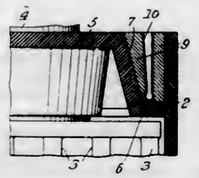
1. In a fuse device, the combination of a container comprising an outer sleeve of condensation product and an inner lining of fiber impregnated in a solid waxy halogen derivative of naphthalene, and a fusible link within said container.

1,862,318. PLASTER BOARD MACHINE. GEORGE H. A. RUBY, Linden, N. J. Filed Jan. 6, 1930. Serial No. 418,793. 2 Claims. (Cl. 154—1.)



2. In a machine of the class described, an endless, horizontal conveyor having spaced apart upwardly extending flanges at its sides thereby providing a continuous relatively wide and shallow trough at the upper side of the conveyor, means for driving the conveyor, means for continuously depositing a substantially uniform layer of dry cementitious material in said trough on the conveyor as the same is moved, means for continuously depositing picked apart fibrous material in fluffy state on and above said cementitious material as the conveyor is moved, means for continuously sprinkling water against the upper side of said fibrous material as it moves with the conveyor, a grooved roller underneath which said first cementitious material and sprinkled fibrous material passes, means for continuously depositing a second substantially uniform layer of dry cementitious material on and above the fibrous material, and an endless horizontal belt located above and parallel to the upper side of the conveyor underneath which said layers of material are carried for a distance, said belt bearing against the upper sides of said flanges to thereby compress said cementitious and fibrous materials together within the trough of the conveyor and hold them compressed until said cementitious material have hardened and set.

1,862,319. STORAGE BATTERY CONSTRUCTION. DALE E. RUDERT, Saxonburg, Pa. Filed Nov. 12, 1928. Serial No. 318,760. 7 Claims. (Cl. 136—170.)



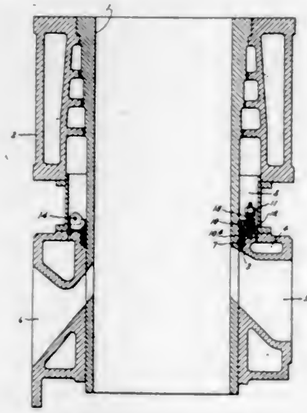
1. In a storage battery, a cell, a cover therefor, sealing means for sealing the joint between the cell and cover, and flexible metal means having relatively movable portions in the joint.

1,862,320. PRESS-BUTTON LOCK. AUGUST RUEF, Freiburg, Germany. Filed Dec. 6, 1928, Serial No. 324,239½, and in Germany Apr. 10, 1928. 2 Claims. (Cl. 220—78.)



1. A paper fastener comprising separately-constructed interlocking members, each of said interlocking members consisting of a tubular shank constructed with a solidly-formed cylindrical wall and provided with a circular clamping flange, said clamping flanges being provided with wavy cross-sections and the tubular shank of one of said interlocking members being insertable axially into the tubular shank of the other of said interlocking members to bring the wavy flanges into interlocking clamping engagement with the papers to be clamped, the ends of said tubular shanks distant from said wavy flanges being upset and permanently riveted together to retain said wavy flanges in positive clamping engagement with the interposed papers.

1,862,321. INTERNAL COMBUSTION ENGINE. FRIEDRICH SASS, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 29, 1930, Serial No. 471,580, and in Germany Aug. 1, 1929. 3 Claims. (Cl. 123—173.)

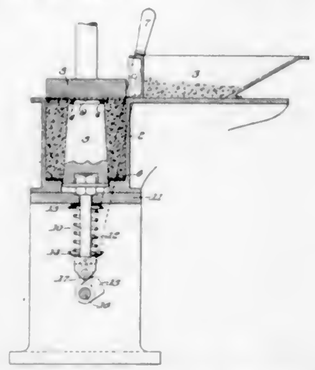


1. The combination with an internal combustion engine having a liner and a frame which define between them a water cooling chamber, of means between the liner and a portion of the frame for preventing cooling fluid circulated in the cooling chamber from leaking along the liner, said means comprising an annular packing, a gland for compressing said packing, gland screws having heads on their ends, and spring members arranged between said heads and the gland for forcing it against the packing.

1,862,322. SAPONACEOUS EMULSION AND PRODUCT CONTAINING THE SAME. WILLIAM G. SOLEY, La Salle, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Nov. 23, 1926. Serial No. 150,380. 4 Claims. (Cl. 87—5.)

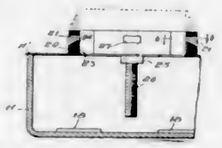
2. An abrasive composition comprising a cream-like emulsion of soap, water and an essential oil together with abrasive particles, and having bentonite mixed therewith as a stiffening material, the composition containing substantially 20% of soap, 20% of oil, 20% of bentonite and 40% of water.

1,862,323. MANUFACTURE OF CONCRETE BUILDING BLOCKS. FRANCIS J. STRAUB, New Kensington, Pa. Filed Aug. 15, 1931. Serial No. 557,258. 4 Claims. (Cl. 25—155.)



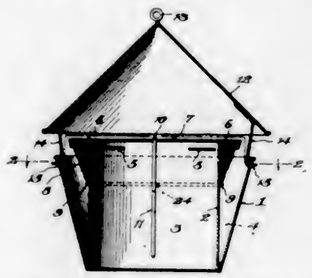
1. In the manufacture of concrete aggregate building blocks or the like, the method herein described consisting in tamping the aggregate within a mold around an elevated core, removing surplus aggregate and lowering the core, and then applying pressure to the top of the molded block.

1,862,324. JUNCTION BOX AND COVER. LOUIS STRNAD, Chicago, Ill. Filed Sept. 17, 1928. Serial No. 306,386. 7 Claims. (Cl. 247—19.)



1. In a substantially enclosed device of the class described, a member attachable to a junction box, and means associated with said member and forming a part of the enclosure for supporting a cover plate, said means comprising a plurality of telescoping members each having a slot in registry with a corresponding slot in an adjacent member, one wall of each of said slots projecting into the adjacent slot for the purpose described.

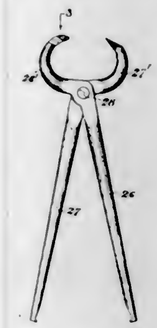
1,862,325. OUTDOOR SANITARY EXTERMINATOR FOR HOUSE AND BLOW FLIES. EDWARD L. WATSON, Rochester, N. Y. Filed May 18, 1931. Serial No. 538,320. 5 Claims. (Cl. 43—107.)



1. In an exterminator for flies, the combination of a container having an inner compartment to contain fermenting lure to attract the flies, an outer compartment

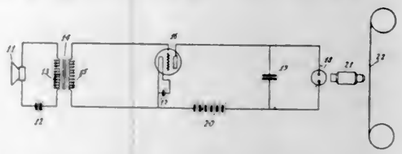
to contain poison bait, the inner compartment having apertures near its rim to permit the odor of the lure to escape, a cover plate seated over the inner compartment and projecting substantially beyond the rim of the inner compartment to darken the outer compartment to make the outer compartment more attractive to blow flies, a strip of screen attached to the rim of said cover plate and a ring encircling the inner compartment and to which the lower edge of the screen is attached, to prevent the eggs and larvæ of blow flies from reaching the inner compartment.

1,862,326. TONGS. GEORGE F. ALTICE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 27, 1928. Serial No. 295,722. 2 Claims. (Cl. 29—87.1.)



1. A tool comprising crossed arms pivoted together to form handles and curved jaws, one of the jaws being shaped to provide a pointed end, the other jaw being notched at its extremity to provide a hook-engaging means and being provided with a recess spaced from the end of the jaw and extending through the jaw from the inner to the outer surface thereof in alignment with the force exerted by the jaws when the tool is manipulated.

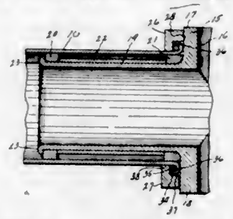
1,862,327. SOUND RECORDING. SAMUEL M. BAGNO, Bronx, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 18, 1930. Serial No. 421,782. 5 Claims. (Cl. 179—100.3.)



1. The method of sound recording which comprises producing an electric current varying in accordance with the sound to be recorded, producing light impulses of constant duration at an interval varied in accordance with the intensity of the current representing the sound to be recorded and recording of said light impulses.

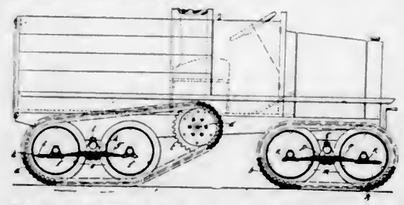
1,862,328. PROPELLER. FRANK W. CALDWELL, Dayton, Ohio, assignor, by mesne assignments, to Hamilton Standard Propeller Company, a Corporation of Delaware. Filed Feb. 4, 1928. Serial No. 251,897. 9 Claims. (Cl. 170—173.)

1. A propeller comprising a pair of blades having hollow root portions, a hub, independent force transmitting means on said hub engaging inner and outer sides of the root portions of the blade, respectively, one of said means being of integral construction and adapted to transmit rotational thrust force to the blades without materially restraining the blades against centrifugal force, and the



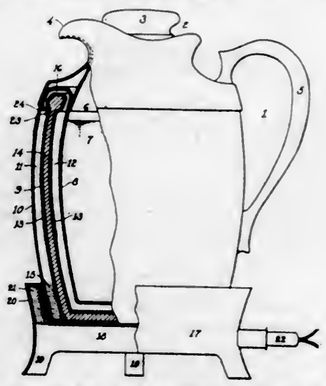
other of said means restraining said blades against centrifugal force and being substantially ineffective in transmitting rotational thrust force.

1,862,329. ENDLESS TRACK VEHICLE. JOHN VALENTINE CARDEN, Piccadilly, Westminster, England, assignor to Vickers-Armstrongs Limited, Westminster, England, a British Company. Filed July 20, 1929, Serial No. 379,855, and in Great Britain Aug. 24, 1928. 2 Claims. (Cl. 180—9.1.)



1. In an endless track vehicle, the provision of a pair of rear endless driving tracks and a pair of front endless driving tracks which are adapted to be moved independently of the rear tracks for steering purposes, a pair of supporting wheels associated with each of said endless tracks each pair of wheels associated with said tracks being mounted at the opposite ends of a laminated spring member pivotally carried by the framework of the vehicle, the supporting wheels on one side of the vehicle being mounted independently of those on the other side of the vehicle so as to permit independent relative movement between all of the wheels of the vehicle.

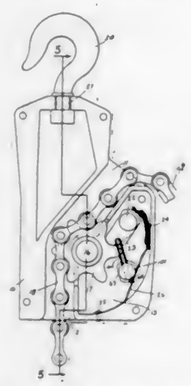
1,862,330. AUTOMATICALLY REFRIGERATING RECEPTACLE. PHILIP P. CHAPIN and WILLIAM J. KUPEC, New York, N. Y. Filed May 31, 1928. Serial No. 281,759. 3 Claims. (Cl. 62—120.)



1. The combination of a receptacle for the utilizable substance, a gas liquefying receptacle enveloping said receptacle, an insulating wall enveloping said gas lique-

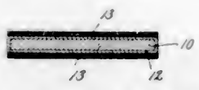
fying receptacle, a gas absorbent receptacle enveloping said wall, and said last two receptacles being in communication with each other.

1,862,331. AUTOMATIC REVERSE RATCHETING HOIST. FREDERICK W. COFFING, Perrysville, Ind. Filed Sept. 3, 1929. Serial No. 389,956. 15 Claims. (Cl. 254—176.)



1. In a free chain hoist the combination of a load sustaining sprocket, a spindle supporting the same, a body supporting said spindle and including a chain passage into which said sprocket projects, a sprocket chain in said passage and engageable by the teeth of the sprocket, a load sustaining pawl pivotally supported by the body and normally preventing return rotation of the sprocket, an operating lever handle, a ratchet engaging pawl supported by said handle and movable therewith, a ratchet secured to said spindle for rotating the same and said sprocket through said second mentioned pawl for moving the chain in one direction, said chain being free running in said direction, and means co-acting with the ratchet engageable pawl and the sprocket engageable pawl for automatically releasing the same for step by step reverse movement of the chain.

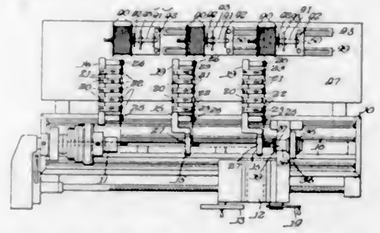
1,862,332. PROTECTED METAL ARTICLE AND METHOD OF MAKING THE SAME. ALDEN W. COFFMAN, Pittsburgh, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 3, 1931. Serial No. 519,803. 8 Claims. (Cl. 154—2.)



8. The method of producing a protected metal article having a fibrous layer affixed to a metal member by an interposed metallic layer of lower-melting point than said metal member, which consists in pressing the fibrous layer against the metallic layer of lower-melting point while the latter is in a heated condition and substantially fluid, and then allowing the substantially fluid metal to cool.

1,862,333. MULTIPLE WINDING DEVICE. ALBERT H. COLE, Chicago, Ill., assignor, by mesne assignments, to The Muter Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1931. Serial No. 533,941. 10 Claims. (Cl. 242—25.)

1. Means for simultaneously winding a plurality of lengths of resistance wire on a common base of relatively flexible construction, comprising, in combination, a bed, a driven head having means for rotating and permitting longitudinal sliding movement of the base, a carriage on the bed having means for gripping an extremity of said base and permitting rotation thereof and for causing



longitudinal travel of the base in timed relation to its rotation, means for supporting said base between its ends with capacity for rotation at points in spaced relation corresponding to the desired length of the windings on said base, and means for supplying the wire to be wound.

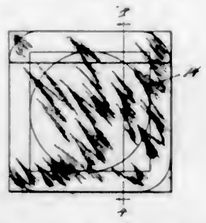
1,862,334. RUBBER STOCK FABRICATING MACHINE. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 16, 1926. Serial No. 148,702. 9 Claims. (Cl. 18—4.)



9. A tread rubber stock fabricating machine comprising an extruding machine, an assembly table, conveying means interposed between the extruding machine and assembly table for continuously delivering a strip of tread rubber stock from the extruding machine to the assembly table, means for operating said conveying means at a speed greater than the rate of extrusion of said stock to stretch the strip as it leaves the extruding machine, means associated with the conveying means for cooling the strip means for shrinking the strip to relieve the tensile stresses therein after cooling, means for delivering cushion stock to the assembly table at substantially the same rate as the tread rubber stock, means for positioning the cushion stock directly over the tread rubber stock and means for stitching the two stocks securely together

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1,862,335. MERCHANDISING PACKAGE. JOHN R. DENNIS, Providence, R. I. Filed Sept. 24, 1930. Serial No. 484,031. 2 Claims. (Cl. 206—46.)

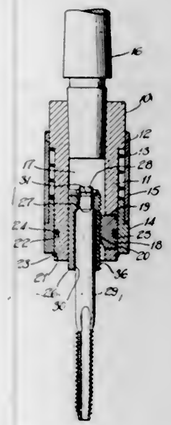


1. A mercantile article for ribbon textile materials, comprising a hollow core having a rectangular outer configuration, and a length of ribbon material of a single width engaged and wound about the outer rectangular surface of said core in superimposed relation, the width of the ribbon material equalling substantially the width of said core surface, and said article being enclosed and protected by a wrapper.

1,862,336. ARTIFICIAL DENTURE AND MANUFACTURE THEREOF. ISRAEL JOHN DRESCH, Toledo, Ohio, assignor to Prosthetic Products, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 22, 1931. Serial No. 570,508. 5 Claims. (Cl. 32—4.)

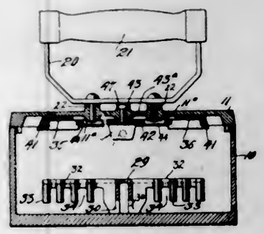
2. In an artificial denture, an improved translucent water-resistant product comprising a glycerine-phthalic anhydride resin having a relatively small amount of an inert inorganic filler in a finely divided state uniformly distributed therethrough, said inert filler being heat resistant and having a low water absorption ratio.

1,862,337. TAP, DRILL, AND SIMILAR TOOL. GEORGE W. EMRICK, Brooklyn, N. Y. Filed Jan. 28, 1931. Serial No. 511,781. 4 Claims. (Cl. 279—90.)



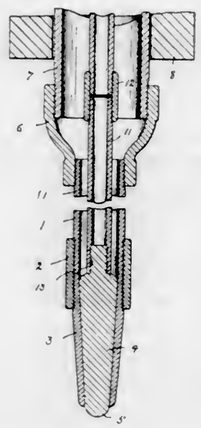
1. A tap of the class described, the shank of which includes a portion provided with closely arranged, longitudinally spaced grooves, whereby said tap may be keyed to and adjustable longitudinally of a suitable support, and a spring ring engaging a groove in said tap in keying the same in connection with the support.

1,862,338. SADIRON. GEORGE FINN, Newark, N. J. Filed Aug. 9, 1930. Serial No. 474,108. 9 Claims. (Cl. 68—26.)



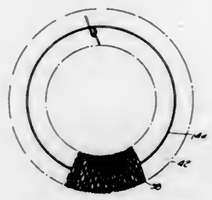
1. In a sad iron, the combination of a body having a heating chamber, and a transverse flue extending continuously across the chamber intermediately of the length thereof, the body having air inlet openings located at the ends of the flue, and the flue having openings leading to the heating chamber.

1,862,339. EARTH TESTING INSTRUMENT. JOSEPH H. HIGHMARK, Duluth, Minn. Filed Feb. 12, 1932. Serial No. 592,528. 3 Claims. (Cl. 255—1.)



1. A testing instrument of the class described comprising a pipe, a hollow tapering point removably attached to the lowermost end of the pipe, a smooth core snugly fitted within the point and projecting slightly therethrough, a smaller pipe or rod axially disposed within the first mentioned pipe and to which the core is attached, a larger pipe attached to the upper end of the first pipe, reciprocable driving means about the larger pipe, and means upon the upper end of the larger pipe for adjustment of the core in the point.

1,862,340. CONVOLUTED ORNAMENT OF FLEXIBLE MATERIAL. VICTOR T. HOEFLICH, New York, N. Y. Filed Apr. 4, 1928. Serial No. 267,387. 13 Claims. (Cl. 41—10.)

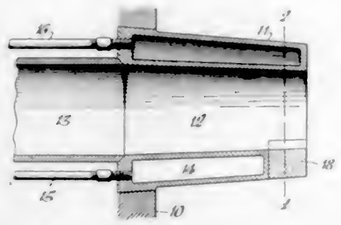


10. An ornamental figure comprising a semi-rigid core and a strip of sheet material twisted therearound, said strip having a series of transverse waves therein forming wavy edges, and presenting both its edges to define the surface of the figure.

1,862,341. BLAST FURNACE TUYÈRE. CHARLES R HOLZWORTH, Struthers, Ohio. Filed Sept. 27, 1929. Serial No. 395,715. 3 Claims. (Cl. 122—6.6.)

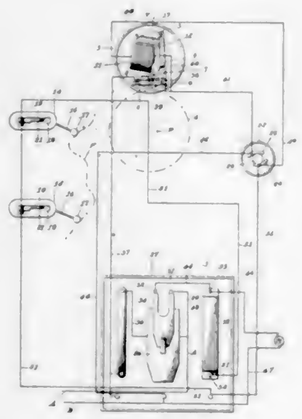
1. A blast furnace tuyère, comprising a body having a substantially radial notch extending transversely through

its wall, said notch being disposed in the bottom side of the nose end of the tuyère and converging in the direction of length of the tuyère toward its nose and converging in



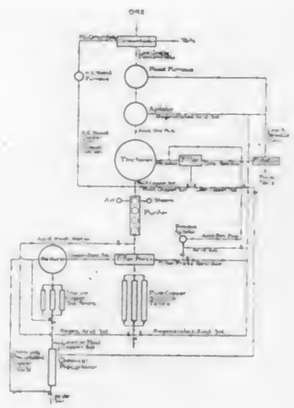
a direction transversely thereof toward the outer side of the tuyère, and an insert made of a material having a high temperature melting point fitted in said notch.

1,862,342. CONTROL CIRCUITS FOR FIRE PREVENTION APPARATUS. THOMAS TWADDEL ALLEN and JOHN FRANCIS ADAMS, Philadelphia, Pa., assignors to Sentry Safety Control Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed July 18, 1929. Serial No. 379,091. 4 Claims. (Cl. 88—17.)



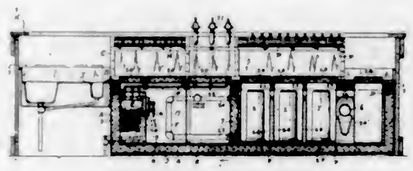
2. Control circuits for fire prevention apparatus for a motion picture machine having a film feeding mechanism and a motor for operating the same, a control unit including an electro-magnet, a motor switch, a dowser mounted on a shaft, a cam on said shaft for closing the motor switch, and a control plate for the dowser, switches engaging the film and held closed thereby during the normal advancement of the film in the machine, a centrifugal switch, a relay, and a protective resistance, a circuit including the coil of the relay and the motor switch closed by the cam upon a slight upward movement of the dowser, a motor circuit closed by the energization of said relay coil, a circuit leading from the motor switch through the closed centrifugal switch, said protective resistance, and the film switches when the machine has not attained its required speed, and which when the said speed is attained opens the centrifugal switch to include the motor switch, electromagnet and film switches in series, the magnet thereby moving the control plate and unlocking the dowser whereby it may be raised to open position.

1,862,343. COPPER EXTRACTION PROCESS. WILLIAM E. GREENAWALT, Denver, Colo. Filed July 15, 1929. Serial No. 378,298. 14 Claims. (Cl. 204—15.)



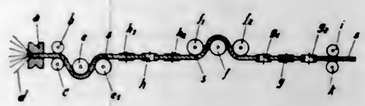
1. A process comprising, treating copper ore with acid solution in excess to extract the copper, applying finely divided copper oxide in excess to the acid copper solution to neutralize the acid and precipitate soluble impurities, separating the resulting pure copper solution from the insoluble residue, electrolyzing the pure copper solution to deposit the copper and regenerate acid, re-dissolving the impure precipitate with an acid solution, separating the resulting impure copper solution from the insoluble residue and separately precipitating the copper therefrom, and applying regenerated acid solution to the insoluble residue to dissolve the copper of the excess copper oxide.

1,862,344. COOLING AND DISPENSING APPARATUS. FRANK T. WIECHERT, Lakewood, Ohio, assignor of one-half to Robert C. Trimmer, Cleveland, Ohio. Filed May 6, 1929. Serial No. 360,718. 1 Claim. (Cl. 62—101.)



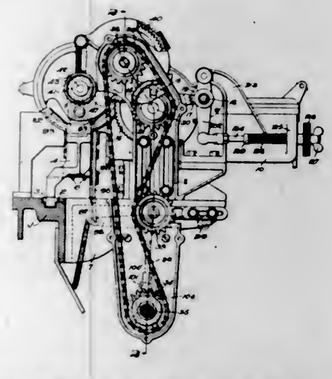
A cooling and dispensing apparatus, comprising a base section including two nested sheet metal shells insulated from each other and divided into separate goods and brine chambers, a plurality of individual refrigerating evaporators, one for each of said chambers, an auxiliary cooling device, associated with said brine chamber extending into said goods chamber, pipe connections for each of said refrigerating evaporators and a conduit for said pipe connections extending lengthwise of one wall of said outer shell and communicating with said refrigerating evaporator, said refrigerating evaporator in said brine chamber being set for substantially lower temperatures than said refrigerating evaporator in said goods chamber.

1,862,345. APPARATUS FOR MANUFACTURING WIRE ROPES AND THE LIKE. GUSTAV WOLF, Gutersloh, Germany. Filed Nov. 25, 1929. Serial No. 409,668. 1 Claim. (Cl. 117—16.)



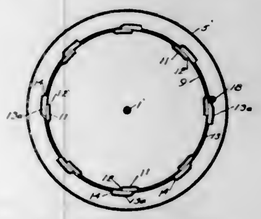
Apparatus for reducing the twist tension of wire ropes and strands by bending as described, comprising a plurality of roller sets disposed one behind the other in zigzag order and adapted to bend the wire and strands beyond their longitudinal axis and in different planes radial to their axis, the individual rolls rotating in the longitudinal direction of the rope and strands.

1,862,346. CARTON END GLUING AND CLOSING MEANS. EDWARD VAN DER PYL, Worcester, Mass., and ROBERT H. STIMPSON, Nashua, N. H., assignors, by mesne assignments, to Frederick L. Emery, Boston, Mass. Filed Jan. 22, 1929. Serial No. 334,249. 23 Claims. (Cl. 93—7.)



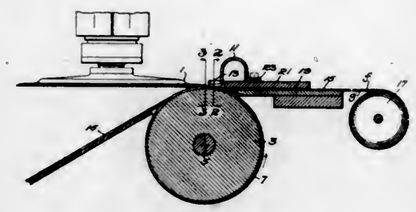
1. Carton closing mechanism comprising a bed, a conveyor thereon for the cartons, upper flap folding means including a movable minor flap folder operable across the carton path, a movable major flap folder with compound motion, a plurality of carton drying and conveying members, and means to shunt the carton therebetween for conveyance and to also infold the second major flap.

1,862,347. MATERIAL SPREADER. ESTUS J. HAWKS, Cedar Rapids, Iowa. Filed Nov. 5, 1928. Serial No. 317,138. 6 Claims. (Cl. 275—2.)



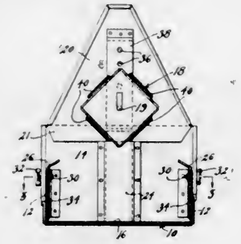
1. In a material spreader, the combination of a feed drum having tangentially faced openings through the shell thereof; a portable rotative mounting for the drum; and means adjusting the feed openings comprising a cylinder carried by the drum and having tangentially faced openings registering with the openings in the wall of the drum, said cylinder being movable relatively to the drum to vary the openings.

1,862,348. APPARATUS FOR SKIVING STRIP MATERIAL. FRANK W. MERRICK, Dorchester, Mass., assignor to American Stay Company, East Boston, Mass., a Corporation of Massachusetts. Filed Sept. 22, 1928. Serial No. 307,758. 6 Claims. (Cl. 69—16.)



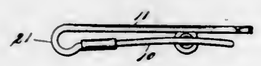
1. Apparatus for skiving strip material comprising, in combination, a rotary disk skiving-knife, a rotary part having its axis in a plane substantially tangent to the cutting edge of said knife, said rotary part provided with a circumferential groove, and a normally stationary presser cooperating with said groove for forcing the body portion of said strip into said groove with the opposite edge portions only of the strip extending above the surface of said rotary part in the path of said knife.

1,862,349. POULTRY FEEDER. FRANKLIN W. PERRY, Lynnfield Center, Mass. Filed Dec. 6, 1928. Serial No. 324,086. 1 Claim. (Cl. 119—61.)



A feed trough having side walls extensible vertically; a freely rotatable bird barrier, supported in a position extending along and over the trough with free space under the barrier; and means for holding said rotatable barrier at various elevations above the bottom of the trough and at increasing elevations above the tops of the side walls, as the latter are raised.

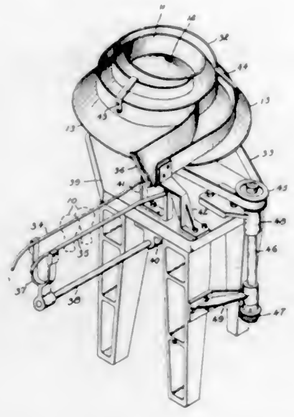
1,862,350. CLASP FOR NECKTIES OR THE LIKE. FRANK P. DAUGHADAY, Providence, R. I. Filed Sept. 29, 1931. Serial No. 565,723. 4 Claims. (Cl. 24—255.)



1. A clasp for neckties or the like comprising front and rear jaw members, one of said members being provided with a portion bent upon itself to furnish a portion in line with a portion of the opposite jaw member and to

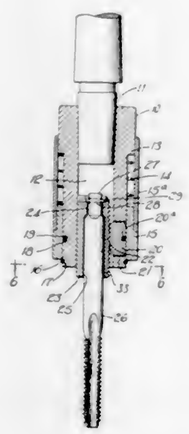
overlap a portion thereof, and wing portions extending laterally from one of said jaw member portions along the overlapping part thereof to be folded about the other jaw member portion to clamp the jaw members together.

1,862,351. FEEDING DEVICE FOR GLASS ARTICLES. RINZO HAGIWARA, Tokyo, Japan, assignor to General Electric Company, a Corporation of New York. Filed Mar. 11, 1931, Serial No. 521,816, and in Japan Mar. 20, 1930. 5 Claims. (Cl. 198—29.)



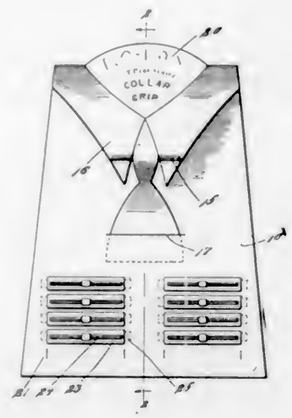
1. An apparatus for feeding bulbs and similar articles comprising a receptacle having a movable bottom, an inclined skirt surrounding said receptacle, a stationary partition mounted over said skirt, means for causing a gradual elevation of said bottom and means for rotating said skirt.

1,862,352. TOOL ADAPTER. GEORGE W. EMRICK, Brooklyn, N. Y. Filed Jan. 28, 1931. Serial No. 511,780. 14 Claims. (Cl. 279—74.)



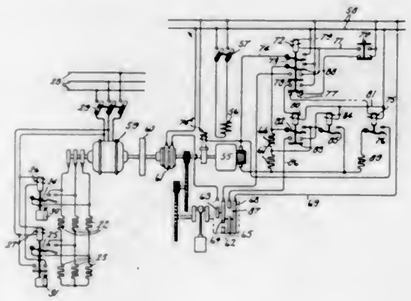
1. An adapter of the class described comprising a tubular body having a bore at one end thereof which is angular in cross sectional form and adapted to receive the angular shank of a tool mounted therein to key the tool against rotary movement with respect thereto, and other means arranged to the angular bore of the adapter cooperating with a tool supported therein to key the tool against longitudinal movement with respect thereto.

1,862,353. DISPLAY DEVICE. JAMES F. ALLISON, Providence, R. I., assignor to Freeman-Daughaday Company, a Corporation of Massachusetts. Filed Nov. 19, 1930. Serial No. 496,707. 10 Claims. (Cl. 260—79.)



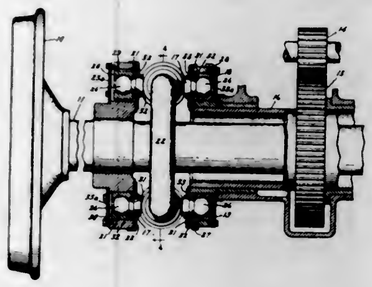
1. A display device formed of sheet stock comprising a base portion and a portion overlying said base and secured to the base at its upper edge to extend over the front face thereof, said overlying portion being shaped to simulate a collar and necktie, and means permitting mounting a collar holder thereon.

1,862,354. MOTOR CONTROL SYSTEM. HARRY A. WINNE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 28, 1930. Serial No. 491,806. 6 Claims. (Cl. 172—239.)



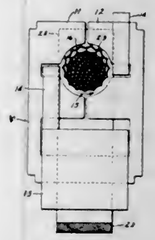
1. The combination in a motor control system of a main driving motor, a secondary driving motor, an inertia device driven by said main driving motor, means for connecting said motors together and means driven by said secondary driving motor for controlling the operation of said connecting means.

1,862,355. FLEXIBLE COUPLING. ROBERT G. ANDERSON, Harborcreek, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 11, 1930. Serial No. 474,386. 4 Claims. (Cl. 64—97.)



1. A flexible coupling comprising two rotatable elements, means including members extending axially of said elements and a link pivotally connecting said members together intermediate the ends thereof for transmitting torque between said elements.

1,862,356. ELECTRIC MOTOR. HENRY E. WARREN, Ashland, Mass., assignor to Warren Telechron Company, Ashland, Mass., a Corporation of Maine. Filed July 14, 1930. Serial No. 467,743. 8 Claims. (Cl. 172—275.)

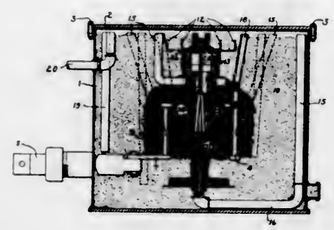


1. An electric motor having a field element provided with an air gap and means for producing a bipolar rotating magnetic field in said air gap, a polarized rotor member in said air gap, a stationary retaining member for the rotor member centrally located with respect to the axis of rotation of the rotating magnetic field about which said rotor is permitted to gyrate in synchronism with said field, a shaft upon which said rotor member is mounted, a universal bearing for said shaft at a point removed from the rotor member, and a drive gear on said shaft closely adjacent to said bearing.

1,862,357. MAGNETIC MATERIAL. WILLIAM E. RUDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 11, 1930. Serial No. 460,549. 9 Claims. (Cl. 175—21.)

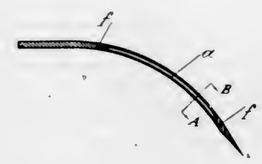
1. The method of making a nickel iron magnetic alloy which comprises melting the materials comprising the alloy, rolling the alloy into sheets, annealing the sheets at a temperature between about 900° C. and 1100° C. and cooling the sheets to about 600° C. at a rate greater than 1½° per minute but less than 100° C. per minute.

1,862,358. METHOD AND APPARATUS FOR FUSING SILICA AND THE LIKE. PHILIP K. DEVERS, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 19, 1930. Serial No. 453,515. 9 Claims. (Cl. 49—78.1.)



1. The method of producing vitreous silica products from raw silica which consists in subjecting a mass of silica to fusion and venting gases through conduits projecting into the interior of said mass.

1,862,359. SHOE SHANK STIFFENER. SALVATORE FERRAGAMO, Florence, Italy. Filed May 9, 1930, Serial No. 450,919, and in Italy July 9, 1929. 4 Claims. (Cl. 36—76.)

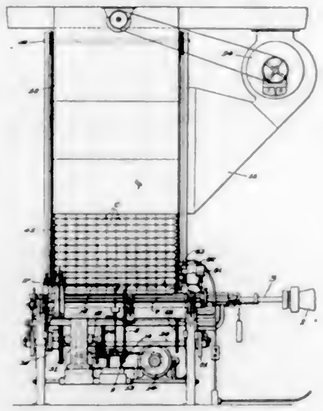


1. A reenforced arch for footwear, comprising a leather layer provided with an internal cavity, the outer walls of which are tapered towards the center line on one face of the layer, said center line coinciding with a slit to provide access into the cavity, and an arched rigid reenforcing member entirely encased in said cavity and comprising a strip of metal angular in transverse section to rest on the tapered sides of the cavity and being flat at the ends with upturned teeth penetrating and clinching the leather layer.

1,862,360. SOAP CUTTING MACHINE. HARRY P. FORTÉ, Newton, Mass., assignor to Lever Brothers Company, Cambridge, Mass., a Corporation of Maine. Filed Dec. 14, 1929. Serial No. 414,035. 25 Claims. (Cl. 25—106.)

1. In a machine cutting soap issuing from a plodder, the combination of a support for receiving a strip of soap as it is extruded from the plodder, means for cutting said strip, a reciprocating plunger for pushing said strip off said support, a second support for receiving said strip, a

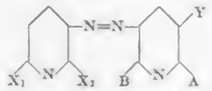
second plunger for pushing said strip across the surface of said second support, and mechanism for operating said



second plunger including means for maintaining said operation in a definite time relationship to the operation of the first plunger.

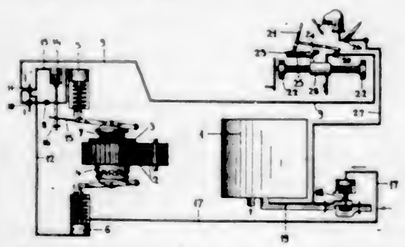
1,862,361. COMPOUNDS OF HETEROCYCLIC AZO DERIVATIVES AND PROCESS OF MAKING THEM. MAX DOHAN, Berlin-Charlottenburg, and PAUL DIEDRICH, Berlin-Neufinkenkrug, Germany, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Filed Dec. 3, 1929, Serial No. 411,385, and in Germany Dec. 11, 1928. 10 Claims. (Cl. 260—42.)

1. As new products heterocyclic azocompounds of the formula:



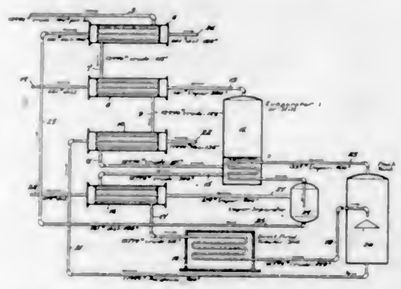
wherein A is a hydrogen atom or the amino-group, B a hydrogen atom or the hydroxy-group or the amino, or a monoacylated amino-group, Y a hydrogen atom or the amino-group or a halogen atom, X_1 a hydrogen atom or a halogen atom or the hydroxy-or alkoxygroup or a monoacylated or non-acylated aminogroup, and X_2 hydrogen or an alkoxygroup, which products are dark-coloured substances and form with mineral acids water soluble salts.

1,862,362. DEVICE FOR STARTING AUXILIARY ENGINES FOR LOCOMOTIVES. LADISLAV HLADIK, Pilsen, Czechoslovakia, assignor to Limited Company, formerly The Skoda Works, Pizen, Prague, Czechoslovakia, a Corporation of Czechoslovakia. Filed Apr. 8, 1929, Serial No. 353,274, and in Czechoslovakia Apr. 19, 1928. 5 Claims. (Cl. 105—48.)



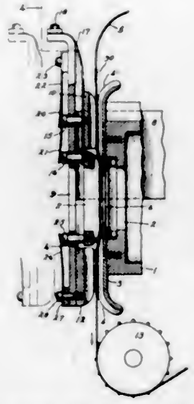
1. In a locomotive or similar vehicle, the combination of an auxiliary engine, with a supporting axle of said locomotive, a pair of clutches or couplings interposed between said auxiliary engine and said supporting axle, one of said clutches or couplings consisting of a friction-clutch and the other of a claw-coupling, mechanism for operating said friction clutch, when starting said auxiliary engine to come up to a speed which is approximately equal to the speed of said supporting axle during travel of said locomotive, and further mechanism for throwing-in said claw coupling at a time when said two speeds are approximately equal.

1,862,363. PETROLEUM DISTILLATION SYSTEM. HARLAN W. HOW, Warren, Pa., assignor to Struthers Wells-Titusville Corporation, Warren, Pa., a Corporation of Maryland. Filed July 11, 1929. Serial No. 377,541. 5 Claims. (Cl. 196—106.)



5. In a fractional distillation system, an evaporator, a high boiling point still, means for heating the liquid in said still, means for conducting the liquid to be fractionated through said evaporator and thence through said still, means for heating said evaporator through heat derived from the distillate from said still to effect evaporation of the lower boiling point fraction in said evaporator, means for separating the uncondensed vapor and condensate from the distillate from said still subsequent to its passage through said evaporator and means for raising the temperature of the liquid before entering said still through heat derived from said uncondensed vapor.

1,862,364. FILM GATE FOR MOTION PICTURE MACHINES. CHARLES L. HEISLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1929. Serial No. 350,403. 2 Claims. (Cl. 88—17.)



1. In a motion picture machine, a film gate comprising an aperture plate having guide runners thereon, a movable supporting member, a flexible strip secured at one end to

said member, a plurality of longitudinally alined runners adapted to press a film against the guide runners of said plate and means connecting the longitudinally alined runners with said strip, the runners engaging the strip at their adjacent ends whereby the raising of one runner by the passage thereunder of a splice in the film initiates the raising of the runner next following.

2. In a motion picture machine, an aperture plate having film guide runners thereon arranged in sections, the section opposite the aperture in said plate being offset at right angles to the plate with respect to the adjoining section, and a shoe having resiliently mounted runners comprising relatively offset sections arranged to cooperate with the respective sections of said guide runners to cause the film to be given a slight kink in passing from one section to the next.

1,862,365. MAGNETIC ALLOYS AND METHOD OF MAKING THE SAME. WILLIAM E. RUDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 6, 1928. Serial No. 290,889. 16 Claims. (Cl. 175—21.)

1. The method of making a nickel-iron alloy which comprises melting the materials comprising the alloy, rolling the alloy into sheets and annealing the sheets at a temperature not materially less than 1200° C.

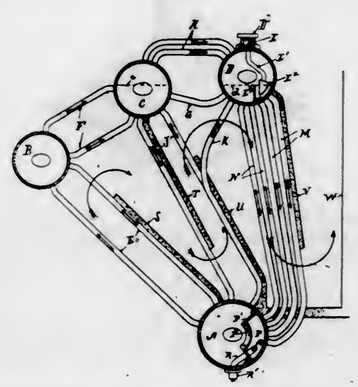
1,862,366. MARKING QUARTZ. SYLVESTER BOYER, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 2, 1926. Serial No. 91,843. 3 Claims. (Cl. 73—52.)



1. A thermometer formed from fused quartz and having vitreous contrasting markings fused thereon, said markings being composed of material which is stable at a temperature up to and in excess of 500° C.

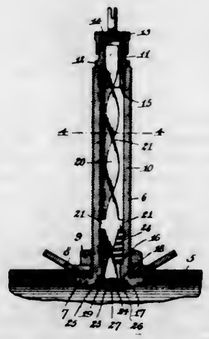
1,862,367. STEAM GENERATOR. LAWRENCE E. CONNELLY, Cleveland, Ohio, assignor, by mesne assignments, to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 17, 1924, Serial No. 750,326. Renewed Jan. 6, 1930. 3 Claims. (Cl. 122—302.)

1. In a steam generator, a mud-drum, a water drum above and in front of the mud-drum, a bank of up-flow water tubes connecting said mud-drum and water-drum, a steam liberating drum above and to the rear of said water drum, up-flow water tubes connecting said water drum and steam liberating drum, a bank of down-flow water tubes connecting said steam liberating drum and mud-drum, a steam and feed water receiving drum at the rear of said steam liberating drum, a bank of steam conveying tubes connecting the upper portions of said steam liberating drum and feed-water receiving drum, down-flow and up-flow feed-water tubes connecting said feed-water drum and mud-drum, a water-tight chamber secured to the shell of and within said mud-drum enclosing the lower ends of said down-flow and up-flow feed-water tubes, a vertical water-tight division plate secured to the lower portion of the shell of said feed-water drum



between said down-flow and up-flow feed-water tubes, means to supply feed-water to the down-flow side to said plate, and a series of down-flow tubes connecting said feed-water drum adjacent to said up-flow feed-water tubes and said mud-drum outside of said chamber.

1,862,368. AIR VALVE. JOHN S. CUTHBERTSON, Buffalo, N. Y., assignor, by direct and mesne assignments, of two-thirds to Frank H. Deagan, Buffalo, N. Y., and one-third to John H. Hifler, Tonawanda, N. Y. Filed Dec. 17, 1929. Serial No. 414,793. 2 Claims. (Cl. 152—12.)

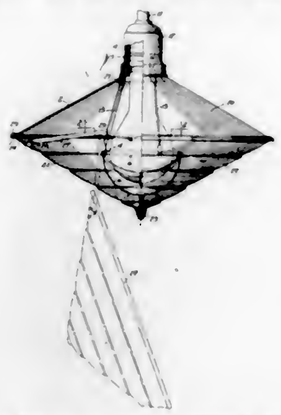


2. An air valve, comprising an elongated casing having a valve seat at its inner end, a valve bearing against said seat, and a valve stem extending from said valve into said casing, said valve stem being formed of a flat twisted metallic strip provided at opposite edges with oppositely-extending ears.

1,862,369. INDIRECT LIGHTING FIXTURE. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Aug. 8, 1930. Serial No. 473,812. 7 Claims. (Cl. 240—78.)

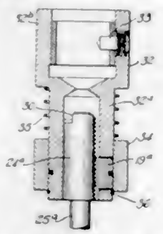
2. An enclosed indirect lighting fixture comprising a downwardly opening lamp socket, a lamp bulb in the socket, a socket cover, a glass cover plate secured to the socket cover, a frame secured to the socket cover and extending downwardly about the lamp bulb, a reflector

of substantially the same outside diameter as the cover plate, means for detachably supporting the reflector from the frame with the edges of the reflector and cover plate



together, and suspension means connecting the frame and reflector to allow the reflector to hang from the frame when the first means is disconnected.

1,862,370. CHUCK DEVICE. GEORGE W. EMRICK, Brooklyn, N. Y. Filed Jan. 28, 1931. Serial No. 511,779. 5 Claims. (Cl. 279—74.)



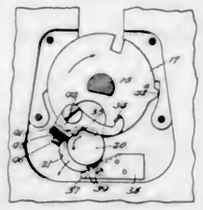
1. An adjustable tool supporting chuck of the class described comprising a chuck body having a tool receiving chamber at one end thereof, the tool insertable into said chamber including a plurality of longitudinally spaced elements arranged in close proximity to each other, a member mounted in the chuck body and movable radially with respect to and opening into the chamber thereof, the inner surface of said member having a plurality of elements spaced longitudinally of the chamber adapted to engage a plurality of the elements on said tool in adjustably supporting the tool in the chuck body, and means movably supported on the chuck body cooperating with said member for retaining the same in firm engagement with the tool supported therein.

1,862,371. CONTINUOUS PICKLING APPARATUS. RAY M. FENTON, Youngstown, Ohio, assignor to The Newton Steel Company, Youngstown, Ohio, a Corporation of Ohio. Filed Aug. 9, 1930. Serial No. 474,265. 9 Claims. (Cl. 266—9.)



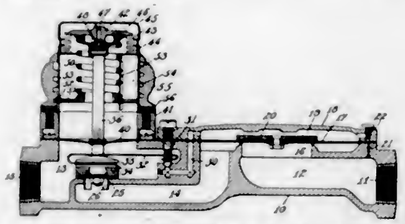
7. In apparatus of the class described, the combination with a tank for sheet treating fluid, of means mounted over said tank for conveying metal sheets through said treating fluid, said means comprising spaced housings extending transversely of said tank, endless conveyor chains arranged in overlying relationship in said tank, means associated with said housings for rotatably supporting said chains, and means including rotatable air tight cylinders for movably supporting submerged portions of one of said conveyor chains intermediately of said housings.

1,862,372. COIN CONTROLLED MECHANISM. MYRON H. RICHARDSON, Chicago, Ill., assignor to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 4, 1929. Serial No. 404,558. 16 Claims. (Cl. 194—63.)



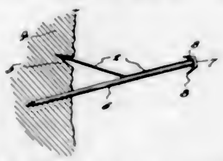
8. Coin controlled mechanism embodying a passageway including a member adapted to be moved by a coin as the coin passes therethrough, means for moving the coin through the passageway, and stationary means for causing the coin to rotate about its axis as it passes through the mechanism.

1,862,373. SNAP ACTION VALVE. PAUL F. SHIVERS, Wabash, Ind., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed June 17, 1931. Serial No. 544,979. 8 Claims. (Cl. 236—80.)



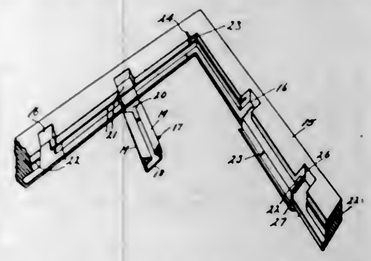
1. A valve structure comprising a main body having an inlet and an outlet, an induction flow-controlling element and an eduction flow-controlling element interposed in the order named between the inlet and the outlet, a pressure chamber having bleed communication with the inlet and so arranged that accumulated pressure therein will move the induction flow-controlling element to flow-stopping position, a bleed passage leading from said pressure chamber, and a bleed valve connected to and moved by the eduction flow-controlling member to close said last-mentioned bleed passage when the eduction flow-controlling member is closely adjacent its minimum-flow position.

1,862,374. TURPENTINE GUTTER AND SECURING MEANS. CLAUDE A. TOMPKINS, Jacksonville, Fla. Filed Nov. 18, 1930. Serial No. 496,481. 2 Claims. (Cl. 47—11.)



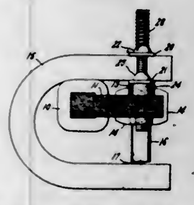
2. A nail for securing a sap gutter to a tree comprising an elongated shank having a head at one end, the head having opposed portions reduced in width to form tapered end portions and the said end portions being bent to form tapered tongues diverging from opposite sides of the shank whereby a selected tongue may be engaged over an outer side edge of a gutter and secure the gutter to a tree with the gutter resting upon the shank of the nail.

1,862,375. INTERCHANGEABLE LETTER SIGN. WILLI HERBERT TROSTEL, Philadelphia, Pa. Filed Mar. 14, 1931. Serial No. 522,650. 4 Claims. (Cl. 40—140.)



1. An interchangeable letter sign comprising a frame; the rails of which have notches formed therein; attaching bars; the ends of which are adapted to fit within said notches; wing holder strips carrying said bars, means for securing the bars within the notches.

1,862,376. ELECTRIC MOTOR. HENRY E. WARREN, Ashland, Mass., assignor to Warren Telechron Company, Ashland, Mass., a Corporation of Maine. Filed July 14, 1930. Serial No. 467,742. 18 Claims. (Cl. 172—275.)

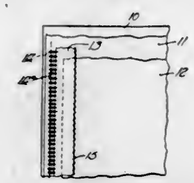


1. An electric motor comprising a field member having an air gap and means for producing a rotating magnetic field in said air gap, a polarized armature member in said air gap so mounted and of such dimensions that it is permitted to gyrate in said air gap with said rotating magnetic field, a terminal shaft for said motor, and means for causing the gyrating motion of said armature to rotate said shaft at a slower speed than the speed of the rotating magnetic field.

12. In an alternating current motor of the type in which a synchronous relation is maintained between a bi-polar rotating magnetic field and a movable field and a movable magnetic armature on which the field operates, the method of reducing the synchronous speed of rotation which consists in magnetizing the armature element so as to produce therein only one pole of constant magnetic polarity, permitting said armature member to gyrate in synchronism with the rotating magnetic field and converting such gyrating movement into a sub-synchronous rotary movement.

1,862,377. GARMENT EDGE. ARTHUR J. C. HARPER, Chicago, Ill. Filed Oct. 26, 1929. Serial No. 402,579. 3 Claims. (Cl. 2—275.)

1. A garment edge comprising margins of oppositely disposed materials stitched together and to an interior anchor member provided with attaching means extending along one edge uniformly thinner throughout and more flexible than said anchor member, said margins being folded between said materials so that the margins are superposed one upon the other and upon said anchor



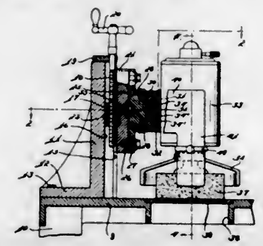
member, said anchor member being attached by said attaching means to the stitch securing the margins together, whereby the anchor member lies unfolded within the edge.

1,862,378. SKID CHAIN APPLICATOR. ROYAL T. HOWARD, Represa, Calif. Filed Mar. 10, 1930. Serial No. 434,528. 5 Claims. (Cl. 152—14.)



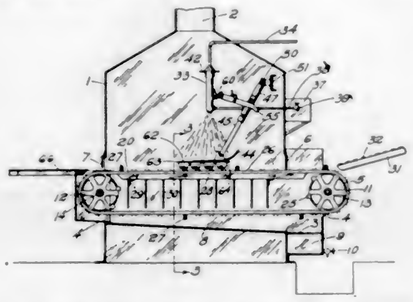
1. An antiskid chain applicator, comprising in combination a trough releasably secured to, and resiliently urged against, the bottom of the running board of a vehicle and swingable longitudinally thereof when released, releasing means for said securing means, an anti-skid chain freely disposed in open arrangement in said trough, said chain being provided with cooperative locking yokes at the opposite ends thereof adapted to engage a vehicle tire, and restraining means resiliently secured to one of said locking yokes for tensioning said chain during application to the tire and engagement of the locking yokes, release of said restraining means and removal of said chain permitting said trough to swing against and be automatically secured to, the bottom of said running board.

1,862,379. GRINDING MACHINE. HERMAN F. KOESTLIN, Detroit, Mich. Filed Mar. 19, 1928. Serial No. 262,622. 1 Claim. (Cl. 51—166.)



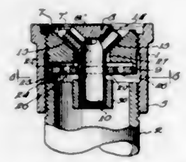
In a grinding machine of the class described, a supporting bed, a supporting standard, a vertically movable slide mounted on said standard, means to move said slide vertically, a head pivotally secured to said slide and adjustable about a horizontal axis, a driving means slidably carried by said head, means to move said driving means horizontally relative to said head, a grinding wheel mounted on and rotatable by said driving means, said grinding wheel lying in a horizontal plane, a bracket secured to and projecting outwardly from said head, a dressing tool carried by said bracket, and means for moving said dressing tool vertically relative to said bracket and grinding wheel.

1,862,380. AUTOMATIC PAN SPRAYING MACHINE. SVEN P. LARSON, Berkeley, Calif., assignor to Larson Machine Company, Ltd., a Corporation of California. Filed Dec. 9, 1929. Serial No. 412,704. 3 Claims. (Cl. 91—45.)



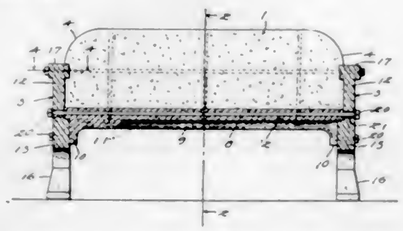
1. In combination with a cabinet having disposed therethrough a conveyor adapted to transport containers through said cabinet and driving means for said conveyor, a shoe pivotally mounted on a pivotally hung arm, means for adjusting the vertical position of said shoe relative to said conveyor, a cam adjustably mounted on said arm and cooperating with a lever for operating an actuating valve or release device on a spraying device.

1,862,381. SPRINKLER NOZZLE. AXEL R. LE MOON, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,970. 5 Claims. (Cl. 299—69.)



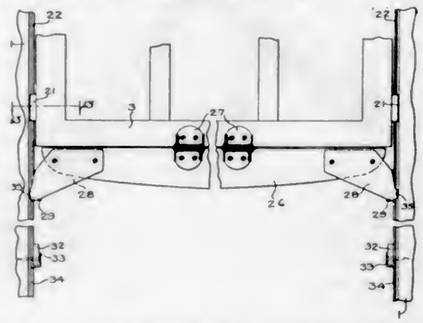
3. A sprinkler nozzle comprising a rotary multiple stream directing member having a plurality of concentric rows of outlet apertures, said member having a tubular shank and a conoidal head containing divergent passageways fed through said shank and said head having codirectional inclined flutings on its conoidal face.

1,862,382. BENCH. JAMES C. MATHIS, Ada, Okla. Filed Dec. 16, 1930. Serial No. 502,788. 3 Claims. (Cl. 155—196.)



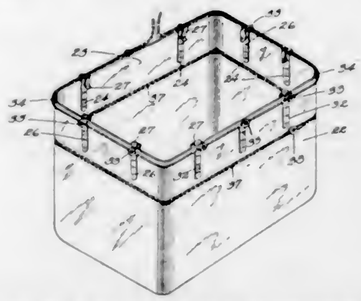
1. A bench structure of molded material made up of individually cast units, comprising a pair of end units each formed to provide an upper and lower portion, a flanged formed transversely of the inner face of each end unit at the point of joinder between the upper and lower portions, a pocket formed in the inner face of the lower portion of each unit and opening upwardly through the adjacent flange, a seat unit disposed between the end units and resting at its ends upon the adjacent flanges, a reinforcing rib extending longitudinally of the under surface of the seat unit and having its ends located in said pockets, a back unit disposed between the end units and resting upon the seat unit, and securing elements connecting the units together.

1,862,383. CHILD'S KNOCKDOWN CRIB CONSTRUCTION. EDGAR MAYETTE, Rochester, N. Y., assignor to Kennedy-McCandless Corporation, Rochester, N. Y., a Corporation of New York. Filed Feb. 20, 1929. Serial No. 341,389. 5 Claims. (Cl. 5—100.)



1. In a knock-down crib, the combination with ends having vertically disposed tracks attached thereto and facing each other, of a side wall provided with shoes adapted to embrace and slide on the tracks and freely detachable therefrom by an upward sliding movement thereon, a controlling rail pivoted at the lower edge of said side wall and adapted to swing inwardly thereof, and locking plates at the ends of the controlling rail having dogs adapted to lock the side wall to the tracks, the latter having recesses to receive the dogs.

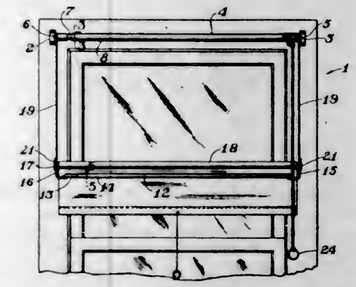
1,862,384. BAG FOR COTTON PICKING MACHINES OR THE LIKE. JOHN R. MILLAR, Oakland, Calif. Filed July 3, 1929. Serial No. 375,673. 4 Claims. (Cl. 150—1.)



4. A bag for cotton picking machines comprising a substantially rectangular form of pliable material, suspending hooks and draw-string eyes of rigid material disposed on opposite sides of said pliable material and secured together through said material.

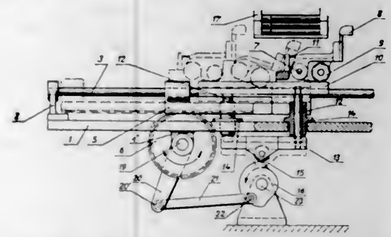
1,862,385. SHADE SUPPORTING STRUCTURE. WORTHIE W. MOREY, Columbus, Ohio. Filed July 18, 1930. Serial No. 468,839. 3 Claims. (Cl. 156—27.)

1. A window shade supporting structure, comprising an adjustable bar stationarily secured to a window casing, an adjustable shade carrier arranged below said bar, flexible means connecting the ends of said carrier and the ends of said bar, said flexible means passing through said bar and outwardly therefrom through one end thereof, a member positioned within one end of said bar and having a horizontally arranged diverging groove formed therein for guiding the flexible means into and out of said bar, a horizontally disposed clamping plate slidably positioned in said member below said groove, a vertical guiding plate



attached to said member in front of said clamping plate, a depending arm arranged exteriorly of said member and connected for movement with said plate, and a laterally bent extension formed with said arm having an opening therein through which the free ends of said flexible means extend, whereby upon a sideward movement of said latter means said arm will likewise be moved to effect the movement of said plate into clamping engagement with said flexible means and said guiding plate.

1,862,386. APPARATUS FOR REMOVING ARTICLES FROM A PILE. JOHANNES NEFF, Dresden, Germany, assignor to Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Filed Dec. 19, 1930, Serial No. 503,480, and in Germany Aug. 22, 1930. 2 Claims. (Cl. 214—8.5.)



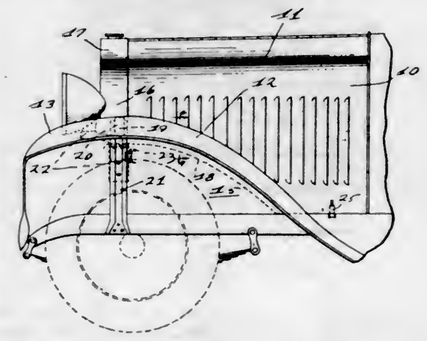
1. Apparatus for removing articles from a pile comprising a ram, a reciprocally movable carriage to which said ram is pivoted and control members that engage said ram and swing it to and fro relatively to said carriage, said control members including a reciprocally movable rail and a roller on said ram adapted to travel over said rail.

1,862,387. MACHINE FOR MAKING FIBER REED. GUSTAF E. NORDSTROM and JOHN E. MILLETT, Gardner, Mass., assignors to American Fibre Corporation, Gardner, Mass., a Corporation of Massachusetts. Filed Apr. 27, 1928. Serial No. 273,413. 15 Claims. (Cl. 154—1.)



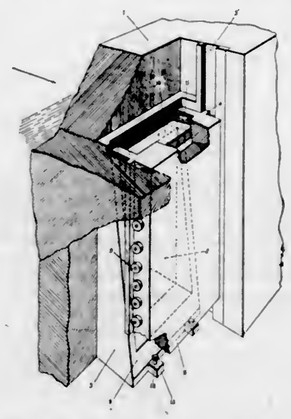
1. In a fiber reed machine, having means to supply a fiber strip, means to prepare said strip for subsequent gluing and folding, the combination with a folding device comprising an undercut stationary member effective to form a first fold in a glued fiber strip, and a second stationary member spaced longitudinally from said first member and effective to form a second fold in said fiber strip, said second folding member having a guide finger depending therefrom and effective to close the first fold as it approaches folding position in said second member.

1,862,388. FENDER AND HOOD CONSTRUCTION FOR MOTOR VEHICLES. IVAN ORNBERG, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Aug. 20, 1928. Serial No. 300,925. 4 Claims. (Cl. 280—152.)



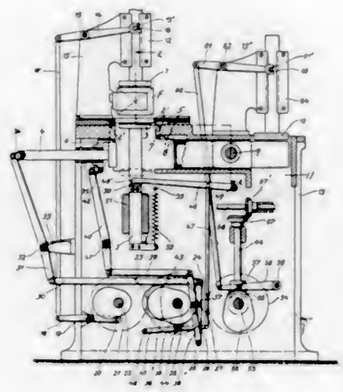
1. A vehicle having in combination, a bood, a radiator, and a fender having a lateral portion provided at its inner edge with a downwardly extending vertical flange engaging one side of the radiator, said flange having a portion in advance of radiator forming an apron and having another portion in rear of the radiator forming a continuation of the hood.

1,862,389. SLUICE GATE. ERWIN B. PHILIPS, Kenton, Ohio, assignor to Philips and Davis, Inc., Kenton, Ohio, a Corporation of Ohio. Filed May 16, 1928. Serial No. 278,206. 7 Claims. (Cl. 61—28.)



1. A sluice gate for reciprocation between open and closed position comprising a frame, sealing surfaces on said frame and inclined from the vertical, a shelf projecting from said frame adjacent the upper edges of said sealing surfaces, a gate, and projecting members on said gate having sealing surfaces for cooperating with the sealing surfaces on said frame.

1,862,390. METHOD OF FORMING BOXES OR BOX PARTS WITH CURVED BOTTOMS. JOHANNES SCHMIEDEL, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen Fabrik J. C. Müller & Co., Dresden, Germany. Filed Feb. 8, 1930, Serial No. 426,887, and in Germany Feb. 26, 1929. 3 Claims. (Cl. 93—51.)



1. Apparatus for forming boxes or box parts with curved bottoms including a forming block said forming block formed with a curved portion, a feed channel serving to receive the forming block provided with the folded box, said feed channel formed with an opening, and a shaped die movable transversely of the longitudinal direction of the channel and adapted to press the box around the said curved portion of the forming block.

1,862,391. METAL CLIP FOR PLASTER BOARD OR LATH. ROY J. TAYLOR, Ashtabula, Ohio, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio, a Corporation of Ohio. Filed June 13, 1931. Serial No. 544,145. 2 Claims. (Cl. 72—118.)

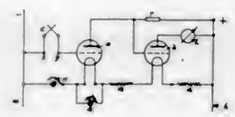


1. A clip for plaster boards and the like comprising a plate having an arm stuck up therefrom at a right angle, the end of the arm having a laterally projecting hook portion in the same plane as the arm to engage behind a stud or the like, the end of the arm also having oppositely directed flanges to engage the sides of panels on the side of the stud opposite to the plate.

1,862,392. PROCESS FOR CLEANING SPRAY BOOTHS. GREGOR S. AFFLECK and AXEL S. ANDERSON, Detroit, Mich. Filed Jan. 24, 1927. Serial No. 163,301. 2 Claims. (Cl. 87—5.)

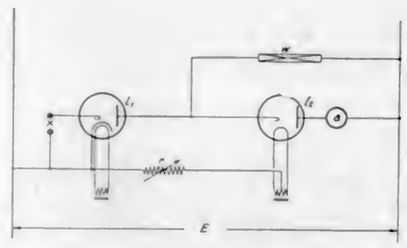
1. The process of removing paint and finish from the inner surface of spray booths consisting in applying, prior to the spraying operation, on the inner surface of said spray booths, a protective coating of water soluble material and removing said protective coating from said surface subsequent to the spraying operation by forcibly bringing water or steam into contact with said coating.

1,862,393. THERMIONIC AMPLIFYING CIRCUITS. ERICH ASCH, Berlin-Sudende, Germany, assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 24, 1928, Serial No. 314,768, and in Germany Nov. 10, 1927. 19 Claims. (Cl. 179—171.)



4. In an electrical system, a first thermionic tube having anode, cathode, and control electrodes; a second thermionic tube having anode, cathode, and control electrodes; a source of energy; a direct conductive connection from the anode of said first tube to the control electrode of said second tube; means including circuit connections for connecting the anode circuits of said tubes in parallel across said source of energy.

1,862,394. CONTINUOUS CURRENT AMPLIFIER. ERICH ASCH, Sudende, near Berlin, Germany, assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 3, 1930, Serial No. 418,311, and in Germany Jan. 8, 1929. 8 Claims. (Cl. 179—171.)

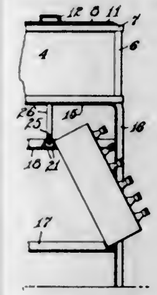


1. In a direct coupled electron tube cascade system comprising at least a first discharge tube, a second discharge tube, said tubes having filament, anode and control electrodes, a direct coupling connection from said first tube to the control electrode of said second tube, a source of operating current, said tubes being connected across said source in parallel, series resistors in the supply leads of said tubes for producing proper biasing potential of said second tube and means for maintaining the filament potential independent of the filament heating current.

1,862,395. BOTTLE REFRIGERATOR. CHESTER A. FRICK, Muncie, Ind., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed Feb. 2, 1929. Serial No. 337,038. 3 Claims. (Cl. 211—71.)

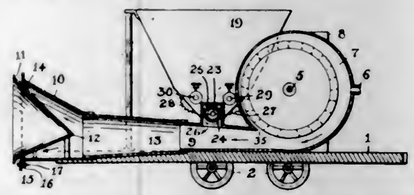
2. A stand for containers, comprising a pair of end members, each formed of a one-pieced member bent to form a horizontal bridge and a pair of legs connected thereto, top and bottom transversely extending braces extending between the legs, a V shaped channel member connecting

the bottom braces of the end members and located adjacent the legs, a top bracing member extending between the top transversely extending brace on each end member



at a point intermediate of the ends of the brace, to form a support for the upper end of a box, the bottom edge of which rests within said V shaped channel.

1,862,396. DUSTING MACHINE. THOMAS W. GRAY, JAMES LEWIS, and CHARLES B. LE BON, Sr., Library, Pa. Filed Dec. 8, 1924. Serial No. 754,635. 11 Claims. (Cl. 169—2.)



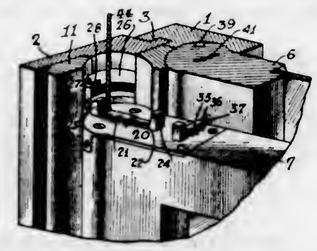
1. In a dust spraying machine, a frame, a motor mounted thereon, a blower of the continuously discharging type driven by said motor, an air discharge pipe leading from said blower and flared towards its discharge end, the arrangement of the pipe and blower being such as to create a partial vacuum area within said pipe during the flow of air, air passage restricting spreader means at the end of said discharge pipe, said means restricting the air passage insufficiently to destroy the partial vacuum area within said pipe, a dust hopper, and a dust connection from said hopper to the partial vacuum area of said pipe.

2. In a dust spraying machine, a frame, a motor thereon, a blower driven by said motor, an air discharge pipe leading from said blower, a wedge-shaped dust hopper, a feed conveyor lying in the thin bottom end of the hopper and discharging dust into the air pipe, a pair of agitating conveyors in parallel relation to said feed conveyor, and one of each being at one side and above the feed conveyor, and moving in the opposite direction and means for driving all of said conveyors.

8. In a dust spreading machine, a blower, a flared discharge pipe connected thereto and consisting of several sections, the last section being substantially D shaped, a spreader substantially conforming in shape to and positioned symmetrically in said last section, a hopper and a dust feeding connection between said hopper and said discharge pipe.

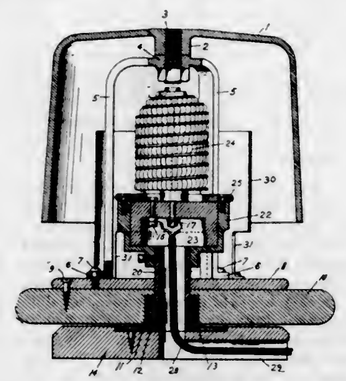
1,862,397. WINDOW CONSTRUCTION. PIERRE HAMELIN, Montreal, Quebec, Canada. Filed July 10, 1930. Serial No. 467,066. 10 Claims. (Cl. 20—46.)

1. In a window construction, a window frame, sashes vertically slidable therein, said sashes having rounded vertical ends receivable in arcuate grooves in said sashes, molding strips retaining said sashes, said strips being partially removable to permit one edge of each sash to be swung out of said frame, the remaining edge of each sash having a pivotal mounting in said frame, and latching



means carried by said sashes and slidably entering said frame to prevent total detachment of said sashes from said frame.

1,862,398. BLOCKING OF HATS. ALFRED HANDS, Annandale, Sydney, New South Wales, Australia. Filed Dec. 16, 1930, Serial No. 502,742, and in Australia Dec. 17, 1929. 1 Claim. (Cl. 223—21.1.)

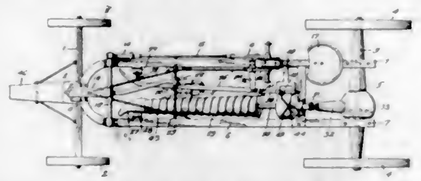


Apparatus for use in blocking hats, comprising, in combination, a base, a pillar perpendicular to said base, a block of electrically insulating material on said pillar, an electric heating element on said block, a pulley rotatable about said pillar, a spider frame supported on said pulley and located about said heating element, a hollow hat block detachably mounted on said frame and partly embracing the heating element, and an annular shield open at both ends, supported on said pulley and positioned about the heating element to minimize direct radiation and establish air circulation within the block.

1,862,399. AUTOMATIC BEET HARVESTER. JAMES JOSEPH HANNAH, Canon City, Colo. Filed Oct. 20, 1930. Serial No. 489,995. 1 Claim. (Cl. 55—9.)

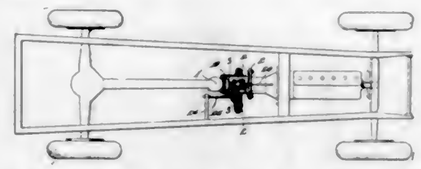
A beet harvester comprising front and rear axles, wheels carried thereby, a frame having its rear end rotatably supported from the rear axle, means for supporting the front end of the frame from the front axle for vertical movement, manually operated means for raising and lowering the front of the frame, a plow carried by the frame, means for adjusting the same vertically, an outwardly curved and forwardly tapered member supported from the frame and adapted to engage the ground, a tapered spirally grooved member having its front end rotatably arranged in said tapered member, said spiral member extending upwardly and rearwardly, a shaft connected with the rear end of said member, means for

driving the shaft from the rear axle, a bar supported from the frame and diverging from the spiral member and having its forward end curving outwardly, said spiral member and the bar forming conveying means for conveying the beets from the plow rearwardly by



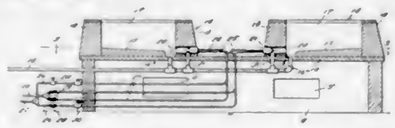
engagement of the tops of the beets by the grooved portions of the spiral member, a knife for severing the tops from the beets at the rear end of the spiral member and a cam member on the driven shaft for reciprocating the knife.

1,862,400. POWER TAKE-OFF MECHANISM FOR AUTOMOBILES. FRED P. HERMAN, McCamey, Tex. Filed Jan. 14, 1930. Serial No. 420,798. 3 Claims. (Cl. 74—7.)



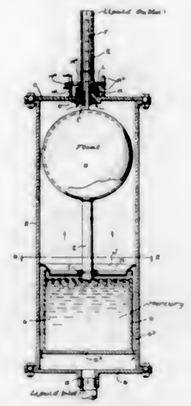
1. A power take-off apparatus for automobiles comprising a spline sleeve having a portion of its bore angular to fit the sliding gear shaft of an automobile, a shaft to fit and turn loosely in said sleeve, an internally toothed clutch member fixed to said shaft, another sleeve mounted to slide on and turn with said spline sleeve, a clutch member carried by said second sleeve to slide into and mesh with said first mentioned clutch member, another gear carried by said second sleeve, a power shaft having a gear fixed thereto and adapted to mesh with the second gear on the second sleeve when the latter is disengaged from the internally toothed cluth member thereby releasing the shaft on which said clutch member is mounted and connecting up the power take-off shaft with the sliding gear shaft.

1,862,401. OIL BURNER. ERNEST S. HOYT, Pepin, Wis. Filed Sept. 20, 1930. Serial No. 483,354. 3 Claims. (Cl. 158—28.)



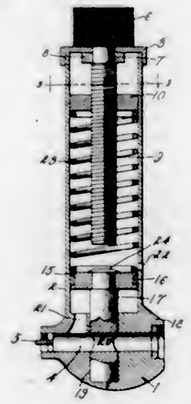
1. An oil burner of the class described comprising a hollow base having an opening therein for the admission of air, the top of the base having a pair of spaced elongated slots therein through which the air passes from the base, a fire box seated on the base and enclosing the slots, an elongated deflector block located in the fire box and placed between the slots, said block being of V-shape in cross section, said block having one end spaced from a wall of the box, said wall having an opening therein in alinement with the block, means for introducing a mixture of liquid fuel and air into said opening, and those walls of the fire box which are parallel to the block sloping upwardly and inwardly.

1,862,402. INDICATING LIQUID GRAVITOMETER. ALFRED W. HUBBELL, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed Dec. 10, 1930. Serial No. 503,575. 8 Claims. (Cl. 265—45.)



2. An indicating gravitometer comprising a closed casing having an inlet and an outlet, a float in the casing, a pool of mercury in the casing, a container in the casing for said pool, a stem depending from the float into the mercury pool and of materially less diameter than the diameter of the free surface of the pool, means actuated by the float for indicating specific gravity of a liquid flowing through said casing, and a deflector for causing liquid travelling through the casing to fall upon the surface of the mercury.

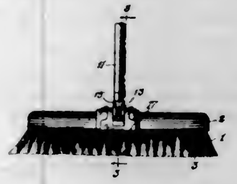
1,862,403. AIR GAUGE. ORA W. INGRAM, Cleveland, Ohio. Filed Dec. 14, 1928. Serial No. 326,101. 1 Claim. (Cl. 50—8.)



An air gauge of the type described, comprising a substantially T-shaped casting which is round in cross section, and which has its longitudinal arm slotted longitudinally and provided with a bore and the lateral arm being provided with a transverse passage, the wall between the bore and passage having a round opening therethrough which extends into the lower wall provided by the passage, and said division wall being further provided with a port that establishes a communication between the bore and passage, a piston in the bore having a stem extending through the central opening thereof and

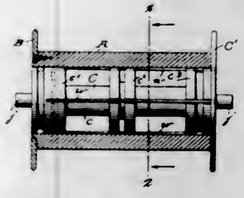
entering the opening in the lateral arm of the casting, and said stem having a transverse opening to register with the passage in said transverse arm, a bolt having a milled head revoluble on the outer end of the central longitudinal arm and held from movement other than turning thereon, a nut which is round in plan and which is received in the bore of the longitudinal arm and through which the bolt is screwed, said nut having a round extension that is received through the longitudinal opening in the said arm of the casting provided on its sides, adjacent to its outer end, with oppositely disposed indicator fingers, and the casting, to the opposite side of the longitudinal slot having inscribed thereon marks for indicating pounds pressure of air received against the piston, a coil spring exerting a pressure between the nut and the piston, and the said longitudinal arm of the casting having an air outlet port disposed above the piston when the latter is in normal position.

1,862,404. BRUSH HOLDER. WADE H. JAYNE, New York, N. Y. Filed Mar. 19, 1931. Serial No. 523,861. 5 Claims. (Cl. 15—146.)



1. A brush holder for a brush having a wood back comprising a single piece metallic body adapted to fit over said back, said body being formed with inturned flanges at the front and rear edges positioned to extend beneath said back, each of said flanges having an outwrdly extending portion acting as a scraper and means for connecting a handle to said body.

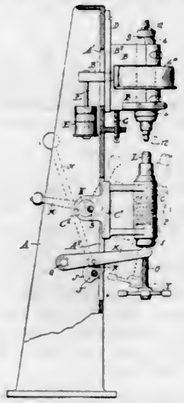
1,862,405. SPOOL FOR YARNS OR THREADS. HENRY JOHNSON, Coventry, England, assignor to The Viscose Company, Marcus Hook, Pa., a Corporation of Pennsylvania. Filed Sept. 23, 1930. Serial No. 483,916. 5 Claims. (Cl. 242—124.)



1. A spool for yarn or thread, consisting of two parts, one a tubular part carrying a winding retaining flange at one end in combination with a removable core to fit therein, said core having a corresponding flange at the other end, journals at both ends, and yielding means retaining said core in place.

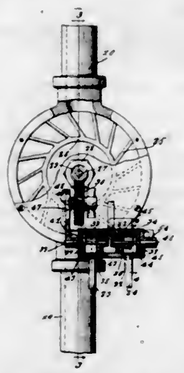
1,862,406. BUTTON BLANK CUTTING MACHINE. ALBERT F. KEFFLO, Muscatine, Iowa, assignor to Automatic Pearl Button Co., Muscatine, Iowa, a Corporation of Iowa. Filed May 29, 1930. Serial No. 457,024. 7 Claims. (Cl. 79—16.)

1. In a machine of the character specified; a support, a tail stock adapted to hold the work and pivotally attached to an eccentric rotatably mounted on said support, whereby the said tail stock will be pivoted into and rigidly held in operative position when the eccentric is rotated into one position, and the tail stock will be



tilted to permit ready removal and replacement of the work when the eccentric is rotated into another position, and manually operable means for shifting said eccentric.

1,862,407. MULTIPLE VALVE FOR PUMPING SYSTEMS. HENRY M. KEITH, Harrisburg, Ill. Filed Jan. 12, 1931. Serial No. 508,290. 1 Claim. (Cl. 103—240.)



A pumping system multiple valve comprising a cylinder having partition walls therein, said walls dividing the interior of the cylinder into intermediate and end chambers, said partition walls having aligned ports, the end walls of the cylinder having ports, air pipes connected with the intermediate and end chambers through the sides of the cylinder, shafts journalled in the ends of the cylinder and extending across the end chambers and entering the intermediate chambers, discs mounted between the inner ends of said shafts and having ports adapted to register with the ports of the partition walls, other discs located in the end chambers and mounted upon the shaft and having port adapted to register with the port in the ends of the cylinder and means for rocking the shafts intermittently.

1,862,408. NONSKID UNIT. JOSEPH J. KRALY and CHARLES KRALY, Pittsburgh, Pa. Filed Jan. 29, 1930. Serial No. 424,389. 1 Claim. (Cl. 152—14.)

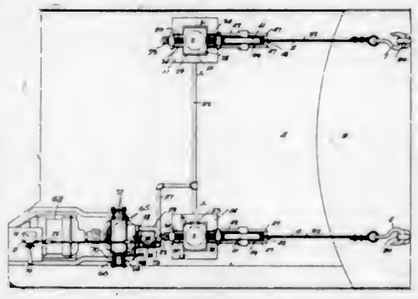
A non-skid unit comprising an odd number of flat members, links connecting the same, a lining strip extending

across the inner faces of the members and links, cleats formed only on the member at the median of the series of said members and securing the lining therewith, and outer substantially V-shaped flat chain attaching devices



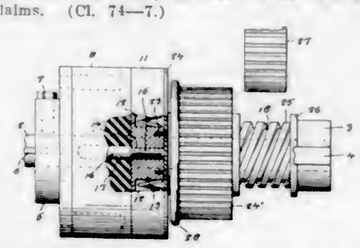
at their smaller ends connected with the outermost members and overlying the ends of said lining and adapted at their opposite ends for two-point connection with side chains.

1,862,409. MOORING APPARATUS. ROBERT C. LAMOND, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 6, 1925. Serial No. 28,344. 6 Claims. (Cl. 60—52.)



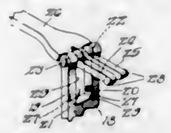
1. A mooring device comprising a standard having longitudinal elements constituting guides, a working cylinder at the bottom of said standard, a piston in the cylinder and a piston rod extending upwardly between said guides, a crosshead at the upper end of said rod slidably interlocked with the guide elements, a sheave carried by the crosshead, a bracket pivotally mounted at the lower end of the standard for transverse oscillation, a sheave carried thereby, fluid-pressure mechanism for actuating the piston, a mooring cable fixed at one end adjacent the lower end of the standard and extending in successive passes over and under the first and second named sheaves respectively, whereby by actuation of the piston the free end of the cable may be extended and subsequently retracted transversely from and toward the standard.

1,862,410. STARTING DEVICE. WILLIAM LINGO, Pasadena, Calif. Filed May 4, 1931. Serial No. 534,997. 4 Claims. (Cl. 74—7.)



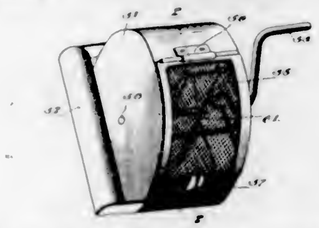
1. A starting device including a shaft of a starting motor, a feed sleeve journalled on the shaft, a starter pinion threaded to said sleeve and moved endwise by the rotation thereof to engage the teeth of a fly wheel of an engine, a driving plate secured to the shaft, a cushion disk mounted on the shaft and secured to the driving plate, and a yieldable driving means between the cushion disk and the sleeve.

1,862,411. ELECTRIC IRON ATTACHMENT. WILLIAM MACKENZIE, Jr., Chicago, Ill. Filed Mar. 2, 1931. Serial No. 519,539. 1 Claim. (Cl. 248—30.5.)



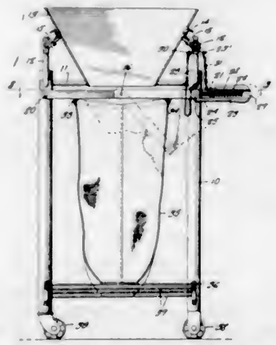
A holder for the flexible member for supplying the heating medium to an iron comprising a pair of spaced upright members for attachment to the iron each having a recess formed on its inner side, a flexible member holding element hingedly connected to said members, a pair of yieldable arms attached to said holding portion and movable between said members, and a projecting portion on each of said arms yieldably engageable in the recesses to hold the holding element and flexible member in upright position.

1,862,412. MIXER AND SIFTER. ANGUS D. MACLELLAN, Owensboro, Ky. Filed Nov. 8, 1929, Serial No. 405,813. Renewed Oct. 24, 1931. 11 Claims. (Cl. 209—283.)



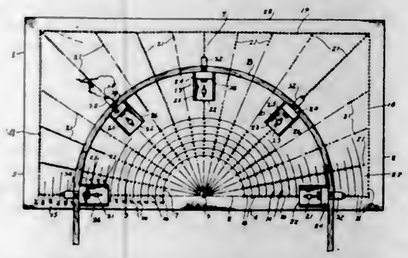
8. A combined mixer and sifter comprising a drum with an opening, a screen to cover the opening, a rotor operable in the drum having pans for lifting portions of the material charged into the drum and wings for agitating said material, and a flexible wire to scrape the inner periphery of the drum as well as the screen being attached to said wings.

1,862,413. SACK HOLDER. LEANDRO MALICAY, Westwood, Calif. Filed Jan. 27, 1930. Serial No. 423,808. 3 Claims. (Cl. 83—26.)



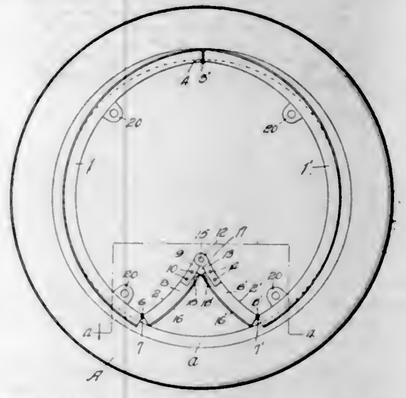
1. In a sack holder, a main supporting frame, a relatively movable frame, means to pivotally secure one end of the relatively movable frame to the main frame, means to detachably secure the other end of the relatively movable frame to the main frame, a stretcher frame carried by the movable frame, and a combined movable frame handle and stretcher frame latch to manipulate the movable frame and hold the stretcher frame in position.

1,862,414. WOOD BENDING EQUIPMENT. JAMES A. MCALISTER, Shreveport, La. Filed Jan. 9, 1931. Serial No. 507,685. 6 Claims. (Cl. 144—259.)



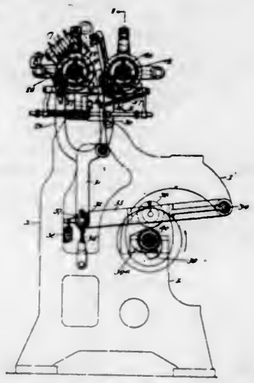
1. In woodbending apparatus, a clamping member comprising a base-plate, a standard extending perpendicularly from said base-plate and provided with slots spaced apart thereon, a clamping plate having lugs projecting from one face thereof and slidably engaging said slot, and means for moving said clamping plate toward and from said standard.

1,862,415. COLLAPSIBLE DEMOUNTABLE TIRE RIM. TONEY W. MORGAN, St. Louis, Mo., assignor of one-third to William Boston and one-third to David L. Goldberg, St. Louis, Mo. Filed Mar. 24, 1930. Serial No. 438,407. 1 Claim. (Cl. 301—32.)



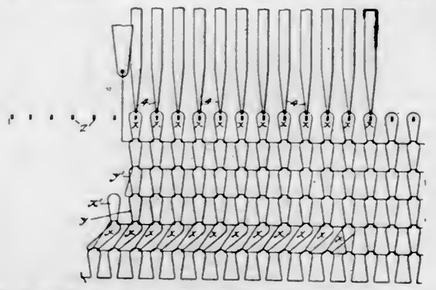
The combination of a demountable tire rim having two main sections hingedly connected and two auxiliary sections hingedly connected at one end to the adjoining ends of the main sections, of a straight flat hinge strap fixed to the flanges on each side of one of the auxiliary sections and extending beyond the inner end edge of the auxiliary section and provided at its extended end with a head having a central opening and a curved periphery, an off-set hinge strap fixed to the flanges on each side of the other auxiliary section and provided at its inner end edge with a head having a central opening and a curved periphery, a rivet receivable in the central openings of each pair of hinge straps acting as a hinge pin for each pair of hinge straps disposed on opposite sides of the auxiliary sections, the side flange of each auxiliary section adjacent the inner end edges of the auxiliary sections being cut away to provide recesses for the reception of the heads of the hinge straps, the corners of the auxiliary sections adjacent the inner ends of the hinge pins being curved for riding contact adjacent the inner ends of the hinge pins when collapsing the auxiliary sections and the angular corners of the flanges of the auxiliary sections formed remote from the curved corners by cutting cutaway portions of the flanges adapted to act as stops for the auxiliary sections when collapsing said sections to limit the collapsing movement thereof.

1,862,416. KNITTING. ERNST OSCAR NEBEL, Philadelphia, Pa. Filed June 5, 1930. Serial No. 459,340. 3 Claims. (Cl. 66—89.)



2. The combination in a full fashioned knitting machine of a set of needles, a set of narrowing points cooperative with said needles, a thread carrier co-operating with said needles, a narrowing screw for controlling said narrowing points, a narrowing screw for controlling said thread guide, a ratchet wheel on said thread guide controlling screw having teeth spaced a given distance apart, a ratchet wheel on said narrowing point controlling screw having teeth spaced apart substantially half the distance of those of the thread guide ratchet wheel, independent pawls co-operating respectively with said ratchet wheels, a common actuator for said pawls adapted to move the same synchronously a distance substantially equal to the larger spacing of the teeth of the thread guide controlling ratchet, and means for holding the pawl of the narrowing point ratchet out of engagement therewith for substantially one-half the movement of the common actuator.

1,862,417. KNITTING. ERNST OSCAR NEBEL, Hatboro, Pa. Original application filed June 5, 1930, Serial No. 459,340. Divided and this application filed Feb. 25, 1931. Serial No. 518,268. 2 Claims. (Cl. 66—183.)

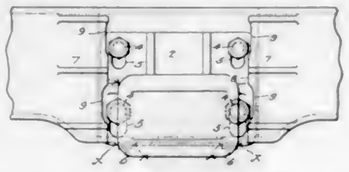


2. A method of producing full fashioned hosiery which comprises the knitting of successive courses of stitches and transferring a number of the stitches of certain of

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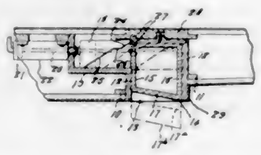
said courses laterally from the needles on which such stitches have been respectively formed to the needles next adjacent thereto, and knitting off the stitches formed at the ends of certain of the courses of which the fabric is composed to narrow the stocking fabric.

1,862,418. SAFETY DEVICE FOR COUPLER POCKETS. LAWRENCE L. NEEBE, Woodbury, N. J. Filed July 8, 1931. Serial No. 549,537. 5 Claims. (Cl. 213—6.)



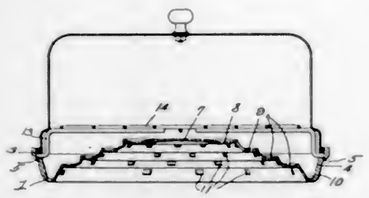
1. The combination of a bumper of a railway vehicle; a coupler pocket; bolts securing the coupler pocket to the bumper; and lugs cast integral with the bumper and extending over a portion of the pocket, acting as safety devices to retain the coupler in position in the event of the stretching or failing of the bolts.

1,862,419. HYDROBRAKE. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,408. 12 Claims. (Cl. 244—2.)



1. A sea plane having pontoons, a member, having a hydroplane surface and a braking surface mounted on each pontoon and operable to serve as a hydroplane surface or as a water brake.

1,862,420. BROILER. MARY BUXTON O'BRIEN, Chicago, Ill. Filed Oct. 6, 1931. Serial No. 567,278. 2 Claims. (Cl. 53—5.)



1. A utensil comprising a skillet having annular gutters stepped upwardly from the side flange to a raised center thereby forming the bottom of the skillet, the outer edges of the gutters being provided with drain recesses or channels for the gravitation of juices from one gutter to another, there being openings in the inner walls of the gutters above the levels assumed by juices in the gutters, a grid extending over the bottom of the skillet, and supporting legs therefor, there being notches in the flange of the skillet for receiving the legs and holding the grid against radial and annular displacement.

1,862,421. STABILIZING DEVICE FOR AIRCRAFT. JOHN F. O'MALLEY, New York, N. Y. Filed July 18, 1931. Serial No. 551,763. 7 Claims. (Cl. 244—12.)

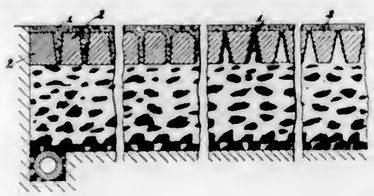


1. In an airplane, a wing structure having recessed portions forming part of the entering and trailing edges of the upper surfaces thereof, and shutters mounted to normally lie within said recessed portions and movable to various angular relations to provide cooperative head resistance surfaces.

1,862,422. ARC LAMP ELECTRODE. MARCEL OSWALD, Nanterre, France, assignor to Compagnie Lorraine de Charbons pour l'Electricite, Paris, France, a Corporation of France. Filed Apr. 16, 1928, Serial No. 270,580, and in France Apr. 21, 1927. 9 Claims. (Cl. 176—134.)

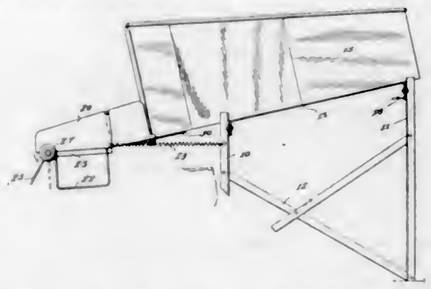
1. An arc lamp electrode comprising carbon, a mineralizing material including an oxygen-containing metallic compound of low ionization potential, and up to about 2 per cent of a refractory reducing material adapted to increase the stability of the arc flame, intimately mixed together.

1,862,423. PLAYING COURT. KURT-WILLY OTTO, Bad Pyrmont, Germany. Filed Sept. 17, 1928, Serial No. 306,416, and in Germany Sept. 20, 1927. 4 Claims. (Cl. 94—6.)



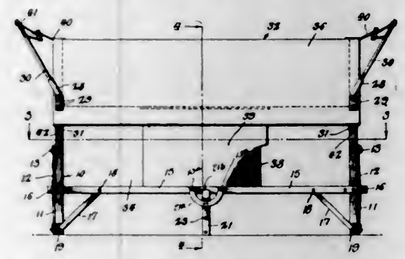
1. In a playing court, a layer of covering material pervious to moisture, and a second layer less pervious to moisture, the said pervious layer penetrating the less pervious layer in its entire thickness and having the effect of conducting away the water.

1,862,424. POTATO SACKER. DEAN H. PAISLEY, Cambridge, Nebr. Filed Nov. 8, 1930. Serial No. 494,391. 1 Claim. (Cl. 226—59.)



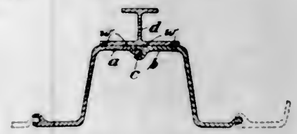
A sacking device comprising a support having a hopper angularly arranged thereon, an end wall hingedly mounted at the discharge end of the hopper having an opening therein, stationary receptacle supporting members carried by and projecting from the wall about said opening, an adjustable frame member upon the wall cooperating with the receptacle supporting members in the accommodating of receptacles of different sizes and shapes, and yieldably operable means for retaining the wall against accidental displacement when shifted to occupy retracted and extended positions.

1,862,425. COLLAPSIBLE AND PORTABLE LODGE. WILLIAM B. POOCH, Racine, Wis. Filed Sept. 3, 1931. Serial No. 561,041. 5 Claims. (Cl. 135—3.)



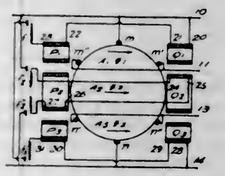
1. In a lodge, a supporting frame, a tent structure coacting with the frame, cable means connected to the tent structure adjacent the top thereof, and rods extending outwardly beyond the corner posts, and said cables being connected to the rods outwardly of the tent structure.

1,862,426. SHEET PILING. WALTHER PRIELIPP, Dortmund, Germany. Filed Aug. 28, 1930, Serial No. 478,479, and in Germany Aug. 28, 1929. 10 Claims. (Cl. 61—62.)



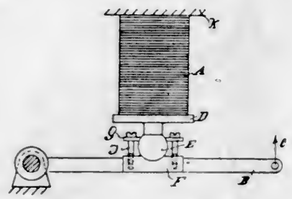
1. The method of increasing the moment of resistance of sheet piling walls formed by Z-shaped sections interconnected in pairs, which consists in applying a reinforcing backing member against the side flanges or longitudinal edges of each pair at and along the point of connection with each other on opposite sides of the wall's neutral axis so as to prevent relative rotation of the members and tendency thereof to pull apart during ramming into place.

1,862,427. PRESSURE SPLITTING DEVICE. ANGELO DELLA RICCIA, Brussels, Belgium. Original application filed Dec. 2, 1921, Serial No. 519,558, and in France Dec. 16, 1920. Divided and this application filed Oct. 28, 1927. Serial No. 229,467. 7 Claims. (Cl. 172—239.)



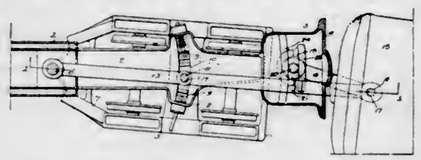
1. A direct current transformer or pressure splitting machine with two extreme and at least two intermediate symmetrical terminals, consisting in a machine comprising a field structure with each pole subdivided in two end and other intermediate parts; the parts of the same range with respect to the center of the pole being equal so as to compose a symmetrical subdivided pole, two end armature winding parts and other intermediate armature winding parts, two end commutator parts and other intermediate commutator parts, each armature winding part subject to the flux of a corresponding part of said poles and proportioned to this part of said poles, two main brushes at the two ends of the armature winding taken as a whole connected to the two terminals of the main distributing line, a pair of auxiliary brushes between each two consecutive armature winding parts, and means to vary in a like manner the fluxes through the two end winding parts and to vary as desired the whole of the fluxes through the intermediate winding parts, so as to vary symmetrically the pressures at the intermediate terminals of the machine with respect to the pressures applied to the extreme terminals of the machine.

1,862,428. ELECTRICAL RESISTANCE. JAKOB RIOTTE, Nowawes, Germany. Filed Oct. 1, 1928, Serial No. 309,566, and in Germany Oct. 7, 1927. 3 Claims. (Cl. 201—51.)



1. In a form of embodiment of an electrical resistance, a pile of carbon discs constituting the resistance proper, a lever for applying varying pressure to the said pile, a plate resting against one end of the said pile, a ball joint between the said plate and the said lever so as to enable the said plate to adapt itself to the said pile, and a friction means provided at the said joint in order to restrict the free movability of the plate.

1,862,429. LOCOMOTIVE DRAWBAR. MENAHEM RIVKIN, Philadelphia, Pa. Filed June 20, 1930. Serial No. 462,610. 7 Claims. (Cl. 213—3.)



2. The combination of a main frame of a locomotive; a rear truck pivoted to the main frame; a draw bar pivotally connected to the said main frame, directly back of the driving wheels and extending over the rear truck and projecting at the rear, and having means whereby it can be coupled to the tender of the locomotive, said bar havig an opening directly above the center of the truck; and a center pin coupling the truck to the draw bar and extending through said opening in the bar.

1,862,430. PAINTER'S STRIPING BRUSH. CARL O. ROBB, Colorado Springs, Colo. Filed Feb. 16, 1929. Serial No. 340,606. 1 Claim. (Cl. 15—140.)

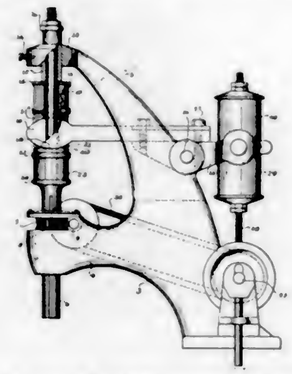
A painter's brush comprising an elongated head having a chamber intermediate its ends and inlet and outlet passages leading from the chamber outwardly of the ends thereof, a bonnet at the outlet end of said head and having

an apertured partition, a bristle carrying nipple detachably engaged with the outer end of said bonnet and having a passage therethrough, a valve body having sliding fit in the said chamber and having a chamber opening through its outer end, said valve body having an annular chamber formed exteriorly of its rear and a passage leading for-



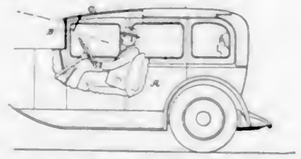
wardly from the latter through the body and opening into the inner end of the said chamber at its outer end, a spring engaged in the chamber at the other end of said valve and normally acting to hold the rear end of said valve closed and means carried externally of said head for actuating said valve to open position.

1,862,431. HELVE OPERATED HAMMER. WILLIAM A. ROCKENFIELD, Rochester, N. Y., assignor to High Speed Hammer Co. Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 19, 1929. Serial No. 341,188. 11 Claims. (Cl. 78—53.)



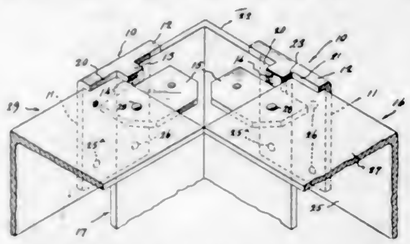
1. A helve operated hammer comprising a rotary and reciprocating hammer, two spaced arms each having a guide, the guides being arranged one above the other and in which the hammer slides and rotates, one of said arms having an opening therein, two non-turning abutments surrounding said hammer, a vibrating helve extending through said opening of one of said arms and having an opening through which the hammer passes and turns arranged between and cooperating with the two abutments, shock absorbing devices arranged between the helve and the hammer, and means for turning the hammer relatively to the abutments and the helve.

1,862,432. HINGE. ALONZO N. ROSE, Yonkers, N. Y. Filed June 26, 1930. Serial No. 464,006. 3 Claims. (Cl. 296—97.)



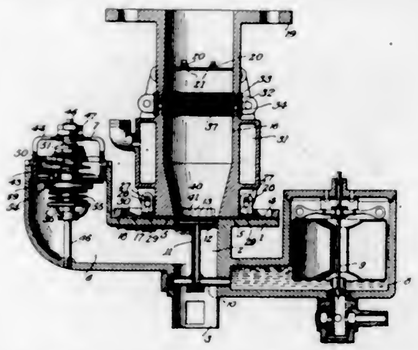
1. A hinge comprising a resilient leaf having at one end thereof a split tubular cylindrical portion and a pintle forced into the same, said pintle being of a larger diameter than the original internal diameter of the split tubular cylindrical portion of said leaf with the free edge of said cylindrical portion spaced from the body of said leaf.

1,862,433. STEEL FRAMEWORK BRACKET. WILLIAM L. ROSS, Jersey City, N. J. Filed Dec. 12, 1930. Serial No. 501,938. 4 Claims. (Cl. 189—36.)



1. In steel building framework construction, an interlocking combination bracket for joining angle bars, said bracket including a vertical body portion, a horizontal top portion a right angular depending portion and a horizontal supporting portion at a right angle to said body portion and depending portion, all said portions being integral and coextensive with each other whereby said bracket includes a cutout adapted to receive a portion of an angle bar, and means to secure said angle bar to said vertical body portion and to said supporting portion.

1,862,434. CARBURETOR. FREDERICK W. SCHAFFNER, Brooklyn, N. Y. Filed Sept. 3, 1931. Serial No. 561,068. 16 Claims. (Cl. 261—44.)

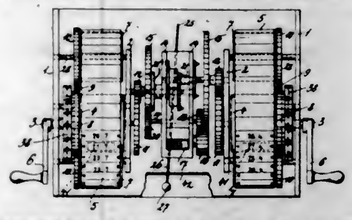


1. A carburetor comprising a base having an air chamber, a fuel supply means on the base, a mixing chamber secured to the base and connected to an engine and having a venturi in communication with the air chamber, an air supply means for the chamber, a T-shaped nozzle located in the air chamber and in communication with the fuel supply means and having a plurality of apertures located adjacent the venturi, a throttle valve in the mixing chamber, and gate valves in sliding contact with said T-shaped nozzle for controlling the fuel from the apertures and the air from the air chamber to the mixing chamber in proportions in accordance with the positions occupied by the throttle valve and operating means between the throttle valve and the gate valves to cause said valves to move in unison.

1,862,435. DEVICE FOR ASCERTAINING THE NUMBER OF DAYS BETWEEN ANY TWO GIVEN DATES. ADOLF SCHMID, Vienna, Austria. Filed July 29, 1930, Serial No. 471,585, and in Austria Aug. 10, 1929. 3 Claims. (Cl. 235—86.)

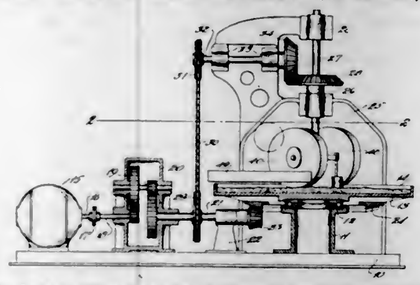
1. Device for determining the number of days lying between two calendar dates, comprising two shiftable graduated bands containing the consecutive calendar days, conveyor rollers over which said bands are passed, a single

register adapted to be operated alternatively by both rollers in common, a shiftable clutch means for selectively coupling the register at any moment with the roller of one



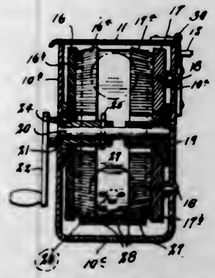
of the two graduated bands and means whereby the other gradusted band, which at that time is disconnected from the register, is simultaneously locked.

1,862,436. CONTINUOUS MIXING MACHINE. VICTOR E. SCHMIEDEKNECHT, Louisville, Ky. Filed Apr. 15, 1931. Serial No. 530,398. 4 Claims. (Cl. 83—45.)



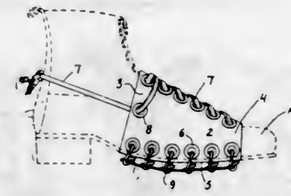
1. In a mulling machine, a vertical muller wheel shaft, a sleeve keyed on the lower end of the shaft and having oppositely extending arms forming a cross-head, a head having a central chamber surrounding the cross-head and spaced therefrom, said chamber having vertically aligned openings for the end portions of said sleeve, adjusting screws screwed through the upper part of the head and entering the chamber to engage on top of said arms, and muller wheels carried by said head.

1,862,437. GOLF BALL CLEANING DEVICE. LUIGI SIGNORINI, Rome, Italy. Filed Dec. 5, 1928. Serial No. 323,982. 2 Claims. (Cl. 15—21.)



1. A golf ball cleaning device, comprising a water container, a pair of vertically disposed circular brushes, one of which is movable relatively to the other, the bristle sides of said brushes being arranged in opposed relation and spaced from each other less than the diameter of a golf ball so as to receive therebetween a golf ball to be cleaned, means for actuating said movable brush thereby causing said golf ball to be acted upon by said brushes during its travel about the axes thereof, and a guard for encircling the lower parts of said brushes to prevent accidental disengagement of the golf ball therefrom, said guard being open on top.

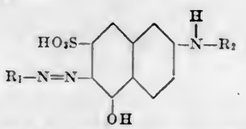
1,862,438. FOOTWEAR ATTACHMENT. FLOYD L. SIMONSON, Pittsburgh, Pa. Filed Dec. 19, 1930. Serial No. 503,553. 1 Claim. (Cl. 36—63.)



An attachment for shoes comprising a pair of sections adapted to fit the top and sides of footwear and being elongated in formation, eyelets arranged in row formation adjacent the longitudinal edges of the sections, chains having one of their ends secured in the rows of eyelets adjacent the lower longitudinal edge of the sections, a lacing disposed in eyelets arranged adjacent the upper longitudinal edges of the sections, an eyelet disposed adjacent the upper edge of each section and arranged midway the sides thereof, said lacing being adapted to secure the sections to footwear in a manner whereby the chains transverse the sole of said footwear and the lacing being passed through the last mentioned eyelets whereby the end portions of said lacing are directed to the rear of the footwear.

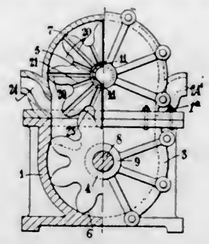
1,862,439. METALLIFEROUS DYESTUFFS AND PROCESS OF MAKING SAME. FRITZ STRAUB and WALTER ANDERAU, Basel, Switzerland, assignors to Firm "Society of Chemical Industry in Basle," Basel, Switzerland. Filed May 22, 1930, Serial No. 454,829, and in Switzerland May 25, 1929. 12 Claims. (Cl. 260—12.)

1. A process for the manufacture of new metalliferous azodyestuffs consisting in treating the azo-dyestuffs of the general formula



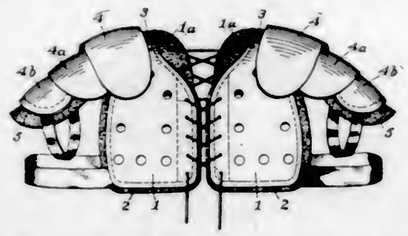
wherein R_1 means a benzene nucleus containing a lake-forming group in the o-position to the azo bridge and R_2 means an alkyl-, benzyl, phenyl or naphthyl radicle, with agents that yield metals capable of forming complex compounds with the lake-forming group of the azo-dyestuff, and with a nitrosating agent.

1,862,440. ROTARY ENGINE. PERCY GEORGE TACCHI, Bracklesham, near Chichester, England, assignor of one-half to Ernest Mayer-Neville, London, England. Filed Oct. 19, 1931, Serial No. 569,752, and in Great Britain Oct. 20, 1930. 3 Claims. (Cl. 121—70.)



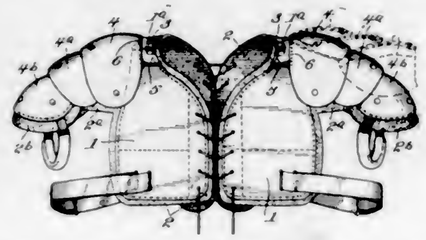
2. A rotary engine as claimed in claim 1, wherein said passages extend some through the teeth of said rotor and others through the portions of the rotor between the adjacent teeth thereon.

1,862,441. SHOULDER PAD. EDWIN W. TILL, Philadelphia, Pa., assignor to A. J. Reach Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 8, 1930. Serial No. 450,756. 6 Claims. (Cl. 2—2.)



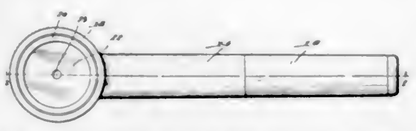
1. The combination with a guard having a portion shaped to fit on the top of the shoulder, of an outer guard cap and a plurality of intermediate caps, all of said caps being arranged in overlapping cooperating relation, and freely flexible means connecting said caps to each other and to the shoulder portion of the guard.

1,862,442. SHOULDER PAD. EDWIN W. TILL, Philadelphia, Pa., assignor to A. J. Reach Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 14, 1931. Serial No. 537,423. 7 Claims. (Cl. 2—2.)



1. The combination with a shoulder guard, of a narrow shoulder strap portion shaped to fit on top of the shoulder at the junction with the neck, an outer guard cap and a plurality of guard caps between said outer cap and the narrow shoulder strap portion, all of said caps being arranged in overlapping cooperating relation, and separate freely flexible hinge straps for said caps, each of said hinge straps connecting one of said caps to said narrow shoulder strap portion independently of the other caps and connecting hinge straps.

1,862,443. PIPE. EDGAR C. TUGGLE, Sharon, Pa. Filed Aug. 8, 1930. Serial No. 473,997. 3 Claims. (Cl. 131—12.)



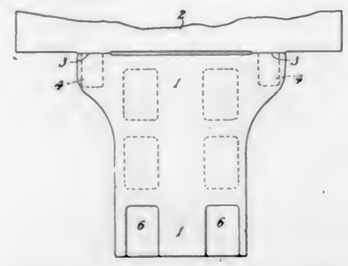
1. A pipe comprising a bowl made of wood, a metal casing, means to support the bowl in the casing in spaced relation with the walls of the casing, the casing having an angular extension forming a chamber for receiving smoke, the bottom of the bowl having a passage connecting the bowl with the chamber, a stem connected with the outer end of the extension, the casing and extension being formed of material which will readily radiate heat of the smoke to the exterior, the bowl having an outer covering of metal spaced from the inner wall of said casing.

1,862,444. COLLAR DEVICE. WILLIAM HOWARD VICKERS, Liberal, Kans. Filed Apr. 7, 1931. Serial No. 528,357. 1 Claim. (Cl. 24—81.)



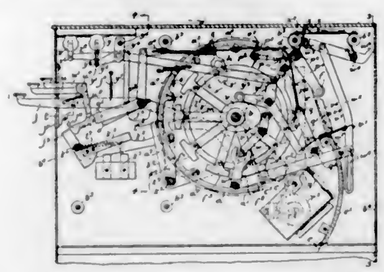
A collar holder, comprising two spaced clasp members, each having a back plate to which clamping tongues are hingedly connected and the said back plates, adjacent the confronting ends of the clasp members, being formed with bowed portions, short chains having their inner links swingably supported on the said bowed portions and a plate comprising two hingedly connected members having openings adjacent to the outer ends thereof for the reception of the outer links of the short chains.

1,862,445. CONTINUOUS GLASS GRINDING AND POLISHING APPARATUS. FREDERIC BARNES WALDRON, Prescot, England, assignor to Pilkington Brothers Limited, Liverpool, England. Filed Mar. 5, 1931, Serial No. 520,207, and in Great Britain Mar. 18, 1930. 6 Claims. (Cl. 51—240.)



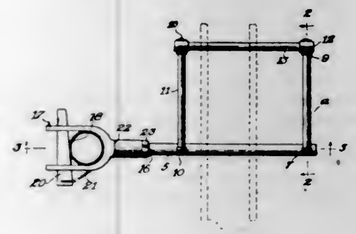
1. In continuous glass grinding and polishing apparatus employing a series of travelling work tables, a skeleton table adapted to take the place of a work table in the series, so constructed as to give access during its travel to apparatus beneath the series of tables.

1,862,446. PRINTING MACHINE. CHRISTOPHER FREDERICK WEBB, Kenton, Middlesex, England, assignor, by mesne assignments, to The Bell Punch and Printing Co. Limited, Uxbridge, Middlesex, England. Filed Mar. 9, 1928, Serial No. 260,268, and in Great Britain Apr. 12, 1927. 32 Claims. (Cl. 101—66.)



1. In a printing machine, a rotatable type cylinder having a series of printing surfaces circumferentially arranged on its periphery, an impression member movable toward and away from the periphery of the cylinder, means for positioning a strip to be printed, between the cylinder and impression member, a series of cams movable in unison with the cylinder, the number of cams being equal to the number of printing surfaces, and the cams being arranged to accord with the arrangement of the printing surfaces, actuating means for the impression member provided with an element adapted to be shifted so as to be positioned in the path of movement of any selected one of the cams, and manipulative means for shifting said element.

1,862,447. WRENCH RACK. JOHN E. WHITTAKER, St. Louis, Okla. Filed Oct. 26, 1931. Serial No. 571,211. 1 Claim. (Cl. 211—107.)



A rack of the kind described comprising a clamp for detachable engagement with an upright, a rod adjustably engaged with the clamp, side brackets carried by the rod, a hanger rail carried by the said brackets for accommodating rod wrenches thereon with the same resting upon said rod, means on the rod and coacting with the clamp to sustain the rod adjustably connected with said clamp, and a wedging key associated with the clamp for firmly securing the latter to an upright.

1,862,448. LITHIC COMPOSITION. WALTER E. WILLETT, Cortland, N. Y. Filed Feb. 17, 1931. Serial No. 516,527. 2 Claims. (Cl. 106—24.)

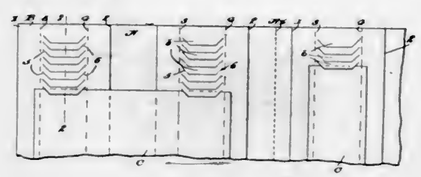
1. A lithic composition aggregate including crushed glass-hard coke, cement, lime, soap powder, alum, and sodium thiosulphate.

1,862,449. SEALED CAN OR RECEPTACLE. RALPH AUGUSTUS YEOMANSON, London, England, assignor to British-American Tobacco Company Limited, Westminster, England. Filed July 18, 1930, Serial No. 468,952, and in Great Britain July 26, 1929. 1 Claim. (Cl. 220—48.)



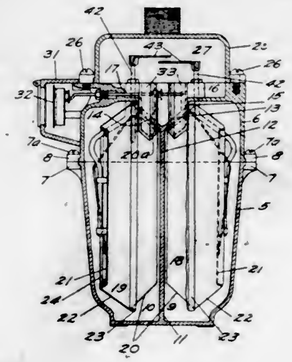
A receptacle having a reduced neck, a tagger tin hermetically sealing said receptacle, a seal breaking device comprising a cap protecting said tagger tin and fitting over said reduced neck, a cutter on said cap for removing said tagger tin, in combination with an outer cover having screw threaded enagement with said receptacle below said reduced neck, whereby after removal of said cover and operation of said seal breaking device to unseal the receptacle the seal breaking device may be discarded and the receptacle closed by replacing said cover.

1,862,450. PAPER FILE. ALBERT A. AINSWORTH, Ossining, N. Y. Filed Nov. 29, 1930. Serial No. 499,087. 10 Claims. (Cl. 129—19.)



9. A filing device comprising a backing of comparatively stiff material, and one or more strips of tough, flexible material gummed thereon, said strips having gummed portions accessible for mounting bills or other articles thereon.

1,862,451. GAS METER. JAMES R. ARMSTRONG, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 2, 1926. Serial No. 91,746. 7 Claims. (Cl. 73—1.)

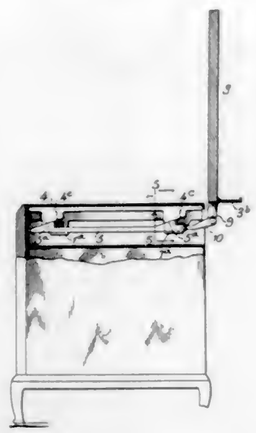


1. In a gas meter, the combination with a horizontally divided housing comprising upper and lower sections of relatively small height, said sections having co-operating partition members to form a main measuring chamber, a supplemental chamber within the main chamber and having a port in a wall thereof, a hollow member formed on the upper section in communication with the port of the supplemental chamber, and a cover for the meter having a gas admission inlet and a gas discharge outlet.

1,862,452. DISAPPEARING COOKING TOP FOR TABLE STOVES. ALVIN G. ARNDT, Owosso, Mich., assignor to Independent Stove Company, Owosso, Mich., a Corporation of Michigan. Filed Feb. 26, 1931. Serial No. 518,542. 9 Claims. (Cl. 126—37.)

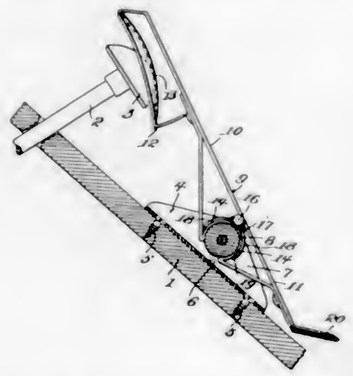
1. In a stove, a cooking top carrying the heating elements; a pivoted cover for concealing the cooking top

when the cover is closed; and cam means automatically operated by the cover for raising the cooking top into



the plane of the top of the stove when the cover is opened; said means automatically lowering the cooking top when the cover is lowered.

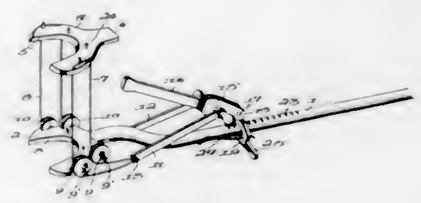
1,862,453. FOOT REST ACCELERATOR CONTROL. HARRISON BAILEY, Mount Carmel, Pa. Filed Jan. 8, 1932. Serial No. 585,612. 4 Claims. (Cl. 74—81.)



1. A foot rest for accelerators comprising a supporting bracket, a journal carried by said bracket, an elongated plate including hinged sections and arcuate shaped portions fitting about the journal, and tension means urging the arcuate shaped portions in engagement with the journal, and means carried by said plate for connecting the latter to an accelerator.

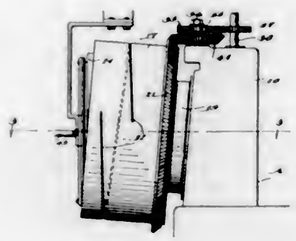
1,862,454. SPRING COMPRESSOR FOR REMOVING POPPET VALVES. ROLAND B. BARBER, Wheeler Road, Md. Filed Dec. 8, 1931. Serial No. 579,807. 13 Claims. (Cl. 29—86.3.)

1. A spring compressor comprising a body portion, a spring engaging member carried by said body portion, a second spring engaging member lying in a substantially parallel plane and in superposed relation to said first named member, a plurality of flexible connections secured at one end to said second member, their other ends being secured to an eccentric lever mounted on said body portion, the intermediate portions of said connections passing over rollers secured to said first named member,



and means for adjusting the longitudinal position of said lever mounted on said body portion to take up any slack in said connections, whereby when a coil spring is interposed between said spring engaging members, the movement of said lever on its fulcrum will draw the second member toward the first to compress the spring.

1,862,455. TELEVISION SCANNING DEVICE. WILLIAM JOHN BARNECUT, Highland Park, Mich. Filed Mar. 11, 1931. Serial No. 521,868. 6 Claims. (Cl. 178—6.)

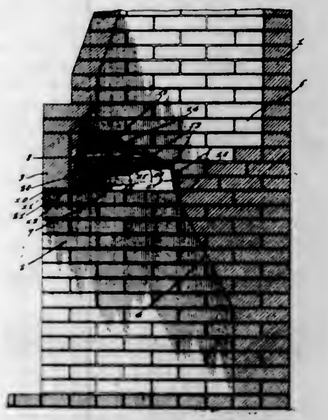


1. In a television scanning device, the combination of a rotating cylinder, a stationary light casing concentrically mounted within said cylinder, said casing having a light aperture, a source of light within said casing, said cylinder having a plurality of scanning apertures arranged in spiral formation, a second cylinder eccentrically mounted and inclined with respect to said first named cylinder and revoluble thereabout, means for rotating said cylinders, and said second named cylinder having a spiral slot adapted for registry with said scanning apertures during rotation of said drums.

1,862,456. FIREPLACE DAMPER. NEALEY E. BARROWS, Bangor, Me. Filed Apr. 9, 1930. Serial No. 442,890. 1 Claim. (Cl. 126—288.)

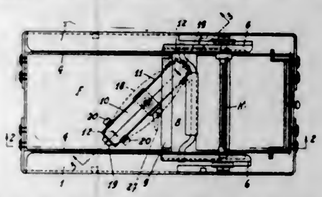
A damper comprising a frame including integral side, front and rear walls, flanges formed on said walls and adapted to be embedded in the chimney of a fireplace, a regulating member hinged to the side walls, a bearing formed on said front wall, a substantially L-shaped arm having one arm portion received by said bearing, a link pivotally connected to said regulating member adjacent the rear edge thereof and pivoted to the other arm portion of said L-shaped arm, a substantially L-shaped

lever having the end of one arm portion formed on said L-shaped arm adjacent to the bearing thereof, a hand grip on the end of the other arm portion of the L-shaped



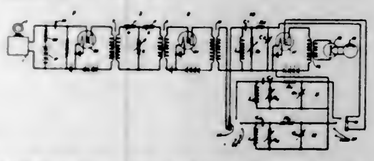
lever, and spaced stops on the flange of the front wall to be engaged by the L-shaped lever for holding the regulating member in adjusted positions.

1,862,457. DEVICE FOR SHARPENING THE BLADES OF SAFETY RAZORS. WILHELM BARSCH, Paris, France. Filed July 1, 1929, Serial No. 375,302, and in Germany July 14, 1928. 3 Claims. (Cl. 51—153.)



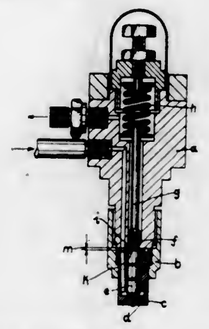
1. In a device of the type set forth, a frame having a stationary plate, a transverse plate, a carriage slidably mounted in said frame, and a blade holder on said carriage, a sharpening body having two sharpening faces loosely placed upon said plate, pins at each end of said sharpening body, a leaf spring loosely placed upon the underside of said plate and having its end bent upward and extending through openings in said plate and engaging over said pins of the sharpening body, projections at the bottom side of the sharpening body engaging the said plate and sliding thereon during the tilting of the sharpening body.

1,862,458. MEASURING APPARATUS. JOHN M. BARSTOW, Mountain Lakes, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 29, 1930. Serial No. 492,066. 11 Claims. (Cl. 181—0.5.)



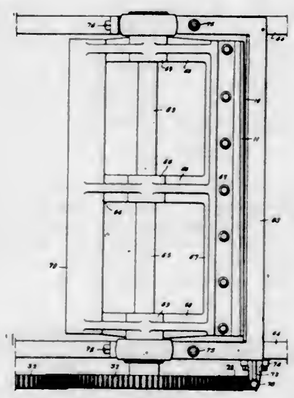
1. In combination with a source of sound waves and means for converting them into electrical waves, an indicating device responding in accordance with the energy level of the electrical waves applied thereto, and means to weight said electrical waves in their effect on said indicating device in accordance with the loudness of said equivalent sound waves.

1,862,459. INJECTION NOZZLE FOR INTERNAL COMBUSTION ENGINES. OTTMAR BAUR, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed June 11, 1929, Serial No. 369,984, and in Germany Aug. 30, 1928. 4 Claims. (Cl. 299—107.6.)



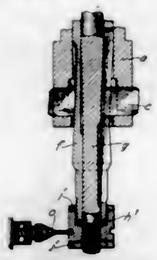
1. An injection nozzle for internal combustion engines comprising in combination a holder, a jet member mounted on said holder and having a bore formed therein, a piston element mounted in said bore, a needle carried by one end of said piston element, said piston element being of a length less than the bore by the predetermined amount of lift of the needle, a pin of less diameter than the piston element mounted upon the other end of said piston element and extending into an aperture formed in said holder of less diameter than the bore, whereby said piston element abuts against said holder to limit the opening of said needle.

1,862,460. CUTTING MECHANISM FOR CUTTING AND FOLDING MACHINES. CHARLES J. BECK, Philadelphia, Pa. Original application filed July 27, 1927, Serial No. 46,342. Divided and this application filed Apr. 27, 1929. Serial No. 358,527. 2 Claims. (Cl. 164—68.)



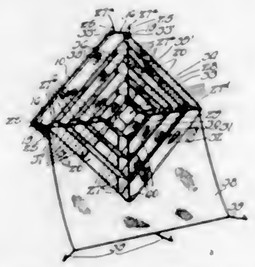
1. A cutting unit for a cutting and folding machine comprising an adjustable frame; a revolving frame journaled in said adjustable frame; a gear wheel for driving said revolving frame; pinions meshing with said gear wheel; and a pivot for said adjustable frame disposed in a plane substantially bisecting the face of said gear wheel.

1,862,461. BORING AND TAPPING TOOL. WILHELM BIATEL, Dusseldorf-Rath, Germany. Filed Apr. 5, 1929, Serial No. 352,748, and in Germany Apr. 24, 1928. 4 Claims. (Cl. 10—45.)



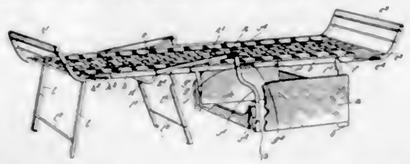
4. In a device adapted to cut internal surfaces in a socket or the like, cutting dies, a retaining device for said dies, a sleeve device within said retaining device, said sleeve device having an inclined channel, a mandrel within said sleeve device, said mandrel having a channel inclined in the opposite direction from the first mentioned channel, said dies engaging in said inclined channels and moving along them during the cutting, and said dies being radially moved upon relative axial movement of said retaining device and said sleeve device and mandrel.

1,862,462. GOLF TARGET. ARTHUR S. BOYD, Topeka, Kans. Filed Jan. 10, 1931. Serial No. 507,964. 4 Claims. (Cl. 273—35.)



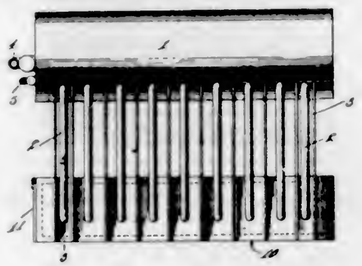
1. A golf target comprising flexible means defining a plurality of concentric compartments having an open side, cushioning means at the rear of said compartments to absorb the impact of the ball when struck thereagainst so that the ball will remain in the compartment into which it is driven, and a supporting structure for said first named means and said cushioning means.

1,862,463. COLLAPSIBLE BED AND THE LIKE. SAMUEL BRECKMAN, Brondesbury, London, and JULIUS BRECKMAN, London, England; Beatrice Lilian Breckman executrix of said Samuel Breckman, deceased. Filed May 4, 1931, Serial No. 534,852, and in Great Britain May 20, 1930. 4 Claims. (Cl. 5—153.)



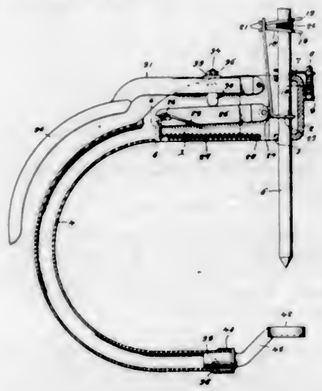
1. A collapsible bed comprising a frame, a three section bed framework, the sections of which are pivoted together end to end so that when collapsed the framework is of substantially U-form, a pair of pivoted arms at the front end of said frame disposed one on each side of said bed framework, a pin and slot connection between said arms and the middle section of the bed framework so that said arms support the said section in the open position and slide with respect thereto on the pin and slot connection during the closing operation, pivot members in said frame for one end section of the bed framework, said end section being mounted on said pivot members at a point intermediate of its length so that in the closing operation the inner end of said end section swings downwardly and depresses the middle section into the frame.

1,862,464. REFRIGERATOR. CHARLES M. BRENNER, Shreveport, La. Filed June 24, 1930. Serial No. 463,498. 1 Claim. (Cl. 62—95.)



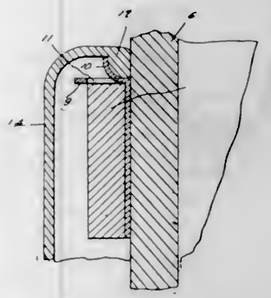
A refrigerating unit including a boiler with refrigerant containing tubes depending from opposite sides, a freezing compartment, the tubes being connected with opposite side walls of the freezing compartment and communicating with the interior, a container mounted in said compartment and spaced from the walls thereof, between which and said walls the refrigerant is adapted to flow to completely surround said container, and radiating fins connected with the side walls of the container and extending upwardly between the spaced tubes.

1,862,465. VALVE TOOL. BERT B. BROWN, The Dalles, Oreg. Filed Apr. 27, 1931. Serial No. 533,227. 3 Claims. (Cl. 29—86.3.)



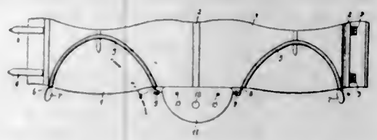
1. A valve spring compressor comprising a body, a spindle mounted for slidable movement through said body and having a pointed lower end, a curved handle portion formed with said body and terminating in alignment therewith, a spring foot detachably associated with the curved handle portion and arranged in alignment with the spindle for cooperation therewith, a strip having a bent lower end arranged in said body, said curved lower end provided with an opening through which passes the spindle, means carried by the strip for gripping the spindle, said means being manually releasable, means for operating the strip for moving the spindle, said operating means being adjustable to vary the movement of the spindle, spring pressed latching means for the spindle, a trigger for operating the latching means, and means for holding the latching means in operative position.

1,862,466. BRACKET. FRED W. BUECKER, Jr., Springfield, Ill. Filed Oct. 21, 1930. Serial No. 490,278. 1 Claim. (Cl. 248—20.)



A device for holding the vertical part of a sink to a wall comprising a block fastened to the wall within the space formed by said vertical portion, a plate located between the block and said wall, and having a flange at its upper end extending at right angles outwardly from the plate and resting on the top of the block, said flange being cut to form a tongue, the tongue being bent upwardly in a curve to engage the curved bead of the top of the vertical portion of a sink.

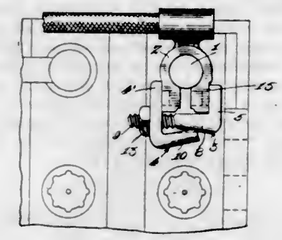
1,862,467. ORTHOPEDIC SUPPORTER. MANUEL CAO, Buenos Aires, Argentina. Filed July 31, 1930. Serial No. 472,108. 1 Claim. (Cl. 128—167.)



An abdominal supporter comprising a body embracing band, curved hip embracing staves secured to said band, an abdomen supporting device, said device including a casing, an axle rotatably supported on said casing, forked members carried by said axle, means non-rotatably connecting the ends of the axle with the adjacent ends of the staves permitting angular movement of the latter with respect to the axle and preventing rotation of the axle, an adjusting screw rotatably mounted on the casing and held against axial displacement relative thereto, and a nut carried by the forked members and threaded on said screw.

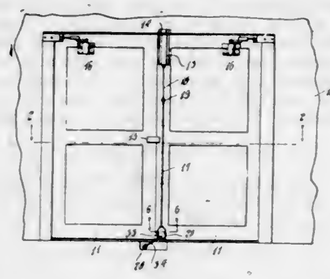
1,862,468. BATTERY TERMINAL CLAMP. GARRETT H. CHRISTENSEN, Clifton, Ill., assignor of one-half to George O. Christensen, Clifton, Ill. Filed Jan. 31, 1931. Serial No. 512,731. 1 Claim. (Cl. 173—259.)

A split battery cable terminal having its arms provided with alining bolt openings, and a clamp for compressing the arms of the terminal, said clamp comprising two angle members that have normally parallel ends provided on their inner faces with lugs to be received in the bolt openings of the terminal, the outer angle portion of one of the clamp members being round in cross section and tilted and merged into a threaded shank which is received through the lug carrying arm of the cooperating clamp, the angle end of the last mentioned clamp being inclined and



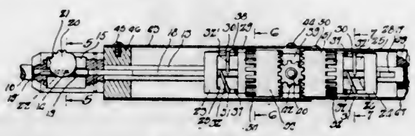
having its upper face formed with a longitudinal tapered groove to ride over the rounded outer face of the cooperating clamp and a nut screwed on the shank for adjusting the clamp members with respect to each other and with respect to the battery cable terminal.

1,862,469. GARAGE DOOR OPENER. JOSEPH T. CRAWLEY, Fayetteville, N. C. Filed Apr. 10, 1930. Serial No. 443,157. 1 Claim. (Cl. 292—94.)



In combination, a pair of doors, latch means on the inside of one of said doors to maintain the doors in closed position, said latch means including an actuating element provided with a loop adjacent the base thereof, a diagonally disposed rod operable from a distance disposed in the path of approach to the doors, a crank on the rod having a free end disposed in the loop in the closed position of the doors, said free end extending in the direction of the rod and so positioned that when the doors are in closed position it will engage in the loop.

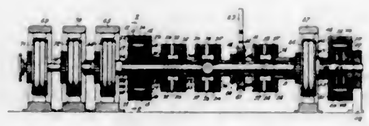
1,862,470. SCREW DRIVER. GUS EDSTROM, Merrill, Wis. Filed June 26, 1931. Serial No. 547,108. 4 Claims. (Cl. 145—78.)



3. A tool of the character described comprising a rotative shaft, a pair of spaced collars on and fixed to the shaft, a driving gear and a driven gear floating on

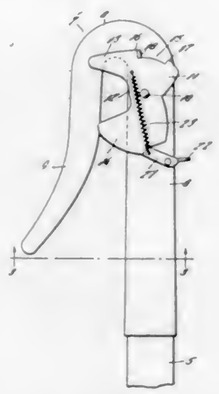
the shaft, a slide bar, spaced elements on said gears projecting over the collars, a pair of latching elements on each of said collars movable into latching engagement with said projecting elements to latch the gears to the collars, each of said latching elements having a beveled edge and a straight edge, springs urging said latching elements into latching engagement with said projecting elements, and means having connection with the slide bar for moving simultaneously one of said pivotal elements from each pair thereof out of latching engagement with said projecting elements against the action of said springs, whereby the projecting elements on the gears when rotated in one direction will ride over the beveled edge of said latching elements but will engage the straight edges thereof when rotated in the opposite direction and thereby latch the collars to the gears.

1,862,471. POWER AND MOTION TRANSMISSION MECHANISM. STEPHEN A. FARRELL, Brooklyn, N. Y. Filed Sept. 13, 1929, Serial No. 392,442. Renewed Nov. 11, 1931. 16 Claims. (Cl. 74—34.)



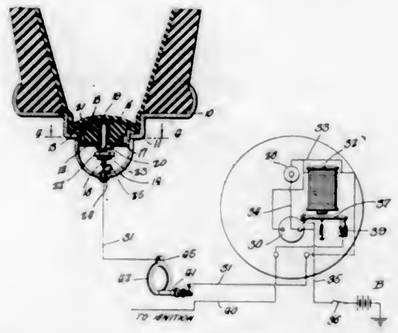
1. In a mechanism of the class described, the combination of a power drive shaft, a planetary locking gear set gearing with said drive shaft, a second planetary gear set gearing with said first planetary gear set, said second planetary gear set including a rotatable box; and means to operate said first planetary gear set to vary the speed of rotation of said box from zero to full speed.

1,862,472. POULTRY CATCHER. FLOYD FISHER, Forest City, Iowa. Filed Nov. 16, 1929. Serial No. 407,694. 1 Claim. (Cl. 119—152.)



A poultry catcher comprising in combination a hook including a shank having a leg disposed laterally thereto, a plate pivotally mounted intermediate its ends on said shank and having a jaw extending therefrom adapted to bridge the space between said shank and said leg, said plate adjacent one end thereof provided with a notch, a dog pivotally mounted on said shank and engageable with the notch for retaining said jaw in position, bridging the space between the shank and said leg, spring means connecting said latch and said plate normally urging said plate in one direction and for normally urging said latch in a direction toward said plate, said spring means having its longitudinal axis disposed laterally with respect to the axis of said plate, and stop means for limiting the swinging movement of said plate.

1,862,473. PRESSURE OPERATED SWITCH. JOHN R. FITZGERALD, Harlingen, Tex., assignor of one-eighth to Orville F. Bakhaus, Castle, Okla. Filed Apr. 5, 1930. Serial No. 441,895. 1 Claim. (Cl. 200—58.)



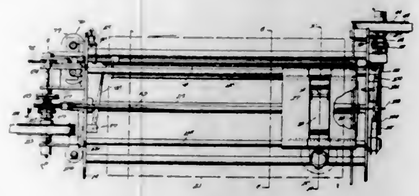
A switch element for pneumatic tires comprising a cup-shaped member carried by the tire rim adjacent the tube therefor, a compressible cushion member seated within the cup-shaped member and engageable with the tube, a sleeve carried by and outwardly projecting from the bottom wall of the cup-shaped member, a shaft carried by and operable with said cushion member and projecting through said sleeve, a contact nut carried by the shaft for selective contacting engagement with the sleeve, a closure cap for the cup-shaped member housing the projecting portion of the shaft and contact member, and a companion contact member carried by and insulated from the closure cap having flexible conductive connection with the extended portion of said shaft.

1,862,474. SYNCHRONIZING AND PHASE INDICATING DEVICE. WILLIAM G. FLUHARTY, Rockville Center, and PAUL A. NOXON, Jackson Heights, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Oct. 23, 1930. Serial No. 490,702. 6 Claims. (Cl. 178—69.5.)



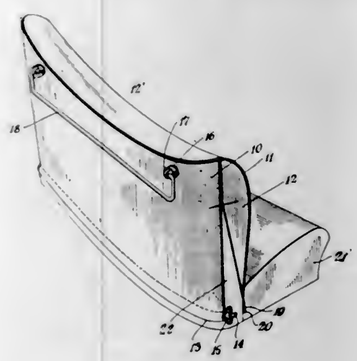
1. In a device for indicating the synchronic and phase relations between a pair of revolving members, the combination of a relay, means associated with one of said members to transmit current impulses of alternating polarity to the winding of said relay, an electric lamp of the glower type associated with the other revolving member, and means controlled by said relay and conductively connected to said lamp for alternately energizing and deenergizing said lamp, said means including a switch adapted to reverse the polarity of the current through said lamp.

1,862,475. ANNOUNCING DEVICE. JOHN L. FRANKLIN, Atlanta, Ga. Filed Nov. 24, 1930. Serial No. 497,910. 23 Claims. (Cl. 179—6.)



1. The combination with a telephone having a receiver support, of means for raising and lowering said support, and means for making an announcement into the transmitter of the telephone during the time between the raising and lowering of said support, said last mentioned means including a record member and reproducer member, and clock controlled means for moving one of said members relatively to the other.

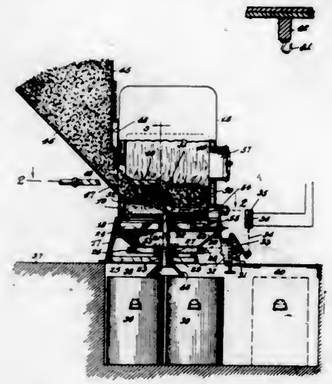
1,862,476. SEAT COVER. WALTER L. FRY, Scarsdale, N. Y., assignor, by mesne assignments, to Wil-Fry Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1929. Serial No. 352,375. 1 Claim. (Cl. 155—182.)



A cover for the back rest of a cushioned seat of the type having an exposed back comprising a hood open at the bottom and having a portion extending over the front of the back rest, a portion extending over the entire seat back, and end portions secured to said hood along the upper edges of the back portion and along the entire side edges of said front portion, said end portions being cut obliquely to allow adjustability over the end of the back rest, distributing elements carried by the lower edges of said front and back covering portions, said front distributing element being secured between the seat cushion and back rest cushion, and said back distributing element being secured to a support at the end of the back rest.

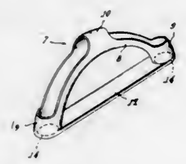
1,862,477. FURNACE. ALBERT LEET GALUSHA, Caldwell, N. J. Filed June 24, 1926. Serial No. 118,243. 9 Claims. (Cl. 110—36.)

1. In a furnace, a rotary grate, lateral fuel feed and ash discharge ports above the grate, and a combined fuel distributor and ash plow having sections at different levels above the grate and respectively associated with said ports



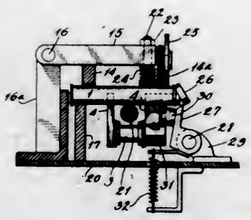
to direct fuel inwardly toward and ash outwardly from the central area of the grate during the rotation of the latter.

1,862,478. ROPE-SAVING SLING THIMBLE. GEORGE W. GASCOIN, Jersey City, N. J. Filed Apr. 1, 1931. Serial No. 526,998. 1 Claim. (Cl. 24—129.)



A sling thimble comprising an arcuate tubular member cut away on the upper side between the center and extremities to provide a rope seat bridged at the center and at the extremities by the unremoved portion, said member being formed on a constant radius and having an integral straight bridge piece connecting its extremities.

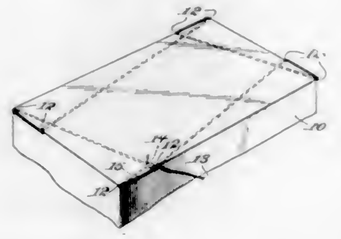
1,862,479. AUTOMATIC CAN FEEDER. JOHN GASPER, Chicago, Ill., assignor to Liggett & Myers Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 30, 1929. Serial No. 389,403. 15 Claims. (Cl. 226—129.)



1. In a machine for automatically feeding hinged cover cans to filling mechanism, means for supporting and transporting a series of cans in like relation, hook means engaging the free edges of the cover, said means being piv-

otally mounted for oscillation in a direction generally toward and from the can body and lengthwise thereof, and means carried by the transporting means for operating said hook means for imparting an initial opening movement to the covers.

1,862,480. RECEPTACLE OPENER. PRESTON C. GIBSON, Gillespie, Ill. Filed Sept. 28, 1931. Serial No. 565,679. 2 Claims. (Cl. 229—51.)



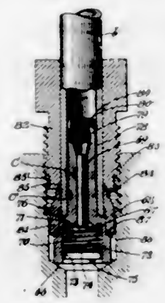
1. A paper receptacle including a top and spaced pairs of openings in each side and end along the edges thereof, and a flexible element located beneath the top of the receptacle and threaded through said openings with a portion exposed adjacent each corner of the receptacle, one end of said element being secured to the receptacle adjacent one corner thereof, and the other free end projecting from the receptacle and adapted to be pulled upon to sever said top from the receptacle along definite lines.

1,862,481. VARIABLE PITCH PROPELLER. HOWARD GLENWAIGHT, Wilkes-Barre, Pa. Filed Feb. 24, 1931. Serial No. 517,957. 3 Claims. (Cl. 170—162.)



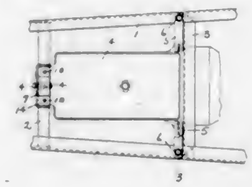
1. In a propeller, a hub plate having attaching means, bodies pivoted to said hub plate for pivotal movement in lines approximately at right angles to the axis of the hub plate, blades carried by said bodies, the inner portions of said bodies being provided with gear segments having interlocking engagement, and means limiting the movement of said blades with respect to each other.

1,862,482. LUBRICATING INSTALLATION AND APPARATUS. EDWARD H. KOCHER, Boonton, N. J., assignor to Auto Research Corporation, a Corporation of Delaware. Filed Mar. 10, 1926. Serial No. 93,582. 64 Claims. (Cl. 184—7.)



1. A pipe terminal comprising a mounting socket, a flow controlling cartridge bottoming in said socket, a cylindrical pipe end in telescoping relation with respect to the outer end of said cartridge, a bushing plugging said socket and a tapered structure encircling said pipe and wedged by said bushing inward to grip said pipe.

1,862,483. AUTOMOBILE ENGINE MOUNTING. HUGH C. LORD, Erie, Pa. Filed June 23, 1930. Serial No. 463,067. 19 Claims. (Cl. 248—14.2.)

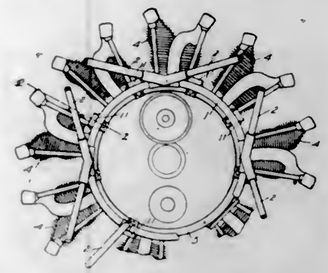


2. In an automobile engine mounting, the combination of an automobile frame, an engine, and rubber mountings for the engine having portions secured to the engine and the frame and forming the only supporting connection therebetween, at least one of said mountings being so constructed and arranged as to carry a portion of the motor weight through a shear stress of the rubber.

1,862,484. MOUNTING. THOMAS LORD and IRVING P. WHITEHOUSE, Erie, Pa., assignors to Hugh C. Lord, Erie, Pa. Filed May 14, 1929. Serial No. 363,070. 22 Claims. (Cl. 248—14.2.)

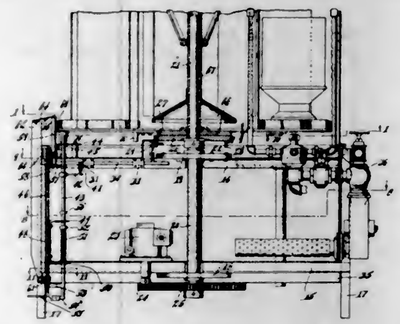
15. The combination of means mounting a member having rotating parts, subjecting the member to torque-induced vibrations, a supporting member for the vibrating member, said members having attaching parts, and rubber cushioning means disposed between the attaching parts and secured with relation to one member at least

by bonding, the rubber means being so disposed between the parts that the major portion of the torque movement of the torque vibrated member is yieldingly accommodated



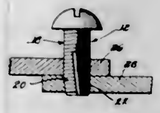
by a shear stress of the rubber and the major portion of the gravity thrust is taken through direct nonshear stress of the rubber.

1,862,485. ROTARY CONVEYER. CHARLES F. MCEWAN, Chicago, Ill., assignor to Harry D. Lathrop, Chicago, Ill. Original application filed Oct. 10, 1928, Serial No. 311,538. Divided and this application filed May 25, 1931. Serial No. 539,717. 7 Claims. (Cl. 198—209.)



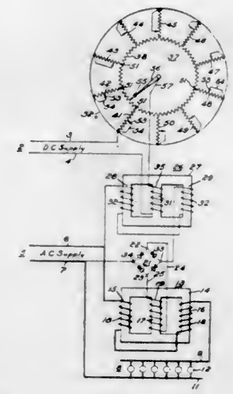
2. Conveying apparatus of the character described comprising, in combination, a drive shaft, a drive disc mounted upon said drive shaft, a carriage, a driven disc mounted upon said carriage and adapted to frictionally engage said drive disc to rotate said carriage upon rotation of said drive shaft, a slidably mounted stop rod adapted to periodically engage and arrest the travel of said carriage, and means upon said drive disc for releasing said stop rod.

1,862,486. TAPPING FASTENER. GEORGE C. TROTTER, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed July 20, 1931. Serial No. 551,904. 18 Claims. (Cl. 85—41.)



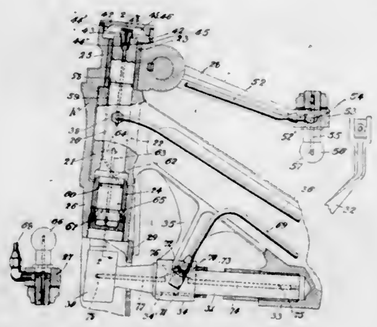
1. A thread cutting fastener including a body portion provided with a thread, said body including a section having a cutting edge and a yieldable section for increasing the cutting effectiveness of the edge on said other section.

1,862,487. PROPORTIONAL PRESET DIMMER SCHEME. ROY J. WENSLEY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 13, 1929. Serial No. 406,966. 5 Claims. (Cl. 171—242.)



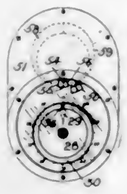
1. Circuit-controlling apparatus comprising a uni-directional-current-supply circuit, a reactor having a uni-directional-current-control winding connected to the supply circuit and a resistance unit for controlling the current supplied to the control winding comprising a plurality of adjustable resistor sections connected in parallel across the supply circuit, one of the conductors of which comprises a resistance element to which the sections are connected at spaced intervals and a movable contact connected in the circuit for engaging the resistance element at different points.

1,862,488. CHASSIS LUBRICATION. JOSEPH BIJUR, New York, N. Y., assignor, by mesne assignments, to Auto Research Corporation, a Corporation of Delaware. Filed Nov. 8, 1923. Serial No. 673,519. 34 Claims. (Cl. 184—7.)



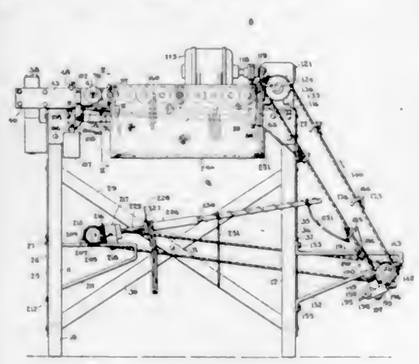
1. The combination of an axle, a steering knuckle, control bearings carried thereon, a king pin pivot mount for said knuckle, upon said axle, a lubricant inlet attached to a part of said pivot mount rigid with said axle, lubricant distributing means movable with the knuckle, means including a duct extending through said king pin to connect said inlet with said distributing means, and an automatic flow control means at said distributing means determining the division of lubricant to said control bearings.

1,862,489. TARGET INDICATOR. EARL W. CHAFEE, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 21, 1927. Serial No. 227,843. 15 Claims. (Cl. 177—351.)



2. In a training system, the combination with a target bearing transmitting instrument and a controlled instrument to be trained, of coarse and fine relative position indicators of target position and controlled instrument train, comprising a zero reader indicator and a follow-the-pointer indicator, a one-to-one connection from said controlled instrument and from the target bearing instrument respectively to said coarse indicator, and a multiple speed connection from said controlled instrument and from the target bearing instrument respectively to said fine indicator.

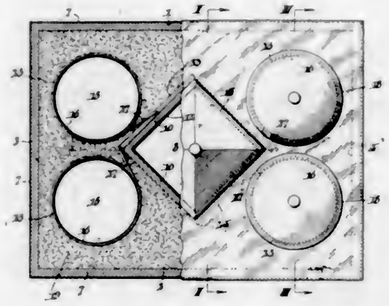
1,862,490. MACHINE EMPLOYED IN MANUFACTURING BELTS. WILLIAM H. GERSTENSLAGER, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 3, 1929. Serial No. 330,033. 5 Claims. (Cl. 18—2.)



1. Apparatus for disassembling circular articles from each other comprising a frame, an arm pivoted on the frame adapted to extend through the circular articles to be separated, rollers on the arm adapted to support the articles to be disassembled, automatic means for periodically moving the articles toward the free end of the arm, and means adapted to engage the articles periodically and disassemble them.

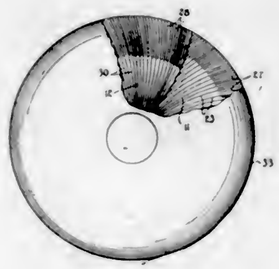
1,862,491. REFRIGERATOR. HERMANN M. HESSENBRUCH, Wynnewood, Pa., assignor to Philadelphia Lawn Mower Company Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 26, 1931. Serial No. 525,444. 10 Claims. (Cl. 62—91.5.)

1. In a refrigerator designed for use of a refrigerant like solid carbon dioxide, a multiplicity of individual refrigerating chambers; a separate compartment for the refrigerant; and a thermal conductor element formed in-



tegrally from a single strip of sheet material and connecting the several refrigerating chambers with the compartment containing the refrigerant.

1,862,492. PNEUMATIC TIRE AND METHOD OF MAKING IT. GERALD D. MALLORY, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 457,773. 5 Claims. (Cl. 154—14.)

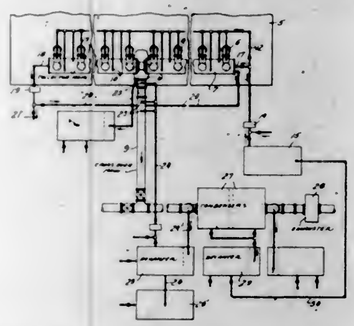


5. A method of making tires which comprises shaping a ply of cord fabric in substantially cylindrical form, superposing thereon a relatively narrower ply of cord fabric with its cords running in substantially parallel relation to an adjacent wider ply, and subsequently arranging the cords of the narrower ply between the cords of the wider ply to form a single ply including all of the cords.

1,862,493. DISTILLATION OF OIL. STUART PARMELEE MILLER, Tenafly, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 29, 1927. Serial No. 179,209. 2 Claims. (Cl. 202—30.)

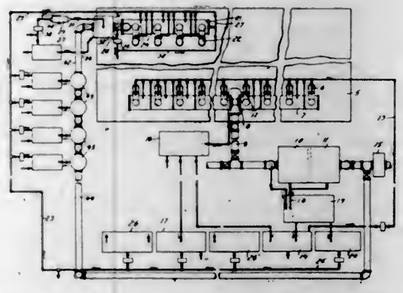
1. The improvement in the distillation of tar in connection with the distillation of coal in coke ovens having a collector main connected to the individual ovens of a battery of oven by uptake pipes leading from said ovens and goosenecks, which comprises destructively distilling coal in the ovens, spraying oils derived from the condensation of vapors from the coke oven gases into the coal distillation

gases as they pass through the uptake pipes and goosenecks and are still hot so as to distill the oil, collecting the non-volatilized residue of such oil in the collector main;



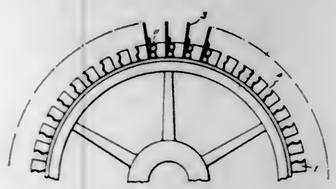
withdrawing the gases thus enriched from the collector main while still hot and cooling them to separate oils therefrom.

1,862,494. DISTILLATION OF TAR. STUART PARMELEE MILLER, Tenafly, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 7, 1927. Serial No. 197,030. 3 Claims. (Cl. 202—66.)



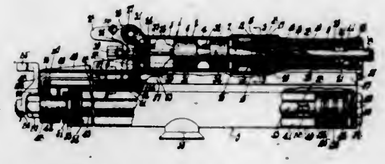
1. The method of distilling tar, which comprises introducing varying quantities of oil into hot coal distillation gases to regulate their temperature, heating and distilling the tar by contact with the resulting partially cooled gases and scrubbing with tar or oil the resulting gases enriched in oil vapors by the distillation of tar to remove tarry constituents therefrom.

1,862,495. BEATER ROLL. WILLIAM V. PHENICE, Dayton, Ohio, assignor to Midwest-Fulton Machine Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 13, 1930. Serial No. 488,424. 20 Claims. (Cl. 92—22.)



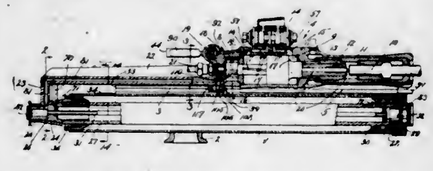
1. A fly bar for a beater roll having one flat side and having an arcuate concave face on the opposite side of the bar.

1,862,496. DRILLING MECHANISM. THORE R. E. RUNDQVIST, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Jan. 5, 1924, Serial No. 684,634. Renewed May 25, 1931. 70 Claims. (Cl. 121—5.)



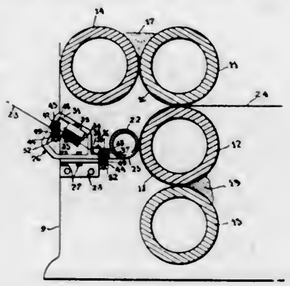
1. In a drilling mechanism, a pressure fluid drilling motor including a hammer piston, a drill steel actuated thereby, rotation means for said steel operated by said piston, reversible positive feeding means for said drill steel comprising a single reversible motor, and means controlled by resistance to rotation of said drill steel for automatically reversing said feeding means.

1,862,497. DRILLING MECHANISM. THORE R. E. RUNDQVIST, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 13, 1924, Serial No. 699,109. Renewed Sept. 15, 1930. 77 Claims. (Cl. 121—4.)



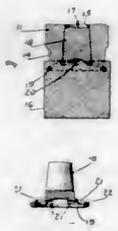
1. A drilling mechanism comprising a pressure fluid actuated drilling motor, feeding means therefor, a main valve for controlling said motor, and a fluid actuated valve carried in said main valve for automatically controlling said feeding means.

1,862,498. APPARATUS FOR FORMING WEFTLESS CORD FABRIC. WILLIAM W. STEPHENS, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 457,863. 4 Claims. (Cl. 154—1.)



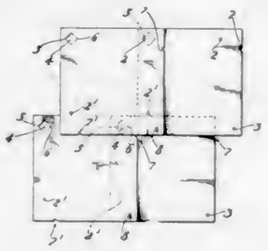
1. The combination with a calendar having a plurality of rollers mounted in superposed relation, of a unitary guiding device for directing a multiplicity of cords to the calender in parallel relation, comprising means for removably securing the entire device to the calender, means for spacing the cords, and a pair of clamping means associated with the last mentioned means for preventing the cords from sagging when the guiding device is removed from the calender.

1,862,499. HORSESHOE CALK. ARTHUR R. SWANSTROM, Duluth, Minn., assignor to Diamond Calk and Horseshoe Co., Duluth, Minn., a Corporation of Minnesota. Filed Nov. 19, 1930. Serial No. 496,652. 5 Claims. (Cl. 168—41.)



1. A padded horseshoe calk comprising a securing member having a shank adapted to be secured to a horseshoe, an anchoring portion on said shank, a resilient pad surrounding said anchoring portion, and an extension on said anchoring portion having a flange terminating at the exterior surface of said pad.

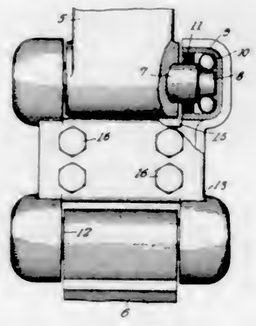
1,862,500. SHINGLE. HERBERT ABRAHAM, New York, N. Y., assignor to The Ruberoid Co., New York, N. Y., a Corporation of New Jersey. Filed June 1, 1931. Serial No. 541,246. 5 Claims. (Cl. 108—9.)



1. A shingle adapted to be laid with a side lap of different widths, said shingle being substantially rectangular in form, and having a gauge in one upper corner for indicating the different widths of laps with which the shingle may be laid and a perforation in the opposite upper corner for the reception of a fastening nail, the particular width of lap with which the shingle is to be laid being determined by bringing the nailing perforation of an overlapping shingle into position with that part of the lap-gauge of an overlapped shingle that indicates a lap of the desired width, said shingle being so arranged that the overlapping shingle is supported in the immediate vicinity of its nailing perforation by a portion of the overlapped shingle.

1,862,501. SPRING END CONNECTION. FRED J. BECHERT, Stamford, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Nov. 3, 1928. Serial No. 316,909. 6 Claims. (Cl. 267—54.)

1. In a spring shackle construction, a pin to be secured to a frame, a pin to be secured to a spring, antifriction bearings at the ends of each of said pins, said bearings including outer race rings and antifriction bearing members, a pair of shackle plates each having four depressions at the corners thereof for receiving and sustaining the outer bearing raceways of said antifriction bearings, means for securing said shackle plates together, said plates having a substantially continuous portion at a region

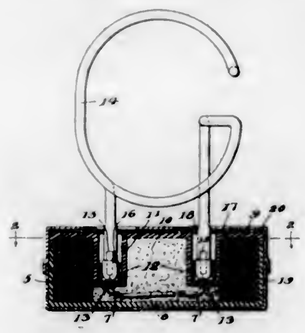


intermediate said pins and extending transversely from side to side of said plates and means for closing the spaces between said outer rings and pin ends.

1,862,502. PAVING MIXTURE. JAMES EDGAR BLACK, Kansas City, Mo., assignor to National Pavements, Incorporated, Kansas City, Mo., a Corporation of Arizona. Filed Mar. 28, 1929. Serial No. 350,821. 6 Claims. (Cl. 106—31.)

1. A paving mixture adapted to be laid cold, consisting of a relatively coarse mineral aggregate, substantially equal proportions of a cutback asphaltic binder and a discrete clay material sufficiently fluid to be mixed without heating, the latter having an adsorptive attraction for the asphalt.

1,862,503. GAS TUBE TRANSFORMER AND SOCKET. JOSEPH O. CADIEUX, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn., a Corporation of Delaware. Filed Sept. 11, 1930. Serial No. 481,161. 5 Claims. (Cl. 175—356.)

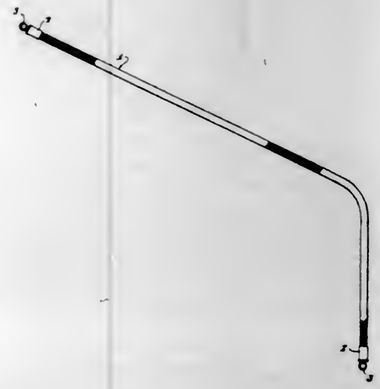


1. A transformer and socket for gas tubes comprising a housing having spaced sockets open at one end, contact clips mounted in said sockets at their closed ends and adapted to hold the ends of an inserted tube, and a transformer in the housing having its output leads connected to said clips.

1,862,504. METHOD OF MAKING VISCOSE-LATEX COATED FABRICS. WILLIAM C. CALVERT, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 17, 1930. Serial No. 429,213. 6 Claims. (Cl. 91—68.)

5. The method of treating fabric which includes the steps of coating the fabric with rubber, applying a plurality of coatings comprising mixtures of viscose and latex of which coatings the innermost consists principally of latex and the outermost consists principally of viscose, and regenerating the cellulose of the viscose in situ by subjecting it to the action of a bath maintained under conditions such that diffusion through the coating film is inhibited, said bath comprising glycerol, boric acid and approximately equal amounts of alcohol and water.

1,862,505. REENFORCED ROPE OR CORD CONSTRUCTION AND METHOD OF MAKING SAME. JOSEPH H. CHADBOURNE, Danielson, Conn., assignor to E. H. Jacobs Mfg. Co., Danielson, Conn., a Corporation of Connecticut. Filed Apr. 20, 1931. Serial No. 531,329. 2 Claims. (Cl. 139—88.)



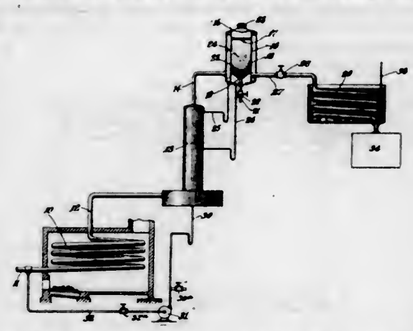
1. An improved reenforced dobby cord for use in loom harness, comprising two separate braided layers of fibrous material, and an intermediate metallic reenforcing layer, fastening means in each end imbedded in the central fibrous core, and a metallic ferrule surrounding the outer fibrous layer.

1,862,506. EXPANSION JOINT MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Aug. 30, 1926. Serial No. 132,547. 7 Claims. (Cl. 106—31.)

1. A ready to pour expansion joint material comprising a homogeneous mixture of finely divided granules and bituminous material having incorporated therewith an emulsifying agent comprising a soap formed of resin oil and an alkali.

1,862,507. TREATMENT OF HYDROCARBONS. THOMAS T. GRAY, Elizabeth, N. J., assignor to The Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed June 26, 1926. Serial No. 118,621. 6 Claims. (Cl. 196—96.)

1. In an apparatus of the character described, a still, a dephlegmator for receiving vapors from the still, a tower, means within said tower to support for free drainage treating material capable of polymerizing unstable unsaturated hydrocarbons, means for introducing vapor from said dephlegmator into said tower at a point above said supporting means, means for withdrawing treated

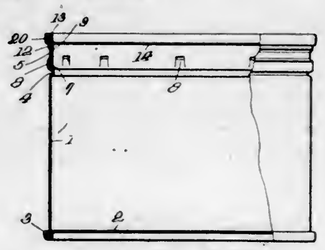


vapor from said tower at a point below the point of introduction, and separate means for draining from said tower polymers collected therein.

1,862,508. TREATING EGGS. WILLIS G. HOWARD, Chicago, Ill., assignor to The Sterolene Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 31, 1927. Serial No. 165,038. 9 Claims. (Cl. 99—8.)

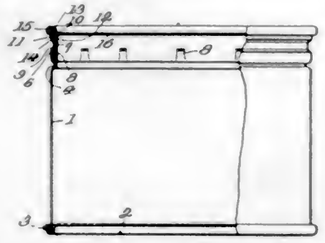
1. That part of the process of treating eggs of different temperatures by immersion and in which process heat and a small interval of time are the factors of the treatment, which comprises varying one of said factors in accordance with variations in the temperature of the eggs, the other of said factors remaining substantially constant.

1,862,509. EASY OPENING CONTAINER. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 10, 1931. Serial No. 507,955. 2 Claims. (Cl. 220—54.)



1. An easy opening container comprising a body portion having spaced score lines adjacent one end thereof forming a rip strip, the wall of said body portion being folded inwardly upon itself to form a depending collar extending below the upper score line, said folded body from the upper score line to the upper end of the body wall being flared or tapered outwardly so as to provide a surface of increasing diameter from the upper score line to the end of the body wall, an end having a central depressed portion providing a vertical wall adapted to fit within the mouth of the container body, said end having a projecting flange extending over the end of the body wall, said flange of the end when secured to the body wall having an upwardly extending portion contacting with the outer face of the wall of the container body and terminating adjacent the upper end of the body wall, and a sealing material filling the space between the flange and the upper end of the body wall, and an inserted collar attached to the body and having the upper portion thereof overlying and contacting with the inner faces of the depending collar formed by the folding of the body wall.

1,862,510. EASY OPENING CONTAINER. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 10, 1931. Serial No. 507,956. 2 Claims. (Cl. 220—54.)

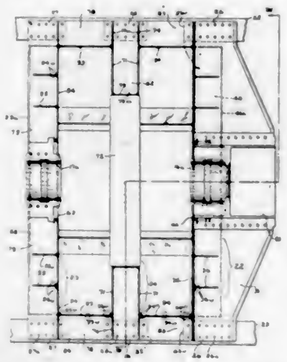


1. An easy opening container having score lines in the body wall adjacent one end thereof thereby forming a rip strip, said body wall being folded upon itself so as to provide a depending portion adapted to contact with the inner face of the body wall and said depending portion being folded upwardly upon itself and extending above said first named fold in the body wall, so as to permit the upwardly extending portion to be double seamed to the upper end of the container, and an inserted collar located within the body portion, means for securing said inserted collar to said body portion, the upper end of said inserted collar overlapping and contacting with the lower portion of the depending collar formed by the folding of the body wall.

1,862,511. PROCESS FOR THE PRODUCTION OF d-GLUCONO-δ-LACTONE. RICHARD PASTERNACK, Brooklyn, and WILLIAM RALPH GILES, Richmond Hill, N. Y., assignors to Charles Pfizer & Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed Mar. 16, 1931. Serial No. 523,186. 11 Claims. (Cl. 260—123.)

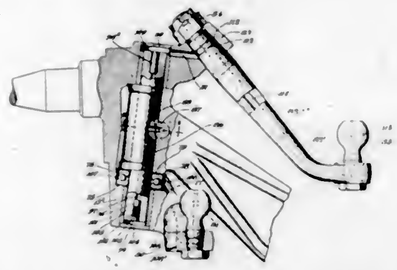
1. In the process of preparing d-glucono δ-lactone, the step which comprises seeding aqueous gluconic acid solution of about 80% strength at below about 70° C. with d-glucono δ-lactone crystals to crystallize out additional d-glucono δ-lactone

1,862,512. REDUCTION GEAR CASING. IRA SHOAT, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 1, 1931. Serial No. 554,483. 19 Claims. (Cl. 74—56.)



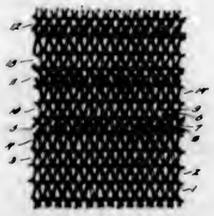
1. The combination with supporting structure and a marine reduction gear embodying meshing pinion and gear members arranged in a fore-and-aft direction and the gear member being carried by a spindle directly connected to the propeller shaft, of means for retaining the pinion and gear members in meshing relation, said retaining means including a stress member which is relatively strong and stiff transversely of and in the plane of the gear member axis and connected to said plane of the gear member axis and connected to said supporting structure, and a thrust bearing carried by the stress member and cooperating with the gear member spindle for transmitting end thrust through the stress member to to the supporting structure.

1,862,513. STEERING KNUCKLE LUBRICATION. JOSEPH BIJUR, New York, N. Y., assignor to Auto Research Corporation, a Corporation of Delaware. Filed Sept. 26, 1925, Serial No. 58,704. Renewed July 21, 1931. 85 Claims. (Cl. 184—7.)



1. In a motor vehicle, in combination, an axle, a knuckle, a bearing carried thereby, a pivot mount for said knuckle at said axle, and including a portion extending above the axle, a lubricant inlet at a part rigid with said axle, a passageway in lubricant tight connection with said inlet and leading upward to supply lubricant from said inlet to the upper part of the knuckle structure, and a conduit carried by said knuckle draining lubricant from said upper knuckle part to said bearing.

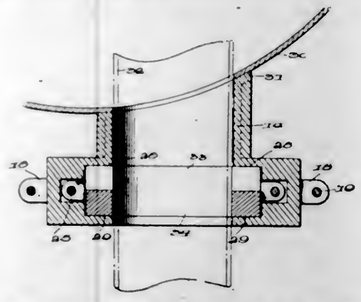
1,862,514. METHOD AND MECHANISM FOR MAKING KNITTED FABRIC. ALFRED GRAENZ, Philadelphia, Pa., assignor to Non-Run Fabric and Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 11, 1932. Serial No. 604,474. 39 Claims. (Cl. 66—86.)



1. The method of knitting a fabric which comprises forming successive courses and wales of loops, and displacing selected loops, each loop being displaced from a wale in the body of the fabric into an adjacent wale while simultaneously moving the thread for a succeeding course of loops.

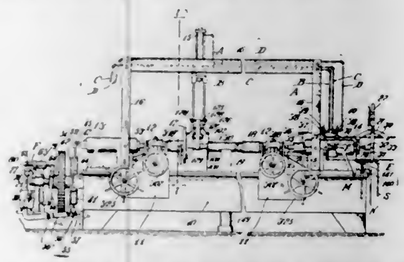
1,862,515. CASING FOR OUTSIDE STEAM PIPES. WALTER G. GRAY, Medford, Mass. Filed Mar. 16, 1927. Serial No. 175,733. Renewed Nov. 6, 1931. 3 Claims. (Cl. 285—30.)

1. The combination with a locomotive boiler smoke box and a steam supply pipe extending through the smoke box shell, of a casing comprising a member supported upon said pipe, a second member having an air tight



groove in which said first member is located and said second member having a portion making an air tight connection with the shell of said smoke box.

1,862,516. AXLE BURNISHING MACHINE. GOMERT POWELL, Michigan City, Ind., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation, a Corporation of Delaware. Filed June 27, 1929. Serial No. 374,156. 35 Claims. (Cl. 29—27.)

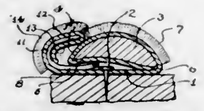


1. A burnishing machine comprising in combination, a burnishing lathe, mechanism including a movable loading platform for delivering work to said lathe, other mechanism for automatically adjusting said work, means operatively connecting said adjusting and delivery mechanism, and manually operable means including a plurality of valves and associated levers controlling said mechanism, and fluid pressure cylinders controlled by said valves for operating said adjusting means and the platform.

18. In a burnishing machine, the combination comprising a burnishing lathe, mechanism for delivering work to said lathe, divided gear and housing elements having relatively movable portions separable to receive said work, locking means for said elements carried on said movable housing portion including locking bars, springs, thrust links pivotally secured at their respective outer ends to said bars, lifting means, and a thrust block secured to said lifting means yieldably engaging said housing and links and adapted to actuate said bars against the pressure of said springs to lock said gear and housing.

34. In a burnishing machine, the combination including a burnishing lathe, of means for delivering work to the lathe comprising a gravity feed skid table in spaced operative relation to the lathe, a relatively movable platform pivotally mounted on said table and adapted to span the space between table and lathe, thrust mechanism operable by said platform for positively feeding work to the platform, means operatively connecting said lathe and platform, work receiving roller mechanism intermediate said thrust mechanism and platform for driving said work, overhanging brushing means engaging said driven work, work lubricating mechanism normally in the path of said work as the work is lifted from said rollers, and means for restoring said thrust mechanism.

1,862,517. UPHOLSTERY MOLDING. CHARLES P. SCHLEGEL, Rochester, N. Y., assignor to The Schlegel Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 24, 1928. Serial No. 314,749. 10 Claims. (Cl. 155—184.)



1. An upholstery molding comprising an elastic web through which a fastening device is passed, a cover for the fastening devices hinged at one edge to said web, an overhanging portion along the other edge of the web, and holding means having a channel formation and having its two walls substantially rigid with reference to each other, one wall extending into the overhanging portion, the edge of the cover being received in the channel between the two walls thereof.

Patents Nos. 1,862,518 to 1,863,553

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Total	1,375		

Changes in Classification

Order No. 3,221, May 25, 1932, directs:

In *class 36, Boots, Shoes, and Leggings* (Division 11), establish the following subclasses and definitions:

2.5 Boots and shoes
8.1 Bathing,
8.2 Burial,
8.3 Dancing,
8.4 Fitting,
8.5 Orthopedic.

2.5. BOOTS AND SHOES. Boots and shoes not provided for in the subclasses indented hereunder.

8.1. BOOTS AND SHOES, BATHING. Shoes which by their construction are particularly adapted for bathing purposes.

Note.—Bathing sandals are found in this class, subclass 11.5.

8.2. BOOTS AND SHOES, BURIAL. Shoes which are particularly constructed and adapted for burial purposes.

8.3. BOOTS AND SHOES, DANCING. Shoes which by their construction are particularly adapted for dancing.

8.4. BOOTS AND SHOES, FITTING. Shoes which by their construction are particularly adapted for fitting other shoes.

8.5. BOOTS AND SHOES, ORTHOPEDIC. Orthopedic shoes of general construction not otherwise classifiable.

Note.—Ankle supports or braces made independent of the boot or shoe are found in class 128, SURGERY, subclass 166.

Note.—Ankle supports attached to skates are in class 208, VELOCIPEDES, subclass 183.

The patents contained in these subclasses have been taken for the most part from various subclasses in class 36, and some in subclass 8.5 have also been taken from class 128, Surgery, subclass 80.

In *class 36, Boots, Shoes, and Leggings* (Division 11), change the titles of the following subclasses to read under 2.5, Boots and shoes:

3 Ventilated.
4 Rubber
5 Overshoes
6 Heelless.
9 Felt and fabric.
11 Moccasins.
11.5 Sandals
11.6 Protective
11.7 Spring.

In *class 36, Boots, Shoes, and Leggings* (Division 11), subclass 71, Pads and foot supporters, in the third line of the definition cancel the words "or ankle," abolish the existing search notes, and establish the following notes:

Note.—Ankle supports are found in this class, subclass 8.5.

Note.—Arch supporting bandages and arch supports provided with bandage structure for applying them to the foot and holding them in place on the foot are in class 128, SURGERY, subclass 166.5.

In *class 128, Surgery* (Division 43), subclass 166, Bandaging, Bandages, Arm and leg, Ankle, at the end of the definition, establish the following search notes:

Note.—See this class, subclass 80.

Note.—Ankle supports forming part of the shoe structure are in class 36, BOOTS, SHOES, AND LEGGINGS, subclass 8.5.

Note.—Ankle supports attached to skates are in class 208, VELOCIPEDES, subclass 183.

Adjudicated Patents

(D. C. N. Y.) Calkins patent, No. 1,451,491, for pattern and guide strip, claims 4, 5, 6, and 7 *Held* infringed. *Traitel Marble Co.* v. *Manhattan Terrazzo Brass Strip Co.*, 56 F.(2d) 1039.

(D. C. N. J.) Chipman patent, No. 1,694,205, for weed killer and method of killing weeds, claim 7 *Held* valid and infringed. *Chipman Chemical Engineering Co.* v. *Reade Mfg. Co.*, 56 F.(2d) 1048.

(D. C. N. Y.) Calkins reissue patent, No. 15,824, for pattern and guide strip, claim 3 *Held* infringed. *Traitel Marble Co.* v. *Manhattan Terrazzo Brass Strip Co.*, 56 F.(2d) 1039.

(C. C. A. Ind.) Booth reissue patent, No. 16,579, for motor vehicle, claims 5-10 *Held* invalid. *Booth* v. *Stutz Motor Car Co. of America*, 56 F.(2d) [illegible]

Condition of Applications Under Examination at Close of Business May 28, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 75,845; Trade-Mark Division, 918. Oldest new case, Oct. 28, 1931; oldest amended, Nov. 4, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	†Feb. 12	†Mar. 1	502
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	†Jan. 5	†Jan. 15	1,070
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Feb. 10	†Feb. 23	744
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Mar. 1	†Mar. 14	558
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 31	Dec. 31	410
4898 C	6. LEWERS, A. M., Carbon Chemistry	Nov. 16	Nov. 17	1,947
5725	7. JARBOE, C. G., Optics; Photography	Dec. 27	Dec. 27	1,519
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 15	Dec. 19	1,249
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Feb. 19	†Feb. 19	847
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Dec. 16	Dec. 22	938
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Jan. 23	†Feb. 1	603
7701	12. HENRY, C. C., Machine Elements	†Feb. 3	†Feb. 5	628
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 11	†Jan. 11	1,172
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Feb. 10	†Feb. 19	760
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 21	Dec. 21	2,012
5612	16. SPENCER, C. J., Telegraphy; Telephony	†Feb. 2	†Feb. 3	893
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Nov. 28	Nov. 30	1,390
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 7	†Jan. 11	803
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Nov. 10	Nov. 16	1,744
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	†Feb. 11	†Feb. 11	634
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	†Jan. 15	†Jan. 15	928
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Jan. 28	†Feb. 23	598
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Nov. 10	Nov. 7	946
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 31	†Jan. 11	711
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Dec. 8	Dec. 9	1,549
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Dec. 1	Dec. 9	961
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	†Jan. 16	†Jan. 16	961
4628	28. BENSON, A. R., Internal-Combustion Engines	Nov. 30	Nov. 30	1,373
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Nov. 9	Nov. 9	976
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 30	†Jan. 30	876
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Nov. 24	Nov. 25	1,551
4080	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 26	†Jan. 29	1,003
6066	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Nov. 30	Nov. 30	2,395
6025	34. SIMPSON, O. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Dec. 30	Dec. 26	898
3400	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Apr. 14	†Apr. 5	425
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Dec. 1	Dec. 1	1,756
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Dec. 2	Dec. 7	1,369
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 10	†Mar. 10	295
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 28	Nov. 30	1,521
7880	40. OBERLIN, J. J., Receptacles	Dec. 24	Dec. 26	2,018
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	†Feb. 4	†Feb. 25	776
5882	42. CUTTING, H. O., Electric Signaling	Nov. 21	Nov. 23	1,457
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 31	Dec. 31	1,428
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 28	Nov. 4	1,836
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Jan. 18	†Jan. 18	1,205
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	†Jan. 8	†Jan. 18	742
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Dec. 28	Dec. 28	2,108
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Dec. 15	Dec. 14	954
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 14	Nov. 14	1,573
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Nov. 19	Nov. 28	2,116
5628	51. BACKUS, C. D., Radiant Energy	Dec. 23	Dec. 23	1,269
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Feb. 16	†Feb. 24	800
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 29	†Feb. 29	577
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Nov. 17	Nov. 17	1,143
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Apr. 15	†Apr. 12	253
	55. BOWEN, S. T.—Designs	†May 3	†May 16	153
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 7	Dec. 10	1,494
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 29	†Jan. 9	673
5605	58. DOWELL, E. F., Abrading; Typewriting	Nov. 23	Nov. 23	1,377
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 18	Nov. 21	1,617
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Nov. 16	Nov. 17	1,517
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Nov. 9	Nov. 20	1,501
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Nov. 28	Nov. 28	1,757
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Nov. 27	Nov. 27	1,479
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Dec. 31	Dec. 31	692
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Nov. 14	Nov. 14	1,815
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	†May 3	†May 13	797
	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Labels and Prints	†Apr. 28	†May 14	121

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

Stewart *v.* Robinson

No. 2,851. Decided February 8, 1932

1. Interference—Priority—Abandoned Experiment.

Where S. built an attachment for a knitting machine for making a certain type of high splice in a stocking, but a satisfactory splice was not made thereon and the device was laid aside for over five years, *Held* that the making of that device was a mere abandoned experiment.

2. Same—Same.

Where S. did nothing prior to the work of R. except to make an attachment which did not work satisfactorily and which was laid aside for more than five years, *Held* that priority was properly awarded to R. as the first inventor.

Appeal from the Patent Office. Affirmed.

Mr. Irving U. Townsend for Stewart.

Messrs. Howson and Howson, Mr. W. A. Smith, jr., Mr. W. G. Stewart, Mr. H. A. Howson, and *Mr. Hubert Howson* for Robinson.

Bland, *J.*:

In this appeal we review the action of the Board of Appeals of the United States Patent Office, in reversing the decision of the Examiner of Interferences, and in awarding priority of invention in six counts of an interference to the appellee, Robinson.

The subject matter of this interference is an attachment to a machine for the circular knitting of stockings which have tapered high splices. The tapered high splice is the familiar pointed dark area seen just above the heel on stockings. Prior to 1922 such reenforcements were commercially made only in full fashioned or flat knit stockings. The parties to this interference invented attachments to be placed on the ordinary stocking-knitting machine whereby the high splice might be knit into circular-knit stockings. The full-fashioned or flat-knit stockings which first contained the high splice was known as the "Pointex" stocking and the high splice which had a pointed top was made by sewing the two edges of the flat knit stocking material together so as to form a triangle on the back of the stocking with a seam running in the center thereof from the point of the triangle downward.

The counts of the interference are illustrated by count 1 which follows:

1. In combination with a circular knitting stocking machine, means for intermittently raising and lowering the high splicing finger of the machine and means cooperating with said means for modifying the action of said means to cause said finger to be in operation for a successively increasing period to thereby knit the high splice triangular in configuration.

The application of Robinson was filed May 16, 1921, and that of Stewart was filed August 7, 1923.

The Examiner of Interferences found that Stewart reduced the invention to practice not later than May 23, 1917, by placing his attachment (Stewart's Exhibit 6) on a knitting machine and successfully operating it to produce a stocking with a tapered high splice. He gave Robinson a date not later than November, 1920, as a date of conception, and February, 1921, as a date of reduction to practice.

The Board of Appeals did not agree with the finding of the Examiner of Interferences that Stewart had conceived and reduced to practice the subject matter of the counts in 1917, and held that Stewart's activity at that time amounted to an abandoned experiment only. The Board also held that Stewart could not prevail because he was the last to reduce to practice and was not diligent at the time Robinson entered the field nor for a long time after Robinson had reduced to practice.

The Examiner of Interferences, having found that Stewart's Exhibit 6 showed evidence of a completed invention, held that he was entitled to priority, although he did not file his application until nearly five years after he had constructed and operated the machine. The Examiner of Interferences held that the doctrine of *Mason* v. *Hepburn*, 13 App. D. C. 86, 84 O. G. 147, did not apply because appellant and those associated with him did not "purposefully" suppress the invention from public knowledge and because there was no satisfactory proof that Stewart's later activities resulted from knowledge of the work done by Robinson.

The Examiner of Interferences and the Board of Appeals discussed the evidence in great detail and we will not attempt to state all the facts which might have bearing upon the questions involved. The record shows that Stewart, in the spring of 1917, recognizing the desirability of having a machine which would produce the pointed high splice on a circular-knit stocking, set about to produce such a machine. His attachment, which was composed of cams and levers that operated a knitting finger which brought about, at a predetermined time, the knitting of a splice more particularly described hereinafter, was in operation in May of 1917.

[1] We think the proof conclusively shows that this machine would not knit the high splice in such form as was desired or regarded as commercially suitable by Stewart and his company. The record shows that it produced a splice with the top part of the triangle flat. The width of the flat top depended on the size thread used. Stewart admits the width of the flat top was three-quarters of an inch. There is considerable evidence by Stewart's own witnesses that the machine was not so perfected but that, when this point was reached in knitting the high splice, the necessary point for filling out the pointed triangle would appear on the front part of the stocking just above the instep. It is obvious that this splice was not satisfactory and that a sharper pointed splice was desired. Some of the witnesses of appellant testified that stockings were made on this machine and displayed in their plant. These stockings, if so made and displayed, were not introduced in evidence and we are not satisfied that the machine produced a

stocking which had the sharp pointed high splice which was desired.

Stewart in 1917 took the attachment off the machine and put it into or on a junk box or tool box underneath his desk where odds and ends were placed. It remained there for about five years. There is no record of anyone having seen this attachment during that period of time. Certain letters between certain interested parties, throwing some light on the question of market conditions and on the question of Stewart's being stimulated into activity were introduced, but we do not think it necessary to further refer to them.

Stewart's contention here is that he had successfully conceived and reduced the invention to practice in 1917 and that his delay in getting into the Patent Office should not be regarded as raising the presumption that his early activities amounted to an abandoned experiment, because he claims that the record shows abundant excuse for the long delay. He points to the fact that there was no market for the attachment or for the goods that it made, and that it was desirable to bring out in the same machine a lace formation attachment upon which he was then working, and also that at that time there was a depression following the World War which affected the market of the product of the machine, and it is furthermore suggested that there was no little uncertainty as to the existing patent situation in this particular art.

Late in 1922 or early in 1923, after Stewart had "resurrected" his device, he constructed and placed upon the same a pivoted filler lever, spring, and pin, and when so improved the same would make the sharp-pointed high splice which he desired. The new device was introduced in evidence at Stewart's Exhibit No. 11, but the date of its construction was long after Robinson had his machine in successful operation.

The record shows that between 1917 and 1922 Stewart, and the company with which he was associated, made applications for and secured patents on several inventions relating to the stocking making industry.

Concerning Stewart's "resurrection" of his high splice attachment, and concerning further steps of the parties, the Board said (record citations omitted in quotation):

> Concerning the reason for the resurrection of the Stewart high splice attachment in 1922 and the possibility of Stewart's assignee company having been stimulated into activity by knowledge of the entry of Robinson into the field, the evidence shows that samples of Robinson's tapered high splice seamless stockings were taken to a number of jobbers in New York city in July, 1921 and that in September, 1921 Robinson's Mills entered into a contract with Emery & Beers, who for years had been making full-fashioned stockings with the "Pointex" tapered high splice, to handle the sale of the entire product of the seamless stockings from the Robinson's mill. In July, 1921 Robinson put his tapered high splice attachment on a machine received from the Hemphill Company. In October or November, 1921 ten additional machines were received from the Hemphill Company. Four men from the Hemphill Company were at Robinson's mill in December, 1921 putting the machines into running order and they saw the machines running with the tapered high splice attachments. By April, 1922 Kupp had started sixty of these machines. In the month of December, 1921 the output of these stockings was 148 dozens.
>
> As heretofore noted, Stewart's witness Lawson testified that in 1921 and 1922 there was a strong demand for "an attachment for making the pointed heel." Stewart and Duffy deny any direct knowledge of Robinson's machine prior to their resurrection of their Exhibit 6 machine in 1922. It seems probable, however, that they, together with other manufacturers, were aware of the activity in the art and the demand for a pointed heel attachment testified to by their witness Lawson and that this stimulated them to renew their interest and to resurrect their 1917 device.
>
> Not only does this evidence indicate that the 1917 device was not a complete and perfected invention but the presumption, arising from the long period in which nothing was done with it, is that it amounted to merely an abandoned experiment. This conclusion is believed to be in accord with a large number of decisions of which the following are here cited: [Here several authorities are set out, some of which are hereinafter cited and portions of the same are quoted.]

In concluding, the Board said:

> In view of our finding that Stewart's 1917 device amounts merely to an abandoned experiment it is unnecessary to consider whether, had it been an actual reduction to practice, the doctrine of equitable estoppel as announced in *Mason* v. *Hepburn* 1898 C. D., 510 would apply.
>
> In our opinion Stewart cannot prevail because he was the last to reduce to practice and admittedly was not diligent at the time Robinson entered the field or for a long time after Robinson had actually reduced to practice and had filed his application.

We agree with the Board that Stewart's 1917 device amounted to nothing more than an abandoned experiment. This being true, we concur in the conclusion of the Board that it was not necessary to consider the application of the doctrine laid down in *Mason* v. *Hepburn*, supra. Not only do we concur in the view expressed that the long period of time in which nothing was done with the 1917 machine after its production raises the presumption that it was merely an abandoned experiment, but we think that the evidence as a whole shows that it was not a complete and perfected invention of the subject matter of the counts at bar.

In *Vanore* v. *Improta*, 58 App. D. C. 130, 135, 25 F.(2d) 918, 372 O. G. 763, a question quite similar to the one at bar was in issue and the Court of Appeals of the District of Columbia, speaking through Judge Smith, said:

> The primary purpose of conferring on Congress the power to pass patent laws and to grant for a limited time patent rights to inventors was not to help or reward the inventor, but to promote the progress of science and the useful arts, for the benefit of the public and organized society. Such being the purpose of patent laws, inventors have no right, without just cause or reason, to conceal their inventions or to withhold them from the public. Inventors who do so, not only defeat in some measure the chief end to be accomplished by patent laws, but work a most serious injustice to those who later enter the field and expend their time, money, and energies in developing a conception, reducing it to practice, making it useful to the public, and in diligently prosecuting their claims to a patent.
>
> As against the inventor who is guilty of inexcusable delay in asserting his priority according to law, all the equities and presumptions are in favor of the inventor who, though later in conception, first files his application for a patent. An inventor may have a reasonable excuse for not promptly applying for a patent; but, if he has none, and unreasonably delays in taking the necessary steps to secure a patent, *the courts are warranted in presuming that his claim of reduction to practice was nothing better than an abandoned experiment.* [Italics ours.]

In *Warner* v. *Smith*, 13 App. D. C. 111, 115, 84 O. G. 311, in which Mr. Justice Morris delivered the opinion, the court was considering a similar issue. Smith, the junior party, claims that he had conceived and reduced to practice the invention of a garment button, manufactured in part of rubber, by actually constructing such an article which could have been used and worn on the person and which to some extent could have served the purpose for which it was designed. He later laid it aside for several years. The court held that he had not reduced to practice and said:

> • • • Probably such claimant is not barred by any statute from making his claims; and if he sufficiently proves it, he and not his competitor will be entitled to the patent; for it is to the first inventor, the first to conceive and to reduce into practice, that the law awards priority. But such conditions make it imperative upon him that he should prove his claim beyond all reasonable doubt: *and the Patent Office and the courts are justified in presuming in such cases that what is claimed to be reduction to practice is no more than mere experiment until the contrary is clearly shown.* [Italics ours.]
>
> The appellee in this case, if we admit that he had the conception of this invention in the latter part of the year 1891, claims to have reduced it to practice in January of 1892, and thereafter did nothing and remained silent for three years and nine months, although there were several occasions when he might and should have spoken, if his invention was such as he now claims it to have been; and he made no movement whatever, either through the Patent Office, or otherwise, to give the public the benefit of it in any way. • • •.

In *Quist* v. *Ostrom*, 23 App. D. C. 69, 74, 108 O. G. 2147, the Court of Appeals of the District of Columbia, in discussing the effect of years of delay in getting into the Patent Office or making use of the invented device, said:

> • • • Yet during four years they sold the old machines, made and sold improved ones, without attaching or using this effective device, or attempting to obtain a patent upon it, and even invented, patented, and manufactured another. Such conduct is irreconcilable with the idea that the experiment of 1894 had operated in such manner as to demonstrate its practical operativeness to the satisfaction of its inventor and owner.

In *Moore* v. *Hewitt*, 31 App. D. C. 577, 580, 136 O. G. 1535, the Court of Appeals of the District of Columbia, in an opinion by Mr. Justice Robb, approved the finding of the Commissioner of Patents which was in the following language:

> The imperfect operation of the lamps made by Moore, and the fact that he did not file his application until seven years after the date when he claims to have made the invention, during which period he was active in developing other inventions, lead to the conclusion that his operations amounted to nothing more than abandoned experiments, and that he is entitled to no date of invention prior to the filing of his application.

In *Curtain Supply Co.* v. *National Lock Washer Co.*, 174 Fed. 45, 47, the Circuit Court, N. D. Illinois, E. D., said:

> It is the settled doctrine of the Court of Appeals for the District of Columbia that when an inventor perfects and reduces to practice an invention, and fails for an unreasonable period to take steps to give it to the public, and until some one else has independently invented and patented it, the earlier inventor forfeits his rights to a patent as against the later inventor. [Many authorities were here cited.]

Many other authorities on this subject may be cited and the following, we think, are quite pertinent: *Duncan* v. *Shelly*, 49 App. D. C. 243, 263 Fed. 639, 273 O. G. 409; *Bijur* v. *Kennington*, 51 App. D. C. 230, 278 Fed. 313, 295 O. G. 887; *Evans* v. *Richard*, 17 C. C. P. A. (Patents) 653, 36 F. (2d) 287, 391 O. G. 502; *American Metal Cap Co.* v. *Anchor Cap & Closure Corp.*, 278 Fed. 670.

[2] We conclude that Stewart's early device amounted to nothing more than an abandoned experiment, and that it was neither evidence of conception nor reduction to practice of the invention in controversy. Robinson was the first inventor of the subject matter of the counts of interference and was properly awarded priority therein, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

ROWE *v.* HOLTZ

No. 2,890. Decided Feb. 8, 1932

1. INTERFERENCE—PRELIMINARY STATEMENTS—WHAT MAY BE PROVEN THEREUNDER.

Where H. alleged conception of an invention between June 1, 1919, and August 1, 1919, and did not allege disclosure to others prior to December 1, 1919, *Held* that his proof as to the making of certain drawings was permissible to establish conception of the invention as of October 27, 1919.

2. SAME—SAME.

Evidence reviewed and *Held* to establish that H. is entitled to the award of priority as the first to conceive and the first to reduce the invention to practice.

APPEAL from the Patent Office. Affirmed.

Mr. O. H. Eschholz, Mr. R. E. Marine, Mr. O. B. Buchanan, Mr. Wesley G. Carr, and *Mr. Jo Bailey Brown* for Rowe.

Mr. Charles E. Tullar, Mr. Alex D. Salinger, and *Mr. Russell A. Warner* for Holtz.

BLAND, *J.*:

This is an interference proceeding involving priority of invention of 13 counts relating to subsynchronous motors.

The Board of Appeals of the United States Patent Office awarded all 13 counts to Holtz, which was an affirmation of the Examiner of Interferences' decision as to counts 2, 7, 11 and 12 and reversal of his decision as to the remaining counts.

Counts 1 and 7 are illustrative and follow:

> 1. A self-starting synchronous motor comprising cooperating stator and rotor elements, means associated with said stator element for producing a strongly pulsating, shifting magnetic field through said rotor element, a short-circuited current path on said rotor element for producing induction motor action, and a magnetic circuit on said rotor element designed to give the rotor a predominating reactance characteristic at an operating speed where considerable induction motor action exists.
>
> 7. A self-starting, single-phase synchronous motor comprising a field member having split salient poles and a shading coil on one portion of each pole, and an open-slot, squirrel-cage secondary member cooperating therewith in such manner that the teeth between the slots cooperate with the portions of the split poles to cause the motor to operate, under normal load conditions, at a synchronous speed less than the induction-motor speed.

Holtz's application was filed October 1, 1921, and Rowe's was filed April 29, 1922, Rowe being the junior party. Both parties took testimony. Two electrical manufacturing companies are the assignees of the applications and are the real parties in interest in the appeal.

The record shows that both parties were attempting to develop for their respective companies a small, self-starting, subsynchronous motor suitable for driving demand-meter attachments, and for general timing purposes such as in clocks; that prior to such inventions a full synchronous motor had been used for such purposes and that it was unsatisfactory because it operated at a very high rate of speed, i. e. one revolution for each cycle, or 3600 revolutions per minute on 60 cycle current circuits; that this great speed caused the motor to quickly deteriorate; that it was necessary to encase the motor in oil, and when so encased leakage and other undesirable conditions resulted.

The Examiner of Interferences describes the invention in the following language:

> The subject matter of this interference relates to small alternating current motors which start as an induction motor but lock into step at a fairly low synchronous speed with ample torque for driving timing devices. The stator of the motor is of the usual single-phase construction having two poles on portions of which are mounted shading coils to make the alternating flux shift in the direction in which rotation is desired. The rotor upon which this alternating shifting flux operates comprises a squirrel cage winding, or its equivalent, and a polar magnetic structure. The number of salient poles of the latter is greater than the number of poles of the stator. The number of salient poles determines the speed of the rotor. The six-pole rotor operates at 1200 revolutions per minute and the twelve-pole at 600 revolutions per minute on a sixty-cycle alternating current circuit. These motors are used for operating time switches, clocks, and the timing devices of demand meters.

The Examiner of Interferences found that Holtz established conception of the invention on October 27, 1919, for all the counts except count 7, but held that Holtz must be limited for conception to December 1, 1919, because his preliminary statement, while alleging conception between June 1, 1919, and August 1, 1919, did not allege disclosure to others prior to December 1, 1919. This holding of the Examiner of Interferences involves the main point of law in this case, which question for the most part, controls the decision. The Examiner of Interferences gave Holtz April 8, 1921, as the date of conception and reduction to practice of count 7, and held that Holtz was entitled to December 22, 1919, as the date of reduction to practice of counts 8, 9, and 11, and that April 8, 1921, was the date of reduction to practice of all counts (this being a second reduction to practice of counts 8, 9, and 11.) The Board disagreed with the finding of the Examiner of Interferences as to the conception date to be allowed to Holtz. (December 1, 1919.)

Holtz also claimed to have conceived the invention on June 15, 1919, and for proof relies on Exhibits 1, A, 2, 3, and 9, as corroboration of his own testimony on the subject. Neither tribunal below allowed this date.

The Examiner of Interferences gave Rowe as a date of conception, November 14, 1919, for counts 1, 3, 4, 5, 6, 8, 9, 10 and 13, and October 27, 1921, for counts 2, 7, 11, and 12, and for conception held Holtz restricted to December 1, 1919, and held that Rowe was diligent from the date of his conception until the date of his reduction to practice, which was October 27, 1921, and which was after the date of reduction to practice allowed Holtz.

The Board of Appeals, having given Holtz October 27, 1919, as the date of conception of all the counts except count No. 7, the question of diligence was not involved, since Holtz, as to these counts, was first to conceive and first to reduce to practice.

Both tribunals gave Rowe the date of October 27, 1921, as a reduction to practice of all counts, and Holtz was, by both tribunals, given a date of reduction to practice of counts 8, 9, and 11 of December 22, 1919, and as to count 7 and the remaining counts, April 8, 1921.

In this court Rowe has argued at great length that he should have August 8, 1919, as the date of conception, basing his argument upon a motor with an aluminum rotor with four slots in the periphery, which was built and tried out, according to Rowe's contention, on or before August 8, 1919. He then contends that he has shown diligence from that date until his reduction to practice, which entitles him to priority of most of the counts in the interference.

This evidence was carefully considered by the Examiner of Interferences and thoroughly discussed in his decision. The Board of Appeals, without detailed discussion, approved the holding of the Examiner of Interferences in rejecting this proof as not being satisfactory evidence of conception, and in awarding to Rowe as his earliest date of conception November 14, 1919.

We agree with the two concurring tribunals that the evidence relied upon by Rowe for his earliest claimed date of conception is not satisfactory and does not establish conception on a date earlier than November 14, 1919.

Another issue involved in the case is whether count 7 reads upon the Holtz application. Count 7 relates to an open-slot squirrel-cage secondary member, cooperating with a field member in such manner that the teeth between the slots cooperate with the portions of the split poles to cause the motor to operate, under normal load conditions, at a synchronous speed less than the induction-motor speed. The Law Examiner, the Examiner of Interferences and the Board of Appeals held that Holtz could make the count, after Rowe had moved to dissolve the interference on the ground that Holtz could not make it. The claim was inserted in the Holtz application upon the suggestion of the Patent Office.

As we view the case the decision of the issue as to all the counts except count 7 depends upon the correctness of the Board's ruling that Holtz was entitled to the date of October 27, 1919, as the date of conception of all counts except count 7, since if he was first to conceive and first to reduce to practice, he is entitled to priority. It will not be necessary for us to discuss the facts and the law on this question to any great length. They were thoroughly discussed by both tribunals.

[1] The Examiner of Interferences was in agreement with the Board that Holtz had conceived the invention on October 27, 1919, but since he did not disclose it to others, found that he was not entitled to such a date for the purposes of the interference. The Board of Appeals, following the reasoning of the Examiner of Interferences, found that he had conceived the invention on October 27, 1919, and found that it was not necessary for him to show a verbal disclosure of it to others if the fact that he had conceived it was otherwise satisfactorily proved. Concerning the holding of the Examiner of Interferences with respect to the necessity of corroborating testimony of other witnesses as to disclosure the Board said:

> The Examiner of Interferences appears to be of the opinion that an applicant's allegation of conception can be established only by the corroborating testimony of other witnesses and that it can not be established as of a date prior to his disclosure to others. Such holding is in line with the practice of this Office prior to 1910 of holding a party for date of conception to the date alleged in his preliminary statement for disclosure to others. This practice, however, was overruled by the Court of Appeals of the District of Columbia in *Peters v. Hopkins and Demond*, 1910 C. D., 278 • • •.

The Board then quotes from *Peters v. Hopkins*, 34 App. D. C. 141, 150 O. G. 1044, and discusses and quotes from *Mergenthaler v. Scudder*, 11 App. D. C. 264; 81 O. G. 1417; *De Forest v. Meissner et al.*, 208 Fed. 1006; and *Armstrong et al. v. De Forest Radio Telephone & Telegraph Co.*, 279 Fed. 445, and 280 Fed. 584. Following the rule laid down in the above-quoted decisions, the Board held that Holtz Exhibit Nos. 4 and 5, which were undated sketches bearing descriptive notes and showing the added star plate to the rotor as disclosed in the Holtz application involved in this interference, constituted satisfactory evidence of conception and disclosure without the necessity of further verbal disclosure, and in deciding this question said:

> In his stipulated testimony Lanphier, president of the Sangamo Company, testifies that a small sub-synchronous motor embodying the general characteristics of the Holtz apparatus disclosed in the applications involved in these interferences was conceived by Holtz in the summer of 1919.
>
> The Holtz Exhibits Nos. 4 and 5 are undated sketches bearing descriptive notes and showing the added starplate to the rotor as disclosed in the Holtz application involved in this interference. They support and are believed to constitute a satisfactory disclosure to one skilled in the art of all counts of the interference, except count 7, without further verbal disclosure. The sketches were given to Buoy with instructions to build the motor. Buoy's stipulated testimony is that the sketches, Holtz Exhibits 4 and 5, were given him a few days prior to October 27, 1919 by Holtz with request to construct a motor in accordance therewith and that his time records show that he worked on it nine hours on October 27, 1919, followed by work aggregating over 100 hours, and that the motor was completed on December 22, 1919.
>
> We agree with the Examiner of Interferences that the unimpeached evidence in behalf of Holtz establishes a conception of all the counts of this interference (except count 7) as early as October 27, 1919 but we do not concur in his technical ruling that the earliest date of conception that can be accorded Holtz, under the allegations of his preliminary statement, noted above, is December 1, 1919.

We agree with the decision of the Examiner of Interferences and the Board that Exhibits 4 and 5 are evidence of a full conception of the invention in all the counts of the interference except as to count 7 and we agree with the decision of the Board that the facts referred to by the Board, as is shown in the record, sufficiently established the conception of the invention of such counts as to entitle Holtz to the date of October 27, 1919, as the date of conception. The decisions of the District of Columbia Court of Appeals, cited by the Board, thoroughly support the Board's conclusion as to the sufficiency of the conception on the part of Holtz on October 27, 1919. The principle announced in such decisions is fully approved by this court in *Townsend v. Smith*, 17 C. C. P. A. (Patents) 647, 36 F.(2d) 292, 391 O. G. 753. The soundness of these decisions and the correctness of the Board's application of the same to the issue involved here is not seriously questioned in this appeal.

The test on the motor that was built by Buoy under the instructions of Holtz, and in accordance with the sketches of Exhibits Nos. 4 and 5, shows that the motor was not self-starting and the Examiner of Interferences and the Board both found that the building of this motor was a reduction to practice of counts 8, 9 and 11 only, which counts are not limited to self-starting motors. At a later date the star plate of the Holtz motor was shifted on the shaft so that the projections on the star-plate would extend outside the field laminations, and slots were sawed in the rotor above and down to some of the rotor conductors. This motor was tested on April 8, 1921, and found to be self-starting and to operate successfully. The Board and the Examiner of Interferences found that this motor, which was tested on April 8, 1921, by Holtz, had the limitations of count 7, that is an open-slot, squirrel-cage secondary member, not found in the other counts, and that it constituted a conception of count 7 and a reduction to practice of all the counts of the interference.

[2] Since Holtz was the first to conceive and the first to reduce to practice the invention of all the counts, he is entitled to an award of priority, and we agree with the decision of the Board in awarding priority of invention of all the counts to Holtz, and we also agree with the concurring decisions of the three Patent Office tribunals, for the reason stated therein, that Holtz could make count 7, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

ROWE *v.* HOLTZ. HOLTZ *v.* ROWE

Nos. 2,891 and 2,892. Decided February 8, 1932

1. INTERFERENCE—CONCEPTION—PROOF OF.

   The making of a drawing and the explanation thereof can not be held to establish conception of the invention in issue unless a device made in accordance with such drawing and description would operate in the manner provided by the counts of the issue.

2. SAME—PRIORITY.

   Evidence reviewed and *Held* to justify the award of priority to H. as to counts 3 and 6 and award of priority to R. as to counts 1, 2, 4, and 5.

APPEAL from the Patent Office. Affirmed.

Mr. O. H. Eschholz, Mr. R. E. Marine, Mr. O. B. Buchanan, Mr. Wesley G. Carr, and *Mr. Jo Bailey Brown* for Rowe.

Mr. Charles E. Tullar, Mr. Alex D. Salinger and *Mr. Russell A. Warner* for Holtz.

BLAND, *J.*:

The appeals at bar are both from a decision by the Board of Appeals of the United States Patent Office in an interference in which priority of invention was awarded to Holtz as to counts 3 and 6, and to Rowe as to counts 1, 2, 4 and 5. Holtz appealed from the decision of the Board awarding to Rowe priority of invention of the subject matter of counts 1, 2, 4 and 5, of which count 1 is illustrative, and follows:

> 1. A single-phase induction motor comprising a stator member having split poles and shading coils on the trailing sections of said split poles, and a rotor member comprising a magnetizable core member having open slots providing a larger number of poles than said stator poles and a squirrel-cage winding comprising conductors disposed in said rotor slots, the parts being so designed that the rotor poles lock into synchronism with the stator poles at a sub-synchronous speed.

Rowe appealed from the same decision of the Board in the same interference, which awarded priority of invention to Holtz of the subject matter of counts 3 and 6, of which count 3 is illustrative and follows:

> 3. An induction reaction motor having a salient pole primary member and a salient pole secondary member, an

induction motor secondary winding on said secondary member, the salient poles of said secondary member constituting a reaction motor secondary having a greater number of poles than the primary member said secondary member being so designed that the reaction motor torque at the synchronous speed corresponding to the pole number of the secondary is in excess of the induction motor torque at said speed, whereby said motor is capable of simultaneously operating as an induction motor and a reaction motor at a synchronous speed corresponding to the number of poles of the reaction motor secondary.

The invention involved relates to what is known as subsynchronous electric motors, used in connection with operating time switches, clocks and different kinds of timing devices, which motors constituted the subject matter involved in interference No. 55,103, decided by this court concurrently herewithin in patent appeal No. 2890.

While the three appealed cases have been separately briefed, there is but one record and the same testimony of the respective parties has been filed in both interferences, and is relied upon to prove the respective contentions of the parties. Both appeals in the instant interference will be decided in one opinion.

In appeal No. 2890, interference No. 55,103, there were involved an application of Rowe filed April 29, 1922, and an application of Holtz which was filed October 1, 1921. There, Rowe was the junior party. The present interference involves the same application of Rowe but an application of Holtz filed December 18, 1923, which later application of Holtz relates to the same general kind of motor as his former application, but is directed particularly to certain structural features which, for the purposes of this decision, may be regarded as not disclosed or claimed in the first application. Holtz is the junior party in this interference. The fact that one party is senior in one interference and junior in the other interference apparently accounts for the declaration of two interferences.

In this interference, unlike the companion interference, the decisions of the Examiner of Interferences and the Board concur upon each of the issues decided. The Examiner of Interferences and the Board gave Holtz a date not later than October 27, 1919, as the date of conception, and April 8, 1921, as the date of reduction to practice, of the invention of counts 3 and 6, and November 14, 1921, as the date of conception and reduction to practice of invention of counts 1, 2, 4 and 5. The Examiner of Interferences gave Rowe October 27, 1921, as the date of conception and reduction to practice of all the counts, and on the basis of these dates held that Holtz was the first to conceive and reduce to practice the invention involved in counts 3 and 6, and that Rowe conceived and reduced to practice the invention involved in counts 1, 2, 4 and 5, prior to Holtz' date of conception. The Board of Appeals, without discussing the questions at length, agreed with the Examiner of Interferences in his interpretation of the counts, and in the dates awarded to the parties for conception and reduction to practice, and in his award of priority of invention.

We will first dispose of the appeal in which Holtz is appellant.

In this court it is urged by Holtz that he is entitled to a date of conception for counts 1, 2, 4 and 5 (which were awarded to Rowe), of June, 1919, or at least as early as October 31, 1919, and bases his argument chiefly upon Holtz' Exhibit 1, which consists of drawings and notes dated June 15, 1919, which, he states, shows a four-pole, squirrel-cage rotor, meeting the requirements of the counts. He contends that when it was shown that he made this sketch and explained it to one Anderson, he had proved conception.

It will be noticed that in the companion interference, No. 55,103, Rowe was claiming a date for his conception of the invention involved in that interference which was prior to August 11, 1919, when he had used an aluminum cup rotor. In that interference, Holtz did not need to claim an earlier date than that allowed him by the Board, October 27, 1919, unless Rowe was given his earlier claimed date. In that case, however, Holtz did make claim to June 15, 1919, for his date of conception in event Rowe was given his earliest claimed date. The court did not find it necessary to go into the question as to whether or not Holtz was entitled to June 15, 1919, since it did not give Rowe his earliest claimed date.

In the case at bar, if Holtz wins his appeal as to counts 1, 2, 4 and 5, he not only must be allowed the early date claimed, but it must also be held that he was diligent from a time just prior to Rowe's conception (October 27, 1921), until November 14, 1921, which is the date of reduction to practice by Holtz.

The Examiner of Interferences in his decision in this interference, with respect to Exhibit 1 and the early claimed date of conception of Holtz said:

> The sketch (Exhibit 1) which was drawn by Holtz for Anderson on June 15, 1919, does not prove that Holtz was in complete possession of the invention defined in counts 3, 4, 5 and 6, as alleged by Holtz, for the same reason that said sketch does not amount to complete conception of counts 1 to 6 and 8 to 13 of the companion interference and as pointed out therein.

In the companion interference, No. 55,103, above referred to, the Examiner of Interferences discussed Holtz's Exhibit 1 and Exhibit A and held against Holtz on his earliest claimed date of conception, and said:

> Holtz testified that he is an electrical engineer and was chief engineer of the Sangamo Electric Co. at the time the invention involved herein was conceived. The circumstances incident to this conception occurred in connection with the development of a kva. measuring device which required the use of a small self-starting synchronous motor. Holtz built a small synchronous motor (Exhibit A) for the equipment. This motor was tested by Holtz and an assistant named Anderson and it was found to be neither self-starting nor synchronous. The rotor of the first motor was bi-polar and upon its failure to start and to come up to synchronous speed Holtz drew a sketch (Exhibit 1) for Anderson on June 15, 1919, of a four-pole squirrel-cage rotor to be built up of soft iron laminations and to be used in the original stator of Exhibit A. Holtz was of the opinion that the data taken on the original structure indicated such a rotor would probably operate satisfactorily. This rotor, however, was never constructed.
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> • • • • • • • •
>
> Holtz contends that the disclosure of Exhibit 1 establishes conception as of that date of all the counts here involved except count 7. A complete conception as defined in an issue of priority of invention is matter of fact and must be clearly established by proof. It is not clear that Holtz at the time he disclosed Exhibit 1 to Anderson had a complete concept of the subject matter of the counts in issue. In answer to cross-questions 145 and 146 Holtz stated that he considered that a hardened steel star disc becoming permanently magnetized was an important or essential feature of the sub-synchronous motor design there under consideration. The motor, under consideration in XQ's 145 and 146, is not the same as the motor shown in Exhibit 1 which is being considered here but, in view of the above answer, it is believed that Holtz should have shown either, that it was not necessary to construct the rotor of the motor in Exhibit 1 of hardened steel, or, if a rotor were constructed of soft iron as indicated in Exhibit 1, it would function at least to some extent. In other words, it is not clearly established that if a rotor were constructed as disclosed in Exhibit 1 and inserted in the stator of Exhibit A, the structure unquestionably would be an operative device. Hence it does not establish conception of any of the counts. Where performance of the device is dependent on the material, the conception is not complete until the right material is ascertained.

In that interference it was not necessary for the Board to pass upon this evidence inasmuch as it reversed the Examiner of Interferences on the early conception date given Rowe.

In the present interference, the Board of Appeals affirmed the Examiner of Interferences in not allowing Holtz the early date of conception based upon Exhibit 1.

It is argued by Holtz that the tribunal's findings against him on his claim for June 15, 1919, as the date of conception, result from a misunderstanding of the testimony or from the fact that they completely ignored the same. Holtz claims the testimony shows definitely that a hard steel rotor was not necessary for the proper operation of the motor and that soft steel was preferred and that at any rate neither the counts in interference nor either of the applications are in any way restricted to hard material. It is argued that the exhibits referred to are only relied upon for conception and not for reduction to practice, and that the holding of the Examiner of Interferences that a rotor constructed as is shown in Exhibit 1, and inserted in the stator of Exhibit A, would not be an "operative device", is holding Holtz to an operative test which is required in reduction to practice but which is not required for conception.

[1] With respect to this feature of the case, we are of the opinion that the exhibit and the explanation of the same to Anderson would not afford sufficient evidence of conception of the invention of the counts at bar, if when the rotor had been constructed in accordance with such teachings and inserted in the stator of Exhibit A, it failed to function under such circumstances as are shown in this case. If something else had not been conceived and done which was not then within the contemplation of the inventor, it is obvious that the invention in controversy would not have been produced. As to whether Holtz, in June, 1919, had fully performed the mental part of the invention by conceiving a device responding to the counts which, when constructed, would operate in the manner provided by the counts, we are constrained to be guided in our conclusion by the concurring findings of the tribunals below. The question involves highly technical matters of electrical engineering and we can not say that the tribunals below were clearly in error in their findings. *In re Wietzell et al.*, 17 C. C. P. A. (Patents) 1079, 1082, 39 F.(2d) 669, 400 O. G. 463; *Gleason* v. *Dosch et al.*, 17 C. C. P. A. (Patents) 1012, 39 F.(2d) 687, 397 O. G. 547. Furthermore, it seems to us that if Holtz had a full conception of a motor responding to the counts at bar in June, 1919, he would not have embarked upon the invention and construction of the star plate rotor upon which he was awarded priority in the companion interference case.

Conception is defined in Robinson on Patents, §376, as follows:

> The conception of the invention consists in the complete performance of the mental part of the inventive act. • • • All that remains to be accomplished, in order to perfect the art or instrument, belongs to the department of construction, not creation. It is thus the formation, in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice.

In *Mergenthaler* v. *Scudder*, 11 App. D. C. 264, 279, 81 O. G. 1417, with reference to conception, the court said:

> If drawings be exhibited and relied on as evidence of the conception of the invention, they must show a complete conception, free from ambiguity or doubt, and such as would enable the inventor or others skilled in the art to reduce the conception to practice without any further exercise of inventive skill.

While no authorities based upon a state of facts identical with those at bar have been found, we think *Glidden* v. *Noble*, 5 App. D. C. 480, 71 O. G. 141; *Mergenthaler* v. *Scudder*, supra; *Appert* v. *Schmertz*, 13 App. D. C. 117, 84 O. G. 508; and *Deering* v. *Winona*, 155 U. S. 286, 301–302, 69 O. G. 164, support the view that Holtz did not conceive the invention involved in the counts at bar in June, 1919.

Since Rowe was first to conceive and first to reduce to practice the counts in issue in this appeal, it is not necessary to consider the diligence of Holtz, and the Board of Appeals properly awarded priority to Rowe therein.

We will now take up the appeal of Rowe, in the same interference, No. 55,104, from the action of the Board of Appeals in awarding priority to Holtz in the invention of counts 3 and 6.

Both of the counts originated in the Holtz application and the limitations and particular structure involved in this appeal, are, we think, sufficiently set out in the claims.

The Examiner of Interferences held that Holtz conceived on October 27, 1919, and reduced to practice April 8, 1921. Rowe was given October 27, 1921, as the date for both conception and reduction to practice. As will be noted in the statement of the case, supra, as to counts 3 and 6 Holtz was held to have conceived the invention and reduced the same to practice before Rowe had conceived the same.

In view of our holding in appeal No. 2890, the only issue involved in this interference is the interpretation of the counts. If the concurring tribunals below have correctly interpreted the counts, their action in awarding priority must be approved.

The character of the claims with reference to limitations and lack of limitations is referred to and discussed in the opinion of the Examiner of Interferences. The views of the Examiner of Interferences were approved by the Board of Appeals.

The Board said:

> We agree with the Examiner of Interferences that counts 3 and 6 are broadly worded and that Holtz is

entitled to October 27, 1919, for conception of counts 3 and 6 for reasons similar to those upon which we held Holtz entitled to this date for conception of certain counts in the companion interference. The successful tests of the star-plate motor on April 8, 1921, constitutes a reduction to practice of counts 3 and 6.

Since we approve of what the Examiner has said with reference to the character of the claims and the interpretation they are to be given, we do not feel called upon to further comment on this phase of the case.

The date of October 27, 1919, which was awarded to Holtz for conception is the conception date awarded Holtz in the companion interference for all the counts there involved except count 7, and we think on that date, which is the date of conception of the star-plate motor, he conceived the invention of the counts herein involved. When this fact is conceded, there is no question as to who is entitled to priority.

The decision of the Board of Appeals, awarding priority of invention to Holtz as to counts 3 and 6 in this interference was proper and should be affirmed.

[2] We hold that the decision of the Board of Appeals awarding priority of invention in counts 1, 2, 4 and 5 to Rowe and in awarding priority of invention in counts 3 and 6 to Holtz was proper and the same is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,089,405, W. S. Ferguson, Reinforced concrete dock or pier, D. C., W. D. N. Y., Doc. 480, *Dock & Terminal Engineering Co. et al.* v. *Washburn Crosby Corp.* Dismissed Apr. 5, 1932.

1,125,476, G. Claude, System of illuminating by luminescent tubes, filed Jan. 16, 1932, D. C., W. D. Wash., N. Div., Doc. 905, *Claude Neon Electrical Products Corp., Ltd., et al.* v. *Eldridge Buick Co.* Doc. 883, *Claude Neon Electrical Products Inc., et al.*, v. *K. Okazaki (Togo Furniture Co.) et al.* Dismissed as to defendants C. J. Hook and E. James Apr. 18, 1932.

1,131,525, Kelley & Wood, Locomotive curtain, D. C. Minn. 4th Div., Doc. 1094, *C. Kelley et al.* v. *Northern Pacific Rwy. Co.* Dismissed with prejudice Apr. 19, 1932.

1,135,108, L. Gschwind, Dish washing apparatus, filed Apr. 11, 1932, D. C., W. D. Mich., S. Div., Doc. E 2536, *L. Gschwind et al.* v. *Richards Mfg. Co. et al.* Doc. E 2537, *L. Gschwind et al.* v. *Crane Co. et al.* Doc. E 2538, *L. Gschwind et al.* v. *Standard Sanitary Mfg. Co.*

1,146,182, S. Lipsius, Raised printing process and product, D. C., S. D. N. Y., Doc. E 57/101, *S. Lipsius et al.* v. *Flexo Mfg. Co., Inc.* Consent order of discontinuance Apr. 20, 1932.

1,153,775, F. Galler, Book sewing machine, D. C., S. D. N. Y., Doc. E 56/157, *W. H. Rademaikers & Son Co. et al.* v. *Dess & Talan Co., Inc.* Dismissed (notice Apr. 13, 1932).

1,185,313, E. C. Haviland, Collapsible cable lock, filed Apr. 6, 1932, D. C. Mass., Doc. E 3613, *Van Kannel Revolving Door Co.* v. *Hayes Bickford Lunch System, Inc., et al.*

1,193,093, B. Weinberger, Garment pressing machine, filed Apr. 21, 1932, D. C., S. D. N. Y., Doc. E 66/395, *U. S. Hoffman Machinery Corp.* v. *Goldman Pressing Machine Corp.*

1,212,840, F. J. Straub, Building block and method of making, D. C., E. D. N. Y., Doc. E 5906, *Crozier-Straub, Inc.*, v. *United Cement Products Co., Inc.* Consent decree for plaintiff Apr. 20, 1932.

1,226,188, R. R. Corn, Rock-shaft bearing for looms, filed Apr. 8, 1932, D. C., W. D. S. C. (Greenville), Doc. E 337, *W. H. Bahan, jr.*, v. *M. E. Tanner et al (Carolina Foundry & Machine Co.).*

1,271,529, M. C. Hopkins, Acoustic device, filed Apr. 18, 1932, D. C., S. D. N. Y., Doc. E 66/380, *Lektophone Corp.* v. *Crosley Distributing Corp.* Same, D. C., E. D. N. Y., Doc. E 6252, *Lektophone Corp.* v. *Bushwick-McPhilbin Corp.* Doc. E 6253, *Lektophone Corp.* v. *A. A. Straus, Inc., et al.*

1,306,128, R. A. Simpson, Dumping butter mold, filed Feb. 26, 1932, D. C. Wash. (Yakima), Doc. E 1639, *R. A. Simpson Mfg. Co., Inc.*, v. *G. R. Harrild et al. (The Woodcrafters).*

1,307,734, A. V. Gullborg, Lubricating means, D. C., N. D. Calif. (San Francisco), Doc. E 2593–K, *Alemite Corp.* v. *M. D. Cohn. (Hughes Equipment Co., Inc.).* Claims 14 and 15 held valid and infringed Jan. 29, 1932.

1,308,583, A. C. Dennis, Method of tunneling, D. C., E. D. Wash. (Spokane), Doc. E 4341, *A. C. Dennis et al.* v. *Great Northern Rwy. Co.* Patent held void, Mar. 14, 1932.

1,315,585, C. Weizman, Production of acetone and alcohol by bacteriological process, appeal filed Feb. 26, 1932, C. C. A., 3d Cir., Doc. 4866, *Union Solvents Corp.* v. *Guaranty Trust Co. et al.*

1,318,670, H. Hull, Selective signaling apparatus, appeal filed Apr. 9, 1932, C. C. A., 2d Cir., Doc. 12046, *Appliance Investment Co.* v. *Western Electric Co., Inc.*

1,372,680, C. E. Frost, Brush, D. C., N. D. Ohio, E. Div., Doc. 3531, *The Osborn Mfg. Co.* v. *The Specialty Mfg. Co.* Claims 1, 2, and 3 held valid and infringed Apr. 13, 1932.

1,390,349, J. H. Emery, Artificial grapes and method of producing same, filed Apr. 14, 1932, D. C. Conn. (New Haven), Doc. E 2195, *J. H. Emery et al.* v. *G. C. Murphy Co.*

1,414,387, B. Wexler, Dumb waiter door, C. C. A., 8th Cir. (St. Louis), Doc. 9314, *The Peelle Co.* v. *Security Fire Door Co.* Decree affirmed Apr. 15, 1932.

1,415,686, L. Oppenheim, Calendar, D. C., S. D. N. Y., Doc. E 54/233, *I. D. L. Mfg. Corp.* v. *Export Underwriter's Corp.* Consent order of discontinuance (notice Apr. 14, 1932).

1,440,973, C. E. Dolbear, Method of controlling foaming of boiling liquids, filed Mar. 30, 1932, D. C., S. D. Calif. C. Div., Doc. E W–71–H, *C. E. Dolbear et al.* v. *American Potash & Chemical Corp.*

1,460,716, B. F. Greer, Book form savings bank, C. C. A., 2d Cir., Doc. 11846, *B. B. Deitel* v. *Reich-Ash Corp. et al.* Decree reversed (notice Apr. 11, 1932).

1,492,472, A. B. Leech, Light transmitting structure, filed Apr. 22, 1932, D. C., S. D. N. Y., Doc. E 67/33, *Scene-In-Action Corp.* v. *Celluloid Corp.*

1,516,383, F. E. Hoddersen-Balling, Ham boiler, appeal filed Apr. 16, 1932, C. C. A., 2d Cir., Doc. 12068–4, *F. E. Hoddersen-Balling* v. *D. F. Lorenz et al.*

1,526,982, E. W. Hill, Stencil sheet, D. C., M. D. Pa. (Scranton), Doc. 634, *A. B. Dick Co.* v. *Cotterel Co.* Injunction granted Dec. 14, 1931.

1,540,628, Hurxthal & Hurxthal, Automatic temperature control for bread toasters, filed Apr. 22, 1932, D. C., E. D. N. Y., Doc. E 6261, *Proctor & Schwartz Electric Co.* v. *J. Davidson.*

1,548,360, A. C. Mason, Fabric shearing machine, filed Apr. 12, 1932, D. C. Mass., Doc. E 3614, *Hermas Machine Co.* v. *Curtis & Marble Machine Co.*

1,576,480, A. W. Kath, Clip attaching machine, C. C. A., 2d Cir., Doc. 11872, *A. Colton Co.* v. *McKesson & Robbins, Inc.* Decree reversed (notice Apr. 18, 1932).

1,581,292, H. B. Ross, Power transmission mechanism, filed Apr. 7, 1932, D. C. Colo. (Denver), Doc. 9806, *H. B. Ross* v. *Chevrolet Motor Co.*

1,612,992, B. A. Sterling, Fastening device, filed Apr. 22, 1932, D. C., S. D. N. Y., Doc. E 67/31, *B. A. Sterling* v. *New York Hair Co., Inc.*

1,615,315, H. J. Shaw, Concrete mixer, filed Apr. 8, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4221, *H. J. Shaw et al.* v. *Portland Concrete Machines Co.*

1,623,469, F. A. Fahrenwald, Metallurgical furnace, appeal filed Dec. 1, 1931, C. C. A., 3d Cir., Doc. 4787, *F. A. Fahrenwald et al.* v. *Republic Iron & Steel Co.*

1,650,905, O. L. Mills, Welding rod, D. C., S. D. Calif. C. Div., Doc. E R–113–J, *Mills Alloys, Inc.* v. *Stoody Co. et al.* Dismissed Apr. 15, 1932.

1,666,015, G. W. Land, Tank cleaning apparatus, D. C., N. D. Calif. (San Francisco), Doc. E 2952–L, *G. W. Land, et al.* v. *H. D. Southwick (Pyrate Products Co.).* Patent held valid and infringed Apr 6, 1932.

1,669,790, Sheridan & Jacobson, Stocking protector, filed Apr. 15, 1932, D. C. Mass., Doc. E 3616, *F. B. Sheridan et al.* v. *Silver-Brown Co.*

1,683,806, J. W. Richards, jr., Shoe for transmission clutch drum lugs, D. C. Minn. (St. Paul), Doc. 2184, *J. W. Richards, jr.*, v. *Ford Motor Co.* Dismissed without prejudice Mar. 27, 1932.

1,710,565, E. Bohm, Carroting animal hair and wool, filed Apr. 8, 1932, D. C. Conn. (New Haven), Doc. E 2192, *E. Bohm* v. *American Hatters & Furriers Co., Inc.*

1,715,821, B. B. Deitel, Novelty case, filed Apr. 11, 1932, D. C., S. D. N. Y., Doc. E 66/340, *B. B. Deitel* v. *Superior Packing Corp.*

1,737,030, R. G Stephens, Electric lighting unit, filed Apr 1, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3227–L, *R. G. Stephens et al.* v. *M. W. Berger et al. (Neon Symbol Light Co.).*

1,740,554, C. F. Tageser, Pajama pants, filed Apr. 19, 1932, D. C. Md., Doc. E 2049, *Stadium Undercoar Co., Inc.*, v. *Oppenheim, Oberndorf & Co., Inc.*

1,782,108, J. C. Wahl, Desk stand and holder for fountain pens, filed Apr. 21, 1932, D. C., E. D. N. Y., Doc. E 6260, *Pen Desk Set Co.* v. *Wm. Wise & Son, Inc.*

1,833,581, W. J. Jordan, Fishing lure, filed Apr. 8, 1932, D. C., N. D. Ind. (South Bend), Doc. E 467, *South Bend Bait Co.* v. *A. Berman (Berman's Sport Goods Store).*

1,840,415, D. H. Schweyer, Inductive control device, filed Mar. 9, 1932, D. C., S. D. Ind. (Indianapolis), Doc. 1384, *Schweyer Electric & Mfg. Co.* v. *Chicago, Indianapolis & Louisville Rwy. Co.*

Re. 16,360, F. C. Stephens, Needle and its use, D. C., S. D. N. Y., Doc. E 48/16, *The Stelos Co., Inc.*, v. *Hosiery Motor-Mend Corp. et al.* Dismissed (notice Apr. 11, 1932).

Des. 82,430, J. F. Kasper, Kitchen cabinet, filed Apr. 8, 1932, D. C. M. D. Pa., Doc. 922, *J. F. Kasper* v. *Keystone Cabinet Co. et al.*

Des. 84,089, E. W. Freudenberg, Embroidered textile fabric, filed Apr. 11, 1932, D. C., S. D. N. Y., Doc. E 66/341, *Amreim-Freudenberg Co., Inc.*, v. *E. S. Wintermute Co., Inc.*

Disclaimers

Re. No. 16,803.—*Edmund M. Flaherty*, Parlin, N. J. LOW-VISCOSITY LACQUER AND FILM PRODUCED THEREFROM. Patent dated November 29, 1927. Disclaimer filed May 26, 1932, by the assignee, *E. I. du Pont de Nemours & Company.*

Hereby enters this disclaimer to that part of said specification and claims which is in the following words; to wit: "and generally the said lacquers and solutions are distinguished over the prior art by containing a nitrocellulose whose inherent viscosity characteristic is such that at above 20% concentration in a mixed solvent of the character described in Example I, it will provide a solution below 25,000 centipoises in viscosity". (P. 3, 11.2–9.)

"13. A composition comprising cellulose nitrate having an inherent viscosity characteristic such that at above 20% concentration in mixed solvent of the composition hereinbefore described it will provide a solution below 25,000 centipoises in viscosity, and comprising also a resin and a solvent.

"14. A composition comprising cellulose nitrate having an inherent viscosity characteristic such that at above 20% concentration in mixed solvent of the composition hereinbefore described it will provide a solution below 25,000 centipoises in viscosity and comprising also a resin and solvent to bring the viscosity of the total composition below 25,000 centipoises.

"15. An article covered with a hard, durable, tough, non-shrinking and adhesive film formed from a composition comprising a cellulose nitrate having a viscosity characteristic such that at above 20% concentration in mixed solvent of the composition hereinbefore described it will provide a solution below 25,000 centipoises in viscosity, and comprising also a resin.

16. An article coated with a hard, durable, tough, and adhesive film formed from a composition containing a resin, a softener, and a cellulose nitrate having a low viscosity characteristic such that at above 20% concentration in mixed solvent of the composition hereinbefore described it is capable of producing a solution below 25,000 centipoises in viscosity."

1,454,397.—*William W. MacDonald*, San Francisco, Calif. HYDRAULIC BRAKE. Patent dated May 8, 1923. Disclaimer filed May 25, 1932, by the *patentee.*

Hereby disclaims from each and all claims 1 to 5, inclusive, of said patent any device except when the device is connected and combined with, and adapted and arranged for remote operation of, a plurality of hydraulic brakes and brake setting mechanisms and in which the connections between the brake setting mechanisms and cylinder 8 and between the latter and the reservoir permit automatic venting and priming whenever the brakes are returned to released position, and in which device the reciprocating means for the piston include a brake pedal.

1,690,109.—*Ralph A. Gross*, Lititz, Pa. COLLAPSIBLE BOX. Patent dated November 6, 1928. Disclaimer filed May 21, 1932, by the patentee, and the assignee, *Simplex Paper Box Corporation.*

Hereby disclaim from the scope of each of claims numbered 3 and 4 all collapsible boxes except those provided with corner sections integral with both the adjacent main side flaps and end flaps and provided with diagonal lines of fold dividing them into triangular portions, which fold upon themselves and upon the connected end flaps, and are enclosed between the end flaps and the locking flaps connected therewith.

1,744,917.—*Gustave C. Pearson*, Denver, Colo. FLUID-OPERATED TOOL. Patent dated January 28, 1930. Disclaimer filed May 24, 1932, by the assignee, *Gardner-Denver Company.*

Hereby enters this disclaimer to claims 1 and 2 of said patent which is in the following words, to wit:

"1. In a fluid operated tool, the combination with a cylinder member having a piston chamber and a cell in rear of the piston chamber, of a piston in the piston chamber, a plug fitting the cell and having a valve chamber and a ratchet chamber, an automatic distributing valve in the valve chamber controlling the supply of motive fluid to the piston chamber, and a rifle bar having ratchet mechanism in the ratchet chamber.

"2. In a fluid operated tool, the combination with a cylinder member having a piston chamber and a cell in rear of the piston chamber, of a piston in the piston chamber, a plug fitting the cell and having a valve chamber and a second chamber provided with ratchet means on its peripheral wall, an automatic distributing valve in the valve chamber controlling the supply of motive fluid to the piston chamber, and a rifle bar having ratchet mechanism in the second chamber coacting with the said ratchet means on the wall of said chamber."

1,778,500.—*Otto J. Kuhlke*, Akron, Ohio. APPARATUS FOR MAKING MOLDS. Patent dated October 14, 1930. Disclaimer filed May 21, 1932, by the assignee, *National Rubber Machinery Company.*

Hereby enters this disclaimer to claims 1, 2, 3, and 4 in said patent, which are in the following words, to wit:

"1. In mold-forming apparatus, the combination of means for holding a mold section, a die member, and means for successively positioning said die member with a part thereof in spaced relation to different portions of said mold section to form die cavities for casting recurring pattern-molding units in said mold section.

"2. In mold-forming apparatus, the combination of means for holding a mold section, a die member, means for successively positioning said die member with parts thereof in spaced relation to different portions of said mold section to form die cavities for casting pattern-molding units in said mold section, and means for supplying molten metal to said die cavities.

"3. In mold-forming apparatus, the combination of means for supporting a mold section having a molding face formed therein, a die member, means for successively positioning said die member with a part thereof in spaced relation to different portions of said molding face to form die cavities for casting pattern-molding units in said mold section, means for supplying molten metal to said die cavities, and means for preventing relative movement between said mold section and said die member during the casting operations.

"4. In mold-forming apparatus, the combination of means for holding a mold section having a molding face formed with an annular recess therein, a die member, means for successively positioning said die member with a part thereof in spaced relation to the bottom of said recess to form die cavities for casting pattern-molding units in said mold section, and means for supplying molten metal to sa'd die cavities."

1,780,328.—*Elmer U. Ames*, late of Collingswood, N. J., deceased, by *Caroline F. Ames*, Haddonfield, N. J., administratrix. KNITTING MACHINE. Patent dated November 4, 1930. Disclaimer filed May 23, 1932, by the administratrix, *Caroline F. Ames*.

Therefore disclaims claims 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, and 19 of the patent except insofar as said claims relate to a pattern element with projections (variously designated in said claims as butts or selecting means or selective operating points) having active faces at their outer ends for contacting with other elements of the machine in which said pattern elements are employed.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,640,542, B. F. Fuller, Circuit controlling apparatus, decided March 30, 1932, claim 7.

Pat. 1,683,451, Lee de Forest, Sound recording and reproducing apparatus, decided April 27, 1932, claim 3.

Pat. 1,687,494, R. B. Fisher, Lubrication of sleeve-principle engines, decided March 29, 1932, claims 10, 11, and 12.

Pat. 1,716,738, J. Reid, Clutch pulley control, decided March 31, 1932, claim 3.

Pat. 1,747,534, T. Visota, Piston for explosion motors, decided May 19, 1932, claim 2.

Pat. 1,770,888, W. L. Carlson, Radio signalling apparatus, decided May 16, 1932, claim 6.

Pat. 1,817,390, A. J. Meyer, Internal combustion engine, decided May 20, 1932, claims 2, 3, 4, 5, and 6.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, D. C., May 21, 1932.*

The Dryzol Chemical Co., their assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Lysol, Incorporated, of Bloomfield, N. J., to effect the cancellation of the trade-mark registration of The Dryzol Chemical Co., of 544 Broadway Buffalo, N. Y., No. 140,368, dated March 15, 1921, and the notice of such proceeding sent by registered mail to The Dryzol Chemical Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless The Dryzol Chemical Co., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 24, 1932.*

Dr. J. A. Walsh Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Gladys V. McCune, of Hotel Ambassador, 51st Street and Park Avenue, New York, N. Y., to effect the cancellation of the trade-mark registration of Dr. J. A. Walsh Co., of 2414 Washington Street, Boston, Mass., No. 96,760, dated April 28, 1914, and the notice of such proceeding sent by registered mail to the said Dr. J. A. Walsh Co. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Dr. J. A. Walsh Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 14, 1932

[VOL. 419. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 326,707. DYNAMIT-ACTIEN-GESELLSCHAFT VORMALS ALFRED NOBEL & CO., HAMBURG, Troisdorf, Germany. Filed May 3, 1932.

Acetylon

For Partly Prepared Cellulose Acetate Material in the Form of Sheets, Rods, Tubes, and the Like.
Claims use since July 14, 1931.

Ser. No. 326,712. FRED GOULD, Newfield, N. J. Filed May 3, 1932.

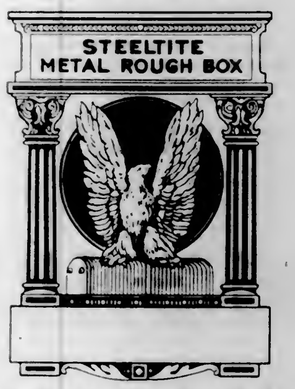
TIP-TOP

For Pigeon Grit.
Claims use since July 3, 1931.

CLASS 2

Receptacles

Ser. No. 325,043. THE G. F. MITCHELL & SONS COMPANY, Cleveland, Ohio. Filed Mar. 11, 1932.



No claim is made to the exclusive use of the words "Metal Rough Box" nor to the representation of a rough box which appears in the drawing.
For Metal Rough Boxes for Burial Purposes.
Claims use since Jan. 21, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 321,628. H. & L. PRODUCTS CO., Linden, N. J. Filed Nov. 27, 1931.

VELVO

For Compound for General Cleaning Purposes.
Claims use since Aug. 16, 1930.

Ser. No. 325,383. CHARLES BURKE & SONS, Detroit, Mich. Filed Mar. 21, 1932.

Copperhead

For Copper Polish.
Claims use since Feb. 1, 1931.

Ser. No. 325,697. THE SOLVAY PROCESS COMPANY, Geddes, N. Y. Filed Mar. 31, 1932. Under section 5b of the act of 1905 as amended in 1920.

SOLVAY

For Cleansing and Scouring Compound and for a Cleaning Compound for Removing Casein and Milkstone, Particularly for Use in Dairies and Creameries.
Claims use since Sept. 29, 1930, Cleansing and scouring compound, and Feb. 26, 1931, casein and milkstone remover.

Ser. No. 326,408. YARDLEY & CO., LIMITED, London, England. Filed Apr. 22, 1932. Under 10-year proviso.

YARDLEY'S

For Bath Soap, Toilet Soaps, Shaving Powder.
Claims use since 1890.

Ser. No. 326,576. E. L. BOYNTON, doing business as California Cleaning Products Co., Los Angeles, Calif. Filed Apr. 28, 1932.

RING EX

For Powder for Dry Cleaning.
Claims use since Apr. 18, 1932.

CLASS 5

Adhesives

Ser. No. 326,327. THE KAYON COMPANY, Milwaukee, Wis. Filed Apr. 21, 1932.

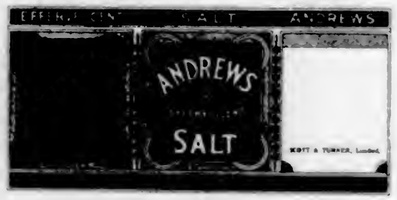
KAYON

For Adhesive Cement.
Claims use since Jan. 19, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 317,873 SCOTT & TURNER, LIMITED, Newcastle-upon-Tyne, England. Filed Aug. 11, 1931.



The drawing is lined and shaded to indicate the colors green and black. No claim is made to the words "Effervescent Salt."
For Effervescent Medicinal Salt.
Claims use since May 1, 1931.

Ser. No. 322,636. GETZ EXTERMINATORS, INC., St. Louis, Mo. Filed Jan. 2, 1932.



The name "W. D. Hussung" is a facsimile of the signature of W. D. Hussung, deceased.
For Preparations for Exterminating Insects.
Claims use since 1888.

Ser. No. 323,872. THE PERFECT MANUFACTURING CO., Cincinnati, Ohio. Filed Feb. 5, 1932.

SAVASOLE

For Shoe Resoling and Repairing Compound.
Claims use since Jan. 10, 1929.

Ser. No. 324,032. HENRY A. CORDES, doing business as The H-B Co., Jersey City, N. J. Filed Feb. 10, 1932.

1. 4. U.

For Medicine for Stomach Troubles, Nervous Diseases, and Blood Impurities, Rheumatism and Lumbago, and Hemorrhoids.
Claims use since Jan. 15, 1907.

Ser. No. 324,318. HARVEY B. MCGRAW, doing business as Fullsong Products Co., Cortland, N. Y. Filed Feb. 19, 1932.



No claim being made to exclusive use of the word "Products" apart from the mark shown on drawing.
For Animal Preparations—Namely, Feather Pulling Tonic, Laxative Regulator for Birds, Anti-Asthmatic Liquid for Birds, Foot Ease, Preparation for Treating Birds, Bird Bitters and General Tonic, Tonic Stimulant for Colds in Birds, Bird Pepper, a Stimulant for Treating Colds, Antiseptic Wash, Red Mite Liquid, Red Mite Powder, Vitamin Tonic, a Health Builder for Birds.
Claims use since 1925.

Ser. No. 324,745. WILLIAM C. JACKSON, Tulsa, Okla. Filed Mar. 3, 1932.



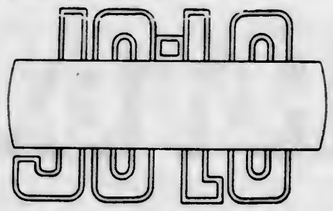
The symbol "℞" not being claimed.
For Medicinal Compound for Use in the Relief of Pains and Cramps and the Feeling of General Debility Just Prior to and During the Period of Menstruation.
Claims use since Feb. 20, 1932.

Ser. No. 324,858. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Mar. 7, 1932.

UNION

For Medicinal Petroleum Oil, Radiator Glycerine, Radiator Cleanser and Anti-Corrosion Material, Insecticidal Oils, Oils for Oiling Paper, and Cosmetic Oils—Namely, Oils Used as an Oil Base for Making Cold Creams, Nourishing Creams, Shaving Creams, and Hair Oils, Etc.
Claims use since September, 1924.

Ser. No. 324,898. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed Mar. 8, 1932.



For Insect Powders, Baking Powder; Ingredients of Baking Powder—Namely, Bicarbonate of Soda, Cream of Tartar, Sodium Aluminum Sulphate, Calcium Acid Phosphate, Sodium Acid Pyrophosphate, Mono-Basic Phosphate of Sodium, Calcium Acid Phosphate, Sodium Acid Pyrophosphate, Mono-Basic Phosphate of Sodium, and Double Sulphates of Aluminum and Sodium.
Claims use since 1919.

Ser. No. 325,110. PAPIER POUDRÉ, LIMITED, London, England. Filed Mar. 14, 1932.



The portrait in the drawing is fanciful. No claim is made to the exclusive use of the words "Nail Polish" apart from the mark shown on the drawing.
For Nail Polish.
Claims use since Oct. 13, 1931.

Ser. No. 325,140. JAMES A. GILMORE, Spokane, Wash. Filed Mar. 15, 1932.



No claim being made for the use of the words "A Healing Shampoo" and "By Originator of Hairmore" apart from the mark as shown.
For Hair Treating Compound in the Form of a Solution, Lotion, Paste, or Cream for Use as a Hair Wash or Shampoo for Use in the Treatment of the Hair.
Claims use since Jan. 15, 1932.

Ser. No. 325,400. EUSTACE H. GANE, doing business as R-Tex Laboratories, New York, N. Y. Filed Mar. 23, 1932.

R-TEX

No claim is made to any exclusive rights to the symbol "B" except in the precise relation and association in which it appears in the drawing forming part of this application.

For Medicinal Preparation for the Treatment of Eczema, Facial Eruptions, Poison Ivy, Insect Bites and Stings, and Skin Diseases Accompanied by Itching.

Claims use since May 1, 1930.

Ser. No. 325,465. HAROLD H FRIES, doing business as Fries Bros., New York, N. Y. Filed Mar. 25, 1932.

XEROL

For Emulsifying Agent in the Nature of a Wax Which is Principally Used in the Manufacture of Pharmaceutical and Cosmetic Preparations.

Claims use since Mar. 11, 1932.

Ser. No. 325,555. LEON BARON, doing business as N. C. Goodwin's Laboratory, Inc., Brooklyn, N. Y. Filed Mar. 28, 1932.

EFFO

For Greaseless and Stainless Jelly for the Relief of Foot Odor and Perspiration.

Claims use since 1926.

Ser. No. 325,580. THE HY'NE CO., Chicago, Ill. Filed Mar. 28, 1932.



No exclusive claim is made to the words "Trade Mark" apart from the mark as shown on the drawing. The representation of the female head forming a feature of the mark is fanciful.

For Vaginal Suppositories for Women's Hygiene.

Claims use since 1887.

Ser. No. 325,585. IRVING LEVIE, Brooklyn, N. Y. Filed Mar. 28, 1932.

FE-GENE

For Effervescent Tablets for Use in Feminine Hygiene.

Claims use since Feb. 29, 1932.

Ser. No. 325,703. GEORGE W. BEEMAN, Detroit, Mich. Filed Apr. 1, 1932.



The trade-mark is described as consisting of a rectangle divided into three triangles having a common apex at the middle of one side of the rectangle, having the two lesser triangles colored black, and having the words "Beauty Counselor" printed in the larger triangle.

For Face Creams, Face Powders, and Hand, Face, and Skin Lotions.

Claims use since Mar. 23, 1931.

Ser. No. 325,954. MERCK & CO., INC., Rahway, N. J. Filed Apr. 9, 1932.

ARCOLOY

For Silver Copper Alloy Mirroring Solution.

Claims use since Jan. 18, 1932.

Ser. No. 325,958. PEOPLES DRUG STORES, INC., Washington, D. C. Filed Apr. 9, 1932.

Borolestone

For An Antiseptic and Astringent Preparation for General Household Use as a Mouthwash and Gargle, for Treating Bad Breath and Throat Irritations, for Use After Shaving, and as a Rub for the Scalp.

Claims use since Oct. 9, 1931.

Ser. No. 325,972. ELECTROBLACKS, INCORPORATED, Culver City, Calif. Filed Apr. 9, 1932.

ELECTROBLACKS
PRODUCTS
TRADE MARK
ELECTROBLACKS, INC.
CULVER CITY, CALIF.

No claim is made to the word-portion "Blacks", nor to the words "Products", "Trade-Mark", "Electroblacks, Inc.," and "Culver City, Calif." apart from the mark as shown.

For Carbon-Black for Use in Rubber Compounding, Manufacture of Paints and Inks, and Other Uses.

Claims use since Mar. 1, 1932.

Ser. No. 325,978. ATHELENE CHEMICAL CORPORATION, New York, N. Y. Filed Apr. 11, 1932.

Athelex

For Preparation for the Treatment of Athlete's Foot.

Claims use since Apr. 4, 1932.

Ser. No. 325,986. MANAHAN CHEMICAL CO., INC., New York, N. Y. Filed Apr. 11, 1932.

PURCOL

For Dyestuffs.

Claims use since Nov. 12, 1930.

Ser. No. 326,002. GEORGE SOTIRIADES, doing business as Sotirion Remedies, Pittsburgh, Pa. Filed Apr. 11, 1932.

SOTIRION

For Preparation for the Treatment of Leucorrhea, Prostatis, Arthritis, Gonorrhea, Epilepsy, Anemia, Cancer Serum, and Hernia.

Claims use since March, 1916.

Ser. No. 326,009. THE G. E. CONKEY COMPANY, Cleveland, Ohio. Filed Apr. 12, 1932.

Nikāla

For Vermifuge (Worm Tablets for Poultry).

Claims use since Mar. 26, 1932.

Ser. No. 326,117. HERMAN L. SMIDLER, doing business as Tricasco Laboratories, Chicago, Ill. Filed Apr. 14, 1932.

TRICASCO

For Reconstructive Tonic.

Claims use since Jan. 30, 1932.

Ser. No. 326,198. WILLIAM R. WARNER & CO., INC., New York, N. Y. Filed Apr. 16, 1932.



For Medicinal Preparations Indicated in the Treatment of Hyper-Acidity, Rheumatism, Gout, Lumbago, and Coryza; and for a Tonic, Stimulant, and Expectorant.

Claims use since Oct. 31, 1931.

Ser. No. 326,201. HARRY A. BAME, New York, N. Y. Filed Apr. 18, 1932.

ENCHANTACONE

For Chemical Composition for Producing Colored Flames.

Claims use since Feb. 24, 1932.

Ser. No. 326,231. S. M. LABORATORIES, INC., Seattle, Wash. Filed Apr. 18, 1932.

Richard H. Simmons, M.D.

The trade-mark consists of the script signature "Richard H. Simmons, M. D.," which is in the handwriting of Dr. Richard H. Simmons, a stockholder of the applicant corporation, who has consented to the use thereof as such trade-mark.

For Vaginal Suppositories.

Claims use since Nov. 30, 1931.

Ser. No. 326,425. JOHN WILEY JONES, doing business as John Wiley Jones Co., Le Roy N. Y. Filed Apr. 23, 1932.

SUNNY SOL
Bottled Sunshine

For Chemical Preparation for Use in Bleaching or Whitening Clothes; for Removing Stains, Dirt, and Grease; and for Use as an Antiseptic, a Germ Killer, a Deodorizer, and Disinfectant.
Claims use since Apr. 6, 1932.

Ser. No. 326,590. TOM HUSTON CORPORATION, Columbus, Ga. Filed Apr. 28, 1932.

ROYAL BLUE

For Aspirin.
Claims use since Dec. 24, 1931.

Ser. No. 326,699. THE WILBUR WHITE CHEMICAL COMPANY, Owego, N. Y. Filed May 2, 1932.

BRYTEX

For Wax Emulsion for the Preservation and Improvement in Appearance of Citrus Fruit and Other Edibles.
Claims use since Mar. 14, 1932.

Ser. No. 326,714. HYGEIA PRODUCTS, INC., Brooklyn, N. Y. Filed May 3, 1932.

HY·PRO·DENT

For Tooth Dentifrice.
Claims use since Apr. 1, 1932.

Ser. No. 326,819. HELPS TO HEALTH, INC., New York, N. Y. Filed May 6, 1932.

HEALTHWAY

For Psyllium Seeds.
Claims use since Mar. 28, 1932.

Ser. No. 326,983. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio. Filed May 11, 1932.

DIOTHANE

For Anæsthetic.
Claims use since Apr. 25, 1932.

CLASS 7

Cordage

Ser. No. 325,996. PERFECTION TWINE COMPANY, Camas, Wash. Filed Apr. 11, 1932.

BEACON-RAY

For Cellulose Twine and Tying Ribbon and the Like.
Claims use since Dec. 20, 1931.

CLASS 12

Construction Materials

Ser. No. 321,490. ETERNIT, INC., St. Louis, Mo., and New York, N. Y. Filed Nov. 25, 1931.

ETERNIT STONEWALL SIDING

Applicant disclaims exclusive use of the words "Stonewall Siding" apart from the mark as shown.
For Asbestos-Cement Siding Strips.
Claims use since July 3, 1931.

Ser. No. 321,625. NATIONAL HELIOPORE FLOOR CORPORATION, Boston, Mass. Filed Nov. 30, 1931.

HELIOPORE FLOORS

No claim is made to the word "Floors" apart from the mark shown on the drawing.
For Cementitious Floor Construction Material, Particularly Terrazzo.
Claims use since July 1, 1930.

Ser. No. 324,584. THE COMPO-BOARD CO., Minneapolis, Minn. Filed Feb. 27, 1932.

Compo Board
THE REDWOOD CORE WALL BOARD

No claim being made to the word "Board" and "The Redwood Core Wall Board" apart from the mark as shown on the drawing.
For Artificial Lumber in Strips, Sheets, and Boards.
Claims use since 1891.

Ser. No. 325,044. NATIONAL TRAFFIC GUARD CO., Atlanta, Ga. Filed Mar. 11, 1932.

RESILIFLEX

For Road Guards Formed of Resilient Metal Impact Members Secured Under Tension to Spaced Posts.
Claims use since June 11, 1928.

Ser. No. 326,423. HARRIS MANUFACTURING COMPANY, Johnson City, Tenn. Filed Apr. 23, 1932.

ECONOMY

For Wooden Flooring.
Claims use since Jan. 1, 1924.

Ser. No. 326,528. PAN-PACIFIC PILING & CONSTRUCTION CO., Wilmington, Calif. Filed Apr. 26, 1932.

PENOCRETE

For Impregnated Concrete Pipe and Wall Structures.
Claims use since Feb. 2, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 320,505. LOUIS H. LEHMAN, doing business as Lehman Sprayshield Company, Philadelphia, Pa. Filed Oct. 27, 1931.

SWAN

For Glass Shower Stall Doors, Shower Bath Shields, and Bath Enclosures.
Claims use since July, 1930.

Ser. No. 320,714. THE BIGGS BOILER WORKS COMPANY, Akron, Ohio. Filed Nov. 2, 1931.

SAFE
BIGGS-WELD
DUCTILE
UNIFORM
STRONGER THAN THE PLATE ITSELF

All words shown on the drawing except "Biggs" and applicant's corporate name are disclaimed apart from the mark as shown.
For Steel Pipe.
Claims use since June 1, 1930.

Ser. No. 326,303. SCHNEIDERMAN BROS., New York, N. Y. Filed Apr. 20, 1932.

EZ SNAP

The word "Snap" is disclaimed apart from the mark as shown.
For Slider Controlled Fasteners for Use on Children's Legging Sets and Boys' Overcoats.
Claims use since February, 1932.

Ser. No. 326,554. PARKER-KALON CORPORATION, New York, N. Y. Filed Apr. 27, 1932.

P.K

For Nails, Drive Screws, Screws, Drive Pins, Rivets, Studs, Nuts, Bolts, and Metal Washers.
Claims use since Jan. 2, 1923.

Ser. No. 326,805. BROWN, BOVERI & CIE., Baden, Switzerland. Filed May 6, 1932.

Velox

For Heating Tubes and Tube Couplings.
Claims use since 1930.

CLASS 15

Oils and Greases

Ser. No. 323,697. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla. Filed Feb. 1, 1932.

IONIC

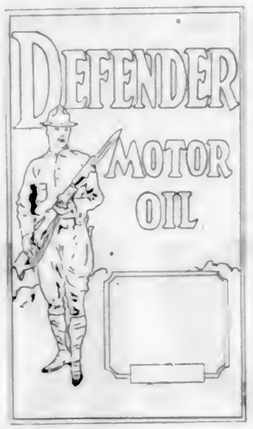
For Motor Fuel Oils and Lubricating Oils.
Claims use since Jan. 23, 1932.

Ser. No. 325,626. WASHINGTON PETROLEUM PRODUCTS, INC., South Washington, Va. Filed Mar. 29, 1932.

PENAk

For Motor Lubricating Oils.
Claims use since Mar. 10, 1932.

Ser. No. 325,797. PENNSYLVANIA PETROLEUM PRODUCTS CO., Philadelphia, Pa. Filed Apr. 4, 1932.



The words "Motor Oil" being disclaimed apart from the mark shown in the drawing.

For Oils and Lubricants, Particularly Motor Lubricating Oils, Illuminating Oils, Motor Fuel Oils, and Crude Petroleum Oil.

Claims use since Feb. 15, 1932.

Ser. No. 325,927. U. S. OIL COMPANY, East Providence, R. I. Filed Apr. 8, 1932.

Oil Lube

No claim is made for the word "Oil" apart from the mark shown in the drawing.

For Lubricating Oils and Greases.

Claims use since Mar. 15, 1932.

Ser. No. 326,360. CONTINENTAL OIL COMPANY, Ponca City, Okla. Filed Apr. 22, 1932.

CIRCOL

For Lubricating Oil.

Claims use since Aug. 27, 1930.

Ser. No. 326,654. WOLVERINE-EMPIRE REFINING COMPANY, Wilmington, Del., and New York, N. Y. Filed Apr. 30, 1932.

MOTOR FREE

For Light Oil Having Lubricating Properties.

Claims use since January, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 288,624. STEELCOTE MANUFACTURING COMPANY, St. Louis, Mo. Filed Aug. 16, 1929.



The words "Products" "Wear Like Steel" are disclaimed apart from the mark as shown.

For Paint and Varnish Remover, Putty, and Automobile Polish.

Claims use since June, 1915.

Ser. No. 314,695. THE R. M. HOLLINGSHEAD CO., Camden, N. J. Filed May 18, 1931.

LUSTERIZE

For Polish and Polishing Preparations for Automobiles and Furniture.

Claims use since Sept. 1, 1923.

Ser. No. 321,753. EDISON STORAGE BATTERY COMPANY, West Orange, N. J. Filed Dec. 4, 1931.

ESBALINE

For Coating and Protecting Compound Partaking of the Nature of a Paint or Varnish.

Claims use since June 11, 1931.

Ser. No. 325,200. WALTER T. TERRY, Jr., doing business as The Best Products Co., Kansas City, Mo. Filed Mar. 14, 1932.

Instant
LUSTRWAX
"Dries Bright in 15 Minutes"

All the wording appearing on the drawing with the exception of the word "Lustrwax" is hereby disclaimed apart from the other features of the mark as shown.

For Floor and Furniture Wax and Polish.

Claims use since Jan. 1, 1929.

Ser. No. 325,375. THE RED CORAL PRODUCTS CORPORATION, New York, N. Y. Filed Mar. 22, 1932.



The word "Certified" is hereby disclaimed apart from the mark as shown on the drawing.

For Automobile Polish.

Claims use since Jan. 1, 1932.

Ser. No. 325,841. ALABASTINE COMPANY, Grand Rapids, Mich. Filed Apr. 6, 1932.

Alaba-Tone

For Base, Made Up of a Dry Powder for a Waterproof Cement Wall Coating or Covering in the Nature of a Paint, for Use on Exterior Walls, After Admixture with Water.

Claims use since Nov. 7, 1930.

Ser. No. 325,843. ALABASTINE COMPANY, Grand Rapids, Mich. Filed Apr. 6, 1932.



No exclusive right is claimed to the use of the words "Art-Color-Pak" except as a part of the mark shown.

For Dry Colors, the Same Being a Dry Powder in the Nature of a Paint, for Use for Art, Decorative, and Other Purposes, After Mixtures with Water or Other Suitable Liquid.

Claims use since Dec. 23, 1931.

Ser. No. 326,118. STUDEBAKER CHEMICAL COMPANY, Elyria, Ohio. Filed Apr. 14, 1932.

RUST-OY

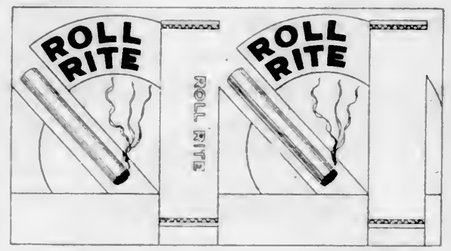
For Protective Primer Coatings for Metal Surfaces, Cement Surfaces, and Wood Surfaces.

Claims use since Jan. 15, 1928.

CLASS 17

Tobacco Products

Ser. No. 319,897. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va. Filed Oct. 9, 1931.



No claim is made to the representation of the label as shown on the drawing.

For Smoking Tobacco.

Claims use since Oct. 3, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 326,119. U. S. HAME COMPANY, Buffalo, N. Y. Filed Apr. 14, 1932.

KARI KART

No registration rights are claimed for the word "Kart" apart from the mark as shown.

For Go-Carts.

Claims use since Feb. 18, 1932.

Ser. No. 326,286. GENERAL AMERICAN TANK CAR CORPORATION, Chicago, Ill. Filed Apr. 20, 1932.

DRY-FLO

For Tank Cars.

Claims use since Apr. 11, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 319,511. CONSOLIDATED WIRE & ASSOCIATED CORPORATIONS, Chicago, Ill. Filed Sept. 28, 1931.

STA-PUT

For Bare, Insulated Wire, Cord, and Cable for General Electrical Use, and Radio Antenna Wire.

Claims use since Aug. 3, 1919.

Ser. No. 322,633. GENERAL ELECTRIC COMPANY, Schenectady, N. Y. Filed Jan. 2, 1932.

PYRANOL

For Capacitors.
Claims use since Dec. 18, 1931.

Ser. No. 324,093. CUTLER-HAMMER, INC., Milwaukee, Wis. Filed Feb. 12, 1932.



The words "Safe Lock" are disclaimed apart from the mark shown in the drawing. The shading in the drawing does not indicate color.
For Manually Operable Enclosed Switches of the Fuse Type.
Claims use since Mar. 7, 1931.

Ser. No. 324,664. THE P. A. GEIER COMPANY, Cleveland, Ohio. Filed Mar. 1, 1932.

ROYAL

For Electrically Operated Suction Cleaners.
Claims use since September, 1908.

Ser. No. 325,303. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Mar. 18, 1932.

Laytex

For Rubber Covered Wire for Electrical Use.
Claims use since Feb. 11, 1932.

Ser. No. 325,976. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass., and Hoboken, N. J. Filed Apr. 11, 1932.

AMERCLAD

For Insulated Electric Cord, and Particularly Rubber Covered Electric Cord.
Claims use since Mar. 18, 1932.

Ser. No. 326,321. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn. Filed Apr. 21, 1932.

AIRALITE

For Flash Lights.
Claims use since Mar. 15, 1932.

Ser. No. 326,323. FREDERICK W. GROSCHE, Baltimore, Md. Filed Apr. 21, 1932.



For Storage Batteries.
Claims use since Sept. 5, 1922.

Ser. No. 326,537. CHICAGO FLEXIBLE SHAFT COMPANY, Chicago, Ill. Filed Apr. 27, 1932.

IRONMASTER

For Electric Sadirons.
Claims use since Mar. 4, 1932.

Ser. No. 326,598. C. D. WOOD ELECTRIC COMPANY, INC., New York, N. Y. Filed Apr. 28, 1932.

CAPLOX

For Attachment Plugs.
Claims use since Oct. 1, 1931.

Ser. No. 326,652. TRICO FUSE MFG. CO., Milwaukee, Wis. Filed Apr. 30, 1932.

ROLL-A-WAY

For Flexible Take-Up Cords Used in Connection with Electrical Appliances.
Claims use since Nov. 20, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 324,971. PLAYSKOOL INSTITUTE, INC., Milwaukee, Wis. Filed Mar. 9, 1932.



The representation of the goods and the words "Hammer-Nail" except in the association shown on the drawing are disclaimed for purposes of registration.
For Toy Construction Outfits Including Hammer, Nails, and Construction Elements Sold as a Unit.
Claims use since Mar. 5, 1932.

Ser. No. 326,459. COLLINS-KIRK, INC., Chicago, Ill. Filed Apr. 25, 1932.

Sticker Tots

No claim is made to the word "Sticker" except in the association shown on the drawing.
For Paper Dolls.
Claims use since Apr. 15, 1932.

Ser. No. 326,859. HOOVER CONDITIONER, INC., New York, N. Y. Filed May 7, 1932.

HOOVER CONDITIONER

For Rowing Machines.
Claims use since Dec. 1, 1931.

Ser. No. 326,874. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio. Filed May 7, 1932.

toy town

For Playing Cards.
Claims use since Apr. 26, 1932.

Ser. No. 326,975. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed May 11, 1932.

DIAMOND

For Billiard Cue Tips.
Claims use since Jan. 1, 1924.

Ser. No. 327,017. THE INDIA RUBBER, GUTTA PERCHA & TELEGRAPH WORKS COMPANY, LIMITED, London, England. Filed May 12, 1932.

KING PLUS

For Golf Balls.
Claims use since Mar. 21, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 314,505. JOHN W. LOOSCHEN, Paterson, N. J. Filed May 13, 1931.

SIMPLICITY

For Boat Hoists.
Claims use since July, 1930.

Ser. No. 325,949. HIBBARD, SPENCER, BARTLETT & CO., Chicago, Ill. Filed Apr. 9, 1932.

Hibbard's True Value

The applicant is the owner of Trade-Mark registration No. 203,991, dated Sept. 29, 1925.
For Bit Braces, Expansive Bits, Auger Bits, Drawing Knives, Hand Saws, Planes, Tinners' Snips, Pliers, Wrenches, Wood Chisels, Cold Chisels, Carpenter Pincers, Hand Drills, Screw Drivers, Hatchets, Hammers, Carpenter Bars, and Trowels.
Claims use since Mar. 16, 1932.

Ser. No. 326,165. SEIDERS-MATHER CORPORATION, Chicago, Ill. Filed Apr. 15, 1932.

KRIMP'IT

For Implement for Fastening Sheets of Paper Together Along One of Their Edges by Passing Them Between Wheels Having Shallow Intermeshing Teeth.
Claims use since Apr. 9, 1932.

Ser. No. 326,522. B. P. EVANS, doing business as Wonder Hoe Co., Fort Worth, Tex. Filed Apr. 26, 1932.

THE WONDER HOE

The word "Hoe" is disclaimed apart from the mark shown in the drawing.
For Hoes.
Claims use since Mar. 5, 1932.

Ser. No. 326,711. GOULDS PUMPS, INCORPORATED, Seneca Falls, N. Y. Filed May 3, 1932.



For Double Acting Piston Pumps.
Claims use since 1880.

Ser. No. 326,716. MINUTE SAFETY RAZOR CORP., Newark, N. J. Filed May 3, 1932.

Minute Man

For Safety Razor Blades.
Claims use since Apr. 14, 1932.

Ser. No. 326,751. MARATHON RAZOR BLADE CO., INC., Irvington, N. J. Filed May 4, 1932.

JIFFY

For Safety Razor Blades.
Claims use since Apr. 26, 1932.

Ser. No. 326,752. MARATHON RAZOR BLADE CO., INC., Irvington, N. J. Filed May 4, 1932.

LEADER

For Safety Razor Blades.
Claims use since Apr. 26, 1932.

Ser. No. 326,753. MARATHON RAZOR BLADE CO., INC., Irvington, N. J. Filed May 4, 1932.

OLYMPIC

For Safety Razor Blades.
Claims use since Apr. 26, 1932.

Ser. No. 326,754. MARATHON RAZOR BLADE CO., INC., Irvington, N. J. Filed May 4, 1932.

VARSITY

For Safety Razor Blades.
Claims use since Apr. 26, 1932.

Ser. No. 326,881. THE AKRON EQUIPMENT COMPANY, Akron, Ohio. Filed May 9, 1932.

BRICKMASTER

For Ice Cream Cutting Machines.
Claims use since June 17, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 321,509. WALL & OCHS, INCORPORATED, Philadelphia, Pa. Filed Nov. 25, 1931.

Perimetric

For Lenses for Eyeglasses and Spectacles.
Claims use since September, 1930.

Ser. No. 326,538. THE FOXBORO COMPANY, Foxboro, Mass. Filed Apr. 27, 1932.

LAUNDERLOG

For Combined Thermometer and Liquid Level Gage.
Claims use since Apr. 11, 1932.

CLASS 27

Horological Instruments

Ser. No. 326,653. VIDRIO PRODUCTS CORPORATION, Cicero, Ill. Filed Apr. 30, 1932.

LECTROLARM

For Electric Alarm Clocks.
Claims use since Feb. 15, 1932.

Ser. No. 326,708. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill. Filed May 3, 1932.

ALL AMERICAN

For Watches, Watch Movements, and Watch Cases.
Claims use since Apr. 15, 1932.

Ser. No. 326,709. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill. Filed May 3, 1932.

ALL STATE

For Watches, Watch Movements, and Watch Cases.
Claims use since Apr. 15, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 320,770. WARD-LOVE PUMP CORPORATION, Rockford, Ill. Filed Nov. 3, 1931.

WARLO

For Apparatus for Purifying, Filtering, and Softening of Water—Namely, Filters and Zeolite Softeners and Parts Thereof.
Claims use since Feb. 2, 1925.

CLASS 32

Furniture and Upholstery

Ser. No. 326,427. JOHN VINCENT LITTIG, doing business as Jay Vee Studio, Washington, D. C. Filed Apr. 23, 1932.

ONE OVER ONE

For Tables.
Claims use since Apr. 19, 1932.

CLASS 33

Glassware

Ser. No. 326,765. THE TOLEDO PLATE & WINDOW GLASS COMPANY, Toledo, Ohio. Filed May 4, 1932.



The words "Toledo Brand" are disclaimed except in the representation shown.
For Plate and Window Glass.
Claims use since Oct. 5, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 326,450. ALLBESTOS CORPORATION, Philadelphia, Pa. Filed Apr. 25, 1932.

CAVALIER

For Brake Linings.
Claims use since Apr. 8, 1932.

Ser. No. 326,701. ALLBESTOS CORPORATION, Philadelphia, Pa. Filed May 3, 1932.

KING-PIN

For Brake Linings.
Claims use since Apr. 2, 1932.

CLASS 37

Paper and Stationery

Ser. No. 325,578. EDWARD GREENE, doing business as E. Greene & Company, Newark, N. J. Filed Mar. 28, 1932.

FITZALL

For Printed Paper Caution Signals for Index Systems.
Claims use since Oct. 26, 1931.

Ser. No. 326,370. WALTER L. JENKINS, Cleveland, Ohio. Filed Apr. 22, 1932.

ROT-O-BRIDGE

The word "Bridge" is disclaimed except in the association shown.
For Bridge-Score Table Guide.
Claims use since Mar. 17, 1932.

Ser. No. 326,758. POND'S EXTRACT COMPANY, New York, N. Y. Filed May 4, 1932.



No claim is made herein to any of the wording appearing in the mark with the exception of the words "Pond's" apart from the mark shown in the drawing.
For Tissue Paper Adapted for Removing Cold Cream, for Handkerchiefs, and for Similar Purposes.
Claims use since Apr. 15, 1932.

Ser. No. 326,852. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed May 7, 1932.

Queen Anne

For Toilet Paper, Paper Towels, Paper Napkins, Paper Doilies, Paper Table Cloths, Tissue Paper, and Crepe Paper.
Claims use since Apr. 18, 1932.

Ser. No. 326,902. KALAMAZOO VEGETABLE PARCHMENT COMPANY, Parchment, Mich. Filed May 9, 1932.

PROSPERITY

For Writing Paper.
Claims use since Jan. 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 324,826. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa. Filed Mar. 5, 1932.

BILDCOST

For Lists, and Specifications for House Plans and Architectural Plans.
Claims use since Dec. 8, 1931.

Ser No. 326,170. CHESTER F. TOURNER, Bloomington, Ind. Filed Apr. 15, 1932.



For Thrift Books.
Claims use since Apr. 4, 1932.

Ser. No. 326,505. WEST VIRGINIA STATE MEDICAL ASSOCIATION, Charleston, W. Va. Filed Apr. 25, 1932.

The West Virginia Medical Journal

For Periodical.
Claims use since 1902.

Ser. No. 326,616. PEPPERELL MANUFACTURING COMPANY, Boston, Mass. Filed Apr. 29, 1932.

THE PEPPERELL News SHEET

For Periodical Publication.
Claims use since Apr. 1, 1929.

Ser. No. 326,756. NATIONAL SALES PROMOTION INSTITUTE, INC., Philadelphia, Pa. Filed May 4, 1932.

BUSINESS ADMINISTRATION MAGAZINE

For Semi-Monthly Magazine.
Claims use since Apr. 25, 1932.

CLASS 39

Clothing

Ser. No. 252,157. LADIES GARMENT MANUFACTURING COMPANY, Minneapolis, Minn. Filed July 16, 1927.



The words "Frocks" and "Trade Mark" are disclaimed apart from the mark as shown on the drawing.
For Ladies', Misses', and Juniors' Dresses.
Claims use since May 1, 1927.

Ser. No. 298,558. SIMON ACKERMAN CLOTHES, INC., New York, N. Y. Filed Apr. 9, 1930.

NATIONAL CITY

For Men's and Young Men's Coats, Vests, Trousers, and Overcoats.
Claims use since May 8, 1929.

Ser. No. 320,703. JACOB STEIN, doing business as Climax Rubber Company, New York and Brooklyn, N. Y. Filed Oct. 31, 1931.

Health-Gard



For Rubber Baby Pants and Rubber Diapers, Diaper Covers, Bibs, Kiddy Aprons, Bath Aprons, Girdles, Full-Length Corsets, Bandeaux, Brassières, Garter Belts, Reducing Corsets, Household Aprons, Rubber Household Gloves; Bathing Shoes, Bathing Caps, Bathing Belts, Bathing Coats, Capes, and Robes; Shower Caps, Women's Underwear.
Claims use since October, 1930.

Ser. No. 323,239. FRANCO CORSET COMPANY, New York, N. Y. Filed Jan. 21, 1932.

Lefrancois

For Corsets, Corselettes, Step-In Corsets, and Girdles.
Claims use since Nov. 16, 1931.

Ser. No. 323,557. NEIMAN-MARCUS CO., Dallas, Tex. Filed Jan. 28, 1932.

TRADE-MARK



The name "Neiman-Marcus Co." and the notation "Trade-Mark" are disclaimed by applicant apart from the mark as shown on the drawing.
For Ladies' Panties, Bloomers, Drawers, Step-Ins, and Teddies.
Claims use since Dec. 19, 1931.

Ser. No. 323,751. MARCUS & WIESEN INC., New York, N. Y. Filed Feb. 2, 1932.

Vanity Fair

For Girdles and Garter Belts, Hose Supporters, Garters, Armbands, and Knicker Garters.
Claims use since 1915.

Ser. No. 324,298. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 18, 1932.

Fashion Rite FOOTWEAR

Applicant disclaims the exclusive right to the word "Footwear" except in the precise relationship in which it is disclosed in the drawing.
For Footwear—Namely, Men's, Women's, Misses', and Children's Oxfords (Known in the Trade as Pumps, Straps, and Ties) Composed of Leather and Satins, Canvas, Ducks, and Linens, and Combinations Thereof.
Claims use since November, 1930.

Ser. No. 324,982. BLOOM & JAFFIN, New York, N. Y. Filed Mar. 10, 1932.

Mural

For Ladies', Misses', and Junior Underwear and Slips, Dresses, Frocks, and Gowns.
Claims use since Apr. 1, 1931.

Ser. No. 325,282. BRIGHTON LADIES HAT CO. INC., New York, N. Y. Filed Mar. 19, 1932.

KENTUCKY DERBY

For Women's, Misses', and Children's Hats.
Claims use since Jan. 10, 1932.

Ser. No. 325,381. SAMUEL GOLDBAUM, doing business as Lily Hat Company, New York, N. Y. Filed Mar. 10, 1932.

the Rumba

For Ladies' Hats.
Claims use since December, 1931.

Ser. No. 325,469. LEONARD D. GREENHALL, doing business as Greenhall Bros., Brooklyn, N. Y. Filed Mar. 25, 1932.

ULTRA-FLEX

For Suspenders, Garters, and Apparel Belts.
Claims use since Mar. 15, 1932.

Ser. No. 325,485. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Mar. 25, 1932.

"Dia-Trim"

For Corsets, Brassières, Girdles, and Combinations (Brassières and Girdles).
Claims use since Feb. 18, 1932.

Ser. No. 325,568. P. T. CUTHBERT & CO., INC., New York, N. Y. Filed Mar. 28, 1932.

CLEARVIEW

For Hosiery.
Claims use since Jan. 2, 1932.

Ser. No. 325,858. SALFELTS, New York, N. Y. Filed Apr. 6, 1932.

ORIGINAL
"Sal-o-mat"

The applicant hereby disclaims the right to the exclusive use of the word "Original" as shown in the accompanying drawing.
For Ladies' Hats.
Claims use since Jan. 2, 1931.

Ser. No. 326,051. BEAUCIE J. HEBERT, Spokane, Wash. Filed Apr. 13, 1932.

Miss Spokane

For Dresses Used for Women, Misses, and Children.
Claims use since Feb. 20, 1919.

Ser. No. 326,155. MERIT CLOTHING COMPANY, INC., Mayfield, Ky. Filed Apr. 15, 1932.

STYLE MART

For Men's, Young Men's, Youths', and Boys' Coats, Vests, Pants, Overcoats, and Top Coats.
Claims use since March, 1932.

Ser. No. 326,210. THE FLORSHEIM SHOE COMPANY, Chicago, Ill. Filed Apr. 18, 1932.

PED-FLEX PROCESS

No claim being made to the exclusive use of the word "Process" apart from the mark as shown in the drawing.
For Shoes Made of Leather.
Claims use since Mar. 10, 1932.

Ser. No. 326,237. VANITY FAIR SILK MILLS, Reading, Pa. Filed Apr. 18, 1932.

Skintites

For Knitted and Textile Underwear and Hosiery for Women and Children—Namely, Vests, Bloomers, Knickerbockers, Union Suits, Combination Underwear, Step-Ins, Chemises, Corset Covers, Nightgowns, Pajamas, Petticoats, Princess Slips, Bandeaux, Bandeau Chemises; Knitted and Textile Underwear for Men—Namely, Union Suits, Shirts, and Drawers.
Claims use since Apr. 6, 1932.

Ser. No. 326,254. FRANKLIN SIMON & CO. INC., New York, N. Y. Filed Apr. 19, 1932.

BRIDLEWISE

For Men's and Women's, Boys' and Girls' Riding Suits, Riding Coats, Riding Habits, Riding Hats, and Riding Boots.
Claims use since Apr. 1, 1932.

Ser. No. 326,452. BEAR BRAND HOSIERY CO., Kaukakee and Chicago, Ill. Filed Apr. 25, 1932.

ROYAL CANADIAN

The word "Canadian" is disclaimed apart from the mark as shown.
For Hosiery.
Claims use since Apr. 15, 1932.

Ser. No. 326,516. BRIGHTON LADIES HAT CO. INC., New York, N. Y. Filed Apr. 26, 1932.

French Softy

For Women's, Misses', and Children's Hats.
Claims use since Jan. 15, 1930.

Ser. No. 326,703. THE B. V. D. COMPANY, INC., Baltimore, Md. Filed May 3, 1932.

BUMBOREE

For Trunks Worn as Outer Garments by Males and Females for Bathing, Camping, and Other Sport and Athletic Uses Generally.
Claims use since Apr. 11, 1932.

Ser. No. 326,810. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed May 6, 1932.

KNICKEROLE

For Coats, Vests, Pants, and Overcoats for Men and Boys.
Claims use since Apr. 1, 1932.

Ser. No. 326,857. HARZFELD'S, INC., Kansas City, Mo. Filed May 7, 1932.

PETTICOATLANE

For Ladies' Hosiery.
Claims use since Feb. 1, 1932.

Ser. No. 326,973. BELMONT HOSIERY COMPANY, Belmont, N. H. Filed May 11, 1932.

NEW ENGLAND LADY

For Hosiery.
Claims use since Mar. 10, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 323,260. THE WARREN FEATHERBONE COMPANY, Three Oaks, Mich. Filed Jan. 21, 1932.



Exclusive use of the words "Three Oaks, Mich." and the pictorial representations of the goods except in the association shown is not claimed apart from the mark as shown in said drawing.
For Bias Fold Tape.
Claims use since Jan. 7, 1932.

Ser. No. 325,482. POIRIER AND LINDEMAN COMPANY, New York, N. Y. Filed Mar. 25, 1932.

ETERNALASTIC

For Narrow Webbing and Braids.
Claims use since Oct. 1, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 316,802. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed July 10, 1931.

Yutex

For Pile Fabrics in the Piece.
Claims use since July 1, 1931.

Ser. No. 317,157. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed July 21, 1931.

CELANSILK

For Fabrics Made of Silk and Cellulose Derivatives.
Claims use since July 18, 1931.

Ser. No. 317,158. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed July 21, 1931.

NESESILK

For Fabrics Made of Silk and Cellulose Derivatives.
Claims use since July 18, 1931.

Ser. No. 322,418. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Dec. 24, 1931.

JERSANESE

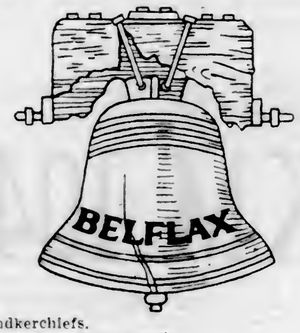
For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Dec. 22, 1931.

Ser. No. 325,183. PINK SUPPLY COMPANY, Minneapolis, Minn. Filed Mar. 16, 1932.

Puritan

For Plain Absorbent Cheesecloth in the Piece.
Claims use since Jan. 1, 1932.

Ser. No. 326,678. GIMBEL BROTHERS, INC., New York, N. Y.; Philadelphia, Pa.; Milwaukee, Wis.; and Pittsburgh, Pa. Filed May 2, 1932.



For Handkerchiefs.
Claims use since Oct. 4, 1929.

Ser. No. 326,721. ROSSIE VELVET COMPANY, Mystic, Conn. Filed May 3, 1932.

Faunvel

For Velvets in the Piece.
Claims use since Apr. 16, 1932.

Ser. No. 326,722. MADISON WOOLEN COMPANY, Madison, Me. Filed May 3, 1932.

Skytop

For Woolen Piece Goods.
Claims use since Apr. 18, 1932

Ser. No. 326,760. ROSSIE VELVET COMPANY, Mystic, Conn. Filed May 4, 1932.

Sombrvel

For Velvets in the Piece.
Claims use since Apr. 20, 1932.

Ser. No. 326,808. F. DUCHARNE SILK CO. INC., New York, N. Y. Filed May 6, 1932.

KM. 104

For Piece Goods of Silk, Rayon, Cotton, and Wool and Mixtures of These Materials.
Claims use since Apr. 21, 1932.

Ser. No. 326,883. AMERICAN BLEACHED GOODS COMPANY, INC., New York, N. Y. Filed May 9, 1932.

BROSHAN

For Cotton Piece Goods.
Claims use since Apr. 29, 1932.

CLASS 43

Thread and Yarn

Ser. No. 326,823. S. H. KRESS & CO., New York, N. Y. Filed May 6, 1932.

BONITA

For Thread and Yarn.
Claims use since Feb. 10, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 318,431. ISADORE SABEL, Philadelphia, Pa. Filed Aug. 25, 1931.

SABEL'S CLUB FOOT SHOE

No claim of exclusive right is made to the words "Club-Foot Shoe" or to the word "Sabel's" apart from the representation of the trade-mark as actually shown.
For Corrective Shoes—Namely, Club-Foot Shoes.
Claims use since May, 1931.

Ser. No. 325,770. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa. Filed Apr. 2, 1932.

TRUE

For Dental Alloys.
Claims use since 1900

Ser. No. 326,389. ROBERT MCNEIL, Philadelphia, Pa. Filed Apr. 22, 1932.

Rosebud

For Tampons.
Claims use since May 14, 1923.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 325,876. FREDERIC J. HUFF, Binghamton, N. Y. Filed Apr. 7, 1932.

"DIXIE-NECTR"

No claim is made to the exclusive use of the word "Nectr" apart from the mark as shown in the drawing.
For Nonalcoholic, Maltless Beverage Sold as a Soft Drink and Syrups, Concentrates, and Extracts for Making the Same.
Claims use since Sept. 22, 1931.

Ser. No. 326,404. VIMOLA SALES COMPANY, New York, N. Y. Filed Apr. 22, 1932.

VIMOLA

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts Therefor.
Claims use since Feb. 18, 1932.

Ser. No. 326,870. PALMYRA SPRINGS, INC., Palmyra, Wis. Filed May 7, 1932.

TULO

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Apr. 30, 1932.

Ser. No. 326,939. GROWERS' CO-OPERATIVE GRAPE JUICE COMPANY, INC., Westfield, N. Y. Filed May 10, 1932.

AUTUMN

The drawing is lined to indicate the color blue.
For Grape Juice.
Claims use since Apr. 9, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 293,587. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed Dec. 12, 1929.

JOLO

For Food Products—Namely, Agar Agar, Albumen (Egg), Edible Corn Starch, Edible Gelatine, Potato Starch, Rice Starch, Edible Gums, Marshmallow Powder, Meringue Powder, Jelly Powder, Edible Tapioca Starch, Vegetable Colloid, Almond Paste, Batter Paste, Chocolate Paste, Confectioner's Glaze, Icing Paste, Nut Paste, Fudge Paste, White Fudge, Chocolate Coating, Pie Fillings, Vanilla Bean Powder, Chocolate Powder, Cocoa Powder, Powdered Coffee, Egg Yolk Powdered, Whole Egg Powdered; Egg Preparations for Improving Candy Mixes, Cake Mixes, or Ice Cream Mixes; Malted Milk Powder, Whole and Skim Milk Powder, Dusting or Coating Powder for Doughnuts and Other Cakes, Wheat Flour, Potato Flour, Rice Flour, Tapioca Flour; Flour Mixes for Making Cakes, Cookies, Bread, Waffles, Doughnuts, and Fried Cakes; Butter Emulsion, Butter Flavor, Caramel Flavor, Fruit Acids for Flavoring Purposes, Coffee Cake Emulsion, Coffee Cake Flavor, General Emulsions for Flavoring Purposes, General Essences for Flavoring Purposes, General Extracts for Flavoring Purposes, General Essential Oils for Flavoring Purposes; Fruit Concentrates of Various Flavors, Both Imitation and Pure; Imitation or Compound Vanilla Bean Flavor, Pure Extract of Vanilla, Pure Extract of Lemon, Edible Corn Starch, Canned Fruits, Evaporated or Dried Fruits, Fruit Mixtures; Fruit and Vegetable Mixtures, in Sealed Bottles, Cans, Kegs, Barrels, and Other Such Containers; Fruit Concentrates, Fudge, Cocoa, Chocolate Candy, Chocolate Cake; Ingredients of Confectionery—Namely, Glucose, Pure Maple Syrup, Imitation Maple Syrup; Macaroon Granules—Namely, Toasted Cocoanut Cake in Granular Form, Used Principally by Ice Cream Manufacturers; Whole Milk Powder, Skim Milk Powder, Malted Milk Powder, Poppy

Seed, Caraway Seed; Cherries—Maraschino; Cocoanut, Corn Flakes, Dehydrated Eggs, Edible Gelatine, Glucose, Nuts, Mince Meat, Spices; Shortenings—Namely Edible Vegetable Fats and Oils; Sugar Color—Namely, Burned Sugar or Caramel Used for Coloring Foods; Tapioca, Baked Cakes; Fried Cakes, Such as Doughnuts.
Claims use since Jan. 1, 1919.

Ser. No. 306,320. MALT-DIASTASE COMPANY, Brooklyn, N. Y. Filed Oct. 2, 1930.

PIONEER



For Malt Extracts and Malt Syrups.
Claims use since Aug. 25, 1930 and since January, 1910 as to word "Pioneer."

Ser. No. 306,592. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif. Filed Oct. 10, 1930.

CALAVO

For Avocado Pulp as a Base for Ice-Creams, Ices, and the Like.
Claims use since 1926.

Ser. No. 307,170. A. H. NIOLON & SON, INC., Lauderdale, Miss. Filed Oct. 25, 1930. Under 10-year proviso.

No-4

For Coffee.
Claims use since 1883.

Ser. No. 312,447. MT. SIONAL PRODUCE CO., Calexico, Calif. Filed Mar. 23, 1931.

DESERT CREST

For Fresh Lettuce, Fresh Strawberries, and Fresh Melons—Namely, Cantaloupes, Honeyballs, Honeydews, Casabas, Persian Melons, Japanese Melons, and Water Melons.
Claims use since Feb. 15, 1930.

Ser. No. 317,426. RALPH DI LORENZO, doing business as Meadville Malt Co., Meadville, Pa. Filed July 29, 1931.



The drawing is lined to indicate the colors red and yellow. No claim is made to the words "Three for One Dollar" apart from the mark as shown.
For Malt Syrups.
Claims use since Apr. 1, 1931.

Ser. No. 320,567. JOSÉ ARECHABALA S. A., Cardenas, Cuba. Filed Oct. 27, 1931.



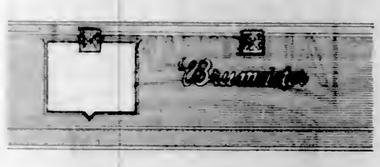
Exclusive use of the words "La Vizcaya" are disclaimed apart from the mark shown on the drawing.
For Refined Sugar and Centrifugal Sugar in Any Condition, Vinegar, Table Syrups, and Molasses.
Claims use since Sept. 19, 1931.

Ser. No. 321,831. TEX-O-KAN FLOUR MILLS CO., Dallas, Tex. Filed Dec. 5, 1931.



The word "Flour" is disclaimed apart from the mark shown on the drawing. The word "Texas" is also disclaimed apart from the mark shown on the drawing.
For Wheat Flour.
Claims use since Oct. 20, 1931.

Ser. No. 321,994. ISIDORE FINK, doing business as Reischwuhr Malt Products, Astoria, Long Island, N. Y. Filed Dec. 10, 1931.



In the drawing the blue coloring is disclaimed.
For Barley Malt Syrup.
Claims use since Nov. 1, 1931.

Ser. No. 322,713. PAUL J. SBISA, doing business as P. J. Sbisa Coffee Company, New Orleans, La. Filed Jan. 4, 1932.

SBISA'S SUN BRAND COFFEE

No claim being made to the words "Coffee" and "Brand" apart from the mark shown in the drawing.
For Coffee.
Claims use since Nov. 1, 1926.

Ser. No. 323,438. KELLOGG COMPANY, Battle Creek, Mich. Filed Jan. 25, 1932.

PEP

For Coffee-Like Beverage.
Claims use since 1914.

Ser. No. 323,727. SUN-MAID RAISIN GROWERS OF CALIFORNIA, Fresno, Calif. Filed Feb. 1, 1932.

"Thermo Jell'd"

For Dried Raisins and Dried Fruits.
Claims use since Jan. 20, 1932.

Ser. No. 323,860. DIXIE MILLS COMPANY, East St. Louis, Ill. Filed Feb. 5, 1932.

DIXIE



For Pig Feed and Hog Feed.
Claims use since January, 1918.

Ser. No. 323,861. DIXIE MILLS COMPANY, East St. Louis, Ill. Filed Feb. 5, 1932.

DIXIE

For Dairy Feeds—Namely, Cow Feed, Supplement Feed, Cattle and Steer Feed, and Calf Feed.
Claims use since May, 1912.

Ser. No. 324,663. THE R. T. FRENCH COMPANY, Rochester, N. Y. Filed Mar. 1, 1932.



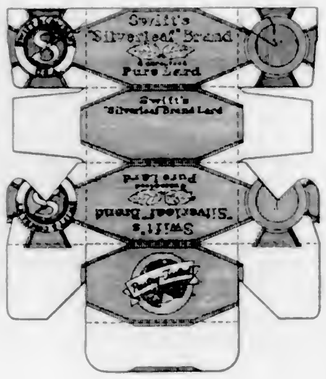
The trade-mark consists of a white triangular mark at the upper right hand corner of the package or carton in which the product is contained, of a color or shade contrasting with that of the package or carton. The outline of the label appearing on the drawing is disclaimed. The applicant specifically reserves all its common law rights in and to the use of the design comprising the mark regardless of color.
For Bird Seed, Bird Gravel, Bird Biscuit, and Bird Food.
Claims use since Jan. 20, 1932.

Ser. No. 325,564. THE CARTER-VENABLE CO., INC., Richmond, Va. Filed Mar. 28, 1932.



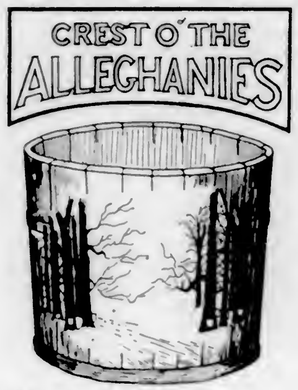
Applicant hereby disclaims exclusive use, apart from the mark as shown on the drawing, of the words "Vigorous Clean Seed—Wholesome Clean Feed," also the words "Seeds" and "Feeds."
For Poultry and Dairy Feeds.
Claims use since 1911.

Ser. No. 325,932. SWIFT AND COMPANY, Chicago, Ill. Filed Apr. 7, 1932.



The drawing is lined for blue and red. No claim is made to the representation of a carton and a pie or to the words "Guaranteed," "Pure," "Lard," "Brand," and "Pastry-Tested" except in the association shown.
For Lard.
Claims use since Jan. 28, 1932.

Ser. No. 325,946. GARRETT COUNTY MAPLE PRODUCTS ASSOCIATION, Oakland, Md. Filed Apr. 9, 1932.



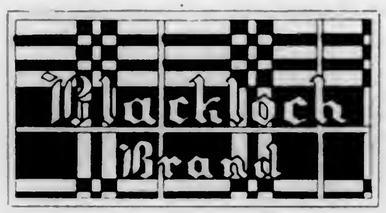
For Maple Syrup.
Claims use since Mar. 24, 1932.

Ser. No. 325,974. E. ROSEN COMPANY, Providence, R. I. Filed Apr. 9, 1932.



The word "Pops" is disclaimed apart from the mark as shown.
For Candy.
Claims use since Mar. 24, 1925.

Ser. No. 326,453. BLACKFORDS, INC., New York, N. Y. Filed Apr. 25, 1932.



The word "Brand" is disclaimed apart from the other features of the mark shown in the drawing.
For Smoked and Salt Fish.
Claims use since Mar. 8, 1932.

Ser. No. 326,472. S. GUMPERT CO. INC., Brooklyn, N. Y. Filed Apr. 25, 1932.

Buddie Boy

For Chocolate Nut Cakes, Cookies, and Pastries.
Claims use since Feb. 4, 1932.

Ser. No. 326,483. LARABEE FLOUR MILLS COMPANY, Kansas City, Kans., and Kansas City, Mo. Filed Apr. 25, 1932.

Dixie Dream

For Wheat Flour.
Claims use since July 10, 1919.

Ser. No. 326,551. LOUIS F. LAMBERT, doing business as Pennsylvania Mushroom Co., Coatesville, Pa. Filed Apr. 27, 1932.

Chesterdale

For Canned Mushrooms.
Claims use since Apr. 18, 1932.

Ser. No. 326,559. HOWARD E. SNYDER, Chicago, Ill. Filed Apr. 27, 1932.

WHOOPEE-PUP

For Cooked Sausages and Sandwiches.
Claims use since Apr. 14, 1932.

Ser. No. 326,783. WILLIAM ISAAC GROVE, doing business as Fort Defiance Mills, Fort Defiance Va. Filed May 5, 1932.



The lining indicating shading only.
For Self-Rising Flour.
Claims use since July 1, 1920.

Ser. No. 326,785. INTERNATIONAL MILLING COMPANY, Minneapolis, Minn. Filed May 5, 1932.



The lining indicating shading only.
For Wheat Flour.
Claims use since Nov. 1, 1927.

Ser. No. 326,833. BAYARD S. SCOTLAND, doing business as Economy Macaroni Co., Joliet, Ill. Filed May 6, 1932.

BIG NICKEL

For Macaroni, Spaghetti, and Noodles.
Claims use since Oct. 31, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 325,309. WILBAR PHOTO ENGRAVING CO., INC., New York, N. Y. Filed Mar. 19, 1932.

Wilbar Technique

For Photo Engraving Plates.
Claims use since Mar. 8, 1932.

Ser. No. 326,319. AMERICAN FELT COMPANY, New York, N. Y. Filed Apr. 21, 1932.

"SOLEIL"
FELT

No claim is made to the exclusive use of the word "Felt" apart from the mark shown on the drawing.
For Wool Felt.
Claims use since Mar. 20, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 14, 1932

294,919. FABRICATED METALLIC LEAF FOR LETTERING, DECORATING, AND NUMBERING BOOKS, PAPERS, ETC. THE H. GRIFFIN & SONS COMPANY, New York, N. Y.
Filed August 16, 1930. Serial No. 304,086. PUBLISHED APRIL 5, 1932. Class 14.

294,920. ELECTRIC WELDERS. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed August 7, 1931. Serial No. 317,836. PUBLISHED MARCH 29, 1932. Class 21.

294,921. CHEMICAL SOLUTION FOR REPELLING MOTHS. LUCY C. HALJEAN, doing business as Egyptian Mothproofing Co., Hollywood, Calif.
Filed August 21, 1931. Serial No. 318,275. PUBLISHED MARCH 22, 1932. Class 6.

294,922. RADIO RECEIVING SETS AND PARTS THEREOF. INTERNATIONAL RADIO CORPORATION, Ann Arbor, Mich.
Filed August 29, 1931. Serial No. 318,558. PUBLISHED MARCH 29, 1932. Class 21.

294,923. RADIO ELECTRON TUBES. NATIONAL UNION RADIO CORPORATION, Newark, N. J.
Filed September 3, 1931. Serial No. 318,758. PUBLISHED MARCH 29, 1932. Class 21.

294,924. MEDICINAL PREPARATION. SOCIÉTÉ DES USINES CHIMIQUES RHONE-POULENC, Paris, France.
Filed September 10, 1931. Serial No. 318,925. PUBLISHED MARCH 29, 1932. Class 6.

294,925. LUBRICATING OILS AND GREASES. FRANKLIN RAILWAY OIL CORPORATION, Franklin, Pa.
Filed September 22, 1931. Serial No. 319,287. PUBLISHED MARCH 22, 1932. Class 15.

294,926. CLOCKS, ELECTRICAL CLOCKS, AND CLOCK MECHANISMS. LANDIS & GYR A.-G., Zug, Switzerland.
Filed October 24, 1931. Serial No. 320,438. PUBLISHED JANUARY 19, 1932. Class 27.

294,927. POPPED CORN, CRYSTALLIZED POP CORN, CHOCOLATE TREATED POP CORN. WILLIAM H. KELLOGG, Battle Creek, Mich.
Filed November 30, 1931. Serial No. 321,598. PUBLISHED APRIL 5, 1932. Class 46.

294,928. CANDY. IDAHO CANDY CO., Boise, Idaho.
Filed December 1, 1931. Serial No. 321,649. PUBLISHED APRIL 5, 1932. Class 46.

294,929. MINERAL OIL AND MEDICINAL COMPOUND. THE ULTICUR CO. INC., Chicago, Ill.
Filed December 29, 1931. Serial No. 322,527. PUBLISHED MARCH 29, 1932. Class 6.

294,930 LUBRICATING OILS. TRI-STATE REFINING COMPANY, Ashland, Ky.
Filed December 30, 1931. Serial No. 322,567. PUBLISHED MARCH 22, 1932. Class 15.

294,931. PILE SALVE. ESTELLA HARRIS, Rocky Mount, N. C.
Filed December 31, 1931. Serial No. 322,586. PUBLISHED MARCH 29, 1932. Class 6.

294,932. CAPS AND CLOSURE SEALS FOR BOTTLES AND OTHER CONTAINERS. ALUMINUM SEAL COMPANY, Arnold, Pa.
Filed January 8, 1932. Serial No. 322,814. PUBLISHED APRIL 5, 1932. Class 50.

294,933. METALLIC CONDUITS OR HOUSINGS FOR ELECTRICAL CONDUCTORS AND PARTS THEREOF. THE TRUMBULL ELECTRIC MANUFACTURING COMPANY, Plainville, Conn.
Filed January 11, 1932. Serial No. 322,898. PUBLISHED MARCH 29, 1932. Class 21.

294,934. ELECTRICAL GOODS AND APPARATUS. EDWARDS AND COMPANY, INC., New York, N. Y.
Filed January 15, 1932. Serial No. 323,038. PUBLISHED MARCH 29, 1932. Class 21.

294,935. PETROLEUM PRODUCTS—NAMELY, GASOLINE. THE TEXAS COMPANY, New York, N. Y.
Filed January 16, 1932. Serial No. 323,100. PUBLISHED MARCH 29, 1932. Class 15.

294,936. FRESH OR RAW CITRUS FRUITS AND FRESH OR RAW TOMATOES, CUCUMBERS, PEPPERS, AND POTATOES. INDIAN RIVER FRUIT GROWERS, Wabasso, Fla.
Filed January 18, 1932. Serial No. 323,134. PUBLISHED APRIL 5, 1932. Class 46.

294,937. CANDLES. WILL & BAUMER CANDLE CO., INC., Syracuse, N. Y.
Filed January 18, 1932. Serial No. 323,155. PUBLISHED MARCH 22, 1932. Class 15.

294,938. CANDLES. WILL & BAUMER CANDLE CO., INC., Syracuse, N. Y.
Filed January 18, 1932. Serial No. 323,156. PUBLISHED MARCH 22, 1932. Class 15.

294,939. MEDICINAL PREPARATION FOR THE PREVENTION AND RELIEF OF SEA, AIR, AND TRAIN SICKNESS. KATHERINE C. DAY, doing business as K. C. Day Company, Coral Gables, Fla.
Filed January 21, 1932. Serial No. 323,226. PUBLISHED MARCH 15, 1932. Class 6.

294,940. ELECTRICAL APPARATUS—NAMELY, ELECTRIC MOTORS, MOTOR GENERATOR SETS, AND ELECTRIC FANS. CENTURY ELECTRIC CO., St. Louis, Mo.
Filed January 22, 1932. Serial No. 323,279. PUBLISHED MARCH 29, 1932. Class 21.

294,941. GASOLINE. RICHFIELD OIL COMPANY, Los Angeles, Calif., assignor to William C. McDuffie, as Receiver for Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware.
Filed January 23, 1932. Serial No. 323,362. PUBLISHED MARCH 22, 1932. Class 15.

294,942. GASOLINE. RICHFIELD OIL COMPANY, Los Angeles, Calif., assignor to William C. McDuffie, as Receiver for Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware.
Filed January 23, 1932. Serial No. 323,363. PUBLISHED MARCH 15,1932. Class 15.

294,943. GASOLINE. RICHFIELD OIL COMPANY, Los Angeles, Calif., assignor to William C. McDuffie, as Receiver for Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware.
Filed January 23, 1932. Serial No. 323,365. PUBLISHED MARCH 15, 1932. Class 15.

294,944. ROASTED COFFEE. JAMES J. O'CONNOR, doing business as Jas. J. O'Connor Coffee Co., St. Louis, Mo.
Filed January 25, 1932. Serial No. 323,419. PUBLISHED APRIL 5, 1932. Class 46.

294,945. CANNED FISH. G. P. HALFERTY & CO., INC., Seattle, Wash.
Filed January 26, 1932. Serial No. 323,455. PUBLISHED APRIL 5, 1932. Class 46.

294,946. METAL CASTINGS, DIE CASTINGS, AND FORGINGS MADE OF SUBSTANTIALLY NONFERROUS METALS AND COMBINATIONS THEREOF. SCHULTZ DIE CASTING COMPANY, Toledo, Ohio.
Filed February 3, 1932. Serial No. 323,792. PUBLISHED APRIL 5, 1932. Class 14.

294,947. RADIO RECEIVING SETS, KITS FOR RADIO RECEIVING SETS, ETC. SILVER-MARSHALL, INC., Chicago, Ill.
Filed February 5, 1932. Serial No. 323,849. PUBLISHED MARCH 29, 1932. Class 21.

294,948. CHEMICAL PAINT PREPARATION USED FOR PAINTING CONCRETE FORMS IN ORDER TO FACILITATE STRIPPING. PHILA. EQUIPMENT & SUPPLY CO., Philadelphia, Pa.
Filed January 29, 1932. Serial No. 323,587. PUBLISHED APRIL 5, 1932. Class 16.

294,949. CANS, BOXES, TUBES, CONTAINERS AND RECEPTACLES, MADE IN WHOLE OR IN PART OF PAPER, CARDBOARD, ETC. THE CINCINNATI MAILING DEVICE COMPANY, Cincinnati, Ohio.
Filed January 30, 1932. Serial No. 323,609. PUBLISHED APRIL 5, 1932. Class 2.

294,950. MIXTURE OF VARNISH AND WAX FOR WOOD FLOORS. HUNTINGTON LABORATORIES, INC., Huntington, Ind.
Filed January 30, 1932. Serial No. 323,618. PUBLISHED MARCH 29, 1932. Class 16.

294,951. VARNISH. HUNTINGTON LABORATORIES, INC., Huntington, Ind.
Filed January 30, 1932. Serial No. 323,619. PUBLISHED MARCH 29, 1932. Class 16.

294,952. FURNITURE POLISH. DOMINIC J. SCHUH, Cincinnati, Ohio.
Filed February 1, 1932. Serial No. 323,721. PUBLISHED MARCH 29, 1932. Class 16.

294,953. PROPHYLACTIC RUBBER ARTICLES. BLUE RIBBON RUBBER COMPANY, Baltimore, Md.
Filed February 3, 1932. Serial No. 323,774. PUBLISHED MARCH 29, 1932. Class 44.

294,954. ATHLETIC APPLIANCES—NAMELY, ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed February 3, 1932. Serial No. 323,782. PUBLISHED APRIL 5, 1932. Class 22.

294,955. TABLE GAME PLAYED WITH PIECES. GLENN V. JEFFERSON, Swissvale, Pa.
Filed February 3, 1932. Serial No. 323,783. PUBLISHED APRIL 5, 1932. Class 22.

294,956. DOUCHE SYRINGES. JULIUS SCHMID, New York, N. Y.
Filed February 3, 1932. Serial No. 323,790. PUBLISHED APRIL 5, 1932. Class 44.

294,957. DRAPERY HOLDBACKS. KENNEY MANUFACTURING COMPANY, Cranston, R. I.
Filed February 4, 1932. Serial No. 323,818. PUBLISHED APRIL 5, 1932. Class 13.

294,958. ROPE. WHITLOCK CORDAGE CO., New York, N. Y.
Filed February 4, 1932. Serial No. 323,837. PUBLISHED APRIL 5, 1932. Class 7.

294,959. SANITARY ABSORBENT TAMPONS. THE TAMPAX, INC., Denver, Colo.
Filed February 5, 1932. Serial No. 323,876. PUBLISHED MARCH 20, 1932. Class 44.

294,960. DENTAL SUPPLIES. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed February 5, 1932. Serial No. 323,880. PUBLISHED APRIL 5, 1932. Class 44.

294,961. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES AND CONCENTRATES FOR MAKING THE SAME. NEHI, INC., Columbus, Ga.
Filed February 6, 1932. Serial No. 323,903. PUBLISHED APRIL 5, 1932. Class 45.

294,962. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES AND CONCENTRATES FOR MAKING THE SAME. NEHI, INC., Columbus, Ga.
Filed February 6, 1932. Serial No. 323,904. PUBLISHED APRIL 5, 1932. Class 45.

294,963. SILOS. MAURICE WHITLOCK MOTT, doing business as Grange Silo Company, Red Creek, N. Y.
Filed February 8, 1932. Serial No. 323,957. PUBLISHED APRIL 5, 1932. Class 2.

294,964. EMOLLIENTS. MYRZELLE COMPANY, Minneapolis, Minn.
Filed February 8, 1932. Serial No. 323,958. PUBLISHED MARCH 22, 1932. Class 6.

294,965. CANNED SEAFOODS—NAMELY, SHRIMP, OYSTERS, PRAWNS. ATLANTIC SEAFOOD PACKERS, INC., Darien, Ga.
Filed February 12, 1932. Serial No. 324,094. PUBLISHED APRIL 5, 1932. Class 46.

294,966. CHEMICAL PREPARATION FOR USE IN THE TREATMENT OF ALCOHOLIC INEBRIETY AND NARCOTIC ADDICTION. C. A. OUELLETTE, doing business as Alnar Company, Seattle, Wash.
Filed February 15, 1932. Serial No. 324,186. PUBLISHED MARCH 29, 1932. Class 6.

294,967. PREPARATION FOR TREATING CORNS. THE E. L. PATCH COMPANY, Stoneham, Mass.
Filed February 15, 1932. Serial No. 324,187. PUBLISHED MARCH 22, 1932. Class 6.

294,968. TEMPORARY COVERINGS FOR WINDOW OPENINGS, ETC., MADE OF WOVEN PAPER CLOTH TO WHICH IS ADHERED TRANSPARENT MATERIAL. THE CHASE BAG COMPANY, Cleveland, Ohio.
Filed February 23, 1932. Serial No. 324,368. PUBLISHED APRIL 5, 1932. Class 12.

294,969. CANNED PINEAPPLE. LIBBY, MCNEILL & LIBBY, Chicago, Ill.
Filed February 23, 1932. Serial No. 324,385. PUBLISHED APRIL 5, 1932. Class 46.

294,970. CANNED PINEAPPLE. LIBBY, MCNEILL & LIBBY, Chicago, Ill.
Filed February 23, 1932. Serial No. 324,386. PUBLISHED APRIL 5, 1932. Class 46.

294,971. CANNED FRUITS. TULARE PACKING COMPANY, LTD., Tulare, Calif.
Filed February 23, 1932. Serial No. 324,409. PUBLISHED APRIL 5, 1932. Class 46.

294,972. MAINSPRINGS FOR WATCHES. THE NEWALL MANUFACTURING COMPANY, Chicago, Ill.
Filed February 25, 1932. Serial No. 324,481. PUBLISHED APRIL 5, 1932. Class 27.

294,973. VEGETABLE SHORTENING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed February 26, 1932. Serial No. 324,534. PUBLISHED APRIL 5, 1932. Class 46.

294,974. VEGETABLE SHORTENING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed February 26, 1932. Serial No. 324,535. PUBLISHED APRIL 5, 1932. Class 46.

294,975. VEGETABLE SHORTENING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed February 29, 1932. Serial No. 324,614. PUBLISHED APRIL 5, 1932. Class 46.

294,976. VEGETABLE SHORTENING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed February 29, 1932. Serial No. 324,616. PUBLISHED APRIL 5, 1932. Class 46.

294,977. VEGETABLE SHORTENING. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed February 29, 1932. Serial No. 324,617. PUBLISHED APRIL 5, 1932. Class 46.

294,978. CHARCOAL. THE CROSSETT CHEMICAL COMPANY, Crossett, Ark.
Filed February 3, 1932. Serial No. 323,777. PUBLISHED MARCH 29, 1932. Class 1.

294,979. MALT EXTRACT SYRUP. SCHREIBER PRODUCTS CORPORATION, Buffalo, N. Y.
Filed February 3, 1932. Serial No. 323,791. PUBLISHED MARCH 29, 1932. Class 46.

294,980. LEATHER PRODUCTS—NAMELY, COMBINATION VISITING OR BUSINESS CARD, PASS AND BILL HOLDER; POCKET-BOOKS, KEY CASES, VISITING OR BUSINESS CARDCASES, BILL BOOKS, WALLETS, MUSIC ROLLS, MUSIC BAGS, PASS CASES, AND BILL FOLDERS. AMITY LEATHER PRODUCTS CO., West Bend, Wis.
Filed February 6, 1932. Serial No. 323,881. PUBLISHED MARCH 29, 1932. Class 3.

294,981. SILK PIECE GOODS. COHN-HALL-MARX CO., New York, N. Y.
Filed February 6, 1932. Serial No. 323,885. PUBLISHED APRIL 5, 1932. Class 42.

294,982. BREAD. J. E. SIEBEL SONS' COMPANY, INC., Chicago, Ill.
Filed February 6, 1932. Serial No. 323,914. PUBLISHED MARCH 29, 1932. Class 46.

294,983. BREAD. SCHEIN BAKING CO., INC., New York, N. Y.
Filed February 9, 1932. Serial No. 324,012. PUBLISHED MARCH 29, 1932. Class 46.

294,984. CLASSIFYING MACHINES FOR GRADING MATERIALS. THE W. S. TYLER COMPANY, Cleveland, Ohio.
Filed February 9, 1932. Serial No. 324,019. PUBLISHED APRIL 5, 1932. Class 26.

294,985. BREAD. ALFRED NICKLES, doing business as Nickles Bakery, Navarre, Ohio.
Filed February 10, 1932. Serial No. 324,046. PUBLISHED MARCH 29, 1932. Class 46.

294,986. GLUE OR ADHESIVE SUBSTANCE FOR SECURING SURFACES TOGETHER, PARTICULARLY PLYWOOD. INDIANA FILM COMPANY, INCORPORATED, New Albany, Ind.
Filed February 15, 1932. Serial No. 324,169. PUBLISHED MARCH 29, 1932. Class 5.

294,987. CREAM. THE DE LAVAL SEPARATOR COMPANY, New York, N. Y.
Filed February 17, 1932. Serial No. 324,244. PUBLISHED MARCH 29, 1932. Class 46.

294,988. SODA CRACKERS. PENNSYLVANIA BAKING COMPANY, INC., Scranton, Pa.
Filed February 17, 1932. Serial No. 324,266. PUBLISHED MARCH 29, 1932. Class 46.

294,989. SHEET GLASS. AMERICAN WINDOW GLASS COMPANY, Pittsburgh, Pa.
Filed February 24, 1932. Serial No. 324,421. PUBLISHED APRIL 5, 1932. Class 33.

294,990. SHEET GLASS. AMERICAN WINDOW GLASS COMPANY, Pittsburgh, Pa.
Filed February 24, 1932. Serial No. 324,422. PUBLISHED APRIL 5, 1932. Class 33.

294,991. THREAD. THE GARDINER HALL JR. COMPANY, South Willington, Conn., and New York, N. Y.
Filed February 25, 1932. Serial No. 324,462. PUBLISHED APRIL 5, 1932. Class 43.

294,992. TEXTILE BAGGING MATERIAL IN THE PIECE. MENTE & CO., INC., New Orleans, La.
Filed February 25, 1932. Serial No. 324,479. PUBLISHED APRIL 5, 1932. Class 42.

294,993. MALT SYRUP. SAMUEL KASSER, doing business as Union Products Co., Philadelphia, Pa.
Filed July 1, 1931. Serial No. 316,533. PUBLISHED AUGUST 18, 1931. Class 46.

294,994. MALT AND HEALTH FOOD PRODUCTS—NAMELY, MALT SYRUP AND A CHOCOLATE MALT POWDER. DEXTORA COMPANY, Indianapolis, Ind.
Filed June 20, 1931. Serial No. 316,085. PUBLISHED MARCH 29, 1932. Class 46.

294,995. TEXTILE NET PIECE GOODS. ROBERT LEFORT & COMPANY, INC., Philadelphia, Pa.
Filed June 2, 1931. Serial No. 315,314. PUBLISHED APRIL 5, 1932. Class 42.

294,996. ARTIFICIAL SILK, SPUN, THROWN, SEWING OR KNITTING, TWIST, YARN, AND THREAD. SNIA-VISCOSA SOCIETÀ NAZIONALE INDUSTRIA APPLICAZIONI VISCOSA, Milan, Italy.
Filed May 5, 1931. Serial No. 314,217. PUBLISHED APRIL 5, 1932. Class 43.

294,997. TEA, COFFEE, COCOA, CHOCOLATE, SUGAR, SPICES, PREPARED PUDDINGS; SPREADS FOR BREAD, CAKE, AND/OR CRACKERS—NAMELY, CHEESE, RELISH, PRESERVES, AND MIXED MEAT SPREADS. JOSEPH TETLEY & CO., INC., New York, N. Y.
Filed May 4, 1931. Serial No. 314,179. PUBLISHED MARCH 29, 1932. Class 46.

294,998. CANNED FRUITS, VEGETABLES, FISH, ETC. LOWRY-RODGERS COMPANY, doing business as Alfred Lowry & Brother, Philadelphia, Pa.
Filed March 3, 1931. Serial No. 311,689. PUBLISHED MARCH 1, 1932. Class 46.

294,999. MACHINES FOR MAKING METAL STAYS AND MACHINES FOR APPLYING METAL STAYS TO PAPER BOXES. NATIONAL METAL EDGE BOX COMPANY, Philadelphia, Pa.
Filed February 20, 1931. Serial No. 311,304. PUBLISHED APRIL 5, 1932. Class 23.

295,000. MECHANICAL SAFETY RAZOR BLADE SHARPENERS. DALTON AND SNYDER, Pittsburgh, Pa.
Filed January 12, 1931. Serial No. 309,847. PUBLISHED APRIL 5, 1932. Class 23.

295,001. OPHTHALMIC MOUNTINGS AND PARTS THEREFOR. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed January 30, 1932. Serial No. 323,604. PUBLISHED APRIL 5, 1932. Class 26.

295,002. MILK, CREAM, BUTTER OIL, ETC. LAND O'LAKES CREAMERIES, INC., Minneapolis, Minn.
Filed May 12, 1930. Serial No. 300,354. PUBLISHED MARCH 29, 1932. Class 46.

295,003. YARNS OF CELLULOSE. COURTAULDS, LIMITED, London, England.
Filed March 16, 1931. Serial No. 312,177. PUBLISHED MARCH 29, 1932. Class 43.

295,004. CHICKEN CREAM OF POTATO SOUP, OLD FASHIONED CHICKEN FRICASSEE, ETC. DIPLOMAT PRODUCTS, INC., New York, N. Y.
Filed December 10, 1931. Serial No. 321,992. PUBLISHED MARCH 29, 1932. Class 46.

295,005. ISLAND DISPLAY SHOW CASES, AUTOMOBILE TIRE DISPLAY RACKS AND STORAGE BATTERY DISPLAY RACKS. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J.
Filed January 4, 1932. Serial No. 322,676. PUBLISHED APRIL 5, 1932. Class 32.

295,006. CHOCOLATE FLAVORED SYRUP OR POWDER. CHOICE FOODS, INC., Detroit, Mich.
Filed January 4, 1932. Serial No. 322,685. PUBLISHED MARCH 29, 1932. Class 46.

295,007. SILK, RAYON, COTTON, AND/OR COMBINATIONS THEREOF IN THE PIECE; ALSO SHEETINGS AND TOWELINGS. FRED BUTTERFIELD & CO., INC., New York, N. Y.
Filed January 8, 1932. Serial No. 322,819. PUBLISHED MARCH 29, 1932. Class 42.

295,008. PIECE GOODS CONSISTING OF THE MIXTURE OF SILK AND SYNTHETIC YARN. VANITY FAIR SILK MILLS, Reading, Pa.
Filed January 9, 1932. Serial No. 322,869. PUBLISHED APRIL 5, 1932. Class 42.

295,009. CEREAL FOOD FOR DOGS, CATS, AND SMALL FUR BEARING ANIMALS. YEASTIES PRODUCTS, INC., Irwin, Pa.
Filed January 9, 1932. Serial No. 322,870. PUBLISHED MARCH 29, 1932. Class 46.

295,010. FILAMENTS, THREAD, AND YARN OF ARTIFICIAL ORIGIN. J. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed January 14, 1932. Serial No. 322,988. PUBLISHED APRIL 5, 1932. Class 43.

295,011. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed January 18, 1932. Serial No. 323,122. PUBLISHED APRIL 5, 1932. Class 42.

295,012. COTTON, RAYON, SILK, AND WOOLEN PIECE GOODS. C. M. DE LAND, Garden City, N. Y.
Filed January 18, 1932. Serial No. 323,128. PUBLISHED APRIL 5, 1932. Class 42.

295,013. DRIED FRUITS, CANNED VEGETABLES, TOMATO PASTE, AND TOMATO SAUCE. FRAERING BROKERAGE CO., INC., doing business as Dubon Company, Inc., New Orleans, La.
Filed January 19, 1932. Serial No. 323,168. PUBLISHED MARCH 29, 1932. Class 46.

295,014. FIXING BOXES (TANKS USED IN THE FLUID TREATMENT OF PLATES AND FILMS). EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed January 20, 1932. Serial No. 323,192. PUBLISHED APRIL 5, 1932. Class 26.

295,015. DIMENSIONAL GAGES. PRATT & WHITNEY COMPANY, Hartford, Conn.
Filed January 21, 1932. Serial No. 323,276. PUBLISHED APRIL 5, 1932. Class 26.

295,016. GROUND FOOD COMPRISING A MIXTURE OF GROUND WHEAT AND GROUND DRIED BERRIES. THE HEALTH WHEAT CORPORATION, Chicago, Ill.
Filed January 25, 1932. Serial No. 323,405. PUBLISHED MARCH 29, 1932. Class 46.

295,017. DISPLAY CASES, COUNTERS, SHELVING, AND DISPLAY BRACKETS. THE COLUMBUS SHOW CASE COMPANY, Columbus, Ohio.
Filed January 29, 1932. Serial No. 323,565. PUBLISHED APRIL 5, 1932. Class 32.

295,018. MALT EXTRACT. STERLING PRODUCTS COMPANY, Evansville, Ind.
Filed February 1, 1932. Serial No. 323,726. PUBLISHED MARCH 29, 1932. Class 46.

295,019. CHEWING GUM AND CANDY. DILLING & COMPANY, Indianapolis, Ind.
Filed June 4, 1931. Serial No. 315,389. PUBLISHED APRIL 5, 1932. Class 46.

295,020. FRESH VEGETABLES. PATRICK FARMS, INC., Chular, Calif.
Filed June 16, 1931. Serial No. 315,922. PUBLISHED APRIL 5, 1932. Class 46.

295,021. PAPER BOARD DISPLAY STANDS FOR HOLDING MERCHANDISE. BROWN PAPER GOODS COMPANY, Chicago, Ill.
Filed January 28, 1932. Serial No. 323,524. PUBLISHED APRIL 5, 1932. Class 2.

295,022. GAMES—NAMELY, A TABLE BOARD GAME PLAYED WITH PIECES. HORACE HAGUE, Huntington Bay Hills, Huntington, N. Y.
Filed January 27, 1932. Serial No. 323,491. PUBLISHED APRIL 5, 1932. Class 22.

295,023. ENAMELED WARE — NAMELY, BASINS, BATH TUBS, ETC. COLUMBIAN ENAMELING & STAMPING CO., Terre Haute, Ind.
Filed January 27, 1932. Serial No. 323,480. PUBLISHED APRIL 5, 1932. Class 13.

295,024. PROPHYLACTIC RUBBER AND MEMBRANOUS ARTICLES. JULIUS SCHMID, New York, N. Y.
Filed January 25, 1932. Serial No. 323,473. PUBLISHED APRIL 5, 1932. Class 44.

295,025. PAPER BAGS. THE RAYMOND BAG COMPANY, Middletown, Ohio.
Filed January 25, 1932. Serial No. 323,421. PUBLISHED APRIL 5, 1932. Class 2.

295,026. MANICURE AND SURGICAL SUPPLIES. S. H. KRESS & CO., New York, N. Y.
Filed January 23, 1932. Serial No. 323,336. PUBLISHED APRIL 5, 1932. Class 44.

295,027. WAXING AND POLISHING COMPOSITIONS FOR AUTOMOBILES, FLOORS, ETC. THE WILBUR WHITE CHEMICAL COMPANY, Owego, N. Y.
Filed January 21, 1932. Serial No. 323,262. PUBLISHED APRIL 5, 1932. Class 16.

295,028. STUFFED TOY ANIMALS. GEORGINA L. TAPSCOTT, Inglewood, Calif.
Filed January 13, 1932. Serial No. 323,075. PUBLISHED APRIL 5, 1932. Class 22.

295,029. PISTOLS. COLT'S PATENT FIRE ARMS MANUFACTURING CO., Hartford, Conn.
Filed March 2, 1932. Serial No. 324,698. PUBLISHED APRIL 5, 1932. Class 9.

295,030. WIRE ROPE AND PARTICULARLY PREFORMED WIRE ROPE. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J.
Filed March 1, 1932. Serial No. 324,646. PUBLISHED APRIL 5, 1932. Class 7.

295,031. REFRIGERATED DISPLAY CASES AND REFRIGERATED STORAGE CASES. GRAND RAPIDS STORE EQUIPMENT CORPORATION, Grand Rapids, Mich.
Filed February 29, 1932. Serial No. 324,602. PUBLISHED APRIL 5, 1932. Class 31.

295,032. DOLLS. IDEAL NOVELTY & TOY CO., Brooklyn, N. Y.
Filed February 27, 1932. Serial No. 324,561. PUBLISHED APRIL 5, 1932. Class 22.

295,033. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND POWDERS, EXTRACTS, AND CONCENTRATES FOR MAKING THE SAME. FRANK URBAN, doing business as Close & Company, Chicago, Ill.
Filed February 25, 1932. Serial No. 324,494. PUBLISHED APRIL 5, 1932. Class 45.

295,034. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. MAXWELL CALVERT RAVEL, Clearwater, Fla.
Filed February 17, 1932. Serial No. 324,268. PUBLISHED APRIL 5, 1932. Class 45.

295,035. CALCIMINE WALL FINISH. DEVOE & RAYNOLDS COMPANY, INC., New York, N. Y.
Filed February 17, 1932. Serial No. 324,245. PUBLISHED APRIL 5, 1932. Class 16.

295,036. MASSAGE DEVICES. ROBERT H. HASSLER, doing business as Ro-To-Flex Mfg. Co., Indianapolis, Ind.
Filed February 15, 1932. Serial No. 324,165. PUBLISHED APRIL 5, 1932. Class 44.

295,037. COMBINED SANITARY GARMENT AND HOLDER FOR SANITARY NAPKINS, PADS, AND THE LIKE. MACULETTE GARMENT CO. INC., Buffalo, N. Y.
Filed January 8, 1932. Serial No. 322,828. PUBLISHED APRIL 5, 1932. Class 44.

295,038. REMOVABLE METAL PANS, REMOVABLE METAL FORMS, AND REMOVABLE ADJUSTABLE SHORES FOR TEMPORARILY SUPPORTING SUCH PANS AND FORMS, ALL USED IN CONSTRUCTION OF CONCRETE BUILDINGS. THE H. W. ROOS COMPANY, Cincinnati, Ohio.
Filed June 3, 1931. Serial No. 315,380. PUBLISHED MARCH 29, 1932. Class 12.

295,039. HEAT TREATING AND COPPER BILLET HEATING FURNACE PARTS. MICHIANA PRODUCTS CORPORATION, Michigan City, Ind.
Filed May 18, 1931. Serial No. 314,708. PUBLISHED MARCH 29, 1932. Class 34.

295,040. MEDICINAL SALVE FOR PILES, BURNS, BARBER'S ITCH, SKIN ERUPTIONS, ECZEMA, SWEATY FEET, CRACK IN SKIN, CHIGRES, PIMPLES, BLACK HEADS, SUN BURNS, CHAPPED HANDS. Mrs. R. ROBINSON, doing business as Robinson Remedies, Hanover, Ill.
Filed March 26, 1931. Serial No. 312,580. PUBLISHED JANUARY 5, 1932. Class 6.

295,041. CONFECTION CONSISTING OF LARGE WHOLE BEANS COOKED AND SALTED AFTER THE COTYLEDONS THEREOF HAVE BEEN PARTIALLY SEPARATED. BEANETTS MFG. CO., Seattle, Wash.
Filed March 21, 1931. Serial No. 312,357. PUBLISHED APRIL 5, 1932. Class 46.

295,042. GAS FOR ILLUMINATING PURPOSES, GAS FOR FUEL PURPOSES, GAS FOR HEATING PURPOSES, PETROLEUM GAS, LIQUEFIED PETROLEUM GAS, BUTANE. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif.
Filed February 24, 1931. Serial No. 311,400. PUBLISHED MARCH 22, 1932. Class 6.

295,043. ELECTRIC VACUUM CLEANERS AND PARTS THEREOF. MAJESTIC HOUSEHOLD UTILITIES CORPORATION, Chicago, Ill., assignor to Grigsby-Grunow Company.
Filed February 7, 1931. Serial No. 310,831. PUBLISHED MARCH 22, 1932. Class 21.

295,044. RECORDS FOR USE IN CONNECTION WITH PHONOGRAPHS. BRUNSWICK RADIO CORPORATION, New York, N. Y.
Filed February 3, 1931. Serial No. 310,710. PUBLISHED MARCH 29, 1932. Class 36.

295,045. BUILDING TILES. LUTHER S. MUNSON, Washington, D. C.
Filed January 31, 1931. Serial No. 310,609. PUBLISHED APRIL 5, 1932. Class 12.

295,046. LUBRICATING MOTOR OILS, KEROSENE, GASOLINE, LUBRICATING GREASE, AND TECHNICAL WHITE OIL USEFUL AS A SLAB OIL FOR BAKERIES AND OTHER USES. EMLENTON REFINING COMPANY, Emlenton, Pa.
Filed January 30, 1931. Serial No. 310,558. PUBLISHED MARCH 29, 1932. Class 15.

295,047. PLANK AND BLOCK FLOORING. PLYWOOD PRODUCTS COMPANY, Louisville, Ky.
Filed January 24, 1931. Serial No. 310,349. PUBLISHED MARCH 22, 1932. Class 12.

295,048. LUBRICATING OIL, LUBRICATING GREASES, GASOLINE, KEROSENE, AND MOTOR FUEL OILS. CONTINENTAL OIL COMPANY, Chicago, Ill.
Filed January 15, 1931. Serial No. 309,967. PUBLISHED MARCH 22, 1932. Class 15.

295,049. CORN, CALLOUS, AND BUNION PADS. ARROWSMITH MANUFACTURING COMPANY, New York, N. Y.
Filed December 18, 1930. Serial No. 309,115. PUBLISHED MARCH 29, 1932. Class 44.

295,050. AUTO GLARE SHIELDS. STOCK-KING MFG. CO., St. Louis, Mo.
Filed August 19, 1931. Serial No. 318,182. PUBLISHED APRIL 5, 1932. Class 19.

295,051. DRY CLEANING PLANTS OR SYSTEMS. SHRADER BROS., Louisville, Ky.
Filed September 15, 1931. Serial No. 319,083. PUBLISHED NOVEMBER 24, 1931. Class 24.

295,052. OPAQUING AGENTS IN THE NATURE OF PAINT PIGMENTS FOR GLASS AND ENAMEL, ETC. VEREINIGTE CHEMISCHE FABRIKEN KREIDL, HELLER & CO., Vienna, Austria.
Filed September 21, 1931. Serial No. 319,269. PUBLISHED MARCH 29, 1932. Class 16.

295,053. OPAQUING AGENTS IN THE NATURE OF PAINT PIGMENTS FOR GLASS AND ENAMEL, CERAMIC PAINT COLOURS, OPAQUE PAINT COLOURS, AND ENAMEL PAINT COLOURS. VEREINIGTE CHEMISCHE FABRIKEN KREIDL, HELLER & CO., Vienna, Austria.
Filed September 21, 1931. Serial No. 319,270. PUBLISHED MARCH 29, 1932. Class 16.

295,054. CERTAIN NAMED PAINT PRODUCTS. LOUIS FOLLMAN, New York, N. Y.
Filed October 6, 1931. Serial No. 319,773. PUBLISHED APRIL 5, 1932. Class 16.

295,055. GLOSS OILS USED IN THE MANUFACTURE OF PAINTS AND VARNISHES. GENERAL NAVAL STORES COMPANY, INC., New York, N. Y.
Filed October 17, 1931. Serial No. 320,164. PUBLISHED APRIL 5, 1932. Class 16.

295,056. TRACING AND DRAWING GAME OR BOOK. JUVENILE GRAPHIC PRODUCTIONS, New York, N. Y.
Filed October 22, 1931. Serial No. 320,340. PUBLISHED APRIL 5, 1932. Class 22.

295,057. ELECTRIC REFRIGERATORS. TRUPAR MANUFACTURING COMPANY, Dayton, Ohio.
Filed November 12, 1931. Serial No. 321,084. PUBLISHED APRIL 5, 1932. Class 31.

295,058. MEDICAL NECKLACES COMPRISING ELECTRICAL APPARATUS USED IN TREATING DEBILITY. GEORGES LAKHOVSKY, Paris, France.
Filed November 16, 1931. Serial No. 321,166. PUBLISHED APRIL 5, 1932. Class 44.

295,059. LIQUID FUEL FOLDING OR CAMP STOVES. OWEN E. PRATT, doing business as Pratt Manufacturing Company, Armington, Ill.
Filed November 19, 1931. Serial No. 321,297. PUBLISHED APRIL 5, 1932. Class 34.

295,060. OPERATING ROOM AND SURGICAL SUPPLIES. RED ARROW PRODUCTS, INC., Oradell, N. J.
Filed November 23, 1931. Serial No. 321,442. PUBLISHED MARCH 29, 1932. Class 44.

295,061. POP-GUN GAME PLAYED WITH A GUN AND PROJECTILE AND TARGET, PRODUCING A DISTINCTIVE NOISE WHEN PROPERLY AIMED. PHILIP COOK, New York, N. Y.
Filed November 27, 1931. Serial No. 321,529. PUBLISHED APRIL 5, 1932. Class 22.

295,062. FLOOR, WOODWORK, AND FURNITURE POLISHES. THE GERSON-STEWART CORPORATION, Cleveland, Ohio.
Filed December 1, 1931. Serial No. 321,654. PUBLISHED MARCH 29, 1932. Class 16.

295,063. STEAM GENERATORS AND ACCESSORIES—NAMELY, WATER SEPARATORS, HIGH-PRESSURE FIRE BOXES MADE OF TUBES, SUPERHEATERS, AND PREHEATERS FOR MAKE-UP WATER. BROWN, BOVERI & CIE., Baden, Switzerland.
Filed December 2, 1931. Serial No. 321,704. PUBLISHED APRIL 5, 1932. Class 34.

295,064. RANGE OIL BURNERS AND PARTS THEREFOR. KENMORE ENGINEERING CO., INC., Boston, Mass.
Filed December 16, 1931. Serial No. 322,177. PUBLISHED MARCH 29, 1932. Class 34.

295,065. METAL REFLECTING LAMP SHADES. ALBERT M. KANTRO, Chicago, Ill.
Filed December 30, 1931. Serial No. 322,613. PUBLISHED APRIL 5, 1932. Class 34.

295,066. BLOWER TYPE AIR CONDITIONING HUMIDIFYING, AND VENTILATING UNITS. AMERICAN WOOD PRODUCTS COMPANY, Minneapolis, Minn.
Filed January 2, 1932. Serial No. 322,621. PUBLISHED APRIL 5, 1932. Class 34.

295,067. AIRPLANE PROPELLERS. NICHOLAS-BEAZLEY AIRPLANE COMPANY, INC., Marshall, Mo.
Filed January 4, 1932. Serial No. 322,702. PUBLISHED APRIL 5, 1932. Class 19.

295,068. CORNED BEEF, POTTED MEAT PRODUCTS, CHICKEN CREAM OF POTATO SOUP, ETC. DIPLOMAT PRODUCTS, INC., New York, N. Y.
Filed December 10, 1931. Serial No. 321,991. PUBLISHED MARCH 29, 1932. Class 46.

295,069. CULTURE FOR USE IN MAKING BUTTERMILK, FERMENTED MILK, AND BUTTERMILK AND FERMENTED MILK. PETER PETERSEN, doing business as Citrolac Products Co., Chicago, Ill.
Filed August 3, 1931. Serial No. 317,614. PUBLISHED MARCH 29, 1932. Class 46.

295,070. SHOES CONSTRUCTED FROM LEATHER OR FABRIC, OR THE COMBINATION OF LEATHER AND FABRIC. PETTY SHOE COMPANY, Pittsburgh, Pa.
Filed August 12, 1931. Serial No. 317,902. PUBLISHED MARCH 22, 1932. Class 39.

295,071. BARBER AND BEAUTY OPERATOR CHAIRS AND TABLES. F. & F. KOENIGKRAMER, Cincinnati, Ohio.
Filed August 31, 1931. Serial No. 318,597. PUBLISHED APRIL 5, 1932. Class 32.

295,072. BED BLANKETS OF WOOL AND MIXTURES OF WOOL AND COTTON. MAX FERTIG & CO. INC., New York, N. Y.
Filed September 10, 1931. Serial No. 318,908. PUBLISHED APRIL 5, 1932. Class 42.

295,073. SEWING MACHINES. THE NEW HOME SEWING MACHINE COMPANY, Rockford, Ill.
Filed September 19, 1931. Serial No. 319,215. PUBLISHED APRIL 5, 1932. Class 23.

295,074. CAKES. OSWALD JAEGER BAKING CO., Milwaukee, Wis.
Filed September 25, 1931. Serial No. 319,413. PUBLISHED MARCH 29, 1932. Class 46.

295,075. BARLEY MALT SYRUP. BROOKLYN HOME SUPPLY COMPANY, Cleveland, Ohio.
Filed October 19, 1931. Serial No. 320,327. PUBLISHED MARCH 29, 1932. Class 46.

295,076. STONE JARS AND JUGS. THE PFALTZGRAFF POTTERY COMPANY, York, Pa.
Filed November 12, 1931. Serial No. 321,080. PUBLISHED APRIL 5, 1932. Class 30.

295,077. CHEMICAL COMPOUNDS SUITABLE FOR THE FLAVORING OF FOOD PRODUCTS AND CHEMICAL PREPARATIONS SUITABLE FOR THE FLAVORING OF FOOD PRODUCTS. FRITZSCHE BROTHERS, INC., New York, N. Y.
Filed November 17, 1931. Serial No. 321,204. PUBLISHED MARCH 29, 1932. Class 46.

295,078. THREADS. GUDEBROD BROTHERS SILK COMPANY, Philadelphia, Pa.
Filed November 19, 1931. Serial No. 321,318. PUBLISHED APRIL 5, 1932. Class 43.

295,079. SUGAR. GODCHAUX SUGARS, INC., New Orleans, La.
Filed November 28, 1931. Serial No. 321,559. PUBLISHED MARCH 29, 1932. Class 46.

295,080. ALIMENTARY PASTE PRODUCTS. JOHN MINERVINI, INC., Hoboken, N. J.
Filed November 28, 1931. Serial No. 321,572. PUBLISHED MARCH 29, 1932. Class 46.

295,081. BRAKE LINING. L. J. MILEY COMPANY, Chicago, Ill.
Filed December 3, 1931. Serial No. 321,792. PUBLISHED APRIL 5, 1932. Class 35.

295,082. CHICKEN CREAM OF POTATO SOUP, OLD FASHIONED CHICKEN FRICASSEE, ETC. DIPLOMAT PRODUCTS, INC., New York, N. Y.
Filed December 10, 1931. Serial No. 321,990. PUBLISHED MARCH 29, 1932. Class 46.

295,083. SMOKED SUGAR CURED HAM. FRED ECKART PACKING CO., Fort Wayne, Ind.
Filed January 14, 1932. Serial No. 323,000. PUBLISHED APRIL 5, 1932. Class 46.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

295,084. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SCHULER VINEYARD CO., Stockton Calif., assignor to Herman S. Brueck, Lodi, Calif. Filed Apr. 20,1929. Serial No. 282,756.

MANHATTAN
Flame Tokay Grapes

For Fresh Grapes.
Claims use since Feb. 21, 1929.

295,085. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed Apr. 9, 1930. Serial No. 298,559.

SANITARY SYSTEM

For Portable Electric Suction Cleaners and Parts Thereof.
Claims use since August, 1926.

295,086. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CRYSTAL CHEMICAL COMPANY, INC., New York, N. Y., now by change of name Crystal Corporation. Filed Oct. 28, 1930. Serial No. 307,266.

MIAMI

For Face Powders, Rouges, Face Creams, and Lipstick.
Claims use since May 15, 1930.

295,087. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) SOCIÉTÉ ANONYME POUR LA DÉCORATION INTÉRIEURE MODERNE, Paris, France. Filed Nov. 10, 1930. Serial No. 307,746.

Dim

For Electric Floor, Table, and Bridge Lamps; Electric Lamp Stands and Parts Thereof, Electric Night Lights and Parts Thereof, Electroliers and Parts Thereof, Ceiling and Cornice Electric Lamp Fittings and Electric Lamp Brackets and Parts Thereof, Electric Kettles, Electric Cigar Lighters, Glow Electrical Heaters and Unitary Water Heating Electric Radiators, Electric Flat Irons, and Electrical Liquid Heaters.
Claims use since June 1, 1914.

295,088. (CLASS 46. FOODS, AND INGREDIENTS OF FOODS.) FRANK AND COMPANY, Milwaukee, Wis. Filed Dec. 9, 1930. Serial No. 308,776.

CONSISTENTLY SUPERIOR

For Rye Bread, Chili Con Carne in Packages, Smoked Goose Breasts, and Smoked Goose Shanks.
Claims use since Nov. 1, 1930.

295,089. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) NEWTON JUNIOR CORPORATION, New Haven, Conn. Filed Mar. 25, 1931. Serial No. 312,524.

Kaster-Kit

For Toy Casting or Molding Machines and Parts Thereof.
Claims use since Dec. 8, 1930.

295,090. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HURON MILLING COMPANY, Harbor Beach, Mich. Filed Apr. 13, 1931. Serial No. 313,294.

MUFFIN CRISPS

For Toasted Muffins.
Claims use since Mar. 1, 1931.

295,091. (CLASS 39. CLOTHING.) HERMAN BRODY, INC., New York, N. Y. Filed Apr. 15, 1931. Serial No. 313,362.

BENTLEY MODES

For Women's, Misses', and Children's Dresses.
Claims use since Apr. 9, 1931.

295,092. (CLASS 15. OILS AND GREASES.) A. GROSS CANDLE COMPANY, INC., Baltimore, Md. Filed Apr. 27, 1931. Serial No. 313,847.

MEMORIAL BRAND

For Candles and Ceremonial Lights.
Claims use since Apr. 15, 1931.

295,093. (CLASS 15. OILS AND GREASES.) A. GROSS CANDLE COMPANY, INC., Baltimore, Md. Filed Apr. 27, 1931. Serial No. 313,848.

MENORAH BRAND

For Candles.
Claims use since Apr. 15, 1931.

295,094. (CLASS 31. FILTERS AND REFRIGERATORS.) THE ILLINOIS MOULDING COMPANY, Chicago, Ill. Filed May 14, 1931. Serial No. 314,565.

ILLINOIS

For Refrigerators.
Claims use since Apr. 1, 1931.

295,095. (CLASS 48. MALT BEVERAGES AND LIQUORS.) ADAM SCHEIDT BREWING COMPANY, Norristown, Pa. Filed May 21, 1931. Serial No. 314,868.

BremerBrau

For Malt Beverages Containing Less Than One-Half of One Per Cent Alcohol by Volume.
Claims use since May 4, 1931.

295,096. (CLASS 43. THREAD AND YARN.) LUDLOW MANUFACTURING ASSOCIATES, Boston, Mass. Filed June 20, 1931. Serial No. 316,143.

ANKLE-FIT



For Linen Thread.
Claims use since Apr. 29, 1931.

295,097. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN CHICLE COMPANY, Long Island City, N. Y. Filed June 30, 1931. Serial No. 316,474.

COLGAN'S VIOLET CHIPS

For Chewing Gum.
Claims use since May 1, 1931.

295,098. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN CHICLE COMPANY, Long Island City, N. Y. Filed July 7, 1931. Serial No. 316,691.

COLGAN'S MINT CHIPS

For Chewing Gum.
Claims use since May 1, 1931.

295,099. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) HOMER A. EDWARDS, Chicago, Ill. Filed July 24, 1931. Serial No. 317,274.

LINKREEL

For Sausage Machines.
Claims use since Apr. 1, 1930.

295,100. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE HATFIELD CAMPBELL CREEK COAL COMPANY, Cincinnati, Ohio. Filed Aug. 8, 1931. Serial No. 317,804.

HATFIELD DANA COAL

For Coal.
Claims use since Apr. 24, 1931.

295,101. (CLASS 15. OILS AND GREASES.) EDMOND PICHOU, Salon, Bouches-du-Rhone, France. Filed Aug. 19, 1931. Serial No. 318,165.

Fire-saving Oil



Huile de Protection

For a Motor Fuel Oil.
Claims use since Oct. 17, 1930.

295,102. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MAHLER TEXTILES, INC., New York, N. Y. Filed Oct. 6, 1931. Serial No. 319,789.

ARGENTINE CLOTH



For Cotton Piece Goods.
Claims use since Feb. 20, 1931.

295,103. (CLASS 39. CLOTHING.) HAHN DEPARTMENT STORE, INC., Wilmington, Del. Filed Nov. 9, 1931. Serial No. 320,925.

MILLAY

For Women's Ready-to-Wear and Accessories—Namely, Coats of Fabric and/or Fur, Dresses, Suits, Skirts, Blouses, Negligees, Underwear, Corsets, Scarfs, Pajamas, Sweaters, Gloves and Mittens of Fabric or Leather, Hats; Shoes of Leather, Rubber, or Fabric; Riding Boots, Riding Habits, Ski Suits, Snow Suits, Skating Suits, Leather Coats, Jackets of Fabric or Leather, Bathing Suits, Bathing Trunks, Bathing Wraps and Robes, Bathing Shoes, and Bathing Caps.
Claims use since Mar. 2, 1931.

295,104. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE NORTH CAROLINA GRANITE CORPORATION, Mount Airy, N. C. Filed Nov. 9, 1931. Serial No. 320,940.

WHITE MOUNT AIRY GRANITE

THE NORTH CAROLINA GRANITE CORPORATION

For Building Stone as It Comes from the Quarry.
Claims use since December, 1930.

295,105. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MUPU CITRUS ASSN., Santa Paula, Calif. Filed Dec. 11, 1931. Serial No. 322,026.

BARGAIN

For Fresh Citrus Fruit.
Claims use since 1922.

295,106. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MAINE STEEL PRODUCTS CO., South Portland, Me. Filed Feb. 4, 1932. Serial No. 323,822.

Sargent

For Snow Plows and Parts Thereof.
Claims use since March, 1921.

295,107. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Feb. 15, 1932. Serial No. 324,209.

KARKLEAN

For Soap.
Claims use since February, 1928.

295,108. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) ERNEST C. FOX, doing business as Independent Register & Manufacturing Company, Cleveland, Ohio. Filed Apr. 16, 1932. Serial No. 326,182.

"FABRIKATED"

For Heating and Ventilating Registers, Register Faces, and Grills.
Claims use since 1920.

TRADE-MARK REGISTRATIONS RENEWED

11,215. IT REACHES THE RIGHT SPOT, for Medicine. Registered July 5, 1904. ALEXANDER CRICHTON, Castleton, Canada. Renewed July 5, 1932.

38,240. STEEL PENS. Registered May 13, 1902. M. MYERS & SON, Birmingham, England. Renewed May 13, 1932, to Bainbridge, Kimpton & Haupt, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

38,335. BUTTER. Registered May 27, 1902. LESTRADE BROS., New York, N. Y. Renewed May 27, 1932, to Viking Butter Co., Inc., New York, N. Y., a Corporation of New York, successor.

38,629. CALCIUM CARBID. Registered July 15, 1902. ELECTRO LAMP CO. Renewed July 15, 1932, to Union Carbide Company, New York, N. Y., a Corporation of Virginia, assignee.

38,631. LUBRICATING OILS. Registered July 15, 1902. GALENA-SIGNAL OIL COMPANY, Franklin, Pa. Renewed July 15, 1932, to Valvoline Oil Company, Edgewater, N. J., and New York, N. Y., a Corporation of New Jersey, assignee by mesne assignments.

38,937. LAMPS FOR BURNING ACETYLENE GAS. Registered September 23, 1902. ELECTRO LAMP CO. Renewed September 23, 1932, to Union Carbide Company, New York, N. Y., a Corporation of Virginia, assignee.

39,043. STOVE POLISH. Registered October 14, 1902. WILLIAM HALLEMAN, Renewed October 14, 1932, to Empire Bottling Works, Newark, N. J., a Corporation of New Jersey, successor.

39,128. FOUNTAIN-PENS. Registered October 28, 1902. L. E. WATERMAN COMPANY, New York, N. Y., a Corporation of New York. Renewed October 28, 1932.

39,132. SHAVING SOAP. Registered October 28, 1902. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn., a Corporation of Connecticut. Renewed October 28, 1932.

84,725. CAUSTIC SODA. Registered January 2, 1912. BURGESS SULPHITE FIBRE COMPANY, Berlin, N. H. Renewed January 2, 1932, to Brown Company, Portland, Me., and Berlin, N. H., a Corporation of Maine, successor.

85,094. TOILET PREPARATIONS TO PREVENT CHAFING AND CHAPPING. Registered January 30, 1912. GODFREY EDWARDS, Liverpool, England. Renewed January 30, 1932, to Gripolin Co., Chester, England, a Firm, successor.

86,208. NATURAL MINERAL WATERS. Registered April 23, 1912. LA COMPAGNIE FERMIERE DE L'ETABLISSEMENT THERMAL DE VICHY, Paris, France, a Corporation of France. Renewed April 23, 1932.

86,209. NATURAL MINERAL WATERS. Registered April 23, 1912. LA COMPAGNIE FERMIERE DE L'ETABLISSEMENT THERMAL DE VICHY, Paris, France, a Corporation of France. Renewed April 23, 1932.

86,271. ANISETTES. Registered April 30, 1912. BOSCH & Co., Badalona, near Barcelona, Spain, a Firm. Renewed April 30, 1932.

86,307. MEN'S UNDERWEAR—NAMELY, KNITTED AND TEXTILE UNDERSHIRTS AND DRAWERS. Registered April 30, 1912. ALBIN KUEHNERT, doing business as A. Kuehnert & Co., New York, N. Y. Renewed April 30, 1932.

86,453. CANNED OYSTERS. Registered May 7, 1912. RICE BROS. PACKING COMPANY, Apalachicola, Fla., a Firm. Renewed May 7, 1932.

86,522. STATIONERY SUPPLIES. Registered May 14, 1912. A. W. FABER, Stein, Germany. Renewed May 14, 1932, to A. W. Faber, Inc., Newark, N. J., a Corporation of New Jersey, assignee by mesne assignments.

86,576. NATURAL MINERAL WATERS. Registered May 21, 1912. LA COMPAGNIE FERMIERE DE L'ETABLISSEMENT THERMAL DE VICHY, Paris, France, a Corporation of France. Renewed May 21, 1932.

86,618. CYLINDER-OIL. Registered May 21, 1912. WM. C. ROBINSON & SON, CO., Baltimore, Md., and Corsopolis, Pa. Renewed May 21, 1932, to Wm. C. Robinson & Son, Co., Baltimore, Md.

86,624. RYE WHISKY. Registered May 21, 1912. THE SELIGMAN DISTILLERY COMPANY, Cincinnati, Ohio. Renewed May 21, 1932, to Standard Brands Incorporated, New York, N. Y., a Corporation of Delaware, successor.

86,676. ICE-CREAM. Registered May 21, 1912. BREYER ICE CREAM CO., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed May 21, 1932.

86,809. ROACH-POWDER. Registered June 4, 1912. LOUIS A. KAAS, Newark, N. J. Renewed June 4, 1932.

86,854. SHAVING AND TOILET SOAPS. Registered June 4, 1912. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn., a Corporation of Connecticut. Renewed June 4, 1932.

86,951. REFINED OIL FOR LIGHTING, HEATING, AND POWER PURPOSES. Registered June 11, 1912. STANDARD OIL COMPANY, Bayonne, N. J. Renewed June 11, 1932, to Standard Oil Company of New Jersey, Wilmington, Del., a Corporation of Delaware, assignee.

87,062. CALCIMINES. Registered June 25, 1912. M. EWING FOX & CO., New York, N. Y. Renewed June 25, 1932, to The Glidden Company, Cleveland, Ohio, a Corporation of Ohio, assignee by mesne assignments.

87,177. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES. Registered July 2, 1912. M. HARTLEY DODGE, Passaic, N. J., and New York, N. Y. Renewed July 2, 1932, to Remington Arms Company, Inc., Bridgeport, Conn., and Ilion and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,283. LUBRICATING-OILS. Registered July 2, 1912. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed July 2, 1932, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

87,336. WOVEN CARPETS AND RUGS. Registered July 9, 1912. Hardwick & Magee Company, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed July 9, 1932.

87,422. CERTAIN RAW OR PARTLY PREPARED MATERIALS. Registered July 16, 1912. CARGILL ELEVATOR CO. Renewed July 16, 1932, to Minneapolis Seed Co., Minneapolis, Minn., a Corporation of Minnesota, assignee.

87,498. SEWING-NEEDLES. Registered July 16, 1912. JOHN THORNTON, Jr. Renewed July 16, 1932, to John Thornton & Co., New York, N. Y., a Firm, successor.

87,743. CERTAIN TOILET COSMETICS. Registered August 6, 1912. HENRIETTE GABILLA, Paris, France. Renewed August 6, 1932, to Gabilla, Incorporated, New York, N. Y., a Corporation of New York, assignee.

87,765. VENTILATORS. Registered August 6, 1912. IDEAL VENTILATOR CO., Boston, Mass., and Providence, R. I. Renewed August 6, 1932, to Ideal Ventilator Co., Providence, R. I., a Corporation of Rhode Island, assignee.

87,849. WHITE LIQUID PREPARATIONS FOR CLEANING WHITE GOODS. Registered August 13, 1912. CAMMEYER. Renewed August 13, 1932, to Cammeyer Inc., New York, N. Y., a Corporation of New York, successor.

87,889. SOAP (SOLID AND LIQUID). Registered August 13, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed August 13, 1932.

88,032. LUBRICATING-OILS. Registered August 20, 1912. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed August 20, 1932, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

88,057. PREPARATIONS FOR CLEANING ALL SORTS OF WHITE GOODS. Registered August 27, 1912. CAMMEYER. Renewed August 27, 1932, to Cammeyer Inc., New York, N. Y., a Corporation of New York, successor.

88,078. TOYS AND TRICK APPARATUS. Registered August 27, 1912. ALFRED C. GILBERT. Renewed August 27, 1932, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland, assignee by mesne assignments.

88,087. HAIR-TONIC. Registered August 27, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed August 27, 1932.

88,174. GAMES, TOYS, FISHING-LINES, AND FISHING TACKLE. Registered September 3, 1912. LOUIS J. EPPINGER, Detroit, Mich. Renewed September 3, 1932.

88,244. NATURAL MINERAL WATERS. Registered September 10, 1912. LA COMPAGNIE FERMIERE DE L'ETABLISSEMENT THERMAL DE VICHY, Paris, France, a Corporation of France. Renewed September 10, 1932.

88,250. MACARONI, SPAGHETTI, VERMICELLI, AND NOODLES. Registered September 10, 1912. THE DENVER MACARONI & NOODLE CO., Denver, Colo. Renewed September 10, 1932, to Kansas City Macaroni & Importing Company, Kansas City, Mo., a Corporation of Missouri, successor.

88,254. A REMEDY FOR DISEASES OF THE LIVER. Registered September 10, 1912. JAMES G. DODSON, Americus, Ga. Renewed September 10, 1932, to Sterling Products (Incorporated), Wheeling, W. Va., a Corporation of West Virginia, assignee by mesne assignments.

88,264. CERTAIN NAMED STOUTS, BEER, PORTER, WINES, AND ALES. Registered September 10, 1912. BASS, RATCLIFF & GRETTON, LIMITED, Burton-on-Trent, England, a Corporation of Great Britain. Renewed September 10, 1932.

88,265. CERTAIN NAMED STOUTS, BEER, PORTER, WINES, AND ALES. Registered September 10, 1912. BASS, RATCLIFF & GRETTON, LIMITED, Burton-on-Trent, England, a Corporation of Great Britain. Renewed September 10, 1932.

88,266. PALE ALE AND BEER. Registered September 10, 1912. BASS, RATCLIFF & GRETTON, LIMITED, Burton-on-Trent, England, a Corporation of Great Britain. Renewed September 10, 1932.

88,267. CERTAIN NAMED STOUTS, BEER, PORTER, WINES, AND ALES. Registered September 10, 1912. BASS, RATCLIFF & GRETTON, LIMITED, Burton-on-Trent, England, a Corporation of Great Britain. Renewed September 10, 1932.

88,620. REMEDIES FOR DISEASES OF THE KIDNEY AND BLADDER AND RHEUMATISM. Registered October 8, 1912. FOLEY & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed October 8, 1932.

88,699. VACCINE. Registered October 15, 1912. PARKE, DAVIS & CO., Detroit, Mich., a Corporation of Michigan. Renewed October 15, 1932.

88,712. LUBRICATING-OIL. Registered October 15, 1912. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed October 15, 1932, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

88,713. KEROSENE. Registered October 15, 1912. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed October 15, 1932, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

88,722. CORSETS. Registered October 22, 1912. B. ALTMAN & CO., New York, N. Y., a Corporation of New York. Renewed October 22, 1932.

88,727. BOOK-CLOTHS. Registered October 22, 1912. JOSEPH BANCROFT & SONS CO., Wilmington, Del., a Corporation of Delaware. Renewed Oct. 22, 1932.

88,728. WINDOW-SHADE FABRIC. Registered October 22, 1912. JOSEPH BANCROFT & SONS CO., Wilmington, Del., a Corporation of Delaware. Renewed October 22, 1932.

88,802. HOSIERY. Registered October 22, 1912. E. SUTRO AND SON COMPANY. Renewed October 22, 1932, to E. Sutro & Son Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee by mesne assignments.

88,806. KEROSENE. Registered October 22, 1912. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y. Renewed October 22, 1932, to The Texas Company, New York, N. Y., a Corporation of Delaware, assignee.

88,824. MEDICATED ANTISEPTIC SOLUBLE TOILET POWDERS. Registered October 29, 1912. AMERICAN AMMONE COMPANY, Buffalo and New York, N. Y. Renewed October 29, 1932, to American Ammone Company, New York, N. Y., a Corporation of Delaware.

88,825. CORN AND BUNION PLASTERS. Registered October 29, 1912. ASEPTIC PRODUCTS COMPANY, Long Island City and New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,827. CERTAIN NAMED FOODS. Registered October 29, 1912. C. W. ANTRIM & SONS, Richmond, Va., a Firm. Renewed October 29, 1932.

88,842. HAMS, BACON, AND LARD. Registered October 29, 1912. CARSTENS PACKING COMPANY, Tacoma and Seattle, Wash., a Corporation of Maine. Renewed October 29, 1932.

88,863. WHEAT-FLOUR. Registered October 29, 1912. FISHER FLOURING MILLS COMPANY, Seattle Wash. Renewed October 29, 1932, to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash., a Corporation of Washington.

88,865. WHEAT-FLOUR. Registered October 29, 1912. THE FOLTZ GROCERY & BAKING COMPANY. Renewed October 29, 1932, to The Kroger Grocery & Baking Co., Cincinnati, Ohio, a Corporation of Ohio, successor.

88,891. COFFEE. Registered October 29, 1912. JOHNSON-ALLEN COFFEE CO. Renewed October 29, 1932, to Norwine Coffee Company, St. Louis, Mo., a Corporation of Missouri, assignee.

88,998. CERTAIN FOODS. Registered November 5, 1912. JOHN BLAUL'S SONS COMPANY, Burlington, Iowa, a Corporation of Iowa. Renewed November 5, 1932.

89,008. CERTAIN NAMED HARDWARE ARTICLES. Registered November 5, 1912. THE COLLINS COMPANY, Collinsville, Conn., a Corporation of Connecticut. Renewed November 5, 1932.

89,042. COFFEE, A COMPOUND OF COFFEE AND CHICORY, COCOA, AND CHOCOLATE. Registered November 5, 1912. THE LIVERPOOL CHINA & INDIES TEA CO. LTD., Liverpool, England, a Corporation of Great Britain. Renewed November 5, 1932.

89,052. SHEETS AND PILLOW-CASES. Registered November 5, 1912. NAUMKEAG STEAM COTTON CO., Salem, Mass., a Corporation of Massachusetts. Renewed November 5, 1932.

LABELS

REGISTERED JUNE 14, 1932

40,824.—*Title:* MORTEMOTH KILLS MOTHS. For Preparation for Killing Moths. LOUIS BERKOFF, doing business as The Mortemoth Company, Milwaukee, Wis. Published January 10, 1932.

40,825.—*Title:* OLD HEIDELBERG. For Beverage Containing Less Than One-Half of One Per Cent Alcohol by Volume. BLATZ BREWING COMPANY, Milwaukee, Wis. Published April 30, 1932.

40,826.—*Title:* KENTUCKY PRIDE DIXIE. For Brew. THE BRUCKMANN CO., Cincinnati, Ohio. Published May 4, 1932.

40,827.—*Title:* SANIPLATE, THE DENTAL PLATE CLEANSER. For Dental Plate Cleanser. M. L. BURTON, Los Angeles, Calif. Published April 1, 1932.

40,828.—*Title:* BAMOA. For Fresh Tomatoes. BYRON S. BUTCHER, Nogales, Ariz. Published December 28, 1931.

40,829.—*Title:* JEWEL T J B COFFEE. For Coffee. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published December 8, 1931.

40,830.—*Title:* JEWEL T J C COFFEE. For Coffee. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published December 28, 1931.

40,831.—*Title:* JEWEL T J S COFFEE. For Coffee. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published October 10, 1931.

40,832.—*Title:* WYNWOOD HALL. For Cigars. BENJAMIN KANE, Philadelphia, Pa. Published May 14, 1932.

40,833.—*Title:* POPEYE SPARKLER. For Toy Sparklers. KING FEATURES SYNDICATE, INC., New York, N. Y. Published February 1, 1932.

40,834.—*Title:* SILHOUETTE CHOCOLATES BY BEAUDRY, LOS ANGELES. For Chocolates. LOS ANGELES PAPER BOX FACTORY, Los Angeles, Calif. Published March 15, 1932.

40,835.—*Title:* FUNGICIDE. For Fungicide. EMERICK J. MARKEL, New Haven, Conn. Published April 6, 1932.

40,836.—*Title:* MECHLING'S PYROTE INSECTICIDE. For Insecticide. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published May 11, 1932.

40,837.—*Title:* PRESERVO PANS. For Pans. NATIONAL ENAMELING & STAMPING COMPANY, Milwaukee, Wis. Published March 2, 1932.

40,838.—*Title:* OLD TIMER BREAD. For Bread. NEWARK PARAFFINE & PARCHMENT PAPER CO., Newark, N. J. Published March 18, 1932.

40,839.—*Title:* CHIKLOH TONIC. For Tonic for Poultry, Birds, and Baby Chicks. PETER J. OESTERLING & SON, INC., Butler, Pa. Published April 28, 1932.

40,840.—*Title:* HONEYEAST. For Chewing Gum. ORBIT GUM COMPANY, Chicago, Ill. Published May 7, 1932.

40,841.—*Title:* ENTRE. For Cigars. SAM PENSKY, doing business as The Plaza Cigar Co., Brooklyn, N. Y. Published March 17, 1932.

40,842.—*Title:* STAMP SERVICE. For Postage Stamps. POSTAL ADVERTISING SERVICE, Long Island City, N. Y. Published February 25, 1932.

40,843.—*Title:* CHAMPION. For Spark Plug Cable Sets. REAL PRODUCTS CORPORATION, Brooklyn, N. Y. Published January 22, 1932.

40,844.—*Title:* BLUME KNITWEAR. For Knitted Outerwear. SACKS-SONS CARTON CO., INC., Brooklyn, N. Y. Published February 1, 1932.

40,845.—*Title:* BAKE RITE BAKING POWDER. For Baking Powder. JOS. STERKX, doing business as Bake Rite Baking Powder Co., Alexandria, La. Published January 5, 1932.

40,846.—*Title:* WARD'S SOFT BUN BREAD. For Bread. WARD BAKING COMPANY, New York, N. Y. Published January 18, 1932.

40,847.—*Title:* BETTER BREAD. For Bread. WAXIDE PAPER COMPANY, Kansas City, Mo. Published March 31, 1932.

40,848.—*Title:* MEMORY JOGGER. For Memo Pads. WHITE & WYCKOFF MFG. CO., Holyoke, Mass. Published April 8, 1932.

PRINTS

REGISTERED JUNE 14, 1932

13,749.—*Title:* MADE OF LIVELY WOOL THAT SPRINGS BACK UNDERFOOT. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published March 15, 1932.

13,750.—*Title:* LOOK FOR THIS SYMBOL OF QUALITY. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published March 14, 1932.

13,751.—*Title:* IT SPRINGS BACK UNDERFOOT. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published March 15, 1932.

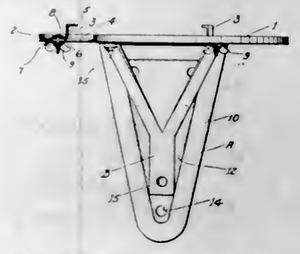
13,752.—*Title:* LIVELY WOOL THAT SPRINGS BACK UNDERFOOT. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published March 16, 1932.

13,753.—*Title:* ASK FOR J. OJRZYNSKI'S PURE RYE BREAD, ROLLS & CAKES, 191 GRAND ST., 172 N. 1ST, BROOKLYN, N. Y. For Bread, Rolls, and Cakes. JOHN OJRZYNSKI, Brooklyn, N. Y. Published January 23, 1932.

REISSUES

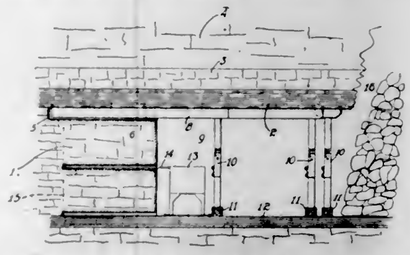
JUNE 14, 1932

18,490. BRACKET DEVICE. JACOB LANDAU, Jersey City, N. J. Original No. 1,771,682, dated July 29, 1930, Serial No. 236,268, filed Nov. 28, 1927. Application for reissue filed July 1, 1931. Serial No. 548,230. 2 Claims. (Cl. 248—20.)



1. In a bracket of the kind described, the combination of a bracket, an article-supporting disk carried thereby and provided with slots therealong, article-clamping elements formed of stamped sheet metal and provided with a hole through each to receive a clamping bolt, and clamping bolts through said holes to hold said elements at desired positions along said slots and preventing their rotation relative thereto.

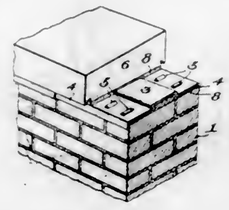
18,491. METHOD OF AND MEANS FOR SUPPORTING ROOF STRATA DURING THE MINING OF MINERALS. WILLIAM P. TABER, Adena, Ohio, assignor, by mesne assignments, to Pittsburgh Coal Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original No. 1,630,589, dated May 31, 1927, Serial No. 35,444, filed June 6, 1925. Application for reissue filed Jan. 11, 1932. Serial No. 585,984. 11 Claims. (Cl. 262—1.)



1. The herein described method of supporting roof strata during the mining of minerals, which consists in excavating at the top of a mineral vein, a hole which extends beyond the vertical plane of the section of minerals next to be removed, then inserting in said hole a support to rest at its inner end upon the solid minerals beyond the section thereof to be taken out, and then sustaining said support at its outer end in the space from which the minerals have previously been removed.

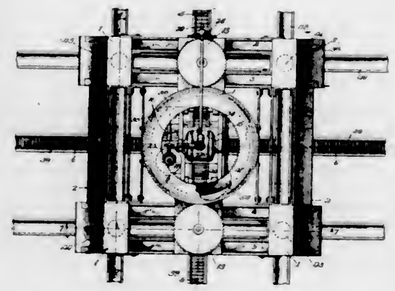
18,492. METAL FLASHING. EDMUND H. FRIEDRICH, Holyoke, Mass., assignor to The Cheney Company, Winchester, Mass., a Corporation of Massachusetts. Original No. 1,843,948, dated Feb. 9, 1932, Serial No. 490,447, filed Oct. 22, 1930. Application for reissue filed Apr. 15, 1932. Serial No. 605,540. 14 Claims. (Cl. 72—127.)

6. A sheet metal flashing plate provided with a main ribbed portion formed in said plate and providing an undercut recess for the reception of mortar for locking said flashing sheet to said mortar bed against movement vertically and longitudinally in one direction, and a plurality



of spaced projections formed from said sheet and arranged to receive mortar for locking said flashing sheet against movement in another longitudinal direction.

18,493. APPARATUS AND METHOD FOR HANDLING AND STORING AUTOMOBILES. FREDERICK P. DINKELBERG, Evanston, Ill., assignor, by mesne assignments, to Cross Parking Systems, Inc., Chicago, Ill., a Corporation of Illinois. Original No. 1,584,080, dated May 11, 1926, Serial No. 581,548, filed Aug. 12, 1922. Application for reissue filed Feb. 16, 1928. Serial No. 254,919. 32 Claims. (Cl. 214—16.1.)

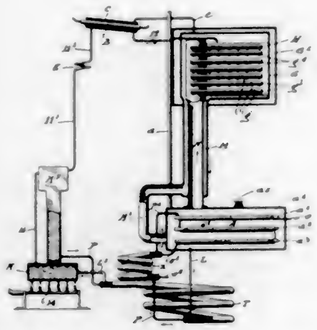


30. In a vehicle storage system, a plurality of vehicle storage stalls arranged tier on tier, a receiving tier, an elevator travelling between said tiers, a vehicle carrier mounted in said elevator, mechanism for propelling said carrier from the elevator on said receiving tier, an automobile driveway adjacent to and extending past said elevator hatchway at said receiving tier, means for operating the carrier propelling mechanism to move said carrier from the elevator to the driveway of the receiving tier, extensible mechanism mounted on said carrier operative to associate an automobile with the carrier, said propelling mechanism being then operable to move said carrier back on said elevator in a direction at substantially right angles to the lengthwise position of the car.

18,494. REFRIGERATION. DONALD B. KNIGHT, Brooklyn, N. Y. Original No. 1,748,957, dated Mar. 4, 1930, Serial No. 280,139, filed May 24, 1928. Application for reissue filed Apr. 16, 1931. Serial No. 530,700. 31 Claims. (Cl. 62—179.)

3. The improvement in the process of refrigerating by the aid of a system including an evaporator and an ab-

sorber and open to the influence of atmospheric pressure which consists in diffusing a cooling agent which is in itself of relatively low vapor pressure, without admixture



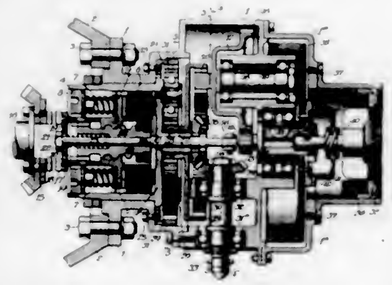
of an absorbent in the presence of an auxiliary agent in the evaporator, and circulating the auxiliary agent through the evaporator and the absorber.

18,495. SUPPLEMENTAL RESISTANCE FOR SERIALLY-MOUNTED LAMPS. ALFRED LAMPL, Berlin-Halensee, Germany, assignor to Noma Electric Corporation of New York, New York, N. Y. Original No. 1,692,272, dated Nov. 20, 1928, Serial No. 68,042, filed Nov. 9, 1925, and in Germany May 9, 1925. Application for reissue filed July 3, 1929. Serial No. 375,866. 6 Claims. (Cl. 200—118.)



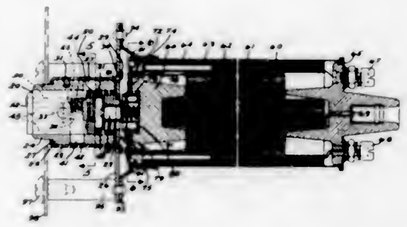
1. In an electric system, electric contacting terminals and a shunt on said terminals, comprising a supply of loosely aggregated substantially granular iron chips.

18,496. ENGINE STARTER. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Original No. 1,691,820, dated Nov. 13, 1928, Serial No. 82,394, filed Jan. 20, 1926. Application for reissue filed Nov. 13, 1930. Serial No. 495,524. 40 Claims. (Cl. 290—48.)



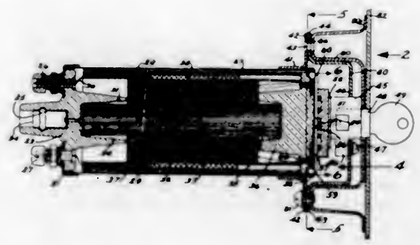
26. An engine starter including a drive or transmission having a centrally located driving member mounted for movement to engage a member of the engine to be started and for rotary movement for cranking such engine member, a rotatable inertia device operatively connected with such drive and a motor operatively connected with the inertia device for operating it for the starting operation, said driving member and inertia device having the same axis of rotation.

18,497. IGNITION COIL AND LOCK SWITCH. HARRY E. NORVIEL, deceased, Anderson, Ind., by Delco-Remy Corporation, Anderson, Ind., assignee. Original application filed Aug. 21, 1926, Serial No. 130,615. Divided and application filed Apr. 12, 1927, Serial No. 183,144. Renewed Oct. 2, 1929. Patent No. 1,759,462, dated May 20, 1930. Application for reissue filed Apr. 12, 1932. Serial No. 604,841. 15 Claims. (Cl. 175—357.)



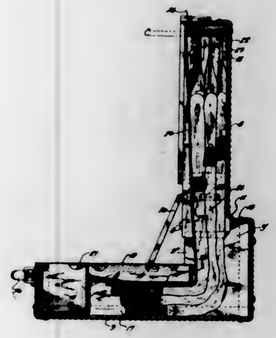
1. A coil and circuit controller therefor comprising, in combination, a unitary sub-assembly incuding an operating member, a lock therefor, and a support for the operating member and lock and including a mounting plate; a unitary sub-assembly including an ignition coil having a cylindrical housing and an ignition switch mounted on one of the coil housing end walls and having an operating member, and a collar attached to the coil cylindrical housing and extending beyond the end wall carrying the switch; and means for securing the collar to said plate, said plate and collar being adapted to provide a housing for the switch, and to locate the first mentioned operating member in operative relation to the switch operating member.

18,498. IGNITION APPARATUS. HARRY E. NORVIEL, deceased, Anderson, Ind., by Delco-Remy Corporation, Anderson, Ind., assignee. Original No. 1,828,378, dated Oct. 20, 1931, Serial No. 97,457, filed Mar. 25, 1926. Application for reissue filed Apr. 12, 1932. Serial No. 604,842. 26 Claims. (Cl. 175—357.)



1. Ignition apparatus comprising, in combination, an ignition coil having a housing providing a switch case member; a second switch case member; means for attaching together the switch case members; an ignition switch enclosed by said members; means enclosed by the housing for electrically connecting a coil winding with the switch; means for rendering the attaching means inaccessible for removal; and a key controlled device for operating the switch and for locking said last means in operative position.

18,499. WARDROBE CASE. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Original No. 1,719,625, dated July 2, 1929, Serial No. 208,293, filed July 25, 1927. Application for reissue filed Dec. 7, 1929. Serial No. 412,558. 8 Claims. (Cl. 190—41.)



1. A wardrobe case, comprising a main section having an upwardly extending side extension, a portion of said extension having a right angular opening, a cover section of less depth than said side extension and having an open lower end portion which is hinged to said extension adjacent its opening and inwardly of the end of the extension and forming a continuation thereof, and garment hangers mounted in the upper portion of the cover section for holding garments which may extend into the main section without creasing.

18,500. CORE DRILL. FREDERICK STONE, Los Angeles, Calif., assignor to Doheny-Stone Drill Co., Los Angeles, Calif., a Corporation of Delaware. Original No. 1,720,700, dated July 16, 1929, Serial No. 732,981, filed Aug. 19, 1924. Application for reissue filed Dec. 15, 1930. Serial No. 502,573. 4 Claim. (Cl. 255—72.)



1. The combination in rotary drills and equipment for drilling or boring into the earth, of a double tube core barrel for taking samples or core of the mineral or earth, drilled through, said tubes of the core barrel having a fixed position relative to each other for simultaneous rotation, the inner tube of the core barrel having a recessed portion, a free turning shell loosely mounted on the recessed portion of the inner tube of the core barrel, a core retainer carried by the free turning shell, a cutting bit sub-joined on the outer core barrel said cutting bit having inwardly extending flanges on which the aforesaid free turning shell is supported for free turning movement.

DESIGNS

JUNE 14, 1932

87,141. SHOE. ALBERT F. BANCROFT, West Newton, Mass. Filed Nov. 27, 1931. Serial No. 41,871. Term of patent 3½ years.



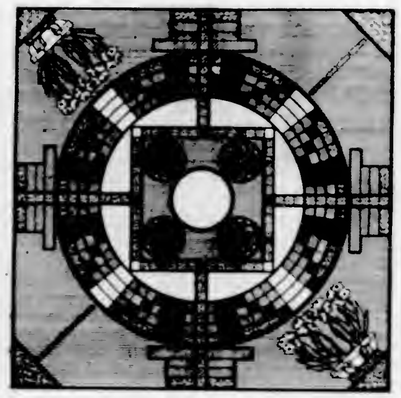
The ornamental design for a shoe, as shown and described.

87,142. BOTTLE OR SIMILAR CONTAINER. FERDINAND S. BARBIERS, Lancaster, Ohio, assignor, by mesne assignments, to Marion Lambert, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Mar. 7, 1932. Serial No. 43,109. Term of patent 14 years.



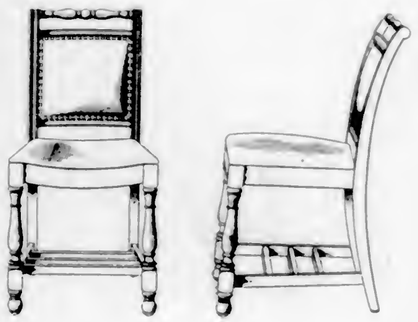
The ornamental design for a bottle or similar container as shown.

87,143. GAME BOARD OR THE LIKE. FLORENCE BARNARD, Brookline, Mass., assignor to Milton Bradley Company, Springfield, Mass., a Corporation of Massachusetts. Filed Apr. 14, 1931. Serial No. 39,482. Term of patent 14 years.



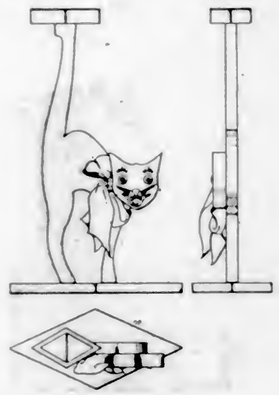
The ornamental design for a game board or the like as shown and described.

87,144. CHAIR. JOHN M. BROWER, Grand Rapids, Mich. Filed Apr. 4, 1932. Serial No. 43,382. Term of patent 3½ years.



The ornamental design for a chair, as shown.

87,145. SMOKING STAND. CLIFFORD B. CAMP, Bay City, Mich., assignor to The Woodcraft Corporation, Bay City, Mich., a Corporation of Michigan. Filed Apr. 23, 1932. Serial No. 43,587. Term of patent 3½ years.



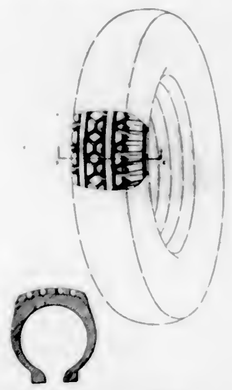
The ornamental design for a smoking stand as shown.

87,146. LACE. GEORGES CORDIER, Calais, France. Filed Dec. 14, 1931. Serial No. 42,085. Term of patent 3½ years.



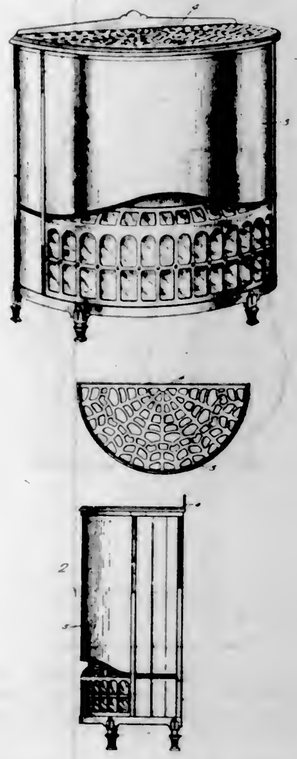
The ornamental design for lace, as shown.

87,147. TIRE. BURGESS DARROW, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 25, 1931. Serial No. 38,827. Term of patent 3½ years.



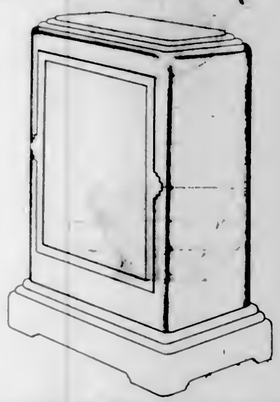
The ornamental design for a tire, as shown.

87,148. CIRCULATING HEATER. LEONARD DE WIT, Chicago, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Apr. 9, 1931. Serial No. 39,418. Term of patent 3½ years.



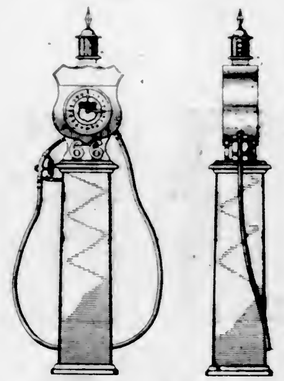
The ornamental design for a circulating heater as shown, and described.

87,149. CLOCK CASE. GEORGES GENAILLE, Ridgefield Park, N. J., assignor to Delvicar, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 2, 1932. Serial No. 43,360. Term of patent 7 years.



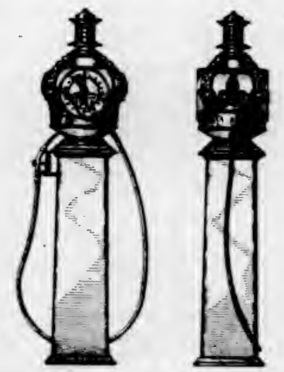
The ornamental design for a clock case, as shown.

87,150. FLUID DISPENSING APPARATUS. WILLIAM M. GRIFFIN, Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Jan. 15, 1932. Serial No. 42,484. Term of patent 7 years.



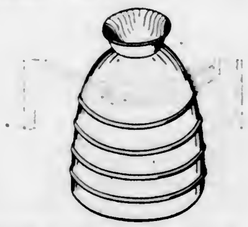
The ornamental design for a fluid dispensing apparatus as shown and described.

87,151. FLUID DISPENSING APPARATUS. WILLIAM M. GRIFFIN, Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Jan. 15, 1932. Serial No. 42,485. Term of patent 7 years.



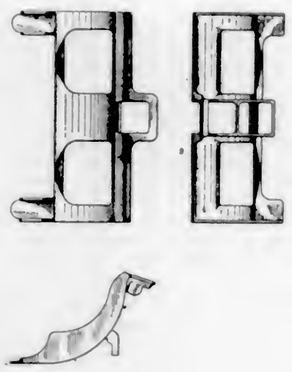
The ornamental design for a fluid dispensing apparatus as shown and described.

87,152. EGG YOLK SEPARATOR. CARLYLE HALL, Seattle, Wash. Filed Aug. 18, 1931. Serial No. 40,879. Term of patent 7 years.



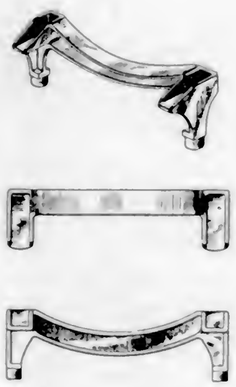
The ornamental design for an egg yolk separator, as shown.

87,153. FRONT FRAME MEMBER FOR ROWING MACHINES. PETER S. HARDY, Stratford, Conn., assignor to Health Developing Apparatus Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1932. Serial No. 43,126. Term of patent 7 years.



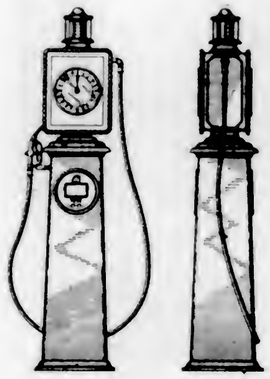
The ornamental design for a front frame member for rowing machines, as shown.

87,154. REAR FRAME MEMBER FOR ROWING MACHINES. PETER S. HARDY, Stratford, Conn., assignor to Health Developing Apparatus Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1932. Serial No. 43,127. Term of patent 7 years.



The ornamental design for a rear frame member for rowing machines, as shown.

87,155. FLUID DISPENSING APPARATUS. JACOB W. HARTMAN, Jr., Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Apr. 4, 1932. Serial No. 43,378. Term of patent 7 years.



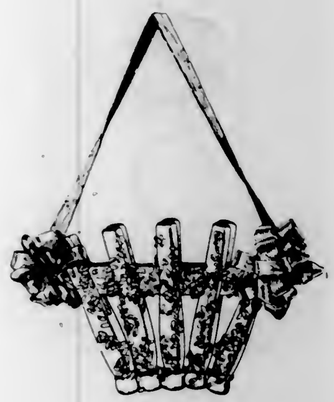
The ornamental design for a fluid dispensing apparatus as shown and described.

87,156. CUP OR SIMILAR CONTAINER. DANIEL W. JANOVER, Brooklyn, N. Y., assignor to S. Gumpert Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 25, 1932. Serial No. 43,605. Term of patent 3½ years.



The ornamental design for a cup or similar container as shown and described.

87,157. WALL ORNAMENT. MICHEL JAVICK, Plains, Pa. Filed Mar. 29, 1932. Serial No. 43,322. Term of patent 3½ years.



The ornamental design for a wall ornament, as shown.

87,158. SHOE HEEL. FRANK J. KELLEY, Milwaukee, Wis., assignor to Panther Rubber Manufacturing Company, Stoughton, Mass., a Corporation of Massachusetts. Filed Apr. 25, 1932. Serial No. 43,603. Term of patent 14 years.



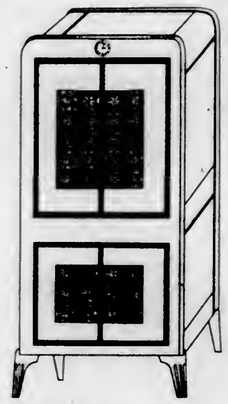
The ornamental design for a shoe heel as shown.

87,159. FINGER RING. THEODORE KOCHANKOFF, Brooklyn, N. Y. Filed Apr. 7, 1932. Serial No. 43,414. Term of patent 14 years.



The ornamental design for a finger ring, as shown.

87,160. KITCHEN CABINET. HARRY L. KUCHINS, Normandy, Mo. Filed Apr. 9, 1932. Serial No. 43,447. Term of patent 3½ years.



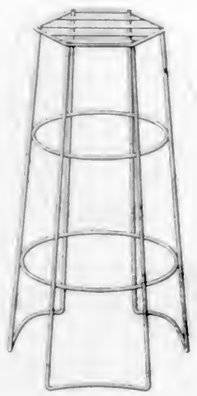
The ornamental design for a kitchen cabinet, as shown and described.

87,161. DESK ORNAMENT. CLAUDE A. LEWIS, Medford, Mass. Filed Mar. 3, 1932. Serial No. 43,060. Term of patent 14 years.



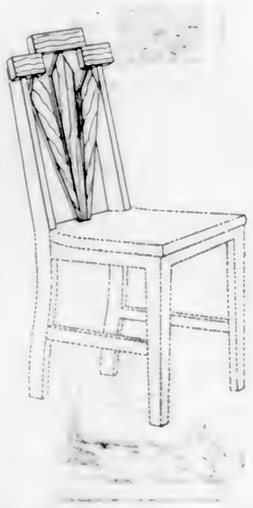
The ornamental design for a desk ornament substantially as shown.

87,162. FLOWER STAND. JOSEPH S. MALIK, Cleveland, Ohio. Filed Mar. 15, 1932. Serial No. 43,201. Term of patent 7 years.



The ornamental design for a flower stand, substantially as shown.

87,163. CHAIR OR SIMILAR ARTICLE OF FURNITURE. FRANK MASTRANGELO and ALPHONSO MASTRANGELO, Fitchburg, Mass., assignors to Angel Novelty Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1932. Serial No. 43,264. Term of patent 14 years.



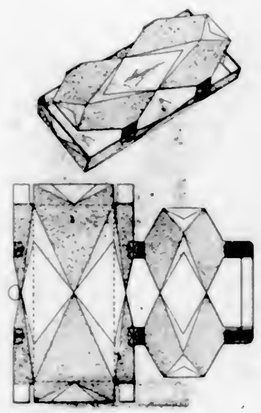
The ornamental design for a chair or similar article of furniture as shown.

87,164. FINGER RING. ROBERT L. MCCARTY, Jr., Edgewood, Pa. Filed Mar. 19, 1932. Serial No. 43,240. Term of patent 3½ years.



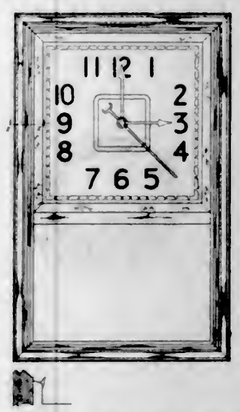
The ornamental design for a finger ring substantially as shown.

87,165. FOLDING PAPER BOX. WILLIAM MEDOFF, New York, N. Y., assignor to National Cellulose Corporation, New York, N. Y. Filed June 25, 1931. Serial No 40,321. Term of patent 14 years.



The ornamental design for a folding paper box, as shown and described.

87,166. CLOCK DISPLAY ADVERTISING UNIT. ARTHUR J. MUCHNICK, Elizabeth, N. J., assignor of one-half to Benjamin Epstein, Brooklyn, N. Y. Filed Mar. 25, 1932. Serial No. 43,289. Term of patent 3½ years.



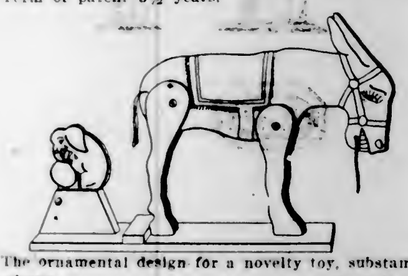
The ornamental design for a clock display advertising unit, as shown and described.

87,167. JAR OR SIMILAR ARTICLE. OLBERT C. NOBLE, Washington, Pa., assignor to Tygart Valley Glass Company, Washington, Pa., a Corporation of West Virginia. Filed Apr. 14, 1932. Serial No. 43,492. Term of patent 7 years.



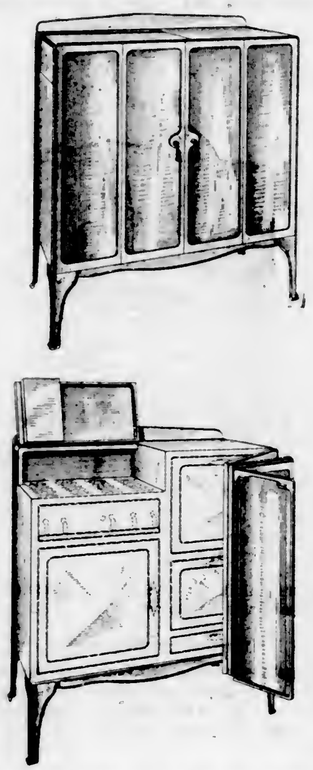
The ornamental design for a jar or similar article, as shown.

87,168. NOVELTY TOY. DOROTHY M. NOLAN, Los Angeles, Calif. Filed Apr. 13, 1932. Serial No. 43,486. Term of patent 3½ years.



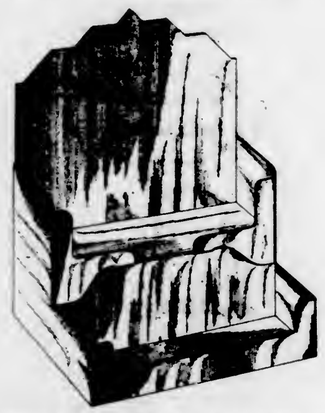
The ornamental design for a novelty toy, substantially as shown.

87,169. GAS STOVE CASING. HENRY W. O'DOWD, Jersey City, N. J., assignor to Standard Gas Equipment Corporation, a Corporation of Maryland. Filed Apr. 23, 1931. Serial No. 39,598. Term of patent 14 years.



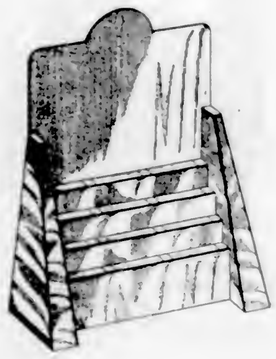
The ornamental design for a gas stove casing substantially as shown.

87,170. DISPLAY STAND OR SIMILAR ARTICLE. CARL A. PHILIPPI, New York, N. Y., assignor to International Folding Paper Box Co. Inc., North Bergen, N. J., a Corporation of New Jersey. Filed Mar. 26, 1932. Serial No. 43,293. Term of patent 7 years.



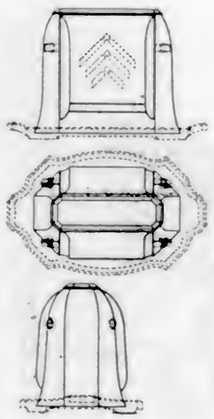
The ornamental design for a display stand or similar article substantially as shown.

87,171. DISPLAY STAND OR SIMILAR ARTICLE. CARL A. PHILIPPI, New York, N. Y., assignor to International Folding Paper Box Co. Inc., North Bergen, N. J., a Corporation of New Jersey. Filed Mar. 26, 1932. Serial No. 43,294. Term of patent 7 years.



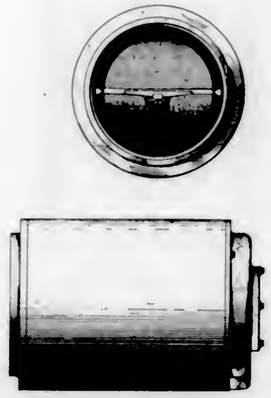
The ornamental design for a display stand or similar article substantially as shown.

87,172. ELECTRIC TOASTER. ABE O. SAMUELS, Rochester, N. Y., assignor to Samson-United Corporation, Rochester, N. Y. Filed Mar. 21, 1932. Serial No. 43,246. Term of patent 7 years.



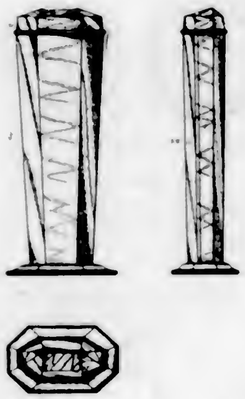
The ornamental design for an electric toaster, as shown.

87,173. AIRCRAFT LEVEL INDICATING DEVICE. ELMER A. SPERRY, Jr., Brooklyn, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Oct. 7, 1931. Serial No. 41,327. Term of patent 14 years.



The ornamental design for an aircraft level indicating device as shown and described.

87,174. NEWS TICKER CASING OR STAND. ALFRED VISCHER, Jr., Ridgewood, N. J., assignor to The Financial Press Companies of America, Boston, Mass., a Trust of Massachusetts. Filed Apr. 2, 1932. Serial No. 43,366. Term of patent 14 years.



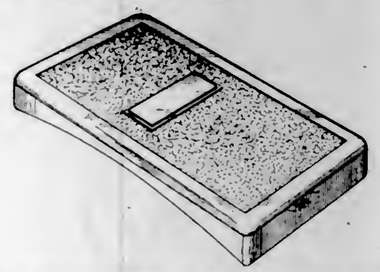
The ornamental design for a news ticker casing or stand, as shown.

87,175. PLATE. JOHN G. STANWAY, Wheeling, W. Va., assignor to The Salem Pottery Co., doing business as The Salem China Company, Salem, Ohio. Filed Apr. 15, 1932. Serial No. 43,508. Term of patent 3½ years.



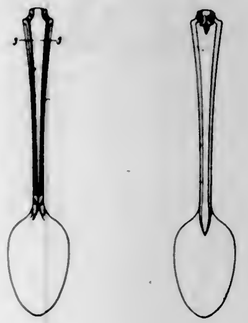
The ornamental design for a plate, as shown.

87,176. BURIAL RECORD CONTAINER. THEODORE R. TREIBER, Chicago, Ill. Filed May 14, 1931. Serial No. 39,854. Term of patent 7 years.



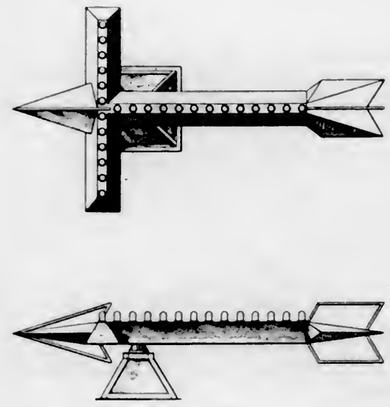
The ornamental design for a burial record container as shown.

87,177. SPOON OR SIMILAR ARTICLE. WILLIAM S. WARREN, Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a Corporation. Filed Feb. 26, 1932. Serial No. 43,012. Term of patent 14 years.



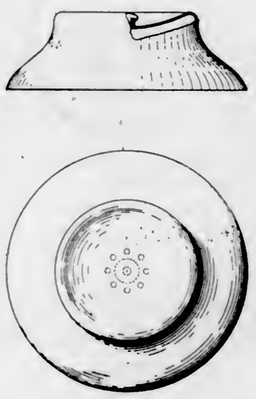
The ornamental design for a spoon or similar article as shown.

87,178. LANDING INDICATOR FOR AIRPORTS. ARTHUR M. WILHELM, Randolph, N. Y. Filed May 6, 1931. Serial No. 39,737. Term of patent 3½ years.



The ornamental design for a landing indicator for airports, as shown.

87,179. UPPER BOWL COVER FOR COFFEE-MAKERS. FRANK E. WOLCOTT, West Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Jan. 15, 1932. Serial No. 42,490. Term of patent 14 years.



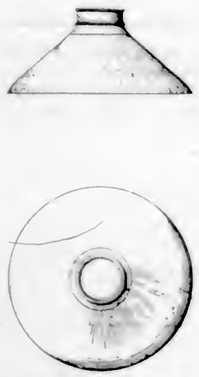
The ornamental design for an upper bowl cover for coffee makers, substantially as shown and described.

87,180. COFFEE MAKER. FRANK E. WOLCOTT, West Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Jan. 15, 1932. Serial No. 42,491. Term of patent 14 years.



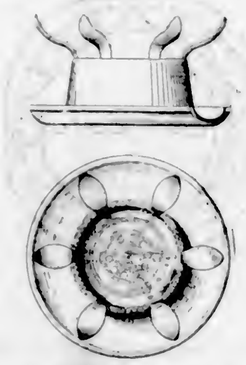
The ornamental design for a coffee maker, substantially as shown.

87,181. LOWER BOWL COVER FOR COFFEE MAKERS. FRANK E. WOLCOTT, West Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Jan. 26, 1932. Serial No. 42,629. Term of patent 14 years.



The ornamental design for a lower bowl cover for coffee makers, substantially as shown.

87,182. HEATER STAND FOR COFFEE MAKERS. FRANK E. WOLCOTT, West Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Jan. 26, 1932. Serial No. 42,630. Term of patent 14 years.



The ornamental design for a heater stand for coffee makers, substantially as shown and described.

87,183. COFFEE MAKER. FRANK E. WOLCOTT, West Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Jan. 26, 1932. Serial No. 42,631. Term of patent 14 years.

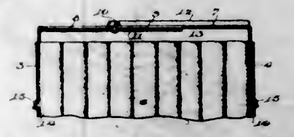


The ornamental design for a coffee maker, substantially as shown.

PATENTS

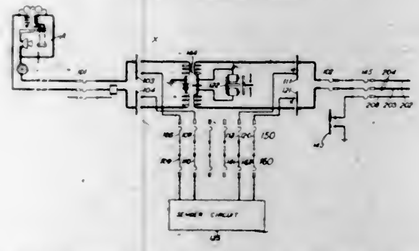
GRANTED JUNE 14, 1932

1,862,518. CLOSURE FOR CIGARETTE AND SIMILAR PACKAGES. MAURICE ALLAND, Atlantic City, N. J. Filed Mar. 17, 1930. Serial No. 436,411. 1 Claim. (Cl. 206—41.)



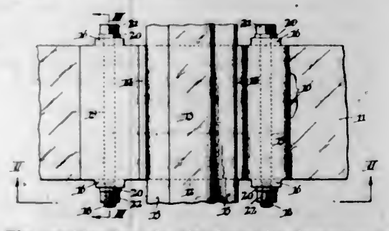
A package closure, comprising a body portion, oppositely positioned fingers carried by said body and adapted to slidingly engage the walls of a package, and undercut lugs laterally extending from said fingers and so shaped as to permit said fingers to move freely in one direction with respect to the package walls, and to prevent movement in the opposite direction without mutilation of such walls, after the material of the latter has been manually forced into the undercut of the lugs.

1,862,519. TIME OF DAY ANNOUNCING SYSTEM. HORATIO G. W. BROWN, Valley Stream, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1931. Serial No. 508,207. 16 Claims. (Cl. 179—2.)



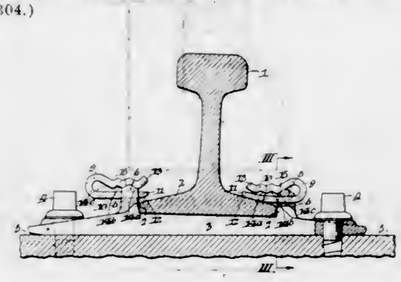
1. In a telephone system, a central bureau desk circuit, a plurality of distributing centers, a plurality of trunks multipled to said desk circuit and extending to said distributing centers, a supervisory circuit extending over each of said trunks, means in each trunk at the outgoing end thereof to reverse current flowing in the supervisory circuit thereof, and means common to said trunks controlled from said desk circuit for simultaneously operating the reversing means of said trunks.

1,862,520. RAILROAD TIE PLATE. ROBERT FARIES, St. Davids, Pa. Filed Mar. 31, 1931. Serial No. 526,650. 4 Claims. (Cl. 238—299.)



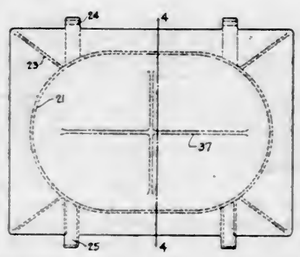
1. The combination of a tie plate with depending corner lugs adapted to lap the side faces of the tie; securing means passing through apertures in the tie plate lugs and extending horizontally into the tie; and means operative incident to tightening of the securing means to draw the tie plate firmly down onto the top surface of the tie.

1,862,521. RAIL RETAINING MEMBER. ROBERT FARIES, St. Davids, and ROBERT H. BOYD, Philadelphia, Pa. Filed Oct. 10, 1931. Serial No. 568,122. 7 Claims. (Cl. 238—304.)



1. In combination with a rail and a tie plate having a projecting lug thereon, a retaining clip having one part passing through said lug to a position above the rail flange and another part caught on the surface of said lug, said latter part having a plurality of notches spaced therealong whereby the retaining clip is adapted to be held in place in any one of a number of predetermined positions with relation to the rail flange.

1,862,522. DROP DOOR FOR RAILWAY CARS. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Apr. 26, 1929, Serial No. 358,305, now Patent No. 1,813,536, dated July 7, 1931. Divided and this application filed Jan. 19, 1931. Serial No. 509,712. 3 Claims. (Cl. 105—280.)

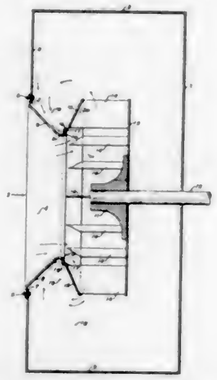


1. A hinged door for a railway car comprising a body, a substantially circular rib, and cruciform means to reinforce the portion of the body within the circular rib.

1,862,523. INDUCTION FLOW INLET FAN. EDWARD L. ANDERSON, Grosse Ile, Mich., assignor to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 28, 1929. Serial No. 402,883. 2 Claims. (Cl. 230—127.)

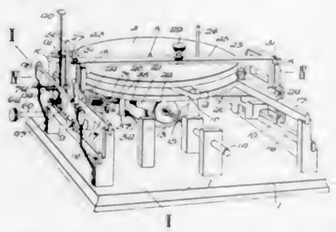
1. In a fan, a casing, an inlet passageway member in said casing, and a fan in said casing having blades and

an overlapping portion extending toward the eye of the fan beneath the blades, and overlapping the inner end of said passageway member, said fan being located in the



center of said casing with its front and back remote from the front wall and the rear wall so that a large recirculating space is provided.

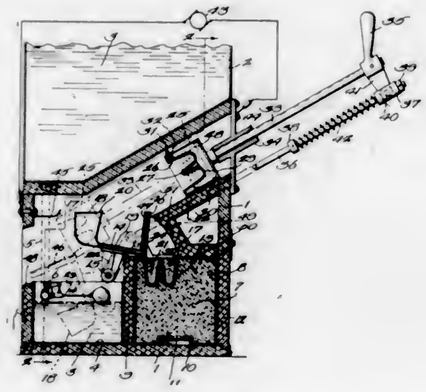
1,862,524. APPARATUS FOR RECORDING AND REPRODUCING DISK RECORDS FOR TALKING MACHINES. HORACE JOHN ALBERT BARLOW, Fendalton, Christchurch, and ROBERT DOUGLAS CARGILL, Christchurch, New Zealand. Filed June 27, 1930, Serial No. 464,146, and in New Zealand Aug. 31, 1929. 10 Claims. (Cl. 274—13.)



1. Improvements in apparatus for recording and reproducing disk records for talking machines comprising in combination with a needle-carrying unit whose needle is adapted to engage in the volute groove of the record, a base, a disk rotatably mounted thereon, a record-carrying turn-table above said disk co-axial therewith and drivably connected thereto, a driving-shaft disposed radially of said disk a roller on said shaft drivably connected thereto and slidable thereinlong, the periphery of said roller being engageable frictionally with the face of said disk to rotate the latter and with it the turn-table, a carriage movable along fixed guides parallel with said shaft and by which carriage said friction roller is carried for movement therewith along said shaft, and means operable to produce progressive traversing movement of said carriage along its guides during said rotation of the disk.

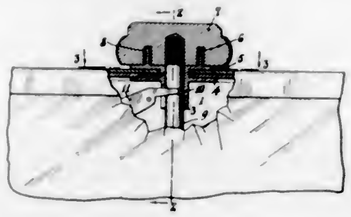
1,862,525. MOLDING DEVICE. FRANKLIN F. BRADLEY, Chicago, Ill. Filed Sept. 17, 1931. Serial No. 563,298. 4 Claims. (Cl. 62—105.)

1. In a device for molding congealable liquid into blocks including a source of congealable liquid supply, refrigerator means, a pivotally mounted mold, a mold supply receptacle secured to and in spaced relation to the mold and having duct communication therewith, the mold and receptacle being adapted to oscillate into raised and lowered positions with one alternately above the other, the receptacle being adapted to be brought into cooperative relation with the source of supply in its lowered position to receive a supply of liquid and to fill the mold by gravity



through its duct communication when in its raised position, and the mold being in cooperative relation with the refrigerator means in its lowered position to congeal the liquid therein into a solidified block.

1,862,526. WATCH PENDANT CONSTRUCTION. ALBERT CHAPATTE, Brighton Beach, N. Y. Filed June 25, 1930. Serial No. 463,752. 1 Claim. (Cl. 58—95.)

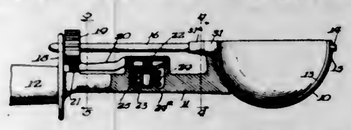


A pendant for watches comprising a tubular body partially cut out at its lower part to enable a setting lever to pass therethrough, a pair of spaced flanges on the tubular body intermediate its length and above the cut-out portion between which the notched edges of a watch case are adapted to fit, the tubular body extending above the upper flange said upward extension being of greater diameter than the lower portion of the tubular body, a stem passing through the tubular body provided with a groove adjacent the cut out portion of the tube and adapted to engage a setting lever, a crown on the upper end of said stem provided with an annular groove engaging the tubular upper portion of the body and lying against the upper flange both within and without the upper extension.

1,862,527. DISHER. JOHN W. COX, Newark, N. J., assignor to The Gilchrist Company, Newark, N. J., a Corporation of New Jersey. Filed Mar. 31, 1930. Serial No. 440,376. 2 Claims. (Cl. 107—48.)

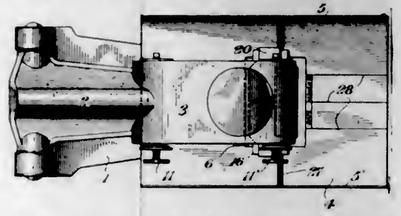
1. In a disher, the combination of a bowl, a handle on the bowl, a resilient scraper working in the bowl and provided at one of its ends with an extension, a scraper

shaft having a longitudinal slot in one end thereof in which the extension fits, a lever for rotating the shaft, and a sleeve fixed on said one end of the shaft, positioned



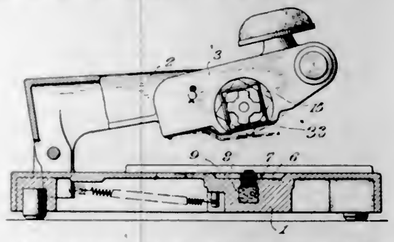
so that it surrounds the extension, and having means interlocking with a portion of the scraper, so that it is locked against rotation relatively to the shaft.

1,862,528. APPARATUS FOR RECORDING TRANSACTIONS. JOSEPH J. DICKMAN, Brooklyn, N. Y., assignor to Library Efficiency Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 5, 1927. Serial No. 159,039. 7 Claims. (Cl. 101—301.)



1. In an apparatus of the character described, a platen, a head, and a sheet metal frame permanently secured to said head for removably holding a slug in position to cooperate with said platen for impression making purposes, said platen being of less width than said frame.

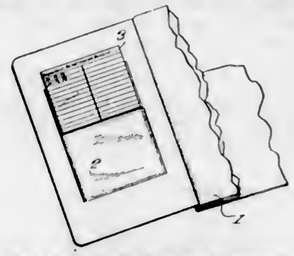
1,862,529. APPARATUS FOR RECORDING TRANSACTIONS. JOSEPH J. DICKMAN, Brooklyn, N. Y., assignor to Library Efficiency Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1927. Serial No. 186,641. 3 Claims. (Cl. 101—94.)



1. In an apparatus of the character described, a platen, a head, means on said head for holding a plurality of slugs, said means being rotatable to permit said slugs to be brought selectively to position to cooperate with said platen for impression making purposes, and a plate secured to said head and extending along the bottom of said head to cover said slug holding means, said plate being flexible to permit rotation of said slug holding means, and said plate being provided with an aperture between said slug and said platen.

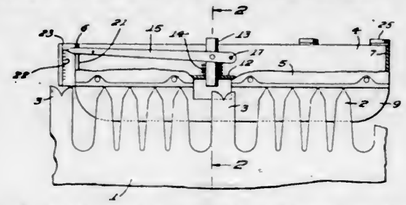
1,862,530. ARTICLE FOR USE WITH LIBRARY BOOK CHARGING SYSTEMS. JOSEPH J. DICKMAN, Brooklyn, N. Y. Filed Aug. 17, 1928. Serial No. 300,292. 1 Claim. (Cl. 40—16.)

The combination of a pocket member and a card removably positioned therein, said card being provided with a straight dividing line extending perpendicularly to the longitudinal axis of said card at the center thereof, said card also being provided with identification matter at each end normally positioned to be readable when the respective end is exposed, the dividing line and the identification matter defining spaces for notations and the outer wall of said pocket member having a straight



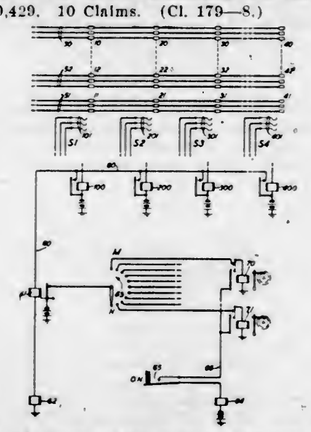
edge extending across the same and substantially flush with said dividing line when the card is in normal position in said pocket member.

1,862,531. SAW GAUGE. ANDERS JOHAN ENGLUND, Milner, British Columbia, Canada. Filed Feb. 24, 1930. Serial No. 430,724. 2 Claims. (Cl. 33—202.)



1. In a saw gauge, an elongated frame comprising a floor formed with an offset portion, a scale carried by said frame, a web carried by and depending from said frame and being recessed in alignment with the offset portion of said frame, an indicator fulcrumed to said frame and extending outwardly through one end thereof for registration with said scale, a plunger arranged in said frame and extending out through the offset portion thereof, and a pin pivotally connecting said plunger and indicator together, said plunger yieldingly retaining said indicator in a predetermined position relative to said scale.

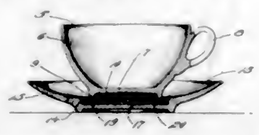
1,862,532. TELEPHONE SYSTEM. JAMES G. FERGUSON, Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 26, 1931. Serial No. 559,429. 10 Claims. (Cl. 179—8.)



1. In a telephone system, selector switches, groups of trunks connected to correspondingly situated groups of terminals in each of the banks of said selector switches,

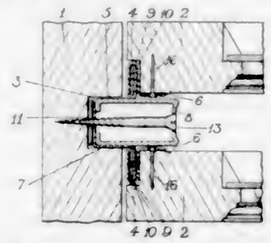
means individual to each selector switch for selecting a a desired one of said groups of trunks, meters one for each of said groups of trunks, and means responsive to the selective operation of any one of said selector switches for operating that one of said meters which corresponds to said desired group of trunks.

1,862,533. CUP AND SAUCER. CHARLES R. FISH, JR., Providence, R. I. Filed Oct. 14, 1931. Serial No. 568,675. 3 Claims. (Cl. 65—15.)



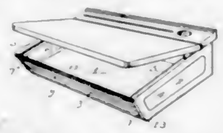
3. For use with a cup having a bottom provided with a depression; a saucer adapted to support the cup comprising a bottom provided with a recess and a side, and an absorbent member wholly contained in the recess and extending into the depression.

1,862,534. WEATHER STRIP STRUCTURE. MCREE GREEN, St. Louis, Mo. Filed Jan. 27, 1930. Serial No. 423,818. 9 Claims. (Cl. 20—69.)



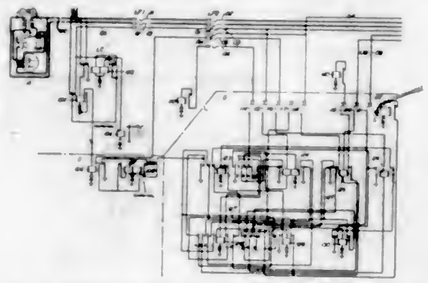
1. A weatherstrip structure for windows including a member carried by the window frame and extending along the side face of but separate from the parting strip of said window frame and a member carried by the sash; said members being formed and arranged to have a sliding weathertight engagement with one another, and said member carried by the window frame also being arranged and mounted so as to be movable away from or towards said frame whereby said member will adjust itself to any irregularities in the parts of the window when said sliding engagement is made.

1,862,535. BOX. GEORGE H. HAMILTON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Apr. 2, 1930. Serial No. 440,912. 5 Claims. (Cl. 220—75.)



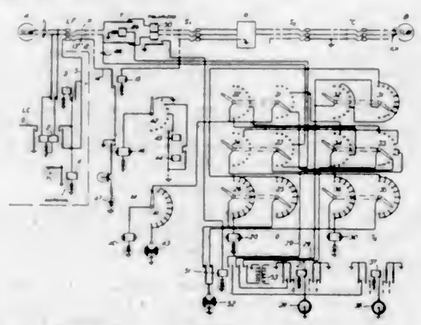
1. In a box: a bottom; an end wall comprising a body, an inwardly extending top flange having a downwardly extending end portion, an inwardly extending flange angularly disposed relatively to the first-mentioned flange, and a bottom flange extending inwardly beneath said bottom; a side wall comprising a body seated in the angle between the body of the end wall and the second-mentioned flange thereof, an inwardly extending curled-over top flange having a keeper socket receiving the downwardly extending end portion of the top flange of the end wall in contacting relation therewith at angularly spaced points of the curled-over top flange, and a bottom flange extending inwardly beneath said bottom; means extending through said bottom flanges and into said bottom for fastening said parts together.

1,862,536. TANDEM TRUNK CIRCUITS. GEORGE CLIFFORD HARTLEY and ESMOND PHILIP GOODWIN WRIGHT, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1930, Serial No. 505,516, and in Great Britain Jan. 7, 1930. 17 Claims. (Cl. 179—9.)



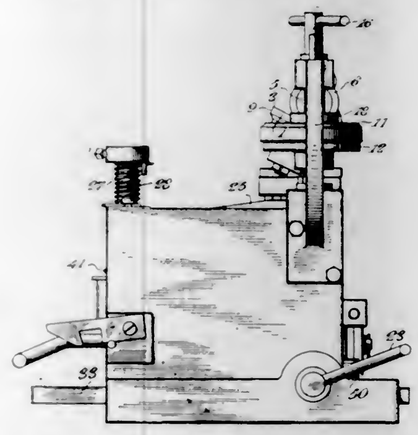
1. In a telephone system a calling line, a meter for said calling line, a called line, an impulse sender, a tandem trunk, a translating device, means for connecting said tandem trunk to said impulse sender, means in said tandem trunk for forwarding impulses from said impulse sender without repetition at said tandem trunk, means in said tandem trunk for registering a charging condition transmitted by said impulse sender, means including said tandem trunk for establishing a talking connection between said calling line and said called line, means in said tandem trunk responsive to said called line for connecting said translating device to said tandem trunk and means responsive to the establishment of said connection between said tandem trunk and said translating device for operating said meter in accordance with the said charging registration in said tandem trunk.

1,862,537. TIME MEASURING DEVICE. WILLIAM HATTON, Paris, France, and KAREL MARCEL SANO, Antwerp, Belgium, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 18, 1931, Serial No. 516,582, and in Great Britain Mar. 5, 1930. 13 Claims. (Cl. 179—7.1.)



2. The combination of a plurality of switching mechanisms, sources of periodic impulses of different frequencies, means associated with each of said mechanisms for responding to impulses from a different one of said sources, means for starting the operation of said mechanisms, a circuit closed by the cooperation of said mechanisms for indicating the termination of an interval of time whose maximum variation is one cycle of that one of said sources which transmits impulses at the highest frequency, and circuits closed by the continued operation of said mechanisms for indicating the termination of succeeding predetermined intervals of time.

1,862,538. TRIMMING MACHINE. PENROSE R. HOOPES, Hartford, Conn. Filed Feb. 12, 1930. Serial No. 427,763. 9 Claims. (Cl. 164—63.)



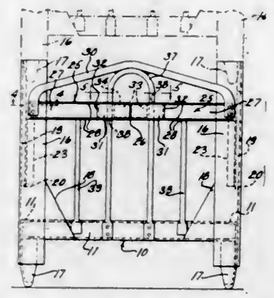
1. In a trimming machine, a rotatable work supporting instrumentality, a cutting instrumentality having a single point of shear, means for supporting said cutting instrumentality for pivotal movement about two separate axes, and means for bodily moving said cutting instrumentality to maintain said point of shear at the edge of the work piece on said work supporting instrumentality.

1,862,539. DEEP SEA TONGS. WILLIAM M. JOHNSON, Mobile, Ala. Filed May 14, 1931. Serial No. 537,397. 3 Claims. (Cl. 294—66.)



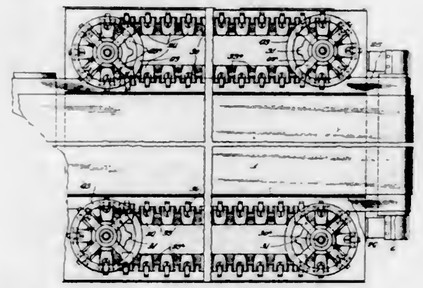
1. A deep sea grapple comprising a pair of pivotally connected intersecting levers, gripping jaws carried by the lower ends thereof, upper and lower independently operable toggles connected with the upper ends of said levers, the links of the lower toggle being provided near their upper ends with pivotally mounted stops for limiting the degree of expansion of said lower toggle.

1,862,540. CARRIER. HENRY M. KOLL, Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1930. Serial No. 505,952. 11 Claims. (Cl. 266—4.)



1. In a carrier designed to be subjected to temperature variations, a load supporting member, spaced frame members secured thereto, and telescopic means connecting said frame members.

1,862,541. MACHINE FOR MAKING TRANSPARENT PAPERS. EDOUARD M. KRATZ, Chicago, Ill., assignor, by mesne assignments, to Marsene Products Co., a Corporation of Illinois. Filed May 14, 1930. Serial No. 452,161. 19 Claims. (Cl. 18—15.)

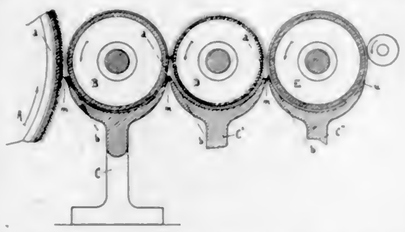


12. In a machine for forming transparent sheet material, an endless belt for carrying a gelatine film, a chill box having an air compartment through which said belt and film pass, but of such width that the side edges of said belt project therefrom, a brine chamber beneath said air compartment, a second air compartment beneath said brine chamber and connected to said first air compartment, means for circulating air through said air compartments and brine through said brine chamber to effect a congealing of said film as the belt moves through said upper air compartment and traveling gripping means along said chill box for grasping the projecting edges of said belt to draw it through said box and maintain it taut in its passage therethrough.

1,862,542. CARDING ENGINE. GUILLAUME CLEMENT LAURENCY, La Hulpe, Belgium. Filed Feb. 21, 1930. Serial No. 430,386. 1 Claim. (Cl. 19—106.)

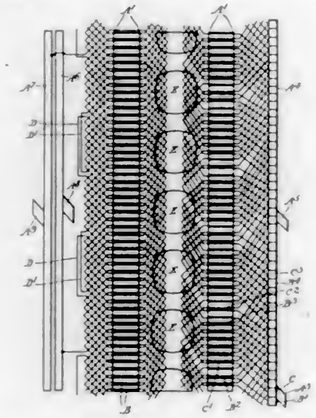
In a carding engine for producing a web of straightened and parallel fibers, comprising a series of rollers, with a compressible surface, and a combing cylinder

revolving with successively increased speeds in hollow recessed blocks into which they draw and elongate the web of fibres taken off the doffer, the combination of hollow rollers, a shaft extending through each of said rollers and supporting each roller by its centre only, a recessed block having one edge close to the doffer and tangent



to the first roller, providing thereby a tapering entrance in between the surface of said roller and the surface of said block for strange and extraneous bodies to be carried on with the fibres, and a recessed block with a similar edge close to the combing cylinder, mounted in combination with the roller pulling the fleece off said combing cylinder.

1,862,543. ELECTRIC MACHINE. THOMAS E. MCDOWELL, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Mar. 20, 1930. Serial No. 437,319. 2 Claims. (Cl. 171—123.)



1. A self-excited electric machine comprising a slotted armature, a commutator, a pair of slip rings, a wave-winding in the armature slots connected to said commutator, circuit means connecting the commutator to field windings of the machine, an A. C. winding in the armature slots having its ends connected to said slip rings, alternate banks of coils in said A. C. winding being connected in reversed circuit association with the other coils of the winding, coil sides of both windings being positioned in certain armature slots.

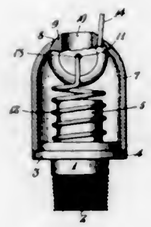
1,862,544. CONCRETE WALL AND METHOD FOR MAKING IT. ROBERT C. MCWANE, Ridgewood, N. J. Substitute for abandoned appplication Serial No. 253,275, filed Feb. 10, 1928. This application filed Sept. 20, 1930. Serial No. 483,391. 6 Claims. (Cl. 25—155.)

2. The method of making a concrete wall including the steps of supporting a boardlike strip of waterproof material with its short edges vertical, pouring a concrete mixture into a defined space at each side of the strip approximately to its top while keeping vertical spaces on opposite sides of the strip and adjacent to it free from concrete, placing tie rods across the upper edges of the strip, placing and holding in vertical position a second strip of waterproof material abutting with



its lower edge against the upper edge of the first strip, pouring concrete on each side to a point approximately at the top of the second strip while keeping free of concrete vertical spaces alined with the first named vertical spaces, and adding further courses in the same manner.

1,862,545. VALVE. INGEBORG R. OLSON, Brooklyn, N. Y. Filed May 21, 1931. Serial No. 538,987. 3 Claims. (Cl. 251—9.)

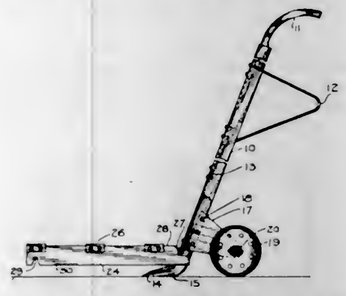


3. A valve comprising a lower body provided with a passage therethrough, a guide sleeve thereon, means for attaching said lower body to an article, a hollow upper body provided with an opening at its upper end, a helical spring co-operating with said guide sleeve so as to be guided thereby, the upper end of the spring terminating in a cross shaft, a ball provided with an opening therethrough and bearings on the axis thereof at right angles to the opening, said bearings being mounted on the spring cross shaft whereby the ball is adapted to rotate on a fixed axis and be forced against a seat surrounding the opening in the upper body, and a finger mounted on said ball and extending through the opening in the upper body.

1,862,546. DETACHABLE CARRIER FOR HAND TRUCKS. SVEN JOHAN PEHRSSON, Elyria, Ohio, assignor to The Colson Company, Elyria, Ohio, a Corporation of Ohio. Filed Mar. 14, 1930. Serial No. 435,758. 5 Claims. (Cl. 214—65.)

3. In an auxiliary rack for hand trucks of the push type, the combination of a pair of laterally disposed longitudinally extending side bars, cross bars interconnecting the side bars, said side bars each being notched near an end,

said notches being oppositely disposed to each other and adapted to receive a cross bar of the truck projected therein and making interlocking engagement therewith, said



rack cross bars disposed in parallelism on the same side of the side bars, said cross bars having their flanges adapted to fit over and embrace the side bars.

1,862,547. FROG. WHITTIER PERDUE, Chicago, Ill., assignor to Ramapo Ajax Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 23, 1931. Serial No. 510,621. 9 Claims. (Cl. 246—455.)



1. In a rail frog, a pair of wing rails, point rails therebetween, means for holding said point rails and wing rails in assembled relation, risers on said wing rails opposite the frog point to relieve the frog point of the weight of the car wheels, said wing rails and point rails being of standard rail material, said risers being welded to the top surfaces of the wing rails.

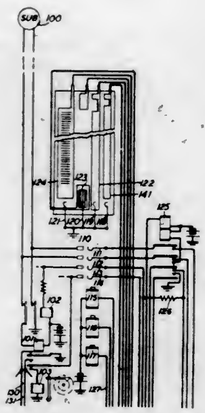
1,862,548. METHOD OF AND TUNNEL KILN FOR THE TREATMENT OF CERAMIC WARE. THEODORE C. PROUTY and WILLIS OSWALD PROUTY, Hermosa Beach, Calif., assignors to American Encaustic Tiling Company, Ltd., New York, N. Y., a Corporation of New York. Filed Mar. 24, 1927. Serial No. 177,914. 55 Claims. (Cl. 25—142.)



1. In a tunnel kiln, a tunnel chamber, means for conveying products therethrough, means for pre-heating air by heat emitted from said products within a definite part of said chamber, means for venting said definite part of the chamber through the crown thereof for effecting the outflow of fumes and gases evolved with the radiation of heat from the fired product, and means for blowing the pre-heated air into a ware pre-heating zone of said chamber and substantially below the level of the products therein.

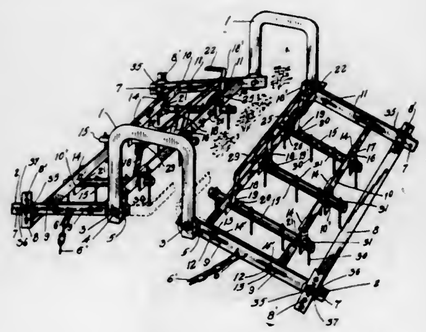
1,862,549. TELEPHONE SYSTEM. RALPH RAYMOND, Nyack, and WALTER J. SCULLY, Hastings-upon-Hudson, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 11, 1931. Serial No. 543,510. 12 Claims. (Cl. 179—18.)

1. In a telephone system, a plurality of registers for recording the digits of telephonic designations, means for recording the first digit of the designation on the first of said registers, means normally responsive to the operation of said first register to prepare the second of said registers to receive the second digit of said designation,



and means operated in response to certain settings of said first register to prepare the third of said registers to receive the second digit of said designation.

1,862,550. DEVICE TO RETAIN MOISTURE IN LAND. ORLAND BAZIL RECTOR, Eaton, Colo. Filed Feb. 9, 1931. Serial No. 514,585. 11 Claims. (Cl. 55—3.)

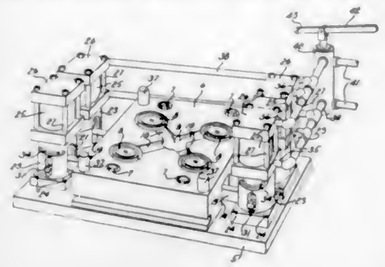


1. In a harrow, a runner frame having ground-contacting runners, arms attached to the runners adjacent their ends and central means providing angular adjustment between the corresponding arms, tooth frames attached to the arms on opposite sides of said central means, and ground-engaging teeth carried by said tooth frames.

1,862,551. APPARATUS FOR ACTUATING THE CORES OF A DIE CASTING MACHINE. ALBERT P. ROSANDER, Forest Park, and FRANCIS P. TIKALSKY, La Grange, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,558. 3 Claims. (Cl. 22—93.)

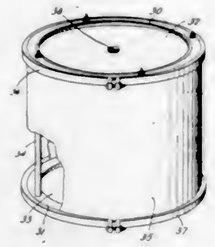
1. In a casting apparatus, a base, a mold part mounted thereon having a casting cavity, an apertured core recipro-

cably mounted within the cavity, a lever extending through the aperture in the core and fulcrumed at one end within the base, and means operatively connected to the lever



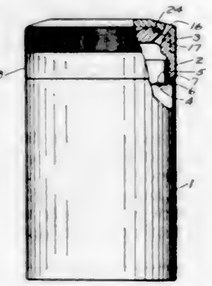
for moving it about its fulcrum to cause an inserting and retracting movement of the core relative to the casting cavity.

1,862,552. ACOUSTIC DEVICE. VESPER A. SCHLENKER, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 2, 1928. Serial No. 296,970. 3 Claims. (Cl. 181—31.)



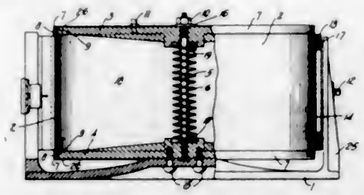
1. An acoustic device comprising a pair of parallel stretched membranes and a cylindrical stretched membrane coupled together to form a confined air chamber therebetween, said cylindrical membrane being stretched longitudinally and circumferentially.

1,862,553. CONTAINER. JOHN E. SEVOY, Seattle, Wash. Filed Feb. 17, 1930. Serial No. 429,101. 3 Claims. (Cl. 215—63.)



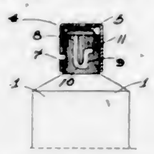
3. In a container closure of the type where a first part with oppositely positioned openings in the edge thereof screws upon the container and a second part with similar openings is positioned upon said first part and substantially covers the same thereby sealing the space between the two, and where both parts are provided with both limiting and locating means, resilient means for holding said first part to said second part, and means for holding said resilient means in such a manner that the parts may be readily separated, the whole forming a comparatively thin closure cap for a container of the type having a threaded neck upon which said first part screws.

1,862,554. ACOUSTIC DEVICE. EDWIN H. SMYTHE, Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1929. Serial No. 354,801. 26 Claims. (Cl. 181—31.)



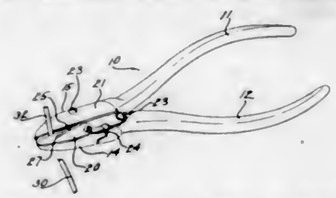
1. An acoustic device comprising a circularly disposed sound radiating diaphragm in the form of a strip relatively long as compared to its breadth, means to seal one surface of said diaphragm from the atmosphere, fluid means acting on one surface for tensioning said diaphragm in the direction of its long dimension, and means for imparting vibrations thereto.

1,862,555. CLOSURE ORGANIZATION FOR COLLAPSIBLE TUBES AND LIKE CONTAINERS. WILLIAM H. THORNE, Grove City, Pa. Filed Aug. 4, 1931. Serial No. 554,961. 2 Claims. (Cl. 221—60.)



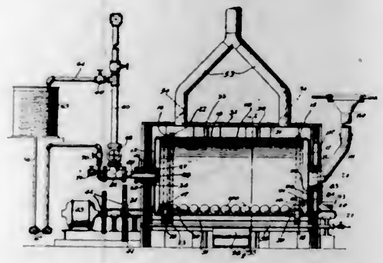
1. A closure organization for collapsible tubes and like containers and which is adapted to be applied to such tubes, comprising in combination two caps arranged in telescoping relation and adapted for relative longitudinal movement, the end walls of said caps being in juxtaposition, a compression spring interposed between the adjacent faces of said end walls, guiding and limiting means whereby the movement of one of said caps upon the other is defined and the extent of such movement is limited, there being registrable openings through the side walls of said caps which are in registry at one limit of said movement for the passage of the content of the related container therethrough, and out of register at the opposite limit of said movement, said out of register position being normally maintained by the expansion reaction of said spring.

1,862,556. TOOL. EDWARD WELHAVEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 9, 1930. Serial No. 474,146. 3 Claims. (Cl. 30—17.)



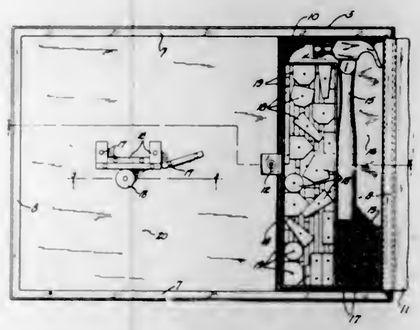
1. In a wire cutter, a pair of relatively movable jaws having cooperating cutting edges, each of the jaws being formed and cooperating when closed to provide a recess at one side thereof, and enclosure elements carried by the jaws and arranged to cooperate with the recess formed by the jaws when closed to provide a complete enclosure for retaining short lengths of wire severed by the jaws.

1,862,557. BALL MILL. ADOLPH F. WENDLER, Buffalo, N. Y., assignor to National Aniline & Chemical Co. Inc., New York, N. Y., a Corporation of New York. Filed May 14, 1926. Serial No. 109,067. 10 Claims. (Cl. 23—286.)



1. A reactor comprising in combination a drum, means for rotating said drum, said drum having an axially alined opening, and a reflux condenser connected with said opening.

1,862,558. CONSTRUCTIONAL TOY. HARRY C. WETZEL, Milwaukee, Wis., assignor, by mesne assignments, to Playskool Institute, Inc., Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 6, 1931. Serial No. 513,801. 1 Claim. (Cl. 46—35.)

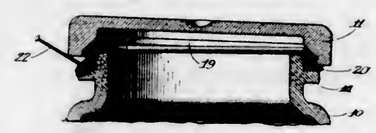


A constructional toy, comprising a composition base formed of compressed fibrous material in which the fibers are matted and are irregularly disposed and having the characteristic of offering less resistance to the insertion of a nail than ordinary wood, but offering sufficient resistance to compel the application of a percussive force for the insertion of a nail thereinto, a plurality of perforated construction elements of varied shapes, and nails loosely positionable through the perforations of said elements and adapted to be readily withdrawably driven into said base to removably attach the elements thereto in any desired constructional arrangement, the base being of a substantial thickness to form a recipient for percussions and to provide for the reception of nails of substantial length, and the irregularly disposed fibers of the base preventing the base from being split by nails entering thereinto, and yielding to fill nail holes occasioned by withdrawal of the nails.

1,862,559. WORKABLE MAGNETIC COMPOSITIONS CONTAINING PRINCIPALLY IRON AND COBALT. JOHN H. WHITE, Cranford, N. J., and CHARLES V. WAHL, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1931. Serial No. 557,132. 7 Claims. (Cl. 175—21.)

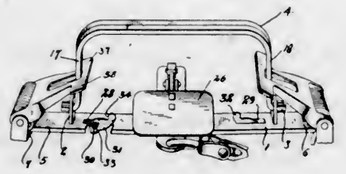
1. A magnetic composition composed of between 30 and 70% iron, between 70 and 30% cobalt and capable of having induced therein a high flux density at high magnetizing forces when properly heat treated, characterized in this that the workability and ductility of the material is improved without appreciably impairing its magnetic properties by the inclusion therein of ½ to 4% vanadium.

1,862,560. VACUUM JAR. WILLIAM B. WILLCUTT, New York, and CHARLES A. SLEICHER, Troy, N. Y., assignors to Vacuum Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed May 24, 1929. Serial No. 365,622. 1 Claim. (Cl. 215—40.)



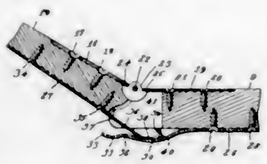
In combination in a vacuum jar construction with an outside seal of the class described, a container having the outer edge of its rim provided with a shoulder to form a seat for a gasket, a gasket resting on said seat, and a cover for cooperation with said gasket and arranged to serve as a valve during the sealing of the container, said cover having a substantially vertical flange for compressing the gasket on said seat which flange terminates in an inwardly inclined surface which in turn terminates in a differently inclined surface, said inclined surfaces cooperating with said vertical flange in the compressing of the gasket, so that said gasket when compressed will bulge between the lower edge of the flange of the cover and the shoulder of said container, as well as between the extreme upper end of the container and said second mentioned slanting surface, and will overhang the peripheral edge of said shoulder and the upper end of the container.

1,862,561. GAME TRAP. FRANCIS E. ADAMS, Oneida, N. Y., assignor to Triumph Trap Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 21, 1928. Serial No. 307,443. 7 Claims. (Cl. 43—88.)



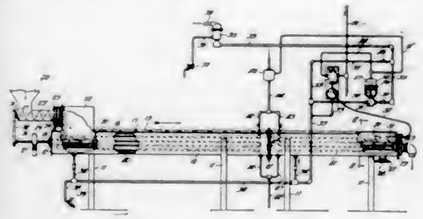
1. In a game trap, in combination, a base plate, a pair of jaws pivotally mounted thereon, a cross-piece passing to the base plate, a pan and jaw-locking latch pivotally mounted upon the base plate, a pair of spring actuated levers pivotally mounted upon the base plate for closing the jaws, and means for independently locking each of said actuating levers against the tension of their springs, when said actuating levers are swung downwardly toward the base plate.

1,862,562. BOOKSTAND. GEDOR W. ALDEEN and ALFRED A. CARLSON, Rockford, Ill., assignors to The Skandia Furniture Company of Rockford, Ill., Rockford, Ill., a Corporation of Illinois. Filed Aug. 9, 1930. Serial No. 474,165. 3 Claims. (Cl. 45—85.)



1. In a bookstand having supporting means, the combination therewith of a centerboard, side boards hingedly connected thereto at each side thereof, and at least one latch acting between said center-board and each of said side boards, each of said latches comprising an outer member secured to said center-board, provided with spring supported socket portions defining two positions of said side board, an inner member secured to said side board having an end arranged to engage either of said socket portions to frictionally secure said side board in either of said positions and move between said sockets under a predetermined amount of pressure.

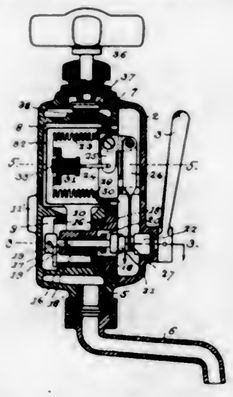
1,862,563. APPARATUS FOR TREATING CHEESE. ARTHUR W. BELL, Chicago, Ill., assignor, by mesne assignments, to Kraft-Phenix Cheese Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,850. 2 Claims. (Cl. 99—2.)



1. In an apparatus for treating cheese, the combination with a trough and cover forming a cooking chamber, of a heating jacket on said trough, and a rotatable spiral extending lengthwise of said trough and occupying only a portion of the trough cross-section, thereby providing a passageway in the trough above said spiral for permitting rearward movement of the cheese, said chamber having a normally closed discharge opening at one end, whereby said trough is adapted to be substantially filled with cheese, the full load of cheese subjected to heat and circulated longitudinally of the trough as an incident to the operation of said spiral, and discharged from the trough after the desired treatment is completed.

1,862,564. THERMOSTATIC MIXING VALVE. HARRY A. BERN, Chicago, Ill. Filed Oct. 7, 1929, Serial No. 397,762. Renewed Nov. 6, 1931. 12 Claims. (Cl. 236—12.)

1. The combination in a mixing valve, of a valve housing formed with an outlet chamber, a valve chamber and a pair of inlet chambers in lateral relation to said valve chamber and having openings into the same, the outer wall of the valve housing having a controlled outlet passage connected with the aforesaid outlet chamber and hot and cold water inlet openings connecting with said lateral chambers, a semi-rotary valve member arranged in said valve chamber in controlling relation to the inlet openings from said lateral chambers, a thermostatic controlling means arranged in said outlet chamber, the same comprising an inner expansion shell of the bellows type and an outer enclosing shell, operative con-



nections between said inner shell and the said valve member and means for effecting manual adjustment of said valve member.

1,862,565. WATERPROOFING COMPOSITION AND ARTICLES TREATED THEREWITH. CHARLES E. BURKE and WALTER E. LAWSON, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 9, 1928. Serial No. 291,480. 3 Claims. (Cl. 91—68.)

3. A shotgun shell coated with a waterproofing composition containing about 18 parts by weight of meta styrene, about 3.6 parts by weight of tricresyl phosphate, and about 100 parts by weight of solvent.

1,862,566. DISPLAY CARD. FRANKLIN E. EVERSON, Scarsdale, N. Y. Filed Feb. 9, 1932. Serial No. 591,855. 6 Claims. (Cl. 40—126.)

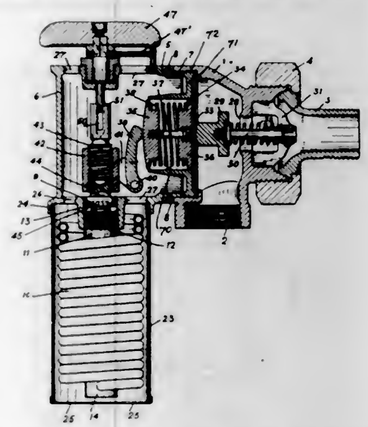


1. A display card which comprises a blank having end portions and intermediate foldable portions, the end portions adapted to be aligned to form a front wall with their adjacent edges abutting each other to make the front wall a continuous one and the foldable portions adapted to be laid abutting each other to form a rear supporting wall, and a front supporting leg extending forwardly from the lower edge of the front wall.

1,862,567. THERMOSTATIC CONTROL FOR VALVES. VALENTINE FINA, Milwaukee, Wis., assignor to direct Control Valve Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 2, 1928. Serial No. 309,817. 6 Claims. (Cl. 236—42.)

1. In combination in thermostatically controlled means for actuating a valve, a longitudinally expansible and

contractile tubular cell containing thermo-responsive expansible and contractile liquid, and means adjustable for increasing the length of said cell independently of expansion thereof due to rise of temperature, said means including a cell supporting sleeve laterally surrounding



the cell, an abutment on one end of said cell in longitudinal cooperative alinement with said sleeve, and a cell-supporting block to which the opposite end of said cell is attached, said block and sleeve being longitudinally adjustable, at will, relative to each other.

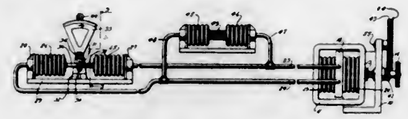
1,862,568. WINDOW LOCK. LOWRY GARBE, Ozone Park, N. Y. Filed Oct. 24, 1929. Serial No. 401,990. 2 Claims. (Cl. 292—202.)



1. In combination with a pair of window sashes, a base plate mounted on one of said sashes, a member carried by said base plate and having a latch member and a cupped catch member hinged thereto, said catch member being disposed above said latch member, said lower or latch member having a finger thereon adapted to be pressed into said catch member, causing said members to become interlocked at an angle from said base plate whereby the other of said sashes cannot pass when in such position.

1,862,569. REMOTE CONTROL DEVICE. JOHN O. GARGAN, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1929. Serial No. 397,259. 2 Claims. (Cl. 60—54.5.)

1. In a hydraulic remote control, a plurality of pairs of expansible and contractible members, one of said pairs being of larger diameter than the other pair, conduits connecting said members, a manually operable device for actuating the larger pair of said members to cause a pressure difference in the other members for actuating them with a differential movement with respect to the other pair, a mechanism actuated by the expansion and contraction of the last mentioned members, an auxiliary pair of expansible and contractible members connected to said conduits disposed in coaxial alignment one with respect to the other and a spring interposed between the

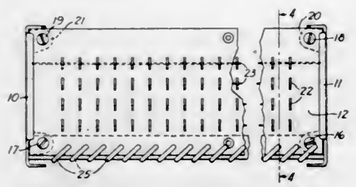


last mentioned members and automatically operating for compensating for the difference of pressure due to temperature changes in said members and said conduits.

1,862,570. ELECTRICAL CONDENSER. FREDERICK J. GIVEN, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 8, 1928. Serial No. 259,938. 10 Claims. (Cl. 175—41.)

1. A rolled paper condenser comprising conductive elements, and insulation therebetween, the longitudinal ends only of one of said elements being connected together.

1,862,571. TERMINAL STRIP. HAROLD W. GOFF, Great Neck, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1929. Serial No. 354,792. 8 Claims. (Cl. 175—306.)

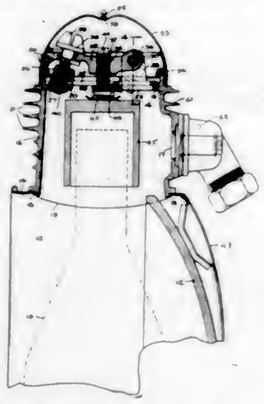


8. In combination, a terminal block consisting of a box-like structure having two of its opposite sides provided with vertical rows of slots, terminal members supported in oppositely disposed slots in said sides and a fanning strip removably associated with said terminal block as a unit comprising a channel member to which said sides are secured at one end and a plurality of fanning bars having overlapping hooked ends each welded across the edges of said channel member at a point immediately below one of said vertical rows of slots.

1,862,572. LAMP. HERBERT J. GRAHAM, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1929. Serial No. 357,906. 8 Claims. (Cl. 240—44.2.)

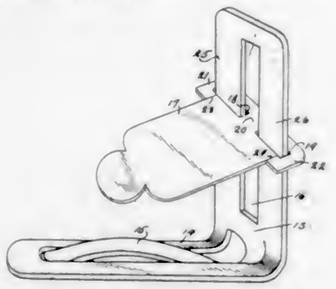
1. In a light projecting device, in combination, a hollow casing having an opening therein, an apertured plate positioned over said opening, an axially immovable bearing screw journalled upon one side of said plate, a member extending across said plate aperture having one end thereof pivotally mounted upon said screw, the free end of said member being provided with an elongated extension paralleling said screw, said screw being adapted for rotation whereby to shift said member in the direction

of its pivotal axis, an axially movable stud received in said plate and slidably engaging the elongated extension of said member to adjust the latter angularly about said



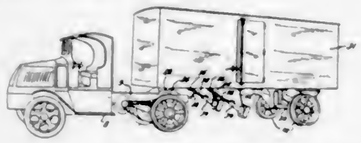
axis, and a lamp-supporting screw movable axially through said member and projecting interiorly of said casing through said opening.

1,862,573. BOOKMARK. KAROLY GROSZ, New York, N. Y. Filed Oct. 19, 1931. Serial No. 569,685. 4 Claims. (Cl. 281—42.)



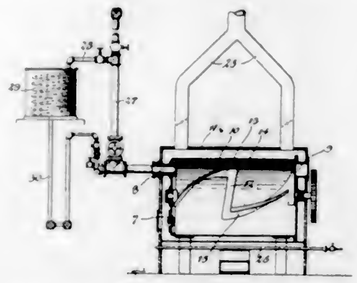
2. An article of the class described comprising in combination an upright, resilient means for frictionally holding the upright removably attached to a book cover, said upright being provided with a slot extending lengthwise thereof, a book mark, said book mark being provided with an integral connecting portion extending through said slot and loosely holding the book mark attached to the upright so that the book mark may be raised on said upright by the turning of a page in the book and lowered by gravity.

1,862,574. TRUCK TRAILER HOIST AND SUPPORT. GEORGE W. KUHLMAN, Long Island City, N. Y., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 7, 1929. Serial No. 330,799. 7 Claims. (Cl. 280—33.1.)



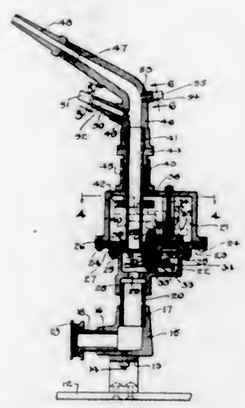
7. A truck trailer connection comprising, a truck having thereon laterally spaced differentially movable hydraulic hoist members, a trailer having a portion extending over said hoist members, and a trailer supporting element interposed between said trailer portion and said hoist members and extending transversely of said truck, said element being pivotally connected to said trailer and being adapted to tilt relative to said hoist members when the latter are displaced differentially relative to said truck.

1,862,575. PROCESS OF MAKING SULPHUR DYES. JOSEPH M. F. LEAPER and RAYMOND W. HESS, Buffalo, N. Y., assignors to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 15, 1926. Serial No. 148,398. 12 Claims. (Cl. 260—17.)



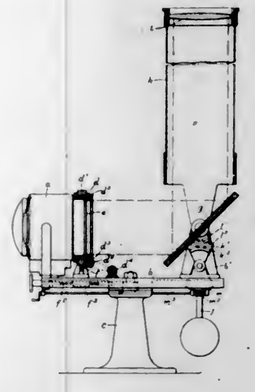
1. In a fusion process of reacting materials, wherein the reaction mass passes through viscous and intumescent stages, the improvement which comprises heating said reaction mass in a rotary ball mill.

1,862,576. SPRINKLER. MALCOLM C. LUDLAM, Woodbury, N. J. Filed Oct. 5, 1928. Serial No. 310,563. 2 Claims. (Cl. 299—67.)



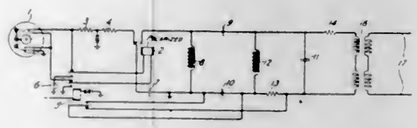
2. In a sprinkler, in combination, a fluid inlet member having a vertically extending passage, a tubular stem disposed above and in vertical alinement with said passage, an impeller member rotatable about a vertical axis offset from the common axis of said passage and stem, said impeller being provided in its margin with a plurality of vanes arranged to traverse the space between the proximate ends of said stem and passage, and means for imparting rotation to said tubular stem upon rotation of said impeller by the action of the fluid impinging against the impeller vanes, said fluid being directed upwardly between said vanes and through said tubular stem.

1,862,577. OPTICAL PROJECTION. HARRY GRINDELL MATTHEWS, London, England, assignor to Sky Projector Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 30, 1926, Serial No. 132,478, and in Great Britain Mar. 17, 1926. 4 Claims. (Cl. 88—24.)



1. In apparatus for effecting optical projection into the sky, a searchlight projector arranged to project its beam substantially horizontally, a transparency illuminated by said projector, an optically true plane mirror directing upwards said beam from said projector, above said mirror an objective of long focal length so located relatively to said transparency as to give a remote real image thereof, and means for moving said mirror and objective in the same direction at different speeds thereby to vary their relative angular positions.

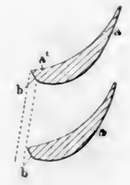
1,862,578. SIGNALING SYSTEM. PAUL B. MURPHY, Nyack, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1928. Serial No. 317,584. 6 Claims. (Cl. 178—44.)



6. In a system for producing and transmitting trains of oscillations, the method comprising producing said trains of oscillations in two stages, increasing the rate of transmitting the trains of oscillations in the first stage, and simultaneously increasing the damping of said trains of oscillations in the second stage.

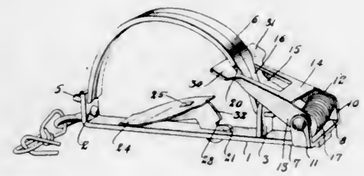
1,862,579. ELASTIC FLUID TURBINE. CHARLES ALGERNON PARSONS, ALFRED QUINTIN CARNEGIE and FRANCIS WILLIAM GARDNER, Newcastle-on-Tyne, England; said Carnegie and said Gardner assignors to said Parsons; Katharine Parsons, Vincent Thompson and Frederick Gordon Hay Bedford, legal representatives of said Charles Algernon Parsons, deceased. Filed Nov. 12, 1930, Serial No. 495,032, and in Great Britain Feb. 11, 1930. 6 Claims. (Cl. 253—77.)

1. A reaction turbine blade of the Parsons type in which a certain region of the blade tip liable to impact with water particles and disposed on the convex side of the inlet edge is modified by the provision thereon of an



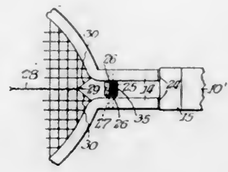
elongated erosion-resisting flat inclined to the direction of said impact, the length of said flat being longitudinal of said blade.

1,862,580. GAME TRAP. JAMES I. PNEUMAN, Oneida, N. Y., assignor to Triumph Trap Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 21, 1928. Serial No. 307,360. 4 Claims. (Cl. 43—88.)



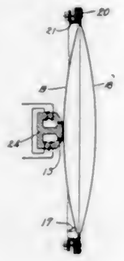
1. In a game trap, in combination, a base plate, a pair of cooperating jaws mounted upon the base plate, a jaw-closing lever pivotally mounted on the base plate, a spring for operating said lever, a pan having a shank mounted on the base plate, and said shank having means for engaging the jaw closing lever and holding the latter locked against the tension of its spring.

1,862,581. TENNIS RACKET. ROY H. ROBINSON, Chicago, Ill. Filed Feb. 25, 1927. Serial No. 170,777. 11 Claims. (Cl. 273—73.)



1. In a tennis racket, a frame comprising a tubular metal shell, the ends of the shell being bent outwardly to form a throat portion, a handle mounted on said ends, stringing in the frame extending partially into the throat portion, and means between said shell ends below said throat portion for spacing or contacting the same, the throat defining shell portions being mutually unconnected to permit independent flexing and torsion thereof under playing strains.

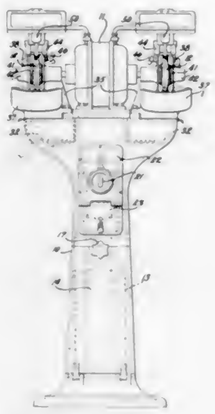
1,862,582. ACOUSTIC DEVICE. VESPER A. SCHLENKER, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 2, 1928. Serial No. 296,971. 16 Claims. (Cl. 181—31.)



4. An acoustic device comprising two large direct-acting sound radiating diaphragms coupled together at their peripheries, means for driving one of said diaphragms, and a layer of light gas between said diaphragms.

16. The method of stretching two sound radiating diaphragms joined at their edges, which comprises injecting an inert gas between said diaphragms until each of said diaphragms assumes an outwardly curved surface.

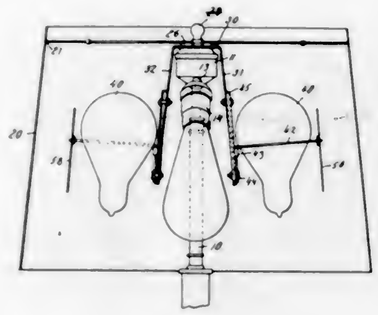
1,862,583. ABRADING APPARATUS. RUDOLPH ANTHONY SKRIBA, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1927. Serial No. 186,839. 4 Claims. (Cl. 51—267.)



1. In an abrading apparatus, an abrading element, means for applying an atomized spray of liquid thereto, means for adjusting the spray applying means to control the volume of liquid passing therefrom, and means operatively associated therewith for limiting the adjustment of the spray applying means.

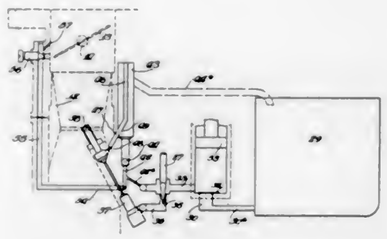
1,862,584. FIRE EXTINGUISHER. HARLOW T. STOKES, Brooklyn, N. Y., assignor to International Fire Equipment Corporation, West New Brighton, N. Y., a Corporation of Delaware. Filed Oct. 8, 1929. Serial No. 398,114. 3 Claims. (Cl. 169—26.)

1. In combination, a lamp standard, lamps carried thereby and extending laterally therefrom, a lamp shade frame mounted on said standard having vertical openings therethrough, a bracket mounted on said standard and having a depending portion, means on said portion for supporting a fire extinguisher container, and means for so locating the bracket relative to the lamp shade frame



that the container supporting means on said bracket will be positioned below one of the frame openings whereby access to the container may be had through one of said openings.

1,862,585. CARBURETOR. HAROLD H. TIMIAN, Indianapolis, Ind., assignor to Wheeler-Schebler Carbureter Company, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 23, 1929. Serial No. 342,097. 6 Claims. (Cl. 261—34.)



1. In a plain tube carburetor including the throttle valve and fuel metering system thereof, an accelerating fuel pump directly operated by the throttle and positioned in series with the normal fuel metering system, a fuel well having a supply connection from said accelerating pump, an air bleed connection in said well leading to the fuel metering system, said air bleed connection being open to the atmosphere at one end and having an inlet thereto adapted to drain said well.

1,862,586. FOUNTAIN PEN. GEORGE STEWART VIVIAN, London, England, assignor of one-half to T. B. Ford Limited, High Wycomb, Buckinghamshire, England. Filed May 3, 1930, Serial No. 449,604, and in Great Britain May 8, 1929. 6 Claims. (Cl. 120—47.)

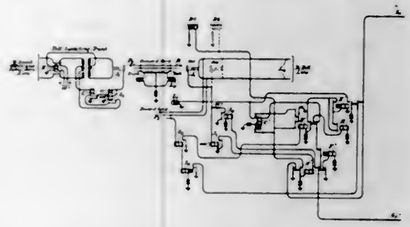
1. A self filling fountain pen comprising a casing and an ink reservoir slidable within and removable through the upper end of said casing, said casing being provided with a nib and an ink passage in its lower end, a reciprocating member projecting through the upper end of said reservoir for operating a reciprocating pump plunger

in the lower end of the reservoir, a one-way valve in said plunger, and a closure cap on the upper end of said casing adapted when applied to the casing to depress



said reciprocating member and thereby to set said valve in a position to allow ink to flow from the reservoir into said ink passage.

1,862,587. SIGNALING ARRANGEMENT FOR TELEPHONE SYSTEMS. MILTON L. ALMQUIST, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 19, 1931. Serial No. 545,589. 6 Claims. (Cl. 179—43.)



1. In a telephone system, the combination of a plurality of telephone circuits extending between two offices, a signaling path common to said telephone circuits, switching apparatus at each end of said signaling path, said switching apparatus having switch arms connected to the ends of said signaling path and having contact terminals with which said arms successively connect, a plurality of local outgoing signaling circuits and local incoming signaling circuits for each end of said telephone circuits and individual thereto, connecting circuits for associating the local signaling circuits of each telephone circuit with corresponding contact terminals of said switching apparatus at the two ends of said common signaling path, and translating devices in the connecting circuits of each of said local outgoing signal leads, said translating devices each comprising a combination of relays for interpreting the type of signals applied to the local signaling circuit and a mechanism upon which said interpreted signals may be set up by said relays.

1,862,588. FACIAL MASK. MARION E. CONLEY, Miami, Fla. Filed Mar. 20, 1931. Serial No. 524,146. 1 Claim. (Cl. 128—163.)

A mask of the class described comprising a body formed of light-weight material and covering the entire face, and the front part of the neck and having openings therein for the eyes, nose and mouth, with the openings made small so that the mask will cover the skin close to the eyes, nose and mouth of the user, pockets attached to the outer face of the front of the mask directly under

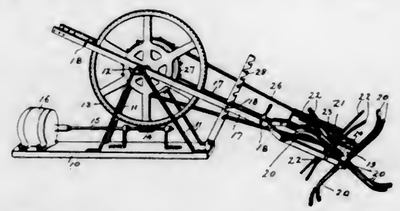


the eye with their openings in alinement, a nose strip formed of bendable material which will retain its shape and having its ends removably placed in said pockets.

1,862,589. MANUFACTURE OF CELLULOSE ESTERS. HENRY DREYFUS, London, England. Original application filed Apr. 18, 1923, Serial No. 633,016, and in Great Britain May 24, 1922. Divided and this application filed Jan. 20, 1926. Serial No. 82,624. 14 Claims. (Cl. 260—101.)

1. Process for the manufacture of cellulose esters characterized in that cellulose is esterified by means of an esterification medium comprising 3 gram molecules of fatty acid anhydride for each gram molecule of cellulose calculated as $C_6H_{10}O_5$, a further quantity of an organic liquid not less than 8 times the weight of the cellulose, said organic liquid functioning as solvent and comprising an amount of fatty acid anhydride in addition to the three molecular proportions above specified and a quantity of condensing agent so adjusted in accordance with the quantity of fattye acid anhydride that cellulose esters of very high viscosity are produced.

1,862,590. STIRRING MACHINE. ROLLER E. DUTT, Tiffin, Ohio. Filed June 18, 1928. Serial No. 286,425. 1 Claim. (Cl. 259—131.)

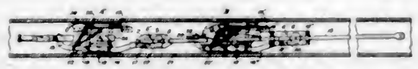


A stirring mechanism having two sets of rotary stirring means situated side by side and means for rotating the two sets in opposite directions simultaneously while in the material to be stirred, comprising sprocket wheels for the respective stirrers, a sprocket chain engaging both sprocket wheels, and a driving sprocket wheel.

1,862,591. CONDUIT THREADER. DONALD FISHER, Elizabeth, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 17, 1931. Serial No. 551,528. 2 Claims. (Cl. 175—379.)

1. A conduit threading device including a front traveler and a rear traveler, a pivoted shoe and a rigid shoe for each traveler for engaging a duct wall, toggle links connecting the pivoted shoe and rigid shoe together, a rod hingedly connected to the front traveler and providing a support upon which the rear traveler is adapted to reciprocate, a pulley and supporting block therefor carried on the forward end of said rod, a second pulley and supporting block

therefor carried by the rear traveler, a pull line connected to the rear traveler and passing over the first mentioned pulley for actuating the shoe members of the rear traveler to advance it in the duct, and a second pulley line

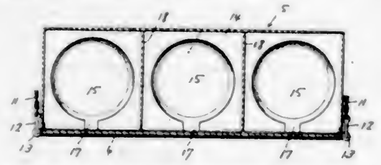


connected to said rod and passing over the second mentioned pulley for actuating the shoe members of the front traveler to advance it in the duct alternately with the rear traveler.

1,862,592. MANUFACTURING VISCOSE. ERICH GOTH, Elberfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 9, 1930, Serial No. 487,636, and in Germany Oct. 16, 1929. 8 Claims. (Cl. 260—100.)

1. The process which comprises xanthogenizing an alkali metal cellulose with carbon disulfide in the p esence of an alkali metal sulfide.

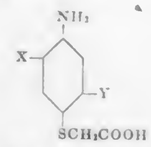
1,862,593. DISPLAY SHELF. JAMES W. HARRISON, Youngstown, Ohio. Filed Feb. 13, 1931. Serial No. 515,622. 1 Claim. (Cl. 211—153.)



A shelf provided with a depression for receiving a pie plate, and an indenture extending inwardly from one edge of the shelf, and having an inclined bottom merging with the bottom of the depression, said indenture constituting a knife guide whereby an end of the knife will be guided downwardly and inwardly to engage the under side of the pie plate to thereby raise the pie plate upon rotation of the blade with the edge of the shelf acting at a fulcrum for the blade.

1,862,594. PROCESS FOR MANUFACTURING HALOGEN ARYL-THIOGLYCOLLIC ACIDS. RICHARD HERZ, NORBERT STEIGER, and FRITZ SCHULTE, Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 29, 1928, Serial No. 309,352, and in Germany Oct. 22, 1927. 7 Claims. (Cl. 260—109.)

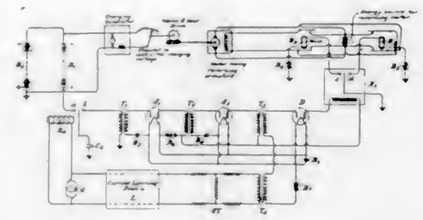
6. As new compounds amino-aryl thioglycollic acids of the general formula



wherein X means hydrogen or an alkyl group and Y halogen or an alkyl group, which compounds are colorless crystalline substances, soluble in dilute mineral acids and in dilute alkaline solutions and solutions of acetates.

1,862,595. VOLTAGE REGULATOR. WILLIAM H. T. HOLDEN, Brookyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 17, 1930. Serial No. 436,546. 10 Claims. (Cl. 171—314.)

1. The combination of a battery of highly constant voltage, a battery of substantially equal voltage which is variable one pole of which is connected to the similar pole of the other battery, a condenser, means for periodically



connecting said condenser in series will the remaining poles of said batteries, and means for determining the polarity of the voltage impressed upon said condenser.

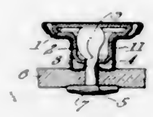
1,862,596. POLYHALOGENATED FATTY ACIDS AND PROCESS OF MAKING SAME. KARL KELLER and FERDINAND MÜNZ, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 10, 1929, Serial No. 377,348, and in Germany July 25, 1928. 5 Claims. (Cl. 260—113.)

4. As new compounds polyhalogenated hydroxystearic acid derivatives of the probable general formula:

$$C_nH_{x-4-m}(OH)_mHal_4COOH,$$

wherein m means the number 1 or 2, x a number more than 4, which compounds are viscous oils to plastic materials, soluble in dilute caustic alkali solutions, mostly almost colorless and sticky.

1,862,597. TACK FASTENED BUTTON. GEORGE A. KING, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 30, 1931. Serial No. 566,116. 5 Claims. (Cl. 34—95.)

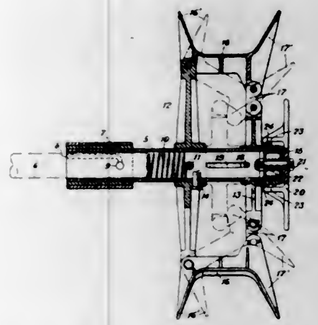


1. A button, having a solid top provided with arms drawn down into substantially lateral contact to form a cylindrical shank or hub, the terminals of the arms turned in toward one another to form a bottom having an opening for the reception of a tack fastening, the entire button being formed of a single piece of metal drawn or pressed into shape.

1,862,598. REELING DEVICE. WILLIAM T. LIVERMORE, Westfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 16, 1930. Serial No. 468,401. 1 Claim. (Cl. 242—111.)

A reel comprising a fixed spider and a movable spider, each having parallel arms extending from a central hub, a shaft to which one of said hubs is fixed, the other hub being slidable upon said shaft, sectional rim members, each sectional rim member forming a segment and having one end pivoted to an arm of the spider with the fixed hub, each rim member having fixed projecting arms extending at an

angle thereto and forming a retaining member at each side of the reel, a single toggle link extending from each arm of the spider with the movable hub and directly piv-

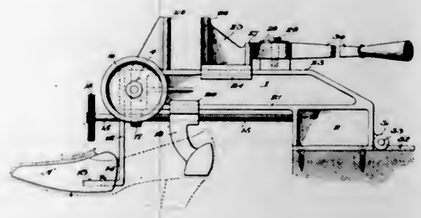


oted to the opposite end of the corresponding rim member, and locking means associated with movable spider to fix it upon said shaft so as to prevent collapse of said reel.

1,862,599. CATALYTIC MANUFACTURE OF HEXA HYDRO ANILINE. WILHELM LOMMEL, Wiesdorf-on-the-Rhine, and THEODOR GOOST, Leverkusen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 12, 1928, Serial No. 312,206, and in Germany Nov. 26, 1926. 6 Claims. (Cl. 260—130.5.)

1. In the process of producing hexahydro aniline, the step which comprises treating aniline with hydrogen in the presence of a cobalt catalyst under super-atmaspheric pressure, at a temperature range of from about 170° to about 350° C.

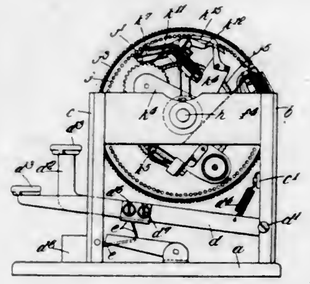
1,862,600. SHOE EASING DEVICE. FRED R. LONG, Catawissa, Pa. Filed Dec. 30, 1931. Serial No. 583,975. 9 Claims. (Cl. 12—128.2.)



1. A shoe easing device including a body having means at one end for attaching the same to the support, a crosshead at the end of the body opposite the point of support, a pair of oppositely adjustable last supports slidably mounted in said cross head, a heel piece slidably carried by the body at the underside thereof, and means for adjusting the heel piece toward and away from said last supports.

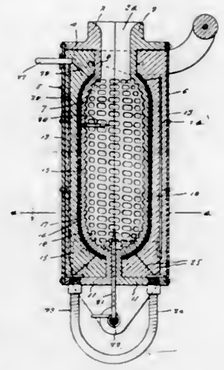
1,862,601. IMPULSE SENDER FOR USE IN AUTOMATIC TELEPHONE SYSTEMS AND THE LIKE. DONALD MACADIE, London, England. Filed Mar. 12, 1931, Serial No. 522,060, and in Great Britain Apr. 4, 1930. 56 Claims. (Cl. 179—90.)

1. An impulse sender for use in automatic telephone systems and the like, comprising a plurality of depressible keys each corresponding to a number, a set of interrupter contacts to transmit the impulses over the line, means for causing operation of said contacts, setting mechanism controlled by said depressible keys to set said contact operating means so that for any key depressed said contact operating means will cause said contacts to be in-



terrupted a number of times equal to the number corresponding to the key depressed, plus a fixed number, and means for suspending the action of said impulse sending contacts over a period corresponding to the predetermined fixed number.

1,862,602. COOKING UTENSIL. EDWIN E. MARQUART, Findlay, Ohio. Filed July 11, 1931. Serial No. 550,243. 4 Claims. (Cl. 107—66.)

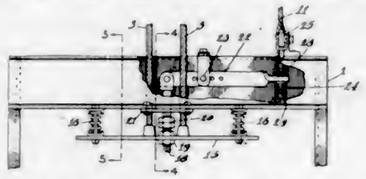


3. A cooking device of the character described comprising a pair of mold sections, a pivot pin connecting the sections swingably together, and a pointed pin extending from the pivot pin and between the said mold sections with the mold sections clamping against the pointed pin when in closed position to set the pointed pin in a definite position between the mold sections, a coiled spring convoluting the said pivot pin, and having one end bearing against one of the mold sections and the other end bearing against the pointed pin.

1,862,603. LOAD COMPENSATOR FOR AUTOMATIC ELEVATORS FOR MAKING MORE PERFECT LANDINGS. ROBERT PETER MCNAUGHT, San Francisco, Calif. Filed Dec. 26, 1928. Serial No. 328,413. 4 Claims. (Cl. 187—29.)

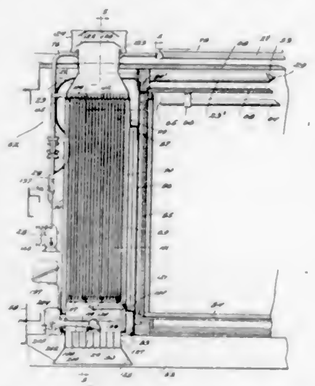
1. In combination, a floor limit device for elevator cars, an elevator car, operating means for said device including a cable, a lever pivoted on the car, a second lever pivoted on the car and being yieldingly connected to said

first lever and connected to said cable, hoisting means for the car and compensating means between the second lever and hoisting means whereby the actuation of the



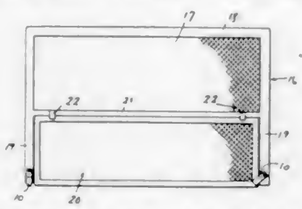
limit device is advanced or delayed as the weight of the load on the car is increased or decreased with respect to a predetermined weight.

1,862,604. REFRIGERATION CAR. ERNEST B. MILLER, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Apr. 28, 1928. Serial No. 272,293. 33 Claims. (Cl. 62—117.)



33. In a railway refrigeration car, in combination, a storage compartment having a roof, a floor, and a substantially vertical enclosing wall, refrigeration apparatus including an evaporator in said compartment, and an adsorber unit supported from and outside of said wall.

1,862,605. AUTOMOBILE SCREEN. LEROY MILLER, Oxford, Ind. Filed June 23, 1930, Serial No. 463,112. Renewed Nov. 3, 1931. 3 Claims. (Cl. 156—14.)



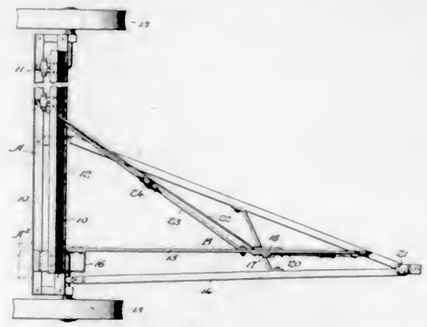
1. In an automobile screen of the class described, a frame including a relatively rectangular portion having end extensions constituting retaining legs, screen netting in the frame portion defining the stationary section of the screen, a swingably mounted screen section confined in the space between said legs, U-shaped clips carried by the lower frame bar of the stationary section and hingedly connected with the adjacent frame bar of the swingably mounted section, and a pair of pivotally mounted retention brackets fastened to the terminal end portions of said leg extensions.

1,862,606. DIRIGIBLE CONSTRUCTION. ADOLPHE C. PETERSON, Minneapolis, Minn. Filed May 1, 1929. Serial No. 359,680. 2 Claims. (Cl. 244—6.)



1. A rigid airship comprising in combination, a central longitudinal vertical member of metal construction and having a lattice work construction and plan form substantially that of the vertical section of the airship, a longitudinal horizontal member of metal lattice work construction and having a form substantially that of the horizontal section of the airship, transverse lattice work structures fixed to the longitudinal members at intervals and having an outer circumferential form substantially that of the transverse cross section of the airship at the point of location, longitudinal tension cables stretched each from end to end of the airship each braced at a remote circumferential point of each transverse lattice work member inwardly against the member and anchored by its ends at the ends of the airship substantially on the longitudinal axis of the airship to the lattice work longitudinal member structure to provide by their tension against bending longitudinally of the airship, and gas supporting cells within the structure formed disposed in the spaces bounded by the structural members.

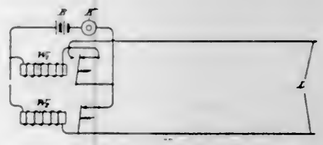
1,862,607. FRAME BRACING AND ADJUSTING MEANS. JOHN POWELL, Kokomo, Ind. Filed May 15, 1930. Serial No. 452,709. 7 Claims. (Cl. 56—15.)



1. In combination with a structure which is subjected to torsional stresses, a lever secured rigidly to said structure and extending therefrom for rotatably adjusting said structure, means to secure said lever in different adjusted positions, and a pair of braces each connected with said lever at a point spaced from said structure and, respectively, connected with said structure at points spaced transversely thereof and remote from the point of connection of the lever therewith.

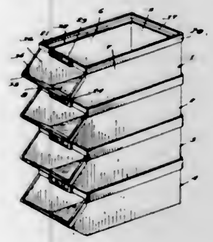
1,862,608. ARRANGEMENT FOR PRODUCING MODULATED CURRENTS. HAROLD H. SCHIMMING, Minneapolis, Minn., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 1, 1930. Serial No. 499,402. 7 Claims. (Cl. 179—84.)

1. The combination of a battery, first and second relays, and a line, one terminal of each of the windings of said relays being connected to one terminal of said battery, the back contact of the armature of the first relay being connected to the other terminal of the winding of the first relay, the armature of the first relay and the back contact of the second relay being connected to the other terminal of said battery, one side of said line being connected to the front contact of the armature of the



first relay, the other terminal of the winding of the second relay and its armature being connected to the other side of said line.

1,862,609. NESTING BIN. THOMAS SHAW, Woonsocket, R. I. Filed Oct. 16, 1930. Serial No. 489,201. 2 Claims. (Cl. 220—97.)



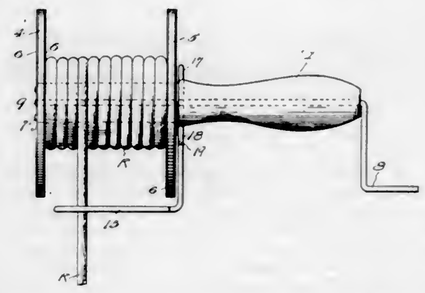
1. A bin for storing and displaying goods and the like comprising a box-like container having a bottom, front, side and rear walls, said front wall being inclined at an angle to form a mouth for the reception and discharge of goods, said side and rear walls having their upper portions bent inwardly to define shelves, a band surrounding the top of said container and having vertically extending walls for securing a similarly formed bin in nested relationship, and said band adjacent the mouth of the receptacle being bent inwardly to lie flush with the shelves formed by the side and rear walls.

1,862,610. MATERIAL LOADING MACHINE. CHARLES R. STAHL, Stotesbury, W. Va. Filed Feb. 18, 1930. Serial No. 429,318. 17 Claims. (Cl. 214—105.)



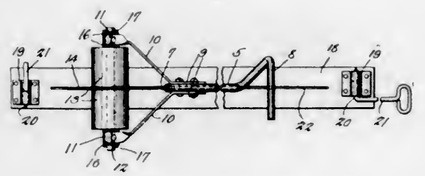
1. In a loose material loading machine, a wheeled frame, an inclined slide over which the material is dragged and thus elevated suitably for delivery into a receiving car, means including winding drums, sheave guided cables and a scraper for dragging the material, a motor mounted beneath the slide toward its delivery end, said drums being mounted above said slide toward its receiving end, a swingable frame on which said drums are mounted and serving to position the drums in a normal operative position extending above the wheeled frame or in an inoperative compacted position below the upper limits of the wheeled frame accordingly as said wheeled frame is in stationary operative position or compacted for travel upon the wheels thereof, means to impart rotation from the motor to the drums comprising a counter shaft, power transmitting connections between the motor and the counter shaft, and power transmitting connections between the counter shaft and the drums.

1,862,611. HAND REEL. OSCAR E. SWEARINGEN, Mattoon, Ill. Filed Nov. 19, 1929. Serial No. 408,278. 2 Claims. (Cl. 242—96.)



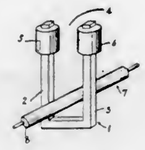
1. The combination with a reel and its crank shaft, and a handle in which the shaft is journaled, of a rope guide comprising angular arms one of which is formed with a guide loop, parallel-locking bars having spread portions to form an eye in the other arm for co-action with the handle and shaft, and a crank handle formed at one end of the shaft.

1,862,612. EXPANSION JOINT GROOVE FORMING DEVICE. ROBERT C. THOMASSON, Alderwood Manor, Wash. Filed Sept. 6, 1927. Serial No. 217,755. 7 Claims. (Cl. 94—39.)



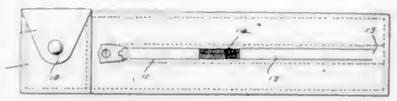
1. In a device of the character described, a roller, a cutting disk disposed at a point intermediate the ends of the roller and having portions thereof extended beyond the periphery of the roller, a guide plate having a slot through which the cutting disk operates to cut material under the plate, and means for operating the roller.

1,862,613. SPLIT CORE CURRENT TRANSFORMER. MIYAJI TOMODA, Kichishoji, Japan, assignor to Kabushiki Kaisha Yokogawa Denki Seisakusho, Shibuyn-Machi, Tokyo, Japan. Filed Dec. 29, 1931, Serial No. 583,771, and in Japan July 8, 1931. 3 Claims. (Cl. 175—358.)



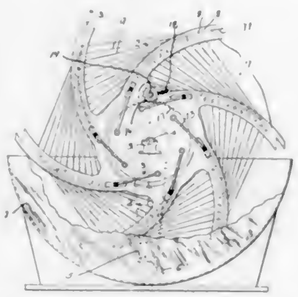
1. A split core current transformer, comprising an iron core of U-shape, between the free ends of the legs of which a wide air-gap is permanently formed, and an induction winding provided near the free end of a leg of the iron core, the said winding being entirely concentrated near the said free end of the leg and the said air-gap being wide enough to allow the introduction of a conductor, the current flowing through which is to be measured.

1,862,614. GOLF BALL CARRIER. ADOLPHUS F. TURANO, New York, N. Y. Filed Feb. 27, 1930. Serial No. 431,793. 3 Claims. (Cl. 224—5.)



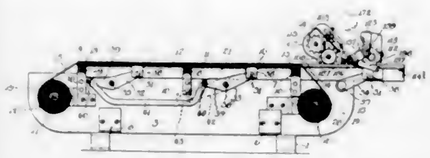
1. An elongated closed container of flexible material for partly encircling the body of a person, said container having a strip of material partly cut therefrom along one side thereof to provide an opening, the strip of material being unsevered at one end, a closure fastener having one element movable longitudinally of the opening, and having the free end of the material attached thereto for seating the strip within the opening when the fastener is closed and body attaching means for the container.

1,862,615. PROCESSING REEL. HENRY ERWIN WALKER, Portland, Oreg. Filed Sept. 10, 1928. Serial No. 305,006. 9 Claims. (Cl. 242—114.)



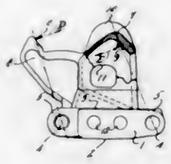
8. A processing reel, arms at the ends of said reel arranged for bodily movement in and out from the reel axis, said arms extending at all points at an inclination to the radial lines of a circle concentric to the axis of the reel, and means provided for effecting such movement of the arms.

1,862,616. GELATIN PAD COPYING MACHINE. WILLIAM ERASTUS WILLIAMS, San Francisco Calif., assignor to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed July 21, 1928, Serial No. 294,550. Renewed Nov. 12, 1931. 18 Claims. (Cl. 101—133.)



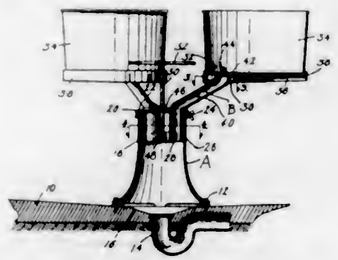
1. In a machine of the class described, a frame having an impression bed and means for holding spindles at each end of the bed which spindles are adapted to carry and have wound thereon gelatin pad copy sheets of the hectograph type, side rails extending longitudinally of the said impression bed and adapted to support and carry an impression carriage, an impression carriage mounted to be carried by the said side rails and moved thereon backward and forward over the said impression bed, means for raising and lowering the said side rails with the carriage thereon in relation to the said bed to facilitate training over the said bed the said gelatin pad sheets.

1,862,617. TREAD LINK. ARTHUR P. ARMINGTON, Willoughby, Ohio, assignor to The Euclid Road Machinery Company, Euclid, Ohio, a Corporation of Ohio. Filed Oct. 27, 1931. Serial No. 571,377. 4 Claims. (Cl. 305—10.)



3. In a tread link of the class described and having a shoe portion with a hinge at each end, and truss members extending upwardly, said truss members having faces adapted to abut corresponding faces of adjacent similar links in a stretch of linkage, to impart beam characteristics to the stretch, said face of one of said truss members being arranged in a plane which passes substantially equidistant between the hinges on the opposite ends of said link, and said face of the other truss member being substantially parallel with said plane.

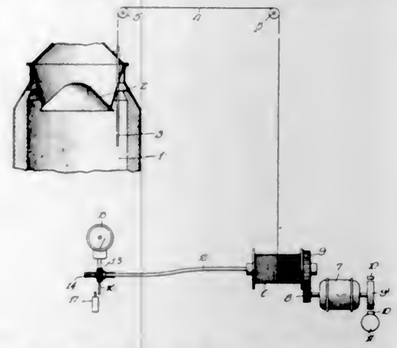
1,862,618. LAUNDRY APPLIANCE. JOHN G. FEHN, Des Moines, Iowa. Filed Sept. 10, 1928. Serial No. 304,895. 5 Claims. (Cl. 68—35.)



1. A laundry appliance comprising a base, an arm extending laterally from one side thereof, container supporting means on the outer end of said arm, said means including an annular track, and a container carried by said annular track for rotary movement relative thereto, said container being provided with a drain opening, said arm comprising a liquid conductor adapted to receive liquid from said drain opening and discharge such liquid within said base, the rotary movement of said container permitting its drain opening to be brought into register with the upper end of said arm.

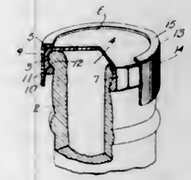
1,862,619. STOCK INDICATOR. GORDON FOX, Chicago, Ill., assignor to Freyn Engineering Company, Chicago, Ill., a Corporation of Maine. Filed Mar. 26, 1926. Serial No. 97,810. 6 Claims. (Cl. 33—125.)

1. A level indicator comprising a gravity responsive test member, an electric motor for raising said test member, said motor being provided with a dynamic braking circuit, mechanical brake means for said motor biased to braking relationship with said motor, and electric control means for said mechanical brake means and said motor, said electric control means being adapted to release said brake and to operatively connect said dynamic braking



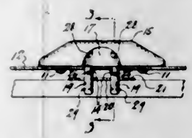
circuit with said motor, said electric control means being provided with time control means for rendering said motor operative to perform motoring functions.

1,862,620. BOTTLE CAP. RALPH A. GRAHAM, Kansas City, Mo. Filed Dec. 19, 1928. Serial No. 327,121. 3 Claims. (Cl. 215—83.)



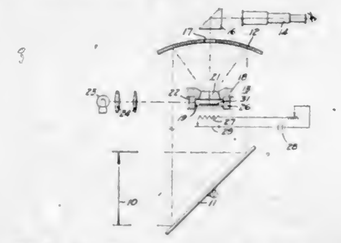
1. A bottle cap comprising a circular gasket formed of compressible material and having integral flexible fingers adapted to form a split depending skirt, beads at the free lower ends of said fingers comprising enlarged integral portions thereof forming rib-like flanges having outer surfaces substantially in the planes of the outer faces of the fingers and convex inner surfaces forming together a circumferential inwardly extending discontinuous annulus to engage under the bead of the bottle, and a retainer including a cylindrical body having substantially the same diameter as the gasket and movable over said fingers so as to form the skirt and having a portion engageable with the outer surface of said annulus to press the beads of the fingers beneath the bottle bead.

1,862,621. BAG FRAME SIDE CATCH. WILLIAM A. HEILMANN, Orange, N. J., assignor to Newark Rivet Works, Newark, N. J., a Corporation of New Jersey. Filed Feb. 23, 1932. Serial No. 594,464. 3 Claims. (Cl. 292—147.)



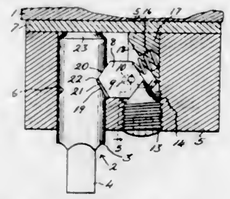
1. A side catch for bag-frames or the like, comprising a main body for fixed attachment to a frame member, said main body having vertically disposed guideway means, latching bolt means capable of vertical rectilinear sliding movement through said guideway means into and out of holding engagement with a cooperating frame member, a manipulatable crown-member external to said main body and to which said latching bolt means is secured, and yieldable detent means cooperative with said latching bolt means to hold the latter selectively in raised or lowered position.

1,862,622. TRANSLATING DEVICE. SAMUEL O. HOFFMAN, San Francisco, Calif. Filed May 9, 1927. Serial No. 189,782. 20 Claims. (Cl. 250—1.)



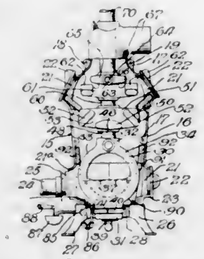
1. Means for translating energy variations into light indication comprising a substance adapted to absorb said energy, and means for maintaining said substance at a fixed temperature at which its light inflective properties are sensitive to energy absorption.

1,862,623. TOOL HOLDER. FERRIS T. HARRINGTON, Detroit, Mich., assignor to Whitman & Barnes, Incorporated, Detroit, Mich., a Corporation of Michigan. Filed Feb. 16, 1931. Serial No. 516,192. 12 Claims. (Cl. 279—76.)



1. In a tool holder, a body having a bore for receiving the shank of a tool, a seat for the shank at one end of the bore, and means for pressing the shank against said seat including a plunger movable longitudinally in the body and having a cam surface at its outer end engageable with the shank, a spring constantly bearing against the plunger to maintain it in projected position, and an adjustable element in the body and engageable with the plunger.

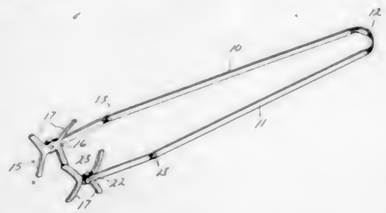
1,862,624. FURNACE. ACHILLE KAIS, Detroit, Mich. Filed May 14, 1928. Serial No. 277,700. 6 Claims. (Cl. 122—210.)



1. A furnace including in combination, an outer shell, and a plurality of superposed cast boiler sections within said shell in the path of the flow of the products of

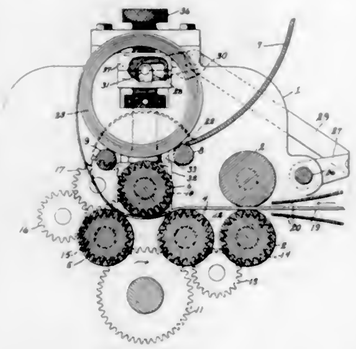
combustion through the said shell, one of said sections including a horizontally arranged water leg, a vertically extending water leg crossing said horizontally arranged leg, and a plurality of water legs carried by said vertically extending leg and arranged at an angle to the horizontal to deflect the flow of the products of combustion through the said shell.

1,862,625. TONGS. ROBERT M. KERR, Detroit, Mich., assignor to Detroit Dental Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 26, 1931. Serial No. 571,221. 12 Claims. (Cl. 294—99.)



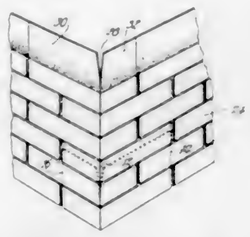
1. In a tongs construction, the combination of spaced gripping arms, gripping members loosely mounted on said arms for universal movement with respect thereto, and means limiting movement of said gripping members relative to said gripping arms.

1,862,626. COIL MACHINE. FRANK C. LINDH, Chicago, Ill. Filed May 25, 1928. Serial No. 280,475. 5 Claims. (Cl. 242—78.)



5. A coil machine having means for coiling a sheet metal strip so as to leave a projecting end extending outwardly from the body of the coil comprising three coiling rollers, two on one side of the strip and one on the other, means for holding said rollers in position to cause the strip to be bent as it passes through the rollers, guide means for guiding said strip after it has passed through said rolls and forming it into a coil having an open center, and means whereby at least one of said rollers may be readily and substantially instantaneously moved to such a position that the remainder of the strip will not be bent substantially, said guide means being positioned entirely outside the open center of the coil whereby after said roller has moved to non-bending position, the entire coil may move bodily in the direction of the feeding movement of the strip, so that a straight end of the strip may be left extending outwardly from the body of the coil to facilitate feeding the coil to a succeeding set of rolls.

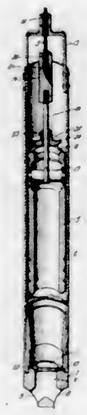
1,862,627. SURFACE COVERING FOR BUILDINGS. ROBERT MACLEAN, Franklin, Ohio. Filed Dec. 8, 1930. Serial No. 500,806. 13 Claims. (Cl. 20—5.)



6. A corner element for roofing comprising a strip of flexible roofing material bent to form a dihedral angle, said strip having a kerf extending from one edge part way across said strip, and a reinforcing strip on said element.

12. In a surface covering for a building corner, a plurality of angular flexible units of roofing material arranged at an inclination with each upper unit overlying a part of the next adjacent lower unit, and each unit having a slot in the upper portion thereof to permit foreshortening of this portion without distortion.

1,862,628. BAILER. GEORGE W. MILLER, Sapulpa, Okla., assignor to Miller Combination Bailer and Pump Company, Sapulpa, Okla., a Corporation of Oklahoma. Original application filed July 28, 1927, Serial No. 125,485. Divided and this application filed Aug. 24, 1928. Serial No. 301,747. 2 Claims. (Cl. 166—19.)



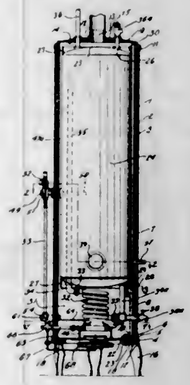
1. In a combined pump and bailer including a barrel having an upwardly opening valve at its lower end and a rope guide at its upper end, a tubular plunger slidable in the barrel having an upwardly facing valve seat at its upper end, a cross bar in said plunger, a rigid rod having its lower end hingedly connected with said cross bar below said seat and extended through said valve seat, a flexible line slidably extended through said guide, a coupling on said line having a threaded socket for receiving the upper end of said rod, and a plate valve slidable on the rod and cooperative with said seat to close the plunger on upstroke of the plunger.

1,862,629. WELL DRILL. JAMES D. MORRISON, Reinbeck, Iowa. Filed May 16, 1928. Serial No. 278,194. 4 Claims. (Cl. 255—76.)



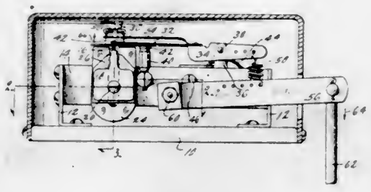
4. In combination, a rotary drill-pipe, and a separate removable drilling device non-rotatably slidingly connected thereto for limited relative longitudinal movements, whereby the drilling device is operated only under its own weight and the pump pressure of liquid thereupon and independently of the weight of the drill pipe.

1,862,630. DOMESTIC HOT WATER HEATER. CLARENCE H. MORROW, Cleveland, Ohio, assignor to The Hotstream Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 12, 1928. Serial No. 261,160. 3 Claims. (Cl. 122—18.)



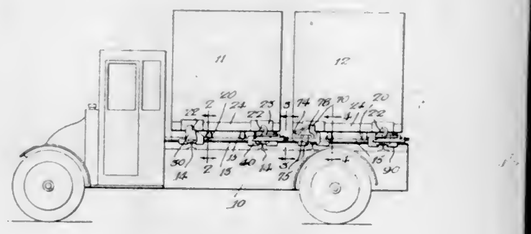
1. A domestic water heater, comprising a base having a horizontal wall provided with a central opening and an upstanding collar surrounding the same, a tank supported by said base and lying above the same, a water-circulating heat-absorbing coil communicating with said tank and lying above and within said collar, and a ring shaped burner supported by said collar and lying within the same and provided with jet producing members adapted to direct jets of flame upon said coil.

1,862,631. SWITCH STRUCTURE. ALBERT PENN, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed July 16, 1928. Serial No. 293,270. 3 Claims. (Cl. 200—147.)



1. In a switch structure, a base, a magnet thereagainst, a plate for retaining the magnet in such position thereagainst, an extension on the plate between the poles of the magnet, a contact carried by said extension, a second contact movable relative to the first one and engageable therewith, and means for insulating said plate from said magnet.

1,862,632. REMOVABLE CONTAINER. DONALD W. PERIN, Brookline, Mass., assignor to American Freight Service, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1927. Serial No. 232,590. 6 Claims. (Cl. 296—35.)

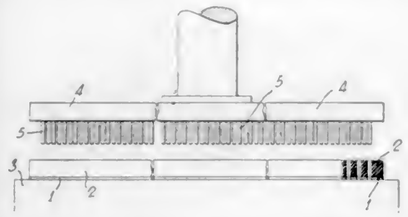


1. Means for locking a container upon a track on a platform, which container has members engaging the track whereby the movements of said container over the track are guided, comprising a plurality of pins projecting laterally from said container in pairs and a set of latches carried by said platform beside said track, said set comprising two pair of latches, one pair being fixed against movement parallel to said track and adapted to engage one pair of pins and check forward and upward movement of the container, and each latch of the other pair including a base fixed upon said platform, a block slidable in said base parallel to said track and a hook pivoted upon said block for lateral movement into and out of a plane parallel to the track, said hooks being movable in said planes into engagement with another pair of pins to check rearward and upward movement of the container.

1,862,633. METHOD OF PERFORATING SHEET RUBBER. ALLAN RAMSAY, Carbondale, Pa., assignor to Hendrick Manufacturing Company, Carbondale, Pa., a Corporation of Pennsylvania. Filed May 2, 1930. Serial No. 449,099. 8 Claims. (Cl. 18—50.)

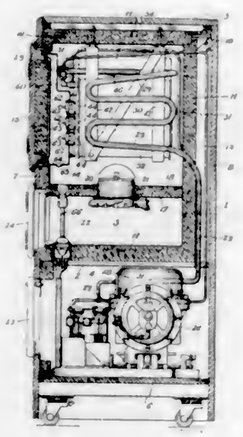
5. The method of producing a cured rubber sheet having a multiplicity of minute and definite apertures therethrough, which includes bonding stretch-resisting mate-

rial to one surface of a sheet of cured elastic rubber and then punching in the sheet, while held against stretching by said stretch-resisting material, a multiplicity of holes simultaneously by means of a perforated



press having a multiplicity of simultaneously operating punching prongs of approximately one thirty-second of an inch in diameter and spaced approximately one-thirty-second of an inch apart.

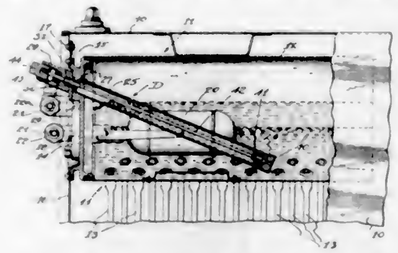
1,862,634. REFRIGERATOR. JOHN R. REPLOGLE, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed Feb. 28, 1921, Serial No. 448,331, now Patent No. 1,719,024, and in Canada Feb. 11, 1922. Divided and this application filed May 14, 1927. Serial No. 191,478. 13 Claims. (Cl. 62—116.)



1. In refrigeration apparatus, the combination of a cooling chamber; a brine tank located in said cooling chamber and formed with a horizontally disposed interior food chamber opening through the front wall of the said brine tank; and a guard plate for the front of said cooling chamber formed with an opening to register with the said food chamber; said tank being adjustably supported whereby the desired alignment of the chamber with the opening in said guard plate can readily be secured.

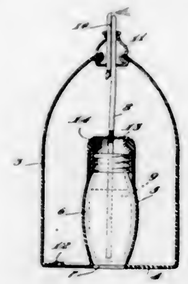
1,862,635. CONTROLLING MECHANISM FOR REFRIGERATING APPARATUS. JOHN R. REPLOGLE, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 7, 1927. Serial No. 166,277. 4 Claims. (Cl. 62—4.)

1. The combination with an artificial refrigerating apparatus supplied with power including a refrigerant evaporator of a temperature responsive device for controlling the operation of the apparatus, comprising: an elongated tube disposed within the evaporator and having one end secured to a wall thereof and connected to the power



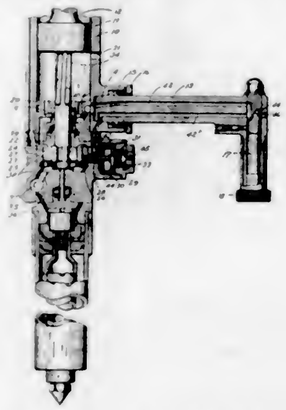
supply for the apparatus, means at the opposite end of the tube for admitting refrigerant from the evaporator to the tube and means for controlling said latter means.

1,862,636. ATOMIZER. JOHN D. RODGERS, Griffin, Ga. Filed Mar. 23, 1931. Serial No. 524,519. 8 Claims. (Cl. 299—88.)



4. An atomizer comprising a compressible bulb provided with an interior neck of resilient material and having a base opening leading into said neck, the neck being spaced from the sides and top of the bulb, a receptacle insertible through said opening and removably retained within said neck, a liquid-ejecting conduit extending from the receptacle through the top of the bulb, and means for ejecting liquid through said conduit.

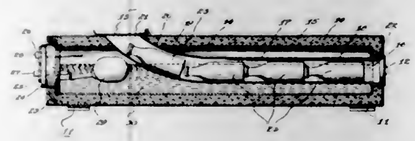
1,862,637. FLUID ACTUATED TOOL. ALFRED G. SLATCHER, Cleveland, Ohio. Filed July 24, 1929. Serial No. 380,478. 17 Claims. (Cl. 121—7.)



1. In a rock drill, a cylinder having a piston reciprocable therein, a rotation mechanism including a ratchet ring ro-

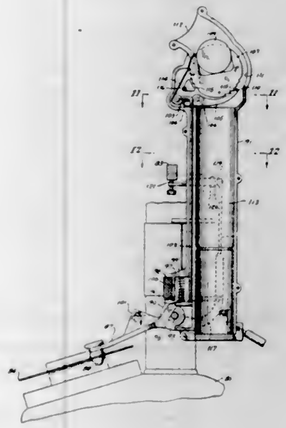
tatably mounted in said cylinder, a rifled stem engaged with said piston, and pawls operatively connecting said ring and said stem, a locking member mounted in said cylinder and movable into or out of engagement with a locking recess in said ring, means for resiliently urging said member in one direction, and fluid means controlled by the operator for resiliently urging said member in the other direction.

1,862,638. REFRIGERATING APPARATUS FOR BOTTLED GOODS. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 25, 1927. Serial No. 186,433. 4 Claims. (Cl. 62—126.)



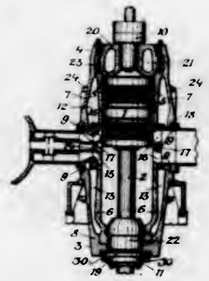
1. In a refrigerating apparatus, a container adapted to serve as an evaporator, a container adapted to surround said evaporator in spaced relation thereto, and a passageway through both of said containers, said passageway comprising a relatively long substantially straight portion and a relatively short curved portion, a door in the end of said outside container adjacent the end of said straight portion, and a door in the cylindrical surface of said outside container adjacent the opposite end thereof and adjacent the end of the curved portion of said passageway.

1,862,639. PREPAYMENT TELEPHONE. KARL W. THALHAMMER, Los Angeles, Calif. Filed July 8, 1926. Serial No. 121,136. 13 Claims. (Cl. 194—61.)



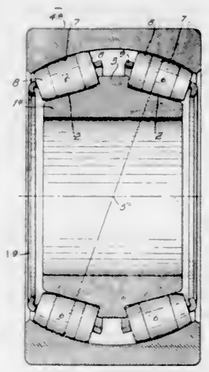
12. In combination, a member arranged to engage the dial of an automatic telephone and thus prevent its use, a detent for holding the member in locking position, means resiliently urging the detent toward engaging position, and a coin operated device for moving the detent to unlocking position.

1,862,640. DOUBLE-ACTING TWO-STROKE INTERNAL COMBUSTION ENGINE. MAX TRECHSEL, Winterthur, Switzerland, assignor to the Firm of Sulzer Frères Societe Anonyme, Winterthur, Switzerland. Filed Sept. 19, 1929, Serial No. 393,688, and in Switzerland Oct. 30, 1928. 3 Claims. (Cl. 126—61.)



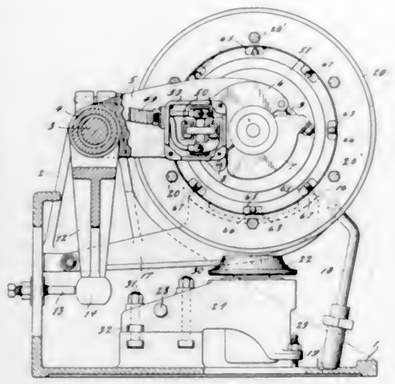
1. In a double-acting two-stroke internal combustion engine, a transversely divided cylinder body, abutting cylinder liners disposed in axial alignment having scavenging air ports, charging air ports and exhaust air ports adjacent the line of abutment of the liners, and an intermediate connecting member disposed between said divided cylinder body, said intermediate member having passages therein connecting with the scavenging air ports, the charging air ports and the exhaust air ports.

1,862,641. ROLLER BEARING. GILBERT H. TURNER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 1, 1930. Serial No. 472,229. 2 Claims. (Cl. 308—212.)



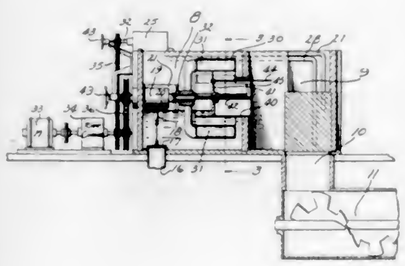
1. A roller bearing comprising an inner bearing member having a conical race portion and a thrust rib at its large end, an outer bearing member concavely curved endwise and rollers of generally tapering from therebetween, said rollers having conical middle portions engaging said inner bearing member and end portions convexly curved endwise and engaging said outer bearing member.

1,862,642. TRANSFORMER. EDMUND J. VON HENKE, Chicago, Ill., assignor to American Electric Fusion Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1929. Serial No. 339,123. 32 Claims. (Cl. 219—6.)



1. In combination a base, a standard extending upwardly from said base and having a pivot thereon, an arm rotatably mounted on said pivot, a transformer rotatably carried by said arm, and welding electrodes on said transformer and connected to the secondary thereof.

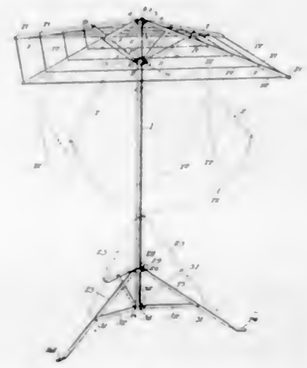
1,862,643. PROPORTIONING AND METERING APPARATUS. HAROLD DONALD WELLS, Glens Falls, N. Y. Filed May 28, 1931. Serial No. 540,676. 14 Claims. (Cl. 92—46.)



6. In a device of the character described, the combination with a rotor provided with peripheral buckets, of a trough having a portion positioned to receive discharge from said buckets, and an end wall adjustably determinative of the portion so received.

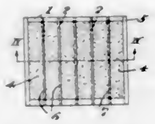
1,862,644. CLOTHES DRIER. GEORGE R. WIENEKE, Chicago, Ill. Filed June 7, 1929. Serial No. 369,214. 2 Claims. (Cl. 211—167.)

1. A clothes drier comprising a standard, means secured to said standard and retractable into inoperative position in close proximity to said standard for supporting said standard when in extended position, a collar rotatably secured to said standard at its upper end, arms pivotally secured at their ends to said collar, an adjustable collar secured to said standard adjacent its upper end for rotary and axial movements thereon, means for selectively securing said adjustable collar against axial movement on said standard, a sleeve rotatably carried by said adjustable collar, said collar being flanged outwardly above said sleeve



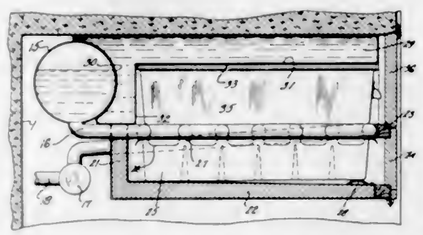
to secure the latter to said collar and links pivotally connected to said arms intermediate their ends and to said sleeve.

1,862,645. PROCESS OF PRODUCTION OF SEPARATORS, DIAPHRAGMS, FILTERS, AND THE LIKE CONSISTING OF POROUS AS WELL AS POROUS AND NONPOROUS EBONITE AND THE LIKE. MEYER WILDERMAN, Hampstead, London, England, assignor, by mesne assignments, to The American Wilderman Porous Ebonite Company, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 23, 1929, Serial No. 334,447, and in Great Britain Dec. 20, 1928. 4 Claims. (Cl. 18—53.)



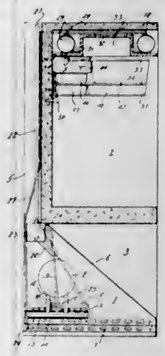
1. The process of manufacturing porous ebonite bodies and the like, comprising introducing partially vulcanized particles between foils while maintaining the particles at elevated temperature at which they remain in a state of fine sub-division, compressing the particles while between the foils to form a porous body, and heating the compressed body to complete the vulcanization.

1,862,646. ABSORPTION REFRIGERATING APPARATUS. EDMUND E. ALLYNE, Cleveland Heights, Ohio. Filed Feb. 7, 1929, Serial No. 338,175. Renewed Nov. 14, 1931. 4 Claims. (Cl. 62—118.)



1. In absorption refrigerating apparatus, a cabinet having a refrigerant chamber, a refrigerating storage within and adjacent the top of said refrigerating chamber, a refrigerating unit in liquid gravitating communication with said storage, a housing for said refrigerating unit and comprising a heat absorber forming the upper part of said housing and in heat transfer relation to said storage and to said refrigerating unit, and a heat insulating casing forming the remaining portion of said housing.

1,862,647. ABSORPTION REFRIGERATING APPARATUS. EDMUND E. ALLYNE, Cleveland Heights, Ohio. Filed Feb. 7, 1929, Serial No. 338,176. Renewed Nov. 14, 1931. 2 Claims. (Cl. 62—118.)



1. Refrigerating apparatus, comprising a cabinet having a refrigerating chamber, an annular evaporator storage on top of said refrigerating chamber, a refrigerating unit in liquid gravitating communication with said storage, and an annular heat insulating housing about said storage providing a central heat collecting dome within the same.

1,862,648. CIRCUIT INTERRUPTER. NATHAN ABRAMSON, Brooklyn, N. Y., assignor to Presto Products Co., a Firm and Partnership composed of Nathan Abramson and David Abramowitz, New York, N. Y. Filed Dec. 20, 1928. Serial No. 327,330. 3 Claims. (Cl. 200—122.)



1. A circuit interrupter comprising a disc of insulation, a thermostat on the disc having one end disposed through the disc, a plate disposed in contact with the thermostat, and a second contact plate on the opposite side of the disc and covering the thermostat.

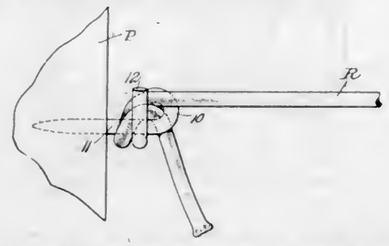
2. A circuit interrupter comprising a disc of insulating material having a contact plate of lesser diameter than the disc on either side thereof, a thermostat between one of said plates and the disc and having one end of the thermostat disposed through the disc to make contact with the other of said plates.

1,862,649. KNIFE HANDLE CONSTRUCTION. NICHOLAS AMONOSO, Providence, R. I. Filed Jan. 20, 1932. Serial No. 587,632. 4 Claims. (Cl. 30—10.)



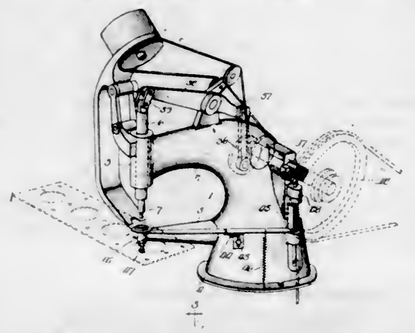
1. In a knife assembly, handle scales each comprising an ornamental piece, a liner plate contiguous thereto, and a frame piece having spaced peripheral flanges which engage and hold the ornamental piece and the liner plate in the frame piece in assembled relation, a blade and a blade spring between said handle scales, and rivets extending through said blade and blade spring and seated in said handle scales.

1,862,650. HOLDFAST FOR ROPES. ALEXANDER M. ANGUS, Groveland, Mass. Filed Jan. 26, 1932. Serial No. 588,903. 3 Claims. (Cl. 24—131.)



1. A device of the character described made from a single piece of stiff wire bent near its middle to form a single coil convolution having a leg extending tangentially therefrom and adapted to be secured to a fixture and having another leg extending from the opposite end of said coil which is bent around said first-mentioned leg and has an end portion disposed perpendicular with respect to the axis of said first-mentioned leg and opposite said coil to provide a rope-receiving pocket between said last mentioned leg and said coil.

1,862,651. PROTECTING DEVICE. ANDREW A. AUGUST, Chicago, and BENJAMIN J. VICTOR, Oak Park, Ill., assignors to Victor Manufacturing and Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1930. Serial No. 442,830. 10 Claims. (Cl. 218—2.)

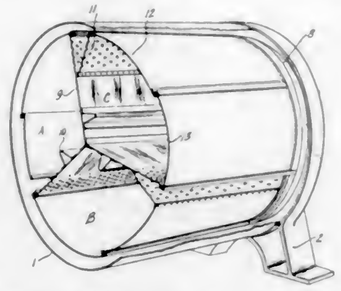


1. In a machine comprising an operating mechanism including a movable portion and a stationary portion, operating means for said movable portion, controlling means for said operating means, and means independent of said operating means for preventing operation of said controlling means including a portion disposed below the material to be acted on by said operating mechanism.

1,862,652. WASHING MACHINE. FRITZ BALZER, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 21, 1930. Serial No. 476,754. 4 Claims. (Cl. 68—18.)

1. In a machine of the class described, an outer tub for treating liquid, a load-carrying cylinder rotatably mounted in said tub and comprising end heads, an outer cylinder wall made up of a plurality of spaced sections con-

nected to said end heads, and longitudinally extending compartment forming partitions extending radially outwardly from the center of said cylinder to one edge of each cylindrical wall section and forming angular pockets at the junction therewith, said partitions being per-



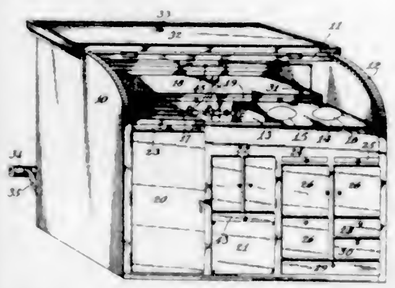
forated adjacent their points of connection with said wall sections whereby an opening is provided of a size to be successively covered and uncovered by the load during operation of the apparatus to retain liquid within the compartments or permit liquid to enter and exhaust from said compartments.

1,862,653. ELECTRIC SOLDERING MEANS. LOUIS A. BEAN, Denver, Colo., assignor to Ivan L. Bean, Denver, Colo. Filed July 1, 1929. Serial No. 375,034. 5 Claims. (Cl. 219—26.)



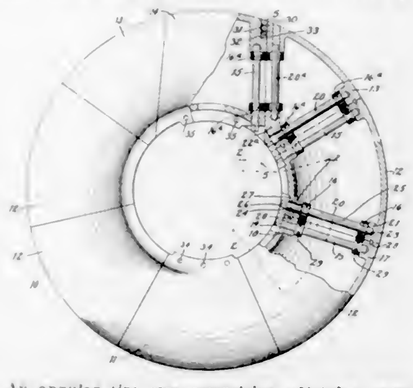
1. Electric soldering means comprising a manually-operable tool, a solder-working tip formed of semi-cylindrical counterpart members of electrically-heatable material supported in and projecting from one end of said tool, each of said counterpart members being electrically isolated relative to said tool and the other member and arranged with its plane surface in closely spaced parallelism with that of its counterpart member, and means for operatively connecting each of said counterpart members with a source of electrical energy.

1,862,654. CABINET BAR. MARGARET BOOTH, New York, N. Y. Filed Apr. 8, 1931. Serial No. 528,600. 1 Claim. (Cl. 312—169.)



A cabinet simulating a roll top desk and adapted for location away from a wall to be accessible on opposite longitudinal sides thereof, the top of said cabinet being provided with raised edges, a drain for said top, a sink and table portion arranged longitudinally of said cabinet and both located at about the same level and laterally of and below said top, a roll-top closure extensible from adjacent a longitudinal side of said top over said sink and table portions, extensible work-table members separately slidable to cover or expose each of said sink and table portion, and when exposing said sink and table portion said work-table members being retained in a position beneath said cabinet top, a drain pipe from said sink connected to a drain pipe from said top, and a supply pipe leading to said sink.

1,862,655. TIRE CORE. HENRY C. BOSTWICK, Akron, Ohio, assignor to the Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 24, 1930. Serial No. 497,662. 8 Claims. (Cl. 154—9.)



2. An annular tire core comprising adjoining radially divided segments, and a hook member on one segment coacting with a complemental member on the other segment and mounted to turn on an approximately radial fixed axis, for detachably connecting said segments against circumferential separation.

6. An annular tire core comprising adjoining segments, and a lock detachably connecting said segments and including a locking member adapted, by a reverse movement, to separate the segments.

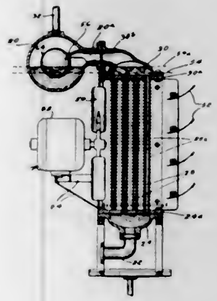
1,862,656. MANUFACTURE OF TRANSPARENT PAPER. SYLVESTER BOYER, Portland, Me., assignor to S. D. Warren Company, Boston, Mass., a Corporation of Massachusetts. Filed May 27, 1930. Serial No. 456,023. 9 Claims. (Cl. 92—71.)



1. Method of enhancing transparency of paper, characterized by subjecting the paper while moist, to hard roll compression, meanwhile reducing the moisture content, then to soft roll compression while the paper still contains enough moisture to prevent injury between soft rolls, then subjecting the paper again to hard roll pressure while reducing its moisture content to the percentage requisite to maintain paper strength.

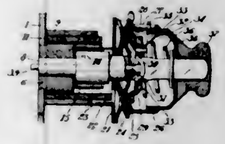
3. Calender for transparentizing paper, comprising a series of pressure rolls, the first part and last part of the series consisting respectively of a plurality of adjacent, contacting hard rolls, rolls forming an intermediate part of the series being soft rolls.

1,862,657. REFRIGERATING SYSTEM AND APPARATUS THEREFOR. CHARLES H. BREIDENTHAL, Barrington, R. I., assignor to General Fire Extinguisher Company, Providence, R. I., a Corporation of Delaware. Filed Mar. 26, 1930. Serial No. 439,006. 3 Claims. (Cl. 62—126.)



1. Apparatus for a refrigerating system, comprising an evaporator having bottom and top headers and a series of tubes extending vertically therebetween, combined with a casing connected to said bottom header for transfer of liquid refrigerant thereto and connected to said top header for transfer of gaseous refrigerant therefrom: means for supplying liquid refrigerant to said casing; and means connected with the casing above the liquid therein for withdrawing gaseous refrigerant therefrom; there being a nozzle associated with the connection between said top header and casing having its outlet opening downward in said casing whereby any liquid entrained in the gaseous refrigerant passing into said casing is prevented from going on with the gas to said withdrawing means.

1,862,658. GRADUATED TENSION DEVICE FOR SEWING MACHINES. DANIEL H. CHASON, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 1, 1931. Serial No. 541,285. 5 Claims. (Cl. 242—150.)



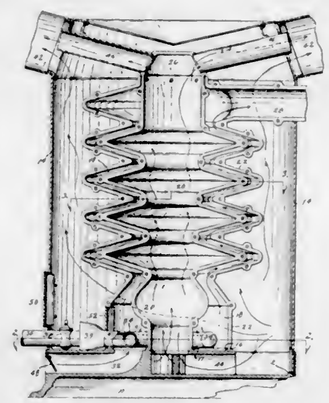
1. A sewing machine tension-device having a support, an arbor rotatably adjustable about its axis in said support, a torsion check-spring anchored at one end to said arbor, a main tension-spring, a first member anchored against rotation relative to said arbor, a second member adjustably anchored to said first-mentioned member and bearing a tension indicating scale, and a tension-regulating device including a tension-regulating nut and an indicator playing over said scale.

1,862,659. FILTER. CHARLES CHRISTOFFERSON, Duluth, Minn. Filed Apr. 12, 1930. Serial No. 443,638. 2 Claims. (Cl. 183—51.)



1. In a filter unit, the combination with an open rectangular frame comprising spaced top and bottom members and spaced side members having flanges lying in a common plane; of a rectangular, metal screen; a frame within which said screen is clamped, said last named frame being fixed to the inner sides of the flanges of the first named frame; a second rectangular screen; a frame within which said second named screen is clamped, said last named frame being hinged at one edge to said second named frame; sheet filtering material between said screens; and means on said first named frame locking said hinged frame in position in clamping relation to the filter sheets between said screens.

1,862,660. GAS FURNACE. EDWARD J. CLYNCH, Dowagiac, Mich. Filed May 12, 1930. Serial No. 451,689. 11 Claims. (Cl. 126—116.)

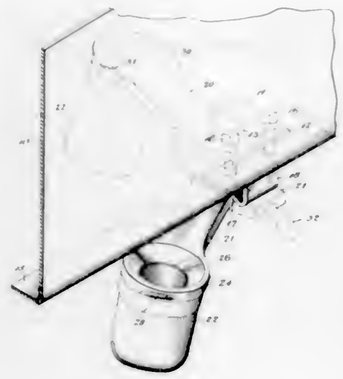


1. In a furnace of the character disclosed, a combustion chamber, a gas burner therein, an interior air chamber within said combustion chamber, an exterior air chamber surrounding said combustion chamber, means for supplying air to the exterior air chamber, radial conductor means, circumferentially spaced for conducting air from the exterior air chamber to the interior air chamber, a hot air discharge pipe and means for discharging such air, after contact with the inner and outer walls of said combustion chamber, into said hot air discharge pipe.

1,862,661. ASH RECEIVER FOR MOTOR VEHICLES. JOSEPH H. COHEN, Bridgeport, Conn. Filed Dec. 9, 1929. Serial No. 412,714. 23 Claims. (Cl. 206—19.5.)

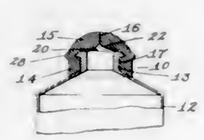
21. An ash receiver for motor vehicles comprising a supporting frame attachable to an instrument board; an ash receptacle; an arm pivotally mounted on the supporting frame having an end carrying the ash receptacle, said arm being movable to carry the ash receptacle to and from positions back of the instrument board where it is inaccessible to an accessible position in front thereof for

nse; spring means tending to complete the movement of the arm when moving to carry the ash receptacle to either accessible or inaccessible position; and manually engageable means secured to said arm and located adjacent the



pivotal mounting thereof and remote from the receptacle carrying end for operating the arm when it is desired to move the receptacle from inaccessible to accessible position.

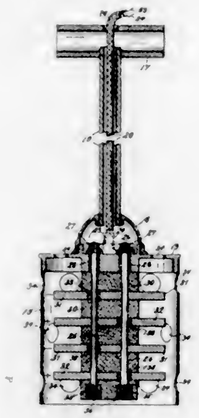
1,862,662. CAP FOR COLLAPSIBLE TUBES. FRANCIS J. COSTELLO, Newton, Mass. Filed Dec. 27, 1930. Serial No. 505,025. 7 Claims. (Cl. 221—60.)



1. A cap of resilient material for collapsible tubes and like containers having a nozzle, comprising a body portion having a cavity in its under side, the lower portion of said cavity being of a size adapted to fit about the nozzle of the tube, the upper part of said cavity being larger than the lower portion and of a depth so as to form a shallow chamber whose upper wall forms the head of said cap, the said head having its lower surface in substantially close proximity to the upper surface of said nozzle when the cap is fitted on the latter and being of substantial thickness and provided with a slit extended through it, said slit having its walls normally in contact.

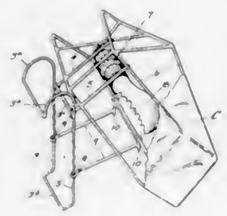
1,862,663. ELECTROLYTIC WATER PURIFIER. THOMAS J. CURTIS, Venice, Calif., assignor, by mesne assignments, to Effie G. Hooper, Beverly Hills, Calif. Filed Nov. 28, 1930. Serial No. 498,635. 2 Claims. (Cl. 204—25.)

1. A submergible electrolytic water purifier including a cylindrical metal housing having an open lower end, a top secured to the upper end of said housing, a cap secured to an upwardly extending flange on said housing, an elongated tube having its lower end secured to said cap and its upper end secured to a handle, positive and negative metal rods having their upper ends secured to said top and in circuit with an electric cord extended down into said cap through said tube, disk-shaped cathodes and anodes mounted on said rods and insulated so that the electric circuit from the cathodes to the anodes will pass



through the water in which the purifier is submerged, and opposing nuts on said rods for securing said cathodes, anodes and insulation together.

1,862,664. ADJUSTABLE BED LAMP SHADE. LEWIS N. DAVIS, Santa Monica, Calif. Filed Oct. 1, 1930. Serial No. 485,601. 1 Claim. (Cl. 240—4.)

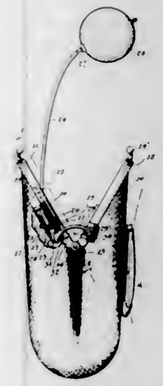


A portable and adjustable lamp and shade consisting of a box-like shade body open at its bottom, means for holding an electric lamp therein, a supporting member adapted to be hooked over a bed head, said shade body being pivotally connected at its upper, rearward side to said supporting member, whereby said shade body can be swung outwardly away from said supporting member, and a pivoted brace member pivotally connected at one end to the lower rear side of said shade body and at its other end slidably connected to said supporting member to slide up and down on said supporting member, whereby as said shade body is swung outwardly said brace member will automatically slide down on said supporting member to hold said shade body in its out position, and when said brace member is pushed upwardly on said supporting member, said shade body will move inwardly against said supporting member.

1,862,665. POCKETBOOK. JOSEPH J. DVORAK, Chicago, Ill. Filed Dec. 23, 1929. Serial No. 416,026. 3 Claims. (Cl. 150—29.)

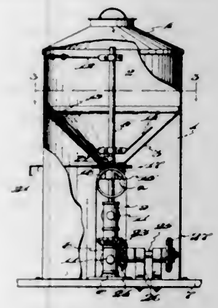
1. The combination with the jaw members of a purse, of a reel mounted on one of said members including a spool

and a spiral spring adapted to rotate said spool, a flexible cable adapted to wind on said spool, an applicator on the free end of said cable, and a pawl movably mounted on the



other of said jaw members adapted to engage said spool when said jaw members are in a predetermined position relative to each other.

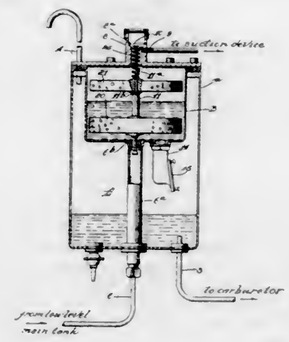
1,862,666. POISON DISTRIBUTING MACHINE. JAMES W. DUNCAN, Wichita Falls, Tex. Filed Mar. 30, 1931. Serial No. 526,391. 4 Claims. (Cl. 43—148.)



1. A poison distributing machine including a hopper and a vertical shaft therein provided with agitating elements, an encased, multi-chambered valve also carried by said shaft and communicating with a discharge conduit and means for urging material from said hopper to be successively received in the chambers of said valve and moved to a position for discharge into said conduit.

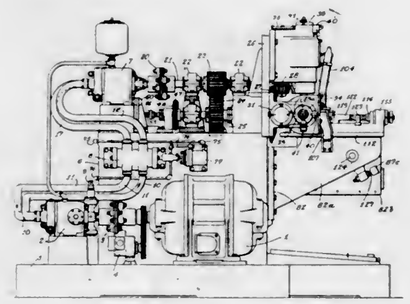
1,862,667. VACUUM FUEL FEEDING DEVICE. WILLIAM A. EDWARDS, Chicago, Ill., assignor of one-half to Charles S. Burton. Filed Oct. 16, 1930. Serial No. 489,088. 3 Claims. (Cl. 103—236.)

1. A vacuum fuel feed device comprising a chamber having a suction connection, an atmosphere inlet, and a liquid fuel supply connection; a valve to control the atmosphere inlet; a float device in the chamber arranged to be actuated by change of liquid level in the chamber, a connection by which the float operates the atmosphere valve, said float comprising two float members at different levels a substantial distance apart in said chamber, the lower float member being adapted as to buoyancy to counterbalance the weight of the valve and all parts moving with it, and the other float member being adapted as to buoyancy to overcome the suction hold on the valve; the second mentioned float member being mounted for movement vertically independently of the first mentioned



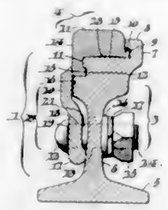
float member, and a spring interposed between said second mentioned float member and the valve for communicating opening movement to the valve.

1,862,668. METAL CUTTING MACHINE. FAYETTE R. ELDREDGE, Providence, GEORGE W. NEWMAN, Norwood, and JOHN B. PHILLIPS, Riverview, R. I.; Mildred C. Newman, administratrix of said George W. Newman, deceased; assignors to General Fire Extinguisher Company, Providence, R. I., a Corporation of Delaware. Filed Sept. 14, 1929. Serial No. 392,536. 5 Claims. (Cl. 10—129.)



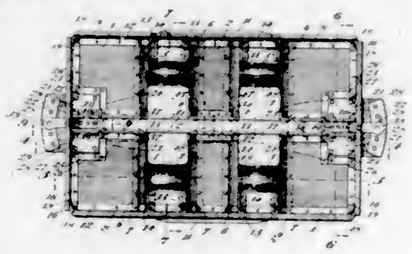
2. A metal cutting machine having a tool arranged to be rotated in different directions and reciprocated to travel respectively into and out of the work being cut; work holding means adapted to move the work to and from cutting position; and means controlling the movements of said tool and said work holding means comprising a valve whose movements govern the direction of rotation and reciprocation of said tool; a second valve whose opening effects the movement of the work to cutting position; a third valve whose opening effects the withdrawal of said work from cutting position and its discharge from the machine; and automatically operated mechanism arranged to move the first and second mentioned valves together to effect movement of the work to cutting position as the tool travels toward the work and then to effect travel of the tool from the work after the cutting is completed; said mechanism including an element arranged to move said third valve to effect withdrawal of the work from cutting position after the tool has traveled out of said work.

1,862,669. RAIL. ROBERT FARIES, St. Davids, and CHARLES D. YOUNG, Haverford, Pa. Filed Mar. 11, 1931. Serial No. 521,622. 3 Claims. (Cl. 238—143.)



1. A rail comprising upper and lower sections formed with interlocking surfaces restraining separation of the sections in a vertical direction, said lower section including an upstanding shoulder embracing one side of the upper rail section near the wearing surface thereof, and a retaining member having its base portion fulcrumed on the lower rail section and its top portion bearing solely on the upper rail section opposite the aforesaid shoulder to restrain separation of said sections in a lateral direction.

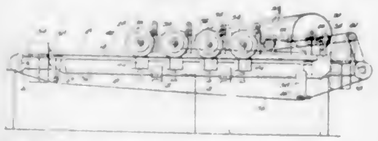
1,862,670. MINE CAR. BENJAMIN F. FAUNCE, Westmont, Johnstown, and WALTER H. STATLER, Johnstown, Pa., assignors to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Sept. 7, 1929. Serial No. 391,084. 22 Claims. (Cl. 105—364.)



1. In a car structure, comprising a body having sides and end walls, a floor extending the full length of the car secured to the sides and end walls having transversely spaced housings formed therein, and a longitudinal ridge connecting the spaced housings and end walls together.

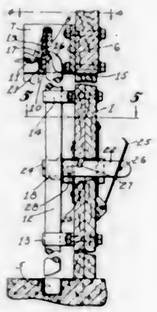
2. In a car structure, a body having walls and a floor extending the full length of the car, spaced housings extending transversely of the floor and forming a portion thereof, running gear for the car mounted in the spaced housings, and a longitudinal ridge connecting the central portions of the spaced housings and end walls together.

1,862,671. GRINDING OR POLISHING MACHINE. SAMUEL B. FIELD, Holbrook, Mass., assignor to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Filed Jan. 5, 1927. Serial No. 159,128. 2 Claims. (Cl. 51—76.)



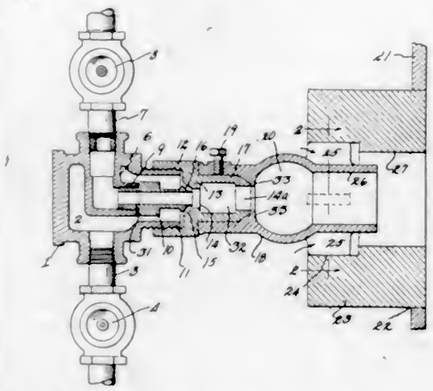
1. In a machine of the character described, in combination, a plurality of abrasive wheels mounted for rotation in planes extending in the same direction and adapted to successively engage the work fed beneath them, a unitary work supporting member extending under all of the wheels and mounted to be capable of oscillation in a direction at right angles to the planes of said wheels, a travelling member for engaging and moving the work mounted upon and oscillatory with the work supporting member, and means for oscillating the unitary work supporting member to simultaneously oscillate the work being engaged by all of the wheels.

1,862,672. DOORLOCK. THOMAS FLEMING, East St. Louis, Ill. Filed Apr. 6, 1931. Serial No. 527,986. 4 Claims. (Cl. 292—5.)



1. A latch for a hinged door, comprising a bracket mounted above said door and having upwardly extending elongated slots therein and U-shaped guides below said slots; a bar vertically and hingedly movable in said slots and seating on said guides; a vertically movable latch rod carried by said door and having its upper end adapted to actuate said bar pivotally and vertically when the door is swung with the rod lifted; and means for operating said rod from without said door.

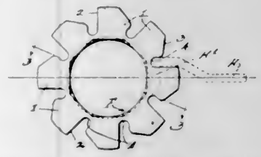
1,862,673. GAS BURNER. WILLIAM H. FOSTER, Ypsilanti, Mich., assignor to Thermal Engineering Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 5, 1929. Serial No. 352,711. 2 Claims. (Cl. 158—109.)



2. A gas burner for furnaces comprising a chambered body having an inlet on one side and an extension open to the chamber, an integral conduit extending into the chamber of the body and having a terminal portion positioned on the axis of the said extension of the body and providing an inlet for gas, a nozzle detachably connected to the said terminal portion of the integral conduit, a cap member for the extension having an opening

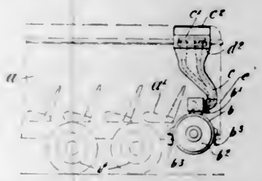
therethrough into which the nozzle extends, the opening having a shape corresponding to the external shape of the nozzle and being adjustable to vary the space between the nozzle and the wall of the aperture through which air from the chamber may flow, a tubular device providing an extension for the cap connected with the said cap in a manner to permit adjustment of the cap on the said body and through which the gas and air may pass, a refractory element having a central aperture from which the products of combustion pass into the furnace, said refractory element and the end of the tubular device being so arranged that the end of the tubular device is supported in spaced relation with the wall of the aperture providing for a flow of air about the exterior of the forward end of the said tubular element for cooling the same.

1,862,674. UMBRELLA. ELMER E. FREY, Los Angeles, Calif., assignor to Edward F. Leonard and John P. Meehan, Los Angeles, Calif. Filed Apr. 1, 1929, Serial No. 351,636. Renewed Nov. 6, 1931. 2 Claims. (Cl. 135—32.)



1. In an umbrella, in combination with a rib and a brace adapted to be pivotally attached thereto, of an attaching device frictionally supported on the rib and provided with a central portion embracing the rib, and extensions therefrom provided with central bearing portions spaced apart, and another extension therefrom spaced from the bearing portion, said brace having a right angularly bent portion pivotally held in said bearing portions and adapted to engage said other extension for preventing the displacement of the brace from the bearing.

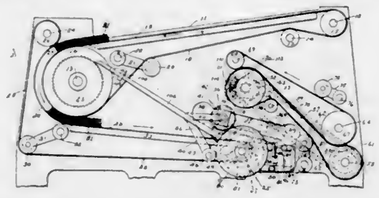
1,862,675. INTERNAL COMBUSTION ENGINE COOLING SYSTEM. CHARLES FROESCH, Teaneck, N. J., and WILLIAM B. JUPP, New York, N. Y., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 27, 1927. Serial No. 222,276. 1 Claim. (Cl. 123—174.)



In a vehicle having an engine, a housing substantially above the engine, the upper wall of the housing forming a portion of the roof of the vehicle, a radiator for cooling the engine mounted in the upper wall of the housing and communicating with the atmosphere through the upper wall thereof, a pipe leading from inside said housing to the outside, and means to discharge the exhaust from the engine into said pipe, whereby air is drawn through said radiators.

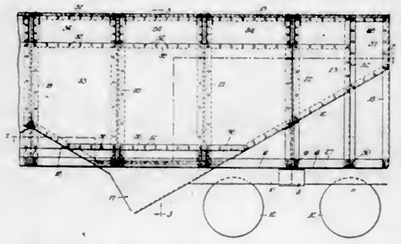
1,862,676. AUTOMATIC FEEDER. FRED GITZENDANNER, New York, N. Y. Filed Feb. 9, 1931. Serial No. 514,483. 8 Claims. (Cl. 271—38.)

1. In a feeding device of the class described, a table for supporting a plurality of the sheets to be fed, a suction roller for separating the uppermost sheet from the remaining sheets, a valve for automatically controlling the suction of said roller, means for rolling said suction roller rearwardly over the remaining sheets, and



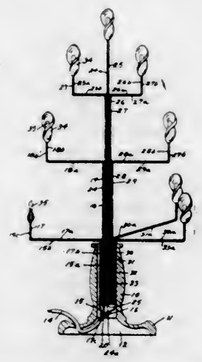
a roller having cam-operated gripping fingers for removing each sheet from the suction roller and discharging it from the device.

1,862,677. CAR CONSTRUCTION. HARRY S. HART and DAVID HINDAHL, Chicago, Ill., assignors to Harry S. Hart, Chicago, Ill. Filed Mar. 13, 1929. Serial No. 346,559. 14 Claims. (Cl. 105—247.)



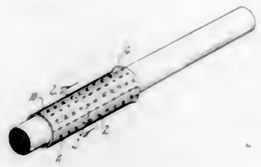
3. A car side stake of substantially I cross-section, having one cross-end flange of greater width than the other cross-end flange throughout the intermediate portion of its length, and having the opposite cross end flange of greater width than the other cross-end flange at its end.

1,862,678. ILLUMINATED NOVELTY. ERNEST W. HERRING, Maywood, Calif. Filed July 13, 1931. Serial No. 550,318. 7 Claims. (Cl. 240—10.)



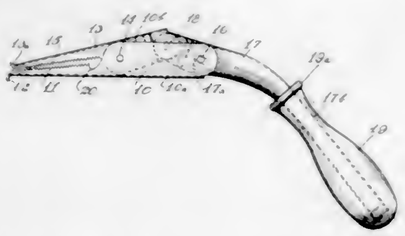
1. A device of the kind described consisting of a pedestal, and a length of wire made into a plurality of folds, each of the folds consisting of twisted parts, some portions of the wire being arranged in folded contacting upright position, with respect to which the folds extend angularly as branches of a tree, lamps fused upon the branch-like folds of the device, said wires being included in an electric circuit for furnishing current to the lamps.

1,862,679. CIGARETTE JACKET. JOHN A. HOLSMAN, Des Moines, Iowa. Filed May 9, 1930. Serial No. 451,043. 1 Claim. (Cl. 131—51.)



A temporary jacket for cigarettes comprising a light thin cylinder of slightly resilient flexible material having portions impressed for resiliently engaging the cigarette at a large number of points, the impressed portions extending radially inwardly and the parts being so arranged that the jacket may be readily moved lengthwise in either direction on the cigarette or may be grasped by the fingers and pressed against the cigarette so that the cigarette will not move therein.

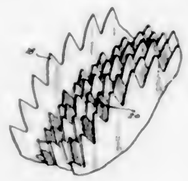
1,862,680. REMOVABLE HANDLE. THOMAS S. HUTCHISON, Chicago, Ill. Filed May 26, 1930. Serial No. 455,510. 7 Claims. (Cl. 294—28.)



1. In a handle of the class described, the combination of a sheet metal body portion of channel formation, a sheet metal jaw member of channel formation between opposite walls of said body portion, the backs of said channel formations being away from each other, a first pivot rod extending through the mid portion of said jaw member and through said opposite walls of said body portion, a sheet-metal operating member of channel formation also between said opposite walls of said body portion and having its back away from the back of said body portion, the adjacent ends of the side walls of said jaw member and of said operating member overlapping each other, a second pivot rod extending through the adjacent ends of the side walls of said jaw member and of said operating member, said second rod being shorter than the distance between the side walls of said body portion, a third pivot rod extending through the side walls of said body portion and of said operating member, there being slots for said third rod in one of said parts connected thereby, and a handhold carried by the outer end of said operating member, said body portion and said jaw member having co-operating portions on their channel edges for engagement with an article to be handled, and the side walls of said body portion between said first and said third pivot rods overlapping the side walls of said jaws member and of said operating member for all positions of said jaw member.

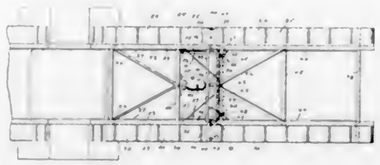
1,862,681. TOOL FOR SURFACING AND FORMING FIBROUS MATERIAL. ARTHUR B. JOHNSON, Minneapolis, Minn. Filed Apr. 12, 1930. Serial No. 443,679. 1 Claim. (Cl. 144—237.)

A tool for surfacing fibrous materials comprising a plurality of toothed disk saws closely clamped together, the teeth of the several saws having blunt ends that conform to the periphery of a circle struck from the axis of



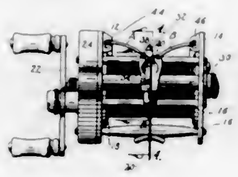
the saws and said blunt ends extending circumferentially of the saws a distance substantially equal to the width of the saw teeth.

1,862,682. MEANS FOR TRANSPORTING VEHICLES AND THE LIKE. IRVING H. JUDD, Detroit, Mich., assignor to Whitehead & Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed Apr. 13, 1931. Serial No. 529,874. 4 Claims. (Cl. 214—85.)



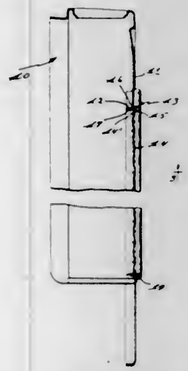
1. In a transportation means of the class described, longitudinally extending structural elements providing a runway for receiving vehicles to be transported, a frame for supporting said runway in elevated position, track sections pivotally connected to the rear ends of said structural elements for movement from an inclined position in which they extend from the rear end of said structural elements to the ground to a position in which they constitute a substantially horizontal extension of said runway, a frame rigidly connected to said track sections, and means engageable with said frame for holding said track sections in substantially horizontal position, said means including an auxiliary frame pivotally connected to the frame of said structural elements.

1,862,683. LEVEL-WIND FISHING REEL. JOE KAUTZKY, Jr., Fort Dodge, Iowa. Filed Aug. 4, 1930. Serial No. 472,812. 5 Claims. (Cl. 242—84.4.)



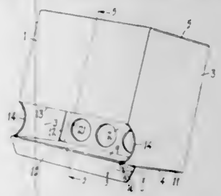
1. In a fishing reel having a frame and a spool rotatably mounted therein to receive a line, a level-wind mechanism comprising a line carriage arranged for reciprocation in front of said spool, said carriage being formed with a line-receiving notch, and arms pivotally connected to said carriage and movably engaging opposite sides of the frame, each arm sloping toward the notch of said carriage for guiding the line thereto.

1,862,684. REMOVABLE RADIATOR SHIELD. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Aug. 10, 1931. Serial No. 556,261. 4 Claims. (Cl. 293—54.)



1. In combination, a radiator shell having a flange on its inner periphery, and a shield having a frame provided with attaching flanges adapted for detachable engagement with the flange of said shell.

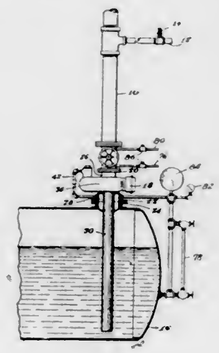
1,862,685. SHIPPING AND DISPLAY CARTON. FRANK KENNETT, Kalamazoo, Mich. Filed July 16, 1930. Serial No. 468,225. 10 Claims. (Cl. 206—44.)



1. A display carton comprising front, rear, end and bottom walls and top closing flaps, the front wall having a discharge opening extending horizontally across the bottom thereof, the end walls having segmental notches at the ends of said discharge opening, the rear wall having a horizontal series of finger openings opposite said discharge opening, and a flap-like combined support and discharge opening closure member on the front edge of the bottom adapted to be adjusted as a closure for said discharge opening and having segmental end extensions constituting closures for said notches in said end walls, member having a tongue slit therein and being longitudinally scored so that it may be folded into a V cross section and adjusted under the bottom as a support with said extensions folded inwardly to provide tongue-engaging members, said bottom having forwardly projecting outer and intermediate tongues, the outer tongues being engageable within said member and said tongue-engaging members and the intermediate tongue being engageable on the outside of said member and through said slit therein.

1,862,686. COUPLING UNIT. IRA W. KNIGHT, Providence, R. I., assignor to General Fire Extinguisher Company, Providence, R. I., a Corporation of Delaware. Filed Oct. 4, 1930. Serial No. 486,385. 7 Claims. (Cl. 169—9.)

1. A coupling unit for a liquid delivery system having a distributing pipe filled with gas under pressure and a supply tank partly filled with liquid, comprising, in combination, means forming an open connection between said pipe and said tank below the level of the liquid therein; means forming a restricted connection between said pipe



and said tank above the level of liquid therein; and means actuated by the liquid upon flow occurring through said open connection for closing said restricted connection.

1,862,687. METHOD OF MAKING A FIBER FABRIC. LEWIS LARSEN, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 4, 1930. Serial No. 472,862. 22 Claims. (Cl. 139—11.)



1. The method of making fiber fabric which consists in providing a relatively wide strip of fibrous material, operating upon the strip to slit the same into portions which are compressed inwardly to produce a plurality of strands therefrom, shedding the strands thus produced and inserting wefts into the shedded strands to form the fabric.

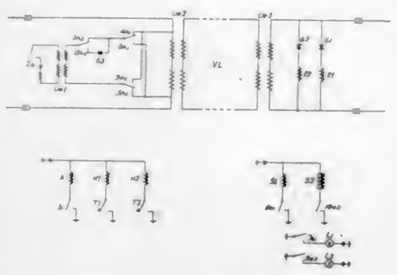
1,862,688. PROCESS FOR MAKING A FIBROUS BUILDING MATERIAL. EMIL C. LOETSCHER, Dubuque, Iowa. Filed July 12, 1929. Serial No. 377,918. 5 Claims. (Cl. 92—61.)

1. The process of manufacturing a composite fibrous material consisting of compressing a relatively thick mat of the moist material in the presence of heat for a period of time sufficient to remove a predetermined portion of the moisture and reduce the same to substantially its final thickness and density, releasing the material from compression and reducing the same to substantial dryness; and again compressing the material to its final thickness and density.

1,862,689. TELEPHONE SYSTEM. FRITZ LUBBERGER and GERHARD ROTHERT, Berlin, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemenstadt, near Berlin, Germany. Filed Aug. 3, 1931, Serial No. 554,701, and in Germany Nov. 21, 1930. 9 Claims. (Cl. 179—84.)

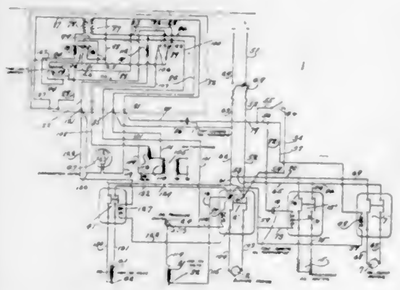
1. In a signal transmission system, a trunk line, switching devices inductively connected to one end of the trunk

line for transmitting current impulses of different polarity over the trunk line, signals at the other end of the trunk line, and discriminating means at said other end of the



trunk line responding to the current impulses in accordance with their polarity to operate one of the signals corresponding with the polarity of the received impulses.

1,862,690. OIL BURNING APPARATUS. JAMES N. MACRAE and RALPH S. THORESEN, Stamford, Conn., assignors to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 28, 1929. Serial No. 388,884. 8 Claims. (Cl. 158—28.)

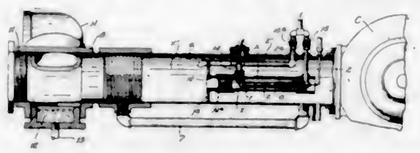


1. Oil burning apparatus comprising in combination a burner, a blower therefor, an electric blower motor, an electric switch for controlling the circuit of the blower motor, means for supplying oil to the burner, means for preheating the oil, a transformer, a thermostatic switch in the circuit of said transformer operated by the oil temperature, a relay controlled by said transformer for controlling said electric switch, and a valve for preventing a flow of oil to the burner prior to the closure of said thermostatic switch, operation of the blower motor being essential to an opening of said valve.

4. In oil burning apparatus, the combination of a burner, means for supplying oil thereto, means for preheating the oil, a valve controlling the admission of oil to the burner, means controlled by the temperature of the oil for operating said valve to control the admission of oil for ignition, a second cooperating valve, and means for opening said second valve only after the operation of the first-mentioned valve for controlling the admission of maximum oil to the burner after the operation of the first-mentioned valve.

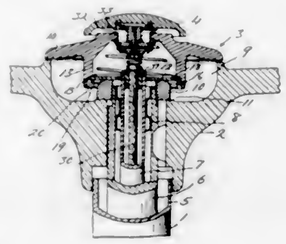
1,862,691. OIL BURNER. WALTER L. MAJORS, St. Louis, Mo. Filed Feb. 4, 1928. Serial No. 251,889. 7 Claims. (Cl. 158—28.)

2. An oil burner, comprising a tubular member having an air inlet at one end, a flame discharge portion at the opposite end of said member, a partition within said member forming a combustion chamber with said flame discharge portion, means for supplying fuel to said combustion chamber and a sleeve of greater diameter than



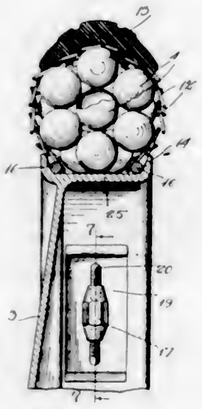
said tubular member which joins said flame discharge portion to said member and also forms a pocket between said parts, for the purpose described.

1,862,692. STEERING CONTROL. HENRY MARLES, Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 25, 1929. Serial No. 409,598. 2 Claims. (Cl. 74—89.)



2. In a steering wheel control assembly, a steering column including a rotatable shaft, a control member having a recess and a series of integrally formed lugs extending into said recess, a disk like member rigid with said shaft and being formed with a plurality of peripheral lugs interlocking with the lugs aforesaid, said first mentioned lugs being provided with grooves, and a resilient ring received in said grooves for maintaining said lugs in interlocking relation.

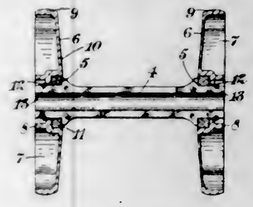
1,862,693. TIRE. JAMES V. MARTIN, Garden City, N. Y. Filed Mar. 2, 1926. Serial No. 91,792. 2 Claims. (Cl. 152—5.)



2. In a resilient tire, a tread of flexible material, a metallic mesh structure centrally vulcanized to the inner surface of said tread and exposed thereon, said mesh

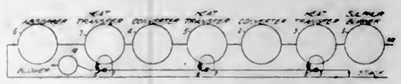
structure constituting heat radiating means for said tread, the side portions of said mesh structure projecting laterally from the tread to constitute open mesh side walls for the tire, means for securing the lateral edges of the side walls to a wheel center, and a multiplicity of rubber objects in the space within the mesh structure, the major number of the said objects being in contact with the metallic mesh whereby the latter acts to radiate heat from said objects.

1,862,694. BOBBIN. FREDERIC WHIGHAM MCCONNEL, Martley, and ALFRED HUMPHRIES, Worcester, England. Filed Dec. 19, 1929, Serial No. 415,299, and in Great Britain Dec. 21, 1928. 5 Claims. (Cl. 242—123.)



1. A bobbin comprising in combination a sleeve having a shoulder near each end, two opposed end flanges thereon with opposed annular recesses facing one another so as to afford accommodation for an annular buffer to engage the sleeve and shoulder thereon.

1,862,695. METHOD OF AND MEANS FOR TREATING WASTE GASES. HENRY F. MERRIAM, West Orange, N. J., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Mar. 13, 1926. Serial No. 94,561. 15 Claims. (Cl. 23—176.)



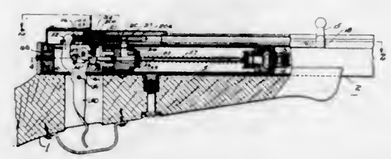
14. The process of treating exit gases from an operation involving an exothermic reaction wherein excess heat is developed which consists in absorbing excess heat in an unobjectionable gas to raise the temperature of such unobjectionable gas in excess of the normal discharge temperature of said exit gases, and then mixing the said heated unobjectionable gas with the exit gases from the system prior to discharge therefrom to raise the temperature of the exit gases substantially above normal exit temperature.

1,862,696. GENERATION AND APPLICATION OF AMMONIA AND COMPOSITION THEREFOR. FLOYD J. METZGER, New York, N. Y., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 9, 1928. Serial No. 260,551. 6 Claims. (Cl. 23—195.)

1. The method of generating ammonia which comprises admixing calcium cyanamid with an inorganic material containing combined water to form a mixture substantially dry at ordinary temperatures, and heating the resulting mixture to a sufficient temperature to drive off the water of combination and to cause it to react with the calcium cyanamid to produce ammonia.

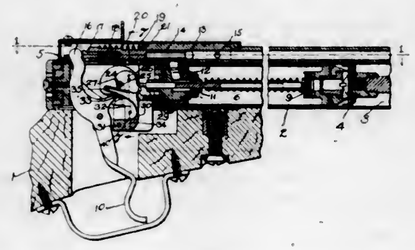
6. A new composition for use in the generation and application of ammonia comprising calcium cyanamid and an alkali earth hydroxide, the same being intimately admixed to form a substantially dry mixture at ordinary temperatures which can be stored and shipped and which on heating to a high temperature will give off combined water which will react with the calcium cyanamid to form ammonia.

1,862,697. AIR RIFLE. FRANK MIHALYI, St. Louis, Mo., assignor to Benjamin Air Rifle Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 19, 1930. Serial No. 445,728. 17 Claims. (Cl. 124—8.)



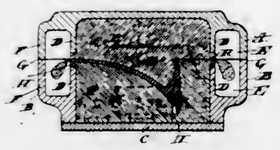
1. In an air gun, a magazine barrel, a discharge barrel, a passageway between said barrels, a member movable in said discharge barrel, and a spring engaging said discharge barrel and said member and tending to move said member rearwardly in said discharge barrel to open said passageway to admit a bullet from said magazine barrel into said discharge barrel.

1,862,698. AIR RIFLE. FRANK MIHALYI, University City, Mo., assignor to Benjamin Air Rifle Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 19, 1931. Serial No. 509,829. 11 Claims. (Cl. 124—8.)



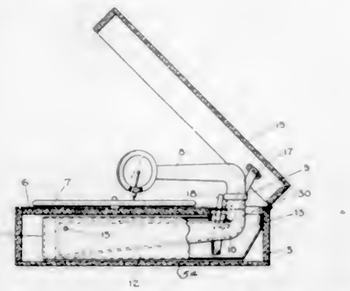
2. In an air gun, a compressed air chamber, a discharge valve, a trigger, mechanism for opening said valve, said mechanism being set in motion from the cocked position by said trigger and thereafter momentarily opening said valve independently of said trigger and means for automatically returning said mechanism to said cocked position.

1,862,699. FLASK FOR MANUFACTURING ARTIFICIAL DENTURES. ROLAND M. MILLER, Cleveland, Ohio. Filed Dec. 30, 1929. Serial No. 417,273. 3 Claims. (Cl. 18—33.)



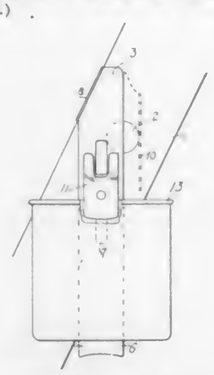
1. In a flask for the manufacture of an artificial denture, upper and lower metal flask portions and a cover for the upper portion, said portions being provided with integral spaced outer and inner concentric side walls forming registering channels therein and providing an external overflow chamber thereabout, the edges of the outer walls being in contact with each other to form the parting line of said flask, the edges of said inner walls being vertically separated to provide a lateral opening through which the matrix material will pass, to line the walls of said opening and prevent contact of the denture material therewith.

1,862,700. TALKING MACHINE AND THE LIKE. FRANK ALLEN MITCHELL, London, England, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Oct. 12, 1927, Serial No. 225,732, and in Great Britain Nov. 4, 1926. 17 Claims. (Cl. 274—2.)



1. In a talking machine, a cabinet including a motor-board and a base, said motor-board and base being spaced apart to form a compartment and said motor-board arranged to provide an exit from said compartment, a horn extending into the space between the motor-board and base, a reflector, said horn having an outlet delivering sound against the reflector, an amplifying chamber between said motor-board and base and of a height substantially equal to the distance between the motor-board and base and closed at one end by said reflector, said amplifying chamber carrying the sound in a direction opposite to its direction of travel in said horn, and discharging it upwardly through the exit opening.

1,862,701. LADDER BRACKET FOR PAINT POTS. EDWARD J. MOELTER and DORR R. BATES, Lansing, Mich. Filed Jan. 15, 1931. Serial No. 509,015. 3 Claims. (Cl. 248—22.)

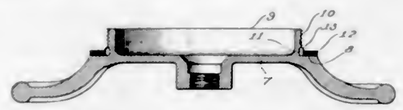


1. A ladder bracket formed of a unitary metal sheet, having a body portion, said body having a device for supporting a paint pot, an inclined end portion, a flat inner face, a tongue extending from said face in the same direction as the body and spaced therefrom, and removable means for holding a paint brush upon the said body.

1,862,702. INSULATING BUILDING MATERIAL. GEORGE L. OSWALT, Forest Park, Ill. Filed Feb. 11, 1929. Serial No. 339,274. 1 Claim. (Cl. 106—24.)

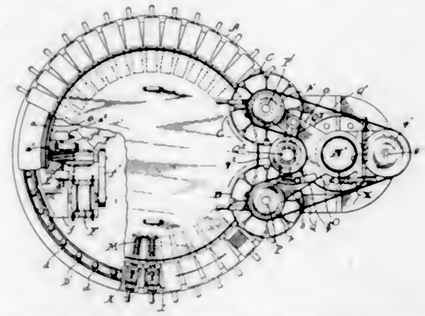
As a building material uniting a maximum of compressive strength and a maximum of heat insulating value, formed concrete composed of an aggregate of coal cinders of two orders of size, the fragments in one order of size ranging between 1/16 to 5/16 of an inch in diameter and the fragments of the other order of size being between 5/16 and 1 inch in diameter, and a matrix of set cement, the fragments of the larger order of size being approximately four parts in volume to three parts of the fragments of the lower order of size.

1,862,703. GASKET. FRANK J. OVEN, Chicago, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 515,904. 5 Claims. (Cl. 288—1.)



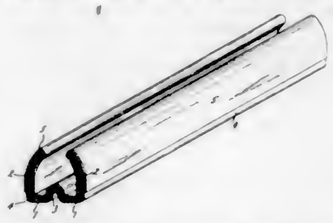
4. A gasket comprising a layer of gasket material, a bottom metal layer folded over the inner and outer edges of the gasket material, and a top metal layer having one edge engaged with a folded edge of the bottom layer and its other edge provided with an upstanding flange adapted to be bent downwardly to form a means for centering and retaining the gasket on its seat.

1,862,704. TILE GRINDING MACHINE. THEODORE C. PROUTY and WILLIS O. PROUTY, Hermosa Beach, Calif., assignors to American Encaustic Tiling Company, Ltd., New York, N. Y., a Corporation of New York. Filed Oct. 31, 1927. Serial No. 230,112. 17 Claims. (Cl. 51—134.)



11. In a tile grinding machine, a carrier, a work holder thereon including a plurality of jaws, a resiliently mounted lever attached to one of said jaws and adapted to move the jaw, a resiliently mounted thrust rod, and a manually operable member pivoted to the thrust rod and engageable with the lever.

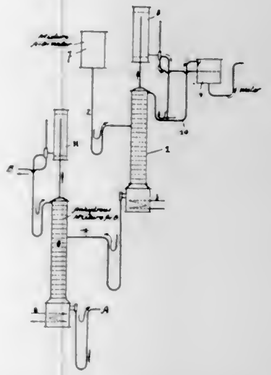
1,862,705. FLUTED CHANNEL. JAMES S. REID, Shaker Heights, Ohio, assignor to The Reid Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 17, 1930. Serial No. 468,676. 2 Claims. (Cl. 296—44.5.)



1. A window channel comprising an inner spring metal core in channel form including flat bottom portions and side flanges bent at substantially right angles thereto and

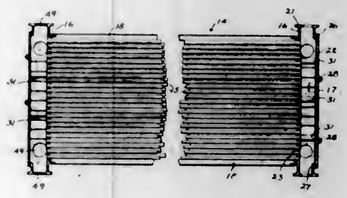
curved inwardly to form glass engaging portions near their outer edges, and a suitable flute formed in the base for permitting lateral yield of the channel to adapt it to varying outer dimensions of window grooves.

1,862,706. CONTINUOUS PROCESS FOR SEPARATING ORGANIC LIQUIDS. ELOI RICARD and HENRI MARTIN GUINOT, Melle, France, assignors to U. S. Industrial Alcohol Co., New York, N. Y., a Corporation of West Virginia. Filed Nov. 14, 1928, Serial No. 319,265, and in Belgium Feb. 6, 1928. 7 Claims. (Cl. 202—42.)



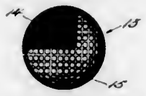
1. A continuous process for the separation of organic liquids contained in mixtures containing an organic liquid A, which is insoluble or slightly soluble in water, an organic liquid B more volatile than A, and water, the said process comprising first dehydrating the said mixture in a continuous manner by distilling the same in a column in the presence of a water entrainer placed once for all in the still, condensing the vapors evolved from the column, decanting the condensate, and returning continuously to the column the layer of entraining liquid, separating continuously in a second column an anhydrous mixture obtained at the lower part of the column of azeotropic dehydration, and collecting the pure liquid B at the top and the liquid A at the base of the said second column.

1,862,707. HEAT EXCHANGER UNIT. WILLIAM L. RIFENBERICK and CHARLES O. SANDSTROM, Los Angeles, Calif. Filed June 14, 1930. Serial No. 461,128. 6 Claims. (Cl. 257—248.)



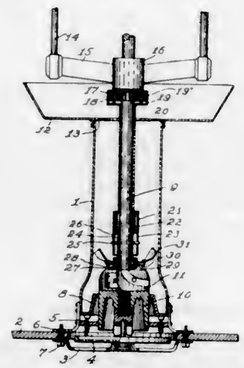
1. In a heat exchanger, a generally trough-like header member having a wall formed as a tube plate and side walls integral with said wall, said side walls provided with mutually parallel and relatively low ribs extending from and across the opposed inner faces thereof, and a partition for removable and entirely lateral engagement with and between ribs of the different side walls whereby to partition the header space.

1,862,708. PRACTICE GOLF BALL. LOUIS FRANK ROSENBERG, Providence, R. I. Filed Oct. 31, 1931. Serial No. 572,278. 2 Claims. (Cl. 273—62.)



1. A practice golf ball having its surface divided into two continuous colored areas having greatly different perceptibility to the eye of a player, the area of less perceptibility covering a substantial portion of the area of the ball visible from one side, whereby one of said areas increases the concentration of the eye of the player thereon to indicate an impact area, and the other of said areas decreases the concentration of the eye of the player thereon.

1,862,709. MACHINE FOR CONSTRUCTING CONCRETE PIPE. ALFRED W. SCHULTZ, Waterloo, Iowa, assignor to Zeidler Concrete Products Machinery Company, St. Joseph, Mo. Filed Mar. 24, 1930. Serial No. 438,488. 10 Claims. (Cl. 25—36.)



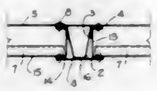
9. In a machine of the character described, an open end mold casing, a troweling device movable rotatably and for longitudinal movements therethrough, an apertured pallet mounted removably upon the open end of said casing to project inwardly thereover, sectional distributing arms rotatable in and movable longitudinally in said casing, said arms each having an outer section movable outwardly longitudinally limitedly upon an inner section, resilient means for yieldingly propelling said outer section outwardly, and coacting operating means between said troweling device and said arms adapted to rotate the arms in a direction opposed to the direction of rotation of said troweling device.

1,862,710. JEWELRY CONSTRUCTION. WILLIAM SILVERMAN and MAURICE CONSTANTINE, Providence, R. I. Filed July 31, 1931. Serial No. 554,178. 5 Claims. (Cl. 63—15.)



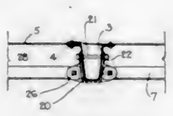
1. In a construction for a finger ring or the like, a bezel member, an arcuate band member secured at its ends to the bezel member, and shoulders mounted at the junction of said members and secured to both said members, whereby completely closed hollow chambers are formed.

1,862,711. LOAD LIFTING DEVICE FOR RAILWAY CARS. ARTHUR E. SMALL, Chicago, Ill., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 456,575. 8 Claims. (Cl. 108—5.4.)



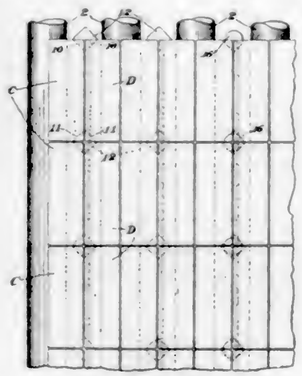
1. In a railway car, the combination of a U-shaped carline having lateral flanges at its upper margins, roofing, means securing said roofing to said flanges, a bracket secured to said flanges by said means, and a load lifting beam supported by the bracket.

1,862,712. LOAD LIFTING ARRANGEMENT FOR RAILWAY CARS. ARTHUR E. SMALL, Chicago, Ill., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 457,577. 8 Claims. (Cl. 108—5.4.)



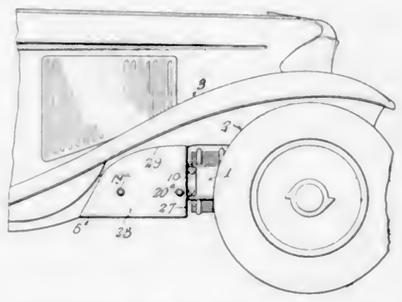
1. In a railway car, the combination of a U-shaped carline having spaced apart substantially vertical walls, roofing secured to said carline and closing the channels therein, a bracket having spaced apart portions on opposite sides of the carline, means passing through both walls of said carline and through both portions of said bracket to secure the bracket to the carline, and load lifting beams secured to said bracket of said carline.

1,862,713. FURNACE WALL. ARTHUR E. SMITH, Newton, Mass., assignor to Bernitz Furnace Appliance Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 10, 1930. Serial No. 501,304. 9 Claims. (Cl. 122—6.)



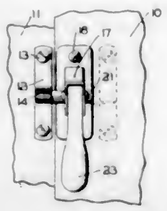
1. In a furnace wall, the combination with a series of upwardly extending parallel supports, of a wall facing comprising blocks arranged in two opposed series between each pair of adjacent supports, the blocks in each series being positioned end to end and each bearing against its respective support, the blocks of one series, each having between its ends, faces inclined laterally with reference to said supports, located between the supports and positioned in opposed relationship to similarly inclined faces on the blocks of the other series, and devices engaging said inclined faces and operating through them to cause the tendency of the superposed blocks to slide lengthwise of the supports under the influence of gravity to crowd the opposed blocks away from each other and into contact with their respective supports.

1,862,714. BATTERY MOUNTING FOR AUTOMOBILES. HERBERT C. SNOW, Auburn, Ind., assignor to Manning & Co., Chicago, Ill., a Corporation of Illinois. Filed July 17, 1930. Serial No. 468,528. 13 Claims. (Cl. 180—68.5.)



1. In combination with an automobile including a side frame member and an associated fender, means secured to and projecting from the outside of said side frame member beneath the fender and providing a support for a battery which support is open along that side spaced from the frame member for the lateral removal and insertion of the battery from below the fender and removable means for closing the open side of said support for retaining the battery therein.

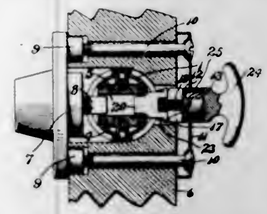
1,862,715. RIGHT AND LEFT HAND LATCH. FOSTER K. SOLLIDAY and CORNELIUS DE RIDDER, Grand Rapids, Mich., assignors to National Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Jan. 19, 1931. Serial No. 509,576. 10 Claims. (Cl. 292—244.)



10. A latch device comprising a housing member, a handle pivotally mounted therein, a latch bolt and means to movably mount the latch bolt so as to extend from either side of the handle whereby the latch device is either right hand of left hand as desired.

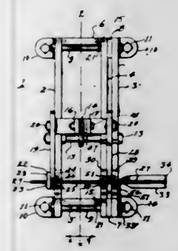
1,862,716. LATCH BOLT OPERATING MEANS. FOSTER K. SOLLIDAY, Grand Rapids, Mich., assignor to National Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Aug. 10, 1931. Serial No. 556,086. 7 Claims. (Cl. 292—358.)

1. Latch bolt operating means comprising, a plate adapted to be attached to a side of a door, a body member rotatably mounted on and extending through said plate, manually operable means at the outer end of said member for turning the same, an engaging member adjustably mounted for movement on said body member in the direction of the



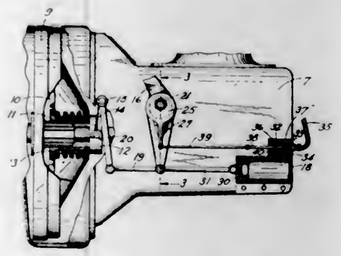
length of said body member adapted to engage with a bolt operating means, and spring means for normally moving the engaging member inwardly, as specified.

1,862,717. DEVICE FOR FORMING WIRE FASTENERS. ELMER SORRICK, Newark, N. J., assignor to M. Platt, Inc., Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 2 1931. Serial No. 512,774. 12 Claims. (Cl. 140—71.)



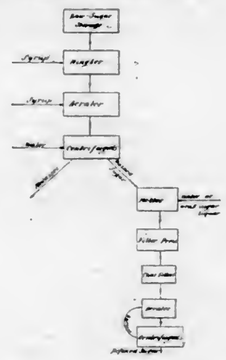
1. A forming device of the character described comprising, a frame, said frame having guide means therein for receiving wire or rod stock, a shearing member pivotally mounted on said frame, a forming member pivotally mounted on said frame, said shearing and forming means being rotatable about a common axis, and a single power transmission means connected to said shearing and forming members, said power transmission means simultaneously actuating said shearing and forming means to initially cause said shearing member to sever the stock carried by said guide means and thereafter to cause said forming member to bend said stock into desired shape.

1,862,718. FORCE AMPLIFYING MEANS. WILLIAM R. SPILLER, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 433,151. 12 Claims. (Cl. 192—085.)



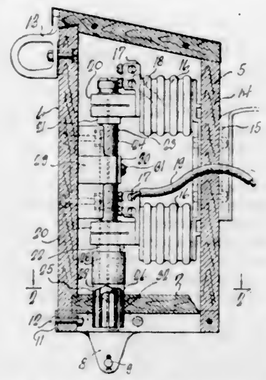
1. In combination, a spring closed clutch, a manually operable fulcrumed lever for opening said clutch, a fluid pressure cylinder having a piston associated with said lever, a valve for connecting said cylinder with a source of power to create a pressure on said piston tending to open said clutch, and means associated with the fulcrum of said lever and controlled by the pressure of said lever against its fulcrum for opening said valve.

1,862,719. REFINING SUGAR. CLAUS A. SPRECKELS, New York, N. Y. Filed Mar. 26, 1928. Serial No. 264,887. 11 Claims. (Cl. 127—60.)



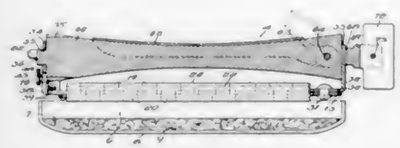
1. In a process of refining sugar the steps which comprise forming a mixture of raw sugar and a sugar-coating liquid and subjecting said mixture to vigorous agitation by passing air in finely-divided form therethrough, continuing such treatment until crystallization of sucrose from the liquid begins, adding fresh sugar-containing liquid and continuing the treatment until the sugar crystals have been grown to the desired extent, and separating the crystallized sugar from the residue.

1,862,720. HOUSING FOR ELECTRICAL DEVICES. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed July 24, 1929. Serial No. 380,663. 9 Claims. (Cl. 200—133.)



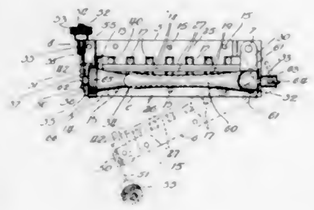
1. In a device of the character described, a housing having line terminals therein, a door swingingly connected with the housing adapted to close the housing and having an opening extending through a portion thereof, and an expulsion fuse carried by the door in spaced relation thereto but having its discharge end snugly received within the opening in the door to vent the gases incidental to volatilization of the fuse exteriorly of the housing, and contacts carried by the fuse and engageable with the line terminals as the door is closed.

1,862,721. HAIR WAVER. BERNARD A. STERLING, Chicago, Ill. Filed Jan. 16, 1929. Serial No. 332,831. 14 Claims. (Cl. 132—33.)



1. A hair waver comprising a protecting clamp and a curler, said clamp comprising pivoted jaws, fastening means comprising an apertured tongue and a spring pressed pivoted detent arm engaged automatically by the closing of said jaws for holding same closed, and means on said jaws for rotatably supporting the curler with the hair wound thereon.

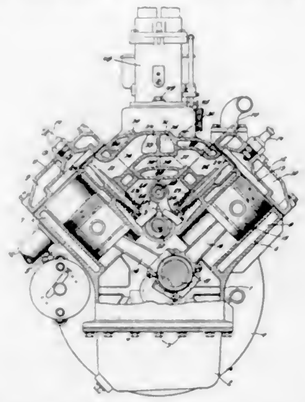
1,862,722. HAIR WAVER. BERNARD A. STERLING, Chicago, Ill. Original application filed May 8, 1929, Serial No. 361,285. Divided and this application filed Jan. 29, 1930, Serial No. 424,185. Renewed Mar. 4, 1932. 4 Claims. (Cl. 132—36.1.)



3. A hair waver clamp comprising a pair of clamping jaw members pivotally connected together at one end to swing relatively to each other in the same plane and having cooperating edges, and means at the free ends of said jaw members for detachably securing said fore ends with the cooperating edges in proximate clamping position comprising a substantially U-shaped receiving element extending from the free end of one of said jaw members in a plane normal to the plane of said jaw members, a rod pivoted to the other of said jaw members and adapted to swing in coplanar relation to said receiving element, said receiving element having converging guide portions to guide said rod into cooperative relation therewith, a stop shoulder on said rod adapted to cooperate with said receiving element to maintain said rod in a plane substantially parallel with the plane of said jaw members in cooperative relation, and adjustable means on said rod adapted to cooperate with said receiving element for drawing the free ends of said jaw members together, said securing means being disposed in spaced relation to that plane of said jaw members in the clamping position thereof.

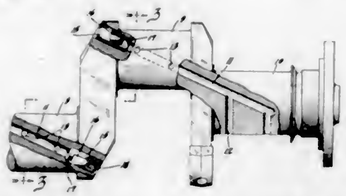
1,862,723. V-TYPE ENGINE. CALEB E. SUMMERS, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 7, 1929. Serial No. 397,859. 26 Claims. (Cl. 123—55.)

1. An internal combustion engine, including a crankcase and a pair of spaced divergently disposed cylinder blocks integral with the crankcase, and a cover removably secured to the blocks to completely close the open space



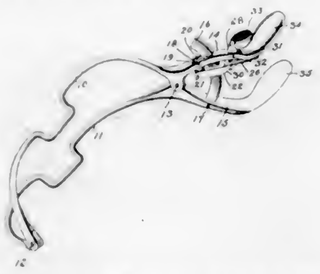
therebetween above the crankcase, said cover having passages therein in communication with corresponding passages in the two blocks.

1,862,724. LUBRICATING SYSTEM. CALEB E. SUMMERS, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 9, 1931. Serial No. 507,558. 13 Claims. (Cl. 184—6.)



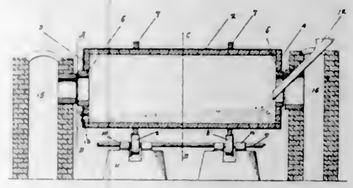
1. In a rotatable element, a fluid passage associated with the element and extending in the general direction of the axis of rotation but eccentric thereto, whereby the heavier particles in the fluid are thrown outwardly against the outermost part of the passage wall under centrifugal force upon rotation of the element and an outlet in the wall of the passage at other than the outermost part thereof so as to reduce the likelihood of such particles passing through the outlet.

1,862,725. DILATOR. ROBERT THOMAS and WILLIAM THOMAS, Philadelphia, Pa. Filed June 7, 1930. Serial No. 459,632. 6 Claims. (Cl. 128—345.)



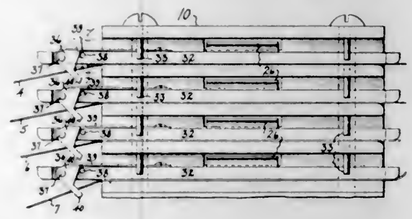
3. A dilator comprising pivoted handles, a segment carried by one handle and slidably inserted through a slot in the other handle, a slotted clutch bar slidable upon the segment and pivoted to the last mentioned handle, and means providing longitudinal and oscillating movement to cause said clutch bar to bitingly engage the segment within its slot.

1,862,726. ROTARY ORE FURNACE. ALFRED M. THOMSEN, San Francisco, Calif. Filed June 24, 1929. Serial No. 373,252. 8 Claims. (Cl. 263—33.)



5. A continuous feed ore furnace, consisting of a horizontally disposed cylindrical shell rotatable about a horizontal axis; opposing heads for said shell, one provided with a heat intake, the other with an untreated ore intake; and an open passage-way provided with an adjustably mounted gate located in said heat intake head for regulating the duration of the ore roasting period.

1,862,727. MECHANISM FOR WINDING COPPER RIBBON WITH TAPS INTO MULTIPLE COILS. CHESTER H. THORDARSON, Chicago, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1930. Serial No. 425,336. 7 Claims. (Cl. 242—76.)



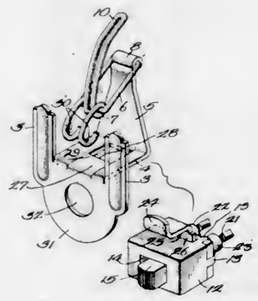
1. A guide and tensioning means for strips having transverse tabs comprising a support over which a metallic strip may slide, a pressure shoe on said strip, a movable guiding arm mounted on said shoe, and means for varying the pressure on said shoe, the tabs on the strip engaging said arm to move it out of their path.

1,862,728. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Dec. 20, 1929. Serial No. 415,520. 9 Claims. (Cl. 72—68.)



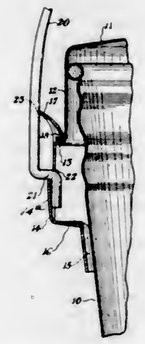
4. In a building structure a suitable floor having embedded therein and depending therefrom supports for a common carrier, a common carrier fixed to said supports, precast slabs having slotted ends arranged end to end, carried by said supports, hook-like members arranged upon said common carrier for engaging the slotted parts of said slabs, and tie wires for securing said slabs with respect to one another endwise.

1,862,729. ASSEMBLING DEVICE. FELIX J. WATTS, Bronson, Mich., assignor to Harry A. Douglas, Bronson, Mich. Filed Aug. 8, 1930. Serial No. 473,820. 5 Claims. (Cl. 248—20.)



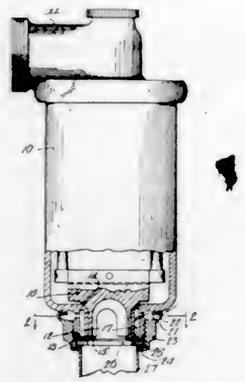
1. In combination with a spring metal mounting bracket having two angularly related abutments; of a member also having two angularly related abutments that are respectively engageable with the abutments of the bracket; and a single spring metal clamping device upon the mounting bracket and positioned with respect to said member to maintain the abutments of this member respectively in engagement with the abutments on the bracket.

1,862,730. COVER LOCK FOR PAILS. VIRGIL P. WENDLE, Dover, Ohio, assignor to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed Jan. 25, 1929. Serial No. 334,997. 2 Claims. (Cl. 220—56.)



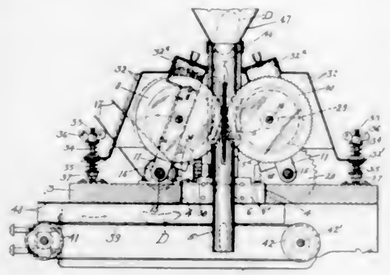
1. In combination with a receptacle, a cover therefor provided with a peripheral bead, a one-piece ear at each side of the receptacle near the upper end thereof, an integral resilient tongue upon each ear for locking engagement with the bead upon the cover, and a handle bail carried by said ears, each ear having a notch for engagement with the handle bail to hold the tongues in locking position.

1,862,731. SIPHON-BREAK FOR FLUSH VALVES, ETC. HAROLD WESSON, Springfield, Mass., assignor to Smith and Wesson, Inc., Springfield, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1929. Serial No. 413,750. 8 Claims. (Cl. 137—93.)



1. A conduit for connection to the discharge size of a flush valve, said conduit having ports adjacent the end thereof, an annular member on the conduit and having passages leading from the ports longitudinally of the conduit toward the flush valve and to the atmosphere, the passages being open under all conditions of operation.

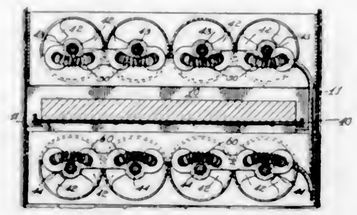
1,862,732. SEEDER. CLYDE M. WESTCOTT, Los Angeles, Calif. Filed Sept. 17, 1928. Serial No. 306,346. 4 Claims. (Cl. 146—17.)



1. A seeder for removing the seeds from fruit including a vertical tubular member through which the article is fed, radially disposed cutters operating through slots in the sides of said tubular member, means for driving said cutters together, an inner tubular member telescoping up into said first tubular member and having a conical upper end slitted to receive said cutters, said conical upper end being open to receive the seed and adapted to peel the meat from the fruit as it is forced down by said cutters between the inside of the outer member and outside of said inner tubular member.

1,862,733. ELECTRIC TOASTER. HORACE CALDWELL WRIGHT, Oak Park, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1929. Serial No. 366,788. 16 Claims. (Cl. 53—5.)

10. In a heat treatment apparatus, a heating unit mounted in fixed position; a carrier for the article to be treated mounted fixedly with respect to the heating unit, and means for concentrating the heat radiated from the heating unit on the article on the carrier, said means being mounted for movement back and forth between a



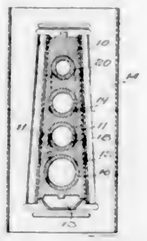
position for directing the radiated heat toward the article and a position for directing the heat away from the article treated.

1,862,734. SHOE AND SHANK STIFFENER THEREFOR. REINHARD B. BARTELS, Melrose, Mass. Filed Feb. 10, 1928. Serial No. 253,316. 4 Claims. (Cl. 36—76.)



4. A shank stiffener for positioning between an inner and an outer sole of a shoe and comprising a pair of superposed members secured together in predetermined relation, the upper of said members having an upwardly projecting hump to produce a corresponding hump on the upper face of the inner sole, and the lower of said members being formed with a definite configuration and imparting a desired finish contour to the outer sole, said stiffener thus aiding to definitely locate said hump on the innersole relative to the contour of the outer face of the outer sole whereby to facilitate constructing of shoes uniform with respect to such location.

1,862,735. RADIATOR. EARL H. BELING, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed July 28, 1930. Serial No. 471,293. 12 Claims. (Cl. 257—145.)



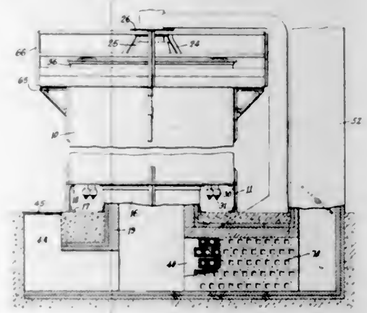
3. In a radiator, the combination of a wedge shaped core and a plurality of radiating fins wedged upon the core, the core being provided with a plurality of communicating passageways extending therethrough for the circulation of fluids, said passageways being afforded by a tube assembly embedded within the core and comprising a single longitudinally extending header tube located near the base of the core and a plurality of branch tubes located at progressive elevations within the core and each having both of its ends downturned and in communication with the header tube.

1,862,736. ELECTRIC RAILROAD SYSTEM. RICHARD CRETER, New York, N. Y. Filed June 6, 1928. Serial No. 283,268. 2 Claims. (Cl. 246—31.)



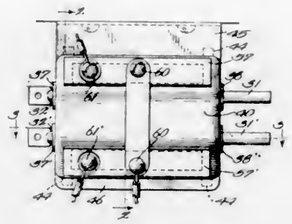
1. In an electric railroad system the combination which comprises a live section of railroad track, a second section of track conflicting with said live section and capable of being rendered dead and an electro-magnet circuit connected in shunt with the power circuit of said live section of track, an armature circuit connected in series with the power circuit of said second section of track, said electro-magnet circuit and said armature circuit being associated with each other in such a manner that when a train is located in the first-named section of track the electric power is cut off in the power circuit of said second-named track, and a signal system electrically connected with said electro-magnet circuit and said armature circuit in such a manner as to operate and signal to an anterior train in the live section to proceed and to a posterior train in the second section to stop.

1,862,737. METHOD OF OPERATING FURNACES. LUIS DE FLOREZ, Pomfret, Conn., assignor to The Texas Company, a Corporation of Delaware. Original application filed Oct. 29, 1926, Serial No. 145,054. Divided and this application filed Nov. 3, 1928. Serial No. 317,028. 3 Claims. (Cl. 196—116.)



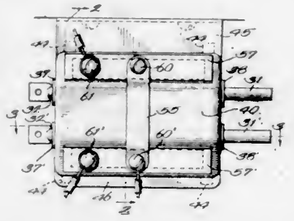
1. The method of quickly raising hydrocarbon oils to a high temperature, comprising burning a fuel to create a source of intensive radiant heat and impelling the flame and the products of combustion in a vertical unobstructed path, passing the oil in a series of vertical parallel paths, all of said paths being in substantially uniform radiative relation to the source of heat and parallel to the path of the flame and products of combustion, to quickly absorb such heat and reduce the temperature of the combustion gases, withdrawing the gases while maintaining them in substantially non-convective relation to said paths, and passing the gases in convective relation to the air employed for combustion to preheat the same.

1,862,738. SIGNALING SYSTEM FOR AUTOMOTIVE VEHICLES. HARRY A. DOUGLAS, Bronson, Mich. Filed May 16, 1929. Serial No. 363,682. 8 Claims. (Cl. 200—1.)



1. Switching mechanism including a support; two switching devices each including a contact actuating member and two complemental contacts of which one is in the form of a contact arm; and reversible insulating bars assembled with said support and having the contact arms assembled therewith and also carrying the contacts complemental to the contact arms, the places of assembly of these complemental contacts with the insulating bars being substantially midway between the ends of the bars while the contact arms are assembled each at a place upon one side of the place of assembly of the complemental contact pertaining thereto; and a conductor connecting the aforesaid complemental contacts.

1,862,739. SIGNALING SYSTEM FOR AUTOMOTIVE VEHICLES. HARRY A. DOUGLAS, Bronson, Mich. Original application filed May 16, 1929, Serial No. 363,682. Divided and this application filed May 19, 1930. Serial No. 453,505. 1 Claim. (Cl. 200—1.)



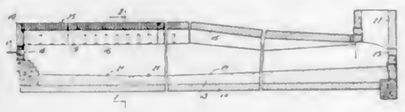
As an article of manufacture, a switch for automotive signaling system comprising, in combination, a casing; a plurality of pairs of bearings in each end of the casing, the casing being split along a plane passing through the axes of all of the bearings; a plurality of reciprocable rods in the bearings and projecting from the casing at each end thereof; a contact member carried by the wall of the casing individual to each rod and operable thereby upon movement of the rod in one direction, said rods and said contact members being reversible in the casing; a contact individual to each rod and complemental to each said contact member; a metallic strap connecting the complemental contacts individual to each rod; and a coil spring on each rod urging it away from its contact member.

1,862,740. PRODUCTION OF MOLDED ARTICLES. THOMAS A. EDISON, West Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Oct. 6, 1928. Serial No. 310,920. 3 Claims. (Cl. 18—47.)

1. The process which consists in applying a thin film of gilsonite to a mold by coating the latter with a solution of such gilsonite in a solvent which is readily volatilized,

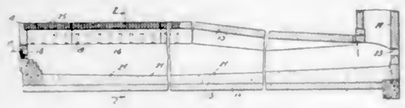
then placing rubber containing material to be molded in the mold in direct contact with said film and molding the same, and removing the molded article from the mold, substantially as described.

1,862,741. SMELTING OF METALLIFEROUS MATERIAL. EMIL ENGBLOM, Caletones, Chile, assignor to Braden Copper Company, New York, N. Y., a Corporation of Maine. Filed Dec. 18, 1929. Serial No. 415,041. 6 Claims. (Cl. 75—17.)



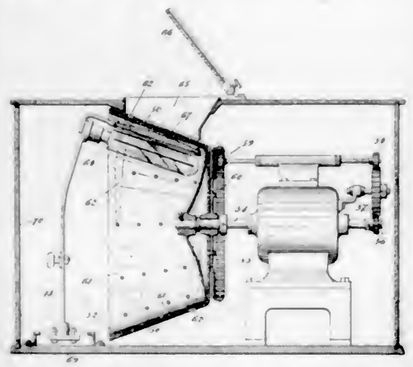
1. The method of smelting metalliferous material in a reverberatory furnace which comprises directing highly heated reducing gases over a charge to be smelted, and supplying air along the inner face of the furnace arch above the charge at a plurality of points in amount adapted to support combustion at least in part of the reducing gases, said air being supplied in a manner adapted to cool the furnace arch while at the same time tending to keep dust particles rising from the charge out of contact with the furnace arch.

1,862,742. SMELTING OF METALLIFEROUS MATERIAL. EMIL ENGBLOM, Caletones, Chile, assignor to Braden Copper Company, New York, N. Y., a Corporation of Maine. Filed Dec. 18, 1929. Serial No. 415,042. 5 Claims. (Cl. 263—44.)



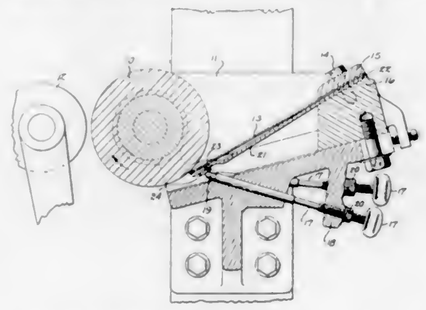
3. In a copper smelting furnace of the reverberatory type, the combination comprising a plurality of spaced slots extending completely through the arch surmounting the smelting chamber, said slots being exposed at their upper ends to the open atmosphere whereby outside air may freely seep through the slots in the chamber.

1,862,743. TELEVISION. CALLO D. FAHRNEY, Cambridge, Mass. Filed Mar. 11, 1929. Serial No. 345,978. 3 Claims. (Cl. 178—6.)



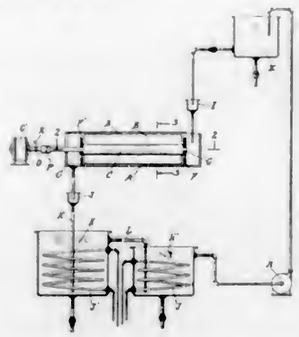
1. In a television receiving apparatus, the combination of a pair of drums one located within the other and both rotatable on parallel axes, the surface of one drum having a plurality of circumferentially spaced light-transmitting apertures arranged in a plurality of spirals, and the surface of the other drum having a plurality of light-transmitting slots, and means to rotate said drums at such relative speed that said slots cooperate with successive spirals of apertures.

1,862,744. INKING MECHANISM. HARLAND FANKBONER, Chicago, Ill., assignor to The Goss Printing Press Company, a Corporation of Illinois. Filed Aug. 31, 1929. Serial No. 389,702. 13 Claims. (Cl. 101—365.)



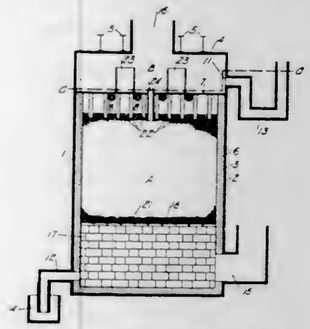
1. An ink fountain including in combination a fountain roller, a fountain blade cooperating therewith, a plurality of spring uniformly spaced along the length of the blade forcing the blade away from the roller and screws for opposing the action of the springs.

1,862,745. PROCESS FOR ELECTRODEPOSITING IRON. GEORGE PRESCOTT FULLER, Niagara Falls, N. Y., and CEDRIC A. VINCENT DAVISS, Niagara Falls, Ontario, Canada, assignors, by mesne assignments, of one-half to said Fuller and one-half to Edward Michael, Buffalo, N. Y. Filed Dec. 12, 1928. Serial No. 325,499. 5 Claims. (Cl. 204—1.)



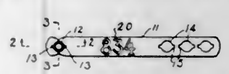
1. The process of electro-depositing seamless iron tubes on a rotatable cathode located in a one-compartment electrolytic cell provided with insoluble anodes, which consists in supplying to said cell an electrolyte consisting of a substantially saturated hot solution of a ferrous salt, containing a small proportion of ferric salt, continuously circulating said electrolyte at a rate determined by the density of the current supplied to the anodes, controlling the rate of circulation so that the ferric iron in the electrolyte in the cell shall not exceed 2.5% of the iron content, reconcentrating the effluent electrolyte with iron or iron compound soluble in ferric salt so that the ferric iron shall not exceed 5 grams per litre, and returning the electrolyte to the cell.

1,862,746. DRYING TOWER. LOWRY GILLETT, Syossett, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Oct. 16, 1926. Serial No. 142,137. 11 Claims. (Cl. 23—283.)



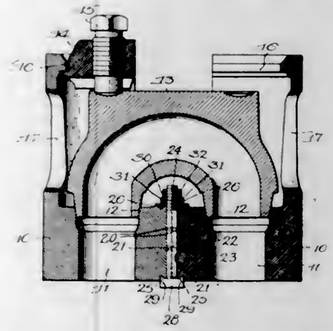
7. A gas drying tower comprising a gas drying portion, a gas collecting portion, means positioned between and connecting said drying portion and said collecting portion for distributing drying reagent to said drying portion, and means formed so as to prevent passage of drying reagent from the collecting portion to the drying portion for connecting said drying portion and said collecting portion independently of said first named means and for equalizing the pressures in said portions.

1,862,747. POULTRY BAND. JOSEPH HAAS, Newport, Ky. Filed Aug. 3, 1931. Serial No. 554,673. 4 Claims. (Cl. 40—3.)



1. A poultry band comprising a flexible metallic strip provided at opposite ends with an opening and an open topped integral stud respectively, impressions forming keys in the base of said stud and cooperating extending slots in said openings, whereby on the ends of the band being brought together said keys locate in said slots to prevent lateral movement of said engaging ends.

1,862,748. RETURN BEND. CLARENCE B. HARRISON, Lima, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed June 27, 1931. Serial No. 547,221. 5 Claims. (Cl. 285—20.)



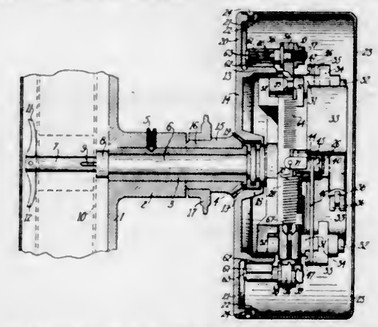
1. In a return bend fitting, a pair of separable yokes adapted to have mutual lateral engagement, a bolt disposed along and between the meeting faces of said yokes, and clamping means carried by said bolt having wedging action with said yokes to draw them toward each other.

1,862,749. TREATMENT OF ARTIFICIAL LEATHER SHEETINGS AND PRODUCT OF SAME. ROGER B. HILL, Berlin, N. H., and JOHN A. FOGARTY, Portland, Me., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 27, 1929. Serial No. 358,745. 4 Claims. (Cl. 92—70.)



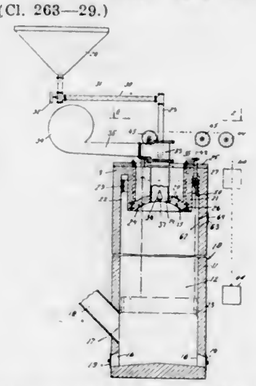
1. A method which comprises wetting dry, rubber-impregnated, fibrous sheet material with water containing a water-soluble dyeing agent, mechanically working it while wet to soften the sheet and to distribute the agent uniformly therethrough, and again drying.

1,862,750. AUTOMATIC VARIABLE FRICTION DRIVE. ARTHUR J. HOLMAN, Brookline, Mass. Filed Dec. 16, 1929. Serial No. 414,483. 11 Claims. (192—103.)



1. In a device of the character specified, a centrifugal spring tension control mechanism comprising a supporting member fast mounted on a variable speed friction driven reel shaft, a pivotally mounted spring tension control arm, pivotally mounted centrifugal weights, links pivotally connected to said control arm and said centrifugal weights in a manner whereby all relative movements of said parts take place in planes perpendicular to said reel shaft, and yielding means opposing the relative movements of said parts in response to acceleration of said reel shaft.

1,862,751. ORE ROASTING FURNACE. HAROLD O. C. INGRAHAM, Greenwich, Conn., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,660. 16 Claims. (Cl. 263—29.)

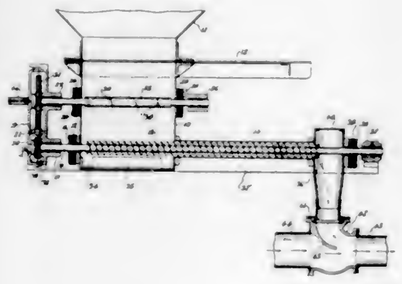


3. A furnace comprising a shell defining a reaction chamber, a crown closing one end of the chamber, a member associated with the crown projecting into the chamber

and forming with the walls of the chamber a recess, a wall cleaning device normally positioned in the recess, and means for moving the device out of said recess and along the chamber walls.

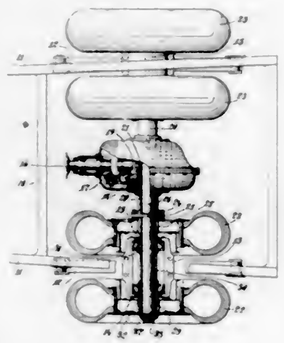
14. An ore roasting furnace comprising a shell defining a reaction chamber, a crown member closing one end of the reaction chamber, a wall-cleaning device in said chamber, and means for moving said device through the chamber in contact with the walls thereof.

1,862,752. PULVERIZED COAL FEEDER. FRED A. JONES and WILLIAM H. HARTMAN, Canton, Ohio, assignors to Jones and Hartman, Inc., Canton, Ohio, a Corporation of Ohio. Filed Apr. 4, 1929. Serial No. 352,484. 2 Claims. (Cl. 221—129.)



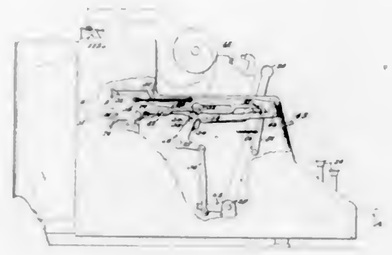
1. A powdered coal feeder including a housing, a plurality of feed screws located through the housing, a plurality of agitator shafts within the housing above the feed screws, a single conduit communicating with the housing to receive the fuel fed by all of said feed screws, and a drive shaft operatively connected to all of said feed screws and agitator shafts for driving all of the feed screws in one direction and all of the agitator shafts in the opposite direction.

1,862,753. DUAL WHEEL MOUNTING AND DRIVE. LYMAN C. JOSEPHS, Jr., and ERVING R. GURNEY, Allentown, Pa., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 24, 1930. Serial No. 504,568. 2 Claims. (Cl. 180—22.)



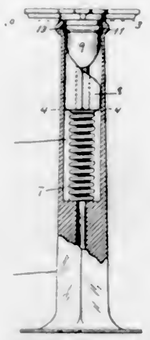
1. A device of the character described comprising a power apportioning means, hollow aligned jack shafts driven by the apportioning means, a shaft section rotatably mounted within the jack shafts, a plurality of wheels driven by each jack shaft, and means to space the wheels apart and connect them as a unit to the respective jack shafts.

1,862,754. AUTOMATIC SHUTTLE MECHANISM FOR ADDING MACHINES. FOREST LINK, Cincinnati, Ohio, assignor to Remington Rand Inc., Tonawanda, N. Y. Filed Sept. 19, 1927. Serial No. 220,324. 13 Claims. (Cl. 197—65.)



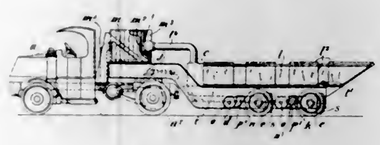
13. In a computing and printing machine, the combination of a carriage, a carriage-driving member having a definite movement at each operation of the machine, means whereby at each of a plurality of successive operations of the machine said member positively communicates to said carriage a step of motion in one direction, and means acting on a different leverage whereby said member at the next operation of the machine positively drives said carriage in the opposite direction to initial position.

1,862,755. LUNCH COUNTER STOOL. PETER MADSEN, Los Angeles, Calif. Filed Oct. 4, 1926, Serial No. 139,334. Renewed May 18, 1929. 7 Claims. (Cl. 155—95.)



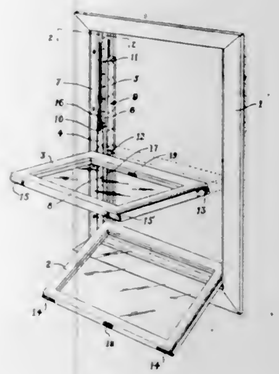
1. A lunch counter stool comprising a seat having a back; a cam secured to said seat, said cam being circular just below the seat and having a groove in said circular part; a pedestal having a chamber in the upper portion into which the seat cam projects; a cam in said chamber slidable but not revoluble therein; a spring in said chamber bearing upon the lower cam; a pierced lug on the upper part of the pedestal; and a bolt through said lug and the groove of the upper cam.

1,862,756. REFUSE DISPOSAL TRUCK. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Original application filed May 29, 1930, Serial No. 456,938. Divided and this application filed June 22, 1931. Serial No. 545,967. 1 Claim. (Cl. 280—33.1.)



A tractor, a closed trailer body, a fifth wheel connection between the body and the tractor, means to elevate the body, a relatively stationary air cleaner, a conduit communicating between the cleaner and body, and a ball joint connecting means between the cleaner and conduit to permit turning of the conduit with respect to the cleaner, said cleaner being formed with a groove to permit the ball joint to be elevated with respect to the cleaner.

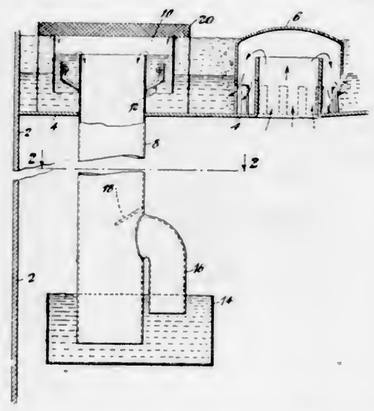
1,862,757. WINDOW CONSTRUCTION. ALBERT W. MENNS, Malden, Mass., assignor, by direct and mesne assignments, to Menns Window Corporation, Boston, Mass., a Corporation. Filed Feb. 18, 1930. Serial No. 429,305. 6 Claims. (Cl. 20—49.)



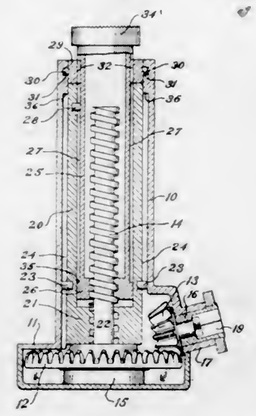
1. In combination, a window frame having stile grooves for sliding sashes, sashes mounted upon riders slidable in the stile grooves, means for locking the sashes to the riders, and cooperating means borne by the riders and the window frame for locking positively against upward movement the riders in the stile grooves at various elevations comprising latch means and integral members adapted at points spaced throughout their lengths to engage with the latch means.

1,862,758. ART OF RECTIFICATION. SYLVAN R. MERLEY, Dover, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 9, 1929. Serial No. 338,811. 5 Claims. (Cl. 261—114.)

1. A vapor rectifying column, comprising a plurality of vertically spaced bubbler trays, a liquid overflow pipe projecting above each tray, for retaining a layer of condensate thereon and for conducting relatively heavy condensate therefrom onto the next lower tray, and a vertically adjustable overflow band spaced from, surrounding and projecting above the upper projecting end of said overflow pipe for maintaining a higher level of relatively light condensate on each tray.



1,862,759. DOUBLE LIFT SINGLE SCREW JACK. JOHN A. MORRISON, Warren, Ohio. Filed Mar. 28, 1931. Serial No. 526,040. 9 Claims. (Cl. 254—102.)

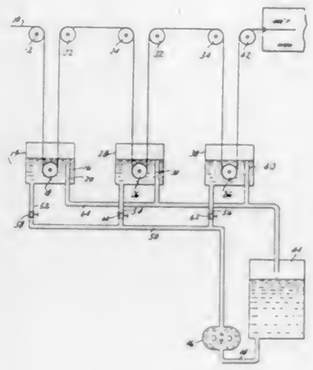


1. A lifting jack including a housing, a screw within the housing, means for rotating the screw, a pair of tubular lifting members normally telescoped within the housing, nuts upon said lifting members for engagement with the screw, a collar at the upper end of the outer lifting member, and means for automatically locking said collar to the inner lifting member when said inner lifting member has been raised to a predetermined point.

1,862,760. FRICTION FABRIC AND METHOD OF MAKING THE SAME. WILLIAM NANFELDT, Paterson, N. J., assignor to World Bestos Corporation, Paterson, N. J., a Corporation of Delaware. Filed Oct. 30, 1928. Serial No. 316,062. 24 Claims. (Cl. 91—70.)

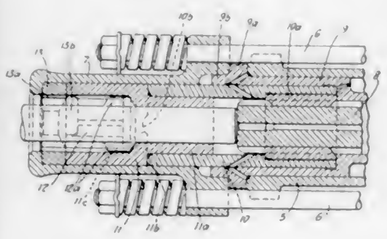
1. A friction fabric comprising a fabric impregnated with a glaze-forming material and a glaze-destroying material in proportions so that as glazing action takes place

in use of the frictioning material the glaze-destroying action or pulverizing action acts simultaneously to maintain a substantially constant coefficient of friction.



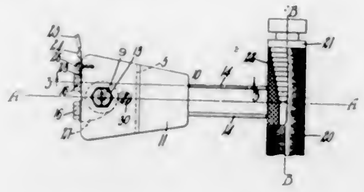
13. A method of making a friction fabric which comprises impregnating a fabric with a glaze-forming material and a glaze-destroying material so that as glazing action takes place in the use of the completed friction fabric the glaze-destroying action acts simultaneously therewith to maintain a substantially constant coefficient of friction.

1,862,761. DRILL CHUCK. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 7, 1929. Serial No. 338,060. 2 Claims. (Cl. 121—7.)



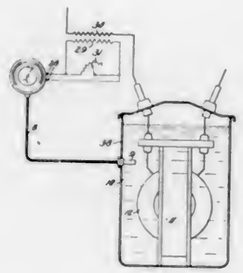
1. Chuck mechanism for percussive drilling machines comprising a rotatable sleeve having a smooth cylindrical internal surface of uniform size, a driver member for receiving the drill steel and for taking the wear of the latter, said member having a part for end engagement with said sleeve and an extended reduced cylindrical portion of uniform size with a smooth exterior to telescope within said sleeve and to engage the same with a press fit, and means on the end engaging parts of said sleeve and member comprising a low rounded projection on said sleeve fitting a cooperating recess or socket in said member, the interfitting arrangement and the press fit of the telescoping portions operating to maintain the engaging parts in rigid and fixed alignment.

1,862,762. ELECTRIC FEELER MECHANISM FOR LOOMS. ROBERT C. NEWTON, Needham Heights, and SHERWOOD O. DODGE, Medford, Mass., assignors to Guaranteed Parts, Inc., Allston, Mass., a Corporation of Massachusetts. Filed Jan. 26, 1931. Serial No. 511,234. 5 Claims. (Cl. 139—273.)



1. A device of the character described having, in combination, a stationary member provided with a recess therein, a feeler mechanism pivotally mounted on said stationary member, and resilient means seated within said recess adapted to return said feeler mechanism to a normal position from opposite directions.

1,862,763. TEMPERATURE INDICATOR. LOUIS C. NICHOLS, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 30, 1922, Serial No. 547,994. Renewed Mar. 9, 1932. 16 Claims, (Cl. 73—52.)

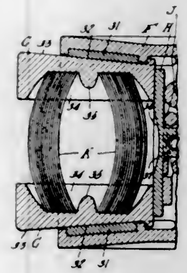


16. A device for measuring the temperature of a current carrying conductor immersed in a cooling medium, comprising in combination, a Bourdon tube, an indicator member, a tube element connected to said Bourdon tube and adapted to be immersed in a cooling medium, means for causing said Bourdon tube to impart rotational movement to said indicator member in response to the temperature of said medium, means responsive to the current in said conductor for imparting additional rotational movement to said indicator proportional to the difference in temperature of said conductor and the temperature of said medium, and a temperature scale arranged in cooperative relation with said indicator member.

1,862,764. FRICTION SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,770. 2 Claims. (Cl. 213—30.)

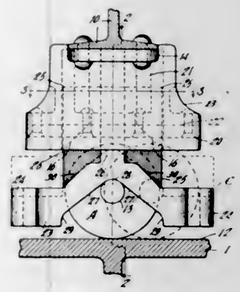
1. In a friction shock absorbing mechanism, the combination with a casing having opposed, interior wedge faces; of a pair of shoes laterally movable toward each other and directly receiving the actuating force, having

wedging engagement with said wedge faces and being slidable lengthwise thereon; spring resistance means opposing inward movement of the shoes; and means yieldingly opposing relative approach of the shoes, including



a group of curved spring plates interposed between said shoes and bearing on said shoes only, said spring plates being arranged transversely of the mechanism and having their opposite ends bearing on said shoes.

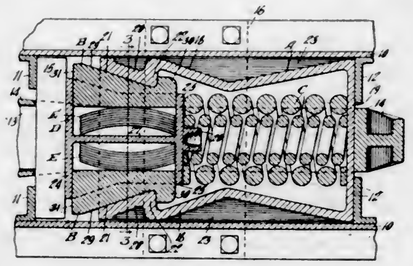
1,862,765. ANTIFRICTION BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,651. 7 Claims. (Cl. 208—226.)



1. In an anti-friction bearing for railway cars, interposed between the body and truck bolsters of the car, the combination with an anti-friction element always supported on the truck bolster; of means for centering said anti-friction element supported at all times on said anti-friction element, and guided for vertical movement on said body bolster, said centering means being automatically adjustable toward and away from the body bolster to correspond with relative adjustments in height of the body and truck bolsters.

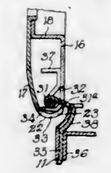
1,862,766. FRICTION SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,266. 5 Claims. (Cl. 213—30.)

5. In a friction shock absorbing mechanism, the combination with a main follower; of a casing having opposed interior, inwardly converging friction wedge surfaces; a pair of friction wedge blocks having wedging engagement with the wedge surfaces of the casing; a carrier telescoped within the casing and supporting said wedge blocks; a main spring resistance opposing inward movement of the carrier; guide means forming a part of the carrier rigid therewith for guiding the friction wedge blocks for movement transversely thereof, said guide means engaging the main follower; and plate spring



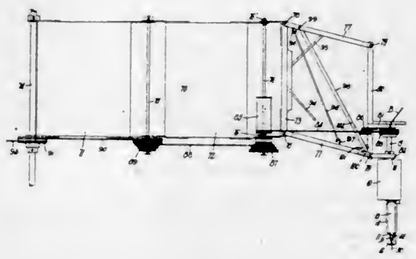
means supported on the carrier interposed between the friction wedge blocks and yieldingly opposing relative lateral approach of the same.

1,862,767. COOK STOVE. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed Jan. 21, 1929. Serial No. 334,074. 2 Claims. (Cl. 126—191.)



1. A stove having in combination with a door receiving frame, inner and outer interfitting sections detachably secured together to form a door which is hollow along one edge thereof, means formed from sheet metal and secured to the inner one of said sections within said hollow edge of the door providing coaxial curls at opposite ends of said edge, means formed from sheet metal and secured to said frame providing stationary arms extending outwardly of said frame and having curls formed at the outer ends of said arms, said hollow edge of said door having openings therein through which said arms may project, and means within said hollow edge pivotally connecting the curls on said door and said frame.

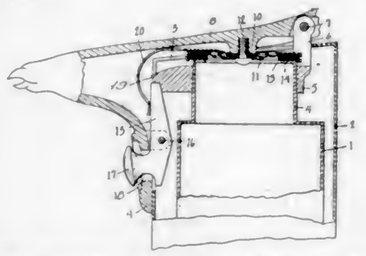
1,862,768. MACHINE FOR HOOKING RUGS AND THE LIKE. EDWARD E. RICE, North Quincy, Mass. Filed July 1, 1930. Serial No. 465,133. 10 Claims. (Cl. 112—79.)



1. A machine for hooking rugs and the like comprising, in combination, a casing embodying therein a tubular extension, a drive shaft mounted therein, a clutch mem-

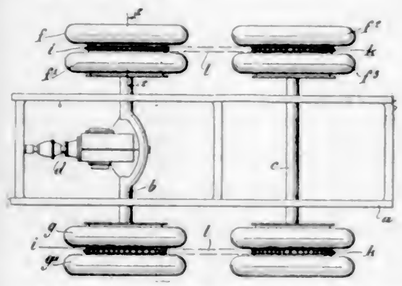
ber fast to said shaft, a foot attached to the extension, a hooking needle slidably mounted in the extension and adapted to penetrate the sheet material of the rug and force loops of hooking material therethrough, a follower positioned adjacent to the needle and adapted to engage said loops and hold the same during the withdrawing movement of the needle, a cam member loosely mounted upon the shaft and operatively connected to the needle and follower, a handle slidably mounted upon the extension of the casing, and means operatively connecting the clutch and handle and actuated by a vertical movement of the latter, whereby the cam member is interlocked with the clutch member and driven thereby.

1,862,769. RADIATOR FOR MOTOR VEHICLES. FREDERICK C. RUPPEL, Grand Rapids, Mich., assignor to W. B. Jarvis Company, Grand Rapids, Mich. Filed Feb. 27, 1928. Serial No. 257,436. 7 Claims. (Cl. 220—24.)



7. The combination with a radiator shell having an opening therein, and a radiator provided with a filling neck terminating within said opening, of a radiator cap for said shell opening pivoted to said neck, and a closure for said neck carried by said cap.

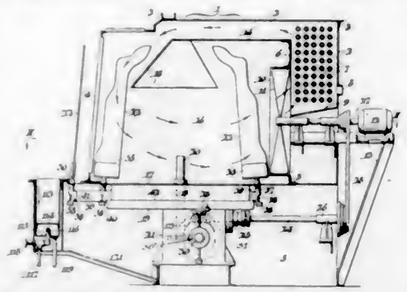
1,862,770. WHEEL DRIVE. WILLIAM D. SARGENT, Newark, N. J. Filed Dec. 28, 1929. Serial No. 417,024. 2 Claims. (Cl. 180—22.)



2. In a vehicle, in combination with a positively driven load carrying road wheel, an idle load carrying road wheel tracking the driven wheel, a pair of spaced rims mounted on each wheel, bearings for the respective wheels, aligned sprockets mounted between the said pairs of rims, respectively, and disposed substantially in the plane of said bearings and a drive chain engaging the sprockets whereby rotation of the driven wheel imparts rotation to the idle wheel.

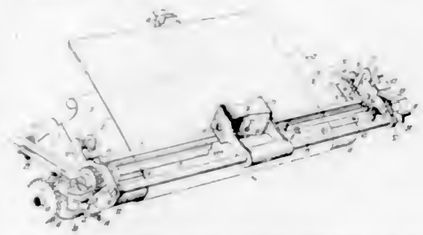
1,862,771. AUTOMATIC DRYING MACHINE. WALTER W. SIMSON, and HARRY H. WIGGLESWORTH, Philadelphia, Pa., assignors to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 7, 1927. Serial No. 217,924. 4 Claims. (Cl. 198—19.)

1. A machine of the character described comprising an enclosure with entrance and exit openings; a revolving table in said enclosure, extending outside the same between said entrance and exit; carriers on said table shiftable relative thereto between inner and outer positions, in one of which positions they pass through said exit and entrance openings with intermediate travel outside, and also turnable to diverse angular positions; means



below the table top for shifting said carriers as aforesaid; and means actuated by said means below the table top for engaging said carriers above it and turning them, to align them to pass through said entrance and exit openings, and to place them in a different angular relation to the table for travel within the enclosure.

1,862,772. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 4, 1927. Serial No. 165,797. 7 Claims. (Cl. 197—133.)

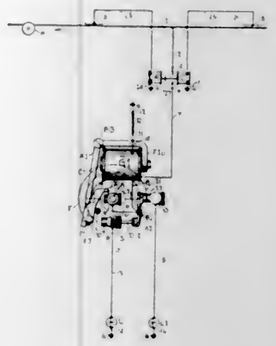


1. In a continuous billing typewriting machine having a platen, a circular knife having a cutting periphery, a knife having a straight cutting edge parallel to the axis of the platen, an equalizing device for holding a web on both sides of the circular knife, and means for holding the circular knife in its ineffective position at either side of the platen, said means including a housing for the circular knife, the housing having holes therein in the sides thereof for receiving fixed headed studs at either end of the platen.

1,862,773. RAILWAY SIGNALING FLASHER. SAMUEL S. STOLP, Louisville, Ky., assignor to Nachod & United States Signal Company, Inc., Louisville, Ky., a Corporation of New York. Filed July 10, 1926. Serial No. 121,620. 3 Claims. (Cl. 177—329.)

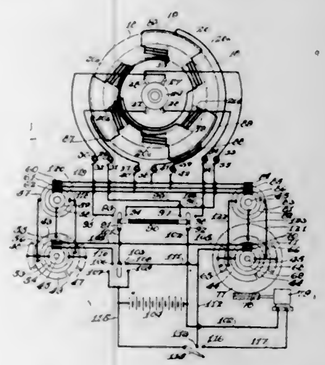
2. In an apparatus of the class described, an electromagnet, an armature, means mounting the latter for movement to and fro with respect to the electromagnet including structure whereby the armature is held in its attracted position by residual magnetism when the electromagnet is deenergized, an inertia member, means mounting it for oscillating movement with respect to the armature, the member being provided with a projection in the path of the armature to be engaged when the armature moves under the attraction of the electromagnet to force the inertia member to an extreme position in which

the projection is carried out of contact with the armature, a resilient stationary contact, a movable contact carried by the armature, the contacts being so located as to be in engagement when the armature is in its attracted position said apparatus also including means for increasing the attractive power of said electromagnet by increasing the current flow therethrough near the end of the travel of the armature and means for deenergizing said electromagnet at the end of the movement of its armature to its attracted position, a resistance, a conducting path including said magnet and said resistance in series, a second



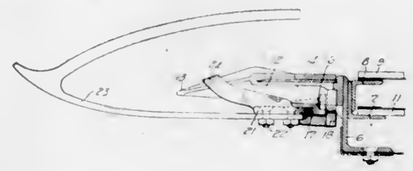
conducting path in parallel with said first mentioned path including said armature and said contacts, a conducting path leading from said stationary contact, a lamp in said path, a second contact carried by said armature, a second stationary contact cooperating therewith having a conducting surface so located as to be engaged after the engagement of the first movable contact with the resilient contact, a conducting path between said stationary contact and said first named conducting path, whereby the magnet is short circuited when the second named contacts are in engagement.

1,862,774. ELECTROMECHANICAL CHANGE SPEED GEARING. HUGO L. SWARTLING, Berlin, Germany. Filed Apr. 18, 1928, Serial No. 270,864, and in Germany Mar. 24, 1926. 10 Claims. (Cl. 290—20.)



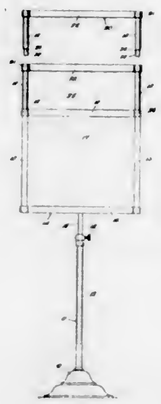
3. In a driving mechanism for a motor vehicle, the combination of a driving shaft, a vehicle driving motor connected with said driving shaft, a driven shaft, a differential gearing connecting said shafts and having a floating member, cooperating armature and field elements carried by one of said shafts and said member to generate electric current, windings and circuit connections for exciting said field element by said current, and circuit changing devices for shifting the magnetic poles in said field element in a first direction to accelerate the speed of the vehicle and in the reverse direction to reverse the direction of torque on the driven shaft.

1,862,775. PICK-UP GUARD ADAPTER. LOWELL H. THOEN, Stockton, Calif., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Nov. 28, 1928. Serial No. 322,304. 15 Claims. (Cl. 56—314.)



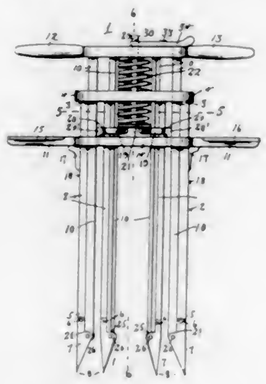
1. A pick-up guard adapter comprising a body, a pad on said body for securing a pickup guard to said adapter, and a second pad on said body disposed in a plane substantially perpendicular to the plane of said first pad and offset laterally therefrom for securing said adapter to a member of a harvesting machine.

1,862,776. DISPLAY CARD HOLDER. PAUL J. TIMBERLAKE, Jackson, Mich. Filed July 22, 1931. Serial No. 552,513. 6 Claims. (Cl. 40—148.)



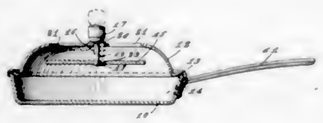
1. An auxiliary card holder for display card frames, comprising a pair of channeled uprights for receiving the lateral edges of a card and a transverse member secured thereto to maintain them in spaced relation, each upright having a longitudinal extension for detachable connection with the main card frame, and being also provided with a rest for supporting the auxiliary card.

1,862,777. CLAM DIGGER. IVER VIITA, Cle Elum, Wash. Filed Aug. 20, 1928. Serial No. 300,728. 27 Claims. (Cl. 294—126.)



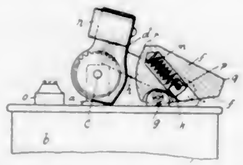
1. A clam digger including a cage formed of a series of vertical legs, having pointed pivotal ends, and means for moving said ends to close the bottom of said cage, said means consisting of vertically movable rods.

1,862,778. COMBINATION FRYING PAN AND COOKING OVEN. ARTHUR L. VOUGHT, Sparta, N. J. Filed May 21, 1931. Serial No. 539,045. 1 Claim. (Cl. 53—7.)



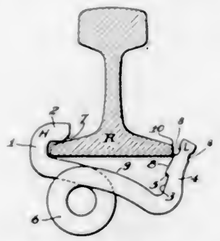
A cooking utensil of the character described comprising a lid having vents therein, a shutter for opening and closing the vents, a stem operatively mounted in the cover and carrying the shutter for the opening and closing of said vents, and a latching lug on the stem and engageable with the cover to hold the shutter in closing position with respect to the vents, said cover having an opening for accommodating the lug to permit it to be moved from one side of the cover to the other for the latching and unlatching of the shutter.

1,862,779. POCKET CIGAR LIGHTER. ERICH WIEDEN, Ohligs, Germany. Filed May 31, 1930, Serial No. 458,825, and in Germany Jan. 28, 1930. 4 Claims. (Cl. 67—7.1.)



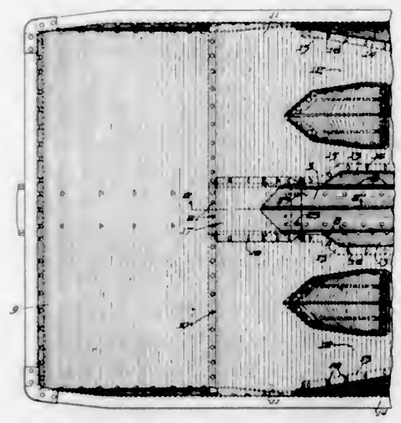
4. A pocket lighter comprising a casing, a wick carried by the casing, a closing cap pivotally connected with the casing, a rotatable friction body adjacent the wick, a finger piece pivotally mounted on the casing, a link connecting the closing cap and finger piece, a spring in the connection between the link and finger piece, the cap and finger piece having coacting abutments, said spring serving to hold the cap in a position of rest when the abutments are engaged, said abutments being disengageable from each other upon depressing the finger piece to swing said cap open under the action of said spring.

1,862,780. LOOP RAIL ANCHOR. ROBERT T. WOODINGS, Oakmont, Pa., assignor to Woodings-Verona Tool Works, Verona, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1930. Serial No. 481,615. 3 Claims. (Cl. 238—330.)



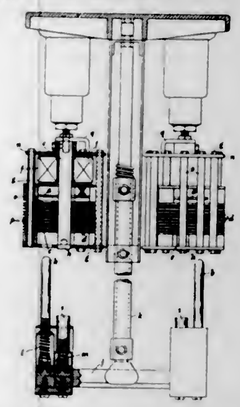
1. A rail anchor formed of a single bar of spring steel bent to provide a rail base-engaging jaw at one end and forged at the other end to provide an inclined face adapted preliminarily to contact the lower corner of the rail base, said face having a shoulder adapted to snap over the upper corner of the rail base when the anchor is sprung by moving the inclined face upward after preliminary contact with the base, said inclined face extending substantially beyond and above said shoulder, the bar between said jaw and inclined portion being bent on itself to form a helical loop disposed substantially in the plane of the anchor and to form a raised intermediate portion adapted to bear against the under side of the rail.

1,862,781. RAILWAY HOPPER CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Sept. 2, 1930. Serial No. 479,365. 6 Claims. (Cl. 105—240.)



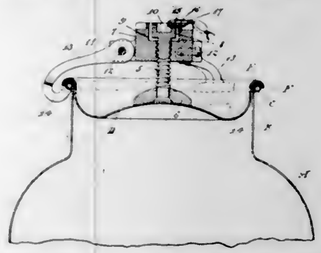
1. In a railway hopper car, the combination with a center sill having a hood provided with downwardly diverging portions, of a body bolster, slope sheets extending downwardly from the body bolster on opposite sides of the center sill, a splice sheet extending downwardly from the bolster and connecting the slope sheets above the center sill, the lower portion of said splice sheet having offset portions arranged in overlapping relation to the downwardly diverging portions of the center sill hood.

1,862,782. ELECTRIC SWITCH OR CIRCUIT BREAKER. JAMES ANDERSON, Birmingham, England. Filed Feb. 25, 1931, Serial No. 518,194, and in Great Britain Feb. 27, 1930. 4 Claims. (Cl. 200—144.)



1. In an electric switch or circuit breaker, the combination of a fixed and a movable contact piece, a plurality of spaced plates arranged at right angles to the direction of movement of the movable contact, apertures in the plates through which the movable contact can pass, a magnet pole passing through the plates and situated at one side of the said apertures in the plates, and a magnet winding situated at one end of the said magnet pole, the whole being arranged and adapted to break up the arc incident to the opening of a circuit and to simultaneously whirl the arc portions through circular paths between the plates, substantially as described.

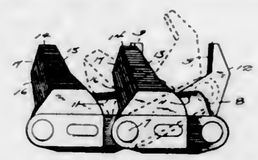
1,862,783. CONTAINER CLOSURE SECURING DEVICE. BENJAMIN BURVENICK, Woodhaven, N. Y., assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Dec. 5, 1930. Serial No. 500,377. 2 Claims. (Cl. 220—57.)



1. A device for securing a container closure in place, having the combination with a container provided with an external marginal bead at its open end, of a threaded stem having a swiveled head at one end adapted to bear against the closure, a nut member through which the stem is threaded having a plurality of circumferentially spaced pairs of radially projecting bearing ears, a claw fulcrumed in each pair of ears, a hooked terminal at the free end of each claw engageable behind the bead, a manipulating head at the outer end of the stem having a key socket and a recessed portion at the outer end of the member within which the manipulating head is disposed.

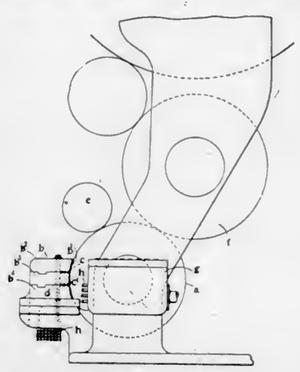
1,862,784. TRACKLAYING BELT. ROY E. CHOATE, Cedar Rapids, Iowa. Filed Sept. 14, 1931. Serial No. 562,809. 4 Claims. (Cl. 305—10.)

2. In a track laying belt of the type formed with a plurality of similar pivotally connected track shoes each having an upstanding male and female member for interengagement with corresponding cooperating members on the next adjacent articulated shoes to form a belt; the female member of each shoe formed with a plurality of surfaces disposed angularly with respect to each other and with respect to the transverse axis of the shoe and converging outwardly, one of said surfaces forming an edge to provide a peeling action to remove extraneous matter adher-



ing to the interengaged male member of an adjacent shoe, and both of said surfaces cooperating with opposed angularly disposed surfaces of the female members of the next adjacent articulated shoes to form substantially wedge-shaped spaces between the female members of the respective shoes and adapted to extrude and squeeze out dirt, stones, sand and other extraneous clogging material between the shoes when the shoes are deflected toward each other.

1,862,785. INKING MECHANISM FOR PRINTING MACHINES. CHARLES HENRY CRABTREE, Leeds, England. Filed Aug. 7, 1930, Serial No. 473,591, and in Great Britain Aug. 20, 1929. 7 Claims. (Cl. 101—366.)



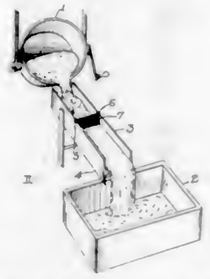
1. Inking mechanism for printing machines, comprising, an inking cylinder, means for rotating said inking cylinder, and means to deliver ink to said inking cylinder consisting of a plurality of delivery orifices disposed in sets distributed around the periphery of the inking cylinder, the orifices in which sets alternate in staggered relation, an ink reservoir and pumps for supplying ink to said delivery orifices, the inking cylinder being rotated slowly so that the separate bands of ink applied thereto from the respective delivery orifices form a continuous film of ink on the surface of the cylinder.

1,862,786. PRODUCTION OF ANTHRAQUINONE DERIVATIVES. HUGH ALBERT EDWARD DRESCHER, WILLAIM SMITH, and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Original application filed July 20, 1926, Serial No. 123,792. Divided and this application filed Dec. 20, 1927. Serial No. 241,450, and in Great Britain July 21, 1925. 2 Claims. (Cl. 260—60.)

1. The process which consists in dissolving the mixture obtained by halogenating the mixture of amino-halogenanthraquinones resulting from the ring closure of 3'-amino-

4'-halogen-2-benzoyl benzoic acid in sulphuric acid of strength greater than 80% adding water to reduce the strength of the acid to about 80% and separating the precipitate thus formed.

1,862,787. POURING TROUGH. WILLIAM T. ENNOR, Massena, N. Y., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 27, 1931. Serial No. 553,316. 3 Claims. (Cl. 266—38.)

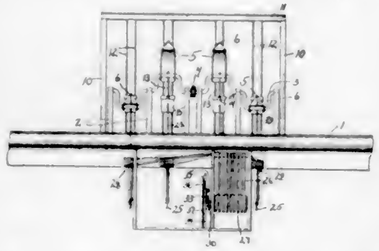


1. In apparatus for the transfer of molten metal, a skimming member and means for pivotally supporting said member so that its lower edge will be substantially at the surface of the flowing metal.

1,862,788. ALUMINUM ALLOY. EARL MCKINLEY GINGERICH, Cleveland, Ohio, assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 30, 1931. Serial No. 526,567. 4 Claims. (Cl. 75—1.)

1. An aluminum base alloy containing from about 3 to 15 per cent of silicon, from about 0.01 to 0.1 per cent of calcium, and from 0.01 to 0.3 per cent of titanium.

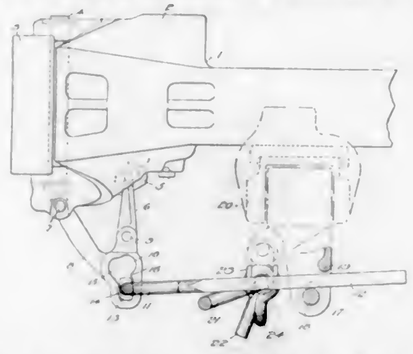
1,862,789. AEROPLANE PROPELLING MEANS. HUBERT M. GRAF, Kansas City, Mo. Filed Mar. 24, 1930. Serial No. 438,478. 4 Claims. (Cl. 244—13.)



1. The combination in an aeroplane of a supporting wing, a driven shaft extending longitudinally of the wing and being formed with a crank, a vane mounted on said crank and adapted to be driven thereby, and a carrier bearing a fixed relation to the wing and a slidable relation to the vane.

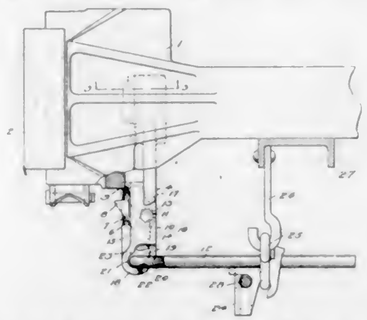
1,862,790. COUPLER LOCK CONTROLLING DEVICE. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 23, 1928. Serial No. 287,717. 8 Claims. (Cl. 213—167.)

1. In mechanism of the character indicated, the combination with a car coupler having a lock, of a device for controlling said lock, said device being adapted to move the lock to unlocked position and to prevent it from accidentally moving to unlocked position and including a plurality of movably connected members one of which is movably mounted upon the coupler, said members being provided with means whereby they are interlocked in one



relative position to prevent them from executing uncoupling movements corresponding to an unlocking movement of the coupler lock and whereby when they are in another relative position they are free to execute uncoupling movements corresponding to an unlocking of the lock.

1,862,791. COUPLER RELEASE MECHANISM. WILLIAM KELSO, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 12, 1928. Serial No. 292,296. 8 Claims. (Cl. 213—167.)

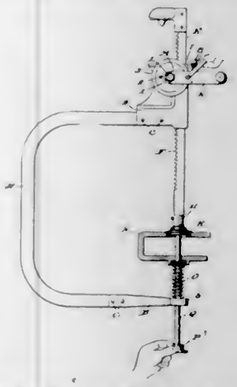


1. In mechanism of the character indicated, the combination with a car coupler having a rotatable knuckle and a lock for the latter provided with a depending leg projecting downwardly through the bottom wall of the coupler head, of means movably mounted on the leg for cooperating with a portion of the coupler head to prevent said lock from accidentally assuming unlocked position, and a vertically movable lifter bar extending longitudinally of the coupler for actuating said means to permit the lock to move to unlocked position, said lifter bar and lock having a pin and slot connection enabling the lifter bar to actuate said means and thereafter to move the lock to unlocked position and also serving to cause draft and buffing movements of the coupler to be communicated from said lock to said lifter bar independently of said means.

1,862,792. VALVE-SPRING LIFTER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed June 12, 1929. Serial No. 370,255. 9 Claims. (Cl. 29—86.3.)

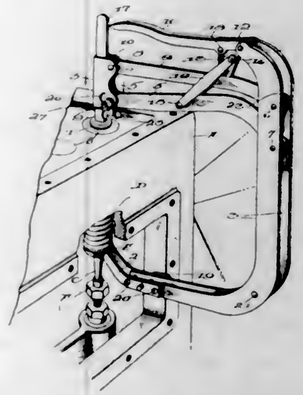
1. A valve-spring lifting tool comprising a frame having a housing, a rack-bar mounted in said housing, a pinion mounted for rotation in said housing and meshing with

the teeth of said rack-bar to reciprocate the latter in said housing, a shaft turning with said pinion, and a crank-lever connected with said shaft to turn therewith, in combination with a brake-drum secured to said housing against rotation, a thick resilient split metal brake-band arranged adjacent to and concentrically about said brake-drum and having an anchored end and a movable end, a pin connecting said anchored end to said crank lever to be immovable in a peripheral direction with relation thereto and to turn therewith about said brake-drum, adjustable



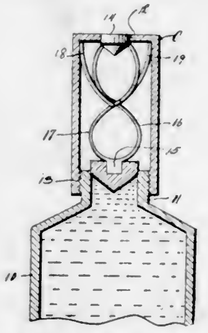
resilient means for forcing said movable end toward said anchored end to contract said brake-band, a spreading member rotatably mounted in said crank-lever and extending between the opposed end faces of said brake-band, and a lever mounted on the forward end of said spreading member in front of said crank-lever to turn with said spreading member about its axis, said spreading member being provided wtih a portion adapted to engage a related element to prevent rotary movement of said spreading member about its axis from its inoperative position in one direction.

1,862,793. VALVE-SPRING LIFTER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed May 29, 1930. Serial No. 457,027. 10 Claims. (Cl. 29—86.3.)



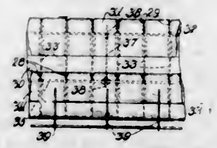
1. A valve-spring lifting tool comprising a frame, a pair of jaws mounted on said frame, a sleeve, a post slidably mounted in said sleeve for movement therein toward and from said jaws, a pair of parallel movement arms pivotally connected at their respective end portions to said frame and to said sleeve respectively, said post having a vertically extending portion formed with a plurality of teeth having abrupt flat horizontal faces, a catch mounted for partial rotation about the axis of the pivotal connection of one of said arms to said sleeve and straddling said sleeve and operatively engaging the lower face of said sleeve and the opposed upper face of one of said teeth to lock said post against movement in said sleeve away from said jaws, and means for holding said catch in operative position, in combination with a handle pivotally mounted in the upper portion of said frame adjacent to one of said arms, said handle being provided with a cam having a long straight lower edge face substantially parallel with the opposed edge face of said adjacent arm when in engagement therewith, a pair of thrust links extending parallel to, and in registry with, each other and respectively disposed on opposite sides of said cam and arms, and pivot pins respectively passing through the registering respective end portion of said links and the intervening portions respectively of said cam and the distant arm, said lower face of said cam engaging the opposed upper face of the adjacent arm in the closed position of the tool, and in such position the line of thrust of said thrust links extends below and to the rear of the pivotal point of mounting of said handle in said frame, whereby the spring being compressed will hold the tool closed and whereby said cam will hold the gripping portion of said handle in spaced relation to said adjacent arm to be easily gripped by hand.

1,862,794. COLLAPSIBLE TUBE CLOSURE. PORTER P. LAMB, Detroit, Mich. Filed Nov. 19, 1931. Serial No. 576,142. 6 Claims. (Cl. 221—60.)



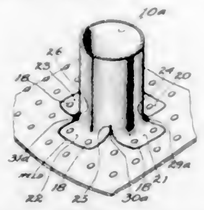
1. A closure means comprising a cap having a discharge opening at one end, the opposite end of the cap being open and constructed to engage the discharge end of a container, and automatic closure means disposed within the cap and normally engaging said discharge opening and discharge end of the container, said closure means automatically moving into open position upon application of pressure to the material in said container.

1,862,795. MOVABLE SECTIONS IN WINGS FOR AIRCRAFT. LAWRENCE W. MAMMEN, Chicago, Ill. Filed Apr. 18, 1930. Serial No. 445,389. 16 Claims. (Cl. 244—12.)



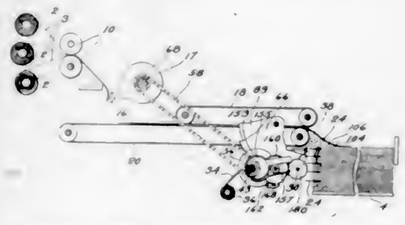
1. In an aircraft having wings, sections pivotally mounted along the leading edge and the underside of such wings, such sections forming a portion above and another portion below the pivoted point, which upper portion swings into the wing and its lower portion out from the wing, when operated and admits air into the wing.

1,862,796. FLANGE AND CONNECTION FOR TUBULAR HEATING ELEMENTS. JESSE C. MARTIN, Jr., Los Angeles, Calif. Filed June 24, 1931. Serial No. 546,647. 7 Claims. (Cl. 29—157.4.)



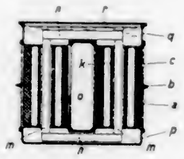
1. A connection for joining a tubular heated element to the sheet of a firebox comprising a split flange on the end of the element, and the firebox sheet having an opening with a contour shaped to fit said flange and split portion, the edges of said flange and split portion butt welded to the edges of said opening.

1,862,797. COUNTING AND MARKING MACHINE. LOUIS LANDAFF MATTHEWS, Westerly, R. I., assignor to Charles B. Maxson and Julian W. Maxson, Westerly, R. I. Filed May 18, 1929. Serial No. 364,111. 14 Claims. (Cl. 93—93.)



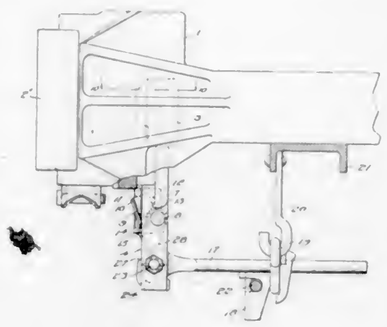
1. A counter having, in combination, a counting member having counting teeth, a pawl for engaging the teeth, whereby actuation of the pawl effects the actuation of the counting member, a rack member for actuating the pawl, a second rack member engaging the first-named rack member, and means for actuating the second-named rack member.

1,862,708. HIGH TENSION TRANSFORMER. AUGUST MEYERHANS, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed June 7, 1928. Serial No. 283,700, and in Germany June 13, 1927. 3 Claims. (Cl. 175—356.)



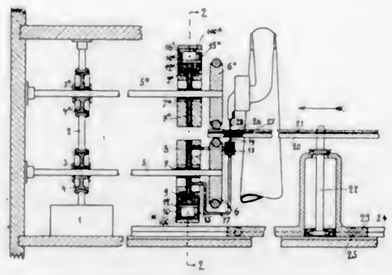
1. A transformer having a rectangular shaped core carrying a high and low tension winding, a casing containing an insulating liquid and totally enclosing said transformer, the said casing being partly metallic and partly of insulating material, the part surrounding the windings being of insulating material and arranged in close proximity to the windings, the said high tension winding having its high potential end midway along its axial length and connected to a high tension terminal arranged midway along the axial length of the insulated part of the casing which latter forms the sole leading-in insulator for the said high tension terminal.

1,862,799. CAR COUPLER MECHANISM. HOWARD F. MILLER, Pittsburgh, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 29, 1928. Serial No. 281,482. 4 Claims. (Cl. 213—148.)



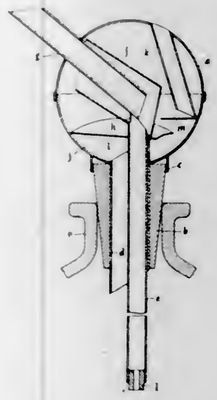
1. In mechanism of the character indicated, the combination with a car coupler having a rotatable knuckle and a lock therefor formed with a depending leg extending downwardly through the bottom wall of the coupler head, of a lock-to-the-lock device mounted on said leg for slidable and rotatable movements relative thereto and adapted to cooperate with a portion of the coupler head to prevent said lock from accidentally assuming unlocked position, said device and the lock leg having a pin and slot connection, and a vertically movable lifter bar for actuating said device to permit the lock to move to unlocked position, said lifter bar being out of contact with said device when the latter is in normal locked position and being adapted to cause said lock to execute an unlocking movement.

1,862,800. GRAMOPHONE. WILHELM OTTEN, Stuttgart, Germany. Filed May 20, 1930, Serial No. 454,154, and in Germany May 25, 1929. 10 Claims. (Cl. 274—12.)



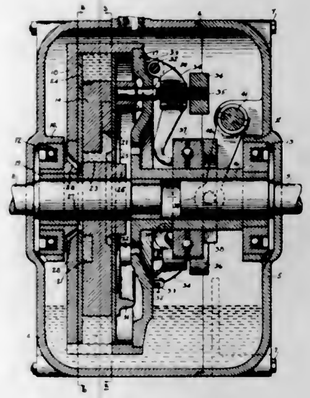
1. In a gramophone, a rotatable record carrier adapted to support a disk record thereon having spiral sound grooves, a driving system comprising a pair of rollers adapted to engage from opposite sides the record and record carrier and a guide point substantially fixed with respect to said rollers, means whereby said driving system and record carrier are mounted so as to be relatively displaceable in a radial direction with respect to said record carrier, said record carrier having a spiral guide groove therein congruent to the sound groove of the record and adapted to receive said guide point to cause the relative displacement of said driving system and record carrier as the latter rotates.

1,862,801. APPARATUS FOR DELIVERING MEASURED QUANTITIES OF LIQUID BY VOLUME FROM BOTTLES OR SIMILAR VESSELS. LAWRENCE TEMPLE PAYNE and HAROLD GEORGE CONRADE, Birmingham, England. Filed Aug. 6, 1931, Serial No. 555,596, and in Great Britain Aug. 5, 1930. 2 Claims. (Cl. 215—57.)



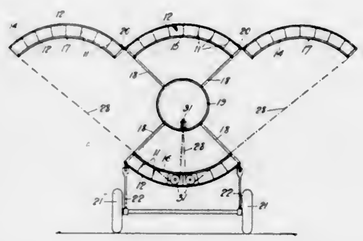
1. In liquid measuring devices, the combination with a hollow body part containing a siphon, of a partition plate which divides the body part into a measuring chamber communicating with the outlet, and a compartment communicating with the liquid supply conduit, the arrangement of the partition plate being such that the said compartment must be filled before liquid can flow into the measuring chamber, substantially as described.

1,862,802. SPEED CONTROL MECHANISM. ALTON I. POPE, Fort Worth, Tex. Filed Mar. 11, 1930. Serial No. 435,012. 17 Claims. (Cl. 192—58.)



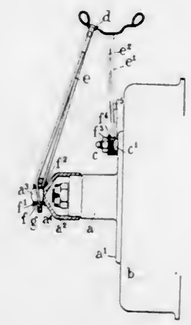
1. In a speed control mechanism, driving and driven members, means for maintaining a supply of liquid in said members in readiness to be introduced as a power transmission element between said members, means for normally inhibiting the said introduction of said liquid, and means responsive to increase in the speed of said driven members for countering the action of said inhibiting means.

1,862,803. AERONAUTICAL MACHINE. JAMES ROBERTSON PORTER, Wantage, England. Filed Aug. 2, 1929, Serial No. 382,987, and in Great Britain Aug. 17, 1928. 3 Claims. (Cl. 244—14.)



2. In an aircraft, an annular aerofoil divided into upper, lower and opposed side sector sections of rigid truss form, a fuselage, the upper and lower sections rigidly secured to the fuselage, and the opposed side sections, each hinged at its upper end to the corresponding end of the upper section and swingable from its closed position into a substantially horizontal load lifting position, and means for restoring the opposed side sections to their closed position.

1,862,804. VEHICLE WHEEL. JOHN VERNON PUGH, Meriden, England. Filed Sept. 11, 1928, Serial No. 305,258, and in Great Britain Oct. 20, 1927. 9 Claims. (Cl. 301—55.)

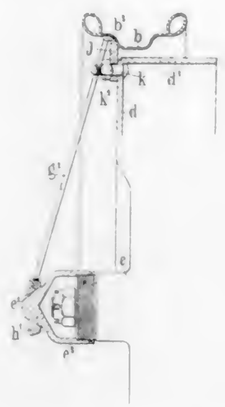


1. A wheel forming structure having sets of spokes upon opposite sides and at least one of said sets divided into groups and each group co-operating with separate means for attaching the structure to a vehicle hub, said sets of spokes being adapted to acquire suspensory, side strain-resisting and torque-resisting tensions by their relative axial displacement.

1,862,805. VEHICLE WHEEL. JOHN VERNON PUGH, Meriden, England. Filed Oct. 1, 1928, Serial No. 309,640, and in Great Britain Nov. 4, 1927. 6 Claims. (Cl. 301—6.)

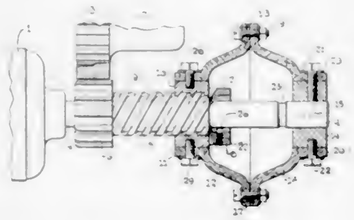
1. A vehicle wheel and co-operating brake drum structure including a brake drum attached to a shaft or hub

more or less permanently by means adapted to withstand the stresses due to load and torsion, a detachable type-carrying rim securely supported on the brake drum struc-



ture and having a single set of axially deflectable spokes which are tensioned while completing attachment of the rim to the brake drum.

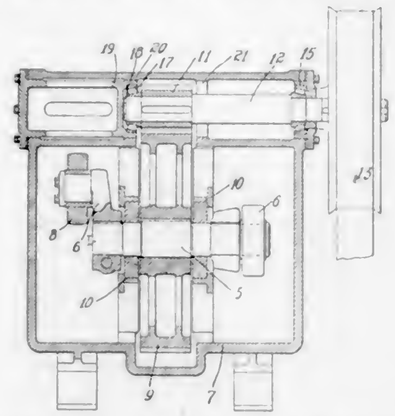
1,862,806. STARTER DRIVE. CLARENCE RINGWALD, South Bend, Ind., assignor, by direct and mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Feb. 6, 1928. Serial No. 252,284. 4 Claims. (Cl. 74—7.)



1. In a starter for internal combustion engines the combination of a starter shaft, a threaded sleeve member and a threaded nut member, one of said members having pinion teeth thereon for engagement with a member of the engine to be started, and the other member being adapted to be driven from the starter shaft, a pair of cup-shaped, flexible elements adapted to be connected between said other member and the shaft, said elements having limited endwise and rotary flexibility and having flanges about their rims and means for connecting said flanges.

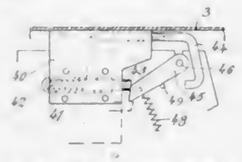
1,862,807. DRIVING MECHANISM. JOHN M. SHIMER, Wilkinsburg, Pa., assignor to Wilson-Snyder Manufacturing Company, a Corporation of Pennsylvania. Filed May 2, 1929. Serial No. 359,732. 10 Claims. (Cl. 74—7.)

1. Driving mechanism comprising a housing having opposed openings, a shaft extending through one of said openings and journalled in a bearing carried in said opening by the housing, said shaft being substantially shorter than the distance between said opposed openings, a bearing carrier projecting inwardly through the other opening and removable therethrough, the inner end of the shaft being journalled in a bearing carried by the bearing car-



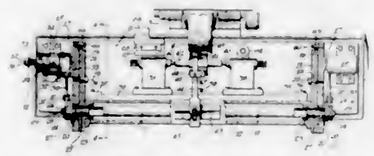
rier and having a gear mounted thereon adjacent its inner end, and a gear meshing with the gear mounted on said shaft.

1,862,808. CHECKING APPARATUS. PETER SOLHEIM, Gjelthus, Modum, Norway. Filed Nov. 16, 1931, Serial No. 575,404, and in Norway Apr. 5, 1927. 2 Claims. (Cl. 282—16.)



1. A checking apparatus, comprising a cover for the apparatus, which is capable of being opened and closed, means within the apparatus for reeling up the continuous copy strip, an arm pivoted in the apparatus, means for limiting the downward motion of the arm, a knife edge fixed to the said pivoted arm for incising the said strip, and a spring-loaded slidable catch mounted on the inside of the cover, capable of being forced aside while the cover is being closed and of engaging under one end of the said arm for taking the arm along with it on the cover being opened, as and for the purpose set forth.

1,862,809. GRINDING MACHINE. ARTHUR J. STRONG, Detroit, Mich. Filed Feb. 16, 1929. Serial No. 340,497. 3 Claims. (Cl. 51—225.)



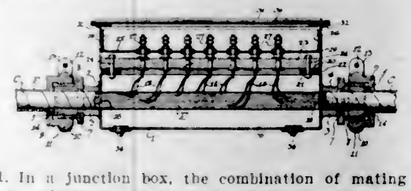
1. In a grinder for use in conjunction with a grind stone having a fillet, a base, a carrier pivotally and slidably supported by said base, clamping means on said carrier for holding a work piece to be ground, means for adjusting said clamping means in an eccentric relation to the pivotal center of said carrier, co-operating cam members, one of said members being fixed and the other being movable with said carrier to move the carrier towards said fillet as the carrier is swung on its pivotal axis.

1,862,810. RESURFACING TOOL. NATHANIEL B. STONE, Washington, D. C. Filed May 20, 1930. Serial No. 454,073. 4 Claims. (Cl. 90—12.5.)



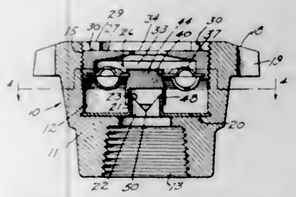
1. A valve resurfacing tool, comprising a hollow body portion, a centering member comprising yieldable leg members, extended into the body portion, means for forcing the leg members laterally into close engagement with the body portion, a bit having cut out portions to receive the leg members, and a tapered centering sleeve on the body portion.

1,862,811. JUNCTION BOX. ARTHUR J. STRONG, Detroit, Mich. Filed Mar. 30, 1931. Serial No. 526,406. 3 Claims. (Cl. 247—7.)



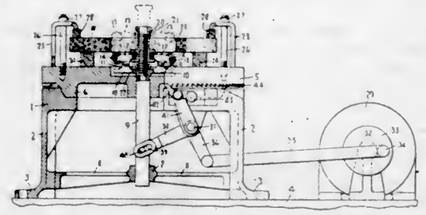
1. In a junction box, the combination of mating box parts, tubular members on the ends of said parts and each formed in parts meeting in the plane of the meeting plane of said box parts and to receive and support a cable extended across the chamber formed by said box parts, a sleeve member on each of said tubular members rotatable thereon and engaged therewith to prevent longitudinal movement of said sleeve member upon said tubular members, said sleeve member being divided longitudinally into parts, a nut on each of said sleeve members, said nut being divided longitudinally into parts, and a clamping band encircling each of said nuts and detachably holding said parts thereof together.

1,862,812. SPRAY ADJUSTMENT MEANS FOR SPRINKLER HEADS. WALTER VAN E. THOMPSON, Los Angeles, Calif., assignor to Thompson Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 10, 1928. Serial No. 245,678. 2 Claims. (Cl. 251—34.)



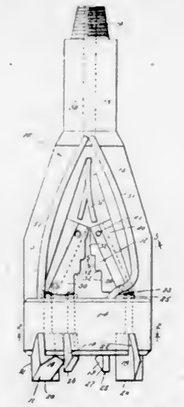
2. An article of manufacture comprising a valve member in the form of a plate having the central portion bent outward to form a passage, said bent portion providing a V-shaped notch, the apex of which is near said plate.

1,862,813. APPARATUS FOR APPLYING BUSHINGS. GEORGE E. VANCE, Springfield, Ohio, assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio, a Corporation of Ohio. Filed Aug. 24, 1931. Serial No. 558,851. 13 Claims. (Cl. 153—80.5.)



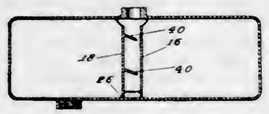
5. In an apparatus for applying a bushing to the bore of an article, a support, a table rotatably mounted on said support, a plurality of stretching and ironing rolls above said table, and means for reciprocating said rolls through the bore of said article and imparting a rotary movement to said table.

1,862,814. WELL DRILL. JESSE C. WRIGHT, Huntington Park, and LYNN F. BONNEY, Los Angeles, Calif., assignors, by mesne assignments, to Globe Oil Tools Company, Los Nietos, Calif., a Corporation of California. Filed Aug. 23, 1927. Serial No. 214,964. 1 Claim. (Cl. 255—72.)



A well drilling bit having a shank, downwardly projecting spaced leg members depending from said shank, an annular member projecting from the lower end of said leg members, core cutters on the lower end of said annular member, secondary cutters located within said leg members and arranged in V-formation for the purpose of destroying the core cut by said first mentioned cutters, each of said secondary cutters comprising a flat plate having a series of stepped cutter portions on one edge thereof and means for attaching said secondary cutters to said leg members.

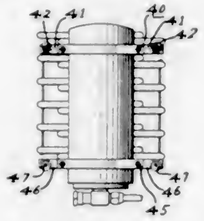
1,862,815. THEFTPROOF GASOLINE TANK. CHARLES V. BUDDENBROCK, Trinidad, Colo. Filed Mar. 27, 1929. Serial No. 350,332. 2 Claims. (Cl. 220—85.)



1. A theftproof gasoline tank, comprising in combination with the tank, a plurality of partitions beneath the inlet opening of the tank, and gasoline strainers at the

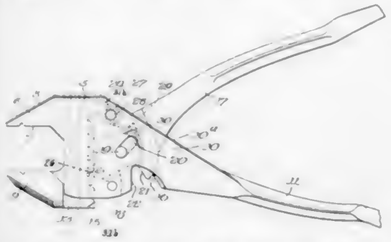
tops of the partitions, at least one of the partitions having a relatively small hole therein to allow gasoline from the main portion of the tank to slowly flow into the space defined by the partitions.

1,862,816. REFRIGERATING APPARATUS. HENRY P. BRAEUTIGAM, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1928. Serial No. 281,604. 5 Claims. (Cl. 62—169.1.)



4. A refrigerator comprising a cabinet and a cooling unit in said cabinet, said cabinet being provided with a plurality of inwardly directed members, front and rear hangers on said cooling unit each provided with two flat horizontal ends, notches at the ends of the rear one of said hangers having a sliding engagement with two of said members, the ends of the front one of said hangers being provided with openings, two of said inwardly directed members passing through said openings and means for locking said ends on said last named members.

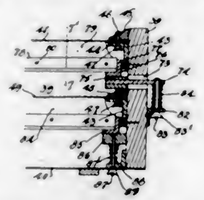
1,862,817. WRENCH. JOSEPH EIFEL, Chicago, Ill. Filed Dec. 31, 1927. Serial No. 244,022. 3 Claims. (Cl. 81—86.)



1. In a wrench of the class described, a fixed jaw member and a sliding jaw member, the latter formed with a toothed rack, an operating handle having teeth engaging the rack and having trunnions, there being slots in the fixed jaw member receiving said trunnions, said handle also being cut away to form a shoulder, a transverse pin in the fixed jaw member and a coiled spring surrounding said pin and engaging the shoulder of the handle at one end and the fixed jaw member at the other.

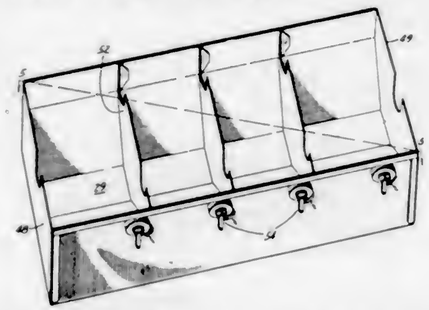
1,862,818. SIEVE CLEANER. FREDERICK FORSBERG, Dauphin, Manitoba, Canada. Filed Jan. 5, 1928. Serial No. 244,746. 1 Claim. (Cl. 209—387.)

In a grain cleaning machine, the combination with an endwise reciprocated shoe and a screen carried by the side boards of the shoe, of guide bars located to the inner sides of the side boards and underlying the screen, arms permanently secured to the guide bars and extending outwardly through vertically disposed slots provided in the boards, brackets permanently secured to the outer sides of the side boards, and underlying the outer ends of the arms, adjusting bolts tying the brackets to the arms, springs interposed on the bolts and operating to press the bars upwardly to the limit of the adjustment provided by the bolts, a brush holder slidably mounted on the guide bars for endwise sliding movement underneath the screen, a set of transversely extending flexible brushes



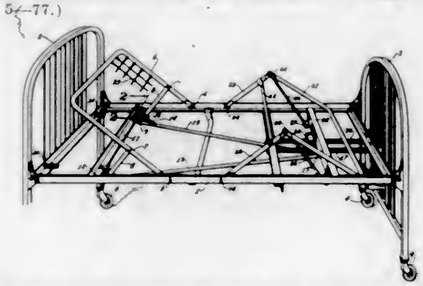
carried by the holder and engaging the under side of the screen and means for reciprocating the holder to cause the brushes to sweep the under side of the screen.

1,862,819. VARIABLE TUNING DEVICE. ERNEST G. DANIELSON, San Francisco, Calif., assignor to Gray & Danielson Manufacturing Company, San Francisco, Calif., a Copartnership consisting of Ernest G. Danielson and Thomas B. Gray. Filed July 22, 1929. Serial No. 379,916. 5 Claims (Cl. 175—41.5.)



1. In a combined support and housing for an electrical tuning instrument having a pair of relatively movable tuning elements, a sheet metal frame serving to support and maintain said elements in accurate alignment, said frame comprising sheet metal bottom and side walls, and sheet metal end walls forming a housing for said elements, a sheet metal channel member secured to said bottom and having portions extending between the bottom and side walls at an angle thereto, effective to brace said frame and provide space for said tuning elements.

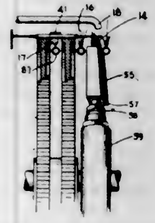
1,862,820. HOSPITAL BED. WILLIAM J. DUVALL, St. Louis, Mo., assignor to Smith & Davis Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed June 18, 1927. Serial No. 199,660. 1 Claim. (Cl. 5—77.)



A hospital bed comprising, a frame, a rest pivoted on said frame intermediate its ends, a crosshead guided for movement along said frame, links connecting said head with said

rest to form toggles with the latter, a screw extending along said frame and connected with said head to move the same back and forth along said frame, and springs between the end of said frame and the ends of said head and adapted automatically to apply a force to said head to start and arrest said head.

1,862,821. APPARATUS FOR PRODUCING LIQUID PACKAGES. EDWARD E. HENDERSON, New York, N. Y., assignor to Nips Patent Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 13, 1928, Serial No. 246,457. Renewed Nov. 3, 1931. 16 Claims. (Cl. 226—80.)



1. A sealing mechanism for purposes described, comprising a continuous conveyor having spaced pockets adapted to receive containers of the characters described, means for maintaining a series of sealing flame jets in the path of movement of the exposed container ends whereby to produce sealing formations thereon, and means for cooling portions of the containers adjacent the zone of heating.

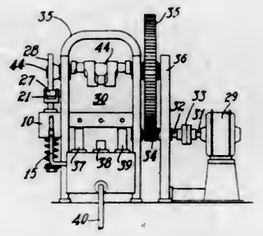
1,862,822. CLIP FOR PENCILS. ERNEST E. HILL, Chicago, Ill., assignor to Rite-Rite Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1931. Serial No. 562,450. 1 Claim. (Cl. 24—11.)



In combination with a pencil body, a clip consisting of a base member and of a clip member, said base member being flat and being provided at its lateral edges with narrow flanges bent at an angle to the base, and the clip member being of transversely curved section substantially throughout its length with its lateral margins continuous with the flanges of said base, said base being provided with two longitudinally spaced apertures and drive screws engaged through said apertures and securing said base to said pencil body.

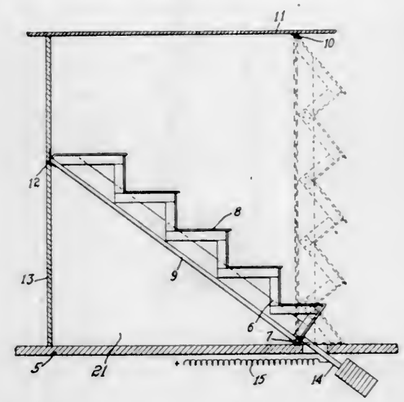
1,862,823. PUMP. JOSEPH E. HOLVECK, Pittsburgh, Pa., assignor to The Aldrich Pump Company, a Corporation of Pennsylvania. Filed May 17, 1929. Serial No. 363,891. 7 Claims. (Cl. 103—11.)

1. The combination with a discharge apparatus having a crank shaft and a discharge line, of means secured to said apparatus and cooperating therewith for maintaining a constant rate of flow in said discharge line, said means including a cylinder casing having a chamber in open communication with said line, a plunger associated with said chamber and having a piston portion terminating at one end in a rod portion, said portions extending through opposite ends of said casing, a resilient means positioned on the extending rod portion of said plunger for holding said



plunger in a normal position, a plunger-operating-cam secured to said crank shaft for moving said plunger, so that said plunger will be operated to force more liquid into the discharge line when the discharge of the apparatus is below mean.

1,862,824. CONVERTIBLE WALL BLEACHER. RUSSELL G. HOWARD, Du Bois, Pa., assignor to Russell G. Howard & Associates, Inc., a Corporation of Pennsylvania. Filed Feb. 26, 1929. Serial No. 342,782. 10 Claims. (Cl. 20—1.12.)

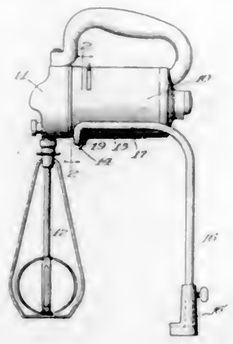


1. The combination with a movable partition supported near its bottom and adapted to be swung about said support into and out of operative position, of a framework adapted to form a tier of seats when said partition is in inoperative position.

1,862,825. METHOD OF MAKING SULPHUR TRIOXIDE AND CATALYST FOR USE IN SAID METHOD. NAPOLEON ARTHUR LAURY, Rockville Center, N. Y., assignor, by mesne assignments, to The Calco Chemical Company, Inc., a Corporation of Delaware. Filed Aug. 15, 1928. Serial No. 299,879. 6 Claims. (Cl. 23—234.)

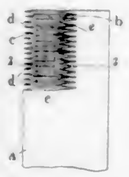
4. A catalytic mass for use in the contact method of making sulphuric acid, comprising natural diatomaceous particles which are of sufficient size to render the mass easily gas permeable and which have been fired to a temperature which renders them non-crumbling without changing their lace-like surface, and a catalytic material coated upon the surfaces of said particles.

1,862,826. ADJUSTABLE SUPPORT FOR FOOD MIXERS. EDWARD R. MROSS, Racine, Wis., assignor to Hamilton Beach Manufacturing Company, Racine, Wis., a Corporation. Filed Nov. 3, 1930. Serial No. 492,885. 4 Claims. (Cl. 248—15.)



1. A support for a motor driven food mixer comprising a base, a pair of upright members mounted on the base, horizontally disposed arms extending forwardly from said upright members, a cross rod connecting the forward ends of said arms, and cooperating means on the motor and on the support for retaining the mixer in adjusted position on the support, said cooperating means comprising a pin on the cross rod and a slotted flange on the motor.

1,862,827. STEAM TURBINE. CHARLES ALGERNON PARSONS, ALFRED QUINTIN CARNEGIE, and FRANCIS WILLIAM GARDNER, Newcastle-on-Tyne, England; said Carnegie and said Gardner assignors to said Parsons; Katharine Parsons, Vincent Thompson, and Frederick Gordon Hay Bedford legal representatives of said Charles Algernon Parsons, deceased. Filed Nov. 21, 1930, Serial No. 497,090, and in Great Britain Jan. 22, 1930. 12 Claims. (Cl. 253—77.)

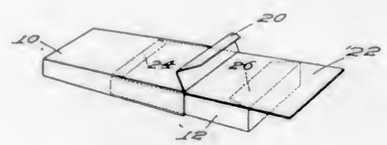


1. An elastic-fluid turbine rotor blade of concavo-convex strip form, subject as regards a region adjacent the leading edge of the convex face to impact with liquid particles in said elastic fluid, in which said region subject to impact is provided with a multiplicity of sharp salients, elemented areas of the surfaces of which are disposed oblique to the direction of impact.

1,862,828. ROASTING OF ZINC SULPHIDE ORES. STANLEY ROBSON, Avonmouth, England. Filed Sept. 20, 1928, Serial No. 307,338, and in Great Britain Oct. 24, 1927. 5 Claims. (Cl. 75—60.)

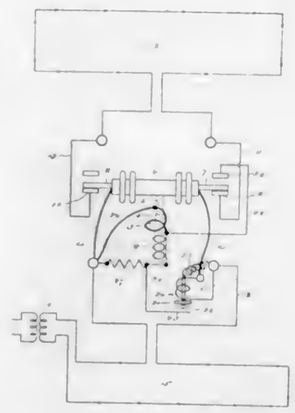
1. A process for the production from zinc sulphide ores, concentrates and the like of a porous material suitable for subsequent distillation for the recovery of the zinc, consisting in evenly mixing with the green ore, concentrate or the like a granular material containing a major proportion of particles of one-sixteenth to one-eighth inch granular size and in such quantity that the mixture has a sulphide sulphur content of four to seven percent and blast-roasting the mixture in a single operation.

1,862,829. GARMENT SHIPPING CONTAINER. FREDERICK G. ROEMPLER, Chicago, Ill. Filed July 29, 1927. Serial No. 209,233. 1 Claim. (Cl. 206—7.)



A garment shipping container, comprising an inner open top box, having overhanging flaps at the ends, one of said flaps being longer than the other, and an outer enveloping container for said box, together with means for packing additional garments into the container, said means comprising a sheet of material similar to the box material, and of substantially the same size as the open end of the inner container, said sheet being fitted under the shorter of the flaps of the inner container and passing over the longer flap, said sheet being adapted to be withdrawn when the garments are packed in said container.

1,862,830. AUTOMATIC SERIES CUT-OUT. RAYMOND N. ROWE, Plainville, Conn., assignor to The States Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 26, 1930. Serial No. 504,821. 7 Claims. (Cl. 175—294.)



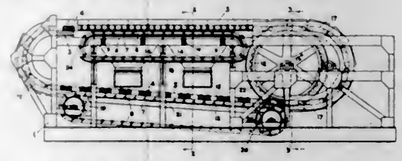
1. A cut-out comprising fixed contacts designed to be connected with a loop to be protected, movable contacts normally engaged with said fixed contacts, one movable contact being connected with one side of the current source and the other movable contact being connected with a solenoid coil that is connected with the other side of the current source, said coil having a movable core with a gap electrode that is connected with the current source on the same side as the coil, a solenoid coil with a core connected to lift said movable contacts from the fixed contacts when said coil is energized, said latter coil having one terminal connected with the current source and its other terminal connected with a fixed gap electrode, and a fixed contact connected with said latter coil and adapted to be engaged by one of said movable contacts when said coil is energized, whereby under normal operation the current causes a wide gap to exist between said electrodes and interruption of the current causes a reduction in the gap.

1,862,831. TILE PARTITION. JAMES H. RYAN, St. Louis, Mo. Filed June 13, 1931. Serial No. 544,075. 8 Claims. (Cl. 72—46.)



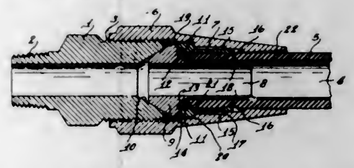
1. A partition comprising a channel member, a cushion element in said channel member, adjacent tiers of tiles having the lower tiles thereof seated on said cushion member and located within said channel member and the tiles of each tier being laid one upon the other and having grooves in their ends, tubes embedded in opposite tiles of the tiers of tiles and having their ends opening into said grooves, and a metallic channel member between adjacent tiers of tiles having flanges embracing between them the ends of the tiles of one tier of tiles and having tie portions projecting oppositely from said flanges and embracing between them the ends of the adjacent tier of tiles, said channel member having holes between said tubes.

1,862,832. SINTERING MACHINE. HENRY J. STEHLI, Cedar Grove, N. J. Filed Feb. 15, 1932. Serial No. 592,896. 20 Claims. (Cl. 266—21.)



1. A sintering machine having means to support pallets adjacent to their sides, and movable means to engage the pallets between their sides to resist sagging of the midportions of the pallets.

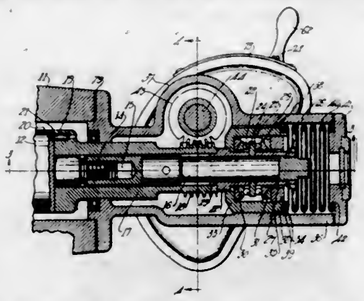
1,862,833. COUPLING FOR RUBBER COVERED TUBING. FRANK B. STOVER, Detroit, Mich., assignor to Sky Specialties Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 23, 1931. Serial No. 582,741. 9 Claims. (Cl. 285—86.)



1. A coupling for tubing covered with a yielding material, comprising a threaded member to which the tubing is to be coupled, an annular member abutting said threaded member and having an annular flange adapted to receive the tubing, a nut adapted to surround the tubing and to be screwed on said threaded member, and means associated with said nut for forcing said flange angularly into the yielding material on screwing of said nut.

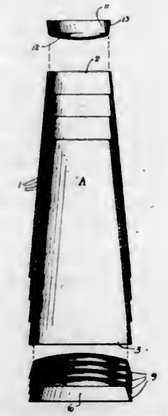
1,862,834. GRINDING MACHINE. MAX O. TRUDEAU, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 28, 1930. Serial No. 432,192. 17 Claims. (Cl. 74—14.)

1. In a grinding machine the combination of a spindle, bearings for the spindle, means to reciprocate the spindle through its bearings including a rotating shaft, an eccentric carried and driven thereby, pivotally mounted lever to be oscillated about its pivot by the eccentric, means connecting the lever with the spindle whereby the oscillations of the lever are converted into axial reciprocations



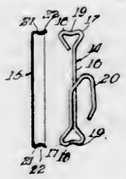
of the spindle, and means to vary the length of oscillations of the lever to thereby vary the stroke of reciprocation of the spindle.

1,862,835. CONTAINER AND PROCESS OF MAKING SAME. KONOSUKE TSUCHIYA, Sausalito, Calif. Filed Nov. 29, 1930. Serial No. 499,024. 4 Claims. (Cl. 93—39.)



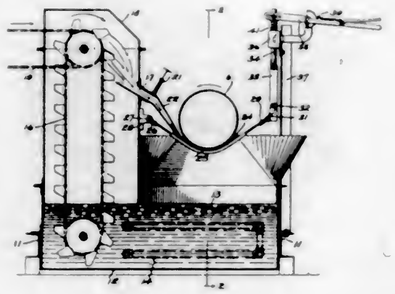
1. The method of forming a container consisting of the steps of assembling in frictional contact and in overlying planes the skirt of an arcuately crowned closure member having a skirt flared radially outwardly and depending from the periphery of the arcuately crowned portion, and thereafter forming an interengaging groove simultaneously in the said skirt and said container wall.

1,862,836. DRAPERY SUPPORTING DEVICE. JOHN S. VANCE, Chicago, Ill. Filed Feb. 23, 1931. Serial No. 517,645. 4 Claims. (Cl. 152—21.)



3. The invention as defined in claim 1, the second member being normally slightly bowed longitudinally to facilitate the engagement of the members with each other.

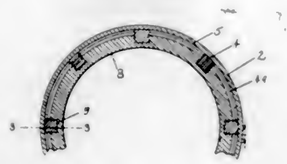
1,862,837. COATING MACHINE. CHARLES F. WIELAND and RUSSELL H. HUBBELL, San Francisco, Calif.; said Wieland assignor to General Paint Corporation, a Corporation of Nevada. Filed May 28, 1928. Serial No. 281,054. 5 Claims. (Cl. 91—43.)



1. The herein described method of applying coating material to a pipe, including revolving the pipe in close proximity with a wiper positioned below the pipe and conformable thereto, and supplying the coating material to the wiper at the bottom of the pipe whereby the material is uniformly spread by the wiper upon the pipe.

4. In a pipe coating machine, a framework adapted to support a pipe for axial rotation, a flexible sheet-like sling, means for supporting said sling adjacent the under side of said pipe, said supporting means being connected to the edges of said sling at opposite sides of the pipe, whereby the intermediate portion of the sling conforms to only a portion of the periphery of the pipe adjacent the under side of the pipe, said supporting means likewise serving to restrain said sling to effect a wiping action as the pipe rotates, and means for feeding plastic coating material between the upper side of said sling and the lower side of said pipe.

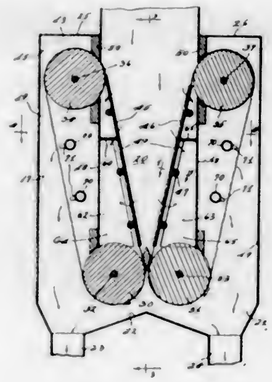
1,862,838. DEEP WELL STRAINER. GEORGE E. WILLERS, Lawrenceburg, Ind., assignor to A. D. Cook, Inc., Lawrenceburg, Ind., a Corporation of Indiana. Filed Jan. 8, 1931. Serial No. 507,351. 9 Claims. (Cl. 166—8.)



1. In a well strainer, the combination of supporting rods having spirally formed grooves therein, a strainer wire wrapped within a portion of the spiral grooves, and an end support for said rods having internal threads to screw into another portion of the spiral groove.

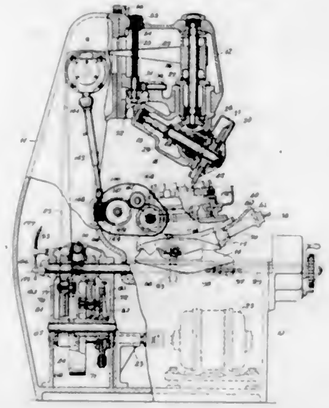
1,862,839. APPARATUS FOR SEPARATING DUST FROM GASES. HARRY E. BRELSFORD, Detroit, Mich., and NORMAN L. SNOW, New Canaan, Conn., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 2, 1929. Serial No. 411,169. 4 Claims. (Cl. 183—63.)

1. An apparatus for removing ash from furnace gases including in combination a casing divided to form a gas passage and a pair of ash chambers, endless belts of fine mesh material arranged in said casing and extending from said gas passage to said ash chambers, said belts being arranged across the flow of gases through said gas passage and being adapted to collect the ash from said gases, means for moving said belts to carry the ash collected by



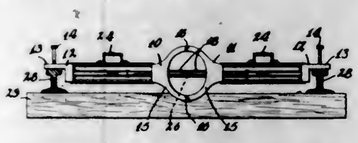
the same into said ash chambers, and blower elements arranged in said ash chambers for blowing the ash from said belts.

1,862,840. MACHINE FOR SHARPENING CUTTERS. EDWARD W. BULLOCK and RAYMOND WEBSTER, Rochester, N. Y., assignors to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Sept. 20, 1927. Serial No. 220,784. 43 Claims. (Cl. 51—134.)



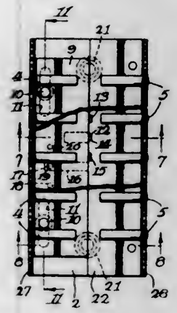
1. In an automatic grinding machine, a rotatable work support, means for producing alternately a series of reciprocating movements of relatively short length between the grinding wheel and the work and then a reciprocating movement in the same direction as the short strokes but of relatively greater length during which the work and wheel are moving clear of one another, means for producing a relative feeding movement between the grinding wheel and the work between the successive short movements to enable more stock to be ground off the work on successive short strokes, means operative on the periodic long strokes to index the work when it is clear of the wheel, and means operative on the long stroke, also, to reverse the feed mechanism to cause the work and wheel to be withdrawn from one another the distance of the feed movement in the preceding series of short strokes.

1,862,841. LEVELING DEVICE. LUGARDO T. CAMACHO, Armstead, Mont. Filed Oct. 12, 1929. Serial No. 399,217. 2 Claims. (Cl. 33—145.)



1. A device of the class described, comprising a pair of elongated sections adapted to be aligned in end contacting relations hingedly connected at their inner contacting ends and each section consisting of an outer end member formed with a horizontal finger, vertical adjustment screws engaged thru the finger, an inner end bracket with an eye for hinging braces between the said member and bracket, a handle on one of the braces, said bracket including a tube, and a spring pressed plunger in the tube.

1,862,842. VISIBLE RECORD AND LEAF HOLDER. HERBERT AUSTIN CONSOR, Monroe, Mich., assignor to The Weis Manufacturing Company, Monroe, Mich., a Corporation of Michigan. Filed June 8, 1929. Serial No. 369,341. 1 Claim. (Cl. 129—24.)



In a visible record removable leaf holder, the combination of a back having tilting sections therein, arranged to tilt about parallel axes disposed at the outer longitudinal edges of the back, ring halves on each section, and instrumentalities whereby the halves on one section are movable in unison out of alignment with the ring halves of the other section, said instrumentalities comprising a plate rigid with the ring halves and slidable on said one of said sections, in combination with means for holding said plate in any one of three adjusted positions, together with a click device to indicate each of said three positions of the slidable plate on its allotted section.

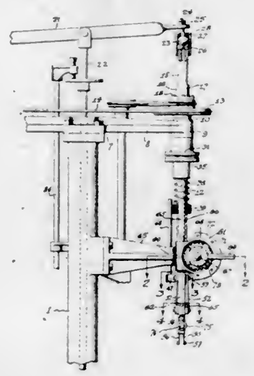
1,862,843. HALOGENATED INDANTHRONES AND PROCESS OF PREPARING THE SAME. JOSEPH DEINET, Milwaukee, and ROBERT J. GOODRICH and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed July 1, 1929. Serial No. 375,317. 11 Claims. (Cl. 260—31.)

1. The process of preparing halogenated indanthrones, which comprises treating N-dihydro-1,2,2',1'-anthraquinone azine substituted in at least one of the 3-positions by bromine with chlorinating agents under conditions milder than those leading to direct chlorination whereby to produce an intermediate complex addition product between the N-dihydro-1,2,2',1'-anthraquinone azine and the chlorinating agents, and thereafter decomposing said complex addition product with the elimination of bromine.

1,862,844. HALOGENATED INDANTHRONE COMPLEX AND PROCESS OF PREPARING THE SAME. JOSEPH DEINET, Milwaukee, and ROBERT J. GOODRICH and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed July 1, 1929. Serial No. 375,318. 17 Claims. (Cl. 260—31.)

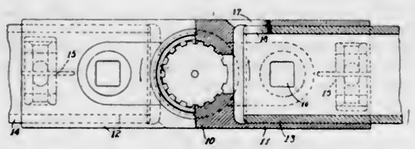
1. The process of preparing a halogenated indanthrone complex body, which comprises treating a halogenated N-dihydro-1,2,2',1'-anthraquinone azine containing at least one atom of bromine in a 3-position with sulfuryl chloride under conditions milder than those leading to chlorination.

1,862,845. SPINDLE FOR SCREW DRIVING MACHINES. FRANK H. DELLABEE, Detroit, Mich. Original application filed Jan. 9, 1926, Serial No. 80,184. Patent No. 1,813,697, dated July 7, 1931. Divided and this application filed Jan. 2, 1931. Serial No. 506,116. 13 Claims. (Cl. 144—32.)



1. In a fastener driving machine, an upper spindle section, means for rotating the same, a lower spindle section having a rotary and sliding engagement with said upper section and supported thereby in suspension to descend and rotate frictionally therewith, means carried by said upper section for transmitting downward movement from the upper section to the lower section, said means being spaced from the coacting portion of the lower section in raised or non-driving position of the upper section, whereby to permit partial descent of the upper section prior to the operation of said transmitting means, cooperating clutch elements carried respectively by said sections, and means for lowering and raising said upper section and effecting engagement and disengagement of said clutch elements.

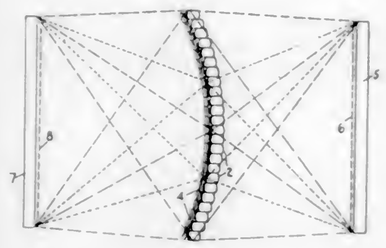
1,862,846. PROPELLER. THOMAS A. DICKS, Pittsburgh, Pa., assignor to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 2, 1930. Serial No. 499,511. 7 Claims. (Cl. 170—159.)



1. In combination, a hub having radially disposed sockets provided with ports facing in the direction of rotation, and a detachable hollow propeller blade adapted to

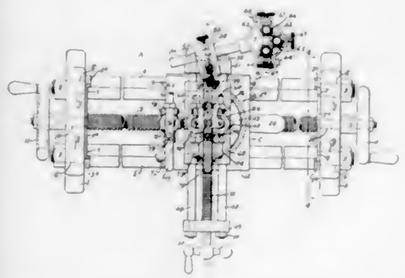
be received in each of said sockets and having a portion of the shank thereof cut away and registering with said port, and having slots along the trailing edge thereof for creating a low pressure area in said blade on rotation thereof so as to cause air to flow from the hub to the trailing edge of said propeller.

1,862,847. METHOD OF MAKING STEREOSCOPIC PICTURES. ERNEST E. DRAPER, Scarsdale, N. Y., assignor to The Perser Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,930. 3 Claims. (Cl. 88—24.)



1. The method of printing stereoscopic positives from relief negatives, which consists of projecting the image through a multiplicity of lenses arranged on the arc of a circle, adjacent prisms and a screen located between said negative and said lenses, on to a sensitized plate placed slightly behind another similar screen, both of said screens being formed of alternate opaque and transparent vertical lines.

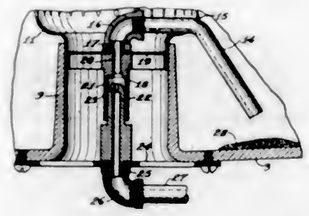
1,862,848. CUTTING MACHINE. ARTHUR J. FAUSEK and IRWING F. FAUSEK, Clayton, Mo. Filed July 24, 1930. Serial No. 470,395. 17 Claims. (Cl. 266—23.)



1. A cutting machine comprising supporting means, guiding members supported by said supporting means, a traveling carriage supported by and movable along said guiding members, means associated with said carriage for engaging a cutting torch, screw-threaded means for imparting movement to a part associated with said carriage, and a manually releasable element associated with said carriage and movable into and out of cooperative engagement with said screw-threaded means.

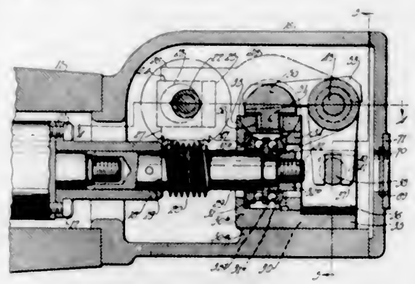
1,862,849. GAS PILOT FOR OIL BURNERS. AUGUSTUS J. FRAME, Columbus, Ohio. Filed Mar. 18, 1931. Serial No. 523,525. 6 Claims. (Cl. 158—92.)

1. In oil burning apparatus, a combustion vessel formed to comprise a bottom, side walls and a substantially open top, an air distributor disposed within said vessel and separably connected therewith, and a pilot burner com-



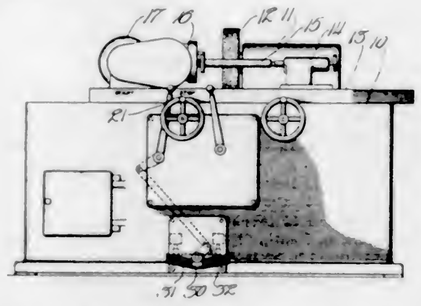
prising separable sections, one section of said burner being supported by said vessel and the other section of said burner being supported by said distributor.

1,862,850. GRINDING MACHINERY. HANS FRITSCHI, Cincinnati, Ohio, assignors to The Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 15, 1930. Serial No. 428,802. 16 Claims. (Cl. 74—14.)



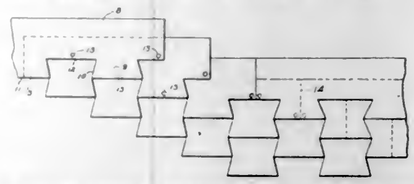
1. In a device of the class described the combination of a support, bearings carried thereby, a spindle rotatable in and axially shiftable through the bearings, disconnectable means for axially shifting the spindle, and means thereof for simultaneously disconnecting the axially shiftable means from the spindle and for locking same against axial displacement.

1,862,851. GRINDING MACHINERY. FREDERICK S. HAAS, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 5, 1927. Serial No. 210,836. 6 Claims. (Cl. 51—232.)



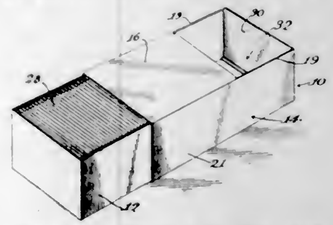
1. A grinding machine, including a bed, a table member movable on the bed, a rotary work driving member, power means for shifting the table, a motor for driving the work driving member, a control lever for the table power means, a control switch for the motor, and connections between the lever and switch whereby the switch may be actuated jointly with or independently of the movement of the lever.

1,862,852. ROOFING AND SIDING ELEMENT. NORMAN P. HARSHBERGER, Scarsdale, N. Y. Filed May 26, 1930. Serial No. 455,841. 8 Claims. (Cl. 108—7.)



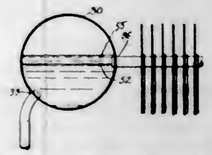
1. Shingle elements assembled on a roof in overlapping courses, each course having alternating depending tabs and recesses, the recesses being complementary in shape to the tabs, and each course comprising a plurality of separate elements having end extensions which abut one another, the lower edges of said abutting end extensions forming the bases of some of the recesses, said tabs having their lower edges of greater length than the upper portions of the tabs and said lower edges being of substantially the same length as the bases of the recesses, certain of the tabs being positioned over the abutting ends of two elements in the course below to protect the joint formed by said ends.

1,862,853. MATCH BOX CONSTRUCTION. HERMAN J. HAUSER, Los Angeles, Calif. Filed Sept. 29, 1930. Serial No. 485,117. 2 Claims. (Cl. 206—31.)



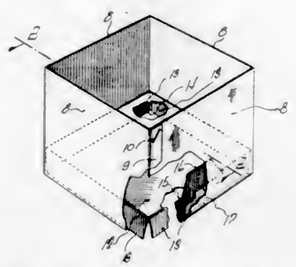
1. A match box comprising an open ended cover, a match container of tray form slidingly mounted in the cover, a closure tongue formed in the top wall of the cover adjacent one end thereof, said tongue adapted to be bent downwardly into the cover to form an end closure after the closure has been partially withdrawn from the container, whereby the end wall of the container within the cover, the side walls and closure tongue of the cover will form a compartment for the reception of used matches.

1,862,854. REFRIGERATING APPARATUS. CHARLES F. HENNEY, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 17, 1930. Serial No. 468,555. 4 Claims. (Cl. 62—95.)



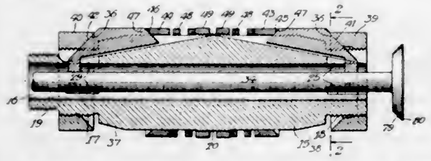
1. In a cooling unit for refrigerating apparatus, the combination of a header adapted to contain liquid refrigerant and a floating layer of lubricant, means for regulating the level of the liquid refrigerant, and a looped duct having one end depending from the header and connected thereto to receive liquid refrigerant therefrom and having the other end connected into the header at the liquid refrigerant level.

1,862,855. COLLAPSIBLE BOX. JOHN VINCENT HOOD, Racine, Wis. Filed Mar. 28, 1930. Serial No. 439,738. 5 Claims. (Cl. 229—16.)



1. A collapsible box comprising side walls, a bottom integrally connected, with one of the side walls and folded adjacent its connection with the said side wall to space the same inwardly from the lower edges of the side walls, a downwardly folded portion extending across each of the edges of the bottom, the bottom having an aperture adjacent the fold between the bottom and one of said portions, an upwardly directed extension on the side wall adjacent the aperture in the bottom to support the bottom, and a projection on said upwardly directed extension projecting through said aperture.

1,862,856. CHUCK. LEONARD W. JOHNSON, Batavia, Ill. Filed Dec. 9, 1929. Serial No. 412,691. 3 Claims. (Cl. 279—60.)

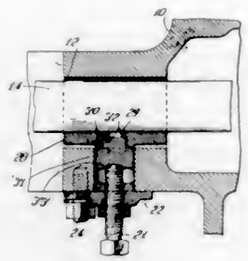


1. A chuck, comprising a body member having a central opening therein and a plurality of V-shaped inclined guideways in its outer wall and having openings from said guideways into said central opening, the said guideways being inclined towards the ends of the said body member, slidably mounted V-shaped members in said guideways having sloping surfaces at each of their ends, movably mounted retaining members having undercut portions adapted to overlap said slidably mounted members, and means carried by said slidably mounted members extending through the said slots into the central bore to engage a workpiece at right angles thereto.

1,862,857. BUFFER-STEM WEAR PLATE ADJUSTER. MALCOLM S. JOHNSON, Chicago, Ill., assignor to Transery Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1930. Serial No. 493,492. 2 Claims. (Cl. 213—222.)

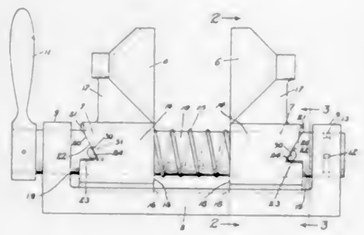
1. A buffer-stem wear plate adjuster comprising a wear plate adapted to fit into the buffer-stem channel of the platform underframe of a railroad car, the underframe having an opening transverse to the buffer-stem, the wear plate on its lower face being provided with an opening, a follower member arranged in said transverse opening and provided with an upstanding portion adapted to fit into the opening in the wear plate to lock the latter in

place, an adjusting bolt adapted to engage with the lower end of the follower member and thereby force the latter upwardly and hold the wear plate in supporting relation



with the buffer-stem, and means adapted to be secured to the bottom of the underframe whereby the bolt is adjustably held in place.

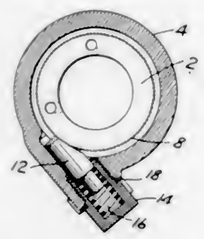
1,862,858. GOLF BALL MARKING MACHINE OR THE LIKE. JESSE D. LYON, Cincinnati, Ohio. Filed Dec. 2, 1929. Serial No. 410,999. 6 Claims. (Cl. 81—26.)



1. In combination in a vise a shaft having an opening therein, said shaft being mounted for rotatory movement, a sliding clamp jaw element having an interior annular wall surrounding the shaft and freely movable relative thereto, a cam follower pin rotatably received in the opening of the shaft, a projecting portion on the cam follower pin, said portion being provided with a substantially flat face, a curved terminal annular cam face on the sliding element for co-operation with the substantially flat face of the pin, a shoulder on the pin in advance of the face for abutting the interior annular wall of the sliding element to preclude outward displacement thereof from the opening of the shaft, and means for normally retaining the cam face and the cam follower face in abutment, whereby the cam and pin are maintained in engagement and the pin retained in place, while permitting ready removal and replacement of the pin by longitudinal manual shifting of the jaw.

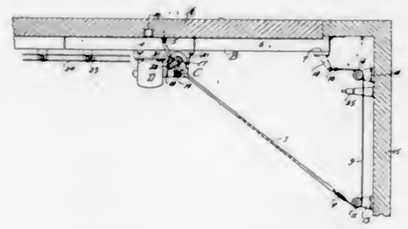
1,862,859. LOCKING DEVICE FOR PNEUMATIC TOOLS. JOHN MICHEL, Conshohocken, Pa., assignor to The Dallett Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 3, 1931. Serial No. 513,076. 3 Claims. (Cl. 285—146.)

1. In a pneumatic tool, a barrel, a sleeve arranged to be threaded upon the barrel, a circular series of ratchet teeth carried by the barrel, and a spring pressed wedge-shaped pawl carried by the sleeve and adapted to engage the teeth to prevent relative rotation between the sleeve and barrel in such direction as would release them from each other, said pawl being in the form of a plunger having teeth arranged in a series along a plane tangential to said series of ratchet teeth, each of the pawl teeth having an outer face forming a large angle, of the order



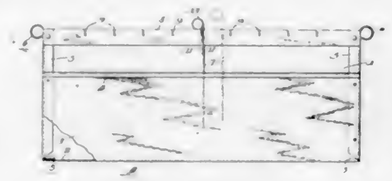
of a right angle, with the tangent plane and an inner face forming a relatively small angle therewith, the pawl being wedged by the spring between the sleeve and barrel.

1,862,860. DOOR OPERATING MECHANISM. FRANK L. MORSE, Ithaca, N. Y. Original application filed Oct. 2, 1925, Serial No. 60,003, Patent No. 1,777,526, dated Oct. 7, 1930. Divided and this application filed Nov. 26, 1929. Serial No. 409,785. 4 Claims. (Cl. 268—63.)



1. A door operating mechanism comprising in combination a flexible rack, a motor device including a driven gear mounted on the door and movable along said rack to open and close the door and means operable by the door for operating on said rack to hold the flexible rack in driving engagement with the gear.

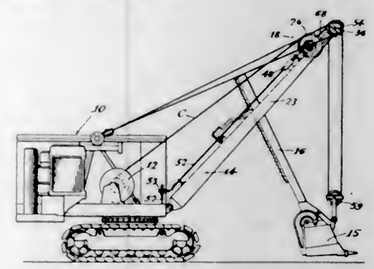
1,862,861. FILING CONTAINER. GEORGE J. PUBUCKER, Fort Atkinson, Wis. Filed May 6, 1931. Serial No. 535,395. 4 Claims. (Cl. 129—16.)



2. A filing container comprising a receptacle having an open top, an adjustable partition therein, said partition being substantially perpendicular to the bottom of the container, and a pair of spaced guide rails for suspending said partition in said container through the open top thereof, said rails having spaced notches along their upper edges, said notches being of substantially greater depth than width and said partition having means slidingly

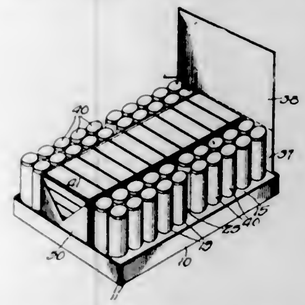
engaging said rail, portions of said means being adapted to seat within said notches whereby the partition will be maintained substantially perpendicular to said base when interlocked with said rails.

1,862,862. HOISTING APPARATUS FOR POWER OPERATED SHOVELS. WILLIAM RUDDOCK, Whittier, Calif. Filed June 29, 1931. Serial No. 547,661. 3 Claims. (Cl. 214—135.)



1. In a power shovel including a boom, a hoisting cable, and a dipper having a pulley, a spindle disposed in openings formed in the side members of said boom adjacent the outer ends thereof, a drum mounted on said spindle, an idler sheave mounted on said spindle, a second spindle mounted on the side members of the boom rearwardly of said first spindle, a sheave wheel of larger diameter than said drum mounted on said second spindle, and transmission between said sheave and drum, the hoisting cable adapted to be passed around said sheave over said idler pulley around the dipper pulley and connected to said drum.

1,862,863. DISPLAY CONTAINER. OTTO Y. SCHNERING, Chicago, Ill., assignor to Curtiss Candy Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1930. Serial No. 480,315. 5 Claims. (Cl. 206—44.)



1. A box for merchandise articles of different characteristics, comprising a bottom, a merchandise-supporting member telescoping into said bottom, said supporting member having a plurality of spaced apart openings therein in parallelism, one side of said openings being serrated to provide dividers between items of merchandise, a top for said supporting member, and a display card at one end of said box between said bottom and supporting member and forming an end support for merchandise on said top.

1,862,864. CENTRIFUGAL FLEXIBLE COUPLING. FRANK SCHOUTEN, Glen Arm, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed Feb. 19, 1930. Serial No. 429,502. 6 Claims. (Cl. 64—96.)

1. The combination in a centrifugal flexible coupling of driving and driven members substantially in axial alignment and means connecting the driving and driven members comprising centrifugal arms on the driving member and spaced abbutments on the driven member enclosing said arms, part of said abutments being adjacent the outer ends of the arms and spaced slightly more than the

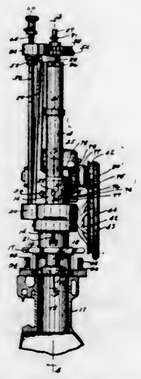


width of the arms and part of said abutments being adjacent the inner ends of said arms and spaced to provide angular play of said members, the torque of the load being normally balanced by the tangential component of the centrifugal force of the arms applied at said outer abutments.

1,862,865. MONO-BROMO-MONO-CHLORO INDANTHRONE AND PROCESS OF PREPARING THE SAME. OTTO STALLMANN, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed July 1, 1929. Serial No. 375,329. 9 Claims. (Cl. 260—31.)

1. The process of preparing a mixed dihalogenated member of the indanthrone family, which comprises hydrolyzing the intermediate reaction product obtainable by treating substantially one molecular proportion of 3,3'-dibromo-N-dihydro-1,2,2',1'-anthraquinone azine in an inert diluent with 2 molecular proportions of sulfuryl chloride at temperatures below 80° C.

1,862,866. BORING MACHINE. ADOLPH STORM, Minneapolis, Minn., assignor to Storm Manufacturing Co., Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 14, 1929. Serial No. 392,649. 2 Claims. (Cl. 77—2.)



1. A machine of the class described comprising a housing having a supporting base, upper and lower axially aligned and axially spaced split conical bearings adjustably mounted in the housing, said housing being of increased diameter between the bearings to provide a gear compartment, a tubular boring bar mounted in the bearings for compound rotary and axial movements, a nut threaded on each split bearing to shift it axially and to thereby center the bar within the hous-

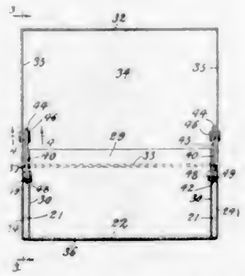
ing, a post mounted on the gear compartment of the housing, a bearing head on the post axially aligned with said bearings and axially spaced above the housing, a feed screw extending axially into the boring bar from the top thereof and journaled at its upper end in the bearing head and held therein against axial movement, a nut-acting member on the feed screw and fixed in the upper end of the boring bar, a feed shaft journaled at its lower end in a bearing on the housing and extending into the gear compartment and at its upper end in a bearing on the post, a worm gear in the gear housing keyed to the boring bar with freedom to permit the boring bar to move axially therethrough, an electric motor mounted on the gear compartment, a worm journaled in bearings in said compartment and meshing with the worm gear, a pulley on the worm, a second pulley on the rotor of the motor, a belt arranged to run over said two pulleys, driving connections from the worm gear to the feed shaft within said compartment, and other driving connections from the feed shaft to the feed screw.

1,862,867. WHEEL. JOSEPH B. STRAUSS, Chicago, Ill. Filed Feb. 28, 1930. Serial No. 432,279. 4 Claims. (Cl. 295—22.)



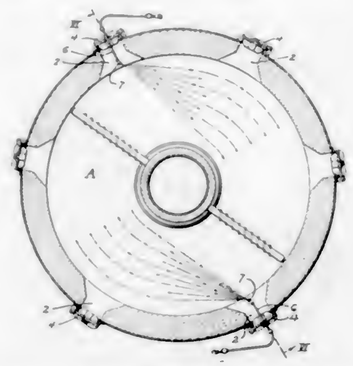
1. A wheel comprising a series of main laminæ placed side by side and means for uniting them into a unitary whole the outside laminæ on both sides of the wheel being metal, the central portion of the wheel being provided on opposite sides of the main laminæ with laminæ smaller in diameter than the main laminæ and forming the outer sections of the hub of the wheel.

1,862,868. CONTAINER. MORRIS SUKOFF, Brooklyn, N. Y. Filed Mar. 22, 1930. Serial No. 438,103. 2 Claims. (Cl. 229—44.)



1. In a container the combination of a body portion, a neck inserted in said body portion, a cover hinged to said body portion, a pair of adjusting links interposed between said cover and said body portion, said links having each a guide slot formed therein, eyelets connecting the upper ends of said links and said cover, the other end of each link located between a wall of the neck and wall of the body portion and in frictional engagement with the said wall of the neck and eyelets extending from said neck and extending through the guide slots of said links.

1,862,869. METHOD OF ROASTING ORES AND CONCENTRATES. URLYN C. TAINTON, St. Louis, Mo. Filed Aug. 9, 1930. Serial No. 474,148. 2 Claims. (Cl. 263—26.)



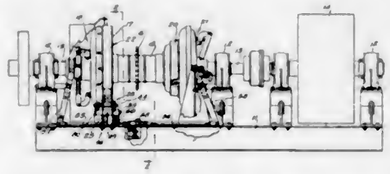
1. A method of increasing the capacity of a roasting furnace and the quality of gas obtained therefrom, which consists in directing small jets of air under high pressure into the roasting furnace so as to agitate the gas immediately over the hearth and thus prevent any layer of stagnant gas which would otherwise form and insulate the ore from contact with the oxidizing gases, and in a manner to impart motion to the oxidizing gases and to continuously bring the oxidizing gases into intimate contact with the ore being roasted.

1,862,870. PASTE DISPENSING TUBE. JAMES A. TISCORNIA, San Jose, Calif. Filed Nov. 12, 1930. Serial No. 495,097. 1 Claim. (Cl. 221—60.)



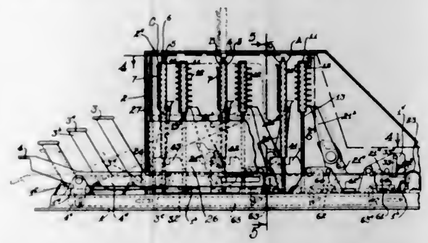
A spreader head for collapsible paste tubes comprising, an elongated element disposed on the end of the tube crosswise thereof and provided with an outwardly directed spreader surface curvilinear in transverse cross-section and having a passage formed therein communicating with said surface and the interior of the tube, the said element having a slot formed therethrough crosswise thereof and intersecting said passage, and an element slidably mounted in said slot and having an orifice formed therein registrable with said passage.

1,862,871. REVERSE GEAR MECHANISM. GUGLIELMO TREMOLADA, Los Angeles, Calif., assignor of one-half to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Apr. 7, 1930. Serial No. 442,093. 17 Claims. (Cl. 192—4.)



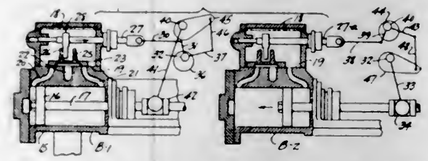
1. A reversing drive mechanism of the character described, including: a drive means and a driven means; a direct drive and a reversing drive therebetween; a neutral brake adapted to stop the driven means when shifting from one drive to the other; a single operating mechanism interconnecting the direct and reverse driving mechanism and neutral brake whereby the application of the neutral brake is performed by a shift from one driving means to the other; and an auxiliary brake applying mechanism for positively applying said neutral brake when it is desired to positively hold said driven means from rotating.

1,862,872. EDUCATIONAL APPARATUS. LOUIS H. VINCENT, Santa Paula, Calif., assignor of one-half to J. G. Leavens, Santa Paula, Calif. Filed Apr. 5, 1930. Serial No. 441,809. 25 Claims. (C. 35—9.)



1. In an apparatus of the class described, a movable index carriage, a multiplicity of fingers in association with and positioned normally in the path of the carriage, each finger being normally positioned to check the movement of the carriage and keys, one operatively connected with each of the fingers for shifting the same free of the carriage, and allowing the movement of the carriage to be checked by another of said fingers, said carriage being held against movement by one of the fingers at a time and adapted to be released when said finger is shifted by the key connected therewith.

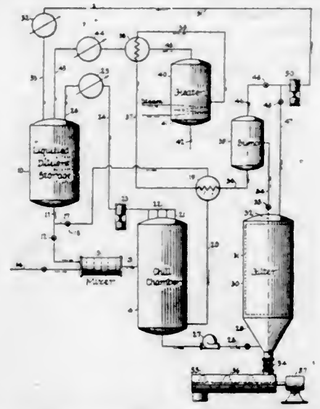
1,862,873. COMPOUND VALVE MOTION FOR STEAM PUMPING ENGINES. GOTTLIEB W. VOLZ, Long Beach, Calif. Filed July 7, 1931. Serial No. 549,147. 6 Claims. (Cl. 121—116.)



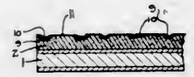
1. In a duplex pump having reciprocating plungers, a duplex reciprocating fluid actuated motor having piston rods, one connected to each plunger, slide valves for said motor controlling inlet ports thereto; a valve motion including linkage, one for each valve, each linkage including a lost motion connection to a valve, a rock shaft having a lever for operating each valve, a rockable bearing sleeve in which said rock shaft is eccentrically journalled, means connecting said rock shaft to one piston rod whereby to be rocked thereby, means connecting said sleeve to the other piston rod to be rocked thereby; said piston rods thereby producing a composite motion in said valve rods whereby to operate said valves so as to advance the lost motion connection toward valve opening of the pump which is a companion to the pump started on its stroke.

1,862,874. SEPARATING WAX FROM OIL. VANDERVEER VOORHEES, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Oct. 26, 1931. Serial No. 571,066. 7 Claims. (Cl. 196—19.)

4. The process of dewaxing a viscous mineral oil comprising diluting said oil under pressure with a solvent selected from the class consisting of the normally gaseous alkyl and alkylene ethers, reducing the pressure on the solution, permitting a portion of the solvent to evaporate and thereby cooling the solution to a low temperature at which the wax is substantially all crystallized from the solution, separating the wax from the oil and solvent, and subsequently recovering the remaining solvent from the oil.

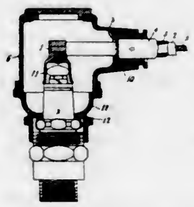


1,862,875. SURFACE ORNAMENTATION AND METHOD OF PRODUCING SAME. JOHN J. WEBER, Wilmette, Ill., assignor to J. H. Jochum, jr., Chicago, Ill. Filed June 4, 1928. Serial No. 282,676. 10 Claims. (Cl. 41—17.)



1. In a process of making artificial stone, the steps of producing different colored batches of a plastic material, combining the batches into a single pile without mixing the same, and applying irregular portions from said pile over irregular areas of a carrier until the entire surface of the carrier is coated with said mass and with the surface which is to constitute the front surface of the product exposed, roughening the portions of the said surface of the mass while still in plastic condition and letting it harden.

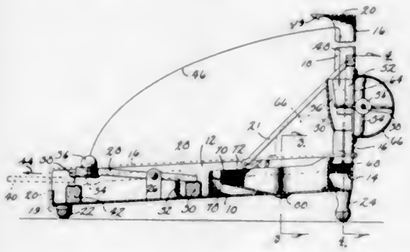
1,862,876. CONNECTER HOUSING. GEORGE MAURICE WRIGHT, Great Baddow, Chelmsford, and SIDNEY BERTRAM SMITH, Gordonville, Chelmsford, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 23, 1928, Serial No. 321,302, and in Great Britain Dec. 5, 1927. 3 Claims. (Cl. 173—259.)



1. Metallic shielding apparatus for preventing electrical disturbances from being radiated from electrical conductor connecters, including, a metallic cup shaped base member

connected with one of said conductors and supported thereby, said base member being enlarged at its free end and terminating in a flange, a metallic shell-like body member adapted to be seated on said base member, threaded means for retaining said body member on said base member, a closure member threaded to said body member, and means comprising a water-proof joint in said closure member for permitting another of said conductors to be connected with said first named conductor.

1,862,877. MARBLE GUN GAME APPARATUS. AUGUST ANDERSEN, Des Moines, Iowa; Harry Andersen, administrator of said August Andersen, deceased, assignor to Peder Andersen, Des Moines, Iowa. Filed Apr. 1, 1929. Serial No. 351,540. 2 Claims. (Cl. 273—95.)



1. In a game apparatus of the class described, a basket having a vertical slot, a marble adapted to be projected through said basket, a score dial actuator adapted to be actuated by said marble when passing through said basket, said score dial actuator comprising a rotor back of said basket having arms adapted to project through said slot, a score dial operatively connected with said score dial actuator, a plurality of troughs, adapted to receive said marble from said basket and a plurality of depressions for finally receiving said marble.

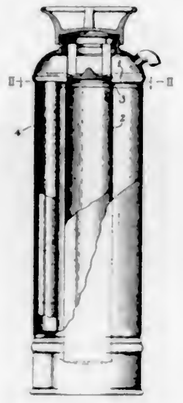
1,862,878. HEEL AND HEEL COVERING AND METHOD OF MAKING THE SAME. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 11, 1929. Serial No. 413,370. 35 Claims. (Cl. 12—147.)



1. A heel having a covering comprising a plurality of strips of leather in which the grain extends endwise to the side faces of the strips, said strips extending around the rear and sides of the heel.

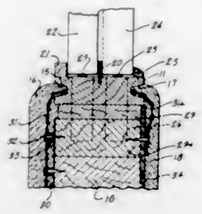
1,862,879. FIRE EXTINGUISHER. ADDISON O. BONIFACE, Utica, N. Y., assignor, by mesne assignments, to American La France and Foamite Corporation, a Corporation of New York. Filed Aug. 20, 1925, Serial No. 51,277. Renewed May 5, 1930. 4 Claims. (Cl. 169—32.)

1. In a tipping foam-type extinguisher having an outer container and an inner tubular container for the respective foam-making solutions and having a filling opening, and the inner container having a cage supported in said opening, a partition provided in said outer container through which and through said filling opening said inner container is insertable and removable and which defines a mixing chamber by dividing off the end of the extinguisher from the outer solution container and which terminates short of the inner container to provide between the same and itself an open annular solution discharge outlet to the mixing chamber which chamber has a foam discharge outlet, said inner solution container having its discharge outlet to the mixing chamber located near the discharge outlet



thereto of the outer container, both said outlets being open on tipping of the extinguisher and all said parts being mutually organized to produce first contact of the two solutions solely by their gravitational flow on tipping of the extinguisher and as they enter the mixing chamber, the means of outlet for the respective solutions from each container to said mixing chamber being of such relative areas as to produce such a mixture of the solutions as will produce a good foam.

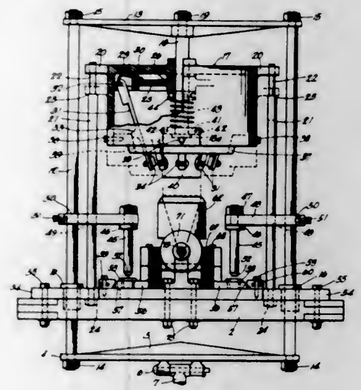
1,862,880. DOOR AND WINDOW FRAME CONSTRUCTION. SHOLTS H. BOYD, Venice, Calif. Filed May 16, 1930. Serial No. 452,993. 11 Claims. (Cl. 20—11.)



1. A door and window frame construction comprising, in combination: a frame member; a plaster wall coating; the frame member having an outer surface extending substantially parallel with and normally back of the outer surface of the plaster coating; the said outer surface of the frame member having a groove therein extending inwardly at substantially right angles to the plane of the plaster coating, the terminal edge of the plaster coating being extended into said groove.

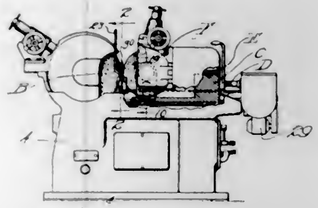
1,862,881. MACHINE FOR HERMETICALLY SEALING PACKAGES. WILLIAM H. CARSON, Norman, Okla. Filed Mar. 21, 1929. Serial No. 348,894. 10 Claims. (Cl. 226—87.)

1. A machine for hermetically sealing cone shaped packages comprising, a cap gripping cylinder for holding a hemispherical cap within the mouth of a conical container and for inter-engaging the cap with the edge portions of the walls of the container, and means for compressing the



inter-engaged portions, said compressing means contacting the upper edges of said cap and container approximately in alinement with the sides of the container.

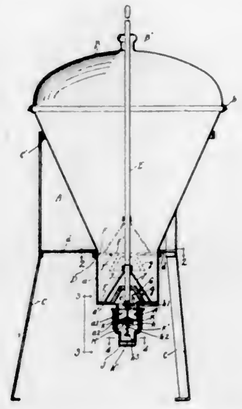
1,862,882. GRINDING MACHINERY. JOHN E. CASTER, Cincinnati, Ohio, assignor to The Cincinnati Grinders, Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 23, 1926. Serial No. 137,205. 13 Claims. (Cl. 51—103.)



1. A grinding machine including opposed grinding and regulating wheels and an intermediate work rest, the grinding wheel moving in the direction of the work rest at a high or grinding rate of speed and the regulating wheel having its operative surface moving upwardly adjacent the work rest at a speed to frictionally engage and control the rate of rotation of the work piece, the grinding wheel having a work receiving groove formed annularly in its face and means for reciprocating one of the three work throat forming members to alternately urge the work piece against opposite sides of the grinding wheel groove to equalize the wear on the walls of the groove.

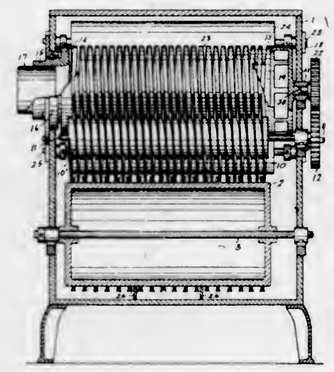
1,862,883. MAYONNAISE DISPENSER. CLAY R. CHENEY, Los Angeles, Calif. Filed Nov. 21, 1928. Serial No. 321,010. 1 Claim. (Cl. 221—78.)

A dispenser comprising a receptacle formed at its lower end with a depending neck, an outlet chamber depending from the lower end of said neck, a cap fitted over said outlet chamber and depending therefrom, said cap being provided with an outlet in its lower end, a bayonet joint for holding said cap on said outlet chamber, a plunger mounted in said neck, a valve in said plunger, constructed and arranged to open upon the upward stroke of the plunger to admit a portion of the contents of said receptacle into said neck and outlet chamber, and to close upon the downward stroke of said plunger, and a valve controlling said outlet chamber, constructed and arranged to close



upon the upward stroke of the plunger and to open upon the downward stroke of the plunger to enable the plunger to force the contents of said neck and outlet chamber out through the outlet in said cap.

1,862,884. COTTON GIN. WILLIAM REID COLLIER, Houston, Tex. Filed Jan. 15, 1929. Serial No. 332,701. 14 Claims. (Cl. 19—55.)

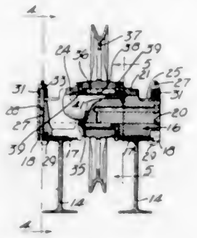


1. In a cotton gin a saw element having peripheral teeth which describe a cylindrical surface as the element rotates, and means for feeding seed cotton to said teeth in a direction parallel with the axis of said element, said teeth being spirally arranged and being effective to assist in the movement of the cotton along from end to end of the element.

1,862,885. SHEAVE ASSEMBLY FOR CROWN BLOCKS. WILLIAM D. DAVIDSON and EDWIN W. GOESER, Los Angeles, Calif., assignors to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 3, 1927. Serial No. 158,546. 17 Claims. (Cl. 308—59.)

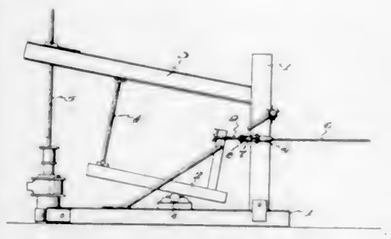
1. In combination in a crown-block: a shaft; a sheave rotatably mounted on said shaft; boxes embracing said

shaft on opposite sides of said sheave, said boxes being supported by supporting members, and said boxes having integral bridge portions so that said boxes have annular



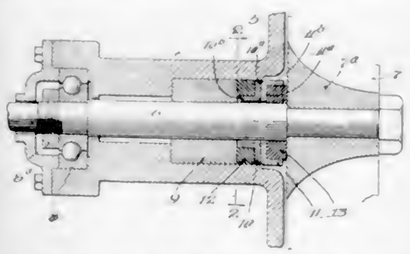
bearing faces adjacent to said sheave; securing means for securing said boxes to said supporting members; and clamp means for clamping said shaft from rotation.

1,862,886. PULL ROD SLIP CLAMP. REAGAN C. DUBLIN, Wichita Falls, Tex., assignor of one-half to Underwood Drilling Company, Wichita Falls, Tex. Filed Jan. 30, 1931. Serial No. 512,324. 1 Claim. (Cl. 24—126.)



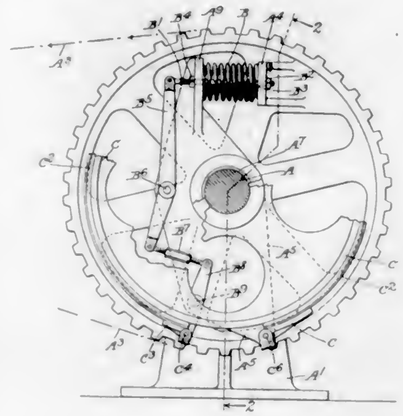
In a pull rod slip clamp, a combination including a body having a pair of parallel arms integral therewith and perforated to receive a bolt, said body being swaged into conical shape at one end and having diametrically opposed slots at a point immediately forward of said conical end, trunco-coniform slips arranged to conform within the conical end of said body and capable of limited relative slidable movement and having roughened inner surfaces to engage and hold a rod and a wedge receivable in the slots in said body to prevent displacement of said slips.

1,862,887. SEAL FOR SHAFTS. AUGUSTUS C. DURDIN, Jr., Chicago, Ill., assignor to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1929. Serial No. 356,629. 11 Claims. (Cl. 286—7.)



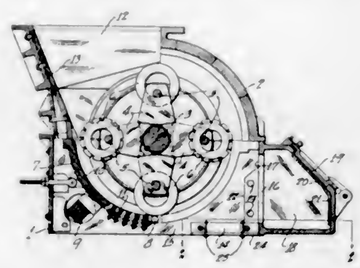
1. A seal for rotating shafts comprising two relatively rotatable metal rings held in running contact with each other, two resilient sealing rings disposed at the sides of the metal rings and contacting therewith, all of said rings being adapted to surround a rotatable shaft, and one resilient sealing ring contacting with a stationary wall and the other with the shaft, and means for applying pressure upon said rings in a direction parallel with the shaft whereby the resilient sealing rings are compressed and the metal rings held in close running contact.

1,862,888. OVERLOAD RELEASE. ASGER EILERSGAARD, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed July 18, 1930. Serial No. 468,852. 10 Claims. (Cl. 64—99.)



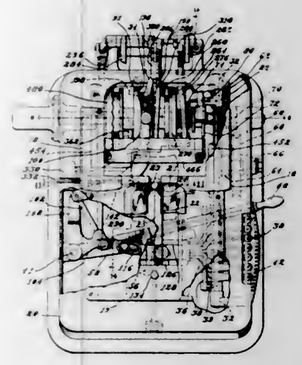
1. An overload release comprising a driving wheel and a driven member, a clutch interposed between them, a spring interposed between them through which power is transmitted, means for adjusting the initial resistance of the spring, and a connection between the spring and the clutch whereby when the spring is loaded beyond its initial adjustment the clutch is released and means for adjusting said connection.

1,862,889. PULVERIZING OR CRUSHING MACHINE. EDWIN E. ELZEMEYER and HENRY C. GRIESEDIECK, Webster Groves, Mo., assignors to American Pulverizer Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 10, 1930. Serial No. 494,661. 17 Claims. (Cl. 83—11.)



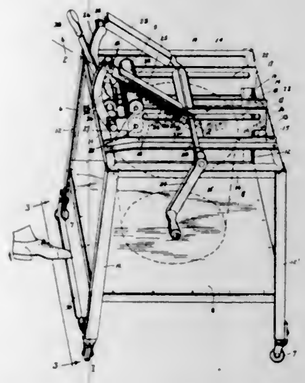
1. In a machine of the class described, in combination, a casing, rotary crushing means within the casing, and a screening grid disposed horizontally within the casing below the path of and tangentially to said rotary means for separating material cast therefrom.

1,862,890. PREPARING AND ASSEMBLING PARTS OF SHOE UPPERS. HERBERT ELLIOT ENSLIN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 27, 1924. Serial No. 695,567. 124 Claims. (Cl. 12—51.)



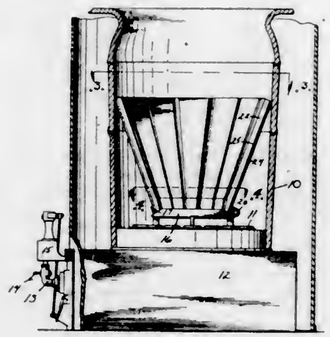
1. In a machine for preparing shoe parts, mechanism adapted to be brought into engagement with a piece of work, power means constructed and arranged to move said mechanism directly to any one of a plurality of operative positions in accordance with a characteristic of the work to be operated upon, and means under the control of the operator for controlling the extent of the movement imparted by said power means.

1,862,891. MOP WRINGING UNIT. FRANK M. FRITSCH, Hamilton, Ohio, assignor to The Eagle Woodenware Manufacturing Company, Hamilton, Ohio, a Corporation of Ohio. Filed May 24, 1930. Serial No. 455,428. 2 Claims. (Cl. 15—262.)



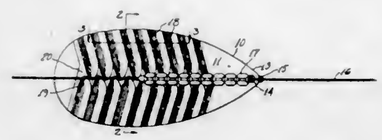
1. In combination a tractional frame comprising legs, a platform for a container supported by the frame, a wringing device supported by the frame above the platform and comprising a crank shaft for actuating the wringing device from an operator's position in front of the frame, a slightly elevated foot piece connecting adjacent legs and extending across the front of the frame in parallelism with the crank shaft for use simultaneously with the wringing device and an elevated hand lever arranged for shifting the crank shaft and disposed outwardly of and beyond the frame at hip level when the device is in the operative wringing position, whereby an operator may stabilize the device by leaning against the extending hand lever while depressing the foot piece and operating the crank shaft.

1,862,892. HEAT RADIATING DEVICE FOR GAS FURNACES. WILLIS G. HASKELL, Jr., Cedar Rapids, Iowa. Filed Sept. 29, 1930. Serial No. 485,155. 3 Claims. (Cl. 158—7.)



1. A heating radiating device for furnaces comprising a series of sections, each section being made of a material capable of becoming radiant when subjected to heat, and also of such nature that it may be readily cut away by an ordinary rasp or file, each section having its outer surface segmental in shape to substantially fit the interior of a furnace and having the outer portions of its side edges relatively narrow and arranged substantially radial to the curvature of the outer surface with the remainder of the side edges inclined at a relatively acute angle toward each other so that when two sections are arranged side by side only the narrow outer portions of their adjacent edges will engage.

1,862,893. ATTRACTOR FOR GAME FISH. EARL G. HOLTZCLAW, Portland, Oreg. Filed June 23, 1931. Serial No. 546,213. 1 Claim. (Cl. 43—45.)

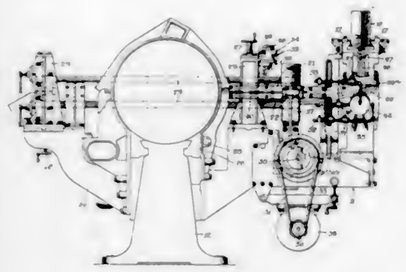


An attractor consisting of a dished oval reflector having two groups of corrugations formed therein each of which groups extends from the periphery of the attractor backwardly toward its major axis, the end nearest the major axis having a rounded reflecting surface merging into the body of the attractor, the corrugations of the adjacent groups having an alternate relationship.

1,862,894. WORK FEEDING DEVICE. DAVYDD C. HUGHES, Beloit, Wis., assignor to Gardner Machine Company, Beloit, Wis., a Corporation of Illinois. Filed Jan. 2, 1931. Serial No. 506,027. 22 Claims. (Cl. 51—215.)

1. In a machine having a tool, means for advancing work pieces into operative relation to the tool, a hopper

for containing a supply of work pieces, means for feeding such work pieces from said hopper to said advancing means one by one, and a control device for said feeding



means operable when actuated to initiate feeding action of said feeding means and arranged to be actuated by the work pieces as they are moved by said advancing means.

1,862,895. PRODUCTION OF RIVETED JOINTS AND IN APPARATUS THEREFOR. ARTHUR NEWTON JACKSON, Manchester, England, assignor to De Bergue and Company Limited, Manchester, England. Filed July 15, 1929, Serial No. 378,371, and in Great Britain Aug. 1, 1928. 2 Claims. (Cl. 78—46.)



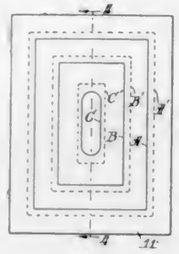
1. A riveting tool for pressing rivets into metal plates to leave the preformed head flush with the surface of the plate comprising two dies, one die formed with a flat face to engage the flat head of the rivet and means on the said flat face to centre the rivet relatively to the other die and the second die formed with a circular recess in the centre substantially larger than the rivet head to receive and depress the plates, a cup shaped aperture concentric with and opening out of the recess to spread out the shank of the rivet and form a new head on the reverse end thereof, the pressing of the plates into the recess and the spreading out of the shank being carried out simultaneously at the same operation.

1,862,896. STABILIZED BACTERICIDE AND PROCESS OF STABILIZING IT. MORRIS S. KHARASCH, Chicago, Ill. Filed Aug. 22, 1931. Serial No. 558,830. 19 Claims. (Cl. 23—250.)

1. The process of stabilizing a water solution of a water-soluble alkyl mercuric salt in which one bond of the mercury atom is attached to a carbon atom of an alkyl radical, the other bond of the mercury atom is attached to one bond of a sulphur atom, and the other bond of the sulphur atom is attached to a carbon atom of an organic radical containing an acid group which has a valence bond attached to an alkali or alkali-earth metal; which consists in adding to such solution an anti-oxidant which tends to inhibit the acquisition of burning properties by the solution.

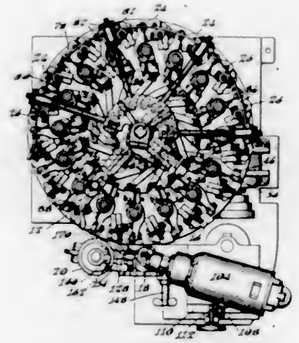
1,862,897. METHOD AND BLANK FOR PRODUCING FRAMES. FRANK H. KLIE, Chicago, Ill. Filed Sept. 16, 1931. Serial No. 563,069. 7 Claims. (Cl. 40—152.)

1. The method of making frames from sections of pressboard or the like which consists in cutting into one side of the board to a predetermined depth on the outline of the effective frame opening desired, similarly cutting the opposite side on an outline of greater area, and tearing



apart the two portions of the board outlined by said cuts, thus producing a rabbeted edge in the material that joined the opposite cuts.

1,862,898. MACHINE FOR OPERATING UPON HEEL BLANKS. RALPH F. KNIGHT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 18, 1930. Serial No. 476,034. 29 Claims. (Cl. 12—42.)

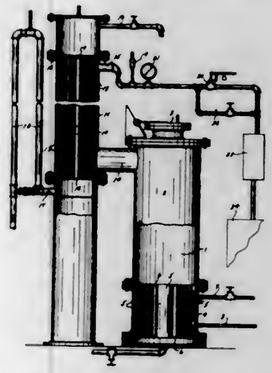


1. In a grooving machine, a cutter, a jack arranged to hold a heel blank, said cutter and said jack being relatively movable to carry the heel blank past the cutter in a direction extending heightwise of the heel blank, and means for moving the cutter as a whole in a direction transverse to the path of said relative movement of the heel blank and cutter, as the heel blank and cutter move past each other, to form a heel breast surface the lateral corners of which will lie in a plane.

1,862,899. TREATMENT OF FINELY DIVIDED SULPHIDE ORES. NILS ERIK LENANDER, Lokken Verk, Norway, assignor to Patentaktiebolaget Grondal-Ramen, Stockholm, Sweden. Filed July 26, 1930. Serial No. 471,101. 3 Claims. (Cl. 23—227.)

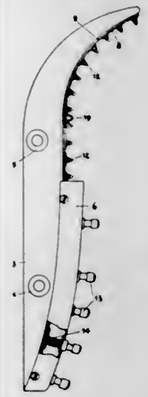
1. In the process of treating a finely divided sulphide ore in a blast furnace with the production and withdrawal therefrom of a gaseous product containing elemental sulphur, the preparation of said finely divided ore for introduction into said furnace which comprises mixing cementitious-forming material with the ore in sufficient quantity to form a strong bond, agglomerating the resulting mixture, and subjecting the resulting agglomerates to the action of steam under pressure whereby a cementitious bond is formed within the agglomerates.

1,862,900. METHOD OF PRODUCING HYDROGEN SULPHIDE. GEORGE LYNN, Wadsworth, and EDWARD M. ALLEN, and BRAZIER K. BEECHER, Barberton, Ohio, assignors to Pittsburgh Plate Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 19, 1930. Serial No. 453,592. 5 Claims. (Cl. 23—181.)



2. A method consisting in heating together sulphur and an alkali substance in the presence of water at a temperature above the normal boiling point of water and at a pressure above atmospheric, thereby producing hydrogen sulphide and a sulphur containing compound of the alkali employed, and continuing the reaction at such temperature and pressure until the sulphur containing compound becomes a sulphur-oxygen salt.

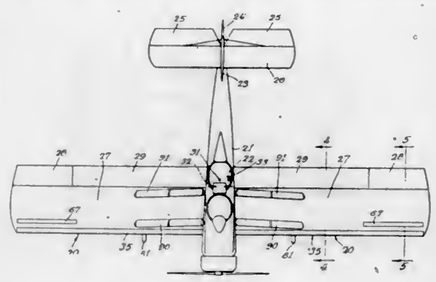
1,862,901. CALCULATING MACHINE. RUDOLF MARTIN, Berlin-Charlottenburg, Germany, assignor to Jean Bergmann, Berlin-Wannsee, Germany. Filed June 22, 1927, Serial No. 200,629, and in Germany June 16, 1925. 4 Claims. (Cl. 235—79.)



1. Setting mechanism for calculating machines with planet-like circularly moving counting mechanism including a flexible setting rack provided with setting teeth and movable through a partly curved path.

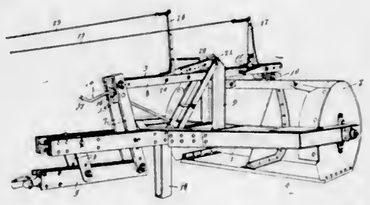
1,862,902. AIRPLANE. JAMES S. MCDONNELL, JR., Chicago, Ill. Filed Aug. 23, 1930. Serial No. 477,252. 23 Claims. (Cl. 244—29.)

1. In an airplane, the combination of main lift airfoils having adjustable high-lift means, complemental airfoil means adjustable to compensate for shifting of the center of pressure on said airfoils under changes of adjustment of said high-lift means, connections between said high-lift means and said complemental airfoil means for simultaneous operation thereof to maintain substantial longitudinal stability of said plane in any position of adjustment



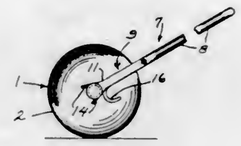
of said high-lift means and arranged to be reacted on oppositely, with balancing tendency, by said high lift means and complemental airfoil means under the aerodynamic forces that tend to move them and means to operate said connected parts.

1,862,903. CONTROL FOR SCRAPERS. ALVIN P. OLINGER, Wichita, Kans., assignor to Killefer Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed June 26, 1931. Serial No. 546,970. 2 Claims. (Cl. 37—140.)



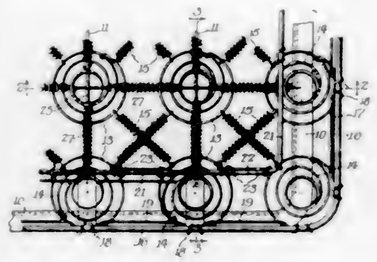
1. In a scraper, the combination of a frame, a bowl journalled thereto, a movable draw bar operatively carried by said frame, a bar operatively connecting said draw bar with said bowl, a stop carried by said bar, a standard mounted upon said frame, a latch journalled upon said standard and engageable with said stop, and a releasing lever journalled upon the end of said latch and operable for disengaging said latch from said stop.

1,862,904. BALL AND PROJECTOR THEREFOR. HENRY C. PEARSON, Pasadena, Calif. Filed Apr. 1, 1929. Serial No. 351,648. 2 Claims. (Cl. 273—129.)



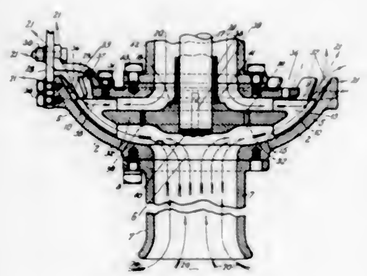
1. The combination of a ball having means projecting therefrom for engagement by a propelling member, the latter consisting of a grip member and hook means, said hook means having a part opening forwardly for engagement with the first mentioned means for pushing the ball and a part opening rearwardly for engagement with the same means for drawing the ball backwardly.

1,862,905. BEDSPRING. GEORGE G. POWERS, Winnetka, and LAWRENCE J. SIEGER, Cicero, Ill., assignors to Union Bed and Spring Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1929. Serial No. 392,028. 1 Claim. (Cl. 5—260.)



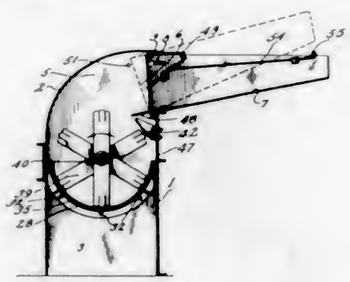
In a bed-spring, the combination of a supporting-frame, a plurality of upright spiral-springs mounted on said frame and arranged in rows, an outer border-wire, means securing said outer border-wire to the extreme outer portions of the top convolutions of the marginal spiral-springs, an inner border-wire crossing said convolutions of said border springs at a distance from their innermost portions, means securing said inner border-wire to said convolutions at their points of crossing, said three connections of said border-wires with each top convolution except those of the corner springs, being roughly equally spaced apart to secure effective stiffening of the structure, and helical-springs connecting the top convolutions of said upright springs together, each of said border springs, with the exception of the corner ones, having its top convolution connected by two of such helical springs to two upright springs in the next rows on opposite sides of the rows of which the spring under consideration forms a part.

1,862,906. MECHANICAL STIRRER. JULIUS PRELEUTHNER, New York, N. Y. Filed Nov. 18, 1930. Serial No. 496,442. 3 Claims. (Cl. 259—96.)



1. A mechanical stirrer comprising two stirrer units, a housing for one unit, a flat top for said housing, constituting an impeller disc, and a cup-shaped element, said flat disc and said cup-shaped part constituting the housing for the second unit, a means for rotating said disc, a common upwardly slanting discharge lip forming part of said cup-shaped element provided with a plurality of indentations for causing frequent changes in the direction of the discharge currents and irregular commotions therein to promote intimate and efficient mixing, means for uniting the units, and separate inlet or suction tubes for each unit.

1,862,907. FEED GRINDING MILL. WILLIAM F. RESCHKE, Wichita, Kans. Filed July 20, 1929. Serial No. 379,728. 2 Claims. (Cl. 83—11.)



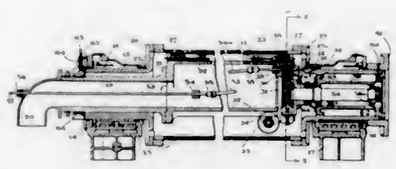
1. A feed grinder comprising a casing, a cylinder and concave in the casing, a gang or fixed cutting knives above the concave and means for interchangeably connecting the knives to the front and back of the casing.

1,862,908. CORE. ARTHUR T. RICHARDSON, Geneva, Ill. Filed July 31, 1930. Serial No. 471,096. 2 Claims. (Cl. 22—168.)



1. A tack core comprising a cup shaped member having conical walls sloping outwardly from the edge of the cup to its base and having prong-like projections formed at its edge.

1,862,909. SUCTION ROLL. ANDREW N. RUSSELL, Lachine, Quebec, Canada, assignor to The Paper and Textile Machinery Company, Sandusky, Ohio. Filed Jan. 9, 1928, Serial No. 245,406. Renewed Feb. 18, 1929. 31 Claims. (Cl. 92—53.)

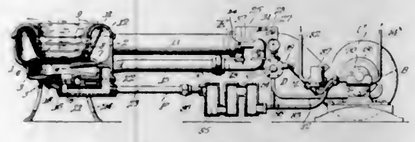


1. In a suction roll, a perforated cylinder, a suction box within the cylinder and supported on flexible means carried by said cylinder.

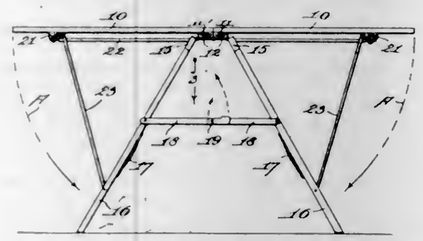
1,862,910. APPARATUS FOR BURNING FUEL. JOSEPH MARTIN SCHUTZ, Nashville, Tenn., assignor to The Radiant Combustion Engineering Co., Nashville, Tenn., a Corporation of Tennessee. Filed June 7, 1929. Serial No. 369,069. 14 Claims. (Cl. 158—28.)

1. A fuel burner comprising a gas generating chamber having a restricted outlet and an inlet opening thereinto at an angle from a radial line, means to inject fuel

through the inlet opening in a blast tangentially into the generator chamber to circulate therein and escape through the outlet, a burner annulus fitted concentrically around the restricted outlet of the gas generating chamber and provided with tangential air inlet passages, and means to introduce air under pressure in a stream substantially axially through said generating chamber and the outlet thereof.

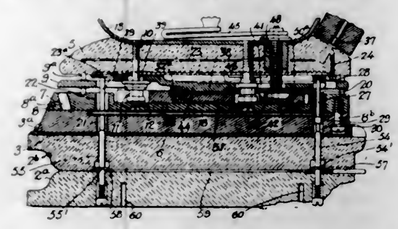


1,862,911. CAMP TABLE. WILLIAM A. SNYDER, Los Angeles, Calif. Filed Dec. 3, 1930. Serial No. 499,746. 6 Claims. (Cl. 45—116.)



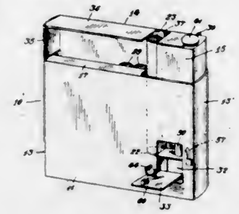
1. In a folding table, a pair of table top sections, cleats secured to the undersurfaces of said table top sections adjacent to their inner edges, a pair of legs for each table top section, hinges connecting said cleats to each other and connecting said cleats to the upper ends of said legs, retaining members secured to said cleats and extending outwardly beneath the table top section and spaced apart therefrom and folding braces pivotally connected to the lower portions of said legs and adapted to support the outer portions of said table top sections the intermediate portions of which folding braces are positioned between said table top sections and said retaining members.

1,862,912. COMBINED ELECTRIC IRON AND ELECTRIC STOVE. MANUEL HUMBERTO PEREZ SOLOGAISTOA, San Pedro Sula, Honduras, assignor to Adriana Guzman, New York, N. Y. Filed May 2, 1929. Serial No. 359,851. 7 Claims. (Cl. 219—25.)



5. In an electrically heated iron, an iron, a stand for said iron, a heating unit for said iron including contacts disposed in sockets formed in the iron and opening through the face thereof, said contacts terminating short of the plane of the face of the iron, and means carried by the stand for supplying current to the heating unit when the iron is resting upon the stand including contact pins projecting upwardly from the upper face of the stand to enter the sockets and engage the contacts of the iron when the iron is set in place upon the stand.

1,862,913. CIGARETTE CASE AND LIGHTER. SIDNEY SPRAGUE, Boston, Mass. Filed May 24, 1929. Serial No. 365,626. 8 Claims. (Cl. 206—41.4.)



1. A cigarette case and lighter, comprising two major sections detachably interengaged, a box-compartment pivotally connected to and forming part of one of the said sections and serving as an auxiliary means for engaging and disengaging the said sections, the said box-compartment having a receptacle containing a lighting fluid, a tube downwardly extending from said receptacle, a wick arranged in said tube and a cap formed upon a side-door of one of the said sections, for enclosing the exposed part of the wick when the device is not in operation, the said tube consisting of two parts, one of these being formed with a cutaway portion and having an open end, the other of the said parts being formed as a cap adapted to cover the open end portion of the said former part of the tube.

1,862,914. PROPELLANT POWDER AND PROCESS OF MAKING THE SAME. WILLIAM E. WAGNER, Alton, Ill., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed May 1, 1929. Serial No. 359,707. 11 Claims. (Cl. 52—13.)

1. In the art of making propellant powders, the process comprising, treating nitro-cellulose grains with a solution of nitro-glycerine in a non-solvent for nitro-cellulose.

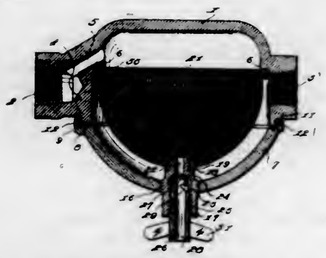
8. A propellant powder grain of nitro-cellulose, surface treated with nitro-glycerin.

1,862,915. PROPELLANT POWDER AND PROCESS OF MAKING THE SAME. WILLIAM E. WAGNER, Alton, Ill., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed May 1, 1929. Serial No. 359,708. 17 Claims. (Cl. 52—22.)

1. In the art of making propellant powders, the process comprising, treating nitro-cellulose grains with a solution containing nitro-cellulose near its precipitating point.

16. A propellant powder grain of nitro-cellulose surface-treated with nitro-cellulose and nitro-glycerine.

1,862,916. STRAINER FOR MECHANICAL REFRIGERATION. HARRY G. WEYMOUTH and HORACE CHRISMAN, Pittsburgh, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 10, 1930. Serial No. 427,330. 2 Claims. (Cl. 210—165.)



1. In a combined drain and strainer for use in the water cooling lines of mechanical refrigeration systems, a cylindrical housing having an open bottom and closed

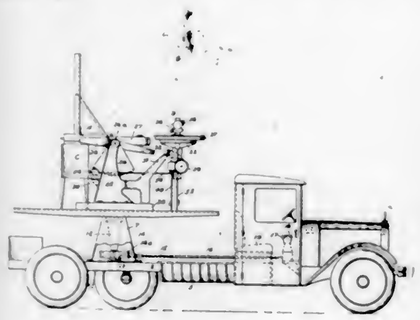
top, the axis of which extends transversely to the direction of flow therethrough; inlet and outlet connections located near the top of the said housing and extending radially therefrom; a substantially cup shaped closure for the open bottom of said housing and a substantially cup shaped screen located within said closure; said closure and screen being in spaced cooperating nested relationship, the upper portion of said housing being reduced in diameter defining a chamber with which said inlet connection communicates, the said reduced portion defining a downwardly facing shoulder or annular seat against which the upper periphery of said screen abuts, the lower edge of the housing defining a downwardly facing annular seat against which the upper edge of said closure seats in sealing relation; and releasable means holding said closure and screen in clamping relation with their respective seats, whereby, when said means are released said closure and screen may be dropped away from said housing for cleaning or other purposes.

1,862,917. FISHING SPOON. MARTIN S. ANDERSON, Seattle, Wash. Filed May 29, 1929. Serial No. 366,945. 1 Claim. (Cl. 43—42.)



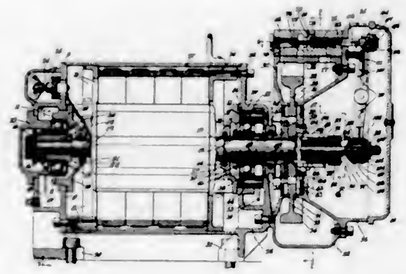
In a fishing spoon, a substantially rigid sheet having a rear end provided with a hook-attaching means, and having a narrow front end from which the lateral edges diverge gradually and evenly to the rear end, said plate defining an even compound curve along its median line, said rear end being semicircular and also curved from one end portion to the other in cross section and simulating the bowl of a table-spoon or ladle, the said narrow end and the longitudinal central part of the plate being straight in cross section, and a line-attaching loop extending out from the bulge of the curved median line and on the same side of the plate that includes the concave of the wide rear end, substantially as shown.

1,862,918. SYSTEM OF FIRE CONTROL. GLADEON M. BARNES, Hastings, Mich. Filed June 16, 1930. Serial No. 461,516. 7 Claims. (Cl. 89—41.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



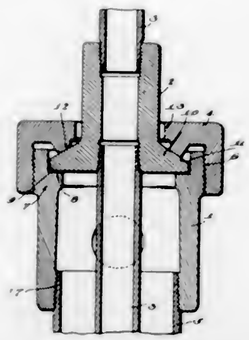
7. In combination with a gun, a stereoscopic telemeter normally parallel to the axes of bore of the gun, sighting means on the telemeter, sighting controls moving the gun and telemeter in unison and means for displacing the telemeter from parallelism with the axes of bore of the gun.

1,862,919. TURBINE GENERATOR SET. ELI J. BLAKE, Buffalo, N. Y., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 14, 1925. Serial No. 43,540. 12 Claims. (Cl. 253—52.)



1. A mechanism comprising, in combination, a frame, a driven member and its shaft mounted in said frame, a bearing assembly including raceways for one end of the shaft, a sleeve slidable axially on the shaft and extending through said bearing to support the same, a turbine wheel carried by said sleeve for rotating the same, said sleeve having means for holding the bearing on one side thereof, means screw threaded on the sleeve for holding the bearing on the other side thereof, and screw means for forcing the bearing assembly from said sleeve.

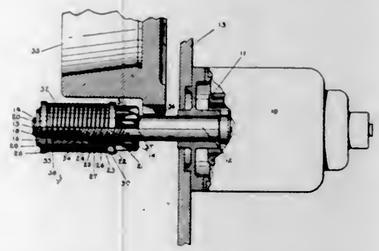
1,862,920. CASING HEAD. ALEXANDER BOYNTON, San Antonio, Tex. Filed Nov. 23, 1927. Serial No. 235,310. 3 Claims. (Cl. 285—22.)



1. A casing head comprising a main body having a seat, a carrier for the tubing string of a well having a flange with an inclined upper side, a pressure sleeve threaded upon the main body, and a circular projecting flange on the sleeve having a correspondingly inclined contacting surface engaging the inclined upper side of the carrier for urging the carrier flange toward the seat.

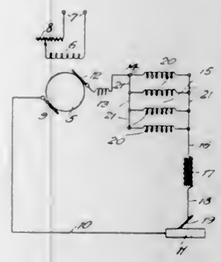
1,862,921. ELECTRIC STARTER. CARL P. BROCKWAY, Paterson, N. J., assignor to Industrial Research Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Sept. 20, 1920, Serial No. 411,599. Renewed May 15, 1929. 11 Claims. (Cl. 74—7.)

1. In a starting mechanism for non-self starting engines, the combination of a motor; a shaft therefor provided with an elongated extension, said extension having a median portion screw threaded, and an outer portion of less diameter than the middle portion; an internally threaded hollow sleeve having screw threaded engagement with the shaft; a pinion positioned on the shaft between the first named sleeve and motor and having a portion thereof extended outwardly to form a sleeve; a loose connection between said sleeves permitting limited relative longitudinal movement of the pinion; an annular



member positioned on the pinion sleeve and adapted to have frictional engagement with the pinion; a spiral drive spring encompassing said sleeves, one end thereof being fixed to the threaded sleeve and the other end to the annular member; and a compression spring encircling the outer portion of the motor shaft, one end thereof bearing against the shoulder formed at the junction of outer and middle shaft portions and the other end bearing against a portion of the threaded sleeve.

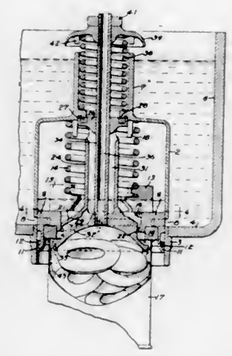
1,862,922. WELDING GENERATOR. ALEXANDER CHURCHWARD, New York, N. Y., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J., a Corporation of New York. Filed Jan. 8, 1930. Serial No. 419,268. 2 Claims. (Cl. 171—223.)



1. For use in an electric arc welding circuit, a direct current welding generator having a separately excited field winding and a plurality of bucking series field windings arranged for series and parallel connection in the welding circuit, whereby the welding current may be varied and the inductive effect in the welding circuit of said series field windings may be oppositely varied while maintaining substantially constant the ampere-turn effect of said series field windings.

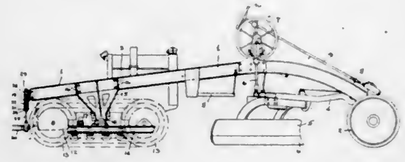
1,862,923. FILLING VALVE. WILLIAM DE BACK, San Leandro, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill., a Corporation of Delaware. Filed June 18, 1927. Serial No. 199,772. 17 Claims. (Cl. 226—22.)

1. A filling valve comprising a housing adapted to hold a quantity of liquid, a movable valve for controlling the flow of liquid into said housing, a movable valve for controlling the flow of liquid out of said housing, a movable valve for allowing the flow of air out of said housing



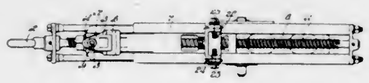
when liquid flows into the housing, and means for correlating said valves so that they move always in the same direction.

1,862,924. ROAD GRADER AND THE LIKE. HARRY W. DEISLER, Bucyrus, Ohio, assignor to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Oct. 4, 1929. Serial No. 397,358. 14 Claims. (Cl. 180—1.)



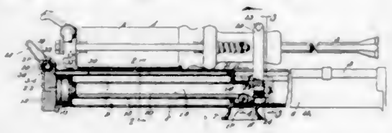
1. The combination with a tractor of the crawler type having a main tractor body and oscillatory crawler tread frames, of an implement carrying frame structure projecting forwardly from said tractor, steering wheels supporting the forward end of said frame structure, universal couplings securing said frame structure to the crawler tread frames of said tractor, and resilient means connecting the rear of said frame structure with the rear end of said main tractor body.

1,862,925. TOOL MOUNTING. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Aug. 16, 1928. Serial No. 299,915. 10 Claims. (Cl. 255—45.)



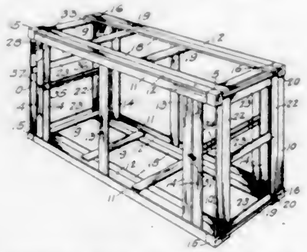
1. A tool mounting comprising a cradle, a clamping device for clamping a tool rigidly to said cradle at one end, a second tool holding means adjustably mounted on said cradle, and means for securing the tool rigidly to said second tool holding means and including a pair of set screws engaging the opposite sides of the tool.

1,862,926. ROCK DRILL. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 1, 1929. Serial No. 396,559. 15 Claims. (Cl. 255—45.)



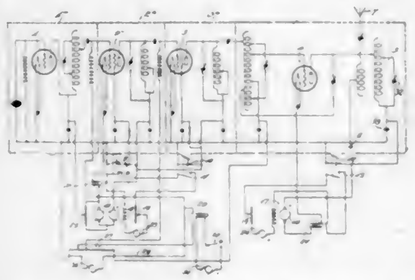
7. In a rock drill, a guide shell, a drilling tool guided thereon, pressure fluid operated mechanism for feeding the tool relative to said shell including relatively reciprocable feeding elements, and connections between one of said feeding elements and the tool including cooperating toothed elements one of which is telescopically arranged within one of said feeding elements, and connections between one of said toothed elements and the drilling tool.

1,862,927. COLLAPSIBLE CRATE. WILLIAM L. GARRETT, Los Angeles, Calif., assignor of one-fourth to W. F. Garrett, Oakland, Calif. Filed Mar. 9, 1931. Serial No. 521,060. 6 Claims. (Cl. 217—46.)



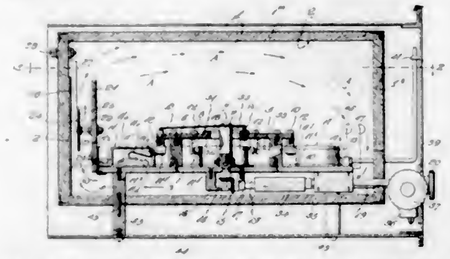
1. A collapsible crate comprising a back, two ends hingedly connected to said back and adapted to fold within said back, a top and a bottom hingedly connected to said back and adapted to fold against said ends in folded position, and a front provided with a plurality of latches adapted to cooperate with pins on said ends in open position and with pins on said back in folded position.

1,862,928. RADIO TRANSMITTER. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,739. 2 Claims. (Cl. 250—17.)



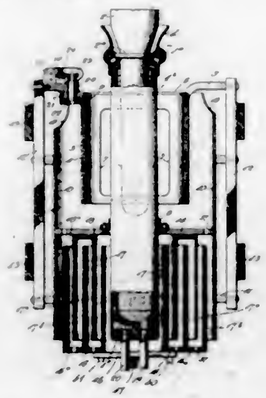
1. In a radio transmitter employing thermionic tubes, each having cathode, anode, and grid electrodes, an enclosure surrounding said thermionic tubes, a door in said enclosure permitting access thereto, a source of potential for the electrodes of said tubes comprising a generator having armature and field windings, a line switch controlled by the movements of said door and adapted to open the field circuit of said generator when said door is opened, a grounding switch controlled by the movements of said door and adapted to connect said electrodes to a point of substantially ground potential when said door is opened, and retarding means for delaying the closing of said grounding switch until after said field circuit is opened.

1,862,929. TEMPERATURE CONTROL APPARATUS FOR FREQUENCY CONTROL DEVICES. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 16, 1929. Serial No. 347,554. 9 Claims. (Cl. 219—19.)



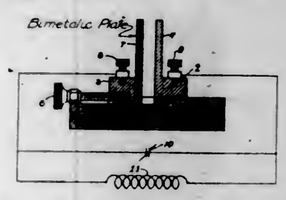
2. In a system of the class described the combination of a container having walls of heat retaining material, an electromechanical vibrator positioned within said container, a plate of heat conducting material for supporting said electromechanical vibrator, a heating unit positioned in said container for heating the circulating medium in said container, a baffle adjacent to said heating unit, said baffle serving to deflect said circulating medium and cause said medium to circulate beneath said plate of heat conducting material, and a thermostat positioned in said container, said thermostat being arranged to control the temperature within said container.

1,862,930. CONDENSER SYSTEM. LOUIS A. GEBHARD and CORRIE F. RUDOLPH, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 15, 1929. Serial No. 355,375. 10 Claims. (Cl. 250—16.)



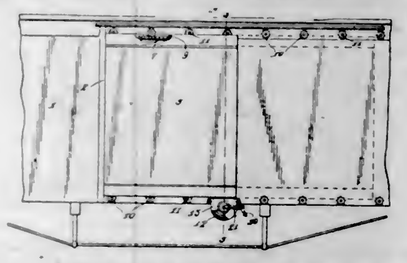
1. A condenser system comprising in combination a metallic cylindrical plate member adjustably positioned concentric with a metallic cylindrical shaped thermionic tube socket and insulated therefrom, a metallic cylindrical plate member the outer wall of which is frictionally positioned against the inner wall of said adjustable member, and said cylindrical plate members having cut away portions adapted to be superimposed for adjustments of minimum capacity value.

1,862,931. TEMPERATURE RESPONSIVE CONDENSER. ROSS GUNN, Washington, D. C. Filed Jan. 10, 1929. Serial No. 331,576. 2 Claims. (Cl. 175—41.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



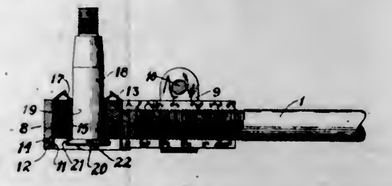
1. In a variable condenser, the combination of a plurality of condenser plates insulated from each other and adapted to be interposed in an electric circuit, means for varying the spacing between said plates in proportion to temperature changes, said means consisting of a separate plate of metal integrally attached to one side of at least one of said condenser plates, thereby forming a composite condenser plate or plates having a characteristic of expansion differing from that of its adjacent condenser plate, means for slidably supporting said composite condenser plate or plates for bodily movement closer to and further from its adjacent condenser plate, and operating means for said supporting means.

1,862,932. FREIGHT CAR DOOR. ALEXANDER STILL HOME, Tampashores, Fla. Filed Jan. 10, 1931. Serial No. 507,939. 5 Claims. (Cl. 268—44.)



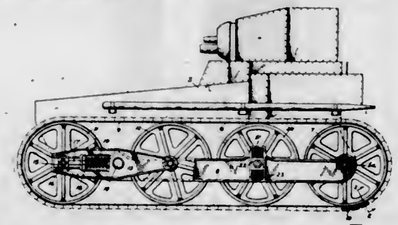
1. In a sliding door for freight cars having rails on the upper and lower edges thereof, spring influenced means for forcing the rails away from the door, a rack bar on the outer face of each rail, pinions on the car engaging the rack bar, and an operating toothed wheel also engaging the lower rack bar.

1,862,933. TIE ROD END. GEORGE H. HUFFERD and MATTHEW P. GRAHAM, Detroit, Mich., assignors to Thompson Products, Incorporated, Detroit, Mich., a Corporation of Ohio. Filed July 1, 1929. Serial No. 375,008. 10 Claims. (Cl. 287—93.)



1. A tie rod end bearing assembly comprising a member having a cylindrical housing, inner and outer spaced concentric sleeves within said housing, a resilient bushing held under compression between said sleeves, said sleeves having flanges cooperating with each other and said housing for retaining themselves and said bushing in position in said housing and a stud rotatably mounted within said inner sleeve for bearing contact therewith.

1,862,934. SUSPENSION FOR TRACKLAYING VEHICLES. HARRY A. KNOX, Davenport, Iowa. Filed Mar. 1, 1928. Serial No. 258,325. 3 Claims. (Cl. 305—8.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



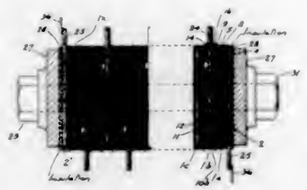
1. A track laying unit for vehicles embodying a main frame, a drive wheel carried thereby, a centrally pivoted auxiliary frame at the forward end of the main frame, a wheel on each end of the auxiliary frame, an endless band track encircling the wheels, means for urging the front wheel forwardly to maintain the band track under tension, a vertically movable wheel supported intermediate the drive wheel and the rear wheel on the auxiliary frame and all of said wheels being of uniform size.

1,862,935. CURRENT METER INDICATING DEVICE. JOHN E. LANGLEY, U. S. Army, Kansas City, Mo. Filed Mar. 8, 1929. Serial No. 345,555. 1 Claim. (Cl. 73—37.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



In a device of the character described, the combination with a meter rod adapted to be vertically suspended in a stream, the current velocity of which is to be determined, and a current meter attached to the lower end of the rod and movable therewith, said meter including means for maintaining its longitudinal axis parallel to the flow of the stream; of an indicating mechanism secured to the meter rod at a point above the surface of the water and consisting of a clamp formed of hingedly connected sections adapted to embrace the rod, a plurality of arms supported by the sections, certain of said arms extending at right angles to the longitudinal axis of the current meter, the other projecting in parallelism with the longitudinal axis of the meter whereby to indicate deviations of the meter rod and the longitudinal axis of said meter with respect to said base line.

1,862,936. RECTIFYING APPARATUS. MARCEL A. LISSMAN, Los Angeles, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 11, 1930. Serial No. 420,130. 9 Claims. (Cl. 175—366.)

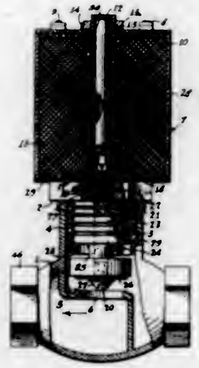


1. An electric current rectifying apparatus comprising a longitudinally compressed stack consisting of a plurality of copper plates each having a coating of copper oxide formed over the major portion of both contact faces and also having a non-oxidized contact surface portion of relatively small area, a plurality of metal contact elements corresponding to the respective copper plates and each making contact with substantially the entire surface of the copper oxide coating on both faces of one of said copper plates and having a portion also interposed in the stack and making contact with the non-oxidized surface portion of an adjacent copper plate, insulating and spacing means interposed between adjacent copper plates and contact elements in such manner as to provide a compact stack adapted to transmit pressure throughout its length, and means compressing the entire stack longitudinally so as to hold the contact elements, solely by the pressure thus exerted thereon, in intimate contact with both the copper oxide coatings and the non-oxidized surface portions of the copper plates.

9. An electric current rectifying apparatus comprising a plurality of rectifying units, each of said units comprising three stacks extending side by side and each stack comprising a plurality of asymmetric solid contact rectifying elements and a plurality of contact elements connecting said rectifying elements in series for passage of electric current in substantially one direction only through the entire stack, each of said rectifying units further comprising means electrically connecting all of the stacks of rectifying elements of said units in series, common thrust members engaging the opposite ends of all the stacks of said units, compressing means extending outside the cross section of said stacks and holding said thrust members toward one another so as to tightly compress the stacks and maintain tight electrical contact between the rectifying elements and contact elements of each stack, contact members at the opposite ends of said unit and means electrically connecting the respective contact members to the opposite ends of the series of stacks of said unit, and said apparatus further comprising supporting means, and connecting clips mounted on said supporting means and provided with means for removably receiving the contact members of two adjacent rectifying units, said rectifying units being mounted with the adjacent connecting members of adjacent units removably inserted in the respective connecting clips, whereby clips serve both to support said units and to electrically connect all of said units together in series.

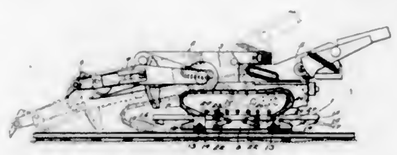
1,862,937. VALVE AND ITS OPERATION. EDGAR EARLE LITTLEFIELD, Los Angeles, Calif. Filed Sept. 2, 1925. Serial No. 54,080. 27 Claims. (Cl. 137—139.)

1. A combination including a valve casing having inlet and outlet openings; a seat arranged to support the weight of a closure within said casing; a closure cooperating with said seat, said closure having a by-pass; an electrically energized controlling member for said closure, said member forming an auxiliary valve; means movable by the fluid controlled by said valve for electri-



cally energizing said member; energizing means for said fluid movable means, said energizing means being supported independently of the auxiliary valve.

1,862,938. TRANSPORT TRUCK. PAUL H. NAST, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 4, 1930. Serial No. 441,691. 22 Claims. (Cl. 105—161.)



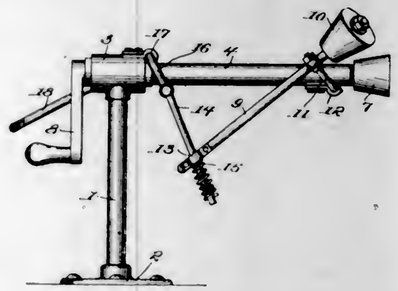
1. A loading machine transport truck comprising a wheel truck frame, and an adjustable machine receiving frame mounted on and overlying said truck frame and adjustable into different machine receiving positions relative thereto, the ends of said receiving frame overhanging the truck frame and having provision for receiving a loading machine at either end thereof.

1,862,939. AEROPLANE SAFETY WING CONSTRUCTION. ALLEN PARKER, Waterloo, N. Y. Filed May 31, 1930. Serial No. 458,128. 8 Claims. (Cl. 244—29.)



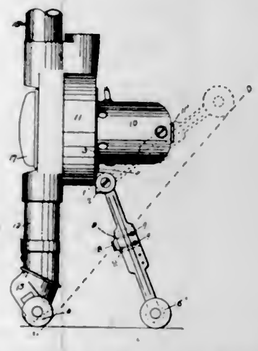
1. An aeroplane wing comprising a main wing section, an auxiliary wing positioned at the upper forward end thereof, an adjustable aerofoil beneath said auxiliary wing, and an aileron positioned at the rear of said main wing and pivotally secured thereto, said auxiliary wing and adjustable aerofoil when in normal position being flush with the outer surface contour of the main wing to permit uninterrupted flow of air currents thereover, said aileron being substantially parallel to the bottom of said main wing when in normal position, link and lever means operatively connecting said auxiliary wing and adjustable aerofoil to said main wing section, a connection between said adjustable aerofoil and said aileron, and manually operated means for controlling and actuating the above connecting means to move said adjustable aerofoil, auxiliary wing and aileron into operative position.

1,862,940. SHOE STRETCHING DEVICE. WILLIAM E. RALSTIN, Fort Worth, Tex., assignor of one-half to William A. Harris, Fort Worth, Tex. Filed Nov. 19, 1930. Serial No. 496,719. 3 Claims. (Cl. 12—51.)



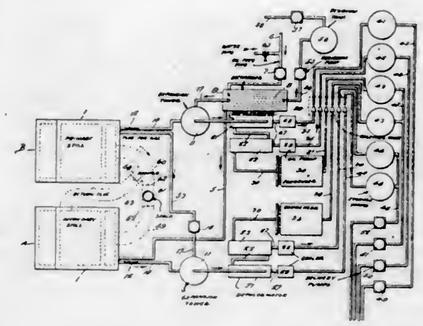
1. A device of the class described comprising a supporting frame, a shaft rotatably arranged therein, a roller carried by the shaft, a U-shaped member supported for rocking movement by the frame, a roller rotatably arranged on the extremity of each limb of the U-shaped member, means for moving said member to a position where the rollers carried thereby will be moved against the first roller, and means for rotating the shaft to impart rotary movement to the rollers.

1,862,941. ADJUSTABLE ROLLER SUPPORT FOR AIRWAY CLEANERS. DANIEL BENSON REPLOGLE, Berkeley, Calif., assignor, by direct and mesne assignments, to The Commerce Guardian Trust & Savings Bank, Toledo, Ohio, trustee. Filed May 7, 1928. Serial No. 275,905. 7 Claims. (Cl. 15—16.)



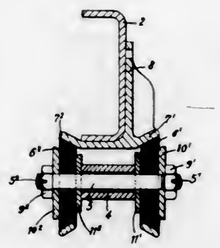
2. In combination with a suction cleaner having a source of suction, an open-ended suction handle operatively connected to the source of suction, a floor tool connected with one end of the suction handle, and means hingedly carried by said cleaner for supporting the same with the tool resting on the floor and the suction handle in substantially upright position.

1,862,942. METHOD OF DISTILLING CRUDE OIL. THOMAS J. RYAN, Burnett, Calif. Filed June 1, 1927. Serial No. 195,796. 1 Claim. (Cl. 196—86.)



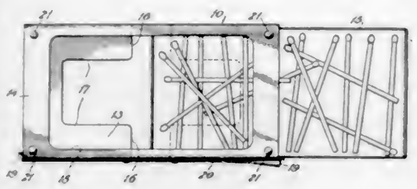
The method of distilling crude oil, which consists in flowing crude oil through a pipe to a primary still, flowing water from the source of supply to the pipe for admixture with the oil, subjecting the oil and water in course of flow to forcing agitation so as to effect a thorough admixture thereof, heating the oil and water to a temperature of from 300° to 350° F. and generating the steam from the water for eliminating the sulphur from the light volatile products and changing the sulphur from a corrosive to a non-corrosive condition, separating the lighter and heavier products, conducting the unvolatilized oil to a secondary still and reheating the same therein at a temperature of from 350° to 450° F., utilizing the heat of the residuum from the secondary still to heat the crude oil feeding to the primary still, and utilizing the waste heat from the secondary still for a heating action in the primary still.

1,862,943. SUSPENSION SPRING CONNECTION. LÉON SAIVES, Billancourt, France, assignor to Louis Renault, Billancourt, France. Filed Sept. 18, 1930, Serial No. 482,895, and in France Oct. 31, 1929. 1 Claim. (Cl. 267—54.)



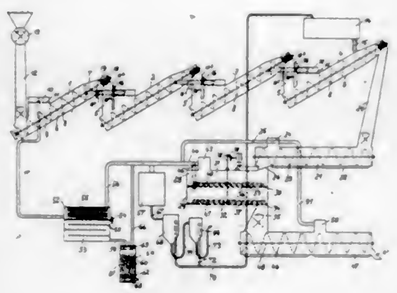
In a spring assembly for vehicles, a bracket secured to the body of the vehicle and provided with a pair of laterally outwardly diverging flanges, a spindle mounted therein adapted to engage an end of a spring, a resilient washer at each side of the spring surrounding said spindle, the peripheries of said washers being beveled to conform with and engage said bracket flanges, and reinforcing washers mounted on each side of and in contact with said resilient washers, said reinforcing washers having their peripheral edges formed so as to flare away from the sides of said resilient washers, and means for regulating the pressure of the reinforcing washers upon the resilient washers.

1,862,944. MATCH SAFE. TOMITARO SANO, Fresno, Calif. Filed Apr. 16, 1929, Serial No. 355,467. Renewed Apr. 7, 1932. 2 Claims. (Cl. 312—73.)



1. A match safe comprising, in combination, a sheet metal casing open at the ends and having two side walls and two other walls providing a housing for a cardboard match tray; resilient locking means at the ends of the casing to hold the tray in the casing; one of the other walls having a cross-shaped opening therethrough formed by a narrow transverse slot extending to the side of the casing and a longitudinal slot intersecting the transverse slot and terminating short of the ends of the casing to afford access to the matches; the second other wall having a rectangular opening extending near to the marginal edges of the wall whereby the tray may be turned over to expose the matches therethrough; and pressed-out projections in both of said other walls, providing feet to support the casing with either open side on top.

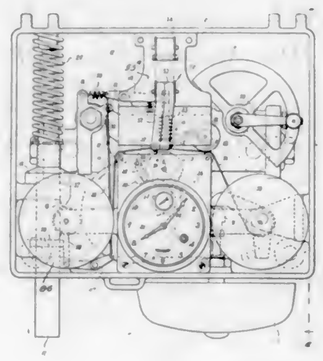
1,862,945. PROCESS OF EXTRACTION FROM SUBSTANCES CONTAINING OIL, FAT, ETC. CONRAD SCHLOTTERHOSE, Wesermunde-Wulsdorf, Germany. Filed Aug. 17, 1929, Serial No. 386,673, and in Germany Aug. 4, 1928. 4 Claims. (Cl. 87—6.)



1. An extractive process for oil and fat bearing materials with the aid of suitable solvents comprising conveying the material to be treated and the solvent in counter-current through a number of extractors thereby moving the material to be treated in each extractor in an upward directed path and alternately dipping it in the extracting fluid, trickling it with said fluid, and then passing it out and removing the solvent and extract mixture out of the lower part of the first extractor.

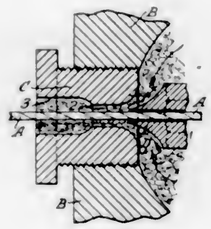
1,862,946. TIMING AND RECORDING MECHANISM. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 27, 1928. Serial No. 257,260. 19 Claims. (Cl. 234—1.)

1. The combination with a machine whose operations are to be timed, of a timing device, a recording mechanism for indicating the length of time taken for an operation of the machine, means for causing the timing device and the recording mechanism to be set into operation simultaneously by the said machine, and means for ter-



minating the individual operations of the machine and for causing the recording mechanism to make its records thereof.

1,862,947. MANUFACTURE OF ARTICLES FROM THERMOPLASTIC MATERIALS. WILLOUGHBY STATHAM SMITH, Newton Poppleford, HENRY JOSEPH GARNETT, Solefields, Seven Oaks, and JOHN NORMAN DEAN, Orpington, England. Filed May 10, 1930, Serial No. 451,492, and in Great Britain May 16, 1929. 5 Claims. (Cl. 18—13.)

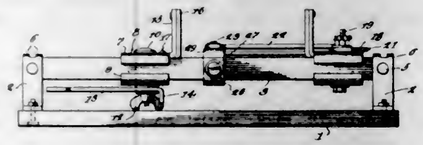


1. The method of removing strain in the applied gutta percha or like thermoplastic insulation of an electrical conductor which comprises extruding the gutta percha under such pressure and so controlling the rate of travel of the conductor that the gutta percha extruded upon the conductor is of a materially greater cross-section than that of the most constricted portion of the extruding die.

1,862,948. VALVE SPRING COMPRESSOR. JOSEPH E. WAINWRIGHT, Brooklyn, N. Y. Filed May 29, 1930. Serial No. 457,321. 10 Claims. (Cl. 29—87.1.)

1. A valve spring compressor comprising a pair of parallel tracks, means for supporting said tracks in spaced relation, brackets for supporting the ends of said track, a compression shoe slidably mounted upon said tracks, an abutment shoe anchored upon said track, each of said shoes comprising an upper and a lower plate having overhanging flanges engaging said tracks and means passing

through the plates for binding the same together upon said tracks, an operating lever carried by said compression shoe, a link connected to one end of said operating lever,



a bracket carried by said tracks and pivotally supporting the opposite end of said link, and spring engaging means carried by each of said shoes.

1,862,949. PROCESS FOR MANUFACTURING NICKEL CATALYSTS. JAN AL, Amsterdam, Netherlands assignor to De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed June 8, 1929, Serial No. 369,533, and in the Netherlands July 5, 1928. 3 Claims. (Cl. 23—233.)

1. The herein-described process of manufacturing a nickel catalyst in a finely divided state, comprising the steps of treating a nickel salt with a solution which will convert said salt into nickel hydroxide, and then further reducing the hydroxide into nickel by treating it with hydrogen; said process being essentially characterized in that less than the theoretical quantity of the aforesaid solution is used.

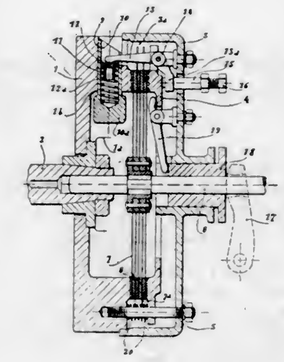
1,862,950. OPTICAL APPARATUS. JOSEPH A. BALL, Los Angeles, Calif., assignor to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Filed June 17, 1929. Serial No. 371,412. 12 Claims. (Cl. 88—57.)



6. A wide angle lens system adapted to be used with a picture aperture and comprising a positive lens assembly and a negative lens assembly spaced one from the other a distance greater than the focal length of the positive lens assembly and with the latter adapted to be nearer the picture aperture, said lens system having an equivalent focal length no greater than twice the length of the longest side of the picture aperture.

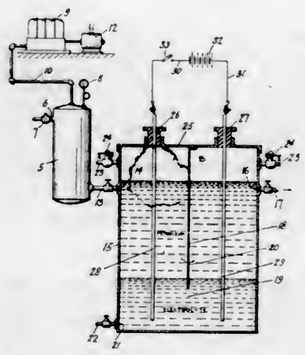
1,862,951. CLUTCH. PIERRE BIGNAND, Paris, France, assignor to Societe Industrielle de Mecanique Automobile et de Radio-Electricite, Levallois-Perret, France. Filed Nov. 20, 1929, Serial No. 408,603, and in France July 29, 1929. 2 Claims. (Cl. 192—105.)

1. The combination with a disc clutch having a clamping plate, a flywheel, bell crank levers cooperating with said clamping plate for a clutching operation, of radially movable centrifugal control weight members slidably mounted in the flywheel and cooperating with arms of the bell crank levers for rocking the same for a clutching operation through the clamping plate, yieldable means in said weight members and cooperating with the arms of the bell crank levers for the clutching operation, said



yieldable means forming means for returning the weight members to inner inoperative positions when the speed of rotation of the flywheel is below a predetermined speed.

1,862,952. METHOD OF TREATING PETROLEUM. WARREN F. BLEECKER, Boulder, Colo. Filed May 1, 1928. Serial No. 274,215. 6 Claims. (Cl. 196—29.)



2. A process of removing sulphur compounds from petroleum containing such compounds, comprising introducing into the petroleum an oxidizing gas produced by electrolysis of an electrolyte in the presence of the petroleum, and displacing the oxidizing gas in the petroleum by hydrogen produced by electrolysis of an electrolyte in the presence of the petroleum, the introduction of said gases into the petroleum being in separate and distinct steps.

1,862,953. SEAT SUSPENSION. JEAN D. COUCH, East Point, Ga. Filed Nov. 19, 1931. Serial No. 576,149. 3 Claims. (Cl. 5—129.)

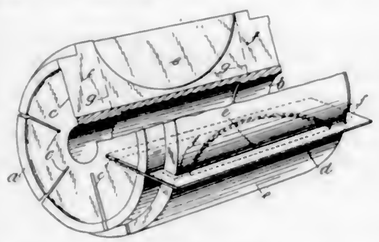
1. In combination with a swinging seat of the character described, a supporting frame including uprights having horizontal rails; brackets rigidly connected to the seat portion and extending beyond the uprights at the corners

of the seat; rigid T-shaped suspension elements having vertical arms pivotally connected with respect to said rails; and means connecting the ends of the horizontal



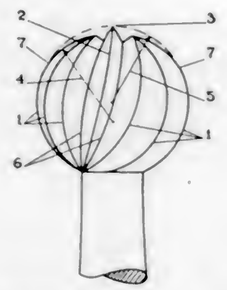
arms of the T-shaped elements at spaced points to the extending ends of the said brackets whereby to prevent swaying movement of the seat.

1,862,954. ROTARY PUMP MACHINE. GEORGE EDWARD THOMAS EYSTON, London, England, assignor to Powerplus (1927) Limited, London, England, a Corporation of Great Britain. Filed Dec. 21, 1928, Serial No. 327,588, and in Great Britain Dec. 23, 1927. 4 Claims. (Cl. 103—136.)



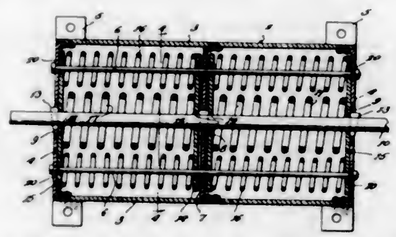
1. A rotary pump machine comprising an outer casing, a piston body or rotor mounted eccentrically in said casing and having longitudinal slots or recesses with side walls which are recessed or cut away slightly at parts of their length to provide rigid flat projecting parts and slightly sunken clearance parts extending to the outer edges of the slots, and relatively slidable piston vanes fitted in said slots or recesses and adapted to take bearing on said rigid flat projecting parts over part of their length while having just a slight clearance, at said clearance parts, over the remainder of their length.

1,862,955. DRILL FOR DENTAL PURPOSES. RUDOLF FUNKE, Dusseldorf, Germany. Filed Feb. 20, 1930, Serial No. 430,024, and in Germany Nov. 5, 1929. 1 Claim. (Cl. 32—31.)



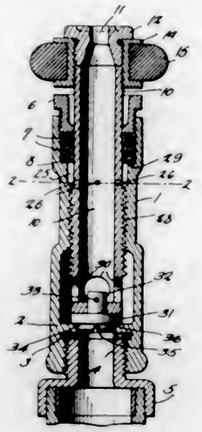
A dental drill having a substantially spherical head provided with a continuous drilling edge the center of the radius of which is coincident with that of the head and also having cutting edges at opposite sides of said continuous drilling edge, the center of the radius of said cutting edges on the crown portion of the head being eccentric to that of the said continuous drilling edge, so that said lateral cutting edges lie wholly within the outline of the head and its crown portion and said drilling edge projects beyond said cutting edges at the crown portion of the head and axially of the drill.

1,862,956. DRAWBAR. WILLIAM S. FIX, Finley, Wash. Filed June 23, 1928. Serial No. 287,727. 3 Claims. (Cl. 213—8.)



2. A device of the class described comprising a casing for attachment to each end of a car, bolts fixed in the casings, a train length coupling rod extending between the casings and slidable therein, plates in the casings slidably engaged on the bolts, coil springs encircling the bolts, coil springs encircling the coupling rod, all of said coil springs having their ends engaged with said plates, and wedges carried by the coupling rod for engagement with the plates to move the plates to compress the springs when the coupling rod is moved longitudinally.

1,862,957. NOZZLE. JORDAN W. GRANT, Portsmouth, Va. Filed June 13, 1930. Serial No. 461,019. 1 Claim. (Cl. 299—150.)



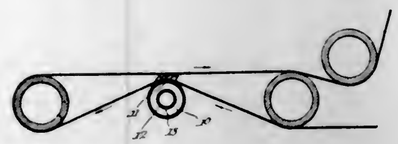
A nozzle comprising a body having a seat, an outlet tube carrying a valve cooperating with the seat to govern the flow of liquid through the outlet tube, the outlet tube being threaded into the body, thereby enabling and compelling the operator to open the valve so slowly that the air in the hose, behind the nozzle, will flow gradually through the nozzle, check the forward flow of liquid, and prevent the liquid from arriving at the nozzle with an impact of objectionable force, the threading of the nozzle into the body enabling and compelling the operator to close the valve so slowly that no objectionable burating pressure will be created in the hose, behind the nozzle, the nozzle being characterized by the provision of means whereby the outlet tube is packed lightly when the valve is closed, thereby enabling the operator to move the outlet tube with a light and easily regulated effort, said means comprising a packing washer within the body, about the outlet tube, and abutting against a shoulder in the body, and a nut threaded into the forward end of the body, and exerting an adjusted but continuing pressure on the washer; the nozzle being further characterized by the provision of means whereby, after the occasion for the adjustment of the inlet tube by an operator has passed, the packing may be compressed more tightly about the inlet tube, to avoid leakage under working pressure, the last-specified means embodying an annular chamber in the body, behind the washer, which admits pressure upon the washer and compresses it beyond the pressure afforded by the said nut, and there being, in the outlet tube, at least one port which admits pressure to the chamber, from the interior of the nozzle, and said port being small enough so as to cause no swirl or practical variation in the flow of liquid through the outlet tube.

1,862,958. STAIRWAY. AKOS J. HALL, Cleveland, Ohio. Filed Apr. 4, 1927. Serial No. 180,762. 4 Claims. (Cl. 189—43.)



1. A stairway including a stair including opposite stringers having spaced holes through the webs thereof, step elements between said stringers and having lugs on the longitudinal ends thereof, of less cross-sectional size than the size of said holes, spaced in correspondence with said holes and extending through the corresponding ones of said holes, and filler material between sides of said lugs and walls of the corresponding holes.

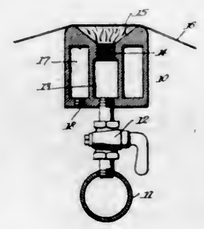
1,862,959. METHOD OF SINGEING. WILLIAM WALLACE KEMP, Baltimore, Md., assignor to The C. M. Kemp Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed May 10, 1930, Serial No. 451,374. Renewed May 7, 1932. 5 Claims. (Cl. 26—3.)



1. The new and improved method of singeing, which consists in passing through the material to be singed a combustible fuel, and igniting and maintaining a singeing flame on the side of the material opposite to the side from which the fuel comes.

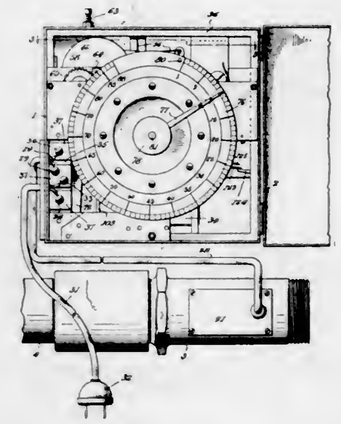
1,862,960. METHOD OF SINGEING. WILLIAM WALLACE KEMP, Baltimore, Md., assignor to The C. M. Kemp Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed May 10, 1930. Serial No. 451,375. 6 Claims. (Cl. 26—3.)

1. The new and improved method of singeing, which consists in passing the material to be singed in such proximity to a fuel burner having a combustion chamber as to bring the material and fuel burner flame into direct



and intimate contact over an appreciable area and substantially close the chamber to confine and compress the fuel burner flame therein.

1,862,961. REGISTER FOR LIQUID-DISPENSING APPARATUS. JOSEPH H. LASATER, Sulphur Springs, Tex., assignor of one-third to John D. Williams, Sulphur Springs, Tex. Filed June 8, 1929. Serial No. 369,442. 15 Claims. (Cl. 221—101.)

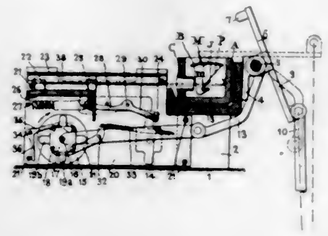


1. Means for measuring a liquid including a conduit through which the liquid may flow, an impeller arranged within the conduit and having an eccentric wrist pin, a pair of contact fingers arranged upon the conduit, one of said fingers being extended beyond the other finger and formed into an abutment, a rock shaft mounted in the wall of the conduit and provided at its upper end with a crank engaging said abutment and at its lower end with a crank engaging said abutment and at its lower end with a crank arranged in the path of the wrist pin, a signal and an electric circuit including the signal and said contact fingers whereby the signal will be energized at the end of a predetermined interval.

1,862,962. WEAVING APPARATUS. MAURICE CHARLES HENRI OCTAVE LECOCQ, Cambrai, France. Filed May 19, 1931, Serial No. 538,553, and in Belgium May 22, 1930. 13 Claims. (Cl. 139—380.)

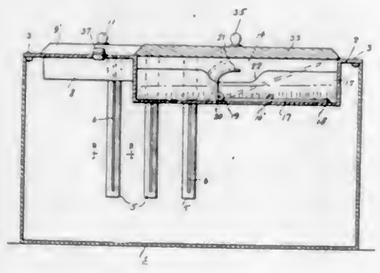
1. Device for facilitating and accelerating the refilling of spent shuttles from weaving looms with new cops or spools, comprising pressure exerting means arranged to be brought into operation against the cover of the shuttle to

facilitate the release and closure thereof, means for engaging the thread when a new cop has been inserted in said shuttle, and means for producing the introduction and



withdrawal of said thread engaging means into and from said shuttle to produce threading of the weft through the eyelet thereof.

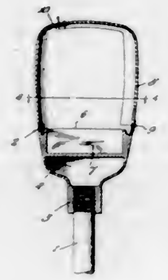
1,862,963. STERILIZER. JOSEPH C. LEO, Olewein, Iowa. Filed June 29, 1931. Serial No. 547,763. 5 Claims. (Cl. 167—3.)



3. A sterilizer comprising a tank for the reception of a sterilizing solution, a closure plate mounted on the tank, and wells for the reception of the articles to be sterilized, mounted on the closure plate and depending therefrom into the solution, said wells having perforations therein for the passage of the solution thereinto for contact with said articles, a partition extending through one of the wells and providing a pair of comb receiving compartments therein, and a comb ejector mounted for swinging movement on the partition and engageable with one end portion of the combs for lifting said combs out of the compartments, said ejector comprising a length of wire bent upon itself in a manner to provide an actuating handle, said handle straddling the partition, eyes merging with the handle for engagement with the pivot pin for swingingly mounting the ejector in position, arms extending from the eyes adjacent opposite sides of the partition, said arms terminating in outturned free end portions for operative engagement with the combs in the compartments.

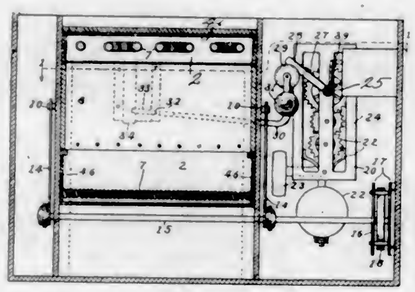
1,862,964. COMBINED SHIFT LEVER KNOB AND CONTAINER. JONATHAN M. LILLIGREN, Enid, Okla. Filed Nov. 1, 1927. Serial No. 230,861. 1 Claim. (Cl. 206—19.5.)

A knob for shift levers comprising a hollow body portion having one end thereof reduced to form a ferrule, the interior walls of which are threaded for engagement with a shift lever, a substantially rectangular article holder centered within the body portion and having its end walls integral with said body portion and its side walls spaced therefrom to form side pockets, the bottom of the holder extending transversely across the body portion in spaced



relation to the threaded end of the ferrule, and a downwardly swinging pivoted section forming a part of the body portion and disposed in alinement with one end of the article holder to permit ready access to both the article holder and said side pockets.

1,862,965. AUTOMATIC SANDWICH TOASTER. ALEXANDER MARAGOS, Omaha, Nebr. Filed Oct. 16, 1928. Serial No. 312,759. 1 Claim. (Cl. 161—16.)

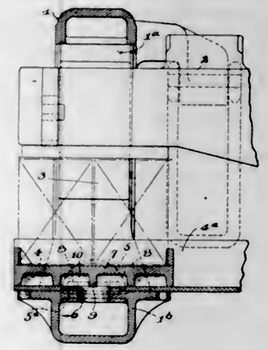


A time controlled latching device comprising a pivoted arm, an upwardly extending arm carried by one end of the pivoted arm, a roller carried by the upwardly extending arm, a time controlled mechanism to one side of the roller, a rotatable shaft carried by said time controlled mechanism, radial arm carried by the shaft and extending towards the roller and a hinged extension arm carried by the radial arm and extending into the path of the roller and forming means whereby upon rotation of the shaft in one direction, said latch arm will be rocked and when rotated in the opposite direction said extension arm will hingedly move when engaging the roller without rocking the latching arm.

1,862,966. MEANS FOR INTERLOCKING CAR TRUCK PARTS. JOHN S. MCPHERSON, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed May 29, 1930. Serial No. 457,326. 11 Claims. (Cl. 105—208.)

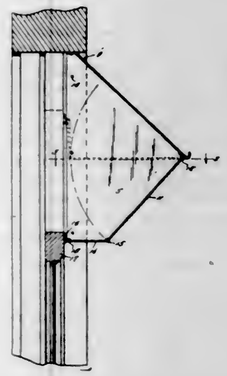
10. A car truck side frame having a tension member provided with an upwardly extending substantially circu-

lar boss having substantially radial notches in its upper edge, and a spring plank and superposed spring seat rest-



ing on said tension member and interlocked with the boss, the spring seat having portions extending into the notches for also interlocking the spring seat with the boss.

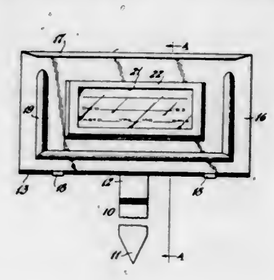
1,862,967. COMBINATION WINDOW AWNING AND VENTILATOR. GEORGE E. PARKER, Fonda, N. Y. Filed Feb. 10, 1931. Serial No. 514,860. 4 Claims. (Cl. 98—98.)



1. In combination with a window awning, a perforated screen panel hingedly mounted therein, and a second panel hinged to the first mentioned panel and having means for hinging it to a window sash.

1,862,968. GRAVE MARKER. DON C. PEGLAR, Chattanooga, Tenn. Filed Feb. 11, 1932. Serial No. 592,418. 3 Claims. (Cl. 40—124.5.)

1. A grave marker comprising, in combination, a metallic staff whose lower end is pointed and whose upper end is bent at an obtuse angle; a metallic base plate spot-welded to the bent upper end of the staff; said base plate having a marginal flange along its upper edge which is at an acute angle to the plane of the base plate and overhangs the base plate; a card-retaining plate the upper edge of which is received between said marginal flange and the base plate, said retaining plate being of substantially the same shape and size as the base plate and having integral bendable ears projecting from its lower edge which are

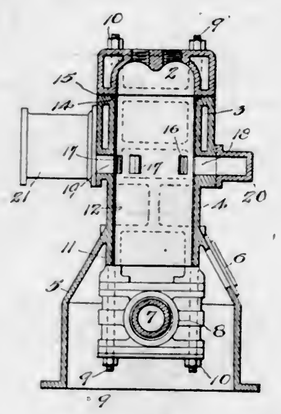


adapted to be bent upwardly, underneath the base plate; and co-operating means on both plates to prevent shifting of the retaining plate on the base plate.

1,862,969. RECORD FOR GRAMOPHONES AND THE LIKE AND METHOD OF MANUFACTURING SAME. WILLIAM FOWLER PETTIE, Alton, England. Filed Feb. 11, 1929, Serial No. 339,273, and in Great Britain Feb. 15, 1928. 6 Claims. (Cl. 18—48.3.)

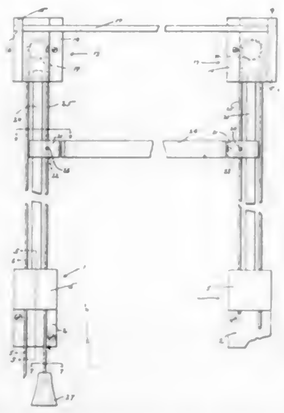
2. The method of manufacturing disc records for gramophones and the like consisting in bringing glue into a plastic state, treating it with a hardening material to bringing it into suitable condition for working into a disc, forming it into a disc and by means of a matrix impressing the record matter into the surface of the disc while the latter is still in an impressionable condition and subsequently allowing said disc to harden.

1,862,970. CYLINDER FOR INTERNAL COMBUSTION ENGINES. ARTHUR B. RAYMOND, Montclair, N. J. Filed Nov. 10, 1928. Serial No. 318,392. 2 Claims. (Cl. 123—173.)



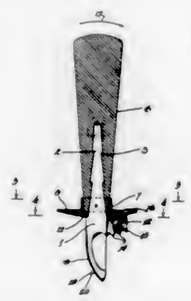
1. The combination with a ported cylinder, of a ported liner adjustable on its axis, a cylinder head and a bearing block at opposite ends of the cylinder, means for sustaining the liner in the cylinder, and tie-bolts between the cylinder head and bearing block for clamping the enumerated parts in a rigid structure.

1,862,971. CURTAIN AND ADJUSTABLE SHADE SUPPORT. FRANK A. LOVRICH, Damsite, Mo. Filed Dec. 6, 1930. Serial No. 500,618. 3 Claims. (Cl. 156—27.)



1. A curtain and shade supporting structure comprising a pair of upper brackets and a pair of lower brackets attached to a window frame, a guide rod of polygonal cross section extending between each of the corresponding upper and lower brackets and supported thereon, a block mounted for vertical sliding movement on each of said guide rods each block having a polygonal opening therein for the passage of the respective guide rod for retaining the blocks against rotation, said blocks engageable with the respective ends of a shade roller in a manner to rotatably support said shade roller therebetween, each block being further provided with a vertical opening in its intermediate portion, the upper brackets each being provided with a recess, a pulley journaled for rotation in each recess, a flexible cable trained over each pulley and having its end portions depending therefrom, one of said end portions of each cable extending through the vertical opening in each of the blocks, a set screw securing each of the blocks to one of the cables, and means on each of the lower brackets for frictionally retaining the end portions of each of the cables against movement.

1,862,972. CAN OPENER. CARL JACOB MAIER, Aurora, Ill. Filed Nov. 7, 1930. Serial No. 494,150. 2 Claims. (Cl. 30—3.)



1. A can opener comprising a handle, a blade, a guard for said blade, and a slotted guard plate separating said guard and said blade at the inner end of said handle, said blade and said guard each having an integral shank extending into said handle and converging together and rigidly secured to each other at their upper end, said blade and said guard each having integral therewith laterally extending portions fixedly secured together beneath said guard plate, said laterally extending portions each having an upper edge abutting against said guard plate and having a lower edge serrated and adapted to serve as a fulcrum point.

1,862,973. DISPENSING CAP. JOSEPH J. MCDONALD, Lansford, Pa. Filed Dec. 6, 1930. Serial No. 500,616. 1 Claim. (Cl. 221—60.)



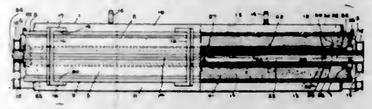
Dispensing means for a tube containing paste or the like comprising a cylinder connected to the neck of the tube and having an annular slot therein extending from the free end of the cylinder to a point an appreciable distance from the other end of the cylinder, said slot forming an annular pocket, a sleeve having its outer end closed and its other end open, said sleeve being slidably and rotatably arranged in the pocket, said sleeve having an L-shaped slot therein, the long arm of which is longitudinally arranged therein and a pin passing through one wall of the cylinder and through the slot in the sleeve whereby the sleeve can be moved outwardly so that a part of the slot will act as a discharge opening for the contents of the tube and by pushing the sleeve inwardly and giving it a turning movement the pin will enter the short arm of the slot to lock the sleeve in closing position in the cylinder.

1,862,974. CERAMIC WARES AND METHOD OF MANUFACTURE. TAINE G. MCDOUGAL, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Continuation of application Serial No. 291,127, filed July 7, 1928. This application filed June 20, 1929. Serial No. 372,543. 11 Claims. (Cl. 25—156.)

7. The process of making ceramic wares which consists in preparing non-plastic material in unstable crystalline form, mixing the non-plastic material with the plastic material to form the raw batch, molding the wares from the batch, and firing the wares thereby producing a crystalline framework within the body as a result of further growth of the unstable crystalline material during final firing.

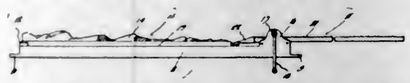
1,862,975. PIPE CASTING APPARATUS. DANIEL H. MELOCHE, New York, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 30, 1930. Serial No. 492,111. 6 Claims. (Cl. 22—131.)

1. An apparatus for casting pipe, comprising a flask body having alined apertures through its opposite end walls, a core arbor extending freely through said apertures in spaced relation to said walls, said arbor having a core member formed thereon and spaced from said walls, mold forming material in said body having portions conforming to and supporting said core member adjacent its



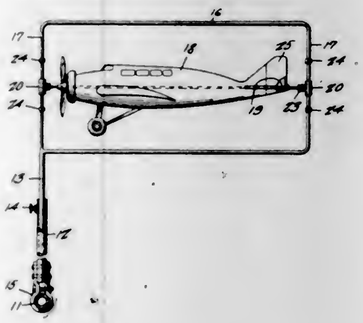
ends, said mold forming material being the sole supporting means for said arbor and core member, and a mold cavity formed in said material between said supporting portions and surrounding said core member.

1,862,976. GLASS EXTRACTING DEVICE. JOHN K. MERNECK, Hammond, Ind. Filed Dec. 18, 1930. Serial No. 503,295. 2 Claims. (Cl. 18—3.5.)



1. In a glass ejecting device of the class described, a channel-shaped base adapted to be attached to a relatively stationary support, a keeper at one end of the base, and guide means at the opposite end of the base, and a reciprocatory ejecting device associated with said guide means, said device being in the form of a rack bar having a wedge-shaped head on its inner end adapted to ride along and in the channel holding the glass.

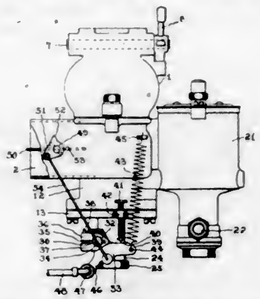
1,862,977. AUTOMOBILE ATTACHMENT. ROBERT B. MUFFETT, Ridgefield, Wash. Filed Mar. 27, 1931. Serial No. 525,835. 3 Claims. (Cl. 46—14.)



2. An automobile attachment of the character described comprising a frame including opposed parallel members, sleeves slidably mounted on said members, a miniature aeroplane including a longitudinally disposed shaft terminally coupled with said sleeves, whereby said aeroplane is mounted for vertical movement on said frame, a substantially U-shaped element carried by the plane and connected with one of the couplings for said shaft, to prevent rotation of the plane on said frame, and means for connecting the frame to an appropriate part of the vehicle.

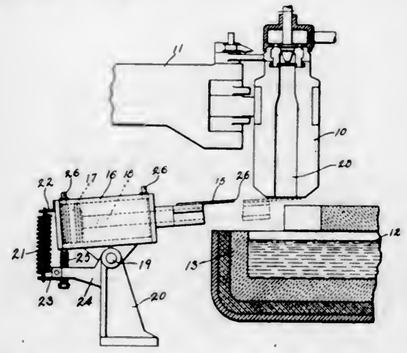
1,862,978. CARBURETOR. HARRY BARKER NORRIS, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 27, 1928. Serial No. 308,617. 7 Claims. (Cl. 261—50.)

1. A carburetor comprising a hollow casing having a mixing chamber and a mixture outlet, said casing having an air inlet and a fuel inlet to said mixing chamber, control means for said fuel inlet, control means for said air inlet, spring means normally urging said second-named control means to a position to permit flow of air to said chamber, a shaft journaled in said casing, means fixed on



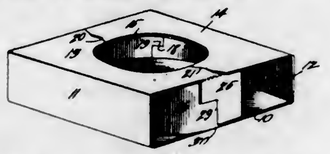
said shaft positively connecting said shaft with said first-named control means, means positively connecting said shaft to said second-named control means, and means to rotate said shaft to operate said first-named and said second-named control means.

1,862,979. GLASS SEVERING APPARATUS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 16, 1928. Serial No. 319,915. 6 Claims. (Cl. 49—5.)



1. In combination, a receptacle for segregating mold charges of molten glass by suction, a shear blade, a fluid-pressure cylinder having a piston and a piston rod which carries said shear blade, means for pivotally mounting said cylinder, a spring tending to incline said shear blade upwardly, and means for regulating the inclination of said cylinder and said shear blade.

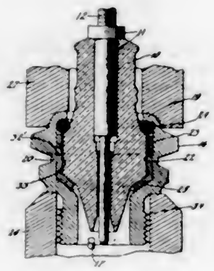
1,862,980. BOX. THOMAS P. PRATHER and EMORY C. MARLOWE, Lexington, Ky. Filed Feb. 10, 1930. Serial No. 427,356. 2 Claims. (Cl. 229—16.)



1. A folding box comprising a blank having a bottom, end sections and cover sections, a commodity holder integral with the bottom and comprising longitudinally ex-

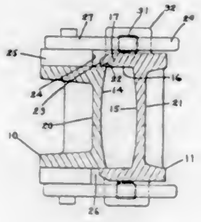
tending parts adapted to be folded at right angles to the bottom, interengaging connections on the said parts whereby one part is secured to the other part, the interengaging elements of said parts being adjustable whereby the said parts may be secured when shaped to form a circular or square commodity holder, means by which one of the cover sections is secured to the said parts, and means by which the other cover section is secured to the section anchored to the said parts.

1,862,981. EQUATORIALLY SEALED SPARK PLUG AND METHOD OF MAKING THE SAME. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Corporation of Michigan. Filed Dec. 21, 1928. Serial No. 327,550. 7 Claims. (Cl. 29—155.5.)



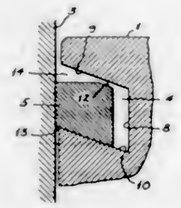
1. A spark plug comprising a one-piece insulator providing shoulders which are spaced apart by an intermediate main portion; and a conductive shell providing an inner section and an outer section respectively opposite said shoulders and having therebetween a reduced-section zone which is so collapsed as to provide a gas-tight joint between said zone and said insulator,—a deformable gasket element being interposed between said insulator and said shell and inwardly deformed opposite said zone.

1,862,982. OPEN-JOINT MOLD. ROBERT G. REDMANN, Bristol, Conn. Filed June 1, 1931. Serial No. 541,318. 3 Claims. (Cl. 22—145.)



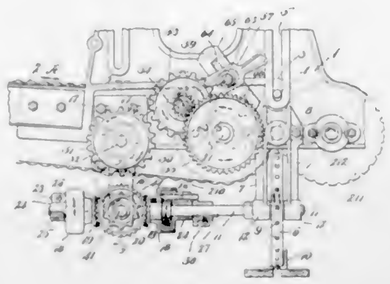
1. An open-joint mold comprising a back part and a front part having opposed cooperating main portions that enclose a mold cavity, said portions comprising free and unobstructed overlapping faces at the side spacer positioning means for said parts for use in the closed molding position that operate to restrict relative movements of the parts both towards and away from one another.

1,862,983. PISTON RING. GEORGE H. ROBERTS, Rock Island, Ill., assignor to American Trust Co., trustee, Davenport, Iowa, a Corporation of Iowa. Filed Oct. 31, 1931. Serial No. 572,281. 13 Claims. (Cl. 74—109.)



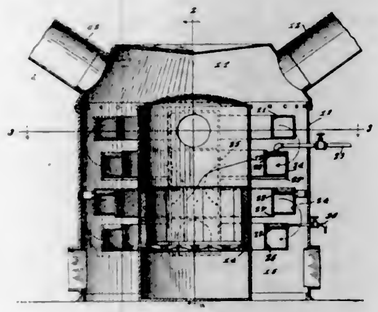
1. A piston assembly comprising a piston having a peripheral groove adjacent the closed end thereof, said groove having side walls inclined from their marginal outer edges toward the open end of said piston, and a split single piece ring having one side face inclined to substantially the same angle as the groove side wall nearest said open end of said piston, and having the other of said side faces inclined to substantially the same angle as the other groove side wall for a relatively narrow portion of its width near its inner periphery, the remaining portion of said last mentioned side face being substantially perpendicular to the axis thereof, said ring being positioned within said groove with substantial axial and radial clearances for movement into contact at times with one or the other of said groove side walls.

1,862,984. LAPPING MACHINE. WILLIAM D. RUNDLETT, North Adams, Mass., assignor to The James Hunter Machine Company, North Adams, Mass., a Corporation of Massachusetts. Filed Apr. 4, 1930. Serial No. 441,629. 9 Claims. (Cl. 19—163.)



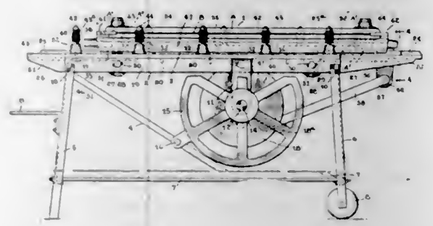
1. In a lap-forming machine, the combination with a traversing carriage, and a bat-receiving apron thereon traveling with the carriage to form the lap, and relatively thereto to wind the lap into a roll, of a stationary runway, a spiked wheel upon said carriage engaging with apertures in said runway, and means for feeding the apron progressively in one direction through motion derived from the rotation of said wheel in rolling back and forth upon said runway, said means being contrived to be set to feed the apron through rotation of such wheel in one or both directions.

1,862,985. AIR HUMIDIFYING FURNACE. ROBERT SANDWICK, Scobey, Mont., and EMIL DAHLSTROM, Jamestown, N. Dak. Filed Nov. 1, 1930. Serial No. 492,838. 3 Claims. (Cl. 126—113.)



1. A heating furnace comprising a heating chamber, a housing enclosing said chamber and spaced therefrom to provide a compartment therebetween, a flue pipe, smoke flues projecting laterally within the compartment, complemental smoke flues in communication with the first mentioned flues having a point of discharge beyond the inlet ends of the first mentioned flues, and water troughs carried upon the complemental flues.

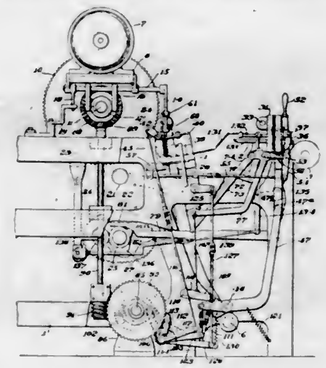
1,862,986. CORE APPARATUS. ERIC SJODEN, Buffalo, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed June 4, 1929. Serial No. 368,222. 10 Claims. (Cl. 125—2.)



8. A device for removing a burr from a core member of baked finely divided material, comprising a supporting member operable to support a core member, and transversely extending cutter means mounted at the opposite ends of said supporting member and operable upon positioning a core member on said supporting member to remove the burr from the core member.

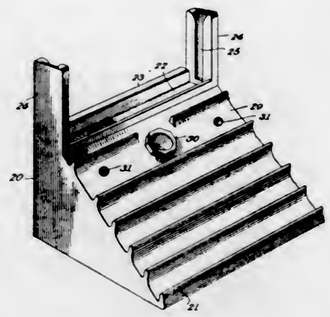
1,862,987. SHUTTLE REPLENISHING LOOM. EDWIN W. STONE, Longmeadow, and FRANK V. GRENNOR, Chicopee, Mass., assignors to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Nov. 15, 1930. Serial No. 495,924. 10 Claims. (Cl. 139—227.)

1. In an automatic shuttle replenishing loom, in combination, a lay, a change-shaft driven independently of the loom, replenishing mechanism for replacing the exhausted shuttle with a full shuttle including cam means rotatably mounted on said shaft and adapted to be rotated upon call for shuttle transfer, a filling feeler, a ratchet wheel rotated by the change-shaft, a pawl mounted upon said cam means to rotate the latter from said shaft, a pawl holder movable into and out of the path of the pawl and adapted normally to hold the pawl away from the ratchet



wheel, and means controlled by the filling feeler for actuating the pawl holder to cause the pawl to engage the ratchet and effect shuttle transfer.

1,862,988. COMBINED PENHOLDER AND INKWELL. SALVATORE S. TAMBURO and GIUSEPPE S. TAMBURO, New Kensington, Pa. Filed Jan. 10, 1931. Serial No. 507,973. 1 Claim. (Cl. 120—1.)

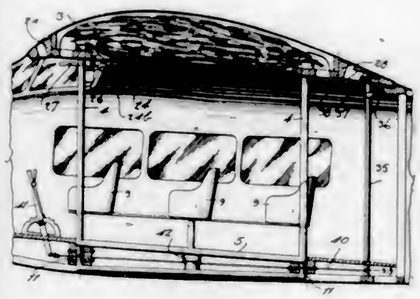


A desk appliance comprising a casting having a straight back whose upper edge is hooked, sides and an inclined front, said front at its juncture with the back having a longitudinal depression providing a pocket, the sides, at the rear thereof having extensions affording end walls of a trough and the said extensions, from their upper edges having aligning grooves, the front adjacent to the trough, having a round opening therethrough, a well to the rear of the opening arranged upon the under face of the front and having a threaded opening therethrough registering with the opening in the front, a cap nut having its shank passing through the opening in the front and screwed into the opening in the well, said well comprising an elongated body that is wholly closed except for the threaded opening therein, and which body has its bottom wall tapered to its side walls.

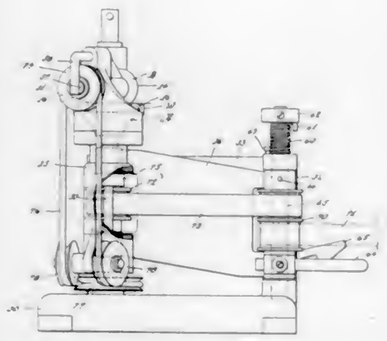
1,862,989. SAFETY APPLIANCE FOR AIRCRAFT. FREDERICK A. TOWNSLEY, St. Albans, N. Y. Filed Apr. 10, 1929, Serial No. 353,988. Renewed Nov. 3, 1931. 7 Claims. (Cl. 244—21.)

1. A safety appliance for aircraft comprising an aircraft body, a passenger carriage releasably retained in the

body, a cover wall in the stream line of the body above the carriage, means for retaining and releasing the carriage and cover wall from the body, a parachute releasably attached to the carriage and normally confined by the cover wall, and means for releasing the parachute from the carriage.



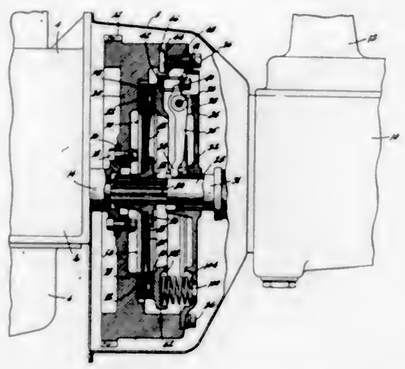
1,862,990. TRIMMING MACHINE. ANTON VAN VEEN, West Hartford, Conn., assignor, by mesne assignments, to Penrose R. Hoopes, Hartford, Conn. Filed June 22, 1928. Serial No. 287,571. 13 Claims. (Cl. 164—63.)



1. In a trimming machine, a work supporting instrumentality, a cutting instrumentality having a cutting point and arranged to engage and be guided by the edge of the work to be trimmed, means for supporting said cutting instrumentality for bodily movement so that the engagement between the cutting instrumentality and the work maintains the cutting point at the point of tangency therebetween and means for urging the cutting instrumentality towards the work.

1,862,991. DISK CLUTCH. ANDREW LOUIS VARGHA, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 14, 1929. Serial No. 347,027. 7 Claims. (Cl. 192—68.)

1. In a clutch, a clutch member including a plurality of disks, a slidable member at the center of the disks, means for rigidly securing said disks to said slidable member, said disks concentrically diverging for a portion of their extent so as to space the peripheral portions of the disks in substantially parallel planes, yielding means interposed at the peripheries, friction means at the outer sides of said disks, and independent means passing through each disk to secure said friction means, said yielding means having openings conforming to or mating with said securing means to permit the compression of said resilient means.

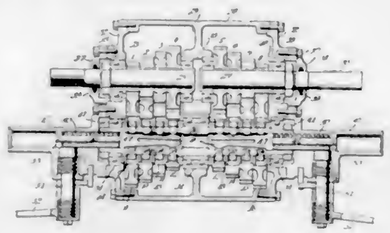


1,862,992. COIL SPRING. ANDREW LOUIS VARGHA, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 14, 1929. Serial No. 370,819. 5 Claims. (Cl. 267—61.)



1. A coil spring of wire of sinuous shape in which the sinuosities are located in a plurality of planes.

1,862,993. CHANGE SPEED GEAR. ROY T. WISE, Berkeley, Calif., assignor to Wise Patent and Development Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,211. 1 Claim. (Cl. 74—59.)



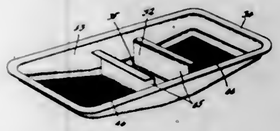
A multiple speed constant mesh gear transmission comprising a casing having a central bearing web, a drive shaft, a driven shaft in horizontal alignment with said drive shaft, said shafts having their inner ends journaled in said central web and their outer ends journaled in the walls of the casing, a countershaft extending longitudinally of the casing and vertically spaced relative to the drive and driven shaft, the medial portion of said countershaft being journaled in said central web, and the ends thereof journaled in the side walls of the casing, a series of gears keyed to the drive shaft, a series of gears keyed to the driven shaft, a series of gears loosely mounted on the countershaft on each side of the central web and constantly meshing with the complementary gears on the drive and driven shaft, a clutch for each loose gear, clutch actuating rods axially movable in the countershaft for progressively clutching the loose gears thereto, each of said rods having a cam portion slotted to render the same inherently resilient, whereby means are provided to change from one speed to the other at full speed.

1,862,994. HEAT INDICATOR. JOSEPH ZUBATY and JESSE E. ESHBAUGH, Flint, Mich., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 26, 1927. Serial No. 222,097. 9 Claims. (Cl. 177—327.)



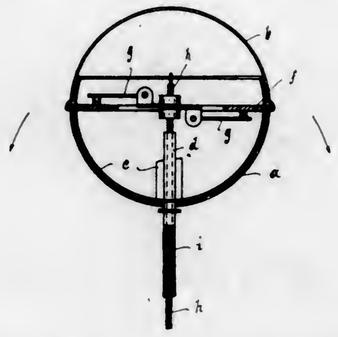
8. In a gauge, a pointer, an armature movable with said pointer, a plurality of relatively crossed magnets for determining the position of said pointer, said magnets being of progressively increasing strength for the same amount of current whereby the energization of a stronger magnet will swing the pointer and armature from the weaker magnet, said weaker magnet acting on the armature to swing the pointer toward the stronger magnet from one of its extreme positions.

1,862,995. ENGINE LUBRICATING SYSTEM. BENJAMIN H. ANIBAL, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 29, 1928. Serial No. 309,264. 4 Claims. (Cl. 184—6.)



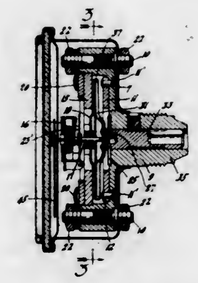
1. In an engine lubricating system, an oil pan, a tray suspended in the pan and formed from sheet metal, having sides and a bottom, a portion of the bottom being punched out and bent upwardly to provide a baffle wall inside the tray, a screen placed over the opening left by said upwardly punched baffle wall through which oil in the pan enters the tray, a cover for the top of the tray extending entirely across from side to side of the pan but terminating short of the end of the pan, and an oil pump delivering oil under pressure to the engine bearings and having its suction side communicating with the interior of the tray.

1,862,996. ILLUMINATED BALL. CARL ARNOLD, Nuremberg, Germany. Filed Feb. 16, 1931, Serial No. 516,174, and in Germany Jan. 22, 1931. 2 Claims. (Cl. 46—37.)



1. An illuminated ball, comprising in combination a two-part spherical wall of transparent material, a four part cage in and reinforcing the lower part of said wall, a friction disc carried by said cage, a layer of emery on each side of said disc, mutually displaced cerium stones adapted to cooperate with said two layers of emery to produce bundles of sparks, a sleeve carrying said cage, and a wire spiral carrying said cerium stones extending through said sleeve through the lower part of said wall, adapted to be rotated and in turn to rotate said stones relative to said disc.

1,862,997. TACHOMETER JEWEL FRAME AND DRIVE SHAFT RETAINER. ELBRIDGE F. BACON, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Feb. 16, 1929. Serial No. 340,633. 4 Claims. (Cl. 264—13.)

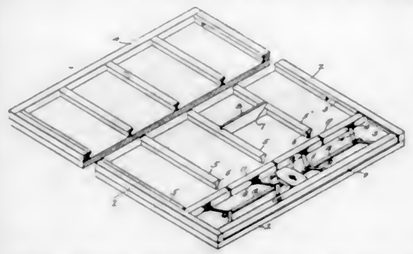


1. In a tachometer, a cup-shaped frame having an axial stem extended horizontally, a rotor shaft extended through said stem, a rotor carried by and in the plane at right angles to said shaft, means to retain said shaft comprising a plate having a slot, said shaft having an annular groove to cooperate with said slotted plate, and means to secure said plate to the bottom of said cup-shaped frame over said stem.

1,862,998. PRINTING GALLEY. GUY D. BAILEY, Narberth, Pa., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Nov. 7, 1930. Serial No. 494,163. 8 Claims. (Cl. 276—43.)

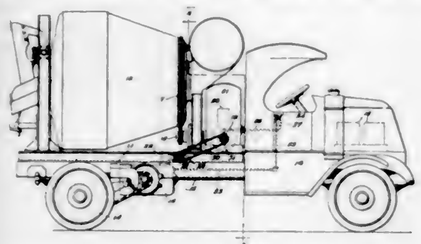
1. A printing galley comprising a base, side and end bars secured thereto, the said side bars having longitudinal slots adjacent the forward ends, a plurality of spaced parallel guide rails on the base and adapted for

interlocking engagement with the extremities of type slugs inserted therebetween, and "lock-up" means removably mounted in the slots in the side bars and adapted



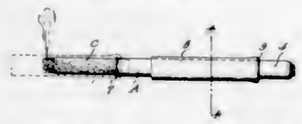
to afford pressure against the columns of type slugs thereby maintaining the said slugs in a predetermined position.

1,862,999. APPARATUS FOR STARTING INTERNAL COMBUSTION ENGINES. CHARLES F. BALL, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 10, 1930. Serial No. 494,823. 1 Claim. (Cl. 180—1.)



The combination in a motor vehicle having a motor, traction means, driving connections between said motor and traction means, a power take-off from said drivig connections, means for controlling said take-off, and an independent motor for supplying power to instrumentalities carried by said vehicle, of power transmitting connections including a clutch between said take-off and the shaft of said independent motor; means for positively engaging the elements of said clutch, whereby the latter may be started through power derived from the vehicle motor; and means for automatically disengaging the clutch elements when said independent motor starts.

1,863,000. CIGARETTE EXTINGUISHER. GEORGE D. BARNES, Penn Yan, N. Y. Filed Mar. 31, 1930. Serial No. 440,442. 1 Claim. (Cl. 131—10.)



As a new article of manufacture, a cigarette extinguisher and snuffer, comprising an elongated cigarette holding barrel having one end flanged for the reception of a cigarette and its opposite end contracted, an elongated tapered sleeve slidable on the barrel and having its rear end flanged and adapted to contact with the flange on the cigarette holding barrel for limiting the outward movement of the sleeve with respect to the cigarette holding barrel, said sleeve having an inner bore of the same size as a conventional cigarette, and adapted to slidably contact with the outer face of a cigarette for extinguishing the same as the sleeve is moved in contacting longitudinal movement over the outer face of the cigarette carried by the cigarette holding barrel, the flanged end of the sleeve being of resilient character to permit the flexing thereof when the sleeve is slid on the barrel to permit complete contacting relation between the cigarette carried by the cigarette holding barrel and the inner face of the bore of the sleeve.

1,863,001. CONTAINER FOR VENDING MACHINE GOODS. GEORGE D. BAROK and BURR H. SLATER, Columbus, Ohio, assignors to The Aspirin Machine Company, Inc., Columbus, Ohio, a Corporation of Ohio. Filed Dec. 22, 1930. Serial No. 504,085. 8 Claims. (Cl. 206—43.)

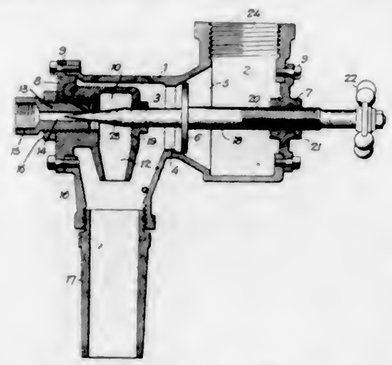


1. A dispensing container for articles comprising two hollow sections joined so as to form a closed chamber and secured together by a breakable seal along substantially the entire length of the joint, said sections being of a material of such rigidity that they produce when joined a container which will resist normal pressures arising from ordinary use but of sufficient pliability that they may be deformed and caused to burst apart by the application of pressure adjacent the seam thereof on account of the character of the joint.

1,863,002. PROCESS FOR GRINDING ETCHING PLATES MADE OF MAGNESIUM ALLOYS FOR PLANOGRAPHIC PRINTING. ADOLF BECK and WALTER SCHMIDT, Bitterfeld, and HUGO DIBELKA, Dusseldorf-Oberkassel, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 20, 1929, Serial No. 379,870, and in Germany July 25, 1928. 5 Claims. (Cl. 41—41.5.)

1. The process which comprises grinding etching plates made of magnesium alloys for planographic printing with a grinding medium in the presence of a dilute aqueous solution of a bichromate.

1,863,003. GAS BURNER. ALBERT R. BETHEL, Huntington Park, Calif. Filed May 13, 1929. Serial No. 362,791. 8 Claims. (Cl. 158—119.)

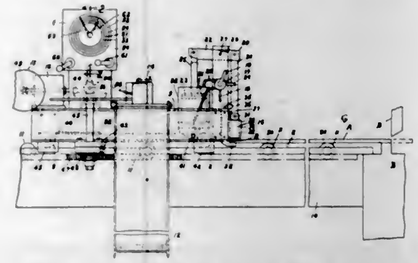


1. A gas burner comprising a burner casing having an air inlet chamber open at its outer side, a mixing chamber open at its outer side, a burner communicating with the mixing chamber, a tapering air feed passage connecting the air inlet chamber at its inner side with the inner side of the mixing chamber, closures for the outer sides of the chambers, said closures having threaded openings, a gas inlet chamber carried by the closure of the mixing chamber and communicating with the latter, a gas feed tube having a gas channel and adjustable in the threaded opening in the closure of the mixing chamber, a valve stem in threaded engagement with the threaded opening in the closure of the air inlet chamber, a tapering valve member carried by said stem and controlling the channel in the gas feed tube, and a disk-shaped valve carried by the stem and controlling the tapering air inlet passage.

1,863,004. LUBRICANT AND PROCESS OF MAKING THE SAME. ARTHUR W. BURWELL, Niagara Falls, N. Y., assignor to Alox Chemical Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 18, 1928. Serial No. 326,901. 18 Claims. (Cl. 87—9.)

1. The method of increasing the lubricating properties of an oil of petroleum origin which consists in adding to said oil an oil-soluble addition material obtainable by oxidizing a mixture consisting essentially of relatively high molecular-weight, saturated, aliphatic hydrocarbons of mineral origin, in the liquid phase, at a temperature of from about 100° to about 150° C. and at a super-atmospheric pressure not greater than about 320 pounds per square inch, in the presence of an exciter of oxidation, until the point of incipient formation of compounds which are insoluble in petroleum and in the reaction mixture, which mixture comprises saponifiable and unsaponifiable components, separating the saponifiable components from at least the major portion of the unsaponifiable components, treating the separated portion containing said saponifiable components with steam until substantially no more volatile material passes over, and drying the resulting residue.

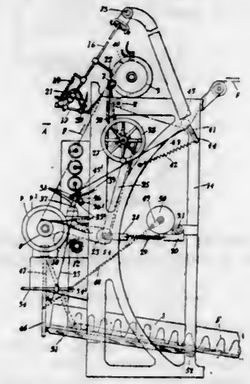
1,863,005. DEVICE FOR MEASURING AND SUBMITTING MATERIAL TO MACHINES. ACHESON M. CAMPBELL, Hamilton, Ohio, assignor to The Mosler Safe Company, Hamilton, Ohio, a Corporation of New York. Filed Mar. 27, 1931. Serial No. 525,826. 11 Claims. (Cl. 164—59.)



1. In a device of the class described the combination of a tool for operating upon material, a movable carriage and a supporting means therefor, an operator's station on the carriage and indicating means at the operator's station and movable bodily with the carriage for directly indicating the distance between the tool and a point on the carriage.

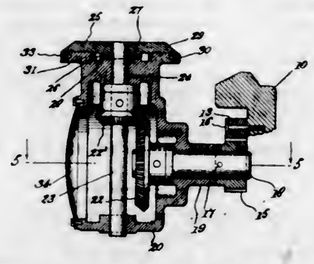
1,863,006. MACHINE FOR CUTTING THE PILE OF WEFT-PILE FABRICS. EDFORD CARMICHAEL, Warrington, England, assignor of one-half to The United Velvet Cutters Association, Limited, Manchester, England. Filed July 9, 1931, Serial No. 549,786, and in Great Britain July 11, 1930. 9 Claims. (Cl. 26—10.)

1. In a machine for cutting weft-pile, an upper roller and a lower roller about which the fabric is passed, the lower roller being so set in relation to the upper that the stretch of fabric between them inclines downwardly and forwardly, an overhead screw on which a rod or tube is mounted pivotally and means for driving said screw, a cutting knife carried by an arm mounted pivotally on said



rod or tube and adapted to engage the fabric at a point adjacent the upper end of the inclined stretch, and means operative in case of abnormality in connection with the knife to withdraw the knife from the fabric and to stop the traverse of the latter before the point at which cutting stopped reaches the lower roller.

1,863,007. LATHE ATTACHMENT. WILLIAM M. ELKINS, Winchester, Ind. Filed Apr. 11, 1931. Serial No. 529,525. 1 Claim. (Cl. 82—34.)

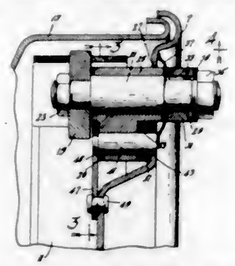


An indicator for lathes having a fixed frame and a travelling tool holder, comprising a hollow housing adapted to be mounted on the tool holder and to travel therewith, a pair of axially intersecting shafts in the housing, intermeshing bevel gear wheels carried by the shafts and proportioned in desired ratio with respect to the relative turning of the shafts, a pinion fixed on one shaft, a longitudinal rack adapted to be mounted on the fixed frame of the lathe in position to mesh constantly with said pinion for turning the shafts upon movement of the tool holder, said second shaft projecting upwardly through said housing, a graduated upwardly faced dial fixed upon the upper end of the shaft above the housing in proximity to the upper face of the tool holder and positively driven by the shaft, and an adjustable indicating ring carried by the housing and surrounding the marginal edge portion of the dial.

1,863,008. INTERNAL BRAKE. ALBERT W. FREHSE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 339,009. 12 Claims. (Cl. 188—78.)

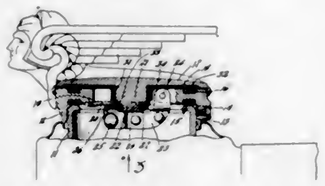
1. In combination, a brake drum, frictional members to engage the drum, means to expand said members into

contact with the drum, movably mounted means carrying said expanding means, a single spring having arms each normally under tension by engagement with said movable



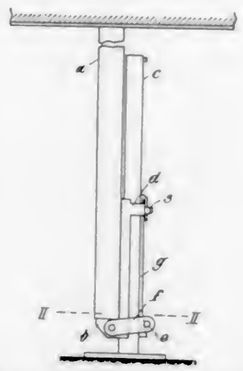
means, said spring arms being each additionally tensioned by said movable means when moved from its normal position.

1,863,009. RADIATOR CAP. ALBERT G. GEISTERT and ARTHUR J. ALTZ, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 11, 1929. Serial No. 354,260. 7 Claims. (Cl. 220—24.)



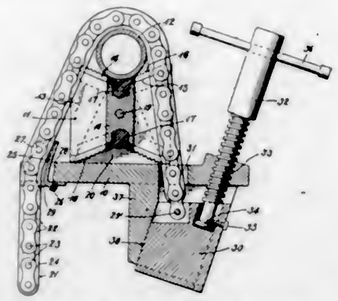
1. In a radiator cap organization: a cap element which is interiorly provided with radial retaining fingers; a collar comprising parts engageable thereby; and pivotal means comprising an interior link, for limiting the removal of said cap relatively to said collar,—said cap being interiorly provided with a post carrying some of said cam means and provided with an extension with which said pivotal means is rotatively connected by means of a link carrier which is provided with means for limiting its relative rotation.

1,863,010. CENTERING PROP. WILHELM GNIRS and ADOLF URBAN, Basel, Switzerland. Filed Jan. 29, 1931, Serial No. 512,113, and in Switzerland Feb. 4, 1930. 2 Claims. (Cl. 248—2.)



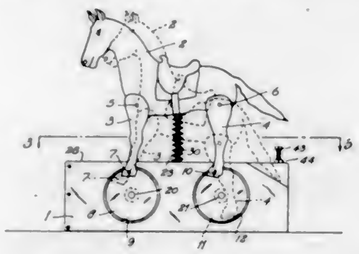
1. A centering prop, comprising in combination an iron base, a guide bar on said base, a wooden prop at the side of said guide bar, a shoe fixed on the lower end of said prop, a rigid strap extending from the upper end of shoe around said guide bar, two links hingedly mounted at one end one on each side of said shoe extending to beyond the side of said guide bar remote from said prop, a bolt connecting the other ends of said links, and a wedge between said guide bar and both said rigid strap and said bolt adapted to be held by said strap and to coact with said links and said bolt to automatically clamp said prop in adjusted position on said guide bar.

1,863,011. PIPE VISE. HENRY J. HACH, Louisville, Ky. Filed Mar. 14, 1931. Serial No. 522,707. 6 Claims. (Cl. 81—19.)



1. In a vise, a base, a jaw therefor, a flexible element passing over said jaw, means operable to tighten the flexible element, an anchor for the normally free end of the flexible element, means of separable engagement between the anchor and the flexible element, and means movably connecting the anchor to the base, said anchor having means thereon adapted to abut the base.

1,863,012. MECHANICAL HOBBYHORSE. JAMES OTTO HAHS, Sikeston, Mo. Filed Feb. 21, 1931. Serial No. 517,472. 10 Claims. (Cl. 272—52.)



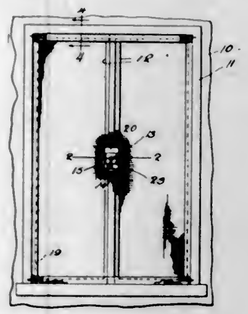
1. A mechanically operated hobby-horse comprising, in combination, a base having on opposite sides thereof two pairs of rotatable crank-members, a horse body having front and hind legs pivotally connected at their upper ends to the body and at their lower ends to said crank-members, means for yieldingly supporting the body of the horse, and means for simultaneously rotating said crank-members at different rate of speed.

1,863,013. FLOTATION PROCESS. MAHLIN S. HANSEN, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Mar. 14, 1931. Serial No. 522,790. 15 Claims. (Cl. 209—166.)

1. The process of concentrating materials by froth flotation, which consists in subjecting the unconcentrated material to froth flotation in the presence of a reaction product of an initially unsaturated fatty substance having an

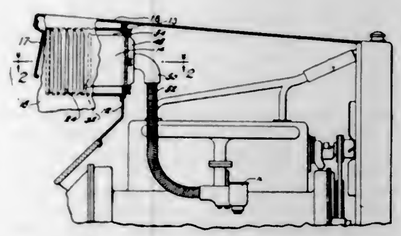
organic-acid radical containing from 6 to 22 carbon atoms, with a compound having the structure $(MCN)_2$ where "M" represents an element of the group comprising sulfur and selenium.

1,863,014. WINDOW SCREEN. LANEY D. HERNDON, Columbus, Ga. Filed Sept. 5, 1931. Serial No. 561,438. 3 Claims. (Cl. 156—14.)



1. An improved window screen construction comprising screen mesh, a small frame carried by the mesh, a backing plate attached to the mesh and said frame and having a relatively large opening therein for receiving the operating member of the window locking device, and a front plate removably fitted to said back plate and having a smaller opening therein snugly fitting about said operating member.

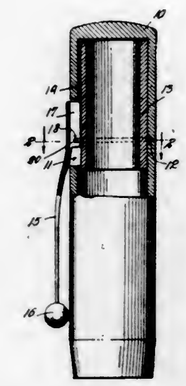
1,863,015. AIR FILTER. HERBERT G. KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 13, 1927. Serial No. 212,696. 10 Claims. (Cl. 180—54.)



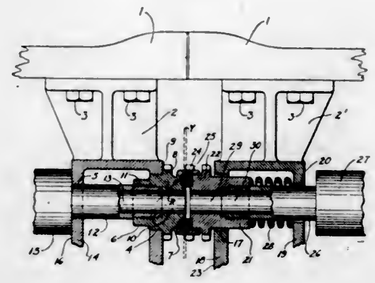
1. In an automotive vehicle including a dash provided with an aperture, a valve chamber on the operator's side of said dash and covering said aperture, openings in said valve chamber leading to the outside and inside of the vehicle respectively, an element movable to close either entrance, and an air inlet including an air filter mounted over said aperture.

1,863,016. CLIP FOR FOUNTAIN-PEN CAPS, PENCILS AND THE LIKE. HENRY KRAUSE, Little Neck, N. Y. Filed Dec. 5, 1929, Serial No. 411,748. Renewed Oct. 29, 1931. 6 Claims. (Cl. 24—11.)

1. The combination with a tubular body having an elongated aperture in its wall and a groove in the bore of said body adjacent to said aperture, of a clip arranged longitudinally of said tubular body with one end thereof in said aperture, a split ring adapted to be placed in the groove of said body and passed through said clip to support the same in connection with said body, and means arranged in the bore of said body for retaining said ring against displacement from said groove.

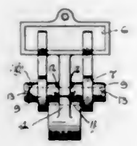


1,863,017. COUPLING DEVICE. ERNST A. LARSSON, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 29, 1930. Serial No. 456,972. 4 Claims. (Cl. 285—70.)



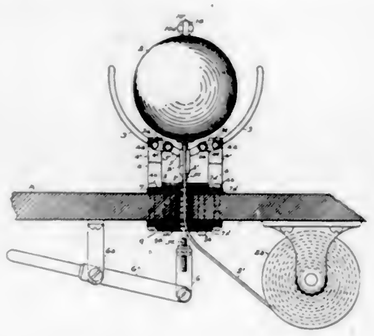
1. A connecting device comprising a pair of supports each connected to a car coupler and movable towards each other when a coupling is made, tubular connecting members fixedly secured to one support and one member projecting and having a spherical contact surface, tubular connecting members mounted on the other support and movable longitudinally thereto and one member projecting and having a spherical contact surface conforming to the contact surface on the other said projecting member and to engage the same to form a tight joint, spring means to advance the second projecting member and hold it in contact with the first projecting member and means to limit the advance when the devices are uncoupled, the spherical surface on the one projecting member being of greater extent than that on the other member.

1,863,018. BRUSH HOLDER FOR DYNAMO ELECTRIC MACHINES. ALEXANDER MORTON MACCUTCHEON, Shaker Heights, Ohio, assignor to The Reliance Electric and Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 9, 1931. Serial No. 528,771. 7 Claims. (Cl. 171—324.)



1. A brush holder, comprising a guide-way, an external spring having an extension for coacting with a brush therein, a sleeve for said spring, and support-means for the sleeve, the spring-force retaining the sleeve against axial displacement therefrom without auxiliary end-obstructing means.

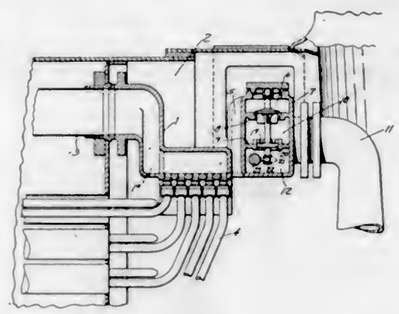
1,863,019. SUBMARINE DISTRESS SIGNAL. JOHN MANGIONE and SALVATORE TERRANOVA, Auburn, N. Y. Filed Mar. 8, 1932. Serial No. 597,444. 3 Claims. (Cl. 114—16.5.)



1. A buoyant signal for indicating location and distress of a submerged vessel, comprising a buoyant sphere mounted upon the deck of the vessel, a plurality of arms adapted to grip and hold the sphere inoperative, means passing through a small opening of the deck and operable from the interior of the vessel to cause said arms to grip and release the sphere, a cable attached to the sphere and passing through a second larger opening of the deck and being wound upon a drum disposed below the deck, a guide plate mounted on top of the deck having an opening to operatively receive said cable, a heavier emergency cable stowed in the hold of the vessel, and means within the vessel to release said guide plate to enable the emergency cable to be drawn through the larger opening by the smaller cable to supplant the latter cable.

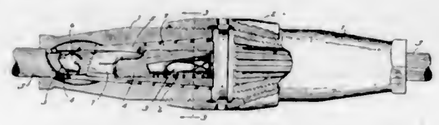
1,863,020. VALVE. JARVIS C. MARBLE, Mount Vernon, N. Y., assignor to American Throttle Company, Inc., New York, N. Y. Filed Mar. 21, 1928. Serial No. 263,575. 4 Claims. (Cl. 137—144.)

1. In apparatus of the class described, a casing forming an inlet chamber, an outlet chamber and a balancing chamber, a valve controlling communication between the inlet and the outlet chamber and opening against pressure in the inlet chamber, a valve balancing piston between the outlet chamber and the balancing chamber, means for admitting steam to the balancing chamber, and



means for venting the balancing chamber to the outlet chamber past the balancing piston before the valve reaches its fully opened position.

1,863,021. CABLE CONNECTER. SAMUEL S. MATTHES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Sept. 7, 1927. Serial No. 217,938. 7 Claims. (Cl. 173—303.)

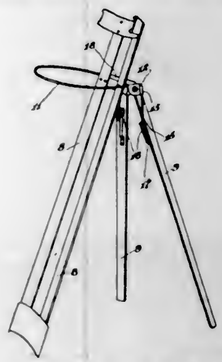


1. A cable coupling for a hollow stranded cable having a plurality of layers of strands, comprising a connecting member having a bore to receive the cable and within which the cable is compressed and tubular means with parallel sides positioned interior of the cable to support the strands and tapered means between the strand layers to compress the strands against the connecting member and the tubular means.

1,863,022. PORTABLE STAND FOR GOLF BAGS. HAROLD WENSLEY MAY, Cowichan, British Columbia, Canada. Filed Apr. 27, 1931, Serial No. 533,346, and in Canada Mar. 10, 1931. 1 Claim. (Cl. 150—1.5.)

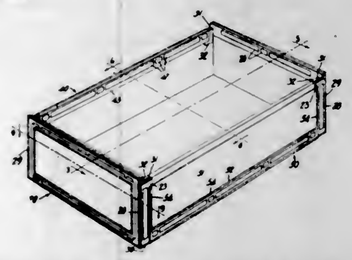
A portable stand for a golf club bag and comprising a fore leg member adapted for securing to the said golf bag, a body member secured transversely of said fore leg member and characterized by the angular face formation of its rear edge the projection of the planar surfaces corresponding to said angular faces intersecting at an obtuse angle, hinge members on each of said angular surfaces, a rear leg member secured at its upper and to each mobile portion of said hinges, a bail member adapted to substantially encircle the body of the said golf bag and having its extremities extended thereby forming a pair of levers fulcrumed upon a common axis, a fulcrum pin projecting from each end of said transverse body member, means for pivoting said bail-member levers on said pin, the lever extremities of said bail-member adjacent said fulcrum pin being bent downwardly and thence inwardly to engage the inner surface of each said leg member whereby upon the depression of said bail-member in the act of positioning the device during play the said lever extremities are moved outwardly from the said fore leg member and the golf bag and the said inwardly turned ends of the levers impinge the inner surface of the rear

legs so as to extend them and by reason of the said angularity of the hinge axes the rear legs are also widened apart to form a stable condition for the stand, and means



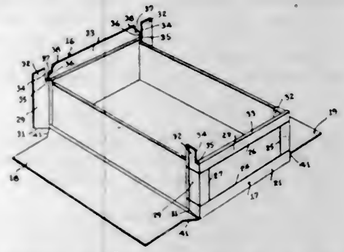
connected to said rear legs whereby the said inwardly turned ends of the levers are retained in engagement with said rear legs and their angular movement limited.

1,863,023. BOX LABELING AND EDGING. WILLIAM H. MEYER and WILLIAM A. JEPSEN, Newark, N. J. Filed July 18, 1928. Serial No. 293,548. 8 Claims. (Cl. 229—6.)



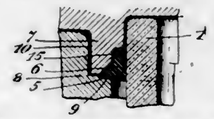
2. A set of combined labeling and edging units for the front and end walls of a cigar box, comprising a combined labeling and edging unit for each end wall and a combined unit for the front wall, the end units being longer than the end wall of the box and the front unit being shorter than the front wall of the box whereby the set is adapted to be applied to boxes of different dimensions.

1,863,024. BOX LABELING AND EDGING. WILLIAM H. MEYER and WILLIAM A. JEPSEN, Newark, N. J. Filed June 10, 1929. Serial No. 369,661. 2 Claims. (Cl. 229—6.)



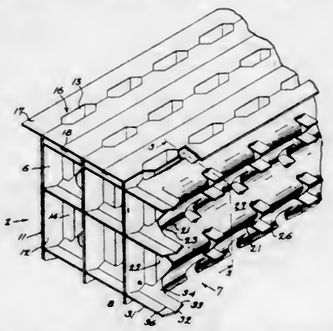
1. A wrapper for cigar boxes having their end walls projecting upwardly above the upper level of the front and rear walls, said wrapper comprising a pair of combined label and edging units for the end walls of the box, said units having overlapping portions forming edging strips for the adjacent corners of the front and rear walls, said units also being provided with cut out portions formed to cover the projecting parts of the end walls with a single layer of wrapper material, said wrapper also comprising a substantially rectangular unit providing a label and horizontal edging strips for the front wall, and a substantially rectangular unit forming an edging strip for the lower corner of the rear wall and a label for the lower portion of the said rear wall, and having a longitudinal strip of the said wall exposed for attachment of the hinge for the cover.

1,863,025. SEALED PACKAGE AND METHOD OF SEALING. GEORGE W. MULLEN, Flushing, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed July 25, 1929. Serial No. 380,895. 9 Claims. (Cl. 215—40.)



1. A sealed package comprising a container, a closure cap having a cover part and a depending skirt, a bead in said skirt, and a gasket in said bead, the outer upper corner of said bead being pressed inwardly and downwardly toward the container without changing substantially the outer periphery of the lower portion of the bead and without decreasing the length of the skirt of the cap, and the lower edge of said bead forming substantially a horizontal shelf to hold said gasket in position.

1,863,026. RADIATOR CONSTRUCTION. OSCAR C. PALMER, Phoenix, Ariz. Filed Feb. 26, 1931. Serial No. 518,397. 8 Claims. (Cl. 257—130.)

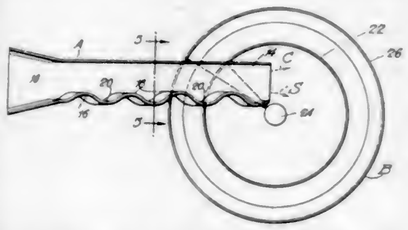


1. In a radiator construction, tube members having beads extending from both faces, said beads being hollow to define water tubes, and said members being spaced to define air passages with said beads extending thereinto, and fins disposed within said air passages, each fin comprising a plate having corrugations therein extending angularly with respect to said water passages, the crests of said corrugations engaging the outermost portions of said beads, and tongues struck from said plate and extending beyond said crests into engagement with said tube members between said beads.

1,863,027. SEPARATOR. FRANK PARDEE, Hazleton, Pa., assignor to Anthracite Separator Company, Hazleton, Pa., a Corporation of Pennsylvania. Filed May 31, 1929. Serial No. 367,183. 5 Claims. (Cl. 209—117.)

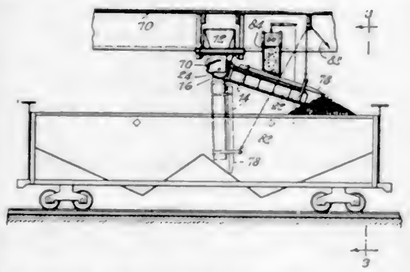
1. A two stage separator comprising an inclined chute having an upright undulated wall adapted to exert a pre-

liminary spreading and lateral stratification of the lighter from the heavier material flowing down the chute and a



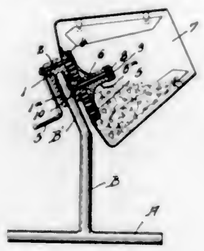
separator adjacent said chute arranged to receive the material from the chute in its spread out and stratified condition and to effect a final separation thereof.

1,863,028. LOADING CHUTE. FRANK PARDEE, Jr., Hazleton, Pa., assignor to Anthracite Separator Company, Hazleton, Pa., a Corporation of Pennsylvania. Filed July 15, 1930. Serial No. 468,029. 8 Claims. (Cl. 193—32.)



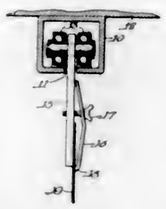
3. A lowering chute for coal and similar materials comprising spaced plates with pivotally mounted retarder members between them, means for pivotally supporting the chute as a whole, an operating bar connected with said retarders, a fixed cam and means co-acting with said cam for shifting said bar when the chute is moved about its pivotal support.

1,863,029. CONCRETE MIXER. VAINO PIISPANEN, Helsinki, Finland, assignor to Koebring Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 29, 1930, Serial No. 478,701. Renewed Apr. 19, 1932. 4 Claims. (Cl. 83—73.)



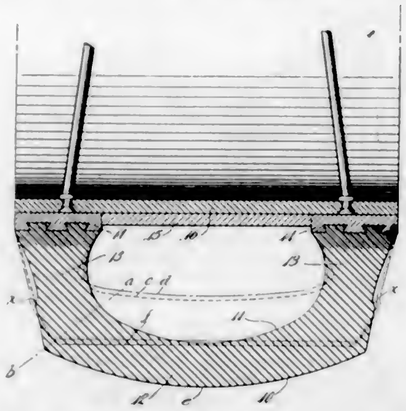
1. In a concrete mixing machine, in combination, a base, a standard carried by said base and arranged at an angle to the vertical, a supporting head mounted on said standard and adapted to revolve about the standard as an axis, and a rotatable mixing drum carried by said head and adjustable by reason of movement with the head to assume discharging and non-discharging positions.

1,863,030. HANGER FOR RUGS AND THE LIKE. JULIUS RUWITCH, Norway, Mich. Filed Apr. 7, 1930. Serial No. 442,442. 3 Claims. (Cl. 211—46.)



1. A hanger for supporting rugs and the like in vertical position, comprising a relatively long casing, said casing being closed on all sides and having a longitudinal slot extending the length of the lower face thereof, a plurality of roller bearings within said casing and adapted to travel the length thereof, a flat strip connected to said bearings, a portion thereof extending through said longitudinal slot, and a plurality of clamps disposed along the lower margin of said strip to support a rug or the like in a vertical position, said clamping means comprising a substantially rectangular sheet of metal bent into an obtuse angle, the upper margin thereof having contact with a rug or the like, and having a thumb screw connecting said clamp with said strip at a point above the bend therein.

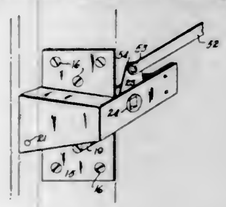
1,863,031. CUSHION TIRE. HENRY F. SCHIPPEL, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 27, 1931. Serial No. 525,856. 6 Claims. (Cl. 152—1.)

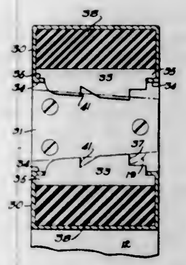


1. A cushion tire comprising a substantially all-rubber tire body formed with a longitudinal cavity of substantially elliptical cross-sectional form having the major axis of the ellipse parallel with the axis of rotation of the tire and substantially spaced from the base of the tire.

1,863,032. COMBINED AUTO DOORLOCK AND DOVETAIL. WILLIAM J. SEELINGER, Detroit, Mich. Filed Apr. 16, 1931. Serial No. 530,487. 8 Claims. (Cl. 292—223.)

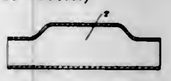
1. A supporting and locking means for a door frame member and a door member hinged thereto for swinging toward and away from the frame, comprising coacting wedging elements on said members, a shoulder on one of said elements, a coacting latch mounted in and movable relative to the other of said elements and engageable with said shoulder when the wedging elements are in contact, a manually operated latch moving element, a handle on the outside of said door having a shank en-





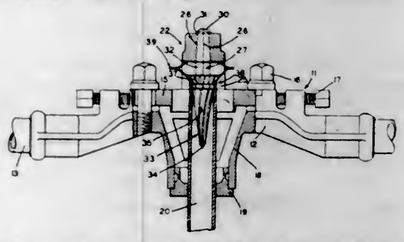
gaging said latch moving element, a second handle on the inside of said door being a shank, a link connection between the last mentioned shank and the latch moving element.

1,863,033. MANUFACTURE OF RETURN BENDS AND SIMILAR STRUCTURES. CHARLES H. TRUE, Chicago, Ill., assignor to The Superheater Company, New York, N. Y. Filed Nov. 22, 1928. Serial No. 321,141. 1 Claim. (Cl. 29—157.6.)



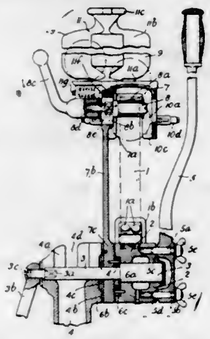
The process of making an elbow comprising the steps of selecting a pipe length of a diameter larger by a suitable amount than the desired diameter of the finished product, swaging down the ends of the pipe to the diameter of the final product, portions of the walls of the two swaged ends being in alinement with each other and with a portion of the wall of the unswaged part of the pipe, flattening the unswaged part so no portion extends beyond two parallel planes tangent to the swaged portions, and bending the piece into final shape with the said alined portions of the wall on the inside of the curve of the elbow, whereby the free inner cross-sectional area is nowhere smaller than at the swaged ends.

1,863,034. REAMER AND REAMER CHUCK FOR PIPE THREADING DEVICES. JOSEPH HENRY STROCK, Los Angeles, Calif. Filed Apr. 23, 1930. Serial No. 446,593. 6 Claims. (Cl. 77—73.)



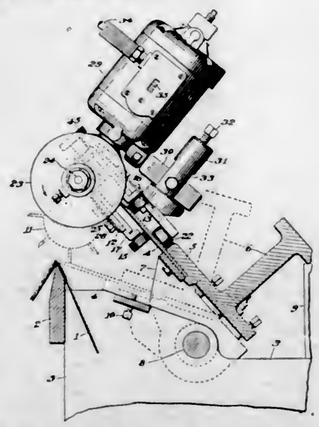
2. In a pipe threading device having threading cutters forming an aperture, a reamer fixed in axial alignment with the aperture and a slidable reamer in axial alignment with the fixed reamer and slidable relative thereto, the fixed reamer being adapted to ream the interior of a pipe on advancement of the pipe through the threading device, and the slidable reamer being adapted to ream the end of the pipe.

1,863,035. PROPELLING APPARATUS APPLICABLE PARTICULARLY TO THE PROPELLING OF LAWN TENNIS BALLS AND OTHER GAME MISSILES AND THE LIKE. THOMAS STUART, Erdington, Birmingham, England, assignor, by direct and mesne assignments, of one-half to Dunlop Rubber Company Limited, Birmingham, England, a British Corporation, and one-half to Jean Rene Lacoste, Sylvestere, Courlevale, Seine, France. Filed Dec. 27, 1929, Serial No. 416,868, and in Great Britain Jan. 1, 1929. 2 Claims. (Cl. 273—107.)



1. Apparatus for propelling tennis balls comprising a supporting head, a spindle, a spring mounted for rotation about the axis of said spindle, said spindle comprising means to lock the head of the apparatus in position when tightened in its mounting and to free the head so that said head can be moved bodily around the spindle for the purpose described when said spindle is loosened.

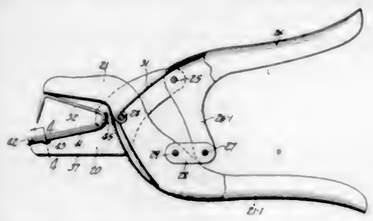
1,863,036. LEDGER BLADE GRINDER. CARL WICKE, Amsterdam, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Apr. 19, 1930. Serial No. 445,561. 6 Claims. (Cl. 51—173.)



1. A ledger blade grinder, comprising in combination, a frame constructed to straddle a ledger blade of the type comprising a blade and supporting bar having a lateral shoulder extending lengthwise of the blade, said frame

being provided with rollers adapted to travel along said shoulder and other rollers that engage the sides of the blade and adapted to guide the frame along the blade, a power driven grinding wheel supported by said frame, and adjustable means for raising and lowering the grinding wheels relative to the blade to vary the cutting action of the grinding wheel.

1,863,037. PLIERS. CHARLES A. ARCHBOLD, Salt Lake City, Utah, assignor to Salt Lake Stamp Company, Salt Lake City, Utah, a Corporation of Utah. Filed Aug. 18, 1930. Serial No. 475,865. 10 Claims. (Cl. 128—331.)



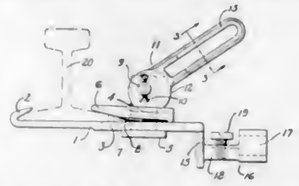
5. Pliers, including in combination, a jaw portion and an insert for said jaw portion; said insert comprising two channels spaced apart from each other, a bed extending from the inner flange of one channel to the inner flange of the other channel, and means for holding said insert in position in said jaw portion.

1,863,038. LAWN MOWER SHARPENER. JOHN B. BRADFORD, Los Angeles, Calif., assignor of one-half to Charles J. Heyler, Los Angeles, Calif. Filed Nov. 7, 1928. Serial No. 317,789. 2 Claims. (Cl. 76—82.)



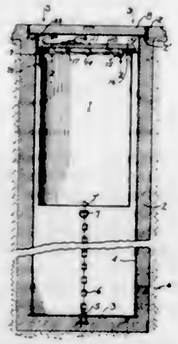
1. A sharpener for lawn mowers, comprising a flat bar having file teeth on its upper surface and end portions having a reverse bend on the underside of the bar with screw devices extending through said ends from underneath, the said bar being adapted to fit on a stationary blade of the lawn mower with the bent ends engaging over the ends of said blade, the upper surface of the said bar being adapted to engage the rotary blades of the lawn mower, said file teeth being inclined on one side to one edge and on the opposite side to the opposite edge in a reverse direction whereby the upper surface of the bar may be optionally positioned to have its teeth to run in either direction to engage the rotary blades of either a right hand or left hand mower respectively.

1,863,039. CLAMP. HOMER P. CHANDLER, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 14, 1930. Serial No. 452,361. 7 Claims. (Cl. 173—273.)



1. A clamp comprising a body member having a turned back end to form a hook to engage an edge of a flange; an elongated slot in the body, a transverse stud slidably mounted in the slot and held against rotation, a clamping member mounted on the stud against rotation but movable longitudinally of the stud, a projecting portion on the clamping member having a sloping face to engage and grip another edge of the flange and force it against the body member, an insulated handle pivotally mounted on the stud and having a cam shaped portion to engage the clamping member to force the clamping member into engagement with the flange and hold the engagement and means on the body member to receive and hold a conductor.

1,863,040. THERMOSTATICALLY CONTROLLED RECEDING FIREPROOF SAFE. BENJAMIN F. CISOR, Los Angeles, Calif. Filed Feb. 13, 1931. Serial No. 515,466. 3 Claims. (Cl. 109—2.)



1. The combination of a safe having a lock controlled door, fireproof walls forming a vertical elongated chamber in the upper part of which said safe is disposed and providing a recess below said safe, means including a fusible member for holding said safe in position and attached to the fireproof walls whereby on the failure of the fusible member the safe will fall by the action of gravity to the bottom of said recess.

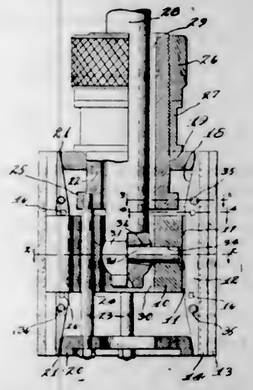
1,863,041. SEAL. NORMAN DRESSAUER, New York, N. Y., assignor to The International Seal & Knot Protector Co., New York, N. Y., a Corporation of New York. Refiled for abandoned application Serial No. 318,475, filed Nov. 10, 1928. This application filed Jan. 11, 1932. Serial No. 585,971. 2 Claims. (Cl. 292—325.)



1. A seal including a casing formed of a single piece of metal including two plate portions and a connecting wall, said plate portions being in superposed spaced relation-

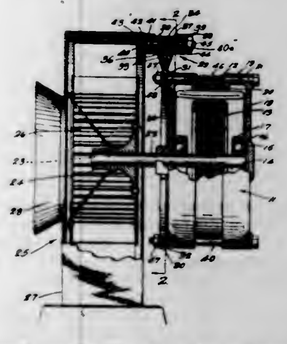
ship and the connecting wall forming one end of the casing, one of said plate portions having side flanges for spacing the plate portions and the other having side flanges for receiving therebetween the first mentioned side flanges and bent into engagement with the first mentioned plate portion to permanently hold the plate portion in predetermined relationship, a slide movable within said casing and projecting out through the side thereof opposite to said connecting wall and having a notch therein for carrying cord ends into said casing, said slide having a shoulder, and one of said first mentioned flanges having a portion bent inwardly and forming a resilient tongue for engagement with said shoulder to prevent the outward movement of said slide.

1,863,042. GRINDING DEVICE. CARL W. FLOSS, Detroit, Mich. Filed Jan. 23, 1928. Serial No. 248,782. 10 Claims. (Cl. 51—184.1.)



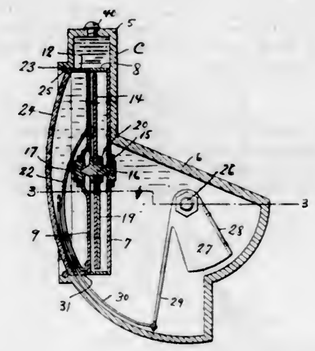
1. 1. In a lapping tool, in combination, a plurality of abrasive members, a body upon which said members are mounted for radial movement located substantially centrally of said members, adjusting elements for said abrasive members spaced respectively from the ends of said body and supported independently thereof and a driving shaft extending through one of said elements and into said body and means for drivingly connecting the end of said shaft to said body.

1,863,043. MOTOR SUPPORT FOR VENTILATING FANS. CARL E. JOHNSON, Pasadena, Calif. Filed Jan. 13, 1931. Serial No. 508,481. 1 Claim. (Cl. 248—16.)



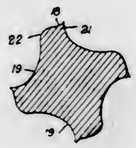
In a support construction for a motor driven fan, the combination of: a ring adapted to be attached to the casing of said motor; arms on said ring, each of said arms having an opening at its end; a resilient lining in each of said openings; a resilient pad on one side of each of said arms; and bolts adapted to extend through said openings and engaging said linings to adjustably secure a fan against said resilient pads.

1,863,044. PENDULUM BANK AND CLIMB INDICATOR FOR AEROPLANES. DELBERT O. JOHNSON and WALTER W. WEBSTER, Bloomington, Calif. Filed Dec. 10, 1929. Serial No. 413,058. 3 Claims. (Cl. 33—215.)



1. In a pendulum bank and climb indicator for aircrafts, an indicator plate provided with an opening at the top with means to indicate the center of said opening, a pendulum swinging in a plane parallel to said plate, a dial plate carried by the pendulum and cooperating with the indicator plate, a second indicator plate immediately below said opening, a second pendulum below and in the rear of the first pendulum and swinging in a plane at right angles thereto, a pointer carried by the second pendulum vertically movable adjacent to and in front of the second indicator plate, both the second indicator plate and the pointer being segments of concentric circles having the axis of the second pendulum for their common center.

1,863,045. EXTRACTOR FOR SCREWS AND THE LIKE. NORMAN RANDALL, Cleveland, and JAMES B. DILLARD, Cleveland Heights, Ohio, assignors to The Cleveland Twist Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 3, 1931. Serial No. 548,546. 3 Claims. (Cl. 81—71.)



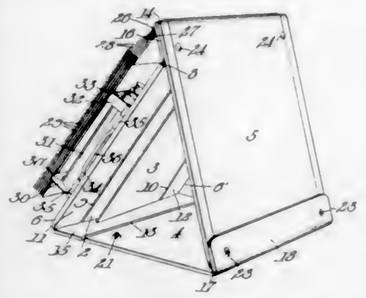
1. An extracting tool comprising an operating portion provided with helically disposed lands and grooves, said lands having gripping edges with at least zero rake, and said grooves having helically disposed ridges adjacent to said gripping edges to support said edges and to limit penetration of the lands thus preventing undue expansion of the hole provided for insertion of the tool.

1,863,046. EXTRACTOR. THOMAS F. GITHENS, Cleveland Heights, and JOSEPH V. EMMONS, Shaker Heights, Ohio, assignors to The Cleveland Twist Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 11, 1931. Serial No. 550,138. 6 Claims. (Cl. 81—71.)



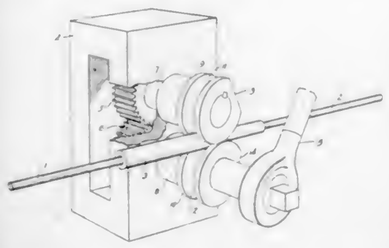
1. An extracting tool comprising a body portion, a shoulder on the forward end of said body portion equipped with serrations adapted to engage an object to be removed without chipping metal, an entering portion integrally united to said body portion, and lands on said entering portion formed by flutes which continue into said shoulder and provide said serrations.

1,863,047. EXHIBITOR. HARRY C. GRIMSLEY, Vincennes, Ind., assignor to Indian Refining Company, Lawrenceville, Ill., a Corporation of Maine. Filed Feb. 5, 1930. Serial No. 426,132. 5 Claims. (Cl. 206—44.)



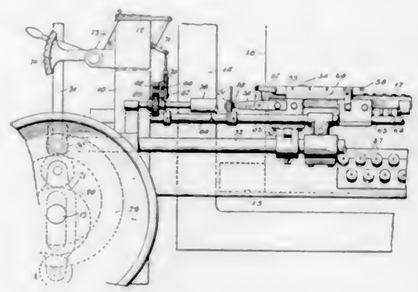
1. In an exhibitor, a back member, closure flaps hinged to the sides and ends of said back member and articulated to provide side and end members, frames adapted to support samples of merchandise hinged to the opposite sides of said back member and adapted to fold against said back member and to swing outwardly, and means for limiting the outward movement of said frames at a position not beyond the plane of said back member.

1,863,048. METHOD OF JOINING WIRES. WALTER S. HAYFORD, Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 15, 1929. Serial No. 371,254. 1 Claim. (Cl. 29—148.)



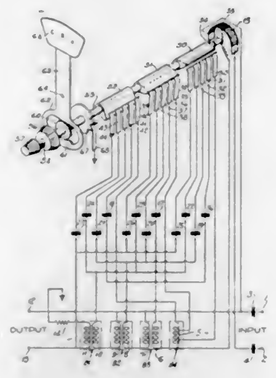
The method of making joints in wires or the like which consists in inserting in opposed relation the ends of the wires to be joined in a relatively soft metallic sleeve and then rolling said sleeve into intimate contact with the wires to be joined, said rolling action starting at one end of the sleeve and continuing to the other.

1,863,049. MACHINE FOR MAKING PILE FABRICS. JACOB HERMANN, Newton, N. J. Filed Dec. 16, 1929. Serial No. 414,326. 7 Claims. (Cl. 112—79.)



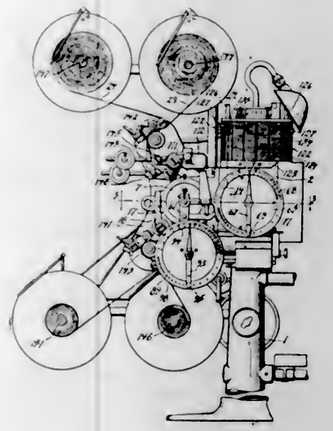
1. In a machine for making pile fabrics, front and rear carriages, means to reciprocate said carriages in opposite directions relative to a foundation fabric interposed therebetween, a needle bar carried by one of said carriages the needles of which are operable to form pile loops in said fabric, and a presser plate on the other carriage engaging said fabric during the penetration thereof by said needles.

1,863,050. RADIO FILTER APPARATUS. ALFRED H. HOTOPP, Jr., Caldwell, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 14, 1931. Serial No. 550,665. 4 Claims. (Cl. 178—44.)



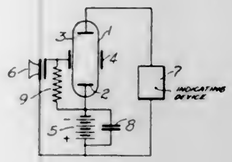
4. Radio filter apparatus comprising, mounting means, plurality of circuit components mounted upon said mounting means, a rotatable shaft, a plurality of resilient contact members aligned in a plane parallel to the axis of said shaft, said contact members being connected to said circuit components, a plurality of angularly displaced projecting members on said shaft for sequentially engaging with different groups of said contact members when said shaft is rotated, an indent member mounted upon said shaft, and a resilient detent member for engaging with said indent member.

1,863,051. PHOTOGRAPHIC PRINTING MACHINE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed July 9, 1929. Serial No. 376,947. 15 Claims. (Cl. 95—75.)



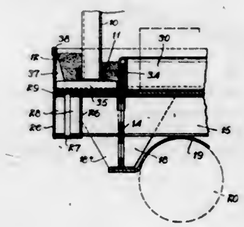
1. In a motion picture film printing machine the combination with a revoluble film feed sprocket, comprising two axially spaced wheels, and a film guide disposed for guiding superposed films engaged on said sprocket and exposure apertured between said wheels and inwardly thereof, of a single source of printing light, a light separating partition between said wheels for subjecting independently, in said guide, different longitudinal sections of said films to light from said source and passing between said wheels, and shutter devices for varying independently the exposure of said sections to said source.

1,863,052. PICK-UP AMPLIFIER. AUGUST HUND, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 12, 1930. Serial No. 467,489. 2 Claims. (Cl. 179—171.)



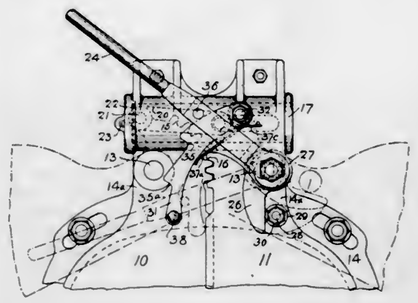
1. A pick-up amplifier comprising, an envelope, a photosensitive cathode and anode positioned within said envelope in a manner adapted to produce an elongated electronic stream, an electrostatic control electrode exteriorly positioned on said envelope, said control electrode and said cathode being relatively movable; an output circuit connected between said anode and said cathode and including an indicating device, an input circuit connected between said control electrode and said cathode and including an electrostatic condenser microphone, and a single source of voltage common to said input circuit and said output circuit for supplying a potential to said anode and to said condenser microphone.

1,863,053. ANNEALING APPARATUS. PERCY E. HUNTER, Pittsburgh, Pa., Filed May 11, 1931. Serial No. 536,476. 23 Claims. (Cl. 263—49.)



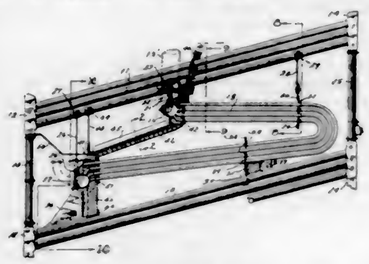
1. Annealing apparatus comprising a tray portion for supporting articles to be annealed, and a trough portion for supporting an annealing box, one of said portions having its edges bent in vertical directions to form a groove, and the other portion having its edge bent to form a flange fitting within said groove.

1,863,054. FIRE DOOR APPARATUS. ALFRED HUTTON and SHERMAN MILLER, Schenectady, N. Y. Filed Oct. 19, 1929. Serial No. 400,976. 10 Claims. (Cl. 110—176.)



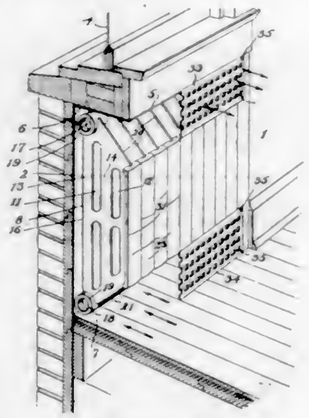
1. In a fire door apparatus, the combination of a fire door adapted to open laterally and vertically, a pivot for the door, a lever having two arms for swinging the door on its pivot, a pivot fulcruming the lever, and means on the said door operably engaging one arm of the lever, the axis of the door pivot and the axis of the lever pivot being spaced one from the other to effect the gradual approach of said means toward said lever pivot during the opening of the door.

1,863,055. SUPERHEATER BOILER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 18, 1925, Serial No. 69,744. Renewed Feb. 18, 1931. 15 Claims. (Cl. 122—476.)



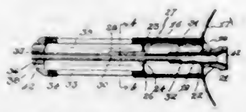
10. In a boiler having water tubes, a boiler setting and a tubular superheater supported entirely upon said tubes, said superheater having headers extending through said setting and freely movable with respect thereto.

1,863,056. RADIATOR. WALTER E. KUENSTLER, New York, N. Y. Filed Sept. 3, 1929. Serial No. 389,976. 4 Claims. (Cl. 257—151.)



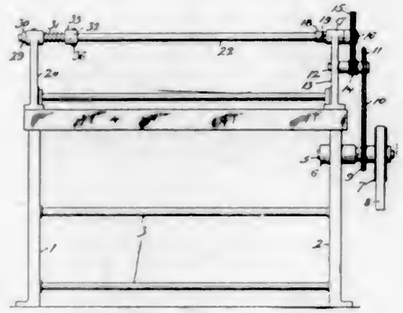
3. In a radiator construction, a plurality of connected radiator units, some of said units comprising intermediate members having a shorter front flanged edge and a longer rear edge, connection openings disposed in each of said units at the outer terminations of the longer rear edge, end units being connected to said intermediate members and supporting the same, and a grille disposed above the upper terminations of the flanged edges on the intermediate units and means for securing said grille to the end units.

1,863,057. SURGICAL DRAIN. GEORGE A. INNES, Philadelphia, Pa. Filed Mar. 3, 1930. Serial No. 432,609. 20 Claims. (Cl. 128—350.)



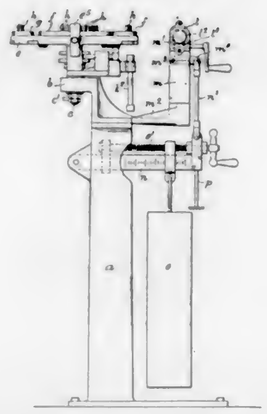
3. A surgical instrument comprising a laterally expansible drainage conduit, and an irrigating conduit extending entirely through said drainage conduit, and an elastic envelope for said conduit, said envelope being imperforate about the expandible part and perforate at the locus of the irrigating conduit.

1,863,058. WINDING MACHINE. OSCAR I. JUDELSHON, Park Ridge, N. J. Filed Jan. 6, 1931. Serial No. 506,893. 9 Claims. (Cl. 242—55.)



1. In a machine having a detachable shaft, the combination of spaced members adapted to receive a shaft therein and to support the shaft in position to be revolved, one of said members being adapted to receive one end of the shaft axially therein, the other of said members having a pivotal sleeve for receiving the other end of said shaft whereby one end of the shaft may be inserted in said sleeve while the latter is turned at an angle to the axis of the member by which it is carried and then turned with said sleeve into alignment with said first shaft supporting member, said supporting members being relatively movable axially.

1,863,059. STRINGING OF LAWN TENNIS AND LIKE RACKETS. WILLIAM EDWARD BERTHOLD JAFFÉ, Chelsea, England. Filed Feb. 20, 1930, Serial No. 429,929, and in Great Britain Apr. 30, 1929. 14 Claims. (Cl. 273—73.)



1. In a racket stringing apparatus, means for holding a racket frame against distortion in all directions, a winding drum pivoted adjacent to and tilting towards said racket frame holding means, and loading means restraining tilting of said drum.

1,863,060. MIRROR SUPPORTING DEVICE. CARL L. KNUTSON, Maywood, Ill., assignor to Cinch Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 22, 1928. Serial No. 313,996. 5 Claims. (Cl. 45—97.)

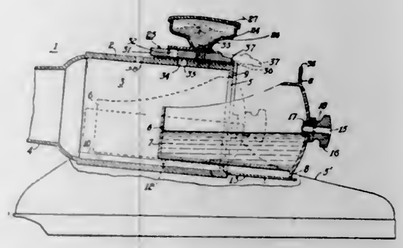


1. A mirror-supporting device comprising, in combination, a bracket, mirror-holding means carried by said bracket, and a universal joint connection between the bracket and the mirror-holding means permitting angular adjustment of the mirror-holding means in any direction, said universal joint connection comprising a socket portion, a rounded projection engaged directly with said socket portion, a cup-shaped member and clamping means, said cup-shaped member having a yieldable bottom which cooperates with the clamping means to press the socket portion and rounded projection together while permitting relative movement without changing the said clamping means.

1,863,061. RECEPTACLE FOR PEN POINTS PROVIDED WITH DARK BANDS. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Jan. 23, 1930. Serial No. 422,788. 5 Claims. (Cl. 120—42.)

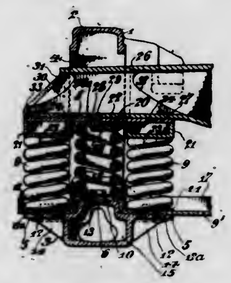
1. A receptacle for a pen point formed of light transmitting material and provided with an opaque band overlying the portion of the interior of the receptacle which is liable to be soiled by ink transferred thereto from the pen point.

1,863,062. TOY CANNON. JOHN W. MACDONALD, Wilkinsburg, Pa. Filed Dec. 13, 1930. Serial No. 502,062. 9 Claims. (Cl. 89—7.)



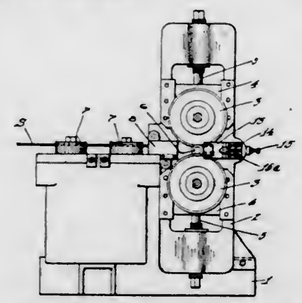
4. A toy cannon having an explosion chamber, a water chamber disposed within the explosion chamber and being removable therefrom as a unit.

1,863,063. RAILWAY CAR TRUCK. MARK H. MARTIN, Reading, Pa., assignor to Birdsboro Steel Foundry & Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Dec. 11, 1928. Serial No. 325,268. 8 Claims. (Cl. 105—197.)



1. In a railway car truck, a side frame for said truck adapted to support a plurality of springs, and a cap for said springs, said cap having inner and outer spring-engaging surfaces located in a common plane, and an intermediate spring-engaging surface located in a plane above that of the said surfaces.

1,863,064. ATTACHMENT FOR MACHINES FOR COILING METAL. MICHEL NIGRO, Worcester, Mass., assignor to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 12, 1929, Serial No. 385,234, and in Sweden May 31, 1929. 8 Claims. (Cl. 153—65.)

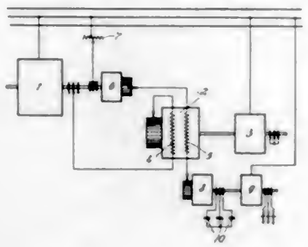


1. In a machine of the class described, the combination with means for feeding metal stock and means for coiling the stock into helical form comprising a mandrel, a rotatably driven coiling roll cooperating with said mandrel, and a coiling tool providing a surface of revolution smaller in diameter than said coiling roll and substantially tangent to the coiling surface of said roll, of a stock deflector providing a triangular portion substantially filling the space between said coiling roll, said coiling tool and stock coiled on said mandrel, with the faces of said triangular portion corresponding to the curvature of said coiling roll, said coiling tool and said mandrel, respectively.

1,863,065. MEANS FOR COMPENSATING THE REACTANCE OF INDUCTIVE WINDINGS. JOHANN OSSANNA and HANS GRANER, Munich, and FRITZ HOFMANN, Munich-Talkirchen, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Apr. 17, 1928, Serial No. 270,656, and in Germany Apr. 25, 1927. 4 Claims. (Cl. 172—274.)

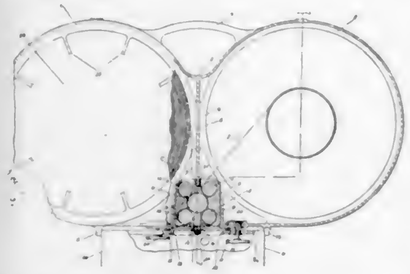
4. In an electric circuit, carrying currents of variable frequency, in combination, a self inductive winding in

said circuit, an auxiliary frequency-converting machine having a primary and a secondary winding, said primary winding being also connected in the circuit of variable frequency, means for operating said auxiliary machine in the direction of rotation by which the frequency of the E. M.



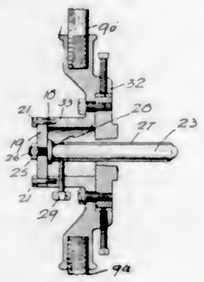
F. induced in its secondary winding is higher than the frequency impressed on its primary winding, a device connected to the secondary winding of said auxiliary machine, said device being adapted to take up capacitive currents.

1,863,066. FILM MAGAZINE. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,386. 8 Claims. (Cl. 88—17.)



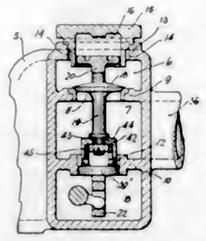
7. A film magazine for motion picture cameras comprising a housing having film reel sections and a throat chamber, and a pair of blocks removably secured in said chamber and having film guiding means therethrough.

1,863,067. PIPE THREADING DEVICE. CLAUDE B. PERRY, San Jose, Calif. Filed Apr. 4, 1928. Serial No. 267,161. 2 Claims. (Cl. 10—127.)



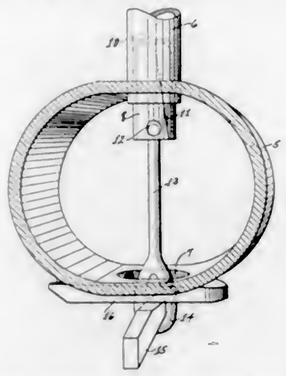
1. A pipe threading device comprising, in combination with a die, a die stock provided with a cylindrical axial extension relative to said die, a spider consisting of a central hub and a plurality of radial arms, concentric slots adjacent the ends of said arms adapted to cooperate with studs, a plurality of studs secured in said extension, a pilot secured in said hub and extending through said die, a sleeve rotatable on said pilot, and means retaining said sleeve against withdrawal on said pilot.

1,863,068. THROTTLE. GEORGE F. PIPPY, East Orange, N. J., assignor to American Throttle Company Inc., New York, N. Y. Filed June 19, 1929. Serial No. 372,023. 3 Claims. (Cl. 251—131.)



1. In apparatus of the class described, the combination of a casing having two partitions dividing the interior into an intermediate and two outer chambers, said partitions each having a port, the two ports being alined with each other, a disk valve controlling one of the ports and opening toward one of the outer chambers, a piston reciprocable in the other port, a slotted stem connected to and extending from the piston into the second outer chamber, an intermediate stem connecting the valve to the piston, the connection between one of the stems and the piston being by a swivel joint permitting relative rotary motion and no material longitudinal motion, and an operating cam extending into the slot; whereby the valve can be positively raised and lowered by means of the cam and can be rotated without the removal of the cam from the slot.

1,863,069. FERRULE FOR TUBES. LOUIS RAMSTHALER, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 26, 1927. Serial No. 215,744. 6 Claims. (Cl. 137—112.)

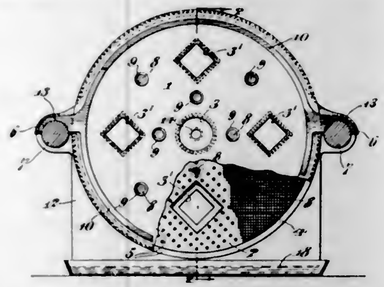


1. A ferrule having a slot in one side with the central line of said slot at an angle to the axis of the ferrule and having one end thereof reduced in diameter, said ferrule having a hole through the wall thereof near said slot at its end opposite said reduced end.

1,863,070. PROCESS OF MAKING POROUS BODIES. NIKOLAUS SCHÖNFELDT, Berlin-Charlottenburg, Reinhold Reichmann, Berlin, and VICTOR ENGELHARDT, Berlin-Charlottenburg, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Apr. 11, 1928, Serial No. 269,058, and in Germany Apr. 19, 1927. 4 Claims. (Cl. 18—47.5.)

3. A process for the manufacture of filters or diaphragms which consists in sintering a mixture of pulverized chromium oxide with other chromium oxygen compounds and mechanically working the material to get a body of the predetermined form.

1,863,071. FILTER PRESS. LLOYD B. SMITH, Moorestown, N. J., and EDWARD H. TEN BROECK, Philadelphia, Pa., assignors to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1929. Serial No. 407,423. 4 Claims. (Cl. 210—188.)



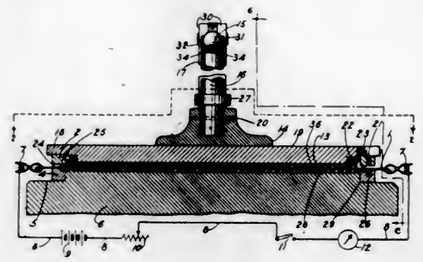
1. A filter press assembly comprising two end members, one of said end members having an inlet, filter plates between said end members, each of said plates having at least three apertures spaced at intervals from one another such that the maximum distance from any point in the effective filtering area of the plate to an aperture is substantially less than the radius of the effective filtering area of the plate, means between two each of a plurality of plates for holding them at substantially equal intervals apart, and means between the end member having the inlet and the plate facing it for holding such parts at a greater interval from each other than the interval between two plates of said plurality.

1,863,072. SOUND RADIATOR AND METHOD OF MAKING THE SAME. EDWIN H. SMYTHE, Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 26, 1929. Serial No. 416,394. 18 Claims. (Cl. 181—31.)



1. A sound radiator comprising a stretched membrane, certain portions of which have different propagation constants, and all of said portions having their characteristic impedances substantially matched.

1,863,073. METHOD AND MEANS FOR TENSIONING AND FOR MOUNTING DIAPHRAGMS. EDWIN H. SMYTHE, Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 23, 1930. Serial No. 446,691. 14 Claims. (Cl. 219—11.)



1. The method of uniformly tensioning a metallic diaphragm which comprises passing an electric current therethrough to cause it to increase in temperature and to expand, and constraining said diaphragm against contraction upon the cessation of said current flow and the consequent cooling of the diaphragm.

1,863,074. RAZOR BLADE CONTAINER. HARRY SWAN, New York, N. Y. Filed July 5, 1929, Serial No. 376,119, and in Great Britain Dec. 10, 1926. 5 Claims. (Cl. 206—16.)

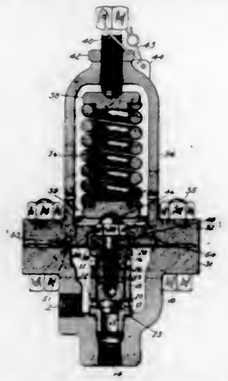


1. A razor blade container for holding razor blades of the safety razor type having a plurality of holes through the same comprising a resilient box-like outer member and a blade carrier frictionally co-operating therewith, said carrier comprising a base plate and posts projecting upwardly from said base plate to pass through holes in the blades and projections extending from the outer member toward the base plate, said projections and carrier serving to space the blades carried from all sides of said outer member.

1,863,075. VALVE. CHARLES M. TERRY, Decatur, Ill., assignor to A. W. Cash Company, Decatur, Ill., a Corporation of Delaware. Filed June 30, 1930. Serial No. 464,898. 1 Claim. (Cl. 137—53.)

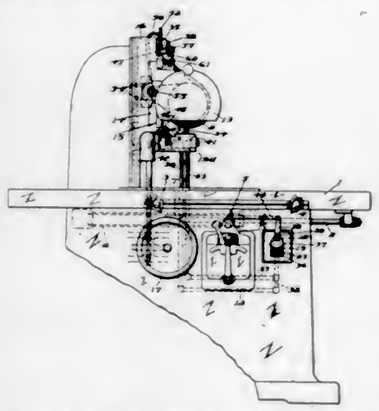
A high pressure valve comprising a hollow open ended valve casing provided with an inlet and an outlet, a movable valve member mounted in the casing and arranged to control the flow of fluid between the inlet and the outlet, a flat flexible diaphragm mounted over the open end of the casing and connected to the valve to actuate the same, the diaphragm being exposed on one side to the fluid pressure within the casing, a replaceable diaphragm ring in contact with the opposite side of the diaphragm and having a small central circular opening therethrough, said ring serving to support the diaphragm against the fluid pressure and to limit the effective unsupported area of the diaphragm to a small size as predetermined by the high pressure conditions within the valve casing, a heavy compression spring connected to the diaphragm through the opening in the ring and tending to move the diaphragm in opposition to the fluid pressure, said spring being formed of large diameter wire coiled into a helix having an external diameter greater than the diameter of the opening and providing when compressed a sufficient force to counteract the fluid pressure on the effective diaphragm

area, a spring casing arranged to enclose the spring and hold it in a compressed condition, said valve casing and spring casing being shaped to hold the diaphragm ring and diaphragm clamped therebetween and the spring cas-



ing being closed at the end opposite the diaphragm, and means for removably securing the casings together, the diaphragm ring being separable from the spring casing to permit insertion of the spring therein at assembly.

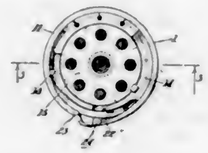
1,863,076. FLUID PRESSURE ACTUATING MECHANISM. ALBERT TURNER, Shrewsbury, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1930. Serial No. 428,789. 11 Claims. (Cl. 51—92.)



1. In apparatus of the class described, the combination with a periodically actuated element, fluid pressure actuating mechanism, and a second element adapted to be actuated by said fluid pressure actuating mechanism, of valve means to cause said second element to be operated when said valve means are moved by said first element, and valve means responsive to movement of said second element to cut off the flow of fluid.

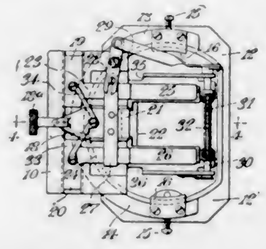
1,863,077. SEWING MACHINE LOOP-TAKER. MAX L. WATERMAN, Fairfield, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 24, 1930. Serial No. 504,613. 5 Claims. (Cl. 112—230.)

1. A rotary loop-taker for sewing machines having separable and mutually embracing inner and outer cylindrical body-sections, the inner body-section having a thread-loop engaging nose disposed within the outer body-section and extending outwardly away from the loop-taker axis beyond the cylindrical surface of said inner body-section,



said outer section having an inner body-section-nose clearance channel extending to the base of the outer body-section and providing for separably uniting said body-sections in mutually embracing relationship.

1,863,078. MATTING DEVICE FOR MOTION PICTURE PROJECTORS. JOHN E. WOODLAND, Richmond Hill, N. Y. Filed May 4, 1929, Serial No. 360,376. Renewed Nov. 14, 1931. 7 Claims. (Cl. 88—24.)



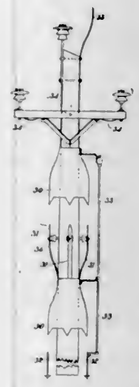
2. A device for motion picture projectors comprising a movable matting plate, a lens support, said support being movable into and out of the path of the projection light beam, and means associating them to cause movement of one with the other.

1,863,079. BATON. DEXTER M. WRIGHT, New York, N. Y. Filed Apr. 12, 1930. Serial No. 443,878. 2 Claims. (Cl. 84—477.)



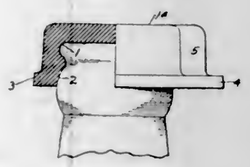
1. A baton comprising a core, a handle formed therewith, an outer cover of straps or strings for said handle and a celluloid coating for core and handle.

1,863,080. PROTECTION OF WOOD POLES BY AN INTERRUPTED OR SHUNT PATH. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of Ohio. Filed July 2, 1926. Serial No. 120,086. 27 Claims. (Cl. 175—30.)



1. The combination with a wood pole of a transmission line carried by said pole and insulated therefrom, a screening member of conducting material mounted on said pole near said transmission line but insulated therefrom, and an interrupted arcing path comprising a plurality of conducting members spaced outwardly from the said pole and outlining an arcing path from said screening member to ground.

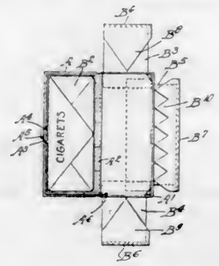
1,863,081. BOTTLE CAP. EARL S. BELLOWS, Portland, Oreg., assignor to Huntington Rubber Mills, Portland, Oreg., a Corporation of Oregon. Filed Aug. 4, 1930. Serial No. 472,957. 2 Claims. (Cl. 215—41.)



2. In a bottle cap of resilient material, a closure cap portion, an internally formed annular recess within the cap adapted to fit an external bead on the mouth of a bottle, a shaped portion adapted to conform to a bilge therebelow, a surrounding bottom flange having an outside diameter in excess of the main structure, and a larger thumb tab portion formed thereon and a reinforcement above the thumb tab portion molded integral with the cap for the purpose specified.

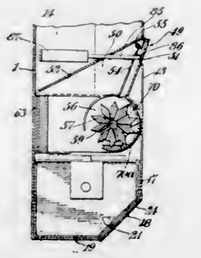
1,863,082. CIGARETTE CASE. GUY W. BLACKBURN, Elgin, Ill., assignor to Fred W. Gusle, Elgin, Ill. Filed May 20, 1929. Serial No. 364,424. 11 Claims. (Cl. 206—41.)

1. A receptacle adapted to contain a closed severable package, a pivoted latched cover for one end thereof, means mounted in the cover for severing the end of the package on three sides thereof and for gripping the severed end in the cover, the cover being hinged at a point below the end of the receptacle whereby when the cover is opened after



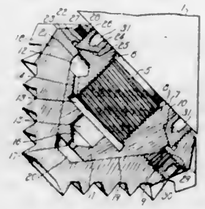
severing the end of the package, the side of the package adjacent the unsevered portion will be torn back a short distance.

1,863,083. DISPENSING APPARATUS. ANDREW JOSEPH BRECHT, Albany, N. Y., assignor to A. P. W. Paper Co., Albany, N. Y., a Corporation of New York. Filed Jan. 11, 1929. Serial No. 331,738. 5 Claims. (Cl. 194—85.)



1. A coin-actuated mechanism comprising a member carrying a coin slot, and devices for the feeding of articles provided with a plurality of slots and adapted to be operated by one of a plurality of coins inserted in the slot for a single actuation of said feeding devices, comprising a movable flap adapted to release into the apparatus coins in excess of the first coin introduced.

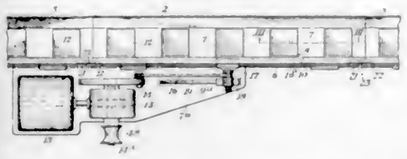
1,863,084. CUTTER BEARING STRUCTURE. IRA L. CHAMBERS, Garber, Okla., assignor to Garber Tool Company, Garber, Okla., a Corporation of Oklahoma; E. A. Reed trustee of the Garber Tool Company, bankrupt. Original application filed Mar. 15, 1930, Serial No. 436,037. Divided and this application filed Aug. 18, 1930. Serial No. 476,051. 5 Claims. (Cl. 255—71.)



1. A device of the character described including a cone having a conical socket and a side port, a bearing member having a tapered portion adapted to rotatably engage the

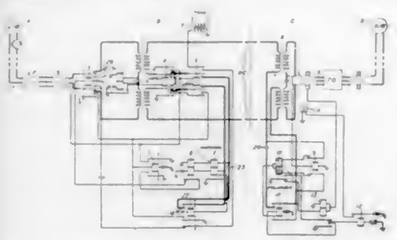
conical wall of said socket to form a chamber between the apex of the bearing member and the base of the socket, the bearing member having a channel adapted to connect said port with said chamber, and means for retaining the cone in rotative engagement with said bearing member.

1,863,085. CONVEYER. GEORGE M. CRAWFORD, Ingomar, and JACOB M. LONDON, Butler, Pa. Filed June 21, 1926. Serial No. 117,247. 18 Claims. (Cl. 198—221.)



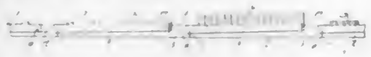
1. A conveyer including a structural metal beam, a shoe slidable on the beam, a reciprocable side member carried by the shoe, a series of flights secured to the side member, said flights being inclined in one direction and having a material engaging shoulder thereon, means for reciprocating the side plate, and a bottom plate over which the flights are reciprocated.

1,863,086. TELEPHONE SYSTEM. THOMAS V. CURLEY, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 1, 1931. Serial No. 560,550. 11 Claims. (Cl. 179—84.)



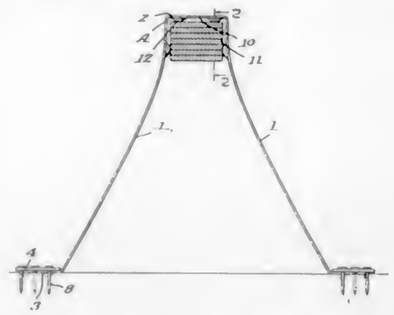
2. In a telephone system, a trunk, a repeating coil inserted in said trunk near each end thereof, means responsive to the application of a direct current signal to one conductor at one end of the trunk for opening the connection over the tip and ring conductors of the trunk between the repeating coils, a source of ringing current and means responsive to said opening for connecting said source of ringing current to the trunk at the opposite end thereof.

1,863,087. MEANS FOR HANDLING LUMBER. ROBERT Z. DRAKE, Omaha, Nebr. Filed Apr. 10, 1929. Serial No. 353,979. 10 Claims. (Cl. 214—1.)



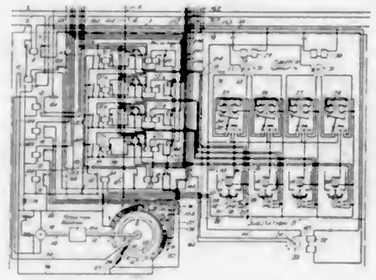
1. In lumber handling apparatus a pair of continuously moving spaced parallel conveyor cables for carrying pieces of lumber laid cross-wise thereon, a plurality of longitudinally spaced pairs of storage skids, each pair consisting of skids pivotally mounted at one end outside of each cable and normally below and out of contact with the lumber moving with the cables, and manually operable for selectively elevating one end of one or more selected pairs of skids as desired, to raise the lumber thereover out of contact with the cables and hold it out of such contact and stationary as long as desired.

1,863,088. BUTTONED HOLDDOWN. GEORGE C. FEDDERMAN, Detroit, Mich. Filed Feb. 24, 1930. Serial No. 430,707. 8 Claims. (Cl. 188—32.)



1. A hold-down having a foot, a foot plate secured thereto, one of said elements having a button projecting through the other element, the button being integral with the first element, and overlying a similar button on the other element.

1,863,089. REMOTE CONTROL SYSTEM. JOSEPH C. FIELD, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 28, 1927. Serial No. 243,031. 4 Claims. (Cl. 177—353.)

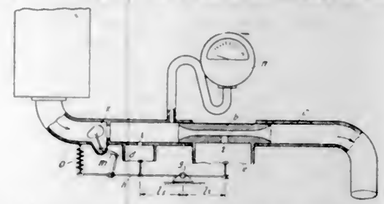


3. In a signaling system, a central station, a plurality of remote stations connected to said central station over a common line, a group of switches at each of said remote stations, code responsive means energized from said central station connected to said line at each of said remote stations for operating said switches, signal receiving means at the central station, a transmitter at each remote station to send answer-back code signals over the common line to the central station to operate said signal receiving means to indicate the positions of the switches at the remote station, and means at each remote station automatically operative through a chain circuit when a switch at said remote station changes position to disconnect all of said code responsive means at the remote stations from said central station until the answer-back signals have been sent to said central station.

1,863,090. METHOD AND MEANS FOR MEASURING THE VISCOSITY OF LUBRICATING OILS AND OTHER LIQUIDS. WALTER J. ALBERSHEIM and HARVEY S. KONHEIM, New York, N. Y. Filed Nov. 23, 1927. Serial No. 235,170, and in Germany July 8, 1927. 17 Claims. (Cl. 265—11.)

1. The method of measuring the viscosity of a liquid flowing in a conduit, which comprises maintaining a predetermined pressure difference between two fixed points in

the conduit, controlling the speed flow of the liquid through the conduit by said pressure difference, passing the liquid flowing through a restricted passage in the con-



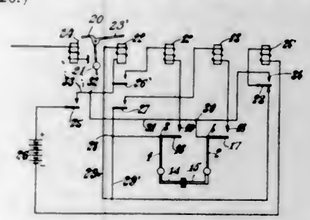
duit, and producing indications of variations in pressure through the conduit due to said flow, whereby to indicate upon a calibrated gage measurements of viscosity.

1,863,091. DRAWING INSTRUMENT. ARCHIE M. ALLRED, High Point, N. C. Filed May 8, 1930. Serial No. 450,862. 2 Claims. (Cl. 33—1.)



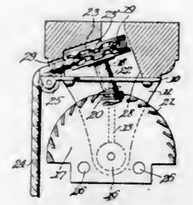
1. A drawing instrument particularly for employment with a curved edge templet, or the like, comprising a flat sheet-like body having a plurality of peripheral point-like edges with the body concaved appreciably between two of the points so that the two points may be set against the curved edge of the templet and slid therealong, said body having spaced apart apertures leading away from one of said points for associating a scribing element therewith for drawing spaced apart lines paralleling the edge of the templet along which the instrument is slid.

1,863,092. DEVICE WITH RETARDED RELEASE. JEAN ANDRÉ ALTMAYER, surnamed ALTMAYER-DELABUELLE, Paris, France. Filed July 27, 1925, Serial No. 46,504, and in France Aug. 7, 1924. 3 Claims. (Cl. 175—320.)



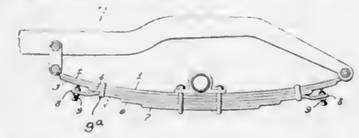
1. In a device with retarded release, two oscillating organs having different periods and arranged for coming in engagement with each other at a certain moment, means for controlling the oscillation of these oscillating organs, a source of electric energy, a circuit fed by the said source and comprising an electromagnet, means for energizing this electromagnet when the oscillating organs come in contact.

1,863,093. VENETIAN BLIND BRACKET. EDWIN ANDERSON, Los Angeles, Calif. Filed Feb. 21, 1931. Serial No. 517,583. 9 Claims. (Cl. 156—17.)



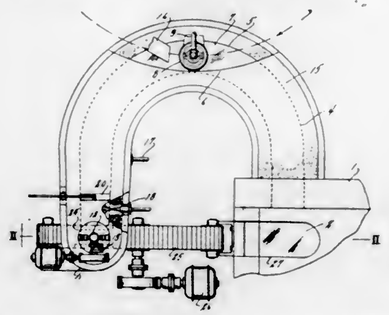
4. A bracket for Venetian blinds comprising a bracket member, a rocker member mounted on the bracket for shifting the blind header, means mounted on the bracket for actuating said rocker including a pulley wheel, a pull cord trained around said wheel, and guides on the front portion of said bracket for supporting the free ends of said cord and directing the cords to the groove of the pulley wheel from which said cord depends.

1,863,094. LEAF SPRING. EDWIN BAGNALL, Toronto, Ontario, Canada, assignor, by mesne assignments, to Cooper Spring Service Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 4, 1925. Serial No. 66,857. 7 Claims. (Cl. 267—48.)



1. As a new article of manufacture, a laminated leaf spring wherein the ends of one of the leaves of the said spring are extended over the end portions of another of the leaves of the spring and provided with abutments adapted to engage the said end portions over which they extend to increase the initial frictional contact of the end portions of the leaf so engaged with the underlying leaf of the spring, and straps embracing the leaves of said spring including the extended leaf to prevent separation of said leaves.

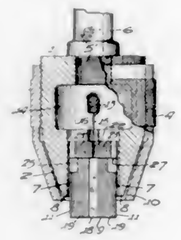
1,863,095. FEEDING MOLTEN GLASS. GEORGE W. BATCHELL, Toledo, Ohio. Filed Nov. 7, 1928. Serial No. 317,808. 3 Claims. (Cl. 49—55.)



1. Molten glass supply means, a way therefrom provided intermediate its length with an exposed port for removal of molten glass from the upper surface of the glass in said way, and therebeyond provided with a port for the

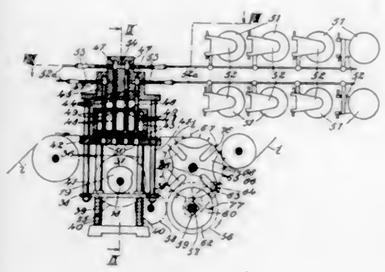
removal of glass from the way bottom, there being control means for the latter port, receiving means for the molten glass from the latter port, and reheating means between said ports.

1,863,096. CHUCK. LAWRENCE O. BEARD, Lancaster, Pa. Filed Apr. 4, 1931. Serial No. 527,783. 1 Claim. (Cl. 279—56.)



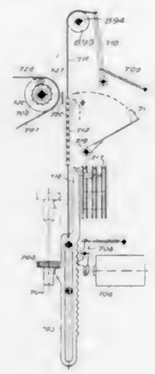
In a chuck, a pair of tool-shank engaging jaws, the inner face of each jaw being formed with inner and outer longitudinally disposed recesses, the opposing sides of the inner and outer recesses being at similar angles to each other to respectively engage the flat end faces and the cylindrical portion of a tool shank and the sides of said outer recesses being notched at their inner ends, and the outer recess being deeper than the inner recess whereby the outer ends of the sides of the inner recesses will serve as a stop for engagement with the ends of the cylindrical portion of the tool shank.

1,863,097. INSTALLATION FOR REGISTERING DATA BY PERFORATION BY MANUAL AND AUTOMATIC MEANS. CHARLES BOREL, Chene-Bougeries, near Geneva, Switzerland. Filed Dec. 15, 1924, Serial No. 756,169, and in Switzerland Dec. 24, 1923. 25 Claims. (Cl. 164—113.)



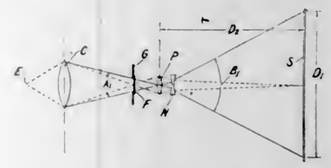
1. Installation for perforating on cards or sections of a strip data taken from a control strip having perforated data thereon, comprising in combination an automatic perforating apparatus comprising punch setting electromagnets; punches controlled by the said electromagnets; and adapted to produce perforations representing data in the said strip; an automatic apparatus for transmitting data from a perforated control strip to said electromagnets, the transmitting apparatus comprising a plurality of contacts for periodically closing through the perforations of the control strip for effecting the transmission in the form of currents of data from the control strip; means for producing step by step movement of the strips in the said apparatus, whereby various sections of the strip are brought successively into perforating position opposite the punches, and into reading position opposite the contacts, respectively; a manually operable data transmitting apparatus comprising a plurality of control members each corresponding to a particular digit; sets of contacts, switches, and sets of relays controlled by the said control members and adapted to transmit the data in the form of electric currents corresponding to the control member which has been manually operated; connecting means for connecting prior to the start of operations and at the will of the operator selected ones of the punch setting means of the perforating apparatus to one or both of the transmitting apparatus according to the nature of the transfer to be effected; a selecting apparatus connectible at will with the perforating apparatus and the automatic transmitting apparatus, comprising a plurality of electromagnets for receiving the data transmitted from the automatic transmitting apparatus, and a plurality of contacts controlled by the said electromagnets and arranged in such manner that for each datum received by the electromagnets, certain of the contacts are closed while selected other magnets are opened, and controlling automatically the transmission or preventing the transmission of all or part of the data obtained from the automatic transmitting apparatus according to the value of at least one datum on the control card.

1,863,098. APPARATUS FOR COMPUTING STATISTICAL DATA. CHARLES BOREL, Geneva, Switzerland. Filed Dec. 3, 1928, Serial No. 323,545, and in Switzerland Dec. 5, 1927. 6 Claims. (Cl. 101—93.)



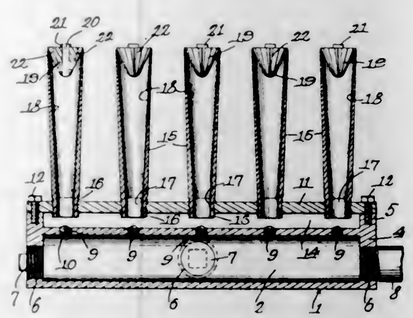
1. In combination, printing apparatus, at least one data forwarding apparatus with which the said printing apparatus collaborates in the abstracting of statistical data, means producing electric impulses whereby the data of the data forwarding apparatus is transmitted, the said means forwarding substantially the only connection between the forwarding apparatus and the printing apparatus, the said printing apparatus comprising a number of elements corresponding each to a given denomination and each comprising at least one electro-magnet cooperating with the said elements to receive the electrical impulses corresponding to one denomination of the data to be printed, a series of movable types corresponding to the transmitted data, and adapted to be temporarily stopped in the printing position by a corresponding electromagnet in such a manner that a number of the said elements may produce simultaneously the printing of characters corresponding to the different denominations of a datum, and means for automatically preventing the printing of superfluous zero figures.

1,863,099. PROJECTION SYSTEM AND PROJECTION LENS SYSTEM THEREFOR. LESTER W. BOWEN, Larchmont, N. Y., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 15, 1930, Serial No. 420,937, and in Canada and France Oct. 30, 1929. 24 Claims. (Cl. 88—24.)



1. In a rear projection system for motion pictures, the combination of a motion picture aperture and a wide angle lens projection system comprising a positive lens assembly and a negative lens assembly spaced one from the other a distance greater than the focal length of the positive lens assembly and with the latter positioned nearer the picture aperture, said system having an equivalent focal length approximately equal to the length of the longest side of the picture aperture.

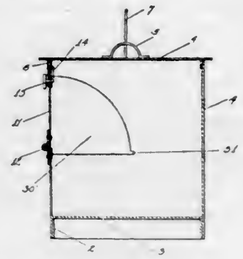
1,863,100. GAS BURNER. THOMAS A. COLEMAN, Carbondale, Pa. Filed Sept. 21, 1931. Serial No. 564,224. 3 Claims. (Cl. 158—106.)



1. A device of the class described, comprising an elongated hollow body having a fuel inlet, the body comprising end walls that extend above the body, nozzles in the top of the body, a table mounted on the upper ends of the end walls and spaced from the top of the body to form an air inlet extended entirely across the device from side to side, mixing tubes located directly above the nozzles, means for mounting the mixing tubes in the table for longitudinal adjustment, toward and away from the nozzles, the mixing tubes having bores that flare as they extend upwardly, and conical caps seated in the upper ends of the mixing tubes, the caps having central longitudinal passages, and being provided on their outer surfaces with longitudinal grooves disposed immediately adjacent to each other and increasing in width from their lower ends to their upper ends.

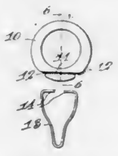
1,863,101. SANITARY GARBAGE CONTAINER. SCOTT W. COMBS, Topeka, Kans. Filed Feb. 4, 1929. Serial No. 337,400. 1 Claim. (Cl. 220—32.)

A garbage can comprising a body provided with a doorway in one side and having a portion of the wall at the upper edge of said doorway thickened and offset inwardly to provide a door seat, a hinged door for said doorway and having upper and lower portions offset in opposite directions with the upper portion engaging the seat and the lower portion engaging the inner face of the wall of said body when the door is in a position to close said doorway,



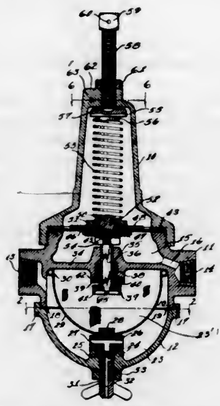
and side wings on the door and located within the body when the door is in closed position and adapted to move partially outwardly of the body when the door is opened.

1,863,102. BOTTLE, JAR, AND OTHER SIMILAR VESSEL. FRANK L. DARLING, Long Beach, Calif. Original application filed Oct. 25, 1928, Serial No. 315,017. Divided and this application filed Oct. 31, 1928. Serial No. 316,240. 4 Claims. (Cl. 215—46.)



1. As a new article of manufacture, a vessel having a mouth, and a pair of seats formed by a continuous transverse recess extending across the top face of the vessel and spaced from said mouth for receiving a cap remover.

1,863,103. COMBINED STRAINER AND REGULATOR FOR GAS REFRIGERATING APPARATUS. RICHARD G. DOWINS, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 4, 1931. Serial No. 513,438. 2 Claims. (Cl. 210—166.)



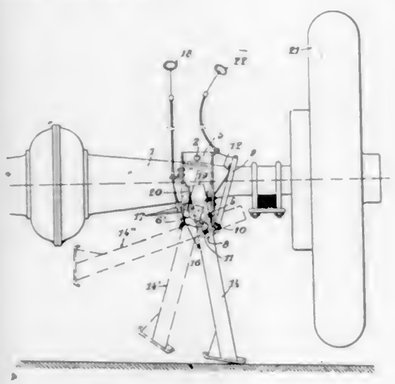
1. In a combined pressure regulator and strainer, a housing having an open bottom and closed top; an apertured partition disposed in said housing and dividing the

same into high and low pressure chambers; a flexible diaphragm disposed in said housing above said aperture; a pan member operatively associated with said diaphragm; a valve having the stem thereof extending through said aperture and threaded into said pan member; a closure for the bottom of said housing, said closure having a screen disposed therein, the lower edge of said housing defining a downwardly facing seat against which the upper edge of said closure seats in sealing relation, the upper edge of said screen abutting against the lower face of said partition and encompassing said aperture; and releasable means for holding said closure and screen in clamping engagement with their respective seats, whereby when said means are released, said closure and screen may be dropped away from said housing and said valve may be unscrewed and removed from the device for purposes of cleaning or grinding.

1,863,104. CONSTRUCTIONAL MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Aug. 15, 1927. Serial No. 213,187. 3 Claims. (Cl. 154—44.)

1. Constructional material comprising a sheet molded from a mixture of fiber and dense waterproofing mastic intimately commingled, said sheet being coated on one exposed face with a slow-drying adhesive which is lastingly adhesive and sticky to the touch.

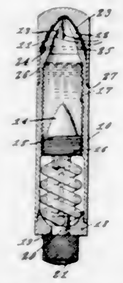
1,863,105. SUPPORTING DEVICE FOR VEHICLES. ABEL JEAN MARIE GARNIER, Saint-Ouen, France, assignor to Arsene Vallet, Paris, France. Filed May 22, 1931, Serial No. 539,402, and in France June 25, 1930. 6 Claims. (Cl. 248—41.)



1. A supporting device of the type described for automobiles and other vehicles which comprises in combination, a piece adapted to be rigidly secured to a part of the vehicle, an arm pivoted to said piece, locking means for maintaining said arm in its downward position, elastic means for bringing said arm back to said position, a crutch pivotally mounted on said arm, means for releasing said locking means, and means for maintaining said crutch above the ground.

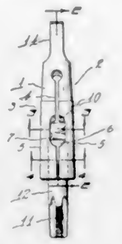
1,863,106. LIP STICK HOLDER. ALEXANDRE GIMONET, Arrochar, Staten Island, N. Y. Filed June 17, 1929. Serial No. 371,617. 2 Claims. (Cl. 206—56.)

1. In a container, a tubular member having a pointed end and having elongated slots thereacross to provide a restricted outlet at said end, a compression member threadedly engaging the inner wall of the tubular member and having a portion shaped in conformity with the shape of the interior of the tapered end to force the contents of the tubular member through said slots, a porous cover for said slots, a rotatable operating member, and means connecting the operating member and compression member to



rotate the latter and move said compression member longitudinally of the tubular member when the operating member is rotated.

1,863,107. TOOL DRIVER. JOHN C. GLENZER, Detroit, Mich. Filed Mar. 7, 1929. Serial No. 344,958. 2 Claims. (Cl. 279—103.)

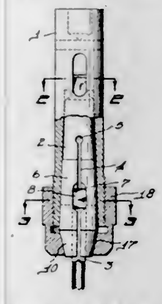


1. In combination, a tool driver comprising a one-piece tapered body adapted for direct insertion in the tool holder of a drill press and having a slot extending diametrically through and bifurcating the larger major end portion thereof to provide a pair of opposed jaws adapted to clamp a tool therebetween when inserted in said tool holder, said slot being enlarged between the ends thereof to form a recess extending through the body and having opposed straight side facets, said recess being enlarged and continued below said facets in the form of a circular axial opening to the tool receiving end of the body, said body having shoulders in the enlarged portion of the slot pointed downwardly from the upper ends of said facets, the points of said shoulders being flattened to form projecting faces extending into said recess at right angles to said facets, and a tool having a cylindrical shank adapted to fit into said circular axial opening, the upper end of said shank being provided with flat facets at opposite sides thereof engageable by the straight side facets of the body to provide a positive drive between the driver and the tool, said tool shank being adapted to seat against said projecting faces of the driver to prevent further movement of said shank into the driver and spreading of the jaws of the driver thereby.

1,863,108. TOOL HOLDER. JOHN C. GLENZER, Detroit, Mich. Filed July 18, 1930. Serial No. 468,864. 2 Claims. (Cl. 279—49.)

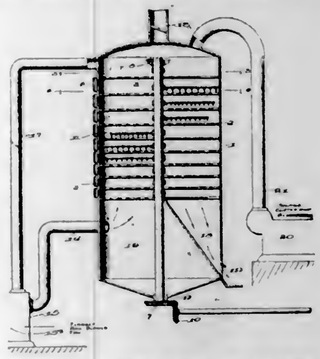
1. In combination, an elongated drill sleeve adapted at one end for attachment to the spindle of a drilling machine and having an axial recess in the major portion thereof flaring gradually larger toward and opening through the other end of the same, a tool holder adapted for direct insertion in the drill sleeve and comprising a

one-piece body having a driving tang at one end and flaring gradually larger toward its other tool-receiving end and having a slot extending diametrically through and bifurcating the larger major end portion thereof to provide a pair of opposed jaws adapted to clamp a tool therebetween, the flaring surfaces of the drill sleeve and tool holder coacting to cause gripping of the tool shank by said jaws with a force proportional to the pressure exerted on the tool toward the drill sleeve, said larger end portion of the tool holder being bored to provide inner flat faces



intermediate the ends of the slot to engage the inner end and opposite sides of the squared tang of the tool and an outer cylindrical bore portion to engage the cylindrical shank of the tool, the outer portion of the tool receiving end of the tool holder tapering gradually smaller toward the end thereof, and a member detachably secured on said other end of the drill sleeve and having a gradually tapering inner face coacting with the last-named tapered portion of the tool holder to cause gripping of the tool shank by said jaws with a force proportional to any pull exerted between the tool and the drill sleeve.

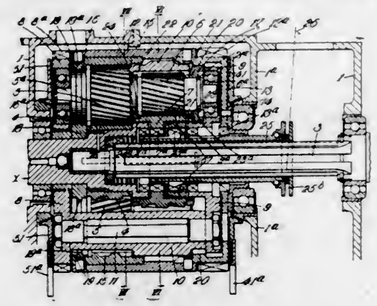
1,863,109. MANUFACTURE OF HIGHLY DIGESTIBLE FEED. ROY R. GRAVES, Kensington, Md. Filed Nov. 20, 1926. Serial No. 149,684. 6 Claims. (Cl. 99—11.)



1. The process of making a dried feed capable of being rehydrated and possessing all the normal constituents other than moisture of green fodder material, which comprises cutting green fodder into short pieces and passing such pieces as a traveling layer in a circuitous passage through a slowly moving body of warm humid air.

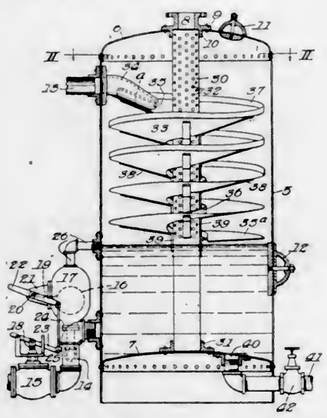
1,863,110. POWER TRANSMISSION MECHANISM. PIERO MARIANO SALERNI, Westminster, England. Filed Oct. 8, 1930, Serial No. 487,187, and in Great Britain Oct. 16, 1929. 13 Claims. (Cl. 74—34.)

1. In epicyclic gearing of the type described and including a plurality of gear members, a shaft, and an axially movable clutch member for rotatably connecting the shaft with a member of the gearing, so that the so-connected members provide a positive bi-directional drive, in combination with means for preventing connection



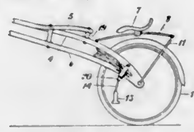
of said clutch member with any member of the gearing until the rotational speeds of the members to be connected are substantially equalized.

1,863,111. OIL AND GAS SEPARATOR. EDGAR E. GREVE, Bellevue, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed May 25, 1928. Serial No. 280,523. 6 Claims. (Cl. 183—2.7.)



1. In an oil and gas separator, the combination with a tank, a crude oil conveyor means located within the tank for imparting a descending circuitous movement to a stream of crude oil for separating matter therefrom according to its specific gravity, said means comprising a banked spiral race-way structure having the inclination of the banked portion gradually diminishing from its top downwardly.

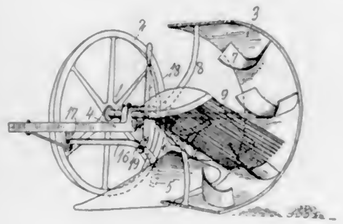
1,863,112. SULKY. HERBERT WILMER HANAN, Brooklyn, N. Y. Filed Nov. 13, 1928. Serial No. 319,031. 9 Claims. (Cl. 280—78.)



9. Shafts for a vehicle, each comprising a plurality of members, one of which is common to both shafts, the said members of each shaft being closely bound together at or

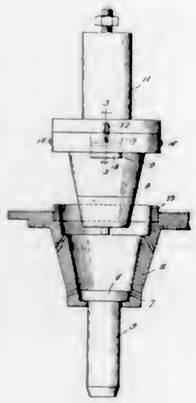
near the forward end of the shafts and being spread apart as they extend rearwardly, the said common member extending from the junction point of the members of one shaft to the junction point of the members of the other shaft, crossing the members of both shafts at the rear ends thereof.

1,863,113. POTATO HARVESTING MACHINE. KAARE HANSTAD, Lillehammer, Norway. Filed Oct. 15, 1928, Serial No. 312,725, and in Norway Aug. 10, 1928. 1 Claim. (Cl. 55—50.)



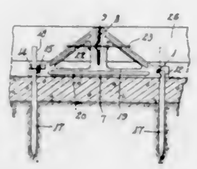
In a machine for harvesting agricultural products, a pair of running wheels mounted on an axle therebetween, both of which are in operative contact with the surface of the ground, one of which wheels is a lifting wheel having lifting means for elevating vegetables and earth thereon, an inclined transverse grating on the axle, one end of which extends beyond the outside edge of the rim of the lifting wheel, for depositing the separated vegetables in a longitudinal row outside the path of the machine; in combination with an adjustable ploughing means, and an apron of shorter length than the grating, positioned beneath the latter for collecting débris therefrom.

1,863,114. MOLDING MACHINE. GRANT H. HASERODT, Mount Gilead, Ohio, assignor to The Florence Pottery Company, Mount Gilead, Ohio. Filed Oct. 28, 1929. Serial No. 403,063. 4 Claims. (Cl. 25—28.)



1. A device of the class described comprising a mold, a rotary plunger movable axially into and out of the mold, a top-forming collar movable with the plunger and having an externally reduced lower portion, a retaining ring fitted and removably secured on the reduced lower portion of said top-forming collar, and a plurality of knives carried by and yieldably slidable relative to said retaining ring to cut away plastic material extruded out between said mold and said top-forming collar as said plunger is rotated.

1,863,115. CONCRETE ROAD BUILDING STRUCTURE. JOHN N. HELTZEL, Warren, Ohio. Filed Nov. 18, 1927. Serial No. 234,217. 16 Claims. (Cl. 94—8.)

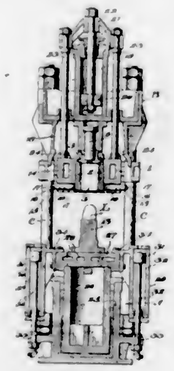


1. The combination with concrete road reinforcement extending across the line of a joint, of a joint member above said reinforcement in said line, a pedestal supporting said member, and means movable with respect to the pedestal for supporting said reinforcement and pedestal from the sub-base of a road.

1,863,116. TOOTHE PASTE. GEORGE H. HEYMANN, Louisville, Ky. Filed Apr. 29, 1929. Serial No. 359,184. 1 Claim. (Cl. 167—93.)

A tooth paste comprising an admixture of sodium perborate and petrolatum.

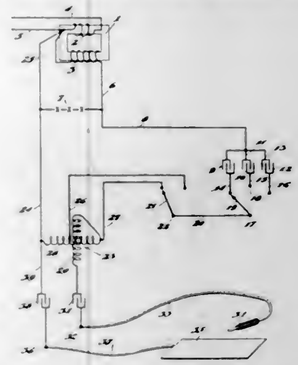
1,863,117. MOLDING PRESS FOR HOLLOW ARTICLES. LOUIS W. HOTTEL, Indianapolis, Ind. Filed Jan. 27, 1930. Serial No. 423,812. 7 Claims. (Cl. 18—19.)



1. In a molding press of the class described, an articulated mold plate assembly, fixed cam elements and a movable mold case carrying mold opening members actuated by said cam elements to cause the opening of the mold plate assembled.

1,863,118. SURGEON'S INSTRUMENT. JOHN G. H. LIEBEL, Cincinnati, Ohio, assignor to The Liebel-Flarsheim Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 31, 1927. Serial No. 229,937. 11 Claims. (Cl. 174—177.)

1. A surgeon's instrument for dissecting tissue, comprising, a surgical circuit including means for discharging a series of sparks into the patient, a control circuit adapted to produce high frequency oscillations, said control circuit including a spark gap, an inductance and a plurality of capacities selectively incorporable in said control circuit



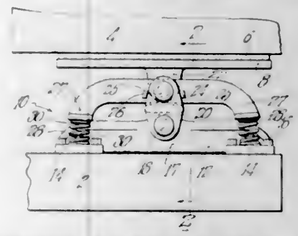
to provide variable circuit capacity and corresponding oscillation damping, and means associating said surgical and control circuits so that the control circuit determines oscillations in the surgical circuit.

1,863,119. PNEUMATIC LOCKING INFLATING TUBE FOR INFLATABLE BODIES. JAMES F. L. MARREN, Philadelphia, Pa. Filed Sept. 19, 1930. Serial No. 483,083. 9 Claims. (Cl. 273—65.)



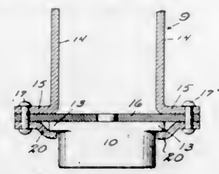
1. An inflatable body having a single wall and provided with a flattened elongated chamber immediately adjacent its interior surface, an inflating tube housed in said chamber with one end fastened to one of the end walls of said chamber and communicating with the interior of the body, the other end of the chamber having an elongated outlet opening and through which the inflating tube is adapted to extend, said tube adapted to be twisted to perform the double function of preventing escape of air from the body and drawing the end of the tube back into the chamber, and means on the drawn-in end of the tube to cooperate with the walls of the chamber to prevent the tube from untwisting.

1,863,120. FIFTH WHEEL APPARATUS. CHARLES H. MARTIN, West Springfield, Mass. Filed Aug. 16, 1930. Serial No. 475,681. 12 Claims. (Cl. 280—128.)



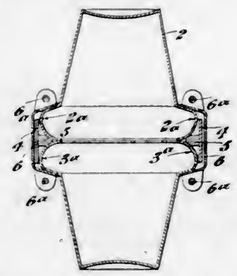
1. The combination of a fifth-wheel plate with a mounting therefor comprising, a bracket member, a link pivoted at its lower end to said member for swinging movements, a pivotal connection between the upper end of said link and plate whereby the latter is supported by the former, arms extending from opposite sides of said link and yielding devices at the ends of said arms.

1,863,121. DEPENDING BEARING ELEMENT MOUNTING. MARK H. MARTIN, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed June 6, 1928. Serial No. 283,382. 7 Claims. (Cl. 308—224.)



1. In a railway car truck, a body bolster, a truck bolster, a side bearing rocker carried by each end portion of the truck bolster, a depending bearing element on the underside of the body bolster for coaction with said rocker, and clip means for securing said depending bearing element in position.

1,863,122. NESTING BARRELS OR CONTAINERS. MATTHEW HENRY MATTHEWS, London, England, assignor to The Kenward Barrel Company Limited, London, England. Filed Dec. 23, 1927, Serial No. 242,222, and in Great Britain Jan. 6, 1927. 5 Claims. (Cl. 220—5.)



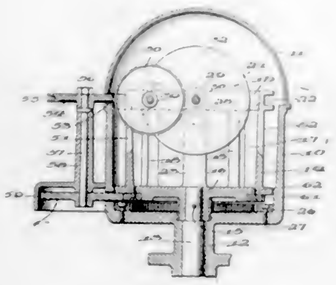
1. A joint for containers having two parts held together at their open ends on a resilient washer, comprising beaded edges formed on the open ends of the containers, a rigid hollow cylindrical centralling member for controlling the two parts when placed together with their open ends in contact, a resilient and compressible washer and means for drawing the open ends of the two parts of the container together, the resilient washer being fixed at its outer edge to the inner surface of the rigid hollow cylindrical centralling member, while its inner edge extends freely between the open ends of the two parts of the container and the rigid hollow cylindrical centralling member extends freely over the beaded edges of both parts of the container independent of the means for holding the two parts of the container together.

1,863,123. HAT FORM. FRANK PERTOT, Brooklyn, N. Y. Filed Mar. 19, 1930. Serial No. 437,091. 3 Claims. (Cl. 223—21.)



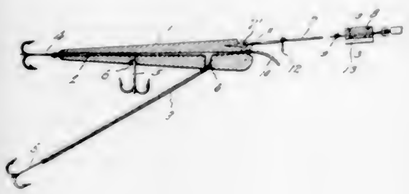
1. A hat form for shaping machines constructed of rubber, and a covering of canvas permanently secured to the exterior shaping surface of such form.

1,863,124. CUT-OFF MECHANISM FOR TUBE MACHINES. JAMES B. PLATT, Baltimore, Md., assignor to Stone Straw Corporation, Washington, D. C., a Corporation of Delaware. Filed Apr. 22, 1931. Serial No. 532,091. 7 Claims. (Cl. 164—61.)



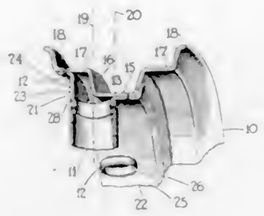
1. Cut-off mechanism for tubes comprising a guide, a circular knife freely rotatable upon a supporting pintle, and mechanism for projecting the knife periodically into the path of the tube with a slashing stroke which will impart rotation to the knife.

1,863,125. FISH LURE. ALVIN POWELL, Cuthbert, Ga. Filed Dec. 2, 1930. Serial No. 499,579. 2 Claims. (Cl. 43—42.)



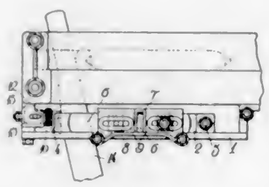
1. A fish lure comprising in combination an elongated body provided with a longitudinally extending bore of relatively small diameter, said body being also provided with lateral openings spaced longitudinally relative to the body, a flexible member having a single length extending through said bore, a hook secured to one end of said flexible member, a hook having a shank extending into said bore through one of said lateral openings, and having an eye slidable on the intermediate portion of said flexible member, said flexible member at its free end provided with means for limiting movement of the flexible member through said bore in one direction, when a pull is exerted thereon by a fish ensnared on one or more of said hooks.

1,863,126. WHEEL CONSTRUCTION. GEORGE B. REED, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 17, 1929. Serial No. 400,175. 6 Claims. (Cl. 301—70.)



2. A wheel having a drop center rim and a spoked wheel body the spokes of which have their ends connected both to the bottom and to a tire bead receiving margin of the drop center rim.

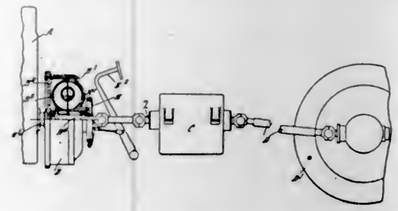
1,863,127. ADJUSTING STOPPING-POSITION OF SHUTTLES OF POWER LOOMS. KYUGORO SAKAMOTO, Hamamatsu, Japan. Filed Aug. 23, 1930, Serial No. 477,435, and in Japan Aug. 31, 1929. 1 Claim. (Cl. 139—165.)



An apparatus for adjusting the position of a shuttle in a power loom comprising a buffer holder, a cushion member adjustably mounted upon said holder, a buffer band positioned in said holder, rollers located upon said holder inside said band, curved spring plates located between said band and said holder urging said band towards the interior of said holder and cam members operating against said springs for varying the tension of said band.

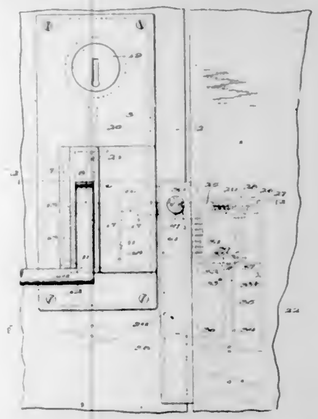
1,863,128. POWER TRANSMISSION MECHANISM. PIERO MARIANO SALERNI, Westminster, England. Filed Mar. 4, 1932, Serial No. 596,852, and in Great Britain May 15, 1930. 1 Claim. (Cl. 74—34.)

A power transmission for motor vehicles comprising in combination an engine shaft, a driven shaft, and a propeller shaft, a positive change speed gearing connected to said driven and propeller shafts, said transmission having a synchronizer operatively associated therewith, means to cause change of gear ratios in said transmission and actuate said synchronizer, a brake mounted on said driven shaft, a hydraulic power transmitter interposed between said engine and driven shafts, said transmitter comprising an impeller connected to the engine



shaft and a turbine element connected to the driven shaft, whereby at low speeds a change of gear ratio may be effected in said transmission through the medium of said synchronizer functioning to cause a slip in said hydraulic transmitter and similar changes may be made at high speeds through the medium of said brake and transmitter.

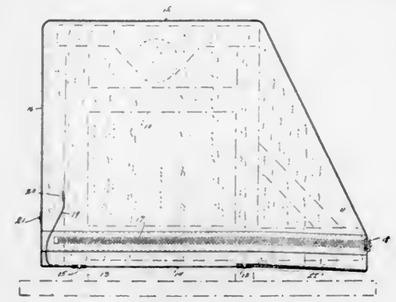
1,863,129. ANTI-PANIC LOCK MECHANISM. WILLIAM E. STONEBRIDGE, New York, N. Y. Filed Nov. 29, 1930. Serial No. 499,108. 19 Claims. (Cl. 70—14.)



19. A lock mechanism for doors comprising a locking member, means engaged by the door when moved into closed position to actuate the locking member into locked position, a locking dog for the locking member, a pivoted lever for moving the locking dog into engagement with the locking member, an operating block controlled by the closing of the door, a resilient connection between the lever and operating block to operate the pivoted lever to move the locking dog into engagement with the locking member to retain the same in locked position, and means for releasing the locking dog to release the locking member to permit the door to be moved into open position.

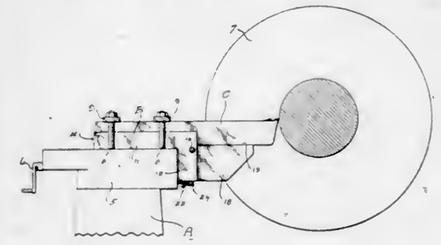
1,863,130. TYPEWRITER COVER. WILLIAM R. SWAIM, Haskell, Tex. Filed Mar. 19, 1931. Serial No. 523,897. 2 Claims. (Cl. 45—68.1.)

1. A cover of the character described comprising a base having a plurality of spaced apertures adapted to receive bolt members carried by a typewriter, a flexible top integrally formed with one edge of the base and a plate member engaging the base and the front leg bolts of the typewriter, and interposed between the base and the bottom of the typewriter whereby to hold one portion of



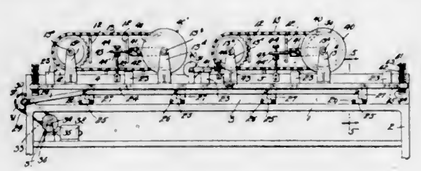
the base away from the key elements of the typewriter, and means carried by the top and the base for securing the top in position over the typewriter.

1,863,131. TOOL HOLDER. HARRY TAYLOR, Burlington, N. J. Filed Nov. 26, 1930. Serial No. 498,440. 7 Claims. (Cl. 29—96.)



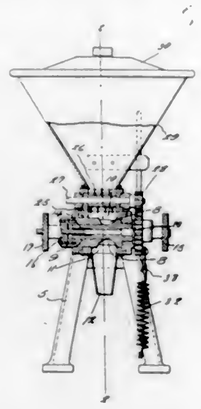
1. A tool holder comprising a body portion provided with a tool seat and a forwardly opening channel, and a supporting tongue carried in and extending forwardly from said channel and forming a support for the forward end of the cutting tool, and adjusting means for the tongue for adjusting the upper edge thereof with respect to said seat.

1,863,132. APPARATUS FOR AND METHOD OF HANDLING PHOTOGRAPHIC PRINTS OR NEGATIVES. WALTER J. WILLIAMS, Woodhaven, N. Y. Filed Oct. 22, 1928. Serial No. 314,148. 27 Claims. (Cl. 95—89.)



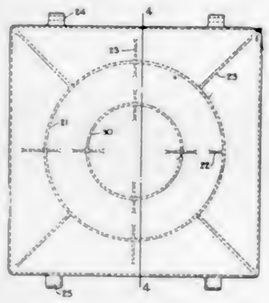
1. The method of handling photographic prints which consists in immersing prints in a print-treating liquid within a receptacle, moving said prints longitudinally of the receptacle by causing the print-treating liquid to have a longitudinal print-carrying movement in said receptacle, and retarding the movement of said prints within the liquid.

1,863,133. MEASURING APPARATUS. JAHNIS ZIEDINS, Riga, Latvia, assignor to Oscar Schenberg, New York, N. Y. Filed Apr. 11, 1930, Serial No. 443,447, and in Latvia Apr. 22, 1929. 1 Claim. (Cl. 221—107.)



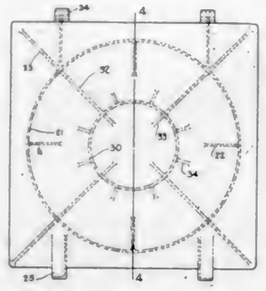
A measuring apparatus of the class described comprising a casing having a discharge opening therein and a rotatable measuring device controlling the opening, said device comprising an elongated section having a thickened part having grooves therein, the grooves being of arcuate shape in cross section, each arc being somewhat less than a semi-circle and the grooves passing through one end of the thickened portion, and a second section having fingers thereon shaped to fit the grooves, the inner ends of the fingers being grooved to form arcs of circles of the same radius as the grooves of the first section, but of slightly less arc, the juxtaposed ends of the grooves in the sections forming semi-spherical recesses for measuring purposes, and means for adjusting one section longitudinally on the other section to vary the size of the said recesses.

1,863,134. DROP DOOR FOR RAILWAY CARS. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Apr. 26, 1929, Serial No. 358,305. Patent No. 1,813,536, dated July 7, 1931. Divided and this application filed Jan. 19, 1931. Serial No. 509,713. 10 Claims. (Cl. 105—280.)



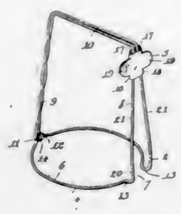
1. A hinged door for a railway car comprising a body, an outer substantially circular rib, and an inner substantially circular rib positioned within said outer rib.

1,863,135. DROP DOOR FOR RAILWAY CARS. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Apr. 26, 1929, Serial No. 358,305. Patent No. 1,813,536, dated July 7, 1931. Divided and this application filed Jan. 19, 1931. Serial No. 509,715. 9 Claims. (Cl. 105—280.)



1. A hinged door for a railway car comprising a body, an outer substantially circular rib, an inner substantially circular rib positioned within said outer rib and concentric therewith, and webs connecting said ribs.

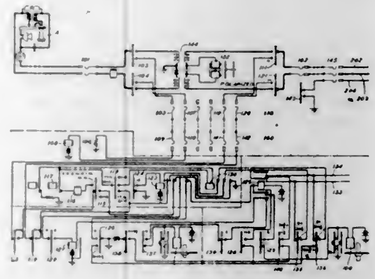
1,863,136. MILK BOTTLE CARRIER. ROBERT A. HOOD and JOSEPH J. SHICKLUNA, Buffalo, N. Y. Filed June 15, 1929. Serial No. 371,283. 6 Claims. (Cl. 215—100.)



1. A bottle carrier formed of a single piece of resilient wire bent into a loop between its ends and having a peripheral opening, thence into an arm by portions of the wire extended upwardly from the peripheral opening of said loop, thence into a handle extending diametrically over the loop and in spaced relation thereto, and finally into a second side member extending downwardly from said handle to said loop and being secured to the loop at a point diametrically opposite the peripheral opening therein, and means slidable along portions of said wire to cause said loop to be clamped around the neck of a milk bottle underneath the flange thereof.

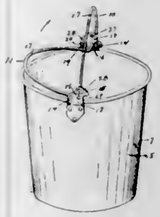
1,863,137. TIME OF DAY ANNOUNCING SYSTEM. CHARLES W. KECKLER, Summit, and ALFRED E. HAGUE, West Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1931. Serial No. 508,211. 14 Claims. (Cl. 179—2.)

1. In a telephone system, a calling line, a trunk circuit, a selector switch, a register sender, means controlled from said calling line for registering in said sender the office and numerical designations of wanted lines, means controlled by said sender in accordance with the office designation registered for setting said switch to select said trunk circuit, means in said sender for transmitting codes of impulses to said trunk circuit in accordance with the numerical designation registered, means in said trunk circuit for absorbing code impulses, and means for



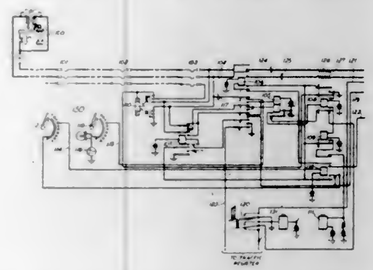
preparing signal circuits at said trunk circuit upon the receipt of the last impulse of the code impulses transmitted thereto.

1,863,138. PAIL. GEORGE ROSS LE SAUVAGE and LESTER E. PADELFORD, Buffalo, N. Y., assignors to Republic Metalware Company, Buffalo, N. Y., a Corporation of New York. Filed Dec. 30, 1929. Serial No. 417,312. 7 Claims. (Cl. 220—94.)



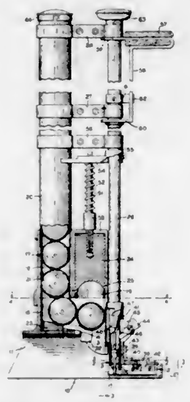
5. As an article of manufacture, a pail having bail tabs, one of the tabs being formed with a number of separate detent means, an axially movable bail pivotally carried by the tabs, and means carried by the bail and engageable with the detent means of the bail tab for locking the bail in a number of positions.

1,863,139. TIME OF DAY ANNOUNCING SYSTEM. ROBERT F. MASSONNEAU, Scarsdale, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1931. Serial No. 508,209. 20 Claims. (Cl. 179—2.)



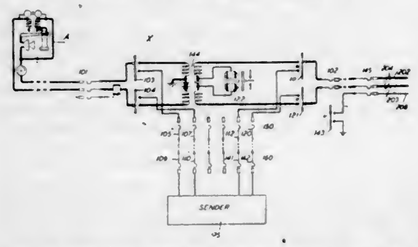
1. In a telephone exchange system, a central bureau, an outgoing distributing point associated therewith, a plurality of intermediate distributing centers, a plurality of local distributing centers, a plurality of offices, local trunks extending from each office to the local distributing center nearest thereto, a trunk circuit extending from each local distributing center to an intermediate distributing center and multiplied at the local distributing center to all local trunks incoming thereto, and a trunk circuit extending from each intermediate distributing center to said outgoing distributing point and multiplied at the intermediate distributing center to all trunks incoming thereto from local distributing centers.

1,863,140. GOLF TEEING MACHINE. LEWIS J. MULVANEY, New York, N. Y. Filed May 16, 1931. Serial No. 537,813. 15 Claims. (Cl. 273—33.)



1. A golf teeing device comprising a ball magazine, a tee magazine, means for ejecting a tee from said magazine and means for positioning a ball thereon.

1,863,141. TIME OF DAY ANNOUNCING SYSTEM. WILLIAM B. PRINCE, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 12, 1931. Serial No. 508,208. 18 Claims. (Cl. 179—2.)

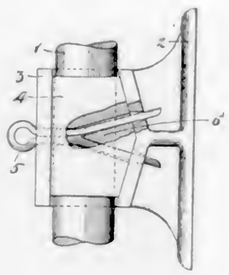


1. In a telephone system, a subscriber's line, a central bureau, a trunk network for connecting said line with said bureau, a jack ended transmission circuit including a vacuum tube repeater at said bureau in which said trunk network terminates, an operator's transmitter and means for closing the filament circuit at said repeater when said transmitter is plugged up in said jack.

1,863,142. BRACKET SUPPORT FOR COUPLER RELEASE RODS. VINTON E. SISSON, Chicago, Ill. Filed July 9, 1930. Serial No. 466,744. 3 Claims. (Cl. 308—74.)

1. A device for supporting a revoluble rod comprising a bracket adapted for attachment to an element and

provided with spaced apart walls, one of said walls having an aperture therein with the other of said walls having a pair of apertures therein, a keeper block positioned between said walls so as to retain the rod therebetween, said keeper block provided with a passageway registering with the first mentioned aperture which extends part way through the block, said keeper block also provided with



a pair of branch passageways registering with said pair of apertures and which branch passageways converge and intersect with the first mentioned passageway to form a wedge in line with the latter, and a split pin to retain the block in the bracket the ends of which pin pass through said apertures and said passageways whereby said pin prevents binding of the block upon the rod by preventing the block from rotating in said bracket.

1,863,143. METHOD OF TREATING WET OILS. JOHN CHARLES WALKER, Eldorado, Kans., assignor, by mesne assignments, to Empire Oil and Refining Company, Dover, Del., a Corporation of Delaware. Filed Nov. 13, 1926. Serial No. 148,315. 46 Claims. (Cl. 196—4.)

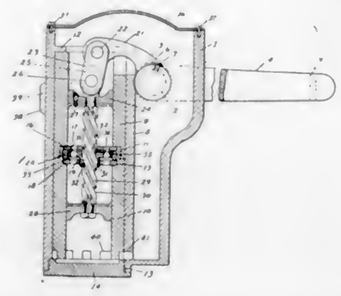
20. The method of treating mixtures of oil and water to prevent the formation of emulsions of the water-in-oil type and to resolve any such emulsions as have already formed which comprises admixing with the wetted oil a reagent comprising a mixture of the ammonium salts of a sulpho-fatty acid, cymene sulphonic acid and a sulphonic acid formed by sulphonating crude spruce turpentine at temperatures below 80° F.

37. The method of treating mixtures of oil and water to prevent the formation of emulsions of the water-in-oil type and to resolve any such emulsions as have already formed which comprises admixing therewith a reagent containing an aromatic hydrocarbon nucleus having linked therewith an alkyl group and a strongly polar negative group, in admixture with a hydrophilic colloid.

43. The method of treating mixtures of oil and water to resolve emulsions of the water-in-oil type comprising mixing with the oil and emulsion a small amount of a compound consisting of an unsaturated hydrocarbon nucleus having coupled thereto a hydrocarbon radical and a strongly polar negative group, raising the temperature of the mixture, permitting the heated mixture to stratify and separating water therefrom.

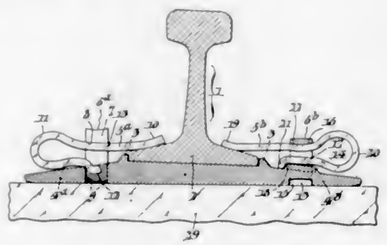
1,863,144. SHOCK ABSORBER. BENJAMIN H. WILE, Louisville, Ky. Filed May 9, 1930. Serial No. 450,979. 8 Claims. (Cl. 188—88.)

1. A hydraulic shock absorber comprising in combination a cylinder for hydraulic fluid, a spiral threaded piston rod, pistons secured at the ends of the rod reciprocal within the cylinder with the direct and recoil strokes of the shock absorber, a pair of spaced discs having radially spaced ports therein fixedly mounted within said cylinder intermediate said pistons, and a disc valve having radially



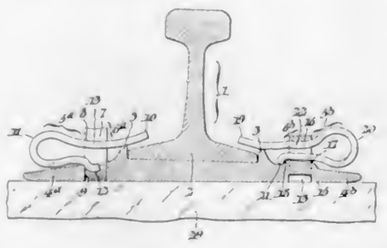
spaced ports mounted intermediate said spaced discs, said valve rotatable with the movement of the piston rod to open and close the ports in said discs.

1,863,145. RAIL RETAINING KEY. CHARLES D. YOUNG, Haverford, Pa. Filed July 13, 1931. Serial No. 550,432. 18 Claims. (Cl. 238—331.)



1. In combination with a rail and tie plate, a fulcrum member on the tie plate affording a curved bearing surface, and a spring key having one end engaging the rail base and the other end engaging the tie plate, and having an intermediate curved portion complementary to the curved bearing surface of the fulcrum member and in contact therewith.

1,863,146. RAIL RETAINING KEY. CHARLES D. YOUNG, Haverford, Pa. Filed Oct. 17, 1931. Serial No. 569,357. 4 Claims. (Cl. 238—304.)



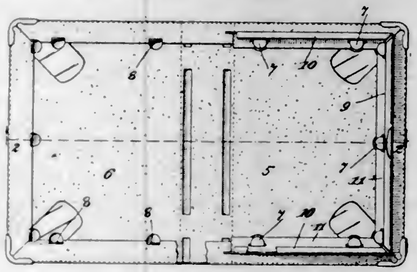
1. In combination with a rail, and a tie plate having a rib adjacent to the rail base, means on said tie plate affording opposed bearing surfaces and a retaining key wedged between said opposed bearing surfaces and said tie plate rib with its end projecting above the rail base, said retaining key and bearing surfaces being so formed as to cause said key when driven to catch on said surfaces with its inner end at a predetermined position clear of the rail base.

1,863,147. INSULATED ELECTRIC CONDUCTOR. JAMES HOWARD YOUNG, Pittsburgh, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 24, 1929. Serial No. 416,267. 5 Claims. (Cl. 173—264.)



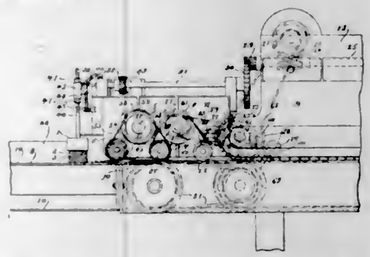
5. An electric conductor having an insulated metallic core and an exterior surface of chlorinated diphenyl.

1,863,148. COIN BANK. DAVID H. ZELL, Brooklyn, N. Y. Original application filed May 15, 1928, Serial No. 277,978. Divided and this application filed Dec. 10, 1929. Serial No. 412,967. 5 Claims. (Cl. 232—4.)



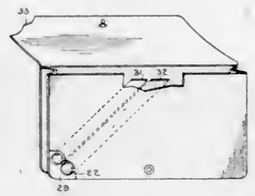
1. In a coin bank, a bank casing having a coin entrance slot in one of its end walls, coin guard means and a housing therefor arranged at the inner side of said end wall of the bank casing, a cover for said casing, and a metal strip attached to one side of said cover having flanges adapted to be bent inwardly over the edges of the casing walls, and one of said flanges also coacting with the wall of said housing for the coin guard means to retain the latter in assembled relation with the casing wall.

1,863,149. LEAF FEEDING ATTACHMENT FOR TOBACCO STEMMING MACHINES. LOUIS H. ZEUN, Catonsville, Md., assignor of one-third to Albert W. Adt and one-third to John B. Adt, Baltimore, Md. Filed Aug. 13, 1929. Serial No. 385,515. 6 Claims. (Cl. 131—37.)



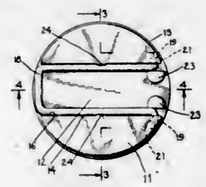
1. In combination with a tobacco stemming and stripping machine, leaf feeding means, means for positively moving leaves to align their butts, means within the path of said aligning means for the purpose of disintegrating groups of leaves into single leaf units, means in the path of and co-operating with said disintegrating means for the purpose of spacing said single leaf units before being conveyed into the operative portion of said tobacco stemming and stripping machine.

1,863,150. HAND BAG, POCKETBOOK, AND SIMILAR ARTICLE OF LUGGAGE. EUGENIE H. ALLEN, New York, N. Y. Filed July 6, 1931. Serial No. 548,949. 3 Claims. (Cl. 150—37.)



3. A hand bag provided with a coin receptacle located in the body thereof, said receptacle forming a channel, having at one end of the same an entrance slot located in the interior of the bag, a cut-away portion on the exterior of the bag into which the dispensing end of the receptacle projects.

1,863,151. FLASH LIGHT BOTTOM CAP WITH HANGER. GEORGE H. BARBER, New Rochelle, N. Y., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Mar. 20, 1929. Serial No. 348,405. 7 Claims. (Cl. 240—10.66.)



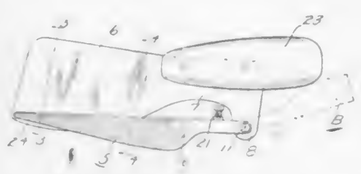
1. A flashlight bottom cap having a surface formed with a groove, a U-shaped hanger having outwardly bent ends received in bearings formed in the walls of the groove and means engaging the inner ends of the outwardly bent ends of the hanger to prevent withdrawal of the ends of the hanger from the bearings.

1,863,152. EXCITER LAMP. ISAAC H. BARKEY, Brooklyn, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1929. Serial No. 406,324. 1 Claim. (Cl. 176—40.)



An exciter lamp including a hermetically sealed vessel, a pair of conducting supports mounted therein, and a filament supported between the free ends of said support, the major portion of which is in the form of a ribbon curved transversely, the connecting ends of the same being reduced transversely.

1,863,153. PAPER-HANGER'S KNIFE AND ATTACHMENT. GAUTIER A. CHRISTOPHERSON, Chicago, Ill. Filed Feb. 5, 1931, Serial No. 513,535. Renewed May 2, 1932. 5 Claims. (Cl. 216—61.)

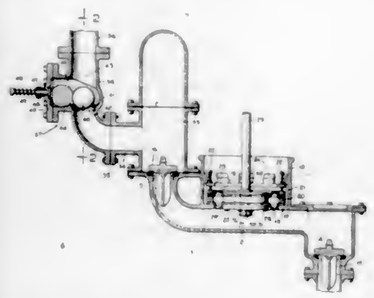


1. A paper hanger's knife comprising a blade consisting of a broad forward portion, narrowing down toward its shank with a depending lug forming a gripping portion forward of the lug for one of the fingers of the hand in holding the knife and adapted for pivotally supporting a smoothing guide thereby.

1,863,154. SOLID DIAZO SALTS. MILES A. DAHLEN, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,919. 32 Claims. (Cl. 260—69.)

1. As a new composition of matter, a solid crystalline diazo salt obtained by the interaction of a diazo body obtained from an unsulphonated primary aromatic amine and the disodium salt of diphenyl-4 : 4'-disulphonic acid.

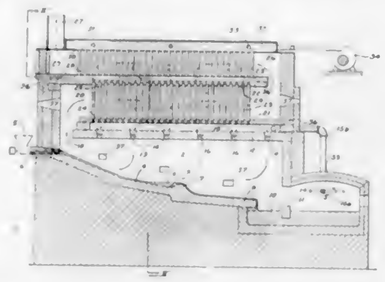
1,863,155. SAFETY DEVICE. JOHN H. V. FINNEY, Denver, Colo., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 28, 1929. Serial No. 366,580. 2 Claims. (Cl. 251—135.)



1. A valve for a pressure line comprising a valve casing having an inlet, an outlet, and a horizontal valve-seat surrounding the inlet; a ball for said valve seat and displaceable therefrom by fluid pressure, a horizontal ball-retaining depression located laterally of said valve-seat and adjacent thereto in said valve casing for holding said ball when not upon its valve-seat, means integral with said casing for normally retaining the ball in said depression, and manually operable means for displacing the ball from its depression and returning it to the valve-seat.

1,863,156. METHOD AND APPARATUS FOR MELTING GLASS. ROBERT L. FRINK, Lancaster, Ohio. Filed Jan. 13, 1927. Serial No. 160,986. 3 Claims. (Cl. 49—54.)

3. The method of melting glass which comprises moving the material over an inclined stationary refractory support, directing hot gases downwardly onto the material on the support, and then causing such gases to move over

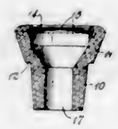


the material in a direction opposite to the direction of travel of the material and increasing the velocity of the gases during such travel.

1,863,157. TREATMENT OF CHEMICAL SUBSTANCES TO PREVENT THEIR DETERIORATION OR INTERACTION WITH OTHER BODIES. ERNEST WALTER GUERE, Beckenham, England. Filed Dec. 21, 1926, Serial No. 156,257, and in Great Britain Aug. 21, 1926. 1 Claim. (Cl. 23—243.)

The process of producing carbon dioxide, consisting in bringing acid substances, in crystalline form and admixed with and enveloped by a moisture resisting medium having a low melting point, in contact with a carbonate, whereby the chemical reaction between said acid substances and said carbonate is controllable by the temperature to which said acids and said carbonate are subjected.

1,863,158. SPRAY STOPPER. IRVING H. GREENE, New York, N. Y. Filed May 28, 1931. Serial No. 540,645. 5 Claims. (Cl. 215—47.)

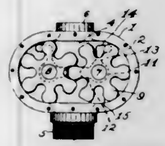


1. A spray stopper comprising a body portion of a resilient material and a head portion having a channel running centrally throughout the length of the stopper, the head portion being provided with an inner peripheral groove, and a disc having a plurality of perforations therein removably seated within said groove, said head portion having a degree of elasticity such that said disc may be inserted in the groove without deforming the disc.

1,863,159. ALLOYS. ROBERT ABBOTT HADFIELD, Westminster, England. Filed Apr. 26, 1928, Serial No. 273,156, and in France Dec. 24, 1924. 4 Claims. (Cl. 75—1.)

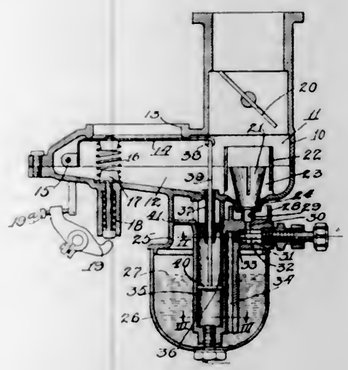
1. An alloy comprising, in addition to iron, from about 0.05 to 1% of carbon, from about 6 to 25% of chromium, from about 5% upward but less than 20% of nickel, from 1 to 5% tungsten, from 1 to 3% of copper, from about 0.05 to 1% silicon and from about 0.10 to 1% of manganese, the combined chromium and nickel content being from 18 to 32%.

1,863,160. ROTARY PUMP. AMOS VERNER JENSEN, Cedar Falls, Iowa, assignor to Viking Pump Company, Cedar Falls, Iowa. Original application filed Oct. 21, 1929, Serial No. 401,191. Divided and this application filed Aug. 23, 1930. Serial No. 477,333. 1 Claim. (Cl. 103—126.)



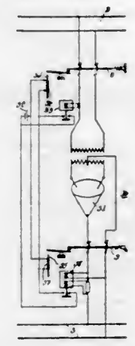
In a rotary pump or motor, an elongated casing having an inlet port and a discharge port and having arcuate opposite walls, like intermeshing piston gears rotatably mounted in the casing to contact with said arcuate walls circumferentially, the meshing teeth of said gears leaving an intermediate space containing liquid under compression, one side wall of the casing having an annular cavity around each gear axis with radial extension in each case to effect a communication with said gear teeth spaces in turn, and each annular cavity having another radial extension at an angle to the first mentioned extension thereof, with each second mentioned radial extension having an angularly directed terminal part extending opposite to the forward direction of rotation of the gear above it, said angularly directed part being longer across each passing tooth of a gear than the transverse width of the tooth to deliver from said annular cavity into the inlet-port end of the casing by way of the trapped spaces in turn between teeth of said gear which are in terminal contact with the adjacent arcuate wall of the casing.

1,863,161. CARBURETOR. CHESTER F. JOHNSON, Detroit, Mich. Filed May 24, 1929. Serial No. 365,701. 3 Claims. (Cl. 261—41.)



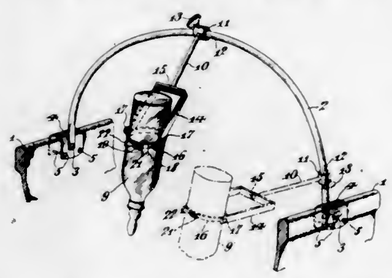
1. A carburetor comprising a mixing chamber, a choke tube opening thereinto, a fuel nozzle discharging into said choke tube, a fuel reservoir for supplying fuel to the nozzle, a stabilizer well supplied with fuel from said reservoir, an air valve for supplying additional air to said mixing chamber, a stabilizer plate in said well and connected to said air valve to be moved thereby, and a tube connecting said well and said mixing chamber and surrounding the connection between the air valve and the stabilizer plate, said tube being adapted to supply fuel to said mixing chamber from said well under all but low depressions.

1,863,162. RECTIFIER SYSTEM. ROBERT KELLER, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed July 2, 1927, Serial No. 203,091, and in Germany July 16, 1926. 7 Claims. (Cl. 175—363.)



3. In a rectifier system, an alternating-current power line, a direct-current power-line, a rectifier for transforming current from said alternating current line into current for said direct-current line, an alternating-current circuit-breaker for disconnecting said rectifier from said alternating-current line, a direct-current circuit-breaker for disconnecting said rectifier from said direct-current line, a reverse-power relay device for causing opening of said direct-current circuit-breaker in response to reverse current flow into said rectifier, said device controlling the operation of said alternating-current circuit-breaker.

1,863,163. BOTTLE SUPPORT. SAMUEL MALTI and SEBASTIANO MELITA, Philadelphia, Pa., assignors of one-third to Rosario Dallura, Philadelphia, Pa. Filed Apr. 14, 1931. Serial No. 529,952. 2 Claims. (Cl. 248—65.)

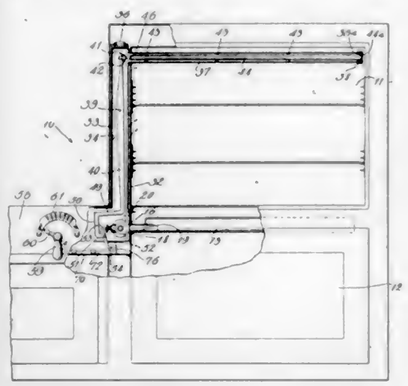


2. In a device of the class described, a substantially semi-circular supporting rod, means for securing the ends of said rod to the opposite walls of a baby carriage or the like, a collar rotatably mounted on said rod and freely movable from end to end thereof, means for securing said collar in any position of adjustment on said rod, an arm having one end secured to said collar and extending transversely of said rod, and means on the opposite end of said arm for securing a nursing bottle thereon.

1,863,164. AUTOMATIC CONTROL DEVICE. BARNET S. MINTERS, Great Neck, N. Y. Filed May 20, 1931. Serial No. 538,721. 8 Claims. (Cl. 236—15.)

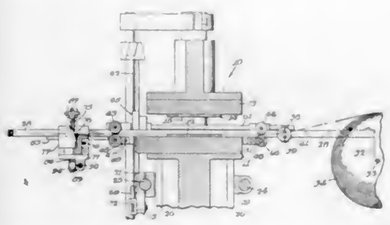
1. In a gas oven having a cooking chamber, a gas burner within said chamber, means for supplying gas to said burner, a gas valve interposed in said supply, said valve

including a movable valve member and a spring normally urging said member to closing position, and means for controlling said valve, said means comprising a tubular member made of material having a relatively high coefficient of expansion attached at one end thereof to a portion of said oven, and extending into said chamber, a lever pivoted to said oven, a member made of material having a relatively small co-efficient of expansion within said tubular



member and contacting the free end of said tubular member at one end thereof, and one end of said lever at the opposite end thereof, a floating lever pivoted mediate the ends thereof to the opposite end of said first lever, one end of said floating lever being adapted to contact said spring pressed movable valve member, and manually actuated means engaging the opposite end of said floating lever for rotating the same about the pivotal point thereof.

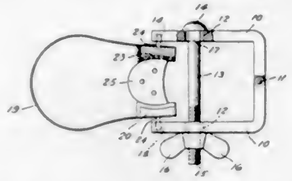
1,863,165. FEEDING ATTACHMENT FOR BOOKBINDER PRESSES. ERNEST LEON PERSONS, Chicago, Ill., assignor to David J. Molloy Company, a Corporation of Illinois. Filed July 13, 1928. Serial No. 292,511. 13 Claims. (Cl. 101—292.)



1. In combination, a bookbinder's press including a reciprocating lower bed plate, frame members secured to said plate, a roll of book cover material, means for supporting said roll on said members, means anterior of and posterior to said bed plate for advancing a web from said roll across said plate a predetermined distance during the reciprocation of said plate and means mounted upon the frame members for severing the web.

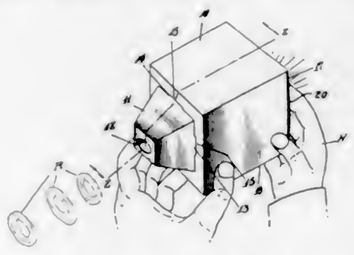
1,863,166. SHOE HEEL CLAMP. FRANK POWYSZYNSKI, Chicago, Ill. Filed Aug. 31, 1931. Serial No. 560,295. 3 Claims. (Cl. 12—103.)

1. A device of the class described comprising a pair of frame members pivotally connected at one of their ends, clamping members, swivel connections between said clamping members and the opposite free ends of said frame members, a bolt passing through said frame members, a nut upon said bolt for maintaining said frame members in a relative angular adjustment, and a spring device



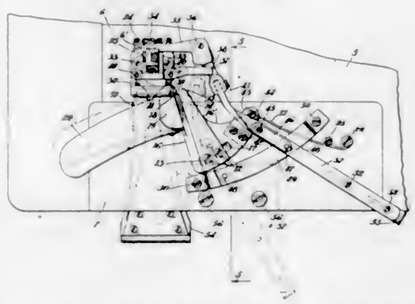
connecting said clamping members for maintaining the same in operative position with respect to said frame members.

1,863,167. TOY. ALFRED B. RODE, New York, N. Y., assignor to Rode & Brand, New York, N. Y., a Corporation of New York. Filed Feb. 17, 1932. Serial No. 593,484. 4 Claims. (Cl. 46—37.)



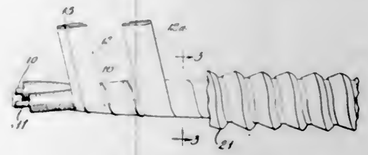
1. A toy device for producing smoke rings, a cubical box, serving as a smoke container, an opening in the front of said box, a conical member attached to the front of said box by means of a plurality of flaps on said member, which flaps engage corresponding slots in said box, one or more flaps on said member turned over to rest on the outer front surface of said box, a circular hole in the front of said conical member, a slightly movable rear wall on said box and air openings adjacent the edges of the rear wall for the proper operation of the toy device for producing smoke rings.

1,863,168. SEWING MACHINE ATTACHMENT. RUDOLPH J. SAILER, Townley, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 20, 1929. Serial No. 387,123. 8 Claims. (Cl. 112—136.)



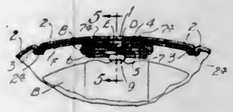
1. A sewing machine for securing a strip of material in a curved path to a body-material including, in combination, stitch-forming mechanism, a work-support, a guide above the work-support for directing the edge of the body-material to the stitch-forming mechanism, a guide below the work-support for directing the strip of material to the stitch-forming mechanism, a tiltable presser-plate above the work-support for stretching one edge of the strip of material, and means under the control of the operator for tilting said presser-plate without stopping the stitch-forming mechanism.

1,863,169. ARMORED CABLE. EDWIN J. SCHNEIDER, Jamaica, N. Y. Filed July 25, 1930. Serial No. 470,626. 4 Claims. (Cl. 173—267.)



1. In armored cable comprising a plurality of insulated conductors contained in an outer, flexible, metallic casing, a protector sheath or covering disposed between said conductors and said casing and consisting of inner and outer spirally wound coverings composed of saturated paper strips of multiple thickness, each strip being of the same width and wound in such manner that adjacent edges of each strip overlap, and the central portion of the outer strip being disposed over the adjacent overlapped ends of the inner strip to dispose said strips in overlapped relation with respect to each other throughout the length of the cable.

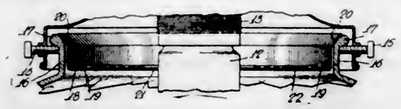
1,863,170. FOOTBALL, BASKET BALL, AND THE LIKE. MASON SCUDDER, Clayton, Mo., assignor to Rawlings Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 25, 1929. Serial No. 349,872. 13 Claims. (Cl. 273—65.)



1. A basket ball, football or the like, comprising a casing, an inflatable member inside of said casing provided with a valve stem, a member arranged on the inside of the casing with which said valve stem is detachably connected, and a supporting device for said last mentioned member arranged on the inside of the casing and secured to the casing by concealed stitches.

1,863,171. REFLECTOR. EDWARD L. SILVERMAN, New York, N. Y. Filed Jan. 19, 1931. Serial No. 509,632. 1 Claim. (Cl. 240—78.)

In a lighting fixture of the character which includes a pendant translucent light diffusing globe having a neck portion to receive support screws, and closed at its top by a substantially light absorbing member which carries the screws, means to substantially exclude the passage of light rays into the light absorbing support member and to intensify the diffused light emanating from the globe without localizing the intensity at any part of the globe, said means comprising a metal stamping including a circular disk having an opening to receive the neck of the lamp and having vent openings therein and a flared circular flange integral with the disk to suspend the same within the neck of the globe, the disk being concentrically annularly corrugated to present a substantially uniformly undulating cross section, and the under face of said disk being highly polished whereby the rays from the bulb are reflected with full intensity by said intensifier against the inner surface of the globe at such a

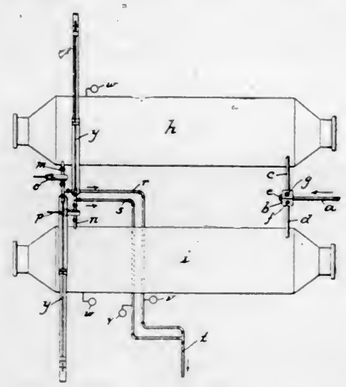


multiplicity of angles that the light intensification is substantially uniform throughout the entire illuminating area of the globe.

1,863,172. PROCESS FOR MAINTAINING THE COMPOSITION OF VISCOSE PRECIPITATING BATHS CONTAINING MAGNESIUM SULPHATE. JOHANN JOSEPH STÖCKLY and RICHARD BARTUNEK, Teltow, near Berlin, Germany, assignors, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Original application filed Nov. 27, 1928, Serial No. 322,295, now Patent No. 1,793,649, and in Germany Dec. 15, 1927. Divided and this application filed June 17, 1930. Serial No. 461,845. 4 Claims. (Cl. 23—121.)

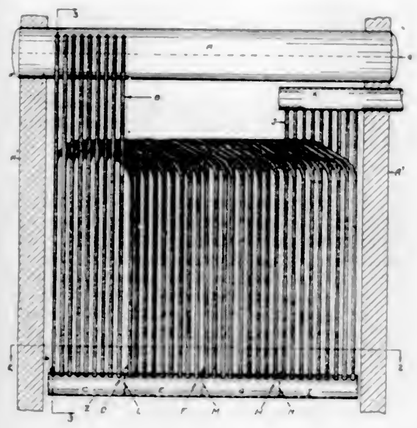
1. For maintaining the composition of sulphuric acid viscose precipitating baths containing magnesium sulphate and sodium sulphate in solution, a process comprising the steps of separating ut part of the soluted sodium sulphate in substantially pure form from the bath at a magnesium sulphate content of less than about 170 gr. per litre by cooling the same, to from 0 to 10° C. separately concentrating the resulting liquor and adding it, with a proportion of magnesium sulphate to the precipitating bath.

1,863,173. OIL CRACKING APPARATUS. HENRY THOMAS, Ridley Park, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed June 8, 1927. Serial No. 197,283. 12 Claims. (Cl. 196—105.)



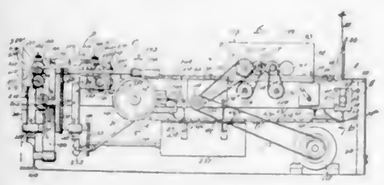
5. In a cracking plant, the combination with a plurality of horizontally extending reaction chambers arranged side by side, of a common supply pipe, branch pipes communicating with the supply pipe and with the respective reaction chambers, outlet pipes for cracked hydrocarbons comprising end sections extending toward one another along radii of two adjacent tanks above and at acute angles to a horizontal plane intersecting the axes of both tanks and extending also in vertical spaced-apart planes perpendicular to the axes of the tanks, regulable valves on said end pipe sections, and boring-out devices connecting and aligning with said valved end pipe sections.

1,863,174. SINGLE HEADER MULTIPLE-PASS SUPERHEATER. CHARLES S. TURNER, Detroit, Mich. Filed Dec. 13, 1928. Serial No. 325,728. 3 Claims. (Cl. 122—460.)



1. In a boiler superheater, in combination with a steam drum and a series of discharge pipes leading therefrom, a plurality chambered superheater header into one section of which said discharge pipes lead in a direction substantially perpendicular to the lengthwise axis thereof, a plurality of series of generally U-shaped pipe sections connecting each of the chambers in the header with the chamber adjoining, the tubes in each case leading into and from opposite sides of the several chambers in substantial lateral alignment with each other.

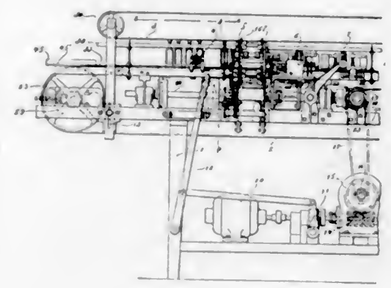
1,863,175. GRID PASTING MACHINE. RAY O. WATKINS, Chicago, Ill., assignor to Universal Battery Company, Chicago, Ill., a Corporation of Illinois. Filed June 27, 1929. Serial No. 374,032. 24 Claims. (Cl. 226—39.)



1. In a grid pasting machine, a paste containing hopper with a horizontal bottom wall, an imperforate circular plate inset into the bottom wall so as to form a continuously flat grid bearing surface, means for continuously advancing the grids through the hopper and along such surface, means for forcing the paste down into the grids, and means for turning the circular plate to distribute the paste in the under side of the grid.

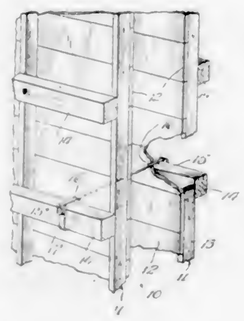
1,863,176. MACHINE FOR LABELING BOTTLES AND THE LIKE. CHARLES H. WILD, Baltimore, Md., assignor to Burt Machine Company, Incorporated, Baltimore, Md., a Corporation of Maryland. Filed May 8, 1930. Serial No. 450,725. 21 Claims. (Cl. 216—58.)

1. In a machine for labeling bottles and the like, means for feeding the bottles through the machine, paste coating and label affixing mechanism spaced along the path of the bottles as fed, and means for spacing the bottles comprising two pairs of gates, and means for operating the gates simultaneously and oppositely at intervals corresponding



to the speed of the feeding motion and adapted to space the bottles in accordance with the spacing of the paste coating and label affixing mechanisms.

1,863,177. CONCRETE FORM CLAMP. ALLEN B. WILSON, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 1, 1929. Serial No. 382,603. 9 Claims. (Cl. 25—131.)



6. A concrete form clamp comprising a bar having means at one end to form an interlocking connection with a strap, an arm formed integrally with said bar and extending transversely thereto at the end opposite said interlocking means, a flange extending from said arm parallel to said bar, and an integral spike carried by said flange and directed inwardly toward said bar.

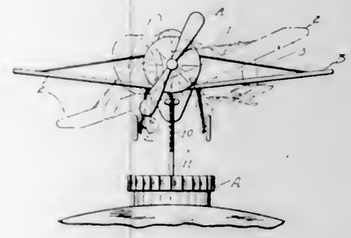
1,863,178. SHINGLE STRIP AND METHOD OF MAKING SAME. HENRY R. WOOD, Sierra Madre, Calif., assignor to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Original application filed May 15, 1929, Serial No. 363,322. Divided and this application filed Dec. 31, 1930. Serial No. 505,706. 6 Claims. (Cl. 164—17.)

1. A single element adapted to be laid with its major axis horizontal comprising a substantially rectangular strip of flexible waterproof material, one edge of said strip being substantially in the form of a harmonic curve, a slit spaced inwardly from one end of the strip and intersecting the curved edge of the strip and extending inward-



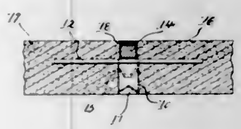
ly from said edge, a slit in the other end of the strip spaced from the curved edge and extending inwardly substantially in the direction of the major axis of the strip.

1,863,179. RADIATOR ORNAMENT. CLARENCE WORMS, St. Louis, Mo. Filed Apr. 15, 1931. Serial No. 530,241. 4 Claims. (Cl. 46—14.)



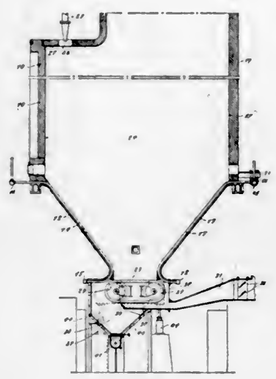
4. The combination with a supporting rod; of an ornament; an axle for mounting the latter for pivotal movement in a vertical plane; and means intermediate the ends of said axle for mounting the latter on said rod for pivotal movement about an axis intersecting the axis of said axle.

1,863,180. EXPANSION JOINT FOR ROADWAYS. ROBERT ADLER, St. Paul, Minn. Filed Nov. 18, 1929. Serial No. 407,962. 6 Claims. (Cl. 94—18.)



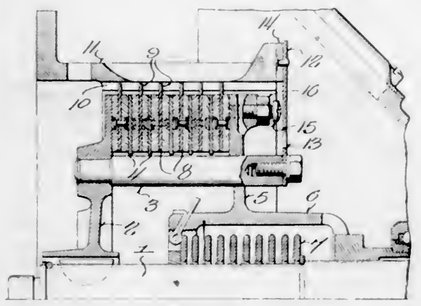
1. In an expansion joint for concrete roads or the like, a horizontally extending, sheet metal, channel member adapted to constitute a receptacle for a filler of bituminous material or the like, said channel member having upstanding side walls adhering to the adjacent concrete and terminating with their upper edges beneath the surface of the concrete, said edges having openings therein and dowel bars supported in said openings, the bottom of said channel member extending at least to the lower surface of the concrete and being formed to permit expansion and contraction of the receptacle.

1,863,181. FURNACE. ERVIN G. BAILEY, Easton, Pa., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed July 6, 1928. Serial No. 290,808. 3 Claims. (Cl. 110—28.)



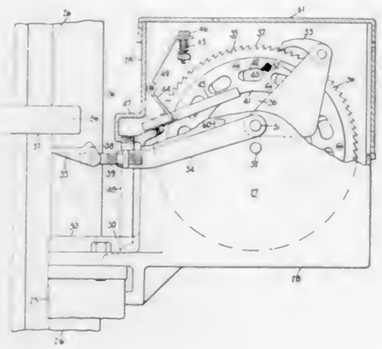
1. In a furnace, walls sloping downwardly and inwardly, means for projecting pulverized fuel downwardly, an ash conveyor in the bottom of said furnace having openings therein, water tubes in said walls providing a cooling zone above said conveyor, and means for keeping fuel from said conveyor, said means comprising a duct for conveying combustion air under pressure beneath said conveyor, said conveyor serving merely for removal of nodules of ash to an ash-pit.

1,863,182. DISK CLUTCH. LEO A. BIXBY, Milwaukee, Wis., assignor to Unit Corporation of America, Milwaukee, Wis. Filed Dec. 12, 1930. Serial No. 501,883. 3 Claims. (Cl. 192—69.)



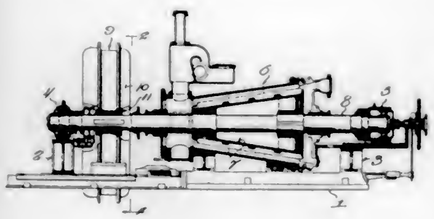
1. In a disk clutch comprising a driving member and a driven member and clutch disks loosely carried by said members for operatively connecting said members, pressure means creating frictional engagement between said driving member and driven member, said means comprising a resilient plate carried by one of said members and frictionally engaging the other of said members when the two are operatively engaged.

1,863,183. LUBRICATING MECHANISM. THOMAS BRADY, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 27, 1930. Serial No. 439,328. 10 Claims. (Cl. 184—21.)



1. In an elevator installation; a hatchway; a guide rail in said hatchway; a casing; a supply of fluid lubricant in said casing; a member rotatably mounted in said casing and having pockets adapted to raise unit quantities of said lubricant from said supply; means for receiving lubricant from said pockets; means for directing said lubricant from said receiving means to said guide rail to lubricate said guide rail; means for causing rotary movement of said rotatable member in steps; and means for adjusting the amount of movement of said rotatable member for controlling the quantity of lubricant received by said receiving means upon each step of operation of said rotatable member.

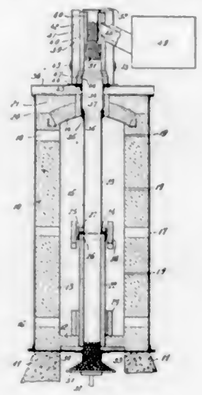
1,863,184. PAPER-STOCK-REFINING ENGINE. GUY S. BRAZEAU and HENRY P. MADSEN, Appleton, Wis., assignors to Appleton Machine Company, Appleton, Wis. Filed Nov. 13, 1930. Serial No. 495,469. 2 Claims. (Cl. 92—27.)



1. A paper-stock-refining engine comprising a base, a shell mounted on said base, a plug shaft extending through said shell, a bearing supported on said base for each end of said shaft, and an electric motor mounted on said base inside of the adjacent bearing, the rotor of said motor being keyed directly on said shaft.

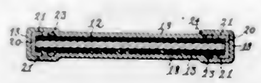
1,863,185. METALLURGICAL FURNACE. EARL H. BUNCE, CLARENCE J. LENTZ, and GEORGE T. MAHLER, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 24, 1930. Serial No. 438,463. 5 Claims. (Cl. 263—29.)

1. An apparatus for the reduction of zinciferous material comprising a vertically disposed and externally heated reduction retort, the lower section being built-up of a multiplicity of refractory brick, the upper section being



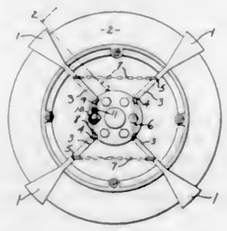
formed of suitable metal, the two sections being joined by an intervening casting adapted to make a substantially zinc-vapor-tight joint.

1,863,186. PROTECTED METAL ARTICLE. JOHN EDGAR BURNS, Ambridge, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 4, 1930. Serial No. 493,326. 4 Claims. (Cl. 154—45.9.)



1. A protected metal article comprising a metal sheet, layers of felt saturated with asphalt covering the opposite surfaces of said metal sheet and uncovering one edge of said metal sheet, a binding member covering the exposed edge of the metal sheet and the saturated felt layers for a portion of the width of the latter, the overlaying and underlaying portions of said binding member having edges and openings at the rear of said edges, and a layer of coating material covering the saturated felt layers and binding member and extended through the openings in the binding member and united with the portions of the saturated felt covered by said binding member.

1,863,187. MUD HOOK. ORVILLE CAREY, Valley Center, Kans. Filed Apr. 22, 1931. Serial No. 531,904. 1 Claim. (Cl. 152—14.)



In mud hooks for the tire of a wheel, a plurality of arcuate hooks to engage on the tire, each hook having a stem with an aperture extending thru and near the end

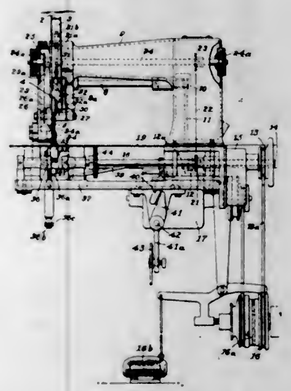
thereof and an aperture thru the stem between the hook and the first mentioned aperture, a chain connecting one pair of the stems at the end apertures, another pair being connected to a chain and link detachably arranged, the pairs being connected by other chains transversely positioned to the first said chain and detachable chain and link, the last said chains engaging with the intermediate apertures of their respective chains by which means all of the hook portions are tensioned to snug engagement on the tire, substantially as shown.

1,863,188. SURGICAL APPLIANCE. HARWOOD G. CLASH, Toledo, Ohio. Filed Aug. 28, 1929. Serial No. 389,063. 4 Claims. (Cl. 128—85.)



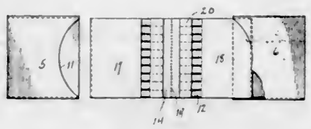
1. A surgical appliance comprising a cross-pin, a pair of toothed anchoring bars spaced apart, a pair of adjustable connectors between the bars and end portions of said pin, said connectors in effect forming longitudinal extensions of the bars, and means for effecting relative lengthwise movement of the bars and connectors to adjust the position of the cross-pin.

1,863,189. APPARATUS FOR MAKING AND APPLYING RUCHING. ARTHUR E. COLLINS, Cuyahoga Falls, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 10, 1929. Serial No. 398,674. 13 Claims. (Cl. 154—1.)



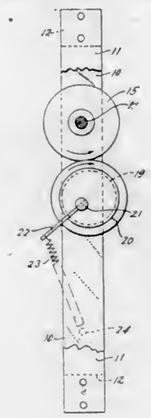
1. In apparatus of the class described, a pair of coacting rolls one having an annular channel in the central portions of its periphery, means for directing a ribbon to be ruched to said rolls, a ruching blade arranged to act on said ribbon in line with said channeled portion and adjacent the bight of the rolls, means for rotating said rolls and operating said ruching blade, and means for applying the ruched ribbon to a body sheet.

1,863,190. CIGARETTE AND CIGAR BOX. ANTHONY COULAPIDES, New York, N. Y. Filed Apr. 28, 1928. Serial No. 273,482. 3 Claims. (Cl. 206—41.)



1. A dual cigarette package comprising a continuous strip of sheet material folded at each end into parallelism with the main body portion thereof to form a space for retaining a layer of cigarettes, and a tubular shell slidably mounted and frictionally held upon each end of the strip to form therewith two compartments for cigarettes, the intermediate portion of said strip joining the two compartments being scored to permit the compartments to be folded with their flat sides adjacent one another.

1,863,191. UNIDIRECTIONAL MECHANISM. LUDWIG M. DIETERICH, Newark, N. J., assignor of one-third to Robert S. Blair, Stamford, Conn. Filed July 11, 1928. Serial No. 291,993. 13 Claims. (Cl. 188—81.)

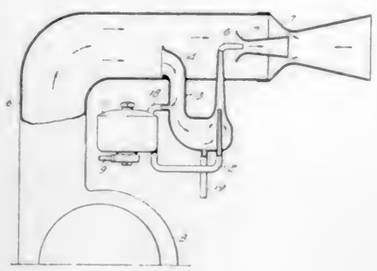


1. In a unidirectional mechanism, in combination, a rotary member having a substantially circular outer surface, a member with the surface of which said first member has a rolling engagement about an axis substantially central thereof, and means mounting said first member to move about an eccentric axis and adapted to cause it to jam into locking engagement upon a tendency to reverse rotation, said eccentric axis passing within the circumference of said first member.

1,863,192. FUEL SUPPLY SYSTEM. WILLIAM A. DOBLE, Jr., Berkeley, Calif. Filed Oct. 9, 1928. Serial No. 311,368. 1 Claim. (Cl. 261—76.)

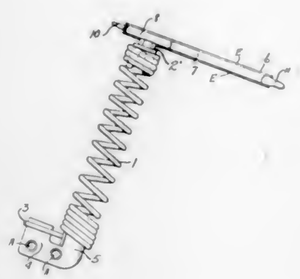
A fuel supply system comprising a continuously open and uninterrupted conduit having a substantially horizontal portion, means for causing a current of air in said conduit, a source of liquid fuel, a fuel nozzle located below said horizontal portion and supplied with fuel from said source, an air duct shunting said conduit and having a terminus adjacent the center of said horizontal portion,

said duct passing said nozzle to aspirate liquid fuel therefrom to form a mixture of fuel and air, a substantially horizontal auxiliary Venturi tube surrounding said terminus



and disposed in said horizontal portion, and a substantially horizontal venturi at the end of said conduit and surrounding said Venturi tube.

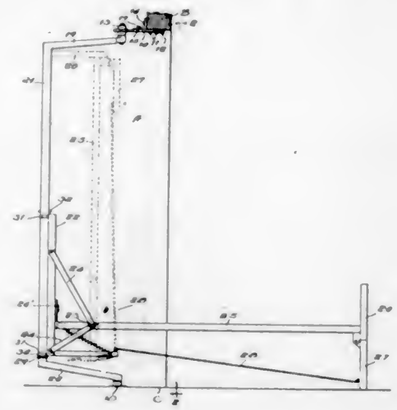
1,863,193. SPRING ATTACHING MEANS. JOHN C. DOZE, Wichita, Kans. Filed Feb. 28, 1930. Serial No. 432,232. 2 Claims. (Cl. 16—76.)



1. A spring tension device for a coil spring comprising an attaching plate for one end of the spring, said plate provided with an offset semi-cylindrical extension for receiving the coils of the spring thereover, said spring having the free end of its convolutions terminating in a lateral extension, a bearing surface for said last named extension carried by the plate, a winding nut for the spring rigidly supported by the opposite end of the spring, a winding bar adapted to engage said nut, a keeper for said bar co-extensive in length with the bar, and means carried by said keeper for holding the bar against longitudinal and lateral movement when in use.

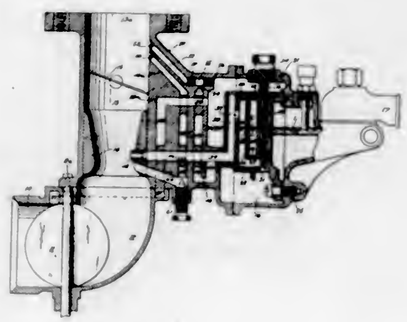
1,863,194. RECESS BED MOUNTING. ROSS J. ELLSWORTH, Woodstock, Ill. Filed Jan. 26, 1929. Serial No. 335,204. 2 Claims. (Cl. 5—170.)

1. The combination with a wall having an opening therein, of a relatively long bar having a slot therein secured to the lintel of the opening adjacent to one side thereof the slot of said bar being free of the lintel, an angular clamping plate slidably mounted on said bar adjoining said lintel, means coacting with the slot aforesaid to fix the angle plate to the bar, means for securing the angle plate to the lintel, a bearing in the remote end of said bar, a second bearing on the floor aligned with the first bearing,



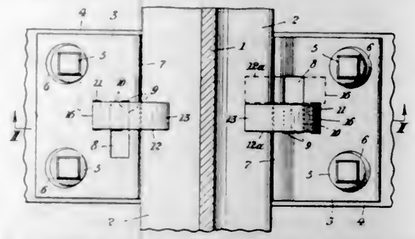
arms pivoted to said bearings, a bar fixedly connecting the ends of said arms, and a bed structure pivoted to said bar.

1,863,195. CARBURETOR. PAUL W. ENSIGN, San Marino, Calif., assignor to Ensign Carburetor Co. Ltd., Huntington Park, Calif., a Corporation of California. Filed July 15, 1930. Serial No. 468,113. 18 Claims. (Cl. 261—121.)



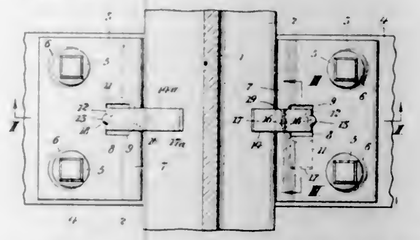
1. In a carburetor, a throttle controlled suction passage, a fuel supply source, a main fuel passage communicating with said supply source and discharging to said suction passage, an auxiliary fuel passage communicating with said main fuel passage at a point between its communication with the supply source and with said suction passage, fuel being taken from said auxiliary passage into the main fuel passage by virtue of the suction in the latter, said auxiliary passage also having communication with the supply source independently of the main fuel passage, and suction operated means governing the delivery of fuel from said auxiliary passage to the main fuel passage and opposing the tending of suction in the main fuel passage to draw fuel from the auxiliary passage into said main fuel passage.

1,863,196. RAIL RETAINING KEY. ROBERT FARIES, St. Davids, and CHARLES D. YOUNG, Haverford, Pa. Filed Nov. 11, 1931. Serial No. 574,314. 6 Claims. (Cl. 238—304.)



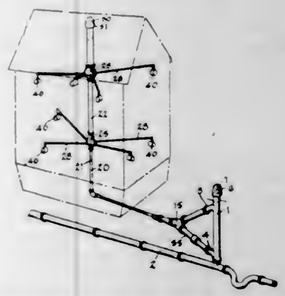
1. In combination, a rail, a tie plate having therethrough a relatively broad slot merging with a relatively narrow slot, and a resilient retaining key having a sharply bent end portion adapted to be passed through said broad slot and shifted into said narrow slot, and having the opposite end caught on the top surface of the tie plate with the intermediate portion looped above the base of the rail.

1,863,197. RAIL RETAINING KEY. ROBERT FARIES, St. Davids, and CHARLES D. YOUNG, Haverford, Pa. Filed Nov. 11, 1931. Serial No. 574,316. 5 Claims. (Cl. 238—304.)



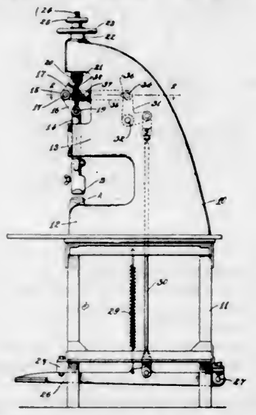
1. In combination, a rail, a tie plate having a slot therethrough, the walls of said slot being offset to afford a shoulder at the base thereof, and a resilient retaining key having a bent end portion adapted to be passed through said slot and then turned to engage the tie plate beneath said shoulder and having the other end portion projecting above the base of the rail.

1,863,198. VENTILATING SYSTEM. JOHN FLAHERTY, St. Louis, Mo. Filed June 28, 1930. Serial No. 464,438. 2 Claims. (Cl. 98—37.)



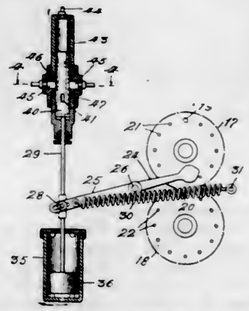
1. In a ventilating system for buildings, a stack located within the building and extending the height of the building, the stack formed to have a plurality of sections increasing in diameter, Venturi shells and tubes located intermediate the sections, a plurality of sets of ventilating heads, a plurality of sets of pipes interconnecting the heads to the shells, the said heads having a diameter larger than the diameter of the pipes, the heads having baffle plates inclined to the axes of the heads to cause rotary movement of the air in the heads, the connecting pipes and the stack.

1,863,199. PRESS. FRED D. FOWLER, Newton, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Sept. 3, 1930. Serial No. 479,565. 5 Claims. (Cl. 101—3.)



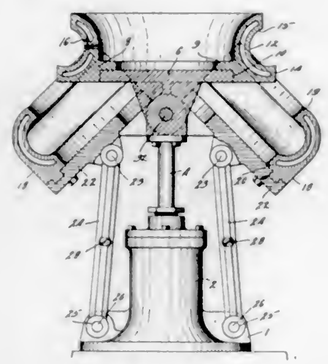
1. In a press, in combination, a ram, operating means, mechanism for moving said ram to and from a work-engaging position, means included in said mechanism under control of said operating means for retaining the ram in said position and for releasing the same, and means for delaying the releasing action of said ram retaining means after release by said operating means for a time interval having a determinate minimum duration.

1,863,200. AUTOMATIC LUBRICATION. WILLIAM P. HAMMOND, East Orange, N. J.; Lillian Louise Hammond, Thomas Edmund Hammond, and Irving Trust Company, formerly Irving Bank Columbia Trust Company, executors of said William P. Hammond, deceased, assignors to Lillian Louise Hammond and William P. Hammond, Jr. Filed Nov. 16, 1922. Serial No. 601,251. 3 Claims. (Cl. 184—7.)



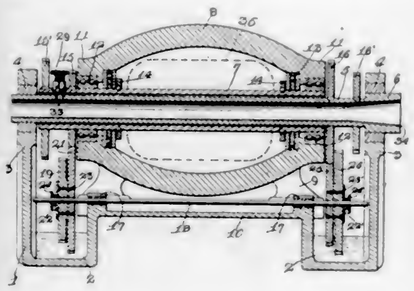
3. A lubricating system comprising a bearing to be lubricated, a lubricant supply reservoir connected therewith, a feeding-in control device therefor, and a speedometer mechanism governing both the cut-on and the cut-off of said device.

1,863,201. VULCANIZER. FRANK L. JOHNSON, Akron, Ohio. Filed Mar. 21, 1929. Serial No. 348,817. 18 Claims. (Cl. 18—19.)



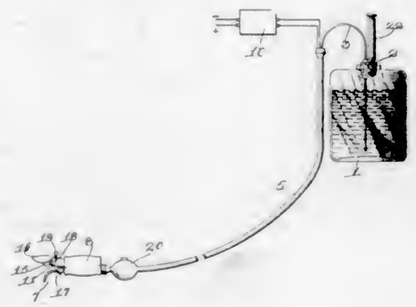
18. In a vulcanizer for tubes or the like, a vertically movable central plate, a pair of swinging plates at the side of the central plate, the swinging plates having relatively fixed fulcrum points and having a common hinged connection with the central plate, mating mold sections carried by the central plate and the swinging plates, the said plates being movable toward and from a common plane in which position the mold sections are in contact, and unbalanced surfaces on the mold sections adapted to force the sections together by the internal pressure against the surfaces.

1,863,202. POWER UNIT. WALTER A. J. KROHN, Milwaukee, Wis. Filed Apr. 25, 1931. Serial No. 532,793. 2 Claims. (Cl. 172—36.)



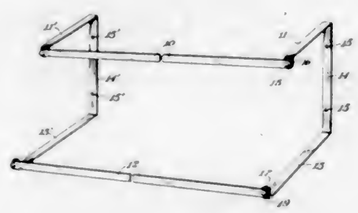
1. A motor transmission mechanism comprising a motor having a hollow armature shaft, a casing for the motor rotatably supporting the hollow armature shaft, a supporting frame, a longitudinally extending operating shaft extending through the hollow armature shaft, bearings carried by the supporting frame rotatably supporting the operating shaft, spaced gears of different sizes keyed to one end of the hollow armature shaft, spaced gears of different diameters keyed to the opposite end of the operating shaft, a longitudinally extending driven shaft rotatably supported by the frame arranged in parallel relation to the first shafts, and pairs of gears of different diameters feathered on the opposite ends of the driven shaft for selective engagement with either one of the spaced gears on the armature and operating shaft.

1,863,203. WATER SUPPLY DEVICE FOR BATTERIES. BERT C. LEWIS, Chicago, Ill. Filed Oct. 29, 1930. Serial No. 491,988. 2 Claims. (Cl. 240—2.)



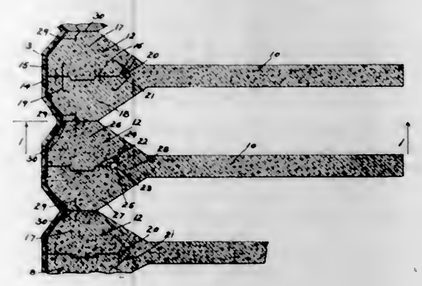
1. A device of the character described including a discharge tube having a nozzle portion at one end, a hand grip embracing and supporting the tube, a valve for controlling the passage of fluid through the tube, a sleeve supported at one end of the hand grip, a movable plunger mounted in the sleeve and connected with the valve, and an illuminated member carried by the sleeve, a finger switch for controlling said illuminating member, a reflecting element carried by the sleeve and arranged at one side of the illuminating member, said switch member and plunger being independently actuated by an operator's hand engaged with the hand grip.

1,863,204. SHOE RACK. ROBERT E. MILLER, Bronxville, N. Y. Filed Mar. 26, 1929. Serial No. 349,969. 3 Claims. (Cl. 211—35.)



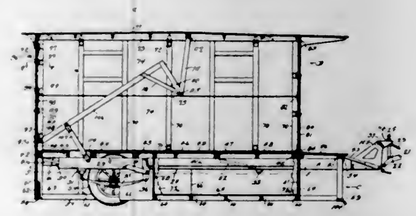
2. A continuous collapsible shoe display rack comprising a pair of brackets, each bracket having parallel arms of unequal lengths connected by a transverse portion, means for securing the transverse portion of the bracket to a surface of a support with the arms extending outward from the support, the shorter of said arms being uppermost, and transverse parallel bars permanently and pivotally connecting the upper and lower arms on said frames to engage the sole and heel of the shoes to support the shoes on an inclined plane and space them from the support.

1,863,205. BUTTRESS TYPE DAM. FRED A. NOETZLI, Los Angeles, Calif., assignor to Ambursen Construction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,270. 24 Claims. (Cl. 61—30.)



1. In a dam, a buttress wall having a buttress head, the buttress head having a vertically extending joint formed therein extending from adjacent its forward face rearwardly, there being a drain formed in the buttress head providing for draining off water which may enter the joint.

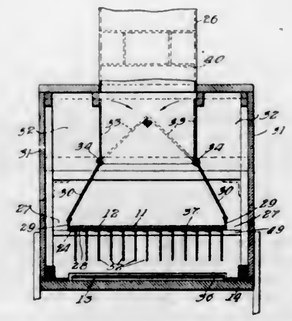
1,863,206. COLLAPSIBLE AND TRANSPORTABLE HOUSING STRUCTURE. JOHN P. QUINN, Sioux City, Iowa. Filed July 13, 1928. Serial No. 292,507. 5 Claims. (Cl. 296—23.)



1. In a storage tank for the intermittent discharge of frame, a floor, a collapsible super-structure comprising a roof, and side walls hinged to the roof and to the floor, the rear side wall comprising a lower section hinged to the floor, an intermediate section hinged to the lower section, and an upper section hinged to the intermediate section and to the roof, the sections being adapted to collapse outwardly when the latter is moved relative to the frame, a counterweight, and means connecting the counterweight, the frame, and the super-structure so as to balance the weight of the latter during folding or unfolding movement.

1,863,207. MEANS FOR COOLING PRODUCTS. ROBERT P. RASMUSSEN, Glen Ellyn, Ill. Filed Jan. 11, 1930. Serial No. 420,207. 6 Claims. (Cl. 34—12.)

1. In an apparatus of the kind described for cooling materials, an elongated closed conduit, a conveyor spaced substantially midway between the top and bottom of the conduit and movable longitudinally through same, air inlet means at substantially the middle of the length of the conduit through which cooling air can be forced into the conduit below the conveyor to flow beneath same towards the ends of the conduit, by-passes at the ends of the conduit for directing the air above the conveyor,

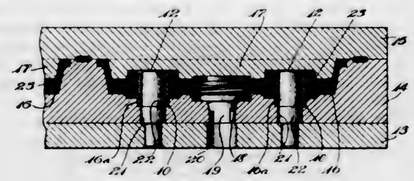


an air exit adjacent to the inlet through which the air can escape, and means preventing the passage of air around the edges of the conveyor except through the by-passes.

1,863,208. MANUFACTURE OF ETHER DERIVATIVES OF CARBOHYDRATES LIKE CELLULOSE. ARLIE W. SCHORGER, Madison, Wis., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Original application filed Aug. 14, 1930, Serial No. 475,249. Divided and this application filed Aug. 25, 1930. Serial No. 477,752. 28 Claims. (Cl. 260—152.)

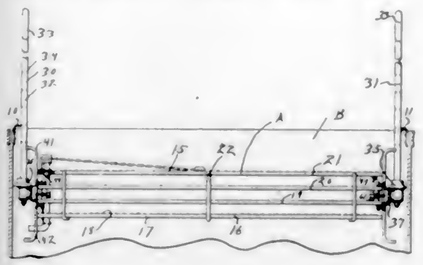
1. The method of making hydroxy-alphyl ethers of carbohydrate which comprises bringing wet alkali carbohydrates and a non-substituted ether-forming oxide of a hydrocarbon of the olefine series into intimate contact.

1,863,209. METHOD OF MAKING MOLDED ARTICLES. MCCONNELL SHANK, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 20, 1929. Serial No. 372,244. 4 Claims. (Cl. 18—59.)



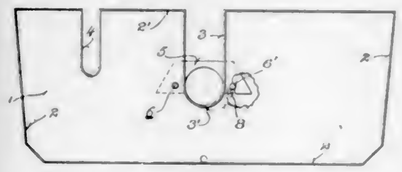
3. The method of making an article of molded material having therein a hollow insert open to the exterior of the article, which comprises forming the insert with an integral protective portion adapted to exclude from the interior thereof moldable material molded about its exterior, molding the material about the insert, and then opening the interior of the insert to the exterior of the article by removing the said protective portion of the insert.

1,863,210. DOUGHNUT COOKER AND TRIPPER. PHILIP SZULCZEWSKI, Milwaukee, Wis. Filed Sept. 23, 1931. Serial No. 564,595. 5 Claims. (Cl. 53—7.)



1. A device for cooking foods in deep grease comprising a reticulated frame for receiving and holding the food being cooked, said frame including release doors, supporting handles for turning the frame, and means for automatically releasing the trip doors when the frame is turned in a predetermined position.

1,863,211. DRIP PAN FOR TOILET TANKS. EDWARD J. WIMMER, Manhattan, Kans. Filed Oct. 29, 1931. Serial No. 571,779. 2 Claims. (Cl. 4—252.)



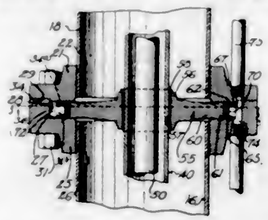
1. In a storage tank for the intermittent discharge of fluid having valve controlled supply and discharge pipes, a detachable drip-pan therefor, adapted to be positioned under the tank, the same having a continuous outer wall provided with U-shaped throats therein for the reception of the supply and discharge pipes and a collar carried by the pan for adjustable engagement with the discharge pipe and throat of said pan, whereby the same is locked in engagement with said discharge pipe to secure the pan in position.

1,863,212. MANUFACTURE OF LIQUID HYDROCARBONS. KARL WINKLER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 13, 1927, Serial No. 219,363, and in Germany Sept. 17, 1925. 5 Claims. (Cl. 196—10.)

3. The process of producing liquid hydrocarbons by the conversion of methane which comprises passing methane at a temperature between 500 and 900° C. under a pressure not less than 50 atmospheres over a catalyst comprising an oxidic compound of an element selected from the class consisting of the alkaline earth metals, magnesium, glucinium, aluminum and silicon.

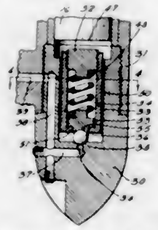
1,863,213. ADJUSTABLE SPIDER FOR DEEP WELL TURBINE PUMPS. JOHN A. WINTROATH, Los Angeles, Calif., assignor to Peerless Pump Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 10, 1927. Serial No. 239,253. 9 Claims. (Cl. 103—111.)

1. In combination: an outer element; an inner element extending into said outer element; a spider between said outer and said inner elements, said spider being adjustable to allow a sidewise movement of one of said elements



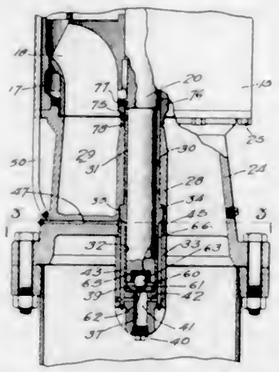
relative to the other of said elements; and fluid means around said spider, said means acting as a dashpot to retard said sidewise movement.

1,863,214. IMPROVED IMPELLER-POSITIONING DEVICE. JOHN A. WINTROATH, Los Angeles, Calif., assignor to Wintroath Pumps, Ltd., Alhambra, Calif., a Corporation of California. Filed June 21, 1930. Serial No. 462,781. 12 Claims. (Cl. 103—102.)



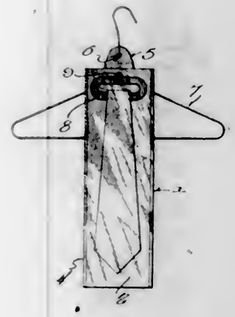
1. A position indicating device for use with a deep well pump structure having a pump shaft and a pump element containing said pump shaft, including: piping extending from an accessible point to said pump element; flow-indicating means for indicating at said accessible point when a flow from the lower end of said piping takes place; a valve for closing the lower end of said piping and adapted when open to allow escape of fluid pressure in said piping; and a valve closing structure yieldably associated with said pump shaft and positioned in said pump element for closing said valve when said pump shaft is below a predetermined position in said pump element.

1,863,215. IMPELLER-POSITIONING DEVICE. JOHN A. WINTROATH, Los Angeles, Calif. Filed June 21, 1930. Serial No. 462,782. 10 Claims. (Cl. 103—111.)



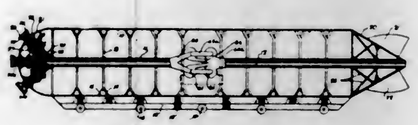
1. In a deep-well turbine pump, the combination of: a pump unit; a line shaft extending into said pump unit; an impeller secured to said shaft and positioned in an impeller chamber of said pump unit; means for axially moving said line shaft to change the position of said impeller relative to said impeller chamber; flow means in said pump unit below the lower end of said line shaft and operating in response to changes in the vertical position of said line shaft; and indicating means cooperating with said flow means for determining when said impeller is properly positioned relative to said impeller chamber.

1,863,216. WRAPPER. GEORGE WORDINGHAM, Milwaukee, Wis. Filed Mar. 12, 1931. Serial No. 521,946. 1 Claim. (Cl. 206—7.)



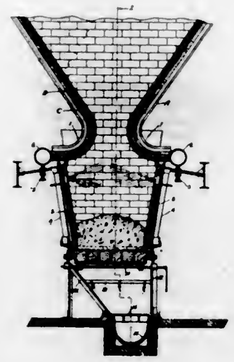
An article of the character described comprising a wrapper for launderers and cleaners, said wrapper comprising a relatively stiff back provided with spaced transverse slots, a combined support and article retainer for said wrapper, said support and retainer being formed from a single blank and comprising a loop portion, and a supporting tab projecting therefrom for insertion through one of the slots in said back, a lip formed out of said tab for engagement with the edge of said slot and a tongue projecting from said lip portion for engagement in the other of said slots in said back.

1,863,217. AIRSHIP. RALPH A. YELLI, Los Angeles, Calif., assignor of one-fifth to H. Mischler, Los Angeles, Calif. Filed Jan. 29, 1929. Serial No. 335,844. 17 Claims. (Cl. 244—10.)



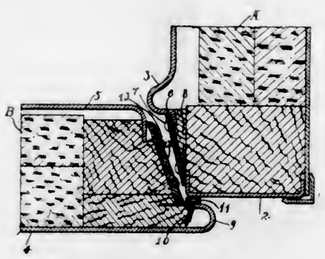
1. An airship having a thru air tunnel extending from the front end clear to the rear end thereof, means for exhausting air from said tunnel, a plurality of interconnected inlet conduits operatively connected to said tunnel at the front end of the airship, means for separately opening the several inlet conduits to the suction of air, suction creating means associated with each inlet conduit, and a unitary controller for the conduit opening means.

1,863,218. METHOD OF AND APPARATUS FOR HANDLING ASH. FRANK B. ALLEN, Lower Merion Township, Philadelphia County, Pa., assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 17, 1928. Serial No. 278,609. 10 Claims. (Cl. 110—171.)



1. The new and improved method of handling incombustible residues resulting from the combustion of powdered fuel which comprises burning powdered fuel in a combustion zone from which the incombustible residues may fall freely during the burning of the fuel, extracting heat from the falling residues in the combustion chamber without congealing molten material therein, cooling the falling residues to below the congealing temperature of molten material therein after the residues have passed out of the combustion zone, and finally removing the cooled residues to a place of disposal.

1,863,219. REFRIGERATOR. GEBHARD C. BOHN, St. Paul, Minn. Filed Feb. 10, 1930. Serial No. 427,159. 5 Claims. (Cl. 220—46.)



1. A refrigerator comprising a body formed with a door opening, enameled sheathing and lining plates for the interior and exterior surface of said body, rubber strips contactingly connecting the lining and sheathing plates of said door body, a door fitted into said door opening, enameled sheathing and lining plates for said door, a metal member secured around the outer door edge and forming a receiving space between it and the adja-

cent edge of the door sheathing to hold a gasket and a rubber strip contactingly connecting the inner lining of the door with the outer sheathing through said metal member in the outer edge of the door.

1,863,220. HAIR WAVING APPARATUS. GEORGE DECKER, Cleveland, Ohio, assignor to The Philad Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 2, 1929. Serial No. 396,694. 7 Claims. (Cl. 132—33.)

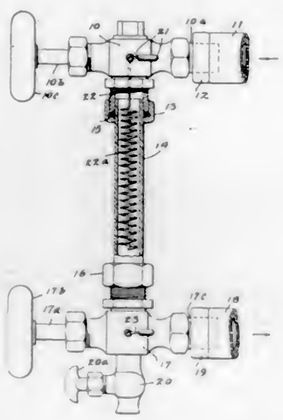


7. A curler rod comprising a cylindrical internally unobstructed tube of resilient material having longitudinally extending slots intermediate its ends.

1,863,221. METHOD OF MAKING METALLIC MAGNESIUM. SHELDON B. HEATH, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 25, 1928. Serial No. 280,659. 1 Claim. (Cl. 204—19.)

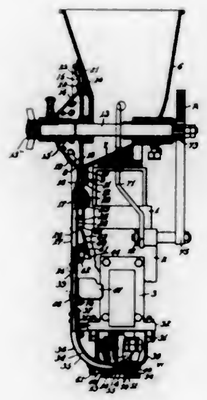
In a method of producing metallic magnesium, including the electrolysis of a fused bath containing magnesium chloride, the step which consists in maintaining said bath by introducing adjacent the anode magnesium chloride containing in excess of five per cent. of basic magnesium chloride.

1,863,222. METHOD OF TREATING FOOD AND OTHER PRODUCTS WITH HIGH FREQUENCY OSCILLATIONS. FREDERIK E. HOERMANN, Hastings, Minn., assignor of one-fourth to Henry M. Robertson and one-fourth to Joseph M. Santo, St. Paul, Minn. Filed May 20, 1929. Serial No. 364,672. 3 Claims. (Cl. 99—15.)



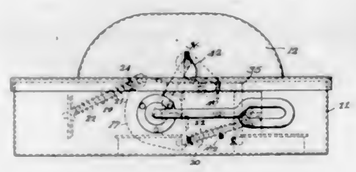
1. The process of treating food and other products containing or subject to the influence of micro-organisms which consists in disposing said products in a receptacle connecting one side of said receptacle to a ground and the other side to a high frequency oscillation circuit terminal so that said product is in a high frequency oscillation circuit and passing high frequency oscillations, having a frequency of between sixty million and six hundred million per second through said circuit and product.

1,863,223. BOTTLE CROWNING MACHINE. JAMES KANTOR, Chicago, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,304. 7 Claims. (Cl. 226—88.1.)



1. In a device of the character described, the combination with a reciprocating crowning unit, of a crown hopper, a crown chute for receiving the crowns from the hopper and delivering them to the crown unit, said chute comprising a stationary portion and a portion connected to and movable with the crowning unit, an arm pivoted to the exterior of the stationary portion of said chute, a pair of spaced fingers carried by said arm, said stationary chute portion being provided with apertures aligned with said fingers, and means associated with said arm and resiliently urging said fingers to enter said chute portion, said fingers, when so entered, obstructing movement of crowns in said chute portion.

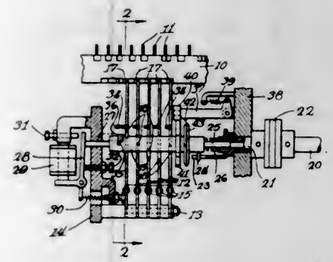
1,863,224. ELECTRICAL SWITCH. THOMAS J. KAUFFMAN, Grosse Pointe Village, and JULES A. WIDMER, Detroit, Mich., assignors to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 28, 1925. Serial No. 5,324. 45 Claims. (Cl. 200—50.)



1. In an electric switch, the combination of a switch box having a cover thereon and switch operating mechanism therein, a switch operating handle supported by a stationary part of said box and normally moving said switch operating mechanism to open and closed positions,

and a plate on said switch operating handle provided with a finger normally engaging said switch operating mechanism, and means operable upon the opening movement of said cover to disengage said finger and switch operating mechanism.

1,863,225. ELECTRIC SELECTOR MECHANISM. HOWARD L. KRUM, Kenilworth, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Original application filed July 16, 1926, Serial No. 122,808, Patent No. 1,783,382, dated Dec. 2, 1930. Divided and this application filed Sept. 26, 1930. Serial No. 484,517. 16 Claims. (Cl. 178—27.)



1. In an electric selecting mechanism, a set of selectors adapted to be conditioned in different combinations, a rotary member vibrated axially in response to receive signals to determine the setting of said selectors, and associated means for holding said member against axial movement at definite spaced points in the setting cycle and during the following intervals in which the setting of the selectors is effected.

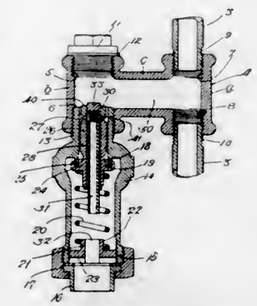
1,863,226. CARD HOLDER FOR ROTARY CARD DISPLAY DEVICES. JOHN D. MACLACHLAN, Kansas City, Mo., assignor to Mac AC Company, Kansas City, Mo., a Corporation of Missouri. Filed Mar. 16, 1931. Serial No. 522,993. 10 Claims. (Cl. 40—72.)



1. A card holder, comprising top and bottom members for engagement at opposite sides by a pair of cards fitting back to back, and end members connecting the top and bottom members and engaging the respective ends of the cards to hold them in parallel and closely adjacent relation, the bottom corners of the holder having trunnions and the bottom member having fixed parts to limit downward movement of the cards relative to the holder, and clips slidable on the top member toward and from the bottom member, one overlapping the upper edge of one of the cards and the other the upper edge of the other card.

1,863,227. RELIEF VALVE FITTING. JOSEPH A. MAYNARD, Boston, Mass. Filed Aug. 3, 1926. Serial No. 126,881. 5 Claims. (Cl. 137—69.)

1. A relief device for a pipe connection to a boiler comprising a double coupling having an intercommunicating passage between said coupling members, one of said members being adapted to fit into a pipe line without interferring with the flow of fluid therethrough, the other coupling member having a removable fusible valve, and a



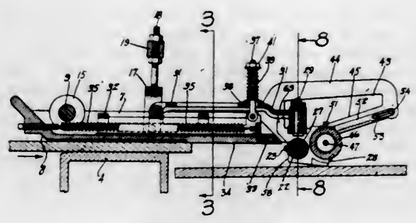
removable plug carried by said last named coupling member and closing an opening therein through which said valve is removable.

1,863,228. RECEPTACLE. WILLIAM M. MCADAM, New Brunswick, N. J. Filed June 13, 1930. Serial No. 460,942. 3 Claims. (Cl. 220—82.)



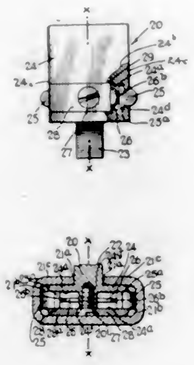
1. A container or receptacle of the class described comprising a pair of frames, each including side walls of sheet material merging into outwardly directed channel extensions facing inwardly, the side walls of one frame being telescoped in the side walls of the other frame, and panels having their edge portions positioned in the channel extensions.

1,863,229. LUMBER GRADE MARKING MACHINE. JOSEPH G. MCDONOUGH, New Orleans, La.; Louise Allgeyer McDonough administratrix of said Joseph G. McDonough, deceased. Filed Mar. 29, 1928. Serial No. 265,625. 16 Claims. (Cl. 101—35.)



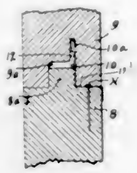
1. The combination with a support over which lumber may be moved, of a lumber marking member normally positioned in the path of the traveling lumber and adapted to be engaged thereby, and a cam-device actuable by engagement of the lumber with said marking member, to move the member out of the path of the lumber.

1,863,230. DENTAL BRIDGEWORK ATTACHMENT DEVICE. JACK L. SHAPIRO, New York, N. Y. Filed Jan. 9, 1931. Serial No. 507,589. 2 Claims. (Cl. 32—12.)



1. In a dental bridgework attachment device, a male member having a lug adapted to interlock with a companionate female member, said lug having a groove, a cover plate forming a closure wall for said groove, the outer surfaces of said plate being flush with a front surface of the lug, projecting means movably mounted in said groove extending beyond a side surface of said lug adapted to engage with said female member.

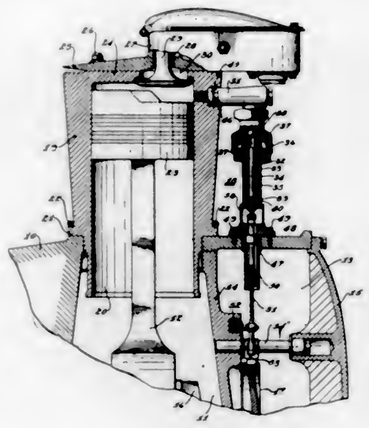
1,863,231. WEATHER STRIPPING FOR FREIGHT CAR SIDINGS. ANTON THUNE, Minneapolis, Minn. Filed Oct. 11, 1930. Serial No. 488,068. 2 Claims. (Cl. 20—)



1. In combination with a pair of boards disposed edge to edge and having a tongue and groove joint therebetween, a joint-closing strip having a flat intermediate portion extending longitudinally throughout its length and adapted to fit between the opposed edges of said boards, extending outwardly from the tongue carried by one of said boards, said strip having an upwardly extending substantially vertical flange disposed against the vertical edge of said tongue and seated in a narrow groove formed in the other board and closing the joint between said boards even when said boards are spaced some distance apart.

1,863,232. INTERNAL-COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 26, 1929. Serial No. 395,423. 11 Claims. (Cl. 123—139.)

1. In a liquid fuel injecting device for internal combustion engines, a casing, a pump barrel carried within the casing, a plunger structure including a plunger in the barrel and a guide extension in the casing, and removable

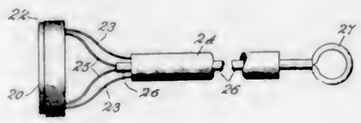


retaining means associated with the casing for preventing the endwise displacement of the plunger structure from operative position.

1,863,233. MANUFACTURE OF RED-ORANGE TO BROWN-RED BASIC DYESTUFFS OF THE ACRIDINE SERIES AND THE PRODUCTS. MANFRED ALIOTH, Basel, Switzerland, assignor to Durand & Huguenin S. A., Basel, Switzerland. Filed July 17, 1929, Serial No. 379,072, and in Germany July 28, 1928. 9 Claims. (Cl. 260—36.)

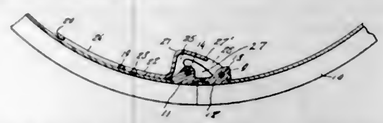
1. A process for the manufacture of red-orange to brown-red basic dyestuffs, being based on the ordinary acridine-orange manufacturing method, which consists in treating tetraalkyldiaminodiphenylmethane (wherein alkyl means a methyl or an ethyl group) with an excess of nitric acid, that is in a proportion of more than two molecules, but not exceeding four molecules of nitric acid for one molecule of tetraalkyldiaminodiphenylmethane, reducing the nitro compound thus obtained to the corresponding amino compound, forming the acridine ring by elimination of ammonia and finally oxidizing the leuco compound thus obtained to the dyestuff.

1,863,234. SURGICAL APPARATUS. JOSEPH B. BACON, Macomb, Ill. Filed July 6, 1931. Serial No. 549,021. 5 Claims. (Cl. 128—303.)



5. Apparatus of the character described, including: a flexible member adapted for insertion in the intestine, said member being provided with a dilatable end; a clasp ring; means for supporting said clasp ring; said supporting means adapted to be slipped over said flexible member; and means for slipping the clasp ring off of the supporting means.

1,863,235. WHEEL LOCK. THOMAS J. BENSON, Melcher, Iowa. Filed Aug. 10, 1931. Serial No. 556,290. 1 Claim. (Cl. 301—3.3.)



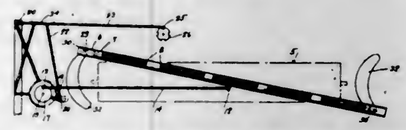
In a structure of the class described, a transversely split annular rim, lugs carried by the meeting portions of the rim and having beveled ends for contact with each other, one of said lugs being extended beyond that end portion of the rim by which it is carried into overlapping relation with the other end portion of the rim, and a lever having one end portion offset and provided with parallel side flanges provided with ears pivoted to one of said lugs, said flanges being provided with continuations in spaced parallel relation and forming legs pivotally connected to the other lug, the offset terminal portion of said lever being in overhanging relation to one of said lugs.

1,863,236. SHOULDER MEASURING INSTRUMENT. JOSEPH BRIENZA, Cincinnati, Ohio. Filed Jan. 13, 1930. Serial No. 420,527. 3 Claims. (Cl. 33—7.)



1. A shoulder measuring instrument adapted to indicate the relative height of the respective shoulders of a person under measurement comprising, a beam adapted to be supported centrally upon the shoulders of the person under measurement, in a horizontal position and having scales upon opposite sides of the center thereof, and transverse members each provided with a scale, said transverse members being each slidably adjustable along said beam to points above the ends of the shoulders and transversely of said beam to contact with the ends of the shoulders, and to indicate the respective distances between the shoulders and the beam.

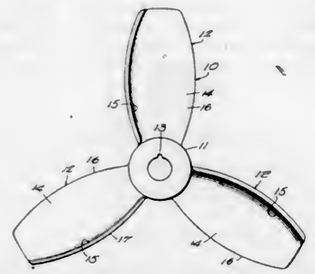
1,863,237. ROLL POLISHER FOR SHEET TIN AND JOBBING MILLS. GEORGE BUTLER and WILLIAM F. ZURCHER, Niles, Ohio. Filed Apr. 9, 1930. Serial No. 442,978. 5 Claims. (Cl. 51—252.)



1. In an apparatus of the class described, a pair of frames, a pair of slides mounted in the frames, means for adjusting the slides, said slides having arcuate edges, a pair of blocks having arcuate edges, tongue and groove connections between the edges, arms extending from opposite ends of the blocks, a holder, ball and socket connections between the holder and the arms, links connected with the ends of the blocks, levers rockable on the frames and connected with the links, and springs between the levers.

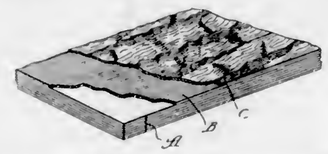
1,863,238. PROPELLER. JOSEPH JEREMIAH CALLAHAN, Cornwells Heights, Pa. Filed July 10, 1930. Serial No. 467,088. 12 Claims. (Cl. 170—159.)

1. A propeller comprising a blade having an active face adapted to create pressure on the fluid in which it operates at right angles to the direction of rotation, said blade having a rear face the major portion of which, lying adjacent the entering edge of the blade, is sloped to increase



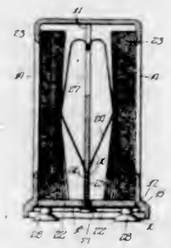
the angle with the axis of rotation from the tip end of the blade toward the axis of rotation, the remaining portions of said rear face being curved toward the following edge of the blade.

1,863,239. DECORATED LAMINATED PRODUCT AND PROCESS OF MANUFACTURE. JOHN D. COCHRANE, Jr., Cincinnati, Ohio, assignor to The Formica Insulation Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 22, 1929. Serial No. 357,142. 6 Claims. (Cl. 41—22.)



1. In a process of manufacturing a decorated laminated phenolic condensation product, the steps which comprise: consolidating under heat and pressure a main body of sheets of fabric impregnated with phenolic condensation product, a superposed opaque sheet impregnated with phenolic condensation product, and a printed surface sheet impregnated with clear phenolic condensation product and of transparent character.

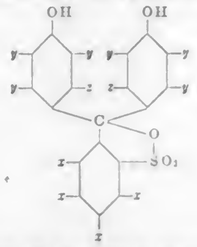
1,863,240. NAPKIN DISPENSER. JOSEPH S. DANIELS, Rhinelander, Wis., assignor to Daniels Manufacturing Company, Rhinelander, Wis., a Corporation of Wisconsin. Filed Dec. 31, 1928. Serial No. 329,337. 3 Claims. (Cl. 312—61.)



1. A napkin dispensing device comprising a body portion having a top, side and end walls, dispensing openings on said end walls, a central partition forming two napkin compartments, an open bottom, and a removable bottom plate closing said open bottom.

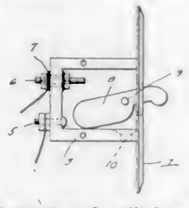
1,863,241. MERCURY DERIVATIVES OF HALOGENATED SULPHONE PHTHALEINS. FITZGERALD DUNNING and ARTHUR E. STICKELS, Baltimore, Md., assignors to Hynson, Westcott & Dunning, Inc., Baltimore, Md., a Corporation of Maryland. Filed Apr. 4, 1928. Serial No. 267,482. 3 Claims. (Cl. 260—13.)

1. A mercury-containing compound of a halogenated sulphone phthalein having most probably the formula



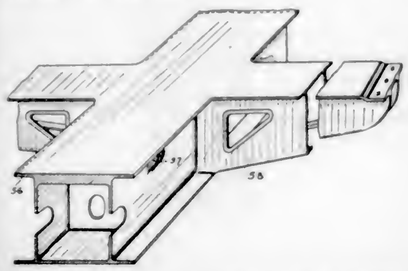
in which *x* stands for hydrogen or halogen, *y* stands for hydrogen, halogen or —HgOH and *z* stands for hydrogen or halogen, at least one and not more than two *y*'s being —HgOH and at least one *x* being halogen.

1,863,242. GRAVITY SWITCH. SAMUEL FREEDMAN and JOHN GILBERT, York, Pa. Filed Nov. 13, 1931. Serial No. 574,892. 2 Claims. (Cl. 200—165.)



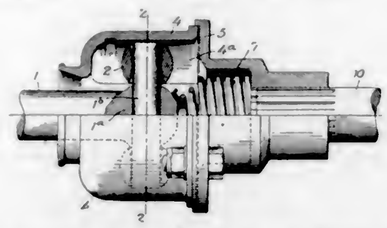
1. A switch of the class described comprising a casing, a pair of terminals extending therefrom, one of the terminals being insulated, and a lever pivoted in the casing and having a part projecting therefrom, with the inner end of the lever heavier than its outer part, whereby the lever is normally held in inoperative position by the action of gravity, and when the outer part is depressed, the inner part will strike the insulated terminal and close the circuit.

1,863,243. CAR CONSTRUCTION. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed May 16, 1929, Serial No. 363,550, now Patent No. 1,813,537, dated July 7, 1931. Divided and this application filed Oct. 30, 1930. Serial No. 492,231. 6 Claims. (C. 105—244.)



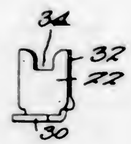
1. A cast metal center construction for a railway car consisting of an integral casting comprising spaced apart webs, an upper portion, a lower portion, and hinge lugs integral with said webs.

1,863,244. BEARING FOR BALLS OF UNIVERSAL JOINTS, ETC. PAUL B. GODDARD, Detroit, Mich., assignor to The Universal Products Co., Inc., Dearborn, Mich., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,076. 4 Claims. (Cl. 64—103.)



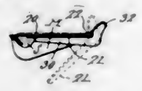
1. In combination a driving and a driven member, a pin on one member adapted to enter a groove in the other member, and a ball having a bore and rotatably mounted on the pin and engaging the groove to transmit pressure from the pin to the groove; said pin and ball normally contacting at the center of the bore and the annular space between the ball and pin within the bore gradually enlarging from center outward toward each end of the bore.

1,863,245. FUSIBLE LINK. CLIFTON P. HOWARD, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, a Corporation of Massachusetts. Filed Oct. 13, 1930. Serial No. 488,333. 1 Claim. (Cl. 169—42.)



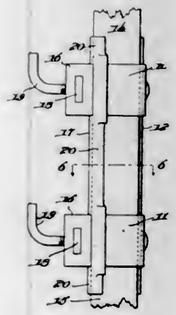
A fusible link comprising first and second link plates and a locking plate, said link plates being assembled face to face in endwise reversed position, said first link plate having an opening and said second link plate having a portion partially severed and displaced outwardly to provide a shoulder positioned adjacent said opening when the link plates are assembled and a cover adjacent said shoulder, and said locking plate being assembled face to face with said first link plate and having a transversely disposed projection extending through the opening in said first link plate and engaging the shoulder of said second link plate with the end of said projection covered and protected by said displaced portion, all of said plates being secured in the defined position by fusible solder melting at a predetermined temperature.

1,863,246. LOCKING MEMBER FOR SPRINKLER HEADS. CLIFTON P. HOWARD, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 2, 1931. Serial No. 572,613. 5 Claims. (Cl. 169—42.)



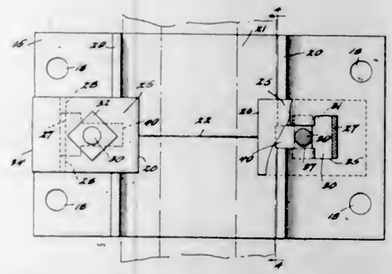
1. In a sprinkler head, a locking element formed of thin metal of substantially uniform thickness throughout and having an extended body portion, an upwardly offset end portion and depending side flanges extending the full length of the body and end portions and substantially stiffening said locking element.

1,863,247. POLE SPLICE CLAMP. THOMAS H. KINGSTON and JOSEPH H. NORMAN, West Somerville, Mass., assignors to Frank G. Kingston, A. Roy Kingston, Charles C. Pimm, and Mabel G. Kitchen, a Partnership doing business as Builders' Patent Scaffolding Company. Filed Feb. 9, 1927. Serial No. 166,908. 5 Claims. (Cl. 304—40.)



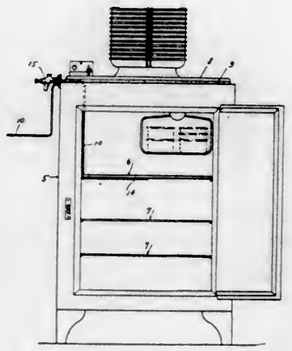
3. A pole splice clamp comprising pole embracing members situated to engage poles above and below the abutting ends of poles, a vertical clamp plate contacting with the pole sides above and below said abutting ends, said plate having at opposite edges inturned wings that contact with the adjacent side surfaces of the poles, a back member having pole-engaging spurs, and means to force said plate against the poles.

1,863,248. RAILWAY TRACK CONSTRUCTION. JOHN A. MCGREW, Albany, N. Y. Filed Jan. 17, 1931. Serial No. 509,495. 16 Claims. (Cl. 238—304.)



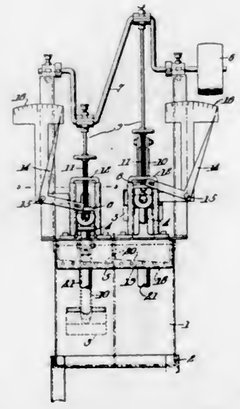
1. In a railway track construction, in combination, a tie plate substantially rectangular in plan, means disposed adjacent the ends of said plate for securing it to a tie, a pair of ribs formed upon said tie plate so as to extend longitudinally of the rail and define between them a rail seat for receiving a portion of the base of the rail intermediate the ends thereof, the surface of said rail seat being cambered longitudinally, and fastening means for securing the rail to said tie plate disposed substantially in the same vertical plane with the highest portion of the camber of said rail seat, whereby the rail is permitted a slight rocking movement relative to the tie plate and relative movement between the tie plate and the tie, whereby said tie plate securing means would be loosened, is obviated.

1,863,249. WATER COOLER. ALBERT F. MORARITY, SAMUEL F. WITTEN, and OTTO SCHOPP, Phoenix, Ariz. Filed July 31, 1931. Serial No. 557,531. 2 Claims. (Cl. 62—141.)



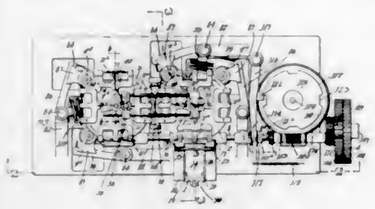
1. A shelf for refrigerators comprising a coil of tubular material, a water inlet and a water outlet, said outlet being provided with a faucet, the outer convolution of the tubular material being offset at the point where it merges into the second convolution so that the outer end portion will be on a line with the inner end portion of the first convolution.

1,863,250. DEVICE FOR FEEDING LIQUIDS. CHARLES W. MORSE, Anaconda, and KENNETH MCKENZIE, deceased, Anaconda, Mont., by J. B. C. Knight, executor, Anaconda, Mont. Filed Feb. 3, 1931. Serial No. 513,172. 8 Claims. (Cl. 221—97.)



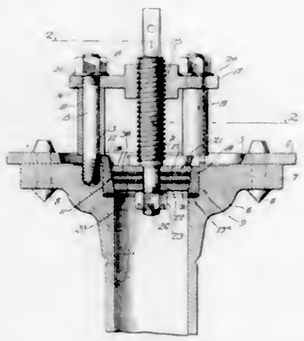
1. A device for feeding liquids comprising a tank, a feeding member consisting of a cup and a spout, a vertically adjustable pivot member, means to oscillate said feeding member into and out of said tank about said pivot, and means for adjusting said pivot member.

1,863,251. EDGE SHAPING MACHINE. EARL R. PERSON, Leominster, Mass., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 14, 1929. Serial No. 339,938. 2 Claims. (Cl. 144—154.)



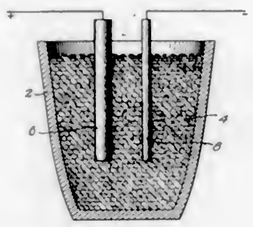
1. A machine of the character described comprising a flat carrier, a plurality of clamps thereon, each clamp being arranged to clamp an article against the face of the carrier and position it with its outer edge overhanging and therefore exposed, shaping devices positioned in the path of movement of the articles, located in the plane of the carrier and operatable on the exposed outer edges of the articles, a second carrier in the same plane as the first carrier, transfer mechanism operating on a line intersecting the centers of the carriers to deliver the articles, shaped edge forward, into a clamp on the second carrier so that the rear edge of the article will similarly overhang the second carrier, all of the said clamps having spaced parts between which the transfer means may engage the blanks to move them out of one clamp and into the other, shaping devices adapted to operate on the outer edges of the articles in the clamps of the second carrier, means for rotating said shaping cutters for one carrier in opposite directions to those for the other carrier and for intermittently rotating said carriers in synchronism but in opposite directions in order to follow the grain on the opposite sides of the work.

1,863,252. OUTLET VALVE. RAYMOND C. PIERCE, Chicago, Ill., assignor to General American Tank Car Corporation, a Corporation of West Virginia. Filed May 27, 1931. Serial No. 540,441. 1 Claim. (Cl. 137—21.)



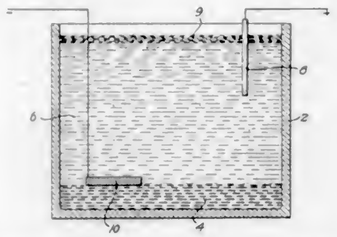
The combination of a tank having an opening in its bottom, a member in said opening having a valve seat, studs extending upwardly around said opening, ears projecting outwardly from said member and containing laterally recessed portions through which said studs extend, a cross member through which said studs extend, bushings surrounding said studs, and means engaging said studs for forcing said cross member against the upper ends of said bushings and the latter against the upper surfaces of said ears.

1,863,253. ELECTRO-CHEMICAL CURRENT INTERRUPTER. HERBERT S. POLIN, San Francisco, Calif., assignor to Polin, Inc., New York, N. Y., a Corporation of Delaware. Filed July 17, 1930. Serial No. 468,645. 17 Claims. (Cl. 200—113.)



1. An electro-chemical current interrupter, comprising a pair of electrodes, and an electrolyte which changes from a conductor to a non-conductor at a certain temperature, and changes back to a conductor upon a return to its first temperature.

1,863,254. PROCESS FOR FORMING AN AMALGAM AND PRODUCT THEREOF. HERBERT S. POLIN, San Francisco, Calif., assignor to Polin, Inc., New York, N. Y., a Corporation of Delaware. Filed July 17, 1930. Serial No. 468,646. 13 Claims. (Cl. 204—2.)



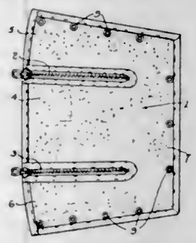
1. A process of forming an amalgam, comprising passing a current from a mercury anode into a metallic cathode.

1,863,255. ROLLER SCREEN FOR AUTOMOBILES. WILFORD ROGERS, Logan, Utah. Filed Dec. 9, 1930. Serial No. 501,138. 3 Claims. (Cl. 156—39.)



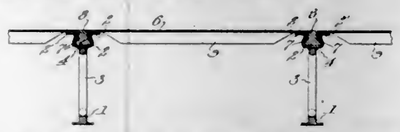
3. In a screening attachment for automobile windows having a sliding glass panel and detachable inner reveals, a roller housing across the upper portion of the window opening in place of the upper reveal and having a roller chamber and a lateral outlet adjacent to its upper portion, the upper and lower walls of which outlet have alined openings whereby the upper wall may be fastened to the window casing, the upper wall of said outlet also having integral struck up tongues projecting into the outlet for the purpose set forth.

1,863,256. BABY BLANKET. EDWARD C. SNODDY, Winston-Salem, N. C. Filed Nov. 20, 1930. Serial No. 497,003. 2 Claims. (Cl. 5—334.)



1. Crib blanket having longitudinal slits on both sides extending from one end and terminating short of the other end, defining a flap bounded by side wing portions and a foot portion, means carried by said wing portions and foot portion for drawing said portions toward one another beneath a mattress, and slide type fasteners for closing said slits.

1,863,257. COMBINATION STEEL JOIST AND DECKING FOR FLOOR CONSTRUCTION. ARMEN H. TASHJIAN, Cleveland, Ohio. Filed Mar. 28, 1929. Serial No. 350,600. 7 Claims. (Cl. 189—34.)



7. The combination of an inwardly bent channel chord and steel decking having parallel bent flanges in facial engagement with said channel, and a wedge-shaped filler in the channel which engages both channel and flanges whereby upward lifting of the decking is prevented.

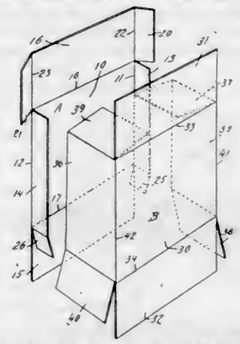
1,863,258. LIGHT FLOOR CONSTRUCTION FOR SKYSCRAPERS. ARMEN H. TASHJIAN, Cleveland, Ohio. Filed Nov. 20, 1930. Serial No. 496,961. 8 Claims. (Cl. 72—70.)



1. A floor panel for buildings, including a structural framework and a slab of plastic material, said slab provided at its edges with aprons flaring from the plane of the slab and with a bridging web intermediate said aprons, said aprons and web providing a means for withstanding lateral pressure applied to the building.

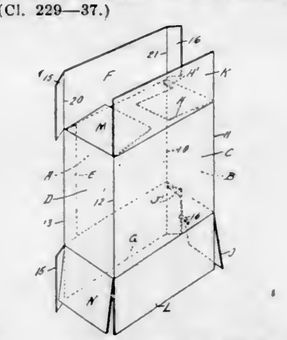
1,863,259. CONTAINER. JOHN VAN BUREN, Brooklyn, N. Y. Filed Jan. 17, 1928. Serial No. 333,144. 4 Claims. (Cl. 229—23.)

1. A container having front and back portions and side sections, inwardly folding main flaps extending from the ends of the front and back portions, and end flaps extending from the ends of the side sections, side tabs interconnecting the side sections with a front or back section, extensions of said side tabs adapted to be affixed



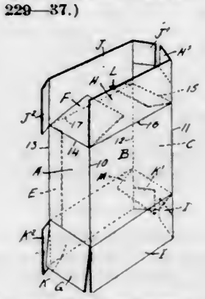
to the end flaps at one end of the side sections and ears projecting from one of the main flaps adapted to be affixed to the other end of the side sections.

1,863,260. CONTAINER. JOHN VAN BUREN, Brooklyn, N. Y. Filed Dec. 17, 1929. Serial No. 414,616. 16 Claims. (Cl. 229—37.)



1. A blank for containers comprising back, front and side sections, flaps at the ends of the front and back sections, tabs at the ends of the side sections, a tongue extending beyond the central part of one end of the blank and spaced ears extending beyond the upper and lower parts of the other end of the blank, the space between the ears corresponding with the vertical dimension of the tongue.

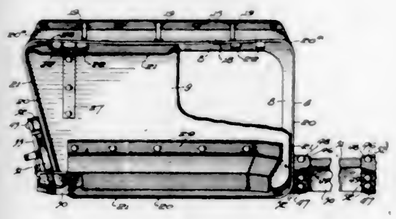
1,863,261. CONTAINER. JOHN VAN BUREN, Brooklyn, N. Y. Filed Apr. 18, 1930. Serial No. 445,296. 19 Claims. (Cl. 229—37.)



1. A blank for containers comprising back, front and side sections and a tongue, a flap at the end of each of the front and back sections, a tab at the end of each side

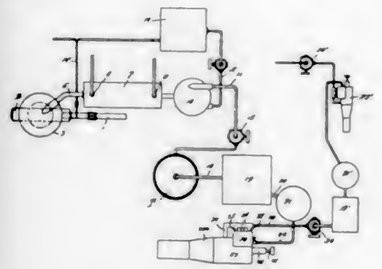
section, short ears extending laterally from proximate edges of said flaps adapted to be folded against and to be secured to an end portion of one of the side sections, and an ear extending laterally from the opposite edge of one of the flaps adapted to be folded against and to be secured to the same end portion of the other of the side sections.

1,863,262. RAILWAY HOPPER CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Sept. 2, 1930. Serial No. 479,366. 16 Claims. (Cl. 105—249.)



1. A railway hopper car having hoppers disposed on opposite sides of the car center sill, a door frame for each of said hoppers, each of said door frames being integrally formed with an inwardly extending laterally projecting bracket, and means connecting said frames involving a beam rigidly secured to said brackets.

1,863,263. PROCESS OF AND MEANS FOR PRODUCING SOLID CARBON DIOXIDE. JOSEPH S. BELT, Amarillo, Tex. Original application filed May 21, 1929, Serial No. 364,890. Divided and this application filed Dec. 27, 1929. Serial No. 416,928. 5 Claims. (Cl. 62—121.)



1. Carbon dioxide snow-forming apparatus, including a snow-forming jet and a separating chamber into one end of which said jet discharges, said separating chamber having a screened top outlet and a discharge pipe for the separated gas escaping through the screen, the other end of said chamber being contracted and forming a restricted outlet for the snow, and means in said chamber for continuously pushing the snow toward said outlet as it forms in said chamber, whereby the snow is protruded in compressed form, said last named means acting to continuously clear the snow from said screen and thereby facilitate the escape of the separated gas.

1,863,264. COMPOSITIONS CONTAINING NITROCELLULOSE. THEODORE F. BRADLEY, Westfield, N. J. Filed June 5, 1925. Serial No. 35,263. 9 Claims. (Cl. 134—26.)

1. A coating composition containing nitrocellulose and a resinous composition derived from glycerol, phthalic anhydride and castor oil.

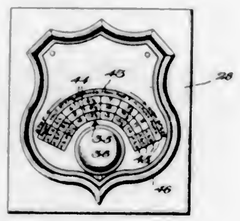
1,863,265. PRODUCTION OF ANTHRAQUINONE DERIVATIVES. WILLIAM BRADLEY, London, and RHYS JENKIN LOVELUCK and ROBERT FRASER THOMSON, Grangemouth, England, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Sept. 19, 1931, Serial No. 563,890, and in Great Britain Aug. 14, 1930. 3 Claims. (Cl. 260—60.)

1. Process for the manufacture of 1-halogeno-5-arylsulphonamidoanthraquinones, comprising the interaction of 1:5-dihalogenoanthraquinone at a temperature above 155° C. with substantially less than two molecular proportions of an arylsulphonamide in presence of an acid-absorber and a copper catalyst in a high-boiling organic liquid medium in which the desired product is substantially insoluble at the temperature of reaction.

1,863,266. PROCESS FOR THE MANUFACTURE OF INSECTICIDES AND METHOD OF MAKING SAME. ROSCOE H. CARTER, Washington, D. C. Filed Nov. 15, 1929. Serial No. 407,553. 5 Claims. (Cl. 167—14.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

2. The process of making insecticidal preparations containing double fluorides of the alkali metals with aluminum wherein is produced simultaneously the double fluoride, hydrated silica and hydrated alumina, intimately mixed, which comprises bringing together, in the presence of water, a water soluble salt of aluminum, an alkali metal compound, and hydrofluosilicic acid, the aluminum and alkaline salts being in excess of the amounts required to react with the hydrofluosilicic acid, but in such relation to each other as to produce alumina.

1,863,267. TRANSFORMER-RHEOSTAT CONTROL DEVICE. JAMES E. CUFF, Hinsdale, Ill., assignor to American Flyer Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed June 23, 1930. Serial No. 463,330. 4 Claims. (Cl. 200—11.)



1. In a device of the character described, a box cover, a shaft extending through said cover, an operating member on said shaft outside of said cover, a series of contacts within the cover, a switch arm on said shaft for cooperation with said contacts, an abutment on said shaft, and a leaf spring between said abutment and said switch arm to urge the latter against said contacts, said leaf spring having an opening therein and said switch arm having a tongue projecting therefrom into said opening.

1,863,268. HYDROXY MERCURI DERIVATIVES OF RESORCIN IODINATED SULPHONE PHTHALEINS. FITZGERALD DUNNING, Baltimore, Md. Filed Feb. 23, 1929. Serial No. 342,318. 16 Claims. (Cl. 260—13.)

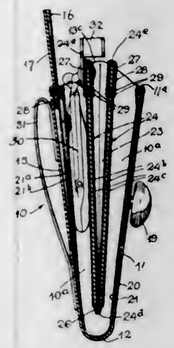
1. As a new product a hydroxy-mercuri resorcin iodinated sulphone phthalein, free of extraneous alkali metal salt and complex mercurial containing an acid radical attached to the mercury and being iodinated in the o-sulphobenzoic acid nucleus.

1,863,269. UPHOLSTERY EDGE. HARRY FOX, Lowell, Mass. Filed Mar. 25, 1931. Serial No. 525,048. 10 Claims. (Cl. 155—184.)



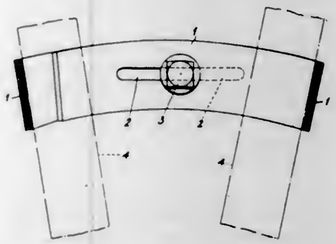
1. An article of the class described having a body comprising loosely felted material and a fabric covering therefor free to move thereon as the article is flexed, and an attaching fin of less thickness extending from said body and comprising felted material and fabric intimately united substantially throughout their confronting areas.

1,863,270. HANDBAG. SAMUEL R. GOLDSMITH, Brooklyn, N. Y. Filed Apr. 30, 1930. Serial No. 448,477. 8 Claims. (Cl. 150—30.)



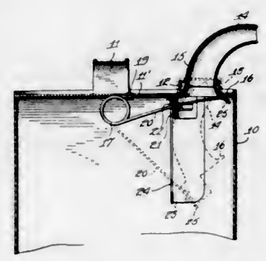
6. In a bag construction of the character described, a main pocket having a single closure flap and formed with pleated end gussets to permit expanding and contracting the size of said pocket, each of said pleated gussets having a central outwardly extending fold, a pair of members secured in said gusset folds wholly within and spaced from the bottom of the main pocket to form a second pocket.

1,863,271. CHECKSTRAP OR THE LIKE AND PICKER STICK FOR UNDER-PICK OR AUTOMATIC LOOMS. GEORGE BERNARD HANDLEY and EDGAR GEOFFREY HANDLEY, Harrogate, England. Filed Dec. 21, 1931, Serial No. 582,402, and in Great Britain Dec. 16, 1930. 3 Claims. (Cl. 139—161.)



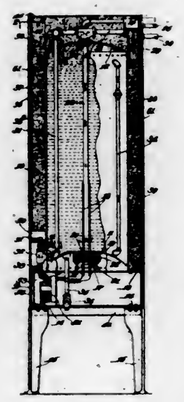
1. A check or lug strap for automatic looms comprising a band formed from a blank curved relative of its length so that the ends of a loop formed by the band bend in a conical formation and said band having means on the ends thereof to permit its attachment to a frame of the loom at the desired position in relation to a picker stick.

1,863,272. AUTOMATIC SPOUT FOR FLUID CONTAINERS. HENRY HENIG, Brooklyn, N. Y. Filed Sept. 27, 1928. Serial No. 308,827. 9 Claims. (Cl. 221—27.)



1. A device of the character described comprising a container having an opening therein, a spout arranged within said container and movable through said opening, said spout being provided with a depending portion having a slot therein, a guide depending into said container adjacent said opening and having a slot therein, and spring means slidable in both of said slots to normally urge said spout through said opening.

1,863,273. WATER HEATER. ORRIN HOFFERBERT, Beaver Dam, Wis., assignor to Malleable Iron Range Company, a Corporation of Wisconsin. Filed Nov. 23, 1929. Serial No. 409,339. 6 Claims. (Cl. 219—38.)

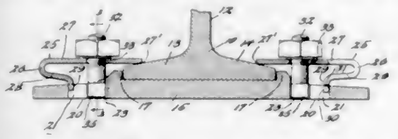


1. A water heater comprising a tank, water heating means therefor, water inlet and outlet conduits communicating with said tank and a hot water trap in each of said conduits, said traps each comprising a receptacle having inlet and outlet ports, an off-set body portion and a baffle interposed between said ports and extending toward and terminating short of the inner wall of said body most remote from said ports.

1,863,274. TIE PLATE AND RAIL FASTENER. JOHN A. MCGREW, Albany, N. Y. Filed July 8, 1930. Serial No. 466,506. 10 Claims. (Cl. 238—349.)

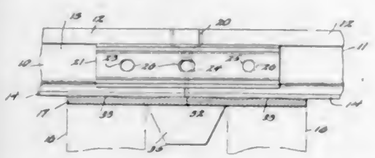
1. In a rail fastener, in combination, a tie plate having a rail seat thereon and a slot formed therein, a U-

shaped spring retaining clip having a straight elongated horizontal leg adapted to bear upon said rail base and a shorter leg having a vertical downwardly bent portion



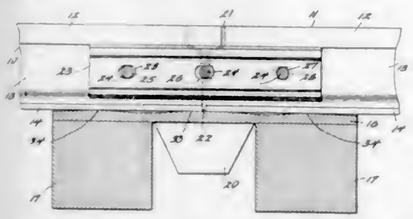
adapted to enter said slot, and adjustable means for securing the intermediate portion of said clip to said tie plate.

1,863,275. RAIL JOINT. JOHN A. MCGREW, Albany, N. Y. Filed Feb. 18, 1931. Serial No. 516,709. 12 Claims. (Cl. 238—210.)



1. In a rail joint construction, a tie plate, a rail seat formed upon said tie plate and provided with a plurality of raised portions for supporting the adjacent rail sections, one of said portions comprising a plane surface adapted to support the abutting ends of said rail sections, and the other portions comprising transverse ridges providing substantially line contact between the rail seat and the underside of the base flanges of said rail sections at points spaced from the abutting ends thereon, spring steel clips disposed upon each side of said rail sections, one end of each of said clips adapted to bear upon the upper surface of said base flanges above said lines of contact between the rail seat and base flanges, and the other end adapted to bear upon a portion of the tie plate, and bolts adapted to pass through the intermediate portions of said clips and to interlock with said tie plate.

1,863,276. RAIL JOINT. JOHN A. MCGREW, Albany, N. Y. Filed Feb. 18, 1931. Serial No. 516,710. 9 Claims. (Cl. 238—210.)

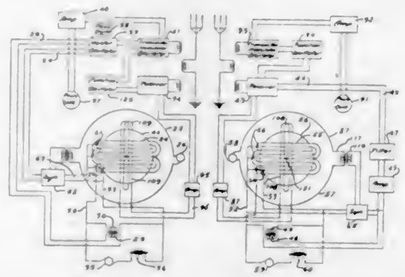


1. In a rail joint construction, in combination, a tie plate, a rail seat formed on said tie plate and provided with a plurality of raised portions for supporting the adjacent rail sections, one of said portions comprising a plane surface adapted to support the abutting ends of said rail sections and the other portions comprising transverse ridges providing substantially a line contact between the rail seat and the undersides of the base flanges of said rail sections at points spaced from the abutting ends thereof, a rib formed on the tie plate in spaced parallel relation to the rail, an overhanging flange formed on said rib, elongated spring keys substantially U-shaped in cross-section disposed horizontally between said rib and the rail and adapted to be compressed beneath said overhanging flange, one arm of each of said keys being longer than the other and adapted to bear upon the upper surface of a base flange of one of the rail sections above one of said ridges.

1,863,277. PROCESS OF MAKING BREAD, CAKES, AND OTHER PRODUCTS OF A SIMILAR NATURE. WILLIAM JAMES MCGROARTY, Toronto, Ontario, Canada, assignor to National Foods Limited, Toronto, Ontario, Canada, a Corporation of Canada. Filed Aug. 20, 1929. Serial No. 387,266. 2 Claims. (Cl. 99—11.)

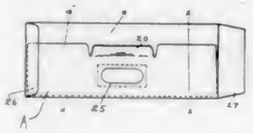
1. A method of making bread, cakes, and other products of a similar nature which comprises preparing an emulsified mixture of salt, sugar, milk, shortening, and yeast food, irradiating this emulsified mixture during emulsification with ultra-violet rays, preparing a yeast suspension and irradiating it with ultra-violet rays, adding the yeast suspension to the flour and water, and then incorporating the emulsified mixture in the dough at the commencement of mixing.

1,863,278. SYSTEM AND APPARATUS FOR THE ELECTRICAL PRODUCTION OF IMAGES. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 7, 1929. Serial No. 397,826. 24 Claims. (Cl. 178—6.)



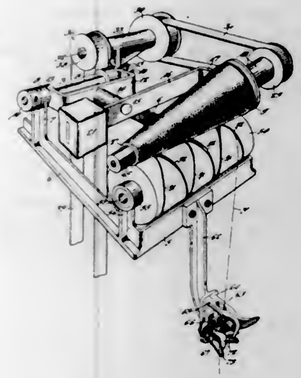
1. In an illuminating screen comprising an arc path, means for obtaining a magnetic field in which said path is located, and means for initiating an arc in said path, said path having stationary electrodes directing said arc along adjacent paths.

1,863,279. ENVELOPE. OSCAR J. OLM, St. Paul, Minn., assignor to Quality Park Envelope Company, St. Paul, Minn., a Corporation of Minnesota. Filed Oct. 7, 1926. Serial No. 140,067. Renewed May 11, 1932. 3 Claims. (Cl. 229—72.)



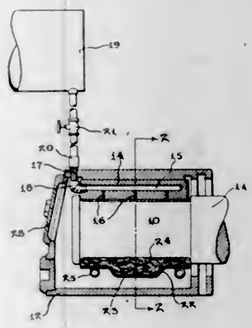
2. An envelope including overlapping side flaps constructing one wall of the envelope, a compartment formed in the said wall with the overlapping sides, and a non-projecting marginal flap formed by notching out portions of the margin of the overlapping sides of the envelope with arcuated portions at the corners and depth of the notched out portions.

1,863,280. TRAVERSING MEANS FOR WINDING MACHINES. EDWARD F. PARKS, Providence, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 13, 1931. Serial No. 529,827. 10 Claims. (Cl. 242—43.)



1. In a winding machine, the combination of means for rotating a package, and means for traversing yarn on the package, said traversing means comprising a rotary element having a yarn-receiving and -guiding groove extending helically of its circumference and arranged to be rotated by peripheral contact with the surface of the package.

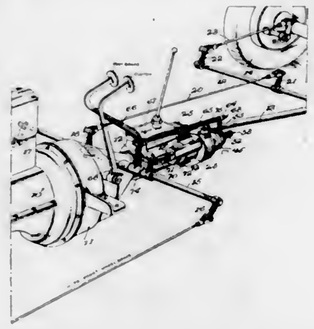
1,863,281. CAR JOURNAL LUBRICATOR. FRED RADCLIFFE, Scranton, Pa. Filed Apr. 1, 1929. Serial No. 351,556. 1 Claim. (Cl. 308—81.)



In combination with a car journal and bearing therefor, a supply tank in valved communication with the bearing, and a follower plate disposed diametrically opposite to the bearing and yieldingly impelled toward the journal, the follower plate being provided with a mat interposed between it and the journal, and having a depressed portion at the center filled with the material of the mat.

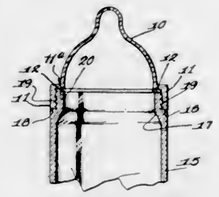
1,863,282. BRAKE OPERATING MECHANISM. FREDERICK HATHAWAY RAGAN, Cleveland, Ohio. Filed June 25, 1928. Serial No. 288,148. 17 Claims. (Cl. 188—140.)

1. A brake operating mechanism including a pair of driving members, a driven member, means under the control of the operator for moving the driven member by causing relative rotation between the driving and driven



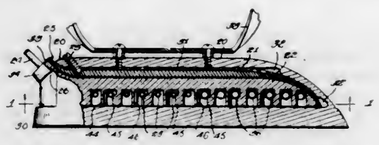
members, and connections between the driven member and the brakes whereby motion of the driven member will operate the brakes.

1,863,283. NURSING BOTTLE. ALMERIN E. ROGERS, Arlington, Calif. Filed Mar. 2, 1928. Serial No. 258,631. 1 Claim. (Cl. 215—11.)



A nursing bottle comprising a smooth body, with a short neck of slightly reduced diameter forming a narrow shoulder between said neck and body and above which shoulder the neck is exteriorly threaded, the mouth of the bottle having a flat surface; together with a rubber nipple having an enlarged lower portion recessed and threaded to provide an internal shoulder and a plain lower end, and a rubber gasket interposed between the internal shoulder of the nipple and mouth of the bottle, the plain lower end of the enlarged portion of the nipple bearing against the shoulder on the bottle to cooperate with the gasket in providing a double seal and the outer surface of said enlarged portion being flush with the outer surface of the bottle.

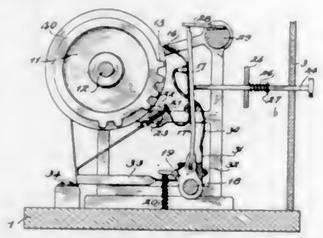
1,863,284. ELECTRIC SADIRON. MICHAEL A. ROLLMAN, Mount Joy, Pa. Filed Oct. 20, 1927. Serial No. 227,521. 4 Claims. (Cl. 219—25.)



4. An electric sad-iron consisting of an integral cast metal shell having a bottom plate, a top wall, and connecting side walls, said shell being grooved interiorly

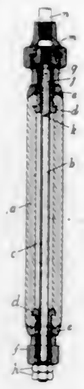
at the junction of the side walls with the base plate and also at the junction of the side walls with the top wall to thus thin these walls at these points to thus hinder the conduction of heat to the top wall of the shell.

1,863,285. SIGNAL TRANSMITTER. DANIEL T. SHAW, Portland, Me. Filed Aug. 18, 1928. Serial No. 300,535. 1 Claim. (Cl. 177—380.)



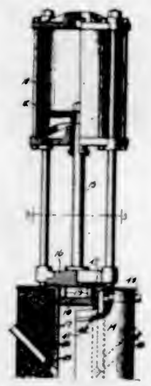
A signal transmitter comprising an insulating base, upright brackets on said base, a shaft mounted in said brackets and carrying a plurality of toothed discs, a motor for rotating said shaft and discs, a pivoted upright arm associated with each disc, spring contacts on said arms, a longitudinal rod in parallel relation to said shaft and carrying contacts for cooperation with the contacts on said arms, said contacts being mounted in sockets in said rod keys for moving said arms into contact-closing position, spring means for restoring said keys after actuation of said arms, gravity operated stops, one for each arm, for holding said arms in contact-closing position, and automatic means for releasing said arms after a predetermined rotation of said shaft and discs.

1,863,286. HYDRAULIC CARTRIDGE FOR USE IN MINING, QUARRYING, AND LIKE OPERATIONS. HENRY BERNARD SHEPPARD, Derby, England. Filed Dec. 18, 1931, Serial No. 581,926, and in Great Britain Nov. 19, 1930. 2 Claims. (Cl. 262—12.)



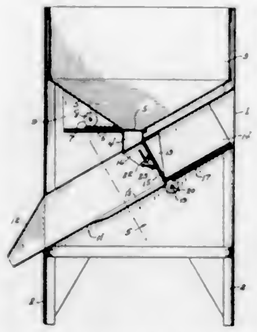
1. A hydraulic cartridge comprising a rigid non-extensible rod having a diameter of uniform cross section adjacent the ends thereof, thimbles adapted to be slid into place adjacent the ends of said rod, each of said thimbles having a raised portion at one end thereof constituting an abutment, an open-ended expansible container having its ends located behind the abutments on each thimble, a fluid duct in the rod for conducting fluid to the interior of the container, clamping members movable upon the thimbles to hold the ends of said expansible member in fluid-tight relation with said abutments, means mounted adjacent the one end of the rod to prevent endwise movements of one of the thimbles and to lock one of said clamping means in clamping engagement with the end of said expansible member, and holding means for the other thimble at the opposite end of said rod.

1,863,287. CARBON DIOXIDE ICE MACHINE. NORMAN M. SMALL, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1929. Serial No. 394,346. 3 Claims. (Cl. 62—121.)



1. A carbon dioxide ice machine comprising a chamber, an expansion nozzle projecting into the chamber, a head held against an end of the chamber, said head having a spaced plate extending within the chamber, a port in said plate, a plunger for closing said port and a piston movable in the other end of the chamber to compress snow in the chamber to compact it into a block of ice said piston serving also as an ejector for the block of ice when the head is removed from the chamber, substantially as set forth.

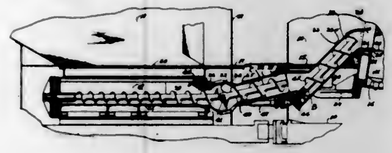
1,863,288. SELF-WEIGHING BIN. WILLIAM V. SPROLES, La Feria, Tex. Filed Jan. 18, 1930. Serial No. 421,744. 1 Claim. (Cl. 221—111.)



A device of the class described comprising a casing, a hopper in the upper end thereof, a diagonally arranged chute in the casing under the hopper and having an opening in its top registering with the discharge end of the hopper, a partition in the chute immediately in rear of the opening therein, a container slidably arranged in the chute and having a door in its front end, manually operated means for adjusting the container in the chute to space its front end varying distances from the partition

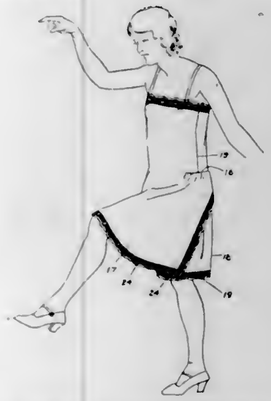
or to place said front end against the partition, a front extension at the top of the container for closing the hopper discharge when the front end of the container is against the partition, means for indicating the distance the container must be adjusted to receive a certain amount of material and manually operated means for opening the door.

1,863,289. LOCOMOTIVE STOKER. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed July 13, 1929. Serial No. 377,933. 6 Claims. (Cl. 110—101.)



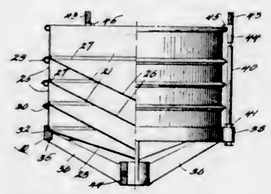
1. In combination, a locomotive having a firebox provided with a firing opening, a tender for said locomotive having a fuel bin, a fuel feeding conduit system comprising a trough fixed on said tender in open communication with the fuel bin to receive fuel therefrom, a forward single tubular conduit section fixed to the locomotive and being open at its upper forward end to deliver fuel directly into the lower portion of said firing opening, and an intermediate conduit universally secured at its rearward end to said trough in end to end relation therewith and having its forward end flexibly mounted with and being in direct communication with the lower portion of said forward conduit section, the front end of the intermediate conduit being offset from and immediately above the lower end of the forward conduit section, a conveying means within said feeding conduit system comprising jointed rear and intermediate sections and a forward separate section, the intermediate conduit being inclined upwardly from the front end of the trough and the forward conduit being inclined upwardly with respect to the intermediate conduit, and means at the upper end of the forward conduit for receiving the fuel therefrom and scattering it over the fire in aerial paths.

1,863,290. SLIP. ADELE G. WEATHERLY, Minneapolis, Minn. Filed Nov. 12, 1928. Serial No. 318,782. 3 Claims. (Cl. 2—73.)



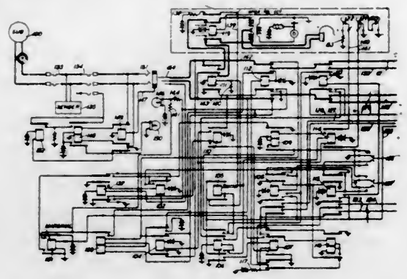
1. A lady's under-slip garment comprising, a two-piece member formed with front and back panel portions, said back panel portion having a comparatively straight panel-like formation from end to end and said front portion formed with projecting skirt hip flaps on either side of the skirt portion of said slip, each of said portions being secured together with a longitudinal seam from the upper edge to the hip line and the hip flaps of the front portion being gathered along the hip line transversely of the garment and attached along the hip line transversely of the back portion to cause the hip flaps to overlie the skirt of the back portion and hang straight longitudinally therewith.

1,863,291. TESTING SCREEN. WILLIAM STEVENSON WESTON, Columbia, S. C. Filed Nov. 3, 1928. Serial No. 317,101. 4 Claims. (Cl. 209—405.)



1. A sieve for use in a testing screen comprising a cylindrical retaining wall, and a conical, perforated sifting portion, said conical portion being connected adjacent the base thereof to one end of the cylindrical portion and being provided with an annular rolled flange extending outwardly of the point of connection with the cylindrical portion and constituting a means of support for the sieve.

1,863,292. TELEPHONE SYSTEM. WILEY WHITNEY, Bloomfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1930. Serial No. 505,823. 20 Claims. (Cl. 179—27.)

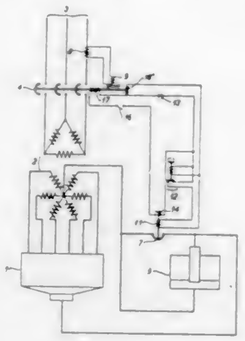


1. In a telephone system, a link circuit, a selector switch in which said link circuit terminates, a plurality of trunk circuits to which said switch has access, means controlled over the test brush of said switch for controlling the hunting movement thereof to cause said switch to connect said link with an idle trunk, a supervisory signal in said link circuit and means for controlling said signal over said test brush.

1,863,293. ELECTRIC CURRENT RECTIFYING CONTROL SYSTEM. STEFAN WIDMER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 3, 1930, Serial No. 449,666, and in Germany May 21, 1929. 6 Claims. (Cl. 175—363.)

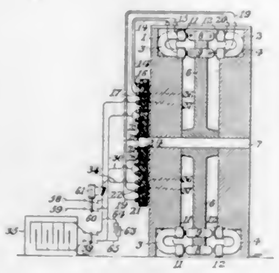
1. In an electric power rectifying system, a power circuit including a source of alternating current, a rectifier of the metallic vapor type, a transformer supplying said rectifier, a circuit breaker connecting said source of cur-

rent and said transformer, said circuit breaker having an auxiliary contact member, and a direct current consuming device connected with said rectifier and with said transformer; and a control circuit including a short-circuiting switch for said current consuming device, said switch having an auxiliary contact member, a circuit for controlling opening of said circuit breaker, a circuit controlled



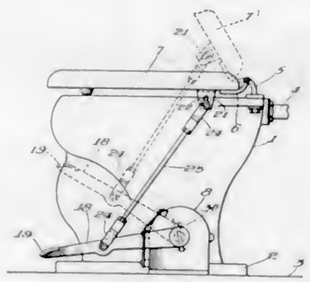
by the auxiliary contact member of said circuit breaker for closing said switch, a circuit for controlling the closing of said circuit breaker, and a switch included in said last-mentioned circuit, said last-mentioned circuit being controlled by the auxiliary contact member of said switch and by said last-mentioned switch, said last-mentioned circuit being arranged to be closed only when said short-circuiting switch is opened.

1,863,294. ELECTRIC MOTOR. LOUIS FRANCIS BOGIA, Philadelphia, Pa., assignor of one-third to William A. Weaver and one-third to Walter Pincus, Philadelphia, Pa. Filed Apr. 14, 1928. Serial No. 269,904. 5 Claims. (Cl. 172—36.)



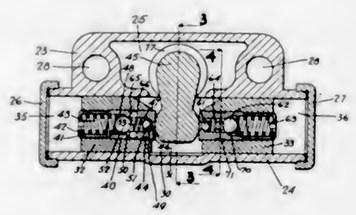
1. In a rotary motor, the combination with a rotor including two circular series of permanent magnets, of the straight type, extending in parallel relation with the axis of the rotor; the poles of one series being reversed with respect to the poles of the other series; of a stator comprising two stationary circular series of permanent magnets, of the horse-shoe type, with the poles of each disposed in radially spaced relation with reference to the axis of said rotor, and in correspondence with the magnets of said rotor; the poles of the two series being opposed in such spaced relation as to permit the rotor to turn between them; the poles of said stator magnets being of opposite polarity to the adjacent poles of the rotor magnets; electrically operative means arranged to momentarily substantially neutralize the externally manifest magnetic force of said stator magnets, when the rotor magnets are substantially at the limit of their approach thereto, and to render such neutralizing means inoperative, when the magnets of said rotor are substantially at the limit of their recession from the stator magnets, including a commutator carried by said rotor, comprising a circular series of segments, and conductors connecting certain of said segments, coil brushes in cooperative relation with said commutator, and conductors connecting said coils in series and with said brushes; supply brushes, in cooperative relation with said commutator; and a source of energy in connection with said supply brushes.

1,863,295. TOILET SEAT APPLIANCE. JOSEPH J. BUKOVITZ, Chicago, Ill. Filed Feb. 12, 1931. Serial No. 515,248. 5 Claims. (Cl. 4—251.)



1. In a toilet seat swinging device comprising in combination, a housing, a shaft rotatably mounted in said housing, means in said housing for rotating said shaft, a lever mounted upon said shaft, means connecting said lever and a toilet seat to swing said seat upon rotation of said shaft, and means for retaining said lever in a predetermined angular position against the force of the shaft rotating means.

1,863,296. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 18, 1930. Serial No. 461,965. 15 Claims. (Cl. 188—88.)

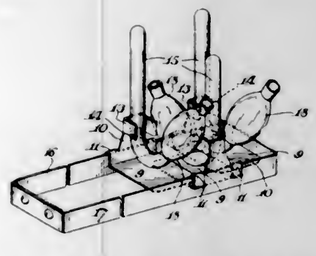


1. A shock absorber comprising, in combination, a casing providing a cylinder; a piston in said cylinder; a wearpiece carried by the piston; a valve-seat provided by the wearpiece; a piston operating member engaging the wearpiece; a valve in the wearpiece; and a spring yieldably urging the valve into engagement with the valve-seat in the wearpiece and the wearpiece toward the operating member.

1,863,297. SUPPORTING MEANS FOR FERMENTATION TUBES AND THE LIKE. HARRIS COMER, Cynwyd, Pa. Filed Aug. 20, 1930. Serial No. 476,528. 1 Claim. (Cl. 211—74.)

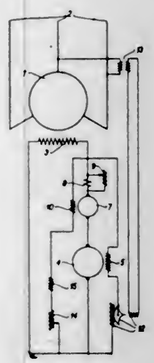
A tube engaging element having a tube supporting portion lying in a horizontal plane, a vertical portion

rising from the margin of the horizontal portion and provided with a clip adjacent the lower end thereof for disengageable connection to a common supporting frame,



the upper end of said vertical portion being reduced in width and provided with two substantially parallel horizontal arms for clamping the neck of the tube.

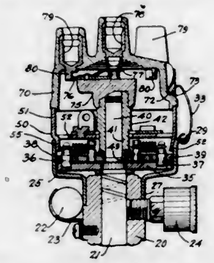
1,863,298. ELECTRIC GENERATOR REGULATING SYSTEM. GEORGES COURVOISIER, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed July 23, 1930, Serial No. 469,951, and in Germany July 26, 1929. 3 Claims. (Cl. 171—119.)



1. In a system for regulating the excitation of a generator, an electric current generator, a main exciter for said generator, a regulator actuated responsive to the output voltages of the said generator operative to control the operation of said main exciter to maintain a substantially constant voltage delivery by said generator, a transformer connected with said generator and supplying the operating voltage to said regulator, an auxiliary exciter operable to supply a voltage in addition to that supplied by said main exciter when required by load changes on said generator, said auxiliary exciter having a series winding and a shunt winding in equalizing opposition during constant load on said generator.

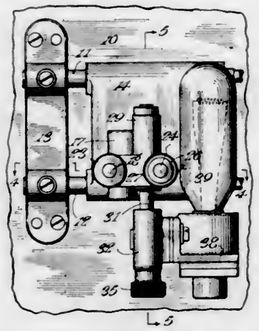
1,863,299. IGNITION DEVICE. CHARLES HALL DAVIS, Jr., Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 29, 1930. Serial No. 456,982. 3 Claims. (Cl. 200—19.)

1. An ignition device comprising, in combination, a base housing having angular ears struck from its peripheral edge, forming diametrically opposite gaps in the side of said housing; a top housing having angular ears struck from the bottom wall thereof which telescopically engage the base housing and enter the gaps therein properly to locate the top housing upon the base housing and to close said gaps; a distributor cap fitting upon



the top housing; and hooks secured to the ears and engaging the cap to hold it upon the top housing and the latter upon the base housing.

1,863,300. SUPPORT AND ADJUSTMENT FOR SPEAKING MOVIE EXCITER LAMPS. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,313. 2 Claims. (Cl. 240—44.2.)

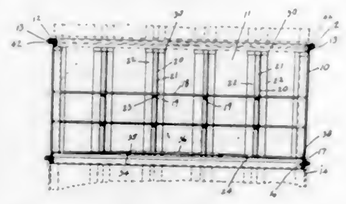


1. An adjusting and supporting device which comprises a mechanism supporting partition, a plurality of rods disposed thereon, a frame slidably supported on said rods, a plurality of rods extending from said frame, a second frame disposed thereon, one of said second mentioned rods engaged with one of the first mentioned set of rods and movable thereby to slide the first frame along its supporting rods, a lamp support disposed adjacent the second frame, a plurality of rods extending from the second frame to the lamp support, means on one of said last mentioned rods to engage one of the rods extending from the first frame to the second frame whereby to slide the second frame along its supporting rods, and means permitting the engagement of another of the rods extending from the second frame to the lamp support with the said rod extending from the first frame to the second frame to cause a movement of the lamp support in a plane at right angles to the movement of the other two frames when the said rod extending from the first to the second frame is turned.

1,863,301. CONTAINER FOR MILK BOTTLES AND THE LIKE. JAMES C. FARRINGTON, La Fayette, Ind. Filed Aug. 11, 1930. Serial No. 474,353. 7 Claims. (Cl. 220—21.)

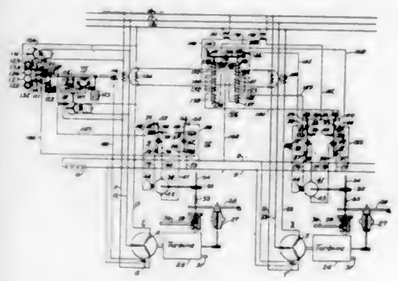
1. A light gauge sheet metal box suitable for the purpose described, including side and end walls arranged in box outline, a bottom bar having a similar outline,

a top rod having an outline of slightly greater length than but similar to the bar outline, the side and end walls being turned angularly at the top and bottom for bar and rod anchorage, and stop portions secured to the



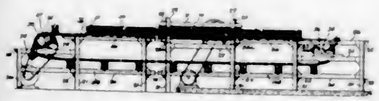
inner side of the end and side walls and extending upwardly from adjacent the bottom toward and terminating short of the top thereof for supporting the bar of a superposed box when in stacked relation and reinforcing said side and end walls.

1,863,302. REGULATOR SYSTEM. RALPH A. GEISELMAN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 22, 1930. Serial No. 483,490. 11 Claims. (Cl. 290—4.)



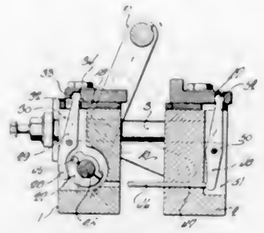
2. In combination, a plurality of electric generators connected to supply power to a power system, a prime mover for driving each generator, a speed governor for controlling the prime mover associated with each generator, means for varying the setting of one of said governors and the output of its associated generator in response to a change in the frequency of said system and means actuated by the change in the generator output for effecting a change in settings of the other governors for changing the outputs of the other generators to maintain the frequency of the system substantially constant and a predetermined load division between the generators.

1,863,303. APPARATUS FOR TRIMMING FLAT PARTS. LOUIS C. GOAD, Muncie, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 26, 1930. Serial No. 439,058. 2 Claims. (Cl. 164—51.)



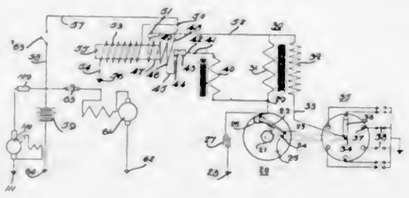
1. Apparatus for trimming flat parts such as battery grid separators comprising, in combination, spaced, parallel cutting members, a chain conveyor having its links provided with plane surfaces upon which a row of parts may be placed, certain equi-spaced links carrying two oppositely facing, relatively stationary and movable clamping plates, a lever carrying a roller and connected with the movable clamping plate, a track engageable with the roller to cause the movable plate to move into clamping position while the parts are being conveyed between the cutting members, and a spring for urging said lever toward its normal inoperative position.

1,863,304. MOLD. JOHN GRAVES, Milwaukee, Wis., assignor to Globe-Union Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 2, 1931. Serial No. 506,113. 11 Claims. (Cl. 22—153.)



2. A mold comprising relatively movable mold parts adapted when closed to provide a mold cavity and when open to provide for a release of the casting from the mold cavity, a gate shear, a single operating handle, and means actuated by the operating handle and connected to the mold parts and to the gate shear to cause initial operation of the gate shear and subsequent opening of the mold when the handle is moved in one direction.

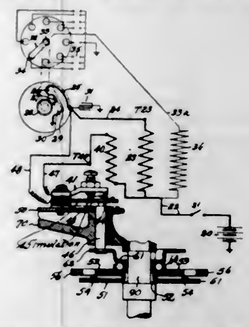
1,863,305. IGNITION APPARATUS. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,804. 4 Claims. (Cl. 123—148.)



1. Ignition apparatus comprising in combination an ignition coil including a primary winding, a current source, a circuit interrupter for controlling the passage of current from the source through the primary winding, a booster induction coil and means responsive to the wattage output of the current source to the primary winding for controlling the connection between the booster coil and primary winding.

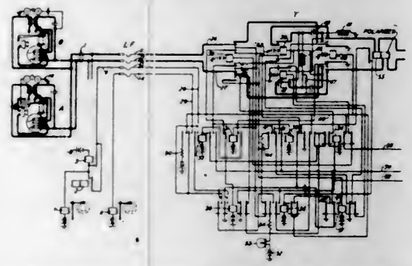
1,863,306. IGNITION APPARATUS. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Jan. 5, 1931. Serial No. 506,693. 5 Claims. (Cl. 123—148.)

1. Ignition apparatus comprising, in combination, an ignition coil having a primary winding, an interrupter in series with the primary winding and including a movable contact and a rotary cam for operating it, a booster inductive winding, a shaft for driving the cam, speed responsive means for connecting the shaft and cam and for varying the angular relation between them, and a



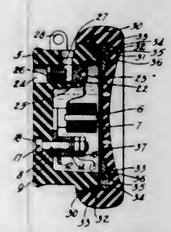
second speed responsive means driven by the first speed responsive means for rendering the inductive winding effective to assist the primary winding.

1,863,307. TELEPHONE EXCHANGE SYSTEM. HENRY HOVLAND, Williston Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 27, 1931. Serial No. 511,511. 7 Claims. (Cl. 179—8.5.)



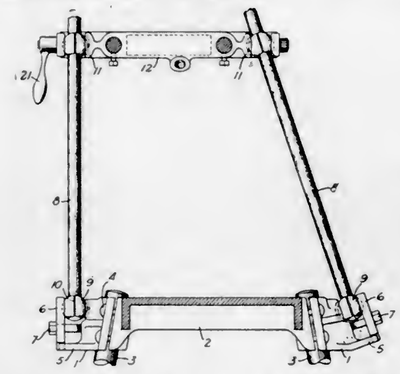
1. In a telephone system, a line having a plurality of subscribers' stations permanently connected thereto, a reverting-call selector for use when the subscriber at one of said stations calls another of said stations, means including a trunk for extending said line to said selector, means associated with said trunk for testing said line to determine which of said stations is the calling station, means for indicating the result of said test to said selector, and means associated with said selector for determining the station at which the call is answered.

1,863,308. RECEIVER. WARREN C. JONES, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 12, 1928. Serial No. 284,793. 10 Claims. (Cl. 179—117.)



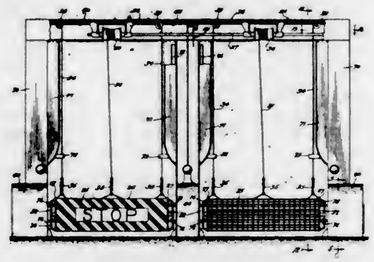
2. A telephone receiver comprising a diaphragm, a core and a coil surrounding a portion of said core for variably energizing said diaphragm, said core being of a material in which saturation sets in abruptly and dimensioned so as to become saturated upon abnormal energization of said diaphragm through said coil.

1,863,309. MOTION PICTURE PROJECTOR. HOWARD L. KITTS, Grant City, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,781. 2 Claims. (Cl. 248—47.)



1. In a motion picture projector in combination, a base, a plurality of sockets supported by said base, a plurality of supports terminating in balls seated in said sockets, a bracket supported by said base, other sockets supported by said bracket, a plurality of balls seated in said other sockets and slidably mounted on said supports, and means to simultaneously clamp all said slidable balls on their respective supports.

1,863,310. RAILROAD CROSSING GATE. ELMER C. KRAGE, Elmhurst, Ill., assignor of one-half to Edward F. Stuenkel, Highland Park, Ill. Filed June 27, 1930. Serial No. 464,190. 20 Claims. (Cl. 39—7.)

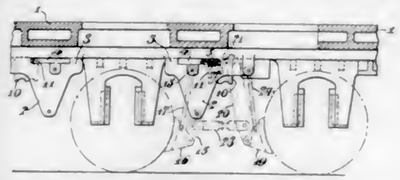


1. A railroad crossing gate embodying a gate proper, means embodying a motor for raising and lowering the gate, means operating automatically to render the raising and lowering means inactive with respect to the gate when the latter reaches the limit of its movement in the respective directions, and means for automatically reversing the direction of operation of said raising and lowering means while the direction of operation of the motor remains constant.

1,863,311. CAST STEEL UNDERFRAME FOR RAILWAY CARS. MARK H. MARTIN, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Oct. 30, 1930. Serial No. 492,187. 7 Claims. (Cl. 188—206.)

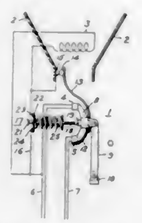
1. An integral cast metal underframe for a railway car structure or the like comprising projections upon the

under side thereof which extend downwardly therefrom, which projections are located in spaced relation to each



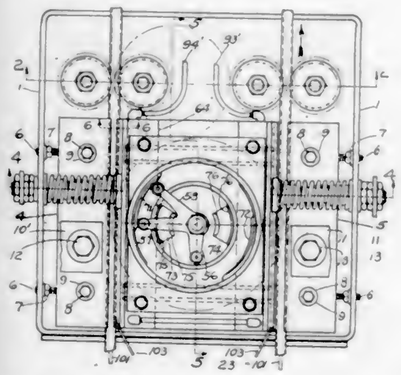
other near the opposite side edges of the said underframe and each of said projections being provided with a horizontal slot within which slots a brake bar is mounted.

1,863,312. TRANSFER CONTACT. RURIC C. MASON, Princeton, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1928. Serial No. 278,974. 4 Claims. (Cl. 200—147.)



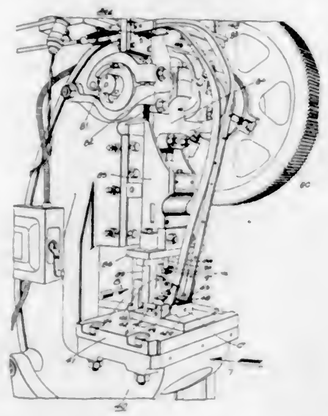
1. The combination, in a circuit interrupter having arcing contacts associated with an arc-quenching means that employs a blowout magnet to move the arc into the said means, of arcing means shunted across the winding of said magnet for by-passing the current therefrom while the circuit interrupter is closed and means actuated by the circuit interrupter to operate said arcing means to insert said winding in series with said arcing contacts before they are opened, said arcing means being connected in series with said arcing contacts.

1,863,313. APPARATUS FOR WELDING TUBING. COURTNEY N. MITCHELL, Cleveland Heights, Ohio. Filed Feb. 24, 1930. Serial No. 430,693. 7 Claims. (Cl. 219—6.)



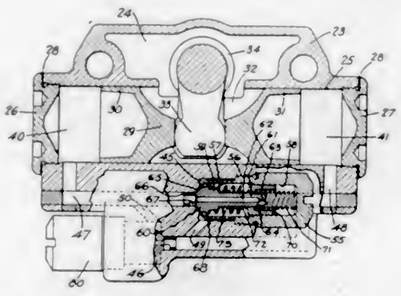
1. In a mechanism for welding longitudinal seams, the combination with a fixed electrode, of means for intermittently moving the material to be welded across the face of said electrode, a movable electrode, means adapted to intermittently move said last-named electrode, into welding relationship with said material, and means adapted to engage said movable electrode for supplying a welding current thereto during its engagement with the work to be welded.

1,863,314. ASSEMBLING APPARATUS. ALVA W. PHELPS and NORMAN L. PENN, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 6, 1930. Serial No. 433,677. 19 Claims. (Cl. 29—84.)



1. Apparatus for assembling a screw with a part having a recess for receiving the head of the screw, comprising in combination, a work holder for holding the part, means for locating the screw with its axis parallel to the longer axis of said part and means for pressing the screw sidewise from this parallel position into one in line with the part in which it is to be inserted to cause its head to enter said recess in such a manner that the axis of the screw is coaxial with the longer axis of said part.

1,863,315. SHOCK ABSORBER. EDWIN F. ROSSMAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 30, 1930. Serial No. 471,680. 9 Claims. (Cl. 188—88.)



1. A relief device for a chamber containing a fluid which is subject to variations in pressure; comprising, a housing; a valve in said housing; a piston in said housing; springs yieldably maintaining the valve and piston in proper normal position relative to each other and to the housing, a spring of comparatively greater tension than the other springs mentioned, interposed between the valve and piston, said spring being shorter than the normal distance between the valve and piston.

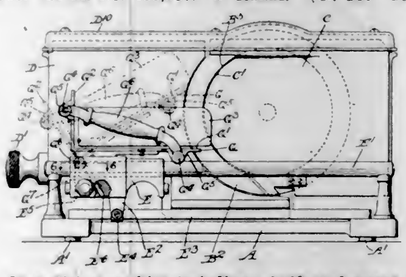
8. A double acting hydraulic shock absorber comprising, a fluid containing cylinder having a relief port communicating with each end thereof; a piston reciprocable in said cylinder forming a compression chamber at each end thereof; a fluid flow controlling device for each cylinder port each device comprising a housing containing a tubular valve for the port; a spring yieldably urging the valve into port closing position when the piston is in neutral position and adapted to yield in response to initial compressive movement of said piston to establish a flow of fluid around said valve into the port of the other fluid flow controlling device and through said valve into its respective housing; and a plunger slidably supported in the housing and fitting about the tubular valve, operated in one direction by a certain fluid pressure through said valve to urge said valve toward the port to reduce the flow of fluid around said valve, and to establish a passage for the escape of fluid flow through said valve; said plunger being moved in the other direction and out of engagement with its respective valve in response to fluid pressure in the port of the other cylinder end to establish a flow of fluid from said port around and through its respective tubular valve and into the port of its respective fluid flow controlling device.

1,863,316. TRACTION MAT. TOWNER K. WEBSTER, Jr., Winnetka, Ill. Filed Dec. 24, 1930. Serial No. 504,589. 3 Claims. (Cl. 238—14.)



1. A traction mat comprising a sheet metal shoe portion having a plurality of diagonally upwardly extending sharp projections, said shoe being sufficiently pliable to conform to the shape of a vehicle tire, a strip of flexible material having one of its ends secured to said shoe, and a plurality of studs secured to said strip and projecting from the opposite sides thereof.

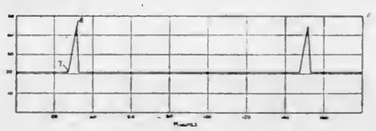
1,863,317. SLICING MACHINE. WALLACE B. WOLFF, Chicago, Ill., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Original application filed June 26, 1929, Serial No. 373,705. Divided and this application filed Mar. 6, 1930. Serial No. 433,537. 2 Claims. (Cl. 146—102.)



1. In a slicing machine including a knife and means for actuating it, a carriage and means for guiding the carriage across the face and past the cutting edge of the knife, a work support adapted completely to underlie and entirely to support the work out of contact with the carriage, a member associated with said support, adapted to penetrate the carriage and to hold the support in work supporting position, the upper surface of the carriage

being provided with a plurality of converging apertures to receive it selectively in a plurality of positions with the work support lying at different angles in relation to the horizontal, depending upon the apertures penetrated.

1,863,318. METHOD OF CALCINING GYPSUM. WALTER AMOSS, Buffalo, N. Y., assignor to Structural Gypsum Corporation, Linden, N. J., a Corporation of Delaware. Filed Jan. 13, 1930. Serial No. 420,469. 4 Claims. (Cl. 222—6.)



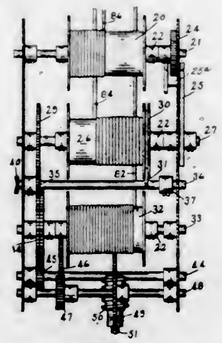
1. A method of calcining gypsum which comprises charging a mass thereof into a kettle, continuously stirring the same by means of an electrically driven device, passing the current therefor through an ammeter, continuously heating the material until the amperage rises to a predetermined figure due to the increased resistance to stirring and then dumping the charge.

1,863,319. HEAD REST. ROBERT C. ANGELL, Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 23, 1929. Serial No. 349,352. 8 Claims. (Cl. 155—177.)



1. A head-rest assembly comprising a head-rest carrier having a tang and a support having a clamp, comprising a head rotatably associated with relatively movable members rotatable with respect to said head and in which said tang may be adjustably engaged, toggle means disposed between said head and associated members, and means arranged to draw said members together towards said head to effect actuation of said toggle means and thereby rigidly engage said tang in adjusted relation with respect to said support.

1,863,320. TOY. EDWARD N. ANKETELL, New Haven, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed May 27, 1927. Serial No. 194,813. 10 Claims. (Cl. 254—184.)



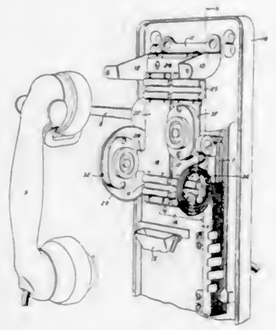
2. A toy of the type described having a hoisting unit, comprising a pair of detachably connected side plates, a pair of drums, each drum being rotatably mounted be-

tween said side plates, a gear rotatable with each drum, and a pinion continuously in mesh with one of said gears and adapted to be drivingly engaged and disengaged with the other gear.

1,863,321. FIRE EXTINGUISHER CHARGE. RALPH W. AUSTIN, Weymouth, Mass. Filed July 18, 1931. Serial No. 551,801. 2 Claims. (Cl. 23—9.)

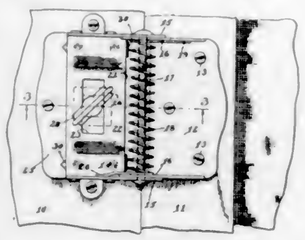
1. In a fire extinguisher, a carbonate solution capable of withstanding a temperature as low as −40° F., comprising a solution of so-called "technical" potassium carbonate, in sufficient amount to impart to the solution a gravity of at least 1.400.

1,863,322. TELEPHONE PAY STATION. ARTHUR F. BENNETT, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 22, 1931. Serial No. 552,345. 10 Claims. (Cl. 179—6.3.)



1. In a telephone pay station, a plurality of sound signals adapted to be operated by coins of different denominations, a sound translating device associated with each signal and a resilient sound absorbing connection between said translating devices.

1,863,323. DETACHABLE SPRING HINGE. CELESTIN BERNE, Bridgeport, Conn., assignor of one-half to Maurice Daniells, Milford, Conn. Filed Jan. 27, 1932. Serial No. 589,160. 5 Claims. (Cl. 16—181.)



1. A detachable spring hinge, comprising in part, two leaf members hingedly connected together, the base portion of one of the said leaf members including a deflected yieldable portion provided with an opening therethrough, a yieldable retaining-plate for permanent attachment to a door frame, upon which the said deflected leaf is positioned, and clamping means carried by said plate and adapted to enter the opening and be operated to clamp the deflected leaf and plate together.

1,863,324. STITCHLESS GARTER CLASP. MORRIS M. BESKIND and JACK MAYPER, Brooklyn, N. Y., assignors to Washington Garter Corp., New York, N. Y., a Corporation of New York. Filed Apr. 6, 1932. Serial No. 603,568. 4 Claims. (Cl. 24—245.)

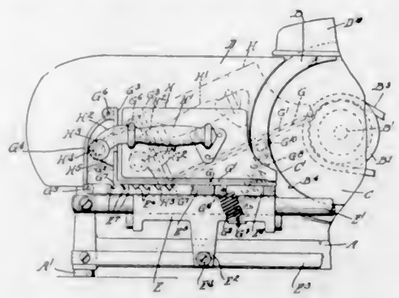


1. In a stitchless garter clasp the combination of a slide provided with two slots, a button plate provided with a slot, a button thereon, a loop adapted to engage said button and a web, a tip on said web, said web passing through one slot in said slide, then through the second slot in said slide, downwardly and through the slot in the button plate, then up and again through a slot in the slide and then through the second slot in said slide with the tipped end lying between reaches of web, and means for swingingly securing the loop to the slide.

1,863,325. CORE FOR ELECTRIC INDUCTION COILS. LESLIE GIDDENS BRAZIER and JAMES URMSTON, London, England. Filed Aug. 28, 1929, Serial No. 389,096, and in Great Britain Sept. 14, 1928. 1 Claim. (Cl. 175—21.)

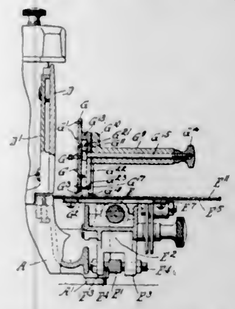
A core for an electric induction coil comprising powdered magnetic material and insulating material for separating the magnetic grains, mixed together and consolidated by high pressure, in which the insulating material is unfused osmotic kaolin.

1,863,326. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed July 5, 1929. Serial No. 375,962. 5 Claims. (Cl. 146—102.)



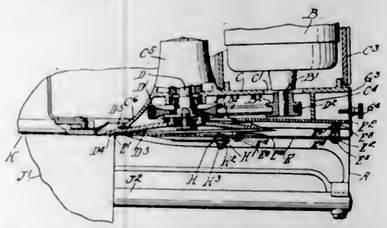
1. In a slicing machine having a knife and means for actuating it, a carriage and means for guiding it past the cutting edge of said knife, a work support mounted upon said carriage and means for adjusting said work support selectively into a horizontal plane and into a plane inclined from the horizontal, including a link to which said work support is pivoted, said link in turn being pivoted to the carriage, a plurality of abutments on said carriage, and a member on said support adapted selectively to engage said abutments.

1,863,327. PUSHER PLATE FOR SLICING MACHINES. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed July 5, 1929. Serial No. 376,071. 1 Claim. (Cl. 146—102.)



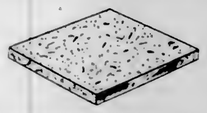
In a slicing machine, a rotary knife, a carriage and means for guiding said carriage along a path across the face of the knife, a pusher plate support mounted for movement on said carriage toward and away from the face of the knife and a pusher plate vertically adjustably mounted thereupon, the connection between pusher plate and pusher plate support including a wedge block on one of said members opposed to a wedge cavity in the other, and locking means for drawing said block into said cavity.

1,863,328. GUARD PLATE AND GUARD PLATE SUPPORT FOR SLICING MACHINES. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed July 12, 1929. Serial No. 377,842. 7 Claims. (Cl. 146—102.)



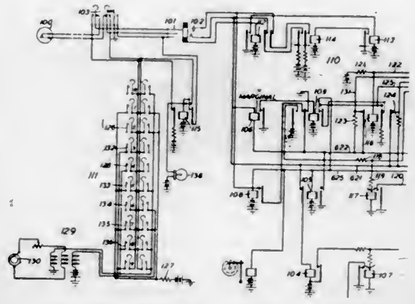
5. In a slicing machine, a motor, a rotary knife, a driving connection between knife and motor, a removable guard plate for the forward face of the knife, and a supporting plate for said guard plate, said supporting plate being interposed between the knife and the driving connection.

1,863,329. INSULATING PRODUCT AND METHOD OF PRODUCING SAME. CYRUS F. LOGAN, Washington, D. C., and CHARLES F. MAHNKE, Moose Lake, Minn.; said Logan assignor to Sedge Products Company, Packwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 22, 1930. Serial No. 477,178. 5 Claims. (Cl. 154—28.)



1. A block of insulating material comprising dried naturally matted and intertangled and tightly interlaced fibers formed only from the live root portions of the water sedge, in which the main roots extend in the direction of shortest dimension of the block, and in which the reproductive ability of said dried root portions has been rendered extinct.

1,863,330. TELEPHONE EXCHANGE SYSTEM. CHARLES DE VRIENDT, Paris, France, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 1, 1931, Serial No. 560,543, and in France Nov. 21, 1930. 20 Claims. (Cl. 179—27.)



1. In a telephone exchange system an operator's position, an impulse dial and a keyset at said position, a trunk circuit and switching mechanism for extending connections from said position, sending mechanism for controlling said switching mechanism having registers for recording the designations of desired connections, and means for controlling said registers from said dial or from said keyset.

1,863,331. PROCESS OF MAKING COLLOIDAL DISPERSIONS OF INSOLUBLE COLORS IN ORGANIC MATERIALS. ANTHONY JAMES HAILWOOD, ARNOLD SHEPHERDSON, and ALEXANDER STEWART, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed Sept. 5, 1929, Serial No. 390,652, and in Great Britain Sept. 12, 1928. 21 Claims. (Cl. 252—6.)

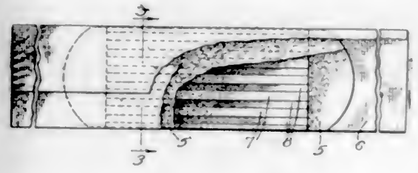
1. In the manufacture of colored organic materials having colloidally dispersed therein an insoluble color, the process which comprises forming an aqueous emulsion and dispersion comprising water, an emulsified water insoluble organic liquid material and a colloidally dispersed insoluble color, breaking the said emulsion and separating the water from the said organic material and said insoluble color, thus producing a colored mass of organic material having colloidally dispersed therein said insoluble color.

1,863,332. PROCESS OF MAKING COLLOIDAL DISPERSIONS OF INSOLUBLE COLORS. ANTHONY JAMES HAILWOOD, ARNOLD SHEPHERDSON, and ALEXANDER STEWART, Manchester, England, assignors to Imperial Chemical Industries Limited, Westminster, England. Filed Apr. 2, 1931, Serial No. 527,346, and in Great Britain Sept. 12, 1928. 8 Claims. (Cl. 252—6.)

1. In the manufacture of colored organic materials having colloidally dispersed therein an insoluble color, the process which comprises forming an aqueous emulsion of a water insoluble organic liquid material, adding to said aqueous emulsion an aqueous solution of diazotized 2-chloro-4-toluidine-5-sulphonic acid, adding to aqueous mixture thus produced an aqueous solution of betanaphthol, thus producing an aqueous mixture comprising water, an emulsified organic material and a colloidally dispersed insoluble azo dyestuff, breaking the emulsion

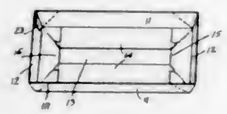
and separating the water from the said organic material and said insoluble azo dyestuff, thus producing a colored mass of organic material having colloidally dispersed therein said insoluble azo dyestuff.

1,863,333. ABSORBENT PAD. WINIFRED C. HEITMEYER, Appleton, Wis., assignor, by mesne assignments, to International Cellucotton Products Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 412,974. 7 Claims. (Cl. 128—290.)



1. In an absorbent body, means for controlling the direction in which absorption spreads from the locus of application of the absorbed fluid, comprising a plurality of co-planar parts in which the body is compressed so as to increase the capillarity of said parts relative to the capillarity of the balance of the body, said parts being elongated in the desired direction of spreading.

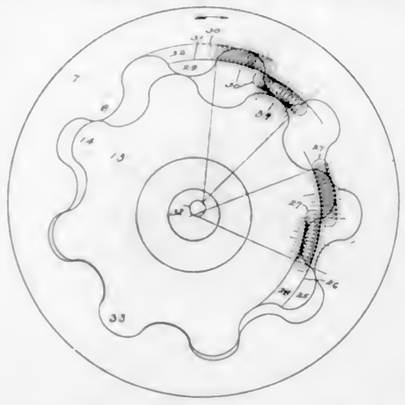
1,863,334. OPEN BOTTOM VENTILATED PAPER TRAY AND PROCESS FOR MAKING THE SAME. JOSEPH J. HESS, Indianapolis, Ind., assignor to International Printing Company, Indianapolis, Ind., a Corporation. Filed Nov. 11, 1929. Serial No. 406,185. 2 Claims. (Cl. 229—39.)



1. A blank for a rectangular tray having scored portions in successive relation for the two ends and two sides of the tray, a bottom portion in scored connection with each side portion with its ends beveled substantially 45° and with a longitudinal slit in each end thereof, and the bottom end portions being rectangular and in scored connection with the ends of the tray and adapted in forming the tray to enter said slits in the ends of the longitudinal bottom portions, substantially as set forth.

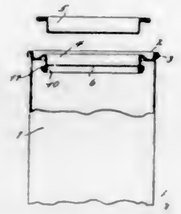
1,863,335. ROTARY PUMP. EBENEZER HILL, South Norwalk, Conn., assignor to The Hill Compressor & Pump Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 20, 1922. Serial No. 607,947. 9 Claims. (Cl. 230—141.)

1. A rotary pump comprising a casing having intake and discharge openings and co-operating eccentrically arranged internal and external pump gears rotatable in the casing, the entire engaging faces of the teeth of said gears being formed on epicycloidal and hypocycloidal curves, the height and depth from the pitch circles of



the teeth being the same but the chords of the curves of the external gear are longer than the chords of the curves of the internal gear.

1,863,336. CAN CLOSURE. LEONARD HIRSCH, Lyndhurst, and EDWIN A. HARRISS, Orange, N. J., assignors to R. B. Davis Company, Hoboken, N. J., a Corporation of New Jersey. Filed Feb. 4, 1930. Serial No. 425,748. 2 Claims. (Cl. 220—27.)

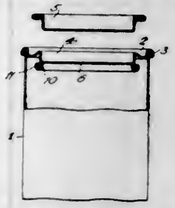


1. A can closure having a recess surrounded by a vertically extending wall of sheet material, the lower edge of said wall being turned outwardly and upwardly to constitute a wall edge portion outside the main portion of the wall, and a sealing member extending across said recess and having an edge portion extending over said wall edge portion and between said wall edge portion and the main portion of the wall and in close contact with both of them.

1,863,337. METHOD OF MANUFACTURING CAN CLOSURES. LEONARD HIRSCH, Lyndhurst, and EDWIN A. HARRISS, Orange, N. J., assignors to R. B. Davis Company, Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 4, 1930. Serial No. 441,446. 5 Claims. (Cl. 113—121.)

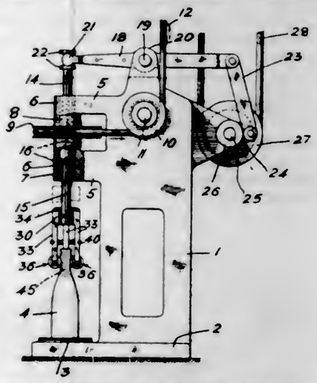
1. The method of manufacturing a can top which comprises forming a one-piece nonfrangible blank with a centrally disposed recess having a bottom connected to a peripheral wall spaced from the edge of the top, cutting out said bottom to leave a hole surrounded by said wall, bending the edge portion of said wall outwardly to form an outwardly extending circumferential flange, placing a sealing member of frangible sheet material over said hole in

contact with said flange and with the edge of the member extending beyond the edge of the flange, folding said edge of the member over said edge of the flange, and folding



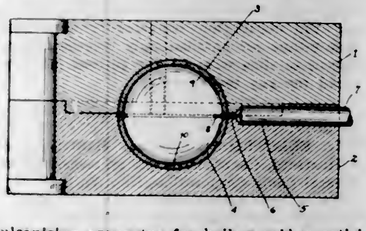
both the flange and the edge portion of the member to a position generally parallel to said wall with said edge portion substantially in contact with said wall.

1,863,338. FOIL REMOVER. ALBERT F. HOFFMAN, Newark, N. J., assignor to Hoffman Beverage Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 353,033. 6 Claims. (Cl. 15—93.)



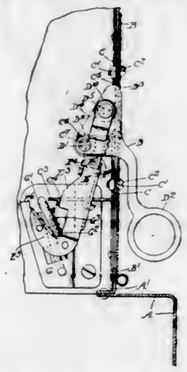
1. Scraping apparatus for purposes described, comprising a cleaner having annularly arranged scraping elements, means for moving the cleaner vertically, and means for concurrently rotating the cleaner, said elements being revoluble discs having beveled peripheries providing sharp scraping edges.

1,863,339. APPARATUS FOR PRODUCING HOLLOW RUBBER ARTICLES. WALTER E. HUMPHREY, Jeannette, Pa., assignor to Pennsylvania Rubber Company, a Corporation of Pennsylvania. Filed May 7, 1931. Serial No. 535,658. 2 Claims. (Cl. 18—35.)



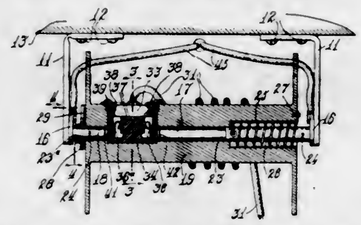
2. Vulcanizing apparatus for hollow rubber articles including a mold body consisting of separable parts and provided with a seat for a pneumatic nozzle formed at the line of meeting of two parts thereof, and a pneumatic nozzle with hollow needle point of elongate cross-sectional shape applicable to and removable from such seat, and when applied to such seat extending through the mold wall and into the cavity within the mold wall and with its major transverse dimension extended in the line of meeting of the mold parts.

1,863,340. HOOD LATCH. DISBELL P. HYNES, Chicago, Ill., assignor to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1930. Serial No. 480,355. 9 Claims. (Cl. 292—113.)



1. In a hood fastener or the like, the combination with a hinged door member to be latched, of a keeper mounted within the hood, a latch bolt carried by the hood door and mounted therewithin to swing with and independently of the door toward and away from the keeper, guiding means on the interior of the door, adapted to guide the movement of the latch bolt, and to limit its movement toward and away from the door, a lever mounted upon the door and extending on each side thereof, a pivotal connection between the inner arm of said lever and the latch bolt, the outer arm of the lever being adapted to serve as a handle, the latch bolt being mounted for longitudinal and lateral movement in relation to the guiding means, said latch including two side members, the side members being pivoted to the inner arm of the lever, and being connected at their lower ends to form a keeper engaging hook.

1,863,341. REEL FOR DETACHABLE CONDUITS. WILLIAM JENSEN, Chicago, Ill. Filed May 31, 1930. Serial No. 457,891. 3 Claims. (Cl. 173—367.)

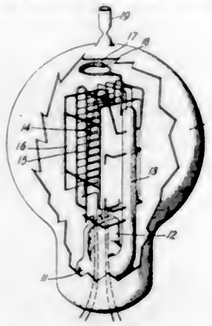


1. A spring wound reel having an extension cord wound thereon; a socket in said reel having electric terminals connected to a supply source; and a plug on said cord adapted to engage in said socket whereby the cord is connected to the supply source.

1,863,342. ELECTRON DISCHARGE DEVICE. MERVIN J. KELLY, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1926. Serial No. 158,167. 10 Claims. (Cl. 250—27.5.)

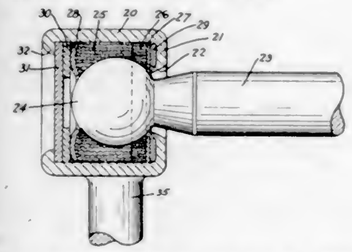
1. An electron discharge device comprising a cathode coated with thermionically active material, a carbon-free

electrode cooperating with said cathode, and an electropositive substance within said device capable of activating



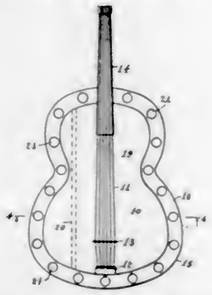
said coated cathode whereby the emission from said cathode does not decrease appreciably over a long period and then decreases rapidly.

1,863,343. LINK FOR SHOCK ABSORBERS. BAYARD D. KUNKLE and EDWIN F. ROSSMAN, Dayton, Ohio, assignors to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 8, 1931. Serial No. 549,422. 9 Claims. (Cl. 287—90.)



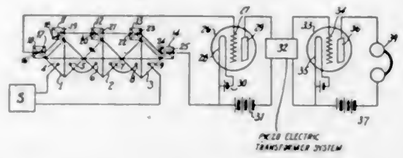
1. A ball and socket joint comprising, in combination, a socket; a shaft having a ball end supported within said socket; a plurality of annuluses of lubricant containing bearing material within said socket supporting the ball end of the shaft; and resilient means in each end of the socket, urging the said annuluses against each other and against the ball end of the shaft.

1,863,344. RESONATING GUITAR. WILLIAM L. LANGE, New York, N. Y. Filed Sept. 19, 1930. Serial No. 482,923. 12 Claims. (Cl. 84—267.)



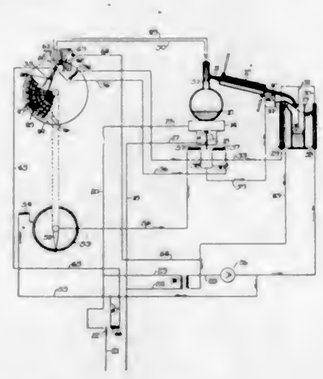
1. In a guitar, in combination, a body having a vibrant portion, and a resonator of material built into said vibrant portion and extending beyond said body, said resonator having sound openings therein.

1,863,345. MULTIPLE PIEZO-ELECTRIC TRANSFORMER. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1927. Serial No. 174,488. 13 Claims. (Cl. 179—171.)



2. A piezo-electric transformer system comprising in combination a plurality of piezo-electric transformers having frequency characteristics different from one another, each comprising a piezo-electric crystal motor element, and a piezo-electric crystal generator element mechanically driven thereby, electrical connections between the motor crystals of each transformer, means for impressing actuating forces on said motor crystals, and means for integrating the effects thereof in said piezo electric crystal generator elements.

1,863,346. AUTOMATIC ENGLER DISTILLATION APPARATUS. JOHN E. MOORE, Chicago, Ill., and GEORGE W. CHENICEK, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Apr. 4, 1931. Serial No. 527,710. 11 Claims. (Cl. 23—253.)



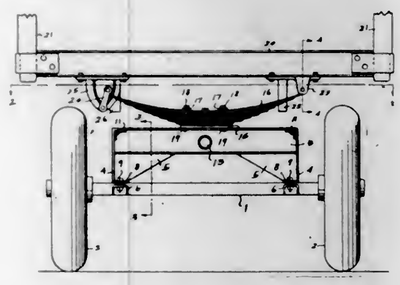
1. In a distillation system, means for automatically recording the distillation temperature with respect to time, and means for automatically recording percent off with respect to time whereby the percent off may be directly read for any temperature.

1,863,347. ELECTRICAL CABLE. DANIEL H. MURPHY, West Hartford, Conn., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed May 25, 1926. Serial No. 111,514. 13 Claims. (Cl. 173—264.)

11. An electrical cable comprising, in combination, metallic conductors each having a surrounding sheath of insulating material, a braided covering surrounding the insulating sheath of each conductor, a protective wrapping comprising a series of separate cords of twisted paper disposed side by side to form a group of cords that are wound spirally about the braid so that they are free to move relatively to each other when the cable is bent, and an outer braided jacket surrounding and uniting the conductors, said cords being treated with a wax-like moisture proofing substance that constitutes a lubricant facilitating relative movement between the different layers of insulating material when the cable is bent.



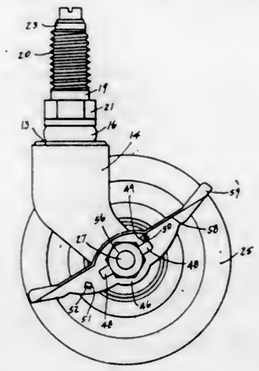
1,863,348. TRAILER. WILLIAM C. NABORS, Mansfield, La. Filed July 14, 1930. Serial No. 467,667. 5 Claims. (Cl. 280—33.4.)



1. A trailer comprising an axle, ground wheels supporting the axle, pairs of front and rear brackets attached to the axle, a sill on the axle, a bearing sleeve, straps whose rear ends extend across the axle and are secured to the corresponding pairs of brackets, side members whose rear ends are attached to said sill, the forward ends of said straps and side members being secured to said sleeve.

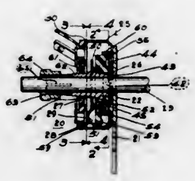
1,863,349. BRAKE CASTER. WILLIAM H. NOELTING and EDWARD A. BROKAW, Evansville, Ind., assignors to Faultless Caster Company, Evansville, Ind., a Corporation. Filed Oct. 24, 1930. Serial No. 490,865. 5 Claims. (Cl. 16—35.)

1. A brake caster including in combination a yoke, a wheel, a bolt extending through the ears of the yoke and said wheel and pivotally supporting the wheel in said yoke, a clutch member carried by the wheel, a clutch member carried by one of the ears of the yoke, said clutch members being coaxially mounted relative to said bolt, a nut upon said bolt including a plurality of radially arranged grooves upon its inner face, a lever coaxially mounted on said bolt and having an offset seatable in one of said grooves, the clutch supporting ear of said yoke having a similar offset portion, the offset portions



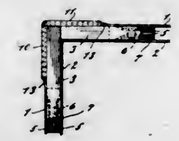
being arranged to progressively nest one within the other for free wheeling and for relative offset positioning and clutch engagement for locking the wheel to the yoke.

1,863,350. SWITCH. HARRY E. NORVIEL and VANCE ECOFF, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 22, 1931. Serial No. 539,211. 5 Claims. (Cl. 200—11.)



1. An electric switch comprising in combination; a casing having parallel walls, one of which is provided with stationary contacts and the other with a series of projections; a contact assembly including a contact carrier having recesses adjacent the projections, a contact member attached to said carrier and provided with bosses adjacent the stationary contacts, a plurality of springs in a circular row confined between the contact member and the carrier for urging the contact member against the stationary contacts and the carrier toward the casing wall having the projections and means for rotating said assembly.

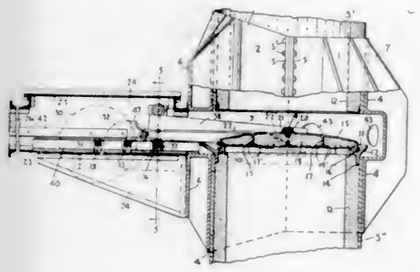
1,863,351. PARTITION BASE. RUDOLPH ORTHWINE, New York, N. Y. Filed July 18, 1930. Serial No. 468,837. 5 Claims. (Cl. 312—140.)



1. A base for partitions which are used to form bins in which articles may be displayed comprising a channel-shaped member adapted to receive the edge of a partition

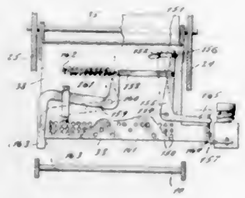
between the sides thereof, opposed strips formed in the sides of the channel-shaped member, the strips extending into the channel and forming a rest for the edge of a partition, and means extending between said strips for securing the edge of a partition between the sides of the channel-shaped member.

1,863,352. DEVICE FOR UTILIZING WASTE HEAT. GLEN S. PIERCE and EVERETT S. CHITTUM, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 15, 1928. Serial No. 319,577. 8 Claims. (Cl. 251—54.)



1. In a mechanism of the character described, a chamber having a valve seat, a valve cooperating with said seat, a pair of stationary track rails for said valve each having an inclined portion adjacent said seat, a pair of racks pivotally connected directly with said valve, and means for reciprocating said racks.

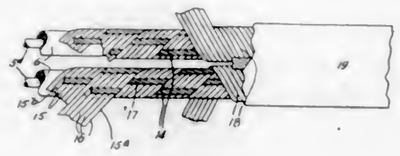
1,863,353. RECORD-SELECTING SYSTEM. PAUL MILLER RAINEY, Montclair, N. J., assignor to Combination Selector Company, Incorporated, Montclair, N. J., a Corporation of New Jersey. Filed Oct. 5, 1928. Serial No. 310,665. 11 Claims. (Cl. 101—58.)



3. In combination, means for comparing characteristics of a master object with predetermined characteristics of a plurality of individual objects, means for operating on the individual objects, and means selectively positioned under control of the master object for determining whether said operating means is to operate on objects which possess the predetermined characteristics or objects which do not possess the predetermined characteristics.

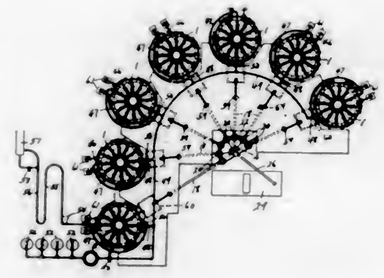
1,863,354. ELECTRIC CONDUCTOR. EDWIN J. SCHNEIDER, Jamaica, and MERRITT B. BRADT, Brooklyn, N. Y., assignors, by mesne assignments, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed July 7, 1926, Serial No. 120,896. Renewed Feb. 10, 1932. 10 Claims. (Cl. 173—264.)

10. An article of manufacture comprising, in combination, a metallic conductor, a body of flexible plastic insulating material surrounding the same, a braided jacket mounted directly upon said body of plastic insulating material, wherein binding strands are interwoven with a multiple wrapping of strip material to form a flexible



covering, a wrapping of fibrous material mounted upon said braided jacket, and a fibrous protective sheath over the whole.

1,863,355. METHOD OF TREATING MILK POWDER. HELGE SCHIBSTED, Syracuse, N. Y., assignor, by mesne assignments, to The Borden Company, New York, N. Y., a Corporation of New York. Filed Jan. 29, 1925. Serial No. 5,643. 2 Claims. (Cl. 99—8.)

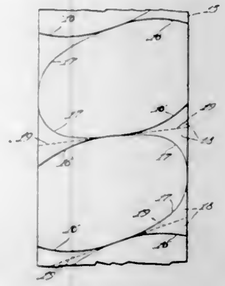


2. The process of packing milk-powder comprising enclosing milk-powder in a container air-tight except for a minute opening, enclosing a considerable number of such containers in an airtight kettle, then producing a substantially perfect vacuum within the kettle, then admitting a gas that does not contain free or uncombined oxygen to the kettle so as to produce a pressure within the kettle not substantially less than two pounds per square inch, then holding the kettle as charged for a period approximating twenty hours, again producing a substantially perfect vacuum within the kettle to reduce the free or uncombined oxygen content of the powder in the containers to an amount not substantially greater than five cubic centimeters for each pound of powder, then charging the kettle with a gas which does not contain free or uncombined oxygen up to a pressure approximating ten pounds per square inch, then removing the containers from the kettle and sealing the openings in the containers without permitting increase of uncombined oxygen content substantially above five cubic centimeters per pound of powder.

1,863,356. SHOE TAP. JOSEPH SLEPIAN, Pittsburgh, Pa., assignor to B. Slepian Company, a Corporation of Massachusetts. Filed Nov. 5, 1930. Serial No. 493,496. 9 Claims. (Cl. 36—25.)

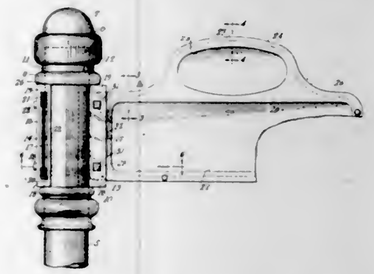
1. A tap blank characterized by having two curved lateral sides, each side having two curved ends, two of the four curved ends of said two sides curving inwardly in conformity to two curved lateral side-ends of the largest size of tap cuttable from said blank, one of the two remaining curved ends of said two sides of the blank having

the same curvature as one of the two first-mentioned inwardly curving curved ends but curving outwardly in reverse direction, the other remaining curved end having



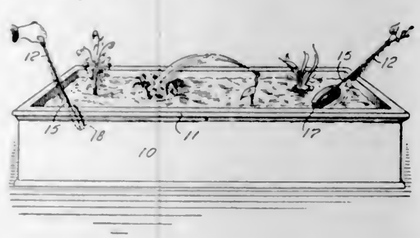
the same curvature as the other of the first-mentioned inwardly curving curved ends but curving outwardly in reversed direction.

1,863,357. STREET SIGN. ABRAHAM SPRUNG, New York, N. Y., assignor to Municipal Street Sign Co. Inc., New York, N. Y., a Corporation of New York. Filed May 20, 1931. Serial No. 538,743. 5 Claims. (Cl. 40—145.)



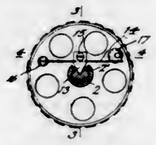
1. A sign holding means consisting of a post engaging corner piece having a cap and collar integral on the upper and lower ends respectively, said corner piece having sign holding arms.

1,863,358. GAME. YASOMATSU TERASAKA, Jackson Heights, N. Y. Filed Aug. 14, 1931. Serial No. 556,981. 5 Claims. (Cl. 273—86.)



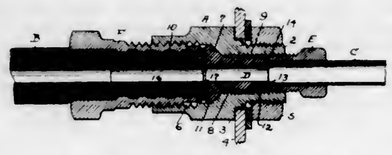
1. In a game of the character described, a tank arranged to include moving objects, of means for snaring or catching such objects, comprising a bailing element of perforable material, said material being readily disintegrable when in contact with water.

1,863,359. TYPE WHEEL MOUNTING FOR PRINTING TELEGRAPHS. ALFRED VISCHER, Jr., Ridgewood, N. J., assignor, by mesne assignments, to The Financial Press Companies of America, Boston, Mass., a Trust of Massachusetts. Filed Aug. 28, 1930. Serial No. 478,532. 5 Claims. (Cl. 197—44.)



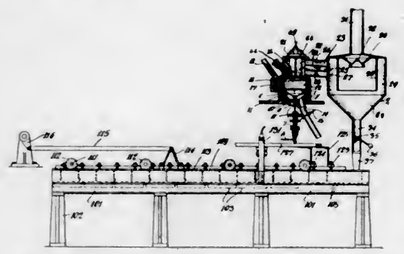
1. In a printing telegraph receiver the combination of a printing wheel, a shaft on which said wheel is mounted and means for rotating the same, said shaft having a longitudinal groove therein, a spline fitting in said groove, and means resiliently connecting said spline to said wheel to effect automatic adjustment of said spline in the groove of said shaft.

1,863,360. PIPE AND TUBE COUPLING. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed June 13, 1930. Serial No. 460,836. 3 Claims. (Cl. 285—86.)



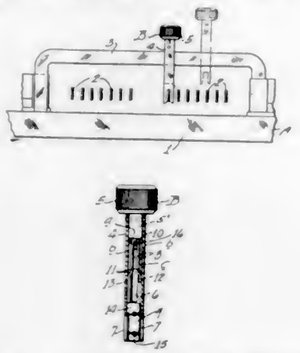
1. A pipe and tube coupling, comprising a coupling body having an axial passage with enlarged and reduced entrances at opposite ends thereof, a separate seating and sealing member of cylindrical form within said passage having enlarged and reduced end seats for effecting sealing unions with a pipe and a flared tube respectively, said body and said sealing and seating member having co-acting seating faces, and means shiftably connected with said body to effect sealing engagement of said pipe and tube with said seating and sealing member, the seating face of said seating and sealing member being axially shiftable toward or away from the co-acting seating face on said body.

1,863,361. MEANS FOR PREPARING DECOLORIZING CARBON AND THE LIKE. LEONARD WICKENDEN, Manhasset, N. Y., and STANLEY A. W. OKELL, Cranford, N. J., assignors to John J. Naugle, Rye, N. Y. Filed Aug. 9, 1928. Serial No. 298,609. 8 Claims. (Cl. 13—7.)



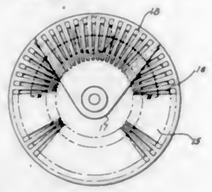
1. Electrical apparatus for the treatment of subdivided carbonaceous material and the like, comprising a primary electric furnace for heating said material in the absence of air, and a secondary electric furnace for heating the preliminary heated material to a lower temperature in the open air.

1,863,362. BUS-BAR CONNECTER. WILLIAM WURDACK, Jr., St. Louis, Mo., assignor to Wm. Wurdack Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 28, 1929. Serial No. 350,626. 4 Claims. (Cl. 173—324.)



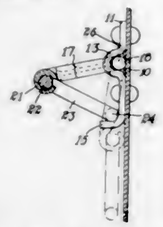
1. A bus-bar connecter comprising an elongated rigid hollow shell open at an end, the shell being provided in its walls with a first pair of registering closed-end bar-accommodating slots intermediate its ends and a second pair of registering bar-accommodating slots disposed at an angle to the first pair of slots and opening at an end to the open end of the shell, and pairs of conducting jaws housed and fixed within the shell in co-operative relation to said slots for yieldingly engaging interposed bars, said jaws having electrical communication the one pair with the other.

1,863,363. VIEW TRANSMISSION SYSTEM. VLADIMIR K. ZWORYKIN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 1, 1929. Serial No. 403,973. 2 Claims. (Cl. 178—7.)



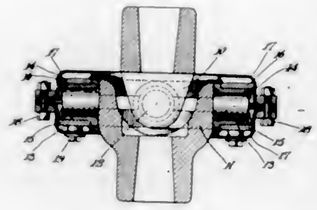
1. In a light-chopper, a rotatable disc provided with a plurality of openings therethrough and a fixed element, having similar openings, disposed adjacent and parallel thereto.

1,863,364. POST POCKET. HARRY T. ANDERSON, Butler, Pa. Filed Jan. 23, 1931. Serial No. 510,677. 21 Claims. (Cl. 105—391.)



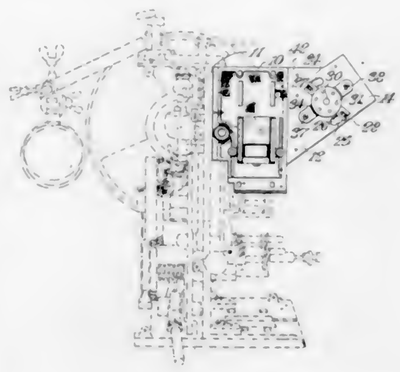
1. A post pocket for gondola freight cars comprising a post-receiving member pivotally secured to the side of said car, and means for supporting said member in post-receiving position, said means being adapted to automatically release said member on removal of the post and permit the same to fall against the side of the car.

1,863,365. UNIVERSAL JOINT. ROGER P. DESCHAMPS, deceased, Brussels, Belgium, by Eleanor M. Deschamps, New York, N. Y., ancillary executrix. Filed June 22, 1928, Serial No. 287,612, and in Belgium June 23, 1927. 1 Claim. (Cl. 64—102.)



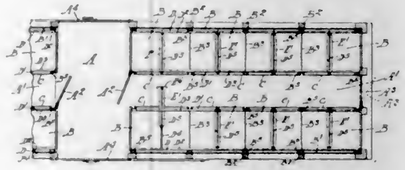
A universal joint comprising a pair of yoke members having outwardly projecting studs, a pair of annular members having cooperating sockets to receive said studs, a pair of rings having portions engaging said annular members and being clamped together to hold the annular members in assembled relation and to provide an enclosing casing, said annular members being spaced whereby lubricant introduced centrally of the joint may be conveyed by centrifugal force between the faces of said studs and sockets.

1,863,366. ADJUSTABLE APERTURE FOR MOTION PICTURE PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,702. 2 Claims. (Cl. 88—17.)



1. A motion picture machine having a film aperture, a frame adjacent thereto, said machine and frame having aligned passages, a pair of apertured slidable plates disposed in said frame and movable in said passages with regard to said film aperture, a rotatable knob on said frame, arms extending oppositely from said knob and having slots therein, and pins on the plates adapted to project into the respective slots whereby the turning of the knob will slide the plates in opposite directions.

1,863,367. POULTRY CAR. PATRICK J. DUIONAN, Kankakee, Ill. Filed Oct. 30, 1930. Serial No. 492,181. 12 Claims. (Cl. 119—12.)



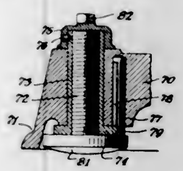
1. In combination with a poultry coop, a feed trough extending transversely thereacross adjacent the top and center thereof, means for rotating the trough about a longitudinal axis and for selectively locking it in the upright and in the reverse position.

1,863,368. FOLDING TABLE FOR AUTOMOBILES. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Folmer-Chapin Corporation, Rochester, N. Y., a Corporation of New York. Filed Mar. 13, 1931. Serial No. 522,374. 5 Claims. (Cl. 45—51.)



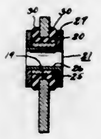
5. In a folding table or the like, the combination with an automobile seat having an inclined back and having a robe rail extending transversely thereof and spaced outwardly therefrom, of a table top, a pair of tapered legs extending at an angle forwardly from the underside of the edge of the top and wedged between the robe and the seat back to support the top horizontally, and a pair of hinges, one leaf of each hinge being fastened to the leg and the other rotatable on the underside of the table top, for the purpose described.

1,863,369. ADJUSTABLE SUPPORT FOR MOTION PICTURE PROJECTION MACHINES. LOUIS SIMON FRAPPIER and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Apr. 22, 1929, Serial No. 356,996. Divided and this application filed Feb. 1, 1930. Serial No. 425,088. 4 Claims. (Cl. 248—15.)



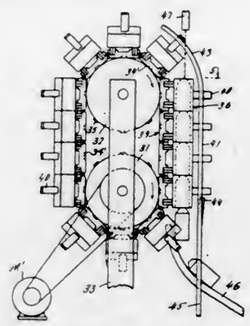
1. In combination with a base, a supporting foot therefor comprising a supporting element, a threaded rod carried thereby, a sleeve in threaded engagement with said rod, means for securing said sleeve against longitudinal movement, a pin secured to said supporting element and engaging a bore in said base, said pin being adapted to secure said supporting element against rotational movement.

1,863,370. RESILIENT CONNECTION. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 6, 1929. Serial No. 412,131. 5 Claims. (Cl. 248—14.2.)



1. A metal-isolating mounting unit for connecting two metal members, comprising: a bracket having relatively thin metal walls and adapted to be secured to one of said members, said bracket having a plurality of spaced holes through said relatively thin walls thereof, a resilient non-metallic bushing permanently mounted in each of said holes and projecting at both ends therefrom, central tubes within said bushings each having end flanges permanently fixed thereto and forced axially upon the opposed ends of said bushing to highly compress said resilient bushing and cause it to bulge radially outwardly under said end flanges and isolate said flanges from said bracket, whereby said tubes and end flanges may be bolted rigidly to the other of said connected members without in any way disturbing the endwise compression upon said resilient bushing.

1,863,371. APPARATUS FOR CASTING. ALBERT E. GREENE, Medina, Wash. Filed Apr. 9, 1930. Serial No. 442,795. 7 Claims. (Cl. 22—76.)

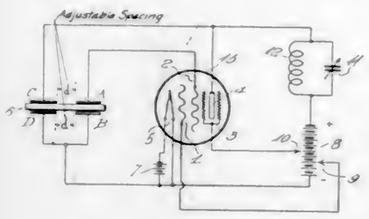


1. In a casting apparatus, a series of molds arranged to travel in a common endless path in a vertical plane, said molds having a recess therein opening to a surface of the mold disposed transversely of the path of travel of the molds and each mold being split in a substantially vertical plane intersecting the recess to define two sections, said sections being pivoted for opening and closing movement, a spout for discharging a stream of molten metal downwardly, means for swinging the sections to closed position beneath the stream, and means for subsequently lowering the series of molds.

1,863,372. MULTIELECTRODE TUBE OSCILLATOR CIRCUITS. JAMISON R. HARRISON, Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 31, 1928. Serial No. 296,586. 6 Claims. (Cl. 250—36.)

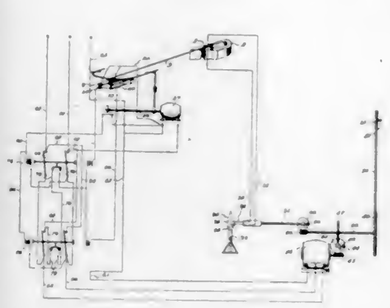
1. In an electron tube generator, in combination, an electron tube having filament, space charge grid, control

grid, shielding grid, and plate electrodes, a source of potential connected to said filament, sources of potential for supplying potentials positive with respect to said filament to said space charge grid, shielding grid, and plate electrodes, said shielding grid being maintained at a greater positive potential with respect to said filament than said space charge grid, and said plate being



maintained at a greater positive potential with respect to said filament than said shielding grid, an input circuit connecting said control grid to said filament, an output circuit connecting said plate to said filament, and means for coupling said input and output circuits, whereby the electron stream between said filament and said plate is maintained and controlled.

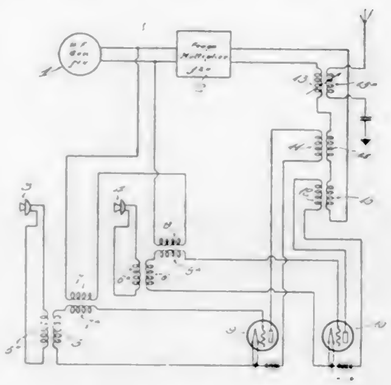
1,863,373. CONTROL METHOD AND APPARATUS. THOMAS RANDOLPH HARRISON, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1925. Serial No. 48,687. 23 Claims. (Cl. 236—1.)



2. In combination, a fuel supply, a burner connected to said fuel supply, another burner connected to said fuel supply, a thermo-couple disposed in the flame of said first burner so as to measure a temperature indicative of flame structure, a galvanometer connected to said thermo-couple and means controlled by said galvanometer for varying said fuel supply to said other burner.

1,863,374. TRANSMITTING SYSTEM. CLINTON W. HOUGH, Boonville, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 328,009. 4 Claims. (Cl. 250—17.)

1. A transmitting system comprising in combination, a source of high frequency electrical energy, a plurality of thermionic tubes, means for increasing the internal resistance of said tubes to inoperativeness in alternate order, means for multiplying the frequency of said high frequency energy, the output circuits of said thermionic



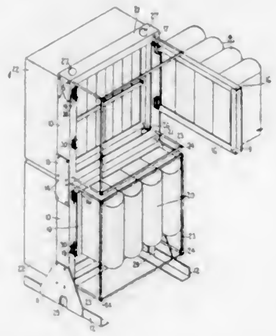
tubes being associated with said energy multiplied frequency value and individual modulating circuit arrangements associated with said thermionic tubes.

1,863,375. METHOD OF MAKING BROMIDES. COULTER W. JONES, McDade, La., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 3, 1929. Serial No. 368,197. 6 Claims. (Cl. 23—89.)

1. A process of making an alkali metal bromide which comprises contacting a current of bromine-laden air with a solution of an alkaline compound of the corresponding metal in the presence of ammonia.

6. A process of making potassium bromide which comprises contacting a current of bromine-laden air with a solution containing potassium bromide and carbonate and limiting the formation of potassium bromate by adding ammonia to said solution.

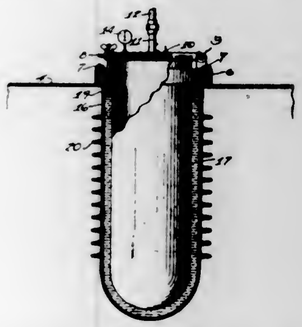
1,863,376. MOUNTING ARRANGEMENT FOR ELECTRICAL APPARATUS. FRANK KESSLER and CECIL ROBERT WOODLAND, Liverpool, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 22, 1929, Serial No. 356,975, and in Great Britain June 12, 1928. 11 Claims. (Cl. 179—91.)



1. A framework comprising a plurality of independent sections adapted to be mounted one on top of another, a hinged-apparatus mounting shelf on the face of each

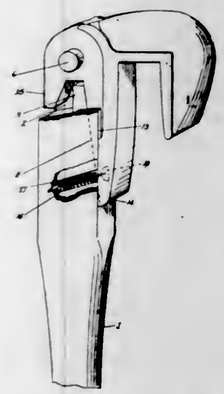
section, a cover support comprising horizontally and vertically-disposed members removably attached to the face of each section, and means for releasing a vertically-disposed element without detaching the same so that it may be deflected to permit the shelf to swing open.

1,863,377. DEVICE FOR SOLIDIFYING LIQUIDS AND GASES. EDWIN J. LOCKWOOD, Peekskill, N. Y., assignor, by mesne assignments, to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 28, 1929. Serial No. 335,702. 10 Claims. (Cl. 62—121.)



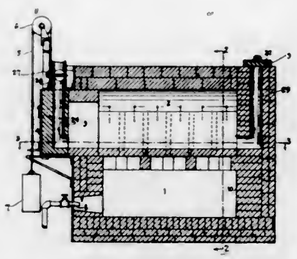
1. In a device for solidifying liquids, an enclosed expansion chamber adapted to receive a container for solidified liquid, means for securing said container to said chamber, with means for inserting liquid into said container under pressure and simultaneous means for preventing the distortion of said container under pressure and for conducting the heat of the liquid in said container to said chamber.

1,863,378. WRENCH. WILLIAM C. MEEKS, Wichita, Kans. Filed Feb. 24, 1931. Serial No. 517,721. 1 Claim. (Cl. 81—53.)



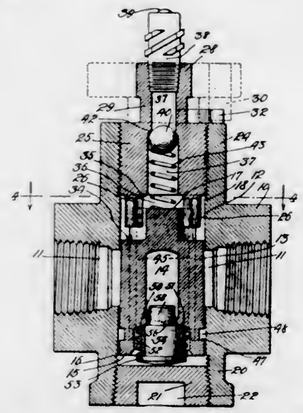
A wrench comprising a handle having one end provided with a slot, a longitudinal stop of less width than the slot having an inclined face, a head pivoted to the handle adjacent to the slot, said head having a notched portion on the head the edges of which overlap the stop to contact therewith to limit the movement of the head in either of two directions, a shank on the head to contact with the inclined portion of the stop and a jaw carried by the head offset with respect to the shank.

1,863,379. FURNACE. JOHN A. MIRZEJEWSKI, West Allis, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed July 17, 1929. Serial No. 378,884. 1 Claim. (Cl. 263—43.)



In a furnace the combination of a substantially box-like housing forming substantially box-like upper and lower chambers, a heat source adapted to direct a heated gaseous blast through a side wall of said housing and substantially horizontally into said lower chamber and in the direction of another wall thereof opposite said side wall, passageways from said lower to said upper chamber and leading from various points adjacent the top wall of said lower chamber, intermediate portions of said passageways being of different resistance to the passage of gas therethrough in accordance with the relative distance of different of said passageways from said other wall, each of said passageways opening into said upper chamber adjacent the top wall thereof, said upper chamber having an opening through a side wall thereof and a movable closure for said opening, and a plurality of outlets from said upper chamber, one of said outlets including a channel through said movable closure and the other including a channel through a wall of the upper chamber opposite the last mentioned side wall, the openings from said upper chamber into said channels being positioned adjacent the bottom wall of said upper chamber.

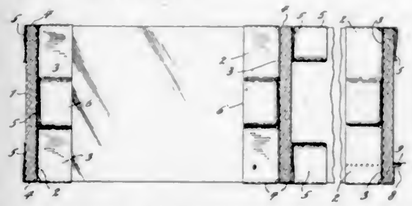
1,863,380. VALVE. SVEN JOHAN NORDSTROM, Oakland, Calif., assignor to Merco Nordstrom Valve Company, San Francisco, Calif., a Corporation of Delaware. Filed May 22, 1929. Serial No. 365,004. 8 Claims. (Cl. 137—93.)



1. A valve comprising, a casing having a fluid passageway therethrough and a tapered bore transverse of the passageway, a tapered plug rotatably positioned in the bore and arranged to move axially therein a minimum of one sixteenth of an inch and to be effective to control the

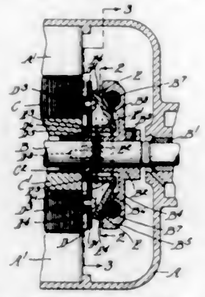
flow of fluid through the casing irrespective of its axial position in the bore, a stop at the larger end of the bore for positively preventing the plug from separating from the bore more than a predetermined distance, the taper of the plug and the bore being such that for each one sixteenth of an inch axial movement of the plug the radial clearance between the plug and the bore varies by less than two one thousandths of an inch, means for forcing lubricant against the plug to move the plug in one direction, means for moving the plug in the opposite direction and to fill the space between the plug and the bore with lubricant so that there is no leakage between the plug and the bore whereby the plug is effective in controlling the flow of fluid irrespective of its axial position, and means for turning the plug.

1,863,381. FASTENER. RUDOLPH ORTHWINE, New York, N. Y. Filed Dec. 18, 1929. Serial No. 414,875. 3 Claims. (Cl. 312—140.)



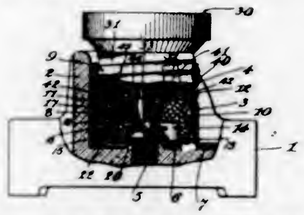
3. In combination, two intersecting partitions adapted to form the sides of a bin in which articles may be displayed and from which articles may be dispensed, and a pair of fasteners for securing the partitions together secured to opposite corresponding edges of the partitions and each fastener including two integral flanges disposed at an angle to each other, the flanges being reversely bent at corresponding ends thereof to form resilient hook-shaped sections for securing the flanges to the edges of the intersecting partitions and having offset portions extending past the transverse centers of the partitions, the offset portions of the flanges of one fastener overlapping the offset portion of the flanges of the other fastener, and one of said fasteners having means for securing the fastener to a counter.

1,863,382. CENTRIFUGAL CLUTCH FOR MOTORS. LAURENCE M. PERSONS, St. Louis, Mo., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed Aug. 16, 1929. Serial No. 386,397. 8 Claims. (Cl. 192—105.)



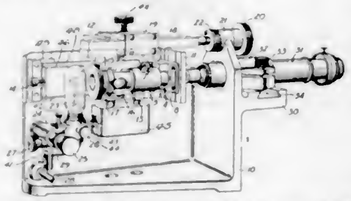
1. In a clutch structure adapted for use with a motor, a fixed clutch member and a centrifugal clutch member mounted for generally radial movement, the clutch members being provided with opposed wedging clutch surfaces the surfaces of each clutch member defining a single cone, and guiding means for the centrifugal member adapted to permit it to tilt somewhat in response to the drag caused by its contact with the fixed clutch member.

1,863,383. FUSE PLUG AND SOCKET. LAMBERT SCHMIDT, Jr., Brooklyn, N. Y., assignor to himself and Louis Freund, New York, N. Y. Filed Jan. 4, 1929. Serial No. 330,380. 30 Claims. (Cl. 200—119.)



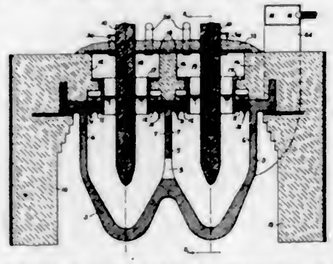
1. In combination with an electric socket, an insulating support therein, a movable contact in the support, interengaging means between the support and contact admitting axial movement of the latter by rotation and preventing axial movement without rotation, and means normally rotating the contact to move it axially to outward, open-circuit position.

1,863,384. LENS TUBE ADJUSTING APPLIANCE. ROY V. TERRY, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1929. Serial No. 388,073. 9 Claims. (Cl. 88—1.)



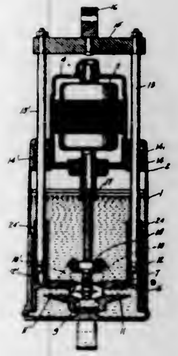
1. In combination a source of light, a support having a main portion and an apertured extension, said extension forming a surface simulating the surface of a film sound record, an optical system mounted on said support and illuminated by said light to form an image in said aperture, and appliance for adjusting said optical system comprising a member having mutually normal flat surfaces formed so as not to obstruct said image, means for retaining said support in contact with said mutually normal surfaces mounted on said member, and manually operable means mounted on said member and engaging said optical system to vary said image.

1,863,385. ELECTROLYTIC APPARATUS. LOUIS E. WARD and RALPH M. HUNTER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 29, 1929. Serial No. 381,937. 12 Claims. (Cl. 204—19.)



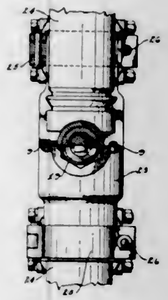
1. In apparatus of the character described, the combination of a metal cathode pot having at least two substantially vertical and parallel opposed principal cathode surfaces, a plurality of anodes depending therein between said cathode surfaces, a separate inverted trough-like collecting trap therein so related to the principal cathode surface as to entrap light metal rising from said surface through the bath, a collecting well for the light metal so entrapped, a dredging well and a curtain dipping in the bath between said anode and cathode surfaces.

1,863,386. QUICK RELEASE HYDRAULIC OPERATOR. WILLIAM J. WOOD., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 15, 1930. Serial No. 495,993. 8 Claims. (Cl. 60—52.)



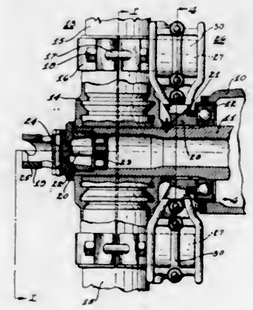
1. An electro-hydraulic operator including a fluid casing, a piston therein biased to one position and movable in response to a change in pressure in the fluid to another position, a pressure creating impeller pump for moving said piston to said other position, a reversible electric motor for driving said pump, driving connections between said motor and pump for driving said pump in one direction only to move said piston, said driving connections permitting said pump to come immediately to rest when said motor is reversed, whereby said piston will return substantially immediately to its biased position.

1,863,387. PROPELLER ATTACHMENT. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 21, 1929. Serial No. 394,277. 7 Claims. (Cl. 170—173.)



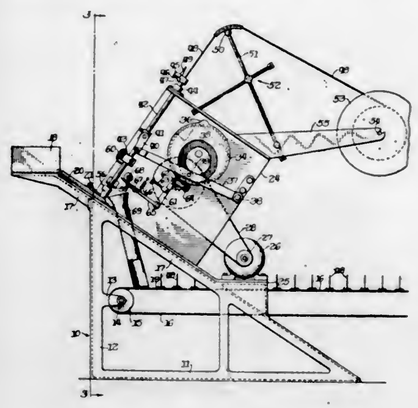
1. In an airplane propelling mechanism, a crankshaft having a hollow end portion, a rod extending through the hollow end portion of said shaft, a propeller rotatably mounted upon the hollow portion of said shaft, a driving connection between the propeller and the shaft, and retaining means associated with the projecting end of said rod fixing the propeller axially upon said shaft.

1,863,388. PROPELLER. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 19, 1929. Serial No. 386,861. 9 Claims. (Cl. 170—177.)



7. In an aeroplane propelling mechanism, a crankshaft having a hollow end, a propeller structure mounted loosely on the hollow end of said shaft, a driving connection between the shaft and the propeller, an axially adjustable shaft extension extending into the hollow end of said shaft, and anchor means securing said extension with the shaft.

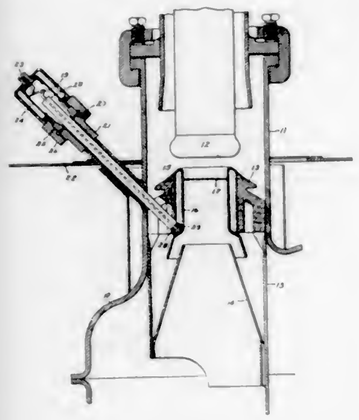
1,863,389. WICKING MACHINE. LOSSIE E. ANDERSON, Chicago, Ill., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Feb. 17, 1930. Serial No. 428,974. 11 Claims. (Cl. 18—1.)



8. In a machine of the type described, a shuttle bar adapted to carry a wick, a loose cap freely movable thereon, said cap having an aperture through which said wick extends, means for forcing said bar against said cap in one position, and means for maintaining the cap and the end of the shuttle bar separated in another position of said bar.

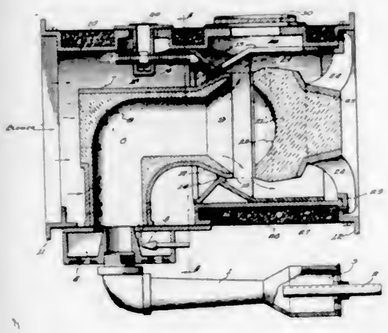
11. The method of making candles which comprises securing a wick to a disk, threading a disk into a precast candle and securing said disk to said candle.

1,863,390. ELECTRIC DISCHARGE DEVICE. FRANK R. BECKERT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 27, 1928. Serial No. 328,739. 3 Claims. (Cl. 250—27.5.)



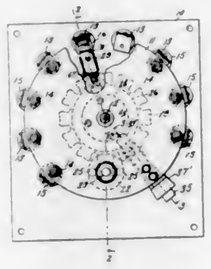
1. An electric discharge device provided with an electrode mounted within an evacuated vessel, a sleeve connected to a wall of said vessel and projecting outwardly thereof, a terminal supported by and insulated from said sleeve, a connection including a rigid member and a helical spring interposed between said electrode and said terminal, said sleeve enclosing a portion of said rigid member, and a cup-shaped member mounted upon said electrode for supporting said spring.

1,863,391. HEATER. GUSTAVE BLUEMEL, Chicago, Ill., assignor to Drying Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1930. Serial No. 420,545. 7 Claims. (Cl. 34—18.)



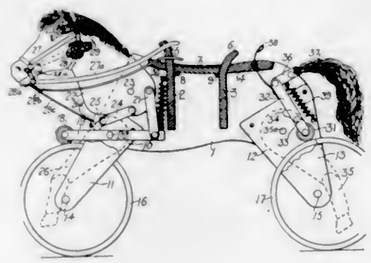
1. A heater comprising a combustion chamber having fuel and air inlets and an outlet, housing means providing an air passage surrounding said outlet, a sleeve in said passage having a throat for restricting said passage in the vicinity of said outlet, said sleeve being of enlarged sectional area beyond said outlet for producing an expanding air current and thereby inducing the flow of products of combustion from said outlet.

1,863,392. ELECTRIC SWITCH. FREDERICK F. BRAND and JOSEPH X. MATHIEU, Pittsfield, Mass., assignors to General Electric Company, a Corporation of New York. Filed Oct. 8, 1931. Serial No. 567,690. 4 Claims. (Cl. 200—7.)



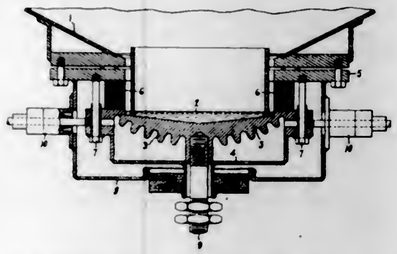
1. A switch including a shaft, two parallel spaced conductive plates supported on said shaft, means for rotating said plates alternately about said shaft, a movable contact secured to each plate, fixed contacts supported in the paths of said movable contacts, and a fixed contact supported in contact with each of said plates.

1,863,393. HOBBYHORSE. JOHN J. BRENNAN, Lansing, Mich. Filed Apr. 2, 1931. Serial No. 527,335. 7 Claims. (Cl. 208—42.)



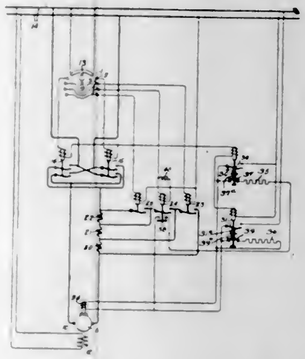
1. A hobby horse having in combination wheels rotatively supported at one side of the center thereof whereby the body portion of the horse is raised and lowered as it progresses, a pivoted head and neck portion, pivoted leg members, and means operated by the rise and fall of the body and the eccentric movement of the wheels whereby the head and neck portion and the leg members are moved.

1,863,394. CATHODE FOR ELECTRIC DISCHARGE DEVICES. JAMES W. CASE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,240. 3 Claims. (Cl. 250—275.)



1. In a mercury arc rectifier provided with a metallic tank, a cathode structure including a flange attached to said tank, a metallic dish attached to said flange and provided with a cathode terminal, an insulator between said dish and flange, and an evacuated chamber surrounding said insulator and dish.

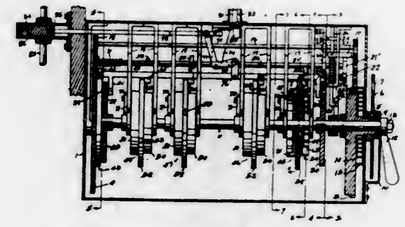
1,863,395. CONTROL SYSTEM. CHARLES B. CONNELY, Ballston, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 3, 1928. Serial No. 310,097. 11 Claims. (Cl. 272—152.)



1. A system of control for an electric motor comprising preselective speed control means, braking means and control means for said braking means arranged to effect a variation in the rate at which said braking means is applied, said control means being responsive to the operation of said preselective speed control means and to a time interval so that when said control means is moved from a preselected speed position said braking means is quickly applied and when said control means is moved from another preselected speed position said braking means is applied at a slower rate for a predetermined interval of time.

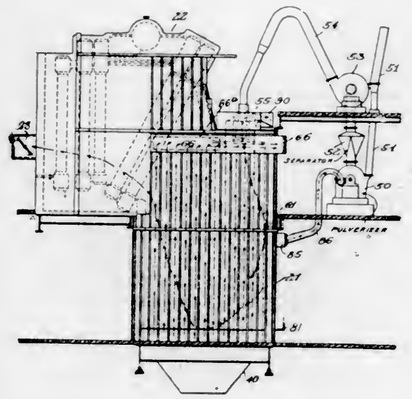
1,863,396. LOCK. DONALD P. DAVIS, Houston, Tex., assignor of four and one-half per cent to Ben H. Johnston, four and one-half per cent to H. M. Duncan, six per cent to James H. Dreher, Harris County, Tex.; two per cent to L. J. Rashbaum, Kansas City, Mo.; one per cent to Harry Gustine and two per cent to W. D. C. Lucy, Harris County, Tex. Filed July 16, 1929. Serial No. 378,666. 17 Claims. (Cl. 70—127.)

1. A device of the character described including a casing, a bar therein, means including a shaft for manually shifting said bar, a plurality of locking units in the casing on said shaft, each unit including means which in one position prevents the actuation of said bar, other means



for locking said bar to prevent the shifting thereof, and manually operable means for selectively operating said units and said locking means into position to release said bar.

1,863,397. COMBUSTION CHAMBER AND DRAFT SYSTEM THEREFOR. ROGER D. DE WOLF, Rochester, N. Y. Original application filed May 1, 1926, Serial No. 106,123. Divided and this application filed Apr. 19, 1928. Serial No. 271,331. 4 Claims. (Cl. 110—28.)

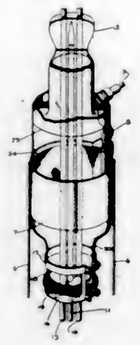


1. In a furnace construction, the combination with a combustion chamber, of means for admitting fuel thereto, a plurality of separate conduits extending substantially vertically in a wall of said combustion chamber, said wall having a plurality of spaced openings leading from the lower portion of one conduit into said combustion chamber, and a plurality of spaced openings leading from the upper portion of another conduit into said combustion chamber, means for admitting air to the upper end of the conduit having openings in its lower portion, and means for admitting air to the lower end of the conduit having openings in its upper portion.

1,863,398. ELECTRIC DISCHARGE APPARATUS. ROBERT H. DOUGHERTY, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 8, 1928. Serial No. 318,040. 5 Claims. (Cl. 250—27.5.)

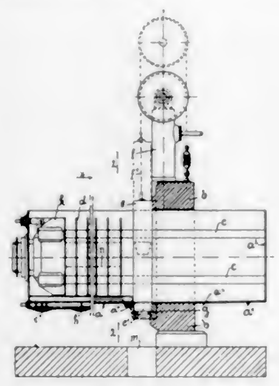
1. In an electron discharge device, an evacuated envelop containing a plurality of cooperating electrodes, said en-

velop terminating in a hollow reentrant portion which is closed by an inverted stem, conductors for one of the



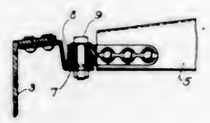
electrodes passing through said stem, and means clamped about the exterior surface of said reentrant portion for supporting said conductors intermediate their length.

1,863,399. HORIZONTAL ALKALI-CELLULOSE PRESS. WILHELM DÜTZMANN, Neustadt, Germany. Filed Apr. 17, 1930, Serial No. 445,105, and in Germany Nov. 4, 1929. 4 Claims. (Cl. 100—50.)



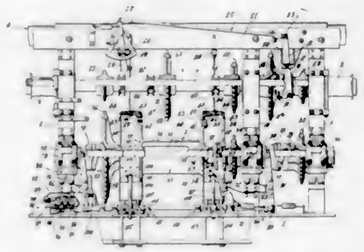
2. In a horizontal alkali-cellulose press including a dipping trough formed with an exit opening, a thrust bearing for the trough arranged immediately adjacent the exit opening, and means for selectively closing said exit opening, said means serving as a limit for the pressing operations and held against movement under such pressing operations by the thrust bearing.

1,863,400. RAILWAY CAR CONSTRUCTION. KNUTE EDAHL, Chicago, Ill. Filed Mar. 7, 1929. Serial No. 344,992. 2 Claims. (Cl. 108—5.5.)



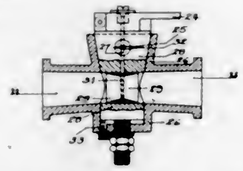
1. In a railway car, the combination of a pair of spaced apart parallel side plates, a plurality of brackets secured to each side plate, each bracket provided with an upstanding cylindrical hub, a plurality of car-lines, each spanning the distance between said side plates and provided with a cylindrical aperture adjacent each end thereof engaging a hub of a bracket on the adjacent side plate and supported thereby, and means to retain the aperture in engagement with the hub whereby said side plates may move relative to each other in a horizontal plane but not in a vertical plane relative to each other so that the car may weave in going over uneven track.

1,863,401. ROTARY DRAWWORKS. DAVID S. FAULKNER and EDWARD TIMBS, Los Angeles, Calif., assignors to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Original application filed June 21, 1926, Serial No. 117,322. Divided and this application filed Nov. 9, 1927. Serial No. 232,084. 7 Claims. (Cl. 254—187.)



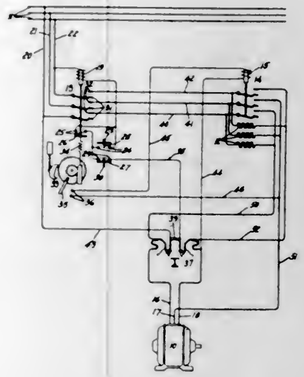
1. In combination with a rotary drawworks comprising a spool, a drum shaft, hubs formed integral with the spool for securing the said spool to the shaft, one of which hubs extends inwardly into the said spool, forged rolled brake rims secured to the said spool, a clutch collar mounted on the said shaft, substantially in engagement with the end face of the said hub and within the interior of one of the forged rolled brake rims secured to the said spool, a clutch sprocket journaled on the said shaft, and lever means extending into the interior of the said forged rolled brake rims for moving the said clutch collar longitudinally on the said drum shaft for engagement with the said sprocket.

1,863,402. CARBURETOR. OTTO HALM, Dresden-Loschwitz, Germany, assignor to Director Heinrich Hofmann, Leipzig, Germany. Filed Oct. 6, 1927, Serial No. 224,452, and in Germany Feb. 27, 1927. 1 Claim. (Cl. 261—44.)



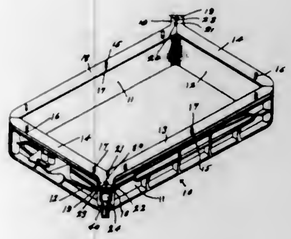
A floatless carburetor comprising a casing having an air inlet and a mixture outlet, a smooth frusto-conical regulating cock disposed in the said casing, a cylindrical passage within the said regulating cock adapted to connect the air inlet and mixture outlet of the said casing, a fuel admission duct opening radially into the said casing, a wedge-like groove arranged on the circumference of the said regulating cock and adapted to communicate with the said cylindrical passage, such combination comprising an annular spray ring in said passage, having a plurality of fuel admission openings, the annular spray ring with the air inlet and mixture outlet having a shape like a Venturi tube, the fuel inlets opening at the narrowest point of the inner free section.

1,863,403. MOTOR CONTROL SYSTEM. LLEWELLYN C. HARDESTY, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 24, 1928. Serial No. 321,715. 2 Claims. (Cl. 172—289.)



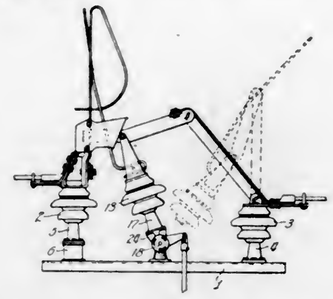
1. In combination with an electric motor, a current limiting device, a line contactor, manually operated means for operating said line contactor to supply current to said motor through said current limiting device, a running contactor for short circuiting said current limiting device, means including a coil for responding to a predetermined counter voltage of said motor to operate said running contactor, and a time delay device set in operation responsively to the operation of said line contactor for connecting said coil to the terminals of said motor a predetermined interval of time after the operation of said line contactor.

1,863,404. FLASK. JAMES F. HINES, Lakewood, Ohio. Filed Nov. 2, 1929. Serial No. 404,228. 4 Claims. (Cl. 22—111.)



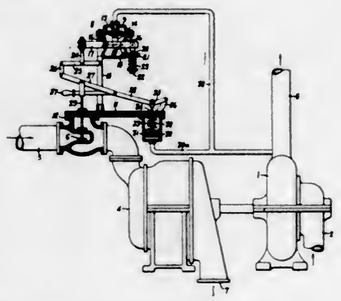
1. In combination with a flask section, sand retaining mechanism mounted on said section and comprising sand strips mounted on certain of the walls of said section, means for retaining said strips on said walls and for guiding the movement of said strips, and means for moving said strips into and out of sand-retaining position, said last-named means comprising a housing mounted on said flask section, a lever mounted in said housing and projecting outwardly therefrom into cooperative relation with one of said sand strips, and a second lever projecting outwardly from said housing and having an operative connection with said first lever whereby movement of said second lever is translated through said first lever to said sand strip.

1,863,405. ROCKING INSULATOR. PEDER B. HOYE, Maywood, Ill., assignor to Electrical Engineers Equipment Co., Melrose Park, Ill., a Corporation of Illinois. Filed Oct. 19, 1928. Serial No. 313,428. 6 Claims. (Cl. 200—48.)



1. In an electric switch, a supporting member, a rocking insulator mounting member, each of said members having a pair of spaced arms, the arms of one of the members extending between the arms of the other member, a shaft extending through both sets of arms and supported by the arms of the supporting member and constituting a support for the arms of the rocking insulator mounting member, and a counterbalancing spring for counterbalancing the mass supported by the rocking insulator mounting member, said spring being disposed between the inner set of arms.

1,863,406. GOVERNING MECHANISM FOR TURBINE DRIVEN PUMPS. MAX B. HUDSON, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed Mar. 9, 1931. Serial No. 521,106. 1 Claim. (Cl. 103—16.)

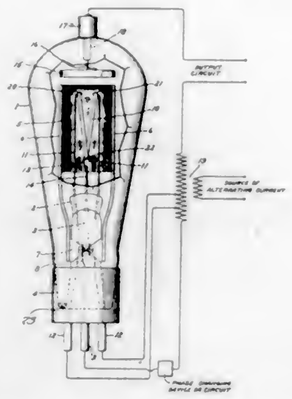


In combination, an elastic fluid turbine, a pump driven thereby, a valve controlling the supply of elastic fluid to the turbine, a floating lever, means connecting the valve to the floating lever, means including a movable abutment which forms a fulcrum for the floating lever, means for subjecting said abutment to the discharge pressure of the pump for holding said abutment in fixed position, means for moving said lever on its fulcrum in accordance with the discharge pressure of the pump for regulating said valve, and means for moving said abutment to close said valve when the pump discharge pressure decreases below a predetermined value.

1,863,407. HOT CATHODE DEVICE. ALBERT W. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 14, 1930. Serial No. 444,094. 3 Claims. (Cl. 250—27.5.)

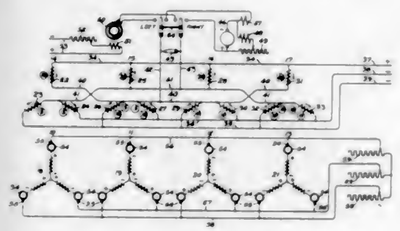
1. A thermionic device comprising an envelope containing a plurality of electrodes including a V-shaped filament,

a plane electrostatic control member and an anode, an ionizing medium in said envelope at a pressure sufficient to support an arc-like discharge at the impressed voltages,



the negative terminal of said filament being positioned nearer the anode and control member than the apex of the V-shaped member.

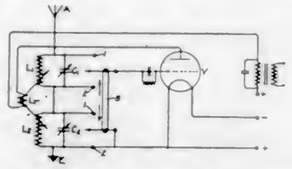
1,863,408. SPEED CONTROL. JOHN I. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1930. Serial No. 478,469. 20 Claims. (Cl. 172—274.)



1. In combination, a plurality of alternating current motors each having stationary and rotatable members, primary windings on one member of each motor, secondary windings on the other member of each motor, means for connecting the secondary windings into a group of parallel connected windings, means for energizing the primary windings with alternating current so as to produce in each motor its normal magnetic flux, thereby producing the normal motor torques in said rotatable members, and means for simultaneously superimposing on the normal magnetic flux of at least one of said motors an additional magnetic flux whose characteristic relatively to that of the normal magnetic flux is such as to result in a flow of local circulating currents between the secondary windings thereby producing generator torques in said rotatable members.

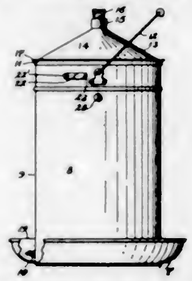
17. The method of obtaining stable synchronized creeping speeds from a group of asynchronous motors having their secondary windings connected in parallel with each other and having their primary windings connected to a source of alternating current to produce in each motor an alternating magnetic flux having the frequency of the source, said method including the steps of increasing the resistances of the secondary winding circuits and superimposing on the alternating magnetic flux of at least one motor an additional alternating magnetic flux having a frequency lower than the frequency of the normal magnetic flux.

1,863,409. RADIO RECEIVING CIRCUITS. THOMAS H. KINMAN, Bilton, near Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Sept. 12, 1927, Serial No. 219,083, and in Great Britain Sept. 14, 1926. 7 Claims. (Cl. 250—20.)



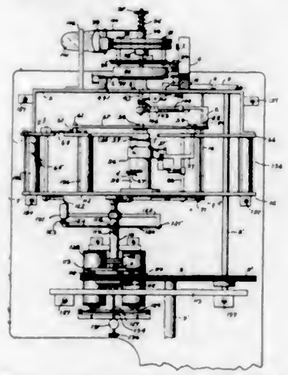
1. In a radio receiving system, a plurality of tuned input circuits and means whereby at least one of the said circuits may be utilized alternatively as a receiver or a rejector circuit.

1,863,410. DRINKING FOUNTAIN FOR POULTRY. ISRAEL MORIN, Toronto, Ontario, Canada. Filed Apr. 9, 1931. Serial No. 528,845. 2 Claims. (Cl. 119—77.)



1. In a drinking fountain of the class described, a reservoir composed of a pair of members for maintaining water in a basin at a certain level, said members being detachably placed one within the other and the inner member resting upon the outer member by means of a shoulder, and clips pivoted to said outer member and adapted to be swung into such a position as to engage said shoulder to retain it in an elevated position.

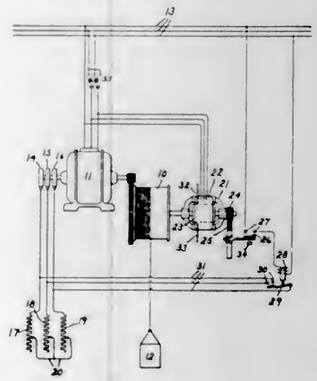
1,863,411. REMOTE CONTROL SELECTIVE MECHANISM. IRVING NACHUMSOHN, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 23, 1928. Serial No. 280,066. 21 Claims. (Cl. 178—33.)



1. In a device of the character described, a plurality of type characters, electro-responsive permutation means comprising a plurality of components each of which, in

ascending order, is given twice as large a rotation assignment as the preceding component, an actuator common to said components, means for successively associating said actuator with said components in descending order.

1,863,412. SPEED RESPONSIVE MEANS. MARCEL PATEAU, Seine, France, assignor to General Electric Company, a Corporation of New York. Filed Aug. 20, 1929, Serial No. 387,173, and in France Sept. 6, 1928. 4 Claims. (Cl. 172—274.)



1. The combination with a polyphase alternating current driving motor, of an auxiliary polyphase alternating current motor of the induction type provided with a stator member having an armature winding connected to the same electrical supply source as said driving motor, and with a rotor connected to be driven by said driving motor at substantially the synchronous speed of said auxiliary motor when the driving motor is operating at a running speed, said stator having a limited freedom of rotation in response to its torque reaction with said rotor, and control means for said driving motor operated by movement of said stator.

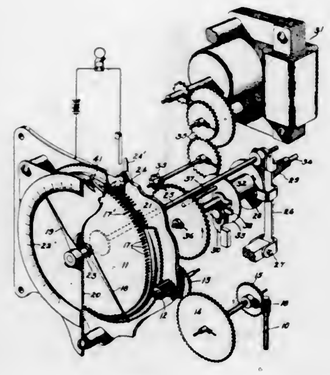
1,863,413. COOKING UTENSIL. FRED I. PIERCE, Niagara Falls, N. Y. Filed July 31, 1930. Serial No. 471,998. 8 Claims. (Cl. 53—1.)



1. In a multiple unit cooking utensil, the combination of three separate units adapted to substantially form a cylinder when in juxtaposition, two of said units having cross sections in the form of segments of a circle.

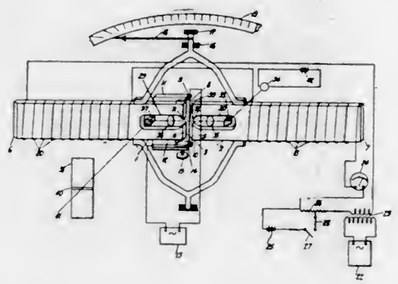
1,863,414. DEMAND METER. WILLIAM H. PRATT, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 27, 1930. Serial No. 505,110. 8 Claims. (Cl. 171—34.)

1. A demand meter comprising a scale, a friction pointer cooperating with said scale, a wheel continuously driven in accordance with a metered quantity, a plurality of movable members spaced apart in a circle on said wheel, any one of which may be moved from an inactive position into an active position where it will serve as a dog for advancing the friction pointer, and time controlled



means for moving a selected one of said members into said active position at the beginning of a predetermined time interval and replacing it to its former inactive position again at the end of such interval.

1,863,415. MAGNETOMETER. FRANK RIEBER, San Francisco, Calif., assignor to General Electric Company, a Corporation of New York. Filed Jan. 4, 1928. Serial No. 244,507. 14 Claims. (Cl. 33—204.)



1. In a magnetometer, a permeable member having high permeability such that a substantial amount of magnetism is induced therein by a magnetic field of substantially the strength of the earth's field, means mounting said member in the field under test so that magnetism is induced therein by said field, and means for conducting current past the face of said member whereby a dynamic effect is obtained between the current and the magnetism induced in said member by said field.

1,863,416. CANDLE AND METHOD RELATING THERETO. HUBER H. ROOT, Medina, Ohio, assignor to The A. I. Root Company, Medina, Ohio, a Corporation of Ohio. Filed June 9, 1930. Serial No. 459,867. 15 Claims. (Cl. 67—22.)

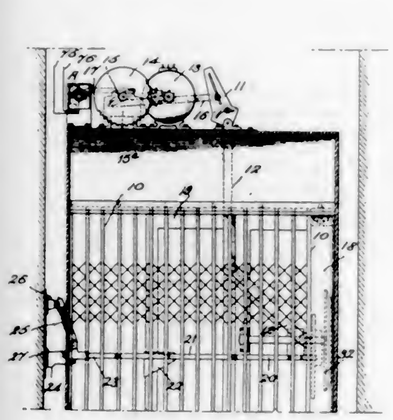
13. A candle comprising a wick, and solid fuel material enveloping the wick, said material incorporating a multiplicity of relatively small openings, a plurality of which are arranged about the wick close thereto, and a plurality

being disposed in surrounding relation to the first plurality, forming a cellular interior body which will melt rapidly close to the wick when the candle is lighted to



thereby form and maintain a deep central fuel cup for retaining the melted fuel at the base of the projecting end of the wick.

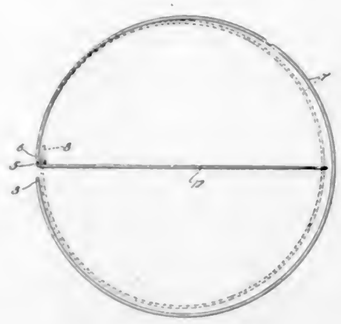
1,863,417. ELECTRIC DOOR OPERATOR. HAROLD W. SHONNARD, Montclair, N. J., assignor to Elevator Supplies Company, Inc., Hoboken, N. J., a Corporation of New Jersey. Filed Sept. 1, 1927. Serial No. 216,808. 13 Claims. (Cl. 187—52.)



1. A slidable door, a group of toggle arms adapted to operate the same, and an extension on one of said arms, in combination with an assisting spring having a pivotal mounting at one end and attached at its opposite end to said extension, said spring being adapted to assist movement of the doors when swung past a critical position.

1,863,418. RING FOR URN BAGS. EDWARD H. SIELING, Chicago, Ill. Filed Feb. 13, 1931. Serial No. 515,447. 8 Claims. (Cl. 53—3.)

7. A device of the kind described comprising a length of wire shaped into a split ring, an eye at one side of the split to receive the other end of the wire, a bail formed from the remaining portion of the wire and extending diametrically across said ring, and means for connecting the end of the bail to the portion of the ring opposite said eye, the ends of the bail being separated



a distance less than the normal diameter of the ring whereby the connection of the bail to the ring slightly distorts the latter.

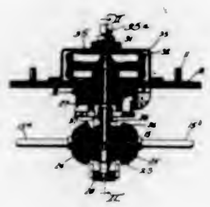
1,863,419. REFINING OF COPPER. WALTER O. SNELLING, Allentown, Pa. Filed Dec. 30, 1930. Serial No. 505,587. 3 Claims. (Cl. 75—62.)

1. In the fining of copper the process which comprises simultaneously oxidizing and reducing a bath of molten copper by maintaining one or more localized zones of oxidation within the body of the molten copper while maintaining reducing conditions at the surface of the molten copper, and producing circulation within the copper bath to continuously transfer copper from the oxidizing zone to the reducing zone.

1,863,420. REFINING OF COPPER. WALTER O. SNELLING, Allentown, Pa. Filed Dec. 22, 1930. Serial No. 504,222. 2 Claims. (Cl. 75—62.)

1. In the fining of copper, the process which comprises oxidizing copper in the presence of more than 10% of cuprous oxide and admixing the product so prepared with molten copper to form a mixture containing more than 5% but less than 10% of cuprous oxide.

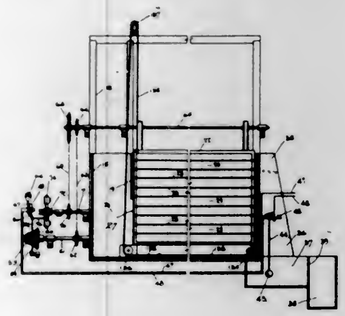
1,863,421. ELECTROMAGNETIC COMPASS. JAMES D. TEAR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 19, 1928. Serial No. 320,239. 16 Claims. (Cl. 33—204.)



1. In a device for indicating the angular relation between the course of a moving body and the earth's magnetic field, a magnetic member provided with an air gap

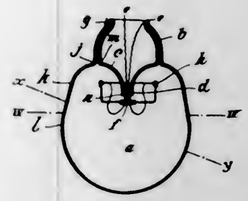
intermediate its ends, means mounting said member on the body for rotation with respect to the body about a horizontal axis and causing said member to move with the body about a vertical axis and means located in said air gap responsive to the magnetic flux induced in said member by the earth's magnetic field.

1,863,422. MEANS FOR SEPARATING PARTICLES FROM FREE WATER. CARL BUSCH THORNE, Hawkesbury, Ontario, Canada. Filed Oct. 15, 1928. Serial No. 312,544. 6 Claims. (Cl. 210—152.)



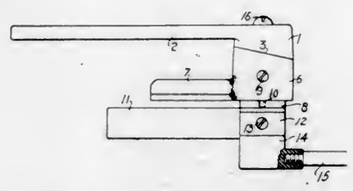
1. In means for separating particles from free water, a tank containing the liquid, a discharge receptacle communicating with said tank towards the upper end, a discharge receptacle communicating with said tank towards and at the lower end, a reciprocatory screen immersed and withdrawn from said tank in successive movements and having horizontal outlet passages between sieve walls open at one end and closed at the other end and directing the residual liquid in sequent discharges into said receptacles respectively, means for supporting said screen, means for reciprocating said screen and a closure operating with said screen to shut off said receptacles on the withdrawal of the screen.

1,863,423. ELECTRIC INCANDESCENT LAMP. JACOB VAN ECK and FEKKO FEKKES, Rotterdam, Netherlands; said Fekkes assignor to Hendrik Fekkes. Filed Jan. 4, 1930, Serial No. 418,616, and in Belgium Aug. 9, 1929. 3 Claims. (Cl. 176—34.)



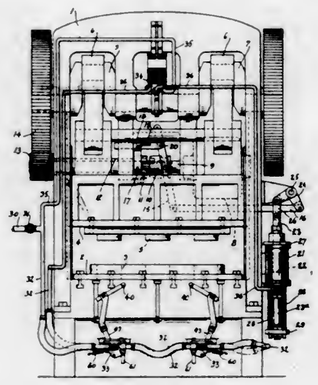
1. An incandescent electric lamp comprising a glass bulb, a glass neck forming an extension of said bulb, an inner glass element sealed to the bulb at the top end thereof and terminating in a tubular part, leading in wires passing through said tubular part and sealed therein, a small pedestal sealed to said tubular part, supporting wires for the filaments fastened to said pedestal and an opening and short pipe at the top end of the neck for gas extracting and filling purposes, the pipe being cut short near the neck.

1,863,424. CUTTING IMPLEMENT. WILLIAM VINNICK, Whitestone, Flushing, N. Y. Filed Jan. 12, 1931. Serial No. 508,252. 2 Claims. (Cl. 164—57.)



1. A cutting implement having a cylindrical body, a member revoluble upon the body and having means for holding it against lengthwise movement on the body, said member having a spiral cam edge and a projecting handle, a second member having a movement lengthwise on the body and means for holding said member against rotation, said second member having a spiral cam edge adapted to co-act with the corresponding edge of said first member, said second member having a projecting cutting blade, said body having a projecting blade arranged below the said blade of the second member and a handle projecting in a direction different from the projection of the said blade on the second member.

1,863,425. CONTROL MECHANISM FOR PRESSES. JOHN J. WALLBILLICH and FLOYD J. POTTER, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 24, 1928. Serial No. 321,746. 9 Claims. (Cl. 192—131.)



1. In a control system for a punch press, or similar machine, the combination of a controlling cylinder with piston therein for controlling successive operations of the press by the power means, a compressed air supply conduit running to the cylinder for the purpose of actuating the piston, a plurality of valves disposed in series in this conduit in advance of the cylinder, each having a port for the passage of air therethrough, each valve having a second port which communicates to the atmosphere, this last mentioned port being arranged to communicate with the air cylinder to exhaust the air therein, the valve body being arranged to close the air line on the side of the supply thereof while the valve is in position to exhaust the cylinder, means for normally holding each of the valves in such position, and a handle or the like for each valve, adapted to be manually actuated to align the first mentioned port with the air conduit to permit compressed air to enter the cylinder.

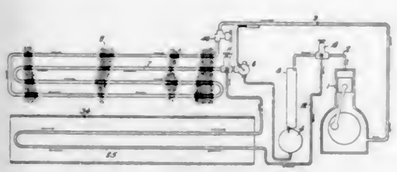
1,863,426. PROCESS FOR THE PRODUCTION OF ARTIFICIAL MASSES. GEORG WALTER, Vienna, Austria, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 25, 1927, Seral No. 235,743, and in Austria Nov. 28, 1925. 21 Claims. (Cl. 260—3.)

1. The process for the production of clear, transparent artificial masses which comprises carefully heating a methylol derivative of urea in the absence of any solvent as quickly as possible at least to the melting point, while avoiding any superheating, and further heating the melt until it is viscous but may still be cast.

11. The process for the production of clear, transparent artificial masses which comprises carefully heating dimethylol urea with the addition of a polymer of formaldehyde and of a non-acid fluxing agent, but in the absence of any solvent as quickly as possible at least to 126° C. and continuing the heating to a temperature not higher than 140° C. until the melt is viscous but may still be cast.

13. The process for the production of clear, transparent artificial masses which comprises carefully heating dimethylol urea with the addition of thiourea, an alkali metal formate and paraformaldehyde, but in the absence of any solvent as quickly as possible at least to 126° C. and continuing the heating to a temperature not higher than 140° C., until the melt is viscous but may still be cast.

1,863,427. DEFROSTING REFRIGERATION SYSTEM. VIRGIL P. WARREN, Atlanta, Ga. Filed Jan. 19, 1931. Serial No. 509,809. 4 Claims. (Cl. 62—103.)



1. Defrosting refrigeration circulation system including a compressor and a refrigerating coil, drainage means underlying said coil, said circulation system being divided into parallel branches between the pressure side of said compressor and said coil, one of said branches having a portion arranged in heat exchanging relation to said drainage means, means for selectively determining the path of flow of said refrigerant through one or the other of said branches, and means for compensating the drop in compression pressure incident to the functioning of said refrigerant as a heating medium of said coil and drainage means, for maintaining the heating efficiency of said compressor during the heating period.

1,863,428. WINDOW SCREEN FOR MOTOR VEHICLES. HARRY A. WESTRICK, Saline, Mich. Filed Apr. 10, 1931. Serial No. 529,187. 1 Claim. (Cl. 156—38.)

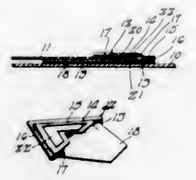


A screen for motor vehicle windows comprising a frame including upper, lower and end members, said upper and one of the end members of integral construction, the other end member including movable sections one slidable within the other and one section slidably receiving the upper and lower members, tension means between said sections, said lower member having a groove to receive one edge of a window glass, guide elements formed on the upper and end members and received by the channels of a window frame, said upper and lower members and one of the side members having slots with the walls thereof curved inwardly to provide resilient gripping tongues, said sections of the other end member having aligned slots and the walls of the slot of the inner section curved inwardly to provide resilient gripping tongues, screen material having the edges thereof located in the slots, and rods gripped by said tongues to force the screen material against certain of said tongues.

1,863,429. BUS BAR JOINT. CHARLES B. WILLMORE, Massena, N. Y., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 18, 1929. Serial No. 408,177. 6 Claims. (Cl. 173—324.)

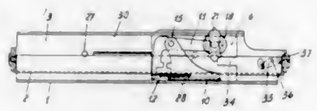
1. In a method of forming a joint of low initial electrical resistance between electrical conductors, the steps comprising coating the contacting surfaces with a layer of unctuous substance and placing between said coated surfaces a plurality of small conducting particles.

1,863,430. ART CORNER. ADOLPH WOERNER, Jr., Chicago, Ill. Filed Apr. 24, 1931. Serial No. 532,671. 3 Claims. (Cl. 40—156.)



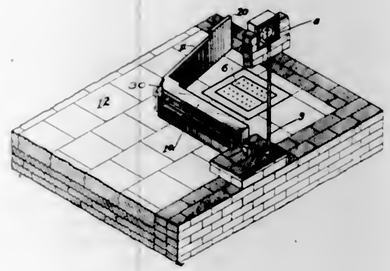
1. Corner mount comprising an upper and a lower tab both having all their marginal edges except one adhesively secured together providing a pocket therebetween for the reception of a portion of an article, and an adhesive on the bottom side of said upper tab for securing said portion in said pocket.

1,863,431. DEVICE FOR SHARPENING THE BLADES OF SAFETY RAZORS. WILHELM BARSCH, Paris, France, assignor to Allegro Machine Co., Paris, France. Filed July 15, 1927, Serial No. 206,095, and in Germany Sept. 29, 1926. 2 Claims. (Cl. 51—133.)



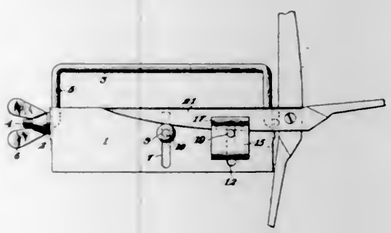
2. A device for sharpening single edged safety razor blades, comprising a frame having races, a sharpening body mounted on the frame, a carriage slidably mounted in the frame, a blade holder rotatably mounted in the carriage, levers fixed on the ends of the blade holder axis and having guide surfaces comprising a flat portion adapted to engage the races to hold the blade in a vertical position, two concentric portions arranged to slide on the races to press the blade on the sharpening body and to roll on the races to turn the blade at the end of each stroke, said frame having abutments, and said levers also having a pointed extension opposite said frame portion and arranged to cooperate with said frame abutments to lift the blade on and off the sharpening body.

1,863,432. BAKING OVEN. LOUIS BOBBIN, ABRAM SIMON, and NATHAN BENDERSON, Troy, N. Y. Filed Dec. 20, 1930. Serial No. 503,848. 5 Claims. (Cl. 107—64.)



2. In combination with a baking oven, a baking compartment, a fire compartment, a guard member disposed between said compartments comprising a heavy metal casting and an integral wing portion disposed angularly thereto, means for spraying water upon the edge of said heavy metal casting facing said baking compartment for the generation of steam in said oven, and a spout in the lower portion of the metal casting facing said baking compartment for the retention of non-evaporated water.

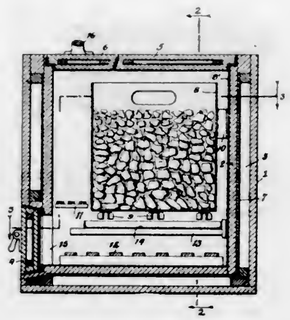
1,863,433. SCISSORS HONING AND CORRUGATING DEVICE. MARION L. BROOKS, Rainier, Oreg. Filed May 18, 1931. Serial No. 538,314. 2 Claims. (Cl. 51—218.)



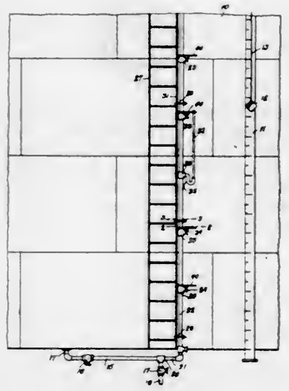
1. A sharpener for shear blades to be sharpened by a honing stone or to be corrugated by a corrugated file, comprising a plate, a supporting stud for the non-sharpened edge of a shear blade supported for lateral adjustment on the plate, a laterally adjustable camp on the pate for holding the blade thereagainst, and a swingable substantially U-shaped hone guide member pivotally supported on the plate, and means engaging one of the pivots for said member for holding the member from swinging.

1,863,434. COLD STORAGE BOX. WILLIAM BROWN, Ossining, N. Y. Filed Feb. 26, 1931. Serial No. 518,568. 2 Claims. (Cl. 62—46.)

1. A cold storage box including a box structure having an opening, a door for closing said opening, a water resistant container arranged in the box, bars secured to the walls of said box structure positioned above said opening for supporting the container, a pair of brackets secured to two of the walls of said box structure for spacing the container away from the walls of the box, a plurality of platforms arranged at different levels for supporting articles, a drip pan and means for slidably supporting the drip pan opposite said door whereby it may be moved through the door at any time.



1,863,435. GRAVITY SYSTEM FOR MEASURING THE CONTENTS OF TANKS. FRANK T. DAVIS, Habana, Cuba. Filed July 10, 1928, Serial No. 291,561, and in Cuba May 13, 1928. Renewed Apr. 26, 1932. 2 Claims. (Cl. 73—54.)

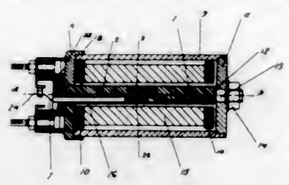


2. A device of the character described comprising, a stand pipe having means for attaching a gauge glass assembly at various points along the pipe, and a gauge glass assembly adapted to be removably and selectively associated at various points in such stand pipe, said assembly including means for attaching the gauge glass at the various points in the stand pipe.

1,863,436. IRON CLAD RELAY MAGNET. YSABEL MARIE-LOUISE DE PANIAGUA, Paris, France. Filed July 16, 1930, Serial No. 468,414, and in France July 22, 1929. 6 Claims. (Cl. 200—87.)

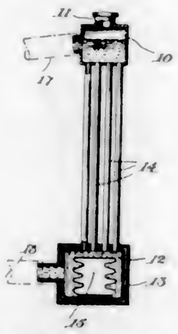
1. An electromagnetic relay comprising a magnet body constituted by a central core of two alined elements separated by a gap, two discs fitted over the outer ends of said elements and a cylindrical part fitted between the peripheries of the discs, a non-magnetic part separating

the two core elements, a spring disposed parallel to and adjacent the core, a coil wound over the core, and passing over the spring, means for securing one end of the spring, a con-



tact controlled by the spring and an armature carried by the spring in front of the non-magnetic part separating the two core elements.

1,863,437. ANTIFREEZE RADIATOR FOR AUTOMOBILES. WILLIAM H. COLLIER, Jackson, Tenn. Filed Dec. 15, 1930. Serial No. 502,544. 5 Claims. (Cl. 257—125.)



1. A radiator of the class described provided with heat radiating elements, and a water storage chamber communicating with the heat radiating elements of the radiator and being provided with means for varying the effective volume inversely with the temperature, the maximum volume of said chamber having a capacity sufficient to hold substantially all of the water in the radiator.

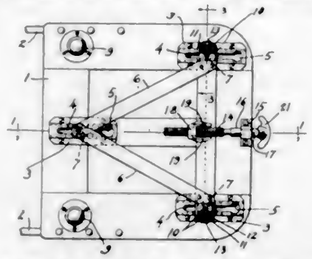
1,863,438. TOY MACHINE GUN. WALTER DASPIT, Chicago, Ill. Filed Sept. 9, 1931. Serial No. 561,950. 4 Claims. (Cl. 46—46.)



1. A toy gun comprising a movable sound producing element, a trigger, a mechanism controlled by the trigger to operate the sound producing element, a motor for said mechanism, and a gun body supporting the aforementioned parts.

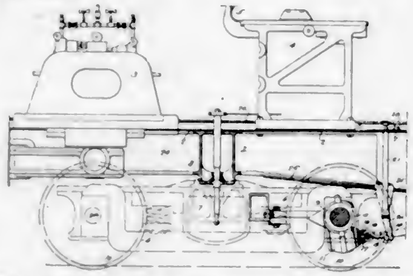
1,863,439. SEAT REGULATOR. HERBERT C. FIELD, Windsor, Ontario, Canada, and ANDREW CHRISTIAN ANDERSEN, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 21, 1928. Serial No. 327,525. 2 Claims. (Cl. 155—14.)

1. An adjustable seat having in combination a seat bottom, a support therefor, a slotted plate and stud guide members between the seat bottom and the support, and a screw and nut adjusting device for adjusting the seat bottom along the support, the said slotted plates having openings at one end of the slots, and the screw and nut



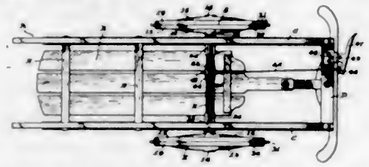
being arranged so that the openings cannot be reached by the studs within the range of adjustment of the screw and nut, but the seat bottom may be disassembled from the support by disengaging the screw.

1,863,440. CLUTCH SHIFTING MECHANISM FOR DYNAMOMETER CARS. FREDERICK A. FLEISCHMANN, Drexel Hill, and ALPHA L. MARSH, Philadelphia, Pa. Filed July 24, 1930. Serial No. 470,419. 1 Claim. (Cl. 105—130.)



The combination in a dynamometer car, of a main frame; a dynamometer mechanism on said frame; a truck located under the frame having two axles, one of said axles being a driving axle; a driven shaft, gearing between the said driven shaft and the driving axle, said mechanism being at one side of the longitudinal central line of the car; clutch mechanism for coupling the driving mechanism to the shaft; a vertical operating shaft located at the side of the longitudinal center line of the car opposite to the clutch; an arm on said shaft extending towards said center line; a lever pivotally mounted on the frame of the truck and connected to the clutch mechanism, the long arm of the lever extending towards the central longitudinal line of the car; and a link connecting the long arm of the lever with the arm of the vertical operating shaft.

1,863,441. NOVELTY JUMPING ACCESSORY FOR SLEDS OR THE LIKE. GUSTAV C. FOLBERTH, New York, N. Y. Filed May 3, 1930. Serial No. 449,623. 13 Claims. (Cl. 280—8.)



1. In an accessory for a sled for elevating the same during translatory movement thereof over a supporting surface, an element mounted for rotation on a horizontal

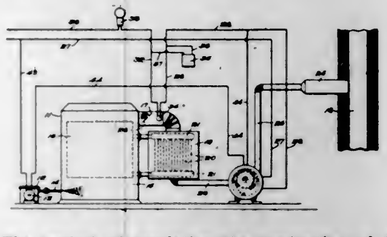
axis, said element having a surface eccentric to its axis for intermittent contact with the supporting surface when rotating, and releasable means for holding said element against rotation in an inactive position.

1,863,442. PORTABLE SAFETY SIGNAL. PATRICK GOODMAN, Brooklyn, N. Y.; Mary Goodman and Elizabeth A. Goodman administrators of said Patrick Goodman, deceased. Filed Dec. 12, 1928. Serial No. 325,465. 3 Claims. (Cl. 248—41.)



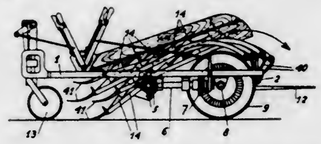
1. A stand comprising pivotally connected links and legs, telescopic sections to the outer one of which the legs and links are connected for opening and closing, a cap to close an end of one of the sections to contain a furled flag and staff within the inner section, a cap to close an end of the other section and limit the contraction of the sections within each other, and means carried by the second cap by which the flag staff is securable to said cap when abstracted from the inner section.

1,863,443. METHOD OF REGULATING COMBUSTION. GEORGE E. GOODRIDGE, Reading, Mass., assignor to Arthur H. Ballard, Incorporated, Boston, Mass., a Corporation of Massachusetts. Original application filed Dec. 3, 1928, Serial No. 323,266. Divided and this application filed Dec. 6, 1929. Serial No. 412,264. 3 Claims. (Cl. 158—117.5.)



2. The method of regulating the combustion of fluid fuel for heating a fluid medium, which consists in igniting and burning the fluid fuel intermittently in response to temperature changes under the influence of an artificially induced draft, transferring heat of combustion at the locus of combustion of said fuel to said medium, conducting the products of combustion from said locus through a second locus and usefully extracting heat therefrom in said second locus, conducting the cooled products of combustion from said second locus and discharging them at an elevation substantially higher than the locus of combustion, creating the artificially induced draft at a point beyond said second locus to lower the pressure in both said loci, initiating said artificially induced draft immediately prior to the ignition of the fluid fuel, and stopping the same on the cessation of combustion.

1,863,444. TEDDER. HANS HÜRLIMANN, Kirchberg, Switzerland. Filed Aug. 22, 1929, Serial No. 387,746, and in Switzerland Aug. 28, 1928. 2 Claims. (Cl. 56—373.)



1. A tedder comprising in combination a frame, wheels supporting said frame, means to lift grass from the ground and to throw it backwardly, shaking means projecting in the path of the falling grass and reciprocating in horizontal planes.

1,863,445. DEVICE FOR REMOVING FORMS FROM MOLDS. ROBERT M. KERR, Detroit, Mich., assignor to Detroit Dental Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 3, 1930. Serial No. 493,089. 6 Claims. (Cl. 263—5.)



1. In a device of the character described, a platform adapted to support a flask, a burner pipe extending longitudinally of said platform in parallelism with one side thereof, and means providing for vertical adjustment of said burner pipe relative to said platform while preventing movement of said burner pipe out of parallelism with the side of said platform.

1,863,446. PROCESS OF FORMING AND STORING CYLINDRICAL CAN BODIES. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 17, 1929. Serial No. 400,329. 1 Claim (Cl. 113—120.)

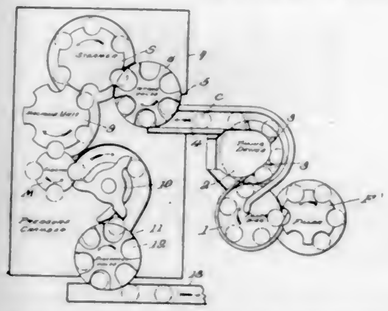


The process of storing and forming cylindrical can bodies consisting in bending a flat blank of metal around a horn convexo-convex in cross section and so proportioned that the opposed walls of the formed body curve circumferentially from the center line of the can body toward each other and meet at the side edges in a relatively small curved portion so that said opposed walls in the central section of the body and extending substantially to their outer edge portions may be bent into contact and will spring apart when released, uniting the side edges of the blank to form a side seam disposed between the side edge portions of one of the walls, storing the blanks for shipment by piling the same one on the other and subsequently expanding the body substantially into cylindrical form and applying pressure to the relatively small curved side edge portions of the body for shaping the body into true cylindrical form.

1,863,447. PROCESS OF STERILIZING FOOD PRODUCTS IN CONTAINERS. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 24, 1930. Serial No. 497,931. 3 Claims. (Cl. 99—8.)

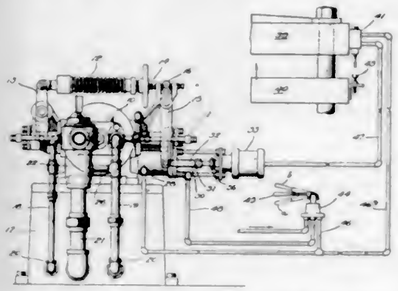
1. A process of sterilizing food products in containers consisting in subjecting the filled container to a pressure

above atmospheric pressure, passing steam under pressure greater than that on the food product into and through the food product, discontinuing the application



of the steam to the food product, and covering and sealing the container while maintained at substantially the pressure on the food product during treatment.

1,863,448. CONTROL SYSTEM FOR RAMS. HENRY W. LANDENBERGER and HARRY WESLEY LINK, Philadelphia, Pa., assignors to American Fluid Motors Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 29, 1929. Serial No. 367,001. 13 Claims. (Cl. 138—17.)



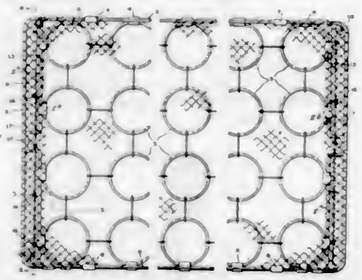
1. In combination with a hydraulic press having a movable platen, a variable-stroke pump supplying fluid to actuate the platen in its working stroke, a shiftable member controlling the stroke of the pump and movable from full-stroke to neutral positions, pressure actuated means engaging said member to shift it to the full-stroke position, pressure actuated means engaging the member to shift it toward its neutral position and adapted to overcome the first-named pressure-actuated means, and means operated by the movable platen after a predetermined movement in its working stroke for automatically introducing pressure to the last-named actuating means.

1,863,449. TOILET IMPLEMENT. EVERARD A. LEES, Central Falls, R. I. Filed May 31, 1930. Serial No. 458,235. 1 Claim. (Cl. 30—12.)



A cuticle treating implement including a shank having an aperture in one portion thereof, the apertured portion being reamed out on one side of the shank and the opposite side of said shank having a convex surface portion, and angularly positioned walls within the aperture, said walls forming edges within the aperture.

1,863,450. SPRING STRUCTURE. EDWARD D. MCNALLY, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich. Filed Feb. 18, 1930. Serial No. 429,420. 2 Claims. (Cl. 5—230.)

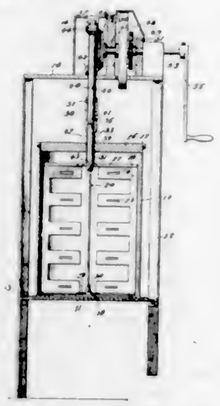


1. In a spring structure comprising a foundation of coil springs, and a top frame connected to the upper coils of the border springs and having a side portion projecting beyond the foundation, a wire fabric extending over the foundation and frame and connected at its edges to the respective sides of the frame, and having the edge portion adjacent the projecting portion of the top frame folded therearound and against the under side of the fabric, a U-shaped member embracing the folded portion of the fabric projecting beyond the foundation, and fastening elements passing through the folded portion of the fabric and engaging the parts of the U member in contact with the said fabric.

1,863,451. MANUFACTURE OF ALKYL METAL COMPOUNDS. DON KYLE PROFFITT and JOEL GEORGE SHARBON, Denver, Colo., assignors, by mesne assignments, to Ethyl Gasoline Corporation, a Corporation of Delaware. Filed Aug. 12, 1926. Serial No. 128,910. 10 Claims. (Cl. 260—11.)

1. In the process of carrying on the Grignard reaction, the step of carrying out the reaction in the presence of a hydro-iodide of an aromatic amine as a catalyst.

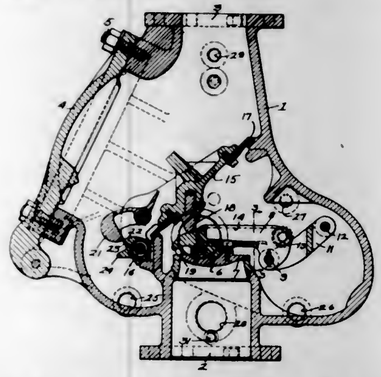
1,863,452. BUTTER MACHINE. TULLY C. ROWLAND, Ferris, Tex. Filed May 21, 1931. Serial No. 539,066. 3 Claims. (Cl. 259—105.)



1. A butter machine comprising a frame, a container carried by the frame, dashers in the container having interdigitating vanes, a hollow shaft for rotating one of the dashers, a jointed shaft within the hollow shaft for rotating the other dasher, means carried by the frame for rotating both of said dashers oppositely to each

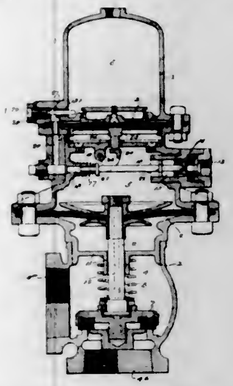
other, said hollow shaft being formed of tubular sections, and a coupling sleeve having a ratchet tooth and notch connection with one of the sections and being slidably mounted on the other section by a pin and slot connection whereby said sections may be rotated as a unit in one direction or one of the sections may be uncoupled from the driving means by the ratchet tooth riding out of the notch and the sleeve riding upon the pin when the direction of rotation is reversed to let the dasher carried by the hollow shaft idle.

1,863,453. DRY PIPE VALVE. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 11, 1928. Serial No. 325,139. 1 Claim. (Cl. 169—20.)



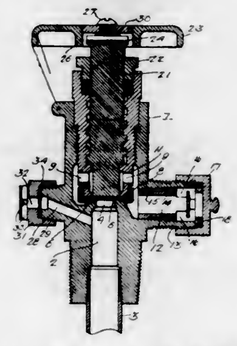
In a dry pipe valve, the combination with a casing, of a valve clapper, means providing a seat for the clapper within the casing, and a lever pivotally secured at its upper end within the casing and having its lower end pivotally attached to the clapper, said lower end being constructed and arranged to swing with the clapper downwardly and away from the said seat when the clapper is unseated, and guide means for the clapper in the casing supporting the free end of the clapper during the unseating movement.

1,863,454. EXHAUSTER. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1930. Serial No. 473,450. 3 Claims. (Cl. 169—17.)



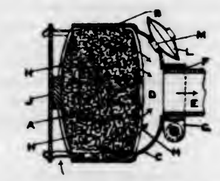
1. In an exhauster for dry pipe systems and the like, the combination with a pressure relief valve for said system, of control means for said valve including a pressure-actuated element, means providing pressure areas at opposite sides of said element, a port for each of said areas through which the latter communicate with said system, and a pin of non-corrodible alloy detachably inserted in one of said ports to relatively restrict said port as compared with the other whereby a pressure change in the system occurring at a rate exceeding a predetermined minimum creates a pressure differential between said areas and consequent actuation of said element.

1,863,455. SEALING AND RELEASE DEVICE. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 4, 1930. Serial No. 500,099. 9 Claims. (Cl. 169—11.)



8. In a device of the character set forth, a casing having a passage terminating in a seat, a frangible disk overlying and sealing the terminal end of said passage, a reinforcing member for one side of the disk normally preventing rupture of the latter by pressure exerted from the opposite side, and means for retracting said member to permit the disk to rupture.

1,863,456. AIR FILTER. FRANK SMITH, Elland, England. Filed July 7, 1930, Serial No. 466,301, and in Great Britain Feb. 20, 1930. 5 Claims. (Cl. 183—45.)

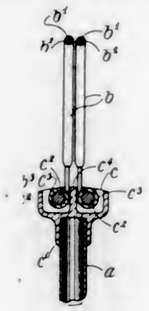


5. In combination with a filtering device adapted to be connected to an apparatus to supply fresh air thereto, of a casing having a filtering media therein, and a signaling device communicating with said casing whereby upon decrease in pressure in the casing due to impairment of the air supply passing through the filtering media, air passes through the signaling device to actuate the same and to restore the supply of air to the apparatus.

1,863,457. WALKING STICK SEAT. HARRY DUDLEY STEVENS, Stoke, Coventry, England. Filed Feb. 26, 1930, Serial No. 431,532, and in Great Britain Sept. 18, 1929. 4 Claims. (Cl. 155—135.)

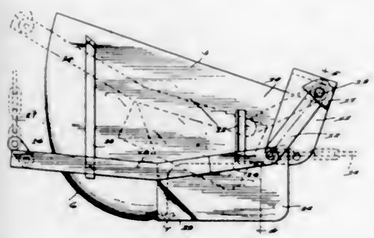
1. In a seat stick having a cane portion, a bracket mounted on the upper end of said cane portion, a pair of anchoring pins mounted in said bracket and extending par-

allel to each other, and a division plate rigid with said bracket and extending from end to end thereof parallel to, between, and equi-distant from, said anchoring pins respectively, the said bracket having sides respectively extending parallel to and adjacent the respective pins, in combination with a pair of resilient loop members respec-



tively mounted on said pins to swing about the respective axes thereof, each said loop member being adapted to swing in an arc not exceeding ninety degrees defined at one end by the division plate and at the other end by the edge of the respective cooperating side portion of the bracket.

1,863,458. BUCKET. WILLIAM L. THOMPSON, Starkville, Miss. Filed Feb. 27, 1930. Serial No. 431,819. 7 Claims. (Cl. 37—135.)



3. In an excavating bucket, substantially parallel side walls, a rear wall connecting the side walls and having a forwardly extending lower terminus, digging means carried by said forwardly extending terminus, extensions on the side walls forwardly of the digging means, upstanding plates pivotally supported from said extensions, a hoist line connected to said plates, and a drag line connected to said plates below the pivotal axis thereof.

1,863,459. DIRECTION INDICATOR. NORMAN W. ADAMS, Syracuse, N. Y., assignor of forty one-hundredths to Homer P. Marsh, Syracuse, N. Y. Filed Feb. 6, 1931. Serial No. 513,882. 1 Claim. (Cl. 74—14.)



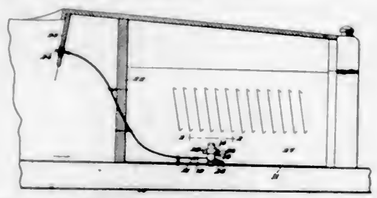
Means for actuating vehicle direction indicators, including a tubular body having a longitudinal hollow rib, a member in the cylindrical portion of the body having a part movable in the rib to prevent rotation of the member, an actuating wire coiled around said member to reciprocate same, a loop-like element carried by the member and through which one end of the coiled wire loosely extends, a stationary guide at one end of the tubular body in which said end of the coiled wire is journaled, whereby upon rotation of the wire the member will be reciprocated, a guiding sleeve receiving the opposite end of the member therethrough and having a flange which loosely and rotatably engages the interior of the body, means to fixedly secure the opposite end of the coiled wire to the sleeve, and means to drive the coiled wire.

1,863,460. PIPE CLEANER. GEORGE AUBINGER, New Rockford, N. Dak. Filed Aug. 8, 1931. Serial No. 556,005. 1 Claim. (Cl. 15—104.30.)



An implement of the kind described comprising a closely convoluted flexible tube, a closely convoluted flexible shank rotatably supported within the tube, a tool head on said shank and protruded beyond one end of the tool, means at the other end of the shank for rotating the same, and tensioning means active between the tube and shank to normally hold the tool head against said tube but permitting displacement of the latter therefrom.

1,863,461. AUTOMOBILE HOOD LOCK. JOSEPH E. BAILEY, Dayton, Ohio. Filed Oct. 3, 1930. Serial No. 486,253. 5 Claims. (Cl. 292—171.)

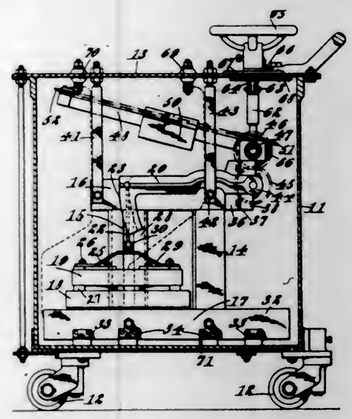


1. In an automobile hood lock, a frame carried member, a latch slidingly supported thereby, a hood carried keeper adapted to be engaged by the latch to hold the hood closed, an L-shaped member to yieldingly hold the latch in keeper engaging position, means to disengage the latch from the keeper, and means to hold the latch in disengaged position.

1,863,462. TRANSFORMER FOR USE IN ELECTRIC WELDING AND LIKE OPERATIONS. GIUSEPPE BENEDETTO, Novara, Italy, assignor to Omes Holding Company Limited, London, England, a British Company. Filed Aug. 4, 1931. Serial No. 555,122, and in Great Britain May 28, 1930. 4 Claims. (Cl. 171—119.)

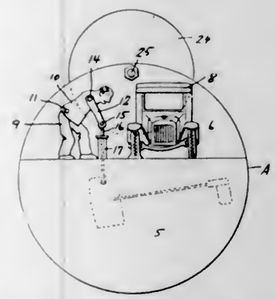
1. In a transformer, in combination, a magnetic core including a vertical limb, a primary coil and a secondary

coil mounted upon said vertical limb, one of said coils being mounted to move upon the vertical limb towards and away from the other coil, two counterbalance levers operatively connected together for movement in opposite



directions and supported one above the other to extend over the plan area of the transformer, means suspending the movable coil from one of said levers, and a counterweight for the movable coil mounted upon the other of said levers.

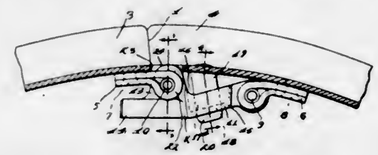
1,863,463. ADVERTISING NOVELTY. JUDD ALLEN BOLINGER, Kingsport, Tenn. Filed Oct. 26, 1931. Serial No. 571,203. 3 Claims. (Cl. 40—138.)



3. In an advertising novelty, a support having an offset intermediate portion defining a platform, a cylinder on the platform and having a rod, a figure secured to said support above said platform and having a pivoted section and a pivoted arm, said arm being connected to said rod, a spring secured to said support, and having a weight connected to said rod, and an attaching means carried by said support.

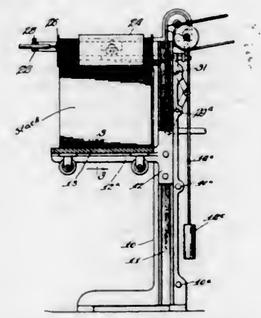
1,863,464. TIRE CARRYING RIM. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Jan. 14, 1929. Serial No. 332,540. 5 Claims. (Cl. 301—34.)

1. The combination with a transversely split rim, of a link pivotally connected to the rim ends comprising bars having resilient portions spaced from each other to form an opening with a width between their inner edges less than that between their outer edges, and a member extending inwardly from one rim end and adapted to extend through the opening, said member having a head of greater width than that of the opening between the inner edges of the bar portions and of substantially the same width as that



of the opening between the outer edges of the bar portions said head being adapted to extend inwardly beyond said bars when the rim is in operative position.

1,863,465. AUTOMATIC JOGGER. RUSSELL W. BORROWDALE, Chicago, Ill., assignor, by mesne assignments, to The Jogger Manufacturing Company, a Corporation of Illinois. Filed Feb. 7, 1928. Serial No. 252,662. 5 Claims. (Cl. 271—88.)



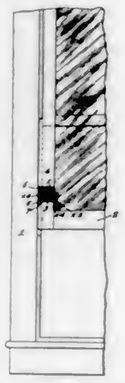
1. The combination with a sheet stacking apparatus having a stack-supporting table and jogging means for successively aligning the edges of sheets being stacked, of a table lowering mechanism comprising a rotatable shaft operatively connected to and for vertically moving said table, manual means for directly engaging said shaft, a second rotatable shaft geared to said first mentioned shaft, means for automatically disengaging said first and second shafts upon rotation of said manual means in one direction, a pivotally mounted actuating arm, a pawl mounted thereupon, a ratchet wheel fixedly mounted on said second shaft, a shroud adjustable on said ratchet wheel to predetermine the number of teeth thereof which are engageable by said pawl, and a reciprocating arm for direct connection with said actuating arm and said jogging means.

1,863,466. LOOP-FORMING NEEDLE. GUSTAV A. CARLSON, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 3, 1930. Serial No. 486,251. 3 Claims. (Cl. 112—80.)



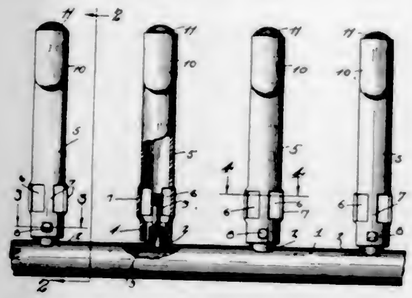
1. A tube-like needle for the purpose set forth having a concavo-convex cross-section affording a back wall which is provided with elongated eyes therethrough near the tip and near the base of the needle, said wall having external thread-grooves between and adjacent said eyes, said grooves being formed by inward depression of the metal adjacent each eye.

1,863,467. WINDOW BOLT. WILLIAM A. CHARLESTREAM, Eagle Bridge, N. Y. Filed Aug. 23, 1929. Serial No. 387,951. 1 Claim. (Cl. 292—58.)



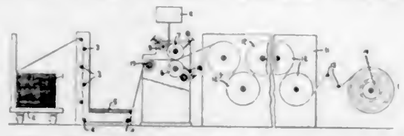
A window fastener comprising a tubular casing adapted to be inserted in an opening formed in a window sash and having bent out portions to frictionally engage the wall of the opening, a spiral rib formed on the inner wall of the tubular casing, a bolt extending through the tubular casing having a spiral groove receiving the rib to cause endwise movement of the bolt when rotated and said bolt having one end bifurcated, a head secured to the other end of the bolt and having a cup shaped face, a frictional disk in the cup shaped base to engage a window frame, a handle pivoted to the bifurcated end of the bolt to permit rotation of the bolt in either direction and normally occupying a depending position from said bolt and adapted to be extended into parallelism with the bolt when desiring to remove the latter from the casing, and substantially V-shaped ribs formed on the tubular casing and terminating at one end thereof to be engaged by the head when in one position and adapted to be partially embedded in the wall of the opening of the window cash for cooperating with the bent out portions of the casing in preventing the latter from rotating within the opening.

1,863,468. GAS BURNER. HUGH W. CHRISTIE, Tulsa, Okla. Filed Nov. 14, 1929. Serial No. 407,161. 1 Claim. (Cl. 158—104.)



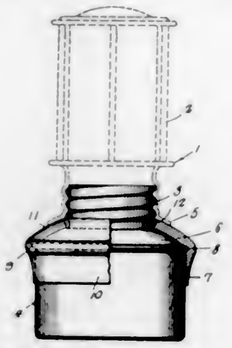
A gas burner of the character described comprising a gas and air mixing section constituting a burner tube, having its lower portion of enlarged diameter and formed with spaced apart air openings in combination with a supply tube formed with a collar to which said burner tube is attached and with a concentric nipple for the attachment of a gas jet tube, said collar being formed with spaces at its base for the admission of air.

1,863,469. LEATHER SUBSTITUTE, BASE SHEET MATERIAL THEREFOR, AND PROCESS OF MAKING SAME. JAMES J. CLIFFORD, Reading, Mass., assignor, by mesne assignments, to Stedfast Rubber Company, Inc., a Corporation of Massachusetts. Filed June 10, 1929. Serial No. 369,631. 29 Claims. (Cl. 91—70.)



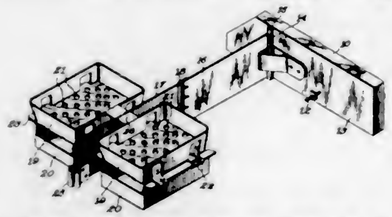
1. The process of producing a sheet material available as a substitute for certain kinds of leather and for other purposes comprising producing a base by, (1) thoroughly impregnating cotton flannel, having loosely twisted warps in which the filling and warps are napped on both sides, with a solution of rubber, organic resin and a filler, (2) drying the impregnated fabric and (3) ironing the impregnated fabric under tension on both sides gently to press the napped fibres at both sides into the impregnating substance and conceal the weave, and thereafter vulcanizing said base.

1,863,470. COMBINED GASKET AND PROTECTOR FOR CARBIDE LAMPS. FRANCESCO COLABRESE, Albert, W. Va. Filed Oct. 7, 1931. Serial No. 567,513. 2 Claims. (Cl. 48—4.)



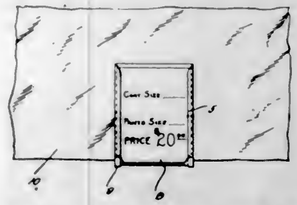
1. In combination with a gas lamp having a fuel bowl provided with cylindrical and frusto-conical portions and an attaching neck with a burner detachably secured thereto, a cushioned body to form a combined gasket and protector mounted on the bowl and conformable to the cylindrical and frusto-conical portions of the bowl and clamped against the frusto-conical portion by the burner.

1,863,471. SANITARY CLEANING MEDIUM CONTAINER. JOHN COLAIZZI, Pittsburgh, Pa. Filed Nov. 6, 1931. Serial No. 573,473. 3 Claims. (Cl. 45—28.)



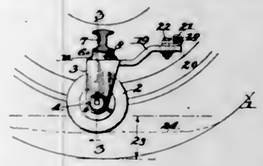
1. In a device of the character described, an arm, trays arranged on opposite sides of the arm and having rigid connection therewith, and trays arranged beneath the first named trays and slidably connected therewith.

1,863,472. TAG HOLDER FOR GARMENTS. JACOB COVITCH, Edensburg, Pa. Refiled for abandoned application Serial No. 563,814, filed May 17, 1929. This application filed Mar. 17, 1932. Serial No. 599,563. 1 Claim. (Cl. 40—11.)



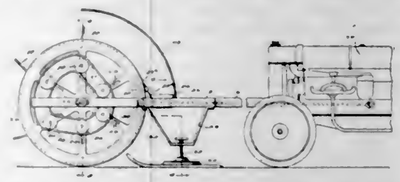
A price tag holder for garments comprising a plate of spring material, said plate being bent at its intermediate portion with its half portions disposed substantially in parallelism, one end portion of the plate being disposed slightly inwardly with its end rolled inwardly, and means on the complementary half portion of the plate for supporting a price tag, said means comprising longitudinal flanges on the plate extending inwardly at its edge portions, the flanges at one side of the holder being spaced from the plate to permit the insertion of a price tag, while the flanges at the opposite side of the holder are flattened against the plate to provide reinforcements.

1,863,473. AUXILIARY VEHICLE WHEEL. JOSEPH CRISANTI, Manasquan, N. J. Filed Oct. 6, 1931. Serial No. 567,268. 2 Claims. (Cl. 280—95.)



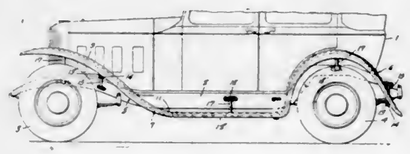
2. In a vehicle having a pair of front wheels, a tie bar connecting the steering knuckles of said wheels, and an axle by which said knuckles are turnably carried; a clamp fixed on the tie bar near each knuckle so as to be adjacent to the respective wheel, each clamp including a projecting portion, a stud carried by each projecting portion and constituting part of a pivotal connection, an auxiliary wheel for each front wheel, each auxiliary wheel having a mount, bearing means by which the mounts are connected with the axle for turning, and an arm extending from each mount for connection with the respective stud, each arm having a slot receiving the respective stud to complete the pivotal connection and to compensate for variations in the distance of the tie bar from the axle.

1,863,474. SNOWPLOW. GUY HOWARD CURTIS, Strome, Alberta, Canada. Filed Jan. 24, 1931. Serial No. 511,092. 3 Claims. (Cl. 37—43.)



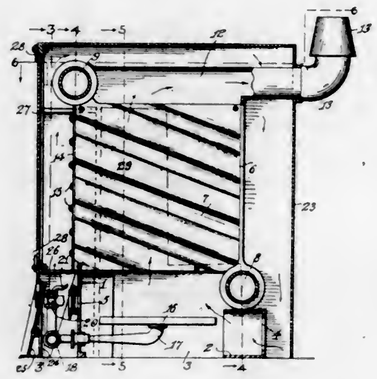
1. In a snow plow a frame, a drum rotatably mounted in the frame, a plurality of projectable and retractible blades supported on the drum, rollers fixed to the blades at opposite ends thereof and a cam-shaped trackway supported at each side of the drum in which the rollers move and cooperating with the latter in causing the blades to be successively projected and retracted at predetermined intervals, and an upwardly curved plate arising from the frame and overlying the drum and cooperating with the latter in directing the snow in a rearward direction, and a horizontally disposed conveyor supported on the frame between the drum and plate.

1,863,475. MOTOR VEHICLE FENDER AND RUNNING BOARD. PHILIP FOX, Brooklyn, N. Y. Filed May 5, 1931. Serial No. 535,240. 1 Claim. (Cl. 280—153.)



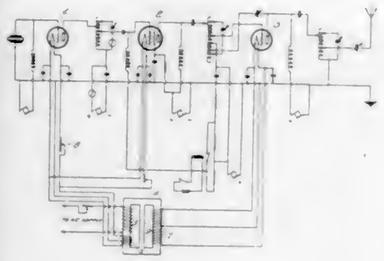
A fender for motor vehicles comprising a frame including curved end portions to be positioned over the front and rear wheels of a vehicle and a straight medial portion, mud guards secured to said curved portions, a running board secured to the straight portion and engaging the adjacent ends of the mud guards, brackets carried by the frame, supporting elements secured to the vehicle and slidably received by the brackets, supporting arms fixed to the frame, and cushion means yieldably securing the arms to the vehicle.

1,863,476. BOILER. GEORGE WILLIAM FRAUZHEIM, Cleveland, Ohio. Filed Feb. 27, 1930. Serial No. 431,866. 3 Claims. (Cl. 122—210.)



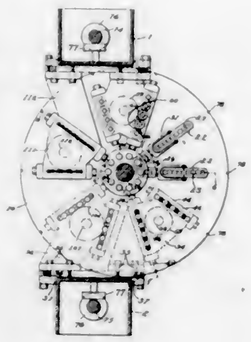
3. The combination with a boiler having flues, a burner thereunder, means for conducting products of combustion from the boiler flues, and a jacket extending over the boiler having an inlet at one end, said jacket constituting means for conducting fresh air to the burner, of a valve for controlling the flow of fuel to the burner, a damper in the inlet of the jacket normally open, and means movable with the valve for engaging the damper when the valve is closed to close the damper, said damper being movable to closed position independently of the valve.

1,863,477. FILAMENT SUPPLY TRANSFORMER FOR RADIO TRANSMITTERS. LOUIS A. GERHARD, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,525. 2 Claims. (Cl. 250—27.)



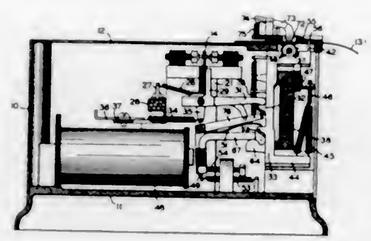
2. In a system of power distribution for thermionic tubes, the combination of, a transformer having a primary winding connected to an alternating current source and a plurality of secondary windings, said secondary windings being connected to a plurality of thermionic tubes and means comprising a magnetic leakage path to maintain the induced voltage of said windings substantially constant.

1,863,478. MULTIPLE BUTTON MACHINE. NORMAN B. HAFLEIGH, Philadelphia, Pa., assignor to Gerald E. Hafleigh, Buchanan, Va. Filed Apr. 24, 1929. Serial No. 357,727. 10 Claims. (Cl. 79—6.)



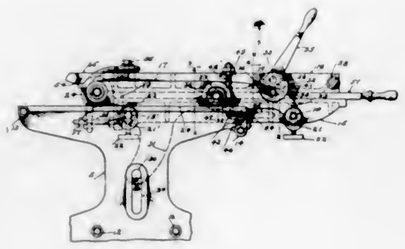
1. In a button forming machine, an index table thereon, means for clamping a piece of button stock on said table, means for shaping a plurality of buttons simultaneously on one face of the stock, means for simultaneously drilling and reaming button holes through the shaped faces of the buttons, means for completing the drilling and reaming of the button holes through the button, means for shaping a plurality of button faces on the opposite face of the button stock, and means for cutting out the buttons.

1,863,479. RUB OUT SIGNAL DELETER FOR TAPE TRANSMITTERS. RAY HOOVER, North Plainfield, and FRANK JOSEPH HAUPT, Bergenfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,764. 13 Claims. (Cl. 178—17.)



1. A tape transmitter comprising a series of transmitting pins, an individual contact arm controlled by each of said pins, a marking and spacing contact for each contact arm, means normally applying marking condition to said marking contacts and means for removing said marking condition and applying a spacing condition to the marking contacts when all of said contact arms are on their marking contacts.

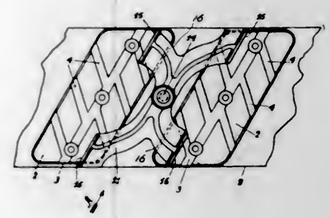
1,863,480. MOLD FOR CASTING STEREOTYPE PRINTING PLATES. WILLIAM F. HUCK, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 18, 1929. Serial No. 407,952. 8 Claims. (Cl. 22—5.)



1. In a device for casting stereotype printing plates, a mold having a bottom member, a cover member hinged thereto, a locking mechanism to lock the cover and bottom together, means to swing the mold to a vertical position and to a horizontal position and a mechanism arranged to prevent moving the mold from the horizontal position except when it is closed.

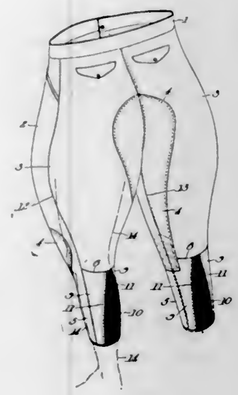
1,863,481. TREAD DEVICE FOR VEHICLE WHEELS. HANS HÜRLIMANN, Wil, Switzerland. Filed May 27, 1930, Serial No. 456,216, and in Switzerland July 6, 1929. 1 Claim. (Cl. 301—44.)

In tread devices for vehicle wheels, the combination of a pair of tread plates spaced apart and secured transversely on a wheel felly and a calkin member arranged between and bearing on the tread plates and detachably secured to the felly, said calkin member having flanges on its



inner side bearing against the opposing edges of the tread plates and also having flanges at its ends engaging over the ends of the tread plates.

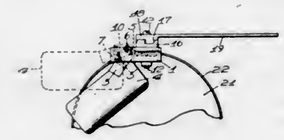
1,863,482. BREECHES. HARRY Z. ISAACS, Baltimore, Md. Filed July 7, 1930. Serial No. 466,254. 2 Claims. (Cl. 2—228.)



1. In breeches, a leg bottom of tapering tubular form, said bottom having a front and a back, said back including two relatively non-resilient members and a tapering resilient member interposed between and joined to one edge of each of said relatively non-resilient members, said resilient member having its portion of greatest width arranged at the portion of said bottom of least diameter, and the opposite edges of said non-resilient members joined to the edges of said front.

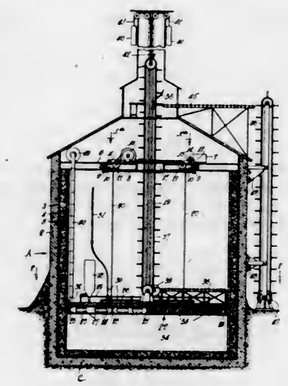
1,863,483. CAN OPENER. GLENN L. JACKSON, Chicago, Ill. Filed Oct. 3, 1927. Serial No. 223,778. 5 Claims. (Cl. 30—3.)

1. A can opener comprising a body portion, a pair of opposed gripping wheels rotatably mounted on said body portion, a cam member disposed in engagement with one of said wheels, a handle having a cam portion arranged to engage said cam member to cause a bodily movement of



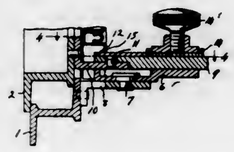
one of said wheels along its axis when the handle is rotated, and a blade connected with said body portion and arranged to center the can top.

1,863,484. STORAGE HOUSE. CHARLES L. JONES, Pelham, and WILLIAM L. KUEHNLE, Garden City, N. Y., assignors to Dryice Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1929. Serial No. 410,747. 28 Claims. (Cl. 62—91.5.)



1. A storage chamber, the walls and bottom of which are insulated and substantially gasproof, a substantially gasproof movable false roof, a skirt extending from the outer edge of said false roof and contacting with said side walls whereby a substantially gasproof seal is provided.

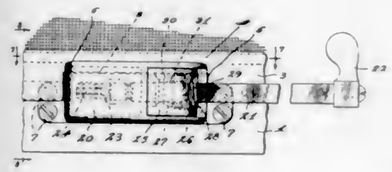
1,863,485. OPERATOR FOR WINDOWS. CLYDE W. KELLY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 7, 1929. Serial No. 330,817. 7 Claims. (Cl. 268—117.)



1. The combination with a window frame having an opening and having a bottom bar, a movable ventilator for the opening and a screen for the opening located at the

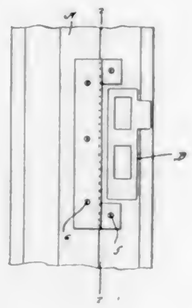
inner side of said frame and provided with an opening, of an operator for said ventilator including a support pivotally mounted upon the bottom bar of said frame and closing the screen opening, and a rod movably mounted upon said support and adapted to extend through the screen opening for actuating said ventilator.

1,863,486. WINDOW OPERATING MECHANISM. CLYDE W. KELLY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 16, 1929. Serial No. 392,995. 10 Claims. (Cl. 268—117.)



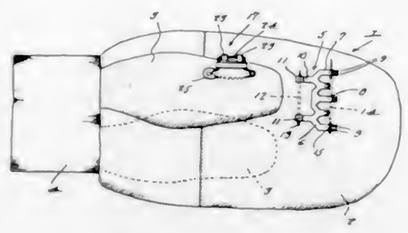
1. The combination with a frame and a movable ventilator, of an operating mechanism for said ventilator, comprising an apertured support fixedly secured upon said frame, an operating rod extending through the aperture and a rotatable guide for said rod journaled upon said support and closing the aperture therein.

1,863,487. LOCK PROTECTING DEVICE. RUSSELL WALLACE KIRKPATRICK, Atlanta, Ga., assignor of one-half to Hugo V. Meyer, Atlanta, Ga. Filed Apr. 21, 1931. Serial No. 531,813. 1 Claim. (Cl. 70—15.)



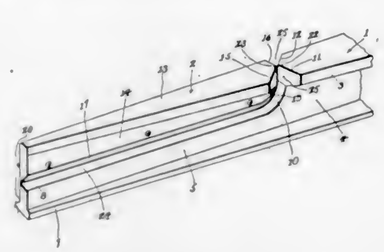
In combination with a door frame having a keeper member thereon and including a stop strip, an elongated angle-shaped member having one part counter-sunk in the outer face of the strip and the other part engaging the inner edge of the strip, said member being located adjacent the keeper member and projecting beyond the ends thereof, that part of the member which engages the edge of the strip being cut adjacent its ends, and the parts between the cuts and the ends being bent at right angles to form ears which are provided with holes for receiving fastening means which penetrate that side of the frame which is covered by the door when the same is in closed position, the part of the member which engages the side of the strip and which is located between the ears having its free edge beveled for penetrating the jamb at the inner edge of the stop strip.

1,863,488. CORN HUSKING HOOK. CALVIN EARL KLING, Laclede, Mo. Filed Mar. 24, 1931. Serial No. 524,927. 10 Claims. (Cl. 130—4.)



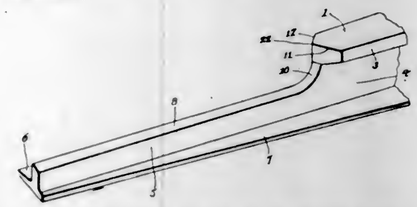
3. A device of the character described comprising a bar, alternately long and short arms extending from one side of the bar, pairs of prongs, mounted integrally with the free end portions of the arms, shanks extending from the other side of the bar, and means for detachably mounting the device in position on a hand covering.

1,863,489. SWITCH POINT RAIL. GEORGE H. LAMBORN, Chicago, Ill., assignor to Louisville Frog, Switch & Signal Company, a Corporation of Kentucky. Filed July 13, 1931. Serial No. 550,526. 9 Claims. (Cl. 246—437.)



1. In a method of manufacturing a reclaimed switch point rail structure, cutting away of the upper part of the damaged portion of an impaired switch point rail to form a recess, providing one end portion of the wall of the recess with oppositely extending angled parts and the remaining portion of such wall beveled throughout, cutting from a track rail an insert for positioning in and corresponding to the shape of such recess, providing that end edge portion of the edge of the insert which is to oppose the said end portion of said wall with oppositely extending angled parts and oppositely bevelling with respect to said remaining wall portion that portion of the edge of the insert which is to oppose the said remaining wall portion, positioning the said portions of the edge of the insert in opposed spaced relation and at an angle with respect to the wall of the recess to form an open bottom V-groove extending longitudinally of the structure and a pair of oppositely disposed V-grooves communicating with each other at their bottoms and extending vertically of the structure, clamping the insert and rail together to maintain the grooves in said structure and the insert at angle, welding at spaced points in the longitudinal groove to connect the insert and rail together, removing the clamp, and then completely filling the grooves, while the area bordering the latter is subjected to a heat treatment with a welding body to provide a unitary structure.

1,863,490. SWITCH POINT RAIL. GEORGE H. LAMBORN, Chicago, Ill., assignor to Louisville Frog, Switch & Signal Company, a Corporation of Kentucky. Filed July 13, 1931. Serial No. 550,527. 5 Claims. (Cl. 246—437.)



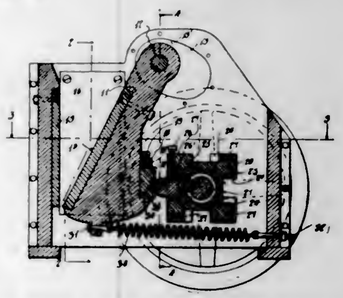
1. In a reclaimed switch point rail structure, a track rail section including a head, web and flange, said section being cut out at its upper part and for a portion of its length to reduce the height of the web and the length of the head thereby providing said rail with a recess, a portion of the wall of the latter being provided by an end edge of the head and the remaining portion by said web, said wall having an upwardly extending rear edge, that portion of said wall provided by said edge of the head being oppositely angled, and that portion of the wall provided by the web being beveled.

1,863,491. SWITCH POINT RAIL. GEORGE H. LAMBORN, Chicago, Ill., assignor to Louisville Frog, Switch & Signal Company, a Corporation of Kentucky. Filed July 13, 1931. Serial No. 550,528. 11 Claims. (Cl. 246—437.)



1. In a reclaimed switch point rail structure, a switch point section including a tapered head and a stem including a bottom and front and rear end edges, said head having its inner end oppositely angled, the inner ends of the angled portions of the head merging into each other to provide a point rearwardly of the outer ends of such portions, and said stem having its bottom and rear end edges beveled.

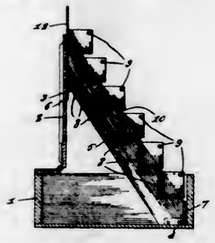
1,863,492. STONE CRUSHER. EARL J. LEAP, Madley, Pa. Filed Apr. 2, 1931. Serial No. 527,259. 4 Claims. (Cl. 83—53.)



1. In a crusher, a jaw movable to crush material, an actuator for said jaw, a shaft having an eccentric operable through the actuator to move the latter to cause movement of the jaw, a contractile spring urging movement of the jaw counter to said actuator, said actuator being rotatable on the eccentric for adjustment thereof and having means controlled by the adjustment for moving the jaw to different extents to govern the degree of crushing.

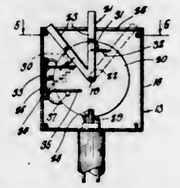
3. In a crusher, a jaw movable to crush material, means to actuate the jaw, a shaft pivotally mounting the jaw, arbors having openings providing bearings for said shaft, said arbors being removable and reversible, and the openings of said arbors for said shaft being closer to one end than to the other.

1,863,493. DISPLAY CASE. HOWARD N. LINES, Sabetha, Kans. Filed Mar. 22, 1930. Serial No. 438,223. 1 Claim. (Cl. 206—45.)



The combination with a packing and shipping case having a hinged cover at its top, of stepped risers removably fitted in the case to meet its front, cleats on the cover, strips on the upper ends of the risers to detachably engage the cleats, brackets in the case close to its front and bottom, strips on the lower portions of the risers to detachably engage the brackets, and a plurality of trays removably supported in the steps of the risers.

1,863,494. SWITCH. GEORGE H. E. LYONS, Dayton, Ohio. Filed Mar. 7, 1930. Serial No. 434,134. 1 Claim. (Cl. 200—73.)

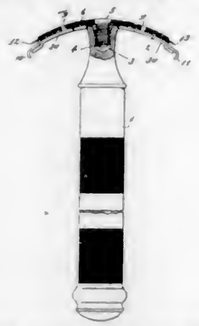


A signalling switch comprising a casing having a slot therein, self opening contacts in the casing, a shaft journalled in the casing and having a crank portion, a tension means between the crank portion and the casing for permitting said crank portion to move into several positions and to retain the crank portion in said positions until moved by a force acting on the shaft, a disk journalled on the shaft, a V-shaped lever having a bifurcated portion straddling the disk and secured to the shaft with the ends thereof extending through the slot to be moved from one position to another, means on said disk to be engaged by the lever to move said disk by the lever, means on the disk to close said contacts during the movement of the disk in one direction and to permit said contacts to open by the movement of the disk in an opposite direction.

1,863,495. SAFETY RAZOR HEAD AND BLADE. EDWARD B. MANLEY, New York, N. Y. Filed Jan. 9, 1931. Serial No. 507,730. 13 Claims. (Cl. 30—12.)

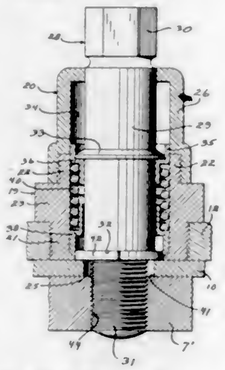
1. In a shaving head unit a pair of thin holding plates one of said plates having fingers acting as a guard, a

threaded stud permanently connected with and extending from one of said plates functioning to receive a handle when the unit is in use, a cutting blade positioned be-



tween said plates provided with cutting edges on the opposite sides, and rivets for rigidly and permanently non-removably securing said blade to said plates.

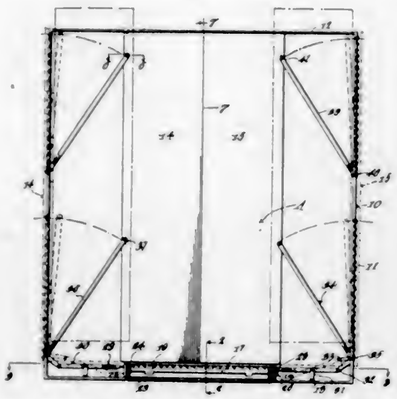
1,863,496. VEHICLE WHEEL BOLT. RICHARD MOONEY, Henryetta, Okla. Filed Apr. 29, 1931. Serial No. 533,813. 6 Claims. (Cl. 301—9.)



1. A coupling device for demountable wheels comprising a housing having a hollow coupling member for connection with the hub shell of the wheel and a cap carried by the outer end of the coupling member and having an axial guide opening thru its outer end wall, a coupling bolt rotatably guided in the housing and projecting thru said guide opening and having a threaded inner end, and an annular flange spaced from an end of the bolt; a guide ring encircling the bolt at the inner side of the flange and a coil spring encircling the coupling bolt and acting against the guide ring to normally urge the bolt outwardly thru the guide opening.

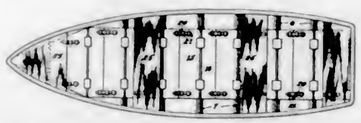
1,863,497. AUTOMATIC DOOR. ANDY P. NELSON, Hurley, S. Dak. Filed May 20, 1929. Serial No. 364,580. 1 Claim. (Cl. 268—40.)

In a door opening and closing device, a supporting frame, a pair of sliding doors movable toward and away from one another, a pair of pivotal platforms leading toward the doors, said frame provided with inner door frame posts extending upwardly upon either side of and adjacent to said platforms for facilitating the holding of said platforms against lateral shifting movement, an operating rod passing transversely of said platforms and securing the adjoining ends of said platforms together, said rod projecting beyond the side edges of said platforms, said inner door frame posts provided with vertically extending slots for receiving said operating rod and limiting the vertical movement of said rod and platforms, link means interposed between the doors and the



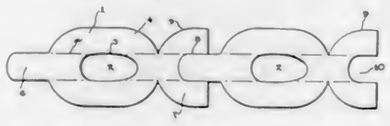
ends of said rod for controlling the operation of said doors as said platforms are operated, and means for supporting the outer ends of said platforms to permit the raising and lowering of the inner ends of said platforms.

1,863,498. COLLAPSIBLE BOAT. JOHN NOWAK, Brooklyn, N. Y. Filed June 24, 1931. Serial No. 546,583. 2 Claims. (Cl. 9—2.)



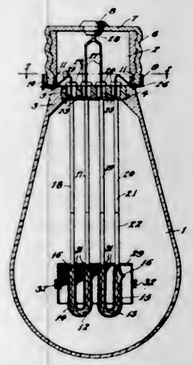
1. A collapsible boat comprising a plurality of frame members, plates hingedly connected together with their hinged edges in overlapping relation to limit them to the same plane in one position, the hinges permitting folding of the plates into contact with each other, the sets of hingedly connected plates being arranged one set between each set of frame members and hingedly connected to the same, to permit folding of the frame members down against each other or extend them into spaced relation, bolts mounted on each pair of plates on the opposite faces from the hinges for spanning relation to the line of connection between the plates, and a flexible covering over the frames.

1,863,499. SANITARY TOILET SEAT PROTECTOR. MARGUERITE T. PHILLIPS, Lansing, Mich. Filed May 26, 1930. Serial No. 455,738. 1 Claim. (Cl. 4—247.)



A toilet seat protector of paper or analogous sheet material, comprising a main cover portion corresponding to the outline of a toilet seat and its opening, and a tab and U-flap at opposite ends of the cover portion and projecting outwardly therefrom, with the tab in line with the opening of the said cover portion and U-flap and equal in width to the width of said openings, the flap conforming to the outline of an end portion of the cover portion to lie snugly thereagainst when tucked thereunder.

1,863,500. INCANDESCENT LAMP. GIOVANNI PIERSIMONI, Akron, Ohio. Filed Dec. 10, 1930. Serial No. 501,392. 15 Claims. (Cl. 176—27.)

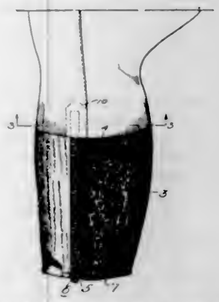


1. An electric light comprising a bulb having one end open and forming a neck, an insulating block removably seated in said neck, a base removably carried by said neck, a top contact carried by said base, a side contact carried by said base, conductors carried by said block and extending therefrom towards the closed end of said bulb, outer portions of said conductors being disposed for engagement by the contacts of said base, a filament connected with inner ends of said conductors, and a vacuum tube enclosing said filament.

1,863,501. STORING ACETYLENE. FRANK ROFFEY, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Sept. 29, 1930, Serial No. 485,338, and in Great Britain Nov. 28, 1929. 8 Claims. (Cl. 23—247.)

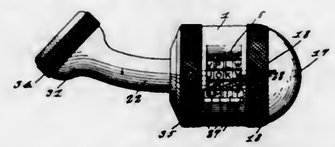
1. The method of storing acetylene which comprises dissolving acetylene in material comprising a solid absorbent impregnated with a relatively non-volatile derivative of a polyhydric alcohol.

1,863,502. BREECHES. GORDON W. ROSENBERG, Philadelphia, Pa. Filed June 5, 1931. Serial No. 542,409. 2 Claims. (Cl. 2—228.)



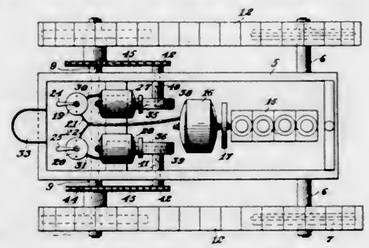
1. A pair of breeches comprising knee portions, calf portions formed entirely of elastic material secured to the lower edges of said knee portions and terminating adjacent the ankle of the wearer in a non-elastic edge, said calf portions each having a longitudinal slit therein, and slide-fastening means on said calf portions adapted to close said slits, whereby said calf portions are self adjusting to conform with the calf of the wearer when said slide-fasteners are operated and said non-elastic edge prevents creeping of said calf portions.

1,863,503. COMBINATION LOCK. JOHN SCHLITZ, Leavenworth, Kans. Filed Sept. 15, 1930. Serial No. 482,102. 2 Claims. (Cl. 70—19.)



1. A lock of the class described comprising a casing having a window in one side thereof and an opening in each end of the same, jaws in the casing, a key passing through the opening in one end of the casing for moving the jaws to releasing position, a member adapted to enter the other opening in the other end of the casing and having a groove therein for receiving portions of the jaws to detachably lock the casing to said member with free rotation of both with respect to each other, and combination members arranged in the casing and having portions visible through the window, said combination members preventing outward movement of the jaws until such members are moved to a certain position.

1,863,504. ELECTRIC DRIVE TRACTOR. STEPHEN SCHMID, Jr., Jersey City, N. J. Filed June 23, 1931. Serial No. 546,334. 1 Claim. (Cl. 180—9.2.)

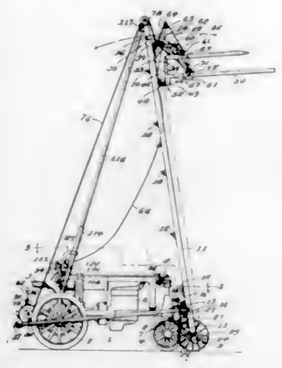


In a tractor of the chain tread type having a driving wheel on each side, a second wheel on each side spaced from the driving wheel and chain treads trained over the driving wheels and second wheels, a pair of motors mounted on the tractor, a pair of aligned shafts mounted on the tractor and projecting laterally from opposite sides thereof, drive chains operatively connecting the driving wheels with said shafts, worm wheels mounted on the inner ends of said shafts, worms carried one each by each of said motors and in mesh with said worm gears, a power supply mounted on the tractor and common to both motors, an operator's seat positioned on the tractor adjacent the rear thereof, and an independent control for each motor, the two controls being positioned adjacent to but on opposite sides of the operator's seat for selective actuation to effect relative changes in speed of the driving wheels and thereby effect diversion of the tractor from a straight course.

1,863,505. HAY LOADER. DAVID SCHON, Red Oak, Iowa. Filed July 12, 1930. Serial No. 467,544. 6 Claims. (Cl. 214—113.)

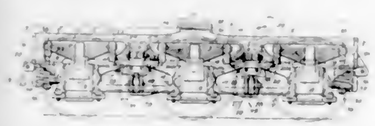
1. In a loading apparatus of the character described, in combination with a tractor, a vertically disposed frame

mounted at the forward end thereof, a rake carriage movable on said frame, means operated from the motor of the tractor for imparting upward movement to the rake carriage, and releasable to permit downward movement of the rake carriage, a rake pivotally mounted on



the carriage, means for controlling the movements of the rake, comprising a tubular member pivotally connected with the carriage, a stem pivotally connected with the rake and having a head slidable within the tubular member, and compression springs within the tubular member and located at opposite sides of said head of the stem.

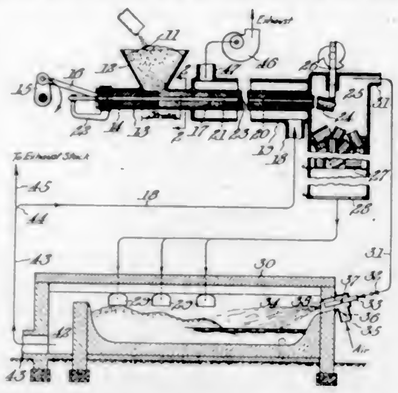
1,863,506. SIX-WHEEL TENDER TRUCK. ELLWOOD M. SHANNON, Bala, Pa. Filed Dec. 12, 1931. Serial No. 580,691. 13 Claims. (Cl. 105—195.)



1. The combination in a six-wheel truck, of a frame consisting of side members and transverse connecting members made in a single casting, each side member having a deep web on the inner side of the longitudinal center line of the side frame; a top member projecting over the space on the outside of the web and having a deep downturned flange acting to reinforce the side frame, said flange having depending portions forming the outer bearings for the pivots of equalizing levers; pedestals projecting outwardly from the web; axle boxes; equalizing mechanism extending the full length of the truck, consisting of springs; equalizing levers and links, the springs resting upon the axle boxes and the equalizing levers pivotally mounted on pins supported by the longitudinal web and the depending portions of the upper flange; links connecting the levers with the springs; and links connecting the outer ends of the end springs with the frame.

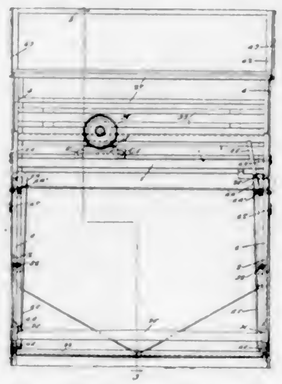
1,863,507. PROCESS OF AGGLOMERATING AND REDUCING ORES. GEORGE T. SOUTHGATE, Forest Hills, N. Y. Filed Aug. 26, 1930. Serial No. 477,939. 2 Claims. (Cl. 75—65.)

1. The process of agglomerating and reducing ores which comprises commingling comminuted ore and hydrocarbons, subjecting said mixture simultaneously to heat and to pressure to drive off hydrocarbon gases and to produce a dense, non-porous agglomerate of interlocked fixed carbon and ore, transferring said agglomerate to a furnace, and burning said evolved hydrocarbon gases in



the furnace in admixture with an oxidizing gas in such proportions that carbon monoxide formed within the furnace will be oxidized to carbon dioxide.

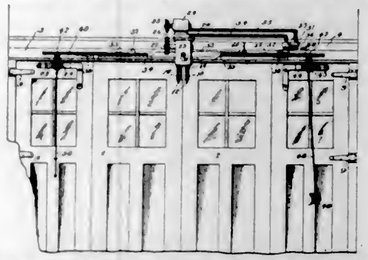
1,863,508. SASH PUTTY REMOVER AND GLAZING TABLE. ELMER A. SPRAGUE, Caldwell, Idaho, assignor of one-half to Harry O. Kellogg, Caldwell, Idaho. Filed May 31, 1930. Serial No. 458,817. 4 Claims. (Cl. 90—11.)



1. A device of the class described comprising a table, a track thereon, a motor support slidably arranged on the track, a motor carried by the support and having a putty cutter, sash supporting means arranged for vertical movement at the rear of the table for presentation to the cutter, shiftable means for the sash supporting means, a clamping frame hingedly connected at its lower end with the rear part of the table and spring means for holding the clamping frame against a sash placed on the supporting means.

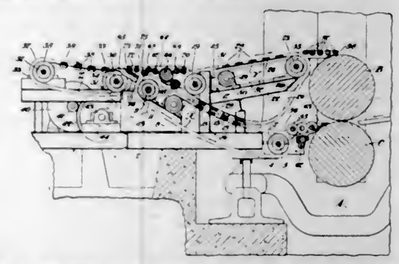
1,863,509. GARAGE DOOR. ALBERT J. SWANSON, Maywood, and JOHN R. GARDNER, Bellewood, Ill. Filed Mar. 18, 1930. Serial No. 436,852. 4 Claims. (Cl. 268—63.)

1. The combination with a swinging door, of an electric motor mounted above the door, means for starting the motor, operative connections between the motor and the door, a normally open stopping switch mounted above the door and including a depending button, an arm disposed below and extending under the button, and a cam



element movable with the door and engageable with said arm to raise the same for pushing the button and closing said switch and holding it closed during movement of the door.

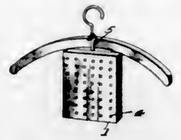
1,863,510. CATCHER. IRWIN R. TAYLOR, Gary, Ind., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Oct. 17, 1930. Serial No. 489,473. 6 Claims. (Cl. 80—47.)



6. A mechanical catcher for sheet mills comprising a frame, an upwardly inclined endless slat conveyer mounted in said frame and arranged to have its top surface move in a direction away from the mill, said conveyer having its end nearest the mill below the line of feed of sheets from the mill, a second endless slat conveyer arranged above said first named conveyer, said last named conveyer being of less length than said first named conveyer and terminating a material distance from the upper end of said first named conveyer, said second named conveyer being operated in a reverse direction to said first named conveyer and being arranged with its bottom stretch slack so as to hang by gravity onto and serve to engage and pinch the sheets being carried by said first named conveyer, a third slat conveyer arranged to the rear of said first and second named conveyers and being operated in the same direction as said second named conveyer, said third named conveyer being adapted to receive the sheets from said first named conveyer and to feed said sheets forwardly onto the top stretch of said second named conveyer which returns them over the mill, and a pivoted roller table mounted between said second and third named conveyers to bridge the space between the ends thereof, said table being so arranged that at least some of its rollers extend down into the path of travel of sheets being conveyed upwardly along said first named conveyer and serve to pinch said sheets against said conveyer as said sheets pass beyond the limit of said second named conveyer.

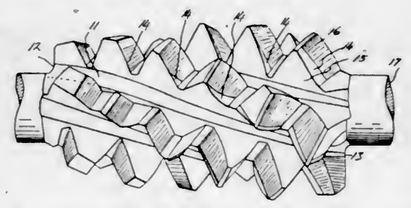
1,863,511. MOTH ERADICATOR. ROSCOE C. TRAVIS, Bowling Green, Va. Filed Oct. 30, 1929. Serial No. 403,560. 1 Claim. (Cl. 299—24.)

An eradicator comprising a pasteboard container of relatively narrow elongated formation and being provided with a plurality of openings, cedar wood curl arranged in said container, strips secured to said container adjacent the ends thereof and being bendable to provide hooks, said strips being normally arranged flat and in parallelism



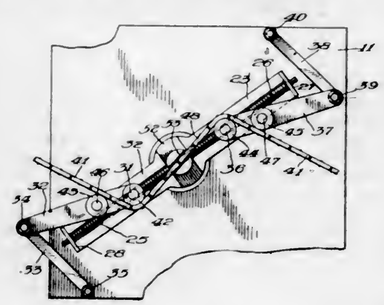
with the container, a cover for said container and disposed over the openings thereof for closing the same, and said cover being removable when it is desired to put the eradicator in use.

1,863,512. WORM HOB. NIKOLA TRBOJEVICH, Detroit, Mich. Filed July 21, 1930. Serial No. 469,577. 6 Claims. (Cl. 29—103.)



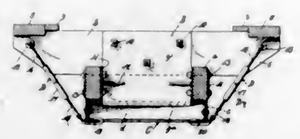
1. A rotary thread tool comprising a threaded portion interrupted by longitudinal flutes forming cutting teeth in which the flutes are of a converging cross section from the entering toward the finishing end and in which the cutting teeth are relieved beginning from a line intersecting the cutting faces at an acute angle at an intermediate point, thereby reducing the entering teeth in thickness and providing the finishing teeth with series of non-relieved helicoidal flanks adjacent to the cutting edges and progressively increasing in area.

1,863,513. BENDING MACHINE. FRANK VITELLI, Chicago Heights, Ill., assignor to Inland Steel Company, Chicago, Ill., a Corporation of Delaware. Filed May 8, 1930. Serial No. 450,757. 23 Claims. (Cl. 153—20.)



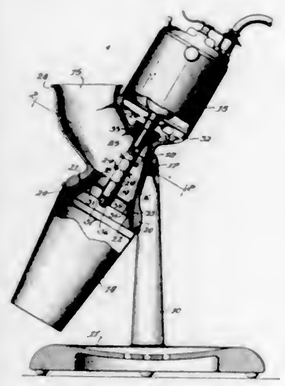
7. In a bending machine, the combination of a pair of stop surfaces for engagement with an article to be bent and inserted therebetween, and a second pair of stop surfaces for engagement with another portion of the article, each stop surface of each pair thereof being mounted for bodily movement in the bending operation and one surface of each pair thereof being rotatable about the other of said surfaces.

1,863,514. REMOVABLE BED OR BODY FOR WHEELED VEHICLES. JOHN ERWIN WALKER, Cedar City, Utah. Filed Feb. 16, 1929. Serial No. 340,546. 3 Claims. (Cl. 296—9.)



1. The combination with the frame of a wheeled vehicle, of a bed including longitudinal sills and transverse sills, and angular bracing plates connected to the side sills and certain of the transverse sills, said bracing plates depending below the longitudinal sills for engagement with the truck frame to position the bed upon the frame.

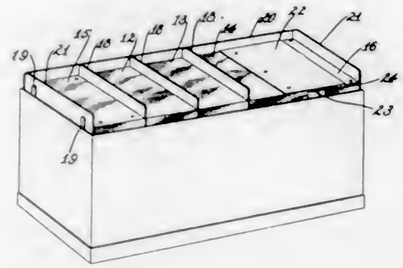
1,863,515. MACHINE FOR DISINTEGRATING, MIXING, AND EMULSIFYING MATERIALS. JOSEPH V. WECKBAUGH, New York, and SAMUEL K. NESTER, Geneva, N. Y.; said Weckbaugh assignor to said Nester. Filed Oct. 8, 1926. Serial No. 140,345. 10 Claims. (Cl. 83—13.)



1. In a machine of the class described, the combination of a mixing chamber merging into a stator surface, a rotor having its surface in close relation to the stator, means for rotating the rotor, a projecting member rotatable with the rotor and operable within the mixing chamber for disintegrating materials admitted thereinto prior to the entry of such materials into the restricted space between the rotor and stator, and a delivery throat adapted to discharge material in oblique relation to the plane of the rotor and direct the same primarily toward one edge of the rotor, the plane of the rotor being at an oblique angle with respect to the vertical, substantially as described.

1,863,516. DISPLAY DEVICE. WILTON I. WELLS, New Albany, Ind. Filed July 14, 1930. Serial No. 467,928. 1 Claim. (Cl. 312—140.)

A display device comprising spaced parallel supporting rails disposed horizontally and having at their upper surfaces laterally disposed flanges extending longitudinally thereof, a series of tray bottoms each having at its under side undercut grooves receiving the flanges of the rails, the terminal tray bottoms of the series being fixed to the rails and the intermediate tray bottoms being slidable



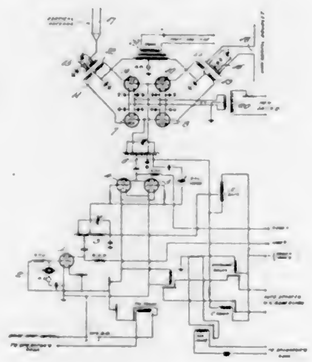
upon the rails and a plate mounted upon one of the slidable tray bottoms and having an edge portion overlapping one of the fixed tray bottoms.

1,863,517. SMUDGE BRICK. WILLIAM DAWSON WHITE, Ocala, Fla. Filed June 22, 1931. Serial No. 546,172. 10 Claims. (Cl. 44—25.)

1. A fuel mixture of the character specified comprising, as ingredients, sawdust, rubber, cotton and rosin.

7. The method herein set forth of producing a fuel mixture, consisting in grinding, mixing, and heating predetermined quantities of sawdust, rubber, cotton and rosin.

1,863,518. SYSTEM FOR REDUCING FADING EFFECTS IN RADIO COMMUNICATION. LEO C. YOUNG, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 29, 1927. Serial No. 179,348. 8 Claims. (Cl. 250—10.)

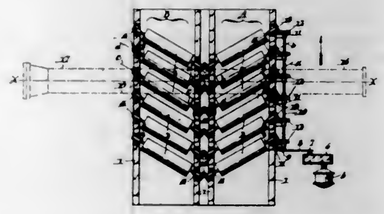


1. A high frequency signaling transmission system, comprising a plurality of independent antennæ, a circuit for generating high frequency oscillations, bi-laterally arranged amplifiers between each of said antennæ and said circuit and a source of alternating current for alternately energizing the plate circuits of each of the bi-laterally arranged amplifiers for periodically rendering said amplifiers operative in successive order for causing high frequency oscillations to be impressed upon said antennæ alternately from said circuit.

1,863,519. PROCESS FOR THE MANUFACTURE OF INSECTICIDES AND METHOD OF MAKING SAME. ROSCOE H. CARTER, Washington, D. C. Filed Nov. 15, 1929. Serial No. 407,552. 2 Claims. (Cl. 167—14.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

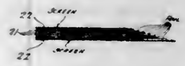
1. As new insecticidal preparations, the complex products of the reactions between aqueous solutions of one mole of aluminum sulphate, twelve moles of potassium hydroxide and less than twelve moles of hydrofluoric acid, such reaction products consisting principally of the water insoluble double fluorides of the alkali metals with aluminum, intimately and inseparably mixed with hydrated alumina.

1,863,520. ROLLER CONVEYER. LOUIS A. CAMEROTA, Burlington, N. J., assignor to Walter Wood, Philadelphia, Pa. Filed Aug. 12, 1931. Serial No. 556,545. 5 Claims. (Cl. 198—127.)



1. A roller conveyer comprising a frame, cylindrical rollers rotatably mounted thereon in a plurality of adjacent rows in a common plane, the rollers of each row having their axes parallel with each other and oblique to the axes of opposite rollers of an adjacent row, and means connecting each roller of one row with a corresponding roller of said adjacent row to cause said corresponding rollers to rotate at the same speed.

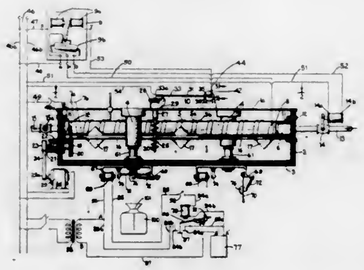
1,863,521. GASKET AND PACKING MATERIAL. JOHN T. CRANE, Maywood, Ill., assignor to Felt Products Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed May 17, 1930. Serial No. 453,184. 13 Claims. (Cl. 154—45.5.)



1. A gasket comprising a flat relatively thin flexible plate consisting of a plurality of sheets of metal foil, and a covering for the outer surfaces thereof formed from sheets of metal having a fusing point higher than the fusing points of said foil.

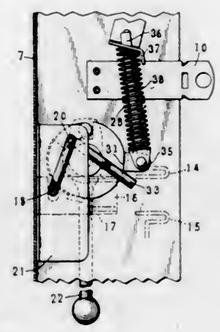
1,863,522. VISCOSIMETER. GEORGE C. FAIRBAIRN, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 15, 1930. Serial No. 420,863. 3 Claims. (Cl. 219—20.)

3. A viscosimeter bath comprising a receptacle for holding the bath fluid, a heating element disposed in the receptacle, means for making and breaking the electrical circuit through said element comprising, a switch for controlling the energization of the heating element, a control circuit for said switch, including a coil adapted to actuate said switch, a continuously rotating contact member and a movable arm in series with said coil, said arm having at one end a contact point adapted to form a non-sticking contact with the rotating contact surface, and means responsive to changes in temperature in the bath



fluid for moving the arm into contact and away from the rotating contact surface to make and break the circuit through said coil.

1,863,523. INCLOSED SWITCH. HERMAN J. HAMMERLY, Wallingford, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Nov. 14, 1930. Serial No. 495,600. 10 Claims. (Cl. 200—76.)

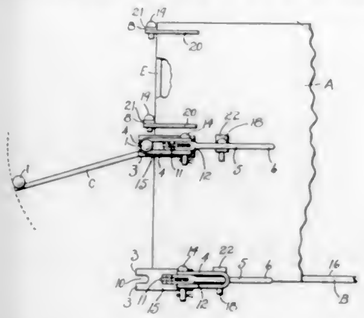


10. In an electric switch, a box, an insulating base mounted therein, stationary and movable contacts carried by said base, a plate secured in the box between the base and one side of the box, an operating crank shaft pivoted in the opposite side of the box and in said plate and having a projecting arm inside of said box, an oscillating disc pivoted in an adjacent side of the box and having a sliding lost motion connection with the projecting arm of said crank and an operating handle pivoted in an adjacent side of the box and having a lost motion connection with said disc and a throwing member connecting said disc to said box.

1,863,524. TOGGLE FASTENING APPLIANCE FOR DOORS. ROY L. HEWITT, Colorado Springs, Colo. Filed Nov. 21, 1930. Serial No. 497,112. 5 Claims. (Cl. 292—246.)

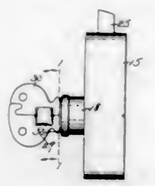
1. A toggle fastening appliance for doors, comprising in combination, a journal bearing secured to the wall of enclosure, a journal operatively mounted in said bearing

and secured rigidly to a door and a toggle clamping means releasably securing said journal in said bearing, said means comprising a clevis member having its ends pivot-



ally pinned to a toggle lever and the bow of said clevis member operatively enclasping said journal to draw it within said bearing.

1,863,525. LOCK. GEORGE ALEXANDER LONG, Hartford, Conn., assignor to The Long Security Lock Company, Hartford, Conn., a Corporation of Connecticut. Filed July 3, 1929. Serial No. 375,643. 19 Claims. (Cl. 70—70.)

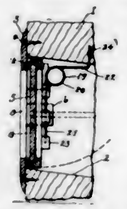


1. A lock mechanism including a key receiving member adapted to receive a two-part key, tumblers adapted to be positioned by both parts of said key in said member to control operations of the lock mechanism, means operated by one part of said key to permit excess movement of said key receiving member to a tumbler changing position, and means to permit insertion of a new key part in said key receiving member when in said position.

19. A lock mechanism including a key receiving member operable by a two-part key having its parts separately connected and inserted in said member, tumblers adapted to be positioned by one of the key parts to control operations of the lock mechanism, means operated by the other key part retained in said member after separation from the first mentioned key part to effect excessive movement of said key receiving member to a tumbler changing position, means for preventing removal of said other key part until said member has been placed in its key changing position, and means to permit removal and insertion of a key part of the first mentioned type in said member when in said position.

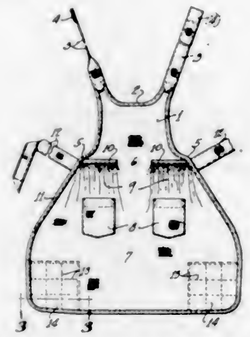
1,863,526. COMBINATION HOUSE NUMBER AND MAIL CHUTE. WILLIS H. SHERICK, Philadelphia, Pa., assignor to Chester D. Sherick, Washington Borough, Pa. Filed June 2, 1931. Serial No. 541,638. 1 Claim. (Cl. 40—130.)

A closure for a mail chute, comprising an outer plate provided with an opening for registration with the chute ears extending inwardly from the plate at the upper corners of the opening therein, the ears being provided in their upper edges with recesses, an open frame located at the inner side of the plate between the ears, lugs extending longitudinally from the upper corners of the frame and positioned in said recesses to swingingly suspend the frame from the plate, a panel secured within the frame and bearing indicia for illumination by light rays passing outwardly through the chute, and a coil spring located at the inner side of the frame in a right angular position with relation thereto and having a



downwardly directed arm secured to the inner side of the frame and an inwardly directed arm adapted to be secured to a wall of the chute, the spring acting to normally hold the frame and panel against the inner side of the plate and constantly urging the frame and panel downwardly to hold the lugs against accidental displacement from the recesses of the ears.

1,863,527. KITCHEN-APRON. SADIE STERN, St. Louis, Mo., assignor of one-third to Maurice Weil, St. Louis, Mo., and one-third to Ralph Kalish, University City, Mo. Filed Jan. 18, 1932. Serial No. 587,222. 3 Claims. (Cl. 2—48.)



1. A garment-apron comprising a skirt having a hand-manipulative readily flexible pad formed as an integral part of the lower depending portion for utensil handling purposes.

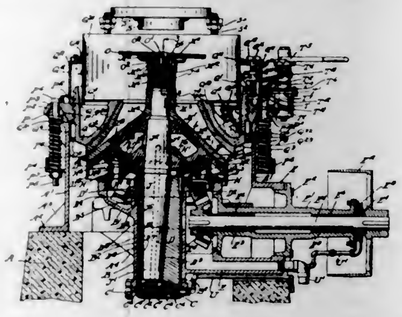
1,863,528. MAGNESIA CEMENT COMPOSITION. LEROY C. STEWART, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 4, 1930. Serial No. 473,128. 8 Claims. (Cl. 106—29.)

1. A plastic cement composition which comprises as active ingredients magnesia, magnesium sulphate and water, together with a relatively small amount of a substantially insoluble citrate intimately incorporated therewith.

1,863,529. CRUSHING APPARATUS. EDGAR B. SYMONS, Hollywood, Calif., assignor, by mesne assignments, to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 19, 1927. Serial No. 220,471. 35 Claims. (Cl. 83—10.)

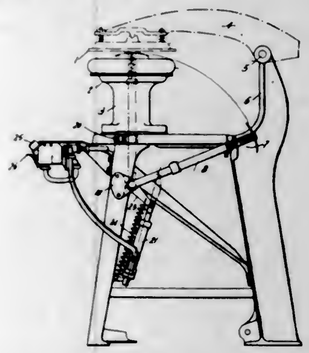
1. In a gyratory crusher, a circumferential frame member, a cone and means for gyrating it, a concave surrounding said cone and supported upon said frame member and

an adjustment interposed between said concave and frame member, including a screw threaded member associated with said frame member, an opposed screw threaded member associated with said concave, means for preventing the access of dust to the threads of said opposed screwthreaded members, and means for rotating the member associated with said concave, including a drum adapted to be mounted on said frame, and means for rotating it, and a flexible member controlled by said drum and adapted to be connected to the member associated with said concave.



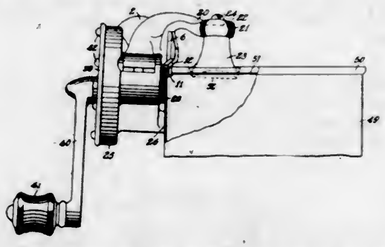
12. In a gyratory crusher, a frame member, a cone and means for gyrating it, a bowl surrounding said cone, a supporting member for said bowl, mounted upon said frame member and tiltable in relation thereto, and yielding means for holding said supporting member normally fixed in relation to said frame, said means including a plurality of springs positioned about the exterior of said frame member.

1,863,530. CUFF HOLDER FOR GARMENT PRESSES. PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 6, 1929. Serial No. 383,913. 15 Claims. (Cl. 68—9.)



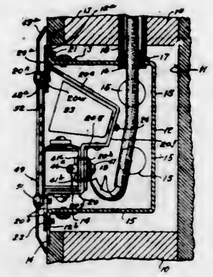
1. In a garment pressing machine including upper and lower cooperating pressing elements, one of which is movable toward and from the other, and means for actuating the movable element, the combination of a work holder; support means for the work holder, a bearing about which the support means is movable to carry the work holder into and out of position over the lower pressing element, another bearing having its axis disposed at an angle to the first mentioned bearing and about which the work holder is movable under action of the upper pressing element, as the press closes, to carry the work holder toward the lower pressing element; and means for operating the support means.

1,863,531. CAN OPENER. GEORGE W. BUNGAY, Plainfield, N. J., assignor to Bungay-Wolf Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 1, 1932. Serial No. 602,473. 19 Claims. (Cl. 30—3.)



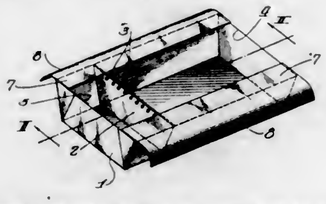
1. A hand-supported can opener comprising means to cut the end out of a can in combination with means to adhesively engage said can end and retain it after severance.

1,863,532. SIGNALING DEVICE. CHRISTIAN MILLER, New York, N. Y., assignor to Edwards and Company, Inc., a Corporation of New York. Filed Dec. 16, 1930. Serial No. 502,651. 32 Claims. (Cl. 177—7.)



5. A signaling unit comprising, in combination, a sheet metal frame member bent to provide end flanges adapted to overlap the end flanges of a standard conduit box, a tapered gong, said frame being bent to provide a recess for said gong, electromagnetic means for striking said gong, said frame being bent to provide a recess for receiving said electromagnetic means, cover means permitting the passage of sound therethrough for closing over said gong, the recess-providing bends in said member being within the space between the plane of the open end of said box and the plane of the bottom thereof, and means for securing a standard cover plate to said frame.

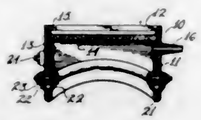
1,863,533. THERMAL TREATMENT APPLICATOR. EARL H. ODELL, Chicago, Ill.; Carl L. Odell executor of said Earl H. Odell, deceased. Filed Aug. 8, 1929. Serial No. 384,349. 1 Claim. (Cl. 128—254.)



A thermal treatment applicator comprising an elongated shallow container having an apertured partition therein dividing the container into a chamber to receive the fluid

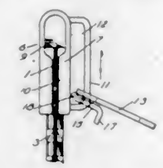
of treatment and a chamber for overflow of the fluid, said container having an apron on each side of its opposed longitudinal sides, said apron extending inwardly of the side of the container and also having an outwardly extending downwardly curved portion, said apron providing means to support a human body lying prone across the container.

1,863,534. VACUUM CUP. EARL H. ODELL, Chicago, Ill.; Carl L. Odell executor of said Earl H. Odell, deceased. Filed Aug. 23, 1930. Serial No. 477,317. 4 Claims. (Cl. 128—300.)



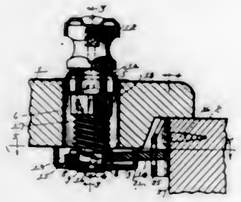
3. A vacuum cup for use in treating the human body with light rays, comprising a dished member having a part thereof transparent to light rays, conduit means on the member for connection with an air-aspirator, and a gasket secured to the rim of said member, said gasket having opposed members secured on opposite surfaces of the wall of said dished member and an integral depending resilient member for contact with the human body to provide an air-tight joint between the body and the dished member.

1,863,535. SEPARABLE FASTENER. NOEL J. POUX, Meadville, Pa., assignor to Lion Fastener, Inc., Meadville, Pa., a Corporation of Delaware. Filed July 9, 1930. Serial No. 466,703. 3 Claims. (Cl. 14—205.)



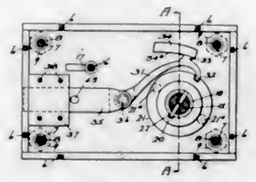
1. In a separable fastener, the combination of stringers; interlocking members secured on the stringers and adapted to swing into and out of interlocking engagement; a slider actuating the members; a tag lug on the slider; a tag slidingly and pivotally mounted on the lug; and a pawl pivotally mounted on the lug, said pawl having a rearward projection in the path of the tag whereby the pawl may be swung to release position through the action of the tag.

1,863,536. LATCH. GORDON E. ROEDDING, Grand Rapids, Mich., assignor to Grand Rapids Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed June 4, 1931. Serial No. 541,965. 3 Claims. (Cl. 292—332.)



1. A latch for a door closure comprising: a base having a ledge; a shaft journalled on the base; a latch bolt carried on the shaft turnably therewith to latching position and tiltable axially thereof; a spring coiled about the shaft, torsionally urging the same to turn the bolt to latching position, and in one position of the shaft tilting the bolt to retracted held position on the ledge; the latch having a keeper on which the retracted bolt strikes in the closure's closing movement to tilt the bolt from the ledge.

1,863,537. COMBINATION LOCK. STANLEY ASTER, Philadelphia, Pa. Filed Nov. 7, 1930. Serial No. 494,086. 1 Claim. (Cl. 70—53.)



A lock comprising a casing, a bolt slidable therein, a dog pivoted to the bolt and provided at its free end with a tooth and an intermediate curved part having at its upper edge a shoulder, a guide plate attached to the casing and having an edge adapted to be engaged by the edge of the shoulder and the under surface, adapted to engage the upper end of the shoulder, a knob shaft journaled in the casing, a master disc fixed to the knob shaft and provided with a peripheral notch, a sleeve loosely mounted upon the shaft, spaced discs loosely mounted upon the sleeve and provided with peripheral notches, said notches adapted to receive said tooth and the width of the tooth being equal to the combined breadth of the discs and the space between them.

1,863,538. GRINDING MACHINE. LIEVIN LOUIS DE SMET, Hawthorne, N. J. Filed Sept. 9, 1929. Serial No. 391,423. 5 Claims. (Cl. 51—92.)

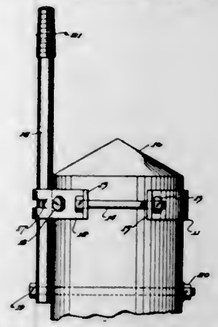


1. A blade grinding machine, including a reciprocating carriage, said carriage being adjustable as to length for receiving blades of different lengths, means for locking said carriage against accidental longitudinal adjustment, a pair of rocking blocks mounted on said carriage, a clamp carried by each block for clamping a blade therein, said blocks being rockable in a plane at right angles to the plane of movement of said carriage to adjust the blade to different angles, a grinding wheel for grinding said blade, and means for adjusting said grinding wheel horizontally and vertically, whereby when in one position the grinding wheel will straighten one edge of said blade and when in the second position will grind a bevel thereon.

1,863,539. POLE TOP PIN. KENT A. HAWLEY, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Dec. 14, 1929. Serial No. 414,147. 6 Claims. (Cl. 173—321.)

1. A pole top pin structure comprising the combination of a pole, a sectional clamp engageable upon the upper end of the pole, a pin closely engaged between the pole and one section of the clamp, means for securing the lower end of the pin to the pole, and means on one section of the clamp engaging opposite sides of the pin for maintaining the same in upright position.

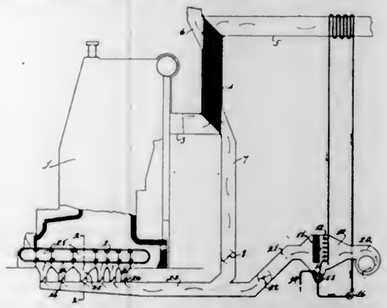
2. A pin and mounting therefor for use on wooden poles, comprising an adjustable clamp adapted to be engaged upon a pole in embracing relation thereto, a pin adapted to be confined between the pole and the clamp and having its lower end adapted to be secured to the pole, the pin engaging portion of the clamp being of angular formation with the pin located and confined in the angle and being provided with projections additionally engaging the pin at a plurality of points for maintaining the same in upright position.



1,863,540. MOLDABLE COMPOSITION AND MOLDED PRODUCT OBTAINED THEREFROM. IRA A. HURST, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 24, 1930. Serial No. 504,642. 3 Claims. (Cl. 106—22.)

1. A composition hot moldable to an infusible product comprising cotton-seed hulls and heat convertible synthetic resin, the proportion of resin in the composition being not more than approximately 30% by weight.

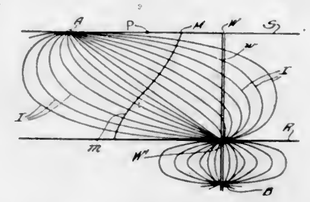
1,863,541. STEAM BOILER AND PROCESS OF FIRING IT. CHARLES B. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 10, 1927. Serial No. 239,099. 4 Claims. (Cl. 110—40.)



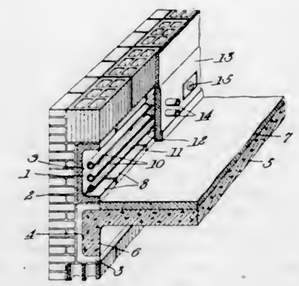
1. The hereindescribed method of operating a stoker fire furnace, which includes the steps of introducing through the stoker, and distributing throughout the area of incandescence adjacent the stoker, an air mixture humidified only to the required degree for producing an endothermic reaction forming water gas and cooling the hotter portion of the stoker area, and consuming the water gas.

1,863,542. ELECTRICAL PROSPECTING. CHARLES R. NICHOLS and SAMUEL H. WILLISTON, Dallas, Tex. Filed Feb. 10, 1930. Serial No. 427,094. Renewed Nov. 12, 1931. 4 Claims. (Cl. 175—182.)

1. The method of electrical prospecting which consists in creating an electrical current flow through the earth between energization points one of which is located at a variable distance below the earth's surface, varying the depth below the earth's surface of the last mentioned energization point, and comparing the effects of said current flow on potential conditions at the earth's surface when said subsurface energization point is at different depths.

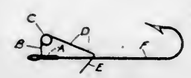


1,863,543. BUILDING CONSTRUCTION. ALDEN J. PALMER, New York, N. Y., assignor to Republic Fireproofing Company, Inc., New York, N. Y., a Corporation of New York. Filed July 23, 1931. Serial No. 552,723. 6 Claims. (Cl. 72—0.5.)



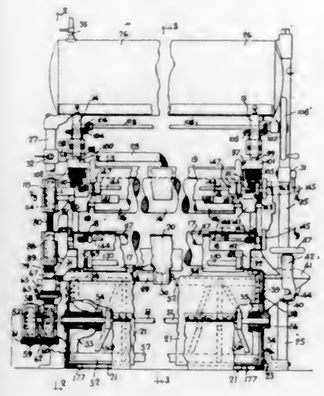
1. In a wall construction, the combination with masonry units, and a plastic joining said units to form a wall, of a row of cement channel blocks set into said wall at substantially the level of a floor, the ends of the flanges of the channel blocks being substantially flush with the interior face of the wall and the webs of the channel blocks lying in the interior of the wall.

1,863,544. ATTACHMENT FOR FISHHOOKS. MARGE V. PROUSE, Minneapolis, Minn., assignor of forty-nine one-hundredths to Artemus O. Cornwell, Minneapolis, Minn. Filed Oct. 24, 1929. Serial No. 402,105. 3 Claims. (Cl. 43—40.)



3. An attachment for fish hooks having a shank and an eye end, comprising an upper member, means for securing said member to said eye end so as to extend out at substantially a right angle, a member normally extending in inclined relation from the outer end of said first member toward said shank, a coil spring connecting said second member with said first member, and a member extending from the inner end of said second member toward said shank, the free end of said third member being sharp and said spring tending to hold said third member close to said shank.

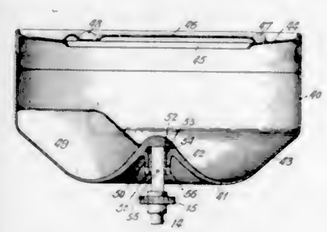
1,863,545. GLUE SPREADING MACHINE. ALFRED WILLIAM RAETTIG, Ann Arbor, Mich., assignor to Merritt Engineering & Sales Company, Inc., Lockport, N. Y., a Corporation of New York. Filed July 6, 1928. Serial No. 290,791. 25 Claims. (Cl. 91—51.)



1. In a glue-spreading machine, the combination of means providing a glue mixing chamber, a pair of spreader rolls above said chamber, a pair of reservoirs above said spreader rolls, valved means to conduct glue from said mixing chamber to one or the other of said reservoirs, fluid pressure means to force glue through said conducting means, and other valved means to conduct glue from one or the other of said reservoirs to said rolls.

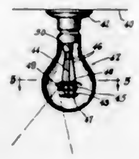
17. In a glue-spreading machine, in combination, an upper and a parallel lower glue-spreading roll, one of them mounted for yielding in a direction away from the other, and one of them positively adjustable towards and away from the other, a glue trough for each spreader roll, a chamber containing glue-stirring means, and means for conducting glue from said chamber to said troughs, a scraper roll yieldingly pressed towards each of said spreader rolls and positively adjustable towards and away from its spreader roll, and power-driven means for simultaneously actuating all of said rolls and said stirring-means.

1,863,546. WASHING MACHINE AND GYRATATOR. HOWARD F. SNYDER, Newton, Iowa, assignor, by mesne assignments, to The Maytag Company, Newton, Iowa, a Corporation of Delaware. Filed Sept. 24, 1924. Serial No. 737,241. 12 Claims. (Cl. 259—101.)



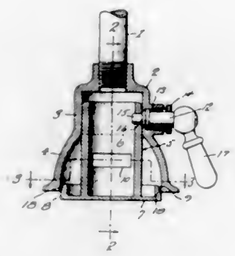
1. In a washing machine having operating mechanism, a tub adapted to be alternately rotated by said mechanism, said tub having a bottom portion provided with a raised central part and a trough portion adjacent the central part, the outer part of the trough portion being integral with the side wall of the tub, and an impelling member extending across the trough portion.

1,863,547. ILLUMINATING DEVICE. SAMUEL F. ARBUCKLE, Detroit, Mich., assignor to Monogram Lens Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 3, 1924. Serial No. 703,846. 6 Claims. (Cl. 176—34.)



3. In an electric light unit, the combination of a glazed envelope; a light source within said envelope; a pair of reflecting elements within said envelope spaced from said envelope and so positioned as to intercept and redirect a portion of the direct rays of light emitted from said source, one of said reflecting elements being adapted to redirect intercepted rays to all areas from which rays have been excluded by the other.

1,863,548. SHOWER BATH HEAD. LEON BLOCH, Cleveland, Ohio, assignor, by mesne assignments, to Speakman Company, Wilmington, Del., a Corporation of Delaware. Filed May 3, 1930. Serial No. 449,462. 10 Claims. (Cl. 299—144.)

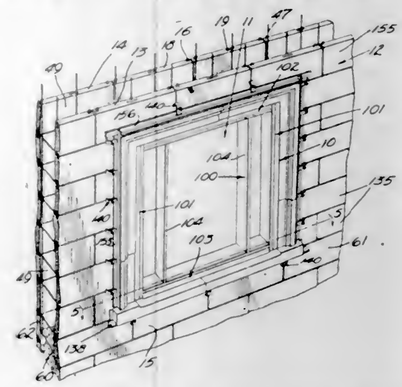


1. A shower bath head comprising a supply pipe, an outer casing secured thereto, an inner casing adjustably mounted within said outer casing and disposed in open communication with said supply pipe and with said outer casing, said inner casing having a substantially annular end portion having a plurality of peripheral notches therein extending in the general direction of the axis of said annular portion and each tapered in the direction of its length cooperating with the wall of said outer casing to define a spray opening through which water supplied to said casings by said supply pipe is discharged, and means for adjusting the position of said inner casing to vary the size of said spray opening.

1,863,549. METHOD OF AND APPARATUS FOR CASTING IN POSITION ARCHITRAVES AND THE LIKE UPON FACED CONCRETE WALLS. ERNEST H. LOCKWOOD, Pasadena, Calif. Filed Mar. 2, 1927. Serial No. 171,997. 22 Claims. (Cl. 25—131.)

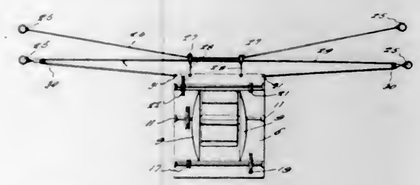
1. A method of molding in a wall opening, a casing, the opening of which is bordered with a frame which makes a weathertight fit with said casing, said method

comprising: assembling said mold upon said frame; erecting said wall about said mold; securing said mold to said wall; and casting said casing in said mold.



22. A method of casting columns, inserts, architraves and other finish to walls faced with precast units interlocked edge to edge, comprising: erecting said facing units so as to leave an opening in said facings for said finish; attaching a mold for said finish to said facings through cracks between said units; and casting said finish in position in said mold.

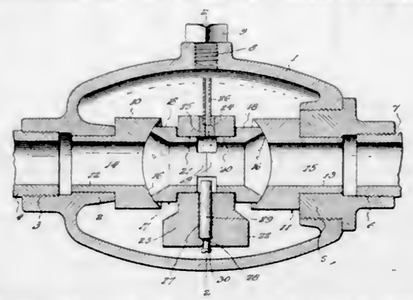
1,863,550. FLOATING WATER WHEEL. ALVIN ROBBINS, Douglas, Wyo. Filed May 6, 1930. Serial No. 450,191. Renewed Nov. 3, 1931. 1 Claim. (Cl. 170—103.)



In combination with a floating water wheel, means for anchoring and permitting said wheel to shift automatically with the stream comprising a pulley anchored on each bank of the stream on opposite sides of the platform of said water-wheel, a cable trained around said pulley and having its end fixed to opposite sides of the platform, an anchor on each bank spaced from said pulley, a second cable stretched across the stream and fixed to the last named anchors, and means slidably connecting said second cable to the platform.

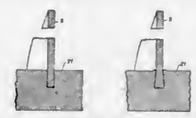
1,863,551. AIR LINE LUBRICATOR. ALFRED G. SLATCHER, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Filed Feb. 24, 1928. Serial No. 256,626. 3 Claims. (Cl. 184—55.)

1. An air line lubricator, comprising a reservoir for containing lubricant, hollow trunnions fitted in the ends of the reservoir and having their opposed faces formed with circular recesses, a hub consisting of hollow sections having their outer ends rotatably engaged in the recesses, a pendulum including a band for engagement with the hub, said pendulum having a passage therein, a plunger mounted in the passage, a tube carried by the band and extended above the level of the lubricant in the reservoir, said plunger being adapted to be reciprocated by the pulsations of the pressure fluid passing through the trunnions and hub sections, and means to adjustably



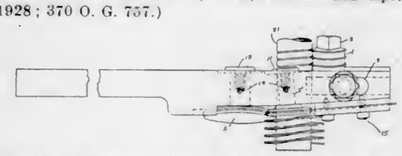
restrict longitudinal movement of the plunger carried thereby.

1,863,552. METHOD OF SECURING METAL FINS TO TUBES OR CYLINDERS. ALFRED J. BERG, Portsmouth, N. H. Filed Jan. 25, 1928. Serial No. 249,405. 33 Claims. (Cl. 29—157.3.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. The method of forming a heat radiator element which includes progressively inwardly crushing a portion of a fin-strip into the metal of the element.

1,863,553. APPARATUS FOR SECURING METAL FINS TO TUBES OR CYLINDERS. ALFRED J. BERG, Portsmouth, N. H., assignor of one-third to Paul F. Foster, U. S. Navy, and one-third to John O. Huse, Baltimore, Md. Original application filed Aug. 6, 1926, Serial No. 127,692. Divided and this application filed Jan 25, 1928. Serial No. 249,404. 38 Claims. (Cl. 29—33.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In an apparatus for uniting a fin and a tube for the production of finned tubes, the combination of a body member having a recessed portion adapted to receive a cylindrical tube, means for retaining the tube within the recess, means for forming a helical groove upon the tube, means for guiding the fin into the groove and means for simultaneously forcing the fin into the groove and bending the fin to conform to the contour of the groove.

6. In an apparatus for uniting a fin and a tube for the production of finned tubes, the combination of a body member having a recessed portion adapted to receive a tube having a helical groove and element mounted upon the body member and having an arcuate portion, means for adjusting the element along the body portion toward and away from the recessed portion of the body member so that the arcuate portion of the element and the recessed portion of the body member form a cylindrical passage corresponding in size to the diameter of the tube, and means for simultaneously guiding the fin into the groove, forcing the edge of the fin to the bottom of the groove and bending the fin to conform to the contour of the groove.

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Patents Nos. 1,863,554 to 1,864,511

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Trade-Marks	163—No.	295,109 to No. 295,261, inclusive.
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Reissues	3—No.	18,501 to No. 18,503, inclusive.
Designs	64—No.	87,184 to No. 87,247, inclusive.
Patents	968—No.	1,863,554 to No. 1,864,511, inclusive.
Total	1,283	

Adjudicated Patents

(D. C. Pa.) Jaenichen patent, No. 1,185,675, for scale, *Held* invalid. *Standard Computing Scale Co.* v. *Lincoln Scale Corporation*, 57 F.(2d) 334.

(C. C. A. N. J.) Crum patent, No. 1,192,504, for brick lifter, *Held* not infringed. *New York Brick Handling Corporation* v. *John P. Callaghan, Inc.*, 57 F.(2d) 135.

(C. C. A. N. Y.) De Simone patent, No. 1,476,804, for denominator and adding machine, claims 4, 5, 9, 26, 28, 33, 37, 40, 46, 49, 50, 74, and 77 *Held* valid and infringed. *De Simone* v. *R. H. Macy & Co.*, 57 F.(2d) 179.

(D. C. N. Y.) Vaughn and Terpening patent, No. 1,611,499, for electrical installation assemblage and conductor clamp, claims 1 and 2 *Held* valid and infringed. *Allied Metal Stamping Co.* v. *Standard Electric Equipment Corporation*, 57 F.(2d) 296.

D. C. N. Y.) Frederickson patent, No. 1,687,013, for armored electric cable, *Held* invalid. *National Electric Products Corporation* v. *Circle Flexible Conduit Co.*, 57 F.(2d) 220.

(D. C. N. Y.) Regar patent, No. 1,719,082, for method of producing scallops in knitted fabrics, *Held* valid. *H. K. Regar & Sons* v. *Scott & Williams*, 57 F.(2d) 242.

(D. C. N. Y.) Suter patent, No. 1,720,301, for hair drying, claims 3 and 4 *Held* not infringed. *Eugene, Limited*, v. *Charles Arnao Co.*, 57 F.(2d) 292.

(D. C. N. Y.) Suter patent, No. 1,720,302, for hair drying, claim 4 *Held* not infringed. *Id.*

(C. C. A. N. Y.) Writer patent, No. 1,725,500, for tampressing machine, claims 7–11 *Held* valid and infringed. *Anderson & Writer Corporation* v. *Hanky Beret, Inc.*, 57 F.(2d) 167.

(D. C. N. Y.) Frederickson patent, No. 1,801,549, for antishort bushing, claims 1, 2, 3, and 7 *Held* invalid. *National Electric Products Corporation* v. *Circle Flexible Conduit Co.*, 57 F.(2d) 220.

(C. C. A. Pa.) Stein reissue patent, No. 16,826, for recuperative furnace, *Held* valid and infringed. *Chapman-Stein Co.* v. *Rust Engineering Co.*, 57 F.(2d) 38.

(C. C. A. Mo.) Schleicher reissue patent, No. 17,328, for paper box, claims 6 and 7 *Held* void as not for same invention as original patent. *Box Patents* v. *Universal Paper Box Mfg. Co.*, 57 F.(2d) 66.

Notices of Cancellation

U. S. Patent Office, *Washington, D. C., May 21, 1932,*

The Dryzol Chemical Co., their assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Lysol, Incorporated, of Bloomfield, N. J., to effect the cancellation of the trade-mark registration of The Dryzol Chemical Co., of 544 Broadway Buffalo, N. Y. No. 140,368, dated March 15, 1921, and the notice of such proceeding sent by registered mail to The Dryzol Chemical Co. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless The Dryzol Chemical Co., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, May 24, 1932.*

Dr. J. A. Walsh Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Gladys V. McCune, of Hotel Ambassador, 51st Street and Park Avenue, New York, N. Y., to effect the cancellation of the trade-mark registration of Dr. J. A. Walsh Co., of 2414 Washington Street, Boston, Mass., No. 96,700, dated April 28, 1914, and the notice of such proceeding sent by registered mail to the said Dr. J. A. Walsh Co. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Dr. J. A. Walsh Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business June 4, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 75,833; Trade-Mark Division, 922. Oldest new case, Nov. 10, 1931; oldest amended, Nov. 9, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
6024	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	†Feb. 29	†Mar. 2	501
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	†Jan. 20	†Jan. 27	1,044
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Feb. 10	†Feb. 23	743
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Mar. 10	†Mar. 16	546
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Jan. 12	†Jan. 5	409
4868 C	6. LEWERS, A. M., Carbon Chemistry	Nov. 18	Nov. 21	1,935
5725	7. JARBOE, C. G., Optics; Photography	†Jan. 5	†Jan. 5	1,521
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 23	Dec. 23	1,254
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Mar. 4	†Mar. 4	842
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Dec. 21	Dec. 26	916
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Feb. 1	†Feb. 5	601
7701	12. HENRY, C. C., Machine Elements	†Feb. 8	†Feb. 10	619
5084	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 16	†Jan. 16	1,173
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Feb. 18	†Feb. 25	759
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 29	Dec. 29	2,027
5612	16. SPENCER, C. J., Telegraphy; Telephony	†Feb. 10	†Feb. 10	903
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Dec. 8	Dec. 10	1,401
4612	18. PORTER, M. F., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 11	†Jan. 19	772
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Nov. 18	Nov. 28	1,755
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Feb. 15	†Feb. 23	629
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	†Jan. 20	†Jan. 22	939
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Feb. 5	†Mar. 1	604
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Nov. 10	Nov. 19	942
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 6	†Jan. 11	716
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Dec. 11	Dec. 16	1,544
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Dec. 10	Dec. 11	980
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	†Jan. 16	†Jan. 16	980
6028	28. BENSON, A. R., Internal-Combustion Engines	Dec. 5	Dec. 5	1,341
5086	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Nov. 16	Nov. 23	990
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Feb. 4	†Feb. 8	851
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Dec. 4	Dec. 4	1,539
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Feb. 2	†Feb. 6	1,000
6096	33. WYMAN, W. L., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 5	Dec. 7	2,403
6025	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Jan. 4	Dec. 31	907
3620	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Apr. 18	†Apr. 5	449
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Dec. 5	Dec. 5	1,760
5589	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Dec. 11	Dec. 7	1,373
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 23	†Mar. 25	294
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Dec. 4	Dec. 4	1,556
7880	40. OBERLIN, J. J., Receptacles	†Jan. 2	†Jan. 4	2,039
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	†Feb. 23	†Feb. 29	775
5882	42. CUTTINO, H. O., Electric Signaling	Dec. 1	Dec. 1	1,447
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	†Jan. 7	†Jan. 7	1,433
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Nov. 11	Nov. 9	1,869
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Jan. 21	†Jan. 21	1,217
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	†Jan. 16	†Feb. 1	739
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	†Jan. 7	†Jan. 5	2,111
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Dec. 22	Dec. 21	956
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 16	Nov. 16	1,578
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Nov. 23	Dec. 4	2,130
5628	51. BACKUS, C. D., Radiant Energy	†Jan. 2	†Jan. 2	1,272
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Feb. 25	†Mar. 5	798
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Mar. 12	†Mar. 12	587
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Nov. 25	Nov. 25	1,145
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Apr. 15	†Apr. 16	356
	Designs	†May 10	†May 26	151
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 10	Dec. 17	1,475
3629	57. NICOLSON, G. D. O., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	†Jan. 6	†Jan. 12	672
5005	58. DOWELL, E. F., Abrading; Typewriting	Dec. 1	Dec. 1	1,371
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 28	Nov. 28	1,618
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Nov. 21	Nov. 24	1,509
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Nov. 27	Nov. 30	1,471
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Dec. 4	Dec. 4	1,782
4888	63. WINKELSTEIN, A. B., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Dec. 4	Dec. 4	1,476
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	†Jan. 13	†Jan. 18	681
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Nov. 21	Nov. 21	1,796
3099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	†May 10	†May 19	807
	Labels and Prints	†May 5	†May 21	115

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE MADGE AND DOYLE

No. 2,868. Decided March 7, 1932

PATENTABILITY—METHOD OF MAKING GOLF BALLS.

Claims for a method of making golf balls *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Walter L. Pipes and *Mr. George F. Gourley* for Madge and Doyle.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, 1 to 17, inclusive, in appellants' application for a patent for an alleged invention relating to golf balls and to a method of making them.

Claims 1, 5, and 13 are illustrative. They read:

1. The method of making golf balls which comprises applying to a core a cover of a balata compound containing an alkaline carbonate, and subjecting the cover to an intensive sulphur monochloride cure.

5. The method of making golf balls which comprises applying to a core a cover of a balata compound containing an alkaline carbonate, subjecting the cover to an intensive sulphur monochloride cure, and eliminating excess sulphur monochloride from the ball.

13. A golf ball embodying a tough and age resisting cover of a balata-rubber compound containing an alkaline carbonate, the cover having a relatively deep sulphur monochloride cure.

The references are: Whittelsey, 1,238,236, August 28, 1917; Hoffman, 1,251,029, December 25, 1917; Muntz, 1,354,123, September 28, 1920; Hoffman, 1,405,845, February 7, 1922.

Appellants' method of making golf balls comprises, first, applying to a core a cover of a balata compound containing an alkaline carbonate, second, subjecting the cover to an intensive sulphur monochloride cure, and, third, the elimination of excess sulphur monochloride by the application of "ammonia water or a caustic solution and then pure water," etc.

According to appellants' specification, the alkaline carbonate serves to neutralize the acids set free by sulphur chloride remaining in the ball after vulcanization.

The patent to Hoffman, No. 1,405,845, discloses the use of a vulcanized balata compound cover for golf balls.

It is true, as argued by counsel for appellants, that the balata compound there disclosed contained an admixture of "small quantities of sulfur and a rapid accelerator of vulcanization." However, the patentee disclosed the method of vulcanizing partly vulcanized covers by the application of sulphur chloride.

The Hoffman patent, No. 1,251,029, shows that it is old to vulcanize the cover of golf balls by the application of sulphur monochloride.

The patent to Whittelsey relates to improvements in the method of vulcanizing rubber articles. In his specification, the patentee stated that the "sulfur chlorid method of curing rubber consists in subjecting the formed articles to the action of a vapor, gas, or solution of sulfur-monochlorid," and that it was old in the art to neutralize the acid formed by the action of free sulphur monochloride by subjecting the articles to "ammonia gas, a weak solution of ammonia, or a water solution of caustic."

The patent to Muntz relates to the treatment of vulcanized india-rubber goods embodying a foundation fabric. This patent shows that it is old to subject finished or partly-finished articles to an alkaline carbonate to neutralize the "products of decomposition." In his specification, the patentee stated that the neutralizing compounds "are either mixed with the rubber solution as 'fillers' or impregnated into or deposited on to the foundation fabric or are formed in situ by treating the salts previously introduced into the components of vulcanized rubber goods with ammonia by immersion either before, during or after vulcanization."

That appellants' claimed process is new and produces a superior product, may be admitted. It does not follow, however, that invention is present. Each step in the process is plainly suggested by the prior art, and, in our opinion, nothing more than the exercise of mechanical skill was required to produce appellants' process.

We concur in the conclusion reached by the patent office tribunals that the involved claims, process and product, are unpatentable. Accordingly, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

WICKS *v.* FRIENDLY

Nos. 2,895, 2,896, 2,897, and 2,898. Decided February 8, 1932

INTERFERENCE—PRIORITY—DILIGENCE.

Evidence reviewed and *Held* to establish that W. was lacking in diligence in reducing the invention to practice after F. entered the field and that priority was properly awarded the latter.

APPEAL from the Patent Office. Affirmed.

Mr. Walter A. Scott and *Mr. Chas. M. Candy* for Wicks.

Mr. George E. Mueller for Friendly.

GARRETT, *J.:*

These appeals from the respective decisions of the Board of Appeals of the United States Patent Office involve count 2 of interference No. 49,496; counts 1, 2, 4 and 6, inclusive, and 11, 12, 15 and 16, inclusive, of interference No. 51,168; counts 4 to 7, inclusive of interference No. 53,227, and counts 1 to 6, inclusive (being all the counts), of interference No. 57,619.

Interference No. 49,496 was declared between a patent, No. 1,404,416, granted January 24, 1922, to Wicks upon an application filed March 4, 1918, and Friendly's application, Serial No. 192,713, filed Sep-

tember 22, 1917. The single count of this interference reads:

2. In a telephone system, an operator's position, a source of signaling current, means controlled by an operator for establishing a connection to a called line and for automatically applying said signaling current thereto, said current being automatically cut off by the response of the called subscriber, a relay, a source of alternating current, means for preventing the release of the connection upon the subsequent hanging up of the receiver at the called station and for preventing said signaling current from being again applied to the called line upon the said restoration of the called subscriber's receiver, and means controlled by the operator for applying said alternating current to said connection to actuate means for again applying said first current to said called line before the connection is released.

Interference No. 51,168 was declared between the application, Serial No. 192,713, filed by Friendly September 22, 1917, and an application, Serial No. 155,640, filed by Wicks on March 19, 1917. Of the 11 counts at issue before us in this interference, we quote count 8:

8. In a telephone system, a called telephone line, operator controlled automatic switching mechanism for extending a connection to said line, automatic ringing equipment for signalling the called subscriber upon the completion of the connection, and operator controlled means for predetermining whether or not said ringing equipment will be operated.

Interference No. 53,227 was declared between a patent, No. 1,441,791, granted to Friendly on January 9, 1923, upon an application originally filed June 11, 1917, and twice renewed at different dates, and the application, Serial No. 155,640, filed by Wicks on March 19, 1917. Count 4 of this interference is here quoted:

4. In a telephone system, a calling station, a telephone line involving near and remote sections thereof, a junction point of the sections, a first relay controlled from the remote section and a second relay controlled from the near section together operative to join the sections at the junction point, first and second signaling current sources, said first source being of a character to which a condenser is transparent, the second relay responsive to the first source to apply the said second source to the line and to prepare an operative circuit path controlled by the first relay, means for completing a connection from the calling station to the line, and means for applying the first source over the near section to operate the second relay to apply the second source to the remote section and to prepare the said circuit path controlled by the first relay and the second relay whereby the sections will become joined under control of the remote section and both said relays will become disconnected from operative relation with the connection.

Interference No. 57,619 was declared between an application, Serial No. 346,323, filed by Wicks on December 20, 1919, and renewed June 2, 1927, and the application, Serial No. 192,713, filed by Friendly on September 22, 1917. Count 1 of this interference is here quoted:

1. In a telephone system, means including a plurality of serially related automatic switches for extending a connection to a called line, a ringing relay in one of said switches for initially ringing the called subscriber, and a ringing relay in another of said switches operable at will for applying ringing current to the line while the receiver is off the hook.

The general subject matter to which all the counts of all the interferences relate is that of an automatic telephone system. More specifically the counts are for certain claimed improvements in the circuits and switches of such systems.

A detailed technical description would require a number of pages, and, since it does not appear to be necessary to a decision of the issues involved that one be given, we refrain from so doing.

It seems sufficient to state, in nontechnical terms, that in the automatic systems, as used prior to the invention at issue, when what is commonly referred to as a "long distance," or toll, call was made to a place having an automatic or dial system, the connection would be made by the operator at the board, and the telephone of the party called would be rung by the operator manipulating a key, rather than automatically, as in local calls where the dial system is in use. Such invention as was incident to the foregoing, which became involved in these cases, is stated to have been the invention of Wicks, and a number of counts relating to this, originally appearing in some of the interferences at issue, were awarded to Wicks and no appeal was taken by Friendly.

The issues here are limited to an improvement which enabled the operator, by "dialing" the instrument of the called party, to cause an automatic ringing of its bells, or, by manipulating a particular key before dialing, to retain control of the connection and thus control the ringing manually.

In other words, the invention is of a device or feature which renders it possible to have either an automatic ringing of the instrument of a called party (in the case of long-distance calls) as a result of dialing by the operator, or a ringing at the will of the operator, operating manually.

The Board of Appeals held that the disclosures of the respective parties read upon the counts at issue. Not all of the subject matter of all the counts, however, is disclosed in any single patent, nor in any single application. Hence the number of interferences.

Both tribunals of the Patent Office agreed in awarding November 11, 1916, to Friendly as the date of his conception, and December 26, 1916, as the date of his reduction to practice.

In his preliminary statements Wicks claimed conception of the count involved in interference No. 49,496, on August 11, 1915, with reduction to practice on September 15, 1915. Of certain of the counts in interference No. 51,168, he claimed conception September 23, 1916, with reduction to practice "middle of December, 1916," and of the others (15 and 16) conception September 23, 1916, with reduction to practice January 8, 1917. Of the counts in interference No. 53,227, he claimed conception March 25, 1915, with reduction to practice September 1, 1915.

Of the counts in interference No. 57,619, he claimed conception July 30, 1918, with reduction to practice September 17, 1918. The dates thus claimed in interference No. 57,619 were subsequent to the filing date (September 22, 1917), of the Friendly application, Serial No. 192,713, with which the Wick's application became involved.

We do not find in the decisions of the tribunals of the Patent Office where express dates were specifically awarded Wicks for conception of any of the involved counts, but it was held that no date earlier than January 12, 1917, could be awarded to him for reduction to practice of any, and priority was awarded to Friendly in interference Nos. 49,496, 51,168 and 53,227 as the first to reduce to practice, on the ground that, even were Wicks awarded the dates claimed by him for conception, thus adjudging him the first to conceive, he failed to sustain the burden of establishing diligence.

In interference No. 57,619 the award was because Wicks's claimed dates were subsequent to Friendly's filing dates, and Wicks failed to show cause why judgment should not be entered against him.

It appears from the record that Wicks, at the time of his work upon the involved invention, was, and for many years previous thereto, had been, in the employ of the Automatic Electric Company of Chicago as a development engineer. He was graduated from the University of Minnesota as an electrical engineer in 1904 and shortly thereafter entered the employ of said company; was for a time thereafter engaged with other electrical concerns; returned to the Automatic Company in 1914 and went to work in the development department, "to keep the development of toll equipment associated with the automatic switchboard abreast with other developments made by the Automatic Electric Company." He was a designer and draftsman of much experience in this field of art.

Friendly also is shown to have been skilled in the art. It appears that he graduated in mechanical engineering in 1896; was for sometime thereafter employed by the Bell Telephone Company; became superintendent of equipment in installation work; later was with the Northwestern Long Distance Telephone Company; handled "circuit detail" and developed "quite a lot of automatic apparatus, with particular reference to long distance operation;" was for three terms a member of the telephony and telegraphy committee of the American Institute of Electrical Engineers, and was, in 1916, employed by the Indianapolis Telephone Company as an assistant to the president thereof, charged with the duty of passing upon and approving all engineering features in connection with the installation for said Indianapolis Company of an automatic system by the Automatic Electric Company, the employer of Wicks.

The installation work at Indianapolis took place in 1916–17. Wicks was not regularly engaged in this installation work but was performing his duties for the Automatic Company at its Chicago plant. Friendly was stationed at Indianapolis.

So far as the record discloses, the idea of having a device to perform the functions claimed for the invention here involved originated with Friendly.

Under date of September 20, 1916, Friendly wrote two letters, which are parts of Wicks's Exhibit 13 in the record, to the Automatic Electric Company, the first being supplementary to the second.

In the first he said:

Your later toll connectors are so arranged that when the toll operator selects one the subscriber must be rung by the toll operator manipulating a key. Will it not be possible to make a slight change that will obviate the operator manipulating the key, that is, the subscriber will be rung as soon as the line is seized.

The second letter says:

Supplementing our letter of even date, in regard to toll service trunks, we would welcome an arrangement whereby our operator could thrown a key before dialing and thereby be able to control the ringing, or not throw the key and the ringing be automatic.

This, however, was merely the expression of an idea or the statement of a problem, and there is no insistence upon September 20, 1916, as Friendly's conception date.

The testimony of Wicks is to the effect that, upon receipt of the letters of Friendly, Mr. Campbell (who had died before the testimony in the case was taken), general superintendent of the Automatic Electric Company, took the matter up with him (Wicks) and that he (Wicks) on September 25, 1916, made a sketch which is Wicks's Exhibit 12 of the record. Richardson, another witness, corroborates Wicks as to the existence of this drawing on September 25, 1916, he having signed it that day, and Quayle states that it was exhibited and explained to him "at or about Oct. 1916." This sketch is claimed to be a disclosure by Wicks of the invention.

It is not contended that anything further in the way of developing the claimed invention was done at that time, by Wicks or by his employer, Automatic Electric Company, which, as the assignee of Wicks, is the real party in interest in this interference. This is explained to have been due to the fact that the Automatic Electric Company was averse to complying with Friendly's suggestions, because, in part, of doubt as to it being possible to develop a practicable working device and install it with the other equipment within the time fixed by the terms of the contract for completion of the installation. Wicks testifies that at the time Friendly's letters were brought to his attention he told Mr. Campbell that:

• • • the switches for Indianapolis were already under production and that it would involve considerable change to embody that feature in the switches themselves, • • •

Wicks further testified in answer to a question as to whether he recalled disclosing his sketch to any one:

Yes, I disclosed it to some of the engineers that had to do with the installation of Indianapolis exchange, but I cannot recall exactly who it was. Then I disclosed it to Mr. Campbell who advised me that as it was questionable whether or not it would be used at Indianapolis that I drop the matter for the time being and file my sketch down to the patent department. I therefore took the sketch down to the patent department and explained it to Mr. Fales and to Mr. Richardson of that department.

In the meantime, under date of September 21, 1916, the Automatic Electric Company had replied to the letter of Friendly, in which reply it was stated.:

In regard to the latter part of your letter of September 20th regarding automatic ringing from the toll connector, will answer you in immediate future.

Notwithstanding this promise, and notwithstanding the sketch made by Wicks, Friendly was not again communicated with concerning the matter.

Thereafter, along in the early part of November, Friendly, not having heard from the Automatic Electric Company, began to develop his own idea, and on November 11, 1916, completed a sketch shown as "drawing N—100," on file in the record as Friendly's Exhibit A, which the experts of the Patent Office have held to be operative and to disclose the invention claimed in the counts.

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This sketch, or a print thereof, he forwarded to the Automatic Electric Company, together with a written description, and a letter, in which letter, among other things, it was said.

> Following letter of yesterday, find herewith private print N—100, which is the toll trunking circuit that we propose using at Indianapolis; also find typewritten description of the circuit which we believe is self-explanatory. • • •
>
> We call your attention that should the operator wish to ring back the subscriber, after he has hung up, if he had first been rung automatically, the operator can do so by simply using her regular cord ringing key. • • •
>
> If you have any suggestions regarding the circuit N—100, feel free to bring them up, as we do not wish to introduce any equipment unless agreeable to you, knowing you are as vitally interested as ourselves. • • •

Upon receipt of this letter and the papers, Wicks, who is not shown to have theretofore done anything whatsoever concerning the matter, except to make the sketch of September 25, 1916, again turned his attention to it.

His activity seems to have been first directed to providing the necessary mechanism and testing the circuit which Friendly's drawing disclosed. Under date of December 20, 1916, the experimental department of the Automatic Electric Company, in a letter addressed to Mr. E. L. Cline, general manager of the Indianapolis Telephone Company, made a report upon a test of same in which a number of alleged defects were listed, and it was suggested that a plan designed by Wicks and referred to as "sketch S—289" be substitued. Wicks testifies that he personally wrote this letter to Cline. There does not appear to have been any use made of, or any attention given to, his sketch of September 25, 1916.

The letter does not seem to have been disclosed to Friendly and he was first made aware of Wicks's opposition to the changes which he (Friendly) had proposed, in a conference sometime in December, 1916, or January, 1917.

The sketch S—289 is in the record as Exhibit 28, and bears a date of December 12, 1916. Testifying concerning it, Wicks, upon cross-examination, stated, in substance, that it was "prepared to represent the manner in which the Automatic Electric Company would recommend that" the result which had been suggested by Friendly should be obtained.

In the testimony of Wicks, upon cross-examination, the following appears:

> X Q. 239. Was this circuit S289 Exhibit 28 designed by you at the time you took up for consideration Mr. Friendly's letter of November 15, 1916, and the description accompanying it forming part of your exhibit No. 13 and Mr. Friendly's sketch N100, Exhibit No. 14.
>
> A. This question was first submitted to me by Mr. Campbell in September, 1916, and the first suggestion I made for equipment to be used for this purpose was the sketch submitted as Exhibit No. 12. The matter was discussed several times after that and the sketch S289 Exhibit No. 28 was prepared to represent the manner in which the Automatic Electric Company would recommend that this work be done. I cannot say for sure whether I had Mr. Friendly's letter at the time I made the sketch, *but I rather think I did so.* (Italics ours.)

In the further development of the invention, Wicks made other sketches and drawings, the chief one of which seems to have been made on January 8, 1917. This appears in the record as Exhibit No. 18. It is a composite drawing, made up of separate drawings and, apparently, represented the device which was reduced to practice January 12, 1917. There is no claim of any reduction to practice of either S289 or the sketch of September 25, 1916, except as they were embraced in Exhibit 18.

Counsel for Wicks has very earnestly urged before us that the Board of Appeals erred in finding lack of diligence upon the part of Wicks.

It is argued that the invention relates to a highly-complicated art; that it was of greatest importance that the practicability of any device proposed should be fully established before being installed; that the contract with the Indianapolis Company, involved an expenditure of about a million dollars, and that changes could not be lightly made in the equipment without endangering its success.

All this may be admitted. Indeed, it seems obvious, but we are unable to see wherein a consideration of the situation at Indianapolis affects the law of the case, since the work there is not shown to have been any impediment to Wicks proceeding with anything he might have wished to do concerning the invention. It is fairly deducible from the record, which is quite voluminous, that the relations between representatives of the Automatic Electric Company and Friendly became somewhat strained; that the former did not take kindly some of the suggestions of the latter, and there is some intimation in the Wicks brief as to Friendly's anxiety not fully to disclose some of his ideas because of his desire to assure himself of patent protection.

All of this likewise appears to us to be beside the question which we are called upon here to decide.

Friendly, at least, did not fail to disclose to the Automatic Electric Company either the idea of the invention here involved, nor his conception of a device through which that idea might be made to function. So far as the issue here involved is concerned Friendly was under no obligation to do it, but he did and had Wicks, or his assignee, after receiving the Friendly letter of September 20th, pursued the matter, the Wicks's plan of operation might easily have been reduced to practice without the slightest interference on the part of Friendly, prior to the time that Friendly entered the field, even with a claim of conception.

That, after all, no very long period of time was required is evidenced by the fact that after Wicks did turn his serious attention to the matter, following the receipt of Friendly's drawing and description of November 11, 1916, he (Wicks) made drawings within a month which, apparently, embraced the invention, and, within another month, had reduced his own invention to practice, after having first tested out the Friendly plan (not theretofore reduced to practice), and profited by his observation and studies of its alleged defects. However complicated the art, it remains a fact that the period within which Wicks made sketch S—289 and reduced to practice (December 12, 1916—January 12, 1917), was just one month. The period between Friendly's first suggestion of the idea and the date of his conception of a device (September 20, 1916—November 11, 1916), was about seven weeks.

There is not the slightest evidence in the record that Wicks, or his assignee, following the making of his sketch of September 25, 1916, ever gave the matter another serious thought until after the receipt of Friendly's drawing of November 11, 1916. Wicks, himself, testified:

> Q. 97. Did you continue your work on circuits and equipment for toll service *after* the year 1916?
> A. Yes, sir.
> Q. 98. How soon after?
> A. I continued to work at that *constantly* off and on during *the latter part* of 1916 and running on to year 1917. (Italics ours.)

Even if we assume this general testimony to relate to the specific invention at issue, it is obviously insufficient to show activity on the part of Wicks immediately prior to November 11, 1916, the date of Friendly's conception.

It is insisted in the Wicks brief that "Wicks started making apparatus for his reduction to practice before knowledge of Friendly's conception."

The only evidence cited in support of this contention is that where Wicks said:

> • • • I remember that when I made a study of the circuit N—100 submitted by Mr. Friendly and I had a sample of the circuit that he submitted made up. I used this switch in making the test [of exhibits 20 or 18 of Wicks's own drawings]. • • •

Surely this is far from proving, or even saying, that he was making apparatus for a reduction to practice of his own device. This testimony, it seems to us, can only be construed to mean that a switch which he had made for use in testing whatever Friendly had conceived, as expressed in drawing N—100, was later found to be serviceable in his own plan after he had evolved it.

The conclusion seems to us to be irresistible that Wicks and his assignee were spurred into activity by Friendly's disclosure received by them November 15, 1916.

Upon this issue we agree fully with the findings of the Board of Appeals, which were in accord with those of the Examiner of Interferences.

The facts of this case are so obviously different from the facts of the case of *Jones* v. *Evans*, 18 C. C. P. A. (Patents) 866, 46 F.(2d) 197, 405 O. G. 841, cited by Wicks, as to render inapplicable here the rule there applied.

In that case we found that the party who was awarded priority had been *doing something* before the losing party entered the field. Here there is not the slightest evidence that Wicks did anything before November 11, 1916, except to make a sketch which was never thereafter used by him, or his assignee, for any purpose, until introduced as evidence.

It was incumbent upon Wicks, or his assignee, to show diligence, and neither did so. *Martocello* v. *Kobash*, 17 C. C. P. A. (Patents) 1095, 39 F.(2d) 677, 397 O. G. 363.

Another contention of Wicks is that:

> • • • Friendly does not have the right to make the claims stated in count 2 of the issue of Interference 49,496, counts 1, 2, 4 to 8 inclusive, 11, 12, 15 and 16 of Interference 51,168 and counts 1 to 6 inclusive of Interference 57,619, these being all of the counts of the three interferences referred to that are involved in this appeal. • • •

Also it is contended that count 4 of Interference No. 53,227 contains limitations which do not read upon Friendly's drawing N—100; that if so construed it will read upon Wicks's drawing of September 25, 1916, thus rendering priority dependent upon Wicks's diligence.

This latter contention is disposed of by our holding upon the question of diligence and need not be further considered, except that it seems proper to say that, in any event, the subject matter of the count is disclosed in a later drawing of Friendly, dated December 23, 1916, being sketch N—125, and was in the device which Friendly reduced to practice on December 26, 1916. This was prior to the reduction to practice by Wicks of the Wicks device.

Upon the contention relating to Friendly's right to make the claims which constitute the counts of interference Nos. 49,496, 51,168 and 57,619, respectively, we shall not dwell at length. The decisions below contain full technical discussions.

The gravamen of Wicks's argument is that Friendly, in his application, Serial No. 192,713, of September 22, 1917, upon the disclosures in which he must depend for his right to make the counts, did not:

> • • • describe or illustrate the construction of the connector switch necessary to establish connection with the called party.

This issue was pressed before, and passed upon by, the tribunals of the Patent Office. At the proper time during the proceedings there Friendly moved to add claims corresponding to counts 8 to 16, inclusive, of interference No. 51,168. Wicks opposed the motion on the ground that Friendly's disclosure did not support the claims. The Law Examiner denied the motion and denied an application for rehearing. His decision was affirmed by the Board of Examiners in Chief. This was prior to the statute which made the decision of the Board of Appeals final and Friendly appealed to the Commissioner. The Commissioner (acting through the first Assistant Commissioner, an expert in the art involved,) reversed the decision of the Examiners in Chief and held that Friendly could make the counts.

There, as here, it was urged that Friendly in his application did not disclose "local and toll selectors and connectors or local and toll connectors," with which his improvement was to cooperate, but merely referred to such structures as "of a well known type."

The Assistant Commissioner pointed out that the record disclosed the installation at Youngstown, Ohio, about the time of, or prior to, Friendly's conception, of a system which included local and toll connectors "which would readily operate with the system disclosed in Friendly's Figures 11 and 16"; that from Friendly's employment and association with some of the engineers engaged in installing the Youngstown system, it was a fair presumption that Friendly was aware of the system, and said:

> It can not be deemed logical that an engineer of Friendly's standing would have devised a complicated system such as disclosed in his Figures 11 and 16 and have sought a patent upon it and yet not have known of the existence of some combination local and toll connectors that would operate with the system that he had invented so as to make the latter possess utility. It is fairly to be deduced from his statement that the circuits of his Figures 11 and 16 were to cooperate with well known combination local and toll connectors and that he knew of such connectors. With these rather complicated automatic telephone systems, it is quite customary, and the custom is encouraged by the Patent Office, to limit the illustration and description, so

far as practicable, to what is new, leaving its relation to what is old to be determined by those having knowledge of the art. While it is preferable to supplement a disclosure, where necessary, by a reference to a patent or a publication disclosing that portion of a system, not illustrated or described, which cooperates with what has been invented, yet if such old devices or circuits are not found in a patent or publication, it is believed sufficient to show that they were in commercial use in an installation.

It is not disputed that the installation at Youngstown disclosed the combination local and toll connectors with which Friendly's new circuits would cooperate and upon which he must have intended such new circuits to be an improvement. Under these conditions, it is believed he should not be denied the right to make these claims.

* * *

In his opinion the Assistant Commissioner, we think, correctly pointed out the distinction between the case there presented and that of *Erickson* v. *Dunham*, interference No. 38,596 cited and quoted from by the Examiners in Chief, and quoted from by Wicks in the brief before us.

When interference Nos. 51,168 and 57,619 were heard finally before the Board of Appeals of the Patent Office, the issue was again raised by Wicks, and the Board formally adopted as its decision the prior decision of the Assistant Commissioner from which we have quoted, supra.

We find no error therein.

In our opinion, the Board of Appeals has correctly determined the issues involved in each of the cases.

Accordingly, the respective decisions of said Board in Appeals 2,895 (Interference No. 49,496), 2,896 (Interference No. 51,168), 2,897 (Interference No. 53,227), and 2,898 (Interference No. 57,619) are affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

MCCREARY v. ZWORYKIN

No. 2,848. Decided February 8, 1932

1. INTERFERENCE—PRIORITY—OPERATIVENESS—BURDEN OF PROOF.

Where the junior party contends that the senior party's application discloses an inoperative device *Held* that the burden of proof is upon the junior party to establish such inoperativeness.

2. SAME—SAME—SAME.

Where it was contended that the senior party's device was inoperative but no testimony was presented, record reviewed and arguments considered and *Held* that such arguments were not sufficient to show that the senior party's device is inoperative.

APPEAL from the Patent Office. Affirmed.

Mr. Walter A. Scott, *Mr. Chas. M. Candy*, and *Mr. Rodney G. Richardson* for McCreary.

Mr. O. H. Eschholz and *Mr. W. H. Whitten* for Zworykin.

LENROOT, *J.*:

This is an appeal in an interference proceeding from the decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner of Interferences, awarding priority of invention to appellee. The invention involved is an improved method and apparatus for television. The issue is embraced in five counts, of which counts 2 and 3 are illustrative and read as follows:

2. In a viewing device for television systems, a screen, means for producing an image on one face of the screen, means for causing a cathode ray to explore the other face of the screen, and means between the faces for establishing conduction transverse to the screen at each point while the cathode ray acts at said point and preventing conduction at other times.

3. Apparatus of the character described comprising a resistance element, whose resistance varies with its illumination, means for forming an image on the element, and means comprising a movable cathode ray for including in an electric circuit successive small areas of said element.

Some of said five counts had been issues in other interferences between appellant, appellee and other applicants, but said interferences were later consolidated with this interference.

Appellant's application was filed on April 10, 1924, and that of appellee was filed on December 29, 1923. Appellee therefore is the senior party.

The principal questions before us relate to the transmitter cathode ray tube disclosed by Zworykin, the principal features of which may be summarized as follows:

In one end of the tube is a hot cathode and a tubular anode, between which there is placed a diaphragm, said diaphragm having a small hole therethrough for the purpose of forming the cathode ray into a thin beam. About midway of the tube there are two plates which are connected to a relatively high frequency generator, the effect of said plates being to create an electrostatic field, which field varies with the frequency supplied. At this point there are also two coils, connected to a generator of relatively low frequency, said coils being so positioned as to produce a varying electromagnetic field which is parallel to the electrostatic field produced by the plates above mentioned. Further along in the tube there is mounted a plate, referred to in the decisions of the Patent Office as the "composite" plate, which is mounted in such manner that the portion of the tube lying beyond said plate is sealed from that part of the tube containing the anode, diaphragm, cathode and plates heretofore adverted to. This composite plate is made up of a thin sheet of aluminum foil, which is presented toward the cathode; on that side of said aluminum foil which is removed from the cathode there is a layer of aluminum oxide; on this, in turn, there is a film of photoelectric material, such as potassium hydroxide. The tube is filled with a low pressure gas, such as argon. The aluminum oxide of the composite plate is normally an insulating layer preventing conduction between the photoelectric material and the aluminum foil. The last element within the tube proper is a grid, said grid being interposed between the composite plate just discussed and a lens, which lens is mounted on the outside of this end of the tube. The lens is to enable the light projected from the image to be broadcast to be focused upon the photoelectric layer of the composite plate.

The operation of the tube, as disclosed in Zworykin's application, is as follows: The light from the image being transmitted is focused, by means of the lens, upon the photoelectric side of the composite plate. The photoelectric material gives off electronic emissions which are proportional to the degree of illumination reflected by the image; this electronic emission serves to bridge the gap between the photoelectric element of the composite plate and the grid interposed between said plate and the lens. The electrostatic and electromagnetic fields set up by the plates and coils respectively so cooperate that the cathode ray is brought to traverse, "point by point," the entire area of the aluminum foil side of the composite plate, completing such traverse, it is stated in Zworykin's specification, in $\frac{1}{32}$ of a second. When the cathode ray bears upon any point of said aluminum foil area, it penetrates it and the effect is that through this point there is established conduction between said aluminum foil and the grid. These elements, the aluminum foil and the grid, are connected to a source of supply, and current flows from one to the other when such conduction has been established by the cathode ray. Such current is, in turn, modulated by the varying degrees of electronic emission at different points of the photoelectric material. Thus there is set up an electrical current which is modulated in accordance with the varying degrees of light intensity on the different points of the photoelectric material; such modulated current is reflected through a series of amplifying devices not necessary here to be considered, and finally the impulses broadcast from the antenna of the transmitting station reflect the modulations of the current flowing through the *aluminum foil to grid* circuit of the cathode ray transmitting tube.

Prior to the consolidations of interferences above noted, as to counts 1, 2 and 3, which were in separate interferences, appellant moved to dissolve upon the ground, among others, that the television system and transmitter described in appellee's application was inoperative; also upon the ground that counts 1 and 3 were misdescriptive of appellee's disclosure. Each of these motions was denied by the Law Examiner. In his decision denying the motion to dissolve as to count 3 (Interference No. 55,448), there is found the following:

* * * It is not evident that any aluminum foil of the thickness originally given by Zworykin could satisfy these conditions but the device including plate 32 can not be held so inoperative as to require dissolution of the interference if it can be made operative by electrical skill without invention, and Zworykin should be allowed an opportunity to establish the operativeness of his device by testimony if necessary. * * *

In the Law Examiner's decision denying the motion to dissolve as to count 2 there is found the following:

The motion to dissolve by McCreary is practically a repetition of a motion to dissolve as to Zworykin in Interference No. 55,448, *Farnsworth* v. *Reynolds* v. *Case* v. *Sabbah* v. *McCreary* v. *Zworykin*. For reasons stated in the decision of the Law Examiner in that interference the motion by McCreary is denied.

In his decision denying the motion to dissolve as to count 1, the Law Examiner said:

The motion by McCreary is directed to practically the same points of insufficiency and inoperativeness of Zworykin's disclosure that are advanced in Interference No. 55,448 and a repetition of the discussion is not deemed necessary.

The record does not show any motion to dissolve the interference as to counts 4 and 5.

After filing his original application, and before the decisions of the Law Examiners upon the motions to dissolve hereinbefore referred to, certain amendments to appellee's disclosure were made, which amendments were objected to by appellant upon the ground that they constituted new matter. Both the Law Examiner and the Board of Appeals found against appellant's contention in this respect, but, as no error is assigned in the reasons of appeal to the allowance of these amendments, they need not be considered by us.

No testimony was taken by either party, and in consequence judgment was rendered by the Examiner of Interferences in favor of appellee, he being the senior party. Appellant appealed therefrom to the Board of Appeals, assigning as grounds of appeal, among others, the following:

(5) The Law Examiner erred in not dissolving the interference on the ground that Zworykin's application does not contain a description of his system which is sufficient to enable a person skilled in the art to construct and use the same.

(6) The Law Examiner erred in not dissolving the interference as to counts 1 and 3 on the ground that these counts are misdescriptive of Zworykin's disclosure.

The Board of Appeals in its decision stated:

The claim of appellant that Zworykin should have taken testimony to establish operativeness is deemed wanting in merit. McCreary took no testimony and made no tests and has merely sought by argument, a process of reasoning, and academic discussion to demonstrate that Zworykin's apparatus will not work. Zworykin has submitted explanations which he regards as fully meeting or answering the objections of McCreary. Clearly enough Zworykin is not called upon to take testimony until McCreary has overcome the prime facie case of operativeness established by Zworykin in filing an application which the Examiner deemed a sufficient disclosure of an operative mechanism. This same conclusion reached by us applies to the allegation of the appellant that Zworykin's original specification and drawings constituted an insufficient disclosure. The Examiner regarded the additional explanation as within the original disclosure and after a careful consideration of the record we see no reason to reach any other conclusion. This Office has no means for testing out the Zworykin apparatus. There is a statement in Zworykin's record, undenied by the appellant, that the apparatus has been constructed by Zworykin and that it did operate. There is a presumption of operativeness which is based upon the fact that it is contrary to the rules of human conduct to go to the trouble and expense of devising or designing an apparatus of this character, preparing and filing an application for a patent upon it if the applicant is not fully satisfied it will work. The burden of proof in showing Zworykin's apparatus inoperative rests upon the appellant and if he had desired to sustain it, he should have taken testimony. We are satisfied the explanations of the senior party of the objections urged by the appellant show that the apparatus, if properly constructed, is operative.

The decision of the Examiner of Interferences awarding priority to the party Zworykin is affirmed.

Upon a request by appellant for reconsideration, the Board of Appeals further found that counts 1 and 3 are supported by appellee's disclosure and reaffirmed its decision affirming the decision of the Examiner of Interferences. Appellant thereupon took this appeal.

Before us, in his brief and upon oral argument, appellant's counsel contends that the Law Examiner denied appellant's motions to dissolve the interferences on condition that appellee produce satisfactory proof that his device "can be made operative by electrical skill without invention," and that, until appellee established the operativeness of the device, he could have no right to contest the issue of priority of invention. Appellant further contends that, the Law Examiner having, as he claims, found that upon the record as it stood appellee's device was inoperative, and appellee having produced no testimony establishing operativeness of the device, he, appellant, was entitled to an award of priority of invention.

We have grave doubt that any of the reasons of appeal given by appellant are sufficiently specific to entitle him to a consideration by us of his contention

that the denial of the motions to dissolve by the Law Examiner was conditional; however, appellee has not raised this question, and, assuming that this contention of appellant has sufficient foundation in the reasons of appeal, we will consider it upon its merits.

We cannot agree with appellant's counsel that the Law Examiner's denial of said motions to dissolve was conditional upon appellee's establishing the operativeness of his device, nor can we agree with appellant's contention that the Law Examiner found that appellee's device, as disclosed in his application, was inoperative. The statement of the Law Examiner, which appellant contends is a finding of inoperativeness of appellee's device, has already been quoted and is repeated here for convenience:

> • • • It is not evident that any aluminum foil of the thickness originally given by Zworykin could satisfy these conditions but the device including plate 32 can not be held so inoperative as to require dissolution of the interference if it can be made operative by electrical skill without invention, and Zworykin should be allowed an opportunity to establish the operativeness of his device by testimony *if necessary*. (Italics ours.)

We do not think the foregoing is a finding of inoperativeness. While it is apparent that the Law Examiner had doubts as to the operativeness of appellee's device, he was not satisfied that it was *inoperative*. The presumption was that it was operative. The Primary Examiner had allowed the claim to appellee and, but for the interference, a patent would have issued thereon, carrying with it the presumption of validity. Therefore, before the Law Examiner would be warranted in granting the motion to dissolve, he should be satisfied that the device was inoperative. Evidently he was not so satisfied for he denied the motion to dissolve.

This conclusion is supported by the latter part of the statement quoted: "• • • Zworykin should be allowed an opportunity to establish the operativeness of his device by testimony if necessary." We can not conceive why the Law Examiner should use the words "if necessary" if his statement was meant to be a finding of inoperativeness. Clearly these words imply that it might not be necessary for appellee to take any testimony, and we think that the words were used to mean that if appellant, being the junior party, introduced testimony overcoming the presumption of operativeness of appellee's device, appellee should have the opportunity to produce testimony that the device could be made operative by electrical skill without invention.

In this view of the case there is no inconsistency between the quoted statement of the Law Examiner and his decision denying the motion to dissolve the interference. We think this construction of his decision is further fortified by the fact that, in denying similar motions in the two other interferences before consolidation, he merely adverted to the decision just discussed and denied the motions without any reference to the possible necessity of appellee's proceeding to establish operativeness. (See his disposition of these motions as hereinbefore quoted.)

We therefore find that there was no error upon the part of the Board of Appeals in holding that the burden of proof was upon appellant to establish, at least prima facie, the inoperativeness of appellee's device, and, unless the application of appellee itself discloses inoperativeness of the device, priority of invention was properly awarded to appellee so far as this question is concerned.

We have hereinbefore noted that the record does not disclose any motion to dissolve the interference as to counts 4 and 5. However, as the Patent Office tribunals and counsel upon both sides have proceeded upon the theory that such motion was made, we would observe that, assuming such motion were based upon the same ground of inoperability, our conclusion with respect thereto would be the same as that reached by us as to counts 1, 2 and 3 upon this question.

In this connection we think it proper to observe that it is unfortunate that the Law Examiner, in denying the motion to dissolve, unnecessarily employed language so ambiguous as to require construction, entailing an unnecessary burden upon this court, the Board, and counsel for the respective parties.

The next question to be determined is upon the merits of appellant's contention that appellee's device shown in his application is, in fact, inoperative.

In the foregoing quotation from the Board's decision the statement is made that:

> • • • There is a statement in Zworykin's record, undenied by the appellant, that the apparatus has been constructed by Zworykin and that it did operate. • • •

We find no such statement in the record except in the preliminary statement of appellee and in a letter of appellee's counsel to the Commissioner. Neither of these statements, so appearing, is any proof of the fact; Patent Office rule 117. However, we think it is apparent from the decision of the Board that it did not rely upon said statements of operativeness, because the Board concludes its decision with the following:

> • • • We are satisfied the *explanations* of the senior party of the *objections* urged by the appellant show that the apparatus, if properly constructed, is operative. (Italics ours.)

The statement referred to by the Board, that the device of appellee had been constructed and did operate, was not an *explanation* of the *objections* urged by appellant, and therefore it would appear that the decision of the Board would have been the same if said statement had not been considered.

[1] However this may be, the burden of proof was upon appellant to show the inoperativeness of appellee's device. As stated by the Board, he took no testimony and made no tests, but has sought by argument and academic discussion to demonstrate the inoperativeness of appellee's device. The art involved is a highly technical one and it is not usual for the courts to disturb the conclusions of the Patent Office upon a question of operativeness without very cogent proof of error. *Fowler* v. *Dodge*, 14 App. D. C. 477, 87 O. G. 895.

If the device disclosed by appellee is in fact inoperative, appellant could have produced testimony of witnesses skilled in the electrical art to show that fact; whereupon, as stated by the Law Examiner, appellee would have had the opportunity, if a prima facie case of inoperativeness had been established, to produce like witnesses to show, if he could, that one skilled in the art, upon reading appellee's application, could readily make the device operative without the exercise of the inventive faculty.

Appellant's chief claim of inoperativeness lies in the assertion that the aluminum foil described in appellee's application must be of an impossible thinness to produce the results claimed in appellee's application. Appellee's answer to this contention is, quoting from his brief:

> To what degree the aluminum foil will be penetrated depends upon its thickness and upon the potential driving the electrons in the cathode ray. What potential can be used depends upon the gas pressure in the part of the tube where the cathode ray is produced. It is McCreary's position that the penetration of the foil by the electrons requires a thinner foil than those skilled in the art know how to produce, or a potential higher than could be employed in the presence of gas. • • •
>
> It is within the skill of a physicist to select the thickness of foil, the degree of gas pressure and the potential in such a way that the desired result will be accomplished.
>
> The discussion of these quantities is complicated by the fact that any one of them may have its value changed by a change in one or more of the others. McCreary has taken advantage of this by taking each quantity in turn, selecting for consideration with it unsuitable values of the correlated quantities and arguing that the quantity being discussed must have an impossible value. It is easy to make in this way an argument that sounds convincing but contains no real merit.
>
> Of course the aluminum foil must be thinner than can be produced *if* one selects potentials low enough to produce this requirement. Likewise potentials must be too low to penetrate the foil *if* the gas pressure is such that higher potentials are impossible, and so on through the list.

We are not satisfied that the foregoing observations are not correct, and, without going into the extremely technical arguments as to various points which appellant claims establish inoperativeness in this and other particulars, we content ourselves with saying that such arguments do not convince us of the inoperativeness of appellee's device, and we do not think that we can take judicial notice of some of the alleged facts upon which appellant rests his argument, such as the impossibility of producing aluminum foil thin enough to make appellee's device operative, when considered in connection with the potential driving the electrons in the cathode ray. Upon the ground that appellant has not convinced us that appellee's device is inoperative, we concur in the finding of the Board that it is operative.

Appellant further contends that counts 1 and 3 are not readable on the apparatus described in appellee's application. The particular elements of these counts which appellant contends are misdescriptive are, in count 1, "a member whose resistance varies with the illumination thereof," and in count 3, "a resistance element, whose resistance varies with its illumination." With respect to this feature the Board of Appeals in its decision said:

> • • • The allegation of McCreary is that counts 1 and 3 specify a cathode ray device having a resistance element "whose resistance varies with its illumination." The contention is made that Zworykin does not disclose a resistance element functioning in this manner. The Law Examiner, as stated by McCreary, regarded the composite plate 32 as a resistance element and held that the current through this plate at different points varied with the illumination of the layer of potassium hydride. The party McCreary admits the possible correctness of this interpretation, but insists that the count calls for a resistance change rather than a current change and the explanation of the Law Examiner is, in consequence, not deemed satisfactory. Furthermore, McCreary deems this view of the Law Examiner somewhat inconsistent with the view expressed by that official regarding the structure in the French Patent No. 559,613 discussed by the Law Examiner in interference No. 55,448. We deem the explanation given by Zworykin, on page 42 of his brief, as persuasive that these counts are supported by the latter's disclosure. The plate 32 is, as noted by Zworykin, a tangible element as is also the photo cell and the layer of potassium hydride. These elements, or they may be read as a single element, function as a member whose resistance varies with the illumination and this is all that is necessary to support these counts.

We are not satisfied that the Board erred in its conclusion and in the reasoning forming the basis of the same, above quoted.

[2] To summarize we find no error in the holding by the Board that appellee's device disclosed in his application is operative; that all of the counts are supported by his disclosure; that his said application complies with the requirements of section 4888, Revised Statutes, and that upon the record appellee is entitled to an award of priority of invention.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

914,678, F. Skelton, Handle for shovels, spades, etc.; 1,240,503, same, Reinforced D-handle, C. C. A., 4th Cir., Doc. 3223, *W. E. Skelton et al.* v. *Baldwin Tool Works.* Decree reversed Apr. 15, 1932.

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,377, A. E. Hull, Method of and means for obtaining constant direct current potentials; 1,297,188, I. Langmuir, System of amplifying variable currents; 1,728,879, Rice & Kellogg, Amplifying system, D. C., S. D. Calif. (Los Angeles), Doc. T-75-H, *Radio Corp. of America et al.* v. *May Department Stores Co.* Dismissed for want of prosecution Apr. 6, 1932.

1,195,632. (See 1,173,079.)

1,203,190, Fritts & Fritts, Recording and reproduction of pulsations or variations in sounds and other phenomena; 1,213,614, same, Record of pulsations of sound and analogous phenomena and process and apparatus for producing same; 1,223,496, I. Langmuir, Electrostatic telephone system; 1,297,188, 1,313,094, same, System of amplifying variable currents; 1,840,351, W. L. Douden, Sound record and method of producing same, filed Apr. 18, 1932, D. C., S. D. N. Y., Doc. E 66/382, *R. C. A. Photophone, Inc., et al* v. *Bene Seal Sound Devices, Inc.*

1,213,614. (See 1,203,190.)

1,219,881 (*a*), 1,243,458, G. Sundback, Separable fastener; 1,302,606, 1,566,996; same, Separable fastener slider; 1,557,381, same, Fastener; 1,598,183, E. M. Whitney, same, filed Apr. 21, 1932, D. C., S. D. N. Y., Doc. E 67/7, *Hookless Fastener Co.* v. *N. Solow.*

1,219,881 (*b*), 1,243,458, 1,813,433, G. Sundback, Separable fastener; 1,302,606, 1,566,996, same, Separable fastener slider; 1,557,381, same, Fastener; 1,598,183, E. M. Whitney, same; 1,830,077, E. O. Seaver, Separable fastener, filed Apr. 21, 1932, D. C., S. D. N. Y., Doc. E 67/8, *Hookless Fastener Co.* v. *Hermes Leather Co., Inc.*

1,223,496. (See 1,203,190.)

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,465,332, same, Vacuum tube amplifier, D. C., S. D. Calif. (Los Angeles), Doc. T-76-H, *Radio Corp. of America et al.* v. *May Department Stores Co.* Dismissed for want of prosecution Apr. 6, 1932.

1,240,503. (See 914,678.)

1,243,458. (See 1,219,881 (*a*) and (*b*).)

1,247,148. (See 1,379,586.) 1,251,377. (See 1,173,079.)

1,297,188. (See 1,173,079 and 1,203,190.)

1,302,606. (See 1,219,881 (*a*) and (*b*).)

1,307,733, A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means, D. C., N. D. Ohio, E. Div., Doc. 4216, *Alemite Corp.* v. *C. Siefert et al.* Pat-

ents held valid, claims 3, 4, and 5 of 1,307,733 and claims 1, 2, 3, 4, 8, 10, 14, and 15 of 1,307,734 held infringed Apr. 11 1932.

1,307,734. (See 1,307,733.) 1,313,094. (See 1,203,190.)

1,352,157. (See 1,411,227.)

1,379,586. J. P. Faber, Concrete mixing apparatus; 1,247,148, A. W. Ransome, Concrete mixer, filed Apr. 8, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4222, *The Jaeger Machine Co.* v. *Portland Concrete Machines Co.*

1,388,434, G. V. Johnston, Method of and apparatus for butt-welding thin gauge tubing and the product thereby produced; 1,435,366, same, Butt-welded thin-walled tubing, appeal filed Feb. 8, 1932, C. C. A., 3d Cir., Doc. 4844, *Steel & Tubes, Inc.*, v. *General Tube Co.*

1,403,475. (See 1,231,764.)

1,411,227. L. A. Suekoff, Spring cushion construction; 1,352,157, same, Spring inserting tool, filed Apr. 13, 1932, D. C. Md., Doc. E 2046, *Nachman-Springfilled Corp.* v. *Comfort Spring Corp.*

1,435,306. (See 1,388,434.) 1,465,332. (See 1,231,764.)

1,544,207. R. L. Beers, Tuyère structure for single-retort stokers; 1,710,260, O. A. Johnson, Tuyère block, filed Apr. 26, 1932, D. C. Mass., Doc. E 3638, *Riley Stoker Corp.* v. *J. H. McElroy.*

1,557,381. (See 1,219,881 (*a*) and (*b*).)

1,564,378, H. Stein, et al., Bleached and dyed furs; 1,573,200, same, Process of bleaching and dyeing furs, appeal filed Apr. 15, 1932, C. C. A., 2d Cir., Doc. 12058, *Steinfur Patents Corp.* v. *Wm. Beyer et al.*

1,566,996. (See 1,219,881 (*a*) and (*b*).)

1,573,200. (See 1,564,378.)

1,598,183. (See 1,219,881 (*a*) and (*b*).)

1,646,558, J. P. Ratigan, Beam hanger; 1,720,056, same, Adjustable beam hanger, D. C., E. D. Okla. (Muskogee, Doc. ——. *J. P. Ratigan* v. *P. D. Hammer et al.* (*Coline Specialty Co.*). Injunction Apr. 18, 1932.

1,658,496, Oishei & Hueber, Windshield wiper; 1,778,256, H. Hueber, same, D. C., S. D. N. Y., Doc. E 63/341, *Trico Products Corp.* v. *Auto Advance Mfg. Co., Inc., et al.* Decree pro confesso for all except T. Weiner, discontinued as to him (notice Apr. 12, 1932).

1,666,516. (See Re. 14,816.) 1,710,260. (See 1,544,207.)

1,720,056. (See 1,646,558.) 1,728,879. (See 1,173,079.)

1,740,048, R. H. Thayer, Key retainer strip; 1,770,327, same, Key filing cabinet, D. C., S. D. N. Y., Doc. E 55/220, *Thayer Telkee Corp.* v. *Davenport-Taylor Mfg. Co.* Consent decree for plaintiff (notice Apr. 20, 1932).

1,742,830, Seaman & Braf, Piping and method of forming same; 1,756,036, same, Sewing machine, filed Apr. 12, 1932, D. C., S. D. N. Y., Doc. E 66/354, *C. Seaman* v. *B. & W. Mfg. Co., Inc., et al.*

1,756,036. (See 1,742,830.) 1,770,327. (See 1,740,048.)

1,778,256. (See 1,659,496.) 1,813,433. (See 1,219,881 (*b*).)

1,830,077. (See 1,219,881 (*b*).)

1,840,351. (See 1,203,190.)

Re. 14,816, W. Tschudy, Method for controlling the efficiency of mercury rectifiers; 1,666,516, same, Vapor rectifier, filed Apr. 7, 1932, D. C., S. D. Calif. (Los Angeles), Doc. 5409–C, *W. Tschudy* v. *Westinghouse Electric & Mfg. Co.* Doc. 5500–C, *W. Tschudy* v. *Allis-Chalmers Mfg. Co.*

Re. 18,395. (See Re. 18,401.)

Re. 18,401, C. C. Richard et al., Punch and die retainer; Re. 18,395, C. C. Richard, same, filed Apr. 18, 1932, D. C., E. D. Mich. (Detroit), Doc. 5341, *Allied Products Corp.* v. *Whitman & Barnes, Inc.*

Des. 84,578, Des. 85,422, E. W. Freudenberg, Embroidered textile fabric, filed Apr. 12, 1932, D. C., S. D. N. Y., Doc. E 66/350, *Amrein-Freudenberg Co., Inc.*, v. *A. Walter et al.*

Des. 84,741, Des. 84,742, F. Grossman, Sport shoe, filed Apr. 14, 1932, D. C., S. D. N. Y., Doc. E 66/365, *J. Grossman, Inc.*, v. *Delman, Inc.* Doc. E 65/79, *J. Grossman, Inc.*, v. *Clement Ball Shoe Mfg. Co.* Consent order of discontinuance (notice Apr. 18, 1932).

Des. 84,742. (See Des. 84,741.) Des. 85,422. (See Des. 84,578.)

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,703,907, T. H. Thomas, Train control device, decided June 1, 1932, claim 8.

Pat. 1,745,312, C. W. Oman, Multi-ply valve bag machine, decided May 27, 1932, claims 17 and 24; and May 31, 1932, claims 18, 19, 20, 21, 22, 23, 25, 26, and 27.

Pat. 1,794,563, W. W. Wenholz, Train dispatching systems for railroads, decided June 2, 1932, claims 3 and 4.

Pat. 1,794,595, F. L. Dodgson, Railway traffic controlling system, decided June 2, 1932, claim 2.

Pat. 1,828,394. W. A. Chryst, Shock absorber, decided June 1, 1932, claims 1, 2, and 3.

Pat. 1,830,401, B. F. Miessner, Electromagnetic sound reproducer, decided May 24, 1932, claim 3.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 21, 1932

[VOL. 419. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 326,611. K. HANFLING & SON, Chicago, Ill. Filed Apr. 29, 1932.



No claim being made to the word "Oak" apart from the other features of the mark.

For Leather.

Claims use since January, 1928.

Ser. No. 327,070. SOUTHERN CHEMICAL COTTON COMPANY, Chattanooga, Tenn. Filed May 13, 1932.

CHEMCOT

For Chemical Cotton Otherwise Known as Cotton Linter Pulp and as Bleached Linters and as Purified Linters.

Claims use since Jan. 1, 1927.

CLASS 2

Receptacles

Ser. No. 323,948. LEONARD HAURY COMPANY, Elyria, Ohio. Filed Feb. 8, 1932.

FIL-LITE

For Battery Fillers.

Claims use since Dec. 29, 1931.

Ser. No. 324,362. PEORIA METAL SPECIALTY CO., Peoria, Ill. Filed Feb. 20, 1932.

SNOWFLAKE

For Metal Bread Boxes, Canister Sets, Flour Bins, Waste Baskets, Utility and Medicine Chests.

Claims use since Dec. 15, 1931.

Ser. No. 324,363. PEORIA METAL SPECIALTY CO., Peoria, Ill. Filed Feb. 20, 1932.

GREEN SNOWFLAKE

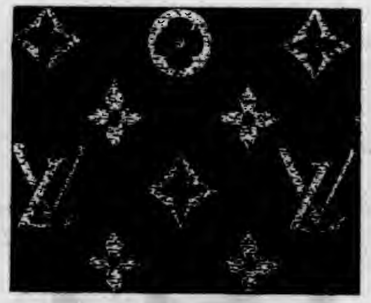
For Metal Bread Boxes, Canister Sets, Flour Bins, Waste Baskets, Utility and Medicine Chests.

Claims use since Dec. 20, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 313,983. VUITTON & VUITTON, SOCIETE A RESPONSABILITE LIMITEE, Paris, France. Filed Apr. 29, 1931.



The representation of a trunk or a section thereof being hereby disclaimed.

For Trunks, Valises, Traveling Bags, Satchels, Hat Boxes, and Shoe Boxes Used for Luggage, Hand Bags and Pocketbooks.

Claims use since 1897.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 302,469. N. S. MEYER, INC., New York, N. Y. Filed June 16, 1930.

LIQUID ROUGE



No claim is made to exclusive use of the words "Liquid Rouge" apart from the mark as shown on the drawing.
For Metal Polish.
Claims use since June, 1928.

Ser. No. 318,549. CRECO COMPANY INC., Long Island City, N. Y. Filed Aug. 29, 1931.

CRECO KLEENRITE

No claim is made to the word "Kleenrite" except in combination with the word "Creco," the mark shown in the drawing.
For Floor Scrubbing Soap.
Claims use since August, 1927.

Ser. No. 324,604. THE GUNN FURNITURE COMPANY, Grand Rapids, Mich. Filed Feb. 29, 1932.

"LINO" FOOD

For Cleaner and Preservative for Linoleum.
Claims use since July 16, 1921.

Ser. No. 325,255. ALEX. C. FERGUSSON CO., Philadelphia, Pa. Filed Mar. 18, 1932.

AFCO

For Cleaning Compounds for General Household Use.
Claims use since November, 1931.

Ser. No. 326,399. SUPREME PRODUCTS COMPANY, St. Louis, Mo. Filed Apr. 22, 1932.

SUPCO

For Metal Cleaners and Polishes.
Claims use since Apr. 19, 1932.

Ser. No. 326,510. WILLIAM T. VASSILATOS, doing business as The Crystal Shoe Polish Mfg. Co., Chicago, Ill. Filed Apr. 23, 1932.



No claim is made to any of the words "Manufactured and Sold by, Chicago, Ill. U. S. A." apart from the mark
For Shoe Cleaning and Polishing Compounds.
Claims use since Apr. 1, 1930.

Ser. No. 326,755. R. B. MARTIE, INC., New York, N. Y. Filed May 4, 1932.

MARSO

For Powdered Soap Compound for Laundry Use and the Like.
Claims use since Jan. 1, 1932.

Ser. No. 326,767. GEORGE M. WOLFF, doing business as U-Zit Manufacturing Company, Chicago, Ill. Filed May 4, 1932.

U-Zit

For Polish in Paste Form for Cleaning and Polishing Silver, Nickel, Brass, Gold, Porcelain Enamel, Mirrors, Windows, and Cut Glass.
Claims use since 1922.

Ser. No. 326,842. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed May 6, 1932.

Fanchon

For Toilet Soap.
Claims use since September, 1931.

Ser. No. 326,943. JOSEPH LACHOFF, doing business as Jlco Laboratories, Chicago, Ill. Filed May 10, 1932.

JLCO

For Shoe Polish.
Claims use since Feb. 1, 1924.

CLASS 5

Adhesives

Ser. No. 322,515. THE LEE HARDWARE COMPANY, Salina, Kans. Filed Dec. 29, 1931.

'Stik-Um Up'



Applicant is the owner of registration No. 125,777.
The terms "Adhesive" and "Stik-Um" are hereby disclaimer apart from the other features of the mark shown.
For General Adhesive Especially Adapted for Book Binding, Cementing, Cellophane, Fabrics, Leather, and Rubber, and for Other Purposes.
Claims use since Dec. 15, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 293,433. ABRAHAM H. KAITZ, doing business as American Proprietaries, Philadelphia, Pa. Filed Dec. 9, 1929.

MADELINE'S



The portrait shown in the drawing is that of Mrs. Sarah Jones, a living individual, who has consented to the use of said portrait.
For Preparations for the Treatment of the Scalp and Hair.
Claims use since Augus, 1922.

Ser. No. 313,722. VITAMINERAL PRODUCTS COMPANY, Peoria, Ill. Filed Apr. 23, 1931.

Con·o·mineral

The word "Mineral" is disclaimed apart from the mark as shown.
For Compound Containing Various Minerals to be Mixed with Feed Rations of Animals for Cor ective Purposes.
Claims use since Apr. 11, 1931.

Ser. No. 313,724. VITAMINERAL PRODUCTS COMPANY, Peoria, Ill. Filed Apr. 23, 1931.

Viamineral

For Compound Containing Various Minerals to be Mixed with the Feeding Rations of Animals for Cor ective Purposes.
Claims use since Apr. 11, 1931.

Ser. No. 317,407. CASHIUS M. SCOTT, doing business as Scott's Scalp Preparation Company, Chicago, Ill. Filed July 28, 1931.

S
S R
CO.

For Hair Grower, Hair Dressing, and Pressing Oil.
Claims use since April, 1905.

Ser. No. 319,054. THE AD-EZ COMPANY, Cleveland, Ohio. Filed Sept. 15, 1931.

AD-EZ

For Skin Lubricating Preparation for Addition to Shaving Lather on the Face.
Claims use since Aug. 1, 1931.

Ser. No. 319,129. G. F. WURTELE, doing business as G. F. Wurtele Company, Philadelphia, Pa. Filed Sept. 15, 1931.

MI-RAX

For Medicinal Preparations in Cream, Liquid, and Powder Form, Said Preparations Comprising a Depilatory for the Feet, and More Specifically for Relief of Excessive Perspiration, Burning, Itching, and General Discomfort of Their Muscles and Nerves.
Claims use since July 17, 1931.

Ser. No. 320,552. FRED RIME, doing business as Par Laboratories, Los Angeles, Calif. Filed Oct. 28, 1931.

PAR

For Medicinal Inhalant.
Claims use since Oct. 28, 1931.

Ser. No. 320,997. AMANDA VAN SICKLE, Ashland, Pa. Filed Nov. 10, 1931.



The representation of the two male figures is fanciful.
For Cramp and Diarrhea Compound.
Claims use since Oct. 1, 1888.

Ser. No. 322,265. THE ODORONO COMPANY, INC., New York, N. Y. Filed Dec. 18, 1931.



For Deodorants and Preparations for Preventing Excessive Perspiration.
Claims use since August, 1931.

Ser. No. 322,922. RAY-MAC SALES CO., Woodridge, N. J. Filed Jan. 11, 1932.

PEPSOLV

For Preparation for Use in Increasing the Efficiency of Gasoline and Preventing the Formation of Carbon in Internal Combustion Engines.
Claims use since Jan. 2, 1932.

Ser. No. 323,776. CHEMISCHE UND PHARMAZEUTISCHE FABRIK DR. GEORG HENNING, Berlin-Tempelhof, Germany. Filed Feb. 3, 1932.

Myoston

For Extract of Skeleton-Muscles, a Preparation Used in the Treatment of Angina Pectoris and Other Heart Vessel Diseases, Hypertony, Circulation Troubles, and Similar Diseases.
Claims use since Jan. 16, 1928.

Ser. No. 323,916. STENOVER, INC., East Orange, N. J. Filed Feb. 6, 1932.

ROTECIDE

For Insecticides.
Claims use since Aug. 17, 1931.

Ser. No. 323,992. NELLIE A. FINLEY, Waco, Tex. Filed Feb. 9, 1932.

BRONZENE

B

For Preparation for Circulating in the Water Cooling System of an Automobile to Prevent Leaking of the Radiator and to Fill Cracks in the Cylinder Head and Motor Block.
Claims use since Jan. 10, 1931.

Ser. No. 324,296. THE ODORONO COMPANY, INC., New York, N. Y. Filed Feb. 18, 1932.



The color lining indicates a red panel upon a buff background. The exclusive right to the use of the words "New York" and "Deodorant and Perspiration Corrective" aside from the use in the mark as shown, is disclaimed.
For Deodorant and Perspiration Corrective.
Claim use since Nov. 20, 1931.

Ser. No. 324,738. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Mar. 3, 1932.

Mowilith

For Polymerized Vinyl Esters of the General Nature of Synthetic Resins in Liquid or Solid Form.
Claims use since May, 1929.

Ser. No. 324,824. S. WILLARD ISAACS, doing business as Matta Grosso Turtle Oil Products Company, Los Angeles, Calif. Filed Mar. 5, 1932.

MATTA GROSSO

For Cosmetic Consisting of Turtle Oil Used for Face Massaging.
Claims use since November, 1931.

Ser. No. 325,038. DR. JERONYMO GESTEIRA, Detroit, Mich. Filed Mar. 11, 1932.

GESTREN

For Medicine Used as a Sedative and Antispasmodic in General Medicine and Gynecological and Obstetrical Practice.
Claims use since Feb. 10, 1932.

Ser. No. 325,039. DR. JERONYMO GESTEIRA, Detroit, Mich. Filed Mar. 11, 1932.

VENTRELAX

For Laxative.
Claims use since Feb. 10, 1932.

Ser. No. 325,379. H. LEROY WRIGHT, doing business as LeRoy Laboratories, Orange, N. J. Filed Mar. 22, 1932.

E-ZALGIC

For Salves, Ointments, Cream and Lotions, All for the External Use and Treatment of the Skin and Skin Disorders.
Claims use since Jan. 15, 1932.

Ser. No. 325,380. H. LEROY WRIGHT, doing business as LeRoy Laboratories, Orange, N. J. Filed Mar. 22, 1932.

RE-AL-EZ

For Salves, Ointments, Cream and Lotions, All for the External Use and Treatment of the Skin and Skin Disorders.
Claims use since Jan. 15, 1932.

Ser. No. 325,471. HITCHCOCK LABORATORIES, Sebring, Ohio. Filed Mar. 25, 1932.



Applicant disclaims the right to the exclusive use of the words "The Ingredient Compound" apart from the mark shown on the drawing.
For Liquid Preparation for Coughs, Colds, Croup, Soreness in Lungs, Inflammation in Air Passages, Asthma, Bronchitis, Sore Throat, and La Grippe.
Claims use since Feb. 1, 1932.

Ser. No. 325,521. GODISSART'S PARFUM CLASSIQUE FRANCAIS INC. LTD., Wilmington, Del., and Los Angeles, Calif. Filed Mar. 26, 1932.

CETTE NUIT OU JAMAIS

For Perfume.
Claims use since June 2, 1927.

Ser. No. 325,686. HABA LABORATORIES, Savanna, Ill. Filed Mar. 31, 1932.

STYP-QUIK

For Liquid Styptic to be Used to Stop the Flow of Blood from Shaving Cuts.
Claims use since Mar. 19, 1932.

Ser. No. 325,699. JAMES T. WEBB, Jr., Macon, Ga. Filed Mar. 31, 1932.



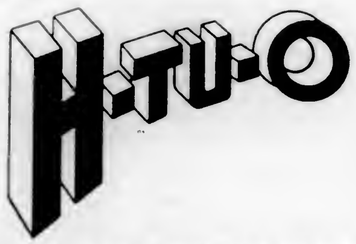
The portrait shown on the drawing is merely fanciful.
For Grease for Reducing Friction on Surgical Gloves and Other Rubber Articles.
Claims use since Mar. 15, 1932.

Ser. No. 325,754. LANAIR COMPANY, Chicago, Ill. Filed Apr. 2, 1932.

de-Mise

For Insecticides.
Claims use since Oct. 18, 1930.

Ser. No. 325,850. GILBERT PRODUCTS CO., St. Paul, Minn. Filed Apr. 6, 1932.



For Composition for Softening Water and for Use as a Soap Saver and Cleaner.
Claims use since Mar. 22, 1932.

Ser. No. 325,890. MAURICE L. ASH, Jr., doing business as Wagir Chemical Company, Chicago, Ill. Filed Apr. 6, 1932.

W.T. 59

For Chemicals Used in the Correction of Water for Scale, Corrosive Action, and Metal Embrittlement.
Claims use since Jan. 1, 1932.

Ser. No. 325,955. MERCK & CO. INC., Rahway, N. J. Filed Apr. 9, 1932.

VINESTHENE

For Anæsthetic.
Claims use since Mar. 18, 1932.

Ser. No. 326,167. SPOONER, INC., New York, N. Y. Filed Apr. 15, 1932.



For Rouge, Talcum, Body Powder, Perfume, Toilet Water, Florida Water, Tooth Paste, Bay Rum, Bath Salts, Lemon Cream, Vanishing Cream, Massage Cream, Nail Polish, Shampoo, Hair Tonic, Sachet, Vegetal, Face Powder, Face Creams, Face Lotions, Astringent, Skin Tonic, Cold Cream, Lipsticks, Honey and Almond Cream, Brilliantine, Hair Pomade, Smelling Salts, After Shaving Lotions, Astringent Cream, Eye Shadow, Mascaro and Lip Rouge.
Claims use since Jan. 15, 1931.

Ser. No. 326,296. A. I. NAMM & SON, doing business as The Namm Store, Brooklyn, N. Y. Filed Apr. 20, 1932.

VALIDE

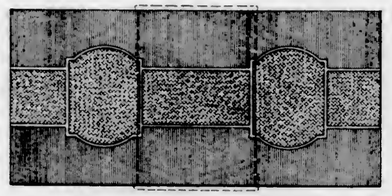
For Liquid Antiseptics and Disinfectants, Bath Salts, Hair Bleach; Cosmetics—Namely, Face Powder, Cleansing Cream, Skin Lotions, Rouges, Tissue Cream, Skin Tonic, Astringents, Perfumes, Toilet Water, Cold-Cream, Vanishing Cream, Hair Tonic, Reducing Cream, Lip-Sticks, Nail Polish, Chemical Cuticle Remover, Dentifrices, Deodorants, Hair-Restorer, Hair Pomade, Preparations for Treatment of Hair and Scalp, a Composition of Mud or Clay and Chemicals Known as a Mud-Pack and Used for Beautifying One's Complexion, Shampoo, Talcum Powder, Dusting Powder, Witch-Hazel, Mascara, Eye-Brow Pencils, Perfume in Paste Form, and Sachets for Wave-Setting.
Claims use since July 10, 1931.

Ser. No. 326,305. E. R. SQUIBB & SONS, New York, N. Y. Filed Apr. 20, 1932.

NEO-SERENIUM

For Medicinal Diamino-Azo-Benzols to be Taken Internally in the Treatment of Cystitis, Pyelitis, Urethritis, Salpingitis, and in General in Infections of the Genito-Urinary Tract and for Local Application in Postoperative Procedure and in the Treatment of Various Skin Infections and Cuts and Wounds.
Claims use since Apr. 15, 1932.

Ser. No. 326,336. NATIONAL CARBIDE CORPORATION, Wytheville, Va., New York, N. Y., and Ivanhoe, Va. Filed Apr. 21, 1932.



The trade-mark consists of the characteristic design in color contrast extending continuously around the cylindrical side of the can, the belt being orange and the remainder of the surface being red, as indicated by the lining on the drawing. No claim is made to the representation of the can appearing on the drawing.
For Calcium Carbide.
Claims use since March, 1921.

Ser. No. 326,342. SERVICE PRODUCTS, INCORPORATED, Greenville, Pa. Filed Apr. 21, 1932.

SANI-URN

For Chemical Preparation for Use in Cleaning Coffee Urns.
Claims use since Feb. 12, 1929.

Ser. No. 326,385. ROBERT MCNEIL, Philadelphia, Pa. Filed Apr. 22, 1932.

Bisalco

For Cholagogue, Biliary Antifermentative, and Laxative.
Claims use since Sept. 21, 1928.

Ser. No. 326,388. ROBERT MCNEIL, Philadelphia, Pa. Filed Apr. 22, 1932.

Physilin

For Preparation for Cleansing Wounds, Ulcers, and the Like.
Claims use since Mar. 9, 1932.

Ser. No. 326,390. ROBERT MCNEIL, Philadelphia, Pa. Filed Apr. 22, 1932.

Stanprotein

For Preparation Used in the Treatment of Staphylococcic Infections.
Claims use since July 18, 1930.

Ser. No. 326,484. JOSEPH F. LAURICELLA, doing business as Crown Pharmacal Company, Long Beach, Calif. Filed Apr. 25, 1932.



For Liquid Preparation for the Treatment of Sunburn.
Claims use since Feb. 18, 1930.

Ser. No. 326,498. SANDOZ CHEMICAL WORKS, INC., New York, N. Y. Filed Apr. 25, 1932.

BELLERGAL

For Products Recommended to Relieve Spasm and to Treat Affections in Which Imbalance of the Autonomic Nervous System Plays an Important Part.
Claims use since Apr. 5, 1932.

Ser. No. 326,599. KEYSTONE LABORATORIES, Memphis, Tenn. Filed Apr. 27, 1932.

WANG

For Hair Dressing.
Claims use since Feb. 5, 1932.

Ser. No. 326,609. GOEDRICH CHEMICAL COMPANY, New York, N. Y. Filed Apr. 29, 1932.

KRESOLF

For Bactericidal and Fungicidal Preparations.
Claims use since Apr. 13, 1932.

Ser. No. 326,638. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Apr. 30, 1932.

Atebrin

For Antimalarial Preparation.
Claims use since Apr. 15, 1932.

Ser. No. 326,640. INNOVINE COMPANY, Fairhaven, Mass. Filed Apr. 30, 1932.

INNOVINE

For Antiseptic and Mouth, Throat, and Dental Lotion.
Claims use since Feb. 1, 1932.

Ser. No. 326,868. THE PAINE DRUG COMPANY, Rochester, N. Y. Filed May 7, 1932.

CUFESOL

For Medicinal Preparation Used in the Treatment of Certain Types of Nutritional Anemia in Infants and Children.
Claims use since Apr. 12, 1932.

Ser. No. 326,880. ALLEN CHEMICAL COMPANY, Toledo, Ohio. Filed May 9, 1932.

HEGX

For Nose and Throat Spray.
Claims use since Mar. 1, 1928.

Ser. No. 326,951. NATIONAL REMEDY COMPANY, New York, N. Y. Filed May 10, 1932.

GRAGO

For Coloring Preparation for the Hair.
Claims use since Apr. 4, 1932.

Ser. No. 327,153. HUNTINGTON LABORATORIES, INC., Huntington, Ind. Filed May 16, 1932.

DERMA-SAN

For Disinfectant.
Claims use since Jan. 2, 1932.

Ser. No. 327,184. OTIS CLAPP & SON, INC., Boston, Mass. Filed May 17, 1932.

MENALGESIA

For Sedative.
Claims use since Apr. 23, 1932.

Ser. No. 327,185. OTIS CLAPP & SON, INC., Boston, Mass. Filed May 17, 1932.

PHENORINE

For Sedative.
Claims use since Aug. 26, 1931.

CLASS 10

Fertilizers

Ser. No. 325,635. LINDA MINERAL SALES COMPANY, Oakland, Calif. Filed Mar. 29, 1932.



The words "Mineral Litter," "Mineral Fertilizer" and "Distributors of Mineral Products" are disclaimed apart from the mark shown.
For Mineral Fertilizers and Poultry Litter.
Claims use since Mar. 12, 1932.

Ser. No. 326,527. NAAMLOOZE VENNOOTSCHAP AMSTERDAMSCHE SUPERFOSFAATFABRIEK, Utrecht, Holland. Filed Apr. 26, 1932.



ULTRA SUPER

For Fertilizers.
Claims use since Mar. 30, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 319,185. RADIO CARBON COMPANY, Dallas, Tex. Filed Sept. 18, 1931.



The words "Sensitiveness," "Selectivity," "Reception," and "Uniformity" are disclaimed apart from the mark shown.
For Carbon Paper and Typewriter Ribbons.
Claims use since Mar. 1, 1931.

Ser. No. 326,289. KAUMAGRAPH COMPANY, New York, N. Y. Filed Apr. 20, 1932.

TRANSOL

For Ink Solvents Other Than Ink Eradicators.
Claims use since Mar. 19, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 320,504. LOUIS H. LEHMAN, doing business as Lehman Sprayshield Company, Philadelphia, Pa. Filed Oct. 27, 1931.

MERMAID

For Glass Shower Stall Doors, Glass Shower Bath Shields, and Glass Bath Enclosures.
Claims use since January, 1926.

CARNEGIE LIBRARY OF ATLANTA

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 297,316. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa. Filed Mar. 14, 1930. Under section 5b of the act of 1905 as amended in 1920.

MIDVALE☆☆

For Tool Steel.
Claims use since Jan. 17, 1930.

Ser. No. 297,317. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa. Filed Mar. 14, 1930. Under section 5b of the act of 1905 as amended in 1920.

MIDVALE☆

For Tool Steel
Claims use since Oct. 7, 1929.

Ser. No. 326,930. ALLIED RESEARCH LABORATORIES, INC., Glendale, Calif. Filed May 10, 1932.

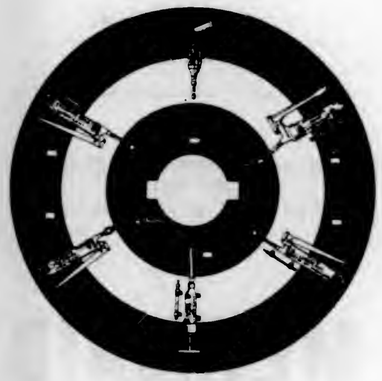
ALUMAWELD

For Solder.
Claims use since December, 1930.

CLASS 15

Oils and Greases

Ser. No. 322,044. HUMBLE OIL & REFINING COMPANY, Houston, Tex. Filed Dec. 12, 1931.



No claim is made to the printed language appearing upon the drawing with the exception of the corporate name "Humble Oil & Refining Company."
For Lubricating Oils and Greases.
Claims use since Sept. 15, 1931.

Ser. No. 325,250. BILTRITE MOTOR EQUIPMENT CO. INC., New York, N. Y. Filed Mar. 18, 1932.

BILTRITE

For Oils and Greases for Motor Vehicles, Hydraulic Brake Oils, Crank Case Oils, Shock-Absorber Oils, and Penetrating Oils.
Claims use since July 2, 1923.

CLASS 16

Paints and Painters' Materials

Ser. No. 310,432. CELOLAC PRODUCTS COMPANY, Minneapolis, Minn. Filed Jan. 26, 1931.

CELOGLAZE

Applicant hereby disclaims the word "Glase" apart from the other features of the mark as shown on the drawing.
For Polish for All Duco, Lacquer, Paint, and Enamel Finishes.
Claims use since Sept. 10, 1930.

Ser. No. 326,479. JONES-DABNEY COMPANY, INC., Louisville, Ky. Filed Apr. 25, 1932.

SYNTEX

For Ready-Mixed Lacquers, Varnishes, Paint Enamels, and Paints.
Claims use since Mar. 15, 1930.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 319,701. LETTY M. MONTGOMERY, New York, N. Y., assignor to Karry Kart, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 3, 1931.

KARRY-KART

No claim is made to the word "Kart" apart from the mark shown.
For Perambulator.
Claims use since May 1, 1931.

Ser. No. 325,935. BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind Filed Apr. 9, 1932.

SERVIX

For Brakes and Brake Systems and Parts Thereof.
Claims use since May 4, 1931.

Ser. No. 325,936. BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind. Filed Apr. 9, 1932.

BENDRAULIX

For Brakes and Brake Systems and Parts Thereof.
Claims use since May 4, 1931.

Ser. No. 325,937. BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind. Filed Apr. 9, 1932.

CABLIX

For Brakes and Brake Systems and Parts Thereof.
Claims use since May 4, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 313,021. STATES BATTERIES, LTD., Los Angeles, Calif. Filed Apr. 4, 1931.

COAST

For Storage Batteries.
Claims use since Sept. 30, 1930.

Ser. No. 313,381. THE MILLER COMPANY, Meriden, Conn. Filed Apr. 15, 1931.

PALITE

For Electric Lighting Fixtures and Lamps.
Claims use since Mar. 16, 1931.

Ser. No. 325,675. AUTOMATIC ELECTRIC COMPANY, Chicago, Ill. Filed Mar. 31, 1932.

STROWGER AUTOMATIC SYSTEMS
COMMUNICATING ····· SIGNALING

No claim is made for the words "Strowger Automatic Systems," "Communicating," and "Signaling" or the representation of the mechanical features of the goods apart from the environment illustrated.
For Communicating and Signaling Systems.
Claims use since Dec. 19, 1930.

Ser. No. 325,860. STRUTHERS DUNN INC., Philadelphia, Pa. Filed Apr. 6, 1932.

LUMISTAT

For Selenium, Thallium, Photo-Electric and Light Sensitive Cells Changing in Electrical Resistance in Response to Changes in Intensity of Light; Cells Generating Electric Current in Response to Light, Units and Systems Comprising Said Cells, and Controlling Instruments Responsive to the Current Through or from Said Cells; Units and Systems Comprising Said Cells and Relays; Units and Systems Comprising Said Cells and Thermal, Electrical and Electromagnetic Contact-Controlling Devices Responsive to the Current Through or from Said Cells; Units and Systems Comprising Said Cells and Amplifiers of the Electrical Effects Due to Changes in Intensity of Light; Units and Systems Comprising Said Cells and Controllers, Responsive to Impingement on Said Cells of Light Representative of Turbidity, Smoke Density and Color; and Controllers Responsive to Light and Changes in Light Intensity for Controlling Electric Circuits, Electric Motors, Electric Lights, Electric Signals and Indicators, Electric Heaters, and Electrically Operated Valves.
Claims use since Feb. 4, 1932.

Ser. No. 326,446. NATIONAL DEVICES CORPORATION, Philadelphia, Pa. Filed Apr. 23, 1932.

DOMESTIC MAID
FOOD PREPARER

No claim is made herein to the words "Food Preparer" apart from the mark shown in the drawing.
For Kitchen Mixing Device.
Claims use since Mar. 1, 1932.

Ser. No. 326,629. AMERICAN FLYER MFG. CO., Chicago, Ill. Filed Apr. 30, 1932.

CHAMPION

For Transformers.
Claims use since Feb. 12, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 321,262. MARION S. TERRY, doing business as Sunshine Magic, Scituate, Mass. Filed Nov. 18, 1931.

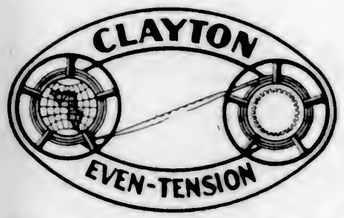
Sunshine Magic

For Child's Blue Printing Set.
Claims use since Sept. 1, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 320,159. JOSEPH CLAYTON, doing business as Clayton Products Company, Corona, N. Y. Filed Oct. 17, 1931.



The right to the exclusive use of the words "Even-Tension" and the representations of parts of a winding mechanism, except in the association shown being disclaimed.

For Mechanisms for Controlling the Tension in the Winding of Material and Apparatus in Which Material is Transferred from One Holder to Another by a Winding Operation Embodying Such Mechanisms and Parts and Elements Thereof.

Claims use since Apr. 14, 1931.

Ser. No. 320,629. BORST ENGINEERING, INC., Buffalo, N. Y. Filed Oct. 30, 1931.

NODIS

For Coin-Operated Dispensing Apparatus.
Claims use since Sept. 1, 1931.

Ser. No. 320,771. WARD-LOVE PUMP CORPORATION, Rockford, Ill. Filed Nov. 3, 1931.

WARLO

Applicant is owner of registered trade-mark #275,517 issued Sept. 23, 1930.

For Mechanical Water-Softening Apparatus and Parts Therefor.

Claims use since Feb. 2, 1925.

Ser. No. 325,065. FABRICA NACIONAL DE TOLEDO, Toledo, Spain. Filed Mar. 12, 1932.



The words "Toledo," "Espana," "Registrada," "Marca," and the representation of a razor blade are disclaimed apart from the mark as shown.

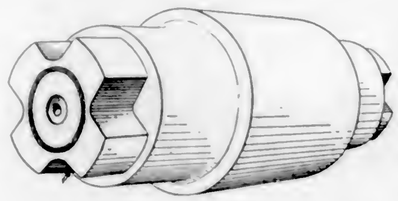
For Razor Blades.
Claims use since 1907.

Ser. No. 326,114. MORGAN CONSTRUCTION COMPANY, Worcester, Mass. Filed Apr. 14, 1932.

MORGOIL

For Rolling Mill Apparatus—Namely, Bearings for Roll Necks and the Like.
Claims use since Jan. 21, 1932.

Ser. No. 326,369. HYDE PARK FOUNDRY & MACHINE COMPANY, Hyde Park, Pa. Filed Apr. 22, 1932.



Consisting of a red colored circle applied to the end of the wabblers of the rolls, and preferably within a recess or depression formed in the ends of the roll wabblers, as indicated by the shade lines shown in the drawing. The trade-mark is preferably applied or affixed to the goods by painting the ends of the rolls or roll wabblers with red colored paint in the manner shown and described. The representation of the roll is disclaimed.

For Rolling Mill Rolls, Including Working, Backing, and Edging Rolls, Roller Leveller Rolls, Pinch Rolls, Conveyor Rolls, and Pack Opener Rolls.

Claims use since Feb. 29, 1932.

Ser. No. 326,729. BYRON JACKSON CO., Los Angeles, Calif. Filed May 2, 1932.

ELECTRIC SPONGE

Applicant disclaims any exclusive right to the word "Electric" except when used as shown in conjunction with the word "Sponge."

For Centrifugal Pumps.
Claims use since Mar. 30, 1932.

Ser. No. 326,743. EMPORIA MACHINE CO. INC., Emporia, Va. Filed May 4, 1932.

NO. I.C EMPORIA MACHINE CO.

The expression "No. 1" and name "Emporia Machine Co." are disclaimed apart from the other features of the mark shown in the drawing.

For Plows.
Claims use since January, 1906.

Ser. No. 326,744. EMPORIA MACHINE CO. INC., Emporia, Va. Filed May 4, 1932.

NO. 2.C EMPORIA MACHINE CO.

The expression "No. 2" and name "Emporia Machine Co." are disclaimed apart from the other features of the mark shown in the drawing.

For Plows.
Claims use since January, 1906.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 317,536. RADIO RESEARCH LABORATORIES, Tacoma, Wash. Filed July 31, 1931.

VISAMETER

For Radio Tube Testers.
Claims use since May 23, 1931.

Ser. No. 325,764. RALPH H. UPSON, Ann Arbor, Mich. Filed Apr. 2, 1932.

AIR-T-ZON

For Navigation and Control Instruments—Namely, Horizon Indicators.
Claims use since Jan. 12, 1932.

Ser. No. 325,765. RALPH H. UPSON, Ann Arbor, Mich. Filed Apr. 2, 1932.

AIRIZON

For Navigation and Control Instruments—Namely, Horizon Indicators.
Claims use since Jan. 12, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 299,243. ALPHA EPSILON PI FRATERNITY, INC., New York, N. Y. Filed Apr. 22, 1930.



For Fraternity Badges, Lapel Buttons, Scarf, Lapel, and Breast Pins, Cuff Links, Tie Clasps, Charms, Finger Rings, Belt Buckles, and Ornamental Shields; All of Precious Metal.
Claims use since November, 1912.

Ser. No. 317,417. THE AMERICAN COLLEGE OF LIFE UNDERWRITERS, Washington, D. C., and Baltimore, Md. Filed July 29, 1931.



For Watch Charms.
Claims use since May 21, 1930.

Ser. No. 326,079. HARVEY CLAP & COMPANY, Attleboro, Mass. Filed Apr. 14, 1932.

Betsy Ross

For Metal Articles of Jewelry for Personal Wear or Adornment, Not Including Watches.
Claims use since Nov. 24, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 327,033. UNITED DRUG COMPANY, Boston, Mass. Filed May 12, 1932.

Jonteel

For Powder Puffs.
Claims use since January, 1926.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 325,448. SÄCHSISCHE PORZELLANFABRIK ZU POTSCHAPPEL VON CARL THIEME, Potschappel-Dresden, now Freital, and Dresden, Germany. Filed Mar. 23, 1932.



No claim is made to the word "Dresden" apart from the mark shown in the drawing.
For Porcelain.
Claims use since 1906.

CLASS 32

Furniture and Upholstery

Ser. No. 309,957. L. BAMBERGER & CO., Newark, N. J. Filed Jan. 15, 1931.

"Under the China-berry Tree"

For Children's Furniture—e. g., Miniature Articles in Imitation of Chairs, Stools, Tables, Desks, Cribs, Beds, Cabinets, and Cupboards.
Claims use since Nov. 28, 1930.

Ser. No. 320,381. T. R. TAYLOR & CO., York, Pa. Filed Oct. 23, 1931.



The applicant disclaims the right to the exclusive representation of the chair apart from the trade-mark as shown in the drawing.
For Upholstered Living Room Furniture—Namely, Davenports, Chairs, Couches, Stools, and Benches.
Claims use since July 1, 1931.

Ser. No. 326,061. N. SUMERGRADE & SONS, INC., New York, N. Y. Filed Apr. 13, 1932.

SLUMBERLAND

For Pillows, Mattresses, and Box Springs.
Claims use since July, 1929.

Ser. No. 326,110. CHAS. B. LEVY, New Orleans, La. Filed Apr. 14, 1932.

DREAM PAL

For Bed Springs, Mattresses, and Pillows.
Claims use since Nov. 1, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 298,331. IRON FIREMAN MANUFACTURING COMPANY, Portland, Oreg. Filed Apr. 3, 1930.

Junior

For Automatic Coal Burners.
Claims use since Feb. 28, 1927.

CLASS 36

Musical Instruments and Supplies

Ser. No. 326,270. SOUND ENGINEERING CORPORATION, New York, N. Y. Filed Apr. 19, 1932.



For Phonographic Machines and Parts Thereof for Recording and Reproducing Sound, and Records and Needles for Use Therewith.
Claims use since Mar. 15, 1931.

CLASS 37

Paper and Stationery

Ser. No. 325,152. RUSSELL BOX COMPANY, Medford, Mass. Filed Mar. 15, 1932.

TEXTITE

For Paper-Board for Use in the Manufacture of Receptacles.
Claims use since Jan. 6, 1932.

Ser. No. 326,225. THE METEX COMPANY, INCORPORATED, Wilmington, Del.; Lock Haven, Pa.; and New York, N. Y. Filed Apr. 18, 1932.

METEX

For Absorbent, Cover, News, Printing (Coated and Uncoated), Tissue, Wrapping, and Writing Papers, and Paper Boards, Such as Cardboards and the Like.
Claims use since Mar. 31, 1931.

Ser. No. 327,097. KOTEX COMPANY, Chicago, Ill. Filed May 14, 1932.

DORIAN

For Toilet Paper.
Claims use since Mar. 10, 1932.

CLASS 38

Prints and Publications

Ser. No. 326,781. WALTER J. GALLAGHER, New York, N. Y. Filed May 5, 1932.

PRO-MOTION-AL

For Printed Folders.
Claims use since Apr. 1, 1932.

Ser. No. 327,088. ROGER F. BANNING, doing business as The Modern Life Publishing Co., St. Paul, Minn. Filed May 14, 1932.

BLAH

For Periodical Magazine.
Claims use since Apr. 15, 1932.

Ser. No. 327,096. HEATING JOURNALS, INC., New York, N. Y. Filed May 14, 1932.

Air Conditioning
with
Fluid Fuels

For Periodical Publications.
Claims use since May 7, 1932.

Ser. No. 327,239. FERRY-HANLY ADVERTISING COMPANY, New York, N. Y.; Chicago, Ill.; and Kansas City, Mo. Filed May 19, 1932.

IT'S AN ELEPHANT'S JOB-
NO TIME FOR 'DONKEY-BUSINESS'!

For Cartoons.
Claims use since May 16, 1932.

CLASS 39

Clothing

Ser. No. 321,730. MERCURY MILLS, LIMITED, Hamilton, Ontario, Canada. Filed Dec. 3, 1931.



The word "Ancaster" is disclaimed apart from the mark as shown for purposes of this registration.
For Clothing—Namely, Knitted and Woven Sweater Coats, Pullovers, Suits, Dresses, Blouses, Bathing Suits, and Hosiery for Men, Women, and Children.
Claims use since March, 1931.

Ser. No. 322,477. WYLE HAT CORPORATION, now by change of name 1632 Indiana Corporation, Chicago, Ill. Filed Dec. 26, 1931.



For Women's Hats.
Claims use since June 19, 1929.

Ser. No. 322,643. NATIONAL SHIRT SHOPS, INC., New York, N. Y. Filed Jan. 2, 1932.

SILVER KING

For Men's Dress, Negligee, and Work Shirts, Underwear, and Pajamas.
Claims use since December, 1929.

Ser. No. 323,337. S. H. KRESS & CO., New York, N. Y. Filed Jan. 23, 1932.

Siren

For Cravats, Hosiery, Women's and Children's Nightgowns; Men's, Women's, and Children's Pajamas and Bath Robes; Women's and Misses' Chemises, Vests, Bloom-

ers, Step-Ins (Underwear), Slips, Petticoats, Bed Jackets and Negligees; Men's, Women's, Misses', and Children's Hats, Fabric Gloves; and Men's, Women's, Misses', and Children's Knickers for Under and Outer Wear; Men's Dress and Work Shirts, Men's Neckties; Men's Union Suits, Undershirts, and Drawers; and Men's, Women's, and Children's Collars.
Claims use since Jan. 2, 1932.

Ser. No. 323,598. VAN RAALTE COMPANY, New York, N. Y. Filed Jan. 29, 1932.

Wynsom-Wyns

For Hosiery.
Claims use since Jan. 10, 1932.

Ser. No. 325,405. OPPENHEIM, OBERNDORF & CO., INC., Baltimore, Md. Filed Mar. 23, 1932.

SUPER-BROAD

No claim is made to the word "Broad" apart from the mark as shown.
For Men's and Boys' Shorts, Dress, Negligee, and Work Shirts, Unionsuits, Pajamas, and Night Shirts.
Claims use since July 1, 1930.

Ser. No. 325,712. HIRSCHBERG-SCHWADRON & CO. INC., New York, N. Y. Filed Apr. 1, 1932.

BRIDGE PRINTS

No claim is made to the word "Prints" apart from the mark shown on the drawing.
For Women's, Misses', and Children's Dresses.
Claims use since Mar. 1, 1932.

Ser. No. 326,073. THE ABBOTT COMPANY, Wilton, Me. Filed Apr. 14, 1932.

STYLOCASIN

For Boots, Shoes, Slippers, and Moccasins of Leather, Rubber, and Fabric or Combinations Thereof.
Claims use since Oct. 20, 1930.

Ser. No. 326,209. NETTIE FISCHMANN, St. Louis, Mo. Filed Apr. 18, 1932.

Nettie Frocks

The word "Frocks" is disclaimed apart from the mark as shown.
For Misses' and Matrons' Dresses and Suits.
Claims use since Mar. 7, 1928.

Ser. No. 326,252. CRADDOCK-TERRY COMPANY, Lynchburg, Va. Filed Apr. 19, 1932. Under 10-year proviso.

College Woman's

WALKING SHOE

For Leather Shoes.
Claims use since Jan. 1, 1895.

Ser. No. 326,393. PHILCO TRADING CO., INC., Philadelphia, Pa., and New York, N. Y. Filed Apr. 22, 1932.

SILVER TOP

For Dress and Work Shirts, Hosiery, Socks, and Work Trousers.
Claims use since December, 1931.

Ser. No. 326,623. BARBARA FORD, Houston, Tex. Filed Apr. 28, 1932.

A COPY *from*



THE COPY CAT

Applicant disclaims the words "A Copy from" from the trade-mark "A Copy from the Copy Cat."
For Women's Dresses, Coats, Coat-Suits, Under-Wear, Hats, Pajamas, Kimonos, Robes, and Negligees.
Claims use since Feb. 15, 1931.

Ser. No. 326,919. SUSSBERG & FEINBERG, INC., New York, N. Y. Filed May 9, 1932.

Slip-in-Two

For Women's, Misses', and Children's Slips.
Claims use since Apr. 21, 1932.

Ser. No. 326,988. PHILLIPS-JONES CORPORATION, New York, N. Y. Filed May 11, 1932.

CRYSTALSHEEN

For Men's and Boys' Negligee Shirts and Pajamas.
Claims use since Apr. 19, 1932.

Ser. No. 327,022. R. H. MACY & CO., INC., New York, N. Y. Filed May 12, 1932.

COMMUTER

For Women's Dresses, Suits, and Coats.
Claims use since May 10, 1932.

Ser. No. 327,055. IPSWICH MILLS, INC., Gloucester, Mass. Filed May 13, 1932. Under 10-year proviso.

IPSWICH

For Hosiery.
Claims use since July 1, 1888.

Ser. No. 327,061. LAKEVIEW MANUFACTURING COMPANY, Chicago, Ill. Filed May 13, 1932.

GIGOLETTE

For Ladies' Dresses.
Claims use since Mar. 1, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 325,981. COLUMBIA PLUSH & PUFF CO., INC., Brooklyn, N. Y. Filed Apr. 11, 1932.

Betty Lou

For Narrow Woven Elastics and Elastic Cords, Hair Pins Made of Non-Precious Metal, Non-Electrical Hair Wavers, Bias Tapes, and Combs.
Claims use since January, 1921.

Ser. No. 326,830. WILLIAM PRYM OF AMERICA, INC., New York and Long Island City, N. Y. Filed May 6, 1932.

MIRACLE

For Common and Toilet Pins and Safety Pins Made of Non-Precious Metal.
Claims use since Apr. 29, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 324,423. BENROSE SILK MFG. CORP., New York, N. Y. Filed Feb. 24, 1932.

Morning Glory Crepe

In the drawing the word "Crepe" is disclaimed.
For Silk and Rayon Crepes in the Piece.
Claims use since February, 1930.

Ser. No. 325,687. WALTER HERBERT HILDEBRAND, Chicago, Ill. Filed Mar. 31, 1932.

FILTRITE

For Cotton Cloth in the Piece, to be Used for Filtering Purposes.
Claims use since Mar. 23, 1932.

Ser. No. 326,018. LEVAY BROS., INC., New York, N. Y. Filed Apr. 12, 1932.

KORDERA

For Silk and Rayon Goods in the Piece.
Claims use since Mar. 29, 1932.

Ser. No. 326,718. NAUMKEAG STEAM COTTON COMPANY, Salem, Mass. Filed May 3, 1932.

PEQUOT

For Bedspreads, Curtains, and Draperies of Fabric; Fabric Mattress Covers, Fabric Mattress Protectors; Blankets, Whether of Wool, Cotton, or Both; and Towels.
Claims use since Apr. 8, 1932.

Ser. No. 327,049. F. DUCHARNE SILK CO. INC., New York, N. Y. Filed May 13, 1932.

MANUELA

For Piece Goods of Silk, Rayon, Cotton, and Wool, and Mixtures of These Materials.
Claims use since Apr. 30, 1932.

Ser. No. 327,050. F. DUCHARNE SILK CO. INC., New York, N. Y. Filed May 13, 1932.

MOLITOR

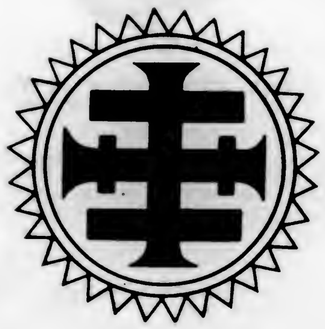
For Piece Goods of Silk and Rayon and Mixtures Thereof.
Claims use since Apr. 30, 1932.

Ser. No. 327,141. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass. Filed May 16, 1932.

SORBANT

For Cotton Cloth Both in the Piece and in Cut Lengths.
Claims use since Nov. 15, 1926.

Ser. No. 327,143. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass. Filed May 16, 1932.



For Cotton Cloth Both in the Piece and in Cut Lengths.
Claims use since 1890.

CLASS 43

Thread and Yarn

Ser. No. 321,272. FITCHBURG YARN COMPANY, Fitchburg, Mass. Filed Nov. 19, 1931.



The words "Cotton Yarn Spun by" and "Makers of" are hereby disclaimed, apart from the mark shown.
For Yarns.
Claims use since June 29, 1931.

Ser. No. 321,273. FITCHBURG YARN COMPANY, Fitchburg, Mass. Filed Nov. 19, 1931.



The words "Brand Spun Yarn Spun by" and "Makers of" are hereby disclaimed, apart from the mark shown.
For Yarns.
Claims use since May 29, 1931.

Ser. No. 326,443. GUDEBROD BROTHERS SILK COMPANY, Philadelphia, Pa. Filed Apr. 21, 1932.



Applicant disclaims the terms "6 Cord Cotton Highest Grade 200 Yards" apart from the mark shown in the drawing.
For Thread.
Claims use since Jan. 2, 1932.

Ser. No. 327,120. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed May 14, 1932.

"NOGA"

For Cotton Thread.
Claims use since Apr. 14, 1932.

Ser. No. 327,121. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed May 14, 1932.

"NOALA"

For Cotton Thread.
Claims use since Apr. 14, 1932.

Ser. No. 327,123. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed May 14, 1932.

"ZENDA"

For Cotton Thread.
Claims use since Apr. 14, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 326,513. THOMAS AUBERGER, Paris, France. Filed Apr. 26, 1932.

MASSACHO

For Massaging Apparatus.
Claims use since May, 1931.

Ser. No. 326,903. MARCUS & WIESEN, INC., New York, N. Y. Filed May 9, 1932.

LADY BETTY

For Sanitary Belt.
Claims use since May 4, 1932.

Ser. No. 326,905. ALFONS MUEHLEISEN, New York, N. Y. Filed May 9, 1932.

PHLEBOPLAST

For Surgical Bandages for the Treatment of Ailments of the Leg.
Claims use since Apr. 30, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 310,305. JOS. SCHLITZ BEVERAGE COMPANY, Milwaukee, Wis. Filed Jan. 23, 1931.

Mamma and Papa



For Canned Malt Syrup.
Claims use since Jan. 15, 1931.

Ser. No. 312,462. SOUTHLAND COFFEE COMPANY, Macon, Ga. Filed Mar. 23, 1931.

SOUTHLAND'S
GEORGIA MAID
COFFEE



No claim is made to the word "Coffee." The picture of the girl is fanciful.
For Coffee.
Claims use since January, 1930.

Ser. No. 313,654. J. G. FALLS, doing business as J. G. Falls Co., Brooklyn, N. Y. Filed Apr. 22, 1931.

Falls
DIETETIC
FLOUR



All the wording appearing on the drawing is disclaimed apart from the other features of the mark shown thereon.
For Dietetic Flour.
Claims use since June 23, 1930.

Ser. No. 314,960. SAUL H. PERRY, doing business as Pickwick Ice Cream Company, Stamford, Conn. Filed May 23, 1931.

PICKWICK

For Ice Cream.
Claims use since Feb. 15, 1929.

Ser. No. 317,520. KIDD PRODUCTS CORPORATION, Chicago, Ill. Filed July 31, 1931.

KEEN GUM

The word "Gum" does not form a part of the registration sought apart from the trade-mark shown in the drawing.
For Chewing Gum.
Claims use since June 3, 1929.

Ser. No. 318,628. LAMONT, CORLISS & COMPANY, New York, N. Y. Filed Sept. 1, 1931.

SPORTSMAN'S

For Prepared Edible Chocolate.
Claims use since Mar. 4, 1915.

Ser. No. 320,010. SOCIETA ANONIMA LUCCHESE OLII E VINI, Lucca, Italy. Filed Oct. 12, 1931.



For Olive Oil.
Claims use since Mar. 1, 1910.

Ser. No. 321,333. FLORIORANGE CANNERIES, INC., Mount Dora, Fla. Filed Nov. 20, 1931.



No claim is made to the name "Florida's" or to the word "Finest" apart from the mark as shown.
For Canned Citrus Fruits and Canned Citrus Fruit Juices for Food Purposes.
Claims use since Nov. 15, 1931.

Ser. No. 322,344. VOLUNTEER STORES, INC., doing business as Volunteer Food Stores, Chattanooga, Tenn. Filed Dec. 21, 1931.



For Canned Fruits, Canned Vegetables, Canned Fruits, for Salad, Canned Sauer Kraut, Rolled Oats, Hominy Grits, Macaroni, Egg Noodles, Wheat Flour, Pickles, Olives, and Catsup.
Claims use since Nov. 1, 1931.

Ser. No. 322,355. CITY MILLS COMPANY, Columbus, Ga. Filed Dec. 22, 1931. Under 10-year proviso.



For Wheat Flour.
Claims use since January, 1881.

Ser. No. 322,897. ROGER W. TRUESDAIL, Los Angeles, Calif. Filed Jan. 11, 1932.

FIDO-FISH

The word "Fish" is disclaimed apart from the mark shown on the drawing.
For an Article of Food for Small Animals, Such as Dogs, Cats, and Foxes, Composed of Fresh Whole Ground Fish, Whole Ground Wheat, Rice, Bran, Milk, Yeast, Bone Meal, Wheat Germ, Baking Powder, Salt, and Certain Concentrates, as Copra or Sesame Meal.
Claims use since Dec. 17, 1931.

Ser. No. 323,049. THE HUDSON MANUFACTURING CO., Chicago, Ill. Filed Jan. 15, 1932.

MIGHTY



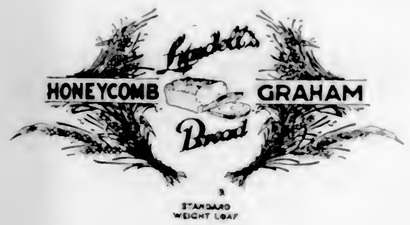
The figure shown on the drawing is fanciful.
For Food Flavoring Extracts, Particularly Concentrated Mexican and Bourbon Vanilla.
Claims use since April, 1929.

Ser. No. 323,207. EDILIO PENNA, Brooklyn, N. Y. Filed Jan. 20, 1932.



For Olive Oil, Canned Tuna Fish, Tomato Paste, and Malt Syrup.
Claims use since May, 1916.

Ser. No. 323,345. BIRGER CARL LYNDELL, Somerville, Mass. Filed Jan. 23, 1932.



Applicant disclaims all notations except "Lyndell's" and "Thought" apart from the mark as shown on the drawing.
For Graham Bread.
Claims use since Feb. 1, 1912.

Ser. No. 323,454. GOLDEN VALLEY PRODUCE CO. LTD., El Centro, Calif. Filed Jan. 26, 1932.

GOLDEN PAK

For Fresh Vegetables.
Claims use since Dec. 18, 1931.

Ser. No. 324,892. KULLA AND VALENTE, New York, N. Y. Filed Mar. 8, 1932.

FANSEE-TRIMS

For Confection for the Decorating of Cakes, Pies, Puddings, Sherbets, Ice Creams, Salads, Cookies, Candies, and Roasts.
Claims use since Nov. 2, 1931.

Ser. No. 325,016. B. M. REEVES CO., INC., Brooklyn, N. Y. Filed Mar. 10, 1932.

REEVE SELECT

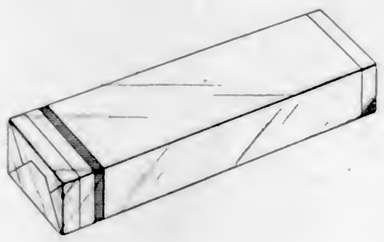
No claim being made to the exclusive use of the word "Select" apart from the mark as shown in the drawing.
For Bottled Olives, Bottled Cherries, and Package Dates.
Claims use since Dec. 1, 1931.

Ser. No. 325,019. SASCO SUGAR CORPORATION, Dover, Del. Filed Mar. 10, 1932.

SASCO-WHITE

No claim being made to the exclusive use of the word "White" apart from the mark as shown in the drawing.
For Sugar.
Claims use since Feb. 18, 1932.

Ser. No. 325,538. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Filed Mar. 26, 1932.



The trade-mark is applied to the goods in the form of a narow band, strip or ribbon-like member of a blue color encircling each individual package of chewing gum adjacent one end. The representation of the container of the goods is disclaimed as a part of the trade-mark.
For Chewing Gum.
Claims use since Mar. 17, 1932.

Ser. No. 325,539. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Filed Mar. 26, 1932.



The trade-mark is applied to the goods in the form of a narrow band, strip, or ribbon-like member of a g een color encircling each individual package of chewing gum adjajacent one end. The representation of the container of the goods is disclaimed as a part of the trade-mark.
For Chewing Gum.
Claims use since Mar. 17, 1932.

Ser. No. 325,596. OLD MISSION PACKING CORP., LTD., North San Diego, Calif. Filed Mar. 28, 1932.

OLD MISSION

For Canned Olives, Olive Oil, Orange Marmalade.
Claims use since 1889 on olive oil; since Jan. 1, 1889, on olives; and since Mar. 1, 1931, on orange marmalade.

Ser. No. 325,720. NATIONAL FRUIT PRODUCT COMPANY, INC., Washington, D. C. Filed Apr. 1, 1932.

WHITE HOUSE

For Apple Products—Namely, Canned Apples, Apple Jelly, Apple Jam, Marmalade, Apple Butter, Apple Sauce, Vinegar, and Table Apples.
Claims use since Apr. 1, 1889.

Ser. No. 326,050. T. A. FAULDS CO., INC., Boston, Mass. Filed Apr. 13, 1932.



For Powdered Baking Flavor.
Claims use since January, 1911.

Ser. No. 326,152. WILLIAM LICHTENSTEIN, doing business as Ideal Trading Co. and Fudo Psyllium Corp., New York, N. Y. Filed Apr. 15, 1932.

TINKLEBELL

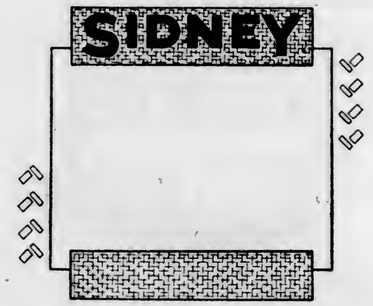
For Bird Seed.
Claims use since Mar. 31, 1932.

Ser. No. 326,193. SANTÉ INSTITUTE, LTD., Los Angeles, Calif. Filed Apr. 16, 1932.

Z-RAY
VITALIZED

For Eggs and Dressed Poultry.
Claims use since Mar. 28, 1932.

Ser. No. 326,561. FRANK H. SWETT, doing business as F. H. Swett & Co., Chicago, Ill. Filed Apr. 27, 1932.



The drawing is lined for yellow.
For Canned Fruits and Canned Vegetables.
Claims use since Aug. 1, 1931.

Ser. No. 326,759. PURITY OATS COMPANY, doing business as Oat Snaps Company, Keokuk, Iowa. Filed May 4, 1932.

OAT

SNAPS

The word "Oat" is disclaimed apart from the mark shown.
For Breakfast Foods in Flake Form Made Principally from Oats.
Claims use since Mar. 31, 1932.

Ser. No. 326,829. C. J. NEUMANN COFFEE CO. INC., Brooklyn, N. Y. Filed May 6, 1932.



The lining on the drawing represents the colors light brown and dark brown, the word "Neumann" being displayed in light brown superimposed on a dark brown background.

For Tea and Coffee.

Claims use since Apr. 25, 1925.

Ser. No. 326,982. KITCHENETTE COOKIE COMPANY, Louisville, Ky. Filed May 11, 1932.

MELINDA'S KITCHENETTE COOKIE DOUGH

No claim is made to the words "Cookie Dough" apart from the mark as shown in the drawing.

For Cookie Dough.

Claims use since Mar. 26, 1932.

Ser. No. 327,013. HENRY & CLOSE CO., Boston, Mass. Filed May 12, 1932.



The words "Fancy Fillets" are disclaimed apart from the mark as shown.

For Fresh Fish Fillets.

Claims use since Apr. 22, 1932.

Ser. No. 327,027. ROBICO BISCUIT COMPANY, New York, N. Y. Filed May 12, 1932.



No rights are asserted to the exclusive use of the words "New York" apart from the trade-mark as shown in the drawing.

For Biscuits and Wafers.

Claims use since Mar. 18, 1932.

Ser. No. 327,039. P. BALLANTINE & SONS, Newark, N. J. Filed May 13, 1932.

GOLDEN DOME

For Malt Syrup.

Claims use since May 9, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 323,268. THE LANDERS CORPORATION, Toledo, Ohio. Filed Jan. 19, 1932.



For Glove Cuff Material Composed of Two Pieces High Grade Quality Cotton Goods, Duck, Drill, or Sheeting Construction, or Any Combination of These Which Serves the Purpose Best, Combined With a Heavy Rubber Compound.

Claims use since June 1, 1931.

Ser. No. 326,465. E-Z TITE RUBBER COMPANY, Renton, Wash. Filed Apr. 25, 1932.

E-Z TITE

The word "Tite" is disclaimed apart from the mark shown.

For Bottle Stoppers.

Claims use since Feb. 29, 1932.

Ser. No. 326,585. FUR PROTECTIVE SEAL CORP., New York, N. Y. Filed Apr. 28, 1932.



For Identification Tags Used for Furs, Raw Skins, or the Like.

Claims use since Mar. 1, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 21, 1932

295,109. METAL POLISH, TREATED POLISHING CLOTHS, ETC. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed October 23, 1931. Serial No. 320,345. PUBLISHED APRIL 5, 1932. Class 4.

295,110. ANTI-KNOCK COMPOUND. ALLISON Do-X COMPANY, Indianapolis, Ind.
Filed October 27, 1931. Serial No. 320,585. PUBLISHED APRIL 5, 1932. Class 6.

295,111. COSMETICS—NAMELY, FACE POWDER, ROUGE, LIP STICK, AND EYE SHADOW ARRANGED IN A COSMETIC SET. PHYLLIS MOFFETT, INC., New York, N. Y.
Filed October 31, 1931. Serial No. 320,694. PUBLISHED APRIL 5, 1932. Class 6.

295,112. LIQUID USED IN TREATMENT OF AND FOR THE PREVENTION OF GUM INFECTIONS. JOSEPH HEARD, doing business as Trenchodine Laboratories, Miami, Fla.
Filed November 25, 1931. Serial No. 321,492. PUBLISHED APRIL 5, 1932. Class 6.

295,113. SHAVING CREAM. ROBOT RAZOR BLADE CORP., New York, N. Y.
Filed December 1, 1931. Serial No. 321,667. PUBLISHED MARCH 29, 1932. Class 4.

295,114. HOSIERY. VAN RAALTE COMPANY, New York, N. Y.
Filed December 1, 1931. Serial No. 321,673. PUBLISHED APRIL 5, 1932. Class 39.

295,115. TOILET PREPARATIONS AND DRUGS. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed December 14, 1931. Serial No. 322,101. PUBLISHED APRIL 5, 1932. Class 6.

295,116. TOILET PREPARATIONS AND DRUGS. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed December 14, 1931. Serial No. 322,103. PUBLISHED APRIL 5, 1932. Class 6.

295,117. JAVELLE WATER. THE GLO MANUFACTURING CO. INC., Niagara Falls, N. Y.
Filed December 22, 1931. Serial No. 322,364. PUBLISHED APRIL 5, 1932. Class 6.

295,118. WOMEN'S APPAREL — NAMELY, FROCKS, DRESSES, AND HOSIERY. BARON BROTHERS, INC., Madison, Wis.
Filed January 6, 1932. Serial No. 322,764. PUBLISHED APRIL 5, 1932. Class 39.

295,119. LUGGAGE CARRIERS IN THE FORM OF A TRUNK AND EXTENSIBLE TO PROVIDE INCREASED CAPACITY FOR CARRYING BAGGAGE AND THE LIKE. THE GABRIEL KARI-KEEN COMPANY, Sioux City, Iowa.
Filed January 6, 1932. Serial No. 322,771. PUBLISHED APRIL 5, 1932. Class 3.

295,120. PREPARATIONS FOR THE POLISHING, SOFTENING, AND TREATMENT OF LEATHER SHOES AND FOR FABRIC SHOES. BENJON CO., New York, N. Y.
Filed January 8, 1932. Serial No. 322,816. PUBLISHED MARCH 29, 1932. Class 4.

295,121. ANTI-FAT PREPARATION WHICH IS USED FOR THE PURPOSE OF AIDING IN THE LOSS OF WEIGHT AND MADE UP OF A GELATINE CAPSULE FILLED WITH A POWDERED PREPARATION FOR THIS PURPOSE. ABE SACHS, doing business as Bessac Laboratories, Bayonne, N. J.
Filed January 14, 1932. Serial No. 322,985. PUBLISHED APRIL 5, 1932. Class 6.

295,122. OVERCOATS AND TOPCOATS FOR MEN AND WOMEN AND CHILDREN. ALFRED DECKER & COHN, INC., Chicago, Ill.
Filed January 14, 1932. Serial No. 322,994. PUBLISHED APRIL 5, 1932. Class 39.

295,123. OVERCOATS AND TOPCOATS AND COATS FOR MEN AND WOMEN AND CHILDREN. ALFRED DECKER & COHN, INC., Chicago, Ill.
Filed January 14, 1932. Serial No. 322,997. PUBLISHED APRIL 5, 1932. Class 39.

295,124. SALVES AND OINTMENTS. STEPHEN J. BARZSO, Hazel Crest, Ill.
Filed January 15, 1932. Serial No. 323,021. PUBLISHED APRIL 5, 1932. Class 6.

295,125. HAND BAG FRAMES AND PARTS THEREOF, INCLUDING FRAME LOCKS. E. POETER & CO. INC., Irvington, N. J.
Filed January 16, 1932. Serial No. 323,095. PUBLISHED APRIL 5, 1932. Class 3.

295,126. FUEL. PAUL BECKWITH, doing business as Paul Beckwith Coal Co., Newark, N. J.
Filed January 20, 1932. Serial No. 323,186. PUBLISHED APRIL 5, 1932. Class 1.

295,127. HOSIERY. HARRINGTON & WARING, New York, N. Y.
Filed January 21, 1932. Serial No. 323,242. PUBLISHED APRIL 5, 1932. Class 39.

295,128. COFFEE FLAVORED CANDIES OF THE TYPE KNOWN AS HOPJES. MAATSCHAPPIJ TOT EXPLOITATIE VAN RADEMAKER'S KONINKLIJKE CACAO & CHOCOLADEFABRIEKEN, The Hague, Netherlands.
Filed January 22, 1932. Serial No. 323,301. PUBLISHED APRIL 5, 1932. Class 46.

295,129. LINIMENTS FOR EXTERNAL USE IN ALLEVIATING ACHES, PAINS, SPRAINS, STIFFNESS, AND KINDRED AILMENTS AND LOTIONS FOR CHAPPED AND ROUGH SKINS. JOSEPH A. RUSSO, Newark, N. J.
Filed January 22, 1932. Serial No. 323,312. PUBLISHED APRIL 5, 1932. Class 6.

295,130. SHAVING CREAM AND SOAP. SAM GLASS, Wauwatosa, Wis.
Filed January 27, 1932. Serial No. 323,490. PUBLISHED MARCH 29, 1932. Class 4.

295,131. SOLE LEATHER. JACOB WEISS, doing business as K. Weiss & Son, Perth Amboy, N. J.
Filed January 27, 1932. Serial No. 323,507. PUBLISHED APRIL 5, 1932. Class 1.

295,132. SHAVING CREAMS. FRANK C. REILLY, New York, N. Y.
Filed February 1, 1932. Serial No. 323,716. PUBLISHED APRIL 5, 1932. Class 4.

295,133. POULTRY SHELL AND GRIT. HENRY N. SWANSTROM, Bellingham, Wash.
Filed February 1, 1932. Serial No. 323,767. PUBLISHED APRIL 5, 1932. Class 1.

295,134. MEDICINAL PREPARATION FINDING ITS APPLICATION IN THE PHOTOGRAPHY BY X-RAYS FOR MEDICINAL AND SIMILAR PURPOSES. HEYDEN CHEMICAL CORPORATION, New York, N. Y.
Filed February 5, 1932. Serial No. 323,863. PUBLISHED APRIL 5, 1932. Class 6.

295,135. MEDICINAL PREPARATION FINDING ITS APPLICATION IN THE PHOTOGRAPHY BY X-RAYS FOR MEDICINAL AND SIMILAR PURPOSES. HEYDEN CHEMICAL CORPORATION, New York, N. Y.
Filed February 5, 1932. Serial No. 323,864. PUBLISHED APRIL 5, 1932. Class 6.

295,136. CLEANSING PREPARATION, DISINFECTANT AND DEODORANT. DENNIS DEVINE, Jr., doing business as Sepsan Products Co., New London, Conn.
Filed February 6, 1932. Serial No. 323,892. PUBLISHED APRIL 5, 1932. Class 6.

295,137. ARTIFICIAL GRANULAR ABRASIVES. WASHINGTON MILLS EMERY MANUFACTURING COMPANY, North Grafton, Mass.
Filed February 8, 1932. Serial No. 323,968. PUBLISHED APRIL 5, 1932. Class 4.

295,138. HOSIERY. VAN RAALTE COMPANY, New York, N. Y.
Filed February 9, 1932. Serial No. 324,021. PUBLISHED APRIL 5, 1932. Class 39.

295,139. HOSIERY. VAN RAALTE COMPANY, New York, N. Y.
Filed February 11, 1932. Serial No. 324,084. PUBLISHED APRIL 5, 1932. Class 39.

295,140. HOSIERY. VAN RAALTE COMPANY, New York, N. Y.
Filed February 11, 1932. Serial No. 324,085. PUBLISHED APRIL 5, 1932. Class 39.

295,141. HOSIERY. VAN RAALTE COMPANY, New York, N. Y.
Filed February 11, 1932. Serial No. 324,086. PUBLISHED APRIL 5, 1932. Class 39.

295,142. DRY CLEANING SOAP. THE DAVIES-YOUNG SOAP COMPANY, Dayton, Ohio.
Filed February 15, 1932. Serial No. 324,151. PUBLISHED APRIL 5, 1932. Class 4.

295,143. LIQUID DRY CLEANING SOAP. THE DAVIES-YOUNG SOAP COMPANY, Dayton, Ohio.
Filed February 15, 1932. Serial No. 324,152. PUBLISHED APRIL 5, 1932. Class 4.

295,144. LIQUID DRY CLEANING SOAP. THE DAVIES-YOUNG SOAP COMPANY, Dayton, Ohio.
Filed February 15, 1932. Serial No. 324,153. PUBLISHED APRIL 5, 1932. Class 4.

295,145. SOAP. POLK MILLER PRODUCTS CORP., Richmond, Va.
Filed February 15, 1932. Serial No. 324,188. PUBLISHED APRIL 5, 1932. Class 4.

295,146. COAL. TRUAX-TRAER COAL COMPANY, Chicago, Ill.
Filed February 15, 1932. Serial No. 324,198. PUBLISHED APRIL 5, 1932. Class 1.

295,147. COAL. TRUAX-TRAER COAL COMPANY, Chicago, Ill.
Filed February 15, 1932. Serial No. 324,199. PUBLISHED APRIL 5, 1932. Class 1.

295,148. COAL. KNIGHT PRODUCTS, INC., Cincinnati, Ohio.
Filed February 16, 1932. Serial No. 324,273. PUBLISHED APRIL 5, 1932. Class 1.

295,149. MEDICATED WAX STICK TO BE RUBBED ON THE SKIN OR CLOTHING TO REPEL MOSQUITOES AND OTHER INSECTS. WILBUR N. MORRILL, doing business as Beu Laboratories, Louisville, Ky.
Filed February 18, 1932. Serial No. 324,294. PUBLISHED APRIL 5, 1932. Class 6.

295,150. TINCTURE ADAPTED TO BE APPLIED TO THE SKIN OR CLOTHING TO REPEL MOSQUITOES AND OTHER INSECTS. WILBUR N. MORRILL, doing business as Beu Laboratories, Louisville, Ky.
Filed February 18, 1932. Serial No. 324,295. PUBLISHED APRIL 5, 1932. Class 6.

295,151. WOMEN'S HOSIERY. ARTCRAFT SILK HOSIERY MILLS, INC., Philadelphia, Pa.
Filed February 20, 1932. Serial No. 324,335. PUBLISHED APRIL 5, 1932. Class 39.

295,152. EMBALMING FLUID. ROSE B. NATIONS, doing business as Naturo Mfg. Co., Los Angeles, Calif.
Filed February 23, 1932. Serial No. 324,392. PUBLISHED APRIL 5, 1932. Class 6.

295,153. SISAL FIBRE. COMPANIA DE JARCIA DE MATANZAS S. A., Matanzas, Cuba.
Filed February 24, 1932. Serial No. 324,430. PUBLISHED APRIL 5, 1932. Class 1.

295,154. SISAL FIBRE. COMPANIA DE JARCIA DE MATANZAS S. A., Matanzas, Cuba.
Filed February 24, 1932. Serial No. 324,431. PUBLISHED APRIL 5, 1932. Class 1.

295,155. BOYS' TROUSERS AND WASH SUITS. B. SCHWARTZ & COMPANY, Philadelphia, Pa.
Filed February 24, 1932. Serial No. 324,446. PUBLISHED APRIL 5, 1932. Class 39.

295,156. IRONING WAX. THE ALDEN SPEARE'S SONS CO., Cambridge, Mass.
Filed February 26, 1932. Serial No. 324,501. PUBLISHED APRIL 5, 1932. Class 6.

295,157. NURSES' AND MAIDS' UNIFORMS, LADIES' DRESSES, APRONS, CHILDREN'S WASH SUITS, TEXTILE UNDERWEAR, SHIRTS, UNION SUITS, AND NIGHT GOWNS. BURTON BROTHERS & CO., INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,505. PUBLISHED APRIL 5, 1932. Class 39.

295,158. INSECTICIDE. MATHEWS NELSON, Tulsa, Okla.
Filed February 29, 1932. Serial No. 324,624. PUBLISHED APRIL 5, 1932. Class 6.

295,159. SOYA BEAN OIL, CORN OIL, COCOANUT OIL, OLIVE OIL, AND LARD OIL. A. KLIPSTEIN & COMPANY, New York, N. Y.
Filed December 3, 1928. Serial No. 276,191. PUBLISHED APRIL 5, 1932. Class 46.

295,160. MEDICINAL PREPARATION FOR BURNS. SAMUEL RAPISARDI & BROS., Philadelphia, Pa.
Filed January 31, 1930. Serial No. 295,441. PUBLISHED DECEMBER 1, 1931. Class 6.

295,161. PERIODICAL. THE BUTTERICK PUBLISHING COMPANY, New York, N. Y.
Filed September 26, 1931. Serial No. 319,441. PUBLISHED APRIL 5, 1932. Class 38.

295,162. PAPER TAGS, SEALS, CUT CARDS, PAPER BINDINGS, PAPER TAPES, AND WRAPPING PAPER IN PACKAGES. WHITE'S QUAINT SHOP, Westfield, Mass.
Filed October 28, 1931. Serial No. 320,574. PUBLISHED APRIL 5, 1932. Class 37.

295,163. ELASTIC OR RUBBER BANDS BUNCHED TOGETHER AND HELD BY A CIRCULAR BAND AROUND THE CENTER THEREOF. A. W. FABER, INC., Newark, N. J.
Filed December 29, 1931. Serial No. 322,505. PUBLISHED APRIL 5, 1932. Class 37.

295,164. MONTHLY PUBLICATION. THE HAT TRADE PUBLISHING COMPANY, New York, N. Y.
Filed January 21, 1932. Serial No. 323,244. PUBLISHED APRIL 5, 1932. Class 38.

295,165. MAGAZINE. DOMINICAN FATHERS PROVINCE OF ST. JOSEPH, New York, N. Y.
Filed February 5, 1932. Serial No. 323,842. PUBLISHED APRIL 5, 1932. Class 38.

295,166. LOOSE LEAF BINDERS ADAPTED TO RECEIVE DATA SHEETS PERTAINING TO ELECTRICAL AND RADIO SUBJECTS. R. C. A. INSTITUTES, INC., New York, N. Y.
Filed February 11, 1932. Serial No. 324,079. PUBLISHED APRIL 5, 1932. Class 37.

295,167. CRAYONS. BINNEY & SMITH CO., New York, N. Y.
Filed February 24, 1932. Serial No. 324,426. PUBLISHED APRIL 5, 1932. Class 37.

295,168. CRAYONS. BINNEY & SMITH CO., New York, N. Y.
Filed February 24, 1932. Serial No. 324,427. PUBLISHED APRIL 5, 1932. Class 37.

295,169. STOCK FEED, CHICKEN FEED, AND DAIRY FEED. TEXAS FARM PRODUCTS COMPANY, Nacogdoches, Tex.
Filed November 28, 1931. Serial No. 321,576. PUBLISHED MARCH 22, 1932. Class 46.

295,170. ARTIFICIAL PLASTIC MASSES SUITABLE AS A SUBSTITUTE FOR CELLULOID AND ARTIFICIAL MASSES OF RESINOUS CHARACTER SUITABLE AS A RAW MATERIAL FOR VARNISHES AND LACQUERS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed December 7, 1931. Serial No. 321,880. PUBLISHED APRIL 5, 1932. Class 1.

295,171. SYNTHETIC CASEIN SOLD AS AN ADHESIVE. THE GLIDDEN COMPANY, Cleveland, Ohio.
Filed November 19, 1931. Serial No. 321,278. PUBLISHED APRIL 5, 1932. Class 5.

295,172. SWEDISH BREAD (KNÄCKEBRÖD, RYE AND WHEAT AND OAT BREAD SLICES, CRISP BREAD). DELEON WALSH, Long Island City, N. Y.
Filed December 31, 1930. Serial No. 309,540. PUBLISHED APRIL 5, 1932. Class 46.

295,173. BABIES' ROBES AND BUNTINGS. IDEAL BATH ROBE CO. INC., Brooklyn, N. Y.
Filed January 24, 1931. Serial No. 310,338. PUBLISHED APRIL 5, 1932. Class 39.

295,174. OXIDIZING AGENT USED IN THE TREATMENT OF DYED FIBERS AND FABRICS. NEWPORT CHEMICAL CORPORATION, Carrollville, Wis.
Filed January 29, 1931. Serial No. 310,556. PUBLISHED APRIL 5, 1932. Class 6.

295,175. CERTAIN NAMED WEARING APPAREL. BLOSSOM PRODUCTS, INC., New York, N. Y.
Filed February 4, 1931. Serial No. 310,713. PUBLISHED APRIL 5, 1932. Class 39.

295,176. FOOD PRODUCTS—NAMELY, OLIVE OIL, TUNA FISH IN CANS, DARK AND LIGHT MALT EXTRACTS, TABLE SYRUPS, FOOD FLAVORING EXTRACTS, COFFEE IN CANS, HOPS FLAVOR MALT EXTRACT. GIANDUJA IMPORTING CO., INC., New York and Bronx, N. Y.
Filed February 17, 1931. Serial No. 311,141. PUBLISHED APRIL 5, 1932. Class 46.

295,177. GUMMED PAPER, GUMMED CLOTH, AND GUMMED PAPER TAPE, AND GUMMED CLOTH TAPE. MCLAURIN-JONES CO., Brookfield, Mass.
Filed February 19, 1931. Serial No. 311,243. PUBLISHED APRIL 5, 1932. Class 37.

295,178. FINGER RINGS. JACOB BERLINGER, doing business as The Diamond Heart Co., New York, N. Y.
Filed February 20, 1931. Serial No. 311,255. PUBLISHED MARCH 31, 1931. Class 28.

295,179. KRAFT PAPER AND GUMMED TAPE. GILMAN PAPER CO., Gilman, Vt.
Filed March 31, 1931. Serial No. 312,757. PUBLISHED APRIL 5, 1932. Class 37.

295,180. MEN'S, BOYS', AND YOUTHS' CLOTHING—VIZ., OVERCOATS; TWO-PIECE SUITS—VIZ., COATS AND TROUSERS; THREE-PIECE SUITS—VIZ., COATS, VESTS AND TROUSERS; FOUR-PIECE SUITS—VIZ., COATS, VESTS, AND TWO PAIRS OF TROUSERS, AND COATS, VESTS, AND TROUSERS SEPARATELY. CHAS. DOUGLIS-MACK CO. INC., New York, N. Y.
Filed April 15, 1931. Serial No. 313,364. PUBLISHED APRIL 5, 1932. Class 39.

295,181. BREAD. J. E. LIMBACHER, doing business as The Fountain Bakery, St. Marys, Ohio.
Filed May 1, 1931. Serial No. 314,062. PUBLISHED APRIL 5, 1932. Class 46.

295,182. BREAD, CAKE, AND PIES. BAKERS SERVICE BUREAU, INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,177. PUBLISHED APRIL 5, 1932. Class 46.

295,183. BREAD, CAKE, AND PIES. BAKERS SERVICE BUREAU, INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,180. PUBLISHED APRIL 5, 1932. Class 46.

295,184. BREAD, CAKE, AND PIES. BAKERS SERVICE BUREAU, INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,181. PUBLISHED APRIL 5, 1932. Class 46.

295,185. WAX FOR MAKING DENTAL IMPRESSIONS. THE L. D. CAULK COMPANY, Milford, Del.
Filed March 1, 1932. Serial No. 324,657. PUBLISHED APRIL 12, 1932. Class 44.

295,186. CERTAIN NAMED PAINT PRODUCTS. B. POLIVY & SONS, INC., New York, N. Y.
Filed June 3, 1931. Serial No. 315,366. PUBLISHED APRIL 12, 1932. Class 16.

295,187. FRESH CITRUS FRUITS. INTERNATIONAL FRUIT CORPORATION, Orlando, Fla.
Filed April 11, 1931. Serial No. 313,238. PUBLISHED APRIL 12, 1932. Class 46.

295,188. SHAMPOO. LENWELLS, INC., Chicago, Ill.
Filed May 22, 1931. Serial No. 314,919. PUBLISHED AUGUST 18, 1931. Class 6.

295,189. LIQUID SPRAY TO KILL FLIES, MOTHS, MOSQUITOES, ROACHES, ANTS, BED-BUGS, FLEAS, AND GNATS. THE FLY-WAR LABORATORY, Greenfield, Ind.
Filed February 17, 1932. Serial No. 324,252. PUBLISHED APRIL 5, 1932. Class 6.

295,190. HAIR PINS AND CLIPS. MOSES HERZOG, New York, N. Y.
Filed February 20, 1932. Serial No. 324,346. PUBLISHED APRIL 5, 1932. Class 40.

295,191. MEN'S HATS. HOLBROOK HAT COMPANY, INC., Perth Amboy, N. J.
Filed February 16, 1932. Serial No. 324,223. PUBLISHED APRIL 5, 1932. Class 39.

295,192. SHOE LACES. LE TRESSAGE ELASTIQUE S. A. R. L., Lille, France.
Filed January 21, 1932. Serial No. 323,246. PUBLISHED APRIL 5, 1932. Class 40.

295,193. SHOE LACES. ST. LOUIS BRAID CO., St. Louis, Mo.
Filed February 1, 1932. Serial No. 323,720. PUBLISHED APRIL 5, 1932. Class 40.

295,194. CIGARETTE AND PIPE SMOKING TOBACCO. SAMUEL SCHULIST, Cleveland, Ohio.
Filed February 24, 1932. Serial No. 324,445. PUBLISHED APRIL 5, 1932. Class 17.

295,195. LEATHER AND FABRIC SHOES. SAMUEL COHEN SHOE STORES, INC., doing business as The New Shoe Store, Hempstead, N. Y.
Filed February 16, 1932. Serial No. 324,219. PUBLISHED APRIL 5, 1932. Class 39.

295,196. CANNED OLIVE OIL. GIUSEPPE TENORE, New York, N. Y.
Filed February 10, 1932. Serial No. 324,121. PUBLISHED APRIL 5, 1932. Class 46.

295,197. TOILET PINS AND SAFETY PINS. THE STAR PIN COMPANY, Shelton, Conn.
Filed February 10, 1932. Serial No. 324,048. PUBLISHED APRIL 5, 1932. Class 40.

295,198. MEN'S AND BOYS' HATS OF FELT, CLOTH, AND STRAW. YOUNG BROTHERS, New York, N. Y.
Filed February 9, 1932. Serial No. 324,025. PUBLISHED APRIL 5, 1932. Class 39.

295,199. BOOTS AND SHOES OF LEATHER, RUBBER, FABRIC, OR COMBINATIONS THEREOF. SHERWOOD SHOE CO., Rochester, N. Y.
Filed February 9, 1932. Serial No. 324,014. PUBLISHED APRIL 5, 1932. Class 39.

295,200. CORSETS, GIRDLES, BRASSIÈRES AND COMBINATIONS OF GIRDLES AND BRASSIÈRES. KOPS BROTHERS, INC., New York, N. Y.
Filed February 9, 1932. Serial No. 324,001. PUBLISHED APRIL 5, 1932. Class 39.

295,201. FOOD PREPARATION IN POWDERED FORM, WITH CHOCOLATE FLAVOR, TO BE DISSOLVED IN LIQUIDS. TODDY, INC., New York, N. Y.
Filed February 5, 1932. Serial No. 323,878. PUBLISHED APRIL 5, 1932. Class 46.

295,202. TAPIOCA. CEYLON SPICE COMPANY, INC., Philadelphia, Pa.
Filed February 5, 1932. Serial No. 323,857. PUBLISHED APRIL 5, 1932. Class 46.

295,203. MALT EXTRACT. STERLING PRODUCTS COMPANY, Evansville, Ind.
Filed February 1, 1932. Serial No. 323,723. PUBLISHED APRIL 5, 1932. Class 46.

295,204. TELEVISION RECEIVING SETS, KITS FOR TELEVISION RECEIVING SETS, ETC. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed January 30, 1932. Serial No. 323,629. PUBLISHED MARCH 29, 1932. Class 21.

295,205. SPICES—NAMELY, RED PEPPER. THE KROGER GROCERY & BAKING CO., doing business as Wesco Foods Co., Cincinnati, Ohio.
Filed January 15, 1932. Serial No. 323,051. PUBLISHED APRIL 5, 1932. Class 46.

295,206. MEN'S, WOMEN'S, AND CHILDREN'S SWEATERS, KNITTED COATS, LEGGINGS, KNITTED CAPS, TOQUES, KNITTED SWEATSHIRTS, KNITTED GLOVES, AND KNITTED MITTENS. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed January 14, 1932. Serial No. 323,014. PUBLISHED APRIL 5, 1932. Class 39.

295,207. HAT LININGS. PER-FIT HAT LINING CORPORATION, New York, N. Y.
Filed January 7, 1932. Serial No. 322,907. PUBLISHED APRIL 5, 1932. Class 39.

295,208. EDIBLE OILS. LEGHORN TRADING CO. INC., New York, N. Y.
Filed December 4, 1931. Serial No. 321,772. PUBLISHED APRIL 5, 1932. Class 46.

295,209. COFFEE, TEA, CANDY, SUGAR, BAKER'S WHEAT FLOUR, BREAKFAST CEREAL, BISCUITS, FISH CAKES, POTATO SALAD, MACARONI SALAD, CHEESE, AND NUTS. KING KULLEN GROCERY CO., INC., Queens, Long Island, N. Y.
Filed October 23, 1931. Serial No. 320,362. PUBLISHED APRIL 5, 1932. Class 46.

295,210. UNDERWEAR INCLUDING VESTS, STEP-INS, CHEMISES, UNION SUITS, PAJAMAS, PANTIE STEP-INS, PRINCESS SLIPS, SHORTY BLOOMERS, BLOOMER-COMBINATION SUITS, AND NIGHT GOWNS. BELLE KNITTING MILLS, Lebanon, Pa.
Filed August 31, 1931. Serial No. 318,581. PUBLISHED APRIL 5, 1932. Class 39.

295,211. MAYONNAISE, SALAD DRESSING, TOMATO KETCHUP, ETC. NALLEY'S, INC., Tacoma, Wash.
Filed July 22, 1931. Serial No. 317,216. PUBLISHED APRIL 5, 1932. Class 46.

295,212. MAYONNAISE AND FRENCH DRESSING. NALLEY'S, INC., Tacoma, Wash.
Filed July 22, 1931. Serial No. 317,215. PUBLISHED APRIL 5, 1932. Class 46.

295,213. ASTRINGENTS, ASTRINGENT CERATES, BLEACH AND BEAUTY CREAMS, ETC. RIMMEL, INC., West Orange, N. J.
Filed August 5, 1931. Serial No. 317,830. PUBLISHED MARCH 8, 1932. Class 6.

295,214. SWEET CHOCOLATE. CHOCOLAT SUCHARD SOCIETE ANONYME, Neuchatel, Switzerland.
Filed August 25, 1931. Serial No. 318,392. PUBLISHED APRIL 12, 1932. Class 46.

295,215. EXPECTORANT COUGH SEDATIVE. JACOB CHERIS, doing business as Paramount Pharmacal Products, Inc., Albany, N. Y.
Filed November 21, 1931. Serial No. 321,377. PUBLISHED FEBRUARY 2, 1932. Class 6.

295,216. READY MIXED PAINTS AND LIQUID VEHICLES FOR PAINTS, ETC. EMIL N. SABBE, Baltimore, Md.
Filed December 14, 1931. Serial No. 322,114. PUBLISHED APRIL 12, 1932. Class 16.

295,217. COFFEE. JOHN H. WILKINS COMPANY, Washington, D. C.
Filed January 7, 1932. Serial No. 322,808. PUBLISHED APRIL 12, 1932. Class 46.

295,218. ANESTHETIC SOLUTION. NOVOCOL CHEMICAL MFG. CO. INC., Brooklyn, N. Y.
Filed January 13, 1932. Serial No. 322,969. PUBLISHED APRIL 5, 1932. Class 6.

295,219. SOAKED FISH, SMOKED FISH, SALT FISH, FRESH FISH, AND FROZEN FISH. THE KILDALL FISH COMPANY, INC., doing business as The Kildall Company, Minneapolis, Minn.
Filed January 16, 1932. Serial No. 323,092. PUBLISHED APRIL 12, 1932. Class 46.

295,220. CANNED FISH. WALLACE R. BOREN, San Francisco, Calif.
Filed January 19, 1932. Serial No. 323,161. PUBLISHED APRIL 12, 1932. Class 46.

295,221. PERFUMES, TOILET WATERS. ORIZA L. LEGRAND, INC., Wilmington, Del., and New York, N. Y.
Filed January 23, 1932. Serial No. 323,341. PUBLISHED MARCH 15, 1932. Class 6.

295,222. PROPHYLACTIC RUBBER ARTICLES. JOSEPH W. YORK, New York, N. Y.
Filed January 25, 1932. Serial No. 323,432. PUBLISHED APRIL 12, 1932. Class 44.

295,223. FLOOR WAX. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed January 30, 1932. Serial No. 323,603. PUBLISHED APRIL 12, 1932. Class 16.

295,224. PAINTS, VARNISHES, AND ENAMELS. JOHN W. MASURY & SON, Brooklyn, N. Y.
Filed February 2, 1932. Serial No. 323,769. PUBLISHED APRIL 12, 1932. Class 16.

295,225. LACQUERS OR DOPES. JOHN W. MASURY & SON, Brooklyn, N. Y.
Filed February 2, 1932. Serial No. 323,770. PUBLISHED APRIL 12, 1932. Class 16.

295,226. CANDY. DE MET'S, INC., Chicago, Ill.
Filed February 6, 1932. Serial No. 323,888. PUBLISHED APRIL 12, 1932. Class 46.

295,227. INDUSTRIAL PAINTS. E. F. HOUGHTON & CO., Philadelphia, Pa.
Filed February 9, 1932. Serial No. 323,998. PUBLISHED APRIL 12, 1932. Class 16.

295,228. POLISH FOR FLOORS, AUTOMOBILES, WALLS, ETC. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio.
Filed February 11, 1932. Serial No. 324,057. PUBLISHED APRIL 12, 1932. Class 16.

295,229. NITROCELLULOSE LACQUER. WABASH PRODUCTS COMPANY, Terre Haute, Ind.
Filed February 12, 1932. Serial No. 324,120. PUBLISHED APRIL 12, 1932. Class 16.

295,230. WAX POLISH FOR ASPHALT, TILE, RUBBER, OR COMPOSITION FLOORING. HUNTINGTON LABORATORIES, INC., Huntington, Ind.
Filed February 15, 1932. Serial No. 324,168. PUBLISHED APRIL 12, 1932. Class 16.

295,231. NEBULIZING OR ATOMIZING APPLIANCES FOR DENTAL, MEDICAL, AND SURGICAL USE. THE PINEOLEUM COMPANY, New York, N. Y.
Filed February 17, 1932. Serial No. 324,267. PUBLISHED APRIL 12, 1932. Class 44.

295,232. MASSAGE DEVICES. ROBERT H. HASSLER, Long Island City, N. Y., doing business as Ro-To-Flex Mfg. Co., Indianapolis, Ind.
Filed February 25, 1932. Serial No. 324,464. PUBLISHED APRIL 12, 1932. Class 44.

295,233. CHEMICALS FOR DESTROYING INSECTS. HAROLD R. HUEBEL, doing business as Sanol Laboratories, Ampere, N. J.
Filed May 17, 1929. Serial No. 284,180. PUBLISHED JUNE 25, 1929. Class 6.

295,234. GENERAL TONIC. HOFFMANN-LA ROCHE, INC., Nutley, N. J.
Filed February 18, 1932. Serial No. 324,287. PUBLISHED APRIL 12, 1932. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

295,235. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE KENDALL COMPANY, Walpole, Mass. Filed Apr. 30, 1930. Serial No. 299,715.

KENDALL MILLS

For Following Fabrics in the Bolt or Piece—Gauze Unmedicated, Crinoline, Sheetings, Pillow Case Tubing, Tobacco Cloth, Cheese Cloth, Longcloth, Cotton Voiles, Nainsooks, Muslins, Canton Flannels, Textile Toweling, Bunting, Scrims, Marquisettes, Cotton Piece Goods, and Rayon Piece Goods.
Claims use since August, 1928.

295,236. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HERBERT B. TROUT, doing business as David C. Bradley Co., Philadelphia, Pa. Filed May 9, 1930. Serial No. 300,246.

"Meats" with your approval

For Fresh and Smoked Beef; Fresh Veal, Fresh Lamb, and Fresh Mutton and Fresh Pork Loins, Fresh Hams, Fresh Shoulders (Pork), Fresh Sausage, Fresh Pork Bellies, Smoked Hams, Smoked Shoulders (Pork), Salt Pork, Bacon, Ham Bologna, Fresh Spare Ribs, Dressed Stewing Chickens, Dressed Roasting Chickens, Dressed Roosters, Dressed Broilers, Dressed Turkeys and Dressed Ducks.
Claims use since Apr. 24, 1930.

295,237. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HUGH CHARLES SULLIVAN, doing business as H. C. Sullivan Cannery, Frostproof, Fla. Filed Nov. 12, 1930. Serial No. 307,835.

EverSweet

For Canned Grapefruit and Canned Citrus Fruit Juices for Food Purposes.
Claims use since Oct. 22, 1930.

295,238. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) NASHUA GUMMED AND COATED PAPER COMPANY, Nashua, N. H. Filed Mar. 28, 1931. Serial No. 312,732.

SURE-HOLD

For Textile Material Having Gummed or Adhesive Backing for Use as Mounting Material, Covering or Lining for Suit Cases, Leather Goods, Boxes, and the Like.
Claims use since Feb. 6, 1931.

295,239. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) CONDITION AIR SALES, LTD., Los Angeles, Calif. Filed Apr. 18, 1931. Serial No. 313,495.

CONDITION-AIRE

For Air Purifying and Cooling Machines.
Claims use since Apr. 8, 1931.

295,240. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE WILLIAM A. WEBSTER CO., Memphis, Tenn. Filed Apr. 20, 1931. Serial No. 313,571.

"YOU CAN TASTE THE QUALITY"

For Tooth Paste.
Claims use since Apr. 11, 1931.

295,241. (CLASS 37. PAPER AND STATIONERY.) A. P. W. PAPER COMPANY, INC., Albany, N. Y. Filed May 1, 1931. Serial No. 314,033.

VOGUE

For Toilet Paper.
Claims use since Mar. 14, 1929.

295,242. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TASTY JELL MFG. CORPORATION, Green Island, N. Y. Filed May 12, 1931. Serial No. 314,469.

TASTY JELL

For Gelatin Dessert Powders.
Claims use since Apr. 28, 1931.

295,243. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHAS. H. POSE, Cedar Rapids, Iowa. Filed May 19, 1931. Serial No. 314,770.

C.H.POSE'S



For Dressed Poultry.
Claims use since May 8, 1931.

295,244. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHETTA & PURPE, INCORPORATED, New Orleans, La. Filed June 3, 1931. Serial No. 315,350.

CHETTA'S

For Canned Spaghetti Gravy.
Claims use since Apr. 1, 1931.

295,245. (CLASS 37. PAPER AND STATIONERY.) RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y. Filed June 11, 1931. Serial No. 315,700.

RIEGEL'S TUF-ROPE

For Tag Stock, Folder Stock, and Bristol.
Claims use since May 10, 1931.

295,246. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. J. RITTER COMPANY, Philadelphia, Pa. Filed June 22, 1931. Serial No. 316,135.

BAKOVEN

For Canned Beans.
Claims use since May 2, 1931.

295,247. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) VISCO-METER CORPORATION, Buffalo, N. Y. Filed July 3, 1931. Serial No. 316,618.

VISCO-METER

For Apparatus for Measuring the Viscosity of Fluids.
Claims use since Mar. 1, 1929.

295,248. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK ARENA, Mount Kisco, N. Y. Filed July 13, 1931. Serial No. 316,872.

FERNET-MILANO

For Stomach Tonic.
Claims use since May 18, 1931.

295,249. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) WADSWORTH HOWLAND & CO., INCORPORATED, Boston, Mass. Filed Sept. 15, 1931. Serial No. 319,089.

WUD-FIL-WOOD

For Fluid or Semi-Fluid Finishing Material Having the Combined Nature of a Paint Oil and Polishing Oil Filler and Finish.
Claims use since Mar. 1, 1931.

295,250. (CLASS 12. CONSTRUCTION MATERIALS.) DEATS SASH & DOOR COMPANY, Los Angeles, Calif. Filed Sept. 23, 1931. Serial No. 319,313.

RAYNPROOF

For Screen Doors.
Claims use since Apr. 27, 1931.

295,251. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) W. A. CASE AND SON MANUFACTURING COMPANY, Buffalo, N. Y. Filed Dec. 23, 1931. Serial No. 322,378.

ROBSON

For Pottery—Namely, Lavatories, Bathtubs, and Toilets.
Claims use since Jan. 1, 1931.

295,252. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Dec. 23, 1931. Serial No. 322,401.

COAT-A-DAY 2

For Paints in Paste, Semi-Liquid, or Ready-Mixed Form; Varnishes, Lacquers, Paint Enamels, Varnish Enamels, Lacquer Enamels, and Clear Varnishes.
Claims use since June 20, 1930.

295,253. (CLASS 12. CONSTRUCTION MATERIALS.) THE ATLAS MINERAL PRODUCTS COMPANY, Mertztown, Pa. Filed Feb. 15, 1932. Serial No. 324,147.

MINERALEAD

For a Jointing Compound for Pipe Connections.
Claims use since May 1, 1929.

295,254. (CLASS 5. ADHESIVES.) GOW & BENTES, Buffalo, N. Y. Filed Feb. 26, 1932. Serial No. 324,510.

GOODYEAR

For Adhesive Cement for Mending China, Glass, Crockery, Leather, Bric-a-Brac, Furniture, Woodwork, and Similar Articles.
Claims use since 1922.

295,255. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) EMIL B. SEGERSTROM, doing business as Segerstrom Soap Company, Anaheim, Calif. Filed Mar. 28, 1932. Serial No. 325,630.

AVOCADO

For Soap.
Claims use since Jan. 15, 1931.

295,256. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) LEWIS BOLT & NUT COMPANY, Minneapolis, Minn. Filed Apr. 18, 1932. Serial No. 326,248.

SEAL TITE

For Bolts.
Claims use since October, 1930.

295,257. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MILTON H. KLEIN, Cleveland, Ohio. Filed Apr. 22, 1932. Serial No. 326,373.

MAISON HEALTH SOAP

For Soap.
Claims use since Apr. 1, 1931.

295,258. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE WOOD CLAPP, doing business as Clapp & Clapp, New York, N. Y.; Orlando, Fla.; and Reading, Pa. Filed Apr. 23, 1932. Serial No. 326,506.

CLAPP + CLAPP

For Fresh Oranges and Grapefruit.
Claims use since Nov. 15, 1930.

295,259. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF.) BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind. Filed Apr. 30, 1932. Serial No. 326,630.

BENDIX

For Carburetors.
Claims use since Feb. 24, 1931.

295,260. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF.) BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind. Filed Apr. 30, 1932. Serial No. 326,632.

STROMBERG

For Carburetors.
Claims use since Feb. 23, 1931.

295,261. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) SUPERIOR METAL PRODUCTS COMPANY, St. Paul, Minn. Filed May 5, 1932. Serial No. 326,793.

Grid

For Strainers.
Claims use since Apr. 4, 1931.

TRADE-MARK REGISTRATIONS RENEWED

37,084. SUBSTITUTE FOR PAPER. Registered March 25, 1902. ALVAH BUSHNELL. Renewed March 25, 1932, to Alvah Bushnell Company, Philadelphia, Pa., a Corporation of New Jersey, successor.

38,341. PASTE. Registered May 27, 1902. CHARLES B. FORSYTH. Renewed May 27, 1932, to Akos Company, Alexandria Bay, N. Y., a Firm, successor.

38,399. CERTAIN NAMED PACKING HOUSE PRODUCTS. Registered June 3, 1902. SWIFT AND COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed June 3, 1932.

38,525. CERTAIN NAMED STATIONERY. Registered July 1, 1902. J. S. STAEDTLER, Nurnberg, Germany, a Firm. Renewed July 1, 1932.

38,538. CERTAIN NAMED PACKING HOUSE PRODUCTS. Registered July 1, 1902. SWIFT AND COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed July 1, 1932.

38,957. CHILL AND FEVER TONIC. Registered September 30, 1902. T. S. ROBERTS, Monticello, Fla. Renewed September 30, 1932, to Monticello Drug Company, Jacksonville, Fla., a Corporation of Florida, successor.

39,017. LOCAL ANTIRHEUMATIC. Registered October 14, 1902. FARBENFABRIKEN OF ELBERFELD CO. Renewed October 14, 1932, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

39,135. A DIURETICUM. Registered October 28, 1902. FARBENFABRIKEN OF ELBERFELD CO. Renewed October 28, 1932, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

39,197. CERTAIN NAMED MEDICINAL PREPARATION. Registered November 4, 1902. DENNIS FLYNN, Lowell, Mass. Renewed November 4, 1932.

84,136. EVAPORATED MILK. Registered November 7, 1911. THE SHEBOYGAN EVAPORATED MILK CO., Sheboygan, Wis. Renewed November 7, 1931, to Carnation Company, Milwaukee, Wis.; Chicago, Ill.; and Seattle, Wash., a Corporation of Delaware, assignee by mesne assignments.

85,655. CARBURETERS, EXPLOSION-MOTOR RADIATORS, PUMPS, AND LUBRICATORS. Registered March 5, 1912. M. GOUDARD AND MENNESSON, Paris, France. Renewed March 5, 1932, to Societe Anonyme Solex, Neuilly-sur-Seine, France, a Corporation of France, successor.

85,823. MACHINES FOR PUNCHING AND SHEARING IRON. Registered March 19, 1912. LITTLE GIANT PUNCH & SHEAR CO., Sparta, Ill. Renewed March 19, 1932, to Theodore J. Gundlach, doing business as T. J. Gundlach Machine Company, Belleville, Ill., assignee.

85,920. TOOL-STEEL. Registered March 26, 1912. J. J. SAVILLE AND CO. LIMITED, Sheffield, England, a Corporation of Great Britain. Renewed March 26, 1932.

86,145. RAW OYSTERS. Registered April 16, 1912. WILLIAM H. MCGEE. Renewed April 16, 1932, to William M. Adams, Baltimore, Md., successor.

86,451. A HAIR-TONIC. Registered May 7, 1912. ALBINO RESIDORI, Carbon Hill, Ill. Renewed May 7, 1932, to Residori and Sons, Joliet, Ill., a Firm, successor.

86,529. CASKS AND BARRELS. Registered May 14, 1912. THE GREIF BROS. CO. Renewed May 14, 1932, to The Greif Bros. Cooperage Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

86,530. CASKS AND BARRELS. Registered May 14, 1912. THE GREIF BROS. CO. Renewed May 14, 1932, to The Greif Bros. Cooperage Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

86,567. LENS EXAMINING AND TESTING INSTRUMENTS. Registered May 21, 1912. AMERICAN OPTICAL COMPANY. Renewed May 21, 1932, to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts, assignee.

86,587. WATCHMEN'S CLOCKS. Registered May 21, 1912. HARDINGE BROTHERS, Chicago, Ill. Renewed May 21, 1932, to Detex Watchclock Corporation, New York, N. Y., a Corporation of Delaware, assignee.

86,674. SAUCE (SOY). Registered May 21, 1912. GEUBA TANAKA, Kaijokori, Chiba-Ken, Japan. Renewed May 21, 1932, to Choshi Shoyu Kabushiki Kaisha, Choshi, Chiba-Ken, Japan, a Corporation of Japan, assignee by mesne assignments.

86,798. ANNULAR KNIVES. Registered June 4, 1912. FORTUNA MACHINE CO., New York, N. Y., a Corporation of New York. Renewed June 4, 1932.

86,824. CERTAIN CHEMICAL PREPARATION. Registered June 4, 1912. OAKES MANUFACTURING COMPANY, Long Island City, N. Y., and Boston, Mass. Renewed June 4, 1932, to Oakes Manufacturing Company, New York, N. Y., a Corporation of Massachusetts, successor.

86,900. COTTON DRESS GOODS. Registered June 11, 1912. MARSHALL FIELD & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed June 11, 1932.

86,991. SALT. Registered June 18, 1912. THE HUTCHINSON-KANSAS SALT COMPANY, Hutchinson, Kans. Renewed June 18, 1932, to Morton Salt Company, Chicago, Ill., a Corporation of Illinois, assignee.

86,999. PORT-WINE. Registered June 18, 1912. ALBERT CHARLES FREDERICK MORGAN. Renewed June 18, 1932, to Morgan Brothers (London) Limited, London, England, a Corporation of Great Britain, assignee.

87,006. PRINTING-PRESSES. Registered June 18, 1912. THE REGINA COMPANY, Rahway, N. J. Renewed June 18, 1932, to New Era Manufacturing Co., Paterson, N. J., a Corporation of New Jersey, successor.

87,035. CERTAIN MEDICINES AND PHARMACEUTICAL PREPARATIONS. Registered June 25, 1912. JAMES F. BALLARD. Renewed June 25, 1932, to James F. Ballard, Inc., St. Louis, Mo., a Corporation of Missouri, successor.

87,089. MINCE-MEAT, INFANT FOOD, AND PRESERVED EGGS. Registered June 25, 1912. MERRELL-SOULE CO., Syracuse, N. Y. Renewed June 25, 1932, to Borden's Milk Products Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,189. KID AND FABRIC GLOVES. Registered July 2, 1912. MARSHALL FIELD & COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed July 2, 1932.

87,224. BAKING-POWDER AND BAKING-SODA. Registered July 2, 1912. LAYTON PURE FOOD COMPANY, East St. Louis, Ill. Renewed July 2, 1932, to Rumford Chemical Works, Rumford, R. I., a Corporation of Rhode Island, assignee.

87,233. DRIED MILK, DRIED EGGS, AND MINCE-MEAT. Registered July 2, 1912. MERRELL-SOULE COMPANY, Syracuse, N. Y. Renewed July 2, 1932, to Borden's Milk Products Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

87,316. A SUBSTITUTE FOR PAPER. Registered July 9, 1912. ALVAH BUSHNELL COMPANY, Philadelphia, Pa., a Corporation of New Jersey. Renewed July 9, 1932.

87,407. RUBBER BOOTS, SHOES, ARCTICS, OVERSHOES, AND SANDALS, INSOLES, SPATS, AND OVERGAITERS. Registered July 16, 1912. THE BEACON FALLS RUBBER SHOE COMPANY. Renewed July 16, 1932, to The Beacon Falls Rubber Shoe Company, Beacon Falls, Conn., a Corporation of Massachusetts, assignee.

87,452. HAM, BACON, AND LARD. Registered July 16, 1912. THE HULL & DILLON PKG. CO., Pittsburg, Kans. Renewed July 16, 1932, to The Iowa Packing Company, Des Moines, Iowa, a Corporation of Iowa, assignee.

87,470. DRY CELLS. Registered July 16, 1912. NATIONAL CARBON COMPANY, Cleveland, Ohio. Renewed July 16, 1932 to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee.

87,605. VARNISHES AND PAINTS. Registered July 30, 1912. THE COPAL VARNISH COMPANY, LIMITED. Renewed July 30, 1932, to Paripan Limited, London, England, a Corporation of Great Britain, assignee.

87,617. CONDENSED SKIMMED MILK. Registered July 30, 1912. FOSTER PACKING COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed July 30, 1932.

87,651. DRY CELLS. Registered July 30, 1912. NATIONAL CARBON COMPANY, Cleveland, Ohio. Renewed July 30, 1932, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee.

87,673. CERTAIN STATIONERY MATERIAL. Registered July 30, 1912. F. SOENNECKEN, Bonn, Germany, a Firm. Renewed July 30, 1932.

87,713. A PREPARATION FOR THE TREATMENT OF AFFECTIONS OF THE EYE. Registered August 6, 1912. JAMES F. BALLARD. Renewed August 6, 1932, to James F. Ballard, Inc., St. Louis, Mo., a Corporation of Missouri, successor.

87,745. CERTAIN TOILET COSMETICS. Registered August 6, 1912. HENRIETTE GABILLA, Paris, France. Renewed August 6, 1932, to Gabilla, Incorporated, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

87,823. PERFUME. Registered August 6, 1912. JOSEPH TETLOW. Renewed August 6, 1932, to Henry Tetlow Company, Philadelphia, Pa., a Corporation of Pennsylvania, assignee by mesne assignments.

87,839. OLEOMARGARIN. Registered August 13, 1912. AMMON & PERSON. Renewed August 13, 1932, to Eckerson Company, Jersey City, N. J., a Corporation of New Jersey, assignee by mesne assignments.

87,905. PORT-WINE. Registered August 13, 1912. ALBERT CHARLES FREDERICK MORGAN. Renewed August 13, 1932, to Morgan Brothers (London) Limited, London, England, a Corporation of Great Britain, assignee.

88,016. DRY CELLS. Registered August 20, 1912. NATIONAL CARBON COMPANY, Cleveland, Ohio. Renewed August 20, 1932, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee.

88,035. PROTECTORS ADAPTED TO BE INSERTED IN THE HEELS AND SOLES OF BOOTS AND SHOES. Registered August 20, 1912. UNITED SHOE MACHINERY COMPANY. Renewed August 20, 1932, to United Shoe Machinery Corporation, Paterson, N. J., and Boston, Mass., a Corporation of New Jersey, assignee.

88,067. ENAMEL IN THE NATURE OF PAINT. Registered August 27, 1912. THE COPAL VARNISH COMPANY, LIMITED. Renewed August 27, 1932, to Paripan Limited, London, England, a Corporation of Great Britain, assignee.

88,091. TOILET SOAP. Registered August 27, 1912. JAMES S. KIRK & COMPANY, Chicago, Ill. Renewed August 27, 1932, to The Procter & Gamble Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

88,183. PERFUMES, TOILET WATERS, AND SACHETS. Registered September 3, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed September 3, 1932.

88,195. DRY CELLS. Registered September 3, 1912. NATIONAL CARBON COMPANY, Cleveland, Ohio. Renewed September 3, 1932, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee.

88,204. CHEMICALS, MEDICINE, AND PHARMACEUTICAL PREPARATIONS. Registered September 3, 1912. J. D. RIEDEL, ACTIENGESELLSCHAFT, Berlin, Germany. Renewed September 3, 1932, to Riedel & Co. Inc., Brooklyn, N. Y., a Corporation of New York, assignee by mesne assignments.

88,226. CANDY. Registered September 10, 1912. AMERICAN CANDY MFG. CO. Renewed September 10, 1932, to American Candy Manufacturing Co., Inc., Selma, Ala., a Corporation of Alabama, successor.

88,294. A TONIC FOR THE STOMACH. Registered September 10, 1912. C. I. HOOD CO., Lowell, Mass. Renewed September 10, 1932, to Pfeiffer Chemical Company, St. Louis, Mo., a Corporation of Missouri, assignee by mesne assignments.

88,341. DRY CELLS. Registered September 10, 1912. NATIONAL CARBON COMPANY, Cleveland, Ohio. Renewed September 10, 1932, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee.

88,434. COFFEE. Registered September 17, 1912. JAMES VAN DYK COMPANY, New York, N. Y. Renewed September 17, 1932, to James Van Dyk Company, Brooklyn, N. Y., a Corporaton of New York.

88,467. HORSESHOE-CALKS. Registered September 24, 1912. CHALLONER COMPANY. Renewed September 24, 1932, to Giant Grip Mfg. Co., Oshkosh, Wis., a Corporation of Wisconsin, by change of name.

88,545. PERFUMERY. Registered September 24, 1912. ALFRED WRIGHT PERFUMER INC., Philadelphia, Pa. Renewed September 24, 1932, to Mellier Company, Perfumer, St. Louis, Mo., a Corporation of Missouri, assignee.

88,635. DRY CELLS. Registered October 8, 1912. NATIONAL CARBON COMPANY, Cleveland, Ohio. Renewed October 8, 1932, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee.

88,644. EJECTORS. Registered October 8, 1912. THE UNITED INJECTOR COMPANY. Renewed October 8, 1932, to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,666. SOAPS AND SOAP POWDERS. Registered October 15, 1912. COLGATE & CO., New York, N. Y. Renewed October 15, 1932, to Colgate-Palmolive-Peet Company, Chicago, Ill., a Corporation of Delaware, assignee.

88,743. OVERALLS. Registered October 22, 1912. ELOESSER-HEYNEMANN CO., San Francisco, Calif., a Corporation of California. Renewed October 22, 1932.

88,821. CANNED SALMON. Registered October 29, 1912. ALASKA FISH CO. Renewed October 29, 1932, to Peril Straits Packing Co., Inc., Seattle, Wash., a Corporation of Washington, assignee.

88,823. BEEF-BROTH PREPARATIONS. Registered October 29, 1912. AMERICAN KITCHEN PRODUCTS COMPANY, New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,945. CRACKERS AND BISCUITS. Registered October 29, 1912. PERFECTION BISCUIT COMPANY, Fort Wayne, Ind., a Corporation of Indiana. Renewed October 29, 1932.

88,987. CERTAIN NAMED TOOLS. Registered October 29, 1912. J. H. WILLIAMS & CO., New York, N. Y. Renewed October 29, 1932, to J. H. Williams & Co., Buffalo, N. Y., a Corporation of New York.

89,050. DRY CELLS. Registered November 5, 1912. NATIONAL CARBON COMPANY, Cleveland, Ohio. Renewed November 5, 1932, to National Carbon Company, Inc., New York, N. Y., a Corporation of New York, assignee.

89,071. SHREDDED WHEAT. Registered November 5, 1912. THE SHREDDED WHEAT COMPANY, Niagara Falls, N. Y. Renewed November 5, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey, assignee.

89,081. MACARONI. Registered November 12, 1912. THE ATLANTIC MACARONI CO. Renewed November 12, 1932, to The Atlantic Macaroni Co. Inc., Long Island City, N. Y., a Corporation of New York, assignee.

89,131. TRANSMISSION APPARATUS AND EXPLOSION-MOTORS FOR MOTOR-VEHICLES. Registered November 12, 1912. MINERVA MOTORS, Berchem, near Antwerp, Belgium, a Corporation of Belgium. Renewed November 12, 1932.

89,137. LUBRICATING OILS AND GREASES AND ILLUMINATING-OILS. Registered November 12, 1912. ORIENTAL OIL COMPANY, Dallas, Tex., a Corporation of Texas. Renewed November 12, 1932.

LABELS

REGISTERED JUNE 21, 1932

40,849.—*Title:* WAVE SET. For Hair Nets. AMERICAN HAIR NET CO., New York, N. Y. Published October 20, 1931.

40,850.—*Title:* BIG TEN. For Prepared Paints. ARMSTRONG PAINT & VARNISH WORKS, Chicago, Ill. Published December 17, 1931.

40,851.—*Title:* BOSS PAINTER. For Prepared Paints. ARMSTRONG PAINT & VARNISH WORKS, Chicago, Ill. Published August 1, 1931.

40,852.—*Title:* RAINBOW FISHING, THE NEW FLY-CASTING GAME WITH GIANT FISH. For Indoor Game. MILTON BRADLEY COMPANY, Springfield, Mass. Published May 11, 1932.

40,853.—*Title:* SMILING FACES, THE HAPPINESS GAME. For Indoor Game. MILTON BRADLEY CO., Springfield, Mass. Published May 11, 1932.

40,854.—*Title:* MASTERPIECE. For Preparation for Repairing Leaks in Auto Water Cooling Systems. CONTINENTAL WORKS CO., Chicago, Ill. Published September 1, 1931.

40,855.—*Title:* KITCHEN KLENZER. For Cleaning and Scouring Compound in Finely Divided Form for Household Use. FITZPATRICK BROS. INC., Chicago, Ill. Published November 19, 1931.

40,856.—*Title:* MAGIC COLD TABLETS. For Cold Tablets. CHARLES G. FOERTMEYER, Cincinnati, Ohio. Published March 14, 1932.

40,857.—*Title:* HI-WAY PAINT. For Paint. FULLERTON LUMBER COMPANY, Minneapolis, Minn. Published April 1, 1932.

40,858.—*Title:* SOLVENE. For a Preparation for Treating Tired, Aching Muscles and Tired, Burning, Aching, and Swollen Feet. C. W. HALLAHAN, doing business as The Solvene Company, Alexandria Bay, N. Y. Published July 28, 1931.

40,859.—*Title:* FUNNY FARM FOLKS. For Candy. THOMAS I. KENT, Boston, Mass. Published March 17, 1932.

40,860.—*Title:* TASTE-TESTED TEA. For Tea. THEODORE O. MORATH, St. Louis, Mo. Published March 13, 1932.

40,861.—*Title:* WHEATSWORTH CRACKERS. For Crackers. NATIONAL BISCUIT COMPANY, New York, N. Y. Published April 15, 1932.

40,862.—*Title:* PARKELP. For Food Supplement. PHILIP R. PARK, INC., San Pedro, Calif. Published March 2, 1932.

40,863.—*Title:* LUSTROL CREME. For Furniture Cream For Cleaning and Polishing. SHULMAN CHEMICAL COMPANY, Philadelphia, Pa. Published April 6, 1932.

40,864.—*Title:* SILK'S SUPREME PREPARED SPANISH STYLE RICE. For Prepared Spanish Style Rice. FRED J. SILK, doing business as Silk Packing Company, Los Angeles, Calif. Published March 28, 1932.

40,865.—*Title:* SOLIDIHED LONG PIN DRAPE TACKS. For Long Pin Drape Tacks. SOLIDHED COMPANY, Hoboken, N. J. Published March 15, 1932.

40,866.—*Title:* LITTLE ARTIST CRAYON SET. For Crayon Sets. STANDARD SOLOPHONE MFG. CO. INC., New York, N. Y. Published April 4, 1932.

40,867.—*Title:* GENUINE MINERALWELLS CRYSTALS. For Crystals Made From Mineral Water. TEXAS CRYSTAL CO., Dallas, Tex. Published April 1, 1932.

40,868.—*Title:* "BLACK LEAF 40" NICOTINE SULPHATE 50 POUNDS. For Nicotine Sulphate. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published March 1, 1932.

40,869.—*Title:* WANZER'S CERTIFIED VITAMIN EGGS. For Eggs. SIDNEY WANZER & SONS, INC., Chicago, Ill. Published April 14, 1932.

LABELS RENEWED

11,355. IT REACHES THE RIGHT SPOT. For Medicine. Registered August 30, 1904. ALEXANDER CRICHTON, Castleton, Canada. Renewed August 30, 1932.

PRINTS

REGISTERED JUNE 21, 1932

13,754.—*Title:* MUCH ADO ABOUT PRACTICALLY NOTHING. For Clothing. BRADLEY KNITTING COMPANY, Delavan, Wis. Published January 1, 1932.

13,755.—*Title:* SOMEWHERE THE SUN IS SHINING. For Clothing. BRADLEY KNITTING COMPANY, Delavan, Wis. Published Feb. 15, 1932.

13,756.—*Title:* A SAILOR'S LIFE FOR ME. For Clothing. BRADLEY KNITTING COMPANY, Delavan, Wis. Published May 1, 1932.

13,757.—*Title:* THE FASHIONS THAT BLOOM IN THE SPRING. TRA LA! For Clothing. BRADLEY KNITTING COMPANY, Delavan, Wis. Published April 1, 1932

13,758.—*Title:* CELLOPHANE HIDES NOTHING. For Bread. THE W E. LONG CO., Chicago, Ill. Published April 8, 1932.

13,759.—*Title:* OLD HOME BREAD IN ITS CELLOPHANE WRAPPER IS MY PROOF OF ABSOLUTE FRESHNESS. For Bread. THE W E LONG CO., Chicago, Ill. Published April 18, 1932.

13,760.—*Title:* YOU CAN SEE THE FRESHNESS—THROUGH CRYSTAL-CLEAR CELLOPHANE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 8, 1932.

13,761.—*Title:* "SEE FOR YOURSELF—" For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 21, 1932.

13,762.—*Title:* JUST A CUP PICKS YOU UP. For Tea. MCCORMICK AND COMPANY, Baltimore, Md. Published April 22, 1932.

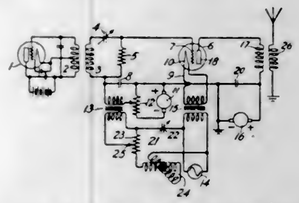
13,763.—*Title:* J. O. FLY SPRAY. For Fly Spray. JOHN OPITZ, INC., New York, N. Y. Published March 7, 1932.

13,764.—*Title:* PIONEER CANDY DROPS. For Candy Drops. STRONG, COBB & COMPANY, INC., Cleveland, Ohio. Published March 8, 1932

REISSUES

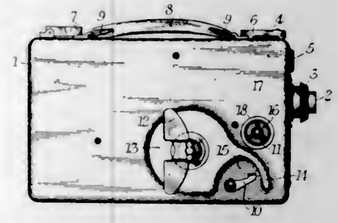
JUNE 21, 1932

18,501. SYSTEM INCLUDING SPACE DISCHARGE DEVICE. ARTHUR A. OSWALD, East Orange, N. J., assignor, by mesne assignments, to American Telephone & Telegraph Company, a Corporation of New York. Original No. 1,665,674, dated Apr. 10, 1928, Serial No. 691,173, filed Feb. 7, 1924. Application for reissue filed Oct. 25, 1928. Serial No. 315,055. 27 Claims. (Cl. 250—6.)



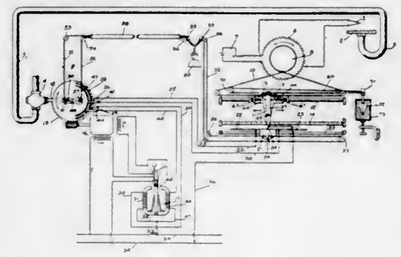
21. The method of eliminating feed frequency tones and harmonics thereof in modulating systems utilizing alternating or rectified currents which consists in deriving from such currents another current and supplying such current to the modulating current in a manner to neutralize the feed frequency tones.

18,502. MOTOR OPERATED MOTION PICTURE CAMERA. PAUL A. STEPHENSON, Leonia, N. J., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Original No. 1,809,256, dated June 9, 1931, Serial No. 331,111, filed Jan. 8, 1929. Application for reissue filed Feb. 20, 1932. Serial No. 594,345. 10 Claims. (Cl. 88—18.4.)



1. In motion picture apparatus, the combination with a pulldown mechanism, of a power drive for the mechanism, a trigger for releasing the power drive, mechanism associated with the power drive adapted to be moved to an operative position for alterating the normal speed of the pulldown mechanism, a push button control member for actuating said mechanism, and a casing for enclosing said parts, an embossing on the casing adjacent the trigger and forming a guard therefor.

18,503. REGULATING SYSTEM. LEWIS L. CUNNINGHAM, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Original application filed July 23, 1924, Serial No. 727,836. Renewed Nov. 16, 1929. Original No. 1,768,890, dated July 1, 1930. Application for reissue filed May 16, 1931. Serial No. 537,966. 12 Claims. (Cl. 236—69.)



1. In a temperature control system the combination of a temperature indicating member automatically movable in response to change of temperature at the point to temperature control, a rotative energy control member actuated by a reversible electrical motor, electrically operated means for reversing the direction of rotation of the said electrical motor, a pair of electrical contacts, fixed with respect to each other, cooperating with an electrical contact, associated with the said indicating member, for the control of the direction of rotation of the said electrical motor; flexible cable means of transmitting motion of the said rotative energy control member to the said pair of electrical contacts; and a cam shaped member adapted to cooperate with the said flexible cable means and to predetermine for different angular positions of the said rotative energy control member, the ratio of motion of the said pair of movable contacts with respect to motion of the said rotative energy control member.

DESIGNS

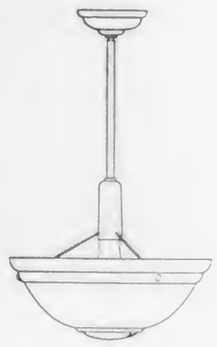
JUNE 21, 1932

87,184. LIGHTING FIXTURE. GEORGE AINSWORTH, New Hyde Park, N. Y. Filed Dec. 15, 1931. Serial No. 42,091. Term of patent 14 years.



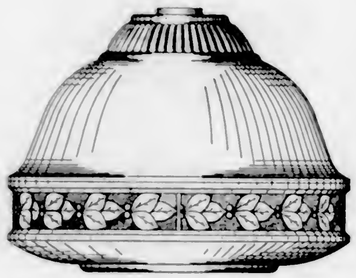
The ornamental design for a lighting fixture substantially as shown and described.

87,185. LIGHTING FIXTURE. GEORGE AINSWORTH, New Hyde Park, N. Y. Filed Dec. 15, 1931. Serial No. 42,092. Term of patent 14 years.



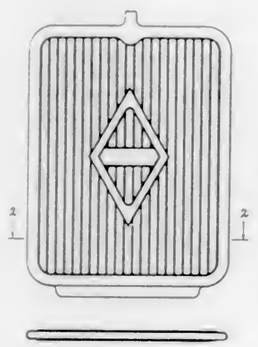
The ornamental design for a lighting fixture substantially as shown and described.

87,186. HUMIDIFIER CASING. ARTHUR A. ARNOLD, New Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Nov. 17, 1931. Serial No. 41,754. Term of patent 14 years.



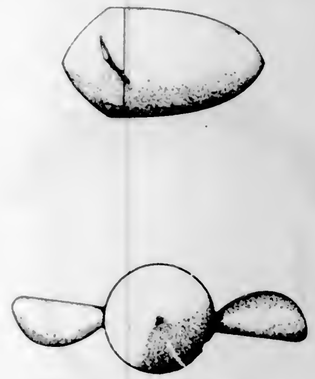
The ornamental design for a humidifier casing substantially as shown and described.

87,187. HEATING PAD. ARTHUR A. ARNOLD, New Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Dec. 1, 1931. Serial No. 41,932. Term of patent 14 years.



The ornamental design for a heating pad substantially as shown and described.

87,188. FAN. WILLIAM P. ARON, Dallas, Tex., assignor of one-half to John E. Knott, Dallas, Tex. Filed Feb. 20, 1931. Serial No. 38,735. Term of patent 14 years.



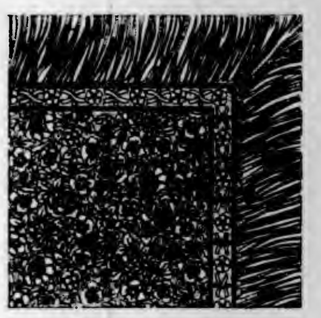
The ornamental design for a fan, as shown.

87,189. OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 19, 1931. Serial No. 41,427. Term of patent 14 years.



The ornamental design for an ophthalmic mounting substantially as shown and described.

87,190. PAPER NAPKIN OR SIMILAR ARTICLE. RICHARD W. BEACH, Noblesville, Ind. Filed Jan. 25, 1932. Serial No. 42,612. Term of patent 3½ years.



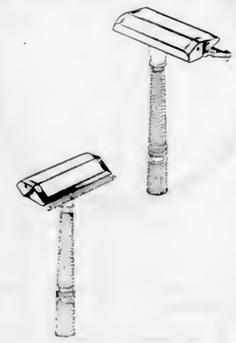
The ornamental design for a paper napkin or similar article, as shown and described.

87,191. PAPER NAPKIN OR SIMILAR ARTICLE. RICHARD W. BEACH, Noblesville, Ind. Filed Jan. 16, 1932. Serial No. 42,513. Term of patent 3½ years.



The ornamental design for a paper napkin, or similar article, as shown and described.

87,192. RAZOR. MARCUS B. BEHRMAN, Brooklyn, N. Y., assignor to American Safety Razor Corporation, Brooklyn, N. Y., a Corporation of Virginia. Filed Jan. 8, 1931. Serial No. 38,242. Term of patent 14 years.



The ornamental design for a razor substantially as shown.

87,193. TEXTILE FABRIC. JULIA BLACK, New York, N. Y., assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Apr. 16, 1932. Serial No. 43,524. Term of patent 3½ years.



The ornamental design for a textile fabric substantially as shown and described.

87,194. TEXTILE FABRIC. JULIA BLACK, New York, N. Y., assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Apr. 16, 1932. Serial No. 43,525. Term of patent 3½ years.



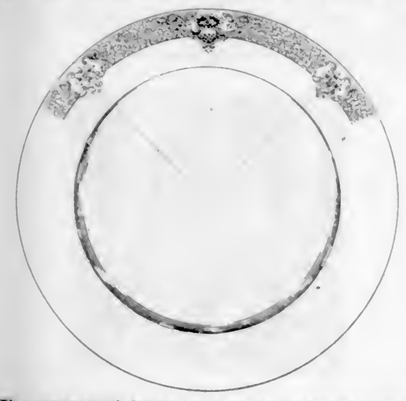
The ornamental design for a textile fabric substantially as shown and described.

87,195. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Apr. 23, 1932. Serial No. 43,579. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown and described.

87,196. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Apr. 23, 1932. Serial No. 43,580. Term of patent 7 years.



The ornamental design for a plate or similar article as shown and described.

87,197. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Apr. 23, 1932. Serial No. 43,581. Term of patent 7 years.



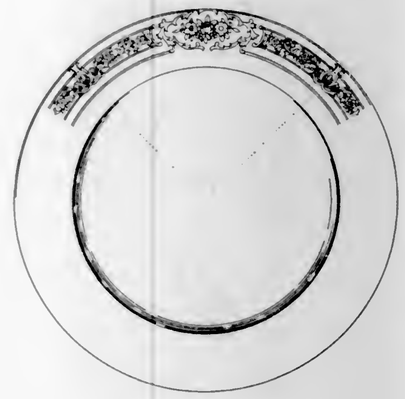
The ornamental design for a plate or similar article, as shown and described.

87,198. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Apr. 23, 1932. Serial No. 43,582. Term of patent 7 years.



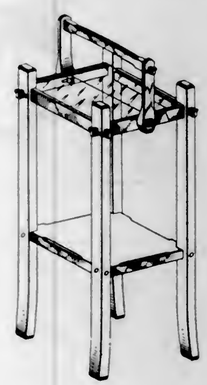
The ornamental design for a plate or similar article as shown and described.

87,199. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Apr. 23, 1932. Serial No. 43,583. Term of patent 7 years.



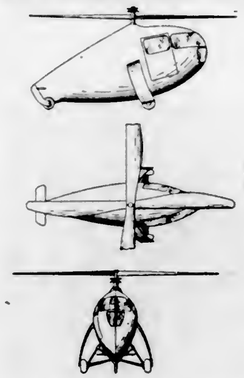
The ornamental design for a plate or similar article, as shown and described.

87,200. SMOKER'S STAND. CARL D. BUNKER, North Haven, Me. Filed Apr. 21, 1932. Serial No. 43,563. Term of patent 7 years.



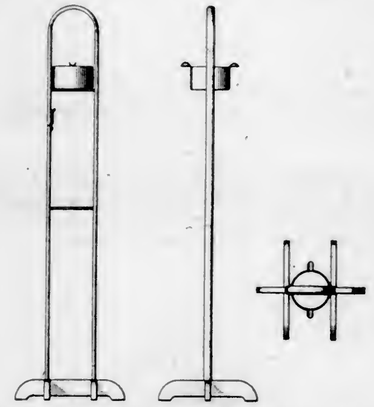
The ornamental design for a smoker's stand, as shown.

87,201. AUTOPLANE. ELLSWORTH W. CARROLL, San Francisco, Calif. Filed Apr. 7, 1931. Serial No. 39,389. Term of patent 14 years.



The ornamental design for an auto-plane, as shown.

87,202. SMOKER'S STAND. MAXIME CHAPUIS, Chicago, Ill. Filed Oct. 2, 1931. Serial No. 41,296. Term of patent 7 years.



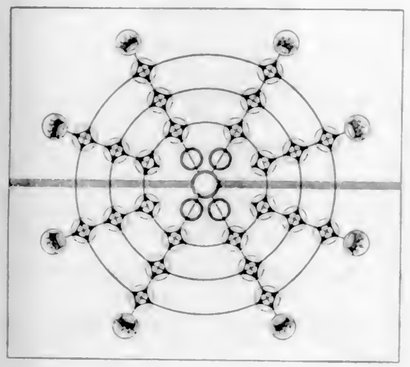
The ornamental design for a smoker's stand, as shown.

87,203. SERVING TRAY. RALPH O. CLARK, Memphis, Tenn. Filed Feb. 9, 1931. Serial No. 38,509. Term of patent 3½ years.



The ornamental design for a serving tray as shown.

87,204. GAME BOARD. ALLEN B. COOKE, Rochester, N. Y., assignor to E. E. Fairchild Corporation, Rochester, N. Y., a Corporation of New York. Filed Nov. 24, 1931. Serial No. 41,844. Term of patent 3½ years.



The ornamental design for a game board, as shown and described.

87,205. BOTTLE. PAUL C. DELAIZE, New York, N. Y., assignor to D'Orsay Perfumeries Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 17, 1931. Serial No. 41,135. Term of patent 7 years.



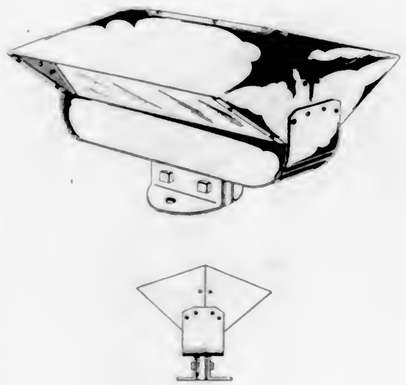
The ornamental design for a bottle as shown and described.

87,206. RING OR SIMILAR ARTICLE. GABRIEL DEMAY, West New York, N. J. Filed Mar. 10, 1931. Serial No. 39,022. Term of patent 3½ years.



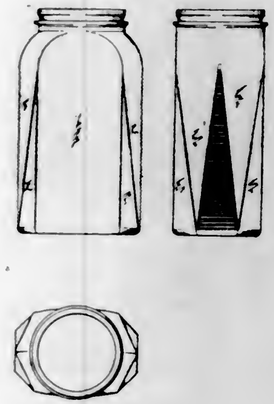
The ornamental design for a ring or similar article, as shown.

87,207. AUTOMOBILE SIGNAL LAMP. JERIE EVICH, Santa Barbara, Calif. Filed Mar. 9, 1932. Serial No. 43,136. Term of patent 14 years.



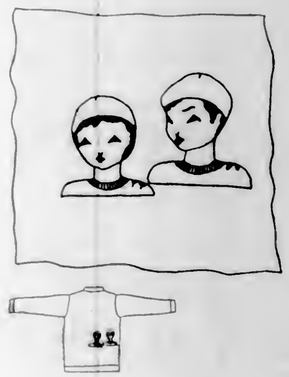
The ornamental design for an automobile signal lamp substantially as shown and described.

87,208. JAR. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 30, 1932. Serial No. 43,674. Term of patent 14 years.



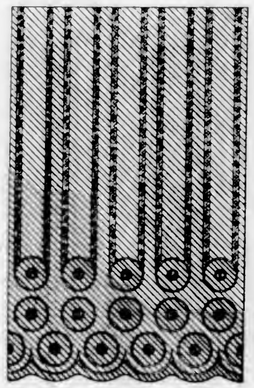
The ornamental design for a jar substantially as shown and described.

87,209. SWEATER OR ANALOGOUS ARTICLE. ANTHONY H. GEUTINO, Merion, Pa. Filed Dec. 17, 1931. Serial No. 42,115. Term of patent 14 years.



The ornamental design for a sweater or analogous article as shown and described.

87,210. AWNING SHEET. PETER LE ROY GOUDIE, Johnson County, Kans. Filed Mar. 28, 1932. Serial No. 43,312. Term of patent 8½ years.



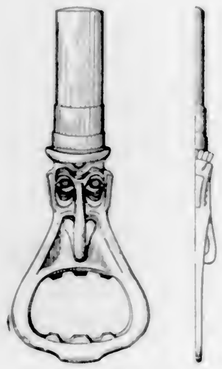
The ornamental design for an awning sheet, as shown, substantially as described.

87,211. SHRINE. MORTON HAGUE, Chicago, Ill. Filed Apr. 4, 1932. Serial No. 43,386. Term of patent 14 years.



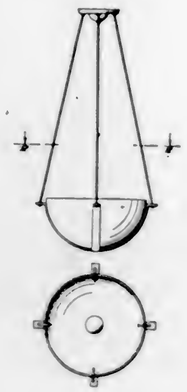
The ornamental design for a shrine substantially as shown.

87,212. BOTTLE OPENER. OSCAR HALVORSEN, Brooklyn, N. Y., assignor to Sterling Die Casting Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 10, 1931. Serial No. 42,023. Term of patent 7 years.



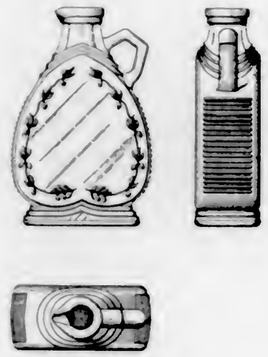
The ornamental design for a bottle opener, as shown.

87,213. LAMP. WOLFGANG HOFFMANN, New York, N. Y., assignor to Luminator Inc., Chicago, Ill., a Corporation of Illinois. Filed Oct. 19, 1931. Serial No. 41,436. Term of patent 14 years.



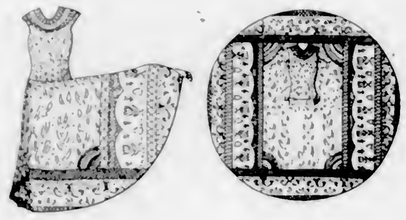
The ornamental design for a lamp, as shown.

87,214. BOTTLE OR SIMILAR CONTAINER. EMANUEL H. JACOBSOHN, New York, N. Y., assignor to W. A. Taylor & Co., New York, N. Y., a Corporation of New York. Filed Oct. 7, 1931. Serial No. 41,328. Term of patent 14 years.



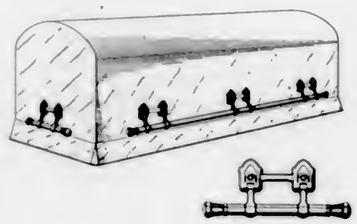
The ornamental design for a bottle or similar container as shown.

87,215. DRESS. MILDRED L. JAMES, Brooklyn, N. Y. Filed Aug. 31, 1931. Serial No. 40,970. Term of patent 3½ years.



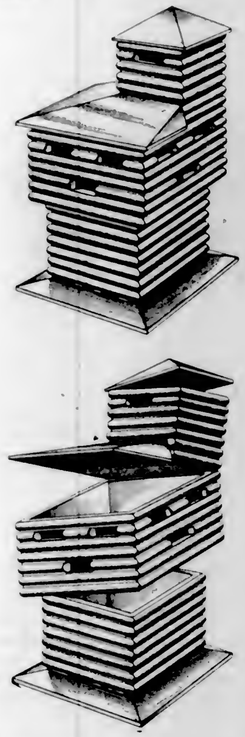
The ornamental design for a dress as shown and described.

87,216. GRAVE VAULT. JAMES A. JENSEN, Philadelphia, Pa. Filed Apr. 18, 1931. Serial No. 39,546. Term of patent 7 years.



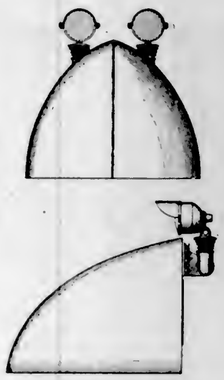
The ornamental design for a grave vault, as shown.

87,217. BOX FOR CONFECTIONERY AND OTHER MERCHANDISE. ERNEST A. KAHLE, Chicago, Ill. Filed Apr. 4, 1932. Serial No. 43,384. Term of patent 3½ years.



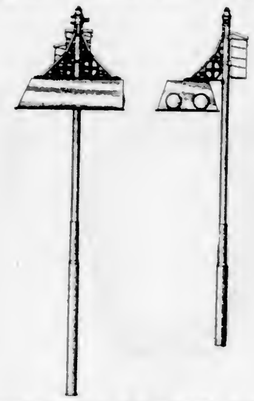
The ornamental design for a box for confectionery and other merchandise, substantially as shown and described.

87,218. BULKHEAD SIGNAL. WILLIAM G. KEITH and JOSEPH A. MANARIK, Chicago Ill., assignors to Welsbach Traffic Signal Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 19, 1932. Serial No. 42,940. Term of patent 14 years.



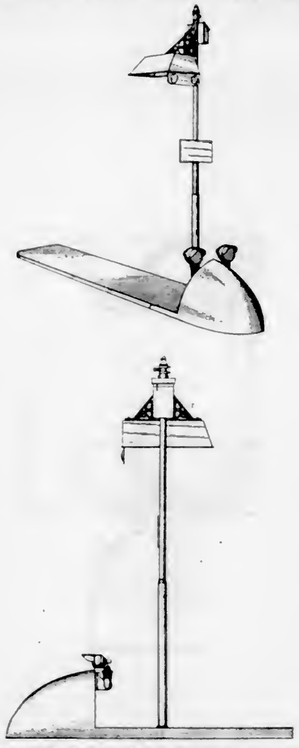
The ornamental design for a bulkhead signal substantially as shown and described.

87,219. TRAFFIC LIGHT DEVICE. WILLIAM G. KEITH and JOSEPH A. MANARIK, Chicago, Ill., assignors to Welsbach Traffic Signal Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 19, 1932. Serial No. 42,941. Term of patent 14 years.



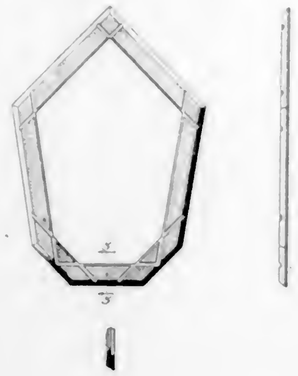
The ornamental design for a traffic light device substantially as shown and described.

87,220. LOADING ZONE SIGNAL PLATFORM. WILLIAM G. KEITH and JOSEPH A. MANARIK, Chicago, Ill., assignors to Welsbach Traffic Signal Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 19, 1932. Serial No. 42,942. Term of patent 14 years.



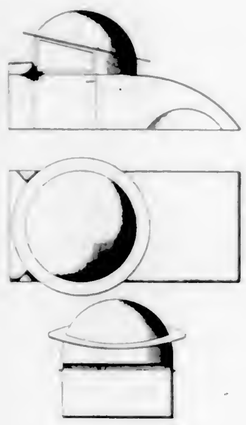
The ornamental design for a loading zone signal platform substantially as shown and described.

87,221. FRAME FOR PICTURES, MOTTOES, AND THE LIKE. FRANK H. KLIE, Chicago, Ill. Filed Nov. 23, 1931. Serial No. 41,818. Term of patent 3½ years.



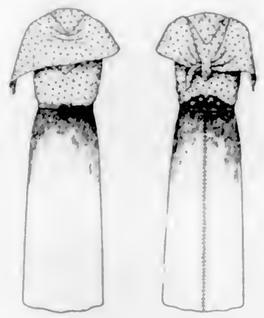
The ornamental design for a frame for pictures, mottoes, and the like substantially as shown and described.

87,222. VEHICLE BODY. FREDERICK LILLICH, Philadelphia, Pa. Filed Mar. 31, 1932. Serial No. 43,338. Term of patent 7 years.



The ornamental design for a vehicle body, as shown.

87,223. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 3, 1932. Serial No. 43,061. Term of patent 3½ years.



The ornamental design for a dress substantially as shown and described.

87,224. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 3, 1932. Serial No. 43,064. Term of patent 3½ years.



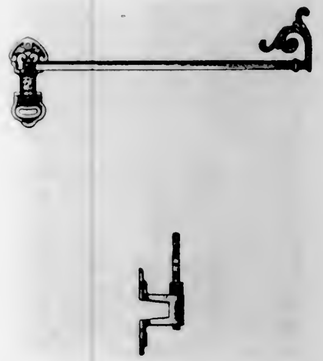
The ornamental design for a dress substantially as shown.

87,225. AUTOMOBILE RADIATOR ORNAMENT OR SIMILAR ARTICLE. LILLYMAY LOWERY, Los Angeles, Calif. Filed Oct. 26, 1931. Serial No. 41,520. Term of patent 3½ years.



The ornamental design for an automobile radiator ornament or similar article as shown.

87,226. CURTAIN SUPPORT. FRANCIS E. MASSELIN, Providence, R. I., assignor to Dovercraft Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Apr. 15, 1932. Serial No. 43,501. Term of patent 3½ years.



The ornamental design for a curtain support, substantially as shown.

87,227. CURTAIN SUPPORTING STRUCTURE. FRANCIS E. MASSELIN, Providence, R. I., assignor to Dovercraft Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed Apr. 15, 1932. Serial No. 43,502. Term of patent 3½ years.



The ornamental design for a curtain supporting structure, substantially as shown.

87,228. BOWL FOR A FRUIT JUICE EXTRACTOR. MICHAEL W. MCARDLE, Chicago, Ill. Filed Mar. 14, 1932. Serial No. 43,189. Term of patent 14 years.



The ornamental design for a bowl for a fruit juice extractor, substantially as shown.

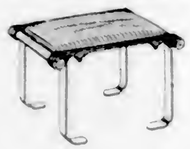
87,229. FOOT STOOL. WILLIAM R. MCGOWEN, Pittsburgh, Pa., assignor to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1932. Serial No. 43,515. Term of patent 14 years.

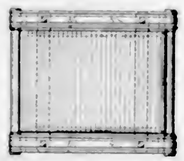




The ornamental design for a foot stool, as shown.

87,230. FOOT STOOL. WILLIAM R. MCGOWEN, Pittsburgh, Pa., assignor to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1932. Serial No. 43,516. Term of patent 14 years.

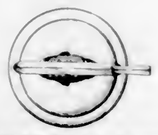




The ornamental design for a foot stool, as shown.

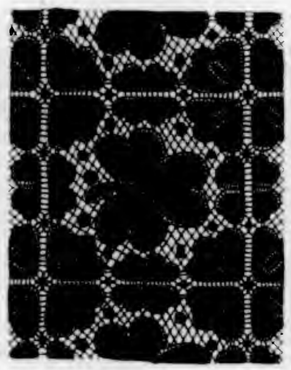
87,231. RADIATOR CAP. WILFRED R. MILNER, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 22, 1932. Serial No. 43,573. Term of patent 3½ years.





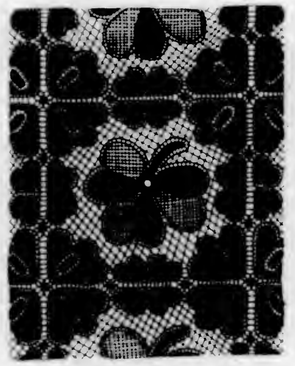
The ornamental design for a radiator cap, as shown.

87,232. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 9, 1932. Serial No. 43,436. Term of patent 7 years.



The ornamental design for lace substantially as shown.

87,233. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 9, 1932. Serial No. 43,437. Term of patent 7 years.



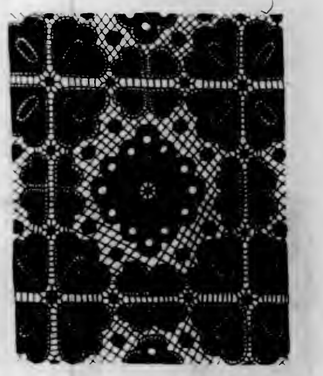
The ornamental design for lace substantially as shown.

87,234. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 9, 1932. Serial No. 43,438. Term of patent 7 years.



The ornamental design for lace substantially as shown.

87,235. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 9, 1932. Serial No. 43,439. Term of patent 7 years.



The ornamental design for lace substantially as shown.

87,236. COFFEE MAKER OR SIMILAR ARTICLE. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc., a Corporation of New York. Filed Apr. 30, 1932. Serial No. 43,671. Term of patent 14 years.



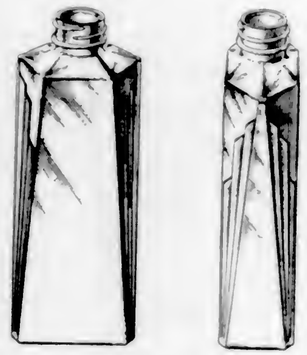
The ornamental design for a coffee maker or similar article substantially as shown and described.

87,237. COFFEE MAKER OR SIMILAR ARTICLE. RAYMOND E. PATTEN, Oak Park, Ill., assignor to Edison General Electric Appliance Company, Inc., a Corporation of New York. Filed Apr. 30, 1932. Serial No. 43,672. Term of patent 14 years.



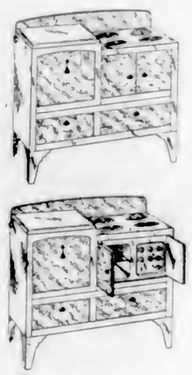
The ornamental design for a coffee maker or similar article substantially as shown and described.

87,238. BOTTLE. FREDERICK N. PEREGOY, Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Apr. 26, 1932. Serial No. 43,610. Term of patent 14 years.



The ornamental design for a bottle, as shown.

87,239. ELECTRIC COOK STOVE. CHARLES A. PIERSON, Toledo, Ohio, assignor to The Standard Electric Stove Co., Toledo, Ohio, a Corporation of Ohio. Filed Apr. 14, 1932. Serial No. 43,491. Term of patent 7 years.



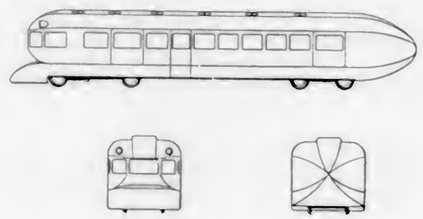
The ornamental design for an electric cook stove, substantially as shown.

87,240. TEETHING DEVICE. LOUIS N. PODELL, Milwaukee, Wis. Filed Oct. 23, 1931. Serial No. 41,501. Term of patent 7 years.



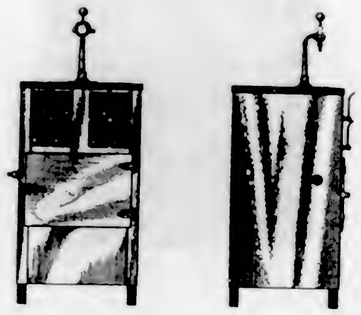
The ornamental design for a teething device substantially as shown.

87,241. MOTOR VEHICLE. HAROLD H. ROBINSON, Opa Locka, Fla. Filed Apr. 2, 1932. Serial No. 43,372. Term of patent 14 years.



An ornamental design for a motor vehicle, substantially as shown and described.

87,242. SODA FOUNTAIN REFRIGERATOR. MATTHEW A. ROSENTHAL, Brooklyn, N. Y. Filed Mar. 14, 1932. Serial No. 43,178. Term of patent 14 years.



The ornamental design for a soda fountain refrigerator, as shown.

87,243. CAKE ORNAMENT OR SIMILAR ARTICLE. WALTER F. SEIDEL, Chicago, Ill. Filed Dec. 8, 1931. Serial No. 42,000. Term of patent 14 years.



The ornamental design for a cake ornament or similar article as shown.

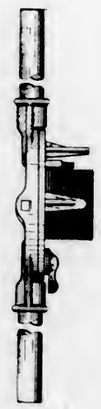
87,244. COMBINED SIGN FRAME AND HOLDER. ABRAHAM SPRUNG, New York, N. Y., assignor to Municipal Street Sign Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 26, 1932. Serial No. 43,617. Term of patent 14 years.



The ornamental design for a combined sign frame and holder, as shown.

87,245. PIPE THREADING DIE HOUSING. WILLIAM O. THEWES, North Ridgeville, Ohio. Filed Jan. 5, 1931. Serial No. 38,194. Term of patent 14 years.





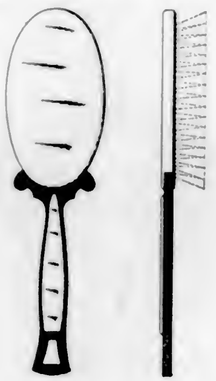
The ornamental design for a pipe threading die housing substantially as shown.

87,246. DISPENSER. PAUL G. WAGNER, Los Angeles, Calif., assignor to Nesbitt Fruit Products, Inc., Los Angeles, Calif., a Corporation of California. Filed Feb. 23, 1932. Serial No. 42,968. Term of patent 14 years.



The ornamental design for a dispenser, as shown.

87,247. TOILET BRUSH OR SIMILAR ARTICLE. JOSEPH S. WILCOX, Athol, Mass., assignor to The Wilcox Company, Athol, Mass., a Corporation of Massachusetts. Filed Apr. 30, 1932. Serial No. 43,668. Term of patent 7 years.

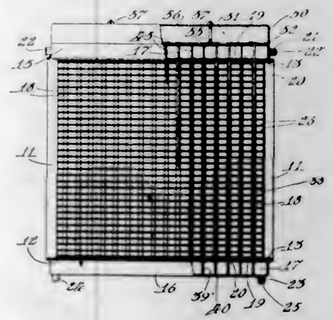


The ornamental design for a toilet brush or similar article as shown.

PATENTS

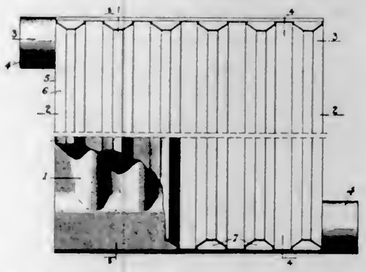
GRANTED JUNE 21, 1932

1,863,554. HEAT RADIATOR. HARRY C. ALBERTS, Chicago, Ill. Filed Mar. 5, 1929. Serial No. 344,263. 7 Claims. (Cl. 257—137.)



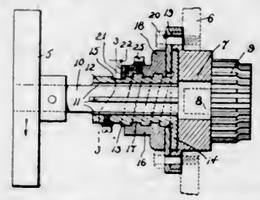
4. In a room heating unit, the combination with spaced intake and outlet headers, of spaced heat tubes disposed between said headers to establish communication therebetween, closely associated plates transversely secured to said heat tubes between said headers to serve as heat radiating surfaces, tubular members disposed axially within said heat tubes to form concentric passages therein for conveying the heat medium between said headers, and an air header in communication with said tubular members, for detachable association with one of said heat tube headers.

1,863,555. SHEET METAL RADIATOR. RUPERT CASTIAUX, Bordeaux, France. Filed Feb. 13, 1931, Serial No. 515,617, and in France Feb. 17, 1930. 3 Claims. (Cl. 257—141.)



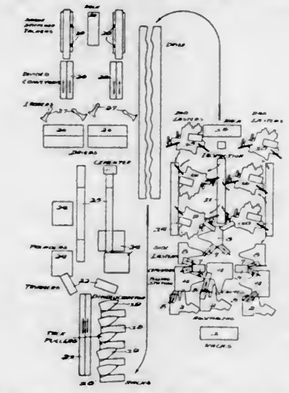
1. A sheet metal radiator comprising a pair of metal sheets having vertical corrugations extending over part of their height and having their upper and lower edges bent inwardly, the said sheets having their flanges and the inner generatrixes of their corrugations juxtaposed so as to provide between the said upper and lower flanges and the respective ends of the said corrugations, horizontal manifolds into which the vertical conduits formed by the said corrugations open, and a pair of metal sheets provided with vertical corrugations and applied respectively with the inner generatrixes of their corrugations against the outer generatrixes of the corrugations of the first mentioned sheets, the said sheets providing therebetween air channels open at the top and bottom thereof.

1,863,556. SELF-ENGAGING REVERSE MOTION BRAKE. HERBERT T. COTTRELL, Vancouver, British Columbia, Canada. Filed July 21, 1927. Serial No. 207,392. 3 Claims. (Cl. 188—30.)



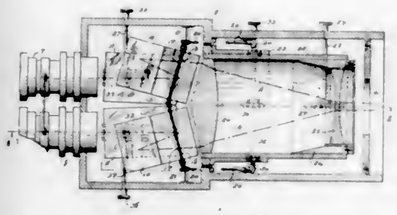
2. A brake mechanism adapted to arrest the rotation of the transmission drive shaft of an automotive vehicle and comprising an externally screw-threaded sleeve provided with a flange lying at right angles to the axis of the screw and having a friction face, said sleeve being slidable along and keyed to said shaft, a nut member having a right-angularly-positioned flange provided with a friction face corresponding to and opposite the friction face of the first mentioned flange, said nut member having an internal screw-thread adapted to engage the thread of said sleeve member, a nonrotatable member adapted to project between the friction faces of said flanges and adapted to resist the frictional engagement of said flanges when said flanges are brought into contact with said nonrotatable member, means independent of the shaft for retaining said nut member upon the sleeve, and a spring secured one end to said sleeve and the other end to said nut member tending to screw the same together.

1,863,557. SYSTEM OF MANUFACTURING SHOES. MYRON O. FROST, Richmond Heights, Mo., assignor to Johnson, Stephens and Shinkle Shoe Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 24, 1931. Serial No. 558,922. 15 Claims. (Cl. 12—142.)



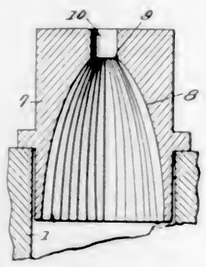
1. The art of making shoes in which parts of shoes are assembled and the assemblies progressed to successive stations where successive operations are performed, characterized by the feature that the stations are arranged in series-shunt relation in accordance with their relative capacities, and that the assemblies are conveyed from a selected anterior station and guided directly to and distributed between several selected posterior stations.

1,863,558. BINOCULAR PHOTOGRAPHIC DEVICE. LAWRENCE HOLDER, Los Angeles, Calif. Filed Jan. 24, 1930. Serial No. 423,219. 2 Claims. (Cl. 88—1.)



1. A photographic apparatus, comprising a casing, a pair of lens barrels at the front of the casing, pairs of opposed prisms within the casing for receiving light rays from each barrel, one prism of each pair reflecting the rays from the barrel to the other prism, a substantially flat prism receiving the light rays from said other prism, lenses rearwardly of the casing in front of an opening therein through which the light rays from the flat prism pass, a base for each pair of prisms and within the casing, an extensible standard supported on each base, means swingingly connecting the prisms of the pairs and standards, means manually operable without the casing to adjust the standards, and mechanism operative on one prism of each pair and said flat prism for simultaneous adjustment thereof with respect to each other.

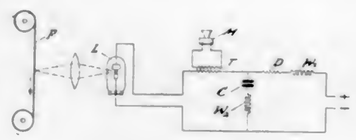
1,863,559. FEEDER FOR INGOT MOLDS. BLOOMFIELD H. HOWARD, Washington, D. C. Filed June 18, 1929. Serial No. 371,776. 7 Claims. (Cl. 22—147.)



1. A feeder for ingot molds comprising a heat retaining body portion adapted to cooperate with the upper end of a mold and having its interior walls provided with many reflecting faces extending upwardly and curved inwardly and terminating in an opening.

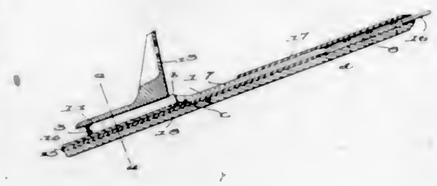
1,863,560. APPARATUS FOR RECORDING ELECTRIC ALTERNATING CURRENTS BY MEANS OF A VOLTAIC ARC. HEINRICH KÖNEMANN, Munster, Germany. Filed Oct. 20, 1928, Serial No. 314,307, and in Germany Oct. 29, 1927. 3 Claims. (Cl. 179—100.3.)

1. The method of recording sound by means of a voltaic arc operating between oxide coated electrodes in a gas, which comprises passing a direct current therethrough to produce the voltaic arc at a temperature below the point of substantial heat ionization of the gas, and modulating



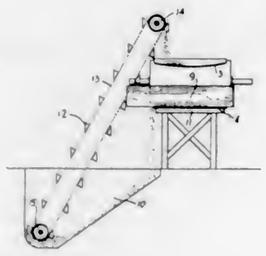
the direct current by a sound current whereby to vary the light intensity of the arc, and recording the light fluctuations of the arc.

1,863,561. SNOW GUARD. RICHARD J. BRINKER, Pittsburgh, Pa., and CASPER J. BRINKER, Cumberland, Md. Filed Nov. 5, 1929. Serial No. 405,036. 2 Claims. (Cl. 108—27.)



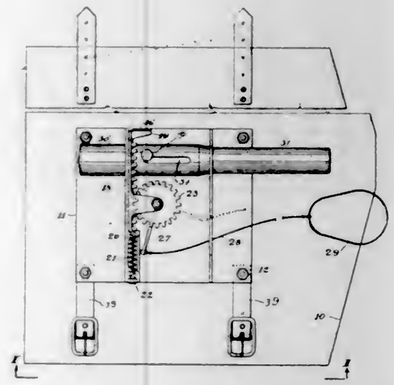
1. A snow guard for roofs, including a securing bar formed of a strip of suitable material having outer, intermediate and inner end portions in different horizontal planes, stepped upwardly from the inner end of said strip to the outer end thereof, the outer end terminating in a head adapted, when the device is in place, to lie and be exposed upon the upper surface of the lower portion of a shingle course, and a guard slidable longitudinally of said head and applicable thereto and removable therefrom, without disturbing the roof elements, and means for limiting the downward movement of said guard.

1,863,562. BELT CONSTRUCTION AND METHOD OF USE. JAMES P. CANNON, Elizabeth, N. J., assignor to Structural Gypsum Corporation, Linden, N. J., a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 397,581. 8 Claims. (Cl. 198—202.)



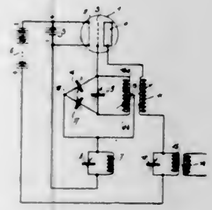
1. In combination, an endless belt having parallel top and bottom portions, stationary guides extending between the top and bottom portions to direct material spilled from the top to the bottom portions, means to remove the material from the bottom portion, and means to return the same to the top portion.

1,863,563. CONCEALED WEAPON. ELMER CARLSTROM, Chicago, Ill. Filed Jan. 2, 1932. Serial No. 584,347. 5 Claims. (Cl. 42—1.)



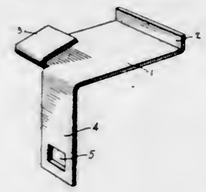
1. In a device of the class described, a frame; a rack bar slidably mounted on said frame; an abutment on one end of said rack bar; a gear wheel pivotally mounted on said frame and in mesh with said rack bar; a lever secured on said gear wheel, and a cartridge exploding device mounted in said frame and having a trigger, the movement of said gear wheel being adapted to move said rack bar to release said trigger.

1,863,564. METHOD AND APPARATUS FOR CHANGING FREQUENCY FOR RADIOSIGNALING. LUCIEN CHRETIEN, Paris, France. Filed Jan. 14, 1928, Serial No. 246,878, and in France Jan. 15, 1927. 5 Claims. (Cl. 250—20.)



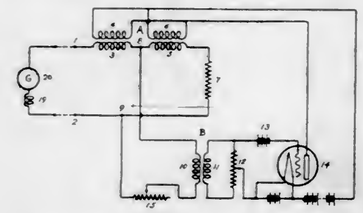
1. A device for changing frequency having a three-element electron tube and inductively coupled grid and plate circuits, comprising a first oscillating circuit furnishing a local frequency, a second oscillating circuit carrying the frequency to be transformed, said first and second circuits being introduced both into the said grid circuit, a third oscillating circuit introduced into the plate circuit and carrying the transformed frequency, and a pair of variable condensers each having one of their plates connected to the terminals of said first oscillating circuit, the other plates being connected to the middle point of the inductance of said first oscillating circuit forming an equipotential connection to which is connected the second oscillating circuit.

1,863,565. SLAB CEILING CONSTRUCTION AND MEANS FOR HANGING THE SLABS. CLARKE F. DAVIS, Westfield, and EDWARD R. SAUNDERS, Cranford, N. J., assignors to Structural Gypsum Corporation, Linden, N. J., a Corporation of Delaware. Filed July 5, 1929. Serial No. 375,927. 2 Claims. (Cl. 72—118.)



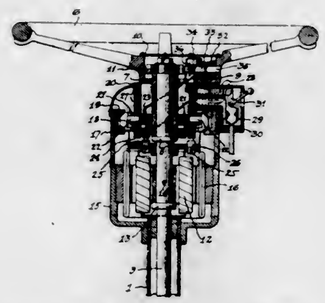
1. As an article of manufacture, a hanger for suspending precast slabs from the bottom flange of a beam comprising a body portion adapted to underlie the bottom flange of the beam, a foot at one edge of the body portion adapted to overlie the flange, a vertically upstanding heel at the opposite edge of the body adapted to extend upwardly alongside of the beam, and an apertured leg depending from the body portion.

1,863,566. NEGATIVE RESISTANCE. MIHRAN M. DOLMAGE, Washington, D. C. Filed Jan. 13, 1927. Serial No. 160,978. 11 Claims. (Cl. 179—171.)



1. An electrical network, means to connect said network to an outside circuit, a detecting-amplifying system in said network, and means to superimpose upon said outside circuit the electromotive force of the final output circuit of said amplifying system in combination with means to prevent said electromotive force from being impressed upon the input circuit of said amplifying system.

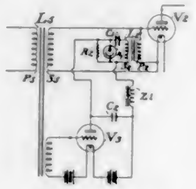
1,863,567. ELECTRICAL STEERING DEVICE. FRANK E. FISHER, Detroit, Mich. Filed June 6, 1931. Serial No. 542,634. 8 Claims. (Cl. 172—239.)



1. A steering device comprising a steering shaft, a steering wheel rotatable on said shaft, a field winding carried by said shaft, a fixed housing surrounding said

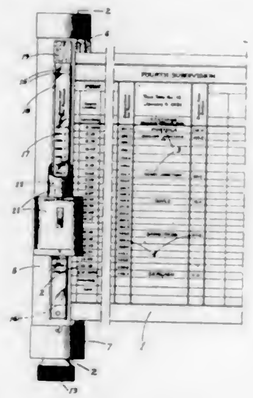
shaft, an armature carried by said housing and surrounding said field winding, a commutator for said armature, brushes rotatable with said wheel and engaging said commutator, and an electrical circuit including said brushes, commutator, armature and field winding.

1,863,568. RADIO. OLIVER T. FRANCIS, Quantico, Va. Filed Dec. 17, 1928. Serial No. 326,658. 2 Claims. (Cl. 179—171.)



1. In a vacuum tube amplifier set, a vacuum tube amplifier, a grid leak consisting of the primary of a transformer, an element in the secondary of said transformer which becomes highly conductive to electricity when a predetermined voltage is impressed thereon, and means for producing said predetermined voltage by rectifying a portion of the input energy of said set thereby virtually short-circuiting signal voltages above a predetermined valve from the grid to the filament of said tube.

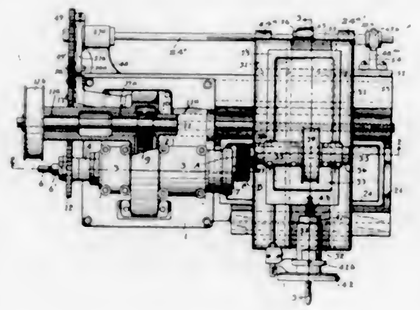
1,863,569. ILLUMINATED CHART READING DEVICE. HORACE HOUSE, Oroville, Calif. Filed Aug. 28, 1931. Serial No. 559,859. 9 Claims. (Cl. 40—85.)



1. A chart holding device comprising a barrel having a longitudinal slot, a spool turnably mounted in the barrel and on which the chart is wound with the unwound portion projecting through the slot, and a source of artificial illumination carried by the device and including a lamp mounted on the barrel adjacent the slot and movable lengthwise thereof.

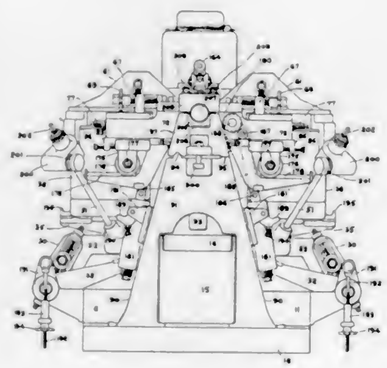
1,863,570. MACHINE FOR CUTTING THREADS AND CUTTING TEETH IN BODIES. ERNEST J. LEES, Cleveland, Ohio, assignor to The Lees-Bradner Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 22, 1924, Serial No. 694,452. Renewed Nov. 11, 1929. 47 Claims. (Cl. 10—154.)

1. In a machine of the class described, a work spindle adapted to support a work piece, a thread milling tool, means for moving the tool and work piece relatively to each other, means for guiding the relative movement along a general direction oblique to the axis of the work spindle to cause the tool to engage the work piece on a



cone shaped portion thereof, said means comprising a pair of tapered rollers arranged with their axes parallel to the axis of the work spindle, one adapted to roll upon and move longitudinally relatively to the other.

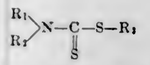
1,863,571. MACHINE AND PROCESS FOR GENERATING GEARS. ERNEST J. LEES, Cleveland, Ohio, assignor to H. T. Bradner, Cleveland, Ohio. Filed Feb. 12, 1925. Serial No. 8,710. 9 Claims. (Cl. 51—52.)



1. The method of generating involute faces on the successive teeth of a gear which includes mounting the gear on a stationary work holder, moving the planular faces of a pair of grinding wheels over the opposite faces of two teeth of the gear simultaneously, controlling the movement of the wheel faces to move on involute paths by causing them to move in unison with a pair of lines rocking simultaneously, on a circle of the gear, the lines each making a constant pre-determined angle with one of the planular wheel faces and indexing the gear teeth after each pair of faces has been ground by indexing the work holder.

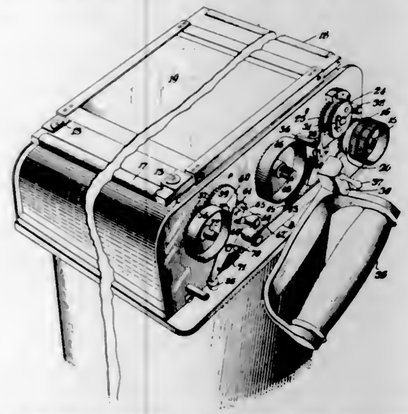
1,863,572. N-SUBSTITUTED DITHIOCARBAMIC ACIDS AND THE SALTS THEREOF. WILHELM LOMMEL, Wiesdorf-on-the-Rhine, THEODOR GOOST, Leverkusen-on-the-Rhine, and HERMANN FRIEDRICH, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 15, 1927, Serial No. 240,332, and in Germany Dec. 18, 1926. 7 Claims. (Cl. 260—108.

1. As new products the compounds of the general formula:



wherein R_1 represents an alicyclic radicle, R_2 a monovalent hydrocarbon radicle selected from the class consisting of alicyclic, alkyl, aryl and aralkyl radicles and R_3 hydrogen, a metal, ammonium, or ammonium having at least one hydrogen replaced by a radicle selected from the class consisting of alicyclic, alkyl, aryl and aralkyl radicles.

1,863,573. CAMERA MECHANISM. FREDERICK W. LUTZ, Floral Park, and AMBROSIUS BRIECHLE, Brooklyn, N. Y., assignors to Fairchild Aerial Camera Corporation, New York, N. Y., a Corporation of New York. Filed July 3, 1931. Serial No. 548,500. 11 Claims. (Cl. 95—12.5.)



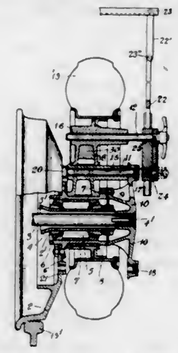
1. In an aerial camera, a roll film magazine, said camera being provided with an exposure opening and a transparent plate adapted to be releasably held thereover by attachment devices, said camera also being adapted to receive magazines containing plates or cut film without the removal of said roll film magazine or reels or film advancing mechanism associated therewith, and by the mere removal of said transparent plate and insertion in lieu thereof, said magazine containing plates or cut film and retention in place by said attachment devices, and a shutter and operating means therefor operable in the same manner in each instance of use of said photosensitive materials.

1,863,574. SUPPORT FOR HOT TOPS. EUGENE L. MESSLER, Pittsburgh, Pa. Filed July 31, 1931. Serial No. 554,219. 2 Claims. (Cl. 22—147.)



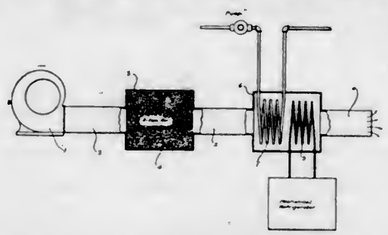
1. Means for supporting a hot top on an ingot mold comprising a flat ring retardedly disintegratable at the temperatures existing during the teeming and solidification of an ingot, an annulus attached to the lower face of the ring intermediate its width to extend downwardly in a generally perpendicular direction therefrom, said annulus being flexible to conform closely to the bore wall of an ingot mold cavity to form with the flat ring a seal therein, and an annulus extending upwardly from the opposite face of the ring intermediate its width and constituting a positioning element surrounding the hot top and in co-operation with the flat ring forming a seal at the lower edge of the hot top.

1,863,575. ROAD AND RAIL TRANSPORT. ALISTAIR HOPE DALGAIRN MONCRIEFF, Westminster, London, and JOHN SHEARMAN, Hampstead, London, England, assignors to Karrier Motors Limited, Huddersfield, England. Filed Jan. 22, 1930, Serial No. 422,528, and in Great Britain Jan. 29, 1929. 8 Claims. (Cl. 105—215.)



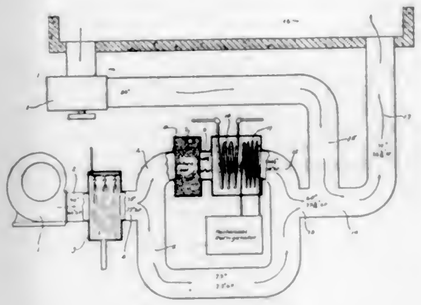
1. Vehicles which are provided with principal wheels adapted for running upon rails and with road wheels permanently mounted upon outer hubs formed on the principal wheels, means being provided whereby the road wheels may be moved into eccentricity relative to the rail wheels when travelling upon the rails.

1,863,576. APPARATUS AND METHOD OF AIR CONDITIONING. CLARK T. MORSE and EDWARD L. HOGAN, Detroit, Mich., assignors to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 408,953. 2 Claims. (Cl. 62—76.)



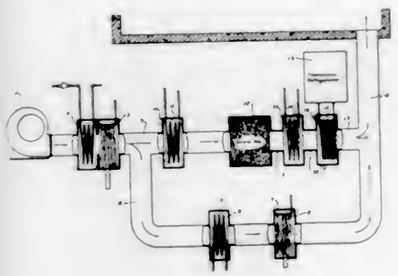
1. In an apparatus for conditioning air, means forming an air passageway, a container in said passageway containing silica gel for removing at least a portion of the moisture in the air, and a second container in said passageway, said second container having water cooled coils for conducting water of known temperature and adapted to impart one stage of temperature to the air and refrigeration coils for conducting a refrigerant of known temperature content from an independent source than that of said coils first mentioned adapted to impart a second stage of temperature to the air, whereby the temperature of the air is reduced as desired without changing the moisture content of the air as it passes from the silica gel.

1,863,577. APPARATUS AND METHOD OF AIR CONDITIONING. CLARK T. MORSE and EDWARD L. HOGAN, Detroit, Mich., assignors to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 408,954. 9 Claims. (Cl. 62—176.)



1. In a method of controlling air conditions, standardizing untreated air to a predetermined temperature and dew point, dividing the standardized air into two streams, treating one of said streams of air of predetermined temperature and dew point to reduce the dew point and elevate the temperature, reducing the temperature of said stream without disturbing the dew point and rejoining the two streams.

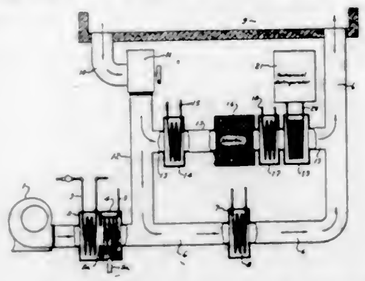
1,863,578. APPARATUS AND METHOD OF AIR CONDITIONING. CLARK T. MORSE and EDWARD L. HOGAN, Detroit, Mich., assignors to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 408,955. 8 Claims. (Cl. 62—176.)



1. In a method of air conditioning, precooling an air stream, dividing said stream, cooling a portion of the divided stream, precooling the other portion of the divided stream, then dehumidifying the last portion and again cooling the dehumidified portion and reconsolidating the streams.

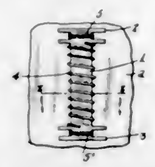
1,863,579. METHOD AND APPARATUS OF AIR CONDITIONING. CLARK T. MORSE and EDWARD L. HOGAN, Detroit, Mich., assignors to American Blower Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Nov. 22, 1929, Serial No. 408,955. Divided and this application filed May 18, 1931. Serial No. 538,035. 9 Claims. (Cl. 62—176.)

1. In a method of air conditioning, precooling and dehumidifying an incoming air stream, removing from an enclosure a body of recirculation air, delivering a portion of it into the incoming fresh air, dehumidifying and cooling the other portion of it, consolidating the mixed fresh air



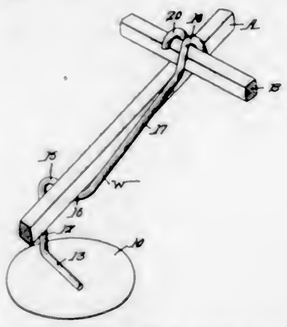
and recirculation air and the dehumidified cooled air into a common stream, and returning said stream to the original enclosure.

1,863,580. MEANS FOR SECURING ORNAMENTS TO WEARING APPAREL. WILLIAM L. MYERS, Newark, N. J., assignor to L. A. Myers, Jr. Inc., Newark, N. J., a Corporation of New Jersey. Filed May 14, 1931. Serial No. 537,417. 6 Claims. (Cl. 2—245.)



1. An ornament fastener comprising a helical spring adapted to be secured to wearing apparel and a co-operating ornament, alined tongues on the back thereof extending towards one another and adapted to engage the spring ends and lie within the coils.

1,863,581. ROAD CHAIR. HOWARD W. NESTER, Worcester, Mass., assignor to Parker Wire Goods Company, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 20, 1930. Serial No. 489,726. 3 Claims. (Cl. 94—8.)



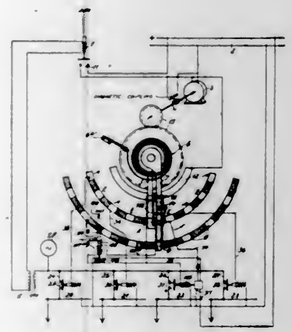
1. A road chair comprising a substantially flat sheet metal base of extended area and a single piece of wire having a foot portion permanently and rigidly secured to said base, said wire extending upwardly from said base and having portions bent to engage and position a plurality of reenforcing members supported thereby.

1,863,582. AIRSHIP PROPELLER. GENE J. PARK, New York, N. Y. Filed May 15, 1930. Serial No. 452,618. 1 Claim. (Cl. 170—153.)



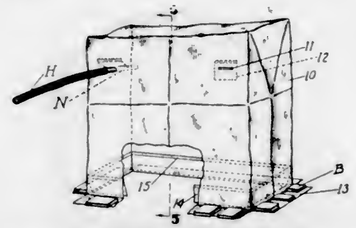
A compound propeller mechanism for airships, which mechanism comprises an annular gear affixed to the said ship concentrically to the drive shaft thereof, a cross shaft affixed to the said drive shaft, blade elements rotatably mounted on the said cross shaft and pinions on the said blade elements in mesh with the said annular gear, and fixed blade elements mounted on the said cross shaft adjacent to the blade elements before mentioned.

1,863,583. GROUND DETECTOR. ROBERT SCHIMPF, Berlin-Schlachtensee, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Apr. 15, 1929, Serial No. 355,360, and in Germany Apr. 23, 1928. 7 Claims. (Cl. 175—294.)



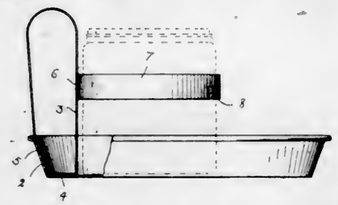
1. In a supervising arrangement for an electric line system, having a plurality of line sections and a breaker for each section, a ground indicating device, comprising an opening and a reclosing device for each breaker, means responsive to grounds which may occur in any of said sections, an automatically moving switching device, actuated by said ground responsive means in case of ground occurrence, and having circuit connections for immediately successively actuating the breaker opening and closing devices of each sound line section encountered, an auxiliary control device for the breaker reclosing device of each line section, actuated by its open breaker for energizing the reclosing device of the breaker of a defective line section, and means controlled by said switching device and responsive in case of a ground persistence after reclosing of the breaker by said auxiliary device for reactuating the breaker opening device and for rendering said auxiliary control device inoperative to prevent the reconnection of the defective line section.

1,863,584. APPARATUS FOR EXTERMINATING INSECTS. PRATT E. TRACY, Toledo, Ohio, assignor to The Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Ohio. Filed May 18, 1931. Serial No. 538,014. 7 Claims. (Cl. 167—3.)



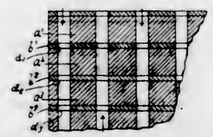
5. An article of manufacture comprising an open mouth receptacle adapted to be drawn over an article until the mouth thereof contacts with a supporting surface, flexible flap means secured to and extending completely around the inside of the bag walls, and means securing one end of said flap means to the bag walls, the lower edge of said flap means being free and adapted to extend away from the bag walls for engagement with the supporting surface for providing a continuous air chamber around the bag mouth.

1,863,585. HOLDER. CLARENCE P. WALKER, Duluth, Minn., assignor to Arthur M. Fay, Chicago, Ill. Filed Dec. 18, 1929. Serial No. 415,099. 1 Claim. (Cl. 248—65.)



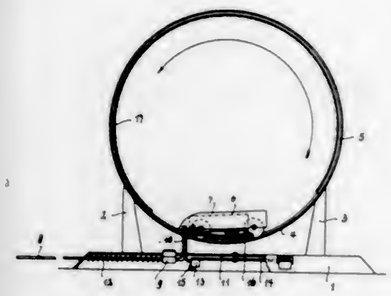
A holder of the type described comprising a base portion, an upstanding handle portion fixed to said base portion, a circular resilient member fixed to the handle portion, said member being provided with means for manually varying its diameter for the purpose described, said means including a scarfed union of the termini of the circular resilient member resulting in uniform size and shape of said circular member, the extremities of which are turned upwardly for convenience in adjustment.

1,863,586. HEAT EXCHANGER. ERNST WILKE, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 18, 1930, Serial No. 429,255, and in Germany Sept. 10, 1928. 2 Claims. (Cl. 257—245.)



1. A heat exchanger comprising at least two passageways for passing fluids therethrough confined by and separated from each other by wall consisting of metal subdivided transversely to the direction of flow of said fluid by at least one layer of a material of poor thermal conductivity.

1,863,587. MECHANICAL TOY. CARL ARNOLD, Nuremberg, Germany. Filed Aug. 25, 1931, Serial No. 559,226, and in Germany Mar. 26, 1931. 5 Claims. (Cl. 46—48.)



1. A mechanical toy, comprising in combination a hoop having a slot and travelling grooves, a vehicle loosely placed in the grooves of said hoop, and a spring actuated tensioning and propelling device adapted to operate through said slot and to cause said vehicle to travel in a circle in said hoop owing to the centrifugal force

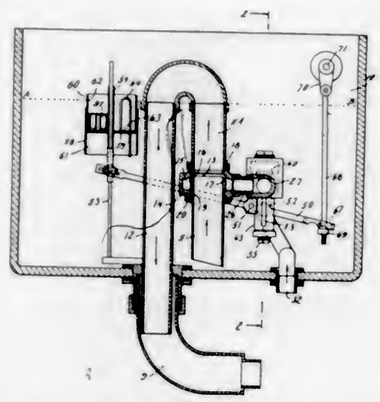
1,863,588. CLOTHESPIN. RALPH L. BALL, South Berwick, Me. Filed Apr. 22, 1931. Serial No. 531,909. 2 Claims. (Cl. 24—139.)



1. A clothes-pin made of wire bent to present a particircular resilient body portion and two jaw portions within the body portion, said jaw portions having a crossing relation, whereby when the clothes-pin is removed from the clothes-line the resiliency of the body will cause them to engage each other and thus limit the contracting movement of the body, and a continuation of the wire from each jaw being bent about the body portion to provide guides for movement of the jaws and being further bent upwardly from the guiding portion, past one side of the body and downwardly past the other side of the body thereby to present two jaw-opening handles having flat faces occupying planes perpendicular to the plane of the body.

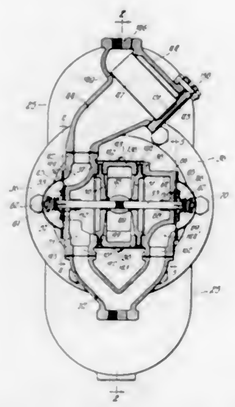
1,863,589. FLUSH TANK FIXTURE. ALFRED A. BRIGGS, New York, N. Y., assignor of one-half to Josiah A. Briggs, New York, N. Y. Filed Feb. 4, 1931. Serial No. 513,267. 13 Claims. (Cl. 4—44.)

1. In a flush tank fixture, a tank, a U-shaped outlet pipe having an inlet leg extending to a position adjacent the bottom of the tank and an outlet leg extending through the bottom of the tank, a pressure main adapted to supply water to said outlet pipe and to the tank, a valve arranged to control the water supply, a float arranged to control the valve, said float comprising an open ended cylinder, a subdividing disc intermediate the ends thereof, the upper edge of said cylinder being slightly above the upper water level in the tank, manual means for depressing the float to initiate the opening of the valve



and to cause the float to sink, and means for permitting the water to escape gradually from the upper part of said cylinder to restore the buoyancy of the float.

1,863,590. VALVE. OSCAR F. CARLSON, Chicago, Ill., assignor to Oscar F. Carlson Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1928. Serial No. 254,345. 15 Claims. (Cl. 137—101.)

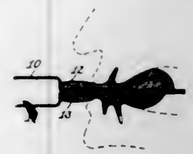


1. A heating system including a boiler, an inlet valve for admitting liquid to said boiler, an outlet valve for draining said boiler, and a common operating shaft connecting said valve and the shaft being mounted for rocking movement on its axis and said valves being mounted upon the shaft for movement therewith.

1,863,591. DENTAL PLASTIC COMPOSITION. WALTER S. CROWELL, Melrose Park, Pa., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 25, 1928. Serial No. 272,736. 4 Claims. (Cl. 18—47.)

1. A mold forming composition comprising 20 to 50% by volume of rounded particles of a heat resisting solid

having a positive coefficient of thermal expansion and having a small surface area and varying in size and being smaller than 20 mesh but not more than substantially



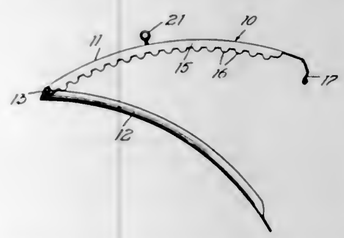
10% of the same being smaller than 200 mesh, and 80 to 50% by volume of a binding cement which sets in the cold by reason of chemical action.

1,863,592. FOOTWEAR. ROBERT T. DAWES, Hudson, Mass. Filed Mar. 20, 1931. Serial No. 524,012. 5 Claims. (Cl. 36—50.)



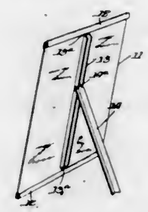
1. A shoe having an upper comprising means forming an external tubular bead, said bead on the upper being below the top edge of the upper and defining a channel extending around the top portion of the upper with its ends opening at the front of the shoe, and a strap extending through said channel, the strap having loops at its ends for the reception of the shoe lace.

1,863,593. WAVER. ROSE EHRLICH, New York, N. Y., assignor to Lapin Specialty Mfg. Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 18, 1932. Serial No. 593,706. 5 Claims. (Cl. 132—41.)



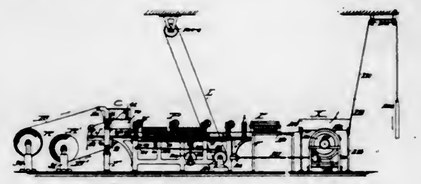
1. An apparatus as characterized comprising a pair of elongated pivotally connected members, said members being longitudinally curved to accommodate the shape of the head, one of said members being cupped transversely to rest upon the scalp of the head and support the other member away from the scalp, the supported member having dependent edges serrated to engage the hair disposed between said pivoted members to avoid the forward movement thereof during the waving period, a hair waver slidably mounted on said supported member between said edges and in approximately parallel relation thereto, means on said supported member for carrying said lever, said hair waver having a series of teeth struck down therefrom to near the cupped member when the pivoted members are closed in service position, and means for sliding said hair waver lengthwise of the apparatus to force the hair held between said pivoted members, toward the forward end thereof.

1,863,594. DISPLAY EASEL. EARL H. GLENDE, Chicago, Ill., assignor, by mesne assignments, to Henry Jay Stephens, Chicago, Ill. Filed Feb. 4, 1932. Serial No. 590,858. 10 Claims. (Cl. 40—125.)



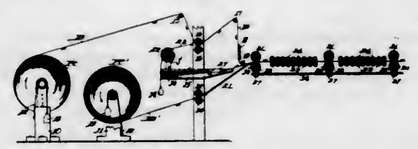
1. An easel for flexible posters comprising a stretcher member and a brace member, the former flexible when flat and folded longitudinally into channel section, the ends of the stretcher engaged with the top and bottom of the poster and one end of the brace engaged with angularly disposed walls of the stretcher intermediate its length to maintain the channel section of the stretcher and to support the stretched poster.

1,863,595. MACHINE FOR CEMENTING BELTING. WINFRED S. GRIFFITH, Worcester, Mass., assignor to Graton & Knight Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 1, 1927, Serial No. 165,214. Renewed Nov. 6, 1931. 26 Claims. (Cl. 154—3.)



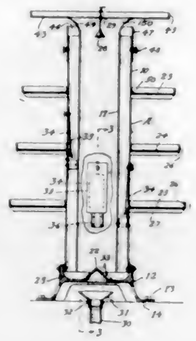
2. A belt cementing machine comprising means to apply tension to two separate belt layers, means to supply cementing material thereto, means to assemble said belt and to apply additional tension thereto as a continuous operation, and additional means to repeatedly apply rolling pressure to the edge portions only of said assembled belt.

1,863,596. METHOD OF MAKING DOUBLE BELTS. WINFRED S. GRIFFITH, Worcester, Mass., assignor to Graton & Knight Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 1, 1927, Serial No. 165,215. Renewed Nov. 6, 1931. 14 Claims. (Cl. 154—4.)



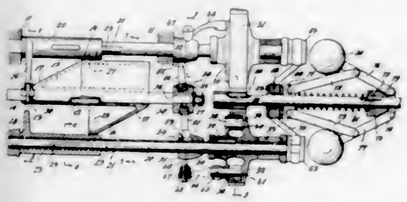
12. The method of making double belts which consists in tensioning two single ply belt layers, inserting a cementing material between the tensioned belt layers and assembling the layers at the point of insertion of the cementing material, and thereafter applying a semi-positive tension followed by a rolling pressure to said assembled belt beyond the point of assembling.

1,863,597. DEVICE FOR DISPLAYING AND KEEPING HARVESTED VEGETATION FRESH. DANIEL HANDELAN, Minneapolis, Minn. Filed Apr. 29, 1929. Serial No. 358,852. 20 Claims. (Cl. 211—127.)



1 In combination, a vertical conduit, means for supporting the same in upright position, a second conduit within said first conduit and spaced from the walls thereof to form a passageway therebetween, said inner conduit being in communication with said passageway, a plurality of shelves secured to said outer conduit and encircling the same, an inlet communicating with the upper end of said inner conduit, said outer conduit being formed with a plurality of openings disposed between said shelves and communicating with said passageway, said openings leading from said outer conduit in several directions over said shelves.

1,863,598. VARIABLE TRANSMISSION. ALFRED JARMANN, Ballston Spa, N. Y. Filed Oct. 11, 1930. Serial No. 487,968. 12 Claims. (Cl. 74—92.)

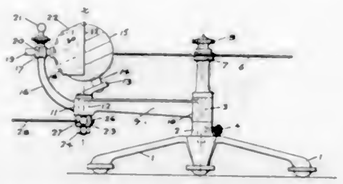


1. In a device of the class described, a driving shaft having a pinion thereon, a cone on said driving shaft, oscillator shafts arranged on opposite sides of said driving shaft, sleeves on said oscillator shafts, means slidable on said sleeves cooperating with said cone for arcuately swinging said sleeves and oscillator shafts, spur gears loosely mounted on said sleeves and meshing with said pinion, means on said driving shaft for locking said spur gears rigidly to said sleeves.

1,863,599. RECOVERY OF METALS FROM THEIR ORES. LESLIE G. JENNESS, Brooklyn, N. Y., assignor to Intermetal Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,622. 5 Claims. (Cl. 23—16.)

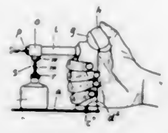
1. The process of recovering tungsten from the ore which consists in igniting the finely divided ore at a temperature of about 700° C., treating said ignited ore with sulphur chlorides and chlorine at about 200° C., and then leaching the ore so treated.

1,863,600. TELLURIAN. FREDERICK GEORGE JONES, Clifton, Bristol, England. Filed Mar. 19, 1930, Serial No. 437,232, and in Great Britain Apr. 15, 1929. 7 Claims. (Cl. 35—3.)



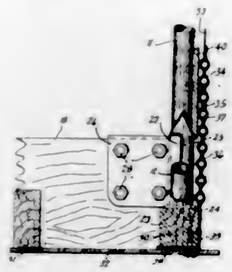
1. In a tellurian, a globe having graduations thereon, and a night shade having graduations thereon adapted to cooperate with the graduations on said globe to indicate the difference between sidereal and solar time at different times of the year.

1,863,601. LIQUID ATOMIZER. HANS KREIDEL, Wiesbaden, Germany. Filed May 28, 1930, Serial No. 456,583, and in Germany Sept. 29, 1929. 5 Claims. (Cl 299—89.)



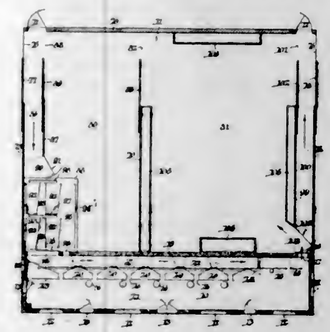
1. Liquid atomizer for operation by one hand, particularly for perfume and the like, comprising a supporting plate adapted to receive a liquid container, a shaft rotatably mounted on said supporting plate at right angles thereto, said shaft being adapted to be norally urged against said supporting plate, a blower device mounted on said shaft, a horizontal pipe mounted on said shaft in communication with said blower device, an atomizing nozzle at the free end of said pipe, a vertical stand pipe carried by said horizontal pipe in aspirating relation with the atomizing nozzle and adapted to be passed into said liquid container, and means carried by said stand pipe adapted to close the opening of said liquid container.

1,863,602. AIRPLANE CONSTRUCTION. THOMAS P. LEAMAN, Hempstead, N. Y., assignor to Amphibions, Inc., Garden City, N. Y., a Corporation of New York. Filed Mar. 6, 1931. Serial No. 520,491. 9 Claims. (Cl. 244—2.)



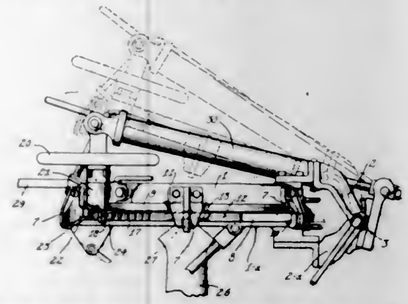
1. In an airplane construction, a hull or float including a frame formed of metal tubing, fabric side coverings, means on the inner sides of said coverings for securing them to the frame, and a solid bottom connecting the lower sides of the frame with the fabric sides extending inwardly under the sides of the frame and between the frame and the bottom.

1,863,603. DAIRY EQUIPMENT. CHARLES DONNELL MARSHALL, Jr., Pottstown, Pa. Filed Mar. 24, 1930. Serial No. 438,323. 7 Claims. (Cl. 119—16.)



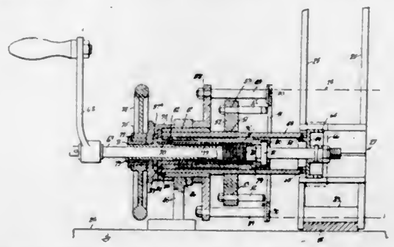
1. In dairy equipment including a milking chamber, the combination of a number of milking stalls with means affording angularly disposed inlet and outlet openings serially arranged end to end in said chamber and spaced from one wall thereof with provision of a single file passage for the cows between an entrant doorway at one end and an exit doorway at the other, each such stall having an inlet gate with a latch to normally hold it closed and means to automatically swing it open, when released, to a position crosswise of the passage aforesaid to divert a cow into the stall, each stall also having an outlet gate, including a latch to hold it normally closed with means operative upon release of said latch to similarly swing the gate open crosswise of the passage to direct the cow back into said passage headed toward the exit door aforementioned, and means whereby the inlet and outlet gates may be individually closed from out side of the stall, including pull chains attached at one end to the swinging ends of the gates, guide pulleys for directing the chains forwardly over the tops of the stalls, and actuating handles attached to the ends of the pull chains at the outside of the stall.

1,863,604. VULCANIZING MOLD. PETER DE MATTIA, Passaic, N. J., assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 5, 1926. Serial No. 146,324. 5 Claims. (Cl. 18—43.)



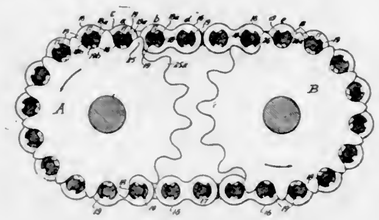
3. In a vulcanizing mold, a relatively fixed mold section disposed in a substantially horizontal plane, a movable mold section hinged with reference thereto and adapted to be swung upwardly from the fixed section to open the mold, locking lugs spaced around the periphery of said movable mold section, a locking ring rotatable on the fixed mold section and provided with lugs to cooperate with those on the movable mold section in locking and unlocking the mold, and power means for rotating the ring to its locking and unlocking positions, said power means including a gear segment on the locking ring, a pinion on the movable mold section for meshing with said gear segment when the mold is closed, and means for manually rotating said pinion.

1,863,605. PORTABLE MORTISE AND TENON MACHINE. ALBERT E. MITCHELL, Stamford, Conn. Filed Mar. 4, 1932. Serial No. 596,682. 5 Claims. (Cl. 144—205.)



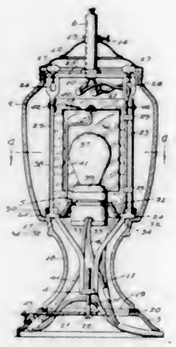
1. In a machine for reforming either end of a conduit section provided with a mortise end and a tenon end and a bore concentric with the said ends, a rotatably and slidably mounted main shaft, a hollow sleeve secured to the said shaft, means on the said shaft for engaging the conduit bore, a tool carrying holder secured to the said sleeve, means for rotating the said tool holder, means for moving the said tool holder towards and away from the said conduit section, and a vise for clamping the said section concentrically with the orbit of the tool.

1,863,606. DRIVE CHAIN. DAVID BARNES PERRY, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed June 19, 1931. Serial No. 545,397. 5 Claims. (Cl. 74—32.)



1. In combination, a drive chain, and driving and driven sprocket wheels over which the chain passes, said chain including overlapping link plates arranged in spaced strands, and joints connecting said link plates, each joint having a pin and a segmental bushing, the pins being non-rotatively carried by and serving as spacers for the plates of every other link, the bushings being non-rotatively carried by and serving as spacers for the plates of the remaining links, said pins having convex surfaces adapted for tooth engagement, the pins of each link being arranged with the convex surfaces faced away from each other, said bushings having convex surfaces adapted for tooth engagement, the bushing of each link being arranged with the convex surfaces faced away from each other, and the convex surfaces of the pins and bushings of each joint being concentric.

1,863,607. LAMP. ALBERT SABATH, Chicago, Ill. Filed Sept. 2, 1931. Serial No. 560,702. 5 Claims. (Cl. 240—81.)



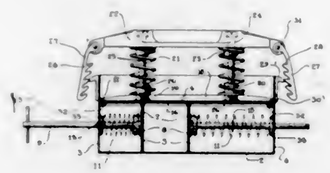
1. A lamp comprising a base having a spider, an urn having an open lower end supported on said base, a U-shapjed bracket located in said urn and having a pair of arms extending downwardly into said open end, a bolt detachably securing said bracket to said spider for clamping said urn to said base, a horizontal plate detachably secured to the upper ends of said bracket arms, a cap detachably secured to the upper end of said urn for concealing said bracket and plate, illuminating means located between said bracket arms, and a lamp standard mounted on said plate and projecting upwardly through said cap.

1,863,608. GARDEN MARKER. CARSON R. STEWART, Burghill, Ohio. Filed Aug. 5, 1931. Serial No. 555,263. 6 Claims. (Cl. 40—10.)



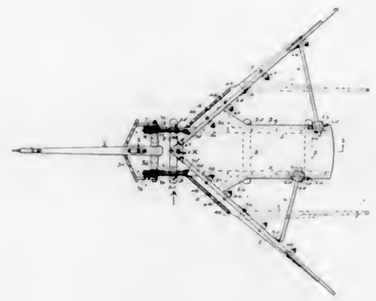
1. A garden marker comprising a name plate and a stake, said name plate being formed at one end with an aperture and a slot, and said stake being formed on one end with a loop or eye that is so shaped and extended through the aperture and slot of the name plate as to effect determinate limited positionability and mobility of the latter with relation to the stake.

1,863,609. MEAT MOLD. MARINUS VANDERKLOOT, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 19, 1931. Serial No. 545,380. 4 Claims. (Cl. 100—57.)



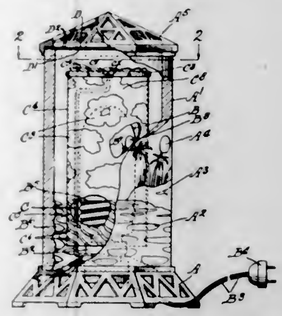
4. A meat mold of the class described, including a body open at the top and having side, bottom and end walls, the end walls being provided at their upper portions with rigid horizontally aligned lugs, a top pressing plate arranged within the body above the said lugs and limited in its downward movement by the same, end pressing plates arranged within the body below the top pressing plate and having a sliding contact at their upper edges with the top pressing plate when the latter is seated upon the said lugs, means for applying spring pressure to the top pressing plate, shafts connected with the end pressing plates and extending outwardly through the end walls of the body, springs surrounding the shafts and interposed between the end pressing plates and the end walls of the body for exerting spring pressure on the ends of the meat, said springs being adapted to be compressed by the outward movement of the shafts, and latches for locking the shafts to the end walls of the body for holding the springs in a compressed condition.

1,863,610. SNOWPLOW. CHARLES A. WETMORE, Glenfield, N. Y. Filed Feb. 4, 1932. Serial No. 590,827. 6 Claims. (Cl. 37—46.)



1. In a horse-drawn snow removing device, a pair of elongated square end runners, a deck to tie and space said runners, a neap pivoted to the forward ends of the runners to enable the horses to draw and guide the device, means carried by the forward ends of the runners to cut channels in the packed snow to be traversed by the runners, hand-levers to independently raise and lower said channel-cutting means, and similar plows rigidly mounted upon said runners at oblique angles to the deck and runners and adapted to disperse the snow laterally in opposite directions.

1,863,611. DISPLAY DEVICE. ALFRED H. ZELEDON, Chicago, Ill., assignor to Scene-In-Action Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1931. Serial No. 543,331. 4 Claims. (Cl. 40—40.)

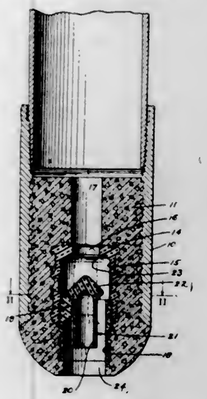


3. In a display device, a translucent screen having a picture thereon and an incandescent bulb associated therewith, said bulb being provided with relief portions having relation to the picture on said screen.

1,863,612. CHEMICALLY RESISTANT SILVER ALLOY. PETER ASSMANN, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 4, 1929, Serial No. 411,684, and in Germany June 19, 1926. 4 Claims. (Cl. 75—1.)

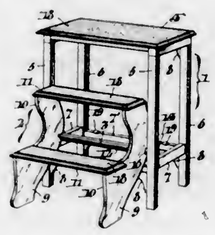
1. A silver alloy consisting of at least 78 per cent of silver, from 0.3 to 20 per cent of aluminium and from 0.3 to 18 per cent of at least one metal selected from the group consisting of thallium, zinc and tin.

1,863,613. FLOATING AND CEMENTING DEVICE FOR WELL CASINGS. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Dec. 9, 1931. Serial No. 579,875. 5 Claims. (Cl. 166—1.)



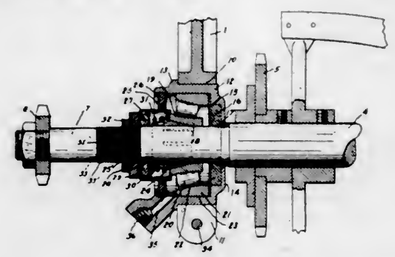
4. As an article of manufacture, a valve cage assembly for floating and cementing devices, said assembly comprising a cylindrical housing having a port formed concentrically in one end thereof, a valve seat formed at the inner end of said port, a cylinder connected to the opposite end of the housing and projecting coaxially therefrom, a valve member having a valve head arranged interiorly of the housing and a valve stem projecting concentrically of said cylinder, a plurality of radial lugs formed integral with the cylinder and projecting radially inwardly equal distances whereby to form a guide for said valve stem and an abutment for said valve head, said valve head being of a diameter less than the interior diameter of said cylinder to enable circulation through said cylinder from said port when the valve head abuts against said lugs.

1,863,614. CONVERTIBLE STOOL STEPS. ELMER B. BECK, Lititz, Pa. Filed Aug. 23, 1929. Serial No. 387,835. 5 Claims. (Cl. 228—30.)



1. Convertible stool-steps comprising a stationary structure serviceable as a stool, a balanced steps foldable within the confines of said stool, a pivot member secured across the stool affording bearing for the steps, and a stretcher-bar intermediate the side components of the steps and rearwardly of the pivot member, said stretcher-bar serving as an actuator to move the steps from the folded-in position to service location by a slight pedal pressure exerted against without disturbing the position of the stool portion aforesaid.

1,863,615. BEARING CONSTRUCTION. HAROLD L. BLYDENBURGH, Detroit, Mich., assignor to The Moto-Mower Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 27, 1927. Serial No. 229,015. 2 Claims. (Cl. 308—178.)



1. A bearing construction comprising a frame member having an aperture therethrough, a bearing cup removably fitted in said aperture, rotary bearing elements assembled in said cup, a shaft centered in said elements, a nut threaded on said shaft at one side of said cup, means between said nut and elements for maintaining said elements against sliding in one direction, and means on said shaft at the other side of said cup for maintaining said cup and bearing elements against sliding in the other direction, said shaft being free adjacent said nut to permit retraction of the nut from said bearing and retraction of said bearing from said frame member by sliding on the shaft.

1,863,616. COMBINATION PENCIL POINTER AND REFUSE RECEPTACLE. HENRY BOSCH, Jr., San Francisco, Calif. Filed June 30, 1930. Serial No. 464,744. 11 Claims. (Cl. 120—89.)

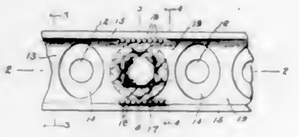
1. In a device of the character described, a housing having a refuse receiving chamber formed therein and an

opening through which the refuse is entered, a closure for said opening, a pivotal support for the closure permitting it to be swung from an opened to a closed position, or vice versa, a pencil pointer accessible only when the clo-



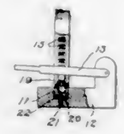
sure assumes an open position, means for retaining the closure in an open position and means for imparting an impact below to the closure during the closing action to remove any graphite dust adhering to the pencil pointer.

1,863,617. RING. BYARD F. BROGAN, Philadelphia, Pa. Filed Aug. 14, 1930. Serial No. 475,355. 2 Claims. (Cl. 63—15.)



1. A ring comprising a band having a channel formed in its exterior surface arcuate throughout its transverse area with cup-shaped reflecting depressions projected at intervals into the bottom of said channel forming perimetrical interlying parts, and stones set in said depressions and contiguous to and in part overhanging said perimetrical parts, said stones being retained by the crimped-in edges of said channel.

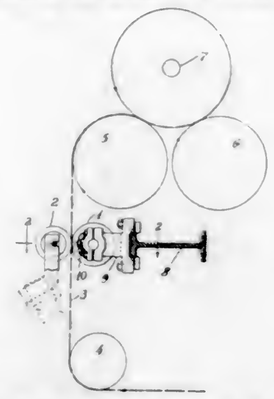
1,863,618. METHOD OF MAKING A RING. BYARD F. BROGAN, Philadelphia, Pa. Filed Aug. 14, 1930. Serial No. 475,356. 9 Claims. (Cl. 29—160.6.)



8. The step in the method of making a ring consisting in impressing a series of indentations into the interior surface of an annular ring blank and forming cavities in the exterior communicating with the indentation.

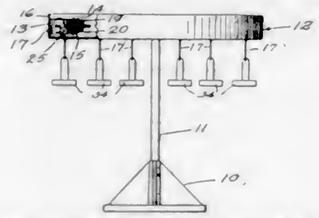
1,863,619. SLITTING MEANS. JAMES A. CAMERON, Brooklyn, N. Y., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 28, 1927. Serial No. 229,309. 6 Claims. (Cl. 164—65.)

1. In a slitting device the combination of a freely revoluble circular backing member, a freely revoluble circular score-cut slitter member to engage the backing member, and web guide and pulling means to direct and pull a web of flexible material in a straight run between the members aforesaid and substantially tangential to both



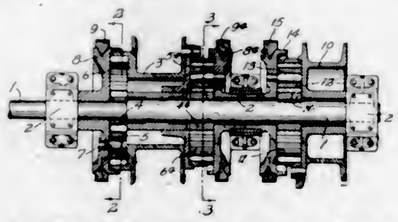
of said slitting members at their point of engagement with each other to thereby rotate both of said members substantially in synchronism with each other and with the movement of the web.

1,863,620. REEL. VICTOR H. CARUSO, Oakland, Calif., assignor to Duart Manufacturing Co. Ltd., San Francisco, Calif., a Corporation of California. Filed Feb. 11, 1929. Serial No. 338,936. 5 Claims. (Cl. 242—109.)



1. A reel comprising a housing, a shaft fixed therein, a disc on said shaft, spring operated spools disposed on opposite sides of said disc and rotatable on said shaft, ears depending from said housing and having idler spools mounted thereon, and means for preventing reversal of said idler spools.

1,863,621. WINDING DEVICE. DOUGLAS C. CORNER, Webster Groves, Mo., assignor of one-half to St. Louis Power Shovel Company, St. Louis, Mo., a Corporation of Missouri and one-half to Lucien Eaton, Ishpeming, Mich. Filed Feb. 20, 1930. Serial No. 429,979. 3 Claims. (Cl. 74—34.)



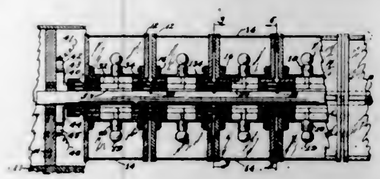
1. A winding device comprising a drive shaft, a winding drum rotatably supported on said drive shaft and provided at its opposite ends with internal gears of different diameters, wheels journaled on said shaft at the ends of said drum, means for holding either of said wheels against rotation, pinions rotatably supported on said wheels and meshing with the internal gears at the ends of said drum, and drive pinions fixed to said drive shaft and meshing with the pinions carried by the respective wheels, the pinions, the drive pinions and the internal gears at the opposite ends of said drum being of different diameters.

1,863,622. PROCESS OF PRODUCING IRON OR STEEL DIRECTLY FROM THE ORE AND CONTROLLING THE SULPHUR CONTENT THEREOF. EDWARD W. DAVIS, Minneapolis, Minn., assignor to Davis Steel Process Corporation, a Corporation of Delaware. Filed July 28, 1928. Serial No. 296,010. 3 Claims. (Cl. 75—14.)



1. In a process of producing fluid iron or steel directly from the ore by smelting a mixture of ore, carbon and fluxing materials with an oxidizing flame in a furnace of the reverberatory type, and in which the slag-forming constituents of the charge are so adjusted as to kind and amount as to form a slag containing insufficient basic constituents to combine with all of the sulphur that is to be removed, the step which comprises regulating the sulphur content of the metal produced by controlling the iron oxide content of the slag.

1,863,623. PICTORIAL DISPLAY APPARATUS. GUSTAVUS W. ESCHENBACH, Los Angeles, Calif. Filed Mar. 28, 1931. Serial No. 526,003. 13 Claims. (Cl. 40—77.)



1. Pictorial display apparatus, including a shaft, a plurality of individual pictorial cylinders mounted thereon so as to be independently revolved, illuminating means mounted in each cylinder, and means in each cylinder registering with corresponding means in adjacent cylinders for maintaining such illumination in a plurality of cylinders from a single source of electricity.

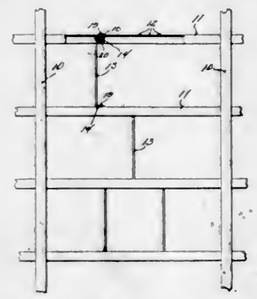
1,863,624. FLEXIBLE VENTILATING HOSE. WILLIAM HOOPER EVANS, Bridgeport, Conn. Filed Jan. 27, 1928. Serial No. 249,976. 3 Claims. (Cl. 154—53.)

1. As a new article of manufacture, multilayer reinforced fungus resisting material for mine ventilating tubing and the like, comprising a laminated structure including a woven fabric layer of given ventilating tubing characteristics irrespective of required ventilating tubing strength, and means adapted to provide said required strength comprising a reinforcing woven wire layer having wires adapted to extend both circumferentially and longitudinally of the tubing, said longitudinal wires



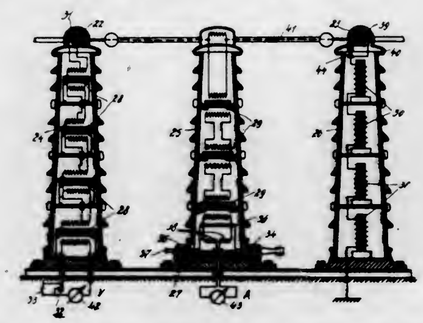
adapted to resist longitudinal pull and said circumferential wires adapted to impart stability to the circumferential shape of the tubing, and a cementitious fungus resisting layer embedding said wire and pressed into the mesh of said woven fabric to render it resistant to fungus growth.

1,863,625. METAL SHELVING. LLOYD H. FENSTERMAKER, Milwaukee, Wis. Filed Nov. 1, 1929. Serial No. 403,938. 7 Claims. (Cl. 211—135.)



1. In a sheet metal structure of knockdown type the combination of a perforated member, a second perforated member for releasable attachment thereto, a pin inserted through perforations in said members, a reduced portion on said pin adjacent one extremity thereof, a clip engaging said pin, a slot in said clip in which said reduced portion of said pin is engaged and a face on said clip coacting with said pin to releasably retain said members in attachment.

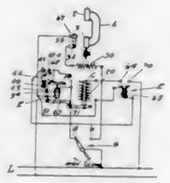
1,863,626. DISCONNECTING SWITCH. FRANZ JOSEPH FISCHER, Dresden, Germany, assignor to the Firm Koch & Sterzel Aktiengesellschaft, Dresden, Germany. Filed Nov. 25, 1929, Serial No. 409,678, and in Germany Nov. 29, 1928. 8 Claims. (Cl. 200—48.)



1. A high voltage disconnecting switch comprising a hollow insulator, a live member and a heating resistance both supported by said insulator and thermally connected

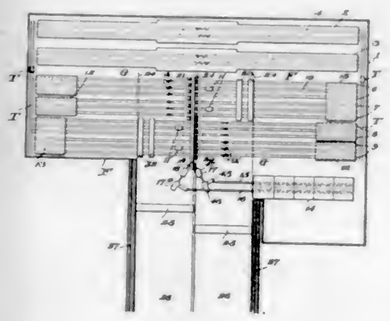
to each other, one end of said heating resistance being electrically connected to said live member, and an impedance within said insulator having its ends electrically connected to the other end of said heating resistance and to ground respectively.

1,863,627. CIRCUIT CONTROL SYSTEM. PRESLEY GRAY, Birmingham, Ala., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 26, 1929. Serial No. 335,248. 17 Claims. (Cl. 175—294.)



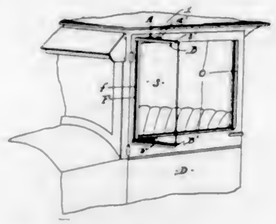
1. In a circuit-controlling system, a main switch, an electro-motive device for actuating the same to a given position, and means for controlling the energization of said electro-motive device comprising a control switch independently biased towards a position adapted to effect energization of said electro-motive device, a second control switch, and means controlled solely by said second control switch for restraining said first control switch in another position.

1,863,628. PLANT FOR THE MANUFACTURE OF CERAMIC PRODUCTS. WILLIAM LEE HANLEY, Jr., and DWIGHT B. HENDRYX, Bradford, Pa., and GEORGE W. HOLBROOK, Hartford, Conn., assignors to Hanley Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Feb. 4, 1928. Serial No. 251,920. 13 Claims. (Cl. 25—2.)



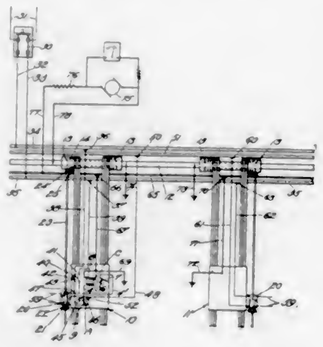
1. In a plant for the manufacture of ceramic products, the combination with a burning kiln having tracks for tunnel cars moving therethrough, a plurality of exterior tracks for tunnel cars located alongside of the kiln and extending parallel thereto, transferring means at each end of the kiln for transferring tunnel cars between the exterior tracks and kiln tracks and vice versa, of forming machines located on the side of the exterior tracks remote from the kiln, a single off-bearing conveyor extending therefrom over said exterior tracks and adapted to receive articles from said machines, setting stations adjacent said off-bearing conveyor whereby operators thereat may remove articles delivered to said off-bearing conveyor from either machine and set the same on tunnel cars, and means for delivering raw material to either machine.

1,863,629. WINDSHIELD FOR CLOSED MOTOR CARS. LEO M. HARVEY, Los Angeles, Calif. Filed Oct. 2, 1928. Serial No. 309,815. 3 Claims. (Cl. 296—84.)



2. An auxiliary windshield for motor cars comprising an integral metal bracket having a supporting web portion bent downwardly at one of its sides, and thence outwardly on a curve, and thence upwardly to provide a channeled portion, and a glass shield adapted to seat in said channeled portion and to be held therein by the tension of the sides of said channel, said sides being bent inwardly over the ends of said channel.

1,863,630. SAFETY MECHANISM FOR CRANES. WILLIAM J. KEENAN and GUERDON SATHER, Detroit, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 1, 1930. Serial No. 465,236. 6 Claims. (Cl. 104—148.)

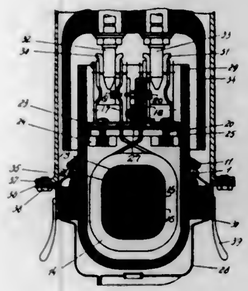


1. In a crane installation having a track adapted to movably support a plurality of cranes, and actuating means for moving said cranes toward and away from one another, the combination therewith of an electrical control for adjacent cranes including an electrically actuated mechanism adapted when the energy supplied thereto is decreased a predetermined amount to render said actuating means inoperative, and means responsive to the relative movement of said cranes for varying the resistance of said circuit to decrease the energy supplied to said mechanism to render said actuating means inoperative when said cranes move to predetermined relative positions.

1,863,631. INSULATOR FOR ELECTRIC SYSTEMS. HANS KLEMM, Dresden, Germany, assignor to the Firm: Koch & Sterzel Aktiengesellschaft, Dresden, Saxony, Germany. Filed July 9, 1929, Serial No. 376,950, and in Germany July 14, 1928. 9 Claims. (Cl. 175—358.)

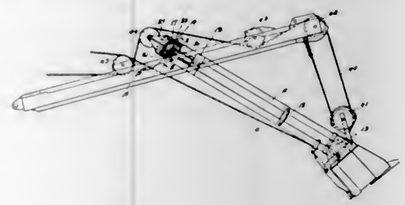
1. A transformer comprising a pot-shaped insulating casing, a primary coil arranged within said casing, two terminal connections for said primary coil also within said

casing and spaced apart from the adjacent end of said casing, a ridge on the inside of said casing for supporting said terminal connections, a support for said terminal connec-



tions adapted to engage one face of said ridge, a bridge adapted to engage its opposite face and an adjustable stay extending from said support to said bridge.

1,863,632. FLEXIBLE DIPPER STICK. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Apr. 3, 1931. Serial No. 527,543. 9 Claims. (Cl. 214—145.)



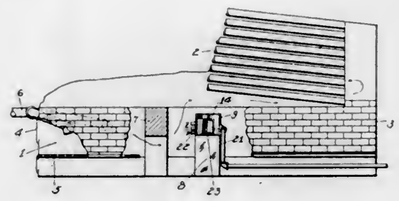
1. In a power shovel, the combination with a boom, of a dipper stick carried by the boom and comprising a pair of vertically spaced members laterally flexible and vertically rigid, each of the vertically spaced members comprising a unitary elongated plate disposed in edgewise relationship with the other.

1,863,633. NAME PLATE. LOUIS MELIND, Chicago, Ill. Filed Mar. 28, 1931. Serial No. 526,065. 2 Claims. (Cl. 40—146.)



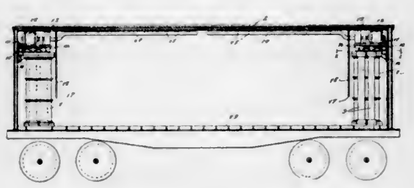
1. In a device of the character described, a plate, supporting brackets at the back of the plate, securing screws passing through the plate from the front thereof and securing said brackets to the plate, the screws having heads countersunk in the front of the plate, a cover member fastened over the front of the plate and transparent throughout the width of said plate, and an insert between said member and the plate, said insert bearing identifying data upon its outer surface and acting to conceal the screws.

1,863,634. FURNACE CONSTRUCTION. ALBERT E. MORELOCK, St. Louis, Mo., assignor to Draftogen Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 17, 1930. Serial No. 496,053. 4 Claims. (Cl. 110—68.)



1. In a furnace having a combination chamber, a wall across said furnace intermediate the front and rear ends of the same and consisting of a series of adjoining hollow metal sections, and means for conducting air through said sections and discharging the same in a direction contra to the draft of the furnace thereat.

1,863,635. REFRIGERATING APPARATUS. CASSIUS C. PALMER, New York, N. Y. Filed July 3, 1929. Serial No. 375,674. 4 Claims. (Cl. 62—91.5.)

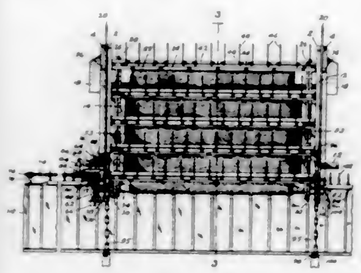


1. In a refrigerating system, means forming a storage space, a container for solid carbon dioxide, an exhaust pipe through which carbon dioxide gas from the melting dioxide may escape, a motor, means to run said motor by said escaping gas, an air exhaust pipe adjacent the top of said space, a fan operated by said motor and adapted to draw air from the storage space through said air exhaust pipe, and means to discharge said air adjacent the bottom of said space.

1,863,636. GASEOUS FUEL MIXTURE. GEORGE C. QUELCH, Oakmont, Pa., assignor, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed June 8, 1926. Serial No. 114,578. 2 Claims. (Cl. 48—199.)

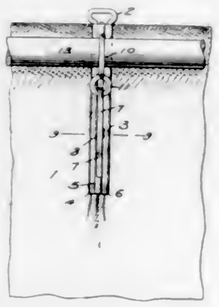
1. A method of producing a highly compressed fuel gas mixture consisting of hydrogen, methane and a small percentage of at least one higher hydrocarbon gas, said mixture being non-condensable upon expanding in one stage from about 1800 pounds per square inch to about 5 pounds per square inch at atmospheric temperatures, from a gas mixture consisting mainly of methane and containing hydrogen and a content of ethane in excess of about 2%, said method comprising mixing said last named mixture with hydrogen until the resulting gas mixture is composed of hydrogen 38% to 45%, methane 53% to 61%, and ethane from slightly less than 1% to 2%, and compressing said resulting gas mixture to about 1800 pounds per square inch in a gas container.

1,863,637. PICK-UP MECHANISM FOR COMBINES AND THE LIKE. EMMITT D. RICHARDSON, Cawker City, Kans. Filed Nov. 11, 1929. Serial No. 406,336. 5 Claims. (Cl. 56—364.)



1. In combination with a combine or like machine, a pick-up mechanism adapted to be arranged at the forward portion of said combine or like machine and consisting of a downwardly and forwardly inclined frame adapted to be connected to said machine, stripper means at the rear portion of said frame, gathering means supported on said frame and comprising a suitably actuated endless conveyer adapted to deliver material to the machine, and teeth projecting outwardly from said conveyer and having spring means whereby they are pressed against the stripper means as they pass the latter.

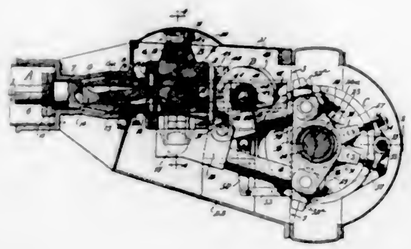
1,863,638. DETACHABLE PLAIT HOOK. ALFRED RICHTER, Chicago, Ill. Filed June 5, 1931. Serial No. 542,376. 3 Claims. (Cl. 156—21.)



2. In a curtain supporting device, the combination with a main member, of longitudinal grooves formed therein, a hooked member attached to said main member, and a looped pin having an enlargement at one end, said looped pin being adapted to engage and retain a curtain member in engagement with said grooves in said main member.

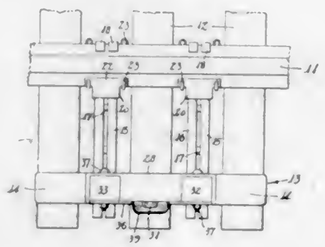
1,863,639. TRANSMISSION DEVICE FOR AUTOMOTIVE VEHICLES. JOHN FRANK RUNKLE, deceased, New York, N. Y., by Ella Runkle, administratrix, New York, N. Y. Filed Apr. 16, 1928, Serial No. 270,405. Renewed Sept. 2, 1931. 7 Claims. (Cl. 74—53.)

1. A transmission device for automotive vehicles comprising in combination, a drive shaft, a variable swash plate driven thereby, a driven shaft, means for driving said driven shaft operated by said swash plate, the speed of rotation of the driven shaft being altered with respect to the speed of rotation of the drive shaft as the position of the swash plate is varied, said means for driving the driven shaft including a rimmed disc secured to the driven shaft, levers for gripping the rim of said



disc, movable mountings on which said levers are fulcrumed, means for moving said mountings from positions in which the fulcrums of the levers are coaxial with the axis of the driven shaft and disc to positions in which said fulcrums are offset from the axis of the driven shaft and disc, and rods connecting said gripping levers to said swash plate.

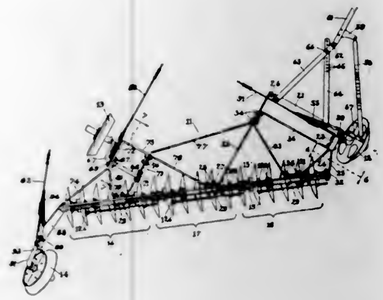
1,863,640. TRAIN CONTROL INDUCTOR. DANIEL HERBERT SCHWEYER, Easton, Pa. Original application filed Sept. 27, 1929, Serial No. 395,682. Divided and this application filed Aug. 21, 1930. Serial No. 476,852. 12 Claims. (Cl. 246—63.)



1. A support for a track inductor comprising a pair of angle bars secured together as a unit and spaced apart to form a truss, means for clamping said bars to the base of a track rail, and means for securing an inductor on said bars.

1,863,641. DISK TILLER. WALTER H. SILVER, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 12, 1927. Serial No. 212,434. 21 Claims. (Cl. 97—53.)

1. In a disk tiller of the class described, the combination of a frame, a plurality of wheels adjustably supporting said frame, one of said wheels consisting of a front furrow wheel, a plurality of gang sections mounted on said frame comprising independently rotatable sets of disks all substantially aligned on a common axis which is inclined to the line of draft of said frame, one of said gang sections being removable from said frame, and means for shifting said front furrow



wheel inwardly along said frame and along a line parallel to the axis of the disks upon the removal of said gang section.

1,863,642. MANUFACTURE OF ALLOYS. ROBERT WICKERSHAM STIMSON, New York, N. Y., and WILHELM BORCHERS, Aachen, Germany. Filed Mar. 13, 1925, Serial No. 15,239¼, and in Great Britain Nov. 6, 1924. 25 Claims. (Cl. 75—22.5.)



1. In a process of manufacturing the specified alloys which comprehends extracting metalline and metallic elements from a mixture of reducible matter comprising compounds of any number of the metalloids, silicon, titanium and zirconium and reducible matter comprising compounds of any number of miscible metals with a reducing agent the step of adding fluxing matter to the furnace charge whose chemical relations to other constituents of the furnace charge are such that a final slag is produced which is neither strongly basic nor strongly acidic whilst its principal basic component has only a mild basic character.

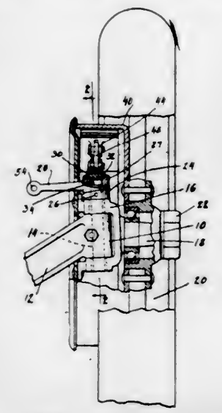
1,863,643. OIL WELL PUMP. HAROLD F. WATKINS, Oakland, Calif., assignor to Watkins Intermtting Pumping Co., San Francisco, Calif., a Corporation of California. Filed May 15, 1928. Serial No. 278,015. 3 Claims. (Cl. 103—234.)

1. In an oil well pump, an oil pipe string extending into the well below the normal oil level, a gas pipe string extending into the well within the oil pipe, a valve associated with the lower portion of the gas pipe, said valve being normally biased toward closed position, means for effecting opening of said valve upon lowering of said gas pipe, a source of gas under pressure located at the surface of the well and connected to said gas pipe, and means located at the surface of the well for cyclically moving said gas pipe at a rate independent of the gas



pressure to effect recurrent opening and closing of said valve, opening of said valve serving to form an upwardly expanding pneumatic piston within the oil pipe.

1,863,644. FRONT WHEEL BRAKE ACTUATING MECHANISM. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 12, 1930. Serial No. 460,724. 1 Claim. (Cl. 188—194.)

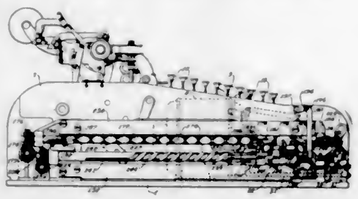


Brake mechanism comprising a spindle rotatably journalled about a fixed king pin, a wheel and brake drum rotatably journalled on said spindle, a pair of expansible friction members non-rotatably supported within the drum, a sleeve secured over said pin above the spindle journal and seated thereon, the upper edge of said sleeve constituting a camming surface, a second sleeve slidable along said pin above the first sleeve and having a lower edge adapted to cooperate with said camming surface to force the second sleeve axially along the pin on rotation thereof, a thrust plate seated by gravity upon the upper edge of said axially movable sleeve and having a central portion depending therein to position said plate, and a toggle connection between adjacent ends of said friction members, the intermediate portion of said toggle being adapted to bear on said thrust plate.

1,863,645. CHEMICALLY RESISTANT SILVER ALLOY. PETER ASSMANN, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 24, 1929, Serial No. 416,293, and in Germany June 19, 1926. 1 Claim. (Cl. 75—1.)

A silver alloy consisting of at least 78 per cent of silver, from 2 to 20 per cent of manganese and from 0.3 to 6 per cent of aluminium.

1,863,646. DRIVING MECHANISM FOR CALCULATING MACHINES. ADOLF BAUMANN and CARL P. HORLACHER, St. Louis, Mo., assignors, by mesne assignments, to The American Exchange National Bank of St. Louis, a Banking Corporation. Filed Mar. 29, 1929. Serial No. 351,060. 27 Claims. (Cl. 192—.02.)



1. Driving mechanism comprising, a guide, a crosshead movable therealong, a driver connected to reciprocate said crosshead, and means for yieldingly arresting and retaining said crosshead at one end of its travel.

1,863,647. PRODUCTION OF ALKOXY ACRIDINIUM COMPOUNDS AND THE PRODUCTS. LOUIS BENDA, Mainkur, near Frankfort-on-the-Main, and OTTO SIEVERS, Hohe Tanne, near Hanau-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 6, 1928, Serial No. 259,601, and in Germany Mar. 15, 1927. 7 Claims. (Cl. 260—36.)

2. Process which comprises heating an alkali metal salt of a hydroxy-acridine compound with an alkylating agent of the group consisting of arylsulfonic acid methyl esters and 1-hydroxy-2-chloro-ethane in an amount at least sufficient for alkylating the hydroxy groups and the nitrogen atom.

1,863,648. HAY PRESS DISCHARGE APPARATUS. CHARLES E. BERNARD, Beaverton, Oreg. Filed Dec. 8, 1931. Serial No. 579,679. 4 Claims. (Cl. 100—19.)



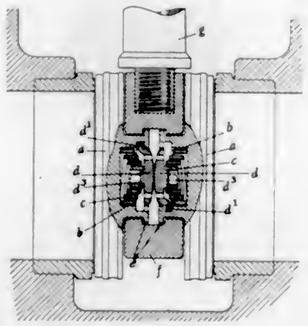
1. A hay press discharge apparatus comprising, a horizontal way adapted for hinged attachment to the hay press to receive the bales discharged therefrom, a chain or other supporting means to limit the downward movement of said horizontal way, a parallelogrammatic structure of two inclined ways to convey the bales to an elevated position and serve as a chute down which divider boards may be returned to the press respectively and suitable vertical members pivotally joined to said inclined ways the same being joined to the remaining extremity of said horizontal way by hinge means, and a way adapted for hinged attachment to the hay press and the remaining one of said inclined ways.

1,863,649. GARMENT HANGER ATTACHMENT. HARRY GOULD BLISS, Richfield Springs, N. Y. Filed Sept. 22, 1930. Serial No. 483,668. 1 Claim. (Cl. 223—61.)



In combination with a hanger wherein the latter includes a suspension bar and a supporting hook intermediate the ends of the bar, a resilient rod provided with a coil intermediate its ends, said coil being disposed about the shank of said hook for sliding and rotative movement relative to said shank, and the end portions of said rod extending in opposite directions from the coil, each of said end portions terminating in a lateral projection yieldably engaging one side of the supporting bar for yieldably retaining said coil against casual movement relative to the shank of said hook.

1,863,650. PARALLEL SLIDE VALVE. EDGAR ANDREW BOLTON and TOM FREDERICK GRAY, Adswood, Stockport, England, assignor to Victory Valves Limited, Adswood, Stockport, England. Filed Aug. 28, 1931, Serial No. 560,038, and in Great Britain Apr. 30, 1931. 4 Claims. (Cl. 251—59.)



1. In parallel slide valves, the provision of a recess in a boss like projection upon the back of each valve and of a volute spring in such recess which bears upon a metal pad, the outer face of which is rounded, the rounded faces of the pads of the two valve discs bearing upon one another, the valve operating means surrounding the boss like projections containing the springs and pads of the valves.

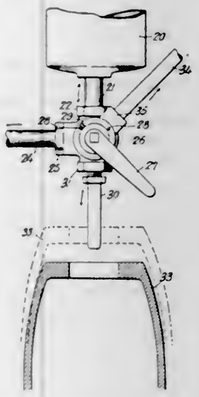
4. In parallel slide valves, the arrangement of the valve disc operating means in the form of a belt eye with a fixed part secured upon the valve spindle, and two movable parts, each pivoted to the fixed part, the one from above and the other from below, the meeting faces of the movable parts forming a boss which is externally threaded and receives a cap which has a central hole therein through which project the divided ends of a split pin, the head of which is held in a recess between the said meeting faces.

1,863,651. APPARATUS AND METHOD FOR REMEDYING CROSS TALK. ARTHUR G. CHAPMAN, Butler, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 3, 1930. Serial No. 499,775. 19 Claims. (Cl. 179—78.)



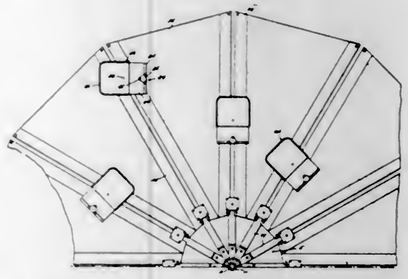
1. A cable of a certain length comprising a plurality of conductor pairs therein and means located half-way along said length and connected across between conductors of certain pairs and conductors of certain other pairs to neutralize the crosstalk between those pairs.

1,863,652. VALVE. FRANK L. DREW, Edgewood Arsenal, Md. Filed Sept. 29, 1930. Serial No. 485,225. 10 Claims. (Cl. 226—22.)



1. In combination, a container for liquid having a passage for conducting liquid from the container to a receptacle, a valve having a rotary plug for controlling the flow of liquid, and means operated by rotating said plug for withdrawing residual or excess liquid back through said passage.

1,863,653. AMUSEMENT APPARATUS. JAMES W. ESTES, Birmingham, Ala. Filed Oct. 9, 1929. Serial No. 398,413. 4 Claims. (Cl. 272—37.)

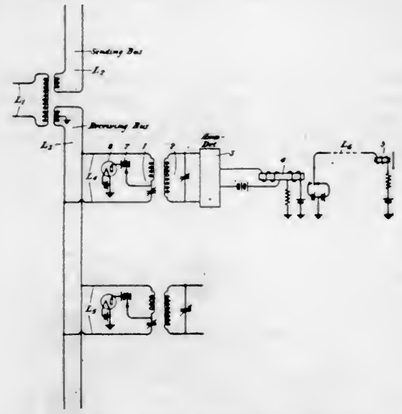


1. A roundabout amusement device comprising a stationary platform, an annular mobile platform encircling said stationary platform, said mobile platform consisting of a plurality of rectangular frames extending radially from said stationary platform in a position declining therefrom, seats slidable on said frames, each of said seats being provided with a depending member, a pulley wheel rotatably mounted on the lower end of the member, a rotary element at each end of each frame, a plate carried by the depending member of the corresponding seat, a flexible element trained about the rotary elements at the ends of the frames and secured at its ends to the said plate, the said flexible element being engaged with the pulley wheel on the depending member of the corresponding seat, and means for rotating one of the said rotary elements at the ends of the frame.

1,863,654. PURIFICATION OF WOOD SUGAR. EDUARD FÄRBER, Heidelberg, Germany, assignor to Holzhydrolyse Aktiengesellschaft, Heidelberg, Germany. Filed July 6, 1929, Serial No. 376,502, and in Germany July 7, 1928. 10 Claims. (Cl. 127—37.)

1. A process for purifying wood sugar obtained by hydrolyzing wood and other substances containing cellulose with hydrochloric acid, consisting in drying the wood sugar by atomization, removing the hydrochloric acid by treating the resulting crude powder with a solvent comprising an alcohol, converting the crude product into a syrup, and removing the solvent.

1,863,655. MEANS FOR REDUCING LIGHTNING INTERFERENCE IN CARRIER TELEGRAPH SYSTEMS. BAXTER P. HAMILTON, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 27, 1930, Serial No. 464,348. Renewed Nov. 11, 1931. 2 Claims. (Cl. 178—69.)



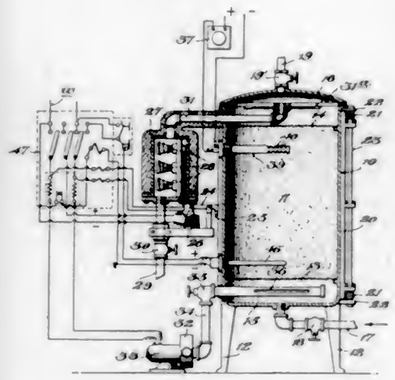
1. In a carrier telegraph system, the combination with a transmission circuit upon which normal signal voltages and abnormal interference voltages may be impressed, of a resonant circuit, comprising an inductance in series with a condenser, connected therewith, and a thermionic vacuum tube having a cathode, an anode, means to heat said cathode, and means to apply a positive voltage to the said anode, the said vacuum tube being connected to ground from the junction of the said inductance and condenser, to detune the said resonant circuit whenever the voltage impressed by the transmission circuit upon said reasonant circuit exceeds a fixed limit.

1,863,656. AIR DEHYDRATOR. HARRY BUXTON HARTMAN, Buffalo, N. Y. Filed Oct. 10, 1930. Serial No. 487,873. 8 Claims. (Cl. 183—4.)

1. An air dehydrator comprising a tank containing air dehydrating material, means for the passage of air to be

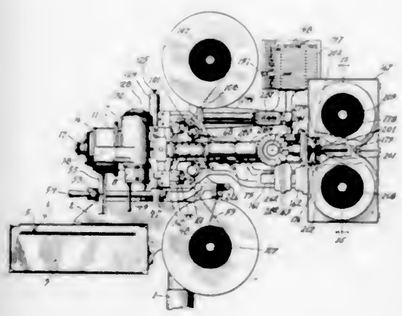
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dehydrated through said tank, means for causing a flow of dehydrating material reactivating air through said tank, a heat insulating casing for said tank, means constantly tending to move said casing to a position to permit contact of the ambient air with said tank, releasable



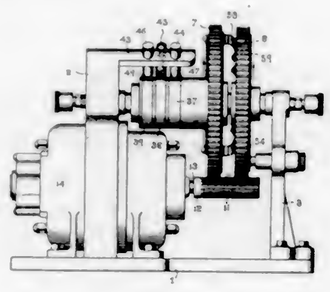
means to hold said casing in a position closely engaging said tank to exclude the ambient air from contact therewith, and means automatically operable upon reactivation of said dehydrating material to effect release of said holding means.

1,863,657. PHOTOGRAPHIC PRINTING MACHINE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1927. Serial No. 200,163. 27 Claims. (Cl. 88—24.)



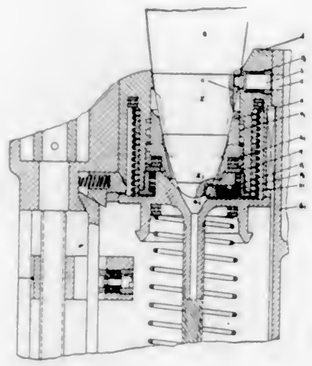
1. In a motion picture film printing machine the combination with a projection device including a light apertured film feed guide and an intermittent feed mechanism for operating a film therein, a frame carrying said feed mechanism, a second frame carrying said guide, means whereby one of said frames is adjustable longitudinally of said guide with respect to the other frame, and a motion picture film photographic device cooperating with said projection device and carried by said second frame.

1,863,658. SWITCH MECHANISM FOR SIGNAL AND OTHER ELECTRICAL CIRCUITS. ROBERT B. JAMES, Atlanta, Ga., assignor of one-half to Cleveland-Browning Company, Atlanta, Ga., a Corporation of Georgia. Filed Oct. 23, 1930. Serial No. 490,754. 5 Claims. (Cl. 200—24.)



1. A switch mechanism, including two contact-carrying disks of different diameters provided upon their peripheries with gear teeth, and a driving pinion meshing with the teeth of both disks and adapted to drive them simultaneously at relatively different speeds, whereby switching action of their contacts is obtained.

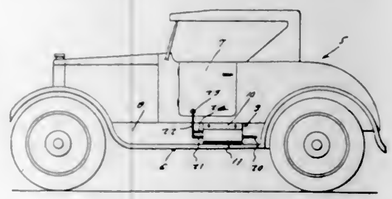
1,863,659. MACHINE ADJUSTING THE TIMING OF A FUSE FOR A PROJECTILE. FRANZ JOHENNING, The Hague, Netherlands, assignor to Naamlooze Vennootschap: Hollandsche Industrie en Handelmaatschappij, The Hague, Netherlands. Filed Feb. 19, 1930, Serial No. 429,641, and in the Netherlands and Germany Dec. 3, 1929. 6 Claims. (Cl. 86—23.)



1. A machine for adjusting the timing of a fuse, comprising in combination a housing with one or more adjusting bores adapted to receive the projectiles which are to be timed; an adjusting cup in each bore; each cup being shiftably arranged by means of a key and groove; a spring-pressed stud in each cup; said cup serving to maintain the inserted projectiles in vertical position; an adjusting socket in each cup; a rotatably and shiftably mounted adjusting element having a spring actuated stud, arranged beneath each cup and provided with a screw of steep pitch; a stationary nut cooperating with said screw, whereby the weight of the projectile will cause the cup

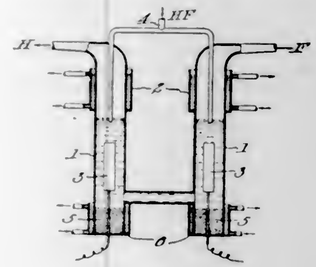
and projectile to descend and rotate about its longitudinal axis; said last named stud springing into the fuse cup of the projectile when in the engaged position and thus causing the latter to rotate when the projectile descends, and a stop to limit the descent of the said projectile in correspondence with the desired timing of the fuse.

1,863,660. VEHICLE RUNNING BOARD MAT. FRED KLEIN, Hollywood, Calif. Filed Apr. 27, 1931. Serial No. 533,320. 4 Claims. (Cl. 280—164.)



1. An attachment of the class described comprising a casing, a spring-wound drum in said casing, a foot mat coiled on said drum, said casing being provided with a slot through which the free end portion of the mat is projectable to permit the mat to be withdrawn from the casing to dispose it in operative position on an associated running board, and door actuated means associated with said drum for mechanically rotating the drum in a direction against the return spring to automatically project the mat to usable position.

1,863,661. MANUFACTURE OF FLUORINE. HEINZ KREKELER, Berlin, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 4, 1930, Serial No. 500,035, and in Germany Dec. 5, 1929. 3 Claims. (Cl. 204—19.)



2. An apparatus for the production of fluorine by electrolysis comprising a vessel divided into an anode and a cathode chamber by means permitting the passage of the electrolyte from one chamber to another but not permitting the evolved gases to pass from one chamber to another, an electrode within each chamber, current supplying means connected with said electrodes, the current supplying means and the electrodes being insulated from the vessel by means of a solid layer of electrolyte interposed between said vessel and said electrodes and current supply means, means for removing evolved gas from the chambers and means for introducing parent material to the vessel.

1,863,662. DERIVATIVES OF MONOAMINODIBENZOPYRENEQUINONE. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE and ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 20, 1929, Serial No. 379,866, and in Germany July 26, 1928. 6 Claims. (Cl. 260—61.)

1. As new articles of manufacture vat dyestuffs corresponding to the general formula:

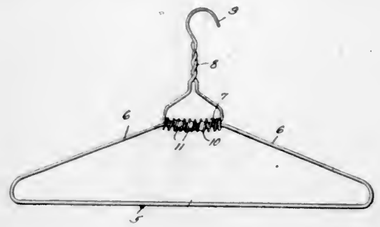


wherein R stands for a 3.4.8.9-dibenzopyrene-5.10-quinone radicle, X for a radicle of an organic compound capable of being vatted and Y for hydrogen or an alkyl radicle.

1,863,663. PIGMENT FOR COATED PAPER. VINCENT A. LAUDERMAN, Hamilton, Ohio, assignor to The Champion Coated Paper Co., Hamilton, Ohio, a Corporation of Ohio. Filed Oct. 23, 1928. Serial No. 314,546. 11 Claims. (Cl. 134—58.)

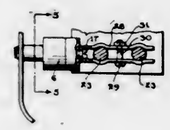
2. Process of converting lime sludge into a pigment suitable for use in coated paper which comprises neutralizing substantially all the free alkali in lime sludge by means of aluminum sulphate to produce a mixture of calcium carbonate and satin white, and grinding.

1,863,664. CLOTHES HANGER. PETER L. LAZARUS, St. Louis, Mo. Filed Oct. 16, 1930. Serial No. 489,177. 1 Claim. (Cl. 223—62.)



A clothes hanger comprising a substantially triangular body portion formed of a length of wire defining side rods and a lower connecting rod, the free ends of the length of wire being twisted together to provide a hook, portions of the side rods near the hook extending inwardly providing inwardly extended fingers, a holder in the form of a coiled wire having open ends to receive the inwardly extended fingers, and said holder adapted to support moth balls.

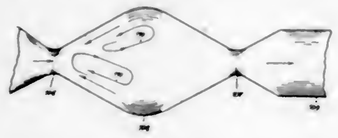
1,863,665. SHOCK ABSORBER. JOHN W. LISTERMAN, Pueblo, Colo. Filed Feb. 12, 1931. Serial No. 515,323. 4 Claims. (Cl. 293—55.)



1. A shock-absorbing means for use on automobiles and the like, comprising a bumper, resilient means for mounting said bumper, and means for securing said re-

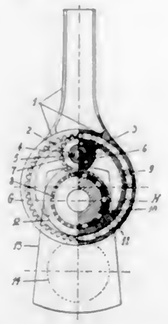
silient means to the floor of the automobile or other vehicle, consisting of horizontally extending walls, one of said walls being connected to the base of the automobile, vertically extending posts between said horizontally extending walls, and straps engageable about said vertically extending posts and with said resilient means.

1,863,666. METHOD OF AND APPARATUS FOR LOOSENING TOBACCO PARTICLES AND FREEING THEM FROM DUST. VALENTIN LORENTZ, Dresden, Germany, assignor to United Cigarette Machine Company Aktiengesellschaft, Dresden, Germany. Filed Apr. 28, 1928, Serial No. 273,642, and in Germany Mar. 19, 1927. 2 Claims. (Cl. 131—60.)



1. A method of loosening tobacco particles and freeing same from dust consisting in conveying the tobacco particles by means of an air stream having different speeds in different parts of its path.

1,863,667. CRANKSHAFT AND CONNECTING ROD FOR INTERNAL COMBUSTION ENGINES. JUAN DA COSTA MIRANDA, Buenos Aires, Argentina. Filed May 28, 1930, Serial No. 456,666, and in Argentina Apr. 9, 1930. 3 Claims. (Cl. 74—14.)



1. The combination with a multi-cylinder internal combustion engine and the connecting rods thereof, of a crank shaft, the pins thereof having teeth thereon, said connecting rods having rims, said pins being journaled eccentrically within the rims having internal teeth, and gears journaled eccentrically within the rims and meshing with the teeth of the pins and rims.

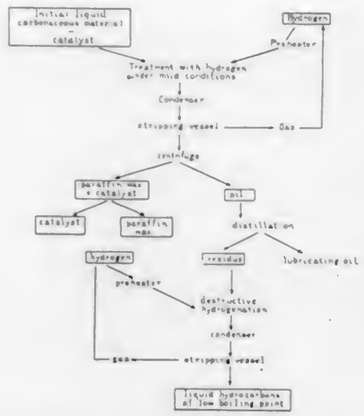
1,863,668. VAT DYESTUFFS. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 17, 1927, Serial No. 234,037, and in Germany Nov. 18, 1926. 3 Claims. (Cl. 260—61.)

3. As a new article of manufacture the black vat dyestuff, which dissolves to a violet solution in concentrated sulfuric acid and produces from a greenish-blue vat greenish blue dyeings on cotton turning black on oxidation, which dyestuff is obtainable by allowing the diazo compound of the aminobenzanthrone, obtainable by reducing the nitrobenzanthrone which can be prepared by nitrating benzanthrone in boiling glacial acetic solution, to act on an alkali metal xanthate, the product of the reaction being then treated with a strong alkaline agent.

1,863,669. PROCESS OF PRODUCING MOTOR FUELS BY DESTRUCTIVE HYDROGENATION OF CARBONACEOUS MATERIAL. MATHIAS PIER, Heidelberg, and MARTIN MÜLLER-CUNRADI, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 14, 1927, Serial No. 233,312, and in Germany Nov. 26, 1926. 6 Claims. (Cl. 196—53.)

1. A process for the production of motor fuels not inclined to knocking from a solid non-asphaltic pyrobituminous material having a high "bitumen" content which comprises removing substantially only the "bitumen" from said materal and thereupon subjecting the resulting residue to destructive hydrogenation.

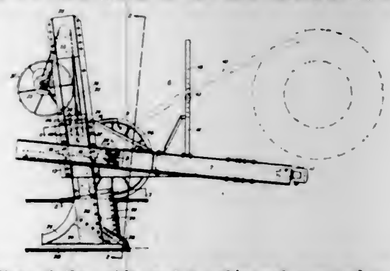
1,863,670. PRODUCTION OF VISCOUS OILS AND HYDROCARBON PRODUCTS OF LOW BOILING POINT. MATHIAS PIER, Heidelberg, Germany, assignor, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed June 7, 1929, Serial No. 369,264, and in Germany June 18, 1928. 5 Claims. (Cl. 196—53.)



1. A process for the production of viscous oils and hydrocarbon products of low boiling point from liquid asphaltic materials, which comprises treating said materials under such mild conditions, at temperatures of between 300° and 440° C. and pressures of the order of those employed in destructive hydrogenation with a gas comprising hydrogen, that any asphaltic substances are reduced and any paraffines present, which are normally solid at low temperatures, are not destroyed, separating from the resulting product the paraffins and those fractions suitable for the preparation of lubricating oils and subjecting the remainder of said product to a heat treatment leading mainly to the splitting of the molecules into hydrocarbon products of low boiling point.

1,863,671. CABLE-LAYING APPARATUS. FREDERICK B. PITTS, Oklahoma City, Okla., and MARSHALL T. GARLINGER, East Orange, and TEMPLE C. SMITH, Westfield, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 11, 1930. Serial No. 494,958. 14 Claims. (Cl. 111—5.)

1. In apparatus for laying cable and the like, the combination of traction means, a cable carrier and also a plow arranged to be drawn by said traction means, said plow including a frame, an adjustable support mounted on said frame, earth-engaging means carried by the support for forming a trench, a feed pipe mounted on said support through which cable passes to be laid in said trench, an adjustable bracket on said frame for guiding cable from the cable carrier to said feed tube without undue



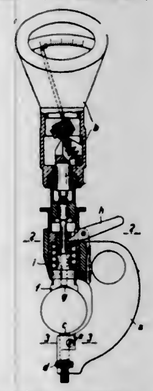
bending of the cable, and a cable reel mounted on the cable carrier to automatically supply cable to said feed tube over said adjustable bracket.

1,863,672. INSECT BARRIER FOR TREES. ALBERT T. REPP, Glassboro, N. J. Filed July 18, 1931. Serial No. 551,765. 2 Claims. (Cl. 43—108.)



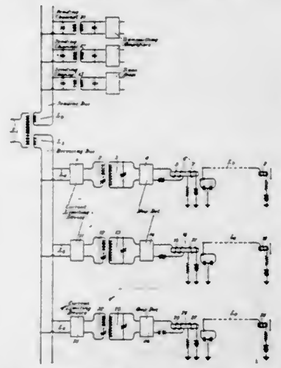
1. Insect barrier for trees comprising an impervious sheet adapted to encircle the tree, a wick carried circumferentially by said sheet, a reservoir for supplying insecticide to said wick, and means for adjusting the height of said reservoir relative to said wick.

1,863,673. INDICATOR JAW GAUGE. ALEXANDER SCHRAVEN, Essen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Jan. 29, 1930, Serial No. 424,346, and in Germany Feb. 11, 1929. 1 Claim. (Cl. 33—147.)



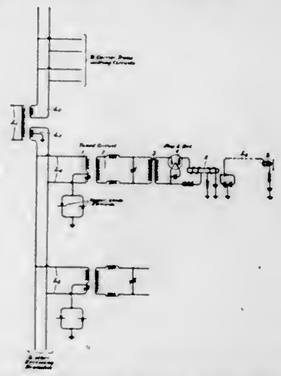
A gauge of the class described comprising a frame forming two jaws rigid relatively to one another, an anvil mounted on one of said jaws, a shiftable spring-influenced centering block and a gauging bolt mounted on the other jaw, a two-armed lever pivoted on said frame and adapted to lift said block against the spring action, and a feeling lever indicating mechanism in operative connection with said gauging bolt.

1,863,674. MEANS FOR REDUCING LIGHTNING INTERFERENCE IN CARRIER TELEGRAPH CIRCUITS. VAUGHN P. THORP, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 19, 1930. Serial No. 462,380. 2 Claims. (Cl. 178—69.)



1. In a carrier telegraph system, the combination with a transmission circuit exposed to lightning interference, of a receiving circuit connected with the said transmission circuit and containing a tuned circuit, and means connected in series with each side of said tuned circuit to automatically dampen the tuning thereof, each of said damping means offering low resistance to current of one polarity and high resistance to the other polarity, the said damping means being connected effectively in opposition.

1,863,675. MEANS FOR REDUCING LIGHTNING INTERFERENCE IN CARRIER TELEGRAPH CIRCUITS. VAUGHN P. THORP, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 19, 1930. Serial No. 462,382. 2 Claims. (Cl. 178—69.)



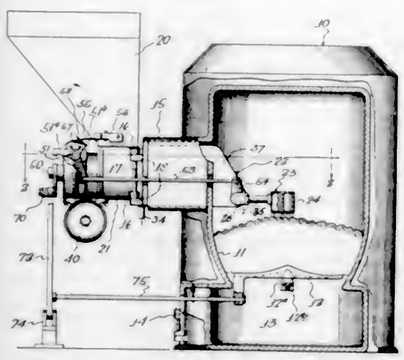
1. In a carrier telegraph system, the combination with a transmission circuit upon which normal signal voltages and abnormal interference voltages may be impressed, of a resonant circuit, comprising an inductance in series

with a condenser, tuned to signal frequency connected with said transmission circuit, and rectifying means operative at a predetermined voltage to effectively short-circuit both of the elements of the resonant circuit.

1,863,676. AMINO-HYDROXY PYRIDINE AND PROCESS OF PREPARING THE SAME. EDMOND T. TISZA, New York, and BERNARD JOOS, Yonkers, N. Y., assignors to The Pyridium Corporation, Nepera Park, N. Y., a Corporation of New York. Filed July 11, 1929. Serial No. 377,599. 9 Claims. (Cl. 260—42.)

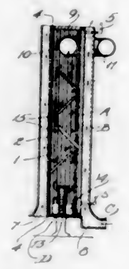
1. The method of preparing alpha-hydroxy-alpha-amino-pyridine which consists in substituting a hydroxyl group for one amino group in alpha-alpha-diamino-pyridine by treatment with a mineral acid of proper strength.

1,863,677. AUTOMATIC STOKING DEVICE. FREDERICK W. VODOZ, Wilmette, Ill. Filed Nov. 12, 1928. Serial No. 318,662. 10 Claims. (Cl. 110—101.)



1. In a furnace, a fire box, feeding means adapted to deposit fuel upon the top of the fuel bed in said fire box, control means for said feeding means including a floating member adapted to contact with the top of said bed of fire and responsive to variations in height thereof, and means for moving said floating member out of contacting position with the fire during operation of said feeding means.

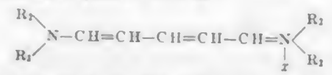
1,863,678. HEAT EXCHANGER. FRED L. WAGAR, Wagar, Ala. Filed May 20, 1929. Serial No. 364,575. 2 Claims. (Cl. 257—136.)



2. A heat exchange device comprising a hollow shell, said shell consisting of concentrically arranged exterior and interior sheets of corrugated metal, the corrugations of one sheet being disposed at angles to the corrugations of the other sheet, and the corrugations of opposite sheets united at their points or areas of contact, means uniting adjacent ends of the sheets to form an inclosed space between the sheets, and pipes for circulating fluid through the inclosed space between the sheets; the interior of said shell being open at each end for the passage of air through the shell.

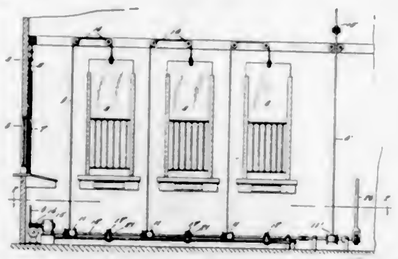
1,863,679. POLYMETHINE DYESTUFFS. OTTMAR WAHL, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 24, 1929, Serial No. 373,475, and in Germany June 28, 1928. 8 Claims. (Cl. 260—47.)

1. The process which comprises heating a compound of the probable general formula:



wherein R_2 stands for hydrogen or an alkyl group, R_1 stands for a radical of the benzene series, and x stands for a monovalent acid radical, with about the double equimolecular quantity of 1.3.3-trialkyl-2-methylene idoline.

1,863,680. BANK PROTECTIVE APPARATUS. ANDREW YOUNG and STEPHEN GERENCSER, Windber, Pa. Filed Jan. 6, 1931. Serial No. 506,986. 1 Claim. (Cl. 268—2.)

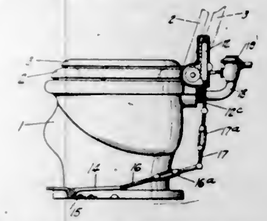


In combination with a wall having a plurality of windows therein, guideways at the sides of the windows, a gravity shield slidable in each pair of guideways for closing a window when the shield is in lowered position, a pair of pulleys located above each window, a cable passing over each pair of pulleys having one end connected to the upper end of a shield, a shaft supported for rotary movement adjacent the bottom of the wall, drums on said shaft and fastened thereto and to which the lower ends of the cables are connected, means for rotating the shaft to cause the cables to wind on the drum to raise the shields, ratchet wheels on the shaft, one under each window, a second shaft supported for rotary movement adjacent the lower end of the wall and parallel to the first shaft, pawls fast on the second shaft one engaging each ratchet wheel for holding the first shaft in position with the cables wound on the drums thereof and a pedal extension on each pawl whereby depression of any one of the pedals will release all the pawls to permit all of the shields to drop into closing position.

1,863,681. PROCESS FOR THE MANUFACTURE OF HYDROGEN. JAN AL, Amsterdam, Netherlands, assignor to Naamlooze Vennootschap De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Original application filed June 8, 1929, Serial No. 369,533, and in the Netherlands July 5, 1928. Divided and this application filed Nov. 13, 1930. Serial No. 495,531. 1 Claim. (Cl. 23—210.)

A process of manufacturing hydrogen by heating a mixture of hydrocarbon and water vapour, in the presence of a nickel catalyst which is prepared by treating a nickel salt with less than the theoretical quantity of a solution which tends to convert said salt into nickel hydroxide, and further reducing the hydroxide to nickel by treating it with hydrogen.

1,863,682. TOILET BOWL. SAMUEL ALBERTS, Los Angeles, Calif. Filed Aug. 23, 1930. Serial No. 477,195. 15 Claims. (Cl. 4—251.)



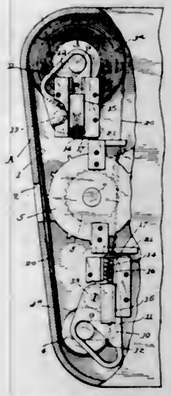
2. A toilet bowl, a toilet receptacle open at its upper side, a toilet seat pivotally mounted at its rear portion over the upper side of the receptacle, a toilet cover pivotally mounted at its rear portion coaxial with the pivotal axis of the toilet seat and positioned above the latter, a gear secured to each of the seat and cover, coaxial with each other and with the pivotal axes of the seat and cover, and means for independently rotating the gears for raising and lowering the cover and seat.

1,863,683. PHONOGRAPH RECORD. EDWARD LINDLEY BOWLES, Wellesley Farms, Mass. Filed May 8, 1930. Serial No. 450,692. 8 Claims. (Cl. 274—42.)



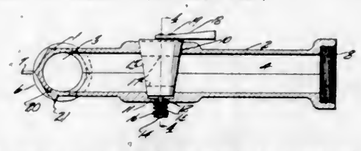
1. A record having two sides, each having a record sound track, and means for tactually distinguishing the sides.

1,863,684. INDICATOR. GEORGE A. COMBRIDGE, San Francisco, Calif. Filed July 17, 1931. Serial No. 551,400. 5 Claims. (Cl. 40—86.)



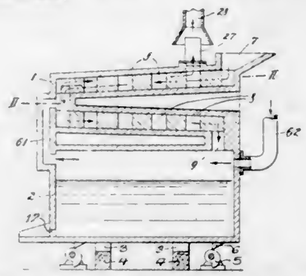
1. In combination, a pair of rollers, a tape having its end wound upon the respective rollers and adapted to unwind from one roller and wind upon the cooperating roller, thereby varying the diameters of the respective rolls of tape, slotted bearings for the rollers, plates slidable perpendicularly to the lengths of the slotted bearings, and rollers on said plates contacting the cooperating rolls of tape for sliding said plates in accordance with said variations in the diameters of the respective rolls of tape, the plates having angularly disposed slots engaging the cooperating rollers for correspondingly relatively shifting the rollers in their slotted bearings in accordance with sliding movement of the plates so as to uniformly maintain the position of the length of tape which extends from one roll to the other.

1,863,685. SPRAYING NOZZLE. CHESTER CARL COVEY, Clarks Summit, Pa. Filed July 9, 1930. Serial No. 466,751. 1 Claim. (Cl. 299—112.)



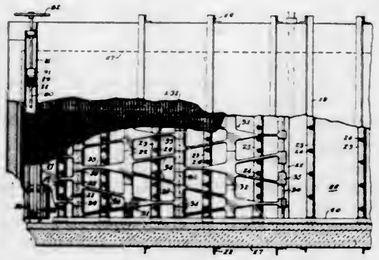
In a device of the kind described, an elongated spray head mounted transversely at the end of a water delivering pipe, the said spray head having a plurality of forwardly disposed spray apertures, a drip lip formed along the under side of the spray pipe immediately back of the said spray apertures.

1,863,686. DEVICE FOR THE REFINING, MIXING, AND PURIFYING OF MOLTEN METALS AND METAL ALLOYS. FRIEDRICH WILHELM CORSALLI, Berlin, Germany. Filed July 23, 1927, Serial No. 207,999, and in Germany June 30, 1926. 2 Claims. (Cl. 266—134.)



1. Apparatus for refining, mixing and purifying molten metals and metal alloys, comprising, a mixer adapted to receive molten metal, a receptacle connected with said mixer, channels in said mixer, the molten metal being mixed in the passage thereof through said channels, and a common actuating means for imparting an oscillating movement to said mixer and receptacle.

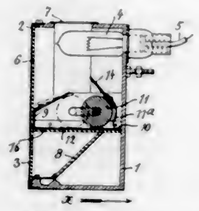
1,863,687. GLASSWARE ANNEALING LEER. ALBERT N. CRAMER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 28, 1928. Serial No. 281,254. 11 Claims. (Cl. 49—47.)



1. A ware conveyor supporting floor for glassware annealing leers, comprising a series of cross bars arranged in parallel relation to each other, and substantially Y-

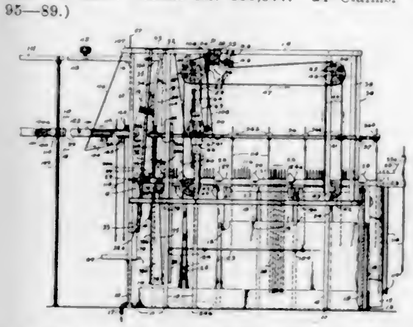
shaped grate bar units arranged in rows parallel with and between pairs of cross bars and having their end portions supported on the latter, said units formed to provide a perforate support assembled.

1,863,688. AUTOMATIC SIGNALING DEVICE FOR MOTOR VEHICLES. PIERRE DELMAS, Paris, France. Filed Feb. 17, 1931, Serial No. 516,387, and in France Feb. 18, 1930. 3 Claims. (Cl. 116—42.)



1. A signaling device for motor vehicles and the like, comprising a casing, a reflector in said casing, means for illuminating said reflector, a transparent signaling sign arranged across the path of the reflected light beam, a cylinder, arranged to travel in said casing above the reflector in the longitudinal direction of the vehicle, and a screen carried by said cylinder and normally held by the latter so as to obscure the reflector, said cylinder adapted, when moved by inertia on reduction of the speed of the vehicle, to remove the screen from the reflector.

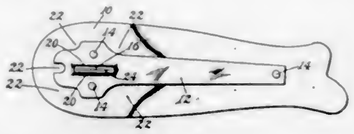
1,863,689. FILM DEVELOPING AND PROGRESSING MACHINE. GLEN M. DYE, Minneapolis, Minn. Filed Apr. 17, 1929. Serial No. 355,877. 24 Claims. (Cl. 95—89.)



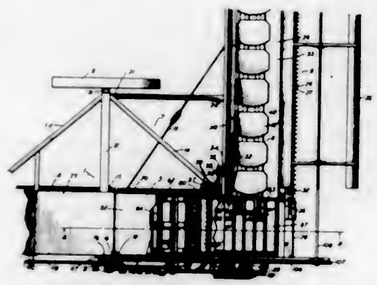
1. A film handling apparatus having in combination, a series of liquid containers, a conveyor movable therealong adapted to support film-carrying members from which the films extend into said containers, said containers to be of substantially equal dimensions in the direction of movement of said conveyor, a pair of rails extending along said containers having spaced means thereon for lifting said film-carrying members from said conveyor, advancing said film-carrying members and lowering said film-carrying members into engagement with said conveyor, and means to progress said conveyor at each cycle of movement of said rails.

1,863,690. SHANK STIFFENER. JOHN B. HADAWAY, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 21, 1929. Serial No. 401,173. 7 Claims. (Cl. 36—76.)

1. A shank piece for turn shoes comprising a filler member having a marginal outline shaped to fit the inside of the heel and shank portions of a shoe, and a reinforcing strip for the filler member, said reinforcing strip having an enlarged rear portion adapted to be located rearwardly beyond the heel breast line of a shoe and said filler member having its margin notched and its central portion perforated to permit the passage of heel-attaching fasteners driven in their usual locations through the shoe bottom.

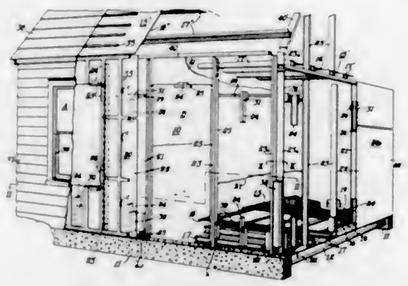


1,863,691. COMBINE HARVESTER. PERREN J. HANSON, Independence, Mo., assignor to Gleaner Combine Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Apr. 19, 1930. Serial No. 445,721. 9 Claims. (Cl. 56—122.)



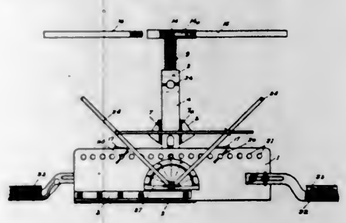
1. In a machine of the character described, a receiver for cut grain, means for discharging grain straw crosswise of the receiver, and a conveyor including sweeper members movable longitudinally of the receiver across the path of discharge of the grain straw, for delivering cut grain from the receiver.

1,863,692. METAL BUILDING CONSTRUCTION. ROBERT P. HUTCHINSON, Bethlehem, Pa. Filed Jan. 24, 1931. Serial No. 511,099. 19 Claims. (Cl. 189—1.)



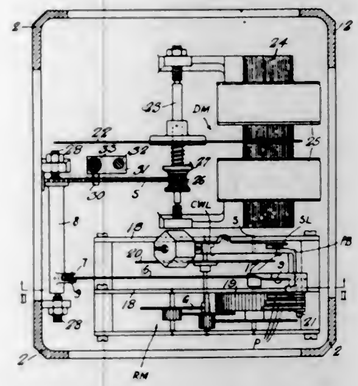
8. In an article of manufacture, a metal wall construction for a building which includes a plurality of plate portions disposed in spaced relation with respect to each other, upwardly extending members disposed between said plate portions and rigidly secured thereto, the inner of said plate portions including upper and lower plates positioned in spaced relation, the lower plate being positioned above a baseboard level and having a width measured from the baseboard level which corresponds to a molding board level, so that molding board may be positioned to cover the space between the upper and lower plates of the inner portion.

1,863,693. MACHINE FOR BENDING METAL TUBES IN THE COLD STATE. CÉSAR MINGORI, Paris, France. Filed May 31, 1930, Serial No. 457,775, and in France Jan. 23, 1930. 5 Claims. (Cl. 153—38.)



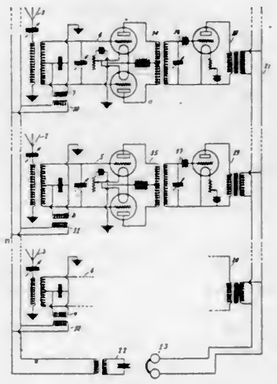
1. A machine for cold bending metal tubes comprising a matrix, two uprights, said matrix sliding between said uprights, said matrix bending the tubes by pressure, a screw adapted to provide said pressure, ratchet mechanism for operating said screw, two oscillating bearings, one of said bearings being mounted on each side of said matrix, means for adjusting said bearings, two cheeks for supporting the tube to be bent, a pedal carried by each cheek, for giving stability to the machine, the oscillating bearings being mounted between said cheeks, means for indicating the angle to which the tube is to be bent, a foot carried by each pedal, said feet acting as bearings, said feet being ribbed, and forming extensions of said pedals such that they have a length equal to the total width of the machine to give perfect stability.

1,863,694. RELAY MECHANISM. BERTRAM READ PADMORE, Newport, Victoria, Australia, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 12, 1930, Serial No. 474,851, and in Australia Aug. 14, 1929. 7 Claims. (Cl. 200—97.)



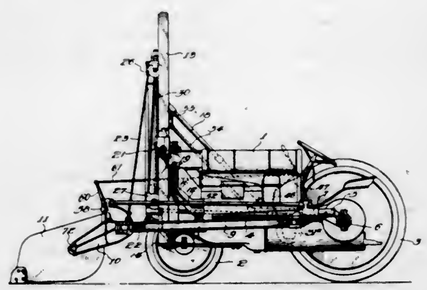
1. Relay mechanism comprising a member movable in two directions, an induction motor for moving said member in one direction, a counterweight for moving said member in the opposite direction independently of said motor, means for retarding the movement of said member when said member is being moved by said counterweight but not when said member is being moved by said motor a pivoted contact carrier biased to one position, and a pin and slot connection between said movable member and said contact carrier for moving the contact carrier to another position during the latter part of the movement of said member by the induction motor and for permitting return of the contact carrier by its bias during the early part of the movement of said member by said counterweight.

1,863,695. ELIMINATION OF FADING BY DIVERSITY FACTOR. HAROLD O. PETERSON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 19, 1925. Serial No. 38,165. 36 Claims. (Cl. 250—20.)



1. The method of receiving signal oscillations which includes intercepting the signal oscillations at various points, generating an audio frequency oscillation at another point, transmitting the audio frequency oscillation to the various points, combining the audio frequency with signal initiated oscillations, and detecting and transmitting the result to the central point and translating it there.

1,863,696. HYDRAULIC DIGGER AND LOADER. RUSSELL B. NORTH, FRANK G. HOUGH, and ROYAL R. MILLER, Chicago, Ill., assignors to William Mitchell Blair, Chicago, Ill. Filed June 15, 1928. Serial No. 285,698. 22 Claims. (Cl. 214—140.)



1. In a hydraulic digger and loader mounted on a tractor, telescoping booms positioned at the opposite sides of said tractor and mounted on the rear axle of said tractor, means for extending said booms upon a raising of the same, and a bucket mounted on the forward ends of said booms.

1,863,697. BRASSIÈRE. GEORGE E. RUTLEDGE, Chicago, Ill., assignor to Vassar Swiss Underwear Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 21, 1931. Serial No. 564,090. 5 Claims. (Cl. 66—176.)



3. A brassière having a bust covering portion formed of knitted textile fibre yarn, a knitted back portion, and an endless lower bust supporting band portion encircling the body and formed of knitted composite rubber yarn, said bust and back portions being formed integrally with adjacent bust supporting band portions.

1,863,698. PROCESS OF PURIFYING AND CONCENTRATING ACETIC ACID. JOHN F. W. SCHULZE, Shaker Heights, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 28, 1929. Serial No. 350,815. 5 Claims. (Cl. 260—122.)

2. In a process of distilling acetic acid the steps comprising adding aqueous acetic acid to a ternary mixture of acetic acid—sulfuric acid—water of a composition within the range of compositions in which, at the boiling point, the concentration of the acetic acid in the vapor phase is greater than the ratio of acetic acid to water in the liquid phase, maintaining the composition of the said ternary mixture within said limits of composition by constantly supplying concentrated sulfuric acid to the contacting zone, constantly removing exhausted ternary mixture and constantly removing vapors of concentrated acetic acid from the contacting zone.

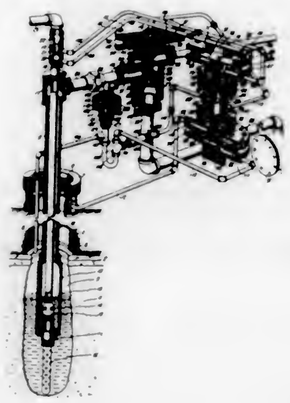
1,863,699. PREPARATION OF BLANC FIXE. WILLIAM SEGUINE, Jr., Newport, Del., assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,742. 3 Claims. (Cl. 23—122.)

1. The method of preparing blanc fixe from barium chloride consisting in thoroughly mixing an acidified solution of barium chloride with gypsum, heating, washing with acidified water, and neutralizing.

1,863,700. MANUFACTURE OF HYDRATED ZINC OXIDE. WILLIAM SEGUINE, Jr., and ALBERT THOMAS MERTES, Newport, Del., assignors, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,912. 3 Claims. (Cl. 23—147.)

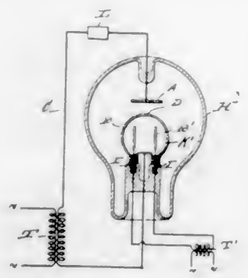
1. The process of producing a hydrated zinc oxide which comprises adding to a substantially pure zinc chloride solution an amount of milk of lime slightly in excess of that equivalent to the zinc chloride, heating the resulting pulp until all chlorine compounds are water soluble, adding an acid, the calcium salts of which are water soluble, in sufficient amount to convert the excess of calcium hydroxide to a soluble calcium salt, separating the hydrated zinc oxide formed from the reaction liquor, and thereafter washing and drying the precipitate.

1,863,701. PNEUMATIC PUMPING APPARATUS. GEORGE B. SMALL, Tulsa, Okla., assignor of three-fourths to Tidal Oil Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Nov. 15, 1929. Serial No. 407,397. 6 Claims. (Cl. 103—245.)



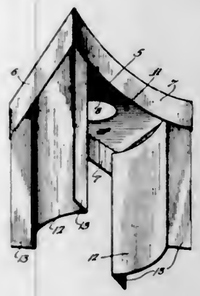
1. Pneumatic pumping apparatus including a well discharge line, a line, including a primary valve, for supplying air under pressure to the well for discharging liquid from the well through said discharge line, and secondary valve mechanism responsive to change in velocity of liquid in the discharge line controlling the valve in the supply line.

1,863,702. GASEOUS CONDUCTION METHOD AND APPARATUS. CHARLES G. SMITH, Medford, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 12, 1926. Serial No. 101,284. 6 Claims. (Cl. 175—363.)



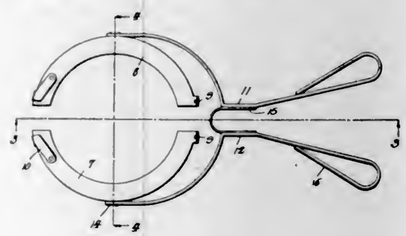
4. A unidirectional gaseous conduction device comprising a sealed vessel containing a gas filling of substantial pressure, an anode, a hollow cathode having an extended interior electrode surface, and means including additional electrode means within said hollow cathode for maintaining in the gas inside thereof a high frequency discharge ionizing the gas enclosed in said hollow cathode to a degree at which a discharge having arc characteristics is maintained between said cathode and said anode.

1,863,703. LUMINAIR FOR CORRIDORS, ETC. JACOB L. STAIR, Chicago, Ill. Filed Sept. 6, 1930. Serial No. 480,111. 11 Claims. (Cl. 240—105.)



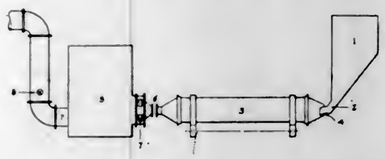
1. A lighting fixture comprising a box-like structure providing a supporting element that is open at its bottom, concave reflector plates depending from the ends of said element, and a lamp within the fixture between the reflectors whereby direct and reflected light rays are projected through the unobstructed sides of the fixture.

1,863,704. DEVICE FOR APPLYING RUBBER RINGS TO HOT FRUIT JARS. MARY T. SUEPER, Lindsay, Nebr. Filed Aug. 12, 1931. Serial No. 556,468. 6 Claims. (Cl. 29—88.2.)



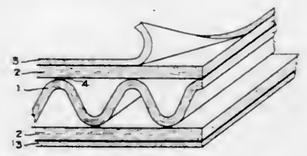
1. A device of the character described comprising upper and lower jaws, each jaw being composed of spaced arcuate sections disposed on a horizontal plane in opposed relation, means pivotally connecting said jaws together so they are capable of moving toward and from each other, and a handle connected to one of said jaws.

1,863,705. PROCESS OF PRODUCING A BURNER GAS SUPPLY OF UNIFORM SULPHUR DIOXIDE CONTENT. WALTER H. WEINBERG, West Toledo, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 13, 1931. Serial No. 522,205. 4 Claims. (Cl. 23—179.)



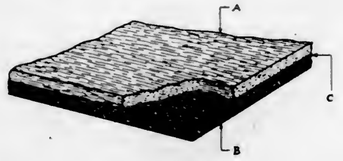
1. The process of producing a sulphur dioxide combustion gas supply of closely limited SO_2 content within the range of concentrations useful in the manufacture of sulphuric acid, which comprises volatilizing and partly burning sulphur in contact with air in a volatilizing zone, adding air to the so obtained primary gases, completing the combustion in a combustion zone, measuring the temperature of the completely burned gases after they have left the combustion zone but before substantial cooling thereof, decreasing the air supply to the volatilization zone when the said temperature increases over a given norm and decreasing the air supply to said volatilizing zone when said temperature falls below said norm.

1,863,706. CORRUGATED PAPER BOARD. CHARLES DE LORMAN WOOD, Sr., Lakewood, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,068. 6 Claims. (Cl. 154—55.)



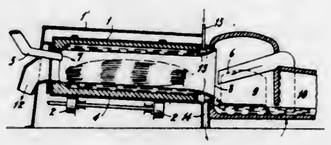
1. A corrugated board comprising a corrugated sheet of paper faced with a liner consisting of sheets of paper of different construction, joined together by an adhesive part of said sheets being cylinder paper, other sheets being Fourdrinier paper.

1,863,707. MULTIPLY PAPER SHEET. CHARLES DE LORMAN WOOD, Sr., Lakewood, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,300. 5 Claims. (Cl. 154—46.)



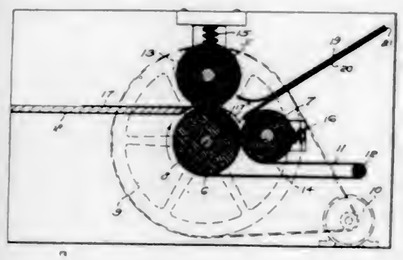
1. A multiply paper sheet consisting of alternating plies of cylinder and Fourdrinier paper joined together by an adhesive.

1,863,708. PROCESS OF AND MEANS FOR MELTING GLASS AND THE LIKE. GEORG ZOTOS, Berlin, Germany. Filed Nov. 2, 1928, Serial No. 316,749, and in Switzerland Nov. 15, 1927. 8 Claims. (Cl. 49—54.)



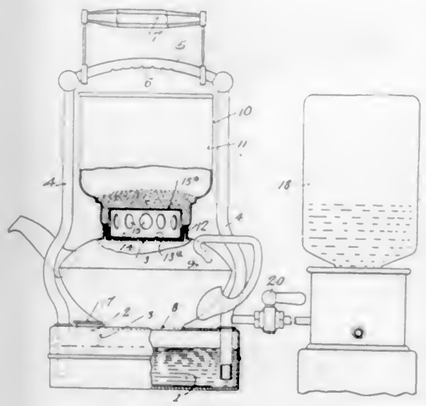
1. A process for melting glass by means of a rotary furnace, comprising continually feeding into a drum lined with refractory material the raw materials forming the glass composition, melting said raw materials by means of a flame, rotating the drum so as to form a hollow cylinder of fluid glass on the inner surface thereof, and withdrawing molten glass from the inner layer of said hollow cylinder of fluid glass.

1,863,709. PAPER FOLDING MACHINE. CLIFFORD S. BEALL, Raymond, Wash. Filed Oct. 30, 1930. Serial No. 492,333. 4 Claims. (Cl. 270—68.)



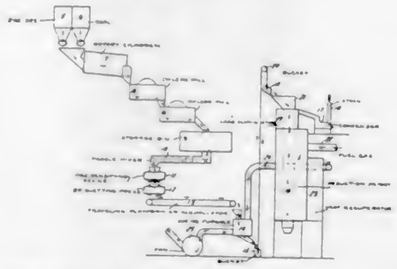
1. A machine of the character described, comprising three horizontally-positioned rubber rollers, one of which is positively driven and the other two of which are frictionally engaged by said driven roller, a feed table with guides for conducting a sheet of paper to and between the driven roller and one of the other two, and means for guiding and stopping the paper on the far side of said rollers,—the remaining or third roller being so associated with the driven roller that when the intermediate portion of the paper is caused to buckle by contact of the forward edge of the paper with the stopping means, said third roller and the driven roller will grip the buckled portion of the sheet and draw it between them, producing a fold in said sheet.

1,863,710. COFFEE MACHINE. CHARLES BERG, New York, N. Y., and CLARENCE F. COOKSON, Lyndhurst, N. J., assignors to Counter Cooking Machine Corporation, New York, N. Y., a Corporation of Delaware. Filed June 10, 1930. Serial No. 460,136. 3 Claims. (Cl. 53—3.)



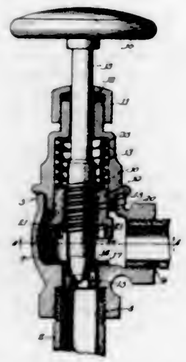
1. A drip coffee pot comprising a lower receptacle for coffee extract, an upper receptacle for ground coffee and water, communicating through a perforated bottom with said lower receptacle, a cup having a bottom pierced with perforations small enough to act as a filter and sides having holes large enough to permit the passage of ground coffee therethrough, said cup being invertible and fitting into said upper receptacle above the perforated bottom thereof so that in bottom down position it acts as a filter and in bottom up position maintains the ground coffee in spaced relation to the perforated bottom of the upper receptacle at the beginning of the coffee making process but permits of the gradual deposition of said ground coffee on a filter placed directly above the perforated bottom of the upper receptacle as the process progresses.

1,863,711. REDUCING ZINCIFEROUS MATERIALS. EARL H. BUNCE, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 30, 1929. Serial No. 417,471. 9 Claims. (Cl. 75—28.)



1. The method of reducing zinciferous material which comprises agglomerating and coking an appropriately prepared mixture of zinciferous and carbonaceous materials and thereby producing coked agglomerates possessing adequate residue strength for vertical retort reduction, progressively passing the coked agglomerates through a vertical retort externally heated by hot gaseous products of combustion to a sufficiently high temperature to reduce the zinciferous material and volatilize the resulting metallic zinc without substantial disintegration of the agglomerates, subjecting the gaseous product of the reducing operation to appropriate treatment for the recovery of its zinc content, and utilizing the exhaust heating gases of the reducing operation for the coking operation.

1,863,712. HEATING SYSTEM. ALBERT H. BYFIELD, Chicago, Ill. Filed July 14, 1930. Serial No. 467,676. 3 Claims. (Cl. 251—27.)



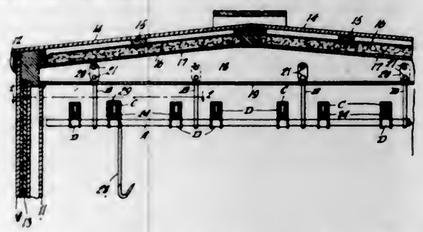
3. The combination of a heating radiator with a control valve connected thereto for controlling the flow of heating medium through said radiator, said valve having a relatively long tapering closure member and a correspondingly long tapering seat member whereby accurate control and regulation of the flow of heating medium through said valve and radiator may be accomplished, the taper of said closure member and said seat member being sufficiently different to create a substantially line contact between said members.

1,863,713. COIL AND METHOD OF MAKING SAME. ROBERT A. CONNOR, Fort Wayne, Ind., assignor, by mesne assignments, to National Electric Products Corporation, New York, N. Y., a Corporation of New Jersey. Filed May 1, 1930. Serial No. 448,876. 11 Claims. (Cl. 175—21.)



1. A coil structure comprising a coil having a tubular core, a covering extending around the circumference of said coil and lapped over the ends thereof, and an annular plate secured over said lapped portion having a central aperture for receiving the end of the core therethrough, the ends of said core being turned back against said plate to form a bead.

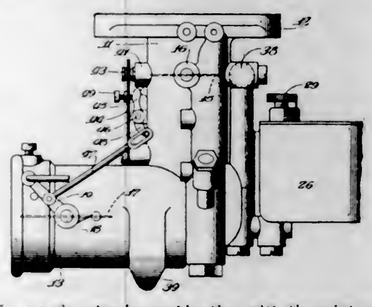
1,863,714. MEAT RACK. WILLIAM A. GEIGER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 18, 1931. Serial No. 551,686. 20 Claims. (Cl. 105—355.)



1. In a meat rack for refrigerator cars, the combination with spaced bars supported on the car structure; of spaced beams supported on said bars and arranged transversely of the same; meat hooks suspended from said beams; and yielding cushioning means forming a part of said rack structure for absorbing shocks imparted thereto.

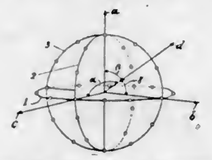
2. In a meat rack for refrigerator cars, the combination with spaced bar members supported on the car structure; of spaced meat hook supporting beam members supported on said bar members, certain of said members being resilient to absorb shocks transmitted to said rack structure.

1,863,715. CARBURETOR. FRANK H. HEITGER, Flint, Mich. Filed Nov. 9, 1929. Serial No. 405,925. 11 Claims. (Cl. 261—46.)



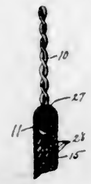
1. In a carburetor in combination with the mixture conduit, fuel feed, throttle and choke valves therefor, a valve adjacent the throttle for by-passing air there around, means connecting said valve to the choke valve to be opened by the closing of the choke valve, a fuel collecting sump fed by the overflow from the normal fuel feed and a conduit leading from said sump to the valve adjacent the throttle whereby the opening of said valve causes the suction about the throttle to draw fuel from the sump.

1,863,716. APPARATUS FOR THE RECEPTION AND TRANSMISSION OF WAVE ENERGY, IN SPACE. HEINRICH HECHT and WILHELM RUDOLPH, Kiel, Germany, assignors to Electroacustic Gesellschaft mit beschrankter Haftung, Kiel, Germany, a Firm of Germany. Filed Nov. 30, 1929, Serial No. 410,763, and in Germany Dec. 6, 1928. 10 Claims. (Cl. 177—352.)



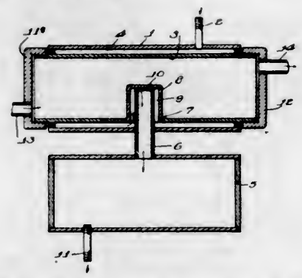
1. Arrangement for directional transmission and reception of wave energy in any desired direction in space, comprising at least two groups of oscillators arranged with their effective directive ranges in different planes crossing each other, an independent compensation means for each group adapted to vary the directional character of its group within its range, to obtain maximum wave energy effects in the desired direction, and means for combining the resultant maximum directional effects of the two groups to obtain a definite single valued maximum directive wave energy effect in space.

1,863,717. THREADING DEVICE. JOHN W. W. HOLDEN, Providence, R. I. Filed Mar. 4, 1931. Serial No. 519,965. 4 Claims. (Cl. 223—36.)



1. In a device of the character described, a metallic needle comprising a shaft and a terminal loop, and a cord comprising braids fixed at their ends to the loop, the cord being of greater cross section than the needle.

1,863,718. REFRIGERATING APPARATUS. HERMAN W. KLEIST, Chicago, Ill., assignor to Dole Refrigerating Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 26, 1926. Serial No. 150,703. 4 Claims. (Cl. 257—28.)



1. A refrigerating apparatus comprising a gas receptacle, a cooling receptacle surrounded by the gas receptacle and separated therefrom by a space into which the gas

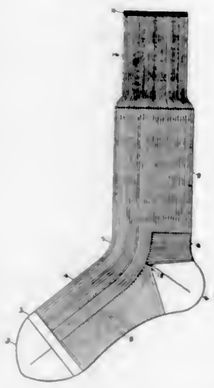
is received, a refrigerant receptacle, a connection between the refrigerant receptacle and the gas receptacle, said connection having an end which projects into the cooling receptacle, an enclosing device for said projecting end, separated from the projecting end by a space which communicates with the space between the gas receptacle and the cooling receptacle and a plurality of openings connecting the space between the enclosing device and the projecting end of said connection, and the interior of said connection.

1,863,719. STOCKING OR HALF HOSE AND METHOD OF MAKING THE SAME. ROBERT H. LAWSON and WILLIAM L. SMITH, Jr., Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed June 25, 1930. Serial No. 463,763. 6 Claims. (Cl. 66—188.)



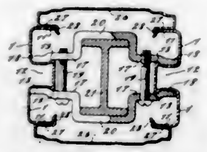
1. A method of knitting consisting in feeding at least one thread to two sets of needles and simultaneously therewith feeding at least one additional thread to a portion only of one of the said sets of needles, withdrawing the last named thread or threads from feeding relation with the needles and severing the additional thread while knitting.

1,863,720. KNITTING MACHINE AND METHOD OF KNITTING. ROBERT H. LAWSON and WILLIAM L. SMITH, Jr., Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Nov. 4, 1930. Serial No. 493,360. 38 Claims. (Cl. 66—24.)



1. A circular knitting machine including a needle dial and a needle cylinder the needles of which are adapted to cooperate in the knitting of a partly ribbed and partly plain fabric, means for reinforcing, by means of a thread other than the body thread, the adjacent plan wales which constitute the plain portion of the fabric, a dial cap provided with cams on one face thereof for controlling the knitting movements of the dial needles and means mounted on the other face thereof for severing the reinforcing thread adjacent to a wale defining one side of the reinforced portion, at least once during the knitting of each reinforced course.

1,863,721. MEANS FOR STIFFENING PARTITION WALLS. LOUIS L. LEVENE, Merrick, N. Y. Filed Aug. 29, 1930. Serial No. 478,673. 10 Claims. (Cl. 189—34.)



1. In a partition wall, the combination of a consecutive series of structurally independent wall sections each having a frame the stiles of which are metal channels the flanges of which project from the edges of the sections, each of the stiles being provided with a panel-holding groove which forms a ridge between the said flanges, each of the said ridges being provided with lateral beads which project towards the respective flanges of the channel, the said stiles of adjacent sections being spaced from one another, a vertical series of clamping devices bridging the space between and detachably connecting together the said spaced stiles, each of these clamping devices comprising a pair of clip members having their ends shaped to engage with the respective opposite sides of the said ridges and with the beads formed thereon, together with screw means for drawing these clip members into clamping and locking relation with the said ridges and their beads, a substantially rigid vertical stiffening member extending downward from a point above the upper ends of the said spaced stiles and between the clip members of at least two of the said clamping devices and firmly but detachably gripped by the said clip members with the said stiffening member terminating at its lower end above the lower ends of the said stiles, and a holding device for the upper end of the said stiffening member secured to an upper part of the building and engaging with the upper end of the said stiffening member to restrain the latter against horizontal movement transversely of the said wall thereby to stiffen the wall along the upper ends of the said connected sections.

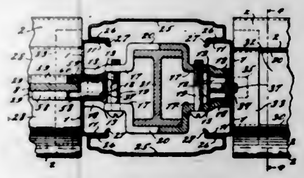
1,863,722. PANEL FRAME CONSTRUCTION. LOUIS L. LEVENE, Merrick, N. Y. Filed Aug. 29, 1930. Serial No. 478,674. 16 Claims. (Cl. 189—34.)



1. In a panel frame, the combination of a frame bar having a longitudinal channel in the panel side thereof opening inwardly from this panel side, and a pair of panel-holding moldings fitting together into the channel alongside of and in engagement with one another, said moldings having portions projecting from the channel and forming between these projecting portions a panel-receiving groove at the outside of the said channel.

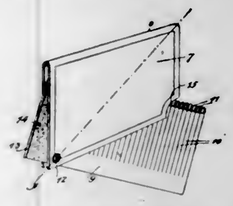
1,863,723. PARTITION WALL CONSTRUCTION. LOUIS L. LEVENE, Merrick, N. Y. Filed Aug. 29, 1930. Serial No. 478,675. 13 Claims. (Cl. 189—34.)

2. In a partition wall, the combination of a consecutive series of structurally independent wall sections each having a frame including metal stiles each of which is provided continuously throughout its length with a panel-holding groove which forms a ridge outwardly on the other side of the stile from the groove, the said ridge being provided continuously throughout its length with lateral beads which project from the opposite sides of the said ridge, the said stiles of adjacent sections being spaced from one another, and a vertical series of vertically spaced clamping devices bridging the space between and detachably securing together the said spaced stiles, each



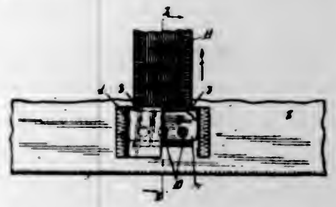
of these clamping devices comprising a pair of laterally spaced clip members having their ends shaped with offset portions to engage with the respective opposite sides of the said ridges and with the beads thereon, together with screw means for drawing the clip members of a pair towards one another into clamping and locking relation with the said ridges and their beads for thereby firmly but detachably securing together the spaced stiles of adjacent sections and constituting the only means provided for that purpose.

1,863,724. MATCH CONTAINER. ELMER S. LINDMARK and FREDERICK C. KAUFMANN, Brooklyn, N. Y.; said Kaufmann assignor to said Lindmark. Filed Jan. 22, 1931. Serial No. 510,551. 3 Claims. (Cl. 206—29.)



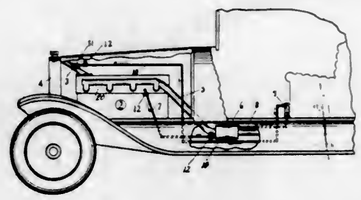
2. A match container comprising a flat sheath, and a match sheet pivoted to and swingable into and from said sheath, said match sheet having a normally exposed abrasive portion which enters the sheath as the match-carrying portion of the carrier is moved out of said sheath.

1,863,725. MEANS FOR SECURING TAPES TO GARMENTS. BERNARD LUSTGARTEN, New York, N. Y. Filed Feb. 14, 1931. Serial No. 515,701. 2 Claims. (Cl. 241—12.)



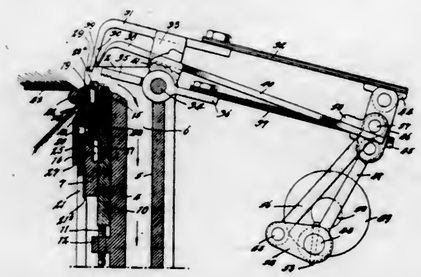
1. Means for connecting straps and garments, comprising a loop secured to a garment, said loop being contracted at one edge, a clip composed of integral plates provided with a slot at their meeting edges, the parts adjacent the slot ends forming shoulders, a strap passing through said clip slot, means on said clip engaging said strap, said strap and clip being passed under said loop with the shoulders on said clip abutting against the contracted edge of the loop.

1,863,726. AUTOMOBILE HEATING SYSTEM. CHARLES C. NUSS, Washington, Pa. Filed May 31, 1929. Serial No. 367,488. 1 Claim. (Cl. 237—12.3.)



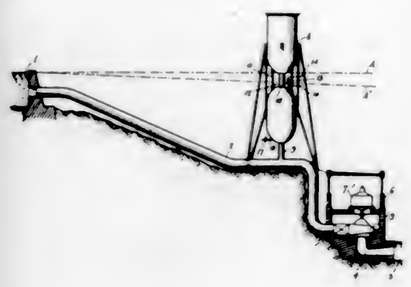
A heating system in combination with an automobile having a motor, a water jacket for the motor, a radiator for cooling the water of said jacket, an outlet conduit from the water jacket to the top of said cooling radiator, and an exhaust passage for the hot products of combustion of said motor; which heating system comprises a water heater associated with said exhaust passage, a heat radiator connected to said water heater, a pipe connecting said heat radiator with the outlet conduit of said water jacket at a point of higher elevation than said heat radiator, said pipe being so disposed relatively to said outlet conduit that an aspirating effect is had upon the water in such pipe, and a heater-feeding pipe leading downward from a point adjacent the bottom of said water jacket to said water heater, the water of said jacket, at the point where its withdrawal is effected by said feeding pipe, being at a lower temperature than the water in said outlet conduit, whereby the temperature gradient of the water in the heating system, together with the relative location of the water heater, the heat radiator and the conduits, combine in creating maximum buoyancy forces to co-operate with the said aspirating effect for producing the flow of water through the heating system.

1,863,727. FUR BREAKING MACHINE. ROBERT H. PLASS, Upper Montclair, N. J. Filed June 17, 1931. Serial No. 544,982. 18 Claims. (Cl. 149—24.)



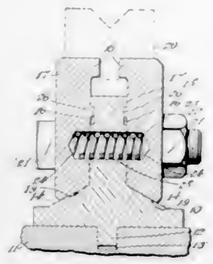
1. In a fur breaking machine, the combination with a guide for fells, of spaced fur-clamping means suitably arranged with respect to said guide to clamp the fur on opposite sides of the points of maximum weakness in the hairs on said fells, and means operating between the spaced clamping means for breaking said hairs.

1,863,728. SURGE TANK FOR WATER PIPE LINES. HARRY T. PORTER, Riverside, Ill., assignor to S. Morgan Smith Company, York, Pa., a Corporation of Pennsylvania. Filed Apr. 13, 1929. Serial No. 354,953. 4 Claims. (Cl. 61—19.)



3. A surge tank for the pipe line of a hydraulic system comprising a lower portion connected to the pipe line, an upper portion superposed above said lower portion, and an intermediate portion interposed between the upper and lower portions, said intermediate portion being of smaller cross-sectional area than the upper and lower portions and terminating at the bottom of the upper portion and at the top of the lower portion.

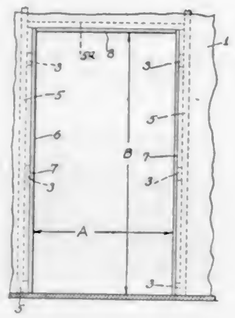
1,863,729. DIE HOLDER. ALBERT RAFTER, Belleville, N. J., assignor to Rafter Machine Company, Belleville, N. J., a Partnership composed of Albert Rafter and John C. Rafter, jr. Filed June 30, 1931. Serial No. 547,826. 5 Claims. (Cl. 113—49.)



1. A die holder for a stamping machine, comprising a support provided with a central portion and inclined surfaces connecting the central portion with said support and extending longitudinally thereof, clamping plates carried by said support provided with inclined surfaces coinciding with the inclined surfaces of the support and means for adjustably connecting said clamping plates and support.

1,863,730. BUILDING CONSTRUCTION. OSCAR A. ROSS, New York, N. Y. Filed Aug. 9, 1928. Serial No. 298,445. 10 Claims. (Cl. 20—11.)

1. The method of forming a doorway in a wall structure arranged to be plastered, the wall structure having an opening formed therein arranged to act as a passageway therethrough which comprises, erecting an auxiliary frame in the opening and securing the frame to the wall structure, then plastering the wall structure carrying the plastering to the auxiliary frame to form a finished plastered wall, and then erecting a normal door frame

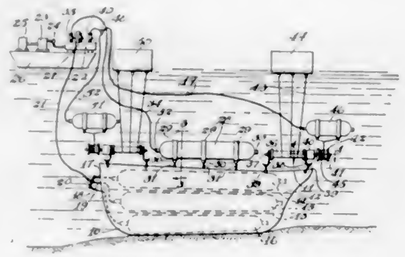


in the opening formed in the auxiliary frame, the frames being rigidly secured together to form a rigid portion of the wall structure.

1,863,731. COATED PAPER AND METHOD OF MAKING THE SAME. ARLIE W. SCHORGER, Madison, Wis., assignor, by mesne assignments, to Burgess Cellulose Company, Freeport, Ill., a Corporation of Delaware. Continuation of application Serial No. 335,390, filed Jan. 26, 1929. This application filed Nov. 12, 1929. Serial No. 406,724. 13 Claims. (Cl. 91—68.)

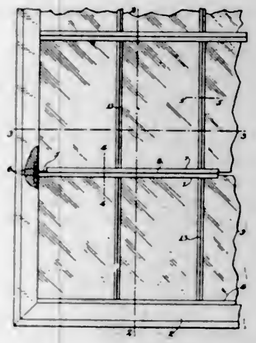
1. The method of making a pervious surface on a stereotype mat which comprises facing the mat with a water suspension containing a salt of a higher fatty acid and a hydrated mineral which loses its water on "scorching", and then "scorching" the mat.

1,863,732. SYSTEM OF AND MEANS FOR RAISING SUBMERGED VESSELS. SEBASTIAN SCHWAGER, Chicago, Ill. Filed Apr. 10, 1931. Serial No. 528,998. 9 Claims. (Cl. 114—54.)



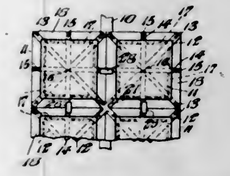
1. In a system for raising submerged hulls, the combination of collapsible air bags for location in and upon and connection to a hull to be raised, check valves carried by said bags permitting air flow into the same and preventing air flow therefrom, pressure relief valves carried by said bags for limiting air pressure in said bags to predetermined amounts, devices for connection with said hull to maintain the same in upright position during its raising, air lines extending from said check valves, and pumping mechanism for forcing air under pressure through said air lines and said check valves into said bags, said devices comprising a floating tank, a submerged collapsible air bag, cable guiding mechanism connected with the upper part of said hull, cables extending from said tank and said submerged bag in opposed relation to said cable guiding mechanism, whereby upward movement of said submerged bag relatively to said hull produces downward movement of said tank relatively to said hull, and an air line extending from said submerged bag to said pumping mechanism to supply air under pressure to said submerged bag.

1,863,733. WINDOW STRUCTURE AND METHOD OF ASSEMBLY THEREOF. CHESTER H. THORDARSON, Chicago, Ill. Filed Feb. 1, 1930. Serial No. 425,837. 15 Claims. (Cl. 189—76.)



1. In a structure of the character described the combination of a frame, a plurality of flanged strips each fastened at its ends to said frame, another flanged strip slidably mounted with respect to said first strips, a pane resting against the flanged portions of both said strips, and means secured to the flanged strips for locking said pane in position.

1,863,734. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed Apr. 14, 1931. Serial No. 529,916. 10 Claims. (Cl. 72—68.)



6. In a floor structure of the character stated, floor members, substantially square, pre-cast slabs of cementitious material arranged upon said floor members side to side in abutting relation, the sides of said slabs having vertical grooves therein at each corner thereof and upon their sides intermediate said corners, metal strips embedded in each slab, metal clips for coupling said slabs together through the medium of said strips, projections upon the sides of said slabs, and wires extending both laterally and longitudinally of said slabs connecting with said projections for tying said slabs together.

1,863,735. PROCESS OF TREATING PHENYLGLYCINE AND PRODUCT THEREOF. JUSTIN F. WAIT, New York, N. Y., assignor to National Aniline & Chemical Co., Inc., a Corporation of New York. Filed Dec. 18, 1924. Serial No. 756,800. 10 Claims. (Cl. 260—51.)

9. In a process which comprises fusing a salt of phenylglycine with caustic alkali in the presence of sodamide and dissolving the fusion mass in water, the improvement which comprises cooling the fusion mass below its solidification temperature and forming the same into flakes, prior to dissolving the same in water, while excluding air by means of an inert atmosphere.

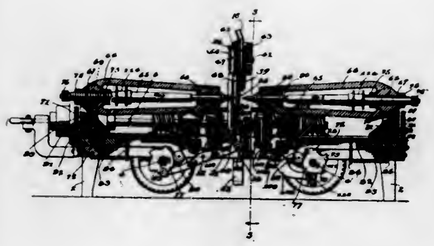
10. A product in the form of flakes comprising a mixture of indoxyl, an alkali metal carbonate, and an alkali metal hydroxide.

1,863,736. RECEPTACLE FOR FROZEN PRODUCTS. WILLIAM R. WILLAUER, Philadelphia, Pa., assignor to Marathon Paper Mills Company, Rothschild, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1930. Serial No. 425,228. 7 Claims. (Cl. 62—91.5.)



1. A refrigerating device for frozen products comprising a container having spaced apart side and end walls with a gas space between said spaced walls, a tube for a solidified gaseous refrigerant centrally positioned in said container and extending the full length thereof, said tube and gas space being interconnected whereby said refrigerant when converted to the gaseous state will circulate from said tube into said gas space.

1,863,737. BUTTON DRILLING MACHINE. OTTO WITTE, Philadelphia, Pa. Filed Aug. 27, 1929. Serial No. 388,676. 9 Claims. (Cl. 79—11.)



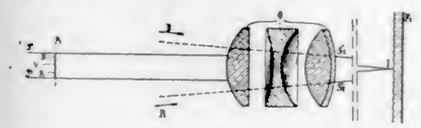
1. In a button drilling machine, button feeding means, button chucking means, a pair of opposed button drills, means for longitudinally reciprocating said drills in alternation, in one horizontal plane, means for reciprocating said drills in alternation in a second horizontal plane, means for oscillating said drills in alternation, longitudinal reciprocation and the oscillation being so timed as to cause one of said drills to cut a kerf transversely of the button during the oscillating movement thereof.

1,863,738. SPRING PAD. ARTHUR H. ADAMS, Yonkers, N. Y., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Oct. 20, 1928, Serial No. 313,858. Divided and this application filed Oct. 1, 1929. Serial No. 396,591. 12 Claims. (Cl. 68—9.)



1. In combination, a base plate, a spring padding mounted on said base plate, a fabric covering for said padding, and means for attaching said covering to said base plate, comprising a spring member attached at one end to said base plate and extending outwardly to a point of attachment with said covering substantially in circumferential alignment with the periphery of said padding.

1,863,739. APPARATUS FOR PHOTOGRAPHY AND CINEMATOGRAPHY IN NATURAL COLORS. RODOLPHE BERTHON, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed June 26, 1928, Serial No. 288,497, and in France June 30, 1927. 2 Claims. (Cl. 95—2.)



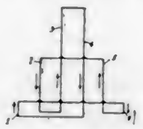
1. Apparatus for photography and cinematography in colors in connection with films goffered with microscopic refracting elements, comprising an objective of wide aperture, a color-selecting device arranged in the front focal plane of the objective, and opaque means limiting the exposure at said device to a single series of color components whose sum is substantially equivalent to white light.

1,863,740. CASING PROTECTOR. WILLIAM I. BETTIS, Los Angeles, Calif. Filed Mar. 3, 1928. Serial No. 258,968. 7 Claims. (Cl. 308—4.)



1. A well casing protector comprising a ring of resilient material, adapted for being stretched over a member of a tool string and thereafter to grip said member; the interior surface of said ring being recessed.

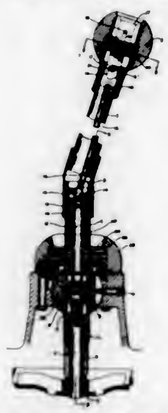
1,863,741. DIRECTIONAL ANTENNA SYSTEM. LÉON BOUTHILLON, Paris, France, assignor to Compagnie Generale de Telegraphie Sans Fil, Paris, France, a Joint Stock Company of France. Filed Oct. 19, 1927, Serial No. 227,129, and in France Nov. 4, 1926. 6 Claims. (Cl. 250—11.)



1. A directional antenna system for use in wireless signalling comprising $(n+1)$ groups of antenna where $n=2$ or more, the sums of the effective heights of successive antenna groups being proportional to the numbers of the series:

$$1, \frac{n}{1}, \frac{n(n-1)}{2} \ldots \frac{n}{1}, 1.$$

1,863,742. COINCIDENTAL LOCK. KARL A. BRAUNING, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed May 19, 1928. Serial No. 279,151. 12 Claims. (Cl. 70—127.)



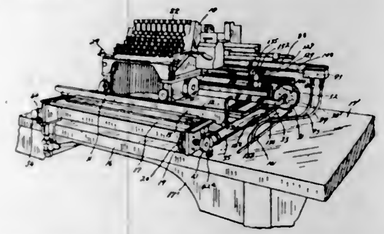
1. In a coincidental lock, a locking bolt, a lock for reciprocating and rotating said bolt when key operated, an ignition circuit, control means for said circuit and means carried by said locking bolt for operating said control means when reciprocated or when rotated by said key operated lock.

1,863,743. MEAT HANGING METHOD. JOSEPH BURNS, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 1, 1930. Serial No. 492,642. 1 Claim. (Cl. 17—45.)



The method of hanging wholesale cuts of meat in a vehicle for transportation which consists in securing the meat to an overhead support, permitting the meat to have a horizontal pivotal swinging movement at the point of support and connecting the meat at spaced points to the support to prevent relative horizontal movement between the meat and supporting means to prevent tearing of the meat.

1,863,744. POWER OPERATING MECHANISM FOR TYPEWRITERS. EDGE T. COPE, RALPH D. PARKINSON, and FREDERICK M. PRICE, Detroit, Mich., assignors to Elliott Fisher Company, a Corporation of Delaware. Filed July 27, 1925. Serial No. 46,461. 13 Claims. (Cl. 197—67.)

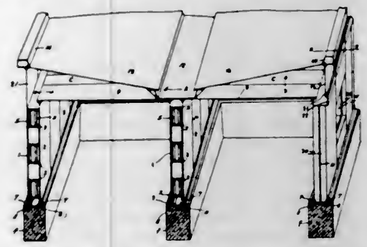


1. In combination with a machine of the character described comprising a platen, a carriage movable longitudinally over the platen between variable limits, a printing machine carried by the carriage and movable transversely thereof between variable limits, of mechanism for applying power to quickly accelerate and move the carriage over the platen between said limits, and means for moving the printing machine transversely thereof, and a single control member for actuating the carriage and printing machine moving means.

1,863,745. PROCESS OF PREPARING CELLULOSE DERIVATIVES FROM ALKALI CELLULOSE IN THE FORM OF PULP BOARDS BY MEANS OF ESTERIFYING AND ETHERIFYING AGENTS IN THE GASEOUS STATE. OTTO ERNST, KURT SPONSEL, and GERHARD BALLE, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 1, 1927, Serial No. 210,013, and in Germany Aug. 6, 1926. 2 Claims. (Cl. 260—100.)

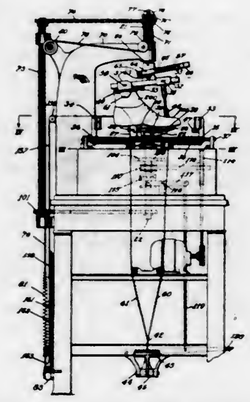
1. A process for the manufacture of cellulose derivatives of the group consisting of cellulose ethers and esters which comprises causing an agent of the group consisting of esterifying and etherifying agents to act in the gaseous state upon an alkali cellulose in the form of a pulp board.

1,863,746. PORTABLE METALLIC STRUCTURE. FERDINAND FILLOD, St.-Amour, France. Filed Mar. 18, 1929, Serial No. 347,916, and in France Nov. 21, 1928. 1 Claim. (Cl. 189—2.)



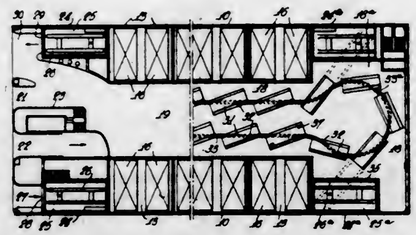
In a construction of the type described, a double wall comprising a plurality of long vertically disposed sheet metal panels, a second plurality of long vertically disposed sheet metal panels, disposed opposite said first mentioned panels and in spaced relation thereto, each of said panels having a vertical flange bent toward the opposing panel and angularly with relation to the panel, a pair of adjacent flanges abutting against each other at their bases and diverging from each other, the adjacent panels thereby abutting against each other and presenting a substantially continuous wall surface, and clamping and bracing means for said wall comprising a plurality of vertically spaced horizontal cross members, each member having at each end thereof a longitudinally split hollow cylinder enclosing a pair of adjacent flanges and gripping the same, and vertical, horizontally spaced bracing members fixed at their ends to said cross members.

1,863,747. FOXING APPLYING MACHINE. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 30, 1927. Serial No. 216,399. 64 Claims. (Cl. 12—1.)



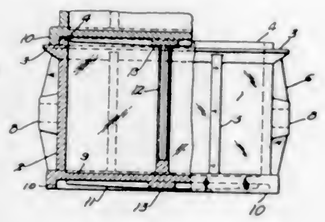
1. A machine of the class described having, in combination, a base, a holder for a shoe, two members for operating successively upon the shoe, a common support for the members separate from the base, and means for producing relative movement between the shoe holder and the support to cause the foxing area to be traversed successively by said members.

1,863,748. MECHANICAL PARKING GARAGE. ERNST GEIGER, Irvington, N. J. Filed Mar. 14, 1929, Serial No. 346,852. Renewed Oct. 9, 1930. 18 Claims. (Cl. 214—16.1.)



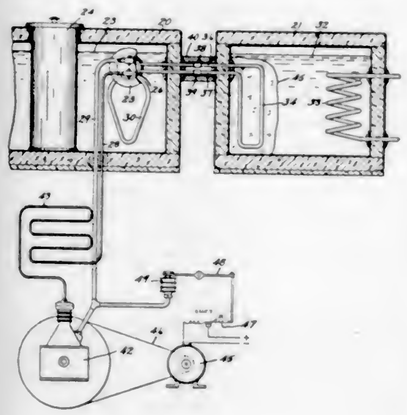
9. A garage including a storage floor, an endless track on the floor including straight runs and curved runs and an endless connected series of car parking platforms movable along the track and having their longitudinal axes disposed at an angle to the straight portions of the track.

1,863,749. ANNEALING POT. HERMAN E. GRAHAM, Marion, Ind., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 14, 1931. Serial No. 575,100. 15 Claims. (Cl. 263—48.)



11. In an annealing pot, substantially upright walls and a floor member, there being substantially horizontal surfaces surrounding the top and bottom edges of said walls, respectively, said pot being adapted to be stacked with other similar pots, and complementary interengaging elements on said surfaces, each of said elements being arranged to cooperate with the complementary element on the adjacent pot in a stack to form a desirably tight joint therewith and assist in maintaining the original shaping of the walls thereof.

1,863,750. REFRIGERATING SYSTEM. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed July 9, 1925. Serial No. 42,564. 4 Claims. (Cl. 62—95.)

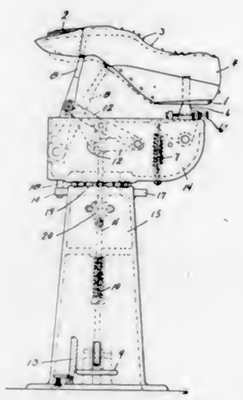


1. Refrigerating apparatus comprising in combination a pair of chambers to be cooled, an evaporator forming a reservoir for liquid refrigerant having a heat exchange means disposed in one of the chambers, means for circulating refrigerant through the evaporator, means for cooling the other chamber including a conduit having both its ends connected with the evaporator and arranged to receive refrigerant therefrom, and means for automatically maintaining the liquid refrigerant at a predetermined level both in the evaporator and the conduit.

1,863,751. PROCESS OF RECOVERING SODIUM, POTASSIUM AND MAGNESIUM CHLORIDES FROM NATURAL BRINES. HERMAN B. KIPPER, New York, N. Y. Filed July 5, 1929. Serial No. 375,908. 4 Claims. (Cl. 23—41.)

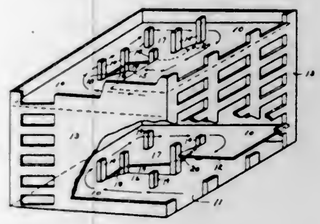
1. The recovery of sodium potassium and magnesium chloride from natural brines containing these salts in aqueous solution and having high percentage of sodium chloride, comprising the steps of first evaporating said brine by solar heat to a point where the brine becomes saturated with potassium chloride and the greater percentage of sodium chloride has been precipitated out and the greater percentage of water evaporated, then heating the solar concentrated brine, saturated as to potassium chloride at the normal atmospheric temperature, for solution of an increased percentage of potassium chloride, soluble at a higher temperature, from a mixture of sodium and potassium chloride subsequently obtained in the process, then filtering off the undissolved sodium chloride, then cooling the brine to from 5° to 15° C., then filtering off the precipitated potassium chloride, then mixing the residual brine with a brine containing magnesium chloride in concentration of about 500 grams per 1000 grams of water and artificially cooled to between 5° and —5° C. by utilizing the compression and expansion of fluids for the production of cold, then filtering off the sodium and potassium chloride crystals precipitated from the said treatment, then evaporating the commingled brines to substantially the original magnesium chloride concentration, then artificially cooling to between 5° and —5° C. by utilizing the compression and expansion of fluids for the production of cold the latter brines for precipitating the residual sodium and potassium chloride crystals therein contained, then filtering off the latter salt crystals and securing crystalline magnesium chloride by further evaporation of the said concentrated brine.

1,863,752. METHOD OF LASTING SHOES. EUCLID I. LA CHAPELLE, Brockton, Mass. Filed Dec. 31, 1931. Serial No. 584,184. 8 Claims. (Cl. 12—145.)



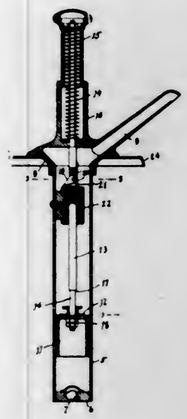
1. That method of lasting shoes which consists in providing a last, and an insole and a shoe upper assembled on the last; in engaging the vamp of the upper at the top of the forepart of the last, back of the toe, to strain the upper lengthwise of the last from the heel to the toe and thereby properly set the vamp and its seams on top of the forepart of the last, back of the toe; in thus straining the upper lengthwise of the last; and in then lasting and fastening in lasted condition the shank-part of the upper, while under lengthwise strain, preparatory to the pulling-over operation at the forepart.

1,863,753. FLOOR CONSTRUCTION. HERMAN LE QUORNIK, Richmond Hill, and DOMINICK SALVATI, Brooklyn, N. Y., assignors, by direct and mesne assignments, to Easy-Drive Garage Corp., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 27, 1929. Serial No. 388,661. 6 Claims. (Cl. 20—1.13.)



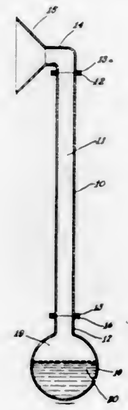
1. A floor construction consisting of a continuous helical floor ascending from the lowest to the highest story of a building and supported by the outer walls and a plurality of central columns, the floor space of each convolution being substantially coextensive with the plan of the building and consisting of portions at different levels separated along straight lines.

1,863,754. SIRUP PUMP. ADOLPH W. LISSAUER and SHERWOOD VERMILYE, Louisville, Ky. Filed Oct. 9, 1929. Serial No. 398,291. 10 Claims. (Cl. 225—35.)



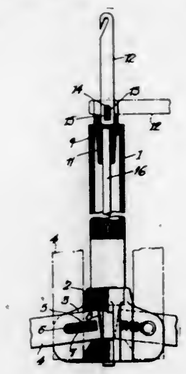
1. In a full stroke sirup pump, a tube having a valve control opening at the bottom thereof, a cover having a delivery nozzle at the top thereof, a piston in said tube having a valve control aperture at the top thereof, a rod extending from said piston through the cover, an actuator secured to the rod, a spring on said rod interposed between the actuator and the cover normally tending to move the rod and piston away from the bottom of the tube, means coupling the rod to the cylinder to permit the rod a longer stroke than the piston, and a normally disengaged pawl and rack mechanism interposed between the rod and tube, said pawl and rack being brought into engagement by the rod as it consumes its excess movement it has over the piston.

1,863,755. PIPE CLEANING METHOD. HERBERT LODDE, New York, N. Y. Filed July 18, 1930. Serial No. 468,823. 1 Claim. (Cl. 15—269.)



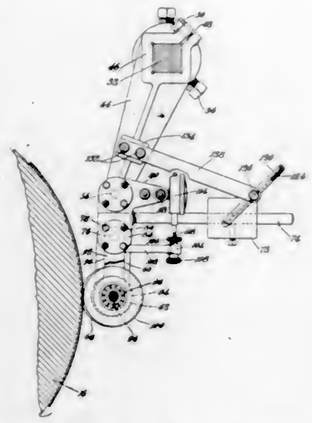
The method of removing clogging material from a pipe which consists in creating a body of vapor at one end of the pipe and confining the vapor against escape except through said pipe, causing the condensate of vapor passing through said pipe to seal the opposite end of said pipe, and permitting the body of vapor to condense, thereby causing said clogging material to be sucked out of said pipe from said first end of the pipe.

1,863,756. PORTABLE STAND. JOHN L. LUFKIN, New York, N. Y. Filed May 19, 1928. Serial No. 278,932. 3 Claims. (Cl. 248—41.)



1. A portable stand of the character described comprising a hollow column threaded externally at its lower end, a hub having threads for engagement with the threaded end of said column and having a plurality of radially extending sockets, ears disposed on opposite sides of said sockets and carrying pivots, feet carried between said ears having their inner ends slidably engaging said sockets, the feet having longitudinal slots through which said pivots pass and a spring engaging each foot and its pivot and tending when the foot is swung down to push it into the socket and when the foot is swung up to push its lower extremity across the length of the socket so as to lock it in the collapsed position.

1,863,757. THICKNESS GAUGE FOR FILM ON CALENDER ROLLS. CUYLER S. MCCHESNEY, Kenmore, N. Y., assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a Corporation of New York. Filed Jan. 23, 1929. Serial No. 334,596. 4 Claims. (Cl. 33—172.)



1. In combination with the rolls of a calender adapted to reduce a plastic mass to a thin film, means for measuring the thickness of the film comprising a disc engaging a roll over which the film travels, a caliper roll engaging the film on said roll near said disc, a pivotally mounted bracket on which said disc is journalled, means tending to hold said disc in contact with said roll, a support for said caliper roll fulcrumed on said bracket and a thickness indicator responsive to relative movement between said disc and said caliper roll.

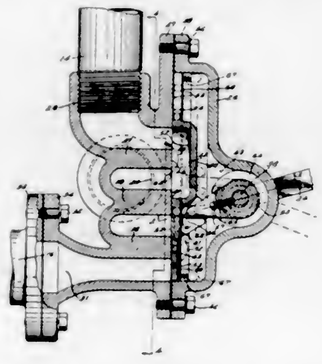
1,863,758. ORNAMENTAL CANDLE. RICHARD S. MCCLAUGHRY and ROSE SKOWRONSKI, Whiting, Ind., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 13, 1929. Serial No. 346,653. 7 Claims. (Cl. 87—21.)



1. An ornamented candle having an irregularly roughened surface having crevice-like irregularities, and a contrasting coating superimposed thereon and collected in the said crevice-like irregularities thereof, said coating comprising a free-flowing wax and a pigment.

7. The method of ornamenting a candle with aluminum bronze powder, which consists in providing thereon an irregularly roughened surface having crevice-like irregularities formed by projecting incrustations formed thereon, thereafter applying thereto a superficial coating of 40 to 50% spermacetti wax, 50 to 60% of stearic acid, and 4 ounces of aluminum bronze powder to a gallon of the mixture, and cooling the candle, said coating settling in relatively thick deposits in crevice-like irregularities formed by the projecting incrustations of the roughened surface and thereby giving local deposits of a contrasting coloring.

1,863,759. SLIDING CLOSURE UNIT AND GAS TRAP CONTROL SYSTEM. WILLIAM MCGRAW and RICHARD WOODWARD, Los Angeles, Calif., assignors to Trumble Gas Trap Company, a Copartnership composed of Francis M. Townsend, A. J. Gutzler, and Milan J. Trumble. Filed Mar. 11, 1926. Serial No. 93,840. 5 Claims. (Cl. 137—103.)



1. In a device of the general character described: a main member provided with an inlet and an outlet for a first fluid, and with an inlet and an outlet for a second fluid; separate conduits connected with each of said inlets and outlets; a subsidiary member removably secured to said main member; a slidable closure plate housed within said subsidiary member and slidably movable over some of said inlets and outlets to alternately close the outlet for one fluid when the inlet and the outlet for the other fluid are connected; and means for so moving said plate.

1,863,760. SEPARATION OF MINERALS BY FLOTATION. FREDERICK G. MOSES, New York, RAYMOND W. HESS, Buffalo, and ROBERT L. PERKINS, East Aurora, N. Y., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 20, 1927. Serial No. 193,060. 10 Claims. (Cl. 209—166.)

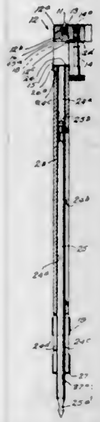
1. In effecting the separation of minerals, the process which comprises incorporating with the mineral pulp a thioacyl compound corresponding with the probable formula

R—CS—X

where R denotes an alkyl radical and X signifies a hydroxyl group or an amino group which may contain substituents, and subjecting the resulting mixture to a froth flotation operation.

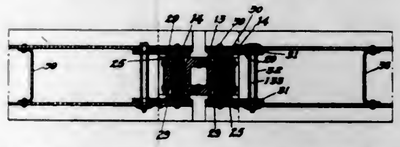
1,863,761. PORTABLE SUPPORTING DEVICE. HERMAN NEUWIRTH, New York, N. Y. Filed Aug. 27, 1930. Serial No. 478,061. 2 Claims. (Cl. 248—43.)

1. In a portable supporting device of the character described, a head, spaced strips having ends pivoted to said head, a non-metallic section member mounted for sliding movement between said strips, means mounted on the ends of said strips opposite the pivoted ends for flexing said ends to clamp said member between said strips, said member having an axially extending passage therethrough



adapted to receive a tubing leg section for sliding movement, and a cap mounted on the end of said member between said strips forming a closure for said passage.

1,863,762. CAR CONSTRUCTION. JOHN O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 9, 1929. Serial No. 384,777. 2 Claims. (Cl. 213—8.)



2. In car construction, the combination with a pair of movable draft sills at each end of the car, the members of each pair of sills being spaced apart laterally and having pairs of spaced stop shoulders at their inner ends, the sills of said pairs extending inwardly from the opposite ends of the car, said pairs having their inner ends normally spaced apart, and said inner ends being engageable with each other to limit the approach of the sills in buff; shock absorbing means opposing movement of each pair of sills with respect to the car in both buff and draft; and yielding connecting means for said pairs of sills, yieldingly opposing relative movement of one pair with respect to the other in both buff and draft, said connecting means including a casting having a pair of spring pockets at opposite ends and spring means within each pocket having shouldered engagement with the pairs of stop shoulders of the corresponding pair of sills, the compression of said connecting means being limited in buff by the engagement of the inner ends of said pairs of sills with each other.

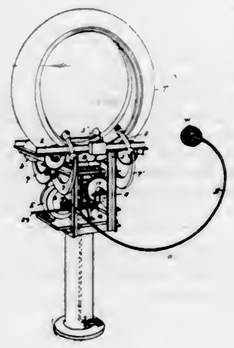
1,863,763. HYDRAZO COMPOUNDS AND METHOD OF PREPARATION. IWAN OSTROMISLENSKY, New York, N. Y., assignor to Ostro Products Corporation of America, New York, N. Y., a Corporation of New Jersey. Filed June 1, 1928. Serial No. 282,275. 11 Claims. (Cl. 260—69.)

1. A new compound of the general formula—

X—NH—NH—Y—NH—NH—X

where X is a naphthalene group having a salt forming group in a side chain, and Y is a diphenyl group.

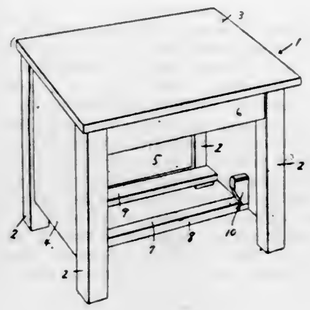
1,863,764. TIRE MACHINE. WILLIAM G. PRENTICE, Indianapolis, Ind., assignor to The Elite Manufacturing Company, Ashland, Ohio, a Corporation of Ohio. Filed Dec. 5, 1929. Serial No. 411,938. 14 Claims. (Cl. 154—9.)



1. A tire machine, including a power unit and a set of co-operative devices actuated by said power unit for spreading a split tire open and revolving the tire about its own axis while it is held in a spread and open state.

9. In a tire machine, revoluble rollers for seating a split tire, tire-spreading devices associated with said rollers adapted to press the tire during spreading proceedings in frictional contact with said rollers, power-transmitting means for revolving said rollers, power-transmitting mechanism for operating said tire-spreading devices, and controlling means for connecting said power-transmitting means and mechanism alternatively with a source of power.

1,863,765. FUEL BOX. HOMER E. RENFROW, Flora, Oreg. Filed Apr. 28, 1931. Serial No. 533,551. 1 Claim. (Cl. 126—283.)



A fuel box of the character described comprising a cabinet formed to provide a table and including a top, supporting legs depending from the corner portions of the top, a rear wall depending from the top between the rear legs, side walls depending from the top between the front and the rear legs, said walls having their lower edges spaced above the lower ends of the legs, fulcrum blocks rigidly secured to intermediate lower portions of the inner surfaces of the side walls, a bin disposed for swinging movement in the cabinet, cleats on opposite sides of the bin operatively engageable with the fulcrums in a manner to swingingly sup-

port the bin thereon, said cleats having recesses in their lower ends for the reception of the fulcrums, the bin being operable between the front legs of the cabinet and open at its top, the cleats being disposed closer to the front wall of the bin than to the rear wall, a bar extending transversely and horizontally between the side walls of the cabinet adjacent the lower edges of said side walls and adjacent the rear wall of the cabinet, said bar being adapted for engagement by the bin, an apron depending from the top between the front legs of the cabinet for abutting engagement with the front wall of the bin, said front wall of the bin being disposed between the front legs of the cabinet in the plane of the apron when the bin is in its closed position, and further having its lower edge disposed in the horizontal plane on the lower edges of the side and rear walls, and a brace extending between the lower end portions of the side walls of the cabinet, in supporting relation to said fulcrum blocks.

1,863,766. DEMOLITION BOMB. OSCAR A. ROSS, New York, N. Y. Filed Nov. 15, 1927. Serial No. 233,484. 4 Claims. (Cl. 102—2.)



3. A weapon of destruction comprising, a demolition bomb having a detonation mechanism arranged to effect explosion of an explosive charge therein for destructive purposes, a detonation bomb supported a predetermined distance below the demolition bomb during the downward flight of the weapon, the detonation bomb having a detonation mechanism arranged to effect explosion of an explosive charge therein upon contact with the terrain or other objects, and means associated with the demolition bomb detonating mechanism affected by abrupt change in gas pressure arranged to effect operation of the demolition bomb mechanism upon the abrupt change in gas pressure exterior to the bombs due to the explosion of the detonation bomb upon contacting with the terrain or other objects.

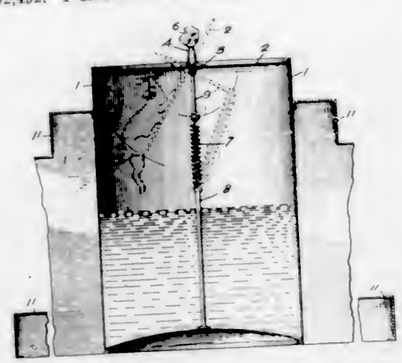
1,863,767. LAMP SHADE AND LAMP. BENJAMIN H. SHAPIRO, Lawrence, Mass. Filed Aug. 25, 1930. Serial No. 477,515. 3 Claims. (Cl. 240—81.)

2. A lamp comprising a stanchion, a socket at the upper end thereof, said socket having a screw threaded portion, and a combined reflector and shade member mounted on said socket, said member comprising a rigid frame having an adapter portion having a screw threaded portion attached to said threaded portion of said socket, said adapter further having an outwardly flaring conical portion, a ring member connected to said conical portion by a plurality of similar rods, and a second ring connected to said first ring by a plurality of equal rods, a reflecting member on the inner side of said frame extending between said adapter and first ring, the lower edge of said reflector being received within said conical portion and a shade on the



outer side of said frame extending between said first and second rings, said reflector and said shade being attached to said frame by lacing wound about said rings and rods.

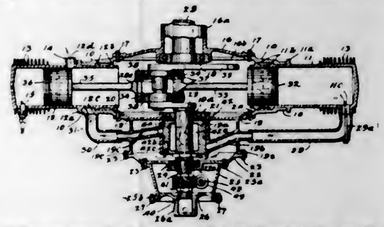
1,863,768. RAT TRAP. FRANCISCO SILVA, San Francisco, Calif., assignor of one-half to Antonio Pereira, San Francisco, Calif. Filed Sept. 17, 1930. Serial No. 482,492. 1 Claim. (Cl. 43—69.)



An animal trap comprising a container, a cover pivotally mounted at the top of the container upon a pivoted rod extending diametrically across the container, the said cover being normally positioned to close the top of the container, a downwardly disposed bar rigidly secured to the rod, and a spring attached at one end to the bar and secured at its opposite end to a stationary anchor, the said spring being adapted to restore the cover to its normal position after the latter has been moved by the weight of an animal into a position whereby the animal is discharged into the container.

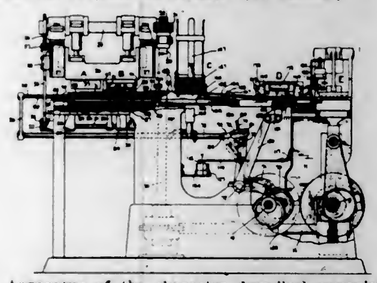
1,863,769. MOTOR. HENRY R. VOGEL, Arcadia, Wis. Filed Feb. 28, 1930. Serial No. 432,062. 5 Claims. (Cl. 123—72.)

1. An internal combustion engine having in combination, a stationary power cylinder, a stationary compression cylinder cooperating therewith, said cylinders having openings leading thereinto, conduits respectively connected to said openings, a casing with which said conduits communicate, a crank shaft passing through said casing, said conduits being off-set longitudinally of said crank shaft, said casing having ports opening into said conduits, a member revoluble with said crank shaft in said casing having a chamber therein and ports leading therefrom



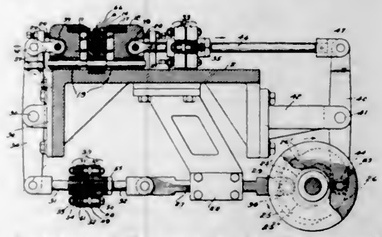
adapted respectively to align with said conduits, said member also having a recess in its periphery adapted to align with the conduit leading to said compression cylinder and a source of gas communicating with said chamber whereby gas can be supplied to said compression cylinder, compressed therein and then delivered to said power cylinder.

1,863,770. MACHINE FOR FORMING COMPOSITE CAN BODIES. VICTOR HENDRICKSON, Manchester, Conn., assignor to The Orford Soap Company, Inc., Manchester, Conn., a Corporation of Connecticut. Filed Nov. 11, 1926. Serial No. 147,670. 84 Claims. (Cl. 153—1.)



1. Apparatus of the character described comprising a pair of dies, means for feeding a blank between said dies when separated, stop means determining the maximum separation of the dies, spring means for maintaining the maximum separation thus determined whereby the dies act as guides for a blank as it is fed between them, power means, and lost motion operative connections therefrom for causing relative movement of said dies toward each other to form the blank.

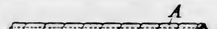
1,863,771. MACHINE FOR FORMING SEAMING STRIPS. GEORGE E. SNOW, Manchester, Conn., assignor to The Orford Soap Company, Inc., Manchester, Conn., a Corporation of Connecticut. Filed Jan. 3, 1930. Serial No. 418,189. 10 Claims. (Cl. 153—13.)



1. Apparatus of the character described comprising a pair of dies, one of which is reciprocable toward and from the other, a power shaft, and die-reciprocating connections from the reciprocable die to said shaft comprising a pair of axially aligned heads fixed against angular movement relatively to each other and opposing to each other plane faces in a common plane transverse to their common axis and each having longitudinal guide pins fast to it and extending freely through the other and spring means interposed between said respective heads and pins.

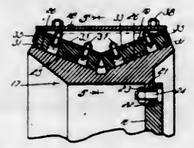
3. Apparatus of the character described comprising side former dies, stops limiting their separation to substantially the width of the blank to be acted on by the dies, power means and operative connections therefrom to the dies for advancing said dies to form the blank and for retracting them to positions determined by said stops, said connections having incorporated therein and subject to movement of translation therewith spring means operated by said power means for holding the dies, during recurring predetermined periods, in said predetermined positions, and means for feeding blanks endwise between and in guiding contact with said side dies while they are so held.

1,863,772. COATED ELECTRODE FOR ELECTRIC ARC WELDING. BERTRAND TURNER, London, England, assignor to Ferro-Arc Welding Company Limited, London, England. Filed Oct. 28, 1931, Serial No. 571,634, and in Great Britain Oct. 24, 1930. 6 Claims. (Cl. 219—8.)



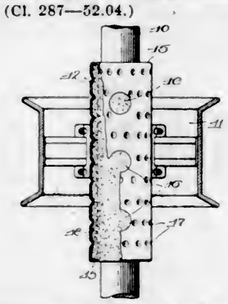
1. A coated welding electrode in which the coating substance is completely encased in a tube of non-metallic material, the said tube being applied to the metal core of the electrode.

1,863,773. BRAKE CONSTRUCTION. WILLIAM ARTHUR VOCK, Long Beach, and CHARLES E. WOOD, Los Angeles, Calif. Filed July 12, 1929. Serial No. 377,679½. 2 Claims. (Cl. 188—77.)



1. A shoe to be mounted on a brake band including, a frame including convergent body parts, brake lining on the body parts, side flanges on the body parts at the edges of the lining and mounting flanges for the frame.

1,863,774. BUSHING FOR ROTARY MEMBERS. ERNEST WANAMAKER, Chicago, Ill., assignor to U. S. Oil and Service Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 11, 1929. Serial No. 406,452. 3 Claims. (Cl. 287—52.04.)



3. The combination of a rotary shaft, a shell arranged around said shaft in pre-determined relation with respect to the axis of rotation thereof and spaced therefrom, said

port the bin thereon, said cleats having recesses in their lower ends for the reception of the fulcrums, the bin being operable between the front legs of the cabinet and open at its top, the cleats being disposed closer to the front wall of the bin than to the rear wall, a bar extending transversely and horizontally between the side walls of the cabinet adjacent the lower edges of said side walls and adjacent the rear wall of the cabinet, said bar being adapted for engagement by the bin, an apron depending from the top between the front legs of the cabinet for abutting engagement with the front wall of the bin, said front wall of the bin being disposed between the front legs of the cabinet in the plane of the apron when the bin is in its closed position, and further having its lower edge disposed in the horizontal plane on the lower edges of the side and rear walls, and a brace extending between the lower end portions of the side walls of the cabinet, in supporting relation to said fulcrum blocks.

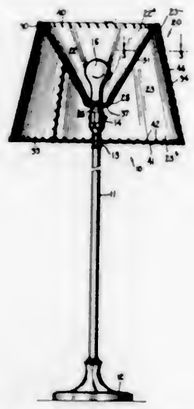
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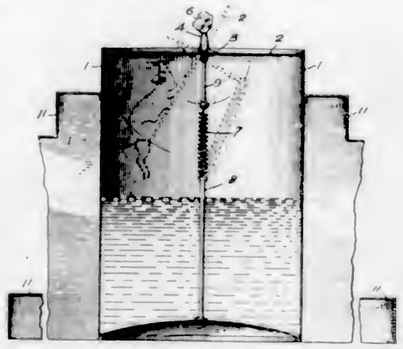
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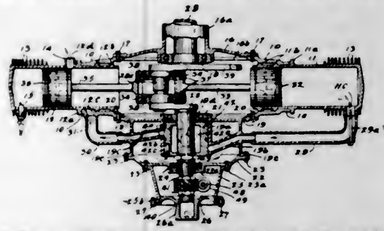
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An animal trap comprising a container, a cover pivotally mounted at the top of the container upon a pivoted rod extending diametrically across the container, the said cover being normally positioned to close the top of the container, a downwardly disposed bar rigidly secured to the rod, and a spring attached at one end to the bar and secured at its opposite end to a stationary anchor, the said spring being adapted to restore the cover to its normal position after the latter has been moved by the weight of an animal into a position whereby the animal is discharged into the container.

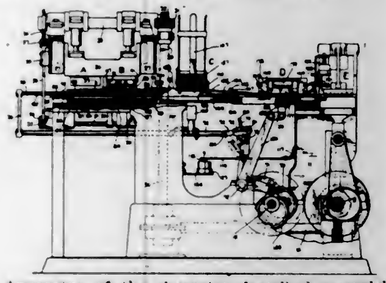
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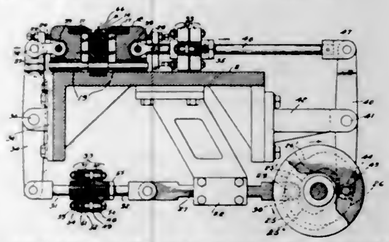
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1,863,770. MACHINE FOR FORMING COMPOSITE CAN BODIES. VICTOR HENDRICKSON, Manchester, Conn., assignor to The Orford Soap Company, Inc., Manchester, Conn., a Corporation of Connecticut. Filed Nov. 11, 1926. Serial No. 147,670. 84 Claims. (Cl. 153—1.)



1. Apparatus of the character described comprising a pair of dies, means for feeding a blank between said dies when separated, stop means determining the maximum separation of the dies, spring means for maintaining the maximum separation thus determined whereby the dies act as guides for a blank as it is fed between them, power means, and lost motion operative connections therefrom for causing relative movement of said dies toward each other to form the blank.

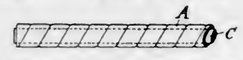
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1. Apparatus of the character described comprising a pair of dies, one of which is reciprocable toward and from the other, a power shaft, and die-reciprocating connections from the reciprocable die to said shaft comprising a pair of axially aligned heads fixed against angular movement relatively to each other and opposing to each other plane faces in a common plane transverse to their common axis and each having longitudinal guide pins fast to it and extending freely through the other and spring means interposed between said respective heads and pins.

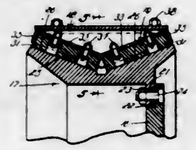
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1,863,772. COATED ELECTRODE FOR ELECTRIC ARC WELDING. BERTRAND TURNER, London, England, assignor to Ferro-Arc Welding Company Limited, London, England. Filed Oct. 28, 1931, Serial No. 571,634, and in Great Britain Oct. 24, 1930. 6 Claims. (Cl. 219—8.)



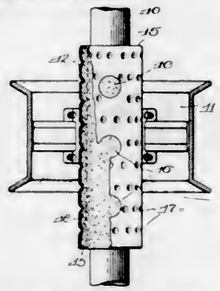
1. A coated welding electrode in which the coating substance is completely encased in a tube of non-metallic material, the said tube being applied to the metal core of the electrode.

1,863,773. BRAKE CONSTRUCTION. WILLIAM ARTHUR VOCK, Long Beach, and CHARLES E. WOOD, Los Angeles, Calif. Filed July 12, 1929. Serial No. 377,679½. 2 Claims. (Cl. 188—77.)



1. A shoe to be mounted on a brake band including, a frame including convergent body parts, brake lining on the body parts, side flanges on the body parts at the edges of the lining and mounting flanges for the frame.

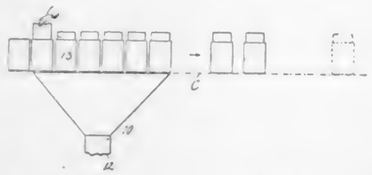
1,863,774. BUSHING FOR ROTARY MEMBERS. ERNEST WANAMAKER, Chicago, Ill., assignor to U. S. Oil and Service Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 11, 1929. Serial No. 406,452. 3 Claims. (Cl. 287—52.04.)



3. The combination of a rotary shaft, a shell arranged around said shaft in pre-determined relation with respect to the axis of rotation thereof and spaced therefrom, said

shell comprising a pair of semi-cylindrical sections, means for securing said sections together after the same have been assembled in cylindrical form around said shaft, a body of hardenable plastic material within said shell forming a bond between the same and said shaft, and a rotary member detachably secured to the exterior of said shell for rotation with said shaft.

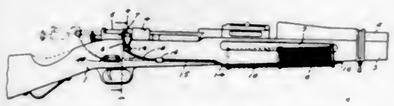
1,863,775. METHOD AND MEANS FOR OPENING BAGS. LOUIS E. WARD, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 28, 1928. Serial No. 265,327. 13 Claims. (Cl. 226—47.)



1. A method of opening bags having the unsealed end in free communication with the atmosphere, which comprises creating a pressure differential between the outside and inside of a bag including the bottom thereof by reducing the outside pressure.

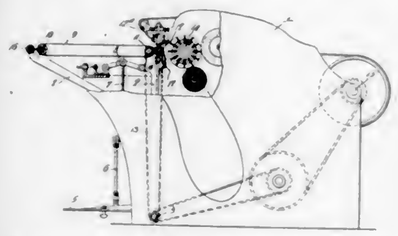
11. An apparatus for opening bags comprising a suction device and a tubular bag receiving means arranged over the same and in free communication with the atmosphere at the bag receiving end, said suction device being adapted to exhaust air from the bag receiving means.

1,863,776. ATTACHMENT FOR BOLT ACTION RIFLES. FRANK C. WATSON, Chester, Pa. Filed Oct. 18, 1930. Serial No. 489,664. 8 Claims. (Cl. 42—16.)



1. An attachment for a magazine rifle having a bolt of the "lift up" type, comprising a reciprocable member mounted upon the foreastock of the rifle, guide means for said member, and a resilient link connecting said member with the bolt whereby oscillatory and reciprocatory movements are imparted thereto upon the movement of said member.

1,863,777. LEATHER SHAVING MACHINE. FRANK WAYLAND, Salem, Mass. Filed Aug. 19, 1930. Serial No. 476,326. 11 Claims. (Cl. 149—16.)



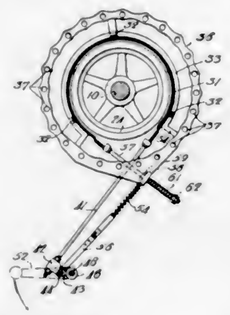
2. A leather shaving machine comprising a cutter, an endless apron having a work-supporting and advancing surface, and a hard surfaced bed roll at the end of said surface, the bed roll being so arranged and so driven relatively to the work-supporting and advancing surface of the apron as to strip the work from the latter.

1,863,778. BATHING IMPLEMENT. RICHARD E. WELSH, Minneapolis, Minn., assignor to Flour City Specialty Manufacturing Company, Minneapolis, Minn., a Corporation. Filed Apr. 24, 1930. Serial No. 446,994. 1 Claim. (Cl. 15—210.)



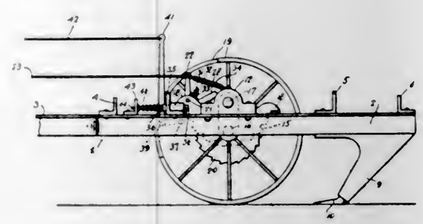
A bathing implement, comprising a head and handle portion, said head having an aperture therethrough near the juncture of the head and handle, and being provided with a central depression for holding a cake of soap and further provided with a peripheral groove on the sides and end thereof, a soap retainer of a heavy coarse water absorbing and retaining texture adapted to cover a cake of soap and having its marginal edges adapted to extend down beyond the sides of said head, and a resilient clamping member comprising an endless coil spring extending through said aperture in said head and adapted to stretch over said head, and normally seated in said groove to hold said holder, soap cake and retainer in assembled relation.

1,863,779. BRAKE. FRANK I. WILLIAMS, Hyde Park, Mass., assignor to American Tool and Machine Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed May 3, 1930. Serial No. 449,466. 21 Claims. (Cl. 188—77.)



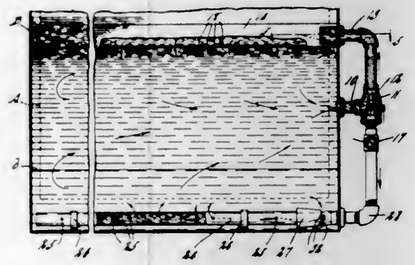
1. In a machine comprising a normally stationary housing, a driven shaft, a brake drum on the shaft, the machine having free space about the housing to accommodate and receive brake actuating mechanism in different positions of angular adjustment about the housing, the combination of a brake element engageable with the drum, a support for the brake element comprising an arcuate attaching bracket concentric with the shaft, means for securing the bracket to the housing in different positions of angular adjustment while maintaining its concentric relation to the shaft, and a brake operating member extending outwardly from the brake support.

1,863,780. SCARIFIER. BRUNO W. WILLIG, deceased, San Angelo, Tex., by Mary Willig, executrix, San Angelo, Tex. Filed Sept. 2, 1931. Serial No. 560,832. 8 Claims. (Cl. 97—73.)



1. A scarifier comprising a frame, a crank axle journalled on the frame, said crank axle including a toothed plate, said toothed plate constituting one of the arms of the crank of the axle, a supporting wheel journalled on the crank axle, means for connecting the crank axle to the wheel for movement therewith, and means engageable with the crank for securing the crank axle against movement.

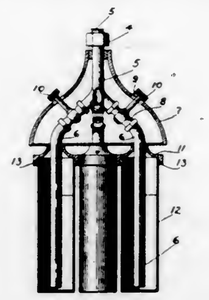
1,863,781. HEATER. KIRK K. WRIGHT, Kenmore, N. Y., assignor to R. G. Wright & Company, Buffalo, N. Y. Filed June 10, 1931. Serial No. 543,338. 15 Claims. (Cl. 257—62.)



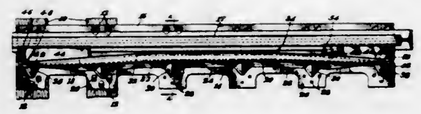
1. A fluid heating and circulating system for heaters, including a container for the liquid to be heated and a tank into which said container extends and which forms with said container a space for the circulation of heating fluid, means for heating the fluid at the upper and lower portions of said space, and for withdrawing fluid from a portion of said space and for introducing the same into another portion of said space to provide for circulation of fluid in said space.

1,863,782. MULTICOLOR ATTACHMENT FOR SPRAY GUNS. HARVEY L. YOUNG, Pacific Grove, Calif. Filed June 16, 1930. Serial No. 461,465. 4 Claims. (Cl. 91—45.)

4. A spray gun attachment comprising a member in the shape of covers, containers removably attached to the covers in the disposition of a circular cluster, a common discharge conduit having branches extending into each of the containers, and an independent valve in each branch allowing liquid to be discharged therethrough after being opened until the same is manually closed.

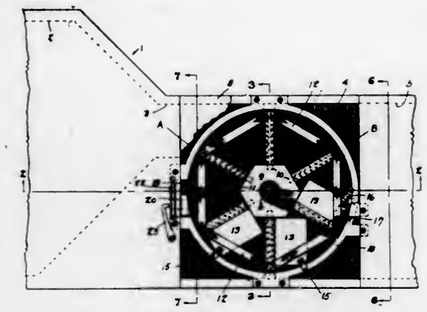


1,863,783. GUARD RAIL. CARROLL BURTON, Johnstown, Pa. Filed Apr. 16, 1932. Serial No. 605,685. 8 Claims. (Cl. 238—19.)



1. A one-piece guard rail comprising longitudinal upright outboard and inboard walls joined at the top, a rail seat portion extended laterally from said outboard wall and a bearing flange extended laterally from the bottom of said inboard wall, all of said parts being of substantially uniform thickness in cross section, so that the rail is producible from flat stock of substantially uniform thickness.

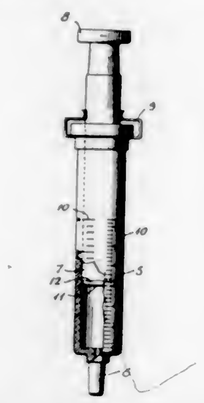
1,863,784. WATER WHEEL. PAUL H. DARRAH, Los Gatos, Calif. Filed July 19, 1930. Serial No. 469,088. 1 Claim. (Cl. 170—122.)



In a water wheel construction, a rotatable wheel having paddles swingably carried thereby, a ring disposed in concentric relation with the wheel and having a portion thereof removed, means for swinging the paddles into a position overlying the ring, a swingable segment for bridging the gap in the ring and allowing the paddles to

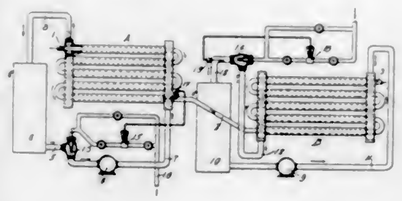
pass thereover, an operating handle extending from the segment having a limited swinging movement, and a hook-shaped member arranged for engaging with the handle and adapted for holding the segment in bridging relation with the ring ends.

1,863,785. SYRINGE. FAIRLEIGH S. DICKINSON, Rutherford, N. J. Filed Mar. 8, 1930. Serial No. 434,192. 4 Claims. (Cl. 128—218.)



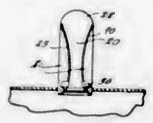
1. In a hypodermic syringe, the combination of a barrel having a cylindrical bore and provided with a scale arranged lengthwise thereof, a cylindrical plunger slidable within said barrel in close frictional contact with the inner walls of said barrel and having a conical beveled portion at its forward edge and an indicating mark on the peripheral surface of said bevel, said mark being of contrasting color from that of the sides and end face of the plunger, whereby, when the barrel is filled with liquid, the mark on the lateral face of the bevel is normally viewable through an annular prismatic portion of the liquid and will appear as a sharply defined mark for visibly indicating, in cooperation with the scale on the barrel, the extent of movement of the plunger into the barrel.

1,863,786. PROCESS AND APPARATUS FOR HEATING LIQUIDS. HARVEY FELDMEIER and ROLAN JAY WIGHTMAN, Little Falls, N. Y., assignors to Cherry-Burrell Corporation, Little Falls, N. Y. Filed Oct. 30, 1929. Serial No. 403,449. 8 Claims. (Cl. 257—10.)



1. The process of heating a liquid to a predetermined required temperature and preventing the overheating thereof, which comprises heating the liquid in successive stages, the liquid being heated in a preliminary stage by circulating a heated medium in heat exchange relation to said liquid, regulating the temperature of the heated medium used in the preliminary stage under the control of the temperature of the liquid being heated so that the liquid will leave the preliminary stage at a temperature lower than the final required temperature, and controlling the temperature to which the liquid is heated in the final stage under the control of the temperature of said heated medium entering said final stage.

1,863,787. SPOUT. WILLIAM J. GEIST, Maplewood, Mo. Filed Oct. 28, 1930. Serial No. 491,667. 11 Claims. (Cl. 221—11.)

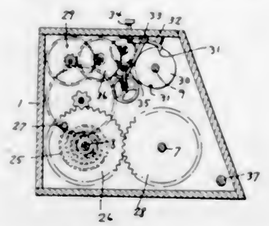


1. A spout for a container wall having an opening including, a bottom, sides projecting from the bottom to extend into the opening, and means forming a hinge connection between the spout and the container wall including lugs projecting from the sides, notches in the spout at the lugs to cooperate with an end of the opening, and a web extending between the lugs for engaging the under side of the container wall.

1,863,788. PREPARATION OF ORGANIC ACID ANHYDRIDES. WILLIAM J. HALE, Midland, Mich. Filed Oct. 20, 1928. Serial No. 313,951. 11 Claims. (Cl. 260—123.)

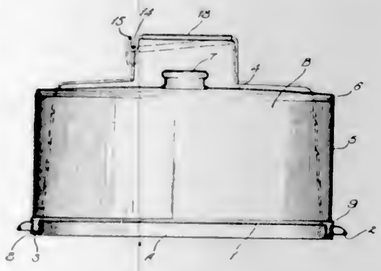
1. The cyclic method of preparing a simple anhydride of a lower saturated aliphatic acid which comprises mixing the latter with an easily dissociable and hydrolyzable organic halide, warming to drive off the hydrogen halide, heating the mixed anhydride substantially to the boiling point of the simple acid anhydride sought, whereby to convert the said mixed anhydride into the acid anhydride sought and the simple anhydride containing the radical of said organic halide combined with oxygen and to vaporize said acid anhydride sought while leaving as residue the anhydride of said other organic radical, and halohydrogenating the said other anhydride whereby to replace its anhydride oxygen by halogen, whereby to form again said initial organic halide.

1,863,789. RADIO PROGRAM EXHIBITOR. SAMUEL H. HALL, Toms River, N. J., assignor of one-half to James A. Ryerson, jr., Brooklyn, N. Y. Filed Apr. 18, 1931. Serial No. 531,227. 1 Claim. (Cl. 40—31.)



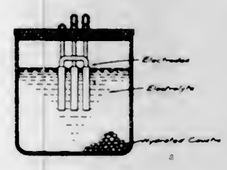
A radio program exhibitor of the character described comprising a cabinet having windows therein, shafts journaled for rotation in the cabinet, spools loosely mounted on certain of the shafts, a roller fixed on the other of the shafts, a spring motor mounted in the cabinet and operatively connected with the shafts for simultaneously rotating said shafts in opposite directions, means for alternately connecting the spools with their respective shafts for actuation thereby, a tape windable on the actuated spool from the unactuated spool, said tape being trained over the roller for actuating said roller and having program indicia thereon, said tape adapted to travel adjacent the windows in a manner to be viewed therethrough, an escapement movement operatively connected to said certain shafts for controlling the speed of rotation thereof under the impulse of the spring motor, a disk fixed on said other shaft for rotation therewith and having notches in its periphery, a rocker arm having one end slidably engaged with the periphery of the disk, a lug on said one end of the rocker arm for engagement in the notches in the disk, a plunger connected to the opposite end of the rocker arm and extending through the casing and a keeper member having a curved lower end with its upper end fixed on the rocker arm for swinging movement therewith, the terminal of said curved end being engageable with the escapement movement in a manner to lock said escapement movement and the shafts when the lug on the rocker arm engages in the notches in the disk.

1,863,790. CAKE SAFE. HENRY HERMANI, Baltimore, Md., assignor to The Tin Decorating Company of Baltimore, Baltimore, Md., a Corporation of New Jersey. Filed Aug. 13, 1930. Serial No. 475,095. 5 Claims. (Cl. 45—71.)



1. An article of the character described comprising a base and a dome-shaped cover, means for maintaining the cover on the base and for carrying the article comprising cooperating resilient bails hingedly connected to the base, each bail having arms extending along the side of the cover and bent to overlie portions of the top of the cover at opposite sides thereof, the portions of the bails overlying the top of the cover being bent upwardly therefrom at points on opposite sides of and spaced a substantial distance from the center of the cover and in spaced relation to each other, one of said bent up portions being provided with an extension across the center of the cover of sufficient length to provide a handle and the other bent up portion forming a keeper to receive said extension to hold the bails together.

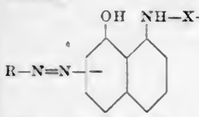
1,863,791. ELECTRIC CELL. GEORGE W. HEISE, Lakewood, Ohio, assignor to National Carbon Co., Inc., a Corporation of New York. Filed May 29, 1928. Serial No. 281,459. 2 Claims. (Cl. 136—153.)



1. In a battery cell assembly comprising positive and negative electrodes, and a container, an electrolyte material comprising essentially a solid soluble hydrate of an alkali hydroxide.

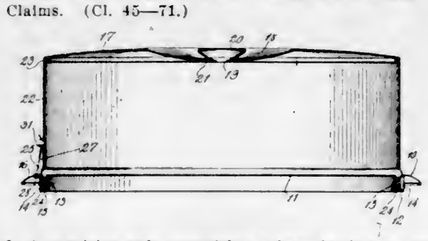
1,863,792. POLY-AZO DYESTUFFS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, and JOSEPH HILGER, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 27, 1928, Serial No. 288,803, and in Germany July 13, 1927. 6 Claims. (Cl. 260—72.)

3. As new products the azo dyestuffs of the general formula:



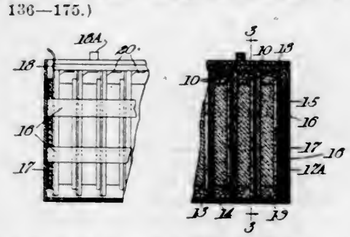
wherein R stands for the residue of an azo compound containing in its complex a benzene or naphthaline nucleus in which two para-positions are substituted by azo groups, and which is furthermore substituted by an ether group, one X represents the CO-group, the other two X's represent CO or —CO—NH—, n represents the numeral 1 or 2, P stands for a coupling component of the group consisting of the pyrazolones, aceto acetic acid arylamides, the methyleketol compounds, sulfazones, 1.3-dihydroxyquinoline and such salicylic acid compounds as are capable of being coupled and wherein the aromatic nuclei may be further substituted by substituents selected from the group consisting of halogen, alkyl, alkoxy, substituted alkoxy, the thio ether group, the sulfonic acid group and the carboxylic acid group, the said new products being in the dry state dark powders of a bronze-like luster, being easily soluble in water with a clear green coloration, and dyeing cotton extremely green shades having a yellow tint.

1,863,793. PROVISION SAFE. HENRY HERMANI, Baltimore, Md., assignor to The Tin Decorating Company of Baltimore, Baltimore, Md., a Corporation of New Jersey. Filed May 9, 1931. Serial No. 536,289. 6 Claims. (Cl. 45—71.)



1. A provision safe comprising a base having a groove defined by oppositely disposed walls adjacent its edge, a cover, oppositely disposed beads on said cover adjacent its lower edge and in spaced relation to each other for contact with the inner surfaces of the opposite walls of the groove.

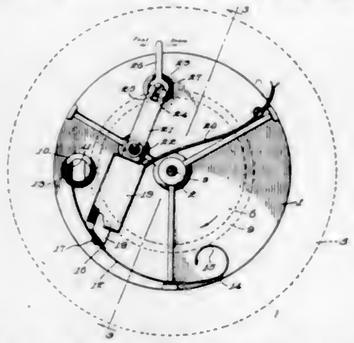
1,863,794. DRY CELL BATTERY. ALTON KARL HUNTLEY, Cleveland, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Original application filed Aug. 9, 1927, Serial No. 211,769, and in Canada Jan. 16, 1928. Divided and this application filed Mar. 24, 1930. Serial No. 438,535. 5 Claims. (Cl. 136—175.)



1. A method of forming a battery of dry cells which comprises assembling the active elements; placing a por-

ous member adjacent to and communicating with said active elements, said member having a portion thereof extending above the normal level of the seal; pouring the seal; and removing that portion of said porous element which extends above the seal.

1,863,795. MOTOR. HOMER H. INGERSOLL, Chicago, Ill., assignor to Williamson Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 22, 1932. Serial No. 588,152. 15 Claims. (Cl. 172—126.)



3. The method of imparting unidirectional motion to a rotative element having a peripheral friction surface which consists in rapidly and successively striking said friction surface with the curled end of a spring element in such a manner that said curled end will impinge upon said friction surface and flex in an angular direction relative to the motion of said spring end prior to impact with said friction surface.

6. A motor comprising a rotary element having a peripheral friction surface, a resilient actuating element having one end secured to a fixed support and a free end disposed in the plane of said rotary element adjacent the peripheral surface thereof, a curved impact member on said free end mounted to roll on said peripheral surface when impinged thereupon, and means for vibrating said actuating element to cause said impact member to impinge upon said friction surface and impart a peripheral driving impulse to said rotary element.

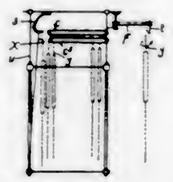
1,863,796. CLOSURE FOR BOTTLES, JARS, AND OTHER CONTAINERS. HERBERT DAVID JACKSON and FRANK WHITE, Walsall, Staffordshire, England. Filed Mar. 26, 1930. Serial No. 439,121, and in Great Britain Mar. 26, 1929. 1 Claim. (Cl. 215—42.)



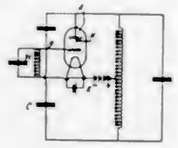
A closure for bottles, jars, and other containers comprising a flanged cap having an opening therein, projections on said cap, means on the neck of the container with which said projections cooperate to retain the cap in sealing engagement with the neck, a resilient tongue member of which one end is frangibly secured to the cap and the other end projects through said opening, and a stop on the neck against which said tongue abuts for a purpose specified.

1,863,797. SELF-ACTING DISPLAY SYSTEM. ROBERT KOLLER, Baden, Switzerland. Filed May 22, 1930, Serial No. 454,805, and in Germany May 28, 1929. 17 Claims. (Cl. 211—1.5.)

1. An automatic display system including an endless article supporting chain disposed in a vertical plane, means for shifting said chain step by step in one direction, an endless return chain moving step by step in the opposite direction and extending approximately parallel to the first named chain, means for receiving the article from the forward end of the first named chain and moving it across the space between the two chains and transferring the article on to the second named chain, and means for transferring the article from the second named chain to the rear end of the first named chain.

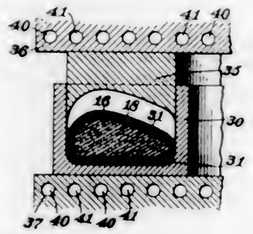


1,863,798. CIRCUIT ARRANGEMENT FOR TRANSMITTER TUBES. WILHELM KUMMERER, Berlin, Germany, Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 25, 1927, Serial No. 163,360, and in Germany Feb. 6, 1926. 10 Claims. (Cl. 250—36.)



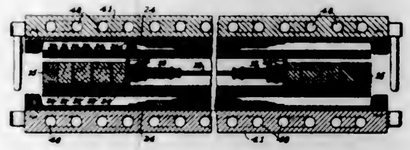
1. In a thermionic tube circuit of the kind described means for avoiding high frequency connection of the output circuit coil with the filament of the thermionic tube, comprising an output circuit coil and a pair of serially connected condensers in shunt therewith, a high frequency path and a direct current path between the common point of said condensers and the filament system and a direct current path between said common point and a substantially centrally located point on said output circuit coil.

1,863,799. METHOD OF MAKING COATED ARTICLES. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Nov. 20, 1930, Serial No. 496,988. Renewed Feb. 15, 1932. 5 Claims. (Cl. 18—59.)



1. The method of making a coated object, consisting in forming an oversize compressible base of matted fibers, varnishing the same with only slight interior penetration with a product that flows under heat and pressure, applying a coating to the varnished base with a product that flows under heat and pressure, and then compressing the coated base to size under heat.

1,863,800. METHOD OF MAKING VENEERED DOORS, PANELS AND THE LIKE. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Apr. 13, 1931. Serial No. 529,774. 13 Claims. (Cl. 144—309.)



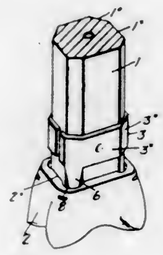
1. The method of making a panel, consisting in attaching unformed molding stock to the stiles and rails, then transforming the molding stock into molding, mitering the stile moldings short of the stile ends and removing the molding ends beyond the miters to permit the ends of the rails to join directly with the stiles, joining the rails and stiles with their molding miters matching to form a frame, providing a filling for the frame center, and affixing a veneer layer to one face of the frame, moldings, and filling and across joints therebetween.

1,863,801. ICE PICK. CHARLES LORBER, Louisville, Ky. Filed Oct. 6, 1930. Serial No. 486,754. 1 Claim. (Cl. 83—62.)



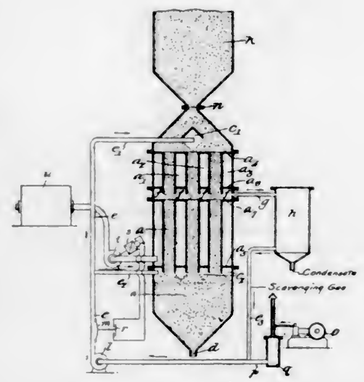
An ice pick including a shank having one end pointed, a wooden handle slidably mounted on said shank and having a longitudinal bore of greater diameter than said shank and extending entirely through the handle, caps each fitted on a respective end of the handle and having an opening therein closely surrounding the shank, said caps fitting on the outside of the ends of the wooden handle to constitute ferrules therefor at each end and thereby to prevent splitting of the handle by blows in either direction, said shank extending through both caps, a collar fixed on the shank within the bore and normally resting against the cap adjacent the shank point, a spring in said bore surrounding the shank and bearing at one end against said collar and at its other end against the cap remote from the point, a striking shoulder on the shank between the first collar and point and adapted to be engaged by the cap upon compression of the spring, and stop means on the remaining end of the shank adapted to engage the other cap upon complete protraction of the pointed end of the shank.

1,863,802. DRILL. HARRY CHARLES NORLEY, North Bay, Ontario, Canada, assignor to Canadian Atlas Steels Limited, Welland, Ontario, Canada, a Company of Canada. Filed Sept. 19, 1931. Serial No. 563,835. 1 Claim. (Cl. 255—64.)



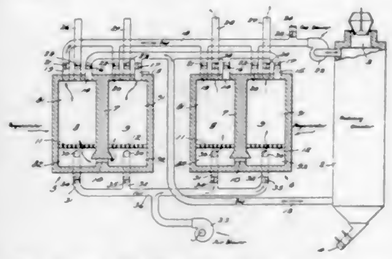
The combination with a drill shank having the opposite face thereof recessed, a split spring member surrounding the shank and having projections fitting into the recesses, a bit having a main recess having engaging recesses in the walls of the main recess, fingers extending from the spring member having outturned ends adapted to fit into the engaging recesses of the bit to be locked therein by the entrance of the shank into such main recess.

1,863,803. APPARATUS FOR THE REGENERATION OF ADSORPTION MATERIAL. VITALIS PANTENBURG, Hesse, Nassau, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Original application filed July 23, 1925, Serial No. 45,723, and in Germany Nov. 12, 1924. Divided and this application filed Jan. 13, 1928. Serial No. 246,561. 3 Claims. (Cl. 202—163.)



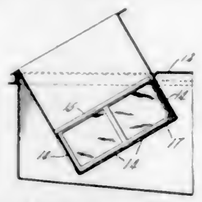
1. Apparatus for regenerating charged adsorption material and for recovery of the adsorptively held gases or vapor comprising a regenerating chamber for receiving the material to be treated, means for indirectly heating the material within the chamber, said chamber including a plurality of vertically disposed tubes in parallel arrangement, a like plurality of tubes spaced therefrom in vertical alignment defining an intermediate gap, means defining a gas space about the tubes adjacent said gap and means for withdrawing gaseous products from said gas space.

1,863,804. PROCESS FOR REDUCING IRON OXIDE ORE TO ITS METALLIC FORM. WILLIAM W. PERCY, Seattle, Wash. Filed Aug. 28, 1928. Serial No. 302,502. 6 Claims. (Cl. 75—14.)



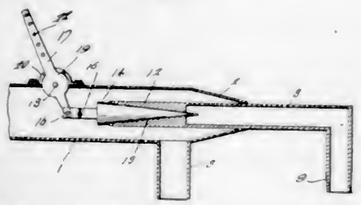
1. The process of reducing iron oxide ore, which comprises treating the ore in a reducing chamber to the action of highly heated carbon monoxide and free hydrogen reducing gases, conducting the used reducing gases in part or in whole successively through a coking coal fuel bed and a coked fuel bed in a two-cell hydro-carbon fueled regenerator for regenerating the same, and returning the regenerated gases to the reducing chamber, the gases to be regenerated being withdrawn from the upper portion of the reducing chamber and conducted to the upper portion of the regenerator, the regenerated gases being withdrawn from the upper portion of the regenerator and conducted into the lower portion of the reducing chamber.

1,863,805. ANTISPLASH DEVICE FOR LIQUID STRAINERS. LOUIS ROSENFELD, Baltimore, Md., assignor to Cherry-Burrell Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 9, 1931. Serial No. 543,067. 10 Claims. (Cl. 210—149.)



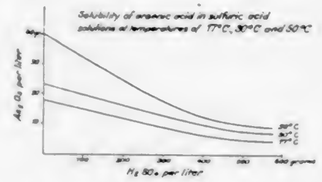
1. The combination with a strainer box having an inlet and a screened outlet of an antisplash grid, comprising spaced thin bars arranged on edge and extending crosswise of the strainer box between the inlet and the screened outlet and through which liquid poured into the strainer passes.

1,863,806. GAS ATTACHMENT. MYRON W. SARSFIELD, Graham, Tex. Filed July 23, 1930. Serial No. 470,185. 2 Claims. (Cl. 48—180.)



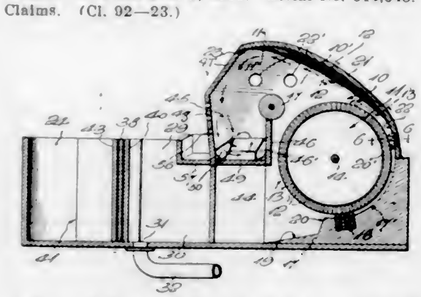
1. An attachment for internal combustion engines for adapting the latter to the use of natural or artificial gas as fuel, comprising a cylindrical casing provided at one end for attachment to the engine for communication with the interior of the engine and having an air intake at its opposite end, a gas intake unit having its outer end adapted for connection to a source of natural or artificial gas and having its opposite end extending within said casing and terminating in a relatively thickened portion having a conical bore, the wider end of which is disposed adjacent the end last referred to of the unit, a conical shapel plug within said bore, an operating lever pivotally mounted on said casing and having one end pivotally connected with said plug, and a control rod connected with the opposite end of said lever.

1,863,807. PROCESS FOR THE TREATMENT OF MATERIALS CONTAINING NICKEL AND/OR COBALT, TOGETHER WITH COPPER, IRON, LEAD, AND PRECIOUS METALS. WALTER SCHOPPER, Hamburg, Germany, assignor to Norddeutsche Affinerie, Hamburg, Germany, a Corporation of Germany. Filed Sept. 8, 1931, Serial No. 561,724, and in Germany Sept. 9, 1930. 6 Claims. (Cl. 75—18.)



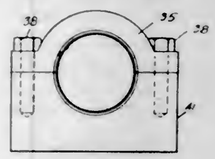
1. Process for the treatment of crude speisses containing nickel and/or cobalt and arsenic and/or antimony together with copper, iron, lead, and precious metals by a dry concentration and a wet dissolving process, which comprises in the dry part of the process, mixing the finely divided speiss with elemental sulphur and smelting the mixture to the formation of a copper containing matte and a concentrated speiss, separating the concentrated speiss and treating the same by the wet part of the process, with concentrated sulfuric acid, whereby the metal content thereof is converted into sulfates and the arsenic content is converted into its oxide, and leaching the converted mass with water, whereby to dissolve the metal sulfates and leave the arsenic oxide as residue.

1,863,808. METHOD OF AND APPARATUS FOR BEATING PAPER PULP. WALTER N. SHERWOOD, North Hoosick, N. Y. Filed Feb. 9, 1931. Serial No. 514,548. 31 Claims. (Cl. 92—23.)



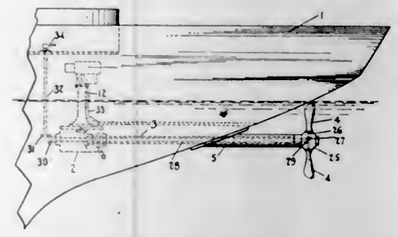
1. The method of beating paper pulp in the presence of a liquid, comprising circulating the mass through a passage, passing the mass beneath and upon one side of a beating roll, driving the roll at a high speed and thereby causing the mass to be thrown by centrifugal force into the air from the opposite side of the beating roll, and guiding the thrown mass in spaced relation from the beating roll over and upon the first-named side of the beating roll, collecting the mass and thoroughly mixing the same.

1,863,809. BEARING. BENJAMIN F. HOPKINS and JOHN V. O. PALM, Cleveland Heights, Ohio, assignors to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 7, 1932. Serial No. 585,341. 10 Claims. (Cl. 308—237.)



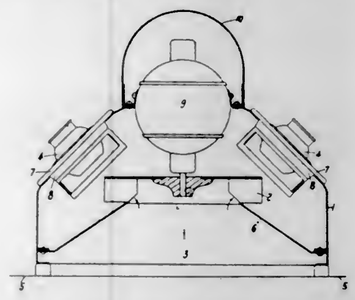
1. A bearing of the character described comprising a thin flexible composite shell having an undisturbed outer surface of predetermined contour and uniform smoothness, and of such thickness and such flexibility under light pressure that said shell is capable of being brought into intimate contact substantially all over its outer surface with an enclosing housing upon assembly therein.

1,863,810. BOAT ENGINE. LORILLARD SPENCER, New York, N. Y. Filed Oct. 9, 1929. Serial No. 398,432. 11 Claims. (Cl. 115—34.)



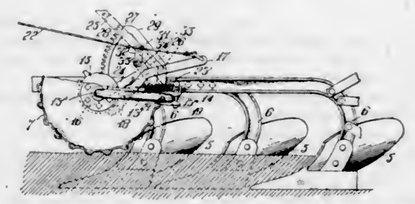
1. In a motor installation for boats, the combination with a gear mechanism rigidly secured within said boat including a propeller shaft extending through the hull of the boat, of an outboard motor removably mounted adjacent said gear mechanism, a water pump mounted within said boat having connections through the hull of said boat and circulating cooling water for said motor, and means for connecting the drive shaft of said motor to said motor to said gear mechanism

1,863,811. AIR CIRCULATING APPARATUS. ALEXANDER WILLIAM STEWART, Glasgow, Scotland. Filed Apr. 2, 1931, Serial No. 527,094, and in Great Britain June 12, 1930. 4 Claims. (Cl. 257—9.)



1. Air circulating apparatus comprising a casing having an air inlet and presenting on its lateral wall a set of sockets, a motor driven fan housed within said casing, and directional nozzles each constituting an air outlet, said nozzles being mounted for universal movement in said sockets, permitting discharge of air in any desired direction within the range of a hemisphere.

1,863,812. PLOW. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. July 5, 1929. Serial No. 376,093. 19 Claims. (Cl. 97—73.)



1. In a power lift plow, the combination of a frame carrying a plow body, a crank axle comprising an upper transverse portion pivotally mounted on said frame, a supporting wheel journaled on the swinging end of said crank axle, a power lift clutch comprising driving and driven clutch members mounted on said crank axle concentrically of said wheel, said driving clutch element rotating with said wheel, a crank pin on said driven clutch element, a lifting bar pivotally connected at its lower end with said crank pin, a motion transmitting lever pivotally supported at its rear end on said upper transverse portion of the crank axle, said lifting bar being pivotally connected with said motion transmitting lever adjacent to the forward end thereof, a manually operated depth adjusting lever pivotally supported at its rear end on said frame on a pivot axis disposed above and forward of the axis of said upper transverse crank axle portion, a motion transmitting link, means pivotally connecting the upper end of said link with said depth adjusting lever, and means pivotally connecting the lower end of said link with the front end of said motion transmitting lever beyond said lifting bar, whereby said crank axle is swung through a smaller degree of angular movement relatively to the angular movement of said depth adjusting lever in the shallow plowing depth adjustments than in the deep plowing adjustments.

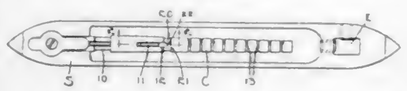
1,863,813. METHOD OF MAKING NONBLEEDING CREPE PAPER. GARDNER R. ALDEN, Framingham, and THOMAS NELSON, Boston, Mass., assignors to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Filed June 15, 1929. Serial No. 371,295. 13 Claims. (Cl. 92—69.)

1. A method of making non-bleeding crepe paper, comprising the steps of treating a sheet of tissue paper with a creping bath characterized by containing a dye, an adhesive protective colloid, and a fixing agent or mordant, and subjecting the treated sheet to creping operation.

1,863,814. SYNTHETIC RESINS. LEO ROSENTHAL, Leverkusen-Wiesdorf-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 5, 1930, Serial No. 480,022, and in Germany Nov. 30, 1926. 5 Claims. (Cl. 260—7.)

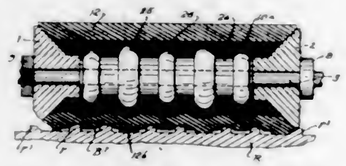
1. In the process for the manufacture of synthetic resins the step which comprises heating crude solvent naphtha boiling at a temperature of between about 160 and about 180° C. in which a phenol is present in an amount of between about 10%, calculated on the amount of indene, and about 10%, calculated on the amount of the resinifiable substance present in the solvent naphtha, with ferric chloride at a temperature of between about 20 and about 60° C.

1,863,815. COP FOR WEFT SHUTTLES. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 29, 1930. Serial No. 499,025. 8 Claims. (Cl. 139—205.)



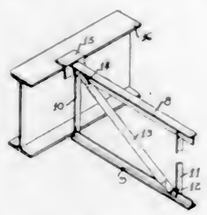
1. A weft carrier having a feeler receiving slot formed therein, said carrier being formed with a zone of depressed surface of less diameter than the diameter of the carrier at that end of the zone adjacent the carrier tip, that end of the slot adjacent the tip of the carrier being located in the zone.

1,863,816. WORK SUPPORTING AND DECORATING METHOD AND APPARATUS. GUIDO VON WEBERN and EDWARD W. HAMANT, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 28, 1930. Serial No. 456,336. 9 Claims. (Cl. 101—35.)



1. A method of decorating blanks having surfaces deviating from a common plane, by the use of a transfer member having a generally smooth surface, comprising forming a transferable pattern on such generally smooth surface and exerting printing pressure on the blank by applying the member thereto and meanwhile exerting unequal pressure on the transfer material of the member opposite the printing point or line, the pressure being greatest where the surfaces to be decorated recede farthest from the points of application of such unequal pressure, and least where the surfaces are closest to such points.

1,863,817. STRUCTURAL STEEL TRUSS JOIST. FREDERICK WELLS, Toledo, Ohio. Filed Dec. 26, 1930. Serial No. 504,768. 1 Claim. (Cl. 189—37.)

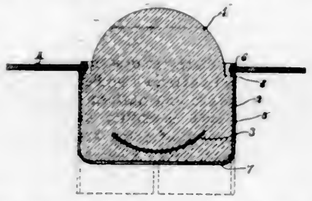


In a truss, upper and lower substantially T-shaped chords, means to connect the chords to a cross-support including a substantially L-shape clip having one of its legs formed to be connected to the cross support and having its other leg welded to the end of the upper chord that is adjacent to the cross-support and extending vertically and alongside the cross-support, a vertical member welded at its ends to the chords and disposed adjacent to said vertically extending leg of the clip and a diagonal welded at its ends to the chords, said diagonal having its upper end disposed at points adjacent to the upper end of the vertical member and embracing the flange of the upper chord.

1,863,818. METHOD OF TOUGHENING SHEEP CASINGS. DANIEL E. WELTS, Pasadena, Calif. Filed July 1, 1931. Serial No. 548,260. 6 Claims. (Cl. 17—45.)

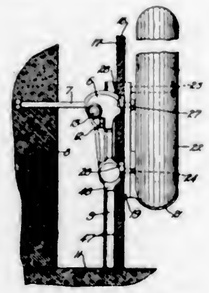
1. The herein described method of toughening sheep casings which consists in treating said casings with a solution composed of water to which has been added relatively small amounts of iodine, ammonia and soap.

1,863,819. REFLECTING BUTTON FOR SIGNS. THEODOR R. WILLWERSCHEID, Cleveland, Ohio. Filed Aug. 26, 1929. Serial No. 388,451. 2 Claims. (Cl. 88—1.)



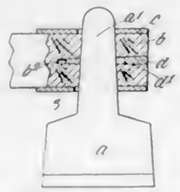
1. A light reflecting unit, comprising a one-piece glass button, a reflecting unit imbedded within said button in opposition to the exposed face of the button and spaced from the rear end of the button.

1,863,820. BRACKET CLAMP. CLIFFORD E. WOLFE, Berkeley, Calif., assignor of one-half to Francis J. Clapham, Berkeley, Calif. Filed Dec. 15, 1930. Serial No. 502,451. 5 Claims. (Cl. 248—17.)



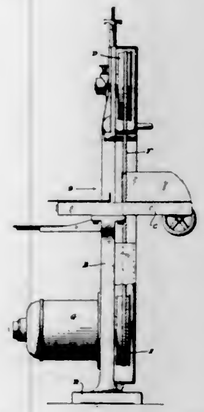
1. A clamp comprising a pair of matched jaws in which a plurality of skewed bars may be seated, inclined guides on the jaws to cause relative displacement as they are drawn together, and means for drawing the jaws together to lock them on the bars.

1,863,821. AX, PICK, AND LIKE HAND TOOL. WALTER WILLIAMS WRIGHT, Umtali, Southern Rhodesia, Africa. Filed Jan. 6, 1931, Serial No. 506,883, and in Great Britain Feb. 15, 1930. 4 Claims. (Cl. 306—40.)



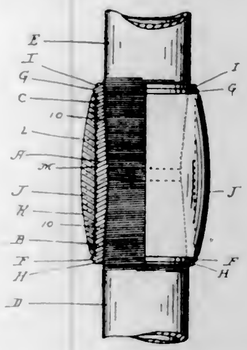
1. A hand tool comprising a haft, a slotted metal sleeve surrounding said haft, a slotted wedge in said haft, a tool head, a tapered tang to said tool head, said tapered tang passing through said slots in said sleeve and said slot in said wedge so that blows on the tool head cause the said wedge to wedge more tightly.

1,863,822. BAND SAW PULLEY DRIVE. PHILIP AVILLA, Daly City, Calif., assignor of two-fifths to T. E. Himle, Burlingame, Calif. Filed Jan. 8, 1930, Serial No. 419,359. Renewed Sept. 21, 1931. 7 Claims. (Cl. 143—30.)



6. In a structure of the character described, a frame, a pair of pulleys mounted on the frame, one of said pulleys presenting a crown pulley surface and the other a flat pulley surface, and a band saw supported by the pulleys, said last-named pulley having an annular groove formed in its face at one side of the flat pulley surface to prevent the teeth of the saw from contacting with the pulley surface.

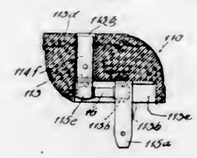
1,863,823. COUPLER. EDWARD PAUL BARCLAY, Los Angeles, Calif. Filed Nov. 28, 1928, Serial No. 322,560. Renewed Nov. 6, 1931. 8 Claims. (Cl. 308—4.)



1. A protective coupling for tubular sections comprising a metal collar with annular external flanges at either end and a resilient band encompassing and affixed to the collar between and adjacent said flanges, said flanges being formed to substantially cover and protect the ends of said band.

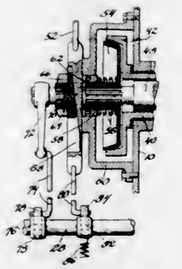
1,863,824. FUSED ATTACHMENT PLUG FITTING. LOUIS BARNETT, Brooklyn, N. Y. Original application filed Dec. 22, 1927, Serial No. 241,808. Divided and this application filed Oct. 2, 1929. Serial No. 396,645. 3 Claims. (Cl. 200—115.5.)

1. A device adapted to be interposed between the two conventional parts of a separable attachment plug comprising a one-piece insulating body having parallelly spaced flat sides, one of said sides having socket recesses extending perpendicularly into the body, spring terminals within said recesses adapted to receive the blades of a cap, contact blades projecting from the other side of said body perpendicularly therefrom adapted to engage other spring



terminals of a separable plug, the last mentioned side having a recess therein, spring clamping means connecting with said terminals and blades in said last mentioned recess, and current limiting means demountably secured in series circuit by said clamping means.

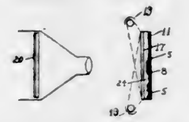
1,863,825. BOOSTER BRAKE. LLOYD BLACKMORE, Highland Park, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 14, 1923. Serial No. 618,941. 61 Claims. (Cl. 188—140.)



1. A self-propelled vehicle having, in combination, a brake, a power-driven shaft, a driver-operated controlling member, and means operated by said member for applying the brake manually or by power derived from said shaft when it is turning in either direction.

53. A braking system comprising a driving member mounted to be driven in both directions of rotation by a transmission shaft, a second member frictionally engageable therewith, manually operable means to affect such an engagement, a third member mounted for rotary movement, mechanism including loose connections between said second member and said third member to effect a uni-directional movement of said third member upon rotation of said rotary driving member in either direction, manually operable means whereby said third member may also be operated directly.

1,863,826. METHOD OF PRODUCING COMPOSITE PICTURES. CONRAD G. BRIEL, Chicago, Ill., assignor to Cinema Development Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 12, 1931. Serial No. 568,388. 22 Claims. (Cl. 88—16.)



1. The method of producing a composite photograph embodying two component parts which includes making a photographic impression of one component upon a

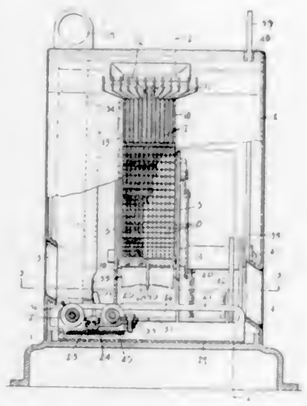
sensitized film, developing the photographic impression to produce a mask thereof on one side of said film and on the other side of said film an image thereof varyingly reflective of light, exposing the other component to the mask side of said film, and treating the photographic impression of said other component to make it varyingly reflective of light.

1,863,827. METHOD OF PRODUCING COMPOSITE PICTURES. CONRAD G. BRIEL, Chicago, Ill., assignor to Cinema Development Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 12, 1931. Serial No. 568,389. 9 Claims. (Cl. 88—16.)



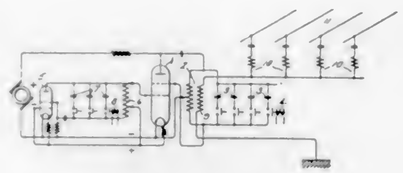
1. The method of producing a composite photograph embodying a foreground component superposed upon a background component which includes making successive photographic silver deposit images of both components surrounded by undeveloped photographic material, and making a reverse image illuminable by transmitted light by removing the silver deposit.

1,863,828. GOLF BALL MARKING MACHINE. CHARLES E. BROMAN, Sparta, and WALTER H. NOWAK, Grand Rapids, Mich. Filed July 29, 1929. Serial No. 381,898. 15 Claims. (Cl. 101—40.)



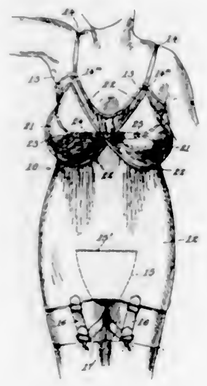
1. In a machine of the class described, the combination with a casing provided with opposed receiving and discharge openings, a marking means disposed within said casing and comprising a plurality of indicia members capable of independent adjustment from the exterior of the casing whereby selected indicia may be brought into alinement, a way disposed in spaced relation to said indicia members, a carriage reciprocatingly mounted on said way and adapted to rotatably support a ball and carry it into rotative engagement with the alined characters, means for manually reciprocating said carriage, an ejector member pivotally mounted on said carriage, and a stop on said way with which said ejector member engages as the carriage approaches the end of its stroke whereby the ball is automatically ejected from the carriage through said discharge opening, the carriage in its initial position being adapted to receive a ball introduced through said receiving opening.

1,863,829. MULTIPLEX SIGNALING SYSTEM. WALDEMAR BRÜCKEL, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 30, 1925, Serial No. 40,606, and in Germany July 14, 1924. 5 Claims. (Cl. 250—17.)



5. In a signaling system, a transmitter comprising an electron discharge device having an anode, a cathode and two control elements or grids interposed between said cathode and anode, means connected to said cathode, anode and one of said control elements to cause said device to produce oscillations of high frequency, means for modulating said oscillations with oscillations of a different frequency, said means comprising an oscillatory circuit connected to said cathode and the other of said control elements and means whereby oscillations determined in frequency by the constants of said oscillatory circuit are excited therein.

1,863,830. BUST-SUPPORTING GARMENT. VITA BUCHANAN, New York, N. Y. Filed June 6, 1929. Serial No. 368,842. 11 Claims. (Cl. 2—30.)

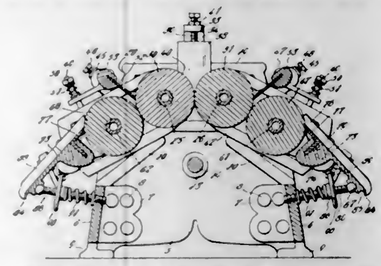


1. A garment of the character described comprising a body portion, bust supporting and confining means at the upper part of said body portion including the material of the body portion, and taping secured to said body portion and outlining the breasts and extending across the front of the garment and rearwardly towards the back thereof and terminating in united ends located at each side of the garment, substantially as specified.

1,863,831. INK ROLLING MILL. WILLIAM H. BYRD, New Orleans, La. Filed Aug. 31, 1929. Serial No. 389,793. 6 Claims. (Cl. 83—12.)

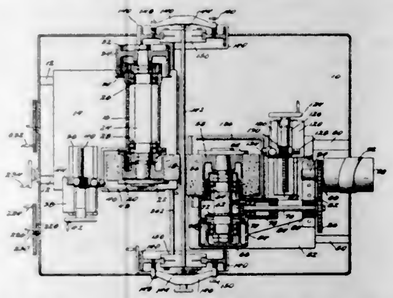
1. An ink rolling mill comprising a pair of upper stationary rolls, and an adjustable lower roll for each

upper stationary roll, a water cooled shaft for each of said rolls, a bearing block for the shaft of each of the



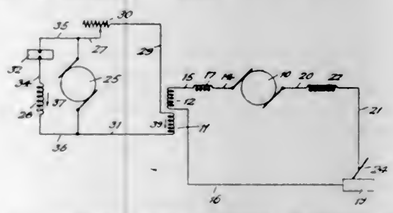
said adjustable rolls, a swingably supported guide for each of the blocks, and means for adjusting the said guide.

1,863,832. CENTERLESS GRINDER. WILLIAM H. CHAPMAN, Montclair, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Feb. 12, 1926, Serial No. 87,940. Divided and this application filed Feb. 19, 1929. Serial No. 341,112. 23 Claims. (Cl. 51—103.)



1. In a centerless grinding machine, a fast wheel, a slow wheel, a work support, a locating rod extending between the wheels, and means for temporarily supporting the rod in a definite and established axis of reference between the wheels; substantially as described.

1,863,833. WELDING APPARATUS. ALEXANDER CHURCHWARD, New York, N. Y., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 444,919. 2 Claims. (Cl. 219—8.)



2. In combination with a welding generator having separately excited field windings and bucking series field windings, means for supplying current to the separately excited field windings comprising a direct current generator having an armature connected in a circuit with said separately excited field windings and shunt field windings connected in a circuit with said armature, and a rectifying unit connected in series with said armature in one of said circuits.

1,863,834. NONCAKING PIGMENTED COATING COMPOSITIONS AND PROCESS OF MAKING SAME. COLE COOLIDGE and HAROLD S. HOLT, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,909. 17 Claims. (Cl. 134—79.)

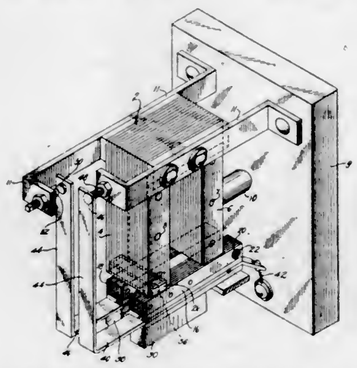
4. A nitrocellulose lacquer containing a pigment whose particles have deposited upon their surfaces a rubber composition which serves as a protective agent.

1,863,835. COMBINED ELEVATOR AND WATER SEAL. WILLIAM P. DENNY, Houston, Tex., assignor of one-half to L. C. Christian, Houston, Tex. Filed July 9, 1929. Serial No. 376,996. 3 Claims. (Cl. 255—1.)



1. In a device of the character described a tubular body threaded at its ends, said body having a socket in its lower end to receive a coupling at the upper end of a drill stem, a divided bushing, a pair of levers pivotally connected with said body, and means connected to said levers to fit about and clamp said bushing firmly about said drill stem.

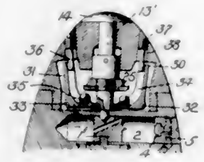
1,863,836. RELAY. JOHN H. DERBY, Scarsdale, N. Y., and HENRY GEORGE LEACH, Red Bank, N. J., assignors to American Fire Prevention Bureau, New York, N. Y., a Corporation of New York. Filed Feb. 26, 1929. Serial No. 342,874. 3 Claims. (Cl. 200—103.)



1. A relay adapted to control a plurality of circuits each in response to a different degree of energizing of the relay which comprises an electromagnet, armatures magnetically connected to one pole of the electromagnet and movable toward and away from the other pole of the

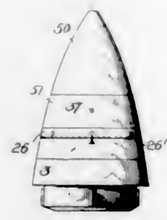
electromagnet within its magnetic field, circuit closing contacts associated with each of the armatures so as to be closed by movement of the armature in one direction and opened by movement in the other direction, said armatures being so designed and proportioned that when all are in the attracted position one is held or dropped accordingly as the current exceeds or falls below a critical value for which the relay is designed to respond.

1,863,837. FUSE FOR PROJECTILES. THOMAS B. DOE, New York, N. Y. Filed Mar. 16, 1929, Serial No. 347,491. Renewed Nov. 7, 1931. 6 Claims. (Cl. 102—39.)



1. In a fuse for projectiles, the combination with the hammer, of a detent for normally holding said hammer retracted, means subject to the air pressure due to the flight of the projectile for holding said detent in place, and movable masses within the projectile subject to the centrifugal force created by the rotation thereof for withdrawing said detent when the air pressure falls below a predetermined amount, said masses also being subject to the acceleration of the projectile within the gun barrel whereby withdrawal of said detent is prevented before the projectile has cleared the muzzle.

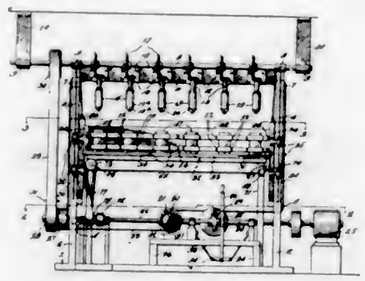
1,863,838. FUSE FOR ANTIAIRCRAFT PROJECTILES. THOMAS B. DOE, New York, N. Y. Filed June 6, 1930. Serial No. 459,556. 22 Claims. (Cl. 102—39.)



1. In a fuse for projectiles, the combination with the hammer, of a detent for normally holding said hammer retracted, means subject to the air pressure due to the flight of the projectile for holding said detent in place, and yielding means opposing said other means for withdrawing said detent when the air pressure becomes a predetermined amount.

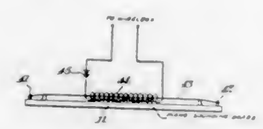
1,863,839. MACHINE FOR MANUFACTURING HOLLOW CONCRETE BRICKS. VERNON C. DUFF, Washington, D. C. Filed July 19, 1928, Serial No. 293,882. Renewed Sept. 12, 1931. 12 Claims. (Cl. 25—35.)

1. A brick making machine, comprising a rotatable boring and packing head, a carriage arranged for movement toward and away from the packing head, a drum, a cable wound about the drum and extending in opposite directions from and connected to the carriage, direction pul-



leys about which the cable passes, and means for rotating the drum in opposite directions to effect the movement of the carriage toward and away from the head.

1,863,840. LOUD SPEAKER APPARATUS AND METHODS. REGINALD A. FESSENDEN, Chestnut Hill, Mass., assignor to Submarine Signal Company, Portland, Me., a Corporation of Maine. Original application filed May 21, 1924, Serial No. 714,899, Patent No. 1,854,025, dated Apr. 12, 1932. Divided and this application filed Jan. 6, 1927. Serial No. 159,366. 17 Claims. (Cl. 179—109.)

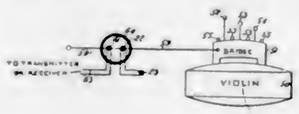


2. In the art of reproducing sounds transmitted electrically, the method of eliminating the effects of static and other disturbing electrical impulses which comprises actuating, by the received impulses, the sounding board of a piano as a loud speaker.

8. A loud speaker comprising a piano sound board and loud speaker electrical mechanism attached to said sound board for actuating the same.

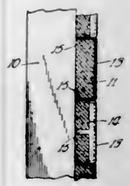
17. A sound producing device comprising a piano sounding board, a plurality of magnetostriction wires stretched across said board and means for energizing the same.

1,863,841. METHOD AND APPARATUS FOR COORDINATING RADIO AND PHONOGRAPH REPRODUCTION. REGINALD A. FESSENDEN, Chestnut Hill, Mass., assignor to Submarine Signal Company, Portland, Me., a Corporation of Maine. Original application filed May 21, 1924, Serial No. 714,899. Divided and this application filed Sept. 13, 1927. Serial No. 219,351. 9 Claims. (Cl. 179—1.)



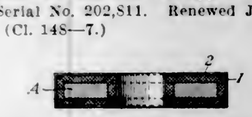
1. In a system of the kind described, a pick up device including an area source and a plurality of substantially parallel resonant elements operated directly thereby, said pick up device including a vibratable element arranged substantially perpendicular to said resonant element.

1,863,842. TILED WALL OR THE LIKE. OWEN E. GATGSBY, Park Ridge, Ill., assignor, by mesne assignments, to Porcelain Tile Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,445. 4 Claims. (Cl. 72—18.)



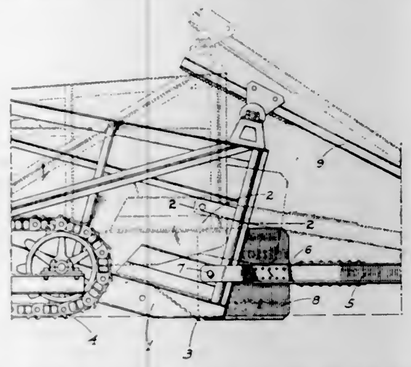
1. A tiled structure comprising the combination of a supporting structure, a sheet secured thereto, said sheet having in its face parallel recesses, said recesses having a plurality of equidistant holes communicating therewith, a plurality of tiles covering said sheet, marginal flanges on said tiles extending into said recesses, and members on said flanges extending into said holes to maintain the tiles on said sheet.

1,863,843. PROCESS OF PREPARING METAL FOR USE IN UNIDIRECTIONAL CURRENT CARRYING DEVICES. LARS O. GRONDAHL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Jan. 7, 1925, Serial No. 1,111. Patent No. 1,640,335. Divided and this application filed July 1, 1927. Serial No. 202,811. Renewed Jan. 15, 1932. 9 Claims. (Cl. 148—7.)



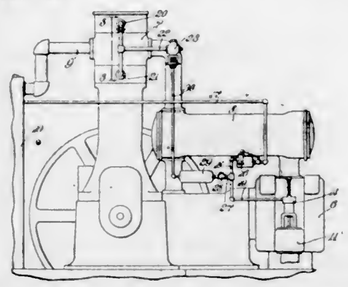
1. The process of preparing a unidirectional current carrying junction which consists in forming a smooth chemically clean surface on a copper blank, heating the blank to form oxides on said surface, and removing the cupric oxide.

1,863,844. AUXILIARY LOADING WING FOR SCRAPERS. WILLIAM H. GUY, IRA D. GUY, and ROBERT E. GUY, Stockton, Calif. Filed Jan. 17, 1931. Serial No. 509,427. 2 Claims. (Cl. 37—118.)



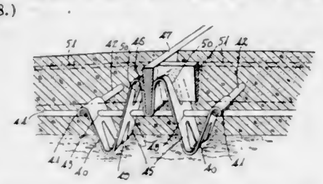
1. In combination, a scraper bowl having side walls, forwardly extending draft arms pivoted on the walls on the outside, said arms close to and ahead of the walls being bent transversely so that their inner faces lie inwardly of the inner faces of the corresponding walls, and wings secured against the inner faces of the transversely bent portions of the arms and extending rearwardly thereof to overlap the side walls.

1,863,845. FLUID COMPRESSOR. HALBERT B. HALVORSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 22, 1929. Serial No. 357,179. 12 Claims. (Cl. 230—26.)



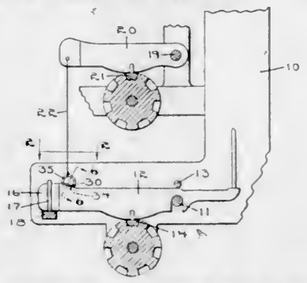
1. In combination with a compound compressor, an unloader for the low pressure cylinder, a device controlling the unloader, unloading means for the high pressure cylinder also connected to said device for control thereby, and means for delaying unloading of the high pressure cylinder a substantial time after unloading of the low pressure cylinder.

1,863,846. JOINT MEMBER AND REENFORCING ROD SUPPORT. JOHN N. HELTZEL, Warren, Ohio. Filed Nov. 12, 1928. Serial No. 318,919. 9 Claims. (Cl. 94—18.)



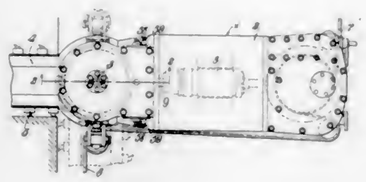
1. A supporting member having means for receiving and supporting a joint member and having means for supporting a reenforcing rod at an angle to said member.

1,863,847. DOBBY FINGER FOR LOOMS. ELBRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1930. Serial No. 446,700. 4 Claims. (Cl. 139—322.)



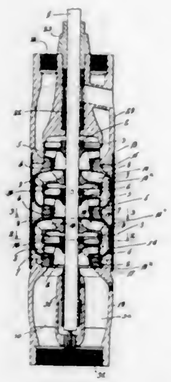
1. In a dobby finger to cooperate with a cord, a pair of normally spaced lips secured to the finger, and a ring located between and held in a substantially fixed relation with respect to the finger by said lips and presenting a surface to cooperate with the cord.

1,863,848. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Original application filed Mar. 29, 1927, Serial No. 179,357, and in Great Britain Feb. 21, 1928. Divided and this application filed Aug. 25, 1930. Serial No. 477,765. 17 Claims. (Cl. 262—30.)



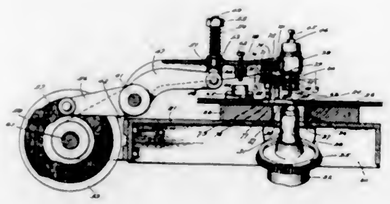
1. In a mining machine, a machine frame, a motor in said frame, cutting mechanism driven by said motor including a cutter bar pivoted on said frame and means for swinging said cutter bar about its pivot, and means separate from said bar swinging means for locking said cutter bar to said frame in different positions to which it is adjusted by swing about said pivot, comprising a rotatable locking ring secured to said bar and having locking recesses on its periphery, and a rotatable locking member carried by said frame and having a locking portion adapted to selectively cooperate with said recesses.

1,863,849. TURBINE PUMP. ALADAR HOLLANDER, Pasadena, Calif., assignor to Byron Jackson Co., San Francisco, Calif., a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 415,912. 4 Claims. (Cl. 103—102.)



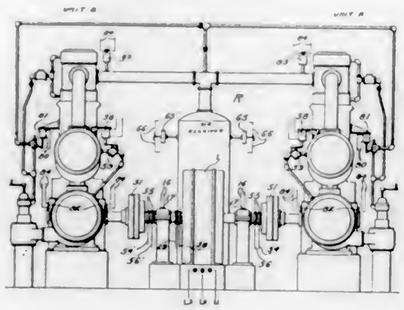
1. A turbine pump comprising an impeller shaft, an impeller on said shaft, a pump bowl including a diffusion chamber member having vanes which spiral upward and outward, being radial at their lower ends and axial at their upper ends, a return chamber member having flange interlocking fit with said diffusion chamber member, said return chamber member having substantially vertical vanes, the return chamber member being divided in a vertical plane, and means for axially compressing the pump bowl parts for retaining the interlocking faces thereof together.

1,863,850. WELDING KEYS TO CAN ENDS. JOSEPH C. HOLLOWAY, New Orleans, La., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 10, 1929. Serial No. 331,563. 18 Claims. (Cl. 219—4.)



1. In an apparatus for attaching opening keys to can ends, the combination of a support for an assembly key and can end, means for welding said key and can end together, and electrical means for heating said can end prior to the welding operation comprising two electrodes contactable with the can end at each side of the place of welding.

1,863,851. AUTOMATIC COMPRESSOR CONTROL SYSTEM. WILLIAM EARL HUGHES, Chicago, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed May 1, 1930. Serial No. 448,991. 20 Claims. (Cl. 230—4.)

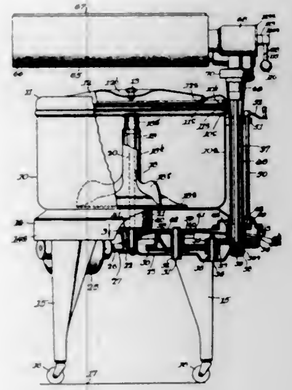


1. The combination comprising a continuously operating motor, a mechanism driven thereby, means for connecting said motor and mechanism in driving relation or disconnecting them, and means for automatically disconnecting said driving relation in accordance with predetermined conditions of operation while permitting motor operation to continue, said means including a time delay relay adapted to break the driving relation after said predetermined condition of operation has existed for a given interval of time.

1,863,852. WASHING AND IRONING MACHINE. JOHN T. HUME, Chicago, Ill., assignor to Electric Household Utilities Corporation, Cicero, Ill., a Corporation of Illinois. Filed Oct. 12, 1928. Serial No. 312,008. 1 Claim. (Cl. 68—9.)

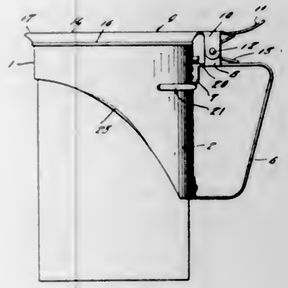
In combination, a support, a driving shaft mounted adjacent said support, a frame detachably and rotatably mounted on said support, an ironing roll and a relatively

movable shoe carried by said frame, a shaft for rotating said roll, a gear actuated by said driving shaft, a manually operated clutch for connecting said gear with



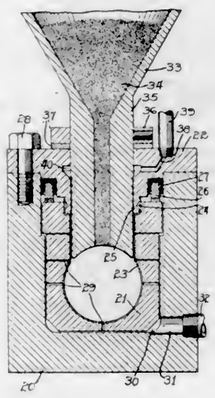
said second-named shaft, and means actuated by the operation of said clutch for effecting movement of said shoe with respect to said roll.

1,863,853. CAN PERFORATING AND POURING ATTACHMENT. LORA B. JACKSON, Green Bay, Wis. Filed Feb 14, 1931. Serial No. 515,861. 6 Claims. (Cl. 220—51.)



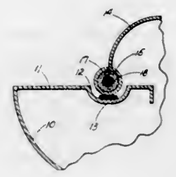
2. A can attachment comprising an open ended casing for disposition on the upper portion of the can, a lid pivotally mounted for swinging movement on the casing and engageable with the upper end of said casing for closing same, an upstanding rib extending diametrically across the lid, said rib providing stiffening means for the lid and further providing a channel in the inner side of the lid, and a pair of spaced can perforating prongs rigidly mounted on the lid in the channel and depending therefrom for operative engagement with the top of the can.

1,863,854. METHOD OF AND APPARATUS FOR SHAPING ARTICLES. BENJAMIN A. JEFFERY, Detroit, Mich., assignor to Champion Porcelain Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 4, 1929. Serial No. 404,541. 28 Claims. (Cl. 25—45.)



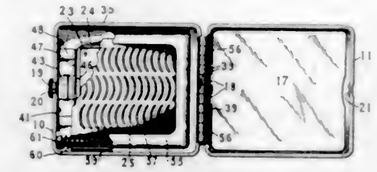
19. The method of molding powdered or granular material, which comprises partially evacuating an elastic container, subjecting the exterior of the casing to a higher vacuum and thereby expanding it, filling the material into the expanded container, and thereafter subjecting the exterior of the container to fluid pressure.

1,863,855. HERMETICALLY SEALED CASKET. EARL G. JENKINS, Pittsburgh, Pa. Filed Dec. 19, 1929. Serial No. 415,190. 2 Claims. (Cl. 27—17.)



1. In combination, a casket having a rim formed with an upwardly opening groove, a cover having a rim arranged to seat in said groove with substantially a line contact therewith throughout the periphery of the casket, fusible sealing material disposed in said groove and arranged to support the rim of said cover out of contact with the groove, and an electrical heating element carried by the rim of the cover for heating said rim whereby the heat of the rim of said cover may be transferred directly to said fusible sealing material to fuse the same and permit the rim of said cover to press downwardly through the fused sealing material substantially into contact with the groove in said casket and transfer heat directly to the line of contact therebetween.

1,863,856. POWDER DISPENSER. NATHAN KASDAN and RICHARD F. LANDWEHR, New York, and DANIEL POLLACK, Brooklyn, N. Y., assignors to Majestic Metal Specialties, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 16, 1931. Serial No. 563,210. 25 Claims. (Cl. 132—83.)



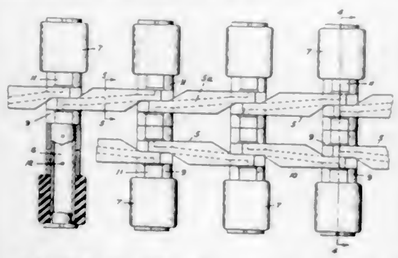
1. A powder dispenser comprising a container for loose powder, a perforate plate across one end portion of said container, a follower plate within said container, means whereby loose powder within said container may be compressed between said follower plate and perforate plate, a hinged cover for said dispenser, and means for actuating said perforate plate in response to movement of said cover during its motion when well opened without actuating said plate during the early opening movement of the cover, the perforate plate being adapted to discharge powder on movement in either direction.

1,863,857. AUTOMATIC IGNITION CONTROL FOR INTERNAL COMBUSTION ENGINES. AUGUST KAZENMAIER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Feb. 12, 1931, Serial No. 515,339, and in Germany Feb. 25, 1930. 8 Claims. (Cl. 64—90.5.)



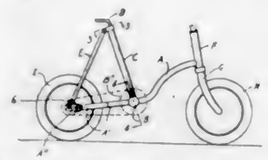
1. An automatic ignition control for internal combustion engines comprising an interrupter cam, resilient means tending to restrain said cam from angular displacement and at least two centrifugal weights adapted to urge said cam in one direction of rotation, one of said weights operating on the cam with greater mechanical advantage than the other.

1,863,858. TRACK FOR TRACKLAYING VEHICLES. HARRY A. KNOX, Davenport, Iowa. Refile of application Serial No. 69,175, filed Nov. 14, 1925. This application filed Oct. 29, 1929. Serial No. 403,301. 5 Claims. (Cl. 305—10.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



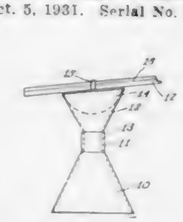
1. In a track for track-laying vehicles, link pins, pairs of symmetrical links connecting the pins, each link terminating in oppositely disposed offset bearings receiving the link pins, each pair of links arranged on the link pins with the offset bearings of their associate ends respectively directed inwardly and outwardly, the inwardly directed bearings serving to space the links and separate shoes positioned one on each extremity of the link pin by the outwardly directed bearings and serving to retain the links and means for retaining each shoe.

1,863,859. CYCLE CONSTRUCTION AND METHOD OF PACKING. HERMAN L. KRAEFT, Cleveland, Ohio, assignor to Murray-Ohio Mfg. Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed May 29, 1930, Serial No. 457,256. Divided and this application filed Dec. 29, 1930. Serial No. 505,221. 6 Claims. (Cl. 208—106.)



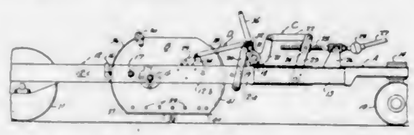
1. A cycle frame, comprising, a main central frame member, a seat post supporting mast hinged to the central member, a backstay hingedly connected to the central member, and a clamp adapted to be released and to slide on said mast, the clamp member being pivotally connected to the upper end of the backstay whereby the mast may be swung forwardly toward the main frame member, without disassociating the said frame parts, to collapse the frame.

1,863,860. SHAMPOO BOARD. HELEN LALIE, Brooklyn, N. Y. Filed Oct. 5, 1931. Serial No. 566,829. 1 Claim. (Cl. 4—159.)



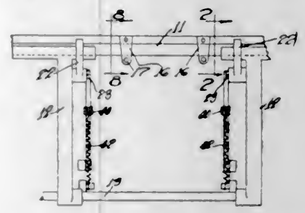
A device of the class described comprising a base, a hollow support mounted on said base and having its upper side open to provide a socket, a curved body rotatably mounted in said socket and having diametrically opposed arms rigid therewith, said upper side having a peripheral edge, the plane passing through said edge lying at an angle to the horizontal, a board adapted to rest on said arms, and tongues on the ends of said arms gripping the edges of said board.

1,863,861. SCRAPER AND LEVELER. CHARLES LE BLEU, Los Angeles, Calif. Filed Aug. 10, 1931. Serial No. 556,057. 5 Claims. (Cl. 37—126.)



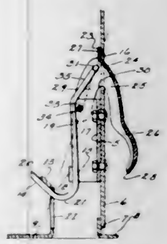
1. A wheeled dirt moving machine comprising a frame supported by wheels at the front and rear, a pan extending transversely of and revolubly supported on said frame intermediate the front and rear wheels, and mechanism to control the position of said pan: said frame comprising three section divided side bars extending longitudinally between said front and rear wheels, a removable bolt securing the middle section of each side bar to an end section, pan trunnion bearings on the middle sections of said bars; a revoluble bowl pan having a curved back with a blade and means to attach a removable bottom with a blade, trunnion members detachably mounted on the side walls for changing the location of the trunnions; and power actuated means on said frame to control the position of said bowl.

1,863,862. LOOSE REED LOOM. WILLIAM E. LUNDGREN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 7, 1931. Serial No. 507,212. 3 Claims. (Cl. 139—191.)



1. In a loom, a lay, a reed loosely mounted therein, means to yieldingly resist movement of said reed relative to said lay, and means to apply additional pressure to said reed as the lay moves toward back center, said additional means comprising members movably mounted on the lay, relatively heavy springs acting to move said members against said reed, and positively acting means effective to swing said members away from said reed as the lay moves forward.

1,863,863. INNER LATCH FOR AUTO HOODS. EDWARD R. MARBACH, Cleveland, Ohio. Filed Jan. 2, 1931. Serial No. 506,050. 4 Claims. (Cl. 292—113.)



1. In a latch for auto hoods, a fixed and rigid latch element on the chassis and within the hood, comprising a horizontal, oblique bar supported on vertical standards, a link member having a lower hook end oblique to the vertical for engaging said latch bar, a transverse angular lever pivoted to the hood on its inner face and extending outwardly through a slot therein, vertical guide members mounted on the inner face of the hood, said link being pivoted at its upper end to the lever at a point above the hood pivot, and guided for vertical movement in said members whereby lowering the outer end of the lever will raise and inwardly move the link to engage said fixed latch bar.

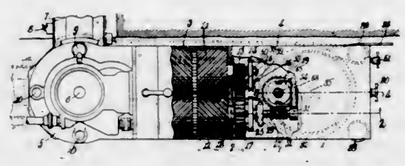
1,863,864. HOOK FOR A GUT STRING POLISHING MACHINE. GUY L. MATTHEWS, Chicago, Ill., assignor to Harry L. Diehl, Chicago, Ill. Filed Nov. 5, 1928. Serial No. 317,461. 3 Claims. (Cl. 51—237.)

1. In a hook for polishing machines of the kind described, a shaft having a fixed axis of rotation, said shaft having a recess extending to beyond the center line and near one end, said end portion having an axially disposed longitudinally extending countersunk aperture, a radially disposed slot in said end portion opening into said aperture



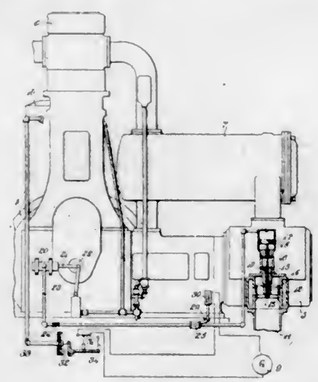
and extending to the lateral face of the hook, and oppositely disposed longitudinally extending grooves in the outer surface of said end portion.

1,863,865. MINING MACHINE. LOUIS A. MAXSON, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 20, 1927. Serial No. 200,096. 35 Claims. (Cl. 262—30.)



18. In a mining machine, a pressure fluid actuated driving motor having intermeshing rotors rotating in opposite directions, and feeding mechanism driven thereby including a feed operating member adapted to cooperate directly with flexible feeding means, driving gearing between said motor and said feed operating member comprising a gear driven only by one of said rotors and a gear driven only by the other of said rotors, and planet gears connecting said gears.

1,863,866. COMPRESSOR CONTROLLING MECHANISM. LOUIS A. MAXSON, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Nov. 21, 1929. Serial No. 408,882. 7 Claims. (Cl. 230—23.)



1. In a compressor controlling system, a valve whose position determines the loading and unloading of the compressor, actuating means therefore operable when subjected to a predetermined subatmospheric pressure, means driven by the compressor for creating a subatmospheric pressure for acting on said actuating means, and means governed by compressor discharge pressure variations and operative during continued running of the compressor for controlling the subjecting of said actuating means to subatmospheric pressure.

1,863,867. PAPER SIZE AND PROCESS OF MAKING SAME. AUGUSTUS E. MAZE, Orange, N. J., assignor, by mesne assignments, to Manson Chemical Company, Montclair, N. J., a Corporation of New Jersey. Original application filed Dec. 30, 1925, Serial No. 78,329. Divided and this application filed Apr. 10, 1926. Serial No. 101,188. 20 Claims. (Cl. 92—21.)

1. In the process of making water-resistant paper, the step which comprises adding to paper pulp, in a beater, an aqueous dispersion of paraffin wax and an oil, said wax and oil being of substantially non-odorous and non-flavor inducing character; said dispersion having the property of substantial freedom from foaming when incorporated in the beater engine.

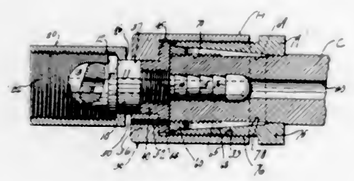
1,863,868. CHROMIUM STRIPPING BATH. JOHN F. MCCULLOUGH, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 6, 1929. Serial No. 344,918. 5 Claims. (Cl. 204—1.)

1. An electrolytic bath for stripping chromium plated articles by placing the article at the anode, comprising an aqueous solution of an organic electrolytic acidic reducing agent.

1,863,869. ELECTROPLATING BATH. JOHN F. K. MCCULLOUGH, Detroit, Mich., and BENJAMIN W. GILCHRIST, East Orange, N. J., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 7, 1929. Serial No. 398,088. 3 Claims. (Cl. 204—1.)

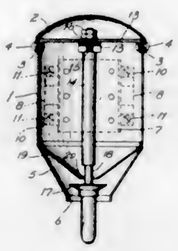
1. An electroplating bath comprising a double cyanide of the metal to be deposited and one of the two alkali metals, sodium and potassium, and a double salt made up of one of a group of organic compound ingredients which consists of the tartrates and citrates and one of the group of alkali metals, which consists of potassium, sodium and ammonium, the proportions for the copper bath being 1 to 2 ounces of copper cyanide, ½ to 1 ounce of alkali metal cyanide and 2 to 4 ounces of caustic soda and 3 to 16 ounces of the double salts of the tartrate or citrate per gallon of water.

1,863,870. COUPLING. BRUCE A. MOORE, Ashland, Ky. Filed June 19, 1929. Serial No. 372,147. 4 Claims. (Cl. 285—86.)



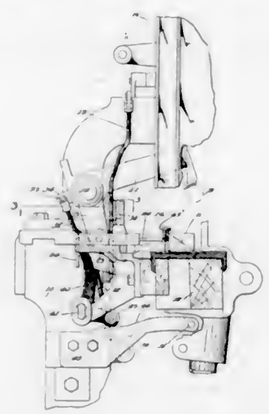
1. In a hose clamp a nipple having a portion adapted to extend into the passageway of a length of hose, and at its opposite end having an annular retaining flange, an internally threaded nut for attachment to some appliance, rotatably connected upon the nipple between said hose inserting portion and said retaining flange and held against displacement from the nipple by the latter, a pair of other nuts interengageably threaded, means associating said last mentioned nuts with the nipple for limited endwise movement therewith, the said interengageable nuts being independently rotatable with respect to the nipple, and wedging means associated with the pair of nuts and about the hose for clamping the latter against the nipple received therein.

1,863,871. DISPENSER. GEORGE H. PACKWOOD, Jr., St. Louis, Mo., assignor to G. H. Packwood Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed Jan. 2, 1931. Serial No. 506,004. 5 Claims. (Cl. 221—108.)



1. A dispenser for finely divided material including a hollow body having a tapering bottom portion with a central opening therein, a vertical plunger movably mounted in said body and extending through the opening in said bottom portion, said plunger being reduced in size for a short distance above and below the part passing through said opening and a dispenser cup member secured to said plunger below said bottom portion.

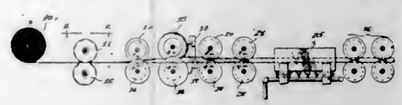
1,863,872. WEFT DETECTING MECHANISM. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 9, 1930. Serial No. 501,081. 3 Claims. (Cl. 139—272.)



1. In a loom having a lay and a shuttle box, in combination, a weft detector mounted on said lay, a withdrawing lever mounted on said lay for said detector, a fixed cam engaging and operating said lever, and a second cam movable with respect to said first cam upon weft carrier transfer and effective to render said withdrawing lever operative at front center.

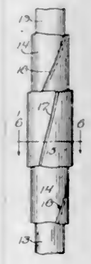
1,863,873. METHOD OF MAKING TUBES. BERT L. QUARNSTROM, Grosse Pointe Park, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed July 15, 1929. Serial No. 378,303. 4 Claims. (Cl. 113—33.)

1. The method of making a longitudinally butt seamed torque resisting tube which comprises, moving a strip of stock longitudinally, cutting the edges of the strip while same is moving to form alternating ridges and furrows, bending the tube transversely into hollow cross sectional form, matching the ridges and furrows of the opposed



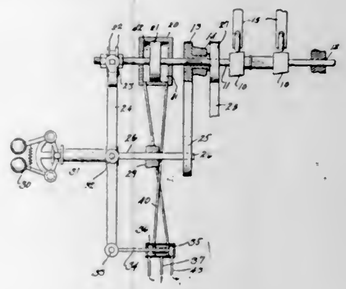
edges, fitting the ridges and furrows together while the strip is moving and then securing the longitudinal seam formed by the interfitting ridges and furrows together by a molten sealing metal.

1,863,874. TUBULAR CONTROL. BERT L. QUARNSTROM, Grosse Pointe Park, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 15, 1930. Serial No. 428,844. 7 Claims. (Cl. 74—39.)



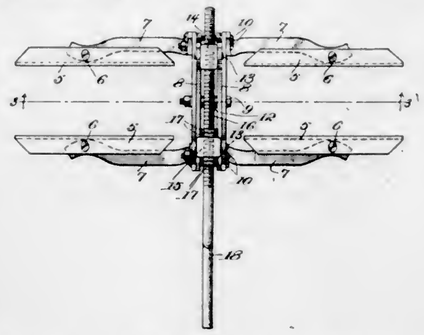
1. A tubular control comprising in combination a plurality of tubes enclosed one within the other and adapted for relative rotative movement, at least two of said tubes each being provided with a curvilinear raised portion which serves as a spacer between the said tubular members, the curvilinear raised portion of one tube having a different pitch from that of the other.

1,863,875. INTERNAL COMBUSTION ENGINE. HECTOR RABEZZANA, Flint, Mich. Filed Aug. 31, 1929. Serial No. 389,631. 1 Claim. (Cl. 123—90.)



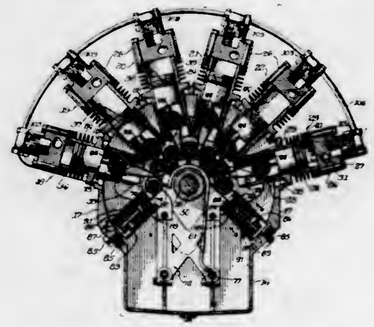
In an internal combustion engine having cam operated valves, variable cams for operating said valves, means for moving said cams to vary the action of said valves, said moving means comprising a speed sensitive device, and a servo-motor controlled thereby to move said cams to a position corresponding to engine speed and maintain them against slight fluctuations in engine speed.

1,863,876. RIM TIRE TOOL. BENNIE F. RENN, Jefferson City, Mo. Filed Apr. 10, 1931. Serial No. 529,247. 4 Claims. (Cl. 157—6.)



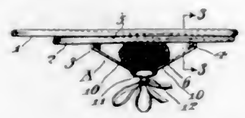
1. A tool for applying a tire to a drop center rim comprising tong members pivotally connected together, internally threaded blocks pivoted upon one end of the tong members, a shank threaded through said blocks and having a crank handle, jam nuts screwed upon the shank and adapted to engage opposite ends of the blocks, angle arms attached to the other ends of the tong members and jaw members pivoted upon the angle arms, there being a pair of jaw members at the end of each tong member and the tong members being between the inner ends of the adjacent jaw members and spaced by the angle arms therebetween.

1,863,877. INTERNAL COMBUSTION ENGINE. ASA LEE RIGHTENOUR, Chicago, Ill. Filed Apr. 2, 1928. Serial No. 266,494. 10 Claims. (Cl. 123—55.)



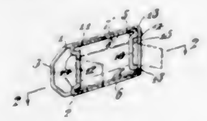
1. In an internal combustion engine, in combination, a casing, a plurality of piston and cylinder units arranged in peripherally spaced relation and grouped in a portion of the periphery of said casing, a shaft, an actuating cam on said shaft, said cam having a plurality of peripherally spaced heads for moving each piston successively in an intake stroke, a compression stroke, a firing stroke, and an exhaust stroke, said heads being of unequal length so that said intake stroke and said exhaust stroke will be substantially longer than said compression stroke and said firing stroke, certain of said heads being similar so as to adapt them to periodically replace each other in operation so as to operate the pistons of said units continuously, retaining means for holding said pistons in operative relation to said cam, means for adjusting said retaining means, means for oiling said retaining means, inlet and discharge valves for said units, operating mechanisms for said valves, and a pair of timing cams rotatable with said actuating cam to actuate said valves in timed relation to the movements of the pistons.

1,863,878. BOUQUET HOLDER. GEORGE J. RILEY, Elkins Park, Pa., assignor to North City Trust Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 3, 1931. Serial No. 519,802. 11 Claims. (Cl. 24—5.)



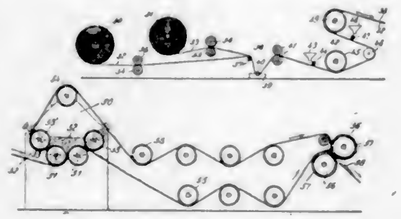
3. A bouquet holder, adapted to engage and hold the stem of a bouquet comprising a member adapted to be engaged with a portion of a garment of wearing apparel, and ball members pivoted to the said member at points in spaced relation from each other, the outer swinging ends of said ball members adapted to be connected together and held against portions of the stem of the said bouquet to hold the same in position upon the said holder.

1,863,879. BOUQUET HOLDER. GEORGE J. RILEY, Elkins Park, Pa. Filed Mar. 14, 1931. Serial No. 522,558. 5 Claims. (Cl. 24—5.)



5. A bouquet holder consisting of a spring wire clip having gripping elements arranged in gripping relation to each other and having at its ends end bars in spaced relation to each other over which a fastening means may be passed, and the said clip having at its opposite ends in adjoining relation to the opposite edges thereof means for retaining the said fastening means in place thereon.

1,863,880. APPARATUS FOR MAKING PREPARED BUILDING PRODUCTS. THOMAS ROBINSON, New York, N. Y., assignor to Lancaster Asphalt, Inc., New York, N. Y., a Corporation of Delaware. Original application filed June 19, 1928, Serial No. 286,502. Divided and this application filed July 16, 1929. Serial No. 378,688. 15 Claims. (Cl. 154—38.)



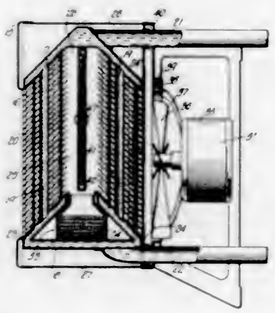
1. Apparatus for the production of products for building and similar purposes, which comprises means for placing a web in longitudinal movement, a coating mechanism for applying sealing material to one face of the web, means for applying a layer of mastic material of selected thickness to the other face of the web, means operatively interposed between the coating mechanism and the layer-applying means for cooling to a preselected temperature the web and the material carried thereby, and means for applying pressure to the opposite faces of the web to force the coating and wipe the mastic into the web to a substantial depth.

1,863,881. SYNTHETIC RESIN. LEO ROSENTHAL, Vohwinkel, near Elberfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 22, 1927, Serial No. 235,117, and in Germany Nov. 30, 1926. 8 Claims. (Cl. 260—7.)

1. In the process for the manufacture of synthetic resins the step which comprises treating crude solvent naphtha to which a phenol is added, with ferric chloride.

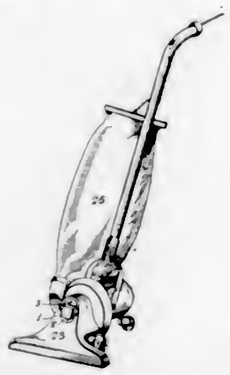
5. The process which comprises treating crude solvent naphtha to which a phenol has been added, with ferric chloride, diluting the reaction mixture with a liquid aromatic hydrocarbon, separating the liquid from the precipitate formed, and treating the liquid with calcium oxide and with fuller's earth.

1,863,882. AUTOMOBILE HEATER. FRANK W. SCHARF, Sioux City, Iowa. Filed May 6, 1929. Serial No. 360,644. 9 Claims. (Cl. 257—137.)



4. In a device of the character described, a housing including walls having respectively air inlet and outlet openings, means for inducing flow of air through said openings to pass through the housing, means for heating air passing through the housing, and means including a series of inclined parallel deflectors located in one of said openings for retarding movement of said air, through the housing.

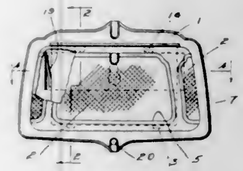
1,863,883. SUCTION CLEANER GERM DESTROYING DEVICE. FRANK M. SCHNEIDER, Mount Healthy, Ohio. Filed July 13, 1928. Serial No. 292,424. 16 Claims. (Cl. 167—3.)



5. A suction sweeper provided with the usual inlet and an auxiliary air inlet, in combination with a germ destroying device adapted to be attached over said auxiliary air inlet and comprising a receptacle having a series

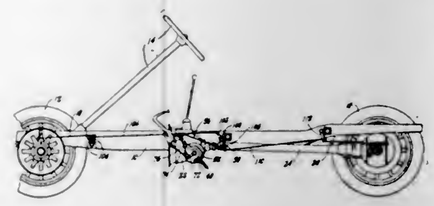
of inlet passages in its top, a partition within said receptacle having a series of passages therethrough, a screen in spaced apart relation from said partition and the bottom of said receptacle, absorbing means located beneath said screen adapted to absorb and hold a germicide chemical and a series of outlet passages in said receptacle in communication with the main air inlet of said sweeper whereby the air, drawn into said sweeper, will pass through said inlet passages of the receptacle, thereby mixing it with said chemicals within said receptacle and drawing it outwardly therefrom into and through said sweeper during the operation of sweeping.

1,863,884. SMOKING CASE. WILLIAM SCHNELL and JOHN B. FLYNN, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 19, 1929. Serial No. 386,922. 2 Claims. (Cl. 206—19.5.)



1. A smoking case comprising in combination, an outer frame having an opening therein, a cloth, a cardboard stiffening member glued to the back of said cloth for maintaining the same smooth, an independent insert member conforming to the inside contour of the said outer frame arranged to press against the card board stiffening member to hold the said card board stiffening member and cloth in closed relation with the said opening in the outer frame to effect a panel.

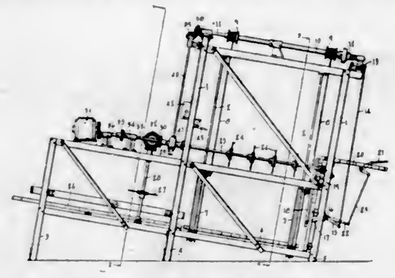
1,863,885. VEHICLE HAVING BRAKES. ERNEST W. SEAHOLM, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 19, 1923. Serial No. 626,066. 8 Claims. (Cl. 188—140.)



1. A vehicle having, in combination, a transmission, a brake drum driven by the transmission, expansible brake shoes within the drum, brakes, driver-controlled means for expanding said shoes to be driven from the transmission through the drum, and alternately operative devices connected to the shoes and arranged to operate the brakes whether the drum is turned by the transmission in a clockwise, or counterclockwise direction.

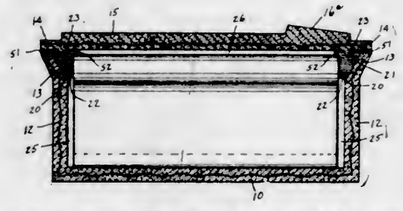
1,863,886. ICE SCORING MACHINE. JOHN R. SNOW, Charlotte, Mich. Filed Dec. 26, 1929. Serial No. 416,535 13 Claims. (Cl. 125—13.)

13. In an ice scoring machine, the combination of an elevator traveling in a path inclined to the vertical, driving means for said elevator including a clutch, a clutch actuating member disposed to be actuated by the work as it is delivered to the elevator, scoring saws disposed to act



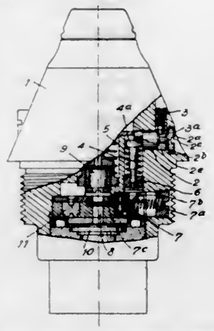
on the work as it is carried by the elevator, an inclined gravity feed chute delivering to said elevator, and scoring saws acting on the work passing along said feed chute.

1,863,887. BURIAL VAULT. FLOYD L. TEMPLE, Terre Haute, Ind. Filed Jan. 18, 1932. Serial No. 587,207. 6 Claims. (Cl. 72—7.)



1. A vault structure including a top having a depending peripheral tongue offset inward an appreciable distance from the periphery, a vault body having a peripheral shoulder adjacent the open mouth thereof, said vault being arranged to receive and enclose a casket, form means peripherally enveloping the casket and operatively associated at its outer edge with the shoulder, and cement material supported and retained by the form means and extended laterally between the cover and upper end of the vault body and inwardly of the tongue for forming overhead and peripheral air chambers between the cover and casket and vault body and casket respectively.

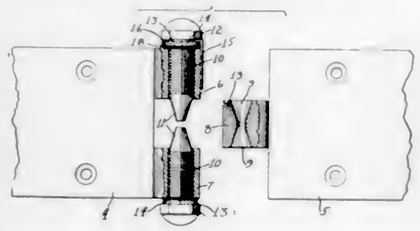
1,863,888. FUSE FOR ARTILLERY PROJECTILES. ANDRÉ VARAUD, Geneva, Switzerland. Filed Jan. 29, 1930, Serial No. 424,167, and in Switzerland Jan. 30, 1929. 4 Claims. (Cl. 102—36.)



4. In a fuse, controlling mechanism comprising a centrifugal control bolt, an axially disposed plunger bolt adapted to be set to prevent movement of the said bolt, and

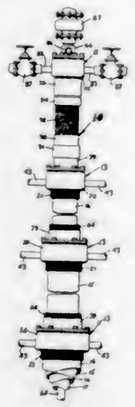
an exteriorly operable setting spindle having an eccentric portion capable of engaging said plunger, a helicoidal spring adapted to bear between the head of said plunger and the top of a guide sleeve for the stem of the plunger.

1,863,889. HINGE. NATHANIEL C. WELLS, Toledo, Ohio, assignor of one-half to Henry Heemsoth, Toledo, Ohio. Filed Nov. 10, 1930. Serial No. 494,530. 2 Claims. (Cl. 16—132.)



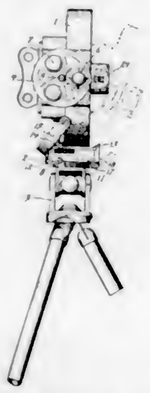
1. In a hinge, the combination of two leaves, one formed with a central knuckle, the other formed with two spaced aligned knuckles adapted to receive said central knuckle between them, said central knuckle having inwardly tapered conical bearing surfaces and a central bore connecting them, headed pins having threaded connections with the spaced aligned knuckles and having integral tapered lateral surfaces engageable with said bearing surfaces, means adjustably limiting the inward setting of said pins, and a protective cap covering the uppermost knuckle and having a slot in its side wall for receiving the leaf of the hinge, the top of the cap being beneath and immediately adjacent the head of the upper pin and formed with an opening to receive the shank of the pin.

1,863,890. COMBINATION CASING HEAD AND CASING SUPPORT. WILSON B. WIGLE, Compton, Calif. Filed June 19, 1930. Serial No. 462,273. 9 Claims. (Cl. 166—14.)



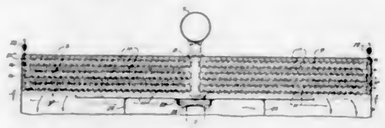
1. In combination with a well casing, a casing support including a body having an aperture, said casing extending through said aperture, casing supporting slips positioned in said aperture, said slips including toothed portions engaging said casing, said teeth being arranged to bite into said casing, there being a downwardly converging tapered recess adjacent the top of said slips, secondary slips positioned in said tapered recess and engaging the surface thereof, teeth on said secondary slips engaging said casing, and means to retain said secondary slips in a fixed position.

1,863,891. PHOTOGRAPHIC CAMERA SUPPORT. JOHN G. ZUBER, Chicago, Ill., assignor to Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 13, 1930. Serial No. 495,443. 12 Claims. (Cl. 95—44.)



1. In a photographic camera support the combination with a base member, of a camera carrying member pivotally mounted thereon, and means for predeterminately positioning said carrying member with reference to said base member in two positions of the pivotal movement of said carrying member.

1,863,892. COOLING AND ICE TANK COILS. ERNST S. H. BAARS, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 12, 1929. Serial No. 370,278. 8 Claims. (Cl. 62—158.)



1. In cooling and ice tank coils, the combination of a tank, said tank being filled for a desired height with a refrigerating liquid, a main header communicating with a source of liquid refrigerant supply, and extending into the tank for a desired distance, a series of supplemental headers extending from and in communication with the main header, and a series of refrigerant tubes on opposite sides of each supplemental header, each tube being bent over at its upper end and extending diagonally over the top of its associated supplemental header and in communication therewith, the curved upper ends of the tubes on opposite sides of the supplemental header being disposed in reverse diagonal directions, and said tubes extending downwardly and upwardly and communicating at the extremities of their upwardly extending portions with their associated supplemental headers.

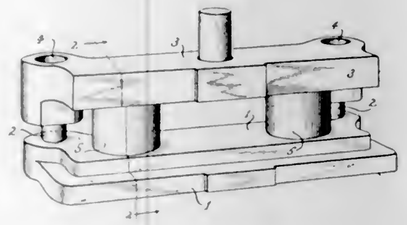
1,863,893. ALL-METAL GASKET. CLAUDE B. BAILEY, Wyandotte, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed Mar. 28, 1927. Serial No. 178,912. 1 Claim. (Cl. 288—1.)



An all-metal gasket having a body of a single layer of sheet metal, said body having its marginal portions about its inner and outer edges beat out of the plane of

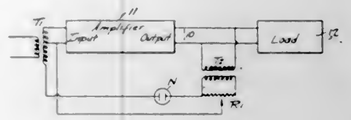
the body layer to one side thereof and folded to provide the pressure receiving portions of the gasket of superimposed layers, said pressure receiving portions being normally inclined upwardly and inwardly from said body layer, the latter between said pressure receiving portions being substantially flat with all portions thereof out of the plane of said pressure receiving portions to provide a non-stretchable seat for the gasket.

1,863,894. METHOD OF PACKING DIE SETS. EMIL A. BAUMBACH, Chicago, Ill. Filed June 1, 1931. Serial No. 541,341. 3 Claims. (Cl. 206—46.)



1. The method of packing a die set for shipment comprising placing the tool holder in position with respect to the die shoe with the leader pins of the die shoe engaging the openings in the tool holder and placing between the proximal surfaces of the die shoe and the tool holder a tubular spacer member of compressible material having sufficient rigidity to normally position the tool holder with respect to the die shoe with the axis of the tubular member exending transversely with respect to said proximal surfaces.

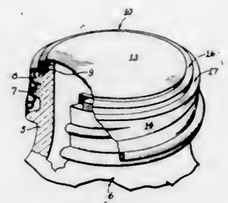
1,863,895. AMPLITUDE LIMITING DEVICE FOR AMPLIFYING SYSTEMS. NATHANIEL BISHOP, Bridgeport, Conn. Filed Feb. 7, 1930. Serial No. 426,578. 10 Claims. (Cl. 179—171.)



1. In an amplifying system the combination with an amplifier of a transmission network having its input connected across the output of said amplifier and having an impedance sufficiently great to prevent current flow through said network until a voltage is impressed thereon greater than the voltage of the desired output from the amplifier and means connecting the output from said network across the input to the amplifier to impress the output thereon 180° out of phase with the input to the amplifier.

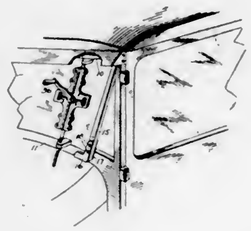
1,863,896. JAR CLOSURE. LESLIE R. N. CARVALHO, Toledo, Ohio, assignor to The Closure Service Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 23, 1929. Serial No. 415,958. 3 Claims. (Cl. 215—43.)

1. A closure comprising a circular top portion, an attaching flange depending from the margin of the top portion, a pair of adjoining inner and outer steps formed about the margin of the top portion parallel with and in planes below the latter and providing outer vertical and top sealing surfaces, screw threads formed on said flange and for



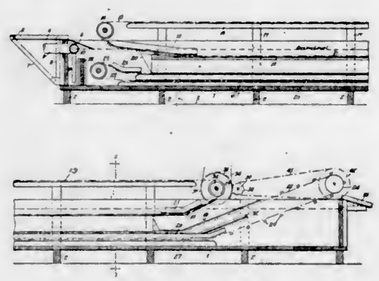
the greater part disposed directly below the outer step, and a sealing gasket affixed to the inner step and vertical sealing surface.

1,863,897. METHOD OF RENEWING WINDSHIELD GLASSES AND AN IMPLEMENT USED IN THE PRACTICE OF THE METHOD. RALPH CLOPPERT, Dayton, Ohio. Filed Apr. 7, 1930. Serial No. 442,245. 7 Claims. (Cl. 29—84.)



1. The method of opening a wind shield frame to put in a glass, which comprises applying pressure simultaneously in opposite directions to the lips of the grooves of opposite frame members.

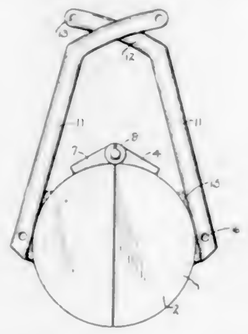
1,863,898. BRINING APPARATUS. ALEXANDER H. COOKE, New York, N. Y., assignor to The Atlantic Coast Fisheries Company, New York, N. Y., a Corporation of Maine. Filed Oct. 31, 1929. Serial No. 403,683. 6 Claims. (Cl. 99—2.)



1. A brining apparatus comprising a tank containing a brine wherein the fish to be treated are freely suspended and not restricted in their longitudinal movement there-

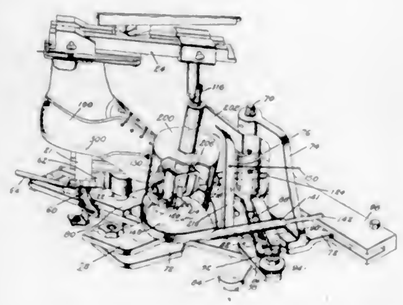
through, means to maintain said fish beneath the surface of said brine and means to supply and withdraw the brine whereby the flow thereof in the tank conveys the fish therethrough.

1,863,899. HOISTING BUCKET. JAMES D. CUMMINS and LEE J. HEWITT, Houston, Tex. Filed July 11, 1930. Serial No. 467,206. 2 Claims. (Cl. 37—185.)



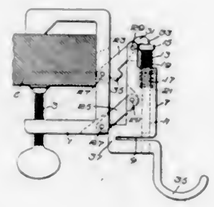
1. A grab bucket including two opposed bucket members hinged together at one side, an arm fixed to each of said members and extending beyond the hinged sides thereof, said arms being independent of each other, each of said arms being of such length that the upper end overlies said members when the bucket is in open position, and means connected to the upper ends to pull on said arms to close said member, whereby the length of the effective lever arm to close said members is greater than the distance from said hinge to the open edge of said members.

1,863,900. FOXING CEMENTING MACHINE. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,345. 46 Claims. (Cl. 12—80.)



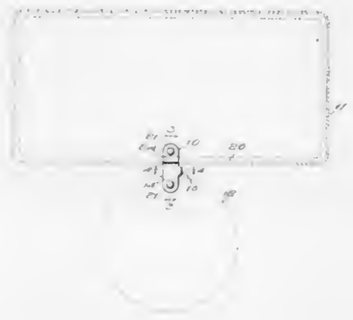
1. In a machine for applying cement to the foxing area of a shoe, means for supporting a shoe with its bottom facing downwardly, a movable annular shield having an upright wall and supported with one edge exposed and adapted to be brought into contact with the shoe on said supporting means at the upper edge of the foxing area, and a cement-applying device arranged to wipe down across the upright wall and the exposed edge of the shield at a considerable angle to the edge thereof and the foxing area of the shoe whereby as relative movement is produced between the cement-applying device and the shoe, all parts of the foxing area will be coated.

1,863,901. PUNCH. JOHN B. GORMLEY, Boston, Mass. Filed Jan. 8, 1930. Serial No. 419,355. 5 Claims. (Cl. 164—119.)



1. A punch having, in combination, a support, a casing containing a punching tool, a lever pivoted at one end portion to said support and at an intermediate portion to said casing, the other end portion of said lever contacting the end of said punching tool for actuating the latter when said casing is moved relative to said support.

1,863,902. CLIP. HENRY S. HANSON, Chicago, Ill., assignor to The C. H. Hanson Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 7, 1930. Serial No. 473,587. 4 Claims. (Cl. 40—125.)

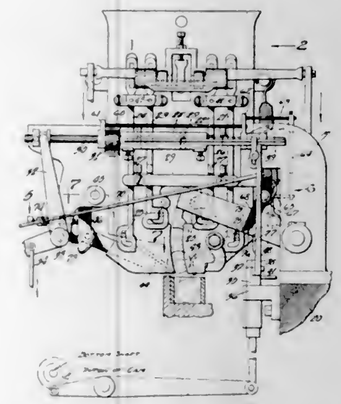


1. A clip comprised of a pair of members and means integral with said members providing a connection between said members, said means providing means for maintaining said members in spaced relation to each other, one of said members having located between an end thereof and said means extending transversely thereof, the other member extending across the grooved portion, a grooved portion and both of said members having registering apertures provided adjacent the opposite ends thereof, providing means through which a fastener may be passed.

1,863,903. METHOD OF BRANDING EDIBLE ANIMAL CARCASSES. ROY W. JOHNS, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1930. Serial No. 502,869. 1 Claim. (Cl. 101—32.)

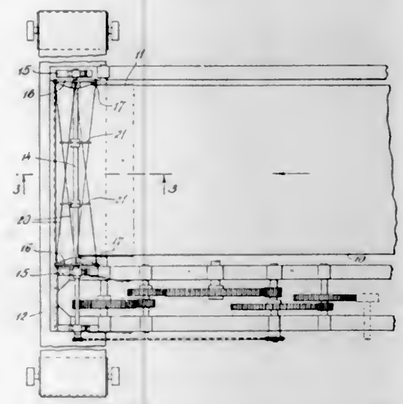
The method of branding adipose fat of edible animal carcasses which consists of applying the mark thereto by a reagent, such as nitric or sulphuric acid, which changes the color of the tissue or walls of the fat cells only, said mark penetrating the surface of a depth to cause the reagent to act upon the walls of the fat cells of the tissue and change the color thereof.

1,863,904. BOBBIN RELEASE FOR WEFT REPLENISHING LOOMS. WILLIAM H. KING, Clinton, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 26, 1930. Serial No. 455,600. 15 Claims. (Cl. 139—232.)



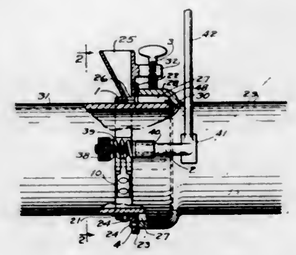
1. In a weft replenishing loom having a lay and a reserve supply of bobbins, means to hold a bobbin derived from the reserve supply in transfer position, a weft detector controlled element, a device to store indication of weft exhaustion, and mechanism to coact with the element on weft exhaustion indicating beats only and acting while the lay is moving rearwardly and independently of the lay to release a bobbin remaining on the means after a prevented transfer, and during the time that another indication is stored by the device.

1,863,905. DISTRIBUTING AND FEEDING APPARATUS. CHARLES R. KUZELL, Clarkdale, Ariz., assignor to United Verde Copper Company, Clarkdale, Ariz., a Corporation of Delaware. Filed Oct. 22, 1929. Serial No. 401,482. 6 Claims. (Cl. 198—167.)



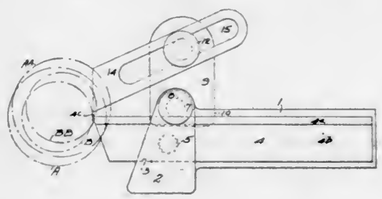
1. The combination with two conveyors so arranged that material carried by one is discharged upon the other of a rotary distributor having a plurality of longitudinally extending cutters adjacent its periphery and one or more radial cutters between its ends.

1,863,906. PIPE JOINT FILLER. ANDREW LARSON, Seattle, Wash. Filed Oct. 13, 1930. Serial No. 488,355. 5 Claims. (Cl. 22—118.)



1. In a filling device for joints of pipe of the type where a straight pipe end extends into the bell of an adjoining section of pipe, an annular member extending around said straight end and abutting the end of the bell, said annular member having a opening therethrough, a hopper corresponding with said opening, means on said annular member for centering the two sections of pipe in relation with each other, and means also on said annular member extending over the shoulder of the bell for holding said member, against the end of said bell.

1,863,907. TOOL HOLDER AND BLADE PROTECTOR. JOHN M. LUERS, Detroit, Mich. Filed Nov. 3, 1930. Serial No. 492,968. 5 Claims. (Cl. 29—96.)



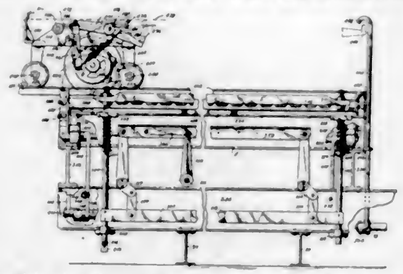
1. In combination, a toolholder, a blade held thereby and projecting therefrom, a protector plate, and means on said toolholder for supporting said protector plate so that it is in vertical alignment with said blade and its forward extremity lies above the cutting edge of the blade, said protector plate being of such width that its sides remain between and spaced from both sides of a cut made by said blade.

1,863,908. AUTOMATIC GLUING AND ASSEMBLING MACHINE. SERN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa, a Corporation of Iowa. Filed Feb. 11, 1931. Serial No. 515,026. 19 Claims. (Cl. 144—7.)

1. A machine of the character described including a movable carrer for assembling stock, an assembly table, to receive said stock after assembly, means for projecting the assembled stock across said table and a rip saw mechanism mounted on said assembly table, said rip saw mechanism comprising a carriage engageable and shiftable by the assembled stock as it is being projected across said assembly table and means operatively connected with said movable carrier for moving said rip saw along its ripping course after said carriage is shifted by said assembled stock.

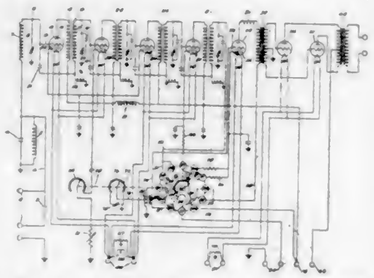
4. In a machine of the class described, a table to receive stock, means to advance said stock across said table and invert the stock thereon, a carrier to receive

stock from said table and advance it at right angles to its travel on said table and means for moving said stock from said carrier and again at right angles to its travel



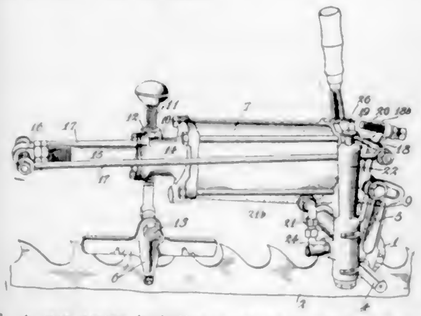
with the carrier but in the opposite direction to its first advance and for assembling it with other stock previously so advanced.

1,863,909. RADIO APPARATUS. RUSSELL L. MAURER, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 25, 1930. Serial No. 423,468. 1 Claim. (Cl. 179—100.11.)



A radio and electric phonograph combination comprising individual volume controls for the radio and phonograph portions of the combination, a changeover switch for selectively rendering one of said portions operative, a shaft for controlling both of said volume controls, said shaft adapted to project through a panel and being provided with a knob at the free end thereof for operation, a lever mounted for oscillation around said shaft and equally accessible with the volume control knob, and means connecting said lever and said changeover switch.

1,863,910. SAW SWAGE. CARL MOREY, Big Rapids, Mich., assignor to Hanchett Manufacturing Co., Big Rapids, Mich. Filed June 28, 1930. Serial No. 464,658. 8 Claims. (Cl. 76—54.)



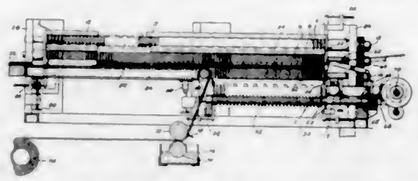
1. A saw swage including a swage block formed with a saw-receiving slot and having a swaging member, a power cylinder having an end rigidly secured to said swage block, a piston rod operative through the front end of the cylinder, at least one connecting rod secured at its front end to the piston rod and extending past the cylinder and operatively connected at its rear end with said swaging member.

1,863,911. HIGH PRESSURE OILER. EMMET H. MORROW, Chicago, Ill., assignor of one-half to John C. Morrow, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,291. 15 Claims. (Cl. 221—51.)



1. An oiler including a spout, said spout having a cylindrical portion and a tapered portion, a valved passage in said spout at the junction of said portions, a piston in said cylindrical portion inwardly of said valved passage, said piston having an oil admission port, a valve normally closing said port, and a plunger for moving said piston toward said valved passage to eject oil through said passage.

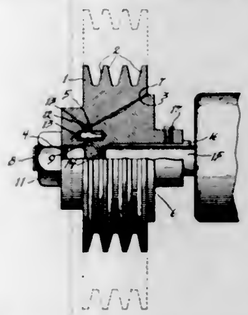
1,863,912. CARPET AND RUG MAKING MACHINE. JAMES BAXTER ROBERTSON, Paterson, and GEORGE ROBERTSON, Ridgewood, N. J., assignors to The Paratex Corporation, a Corporation of New Jersey. Filed Feb. 18, 1929. Serial No. 340,789. 18 Claims. (Cl. 154—1.)



1. A machine for making pile fabric comprising a series of members, means for moving said members into engagement with pile-forming material, a complementary series of members, means for moving the members of said complementary series into engagement with said pile-forming material and into position adjacent to the members of the other series to fold the material into a series of loops, and means for securing the loops of material so formed to a web of backing material.

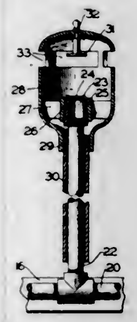
1,863,913. INTERCHANGEABLE STRUCTURE. JOHN E. SCHMIDT, Chicago, Ill., assignor to Kling Bros. Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed Aug. 6, 1930. Serial No. 473,478. 2 Claims. (Cl. 287—53.)

1. In an interchangeable structure the combination with a bored element and a spindle element adapted to be engaged by the bore of said bored element, said bored element being provided in its bore with a relatively steep axial taper and a reduced cylindrical axial portion at the small end of said taper and a radial shoulder therebetween, said spindle element being provided with a corresponding relatively steep axial taper engageable with said taper of the bored element and provided with a reduced cylindrical axial end portion adjoining the small end of said taper thereof and engageable with said cylindrical



portion of the bore of said bored element and provided with a radial shoulder between said end portion and said taper thereof and provided further with an axial bore in its other end for the mounting thereof on the end of a shaft, a nut screwthreaded upon the said end portion of the spindle element for clamping said elements axially to engage said tapers, and an axially extending stud engaged in bores in said elements at said shoulders thereof for angularly fixing said elements and adapted to permit axial engagement and disengagement of said elements.

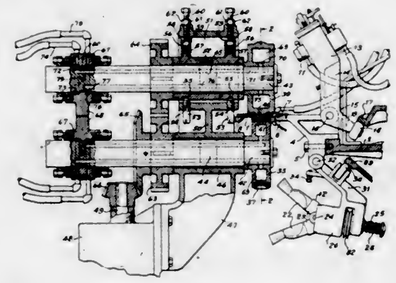
1,863,914. VEGETABLE SPRAYING DEVICE. JERRY TYLER, Muskegon Heights, Mich. Filed Feb. 16, 1931. Serial No. 515,938. 8 Claims. (Cl. 299—58.)



8. In an appliance for humidifying air, a pipe to receive water under pressure, means connected to said pipe, said means having a small orifice therein through which the water issues in a needle-like jet, a member having an impact surface supported in the path of said jet, and shielding means of predetermined dimensions partly enclosing said impact surface and said jet, said shielding means including a drainage pipe surrounding the pressure pipe.

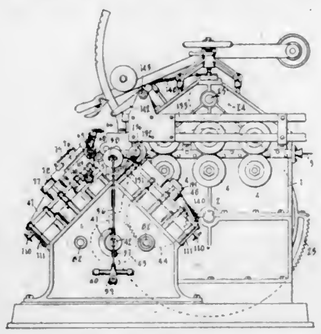
1,863,915. MANUFACTURE OF BLOWN GLASSWARE. THOMAS WAUGH, Jr., Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,587. 8 Claims. (Cl. 49—9.)

1. Apparatus for shaping hollow glassware, comprising a supporting means movable in a closed path at least a portion of which is substantially horizontal, said supporting means having a substantially vertically opening orifice therein and being adapted to receive a strip of hot plastic glass supplied thereto when said supporting means is in the horizontal portion of its path, said strip being received in a position such that a portion thereof overlies said orifice, whereby said portion may sag through said orifice by gravity, a blank mold adapted to support glass descending through said orifice, means for moving said blank mold to and from its glass supporting position with respect to said orifice, a pressing plunger movable



into said orifice from above, means for moving said plunger to cause it to press the glass in said orifice and said blank mold without severing the glass in said orifice from the parent body of said strip and thereafter to cause said plunger to move away from its positions in contact with the glass, a blow mold, means for thereafter moving said blow mold to enclose the shaped glass depending through said orifice, and a blowhead independent of said pressing plunger to expand such depending glass to final form within said blow mold while the body of glass within the blow mold remains integral with the parent body of said strip.

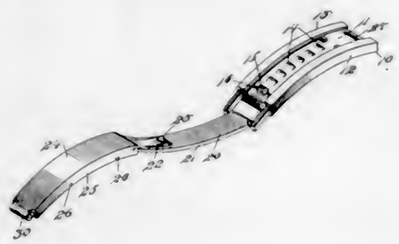
1,863,916. WIRE SPRING MAKING MACHINE. CORBAN H. ZILER, Detroit, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed Mar. 16, 1931. Serial No. 522,973. 41 Claims. (Cl. 140—78.)



1. In a wire spring making machine, the combination of an intermittently acting coiling means, a supporting spindle operatively associated with said coiling means, said supporting spindle having a reciprocatingly mounted outer section provided with a conical spring engaging portion at its outer end, a pivotally mounted holddown clamp provided with a tapered tongue adapted to extend between a pair of coils of the spring, a cutter unit mounted for vertical reciprocation in opposed relation to said holddown clamp, a pair of knotter units disposed in opposed inclined relation to act on the adjacent ends of the severed coils of a spring and comprising reciprocatingly

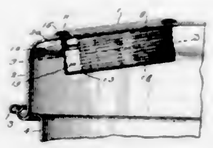
mounted knotters and reciprocatingly mounted holding jaws operatively associated with the knotters, said cutter unit being provided with means for positioning the severed ends to be engaged by the said knotter holding jaws, a transfer member positioned to engage a completed spring when released by said supporting spindle, and synchronized operating means for said coiler, hold-down clamp, cutter unit, knotter units, supporting spindle and transfer means.

1,863,917. BRACELET BUCKLE. SIDNEY O. BIGNEY and CARL ARVIDSON, Attleboro, Mass., assignors to S. O. Bigney & Company, a Corporation of Massachusetts. Filed Feb. 27, 1932. Serial No. 595,493. 9 Claims. (Cl. 24—71.)



1. In a foldable buckle, a plurality of sections hinged together to fold one over the other, one of said sections comprising a pair of slidable members, another section hinged to one of said members, and cooperating means on said sections to hold said sections in different adjusted positions, said means including a latch provided with a roller on one section to move from one position of adjustment to another.

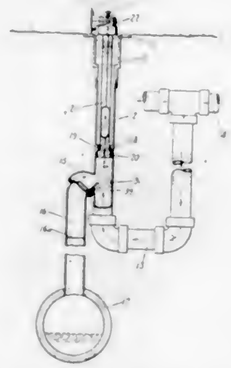
1,863,918. COOKING UTENSIL THERMOMETER. WILLIAM S. BREMER, Chicago, Ill. Filed Oct. 15, 1931. Serial No. 568,895. 4 Claims. (Cl. 73—118.)



4. A thermometer for application to cooking utensils which thermometer comprises thermo-responsive and indicating elements enclosed in tight case, said case having a threaded side wall and an outwardly extending flange at its open end adapted to rest on the outer surface of the utensil to which the thermometer is to be applied, and a cap threaded on said case, said cap having an outwardly extending flange adapted to be forced against the inner surface of the utensil.

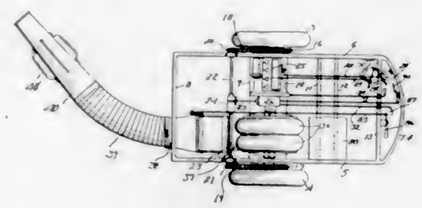
1,863,919. SPRAYING SYSTEM. JOHN A. BROOKS, Detroit, Mich. Filed June 4, 1931. Serial No. 541,984. 10 Claims. (Cl. 299—61.)

1. In a sprinkling system, a casing having communication at its inner end with a source of pressure fluid supply, a fluid discharge nozzle having limited longitudinal movements within said casing and adapted to be moved outward from normal position within the casing upon admission of pressure fluid, a drain duct leading from an inner portion of said casing, a valve controlling said



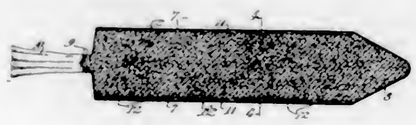
drain duct, and means projecting into the path of movement of said nozzle and engageable thereby for opening said valve upon return of said nozzle to normal position.

1,863,920. AIR BLAST FIRE EXTINGUISHER. CHARLES COSTA, Lodi, Calif. Filed Aug. 13, 1928. Serial No. 299,140. 1 Claim. (Cl. 169—2.)



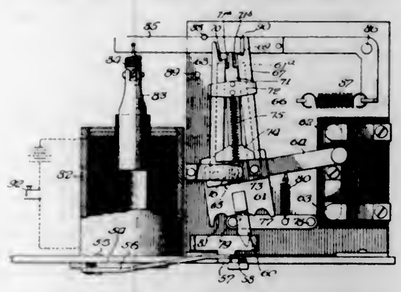
A fire extinguisher of the class described, comprising a light two wheel truck, a blast fan having its outlet tube adjacent the ground, a flexible tube connected to said outlet tube, a nozzle on said flexible tube, an engine for driving the fan, and means to control the operation of the fan blast from the front of the truck.

1,863,921. EXPLOSIVE CARTRIDGE. DON B. MCCLOUD, Duquoin, Ill. Filed Mar. 21, 1931. Serial No. 524,235. 6 Claims. (Cl. 102—6.)



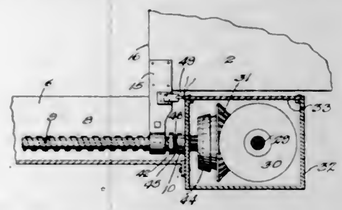
4. A lining material for an explosive cartridge of the character described, comprising a sheet of strawboard, of substantially twenty-five-thousandths caliper, and provided with a plurality of spaced perforations substantially in the proportion of a two inch space between perforations, each of approximately three-eighths inch diameter.

1,863,922. MOTOR REVERSING SWITCH FOR DOOR OPENERS. HERBERT W. CRANE, Oak Park, Ill. Filed June 8, 1928, Serial No. 283,864. Renewed Nov. 4, 1931. 8 Claims. (Cl. 200—104.)



1. A switch for reversing the motor of a door opener, consisting of two pairs of contacts, a contact arm adapted to oscillate between said pairs of contacts, a rocker to which said arm is fixed, three actuating fingers operatively connected to said rocker and arranged at right angles to said arm, two of said fingers being pivoted to the arm, one on each side of its center of oscillation, the third finger between said fingers, a projection on said third finger adapted to contact said arm alternately on opposite sides of its center of oscillation, and an actuating arm having a projection adapted to successively engage each of said three fingers.

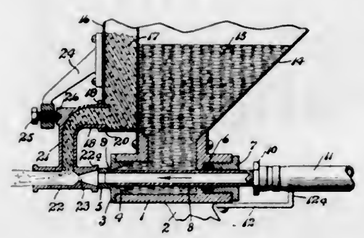
1,863,923. OPERATING MEANS FOR CLOSURES. THOMAS L. DIGGINS, Milton, Oreg., assignor of one-third to Ernest Harris, Seattle, Wash., and two-thirds to R. Gunzel, Freewater, Oreg. Filed July 23, 1928. Serial No. 294,806. 4 Claims. (Cl. 268—40.)



1. An operating means for closures, in combination with a power source and laterally sliding closures, a worm shaft disposed in the threshold of and positioned parallel to the plane of movement of said closures, sleeves threadedly and yieldingly mounted on said worm shaft and removably attached to said closures, pairs of rollers mounted in the plane and on either side of said worm shaft and adapted for frictional engagement by the power source, and an expansible operating means operably connecting said worm shaft and said rollers and provided with a braking mechanism positioned for cooperation with the sliding closure.

1,863,924. SPRAYING DEVICE. HARRY E. DUNN, Holland, Mich., assignor to W. E. Dunn Manufacturing Company, Holland, Mich., a Corporation of Michigan. Filed Apr. 28, 1930. Serial No. 447,839. 4 Claims. (Cl. 91—45.)

1. In a device of the class described, a barrel, an outlet nozzle at one end of the barrel, a hopper carried by the barrel in which liquid material may be contained to pass to said nozzle, a tube slidably mounted lengthwise of the barrel and movable into one position to close the outlet nozzle and into another position to open it, means for conducting compressed air to the tube to pass therethrough, a receptacle for holding dash material mounted at the front of said hopper, and an outlet nozzle member



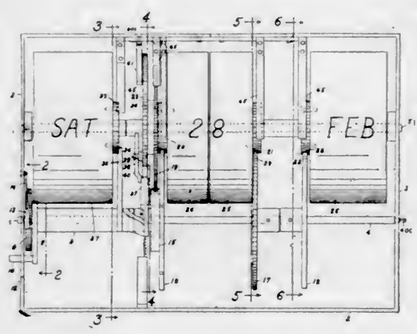
connected with the lower end of said receptacle and rotatable to an upper or a lower position, in the latter of which positions it is in alinement with said outlet nozzle to the barrel.

1,863,925. FOUNTAIN PEN. HOWARD L. FISCHER and CHARLES A. WARD, St. Paul, Minn., assignors to Brown & Bigelow, St. Paul, Minn., a Corporation of Minnesota. Filed Feb. 1, 1926. Serial No. 85,244. 10 Claims. (Cl. 120—46.)



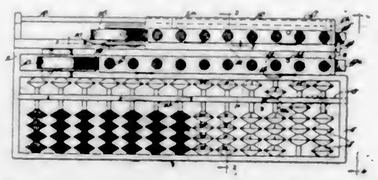
1. A fountain pen, including a barrel, a pivot bar carried by said barrel, a lever adapted to be supported on said pivot bar and means formed in said lever whereby the same is released from said bar when it is turned beyond operating position.

1,863,926. PERPETUAL CALENDAR. WILLIAM O. KLEINE, Cincinnati, Ohio. Filed Feb. 20, 1931. Serial No. 517,189. 11 Claims. (Cl. 40—112.)



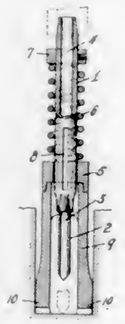
1. In combination in a mechanical calendar indicator a plurality of movable indicia-bearing elements, indicia arranged thereon in a predetermined order, a single actuator movable in two directions not oftener than once daily for causing different degrees of movement of respective indicia-bearing elements upon movement of the actuator in each of its two directions of movement, and motion transmitting means cooperating with the actuator and the indicia-bearing elements.

1,863,927. CALCULATING DEVICE. KANE Y. KONNO, Chicago, Ill. Filed June 12, 1928. Serial No. 284,749. 10 Claims. (Cl. 35—2.)



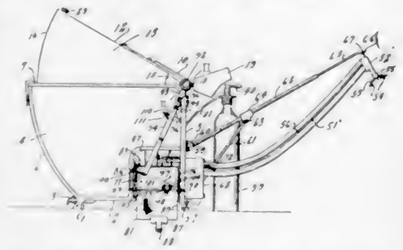
1. The combination with an abacus formed with laterally-spaced rows of counters; of an entry ribbon carried by the abacus, said ribbon sheet extending in a lateral direction, and means spacing the entry ribbon off into divisions registering with the rows.

1,863,928. COMBINATION PERCUSSION AND ROTARY DRILL. JAMES A. MACDONELL, Lima, Ohio. Filed May 9, 1931. Serial No. 536,175. 3 Claims. (Cl. 225—61.)



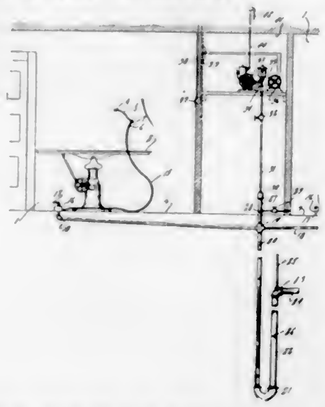
3. The combination with a drill stem, of a percussion type bit rigidly secured thereto, a rotary type bit splined to said stem, and resilient means for maintaining said rotary type bit projected while said stem is reciprocated.

1,863,929. BASAL METABOLISM FACTOR. ELMER I. MCKESSON, Toledo, Ohio. Filed May 21, 1926. Serial No. 110,785. 5 Claims. (Cl. 128—191.)



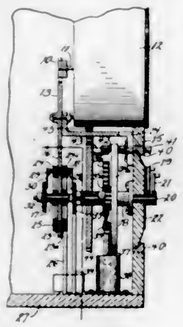
1. An oxygen consumption measuring apparatus comprising a carbon dioxide eliminator, a one-way valve therefrom, a one-way valve thereto, a connection away from the eliminator and between said valves for receiving pulsations of inhalation for withdrawing oxygen from the apparatus and pulsations of exhalation for delivering carbon dioxide to the apparatus to be thereby effective for alternately opening said valves in the sequence of said pulsations, a variable capacity reservoir between the eliminator and valve therefrom to have its contents depleted by said connection operation, said reservoir embodying a rockable member and a mounting bearing therefor, and time-volume measuring means for directly disclosing the rate of oxygen consumption from the degree of depletion in capacity of said reservoir, including an arm fixed with the rockable member of the reservoir and time controlled movable means providing a way over which said arm is operable directly with the rockings of the member for defining the rate of said depletion.

1,863,930. SURGICAL EQUIPMENT. ELMER I. MCKESSON, Toledo, Ohio. Filed Dec. 21, 1926. Serial No. 156,211. 4 Claims. (Cl. 128—276.)



1. Hospital operating room waste equipment comprising an intake nozzle having a directing handle, a flexible line from the nozzle, a suction line from the flexible line, a vent from the suction line for gas removal independently of liquid, a water seal trap liquid waste connection from the suction line, means effecting suction in the suction line for discharging gas through said vent, and a liquid accumulation operated flow-off discharge way from the trap remote from and independent of the suction line normally fluid effective for at least intermittent removal of accumulation in the trap from the suction line independently of disturbing suction line effectiveness during such discharge operation, said trap between the flow-off discharge way and the suction line being of sub-atmospheric pressure holding effectiveness.

1,863,931. SELECTIVE CONTROL MECHANISM FOR RADIO SETS. HENRY R. MILLER, Bernville, Pa., assignor of one-half to Paul A. Holzman, Tulpehocken, Pa. Filed Apr. 26, 1930. Serial No. 447,733. 12 Claims. (Cl. 250—20.)

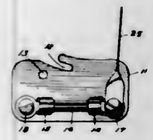


5. In combination, time mechanism, control mechanism and a switch operatively associated with said control mechanism and with said time mechanism and consisting

of a pair of metallic rings insulated from each other and having a drive connection with said time mechanism and a switch element having a slidable electrical connection with said rings and an operative connection with said control mechanism; and dial setting mechanism operatively set into operation upon energizing of the said metallic rings.

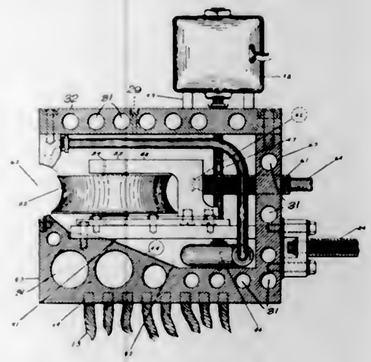
12. In combination with the dial structure and power circuit of a radio set, time mechanism and dial setting mechanism interrelated for periodically closing said power circuit and automatically adjusting said dial structure, said time mechanism consisting of clock mechanism, a switch device operated by the clock mechanism, a manually operated device for controlling the closing of the switch device according to the position to which it is moved by said clock mechanism, said dial setting mechanism consisting of a master gear secured to the dial structure, a second gear meshing therewith, a rack bar for giving movements to said second gear, a manually adjustable device associated with said second gear to control the extent of movement thereof and a solenoid for operating said rack bar.

1,863,932. FUSE BLOCK FOR AUTOMOBILES. GEORGE SAMUEL MOGILNER, Los Angeles, Calif. Filed Apr. 14, 1930. Serial No. 444,081. 3 Claims. (Cl. 200—52.)



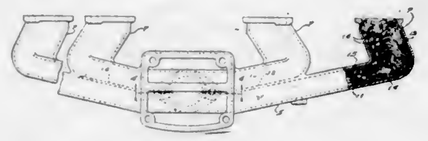
1. For use with a generator having a detachable screw mounted thereon the combination of; a demountable relay switch having an extending leg adapted to be secured to said generator by said screw; a fuse block having a slot adapted to engage said leg and a hole in said block arranged to utilize said screw to secure said block to said generator when said leg and said slot are engaged.

1,863,933. ELECTRIC WELDING APPARATUS. DONALD F. PANCOAST, Cleveland, Ohio. Filed Dec. 13, 1927. Serial No. 239,665. 10 Claims. (Cl. 219—6.)



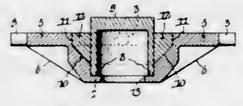
1. An apparatus for tube welding by means of an electric current, having in combination adjustable pressure rolls oppositely disposed and adapted to receive between them the tube stock to be welded and having substantially continuous contact with the tube stock over seventy per cent. of its circumferential extent, and fluid contact means for conducting current to opposite sides of the seam line of the tube stock.

1,863,934. MANIFOLD CONSTRUCTION. HARRY G. SANGER, Detroit, Mich., assignor to Graham-Paige Motors Corporation, a Corporation of Michigan. Filed June 5, 1930. Serial No. 459,333. 7 Claims. (Cl. 123—52.)



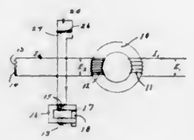
1. In a manifold construction for internal combustion engines, a header and a branch communicating therewith, said branch being disposed at a re-entrant angle with respect to the direction of flow of fuel in said header whereby to produce zone of violent turbulence immediately adjacent to the outlet end of the branch.

1,863,935. MOLD FOR NONFERROUS CASTINGS. VICTOR P. SCHMIDT and HARRY A. BRENAMAN, Altoona, Pa. Filed May 23, 1931. Serial No. 539,426. 1 Claim. (Cl. 22—132.)



A one piece metallic mold for casting nonferrous rings of the character described, said mold having a central circular opening, and a removable core defining with said mold a cavity having a cylindrical open top, said core seating on an annular shoulder adjacent to said central circular opening in the body of said mold.

1,863,936. TRANSFORMER SYSTEM AND APPARATUS. AUGUST C. SCHWAGER, San Francisco, Calif. Filed July 6, 1931. Serial No. 548,900. 15 Claims. (Cl. 175—358.)

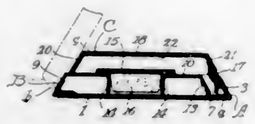


1. A deficiency reactor for correcting to a constant value the errors of a transformer caused by variable phase angle and magnetizing current values resulting from a change in current, comprising a reactance winding adapted to be connected electrically with the transformer, said reactance winding being disposed upon a separate core magnetically insulated from the transformer core and having a portion of reduced cross-section working at high magnetic saturation.

1,863,937. JEWELRY BOX. JOHN M. SHIELDS, Chicago, Ill., assignor to F. H. Noble & Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 30, 1931. Serial No. 577,946. 6 Claims. (Cl. 206—75.)

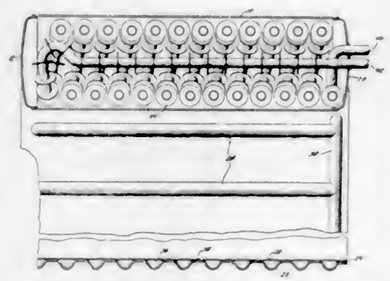
6. A display box comprising a body portion having a bottom section and a rear side section, a lid portion hinged to the top of said rear side section of the body portion,

and a supporting member having a display section and a connected front side section hinged to the front edge of said bottom section of the body portion of the box, said



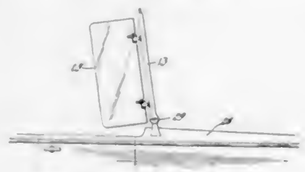
supporting member being formed with end sections connected to said display section arranged to rest against said lid portion closed.

1,863,938. EVAPORATING UNIT. RUSSELL T. SMITH, Greenville, Mich., assignor to Gibson Refrigerator Company, Greenville, Mich., a Corporation of Michigan. Filed Feb. 19, 1931. Serial No. 516,976. 1 Claim. (Cl. 62—95.)



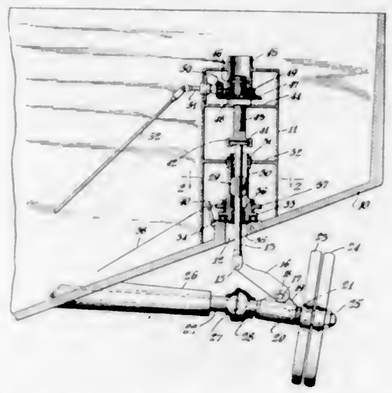
In combination, a pair of relatively nested, U shaped, sheet metal plates secured and sealed to each other on their U shaped edges, a U shaped formations on at least one of the plates, engaging the other substantially on U lines, to provide U passages between the plates from one pair of upper edges to the other pair, a cylindrical tank between the upper edges and secured and engaged by the plates thereat on opposed elements of the cylinder, the tank having openings connecting the interior thereof, with the U passages, the ends of the tank being closed, and a coiled tube within the tank and having an inlet and an outlet projecting thru the tank, the interior of the tube being sealed from the interior of the tank and the space between the plates.

1,863,939. WING MOUNTING CLAMP. VERNON G. SOUDER and HERBERT B. TRIX, Detroit, Mich., assignors to American Injector Company, Detroit, Mich., a Corporation of Michigan. Filed July 2, 1931. Serial No. 548,391. 1 Claim. (Cl. 296—84.)



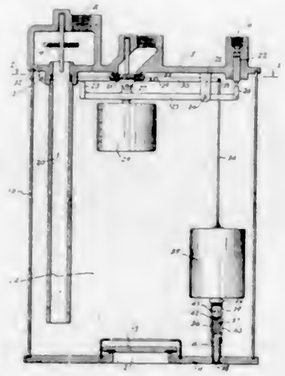
Means for movably securing a glass wing to a windshield post comprising a stud having a threaded end and a ring shaped end whose axis is perpendicular to the axis of the threaded end, a body portion disposed in said ring shaped end, a bolt passed axially thru said ring shaped end and threaded into said body to hold the latter in place, the ring shaped end and the body having cooperating conical engaging formations for friction wedging purposes, an elongated clamp part integral with said body and projecting therefrom at right angles to the axis of the bolt, the ring shaped end and the body, a second elongated clamp part secured to the body by adjustable screws and spaced from the first part, and a folded rubber strip in the space between the clamp parts.

1,863,940. MEANS FOR PROPELLING AND STEERING BOATS. GISBERT RANKE, Maspeth, N. Y. Filed Jan. 27, 1932. Serial No. 589,127. 4 Claims. (Cl. 115—35.)



1. A boat propelling device comprising driving shafts, stub shafts carrying twin propellers, a universal joint coupling said driving shafts with the stub shafts, a rubber mantle covering the housing of the universal joint, a link connected with play to a sleeve carried by said stub shafts, a spindle movably connected to said link, keys on said spindle to guide the same in inner grooves of a rotatable sleeve, means for rotating said sleeve and spindle to displace the propellers laterally at an angle to the boat, and means connected with said spindle to raise and lower the propellers.

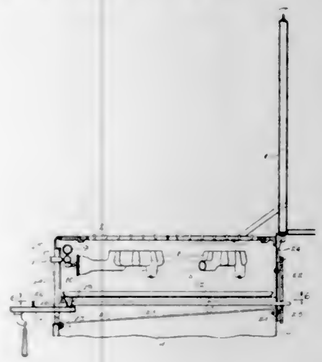
1,863,941. PNEUMATIC PUMP. HOMER S. ROGERS, Milwaukee, Wis., assignor to Milwaukee Air Power Pump Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 17, 1926. Serial No. 109,549. 6 Claims. (Cl. 103—248.)



1. In a pump of the character described, the combination with a pump chamber and the fluid inlet and exhaust valves thereof, of a lever connecting said valves

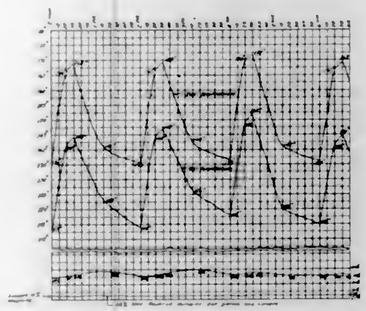
for simultaneous operation, a float associated with said lever for operating the same at high level to cause closing of the fluid exhaust valve and opening of the fluid inlet valve, a second lever mounted in the pump chamber and arranged for engagement with said first-mentioned lever to impart initial opening movement to the exhaust valve and simultaneous closing movement to the inlet valve while permitting said float to complete said last-mentioned movements of the valves by its own weight, and a second float for causing operative movement of said second lever at low level condition in the pumping chamber.

1,863,942. GAS STOVE. WALTER F. ROGERS, Cicero, Ill., assignor to Crown Stove Works, Cicero, Ill., a Corporation of Illinois. Filed Aug. 19, 1931. Serial No. 558,015. 14 Claims. (Cl. 126—37.)



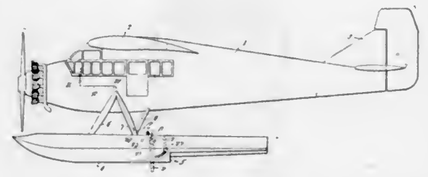
1. A stove comprising a frame having an opening therein, burner control means accessible through said opening, a burner top on said frame, a cover movably mounted on said frame so as to be shiftable into a horizontal closed position to overlie said burner top, a guard movably mounted on said frame so as to be shiftable into position to close said opening, and means operable by said cover for positively securing said guard against opening while said cover is closed.

1,863,943. PROCESS AND APPARATUS FOR DRYING LUMBER. FREDERICK W. RUBIN, Indianapolis, Ind., assignor, by mesne assignments, to The Utility Manufacturing and Sales Company, Indianapolis, Ind. Filed Dec. 7, 1928. Serial No. 324,447. 6 Claims. (Cl. 34—24.)



1. The process of rapidly drying lumber or the like consisting in subjecting the same to a series of cycles of treatment, each cycle consisting of subjecting the lumber to a simultaneous and corresponding rise in dry and wet bulb temperature followed by a simultaneous and corresponding decrease in the dry and wet bulb temperatures, the relative increase and decrease of said dry and wet bulb temperatures for each cycle being substantially the same.

1,863,944. SEAPLANE. HARRY H. SEMMES, Chevy Chase, Md., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed May 28, 1931. Serial No. 539,597. 6 Claims. (Cl. 244—2.)

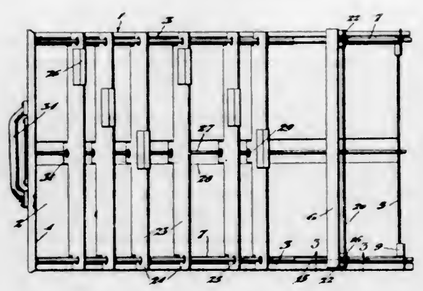


1. In combination with a water brake, means for extending said brake into contact with the water, and automatic means for withdrawing said water brake, at least partially, when a predetermined pressure thereon is reached.

1,863,945. METHOD OF MANUFACTURING COLLOIDAL CARBONATE OF ALKALI EARTHS. TSUNEJI SHIRAISHI, Tatsuta Mura, Inben Gun, Miye Ken, Japan. Filed July 31, 1930, Serial No. 472,210, and in Japan May 31, 1930. 3 Claims. (Cl. 252—6.)

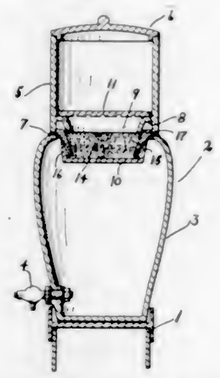
1. Method of manufacturing neutral colloidal carbonate, which, in combination, consists in introducing concentrated carbonic acid gas as rapidly as possible into milky liquor principally consisting of hydroxides of alkali earth metals having a specific gravity below 15° Baumé, converting the said liquor into basic carbonate of rice-gruel-like state by keeping the temperature in the reaction vessel at from 20° to 35° C. and then treating the same with carbonic acid gas of the desired concentration at from 40° to 80° C.

1,863,946. FILING TRAY. SAMUEL SMILEY, Jr., Cincinnati, Ohio, assignor to The Globe-Wernicke Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 6, 1927. Serial No. 196,794. 1 Claim. (Cl. 129—16.)



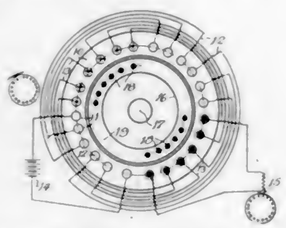
A filing receptacle, comprising, an open top casing, guide rods mounted longitudinally of and at each side of the casing, said casing having a longitudinal depression in the floor thereof, a guide rod mounted longitudinally of and within the confines of the depression, and partitions, each having a three-point loose suspension on said rods.

1,863,947. WATER PURIFIER. CLARENCE K. SMITH, Hermosa Beach, Calif., assignor, by direct and mesne assignments, of one-third to Marrietta Newhouse and one-third to S. O. Newhouse, Long Beach, Calif. Filed Jan. 20, 1930, Serial No. 422,046. Renewed Nov. 23, 1931. 4 Claims. (Cl. 210—105.)



1. A water purifier comprising an olla, a crock resting on said olla, a cup resting on the upper surface of said olla, a filter plate above said cup, a shoulder on which said filter plate rests and a downwardly extending apron from said shoulder, said cup having outlet ducts therein through which the water flows, said ducts extending upwardly and outwardly through the wall of said cup and from adjacent the bottom of the cup to adjacent the top thereof.

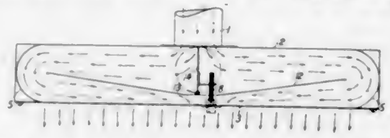
1,863,948. MEANS OF CONVERTING ELECTRICAL ENERGY INTO ROTARY OSCILLATION OF A MASS. WILHELM SPÄTH, Barmen, Germany. Filed Aug. 20, 1927, Serial No. 214,389, and in Germany July 2, 1925. 4 Claims. (Cl. 172—126.)



1. An oscillation motor comprising a stator, a rotor, a pair of windings carried by the stator to be supplied respectively, with direct and alternating currents, said windings being disposed relative to one another to produce when energized an oscillating magnetic field and being spacially displaced to produce instantaneously variable, oscillatory resultant flux distribution, and a winding carried by the rotor adapted to be energized by induction and disposed in the oscillating magnetic field whereby oscillation of the rotor is produced.

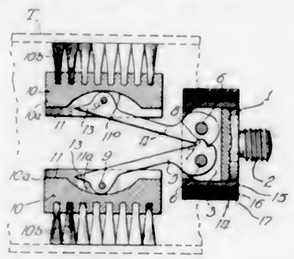
1,863,949. VENTILATING APPARATUS. ALEXANDER WILLIAM STEWART, Glasgow, Scotland. Filed May 27, 1929, Serial No. 366,232, and in Great Britain Aug. 10, 1928. 1 Claim. (Cl. 98—40.)

Ventilating apparatus, comprising, in combination with an air trunk, a casing one side wall of which presents an air outlet, the opposite side wall of said casing being connected to said air trunk, a sectional division plate in said casing interposed between said casing side walls, the ends of said division plate being spaced from the end walls of said casing, said division plate extending substantially parallel to the plane of said outlet, said division plate positioned to divide the air entering said casing from said trunk into two streams flowing in opposite



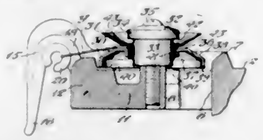
directions, means for effecting angular adjustment of the sections of said division plate, and concaved deflectors interposed between the ends of said division plate and the end walls of said casing.

1,863,950. TUBE COATING BRUSH. CHARLES H. STUBBS, Boston, Mass., assignor to The Dampney Company of America, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 16, 1929. Serial No. 392,837. 1 Claim. (Cl. 15—179.)



In a tube coating brush structure, a rotatable head, links pivoted at one end to the head on axes transverse to and at opposite sides of the axis of rotation thereof for movement toward and away from each other, opposed brush sections pivotally secured intermediate their ends to the links on axes transverse to the axis of rotation of the head, and a cushion guard extending about the head.

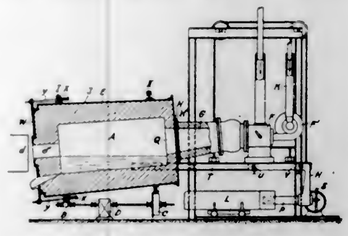
1,863,951. TENSION-DEVICE. ERNEST R. SWANSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed July 21, 1931. Serial No. 552,283. 12 Claims (Cl. 242—150.)



1. A tension-device comprising a pair of opposed disks between which the yarn feeds, one of said disks provided with an axial opening and the other of said disks having an annular neck projecting into the opening in the first disk, said disks so arranged that the yarn drawing around the annular neck of one disk imparts a rotary motion thereto and the rolling engagement of said neck with the opening in the opposite disk sets up a rotary action of the latter.

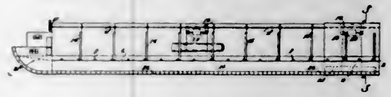
1,863,952. ROTARY FURNACE. ERNST WEISS, Wethmar, near Lunen, Germany. Filed Sept. 10, 1930, Serial No. 481,033, and in Germany Sept. 16, 1929. 12 Claims. (Cl. 263—33.)

3. Rotary smelting furnace comprising a furnace chamber rotatable about an inclined axis, a burner, a combustion chamber detachable from said furnace but adapted to rotate in unison therewith, means for withdrawing said combustion chamber together with the burner from an



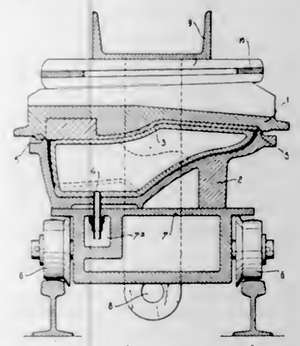
opening in said furnace chamber and means for charging said furnace after removal of said combustion chamber and burner.

1,863,953. LOG BARGE LOADING DEVICE. JOHN THADDAEUS WILBAND, Vancouver, British Columbia, Canada. Filed Sept. 15, 1930, Serial No. 481,981, and in Canada Sept. 14, 1929. 2 Claims. (Cl. 114—72.)



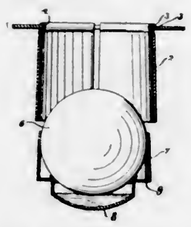
2. A loading device for a log-barge comprising in combination with the said barge a series of columns positioned longitudinally and centrally of said barge, a series of transverse beams secured across the deck of said barge and forming a transverse skidway thereupon, said skidway being suitably declined from the longitudinal centre line of said barge to the sides thereof, a runway on each side of and supported from said columns, a traversable truck on each said runway, said truck being provided with means for hoisting logs and means for actuating and controlling said hoisting means, whereby logs may be floated endwise and in alignment with said columns and raised by said hoisting means and traversed longitudinally to any desired position on said barge.

1,863,954. PROCESS FOR THE PRODUCTION OF HOT VULCANIZED FOOTWEAR. DIRK FRANS WILHELMI, Oosterbeek, Netherlands. Filed Mar. 13, 1930, Serial No. 435,570, and in Germany Mar. 16, 1929. 1 Claim. (Cl. 18—53.)



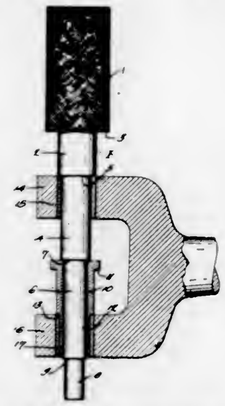
A process for the production of hot vulcanized footwear in a mould and on a pneumatic last consisting in subjecting the sole and heel while in the lower part of the mould and before the vulcanizing to a preliminary pressing, arranging the shoe upper on the last and within the upper part of the mould and uniting the mould sections together, and finally placing the pneumatic last under pressure during vulcanizing to unite the upper to the sole and heel of the shoe.

1,863,955. SIGN. THEODOR R. WILLWERSCHEID, Cleveland, Ohio. Filed Aug. 26, 1929. Serial No. 388,425. 3 Claims. (Cl. 88—1.)



1. In a reflecting device, in combination with a supporting plate formed with an opening, a reflecting button, an enclosing ferrule for said button, means for holding said button from forward movement through said ferrule, consisting of an inturned portion of said ferrule projecting into anchoring engagement with said button, and means for anchoring said ferrule within the opening in said plate, said anchoring means engaging with the outer and inner faces of said plate.

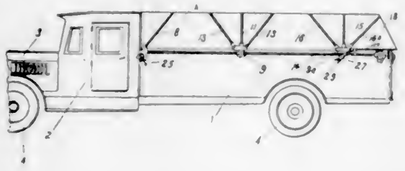
1,863,956. BUSHING REMOVER AND REPLACER. CHARLES A. WILSON, Euclid, Ohio. Filed June 11, 1931. Serial No. 543,589. 8 Claims. (Cl. 29—88.2.)



1. A tool for removing bushings from and inserting bushings in spaced bearings comprising: a main member having a first reduced portion adapted to extend through a first bushing and forming a first shoulder for engagement with one end of said first bushing, and a second reduced portion forming a second shoulder; an auxiliary member having an axial opening for removable engagement by the second reduced portion of said main member and engageable by the second shoulder thereof, said auxiliary member being also formed with a reduced portion adapted to extend into a second bushing and forming a third shoulder for engagement with the corresponding end of said second bushing, said first and third shoulders being spaced apart a distance substantially equal to the distance between the ends of said first and second bushings engaged thereby, whereby said first and second bushings may be simultaneously removed from or inserted in said bearings in the same direction when

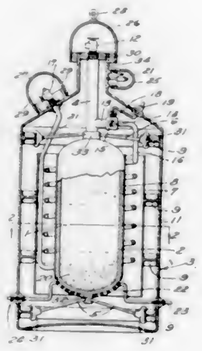
pressure is applied to said main member; and an abutment on said auxiliary member for engagement with the bearing of said second bushing to limit the extent of movement of said auxiliary member.

1,863,957. COVER FOR LAND VEHICLES. WILLIAM WOOLCOTT, Winchester, Ky., assignor to Woolcott Convertible Top Company, Winchester, Ky., a Corporation of Delaware. Filed June 17, 1929. Serial No. 371,419. 4 Claims. (Cl. 296—105.)



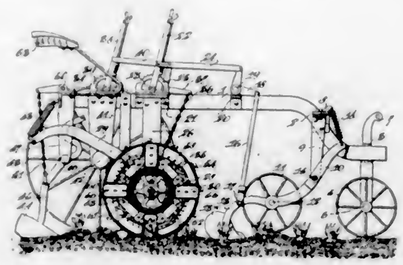
1. In combination with an auto truck having a body, a cover for said body having a back drop curtain, and means for locking said back drop curtain to said cover, said means automatically effective excepting during full extension of said cover, and means automatically effective during the extension of said cover for releasing said locking means, and for extending said back drop curtain following the release of said locking means.

1,863,958. CONTAINER FOR COMPRESSED OR LIQUEFIED GAS. ROBERT G. WULFF, Los Angeles, and CHRISTOPHER V. MOODY, Huntington Park, Calif. Filed Apr. 24, 1929. Serial No. 357,802. 17 Claims. (Cl. 62—1.)



1. In a container of the class described: a chamber adapted to retain a fluid against high internal pressure; a protective casing surrounding said chamber so as to leave a substantial space about the latter; a safety valve communicating with the chamber; a cooling coil about the chamber within the space enclosed by the casing, said coil being adapted to receive the discharge from the safety valve; and an exit valve in the casing adapted to discharge to the outside of the casing fluid which has traversed the cooling coil.

1,863,959. BEET BLOCKER. CARL ALF JOAKIM ANDERSEN, Salt Lake City, Utah. Filed May 12, 1930. Serial No. 451,757. 13 Claims. (Cl. 97—12.)



1. In a plant blocking machine, a frame and supporting wheels therefor, a furrow forming plow mounted at the fore part of said frame, a blocker mounted on the frame to the rear of said plow, said unit comprising a traction wheel to run in the furrow formed by said plow, a set of plant guards mounted on said traction wheel, and a set of blocker knives mounted on said traction wheel between adjacent plant guards, and means effected by rotation of said traction wheel for causing said plant guards and knives to function.

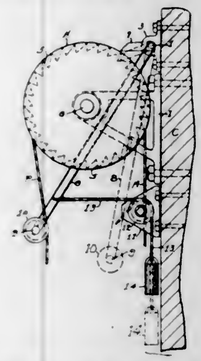
1,863,960. FINGER AND HAND PROTECTOR. ALEXANDER H. ARONSON, Newark, N. J. Filed July 23, 1930. Serial No. 469,967. 1 Claim. (Cl. 2—21.)



A device for protecting the joint of a finger without interfering with the natural movement of the finger, comprising a band of elastic material and a protective strip of fabric of the same width as the band, but of less length than the semi-circumference of the band, secured to the outside of the band.

1,863,961. SAFETY DEVICE FOR SUSPENDED DOORS. HALLECK C. BALL, CLAYTON R. JACKSON, WALTER B. KELLER, and JOSEPH Z. WINDER, Richmond, Ind., assignors to Richmond Fireproof Door Company, Richmond, Ind., a Corporation of Indiana. Filed May 8, 1931. Serial No. 535,844. 3 Claims. (Cl. 20—20.)

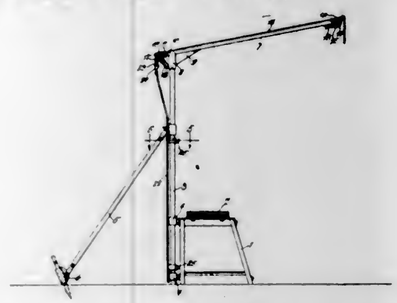
1. In combination with a shaft, a ratchet wheel secured on said shaft, a winding drum also secured on said shaft, a cable adapted to wind on said drum, a weight suspended by said cable and normally holding the cable taut, a pawl adapted to engage with said ratchet but retained out of engagement therewith when the cable is taut but immediately making such engagement when the cable is slackened.



1,863,962. SOLIDIFIED ALCOHOLIC FUEL. KENNETH GEORGE BIERLICH, Bennington, Vt., assignor of one-fourth to J. H. Bierlich, Bennington, Vt., and one-half to C. E. Dooley, Philmont, N. Y. Filed Nov. 13, 1930. Serial No. 495,523. 3 Claims. (Cl. 44—7.)

1. A fuel consisting of Ceylon cocoanut oil, 50 pounds; crude palm oil, 12½ pounds; pale rosin, 87½ pounds, caustic soda lye of 38° Bé., 50 pounds; water, 2½ pounds; and 96 percent alcohol, 8 ounces.

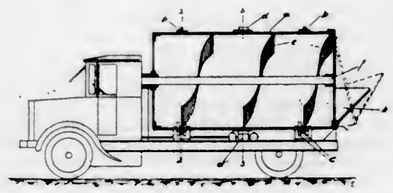
1,863,963. FABRIC CANOPY SUPPORT. JAMES H. BONNET, Champaign, Ill. Filed Aug. 14, 1931. Serial No. 557,143. 5 Claims. (Cl. 135—5.)



2. In a construction of the class described, the combination of a standard, an arm supported thereby, a roof section comprising a rectangular sheet of fabric, a series of rods enclosed in the roof section along the front and rear marginal edges thereof and adapted to connect at the front and rear ends of said arm, and a releasable clamp device for holding said rods in connection with said arm.

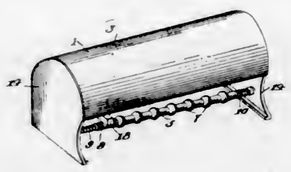
1,863,964. RUBBISH CART. GUILLERMO EMILIO BRENNER, Dusseldorf-Oberkassel, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany, a Corporation of Germany. Filed Aug. 23, 1927, Serial No. 214,845, and in Germany Sept. 4, 1926. 7 Claims. (Cl. 214—67.)

1. A rubbish cart comprising a rotatable rubbish container, a worm arranged on the inner circumference of the wall of said container and fastened thereto, said worm rotating together with said container, said worm being formed by a screw plane which is less broad than the radius of the container, a shaft arranged longitudinally within the container a second worm arranged in the free space around said shaft and inside the inner circumference



of said first mentioned worm, closing means for closing the open end of said rotatable container, said closing means being fastened to a part of the cart frame which does not participate in the rotation of the container, and an opening arranged in said closing means for loading the rubbish into the container.

1,863,965. MECHANICAL SYSTEM FOR GAS AND SMOKE PROTECTION. FRANK J. BRIDGEMAN, Cleveland, Ohio, assignor to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 27, 1931. Serial No. 540,456. 9 Claims. (Cl. 116—75.)



1. A mechanical system for gas and smoke protection against daylight hold-ups as described, comprising a tension wire circuit distributed about the place to be protected, guns distributed about the place to be protected, said guns associated with said tension wire, manually operated mechanical controls distributed about the place to be protected, said controls associated with said tension wire, means to place said tension wire under tension and maintain said wire taut, said controls adapted to mechanically release the tension in said wire and cause the discharge of said guns.

1,863,966. PROCESS FOR EXTRACTING MAGNESIA FROM DOLOMITE. ALEXANDER BROSCHE, Gruiten, Germany, assignor to Rheinische-West-Falische Kalkwerke, Dornap, Germany. Filed Sept. 20, 1929, Serial No. 394,146, and in Germany Sept. 26, 1928. 1 Claim. (Cl. 23—201.)

A method of extracting magnesium from dolomite which consists first, in burning the dolomite at a temperature at which only the magnesium carbonate is decomposed; second, grinding the resulting product; third, treating said product with sufficient water to hydrate the magnesium oxide; fourth, treating the mass with CO_2 in order to form magnesium carbonate; fifth, heating the mass until dry and to form a basic magnesium carbonate; sixth, wind sifting the resulting product in order to separate the basic magnesium carbonate from the heavier calcium carbonate, and lastly heating the basic magnesium carbonate to decompose the same to magnesium oxide, carbon dioxide and water vapor in order to receover the magnesium oxide.

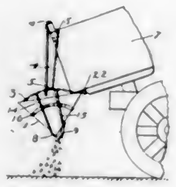
1,863,967. PROCESS OF TREATING OIL AND REAGENTS. GEORGE HENRY BURRUSS, Colorado, Tex., assignor to Col-Tex Refining Company, Colorado, Tex., a Corporation of Delaware. Filed Dec. 12, 1928. Serial No. 325,659. 12 Claims. (Cl. 196—33.)

1. A method of refining oils comprising adding litharge to a suspension of lead sulphide in an alkaline solution, oxidizing the mixture, adding the oxidized mixture to oil to be refined with agitation, then adding sulphur to said oil, and then separating the oil from the resulting suspension of lead sulphide in alkaline solution.

7. A method of treating suspensions of lead sulphide in alkaline solution for use in refining oils comprising adding litharge to a suspension of lead sulphide in an alkaline solution, and then oxidizing the mixture.

12. A treating agent for hydro-carbon oils derived from the reaction of lead sulphide, litharge and oxygen in the presence of alkali and capable of producing a sludge readily separable by settling when mixed with an oil to be treated.

1,863,968. GRAVEL SPREADER. CLARENCE W. DEARING, Watsonville, Calif. Filed Oct. 28, 1930. Serial No. 491,716. 3 Claims. (Cl. 275—2.)



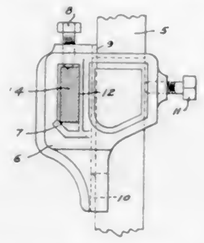
2. In combination with a tiltable truck body, a spreader trough, a seat carried by the body at the rear thereof, said spreader trough having a part engaged with said seat so as to have pivotal movement relative to the truck and to be held by the seat against movement of the trough forwardly of the truck body, and supporting means for the trough connected to the truck and to the trough at points on the latter between said part and points spaced inwardly from the center of the trough so as to hold the said part of the trough against the seat.

1,863,969. DOOR CONSTRUCTION. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 28, 1928. Serial No. 273,478. 4 Claims. (Cl. 20—26.)



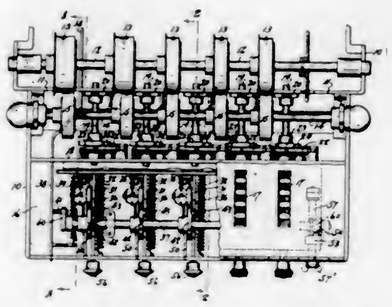
2. In car construction, the combination with a door and a metal door post having a section thereof extending perpendicularly out from the car side wall; of two metal strips, one secured to said post section and the other to the door, said strips having overlapping contacting flanges when the door is in closed position, one of said flanges having a corrugation therein within the overlapping area of the flanges, said corrugation providing a vertically extending space, permitting drainage of any foreign matter entering therein.

1,863,970. ADJUSTABLE CONNECTER. FORREST V. DONALD, Marshalltown, Iowa, assignor to Gilson Manufacturing Company, Port Washington, Wis., a Corporation of Wisconsin. Original application filed Apr. 7, 1926, Serial No. 100,264. Divided and this application filed May 23, 1930. Serial No. 455,037. 3 Claims. (Cl. 287—54.)



3. In combination, a bracket having a pair of openings extending at an angle to each other, each of said openings having a set of endwise separated wedging surfaces, a bar movable along each of said openings, and a screw associated with said bracket at each of said openings and coacting with the adjacent bar between the spaced ends of the corresponding wedging surfaces to urge said bar into locking engagement with said corresponding set of wedging surfaces.

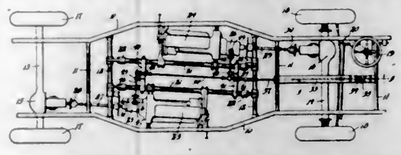
1,863,971. STOP MECHANISM FOR COIN COUNTING MACHINES. EDWARD P. DONNELLAN, Brooklyn, N. Y., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 12, 1931. Serial No. 543,793. 6 Claims. (Cl. 192—138.)



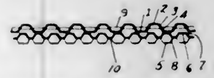
1. In a clutch control for power operated coin counting machines having coin actuated counting register mechanism, a clutch control mechanism, a normally arrested spring actuated slide-bar for operating said clutch control mechanism, means operated through said counting register mechanism to release said slide-bar for operative effect upon said clutch control mechanism, detent means operative to independently hold said clutch control mechanism in slide-bar actuated condition until said slide-bar is reset to normal arrested position, and means operative on excess of return movement of said slide-bar beyond its normally arrested position to release said detent means.

1,863,972. DUAL TRANSMISSION SHIFTING DEVICE. PETER S. ECKLAND and GUNNAR RYDEN, Minneapolis, Minn., assignors to Eckland Bros. Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 26, 1930. Serial No. 484,530. 5 Claims. (Cl. 74—39.)

1. In a vehicle of the class described, a pair of parallel shafts mounted for both sliding and rocking movement and operably connected respectively to the shift levers for the transmissions of a pair of oppositely disposed engines, a third shaft mounted for sliding and rocking movement and extending between said first mentioned shafts and having portions disposed respectively above and below the two first mentioned shafts, downwardly extending connecting means between one of said portions and the first mentioned shaft below the same for transmitting a combined sliding and rocking movement thereto, upwardly extending means between the other portion and the first mentioned shaft above the same for transmitting a combined sliding and rocking movement thereto, and a central operating means for imparting both rocking and sliding movement to said third shaft whereby as said third shaft is slid and rocked, said first mentioned shafts will be rocked and slid in opposite directions relative to each other.

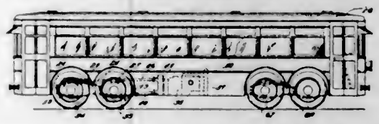


1,863,973. INDENTED PAPER. WILLIAM H. ELLIS, Jr., Glendale, Ohio. Filed Dec. 19, 1930. Serial No. 503,517. 3 Claims. (Cl. 154—55.)



1. An indented paper board composed of two or more layers of indented paper or paper board combined with adhesive, and each layer having numerous small alternating, pressure resisting indentations and protuberances archlike in any cross section and of such size and/or shape that the protuberances of the one sheet will be substantially in offset relation with the indentations of the adjacent sheet or sheets, whereby the composite thickness throughout the sheet is substantially equal to the sum of the thicknesses of the individual sheets.

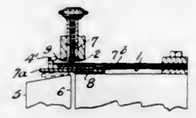
1,863,974. ROAD VEHICLE. ROLLIE B. FAGEOL, Los Angeles, Calif., assignor to Eight-Wheel Motor Vehicle Company, a Corporation of California. Filed Oct. 22, 1927. Serial No. 228,046. 16 Claims. (Cl. 180—22.)



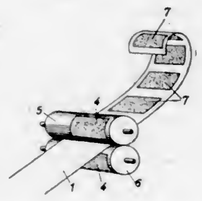
1. In combination with the body of an automotive road vehicle, steering wheels and tandem drive wheels associated with the body, springs mounted to support said body upon said wheel, a power unit supported within the body adjacent each side thereof and intermediate the end thereof, and power transmitting means connecting with the power unit and tandem drive wheels adjacent each side of the body and supported within but adjacent the sides thereof.

1,863,975. ELECTRIC BUZZER, INTERRUPTER, AND LIKE VIBRATORY DEVICE. BERT DAVID FEILD, Forest Gate, London, and THEODORE CECIL STANDBROOK, Ilford, England, assignors to Stanfield Radio Company Limited, London, England, a Company of Great Britain. Filed Nov. 23, 1929, Serial No. 409,380, and in Great Britain Nov. 24, 1928. 4 Claims. (Cl. 200—90.)

1. An electric vibratory device comprising a flexible vibratory armature, an electro-magnetic system for attracting said armature, said armature being inclined with respect to the attracting surface of said electro-magnetic system, a contact device having contacts in the circuit of said electro-magnetic system and lost motion means between said armature and said contact device for operating said device said lost motion being less than the maximum amplitude of said armature.

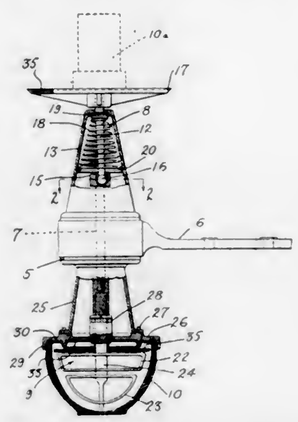


1,863,976. LITHOGRAPHIC OR OFFSET PRINTING PLATE. FERDINAND FISCHER, Berlin, Germany. Filed Dec. 16, 1929, Serial No. 414,570, and in Germany Dec. 24, 1928. 2 Claims. (Cl. 101—401.)



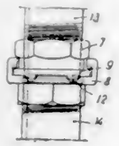
1. In the manufacture of lithographic printing plates of moldable material, the step of graining the face and the back of the plate by a pressing action producing a large number of depressions simultaneously.

1,863,977. COMBINATION VIBRATOR AND MIXER UNIT. THOMAS H. FORDE and NEWTON W. MELLARS, San Francisco, Calif., assignors to Formell Corporation, Ltd., San Francisco, Calif., a Corporation of California. Filed June 18, 1929. Serial No. 371,753. 4 Claims. (Cl. 259—99.)



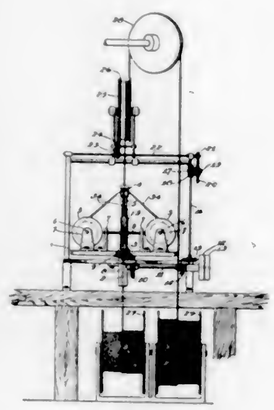
1. A device of the character described a rotary shaft, a vibrator shaft, and resilient means flexibly supporting said vibrator shaft, an eccentric coupling between said shafts providing for vibration of the vibrator shaft on rotation of the other shaft, and a vibrator table fixed to said vibrator shaft.

1,863,978. COUPLING FOR PIPES WITH THREADED ENDS. JACQUES FOUCAULT, Myslowice, Poland. Filed Oct. 28, 1929, Serial No. 403,068, and in Belgium Apr. 25, 1929. 1 Claim. (Cl. 285—143.)



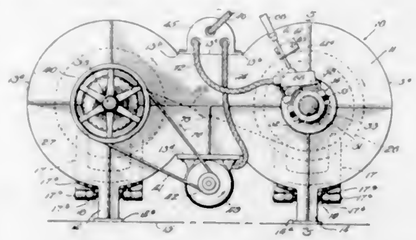
A coupling device for pipes with threaded ends, in which the ends of the pipes are brought together with the interposition of a flexible packing washer, said device comprising two members whereof one is a male member and comprises a flange while the other is a female member having a lateral insertion recess in which is engaged the flange, and cooperating means on said members so that when in mutual engagement with each other, the height of the said flange of the male member and the height of the recess of the female member will be made exactly equal, said means including the provision of notches in the bottom of the insertion recess situated laterally and transversely of the pipe ends, and corresponding projections on the outer end of the male member for cooperating with the notches and the walls of the recess.

1,863,979. MANUFACTURE OF ELECTRICAL CONDUCTORS. JAMES M. G. FULLMAN, Sewickley, and LOUIS J. RITTELMANN, Baden, Pa., assignors, by mesne assignments, to National Electric Products Corporation, a Corporation of Delaware. Filed June 4, 1928. Serial No. 282,650. 2 Claims. (Cl. 173—244.)



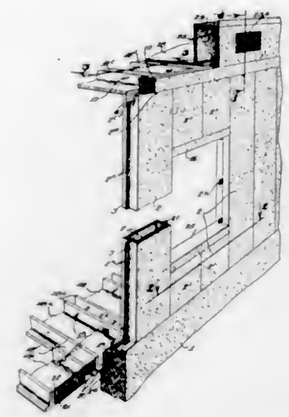
1. The method herein described which comprises transversely crumpling a flat strip of fibrous insulating material into a soft, compressible strand, wrapping the strand upon an electrical conductor in a succession of helical, non-overlapping coils, and compressing the coils tightly upon the conductor and upon adjacent coils thus forming a smooth-surface continuous insulating jacket enclosing the conductor.

1,863,980. APPARATUS FOR REWINDING FILMS. JOSEPH H. GOLDBERG, Chicago, Ill., assignor to Chicago Cinema Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed May 25, 1929. Serial No. 365,856. 7 Claims. (Cl. 242—55.)



4. In apparatus for rewinding films, a casing, means for supporting a pair of reels in said casing, a motor for rotating one of said reels, an electric circuit for said motor, a brake drum mounted to rotate with the other of said reels, a friction brake mounted on said brake drum, and a switch mounted on said friction brake and actuated by the angular movement thereof for controlling said circuit.

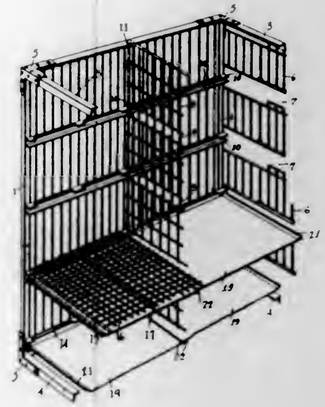
1,863,981. CONCRETE BUILDING CONSTRUCTION. JAMES S. GROVES, San Diego, Calif. Filed June 17, 1930. Serial No. 461,713. 16 Claims. (Cl. 72—16.)



1. In a building structure, a foundation, vertical wall members extending upwardly from the foundation, said wall members comprising a pair of channel members moulded from plastic material and positioned with their channel portions adjacent each other, forming outer parallel sides, said channel members being joined on a plane parallel to the wall and tie means concealed within the margins of said sides for securing said channel members together.

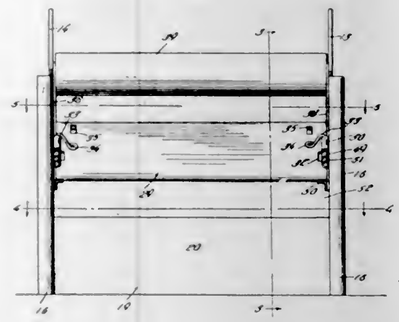
1,863,982. POULTRY COOP OR CRATE. CHARLES T. HATCH, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Sept. 13, 1928, Serial No. 305,656. Renewed May 7, 1932. 7 Claims. (Cl. 119—17.)

1. In a structure of the class described, the combination with the frame comprising uprights, ledges mounted on said uprights in opposed pairs, a partition and side walls disposed at right angles to said ledges and provided with openings alined with said ledges, and pans mounted on said ledges and provided with upturned rims at the front and side edges thereof and with upwardly offset



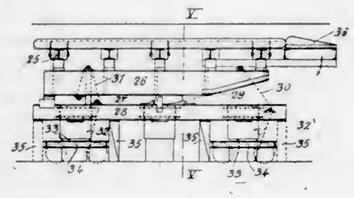
beads at their inner edges disposed in overlapping relation, said beads coacting with each other to hold the pans together.

1,863,983. CHICKEN FEEDER. PETER P. HESS, Drewrys Bluff, Va. Filed June 12, 1930. Serial No. 460,664. 2 Claims. (Cl. 119—61.)



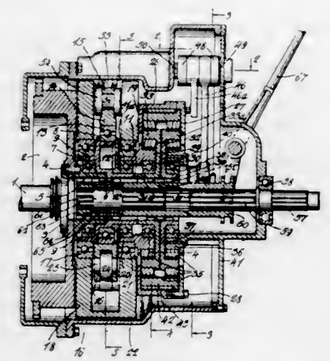
2. A poultry feeder comprising a pair of end members having upper and lower vertically arranged slots therein, a trough located between the lower portions of the end members, bolts passing through the ends of the trough, and through the lower slots, nuts on the other ends of the bolts whereby the trough can be adjusted vertically between the end members, a pair of end bars, bolts passing through said end bars and through the upper slots in the end members, nuts on the outer ends of the bolts whereby the end bars can be adjusted vertically, a roof member having one edge hingedly connected at its ends to the ends of the end bars, a seat at the other end of each end bar forming a rest for the other edge of the roof member and latch means for connecting said other edge of the roof member to the end bars, uprights on the ends of the roof member at the center thereof, and a rotary member having its ends rotatably supported by said uprights.

1,863,984. WORKING AND LOADING PLATFORM FOR GALLERY WORK IN TUNNELS. CRISTOPHER HENRIK HOELFELDT-LUND, Steinkjer, Norway, assignor to A/S Hoeleng, Trondhjem, Norway. Filed Nov. 11, 1929, Serial No. 406,438, and in Norway Sept. 26, 1929. 1 Claim. (Cl. 214—41.)



In a working and loading device for excavating roof galleries in tunnels, a platform disposed at a substantial height above the tunnel floor so as to permit the passage of transport cars below the same, supporting means for said platform extending upon both sides of the track for said transport cars, elastic means disposed between said platform and said supporting means and means for tilting said platform longitudinally for unloading material by gravity from said platform to said transport cars disposed beneath said platform.

1,863,985. AUTOMATIC TRANSMISSION. EDGAR R. HOLMES, Denver, Colo., assignor of one-half to Horace M. Little, Denver, Colo. Filed Jan. 2, 1931. Serial No. 506,208. 5 Claims. (Cl. 74—53.)



1. An automobile transmission comprising, in combination, a drive shaft, a driven shaft, a ratchet wheel nonrotatably connected with the driven shaft, an eccentric secured to the drive shaft so as to be rotated thereby, a strap enclosing the eccentric, an inertia member rotatably supported on the drive shaft, a link connecting one end of the strap with the inertia member and means interposed between the other end of the strap and the ratchet wheel for rotating the latter in one direction when the said other end of the eccentric is oscillated.

1,863,986. PROCESS FOR THE TREATMENT OF LEUCITIC ROCKS WITH NITROUS VAPORS IN A CONTINUOUS CYCLE. FÉLIX JOURDAN, Rome, Italy. Filed Mar. 22, 1929, Serial No. 349,213, and in Italy Apr. 18, 1928. 6 Claims. (Cl. 23—29.)

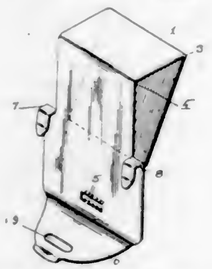
1. The process of treating leucite for the production of a mixture of nitrate of potassium, alumina and silica, enabling all the nitric acid employed to be utilized, which consists in attacking the leucite with vaporous nitric

acid or a mixture of nitrous vapors with vaporous nitric acid and water vapor and air in excess of the proportions required for combining with the potassium, aluminium and iron contained in the leucite thus forming the corresponding nitrates.

1,863,987. SUBSTITUTION PRODUCTS OF PYRANTHRONE. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE and ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed July 20, 1929, Serial No. 379,869, and in Germany July 28, 1928. 4 Claims. (Cl. 260—61.)

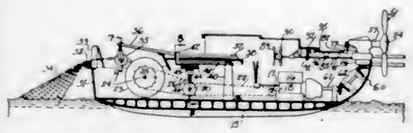
1. As new articles of manufacture alkylated monohydroxy pyranthrones.

1,863,988. ASH TRAY FOR AUTOMOBILES. THEODORE W. KUPPER, Rochester, N. Y. Filed Sept. 30, 1929. Serial No. 396,118. 2 Claims. (Cl. 248—20.)



1 An ash tray support for use in supporting ash trays on automobile window ledges and the wall below the window ledge comprising a bracket, a horizontal supporting ledge at one end of said bracket, a flexible and bendable extension at the other end thereof adapted to engage behind the window ledge and shape itself to the top and front of the window ledge to hold said bracket in a vertical position on the inside of the window ledge, outwardly projecting teeth provided intermediate of said bracket and adapted to engage the wall below the window ledge to prevent a vertical movement of said bracket after the upper extension thereof has been shaped over the window ledge.

1,863,989. BOAT. EVERT LIISANANTTI, Portland, Oreg. Filed Dec. 17, 1929. Serial No. 414,625. 2 Claims. (Cl. 115—3.)



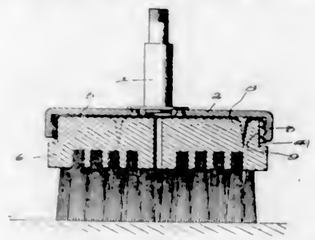
1 In a fishing boat the combination of a hull, a net handling drum mounted on the stern of said hull, fair leading rolls on said hull adapted to narrow the net for winding, a spooling means for guiding the narrowed end along said drum, and a power actuated propeller at the bow of said boat having means for varying its direction of pull

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1,863,990. COMPOSITION CONSTRUCTION OR INSULATING MATERIAL. WILLIAM K. NELSON, Chicago, Ill., assignor to Universal Gypsum & Lime Co., Chicago, Ill., a Corporation of Delaware. Filed Dec. 18, 1929. Serial No. 415,114. 20 Claims. (Cl. 106—18.)

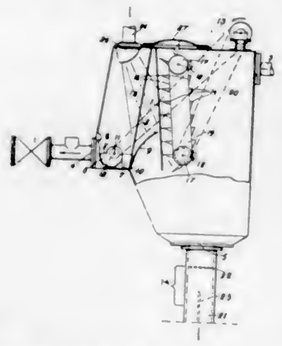
1 A moldable composition material resulting from a mixture comprising water, an inorganic, calcareous, construction material having plastic properties as the major ingredient and selected from the group consisting of calcined gypsum, Portland cement, hydrated lime and clay, and a substance selected from the group consisting of sulphonic acids of alkylated aromatic polynuclear hydrocarbons and salts thereof.

1,863,991. BRUSH HOLDER. ERNEST J. NEWCOMER, York, Pa., assignor to The Floorola Corporation, York, Pa., a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,684. 3 Claims. (Cl. 306—30.)



1. The combination with a brush holder having an internally threaded portion, of a brush head having a peripheral groove therein, a plate fixed to the end of the brush head and having the edge thereof bent back in said groove to form a ring, said ring being externally threaded and normally flared outwardly to be compressed upon engagement with the brush holder.

1,863,992. LIQUID FILTERING APPARATUS. NILS ENOK NILSSON, Aspabruk, Sweden. Filed Dec. 2, 1929, Serial No. 411,111, and in Sweden Dec. 4, 1928. 5 Claims. (Cl. 210—152.)

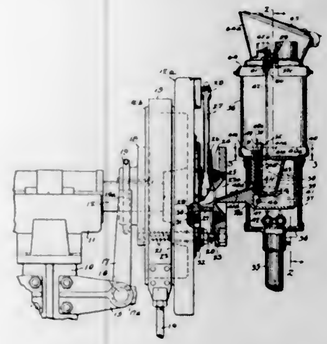


1. A filter comprising a liquid receptacle having a liquid inlet in one vertical side and a liquid outlet in its opposed side, a substantially vertical filtering screen in said receptacle between said inlet and outlet and in a plane transverse to the direction of liquid flow from said inlet to said outlet, means mounting said screen for movement toward and from said inlet and outlet and holding it against other movements, means for repeatedly moving said screen toward said inlet and for releasing it after each of such movements, and means for rapidly moving the screen again toward said outlet after each release of said screen, whereby the screen is washed of particles caught thereby.

1,863,993. CASTING MACHINE WITH METAL FEEDER. LEONARD G. OLANDER, Minneapolis, Minn., assignor to The Monomelt Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 23, 1929. Serial No. 365,345. 6 Claims. (Cl. 22—65.)

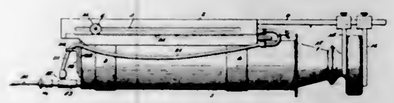
1. A machine for casting bushings in certain articles having in combination means for holding an article in

which the bushing is cast, said means having an opening through which metal is received to form said bushing, a metal pot, means for heating said pot and maintaining



a supply of molten metal therein, means for feeding molten metal from said pot, and means for measuring a definite amount of molten metal and discharging the whole quantity of measured molten metal through said opening.

1,863,994. APPARATUS FOR THE TRANSFUSION OF BLOOD. JOSE DAVID PARIETTI, Paysandu, Uruguay. Filed Mar. 27, 1930. Serial No. 439,424. 1 Claim. (Cl. 128—214.)



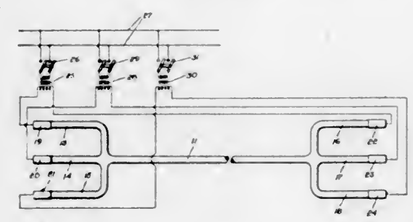
An apparatus for absorbing, citrating, and transfusing blood, comprising a syringe having a piston, a runner mounted above the said syringe, and having slotted side walls, a rack portion in the said slot, a shaft passing through said slots and carrying spur wheels engaging said rack, and a handle for rotating the said spur wheels; rollers also mounted on the said shaft, means mounted on said shaft having sliding and adjustable elements extending therefrom and engaging the said piston of the syringe, the said rollers and the inner lower surface of the runner defining a space therebetween, flexible tubing mounted in the said space and adapted to be squeezed by the rollers upon rotation and movement of the said shaft along the rack, and a nozzle for the said syringe connected to the said flexible tubing.

1,863,995. TOY BUILDING BRICK. FRANK PONSTINGL, Milwaukee, Wis. Filed June 30, 1930. Serial No. 464,975. 1 Claim. (Cl. 20—94.)



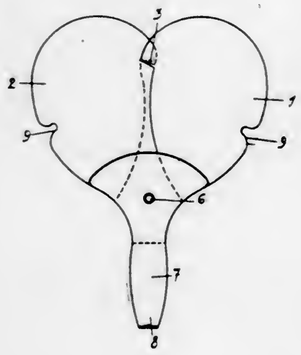
A corner construction for toy buildings, comprising corner blocks having dove tail grooves extending along and near the side edges and having engaging mitered ends, and a triangular block having dove tail extensions formed along its side edges and fitted in the grooves to secure the first mentioned blocks together.

1,863,996. LUMINOUS TUBE. WILLIS O. PROUTY, Hermosa Beach, Calif., assignor, by mesne assignments, to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Oct. 31, 1928. Serial No. 316,158. 11 Claims. (Cl. 176—124.)



1. In a device of the character described, a tube having a plurality of branches at each end, an electrode associated with each of the branches, and means for separately impressing a potential difference across separate pairs of electrodes, each pair including an electrode respectively at each end of the tube.

1,863,997. PLIABLE FAN. EVARISTO RIVA, Buenos Aires, Argentina. Filed Apr. 13, 1931, Serial No. 529,824, and in Argentina Mar. 14, 1931. 1 Claim. (Cl. 230—269.)

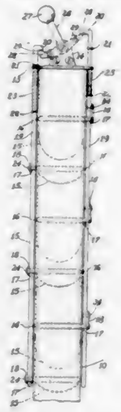


A pliable fan formed of cardboard, wood, sheet metal, celluloid, and the like, comprising a handle formed of two spaced, substantially parallel strips joined by a head portion, a plurality of pear-shaped sheets having elongated lower ends pivoted to said handle, and having grooves at their outer edges, the fan in its folded position having the sheets rotated about the said handle into overlapping relation with respect to each other, and so that the head portion of the handle engages in one of the said grooves to ensure that the fan is folded into its smallest possible compass.

1,863,998. ASH RECEIVER. HERMANN SICKMANN and CARL SICKMANN, Chicago, Ill. Filed Feb. 28, 1931. Serial No. 518,963. 2 Claims. (Cl. 206—19.5.)

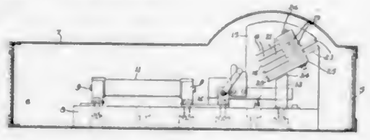
1. In a device of the class described a tubular body, a plurality of plates pivotally mounted in said body, means

for connecting alternate plates with each other, means for urging each series of plates, connected with each other,



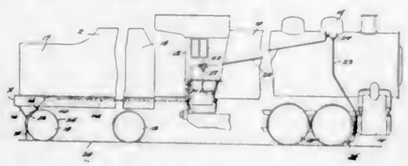
into closing position, and means for pivoting each series of plates into open position independently of the other series.

1,864,[illegible]. SWITCH MECHANISM. OLIVER S. JENNINGS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 13, 1922. Serial No. 606,565. 7 Claims. (Cl. 200—144.)



1. The combination with a movable switch blade and a contact jaw member therefor, of an arc-quenching device comprising a plurality of spaced plate structures arranged on opposite sides of the switch blade and disposed in a plane transverse to that in which the switch member moves and between the edges of which the switch blade passes in moving to open position with respect to the contact jaw member.

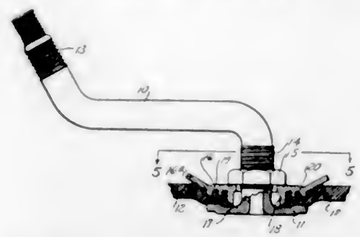
1,864,000. RAIL LUBRICATING DEVICE. HARRY G. BECKER, Albany, N. Y. Filed Jan. 8, 1931. Serial No. 507,472. 11 Claims. (Cl. 299—31.)



1. In a device of the class described, in combination, means for sanding the rail, means for supplying a cleaning fluid to the rail, and fluid pressure means for selectively actuating said first and second named means simultaneously or alternatively.

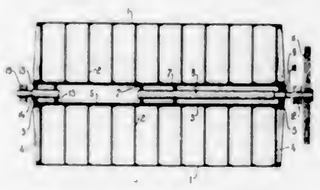
1,864,001. SEALING MEANS FOR TIRE VALVES. DELPHIN H. SPICER, Lakewood, Ohio. Filed Apr. 8, 1932. Serial No. 604,082. 13 Claims. (Cl. 152—12.)

3. In combination with a tire valve stem having a shank and a head, a washer having an opening through which said shank passes and between which and said head a tire tube is adapted to be confined, and metallic means providing a seal, independent of the area of contact be-



tween said tube and said head, to prevent the passage of air through said opening in the event such air should pass said area of contact.

1,864,002. WASHING MACHINE. SIMON HENRI STOFFEL, Delft, Netherlands. Filed July 21, 1930, Serial No. 469,583, and in the Netherlands Aug. 1, 1929. 3 Claims. (Cl. 68—18.)



1. In combination with a drum mounted for rotary reciprocation, a tubular member extending axially of the drum, and connected to the drum adjacent the axial terminals of the latter and otherwise free of connection with the drum, a drive shaft extending longitudinally of said member and having driving connection therewith only at the midlength of the member, and drum driving means connected to one end of the shaft.

1,864,003. METHOD OF MANUFACTURING SPOONS AND SIMILAR ARTICLES. KURT SPRINGORUM, Berlin-Dahlem, Germany. Filed Dec. 26, 1930, Serial No. 504,966, and in Germany June 4, 1930. 3 Claims. (Cl. 76—105.)

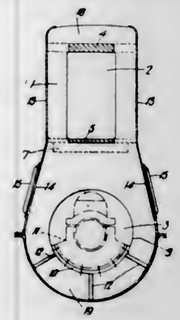


1. The method of manufacturing spoons and similar articles of copper-zinc alloy, comprising casting slabs of the alloy, machining said slabs, annealing them, heating them to higher temperature, rolling them to a given thickness from that temperature, rolling down the hot-rolled sheet in the cold, obtaining blanks from the cold-rolled sheet, and finishing said blanks by hot-forging.

1,864,004. ENGINE FRAME. CLEMENT HENRY STEVENS, Farnham Common, England. Filed Feb. 12, 1931, Serial No. 515,343, and in Great Britain Apr. 25, 1930. 4 Claims. (Cl. 121—194.)

1. A frame for a reciprocating engine of the vertical type, comprising vertical sheet metal plates having openings through which are passed horizontal plates which form the seatings for the cylinders, the upper and lower

portions of the vertical sheet metal plates forming girders which take the upward and downward thrusts due to the explosions in the cylinders and the vertical plates being



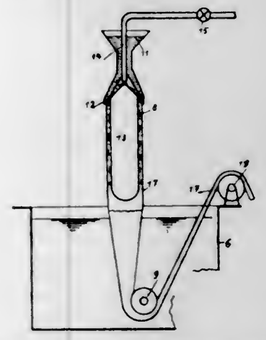
secured together by a wrapper plate member extending the whole length of both sides of the engine and from the base to the top and across the bottom.

1,864,005. STRAW WALKER. HEADLIE SHIPARD TAYLOR, Sunshine, Victoria, Australia, assignor to H. V. McKay Proprietary Limited, Sunshine, Australia. Filed Mar. 5, 1930, Serial No. 433,479, and in Australia Mar. 15, 1929. 10 Claims. (Cl. 130—26.)



5. A straw walker comprising a series of parallelly arranged and reciprocatingly mounted sections the outer sections having their upper surfaces provided with a series of transverse louvres including downwardly from their outer to their inner edges and the upper surfaces of the intermediate sections are provided with series of transverse inclining downwardly from the centres to the sides thereof.

1,864,006. APPARATUS FOR MANUFACTURING SEAMLESS FLEXIBLE TUBES FROM CELLULOSE SOLUTIONS. RICHARD WEINGAND, Bornlitz, near Walsrode, Germany. Filed Jan. 9, 1929, Serial No. 331,379, and in Germany Jan. 25, 1928. 1 Claim. (Cl. 18—5.)

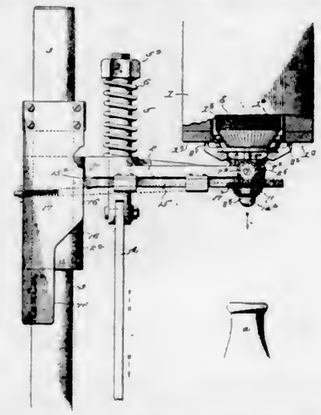


In an apparatus for the continuous manufacture of seamless flexible tubes from cellulose solutions comprising an annular nozzle, a conduit for supplying cellulose solution to said nozzle, a guide member for the cellulose solution issuing from said nozzle, a tube traversing said nozzle and supplying precipitant to said guide member and a vessel containing a fixing bath, the guide member being arranged beneath the annular nozzle and the vessel being situated below the guide member.

1,864,007. PROCESS FOR THE PRODUCTION OF COLORED DISCHARGE EFFECTS. HEINRICH WERDENBERG, Neu-Allschwil, near Basel, Switzerland, assignor to Firm Durand & Huguenin S. A., Basel, Switzerland. Filed Dec. 16, 1930, Serial No. 502,864, and in Germany Dec. 27, 1929. 2 Claims. (Cl. 8—5.)

1. A process for obtaining color discharge effects according to the principle of reduction, consisting in adding to the usual discharge printing color with the view of obtaining color discharge effects of increased intensity together with the reducing agent a chlorate as oxidizing agent.

1,864,008. TRANSFERRING OR DISPENSING SKIRTED PAPER DISKS OR CAPS AND THE LIKE. WILBUR L. WRIGHT and LEE D. PIERCE, Fulton, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed June 23, 1926. Serial No. 118,056. 29 Claims. (Cl. 226—88.1.)

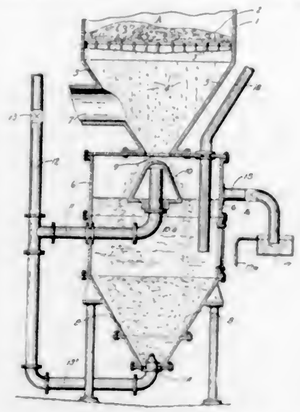


1. A cap transfer for removing caps successively from a cap supply and depositing the same in hood capping position on container heads, comprising a plunger having a plunger head and grippers for grasping a cap and holding the same to said head, and a movable carrier for conveying said plunger back and forth between a cap supply and the point of cap delivery, said plunger having a range of independent movement with respect to said carrier, said grippers being moved to gripping and to cap releasing position by said relative movement, means being provided to control and time said relative gripper operating movements.

1,864,009. APPARATUS FOR HANDLING SOLIDS. FRANK B. ALLEN, Lower Merion Township, Montgomery County, Pa., assignor to The Allen-Sherman-Hoff Company, a Corporation of Pennsylvania. Filed June 6, 1929. Serial No. 368,992. 2 Claims. (Cl. 302—15.)

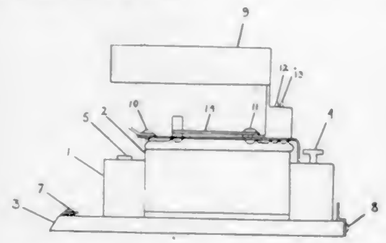
1. In apparatus of the class described, a tank having a top inlet opening for solids and an outlet for mixtures of liquids and solids, an overflow conduit leading from said tank, a liquid seal disposed at the discharge end of said overflow conduit and adapted to prevent the escape of gas from said tank, a liquid conducting conduit extending to the bottom portion of said tank and having a nozzle positioned to direct liquid upwardly into said tank, a

branch conduit leading from said liquid conducting conduit and extending to a point below said solids inlet opening, a closure member slidably mounted on said branch



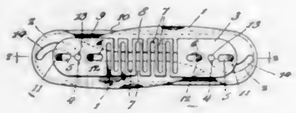
conduit below said solids inlet opening and valve means for controlling the flow of liquid through said liquid conducting conduit to said branch conduit and said nozzle.

1,864,010. ELECTRIC IRON. ALAN L. BECKET, East Orange, N. J. Filed July 18, 1928. Serial No. 293,660. 4 Claims. (Cl. 219—25.)



2. An electromagnetic iron, comprising a metal base and a metal core and insulated wire winding thereon, said core being placed in relation to said base in a manner to allow said core to vibrate in an upward and downward direction.

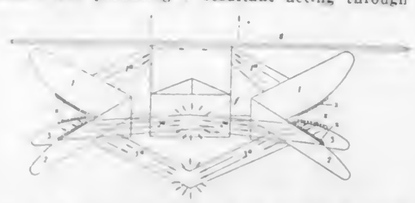
1,864,011. POCKETKNIFE. ROBERT E. BROWN, Olean, N. Y. Filed Aug. 3, 1931. Serial No. 554,900. 11 Claims. (Cl. 30—10.)



1. A knife having pivotally mounted blades, and longitudinally expansible plates extending between said blades with their end portions overlapping side faces of the blades and yieldably resisting opening and closing of the blades.

1,864,012. FLYING MACHINE. THOMAS AUGUSTUS DRING, Poulner, Ringwood, England. Filed Apr. 3, 1931. Serial No. 527,557, and in Great Britain Feb. 14, 1931. 3 Claims. (Cl. 244—25.)

1. Apparatus for lifting or sustaining a flying machine by the expansive force of opposing streams of compressed air produced by non-feathering rotary propellers arranged well towards one end of the body of the machine, the expansive forces set up by said stream acting on the underside of the body or other supporting surfaces of the machine and producing a resultant acting through the



centre of gravity, comprising propellers whose vanes are symmetrically positioned, and means for effecting a synchronized working of the propellers so that each independent stream of compressed air works in synchronism with and opposes the appropriate independent stream produced by the other set of rotary propeller blades or vanes.

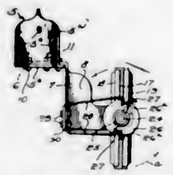
1,864,013. PROCESS FOR ELECTROLYTIC DEPOSITION OF METALLIC CHROMIUM. DWIGHT T. EWING, East Lansing, Mich. Filed July 30, 1926. Serial No. 126,094. 5 Claims. (Cl. 204—1.)

1. The process of electrodeposition of chromium which consists in electrolyzing an electrolyte consisting principally of a solution of chromic acid free from trivalent chromium and in maintaining the chromium in solution in the hexavalent state substantially free from trivalent chromium by electrolyzing the solution in the presence of a metallic ion having strong oxidizing properties.

1,864,014. CHROMIUM PLATING PROCESS. DWIGHT T. EWING, East Lansing, Mich. Filed Jan. 3, 1927. Serial No. 158,822. 6 Claims. (Cl. 204—1.)

1. An electrolyte for electrodeposition of chromium comprising a solution containing principally chromic acid, together with small amounts of cerium oxalate and sodium hydrofluosilicate.

1,864,015. COMBINATION REAR VIEW MIRROR SET FOR AUTOMOBILES. JOHN FOTAKIS, Detroit, Mich. Filed Apr. 1, 1930. Serial No. 440,851. 8 Claims. (Cl. 45—97.)

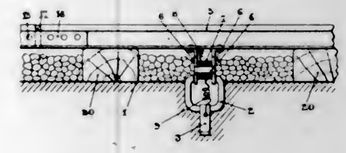


5. A structure of the character described, comprising a pair of mirrors facing in opposite directions, a plate disposed between said mirrors, a pair of trunnion blocks engaging over the edges of said mirrors, and end extensions upon said plate, engaged with said trunnion blocks.

1,864,016. AUTOMATIC SIGNALING DEVICE OPERATED BY THE OSCILLATIONS OF THE RAILS. NICOLAS GHERASSIMOFF, Bois-Colombes, France, assignor to Societe d'Avertisseur Ferrovoie, Paris, France. Filed Feb. 19, 1931, Serial No. 517,060, and in France Dec. 15, 1930. 1 Claim. (Cl. 246—245.)

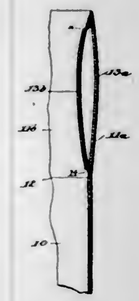
An indicating or signaling device adapted to be operated by the oscillation of the rails or ties of a railway during the passage of a train comprising, vibration transmission members, a pivoted lever, a pinion coaxial with the pivot

of the lever, a conical clutch connecting said members to said lever, the parts of which clutch are mounted upon the pivot of said lever, between the transmission members and



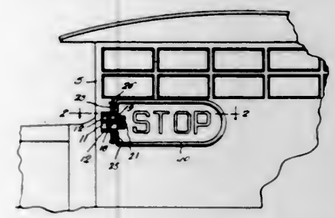
the pinion, electrical signaling means and a circuit adapted to be closed by said lever for operating said electrical signaling means.

1,864,017. HOSIERY. LAZURE L. GOODMAN, Indianapolis, Ind. Filed July 29, 1931. Serial No. 553,841. 7 Claims. (Cl. 2—239.)



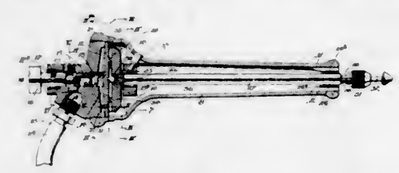
1. A flat-knit full-fashioned stocking having a double welt, the respective edges of the inner and outer fabric of the welt being seamed together independently one of the other.

1,864,018. STOP SIGNAL. EARL M. HICKS, Lebanon, Ind. Filed Mar. 21, 1932. Serial No. 600,327. 8 Claims. (Cl. 116—52.)



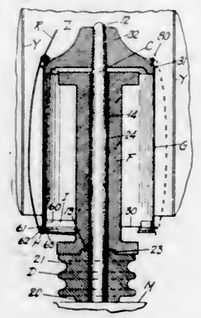
1. A stop signal for motor vehicles comprising a signal arm, means to pivotally mount said signal arm on the side of a vehicle body for horizontal swinging movement, a spring to normally swing said signal arm to an inoperative rearwardly projecting position alongside the vehicle body, and manually operable means to swing said signal arm forwardly to a laterally projecting operative position and to automatically retain the signal arm in the latter position until manually released, said signal arm embodying an elongated sheet of metal having a centrally grooved reduced integral extension on its inner end directed laterally and then curved inwardly to the body of the signal arm to provide a drum segment, said manually operable means including a cable atached to the signal arm and passing over the drum segment.

1,864,019. PORTABLE TOOL. JOHN ROBERT HOFFMAN, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Jan. 8, 1930. Serial No. 419,417. 10 Claims. (Cl. 253—3.)



1. A hand tool comprising a two-part casing; a turbine runner rotatably mounted in one of said parts, said one part containing a plurality of radial ribs forming longitudinal channels connecting the chamber adjacent said runner with atmosphere; and fluid pressure controlling and directing means within the other of said parts.

1,864,020. DOUBLE RING CAP FRAME. MARX INGHAM, Lowell, Mass. Filed Nov. 2, 1931. Serial No. 572,532. 3 Claims. (Cl. 118—49.)

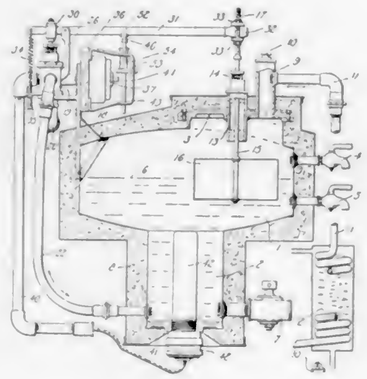


1. The combination in a worsted roving machine, of a frame, a fixed spindle rail, parallel guide spindles fixed thereto, a spool carrier slidable on each spindle together with means to revolve each spool carrier and to move it up and down on its spindle; separators fixed to the frame and positioned midway between the spindles and a wind break fixed to the frame behind the spindles; with a cap carried at its top at the top of each spindle, said cap having near its upper part a hardened outwardly projecting top strand guiding ring together with an upwardly projecting top traveller ring and at its bottom, downwardly and outwardly projecting traveller and strand guiding rings; a traveller slidable on, around and below said bottom traveller guiding ring; a traveller slidable on and around the top traveller ring; strand delivery rolls; and a guide eye rail between the delivery roll and the tops of the spindles, said guide eye rail including pivoted eye holders each formed with a guide eye in line with the axis of a spindle.

1,864,021. APPARATUS FOR EVAPORATING AND DISTILLING LIQUIDS. DOUGLAS GORDON JACK, Auckland, New Zealand. Filed July 22, 1930, Serial No. 469,843, and in New Zealand February 21, 1930. 9 Claims. (Cl. 202—181.)

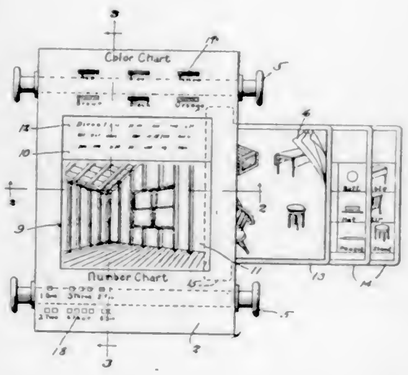
1. In an improved apparatus for evaporating and distilling liquids comprising an air-tight container, means for admitting liquid and maintaining same at a substantially constant level in said container, electric heating means for evaporating the liquid in said container, an outlet from said container for conveying the vapours to a condenser, means for breaking the flow of electric current

to said heating means if the liquid in said container should substantially fall below said contant level breaking means comprising a switch for making and breaking the electric current to said heating means, a cage over said switch carrying a tripper rod with tripper block and spring, an engaging piece at the top of said tripper rod, a pivoted



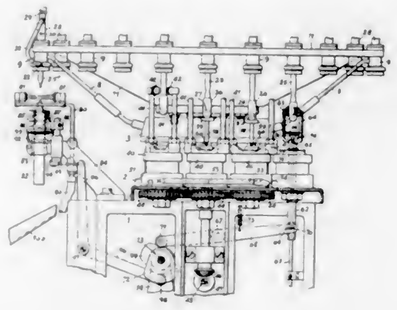
tripper arm adapted to engage said engaging piece and projecting to the vicinity of a control arm having a tappet extension adapted on appropriate movement of said control arm to come into contact with said tripper arm and release the same from said engaging piece, thus releasing said spring which forces said tripper rod downwardly causing said block or tripper rod to cut off the switch.

1,864,022. EDUCATIONAL DEVICE. MILDRED JEWELL, Miami, Fla. Filed Aug. 10, 1931. Serial No. 556,276. 2 Claims. (Cl. 35—12.)



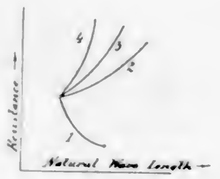
1. An educational device including a box, a movable cover therefor having an opening, a web within the structure and having a series of background illustrations adapted to be displayed successively through the opening, means for moving the web, a panel movable into and out of one side of the box, separate pages on the panel devoted to the respective illustrations on the web, each page containing cut-out pictures to be applied to the illustration associated therewith, there being a slot in the box in which the panel is slidable, and means on the panel cooperating with the end walls of the slot for limiting the outward movement of the panel relative to the box.

1,864,023. AMPUL MACHINE. WILLY LEDIG, Berlin, Germany, assignor to Patent-Treuhand-Gesellschaft fuer Elektrische Gluehlampen m. b. H., Berlin, Germany. Filed June 14, 1929, Serial No. 370,900, and in Germany June 16, 1928. 10 Claims. (Cl. 49—1.)



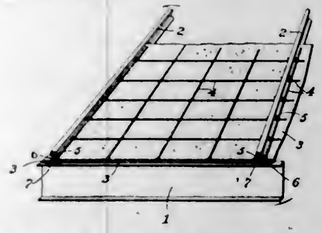
1. In a machine for exhausting and sealing ampuls and similar hollow glass articles in which the ampuls are stepped in a circular path and automatically evacuated; securing heads from which the blanks depend vertically, pairs of burner nozzles between which the blanks are stepped, for softening the necks of the blanks and vertically movable drawing tongs to draw the softened necks to small diameter for exhaustion means to exhaust the blanks, means to seal the blanks, and discharge means to discharge the finished ampuls.

1,864,024. METHOD OF EXPLORING GROUND. HEINRICH LÖWY, Vienna, Austria. Filed Mar. 9, 1928, Serial No. 260,395, and in Austria Mar. 12, 1927. 2 Claims. (Cl. 175—182.)



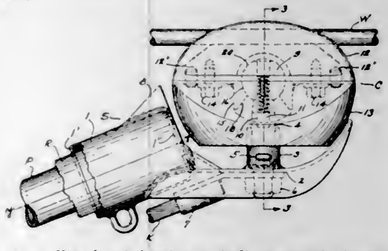
1. A method for determining the existence, the depth below the ground and the nature of strata, differing in electric properties from the surface, consisting in determining the natural wave length and the damping resistance of an overground high frequency oscillation circuit of given constants at a point of the ground to be explored, comparing the results thus obtained with a graph showing curves derived from known layers of different nature by marking the said found natural wave length and damping resistance as abscissæ and ordinates, on the said graph, the curve of the said graph into which falls the point having the said abscissæ and ordinates determining the nature of the said layer, its depth below the ground being indicated by the said wave length.

1,864,025. ROOF AND FLOOR CONSTRUCTION. CHARLES A. MARTIN, Detroit, Mich., assignor to Anchor Fireproofing Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 18, 1926. Serial No. 149,188. 1 Claim. (Cl. 108—6.)



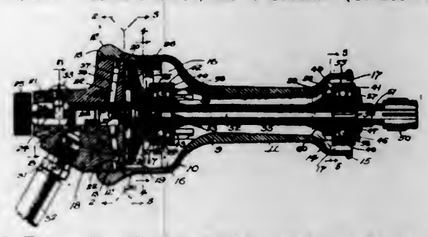
A floor or roof construction comprising supporting girders, rails extending transversely of said girders, plasterboard resting on the transverse rails, reinforcing means including a wire mat resting upon said plaster board and having return bent end portions engageable with the webs of said rails and a plastic filler poured on to said plaster board and embedding said wire mat.

1,864,026. TROLLEY HEAD. EDGAR D. MOORE, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Jan. 12, 1931. Serial No. 508,025. 31 Claims. (Cl. 191—59.1.)



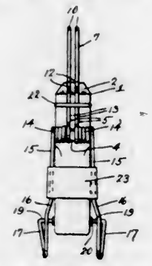
1. A trolley head having a ball mounted thereon and means to secure the head to a trolley pole, a shoe provided with an elongated contact groove and pivotally mounted on the ball in direct surface contact therewith with the vertical center line of the ball substantially intersecting the longitudinal center line of the groove, means attached to the shoe by a bayonet joint as described to secure the shoe in position on the ball, the shoe to pivot in a vertical plane coinciding with the longitudinal center line of the groove.

1,864,027. PRESSURE FLUID TOOL. AXEL PEDERSEN, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Sept. 16, 1931. Serial No. 563,202. 7 Claims. (Cl. 253—3.)



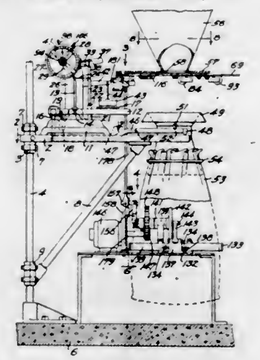
1. The combination in a fluid-operated tool of a casing one wall of which is provided with a pressure fluid inlet port, said wall having no fluid outlet; a turbine runner mounted for rotation in said casing with one face thereof opposed to said casing wall; a series of buckets arranged on said face of the runner in operative relation to the inlet port; and an annular flange on said face of the runner around the series of buckets, the clearance between said flange and said wall being only sufficient to permit operation of the runner and affording the sole avenue of escape for pressure fluid operating on the runner.

1,864,028. ART OF HANGING CLOTHES. ARNOLD R. RASMUSSEN, Sharon, N. Dak. Filed May 28, 1931. Serial No. 540,750. 1 Claim. (Cl. 24—137.)



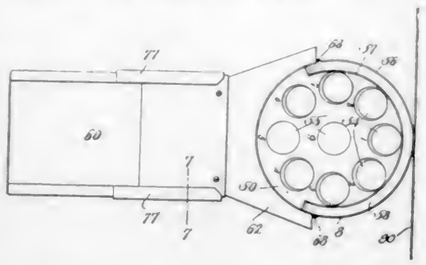
A clothes hanger comprising a bar having a beveled end portion, said bar further having a transverse channel in one side thereof and still further having longitudinal grooves extending from the channel over the beveled end portion thereof, the bar still further having a groove extending therearound intermediate the channel and the beveled end portion and intersecting the first named grooves, an integral supporting hook and clothes clamp mounted on the bar and comprising a length of resilient wire bent upon itself intermediate its ends to provide the hook, said hook comprising spaced, parallel side portions, said wire being further bent to provide parallel angular portions seated in the first named grooves, said angular portions merging with the hook portions at one end, said angular portions merging, at their other ends, with coil springs seated in the transverse channel, securing means engaged with the wire and seated in the second named groove, the clothes clamp comprising leg portions merging with the coil springs, said clamp further including upwardly and forwardly and then upwardly and rearwardly directed end portions said end portions terminating in inturned portions and a tubular sleeve mounted on the end portions.

1,864,029. WEIGHING APPARATUS. WILLIAM H. REES, Berkeley, Calif. Filed June 25, 1930. Serial No. 463,645. 27 Claims. (Cl. 249—63.)



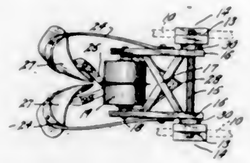
1. In an apparatus for weighing material, a scale having an indicator movable in accordance with the load thereon, an air-tight case enclosing said indicator, means on the scale for supporting a container in which the material flows as it is weighed, and electric control means associated with said scale indicator for controlling the flow of material into the container.

1,864,030. PRACTICE DEVICE FOR GOLF. CHESTER W. ROSS, Medford, Mass. Filed Aug. 6, 1930. Serial No. 473,377. 11 Claims. (Cl. 273—32.)



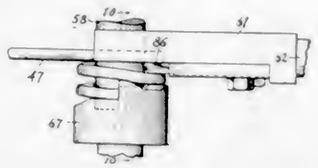
1. In a device of the character described, a casing having a front opening, an inclined runway extending from said opening towards the rear wall of said casing, a deflector interposed between the rear end of said runway and said rear wall for deflecting balls to one side or the other and a passage on each side, each passage extending from one side of said deflector and opening out in the front of said casing on one side of said runway.

1,864,031. BEET TOPPING ATTACHMENT FOR BEET PULLERS. GLENN H. SEELINGER, Greeley, Colo. Filed Feb. 9, 1931. Serial No. 514,553. 6 Claims. (Cl. 55—107.)



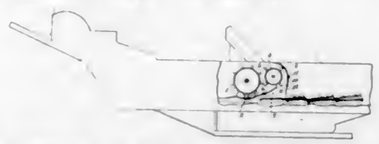
1. A topping attachment for a beet lifter of the type having a frame comprising: a pair of blocks; means for attaching said blocks to said frame; a lateral shaft supported by said blocks across said frame; a roller frame swingingly mounted on said shaft and extending downwardly and rearwardly therefrom; a roller journalled in said roller frame; bracket arms secured adjacent the upper portion of said roller frame and curving to a position immediately in the rear of said roller; a blade extending between the lower extremities of said bracket arms and positioned a predetermined distance below and at the rear of said roller.

1,864,032. WIRE COILING AND FORMING MACHINE. LEAVITT A. SHERTZER, Massillon, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 23, 1931. Serial No. 539,555. 4 Claims. (Cl. 10—73.)



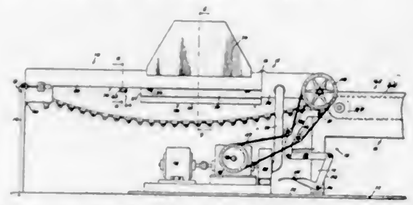
1. In apparatus of the class described, stock feeding means, a die into which the stock is fed endwise, said die having an arbor and means for coiling the stock into the form of a helix and including a finger projecting into the helical path of the stock and having a beveled surface for deflecting the stock axially of the helix, a die movable axially of said arbor and adapted to cooperate with said finger to form a reverse bend in one of the convolutions of the helix into which the stock has been coiled, and means for cutting said helix into sections.

1,864,033. THRESHING MACHINE. GEORGE WETTLAUFER, Saginaw, Mich. Filed July 19, 1930. Serial No. 469,007. 1 Claim. (Cl. 130—27.)



In combination a bean thresher having a rotatable toothed rear threshing cylinder, a co-acting toothed concave, a separating rack rearward of said threshing cylinder, a beater cylinder rotatably mounted rearwardly of the threshing cylinder and having prongs spaced apart approximately the length of a bean, a tined comb at the rear edge of said concave and hinged thereto for adjustment toward and from the beater cylinder and disposed across the path of movement of material discharged from the threshing cylinder, the tines of said comb extending upwardly and rearwardly from the hinge, their free ends being near the under side of the beater cylinder and arranged to interdigitate with the prongs thereof during rotation of the beater cylinder, said free end portions of the tines being yieldable, a curved hood enclosing the upper and rear parts of the beater cylinder, a baffle hinged at the lower edge of said hood, a flexible curtain of fabric suspended from the lower edge of the baffle and extending down close to the separating rack.

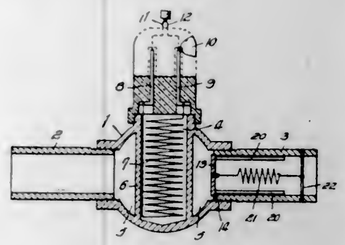
1,864,034. EGG CANDLING MACHINE. WILLIAM C. WYLAND, San Gabriel, Calif. Filed Apr. 17, 1930. Serial No. 445,129. 28 Claims. (Cl. 99—6.)



9. An egg candling machine having a trough shaped structure with the upper run of an endless chain extending therethrough, said chain having rotatable rollers thereon, a box structure having a hinged connection to the under side of the trough structure and having a bank of lamps therein, a longitudinal shelf secured to each side of the trough structure above the box having the lights, there being an opening between the shelves to expose the lights, a track slidable on each shelf, means forming a guide for each track, the rollers bearing on the track, a bar extending downwardly from each track, there being slots in the shelf and in the lower part of the trough structure to accommodate said bars, and a transverse handle connected to the bars and operable from either side of the trough structure to slide the said tracks longitudinally and thereby stop or change the speed of rotation of the rollers.

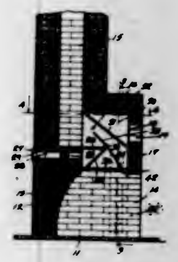
17. An egg candling machine having means to move eggs with a motion of translation between a source of light and an observer, with means to rotate the eggs while undergoing the movement of translation, and means to at will stop or slow the speed of rotation of the eggs while continuing the motion of translation.

1,864,035. ELECTRIC WATER HEATING DEVICE. LOUIS WYNER, University City, and JOHN L. WHEELER, St. Louis, Mo. Filed Dec. 15, 1930. Serial No. 502,313. 3 Claims. (Cl. 219—38.)



1. The combination of a water jacketed internal combustion engine having a water inlet pipe leading from a radiator and provided with a water circulating pump, of a hollow water heater body having an inlet and an outlet member coupled to the water inlet pipe, an electrical heating unit enclosed in said water heater body, a valve disposed within the heater body closing the inner end of the inlet member, fingers directed from said valve into the inlet member of the heater body for guiding the movement of the valve, a coiled spring of sufficient strength to normally hold the valve in a closed position and yet permit opening movement thereof by the action of the pump and said valve serving to prevent the back flow of water from the water heater body to the radiator while being heated by the electrical heating unit.

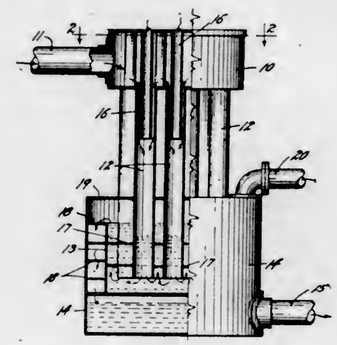
1,864,036. FIREPLACE CONSTRUCTIONS. ROY C. ZORNES, Los Angeles, Calif., assignor, by direct and mesne assignments, to N-U-Heat Company, Inc., a Corporation of California. Filed Mar. 20, 1929. Serial No. 348,518. 16 Claims. (Cl. 126—121.)



1. The combination of a fireplace with a metallic, box-like structure having a pair of curved legs extending downwardly and rearwardly from the rear wall thereof, a cross bar extending across the front face of said structure, the said legs and the cross bar serving to form a guide in making the brick work of the fireplace, and the box-like structure making a form around which the brick of the fireplace may be constructed and having a passage for the products of combustion.

1,864,037. APPARATUS FOR REMOVING GASES FROM PETROLEUM. DON C. ATKINS, Los Angeles, Calif. Filed Nov. 7, 1929. Serial No. 405,516. 3 Claims. (Cl. 183—2.5.)

1. Means for removing objectionable gases from oils comprising: a series of oil tubes, air pipes terminating within said tubes so that the flow of oil through said tubes will draw air through said air pipes; and a bowl, the lower extremities of said tubes being immersed in said bowl



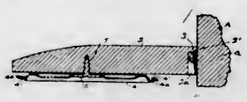
so that the contained air in said oil may bubble to the surface therein; and an oil receiver surrounding said bowl and adapted to receive the overflow therefrom.

1,864,038. MECHANICAL PENCIL. PIERRE BARBERON, Le Fayet, France, assignor to Pencil Mechanism Corporation, New York, N. Y., a Corporation of New York. Filed June 22, 1926, Serial No. 117,770, and in France June 24, 1925. 38 Claims. (Cl. 120—9.)



1. In a mechanical lead pencil, lead guiding means, a toothed lead propelling element rotatably mounted within the body of the pencil and engaging the lead tangentially, and driving means for rotating said lead propelling element.

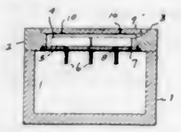
1,864,039. UTENSIL HOLDER. DE WITT M. BROWNSON, Syracuse, N. Y. Filed Jan. 16, 1931. Serial No. 509,173. 2 Claims. (Cl. 248—20.)



1. A holder for kitchen utensils comprising a substantially horizontal bracket having an end adapted to abut a supporting surface, said end being formed with an elon-

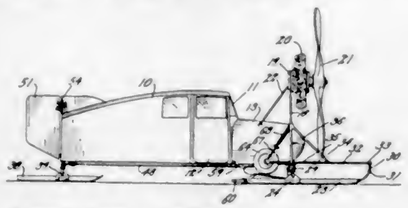
gated inclined recess extending throughout substantially the length thereof and providing a correspondingly inclined wall, and said wall of said recess being provided with spaced recesses disposed at right angles to the elongated recess, and a plate in said elongated recess secured to said wall thereof and having downwardly opening slots alined with the right angular recesses to receive similar fasteners which may be permanently secured to the supporting surface, said plate being angularly disposed in the elongated recess so as to exert a wedging action with the fasteners to draw the bracket tightly against the supporting surface.

1,864,040. CONTAINER. PHILIP S. CAMPBELL, Houston, Tex., assignor of one-half to March Culmore, Harris County, Tex. Filed Feb. 1, 1929. Serial No. 336,729. 1 Claim. (Cl. 62—91.5.)



A container having a storage compartment, a cover therefor, said cover having a refrigerant compartment, the bottom of said refrigerant compartment being formed of a perforated metal plate having a wood lining, tubes aligned with the perforations of said plate and depending into the storage compartment, said cover having an outside removable cover plate forming the top of the refrigerant compartment and having vents therethrough.

1,864,041. MOTOR DRIVEN SLEIGH. HAROLD E. EMIOH, Walden, Colo. Filed Mar. 29, 1930. Serial No. 439,971. 4 Claims. (Cl. 180—3.)



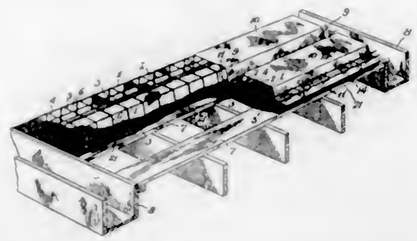
1. A motor sleigh comprising; a fuselage; a pair of forward runners supporting the forward portion of said fuselage; means for maintaining said runners parallel with the axis of said fuselage; a rear guide runner; means for turning said rear guide runner in a horizontal plane to guide said fuselage; an air rudder extending rearwardly from said fuselage; means for causing said air rudder to swing simultaneously with said said rear runner; comprising: a tubular stern post, a steering shaft rotatably mounted in said stern post and projecting above the top thereof; arms projecting from said steering post; hooked arms projecting from said rudder; and links slidable on said hooked arms communicating the motion of said steering post arms thereto a power operated propeller arranged to propel said fuselage.

1,864,042. LAND LEVELER. WILLIAM E. FISHER, Compton, Calif. Filed May 21, 1931. Serial No. 539,022. 11 Claims. (Cl. 55—12.)



1. A land leveler having a pair of side skids, a draw bar connected to said skids, a set of harrowing disks mounted between the skids at their forward portion, and a plurality of fixed blades inclined to the skids and overlapping each other.

1,864,043. FORM FOR MAKING FIREPROOF FLOOR CONSTRUCTION. CLARENCE E. GRUBER, Canton, Ohio, assignor to The Macomber Steel Company, Canton, Ohio, a Corporation of Ohio. Filed June 27, 1928. Serial No. 288,599. 12 Claims. (Cl. 25—131.5.)

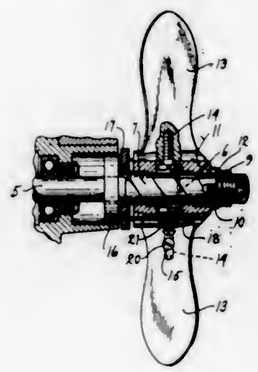


10. A form for making fireproof floor constructions comprising an openwork skeleton frame formed of metal bars secured together, said frame having a top and two opposed divergent sides, and flexible material covering the top and sides of the frame when the form is in use, space below the top and between the divergent sides being open whereby a plurality of frames may be nested when not in use.

1,864,044. METHOD OF MANUFACTURING RUBBER ARTICLES. EARDLEY HAZELL, New York, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Aug. 19, 1927. Serial No. 214,205. 39 Claims. (Cl. 18—50.)

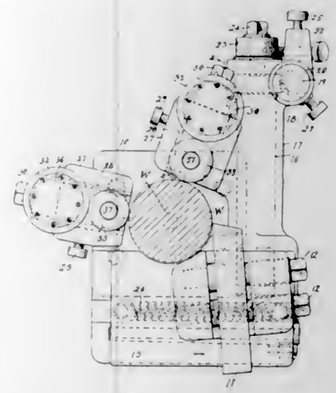
39. A method of increasing the filterability of vulcanized latex which comprises diluting, heating and adding colloidal sulphide to the vulcanized latex.

1,864,045. VARIABLE SPEED PROPELLER. BERT F. KELLOGG and FORREST M. KENT, Spokane, Wash. Filed Nov. 2, 1931. Serial No. 572,574. 3 Claims. (Cl. 170—162.)



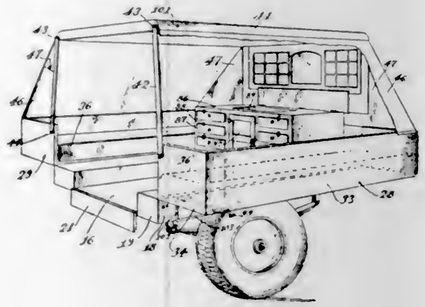
1. A variable speed propeller comprising in combination a wormed shaft, a wormed hub mounted on the shaft, propeller blades concentrically pivoted to the hub, and a disc member revolubly mounted on the shaft and having arms eccentrically pivoted to the propeller blades.

1,864,046. WORK SUPPORT FOR MACHINE TOOLS. MAX E. LANGE, Cleveland Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 28, 1930. Serial No. 491,729. 16 Claims. (Cl. 82—35.)



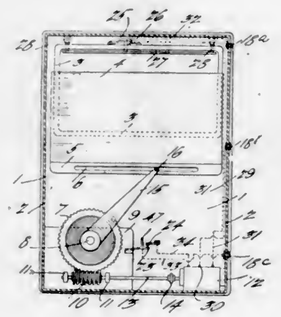
1. In a work and tool holding unit, a cutting tool for engagement with a work piece, and thrust-resisting means including an inner roller engageable with the work piece and an outer roller engageable with the periphery of the inner roller.

1,864,047. EXPANDING COACH. ROY E. LAWHORNE, Santa Barbara, Calif. Filed Apr. 2, 1931. Serial No. 527,145. 7 Claims. (Cl. 296—23.)



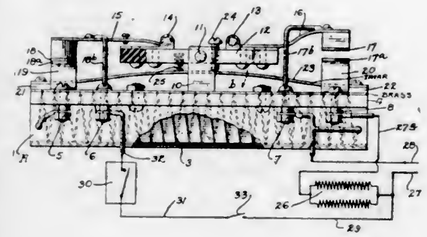
1. A vehicle body construction comprising a bed adapted to be secured to a chassis, side sections extending longitudinally of said bed and hinged thereto for movement about their lower outer corners, each of said side sections comprising an outer wall, end walls, and a top wall, and the inner edges of the end walls and the top walls of said sections abutting each other when in collapsed position, means for supporting said side sections in extended position with said outer walls disposed horizontally, a couch on the inner face of the outer wall of at least one of said sections, a top corresponding in width to the combined width of said side sections and adapted to rest upon said top walls when said side sections are in collapsed position, means for simultaneously swinging said side sections outwards to extended position, and a plurality of links for raising and supporting said top, each of said links being pivoted at one end to said top adjacent a side edge thereof and at its other end adjacent an inner lower corner of one of said side sections.

1,864,048. AUTO WINDOW CONTROL. RALPH MCNUTT, Bay View, Wash. Filed Mar. 13, 1931. Serial No. 522,429. 2 Claims. (Cl. 268—124.)



1. In combination with an automobile having a door with a sliding window panel, a motor mounted in the door, connections between the motor and the window panel to raise and lower the latter, a pair of switches mounted in the steering wheel of the automobile, wiring connected to the motor and extending to contacts on the edge of the door, wiring carried by the automobile and the steering wheel, said wiring having contacts with which the switches cooperate, contacts in the last mentioned wiring to cooperate with the first mentioned contacts to close the circuit when the door is closed, cut outs in the first mentioned wiring above and below the window panel to break the circuit when the window panel reaches its lowermost or uppermost position, and a source of electrical energy in the wiring.

1,864,049. METHOD AND APPARATUS FOR CONTROLLING ELECTRIC CIRCUITS. HARRY A. MULVANY, Berkeley, Calif. Filed Apr. 29, 1930. Serial No. 448,250. 4 Claims. (Cl. 200—122.)



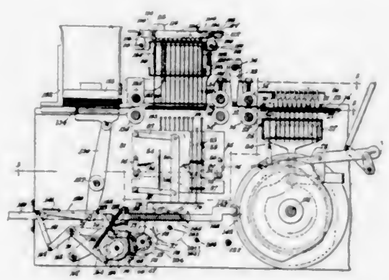
1. In a device of the character described, an expansion member, an electrically energized heating coil whereby it is actuated, a main electric circuit controlled by the expansion member, and means actuated by the expansion member for making and breaking a circuit through the heating coil to prevent excess heating of the expansion member.

1,864,050. FOUNTAIN PEN. HUBERT A. MYERS, Toledo, Ohio. Filed Oct. 27, 1930. Serial No. 491,332. 4 Claims. (Cl. 120—48.)



1. In a fountain pen, a resilient ink bag, means for closing and opening each end of the bag, a member operative by one closing means to operated the other closing means, and a bag depressing means for emptying and filling the bag.

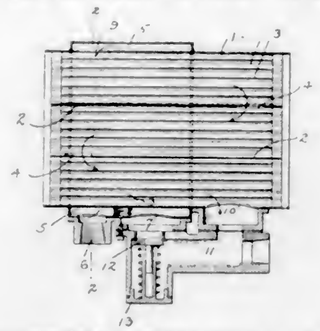
1,864,051. PERFORATED CARD CONTROLLED MACHINE. ROBERT EDWARD PARIS, New York, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Substitute for or continuation in part of applications Serial No. 104,713, filed Apr. 26, 1926, and Serial No. 141,162, filed Oct. 12, 1926. This application filed Aug. 13, 1927. Serial No. 212,731. 47 Claims. (Cl. 235—60.)



6. In a perforated card controlled machine the combination of a main operating mechanism, an analyzing unit, means for feeding cards successively to said unit at a predetermined rate, a total mechanism, and means operated through said analyzing unit by a change of card group designation for operating said total mechanism and causing said card feeding means to operate at a different rate relative to said main operating mechanism.

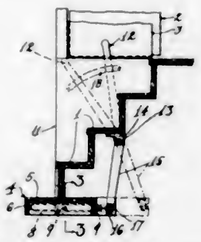
46. The combination of a main operating mechanism acting in cycles, card feeding means normally acting to feed one card for each cycle, means for sensing a designation in the cards, and means controlled by said sensing means for reducing the rate of operation of said card feeding means so as to cause the latter to feed one card for a plurality of cycles of said main operating mechanism.

1,864,052. OIL TEMPERATURE REGULATOR. REUBEN G. DYKEMAN, Dayton, and DUDLEY W. WATKINS, Fairfield, Ohio, assignors to United Aircraft Products, Inc., Dayton, Ohio, a Corporation of Ohio. Filed July 2, 1931. Serial No. 548,353. 15 Claims. (Cl. 257—236.)



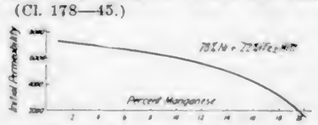
1. In a cooler for a congealable liquid, a radiator body having passages for the circulation of the liquid to be cooled, a warming jacket surrounding the radiator body, a supply inlet to the jacket, an inlet port from the jacket to the radiator, an outlet conduit leading from the radiator and a valved port between the jacket and the outlet conduit and a tensioned valve controlling said last mentioned port.

1,864,053. STAIR FOR RAILROAD COACHES AND THE LIKE. EDWIN S. EBERLEIN, Pittsburgh, Pa., assignor of one-half to Walter J. Clapper, Pittsburgh, Pa. Filed Apr. 6, 1931. Serial No. 527,948. 4 Claims. (Cl. 105—427.)



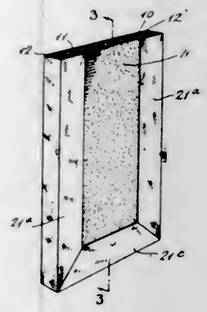
1. In a railway coach and the like, the combination of a stair having stationary steps and stringers, an auxiliary horizontally movable step positioned at the lower end of said stair; means positioned on said stringers for slidably supporting said auxiliary step in a fixed horizontal plane, a lever operable from within said coach to actuate said auxiliary step in and out of operative position; unitary means positioned on one of the stringers to guide and limit the movement of said lever; said guide-means having recesses adapted to be engaged by the lever, and said lever being transversely resilient and initially bent in the direction of said recesses to normally engage same.

1,864,054. MAGNETIC MATERIAL. GUSTAF W. ELMEN, Leonia, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 29, 1926. Serial No. 125,697. 15 Claims. (Cl. 178—45.)



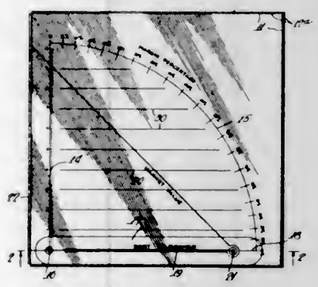
1. A magnetic material comprising substantial quantities of nickel and manganese as essential elements thereof and having higher permeability than iron at low magnetizing forces.

1,864,055. ROOFING MATERIAL. WILLIAM H. FINKELDEY, New Rochelle, N. Y., assignor to Singmaster & Breyer, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,772. 6 Claims. (Cl. 154—51.)



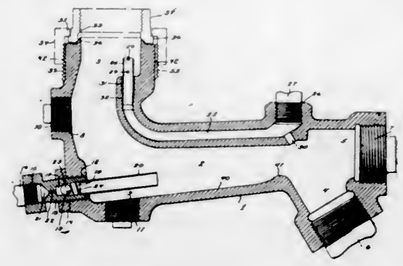
1. A roofing element of the character described comprising a base member formed of fiber board of rigid, inflexible, heat insulating character but compressible and relatively yieldable to indentation and a weather proof protective covering of "dead soft" ductile corrosion resisting metal foil whereby blows on the covering sheet are absorbed by said base, permitting the covering sheet to flow and dent through a substantial distance without rupture.

1,864,056. CALCULATING DEVICE. EDWARD T. FRANKEL, New York, N. Y. Filed Apr. 14, 1931. Serial No. 529,922. 20 Claims. (Cl. 235—89.)



1. In a calculating device of the class described, a chart carrying member displaying a straight scale graduated in terms of certain quantities, an indicator arm pivoted at one end of the scale, a second scale with which the free indicating end of said arm is adapted to coact, an actuating member for the indicating arm having a straight lower edge adapted to be maintained at right angles to the first mentioned scale and an edge disposed at 45° to said lower edge, both of said edges being adapted to register with known quantities on the first mentioned scale, said actuating member at the corner where the said edges intersect being pivotally and slidably connected to said indicator arm, whereby as the actuating member is shifted into setting position with respect to the first mentioned scale, the end of the indicator arm is moved into reading position on the second mentioned scale.

1,864,057. LOCOMOTIVE SANDING TRAP. VIRGIL L. FRANTZ, Roanoke, Va., and GEORGE H. KNAUFF, West St. Paul, Minn., assignors to Graham-White Sander Corporation, Roanoke, Va., a Corporation of Virginia. Filed Nov. 18, 1930. Serial No. 496,496. 11 Claims. (Cl. 291—11.)

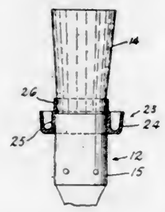


1. In a locomotive sand trap, a trap body having an inlet leg for sand and an outlet leg, a blast nozzle device mounted adjacent the lower portion of the inlet leg and extending toward the outlet leg, said blast device including a constricted jet and a discharge tube with a ball check valve interposed therebetween.

1,864,058. RECOVERY OF ORGANIC ACIDS. HANS FRANZEN and MARTIN LUTHER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 8, 1929, Serial No. 376,841, and in Germany Aug. 8, 1928. 3 Claims. (Cl. 260—116.)

1. The process for the recovery of organic acids from acid oxidation products of high molecular organic compounds which comprises saponifying the oxidation product with an aqueous suspension of an alkaline earth metal hydroxide in excess quantity of that required for saponification, separating any aqueous layer formed, drying the product obtained and subjecting it to extraction with benzine.

1,864,059. SELF-SEALING ONE-PIECE DRIP COLLECTOR. SAMUEL M. FRENKEL, New York, N. Y., assignor to Superset Brush Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 15, 1932. Serial No. 598,891. 1 Claim. (Cl. 15—248.)

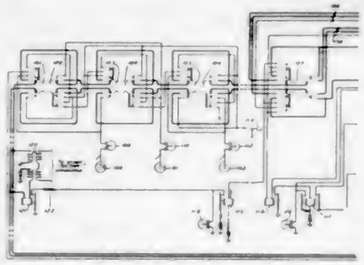


A paint drip collector annular cup for brushes and separable therefrom, including an inner elongated annular wall and an outer annular wall continuously connected to the lower end of said inner wall at the bottom of the cup to form an annular cup therewith having a central opening for slidably receiving a brush, the inner wall projecting to a substantial degree beyond the outer wall, said walls being of one piece elastic construction, whereby the drip collector cup can be pulled upon a brush by grasping the projecting free edge portion of the inner wall.

1,864,060. PROCESS FOR TREATING RUBBER LATEX AND PRODUCT. WILLIS A. GIBBONS, Montclair, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 8, 1930. Serial No. 434,465. 8 Claims. (Cl. 18—50.)

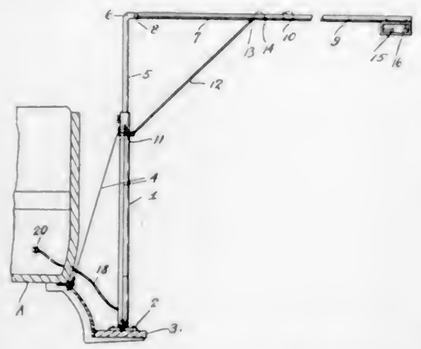
1. Process for treating rubber latex which comprises incorporating with the latex an easily hydrolizable salt of a volatile acid and a volatile base, and manufacturing rubber from the latex by evaporation methods.

1,864,061. TELEPHONE RINGING SYSTEM. JOHN W. GOODERHAM, Larchmont, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1931. Serial No. 562,446. 11 Claims. (Cl. 179—175.)



1. In a telephone system, a first office, a plurality of sources of ringing current at said first office, a second office, a similar plurality of sources of ringing current at said second office, a trunk circuit connecting said offices, a telephone circuit outgoing from said second office, means to apply ringing current from one of said sources at said first office to said trunk circuit, means associated with said trunk circuit at said second office for determining the nature of incoming ringing current, and means responsive to the operation of said determining means to apply ringing current from the corresponding one of said plurality of sources at said second office to said outgoing telephone circuit.

1,864,062. MOVABLE TRAFFIC SIGNAL. BRUCE B. GOODIN, Farmer City, Iowa. Filed Mar. 7, 1931. Serial No. 520,865. 1 Claim. (Cl. 116—52.)



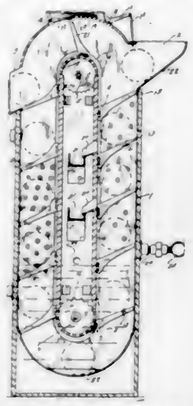
A device of the class described comprising a tubular post, means for connecting the same to a part of the vehicle, a member slidably arranged in the post, and having its upper end bent, a sectional arm having one end pivotally connected with the bent end, the two sections being hingedly connected together, with the hinge at the upper side of the section, a signal at the outer end of the outer section, a collar slidably arranged on the post, and a brace pivotally connected with the collar and having its upper end engaging a notch in the inner section.

1,864,063. MAGNESIA PROCESS AND MAGNESIUM VALUES RECOVERY. HAROLD W. GREIDER, Plymouth Meeting, Pa., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Apr. 18, 1929. Serial No. 356,296. 17 Claims. (Cl. 23—201.)

1. The process of recovering magnesium values from tailings liquor produced upon precipitating basic magnesium carbonate from a magnesium bicarbonate solution, comprising precipitating therefrom magnesium hydroxide and an alkaline earth carbonate by dissolving therein an alkaline earth metal hydroxide.

13. The process of obtaining basic magnesium carbonate and a mixture of magnesium hydroxide with an insoluble metallic carbonate, comprising precipitating basic magnesium carbonate from a solution of magnesium bicarbonate, separating the precipitated basic magnesium carbonate from the tailings liquor, precipitating magnesium hydroxide and a metallic carbonate from said tailings liquor by dissolving therein the hydroxide of a metal whose carbonate is considerably less soluble than its hydroxide and whose carbonate is also considerably less soluble than basic magnesium carbonate, and recovering said mixed precipitates of magnesium hydroxide and insoluble metallic carbonate.

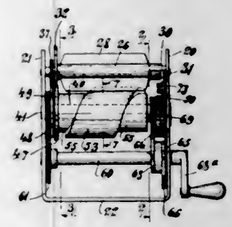
1,864,064. DISHWASHING MACHINE. CHARLES G. HALL, Boise, Idaho, assignor to Automatic Food Machinery Corporation, Boise, Idaho. Filed Feb. 3, 1930. Serial No. 425,700. 4 Claims. (Cl. 141—9.)



1. In a device of the class described, the combination of a cabinet, a feeding station disposed at the upper end of one side of the cabinet, a discharge station disposed upon the oppositely disposed side of the same end of the cabinet, a power driven endless conveyor disposed within the cabinet, spaced blades disposed upon the endless conveyor and adapted for being driven past the receiving and discharge stations, partitions dividing the cabinet into channels disposed longitudinally of the cabinet in which the blades disposed upon the endless conveyor move, trap doors disposed within the feeding station and being normally closed, means for opening the trap doors periodically, and spraying heads disposed within each side of each of the channels.

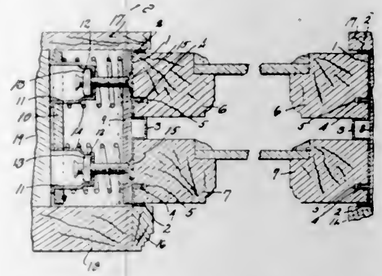
1,864,065. RAZOR BLADE SHARPENER. JOHN HOLTZMAN, New York, N. Y. Filed Aug. 27, 1925. Serial No. 52,722. 3 Claims. (Cl. 51—96.)

1. A mechanical combination including a rotatable sharpening element, a rotatable element carrying a blade, an arm extending from said blade carrying element, a drive shaft, means actuated by said drive shaft to engage said arm to keep the blade in tension against said sharpening element, a gear on said shaft, a second gear in constant mesh with said first gear, a third gear for reversing said blade carrying element, a tension spring ar-



resting said third gear, means on said second gear to actuate said third gear against the tension of said spring for each complete revolution of said second gear, and said spring being adapted to retain said third gear in a predetermined operative position on its pivot for proper engagement thereof by said actuating means.

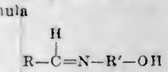
1,864,066. WINDOW CONSTRUCTION. GEORGE H. HOWENSTEIN, Detroit, Mich. Filed Feb. 3, 1930. Serial No. 425,463. 4 Claims. (Cl. 20—12.)



1. In a window construction, a window frame, a pair of sash slidably mounted in the window frame, a sheet metal sash guide formed to provide a channel for each sash, a stiffening strip mounted behind the sash guide, a second strip in spaced relation with the stiffening strip, a pair of hollow sheet metal anchor members mounted in the second strip and extending toward the stiffening strip, each anchor member being provided with a hole in the end, a screw extending through each sash channel and through the hole of the respective anchor member, a nut on each screw within the anchor member, each anchor member on the interior being formed to prevent rotation of the nut in relation thereto, and a coiled spring about each anchor member and screw and tending to force the stiffening strip and second strip apart.

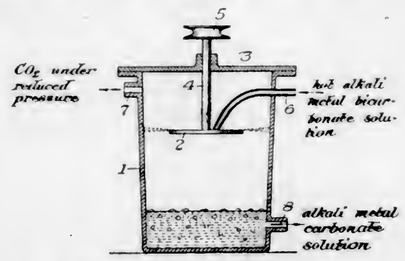
1,864,067. TREATMENT OF RUBBER. LOUIS H. HOWLAND, Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 6, 1930. Serial No. 433,811. 12 Claims. (Cl. 18—50.)

1. A method of retarding the deterioration of rubber which comprises treating rubber with a compound having the general formula



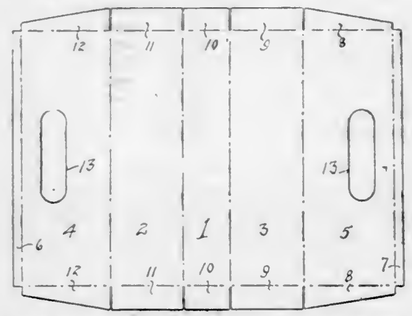
in which R is an aromatic radical and R′— an arylene radical.

1,864,068. MANUFACTURE OF CARBON DIOXIDE. CHARLES L. JONES, Pittsburgh, Pa. Filed Oct. 4, 1928. Serial No. 310,396. 10 Claims. (Cl. 23—150.)



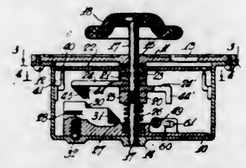
1. In the method of purifying carbon dioxide wherein carbon dioxide gas is absorbed in an absorption chamber by a solution of alkali carbonate to form alkali bicarbonate and the bicarbonate solution is thereafter decomposed, the step which comprises dispersng the hot bicarbonate solution into small particles at a lower pressure than the pressure in the absorption chamber.

1,864,069. CONTAINER. VESS JONES, New York, N. Y. Filed Jan. 19, 1929. Serial No. 333,719. 2 Claims. (Cl. 229—52.)



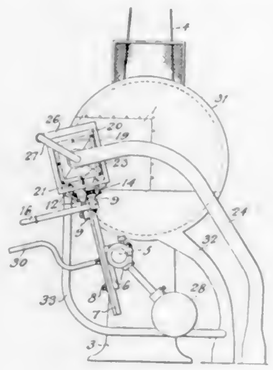
1. In a container made of a one piece blank the construction comprising a single body of flexible material having at least seven united portions delineated by lines of fold between said portions, at least five of said seven portions having end pieces secured thereto but separated from each other by slots, said blank being adapted to be folded along the lines of delineation and the end pieces being adapted to be folded at the point where they unite with the said parts to form a closed container having a flat bottom and sides comprising straight and inclined portions, the inclined portions of the sides having openings to provide a handle for the container.

1,864,070. COMBINATION ELECTRICAL SWITCH. EMIL KAISER, Brooklyn, N. Y. Filed Sept. 7, 1929. Serial No. 390,921. 13 Claims. (Cl. 200—43.)



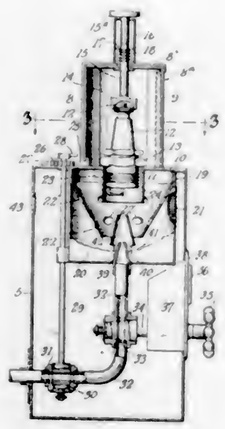
1. In an electrical switch, a stationary contact element, a movable contact element, and means for intermittently advancing the movable contact element in steps of different magnitude into engagement with the stationary contact element to complete an electric circuit.

1,864,071. GRINDING MACHINE. WILLIAM J. KENT, Brooklyn, N. Y., assignor to The Mechanical Rubber Company, Chicago, Ill., a Corporation of New Jersey. Filed Oct. 28, 1927. Serial No. 229,320. 7 Claims. (Cl. 51—235.)



3. A machine for grinding sheet material, comprising a support having a suction face, evacuating means cooperating with said face to hold said material to the support, a grinding wheel, means for relatively moving said support and grinding wheel whereby to present said material to the wheel in grinding relation or withdraw it therefrom, and means connected to said evacuating means adapted to remove the products of abrasion.

1,864,072. COIN-OPERATED SPARK-PLUG CLEANER. MOSES H. KLEINFELD, New York, N. Y. Filed Apr. 11, 1931. Serial No. 529,383. 5 Claims. (Cl. 51—8.)

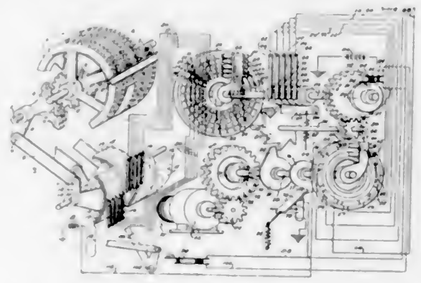


1. In a spark plug cleaner, a housing having a controllable air admission member, a dome affixed to said housing, said dome having an opening, a shuttle slidable to control the opening, means to hold a spark plug in a predetermined position within said dome and housing, means to close said shutter and simultaneously open said air admission member, and means to clean the base of the spark plug while held in such predetermined position.

1,864,073. PRODUCTION OF BACTERICIDE SURFACES. KAMILL KOHN, Bokau, and THEODOR GRUSCHKA, Aussig, Czechoslovakia. Filed Mar. 17, 1928, Serial No. 262,594, and in Czechoslovakia Feb. 25, 1928. 1 Claim. (Cl. 167—19.)

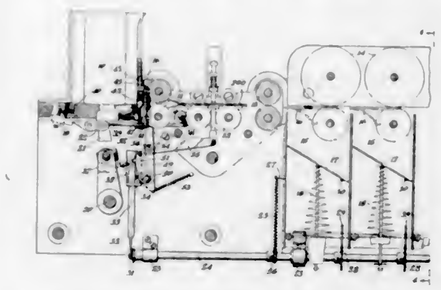
The treatment of surfaces subjected to contact by bacteria carriers, by the production on said surface in each case of a bactericide layer comprising mercury stearate.

1,864,074. TELEGRAPH SIGNALING SYSTEM. HOWARD L. KRUM, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,734. Renewed Jan. 6, 1931. 38 Claims. (Cl. 178—17.5.)



1. In a telegraph system, a plurality of transmitter devices each arranged to transmit a plurality of code signals, a single distributor, means for switching said distributor successively from one to another of said transmitters, a signaling line, and means including said distributor for successively impressing code combinations of impulses on said signaling line from each of said transmitters.

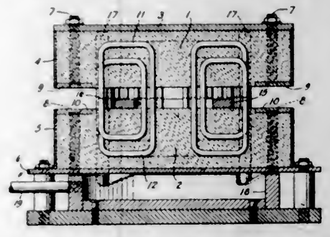
1,864,075. CARD-BOX CONTROLLED NONFEED DEVICE. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 28, 1927. Serial No. 179,024. 15 Claims. (Cl. 209—110.)



1. The combination with sorting mechanism for perforated cards including a card magazine, and card receptacles having spring-supported card-supporting plates, of means operable by said plates for effecting lifting of cards in said magazine.

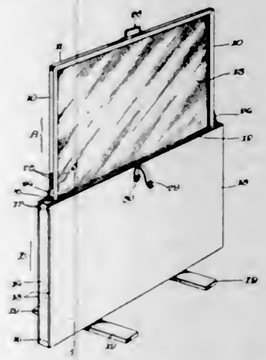
1,864,076. HIGH FREQUENCY FURNACE. VICTOR E. LEOG, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 17, 1928. Serial No. 312,971. 8 Claims. (Cl. 219—47.)

1. In a furnace for heating a core to a high temperature, a toroidal coil comprising a plurality of split turns, adapted to be separated to permit the insertion of the core to be heated, means for maintaining both halves of said coil in accurate alignment as they engage and disengage, said



means comprising a plurality of guide rods, and actuating means therefor comprising a plurality of wedge shaped surfaces for evenly moving said guide rods.

1,864,077. PORTABLE MOTION PICTURE SCREEN. GEORGE P. LEWIS, Forest Hills, and RAYMOND E. SABIN, Flushing, N. Y. Filed Feb. 14, 1930. Serial No. 428,296. 6 Claims. (Cl. 88—24.)



1. A combined portable motion picture screen and a casing therefor, the casing having a bottom member and end members slightly wider than the thickness of the screen, side members connected to the bottom and end members, cooperating guiding means on the screen and the end members to permit the screen to slide in the casing, said screen being arranged to be extended above the casing, means for holding said screen in its extended position, and a pair of basal members pivoted to the bottom member arranged to extend transversely of the casing to form feet for the casing when the screen is extended and to extend parallel to the bottom member when the casing is used as a carrying case for the screen.

1,864,078. PRODUCTS OF LATEX CHARACTER AND A PROCESS FOR PRODUCING THE SAME. MARTIN LUTHER, Mannheim, and CLAUS HEUCK, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 4, 1928, Serial No. 244,550, and in Germany Jan. 8, 1927. 7 Claims. (Cl. 260—6.)

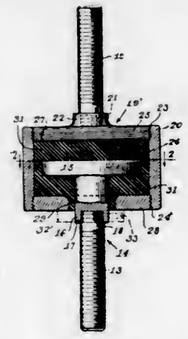
1. The process for the production of stable substances of latex character, which comprises emulsifying diolefines in aqueous media with emulsifying agents having a soap-like character, and polymerizing the emulsified materials in the presence of buffer systems.

7. As a new article of manufacture, a product of latex character comprising water, a sulphonic acid and a polymerized diolefine emulsified in the water.

1,864,079. OXIDATION OF LIQUID HYDROCARBONS. MARTIN LUTHER and HANS KLEIN, Mannheim, Germany. Filed August 1, 1930, Serial No. 472,484, and in Germany Aug. 6, 1929. 5 Claims. (Cl. 260—106.)

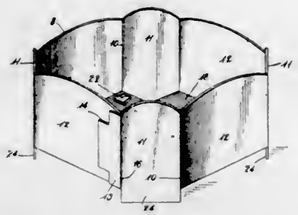
1. In the oxidation of liquid hydrocarbons of the benzine series boiling below 180° C. in the liquid state with the aid of a gaseous oxidizing agent while heating, the step which comprises incorporating the initial material before the oxidation with at least 2 per cent its weight of an aliphatic, saturated carboxylic acid containing up to 4 carbon atoms in its molecule.

1,864,080. NONMETALLIC CONNECTION. NORMAN G. MADGE, Providence, R. I., assignor to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Dec. 10, 1927. Serial No. 239,236. 4 Claims. (Cl. 267—63.)



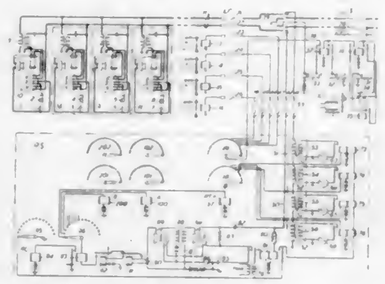
1. A combined insulating and vibration-dampening device for connecting relatively movable parts, comprising a housing adapted to be secured to one of the parts, a member attached to another part and including a headed portion disposed within the housing, and vibration-dampening insulating material filling said housing and embedding said headed portion, the latter having a broad peripheral face disposed relatively close to and parallel with the opposite peripheral wall of said housing and adapted to prevent lateral shifting of said headed portion with respect to said housing.

1,864,081. BLANK AND COLLAPSIBLE BOX FORMED THEREFROM. WILLIAM S. MARR, Nutley, N. J., assignor to Bakeries Service Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,944. 6 Claims. (Cl. 229—39.)



1. A collapsible box formed from a blank having transverse score lines dividing the same into a plurality of panels which when folded form sides for the box, alternate panels forming opposed sides of the box having bottom flaps extended therefrom and folded into interlocked relation to form the bottom of the box, and the entire intervening panels being extended beyond the bottom of the box to form supporting legs supporting the box bottom in spaced relation to an object upon which it is placed.

1,864,082. TELEPHONE EXCHANGE SYSTEM. ROBERT F. MASSONNEAU, Scarsdale, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 25, 1931. Serial No. 565,053. 20 Claims. (Cl. 179—8.5.)



1. The combination in a telephone system of a line having a calling dial, a plurality of sources of current each of a different characteristic, automatic switches, means responsive to the operation of said dial for selecting a particular one of said sources of current, and means responsive to other operations of said dial for sending impulses of current supplied from said selected source to cause the selective operation of said automatic switches.

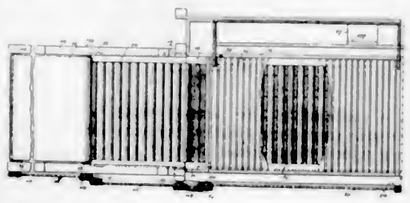
1,864,083. METHOD OF ANNEALING NITRIDED STEEL. WILLIAM J. MERTEN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan 30, 1930. Serial No. 424,727. 3 Claims. (Cl. 148—15.)

1. In the process of removing nitrogen from alloys which have been subjected to a nitriding process, the steps which comprise heating the alloy in a bath comprising one or more chlorides of the alkali or alkaline-earth metals for a sufficient length of time to cause a reaction between the metal constituent of the salt and the nitrogen in the surface material of the alloy.

1,864,084. METHOD OF REMOVING GASES FROM INCLOSED SPACES. HENRY MILLER, Newark, N. J., assignor to New Process Metals Corporation, Newark, N. J., a Corporation of New Jersey. Filed Apr. 15, 1926. Serial No. 102,307. 4 Claims. (Cl. 250—27.5)

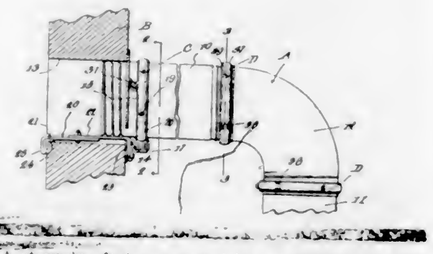
1. As an article of manufacture a thermionic tube having a getter material containing an alloy of cerium and other metals having a nitride and suboxide of certain rare earth metals therein.

1,864,085. FRUIT WASHING APPARATUS. ANDREW O. MOE, Toppenish, Wash., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Mar. 24, 1928. Serial No. 264,286. 8 Claims. (Cl. 146—194.)



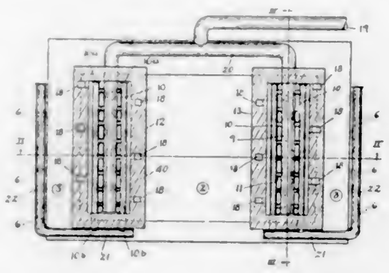
1. In a machine of the class described, means to cause the fruit to travel, means to direct cleaning liquid to the fruit while on the first traveling means, and a drying assemblage adapted to receive the fruit after being cleaned, said drying means including a traveling conveyor for the fruit, and brushes above the conveyor adapted to brush water from the fruit on said conveying means; together with a traveling belt above said brushes on to which belt water is adapted to be splashed by the brushes.

1,864,086. STOVEPIPE FASTENER. HORACE MONROE, Scipio, Utah. Filed Feb. 17, 1930. Serial No. 429,196. 2 Claims. (Cl. 126—318.)



1. A stovepipe fastener comprising a split band having a smooth inner gripping face and apertured ears on each side of the split portion thereof, a pair of resilient ears formed on one edge of the band on each side of the apertured ears, an adjustable locking bar having its opposite ends provided with chimney engaging ears, and a forwardly extending apertured arm provided with serrated faces, said arm lying between the apertured ears of the split band, shims having their inner faces serrated and disposed between the apertured ears and in engagement with the serrated faces of the arm, and an adjusting bolt extending through the apertured ears of the band through the shims and the serrated arm of the locking bar.

1,864,087. RECUPERATOR. GEORGE D. MOOMAW, Syracuse, N. Y. Filed Mar. 29, 1930. Serial No. 440,016. 10 Claims. (Cl. 263—20.)

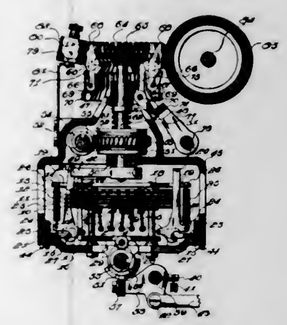


2. In a furnace structure including walls and a roof of refractory material, and a door covering an entrance through said walls, the combination of a flue chamber, a plurality of passages in the roof of said furnace for the conduction of the hot products of combustion of the furnace to said flue chamber, such passages being of unequal area and adapted to short-circuit to the flue chamber air entering the furnace when said door is in position to uncover said entrance, a recuperator pipe member located in the flue chamber for the conduction of air to be preheated by said products of combustion, such recuperator pipe member consisting of an inlet pipe, lateral pipes arranged adjacent said inlet pipe, and a series of nipples interconnecting the inlet and lateral pipes, and a header associated with said lateral pipes to receive the air which moves from the inlet pipe and through the nipples to the lateral pipes, ports in said flue chamber for affording the

said products of combustion an outlet therefrom, and shutters and shutter-operating means for the control of said ports.

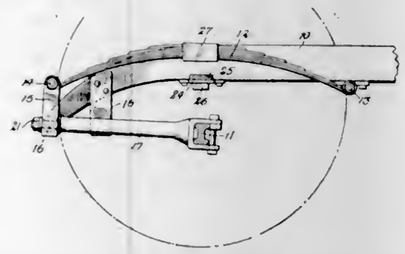
6. In a furnace structure including walls and a roof of refractory material, and a door covering an entrance through said walls, the combination of a flue chamber, a plurality of passages for the conduction of the hot products of combustion of the furnace to said flue chamber, such passages being of unequal area and adapted to short-circuit air which enters the furnace when said door is in position to uncover said entrance, and ports for the escape of said products of combustion from said flue chamber.

1,864,088. SELECTING MECHANISM. STERLING MORTON, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill. Filed Feb. 23, 1927, Serial No. 170,373. Renewed Sept. 18, 1929. 98 Claims. (Cl. 178—27.)



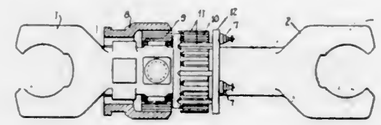
1. In a printing telegraph receiver, a stationary paper platen, a plurality of selecting members, a plurality of latch members selectively operated by said selecting members, a plurality of type bar members individual to and controlled by said latch members, and a movable carriage for supporting all of said members.

1,864,089. SPRING SUSPENSION FOR VEHICLES. OSCAR MULLER, Hempstead, N. Y. Filed Apr. 28, 1928, Serial No. 273,632. Renewed Nov. 9, 1931. 1 Claim. (Cl. 267—19.)



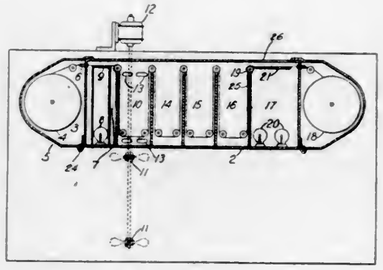
In a spring suspension for vehicles including a chassis frame, an axle underlying the same and supporting wheels carried by the axle, a lever fulcrumed to the chassis frame intermediate its ends to provide a long lever arm attached to the axle and a short lever arm and a normally bowed spring anchored at one end to the chassis frame and secured at its opposite end to the free end of the short lever arm whereby upon relative movement of the chassis frame and axle toward each other the spring is deflected and straightened while relative movement of the same away from each other under the reflex action of the spring is retarded and means on the chassis frame extending alongside of said longer lever arm for guiding the same in its movements.

1,864,090. DRIVE MECHANISM FOR THE ROLLS OF ROLLING MILLS. PAUL MÜLLER, Dusseldorf, Germany, assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany, a Corporation of Germany. Filed May 23, 1931, Serial No. 539,602, and in Germany June 25, 1930. 3 Claims. (Cl. 80—1.)



1. In combination with the roll of a rolling mill, a driving spindle comprising two parts one journalled within the other, a friction coupling operatively connecting said two parts, one of said parts being provided with coupling teeth, and a movable sleeve mounted on the other part and provided with teeth to engage said coupling teeth thereby rigidly connecting said parts.

1,864,091. METHOD AND MEANS OF TESTING PHOTOGRAPHIC DEVELOPERS. IAN H. PARSONS, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 2, 1930. Serial No. 440,903. 5 Claims. (Cl. 95—5.)

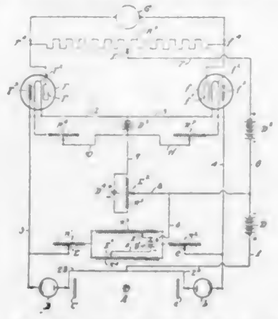


1. The method of testing a photographic developer which comprises moving a portion of photosensitive material past an illuminated area, moving said exposed material in said developer for a known time at a known temperature, rinsing, fixing and again rinsing said developed material and comparing the density developed in said material with a series of areas of graded density to indicate the increase in time required for complete development.

1,864,092. METHOD AND APPARATUS FOR ELECTRICAL MEASUREMENT. FREDERICK A. PEARSON, Great Barrington, Mass. Filed July 8, 1927. Serial No. 204,397. 6 Claims. (Cl. 250—41.5.)

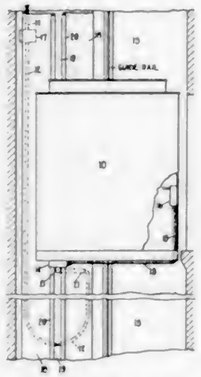
3. The combination with two photo-electric cells, of cell energizing means including a common source of current and resistances in circuit portions individual to the two cells, amplifying means including a pair of three electrode thermionic valves having their grids connected to said circuit portions at points between which a potential difference is created by a difference in resistances of the two cells, a resistance and a measuring instrument connected in parallel with one another between the plates of said valves, a connection from an intermediate point

in said resistance to a common point of the filament circuits of said valves, means for impressing a bias on each grid filament circuit including provisions for adjusting



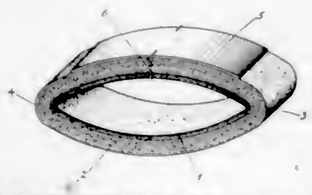
the bias on the two circuits similarly to regulate the strength of the plate currents, and relatively to one another to compensate for irregularities in the valves.

1,864,093. ELEVATOR CONSTRUCTION. ARTHUR ENNIS PRINCE, Merrick, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 23, 1930. Serial No. 477,208. 6 Claims. (Cl. 187—1.)



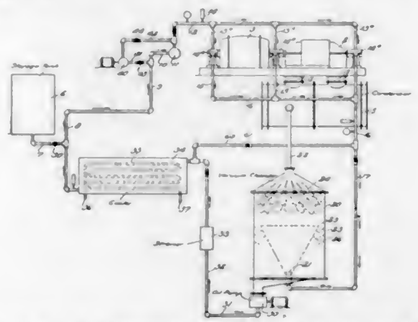
1. In an elevator installation, a hatchway, an elevator car therein, a flexible member hanging in the hatchway with one end attached to the car and the other end attached at a point in the hatchway, and means for confining said flexible member to such definite portion of the hatchway as to prevent said member from fouling objects in the hatchway during movement of the car.

1,864,094. INK BLOTTER. UUNO ILMARI RIKKONEN, Helsinki, Finland. Filed Dec. 11, 1928, Serial No. 325,243, and in Finland Nov. 8, 1928. 1 Claim. (Cl. 120—24.)



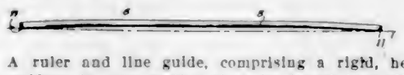
An ink blotter comprising a strip of heavy paper material wound upon itself in a substantially elliptical formation, the wound portions of said paper being glued together to form a self-supporting body, a relatively long continuous strip of blotting paper wound in several superposed layers about said body, a protecting plate substantially covering one of the exposed faces of said wound blotting paper, and an elastic band fixed to said plate and encircling said body and blotting paper whereby the plate may be slid to the other exposed face of the blotter while being constantly urged in closed contact therewith by action of said elastic band.

1,864,095. OIL RECLAIMING AND PURIFYING SYSTEM. CLARENCE J. RODMAN and RUSSELL P. DUNMIRE, Alliance, Ohio, assignors to The Buckeye Twist Drill Company, Alliance, Ohio, a Corporation of Ohio. Filed Dec. 30, 1929. Serial No. 417,355. 7 Claims. (Cl. 184—6.)



1. In an oil purifying and reclaiming system for an engine having a condenser and an oil distributing system for lubricating the bearings, a vacuum chamber connected to the condenser, connections for conveying oil from the oil distributing system to the vacuum chamber, and means for returning purified oil from the vacuum chamber to the oil distributing system.

1,864,096. RULER. SAMUEL M. SCHENKEIN, Newark, N. J. Filed Sept. 23, 1926. Serial No. 137,292. 7 Claims. (Cl. 33—75.)



1. A ruler and line guide, comprising a rigid, heavy strip uniform in cross section along its length bent slightly and uniformly from end to end so that the ends thereof will exert a greater pressure on paper sheets than the intermediate portion, thereby preventing vacuum between the ruler and paper and a drag on the latter.

1,864,097. MANIFOLDING MATERIAL. JOHN Q. SHERMAN, Dayton, Ohio. Filed Oct. 6, 1927. Serial No. 224,488. 10 Claims. (Cl. 282—28.)



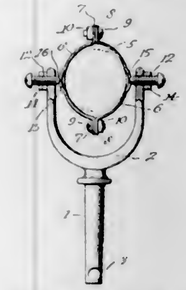
1. A record sheet, a coating of transfer pigment on the back thereof and a coating of cohesive, sealing material overlying the coating of pigment, said coatings being disposed in distinctive immiscible strata.

1,864,098. OARLOCK. EUGENE SISSON, Hudson, N. Y. Filed July 5, 1929. Serial No. 376,194. 1 Claim. (Cl. 9—26.)

An oar lock comprising a standard terminating at its upper end in forked arms, said arms provided with aligned threaded openings, an elongated sectional sleeve of non-

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circular cross section arranged to be detachably mounted between said arms, the sections of said sleeve having vertically disposed outwardly extending abutting flanges, means extending transversely through said flanges for clamping the sections to an oar, the outer surface of each

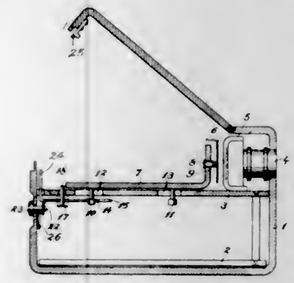


section adjacent the openings in the forked arms having an outwardly bulged portion provided with a recess, screws extending through the openings in said arms and engaging the recesses to permit rocking movement of the sleeve and its ready removal from the standard, and means for locking the screws in a predetermined position.

1,864,099. CELLULOSE ESTER LACQUERS. GERHARD STEIMMIG, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 3, 1928, Serial No. 290,266, and in Germany Apr. 24, 1925. 5 Claims. (Cl. 134—79.)

1. A composition of matter comprising 100 parts of cellulose nitrate, 25 parts of an artificial resin obtained from methyl-cyclohexanone, 25 parts of the neutral phthalic ester of ethylene glycol mono-butyl ether, 350 parts of butyl acetate, 100 parts of butanol and 400 parts of a mixture of ethyl alcohol, benzene and benzine.

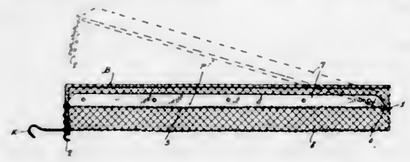
1,864,100. FILM GUIDE FOR PHOTOGRAPHIC CAMERAS. OTTO STEINER, Berlin-Spandau, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Apr. 10, 1931, Serial No. 528,997, and in Germany Aug. 15, 1930. 9 Claims. (Cl. 95—34.)



1. A film camera having a casing provided with a cover, said camera including a film guide provided with a movable member, means for locking the cover, and an operative connection between said locking means and the movable member of the film guide.

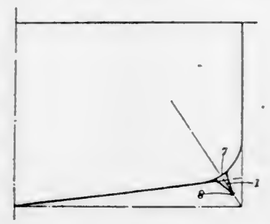
1,864,101. BACON PRESS. HARRY B. STROUP, Alamosa, Colo. Filed Mar. 18, 1931. Serial No. 523,640. 1 Claim. (Cl. 99—2.)

A press for pressing bacon and the like comprising a basket formed of a frame and wire mesh, one end of the basket being closed and the other open, a clamp member formed of a rectangular frame and covered with wire mesh fitting in the basket, longitudinal extending brace members having tapered ends fastened to the end members of the rectangular frame with the lower edges contacting the mesh, a plurality of hooks, on one of the end members of the rectangular frame for engaging por-



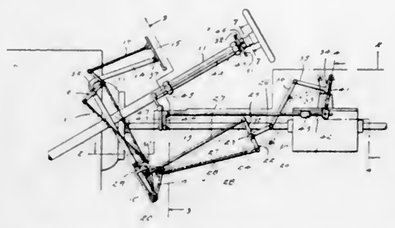
tions of the wire mesh at the closed end of the basket, a wire pivoted to the other end member of the rectangular frame and bent into a plurality of loops for engaging the end member of the basket at the open end thereof, and a hook member pivotally connected to said last mentioned end member of the basket.

1,864,102. BILGE KEEL OR THE LIKE ANTIROLLING DEVICE FOR SHIPS. EDMUND VICTOR TELFER, Newcastle-Upon-Tyne, England. Filed Apr. 11, 1930, Serial No. 443,495, and in Great Britain Apr. 16, 1929. 3 Claims. (Cl. 114—142.)



1. An anti-rolling device for ships comprising a plurality of relatively short bilge keels of symmetrical stream-line form with rounded nose and tapering run aft spaced apart at intervals longitudinally on each bilge of the ship, said bilge keels being provided with flow-caps at their outboard edges substantially parallel to the hull surface.

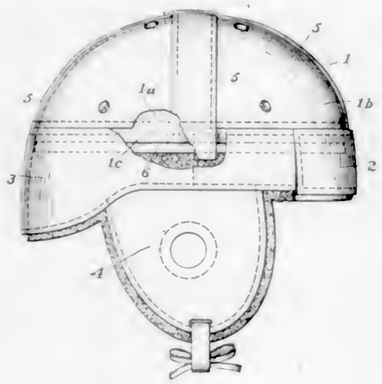
1,864,103. AUTOMATIC GEAR SHIFT. JESSE S. TENBROOK, Oakland, Calif. Filed Mar. 17, 1931. Serial No. 523,331. 5 Claims. (Cl. 74—58.)



1. In combination with a transmission, a pair of rockable members loosely mounted on the clutch lever shaft, connecting means connecting each of said members with the transmission shifting lever, one of said members upon rocking thereof swinging said lever in one direction, the other of said members swinging said lever in the reverse direction, selective means mounted on the clutch pedal and engaging each of said members whereby to rock the shifting lever in the selected direction, and manually con-

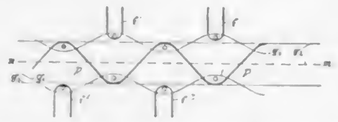
trolled means operable from a point remote from the transmission and engaging the shifting lever whereby to shift said lever laterally upon movement thereof into neutral position.

1,864,104. HELMET. EDWIN W. TILL, Philadelphia, Pa., assignor to A. J. Reach Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 29, 1930. Serial No. 457,405. 2 Claims. (Cl. 2—3.)



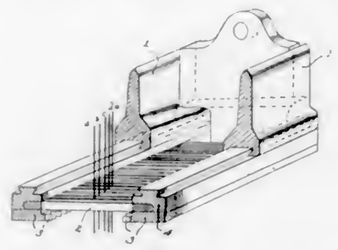
1. A protective helmet having a crown of rigid inflexible material provided with a leather covering, said crown having its margin depending below the edge of the covering and terminating on a line above the ears at all points, leather protectors for the forehead and sides and back of the head having their upper margins secured to the outer face of the depending portion of said crown and with their upper edges in juxtaposition to the edge of the leather cover, and a reinforcing strip overlying the inside of the lower edge of the crown and secured thereto.

1,864,105. PROCESS FOR THE MANUFACTURE OF CURTAIN AND SIMILAR WOVEN STUFF. JACOB VAN DEN BERGH, Nijmegen, Netherlands, assignor to Naamlooze Vennootschap Gebrs. Van Den Bergh's Industrie en Handelmaatschappij, North Brabant, Netherlands, a Company of the Netherlands. Filed May 29, 1929, Serial No. 366,989, and in Germany Mar. 27, 1929. 2 Claims. (Cl. 139—307.)



1. A woven fabric for curtains or similar hangings comprising a woven web formed of a single series of tensioned warp threads extending substantially straight therethrough, a single series of warp threads shedded alternately above and below said series of tensioned warp threads, weft threads inserted in the sheds formed by said two series of warp threads, design pile loops extending about all the weft threads on the same side of the tensioned warp threads to form a patterned surface, and a second series of design pile loops extending about all the weft threads on the other side of the tensioned warp threads to form a like or different patterned surface, the pile loops and their engaging weft threads being on the same side of the tensioned warp threads respectively, whereby the patterned surface on each face is distinct from that on the other face and invisible from the other face.

1,864,106. LOOM FOR THE MANUFACTURE OF PILE FABRICS. PAUL VENAIL, Paris, France, assignor to Societe Anonyme de Fabrication des Tapis a Points Noues "Saftan", Paris, France. Filed Dec. 12, 1927, Serial No. 239,558, and in France Aug. 25, 1927. 3 Claims. (Cl. 139—4.)

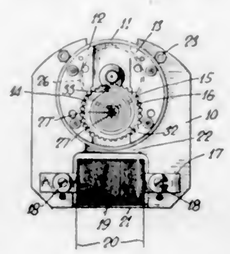


1. In a loom for the manufacture of pile fabric more particularly oriental, Persian, wound and other knot-stitch carpets of the kind referred to, the combination of a batten, two selector combs associated with said batten to move therewith and means for reciprocating said batten and selector combs transversely to the warp threads for the purpose of imparting transverse movement to selected warp threads, substantially as described.

1,864,107. PROCESS OF MAKING CORES. WILLIAM H. WALTER, Cynwyd, Pa. Filed Jan. 20, 1931. Serial No. 510,057. 3 Claims. (Cl. 22—188.)

1. The process of making cores of metal castings, which consists in mixing a solution of celluloid with a volatile solvent such as acetone or butanol to form a paste, and mixing the paste with core sand in the proportion of from ten to twenty-five percent of paste to sand.

1,864,108. SYNCHRONOUS MOTOR. RICHARD H. WHITEHEAD and WILSON E. PORTER, New Haven, Conn., assignors to The New Haven Clock Co., New Haven, Conn., a Corporation of Connecticut. Filed Nov. 26, 1929. Serial No. 409,809. 14 Claims. (Cl. 172—275.)

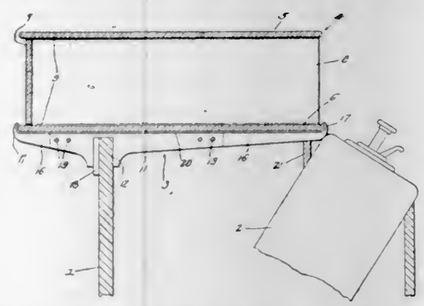


1. In a synchronous motor of the character described, the combination comprising a stator, means for energizing the same, a rotor, driven means associated with said rotor, a yielding member for transmitting driving force from said rotor to said driven means, and an inertia member disposed in loose frictional engagement with said rotor, and adapted to rotate with the same.

1,864,109. DISPLAY COUNTER CASE. WYATT Y. WHITLEY, Fremont, N. C. Filed Apr. 24, 1931. Serial No. 532,640. 5 Claims. (Cl. 312—114.)

1. In combination with a counter structure including a front wall, horizontally disposed brackets mounted

transversely on the upper edge of the front wall, a display case mounted on the brackets, each bracket comprising an intermediate portion and arms mounted on the

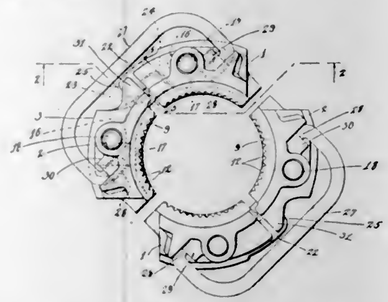


end portions of said intermediate portion, each arm having a hook at its outer end for engagement with the display case for securing the same in position on the bracket.

1,864,110. PROCESS FOR THE TREATMENT OF TEXTILE FIBERS. JACOB WOLFSON, Brooklyn, N. Y., and DOROTHY LANGDON POTTER, Hackensack, N. J., assignors to National Oil Products Company, Harrison, N. J., a Corporation of New Jersey. Filed July 31, 1929. Serial No. 382,582. 13 Claims. (Cl. 19—66.)

1. In the treatment of textile fibers, the step which comprises treating the fiber with a soluble oil and an aqueous soluble salt of beta naphthol 3:6 disulpho acid.

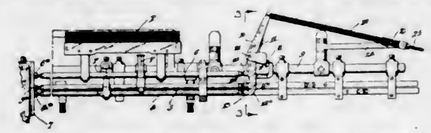
1,864,111. PIPE SLIP. FORREST J. YOUNG, Torrance, Calif., assignor, by mesne assignments, to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed May 22, 1929. Serial No. 365,080. 14 Claims. (Cl. 24—263.)



1. In a liner slip, the combination of two or more slip segments, means for detachably connecting the said slip segments together at their lateral edges, and a liner secured to one of said slips for holding said detachable connecting means engaged.

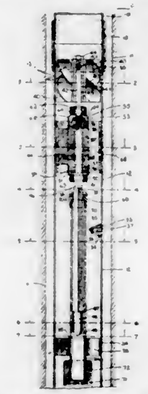
1,864,112. LACE-CLOCK MECHANISM FOR FULL-FASHIONED KNITTING MACHINES. MELCHIOR ZWICKY, Berkshire Heights, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed June 20, 1930. Serial No. 462,495. 2 Claims. (Cl. 66—96.)

1. In combination with a full fashioned knitting machine having a lace-point-rod shifting plate, a rockable lace-clock mechanism comprising a narrowing shaft having spaced brackets thereon supporting respectively, first, a plurality of longitudinally movable lace-point rods, second, a plurality of operating levers for the respective rods, and third, a plurality of tensioning springs for the respec-



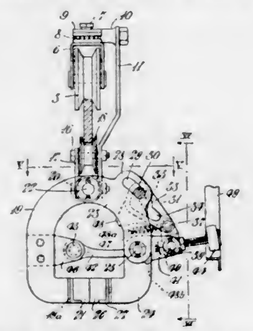
tive levers, each of said tensioned levers acting axially against an end of its respective rod to maintain its opposite rod end in contact with said shifting plate.

1,864,113. APPARATUS AND METHOD OF TAKING CORE SAMPLES OF ROCK IN BORE HOLES. ALEXANDER ANDERSON, Fullerton, Calif. Filed Jan. 19, 1926. Serial No. 82,366. 25 Claims. (Cl. 255—72.)



8. Apparatus for taking cores from earth formations contiguous to a boring comprising in combination a tubular casing to be lowered into a bore hole and to remain stationary during the core cutting operation, a rotary core cutting tool and motor for operating the same supported within the casing, means for operating the tool to cut a core of predetermined length, and means for retaining the cut core and the cutting tool fixed against rotation relative to the casing upon completion of the core cutting operation.

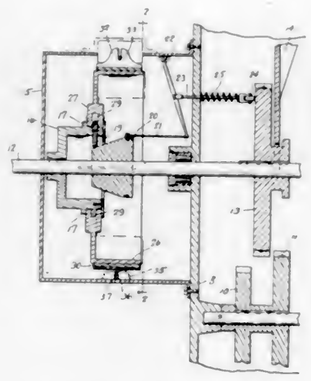
1,864,114. HOLDING DEVICE FOR PIECE GOODS IN SUSPENDED LINES. MATTHIAS ANGERPOINTNER, Djuron, near Norrkoping, Sweden. Filed July 10, 1931. Serial No. 550,023. 8 Claims. (Cl. 198—179.)



1. In a suspension line, a wagon movable along the line, an undivided gripping arm on said wagon, a two-part gripping arm, an articulate joint between the two parts

of said arm, an articulate joint between one of said parts and said undivided gripping arm, an operating lever rotatably journalled on said undivided arm, link members between said operating lever and said joint between said two parts, and an abutment on one of said parts to engage the other of said parts, when in the locked position.

1,864,115. VEHICLE BRAKE. HYRUM K. BARNES, Ogden, Utah. Filed Aug. 29, 1930. Serial No. 478,750. 5 Claims. (Cl. 192—4.)



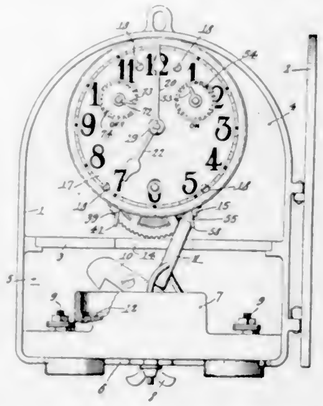
1. A supplemental brake construction comprising, in combination, a transmission housing, a casing fixedly supported thereon, a drive shaft rotatable in the casing and housing, a brake band suspended in said casing, a brake drum confined within said band, and a pawl and ratchet connection between the drum and shaft, a reverse gear on said shaft, a pivotally mounted releasing cam associate with the pawls, a slidable conical expander carried by said shaft and engageable with said releasing cam, and an operating connection between said expander and the reverse gear whereby when the reverse gear is brought into play, the expander will disengage the pawl and ratchet mechanism to temporarily release the brake while backing the vehicle.

1,864,116. PRODUCTION OF PAPERS FOR SECURITY PURPOSES. VIKTOR BAUSCH, Berlin, and ADOLF SCHROTH, Mecklenburg-Schwerin, Germany, assignors to The Corporation Felix Schoeller & Bausch, Neu-Kaliss/Mecklenburg, Germany. Filed Oct. 3, 1931, Serial No. 566,806, and in Germany Oct. 7, 1930. 13 Claims. (Cl. 92—21.)

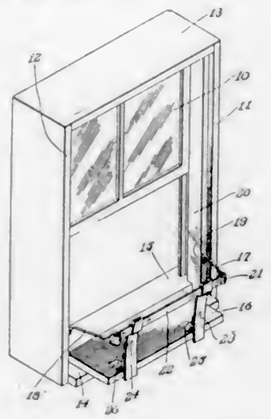
1. A security paper containing in the paper mass a carboxylic hydrocarbon and a reagent sensitive to acids as regards its color.

1,864,117. SWITCH THROWING MEANS. JAMES W. BERRY, Marine City, Mich., and ROBERT MCKNIGHT, Sarnia, Ontario, Canada. Filed May 3, 1926. Serial No. 106,458. 1 Claim. (Cl. 161—1.)

In a switch-throwing device, a frame, a time-train carried by the frame and including hour and minute shafts, dials fixed on the frame, stub shafts fixed upon the frame and located above and in symmetrical relation to the hour and minute shafts, key-operated sleeves journaled upon the stub shafts, indices secured to the sleeves and cooperating with the dials, a gear wheel mounted on one of said shafts of the time-train, like gear trains engaged with the gear wheel and including gear wheels in which the sleeves are rotatable, mechanism for coupling the last-specified gear wheels frictionally to the sleeves, like disks fixed to the sleeves and having like notches in their peripheries, levers provided at their upper ends with fingers riding on the peripheries of the disks and adapted to enter the notches, switch-throwing means on the lower ends of the levers, fulcra on which the levers are mounted intermediate their ends, and a pull spring having its ends connected to the levers below their fulcra: the movement of the fingers in the notches being equal, the distances between each fulcrum and the corresponding stub shaft being so nearly equal, and the distances between each fulcrum and the corresponding end of the spring being so nearly equal, that the ends of the spring will move an approximately equal amount when the spring is elongated by either lever, thereby keeping approximately equal, the pressures exerted by the disks on the fingers as the fingers move out of the notches and upon the peripheries of the disks, and dividing the driving strain with practical equality between the gear trains.

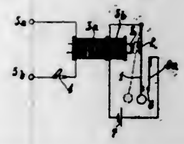


1,864,118. WINDOW SEAT. GEORGE BOLZ, Brooklyn, N. Y. Filed May 5, 1930. Serial No. 449,863. 1 Claim. (Cl. 304—24.)



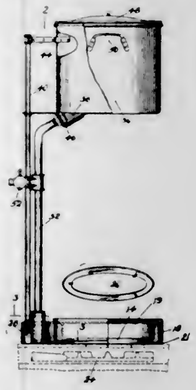
A window seat comprising a seat panel, hinges secured to one edge of said panel, rearwardly bent upright rigid straps secured to said hinges near one end of said straps, the end of each strap extending beyond the hinge to provide an overlap adapted to limit the outward movement of said straps by contact of said overlap with the edge of the panel, the other ends of said straps being bent back to form substantially rectangular sleeves, a horizontal flat bar passing through said sleeves to provide the back of the seat, the ends of said bar being bent back to form channeled bands thereon, hooks pivotally attached to said bands and adapted to engage means on the window to secure the device to the window.

1,864,119. CALL-ANSWERING DEVICE FOR TELEPHONE STATIONS. RUDOLF MAX BRAUN, Vienna, Austria. Filed Mar. 9, 1931, Serial No. 521,275, and in Austria Mar. 17, 1931. 8 Claims. (Cl. 179—84.)



1. In a call-answering device for telephone-stations, the combination with an electro-magnetic device actuated by the incoming ringing current, of an element adapted to oscillate freely by virtue of its momentum after being set in motion by said electromagnetic device, and means for converting said free oscillations into electric impulses in a line.

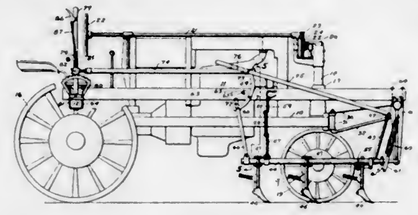
1,864,120. WATER HEATER. AXEL S. CARLSON, Brooklyn, N. Y. Filed Nov. 14, 1930. Serial No. 495,579. 3 Claims. (Cl. 126—53.)



1. A water heater unit comprising a reservoir-supporting base having an opening therethrough, and forming a water heating conduit around said opening, said base being formed on its top as a support for holding a cooking utensil over said opening, a support extending upwardly from said base, a reservoir secured to said support and held by it over said base, leaving a utensil receiving opening therebetween, a wall extending across the conduit in said base, said base having inlet and outlet openings on opposite sides of said wall, pipes connecting said openings with said reservoir, and a heating-current deflector associated with said base for deflecting heating currents coming up through said base opening in a downward direction adjacent and outside of said base.

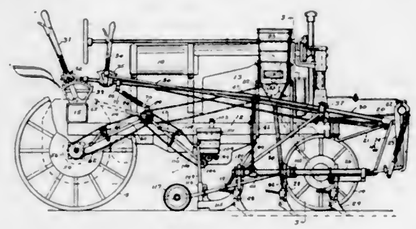
1,864,121. CULTIVATOR ATTACHMENT FOR TRACTORS. EUGENE M. COLE, Charlotte, N. C. Filed Nov. 9, 1928. Serial No. 318,275. 6 Claims. (Cl. 97—47.)

1. In a tractor cultivator having cultivator frames pivotally mounted at each side thereof, and adapted to have both lateral and vertical movement, a substantially vertically disposed member pivoted intermediate its ends above the rear portion of the cultivator frames, members secured to the rear portion of the cultivator frame, and having their upper ends pivotally secured to the said pivoted member, a forwardly projecting member, pivotally secured to the upper end of said pivoted member, and having its other end secured to the front end of the cultivator frame,



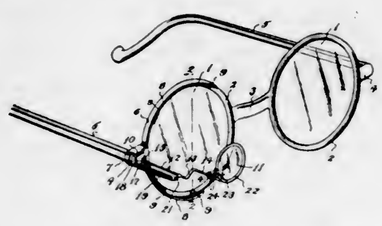
a rearwardly projecting member pivotally secured to the upper end of said pivoted member, a lever having pawl and ratchet mechanism and being pivotally secured to the rear portion of the tractor, a resilient connection between said lever and said rearwardly projecting member, said resilient connection becoming non-resilient when the lever is pushed forwardly, whereby the cultivator frames may be raised.

1,864,122. GUANO DISTRIBUTING ATTACHMENT FOR TRACTOR CULTIVATORS. EUGENE M. COLE, Charlotte, N. C. Filed Dec. 7, 1928. Serial No. 324,406. 5 Claims. (Cl. 111—67.)



4. In combination with a tractor having cultivating members secured on the sides thereof, guano distributing means and a seed planter secured on each side of the tractor and adapted to be both simultaneously and selectively driven by the progress of the tractor, a means for rendering said guano distributing means and seed planters inoperative when the cultivating members are raised.

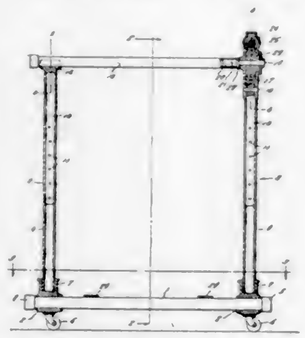
1,864,123. EYEGLASS ATTACHMENT. WILLIAM B. CONRAD, Casper, Wyo. Filed May 19, 1930. Serial No. 453,657. 6 Claims. (Cl. 88—41.)



1. A lens-holding attachment for eyeglasses comprising a frame having jaws to engage about an eyeglass, and a yoke connecting the jaws adapted to engage a hinge at

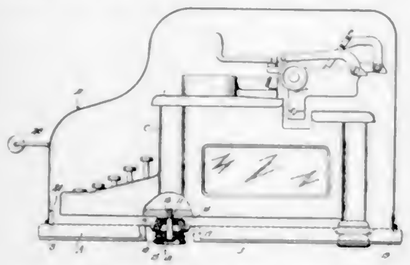
the outer side of an eyeglass, an arm carried by the yoke of said frame and movable from an extended position in front of the frame to a retracted position, means to retain the arm in a set position, and a magnifying lens carried by said arm.

1,864,124. HOIST. CHARLES A. DICKENS, Hagerstown, Md., assignor to Dickens Auto Transmission Hoist Company Inc., Hagerstown, Md. Filed Sept. 16, 1931. Serial No. 563,212. 7 Claims. (Cl. 254—139.1.)



1. A hoist comprising a bar, a pair of feet slidable on the bar for adjustment toward and away from each other, supporting casters on the feet, standards rising from the feet, a shaft rotatably mounted on the standards, means windable on the shaft for suspending a load thereon, and means for manually rotating the shaft.

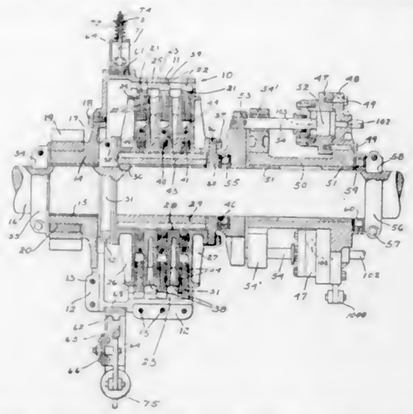
1,864,125. TYPEWRITER CABINET. BERNARD J. DOWD, Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed July 5, 1929. Serial No. 376,155. 3 Claims. (Cl. 248—16.)



1. In a typewriter cabinet, a sheet metal base having a depressed portion, an inverted cup of yieldable material located in said depressed portion, an inverted cup of yieldable material disposed below said depressed portion and projecting below the lower face of the base, and a screw extending upwardly through said cups and depressed portion of the base for connecting said parts and a typewriting machine against relative movements.

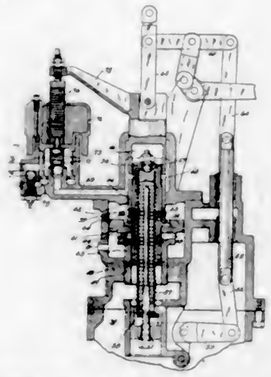
1,864,126. CLUTCH. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 30, 1929. Serial No. 389,336. 5 Claims. (Cl. 192—17.)

1. In a clutch the combination of a shaft, a plurality of clutch plates rotatable with said shaft and relatively movable axially thereof, a seal between said plates for preventing the escape of lubricant therebetween, a clutch disk interposed between said plates, a member surrounding said disk, driving connections between said disk and member permitting axial movement of said disk relative



thereto, and means for effecting relative axial movement between said plates and disk to make and break a clutching engagement therebetween.

1,864,127. GOVERNING MECHANISM. WARREN B. FLANDERS, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 4, 1929. Serial No. 397,355. 7 Claims. (Cl. 264—14.)

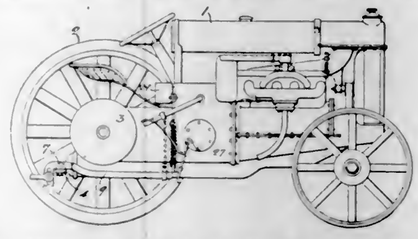


1. In a speed governing mechanism for a prime mover, the combination of means providing a fluid pressure varying as a function of the speed of the prime mover, pressure-responsive means subjected to said fluid pressure, a fluid pressure relay mechanism controlled by said pressure-responsive means and including an operating piston, means providing a second fluid pressure varying as a function of the position of the operating piston, and means for applying said second fluid pressure to the pressure-responsive means in that direction in which the variations in fluid pressure increase the action of the pressure-responsive means.

1,864,128. TRACTOR HITCH. FRANK L. FRAIZER, Troy, Ohio, assignor of one-half to John R. Marshall, Troy, Ohio. Filed Dec. 26, 1928. Serial No. 328,497. 14 Claims. (Cl. 180—14.5.)

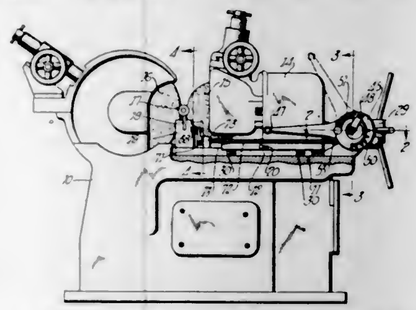
1. In a tractor hitch, an oscillatory L-shaped lever having arms of unequal length pivoted approximately at

the juncture of said arms with the shorter arm substantially vertically disposed, a draft attachment connected to the shorter arm of said lever and a spring connected with the longer arm of said lever at a materially greater distance from the fulcrum point than the draft connec-



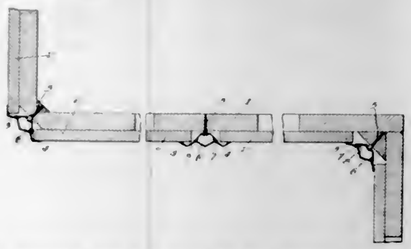
tion, against the yielding resistance of which the lever oscillates under varying resistance of the draft tension, and a tractor control member actuated by the lever when abnormally deflected against the tension of said spring by abnormal resistance of the draft load and means for locking said lever in its operated position.

1,864,129. MACHINE TOOL STRUCTURE. HANS FRITSCHI, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 18, 1930. Serial No. 503,263. 20 Claims. (Cl. 51—103.)



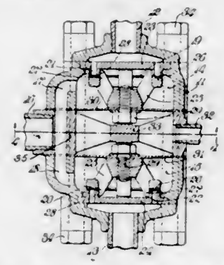
1. In a machine tool organization the combination of a bed, a shiftable member carried thereby, an oscillatable lever, an eccentric operable by the lever, means connecting the eccentric with the shiftable member whereby oscillations of the eccentric are converted into reciprocations of the member, and means for varying the throw of the eccentric.

1,864,130. SECURING DEVICE FOR PANELS OR THE LIKE. ERIC H. GIBIAN, Chicago, Ill., assignor to The Vitrolite Company, a Corporation of West Virginia. Filed Mar. 15, 1930. Serial No. 436,047. 1 Claim. (Cl. 72—115.)



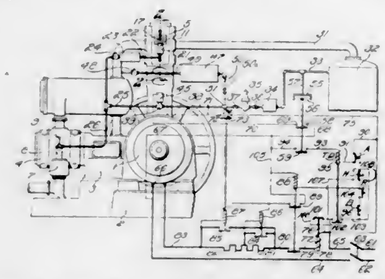
A securing device comprising an element in the form of a sheet metal trough, wider at the top than at the bottom, the sides of the trough being deformed to produce internal longitudinal ribs near the top of the trough, said element having lateral flanges projecting from the trough at the sides of the latter, and a second sheet metal element in the form of a strip wider than the distance between said ribs, said second element being bent along the longitudinal center to produce two sections sloping in opposite directions at about the same angle as the flanges on the trough, one of said elements being resilient to permit the second element to snap into place behind said ribs.

1,864,131. COMPRESSOR UNLOADING MECHANISM. HALBERT B. HALVORSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 29, 1928. Serial No. 315,734. 15 Claims. (Cl. 230—26.)



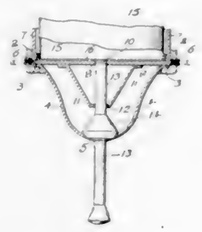
1. In a relief valve type unloading means for the high pressure cylinder of a compressor which comprises a low pressure cylinder, a high pressure cylinder, and an intercooler, in combination, an annular flat valve seat, an annular plate valve mounted for limited movement relative to said seat, and fluid pressure operated mechanism controlled by fluid pressure in the compressor intercooler for controlling said plate valve, said mechanism including a reciprocable member movable relative to said annular plate valve, said reciprocable member engaging said plate valve to hold the same seated during normal operation of the compressor and releasing said plate valve during unloading of the high pressure cylinder, and said plate valve controlling a vent from the high pressure cylinder.

1,864,132. COMPRESSOR SYSTEM. FRANK A. HALLECK, Chicago, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 12, 1931. Serial No. 568,364. 5 Claims. (Cl. 230—26.)



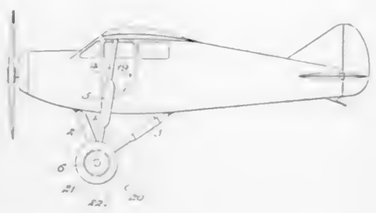
1. In a pumping system, a compressor, unloading devices therefor, operating means for said devices operable by pressure fluid, a source of fluid under a pressure less than compressor discharge pressure, and means for controlling operation of said operating means by fluid from said source including a valve controlling communication between said source of fluid under pressure and said operating means, and means for controlling said valve governed by compressor discharge pressure.

1,864,133. SOAP POWDER DISPENSER. THORVALD F. HAMMER, Branford, Conn. Filed Sept. 18, 1931. Serial No. 563,530. 1 Claim. (Cl. 221—61.)



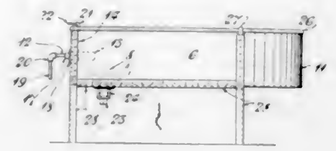
In a soap dispenser having a bracket provided at its outer end with a ring whose bottom extends inwardly to form a seat, a single piece soap canister and annulus, having a soap discharge opening at the bottom supported by the seat and having its upper edge formed into an upstanding annulus, a perforated plate secured to said edge within said canister for supporting a perforated soap container within the annulus, a depending brace and guide member fastened intermediate the perforations to the underside of the plate, an agitator spindle having a valve for normally closing the opening, an opening in the plate and guide for loosely receiving the spindle, the spindle being adapted to extend through the plate for contact with the bottom of the soap container.

1,864,134. LANDING GEAR. HENRY H. HARRIS, Detroit, Mich., assignor to Noble & Harris, Detroit, Mich., a Copartnership composed of Warren Noble and Henry H. Harris. Filed May 29, 1930. Serial No. 456,859. 4 Claims. (Cl. 244—2.)



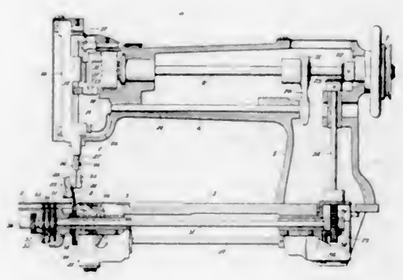
3. In combination with an airplane including a wing, a fuselage and an under carriage, said under carriage comprising wheels and a plurality of pairs of struts supporting said wing and said fuselage on said wheels, one pair of said struts being attached to the axles of said wheels and to another portion of the airplane for pivotal movement to provide a main intermediate support and including shock absorbers, another pair of said struts being forwardly inclined and connected to the axles of said wheels and to said fuselage for pivotal movement, a third pair of struts being rearwardly inclined and connected to the axles of said wheels and to said fuselage for pivotal movement, said last named struts being yieldable longitudinally whereby said wheels may swing through a predetermined angle with the upper pivots of the first named pair of struts as centers of the described arc, all of said struts being proportioned in length and positioned to swing said wheels forwardly of the center of gravity of said plane for landing and to retract said wheels to a point substantially beneath the center of gravity of said plane for taking off.

1,864,135. APPARATUS FOR USE IN SCALDING ANIMAL OFFALS. FREDERICK HILL, Urmston, England. Filed May 14, 1929, Serial No. 363,063, and in Great Britain May 16, 1928. 9 Claims. (Cl. 146—195.)



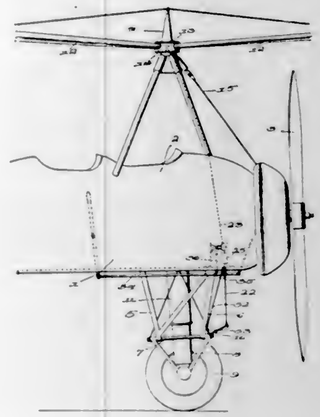
1. A scalding apparatus for the purpose indicated comprising a tank presenting a channel in the form of a closed circuit in the form of two communicating limbs each closed at one end formed by means of a vertically disposed partition extending in part of the tank and contrived in part to provide passage to allow of the circulation of liquid while determining the path of material introduced for scalding from the place of introduction near the closed end of one limb to the place of removal near the closed end of the other limb, a pipe for the discharge of steam into liquid in the tank for heating or keeping hot the liquid in the tank and keeping it in circulation through the channel and a bell applied to provide a chamber around the outlet of said pipe and provided with an inlet and outlet for liquid and means for the inlet of air to said chamber.

1,864,136. SEWING MACHINE. JOHN A. KNOX, New York, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 17, 1929. Serial No. 363,832. 11 Claims. (Cl. 112—214.)



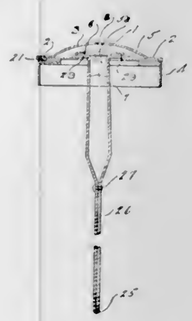
1. In a sewing machine, a work-advancing feed-wheel, a presser opposed to said feed-wheel having a point in its edge on the needle side thereof in substantially the plane containing one edge of the feed-wheel, a vertically reciprocatory needle inclined to said plane, means for deflecting the point end of the inclined needle into substantially said plane before the needle enters the work, and a loop-taker cooperating with the needle in the formation of stitches.

1,864,137. AIRCRAFT OF THE AUTO-ROTOR TYPE. EDWIN K. LE FEVRE, Washington, D. C., assignor to Whitfield Engineering Company, Washington, D. C., a Corporation of Delaware. Filed July 28, 1931. Serial No. 553,655. 19 Claims. (Cl. 244—19.)



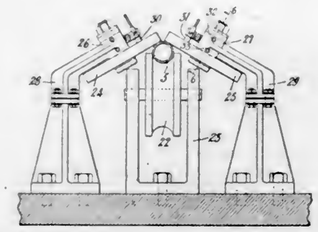
1. Brake control for the rotors of autogyro air craft comprising a brake operator and means operable responsive to a function of the air craft in landing for actuating said operator to apply the brake.

1,864,138. CLOSURE AND GAUGE STRUCTURE. PETER J. MACHONIS, Cleveland, Ohio, assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 4, 1926. Serial No. 146,132. 2 Claims. (Cl. 73—120.)



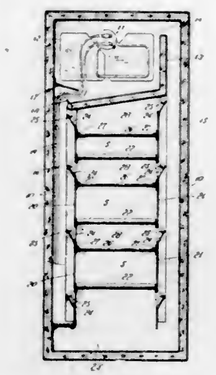
1. A structure of the character described, comprising a closure having an annular skirt and a wall portion extending transversely with respect to said skirt, said wall portion being formed with a circular depression in one surface thereof and with diametrically opposed openings through the side wall of said depression, locking means engaging in said depression, and a gauge extending axially of said annular skirt, said gauge having a "measuring stick" portion and a bifurcated securing portion, the two parts of said bifurcated portion terminating in oppositely extending lugs which engage a surface of said locking means and project through said diametrically opposed openings, whereby said gauge is securely maintained in assembly with said closure and assists in maintaining the locking means of said closure in said depression.

1,864,139. APPARATUS FOR BUTT WELDING. CLAYTON MARK, Jr., Chicago, Ill., assignor, by mesne assignments, to Clayton Mark & Company, Chicago, Ill., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,450. 2 Claims. (Cl. 219—6.)



1. In an apparatus for butt-welding metal tubing, a pair of electrodes on opposite sides of the seam for applying current thereto, and bearing means on which the respective electrodes are journaled for rotation, each of said electrodes having a plane surface engaging the tubing along a line extending longitudinally thereof and substantially parallel to the seam.

1,864,140. REFRIGERATOR. WALTER C. MARSHALL, Milwaukee, Wis. Filed Sept. 10, 1930. Serial No. 480,979. 1 Claim. (Cl. 62—47.)

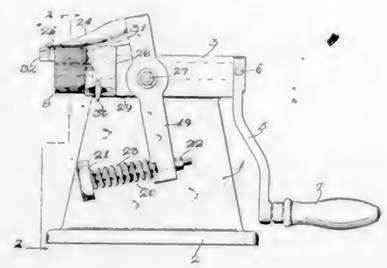


In a refrigerator of the character described, the combination of a refrigerating unit holding compartment in the top, inner vertical walls of temperature conducting material beneath said compartment arranged in spaced relation with the main side walls of the refrigerator and extending from front to rear of the refrigerator to provide a cold air duct and a warm air duct at opposite sides of the refrigerator, food holding compartments having imperforate bottoms disposed between said vertical walls, and regulable openings in the vertical walls communicating with the upper ends of the food holding compartments, with imperforate cover sheets for each food holding compartment secured to said vertical walls beneath the regulable openings and extending throughout the width and depth of the food holding compartments.

1,864,141. SKIVING MACHINE. FREDERICK MEISHNER, Manitowoc, Wis. Filed Apr. 2, 1931. Serial No. 527,117. 2 Claims. (Cl. 69—13.)

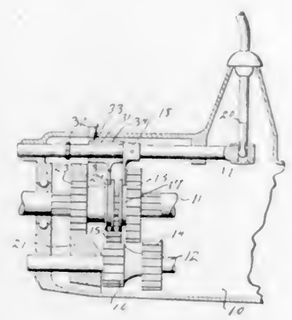
1. A skiving machine including a standard, a rotatable shaft supported thereby, a cylinder at one end of the shaft, longitudinal parallel ribs around the circumference of the

cylinder arranged on an incline and all facing in the same general direction, a knife blade supported by the standard with its cutting edge disposed above the cylinder, a pivotally mounted lever carried by the standard, a guard arm at one end of the lever in opposed relation with the cutting blade and positioned above the cylinder, a lateral lip



carried by the standard, a coil spring between the lip and the other end of the lever, and means for manually imparting movement to the shaft to rotate the cylinder in the direction in which the ribs are facing, whereby to urge the material beneath the guard arm and toward the cutting edge.

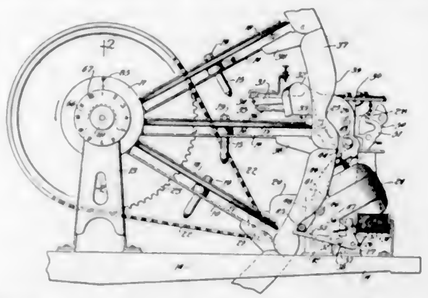
1,864,142. REVERSE LOCK FOR DRIVING GEARS. IAVIN G. MEYER, Milwaukee, Wis. Filed July 16, 1931. Serial No. 551,174. 3 Claims. (Cl. 192—4.)



1. The combination with a transmission including a casing, a rotatable main shaft, a rotatable counter shaft, a first speed gear on the counter shaft, a reverse gear on the counter shaft, an idler gear meshing with the reverse gear, a shift gear feathered on the main shaft movable into and out of meshing engagement with the low speed gear and the idler gear, of a stationary member in the casing having an opening, the wall of the opening being provided with an annular row of internal gear teeth, a roller clutch including a hub feathered on the main shaft, and a rim provided with gear teeth normally meshing with the gear teeth of the rigid member, and means for moving the teeth of the roller clutch out of meshing engagement with the teeth of the rigid member upon the shifting of the shift gear into engagement with the idler gear.

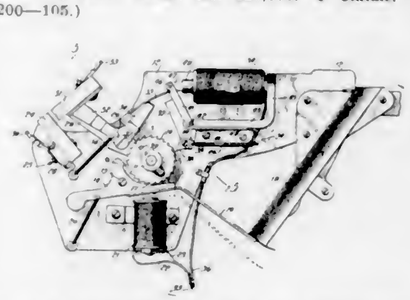
1,864,143. SELECTOR MECHANISM. BERT E. MILLS, Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 10, 1930. Serial No. 427,359. 16 Claims. (Cl. 274—10.)

3. In an automatic multiple-record phonograph; a rotatable record carrier; means for rotating said carrier to move the records to and from a playing station; and selector mechanism for interrupting said carrier rotating means when the selected record arrives at the playing station, said selector mechanism including a switch element rotatable with said carrier, and a second switch element rotatable independently of said carrier, one of said switch



elements being provided with an interrupting plate and the other switch element being provided with contact means affording electrical connection between said elements, said contact means being positioned to engage said interrupting plate when the selected record arrives at the playing station.

1,864,144. CIRCUIT BREAKING DEVICE. BERT E. MILLS, Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 12, 1930. Serial No. 427,670. 9 Claims. (Cl. 200—105.)



1. In a circuit-breaking device for interrupting the cycle of operation of an external mechanism, the combination which comprises; a fixed contact member; a primary switch member positioned adjacent said fixed contact member and operable upon the completion of a predetermined number of cycles of operation of said external mechanism to open an electrical circuit which energizes said mechanism; and an auxiliary switch member positioned adjacent said fixed contact member and operable to keep said circuit closed until after the completion of the cycle or cycles of operation of said external mechanism.

1,864,145. LIGHTING FIXTURE. ALBERT J. D. OHM, Oak Park, Ill., assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 24, 1930. Serial No. 504,560. 3 Claims. (Cl. 240—81.)

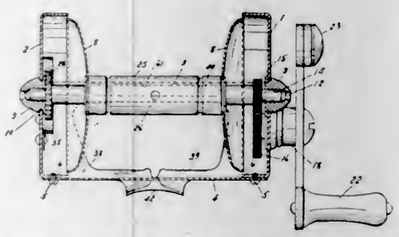
1. A non-self supporting lighting fixture of the character described adapted to be disposed upright against a vertical wall comprising a hollow supporting rod; a flat sided wall contacting bracket portion secured to the upper end of the rod so as to be disposed entirely forward of the vertical plane of the rear side of the rod with the rear face of the bracket portion adapted to extend in the vertical plane of the rear side of the rod; and a base

portion secured to the lower end of said rod and disposed in planes forward of the rear side of the rod and flaring at bottom into vertical planes beyond the center of



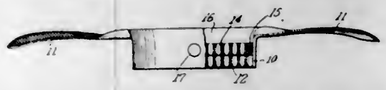
gravity of the fixture so as to provide a fulcrum point whereby the rear sides of the rod and of the bracket portion are forced into flush relation with the vertical wall.

1,864,146. FISHING REEL. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 9, 1928. Serial No. 268,626. 3 Claims. (Cl. 242—84.1.)



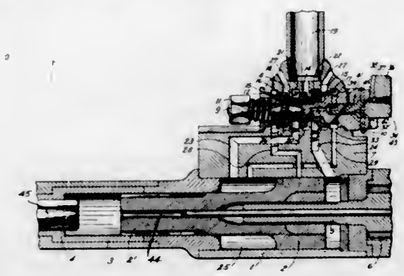
3. In a fishing reel, the combination of a one-piece cradle-like frame comprising a central longitudinally extending member forming the bottom of the cradle, transversely projecting reel seats midway of and integral with said central member, bars forming the sides of the cradle and spool supporting end plates, having integral inturned flanges, said end plates closing the ends of the cradle and being connected thereto by said flanges.

1,864,147. VEGETABLE CUTTER. DANIEL W. RANTINE, Brooklyn, N. Y. Filed May 12, 1930. Serial No. 451,628. 2 Claims. (Cl. 146—210.)



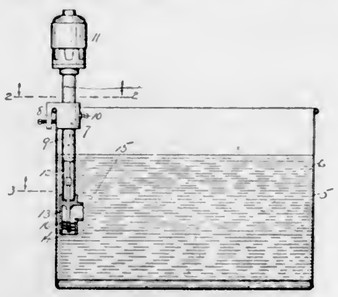
1. A food cutter comprising a handled housing and an upper and lower series of knife blades therein, all of said blades being transversely sharply undulated throughout their length, the centrally disposed blades being bevelled to a cutting edge at the center of their width, and the blades at the sides of the housing bevelled to a cutting edge on their outer sides only.

1,864,148. HOLE CLEANER. LED L. RICHARDSON, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Filed Oct. 24, 1928. Serial No. 314,780. 1 Claim. (Cl. 121—6.)



The combination with a cylinder having a piston hammer reciprocable therein, of a valve chest communicating with a source of motive fluid, a stem in the chest, a valve slidable on the stem for effecting the supply and exhaust of the motive fluid to and from the cylinder, said chest having chambers at the opposite ends of said valve communicating with the opposite ends of said cylinder to effect reciprocation of said valve, a valve shank rotatably associated with said stem, said valve shank and said stem having cooperating ports arranged in one position of said valve shank to conduct motive fluid through the stem to one of said chambers to act against the end of the valve and hold the same inactive.

1,864,149. AGITATOR FOR HARDENING BATHS. STANLEY P. ROCKWELL, West Hartford, Conn., assignor to The Stanley P. Rockwell Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 24, 1929. Serial No. 388,084. 4 Claims. (Cl. 259—97.)

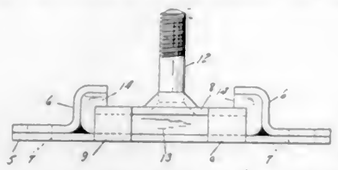


1. An agitator for baths for treatment of metal including a tank, a pump located within the tank to circulate fluid therein, said pump including a chambered housing at its lower end having axial inlet and a lateral outlet, means independent of the tank for adjustably rotatably supporting said pump whereby the lateral outlet at the bottom may be directed in different directions and means for removably attaching said supporting means to the tank.

1,864,150. MOTOR INSULATOR. JESSE W. SHIELDS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 9, 1930. Serial No. 474,292. 2 Claims. (Cl. 248—16.)

1. A shock insulator comprising a plate, a pair of flanges on said plate in parallel relation therewith, a second plate carried between said flanges and said first-

named plate, side flanges on said second plate spaced from the edges of the first-named plate and serving as stops for the relative movement between the plates, and



a rubber pad vulcanized to and between the plates and to and between the flanges on the first-named plate and the second plate.

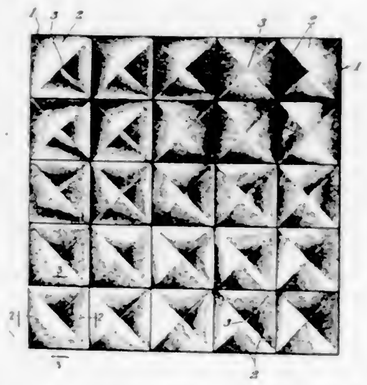
1,864,151. NITROCELLULOSE PLASTICIZER AND PIGMENT GRINDING COMPOSITION. CARSON W. SIMMS, WILLIAM J. BANNISTER, and LLOYD C. SWALLEN, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Original application filed Feb. 9, 1928, Serial No. 253,210. Divided and this application filed Feb. 10, 1930. Serial No. 427,420. 20 Claims. (Cl. 134—79.)

1. A process which comprises grinding a pigment in the presence of a liquid ester of phthalic acid and a metal salt of a half ester of phthalic acid.

1,864,152. NITROCELLULOSE PLASTICIZER AND PIGMENT GRINDING COMPOSITION. CARSON W. SIMMS, WILLIAM J. BANNISTER, and LLOYD C. SWALLEN, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Original application filed Feb. 9, 1928, Serial No. 253,211. Divided and this application filed Feb. 10, 1930. Serial No. 427,421. 12 Claims. (Cl. 134—79.)

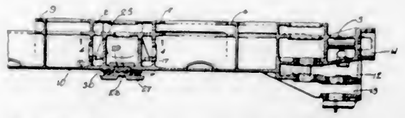
1. A process which comprises grinding a pigment in the presence of tricresyl phosphate and a metal salt of a half ester of phthalic acid.

1,864,153. TILE. PAUL H. SOLON, Scarsdale, N. Y., assignor to American Encaustic Tiling Company, Ltd., New York, N. Y., a Corporation of New York. Filed May 13, 1930. Serial No. 451,949. 6 Claims. (Cl. 41—24.)



1. A glazed tile of the class described, formed with a plurality of angular reflecting surfaces, said surfaces being inclined from the edges of the tile toward an intermediate point.

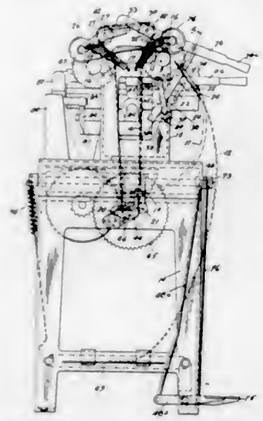
1,864,154. CENTER PLATE STRUCTURE. WILLIAM M. SHEEHAN, Merion, Pa., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed May 11, 1931. Serial No. 536,602. 15 Claims. (Cl. 105—415.)



1. A railway vehicle underframe including a bolster having a recess in the lower surface thereof, and a body center plate welded to said bolster and having an upwardly projecting dowel inserted into said recess to hold the parts in alignment.

2. In combination, a railway vehicle bolster having a recess in the lower surface thereof and having a boss adjacent said recess, and a center plate having a dowel projecting upwardly therefrom and inserted into said recess to hold the parts in alignment, said center plate being welded to said boss.

1,864,155. METHOD AND APPARATUS FOR REENFORCING TIRE BEADS. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed June 11, 1926, Serial No. 115,249, Patent No. 1,787,411, dated Dec. 30, 1930. Divided and this application filed Mar. 31, 1930. Serial No. 440,386. 3 Claims. (Cl. 154—9.)

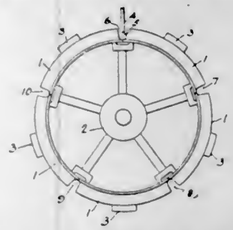


1. That method of reenforcing endless beads of triangular section, comprising securing in transversely flat form about the inner periphery of the bead a strip of fabric of a width to cover and form a flipper on the head of a length equal to the circumference of the bead, folding the strip outwardly about the heel and toe of the bead, and stitching one side of the strip down over the hypotenuse of the bead onto the other side of the strip to completely enclose the bead, and stitching the two sides of the strip together in the direction of the hypotenuse of the bead to form the flipper as a conical extension of the hypotenuse surface of the bead.

1,864,156. METHOD OF MANUFACTURING THICK WALLED PRESSURE VESSELS BY ELECTRICAL WELDING. RICHARD STRESAU, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Feb. 12, 1929. Serial No. 339,292. 5 Claims. (Cl. 219—10.)

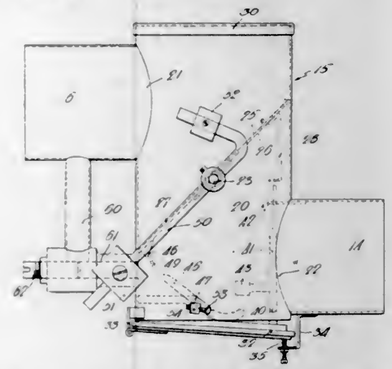
1. The method of manufacturing excessively thick walled tubular structures, which comprises forming an

odd number, not less than three, of thick metal plates into curved segments, arranging said segments in a circle and providing longitudinal welding grooves therebetween, fusing welding metal into one of said welding grooves to form a layer of deposited metal therein, fusing welding metal into a groove nearly opposite to said last specified



groove to form a layer of deposited metal therein, successively fusing metal into nearly opposite non-fused grooves until all of the grooves have deposited metal fused therein, and repeating said fusing operation in similar sequence until the plate are welded into an integral tubular structure.

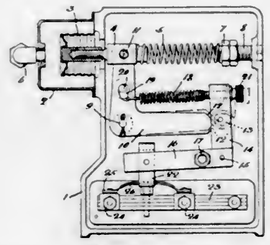
1,864,157. PNEUMATIC DISPATCH SYSTEM. FRED R. TAISEY, Lowell, Mass., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Aug. 14, 1930. Serial No. 475,167. 13 Claims. (Cl. 243—9.)



1. Power control apparatus for a pneumatic dispatch system of the vacuum minimum flow type having a transmission tube and an exhauster connected thereto through said apparatus, said apparatus comprising a housing through which air flows under the urge of said exhauster, a control valve in the housing by which the carrier impelling air flow is regulated, said valve being closed when the transmission tube is empty and open when a carrier is in the tube, means by which a minimum flow of air is permitted when the control valve is closed, said housing having a port through which it is normally in direct communication with the atmosphere and through which air is drawn into the system when the transmission tube is empty and an auxiliary valve by which said port is closed when a carrier is in the tube.

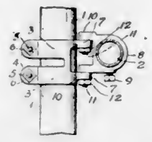
1,864,158. QUICK-ACTING MECHANISM FOR ELECTRIC SWITCHES AND THE LIKE. WALTER H. WEINRICH and FREDERICK CARL GEILER, Dayton, Ohio, assignors to Trupar Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed July 18, 1927. Serial No. 206,526. 10 Claims. (Cl. 74—14.)

1. In a quick acting switch mechanism, or the like, an oscillatory cam arm having oppositely beveled faces, means for oscillating said arm, a trip arm engaging one or the other beveled faces of the cam arm, and a spring under the tension of which such engagement is effected said spring having its ends movably mounted, the limited movement of said cam arm being sufficient to shift the



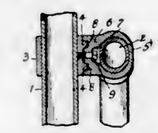
point of engagement of the trip arm past the apex of the oppositely beveled faces, the reaction of said spring causing said engaging point to travel upon the beveled face and by the camming action thereon causing reverse movement of the trip arm.

1,864,159. HIGHWAY GUARD FENCE. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Apr. 30, 1931. Serial No. 534,094. 1 Claim. (Cl. 287—54.)



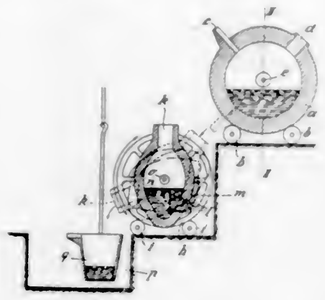
A means for clamping the rods to the posts in highway guard fences consisting of a socket for securing around a post, spaced upper and lower lugs extending from its front portion provided with vertical perforations, a ring through which a rod is adapted to pass provided with rearwardly extending lugs formed with depending threaded bolts for passing through the perforations, nuts driven on the ends of the bolts to secure the ring in offset relation to the post, and a set screw driven through the ring against the rod.

1,864,160. HIGHWAY GUARD FENCE. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Apr. 30, 1931. Serial No. 534,092. 1 Claim. (Cl. 287—54.)



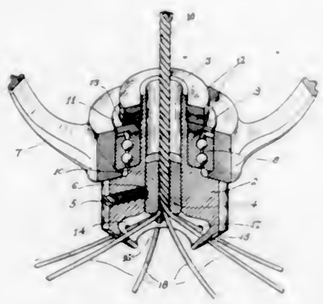
A means for clamping the rods to the posts in highway guard fences consisting of a metal socket for embracing a post having an annulus of truncated cone formation projecting from the front portion, a metal socket for a rod, a recess therein, a hub projecting from its rear portion having an annular depression therein complementary to the annulus, the sides of the annulus and depression having a wedging contact, and a set screw housed within the recess and driven through the hubs and post socket against the post after the rod socket has been adjusted to the desired position.

1,864,161. SEPARATING AND RECOVERING NONFERROUS METALS FROM METALLIC INITIAL MATERIALS. WILHELM WITTER, Halle, Germany, assignor to the Firma M. Lissauer & Cie., Cologne-on-the-Rhine, Germany. Filed Dec. 5, 1930, Serial No. 500,166, and in Germany Dec. 19, 1929. 8 Claims. (Cl. 75—17.)



1. A process for separating and recovering volatile metals such as zinc, tin, antimony, lead, arsenic and bismuth, from metallic initial material containing non-volatile metals such as copper and nickel, which comprises melting said metallic initial material, passing reducing gas through said molten material, and regulating the combustion at the surface of said molten material so as to maintain at said surface an atmosphere which can vary from a slightly reducing to an oxidizing character.

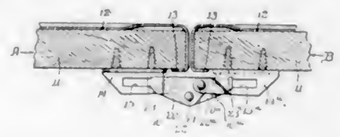
1,864,162. CORDAGE MACHINE. FRANK ZETTEK, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 30, 1929. Serial No. 396,050. 2 Claims. (Cl. 117—50.)



1. In a cordage machine, a frame, an annular member frictionally held therein, a second annular member within said first annular member, a ball bearing between said annular members, a wire guide having a frustro-conical outer surface with a plurality of orifices therein, screw threaded collars holding said wire guide in frictional engagement with said second annular member, a removable die, and a set-screw for holding said die in said wire guide.

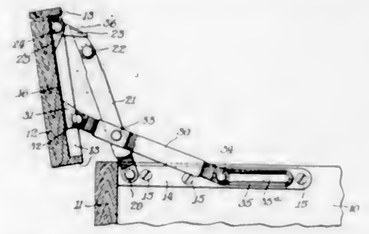
1,864,163. HINGE. GEDOR W. ALDEEN, Rockford, Ill., assignor to American Cabinet Hardware Corp., Rockford, Ill., a Corporation of Illinois. Filed Dec. 7, 1929. Serial No. 412,328. 2 Claims. (Cl. 16—166.)

1. A hinge comprising two members each of which has an attaching portion and a slotted flange, the inner end of said flange extending beyond the inner end of the attaching portion, whereby it will lap a metal covering on the edge of the parts to be connected by the hinge, and a pair of links connecting said members, said links



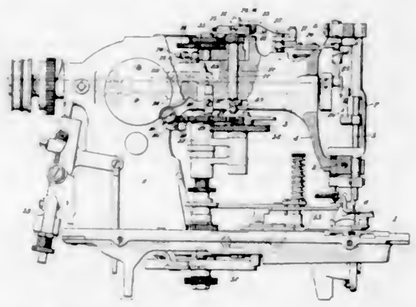
being pivoted to each other and each link being pivoted at one end to the extending end of one flange and having a projection slidable in the slot of the other flange.

1,864,164. HINGE. GEDOR W. ALDEEN, Rockford, Ill., assignor to American Cabinet Hardware Corporation, Rockford, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,123. 2 Claims. (Cl. 16—166.)



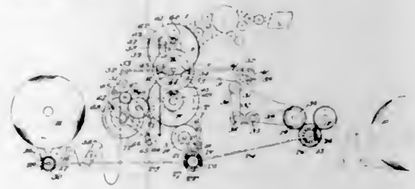
1. A hinge for the lid of a chest comprising, in combination, a lid member attachable to the underside of the lid adjacent the side edge thereof, a body member attachable to the inside of the vertical side wall of the chest along the upper edge thereof, a first lever pivoted to the rear end of the body member, a link pivoted to the free end of the first lever and to the front end of the lid member, and a second lever pivoted to the rear end of the lid member and to the first lever and slidably attached to the front end of the body member, said levers being formed of narrow strips stamped from sheet metal, the second lever being bowed to permit the first lever to fold between it and the body member when the lid is closed, the link being formed in a channel-shape to permit the second lever to fold within it.

1,864,165. SEWING MACHINE. EDWARD B. ALLEN, Newtown, Conn. Filed May 31, 1929. Serial No. 367,511. 6 Claims. (Cl. 112—158.)



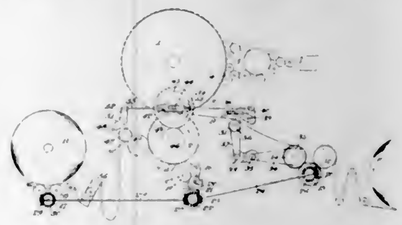
1. In a sewing machine, a needle-bar, a vibratory needle-bar gate, a rotary crank and connections for vibrating said gate, means for imparting operative impulses to said crank, means for changing the operative radius of said crank while the machine is in operation, and means for positively retaining said crank against displacement from its adjusted position.

1,864,166. WEB PRINTING ROTARY PRESS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed June 16, 1931. Serial No. 544,717. 16 Claims. (Cl. 101—228.)



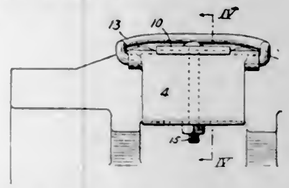
1. In a web printing rotary press, a printing couple driven at a constant speed, web advancing means for passing the web through the printing couple at the surface speed thereof during the printings and at the same or lesser speeds between the printings, and means for bringing the form and impression cylinders into coaction during the printings and out of coaction between the printings.

1,864,167. WEB PRINTING ROTARY PRESS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed June 10, 1931. Serial No. 543,288. 16 Claims. (Cl. 101—228.)



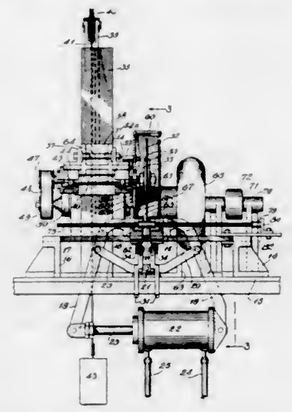
1. In a web printing rotary press, a printing couple driven at a constant speed, and alternately acting web advancing units for passing the web through the printing couple at the surface speed thereof during the printings and at the same or lesser speeds between the printings, according to the required spacings between the impressions.

1,864,168. STORAGE BATTERY HANDLE. ELLIS H. BRIDGE, Akron, Ohio, assignor to The Electric Storage Battery Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Jan. 20, 1931. Serial No. 509,913. 3 Claims. (Cl. 16—114.)



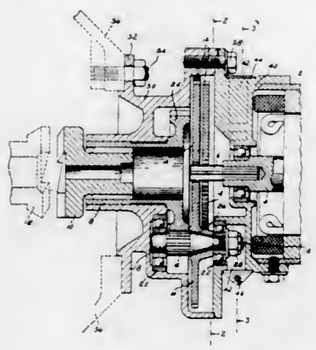
1. A handle for a container comprising a casing, a side plate having at its upper end a bearing surface and at its lower end a lip adapted to engage a wall of said casing, a top plate mounted for hinge movement upon the bearing surface of said side plate, a grip portion having bent ends received between said side plate and said casing, and means for clamping said side plate and said top plate on said casing and securing said grip portion thereto.

1,864,169. METHOD OF CUTTING AND BINDING STRANDED STRUCTURES. GORMAN C. BURD, Newark, N. J., assignor to American Cable Company, Inc., a Corporation of Delaware. Filed Oct. 12, 1929. Serial No. 399,125. 8 Claims. (Cl. 140—2.)



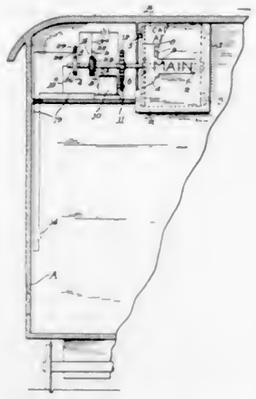
1. A method of cutting off portions from a run of stranded structure and binding the cut ends which consists in clamping the structure on each side of a point where the cut is to be made, severing the structure at said point, inserting the severed ends into opposite ends of a ferrule, and severing the ferrule to leave a portion thereof on each of said cut ends.

1,864,170. GEAR MECHANISM. ROLAND CHILTON, Ridgewood, N. J. Filed Jan. 24, 1931. Serial No. 510,882. 4 Claims. (Cl. 74—7.)



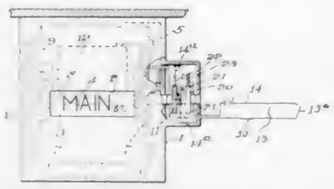
1. A reduction gear mechanism comprising a high speed gear, a series of transmission gears meshing with said high speed gear, a low speed gear, a second series of transmission gears, one for each of the gears of the first series, meshing with said low speed gear, slip connections between the corresponding transmission gears and means for tightening said connections against slippage in operation.

1,864,171. INDICATOR. GEORGE A. COMBRIDGE, Los Angeles, Calif. Filed Sept. 10, 1930. Serial No. 480,875. 5 Claims. (Cl. 40—53.)



1. In combination a shiftable sign element, an electric motor for shifting the sign element, a main switch for starting the motor, said switch being adapted for continuing movement in the same direction after the switch is closed, with said continuing movement opening the switch momently after its closing, an auxiliary switch controlling the motor and adapted to be closed by initial rotation of the motor so as to continue rotation of the motor after the main switch is opened, and means for opening the auxiliary switch for stopping the motor after predetermined shifting of the sign element.

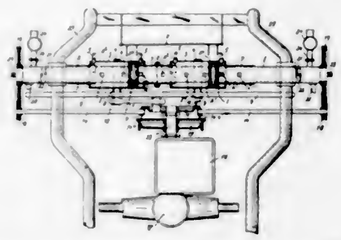
1,864,172. CONTROL MECHANISM. GEORGE A. COMBRIDGE, San Francisco, Calif. Filed June 13, 1931. Serial No. 544,095. 4 Claims. (Cl. 40—53.)



1. In combination, a vehicle adapted to travel a predetermined route, a sign element, means carried by the sign element for indicating successive stops along the predetermined route, means for shifting the sign element step-by-step so as to successively display the indicating means, and a control for said shifting means including a pivoted lever and an actuating pin carried by a door of the vehicle, the door being adapted for movement in opposite directions to open and close the door, and the pin being adapted to yield so as to clear the lever when the door is shifted in one direction, and being held against yielding so as to engage and actuate the lever when the door is shifted in the opposite direction.

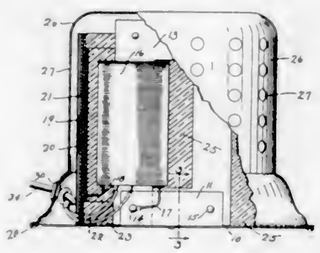
1,864,173. DEVICE FOR CONTROLLING INTERNAL-COMBUSTION ENGINES. STEFAN CREUELS, Baesweiler-Aachen, Germany. Filed Feb. 6, 1930, Serial No. 426,415, and in Germany Nov. 22, 1927. 7 Claims. (Cl. 123—50.)

1. In an internal combustion engine, a stationary piston, a hollow piston rod supporting the piston and having ports therein for the inlet of fuel and the outlet of combustion products, a movable cylinder receiving the pistons,



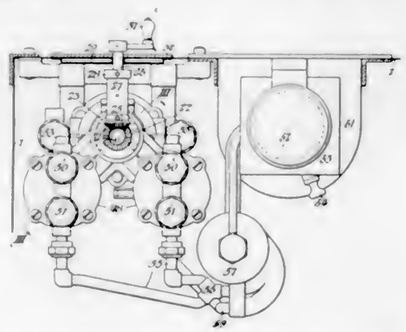
and a tubular controlling element movable in the piston rod and having ports movable into registration in the ports in the piston rod.

1,864,174. OZONE GENERATOR. DEAN W. DAVIS, Pendleton, Ind. Filed Sept. 11, 1930. Serial No. 481,088. 4 Claims. (Cl. 204—32.)



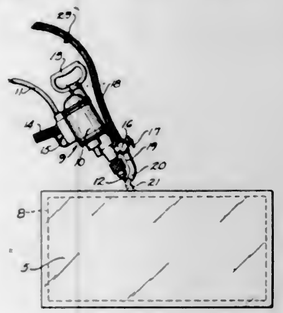
1. In an ozone producing device, a base plate, a tongue extending upwardly from the plate, a transformer core fixed to the tongue, a transformer coil carried on the core, a cylindrical outer shell surrounding the core, an inner shell shorter than the outer shell at both of its ends, and insulating material separating the two shells, said coil having secondary winding terminals in circuit with said shells.

1,864,175. COIN-CONTROLLED DRINK DISPENSING APPARATUS. HARRY MESSNER AUSTIN, Chestnut Hill, Pa., assignor to Charles Blum, Philadelphia, Pa. Filed Dec. 28, 1928. Serial No. 328,886. 7 Claims. (Cl. 225—21.)



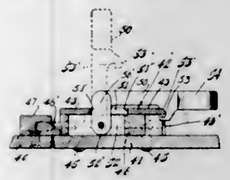
3. In drink dispensing apparatus; the combination with a container for flavoring material; of a piston mounted to reciprocate in said container; and a lever operatively connected with said piston; whereby said piston may be reciprocated by oscillation of said lever; including a reciprocatory cam arranged to operate said lever.

1,864,176. PROCESS AND APPARATUS FOR THE MANUFACTURE OF LAMINATED GLASS. HERBERT H. BAKER, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 26, 1928. Serial No. 272,904. 4 Claims. (Cl. 49—81.)



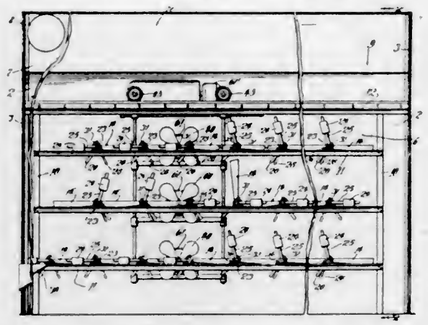
1. In sealing apparatus of the character described, a portable sealing unit movable with respect to the work to be sealed and including a rotatable element adapted to feed the sealing material into place, and a supply conduit having one end terminating in proximity to the rotatable element so that the sealing material issuing from said conduit will flow onto said rotatable element.

1,864,177. LATCH. CHARLES C. BATINA, Chicago, Ill. Original application filed May 31, 1928, Serial No. 281,653. Divided and this application filed Apr. 6, 1929. Serial No. 353,126. 1 Claim. (Cl. 292—173.)



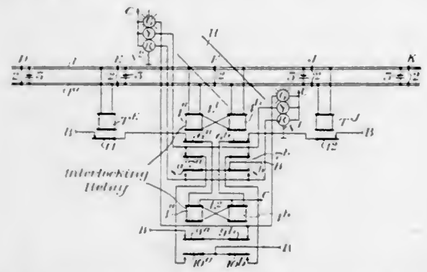
A latch comprising a casing, a bolt slidable longitudinally within said casing and being normally projected in locking position, said bolt being provided with lateral shoulders adjacent its forward end, a pair of compression springs disposed on opposite sides of said bolt and interposed between the respective shoulders and the opposed inner wall surfaces of said casing, said bolt and said casing being provided with cooperatively coincident longitudinal slots, and a substantially L-shaped handle member, the end of one leg portion of which is pivotally secured within the slotted portion of said bolt and said leg being normally projected through the slot in said casing, the other leg of said handle member extending normally substantially parallel with the longitudinal axis of said bolt with its end projected beyond said casing and being provided with a widened end portion having finger engaging apertures, a notched lug on said handle member for releasable interlocking engagement with said casing when said bolt is in normally projected locking condition, said first mentioned leg portion of said handle member being located entirely within the longitudinal slot of said bolt in the retracted position of the latter, and the second mentioned leg portion of said handle member engaging the end of the slot in said casing to hold said bolt in retracted position.

1,864,178. DRIER FOR FOOD PRODUCTS. ALBERT P. D. BELANGER, Chicago, Ill. Filed Oct. 12, 1929. Serial No. 399,241. 14 Claims. (Cl. 34—15.)



1. In a drier, a housing provided with a treating chamber adapted to contain material to be treated, means for supporting said material in position to be treated within said chamber, means for intermittently moving definite portions of said material progressively in successive order, means associated with said last-mentioned means adapted to cause other definite portions of said material to remain stationary concurrently with said movements of said intermittently moving portions of said material, means for causing a current of air to flow in contact with definite portions of said material periodically in consecutive order concurrently with the movement of said intermittently moving portions of said material and means for limiting the flow of said current of air in contact with said definite portions respectively to definite periods.

1,864,179. APPARATUS FOR THE CONTROL OF HIGHWAY CROSSING SIGNALS. CHARLES W. BELL, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1930. Serial No. 490,456. 18 Claims. (Cl. 246—130.)



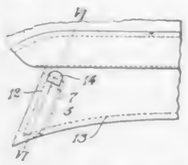
1. In combination, a stretch of railway track divided into first, second, third and fourth successive sections; a highway intersecting said stretch at substantially the junction of said second and third sections, a first interlocking relay having one magnet connected with the rails of said second section and having the other magnet connected with the rails of said third section, a first track relay connected with the rails of said first section and a second track relay connected with the rails of said fourth section, four sources of track circuit current one connected with the rails of each section, a second interlocking relay having its one magnet controlled by said first track relay and said one magnet of said first interlocking relay and having its other magnet controlled by said second track relay and said other magnet of said first interlocking relay, and a highway crossing signal located at the intersection of said railway track and said highways and controlled by said two interlocking relays.

1,864,180. PHOTOMETRIC CALCULATOR. JOSEPH M. BINO, New York, N. Y. Filed Aug. 9, 1929. Serial No. 384,539. 7 Claims. (Cl. 235—87.)



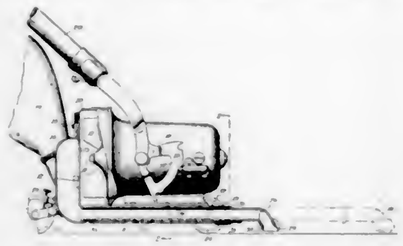
1. A scale device for an exposure meter comprising a first movable member, said member having thereon a first scale indicating stop values and a second scale indicating plate emulsion speeds, said scales being spaced from each other, a second member, said second member having an index adjacent to and cooperating with said second scale, and a third member movable with respect to both the other members and having an index adapted to cooperate with said first scale.

1,864,181. SOFT COLLAR. HERMAN D. BOB, Brooklyn, N. Y. Filed Mar. 23, 1931. Serial No. 524,528. 4 Claims. (Cl. 2—132.)



1. In a soft collar, a pocket adapted to receive and retain a stiffening member, said pocket being formed between one ply of the collar and an insert to the rear thereof, the entrance to said pocket comprising a buttonholed slit extending through a folded portion of said insert the insert being folded near the top thereof on a line substantially parallel to the longitudinal axis of said buttonholed slit.

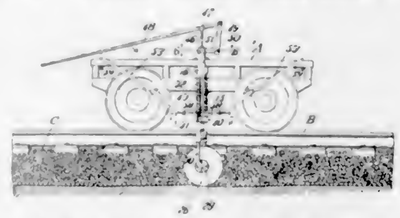
1,864,182. SUCTION CLEANER. HAROLD H. BOYER, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Feb. 20, 1931. Serial No. 517,213. 4 Claims. (Cl. 16—16.)



1. A suction cleaner comprising a suction-creating unit, a suction nozzle having an intake opening and movably carried by said unit, means movably supporting said unit and said nozzle with said intake opening addressing the surface covering undergoing cleaning, characterized by the fact that said nozzle is adjustable horizontally relative to said suction-creating unit.

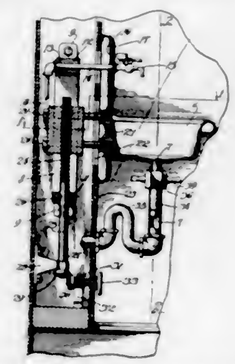
1,864,183. BALLAST LINER. NOAH BRIDGES, Mulvane, and THEODORE TURPIN MOORE, Cassoday, Kans. Filed Mar. 25, 1931. Serial No. 525,219. 5 Claims. (Cl. 37—105.)

1. A ballast liner device comprising a laterally disposed frame portion adapted to be secured to a track car for pendently supporting the device beyond the side of a track car; a vertically disposed frame portion secured to the outer end of the laterally disposed frame portion and involving a pair of telescopically arranged tubes with the inner tube slidably arranged; means secured to the



lower end of the slidable inner tube and adapted to move the ballast toward the track; and means disposed through the telescopic tubes whereby the position of said first mentioned means may be controlled.

1,864,184. SINK POSITIONING MECHANISM. EDWARD N. CAVERT, Chicago, Ill., assignor of one-third to Samuel Petersen and one-third to George B. Archer, Chicago, Ill. Filed Dec. 4, 1930. Serial No. 499,920. 4 Claims. (Cl. 4—187.)



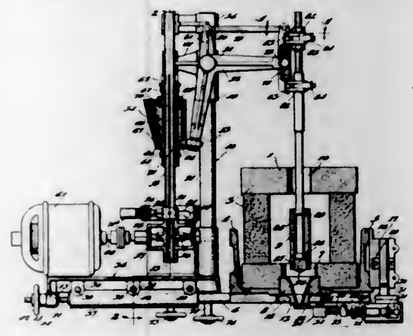
1. In combination, a sink, an outlet pipe for said sink, a stationary drain pipe, means for providing a leakproof connection between said outlet pipe and said drain pipe at any selected elevation of said sink, a stationary supporting frame, a block member slidably mounted upon said supporting frame and connected to said sink, and a vertically extending screw member in threaded engagement with said block member for raising or lowering said block member and sink to any selected position.

1,864,185. METHOD OF AND COMPOSITION FOR PRESERVING SUBSTANCES. LUDWIG J. CHAISTMANN, Jersey City, and DAVID W. JAYNE, Jr., Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Jan. 13, 1931. Serial No. 508,548. 21 Claims. (Cl. 23—230.)

11. A composition of matter containing an organic compound subject to deterioration by light or oxygen and a substituted anthranilic acid.

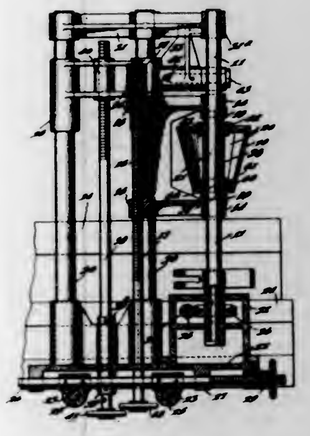
1,864,186. APPARATUS FOR FEEDING MOLTEN GLASS. EDMA H. CURTIS, Jr., Cincinnati, Ohio, assignor, by mesne assignments, to General Glass Corporation, Lancaster, Ohio, a Corporation of Ohio. Filed Feb. 8, 1928. Serial No. 252,882. 34 Claims. (Cl. 49—55.)

22. In a glass feeder, a container having a discharge orifice, a plunger reciprocal therein in alignment with the discharge orifice, a platform disposed at one side of said container, means mounted on the platform enabling the platform to be adjusted in transverse directions in a horizontal plane, a mounting for the plunger and its operating mechanism adjustable vertically on the platform, plunger operating and plunger stroke adjusting mechanism carried by said mounting comprising an elongated differentially contoured cam and translating mechanism relatively adjustable while the cam is in rotation, means for rotating the cam, control members on the platform



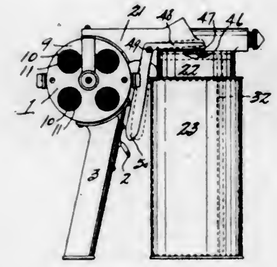
for horizontally adjusting the platform in relation to the container, a control member on the platform for vertically adjusting the plunger system in relation to the container, a control member on the platform for adjusting the stroke length of the plunger, all of said adjustment mechanisms being operative during continued feeding of charges, shears and shear operating mechanism, shear-height adjusting mechanism, and means for synchronizing the plunger and the shear operating mechanisms irrespective of the various adjustments specified.

1,864,187. CAM AND ITS MOUNTING FOR A GLASS FEEDER. EDMA H. CURTIS, Jr., Cincinnati, Ohio, assignor, by mesne assignments, to General Glass Corporation, Lancaster, Ohio, a Corporation of Ohio. Original application filed Feb. 8, 1928, Serial No. 252,882. Divided and this application filed Jan. 16, 1930. Serial No. 421,288. 5 Claims. (Cl. 74—1.)



1. A cam, comprising, axially abutting sections, and a driving sleeve about which said sections are centered and secured, said sleeve having opposing flanges axially adjustably spaced apart and engageable upon and around the respective ends of the joined cam sections for clamping the sections in position against longitudinal and lateral displacement.

1,864,188. SPRAYING DEVICE. SIMON DEUTSCH, South Bend, Ind., assignor, by mesne assignments, to The Electric Sprayit Company, South Bend, Ind., a Corporation of Delaware. Filed June 25, 1928. Serial No. 288,162. 7 Claims. (Cl. 299—89.)

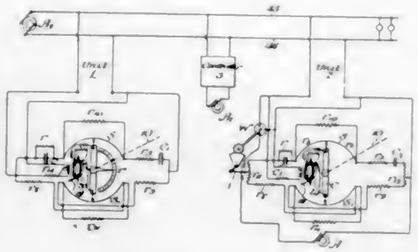


1. In a hand-portable spraying machine, a nozzle unit having a tubular duct, a nozzle at one end of said duct, a liquid container joined to the under side of said duct and so arranged that compressed fluid supplied to said duct causes liquid from said container to be sprayed through said nozzle, a compressor unit including an electric motor and an air compressor carried on and driven by said motor, a bolt extending between the rear portion of said nozzle unit and to said compressor unit clamping the same to each other, said bolt forming a hollow conduit for supplying compressed air from said compressor to the hollow space in said tubular member.

5. The method of controlling the operation of a spraying device of the type including a container for liquid to be sprayed, a compressed fluid discharge duct, a discharge nozzle at the end of said duct, a liquid discharge duct extending from near the bottom of said container into said fluid discharge duct and having a discharge tip back of the opening of said nozzle, and a source of compressed air to supply said compressed fluid discharge duct and the space within said container, which comprises maintaining continuously a flow of compressed air into said liquid discharge duct and through the nozzle, and starting and stopping the spraying action by maintaining the compressed air under compression within said container or releasing the compression therefrom.

6. In a hand portable spraying machine, an electric motor, a rotary compressor at one end of said motor, said compressor having cooling ribs extending outwardly from its periphery, said motor having means for producing a stream of air passing along said cooling ribs to cool said compressor, a rigid nozzle unit having a hollow duct, a spray nozzle at the front end of said duct, a liquid container detachably secured to the underside of said duct to supply spraying liquid to said nozzle, means for detachably supporting the rear end of said nozzle unit on the periphery of said compressor outside the peripheral region occupied by said ribs, the said duct extending in a direction transverse to the motor axis, a duct connection between the discharge opening of said compressor and the rear end of said duct extending through the junction between said nozzle unit and compressor for supplying compressed air to said duct, and means utilizing the compressed air from the duct for delivering liquid from said container to said spray nozzle and discharge it therefrom in atomized form, the discharge opening of said nozzle being so arranged that the direction of the spray issuing from the nozzle is different from the direction of flow of the cooling air passing over said compressor.

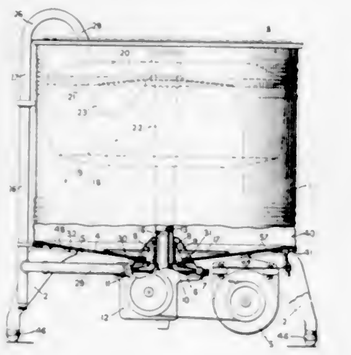
1,864,189. METHOD AND APPARATUS FOR CONTROLLING THE LOAD-SPEED CHARACTERISTICS OF MOVING SYSTEMS. EDGAR D. DOYLE, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 11, 1928. Serial No. 284,369. 13 Claims. (Cl. 290—4.)



2. An alternating current supply system comprising a group of alternators operating in parallel, driving means for each alternator, a plurality of means each adjustable to vary the input energy to one of said driving means, means responsive to system frequency for regulating one of said adjustable means whereby the associated alternator carries the normal increases of system load and maintains the system frequency constant despite said normal increases of load, and a plurality of means each responsive to system frequency and the individual load upon one of the alternators to regulate the other adjustable means whereby increases in load in excess of maximum normal increase are shared by said other alternators and the system frequency held constant at a subnormal value determined by the system load.

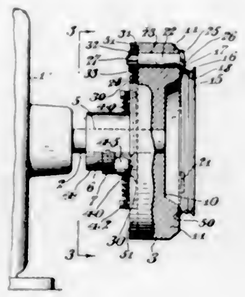
13. An alternating current supply system comprising an alternator, and means for controlling said alternator comprising a balanced electrical circuit, means for varying the input energy to said alternator when the system frequency is other than the frequency at which said circuit is balanced, and means responsive to the load upon said alternator for varying the frequency at which said circuit is balanced.

1,864,190. TANK FOR LAUNDRY MACHINES. GEORGE W. DUNHAM, New Haven, Conn., assignor to The Whirldry Corporation, New Haven, Conn., a Corporation of New York. Filed Jan. 8, 1927. Serial No. 159,784. 5 Claims. (Cl. 68—18.)



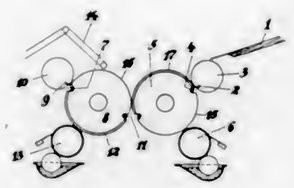
1. In combination, a tank comprising bounding walls including a bottom plate having an opening, said bottom plate having an annular depressed portion surrounding said opening, a separate flat reenforcing ring in said portion, a lining covering said bottom plate and ring, said ring, bottom plate and lining having aligned holes, means for supporting said bottom plate near the outer edge thereof, laundry operating mechanism and fastening devices passing through said holes to secure said laundry operating mechanism in position.

1,864,191. CHUCK. ADAM EIDAM, Hazleton, Pa. Filed May 5, 1928. Serial No. 275,278. 3 Claims. (Cl. 279—1.)



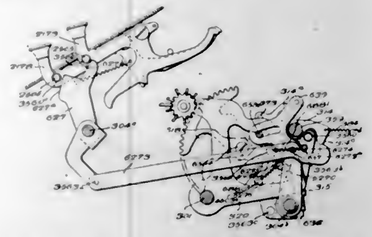
2. In a chuck, the combination of a head, means for rotating the same, a plurality of fixed work-holding members and a movable work-holding member secured to the head for clamping work on the head, and means carried by said movable member adapted to be actuated by centrifugal force induced by rotation of the head for holding the said movable member in contact with the work.

1,864,192. ROTOGRAVURE PRINTING MACHINE. HANS FISCHER, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Mar. 22, 1930, Serial No. 438,068, and in Germany Mar. 25, 1929. 2 Claims. (Cl. 101—157.)



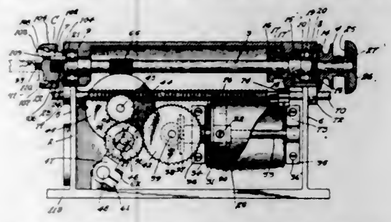
1. A rotogravure printing machine comprising two form cylinders of equal diameter, a first and second impression cylinder mounted on the same level and double the size of the form cylinders, a feed board, a conveyor between said feed board and said first impression cylinder adapted to deliver a sheet to said first impression cylinder in such a manner that the side of the sheet toward the feed board is first printed, a drying cylinder cooperating with said second impression cylinder and upon which the sheet is supported with its printed side out, said sheet thereafter being delivered to said second impression cylinder for another printing operation, and a sheet ejector arranged at the upper side of the second impression cylinder and adapted to receive the sheet from said second impression cylinder with its freshly printed side upward.

1,864,193. CALCULATING MACHINE. CLYDE GARDNER, deceased, Ebensburg, Pa., by Edna B. Gardner, administratrix, Ebensburg, Pa., assignor, by mesne assignments, to Gardner Company, Ebensburg, Pa., a Corporation of Delaware. Original application filed June 7, 1924, Serial No. 718,678. Divided and this application filed Nov. 5, 1928. Serial No. 317,432. 6 Claims. (Cl. 235—130.)



1. In a calculating mechanism, the combination of an operating mechanism, a totalizer, a totalizer clearing mechanism, a full stroke pawl carrying a stop, and means controlled by the clearing mechanism for shifting the full stroke pawl so as to carry the stop into the path of the operating mechanism during the movement of the clearing mechanism to prevent movement of the operating mechanism while the clearing mechanism is moving.

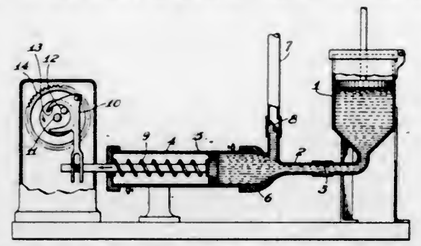
1,864,194. WINDING MACHINE. MARTIN B. GROUT, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed May 23, 1924, Serial No. 715,358. Renewed Feb. 15, 1926. 28 Claims. (Cl. 242—9.)



1. In a winding machine of the class described, including a winding spindle, a spool supported by said spindle, a reciprocating means for placing material in layers upon said spool, a train of gearing associated with said winding spindle, provided with means to permit the substitution of different gears, a tubular cam member, a cam shaft for rotatably supporting said cam member, said shaft being parallel to said winding spindle and said reciprocating means and connected to said winding spindle through said train of gearing, transverse shafts supporting said train of gearing, said cam member having receding faces, and means secured to said reciprocating means and associated with the receding faces of said tubular cam member to cause movement of said reciprocating means, said train of changeable gearing providing different predetermined speeds of rotation for said cam to permit said reciprocating means to be moved in its to and fro movement at different predetermined speeds for different sizes of material which may be placed in layers upon said spool.

1,864,195. LUBRICATOR. GEORGE WILLIS HALL, Wilkinsburg, Pa. Filed June 11, 1928, Serial No. 284,412. Renewed Aug. 29, 1931. 1 Claim. (Cl. 184—27.)

In lubricating apparatus a supply tank for lubricant, a cylinder provided through one head with a single receiving and discharging port, valve-controlled communication from said tank through said port to said cylinder, a valve-controlled discharge passageway with which through said port said cylinder communicates, a piston in said cylinder, means tending always to carry the piston to the limit of its discharge traverse, a bell-crank lever mounted on a fixed fulcrum and adapted to swing in a plane to which the axis of the said cylinder is parallel, one arm of said lever engaging the said piston by slot-and-pin engagement, and the other arm of said lever being bifurcated, and a rotatable shaft equipped with a crank-pin, the shaft being so arranged that during one part

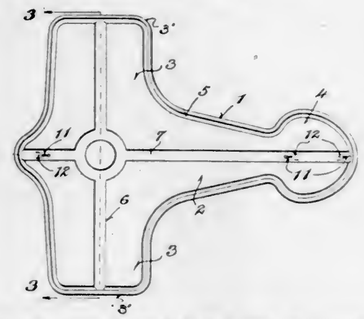


of its cycle of turning the crank-pin alternately engages the bifurcated arm of said bell-crank lever, first on one side and then on the other, and during another part of the cycle the crank-pin is free of engagement with the lever arm, whereby, after the means first named have been effective to shift the piston, the shaft by rotation is effective, through crank-pin and bell-crank lever, first to shift the piston through any still untraversed portion of its discharge stroke and then to shift the piston throughout its receiving stroke.

1,864,196. PROCESS FOR THE PREPARATION OF ACETYLENE AND ETHYLENE. WILLY O. HERRMANN and ERICH BAUM, Munich, Germany, assignors to Consortium fur Elektrochemische Industrie, Munich, Germany. Filed Apr. 14, 1928, Serial No. 270,148, and in Germany Apr. 16, 1927. 2 Claims. (Cl. 260—170.)

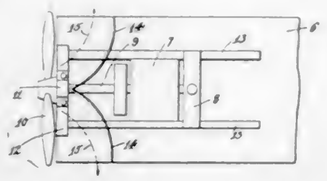
1. Process for the preparation of ethylene and acetylene which comprises producing a flame, by burning a combustible gas with oxygen, within an organic liquid, stopping the flow of combustible gas when the temperature of said liquid in the region near the flame is sufficient to enable the liquid to burn with oxygen alone and thereafter maintaining the flame within the liquid by continuing the flow of oxygen.

1,864,197. KITE. LLOYD E. JOHNSON, Manitowoc, Wis., assignor to Aluminum Goods Manufacturing Co., Manitowoc, Wis. Filed May 28, 1931. Serial No. 540,553. 4 Claims. (Cl. 244—22.)



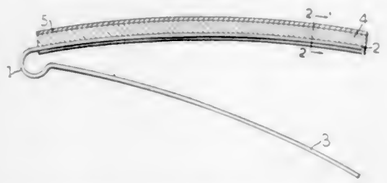
1. A kite formed from a single blank of comparatively light metallic material and comprising an elongated body portion having lateral projecting wings adjacent its forward end, and terminating in an enlarged stabilizing surface at its rear end, said blank being provided with marginal, transverse and longitudinal webs.

1,864,198. APPARATUS FOR TREATING FRUIT TREES. THOMAS W. JOHNSON, Mountain View, Calif. Filed Aug. 13, 1930. Serial No. 475,005. 6 Claims. (Cl. 47—57.)



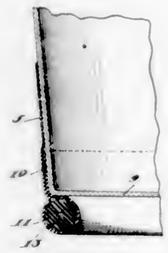
2. An apparatus adapted to subject adjoining rows of fruit trees to a current of air, comprising a vehicle, an air screw mounted upon a shaft substantially parallel to the longitudinal axis of said vehicle, means operably connected to said shaft for driving said air screw, and a substantially vertical curved deflector carried by said vehicle and adapted to receive the air blast from said air screw and deflect said air blast outwardly in substantially opposite directions to both sides of said vehicle.

1,864,199. BARRETTE. JULIUS KAHN, Jersey City, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 30, 1931. Serial No. 512,336. 3 Claims. (Cl. 63—2.)



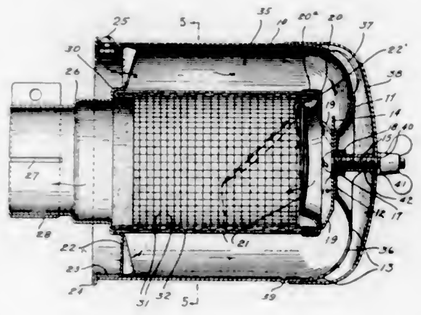
3. A decorated barrette comprising, a metal barrette proper presenting a tongue and a back, a decoration for said barrette proper in the form of a strip of cellulosic plastic carrying a decorative material therein as an element of the composition thereof, said strip lying along said back on the exterior thereof, and an envelope of transparent cellulosic plastic enveloping said strip and back to hold said decoration assembled upon said back while exposing said decoration to view.

1,864,200. PAIL PROTECTOR. HENRY L. KAUFMANN, Newton, Mass. Filed Sept. 13, 1930. Serial No. 481,705. 3 Claims. (Cl. 220—69.)



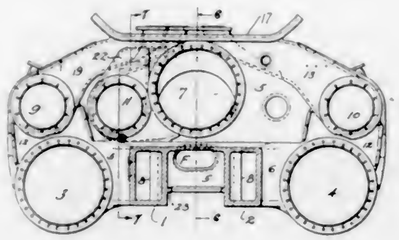
1. A protector for application to the bottom portion of a pail, comprising a sleeve portion of sheet rubber, and a base ring larger in cross-section than the thickness of the sleeve, the base ring consisting of a rubber core and the lower margin of the sleeve being doubled around the ring and secured to the inner surface of the sleeve.

1,864,201. AIR CLEANER. CLAUDE S. KEGERREIS and JOSEPH B. LINDECKER, Toledo, Ohio, assignors to The Tillotson Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 2, 1926. Serial No. 139,064. 12 Claims. (Cl. 183—67.)



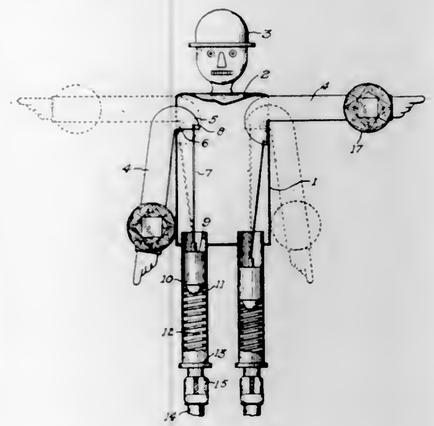
1. In an air cleaner, a casing; a passage through said casing; means to impart a whirling motion to the air to cause dust particles to pass to one side of said passage; means to filter the air; and means to permit a portion of the air from the last mentioned side of said passage to pass unfiltered when the velocity of the air exceeds a predetermined amount.

1,864,202. LOCOMOTIVE STRUCTURE. CLEMENT W. KELL, Ridley Park, Pa., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Mar. 6, 1931. Serial No. 520,510. 10 Claims. (Cl. 105—44.)



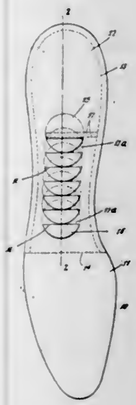
1. In a locomotive structure, a main steam cylinder located at the side of the locomotive structure, a main steam cylinder located adjacent the longitudinal center of the locomotive structure, a steam control chamber located intermediate said cylinders, and an exhaust steam conduit leading from said side cylinder to the portion of said structure above said center cylinder, the wall of said conduit being spaced throughout its length from the walls of said center cylinder and chamber.

1,864,203. ROBOT FOR SIGNALING DEVICES. GEORGE W. MACKENZIE, Beaver, Pa. Filed Nov. 14, 1931. Serial No. 575,105. 6 Claims. (Cl. 116—39.)



1. A signal device for automotive vehicles comprising a movable indicator, conduits normally connecting said indicator to the suction produced by the engine motivating the vehicle, and control means for disconnecting said suction whereby to actuate said movable indicator.

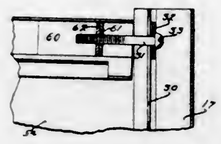
1,864,204. SOCK LINING. MORRIS LAPIDUS, Long Island City, N. Y., assignor, by mesne assignments, to Charles Miller, Esq., as trustee. Filed Nov. 26, 1930. Serial No. 498,212. 6 Claims. (Cl. 36—44.)



1. A sock lining having an upper blank and a lower blank, and a plurality of overlapping pieces of leather disposed partly between said blanks and partly over said upper blank at the shank portion of said sock lining.

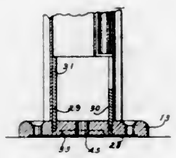
1,864,205. PARTITION FRAME. OSCAR J. LARSON, Jamestown, N. Y., assignor to Wright Metal Incorporated, Jamestown, N. Y., a Corporation of New York. Filed Nov. 12, 1929. Serial No. 406,667. 2 Claims. (Cl. 189—34.)

2. In partition construction, a panel frame unit including vertical and horizontal rails, means adjustably joining said horizontal with said vertical rails for varying the vertical dimension of a panel opening, said means



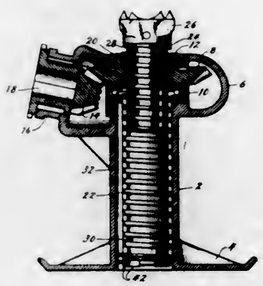
comprising a bracket in said horizontal rail, an elongated slot in said vertical rail and a screw projecting through said slot and engaged with said bracket.

1,864,206. PARTITION POST OR PILASTER. OSCAR J. LARSON, Jamestown, N. Y., assignor to Wright Metal Incorporated, Jamestown, N. Y., a Corporation of New York. Filed Sept. 18, 1929. Serial No. 393,474. 1 Claim. (Cl. 189—34.)



In a partition construction, a post comprising a cast metal base, an intermediate member cast into said base and projecting upwardly therefrom, flexible walls forming said members, said walls being susceptible of adjustment to align them at right angles relative to said base, an upright telescopically engaged with said intermediate member and abutting said base, said upright member being welded to said intermediate member whereby to integrally join said upright to said base.

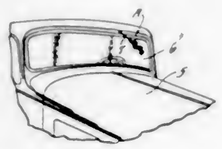
1,864,207. LIFTING JACK. MILLARD B. LUCKER, Benton Harbor, Mich., assignor, by mesne assignments, to The Dayton Malleable Iron Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 1, 1929. Serial No. 351,511. 2 Claims. (Cl. 254—102.)



1. In a double screw lift jack, the combination with a standard provided with a guideway, a rotatable nut mounted on the upper end of said standard and provided with interior threads, means for rotating said nut, a

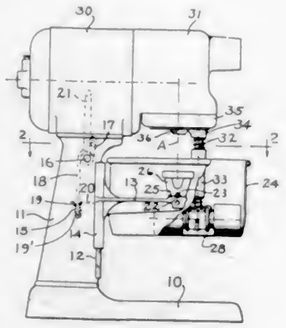
tubular sleeve having exterior threads mounted within the threaded nut, said tubular sleeve having at its upper end interior threads, a second threaded member having exterior threads engaging the interior threads of the tubular sleeve, and provided with a work supporting head, the lower end of said tubular sleeve having a plain cylindrical portion, a coiled spring resiliently gripping the exterior threads of the interior portion with the free ends of the spring engaging the walls of the guide-way, the lower end of said tubular sleeve being peened so as to prevent the inadvertent detachment of the coiled spring.

1,864,208. ICE CUTTER FOR WINDSHIELDS. JOHN RUBEN LUNDBERG, Minneapolis, Minn. Filed Mar. 13, 1931. Serial No. 522,261. 4 Claims. (Cl. 15—255.)



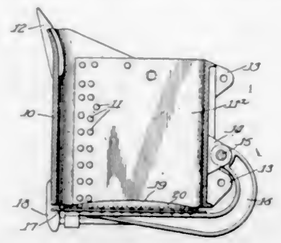
1. For use with a windshield wiper mounted for oscillatory movement over a windshield, a casing member having an open bottomed housing at its upper portion adapted to be hooked over the upper end of said wiper, said casing member having a lower portion adapted to fit against said wiper and a blade secured to said casing member and having a sharpened edge adapted to bear against said windshield, the sharpened edge of said blade being mounted to extend at an acute angle to the windshield.

1,864,209. FOOD HANDLING APPARATUS. DAVID A. MEEKER, Troy, Ohio, assignor to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed Mar. 27, 1930. Serial No. 439,507. 4 Claims. (Cl. 146—175.)



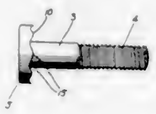
1. In a machine of the character described having a driven shaft having both rotary and bodily translational movements, and a scraping and crushing roller carried by said shaft; a container adapted to receive foodstuffs and to be operated upon by said roller, comprising a side wall having an inwardly curving bottom portion and a perforate bottom wall, the curvature of said bottom portion simulating the outer bounding surface of the imaginary solid circumscribing the sweep of said roller as it is moved within said container by said driven shaft in its rotary and bodily translational movements, whereby substantially no available dead space is provided within the lower portion of said container for the accumulation of foodstuffs not subject to the action of said roller in its movement.

1,864,210. TURTLE BACK REENFORCING CASTING FOR DIPPER DOORS. DANIEL H. MEYER, Elkville, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Oct. 4, 1929. Serial No. 397,379. 5 Claims. (Cl. 214—145.)



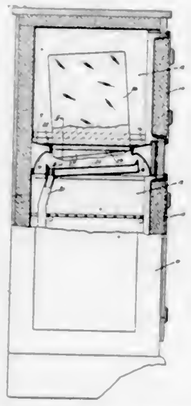
1. In excavating dipper construction, a dipper door and a renewable reenforcing casting secured to and substantially covering the inner surface of the dipper door.

1,864,211. BOLT. OLAF E. OLSON, St. Paul, Minn. Filed Dec. 2, 1929. Serial No. 411,096. 5 Claims. (Cl. 85—9.)



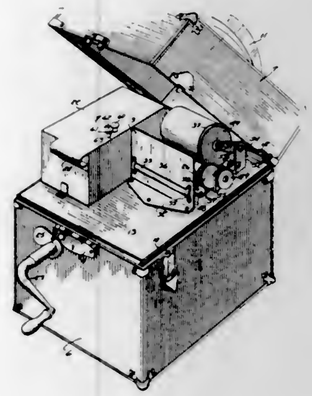
1. A bolt having a shank, and a head having an undulating chisel cutting edge, which completely circumscribes the shank of the bolt and the inclined face of which is opposed to the shank, said shank having threads and a nut threaded thereon as means for axially translating the bolt to obtain cutting action and embedment of the head.

1,864,212. ICE RACK FOR REFRIGERATORS. FRED OPHULS, New York, N. Y., and GEORGE K. NUSS, Duluth, Minn., assignors to Duluth Refrigerator Corporation, Duluth, Minn., a Corporation of Minnesota. Filed Mar. 6, 1931. Serial No. 520,512. 7 Claims. (Cl. 62—31.)



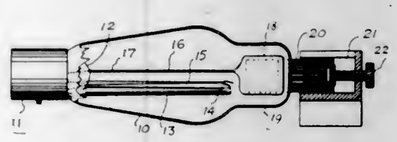
1. An ice rack comprising a plurality of spaced bars adapted to support a block of ice, said bars being of gradually increased depth toward one end for accelerating the melting of said ice at said end.

1,864,213. RECORDING APPARATUS. DARNEY E. PETTY and OLIVE SCOTT PETTY, San Antonio, Tex. Filed Mar. 27, 1928. Serial No. 265,010. 9 Claims. (Cl. 234—1.)



3. A photographic recording apparatus of the character described comprising a closed case, a rotary member for driving a band of photographic paper, a rotary member receiving the exposed photographic paper with the sensitive side inwards and driven at progressively decreasing speed as the band accumulates thereon, and means to permit the passage of the band continuously from said closed case to the said driving member while excluding light from the case.

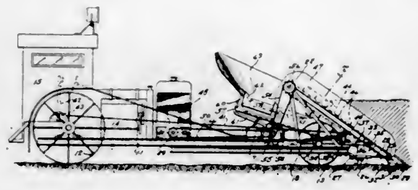
1,864,214. INSTRUMENT FOR DETECTING VIBRATIONS. OLIVE SCOTT PETTY, San Antonio, Tex. Filed Mar. 27, 1928. Serial No. 265,068. 8 Claims. (Cl. 250—27.5.)



1. A seismograph comprising a thermionic vacuum tube with one element thereof serving as a pendulum steady mass movable in only one plane, and external means for damping relative movement of the tube and the steady mass.

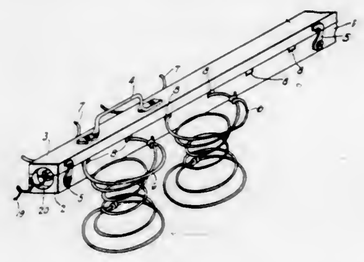
1,864,215. SNOWPLOW. ELMER PITCHER, Minneapolis, Minn., assignor, by mesne assignments, to M. T. Nagle, St. Paul, Minn., J. R. Schoffman, St. James, Minn., Charles H. Miller, Portland, Oreg., Elmer Pitcher, Minneapolis, Minn., J. L. Moore, Wimbledon, N. Dak., Albert Running, St. James, Minn., and Myles Henderson, Crosby, N. Dak. Filed Mar. 23, 1928. Serial No. 264,188. 1 Claim. (Cl. 37—45.)

In a machine of the class described, the combination with a truck, of a forwardly inclined deck mounted to swing about a horizontal axis, a scraper blade at the receiving end of said deck, a counterbalancing device for said deck, a lifting device for swinging said deck about said



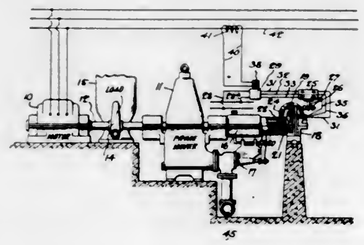
horizontal axis to raise the scraper blade, and a brace normally holding said deck with the scraper blade in an operative position with freedom for lifting movement.

1,864,216. APPARATUS FOR HOLDING COILED SPRINGS WHILE LACING. HOWARD H. POYNER, Oklahoma City, Okla. Filed June 17, 1930. Serial No. 461,740. 2 Claims. (Cl. 140—3.)



1. In a device of the class described, a spring carriage, including a base member and a detachable top member, seat means on said base member for coiled springs, longitudinal tongue gripping means on said top member co-acting with said seat means for holding said springs and hook means for securing said base and said top members detachably together.

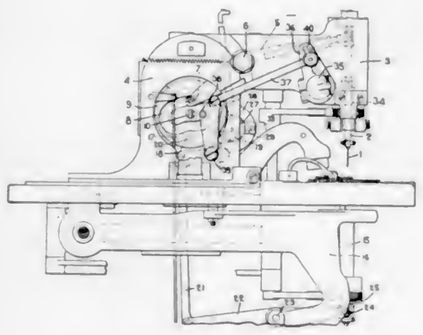
1,864,217. DUAL DRIVE MECHANISM. JOHN P. RATHBUN, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 16, 1929. Serial No. 332,979. 6 Claims. (Cl. 60—6.)



1. The combination with an electric motor, a prime mover and a power load connected to the electric motor and to the prime mover and normally driven by the motor,

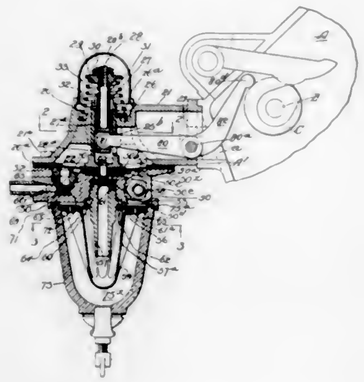
the prime mover including a governor valve and a governor effective while the motor is operating to close the valve, of means responsive to failure of the motor power supply to increase the governing speed of the governor.

1,864,218. LOOPER-ADJUSTING MEANS FOR BUTTONHOLE SEWING MACHINES. FRANKLIN A. REECE, Brookline, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Oct. 6, 1931. Serial No. 567,183. 4 Claims. (Cl. 112—157.)



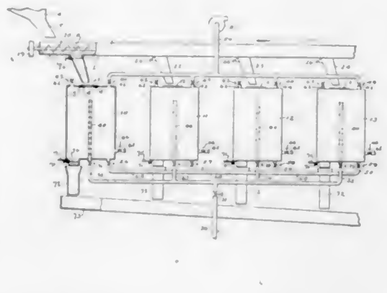
1. In a sewing machine, the combination with looper mechanism, means to actuate the latter comprising a pivoted lever, a cam for actuating said lever and means for adjusting the pivotal point of the lever relative to said cam.

1,864,219. ENGINE OPERATED FUEL PUMP. EDWARD A. ROCKWELL, Long Island City, N. Y. Filed Mar. 31, 1928. Serial No. 266,151. 13 Claims. (Cl. 103—38.)



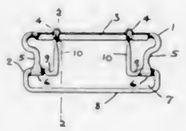
1. An apparatus for moving liquid comprising a housing having a variable capacity chamber with a movable wall member by whose movement the chamber capacity is enlarged for liquid intake and reduced for liquid discharge; means for operating said movable wall member comprising a two-membered stem, said stem members being engaged with each other with lost motion between them in the movement for operating the movable wall member, and furnished with co-operating stops for limiting said lost motion, one of said stem members being arranged for securement to the movable wall member, and actuating means engaging the second stem member, said last mentioned engagement being made with the portion of said second stem member at the end thereof which engages the first mentioned stem member, said first mentioned stem member being apertured for admitting the actuating means into engagement with the second stem member.

1,864,220. PAPER MANUFACTURE. HAROLD T. RUFF, Chillicothe, Ohio, assignor to The Mead Research Engineering Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 14, 1930. Serial No. 444,078. 21 Claims. (Cl. 92—20.)



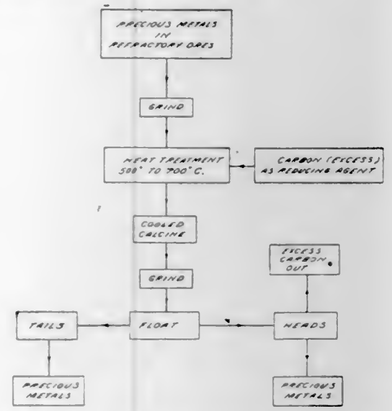
1. In the manufacture of pulp, the method which comprises subjecting fibrous material to treatment with a halogen, then passing a fluid through the treated fibrous material to drive out excess halogen, and passing the mixed fluid and halogen discharging from said fibrous material through additional fibrous material to thereby use the excess halogen in treating the additional fibrous material.

1,864,221. PRONG BUCKLE. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed June 28, 1929. Serial No. 374,393. 3 Claims. (Cl. 24—188.)



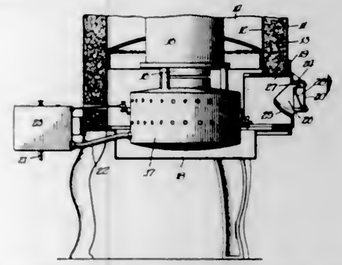
3. A prong buckle comprising a prong member and a frame member, the members being pivotally connected, the prong member having prongs, and the frame member having a bar portion bent to provide spaced arched sections thereof extending entirely across the width and below one surface of the bar portion into which the pointed extremities of the prongs may be swung for protection.

1,864,222. TREATMENT OF PRECIOUS METAL BEARING ORES. SWAIN JOSEPH SWAINSON, Westfield, and ARVID EMIL ANDERSON, Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed June 13, 1931. Serial No. 544,082. 6 Claims. (Cl. 75—185.)



1. A method of recovering precious metals from ores containing them in refractory combination with manganese, which consists in subjecting the same to a reducing heat treatment using a solid reducing agent, removing the excess reducing agent by floation after the heat treatment and recovering the precious metals by cyanidation.

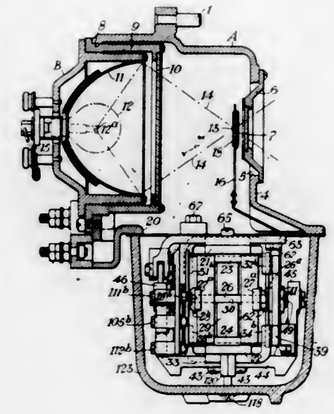
1,864,223. AUTOMATIC DRAFT CONTROL. BEN VALJEAN, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Sept. 19, 1929. Serial No. 393,630. 3 Claims. (Cl. 236—45.)



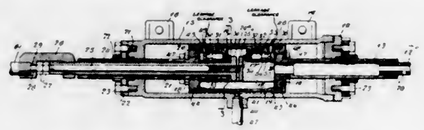
1. The combination with an oil burner and a substantially sealed housing therefor having an air inlet chute of gradually decreasing cross-sectional area, of a draft control device comprising a blade offset to lie in oblique planes and hinged at the upper side of the chute entrance and free to swing into said chute under pressure of the draft, the side walls of the chute cut away over an area including the oblique planes whereby the air inlet area is varied inversely with the draft but in decreasing proportion as the draft increases.

1,864,224. LIGHT SIGNAL. WESLEY B. WELLS, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 8, 1931. Serial No. 507,383. 10 Claims. (Cl. 175—336.)

1. An electro-responsive device comprising a field structure consisting of permanently magnetized bars having their like poles connected by magnetizable backstraps, a first and a second pair of pole pieces attached to said backstraps in such manner that the two pole pieces of each pair are of opposite polarity, the pole pieces of each pair being formed with pole faces which are located in the same vertical plane, a rotor having two armatures connected by a magnetizable core and one separated from the pole pieces of each pair by vertical air gaps, and means for reversibly supplying flux to said rotor.



1,864,225. THROTTLE VALVE OPERATING MEANS. ARTHUR WILLIAMS, New York, N. Y., assignor to American Throttle Company, Inc., New York, N. Y. Filed Oct. 4, 1928. Serial No. 310,284. 14 Claims. (Cl. 121—41.)

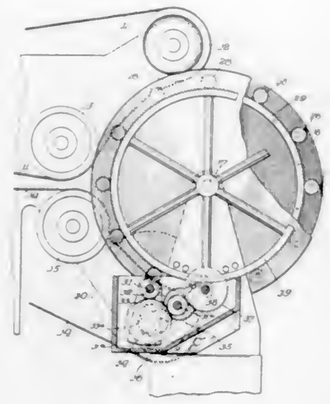


1. An operating motor of the kind described comprising a cylinder, a hollow double ended piston in said cylinder having an annular peripheral recess at an intermediate portion thereof, and provided with an internal space constituting an exhaust chamber, a connection from a source of fluid under pressure to said annular recess, connections in said piston leading from said annular recess to opposite ends of said piston respectively and to said exhaust chamber, means in said connections whereby pressure fluid is supplied to both ends of said cylinder for normally maintaining fluid pressure upon opposite ends of said piston, and valve means of the poppet type located independently of each other in said connections under manual control for selectively directing the pressure fluid from either end of said cylinder to the exhaust chamber and simultaneously directing pressure fluid from said annular recess to the opposite end of said cylinder, said valve means including piston members interposed in the path of the pressure fluid whereby said valve means will be normally urged by said fluid to closed position.

1,864,226. VARIABLE SPEED SURFACING MACHINE. MOSES W. H. WILSON, East Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Apr. 8, 1929. Serial No. 353,295. 9 Claims. (Cl. 51—145.)

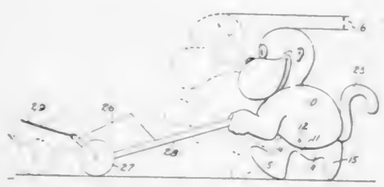
1. In a machine for surface treating articles of non-cylindrical contour, the combination with a uniformly

traveling treating surface, means for moving the article bodily and means for rotating the article in rubbing



contact with said surface, of means for varying the axial speed of rotation through a cycle during the period of such contact.

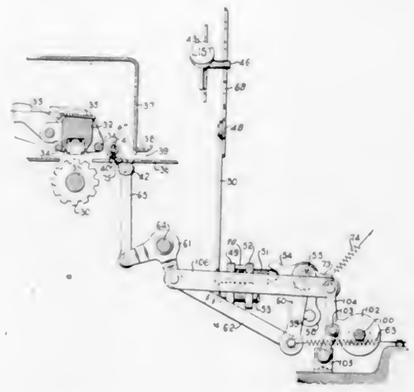
1,864,227. TOY. FROHMAN ANDERSON, Detroit, Mich. Filed Oct. 24, 1929. Serial No. 402,209. 11 Claims. (Cl. 46—40.)



1. In a device of the type described, in combination, a main body member, a leg member pivotally secured thereto, said leg member being provided with a plurality of angularly arranged legs thereon, each of said legs being provided with a foot, the sole of each of said feet being curved, and the sole of each of said feed adjacent the corresponding heel being closer radially to the pivotal point of said leg member than the sole of said foot adjacent the toe thereof, and substantially all points on said soles adapted for engagement with a supporting surface.

1,864,228. CASH REGISTER. FRIEDRICH W. F. BERGER, Berlin, Germany, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed July 20, 1927. Serial No. 207,248, and in Germany Aug. 11, 1926. 7 Claims. (Cl. 235—3.)

1. In a machine of the class described, the combination of a receptacle to receive insertable slips, a pivoted lip normally preventing the insertion of a slip into the receptacle, a depressible key, a bar operable by said key, a bell crank, connections between the bar and the bell crank to operate the latter, a total control lever, a cam actuated by the lever, connections between the cam and the bell

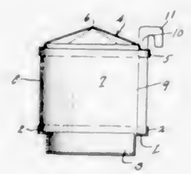


crank to operate the latter, and a link for transmitting the movement of the bell crank to the lip whereby the lip is moved into an ineffective position.

1,864,229. PRODUCTION OF GALACTONIC ACID AND ITS LACTONE. ROBERT S. BLACK, Highland Park, Ill., assignor to Pfanstiehl Chemical Company, Waukegan, Ill., a Corporation of Illinois. Filed Mar. 21, 1927. Serial No. 177,209. 3 Claims. (Cl. 260—119.)

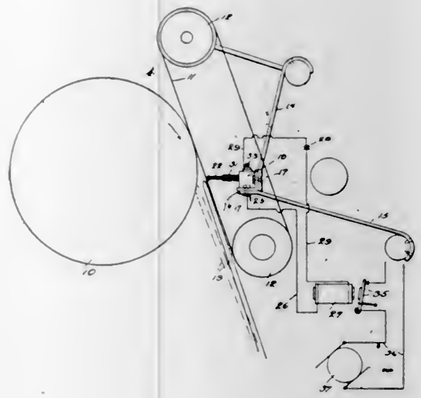
1. The method of producing galactonic acid from galactan which comprises subjecting an aqueous solution of galactan to the action of a halogen while maintaining a temperature of 50° to 70° C., thereby producing galactonic acid directly.

1,864,230. BIRD CAGE BATH. VERN W. BUSCH, Detroit, Mich., assignor to Busch Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 12, 1931. Serial No. 580,630. 5 Claims. (Cl. 119—18.)



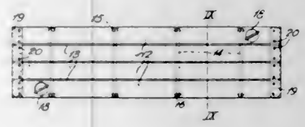
1. In a bird bath, a base formed with a depressed portion for receiving water and having an upstanding peripheral flange, a top having a peripheral downturned flange, a transparent body portion substantially U shaped in plan having the top and bottom edges thereof secured to the respective flanges of the top and base providing the principal means for securing the said top and base in fixed relation, and a supporting means therefor consisting of a pair of strips each having its upper end return-bent and the body thereof cementitiously united with the respective vertical edge of the body member to reinforce the same between the flanges of the top and the base.

1,864,231. PRINTING PRESS ATTACHMENT. JOSEPH N. CANNING, Tampa, Fla. Filed May 3, 1928, Serial No. 274,860. Renewed May 4, 1932. 2 Claims. (Cl. 192—127.)



1. A stop device for machines having a material feed, comprising an angle bar adapted to be secured to the machine adjacent one side of the material, an electric non-conducting beam mounted in said bar and having a plurality of sockets therein opening toward the material, flexible fingers seated in the sockets, means for adjustably holding the fingers in the sockets with the fingers in close proximity to the material, means for connecting the fingers to one side of an electric circuit, and circuit closing means connected to the other side of the electric circuit and mounted on the beam in position to engage the fingers when deflected by abnormal pressure of the material thereon.

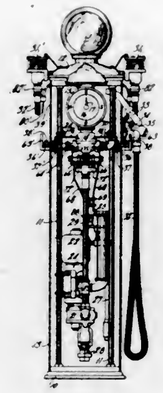
1,864,232. SHIP'S HATCH COVER. HARRY COCKS, Cardiff, Wales. Filed Jan. 9, 1931, Serial No. 507,700, and in Great Britain Aug. 25, 1930. 2 Claims. (Cl. 114—201.)



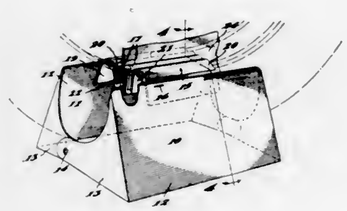
1. A hatch cover comprising a plurality of timbers disposed in side by side relation, and bands disposed transversely across the ends of the outer side faces of the outermost timbers, said bands being countersunk into the timbers whereby the outer faces of the bands are disposed flush with the faces of the timbers across which the bands extend.

1,864,233. LIQUID DISPENSING SYSTEM. WARREN H. DE LANCEY, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 12, 1930. Serial No. 435,311. 15 Claims. (Cl. 221—95.)

1. A liquid dispensing system, comprising, a liquid delivery line terminating with a flexible hose, a normally closed valve at the delivery end of said hose, means for forcing liquid through said line and hose, means controlled by the pressure of liquid in said line for automatically starting and stopping said liquid forcing means, and safety means actuated by abnormal strain on said hose for stopping said forcing means.



1,864,234. TIRE STAND. CHARLES J. DOERING and WILLIAM M. DOERING, Cincinnati, Ohio. Filed Dec. 13, 1929. Serial No. 413,897. 6 Claims. (Cl. 211—24.)

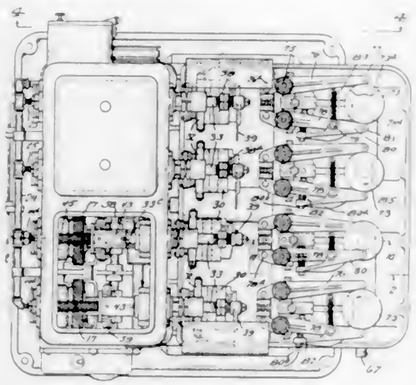


2. A tire casing stand, comprising, a frame provided with an open top to receive the tire casing and ends to fit the cross sectional contour of the tire, straps attached to the respective sides of the frame, said straps having their inner ends frictionally engaged within the interior of the casing by tucking the ends therein.

1,864,235. MACHINE FOR THREADING BOLTS AND THE LIKE OBJECTS. HARRY C. ELLISON, Lakewood, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, a Corporation of New Jersey. Filed Feb. 5, 1930. Serial No. 426,047. 16 Claims. (Cl. 10—91.)

1. In a machine of the character described, the combination of a plurality of chucks, a spindle cooperating with each of said chucks, means for rotating said spindles, threading mechanism carried by each of said spindles, means for moving each of said spindles toward and from its cooperating chuck, a work stop for each such threading mechanism, means operative by the spindle-moving means for moving each such stop in front of its cooperating threading mechanism when the spindle carrying such mechanism is in its retracted position with reference to its cooperating chuck, means operative by the spindle-moving means for opening each chuck and each threading mechanism at the end of the threading operation performed by

such mechanism, means operative by the spindle-moving means for closing each chuck when the cooperating spindle is in its retracted position, means operative by the spindle-moving means for moving each stop from in front of its



cooperating threading mechanism in advance of the movement of such mechanism toward its chuck, and means for closing each chuck and each threading mechanism in advance of such movement.

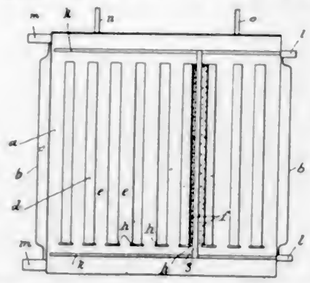
1,864,236. FLUID CONTROL DEVICE FOR AIRCRAFT. ALPHONSE HUBERT EVRARD, Wilmington, Del. Filed Mar. 5, 1929. Serial No. 344,354. 5 Claims. (Cl. 244—29.)



1. In combination with an aircraft or vehicle having a fluid control device using expansible and collapsible elements to transmit motions, a steering gear composed of a shaft and a steering wheel transmitting the hand effort to two master bellows, said bellows being connected by the means of a distributing valve and pipes to secondary bellows located in the tail and wings and actuating the control surfaces; the distributing valve being composed of a piston connected to another bellows or resilient element for tightness purpose and sliding in a cylinder, is actioned by back and forth motions of the steering gear shaft in order to open or close corresponding fluid outlets; a spring having for purpose to keep the piston in neutral position and a finger control comprising an abutment ring and a lever to limit the backward displacement of the piston and vary the occlusion of the corresponding outlets, the primary object of this finger control being the conjugation of rudder and ailerons action by differential fluid distribution on their interconnected secondary bellows or resilient elements.

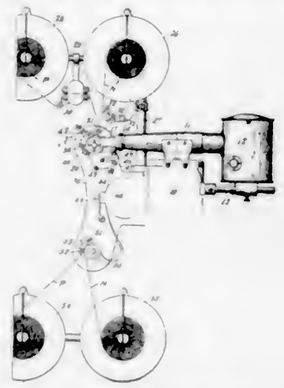
1,864,237. EXTRACTING AND FILTERING APPARATUS. PHILIPP LORENZ FAUTH, Wiesbaden, Germany. Filed Oct. 30, 1931, Serial No. 572,200, and in Germany Nov. 14, 1930. 3 Claims. (Cl. 210—182.)

1. Extracting and filtering apparatus comprising in combination a container, a door closing said container, heating means for the back and side walls of said container, heating pockets extending from the back wall of



said container to said door, a sieve frame between said heating pockets and a filter element disposed on said sieve frame.

1,864,238. FILM PRINTING MACHINE. ASHER FLINT, AUGUST ZIMMERMAN, and JACK G. LEO, New York, N. Y., assignors to Fox Film Corporation, New York, N. Y., a Corporation of New York. Filed July 3, 1928. Serial No. 290,134. 5 Claims. (Cl. 95—75.)

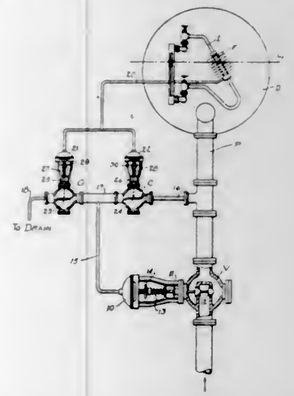


1. The combination with a standard film printing machine, of a sound printing attachment comprising a separate and independent light housing, including a hollow cylindrical head having openings in its peripheral wall, a tubular connection between said housing and one of the wall openings, a block fixed in the other opening, said block containing an aperture registering with the first named wall opening, means to resiliently press moving films against said block to cover the aperture, and sprockets revoluble on the axis of said head to engage perforations in the margins of the films.

1,864,239. FEED WATER REGULATOR. HOWARD S. FRASER, New York, N. Y., assignor to The Swartwout Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 21, 1928. Serial No. 320,836. 7 Claims. (Cl. 122—451.2.)

7. In a boiler feed system, the combination of a pressure actuable feed water valve, a control therefor comprising a pair of valves, a conduit joining said valves, a conduit leading from said conduit to said feed water valve, a connection from one of said valves to a source of fluid pressure, a connection from the other of said valves to atmosphere, one of said valves having a closure member moving downwardly onto its seat to closed position and the other of said valves having a closure member moving downwardly from its seat to open position, a valve stem in each of said valves connected to said closure members,

pressure chambers in each of said valves, a diaphragm closing each of said chambers and associated with said valve stems, springs associated with each of said stems opposing the action of the diaphragms, means associated with each stem for adjusting the compression in said springs, a pressure generator associated with the boiler



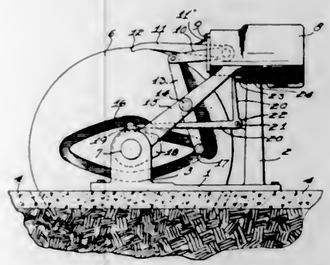
and having a conduit leading to both said diaphragm chambers for maintaining like pressures therein, whereby both valves are moved by a common actuating force one of said valves moving toward closed position while the other of said valves moves toward open position and whereby the lag or lead between said valves may be determined by relative compression in said springs.

1,864,240. BEARING ALLOYS. HORACE W. GILLETT and HOWARD C. CROSS, Columbus, Ohio. Filed Mar. 26, 1932. Serial No. 601,406. 9 Claims. (Cl. 75—1.)



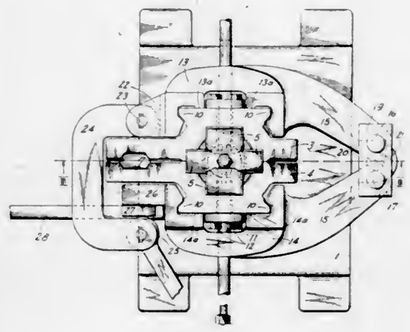
1. A bearing alloy comprising 95% by weight of the cadmium-zinc eutectic and 5% by weight of antimony.

1,864,241. INTERNAL COMBUSTION ENGINE. HANS C. GRONBECK, Chicago, Ill. Filed Sept. 18, 1930. Serial No. 482,882. 3 Claims. (Cl. 123—197.)



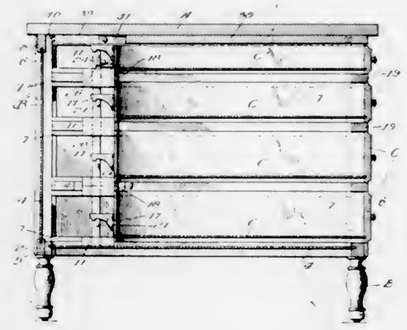
1. A reciprocating engine piston comprising a flywheel having an irregular groove in its face and an abutting element in its periphery, a cylinder provided with a piston, a pivotally supported lever hingedly connected with the piston and having a portion disposed within said groove, and a push rod movably connected with the piston and arranged for engaging said abutting element during the power stroke of the engine.

1,864,242. PERMANENT MOLD. MARIUS GUYOT, Cleveland, Ohio, assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 12, 1928. Serial No. 292,120. 9 Claims. (Cl. 22—136.)



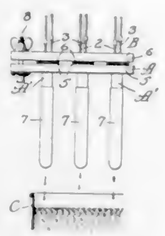
1. A mold comprising side sections provided on their inner surfaces with complementary recesses forming casting, riser, and gate cavities, a pilot forming the bottom of the casting cavity, a core insertable within the side sections, the side sections being provided on their outer surface with outwardly extending flanges, carriers loosely engaging said flanges, and a mold base supporting the pilot, side mold sections, and carriers.

1,864,243. DESK. JACOB P. HAMEETMAN, Chicago, Ill., assignor to Commercial Furniture Company, Chicago, Ill., a Corporation of Illinois. Filed July 14, 1930. Serial No. 467,944. 6 Claims. (Cl. 45—94.)



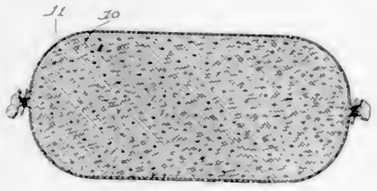
1. In apparatus of the character set forth, a desk providing a drawer compartment, drawer guides within said compartment, a stop member, said guides and stop member being provided with interlocking transverse and longitudinal portions, and drawers carried by said guides.

1,864,244. DEHYDRATED CELLULOSE BUNG, TUBE, ETC. WILLIAM F. HENDERSON, Chicago, Ill., assignor to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Filed July 3, 1929. Serial No. 375,859. 14 Claims. (Cl. 18—58.)



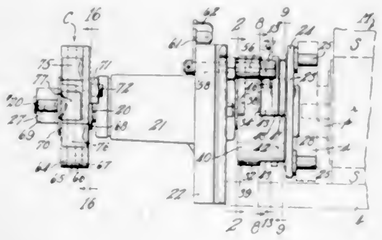
5. In the production of a cellulose bung, the steps which comprise: coating a mandrel with a viscose solution; subjecting the viscose film to a drying action; regenerating the dried film in a regenerating bath and removing the film from the mandrel; and drying the regenerated film.

1,864,245. IMITATION SAUSAGES FOR DISPLAY. WILLIAM F. HENDERSON, Chicago, Ill., assignor to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Filed Nov. 19, 1930. Serial No. 496,783. 17 Claims. (Cl. 40—126.)



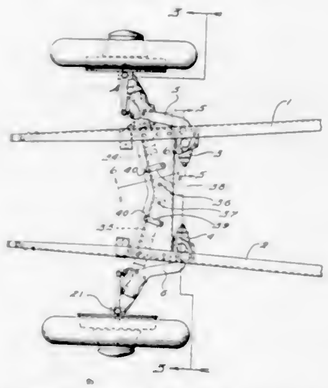
1. A method of producing an imitation sausage for display purposes, which method comprises dyeing a granular substance, mixing the dyed substance to produce a pasty mass, cooling said mass in a mold, and then covering the molded mass with a sausage casing.

1,864,246. IMPULSE COUPLING. IRA E. HENDRICKSON, Tulsa, Okla., assignor to Wico Electric Company, West Springfield, Mass., a Corporation of Massachusetts. Filed June 18, 1931. Serial No. 545,244. 16 Claims. (Cl. 123—149.)



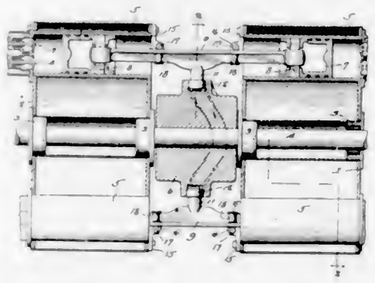
1. In an impulse coupling, driving and driven elements, means intermittently operable on rotation of the driven element in either direction to arrest it during a predetermined angular interval of movement of the driving element and release it for rotation at the end of such interval, and resilient means interposed between said elements and stressable by their relative movement on rotation of the driving element in either direction.

1,864,247. SPRING SUSPENSION. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Apr. 8, 1930. Serial No. 442,647. 7 Claims. (Cl. 280—124.)



1. In a vehicle chassis, a frame, a trunnion arm journaled on one side of said frame and extended outwardly therefrom diagonally with respect to the axis of said frame, front wheel supporting structure rigidly mounted on said arm, a wheel on said structure, and a spring mounted on said frame extending outwardly from the side thereof at an angle to the axis of said frame and connected at its end with the free end of said trunnion arm for resiliently limiting rotation of said arm relative to said frame.

1,864,248. ENGINE. FREDERICK J. HOLMES, Detroit, Mich. Filed Feb. 27, 1930. Serial No. 431,958. 14 Claims. (Cl. 74—14.)

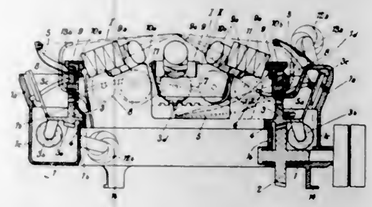


1. An internal combustion engine including spaced aligning cylinders, pistons therein, a rod having a slidable connection with each of the pistons, guiding means for holding the rod against outward and lateral buckling, and power transmitting means operatively connected to the rod.

1,864,249. ROUND BRAIDING MACHINE. GUIDO HORN, Weissensee, near Berlin, Germany. Filed Dec. 26, 1929, Serial No. 416,635, and in Germany Dec. 21, 1928. 11 Claims. (Cl. 96—5.)

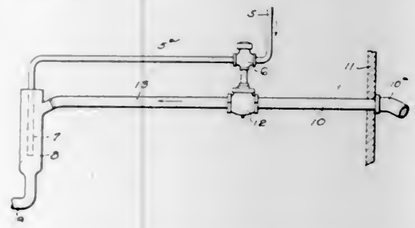
1. In a round braiding machine, a plurality of inner and a plurality of outer carriers, means for causing at least the inner carriers to describe a circular path

round the axis of the machine, slides on these inner carriers, a circular guide for these slides, bearing elements for this guide, of which one part supports parts of said guide from the inner side of the path of the outer carriers, another part of the elements supporting



other parts of said guide from the outer side of the path of the outer carriers, the bearing elements supported at the inner side of the guide path being disposed on an annular fixed part of the machine leaving free the centre part of the latter of a width not substantially less than the diameter of said guide.

1,864,250. METHOD OF AND MEANS FOR DISPOSING OF DANGEROUS FLUIDS. REESE H. LUCAS, Washington, D. C. Filed Feb. 6, 1931. Serial No. 514,049. 13 Claims. (Cl. 62—1.)



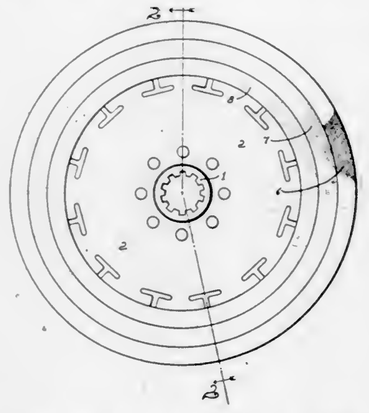
2. In combination, a pressure operated element, means for delivering water pressure thereto, means for conducting water therefrom to a mixing chamber and an ammonia controlling valve actuated under the movement of said pressure operated element.

1,864,251. CAP. ETTA MACDONALD, Iron Mountain, Mich. Filed Aug. 8, 1930. Serial No. 473,998. 1 Claim. (Cl. 2—63.)



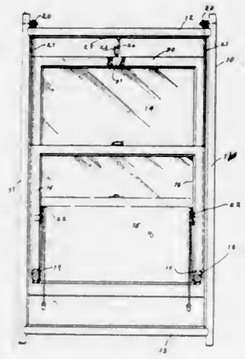
A cap for preventing the hair being disarranged by a hat, comprising a substantially rectangular-shaped sheet of pliable but thin paraffin paper having longitudinally directed pleats leading inwardly from the end edges of said sheet to effect a cap crown for snugly fitting a head of a wearer, and pliable disks folded over the pleated portions of said end edges and having adhesive affixing the folds of said disks to the pleats at the inner and outer sides thereof.

1,864,252. CLUTCH DISK. GEORGE L. MCCAIN, Detroit, and KARL PFEIFFER, Highland Park, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 1, 1930. Serial No. 425,308. 10 Claims. (Cl. 192—107.)



1. A clutch disk having a frictional driving surface, the coefficient of friction of said surface being greater at the inner part of said disk than at the outer portion thereof.

1,864,253. WINDOW SASH OPERATING DEVICE. BENJAMIN E. MCINTYRE, Westerly, R. I. Filed Dec. 26, 1930. Serial No. 504,922. 1 Claim. (Cl. 268—130.)

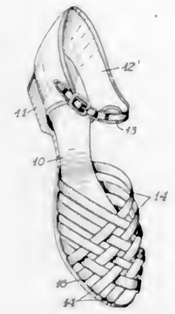


In a window construction in which self balancing upper and lower sashes are slidably mounted in a frame, pulley and cable means for facilitating the simultaneous sliding movement of said sashes to open and closed position and the sliding of said sashes relative to each other, and releasable means for securing the upper sash in closed position against movement when said lower sash is moved to an open position, said releasable means including a turnable stem mounted in the top of said frame and provided with an offset head for passage through a slot provided in the top rail of the upper sash, the stem adapted to be turned to cause the head thereof to engage beneath the top rail of the upper sash when in closed position.

1,864,254. SANDAL. MINNIE MEYER, New York, N. Y., assignor to Golo Slipper Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 24, 1932. Serial No. 600,941. 3 Claims. (Cl. 36—3.)

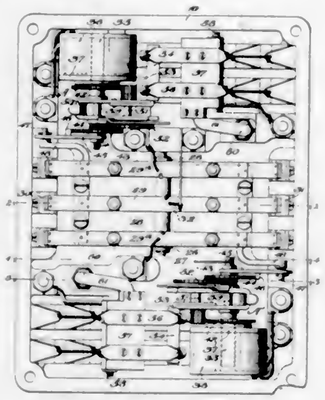
1. A shoe or the like having a sole and a vamp portion, said vamp portion comprising a series of independent

straps which loosely cross each other and which are connected to said sole at separated points thereof, said straps comprising upper layers of textile material having selvaged edges of substantially the same thickness as the



body portions thereof, said straps having reinforcing members applied wholly to their under faces, said reinforcing members having longitudinal inturned edges which abut the under faces of said textile layers.

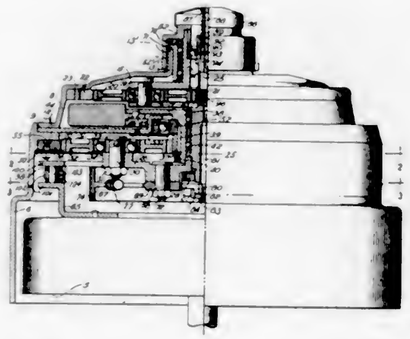
1,864,255. AUTOMATIC TIME INTERVAL CONTROLLING DEVICE. DWIGHT JOSEPH MILLISON, Maywood, Ill. Filed July 16, 1929. Serial No. 378,695. 9 Claims. (Cl. 200—97.)



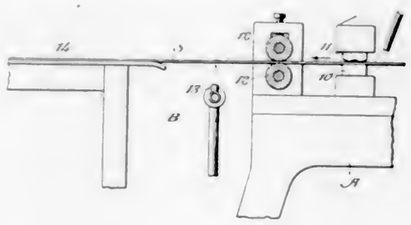
1. In mechanism of the class described, an automatic time interval controlling device comprising an electromagnet, a rotatable and axially movable armature adapted to be moved axially and held against rotation by said electro-magnet when same is energized, and means co-operating with said armature when the same is held against rotation to reverse the condition of a circuit or circuits after the elapse of a predetermined period of time.

1,864,256. ENGINE STARTING APPARATUS. ROMEO M. NARDONE, Orange, N. J., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed June 19, 1931. Serial No. 545,604. 17 Claims. (Cl. 123—179.)

16. In an engine starter of the type embodying an inertia member in which energy is stored for subsequent transmission to a member of the engine to be started, speed varying mechanism drivably connecting said inertia member with said engine member, means associated with said speed varying mechanism for absorbing the reaction resulting from the transmission of said energy to said engine member, and centrifugally operable means for releasing the driving connection between said speed varying mechanism and said engine member when the engine becomes self-operating, said last named means comprising a plurality of weighted members rotatable with said engine member but movable radially to engage a member driven by said speed varying mechanism after said driven member has transmitted a starting torque to said engine member.



1,864,257. MEANS FOR REMOVING LUBRICATING COMPOUND FROM PERFORATED SHEET METAL. WILLIAM J. PURSER, Mineral Ridge, Ohio, assignor to Bostwick Steel Lath Company, Niles, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 458,584. 6 Claims. (Cl. 164—86.)

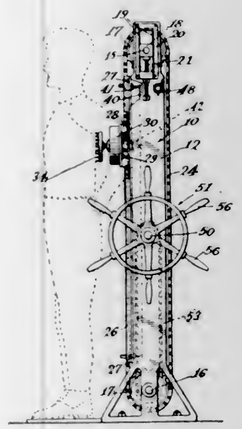


1. In combination with a mechanism for performing operations on sheet metal, means arranged directly adjacent to said mechanism for removing lubricating compound from the sheet metal as it is ejected from the mechanism.

1,864,258. SELF MASSAGE APPARATUS. ALPHONSE ROOS, Los Angeles, Calif. Filed Sept. 22, 1930. Serial No. 483,443. 2 Claims. (Cl. 128—52.)

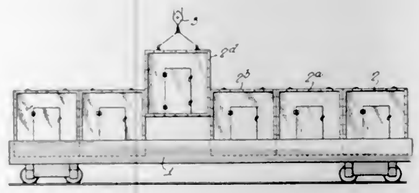
2. An apparatus of the character described comprising a frame having standards, a pair of horizontally disposed shafts journaled in said frame adjacent the upper and lower ends thereof, a pair of sprockets secured to each of said shafts, an endless chain passing over each of said sprockets, a vibratory mechanism having a massaging applicator detachably secured thereto secured to said pair of chains, a third shaft having a sprocket thereon

journaled in the standards of said frame, an endless chain passing over the sprockets on said third shaft and a sprocket on the lowermost of the aforesaid pair of shafts



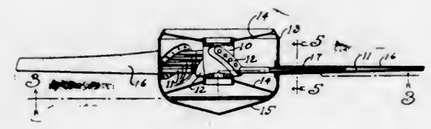
and band wheels secured to said third shaft, whereby said vibratory mechanism may be adjusted and reciprocated upon manually turning of said hand wheels.

1,864,259. REFRIGERATOR CAR AND DETACHABLE UNIT THEREFOR. JOHN D. SMALL, New York, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,704. 11 Claims. (Cl. 62—91.5.)



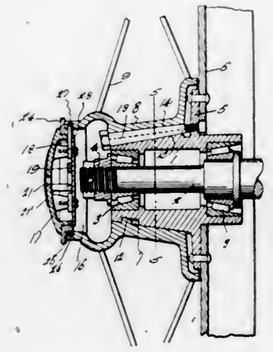
1. A refrigerator car comprising an open or platform freight car having thereon a refrigerator structure comprising a single layer of removable, closely assembled refrigerator units all supported directly on the car platform and occupying substantially the whole load carrying area of the platform, said refrigerator units each extending approximately the full width of said platform and each being approximately cubical, each comprising a gas-tight outer casing of metal having thick inner walls of permeable insulating material enclosing an inner metal container arranged to afford gas circulating interspaces between said permeable insulating walls and said inner container, high level bunkers for solid carbon dioxide outside of said container and discharging gas at a high level for circulation in the interspace between said walls and said container; the upright walls of each being formed with service doors and locking means for the cargo, and its roof provided with an opening for charging the bunkers and with holding devices for hoisting tackle whereby in all transportation and uses it is made difficult to dispose the unit other than right side up.

1,864,260. AIRPLANE PROPELLER. JOHN SQUIRES, Detroit, Mich. Filed Nov. 19, 1928. Serial No. 320,240. 16 Claims. (Cl. 170—159.)



1. A propeller having a blade formed with a tubular framework and a covering for the framework, the tubes of the framework varying in diameter with respect to each other, to provide an airfoil section tapering from its leading edge to the trailing edge.

1,864,261. DEMOUNTABLE AUTOMOBILE WHEEL. REUBEN A. STABLER, Endicott, N. Y. Filed Nov. 7, 1931. Serial No. 573,645. 1 Claim. (Cl. 301—9.)

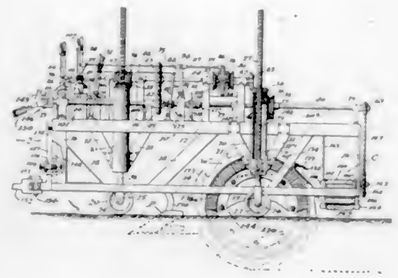


In a wheel of the class described, an inner hub for engagement with a spindle having a flange adjacent its inner end and said hub tapering to its outer end, an outer hub tapered to fit the taper of the inner hub and having a flange on its inner end enclosing the flange on the inner hub, the inner hub having a longitudinally extending groove in its exterior surface and the outer hub having a longitudinally extending groove in its interior surface, a bolt passing through the grooves and threaded in the flange of the inner hub, said outer hub being longer than the inner hub and forming a chamber for receiving the head of the bolt and the outer end of the spindle, and a bayonet joint between the hubs, the bolt holding the hubs against relative rotary movement with the bayonet joint in operative position.

1,864,262. SOIL CHANGING PLOW. WALTER C. STUMPF, Los Angeles, Calif. Filed Mar. 7, 1931. Serial No. 520,796. 6 Claims. (Cl. 97—10.)

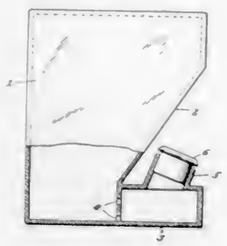
1. An apparatus of the character described comprising a portable frame, a plow for turning the top soil over in

one direction secured to said frame, an excavator mounted in said frame rearwardly of and arranged to remove soil at greater depth than said plow, and a conveyor car-



ried by said frame for receiving the soil removed by said excavator and discharging it on top of the soil turned over by the plow.

1,864,263. INKWELL. BRUCE ALLEN THARRINGTON, Roswell, Idaho. Filed Feb. 9, 1932. Serial No. 591,858. 1 Claim. (Cl. 120—59.)



An ink well comprising an ink reservoir having its front undercut throughout the width of said reservoir, a well below the undercut extending forward from the front wall of the reservoir and having communication with said reservoir for receiving ink therefrom, said well being substantially coextensive with the width of the reservoir and having a top wall, and an outwardly inclined neck rising from the top wall of the well beneath the undercut in spaced relation thereto.

1,864,264. RAKE CLEANER. JOHN VELKOVER, North Chicago, Ill. Filed Oct. 26, 1931. Serial No. 571,200. 2 Claims. (Cl. 55—146.)



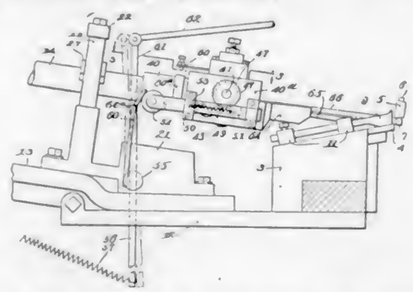
1. In a structure of the class described, in combination, an ordinary garden rake comprising a handle, a toothed head, and a yoke connecting the head with the adjacent end portion of the handle, upper and lower clamping plates bolted against the intermediate portion of the yoke in alinement with said handle, a U-shaped bracket attached to and depending from one of said plates, a rocker comprising a bearing pivotally mounted between the arms of the bracket, said rocker also including a depending lug and an actuating arm, an apertured cleaning plate of elongated form attached to said arm and cooperating with the rake head, the teeth of said head extending through the apertures in said plate, a coil spring anchored at one end on the intermediate portion of the plate and anchored at its opposite end to one of the first-named clamping plates.

1,864,265. TIE. WILLIAM H. VE RELLE, Philadelphia, Pa. Filed Nov. 25, 1931. Serial No. 577,322. 1 Claim. (Cl. 2—150.)



A neck tie comprising a member of flexible material, a wire extending over the upper part of the member and having its ends bent downwardly, the ends of the member being bent over the bent ends of the wire and fastened thereto, a tie part having a tubular part having a portion sewn to the inner face of the said member with said tubular part enclosing the member, a strip forming the small part of the tie, having one end fastened to the inner face of the member and adapted to pass around the neck and then through the knot forming part formed by the member and a pin in the knot part for holding the strip therein.

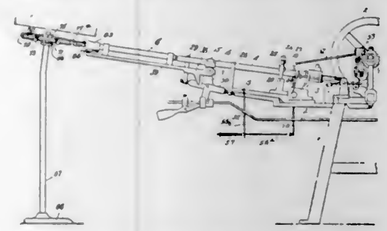
1,864,266. TACK MACHINE. GEORGE B. BAKER, HERBERT B. BAKER, and EDWARD C. BAKER, Brockton, Mass., assignors, by mesne assignments, to George B. Baker and Edward C. Baker, Brockton, Mass., as surviving joint tenants. Filed Oct. 24, 1927. Serial No. 228,138. 17 Claims. (Cl. 10—173.)



1. A tack machine of the type having means for supporting a blank, intermittently acting feed rolls for advancing the blank step by step, cutting means, and stop means for limiting advance of the blank, said machine comprising means tending to turn the feed rolls intermittently through successive arcs each in excess of the amount necessary to engage the end of the blank with the stop means.

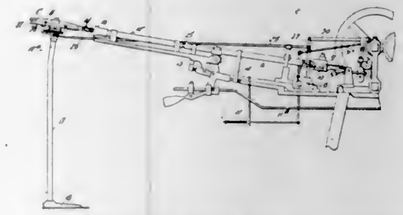
1,864,267. TACK MACHINE. GEORGE B. BAKER, HERBERT B. BAKER, and EDWARD C. BAKER, Brockton, Mass., assignors, by mesne assignments, to George B. Baker and Edward C. Baker, Brockton, Mass., as surviving joint tenants. Filed June 5, 1928. Serial No. 282,899. 9 Claims. (Cl. 10—177.)

1. In combination with a tack machine of the type having an intermittently oscillating blank supporting barrel, cutting means at the forward end of the barrel, and stop means adjacent to the cutting means, a blank feeding mechanism comprising a reel for holding a coil of tack strip, and means for simultaneously drawing off the strip from the reel and yieldingly forcing the for-



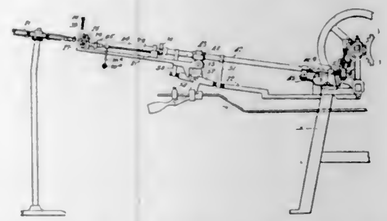
ward end of the strip against said stop means, said yielding means accommodating itself to the variable uncoiling action of the reel.

1,864,268. TACK MACHINE. GEORGE B. BAKER, HERBERT B. BAKER, and EDWARD C. BAKER, Brockton, Mass., assignors, by mesne assignments, to George B. Baker and Edward C. Baker, Brockton, Mass., as surviving joint tenants. Filed Dec. 5, 1928. Serial No. 323,926. 12 Claims. (Cl. 10—177.)



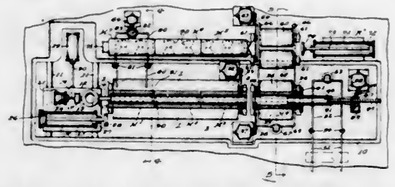
1. A tack machine of the kind having an oscillatory but non-reciprocating strip supporting barrel, a reciprocatory cutter and stop means for limiting advance of the tack strip, comprising means for advancing the tack strip intermittently toward the cutting point, a reel for holding a coiled tack strip, and means for intermittently turning the reel to deliver the strip into the barrel.

1,864,269. TACK MACHINE. GEORGE B. BAKER, Brockton, Mass., assignor, by mesne assignments, to Edward C. Baker and George B. Baker, Brockton, Mass., as surviving joint tenants. Filed Mar. 5, 1930. Serial No. 433,290. 15 Claims. (Cl. 10—172.)



1. A tack machine of the kind having cutting instrumentalities and an oscillating barrel for guiding a tack strip on its way to the cutting instrumentalities, said machine comprising means adjacent to the rear of the barrel for supporting a coil of tack strip, means supported independently of the barrel adjacent to the rear end of the barrel for advancing the strip along the barrel and means mounted on the barrel for actuating the strip advancing means.

1,864,270. METHOD OF CONTINUOUS CENTRIFUGAL CASTING. RICHARD H. EURICH and BENJAMIN F. ANTHONY, Youngstown, Ohio, assignors to The Youngstown Sheet and Tube Company, Youngstown, Ohio, a Corporation of Ohio. Filed May 7, 1930. Serial No. 450,339. 14 Claims. (Cl. 22—200.)

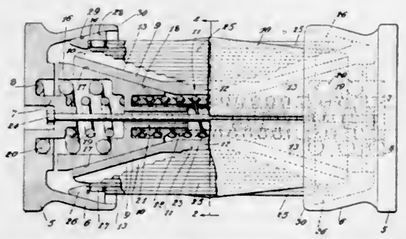


12. A method of centrifugal casting which comprises the steps of rotating a mold in a longitudinally fixed position while pouring a full charge of metal into the mold, and thereafter translating the mold longitudinally while continuously rotating it.

1,864,271. INSIDE COATED LAMP BULB. AARON MARTIN HAGEMAN, Bloomfield, and ALBERT FERDINAND LINDSTROM, Nutley, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 13, 1924. Serial No. 737,609. 2 Claims. (Cl. 176—16.)

1. An incandescent, decorative electric lamp comprising an hermetically sealed bulb having on the interior surface of the light transmitting portion a visible superficial translucent coating of finely divided inorganic material.

1,864,272. DUPLEX COMPOUND DRAFT GEAR. JOHN E. MUHLFELD, Scarsdale, N. Y., and JOSEPH GUTTERIDGE, Pittsburg, Kans. Filed Jan. 10, 1930. Serial No. 419,773. 7 Claims. (Cl. 213—22.)

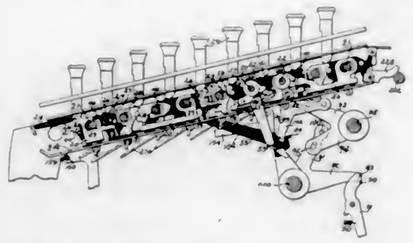


6. In a draft gear, the combination of a pair of longitudinal members transversely movable towards and from each other and each having inclined plane surfaces at its opposite ends, wedges cooperating with said inclined surfaces, end members for transmitting longitudinal thrust to the wedges, main springs bearing against the outer sides of said longitudinal members, and said end members including parts cooperating with means on the opposite ends of the main springs to place the said springs under compression and cushion the impact of the wedges against said inclined surfaces.

1,864,273. ACCOUNTING MACHINE. ROBERT L. MULLER, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 10, 1928. Serial No. 298,819. 48 Claims. (Cl. 235—60.)

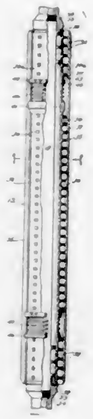
1. In combination, in a calculating machine having depressible amount keys, a proving mechanism associated with said machine and set thereby during the entry of an item in said machine, and means automatically conditioning said proving mechanism after it has been set to

permit subsequent operations of the machine independent thereof, said means having provisions for automatically placing said proving mechanism in control of said amount



keys prior to a predetermined subsequent operation of the machine in which said item is to be again entered to prevent depression of all of said amount keys except those that were depressed when said item was first entered.

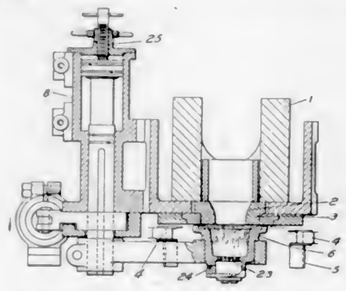
1,864,274. COLLAPSIBLE HOLE STRAIGHTENER. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Jan. 22, 1930. Serial No. 422,578. 1 Claim. (Cl. 308—4.)



A collapsible tool guide comprising, in combination with a drill stem section, an elongate tubular member surrounding said section and having bearings thereon allowing relative rotation between the section and the tubular member, pivot lugs on the tubular member, a plurality of elongate contact shoes of cylindric segmental form and having pivot lugs on their inner faces, swinging links interconnected between the pivot lugs of the tubular member and of the contact shoes, and a spring mounted upon the tubular member and acting upon the contact shoes to move them upwardly and outwardly.

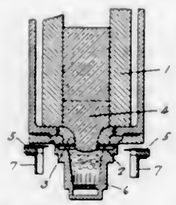
1,864,275. METHOD AND APPARATUS FOR SEPARATING QUANTITIES OF MOLTEN GLASS FROM MASS. OLIVER M. TUCKER and WILLIAM A. REEVES, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 16, 1916, Serial No. 120,429. Renewed Jan. 8, 1931. 97 Claims. (Cl. 49—55.)

3. A machine for separating formed charges of viscous glass from viscous mass comprising a receptacle for viscous glass with a delivery aperture of chosen dimensions in its base; means for controlling delivery of the glass comprising a device for stopping extrusion from the aperture with a static pressure flame and then completely uncovering and leaving the aperture entirely unthrottled when uncovered, severing means independent of said last means, and means for varying either the period of uncovering or the frequency of severing independently of each other.



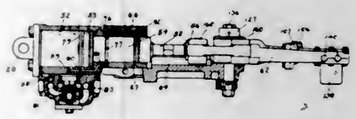
32. In glass working apparatus, a molten glass container having a discharge outlet through which glass may issue downwardly, a means movable below the outlet in the direction and line of flow of the issuing glass for causing a supporting effect on said issuing glass, means for moving said support-effecting means, and means for regulating the speed of movement of said support-effecting means.

1,864,276. METHOD OF GETTING AND DELIVERING PREFORMED CHARGES OF VISCOUS GLASS. WILLIAM A. REEVES and OLIVER M. TUCKER, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 7, 1918, Serial No. 220,959. Renewed Aug. 22, 1930. 3 Claims. (Cl. 49—77.)



1. In the manufacture of glassware, the method of automatically charging glass molds with compact mold charges suitable in size and shape to enter the molds and settle therein without harmful deformation; which method includes the steps of providing a mass of glass above a feed outlet of dimensions selected in accordance with the requirements of the particular molds to be charged; periodically stopping or retarding the issue of glass from said outlet by a change in fluid-pressure effective thereon; periodically passing through said outlet a portion of the molten glass to form one of the mold charges, under an extrusive pressure adequate to shape the major portion of the charge by the act of extruding; the rate of extrusion, the effective pressure and the length of time in which such glass emerges being selected and controlled so as to produce, directly beneath the outlet, a compact mass of glass having dimensions that are appropriate to the mold in which the mold charge is to be received; such dimensions resulting from the selected aperture, the selected pressure and the selected time of issue; cutting off a mold charge from each of these periodically produced masses before its shape changes to the extent of producing a tail or string that would harmfully fold upon the charge in the mold, and receiving each such charge in its mold as a unit and while it has the appropriate shape so produced.

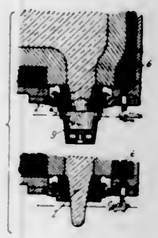
1,864,277. SHEAR STRUCTURE FOR GLASS MACHINERY. OLIVER M. TUCKER and WILLIAM A. REEVES, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 28, 1920. Serial No. 392,231. 50 Claims. (Cl. 49—14.)



1. A shear structure for severing molten glass comprising a pair of shears movable into overlapping relation when the shears are closed, means for opening and closing the shears, and means for varying the degree of overlap of said shears while in operation, said means being adapted to mechanically insure the same degree of adjustment of each blade.

23. In shear structure for glass feeders, a shear lubricating device comprising means for delivering oil laden air to the shears.

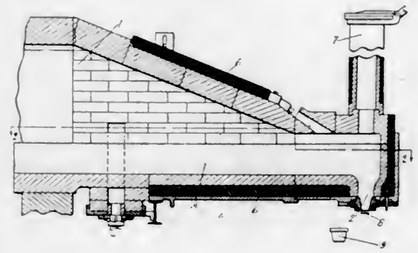
1,864,278. METHOD OF GETTING AND DELIVERING FORMED CHARGES OF VISCOUS GLASS. OLIVER M. TUCKER and WILLIAM A. REEVES, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original application filed Nov. 1, 1918, Serial No. 260,758. Divided and this application filed Nov. 26, 1924, Serial No. 752,378. Renewed June 5, 1930. 5 Claims. (Cl. 49—77.)



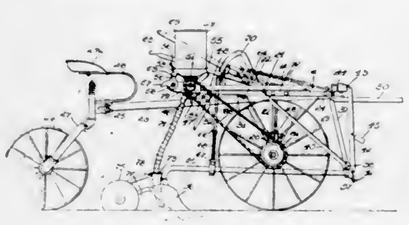
2. In the manufacture of glassware, the method of delivering, to successively presented molds, continuous series of lump charges of molten glass preformed so that they will settle in the molds without lapping, coiling or folding when delivered, which method comprises superimposing a mass of molten glass upon a delivery orifice which is so predetermined as to contour and area that a proper weight charge can be formed and delivered without lapping, coiling or folding, extruding the glass through said orifice, severing each extrusion before it develops into a stream, and regulating the temperature of the glass to regulate the charges as desired.

1,864,279. METHOD OF GETTING AND DELIVERING FORMED CHARGES OF VISCOUS GLASS. OLIVER M. TUCKER and WILLIAM A. REEVES, Columbus, Ohio, assignors, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original application filed Nov. 1, 1918, Serial No. 260,758. Divided and this application filed Nov. 26, 1924, Serial No. 752,381. Renewed June 5, 1930. 17 Claims. (Cl. 49—77.)

1. In the manufacture of glassware, the method of delivering to successively presented molds, continuous series of lump charges of molten glass preformed so that they will settle in the molds without lapping, coiling or folding when delivered, which method comprises superimposing a mass of molten glass upon a delivery orifice which is so predetermined as to contour and area that a proper weight charge can be formed and delivered without lapping, coiling or folding, extruding the glass through said orifice, severing each extrusion before it develops into a stream, and regulating the position relative to the lower end of the orifice of starting of the lower end of the glass column by a force applied beneath the glass to predetermine the charge that will be severed.



1,864,280. PLANTER ATTACHMENT FOR CULTIVATORS. ARTHUR A. SCARLETT, Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill., a Corporation of New Jersey. Filed Sept. 17, 1930. Serial No. 482,515. 2 Claims. (Cl. 111—52.)

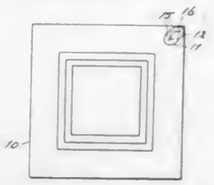


1. A planter attachment for cultivators having a substantially horizontal wheel supported frame structure and a plurality of cultivating units connected to trail behind said frame, comprising a transversely extended supporting frame having a plurality of planter units mounted thereon in spaced relation to the cultivating units, means for removably attaching said frame to the cultivator frame structure in overhanging relation to the cultivating units including forwardly extending horizontal members clamped to the cultivator frame, seeding mechanisms operatively associated with the planter units, means attached to said mechanisms and to one of the cultivator wheels for driving said mechanisms, seed depositing shoes mounted on the cultivating units, and a flexible seed delivery tube leading from each planter unit to one of the shoes.

1,864,281. CLIP FOR PAPER NAPKINS. JAMES SHORT, Camden, N. J. Filed Oct. 23, 1931. Serial No. 570,743. 3 Claims. (Cl. 24—7.)

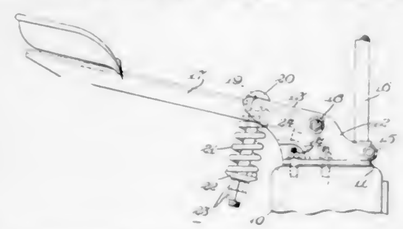
3. As an article of manufacture, a paper napkin having a clip secured by one of its ends to a corner of said napkin, said clip having a transverse weakened line adjacent its fixed end and further provided with a scalloped aperture consisting of two oppositely disposed large scallops and a pair of oppositely disposed smaller scallops between the larger ones and further provided with a pair of oppositely

extending tapered openings in communication with the aperture in the region of the smaller scallops, said aperture and openings permitting the placement of the clip



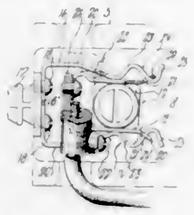
over a button or similar device or a puckered portion of a person's wearing apparel for temporarily attaching the napkin to said apparel.

1,864,282. SEAT SUPPORT. LEONARD B. SPERRY, Western Springs, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Apr. 26, 1930. Serial No. 447,529. 9 Claims. (Cl. 155—51.)



1. In combination, a frame, a bracket carried thereby, a seat supporting bar pivotally connected at one end to the bracket, a spring support for the bar carried by the bracket, and a rigid stop provided on the bracket to limit the drop of the bar should the spring support break.

1,864,283. CONTACT CLIP. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 12, 1929. Serial No. 346,341. 13 Claims. (Cl. 200—134.)

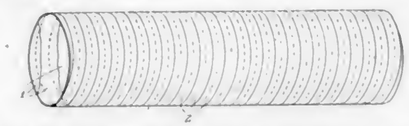


1. In a contact clip, adapted to receive a terminal member, comprising a fixed member, a contact engaging member, means connecting said fixed member and said contact engaging member to permit substantially universal movement therebetween, and means formed on the fixed member and constituting a guide for said terminal member into the entrance of the contact engaging member

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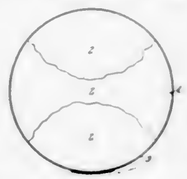
1,864,284. STEAK AND METHOD OF PRODUCING SAME. HARDEN F. TAYLOR, Scarsdale, N. Y., assignor to The Atlantic Coast Fisheries Company, New York, N. Y., a Corporation of Maine. Filed July 1, 1929, Serial No. 375,165. Renewed Nov. 19, 1931. 19 Claims. (Cl. 99—14.)

8. A process of producing steaks which comprises forming a predetermined mass of meat, spirally wrapping said mass with a tape of parchment paper wetted at some stage of the process, the successive convolutions of the wrap overlapping, cutting said mass transversely thereof and freezing the severed portions.



17. A food product comprising a frozen steak formed of a plurality of cross-cut pieces of fresh fish meat having a band therearound resulting from the transverse cutting of a spirally wound tape of overlapping convolutions.

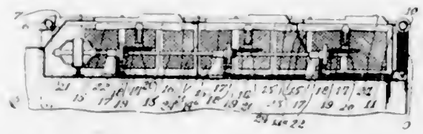
1,864,285. STEAK AND METHOD OF PRODUCING SAME. HARDEN F. TAYLOR, Scarsdale, N. Y., assignor to The Atlantic Coast Fisheries Company, New York, N. Y., a Corporation of Maine. Filed May 23, 1931 Serial No. 539,435. 16 Claims. (Cl. 99—14.)



1. A food product comprising a frozen steak formed of a plurality of pieces of meat having a unitary and integral structure, a band adhering around only the longitudinal periphery thereof and extending over the entire thickness thereof, said band having its ends overlapping

5. A method of producing frozen steaks which comprises forming a predetermined shaped mass of a plurality of pieces of meat, wrapping the peripheral surface of said mass, freezing the wrapped mass, and cutting the frozen wrapped mass into portions of desired size.

1,864,286. CONDENSER SYSTEM FOR RAIL CARS. EARL C. WALKER, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Feb. 7, 1930. Serial No. 426,522. 3 Claims. (Cl. 257—25.)



1. In a steam rail car, a series of condenser units positioned at the top of the car along the sides thereof, an exhaust steam distributor pipe communicating with each of said units, means for collecting the condensate from each of said units, said means including means for removing condensate therefrom and preventing the flow of steam, means cooperating with said units to form an air circulating chamber, an opening in said means, and a fan positioned in said opening and adapted to create a current of air through the condenser units and through said opening.

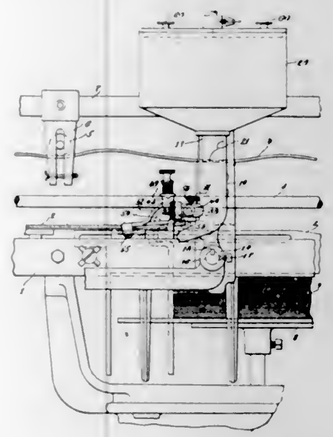
1,864,287. MANUFACTURE OF BUILDING MATERIAL. LON EDWARD WELCH, Jackson, Miss., assignor to Art Marble Company of America, Jackson, Miss., a Corporation of Mississippi. Filed Aug. 9, 1930. Serial No. 474,191. 8 Claims. (Cl. 18—60.)

1. A decorative, sound absorbing wall surface comprising in combination a wall structure faced with a plurality of relatively thin wall slabs each consisting of a mass of coarse wood shaving cemented together by a decorative cement, said shavings lying at random in the mass to produce a multitude of enlarged irregular cavities in the interior of the mass and extending at least half way through the slab, said cavities opening on the face of the material in substantially large openings which permit the effective entrance of sound waves, said mass having a smooth durable face and the cement partly closing said openings to said cavities, the wood shavings in said cavities presenting irregular surfaces which in conjunction with said cavities serve to absorb sound vibrations striking the wall.



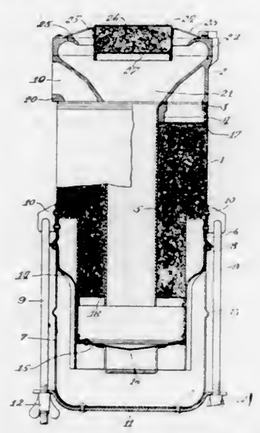
4. A decorative acoustical surfacing material comprising in combination a solidified mass of wood shavings cemented together with magnesia cement and containing a pigment, said shavings lying at random in the mass to produce a multitude of enlarged irregular cavities on the interior of the mass, which open on the face thereof in substantially large openings which permit the effective entrance of sound waves, said mass having a durable, decorative face of cement and the cement partly closing said openings to said cavities, said pigment being irregularly distributed on the face of said material to give a mottled color effect.

1,864,288. CAN LABELING MACHINE. CHARLES H. WILD, Baltimore, Md., assignor to Burt Machine Company, Incorporated, Baltimore, Md., a Corporation of Maryland. Filed Oct. 5, 1929. Serial No. 397,602. 21 Claims. (Cl. 216—58.)



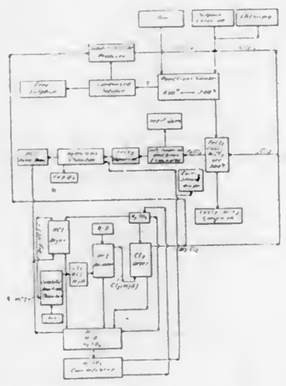
1. In a can labeling machine a lap end pasting mechanism, means for feeding cans through the machine, means for maintaining a supply of labels in the path of the can, a paste delivering nozzle in operative relation to the lap end of the top label and means in the path of the cans to be contacted by each can as it passes for transmitting a feeding impulse from said can to said nozzle and means cooperative with said feeding impulse to produce a positive ejection of the paste from said nozzle in the form of an intermittently operated valve.

1,864,289. AIR CLEANER. HERMAN B. ANGLEMYER, Pomona, Calif., and RAY CHANEY, Fort Wayne, Ind., assignors to International Harvester Company, a Corporation of New Jersey. Filed Nov. 22, 1930. Serial No. 497,406. 5 Claims. (Cl. 183—10.)



1. In an air cleaner utilizing a liquid, said cleaner having an inlet passage, means for preventing the discharge of liquid by back-fire, comprising in combination with the inlet passage a container in line with the inlet passage and spaced from the end thereof to provide an unobstructed air passage; said container being constructed to retain liquid delivered from the inlet passage by backfire.

1,864,290. RECOVERY OF SULPHUR. RAYMOND F. BACON, Bronxville, and HENRY T. HOTCHKISS, Jr., New Rochelle, N. Y.; said Hotchkiss, jr., assignor to said Bacon. Filed Feb. 26, 1930. Serial No. 431,468. 5 Claims. (Cl. 23—226.)

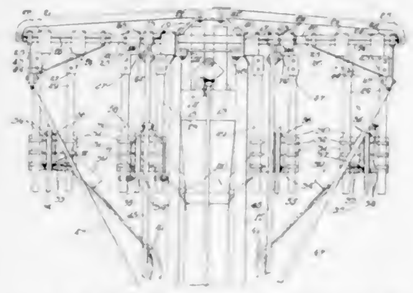


1. The method of treating material containing iron sulphide which comprises subjecting the material to the action of chlorine and sulphur chloride under such conditions that ferrous chloride and elemental sulphur are produced and the sulphur is vaporized, subjecting the ferrous chloride to the action of chlorine to form ferric chloride, subjecting the ferric chloride to the action of water vapor to produce hydrogen chloride, treating the hydrogen chloride to recover chlorine, and returning the chlorine thus recovered to the process.

5. The method of treating iron sulphide-bearing material which comprises subjecting the material to the action

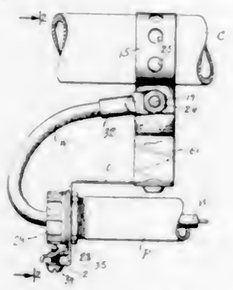
of chlorine and sulphur chloride under such conditions that ferrous chloride and elemental sulphur are produced and the sulphur is vaporized, collecting the vaporized sulphur, subjecting the ferrous chloride to the action of chlorine to form ferric chloride, subjecting the ferric chloride to the action of water vapor to form hydrogen chloride, subjecting the hydrogen chloride to the action of air in the presence of a catalyst to recover chlorine, utilizing a portion of the recovered chlorine to treat the ferrous chloride, combining another portion of the chlorine with a portion of the sulphur produced to regenerate sulphur chloride, and utilizing the remainder of the recovered chlorine together with the regenerated sulphur chloride to treat additional iron sulphide-bearing material.

1,864,291. TRACTOR-HARVESTER. BERT R. BENJAMIN, Oak Park, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Feb. 7, 1930. Serial No. 426,508. 7 Claims. (Cl. 56—10.)



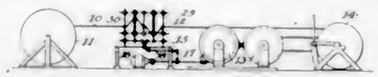
1. In a row crop harvester, the combination with a vehicle of a plurality of plant cutting units carried on said vehicle and spaced transversely thereof to operate on plant rows along which the vehicle moves, said cutting units consisting of two inner units adapted to operate on adjacent plant rows and including means for delivering plants cut thereby in a windrow between said units, outer units adapted to operate on rows next beyond each inner unit, and plant conveying means on the outer units extending on line converging rearwardly of the respective inner units ad delivering plants cut by the outer units in the same windrow as the inner units.

1,864,292. GROUNDING CLAMP. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 17, 1928. Serial No. 326,511. 1 Claim. (Cl. 247—1.)



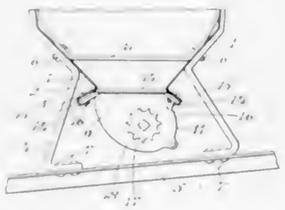
A grounding clamp comprising a first flexible strap having a flexible portion and the end of the strap beyond the flexible portion being bendable around a pipe forming attaching means, a second flexible strap joined with the first strap with their axes at an angle to each other, and an opening upon the end of the second strap to receive a pipe end and spaced from the joining point of the two straps to leave a flexible portion therebetween, the end of the second strap having the opening being bendable at any angle with respect to the strap.

1,864,293. APPARATUS FOR TREATING WIRE ROPE. GORMAN C. BURD, Brooklyn, N. Y., assignor to American Cable Company, Inc., a Corporation of Delaware. Original application filed July 9, 1926, Serial No. 121,397, and in Canada June 9, 1927. Divided and this application filed Sept. 25, 1928. Serial No. 308,267. 12 Claims. (Cl. 153—37.)



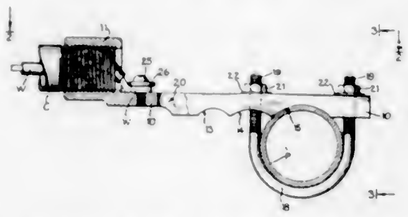
1. An apparatus for treating expansile wire rope to remove from the individual components of the rope their tendency to spread apart when the rope is severed, said apparatus comprising a series of fixed guides, guides movable in rotary paths between the fixed guides, and means for drawing the rope through said guides.

1,864,294. KNOCKDOWN DRAIN DRILL HOPPER. SHERMAN W. CADY, Perry, N. Y., and GEORGE M. KRIEGBAUM, Richmond, Ind., assignors to International Harvester Company, a Corporation of New Jersey. Filed June 12, 1929. Serial No. 370,187. 7 Claims. (Cl. 221—137.)



4. In a dispensing device a hopper, side members forming the side walls of the hopper and having outwardly extending flanges at the bottom, spaced feed cups containing dispensing mechanisms secured to said flanges, a bottom plate bridging the space between two adjacent cups and overlapping the flanges between said cups, and ledges on the seed cups independent of the means for securing the cups to the side member flanges positioned to engage the bottom plate and to hold said plate in contact with said flanges.

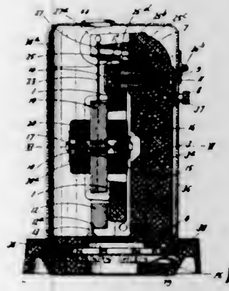
1,864,295. GROUNDING FITTING. LEWIS H. CHURCH, Roselle, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed June 14, 1930. Serial No. 461,107. 9 Claims. (Cl. 247—1.)



9. A grounding fitting comprising a member having substantial thickness, a conduit anchorage means carried thereby, a plurality of pipe clamping seats depressed into

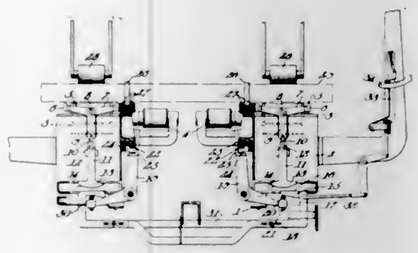
one side of the member having a dimension adapted to embrace less than a semi-circle of the pipe and of different sizes positioned in parallel side by side by side arrangement with the edges of adjacent seats being in close proximity, and means to clamp a pipe in one of the arcuate seats.

1,864,296. ELECTROMAGNETIC SWITCH. FREDERICK GEORGE CREED, WILLIAM HENRY STOREY, and REGINALD DENNIS SALMON, Croydon, England, assignors to Creed & Company Limited, a Company of Great Britain. Filed Dec. 5, 1927. Serial No. 237,921, and in Great Britain Sept. 8, 1927. 17 Claims. (Cl. 200—93.)



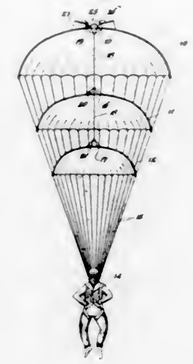
1. An electro-magnetic apparatus comprising magnetic pole pieces arranged opposite each other and at a distance apart, an armature arranged to operate between said pole pieces, a spindle to which said armature is fixed, bearings for said spindle and a carrier of moulded insulating material carrying said pole pieces and one of the armature spindle bearings.

1,864,297. ADZING MACHINE. JESSE C. COOK, Jeffersonville, Ind., assignor to American Creosoting Company, Louisville, Ky., a Corporation of Delaware. Filed Dec. 16, 1931. Serial No. 581,452. 11 Claims. (Cl. 144—133.)



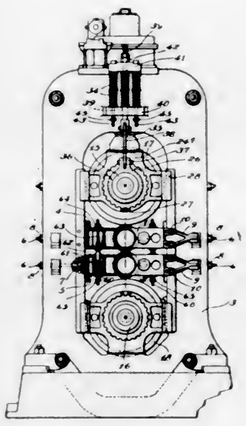
1. In a tie adzing machine, cutting means, means for transporting ties successively past said cutting means, means for supporting a tie for a gaining cut by said cutting means, means for lifting said supporting means with respect to said cutter, means controlled by the shape of said tie for regulating the extent of movement of said supporting means, and means in addition to said regulating means for adjusting the extent of movement of said supporting means.

1,864,298. PARACHUTE OPENING DEVICE. JENNINGS K. DE WITT, New York, N. Y. Filed July 14, 1930. Serial No. 467,786. 2 Claims. (Cl. 244—21.)



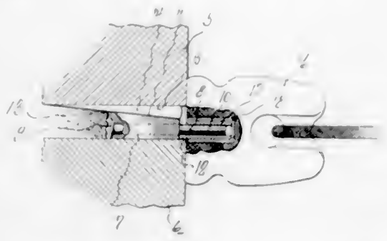
1. In a parachute, a canopy having a central aperture therein, and a member disposed around said aperture and forming air pockets which become distended when the chute is released and support the center portion of the canopy and also apply air currents downwardly through said aperture for preventing collapse of said canopy.

1,864,299. ROLLING MILL. JOSEPH E. FAWELL, Pittsburgh, Pa., assignor to Industrial Methods Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 4, 1928. Serial No. 310,219. 5 Claims. (Cl. 80—38.)



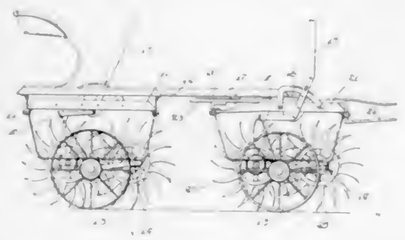
1. A rolling mill comprising a housing, upper and lower working rolls mounted in the housing, upper and lower backing sleeves for the rolls, upper and lower fixed mandrels extending through said sleeves, roller bearings between said mandrels and sleeves for rotatably supporting the latter, yielding means arranged on the outer faces of the housing engaging the ends of said upper mandrel and suspending it and its surrounding sleeve in variable upper positions, and yielding means acting between said working rolls for urging them into firm bearing contact with their respective supporting sleeves.

1,864,300. ANCHOR DEVICE. ELBERT E. FORREST, Gary, Ind., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed July 22, 1929. Serial No. 379,943. 1 Claim. (Cl. 72—105.)



In an anchor device of the character described, adapted to be secured in a recess formed in a support, comprising a flat sided body member formed of relatively soft metal and insertable into the recess, a headed attaching screw embedded in the body member with its threaded end projecting therebeyond and a flat sided wedge, which, when driven into the recess between one wall thereof and the body member secures the body member in the recess in such a manner that outward stress applied to the attaching member tends to move the body member laterally through the entire length into more intimate contact with the recess wall.

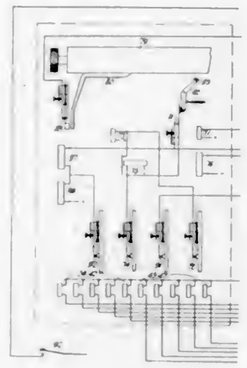
1,864,301. WIDE TYPE ROTARY HARROW. WILLIAM S. GRAHAM, Canton, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Mar. 24, 1930. Serial No. 438,411. 3 Claims. (Cl. 55—11.)

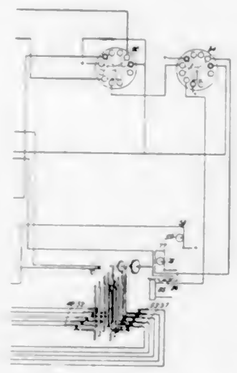


1. A wide spread harrow comprising a transversely elongated rear frame, rigid forwardly converging draft bars extending therefrom, a bearing member connecting the front ends of said bars, a wheel supported harrow unit on each end of said frame, a central front harrow unit including a wheel supported frame having a vertical pivotal connection with the bearing member, an arcuate guide bar connecting the draft bars rearwardly of the bearing member, and a central draft tongue secured on the front harrow unit and crossing said bearing member and having its rear end slidably mounted on said arcuate bar.

1,864,302. TELEGRAPH PRINTING AND LIKE APPARATUS. RONALD GEORGE GRIFFITH, Croydon, England, assignor to International Communications Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 18, 1930, Serial No. 496,373, and in Great Britain Sept. 11, 1930. 20 Claims. (Cl. 178—27.)

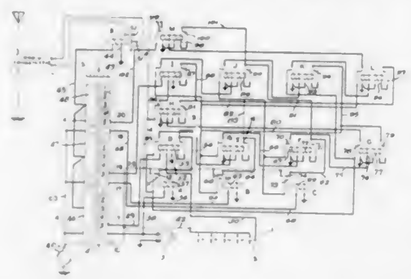
1. In a telegraph apparatus operable under control of a tape perforated in accordance with an unequal element code, a selector mechanism comprising in combination a plurality of peckers for co-operation with the perforated tape, means to feed said perforated tape combination by combination, a series of selector magnet contacts closed by said peckers to actuate corresponding selector magnets in accordance with each individual combination of





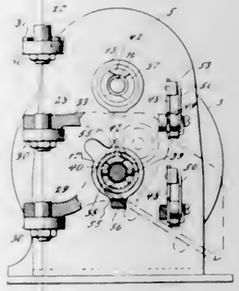
perforations in the tape as fed, and means to render inoperative the remainder of said selector magnets corresponding to elements extraneous to each said combination.

1,864,303. RADIO PRINTING TELEGRAPH SYSTEM. FREDERICK G. HALLDEN, Jamaica, N. Y., assignor to Postal Telegraph-Cable Company, New York, N. Y., a Corporation of Connecticut. Filed Apr. 27, 1928. Serial No. 273,186. 20 Claims. (Cl. 178—17.5.)



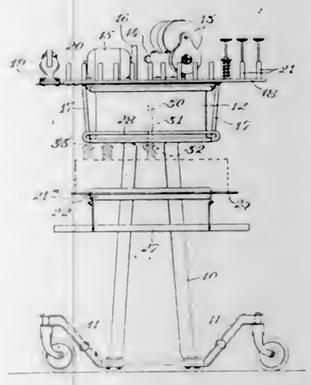
1. In combination with transmitting and receiving means each including a multi-channel distributor having sets of segments, printing means in circuit with said receiving means, a group of storage and transfer relays common to each distributor, control means co-operating with said transfer and storage relays for progressively transferring an impulse as transmitted and received to the storage relays of said groups to prepare for operation a portion of said printing means, and means for operating said portion.

1,864,304. POWER UNIT. ROBERT HOE, Hyde Park, N. Y. Filed Jan. 2, 1930. Serial No. 418,109. 14 Claims. (Cl. 74—7.)



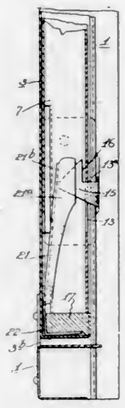
8. In combination, a power unit having a driving shaft, a device hinged to said power unit and having a driven shaft, coacting clutch elements on said shafts adapted to be brought into engagement when said device is swung on its hinge into a certain position, a bearing for said driving shaft projecting from said unit, and a lug on said device beneath said driven shaft and disposed beneath said bearing when the shafts are clutched together, thereby preventing vertical motion of the device and the driven shaft on its hinge.

1,864,305. VALVE FACING MACHINE. JOHN S. HOLMES, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Nov. 6, 1930. Serial No. 493,770. 5 Claims. (Cl. 29—89.)



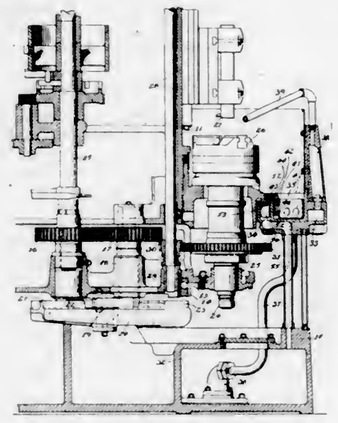
1. In a machine of the class described, a body standard, a support at the top of the standard carrying valve facing accessories, a shelf carried by the standard, said shelf provided with a series of spaced, vertically disposed short pipe elements for temporarily storing disassembled valve parts, and a bracket carried by the standard providing a support for a motor head or block.

1,864,306. LOCKER LATCH. SAMUEL NEWTON HOPE, Wauwatosa, Wis., assignor to Dudley Lock Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1930. Serial No. 488,727. 2 Claims. (Cl. 292—334.)



1. In a locker or the like having an opening, a closure therefor, with a keeper adjacent the opening and a vertically movable locking bar on the closure having a flange portion extending parallel to the plane of the closure and spaced therefrom, said flange having an opening to receive the keeper, the combination of a plug of resilient material held frictionally and removably in a pocket formed in said closure in position for cushioning the impact of the locking bar at one limit of its movement, and a spring detent member having a foot piece disposed in said pocket and anchored by the resilient plug therein, said detent engaging one edge of the opening in the flange of the bar for upholding it at the upper limit of its movement; and being formed for encounter by the keeper, whereby the latter disengages the detent from the bar automatically as the closure approaches closed position.

1,864,307. CHIP REMOVER AND WATER AND DUST SEAL FOR MACHINE TOOLS. ERNEST H. JOHNSON, Bridgeport, Conn., assignor to The Bullard Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 25, 1930. Serial No. 484,328. 11 Claims. (Cl. 29—38.)

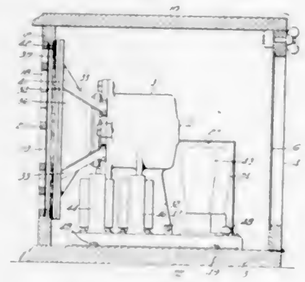


1. In a lathe of the class described, the combination with a fixed base, an annular chip trough formed therein and having an outlet spout, a rotary carrier mounted in

the base, work spindles mounted in the carrier, tools for operations upon work carried by the work spindles, a wiper secured to the movable carrier and extended into the chip trough and adapted to move around with the carrier in a manner to move chips through the fixed trough and discharge the same through the spout.

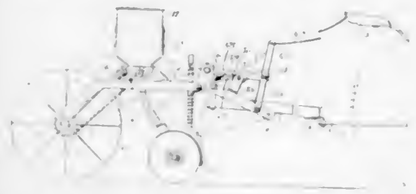
5. In a lathe of the class described, the combination with a base having an annular chip trough formed therein, and an annular pocket formed on the inner side of the chip trough and having one or more drains therefrom, a rotary carrier, work spindles mounted therein, tool heads for operations upon work carried upon said spindles, means for supplying cutting lubricant to said tools and work, an annular depending apron secured to the carrier and extended down into the chip trough, a chip wiper mounted upon the annular face of the apron, and extended across the trough and adapted to move around annularly within the trough, a scraper yieldably mounted in the base adjacent the spout adapted to normally bear against the periphery of the apron and said wiper to scrape the chips therefrom and direct them into the spout.

1,864,308. LOUD-SPEAKER. FREDERICK A. KOLSTER and SIGURD A. SOLLIE, Palo Alto, Calif., assignors to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Oct. 30, 1928. Serial No. 316,038. 12 Claims. (Cl. 181—31.)



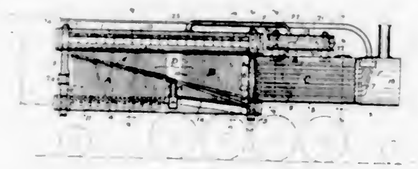
1. A loud speaker comprising a baffle-wall having an opening for sound transmission therethrough, a tympanum co-operatively associated with said opening, a base member adapted to be removably positioned within a cabinet, a sound translating device mounted upon said base for actuating said tympanum, and power supply means also mounted upon said base, the positioning of said base member being effective to maintain the co-operative relation between said tympanum and said baffle-wall, all of said parts carried by said base being solely supported thereby.

1,864,309. DRIVE CONTROL FOR PLANTERS. GEORGE M. KRIEGBAUM and DAVID M. MORRIS, Richmond, Ind., assignors to International Harvester Company, a Corporation of New Jersey. Filed Jan. 14, 1931. Serial No. 508,740. 7 Claims. (Cl. 74—54.)



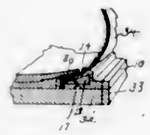
1. A ratchet type device comprising a crank carrier member mounted for rotation on a frame structure, a pair of cranks mounted on said carrier and diametrically spaced from the axis of rotation, a link mounted for reciprocation above the cranks, resilient means for urging the link in one direction, means for positively moving the link in the opposite direction, and a notch formed in said link, said notch having a cam-like edge slanting downwardly in a direction opposite the direction of action of the resilient means whereby said notch engages a crank and rotates the carrier member approximately a half revolution when the link is positively moved in one direction until the second crank contacts with the link, the resilient means returning the link to its original position with the slanting edge of the notch sliding over the engaged crank.

1,864,310. STEAM BOILER. ALPHONSE LIPETZ, Saratoga Springs, N. Y. Filed May 2, 1928. Serial No. 274,426. 14 Claims. (Cl. 122—94.)



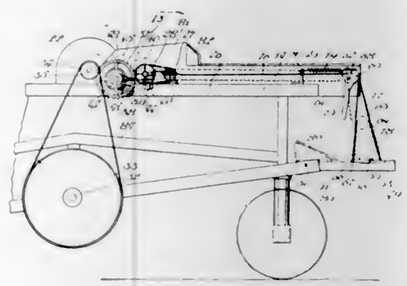
1. A locomotive boiler comprising a fire chamber; a heating chamber forward of the fire chamber; a high pressure water tubular steam generator disposed in said chambers, having upper drums and lower drums disposed at the opposite sides of the said chambers, and tubes connecting said drums, said drums providing steam and water chambers, and of sufficient length to extend uninterruptedly throughout the entire length of the two members, said tubes being arranged in rows extending from end to end of said drums; a transverse wall disposed between the fire chamber and the heating chamber extending upwardly from the bottom of the same; means for introducing feed water to the steam generator; and a fire tube barrel section in advance of the heating chamber for heating said feed water.

1,864,311. WELT FOR BOOTS OR SHOES. HARRY LYON, Holbrook, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed Mar. 17, 1930. Serial No. 436,419. 1 Claim. (Cl. 36—78.)



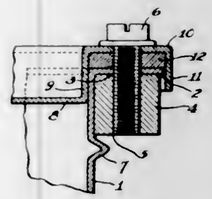
A welt for a boot or shoe comprising a body portion cut to form a flap normally extending beyond the inner edge of the said body portion, a filler strip inserted between said flap and said body portion and provided with an outer wall of greater height than the inner wall thereof and with an inclined upper surface extended from the outer wall to the inner wall and co-operating with said flap to provide the latter with a vertical portion of substantial height and with a substantially wide inclined portion which forms with the said vertical portion a substantially sharp edge and extends downward from said edge in close proximity with the inner edge of the body portion underlying the said flap.

1,864,312. SAFETY DEVICE FOR CORN SHREDDERS. GEORGE M. MERWIN, Berwyn, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Oct. 12, 1927. Serial No. 225,631. 17 Claims. (Cl. 192—129.)



15. A machine of the class described having driving mechanism including a clutch, in combination with a safety device comprising an attendant's platform movable downwardly under weight, clutch throw out connections between the platform and clutch, said connections including a spring pulled, self locking member operable to throw out the clutch and disconnect the driving mechanism when the attendant leaves the platform.

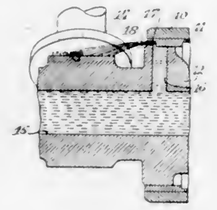
1,864,313. METAL SHIPPING CONTAINER. HEIMER W. MONSON, Portsmouth, Ohio, assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed May 27, 1931. Serial No. 540,316. 2 Claims. (Cl. 220—55.)



1. The combination with a metallic container open at one end and provided peripherally with a lip surrounding said end, of a bolt ring encircling said container on the under side of said lip, means associated with said container holding said ring adjacent said lip, a head for said end comprising a central body portion, a side wall extending upwardly from said body portion telescopically fitting within the end, a top flange forming a continuation of said side wall overlying said lip and bent downwardly about its periphery to form a skirt surrounding the lip, said skirt, flange and side wall forming with said lip a substantially enclosed annular chamber, a sealing gasket disposed in said chamber, the flange, lip, and sealing gasket being provided with bolt openings aligned with threaded bolt openings disposed about said bolt ring, and draw bolts in said openings fastening the head to the container.

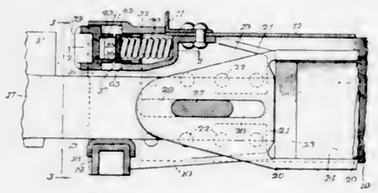
1,864,314. VALVE TAPPET OILING MECHANISM. LEWIS H. MORRILL, Fort Wayne, Ind., assignor to International Harvester Company, a Corporation of New Jersey. Filed May 31, 1930. Serial No. 458,003. 6 Claims. (Cl. 184—6.)

1. In an engine or the like having a cam shaft formed with a cam for moving a tappet, a bearing bushing journaling the shaft adjacent the cam, the shaft having a bore containing lubricant which is delivered through a radial bore in the shaft to a chamber formed in the bushing, and a cut away surface formed on the periphery of the



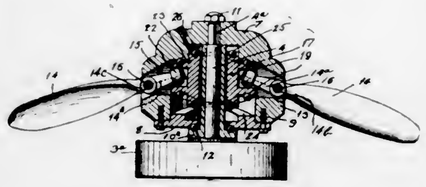
shaft designed to register with the chamber whereby lubricant is spouted laterally from between the shaft and bushing onto the cam.

1,864,315. BUFFER FOR RAILWAY CARS. CHARLES J. NASH and LEWIS T. CANFIELD, Chicago, Ill., assignors to Universal Draft Gear Attachment Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 8, 1927. Serial No. 211,304. 10 Claims. (Cl. 213—59.)



1. In combination, a striker casting for railway cars, a coupler having its shank extending through said casting and having a coupler horn adjacent to said casting, and a yielding buffer device mounted on said casting and adapted to be engaged by said horn, said device comprising a group of relatively movable intercalated friction plates, a pair of followers for engaging one set of said plates for moving the same relatively to the other set of said plates, and means for resisting the inward movement of said followers.

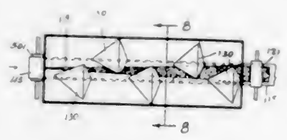
1,864,316. AIRPLANE PROPELLER. JOSEPH PONIATOWSKI, Huntington Park, Calif. Filed Feb. 20, 1931. Serial No. 517,339. 1 Claim. (Cl. 170—164.)



Airplane propulsion means comprising a rotatable housing, a power shaft keyed in the housing, a non-rotative bearing in the housing for the shaft, a cam member splined on the bearing and carrying end thrust bearings, a pair of spaced annular ring members surrounding the

cam member and having cam faces at their outer sides, a cam member on the inner face of the opposite ends of the housing cooperating with the cam faces on the ring members and propeller blades pivoted in the housing with their inner ends positioned between the spaced ring members whereby the blades are moved on their pivot during rotation of the housing.

1,864,317. CONTINUOUS PREDETERMINED CHARACTERISTIC STRIP APPARATUS. EDWARD R. POWELL, Alexandria, Ind., assignor to Banner Rock Corporation, Alexandria, Ind., a Corporation of Delaware. Filed Aug. 17, 1928. Serial No. 300,362. 10 Claims. (Cl. 19—155.)



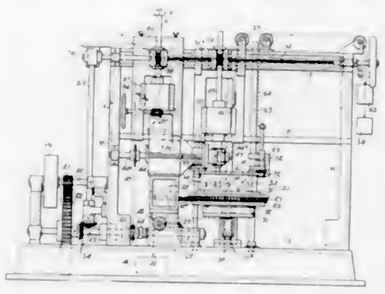
5. In apparatus of the class described, a blow chamber adapted to receive a blast of mineral fibre at one end, said chamber being provided with fiber collecting and delivery surfaces comprising oppositely disposed side walls inclined inwardly from the vertical and terminating at the bottom thereof in a fiber-discharge outlet, a conveyor disposed beneath said outlet and movable in a direction substantially in line with said blast, said fiber-discharge outlet having a configuration adapted to cause a concentrated deposition of the fibers at successive transverse portions of the conveyor during the course of its travel beneath the outlet whereby said fiber is deposited in the form of a bat of substantially uniform thickness.

1,864,318. RING. LEONARD E. POWELL, Kalamazoo, Mich. Filed Dec. 27, 1930. Serial No. 505,044. 1 Claim. (Cl. 46—14.)



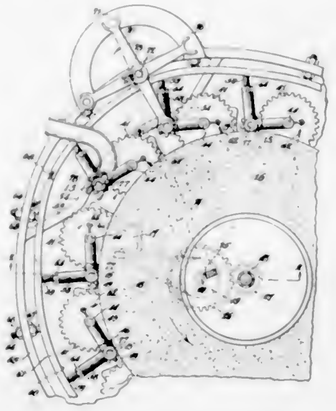
The combination with a cord having a toy secured at one end thereof, of a finger ring connected to the other end of the cord and consisting of a flexible strap located at said other end of the cord and provided at one end with an aperture and having its other end portion of a width to pass through the said aperture for adjusting the strap to vary the size of the finger ring to fit a finger, the end of the strap which is passed through the aperture being adapted to be bent back upon itself to secure the strap in its adjusted position and retain the finger ring in the desired size, and a swivel carried by the ring adjacent the said aperture and connecting the cord with the ring, said swivel lying beyond the inner periphery of the ring so as to be out of contact with the finger.

1,864,319. APPARATUS FOR SHAPING PLASTIC MATERIAL. FRANK W. PRESTON, Butler, Pa. Filed Mar. 7, 1929. Serial No. 344,985. 25 Claims. (Cl. 25—26.)



1. Apparatus for shaping plastic material, comprising a mold, a bottom-forming roll having its axis horizontal, and mounted in position to operate upon material in the bottom of said mold, and means for imparting rotative movements to the mold and the roll about radially offset axes in planes parallel to the bottom of the mold.

1,864,320. EXTERNAL GRINDER. CLIFFORD T. RAULE, Brookline, Pa. Filed July 31, 1930. Serial No. 471,935. 4 Claims. (Cl. 51—53.)

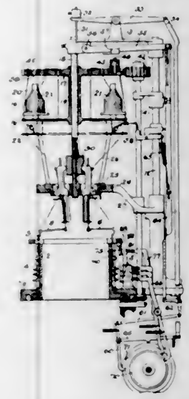


3. In an external grinder, a grinding wheel, mandrel chucks spaced along an adjustable common orbit around the wheel, movable means for supporting the chucks and for moving them about the orbit and means for successively closing the chucks as they successively pass a point of their common orbit in combination with a loading device adapted to hold and carry a work piece and mechanism synchronizing the loading device to bring its loads successively into registry with the axes of the successive chucks at the loading position of the orbit.

1,864,321. STRIPING ATTACHMENT FOR CIRCULAR KNITTING MACHINES. FRANK W. ROBINSON, Reading, Pa., assignor to Schuylkill Hosiery Mills, Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1929. Serial No. 355,605. 7 Claims. (Cl. 66—135.)

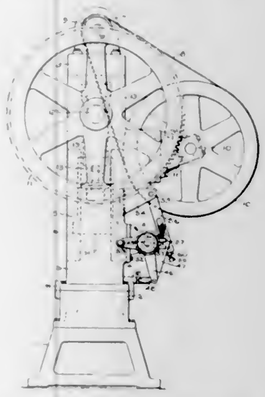
3. In combination with a circular knitting machine comprising a rotatable needle cylinder and operative cam

mechanism therefor, a rotatable striping thread guide carrier, means to cooperatively rotate said carrier and said cylinder, and means to disengage said carrier from



said rotating means during a determined cylinder rotation and to reengage it in a set-back relation relative to said cylinder before the completion of said determined rotation.

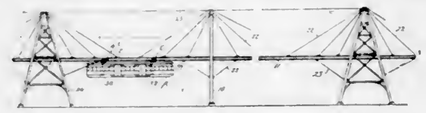
1,864,322. FEED MECHANISM FOR BROACHING MACHINES. LOUIS SANDLER, New Castle, Pa., assignor to Johnson Bronze Company, New Castle, Pa., a Corporation of Pennsylvania. Filed Apr. 1, 1931. Serial No. 526,863. 2 Claims. (Cl. 90—33.)



1. In a machine of the class described, the combination of a pair of slides mounted on the work table thereof, a shaft, a pair of levers fixed to said shaft, and connected to said slides, a second pair of levers also fixed to said shaft and provided with a connecting pin at their ends, a link lever pivotally connected to the ram of the machine and having a slidable connection through its slot with the said lever pin, a brake drum also secured to said shaft, and a flexible brake strap member surrounding said drum, said link lever having an adjustable bearing within one end of its slot, and said brake strap member having adjustable pressure means thereon.

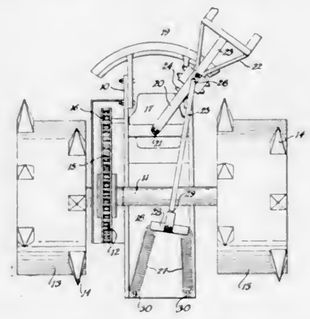
1,864,323. ELEVATED RAILWAY SYSTEM. FREDERICK R. SHERIDAN, Detroit, Mich. Filed Oct. 20, 1930. Serial No. 490,020. 9 Claims. (Cl. 104—124.)

1. In a railway, an overhead supporting structure, a running rail depending therefrom, a wheel engaging said rail, a vehicle below said wheel and supported thereby, said vehicle having the center of gravity thereof laterally



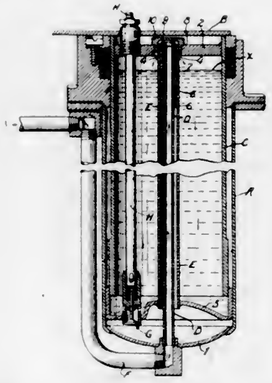
offset from said wheel and means normally exerting a vertical force only for stabilizing said vehicle and counterbalancing the moment due to said offset center of gravity.

1,864,324. TRACTOR STEERING ATTACHMENT. CHARLES C. STEDMAN, Cleveland Heights, Ohio, assignor to Centaur Tractor Corporation, Greenwich, Ohio, a Corporation of Ohio. Filed July 24, 1930. Serial No. 470,276. 4 Claims. (Cl. 280—33.44.)



4. In combination with a front wheel drive tractor having a frame, a drawbar pivoted to the frame and free to swing upon its pivot and an implement trailing the drawbar and connected thereto, spring means pivotally connected to the drawbar at a point spaced in rear of the pivot thereof and to the forward portion of the frame.

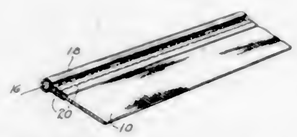
1,864,325. SUPPLY CONDUIT FOR PISTON MACHINES. EDWIN H. STEEDMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed May 5, 1930. Serial No. 449,848. 5 Claims. (Cl. 254—93.)



1. The combination of a cylinder, a hollow piston in said cylinder adapted to hold an incompressible liquid, and a means for introducing a gaseous operating medium into said piston above the level of the liquid therein, compris-

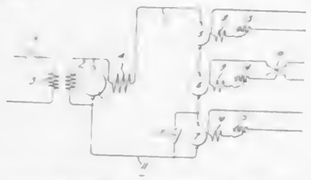
ing a tubular portion on the piston that terminates adjacent the upper end of the piston, a stationary supply pipe carried by the cylinder and extending into said tubular portion, a packing arranged adjacent the upper end of the piston for the annular space between said parts, and means for permitting the operating medium to escape from the supply pipe into the piston.

1,864,326. ANTISQUEAK AND FINISH STRIP. EDWARD F. TANNEWITZ, Detroit, Mich., assignor, by mesne assignments, to Detroit Gasket & Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 5, 1928. Serial No. 290,299. 1 Claim. (Cl. 280—152.)



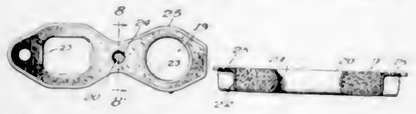
An anti-squeak and finish strip comprising a flat flexible strip of packing material carrying a filler possessing lubricating qualities, a piping extending along one edge of said strip consisting of a flexible cord having a diameter greater than the thickness of said strip, and a strip of hard surfaced flexible finishing material folded over said flexible cord and extending in overlapping relation along each side of said packing material strip, said overlapping portions of the finishing material being secured to said strip to position the flexible cord in slightly spaced relation to the edge of the strip.

1,864,327. SYSTEM OF ELECTRIC MOTOR CONTROL. CHARLES JOSEPH HYDE TRUTCH, Rugby, England. Filed July 18, 1927, Serial No. 206,478, and in Great Britain July 22, 1926. Renewed Jan. 23, 1932. 3 Claims. (Cl. 172—239.)



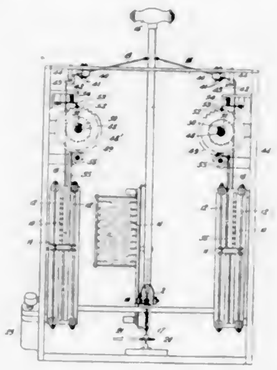
1. A control system comprising a plurality of direct current motors, a direct current generator, a normally closed series circuit for the armatures of all the motors and the armature of said direct current generator, a field windings for the generator comprising a separately excited shunt winding, a self-excited shunt winding, and a differential series winding adapted to give a voltage-current characteristic such that the percentage current variation in said series circuit over a wide range of voltage from zero volts is small, separately excited fields for said motors, and means for independent field control of each motor.

1,864,328. GASKET. JOHN H. VICTOR, Evanston, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 9, 1931. Serial No. 521,143. 3 Claims. (Cl. 288—1.)



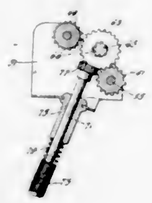
1. A gasket having an opening therein and comprising a body of gasket material and a metallic layer on one face of the body, and an upstanding flange on said metallic layer about the edge of the body, the edge of said flange being turned outwardly and disposed substantially in a plane parallel to the metallic layer and offset therefrom.

1,864,329. CONTROL MECHANISM. CONRAD VOLK, Brighton, England. Filed July 2, 1928, Serial No. 289,843, and in Great Britain July 8, 1927. 4 Claims. (Cl. 74—39.)



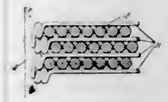
1. A control mechanism comprising a frame structure, a lever universally jointed to said structure, two radial control members each secured to said lever and passing away through respective points fixed on said structure in such positions that said radial control members can be fully actuated by lateral movements as well as straight line movements on said lever in relation to said fixed points, a twist grip member mounted on said lever, a rotary additional control member carried axially of said lever, and means coupling said twist grip to said additional control member.

1,864,330. ODOMETER RESET MECHANISM. IVAR WEDIN, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 23, 1929. Serial No. 387,915. 2 Claims. (Cl. 235—144.)



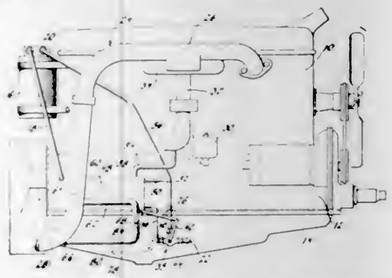
1. In an odometer having a season set of wheels and a trip set of wheels and means to drive the season set, gearing to drive the trip set from the season set including a gear element connected with a wheel of each set and an intermediate gear movable bodily within the plane of said gears to a position in which it engages both said gear elements, means to move said intermediate gear to said position, a combined reset stem and gear, means to guide said reset stem for axial movements, said reset stem and gear, when moved in one direction, engaging and moving said intermediate gear from engagement with the driving one of said gear elements, said stem gear operatively engaging said intermediate gear when so moved, whereby the wheels of the trip may be reset.

1,864,331. ELECTRICAL COIL. ISAAC NEWTON WHITESMITH, Urmston, England, assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1930, Serial No. 495,465, and in Great Britain Nov. 30, 1929. 10 Claims. (Cl. 175—356.)



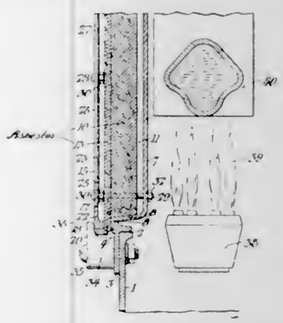
1. The method of making an electrical coil which comprises winding the turns of said coil on sheet insulating material so that the end portions of said sheet insulating material project beyond the end turns of said coil and then compressing the projecting portions of said sheet insulating material inwardly toward said turns and compacting said compressed portions with an insulating material so as to form flanges for said winding.

1,864,332. FILTER AND RECTIFYING SYSTEM. JOSEPH ZUBATY, Flint, Mich., and FRANK D. SMITH, Jr., Washington, D. C., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 19, 1928. Serial No. 278,985. 8 Claims. (Cl. 184—6.)



1. In combination with an internal combustion engine having an exhaust system and a lubricating system interrelated therewith, a filter in said lubricating system, means for causing lubricant to flow to the filter, means for returning the filtered lubricant to the lubricating system, rectifying means and a control in said returning means, means for diverting exhaust gas toward the rectifier, a control in said diverting means, and means for simultaneously operating both said controls.

1,864,333. HEAT INSULATING FURNACE PANEL. HERBERT B. ALDRICH, Baltimore, Md., assignor to The Peerless Heater Company, Boyertown, Pa., a Corporation of Pennsylvania. Filed Oct. 7, 1930. Serial No. 486,962. 9 Claims. (Cl. 110—173.)



1. In a heat insulating panel, the combination of an inner plate of metal, an outer plate of metal, insulating material, between said plates, said insulating material holding said plates apart in insulated spaced relation, and means holding said plates in assembled relation with said insulating material.

1,864,334. METALLIC RESISTOR FOR ELECTRIC FURNACES. THADDEUS F. BAILY, Alliance, Ohio, assignor to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Filed Mar. 10, 1927. Serial No. 174,257. 10 Claims. (Cl. 201—69.)

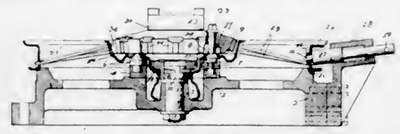


1. A metallic resistor of substantially V-shaped cross section, having sides of less thickness than their depth and an elongated apex, and having the side faces depressed to decrease the difference in the thickness of the metal in the sides and in the elongated apex, as compared with the metal at the junction thereof.

3. A sinuous metallic resistor grid of open V-shaped cross section, the side walls being inclined at a substantial angle from the axis of the V and their depth being many times greater than the thickness thereof, the apex of the V being directed to one side of the plane of the grid.

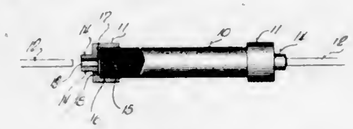
10. A sinuous metallic resistor grid having a substantially Y cross sectional shape.

1,864,335. APPARATUS FOR THE ASSEMBLY OF WIRE WHEELS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 11, 1927. Serial No. 182,824. 14 Claims. (Cl. 29—87.)



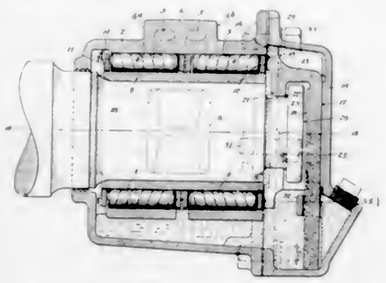
1. In an apparatus for the assembly of wire wheels having a rim with a valve stem hole and a hub shell with a tubular driving projection, the combination of means for supporting the rim, means engageable with the valve stem hole of the rim for peripherally positioning the same, and means engageable with the driving projection of the hub shell for peripherally positioning the same with respect to the rim.

1,864,336. RESISTOR UNIT. HARRY L. BRADLEY, Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 8, 1927. Serial No. 197,398. 4 Claims. (Cl. 173—269.)



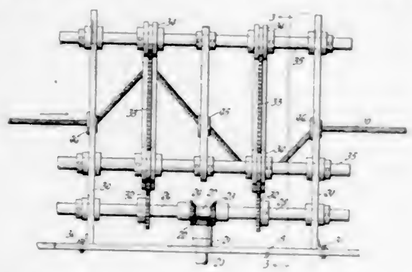
1. A terminal member adapted to be secured over the end of a molded electrical resistor unit, comprising means whereby a bus line may be soldered to the terminal member, and means for venting the interior of the terminal member to prevent its detachment from the unit by the expansion of air trapped between the terminal member and the end of the unit upon application of heat to the terminal member to connect the bus line therewith.

1,864,337. ROLLER BEARING JOURNAL BOX. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 21, 1928. Serial No. 248,343. 6 Claims. (Cl. 308—180.)



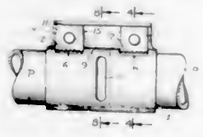
1. In a journal box having roller bearings arranged between the journal and the housing, a separable cover for said housing, a thrust block having an upward projection forming a roller bearing retainer and having bearings on the journal adapted to take up end thrusts in either direction, the thrust block lying wholly outside the plane of the mouth of the housing to permit ready application and removal thereof when the cover is removed.

1,864,338. PROCESS OF TREATING WIRE ROPE. GORMAN C. BURD, Akron, Ohio, assignor to American Cable Company, Inc., a Corporation of Delaware. Filed July 9, 1926. Serial No. 121,397. 5 Claims. (Cl. 153—37.)



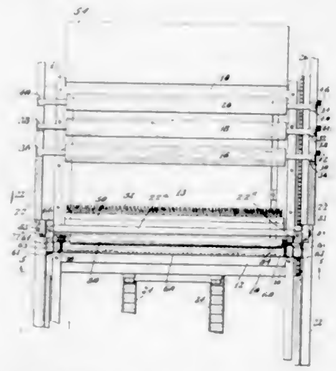
1. A process of treating wire rope formed of multiple helically wound wire components with an expansile characteristic, said process comprising fixing the position of the rope at spaced points, giving the rope between such points an acute angular bend, drawing the rope through such bend, and moving the bent portion of the rope in a rotary path, in such a manner that each of said helical components is alternately bent and unbent, whereby said expansible characteristic is eliminated.

1,864,339. PIPE COUPLER. LEWIS H. CHURCH, Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 16, 1929. Serial No. 355,595. 13 Claims. (Cl. 247—25.)



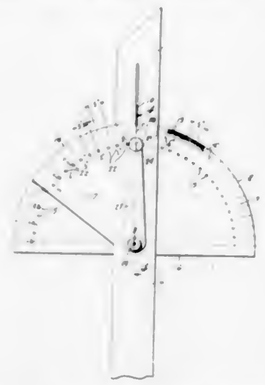
10. A pipe coupler comprising a cylindrical member having an open end to receive a pipe end, an opening in the cylindrical member, spaced screw supporting means projecting from the cylinder, the spaced means being positioned upon one side of the opening, a screw carried by the spaced screw supporting means, a nut on the screw having an edge projecting through the opening in the cylindrical member and contacting with the pipe to clamp it in the coupler, and attaching means for the coupler.

1,864,340. INK DISTRIBUTING DEVICE FOR PRINTING PRESSES. MATTHEW A. CUNNINGHAM, Stoughton, Mass., assignor, by mesne assignments, to Cunningham-Jacques Company, a Corporation of Massachusetts, and to Russell Supply Company, a Corporation of New York. Filed May 21, 1928. Serial No. 279,321. 22 Claims. (Cl. 101—348.)



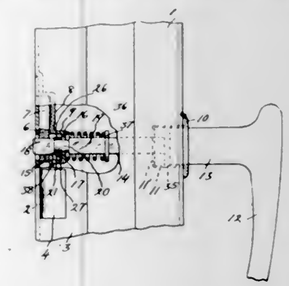
1. An ink distributing device for printing presses having, in combination, a pair of end brackets, clamping means mounted on each of said brackets for fastening said brackets to a fixed part of a printing press, a bearing block mounted in each of said brackets and held therein by the said clamping means thereon and an ink distributing roll rotatably mounted in said bearing blocks.

1,864,341. DRAFTSMAN'S VERNIER PROTRACTOR. ALEXANDER DAVIE, Bridgeport, Conn. Filed Feb. 9, 1931. Serial No. 514,580. 7 Claims. (Cl. 33—75.)



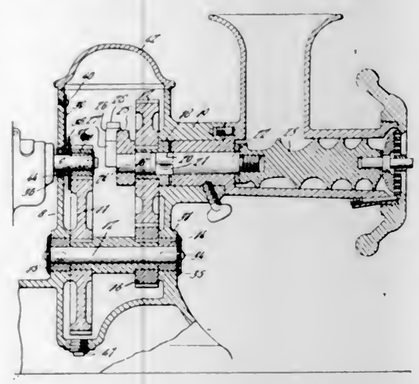
1. A protractor comprising a head having perforations spaced a given number of degrees apart, a straight edge pivoted to said head, said straight edge having a lateral extension overlapping the perforations in the head, the straight edge and extension having spaced perforations, the distance between the perforations in the straight edge and extension being a fraction of a degree greater than the distance between the perforations in the head, and said perforations in the straight edge and extension being sufficient in number whereby the sum of the additional fractions of degrees represented by them equal the distance between two adjacent perforations in the head.

1,864,342. DOOR LOCK HANDLE ANCHORING MEANS. WILLIAM C. DEVEREAUX Detroit, Mich. Filed Apr. 7, 1930. Serial No. 442,389. 3 Claims. (Cl. 292—353.)



2. In a latch structure, a rollback, a housing therefor, a stem extending transversely of the rollback, and means holding the the stem in operative relation with the rollback including a spring having spaced portions gripping said stem and held under tension by a wall of the housing aforesaid.

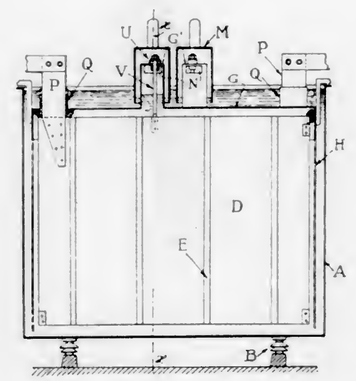
1,864,343. MEAT GRINDER. WILLIAM W. DRYDEN, Louisville, Ky., assignor to Walter F. Stimpson, Detroit, Mich. Filed Mar. 26, 1930, Serial No. 439,152. Renewed Nov. 9, 1931. 5 Claims. (Cl. 74—7.)



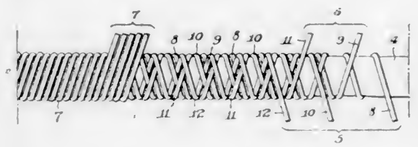
1. A gear assembly comprising a housing having a pinion gear therein, a driven gear operatively connected therewith, a trunnion on one side of the driven gear, a driven shaft at its opposite side and a journal for the trunnion removably supported in the housing.

1,864,344. ELECTROLYZER FOR THE PRODUCTION OF HYDROGEN AND OXYGEN. GIACOMO FAUSER, Novara, Italy, assignor to Montecatini, Societa Generale per l'Industria Mineraria ed Agricola, Milan, Italy, a Joint-Stock Company of Italy. Filed May 8, 1928. Serial No. 276,180, and in Italy June 14, 1927. 1 Claim. (Cl. 204—5.)

Electrolytic apparatus for the electrolysis of water, including a parallelepipedous tank containing the electrolyte, a plurality of flat elongated bells, immersed in parallelism in said electrolyte and each provided at its upper part with a gas collecting chamber extending above the liquid level, a bilamellar rectangular electrode suspended at the top of each of said collecting chambers by means of a single non-conductive tie-rod and a copper blade with nickel plating for supplying the electric current to each of said electrodes being riveted between the two lamellæ constituting each of said electrodes at one of the upper corners of said latter, the electrodes being alternately an anode and a cathode, the chambers for collecting the hydrogen being aligned across the tank in parallelism to the chambers for collecting the oxygen and the blades for supplying the positive current being aligned across one end of the tank while the blades for supplying the negative current are aligned across the opposite end of the tank.



1,864,345. ELASTIC STRAND. WILLIAM J. FOX, Philadelphia, Pa., assignor to James R. Kendrick Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 1, 1931. Serial No. 526,919. 3 Claims. (Cl. 117—57.)



1. An elastic strand comprising a rubber core and two sets of covering threads thereon, the threads of each set being wrapped spirally around the core in alternate succession with and reversely of the threads of the other set, said threads having been applied to said core when it was stretched to at least four times its normal length when uncovered, and said threads maintaining said core stretched to at least two times said normal length.

1,864,346. ELECTRICAL CABLE. OTTO A. FREDERICKSON, Wethersfield, Conn., assignor to The Wiremold Company, Hartford, Conn., a Corporation of Connecticut. Filed May 15, 1926. Serial No. 109,283. 1 Claim. (Cl. 173—264.)

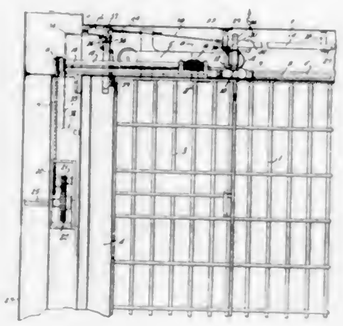
An article of manufacture, comprising in combination, a metallic conductor having a surrounding covering of insulating material, and a protecting sheath constructed largely of strong tough strands of paper formed of ribbon

like strips of paper impregnated with liquid paraffin and twisted after the paraffin has set to form rounded paper strands that are moisture proof and thoroughly lubricated



throughout and the lubricated condition of which facilitates movement between the strands when the covered conductor is bent.

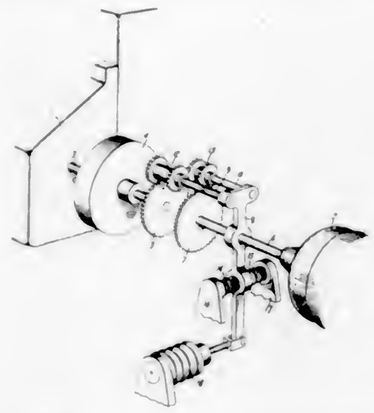
1,864,347. JAIL DOOR CONTROL DEVICE. HARRY D. GARBER, Cuyahoga Falls, and WALTER W. MEIER, Cleveland, Ohio, assignors to The Van Dorn Iron Works Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 12, 1932. Serial No. 592,504. 8 Claims. (Cl. 189—7.)



1. In apparatus for controlling a sliding jail door, a latch bolt associated with said door to move therewith, a gap nut mounted for movement along the path of said door and arranged to engage said latch bolt to move the latter and consequently the door, and means for actuating said gap nut under operator control, said means being incapable of actuation by forces applied to said gap nut.

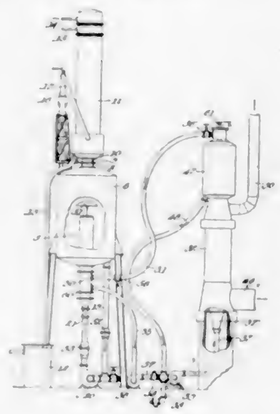
1,864,348. APPARATUS FOR TRANSMITTING ROTARY MOTION. RALPH D. GIVEN, Leamington, England, assignor to General Electric Company, a Corporation of New York. Filed Apr. 30, 1931, Serial No. 534,079, and in Great Britain May 15, 1930. 4 Claims. (Cl. 74—7.)

1. In combination, a driving shaft, a driven shaft, and means for imparting to the driven shaft a uniform speed independent of speed variations of the driving shaft, said means comprising an inertia member associated with the driven shaft, a differential gear mechanism connecting said shafts including a reaction member mounted to have a



limited yielding movement in response to a change in speed of the driving shaft and resilient means for limiting the movement of said reaction member.

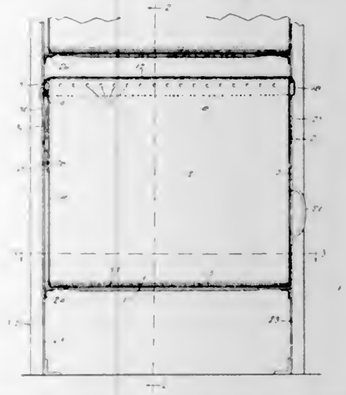
1,864,349. METHOD OF EVAPORATING LIQUIDS. FRANCIS X. GOVERS, Lawrenceville, Ill., assignor to Indian Refining Company, Lawrenceville, Ill., a Corporation of Maine. Filed Nov. 5, 1928. Serial No. 317,297. 8 Claims. (Cl. 196—119.)



6. In the heating of fluid materials the step of imparting heat to such fluid material by means of diphenyl in thermal but out of physical contact with the fluid material and heated to a temperature in excess of the temperature of the fluid material.

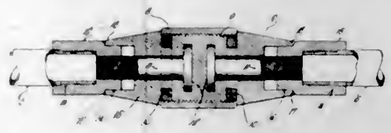
1,864,350. FIREPROOF FILING CONTAINER. BYRON F. HANNUM, Cleveland, Ohio, assignor to Hunt & Dorman Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 16, 1929. Serial No. 399,988. 10 Claims. (Cl. 211—80.)

1. A fireproof container, as for storing such combustible and explosive articles as films and the like, comprising: a rectangular fireproof container provided with apertures along its sides for permitting the escape of gases therefrom; a cover means secured by hinges to one side of said container; and flanges on said cover means extending over said apertures, for preventing dripping liquid from en-



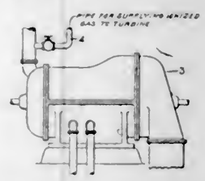
tering said apertures, and spaced from said container for permitting gases to escape from said container through said apertures.

1,864,351. INSULATED JOINT STRUCTURE. LEM E. HENDEE, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 22, 1926. Serial No. 149,973. 1 Claim. (Cl. 287—10.)



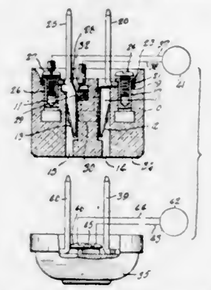
In a joint for connecting two sections of an operating lever, a sleeve member, insulating material substantially filling the interior of the sleeve member, a tension stud embedded in the insulating material and secured thereby against movement with respect to the sleeve member, said insulating material projecting outwardly from the sleeve member over the tension stud to form an extended end portion, a coupling member having a reduced end received in a counterbore in the projected end portion of the insulating material, and said reduced end forming a shoulder to compress the end portion of the insulating material.

1,864,352. MEANS FOR AVOIDING DAMAGE THROUGH MOISTURE IN THE LOW PRESSURE PART OF STEAM TURBINES. NINO HILGERS, Berlin-Westend, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 2, 1931, Serial No. 506,256, and in Germany Jan. 2, 1930. 4 Claims. (Cl. 60—73.)



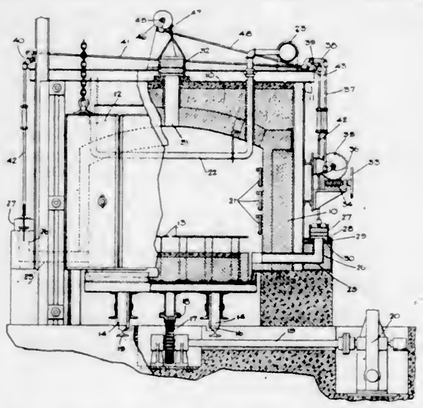
1. The combination with a steam turbine, of means for supplying ionized gas to the steam whereby the number of condensation nuclei for the steam is increased and the number of drops of water formed as the steam passes through the turbine is increased and the size of the drops is decreased.

1,864,353. ATTACHMENT PLUG CAP. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed Mar. 26, 1929. Serial No. 350,655. 1 Claim. (Cl. 173—334.)



In an attachment plug cap, an insulating body member having a pair of longitudinal passages opening through the opposite ends thereof and providing openings in one end of the body for entrance of contact blades, receptacle contacts projecting into said passages from the other end, a pair of blade contacts projecting from the latter end of the body, one of the blade contacts being permanently electrically connected to one of the receptacle contacts, means for connecting a lead wire to said combined blade and receptacle contacts, the other blade contact being separate from the other receptacle contact, means for connecting a lead wire to said other blade contact, and means for connecting a lead wire to said other receptacle contact, whereby circuits may be connected either in series or in parallel through said plug.

1,864,354. FURNACE. CARL L. IPSEN and ALBERT N. OTIS, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed May 6, 1931. Serial No. 535,412. 7 Claims. (Cl. 263—44.)



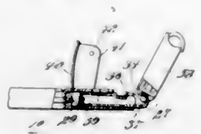
6. The method of cooling a charge in a furnace provided with closed path cooling means and also with means providing for limited circulation of air through the furnace which consists in allowing the furnace to cool at its natural rate down to a predetermined temperature, cooling at a greater rate by said closed path cooling means down to a temperature suitable to a sheltered exposure to air, then admitting air to provide for an increased rate of cooling down to a predetermined temperature and thereafter removing the charge from the furnace and allowing it to cool in the outside air.

1,864,355. WINDOW SEALING CONSTRUCTION. CLARENCE G. JOHNSON, Hartford City, Ind. Filed Nov. 26, 1928. Serial No. 321,861. 5 Claims. (Cl. 20—69.)



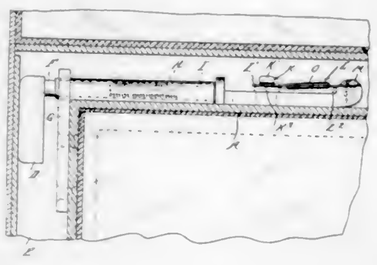
1. In a window, a frame, a pair of sashes slidably mounted therein, a parting strip between said sashes, said parting strip comprising a pair of longitudinal, unitary, U-shaped channel members one within the other and relatively slidable, and spring means between said parts for moving one of said parts into spring pressed engagement with one of said sashes.

1,864,356. CLASP. SYLVESTER A. JOHNSON, North Providence, R. I., assignor to Albert E. R. Speidel, Edgewood, R. I. Filed Nov. 6, 1931. Serial No. 573,359. 9 Claims. (Cl. 24—201.)



6. A bracelet clasp comprising a body member, means for attaching it to one end of the bracelet, a slide member therein provided with a hook to engage a bracelet link, the opening to which hook is exposed upon outward movement of the slide for receiving the bracket link, means for limiting the relative outward movement of said slide and body members, a resilient tongue on said slide member, a latch carried by said tongue and a catch carried by said body member for engaging said latch, said catch being formed with notches in the body member.

1,864,357. THERMOSTATIC RELEASING MEANS FOR SELF-CLOSING VENTILATORS. CLYDE W. KELLY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed July 14, 1930. Serial No. 467,919. 9 Claims. (Cl. 189—74.)



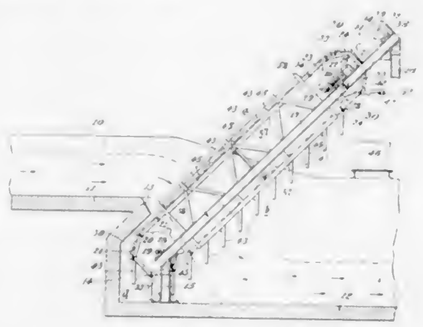
1. The combination with a self-closing ventilator, friction means for holding said ventilator in open position and a resilient member for developing the friction in said means, of a slidable member forming an abutment for said resilient member, of a fixed abutment member, and a link between said slidable and fixed abutments, said link being formed of a plurality of rigid members held in interlocking engagement by a fusible solder.

1,864,358. LATCH LOCKING DEVICE. WILLIAM J. KERWIN, Jr., Pawtucket, R. I. Filed Apr. 23, 1931. Serial No. 532,192. 18 Claims. (Cl. 70—91.)



1. The combination of a latch-bolt, means including a manually movable member for retracting the latch-bolt by movement of the member in one direction and means within the movable member for locking the member by a rotative movement of the member.

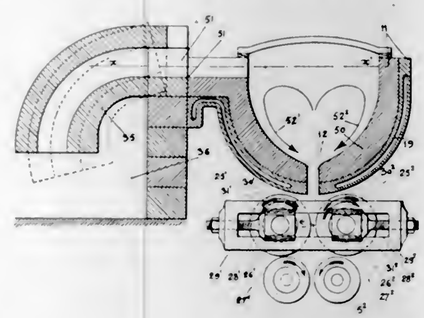
1,864,359. SELF-CLEANING SCREEN CONVEYER. WILLIAM C. LAUGHLIN, Kew Gardens, and ABRAHAM B. ASCH, Brooklyn, N. Y., assignors to Filtration Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1931. Serial No. 514,188. 11 Claims. (Cl. 210—198.)



1. In apparatus for collecting trash from sewage, an inclined endless traveling conveyer having spaced cross rods forming open spaces between the same, a row of finger members attached at one end to each rod with gaps between the members, said members being attached for individual swinging movement and adapted, during one period of the conveyer's travel, to function collectively as trash-collecting grating at the open spaces between the rows, and at another period of the conveyer's travel, to function as separately and independently swingable parts to cause the discharge of the collected trash.

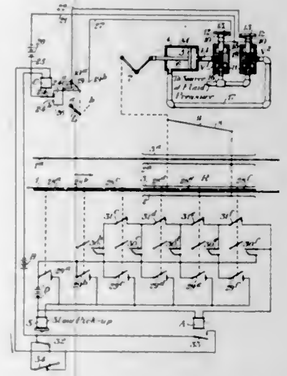
1,864,360. PLANT FOR THE MANUFACTURE OF SHEETS OF GLASS. JEAN HENRI LEMAIRE, Rousies, France. Filed Nov. 21, 1928, Serial No. 320,786, and in France Nov. 25, 1927. 1 Claim. (Cl. 49—33.)

In an installation for the manufacture of sheet glass, a hopper having rigid lateral and bottom walls, said bottom wall being provided with a fixed slot for discharging the glass in thin sheets, the slot in the said bottom wall having a narrow central portion and enlarged end portions, whereby the glass from the hopper spreads along the entire length of the slot, in opposition to the resistance offered to the flowing glass by the walls of the slot, two flow regulating rollers arranged below and spaced from the slot to provide therebetween clearance space for the passing sheet, said rollers being independent of said walls including the bottom of said hopper, means for regulating the position of one of the rollers with respect to



the other and the clearance space for passing the glass sheet, and finishing gauge rollers to receive the glass sheet from the said regulating rollers.

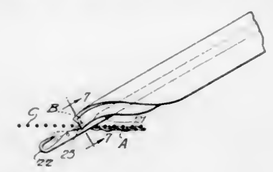
1,864,361. RAILWAY CAR RETARDER. JOHN W. LIVINGSTON, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 29, 1931. Serial No. 547,518. 7 Claims. (Cl. 303—21.)



1. In combination, a stretch of railway track, means located along said stretch for controlling the speed of cars traversing the stretch, a relay having a contact which becomes closed when and only when the relay is successively energized a predetermined number of times in such manner that the time interval which elapses between successive energizations is less than a predetermined value, means effective when a car is traversing said stretch for energizing said relay at least said predetermined number of times in such manner that the time interval which elapses between successive energizations depends upon the speed of the car, and means controlled by said contact for controlling said first mentioned means.

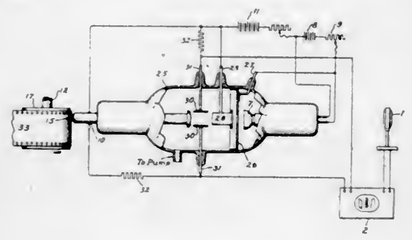
1,864,362. KNITTING NEEDLE. BEN L. MALKIND, Long Island City, N. Y. Filed Mar. 21, 1932. Serial No. 600,350. 3 Claims. (Cl. 66—117.)

1. In combination, a holder element including an elongated handle having a socket in the forward end thereof, a knitting needle having a shank extending in the said socket, a portion of the forward end of said handle cut away to provide a nose disposed above and slightly below the plane of the axis of said socket to act as a stop and the outer face of said nose being concaved for abutting engagement with the ladder threads of a ravel or run in a piece of knitted fabric for limiting forward



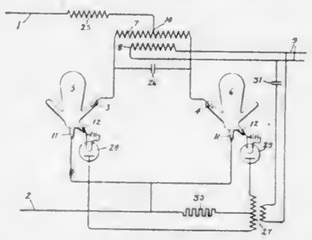
movement of the needle to prevent picking up of more than one ladder thread on each complete actuaton of the needle during use of the same.

1,864,363. RECORDING APPARATUS. HAROLD J. MCCREARY, Chicago, Ill., assignor to General Electric Company, a Corporation of New York. Filed Apr. 21, 1930. Serial No. 446,005. 2 Claims. (Cl. 179—100.3.)



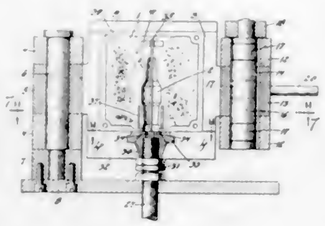
1. Apparatus for making a photographic record of electrical variations on a moving light sensitive member comprising a cathode ray tube constructed to produce a pencil of cathode rays and having an evacuated envelope provided with a window forming a slit through which the cathode rays are ejected from the tube, said tube having electrodes therein arranged to cause a deflection of the pencil of rays in the direction of the slit in accordance with said electrical variations.

1,864,364. SYSTEM OF DISTRIBUTION. ALBERT H. MITTAG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 9, 1925. Serial No. 29,200. 2 Claims. (Cl. 175—363.)



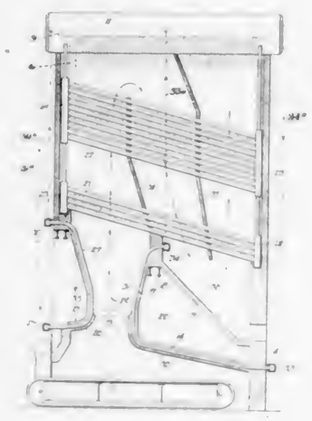
1. In combination a source of direct current, a winding connected to said source through a plurality of vapor electric devices, said vapor devices each having an anode and a cathode, means including an auxiliary starting anode associated with each of said vapor devices for starting an arc therein, a circuit for exciting said starting anodes with opposite polarity from the potential across said winding, and a unilaterally conductive device included in said circuit in series with each starting anode.

1,864,365. PROCESS AND APPARATUS FOR FORMING CERAMIC BODIES. EARLE T. MONTGOMERY, Franklin, Ohio, assignor of one-half to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 6, 1929. Serial No. 390,742. 12 Claims. (Cl. 25—129.)



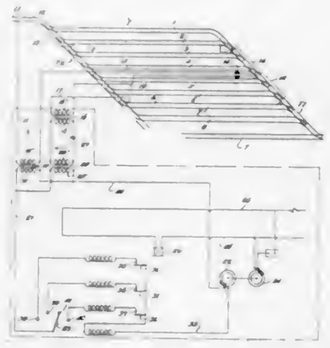
5. The combination of a closed porous mold having a die cavity therein, a source of slip under heavy pressure, a conduit for leading slip from the source to the mold, a nozzle for the conduit adjacent the entrance to the die cavity, said nozzle being provided with one or more fine passages through which slip is fed to the mold cavity.

1,864,366. BOILER. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray executors of said Thomas E. Murray, deceased, assignors to Metropolitan Engineering Company, a Corporation of New York. Filed July 19, 1927. Serial No. 206,903. 4 Claims. (Cl. 122—235.)



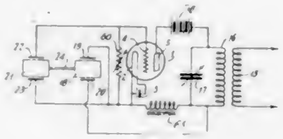
1. A boiler having a combustion chamber with side walls and having tubes above the combustion chamber heated by convection from the combustion gases, a grate for the fuel, an arch extending inward from the rear wall shortly above the grate and inclined downward toward the rear where the combustion is least active and forming above it a dead space, supports in said space for said arch and upright water tubes lining the side walls, having their upper portions uncovered and having their lower portions extended downward through said dead space into the zone below said arch and exposed in said dead air space so as to cool the same and shielded in said zone to limit their cooling effect on the flame.

1,864,367. SIGNALING SYSTEM. FRANK H. NICHOLSON and HOWARD A. THOMPSON, Edgewood, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1931. Serial No. 518,119. 9 Claims. (Cl. 104—26.)



1. A vehicle controlling signal system comprising a plurality of circuits for inductively transmitting indications to a vehicle, transposed conductors in said circuits, and means providing for the passage of signal transmitting current across regions corresponding to dead sections at transposition points in said circuits.

1,864,368. ELECTRICAL OSCILLATION GENERATOR. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1927. Serial No. 180,421. 4 Claims. (Cl. 250—36.)

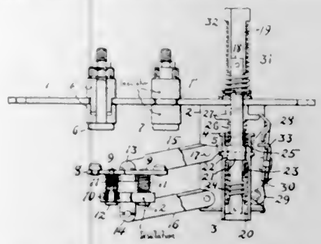


1. In an oscillation generator, a space discharge tube amplifying element, and a frequency controlling element, said frequency controlling element comprising a pair of piezo-electric devices mechanically connected together and non-reactive means for coupling one of said devices with the input circuit of said amplifying element and the other of said devices with the output circuit of said amplifying element to cause the generation of constant frequency oscillations.

1,864,369. ELECTRICAL SWITCH. BYRON J. PEPPER, Fort Wayne, Ind., assignor to Tokheim Oil Tank and Pump Company, Fort Wayne, Ind. Filed July 22, 1929. Serial No. 379,977. 8 Claims. (Cl. 200—70.)

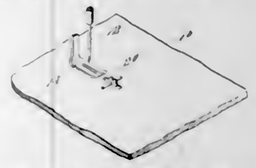
1. An electric switch consisting of a base having a guide bracket; a spring restrained push-rod supported in said base, which rod has thereon a ledge spaced from its ends; a cylindrical plunger guided in said bracket and provided with an internal bearing in which said ledge has sliding movement, and having also an external annular shoulder; an annular flange fixed on said push-rod at a point thereon spaced from said ledge; movable thimbles on said rod, each provided with a flange at one end, which thimbles have engagement with the corresponding ends of said ledge and bearing; a compression spring for each thimble, operatively related with the rod, tending to hold the thimble against the ledge and bearing; a spring-

pressed lock lever having a cam operatively engaged with the flange on said rod, and a latch engageable with the shoulder on said plunger; spaced circuit terminals fixed on said base; and a movably supported contactor for said



terminals actuated by said plunger, said cam being shaped so that the plunger is intercepted and subsequently released by the latch during the closing and opening actions of the switch.

1,864,370. INDICATING ATTACHMENT FOR SEWING MACHINES. STANISLAS PICARD, Providence, R. I., assignor to B. B. & R. Knight Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 20, 1929. Serial No. 348,588. 5 Claims. (Cl. 112—136.)



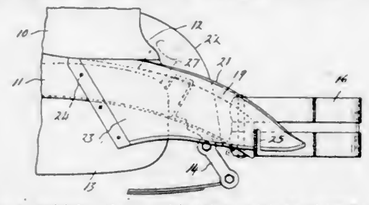
2. In combination with a sewing machine having a work supporting surface, a needle and feeding means for the cloth, a wheel having spurs thereon rotatably mounted in front of the needle beneath the path of the cloth section to be worked on, said spurs being positioned to pierce through the cloth at a point which will be subsequently operated upon by the needle in the normal feeding of the cloth into the machine.

1,864,371. INTERCHANGEABLE STONE SETTING FOR RING TOPS AND THE LIKE. GEORGE PRUSSIAN, Newark, N. J. Filed June 4, 1927. Serial No. 196,427. 13 Claims. (Cl. 63—29.)



1. An interchangeable stone setting for rings, comprising an apertured face plate, with notches forming extensions of the aperture therein, a yoke behind said face plate, and side bar members connecting the yoke to the face plate, an aperture formed in said yoke in line with the first-named aperture, but smaller, a jewel holder comprising a tubular member having integral diverging hooked arms at one end to be received in said notches and clamp a jewel in the face plate, the shank of said tubular member being threaded and having lock tongues on the end thereof opposite said jewel holding arms, a nut adapted to be screwed on said threaded shank behind the yoke and thereby draw in the spider, contract its arms and clamp the jewel, said nut having grooves on the face thereof remote from the yoke, and the tongues on the holder shank being bent outwardly to enter said grooves and lock the nut against rotation.

1,864,372. BODY APRON. JOHN J. PUNKE, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Feb. 4, 1929. Serial No. 337,501. 7 Claims. (Cl. 280—152.)



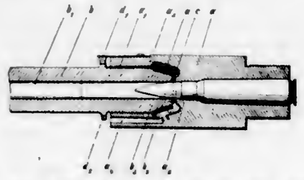
6. In a vehicle, the combination with a chassis frame and a bumper, of means for mounting the bumper adjacent one end of the frame, and an apron carried by the frame having a portion concealing the end aforesaid of the chassis frame and having another portion projecting rearwardly from the frame and concealing the bumper attaching means aforesaid.

1,864,373. FINISHING OF FABRIC. JULIAN ROBERTSON, Salisbury, N. C., assignor to North Carolina Finishing Co. Inc., Salisbury, N. C., a Corporation of North Carolina. Filed Nov. 12, 1931. Serial No. 574,537. 4 Claims. (Cl. 26—51.)



1. The method of finishing continuous web fabric which has been stretched lengthwise and shrunk crosswise during the preliminary wet treatments of bleaching, etc. to which the fabric has been subjected, which comprises stretching the fabric transversely while holding it under lengthwise tension and drying the fabric in such stretched condition, calendering the fabric, subjecting the calendered fabric to a shrinking treatment to permit shrinkage in both directions by wetting the fabric, stretching the fabric transversely while holding it under lengthwise tension, drying and ironing the fabric, subjecting it to a further shrinking treatment by wetting the fabric to permit further shrinking in both directions, and finally drying and ironing the fabric.

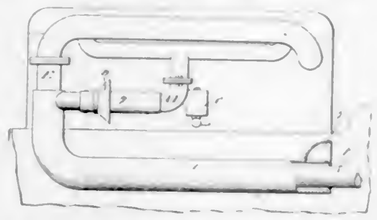
1,864,374. FIREARM. HEINRICH ROMBERG and HERMANN SCHULER, Dusseldorf, Germany, assignors to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Jan. 5, 1932, Serial No. 584,855, and in Germany Jan. 9, 1931. 4 Claims. (Cl. 42—76.)



1. In a fire arm having a device for altering the starting velocity of the projectile by conducting a portion of the driving gases out of the barrel, a cartridge cham-

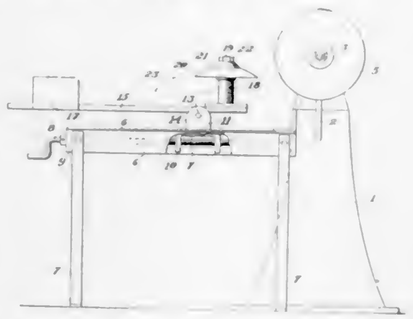
ber, a female thread at the front end of said chamber, a barrel portion having furrows or grooves, a thread at the hind or rear end of said barrel portion fitting said female thread, said barrel portion having a conical rear end extending into a correspondingly shaped portion of said cartridge chamber in such a manner, that an annular space is formed between said parts which communicates with bores provided in said cartridge chamber opening into the atmosphere.

1,864,375. AUTOMATIC AIR TEMPERATURE CONTROL. CARL H. ROOT, Detroit, Mich. Filed Feb. 26, 1931. Serial No. 518,558. 2 Claims. (Cl. 257—241.)



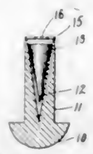
1. In the combination with the exhaust pipe of an internal combustion engine, an air heater associated with said pipe, a hot air pipe leading from said heater and connected with the air intake of a carbureter, the hot air pipe having a plurality of circumferentially disposed passages for placing the hot air pipe in communication with the atmosphere, a sleeve within the hot air pipe and movable over said openings, a spider secured to said sleeve, a second spider secured to the interior of the hot air pipe, a thermostat located within the hot air pipe and connected between the spiders for causing the sleeve to open or close the openings, a circular plate fitting the hot air pipe and provided with a passage, a disk movable by the thermostat for closing the passage when the passages in the hot air pipe have been opened by the sleeve.

1,864,376. DISK GRINDER AND POLISHER. ROBERT RUSSELL, Otis, Colo., assignor of one-fourth to D. D. Amis, Las Animas, Colo. Filed May 18, 1931. Serial No. 538,317. 2 Claims. (Cl. 51—104.)



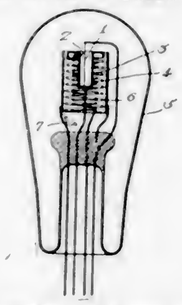
1. A disk grinding and polishing machine comprising a stand, a shaft journaled thereon, a polishing or grinding element carried by the shaft, spaced guide rails leading to the upper portion of the stand, a head block slidably mounted between the guide rails, a screw for moving the head block, a yoke pivoted upon the head block, a lever pivoted to the yoke, a weight adjustably mounted upon the outer end portion of the lever, a spindle mounted upon the inner portion of the lever, clamping elements carried by the spindle, the center of the spindle being located to one side of the plane of the grinding or polishing elements.

1,864,377. RIVET. RALPH W. SIEFFERT, Aliquippa, Pa. Filed Dec. 4, 1929. Serial No. 411,555. 1 Claim. (Cl. 85—37.)



In a rivet, a head, a shank extending from said head and having a bore tapered from the outer end of said shank inward, a conical shaped expansion element housed and mounted for slidable movement within the bore for fitting engagement therewith and being adapted to expand the shank upon inward movement of the element, and a wire looped midway its ends and bridging the outer end of the bore to retain said element therein.

1,864,378. ELECTRON DEVICE. CHARLES G. SMITH, Medford, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1928. Serial No. 263,699. 5 Claims. (Cl. 250—27.5.)



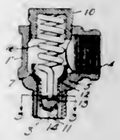
1. An electron discharge device comprising an evacuated envelope, a thermionically emitting cathode and an anode supported in said envelope, a control grid between said cathode and said anode, and an additional grid conductively connected to and mechanically supported by said cathode between said control grid and said anode.

1,864,379. BATH BRUSH. HUMIAG TAILOR, Los Angeles, Calif., assignor of one-half to Leon Timourian, Los Angeles, Calif. Filed Oct. 17, 1930. Serial No. 489,429. 2 Claims. (Cl. 15—222.)



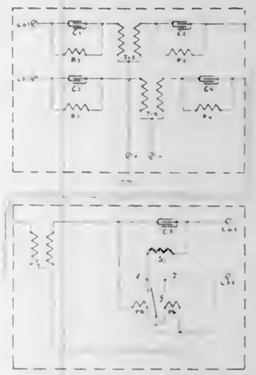
1. In combination, a brush, an elastic element depending from one end thereof and adapted to be held stationary by one hand of the user, and a rigid handle projecting from the opposite end of the brush for moving the latter in one direction against the tension of said elastic element.

1,864,380. SAFETY RELIEF VALVE. EDMUND J. TE PAS, Lakewood, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 1, 1926. Serial No. 119,823. 12 Claims. (Cl. 137—53.)



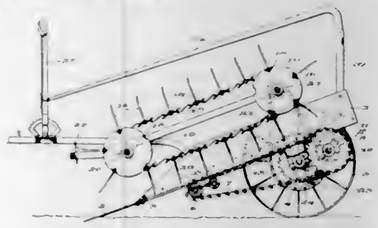
6. In a temperature and pressure responsive relief valve, a valve body having inlet and outlet passageways and a valve port located therebetween, a valve head having a relatively fusible seating-face cooperating with said valve port, resilient loading means for said valve head, and temperature responsive means to vary the load imposed on said valve head.

1,864,381. CIRCUIT ARRANGEMENT FOR SENDING OF CURRENT IMPULSES OVER TELEPHONE LINES. ROMAN TRECHCINSKI, Warsaw, Poland, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Mar. 3, 1927, Serial No. 172,490, and in Poland Apr. 24, 1926. 3 Claims. (Cl. 179—16.)



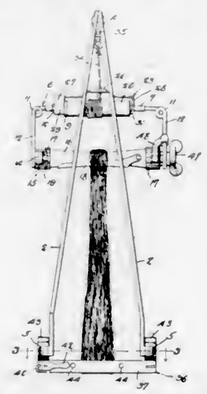
1 An arrangement for sending selecting impulses over a speaking line including a blocking condenser in the line branches, characterized by that the impulse relay is connected to the line behind said condenser, counted from the sending end of the line, in such a manner that the relay will be brought into action by rapid current variations caused in the relay circuit by the line current impulses but not through the absolute value of the line current.

1,864,382. POTATO DIGGER. JAMES L. TWENTYMAN, Cortland, N. Y. Filed Feb. 8, 1929. Serial No. 338,528. 3 Claims. (Cl. 55—128.)



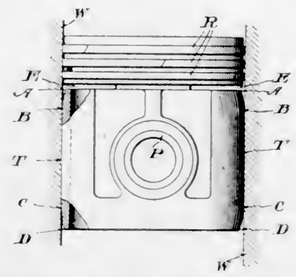
1. In a potato digger, an endless rake having cross-bars, said cross-bars having notches in the opposite ends thereof, rake teeth carried by the cross-bars, links connecting the cross-bars together, and driving disks for the endless rake and having notches in the peripheries thereof receiving the notched ends of the cross-bars.

1,864,383. HAIR WAVING DEVICE. WILLIAM E. VILLINGER, Williamsport, Pa. Filed June 11, 1931. Serial No. 543,684. 5 Claims. (Cl. 132—33.)



1. In a device for tensioning the human hair in the operation of waving, a support, a hair-holder on the support, a hair-winding roller, a frame in which the roller is journaled, a spring-actuated drum journaled on the frame, a guide rotatable about the axis of the drum, a flexible element extended through the guide and wound about the drum, and means for connecting the flexible element releasably with the support.

1,864,384. PISTON. RAYMOND WARE, Brookline, Mass. Filed Oct. 13, 1931. Serial No. 568,601. 6 Claims. (Cl. 74—108.)

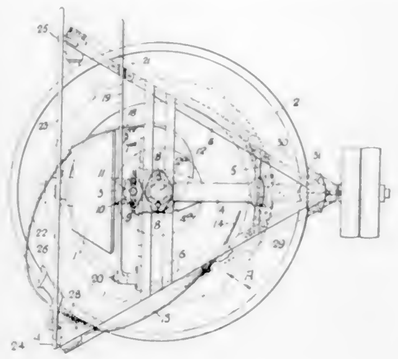


1. A piston having a cylindrical bearing surface, each end of which is progressively reduced in diameter to provide wedge-shaped oil reservoirs from which a film of oil is entrained between said surface and the wall of the cylinder on the side towards which the thrust load is acting.

1,864,385. GRINDING, CRUSHING, AND MIXING MILL. JOSEPHUS WASS, Kettering, England. Filed Mar. 21, 1930, Serial No. 437,738, and in Great Britain July 6, 1929. 1 Claim. (Cl. 83—45.)

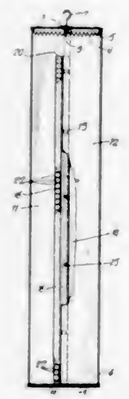
A grinding, crushing and mixing mill of the type referred to, which includes a pan for the reception of the material to be treated, a scraper for the edge of the pan whereby the latter can be kept clean, a frame in which the pan is rotatably mounted, means for rotating the pan in the frame, deflectors in the pan for mixing the material and effecting the discharge of the mixture over the edge

of the pan when required, supports for said frame in which the latter is pivotally mounted so as to be capable of being tilted when required to assist the discharge of the mixture from the pan, a roller for co-operation with the



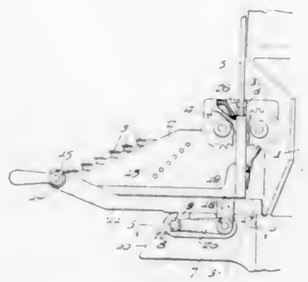
pan for treating the material, and a support for said roller which is pivotally mounted in said frame and is movable for raising the roller from the bottom of the pan, for the purpose described.

1,864,386. GARMENT BAG. BERTHA WIESENFELD, New York, N. Y. Filed Aug. 15, 1929. Serial No. 386,100. 1 Claim. (Cl. 206—7.)



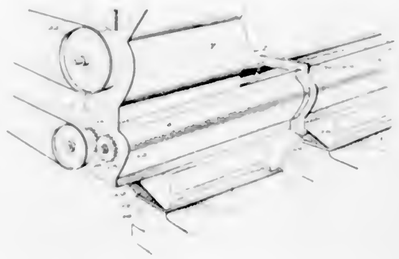
A garment bag comprising a flexible elongated body having an opening extending approximately the length of one of the longitudinal walls thereof, separable fastening means for closing said opening, and a vertically disposed pocket of porous material open at its top and closed at its bottom carried by the inside of the wall in which said opening is provided and disposed adjacent said opening and extending the length of the same for the reception of a column of moth balls, the fumes of which are adapted to pass out through said porous material and act as a repellant against the entrance of moths through said opening.

1,864,387. KEYBOARD FOR TYPOGRAPHICAL MACHINES. LE ROY W. WILLIS, Stamford, Conn., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed June 27, 1931. Serial No. 547,344. 18 Claims. (Cl. 199—18.)



1. In a typographical machine having a set of matrix releasing members mounted thereon, a keyboard for controlling said members, and means supporting the keyboard to shift transversely of said members to remove it from operative relationship therewith and to tilt about a horizontal axis to render the keyboard accessible.

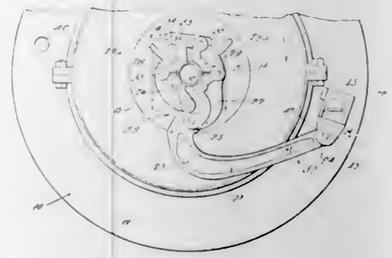
1,864,388. DISTRIBUTOR FOR COTTON GINS. WILLIAM DORSETT WILSON, Memphis, Tenn. Filed July 3, 1930. Serial No. 465,736. 3 Claims. (Cl. 19—74.)



1. A cotton ginning and distributing apparatus comprising in combination, a battery of gins, a casing extending across said gins and open at the bottom above the gins, and a conveyor and feeder within said casing comprising a pair of screw elements, the adjacent sides of the said elements revolving downwardly.

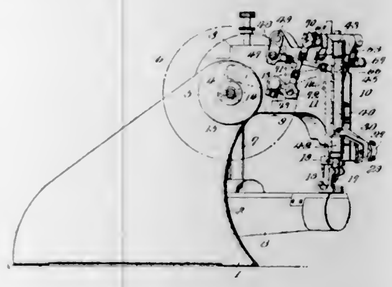
1,864,389. PIPE ROTATING APPARATUS. WILLIAM WEBSTER WILSON, Los Angeles, Calif. Filed Oct. 29, 1928. Serial No. 313,725. 3 Claims. (Cl. 255—35.)

1. In a pipe rotating apparatus, a rotary table, a driving post carried by the table, and tongs adapted to be applied to the pipe and to be operatively engaged by the post when so applied, said tongs being characterized as a handle and a plurality of relatively movable parts pivoted to the handle and adapted to encircle the pipe, said parts being so connected with the handle that swinging movement of the handle with relation to said parts causes the parts to be constricted or opened with respect to the pipe; the portion of the handle where the pivotal connection is made extending substantially radially with respect to the pipe, and the portion of the handle engaged by the post extending at substantially right angles with respect to the first mentioned portion, the center of mass of the



handle being displaced a substantial distance to one side of a line drawn through the swinging center of the handle and the axis of the pipe.

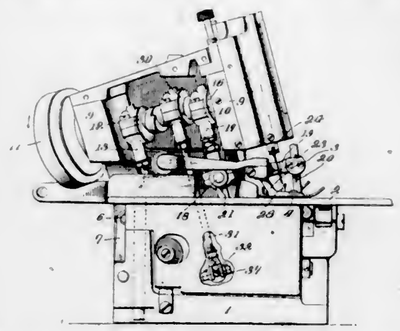
1,864,390. FEEDING MECHANISM FOR SEWING MACHINES. FREDERICK F. ZEIER, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1928. Serial No. 260,041. 8 Claims. (Cl. 112—212.)



1. A feeding mechanism for feeding material along the work supporting arm of a sewing machine and off from the end thereof as it is stitched, including a main shaft, an upper feed dog, a feed bar supporting said upper feed dog, means for raising and lowering the feed dog, an eccentric on the main shaft, a lever oscillated thereby, a rock shaft having its axis parallel with the axis of the main shaft and connected to said lever, a second rock shaft having its axis at right angles to the axis of the first named rock shaft, and connected thereto for oscillation, and a link for connecting said second rock shaft to the feed bar.

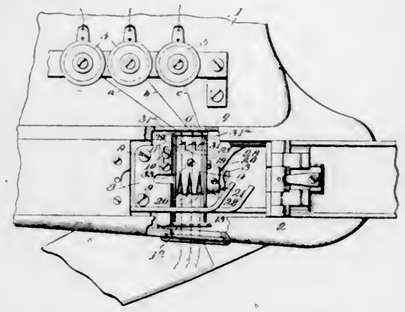
1,864,391. OVEREDGE STITCH FORMING MECHANISM FOR SEWING MACHINES. FREDERICK F. ZEIER, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 9, 1929. Serial No. 398,356. 4 Claims. (Cl. 112—162.)

1. The combination of a work support, a main rotating actuating shaft disposed above the work support, an auxiliary oscillating actuating shaft located beneath the plane of the work support, a needle actuated by said main rotating shaft, an under looper cooperating with the needle beneath the work support, a shaft on which said under looper is mounted, an arm shiftably mounted on said oscillating shaft and connected to said looper for oscillating the same, an overedge looper, a shaft on which said overedge looper is mounted, devices operated by said main



shaft for oscillating said auxiliary shaft, and devices operated by said auxiliary shaft for oscillating said overedge looper.

1,864,392. THREAD CONTROLLER FOR SEWING MACHINES. FREDERICK F. ZEIER and CHARLES F. RUBEL, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 15, 1930. Serial No. 444,465. 10 Claims. (Cl. 112—248.)

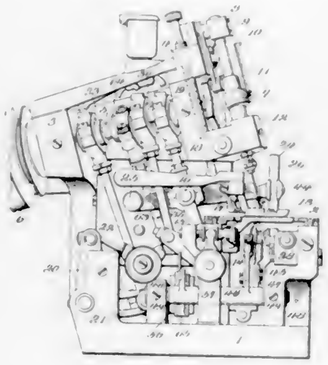


1. A thread controlling mechanism for sewing machines including a rotatable thread controlling element, thread guides associated therewith for directing a thread into engagement with said element in a direction at right angles to its axis of rotation, said thread controlling element having a radially projecting portion adapted to engage and take up said thread, said thread engaging portion being provided with a slot parallel to and at one side of the path of movement of the thread, and a stripper member carried by said element for stripping the thread off from said thread engaging portion into said slot, said thread engaging portion in advance of said stripper member being curved so as to gradually and positively take up the thread as the looper is retracted for holding the looper thread substantially taut until the needle point has passed the looper thread.

1,864,393. OVEREDGE STITCH FORMING MECHANISM. FREDERICK F. ZEIER and CHARLES F. RUBEL, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 6, 1930. Serial No. 450,227. 14 Claims. (Cl. 112—162.)

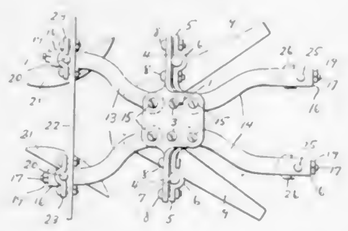
1. The combination of a work support, a stitch forming mechanism, a feeding mechanism, and an actuating

shaft arranged above the plane of the work support and disposed so as to extend in the general direction of the feed, said stitch forming mechanism including an under looper mounted beneath the work support, an eccentrically arranged member on the shaft, means cooperating with



said eccentrically arranged member and connected to the looper for oscillating the same, an overedge looper mounted beneath the work support, a second eccentrically arranged member on said shaft, and means cooperating therewith and connected to said overedge looper for oscillating the same.

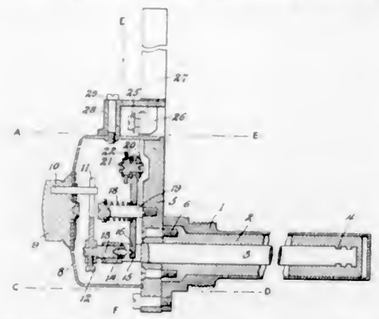
1,864,394. CULTIVATOR ATTACHMENT. WILLIAM ZETZMAN, Post, Tex. Filed Sept. 22, 1931. Serial No. 564,386. 3 Claims. (Cl. 97—179.)



1. A cultivator attachment comprising upper and lower plates, arms formed integrally with the upper plates and projecting laterally therefrom, arms formed integrally with the lower plate and projecting therefrom in opposed relation to the first named arms, shanks extending vertically between the opposed arms, means for clamping the opposed arms around the shanks for adjustably securing said shanks, knives mounted on the shanks, beams connected by one end to the plates for swinging adjustment in a horizontal plane, and earth working elements mounted on the beams.

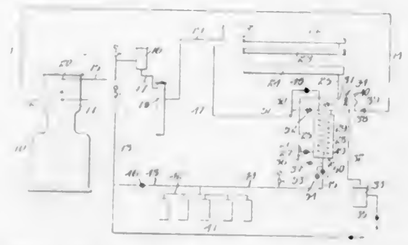
1,864,395. THERMIC INTERRUPTER FOR ELECTRICAL CURRENT. RAUL FEDERICO ZIMMERMANN, Buenos Aires, Argentina. Filed June 27, 1929, Serial No. 374,187, and in Argentina Feb. 5, 1929. 6 Claims. (Cl. 200—137.)

1. The combination with a circuit controlling device; a thermo responsive means having an opening near one end; fixed fulcrums on opposite sides thereof; a lever operatively connecting the circuit controlling device and the thermo responsive means and having intermediate and outer fulcrum engaging portions in a common plane, the intermediate portion entering the opening and the outer



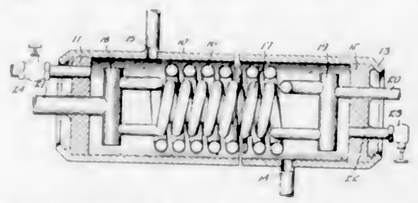
portions engaging the fixed fulcrums; and adjustable means constituting a fulcrum and engaging the intermediate portion.

1,864,396. METHOD AND APPARATUS FOR MANUFACTURING CARBON DIOXIDE ICE FROM LIQUID CARBON DIOXIDE. FRANK R. ZUMBRO, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Oct. 20, 1928. Serial No. 313,887. 5 Claims. (Cl. 62—121.)



1. The combination with a plurality of drums containing liquid carbon dioxide under pressure and a compressor having a low pressure and a high pressure suction port, a condenser, a receiver and a liquid cooler, and means for expanding a portion of the liquid from said drums to cool the liquid carbon dioxide in the said cooler and for delivering the expanded carbon dioxide after its passage through the cooler to the high pressure suction port of the said compressor, and means for expanding the residue of the carbon dioxide from said drums to the low pressure suction port of the said compressor, substantially as set forth.

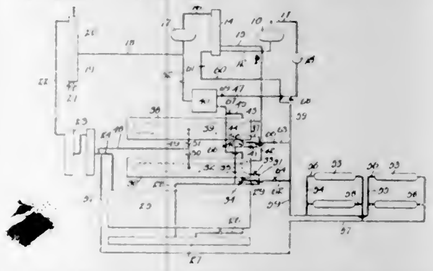
1,864,397. LIQUID COOLER. FRANK R. ZUMBRO, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Jan. 19, 1929. Serial No. 333,559. 1 Claim. (Cl. 62—115.)



A cooler comprising a casing forming a fluid chamber, inlet and outlet ports to said chamber, a pair of headers in said chamber, said headers being connected by a plu-

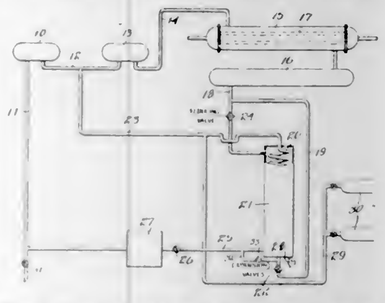
rality of nested coils, inlet and outlet pipes connected to said headers, said headers being supported in said casing by said inlet and outlet pipes, and inlet and outlet connections to the interior of said chamber for passing warm fluid through the chamber for thawing out the chamber from time to time, substantially as set forth.

1,864,398. CARBON DIOXIDE SNOW MACHINE. FRANK R. ZUMBRO, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Jan. 19, 1929. Serial No. 333,561. 8 Claims. (Cl. 62—121.)



1. In a snow making system having means for compressing, cooling and condensing carbon dioxide, a receiver for the condensed carbon dioxide, a liquid cooler, means for delivering carbon dioxide from commercial drums to said cooler, means for expanding the said condensed carbon dioxide from the receiver to cool the carbon dioxide in the cooler and means for subjecting the liquid in the cooler to the pressure in the receiver, substantially as set forth.

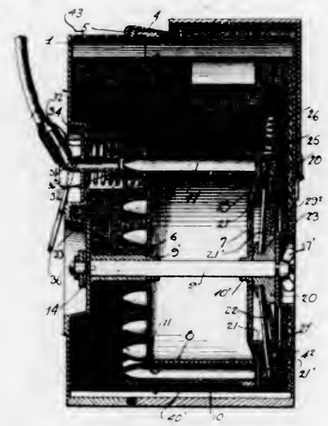
1,864,399. METHOD AND MEANS FOR MAKING CARBON DIOXIDE SNOW. FRANK R. ZUMBRO, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Jan. 23, 1929. Serial No. 334,564. 8 Claims. (Cl. 62—121.)



1. The method of making carbon dioxide snow which consists in compressing, cooling and condensing a fluid mixture of carbon dioxide and water, passing a portion of the fluid to a cooling chamber and simultaneously reducing its pressure, expanding another portion of the fluid in heat exchange relation with said cooling chamber to cool the low pressure fluid therein and to freeze out the water content in the said fluid therein, the said freezing action operating to enable the fluid to be expanded at a low pressure through the expansion valve of a snow machine without freezing in the said valve, substantially as set forth.

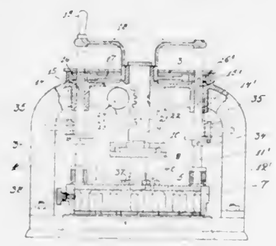
1,864,400. SMOKER'S APPLIANCE. DAVID BERGER, Philadelphia, Pa. Filed Dec. 12, 1929. Serial No. 413,627. 14 Claims. (Cl. 131—12.)

1. A device for the use of tobacco smokers comprising a portable casing constructed and adapted to be carried by a smoker, and containing a rotary cigarette reservoir adapted to contain a plurality of cigarettes and a rotary match reservoir adapted to hold a plurality of matches and means for simultaneously rotating the reservoirs



whereby a cigarette may be brought into smoking position and a match associated therewith automatically lighted, a smoke tube attached to the casing through which a cigarette may be smoked.

1,864,401. MACHINE FOR DIVIDING AND WORKING DOUGH. EUGEN BERNLÖHR, Dolau/Halle, Germany. Filed Jan. 29, 1931, Serial No. 512,159, and in Germany Jan. 27, 1930. 3 Claims. (Cl. 107—20.)

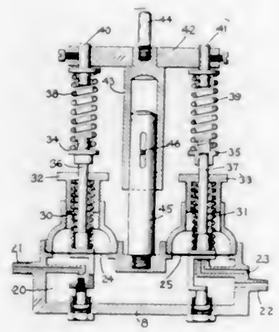


1. A machine for dividing and working dough comprising a frame, a dividing and working head including means for dividing and pressing the dough, vertical rods slidably and rotatably mounted in the frame, said rods having crank pins mounted thereon connected to the dividing and working head, means for rotating said rods to impart a gyratory movement to said dividing and working head, a rack bar mounted in said frame and connected at its lower end to said dividing and working head between said crank pins, and means for raising or lowering said rack bar to raise or lower the dividing and working head.

1,864,402. AUTOMATIC LIQUID-LEVEL REGULATOR. ROBERT BODEMULLER, Nederland, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed July 18, 1930. Serial No. 468,817. 5 Claims. (Cl. 137—68.)

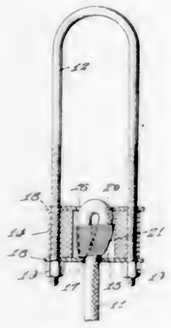
1. A pressure regulator comprising a chamber having a compressed air inlet valve, an air outlet to means con-

trolled by pneumatic pressure, a release valve for releasing air from the chamber, resilient mountings for the air inlet and release valves, springs cooperating with and altering the tension on the mountings, means for adjusting the degree of tension the springs cause on the mountings, cushioning springs cooperating indirectly with the



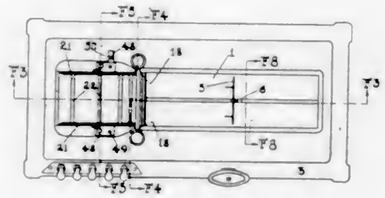
resilient mountings, means connected with the cushioning springs dependent upon movements of separate actuating mechanism to indirectly increase and decrease tension on the mountings to effect the opening and closing of the air inlet and release valves to thereby regulate the pressure within the chamber and on the pressure controlled means.

1,864,403. HOUSE ANCHOR. CHARLES B. BRADLEY, Cleveland, Ohio. Filed Jan. 23, 1930. Serial No. 422,889. 1 Claim. (Cl. 24—123.)



In an anchoring device, a U bolt provided with threaded ends, nuts screwed thereon, the intermediate portion of the bolt adapted to be connected with a cable section, a member slidable upon the threaded ends of the bolt and having a socket opening, plates at the opposite sides of said member and slidable upon the threaded ends of the bolts and having openings, a cable section passing through the openings of the plate and having an enlarged end portion in the socket of said member, the said socket being of greater diameter than the openings in the plates whereby the last-mentioned cable section is retained by the plates within the socket of said member.

1,864,404. MACHINE FOR THE RETAIL MARKETING OF BLOCK CHEESE AND THE LIKE. DAVID JOHN BRADSHAW, Elwood, Victoria, Australia. Filed Apr. 16, 1931, Serial No. 530,693, and in Australia May 8, 1930. 4 Claims. (Cl. 31—17.)



1. In a cutting machine for a commodity of uniform dimensions and density, the combination of a cutter, with means for moving forward said commodity, stop plates, selector keys adapted to move said stop plates into the path of said commodity and to move said cutter out of the path of said commodity, and means for operating said cutter.

1,864,405. SICKLE BLADE REMOVER. ROBERT E. BREWER, Valley Falls, Kans. Filed Mar. 24, 1931, Serial No. 524,963. Renewed Apr. 14, 1932. 3 Claims. (Cl. 29—84.)

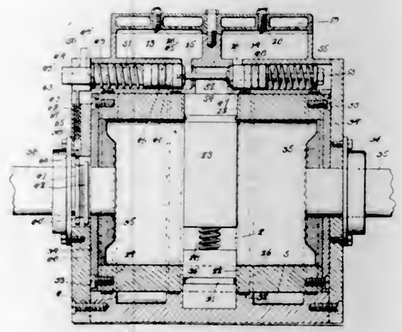


1. As a new article of manufacture, a blade removing device of the character described comprising an elongated bar having a blunt outer end, a guide member carried by the bar and extending outwardly of one end thereof, said guide member having a bifurcated end portion, and means for adjusting the guide member with respect to the bar.

1,864,406. ROTARY ENGINE. CHARLES W. CHRIST, Kansas City, Mo. Filed May 9, 1930. Serial No. 451,153. 2 Claims. (Cl. 123—16.)

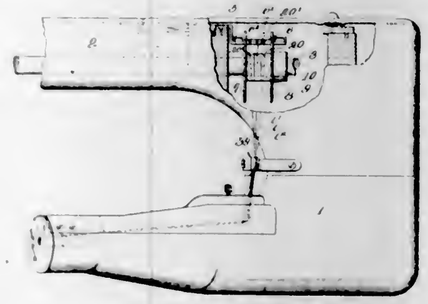
1. In a rotary engine having a pair of spaced ports, a slide valve comprising a pair of oppositely disposed closure members for said ports, a rod rigidly connected with

one of said members and slidably connected with the other of said members, tension means normally forcing the closure member rigidly connected with said rod inwardly to its closure position, stop means on said rod for opening the closure member slidably connected therewith when the closure member rigidly connected therewith



is closed, means for opening the closure member rigidly connected with the rod, and tension means for maintaining the closure member slidably connected with the rod in engagement with said stop means to provide for the closing of the closure member slidably connected with the rod when the closure member rigidly connected therewith is open.

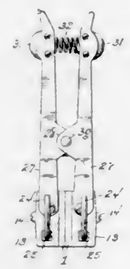
1,864,407. THREAD CONTROLLER FOR SEWING MACHINES. NORMAN V. CHRISTENSEN, CHARLES F. RUBEL, and FREDERICK F. ZEIER, Chicago, Ill., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 2, 1928. Serial No. 297,059. 29 Claims. (Cl. 112—248.)



1. A thread controlling mechanism for sewing machines including a continuously rotating thread controlling element, thread guides associated with said controlling element and disposed so that the thread is led into engagement with the peripheral surface of the controlling element in a plane at right angles to the axis of rotation of said controlling element, said thread controlling element being shaped so as to take up and give up thread twice during each rotation of said controlling element.

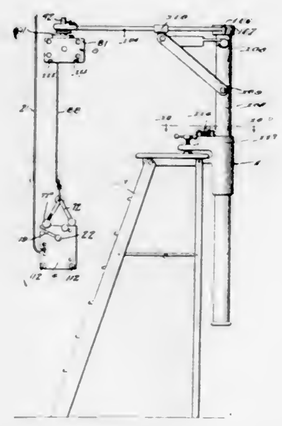
1,864,408. ELECTRIC JIFFY CREASER. ROY E. CONLEY and OTTO M. CONLEY, Fostoria, Ohio. Filed Aug. 27, 1930. Serial No. 478,241. 1 Claim. (Cl. 219—19.)

In a hand operated clothes creasing device, two contacting irons, each including an outer plate and an inner plate which are insulated from each other, heating coils between the plates, metal members having offset ends secured to the ends of the coils, a cover of insulating material for each pair of plates, metal plugs passing through each cover, metal clips for connecting the plugs to the offset ends of one of the metal strips in each of the irons, tubes of insulating material on the cover plates, a wire coil passing through the tubes and entering the cover plates, metal clips for connecting the coil to the



offset end of the second metal strip in each of the irons, arms secured to the ends of the irons having inwardly directed ears arranged in lapping relation and pivotally connected, a handle member secured between the ends of the respective irons, and springs between the opposed handle members exerting a pressure thereagainst for forcing the handles away from each other and the irons toward each other.

1,864,409. WALL PAPERING MACHINE. MAXEY C. COOPER, Detroit, Mich. Filed May 22, 1930. Serial No. 454,761. 6 Claims. (Cl. 216—5.)

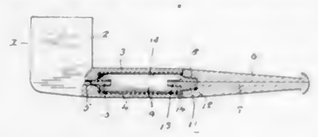


1. A wall papering machine comprising a member adapted to trim and apply the paste to the paper, a suspension member adapted to position said member in elevated and lowered positions during the operation, and means for adjustably positioning said suspension means at the will of an operator.

1,864,410. SMOKING PIPE. DANIEL COPELL, Atlantic City, N. J. Filed May 28, 1931. Serial No. 540,781. 4 Claims. (Cl. 131—12.)

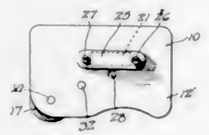
1. A smoking instrument including a neck having a bore and a chamber in communication therewith, a mouth-

piece associated with the neck and having a bore, a receptacle in said chamber, nipples carried by the end walls of the receptacle and arranged concentrically of said



walls and in communication with the bores, said receptacle having a doorway, and a removable door for said doorway.

1,864,411. MARKING DEVICE. GEORGE D. CROTTY, Chicago, Ill. Filed Nov. 20, 1929. Serial No. 408,620. 3 Claims. (Cl. 101—329.)



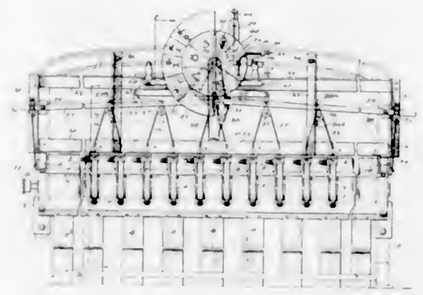
1. A hand stamp for marking parallel and differently colored stripes upon envelopes and for imprinting in one of said stripes indicia signifying that the envelope is to be sent by air mail, comprising a substantially rectangular housing having an opening in one corner thereof and including side walls, a shaft journaled in said side walls adjacent said opening, a pair of rollers mounted on said shaft in spaced relation and having portions thereof extended through said opening and on one of which are formed said indicia, a second shaft journaled in said side walls, and rollers thereon frictionally engaging said first named rollers at the rear thereof, a third shaft, and ink pad rollers thereon frictionally engaging said second named rollers, said housing having other openings therein, and closure members for said last named openings through which inks of different colors may be placed upon said ink pad rollers.

1,864,412. PUMP. ELTON A. DAVIS, Padroni, Colo. Filed Sept. 29, 1930. Serial No. 485,198. 1 Claim. (Cl. 103—46.)



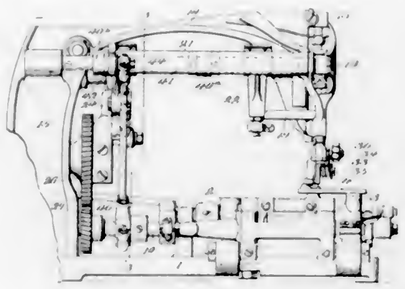
In a liquid pressure pump the combination of a cylinder provided with a plurality of inlets and outlets, means supporting the cylinder below the level of a liquid body, a second cylinder, means supporting the second cylinder in adjustable relation to the first cylinder and independently of the first mentioned means, a reciprocating piston in each cylinder, means for inter-connecting said pistons, and means for introducing an elastic fluid under pressure to said second cylinder.

1,864,413. TESTING MACHINE. WILLIAM A. BOHNE, Philadelphia, Pa., assignor to E. F. Houghton & Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1930. Serial No. 426,107. 9 Claims. (Cl. 73—51.)



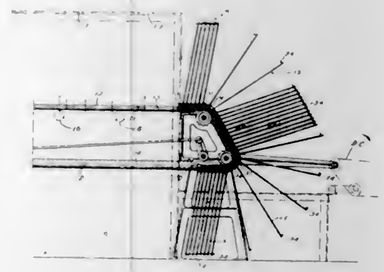
1. In a renitence measuring machine, the combination with a pair of relatively movable elements, of means for passing a test specimen between said elements whereby the relative position of said elements is determined by the thickness of the said specimen, a movable dial, means connecting said dial and one of said elements whereby the position of the dial is controlled by the relative positions of said elements, guide means for effecting a free loop in said test specimen the position of which is determined by the renitence of the specimen, and mechanism actuated by the looped portion of the specimen and including an indicator co-acting with the dial and affording with the latter a visible indication of the renitence of the test specimen.

1,864,414. RUG TUFTING MACHINE. JOHN E. CHALMAN, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 1, 1930. Serial No. 448,977. 11 Claims. (Cl. 112—79.)



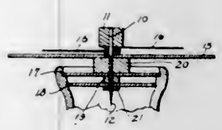
1. A rug tufting machine comprising the work support, a feeding mechanism, a thread carrying needle, complemental stitch forming mechanism co-operating therewith, means for forming loops in the needle thread between consecutive stitches, shearing devices for severing the loops to form tufts and means for operating the shearing devices in timing with the feeding mechanism.

1,864,415. CONVEYER FOR SHEET DRIERS. BENNETT F. CLARK, New Brunswick, N. J., assignor to John Waldron Corporation, New Brunswick, N. J., a Corporation of New Jersey. Filed Oct. 21, 1930. Serial No. 490,255. 3 Claims. (Cl. 198—134.)



1. A conveyer for sheet driers comprising endless side members, cross bars connecting said side members at spaced intervals, a tray associated with each cross bar and having feet to extend adjacent one face of the cross bar, U-shaped clips adapted to straddle the cross bar and having apertures for the passage of said feet and means for shifting the clips to force the feet into engagement with the cross bar.

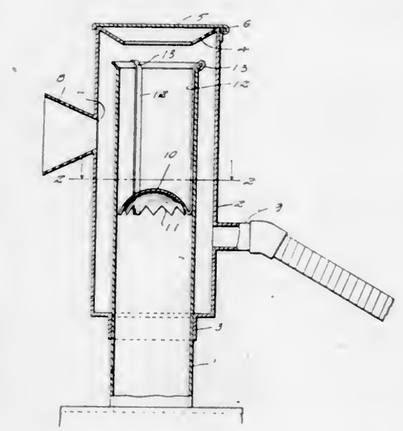
1,864,416. INDICATOR. GARRETT ELLIOTT CONOVER, Verona, N. J. Filed Oct. 5, 1931. Serial No. 567,099. 4 Claims. (Cl. 116—133.)



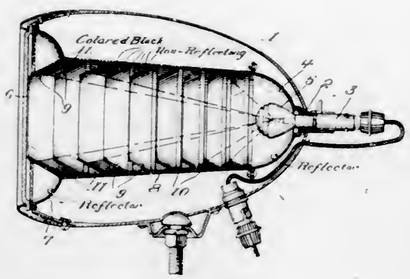
1. A portable indicator of the character described comprising an indicator disk, a support disk adapted to be inserted into the mouth of a container, a portable carrier member extended centrally through said disks and carrying abutment means at its upper end, means on said carrier member for maintaining said disks in axially spaced relation, pointers rotatably mounted on said carrier member between the indicator disk and the abutment means, and means cooperating with said carrier member and said abutment means for retaining the parts in assembled relation, so that they may be inserted into and removed from a container as an assembled unit.

1,864,417. MOTOR VEHICLE BREATHER PIPE ATTACHMENT. WENDELL DUNN, Marshalltown, Iowa. Filed June 10, 1930. Serial No. 460,263. 3 Claims. (Cl. 123—171.)

1. A combined oil inlet and ventilation air inlet device for an engine crankcase; comprising an inner oil pipe open at its upper end, an outer casing enclosing the upper part of said pipe and having an inwardly extending flange about its top edge above the pipe and forming a central opening concentric with and smaller than the pipe, a cover for the casing, an air inlet through the wall of the casing adjacent the top thereof, and an air outlet and fume lead-off opening into the casing adjacent the bottom and at the opposite side from the air inlet.



1,864,418. AUTOMOBILE HEADLIGHT. GEORGE R EHLERS, Holly Oak, Del., assignor of one-half to Henry Hinger, Wilmington, Del. Refiled for abandoned application Serial No. 321,373, filed Nov. 23, 1928. This application filed June 29, 1931. Serial No. 547,765. 3 Claims. (Cl. 240—48.4.)



1. A headlamp comprising a casing, a bulb socket in the rear end thereof, a bulb in said socket, a reflector connected with the socket, a tubular member arranged in the casing with its rear end connected with the reflector, said member tapering from its front end to its rear end, the front end of said member being arranged adjacent the front end of the casing, supporting means for said front end of the member and annular means within the member having surfaces of non-reflecting material and forming annular pockets which produce shadows.

1,864,419. MACHINE FOR SOLDERING SIDE SEAMS OF CAN BODIES. JOSEPH J. ENGELMAN, Chicago, Ill., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 7, 1931. Serial No. 507,251. 7 Claims. (Cl. 113—62.)

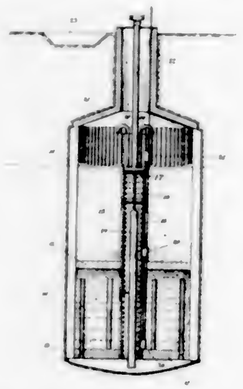
1. A soldering machine for can bodies comprising an inside supporting horse, soldering irons carried thereby

over which the can bodies are passed for applying solder to the side seam, a series of gas jets for applying heat to



the soldering irons, and means movable with the can bodies for shielding the can bodies from the flame of the gas jets while passing the same.

1,864,420. WELL. GALEN EVANS, Shelton, Nebr. Filed May 5, 1930. Serial No. 449,914. 3 Claims. (Cl. 61—40.)



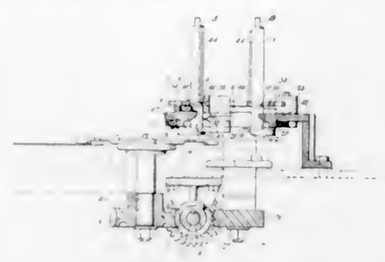
1. A well casing having a porous outer wall for admitting fine sand from a soil stratum of water bearing sand and gravel, a bottom and a false bottom in said well casing and forming a lower closed water chamber and an upper ballast chamber, and means for discharging the ballast from the upper chamber after said casing has been sunk to the desired depth.

1,864,421. WHEEL FOR PNEUMATIC TIRES. EDOARDO FERRABINO, Turin, Italy. Filed Feb. 13, 1929, Serial No. 339,719, and in Italy Mar. 7, 1928. 3 Claims. (Cl. 152—21.)



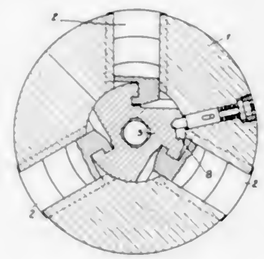
1. A wheel for pneumatic tires comprising a wheel rim, a flange on one edge of said rim and a removable flange on the other edge of said rim, said rim having a row of apertures beyond the position of said removable flange on said rim, locking members each free to move in one of said apertures, means for connecting each of said locking members with play with said rim, comprising a wire passing through each locking member, said wire lying on the inner surface of said rim and being engaged therewith at the sides of each locking member, a bevel surface on each locking member on its end remote from said removable flange, and a bevel surface on the cooperating edge of each aperture to releasably engage said first-mentioned bevel surface to lock said locking member in operative position under the pressure of an inflated tire located on said rim.

1,864,422. FEED FOR COVERS OR ENDS FOR CONTAINERS. GEORGE FLOOK, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,474. 10 Claims. (Cl. 113—114.)



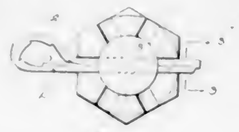
1. A feed for covers for containers comprising a stack holder, a series of supporting and releasing fingers associated therewith, means for oscillating said fingers for releasing the covers one at a time, and means independent of said oscillating means for the fingers whereby the oscillating position of said fingers may be simultaneously shifted bodily toward and from the center of the stack holder.

1,864,423. CHUCK. PAUL FORKARDT, Dusseldorf, Germany. Filed Oct. 3, 1929, Serial No. 397,071, and in Germany Jan. 21, 1929. Renewed Nov. 30, 1931. 4 Claims. (Cl. 279—121.)



1. In a chuck, a body, jaws slidable radially in said body, a central driving plunger rotatable in said body, said jaws and said plunger having cooperating wedge shaped coupling claws open at one side thereon, whereby rotation of said plunger will couple and uncouple said chuck jaws to and from said plunger.

1,864,424. COTTER PIN. ROBERT B. FRANKLIN, Mount Vernon, Wash. Filed Jan. 29, 1931. Serial No. 512,114. 4 Claims. (Cl. 74—8.)



4. As a new article, a cotter pin comprising parallel leg members connected together at one end, and co-acting means carried by the confronting portions of said members intermediate each end thereof whereby to move the members laterally in parallel relation to each other coactive with longitudinal movement of one leg relative to the other.

1,864,425. CONDENSATION PRODUCTS OF ALIPHATIC ALDEHYDE BISULPHIDE COMPOUNDS WITH PRIMARY AROMATIC AMINES AND PROCESS OF MAKING SAME. HERMANN FRITZSCHE, West Didsbury, England, assignor to the Firm The Clayton Aniline Company Limited, Clayton, Great Britain. Filed Aug. 14, 1929, Serial No. 385,975, and in Switzerland Sept. 3, 1928. 8 Claims. (Cl. 260—130.)

1. Process for the manufacture of new condensation products, consisting in causing aliphatic aldehydes to react with an aqueous solution or suspension of the products which are obtained by the reaction of aliphatic aldehyde bisulphite compounds with primary aromatic amines.

1,864,426. DELUSTERED REGENERATED CELLULOSE. HENRY A. GARDNER, Washington, D. C. Filed Oct. 25, 1929. Serial No. 402,552. 10 Claims. (Cl. 18—54.)

1. In delustering artificial silk of the regenerated cellulose type formed by the extrusion process from alkaline solutions of cellulose, the process which comprises adding to an alkaline solution of cellulose a small proportion of an alkaline solution of a resinous body capable of being precipitated in acid solution, said resinous body being a resin of the toluene sulphoamid type, extruding the said mixture into an acid bath and coprecipitating the said resinous body and the cellulose, the said resinous body being precipitated out of solution as a fine haze.

1,864,427. REGENERATED CELLULOSE FILMS AND SHEETS. HENRY A. GARDNER, Washington, D. C. Filed Mar. 25, 1930. Serial No. 438,912. 18 Claims. (Cl. 18—57.)

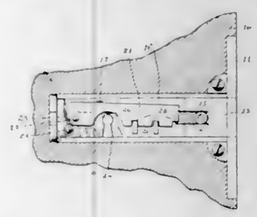
1. The process of lessening the hygroscopicity of regenerated cellulose sheets and films prepared by extrusion of alkaline cellulose solutions into acid baths which comprises dissolving an aryl sulfo amid resin, the aryl group being a nucleus of the class consisting of benzene, toluene and xylene nuclei, in the alkali of said alkaline solution, extruding the alkaline solution thus obtained into an acid bath and coprecipitating said resin and the cellulose.

18. As new articles, coated sheets and films comprising regenerated cellulose containing a coprecipitated resin dispersed therein and having on the surface thereof a coating comprising a cellulose ester and a toluene sulfo amid resin.

1,864,428. MANUFACTURE OF CELLULOSIC MATERIALS. HENRY A. GARDNER, Washington, D. C. Filed Oct. 24, 1930. Serial No. 491,092. 20 Claims. (Cl. 18—54.)

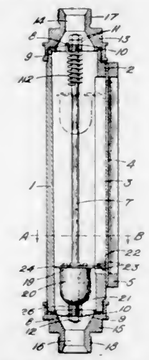
1. In the manufacture of strengthened cellulosic materials by extrusion of a cellulosic solution, the step which comprises admixing with the said cellulosic solution prior to extrusion insoluble polymerization products of an aldehyde, the said polymerization products being solids at ordinary temperatures.

1,864,429. LOCK. WILL GOROSHKO, Maspeth, and GREGORY LAPUT, Brooklyn, N. Y. Filed Jan. 16, 1929. Serial No. 332,936. 1 Claim. (Cl. 70—75.)



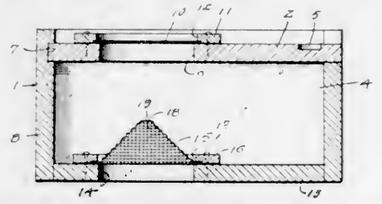
In a device of the character described, a casing having a side, a top and a bottom, a bolt slidable at the bottom of the casing and with its top at the top of the casing, the sides of the rear of the bolt being cut away and the rear of the bolt at its bottom being cut away and there being in the rear of the bolt a key-engaging recess which extends downwardly to the rear cut-away portion, projections at the sides of the bolt, two latch members disposed one at the cut-away portion at each side of the bolt, the latch members being pivoted at the rear of the casing with the pivot disposed in the said rear cut-away portion of the bolt, each of the said latch members having two recesses extending through its bottom in which the projections may be disposed, there being also key-engaging camming surfaces in the latch members between their pivots and the recesses in the latch members, there being a keyhole in the bottom of a side of the casing at the cut-away portion of the bolt adjacent the recess in the bolt and the camming surfaces on the latch members, and a spring at the rear of the casing, the spring engaging the rear of the latch members for holding the latch members yieldingly in operative position.

1,864,430. FLOWMETER. ALAN ARNOLD GRIFFITH, Kensington, London, and PAUL STEVENSON KERR and FREDERICK WILLIAM MEREDITH, South Farnborough, England, assignors to Elliott Brothers (London) Limited, London, England, a Company of Great Britain. Filed Sept. 28, 1929, Serial No. 395,840, and in Great Britain Nov. 28, 1928. 2 Claims. (Cl. 73—167.)



1. A flowmeter for fluids comprising an upright tubular member having an inlet at the bottom, an outlet at the top and an interior which tapers outwardly from the bottom, fixed guide means in said tubular member, and a flow indicating device movable axially in said tubular member on said guide means and comprising a transversely disposed disc having a sharp edge at the intersection of a plane surface on its inflow side with a conical surface on its outflow side, a sinker attached to the disc and an indicator carried by said disc, the density of the flow indicating device being of the order of twice the average density of the liquid to be measured.

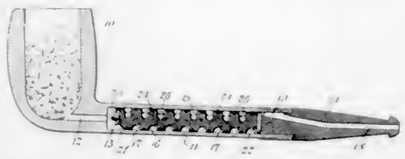
1,864,431. TRAP FOR CATCHING WILD BEES. WILLIAM A. GROVER, Bristol, Vt. Filed Nov. 8, 1930. Serial No. 494,430. 1 Claim. (Cl. 43—107.)



A trap for catching wild bees, comprising an oblong box provided in its bottom with an opening, a cone-shaped wire screen arranged within the box over said opening,

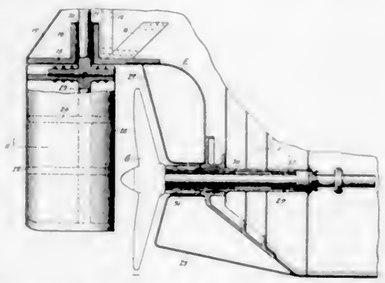
said screen formed in its apex or upper end with an ingress opening, a panel for fastening the base of the wire screen to the bottom of the box, a sliding cover for the box, provided in one end with an opening, a wire screen covering the opening in the sliding cover and a panel for fastening said last mentioned wire screen in place.

1,864,432. SMOKING PIPE. ENOCH C. GUNNARSON, Brooklyn, N. Y. Filed Oct. 24, 1930. Serial No. 490,983. 2 Claims. (Cl. 131—12.)



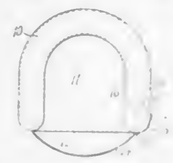
1. In a smoking pipe, stem sections, one of said sections having a spiral groove and a corresponding ridge and extending into the other section to define a spiral smoke passage, said ridge having a continuous groove therein, and a piece of packing material laid in the groove in the ridge and contacting with the surrounding stem section to form an air tight fit between said sections.

1,864,433. METHOD OF REMODELING THE STERN STRUCTURE OF SHIPS. MICHAEL J. HANLON, Weehawken, N. J., assignor to Black Diamond Steamship Corporation, New York, N. Y., a Corporation of Delaware. Filed July 13, 1931. Serial No. 550,549. 10 Claims. (Cl. 114—162.)



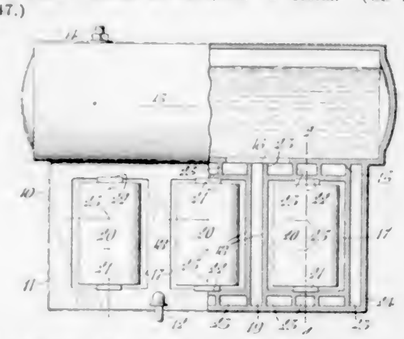
2. A method of modifying a ship of the type specified in order to decrease the hull resistance consisting in removing the depending rudder supporting portion of the stern frame, substituting a streamline spade rudder for the old rudder and adding material to the stern frame above and below the propeller to provide convergent surfaces for decreasing the drag or suction disturbance to a minimum.

1,864,434. HOSPITAL PAD AND RING. MARJORIE HART, Vancouver, Wash., assignor of one-half to John R. Foley, Kelso, Wash. Filed Mar. 29, 1927. Serial No. 179,280. 1 Claim. (Cl. 128—292.)



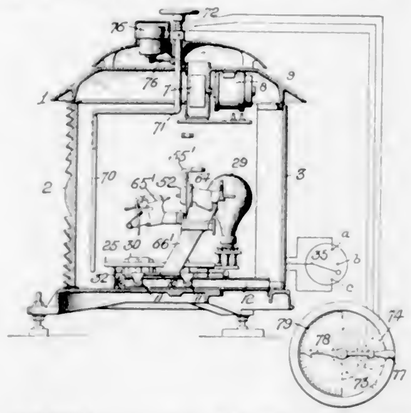
In a hospital ring, the combination of a web provided with a depending pocket, a U-shaped inflatable member extending along the side and rear edges of the web and having its ends terminating at the sides of the pocket for causing fluids deposited on the web to flow into the pocket, the interior of the U-shaped member providing a single chamber extending from end to end of the U-shaped member, an inflating bulb positioned within said chamber, attached to the outer side of the inflatable member and having an inlet valve communicating with the atmosphere at the point of attachment, said bulb also having an outlet valve communicating with the interior of the chamber, said bulb providing means for inflating said U-shaped member from end to end of the latter, and means for discharging air from said chamber when the U-shaped member is to be deflated.

1,864,435. ELECTRIC HEATING APPARATUS. EDWARD S. HEBELER, Williamsville, N. Y., assignor to Allan Manufacturing and Welding Company, Incorporated, Buffalo, N. Y., a Corporation of New York. Filed Oct. 18, 1929. Serial No. 400,514. 1 Claim. (Cl. 219—47.)



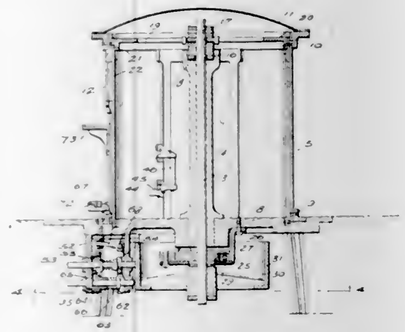
An electric water heater, comprising a tank including an upper section and a lower section, the latter having a series of openings extending transversely thereof and the walls being constructed to permit the passage of magnetic lines of force therethrough, and electromagnets disposed in said openings and having laminated cores connected at their ends to the adjoining walls of the lower tank-section.

1,864,436. LANDING FIELD LIGHT. FRANK R. HOUSE, Baldwin Harbor, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Sept. 30, 1930. Serial No. 485,391. 14 Claims. (Cl. 240—1.2.)



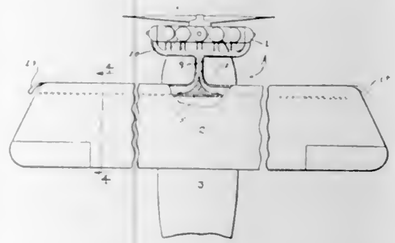
1. A lighting unit comprising a single lamp housing and focusing system, an arc lamp therein normally positioned at the focus and slidably mounted so as to be moved out of focus, a pivotally mounted auxiliary incandescent lamp, and means for swinging said incandescent lamp into focus as the arc lamp is moved out of focus and vice versa.

1,864,437. PROTECTIVE BOOTH FOR BANKS. WILLIAM HARRY INMAN, Keokuk, and HENRY A. FRITZSCHE, Burlington, Iowa. Filed July 15, 1929. Serial No. 378,445. 7 Claims. (Cl. 20—1.01.)



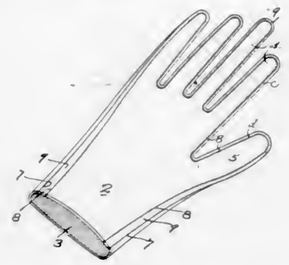
1. In a device of the class described, a base, a cylindrical body portion mounted on the base and having oppositely disposed openings, a cylindrical member having openings to register with the openings in the body portion, mounted for rotary movement within the body portion, a shaft for supporting the rotary member, a substantially wide circular flange secured to the shaft and disposed under the base, said flange having recesses formed in one side thereof and having recesses spaced from the first mentioned recesses, a sliding bolt for engaging within the first mentioned recesses to restrict rotary movement of the rotary member to secure the rotary member in one of its positions of adjustment, a sliding bolt adapted to move into the second mentioned recesses to lock the rotary member against movement, means for preventing rotary movement of the rotary member in a reverse direction, and means for controlling the sliding bolts from a point exteriorly of the body portion.

1,864,438. AEROPLANE. FREDERICK LESTER JANSON, Port Chester, N. Y. Filed Feb. 4, 1931. Serial No. 513,409. 3 Claims. (Cl. 244—31.)



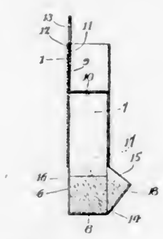
1. In combination with an air craft having a propelling internal combustion engine, a wing having a passage extending lengthwise thereof and opening through its end, means for conveying heating exhaust gases from said engine to said passageway to heat the walls thereof during the passage of the heated gases therethrough, and protecting shield members carried by opposite ends of said wings and extending outward beyond the open ends of the passageway but disposed in alinement therewith.

1,864,439. GLOVE AND METHOD OF MAKING. CARL HUGO JOHANSSON, Los Angeles, Calif., assignor to International Glove Process Company, Ltd., a Corporation of California. Filed Oct. 14, 1930. Serial No. 488,571. 3 Claims. (Cl. 2—159.)



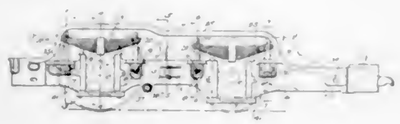
1. A glove having back and palm portions each having a forefinger portion and a thumb portion, the outer edges of the forefinger portions and the inner edges of the thumb portions being spaced apart respectively, and a connector having substantially parallel sides disposed at the said outer edges of the forefinger portions and the said inner edges of the thumb portions, the connector extending from the tip of the forefinger portions to the tip of the thumb portions and having its sides secured to the said outer edges of the forefinger portions and the said inner edges of the thumb portions to provide a closely fitting glove, while permitting free movement of the thumb and the forefinger relatively to each other.

1,864,440. MATCH BOX. JOHN JOSINSKY, Bayside, N. Y. Filed Oct. 29, 1930. Serial No. 492,060. 1 Claim. (Cl. 206—31.)



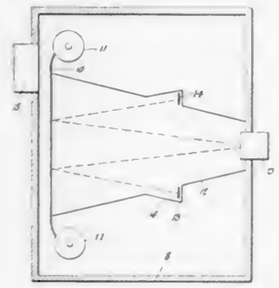
In a convertible match box and safe device of that type including a hollow rectangular cover open at each end, the combination of an open front container having a body part formed of a bottom wall, a reinforced, permanently closed, stationary upper end wall free of said bottom wall and formed of a pair of inwardly extending, overlapping secured together flaps, each integral with an end of a side wall and a stationary lower end wall hinged integral at one end with one end of said bottom wall, a fold hinged at one end to the other end of said bottom wall, arranged exteriorly of the upper end wall and terminating in a slotted flap hinged thereto, a pair of upwardly directed folds integral with the sides of said lower end wall, positioned against and secured to the inner faces of said side walls at the lower terminal portions thereof for reinforcing such side walls at said terminal portions and for maintaining the lower end wall stationary and permanently closed, and an outwardly shiftable fold integral at its lower end with the outer end of said lower end wall and having each side thereof formed with an inwardly directed flap terminating at its top in an extension, said extensions providing stops for arresting the outward shift of said shiftable folds and the latter and said extensions positioned against the outer faces of the side walls.

1,864,441. TRAILER TRUCK. JOHN S. KEEN, Philadelphia, and ELLWOOD M. SHANNON, Bala, Pa. Filed Mar. 2, 1931. Serial No. 519,624. 10 Claims. (Cl. 105—174.)



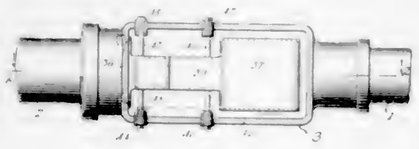
2. A locomotive trailer truck frame, made as an integral casting, consisting of two side members, and a transverse connecting member at one end thereof, the side members of the truck having a central web and a top member extending beyond the web and forming a T-shaped structure, and having a central box-like portion between the pedestals of the frame.

1,864,442. INDICATOR FOR PHOTOGRAPHIC DEVICES. BEVEY A. KINSEY, Dalton, Ga. Filed June 22, 1929. Serial No. 372,936. 1 Claim. (Cl. 88—23.)



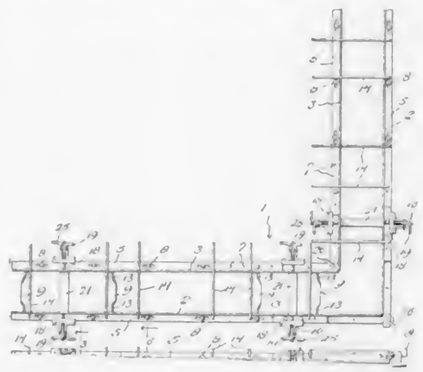
In a photographic camera containing a film to be exposed and having a light admitting entrance, a meter, and photo-electric cells located within the camera in position to be influenced by light entering the camera and reflected from the film whereby current will be generated by said cells and be indicated on the meter for giving a visible indication as to the intensity of the light entering the camera so that more or less light may be admitted as the case may be to insure proper exposure of the film.

1,864,443. FLOOD TIDE AND BACKWATER VALVE. ALBERT M. KHUN, Elizabeth, N. J. Filed Oct. 3, 1930. Serial No. 486,266. 2 Claims. (Cl. 182—26.)



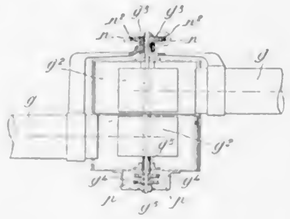
1. A flood-tide and backwater valve including a casing having an inlet and an outlet, a flap valve for closing said inlet, means for pivotally supporting said flap valve, means connected with the flap valve for presenting a pair of spaced fingers, a pivotally mounted float arranged in the casing, and an arm extending from said float and provided with a large rounded end fitting between said fingers and acting to move the flap valve open when the float is swung downwardly and for moving said flap valve closed when said float is swung upwardly.

1,864,444. APPARATUS FOR MOLDING WALLS. BALTHASAR H. KRONEN, Tarentum, Pa. Filed Feb. 6, 1930. Serial No. 426,353. 3 Claims. (Cl. 25—131.)



1. In a wall mold, inner and outer forming walls, a saddle unit for rest upon a foundation and comprising a substantially U-shaped member upon which the lower edges of said walls repose, and having its opposed parallel sides engaging the outer faces of the adjacent walls, means including said parallel sides of the saddle unit for effectively engaging and supporting said walls on the saddle unit, and means engaging the upper edges of said walls and cooperating with the saddle unit to hold said walls uniformly spaced apart.

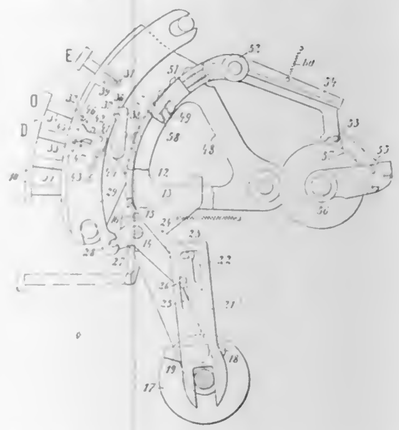
1,864,445. STEREOSCOPIC CINEMATOGRAPHY. EMILE PIERRE LOUIS LE BARBIER, Nice, France. Filed Feb. 5, 1929, Serial No. 337,687, and in Belgium Mar. 30, 1928. 4 Claims. (Cl. 88—16.6.)



1. In combination, a pair of extensible arms rotatable about a common axis, said arms being rotatable in different planes, reflecting elements supported on said arms, a lens system, and means for reflecting images projected by the reflecting elements into said lens system.

1,864,446. ISSUING VOUCHERS IN CASH REGISTERS. KARL AUGUST LEHMANN and ALEXANDER VARREN, Essen, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed July 31, 1928, Serial No. 296,436, and in Germany Sept. 17, 1927. 24 Claims. (Cl. 235—130.)

1. In a machine of the class described three special keys, a locking device normally freeing the first two of said keys and locking the third one, operative connections between said locking device and the second key whereby upon depressing the second key the first key is locked and



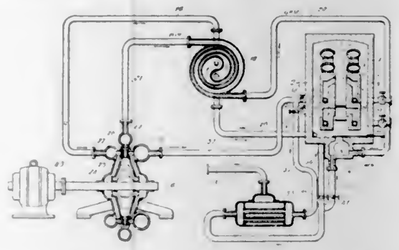
the third key is freed, and operative connections between the third key and said locking device whereby upon depressing the third key the first and second keys are freed.

1,864,447. SAFETY RING GUARD. ARTHUR LEV, Bronx, N. Y. Filed June 13, 1931. Serial No. 544,226. 6 Claims. (Cl. 63—17.)



1. A finger ring guard comprising a metallic strip, a laterally directed tongue at each end of the strip for securing the latter to a finger ring, and means engageable with opposite sides of the free end of each tongue to prevent movement of the tongue in a direction lengthwise of the strip, the side edges of the tongue ends lying within the plane of said means and prevented from contacting the finger of the wearer and said means being located at the inner side of the finger ring.

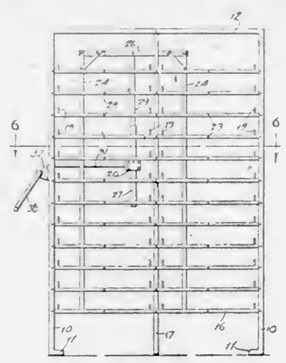
1,864,448. METHOD AND APPARATUS FOR UTILIZING WASTE HEAT. CHRISTIAN LORENZEN, Berlin, Germany, assignor, by mesne assignments, to Bendix Aviation Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 14, 1925. Serial No. 50,274. 8 Claims. (Cl. 60—59.)



1. Method of treating a gas which consists in compressing the gas, transferring thereto waste heat, compressing and simultaneously heating additional gas by the energy of said heated gas, and thereafter using said heated gas for heating.

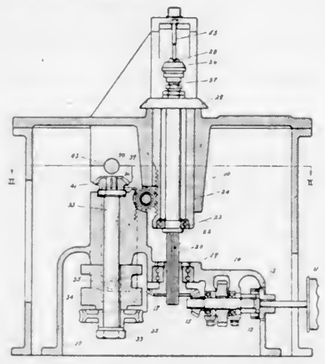
3. An industrial system from which waste heat is given off, and means for utilizing said waste heat comprising a two path heat exchanger, one path of said heat exchanger being adapted to receive said waste heat from said industrial system, a fluid compressor, the other path of said heat exchanger being connected to the outlet of said compressor, said compressor being driven by the gases from said second path, and a connection from said second path whereby fluid used in driving said compressor passes to the industrial system to aid combustion therein.

1,864,449. EGG TURNING AND TRAY HOLDER. CLAUDE M. LOWER, Sturgis, Mich. Filed Apr. 11, 1930. Serial No. 443,468. 3 Claims. (Cl. 119—44.)



1. In an egg tray supporting device, a frame, a plurality of series of tray racks spaced one above the other and having their sides pivoted to said frame, a vertical tie bar for each of said series of racks to which the racks of the respective series are all pivoted in spaced relation to the pivoted axes on which they tilt, a cross bar connecting said tie bars for simultaneous vertical movement, and means to raise and lower said cross bar.

1,864,450. MACHINE FOR MANIPULATING BOLT BLANKS. WILLIAM V. LOZIER, Elmira, N. Y., assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 3, 1928. Serial No. 323,352. 15 Claims. (Cl. 29—26.)

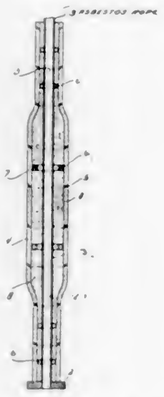


1. A machine of the class described comprising means for receiving a bolt blank, means for engaging the blank below the head thereof and thereby clamping the same in fixed position, rotatable means for pointing the end of the bolt while so clamped, and means adapted to be actu-

ated simultaneously with the pointing means for performing the drilling operation on the head of the bolt.

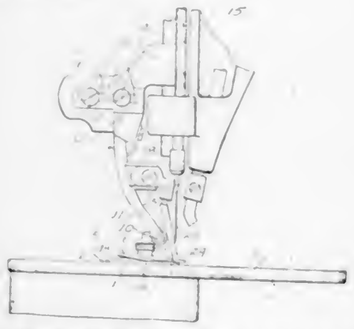
5. A machine of the class described comprising means for supplying predisposed bolt blanks, an intermittently rotatable disc having spaced recesses on its periphery for receiving individually the shank portions of the predisposed bolt blanks from the supplying means said disc being disposed to receive a bolt within each recess, means for maintaining the bolt in position within the recesses, means for clamping the bolt firmly including a resiliently actuated reciprocatory jaw for engaging the bolt below the head thereof and holding it securely against the disc while said disc is stationary, a rotary tool adapted for longitudinal movement to engage and operate on the bolt so held, and a guard co-operative with the rotatable disc for freeing the bolt blank of the disc after the bolt is released.

1,864,451. CORE. ROBERT LUNGEN, Erkrath, near Dusseldorf, Germany. Filed June 19, 1929, Serial No. 372,151, and in Germany July 11, 1928. 4 Claims. (Cl. 22—165.)



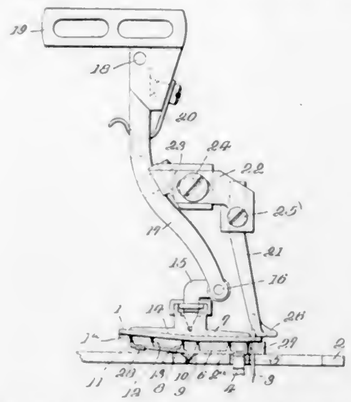
1. A core for moulds for casting hollow bodies from steel, comprising in combination a central tube, exterior tubular members of porous brick material surrounding said central tube, a filling of sand between said central tube and exterior tubular members and spacing discs between said central tube and exterior tubular members imbedded in said filling of sand for centering the tubular members with respect to the central tube.

1,864,452. FEEDING MECHANISM FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed June 18, 1929, Serial No. 371,853, and in Germany Oct. 17, 1928. 7 Claims. (Cl. 112—203.)



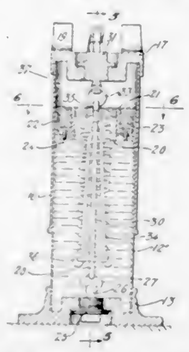
1. A feeding mechanism for sewing machines including a feed dog, a cooperating clamping and directing member for causing the article being stitched to turn about a fixed center, said member being provided with a cone-shaped face adapted to contact with the article from the apex of the cone-shaped face to the periphery thereof and with the apex of said cone-shaped face at the center of the article.

1,864,453. FEEDING MECHANISM FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik G. m. b. H., Stuttgart, Germany. Filed June 18, 1929, Serial No. 371,936, and in Germany Dec. 29, 1928. 10 Claims. (Cl. 112—203.)



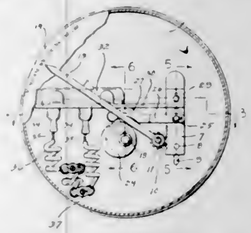
1. A feeding mechanism for sewing machines including a feed dog and cooperating members for clamping and directing the article being stitched, said feed dog being disposed relative to one of said clamping members so as to engage and intermittently turn the same about a fixed center, one of said members having projecting ribs on its fabric engaging face.

1,864,454. AMBULANCE BED REST. HOWARD C. MACDOUGALL, New York, N. Y. Filed June 14, 1929. Serial No. 370,972. 1 Claim. (Cl. 254—93.)



In a pneumatic jack comprising an outer hollow cylinder having a head, a second hollow cylinder having a closed base and a top annular inwardly projecting horizontal flange, said second cylinder being slidable relative to the first cylinder and there being an air chamber within the cylinders, said chamber having also therein a lubricating liquid, a yieldable washer having one flange positioned on said first flange and having a vertical flange disposed in contacting relation with the inner periphery of the outer cylinder, spring means retaining said vertical flange in position, a rigid annular flange positioned on said first yieldable flange, fastening elements maintaining said latter flange and said first flange in tight relation with said first yieldable flange, and a second vertical flange rising from said rigid flange and extending higher than the top of said first vertical flange, thereby providing a space between said second vertical flange and the inner periphery of said outer cylinder for housing part of the liquid to facilitate relative movement of the cylinders, said lubricating liquid extending above the vertical flange of said washer to seal the joint between the cylinders, said hollow cylinders having opposed closed ends, said cylinders having an air chamber therein, a ring on each of said ends in said chamber, an elongate member supported at one of its terminals on one of said rings and having a pair of hooks adjacent the other ring, another elongate member supported at one of its terminals on said latter ring and having a pair of hooks adjacent the first mentioned terminal of said first elongate member, and a helical coil spring carried on said members and having its opposed end coils in the terminal hooks of said respective members for resiliently resisting air pressure in said chamber during reciprocation of said cylinders.

1,864,455. THERMOSTATIC CONTROL APPARATUS. DOMINIC MAZZIE, East Hartford, Conn. Filed Mar. 18, 1931. Serial No. 523,594. 15 Claims. (Cl. 200—138.)



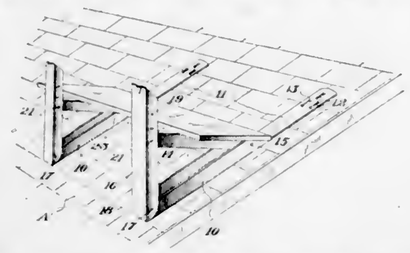
1. In a thermostatic circuit controller, the combination of a fluid contact tube, a thermally operated cam, means supporting said tube and supported by said cam to tilt the tube upon movement of the cam, and means to vary the relationship of said last mentioned means with respect to the cam, to change the point of contact toward and from the throw of the cam.

1,864,456. SPLASH GUARD. WILLIAM MCCOLLUM, Rahway, N. J., assignor to Tingley Reliance Rubber Corporation, Rahway, N. J., a Corporation of New Jersey. Filed Mar. 15, 1932. Serial No. 598,954. 10 Claims. (Cl. 280—152.)



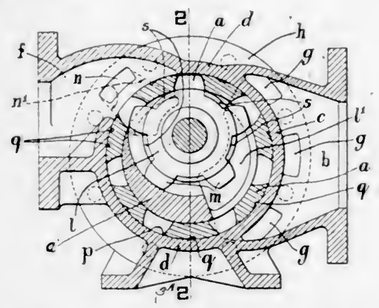
1. In a wheel fender splash guard, the combination with a rubber apron, of a flexible fender and housing member formed integrally with the apron and extending outwardly from one of its face at a short distance below its upper end, and forming a pocket to receive and encase the lower end of the fender from side to side thereof, said pocket being of such depth that its bottom lies below the fender end when the guard is attached thereto whereby a substantial space is provided between the fender end and bottom of the pocket.

1,864,457. ADJUSTABLE ROOF SCAFFOLD SUPPORT. ALFRED O. NELSON, Marshalltown, Iowa. Filed Sept. 9, 1931. Serial No. 561,936. 1 Claim. (Cl. 304—20.)



An adjustable roof scaffold support comprising a channel-like base member, a flat attaching strip projecting from one end of the base and having a plurality of nail receiving slots, a scaffold board support pivoted on one end of the base, a channel brace bar pivoted on the other end of the base and adapted to adjustably receive the adjacent end of said board support, the flanges of said brace bar having spaced aligned openings, a loop carried by the board support and adapted to register with said openings, and a fastening element adapted to be passed through said openings and loop.

1,864,458. ROTARY PUMP. THOMAS WINTER NICHOLS, London, England. Filed Nov. 13, 1931, Serial No. 574,882, and in Great Britain Oct. 24, 1930. 2 Claims. (Cl. 103—126.)

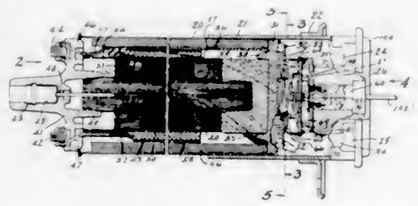


1. In a rotary pump of the character described the combination of a shaft, a rotor on said shaft having a hub, a web and teeth carried by said web, a casing having inlet and outlet ports facing said rotor in the axial direction of the pump, a ring cooperating with said rotor, a crescent between the rotor and the ring, and fixed bearing bushes for said shaft having flanges engaging between said hub and said teeth and having arcuate recesses at their rims facing said inlet and outlet ports.

1,864,459. SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 9, 1929. Serial No. 353,827. 21 Claims. (Cl. 200—11.)

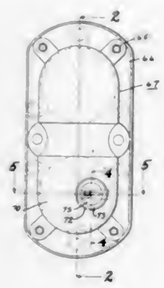
1. In a switch and coil unit the combination comprising, a coil base providing a plurality of switch terminals,

means connecting said switch terminals to terminal posts associated therewith, a floating contact member journalled in said coil base and adapted for coincidental engagement with all of said switch contacts, said contact member including means mating with the coil base to prevent lateral displacement of the member relative to the switch terminals, and means for actuating and securing said contact member in its actuated position.



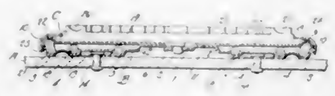
19. In a switch and coil unit, the combination comprising, a tubular housing for enclosing an ignition coil which included windings and a core, a nonconducting end wall member for the housing and having within the housing an annular boss for supporting the core and providing exteriorly of the housing a bearing for a movable switch contact, stationary contacts carried by the end wall member, a rotary contact journalled upon said bearing and adapted to cooperate with the stationary contacts, a rotary controller drivingly connected with the rotary contact, and a switch case including the housing end wall member, a member carrying the controller and a tubular member surrounding the coil housing and fixed thereto and having a peripheral edge portion fixed to the controller carrying member.

1,864,460. SWITCH AND COIL UNIT. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Original application filed Dec. 21, 1927, Serial No. 241,679. Divided and this application filed Mar. 25, 1931, Serial No. 525,198. Renewed Apr. 12, 1932. 13 Claims. (Cl. 175—357.)



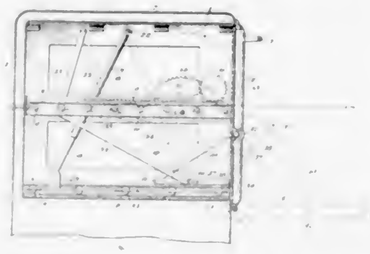
1. A switch and coil unit comprising a plurality of ignition coils each having a nonconducting end wall supporting terminal members, a plate supporting the coils and having apertures through which said end walls are accessible, a conductor electrically connecting certain end wall terminals of the coils, switch contacts supported by one of the coil end walls, one of the contacts being electrically connected with said conductor, a case cooperating with the plate to house the conductor and switch contacts, and a movable member supported by the case, and cooperating with said contacts to open and close an electric circuit.

1,864,461. REVOLUBLE STEP BEARING. WILLIAM GARVIN O'BRYAN, Seaside, Calif., assignor to Dexter M. Rogers, Pacific Grove, Calif. Filed June 10, 1931. Serial No. 543,442. 4 Claims. (Cl. 280—163.)



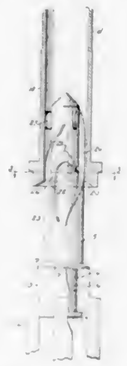
1. In a device of the character described, a stationary base plate, a revoluble upper plate, container-grooves in the base plate, warped, trans-silt rings in the grooves, said upper plate arranged to bear down on said rings, and means pivotally connecting said plates together.

1,864,462. BAKE-OVEN EJECTOR. MORRIS OLSEN, Revelstoke, British Columbia, Canada. Filed June 22, 1931. Serial No. 546,076. 3 Claims. (Cl. 126—340.)



1. An oven attachment comprising a frame adapted to fit in the oven, a plurality of rollers mounted upon the side walls of the frame, shelves for the frame, one of the shelves being slidably supported upon said rollers, a shaft mounted transversely of the frame and having gears adjacent the ends thereof, rack teeth upon the mentioned shelf at the opposite sides thereof having meshing engagement with the gears, linkage connections between the other shelf and gears, and means actuated through movement of the door for imparting motions to the gears and linkage connections to effect sliding movement of the shelves.

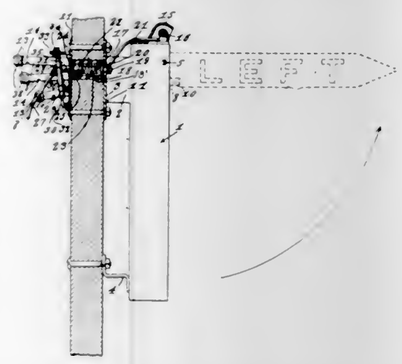
1,864,463. AUTOMATIC VALVE COUPLING. EDWARD A. OWEN, Carta Valley, Tex. Filed Apr. 10, 1931. Serial No. 529,197. 1 Claim. (Cl. 294—86.)



A coupling comprising a tubular housing having at its lower ends inwardly disposed studs, a swiveled member having a body portion adapted to pass between the studs,

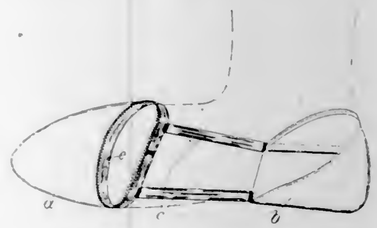
said swivel member provided upon its exterior surface with spiral ribs spaced from each other and V-shaped portions located between said ribs and with which the studs are adapted to engage.

1,864,464. AUTOMOBILE SIGNALING DEVICE. WILLIAM B. OWEN, Las Vegas, Nev. Filed May 10, 1930. Serial No. 451,371. 1 Claim. (Cl. 177—329.)



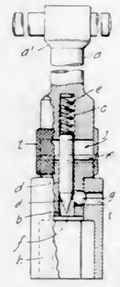
A signal comprising an elongated housing open at one side and provided at its opposite side and in the vicinity of one end with a lateral extension, a series of signal arms pivoted in the housing at a point opposite the end of said extension, a lamp mounted upon the housing above the signal arms, a resilient contact member attached to the extension electrically connected with the lamp, a resilient strip mounted for pivoted movement having a contact mounted thereon and adapted to engage said contact on the contact member, a conductor connected with said strip, a series of bars slidable in the extension and pivotally connected with the respective arms, said bars being mounted one above the other in the same vertical plane, on one side of the strip, each bar having a projection for engaging the pivoted strip when the bar is moved to operative position and means for holding the bars in operative position.

1,864,465. MEANS FOR PREVENTING WEAR OF SOCKS AND STOCKINGS. JOHN PARSONS, Coventry, England. Filed Dec. 3, 1929, Serial No. 411,349, and in Great Britain Dec. 11, 1928. 1 Claim. (Cl. 36—10.)



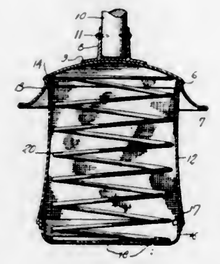
A shield or protector adapted to be worn over a sock or stocking foot so as to present a wear-resisting surface to the inner surface of the boot or shoe comprising toe and heel portions formed of thin strong material, an elastic band having one side edge secured to the peripheral edge of the toe portion so as to smoothly and snugly hold the said portion into position, and elastic straps connecting the toe and heel portions together, said elastic straps being connected at one end to the said elastic band on the toe portion.

1,864,466. TOOL HOLDER. JOHN N. PETERSON, Milwaukie, Oreg. Filed Sept. 10, 1930. Serial No. 480,931. 2 Claims. (Cl. 287—119.)



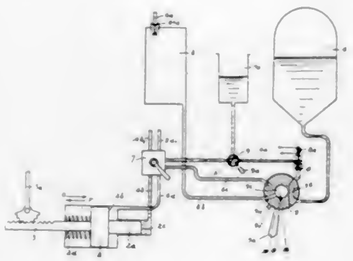
2. In a tool-holder, a shank provided with a longitudinal bore, the wall of which is provided with a lateral cavity, a member provided with a bore adapted to receive said shank, the wall of such bore provided with a cavity registering with the shank's cavity, a locking ball located in the cavity of said shank being of greater diameter than the thickness of the wall of said shank, a bolt reciprocable in said bore of the shank, said bolt having a tapered end, in one position limiting the inward movement of said locking ball, in another position causing said locking ball to lock said member on the shank, said bolt having a transverse pin slidable in guide slots therefor provided in the shank, and a sleeve longitudinally adjustable on said shank with which sleeve the extremities of said pin are connected.

1,864,467. CLOTHES WASHING DEVICE. BERNARD PHILLIPS, New York, N. Y. Filed Oct. 7, 1931. Serial No. 567,480. 5 Claims. (Cl. 68—5.)



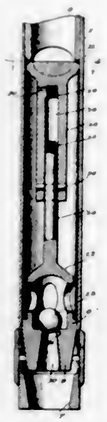
1. A clothes pounder of the character described, comprising a metallic disk member, said metallic disk member having an interior annular recess, a handle secured to the metallic disk member, a cylindrical fabric member having one end secured in the annular recessed portion, a cup-shaped member having a plurality of openings in the bottom thereof secured to the opposite end of the cylindrical fabric member, and a coil spring mounted within the cylindrical fabric member, having its ends bearing against the metallic disk member and the metallic cup-shaped member.

1,864,468. CONTROL DEVICE FOR VEHICLE DOORS. HENRI PIEPER, Brussels, Belgium, assignor to Compagnie Internationale des Freins Automatiques, Societe Anonyme, Liege, Belgium. Filed May 12, 1931, Serial No. 536,920, and in Belgium May 21, 1930. 12 Claims. (Cl. 180—82.)



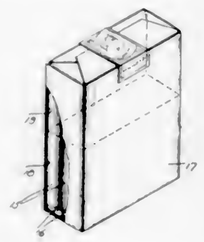
1. A control system for doors of vehicles provided with a source of vacuum, comprising means for producing one of the movements of the door by the action of a reserve of energy placed on the vehicle, means for producing the reverse movement of the door by the action of the source of vacuum, and means for restoring by said reverse movement the energy expended during the first movement.

1,864,469. PUMP PLUNGER AND STANDING VALVE. JOHN W. PIPPIN, Corpus Christi, Tex. Filed Jan. 3, 1931. Serial No. 506,471. 5 Claims. (Cl. 103—180.)



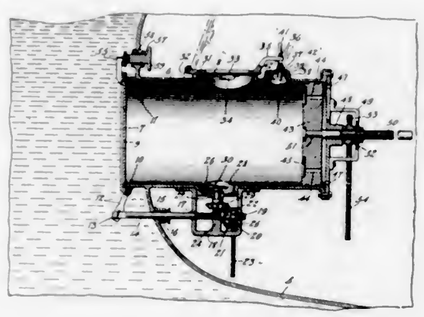
1. In a well fishing tool, a body, a socket depending therefrom and having a downwardly opening bore closed at its upper end, said bore being reduced at its upper end and provided with screw threads, a standing valve, an upstanding stem formed thereon and having a reduced upper end provided with screw threads, said stem being formed to fit said bore, said socket being provided with a bleed port communicating with the upper end of said bore whereby to slowly relieve the fluid pressure in said bore incident to the entrance of said stem therein, said threaded end of said stem being adapted to be engaged in the reduced threaded end of said bore when it is desired to lift said valve from its seat.

1,864,470. IGNITING DEVICE FOR CIGARS AND CIGARETTES. FRANK E. PIKULSKI, Jeannette, Pa. Filed Nov. 30, 1931. Serial No. 578,123. 5 Claims. (Cl. 131—52.)



1. In a cigarette lighter, igniting means at one end of the cigarette and a striking element slidably associated with the igniting means to effect lighting of the cigarette, said striking element including a band surrounding the cigarette, and a striking surface secured to the inner face of the band inwardly of opposite ends thereof.

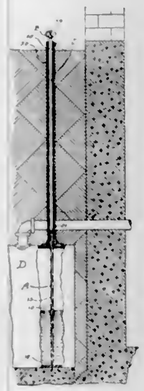
1,864,471. SUBMARINE ESCAPE. CHARLES EMIL CHRISTIAN RADEMACHER, St. Albans, N. Y. Filed Aug. 4, 1931. Serial No. 555,082. 11 Claims. (Cl. 114—16.6.)



1. In a submarine escape, a chamber having an exit, a head for closing the exit, a plunger in the chamber and fitting the chamber snugly for moving in the direction of the exit to eject water from the chamber through the exit, the chamber having an entrance, a door for closing the entrance, and a check valve or valves in the plunger.

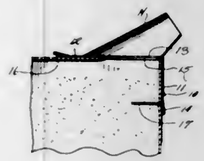
1,864,472. MEASURING INSTRUMENT OR GAUGE. HENRY G. RIEBELING, Pendleton, Ind. Filed May 16, 1929. Serial No. 363,663. 5 Claims. (Cl. 73—82.)

1. A liquid measuring gauge comprising an elongated tubular casing provided with sight openings, a transparent cylinder arranged in the casing, a closure plug arranged in the lower end of the casing and having an opening therethru, a hollow ported head carried by the plug, a valve closing the lower end of said plug opening, a coupling plug carried by the upper end of the casing and having a guide way therethru, a handle connected to the coupling plug and having a guide way aligning with the guide way in the coupling plug, a push rod slidable thru said aligning guide ways, tie means between the push rod and said valve, a button carried by the upper end of



the push rod, and a coil spring encircling the push rod and acting between the handle and said button for normally retaining the valve seated.

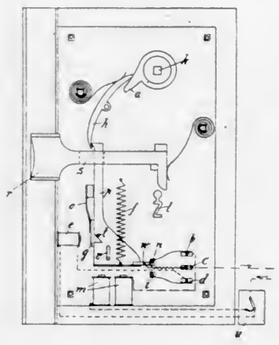
1,864,473. NOZZLE. JOHN RIGBY, New Bedford, Mass. Filed Jan. 28, 1932. Serial No. 589,457. 2 Claims. (Cl. 221—23.)



1. A pouring means adapted to removably engage about the corner of two angular related face portions of a receptacle comprising an L-shaped base plate, upturned end portions formed with each free end of said plate, a nozzle secured to one leg of said plate, and clamping means carried by one plate and engaging one wall of the receptacle on the inner face thereof to hold the plate against lateral movement relative to said one wall.

1,864,474. ELECTRIC LOCK. WILHELM ROSENBAUM, Kiel, Germany. Filed Feb. 25, 1930, Serial No. 431,205, and in Germany Nov. 29, 1928. 2 Claims. (Cl. 70—50.)

1. An electric time switch lock, comprising in combination a latch bolt having a slot, a switch slide extending through the slot in and shiftable at right angles to said latch bolt, a two-armed lever engaging with one arm the upper end of said shiftable bolt, a roll-back bearing upon the other arm of said lever, adapted to pull back said latch bolt through the intermediary of said rocker lever and said shiftable bolt, a spring tending to pull said switch slide in upward direction, an electromagnet adapted to pull said shiftable bolt in downward direction against the action of said spring and out of contact with said two-armed lever, a pin on said shiftable bolt, a resilient pawl adapted to engage said pin and hold said switch slide out of engagement with said two armed lever, a second electromagnet adapted to shift said pawl out of engagement with said pin and allow said switch slide to be re-



turned into engagement with said two-armed lever by said spring, and a switch adapted to actuate both of said electromagnets for the desired period of time.

1,864,475. ART OF PRODUCING CONTAINERS. HARRY B. RUDD, Douglaston, N. Y., assignor to Rudd Patents Corporation, a Corporation of Delaware. Filed Nov. 27, 1931. Serial No. 577,568. 9 Claims. (Cl. 29—148.2.)

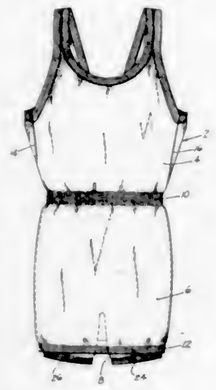


1. In the art of manufacturing a container, the steps which consist in producing, by a drawing operation effected on a mass of metal, a tube-like structure closed at one end by a transverse wall surface, shaping the other end of said tube-like structure to form a neck having an opening of restricted diameter, and forming in said wall surface an opening having less diameter than that of said wall surface whereby an inwardly directed flange is produced at the top of said tube-like structure.

1,864,476. BATHING SUIT. GEORGE E. RUTLEDGE, Chicago, Ill., assignor to Vassar Swiss Underwear Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 21, 1931. Serial No. 564,091. 4 Claims. (Cl. 66—175.)

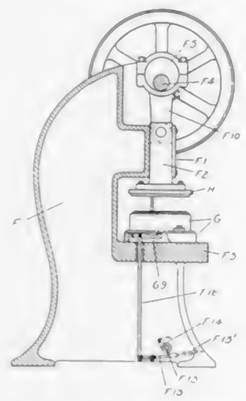
2. A bathing suit comprising a bodice portion formed of knitted textile fibre yarn, a nether portion formed of

knitted textile fibre yarn, and an endless band portion formed of knitted rubber yarn and being more elastic



than said bodice and nether portions, said band portion being integrally knitted with adjacent bodies and nether portions.

1,864,477. METHOD AND MACHINE FOR ASSEMBLING UPHOLSTERY. BRUCE M. STANNARD, Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed Sept. 27, 1928. Serial No. 308,820. 9 Claims. (Cl. 45—138.)



1. A machine for applying cushioned upholstery to panels or the like parts, said machine comprising an abutment provided with seating means adapted to support a panel having a crown plate associated with a circumscribing rabbet-like element and which plate is adapted to mount a cushioning medium thereon together with a superimposed cover fabric, a reciprocative carrier provided with a yieldable pressure pad, said carrier serving to convey therewith binding means adapted to embrace said element, and means moving said carrier toward said abutment to forcibly bring the binding means and said element into clamped engagement with a fabric border portion interposed therebetween, said pressure pad serving to compress the cushioning medium while bringing said binding means into the aforesaid engagement.

9. The method of applying upholstery to a panel or the like and which method consists: firstly, in providing a frame including a cushion support means and which means is circumscribed by a sunken groove adapted to receive a fabric binding device; secondly, supplying such frame with a cushioning medium which projects above the level of the top of the groove; thirdly, placing a fabric cover over said medium to extend beyond the groove confines; fourthly, placing a registering binding device upon the fabric over said groove; fifthly, providing a press having a fixed surface to receive the frame and an opposed reciprocative member having a yieldable pressure pad adapted to engage the cushioning medium and a fixed annular surface adapted to register with the sunken frame groove; and then, placing the frame with its cushioning medium, covering and the binder above mentioned in said press and operating the press to force the binding means into position, thereby stretching the fabric cover.

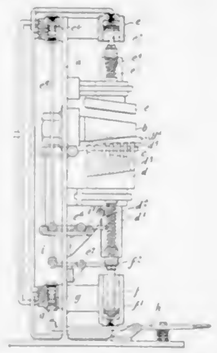
1,864,478. METHOD AND APPARATUS FOR MAKING PILE FABRICS. ERNEST H. WARD, East Orange, N. J., assignor to Lea Fabrics Inc., Newark, N. J. Filed Aug. 16, 1928. Serial No. 299,902. 85 Claims. (Cl. 154—2.)



4. A method of making a pile fabric which comprises feeding a mass of upstanding fibres through an enclosed space in contacting relation with the upper and lower walls of said space, applying back pressure to fibre mass during the passage through said space to compact the fibres to the desired density, and cementing the ends of said fibres on one face of the said mass to a backing material while the fibres are maintained under pressure to form a pile fabric product of uniform density.

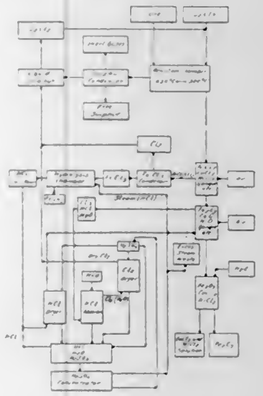
20. A method of making a cemented pile fabric which comprises cutting a pile element material rigidly held above and below the point of cutting to prevent the disturbance of the fibres in the cut sections and in the remaining pile element material, transferring the cut sections into contact with a backing member and cementing the cut sections to the said backing member while the pile element material is still rigidly held to prevent displacement of the fibres until the fibres are permanently cemented to the said backing member.

1,864,479. MEANS FOR FORMING CARDBOARD AND SIMILAR CARTONS OR CONTAINERS. HERBERT MACLEAN WARE, South Croydon, England, assignor to Associated Ice & Dairies Limited, Manchester, England, a Corporation of Great Britain. Filed Jan. 28, 1930, Serial No. 424,043, and in Great Britain Feb. 11, 1929. 4 Claims. (Cl. 93—36.)



1. A machine for producing lap-jointed tubes, such as carton bodies from blanks, the sealing edges of which have been gummed previously to the blanks being fed by band to the machine, comprising a stationary mandril or former corresponding to the shape of the carton to be made, a tray element in which the blank for forming a carton is initially placed by hand for forming around the mandril, said tray element being asymetrically arranged relatively tot he mandril so as to ensure that the edges of the blank overlap in correct relationship, a pivoted bar which is operable to hold the blank in contact with the underside of the mandril, a series of spring jaws which are operable to wrap the so-gripped blank around the mandril and cause the edges of the blank to overlap each other and a member disposed on the upper side of the mandril which is operable to seal the joint.

1,864,480. RECOVERY OF SULPHUR. RAYMOND F. BACON, Bronxville, and HENRY T. HOTCHKISS, Jr., New Rochell, N. Y.; said Hotchkiss assignor to said Bacon. Filed Feb. 26, 1930. Serial No. 431,470. 6 Claims. (Cl. 23—226.)

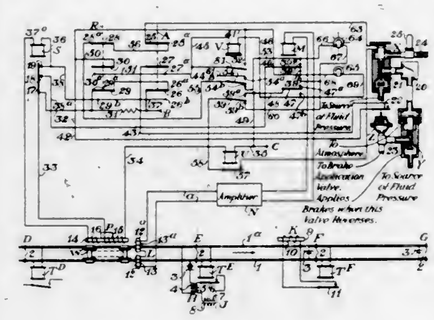


1. In a process for recovering sulphur from iron sulphide-bearing material, the improvement which comprises subjecting the material to the action of sulphur chloride to produce ferrous chloride and elemental sulphur at a temperature sufficiently elevated to vaporize the sulphur, treating the ferrous chloride to produce hydrogen chloride and ferric oxide, and subjecting the hydrogen chloride to the action of air in the presence of the ferric oxide produced to recover chlorine.

6. The method of treating iron sulphide-bearing material which comprises subjecting the material to the action of sulphur chloride to produce ferrous chloride and elemental sulphur at a temperature sufficiently elevated to vaporize the sulphur, subjecting the ferrous chloride to the action of air to form ferric oxide and to form and vaporize ferric chloride, condensing the ferric chloride vapors to eliminate inert gases and any chlorine gas mixed therewith, treating the ferric chloride to form hydrogen chloride, subjecting the hydrogen chloride to the action of air in the presence of the ferric oxide produced to obtain chlorine, subjecting the chlorine thus obtained to the action of molten sulphur produced to regenerate sulphur chloride, and returning the regenerated sulphur chloride to the process.

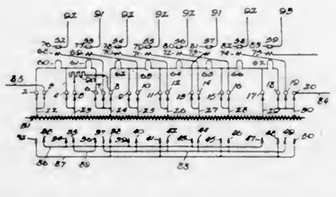
1,864,481. RAILWAY TRAFFIC CONTROLLING APPARATUS. ROY E. BAKER, Reading, Mass. Filed Mar. 21, 1931. Serial No. 524,365. 15 Claims. (Cl. 246—63.)

1. Railway traffic controlling apparatus comprising a first train carried relay controlled by devices located at intervals along the trackway, a second train carried relay controlled by currents supplied to the track rails, a manually operable switch on the train, an acknowledging relay on the train controlled by said switch and by said first



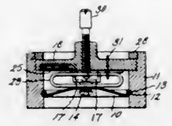
and second relays, and a single brake controlling magnet on the train controlled by said acknowledging relay and by said switch.

1,864,482. ELECTRIC APPARATUS. GLENN W. CARPENTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 30, 1925. Serial No. 65,862. 5 Claims. (Cl. 250—27.)



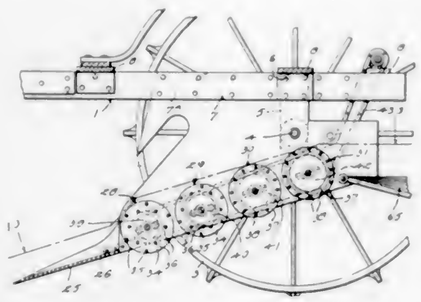
1. The combination of a plurality of electron discharge devices each provided with a cathode and an anode and with a grid arranged to control the current transmitted between said cathode and anode, a receptacle provided with sockets for said devices and with a plurality of terminals mounted on the outside of said receptacle, circuit connections enclosed within said receptacle and connected between said terminals and said sockets, and an impedance device provided with taps arranged to engage said terminals for connecting the cathodes of said electron discharge devices in series and causing a bias potential to be applied to said grids.

1,864,483. BIMETALLIC THERMOSTAT. WALTER COHN-BYK, Berlin, and ALEXANDER VON PAP, Charlottenburg, Germany, assignors to General Electric Company, a Corporation of New York. Filed Mar. 25, 1930, Serial No. 438,861, and in Germany May 4, 1929. 5 Claims. (Cl. 297—15.)



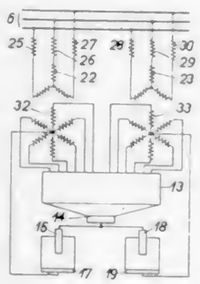
1. A snap acting thermostat comprising a bimetallic washer initially shaped in the form of a truncated cone with its surface at a relatively great angle with the axis of the cone so as to snap to a reverse position upon changes in temperatures.

1,864,484. POTATO DIGGING MACHINE. GEORGE O. CURRIE, Skowhegan, Me.; Augusta C. Currie executrix of the said George O. Currie, deceased. Filed Dec. 26, 1929. Serial No. 416,575. 7 Claims. (Cl. 55—51.)



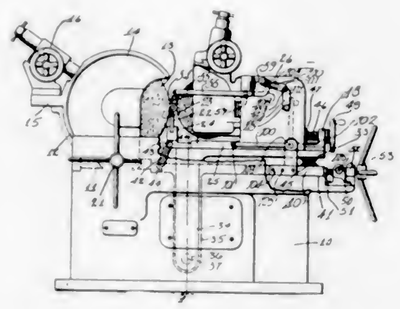
1. A potato digging machine, comprising a wheel supported frame, a plow carried by the frame in an upwardly and rearwardly inclined position, a series of reels journaled on the frame and extending upwardly and rearwardly from the plow, and means for rotating the reels at different speeds, the speeds of the respective reels decreasing consecutively in a rearward direction beginning with the forward reel.

1,864,485. ELECTRIC FURNACE INSTALLATION. OTTO EISENHUT, Heidelberg, ALFRED BASS, Ludwigshafen-on-the-Rhine, and JOHN ALEXANDER MEIER, Heidelberg, Germany, assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Jan. 31, 1930, Serial No. 425,006, and in Germany Feb 4, 1929. 2 Claims. (Cl. 13—9.)



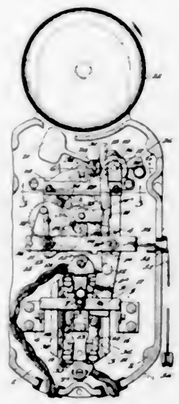
1. A direct current electric furnace installation comprising a source of alternating current, a plurality of arc furnaces, a single metal vapour rectifier vessel, a transformer, primary windings on said transformer connected to said source, a secondary winding for each of said furnaces, the neutral point of each of said secondary windings being connected to the cathode of its associated furnace, connections between the outer ends of each of said secondary windings to a separate group of anodes in the rectifier vessel and a connection between the anode of each furnace and a cathode in the rectifier.

1,864,486. ART OF GRINDING. SOL EINSTEIN, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 30, 1931. Serial No. 512,389. 20 Claims. (Cl. 51—103.)



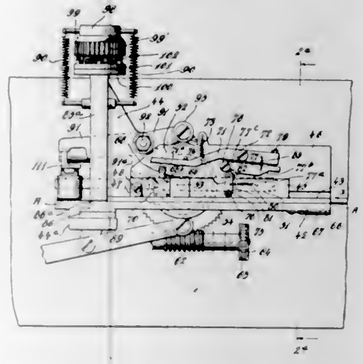
1. In a centerless cam shaft grinder, the combination of opposed grinding and regulating wheels forming a grinding throat therebetween, a work rest blade within said throat for supporting the work, a master cam conforming to the desired configuration to be formed on the work piece, and a stop member for engagement with the master cam to control the action of the grinding wheel on the work.

1,864,487. TIME SWITCH. EDWIN S. FLARSHEIM, Cincinnati, Ohio, assignor to The Liebel-Flarsheim Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 19, 1927. Serial No. 192,748. 5 Claims. (Cl. 200—39.)



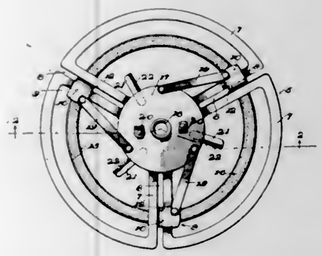
1. A time switch, comprising, a clock escapement mechanism provided with a trip, a switch having a handle for manipulation thereof, connection for starting or stopping the clock as the switch is closed or opened, a flexible link, one end of which is connected to said switch, a spring tending to straighten the flexible link and open the switch, a latch related to the flexible link to hold the switch in closed position against the spring tension, and a bar slidable transversely to the flexible link to engage it and release said latch, said bar positioned to be engaged by the trip on said clock escapement mechanism.

1,864,488. BLADE MAKING MACHINE. HENRY J. GAISMAN, New York, and CONRAD SCHUMACHER, Lynnbrook, N. Y., assignors, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Original application filed Feb. 4, 1927, Serial No. 165,903, now Patent No. 1,788,570. Divided and this application filed Jan. 2, 1931. Serial No. 506,150. 7 Claims. (Cl. 164—48.)



1. In a blade making apparatus the combination of a tool and an opposing die, said tool having spaced projecting ribs to engage a strip to cut off a blade from the strip and an intermediate piece from the strip between the blade and the remainder of the strip.

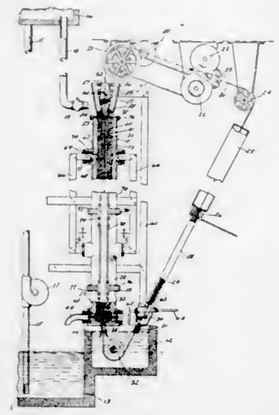
1,864,489. WICK CLEANER. PAUL GENNRICH, Maple Shade, N. J. Filed Nov. 14, 1930. Serial No. 495,709. 9 Claims. (Cl. 67—68.)



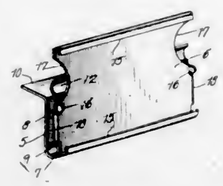
8. A wick cleaner comprising a frame, a plurality of cutters carried by said frame, means mounted on said frame and connected to said cutters for moving all of said cutters simultaneously toward or away from the center of said frame, and means for rotating said cutters as a unit about the center of said frame as an axis.

1,864,490. ELECTROLYTIC APPARATUS. HERBERT CHAMPION HARRISON, Lockport, N. Y.; Florence M. Harrison, Arthur Bridges Branfil Harrison, and William Whitmore Campbell executors and trustees of said Herbert Champion Harrison, deceased. Filed Aug. 23, 1926. Serial No. 130,994. 28 Claims. (Cl. 204—5.)

2. An electrolytic cell having a cathode, and means for causing it to move through said cell, conducting means terminating in solid contact means, a container outside of the cell in which said contact means is disposed, and means for guiding said moving cathode in engagement with said contact means, said container being adapted to receive a liquid covering the area of contact.

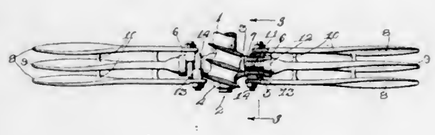


1,864,491. PRICE TICKET HOLDER. PHILLIP HOPP, New York, N. Y. Filed Aug. 5, 1931. Serial No. 555,240. 7 Claims. (Cl. 40—17.)



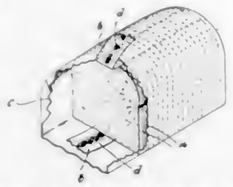
1. A price ticket holder for use with metal shelving comprising a resilient shelf engaging member, U-shaped in cross sectional form, a shelf engaging bead formed on one leg of the shelf engaging member, a shelf-engaging foot carried by the other leg of the shelf engaging member, said bead and foot co-operating with a metal shelf to retain the shelf engaging member on a shelf, and ticket carrying means carried by said shelf engaging member.

1,864,492. AEROPLANE PROPELLER. JOHN KRASNODMSKY, Milwaukee, Wis., assignor of fifteen per cent to Anton J. Koss, Milwaukee, Wis. Filed Jan. 1, 1931. Serial No. 505,993. 3 Claims. (Cl. 170—165.)



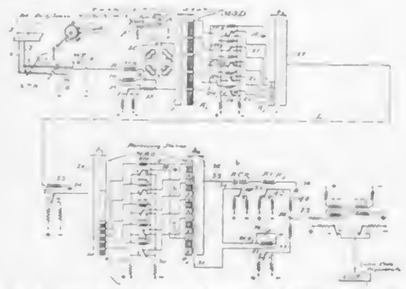
1. A propeller including a hub having radially projecting integrally threaded sleeves, and a plurality of multiple blade units each carrying a threaded stem for detachable engagement with said sleeves.

1,864,493. WRAPPED SLICED BREAD AND METHOD OF MAKING THE SAME. LEON E. LA BOMBARD, Waltham, and MELVIN H. SIDEBOTHAM, Newtonville, Mass., assignors to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed Sept. 5, 1929. Serial No. 390,573. 4 Claims. (Cl. 99—10.)



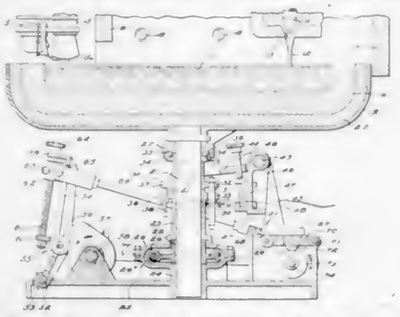
2. The method of preserving bread in a form convenient for users, consisting in cutting a loaf into slices, applying adhesive band material thereto to hold the slices in close relationship whereby opposite edges of the slices will stick to said band material, and then enclosing the slices and band material in a wrapper.

1,864,494. METHOD OF OPERATING A CHANNEL OF DIFFERENTIAL CABLE CODE OVER A CHANNEL OF A MULTIPLEX CIRCUIT. CRESCENT F. NELSON, New Dorp, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,804. 26 Claims. (Cl. 178—52.)



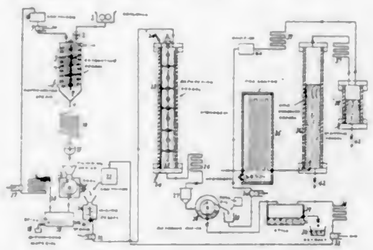
1. In a telegraph system, a code transmitter, a multiplex distributor connected thereto, means for driving said distributor, means for driving said code transmitter, and means for adjusting to unequal speeds the driving means for said distributor and said code transmitter.

1,864,495. GATHERING POOL. KARL E. FEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 6, 1929. Serial No. 337,940. 12 Claims. (Cl. 49—56.)



1. In combination with a suction gathering device, a glass gathering pot, means for rotating the pot, and means for raising and lowering the pot and for varying the height to which the pot is raised in successive movements thereof.

1,864,496. PRODUCTION OF NONKNOCKING MOTOR FUELS. MATHIAS PIER, Heidelberg, and KURT WISSEL, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 25, 1929, Serial No. 381,063, and in Germany Aug. 22, 1928. 4 Claims. (Cl. 196—53.)

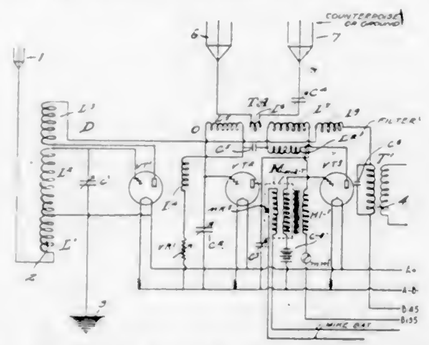


4. A process for the production of non-knocking motor fuels from brown coal having a high "bitumen" content which comprises subjecting said coal to an extraction treatment with benzene at an elevated temperature and pressure to extract "bitumens" suitable for producing paraffin wax, subjecting the extracted residue to extraction at a higher temperature and pressure with anthracene oil to produce a product suitable for condensation into lubricating oils and finally subjecting the residue to destructive hydrogenation to produce low boiling hydrocarbons.

1,864,497. METHOD OF FORGE-WELDING STELLITE. OLE SEVERSON, Shelton, Conn., assignor to The O. K. Tool Company, Inc., New York, N. Y., a Corporation of New York. Filed July 27, 1928. Serial No. 295,848. 8 Claims. (Cl. 76—101.)

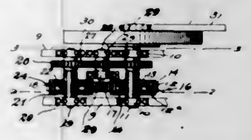
1. The method of welding stellite cutting tips on metal cutting tools consisting of applying a suitable mass of stellite to the desired portion of the cutter body, said stellite being in a plastic state; and applying pressure to the stellite while maintaining it wholly confined within a space defined by the said cutter portion and rigid forming walls, said stellite being sufficiently plastic whereby it readily assumes a shape exactly conforming to said defined space.

1,864,498. TWO-WAY RADIO SIGNALING SYSTEM. LARRY L. SMITH, Monticello, Ky., assignor of one-fourth to James N. Cox, Cookeville, Tenn., one-fourth to Charles H. Moore, Glasgow, Ky., and one-tenth to Edward C. Warner, Cookeville, Tenn. Filed July 26, 1928. Serial No. 295,541. 7 Claims. (Cl. 250—9.)



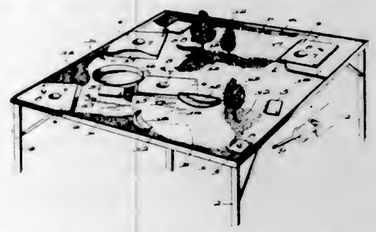
1. In a two-way radio signaling system, the combination with a receiver including detector, oscillator and intermediate or heterodyned frequency amplifier circuits, of a transmitter for operating simultaneously therewith including separate modulating and antenna circuits coupled by the oscillator circuit of the receiver, and a filter between the modulating circuit and oscillator circuit operative to prevent the passage of radio frequency currents from the oscillator circuit.

1,864,499. WAVE MOTOR DRIVING MECHANISM. RUSSELL COLE GRIGSBY, Stockton, Calif. Filed Nov. 25, 1927. Serial No. 235,631. 1 Claim. (Cl. 74—54.)



In a drive gearing for a wave operative power plant, comprising an upstanding float, an actuated rack bar having rack teeth on opposite edges thereof, spaced parallel bearing standards, a main power shaft journalled in said bearing standards, a two-part pawl and ratchet gear for driving said main power shaft in a predetermined direction, said two-part pawl and ratchet gear engaging the teeth at one side of said rack, an auxiliary shaft parallel with said main power shaft, a two-part pawl and ratchet gear mounted on said shaft and adapted to drive said second shaft through engagement with the other series of rack teeth of said rack bar when said first mentioned two-part gear is idling, a spur gear secured to each of said shafts, an idler gear disposed between and meshing with each of said spur gears, a bearing supporting said idler gear, one of said bearing standards and said bearing supporting said idler forming a space therebetween for confining the rack bar against lateral shifting to prevent disengagement of its teeth from said two-part pawl and ratchet gears, a fly-wheel on said main power shaft, and a ratchet driving connection between said fly-wheel and main power shaft whereby the wheel will be driven by said shaft when the same is put in motion by the upward movement of said float and the momentum of the wheel will cause it to run free when the shaft slows down, or is stationary, all of said gears being between said standards and said fly-wheel being disposed closely adjacent the outer side of one of said standards.

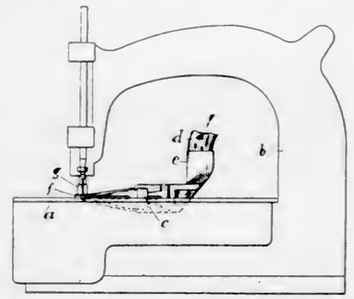
1,864,500. GAME. ELIZABETH LIVINGSTON and LOUIS LIVINGSTON, Washington, D. C. Filed May 13, 1930. Serial No. 452,073. 5 Claims. (Cl. 273—87.)



1. A game board of the character described comprising a playing surface, and having a relatively smooth area thereon, and granular material secured in the playing surface adjacent said smooth area and forming a relatively rough playing area.

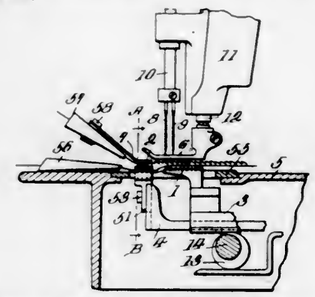
1,864,501. FABRIC GUIDE SUPPORT FOR SEWING MACHINES. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Sept. 28, 1926, Serial No. 138,203, and in Germany Oct. 19, 1925. 1 Claim. (Cl. 112—136.)

In a sewing machine the combination of a work support, a stitch forming mechanism, a fabric guide normally disposed adjacent said stitch forming mechanism in an opening in said work support and with its longitudinal center plane lying in the plane of the work support, and supporting devices for said fabric guide including means whereby the fabric guide may be moved away from the



stitching point in a direction obliquely to the plane of the work support whereby said guide is moved to an inoperative position above the plane of the work support for rendering the stitching element beneath the work support accessible for threading through said opening.

1,864,502. FEEDING MECHANISM FOR SEWING MACHINES. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Nov. 11, 1927, Serial No. 232,617, and in Germany Nov. 27, 1926. 3 Claims. (Cl. 112—209.)

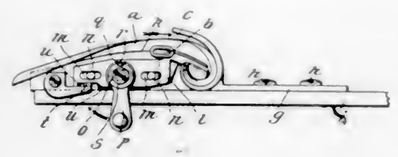


1. A feeding mechanism for sewing machines including a work support, a main feed dog, a presser foot cooperating with said main feed dog, an auxiliary feed dog located beneath the work support and in front of the main feed dog, a yielding device cooperating with the auxiliary feed dog means for supporting and imparting feeding movements to said main feed dog, means for supporting and imparting movements to said auxiliary feed dog, said auxiliary feed dog being constructed so as to provide a space beneath the fabric engaging portions of the feed dog whereby a fabric strip may be guided beneath the feeding surface of said auxiliary feed dog and free from engagement therewith.

1,864,503. COMBINATION HEMMER AND STRIP GUIDE. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Dec. 16, 1927, Serial No. 240,534, and in Germany Jan. 27, 1927. 4 Claims. (Cl. 112—136.)

1. The combination of a hemmer having a fabric supporting plate, means for infolding the edge portion of the fabric and directing the same to a stitch forming mechanism for forming independent lines of stitching, a strip guide independent of the hemmer and located beneath said fabric supporting plate and having its delivery end adjacent the delivery end of the folder and dis-

posed so as to direct an elastic strip between the infolded portions and the body fabric and between the lines of stitching, means controlled by the operator at will for shifting said strip guide relative to the hemmer whereby the

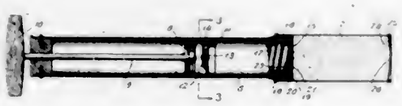


line of stitching adjacent the folded edge of the body fabric is caused to penetrate and secure said elastic strip to said body fabric, and yielding means for holding said strip guide in set position.

1,864,504. COMPOSITE PIGMENT. WILLIAM J. O'BRIEN, Baltimore, Md., assignor, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J., a Corporation of Delaware. Filed Dec. 15, 1928. Serial No. 326,409. 3 Claims. (Cl. 134—58.)

1. A composite pigment comprising titanium oxide and zinc carbonate, the zinc carbonate being present in a preponderance by weight.

1,864,505. SPRAYING APPARATUS. CHARLES P. MCCORMICK, Baltimore, Md. Filed Oct. 6, 1930. Serial No. 486,773. 4 Claims. (Cl. 43—147.)



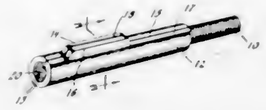
1. The combination with an air pump having means at one end for attaching a container thereto; of a material container having an end closure provided with means cooperating with the first named means to support said container upon said pump, and also having another end closure provided with a material discharge opening.

1,864,506. SHOE. FRANK PARLANTE, Brooklyn, N. Y. Filed May 15, 1931. Serial No. 537,726. 1 Claim. (Cl. 36—45.)



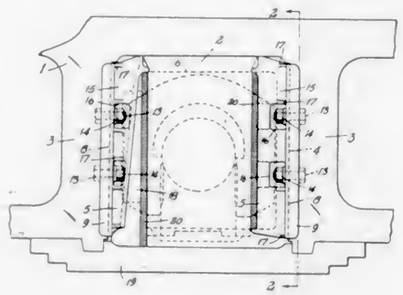
A shoe having a shank and a heel and an upper having a portion which extends under the shank, at the front of the heel, and at the sides of the shoe, the upper also having a portion which extends down at the sides and at the back of the heel, the second mentioned portion of the upper being secured to the first mentioned portion of the upper at the sides of the heel and at the sides of the shoe.

1,864,507. TIP FOR FLEXIBLE DRIVE SHAFTS. AUGUSTE PINEAU, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Apr. 30, 1928. Serial No. 274,023. 15 Claims. (Cl. 64—30.)



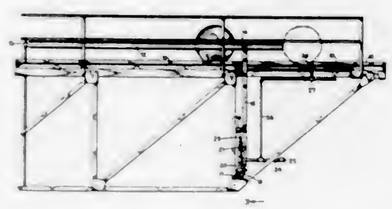
1. In a flexible cable tip, a polygonal end on said cable, a member pressed against said cable to form a tip, the corners of said polygonal end entering the member to form a rigid connection between said cable and tip member.

1,864,508. TRUCK FRAME CONSTRUCTION. CLIFFORD L. EASTBURG, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 11, 1931. Serial No. 580,242. 5 Claims. (Cl. 105—79.)



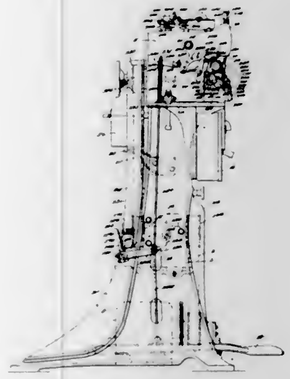
1. In a railway truck having journal box receiving openings, a member adapted to be inserted between the wall of an opening and a journal box therein and another member adapted to be inserted between the wall of the opposite opening on the other side of the truck and its journal box, said members being connected by a transverse member.

1,864,509. DRUM BRAKE. PIERRE L. GUMAER, Long Beach, Calif., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 22, 1930. Serial No. 497,378. 5 Claims. (Cl. 193—40.)



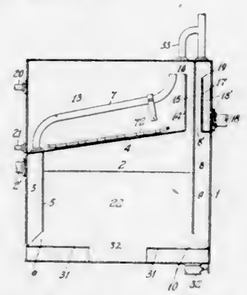
3. The combination with a barrel runway, a brake bar movably mounted on the runway and adapted to engage the end of a barrel rolling on the runway to retard the speed thereof, pressure actuated means operatively connected with the brake bar for actuating the bar into operative position, and means adapted to be actuated by a barrel on the runway for admitting pressure fluid to the brake bar actuating means.

1,864,510. MACHINE FOR LASTING STITCHDOWN SHOES. BERNARD T. LEVEQUE, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 24, 1930. Serial No. 497,809. 57 Claims. (Cl. 12—6.)



1. A machine for lasting stitchdown shoes having, in combination, an upper engaging roll, a member between which and the peripheral surface of the roll the outturned upper and sole are gripped, and means for rotating the roll and guiding the work to draw the upper over the last progressively along the shoe.

1,864,511. METHOD AND APPARATUS FOR SEPARATING IMMISCIBLE SUBSTANCES. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Original application filed May 1, 1924, Serial No. 710,390. Divided and this application filed May 15, 1925, Serial No. 30,449. Renewed Oct. 17, 1931. 37 Claims. (Cl. 210—60.)



1. In a separating device for immiscible substances, a compartment for maintaining a body of the mixture in substantial quiescence, and having an outlet at one level for one substance, means for causing mixture to flow into said compartment at substantially the same level in a stream directed toward said first named outlet, an outlet for withdrawing another substance from a different level of said compartment and means for hydrostatically controlling said withdrawal of said substances through their respective outlets.

THE

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Reissues	6—No.	18,504 to No.	18,509, inclusive.
Designs	40—No.	87,248 to No.	87,287, inclusive.
Patents	910—No.	1,864,512 to No.	1,865,421, inclusive.
Total	1,199		

Adjudicated Patents

(C. C. A. Tenn.) Gray patent, No. 1,220,416, for process of making ferrophosphorus, *Held* infringed. *Warner v. Tennessee Products Corporation*, 57 F.(2d) 642.

(D. C. Mich.) Rubsam patent, No. 1,395,362, for vehicle wheel, *Held* valid and infringed. *Rubsam Corporation v. General Motors Corporation*, 57 F.(2d) 581.

(D. C. Mich.) Rubsam patent, No. 1,576,225, for vehicle wheel, *Held* valid and infringed. *Id.*

(D. C. Mich.) Rubsam patent, No. 1,576,226, for vehicle wheel, *Held* valid and infringed. *Id.*

(D. C. Mich.) Rubsam patent, No. 1,622,846, for vehicle wheel, *Held* invalid. *Id.*

(C. C. A. N. Y.) Greer patent, No. 1,460,716, for book-form savings bank, claim 6 *Held* infringed. *Deitel v. Reich-Ash Corporation*, 57 F.(2d) 708.

(D. C. Mass.) Costello patent, No. 1,753,310, for exercising ball and support therefor, claims 5–7, *Held* valid but not infringed. *Costello v. Israel*, 57 F.(2d) 572.

(D. C. Ohio.) Wahle reissue patent, No. 16,074, for rotary pump, claims 3 and 6 *Held* valid and infringed. *Westco-Chippewa Pump Co. v. Auto-Prime Pump Co.*, 57 F.(2d) 556.

(D. C. Del.) Wahle reissue patent, No. 16,074, for rotary pump, claims 3 and 6 *Held* valid and infringed, but plaintiff *Held*, in view of laches, not entitled to injunction and accounting. *Westco-Chippewa Pump Co. v. Delaware Electric & Supply Co.*, 57 F.(2d) 559.

(D. C. N. Y.) Von Frankenberg design patent, No. 83,080, for ash tray or similar article, *Held* invalid. *Frankart, Inc., v. Apt. Novelty Co.*, 57 F.(2d) 757.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,654,504, J. G. King, Refrigerating apparatus, decided May 16, 1932, claims 10, 11, 14, 15, 19, 20, and 21.

Pat. 1,741,741, F. H. Sherman, Filler for cartons or other containers, decided April 27, 1932, claims 1, 2, 9, and 10.

Pat. 1,805,308, L. W. Dixon, Labeling, decided June 3, 1932, claims 2 and 3.

Interference Notice

U. S. Patent Office, *Washington, June 9, 1932.*

H. J. Kent and Company, its assigns or legal representatives, take notice:

An interference has been declared by this Office between the application of the Standard-Tilton Milling Company, Planters Building, Saint Louis, Mo., for registration of a trade-mark and trade-mark registered February 10, 1925, No. 194,846, to Waukesha Flour Mills, Clinton Street, Waukesha, Wis., which registration, the assignment records of the Office show, has been transferred to H. J. Kent and Company, doing business as The Fluffy-Flour Company, Chicago, Ill. The notice of such declaration sent by registered mail to said H. J. Kent and Company, at the said address, having been returned by the post-office as undeliverable, notice is hereby given that unless said H. J. Kent and Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business June 11, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 75,655; Trade-Mark Division, 879. Oldest new case, Nov. 18, 1931; oldest amended, Nov. 13, 1931. The dates given are 1931 except where † indicates 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action: New	Oldest new application awaiting office action: Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	†Mar. 4	†Mar. 10	501
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	†Feb. 1	†Feb. 3	1,028
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	†Mar. 1	†Feb. 24	741
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	†Mar. 16	†Mar. 29	511
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Feb. 3	†Feb. 3	428
4898 C	6. LEWERS, A. M., Carbon Chemistry	Dec. 1	Dec. 1	1,940
5725	7. JARBOE, C. G., Optics; Photography	†Jan. 14	†Jan. 14	1,510
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	†Jan. 6	†Jan. 12	1,242
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Mar. 11	†Mar. 12	851
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Dec. 28	Dec. 30	929
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Feb. 11	†Feb. 17	603
7701	12. HENRY, C. C., Machine Elements	†Feb. 12	†Feb. 17	629
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 25	†Jan. 25	1,177
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	†Mar. 5	†Mar. 9	764
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	†Jan. 6	†Jan. 6	2,011
5612	16. SPENCER, C. J., Telegraphy; Telephony	†Feb. 16	†Feb. 11	899
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Dec. 15	Dec. 15	1,383
4812	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 26	†Jan. 27	763
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Nov. 18	Nov. 25	1,747
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Mar. 1	†Mar. 5	634
7733	21. THOMPSON, T. J., Textiles, Cloth Finishing	†Feb. 1	†Feb. 4	926
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Feb. 18	†Mar. 11	626
7892	23. GROESBECK, W. D., Coin Handling; Recorders, Registers	Nov. 19	Nov. 19	934
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 12	†Jan. 20	730
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Dec. 16	Dec. 18	1,521
5803	26. HODGES, J. S., Electricity, Generation; Motive Power	Dec. 18	Dec. 23	1,001
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	†Jan. 27	†Feb. 1	971
4028	28. BENSON, A. R., Internal-Combustion Engines	Dec. 14	Dec. 13	1,330
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Dec. 7	Dec. 7	993
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Feb. 15	†Feb. 15	866
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Dec. 11	Dec. 11	1,566
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Feb. 8	†Feb. 12	1,000
6096	33. WYMAN, W. L., Bridges; Masonry and Concrete Structures, Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 12	Dec. 14	2,413
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service, Vehicle Fenders.	†Jan. 11	†Jan. 12	902
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†May 2	†Apr. 30	435
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Dec. 14	Dec. 14	1,742
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Dec. 12	Dec. 14	1,355
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 30	†Apr. 1	266
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Dec. 12	Dec. 14	1,559
7880	40. OBERLIN, J. J., Receptacles	†Jan. 9	†Jan. 14	2,067
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	†Mar. 4	†Mar. 10	751
5882	42. CUTTING, H. O., Electric Signaling	Dec. 4	Dec. 11	1,431
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	†Jan. 14	†Jan. 14	1,444
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Nov. 20	Nov. 13	1,909
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Jan. 29	†Jan. 30	1,169
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	†Jan. 29	†Feb. 4	745
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	†Jan. 12	†Jan. 14	2,108
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Dec. 26	Dec. 28	947
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 23	Nov. 23	1,564
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Dec. 10	Dec. 15	2,087
5628	51. BACKUS, C. D., Radiant Energy	†Jan. 11	†Jan. 11	1,280
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Mar. 4	Mar. 12	773
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Mar. 22	†Mar. 23	588
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Dec. 4	Dec. 4	1,188
6883	55 BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†Apr. 20	†Apr. 20	263
	Designs	†May 16	†May 28	186
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 24	Dec. 24	1,461
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	†Jan. 11	†Jan. 20	659
5605	58. DOWELL, E. F., Abrading; Typewriting	Dec. 3	Dec. 7	1,364
4709	59. RICHARD, V. L., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Dec. 7	Dec. 7	1,627
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Dec. 5	Dec. 7	1,503
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Dec. 5	Dec. 7	1,444
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Dec. 11	Dec. 11	1,789
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Dec. 11	Dec. 11	1,453
4708	64. NASH, F. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	†Jan. 19	†Jan. 25	669
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Dec. 1	Dec. 1	1,759
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—Trade-Marks	†May 19	†May 27	795
	Labels and Prints	†May 11	†May 28	84

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE KRAUCH, HOCHSCHWENDER, AND SCHUNCK

No. 2,801. Decided February 29, 1932

PATENTABILITY—ESTOPPEL.

Where a patent to W. was involved in interference and the assignee of that patent and of appellants' application did not bring forward their application for inclusion in the interference, appellants and their assignee are estopped after a decision in the interference adverse to the patentee to assert a right in said application to claims which were included in the issue of that interference.

APPEAL from the Patent Office. Affirmed.

Messrs. Hauff & Warland, Mr. William E. Warland, and *Mr. Patrick J. Whelan* for Krauch, Hochschwender and Schunck.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner in refusing to allow claims 7, 8 and 9 of an application relating to an invention of a process of manufacturing organic compounds.

Applicants have described the invention in the following language:

This invention has as its object to produce substantial amounts of the said oxygenated organic compounds other than methanol. We have found that such oxygen derivatives, which are partly readily soluble in water, partly insoluble or difficultly soluble and of a more oily nature, are produced in substantial quantities, generally along with greater or less quantities of methanol, when the gas mixture composed as aforesaid of carbon monoxid or dioxid or both and hydrogen or a gaseous hydrocarbon or both, is passed over a contact mass suitable to form methanol at otherwise similar conditions, but at a diminished speed compared with that most suitable for the formation of methanol, so that the gases are in contact with the catalyst for a greater length of time.

Claims 10 to 19, inclusive, of the application were allowed and are not involved here.

While our consideration of the case does not involve a discussion of the language or subject matter of the claims, it is regarded as proper to set out herein claims 7 and 8 which are illustrative:

7. The process of manufacturing oxygenated organic compounds of a higher order than methanol which consists in passing a mixture of an oxid of carbon and a gas containing hydrogen at an elevated pressure and temperature over a contact mass capable of reacting with the said gas mixture to form methanol whereby part of the mixture is converted into methanol and then passing the resulting mixture of methanol, an oxid of carbon and hydrogen over the same contact mass and under the same conditions.

8. The process of producing higher molecular organic compounds containing oxygen which consists in catalyzing a gas containing carbon monoxide and hydrogen with a vaporized aliphatic alcohol at an elevated temperature and pressure.

The patent to Wietzel et al., 1,562,480, November 24, 1925, is the reference upon which the two concurring tribunals relied in one ground of rejection.

The appealed claims were rejected by both tribunals upon three grounds:

First—the claims are not supported by appellants' disclosure.

Second—appellants' assignee (I. G. Farbenindustrie, A. G.) has already been given a patent covering the subject matter of these claims (Wietzel et al., 1,562,480); and

Third—the assignee is now precluded from asserting the subject matter of these claims, having failed at the proper time to bring forward this application for inclusion in interference No. 53,780, *Patart* v. *Wietzel et al.*, to which it was a party in interest, said interference including as counts, present claims 8 and 9, as to which the question of priority was decided against the said assignee.

The Examiner points out that claims 7, 8 and 9 cover substantially the same subject matter as claims 5, 7 and 2 of the Weitzell patent which was copending with this application, both applications during this copendency being owned by a common assignee.

The tribunals below cited *In re Dunbar*, 51 App. D. C. 251, 300 O. G. 201, as authority for their rejection of the claims at bar. They concluded that under the authority of the Dunbar case, the acceptance by the common assignee of the Wietzell patent, which contained claims involving the same patentable subject matter, amounted to an election, and that the said assignee connot thereafter claim the said subject matter in another application and thereby extend the monopoly.

Appellants have filed a very long and well prepared brief in which it is urged with much earnestness that the Patent Office tribunals were in error in their decision in many respects, one of which alleged errors, appellants state, is the findings of the tribunals that the present application was not a sufficient disclosure of the subject matter of the claims. It is urged that the position of the tribunals in so holding in the case at bar is inconsistent with their action in the interference proceeding above referred to.

It seems unnecessary for us to consider the question of consistency or lack of consistency in the positions taken by the tribunals or appellants in this case and related proceedings, because, as has been aptly suggested by the Solicitor for the Patent Office in his brief in this case, since it makes no difference whether the appealed claims read upon the disclosure or do not read upon the disclosure, the result is the same. The Solicitor said:

However, altho the question of readability of the claims upon the application disclosure may not be free from doubt, it is at least perfectly clear that the appealed claims either do read upon the disclosure or do not read upon the disclosure. If they do not read, the case is settled on the ground that they are not allowable to appellants. If they do read, then it is obvious that a motion under rule 109 could have been brought in interference No. 53,780, by the common assignee, to have the present application included in the interference since Patart, the adverse interferant, was making in his application present claims 8 and 9 and could also have made claim 7, as hereinbefore pointed out. No such motion was brought, as is conceded in appellant's brief at the bottom of p. 41.

We do not feel called upon to determine the highly technical question as to whether or not the involved claims read upon appellants' disclosure in the application at bar, since we agree with the Solicitor that if the claims do not read upon the disclosure, they are not allowable to appellants in this application and if the claims do read upon the disclosure, they should have been considered in interference No. 53,780, and appellants' failure to move under rule 109 precludes them and their common assignee from asserting the rights to such claims. We think the case of *In re Dunbar*, supra, and the case of *In re Mann and Koppelman*, 18 C. C. P. A. (Patents) 1020, 47 F.(2d) 370, 408 O. G. 7, support the decision of the Board of Appeals in its rejection upon these grounds. See also *In re Austin*, 17 C. C. P. A. (Patents) 1202, 40 F.(2d) 756, 399 O. G. 625.

It seems that the main argument of appellants as to why they should be allowed the claims at bar is based upon the fact that the Patent Office tribunals, in certain proceedings in connection with the Wietzell patent, supra, and the interference in which it was involved, should have done certain things and should not have done certain other things.

Whether there was error in the action of the Patent Office tribunals in these respects and whether appellants had proper remedy if errors were committed, we are not called upon here to determine. In our view, it is clear, upon this record and as the case is presented here, that appellants are not entitled to the allowance of the appealed claims in the application at bar for the reasons we have hereinbefore suggested.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE ANTISELL AND MULLINEAUX

No. 2,842. Decided February 29, 1932

1. APPEAL—PRACTICE—CLAIMS PRESENTED LATE.
   Record reviewed and *Held* to establish that the Board of Appeals properly refused to consider claims presented after the appeal had been taken and the Examiner had filed his answer thereto.
2. PATENTABILITY—COPPER CAKE AND METHOD OF MAKING THE SAME.
   Claims for a copper cake and a method of making the same *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Milans & Milans and *Messrs. Usina & Rauber* for Antisell and Mullineaux.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

Appellants' application for a patent, filed in the United States Patent Office, relates to the production of copper cakes from which copper sheets are rolled.

Claims 3, 4, 6 and 7 of the application were allowed and claims 8, 9 and 10 were rejected by the Examiner, which action was affirmed by the Board of Appeals.

Claims 11 and 12 were proposed by the applicants after final rejection, but were not entered by the Examiner. The Board declined to consider them. The action of the Board of Appeals in affirming the Examiner in the rejection of claims 8, 9 and 10, and its failure to consider claims 11 and 12, is assigned as error in appellants' reasons of appeal.

The application relates to a copper cake and the method of making it, which cake when made is approximately ten inches, sixteen inches, and four inches in its three dimensions. It is cast endwise and in tapered form so that the top end constitutes the "set face" of the copper, that is to say, it is that portion of the copper which has not been molded against a flat surface.

Appellants claim to have discovered that many beneficial results are obtained by molding a copper cake in a tapered one-piece mold, which mold would give the cake the shape, dimensions and characteristics referred to. They point out that it is desirable to have the least possible "set face"; that when the "set face" portion of a copper cake forms a surface of the rolled sheet, certain stains and discolorations show on the surface which hasten corrosion. The applicants state that the elimination of the discoloration or stains makes the rolled product of uniform color and increases its resistance to corrosion. In addition to the discoloration, one other undesirable result of the old method of casting the cake flat and having the rolls come in contact with a large "set face," was the fact that there was about 30 per cent. of waste brought about in cropping or trimming off the edges. This waste, applicants state, has been reduced, by their method, to about 5 per cent.

The record shows that on December 21, 1926, 18 per cent. of the sheet copper produced in the United States was produced by appellants' end-poured method.

We will first consider the fourth assignment of error which challenges the correctness of the refusal of the Board of Appeals to consider claims 11 and 12. The appeal from the action of the Examiner was taken on September 21, 1929, and the Examiner's statement is dated October 23, 1929. On April 30, 1930, the applicants asked the Examiner to amend the application by inserting claims 11 and 12. The record shows no action whatever by the Examiner in connection with these claims.

The Board's refusal to consider the claims was based upon *Ex Parte Moore*, 1923 C. D. 13, 307 O. G. 4, in which the First Assistant Commissioner of Patents, in passing upon a petition for rehearing, said:

> It is desirable that all claims, so far as possible, which an appellant desires reviewed on appeal, should be first presented to the Primary Examiner. He is regarded as the Office expert in the particular art involved in a given instance. His opinion and judgment should be before an appellate tribunal when the latter reviews the Examiner's holding.

Although appellants have filed a brief, which is rather elaborate on other matters involved in this appeal, they have not discussed the action of the Board in refusing to consider claims 11 and 12 further than to state that claims 11 and 12 are like claims 8 and 9 except that they are not limited to a tapered form of cake, and that they knew nothing of the failure of the Examiner to enter the same until they were so informed in the decision of the Board of Appeals.

[1] We think that the Board properly refused to consider claims 11 and 12. *Ex Parte Moore*, supra, is abundant authority for such action. See also rule 68 of the Rules of the United States Patent Office.

Claims 8, 9 and 10 are as follows:

> 8. A copper cake of the character described for rolling into sheets and sheet bars, having side faces *of considerable width and length and having comparatively thin ends and edges*, said cake being cast endwise in tapered form so that its upper end constitutes the set surface of the copper and its side faces and edges are smooth.
>
> 9. A copper cake of the character described for rolling into sheets and sheet bars, having side faces *of considerable width and length and having comparatively thin ends and edges*, said cake being cast endwise in tapered form so that its upper end constitutes the set surface of the copper and its side faces and edges are smooth, the depth of said cake from the set surface to the opposite end being in excess of eight inches.
>
> 10. The method of making copper cakes for rolling into sheets and sheet bars, said cakes having side faces *of considerable length and breadth and having comparatively thin ends and edges*, which method consists in pouring the copper to form said cakes endwise into tapered one-piece molds and thus producing smooth surfaces on the side faces and the upright edges. (Italics ours.)

The references relied upon are: Cooper, 192,114, June 19, 1877; Tallman, 412,566, Oct. 8, 1889; Wooster, 475,652, May 24, 1892; Leibman, 757,208, Apr. 12, 1904; Gathmann, 1,061,467, May 13, 1913; Gathmann, 1,246,738, Nov. 13, 1917.

Appellants argue that while the result of the findings of the Examiner and the Board concur, the reasons assigned are not concurring. They point out that the Examiner regarded claims 8 and 9 as indefinite inasmuch as the terms "considerable width and length," "considerable length and breadth," and "comparatively thin" are indefinite, since it is not known what measurements would conform to these terms, while the Board stated that "claims [8 and 9] are definite within these limitations, however slight, and that these claims as a whole are merely broad rather than indefinite." Claims 8 and 9 were also rejected by the Examiner and by the Board on the prior art. Claim 10, a process claim, which contains the phrase "which method consists in pouring the copper to form said cakes endwise into tapered one-piece molds and thus producing smooth surfaces [etc.]," was rejected by both tribunals for the reason that it was obvious to use a one-piece mold in place of the two-piece upright tapered molds shown in the prior art, and that if it were so used, the surface of the cakes which came in contact with the mold would be free from foreign bodies and possess the regular and smooth character which was desirable.

We think that the claims allowed appellants, of which claims 4 and 6 are illustrative, fully define the limit of the invention claimed and disclosed in appellants' application. Claims 4 and 6 follow:

> 4. A copper cake of the character described for rolling into sheets and sheet bars cast endwise in tapered form so that its upper end constitutes the set face of the copper and its sides and edges are smooth, the width, length and thickness of such cakes being substantially in the ratio of 10 x 16 x 4½.
>
> 6. The method of producing a copper sheet bar which includes in combination the following steps,—casting a cake with certain faces and edges in contact with the sides of a tapered one-piece mold which produces smooth surfaces on said faces and edges, and rolling said cake out into a bar with rolls engaging said smooth surfaces.

[2] Allowed claims 3 and 4 are directed to the cake as a commercial product but are limited to certain dimensions or proportions of length, width and thickness. Allowed claims 6 and 7 are for the complete method of producing the sheet bar including the casting of the cake and the rolling of it.

We agree with the decision of the Board affirming the action of the Examiner in refusing to allow claims 8, 9 and 10, and in refusing to consider claims 11 and 12, and agree with the reasons assigned therefor. We do not regard it as necessary, in view of our complete approval of the views of the Board, to further refer to the references.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE RUSSEL AND DUEMLER

No. 2,843. Decided March 7, 1932

PATENTABILITY—PRESSURE ATOMIZER NOZZLE.
Claims for a pressure atomizer nozzle *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. John D. Rippey and *Mr. Lawrence C. Kingsland* for Russel and Duemler.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying appellants' application for a patent for an alleged invention relating to "improvements in pressure atomizing nozzles."

The application contains two claims, Nos. 10 and 11. Claim 10 is illustrative. It reads:

> An atomizer nozzle comprising a nozzle tip having a cavity in its inner end, and a discharge opening from said cavity to the outer end of said tip; a spreader element seated against the end wall of said cavity and having a number of grooves in its outer end forming passages from between said element and the wall of said cavity to said discharge opening, and a retaining device screwed in the inner end of said tip and removably abutting against said spreader element and having openings therethrough for the passage of fluid into said cavity.

The reference is: Gronlind (Norwegian) 35,005, 1922.

Appellants' device is adapted for use in oil burners and for other uses where finely-atomized liquid is desired. The oil, or other substance, to be sprayed is caused to whirl within the tip of the nozzle by means of a "spreader element." The structure in question, fully described in the quoted claim, is composed of three members—a nozzle tip, inclosing a "spreader element" and a retaining device screwed in the end of the nozzle tip.

The patent to Gronlind discloses an atomizing nozzle for oil burners. Inclosed within the nozzle tip is a steel plate, held in place by a ring. The steel plate is separable from the nozzle, and, as stated by the Board of Appeals, appears to "constitute a wall of the cavity in the nozzle against which the spreader element is seated." The spreader element, the steel plate, and the ring, are securd in position by a retaining device—an oil-supply pipe.

In his decision, the Primary Examiner, among other things, said:

The reference on which the claims were rejected shows a nozzle tip comprising members 1, 2 and 4 which are independent of each other but which could be made integral if desired, without involving invention since this is the well known and usual practice. This practice being of such common knowledge to those familiar with the art, the citation of reference disclosing the same has been deemed unnecessary. Moreover, even as independent members they are the full equivalent of applicants' tip. Oil pipe 6 has an extension 12 which fits into a cavity in "spreader" member 5. By means of interacting screw threads on the tip and oil pipe members 1, 2, 4, 5, 6 are rigidly held together. Extension 12 has canals which communicate with canals 8 in member 5, and tangential passages 10 establish communication with annular channel 9 and the outlet cavity. These passages are the full equivalent of applicants' passages. Moreover, the result obtained in the Norweglan patent is substantially identical with that obtained by applicants. Construed in this manner the device disclosed in the reference fully anticipates applicants' claims.

The Board of Appeals concurred in the views expressed by the Primary Examiner, and stated that appellants' device was not patentably different from that disclosed by the reference.

It is claimed by appellants that they have made a self-contained device, comprising only three elements, which can be manufactured and sold as an assembled unit at a low cost; and that the Gronlind nozzle, composed of five elements, "cannot be manufactured and assembled and sold as a complete and unitary device because the parts thereof will separate and fall apart." It is further argued that the Gronlind nozzle is not operative.

It is also contended by counsel for appellants that a "foreign patent is to be measured as anticipatory *not by what might have been made out of it*, but by what is clearly and definitely expressed in it," and that, as it would be necessary to make changes in the Gronlind structure, in order to make it operative, it can not be considered as an anticipation of appellants' device.

We may say at the outset that we agree with the views expressed by the tribunals of the Patent Office that the Gronlind device is not only operative, but that it performs the same function, in substantially the same way, as that of appellants.

It is true, as argued by counsel for appellants that, by changing the form of the nozzle tip, the steel plate and the ring for maintaining it in position, disclosed in the reference, have been omitted. However, the steel plate is referred to in the reference as exchangeable and, it is argued by the Solicitor for the Patent Office, was intended as an easy repair feature. This is undoubtedly true. Therefore, by making the nozzle tip in one piece instead of two pieces, appellants have eliminated the ring and its function and, also, the repair feature inherent in the removable plate. They have, also, changed the form of the retaining element. However, all of the elements in appellants' device, or their equivalents, are found in the reference, where they perform the same functions in substantially the same way.

It is our opinion that the reference so clearly discloses appellants' alleged invention as to enable a mechanic skilled in the art to construct it without resorting to experiments, and that the modifications made by appellants are devoid of patentable novelty. This being so, the reference, although a foreign patent, is a proper one and is sufficient to negative patentability of the involved claims. *Hoskins Mfg. Co.* v. *General Electric Co.*, 212 Fed. 422, 429, and cases cited; *Selectasine Patents Co.* v. *Presto-O-Graph Co.*, 267 Fed. 840; Walker on Patents, vol. 1, sec. 91.

The decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HAPGOOD

No. 2,877. Decided March 28, 1932

PATENTABILITY—BEARING MOUNTINGS FOR WEIGHING SCALES.

Claims for a bearing mounting for weighing scales *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. C. A. Marshall and *Mr. A. V. Cushman* for Hapgood.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, 1, 2, 3, 4, and 5, in appellant's application for a patent for an alleged invention relating to a bearing mounting adapted for use on weighing scales.

The alleged invention consists of an agate bearing element, preferably a block of agate having a V-shaped groove at its upper side, about which is cast, as defined in claims 1, 2, and 4, or molded, as defined in claim 5, a clip of metal having a projecting stem, the axis of the stem being perpendicular "to the pivot bearing line of the element."

The agate bearings are designed to support pivots of hardened steel, and it is necessary, if the mechanism is to operate without binding, that the grooves in the agate bearings be accurately aligned. By casting the metal clip about the bearing element, it is held firmly in position.

Claims 1 and 5 are illustrative. They read:

1. In a device of the class described, in combination, a non-metallic bearing element having a bearing line for a pivot, said bearing element being tightly gripped within a clip of metal which is cast about said element, said clip having a stem projecting therefrom, the axis of said stem being perpendicular to the pivot bearing line of the element.

5. In a device of the class described, in combination, an agate bearing element having a bearing line for a pivot, said element being secured within a clip of material which is molded about said element so as to firmly grip it, said clip having a stem projecting therefrom, the axis of said stem being perpendicular to the pivot bearing line of the element.

The references relied upon by the Primary Examiner were: Wennstrom, 856,007, June 4, 1907; Jankower, 1,290,564, Jan. 7, 1919; Lee, 1,331,113, Feb. 17, 1920; Hurt, 1,478,123, Dec. 18, 1923.

The Board of Appeals held that the patents to Wennstrom and Lee, cited by the Examiner, were not proper references, because they did not state how the clips were secured to the bearing elements.

The Board relied upon the following references: Robinson, 2,904, Jan. 10, 1843; Krause, 704,874, Oct. 6, 1903; Loesser, 1,088,233, Feb. 24, 1914; Jankower, 1,290,564, Jan. 7, 1919; Davids, 1,400,423, Dec. 13, 1921; Hurt, 1,478,123, Dec. 18, 1923, and, with regard thereto, said:

A further search discloses the following patents which are held to be pertinent. Patent No. 2,904 to Robinson discloses a glass door knob about which is cast a metallic socket. Patent No. 740,874 to Krause discloses a drawing diamond embedded by casting in iron or steel alloys. Patents 1,088,233 to Loesser and 1,400,423 to Davids show that it is old to secure precious stones or diamonds during grinding by casting about them a holding clip of alloy metal. In our opinion claims 1, 2 and 4 are unpatentable over the patent to Hurt in view of the four patents last cited. In view of the citation of these new references appellant is entitled to the options provided in rule 139.

In view of the fact that claim 5 provided for a clip of metal molded about the agate bearing element, the board held that this claim was unpatentable over the patent to Jankower.

The patent to Hurt shows an agate bearing element for weighing scales, mounted, by means of suitable cement, in a channel-shaped metallic clip having a stem projecting therefrom.

Appellant, as held by the Board of Appeals, has improved the Hurt mounting, owned by a common assignee, merely by *casting* a metal clip about an agate bearing element, thereby securing a firmer and more permanent connection.

The patent to Jankower relates to jewel bearings for weighing scales in which the agate bearing is mounted by means of cement in a metal block. In his specification, the patentee stated that rubber or other suitable plastic material might be used as a substitute for metal, in which case the rubber or other material "should be molded to the agate block or strip and then vulcanized."

Two contentions are made here by counsel for appellant. First, that appellant's agate bearing is firmly secured by casting a metal clip about it, and that certain advantages have been obtained thereby. Second, that the patents to Robinson, Krause, Loesser, and Davids, cited and explained by the Board of Appeals, are from non-analogous arts, and are, therefore, not pertinent references.

We are in accord with counsel's first contention. However, we are unable to agree that the patents referred to are so remote as to require the exercise of the inventive faculties to adapt the disclosures therein made to bearing mountings for weighing scales.

The idea of mounting non-metallic bearing elements by casting metal clips about them is so plainly suggested in those references that, in our opinion, the casting of metal clips about agate bearing elements in mounting them for use in weighing scales would, in view of the patents to Jankower and Hurt, readily occur to a person of ordinary mechanical skill. *In re Vorhees*, 17 C. C. P. A. (Patents) 1162, 40 F.(2d) 773, 399 O. G. 7; *in re Schneider*, 18 C. C. P. A. (Patents) 1114, 47 F.(2d) 970, 410 O. G. 3; *In re Green*, 18 C. C. P. A. (Patents) 1273, 49 F.(2d) 477, 411 O. G. 817.

We are in accord with the views expressed by the Board of Appeals, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

THE BUCKEYE SODA COMPANY *v.* OAKITE PRODUCTS, INC.

No. 2,901. Decided March 28, 1932

TRADE-MARKS—SIMILARITY—"NOVITE" AND "OAKITE".

The term "Novite" used as a trade-mark for washing soda *Held* confusingly similar to the term "Oakite" used as a trade-mark for a granulated chemical cleansing compound.

APPEAL from the Patent Office. Affirmed.

Mr. Henry C. Thomson, *Mr. Charles D. Woodberry*, and *Mr. A. V. Cushman* for The Buckeye Soda Company.

Mr. Louis Alexander for Oakite Products, Inc.

HATFIELD, *J.:*

This is an appeal in a trade-mark cancellation proceeding from the decision of the Commissioner of Patents reversing the decision of the Examiner of Interferences dismissing appellee's application for the cancellation of appellant's registration No. 225,151, issued March 15, 1927, for the trade-mark "Novite" for use on "washing soda."

Appellee is the owner of registration No. 80,287, issued November 29, 1910, to appellee's predecessor, The Oakley Chemical Company, for the trade-mark "Oakite" for use on "a granulated chemical cleansing compound."

It is conceded by counsel for appellant that the goods of the respective parties possess the same descriptive properties, and that appellee used its mark "Oakite" long prior to appellant's adoption and use of the mark "Novite."

The sole issue in the case is whether appellant's registered mark "Novite" so nearly resembles appellee's registered mark "Oakite" as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

The Examiner of Interferences held that the marks were not confusingly similar.

The Commissioner of Patents held that the marks were confusingly similar, reversed the decision of the Examiner of Interferences, sustained the petition for cancellation, and ordered appellant's registration cancelled.

It appears from the record that appellee has expended a large sum of money, about $2,000,000, in advertising its trade-mark and its product in "newspapers, trade-magazines, radio, car cards, posters in elevated and subway stations, food fairs and exhibits, window posters [and] counter displays," substantially throughout the United States, and that its sales amount to approximately $2,000,000 per year. It further appears from the record that the goods of the respective parties are competitive, and are sold in small packages in grocery, department, and hardware stores.

It is contended by counsel for appellant that the only similarity in the marks is the suffix "lte"; that the prefix "Nov" of appellant's mark does not resemble the prefix "Oak" in appellee's mark; and

that, therefore, the marks are not confusingly similar. Counsel for appellant further contends that, if the involved marks are confusingly similar, appellee's mark is confusingly similar to the registered mark "Orite," owned and used by a third party upon a gun cleaning and lubricating material, and that, therefore, "appellee has always been, and still is an infringer without a property right in its mark, and *coming into court with unclean hands, is barred.*"

With regard to the last contention of counsel for appellant, is is sufficient to say that there is nothing in this record to establish that appellee is infringing upon the rights of the owner of the registered trade-mark "Orite."

Considerable testimony was submitted by the parties relative to the existence of actual confusion resulting from the concurrent use of the involved trade-marks. We deem it unnecessary, however, to consider the various arguments presented by counsel relative to this testimony.

It is true, as argued by counsel for appellant, that the marks are not identical, but differ, to some extent, both in sound and in appearance. However, they do closely resemble one another. The goods of the parties are common and widely used household articles, and are sold to the same class of people. Nevertheless, appellant, with knowledge of the value and popularity of the old and established trade-mark of appellee, selected a trade-mark closely simulating it.

We have held on several occasions that the general purpose of the law of trade-marks is to "prevent one person from passing off his goods or his business as the goods or business of another"; and that the purchasing public ought not to be required to dissect trade-marks in order to prevent confusion and deception.

Considering the character of the goods of the parties, the places where, and the people to whom, they are sold, we think that the involved trade-marks, considered as a whole, so nearly resemble one another that the use by appellant of its mark, concurrently with the use by appellee of its mark, would be likely to cause confusion and mistake in the mind of the public and would result in damage to appellee.

Appellee, of course, is not entitled to a monopoly of the suffix "ite." However, as we said in substance in the case of *The Celotex Company* v. *Chicago Panelstone Company*, 18 C. C. P. A. (Patents) 1504, 49 F.(2d) 1051, 413 O. G. 284, when appellant, a newcomer in the field, adopts and uses a mark having the suffix "ite" and a prefix not sufficiently dissimilar to the prefix of appellee's mark to prevent confusing similarity of the marks as a whole, appellee is entitled to the relief intended to be afforded by the statute.

We think that the Commissioner of Patents reached the right conclusion, and his decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE WHITE

No. 2,807. Decided February 8, 1932

PATENTABILITY—WELDING MACHINES.

Certain claims for a welding machine *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Mr. David P. Wolhaupter for White.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.:*

Appellant seeks a patent for alleged improvements in "electrode mounting for welding machines." As we understand it, the device is primarily designed for welding together the crossed wires used in the construction of heavy wire fencing, such as that utilized in fencing the sides of highways and the like.

A number of claims were allowed but Nos. 14 to 17, inclusive, were rejected because held to be readable in terms upon a patent to one Southwick, No. 1,534,034, issued April 21, 1925.

We quote claims 14 and 17:

14. In a machine for welding moving wire fabric, a pair of cooperating electrode members mounted at opposite sides of the plane of the fabric for free pivotal movement, and means for yieldingly forcing said electrode members toward each other to grip the crossed wires of the fabric together under pressure, and whereby the said electrodes are moved by and with the fabric while the cross wires are being welded to the longitudinal wires of the fabric, and means for returning the electrodes to their original position.

17. In a welding machine, a pair of electrodes mounted to yield at right angles to the line of movement of the parts to be welded passing between them, and said electrodes also being pivotally mounted whereby the movement of the work engaging therewith will simultaneously impart movement to the electrodes, and means for returning the electrodes to their original position after welding.

The completed devices of Southwick and appellant are, admittedly, radically different in structure, but the tribunals of the United States Patent Office felt that there had been found in Southwick anticipatory features of the particular elements which appellant here claims, and which are emphasized by italics in the following quotation from his brief:

Each of my appealed claims calls for *a pair of electrodes, movable by the fabric,* and means for *returning* said electrodes to their original or a normal position following each welding operation * * *.

That portion of the Southwick apparatus material to be considered here comprises two shafts upon which are mounted a series of electrodes so arranged, apparently, as that when the shafts, one above the other, bearing the electrodes, are rotated, the strands of wire passing therethrough are brought between two cooperating electrodes, in crossed arrangement, and, while gripped by the electrodes, are charged with an electric current which causes the weld.

The Southwick electrodes are connected with coiled springs which constitute a means for yieldingly forcing said electrode members toward each other to grip the crossed wires of the fabric together under pressure.

Appellant discloses, as parts of the framework of his device, two electrode brackets, which brackets carry two electrode members, designed to cooperate, between which the crossed wires pass for welding. As the wires pass between the electrodes they are pressed together by the electrodes, this movement being produced by means of yieldable coiled springs.

The upper bracket is pivoted at a stated point and the electrode mounted thereon is urged about the pivot in a counterclockwise direction by the spring and is restrained in the tendency to move in this direction by a bolt and nut at the upper end of the bracket. Upward pressure on the electrode causes the bracket itself to pivot and move in a clockwise direction against the opposition of a spring in the bracket.

The tendency of the electrode, mounted pivotally on the bracket, to rotate counter-clockwise by reason of the spring tension, is opposed by an upward extension which engages a cam mounted on a shaft. This cam feature is not here involved.

The lower portion of the apparatus shows a structure corresponding in detail to the upper portion.

As the wires to be welded are moved through the device from left to right, they pass, in cross relationship to each other, between the electrodes which latter are thus forced apart. This compresses the spring in the bracket which latter is rocked about its pivot and so the wires are held tightly pressed together for the weld.

As the wires progress onward to the left the electrodes "pivot about their pivots" and are moved toward each other, contacting with the crossed wires at the latter's point of intersection.

By reason of the rotation of the bracket about its pivot being limited by a bolt near the bracket's top, there is an action upon the electrodes which causes them to separate from the crossed wires, the wire joint passes out from the contact, and the electrodes are returned to normal position ready for the succeeding jointure of wire to be presented for welding by the electric current.

In both devices the fabric is drawn through the merchandise by means outside the machines themselves, and this element is not involved in this controversy.

Of the three features stressed by appellant, viz., (*a*) a "pair of electrodes," (*b*) "movable by and with the fabric," and (*c*) "means for returning said electrodes to their original or a normal position," etc., it seems clear to us that (*a*) and (*c*) are so broad in terms as clearly to read upon Southwick. As to feature (*b*), however, this does not appear to be true.

While it is obvious that both in the Southwick device and in that of appellant there is a pressing apart of the contacting electrodes by the wire passing therethrough, and a snapping back of said electrodes when the joint passes from between them, there does not appear to be in Southwick's device a certain lateral movement which is present in appellant's device, by reason of the shape and arrangement of the electrodes, which produces a step-like action that operates upon the wire joints, as they reach the electrodes, without reference to the width of the mesh which it is desired to produce.

In the Southwick patent the joints to be welded must pass through the mechanism at relatively fixed times, and must be regularly spaced. The mechanism itself must be adjusted so that the junction of the two cooperating electrodes will synchronize precisely with the passage of the wire joints between them. Otherwise, there will be no welding of such joints.

In appellant's structure, by reason of the movement "by and with the fabric," the joints are welded at any moment they may pass between the electrodes, regular spacing is not necessary, nor is the synchronization, essential in Southwick, required by appellant's device.

This movement, by and with the fabric, seems to us to be a new and useful result which involves patentable invention.

This element is described in each of the claims before us on appeal, somewhat more clearly, perhaps, in claims 15 and 17 than in the other two. All the claims are for a combination in which this feature or element is included.

In *Leeds & Catlin Co.* v. *Victor Talking Machine Co.*, 213 U. S. 301, 318, 144 O. G. 1095, the Supreme Court of the United States said:

A combination is a union of elements, which may be partly old and partly new, or wholly old or wholly new. But whether new or old, the combination is a means—an invention—distinct from them. They, if new, may be inventions and the proper subjects of patents, or they may be covered by claims in the same patent with the combination.

No question is made as to claims such as those at bar being proper. A supplemental brief of the Solicitor for the Patent Office, filed in response to a request by the court, states that:

Claims of the character involved in the White appeal are quite universally regarded as proper by the patent bar and the tribunals of the Patent Office.

An element was present in the device involved in the litigation in the Leeds & Catlin Co. case, supra, which appears to be somewhat analogous to the "movable by and with the fabric" element here present. In that case the Supreme Court, discussing a claim for a "talking" machine, said:

We think [it] * * * is a valid combination, consisting of the elements, (1) a traveling tablet having a sound record formed thereon; (2) a reproducing stylus, shaped for engagement with the record, and free to be vibrated and propelled by it. It is, therefore, a true mechanical device, producing by the cooperation of its constituents the result specified and in the manner specified.

It is our view that the combination claims of appellant here at issue, are not anticipated by the prior art cited, and that, under the authorities, they should be allowed.

Accordingly, the decision of the Board of Appeals of the United States Patent Office is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE PIERCE ARROW MOTOR CAR COMPANY

No. 2,870. Decided February 8, 1932

TRADE-MARKS—REPRESENTATION OF THE FRONT END OF AN AUTOMOBILE—DESCRIPTIVE.

A trade-mark for automobiles consisting of the pictorial representation of the front end of the automobile enclosed within a hexagonal border, *Held* properly refused registration since it is merely descriptive of the goods.

APPEAL from the Patent Office. Affirmed.

Mr. Edward R. Alexander, *Mr. Thomas L. Mead, jr.*, and *Messrs. Browne & Phelps* for Pierce Arrow Motor Car Company.

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Commissioner of Patents, affirming the action of the Examiner of Trade-Marks in refusing to register, as a trade-mark for automobile vehicles and their component parts, a pictorial representation of the front end of an automobile enclosed within a hexagonal border. A copy of the application, other than the statement required by the rules of the Patent Office, is not found in the record, but it seems to be conceded that it was filed under the provisions of the Trade-Mark Registration Act of February 20, 1905.

In the record we find, in the statement of the Examiner, the following:

> • • • The representation of the automobile is disclaimed apart from the mark shown.

In the decision of the Commissioner we find the statement that:

> The applicant has disclaimed any exclusive use of the representation of the front end of the automobile vehicle apart from the mark as shown • • •.

Appellant challenges the accuracy of these statements, and contends that the disclaimer was not of "the automobile shown," but of "the front end of an automotive vehicle apart from the mark shown in the drawing."

The disclaimer is not a part of the record, except that in the reasons of appeal error is alleged:

> (7) In holding that applicant's disclaimer:
>
> "Without waiver of any of its common-law rights, applicant hereby disclaims the exclusive use of the representation of the front end of an automotive vehicle apart from the mark shown in the drawing",
>
> is a disclaimer of the automotive vehicle shown in the drawings.

The disclaimer, whatever it was, should, of course, have been made a part of the record in order for us to consider this reason of appeal. However, for the purposes of this case, we may assume that appellant's contention as to the wording of the disclaimer is correct.

Registration of the mark was refused by the Patent Office tribunals upon the ground that the mark is descriptive of the goods to which it is applied. Accordingly, the application was rejected, and from such rejection this appeal is taken.

Appellant contends:

1. That the representation of the front end of any automobile is a representation of appellant's "own unique automobile."

2. That the use of the hexagonal figure enclosing the representation of the front end of the automobile makes the mark a composite one and, as such, it does not consist "merely in devices which are descriptive of the goods with which they are used • • • ".

In its brief appellant states:

> Applicant's motor cars are identified the world over by the peculiar and unique mounting of the headlights on the front fenders, with the shell of the lamp body flowing back and merging in the crown of the fender with a graceful streamline effect. This constitutes a valuable common law right the ownership of which the Patent Office has no authority to deprive applicant. For this reason applicant made disclaimer of "an automotive vehicle", and not of—the motor vehicle—as stated by the First Assistant Commissioner.

Assuming that the foregoing statement as to the characteristics of appellant's motor cars is correct, although there is no proof in the record to support it, appellant does not advise us of the nature of the common-law right claimed by him, or how the rejection of his application would deprive him of his common-law rights if he has any.

In the case of *B. F. Goodrich* v. *Kenilworth Mfg. Co.*, 17 C. C. P. A. (Patents) 1105, 40 F.(2d) 121, 395 O. G. 6, we said:

> The duty of the Commissioner and of this court on appeals from the Commissioner in all cases is simply to determine whether an application meets the statutory requirement so as to be entitled to registration. Registration being granted or refused leaves the parties in interest, with their rights and equities under the common law, legally unaffected, except as they may be enforced under sections 16 and 17, 15 U. S. C. A., sections 96 and 97.

So far as the issue here is concerned, we can see no merit in appellant's contention that there is any distinction between a representation of *the* automobile made by appellant and a representation of *an* automobile. In either case the representation is purely descriptive, and it is immaterial, so far as registration is concerned, that the representation shown in appellant's mark is descriptive of only the automobile made by it. Standing alone, the representation here involved is of the class which consists "merely in • • • devices which are descriptive of the goods with which they are used," and registration thereof is barred by section 5 of said trade-mark act.

With regard to appellant's second contention, that the combination of the hexagonal figure and the pictorial representation makes the mark a composite one which is not "merely" descriptive, we are clear that it is without merit.

In the brief of appellant it is stated that:

> Applicant has given a setting to this distinctive feature of its goods by adopting a hexagonal figure as a frame. *This was done to create a pictorial field and a hexagonal frame was adopted because it tends to enhance the perspective of the unique front of applicant's car.* Apolicant was fully aware that others had used a hexagon in connection with automobiles and parts thereof. It knew that such use was so common that this well known geometric figure was *publici juris*, the same as are squares, ovals, ellipses, circles, rhombs, crescents, stars, and the like. But applicant is not seeking to register this common geometrical figure. It is seeking to register a composite mark. • • • (First italics ours.)

The foregoing is a frank statement of the purpose of the use of the hexagonal figure.

That a composite mark should be considered as a whole and not dissected is well established. *The Celotex Co.* v. *Millington*, 18 C. C. P. A. (Patents) 1484, 49 F.(2d) 1053, 413 O. G. 279.

In the case of *In re Plymouth Motor Corporation*, 18 C. C. P. A. (Patents) 838, 46 F.(2d) 211, 404 O. G. 269, we had occasion to consider the meaning of the word "merely" as used in section 5 of the Trade-Mark Registration Act of February 20, 1905, and we there cited the case of *Hercules Powder Co.* v. *Newton*, 266 Fed. 169, which held that "'merely descriptive' means only descriptive, or nothing more than descriptive."

Viewing appellant's mark as a whole, it is clearly "merely" descriptive. The observer of the mark would attach no importance to the hexagonal figure, admittedly in common use, and its only purpose is more clearly to enll attention to the pictorial representation of the automobile, thus emphasizing the descriptiveness of the mark, or, to use the language of appellant's brief, "enhance the perspective of the unique front of applicant's car."

We are clear that appellant's mark is merely descriptive of the goods to which it is applied, and the decision of the Commissioner of Patents is affirmed.

Affirmed.

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1,263,499, Whiting & Logan, Bottom filler for boots and shoes, D. C. Mass., Doc. E. 3447, *The Elhide Co.* v. *Hyman Golden (Golden Leatherboard Co.)*. Injunction May 10, 1932.

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1,293,897, D. W. Parker, Stone saw; 1,539,259, J. A. Hall, same, D. C. Vt. (Burlington), Doc. 110, *The Parker Rotary Stone Saw Co.* v. *Lane Mfg. Co.* Patent 1,539,259 withdrawn June 25, 1931, claims 1 and 2 of 1,293,897 held invalid and not infringed May 2, 1932.

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1,451,491, S. H. Calkins, Pattern and guide strip, appeal filed May 5, 1932, C. C. A., 2d Cir., Doc. 12114, *Traitel Marble Co.* v. *Manhattan Terrazo Brass Strip Co., Inc.*

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1,533,858, L. A. Hazeltine, Method and means for neutralizing capacity coupling in audions, D. C., S. D. N. Y., Doc. E 54/122, *Hazeltine Corp.* v. *General Motors Radio Corp. et al.* Consent decree for plaintiff (notice May 4, 1932).

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Re. 17,405. (See 1,283,109.)

Des. 84,689, E. W. Freudenberg, Embroidered textile fabric, filed May 5, 1932, D. C., S. D. N. Y., Doc. E 67/186, *Amreim-Freudenberg Co., Inc.*, v. *Schwarz & Mack, Inc.*

Des. 86,021, G. Goldberg, Torchère, filed Apr. 27, 1932, D. C., S. D. N. Y., Doc. E 67/95, *G. Goldberg* v. *Aljac Art Metal Products Corp.*

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 28, 1932

[VOL. 419. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 320,935. EARL C. KILLMER, doing business as Killmer's Northern Nurseries, St. Paul, Minn. Filed Nov. 9, 1931.

PRO-TEK-PAK

The word "Pak" is disclaimed apart from the mark as shown in the drawing.

For Plant Packages Comprising Growing Plants and Cartons Within Which the Growing Plants Are Contained.

Claims use since Oct. 25, 1931.

Ser. No. 325,636. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed Mar. 30, 1932.

OKON

For Plastic or Moldable Material Sold as Such and Adapted for the Manufacture of Various Industrial Products.

Claims use since Mar. 2, 1932.

Ser. No. 326,293. WALTER LEE MORRACHER CORPORATION, New York, N. Y. Filed Apr. 20, 1932.

Lyo Lene Lizard

No claim is made to the exclusive use of the word "Lizard" apart from the other features shown in the mark.

For Tanned Reptile Skins.

Claims use since Feb. 8, 1932.

Ser. No. 326,433. F. RYNVELD & SONS, New York, N. Y. Filed Apr. 23, 1932.

SHUR BLOOM

No registration rights are claimed for the words "Shur-Bloom" apart from the mark as shown.

For Vegetable and Flower Seeds, Bulbs, and Flowers.

Claims use since Jan. 15, 1932.

Ser. No. 326,500. SHELLBUILDER, INC., Houston, Tex. Filed Apr. 25, 1932.

Shellbuilder

The conventional lining is used to indicate the color red.

For Crushed Oyster Shell for Poultry Feed.

Claims use since Oct. 21, 1930.

Ser. No. 327,324. STONEGA COKE & COAL COMPANY, Philadelphia, Pa. Filed May 21, 1932.

DENDRON

For Coal.

Claims use since May 5, 1932.

Ser. No. 327,365. WILLIAM LICHTENSTEIN, doing business as Tinklebell Products Co. and Fudo Psyllium Corp., New York, N. Y. Filed May 23, 1932.

TINKLEBELL

For Bird Gravel.
Claims use since Mar. 31, 1932.

Ser. No. 327,413. THE PHILADELPHIA SEED COMPANY, Philadelphia, Pa. Filed May 24, 1932.

SPLENDORLAWN

For Grass Seed.
Claims use since Mar. 2, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 311,633. WEST DISINFECTING COMPANY, Long Island City, N. Y. Filed Mar. 2, 1931.

CN

The essential feature being the letters "CN" within a border or frame.

For Cleaning Preparations of General Utility in Liquid, Paste, and Powder Form, Dry Cleaner, Floor Cleaner, Hand Cleaner, Woodwork Cleaner, Glass Cleaner, Enamel Cleaner, Porcelain Cleaner, Metal Polish, Stove Polish, Disinfecting Soap, Sweeping Powder, Abrasive Powdered Material for Cleaning Bowls, Pipes, and the Like; Soap in Solid, Powdered, Liquid, and Paste Form.
Claims use since July 15, 1899.

Ser. No. 325,834. TWENTIETH CENTURY MANUFACTURING CO., Cedar Rapids, Iowa. Filed Apr. 5, 1932.

Teutonic

For Cleaner in Paste and Powder Form for Porcelain, Enamel, Glass, Cooking Utensils, Painted Woodwork, Refrigerators, Linoleum, Mirrors, Automobiles, Painted Walls, Tile and Metal.
Claims use since Oct. 15, 1931.

Ser. No. 326,945. MAISON JEURELLE, INC., Jersey City, N. J. Filed May 10, 1932.

Maison Jeurelle

For Toilet Soap.
Claims use since Mar. 16, 1932.

Ser. No. 327,206. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn. Filed May 17, 1932.

NOMAR

For Soaps.
Claims use since May 5, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 285,573. LIQUID DEHYDRATION CORPORATION, Chicago, Ill., assignor, by mesne assignments, to Dee-Hy Products Company, Chicago, Ill., a Corporation of Delaware. Filed June 14, 1929.

DEE-HY

For Soda Ash, Tannin Extracts, Lime and Aluminum Compounds and Earthy Products Used as Insecticides.
Claims use since September, 1928.

Ser. No. 285,901. GASTON TAIEB, Philadelphia, Pa. Filed June 21, 1929.

Gaston de Paris

For Cleansing Creams, Cold Creams, Hand Creams, Foundation Creams, Tissue Creams, Pore Creams, Creams for Treating the Wrinkles Around the Eyes, and Toilet Creams; Talcum Powders, Dusting Powders, and Toilet Powders; Lip Sticks, Rouges, Eye Shadows, Mascara, Astringents, Skin Tonics, Muscle Oils, Toilet Waters, and Hair Tonics; Perfumes and Face Powders.
Claims use since Dec. 1, 1928.

Ser. No. 311,828. DR. PIERRE CHEMICAL COMPANY, doing business as Spaz Mineral Company, Chicago, Ill. Filed Mar. 6, 1931.

Bathaway

For Reducing Bath Salts.
Claims use since Mar. 1, 1926.

Ser. No. 313,900. AMERICAN NICOTON CORPORATION, New York, N. Y. Filed Apr. 28, 1931.

Nicoton

For Liquid Preparation to be Applied to Tobacco, Cigars, Cigarettes, and the Like Before Smoking to Intercept the Nicotine.
Claims use since Apr. 25, 1931.

Ser. No. 319,793. WECOLINE PRODUCTS INC., New York, N. Y. Filed Oct. 6, 1931.

WECOLINE

For Fatty Acids from Tallow, Fish Oil, Whale Oil and Fatty Acids from Vegetable Oils—Namely, Oil of Peanut, Corn, Cocoanut, Castor, Palm, and Wood Oil.
Claims use since Jan. 2, 1931.

Ser. No. 320,942. SCHERING CORPORATION, New York, N. Y. Filed Nov. 9, 1931.

Neo-Iopax

For Preparation for Internal Use for the Purpose of Facilitating the Taking of X-Ray Pictures of Internal Organs.
Claims use since June 1, 1931.

Ser. No. 322,667. WIEBOLDT STORES, INC., Chicago, Ill. Filed Jan. 2, 1932.

Olaf's

For Cod Liver Oil.
Claims use since Oct. 13, 1927.

Ser. No. 323,493. HAPPY DREAM BEAUTY PREPARATIONS CO., New York, N. Y. Filed Jan. 27, 1932.

Happy Dream

For Complexion Powder, Toilet Powder, Nail Polish, Cleansing Cream, Tissue Cream, Astringent Lotion, Toilet Water, Lip Stick, Rouge, Healing Ointment, Muscle Oil, Oil for Preventing and Removing Wrinkles, Preparation for Removing Warts, Perfume, Sachets, Deodorant, and Bath Salts.
Claims use since Nov. 7, 1931.

Ser. No. 323,663. WIRLIE M. HUNTER, Gold Beach, Oreg. Filed Feb. 1, 1932.

Py-Re-Kil

For Preparation for the Treatment of Pyorrhea.
Claims use since Dec. 10, 1931.

Ser. No. 324,815. CLAUDE S. ALLEN, doing business as Enzer Remedy Company, Coral Gables, Fla. Filed Mar. 5, 1932.

Enzer

For Medicinal Preparation for Athlete's Foot or Ringworm of the Feet.
Claims use since Feb. 18, 1932.

Ser. No. 325,592. EDWARD J. MOORE SONS, INC., Long Island City, N. Y. Filed Mar. 28, 1932.

Floradora

For Preparation for the Treatment of Inflammation Pelvic Congestions, Leucorrhea, Vaginitis, Cervicitis, and for the Prevention of Venereal Diseases.
Claims use since Jan. 14, 1932.

Ser. No. 325,846. C. B. DOLGE COMPANY INC., Westport, Conn. Filed Apr. 6, 1932.

DOLCO

For Insecticides, Rodenticides, Germicides, Solvents for Cleaning Greasy Walls and Woodwork and Removal of Chewing Gum, Disinfectants and Deodorizers, None of the Foregoing Made of or Containing Paradichlorbenzene as an Ingredient or Used in Connection with the Production of, or for the Protection of Agricultural, Floricultural or Horticultural Products.
Claims use since 1926.

Ser. No. 325,941. OLUF DALSBO, doing business as Kleereeze Company, Rochester, Minn. Filed Apr. 9, 1932.

DR. DALSBO'S

Kleereeze

For Liquid Preparation for External Application for Certain Abnormal Conditions of the Skin—Namely, Ring-Worm, Athlete's Foot, Barber's Itch, Superficial Pimples, Acne, Non-Specific Irritations and Eruptions of the Skin.
Claims use since Mar. 4, 1932.

Ser. No. 325,961. LOUIS WASHTIEN, Brooklyn, N. Y. Filed Apr. 9, 1932.



For Skin Salve in the Form of Medicated Preparation for Outward Application Used for Sunburn, Sores, to Smooth and Heal the Skin, and for Prickly Heat.
Claims use since Mar. 1, 1932.

Ser. No. 326,060. SULFORALL PRODUCTS LTD., Hollywood, Calif. Filed Apr. 13, 1932.

SULFORALL

For Preparation for Preparing Sulphur Baths.
Claims use since July 1, 1931.

Ser. No. 326,121. THE WHITE TAR COMPANY OF NEW JERSEY, INC., Kearny, N. J. Filed Apr. 14, 1932.

BIF

For Insecticides.
Claims use since June 21, 1930.

Ser. No. 326,186. HERCULES POWDER COMPANY, Wilmington, Del. Filed Apr. 16, 1932.

ABALYN

For Ester of Rosin.
Claims use since Apr. 8, 1932.

Ser. No. 326,187. HERCULES POWDER COMPANY, Wilmington, Del. Filed Apr. 16, 1932.

HERCOLYN

For Ester of Rosin Treated so as to Retard Its Susceptibility of Oxidation.
Claims use since Oct. 12, 1931.

Ser. No. 326,191. PROFESSIONAL LABORATORIES, INCORPORATED, Richmond, Va. Filed Apr. 16, 1932.

BANS

For Medicinal Preparation Used in the Treatment of Headaches, Neuralgia, Muscular Pains, Simple Colds, and Similar Complaints.
Claims use since Feb. 19, 1932.

Ser. No. 326,196. SLENDRESS LABORATORIES, Dallas, Tex. Filed Apr. 16, 1932.



The descriptive words "Cream" and "Keep Slim With" are disclaimed apart from the mark as shown.
For Flesh Reducing Composition.
Claims use since Jan. 26, 1932.

Ser. No. 326,391. ROBERT MCNEIL, Philadelphia, Pa. Filed Apr. 22, 1932.

Sulphen

For Preparation for Promoting the Granulation and Healing of Wounds.
Claims use since May 7, 1930.

Ser. No. 326,613. BARBARA LEE, Maplewood, Mo. Filed Apr. 29, 1932.

Barbara Lee

ANCIENT NIGHT

The name "Barbara Lee" being a facsimile of the signature of the applicant.
For Skin or Tissue Cream.
Claims use since Apr. 1, 1932.

Ser. No. 326,649. FRANK SALATO, St. James, N. Y. Filed Apr. 30, 1932.



LA TOSA

The portrait forming a part of the mark illustrated in the drawing is a draftsman's representation of an actual picture of the applicant, Frank Salato.
For Preparation for Treating Dandruff and Falling Hair.
Claims use since Jan. 2, 1932.

Ser. No. 326,668. BROTHERS CORPORATION, Brooklyn, N. Y. Filed May 2, 1932.

HEMOCOIDS

For Bland Non-Narcotic Suppository for Piles.
Claims use since Jan. 8, 1932.

Ser. No. 326,684. KAYLENE, LIMITED, London, England. Filed May 2, 1932.

KAYLENE-OL

For Medicinal Preparations for Human Use for the Treatment of Indigestion, Rheumatism, Toxæmia, Colitis and All Forms of Chronic Intestinal Stasis.
Claims use since January, 1926.

Ser. No. 326,689. NYAL COMPANY, Detroit, Mich. Filed May 2, 1932.

Pylora

For Tooth Powder.
Claims use since Feb. 10, 1932.

Ser. No. 326,723. THE MOUNTAIN VARNISH & COLOR WORKS, INC., Toledo, Ohio. Filed May 3, 1932.

PRO-TEK

For Preparation in the Form of a Cream for Use in Protecting the Skin from Paint, Varnish, Grease, Oils, and Acid.
Claims use since Mar. 15, 1932.

Ser. No. 327,272. DRYOLET MFG. CO., St. Louis, Mo. Filed May 20, 1932.

Dry Olet

For Shampoo.
Claims use since June 26, 1929.

Ser. No. 327,338. FORTUNATO CALABRO, Berwick, Pa. Filed May 23, 1932.

F. Calabro

The trade mark is the signature of the applicant.
For Liniment for the Treatment of Rheumatism, Colds, and Headaches.
Claims use since January, 1929.

CLASS 10

Fertilizers

Ser. No. 325,987. MENDERTH, INC., Boston, Mass. Filed Apr. 11, 1932.

MENDERTH

For Plant Food Made from Finely Pulverized, Bland, Primal Earth-Minerals.
Claims use since Mar. 31, 1932.

Ser. No. 325,988. MENDERTH, INC., Boston, Mass. Filed Apr. 11, 1932.



The representation of the individual shown on the drawing is fanciful.
For Plant Food Made from Finely Pulverized, Bland, Primal Earth Minerals.
Claims use since Mar. 31, 1932.

Ser. No. 327,244. C. E. BUELL, INC., Boston, Mass. Filed May 19, 1932.

TWO-IN-ONE

For Agricultural Fertilizers.
Claims use since Apr. 1, 1930.

CLASS 12

Construction Materials

Ser. No. 318,126. CEMENT-GUN COMPANY, INC., Wilmington, Del., and Allentown, Pa. Filed Aug. 19, 1931.

GUNITE

For Cementitious Material for Stack Construction and Repair, Zoological Dens, Cementitious Material for Surfacing and Backing of Dams, Gutters and Canals, Cement, Mortar, Concrete, Reinforced Concrete, Walls of Cementitious Material, Cement Floors, Cement and Concrete to be Applied to Walls and Floors, Cement Building-Blocks, Chimneys, Cornices, and Moldings, Interior Partitions, Window and Door Sills, Cement Material for Incasing Steel Girders and Bridges, Cement Material for Protection of Metal Pipe, Concrete Slabs and Pipe, Roofing Slabs, Cement Coal-Bunker Linings, Stucco to be Applied or Used on Brick, Tile, Lath and Other Wall Surfaces, Cement Linings to be Applied in Mine-Shafts, Tunnels, and Cellars.

Claims use since August, 1914.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 319,467. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Filed Sept. 28, 1931.

AMERICAN GLIDDEN

No claim is made to the exclusive use of the word "American" apart from the mark as shown. Applicant is the owner of Registered Trade-Mark 85,639, issued Mar. 5, 1912, under the 10-year proviso of the act of Feb. 20, 1905.

For Wire Fencing, and Particularly Barbed Wire.

Claims use since Mar. 23, 1909.

Ser. No. 326,735. "AUTOMATIC" SPRINKLER CORPORATION OF AMERICA, Cleveland, Ohio. Filed May 4, 1932.

SUPROTEX

For Automatic Sprinkler Systems for Fire Protection, and Parts Thereof—Namely, Adapters, Alarm Valves, Automatic Releases, Air Tubing, Ball Drips, Ceiling Plates, Fire Extinguishing Sprinklers, Check Valves, Compression Couplings, Compression Fittings, Compensating Vents, Drum Drips, Deluge Valves, Automatic Air Releasing Valves, Expansion Joints, Fuse Links, Floor Plates, Floor Sleeves, Hydraulic Valves, Hose Valves, Manual Pulls, Mercury Air Checks, Outside Alarm Covers, Pipe Hangers, Pipe Hanger Inserts, Pipe, Pipe Supports, Metal Pipe Fittings, Post Indicator Valves, Roller Fittings, Sight Drains, Steamer Connections, Steamer Connection Caps, Metal Direction Plates, Wall Plates, and Air Supply Respirators for Sprinkler Pipe Systems.

Claims use since Oct. 27, 1931.

Ser. No. 327,113. WILLIAM THORESEN, doing business as Wm. Thoresen Co., Chicago, Ill. Filed May 14, 1932.

THOR-PRODUCTS

No claim being made to the exclusive use of the word "Products" apart from the mark as shown.

For Metal Decorations for Caskets.

Claims use since Apr. 1, 1931.

Ser. No. 327,199. POLAR WARE COMPANY, Sheboygan, Wis. Filed May 17, 1932.



The words "Sheboygan Enamelware" are disclaimed apart from the other features shown on the drawing.

For Vitreous Enamel Pots, Pans, and Kettles for Cooking, Sanitary, and Storage Purposes for Use in the Home, Restaurant, and Hospital.

Claims use since Apr. 10, 1932.

CLASS 14

Metals and Metal Castings and Forgings

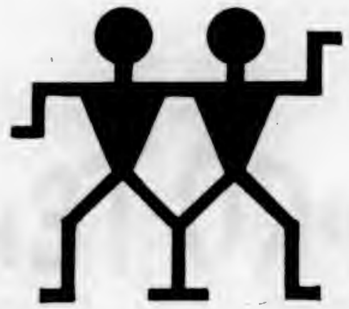
Ser. No. 323,332. J. A. HENCKELS, Solingen, Germany. Filed Jan. 23, 1932.

Twin Works

For Steel, Iron, Lead, Zinc, and Copper.

Claims use since March, 1899.

Ser. No. 323,333. J. A. HENCKELS, Solingen, Germany. Filed Jan. 23, 1932.



For Steel, Iron, Lead, Zinc, and Copper.

Claims use since June, 1731.

Ser. No. 324,936. DRIVER-HARRIS COMPANY, Harrison, N. J. Filed Mar. 9, 1932.

Nilvar

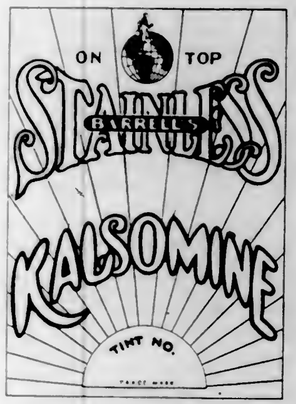
For Nickel-Iron Alloys in Various Forms.

Claims use since Feb. 19, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 316,627. CHARLES BARRELL, Tampa, Fla. Filed July 6, 1931.



The use of the words "Stainless", "Kalsomine", "Tint No.", and "Trade Mark" is disclaimed apart from the mark as shown on the drawing.

For Kalsomine.

Claims use since June 8, 1931.

Ser. No. 325,190. WALTER T. TERRY, Jr., doing business as The Best Products Co., Kansas City, Mo. Filed Mar. 14, 1932.

LUSTRMAX

Polish

The word "Polish" is hereby disclaimed apart from the mark as shown on the drawing.

For Floor and Furniture Wax and Polish.

Claims use since Dec. 1, 1931.

Ser. No. 326,621. CONTINENTAL CAR-NA-VAR CORPORATION, Brazil, Ind. Filed Apr. 27, 1932.

CONTINENTAL "18"

For Liquid Polish for All Kinds of Floors.

Claims use since Jan. 18, 1932.

Ser. No. 326,991. SHELL OIL COMPANY, San Francisco, Calif. Filed May 11, 1932.

SANGAJOL

For Turpentine Substitute and Paint Thinner.

Claims use since Aug. 22, 1931.

CLASS 17

Tobacco Products

Ser. No. 327,309. FEDERAL CIGAR COMPANY, Red Lion, Pa. Filed May 21, 1932.

BALLY-HOO

For Cigars.

Claims use since Sept. 1, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 326,300. QUAKER STATE OIL REFINING CO., Oil City, Pa. Filed Apr. 20, 1932.

QUAKER STATE

For Mechanical Device Upon Which to Record Oil Servicing for Vehicles.

Claims use since Mar. 29, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 323,522. BRITE-BEAM LAMP CORP., Chicago, Ill., assignor to Armstrong & Martin, Inc., Chicago, Ill., a Corporation of Illinois. Filed Jan. 28, 1932.



No claim is made to the representation of a lamp bulb apart from the mark shown in the drawing.
For Electric Light Bulbs.
Claims use since Apr. 15, 1931.

Ser. No. 326,372. L. KLEIN, INC., Chicago, Ill. Filed Apr. 22, 1932.



Applicant disclaims the words "L. Klein—Chicago" apart from the mark shown in the drawing. The representation of a name plate is disclaimed.
For Radio Receiving Sets.
Claims use since Feb. 15, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 309,339. SAMUEL FELTYBERGER, Pittsburgh, Pa. Filed Dec. 26, 1930.

U-KAN

For Portable and Stationary Golf Games Sold as a Unit.
Claims use since July 1, 1930.

Ser. No. 320,157. CELEBRITY PRODUCTIONS, INC., New York, N. Y. Filed Oct. 17, 1931.



FLIP THE FROG

For Toy Books.
Claims use since Sept. 8, 1931.

Ser. No. 324,628. SHAPLEIGH HARDWARE COMPANY, doing business as Diamond Mfg. Co., St. Louis, Mo. Filed Feb. 29, 1932.

SILVER KING

For Fish Lines.
Claims use since July, 1930.

Ser. No. 326,371. K. & S. SALES COMPANY, INC., Chicago, Ill. Filed Apr. 22, 1932.



For Coin-Controlled, Ball-Projecting Amusement Games, Being Mechanical Spring Devices Whereby the Operator, by Means of Exerting His Skill, Causes a Lever to Propel a Ball Upon the Device into Indented Numbered Places Upon the Device in Order to Obtain the Highest Possible Score.
Claims use since Mar. 14, 1932.

Ser. No. 326,405. WILLIAM WELLIS, doing business as "Bridgeco", New York, N. Y. Filed Apr. 22, 1932.

VEST POCKET

For Card Game Accessory Consisting of a Game Board for Use with a Deck of Cards in the Working Out and Solving of Problems in Various Card Games.
Claims use since Mar. 20, 1932.

Ser. No. 326,947. MASTER BRIDGE INSTITUTE, INC., New York, N. Y. Filed May 10, 1932.

Master

For Playing Cards and Playing Card Dealing Accessories—Namely, Deal Boxes and Deal Cards.
Claims use since Apr. 7, 1932.

Ser. No. 327,023. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed May 12, 1932.

GRAND CAMELOT

For Board Game, Played with Movable Pieces.
Claims use since May 5, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 326,887. BISSELL CARPET SWEEPER CO., Grand Rapids, Mich. Filed May 9, 1932.

BROAD-WAY

For Carpet Sweepers.
Claims use since Jan. 16, 1932.

Ser. No. 326,889. CHICAGO FLEXIBLE SHAFT COMPANY, Chicago, Ill. Filed May 9, 1932.

SHEARMASTER

For Electric Animal Shears and Parts Therefor.
Claims use since Oct. 1, 1931.

Ser. No. 327,289. OTTO ROTH, INC., Newark, N. J. Filed May 20, 1932.

GIANT

For Safety Razor Blades.
Claims use since May 12, 1932.

CLASS 24

Laundry Appliances and Machines

Ser. No. 326,428. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Apr. 23, 1932.

OUR OWN

Applicant is owner of prior registration No. 252,742, issued Feb. 12, 1929, for the same mark used for washboards.
For Ironing Tables.
Claims use since Jan. 27, 1932.

Ser. No. 326,726. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed May 3, 1932.



No claim is made to the word "Electric" apart from the mark as shown.
For Laundry Washing Machines.
Claims use since Oct. 5, 1931.

Ser. No. 327,150. HORTON MANUFACTURING COMPANY, Fort Wayne, Ind. Filed May 16, 1932.

Mayflower
DEFENDER

For Laundry Washing Machines.
Claims use since Jan. 19, 1932.

Ser. No. 327,151. HORTON MANUFACTURING COMPANY, Fort Wayne, Ind. Filed May 16, 1932.

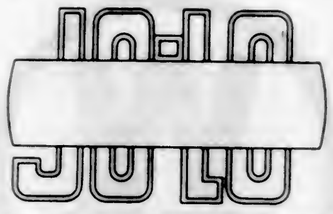
Mayflower
DE LUXE

For Laundry Washing Machines.
Claims use since Jan. 19, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 324,895. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed Mar. 8, 1932.



For Standardizers for Measuring Ingredients in Ice Cream.
Claims use since Jan. 1, 1922.

Ser. No. 326,931. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed May 10, 1932.

BIOPHOR

For Projection and Photographic Lenses.
Claims use since Apr. 29, 1932.

Ser. No. 327,315. KEUFFEL & ESSER COMPANY, Hoboken, N. J. Filed May 21, 1932.

Delac Dupro

Applicant claims ownership of registered trade-mark No. 293,308 issued Apr. 19, 1932.
For Sensitized Black Print Cloth.
Claims use since Feb. 1, 1932.

Ser. No. 327,368. MISSION DRY CORPORATION, LTD., Los Angeles, Calif. Filed May 23, 1932.

Mission

For Measuring Glasses.
Claims use since Apr. 2, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 327,145. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass. Filed May 16, 1932.

COLORBRITE

For Dusting, Wiping, and Polishing Cloths.
Claims use since Jan. 11, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 326,595. THE SAWYER ENGINEERING COMPANY, Milford, Conn. Filed Apr. 28, 1932.

Humidi-Cooler

No claim is made to the word "Cooler" except in the association shown on the drawing.
For Refrigerating Units.
Claims use since Feb. 15, 1932.

Ser. No. 327,076. UNION WADDING COMPANY, Pawtucket, R. I. Filed May 13, 1932.

EXCELSIOR
GLAZED COTTON

No claim is made to the words "Glazed Cotton" apart from the mark as shown.
For Cotton Milk-Strainers and the Material Used in the Same.
Claims use since May 9, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 325,132. AUSTRAL WINDOW COMPANY, Augusta, Me., and New York, N. Y. Filed Mar. 15, 1932.

AUSTRAL

For School Room Wardrobes, Coat Racks, Shelving, and Chalk and Eraser Trays.
Claims use since Jan. 31, 1930.

Ser. No. 326,295. A. I. NAMM & SON, doing business as The Namm Store, Brooklyn, N. Y. Filed Apr. 20, 1932.

Spring-Flex

No registration rights are claimed for the word "Spring."
For Mattresses and Box Springs.
Claims use since Jan. 12, 1932.

CLASS 37

Paper and Stationery

Ser. No. 326,298. OLDMILL PAPER PRODUCTS CORP., Brooklyn, N. Y. Filed Apr. 20, 1932.

CRINKLE

No registration rights are claimed for the word "Crinkle" apart from the mark shown.
For Paper Towels, Paper Napkins, Toilet Paper, Wrapping Paper, Wall-Paper, Paper Fabrics for Skin Cleansing and Cosmetic Removing Purposes.
Claims use since Sept. 25, 1931.

Ser. No. 326,490. NATIONAL BANK NOTE COMPANY, Cleveland, Ohio. Filed Apr. 25, 1932.

ADVISER

For Bond, Ledger, Printing, Writing, Record, and Book Paper and Mailing Envelopes.
Claims use since Feb. 1, 1932.

Ser. No. 327,135. CHESTER M. ANDERSON AND CLARENCE Q. GRAHAM (a Partnership), doing business as The Distribution Systems Company, Washington, D. C. Filed May 16, 1932.

THE
MERCHANDISE
CONTROLLER

For Blank Books.
Claims use since Mar. 14, 1932.

Ser. No. 327,352. FELDER BROS., New York, N. Y. Filed May 23, 1932.

LOOSE LEAF
SNAP-IT
MEMO

No claim being made to the words "Loose Leaf" and "Memo" apart from the mark shown.
For Stationery Supplies—Namely, Memorandum Books, Pads, and Note Books.
Claims use since Apr. 1, 1932.

CLASS 38

Prints and Publications

Ser. No. 322,233. SHELL EASTERN PETROLEUM PRODUCTS, INC., New York, N. Y. Filed Dec. 17, 1931.

In an' out

For Maps or Bulletins.
Claims use since May 1, 1931.

Ser. No. 324,125. SPECIAL LIBRARIES ASSOCIATION, New York, N. Y. Filed Feb. 11, 1932.

SPECIAL LIBRARIES
"Putting Knowledge to Work"

For Monthly Publication.
Claims use since January, 1910.

Ser. No. 324,912. TOWER MAGAZINES INC., Wilkes-Barre, Pa., and New York, N. Y. Filed Mar. 8, 1932.

THE ILLUSTRATED DETECTIVE MAGAZINE
MYSTERY

No claim is made to the words "The Illustrated Detective Magazine" apart from the mark shown.
For Periodical.
Claims use since Feb. 9, 1932.

Ser. No. 326,612. INTELLIGENCER PUBLISHING COMPANY, Edwardsville, Ill. Filed Apr. 29, 1932.

Edwardsville Intelligencer

For Newspaper.
Claims use since Sept. 17, 1868.

Ser. No. 326,628. MONTEE PUBLISHING CO., INC., Baltimore, Md. Filed Apr. 29, 1932.

TURF AND SPORT DIGEST

For Magazine Published Every Month.
Claims use since Aug. 20, 1931.

Ser. No. 326,648. DONALD F. STEWART, New York, N. Y. Filed Apr. 30, 1932.

BOB and BETTY

For Cartoons.
Claims use since Apr. 10, 1932.

CLASS 39

Clothing

Ser. No. 300,385. WESTERN GARMENT MFG. CO., Wichita Falls, Tex. Filed May 12, 1930.

WICHITA
BRAND



Chief of Them All

No claim being made to the word "Brand" apart from the mark as shown on the drawing.

For Men's Overalls and Jumpers, Men's and Ladies' Beach Pants, Men's Pants; Men's Work Shirts, Dress Shirts; Men's Flap Pants, Men's One Piece Work Suits, and Men's Shop Coats.

Claims use since Apr. 1, 1930.

Ser. No. 326,570. WEYENBERG SHOE MFG. CO., Milwaukee, Wis. Filed Apr. 27, 1932.

REDFLASH

For Leather Shoes.

Claims use since Mar. 23, 1932.

Ser. No. 326,822. M. KODANI, doing business as W. R. Honen Co., New York, N. Y. Filed May 6, 1932.

QUIK-SO-FIT

For Aprons.

Claims use since on or about Apr. 4, 1932.

Ser. No. 327,052. FASHION BRASSIERE CO., INC., New York, N. Y. Filed May 13, 1932.

CORSET-LIEU

No claim is made to the word "Corset" apart from the mark shown in the drawing.

For Corsets, Brassières, Garter Brassières, and Foundation Garments, Comprising Corsets and Brassières.

Claims use since Nov. 1, 1931.

Ser. No. 327,232. THE RENOVA CO., St. Petersburg, Fla. Filed May 18, 1932.

RENOVA

For Metal-Less Garters and Hose Supporters.

Claims use since November, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 314,319. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 8, 1931.

Seatex

For Pile Fabrics in the Piece.

Claims use since May 2, 1931.

Ser. No. 321,846. MARSHALL FIELD & COMPANY, Chicago Ill. Filed Dec. 7, 1931.

Superlizarine

For Drapery Fabrics in the Piece, Composed of Cotton, Rayon, Silk, and Wool, or Combinations Thereof.

Claims use since 1911.

Ser. No. 326,306. STERN BROTHERS, New York, N. Y. Filed Apr. 20, 1932.

EVERGLADES

For Textile Rugs.

Claims use since May 29, 1931.

Ser. No. 326,790. POWDRELL & ALEXANDER, INC., Danielson, Conn. Filed May 5, 1932.

FLOUNCETTE

For Piece Goods and Curtains Both of Cotton, Linen, Silk, Rayon, and Combinations Thereof.

Claims use since Apr. 10, 1932.

Ser. No. 327,256. HUGH NELSON-COLUMBIA CARPET MILLS, INC., Philadelphia, Pa. Filed May 19, 1932.

Kardista

For Textile Rugs and Carpets.

Claims use since Apr. 1, 1932.

CLASS 43

Thread and Yarn

Ser. No. 327,181. ASSEMBLED PRODUCTS COMPANY, INC., New York, N. Y. Filed May 17, 1932.

A-P-CO.

For Spools of Thread.

Claims use since Mar. 1, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 284,725. EISEMANN-WERKE AKTIENGESELLSCHAFT, Stuttgart, Germany. Filed May 28, 1929.

FORFEX

For Electric Vibrators, Exercising and Physical-Treatment Apparatus, Therapeutic Lamps, and Machines; Electric Permanent Hair-Waving Machines, Electric Nail Polishers, Electric Hair Blowers, Electric Curling Irons, Electric Massage Apparatus, Electric Hair Drying Apparatus; Hair Singeing Appliances; and Sterilizers for Use in Sterilizing Combs, Brushes, Razors, and the Like.

Claims use since March, 1928.

Ser. No. 318,365. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Filed Aug. 24, 1931.

VIKING

For Hospital and Sick-Room Enameled Ware and Hospital and Sick-Room Rubber Products—Namely, Irrigators, Nasal Douches, Irrigator and Syringe Rubber Tubing, Irrigator and Syringe Attachment Sets, and Irrigator and Syringe Accessories.

Claims use since Oct. 2, 1929.

Ser. No. 326,854. HALLIWELL-SHELTON ELECTRIC CORPORATION, New York, N. Y. Filed May 7, 1932.

KERA-TONIC
curls

The word "Tonic" is disclaimed apart from the mark as shown.

For Pads for Use in Permanent Hair Waving.

Claims use since Feb. 18, 1931.

Ser. No. 326,892. JOANNA FOUTS DAVIS, doing business as Sanitas Fundoshi Company, Cleveland Ohio. Filed May 9, 1932.



In the drawing the ball is lined for red. The words "Sanitas Fundoshi" are hereby disclaimed.

For Suspensory Bandages.

Claims use since Jan. 1, 1896.

Ser. No. 326,921. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa. Filed May 9, 1932.

Denturol

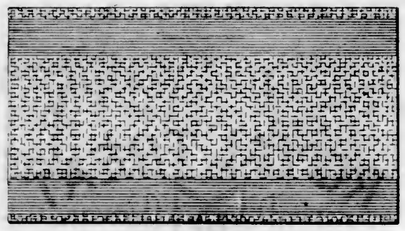
For Base Plates Used in the Manufacture of Artificial Dentures.

Claims use since May 2, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 307,256. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Oct. 28, 1930.



The shading on the drawing indicates the colors yellow and blue.

For Fruit Juices Sold as Soft Drinks.

Claims use since 1918.

Ser. No. 322,529. VINEYARD PRODUCTS CO., Chicago, Ill. Filed Dec. 29, 1931.

Blue Star

The representation of the star constituting a part of the mark depicted in the drawing is lined for the color blue.

For Grape Juices, and Concentrated Powdered Grape Compounds for Preparing Non-Alcoholic Beverages.

Claims use since Sept. 10, 1931.

Ser. No. 322,553. AUGUSTIN TRIGO MEZQUITA, Valencia, Spain. Filed Dec. 30, 1931.

TriNaranjus

For Nonalcoholic, Maltless Beverage Sold as a Soft Drink.

Claims use since Sept. 1, 1931.

Ser. No. 326,491. NEW YORK EXTRACT CO., INC., Philadelphia, Pa. Filed Apr. 25, 1932.

NYECO

For Nonalcoholic, Maltless Syrups and Extracts Used in the Preparation of Soft Drinks.

Claims use since Apr. 14, 1932.

Ser. No. 326,646. JOHN R. POWER, doing business as Galahad Beverage Co., Allston, Mass. Filed Apr. 30, 1932.

SIR GALAHAD

For Soda Water; and Nonalcoholic, Maltless Syrups and Extracts for Making Soft Drinks.

Claims use since Apr. 5, 1932.

Ser. No. 326,727. LON E. WILSON, doing business as Lon E. Wilson Bottling Company, Washington, D. C. Filed May 3, 1932.

ROYAL TREAT

For Non-Alcoholic Maltless Beverages Sold as Soft Drinks.

Claims use since Jan. 1, 1931.

Ser. No. 326,770. LOUIS SAUL HARRIS, doing business as Omeco Sales Products, Brooklyn, N. Y. Filed May 4, 1932.

OMECO

The drawing is lined for red.

For Nonalcoholic, Maltless Beverages, Sold as Soft Drinks and Syrups and Concentrates Used Therefor.

Claims use since Mar. 16, 1931.

Ser. No. 326,954. REED & BELL, INC., Berkeley, Calif. Filed May 10, 1932.

"COLD WHEN ITS HOT" REED & BELL

No claim being made to the representation of the goods except in association shown on the drawing.

For Root Beer and Root Beer Concentrate or Syrup.

Claims use since Mar. 10, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 285,880. PIGGLY WIGGLY CORPORATION, Cincinnati, Ohio. Filed June 20, 1929.

RED GOOSE

For Canned Vegetables and Canned Fish.

Claims use since the spring of 1922.

Ser. No. 302,079. STEELE-WEDELES COMPANY, Chicago, Ill. Filed May 31, 1930. (Under section 5b of the act of 1905, as amended in 1920.)

SAVOY

For Canned Fruits, Canned Vegetables, Canned Fish, Jams, Jelly Powder, Cheese, Pickles, Catsup, Salad Dressing, Prepared Mustard, Olives, Breakfast Cereals, Canned Soup; Canned Meats—Namely, Chicken a la King, Pigs Foot Tid Bits, Boneless Pigs Feet, Frankfurters, Sliced Dried Beef, Ox Tongues, Pigs Foot Dainties, Tamales, Boned Chicken, Sliced Beef, Lamb Tongues, Chop Suey, Chili Con Carne, and Deviled Ham; Cocoanut, Salted Nuts, Chocolate, Pop Corn, Maraschino Cherries, Sandwich Spread, Orange Marmalade, Capers, Marshmallow Creme, Apple Butter, Peach Butter, Chili Sauce, Worcestershire Sauce, Tartar Sauce, Hot Sauce, Cocktail Sauce, Red Pepper Sauce, Mint Sauce, Barbecue Sauce, Fruit Juices for Food Purposes, Sauer Kraut Juice, Tomato Juice, Fountain Fruits—Namely, Crushed Strawberries; and Glacé Fruits.

Claims use since 1894 on canned fruits, canned vegetables, canned fish and breakfast cereals; 1895 on pop corn; 1903 on catsup; 1911 on chili sauce and maraschino cherries; 1912 on apple butter; 1914 on olives; 1915 on Jelly powder, canned soup, marshmallow creme and fountain fruits; 1916 on pickles, salad dressing, prepared mustard, capers, Worcestershire sauce, hot sauce, red pepper sauce and mint sauce; 1919 on canned meats; 1920 on cocoanut; 1922 on jams; 1923 on orange marmalade; 1924 on tartar sauce; 1925 on sandwich spread; 1927 on peach butter and sauer kraut juice; 1928 on cheese, chocolate, nuts, barbecue sauce, cocktail sauce and tomato juice; 1929 on fruit juices.

Ser. No. 304,856. DAVIES & SULLIVAN COMPANY, New York, N. Y. Filed Aug. 21, 1930.

AVON



Applicant disclaims the use of the word "Avon" separate and apart from the mark shown.

For Coffee.

Claims use since June 20, 1930.

Ser. No. 314,115. HAMBLIN-METCALFE, LIMITED, Kitchener, Ontario, Canada. Filed May 2, 1931.

Yeastin

For Chocolate and Chocolate Confectionery—Namely, Chocolate Bars.

Claims use since Feb. 2, 1931.

Ser. No. 314,563. THE HUBINGER COMPANY, Keokuk, Iowa. Filed May 14, 1931.

TIGER



Applicant is the owner of registration No. 49,903.

For Corn Starch.

Claims use since Apr. 15, 1903.

Ser. No. 318,992. S. J. LAHMAN, doing business as Fruit-Sno Co., Oklahoma City, Okla. Filed Sept. 12, 1931.

fruit-Sno

No claim is made to the exclusive use of the word "Fruit" apart from the trade-mark shown.

For Frozen Confections and Flavoring Extracts Therefor.

Claims use since Sept. 1, 1931.

Ser. No. 321,382. GEO. A. HORMEL & COMPANY, Austin, Minn. Filed Nov. 21, 1931.

Streak-O-Lean

No claim is made specifically to the word "Lean" excepting in the relationship in which it is shown with the other features of the mark.

For Salt Pork.

Claims use since Nov. 16, 1931.

Ser. No. 323,269. J. O. PITTS, Atlanta, Ga. Filed Jan. 19, 1932.



The representation of the egg is unqualifiedly disclaimed. The wording is disclaimed apart from the mark as shown on the drawing.

For Fresh Eggs.

Claims use since Nov. 8, 1931.

Ser. No. 323,671. K. R. NUTTING, doing business as K. R. Nutting Co., Salinas, Calif. Filed Feb. 1, 1932.

BROKEN DRUM



For Fresh Vegetables—Namely, Lettuce.

Claims use since Sept. 1, 1931.

Ser. No. 324,459. COMMERCIAL MERCHANDISING CORPORATION, Cincinnati, Ohio. Filed Feb. 25, 1932.

DRY-O-DINE

For Frozen, Frosted, Dried, Evaporated, Canned and Fresh Food Products—Namely, Frozen, Dried, and Canned Fish and Sea Foods (Oysters, Clams, Shrimps, Lobster, Scallops, and Mackerel); Meat (Beef, Mutton, Lamb, and Pork), Dressed Poultry; Canned or Bottled String Beans, Lima Beans, Spinach, Peas, Carrots, Tomatoes, Okra, Okra and Tomatoes, Lettuce, Beets, Potatoes, Broccoli, Celery, Fruit, Berries, and Tomato Juice.

Claims use since Jan. 28, 1932.

Ser. No. 324,460. COMMERCIAL MERCHANDISING CORPORATION, Cincinnati, Ohio. Filed Feb. 25, 1932.

CAR-O-DINE

For Frozen, Frosted, Dried, Evaporated, Canned and Fresh Food Products—Namely, Frozen, Dried, and Canned Fish and Sea Foods (Oysters, Clams, Shrimps, Lobster, Scallops, and Mackerel); Meat (Beef, Mutton, Lamb, and Pork), Dressed Poultry; Canned or Bottled String Beans, Lima Beans, Spinach, Peas, Carrots, Tomatoes, Okra, Okra and Tomatoes, Lettuce, Beets, Potatoes, Broccoli, Celery, Fruit, Berries and Tomato Juice.

Claims use since Jan. 28, 1932.

Ser. No. 324,701. ARTHUR DARBOVEN, doing business as J. J. Darboven, Hamburg, Germany. Filed Mar. 2, 1932.



No claim is made herein to any of the descriptive geographical reading matter shown on the drawing, nor to the outline of the container of the goods, except when used in conjunction with the mark shown. This applies to the following wording: "Mexiko, Guatemala, Honduras, Nikaragua, Costa Rica, Panama, Cuba, Cartagena, Columbia, Haiti, Domingo, Maracaibo, Caracas, Venezuela, Brasilien, Arabien, Abessinien, Mokka, Santos, Ceara, Bahia, Minas Geraes, Victoria, Sao Paulo, Rio de Janeiro, Sa Catharina, Sumatra, Java, Timor, Celebes, Menado, Der Veredelte, Und Leicht Bekommliche, Kaffee, Hamburg, Inhalt Netto 200 gr. Rostkaffee, Verkaufspreis Mk. 1.50."

For Coffee.

Claims use since Mar. 28, 1929.

Ser. No. 324,817. BURROUGHS WELLCOME & CO. (U. S. A.) INC., New York, N. Y. Filed Mar. 5, 1932.

'DEXIN'

For Dietary Material Used for Modifying Milk for Infant Feeding and Also as an Article of General Diet.

Claims use since Jan. 18, 1932.

Ser. No. 325,507. BARENGO BROS., Reno, Nev. Filed Mar. 26, 1932.

TEASER

For Fresh Grapes.

Claims use since Feb. 17, 1932.

Ser. No. 325,661. LOUISIANA STATE RICE MILLING COMPANY, INC., Abbeville, La. Filed Mar. 30, 1932.



The applicant disclaims the exclusive use of the phrase "America's Largest Rice Millers" except in the association shown in the drawing.

For Rice.

Claims use since Feb. 3, 1932.

Ser. No. 326,325. JELL PRODUCTS COMPANY, South Milwaukee, Wis. Filed Apr. 21, 1932.

DEW JELL

The word "Jell" is disclaimed apart from the mark as shown in the drawing.

For Preparation of Gelatine for Use in Making Desserts, Salads, or Food Beverages.

Claims use since Jan. 2, 1932.

Ser. No. 326,359. BROADWAY PRODUCTS CORPORATION, Buffalo, N. Y. Filed Apr. 22, 1932.



For Malt Syrup for Baking and Cooking Purposes.

Claims use since 1910.

Ser. No. 326,381. LOVE-ME ICE CREAM COMPANY, Milwaukee, Wis. Filed Apr. 22, 1932.



For Frozen Confection Similar to Sherbet.

Claims use since Mar. 12, 1932.

Ser. No. 326,394. PROSPECT ISLAND FARMING COMPANY, San Francisco and Rio Vista, Calif. Filed Apr. 22, 1932.

PROSPECT

For Fresh Vegetables.

Claims use since Feb. 29, 1932.

Ser. No. 326,402. TONKIN DISTRIBUTING COMPANY, San Francisco, Calif. Filed Apr. 22, 1932.

PALM GARDEN

For Malt Syrup.

Claims use since Feb. 2, 1932.

Ser. No. 326,468. CLARENCE F. GAINES, doing business as Gaines Food Company, Sherburne, N. Y. Filed Apr. 25, 1932.

VITA-GAINES

The drawing is lined for the color blue. The surname "Gaines" is disclaimed apart from the mark as shown on the drawing.
For Puppy and Cat Food.
Claims use since Dec. 7, 1931.

Ser. No. 326,776. BAY STATE MILLING CO., Winona, Minn. Filed May 5, 1932.



In the drawing the picture of a man is fanciful and the lining indicates shading only.
For Wheat Flour.
Claims use since Mar. 25, 1932.

Ser. No. 326,807. JOSEPH DI SANTO, doing business as Di Santo & Company, Duluth, Minn. Filed May 6, 1932.

MAZZINI

For Foods Flavors—Namely, Grenadine Syrup, Tamarind Syrup, and Orgeat Syrup; Also Canned Asparagus Fresh Watermelons, Canned Oysters, Canned Tomato Juice, Strained Honey, and Honey in the Comb; Canned Tuna Fish, Encased Dried Raisins, Semolina Flour, Canned Anchovies, Canned Ripe Peeled Tomatoes.
Applicant is the owner of registrations Nos. 190,672, 227,054, 265,912, 273,576 and 288,187.
Claims use since Dec. 18, 1920.

Ser. No. 326,836. DAVID TURCOTT, doing business as Turcott & Company, Beloit, Wis. Filed May 6, 1932.

Edenfruit

For Candy Confections.
Claims use since Mar. 1, 1932.

Ser. No. 326,850. COSBY-HODGES MILLNG CO. INC., Birmingham, Ala. Filed May 7, 1932.

Mo-Biscuit

No claim is made to the word "Biscuit" apart from the mark as shown.
For Wheat Flour.
Claims use since Feb. 10, 1930.

Ser. No. 327,162. PERCY E. MEYERS, doing business as Flour Mill Products Co., Philadelphia, Pa. Filed May 16, 1932.

OVEN QUEEN

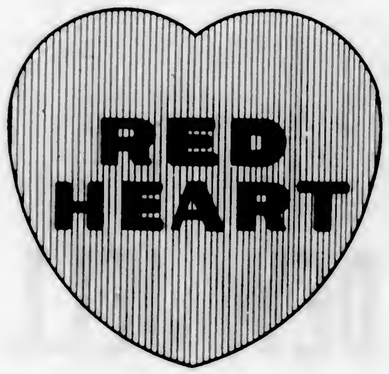
For Wheat Flour.
Claims use since February, 1931.

Ser. No. 327,193. FLOYD L. MARNEY, doing business as Marney Animal Food Co., Huntington Park, Calif. Filed May 17, 1932.

ROWDY

For Dog and Cat Food.
Claims use since Dec. 16, 1931.

Ser. No. 327,195. JOHN MORRELL & CO., Ottumwa, Iowa. Filed May 17, 1932.



The drawing is lined for red.
For Canned Food for Dogs, Cats, Foxes, and Other Carniverous Animals.
Claims use since Apr. 2, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 327,249. THE GARBER BAKING COMPANY, Frederick, Md. Filed May 19, 1932.

"KING OF THE OVEN"

For Bread, Rolls, Cakes, and Pies.
Claims use since May 30, 1924.

Ser. No. 327,251. S. GUMPERT CO., INC., Brooklyn, N. Y. Filed May 19, 1932.

SHORT FELLOWS

For Cakes and Cake Preparations.
Claims use since Mar. 1, 1932.

Ser. No. 327,291. SWIFT AND COMPANY, Chicago, Ill. Filed May 20, 1932.

FORMAY

For Shortening Made from Lard and Vegetable Fats.
Claims use since Apr. 29, 1932.

Ser. No. 327,314. THOMAS J. KENT, Boston, Mass. Filed May 21, 1932.

FUNNY FARM FOLKS

For Candy.
Claims use since Mar. 14, 1932.

Ser. No. 327,387. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y. Filed May 24, 1932.

DAILY MILK

For Stock and Dairy Feed.
Claims use since Sept. 8, 1931.

Ser. No. 327,395. W. B. GRAINGER PACKING COMPANY, Salinas, Calif. Filed May 24, 1932.

RETRIEVER

For Fresh Vegetables.
Claims use since Apr. 13, 1932.

Ser. No. 327,404. NEIGHBOR PRODUCTS COMPANY, Chicago, Ill. Filed May 24, 1932.

BUDDY

For Dog Food.
Claims use since Apr. 28, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 28, 1932

295,262. GASOLINE BURNING LAMPS, LANTERNS, HEATERS, MANTLES, FUEL SUPPLY TANKS, BURNERS, AND PARTS THEREFOR. THE COLEMAN LAMP AND STOVE COMPANY, Wichita, Kans.
Filed February 24, 1931. Serial No. 311,366. PUBLISHED APRIL 12, 1932. Class 34.

295,263. CONCENTRATED MALT SYRUP AS A FOOD PRODUCT. MILLER HIGH LIFE COMPANY, Milwaukee, Wis.
Filed April 8, 1931. Serial No. 313,088. PUBLISHED JUNE 9, 1931. Class 46.

295,264. LADIES' AND CHILDREN'S FELT HATS. HY-HAT MILLINERY, INC., New York, N. Y.
Filed April 22, 1931. Serial No. 313,694. PUBLISHED APRIL 12, 1932. Class 39.

295,265. PREPARED RABBIT FEED. CHAPIN & COMPANY, Hammond, Ind.
Filed May 11, 1931. Serial No. 314,395. PUBLISHED APRIL 12, 1932. Class 46.

295,266. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,803. PUBLISHED APRIL 12, 1932. Class 46.

295,267. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,804. PUBLISHED APRIL 12, 1932. Class 46.

295,268. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,805. PUBLISHED APRIL 12, 1932. Class 46.

295,269. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,807. PUBLISHED APRIL 12, 1932. Class 46.

295,270. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,808. PUBLISHED APRIL 12, 1932. Class 46.

295,271. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed May 20, 1931. Serial No. 314,809. PUBLISHED APRIL 12, 1932. Class 46.

295,272. CHEESE, BUTTER, AND MILK PRODUCTS. SOCIETÀ ANONIMA COOPERATIVA LATTERIA SORESINESE, Soresina, Italy.
Filed May 28, 1931. Serial No. 315,163. PUBLISHED APRIL 12, 1932. Class 46.

295,273. ALL-WOOL BLANKETS. W. S. LIBBEY COMPANY, INC., Lewiston, Me.
Filed June 12, 1931. Serial No. 315,772. PUBLISHED APRIL 12, 1932. Class 42.

295,274. PRESSED STEEL BRAKE STEPS FOR RAILWAY CARS AND LOCOMOTIVES AND ATTACHMENT DEVICES FOR UNCOUPLING RAILWAY CARS. VILOCO RAILWAY EQUIPMENT CO., Chicago, Ill.
Filed June 27, 1931. Serial No. 316,388. PUBLISHED APRIL 12, 1932. Class 19.

295,275. AUTOMATIC COAL OR COKE-FIRED SAND DRIERS. VILOCO RAILWAY EQUIPMENT CO., Chicago, Ill.
Filed June 27, 1931. Serial No. 316,390. PUBLISHED APRIL 12, 1932. Class 34.

295,276. FLEXIBLE PREPARED ROOFING COMPOSED OF FELT IMPREGNATED AND COATED WITH BITUMINOUS COMPOSITIONS IN STRIP, SHINGLE, AND ROLL FORM. THE RUBEROID CO., New York, N. Y., and Bound Brook, N. J.
Filed June 30, 1931. Serial No. 316,509. PUBLISHED APRIL 12, 1932. Class 12.

295,277. COMBINATION OR FOUNDATION GARMENTS CONSISTING OF A CORSET AND BRASSIÈRE IN COMBINATION. VOGUE BRASSIERE MFG. CO., Newark, N. J.
Filed July 28, 1931. Serial No. 317,413. PUBLISHED OCTOBER 6, 1931. Class 39.

295,278. FERTILIZER. SWANN CHEMICAL COMPANY, Birmingham, Ala.
Filed August 3, 1931. Serial No. 317,691. PUBLISHED APRIL 12, 1932. Class 10.

295,279. ELECTRICAL FOOD COOKING APPARATUS IN WHICH THE SUBSTANCE TO BE COOKED CONSTITUTES THE RESISTANCE OR HEAT PRODUCING ELEMENT. ALVIN J. SWANSON, doing business as Sweet-Hot, Inc., Jamestown, N. Y.
Filed October 6, 1931. Serial No. 319,788. PUBLISHED APRIL 12, 1932. Class 21.

295,280. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,047. PUBLISHED APRIL 12, 1932. Class 37.

295,281. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,048. PUBLISHED APRIL 12, 1932. Class 37.

295,282. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,049. PUBLISHED APRIL 12, 1932. Class 37.

295,283. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,050. PUBLISHED APRIL 12, 1932. Class 37.

295,284. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,051. PUBLISHED APRIL 12, 1932. Class 37.

295,285. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,052. PUBLISHED APRIL 12, 1932. Class 37.

295,286. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,053. PUBLISHED APRIL 12, 1932. Class 37.

295,287. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,054. PUBLISHED APRIL 12, 1932. Class 37.

295,288. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 11, 1931. Serial No. 321,055. PUBLISHED APRIL 12, 1932. Class 37.

295,289. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 13, 1931. Serial No. 321,124. PUBLISHED APRIL 12, 1932. Class 37.

295,290. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 13, 1931. Serial No. 321,125. PUBLISHED APRIL 12, 1932. Class 37.

295,291. PARTIALLY BLANK MAILING CARDS SOLD TO THE TRADE AS SUCH. JOSEPH A. VOGEL, Wilmington, Del.
Filed November 13, 1931. Serial No. 321,126. PUBLISHED APRIL 12, 1932. Class 37.

295,292. OIL BURNERS. RHODE ISLAND WELDING COMPANY, INC., Providence, R. I.
Filed November 19, 1931. Serial No. 321,298. PUBLISHED APRIL 12, 1932. Class 34.

295,293. OIL BURNERS. RHODE ISLAND WELDING COMPANY, INC., Providence, R. I.
Filed November 24, 1931. Serial No. 321,474. PUBLISHED APRIL 12, 1932. Class 34.

295,294. COMMON AND TOILET PINS AND SAFETY PINS MADE OF NON-PRECIOUS METAL. WILLIAM PRYM OF AMERICA, INC., New York and Long Island City, N. Y.
Filed December 14, 1931. Serial No. 322,113. PUBLISHED APRIL 12, 1932. Class 40.

295,295. PIPE AND HOSE COUPLINGS, NOZZLES, AND HYDRANTS. EDGAR WARREN WOLFORD, San Jose, Calif.
Filed December 28, 1931. Serial No. 322,489. PUBLISHED APRIL 12, 1932. Class 13.

295,296. JEWELRY NOVELTIES COMPRISING EARRINGS, NECKLACES, BRACELETS, DRESS CLIPS, BROOCHES, PINS, AND SIMILAR ARTICLES OF JEWELRY FOR PERSONAL WEAR, NOT INCLUDING WATCHES. NAT LEVY & COMPANY INC., New York, N. Y.
Filed December 31, 1931. Serial No. 322,593. PUBLISHED APRIL 5, 1932. Class 28.

295,297. THREAD AND YARN. J. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed January 14, 1932. Serial No. 322,987. PUBLISHED APRIL 12, 1932. Class 43.

295,298. THREAD AND YARN. J. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed January 14, 1932. Serial No. 322,989. PUBLISHED APRIL 12, 1932. Class 43.

295,299. BINDING AND FINISHING TAPES, HOOKS AND EYES, CAMISOLE SHOULDER STRAPS, BRAIDS. S. H. KRESS & CO., New York, N. Y.
Filed January 14, 1932. Serial No. 323,009. PUBLISHED APRIL 12, 1932. Class 40.

295,300. METAL PRONG BUCKLES, SLIDE BUCKLES, AND BUTTON LOOPS, NOT MADE OF PRECIOUS METAL. THE WIRE NOVELTY MANUFACTURING COMPANY, West Haven, Conn.
Filed January 15, 1932. Serial No. 323,078. PUBLISHED APRIL 12, 1932. Class 40.

295,301. METAL PRONG BUCKLES, SLIDE BUCKLES, AND BUTTON LOOPS, NOT MADE OF PRECIOUS METAL. THE WIRE NOVELTY MANUFACTURING COMPANY, West Haven, Conn.
Filed January 15, 1932. Serial No. 323,079. PUBLISHED APRIL 12, 1932. Class 40.

295,302. CERTAIN NAMED FURNISHINGS AND NOTIONS. S. H. KRESS & CO., New York, N. Y.
Filed January 25, 1932. Serial No. 323,335. PUBLISHED APRIL 12, 1932. Class 40.

295,303. POWDER PUFFS, DUSTING MITTENS, DISH MOPS, FLOOR MOPS, WHISK BROOMS, WALL BRUSHES, SCRUB BRUSHES, DUSTING BRUSHES, FLOOR BRUSHES, CLOTHES BRUSHES, HAIR BRUSHES, NAIL BRUSHES, TOOTH BRUSHES, COMPLEXION BRUSHES, SHAVING BRUSHES, BATH BRUSHES, PAINT BRUSHES, AND ARTISTS' BRUSHES. S. H. KRESS & Co., New York, N. Y.
Filed January 23, 1932. Serial No. 323,338. PUBLISHED MARCH 15, 1932. Class 29.

295,304. CASTINGS OF BRASS ALLOY. DOEHLER DIE CASTING CO., New York, N. Y.
Filed January 27, 1932. Serial No. 323,484. PUBLISHED APRIL 12, 1932. Class 14.

295,305. SHOES MADE OF LEATHER, FABRIC, AND/OR ANY COMBINATIONS THEREOF. ELCO SHOE MANUFACTURERS, INC., Brooklyn, N. Y.
Filed January 29, 1932. Serial No. 323,573. PUBLISHED APRIL 12, 1932. Class 39.

295,306. WELDING RODS. THE LINDE AIR PRODUCTS COMPANY, New York, N. Y.
Filed January 29, 1932. Serial No. 323,581. PUBLISHED APRIL 12, 1932. Class 14.

295,307. STRIPS OF RUBBER USED FOR EYELASH CURLERS. THE KURLASH COMPANY, INC., Rochester, N. Y.
Filed January 30, 1932. Serial No. 323,623. PUBLISHED APRIL 12, 1932. Class 40.

295,308. SHEET UNITS HAVING WINDOW OPENINGS COVERED WITH TRANSPARENT MATERIAL ESPECIALLY ADAPTED FOR BOOKS OF THE LOOSE LEAF BINDER TYPE. HENRY PLEASANTS, Jr., West Chester, Pa.
Filed January 30, 1932. Serial No. 323,628. PUBLISHED APRIL 12, 1932. Class 37.

295,309. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,674. PUBLISHED APRIL 12, 1932. Class 15.

295,310. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,675. PUBLISHED APRIL 12, 1932. Class 15.

295,311. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,676. PUBLISHED APRIL 12, 1932. Class 15.

295,312. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,677. PUBLISHED APRIL 12, 1932. Class 15.

295,313. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,678. PUBLISHED APRIL 12, 1932. Class 15.

295,314. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,679. PUBLISHED APRIL 12, 1932. Class 15.

295,315. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,680. PUBLISHED APRIL 12, 1932. Class 15.

295,316. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,681. PUBLISHED APRIL 12, 1932. Class 15.

295,317. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,682. PUBLISHED APRIL 12, 1932. Class 15.

295,318. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,684. PUBLISHED APRIL 12, 1932. Class 15.

295,319. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,685. PUBLISHED APRIL 12, 1932. Class 15.

295,320. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,686. PUBLISHED APRIL 12, 1932. Class 15.

295,321. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,688. PUBLISHED APRIL 12, 1932. Class 15.

295,322. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,690. PUBLISHED APRIL 12, 1932. Class 15.

295,323. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,691. PUBLISHED APRIL 12, 1932. Class 15.

295,324. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,696. PUBLISHED APRIL 12, 1932. Class 15.

295,325. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,698. PUBLISHED APRIL 12, 1932. Class 15.

295,326. WEARING APPAREL—NAMELY, MEN'S SHIRTS AND TROUSERS, OVERALLS OR ONE-PIECE SUITS, COATS, SWEATERS, JACKETS, AND CAPS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,705. PUBLISHED APRIL 12, 1932. Class 39.

295,327. RIBBONS MANUFACTURED IN A COMBINATION OF SILK AND RAYON. J. ROSEN & SONS, Paterson, N. J., and New York, N. Y.
Filed February 1, 1932. Serial No. 323,719. PUBLISHED APRIL 12, 1932. Class 42.

295,328. BOOTS AND SHOES OF LEATHER, RUBBER, FABRIC, OR OF ANY COMBINATIONS THEREOF. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y.
Filed February 4, 1932. Serial No. 323,813. PUBLISHED APRIL 12, 1932. Class 39.

295,329. BOOTS AND SHOES OF LEATHER, FABRIC, AND/OR COMBINATIONS THEREOF. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed February 8, 1932. Serial No. 323,941. PUBLISHED APRIL 12, 1932. Class 39.

295,330. GRAIN BINS, SHEEP AND HOG TROUGHS, STORAGE AND STOCK TANKS, BULK OIL STORAGE AND UNDERGROUND OIL STORAGE TANKS, OIL BURNER TANKS, AND PRESSURE TANKS. A. N. EATON, doing business as Eaton Metal Products Company, Omaha, Nebr.; Denver, Colo.; and Billings, Mont.
Filed February 9, 1932. Serial No. 323,990. PUBLISHED APRIL 12, 1932. Class 2.

295,331. CLOCKS, WATCHES, CHRONOMETERS AND CHRONOGRAPHS, AND MECHANISMS RESPONSIVE TO ELECTRICAL CURRENT FOR DRIVING THE SAME, AND PARTS THEREOF. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio.
Filed February 11, 1932. Serial No. 324,067. PUBLISHED APRIL 12, 1932. Class 27.

295,332. STORAGE BATTERIES. MONARK BATTERY COMPANY, INC., Chicago, Ill.
Filed February 13, 1932. Serial No. 324,131. PUBLISHED APRIL 12, 1932. Class 21.

295,333. FELT. THE FELTERS COMPANY, Boston, Mass.
Filed February 17, 1932. Serial No. 324,250. PUBLISHED APRIL 12, 1932. Class 50.

295,334. FORGINGS MADE OF IRON, STEEL, BRASS, BRONZE, AND MONEL METAL. THE ATWATER MANUFACTURING COMPANY, Plantsville, Conn.
Filed February 18, 1932. Serial No. 324,279. PUBLISHED APRIL 12, 1932. Class 14.

295,335. LEATHER AND FABRIC GLOVES. FOWNES BROTHERS & CO. INC., Gloversville, Amsterdam, and New York, N. Y.
Filed February 18, 1932. Serial No. 324,284. PUBLISHED APRIL 12, 1932. Class 39.

295,336. WOMEN'S, MISSES', AND CHILDREN'S HATS. BRIGHTON LADIES HAT CO. INC., New York, N. Y.
Filed February 17, 1932. Serial No. 324,304. PUBLISHED APRIL 12, 1932. Class 39.

295,337. WOMEN'S, MISSES' AND CHILDREN'S HATS. BRIGHTON LADIES HAT CO. INC., New York, N. Y.
Filed February 17, 1932. Serial No. 324,305. PUBLISHED APRIL 12, 1932. Class 39.

295,338. WOMEN'S, MISSES' AND CHILDREN'S HATS. BRIGHTON LADIES HAT CO. INC., New York, N. Y.
Filed February 17, 1932. Serial No. 324,306. PUBLISHED APRIL 12, 1932. Class 39.

295,339. GALVANIZED STEEL SHEETS. THE EASTERN ROLLING MILL COMPANY, Baltimore, Md.
Filed February 19, 1932. Serial No. 324,310. PUBLISHED APRIL 12, 1932. Class 14.

295,340. COPPER BEARING GALVANIZED STEEL SHEETS. THE EASTERN ROLLING MILL COMPANY, Baltimore, Md.
Filed February 19, 1932. Serial No. 324,311. PUBLISHED APRIL 12, 1932. Class 14.

295,341. PERIODICAL. DENTAL SURVEY, INC., Minneapolis, Minn.
Filed February 23, 1932. Serial No. 324,371. PUBLISHED APRIL 12, 1932. Class 38.

295,342. LUBRICATING OILS AND GREASES. THE LUBRI-GRAPH CORPORATION, Cleveland, Ohio.
Filed February 23, 1932. Serial No. 324,387. PUBLISHED APRIL 12, 1932. Class 15.

295,343. FINGER RINGS AND WEDDING RINGS. ABRAHAM SAGER, doing business as Paramount Wedding Ring Co., Chicago, Ill.
Filed February 23, 1932. Serial No. 324,400. PUBLISHED APRIL 12, 1932. Class 28.

295,344. ELECTRIC PANELBOARDS AND ELECTRIC CONTROL BOARDS. SQUARE D COMPANY, Detroit, Mich.
Filed February 23, 1932. Serial No. 324,405. PUBLISHED APRIL 12, 1932. Class 21.

295,345. WOMEN'S SHOES MADE OF TEXTILES AND FABRICS. O'CONNOR & GOLDBERG, Chicago, Ill.
Filed February 20, 1932. Serial No. 324,417. PUBLISHED APRIL 12, 1932. Class 39.

295,346. PERIODICAL. AMERICAN BUILDER PUBLISHING CORPORATION, New York, N. Y.
Filed February 24, 1932. Serial No. 324,420. PUBLISHED APRIL 12, 1932. Class 38.

295,347. SILK AND RAYON CREPES IN THE PIECE. BENROSE SILK MFG. CORP., New York, N. Y.
Filed February 24, 1932. Serial No. 324,424. PUBLISHED APRIL 12, 1932. Class 42.

295,348. COMIC SECTION. KING FEATURES SYNDICATE, INC., New York, N. Y.
Filed February 25, 1932. Serial No. 324,471. PUBLISHED APRIL 12, 1932. Class 38.

295,349. QUARTERLY PUBLICATION. THE LAMMERT FURNITURE CO., doing business as Service Dealers Association, St. Louis, Mo.
Filed February 26, 1932. Serial No. 324,533. PUBLISHED APRIL 12, 1932. Class 38.

295,350. LACES IN THE FORM OF PIECE GOODS. VAN RAALTE COMPANY, New York, N. Y.
Filed February 26, 1932. Serial No. 324,544. PUBLISHED APRIL 12, 1932. Class 42.

295,351. WOMEN'S AND MISSES' SUITS, COATS, DRESSES, AND HATS. MORRIS W. HAFT & BROTHERS, INC., New York, N. Y.
Filed February 27, 1932. Serial No. 324,557. PUBLISHED APRIL 12, 1932. Class 39.

295,352. PUBLICATION ISSUED QUARTERLY. THE ASSOCIATION FOR THE STUDY OF NEGRO LIFE AND HISTORY, INC., Washington, D. C.
Filed February 27, 1932. Serial No. 324,580. PUBLISHED APRIL 12, 1932. Class 38.

295,353. NEWSPAPER PUBLISHED WEEKLY. WILLIAM MEREDITH DAWSON, Jr., Madison, Wis.
Filed February 29, 1932. Serial No. 324,594. PUBLISHED APRIL 12, 1932. Class 38.

295,354. BISCUIT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed February 29, 1932. Serial No. 324,601. PUBLISHED APRIL 12, 1932. Class 46.

295,355. PERIODICAL. HOUSEHOLD JOURNAL COMPANY, Batavia, Ill.
Filed February 29, 1932. Serial No. 324,605. PUBLISHED APRIL 12, 1932. Class 38.

295,356. PAPER USED IN THE MAKING OF BAGS. FOR LINING BOXES AND FOR GENERAL WRAPPING PURPOSES. MOSINEE PAPER MILLS COMPANY, Mosinee, Wis.
Filed February 29, 1932. Serial No. 324,620. PUBLISHED APRIL 12, 1932. Class 37.

295,357. MONTHLY MAGAZINE. NATIONAL DUROC RECORD ASSOCIATION, Peoria, Ill.
Filed February 29, 1932. Serial No. 324,621. PUBLISHED APRIL 12, 1932. Class 38.

295,358. WOOLEN PIECE GOODS. BUCKLEY & COHEN, New York, N. Y.
Filed March 1, 1932. Serial No. 324,652. PUBLISHED APRIL 12, 1932. Class 42.

295,359. WOOLEN PIECE GOODS. BUCKLEY & COHEN, New York, N. Y.
Filed March 1, 1932. Serial No. 324,653. PUBLISHED APRIL 12, 1932. Class 42.

295,360. WOOLEN PIECE GOODS. BUCKLEY & COHEN, New York, N. Y.
Filed March 1, 1932. Serial No. 324,654. PUBLISHED APRIL 12, 1932. Class 42.

295,361. PUBLICATION ISSUED MONTHLY. DRUG MARKETS, INC., New York, N. Y.
Filed March 1, 1932. Serial No. 324,662. PUBLISHED APRIL 12, 1932. Class 38.

295,362. WHEAT FLOUR AND SELF-RISING FLOUR. STANLEY KNECHT FLOUR & GRAIN CO. INC., Birmingham, Ala.
Filed March 1, 1932. Serial No. 324,667. PUBLISHED APRIL 12, 1932. Class 46.

295,363. PERIODICAL PUBLICATION. RALPH BOYER, Washington, D. C.
Filed March 2, 1932. Serial No. 324,695. PUBLISHED APRIL 12, 1932. Class 38.

295,364. WRITING INKS. THE CARTER'S INK COMPANY, Cambridge, Mass.
Filed March 2, 1932. Serial No. 324,696. PUBLISHED APRIL 12, 1932. Class 11.

295,365. COAL. DEBARDELEBEN COAL CORPORATION, Birmingham, Ala.
Filed March 2, 1932. Serial No. 324,702. PUBLISHED APRIL 12, 1932. Class 1.

295,366. CAKES, PASTRIES, AND MORE PARTICULARLY MACAROONS. PASTRY PYGMY CORPORATION, Brooklyn, N. Y.
Filed March 3, 1932. Serial No. 324,756. PUBLISHED APRIL 12, 1932. Class 46.

295,367. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 3, 1932. Serial No. 324,732. PUBLISHED APRIL 12, 1932. Class 42.

295,368. SILK PIECE GOODS. H. R. MALLINSON & CO., INC., New York, N. Y.
Filed March 3, 1932. Serial No. 324,751. PUBLISHED APRIL 12, 1932. Class 42.

295,369. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 4, 1932. Serial No. 324,776. PUBLISHED April 12, 1932. Class 42.

295,370. WHEAT FLOUR. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash.
Filed March 4, 1932. Serial No. 324,786. PUBLISHED APRIL 12, 1932. Class 46.

295,371. SHEETS AND PILLOW CASES. W. T. GRANT COMPANY, New York, N. Y., and Lynn, Mass.
Filed March 4, 1932. Serial No. 324,788. PUBLISHED APRIL 12, 1932. Class 42.

295,372. CORNER MOUNTS FOR PHOTOGRAPHS. ACE ART COMPANY, Reading, Mass.
Filed March 5, 1932. Serial No. 324,813. PUBLISHED APRIL 12, 1932. Class 37.

295,373. PANCAKE FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 7, 1932. Serial No. 324,842. PUBLISHED APRIL 12, 1932. Class 46.

295,374. COTTON THREAD AND YARNS. GROVES THREAD COMPANY, INC., Gastonia, N. C.
Filed March 7, 1932. Serial No. 324,929. PUBLISHED APRIL 12, 1932. Class 43.

295,375. COTTON THREAD AND YARNS. GROVES THREAD COMPANY, INC., Gastonia, N. C.
Filed March 7, 1932. Serial No. 324,932. PUBLISHED APRIL 12, 1932. Class 43.

295,376. COTTON THREAD AND YARNS. GROVES THREAD COMPANY, INC., Gastonia, N. C.
Filed March 7, 1932. Serial No. 324,934. PUBLISHED APRIL 12, 1932. Class 43.

295,377. COAL. KILLARNEY SMOKELESS COAL COMPANY, INCORPORATED, Lynchburg, Va.
Filed March 9, 1932. Serial No. 324,965. PUBLISHED APRIL 12, 1932. Class 1.

295,378. STONE PROTECTING PREPARATIONS WHICH ARE USED FOR PROTECTING STONE AGAINST INFLUENCES OF THE ATMOSPHERE. HANS BROSIUS, Frankfort-on-the-Main, Germany.
Filed March 9, 1929. Serial No. 280,469. PUBLISHED SEPTEMBER 17, 1929. Class 12.

295,379. TRACTORS. THE CLEVELAND TRACTOR COMPANY, Cleveland, Ohio.
Filed March 23, 1929. Serial No. 281,195. PUBLISHED APRIL 12, 1932. Class 23.

295,380. WRITING PAPER SHEETS. REINER'S ROTAPRINT, INC., New York, N. Y.
Filed July 24, 1929. Serial No. 287,597. PUBLISHED APRIL 12, 1932. Class 37.

295,381. ELECTRIC SUCTION CLEANERS AND PARTS THEREOF, DUST COLLECTORS, SUCTION NOZZLES AND BRUSHES FOR USE IN CONNECTION WITH SUCH CLEANERS, INSECTICIDE DUSTING APPARATUS FOR USE IN CONNECTION WITH SUCH CLEANERS, AND POLISHING BRUSHES AND PADS FOR USE IN CONNECTION WITH SUCH CLEANERS. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio.
Filed December 4, 1929. Serial No. 293,205. PUBLISHED APRIL 12, 1932. Class 21.

295,382. MEN'S CAPS, WORK SHIRTS, SWEATERS, JUMPERS, AND OVER-ALLS, NOT OF KNITTED MATERIAL. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed December 11, 1929. Serial No. 293,561. PUBLISHED APRIL 12, 1932. Class 39.

295,383. MAGAZINE OR PERIODICAL. TOWER MAGAZINES, INCORPORATED, Wilkes-Barre, Pa., and New York, N. Y.
Filed February 15, 1930. Serial No. 296,209. PUBLISHED MAY 13, 1930. Class 38.

295,384. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed March 14, 1930. Serial No. 297,296. PUBLISHED APRIL 12, 1932. Class 42.

295,385. PREPARED FLOUR, SYRUP, FLAVORS, SPICES, ETC. I. KALFUS Co., New York, N. Y.
Filed August 20, 1930. Serial No. 304,821. PUBLISHED APRIL 12, 1932. Class 46.

295,386. COFFEE AND OLIVES. PALMER HOUSE COMPANY, Chicago, Ill.
Filed September 17, 1930. Serial No. 305,789. PUBLISHED DECEMBER 2, 1930. Class 46.

295,387. LADIES' AND MISSES' DRESSES. FIFTH AVENUE MODES, INC., New York, N. Y.
Filed October 29, 1930. Serial No. 307,316. PUBLISHED APRIL 12, 1932. Class 39.

295,388. SOFT AND STIFF FELT HATS AND CAPS FOR MEN AND BOYS. JOHN B. STETSON COMPANY, Philadelphia, Pa.
Filed November 20, 1930. Serial No. 308,136. PUBLISHED FEBRUARY 17, 1931. Class 39.

295,389. KNITTED SWEATERS, PULL-OVERS, CARDIGANS, DRESSES, BERETS, CAPS, VESTS, BLOOMERS, UNION SUITS, BABY SHIRTS, BATHING SUITS, AND SHORTS FOR CHILDREN, MAIDENS, AND BOYS. ETABLISSEMENTS ANDRÉ GILLIER, SOCIETE ANONYME, Troyes, France.
Filed January 6, 1931. Serial No. 309,637. PUBLISHED APRIL 12, 1932. Class 39.

295,390. OIL BURNERS. THE HUENEFELD COMPANY, Cincinnati, Ohio.
Filed Feb. 9, 1931. Serial No. 310,868. PUBLISHED APRIL 12, 1932. Class 34.

295,391. MAGAZINE PUBLISHED MONTHLY. SYNDICATE PUBLISHING COMPANY, INC., New York, N. Y.
Filed February 14, 1931. Serial No. 311,166. PUBLISHED MARCH 31, 1931. Class 38.

295,392. SMOKERS' PIPES. EMIL M. SPRICH, St. Louis, Mo.
Filed February 19, 1931. Serial No. 311,249. PUBLISHED APRIL 12, 1932. Class 8.

295,393. STRUCTURAL STEEL, LUMBER, DOORS, METAL DECKING, AND TILE DECKING. THE AUSTIN COMPANY, East Cleveland, Ohio.
Filed July 18, 1931. Serial No. 317,064. PUBLISHED APRIL 12, 1932. Class 12.

295,394. CHEESE. ROETHLISBERGER & SOHN, Langnau, Switzerland.
Filed October 28, 1931. Serial No. 320,553. PUBLISHED APRIL 12, 1932. Class 46.

295,395. BREAD AND CAKE. HANKEY BAKING COMPANY, McKees Rocks, Pa.
Filed November 21, 1931. Serial No. 321,407. PUBLISHED APRIL 12, 1932. Class 46.

295,396. SOY BEAN FLOUR. SHELLABARGER GRAIN PRODUCTS COMPANY, Decatur, Ill.
Filed January 7, 1932. Serial No. 322,809. PUBLISHED APRIL 12, 1932. Class 46.

295,397. PINE TAR. LOUISIANA PINE PRODUCTS COMPANY, INC., Shreveport, La.
Filed January 9, 1932. Serial No. 322,847. PUBLISHED APRIL 12, 1932. Class 1.

295,398. EGGS. NATIONAL POULTRY RESEARCH LABORATORIES LTD., San Francisco, Calif.
Filed January 20, 1932. Serial No. 323,204. PUBLISHED APRIL 12, 1932. Class 46.

295,399. SANDWICHES. ANNA T. HEGLIN, doing business as Ye Olde Tavern Sandwich Inn, Sioux City, Iowa.
Filed January 23, 1932. Serial No. 323,331. PUBLISHED APRIL 12, 1932. Class 46.

295,400. POWDERED HAND CLEANSER. SOUTHERN CLEANSER MFG. CO., Dallas, Tex.
Filed February 5, 1932. Serial No. 323,875. PUBLISHED APRIL 12, 1932. Class 4.

295,401. LAWN SEED. HENRY W. VON DAMM, doing business as F. H. Von Damm, Brooklyn, N. Y.
Filed February 9, 1932. Serial No. 324,023. PUBLISHED APRIL 12, 1932. Class 1.

295,402. PORTLAND CEMENT. NEWAYGO PORTLAND CEMENT COMPANY, Newaygo, Mich.
Filed February 10, 1932. Serial No. 324,045. PUBLISHED APRIL 12, 1932. Class 12.

295,403. DETERGENT COMPOUND USED IN LAUNDERING AND CLEANING PROCESSES. HERCULES POWDER COMPANY, Wilmington, Del.
Filed February 11, 1932. Serial No. 324,069. PUBLISHED APRIL 12, 1932. Class 4.

295,404. FOODS FOR PUPPIES AND DOGS OF ALL BREEDS. POLK MILLER PRODUCTS CORP., Richmond, Va.
Filed February 15, 1932. Serial No. 324,190. PUBLISHED APRIL 12, 1932. Class 46.

295,405. CELLULOSE ACETATE MATERIAL IN THE FORM OF RODS, TUBES, SHEETS, AND POWDER. THE FIBERLOID CORPORATION, Indian Orchard, Mass.
Filed February 17, 1932. Serial No. 324,251. PUBLISHED APRIL 12, 1932. Class 1.

295,406. PLYWOOD PANELS AND VENEER WITH THE PLIES GLUED TOGETHER. INDIANA FILM COMPANY, INCORPORATED, New Albany, Ind.
Filed February 25, 1932. Serial No. 324,466. PUBLISHED APRIL 12, 1932. Class 12.

295,407. JEWELRY POLISH IN LIQUID FORM. ERNEST E. WALTERS, Caldwell, Ohio.
Filed February 25, 1932. Serial No. 324,499. PUBLISHED APRIL 12, 1932. Class 4.

295,408. TRAVELING BAGS, SUIT CASES, AND PORTABLE WARDROBE CASES. K. KAUFMANN & CO., INC., Newark, N. J.
Filed February 27, 1932. Serial No. 324,564. PUBLISHED APRIL 12, 1932. Class 3.

295,409. BISCUIT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed February 29, 1932. Serial No. 324,599. PUBLISHED APRIL 12, 1932. Class 46.

295,410. SAFETY RAZORS AND SAFETY RAZOR BLADES. MAPLEWOOD BLADE COMPANY, Maplewood, and Irvington, N. J.
Filed March 1, 1932. Serial No. 324,670. PUBLISHED APRIL 12, 1932. Class 23.

295,411. WOMEN'S DRESSES AND BLOUSES. STORYK BROS., New York, N. Y.
Filed March 4, 1932. Serial No. 324,805. PUBLISHED APRIL 12, 1932. Class 39.

295,412. NEGLIGEE SHIRTS, PAJAMAS, AND UNDERWEAR—NAMELY, CUT AND SEWN DRAWERS. THE MANHATTAN SHIRT CO., New York, N. Y.
Filed March 7, 1932. Serial No. 324,845. PUBLISHED APRIL 12, 1932. Class 39.

295,413. PISTON RINGS. MCQUAY-NORRIS MANUFACTURING COMPANY, St. Louis, Mo.
Filed August 19, 1931. Serial No. 318,156. PUBLISHED APRIL 12, 1932. Class 35.

295,414. SCIENTIFIC LABORATORY APPARATUS FOR APPLYING TO POLISHED PLATE GLASS A FILM OF PREDETERMINED THICKNESS OF PAINT, VARNISH, PRINTERS' INK, OR OTHER SUITABLE MATERIAL. ALFRED M. PARKS, doing business as Parks Equipment Company, Philadelphia, Pa.
Filed September 15, 1931. Serial No. 319,074. PUBLISHED APRIL 12, 1932. Class 26.

295,415. OLIVE OIL. RIVA HERMANOS, Malaga, Spain.
Filed September 29, 1931. Serial No. 319,537. PUBLISHED APRIL 12, 1932. Class 46.

295,416. FINISHED MACHINERY BEARINGS. FEDERAL MOTOR TRUCK COMPANY, Detroit, Mich.
Filed October 24, 1931. Serial No. 320,405. PUBLISHED APRIL 12, 1932. Class 23.

295,417. MADE-UP COTTON, RAYON, SILK, AND LINEN DRESSES, FROCKS, APRONS, AND SMOCKS FOR THE USE OF WOMEN AND MISSES. THE SABA CORPORATION, Los Angeles, Calif.
Filed October 27, 1931. Serial No. 320,572. PUBLISHED APRIL 12, 1932. Class 39.

295,418. EDIBLE VEGETABLE OILS. C. TORNELLO, doing business as C. Tornello & Co., Youngstown, Ohio.
Filed November 23, 1931. Serial No. 321,450. PUBLISHED APRIL 12, 1932. Class 46.

295,419. OLIVE OIL. M. NOBILE & Co., Hartford, Conn.
Filed December 5, 1931. Serial No. 321,814. PUBLISHED APRIL 12, 1932. Class 46.

295,420. LADIES' HOSIERY. FEDDEN BROTHERS COMPANY, INC., New York, N. Y.
Filed January 9, 1932. Serial No. 322,843. PUBLISHED APRIL 12, 1932. Class 39.

295,421. PADS OF CHARTS FOR DRESSMAKER'S AID. ETHEL TRAPHAGEN, New York, N. Y.
Filed January 16, 1932. Serial No. 323,099. PUBLISHED APRIL 12, 1932. Class 26.

295,422. PAJAMA SETS, ROBES, OF EITHER KNITTED OR WOVEN FABRICS, FOR MEN, WOMEN, AND CHILDREN. MICHAEL COOPER, New York, N. Y.
Filed January 22, 1932. Serial No. 323,280. PUBLISHED APRIL 12, 1932. Class 39.

295,423. SUGAR. CALIFORNIA & HAWAIIAN SUGAR REFINING CORPORATION, LIMITED, doing business as C & H Sugar Refining Corporation, San Francisco, Calif.
Filed January 25, 1932. Serial No. 323,389. PUBLISHED APRIL 12, 1932. Class 46.

295,424. CREOLE SPICED SAUCE. WIDOW'S MITE CORPORATION, Geneva, N. Y.
Filed February 1, 1932. Serial No. 323,733. PUBLISHED APRIL 12, 1932. Class 46.

295,425. GAGE PINS, FEED GUIDES, REGISTRY APPARATUS (MEANING THEREBY DEVICES FOR ALINING AND MAINTAINING ALINEMENT OF SHEETS), AND GRIPPER FINGERS, ALL USED IN PRINTING PRESSES. ALFRED L. MEGILL, doing business as The Edward L. Megill Co., Brooklyn, N. Y.
Filed February 4, 1932. Serial No. 323,824. PUBLISHED APRIL 12, 1932. Class 23.

295,426. HOSIERY. H. STANLEY GILBERT, New York, N. Y.
Filed February 10, 1932. Serial No. 324,036. PUBLISHED APRIL 12, 1932. Class 39.

295,427. FILING AND INDEX CABINETS. DRAWERS, TRAYS, AND FOLLOWERS FOR DRAWERS AND TRAYS. REMINGTON RAND INC., Buffalo, N. Y.
Filed February 11, 1932. Serial No. 324,081. PUBLISHED APRIL 12, 1932. Class 32.

295,428. FILING AND INDEX CABINETS, DRAWERS, TRAYS, AND FOLLOWERS FOR DRAWERS AND TRAYS. REMINOTON RAND INC., Buffalo, N. Y.
Filed February 11, 1932. Serial No. 324,082. PUBLISHED APRIL 12, 1932. Class 32.

295,429. MEN'S AND BOYS' OUTER WEARING APAREL CONSISTING OF COATS, PANTS, KNICKERBOCKERS, AND VESTS. GOODALL WORSTED CO., Sanford, Me.
Filed February 19, 1932. Serial No. 324,316. PUBLISHED APRIL 12, 1932. Class 39.

295,430. RAZOR BLADES. THE OHIO MATCH COMPANY, Wadsworth, Ohio.
Filed February 23, 1932. Serial No. 324,394. PUBLISHED APRIL 12, 1932. Class 23.

295,431. OPHTHALMIC LENSES. OTTO G. HAUSSMANN, Philadelphia, Pa.
Filed February 24, 1932. Serial No. 324,435. PUBLISHED APRIL 12, 1932. Class 26.

295,432. SHOE MACHINERY. POPE MACHINERY CORPORATION, Haverhill, Mass.
Filed February 29, 1932. Serial No. 324,625. PUBLISHED APRIL 12, 1932. Class 23.

TRADE-MARK REGISTRATIONS RENEWED

37,660. BEEF EXTRACTS. Registered January 21, 1902. LIEBIG EXTRACT COMPANY. Renewed January 21, 1932. to Liebig Products Co. Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

38,310. THERMOMETERS, SURGICAL GLASSWARE AND INSTRUMENTS. Registered May 20, 1902. BECTON, DICKINSON & CO., New York, N. Y. Renewed May 20, 1932, to Becton, Dickinson & Co., Rutherford, N. J., a Corporation of New Jersey, assignee.

39,007. SOLID RUBBER TIRES. Registered October 7, 1902. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio, a Corporation of Ohio. Renewed October 7, 1932.

39,106. SASH FASTENERS, SASH LOCKS, SASH CORD AND WEIGHT FASTENERS, AND STOP ADJUSTERS. Registered October 21, 1902. THE H. B. IVES COMPANY, New Haven, Conn., a Corporation of Connecticut. Renewed October 21, 1932.

39,185. WHEAT-FLOUR. Registered November 4, 1902. NEW PRAGUE FLOURING MILLS COMPANY, New Prague, Minn. Renewed November 4, 1932, to International Milling Company, Minneapolis, Minn., a Corporation of Delaware, assignee.

39,287. CERTAIN NAMED PAINTS AND PAINTERS' SUPPLIES. Registered November 18, 1902. STANDARD VARNISH WORKS, New York, N. Y., a Corporation of New York. Renewed November 18, 1932.

39,307. HOSIERY. Registered November 18, 1902. RAMBO & REGAR. Renewed November 18, 1932, to Rambo & Regar, Incorporated, Norristown, Pa., a Corporation of Pennsylvania, assignee.

39,319. CERTAIN NAMED PAINTS AND PAINTERS' SUPPLIES. Registered November 18, 1902. STANDARD VARNISH WORKS, New York, N. Y., a Corporation of New York. Renewed November 18, 1932.

85,972. CERTAIN TOYS. Registered April 2, 1912. ERNST PAUL LEHMANN. Renewed April 2, 1932, to Ernst Paul Lehmann, Patentwerk, Brandenburg-on-the-Havel, Germany, a firm, successor.

86,582. CERTAIN STATIONERY SUPPLIES. Registered May 21, 1912. A. W. FABER, Stein, Germany. Renewed May 21, 1932, to A. W. Faber, Inc., Newark, N. J., a Corporation of New Jersey, assignee by mesne assignments.

86,639. LIQUID MEASURING AND DISPENSING MACHINES. Registered May 21, 1912, to JOHN J. TOKHEIM, as assignee of The Tokheim Manufacturing Company. Renewed May 21, 1932, to John J. Tokheim, doing business as The Tokheim Co., Cedar Rapids, Iowa, assignee.

86,689. SALES-BOOKS. Registered May 28, 1912. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Canada, Niagara Falls and Elmira, New York, a Corporation of Ontario, Canada. Renewed May 28, 1932.

86,706. A BORING-MACHINE FOR BORING JOIST FOR ELECTRIC-LIGHT WIRING. Registered May 28, 1912. JOHN G. HENDERSON, Charlottesville, Va. Renewed May 28, 1932, to Robert H. Henderson, East Orange, N. J., assignee.

86,795. CERTAIN BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES. Registered June 4, 1912. FEDERAL RUBBER MANUFACTURING CO., Cudahy, Wis. Renewed June 4, 1932, to Charles A. Dana and John B. Pierce, receivers of The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

86,901. CERTAIN FOODS. Registered June 11, 1912. A. GOODMAN & SON. Renewed June 11, 1932, to A. Goodman & Sons, Inc., New York, N. Y., a Corporation of New York, assignee.

86,972. OPEN-WEAVE CLOTH. Registered June 11, 1912. W. P. WILLIS & COMPANY, New York, N. Y., a firm. Renewed June 11, 1932.

86,973. PORTLAND CEMENT. Registered June 18, 1912. THE ATLAS PORTLAND CEMENT COMPANY, Northampton, Pa. Renewed June 18, 1932, to Universal Atlas Cement Company, Chicago, Ill., a Corporation of Indiana, assignee by mesne assignments.

87,122. LINEN GOODS IN THE PIECE. Registered June 25, 1912. STEVENSON & SON, LTD., Dungannon, Ireland, a Corporation of Great Britain. Renewed June 25, 1932.

87,163. MOPS. Registered July 2, 1912. CHANNELL CHEMICAL COMPANY. Renewed July 2, 1932, to O-Cedar Corp'n, Chicago, Ill., a Corporation of Illinois, by change of name.

87,202. ROOFING-FELT, DEADENING-FELT, BUILDING-PAPER, AND ROOFING-PAPER. Registered July 2, 1912. GENERAL ROOFING MANUFACTURING COMPANY, East St. Louis, Ill. Renewed July 2, 1932, to Certain-teed Products Corporation, New York, N. Y., a Corporation of Maryland, assignee.

87,290. MEAT-SLICING MACHINES AND MEAT-SLICERS. Registered July 2, 1912. U. S. SLICING MACHINE COMPANY, Chicago, Ill. Renewed July 2, 1932, to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana, assignee.

87,291. MEAT-SLICING MACHINES AND MEAT-SLICERS. Registered July 2, 1912. U. S. SLICING MACHINE COMPANY, Chicago, Ill. Renewed July 2, 1932, to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana, assignee.

87,354. SELF-RISING WHEAT-FLOUR. Registered July 9, 1912. MILLSTADT MILLING CO., Millstadt, Ill., a Corporation of Illinois. Renewed July 9, 1932.

87,601. CERTAIN NAMED HARDWARE. Registered July 30, 1912. THE CHAMPION HARDWARE COMPANY, as assignee of The Champion Safety Lock Company. Renewed July 30, 1932, to The Champion Hardware Company, Geneva, Ohio, a Corporation of Ohio, assignee.

87,696. GASOLENE, BENZIN, NAPHTHA, AND REFINED OIL. Registered July 30, 1912. WEST INDIA OIL COMPANY, Bayonne, N. J., a Corporation of New Jersey. Renewed July 30, 1932.

87,954. GASOLENE AND REFINED OIL. Registered August 13, 1912. WEST INDIA OIL COMPANY, Bayonne, N. J., a Corporation of New Jersey. Renewed August 13, 1932.

88,000. ROOT-BEER AND CHERRY-PUNCH. Registered August 20, 1912. INTERSTATE COMMERCE CO., INC. Renewed August 20, 1932, to The C. F. Sauer Company, Richmond, Va., a Corporation of Virginia, assignee.

88,122. SARDINES. Registered August 27, 1912. SEACOAST CANNING CO., Eastport, Me. Renewed August 27, 1932, to Seacoast Canning Company, Lubec, Me., a Corporation of New Jersey.

88,220. MEAT-SLICING MACHINES AND MEAT-SLICERS. Registered September 3, 1912. U. S. SLICING MACHINE COMPANY, Chicago, Ill. Renewed September 3, 1932, to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana, assignee.

88,280. CANNED FRUITS AND VEGETABLES. Registered September 10, 1912. W. H. HARRIS GROCERY COMPANY, Richmond, Va., a Corporation of Virginia. Renewed September 10, 1932.

88,511. STRINGS FOR MUSICAL INSTRUMENTS. Registered September 24, 1912. NATIONAL MUSICAL STRING CO., New Brunswick, N. J., a Corporation of New Jersey. Renewed September 24, 1932.

88,544. PERFUMERY. Registered September 24, 1912. ALFRED WRIGHT PERFUMER INC., Philadelphia, Pa. Renewed September 24, 1932, to Mellier Company, Perfumer, St. Louis, Mo., a Corporation of Missouri, assignee.

88,605. ANTISEPTIC TABLETS. Registered October 1, 1912. WILLIAM R. WARNER AND COMPANY, Philadelphia, Pa. Renewed October 1, 1932, to William R. Warner & Co., Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

88,606. AN ALTERATIVE, DIURETIC, AND ANTACID. Registered October 1, 1912. WILLIAM R. WARNER AND COMPANY, Philadelphia, Pa. Renewed October 1, 1932, to William R. Warner & Co., Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

88,633. MOVING-PICTURE APPARATUS AND SUPPLIES. Registered October 8, 1912. THE PRECISION MACHINE COMPANY as assignee of Multi-Speed Shutter Company. Renewed October 8, 1932, to The International Projector Corporation, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,745. CLOTH AND LEATHER BOOTS AND SHOES. Registered October 22, 1912. THE FLORSHEIM SHOE COMPANY. Renewed October 22, 1932, to The Florsheim Shoe Company, Chicago, Ill., a Corporation of Illinois, assignee.

88,787. CLOAKS, OUTER SUITS, OUTER SKIRTS, AND OUTER DRESSES. Registered October 22, 1912. R. B. MANUFACTURING COMPANY, New York, N. Y., a Firm. Renewed October 22, 1932.

88,826. CANNED SALMON. Registered October 29, 1912. ASTORIA & PUGET SOUND CANNING CO., Bellingham, Wash. Renewed October 29, 1932, to Astoria & Puget Sound Canning Co., South Bellingham, Wash., a Corporation of Washington.

88,836. STRAW, CHIP, AND JUTE WRAPPING-PAPER AND BOX-BOARD. Registered October 29, 1912. JUSTIN D. BOWERSOCK. Renewed October 29, 1932, to The Lawrence Paper Company, Lawrence, Kans., a Corporation of Kansas, assignee by mesne assignments.

88,858. WHEAT-FLOUR. Registered October 29, 1912. DULUTH-SUPERIOR MILLING COMPANY, Duluth, Minn., a Corporation of Minnesota. Renewed October 29, 1932.

88,973. BOOTS AND SHOES MADE OF LEATHER. Registered October 29, 1912. THAYER, MCNEIL & HODGKINS. Renewed October 29, 1932, to Thayer, McNeil Company, Boston, Mass., a Corporation of Massachusetts, successor.

89,016. WHEAT-FLOUR. Registered November 5, 1912. DULUTH-SUPERIOR MILLING COMPANY, Duluth, Minn., a Corporation of Minnesota. Renewed November 5, 1932.

89,017. WHEAT-FLOUR. Registered November 5, 1912. DULUTH-SUPERIOR MILLING COMPANY, Duluth, Minn., a Corporation of Minnesota. Renewed November 5, 1932.

89,063. COFFEES. Registered November 5, 1912. ROYAL VALLEY COFFEE CO. Renewed November 5, 1932, to R. S. Gehlert & Co., Detroit, Mich., a Corporation of Michigan, assignee by mesne assignments.

89,082. STROPS AND SOAPS. Registered November 12, 1912. AUTO STROP SAFETY RAZOR CO., New York, N. Y. Renewed November 12, 1932, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

89,149. CANNED SARDINES. Registered November 12, 1912. SEACOAST CANNING COMPANY, Eastport, Me. Renewed November 12, 1932, to Seacoast Canning Company, Lubec, Me., a Corporation of New Jersey.

89,151. CANNED SARDINES. Registered November 12, 1912. SEACOAST CANNING COMPANY, Eastport, Me. Renewed November 12, 1932, to Seacoast Canning Company, Lubec, Me., a Corporation of New Jersey.

LABELS

REGISTERED JUNE 28, 1932

40,870.—*Title:* BURGESS FOCUSING ELECTRIC LANTERN. For Hand Lanterns Operated by Means of Dry Batteries. BURGESS BATTERY COMPANY, Madison, Wis. Published April 7, 1932.

40,871.—*Title:* TOY HOUSE GRAHAM WAFERS. For Graham Wafers. DAVIDSON BISCUIT COMPANY, Mount Vernon, Ill. Published May 12, 1932.

40,872.—*Title:* PURE CHEESE. For Pasteurized Cheese. CHARLES DOERING, doing business as the Pure Cheese Corporation, Chicago, Ill. Published September 22, 1931.

40,873.—*Title:* FORT HOWARD. For Toilet Paper. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Published April 26, 1932.

40,874.—*Title:* GANTNER WIKIES. For Swimming Suits. GANTNER & MATTERN CO., San Francisco, Calif. Published January 21, 1932.

40,875.—*Title:* BUDDY BROWN. For Frozen Confections. GOLDEN STATE COMPANY, LTD., San Francisco, Calif. Published March 15, 1932.

40,876.—*Title:* CLAY'S DOUBLE STRENGTH COUGH DROPS. For Cough Drops. LOREN M. HAEBELER, doing business as The Clay Cough Drop Co. not Inc., Chicago, Ill. Published January 15, 1932.

40,877.—*Title:* THE CADILLAC SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 3, 1932.

40,878.—*Title:* GRADE A. For Eggs. KOLLNER'S, INC., Jamaica, L. I., N. Y. Published February 25, 1932.

40,879.—*Title:* GRADE A. For Lard. KOLLNER'S, INC., Jamaica, L. I., N. Y. Published February 15, 1932.

40,880.—*Title:* NORMELLO. For Cigars. PHILIP LUBER, Philadelphia, Pa. Published May 14, 1932.

40,881.—*Title:* MECHLING'S PYROTE. For Insecticide. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Published May 11, 1932.

40,882.—*Title:* NESTLE'S WAVING EMULSION FOR NESTOIL CLIPLESS SUPPLY. For Preparation for Treating Hair and for Use in Waving and Curling Hair. THE NESTLE-LEMUR COMPANY, New York, N. Y. Published November 19, 1931.

40,883.—*Title:* SKINNER'S. For Prepared Cooky Dough. SKINNER MANUFACTURING COMPANY, Omaha, Nebr. Published April 19, 1932.

40,884.—*Title:* FROSTED PINEAPPLE. For Chocolate Coated Frosted Pineapple. SIMON B. STONE, doing business as Frozen Fruit Co., Chicago, Ill. Published May 16, 1932.

40,885.—*Title:* S AND W. For Rice. SUSSMAN, WORMSER & COMPANY, San Francisco, Calif. Published September 29, 1930.

40,886.—*Title:* CREAMERY BUTTER. For Butter. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published July 1, 1931.

40,887.—*Title:* "NICO-FUME" TOBACCO POWDER 10 POUNDS NET. For Tobacco Powder for Fumigating Purposes. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published April 15, 1932.

40,888.—*Title:* GUEST BRAND MALT SYRUP. For Malt Syrup. WESCO FOODS COMPANY, Cincinnati, Ohio. Published April 12, 1932.

PRINTS

REGISTERED JUNE 28, 1932

13,765.—*Title:* THE SYMBOL OF RUG VALUE. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published March 14, 1932.

13,766.—*Title:* EISENLOHR'S CINCI CIGARS. For Cigars. WEBSTER EISENLOHR, INC., Buffalo, N. Y. Published May 17, 1932.

13,767.—*Title:* THE CAT'S WHISKERS. For Chewing Gum. GLENN CONFECTIONS, INC., Buffalo, N. Y. Published May 17, 1932.

13,768.—*Title:* THE TASTE LINGERS. For Punches, Sodas, and Sundaes. ORRIS H. HALVERSON, doing business as Checker Jack Coke Co., Milwaukee, Wis. Published April 12, 1932.

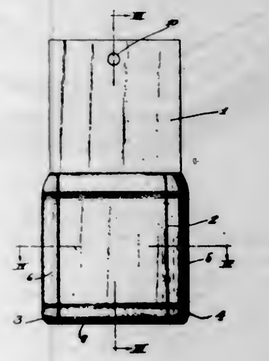
13,769.—*Title:* THE BREAD IN THE SHOW CASE WRAPPER. For Bread. THE W. E. LONG CO., Chicago, Ill. Published April 1, 1932.

13,770.—*Title:* UPSHER SMITH DIGITALIS. For Digitalis. FREDERICH A. UPSHER-SMITH, doing business as Upsher Smith Co., Minneapolis, Minn. Published February 25, 1932.

REISSUES

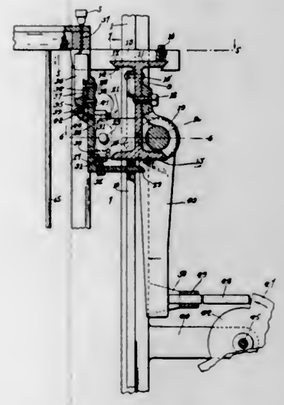
JUNE 28, 1932

18,504. INSECTICIDE AND DEODORIZING TABLET. FRANCIS J. CURRAN, Chicago, Ill. Original No. 1,803,238, dated Apr. 28, 1931, Serial No. 300,225, filed Aug. 17, 1928. Application for reissue filed Apr. 27, 1932. Serial No. 609,002. 9 Claims. (Cl. 299—24.)



8. As an article of manufacture a deodorizing pad including a sheet and a deodorant solidified on both sides of said sheet and including a protuberance positioned so that when the pad is supported against a vertical flat surface it will define a vertical ventilating air space between itself and said surface.

18,505. ATTACHMENT FOR NAILING MACHINES. OSE F. CARPENTER, Brightwood, Va. Original No. 1,834,827, dated Dec. 1, 1931, Serial No. 496,485, filed Nov. 18, 1930. Application for reissue filed Apr. 2, 1932. Serial No. 602,841. 41 Claims. (Cl. 1—15.)

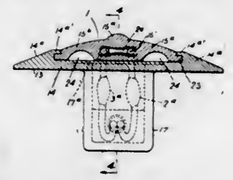


16. In an attachment for coop nailing machines of that type including nail driving chucks, members arranged below the chucks for supporting the work to be operated upon, a supporting bar for said members, said members extending between coop slats depending from the work supported, said members being adjustable lengthwise of said bar to compensate for varying distances between such slats, a plate, and nail clincher bars mounted on said plate and positioned between slats of the coop depending from the work to be operated upon, said clincher bars being adjustable lengthwise of said plate to position them in vertical alignment with respect to the chucks and to compensate for varying distances between the slats between which they extend.

18,506. METHOD OF MAKING POROUS OBJECTS. AMBROSE J. MANDEL, deceased, Forest Hills, Long Island, N. Y., by Edward Mandel, Forest Hills, Long Island, N. Y., administrator. Original No. 1,742,515, dated Jan. 7, 1930, Serial No. 742,481, filed Oct. 8, 1924, renewed Apr. 9, 1929. Application for reissue filed Sept. 29, 1931. Serial No. 565,925. 6 Claims. (Cl. 25—156.)

1. In the method of producing a hard porous object of low thermal conductivity from ceramic materials the steps which include mixing with the ceramic material a completely sublimable substance, mixing with the ceramic material and the sublimable substance a liquid chemically inert with respect to the sublimable substance to render the mix plastic, heating the mixture under reduced pressure to vaporize the sublimable substance without melting it, and firing and heating the mixture to completely harden it.

18,507. SWITCH MEANS. HOWARD I. MORRIS, Lakewood, Ohio, assignor to The Yoder-Morris Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,725,963, dated Aug. 27, 1929, Serial No. 188,163, filed May 2, 1927. Application for reissue filed Mar. 26, 1931. Serial No. 525,578. 29 Claims. (Cl. 200—86.)

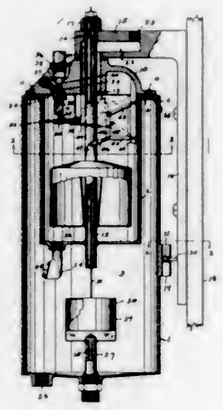


1. A switch comprising a body of material, contacts having portions embedded in said material and portions in superposed relation arranged to contact one with the other when said body is compressed, means connected with said contacts to permit connection with an external circuit, and compressible means interposed between portions of said contacts and normally maintaining their contacting portions out of contact.

18,508. FUEL FEEDING DEVICE. HORACE A. STUKES, San Antonio, Tex., assignor to E. V. Hardway, Harris County, Tex., as trustee for H. M. Duncan, Raymond Pearson, and Ben H. Johnston. Original No. 1,720,931, dated July 16, 1929, Serial No. 263,166, filed Mar. 20, 1928. Application for reissue filed May 22, 1931. Serial No. 540,065. 19 Claims. (Cl. 103—236.)

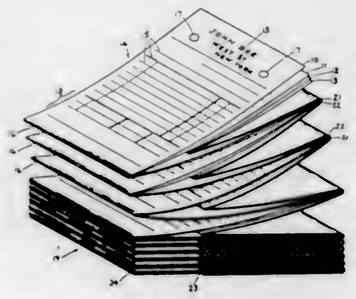
1. A fuel feeding device including an outer tank, an inner tank within and spaced from the outer tank forming a fuel chamber between them provided with an outlet, a common cover for said tanks having air passageways which communicate with the inner tank, a common valve mechanism through which said passageways may be opened and closed, a float in the inner tank, said valve mechanism including a yieldable member and means connecting the float to said yieldable member through which the valve

mechanism may be actuated as the float moves up and down, said connecting means being characterized by the provision of an anchor to which the yieldable member is



attached and a device connected to the anchor and effective to limit said anchor to movement in a straight line vertically.

18,509. MANIFOLDING BOOK. CARL W. BRENN, Montclair, N. J. Original No. 1,848,459, dated Mar. 8, 1932, Serial No. 300,680, filed Aug. 20, 1928. Application for reissue filed Apr. 11, 1932. Serial No. 604,625. 6 Claims. (Cl. 282—12.)



1. A manifolding book comprising a plurality of continuous superposed zig-zag folded worksheet strips, each strip having a succession of forms separated by lines of perforations along which the strip is folded, the forms of one strip being shorter than the forms of another, and having its folds in one direction nested with the folds of the other strip which are in like direction.

DESIGNS

JUNE 28, 1932

87,248. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Jan. 16, 1932. Serial No. 42,507. Term of patent 14 years.



The ornamental design for a clock case, as shown.

87,249. PASTE TUBE CAP. KENNETH E. BEMIS, Glendale, Calif. Filed May 9, 1932. Serial No. 43,762. Term of patent 3½ years.

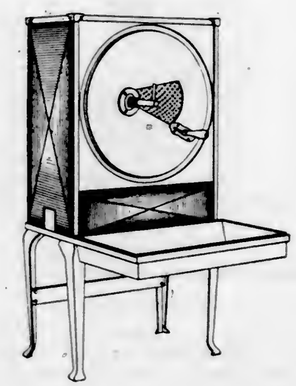
The ornamental design for a paste tube cap as shown.

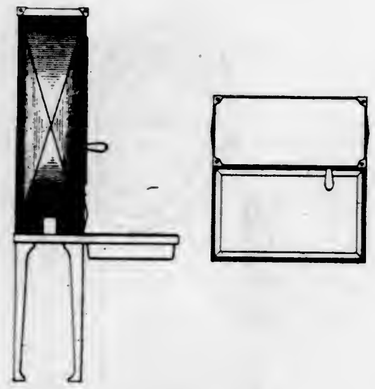
87,250. SAFETY PAPER. EDWIN P. BENSON, New York, N. Y. Filed Oct. 21, 1931. Serial No. 41,477. Term of patent 3½ years.



The ornamental design for safety paper, as shown.

87,251. MACHINE FOR MAKING CONFECTIONS. HERBERT W. EAKINS, Springfield, Ohio. Filed Feb. 8, 1932. Serial No. 42,785. Term of patent 14 years.





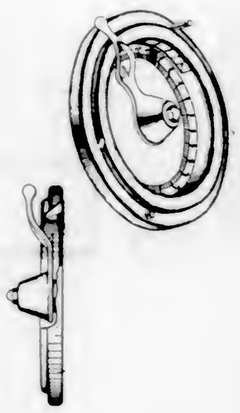
The ornamental design for a machine for making confections, as shown.

87,252. SHOE. FERDINAND W. ELLINGTON, Jamaica, N. Y., assignor to Delman, Inc., New York, N. Y., a Corporation of New York. Filed May 14, 1932. Serial No. 43,803. Term of patent 3½ years.



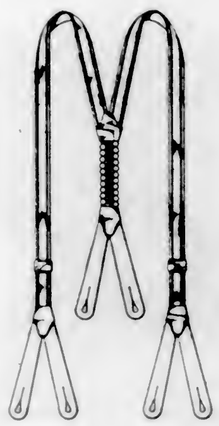
The ornamental design for a shoe as shown.

87,253. COMBINED ILLUMINATED INDICATOR DIAL AND CASING THEREFOR. ARNO A. EWALD, Oakfield, Wis., assignor to Romort Manufacturing Company, Oakfield, Wis., a Corporation of Wisconsin. Filed Dec. 9, 1931. Serial No. 42,015. Term of patent 14 years.



The ornamental design for a combined illuminated indicator dial and casing therefor as shown and described.

87,254. SUSPENDERS. DE WITT FOX, New York, N. Y. Filed Apr. 9, 1932. Serial No. 43,442. Term of patent 7 years.



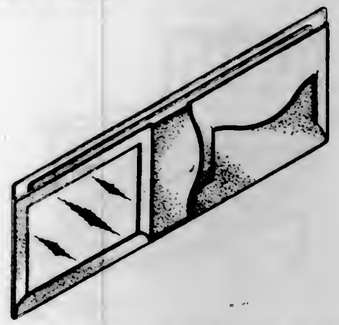
The ornamental design for a suspender substantially as shown and described.

87,255. BOTTLE. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 7, 1932. Serial No. 43,416. Term of patent 14 years.



The ornamental design for a bottle substantially as shown.

87,256. BILL FOLD. PRINCE A. GARDNER, Jr., St. Louis, Mo. Filed Jan. 21, 1932. Serial No. 42,582. Term of patent 14 years.



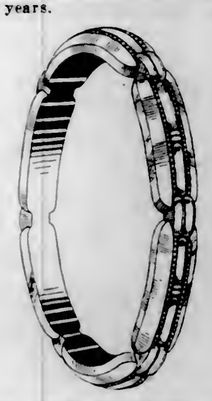
The ornamental design for a bill fold, as shown and described.

87,257. LAMP. JOSEPH GMEINDL, Milwaukee, Wis. Filed Apr. 22, 1932. Serial No. 43,569. Term of patent 3½ years.



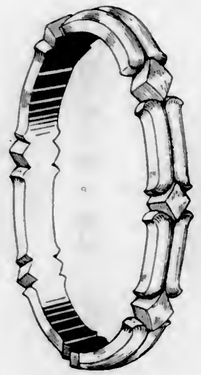
The ornamental design for a lamp, as shown.

87,258. FINGER RING. JOSEPH GRANAT, San Francisco, Calif. Filed Apr. 12, 1932. Serial No. 43,465. Term of patent 3½ years.



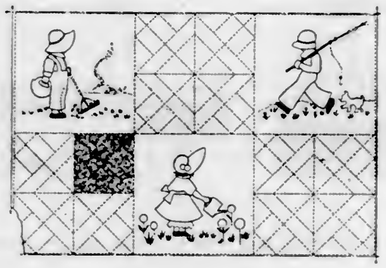
The ornamental design for a finger ring substantially as shown and described.

87,259. FINGER RING. JOSEPH GRANAT, San Francisco, Calif. Filed Apr. 12, 1932. Serial No. 43,466. Term of patent 7 years.



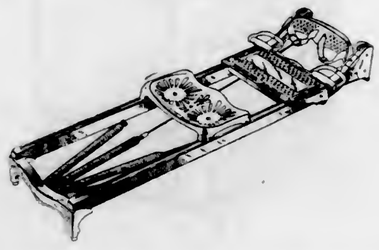
The ornamental design for a finger ring substantially as shown and described.

87,260. PRINTED CHINTZ. MORRIS W. GREENSTEIN, New York, N. Y. Filed Apr. 2, 1932. Serial No. 43,376. Term of patent 3½ years.



The ornamental design for a printed chintz substantially as shown and described.

87,261. EXERCISING APPARATUS. PETER S. HARDY, Stratford, Conn., and THEODORE SMITH, Chicago, Ill., assignors to United Health Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed May 9, 1932. Serial No. 43,763. Term of patent 3½ years.



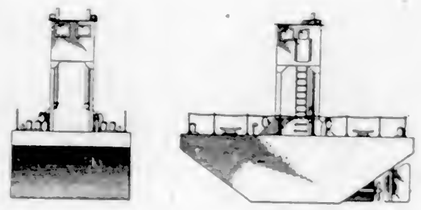
The ornamental design for an exercising apparatus as shown.

87,262. MECHANICAL PENCIL. PAUL S. HAUTON, Atlanta, Ga. Filed Apr. 27, 1932. Serial No. 43,631. Term of patent 14 years.



The ornamental design for a mechanical pencil as shown.

87,263. MARINE TRACTOR. EADS JOHNSON, Morristown, N. J. Filed Apr. 23, 1932. Serial No. 43,588. Term of patent 3½ years.



The ornamental design for a marine tractor as shown.

87,264. CHAIR. MORRIS LEVINE, Woodcliff, N. J. Filed Apr. 13, 1932. Serial No. 43,479. Term of patent 3½ years.



The ornamental design for a chair as shown.

87,265. CHAIR. MORRIS LEVINE, Woodcliff, N. J. Filed Apr. 13, 1932. Serial No. 43,480. Term of patent 3½ years.



The ornamental design for a chair as shown.

87,266. CHAIR. MORRIS LEVINE, Woodcliff, N. J. Filed Apr. 13, 1932. Serial No. 43,481. Term of patent 3½ years.



The ornamental design for a chair as shown.

87,267. CHAIR. MORRIS LEVINE, Woodcliff, N. J. Filed Apr. 13, 1932. Serial No. 43,482. Term of patent 3½ years.



The ornamental design for a chair, as shown.

87,268. COMBINATION CLOCK CASE AND LAMP OR SIMILAR ARTICLE. ABRAHAM LEVY, Brooklyn, N. Y. Filed Sept. 23, 1930. Serial No. 37,053. Term of patent 3½ years.



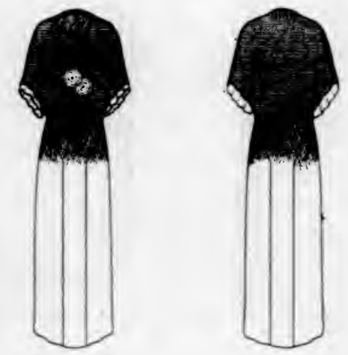
The ornamental design for a combination clock case and lamp or similar article, as shown.

87,269. DRESS. DOROTHY LONO, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 3, 1932. Serial No. 43,063. Term of patent 3½ years.



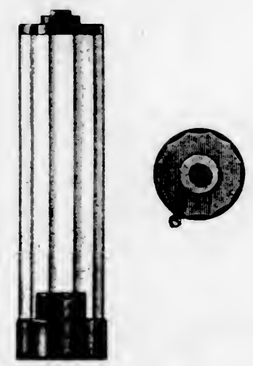
The ornamental design for a dress substantially as shown.

87,270. DRESS. DOROTHY LONO, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 30, 1932. Serial No. 43,331. Term of patent 3½ years.



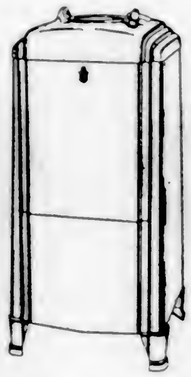
The ornamental design for a dress substantially as shown.

87,271. CASING FOR A HOT WATER HEATER OR SIMILAR ARTICLE. GEORGE M. MAIER, Pelham, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 10, 1931. Serial No. 41,683. Term of patent 14 years.



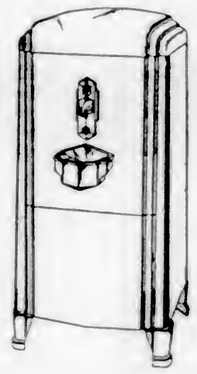
The ornamental design for a casing for a hot water heater or similar article, as shown and described.

87,272. DRINKING WATER COOLER. ORTON S. MCGUFFEY, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 20, 1932. Serial No. 43,547. Term of patent 14 years.



The ornamental design for a drinking water cooler, as shown.

87,273. DRINKING WATER COOLER. ORTON S. MCGUFFEY, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 20, 1932. Serial No. 43,548. Term of patent 14 years.



The ornamental design for a drinking water cooler, as shown.

87,274. SANDAL. MINNIE MEYER and ADOLF HEILBRUNN, New York, N. Y., assignors to Golo Slipper Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 2, 1932. Serial No. 42,718. Term of patent 7 years.



The ornamental design for a sandal substantially as shown and described.

87,275. SHOE. CHARLES MORALI, New York, N. Y., assignor to Delman, Inc., New York, N. Y., a Corporation of New York. Filed May 14, 1932. Serial No. 43,801. Term of patent 3½ years.



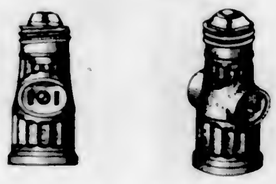
The ornamental design for a shoe as shown.

87,276. STOCKING. EDWARD B. MOSSER, Philadelphia, Pa., assignor to Lehigh Silk Hosiery Mills, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 16, 1932. Serial No. 42,503. Term of patent 3½ years.



The ornamental design for a stocking, as shown and described.

87,277. ELECTRIC LIGHT SOCKET. BERNARD F. MULDOON, Mountainview, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Filed Aug. 24, 1928. Serial No. 27,954. Term of patent 14 years.



The ornamental design for an electric light socket, as shown.

87,278. HANDLE FOR TWEEZERS OR THE LIKE. WILLIAM H. PULFORD, Lima, Ohio, assignor to The Schaaf & Good Company, Fremont, Ohio, a Corporation of Ohio. Filed May 2, 1932. Serial No. 43,686. Term of patent 14 years.



The ornamental design for a handle for tweezers or the like, substantially as shown.

87,279. LAMP. ALBERT SABATH, Chicago, Ill. Filed Feb. 29, 1932. Serial No. 43,043. Term of patent 3½ years.



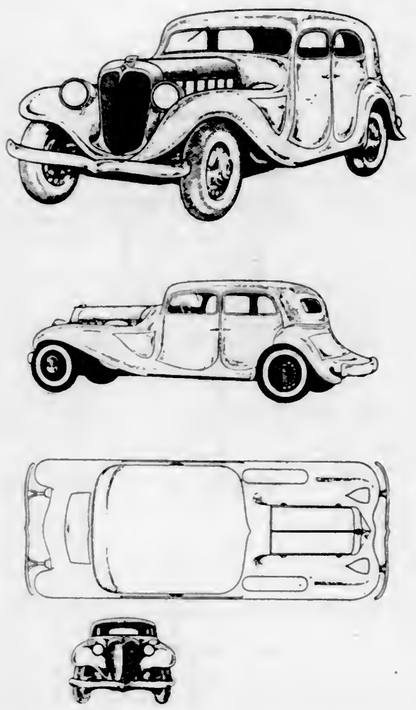
The ornamental design for a lamp, substantially as shown and described.

87,280. RING OR SIMILAR ARTICLE. ABRAHAM SLATIS, Chicago, Ill. Filed Apr. 16, 1932. Serial No. 43,518. Term of patent 3½ years.



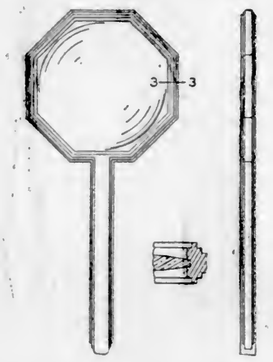
The ornamental design for a ring or similar article, substantially as shown and described.

87,281. AUTOMOBILE. JAMES A. SMITH, Minneapolis, Minn. Filed Jan. 20, 1932. Serial No. 42,562. Term of patent 7 years.



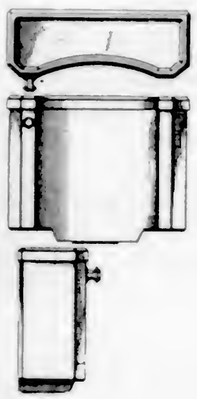
The ornamental design for an automobile, as shown.

87,282. READING GLASS. WALTER D. TEAGUE, Forest Hills, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 22, 1931. Serial No. 41,485. Term of patent 7 years.



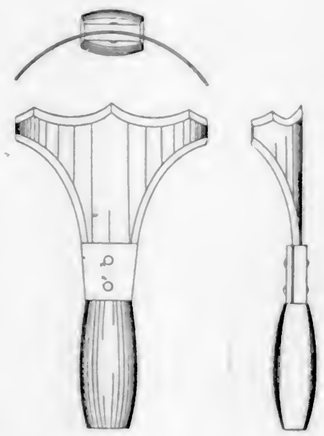
The ornamental design for a reading glass, substantially as shown.

87,283. FLUSH TANK FOR TOILETS. HARRY F. WEAVER, Evansville, Ind., assignor to National-Helfrich Potteries Company, Evansville, Ind., a Corporation of Indiana. Filed Dec. 15, 1931. Serial No. 42,096. Term of patent 7 years.



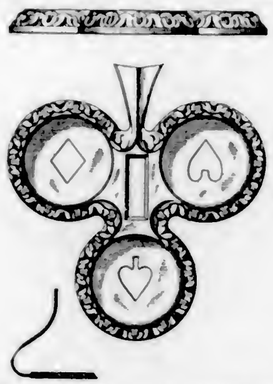
The ornamental design for a flush tank for toilets, as shown.

87,284. BANANA KNIFE. JOSEPH A. WEIGEL, La Crosse, Wis. Filed Dec. 7, 1931. Serial No. 42,158. Term of patent 7 years.



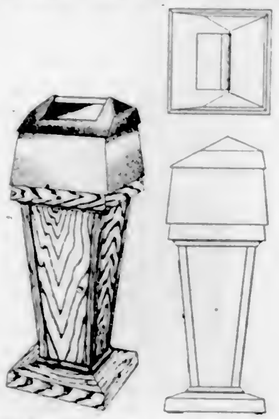
The ornamental design for a banana knife as shown.

87,285. COMBINATION TRAY AND LAMP STANDARD. ELIAS ZIEGLER, New York, N. Y. Filed Apr. 7, 1932. Serial No. 43,356. Term of patent 7 years.



The ornamental design for a combination tray and lamp standard substantially as shown and described.

87,286. COMBINED TABLE AND COVER FOR TELEGRAPH PRINTER. EDWIN A. BESCHERER, Brooklyn, and ARTHUR ZITZMANN, Ozone Park, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1931. Serial No. 40,288. Term of patent 14 years.



The ornamental design for a combined table and cover for telegraph printer as shown.

87,287. BOTTLE. WILL A. CLARK, St. Louis, Mo. Filed Apr. 30, 1932. Serial No. 43,670. Term of patent 14 years.

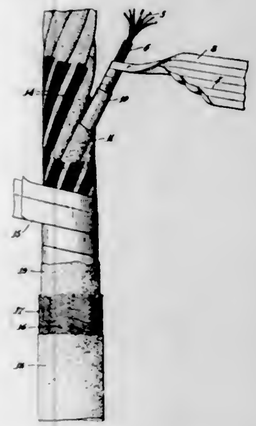


The ornamental design for a bottle, as shown.

PATENTS

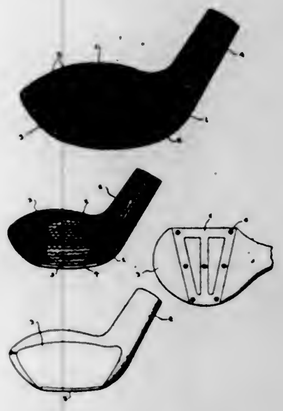
GRANTED JUNE 28, 1932

1,864,512. ELECTRICAL CONDUCTOR. CHARLES WILLS ABBOTT, Rome, N. Y., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Sept. 18, 1924. Serial No. 738,340. 7 Claims. (Cl. 173—264.)



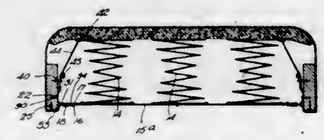
4. A cable which comprises the combination of an insulated conductor, an armor enclosing the conductor and made up of a non-metallic strip wound helically about the conductor and with the convolutions overlapping.

1,864,513. FABRICATED GOLF CLUB HEAD. JACK H. BALCH, Chicago, Ill. Filed Apr. 20, 1929. Serial No. 356,673. 7 Claims. (Cl. 273—77.)



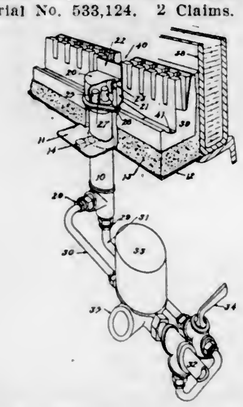
1. A golf club head comprising a body and a shaft receiving neck composed of super imposed layers of fabric impregnated with a plastic composition and vulcanized together, certain of said layers of fabric being of lengths to extend from the toe of the body to the free end of the neck and being curved transversely of themselves adjacent the heel of the body whereby to constitute said neck as an integral portion of the body, and the others of said layers being alternately arranged with respect to the first mentioned layers and being of lengths to extend from the toe to the heel of the body, said neck being formed for connection with a club shaft.

1,864,514. UPHOLSTERY CONSTRUCTION. ALBERT M. BANK, Jersey City, N. J., assignor to Sylvia Bank, Jersey City, N. J. Filed Feb. 12, 1931. Serial No. 515,216. 12 Claims. (Cl. 155—179.)



1. An attachment member for an upholstery frame, comprising a portion adapted to contact the underside of the frame, a portion adapted to contact the inner surface of the frame, a portion interconnecting said first mentioned portions and bent away from said second portion to form, with the frame, an eyelet for receiving an object therethrough, said first and second portions being formed with openings for receiving fastening means for attaching said member to the frame, and a portion extending upwardly from said second portion and bent away therefrom to form a free spring arm, said spring arm having means for attachment of the tie cords of the upholstery.

1,864,515. GAS IGNITION MEANS FOR LIQUID FUEL BURNERS. LYNN C. BEADLE, NOEL SUTTERFIELD, and JOHN A. WILSON, Detroit, Mich., assignors, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 27, 1931. Serial No. 533,124. 2 Claims. (Cl. 158—28.)



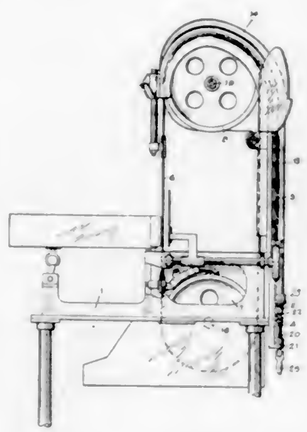
1. In a heater or furnace having a spray device for projecting a mixture of air and liquid fuel particles, a hearth having at its periphery a refractory element adapted to aid combustion, an ignition device in front of and adjacent said element and comprising a hood closed at its top and provided with a lateral opening, said hood also having an opening in its rear wall communicating with a suitable open top space in said element, a gas jet in said hood and directed thru the second opening into said space, a second jet in said hood directed thru said lateral opening and means for controlling said jets.

1,864,516. GOLF TEE AND METHOD OF MAKING THE SAME. ALAN L. BECKET, East Orange, N. J. Filed May 31, 1930. Serial No. 457,994. 4 Claims. (Cl. 273—33.)



1. As an article of manufacture, a piece of semi-rigid material having therein a series of non-parallel frangible fins so positioned that each two consecutive fins converge and describe the outline of a pointed golf tee shank, the material at the edge of said semi-rigid piece flaring out to form a series of recessed heads or caps which are integrally jointed to the upper ends of said shanks, said semi-rigid piece being convertible into a plurality of golf tees by breaking said semi-rigid piece along the said frangible fins.

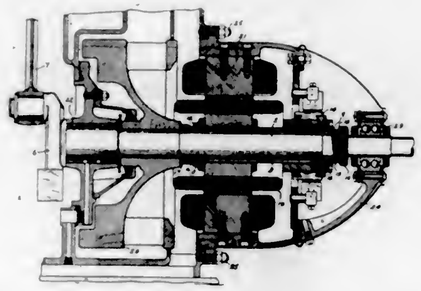
1,864,517. BAND-SAW MEAT CUTTER CONSTRUCTION. CARL G. BIRO, Marblehead, Ohio. Original application filed Apr. 25, 1929, Serial No. 357,917, now Patent No. 1,793,461, dated Feb. 24, 1931, and in Canada July 11, 1930. Divided and this application filed Jan. 23, 1931. Serial No. 510,691. 2 Claims. (Cl. 143—27.)



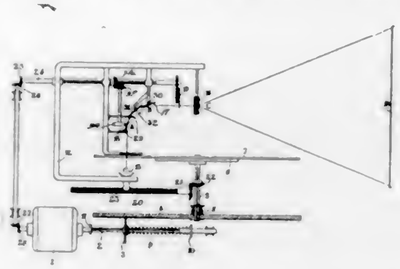
1. In a meat cutter, a frame, a saw band, a pulley wheel rotatably supported on the frame for operating the saw band, a second frame vertically slidable with respect to the first named frame and having a pulley wheel for guiding the saw band, a screw, the first named frame having a nut for receiving the screw, a spring located intermediate the end of the screw and the lower end of the second named frame for adjusting the tension of the saw band, means for clamping the said frames together.

1,864,518. SHAFT-MOUNTING MEANS. ALFRED C. BOOCK, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1927. Serial No. 240,466. 3 Claims. (Cl. 171—206.)

1. As a mounting means for the rotor of an electric machine, a shaft, a sleeve between the rotor and the shaft, closely surrounding the shaft between the ends of the rotor, means for securing the sleeve to the shaft, said means comprising a collar of wedge section, holding means for the collar, and a flared recessed seat for the collar, formed by one end of said sleeve, and means for detachably securing the rotor to the sleeve, including threaded collars carried by opposite ends of the sleeve, and engaging opposite ends of the rotor.



1,864,519. APPARATUS FOR SYNCHRONOUS CINEMATOGRAPHIC PROJECTION AND PHONOGRAPHIC AUDITION. JACQUES DABERT BOULARAN, otherwise known as JACQUES DEVAL, and PIERRE ARMAND DIGEON, Paris, France. Filed Jan. 29, 1930, Serial No. 424,409, and in France Nov. 20, 1929. 3 Claims. (Cl. 88—16.2.)



1. In an apparatus for synchronous cinematographic projection and phonographic audition, adapted to use a record having two concentric portions, one of which is transparent and carries images arranged in a spiral and the other is opaque and carries a phonographic groove also in a spiral, the combination of a rotating horizontal plate adapted to receive the said record, a vertical shaft carrying the said plate, a second plate on the said vertical shaft, this second plate having a groove of spiral shape provided on one side and pitch of which corresponds to that of the cinematographic images of the said record, a roller adapted to enter the said groove, and to drive the groove plate and the plate adapted to receive the record, a driving shaft carrying the said roller and adapted to cause it to rotate and on which the said roller can longitudinally slide.

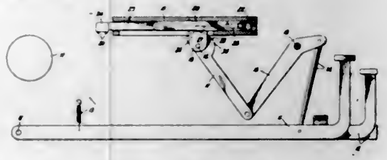
1,864,520. PUMP VALVE. SEPHUS F. BROWN, Amarillo, Tex. Filed May 23, 1929. Serial No. 365,480. 1 Claim. (Cl. 103—180.)

In an oil well pump, a working barrel, a standing valve within the barrel, a shank extending upwardly from the standing valve, a transversely extended head formed integral with the shank, said head having downwardly sloping upper side edges, downwardly extended portions on the head near the shank, and formed along the lower edges of the head, a cage having an elongated opening and having notches formed with inclined surfaces to accommodate the downwardly extended portions of the head, to prevent rotary movement of the cage with respect to the valve when the cage is being lifted, and means for rotating



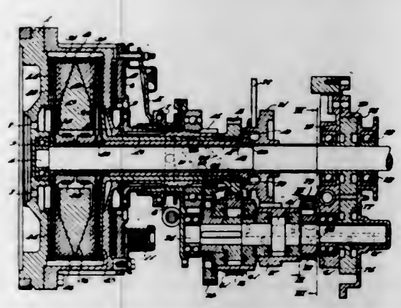
the cage when the cage is dropped on to the standing valve to bring the head into registry with the elongated opening of the cage.

1,864,521. TYPEWRITER. RALPH ATTI, Union City, N. J., assignor to Claude T. Rice, New York, N. Y. Filed Feb. 6, 1929. Serial No. 337,757. 9 Claims. (Cl. 197—25.)



1. In a device of the character described, a platen, a key, a type bar carrying type means to guide the movement of said type bar, and a single train of connections intermediate said key and said type bar whereby said type is first advanced in a substantial straight line to a point opposite said platen and subsequently moved in a direction transverse to its first movement to effect printing on said platen, said train of connections including a link to noiselessly stop the movement of the type bar.

1,864,522. TRANSMISSION MECHANISM FOR MOTOR VEHICLES. FERDINAND M. BARTELME, Glencoe, Ill. Filed May 9, 1929. Serial No. 361,604. 17 Claims. (Cl. 74—97.)



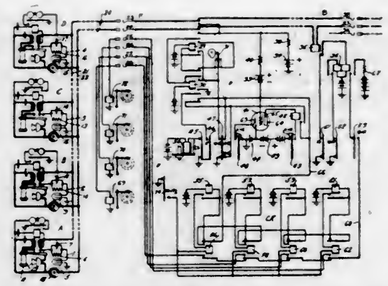
1. In a transmission mechanism, a driving member, a driven member and means for operatively connecting said members at different speed ratios comprising a plurality of frictionally-engaging elements connected for operation at different speeds and means operable in accordance with the speed of said driven member for controlling the degree of frictional engagement of said elements to progressively and cumulatively control their driving engagement.

1,864,523. ORNAMENT. MARY E. BIBER, Providence, R. I., assignor to George F. Berkander, Providence, R. I. Filed Mar. 11, 1932. Serial No. 598,237. 6 Claims. (Cl. 63—20.)



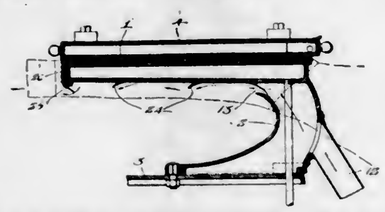
1. An ornament in the shape of an animal, comprising a unitary base of some relatively stiff, non-metallic and flat sheet material, and a covering thereon of pile fabric with the pile extending outwardly therefrom, said covering conforming in shape and size to the base material, whereby a flat reproduction of the living model is obtained, and means for mounting said ornament on the person.

1,864,524. TELEPHONE SYSTEM. HERBERT E. BRAGG, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1930. Serial No. 445,551. 13 Claims. (Cl. 179—8.5.)



1. In combination a line having two stations thereon, a device at one of said stations for causing in said line oscillations of a given character, a device at the other station for causing in said line oscillations of a different character, means responsive to said oscillations, and means controllable by said oscillation responsive means for distinguishing said stations.

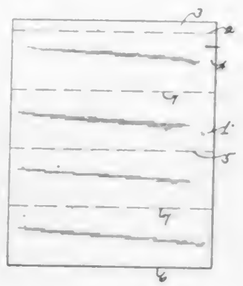
1,864,525. PRESSING MACHINE. PHILIP N. BRAUN, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed July 10, 1926, Serial No. 121,533. Renewed Dec. 5, 1930. 13 Claims. (Cl. 68—9.)



1. In a pressing machine, a support for a tubular article sleeved on said support, said support having a pressing face over which a portion of the article lies, means

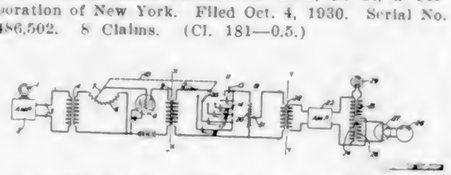
for pressing the portion of the article on the support, and means for blowing air through the tubular article lengthwise thereof.

1,864,526. DEVICE FOR ATTACHMENT TO CONTAINERS. ROBERT R. BROWN, Upper Montclair, N. J., assignor to Outserts, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 445,175. 8 Claims. (Cl. 40—5.)



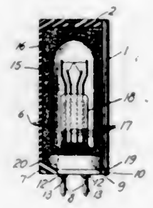
1. In a device of the character described, a folder having a short fold bent from the body portion of said folder at one end and stiffening material in the pores at the bend to keep said fold in proximity to the main portion of said folder.

1,864,527. MEASURING APPARATUS. THEODORE G. CASTNER, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,502. 8 Claims. (Cl. 181—0.5.)



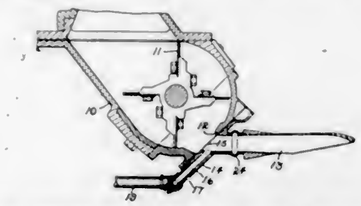
1. A measuring device comprising means to weight applied waves on a frequency basis as a function of their loudness effect, means to attenuate said weighted waves to a predetermined reference level, and means varied in accordance with variations of the attenuating means to change the characteristics of said weighing means in accordance with the loudness value of said applied waves.

1,864,528. VACUUM BULB MOUNTING. ALLEN I. CRAWFORD, New York, N. Y., and MYRON S. GLASS, East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 27, 1930. Serial No. 423,628. 3 Claims. (Cl. 136—4.)



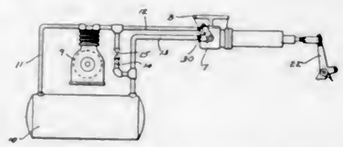
1. A vacuum bulb unit comprising an evacuated vessel having electrodes therein and lead-in wires extending outward of said vessel from the electrodes, a cup-shaped casing of heat insulating material enclosing said vessel, a plug member of heat insulating material to close the open end of said casing, electrical terminals connected to said lead-in wires and projecting from said plug member, and a peripherally disposed lug on said plug member cooperating with side walls forming a slot in the open end of said casing to prevent relative axial turning movements of said plug and casing and crossing of said lead-in wires when the evacuated vessel is inserted within said casing.

1,864,529. MATERIAL DISCHARGING DEVICE. JOHN H. DEACON, Genoa, and CARL H. HARTMAN, Toledo, Ohio, assignors, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed June 13, 1929. Serial No. 370,688. 4 Claims. (Cl. 198—128.)



1. In combination, a casing having a discharge opening, a propeller within the casing adapted to force material through the opening, a discharge spout having a cylindrical passage leading from said opening, there being an air passage through the side of said spout into the side of said cylindrical passage and directed towards the discharge end of the spout, and means for supplying compressed air to said air passage.

1,864,530. HYDRAULIC CONTROL MECHANISM. NEAL W. DORMAN, Toledo, Ohio, assignor to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed June 1, 1931. Serial No. 541,173. 3 Claims. (Cl. 60—52.)



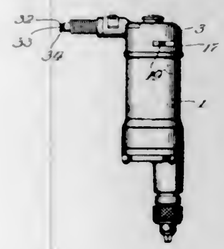
1. In combination, a valve housing, a seat within the housing, a rotatable valve on said seat, said housing including a cap holding the valve on its seat and formed with an annular chamber therein provided with a pressure supply port, said seat having a pressure delivery port therethrough and also an exhaust port, said valve having two holes therethrough and a channel in the base adjacent the seat, said channel establishing unrestricted communication between the delivery port and the exhaust port and one of the holes being in unrestricted communication with the exhaust port in one position of the valve, said channel being idle and the other hole being in communication with the delivery port in another position of the valve.

1,864,531. MANUFACTURE OF ACETIC ACID AND METHYL ACETATE. HENRY DREYFUS, London, and WALTER BADER, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Original application filed Sept. 27, 1926, Serial No. 138,116, and in Great Britain July 20, 1926. Divided and this application filed Mar. 15, 1929. Serial No. 347,448. 14 Claims. (Cl. 260—112.)

1. Process for the manufacture of compounds containing an acetyl group, which comprises subjecting a gaseous mixture containing carbon monoxide and hydrogen to the action of an inorganic acidic catalyst containing a radicle of an oxy acid in which a hydroxyl is directly linked to a non-metallic element.

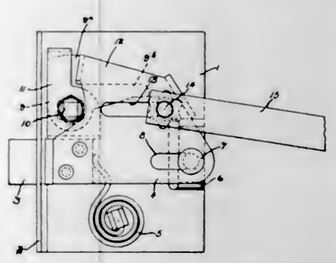
10. A process for the manufacture of acetic acid which comprises subjecting a gaseous mixture containing carbon monoxide and hydrogen to the action of a phosphoric acid and converting the methyl acetate content of the reaction product into free acetic acid by saponification in the presence of substantially the quantity of water necessary for the production of glacial acetic acid.

1,864,532. SWITCH DEVICE. FRITHIOF P. FORSS, Aurora, Ill., assignor to Independent Pneumatic Tool Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 5, 1929. Serial No. 383,643. 14 Claims. (Cl. 200—8.)



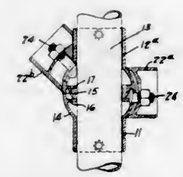
1. A switch device of the character described, comprising a pair of inner and outer ring members of insulating material, one of said ring members being rotatably mounted with respect to the other ring member, a pair of spaced contacts carried by one ring member, and a bridging contact carried by the other ring member, and spring means serving to urge the bridging contact toward the spaced ones and being outside of the circuit passing through the contacts when engaged.

1,864,533. DOOR LATCH. FLETCHER D. GRUND, Weston, Ohio, assignor to The American Swiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 4, 1929. Serial No. 411,429. 4 Claims. (Cl. 292—164.)



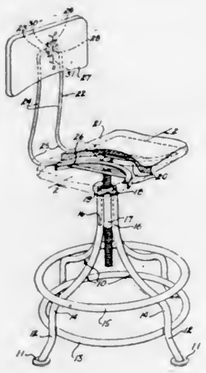
1. A vehicle door latch comprising a latch unit having a back plate, a tensioned latching bolt movable over said back plate, roll back means for retracting said latch bolt, a second means for retracting said latch bolt located at a point remote from said latch unit and including a strap, an arm projecting from said roll back means having a hook-shaped outer end, and a lost motion connection between said strap and latch bolt, said connection including an element adapted to be moved by said strap to block movement of said arm thereby to dog said roll back means for preventing retraction of said latching bolt thereby.

1,864,534. ADJUSTABLE RAIL FITTING. SELDEN JOHN GULESIAN, Revere, Mass. Filed May 14, 1928. Serial No. 277,435. 11 Claims. (Cl. 287—54.)



1. A swivel pipe fitting of the character described comprising a hollow member having a peripheral edge, an interior flange within said edge and separated coupling fingers extending outwardly at an inclination to the plane of said edge and across said plane, and a complemental hollow member having an edge adapted to bear on the edge of the first member and having a contracting conical lip within its edge extending between the edge of the first member and the said fingers and being overlapped thereby.

1,864,535. CHAIR. CLARENCE ALBERT HACH, Oak Park, and FRANCIS ALBERT SANBORN, Berwyn, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1928. Serial No. 299,524. 9 Claims. (Cl. 155—93.)

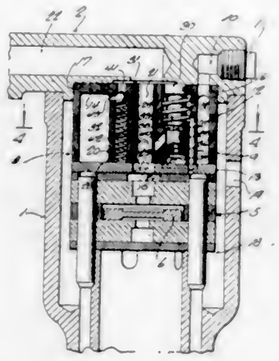


1. In a chair, a standard comprising a plurality of circular tubular metal rungs, a plurality of curved tubular metal legs held between the metal rungs and having straight upper portions, an internally threaded sleeve secured to the legs at said straight upper portions, and a plate joined to the legs, at least one of said metal rungs located outside of said metal legs and at least one other of said metal rungs located inside of said metal legs.

1,864,536. LUBRICATING DEVICE FOR PNEUMATIC TOOLS. FRANK B. HAMERLY, Aurora, Ill., assignor to Independent Pneumatic Tool Company, Chicago, Ill., a Corporation of Delaware. Filed June 25, 1931. Serial No. 546,728. 3 Claims. (Cl. 184—6.)

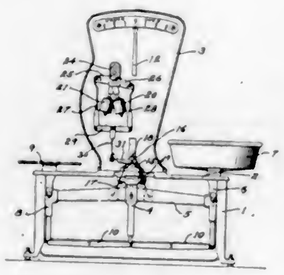
1. In a pneumatic tool, a throttle valve for controlling admission of pressure fluid into the tool, a lubricant containing reservoir, a chamber having larger and smaller portions, inlet and discharge ports for the smaller portion of the chamber with the inlet port connected with the reservoir, a plunger having a head in the larger por-

tion of the chamber and a stem in the smaller portion thereof to control the opening and closing of said ports, spring means in the larger portion of the chamber and engaging the head of the plunger to act thereon on the closing of the throttle valve to move the plunger in a direction to close the discharge port and open the inlet port whereby the chamber may take in a charge of lubricant from the reservoir, the head of the plunger being acted on by the pressure fluid admitted in the tool on



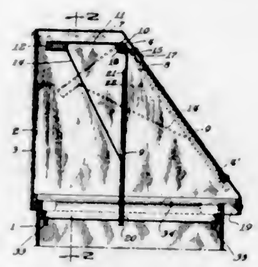
the opening of the throttle valve for moving the plunger in a direction to close the inlet port and open the discharge for discharging the lubricant from the chamber through said discharge port into the path of the pressure fluid supplied to the tool, said stem having a passage and connected annular groove for connecting the smaller portion of the chamber with the discharge port when the plunger opens the same, and means for venting the large portion of the chamber occupied by the spring to the exhaust side of the tool.

1,864,537. WEIGHING SCALE. CLARENCE H. HAPGOOD, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed June 30, 1927. Serial No. 202,508. 6 Claims. (Cl. 265—58.)



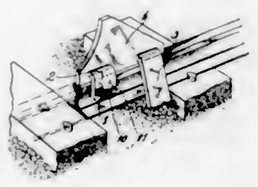
1. In a device of the class described, in combination, a frame, an even arm lever pivoted on said frame, a commodity-receiver supported upon one end of said even arm lever, a poised receiver supported upon the other end of said lever an indicator connected to said lever, a pair of oppositely swinging pendulums pivotally supported on coincident axes on said frame, and means connecting said pendulums and said lever whereby said pendulums are caused to normally hold said lever and said indicator in the same position relative to said frame.

1,864,538. RECEPTACLE. GEORGE D. HAUSER, Utica, N. Y., assignor to Utica Products, Inc., Utica, N. Y., a Corporation of New York. Filed Feb. 18, 1929. Serial No. 340,788. 6 Claims. (Cl. 220—32.)



1. A receptacle comprising a body portion and a top therefor provided with an inclined door, a portion of said top being spaced from said body portion to provide a drain opening and said door being provided with means for directing water impinging thereon out of the container through said opening.

1,864,539. SCOTCH BLOCK. STANLEY W. HAYES, Richmond, Ind., assignor to Hayes Track Appliance Company, Richmond, Ind., a Corporation of Indiana. Filed Oct. 18, 1930. Serial No. 489,524. 20 Claims. (Cl. 104—258.)

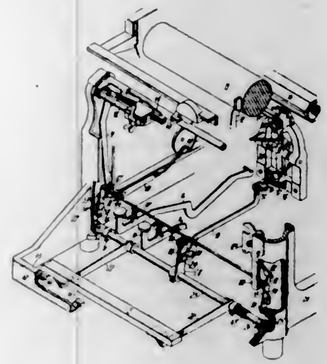


1. A scotch block seating on the rail and having a car wheel abutment upstanding above the rail head to substantially the level of the car wheel axis and having downward extension below the base of the rail for contact with the roadbed, and at its forward end a group of screws seating some against the side of the rail head and some under the rail head.

1,864,540. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 5, 1929. Serial No. 383,684. 6 Claims. (Cl. 197—110.)

1. In a typewriting machine having a carriage, a feeding mechanism therefor, a system of type-key-levers provided with hooks, and a rock-shaft extending across the system of key-levers beneath the same and having forwardly-extending arms and a space-bar mounted upon said arms, the combination of a light rod extending across the system of key-levers and over the same to co-operate with said hooks to lock the keys, and having arms fixed to the ends thereof pivotally supported by the frame of the machine, a support on said rock-shaft and independent of said rod to project up between the key-levers for supporting the middle portion of the key-lever-locking rod,

the middle support clearing said rod when rocked by the shaft but intercepting the rod when it is sprung down by a locked key-lever, and a connection with the carriage-

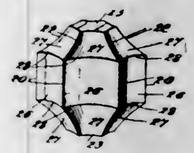


feeding mechanism including a stud on said middle support and a link connecting the stud with the carriage-feeding mechanism.

1,864,541. PROCESS OF OXIDIZING ORGANIC SUBSTANCES. WILLY O. HERRMANN and ERICH BAUM, Munich, Germany, assignors to Consortium fur Elektrochemische Industrie, Munich, Germany. Filed May 1, 1925, Serial No. 27,296, and in Germany May 6, 1924. 2 Claims. (Cl. 260—138.)

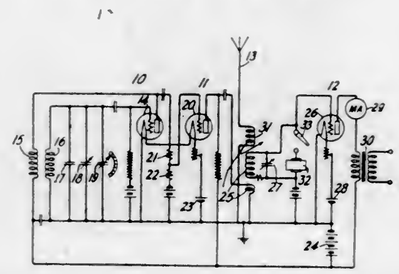
1. Process of partially oxidizing organic compounds containing carbon, hydrogen and oxygen which consists in causing mixtures of the said compounds with oxygen to be projected through capillary tubes heated only for a small portion of their length.

1,864,542. GRINDING BODY. KARL ERNST EBERHARDT HOLZAPFEL, Munster, Germany, assignor to Fried. Krupp Grusonwerk A. G., Magdeburg-Buckau, Germany, a Corporation of Germany. Filed May 31, 1930, Serial No. 458,083, and in Germany June 11, 1929. 2 Claims. (Cl. 83—9.)



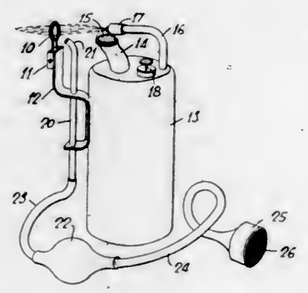
1. A grinder for the purpose set forth, comprising a solid body characterized by having a central cylindrical portion and end sections at either end thereof in the form of truncated cones, the perimeter of the central portion between the end sections being parallel to the axis of the body, the outer boundaries of the cone bases forming at the ends of the cylindrical portion, exterior grinding angles with the perimeter of the cylindrical portion, and the surfaces of the cones between the cylindrical portion and the cutting planes of the cones being provided with cavities concaving toward the axis of the body to give the grinding angles at the ends of the cylindrical portion and as well the grinding angles formed with the cutting planes of the cones, a form that will endure long grinding wear.

1,864,543. FREQUENCY MEASURING CIRCUITS. JOSEPH W. HORTON, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1927. Serial No. 172,147. 7 Claims. (Cl. 250—39.)



4. A frequency meter comprising an oscillator, a detector having a tuned input circuit, calibrated means for controlling the frequency of said oscillator, a body of piezo-electric character associated with said detector, and standardizing means for adjusting the frequency of said oscillator to give an indication in said detector when said calibrated means is set at a definite position.

1,864,544. DEVICE FOR DETECTING METHYL CHLORIDE. ARTHUR B. LAMB, Cambridge, Mass. Filed Oct. 1, 1929. Serial No. 396,458. 7 Claims. (Cl. 23—253.)

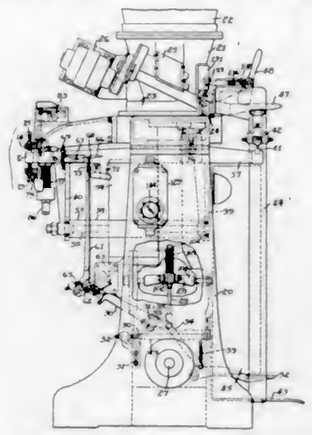


1. In a device of the character described, the combination with a copper coil, of a portable burner device supporting said coil, means for projecting a jet from said burner through said coil, and means for introducing a gaseous medium at will into said flame, said coil, said device and said means being combined to form a portable structure.

1,864,545. APPARATUS FOR FILLING VALVE BAGS. ESLI A. MARSH, Oswego, N. Y., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Dec. 26, 1928. Serial No. 328,449. 18 Claims. (Cl. 249—62.)

1. In apparatus for filling valve bags, a substantially horizontal spout adapted to enter the valve of a bag, weighing means adapted to support a bag being filled through said spout, main feeding means adapted to pro-

pel material at high speed through said spout, auxiliary means adapted to propel material at a relatively low speed through said spout, and means controlled by the weigh-

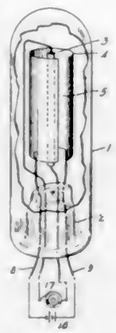


ing means for cutting off the main feeding means when the bag is nearly full and the auxiliary feeding means when the bag has received a full charge.

1,864,546. PROCESS OF PREPARING CELLULOSE ETHERS. GEORGE W. MILES, Boston, Mass., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed July 10, 1928. Serial No. 291,706. 4 Claims. (Cl. 260—152.)

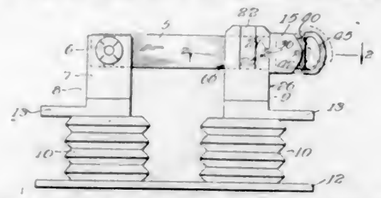
1. Method of preparing cellulose ethers comprising treating an alkali cellulose which contains 140 to 200 parts of an alkali solution corresponding to 15 to 20% solution of caustic soda and 100 parts of cellulose with an etherifying agent in amounts equal to 5 to 9 molecular proportions for each molecular proportion of cellulose present and causing etherification of the cellulose to proceed by adding alkali in solid form in increments in amounts sufficient to react with the etherifying agent present at temperatures ranging from room temperatures to 60° C.

1,864,547. INCANDESCENT LAMP. EDMUND R. MORTON, New York, N. Y., and HUGH M. STOLLER, Mountain Lakes, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 7, 1929. Serial No. 384,032. 10 Claims. (Cl. 176—16.)



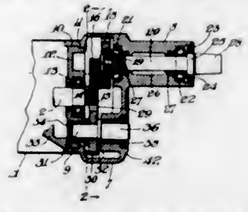
3. In a lamp, a sealed envelope, an incandescent body supported in said envelope and a plurality of reflectors supported in said envelope concentrically and coaxially with respect to said body, each of said reflectors having a narrow light transmitting slit, said slits being radially aligned with the axis of said body.

1,864,548. SWITCH LOCK. ERIC NORDHEM, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 27, 1926. Serial No. 137,833. 10 Claims. (Cl. 200—169.)



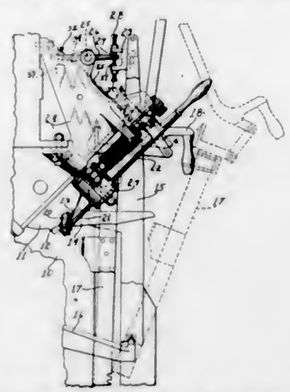
1. In a switch, a contact member having a pair of contact jaws, a switch member movable into and from engagement between said jaws, a locking member embracing said switch member and slidable thereon, said locking member having means on opposite sides of the switch member for engaging equally with each of said jaws to lock said switch member in engagement with said contact member, a cam member permanently mounted on said locking member and engaging the blade to slide the locking member longitudinally of said switch blade.

1,864,549. PORTABLE POWER DRIVEN TOOL AND POWER CONVERTING ATTACHMENT THEREFOR. FLOYD O. PAUL, Yeadon, Pa. Filed May 23, 1929. Serial No. 365,394. 15 Claims. (Cl. 74—7.)



1. A portable power driven tool having a nose at its forward end, with a main power take-off, an auxiliary power take-off, and a power converting attachment fixed to said nose and deriving power from said auxiliary power take-off.

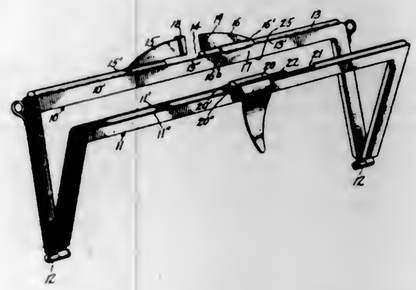
1,864,550. CLOSING DEVICE FOR BAG FILLING MACHINES. WILLIAM R. PETERSON, Oswego, N. Y., assignor to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Nov. 5, 1930. Serial No. 493,519. 6 Claims. (Cl. 249—60.)



1. In a valve bag filling machine, a discharge tube adapted to enter the valve of a bag, a frame adapted to support a bag in position to receive material from said tube, a

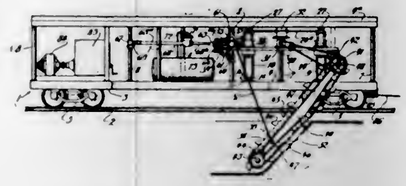
vertically movable weighing member supporting said frame, a horizontally movable gate controlling admission of material into the tube, a lever, a link connecting one end of the lever to the gate, a spring normally urging the lever to gate-closing position, and a trip device normally holding the lever in gate-opening position, and means connected with the frame for releasing the trip upon downward movement of the frame.

1,864,551. FASTENING DEVICE. EDWARD POETER, Irvington, N. J., assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed Aug. 13, 1930. Serial No. 475,075. 6 Claims. (Cl. 292—145.)



1. Fastening means for the purpose set forth comprising a pair of cooperating frame elements having, respectively, a pair of upstanding vanes and a lip, one of the vanes being mounted for sliding movement into and out of engagement with the other and provided with a catch adapted for engaging and disengaging with said lip.

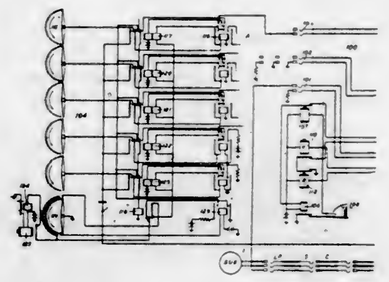
1,864,552. EXCAVATOR CAR. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Mar. 7, 1929. Serial No. 345,166. 13 Claims. (Cl. 37—84.)



7. In combination with a vehicle, an excavating mechanism, a supporting frame therefor disposed longitudinally of the vehicle, and means connecting said frame and vehicle for a horizontal swinging parallelogram movement away from and toward the vehicle to locate said frame and mechanism in any one of a number of different operative positions spaced laterally from the vehicle.

1,864,553. TELEPHONE SYSTEM. RALPH L. QUASS, Hawthorne, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 6, 1930. Serial No. 500,492. 19 Claims. (Cl. 179—27.)

1. In a telephone system, a first office, a second office, a subscriber's line at the first office, an operator's position at the second office, means for establishing a connection from the subscriber's line to the operator's position, means for establishing a second connection from

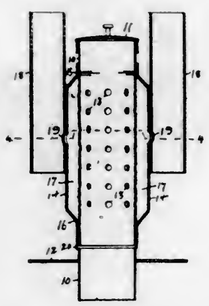


the operator's position to the subscriber's line, a signal at the operator's position and means responsive to the establishing of said connections for actuating said signal.

1,864,554. PROCESS FOR REDUCING THE VISCOSITY OF CELLULOSE ETHERS. EBENEZER EMMET REID, Baltimore, Md., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Original application filed June 6, 1928, Serial No. 283,466, and in Great Britain and Australia in 1929. Divided and this application filed Feb. 7, 1930. Serial No. 426,776. 5 Claims. (Cl. 260—152.)

1. The process of reducing the viscosity of a cellulose ether which comprises bringing an acid gas in contact with a charge of the ether cellulose.

1,864,555. VENTILATOR. VINZENT R. ROSTEK, Philadelphia, Pa. Filed Oct. 26, 1931. Serial No. 572,638. 4 Claims. (Cl. 98—78.)

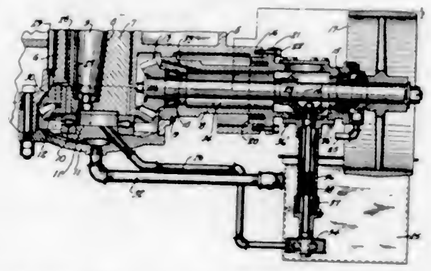


1. A ventilating apparatus comprising a main flue having a closure at the upper end and a plurality of lateral apertures, a shell surrounding the main flue and providing a chamber externally thereof and enclosing said apertures, and discharge flues connected to the shell and communicating therewith.

1,864,556. CRUSHER MILL DRIVING MEANS. HARVEY H. RUMPEL, Milwaukee, Wis., assignor to Smith Engineering Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 19, 1928, Serial No. 313,460. Renewed Nov. 7, 1931. 5 Claims. (Cl. 74—7.)

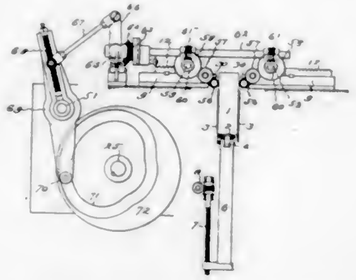
1. In combination, a main frame having bottom and side openings with vertical and horizontal bores disposed concentrically of said openings respectively, a removable

closure cap for said bottom opening spaced from the lower end of said vertical bore, an eccentric rotatable in said vertical bore and having annular thrust bearing engagement with said cap, a gear secured to said eccentric in the space between said cap and the lower end of said vertical bore, said gear and annular bearing being axially removable through said lower opening upon removal of said cap, a tubular casing provided with horizontally spaced guide bearings and having an end extending into said horizontal bore through said side opening, a drive



shaft supported in said guide bearings, a pinion secured to the end of said drive shaft within said main frame and meshing with said gear, means for applying power to the opposite end of said shaft beyond said bearings, a pump operable from the portion of said shaft between said bearings, means for conducting lubricant from said pump to the interior of said thrust bearing and eccentric through said cap, and means for returning lubricant to said pump from the exterior of said eccentric and thrust bearing through said cap.

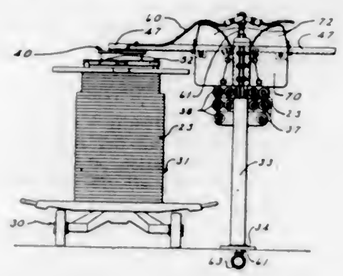
1,864,557. MACHINE FOR SHAPING THE BACKS OF UNBOUND BOOKS. CARL SCHRAMM, West Hartford, Conn., assignor to The Smyth Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 12, 1932. Serial No. 592,483. 19 Claims. (Cl. 11—5.)



1. Mechanism for shaping the backs of unbound books which comprises means for supporting the books, means movable toward the sides of the books for straightening and sustaining the backs, means movable against the backs while sustained for pressing the backs into initial shape, and means movable with the straightening and sustaining means for elevating the books.

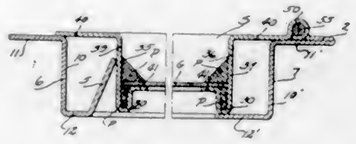
1,864,558. STRAND SUPPLYING AND DISTRIBUTING APPARATUS. GEORGE A. SEELEY, Irvington, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 9, 1929. Serial No. 412,690. 6 Claims. (Cl. 242—128.)

1. In an apparatus for supplying strand material, a plurality of rotatable strand supplies, a fluid operated braking device removably associated with each of said supplies, and common means for supplying an operating fluid to all of the braking devices.



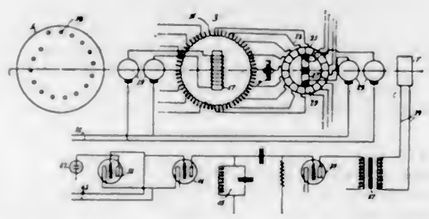
4. In an apparatus for supplying strand material, a plurality of rotatable strand supplies arranged in pairs, a supporting member associated with each pair of strand supplies, a pivoted member extending from the supporting member to each of the associated strand supplies, an adjustable fluid operated braking device carried by each of the pivoted members for operatively engaging the associated strand supply to retard the rotation thereof, and common means for simultaneously adjusting all of the braking devices.

1,864,559. METAL WINDOW STRUCTURE. ANTHONY G. SIEBENLIST, Milwaukee, Wis., assignor, by mesne assignments, to Milcor Steel Company, Milwaukee, Wis., a Corporation of Delaware. Original application filed Apr. 30, 1928, Serial No. 274,122. Divided and this application filed July 1, 1929. Serial No. 374,994. 14 Claims. (Cl. 189—69.)



1. An all metal window frame comprising side frame members and end frame members constituted of a single piece of metal, one side frame member having its marginal portion doubled back upon itself and formed with integral lugs shaped to provide hinge ears.

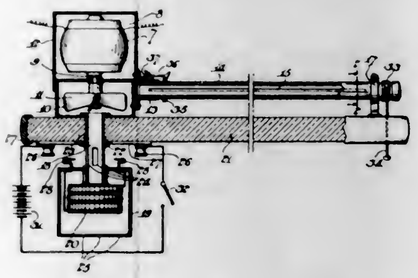
1,864,560. SYNCHRONIZING SYSTEM. THEODORE A. SMITH, Ridgewood, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,704. 7 Claims. (Cl. 172—293.)



1. A synchronizing system including a large motor for driving a rotational element, a small synchronous motor, means for bringing the synchronous motor up to

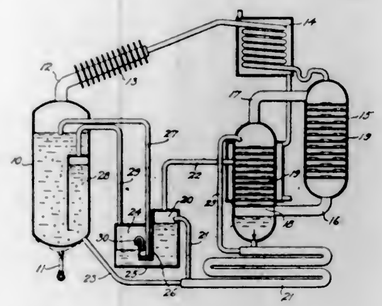
speed by said large motor, means for mechanically disconnecting said motors one from the other at a time when the desired speed is attained, means for supplying impulses to said small synchronous motor at a predetermined rate, and means associated with and controlled from said small synchronous motor for converting said large motor into a synchronous torque motor mechanically independent from said small synchronous motor for driving the said rotational element at a synchronous speed.

1,864,561. WINDSHIELD CLEANER AND PROTECTOR. GERRIT VAN DAAM, Buffalo, N. Y. Filed Jan. 2, 1930. Serial No. 418,143. 5 Claims. (Cl. 20—40.5.)



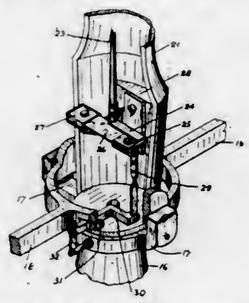
1. In a windshield cleaner and protector, a self-contained unit comprising a chambered formation, a motor, a chamber enclosed motor driven fan, an air delivery pipe supported by said formation and extending from said chamber and having a swiveling connection therewith and means operable to the rear of the windshield for rocking the pipe to change from time to time as required the direction of air discharge.

1,864,562. REFRIGERATION. BALTZAR CARL VON PLATEN and CARL GEORG MUNTERS, Stockholm, Sweden, assignors to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 25, 1928, Serial No. 249,357, and in Sweden Feb. 1, 1927. 5 Claims. (Cl. 62—119.5.)



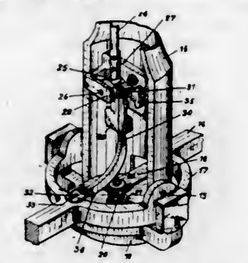
1. Absorption refrigerating apparatus comprising a generator, an absorber, an equalizer vessel, means affording communication between said absorber and said equalizer vessel arranged to permit a constant level of liquid in the absorber independently of variations of liquid level in the equalizer vessel, and means connected with the equalizer vessel for lifting liquid therefrom to above the level of liquid in the absorber and for conveying the liquid so lifted to the generator.

1,864,563. SCALE. GEORGE WALKER, Brooklyn, N. Y., assignor to The Jacobs Bros. Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,756. 6 Claims. (Cl. 265—59.)



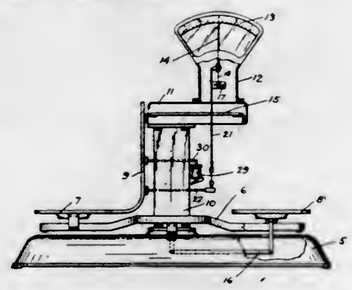
1. A scale including a frame, a rockingly mounted beam associated therewith, a flexion strip secured at one end to said frame, a registering mechanism associated with the other end of said flexion strip and means for transmitting in a magnified manner the movements of said beam to said flexion strip.

1,864,564. OVER AND UNDER WEIGHT SCALE. HAROLD L. WALKER, Brooklyn, N. Y., assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed July 11, 1928. Serial No. 291,777. 14 Claims. (Cl. 265—59.)



1. A scale including a base, a beam rockingly mounted thereon, a flexion strip, means for normally retaining one end of said flexion strip against movement with respect to said beam and means slidably engaging the opposite end of said strip to retain the same in predetermined position with reference to said base.

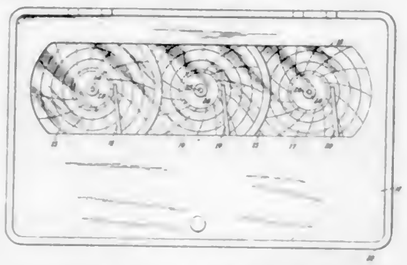
1,864,565. SCALE. HAROLD L. WALKER, Brooklyn, N. Y., assignor to The Jacobs Bros. Co. Inc., a Corporation of New York. Filed May 14, 1929. Serial No. 362,957. 9 Claims. (Cl. 265—59.)



1. A scale including a rockingly mounted beam, a plurality of check rods including an element pivotally mounted at one of its ends and pivotally associated with one

end of the beam at its opposite end, and a second element arranged above said beam and associated therewith at one end, and means for rockingly supporting the opposite end of said latter element.

1,864,566. MULTIPLE RECORDING UNIT. GEORGE F. WALTER, Maplewood, N. J. Filed May 23, 1929. Serial No. 365,349. 1 Claim. (Cl. 234—1.)

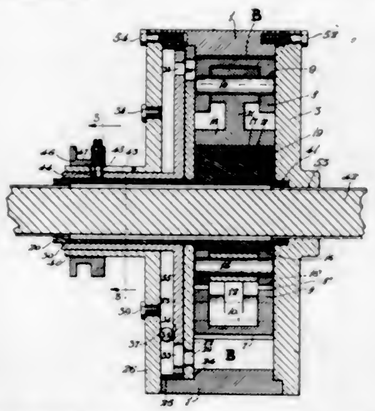


In a recording apparatus, a plurality of rotatable chart-supporting members, circular charts supported thereon for rotation therewith, recording members associated with the respective charts for effecting a record thereon, said recording members all operating over substantially similar portions of the different charts, and means common to the various chart-supporting members for effecting synchronous and continuous rotation thereof, the said supporting members for the charts being so located relatively to each other that the charts are supported thereon in manner such that a temporarily active portion of one chart overhangs a temporarily inactive portion of another.

1,864,567. ALLOY OF AZOTIZED CHARACTER. RICHARD R. WALTER, Starnberg, Germany. Filed Sept. 20, 1929, Serial No. 394,136, and in Germany Aug. 5, 1929. 6 Claims. (Cl. 75—1.)

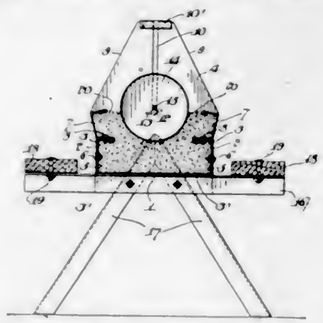
1. An alloy comprising principally a powdered, pressed and sintered carbonaceous tungsten compound together with at least one homogeneously mixed azotized auxiliary metal of the iron or chromium group.

1,864,568. HYDRAULIC TRANSMISSION. JESSE S. WENTWORTH, Norwood, Ohio, assignor to S-W Hydraulic Laboratories, Hamilton, Ohio, a Partnership consisting of Alexander J. Steidl and Jesse S. Wentworth. Filed Feb. 17, 1931. Serial No. 516,364. 5 Claims. (Cl. 192—58.)



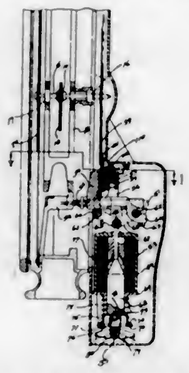
1. A combined hydraulic transmission and clutch comprising an outer rim, covers therefor, said rim and covers constituting a cylindrical housing, a driven shaft passing through the mean center of said housing, a hollow shaft received over said driven shaft and fixed for rotation with the latter, an eccentric formed upon said hollow shaft, an inner port plate held in fixed relation relative to said rim, an outer port plate located adjacent said inner port plate, a liquid chamber located between said outer port plate and one of said covers, ports in each of said plates, means for closing and opening said ports, an eccentric ring mounted upon said eccentric, a plurality of bellows plates pivotally mounted in spaced apart relation adjacent the inner periphery of said rim and links pivotally connecting the bellows plates with said eccentric ring, respectively, whereby when said ports are fully opened said driven shaft is at rest when said housing is in motion and whereby when said ports are fully closed said driven shaft is driven at the same speed as said housing, substantially as set forth and for the purposes specified.

1,864,569. FEEDER. CHARLES H. WILLAUER, Richland Township, Bucks County, Pa. Filed Oct. 15, 1930. Serial No. 488,729. 3 Claims. (Cl. 119—52.)



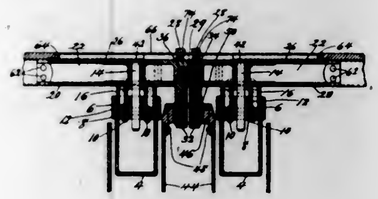
1. Apparatus of the character described comprising means forming a feed chamber having a mouth and a hollow drum journalled adjacent to and partially obstructing said mouth.

1,864,570. TOTAL LOAD RECORDING SCALE. LAWRENCE S. WILLIAMS, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 22, 1930, Serial No. 446,395, and in Canada Sept. 24, 1930. 20 Claims. (Cl. 265—5.)



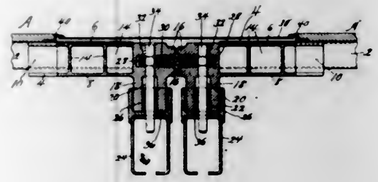
1. In a scale of the type described, in combination, weighing mechanism comprising automatic load counterbalancing and load counterbalancing means, recording mechanism operating in conjunction with said weighing mechanism, said recording mechanism including a member of thin flexible material bearing graduations and numerals.

1,864,571. ARTICULATED CAR. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1930. Serial No. 492,690. 18 Claims. (Cl. 105—4.)



1. In an articulated car comprising a plurality of car bodies, means connecting the adjacent end portions of said bodies comprising a truck beneath the adjacent end portions of said bodies provided with a pair of bolsters, body and truck bearings for connecting the bodies respectively with the bolsters, body castings to which the body bearings are secured having their forward ends arranged in abutting relation and extended into a truck part, the said abutting ends having alined recesses therein, and a locking key disposed in said recesses for limiting relative vertical shifting of the bodies.

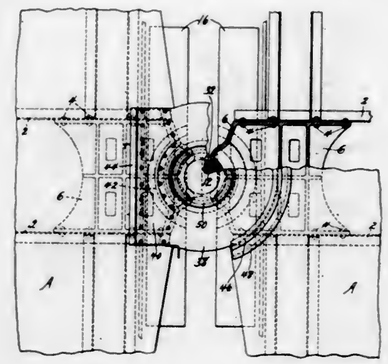
1,864,572. ARTICULATED CAR. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 9, 1930. Serial No. 501,019. 6 Claims. (Cl. 105—4.)



1. In combination, a plurality of car bodies having their adjacent end portions arranged relatively close together, the adjacent end portions of said bodies being provided with recesses, a truck for supporting the adjacent end portions of said bodies, a pair of truck bolsters arranged side by side and each having a center bearing, body center bearings respectively engaging the truck center bearings, and a restraining element in the before mentioned recesses for preventing excessive relative vertical and sidewise shifting of the bodies.

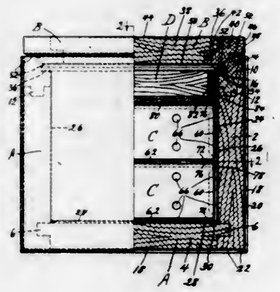
1,864,573. ARTICULATED CAR. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1930. Serial No. 503,465. 6 Claims. (Cl. 105—4.)

1. In an articulated car comprising a plurality of car bodies, a truck for supporting the adjacent end portions of two of said bodies, a pair of bolsters for said truck each having a retaining flange on its upper surface defining a guideway, body supporting elements depending from the adjacent end portions of said bodies engaged in said guideways, and a spacer interposed between the adjacent end portions and body supporting elements for retaining



the end portions of said bodies in spaced relation and for retaining the body supporting elements in said guideways.

1,864,574. PORTABLE REFRIGERATING CONTAINER. JOSEPH L. WOOD, Atlantic Highlands, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 19, 1931. Serial No. 509,596. 10 Claims. (Cl. 62—91.5.)

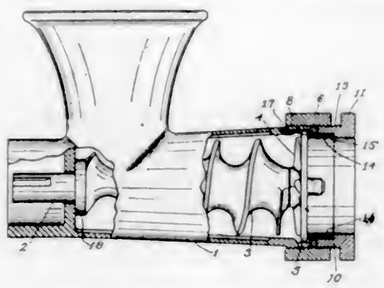


1. A portable refrigerating device comprising an insulated container having a plurality of superposed trays therein for holding goods to be refrigerated, means for maintaining the trays in spaced relation relative to each other and relative to the walls of the container, and a container for solid carbon dioxide supported by the upper tray in spaced relation thereto and arranged in spaced relation relative to the walls of the container whereby gas evolved from the solid carbon dioxide may permeate the interior of the container to provide an insulating blanket of cold gas around the goods in the trays.

1,864,575. MEAT AND FOOD GRINDER. THOMAS F. BALL, Kansas City, Mo. Filed May 17, 1930. Serial No. 453,124. 2 Claims. (Cl. 146—189.)

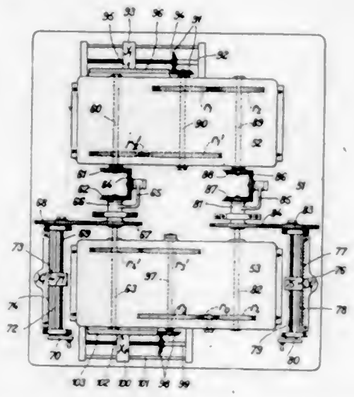
1. In a knife plate clamping device for meat and food grinders, a sleeve shaped nut internally screw threaded from end to end thereof, said thread meshing with the external screw thread of meat and food grinder bodies, a sleeve shaped nut externally screw threaded to mesh with said internal screw threads and provided with a counter bore terminating in an internally radially disposed shoul-

der, a thin hoop shaped sleeve resting in said counterbore with one side thereof abutting said shoulder and the opposite side thereof abutting the knife plate of the food grinder, said hoop shaped ring free to turn on said knife



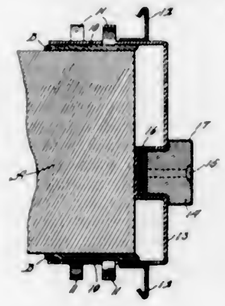
plate, and said externally threaded nut free to turn around said hoop shaped sleeve so that said hoop shaped sleeve forms a floating bearing between said externally threaded nut and the knife plate.

1,864,576. COORDINATE TRANSFORMER. WALTHER BAUERSFELD, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Apr. 25, 1930, Serial No. 447,399, and in Germany Apr. 9, 1929. 1 Claim. (Cl. 235—61.)



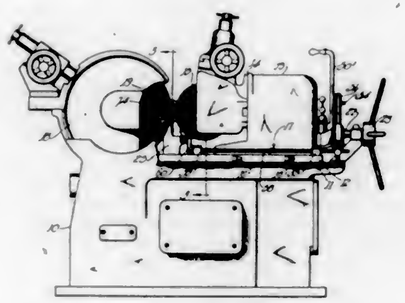
A device for transforming co-ordinates, comprising four indicating devices and four screw spindles, each of these indicating devices comprising a scale and an index adjustable along the scale by means of one of these screw spindles, two handwheels, each of these handwheels being connected to one of the said screw spindles, a gear train coupling those two screw spindles which are connected with a handwheel to the two other screw spindles in such a manner that on so turning the said first two screw spindles as to adjust the two appertaining indices along their respective scales according to the co-ordinates of a point with respect to a plane system of rectangular co-ordinates the said two other screw spindles are so turned that the two appertaining indices are adjusted along their respective scales according to the co-ordinates of this point with respect to another plane system of rectangular co-ordinates turned relatively to the said first system of co-ordinates about the origin of same, the said gear train comprising two differential gears and six shafts, two of these shafts being coupled to the said two other screw spindles, respectively, by means of toothed wheels, each of these two shafts being further coupled to two of the other four shafts by means of toothed wheels, each of the said two differential gears comprising three bevel gears, the axes of rotation of two of these bevel gears being stationary while the axis of rotation of the third bevel gear is rotatable in a plane, those four bevel gears of the said two differential gears which have stationary axes of rotation being rigidly connected to the said other four shafts, respectively, and the two other bevel gears being coupled to the said first two screw spindles, respectively, by means of toothed wheels.

1,864,577. DOORSTOP. ISAAC A. BAUM, Chicago, Ill. Filed Dec. 3, 1928. Serial No. 323,364. 2 Claims. (Cl. 189—46.)



1. In door frame construction, the combination of a metal jamb having a continuous channel in the face thereof, a reinforcement secured in the bottom of said channel and extending the length thereof, a T-shaped door stop the body of which is composed of wood and covered with a sheathing of metal, the leg of said door stop being adapted to be received within said channel, and the inner faces of the head of said door stop contacting the frame member adjacent to said channel.

1,864,578. GRINDING MACHINE. GEORGE W. BINNS, Cincinnati, Ohio, assignor to The Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 25, 1930. Serial No. 423,529. 15 Claims. (Cl. 51—103.)



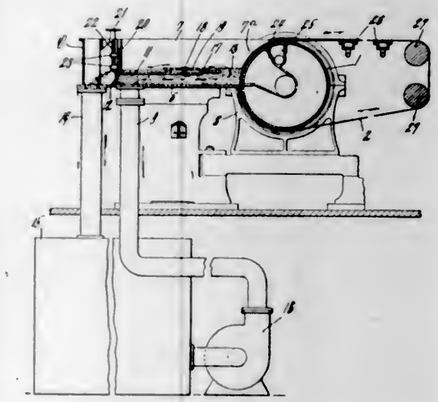
1. In a device of the class described the combination of opposed grinding and regulating wheels forming a grinding throat therebetween, a work rest blade within the throat peripherally supporting a work piece during grinding, a rotatable arbor within the throat held against axial movement relative thereto and receiving the work piece for determining the ultimate axis of rotation of the work, and means for ejecting said work piece from the arbor after completion of the grinding operation.

1,864,579. SCOURING UTENSIL. EDWARD S. BRADFORD, Jr., Longmeadow, Mass., assignor, by direct and mesne assignments, of one-half to Springfield Wire & Tinsel Co., Springfield, Mass., a Corporation of Massachusetts, and one-half to Metal Textile Corporation, Orange, N. J., a Corporation of Delaware. Filed Aug. 11, 1930. Serial No. 474,551. 2 Claims. (Cl. 15—208.)



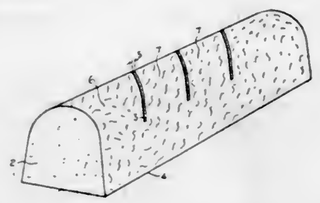
1. A cleaning utensil of the class described comprising two ring binding elements, a mass of metallic gimped strand material formed into loops, each loop passing once through each binding element at substantially opposite points of the loop, there being enough of said loops to form a loose substantially spherical mass between the binding elements, said loops being tied only by said binding elements.

1,864,580. METHOD OF MAKING FIBER WEBS AND WET-MACHINE THEREFOR. ROY E. BRAWN, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed June 6, 1931. Serial No. 542,610. 6 Claims. (Cl. 92—39.)



1. The combination with a roll through the periphery of which water from an aqueous pulp suspension may pass, of a pulp-vat having a bottom and side walls terminating in close proximity to the periphery of said roll, a false bottom arranged above said vat-bottom and having a rear dam portion removed from the rear wall of said vat and a front edge spaced sufficiently from the periphery of said roll to permit excess pulp suspension to flow freely thereover and thence in back of said dam, means for supplying excess aqueous pulp suspension into said vat under said false bottom, and means for removing the excess pulp suspension in back of said dam.

1,864,581. ROLL SCOURING BLOCK. FRANK L. BUELL, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Oct. 7, 1929. Serial No. 398,046. 3 Claims. (Cl. 51—255.)

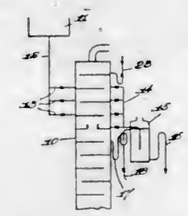


1. A scouring block having a plurality of slots arranged diagonally to the long axis of the block, said slots being narrow as compared with their depth and extending below the abrasive surface to not more than half the depth of the block.

1,864,582. COLOR DISCHARGE PRINTING. FREDERICK R. BYROD, Sunbury, Pa., assignor to Susquehanna Silk Mills, a Corporation of New York. Filed Dec. 10, 1931. Serial No. 580,224. 10 Claims. (Cl. 8—5.)

1. A process of obtaining colored discharges on textile materials which have been dyed with a dischargeable ground color which comprises printing said materials with a colored discharge paste containing a reducing agent, an unreducible coloring matter and titanium dioxide.

1,864,583. METHOD OF PURIFYING OIL VAPORS. GEORGE B. COUBROUGH, Long Beach, Calif., assignor, by mesne assignments, to The Lummus Company, a Corporation of Delaware. Filed June 28, 1927. Serial No. 202,121. 4 Claims. (Cl. 196—93.)



1. The method of purifying light petroleum distillates which consists in passing the distillate vapors through a rectifying zone, passing the rectified vapors through a washing zone, introducing water into the washing zone in countercurrent to the vapors and in quantity insufficient to condense more than a small quantity of vapor, withdrawing the water and condensate to prevent passage of the water into the rectifying zone, and permitting the purified distillate to pass off from the washing zone as vapor.

1,864,584. METHOD AND MECHANISM FOR GRINDING RODS. ROBERT H. COWDERY, Geneva, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 23, 1928. Serial No. 287,789. 5 Claims. (Cl. 51—100.)

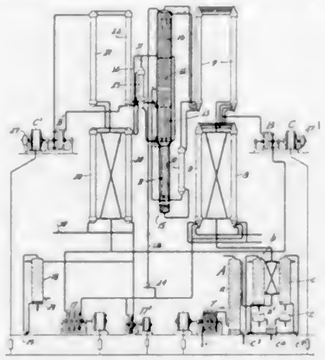
2. In a grinder for tapered rods and tubes, the combination of a bed for the grinder, a rotary grinder wheel, means for simultaneously rotating the work and the grinder wheel, an abutment member, said grinding wheel and abutment member being disposed on opposite sides of the

work, a common support for said abutment and grinder wheel, a rod support on the common support, means to effect relatively longitudinal movement of said common support and work, while the work and grinding wheel are



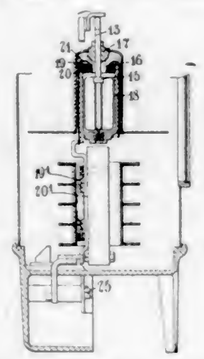
rotating, and means simultaneously operable to effect simultaneous equal oppositely directed lateral guiding movements of the grinder wheel and abutment according to the relative longitudinally adjusted position of the work.

1,864,585. ART OF RECTIFYING MIXED GASES. WILLIAM L. DE BAUFRE, New York, N. Y. Filed Feb. 18, 1927. Serial No. 169,338. 4 Claims. (Cl. 183—115.)



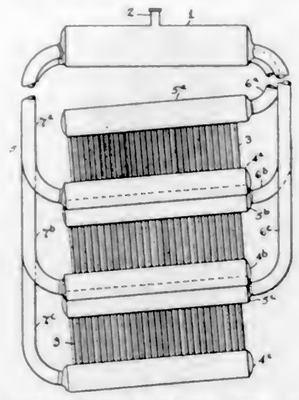
3. In a rectification process employing an external cycle of refrigeration, the compressing of the refrigerating fluid of said cycle, the expanding of a part thereof from a relatively high temperature and applying it to a relatively warm portion of the system, the expanding of another part after it has been cooled to a relatively low temperature and utilizing it in the liquefying of the remainder, and in applying the remainder to a relatively cold part of the system.

1,864,586. INDUCTION ELECTRICITY METER. SEBASTIAN ZIANI DE FERRANTI, Hollinwood, England, assignor to Ferranti Limited, Hollinwood, England. Filed Sept. 14, 1925, Serial No. 56,318, and in Great Britain Oct. 9, 1924. 3 Claims. (Cl. 171—264.)



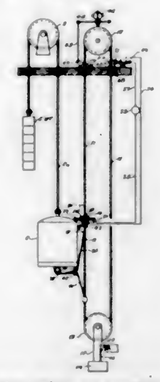
1. An induction electricity meter of the type set forth including a rotor, and a buoyancy chamber associated therewith, said rotor and said chamber being mounted in a removable frame which can be withdrawn as a unit while maintaining the relative positions of chamber, rotor and frame.

1,864,587. MEANS FOR VAPORIZING LIQUIDS. HERBERT H. DOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 18, 1927. Serial No. 169,227. 2 Claims. (Cl. 122—347.)



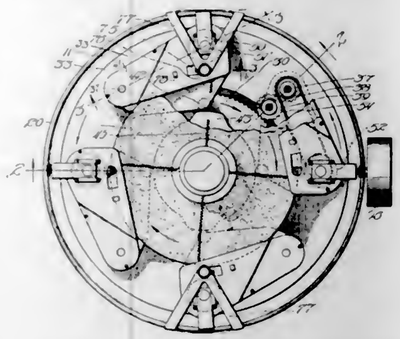
1. In an apparatus for generating vapor, the combination of a plurality of sets of top and bottom drums, a plurality of vertical liquid-heating tubes connecting the top and bottom drum in each set, each such set of top and bottom drums being located at slightly overlapping progressively higher levels, and a vaporizing chamber in common connected with and elevated above said sets of drums, the connections between said chamber and said drums including ducts between one end of the chamber and the corresponding end of the top drums and ducts between the other end of the chamber and the corresponding end of the bottom drums.

1,864,588. AUTOMATIC RESET SAFETY DEVICE. JAMES DUNLOP, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Pennsylvania. Filed Sept. 6, 1930. Serial No. 480,095. 5 Claims. (Cl. 187—89.)



1. The combination with an elevator system comprising an elevator car, a safety device operable by unreeling a safety cable from a safety drum, means responsive to overspeeding of the elevator car for unreeling the safety cable to set the safety device and stop the car, of means for automatically rewinding the safety cable and releasing the safety device when the elevator car moves in the opposite direction.

1,864,589. GRINDING MACHINERY. HANS ERNST, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 4, 1926. Serial No. 152,589. 33 Claims. (Cl. 51—108.)

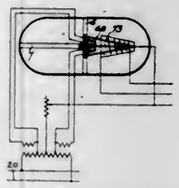


1. A centerless grinder, including a grinding wheel, a plurality of regulating wheel units peripherally opposed thereto, said individual units each including a regulating wheel and an associated work support, a single means for sequentially shifting the several units toward and from the grinding wheel, and additional means for individually adjusting the regulating wheels relative to their supporting units to control the size of work produced by such individual units.

1,864,590. PROCESS OF PREPARING WEARING SURFACES FOR TOOLS, DIES, AND THE LIKE, AND RESULTANT PRODUCT. ALBERT F. FIFIELD, St. Catharines, Ontario, Canada, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 11, 1925. Serial No. 29,571. 3 Claims. (Cl. 29—188.)

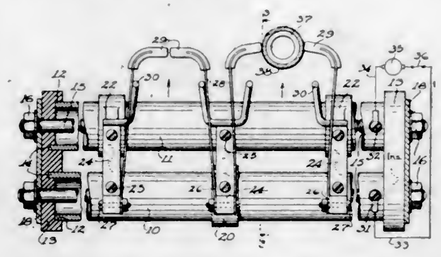
1. The method of forming upon a metal base a working face of a wear resisting alloy such as stellite which consists in applying heat locally to the surface of the base to be treated, to bring the surface to be treated to substantially the melting point, depositing upon said surface a relatively small quantity of said alloy, said alloy being sufficiently resistant to chemical change when fused to prevent oxidation, whereby it will unite directly with the surface of the base, applying heat at a temperature higher than the melting points of the alloy and the base to the deposited alloy to bring said alloy to a fluid condition to cause said melted alloy to flow upon and bind to the surface of the base, leaving thereupon a layer of the alloy substantially uncontaminated by admixture of the base material, the free surface of the layer forming the working face.

1,864,591. THERMIONIC DEVICE. JULIUS E. FOSTER, Pittsburgh, Pa., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 8, 1925. Serial No. 1,182. 4 Claims. (Cl. 250—27.5.)



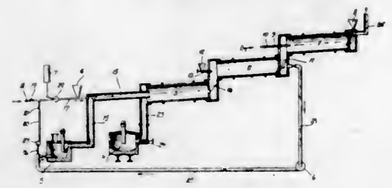
3. An electron discharge device comprising a sealed glass envelope having a press therein, a plurality of thermionic cathodes supported from said press within said envelope, an anode surrounding said cathodes and having an outer surface adapted to function as an equi-potential cathode, means associated with said anode for forming a separate sealed compartment enclosing said cathodes, means for dividing said separate enclosure into separate space discharge regions, each region having one cathode, and a control electrode and an anode disposed around said equi-potential cathode.

1,864,592. MEANS FOR REMOVING FOIL FROM BOTTLES. CHARLES W. GRIFFIN, Lynwood, DANIEL SCHMID, Pasadena, and LAWRENCE P. SINZ, Los Angeles, Calif., assignors to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed June 12, 1930. Serial No. 460,736. 7 Claims. (Cl. 219—1.)



1. Apparatus for removing foil from a bottle, comprising a pair of spaced hollow bars, insulating members on which the opposite ends of said bars are mounted, tie rods extending through said bars for securing said bars to said insulating members, brackets carried by said bars and spaced longitudinally of said bars, and yielding bottle-deflected electrodes carried by said brackets and engageable with the foil-covered portion of the bottle passed therebetween to direct an electric current through the foil to burn the foil.

1,864,593. METHOD OF PRODUCING METAL SPONGE. EMIL GUSTAF TORVALD GUSTAFSSON, Stockholm, Sweden. Filed May 6, 1930, Serial No. 450,326, and in Sweden May 15, 1929. 16 Claims. (Cl. 75—14.)

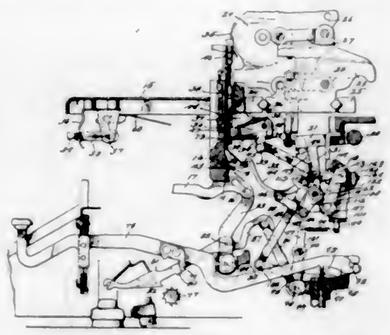


1. Method of producing metal sponge, consisting in reducing in a reduction furnace a charge, containing oxide ore or metal oxide, by means of hot reducing-gases in counter-current to the charge, and supplying finely divided carbonaceous material to said reducing gases before they come in contact with the charge in the furnace.

1,864,594. TYPEWRITER. OTTO A. HOKANSON and JAMES F. KOCA, Woodstock, Ill., assignors to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Jan. 4, 1929. Serial No. 230,201. 10 Claims. (Cl. 197—155.)

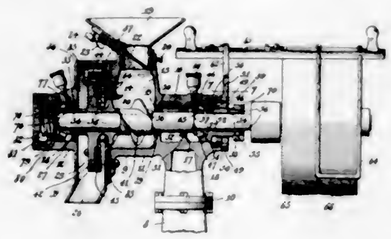
1. In a typewriter, in combination with the frame of the machine, a ribbon vibrator, a universal bar, a lever adapted to be moved by the movement of the said universal bar, a relatively long link adapted to be pivoted in one end of said lever, said link having an inverted T-shaped slot in its upper end and having a laterally projecting

arm substantially intermediate its length, a lever pivoted at one end to said arm, a second lever pivoted to the opposite end of said lever, said second lever being pivotally mounted on a rock shaft, a platen-shifting member, a substantially cradle-shaped lever pivotally carried on said platen-shifting member, a bell crank lever pivotally mount-



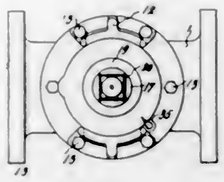
ed on the frame of the machine and having one arm thereof carrying a pin lying in the inverted T-shaped slot of the link, the other arm of the bell crank lever being pivotally mounted to an additional lever, said additional lever being pivotally mounted in turn to the cradle-shaped lever, and a ribbon vibrator connected to the cradle-shaped lever.

1,864,595. COFFEE GRINDER. CHARLES T. HOWSON, Silver Creek, N. Y., assignor to Huntley Manufacturing Co., Silver Creek, N. Y., a Corporation of New York. Filed May 6, 1926. Serial No. 107,094. 5 Claims. (Cl. 83—8.)



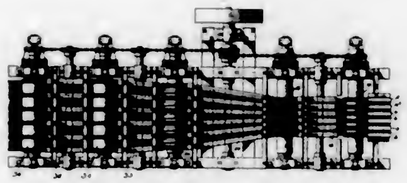
1. In a grinding machine, the combination with a casing having opposite sleeve extensions, a shaft arranged within said casing and extending from a point within one of said sleeve extensions through said casing and through the other sleeve extension thereof, said shaft having an enlarged intermediate portion providing opposite shoulders, a roller bearing for one end of said shaft within one of said sleeve extensions comprising an outer and an inner raceway and an annular series of tapered rollers, a thrust element bearing against said outer raceway, a thrust spring exerting pressure against said thrust element, a sleeve on said shaft bearing with one end against one of said shoulders and having the inner raceway of said roller bearing bear against the other end thereof, a grinding element carried by said sleeve, a grinding element fixed to a wall of said casing for co-action with said first-mentioned grinding element, a roller bearing in the other sleeve extension of said casing comprising an inner raceway bearing against the other shoulder of said shaft, an outer raceway, and an annular series of tapered anti-friction rollers between said raceways, an adjustable abutment bearing against said last-mentioned outer raceway, and means for adjusting said adjustable abutment.

1,864,596. VALVE. JOHN E. JONES, Springfield, Mass., assignor to Chapman Valve Manufacturing Company, Indian Orchard, Mass., a Corporation of Massachusetts. Filed May 6, 1931. Serial No. 535,351. 6 Claims. (Cl. 251—97.)



1. A valve which comprises a valve casing, a valve member having a threaded stem, a rotatable nut engaging the threads of the stem, a keyway movable with the valve member, a free key slidably mounted in the keyway and adapted in one position to lock the stem and valve member to a stationary portion of the valve casing and in another position to lock the stem and valve member to the nut, means operative at a predetermined point in the rotation of the nut in one direction to compel the keyway to move with the nut to thereby force the key into position to lock the stem and valve member to the nut and means operative at said point upon reverse rotation of the nut to restrain movement of the keyway to thereby force the key into position to lock the stem and valve member to the casing and means to prevent axial movement of the nut when the stem and valve member are locked to the casing.

1,864,597. PRODUCTION OF EXPANDED METAL. HARRY A. KESSLER, Buffalo, N. Y., assignor to Kalman Steel Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 10, 1927. Serial No. 211,959. 7 Claims. (Cl. 164—6.6.)

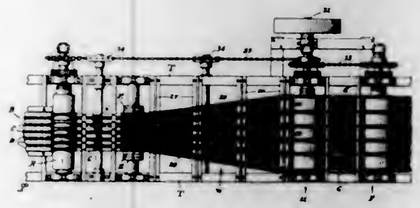


1. The method of manufacturing metal lath from a slitted blank which consists in holding the blank at spaced points against lateral displacement, engaging between the points at which the blank is held parallel portions of the slitted blank, each containing a number of rows of strands with the strands adjacent said engaged portions unengaged, displacing said engaged portions from the plane of the blank, thereby stretching and expanding the unengaged strands at each side of said displaced engaged portions, thereafter stretching and expanding said engaged portions by further cross-sectional displacement of the same, and then operating on the blank to straighten the cross-section of the expanded areas.

1,864,598. MACHINE FOR THE PRODUCTION OF EXPANDED METAL. HARRY A. KESSLER, Chicago, Ill., assignor to Kalman Steel Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 2, 1928. Serial No. 316,676. 12 Claims. (Cl. 164—6.6.)

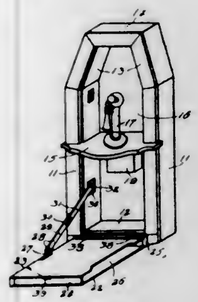
1. In a machine for producing expanded metal from a slitted blank the combination with means for expanding the blank by forming its cross section progressively with displaced components, of means for continuously and

progressively widening the blank to a determined extent as it moves away from the expanding means, said widening means including laterally spaced rows of elements in which the elements of each row are adapted to be fed into engagement with successive portions of a blank and



to move a determined distance with the engaged portions during which movement the relative spacing of corresponding points in each row is progressively increased so as to increase in like manner the relative spacing of the engaged portions of the blank and thereby widen the blank, and means for so moving the elements.

1,864,599. TELEPHONE CABINET. OSCAR J. LINDER, Omaha, Nebr. Filed June 13, 1931. Serial No. 544,069. 3 Claims. (Cl. 312—113.)



1. A telephone cabinet comprising an upright frame adapted to be recessed in a wall, a horizontal partition disposed intermediately in the frame for supporting the telephone, a door pivotally mounted at its lower rear edge to the forward lower edge of said frame and adapted to be swung upwardly against the front of the frame beneath the shelf, said door having a compartment therein opening through one edge of the door whereby access to said compartment may be had in both the open and closed positions of the door, and means for supporting the door when in open position.

1,864,600. METHOD OF FORMING WALL PLATE STRUCTURES FOR FURNACES. HUGH C. LORD, Erie, Pa., assignor to Erie City Iron Works, Erie, Pa., a Corporation of Pennsylvania. Filed June 20, 1930. Serial No. 462,614. 3 Claims. (Cl. 29—157.4.)

1. The method of making furnace walls of metal plate, which consists in forming on a main plate a top and depending sides; forming a flue sheet by shaping the same with its lower edge conforming to the rear end of the top of the main sheet, and bending the ends of the flue sheet rearwardly to provide sides for a return projection of the furnace chamber, bringing the lower edges of the bent ends into joining relation with the sides of the main sheet; forming a rear plate by shaping a rear plate to conform to the rear edges of the furnace sides, bending said rear plate forwardly to conform to the upper edges of the rearwardly bent portions of the flue sheet and shaping the forward edge of said forwardly bent portion to conform to the upper edge of the flue sheet; assembling the sheets by joining the bottom edge of the flue sheet and the lower edges of the rearwardly bent ends with the rear end and sides of the main sheet, and the rear

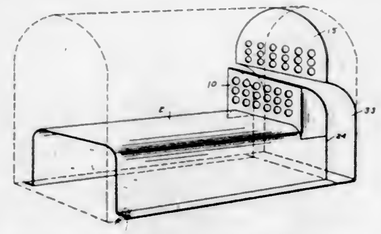
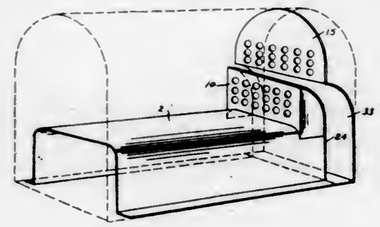


plate with the rear ends of the sides of the main sheet, the top edges of the rearwardly bent ends of the flue sheet and the top edge of the flue sheet; and welding the plates along the joined edges.

1,864,601. WALL PLATE STRUCTURE FOR FURNACES. HUGH C. LORD, Erie, Pa., assignor to Erie City Iron Works, Erie, Pa., a Corporation of Pennsylvania. Original application filed June 20, 1930, Serial No. 462,614. Divided and this application filed July 11, 1931. Serial No. 550,129. 3 Claims. (Cl. 122—74.)

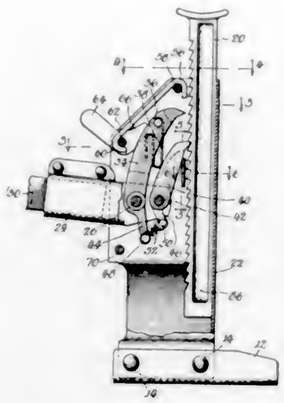


1. A plate wall for furnaces of the class described comprising a main sheet forming a crown sheet with depending sides; a flue sheet extending upwardly from the rear end of the crown sheet and having return projection sides extending rearwardly from the flue sheet and joining the main sheet sides; and a rear plate closing the rear wall and having a forwardly extending upper part having its forward edge joined with the top of the flue sheet and the side edges of the upper part joining with the top and rear of the return projection sides.

1,864,602. LIFTING JACK. MILLARD B. LUCKER, Benton Harbor, Mich., assignor to Auto Specialties Mfg. Co., San Francisco, Calif., a Corporation of California. Filed Dec. 14, 1927. Serial No. 240,055. 2 Claims. (Cl. 254—111.)

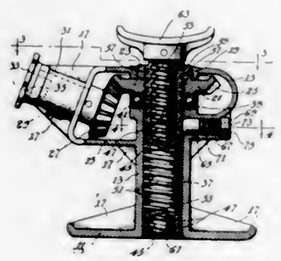
1. In a lifting jack, the combination of a base and an upright, the latter having spaced apart portions forming a housing for a vertically reciprocable toothed lifting bar, a manually operable lever pivotally mounted between said spaced portions forming the upright, a lifting dog pivotally mounted on the inner end of said manually operable lever and having a depending arm, a holding dog pivotally mounted on the pivotal axis of said manually operable lever, said holding dog being relatively longer than the lifting dog and extended above to engage the teeth of the rack bar, a leafspring carried by the upper end of said holding dog and depending downwardly to engage the lifting dog, a reversing lever pivotally mounted between said parallel portions of the upright

and at the upper portion thereof, and having a nose within said portions adapted to engage said spring when said nose is moved into one position whereby to force said dogs into engagement with the teeth and to free said



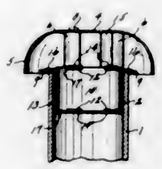
spring when the nose is moved into another position, said holding dog also having a depending arm and a coil spring interconnecting the depending arms of said holding dog and said lifting dog.

1,864,603. LIFTER JACK. MILLARD B. LUCKER, Benton Harbor, Mich., assignor to Auto Specialties Mfg. Co., San Francisco, Calif., a Corporation of California. Filed Feb. 6, 1928. Serial No. 252,089. 2 Claims. (Cl. 254—102.)



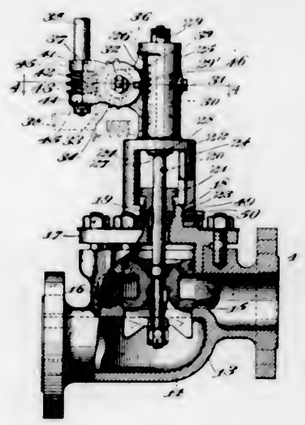
1. In a device of the class described, a frame providing a housing having an opening at the upper end of the frame, an externally threaded extensible member arranged in said housing for projection through the opening thereof, a driving nut journaled at the upper end of the housing and threadingly engaging the extensible member, said nut having gear teeth formed in its periphery and a support member comprising a strap of width substantially less than the diameter of said nut formed integrally with and extending from the side of the frame at a point below said opening, said strap extending outwardly of the frame and upwardly of said opening, a bearing formed in said strap and a driving member rotatably mounted in said bearing and having a portion extending within said strap and operatively engaging the toothed periphery of said nut to form a driving connection therewith, said frame having an enlarged formation therein at the junction of said strap therewith, said formation providing a duct opening into the housing, a spring pressed friction means arranged in said duct in position to enter the housing and to frictionally engage said extensible member whereby to provide a rotation preventing brake for the extensible member with respect to the frame upon the actuation of said operating member, the engagement of the extensible member and the brake means being friction solely, there being no interlocking or splined connection between brake means and driving member.

1,864,604. BREATHER CAP. HOWARD E. LEMMERMAN, Cleveland, Ohio, assignor to Simmons Mfg. Co., Cleveland, Ohio, a Corporation of Ohio. Filed June 14, 1930. Serial No. 461,211. 7 Claims. (Cl. 121—194.)



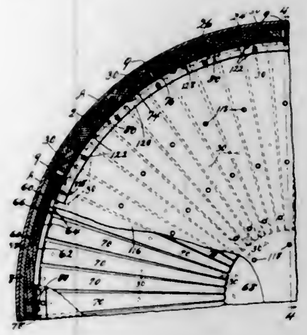
1. A breather cap structure, comprising a tubular body member provided adjacent one of its ends with lateral vent openings, a cover for said body member secured to said aforementioned end thereof, and a screen unit of tubular form mounted within said body member and provided with supporting ears projecting outwardly into the vent openings of said body member, whereby said screen unit is positively connected to and supported by said body member.

1,864,605. VALVE. RICHARD J. MCCARTY, Jr., Bethlehem, Pa., assignor to Bethlehem Steel Company. Filed Feb. 24, 1928. Serial No. 256,605. 9 Claims. (Cl. 137—139.)



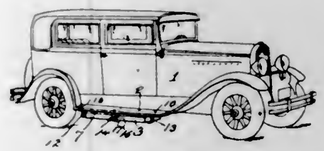
1. A valve comprising a casing, a valve plate having a stem, a worm wheel adapted to reciprocate said stem, a worm in mesh with said wheel, and means for supporting said worm for planetary movement about the axis of said wheel.

1,864,606. CAR TANK. JOHN J. MCBRIDE, Bayonne, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 27, 1929. Serial No. 358,537. 18 Claims. (Cl. 220—9.)



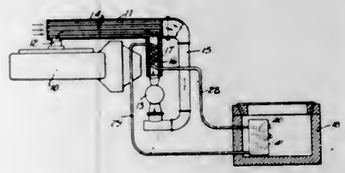
18. In a car tank, a metallic liner therefor, and means for securing the liner in position in the tank comprising a compressible medium interposed between the tank and the liner and secured to the tank, said liner being attached to said compressible medium.

1,864,607. AUTOMOBILE RUNNING BOARD CARRIER. FRANK S. MILLER, St. Louis, Mo. Filed Mar. 21, 1931. Serial No. 524,249. 2 Claims. (Cl. 224—9.)



1. The combination with an automobile running board, of a carrier comprising a movable elongated receptacle divided into compartments and having a lid, horizontal jointed arms of two members supporting each end of the receptacle, one member having a vertical shoulder substantially the depth of the receptacle and pivoted to the underside of the running board and the other member pivoted to the bottom of the receptacle and to the first member, and means to secure said receptacle in its normal closed position below the running board, substantially as described.

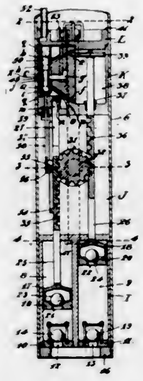
1,864,608. REFRIGERATION. CARL GEORG MUNTERS and SIGURD MATTIAS BÄCKSTRÖM, Stockholm, Sweden, assignors to Platen-Munters Refrigerating System Aktiebolag, Stockholm, Sweden, a Corporation of Sweden. Filed Aug. 1, 1930, Serial No. 472,221, and in Germany Aug. 2, 1929. 30 Claims. (Cl. 62—169.)



1. The method of refrigerating with the aid of an internal combustion engine which consists in vaporizing a liquid fuel to form a combustible mixture, introducing said mixture into said engine and supplying heat for vaporizing said fuel by conduction from a body to be cooled external to the path of flow of said combustible mixture.

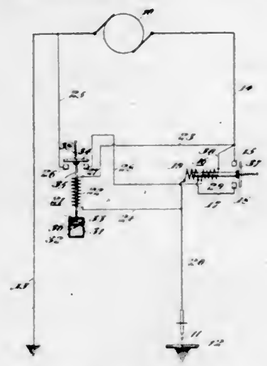
6. Refrigerating apparatus comprising an internal combustion engine, a supply duct for said engine, means for supplying liquid fuel and air to said duct, a body to be cooled external to said duct, and means for conducting heat from said body to the liquid fuel within said duct.

1,864,609. PUMP. HERBERT G. MUSOLF, Long Beach, Calif. Filed Feb. 9, 1931. Serial No. 514,495. 5 Claims. (Cl. 103—48.)



1. In a pump, a pair of reciprocal pump pistons, fluid pressure operated means directly connected to but one of said pistons for effecting reciprocation thereof, means whereby movement of said last mentioned piston in one direction will effect movement of the other piston in the opposite direction, and means actuated by movement of one of said pistons for controlling operation of said fluid pressure operated means.

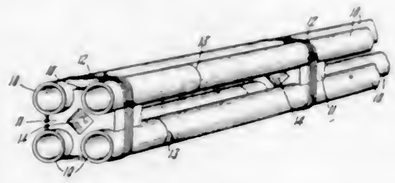
1,864,610. ELECTRIC WELDING SYSTEM. HARRY E. PARKER and SIMON M. STEWART, Quincy, Mass., assignors to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Aug. 27, 1929. Serial No. 388,771. 7 Claims. (Cl. 219—8.)



1. A welding system comprising a source of electrical supply, welding electrodes, connections from said source to said electrodes for initially supplying current to said electrodes upon the contacting thereof, an electromagnet, comprising a core and a coil, having its coil in series with one of said connections, said coil constituting a

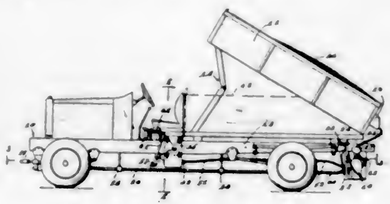
resistance in said connection to limit the supply of current therethrough, a shunt circuit for said coil constituting means for supplying welding current to the electrodes, a normally open switch in series with said shunt circuit, a shunt circuit for the source of supply, an electromagnet, comprising a core and a coil, having its coil in series with said circuit and having its core operatively connected to the switch in the first-mentioned shunt circuit, a normally open switch within the shunt circuit for the source of supply and operatively connected to the core of the first-mentioned electromagnet and a dashpot operatively connected to said switch.

1,864,611. MULTIPLE CONDUIT AND TIE ELEMENT THEREFOR. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 21, 1930. Serial No. 437,694. 5 Claims. (Cl. 247—34.)



1. A multiple conduit section comprising a plurality of single fibrous conduits, spacing blocks between said single conduits, and separate fibrous tie members surrounding the multiple section at spaced points.

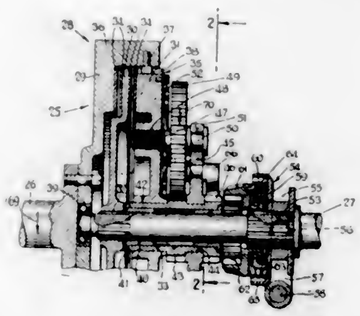
1,864,612. ROAD SURFACING EQUIPMENT. GEORGE E. PEARSON and HARRY E. PETRILLI, Boston, Mass. Filed Oct. 4, 1930. Serial No. 486,497. 6 Claims. (Cl. 275—2.)



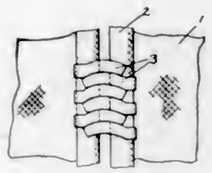
3. An improved road surfacing machine comprising in combination with an automobile truck chassis, motor and dump body, a receptacle located on the rear of said body adapted to receive screened material therefrom, a blower adapted to supply air pressure to said receptacle, a discharge nozzle located on the front of said chassis and connected with said receptacle, driving means connected to the motor of said automobile truck chassis adapted to drive said blower.

1,864,613. AUTOMOBILE TRANSMISSION. HERMAN B. PHILIPS, New York, N. Y. Filed July 17, 1930. Serial No. 468,596. 6 Claims. (Cl. 192—35.)

1. In combination with driving and driven shafts adapted to rotate at different varying speeds, and a clutch to interconnect the shafts to cause the same to rotate in a required speed relation, of releasable actuating means for the clutch including screw means rotated by one of the shafts, and coacting means turned by the other shaft, the coacting means having a thread having running engagement with the screw means, and the latter having relative movement with the coacting means due to said difference in shaft speeds to actuate the clutch, means tending automatically to reverse the direction of rotation of the screw means relative to the coacting means, and releasable locking means to retain the screw means and coacting means against said relative reverse movement.

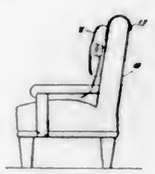


1,864,614. SEPARABLE FASTENER. NOEL J. POUX, Meadville, Pa., assignor to Lion Fastener Inc., Meadville, Pa., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,786. 3 Claims. (Cl. 24—205.)



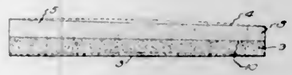
1. A separable fastener comprising stringers, and interlocking members secured to the edges of the stringers, each of said members having a forked front edge engaging the edge of the opposing stringer to prevent the stringer from swinging out of the plane of said opposing stringer on an axis formed by the interlocking members.

1,864,615. SOUND REPRODUCING APPARATUS. EDWIN JAY QUINBY, Yonkers, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 6, 1929. Serial No. 412,044. 10 Claims. (Cl. 181—31.)



1. An individual sound reproducing device comprising a telephone receiver, a cushion-like member including cushioning material completely surrounding said receiver on all sides thereof, the sound waves from said telephone receiver being transmitted through the cushioning material of said cushion-like member.

1,864,616. ABRASIVE STONE. GEORGE R. RAYNER, Lewiston Heights, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Jan. 25, 1928. Serial No. 249,329. 1 Claim. (Cl. 51—278.)



The method of making a hand sharpening stone in the form of an elongated body of bonded abrasive material of trapezoidal cross-section, which body is continuously and gradually tapered from one end toward the other and the length of which is many times its width or thickness, and which is made up of two layers of abrasive of different grit sizes, which comprises first pressing one layer of abrasive material in a mold, then pressing a second layer in contact with the first, and slightly curving the outer faces of the composite article to make the face of article on the fine grit size convex in longitudinal section and the face on the coarse grit size concave in longitudinal section, and then baking the article.

1,864,617. SEWER CLEANER. PETER O. REE, Austin, Minn., assignor of one-half to Ralph H. Peters, Austin, Minn. Filed Feb. 10, 1932. Serial No. 592,040. 8 Claims. (Cl. 15—104.30.)



1. A sewer cleaner comprising a spear having a shank and barbs at the forward end of the shank, cutters having sharpened forward edges and means for holding said cutters in radially spaced relation from the shank of said spear.

1,864,618. WINDSHIELD WIPER. HUGH D. REYNOLDS, Cincinnati, Ohio, assignor of forty-nine per cent to Peter P. Dorne, Cincinnati, Ohio. Filed May 7, 1929. Serial No. 361,231. 7 Claims. (Cl. 74—14.)



1. A device for operating a windshield wiper, comprising, a driven endless cable, means for driving said endless cable, a slidably mounted traveling block adapted to carry the windshield wiper, both forward and return runs of said cable passing through said block, said block formed of sections joined about the cable runs, a protuberance on said cable, means for positively stopping said block at the respective ends of the cable runs, and said block having its traversed portions conically formed in reverse directions for receiving and clutching said protuberance.

1,864,619. CYCLIC PROCESS OF FIBER LIBERATION. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 30, 1925. Serial No. 59,583. 10 Claims. (Cl. 92—11.)

1. A process which comprises cooking raw cellulosic material in an alkaline solution of sodium sulphite; separating the pulp from the spent cooking liquor; smelting the inorganic content and burning the combustible content of such spent liquor; recovering the inorganic smelted compounds; and passing the products of combustion from such smelting operation in contact with like spent liquor for the recovery of the soluble content of such products of combustion.

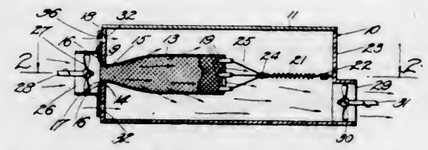
1,864,620. PROCESS OF LIBERATING PULP FROM RAW CELLULOSIC MATERIALS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 18, 1931. Serial No. 516,844. 6 Claims. (Cl. 92—11.)

1. A process which comprises cooking raw cellulosic material in a dilute non-acid sulphite solution, and then cooking to complete fiber liberation in a more concentrated non-acid sulphite solution.

1,864,621. MANUFACTURE OF RUBBER GOODS. VERNON J. SPAUNGER, Akron, Ohio, assignor to American Anode Incorporated, Akron, Ohio, a Corporation of Delaware. Filed Apr. 18, 1931. Serial No. 531,249. 7 Claims. (Cl. 18—58.)

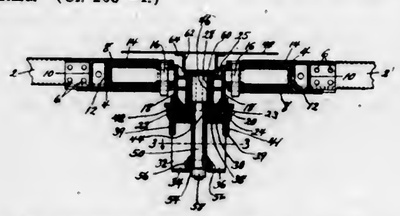
1. The method of manufacturing rubber goods which comprises coating a form with a coagulant, exposing the form to an alkaline vapor, and immersing the coated form in an aqueous dispersion of rubber.

1,864,622. APPARATUS FOR CLEANING VACUUM CLEANER BAGS. ALFRED W. SUTHERLAND, Swampscott, Mass. Filed Oct. 25, 1930. Serial No. 491,199. 2 Claims. (Cl. 15—14.)



1. Apparatus for cleaning porous dust bags and the like, comprising a chamber having opposed inlet and outlet passages, means for engaging the bag at its opposite ends and holding it suspended under tension within said chamber and with its mouth in proximity to said inlet passage, means for forcing a current of air through said inlet passage into the interior of the bag and out through the pores of the bag into said chamber, the wall of said chamber at the inlet end being formed with additional air inlets to admit air directly into the chamber without first entering the bag, and means for forcing the dust laden air out of the chamber through said outlet passage.

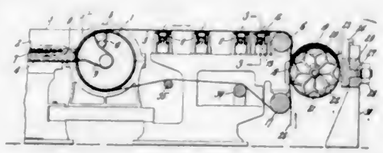
1,864,623. ARTICULATED CAR. JOHN B. D. THOMPSON, Union City, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 3, 1931. Serial No. 506,385. 14 Claims. (Cl. 105—4.)



1. In an articulated car comprising a plurality of car bodies, a truck having a center plate, a bearing member carried by the center plate and provided with an annular

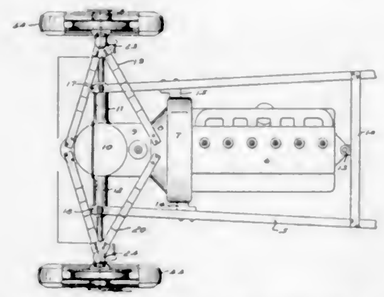
concaved recess, bearing elements at the adjacent end portions of said car bodies having their bearing surfaces complemental to and supported in the annular recess, a spacing element extending upwardly from the bearing member for retaining the bodies in spaced relation, and means extending from the center plate and cooperating with the said spacing element for restraining the bearing member against horizontal shifting.

1,864,624. MANUFACTURE OF PULP ROVINGS. FREDERICK W. VOGEL and WILLIAM B. MEGLITZ, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed June 6, 1931. Serial No. 542,648. 5 Claims. (Cl. 92—39.)



1. A method which comprises progressively depositing from aqueous suspension pulp fibers as ribbons on a traveling wire cloth, progressively detaching the edge portions of the ribbons on only one side from the wire, and frictionally engaging the detached edge portions and rolling out the ribbons into round form while still on the wire.

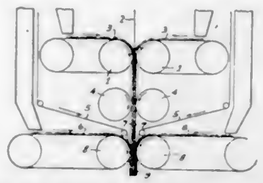
1,864,625. VEHICLE CONSTRUCTION. REX E. WELLS, Detroit, Mich. Filed Jan. 25, 1930. Serial No. 423,516. 6 Claims. (Cl. 180—42.)



1. In a vehicle construction, the combination of a pair of laterally extending springs having their base ends attached to said vehicle in longitudinally spaced relation, the outer ends of said springs converging and attached to one member of a ball and socket joint, a wheel support, a wheel journaled on said support, said support having the other member of said ball and socket joint secured thereto, a second vertically spaced ball and socket joint having one of its members secured to said wheel support, a laterally extending member having the other member of said last mentioned ball and socket joint secured to the outer end thereof, the inner end of said laterally projecting member being secured to the vehicle.

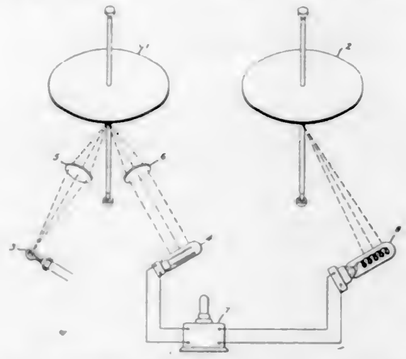
1,864,626. PROCESS FOR THE MANUFACTURE OF CONTINUOUS SHEETS OR CORRUGATED PLATES OF ASBESTOS CEMENT WITH INSERTION OR INSERTIONS OF IRON WIRE NETTING. ARIE HERMANUS ARENTSEN, Amsterdam, Netherlands. Filed Aug. 14, 1929, Serial No. 385,930, and in the Netherlands and Germany May 16, 1929. 2 Claims. (Cl. 25—154.)

1. A process for the manufacture of continuous sheets and corrugated plates of asbestos cement with the reinforcement of iron wire netting, consisting in the mixing of cement and asbestos in a certain proportion together with water and coloring matter to a thick paste, applying this paste to both sides of an iron wire netting, pressing the paste and netting a plurality of times by water permeable means to force the paste against, through and around the meshes of the iron netting and to remove the excess



water, rolling the sheet to the desired thickness, drying the sheet to nearly complete dryness, corrugating the sheets by first rolling two corrugations into the middle of the sheet and then other corrugations on either side of the middle of the asbestos cement sheet in such a manner that the plate is corrugated progressively throughout its whole width, and cutting the sheets into desired lengths.

1,864,627. METER TESTING DEVICE. SAMUEL ARONOFF, Newark, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,140. 4 Claims. (Cl. 88—14.)

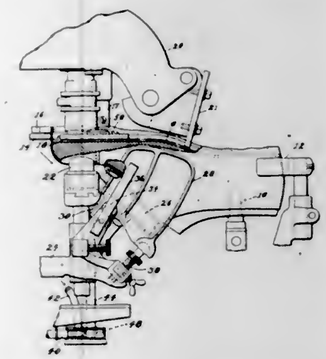


1. In combination, a plurality of rotating discs having equi-spaced alternate light-absorbing and light-reflecting surfaces around their peripheries, means for stroboscopically comparing the speeds of said discs comprising a neon lamp for coaction with one of said discs, a photo-electric cell, a source of light coacting with said light reflecting surfaces of another of said discs, for intermittently creating impulses in said photo-electric cell, and means including an electronic relay for amplifying said impulses to energize and deenergize said neon lamp in accordance with the speed of said last-mentioned disc.

1,864,628. ABSORBENT AND/OR CATALYTIC GELS AND METHOD OF MAKING SAME. EARLE H. BARCLAY, Hamilton, Ohio, assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Original application filed Oct. 3, 1929, Serial No. 397,142. Divided and this application filed May 22, 1931. Serial No. 539,425. 12 Claims. (Cl. 252—2.)

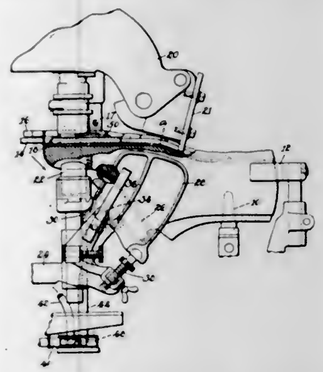
1. A method for preparing a plural gel consisting of the oxides of tin, silicon, and tungsten which comprises forming a mixture of a soluble silicate solution and a tungstate salt solution, and adding a stannic salt solution to said mixture with agitation, the proportions and concentrations of the metallic salt solutions and silicate solution being such that the reaction mass is alkaline.

1,864,629. MANUFACTURE OF SHOES. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 11, 1930, Serial No. 420,251, and in Great Britain Jan. 22, 1929. 17 Claims. (Cl. 12—145.)



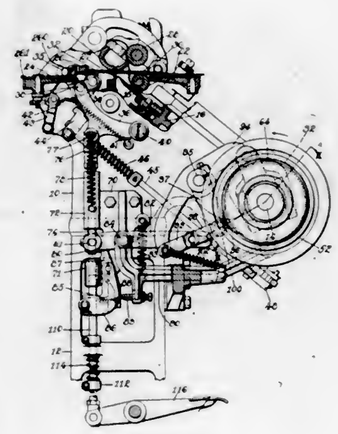
1. That improvement in methods of making shoes which consists in pressing an upper at the rear of the toe in close conformity to the contour of a form in the hollow back of the toe and rearwardly along the instep and also rearwardly along the sides of the form as far as the ball of the shoe and while holding it thus under pressure shaping the margin of its toe end portion over the form, releasing the upper from the pressure thus applied, and thereafter lasting the sides of the shoe at the rear of the toe.

1,864,630. MACHINE FOR SHAPING SHOE UPPERS. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Jan. 11, 1930, Serial No. 420,251, and in Great Britain Jan. 22, 1929. Divided and this application filed June 8, 1931. Serial No. 542,853. 33 Claims. (Cl. 12—7.)



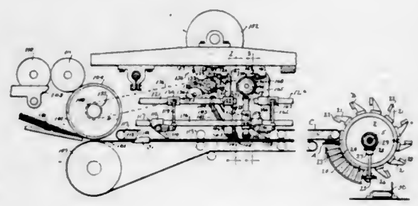
1. In a machine for shaping the toe-end portions of uppers, the combination with means for applying a pull to the toe end of an upper to tension the upper over a form and for thereafter shaping the margin of the toe end of the upper over the form, of fluid-pressure means conformable to the contour of the form and arranged to be rendered operative only after the upper-tensioning operation has been substantially completed to press the forepart of the upper at the rear of the toe closely about the form and to hold it pressed against the form during the shaping of the margin of the toe end of the upper.

1,864,631. SOLE SLASHING MACHINE. WILLIAM C. BAXTER, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 21, 1930. Serial No. 469,372. 16 Claims. (Cl. 12—40.)



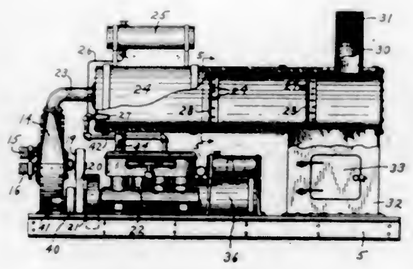
1. A sole slashing machine, having in combination, sole-supporting means, a movable sole-deflecting member cooperating with said supporting means, a reciprocatory slashing knife, actuating mechanism therefor including a clutch, and treadle-operated mechanism for simultaneously moving the sole-deflecting member to deflect the sole and for tripping the clutch, said mechanism being arranged to be disconnected from the deflecting member whereby the latter may be controlled independently of the treadle mechanism after the machine is started.

1,864,632. MACHINE FOR MAKING PAPER BOXES OR THE LIKE. SAMUEL BERGSTEIN, Middletown, Ohio, assignor to The Interstate Folding Box Company, Middletown, Ohio. Filed Oct. 11, 1928. Serial No. 311,859. 3 Claims. (Cl. 93—44.)



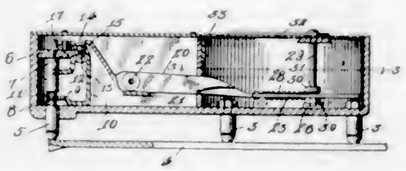
1. A paper box making machine including a female die, a series of male die members movable progressively into operable relation with the female die for forming the boxes, feeding means for moving the box blanks to the female die, including means for rendering the blanks adhesive and for effecting an initial fold on the blanks, and pressure means coacting with the male die members for sealing the boxes, each of the male die members comprising a divided box forming head spaced one part from another for adapting the dies to said fold of the box blanks in the forming operation of the boxes, and movable one part relative to another for reducing the said space therebetween for sealing the boxes.

1,864,633. COMBINATION VACUUM CLEANER AND BURNER. JOHN SIDNEY BESSENT, Bigfork, Mont. Filed July 2, 1929. Serial No. 375,512. 2 Claims. (Cl. 15—19.)



1. A combination vacuum cleaner and burner comprising a rotary fan, nozzles connected to the intake side of the fan, a burner tank, a conduit for the forward end of said tank communicating with the discharge side of the fan, perforated baffle plates disposed in spaced apart relation within the tank, and ignition means for the forward end of the tank located directly below the point of entry of the conduit leading from the fan.

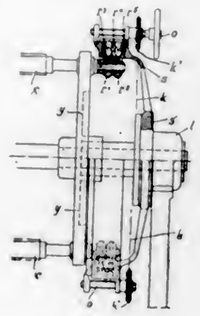
1,864,634. SAW GAUGE. THOMAS J. BRADFORD, Cottage Grove, Oreg., assignor of two-fifths to Emmitt Sharp, Cottage Grove, Oreg. Filed Nov. 27, 1929. Serial No. 410,159. 2 Claims. (Cl. 33—302.)



1. A saw tooth gauge comprising a long casing having depending foot portions thereon to travel over the flat face of a saw and having a pin movable through the bottom adjacent to one end thereof for travel over the teeth of the saw, means limiting the movement of the pin in two directions and a swingable arm actuated by the movement of the pin, a bar pivotally secured to the arm and having a right angle twisted portion, a rack on one of the edges of the said twisted portion, said casing having a dial, a pointer movable over the dial, an arbor for the pointer and journaled in the casing, a pinion on the arbor, flanged elements on the arbor at the opposite sides of the pinion and receiving the rack of the bar therebetween, and spring means influencing the rack to engage with the pinion.

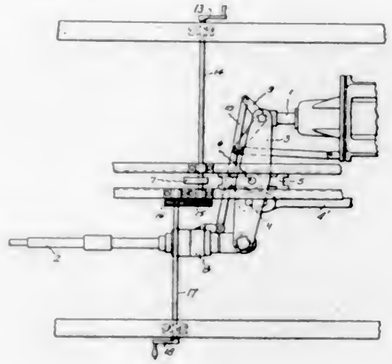
1,864,635. DRIVING MECHANISM FOR THE ROUGHING ROLLS OF A CARD ROUGHING MACHINE. RICHARD BEUTNER and ALWIN HILLE, Neugersdorf, Germany. Filed July 23, 1929, Serial No. 380,369, and in Germany July 27, 1928. 3 Claims. (Cl. 74—34.)

1. In a card roughing machine, the combination with a plurality of roughing rolls, of a rotatable carrier in which said rolls are journalled, friction gears carried by said rolls, cooperating friction means for engaging said gears, means for rotating said carrier with respect to said friction means whereby rotation on their individual axes and rotation about the carrier axis will be simultaneously imparted to said rolls, and means for varying



the contact pressure between said gears and friction means to control the degree of slippage therebetween and thereby the speed with which said rolls are driven.

1,864,636. BRAKE LEVERAGE ADJUSTER. BERT HENRY BROWALL, Malmo, Sweden, assignor to Svenska Aktiebolaget Bromsregulator, Malmo, Sweden, a Corporation of Sweden. Filed July 9, 1930, Serial No. 466,844, and in Germany Aug. 30, 1929. 2 Claims. (Cl. 188—195.)

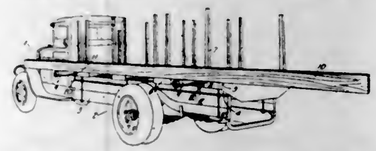


1. In a vehicle brake, a source of braking power, a brake rigging adapted to transmit the braking power to the brake shoes, means adapted for alteration of the leverage of the brake rigging according to the total weight of the car, an automatic slack adjuster mounted in the brake rigging and adapted not only to perform a reduction of too large slacks but also for performing an increase of too small slacks when required, and means for actuation of the slack adjuster in dependency of a movable part of the source of power so that the adjustment performed tends to keep the stroke length of such moving part at a constant value.

1,864,637. EXTENSION RACK FOR TRUCK BEDS. RALPH BYRNE, Kansas City, Mo. Filed Mar. 27, 1929. Serial No. 350,213. 3 Claims. (Cl. 224—29.)

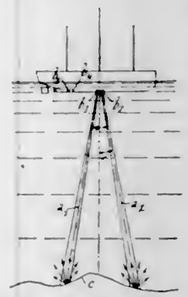
1. In a device of the character described including a frame, an extension rack including a tube supported by the frame transversely thereof having an end extending

beyond the longitudinal side of the frame, a tubular member slidable in said frame-supported tube having a stop member engageable with the tube for limiting slidable



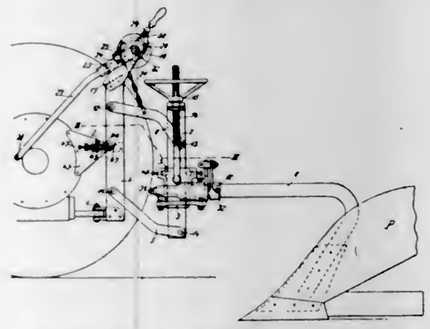
movement of said tubular member, means for latching the tubular member to the tube, and a cross bar in the slidable member for operating the tubular member.

1,864,638. METHOD AND MEANS FOR THE OBSERVATION AND MEASUREMENT OF THE SPEED OF A VESSEL BY DIRECTED BEAMS OF ULTRA-AUDIBLE WAVES. CONSTANTIN CHILOWSKY, Paris, France. Filed Dec. 13, 1924, Serial No. 755,702, and in Belgium Jan. 19, 1924. 5 Claims. (Cl. 177—386.)



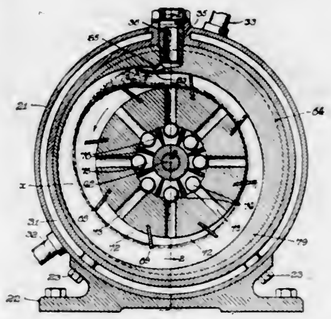
1. A method for determining the speed of a vessel consisting in the emission in water of at least one beam of ultra-audible waves in a direction other than the vertical, and in the observation of the changes in frequency occurring according to Döppler's principle and by reason of the vessel's speed in the ultra-audible beam returning to the vessel after reflection upon a stationary obstacle and deducting the speed of the vessel from the changes of frequency observed.

1,864,639. OPERATING CULTIVATORS. PIETER CREZÉE, Zevenbergen, Netherlands, assignor to Ernst Printz, Kettwig-on-the-Ruhr, Germany. Filed Nov. 29, 1927, Serial No. 236,559, and in the Netherlands Dec. 3, 1926. 15 Claims. (Cl. 97—47.)



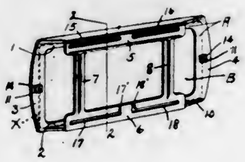
1. The combination of a tractor and a plow, and a draft connection between said tractor and said plow comprising a plow beam, a vertically disposed parallelogram link frame interposed between said tractor and said beam and adapted to swing around a vertical axis on said tractor, and means for enabling said beam to turn around its longitudinal axis, to be displaced vertically in parallel to itself, to be inclined vertically, and to be swung horizontally, relatively to said frame.

1,864,640. ROTARY COMPRESSOR AND PUMP. WILLIAM P. DALRYMPLE, Chicago, Ill., assignor of one-half to Cameron A. Whitsett, Chicago, Ill. Filed Feb. 17, 1930. Serial No. 428,940. 21 Claims. (Cl. 230—79.)



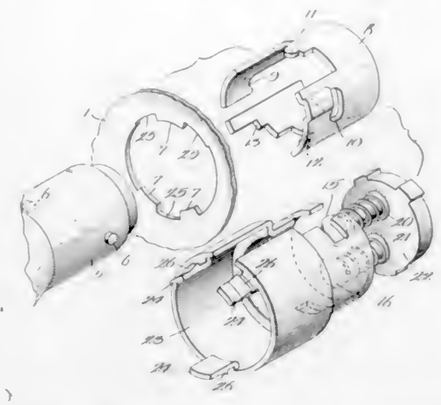
1. In a device of the class described, the combination of a casing, a rotor therein having two laterally spaced annular flanges projecting therefrom to form a peripheral channel in the rotor, an inlet and an outlet for the pumped fluid, means defining working chambers in said channel, separate working fluid passageways in said rotor communicating with each of said chambers, a liquid adapted to be revolved within said casing by said rotor and producing under the action of centrifugal force a liquid ring having piston coaction with said working chambers, and a displacement member extending into the peripheral channel between said flanges for causing piston surging of the liquid ring in said channel.

1,864,641. LICENSE PLATE HOLDER. IRVING J. DAVIS, Syracuse, N. Y. Filed Mar. 6, 1930. Serial No. 433,773. 4 Claims. (Cl. 40—125.)



1. A license plate holder for automobiles comprising an integral substantially rectangular frame having an opening therethrough adapted to disclose the license plate and integral means adapted to support an emblem in a plane at one side thereof and a pair of longitudinally extending bars arranged parallel with respective longitudinal sides of the frame and integrally connected to and spaced from said frame by longitudinally extending parallel spaced walls to permit a license plate to be slid between the frame and the longitudinal bars, each of said bars having a pair of longitudinally extending slots, said slots in the bar adjacent the emblem supporting means being arranged within the plane of said frame opening and the other pair of slots positioned in a plane at one side of said opening and provided with lateral portions extending in the plane within said opening for permitting bolts to be entered into the slots from the opposite side of the frame.

1,864,642. REFLECTING ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Filed Feb. 3, 1930. Serial No. 425,546. 3 Claims. (Cl. 173—339.)

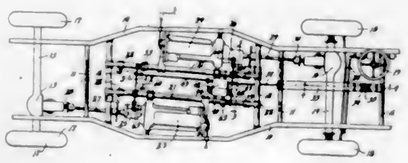


1. The combination with a mounting having an opening therethrough, of a socket in said opening receiving the base of an incandescent lamp, said base having bayonet pin and bayonet channel engagement with said socket, and said socket being provided with three or more contact points spaced apart around the axis of the socket for positioning the socket with respect to the mounting, a spring pressing the lamp base against the socket and through the intermediation of the lamp base pressing the socket against the mounting at said contact points, and a carrier carried by the mounting and carrying said spring, said carrier surrounding the socket and having three or more points of anchorage upon the mounting, said points being spaced apart around the axis of the socket.

1,864,643. MANUFACTURE OF ALIPHATIC ACIDS AND ESTERS. HENRY DREYFUS, London, and WALTER BADER, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 27, 1926, Serial No. 138,116, and in Great Britain July 20, 1926. 29 Claims. (Cl. 260—116.)

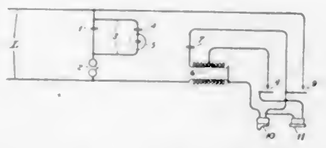
1. Process for the manufacture of compounds containing the acetyl group which comprises subjecting methyl alcohol to the action of carbon monoxide in the presence of an inorganic acidic catalyst containing at least one acidic hydroxyl group directly linked to a non-metallic element.

1,864,644. TRANSMISSION SHIFTING DEVICE FOR VEHICLES HAVING TWO ENGINES. PETER S. ECKLAND and GUNNAR RYDEN, Minneapolis, Minn., assignors to Eckland Bros. Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Dec. 23, 1929. Serial No. 416,162. 9 Claims. (Cl. 74—39.)



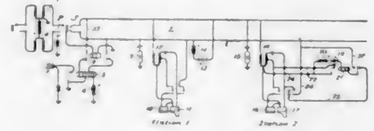
1. In a wheeled vehicle, the combination of an engine adapted to drive the rear wheels of the vehicle, an engine adapted to drive the front wheels of the vehicle, a variable speed transmission for each of said engines, a pair of shifting levers fulcrumed for universal pivotal motion for respectively shifting said transmissions, a controlling lever fulcrumed for universal pivotal motion and means for transmitting the motion imparted to said controlling lever to said shifting levers to impart universal pivotal motion to said levers to operate the same simultaneously and correspondingly in inverse directions.

1,864,645. TELEPHONE SIGNALING SYSTEM. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 27, 1931. Serial No. 547,335. 1 Claim. (Cl. 179—84.)



A telephoning line terminating at a subscriber's station, ringing apparatus comprising a condenser and a ringer bridged across said line at said station, and a signaling circuit connected directly across said condenser, said signaling circuit including a condenser and a cold cathode discharge tube.

1,864,646. TELEPHONE SIGNALING ARRANGEMENT. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 27, 1931. Serial No. 547,337. 4 Claims. (Cl. 179—86.)

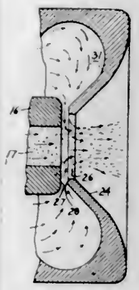


1. A telephone line connected to a central office and extending to a plurality of subscribers' stations, a talking circuit connected across the line at each station and a signaling circuit connected across the line at each station, a cold cathode discharge tube and a battery in each of said signaling circuits, a line battery at said central office opposed to the voltage of the batteries in said signaling circuits and adapted to be connected to said line when the line is idle, the voltage of the line battery being such that when connected to the line the voltage across said tubes will be so reduced that they will not operate, and a talking battery at said central office opposed to the voltage of the batteries in said signaling circuits and adapted to be connected to said line when the line is in use, the voltage across the line at the station due to the talking battery with the line in use being less than that of the line battery so that when connected to the line, the voltages across said tubes will be sufficient to cause them to operate.

1,864,647. MIXING NOZZLE. PAUL L. GEER, Oakland, Calif., assignor, by direct and mesne assignments, of three-tenths to Wesley M. Wooten, San Francisco, Calif., and three-tenths to Laura Fenton Frank, Oakland, Calif. Filed Aug. 17, 1927. Serial No. 213,483. 3 Claims. (Cl. 91—45.)

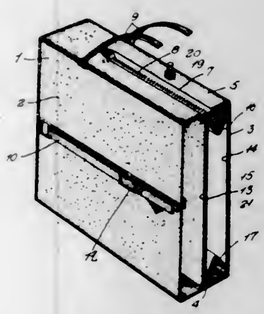
3. In a mixing nozzle, a tubular member providing a passage for axially discharging a stream of material, a second member fixedly related to said first member and

providing a passage for a second stream of material, and means carried by said second member operative to direct the material from its stream entirely perpendicularly into



the first stream adjacent its point of emergence from its passage and from all sides of said first stream in a plane at right-angles to the axis thereof.

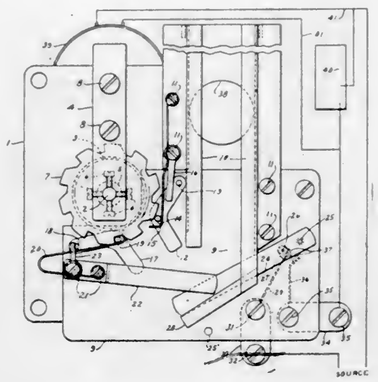
1,864,648. COMBINATION BATHING SUIT BAG, AIR PILLOW, AND AIR FLOAT OR BUOY. GEORGE E. HAINES, Philadelphia, Pa., assignor to L. H. Gilmer Company, a Corporation of New Jersey. Filed Nov. 20, 1931. Serial No. 576,389. 8 Claims. (Cl. 9—17.)



1. A combination bathing suit bag, air pillow and air float or buoy comprising a bag of flexible waterproof material, said bag having an access opening, a flexible partition on the interior of the bag secured to one of the side walls thereof and forming with said wall a receiving compartment, an inflatable sack in said compartment, and means for inflating and deflating the same.

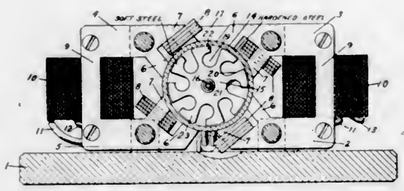
1,864,649. COIN CONTROL CIRCUIT CLOSING APPARATUS. JULIUS W. HANSEN, Princeton, Ind., assignor to Hansen Manufacturing Company, Inc., Princeton, Ind., a Corporation of Indiana. Filed Mar. 17, 1930. Serial No. 436,309. 8 Claims. (Cl. 194—9.)

1. In a circuit closing apparatus, a normally open electric circuit, a coin chute, a rotatable disc, means operated by the weight of a coin in said chute to close said circuit and cause the rotation of said disc, and a plurality



of members operated by said disc, each successively to support the coin on said first means for a definite length of time and then release it, whereby the disc ceases to rotate.

1,864,650. SYNCHRONOUS SELF-STARTING MOTOR. JULIUS W. HANSEN, WILLIAM L. HANSEN, and IRA N. HURST, Princeton, Ind., assignors to Hansen Manufacturing Company, Inc., Princeton, Ind., a Corporation of Indiana. Filed Feb. 9, 1931. Serial No. 514,336. 9 Claims. (Cl. 172—278.)

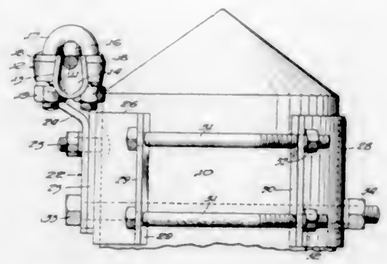


1. A synchronous self-starting motor having, in combination, a stator having means for producing a progressive, magnetic field, a hardened steel bridging ring mounted thereon, and a rotor with geometrical pole members revolving within said ring.

1,864,651. GROUND WIRE CLAMP MOUNTING. KENT A. HAWLEY, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed June 19, 1931. Serial No. 545,532. 5 Claims. (Cl. 248—31.)

1. Means for supporting a ground wire upon a pole, comprising a clamp engaged upon the wire and provided

at its opposite sides with trunnions, a bracket device pivotally receiving said trunnions, a saddle member to

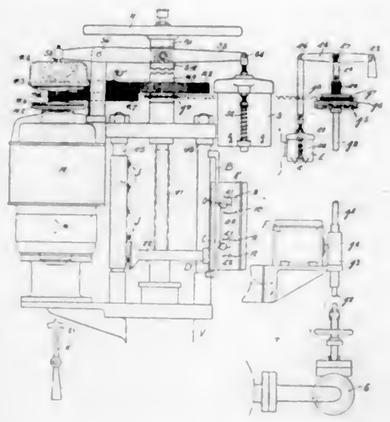


which said bracket device is attached, said saddle member being disposable against a pole, and means for securing said saddle member to the pole.

1,864,652. PRIMARY CELL AND ELECTROLYTE THEREFOR. GEORGE W. HEISE, Lakewood, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Original application filed May 28, 1925, Serial No. 30,612, Patent No. 1,835,867, dated Dec. 8, 1931. Divided and this application filed Apr. 10, 1929. Serial No. 354,177. 3 Claims. (Cl. 136—154.)

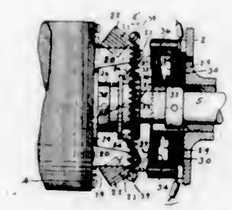
1. An electrolyte for a galvanic cell of the alkaline electrolyte-zinc anode type comprising a solution of caustic alkali and an alkaline earth compound.

1,864,653. POWER OPERATED VALVE OPENING AND CLOSING APPARATUS. CHARLES EDWARD JONES, Bradford, England. Filed Nov. 20, 1930, Serial No. 496,979, and in Great Britain Nov. 26, 1929. 22 Claims. (Cl. 137—139.)



11. In apparatus as claimed in claim 1 in which the electrical driving means comprise a main motor adapted to be coupled to the main valve by a clutch controlled by the main solenoid, and an auxiliary motor adapted to be coupled to the by-pass valve through an auxiliary clutch controlled by the auxiliary solenoid.

1,864,654. ELECTRIC SWITCH. FREDERICK S. KINGSTON and BROOKS L. CONLEY, Warren, Ohio, assignors to The Sunlight Electrical & Manufacturing Company, Warren, Ohio, a Corporation of Ohio. Filed Apr. 19, 1930. Serial No. 445,667. 16 Claims. (Cl. 200—80.)

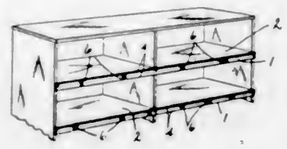


1. In a centrifugal switch, a rotor, a centrifugal device pivoted to said rotor, a controlling spring connected with said device to produce a considerable time lag in operations at different rates of rotor speeds, a sleeve adapted to be shifted by said centrifugal device, a second controlling spring engaged with said sleeve to co-act with said first controlling spring, a shiftable contact disk adapted to be engaged by said sleeve, a spring for controlling the movement of said disk, and electrical contacts adapted to be engaged and disengaged by said disk.

1,864,655. PROCESS FOR THE PRODUCTION OF ORE COKE. HANS KLENCKE, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 19, 1931, Serial No. 523,942, and in Germany Apr. 2, 1930. 6 Claims. (Cl. 75—65.)

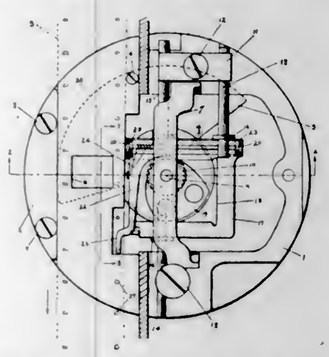
1. A process for the production of ore coke which comprises superficially igniting a mixture of finely divided ore and coking coal on a support that is permeable to gases, and subjecting the ignited mixture to a blast until the mass is coked without any substantial consumption of the coke or melting of the ore.

1,864,656. LABEL HOLDER. ROLAND W. LE BEAUMONT, Syracuse, N. Y. Filed Oct. 18, 1929. Serial No. 400,561. 2 Claims. (Cl. 40—140.)



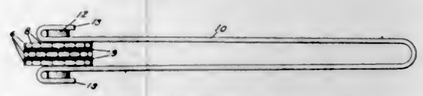
1. A label holder of the class described, comprising, in combination a body member having a pair of opposed parallel grooves sunk at substantially right angles to the face of said body member and extending longitudinally thereof, said grooves having their outer walls undercut and a resilient label member having opposite sides thereof serrated and adapted to engage the undercut walls of the grooves for removably confining the label therebetween.

1,864,657. COMBINED SHUTTER AND FILM MOVING MECHANISM. GUNNE LOWKRANTZ, Binghamton, and LEW W. LESSLER, Johnson City, N. Y., assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Feb. 1, 1929. Serial No. 336,829. 1 Claim. (Cl. 88—18.4.)



In combination, a rotatable shaft, film moving mechanism, a cam rotatable with said shaft for operating said mechanism, and a shutter leaf rotatable with said shaft, said cam and said shutter leaf being offset from said shaft in opposite directions whereby to balance each other in the rotation thereof.

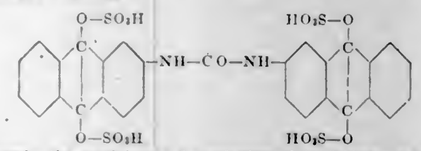
1,864,658. GRINDING WHEEL DRESSER. ROBERT S. MCCONNELL, Urbana, Ohio, assignor to George McConnell, doing business as The Desmond-Stephan Mfg. Co., Urbana, Ohio. Filed Apr. 10, 1931. Serial No. 529,029. 1 Claim. (Cl. 125—37.)



In a grinding wheel dresser, the combination comprising a one-piece handle formed from a strip of metal bent to form and having resilient arms, each arm having a hole at the open end thereof with loop extensions, an axle adapted to fit into said holes and held firmly therein by said looped extensions, toothed cutting members fixed to said axle and projecting therefrom, and spacers of substantially the same diameter as the toothed members positioned between each adjacent toothed member.

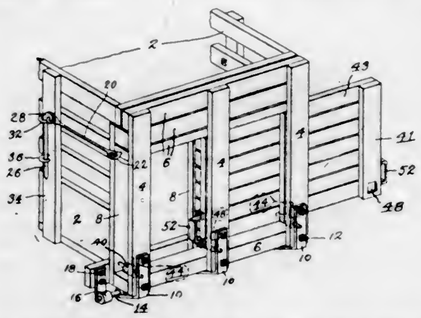
1,864,659. LEUCO SULPHURIC ACID ESTERS OF THE UREAS OF BETA-LEUCO-AMINOANTHRAQUINONES. WILHELM MEISER, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 9, 1931, Serial No. 536,315, and in Germany May 14, 1930. 4 Claims. (Cl. 260—98.)

3. The new compounds having in their free form the probable formula



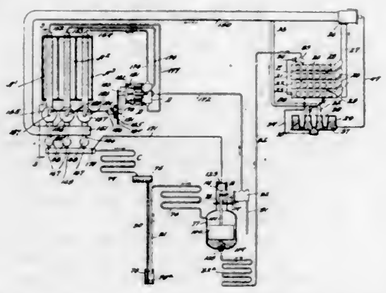
wherein the nuclei may be substituted by halogen atoms, said compounds being in form of their alkali metal salts brown powders easily soluble in water, being split up to the ureas of 2-aminoanthraquinone or nuclear halogen substitution products thereof by treatment with oxidizing agents in an acid medium.

1,864,660. END GATE. ELMER O. MILLER, Beloit, Kans. Filed Feb. 17, 1930. Serial No. 429,016. 1 Claim. (Cl. 296—51.)



In combination with a vehicle body, a main end gate section operably connected to said body and consisting of inner and outer upright members forming the ends and middle portion of said section, and horizontal members forming the upper and lower portions of said section and interposed between said upright members to provide an opening, an auxiliary section mounted to slide to the right or left in said opening; rollers in the lower portion of said opening and upon which said auxiliary section is adapted to operate; means for securing the main section in closed position, and resilient means for securing the auxiliary section in closed position.

1,864,661. REFRIGERATION METHOD AND APPARATUS. ERNEST BALDWIN MILLER, Baltimore, Md., assignor to Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Feb. 26, 1926. Serial No. 90,827. 36 Claims. (Cl. 62—5.)

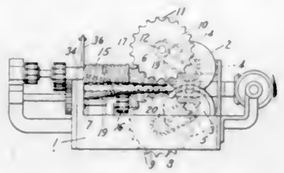


1. A method of refrigeration consisting in evaporating a liquid, adsorbing the vapor in a porous material, in the absence of permanent gases, activating the adsorbent to liberate the adsorbed vapor, condensing the liberated vapor, returning it to the liquid, and maintaining the system free of permanent gases by sweeping the gases out to the atmosphere during, and by, the activation of the adsorbent.

1,864,662. PLASTIC COMPOSITION. ERNEST B. MILLER, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Nov. 20, 1930. Serial No. 497,067. 2 Claims. (Cl. 106—23.)

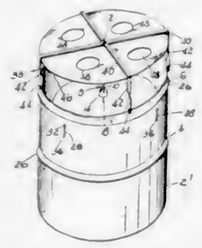
1. A rubber composition consisting of rubber having incorporated therein a powdered, hard, porous, highly adsorptive inorganic gel selected from the group consisting of the oxides of silicon, tin, tungsten, titanium, aluminum, characterized in that it has a tensile strength and elasticity much greater than that of a similar composition containing an equal weight of the oxide in a different form.

1,864,663. CORN BUTTING MACHINE. WILLIAM W. MORBAL, Morral, Ohio. Filed Jan. 28, 1929. Serial No. 335,467. 16 Claims. (Cl. 146—84.)



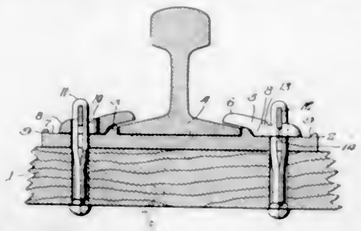
1. In a mechanism of the character described, a butt removing device, a gaging device to position an ear of corn with relation to said butt removing device, a feeding member extending lengthwise of said gaging device, means to guide an ear of corn into engagement with said gaging device and comprising a part extending across said feeding member to support said ear of corn in engagement therewith, and another feeding member arranged between said guiding means and said butt removing device to engage said ear of corn when the latter has been moved laterally with relation to said guiding means by the first mentioned feeding member.

1,864,664. ANIMAL TRAP. HENRY W. MUHLEISEN, Los Angeles, Calif., assignor of one-half to Rachel M. Martin, Los Angeles, Calif. Filed Jan. 20, 1930. Serial No. 422,037. 6 Claims. (Cl. 43—69.)



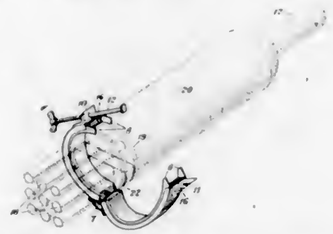
1. An animal trap including an open-topped animal receiving container, an open-ended casing detachably connected with said container, stop means juxtaposed to the lower portion of said casing to engage the top of said container, an animal entry means having a set of depending members adapted to rest upon the top edge of said casing, a tiltable platform suspended from said animal entry means, and positioned within said open ended casing, a bait holder positioned above said platform, and means for adjusting said platform to the weight of the animals to be trapped.

1,864,665. RAIL CLIP. JOHN P. NORTHEY and RODNEY V NORTHEY, Toronto, Ontario, Canada. Filed Dec. 13, 1930. Serial No. 502,171. 5 Claims. (Cl. 238—304.)



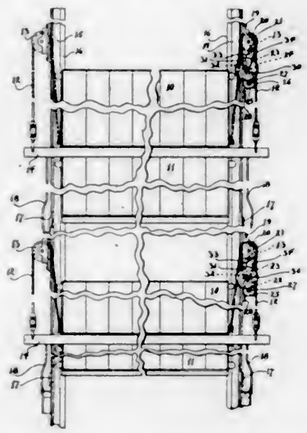
1. The combination of a tie plate; a clip resting on the tie plate and having an end adapted to extend over the base of a rail resting on the tie plate; a slotted key bolt passing through the tie plate and clip from below; a wedge key adapted to be driven through the slot in the key bolt in engagement with the clip; and interengaging shoulders on the tie plate and clip to prevent the latter turning on the tie plate.

1,864,666. ELECTRIC MOLD. JOHN F. OSBORNE, Upper Darby, Pa. Filed Apr. 4, 1930. Serial No. 441,616. 4 Claims. (Cl. 219—19.)



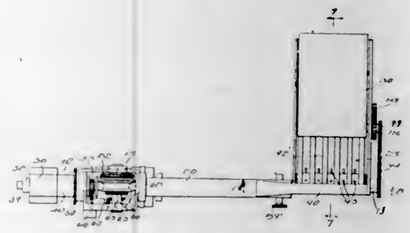
1. An electric mold for forming joints between cables comprising disks laterally spaced from each other and perforated to receive and be permanently united with the cable ends, an annulus having two pivoted sections, means for clamping said sections together over the edges of said disks to hold the disks in place, and heating elements associated with each section.

1,864,667. OPERATOR FOR COUNTERBALANCED ELEVATOR DOORS. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,919. 6 Claims. (Cl. 187—54.)



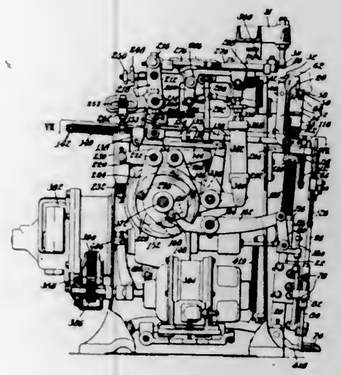
1. An operator for counterbalanced elevator doors embodying therein the combination with a guide rail structure within an elevator shaft, a series of elevator doors each having sections vertically and oppositely movable on said structure, connections between said sections on the opposite sides thereof, and sheaves about which said connections pass, of an electric motor secured to said guide rail structure within the shaft and below a sheave, a gear carried by the shaft of said motor, a shaft counter to the shaft of said motor carrying a large gear enmeshed with the gear upon the motor shaft, and a small sprocket wheel, a sprocket wheel of substantially the diameter of a sheave secured thereto, a sprocket chain cooperating with said sprocket wheels, a main electric power line extending adjacent all of said doors, a branch line extending adjacent all of said doors, a branch line extending therefrom adjacent each door and connected with the motor adjacent such door, a normally open switch in each of said branch lines adapted to be operated only when a car is positioned adjacent said switch, means carried by and movable with an elevator car cooperating with the switch in any branch line, pole changing switches controlling the circuits to said main power line, electro magnetic control mechanisms for said pole changing switches, and means whereby said control mechanisms may be selectively actuated from a remote point.

1,864,668. MACHINE FOR MAKING STICK CANDY. LOUIS J. PROPPER, Chicago, Ill. Filed May 22, 1929. Serial No. 365,032. 10 Claims. (Cl. 107—4.)



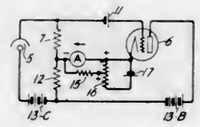
1. In a machine for feeding and twisting a strip of candy and for severing said strip into predetermined lengths, strip severing means mounted for rotation upon axes transverse to the travel of said strip of candy through said machine, a rotatable support upon which said severing means is mounted, and driving means operatively connected with said severing means and with said support for rotating said severing means upon said axes and for simultaneously rotating said support to turn said axes in a plane transverse to the travel of said strip.

1,864,669. MACHINE FOR OPERATING ON SHOES. ARTHUR F. PYM, Swampscott, and WILLIAM E. SCARLETT, East Lynn, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 20, 1930. Serial No. 454,095. 72 Claims. (Cl. 12—14.)



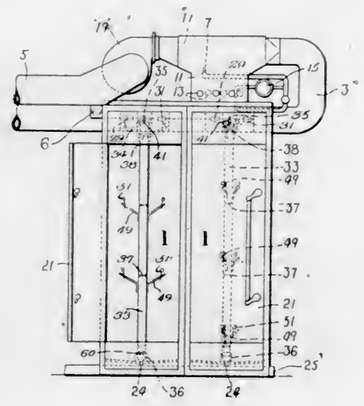
1. In a machine for lasting the heel ends of shoes, the combination with heel-end lasting means, of a shoe support movable to present a shoe in position to be operated upon by said lasting means, and means movable with said shoe support for determining by engagement with the heel end face of the shoe and with a relatively fixed portion of the machine the lengthwise position of the shoe when presented to the lasting means.

1,864,670. ELECTROOPTICAL SYSTEM. FREDERICK W. REYNOLDS, Grantwood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 12, 1929. Serial No. 339,475. 4 Claims. (Cl. 179—171.)



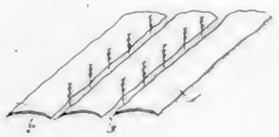
1. An electro-optical system comprising a photoelectric cell, a vacuum tube amplifier, the input voltage versus output current characteristic of which comprises a concave portion, a source of current for said cell, means to impress a voltage on the input circuit of said amplifier in accordance with the current flowing through said cell, the working range of the graph of illumination versus cell current being convex and means to produce a correspondence of operation over the concave portion of the amplifier characteristic and the convex working range of the cell characteristic.

1,864,671. APPARATUS FOR TREATING SHOE PORTIONS. FRED RICKS and HAROLD ERNEST ELLIOTT, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 22, 1929, Serial No. 357,119, and in Great Britain May 8, 1928. 15 Claims. (Cl. 12—1.)



1. In a tempering apparatus, a chamber, a member extending vertically through the chamber near its center, means for supporting articles to be tempered at different heights upon the member and located about it in vertical columns along and in close proximity to the chamber-walls, and means for circulating a tempering medium through the chamber.

1,864,672. SOIL TREATMENT. HAROLD J. ROSE, Penn Township, Allegheny County, Pa., and WILLIAM H. HILL, New York, N. Y., assignors to The Koppers Company, a Corporation of Delaware. Filed June 1, 1929. Serial No. 367,789. 16 Claims. (Cl. 47—9.)

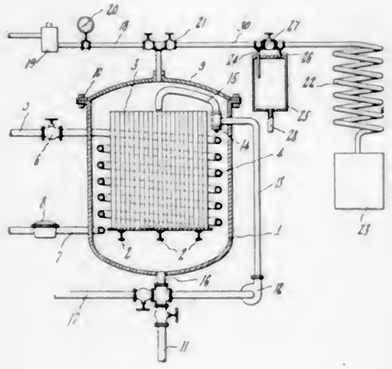


1. A process of preparing a covering for soil used for raising crops, which comprises spreading a coating of a composition comprising coal and oil on the surface of the soil in a given area and providing openings in the coating for plant growth.

1,864,673. PRODUCTION OF PURE METALS. LEO SCHLECHT, Ludwigshafen-on-the-Rhine, and FRANZ DUFTSCHMID, Heidelberg, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 12, 1929, Serial No. 385,473, and in Germany Aug. 27, 1928. 6 Claims. (Cl. 75—14.)

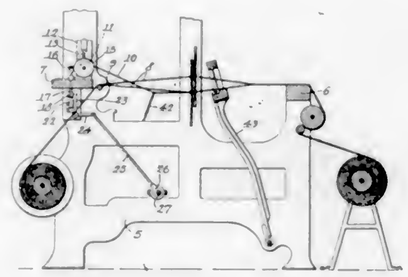
1. The process of producing pure metals which comprises subjecting powdery metal containing impurities which form volatile oxygen compounds, to a uniform oxidizing treatment at a temperature sufficiently low to uniformly superficially oxidize the metal and to avoid any substantial formation of volatile compounds, and then heating the resulting product, thereby causing the impurities to react with the introduced oxygen to form gaseous products.

1,864,674. MANUFACTURE OF IMPREGNATED ARTICLES. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 14, 1930. Serial No. 444,135. 6 Claims. (Cl. 91—68.)



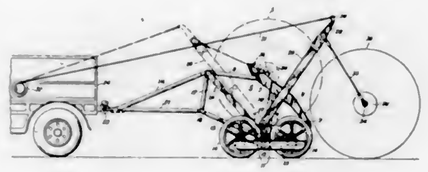
1. In the manufacture of impregnated articles in a wet condition prior to impregnation with a hot impregnating medium, those steps which comprise subjecting the wet articles to a bath of the hot impregnating medium under a pressure higher than the vapor pressure of water at the temperature of the impregnating medium, and slowly lowering the pressure while maintaining the impregnating medium at the elevated temperature.

1,864,675. LOOP SELVAGE DEVICE. HURNDON F. SHUFORD, La Grange, Ga. Filed Oct. 13, 1930. Serial No. 488,448. 1 Claim. (Cl. 139—195.)



In a loom, the combination of warp-carrying means including a heddle, with a wire threaded through the eye of the heddle and carried by the warp-carrying means to extend along an edge of the warp to form filling loops in the selvage, and means operated to feed the wire through the heddle eye at a slower rate of advance than the travel of the warp to shift the bending point of the wire in the heddle eye.

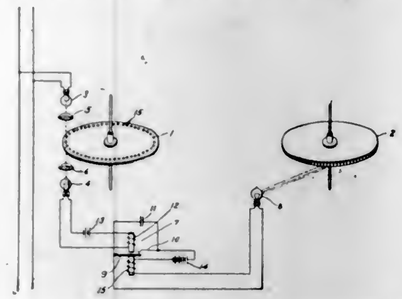
1,864,676. CABLE REEL TRAILER. TEMPLE C. SMITH, Westfield, ALBERT E. FREEMAN, East Orange, and WILLIAM T. LIVERMORE, Westfield, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 23, 1931. Serial No. 524,728. 8 Claims. (Cl. 214—65.)



1. A trailer for transporting cable reels including a main frame, said frame having tubular members forming a lower forked portion and tubular members forming an upper substantially U-shaped portion, supports connected to the upper portion, and an auxiliary frame pivotally connected with the main frame and arranged to swing in an arc between forward and rearward limits thereon to respectively load and unload cable reels on and from said supports.

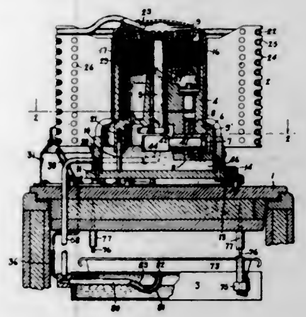
1,864,677. STROBOSCOPIC WATTHOUR METER. HARRY P. SPARKES, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 5, 1929. Serial No. 330,585. 3 Claims. (Cl. 88—14.)

1. In combination, a movable element having alternate light-transmitting and light-retarding areas of predetermined length along a path of movement thereof, a light-sensitive device for generating electrical impulses, means for directing light toward said device through the intermediary of said areas to cause said impulses, a second movable element having alternate light-absorbing and light-reflecting surfaces along a path of movement thereof, a



luminous electrical discharge device for illuminating said second element, and means for amplifying said impulses to energize and deenergize said discharge device.

1,864,678. COMPRESSOR FOR REFRIGERATING MACHINES. CHRISTIAN STEENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed May 18, 1926, Serial No. 109,960. Divided and this application filed May 17, 1928, Serial No. 278,589. Renewed Feb. 28, 1931. 28 Claims. (Cl. 230—206.)



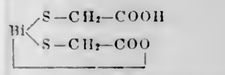
1. A compressor comprising a drive shaft, an oscillatable cylinder, a piston therein, and means carried by the shaft and engaged by the piston for operating the same, said piston having a counterweight arranged beyond said means and said shaft having a counterweight arranged opposite said means.

1,864,679. BISMUTH-DITHIOGLYCOLIC ACID AND THE SALTS THEREOF AND A PROCESS OF PREPARING THEM. KARL STREITWOLF, Frankfort-on-the-Main, ALFRED FEHRLE, Bad Soden-on-the-Taunus, and WALTER HERRMANN and PAUL FRITZSCHE, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 30, 1930, Serial No. 492,352, and in Germany June 5, 1930. 21 Claims. (Cl. 260—11.)

13. As a new product, the bismuth-dithioglycolic acid of the following formula

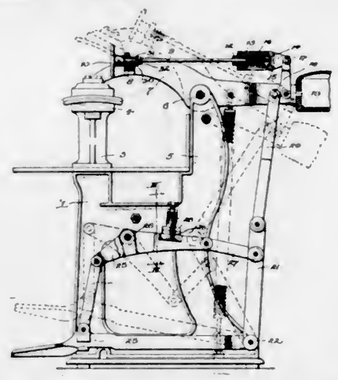
$$BiS_2C_4O_4H_5$$

and the following probable constitution



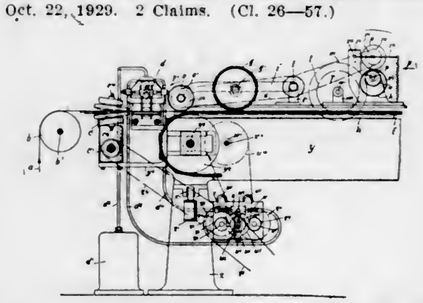
being a yellow powder soluble in sodium carbonate.

1,864,680. GARMENT PRESS. WILLIAM STROBRIDGE, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 4, 1930. Serial No. 473,020. 4 Claims. (Cl. 68—9.)



1. In a garment pressing machine the combination of a main frame; a head-carrying lever fulcrumed thereon; a bell-crank lever pivoted to said head-carrying lever adjacent the rear portion thereof; means for applying pressure to the head, said means being interposed between one arm of the bell-crank lever and a fixed portion of the press; and means connected with the other arm of the bell-crank lever and under the control of the operator for adjusting the angular relation of the bell-crank lever with reference to the head-carrying lever.

1,864,681. APPARATUS FOR FEEDING KNITTED GOODS MADE FROM RAYON OR ARTIFICIAL SILK TO TENTERING MACHINES. FRITZ TANDEL, Chemnitz, Germany, assignor to C. G. Haubold A. G., Chemnitz, Germany, a Joint-Stock Company of Germany. Filed Oct. 20, 1930, Serial No. 490,065, and in Germany Oct. 22, 1929. 2 Claims. (Cl. 26—57.)

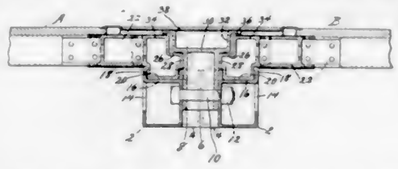


1. The herein described mechanism for automatically feeding knitted fabrics made from rayon, comprising a conveying device, a feeler controlling said conveying device, an apparatus located at the intake side of the said feeler for rolling out the edges of the fabric, and an apparatus located at the delivery side of the said feeler for stretching the fabric at its edges.

1,864,682. ARTICULATED CAR. JOHN B. D. THOMPSON, Union City, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 2, 1931. Serial No. 519,437. 10 Claims. (Cl. 105—4.)

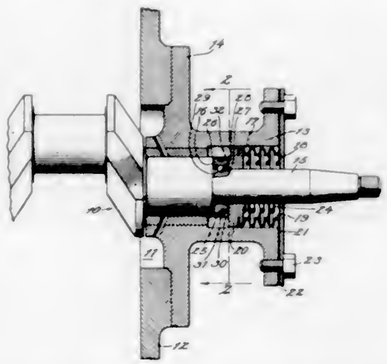
1. In an articulated car comprising a pair of car bodies, a truck arranged beneath the adjacent end portions of said bodies, a pair of truck bolsters for respectively supporting

the adjacent end portions, buffing means arranged between the adjacent end portions of said bodies for retaining the said end portions in proper spaced relation and for restrain-



ing them against excessive relative vertical and sidewise shifting, and means connecting the bolsters for pivotal movement about a horizontal axis.

1,864,683. SEAL FOR SHAFTS. JOHN T. VARDEN, Los Angeles, Calif. Filed Sept. 17, 1929. Serial No. 393,201. 6 Claims. (Cl. 286—11.)

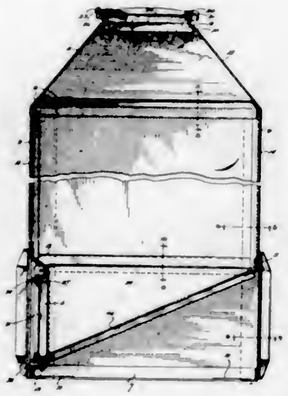


1. In combination, a rotatably mounted shaft having a shoulder thereon, a sealing seat receiving the shaft, a sealing element mounted on the shaft and interposed between said shoulder and seat, means for maintaining the sealing element in sealing engagement with said shoulder and seat, and means for lubricating the contacting surfaces of the sealing element and seat, comprising a peripheral recess in the sealing element, a wick in the recess adapted to be supplied with lubricant, and ducts in the sealing element communicating with the recess and with that surface of the sealing element engaging said seat, through which lubricant from the wick is adapted to be delivered to the contacting surfaces of the sealing element and seat.

1,864,684. AIR AND MOISTURE PROOF CONTAINER FOR CONTAINER CARS. GRAHAM C. WOODRUFF, Bronxville, N. Y., assignor to The L. C. L. Corporation, a Corporation of Delaware. Filed Dec. 9, 1930. Serial No. 501,146. 18 Claims. (Cl. 105—366.)

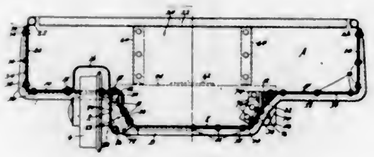
1. An air and moisture proof goods container for container cars comprising a receptacle having a body portion provided with a discharge outlet at one side near its base, an upwardly tapering neck portion terminating in a filling inlet, said body and top portion conjointly providing a storage chamber of substantially uniform area in the body and of gradually diminishing area in the top portion, a bottom inclined toward the outlet, and air and moisture proof closures for the inlet and outlet.

2. An air and moisture proof goods container for container cars comprising a receptacle having a body portion provided with a discharge outlet at one side near its base, an upwardly tapering neck portion terminating in a filling inlet, said body and top portion conjointly providing a storage chamber of substantially uniform area in the body and of gradually diminishing area in the top portion, a bottom inclined toward the outlet, and air and moisture proof



closures for the inlet and outlet, said outlet and its closure being arranged to lie wholly within the plane of the receptacle.

1,864,685. MINE CAR. RALPH E. DENDLER, Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 6, 1931. Serial No. 527,987. 14 Claims. (Cl. 105—364.)



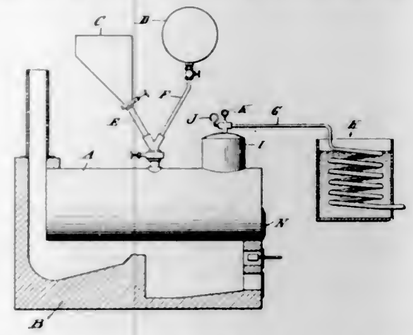
1. A mine car comprising a body having a lower section composed of a bottom and side sills formed as a unitary structure, and an upper portion including side floor portions extending laterally from the sills, upper side walls, axle brackets secured to the sills, a pair of drop axles extending through said brackets and on which the body is removably mounted, and wheels mounted on the axles and projecting through the side floor portions, said central floor portion being mounted above the axles and intersecting the plane of the lower part of the wheels.

2. A mine car comprising a body having a lower portion composed of a central floor portion and side sills formed as a unitary structure, and an upper portion composed of side floor portions secured to the side sills and having side walls rising therefrom, axle brackets secured to the side sills and engaging the side floor portions to stiffen the latter, a pair of drop axles on which the body rests, said axles extending through the brackets whereby the body and axles are detachably connected together, wheels on the axles projecting through the side floor portions, hoods covering the projecting portions of the wheels, and belts secured to the side walls and extending under the body and connected thereto.

1,864,686. PROCESS OF CRACKING AND COKING. JOHN D. FIELDS, Los Angeles, Calif. Filed Mar. 3, 1930. Serial No. 432,910. 4 Claims. (Cl. 202—33.)

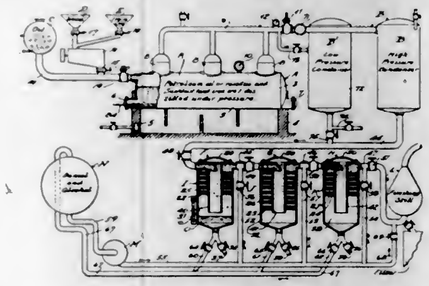
1. The method of simultaneously producing distillates and coke which comprises subjecting a substantially fluid mixture of several parts of petroleum oil containing high boiling constituents and one part of comminuted solid

carbonizable carbohydrate vegetable matter, said mixture being capable of being pumped, to cracking, destructive distillation and coking, while maintaining a superatmospheric pressure of several atmospheres on said mixture, and con-



tinuing the distillation until a solid product containing carbon residue from both said oil and said vegetable matter remains, while condensing the vapors to form a distillate.

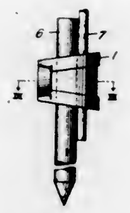
1,864,687. TREATMENT OF PETROLEUM MATERIALS. JOHN D. FIELDS, Los Angeles, Calif. Filed Sept. 24, 1931, Serial No. 564,944, and in Canada, Venezuela, and Mexico after Aug. 1, 1931. 13 Claims. (Cl. 196—55.)



2. A process of refining a cracked distillate produced by heating petroleum mixed with a few per cent of its weight of a solid carbonizable vegetable matter consisting largely of carbohydrates, to a temperature capable of causing destructive distillation of said vegetable matter and capable of causing cracking and distillation of said petroleum and condensing the vapors thereby liberated, which process comprising subjecting such condensed distillate in a liquid state to prolonged contact with an alkali metal in the free state, while at atmospheric temperature but below 125° F., until some at least of the impurities in the distillate are coagulated, and separating the coagulated impurities from the distillate.

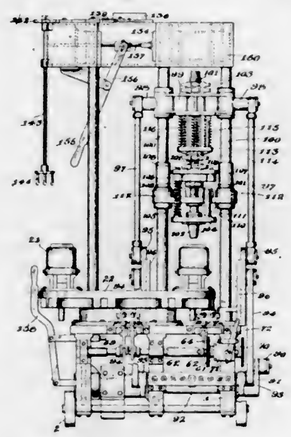
1,864,688. GROUND ROD CLAMP. ROBERT J. FRANK, Pittsburgh, Pa., assignor to Copperweld Steel Company, Rankin, Pa., a Corporation of Pennsylvania. Filed Mar. 29, 1926. Serial No. 98,056. 3 Claims. (Cl. 173—273.)

1. The combination with a conductor, and a ground rod of materially larger diameter than the conductor, of a clamp consisting of a continuous sleeve provided with an opening of elongate uniform cross section having a minor axis slightly larger than the diameter of said rod which is arranged in one end of said opening, the interior wall of said sleeve being provided with a groove at the other end of said opening receiving said conductor in parallel with said rod, a side of said conductor projecting into said opening in contact with said rod, and a screw clamp extending through said sleeve and bearing



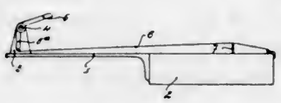
upon said rod at said first-named end of said clamp opening and distorting said conductor in conformity with the contour of said groove.

1,864,689. GLASS FORMING MACHINE. IRA H. FREESE and HALLER H. DAWSON, Clarksburg, W. Va.; Lula P. Dawson, executrix of said Haller H. Dawson, deceased, assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Mar. 25, 1926. Serial No. 97,396. 10 Claims. (Cl. 49—35.)



5. A glass forming machine, including a rotary mold table, sectional molds carried by said mold table, a vertically reciprocable crosshead, two rods carried by the crosshead, a spring connection between the crosshead and the rods, a plurality of rollers carried by each rod, each of said rollers being of increasing diameter from the bottom to the top, whereby a wedging action is exerted on the molds when the crosshead is lowered.

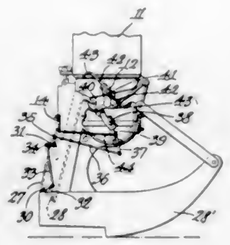
1,864,690. STRINGED MUSICAL INSTRUMENT. GEORGES GUIBEAUD, Perpignan, France. Filed May 17, 1929, Serial No. 363,790, and in France May 24, 1928. 8 Claims. (Cl. 84—454.)



1. The combination with a stringed musical instrument of means thereon to which one end of a string is connected, and means operable by the aforesaid means to

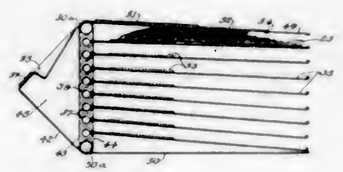
slide along the string and simultaneously change the effective length of the string in accordance with the tension produced on the string.

1,864,691. AUTOMATIC HILL DROP FOR PLANTERS AND LISTERS. RUDOLPH HRONEK, Dodge, Nebr. Filed May 27, 1929. Serial No. 366,436. 1 Claim. (Cl. 111—51.)



The combination with a planter having a discharge spout and having a rotary shaft mounted thereabove, of a grain delivering device including an upper swinging valve and a lower swinging valve mounted within the spout, arms connected with the swinging valves, a rod connected with the arms, a rod connected with one of the arms and extending forwardly therefrom, a pivoted arm mounted on the frame and to which the last mentioned rod is connected, a trip mounted above the pivoted arm and adapted to engage the arm to move the rod and valves, a coiled spring for tensioning the movements of the valves, said spring adapted to normally hold the upper valve open and the lower valve closed, an operating member mounted on the rotary shaft and comprising arms having curved ends engaging the trip, and said operating member adapted to operate the trip to move the valve to release seed.

1,864,692. ARTICULATED INDEX DEVICE. LE ROI EARLE HUTCHINOS, Buffalo, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 13, 1926. Serial No. 154,418. 17 Claims. (Cl. 129—34.)



1. In an index device, a plurality of pockets each having a hingedly connected stub portion, means for connecting said stub portions together to form an articulated series of pockets having overlapping edges, and a panel adapted to support said series of pockets.

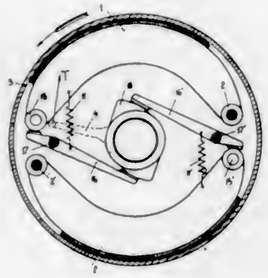
7. In an index device, a frame member of substantially triangular shape, guideways parallel to one side of said frame member, a plurality of covers hingedly connected to said frame member, panels hingedly connected to said guideways, and a series of articulated index elements secured to each panel.

1,864,693. CONTAINER AND METHOD OF PREPARING SAME. FEDELE RICCA, Red Bank, N. J. Filed Dec. 9, 1929. Serial No. 412,851. 6 Claims. (Cl. 128—266.)



1. As an article of manufacture, a container formed from and consisting of the rind of a citrus fruit, said container having a constricted neck, and a closure insertible in said neck, whereby the fragrance of the rind is imparted to the contents of the container.

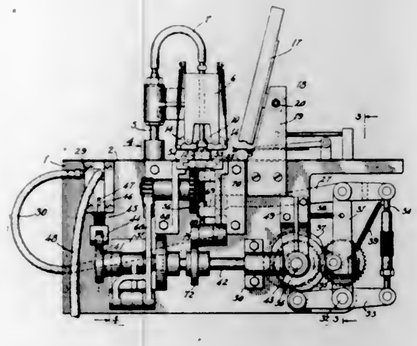
1,864,694. ANTILOCKING BRAKE FOR AEROPLANE WHEELS. CELESTINO ROSATELLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Dec. 11, 1930, Serial No. 501,712, and in Italy Sept. 30, 1930. 1 Claim. (Cl. 188—78.)



In a brake the combination with a brake drum and brake shoes rotatably mounted on fixed pivots and arranged in such a manner that the direction of rotation of the drum is normally directed from the said fixed pivots to the opposite end of said brake shoes, of two-armed levers with one arm of said levers abutting against the free end of said brake shoes, a double cam cooperating with the other arm of said levers and resilient means connecting the brake shoes with the last mentioned arm of said levers.

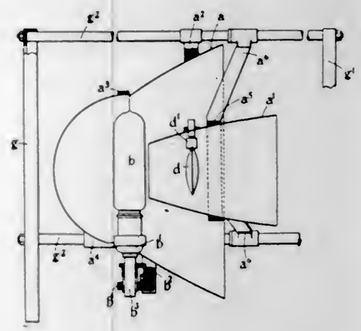
1,864,695. COUPON FEEDING MECHANISM. BERNARD R. SCHNEIDER, Lyndhurst, N. J., and KARL KAISER, New York, N. Y., assignors, by mesne assignments, to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 26, 1929. Serial No. 409,868. 19 Claims. (Cl. 131—61.)

1. In combination with a banding machine having banding mechanism including a plunger and a stop for initiating the operation of the banding mechanism adapted to be engaged and operated by the end of the cigar,



an attachment including means to place a folded coupon beneath the plunger in position for a cigar to rest thereon when engaged with the stop.

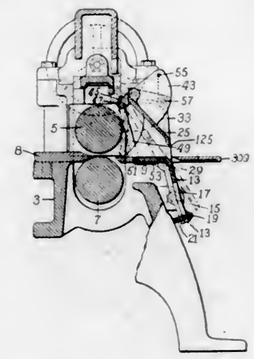
1,864,696. PROJECTION OF LIGHT. LOUIS JOHN STEELE and HAROLD MARTIN, Portsmouth, England. Filed Sept. 14, 1926, Serial No. 135,414, and in Great Britain Sept. 10, 1925. 8 Claims. (Cl. 88—24.)



1. Means for the production of a beam of light of high intensity, consisting of a plurality of annular concentric reflectors having a common axis, each of which is formed by a surface of revolution generated by a conic section rotated about the common axis and having coincident foci, a source of light disposed to the rear of the said reflectors, and a supporting frame comprising a plurality of guide members parallel with the axis of the reflectors and spaced around the said reflectors, upon which the said reflectors and the source of light are positioned.

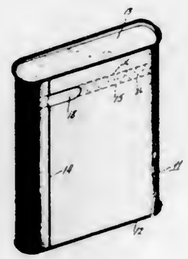
1,864,697. SAFETY DEVICE. WILLIAM D. THOMAS, Lynnfield, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 23, 1930. Serial No. 446,773. 12 Claims. (Cl. 69—18.)

1. In a machine having mechanism to which pieces of work are presented by an operator, a table over which the pieces are presented, a pivot, a guard hung on the pivot for swinging movement, the location of the pivot being such that the guard may be swung toward the mechanism into a position in which its lower edge is near



the table and away from the mechanism into a position in which its lower edge is farther from the table and means for locking the guard in either position.

1,864,698. COMBINED HERMETIC AND HINGED CLOSURE CONTAINER. IVAN D. THORNBURGH, Leonia, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 1, 1924. Serial No. 753,073. 2 Claims. (Cl. 220—54.) 54.)

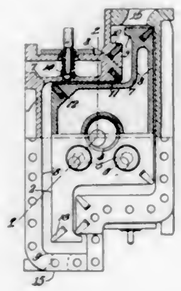


1. An hermetic and hinged closure can comprising a cover, having in combination a body the blank of which is scored to form a tearing strip and formed with hinge lugs in one piece with the top edge of said blank, said lugs carrying a pintle and bent down on the inner side of the body, a collar inserted in the body and having hinge lugs embracing said pintle and extending down between said body and collar, and an end hermetically secured to said body, said cover being released by the removal of the tearing strip so that it can hinge on said pintle and fit removably around said collar.

1,864,699. ROTARY ENGINE, PUMP, AND THE LIKE. CROMWELL HANFORD VARLEY, Corton, near Lowestoft, England. Filed Dec. 24, 1928, Serial No. 328,195, and in Great Britain Dec. 31, 1927. 14 Claims. (Cl. 121—68.)

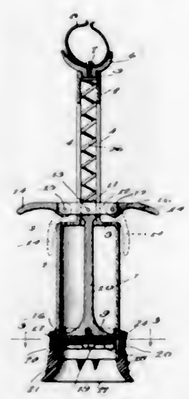
1. Mechanism for pumping or being driven by fluids comprising a casing, a displacer situated eccentrically therein and coupled thereto by means permitting movement of the one in relation to the other, means constrain-

ing such movment so that one cycle consists in execution of a like circle by every point of the displacer within the casing, said displacer and casing presenting to each other surfaces codefining a conduit wholly external to the displacer and during each cycle approaching and receding without contacting, elements distributed on to protrude from said surfaces and in pairs during part of each cycle contacting with and travelling over opposed curved re-



gions across the conduit and forming therewith fluid-tight end closures isolating an intervening portion of the conduit from the remainder while the conduit width between the intervening displacer and casing surfaces changes to vary the volume of said isolated portion, means for admitting fluid into said conduit, means for escape of fluid from said conduit, one of said last two means being located at the said volume-changing portion.

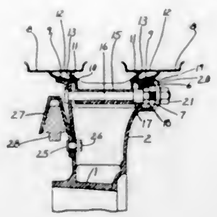
1,864,700. VENOM EXTRACTION PUMP. JOHN H. WADE, St. Petersburg, Fla. Filed Mar. 10, 1931. Serial No. 521,574. 6 Claims. (Cl. 128—297.)



1. A venom extraction pump comprising a cylinder, a plunger disposed therein, a flexible cup secured at one end of said cylinder, an extension carried by the cylinder, a thumb hold carried by said extension, and a pair of foldable finger holds secured to the plunger rod for drawing the plunger within the cylinder.

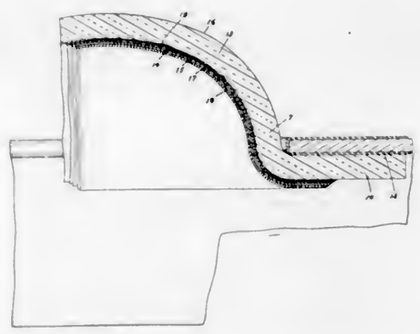
1,864,701. METAL WHEEL. GEORGE WALTHER, Montgomery County, near Dayton, Ohio, assignor to The Dayton Steel Foundry Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 26, 1925. Serial No. 4,782. 3 Claims. (Cl. 301—13.)

3. In a dual rim and wheel structure, inner and outer seats on the wheel, an outer rim supported on the outer seat, an inner rim supported on the inner seat, a series of clamping devices, including spacing members, securing



the inner rim to the wheel independently of the outer rim, and means clamping the outer rim against the outer side of said spacing members.

1,864,702. SIGN. LEHN (MAX) WEESNER, Cincinnati, Ohio. Filed Mar. 10, 1930. Serial No. 434,551. 6 Claims. (Cl. 40—140.)



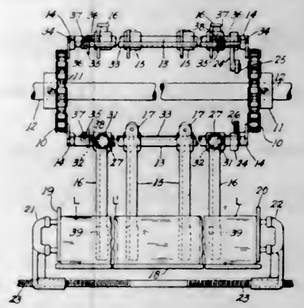
1. A non-burned raised glass letter plate simulating a gilt raised wood letter comprising a transparent glass plate having a hollow character formed in relief thereon, a coating of unburnished gilding material on the inner face of the character portion of the plate, and a protective and positioning coating disposed over the gilding material.

1,864,703. EDUCATIONAL BLOCK. RUTH WEST, New York, N. Y. Filed Apr. 7, 1931. Serial No. 528,288. 7 Claims. (Cl. 35—1.)



1. An educational device comprising a three dimensional block form having a design suggestive of a letter and also impressionistically representing some selected subject the said letter being the initial letter of an appellative for said subject.

1,864,704. PUSHER DEVICE FOR EXTRA LONG LOAVES. SAMUEL A. WICKMAN, St. Albans, N. Y., assignor to American Machine & Foundry Company, a Corporation of New York. Filed Aug. 21, 1931. Serial No. 558,630. 6 Claims. (Cl. 93—2.)



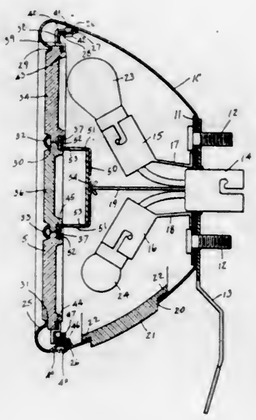
1. The combination with a primary series of traveling fingers for pushing articles through a wrapping machine, of a secondary series of fingers on either side of and having the same movement as the primary series when extra long articles are to be wrapped, and means whereby said secondary series are incapacitated when articles of normal length are to be wrapped.

1,864,705. NECKTIE STRETCHER. WILLIAM H. WILSON, Chicago, Ill. Filed Nov. 15, 1929. Serial No. 407,420. 1 Claim. (Cl. 223—19.)



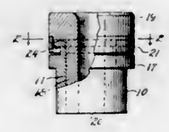
A device of the character described comprising two V-shaped members, a toggle, a hinge connection between one leg of each V and one of the arms of the toggle, and a hinge connection between the other leg of each V and the remaining arm of the toggle, the hinge connections between each member and the toggle being equally spaced from the joint in the toggle, and the hinge connections between one of said members and the toggle being nearer the said joint than are the other hinge connections.

1,864,706. LAMP STRUCTURE. EDWARD C. ALBRIGHT, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind., a Corporation. Filed Mar. 14, 1930. Serial No. 435,722. 5 Claims. (Cl. 177—329.)



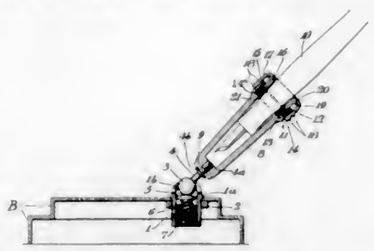
1. In a combination multiple purpose lamp, an open ended casing, a rim having a flange, closure means for said open end including lens means in said rim and an apertured plate in said rim, a lamp bulb in said casing opposite one portion of said lens means, and means for supporting a legend on said plate spaced from and back of another portion of said lens means and adjacent thereto in position to be illuminated by said lamp bulb at least partly by reflection from the back of said lens.

1,864,707. SLIP BUSHING. CARROLL R. ALDEN, Detroit, Mich., assignor to Ex-Cell-O Aircraft & Tool Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 12, 1929. Serial No. 377,689. 7 Claims. (Cl. 77—62.)



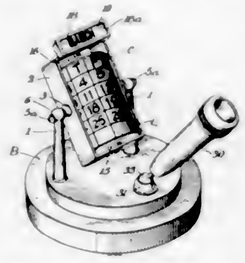
1. A slip bushing comprising, in combination, a liner having a bore opening therethrough, a peripheral collar on the upper end of said liner, said collar being flattened at opposite sides to define two diametrically opposed lobes, a lug struck down from the center of one of said lobes, a bushing slidably and rotatably disposed in said bore, and having a head bearing against the top of said collar, a depending locking ring secured to said head and fitting about said collar, the lower end of said ring being formed with two diametrically opposed inwardly projecting ledges movable under said lobes upon rotation of said bushing in either direction and adapted selectively to engage said lug.

1,864,708. PENHOLDER. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Apr. 14, 1930. Serial No. 444,116. 4 Claims. (Cl. 120—108.)



1. A penholder comprising a receptacle, a rubber annular member for embracing the pen, and means acting on said rubber member for varying the internal diameter thereof to adjust the same to pens of various diameters.

1,864,709. CALENDAR MECHANISM AND ASSOCIATED PENHOLDER. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., Newark, N. J., a Corporation of New Jersey. Filed Apr. 15, 1930. Serial No. 444,375. 12 Claims. (Cl. 40—114.)



1. The combination with a base, of a frame carried thereby, and calendar members rotatable in said frame as a unit about a common axis, said calendar members being rotatable with respect to each other.

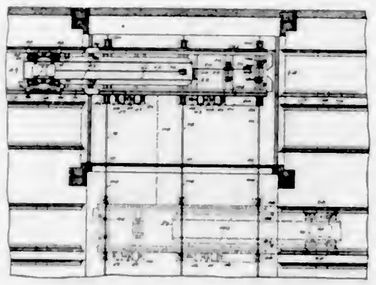
1,864,710. VEHICLE AND SLEEPING BERTH CONSTRUCTION. DWIGHT E. AUSTIN, Los Angeles, Calif. Filed Apr. 2, 1928. Serial No. 266,709. 20 Claims. (Cl. 296—61.)



1. In a structure of the class described, a plurality of compartments arranged on a lower and a higher level, the compartments on each level being positioned side by side and those on the higher level being positioned in staggered relation relative to those on the lower level, said structure having a corridor permitting access to the compartments on the different levels, berths in said compartments, there being provided dressing rooms in said compartments between said corridor and said berths.

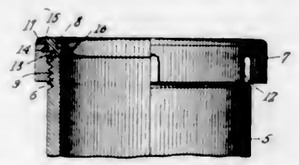
1,864,711. VEHICLE STORAGE SYSTEM. SAMUEL E. BUETTELL, Chicago, Ill., assignor to Cross Parking Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 11, 1928. Serial No. 276,931. 12 Claims. (Cl. 214—16.1.)

1. In a structure for storing automobiles and like vehicles, the combination of a plurality of storage stalls on every floor facing each other with a pathway between, an elevator, a platform carried by the elevator and movable with respect to it along the pathway on any floor, and a second platform carried by the first and movable in one



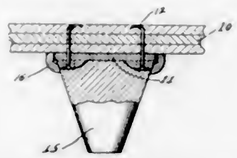
of two directions with respect to it into any stall on the floor to which the elevator has carried it and mechanism carried by one of said platforms for moving the second platform into any stall.

1,864,712. INSULATING BUSHING. MICHAEL J. CAFIERO, Brooklyn, N. Y. Filed Sept. 19, 1930. Serial No. 482,950. 1 Claim. (Cl. 247—43.)



An insulated bushing comprising a mounting ring constructed for engagement over the end of an electric conduit, said ring having intermediate the ends of the same a narrow internal annular flange to extend in partly over the end of the conduit and having above said flange an undercut portion and rough internal surfaces and a ring of insulating material interlocked with said undercut portion and rough surfaces of the mounting ring, said ring of insulating material extending over the end of the mounting ring and within the internal flange, whereby to form a continuous insulating covering over the end of the mounting ring to a point inside the end of the conduit to which the bushing is applied.

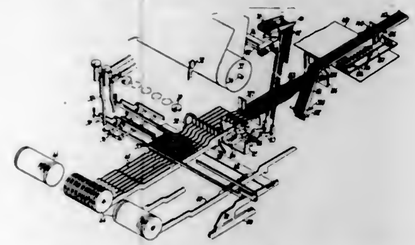
1,864,713. DETACHABLE SELF-CENTERING CLEATS FOR ATHLETIC SHOES. WILLIAM T. CLARK, Milwaukee, Wis. Filed Apr. 25, 1931. Serial No. 532,790. 6 Claims. (Cl. 36—59.)



1. In a detachable shoe cleat, a cleat support adapted to be permanently attached to the sole of a shoe, a cleat enlarged in diameter at its base, a locking ring engaging both the cleat and the cleat support to hold the cleat upon its support, and means between the support and the cleat to position the cleat in relation to its support and prevent rotation.

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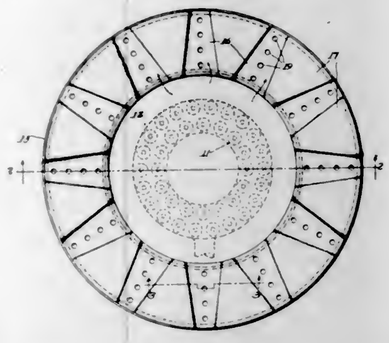
1,864,714. COMBINED TYPEWRITING, BOOKKEEPING AND CARD-PERFORATING MACHINE. FRANK K. DAVIS, Washington, D. C., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 8, 1927. Serial No. 204,249. 20 Claims. (Cl. 235—60.)



11. The combination with computing mechanism having digit-keys, a carriage and a set of key-indexed reciprocatory denominational members, of digit-punches in denominational columns, punch-selectors connected to said reciprocatory members, a general operator, means associated therewith for operating said denominational members and punch-selectors, then operating the selected punches, and then returning the denominational members and punch-selectors to normal positions, a tabulating key for said carriage, and means responsive to said tabulating key to control tabulating operations of the card to extents independent of the tabulating movements of said carriage.

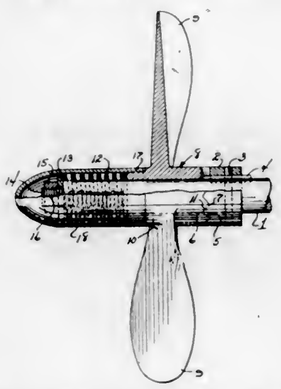
12. The combination with a denomination-controlling carriage, a set of ten numeral-keys controlling said carriage, computing mechanism having a set of movable denominational members which are brought into use seriatim by said carriage, and in which members the digits of items to be accumulated are set up, said members being movable to effect the accumulation of said items, and means controlled by said keys for setting up said items, each key being connectible to set up a digit in any member, of a nest of digit-punches arranged in numerous denominational columns, and means controlled by said members whereby the digit-punches corresponding to the digits of the items set up, in various denominations, are automatically selected and rendered effective to punch a card.

1,864,715. HEAT DISTRIBUTOR PLATE. FOREST V. DETWILER, Chicago, Ill. Filed May 21, 1931. Serial No. 539,042. 12 Claims. (Cl. 126—215.)



1. An annular heat distributing plate for cooking purposes, spaced downwardly projecting flanges encompassing the inner and outer peripheries of the plate, and channels opening through the top of the plate and extending entirely across the plate between the peripheries thereof.

1,864,716. PROPELLER. EDWARD P. DOREMUS, Weeks Island, La. Filed Mar. 19, 1930. Serial No. 437,201. 1 Claim. (Cl. 170—177.)



In combination with a shaft, a marine propeller having a hub provided with a bore which snugly receives the shaft, and fixed blades radiating from the hub approximately midway between the ends of the bore thereof, the hub having clutch elements located at its forward end, a clutch member slidable on the shaft and engageable by the clutch elements, an abutment member carried at the rear end of the shaft, a spring coiled around the shaft and interposed between the rear end of the hub and the abutment member, and a cap attached to the rear end of the hub and housing the spring and the rear end of the shaft, the clutch member, the hub and the cap being the same external diameter.

1,864,717. PROCESS OF MAKING SYNTHETIC AMMONIA FROM PETROLEUM REFINERY BY-PRODUCTS. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Dec. 15, 1921, Serial No. 522,494. Renewed July 17, 1928. 5 Claims. (Cl. 23—7.)

1. In the process of utilizing refinery by-products for the production of gaseous mixtures particularly adapted to the synthesis of ammonia, the steps of treating the oil with air and steam to produce a gaseous mixture containing nitrogen and hydrogen.

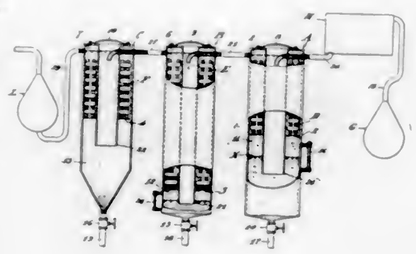
1,864,718. PROCESS FOR TREATING ANIMAL FIBERS. RICHARD FEIBELMANN, Radebeul-Dresden, Germany, assignor to Chemische Fabrik von Heyden, A. G., Radebeul, near Dresden, Germany, a Corporation of Germany. Filed Oct. 25, 1928, Serial No. 315,108, and in Germany Feb. 11, 1928. 2 Claims. (Cl. 8—12.)

1. The process for the carbonization of raw wool containing vegetable impurities, said process consisting in soaking the raw wool in an aqueous solution of an aromatic sulfonic acid, drying the wool, and exposing it to an elevated temperature.

1,864,719. METHOD OF REFINING DISTILLATES. JOHN D. FIELDS, Los Angeles, Calif. Filed June 29, 1931. Serial No. 547,599. 15 Claims. (Cl. 196—41.)

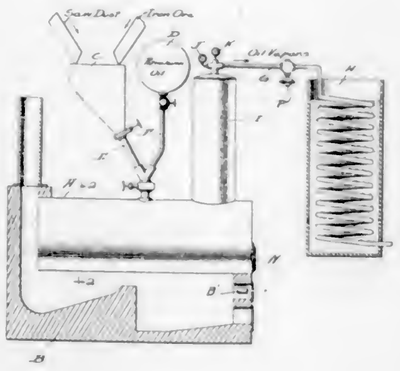
1. The method of removing impurities from petroleum distillates, consisting in subjecting such distillates in liquid condition to the catalytic action of a mass of solid bodies of an alkali metal in the cold, for a sufficient period of time to effect coagulation of the bulk of the impurities, whereby some of the impurities become precipitated on the alkali metal, and separating the coagulated substances from the distillates, and separating the material deposited upon the alkali metal from said alkali metal by

treatment with a solvent liquid, without causing appreciable chemical action of said impurities or oil upon said alkali metal catalyst, and repeating the cycle of operations.



15. A process which comprises contacting solid alkali metal with a mixture of several parts of benzol and one part of alcohol, at about normal atmospheric temperature, then contacting said alkali metal with petroleum hydrocarbon oil, at about normal atmospheric temperature, until said alkali metal becomes coated with impurities congulated upon the same from said oil, and thereafter repeating the said steps in succession.

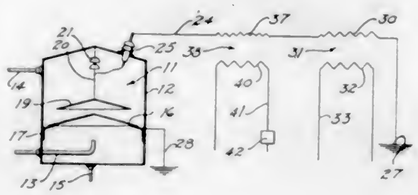
1,864,720. METHOD OF DISTILLING HYDROCARBONS AND PRODUCING COKE AND PRODUCT THEREOF. JOHN D. FIELDS, Los Angeles, Calif. Filed June 29, 1931. Serial No. 547,795. 24 Claims. (Cl. 196—47.)



16. The method of simultaneously producing oil distillate and high grade coke which comprises subjecting a mixture of one part of a mixture of iron ore with comminuted woody matter and at least four parts of petroleum hydrocarbon oil while under superatmospheric pressure, to the influence of heat sufficient to carbonize the woody matter and to crack the hydrocarbon oil with coke formation, condensing the evolved vapors and recovering a ferruginous petroleum coke containing vegetable carbon.

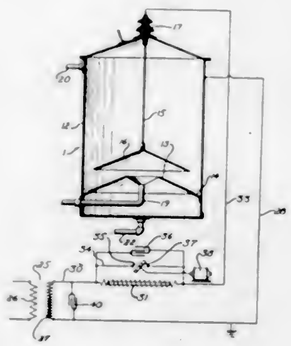
24. A ferruginous petroleum coke having the properties of the product produced by distilling to coke, an admixture of several parts of high boiling petroleum oil and one part of a mixture of carbonizable vegetable carbohydrate material and iron ore, such product being a strong, hard, black coke-like material containing the carbonized residue of said vegetable material.

1,864,721. METHOD OF DEHYDRATING EMULSIONS. HARMON F. FISHER, Long Beach, Calif., assignor to Petroleum Rectifying Company of California, San Francisco, Calif., a Corporation of California. Filed Aug. 30, 1926. Serial No. 132,375. 12 Claims. (Cl. 204—24.)



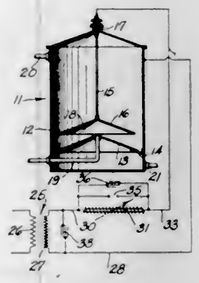
1. A dehydrating apparatus including a pair of electrodes between which is positioned an emulsion to be treated, means for creating an electric field between said electrodes; and means for periodically increasing the potential of said electric field.

1,864,722. SYNCHRONOUS GAP POTENTIAL CONTROL FOR TREATERS. HARMON F. FISHER, Long Beach, Calif., assignor to Petroleum Rectifying Company of California, Los Angeles, Calif., a Corporation of California. Filed Sept. 6, 1927, Serial No. 217,680. Renewed Oct. 13, 1931. 10 Claims. (Cl. 204—24.)



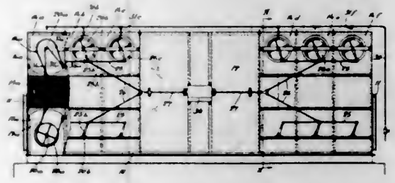
7. In an apparatus for dehydrating emulsion, the combination of: a pair of electrodes; an electricity supply means for supplying electricity to said electrodes; potential reducing means for reducing the potential impressed on said electrodes; a shunt circuit around said potential reducing means, said shunt having a gap; means for closing said gap for periodically closing said shunt circuit; and an electricity storage means connected to said supply means.

1,864,723. TREATER USING HIGH TENSION REACTANCE. HARMON F. FISHER, Long Beach, Calif., assignor to Petroleum Rectifying Company of California, Los Angeles, Calif., a Corporation of California. Filed June 22, 1931. Serial No. 546,005. 22 Claims. (Cl. 204—24.)



1. A method of treating an emulsion which comprises: passing said emulsion into an electric field between a pair of electrodes, said field being formed by an electromotive force impressed between said electrodes; and changing the wave form of said electromotive force when the potential between said electrodes decreases.

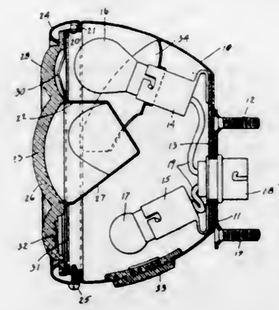
1,864,724. REGENERATIVE HEATING DEVICE. NILS RICHARD FORSSBLAD, Vasteras, Sweden, assignor to Aktiebolaget Ljungströms Angturbin, Lidingo-Brevik, Sweden, a Corporation. Filed Sept. 30, 1924, Serial No. 740,864, and in Sweden Oct. 4, 1923. 25 Claims. (Cl. 257—6.)



10. A regenerative heating device for transmitting heat from one fluid to another, comprising regenerating material provided with channels extending from one end of said material to the other, a chamber at each end of said material conducting the one fluid, movable distributor conduits conducting the other fluid within said chambers, said distributor conduits communicating with each other by means of a plurality of said channels, whereas other channels effect communication between said chambers, a pipe extending longitudinally of each of the end edges of one of the distributor conduits and provided with openings directed towards the regenerating material and means to connect said pipes with a source of cleaning medium.

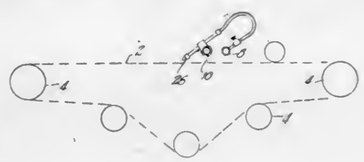
1,864,725. LAMP CONSTRUCTION. HARRY C. FOSTER, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind., a Corporation. Filed Jan. 30, 1930. Serial No. 424,472. 1 Claim. (Cl. 177—329.)

A lamp construction including a casing having an opening therein, a lens closure for said opening having a convex outer surface for magnification, a lamp bulb within said casing, and a stencil interposed between said lens and said lamp, said stencil being shaped in approximate



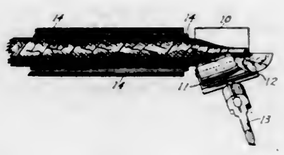
conformity with the inner surface of said lens to bring the same into proper focus whereby a legend formed thereon will be magnified.

1,864,726. AIR DECKLING. COURTLANDT B. GRIFFIN, Longmeadow, Mass., assignor to Carew Manufacturing Company, South Hadley Falls, Mass., a Corporation of Massachusetts. Filed July 10, 1930. Serial No. 466,936. 3 Claims. (Cl. 92—44.)



1. The combination with the movable web forming member of a paper making machine of apparatus for making deckle edge paper comprising in combination, a main common air supply pipe and a support disposed transversely of said web forming member, a plurality of slide members rotatably and slidably adjustable on said support, nozzle tubes slidably adjustable in said slide members and flexible connections between tubes and said common supply pipe whereby the slide members may be adjusted independently of one another.

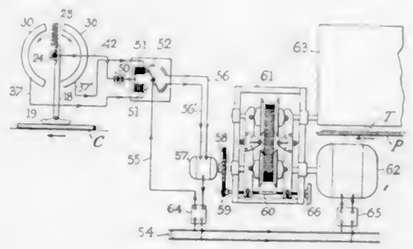
1,864,727. STOGIE HEADING DEVICE. JOHN F. HALSTEAD, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Jan. 18, 1930. Serial No. 421,699. 5 Claims. (Cl. 131—39.)



1. A stogie heading device for cigar machines, comprising means for rotating a stogie bunch having a binder projecting beyond the head end of its filler and a wrapper

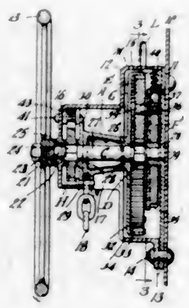
projecting beyond the binder, means for supporting the head end of the bunch and its projecting binder and wrapper, and means coacting with said supporting means when said rotating means is in action to roll the wrapper over the head end of the bunch and on the binder beyond said end and on itself beyond the binder.

1,864,728. AUTOMATIC TOBACCO FEED CONTROL. WILFORD J. HAWKINS, Claiborne, Md., and ALFRED E. WIENER, Brooklyn, N. Y., assignors to American Machine & Foundry Company, a Corporation of New Jersey. Filed Nov. 20, 1930. Serial No. 496,992. 19 Claims. (Cl. 131—39.)



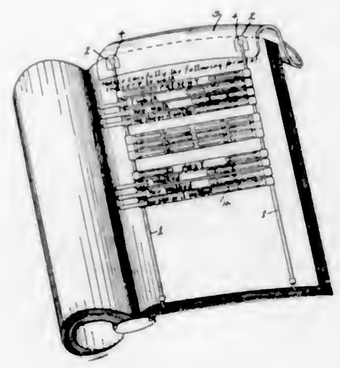
1. In a cigarette machine, the combination with cigarette rod forming mechanism, of a tobacco feed for supplying tobacco to said mechanism, and means engaging the rod and actuated by variations in its density to control the operation of the feed.

1,864,729. HAND BRAKE. WILLIAM A. HEITNER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 14, 1930. Serial No. 467,797. 17 Claims. (Cl. 74—112.)



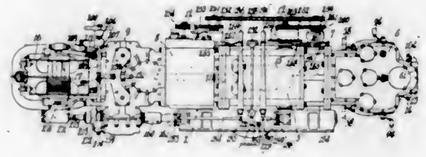
1. In a hand brake mechanism, the combination with a chain winding drum; of a hand wheel; means for transmitting power from the hand wheel to the drum including a planetary gear means; releasable ratchet means for holding said hand wheel and power transmitting means against backward rotation; and locking means for holding said planetary gear means against planetary movement while the hand wheel is rotated to wind the chain on the drum, said locking means being releasable to permit planetary movement of said gear means and free unwinding movement of the chain winding drum with respect to the hand wheel while the latter is held against backward movement by the ratchet means.

1,864,730. LINE, COLUMN, AND WORD INDICATOR. WILLIAM HINES, Washington, D. C. Filed Mar. 16, 1932. Serial No. 599,317. 8 Claims. (Cl. 116—119.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a device of the character described, the combination of a pair of guide cords, upper and lower attaching means for said guide cords, a frame bridging said guide cords and slidably attached thereto, and a shutter hingeably and slidably mounted within said frame.

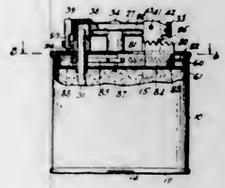
1,864,731. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 16, 1929. Serial No. 355,561. 42 Claims. (Cl. 262—28.)



1. In a mining machine, cutting mechanism, adjustable supporting means therefor including relatively adjustable front and rear supports, said cutting mechanism including a kerf cutter pivoted to swing completely across the forward end of the machine without adjustment of said supports, and motor operated mechanism for separately or simultaneously adjusting said supports to vary the elevation of said cutting mechanism and to effect tilting of the plane of swing of said kerf cutter about a horizontal axis extending at right angles to the direction of bodily movement of the machine during cutting including an independent drive and control for each of said supports and adjusting elements driven and controlled thereby and operatively connected to said supports at the same side of the machine.

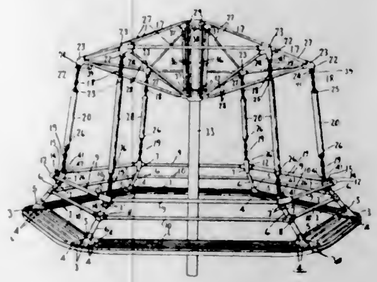
1,864,732. LIGHTER. JOHN HOLTZMAN, New York, N. Y. Filed Feb. 5, 1929. Serial No. 337,567. 15 Claims. (Cl. 67—7.1.)

5. In a lighter, a casing, a horizontal partition in the casing and near the top thereof forming an upper compartment in the casing, an abrading wheel above the top of the casing, an element on the top of the casing adapted to urge a pyrophoric block into contact with the wheel, a substantially upright shaft for the wheel extending through the top of the casing into said compartment, a pinion on said shaft in said compartment, a rack in said compartment engaging said pinion, said rack and pinion being relatively slidable, a spring for imparting relative



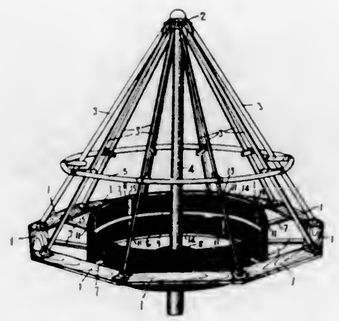
movement to said rack and pinion in one direction, and a snuffer element, terminating in a hollow snuffer cap and pivoted above the top of the casing for movement in a vertical plane toward and from the top of the casing on the relative movement of the rack and pinion, the relative movement of the rack and pinion in the other direction being accomplished by the manual operation of one of said elements.

1,864,733. MERRY-GO-ROUND. CHARLES E. HOPPES and EDWIN F. HOPPES, Springfield, Ohio, assignors to The Everwear Manufacturing Company, Springfield, Ohio, a Corporation of Ohio. Filed July 27, 1931. Serial No. 553,241. 9 Claims. (Cl. 272—33.)



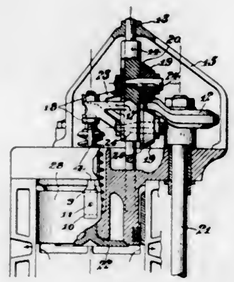
1. In an apparatus of the character described, a central vertical support, revolubly mounted radially-extending arms on the upper end thereof, a circularly-extending platform, a plurality of freely-movable suspension members for supporting said platform from said arms, the lengths of said suspension members being less than the lengths of the arms, said platform being located in vertical planes further removed from said central support than the planes of said suspension members.

1,864,734. PLAYGROUND APPARATUS. EDWIN F. HOPPES, Springfield, Ohio, assignor to The Everwear Manufacturing Company, Springfield, Ohio, a Corporation of Ohio. Filed June 13, 1931. Serial No. 544,127. 7 Claims. (Cl. 272—33.)



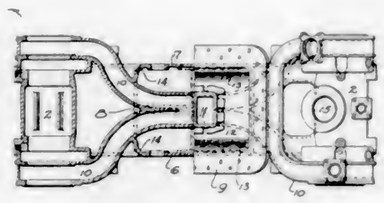
1. In a playground apparatus, a central post, a revoluble circularly-extending support suspended thereon, a circular bumper ring movable with the support and located between the support and the center post, and a guard member between the bumper ring and the support.

1,864,735. VALVE OPERATING MECHANISM FOR INTERNAL COMBUSTION ENGINES. HORACE JOHN HOWARD, Southport, England. Filed Jan. 13, 1927, Serial No. 161,013, and in Great Britain Jan. 15, 1926. 6 Claims. (Cl. 123—75.)



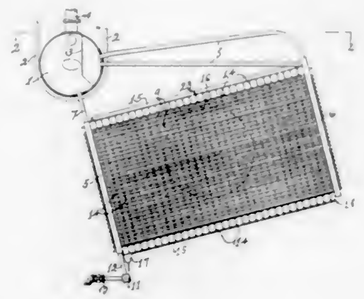
1. In valve controlling mechanism for an internal combustion engine, the combination with the engine cylinder having exhaust ports in its periphery, of a reentrant cylinder head, a valve controlling said exhaust ports and slidable between said cylinder head and engine cylinder, stems for said valve, an inlet port opening through the end of said cylinder head, a valve controlling said port, a frame guided in a rectilinear path, having an arm to effect the opening movement of said inlet valve and provided with arms fixedly connected with the stems of said exhaust valve, and a cam to reciprocate said frame.

1,864,736. LOCOMOTIVE CYLINDER SADDLE STRUCTURE. KARL S. HOWARD, St. Louis, Mo., and EINAR G. HALLQUIST, Edwardsville, Ill., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed June 3, 1931. Serial No. 541,894. 25 Claims. (Cl. 105—44.)



1. In a locomotive cylinder saddle structure upright walls for supporting the boiler, a transverse web extending between said walls and provided with one or more corrugations to accommodate expansion in the structure due to variations in temperature.

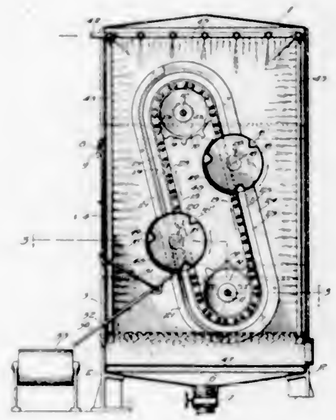
1,864,737. MERCURY CONDENSER WATER TUBE STEAM BOILER. WILLIAM A. JONES, Westerleigh, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed July 6, 1928. Serial No. 290,728. 10 Claims. (Cl. 122—32.)



1. A water tube boiler comprising tubes and headers, an air tight casing around said tubes attached to said headers, supports to prevent said casing from moving toward said tubes, and means closing the spaces between said headers which together with said headers constitute the ends of said casing.

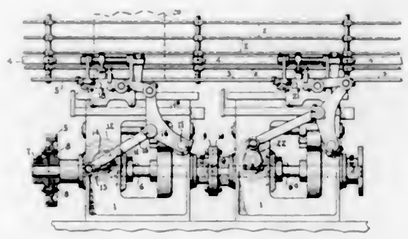
1,864,738. LAUNDERING MACHINE. FRANK M. KING, Oak Park, Ill., assignor of one-third to Jacque C. Morrell, River Forest, Ill., and one-third to Edward Halter, Chicago, Ill. Filed Mar. 21, 1928. Serial No. 263,411. 10 Claims. (Cl. 68—18.)

1. In a clothes washer, the combination with a housing adapted to receive water, a plurality of drums movable in an endless path in said housing, a movable conveyor on which said drums are mounted, means for driving said conveyor to move said drums within said housing, means for rotating the drums during their movement in the



housing, and means for periodically reversing substantially instantaneously the direction of rotation of but two drums at one time.

1,864,739. BOOKBINDER STITCHER. PAUL E. KLEINBERG, Easton, Pa., assignor to American Assembling Machine Company, a Corporation of Delaware. Filed Oct. 28, 1930. Serial No. 491,700. 2 Claims. (Cl. 1—7.)

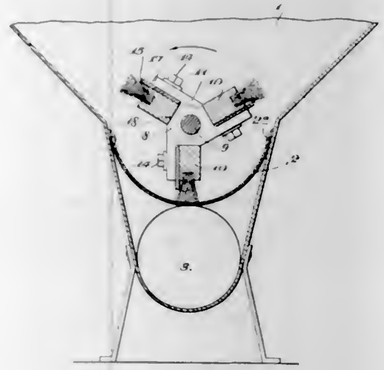


1. Means for spacing and applying staples to the backs of books in the binding thereof, comprising a book race along which travel the books to be stitched, a book conveyor for advancing the books along the race, a source of power common to the conveyor and a plurality of stitching heads cooperating therewith, each head being timed with reference to the point on the books at which the staple is to be applied by that head as the books are advanced by the conveyor, through an adjustment of the driving connections between the heads and the source of power.

1,864,740. BRUSH FEED FOR DUSTING MACHINES. EDGAR KNAPP and CARL G. ALLGRUNN, Middleport, N. Y., assignors to Niagara Sprayer Company, Middleport, N. Y., a Corporation. Filed Dec. 2, 1927. Serial No. 237,201. 6 Claims. (Cl. 43—148.)

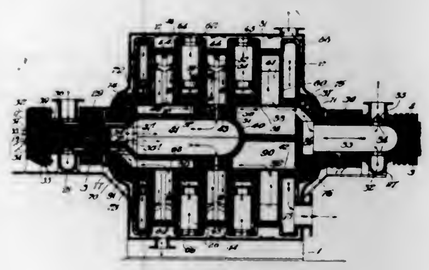
1. In a dusting machine for dusting parasiticidal dusts upon vegetation, a hopper for containing a powdered

material having a filler opening at the top thereof, a semi-cylindrical screen in the bottom of said hopper, and a rotary agitator brush member comprising a shaft coaxial with the screen, spiders on said shaft having tangential arms, radial brushes adjustably mounted on said spider arms moving in contact with said screen, means for reinforcing the bristles at the rear edges of said



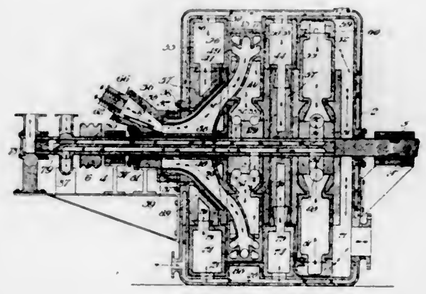
brushes and means for securing the brushes on the spider arms, said means being positioned for ready access from the filler opening at the top of the hopper, and fastening means for said screen constituting a longitudinal rib to catch lumps of the material and crowd them under the revolving brushes, a mixing chamber positioned below the screen, and means for producing a current of gas through said mixing chamber.

1,864,741. COMBUSTION TURBINE AND METHOD OF FEEDING AND BURNING FUEL. CHARLES N. KOCH, Kane, Pa. Filed June 15, 1923. Serial No. 645,709. 1 Claim. (Cl. 60—41.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



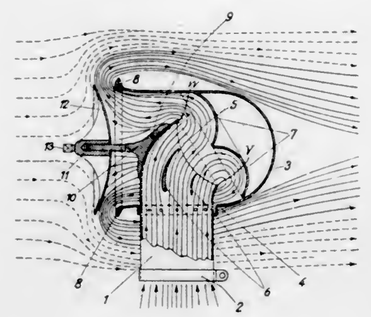
In a combustion turbine, a frame, a stator member mounted in said frame, a rotor member having a shaft secured thereto, bearings in said frame for said shaft, cooling medium passages through said members and shaft, a common means for compelling the flow of said medium through said passages, auxiliary means for supplementing the flow of said medium through said passages in said shaft and said rotor member, and means for driving said common and said auxiliary means from said shaft.

1,864,742. COMBUSTION TURBINE AND METHOD OF BURNING FUEL. CHARLES N. KOCH, Kane, Pa. Filed June 15, 1923. Serial No. 645,710. 5 Claims. (Cl. 60—41.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a combustion turbine, a plurality of combustion chambers, each at an angle to one of said chambers, means for relatively moving said chambers, means of communication between said chambers, means for admitting air and fuel into one of said chambers, and means for igniting said fuel.

1,864,743. VENTILATOR. HEINRICH KUCKUCK, Bremen, Germany. Filed Sept. 30, 1929, Serial No. 396,249, and in Germany Jan. 17, 1929. 14 Claims. (Cl. 98—66.)

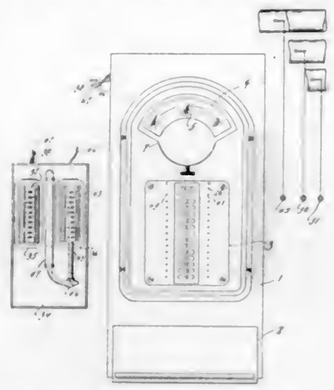


8. In a ventilating device, a ventilator cap open at one end, an air-funnel projecting into the cap and terminating therein, the upper portion of the funnel being curved within the cap and toward the closed end thereof, and a deflector for creating suction in the cap and in the funnel when an air current passes adjacent thereto disposed in front of the open end of the cap but spaced therefrom.

1,864,744. HUMIDITY AFFECTED TELETHERMOMETER. CARL H. KUHLMAN, Toledo, Ohio, assignor to The American Temperature Indicating Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 3, 1928. Serial No. 258,895. 11 Claims. (Cl. 73—24.)

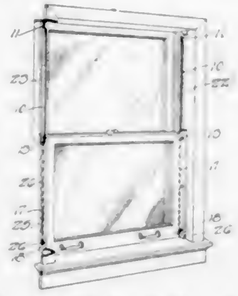
1. In combination a wet and dry ratio direct temperature electrical responsive instrument for a remote loca-

tion, a scale, a galvanometer provided with indicating means coacting with said scale, and independent option-



ally operable connections therefrom to the scale for ascertaining a direct disclosure at the scale of the instrument responses.

1,864,745. WINDOW SASH BALANCE. ALGOT LARSON, Elmhurst, Ill., assignor to Unique Balance Co., Chicago, Ill. Filed June 11, 1930. Serial No. 460,493. 4 Claims. (Cl. 16—197.)

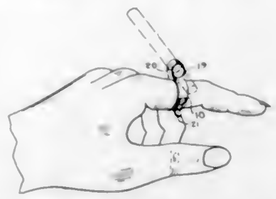


1. In a device of the class described, an elongated spiral member, said member having a portion at one end thereof bent back upon itself to provide a loop and having a portion at the opposite end thereof bent angularly to provide a lip, said member having a convoluted groove formed in the periphery thereof and extending from said loop to said lip portion, said spiral being formed so that the pitch of said groove is graduated from a minimum at the end providing said loop to a maximum at the end providing said lip, an elongated spring member adapted to have one end attached to a support and having a free end rotatable on said spiral member, means including a guide member for guiding said spring member in said groove, said means including means providing connection between said guide member and said spring member.

1,864,746. PROCESS FOR THE PRODUCTION OF ORGANIC ACIDS FROM CELLULOSIC MATERIAL. DAVID A. LEGG and LEO M. CHRISTENSEN, Terre Haute, Ind., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Feb. 19, 1930, Serial No. 429,818, and in Canada Oct. 22, 1929. 10 Claims. (Cl. 260—120.)

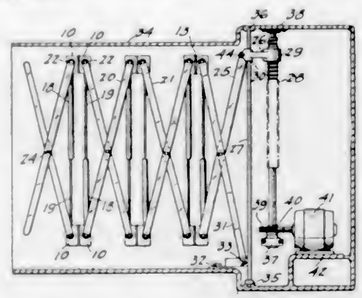
1. A process for the production of fatty acids which comprises subjecting a mash containing cellulosic materials to the action of bacteria capable of fermenting cellulose, controlling the acidity of the mash so that the hydrogen ion concentration is maintained preferably within the limits 10^{-5} and 10^{-3} measured in the bulk of the mash, and effecting the necessary supply of nutrient for the cellulose fermenting bacteria at least in part by steep water.

1,864,747. CIGARETTE HOLDER. ROBERT J. MCANIFF, Brooklyn, N. Y. Filed Aug. 12, 1930. Serial No. 474,748. 6 Claims. (Cl. 131—51.)



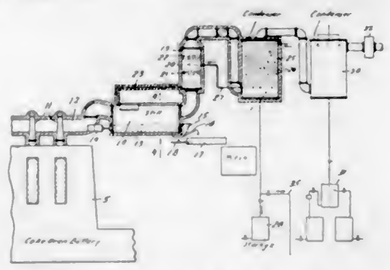
1. In a cigarette holder, the combination with a body member having means for gripping a cigarette and separate means on said body member responsive to the movement of the thumb for removing ashes from the cigarette.

1,864,748. GATE FOR RAILROAD CROSSINGS AND PEDESTRIAN CROSSINGS. FRANCIS W. MCFARLAND, Martinez, and WILLIAM R. LONG, Bay Point, Calif. Filed Dec. 19, 1930. Serial No. 503,464. 6 Claims. (Cl. 39—7.)



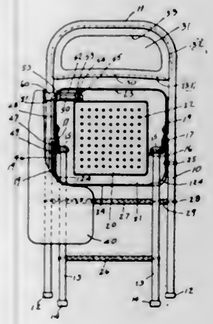
1. In combination, a lazy-tongs consisting of a plurality of resiliently restrained hingedly connected sections, means for preventing sag or drop at the hinge joints, and means for actuating said lazy-tongs.

1,864,749. RECOVERY OF LIGHT OILS. STUART PARMELEE MILLER, Englewood, and EDWARD H. ELLMS, Morsemere, N. J., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 18, 1930. Serial No. 429,304. 18 Claims. (Cl. 202—30.)



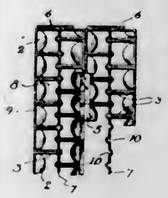
1. The method of recovering light oil from coal distillation gases, which comprises cooling the coal distillation gases to separate a coal tar, distilling the coal tar so as to produce a coal tar distillate of high boiling range, bringing this distillate into direct contact with the coal distillation gases after cooling, and after the removal of ammonia, to absorb light oil therefrom, stripping the resulting solution of light oil in coal tar distillate to remove light oil, and running the resulting oil to storage.

1,864,750. UNIVERSAL FOLDING CHAIR. JESSE C. MOORE, Indianapolis, Ind., assignor to Columbia School Supply Company, Indianapolis, Ind., a Corporation. Filed Apr. 7, 1930. Serial No. 442,075. 4 Claims. (Cl. 155—145.)



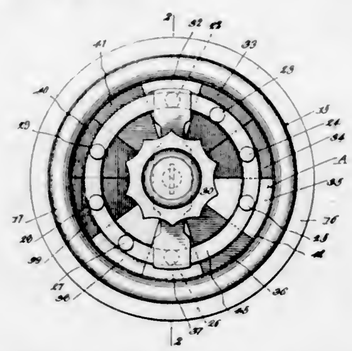
1. In a chair, the combination with a back frame and a seat pivoted thereto so as to fold up, of an arm rest pivoted at its rear end to said frame, and a support for the arm rest consisting of two telescoping members, one of said members pivoted to the front end of the arm rest and the other member pivoted to the front of the seat, whereby the arm rest may be folded either upward or downward against the folded frame and seat.

1,864,751. RADIATOR CORE FOR AUTOMOBILE COOLING SYSTEMS. WELLINGTON W. MUIR, Lockport, N. Y. Filed Apr. 27, 1929. Serial No. 358,736. 7 Claims. (Cl. 257—130.)



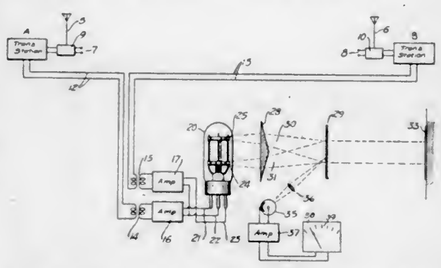
1. A radiator core comprising a plurality of units, each unit forming with its adjacent unit a water tube, each unit formed from sheet metal folded to create heat radiating fins at spaced intervals and bent so said fins extend inwardly, a separator strip disposed between said fins said strip having grooves therein engaging the length of said fins on either side thereof in positive heat conducting relation, and indentions disposed between said fins in the surfaces of said water tubes and extending substantially half way to said strip.

1,864,752. SIGNAL. DANIEL F. MURPHY, Galveston, Tex. Filed Jan. 27, 1930. Serial No. 423,845. 2 Claims. (Cl. 200—11.)



1. A switch for direction signals for automobiles comprising a base plate, a rotatable bridge member carried by the base plate including radially extending resilient contact arms, the base plate being divided into sectors of contrasting colors, and contact pins arranged in certain of the sectors to be engaged by said bridge arms.

1,864,753. HIGH FREQUENCY SYNCHROSCOPE. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed July 25, 1930. Serial No. 470,699. 14 Claims. (Cl. 172—245.)



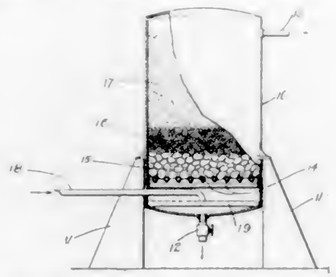
1. In combination, a plurality of frequency sources, means for producing a light from each of said sources, means for causing said lights to form in a definite pattern, and means for detecting said interference pattern.

5. The method of determining the phase displacement between currents of two frequencies, which comprises generating light rays with each of said frequencies, forming interference patterns with each of said frequencies, and detecting the appearance and disappearance of said interference patterns.

1,864,754. PROCESS OF MAKING A COMPOSITION FOR PRODUCING IRRITATING GAS. NICHOLAS E. OGLESBY and DAY EHRENFELD, Edgewood, Md., assignors, by mesne assignments, to Federal Laboratories, Inc., Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 30, 1924, Serial No. 710,171. Renewed Dec. 26, 1930. 4 Claims. (Cl. 167—47.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

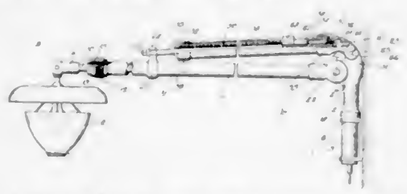
3. A process for making a composition for producing an irritating gas comprising intimately mixing a fuel, an irritant, solid at ordinary temperatures, a composition to retard the combustion of the irritant and fuel mixture, coating the mixture with a volatile solvent, and evaporating the solvent.

1,864,755. METHOD AND APPARATUS FOR TREATING OILS. JAMES H. OSMER, Berkeley, and FREDERICK L. CRAISE, El Segundo, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,282. 8 Claims. (Cl. 210—140.)



1. A continuous process of removing finely divided suspended sludge from petroleum oils comprising, forming a porous bed of solid non-absorbent insoluble material capable of being preferentially wetted by the sludge, the pores formed in such bed being of sufficient size to prevent sludge films formed on the surfaces of the insoluble material from completely filling such pores, passing an oil containing suspended sludge upwardly through such porous bed, congulating the sludge upon the surfaces of such bed, discharging sludge-free oil from an upper portion of such bed and allowing sludge congulated upon the solid surfaces to flow downwardly through such bed.

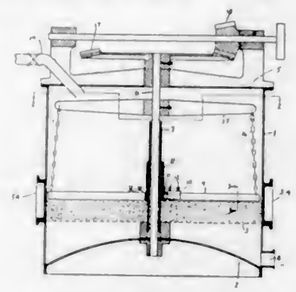
1,864,756. LIGHT BRACKET. ALPHONSE F. PIEPER, Rochester, N. Y. Filed Dec. 19, 1929. Serial No. 415,175. 13 Claims. (Cl. 248—9.)



1. A lighting fixture comprising a support, a light supporting arm swiveled to the support, means for holding said arm in adjusted position, said means comprising a tubular member and a relatively slidable rod therein, one pivoted to the arm and the other to said support, resilient means controlling the relative movement of said rod in said tubular member, and means for limiting the relative movement of the rod in said tubular member and comprising an abutment in said tubular member and a nut on said rod, said nut adapted to contact said abutment in the longitudinal movement of said rod.

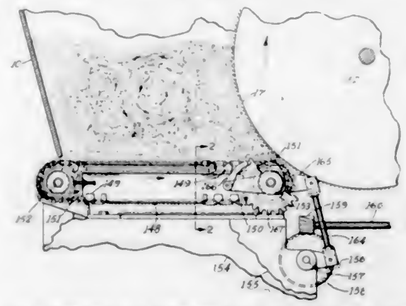
1,864,757. FILTER. KURT F. PIETZSCH, Pittsburgh, Pa., assignor, by mesne assignments, to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Original application filed June 7, 1928, Serial No. 283,493. Divided and this application filed Mar. 23, 1929. Serial No. 349,488. 2 Claims. (Cl. 210—151.)

1. A filter comprising in combination a filter chamber having a screened bottom, at least one discharge opening in the side of the chamber immediately above the screen, a vertical shaft centrally mounted in said chamber and adapted to be rotated in either direction, arms rigidly connected to said shaft and rotating therewith, a poly-armed sledge member capable of free rotation about the vertical shaft and longitudinal movement thereon, flexible connections between the rotating arms and the sledge arms, said sledge being so adjusted as to compact any cake formed on the filter during one direction of rotation and to plow said cake outwardly through said discharge



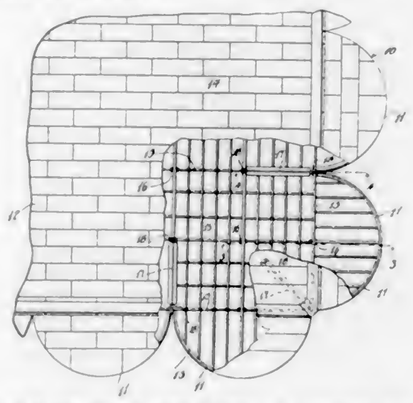
opening on the reverse direction of rotation and means for introducing a mixture of solids and liquids into the filter chamber.

1,864,758. TOBACCO-FEED BELT FOR CIGARETTE MACHINES. ARTHUR PODMORE, London, England, assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Oct. 28, 1930. Serial No. 491,755. 4 Claims. (Cl. 131—39.)



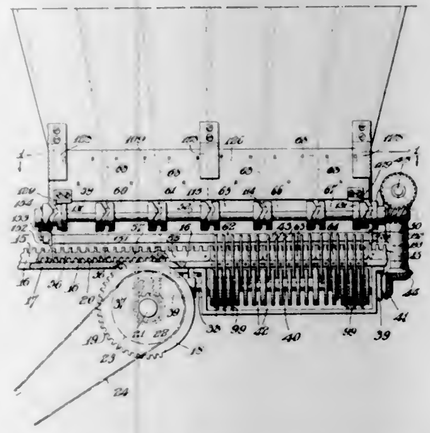
1. In a cigarette machine feed, the combination with a hopper, of a feed drum therein, a carded belt forming the floor of said hopper, transversely spaced chains for positively driving said belt toward the drum, and connections between said belt and chains for supporting the belt on the pitch lines of the chains.

1,864,759. STORAGE TANK OR CONTAINER. CLIFFORD M. PRITCHARD, Tulsa, Okla. Filed Nov. 14, 1928. Serial No. 319,304. 1 Claim. (Cl. 220—1.)



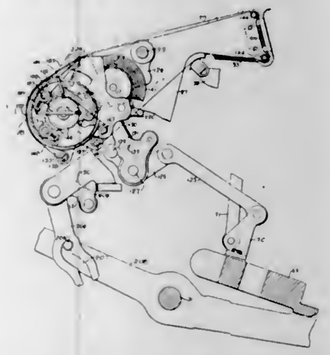
A tank for storing liquid having a rectangular shape defined by a plurality of straight side walls connected together by a top and a bottom, each side wall comprising semi-circular sections in longitudinal alignment and bracing panels connecting adjacent ends of the semi-circular sections and projecting into the interior of the tank beyond the abutting ends of the semi-circular sections.

1,864,760. FEED FOR MATCH PACKAGING MACHINES. RODNEY S. PULLEN, Philadelphia, and WILLIAM J. CROWELL, Jr., Wyncote, Pa., assignors to Pullenlite Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1930. Serial No. 430,216. 20 Claims. (Cl. 93—2.)



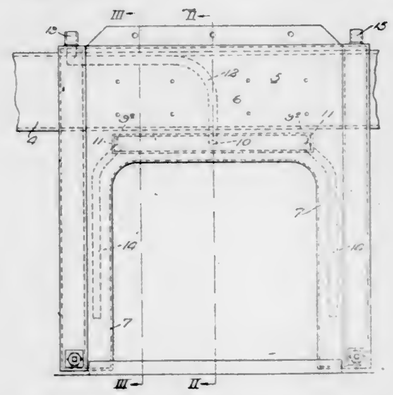
1. In a match delivery hopper, a hopper bottom having a succession of match delivery grooves on its upwardly directed surface, each groove too narrow to hold more than one match laterally, two laterally spaced plates higher than the grooves, each parallel to the grooves and adapted to present a steep side along the sides of matches in the hopper and means for laterally and oppositely oscillating the plates in order to laterally agitate the matches, the simultaneous movements of the respective plates being in relatively opposite directions.

1,864,761. CASH REGISTER. WILLIAM H. ROBERTSON, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed July 28, 1924. Serial No. 728,646. 28 Claims. (Cl. 235—2.)



1. In a machine of the class described, the combination of printing elements for printing upon record material, a casing having a writing opening spaced from the printing elements, means for shifting the record material forwardly from a position adjacent the writing opening to a position adjacent the printing elements, and for shifting the record material reversely toward the writing opening, means for making an impression on the record material, and means for simultaneously feeding the record material in the forward direction when shifting the record material reversely.

1,864,762. WATER COOLER FOR FURNACES. GEORGE L. ROBINSON, Pittsburgh, Pa., assignor to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed Apr. 25, 1931. Serial No. 532,774. 4 Claims. (Cl. 122—499.)



1. A hollow water-cooled furnace door frame and skewback channel cooler, comprising a body portion forming the top of the frame, legs forming the sides of the frame, a hollow horizontal offset adapted to project into the furnace chamber beneath the skewback channel and forming a lintel, the body portion and lintel being separated by a wall, and connections for causing flow of water through the lintel and then through the frame.

1,864,763. ORNAMENTAL FINISH. FRANK BRIAN ROOT. East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Mar. 8, 1929. Serial No. 345,453. 4 Claims. (Cl. 91—70.)

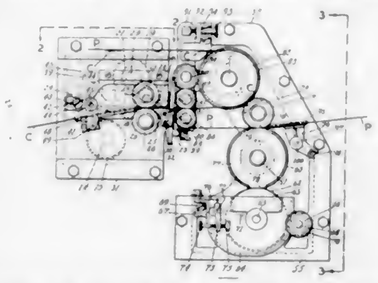


1. An ornamental article of manufacture comprising an article having a bright reflecting surface carrying a single, unpigmented, wrinkle finish coating whereby a patinized finish is obtained.

1,864,764. CORK-TIPPER FOR CIGARETTE MACHINES. RUPERT E. RUNDELL, Rockville Center, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Mar. 22, 1930. Serial No. 438,192. 18 Claims. (Cl. 131—39.)

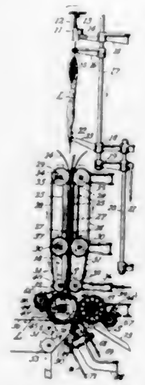
12. The combination with mechanism for continuously feeding a strip of tip material, of means for cutting the

tip material including a reciprocating ledger plate and a knife cooperating therewith to cut strips of tip material,



and means for reciprocating said ledger plate including a reciprocating cam operated slide supporting said ledger plate.

1,864,765. LEAF STEMMING MACHINE. RUPERT E. RUNDELL, Rockville Center, and GUSTAF E. HAGQUIST, Brooklyn, N. Y., assignors to International Cigar Machinery Company, a Corporation of New Jersey. Filed Feb. 18, 1931. Serial No. 516,789. 68 Claims. (Cl. 131—57.)



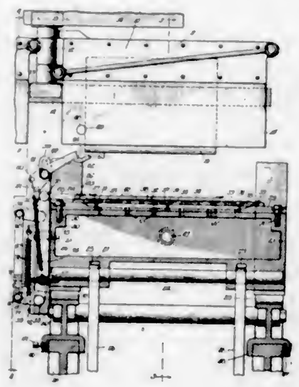
1. The combination with mechanism for spreading out leaves from which their stems are to be removed, of stemming devices receiving outspread leaves from said mechanism and tearing their stems and webs apart toward their butts.

32. The combination with a leaf support, of a suction chamber having air exhausting connections, and means for producing a relative movement of said support and said chamber to cause leaves to enter said chamber and be spread out by outgoing air.

60. The combination with means for transporting an outspread leaf, of stemming devices receiving the leaf from said means, including stem holding means and web holding means traveling in divergent directions to tear its stem and web apart towards its butt, and also including relatively movable mounts for said stem holding means and said web holding means to cause said stem holding means to hold and tear out predetermined stem portions only.

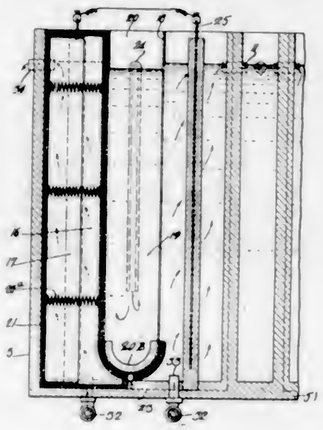
1,864,766. BOOKBINDING MACHINERY. WILLIAM C. SCHMIDT, Chicago, Ill., assignor, by mesne assignments, to T. W. & C. B. Sheridan Company, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1928. Serial No. 298,260. 24 Claims. (Cl. 154—41.)

1. In a machine of the character described, the combination of traveling means, and means for approaching said traveling means, mechanism connecting said traveling means and approaching means, for causing said traveling means to remain at rest in a predetermined position and said approaching means to approach said traveling



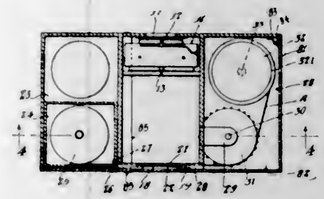
means and to cooperate therewith in substantial registration while at rest, and independent means for causing positive registration between said traveling means and said approaching means.

1,864,767. PURIFICATION APPARATUS. HERMAN J. SCHNEIDERWIRTH, New York, N. Y. Filed Mar. 19, 1928. Serial No. 262,967. 8 Claims. (Cl. 204—25.)



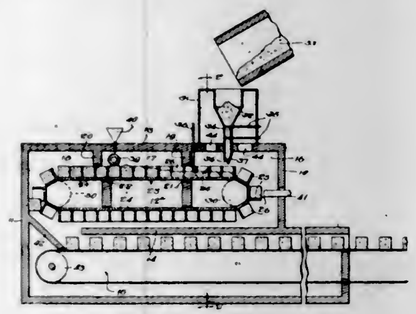
1. An apparatus for the treatment of fluids comprising a casing having slotted sections forming walls therein, holders removably disposed in said slots and extending between said walls and dividing said sections into compartments, said holders comprising expandible members, springs between said members, and a flexible waterproof covering housing said springs and said expandible members, diaphragms releasably held between the expandible members and arranged to divide the compartments into cells, wall pieces between said expandible members arranged to support pipes leading the liquid to be purified from one of the middle cells to the next and about which said diaphragms are secured.

1,864,768. ROLL-FILM CAMERA. CHARLES R. SEELING, Burbank, Calif., assignor to Pictola Camera Co. Ltd., Los Angeles, Calif., a Corporation of California. Filed Mar. 14, 1930. Serial No. 435,742. 20 Claims. (Cl. 95—31.)



1. A roll-film camera comprising a case, a stationary fixed focus lens carried by the case, a film moving means in the case, and a means in the case operable to first expose a portion of the film and thereafter to automatically move the film a predetermined amount.

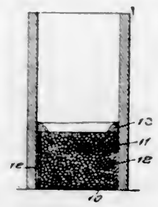
1,864,769. KILN FOR THE MANUFACTURE OF BLOATED CLAY PRODUCTS. KEMPER SLIDELL, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed Nov. 27, 1929. Serial No. 410,037. 12 Claims. (Cl. 25—142.)



1. In a kiln of the class described, the combination of a bloating chamber, an endless conveyor consisting of connected sections provided with walls constituting molds, means for moving one of the runs of said endless conveyor through the bloating chamber, and means for charging granular material into said molds when brought into adjacent relation to said charging means, a cooling chamber underneath the bloating chamber, and a conveyor movable through said cooling chamber and positioned to receive blocks of bloated material when discharged from the molds.

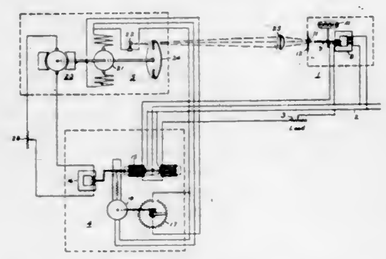
1,864,770. METHOD OF PRODUCING CELLULAR MATERIAL. KEMPER SLIDELL, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 3, 1930. Serial No. 465,536. 6 Claims. (Cl. 25—156.)

1. The method of producing cellular material which consists in introducing a charge of earthy material in granular form into a mold, interposing a layer of lubricating material between the walls of the mold and the charge of granular material to prevent adhesion, and so disposing said lubricating material with reference to the charge of granular material as to insure distribution of the lubricating material along the walls of the mold during the bloating operation, subjecting the contained charge of granular earthy material to a bloating temperature to cause expansion thereof by the formation of cells throughout the mass, and to insure the distribution of the



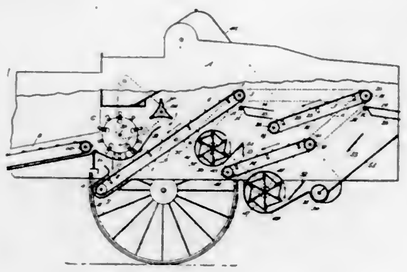
lubricating material along the walls of the mold to prevent adherence, and removing the bloated mass from the mold.

1,864,771. METHOD AND APPARATUS FOR CALIBRATING ELECTRICAL INSTRUMENTS. HARRY P. SPARKES, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 16, 1926. Serial No. 135,981. 7 Claims. (Cl. 175—183.)



3. Calibrating apparatus for electrical instruments comprising stroboscopic means including a motor connected to the circuit to which the instrument is connected and a light source controlled in accordance with the speed of said motor, speed-controlling means for said motor, and means automatically operating said speed-controlling means in accordance with variations in an electrical quantity of the circuit.

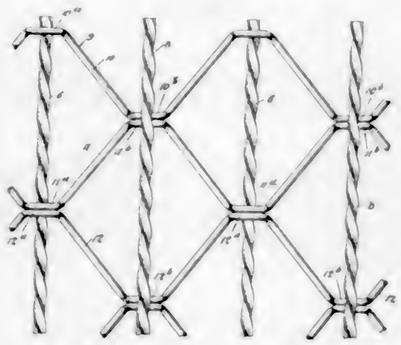
1,864,772. GRAIN SEPARATOR FOR THRESHING MACHINES OR COMBINES. FRANK N. SPRAGUE, Holyoke, Colo. Filed Nov. 4, 1930. Serial No. 493,320. 3 Claims. (Cl. 130—21.)



1. In mechanism of the character described, a straw shaker comprising a shaft having an upper and lower row of spaced fingers which are bent over and then under at

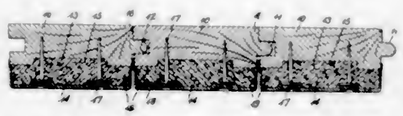
one end to provide short portions which are passed through holes in said shaft, the ends of said short portions being threaded and provided nuts, the lower fingers being bent at their connection with the shaft to form depending portions, and then outward parallel with the upper fingers.

1,864,773. REENFORCING MEMBERS FOR CONCRETE. GEORGE I. STANFORD, Milford, Conn., assignor to The Universal Pipe and Radiator Company, New York, N. Y., a Corporation of Maryland. Filed Mar. 25, 1930. Serial No. 438,662. 6 Claims. (Cl. 72—110.)



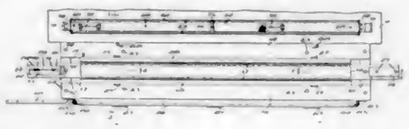
1. In a metallic framework for concrete reenforcement, a plurality of staggered metallic bars, alternate bars being arranged in transversely spaced planes, cross connecting members rigidly connected alternately with bars in the different planes, said connecting members extending obliquely with respect to the length of said bars as they extend alternately to bars in the different planes, each connecting member extending to a plurality of bars in each plane.

1,864,774. SOUND AND HEAT INSULATED FLOORING. RAYMOND W. STORM, Pelham Manor, N. Y. Filed May 2, 1931. Serial No. 534,631. 8 Claims. (Cl. 20—91.)



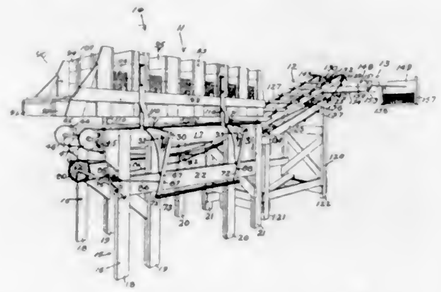
1. A flooring element comprising, in combination, a wearing surface layer element having a recess in its nonwearing surfaces, a resilient bearing element having a portion projecting into said recess and its vertical edges set back from the adjacent edges of the wearing layer, and a layer of cementitious material covering the bearing surface and exposed edges of said bearing element.

1,864,775. BUNDLE WRAPPING DEVICE. ERNEST T. STRAUBEL, Green Bay, Was. Filed Apr. 18, 1931. Serial No. 531,242. 4 Claims. (Cl. 93—93.)



1. In a device of the kind described, a supporting member for receiving a wrapper sheet and a bundle positioned on said sheet, gauge means for locating the wrapper sheet in exact predetermined position on the supporting member, a movable gauge member for locating the bundle in predetermined position on said wrapper sheet, a laterally collapsible bar, means operable to clamp said bar into compressive contact with the bundle, means positioned under said supporting member and operable to fold said wrapper sheet up along the sides of said bundle, and means operable upon the collapse of said bar to tuck said wrapper sheet inwardly over the top of the bundle on each side of said bar, said tucking means being also operable to hold said sheet in contact with said bundle when said bar is removed.

1,864,776. SHOOK ARRANGER. CLESS EUGENE STUBBS and EUGENE DINARD BROOKS, Riverside, Calif. Filed July 16, 1929. Serial No. 378,806. 9 Claims. (Cl. 1—14.)

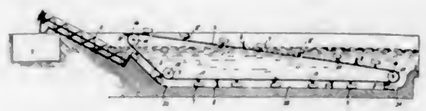


1. In combination: a plurality of magazines arranged in a row for holding box shook in stacks; endless belt conveying means disposed below said magazines; means for moving said belt means and periodically lowering said magazines toward said belt means; and means carried by said belt means for removing pieces of shook from said magazines when the latter are so lowered.

1,864,777. RECOVERY OF METALS FROM ZINC PLANT RESIDUE. URLYN C. TAINTON, St. Louis, Mo. Filed Nov. 13, 1929. Serial No. 407,002. 7 Claims. (Cl. 75—18.)

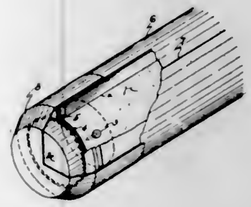
1. In the recovery of metals from zinc plant residues previously roasted and leached under conditions such as to precipitate hydrated ferric oxide in the material, the step which consists in driving off the combined water from the hydrated ferric oxide by heat treatment, and subsequently leaching the material to dissolve the metal values.

1,864,778. SETTLING SYSTEM FOR SEPARATING SOLIDS FROM FLUIDS. MARCUS B. TARK, Philadelphia, Pa., assignor to Link-Belt Company, Philadelphia, Pa. Filed June 18, 1929. Serial No. 371,876. 18 Claims. (Cl. 209—463.)



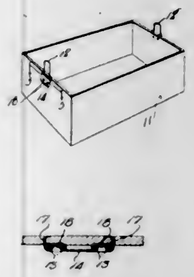
1. A settling tank having at one end a discharge port for settled solids narrower than the width of the tank itself, and a collecting mechanism having means for moving settled solids toward the discharge port end of said tank, said means being adapted to import lateral motion to solids not in line with said discharge port to bring them into line therewith.

1,864,779. CONSTRUCTION OF CYLINDRICAL PACKAGES. WALTER VEIT, East Orange, N. J., assignor to Congoleum-Nairn, Inc., a Corporation of New York. Filed Dec. 6, 1929. Serial No. 412,113. 1 Claim. (Cl. 206—46.)



An improved package for web material comprising, in combination, a core upon which the web material may be wound; shouldered, shock-absorbing members interfitting and united with the respective ends of said core; annular rings at each end of said core, retained against outward movement by said shouldered shock-absorbing members and adapted to prevent any substantial endwise movement of the packaged web; a wrapper enclosing the packaged web; and a perforate end-cap overfitting each shock-absorbing member, enclosing the respective annular ring and extending over the edge of and engaging said wrapper; said shock-absorbing members being characterized by projecting beyond the end of the packaged web a distance such that a plane tangent to the periphery of the shock-absorbing members and the periphery of the end of the packaged web will form an angle of approximately 45° with the longitudinal axis of the package.

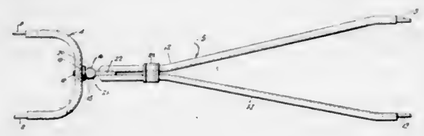
1,864,780. FASTENER FOR BOXES OR THE LIKE. ARTHUR A. WELLER, Providence, R. I., assignor to The Mason Box Company, Attleboro Falls, Mass., a Corporation of Massachusetts. Filed Mar. 18, 1931. Serial No. 523,403. 7 Claims. (Cl. 292—253.)



1. A fastener permanently attached to the body of a box and adapted to be detachably secured to a slotted cover for the box, comprising a loop member formed of a single piece of ductile wire having parallel legs applied against the outer surface of the box, and a saddle straddling said legs and covering the ends of said legs, the saddle having retaining portions engaging the box body to clamp the loop legs therebetween.

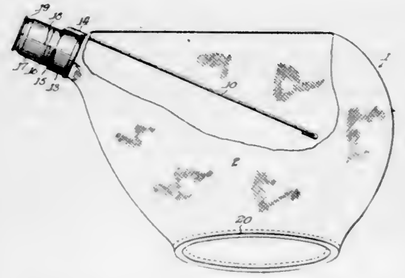
1,864,781. METHOD AND APPARATUS FOR TRANSPORTING AUTOMOBILES. CHANDLER WELLS, Buffalo, N. Y. Filed Jan. 23, 1931. Serial No. 510,801. 10 Claims. (Cl. 280—33.1.)

2. A device for transporting motor cars comprising a front or towing car engaging member, a rear or towed car engaging member for attaching to the rear axle of the towed car, and articulating means for associating said front and rear members for relative pivotal movement



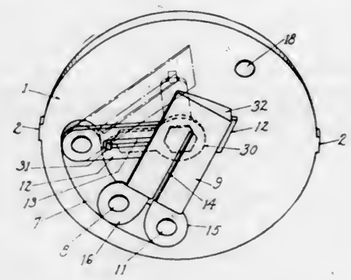
in a horizontal plane, said articulating means acting to preserve axial alignment of the front and the rear members against movement in a vertical plane.

1,864,782. SUCTION CLEANER. HARRY B. WHITE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Jan. 20, 1930. Serial No. 421,900. 5 Claims. (Cl. 183—52.)



1. A dust separator for suction cleaners comprising a bag composed of filtering material, a fitting which is secured to the inlet of the bag and is adapted to be secured to its opposite end to the outlet of a suction cleaner and means carried by said fitting and extending within said bag for supporting said bag when in use and movable relative to said bag for beating the interior thereof when detached from the cleaner and being cleaned.

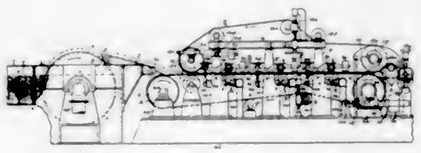
1,864,783. THERMOSTATIC CIRCUIT BREAKER. THOMAS WHITEFORD, Chelsea, and LAWRENCE E. DONNELL, Everett, Mass. Filed Nov. 17, 1930. Serial No. 496,106. 2 Claims. (Cl. 200—116.)



1. A device of the character described comprising conducting terminals; a switch member normally bridging said terminals; a thermal member; a pivoted member normally held against movement by said thermal member;

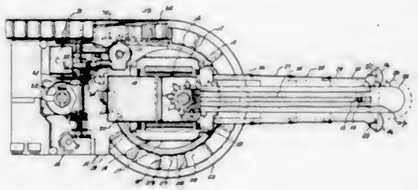
means tending normally to move said switch member out of bridging position; an element separate from said pivoted member and having operative connection with relation to said switch member and having a portion to operatively engage said pivoted member, the point of such engagement being normally very close to the pivot of said pivoted member, whereby the thermal member is allowed to return to normal position after being subjected to an overload of current not sufficient to break the circuit.

1,864,784. WET MACHINE FOR INSULATING BOARD. JOHN A. WIENER and JOHN B. HARMON, Oswego, N. Y. Filed Nov. 30, 1931. Serial No. 578,020. 9 Claims. (Cl. 92—39.)



1. In combination a cylindrical foraminous vacuum mold adapted to produce a continuous thick web of fiber, a pair of Fourdrinier belts one above the other, adapted to receive therebetween said web, means to transfer the web from the mold to said belts, common means to drive said mold and said transfer means, rolls to independently support said belts, vacuum means below the lowermost belt to sequentially extract the water from said web, press-rolls arranged in pairs, the corresponding rolls of each pair being disposed respectively above and below said belts, and common means to drive said belt-supporting rolls and the lowermost of press-rolls.

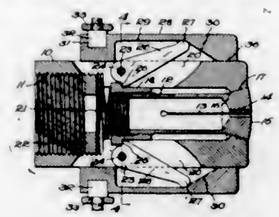
1,864,785. MINING MACHINE. CHARLES F. WILHELMI, Huntington, W. Va., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 2, 1928. Serial No. 297,069. Renewed Dec. 1, 1930. 27 Claims. (Cl. 262—28.)



1. In combination with a track mounted mining machine, a cutting element adaptable to cut a horizontal kerf in the mine wall at various elevations with respect to the mine bottom, a cuttings-gathering chute extensible substantially longitudinally of said cutting element and telescopic within itself beneath said cutting element, and yieldable transversely extending material engaging means at the outer end of said chute.

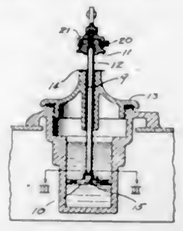
1,864,786. COLLET CHUCK. ARTEMAS O. WILKINS, Saugus, Mass. Filed Dec. 30, 1930. Serial No. 505,552. 5 Claims. (Cl. 279—51.)

1. In a collet chuck, the combination of a chuck body for attachment to a driving spindle; a collet; said body and said collet having cooperative means to cause work to be gripped by said collet when the latter is moved inwardly with relation to said body; and means to move said collet inwardly, the last-mentioned means including collet-actuating levers fulcrumed on said body and having short arms extending inwardly from the fulcrums of said levers and actuating said collet, and relatively longer arms extending lengthwise of and toward the outer end of said chuck-body, a sleeve about said levers and about and slidable lengthwise of said body and having a lon-



gitudinally tapered cam-surface about and engaging said longer arms to swing the latter inwardly toward the axis of rotation of the chuck; and means engaging said sleeve to move the latter lengthwise during the rotation of the chuck.

1,864,787. DASHPOT FOR WEIGHING SCALES. LAWRENCE S. WILLIAMS, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 3, 1928. Serial No. 266,951. 19 Claims. (Cl. 188—96.)



1. In a device of the class described, in combination, a plunger member, a valve member, one of said members having ports therein, and temperature controlled means for moving said members toward or away from each other, one of said members being resilient whereby it may be forced toward the other by movement in one direction through a fluid.

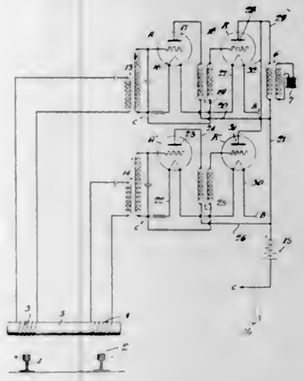
1,864,788. HOSIERY FORM. CHARLES A. BATCHELDER, St. Albans, Me. Filed Oct. 9, 1929. Serial No. 398,487. 5 Claims. (Cl. 223—18.3.)



1. A device for displaying hosiery, comprising as cooperating members, a base having a flat upper part, and a form shaped to simulate the human leg and foot, and

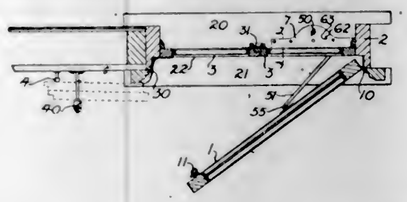
having a flat lower part resting on the flat upper part of the base: and an elongated, U-shaped magnet housed within one of said cooperating members and extending along the inner surface of the flat part of said one cooperating member, lengthwise of the foot portion of the form, the magnet having rectangularly disposed poles extended through said flat part of said one cooperating member, and forming means for holding the magnet in place, the poles being spaced apart transversely, to give the form stability against tipping over sidewise, the exposed ends of the poles constituting wear-resisting elements, the elongated U-shape of the magnet enabling the center of mass of the magnet to be disposed low down, the magnet thus acting as an efficient weight and taking up little room, considered vertically, thereby making it possible to form said one cooperating member of little height, adjacent to the magnet, the other of said cooperating members comprising a part which the magnet attracts.

1,864,789. METHOD OF AND MEANS FOR ASCERTAINING THE INTEGRITY OF TWO LINE CONDUCTORS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 17, 1931. Serial No. 551,391. 2 Claims. (Cl. 246—63.)



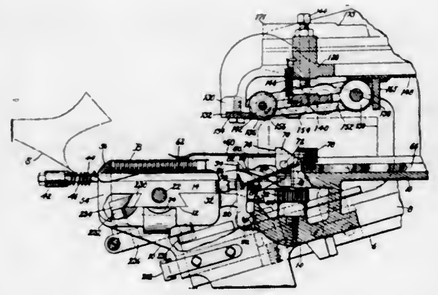
1. The method of ascertaining the integrity of two charged line conductors which consists in rectifying the current received from one conductor into half-wave impulses, rectifying the current received from the other conductor into complementary half-wave impulses, and controlling an indicating device by full-wave impulses composed of the two complementary half-wave impulses.

1,864,790. CASEMENT WINDOW SWINGING MEANS. DAVID J. BARKER, Seattle, Wash. Filed Apr. 22, 1929. Serial No. 357,038. 7 Claims. (Cl. 268—118.)



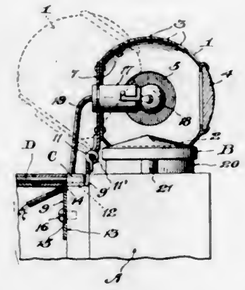
1. A window swinging means for screened casement windows adapted for securement in the window sill, the sill being recessed in its upper and outer faces to receive the window-swinging means, an upwardly flanged plate closing the outside of said recess, a transverse guide above and outwardly of said flange, an apron depending therefrom and contacting with said flange to seal the outer side of the recess, a cover plate closing the upper side thereof, a member transversely slidable in said guide, means operable from a point inwardly of the screen for sliding said member, and a link connecting said member and the window.

1,864,791. MACHINE FOR OPERATING UPON SHOES. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 6, 1928. Serial No. 252,361. 83 Claims. (Cl. 12—17.)



1. A machine of the class described having, in combination, a concave matrix for supporting a leaf blank formed upon a piece of material, and means cooperating with the matrix for trimming portions of the blank to shape the same.

1,864,792. ORNAMENT. HENRY GUY BELL, Brisbin, Pa. Filed June 17, 1931. Serial No. 545,106. 7 Claims. (Cl. 240—8.11.)

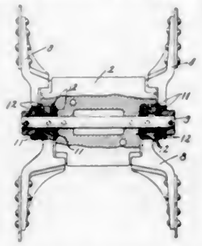


1. An ornament of the character described, adapted for use with an automobile radiator having a filler cap, comprising a plate secured to the rear face of the radiator and extending beyond the upper edge of the latter, an ornament pivotally secured to said plate above the radiator, and means for normally urging said ornament into engagement with the filler cap.

1,864,793. CLAMSHELL BUCKET. HENRY W. BOTTEN, Lakewood, Ohio, assignor to The Owen Bucket Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 23, 1929. Serial No. 365,357. 3 Claims. (Cl. 37—184.)

1. A hoisting bucket, comprising head and counterweight members, bucket members suspended from the head

member, a shaft carried by the counterweight member, said bucket members having arms provided with eyes pivoted on said shaft member, and guard washers sleeved



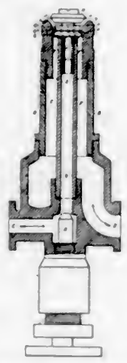
on the shaft and nested in recesses in the adjacent eyes and forming a tortuous passageway to the bearing surfaces.

1,864,794. DECORATIVE MATERIAL. WILLIAM BOWKER, Newark, and JAMES F. WALSH, East Orange, N. J., assignors to Celluloid Corporation, a Corporation of New Jersey. Filed June 26, 1928. Serial No. 288,520. 2 Claims. (Cl. 18—1.)



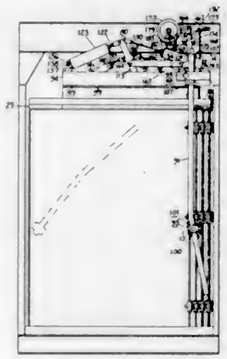
1. An article having decorative effects comprising masses of a translucent thermo-plastic composition of substantial configuration having therein flat light reflecting particles, the flat surfaces of which are in a large number of planes, incorporated in a mass of differently colored substantially opaque thermoplastic material, the whole being in the form of an integral composition, which when cut in substantially any plane presents light reflecting areas simulating mother of pearl effects in said translucent composition.

1,864,795. LIQUID FUEL BURNER. GEORGE WILLIAM BOYD, Edinburgh, Scotland. Filed Apr. 14, 1931, Serial No. 529,965, and in Great Britain May 5, 1930. 1 Claim. (Cl. 299—115.)



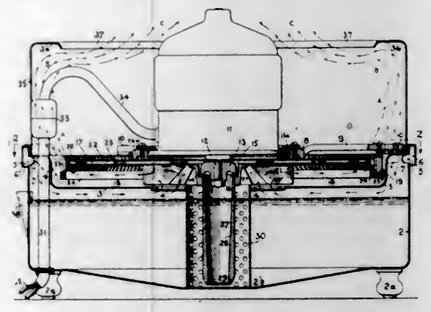
A liquid fuel burner, comprising a pair of tubes disposed in concentric relation and forming a central passageway and an outer passageway, a collar disposed on the outer end of the inner tube and completely closing the end of said outer passageway, said collar having an annular extension spaced from the wall of said outer passageway, a tubular plug extending through said extension and threaded into the outer end of said central passageway, the wall of said extension being radially spaced from said plug and the plug provided with radial perforations communicating with the space between the extension and plug, said plug having an enlarged head overlying the extension, and said collar having a plurality of parallel, inclined perforations communicating at their opposite ends respectively with the outer passageway and with the space between the wall of said outer passageway and said annular extension, the overlying surface of said head being corrugated.

1,864,796. GATE OPERATING MECHANISM. THOMAS BRADY, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Original application filed July 10, 1926, Serial No. 121,572, Patent No. 1,685,225, dated Sept. 25, 1928. Divided and this application filed Oct. 4, 1927. Serial No. 223,966. 1 Claim. (Cl. 187—52.)



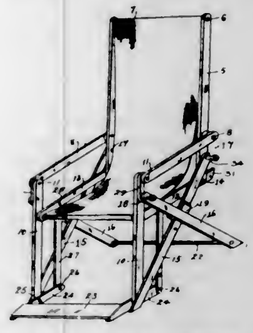
In combination; an elevator car having a gate; an operating member for said gate; a base secured to the top of the car; a lever pivotally mounted at one end on said base; means operatively connecting said operating member to said lever; fluid pressure cylinders pivotally mounted on said base at opposite sides of said lever; a piston for each pressure cylinder pivotally connected to the other end of said lever; liquid check cylinders pivotally mounted on said base at opposite sides of said lever; a piston for each check cylinder pivotally connected to said lever intermediate its ends; a valve; connections from said valve to each of said pressure cylinders, to said source and to atmosphere; an electric motor operably connected to said valve, said motor when energized causing movement of said valve into position to cause compressed fluid to be admitted to one of said pressure cylinders to cause movement of said lever about its pivot to move the gate operating member in a direction to close said gate, said valve at the same time permitting the exhausting of the other of said pressure cylinders, said motor being maintained energized during operation of said car to maintain the valve in position to keep the gate closed; a spring operable upon deenergization of said motor to move said valve into position to cause compressed fluid to be admitted to said other pressure cylinder to cause movement of said lever about its pivot to move the gate operating member in the opposite direction to open said gate, said valve at the same time permitting the exhausting of said one pressure cylinder; one of said check pistons acting in its cylinder to retard the final closing movement of said gate and the other of said check pistons acting in its cylinder to retard the final opening movement of said gate; and means connected to said valve and extending into said car for operating said valve manually to effect the closing of said gate in the event of failure of the supply of electric power to said motor.

1,864,797. PORTABLE HUMIDIFIER. WILLIAM G. R. BRAEMER, Haddonfield, N. J., assignor, by mesne assignments, to Airite Corporation, Dover, Del., a Corporation of Delaware. Filed Sept. 1, 1928. Serial No. 303,595. 2 Claims. (Cl. 261—91.)



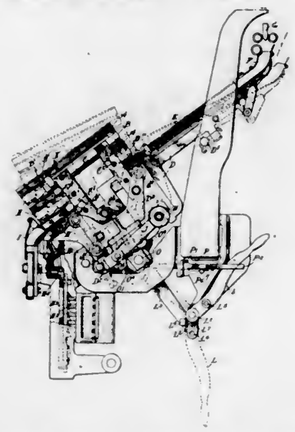
1. A humidifier comprising a tank having its upper portion provided with an annular diaphragm plate open at its center, a motor supported above the annular diaphragm plate, a horizontal rotatable disc secured to the motor shaft and arranged above the annular diaphragm plate, a centrifugal water pump of tapered cylindrical form axially arranged below the motor and rotated by it and extending through the central aperture of the annular diaphragm plate, fan blades secured in close relation to the under side of the horizontal disc and arranged between it and the annular diaphragm plate and immediately above the central opening therein, stationary dissipating means arranged in annular form about the perimeter of the horizontal disc, and a casing above the tank extending above the disc and dissipator means for directing the humidified currents of air upwardly above the motor, said rotatable disc being secured to the motor shaft by a hub having in its upper surface a deep groove terminating at its top with the rotatable disc and provided at its bottom with a transverse aperture communicating with the interior of the centrifugal pump.

1,864,798. ADJUSTABLE RECLINING CHAIR. WILLIAM L. BRYDEN, Cleveland, Ohio. Filed Nov. 14, 1929. Serial No. 407,070. 1 Claim. (Cl. 155—110.)



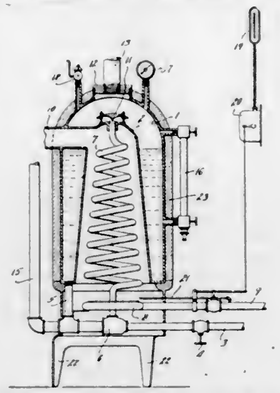
A pivotally adjustable and collapsible reclining chair comprising in combination, a stationary supporting frame including a pair of spaced X-frames, a swinging frame pivoted upon the upper ends of said X-frame and comprising laterally spaced members connected by transverse rods, and a flexible member having its ends suspended from the said rods, the said X-frames comprising cross bars each provided with a supporting block detachably resting upon the upper edge of the other bar, and the swinging frame including in each of said spaced members three parallel and spaced horizontal bars pivotally connected with parallel vertically inclined bars, whereby the swinging frame may swing backward to nearly horizontal position, and it together with the X-frames may be swung forward to collapsed position.

1,864,799. TYPOGRAPHICAL MACHINE. HAROLD A. BURT, St. Albans, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,591. 17 Claims. (Cl. 199—20.)



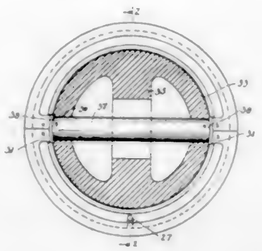
1. In a typographical machine, the combination of a plurality of magazines, and a supporting frame therefor movably mounted in the machine frame, said magazines being shiftable relatively to the supporting frame to bring one or another thereof into operative position, with means for moving the supporting frame from its normal position to facilitate the removal of the magazines, together with means for preventing such movement of the supporting frame except when the magazines occupy a given shifted position therein.

1,864,800. STEAM GENERATING DEVICE. GEORGE H. CHAMBERLAIN, Jr., Elyria, Ohio. Filed Mar. 30, 1928. Serial No. 266,083. 2 Claims. (Cl. 122—169.)



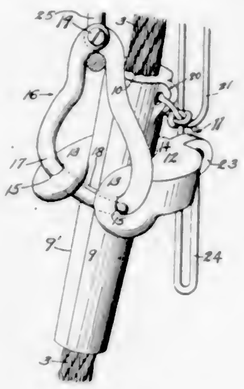
1. A steam-generating device compising a converging heating chamber, a water and steam chamber surrounding said heating chamber, a correspondingly tapering spiral fluid-conveying means extending through said heating chamber and having communication with said water and steam chamber, and the inclination of successive convolutions of said spiral progressively increasing toward the top of the coil.

1,864,801. GYROSCOPIC COMPASS. EDWIN D. CHAPLIN, New York, N. Y., assignor to Harold D. Penney, Pelham, N. Y. Filed Jan. 26, 1928. Serial No. 249,642. 10 Claims. (Cl. 36—226.)



1. In combination, a hollow semi-spherical rotatable carrier having magnet poles thereon; a gyro member rotatable in the hollow of said carrier and also carrying poles, said second poles being rotatable for directionally controlling rotation of said carrier.

1,864,802. LINE LIFT. HARRY E. CLARK, Huntington Park, Calif., assignor of one-third to E. K. Potter, Los Angeles, Calif., one-third to L. A. Friedman, Lovelock, Nev., and one-third to Florence B. Clark. Filed Apr. 14, 1930. Serial No. 444,041. 5 Claims. (Cl. 24—136.)



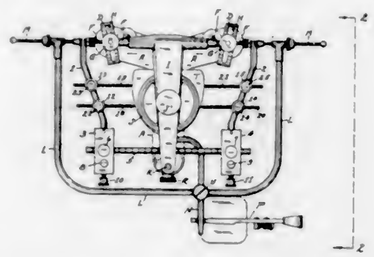
5. A line lift assembly comprising a pair of tapered sleeve segments, each segment having on its meeting face a groove provided with twist strand imprints to fit the twist strands of the wire line; each segment being provided on the back of its larger end with a suspending eye; a ring; flexible connections connecting said eye to the ring; a cramping yoke provided at its bow with an eye and having a seat of more than 180 degrees and of less diameter than the larger end of the sleeve formed by the segments and having arms spaced apart to allow the yoke to be passed onto and from the line, and provided with holes; a flexible connection of greater length than either of the sleeve segment connections, connecting the yoke eye to said ring; a split link having hook arms pivoted together and adapted to enter the holes in said yoke arms; a flexible connection for suspending said link from said ring with its hooks in position to enter the holes in the arms of the yoke; and a soft line connected to the ring for raising and lowering the same.

1,864,803. MARINE AND AEROPLANE PROPELLER. JOHN M. CLARK, Whitestone, N. Y. Filed July 11, 1929. Serial No. 377,584. 2 Claims. (Cl. 170—170.)



1. A propeller blade having a plurality of grooves in approximately one half of the surface of the blade and extending longitudinally of the blade, said grooves spaced approximately equal distances apart, and terminating at one edge of the blade.

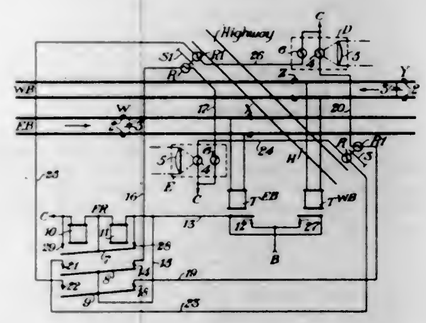
1,864,804. INSTRUMENT FOR OBTAINING CONDYLE-CAST RECORDS. ROY P. CLARK, Brownstown, Ind. Filed May 4, 1931. Serial No. 534,885. 4 Claims. (Cl. 33—174.)



1. In combination with a prosthetic adaptable articular instrument carrying a plaster-cast of a denture mounted therein, an attachment for obtaining condyle and other records from the plaster cast, comprising a frame carried by the said instrument and having a plurality of adjustable pintles to provide contacts for obtaining various data with relation to the plaster cast carried by said instrument.

1,864,805. APPARATUS FOR THE CONTROL OF HIGHWAY CROSSING SIGNALS. PAUL H. CRAGO, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 16, 1932. Serial No. 587,075. 7 Claims. (Cl. 246—130.)

1. In combination, a stretch of railway track intersected by a highway, two normally inactive highway crossing signals each including an electric light and said signals set to govern highway traffic approaching the intersection in opposite directions, a railway signal having two electric lights each adapted to display a distinctive indication, a first circuit including one light of the railway signal and the light of one of said highway signals in series, a second circuit including the other light of the railway signal and the light of the other highway signal in series, and means responsive to a train approaching the intersection adapted to alternately close periodically the said first and second circuits for causing the flashing of said highway signals to warn highway traffic and to alternately flash the two lights of said railway signal as an indication to the approaching train that proper highway warning is being given.



1,864,806. METHOD OF AND APPARATUS FOR PRODUCING ROOFING. DONALD A. CUMFER, Nutley, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed July 17, 1929. Serial No. 378,878. 18 Claims. (Cl. 91—68.)

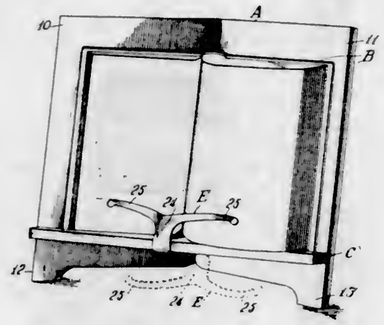


1. In the method of producing roofing elements, the steps which comprise coating the roofing base while it is moving in a direction parallel to the butt edge of the finished elements and applying surfacing material to the coated portions of the base while it is moving in a direction at right angles to the butt edge of the finished elements.

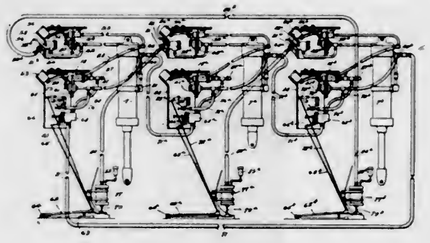
9. Apparatus for the purpose described comprising means for feeding separate elements in a direction parallel to the butt edges thereof, means for supplying coating material to both faces of the elements as thus fed, means for surfacing one of the coated faces of the elements, means for feeding the elements at right angles to the first named direction of movement and means for surfacing the other coated face of the elements while moving in the right-angular direction.

1,864,807. BOOK SUPPORT. BROR ERIC DAHLGREN, Chicago, Ill. Filed Nov. 8, 1928. Serial No. 317,920. 3 Claims. (Cl. 45—61.)

1. A book support comprising an inclined desk; a transverse shelf near the bottom of said desk; and a book-holding clip having a movable member hinged to the under side of said shelf upon an axis extending lengthwise of said shelf, means for yieldingly fixing said movable member in upper and intermediate book-holding positions and in a lower wide-open non-holding position, a shank having its outer end bent upward at an angle to its inner end so as to clear the forward edge of said shelf when said clip is rotated about said axis, and two oppositely extending spring prongs constituting continuations of said shank and operative to engage the opposite leaves of an open book resting upon said desk and shelf, said shank and prongs being yielding toward and away from the book to suit different numbers of leaves on its opposite sides, and the whole clip being movable about said axis into a fully open position beneath said shelf, the path of movement being at all times above any flat support upon which the desk stands.



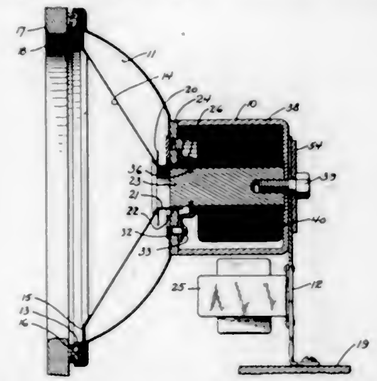
1,864,808. TANDEM CONTROLLING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 22, 1926, Serial No. 149,904. Renewed Nov. 19, 1931. 21 Claims. (Cl. 68—9.)



1. The combination of a plurality of machines having opening and closing movements, power means for opening and closing the machines, means for controlling the operation of the power means including a controlling member associated with each machine and positioned in the path of approach to the machine so as to be engaged and operated by a person approaching the machine and connected to the controlling means of the other machine to effect the closing of said other machine.

16. The combination of a plurality of machines having opening and closing movements, motor means for closing the machines and holding them closed, a control member for controlling the operation of the motor means of each machine, a release member for the motor means of each machine, means for operating the release member of each machine, connections between the control member of one machine and the release member operating means of a second machine for controlling the operation of the release member of the second machine, whereby the release member of the second machine is operated from the controlling member of the first machine.

1,864,809. LOUD SPEAKER. BURGESS DEMPSTER and ARTHUR R. BRUEHL, Berkeley, Calif., assignors to The Magnavox Company, Oakland, Calif., a Corporation of Arizona. Filed Jan. 8, 1930. Serial No. 419,308. 10 Claims. (Cl. 179—115.5.)



10. In a magnetic structure for loud speakers of the moving coil type, the combination of an inner pole piece adapted to support a magnetizing coil, a frame upon which said inner pole piece may be mounted, an outer pole piece adapted to surround the end of said inner pole piece and co-operate with said frame, a centering means carried by said outer pole piece adapted to engage said inner pole piece for maintaining said pole pieces in proper relation with respect to each other, and means carried by said inner pole piece and said centering means adapted to interlock and secure the parts together in operative relation when the inner pole piece is turned in said centering means.

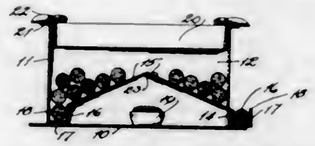
1,864,810. HEALTH LAMP SOCKET. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Aug. 29, 1929. Serial No. 389,161. 19 Claims. (Cl. 173—328.)



1. A socket for mercury arc lamps having one cathode and two anodes, the socket having a cathode receiving chamber provided with a contact device, and an opening at the other end through which the two anodes may be passed, the opening being provided with contacts engageable with the respective anodes.

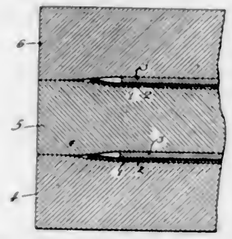
1,864,811. COMBINATION CIGARETTE DISPENSER AND ASH TRAY. PARL O. ECKELS, Cleveland, Ohio. Filed Nov. 4, 1931. Serial No. 573,023. 2 Claims. (Cl. 312—80.)

1. The combination of a casing having end walls each provided with a delivery opening; of a delivery slide in said casing having a trough at each end adapted to receive a cigarette, said slide being of greater length than the casing to fully expose the trough at one end of the slide upon the other end of the slide being pushed into the casing to conceal the entire trough at that end, the



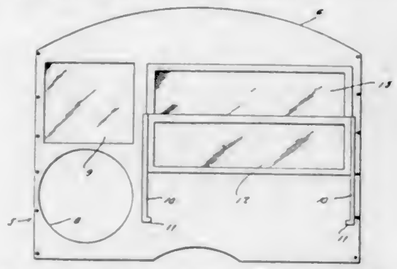
slide between its troughs having its upper face forming synclinal surfaces extending from the center downwardly to the troughs, the openings in the end walls having their upper edges engageable by the synclinal surfaces to form stops for said slide.

1,864,812. METHOD OF GLUING WET VENEERS TO BACKINGS AND DRYING THEM. ARMIN ELMENDORF, Chicago, Ill., assignor to The Flexwood Company, a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,804. 8 Claims. (Cl. 144—309.)



1. The method of gluing wet thin wood veneer to a flexible backing and at the same time drying the veneer, which consists in pressing a composite sheet, composed of a sheet of such veneer and a backing sheet with viscous glue interposed between them, between massive pads of water-absorbent material under sufficient pressure to hold the veneer against shrinkng, and allowing the composite sheet to remain between the pads until the greater part of the moisture therein has been absorbed by the pads.

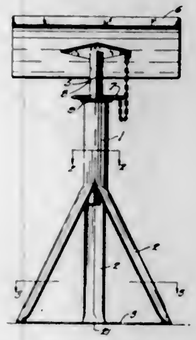
1,864,813. TRACTOR CAB. CHRISTOPHER C. FRAISE, Eldorado Springs, Mo. Filed Mar. 10, 1931. Serial No. 521,538. 2 Claims. (Cl. 296—1.)



1. A cab structure for a canopy equipped tractor, comprising a front wall and a rear wall, and side walls secured to the front wall and rear wall, said front wall and rear wall having their upper part curved to conform with the underside of the canopy of the tractor and their lower part cut away to accommodate the tractor body, a vertically slidable double window in the front wall and at one side, a fixed window in said front wall; a single vertically slidable window in said rear wall and

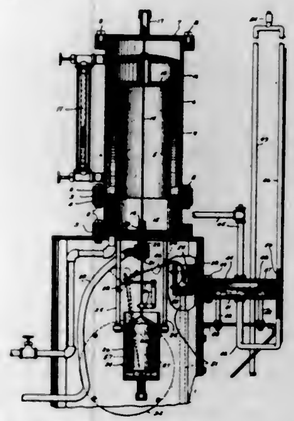
extending substantially thereacross; one of said side walls comprising an upper and a lower channel guide, a pair of cooperating slidable door sections in said guides, a vertically slidable window in each of said door sections; and a single vertically slidable window in the remaining side wall extended substantially the length thereof; said vertically slidable windows comprising each a pair of vertically disposed channel guides, a sash slidable therein; and said double window comprising a pair of double channeled guides on the front wall, a pair of overlapping window sections operable in said double channeled guides.

1,864,814. SUPPORT. BERNARD S. GALLAGHER, Piedmont, and WILLIAM J. EMMONS, Alameda, Calif. Filed July 30, 1930. Serial No. 471,700. 3 Claims. (Cl. 248—41.)



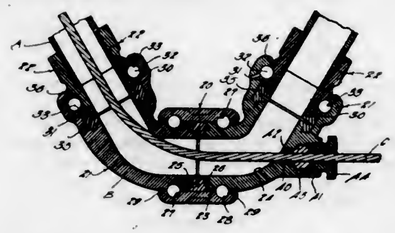
1. A support comprised of a single blank sheet of sheet metal cut and folded to define a supporting column portion of triangular cross section, legs integral with and extending divergently from one end of said column portion, and feet formed integral with the outer ends of and extending inwardly from said legs, and said legs being bent longitudinally thereof to provide them with a substantial V shape in cross section.

1,864,815. CHLORINE METER. ROBERT N. GRAHAM, South Charleston, W. Va., assignor to Carbide & Carbon Chemicals Corporation, a Corporation of New York. Filed Apr. 7, 1928. Serial No. 268,305. 3 Claims. (Cl. 73—31.)



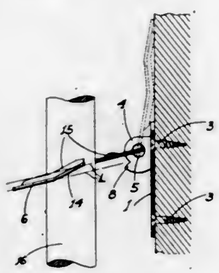
1. In a device for measuring gas pressure, a pressure chamber, a bell arranged to rise and fall therein with fluctuations in the difference in pressure between the interior and exterior of the bell, a liquid in the pressure chamber sealing said bell, counterbalancing means for said bell outside said pressure chamber, a rod passing through the wall of the pressure chamber to communicate the motion of the bell to the counterbalancing means, guide and seal means engaging said rod where it emerges from the pressure chamber, said means comprising spaced portions loosely fitting said rod, and means for introducing inert gas into said guide and seal means between said spaced portions, whereby said rod is enabled to move freely through said guide and seal means without escape of gas from said pressure chamber.

1,864,816. FLUID CONDUIT. LELAND S. HAMER, Long Beach, Calif. Filed May 3, 1930. Serial No. 449,600. 6 Claims. (Cl. 137—75.)



6. In a flexible conduit the combination of, a swivel connection for two lengths of tubing, said connection including relatively rotatable sections, one of said sections having an opening to its exterior, a flexible safety member adapted to extend through the conduit, the said safety member passing through said opening to the exterior of the conduit whereby it may be attached to a relatively fixed object entirely external of the conduit, and means at the said opening for sealing about the safety element.

1,864,817. RACK FIXTURE. ROY R. HART, San Jose, Calif. Filed July 24, 1931. Serial No. 552,836. 7 Claims. (Cl. 24—249.)

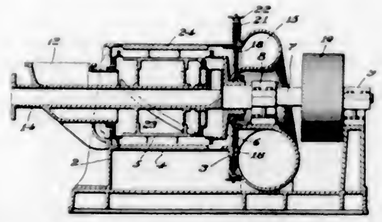


1. A handle holding fixture comprising a bracket adapted to be secured against a wall, ears projecting outwardly from the sides of the bracket, a handle-holding plate pivoted on the ears and projecting laterally beyond the ears in front of the same, and stop shoulders formed with said ears to engage the under side of the plate when the latter is disposed at a predetermined angle to a horizontal plane.

1,864,818. PULP SCREENING MACHINE AND PROCESS. ANTON J. HAUG, Nashua, N. H. Filed Jan. 9, 1929. Serial No. 331,178. 15 Claims. (Cl. 92—35.)

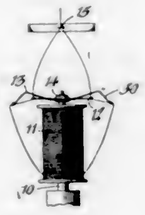
1. A pulp screening machine comprising, in combination, a rotary screening drum, means for rotating said drum rapidly to create a substantial centrifugal effect on

the stock in contact with the drum, means for delivering stock to be screened to the interior of said drum, and means for maintaining said drum submerged in screened



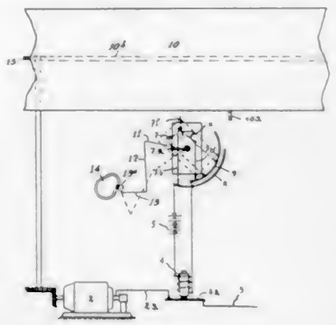
stock and for applying a substantially uniform hydraulic pressure to the drum at points spaced uniformly around the circumference thereof.

1,864,819. FLYER FOR SPINNING MACHINES AND THE LIKE. HENRY C. HERR, Buffalo, N. Y., assignor to Herr Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,463. 9 Claims. (Cl. 117—23.)



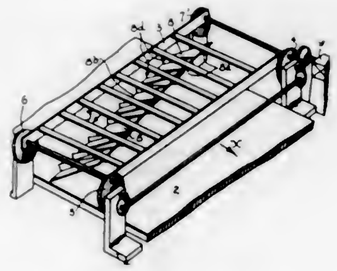
1. A flyer, comprising a body including superposed, relatively movable plates of substantially the same shape in plan, one of said plates having a retaining groove adjacent its outer edge for receiving the inner end of a flyer-wire and an inwardly facing guide-way along its marginal edge intersecting said groove, and the other plate being revolvable over the companion plate to cover and uncover its groove and having its marginal edge engaging said guide-way.

1,864,820. POWER STOP. CHARLES HEUZE, Auvelais, Belgium. Filed Mar. 31, 1928, Serial No. 266,417, and in Belgium Feb. 14, 1928. 2 Claims. (Cl. 192—116.5.)



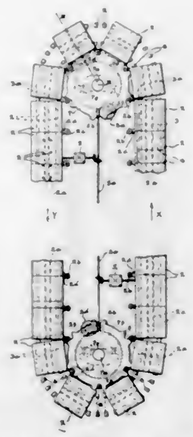
1. A device for breaking the feed circuit of a motor, comprising an interrupter in such circuit; a relay circuit; a controller for said interrupter disposed in the relay circuit; a shiftable member operated by the motor; a circuit breaker in said relay circuit; and a carrier whereon the circuit breaker is mounted displaceable periodically in such a way as to lie outside the path of movement of the shiftable member while still remaining electrically connected in the relay circuit during such periodic displacements.

1,864,821. DEVICE FOR CLEANING TRAVELING TABLES. CHARLES HEUZE, Auvelais, Belgium. Filed Feb. 18, 1929, Serial No. 340,911, and in Belgium Jan. 22, 1929. 3 Claims. (Cl. 15—93.)



1. A device for cleaning traveling tables, comprising at least one scraping blade arranged in contact with the surface of the tables, a frame bearing said blade, and means for automatically reciprocating said frame at a greater speed when the blade is not scraping than when it is scraping.

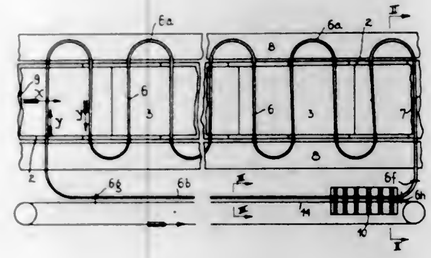
1,864,822. GRINDING, SMOOTHING, AND POLISHING APPARATUS. CHARLES HEUZE, Auvelais, Belgium. Filed May 6, 1929, Serial No. 360,805, and in Belgium Apr. 17, 1929. 1 Claim. (Cl. 51—110.)



Glass supporting and transporting conveyor for an apparatus for grinding, smoothing, and polishing plate glass, comprising movable tables for supporting the glass plates disposed in contact with one another in two parallel rows, devices for coupling the tables to one another and enabling an angular movement of one table in relation to another, rotatable elements in contact with which the rotatables pass from one row to the other, and conical rollers for supporting the tables during their movement

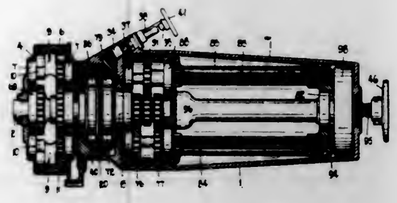
in contact with the said rotatable elements, said rollers having their axes so directed as to intersect the pivots of the rotatable elements in the horizontal plane passing through the contact lines of the rollers and of the tables.

1,864,823. GRINDING, SMOOTHING, AND POLISHING APPARATUS. CHARLES HEUZE, Auvelais, Belgium. Filed Oct. 16, 1929, Serial No. 400,032, and in Belgium Sept. 10, 1929. 2 Claims. (Cl. 51—110.)



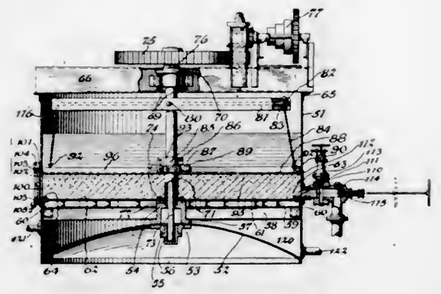
1. An apparatus for polishing plate glass, sheet glass, marble and other similar materials, comprising movable tables for carrying the materials to be treated, polishers displaceable on the materials, carriages for supporting said polishers, means for displacing said carriages in a transverse direction to that of the tables, and guides for guiding said carriages, the said guides comprising parts extending in the transverse direction to that of the tables and curved parts disposed on either side of the tables for connecting successively the first parts in series from the beginning to the end of the polishing zone.

1,864,824. AUTOMATICALLY VARIABLE TRANSMISSION GEAR, PARTICULARLY FOR MOTOR VEHICLES. HOWARD FREDERICK HOBBS, Paradise, South Australia, Australia. Filed June 27, 1931, Serial No. 547,353, and in Australia Sept. 2, 1930. 20 Claims. (Cl. 74—34.)



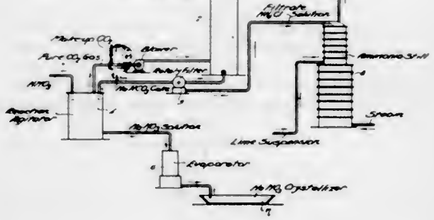
1. An automatically variable transmission gear comprising a driving shaft, at least two sets of planetary masses carried by the driving shaft, an intermediate shaft associated with each set of masses, connections between each intermediate shaft and the associated set of masses whereby the shaft is operated by the centrifugal impulses of the masses, a driven shaft, and at least two sets of straight bars each set connected together to form a torsion spring which is connected at one end to one of the intermediate shafts and at its other end to the driven shaft so that each intermediate shaft is connected independently to the driven shaft by a torsion spring.

1,864,825. AGITATED APPARATUS. JOSEPH E. JEWETT, CLARK C. HERITAGE, and RIEWEN RIEGLER, Buffalo, N. Y., assignors to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 27, 1926. Serial No. 97,982. 22 Claims. (Cl. 210—151.)



1. Apparatus comprising in combination a vessel, a shaft supported within said vessel, an arm extending from said shaft, an agitator slidable along and around said shaft, said agitator including a bar, and flexible means connecting said arm and said bar.

1,864,826. PROCESS FOR MANUFACTURING NITRATES AND OTHER PRODUCTS. DAVID L. JACOBSON, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Oct. 10, 1929. Serial No. 398,639. 9 Claims. (Cl. 23—102.)

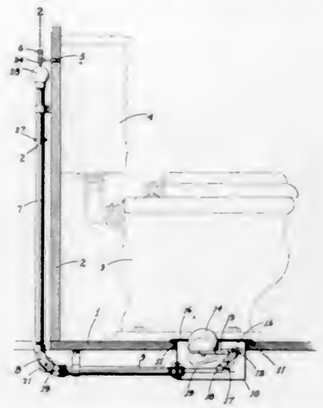


1. A process comprising treating an alkali chloride solution with carbon dioxide and ammonia to form an alkali bicarbonate, removing the alkali bicarbonate thus formed, from the solution, treating the said bicarbonate with nitric acid to form an alkali nitrate and carbon dioxide and treating additional alkali chloride with the latter carbon dioxide.

1,864,827. SANITARY TOILET FLUSH. CLIFFORD W. JENKINS and EDWIN B. BISHOP, Sacramento, Calif. Filed Oct. 2, 1931. Serial No. 566,412. 6 Claims. (Cl. 4—249.)

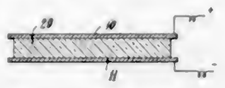
1. A device to actuate the depressible flush control lever of a toilet flush tank comprising a vertical conduit adapted to depend from the outer end of the lever, a horizontal conduit adapted to extend under the floor from adjacent the lower end of the vertical conduit, an elbow fitting connecting the adjacent ends of the conduits, a

direction changing pulley mounted in said elbow, a cable extending through said conduits and about the pulley, connecting means for connecting the upper end of the cable with the lever, a depressible member beyond the outer



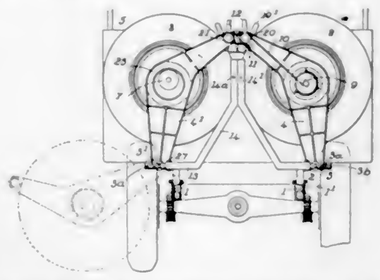
end of the horizontal conduit, and means connecting said member and the adjacent end of the cable in a manner to cause a depression of said member to exert a pull on the cable.

1,864,828. ELECTRICAL CONDENSER AND THE LIKE. ABRAHAM JOFFÉ, Leningrad, Russia, assignor to Industrial Research Company, Cambridge, Mass., a Corporation of Massachusetts. Filed May 15, 1926. Serial No. 109,214. 12 Claims. (Cl. 175—41.)



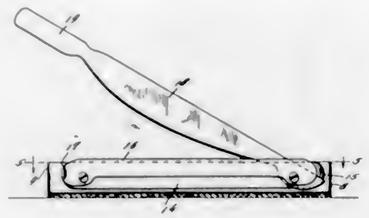
1. A capacitor comprising a plurality of electrically conductive elements and a layer of semi-conductive polarizable material comprising boron trioxide interposed between each pair of said electrically conductive elements of which a layer of a thickness of an order of about 0.01 mm. has a resistance to rupture up to about a voltage of an order of about ten thousand volts under graduated load.

1,864,829. SPARE TIRE CARRIER FOR ROAD VEHICLES. DONALD STUART KENNEDY and IRWIN TREVANION KEMPE, Longparish, England. Filed July 22, 1930. Serial No. 469,794, and in Great Britain Oct. 9, 1929. 14 Claims. (Cl. 224—29.)



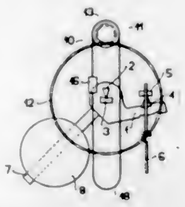
1. A device for carrying upon a road vehicle a mounted spare tire, comprising a carrier beam which at one end is pivotally mounted upon the vehicle so that the other end can assume either an inward position or an outward position, a revoluble support for said mounted tire arranged upon said carrier beam, a cable secured to the carrier beam, means for fixedly securing the mounted tire on the revoluble support, and means whereby revolution of the mounted tire and its revoluble support controls through said cable, the inward and outward positions of the carrier beam.

1,864,830. ENVELOPE OPENER. THOMAS N. JOHNSON, Rome, N. Y. Filed May 11, 1931. Serial No. 536,570. 2 Claims. (Cl. 164—44.)



1. In an apparatus of the class described, a block, pins projecting from a side of the block, a plate on the pins, a second plate on the pins, and a blade pivoted on one of the pins between the plates, the first mentioned plate having an offset end bearing against the pivoted end of the blade, the second mentioned plate having an offset end remote from said end of the first mentioned plate to engage the first mentioned plate and hold the second mentioned plate in spaced relation to the first mentioned plate.

1,864,831. WEIGHING APPARATUS WITH A LOAD BALANCING LEVER. RUDOLF JOKSCH, Vienna, Austria. Filed Apr. 23, 1928, Serial No. 272,176, and in Austria May 23, 1927. 6 Claims. (Cl. 265—62.)

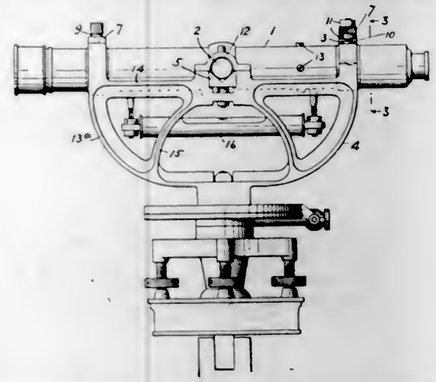


1. In a weighing scale having a load balancing pendulum, an indicator shaft adapted to be rotated by said pendulum and a toothed wheel gearing intermediate said indicator shaft and said pendulum, means to uniformly press the engaging teeth of the toothed wheels against each other constantly in one direction, said means comprising a weight suspended by a flexible means from said indicator shaft.

1,864,832. COMBINED LEVEL AND TRANSIT. GEORGE KEGELMAN, Philadelphia, Pa., assignor to Heller & Brightly, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 28, 1931. Serial No. 577,785. 3 Claims. (Cl. 33—73.)

1. A combined transit and level comprising, in combination, a telescope having at its central part trunnions aligned with its major axis and having at the top of the end parts external flats disposed equidistant from said axis and from the center line of the trunnions, a frame provided with trunnion bearings and having space for

the elevation and depression of the telescope, turnable clips provided on the frame and above the telescope and adapted to be turned clear of the telescope to permit of its eleva-

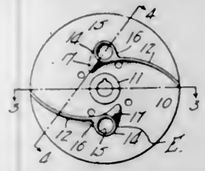


tion and depression, and adjusting screws carried by the clips and adapted to cooperate with said flats to positively position and hold the telescope level.

1,864,833. PROCESS FOR MANUFACTURING ARTIFICIAL STONE PLATES OF FIBROUS MATERIALS AND HYDRAULIC CEMENT. ROBERT KUNZ, Fischlham, Austria, assignor to the Firm of Eternit Inc., St. Louis, Mo. Filed Mar. 28, 1929, Serial No. 350,818, and in Austria Nov. 23, 1928. 7 Claims. (Cl. 92—40.)

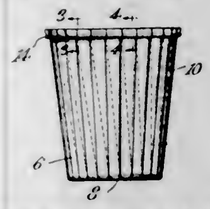
1. Laminated artificial stone plates, consisting of a mixture of hydraulic cement and water with fibrous material and an addition of oil, which will not burst when heated to incandescence by an open flame.

1,864,834. CENTRIFUGAL PUMP IMPELLER. MICHAEL M. KLOSSON, Kenmore, N. Y., assignor to Buffalo Steam Pump Company, Buffalo, N. Y. Filed Dec. 28, 1927. Serial No. 243,149. 8 Claims. (Cl. 103—115.)



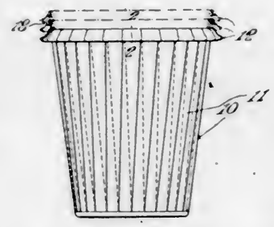
1. A centrifugal pump impeller vane having a narrow portion extending from the outer portion of the impeller toward the axis of the impeller and terminating in an abruptly enlarged forward end which is convexly curved and which merges into the opposite faces of said narrow portion.

1,864,835. PAPER RECEPTACLE. ALEXANDER J. LACKNER, Flushing, N. Y. Filed Mar. 22, 1929. Serial No. 349,228. 6 Claims. (Cl. 229—21.)



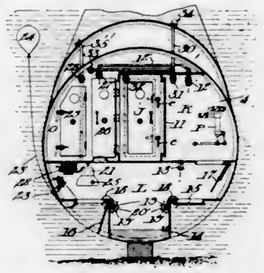
1. A paper receptacle formed from a single sheet of paper having a bottom and plaited sides, the latter terminating in an opening, means for reenforcing said cup, said means comprising a substantially square outwardly projecting fold of the overlapping sides of said receptacle adjacent and encircling said opening.

1,864,836. PAPER RECEPTACLE. ALEXANDER J. LACKNER, Whitestone, N. Y. Filed Sept. 9, 1929. Serial No. 391,309. 4 Claims. (Cl. 225—21.)



1. A paper cup formed with plaited sides terminating in an upper reinforcing rim flange, said flange including two layers curved about centers above the said flange and outwardly of the inner edge thereof, said layers being joined by an outwardly projecting bead.

1,864,837. SUBMARINE OR SUBMERSIBLE BOAT. SIMON LAKE, Milford, Conn. Filed Jan. 11, 1928, Serial No. 246,018. Renewed Nov. 16, 1931. 2 Claims. (Cl. 114—16.)



1. In a submarine or submersible boat, bulkheads, dividing the hull thereof into a plurality of compartments, one of said compartments serving as a combined water-ballast tank and diving compartment, another of said compartments adjacent thereto serving as an airlock, and means affording communication between said combined water-ballast tank and diving compartment and said airlock when the former is used for diving purposes, and a flood-valve affording communication between said combined water-ballast and diving compartment and the sea whereby a diver may leave the boat, said valve operable to admit water to said compartment when same is functioning as a water-ballast tank.

1,864,838. FERMENTATION OF CELLULOSIC MATERIALS. HERBERT LANGWELL, Epsom, England, and ELOI RICARD, Melle, France, assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Nov. 22, 1926, Serial No. 150,139, and in Great Britain Nov. 26, 1925. 13 Claims. (Cl. 260—120.)

1. A process for the fermentation of cellulosic material which comprises subjecting a mash containing cellulosic material to the action of thermophilic bacteria which are capable of fermenting cellulose rapidly and with high yields, controlling the acidity of the mash so that the hydrogen ion concentration is maintained within the limits

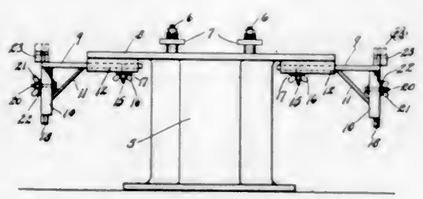
pH 9 and pH 5 measured in the bulk of the mash, and effecting the necessary supply of nutrient for the thermophilic bacteria at least in part by waste liquor from the distillation step in industrial fermentation processes.

1,864,839. FERMENTATION OF CELLULOSIC MATERIALS. HERBERT LANGWELL, Epsom, and WILLIAM ARTHUR BURTON, Aldwych, London, England, assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Nov. 22, 1926, Serial No. 150,140, and in Great Britain Nov. 26, 1925. 12 (Cl. 260—120.)

1. The process which comprises the fermentation by thermophilic bacteria of a mash containing fermentation distillery wastes substantially in excess of the nutrient requirements of the bacteria.

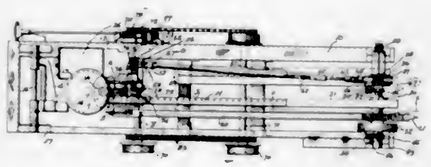
2. The process which comprises the fermentation by thermophilic bacteria of a cellulosic mash containing fermentation distillery wastes substantially in excess of the nutrient requirements of the bacteria.

1,864,840. ADJUSTABLE STOCK SUPPORT BRACKET. LOUIS LEHNER, Bay City, Mich. Filed Nov. 26, 1928. Serial No. 321,804. 1 Claim. (Cl. 144—287.)



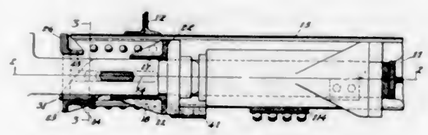
The combination with a shaper table of an adjustable stock bracket support mounted thereon and overhanging from said table and adjustable horizontally with relation thereto, a suspended leg on the end of the bracket and having a way formed therein, a T-shaped vertically disposed member slidably mounted in said way, and adjustable vertically with relation to the said bracket, and means for holding said bracket and member in adjusted position.

1,864,841. MINING MACHINE. FRANK A. LINDGREN, Western Springs, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1926, Serial No. 158,290. Renewed Sept. 10, 1931. 13 Claims. (Cl. 262—29.)



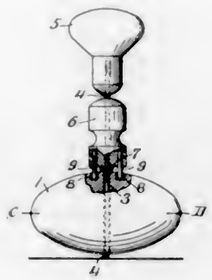
1. In a mining machine of the class described, a truck, a pair of axles having wheels thereon for supporting said truck, a guide frame pivoted on said truck on a transverse axis rearwardly of the rearwardmost pair of said supporting wheels, a reciprocating cutter frame movable in said guide frame, a vertically disposed cutting element on said reciprocating cutter frame including a cutter bar having a cutter chain movable thereabout, and means on said truck forwardly of the forwardmost pair of said truck supporting wheels and adjacent the forward portion of said cutter bar when in a retracted position for moving said guide frame about its axis of pivotal connection to said truck to raise or lower said cutting element.

1,864,842. RAILWAY DRAFT RIGGING. HARVEY J. LOUNSBURY, Glen Ellyn, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 9, 1929. Serial No. 384,679. 2 Claims. (Cl. 213—50.)



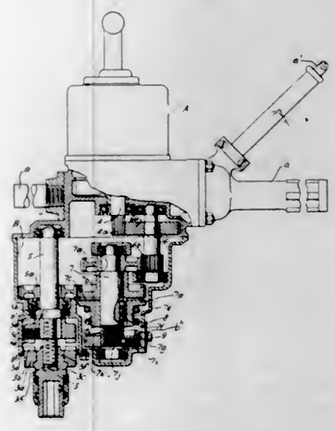
2. In a draft rigging having longer travel in buff than in draft, the combination with spaced draft sills and a coupler having the shank thereof provided with a transverse key slot; of a carry iron member and a striking plate for the coupler head at the outer ends of the sills; a yoke having spaced side arms, said yoke being disposed between the sills and said side arms having aligned coupler key receiving slots; a key extending through the slots of the coupler shank and yoke; a bottom web connecting said yoke arms outwardly of the key slots thereof, said web forming a supporting shelf engaging underneath the coupler shank outwardly of the keyed connection thereof with the yoke, said shelf being slidably supported on the carry iron and normally projecting outwardly beyond the vertical plane of the striking plate; and a guide member fixed to the sills engaging the upper surface of the coupler shank rearwardly of the key slot thereof and overlapping the shank in all operative positions of the latter.

1,864,843. SPINNING TOP. WILLIAM W. MCCALL, Kansas City, Mo. Filed Aug. 20, 1930. Serial No. 476,513. 2 Claims. (Cl. 46—32.)



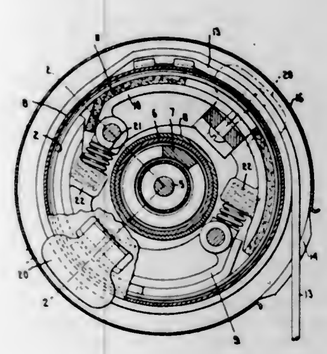
1. A top having a hole extending entirely therethrough, a support having a spindle removably insertible through said hole and adapted to have its lower end projecting below the bottom of said top, said top being revoluble without longitudinal movement on said spindle in a plane transverse to said spindle for the full range of movement of said top lengthwise of said spindle, a member rotatable on said spindle, means for rotating said member, and means independent of said member rotating means for releasably connecting said member with said top so as to rotate the latter when said member is rotated.

1,864,844. TRANSMISSION APPARATUS. LEON F. MEUNIER, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 12, 1928. Serial No. 318,636. 4 Claims. (Cl. 81—54.)



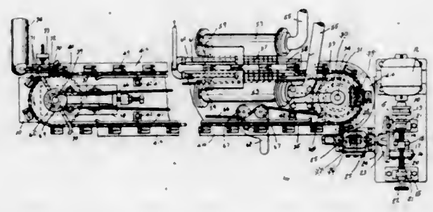
1. A portable power tool having a casing, a motor therein, a tool shaft projecting beyond said casing, and transmission means within said casing between said motor and said shaft including a gear train and a plurality of clutches, said clutches being disposed in juxtaposition on parallel axes, one of said clutches being arranged automatically to break the driving connection to said tool shaft when the latter encounters a predetermined resistance.

1,864,845. SHOCK ABSORBER. COURTNEY N. MITCHELL, Cleveland, Ohio. Filed Nov. 19, 1925. Serial No. 69,991. 7 Claims. (Cl. 267—10.)



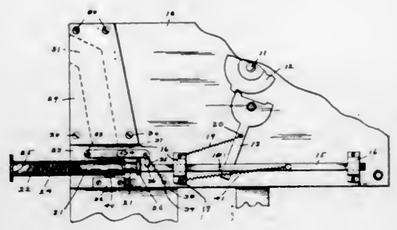
1. A vehicle shock absorber comprising a drum carried by the vehicle frame, a co-operating brake shoe, means connecting said shoe to the vehicle axle whereby movement thereof will effect rotation of said shoe, and means associated with said shoe to cause the same to be thrown by its inertia due to the rotation of the shoe into contact with the drum during the initial movement of said axle in one direction.

1,864,846. APPARATUS FOR SECURING TOGETHER THE BLADES AND HANDLES OF HOLLOW HANDLE KNIVES. CHARLES R. MOON, Muncie, Ind., assignor to Ontario Manufacturing Company, Muncie, Ind., a Corporation. Filed July 23, 1931. Serial No. 552,699. 2 Claims. (Cl. 113—59.)



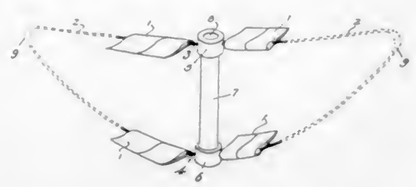
1. In apparatus for securing together the blades and handles of hollow handled knives, the combination of a continuous conveyor, attachments carried thereby, each adapted to yieldingly grasp an assembled knife blade and handle, heating apparatus adjacent said conveyor for heating said knives to solder said blade and handle together, and an arm removable in timed relation to the travel of said conveyor to strike each knife at a predetermined point in its travel after the heating operation to remove the same from the yielding grasp of said attachments.

1,864,847. COIN CONTROLLED LOCKING MEANS FOR VENDING MACHINES. GEORGE MORRISON, Poughkeepsie, N. Y. Original application filed Aug. 14, 1930, Serial No. 475,169. Divided and this application filed June 10, 1931. Serial No. 543,323. 1 Claim. (Cl. 194—57.)



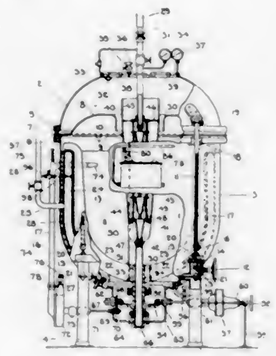
A coin controlled lock for vending machines and in combination with a coin chute, of a push rod formed with a square portion and a round portion separated by a stop collar and having the squared portion slidably mounted in bearings, a finger piece formed with a bore and a head, and slidably mounted on the round portion of the push rod, a spring contained within the bore of the finger piece and in contact with the end of the round portion of the push rod to cushion its inward movement within said bore, the end of said finger piece adapted to abut the stop collar on the push rod upon compression of said spring, said finger piece being provided with a cut out portion to receive a coin, means to support a coin in the cut out portion, a detent for locking the push rod, the initial inward movement of the finger piece adapted to coact with a coin to release said detent from the push rod so that the furthr inward movement of the finger piece against the stop collar will impart movement to said push rod to operate the escapement mechanism.

1,864,848. AIRCRAFT PROPELLER. MAX M. MUNK, Washington, D. C. Filed Dec. 17, 1930. Serial No. 503,040. 11 Claims. (Cl. 170—171.)



1. A looped propeller which is self-adjustable by torsional flexion.

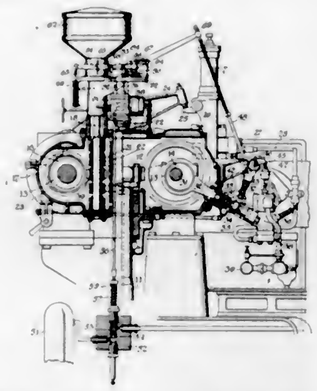
1,864,849. METHOD OF AND APPARATUS FOR DEODORIZING AND DEHYDRATING FLUIDS. HENRY LAMONT MURRAY, Auckland, New Zealand, assignor to The Te Aroha Dairy Company Limited, Te Aroha, New Zealand. Filed May 10, 1926, Serial No. 108,185, and in New Zealand May 12, 1925. Renewed Nov. 12, 1931. 5 Claims. (Cl. 159—25.)



1. A vacuum apparatus for deodorizing, dehydrating or pasteurizing liquids comprising a container having a steam jacket, the inner wall of which container is a surface of revolution free from axial projections, means continuously to feed liquid into said container, means for supplying and distributing steam throughout said jacket for heating liquid in the container to and maintaining the same at boiling temperature, a set of sweeps within said container, means to rotate said sweeps, means for positively and continuously withdrawing liquid from said container, means capable of creating and maintaining high vacuum within said container by condensing vapors emanating from said liquid and exhausting fixed gases, and means for preventing increase of vacuum in the container above a predetermined degree thereby maintaining constant the boiling point of the liquid in the container.

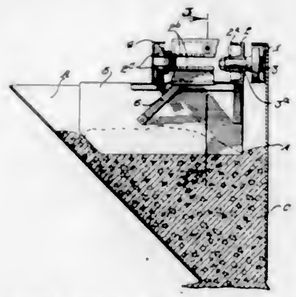
5. The method of deodorizing liquids by evaporating volatile essences and entraining non-volatile odorous substances, said method consisting in continuously introducing liquid into a container, supplying heat to said container to heat the liquid within the container to and maintain the same at boiling temperature, applying centrifugal force to said liquid to produce a revolving wall of liquid and effect horizontal radial molecular circulation within said wall of liquid thereby continuously expelling vapors and fixed gases from within the liquid, continuously condensing said vapors and exhausting fixed gases thereby maintaining high vacuum in said container, continuously withdrawing liquid from said container and preventing increase in vacuum above a predetermined degree thereby controlling the boiling point of the liquid.

1,864,850. ENGINE GOVERNOR. BRUNO V. E. NORDBERG, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 20, 1928. Serial No. 294,157. 6 Claims. (Cl. 123—33.)



1. The combination of a prime mover having an energy input regulating means; a speed responsive governor driven by the prime mover; a connection through which said governor actuates said regulating means, said connection being mounted on an eccentric displaceable to vary the relation of the regulating means to the governor; a reversible motor connected to displace said eccentric; means for controlling the reverse movements of the motor; and a floating lever connected to actuate said controlling means and operatively connected with said governor and with said eccentric.

1,864,851. LEVELING DEVICE FOR HOPPERS, ETC. BERT NOBLE, San Diego, Calif., assignor to Roads Construction Company, Ltd., Los Angeles, Calif., a Corporation of California. Filed Feb. 12, 1930. Serial No. 427,769. 11 Claims. (Cl. 214—17.)

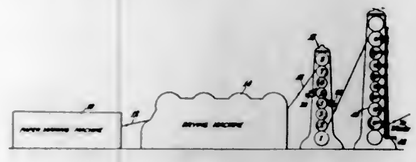


1. In a leveling means for hoppers, the combination with a hopper of a track means extending along the one side only opposite the receiving side thereof, a carriage arranged to travel on said track means, and means extending from said carriage and laterally from said track means into said hopper, whereby material in said hopper sidewise of said tracks may be shifted with the movement of said carriage.

1,864,852. PROCESS OF PRODUCING PAPER. DANIEL B. OBLINGER, New Hope, Pa., assignor to Union Mills Paper Manufacturing Company, New Hope, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1929. Serial No. 403,145. 8 Claims. (Cl. 92—76.)

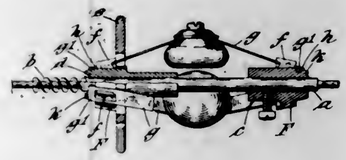
1. The process of producing paper which comprises the steps of forming the paper in a web and passing such web

continuously and from the point of formation through a dryer, from the dryer to calender rolls where the paper is partly calendered to compact the surface, then directly applying a film of water by means which allow a fine



adjustment, the web being run at such speed and the paper being wet to such a degree that thorough permeation of the web does not take place and then running the paper through calender rolls heated to substantially 212° F.

1,864,853. CENTRIFUGAL GOVERNOR. JAMES HERBERT OFFEN, Swindon, England, assignor to The Garrard Engineering & Manufacturing Company Limited, Swindon, England. Filed Apr. 1, 1930, Serial No. 440,695, and in Great Britain Apr. 19, 1929. 4 Claims. (Cl. 188—187.)



1. A centrifugal governor having fixed and sliding bushes of the kind specified, abutments arranged on said bushes, transversely disposed surfaces on the ends of the flexible and elastic members, engaging with said abutments, said abutments maintaining said flexible members in position securely without inadvertently introducing distortion of said members, the free ends of which are supported by a conical surface.

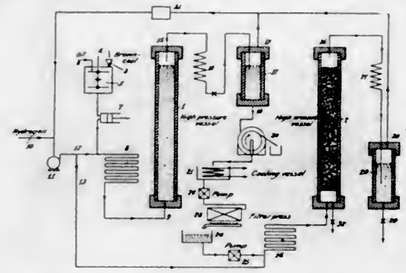
1,864,854. GASKET. FRANK J. OVEN, Chicago, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1931. Serial No. 533,767. 7 Claims. (Cl. 288—1.)



1. A gasket comprising outer metal layers and an interposed layer of gasket material, a shim applied to one side of one of the outer layers, one of said layers having slits and said shim having tongues engaging said slits to secure the shim in place against said outer layer.

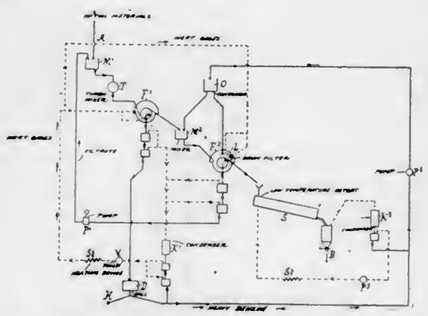
1,864,855. PROCESS OF PRODUCING MOTOR FUEL BY DESTRUCTIVE HYDROGENATION OF CARBONACEOUS MATERIALS. MATHIAS PIER, Heidelberg, and MARTIN MÜLLER-CUNRADI, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Original application filed Nov. 14, 1927, Serial No. 233,312, and in Germany Nov. 26, 1926. Divided and this application filed Oct. 23, 1928. Serial No. 314,538. 3 Claims. (Cl. 196—53.)

1. A process for the production of non-knocking motor fuels from non-asphaltic pyrobituminous materials having a high content of "bitumens" which comprises subjecting said materials to destructive hydrogenation conditions milder than those usually employed in the production of low boiling hydrocarbons to cause an extensive conversion of said materials to middle oils boiling between 200 and 350° C. without a substantial conversion of said "bitumens", cooling the resulting oils to low temperatures to



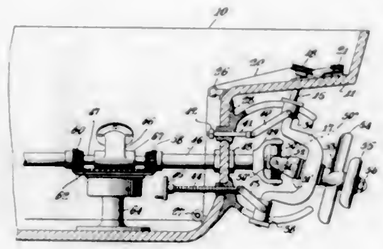
effect a precipitation of substantially all the unconverted "bitumens" in a solid and semi-solid state, separating said precipitated constituents and subjecting the oils freed from said constituents to a more energetic destructive hydrogenation.

1,864,856. SEPARATION FROM SOLID RESIDUES OF OILS OBTAINED IN THE DESTRUCTIVE HYDROGENATION OF CARBONACEOUS MATERIALS. MATHIAS PIER, Heidelberg, ERNST HOCHSCHWENDER, Ludwigshafen-on-the-Rhine, and KURT WENZEL, Mannheim, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Jan. 8, 1929, Serial No. 331,057, and in Germany Jan. 28, 1928. 2 Claims. (Cl. 196—13.)



1. A plant for the continuous separation of oils, from residues obtained in the destructive hydrogenation of carbonaceous materials and consisting of mixtures of oils and solid matter which comprises a first mixing vessel for bringing together a solvent and the oil bearing material provided with a supply pipe for the material from which oil is to be separated, a mixer, a pipe leading from the said vessel to said mixer, a first filter, a pipe leading from the mixer for conveying the mixture of the residue and the solvent from the said mixer to said first filter, a second mixing vessel, a pipe for conveying the filtered residues to said second mixing vessel, a second filter, a pipe leading from the said vessel to said second filter, a reservoir for fresh solvent with pipes leading both to the said second filtering vessel and to the second mixing vessel, a pipe for returning the filtrate from the second filter to the first mixing vessel, a pipe conveying the filtrate from the first filter to a distillation plant, in which the oil to be recovered is separated from the solvent, a pipe for returning the solvent to the reservoir for fresh solvent, and a low-temperature carbonization plant connected with the second filter by means of a pipe for conveying thereto the residues from the said filter.

1,864,857. BOAT PROPELLING DEVICE. GISBERT RANKE, Maspeth, N. Y. Filed Aug. 28, 1931. Serial No. 559,872. 3 Claims. (Cl. 115—41.)



1. In a boat propelling device for boats having an overhanging stern part, a tail board having elongated openings in the stern of said boat, a pair of spaced guide rails on said tail board, a block displaceable in the space between said guide rails, a pair of substantially U-shaped heads guiding propeller shafts, means on said heads extending through the slots in said tail board, pulleys thereon, a pulley on said block, and cables guided over said pulleys to the operator's seat to move said heads and propellers in a horizontal plane.

1,864,858. CADMIUM CONTAINING GLASS AND TUBING MADE THEREFROM. WALTER H. RISING, Painted Post, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Mar. 15, 1930. Serial No. 436,257. 23 Claims. (Cl. 106—36.1.)

23. The method of making ruby glass tubing substantially free from opalescence due to precipitated zinc sulfide which includes preparing a batch for a zinc containing glass, adding to the batch sufficient cadmium sulfide and selenium for coloring purposes and from 0.5% to 2% of cadmium oxide, melting the batch and forming the molten glass into tubing.

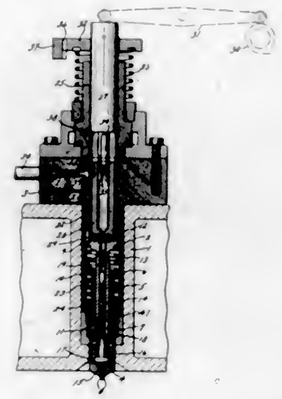
1,864,859. HARROW. JOHN S. RODGERS, Charlerol, Pa. Filed Feb. 1, 1930. Serial No. 425,193. 1 Claim. (Cl. 55—94.)



A harrow comprising a plurality of transverse and longitudinal bars spaced apart and fixedly secured together, a series of spaced annular cavities formed in the lower face of each transverse bar, a harrow tooth with an enlarged headed portion detachably fitted within each cavity, and means for rigidly securing each tooth within each cavity of said transverse bars.

1,864,860. FUEL INJECTION MEANS. CARL D. SALISBURY, Cleveland, Ohio, assignor to Winton Engine Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed Feb. 11, 1931. Serial No. 514,971. 10 Claims. (Cl. 123—139.)

1. In fuel injection apparatus of the class described and including an injection pump plunger and a timed actuating member therefor, hydraulic transmission means effective between said parts to receive motion from said actuating member and impart said motion with amplified effect to said plunger, said transmission means including communicating cylinders of different diameters and pistons for said cylinders, and control means for terminating the working stroke of said plunger to correspondingly effect cutoff of injection, and comprising valve means arranged to relieve pressure between said pistons.

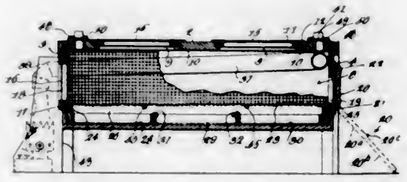


1,864,861. HOSE COUPLING. ALFRED SCHALLER, New York, N. Y. Filed June 5, 1928. Serial No. 282,975. 2 Claims. (Cl. 285—90.)



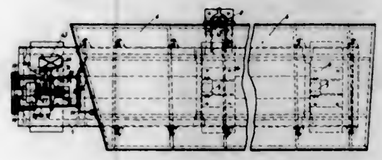
1. A hose connection made up of an elastic wall comprising an intermediate portion formed of a plurality of continuous corrugations arranged in the form of a double cone helix, the largest outside diameter of said convolutions being substantially at the center of said connection.

1,864,862. BROODER. LOUIS F. SCHMID, Winnebago, Nebr. Filed Apr. 6, 1929. Serial No. 353,081. 1 Claim. (Cl. 119—34.)



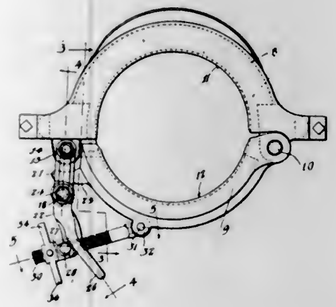
In a sanitary brooder of the character described, a hollow body which includes a floor, shallow pans slidable on said floor and having vertical sides bearing against each other, substantially U-shaped flanges formed on the top edge of the sides of some of the pans and overhanging contiguous sides of the remaining pan for locking said pans against lateral displacement and sealing the joints between the vertical walls of said pans, and a reticulated false bottom supported above said pans in a horizontal plane, as and for the purpose set forth.

1,864,863. APPARATUS FOR VIBRATING SCREENS, SHAKING TABLES, AND OTHER APPARATUS. JOSEPH WILLIAM SHERWEN, Erith, England. Filed Mar. 31, 1931, Serial No. 526,669, and in Great Britain Apr. 15, 1930. 5 Claims. (Cl. 209—368.)



1. Vibratile apparatus comprising a plurality of flexible members which became strained in dependence upon the load imposed upon them, a table carried by said flexible members, motor means for reciprocating said table, regulating means for said motor means the position of said regulating means relatively to said table being dependent upon the amount of strain to which said flexible members are subjected, means for interconnecting said table and said regulating means to cause the latter to be actuated by the former in dependence upon their relative positions, a massive frame member supporting said flexible members, and pendulous supports for said frame member.

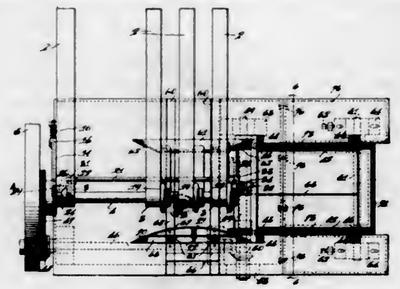
1,864,864. FRICTION GRIP ELEVATOR. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron Jackson Co., Los Angeles, Calif., a Corporation of Delaware. Filed Oct. 6, 1930. Serial No. 486,637. 11 Claims. (Cl. 24—248.)



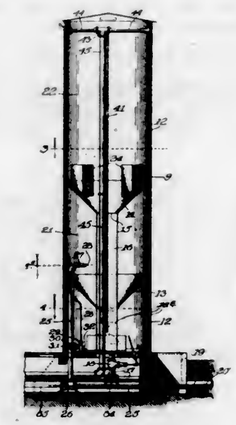
1. A friction grip elevator comprising hingedly connected jaws, an arm pivotally connected with one of the jaws and provided with a pinion, a lug on the other jaw provided with a rack in eccentric relation to the pivot of said arm, said rack adapted to be engaged by said pinion when the arm is in one position, and a means to releasably hold said arm in said position.

1,864,865. BOX SHOOK SPLICING MACHINE. WILLIAM RICHARD SMITH, Goldsboro, N. C., assignor of fifty-two one-hundredths to George A. Smith, Portsmouth, Va. Filed May 24, 1930. Serial No. 455,298. 13 Claims. (Cl. 1—9.)

1. In box shook splicing machines, a table, nailing mechanism mounted on the table, a shook hopper, means for feeding complementary shooks from the hopper onto the table into position with respect to the nailing mechanism, and means for coordinating the time of action of said feeding means and said nailing mechanism, a guide element in the hopper located in the vertical plane of the hammer axis, and a self-adjusting shook clamping fence bodily laterally movable on the table as a unit into which unit the shooks are delivered from the hopper.



1,864,866. WATER TREATING AND STORAGE APPARATUS. BARTON S. SNOW, Wheaton, Ill., assignor to T. W. Snow Construction Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1929. Serial No. 357,858. 4 Claims. (Cl. 210—10.)

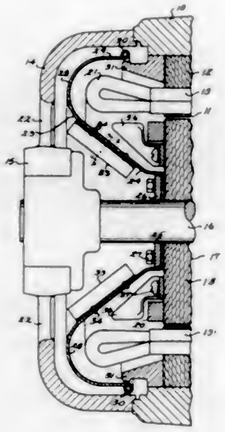


1. Water-treating apparatus comprising a shell containing water-treating and settling compartments arranged one above the other and a third compartment below said water-treating and settling compartments, and chemical-solution-producing means located in said third compartment and in communication with said treating compartment.

1,864,867. PROTECTING AND COOLING MEANS FOR DYNAMO-ELECTRIC MACHINES. JAMES O. SNYDER, Indianapolis, Ind., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 31, 1929. Serial No. 336,346. 3 Claims. (Cl. 172—36.)

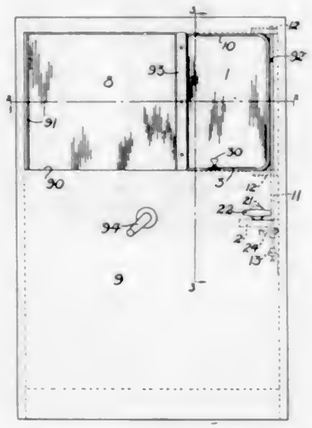
1. An electric motor including a frame, a rotor and a stator having windings associated therewith, a unitary protecting and cooling device for the conducting portions of the motor, the device comprising a shield of sheet metal, of relatively high heat conductivity carried en-

tirely by the rotor, and formed inwardly of its radius into a partly conical structure, and having a portion of curved trend and section for enclosing said windings, and terminating in an outer portion having a running fit with a stationary part of the machine, whereby substantially



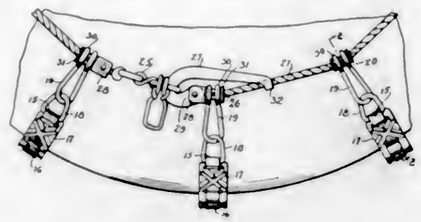
to seal the rotor and stator, including the windings, against the air outside of the shield; and a structure corrugated to constitute a plurality of radiating and air-impelling fins, said structure formed separately from, and exteriorly carried by said shield.

1,864,868. AUTOMOBILE WIND WING. CASPER J. W. SODERBERG, Aberdeen, Wash. Filed Jan. 2, 1930. Serial No. 418,014. 1 Claim. (Cl. 296—44.)



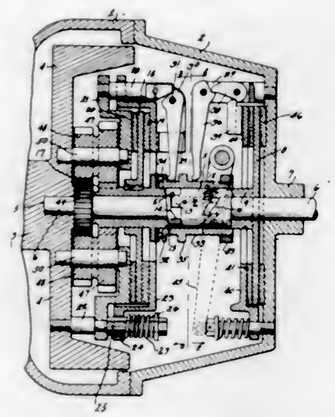
In combination with a vehicle window frame, a pane of less width than the opening in said frame extending from the rear edge thereof forwardly, a transparent shield extending from the forward edge of the frame rearwardly to close the opening ahead of said pane, an upright post supporting said shield to swing outwardly, a spring operatively connected to said post to urge the shield inwardly, releasable means for holding said shield in any adjusted position, and separate means for moving the shield into any desired position.

1,864,869. ANTISKID DEVICE. ARTHUR HYNSON SQUIER, Reno, Pa. Filed Apr. 30, 1930. Serial No. 448,720. 3 Claims. (Cl. 152—14.)



1. In an anti-skid device for tires and the like, side cables adapted to extend around the side walls of a tire, spacing members fixedly secured on said cables, a spacing member at one end of said cables and having a bifurcated portion extending therefrom, fastening means mounted in said bifurcated portion adapted to secure the opposite ends of said cable, cross chains adapted to extend across the periphery of a tire and secured to said spacing members.

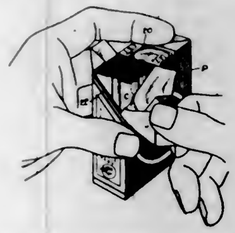
1,864,870. SELECTIVE RATIO CLUTCH. ALBERT E. STOKER, Detroit, Mich. Filed Oct. 5, 1929. Serial No. 397,489. 4 Claims. (Cl. 74—34.)



1. In a selective ratio clutch, a housing a flywheel rotatable in the housing, a shaft rotatable in the housing and piloted in the flywheel, a gear secured to said shaft, a second gear rotatable on the shaft, an epicyclic gear train meshing with the first named gear and provided with companion gears meshing with said second gear, a clutch secured to the flywheel, a clutch disc secured to said second gear and normally held by said clutch, a second clutch disc having a hub, a second clutch secured to the housing and normally holding said second clutch disc from rotation, a member movable longitudinally of the shaft for connecting the second gear to the hub of the second clutch disc, means actuated by release of the first clutch for moving said member to connect the second gear to the hub of the second clutch disc, and means for releasing both clutches successively.

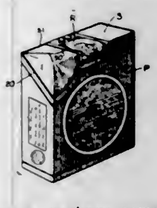
1,864,871. CIGARETTE PACKAGE. HARRY H. STRAUS, New York, N. Y. Filed Oct. 12, 1929. Serial No. 399,201. 13 Claims. (Cl. 229—51.)

1. In combination, a package comprising material possessing little inherent stiffness, said material being imperforate within the outline of the package and further comprising a stiffening member associated therewith in co-operative relation thereto to impart strength and rigidity to said package in the direction of its minimum dimension, said stiffening member having two adjacent edges substantially coextensive with two adjacent edges of the



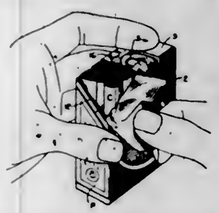
package, the body of said stiffening member being provided with a slot to permit of ready tearing and removal of a portion of the stiffening member at and adjacent said slot to define boundry lines to facilitate detaching a portion of said package of regular and predetermined configuration to make an opening therein for the removal of the contents.

1,864,872. CIGARETTE PACKAGE. HARRY H. STRAUS, New York, N. Y. Filed Oct. 12, 1929. Serial No. 399,203. 6 Claims. (Cl. 229—51.)



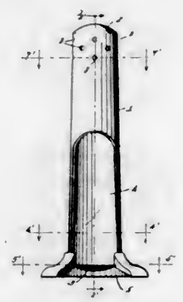
1. In combination, a package comprising material possessing little inherent stiffness, said material extending substantially completely about all sides of the package and at the top end, said package further comprising a stiffening member associated with said material at said sides and at said top end to impart strength and rigidity to the package, said stiffening member having contour edges extending at an angle relative to one another, said contour edges being disposed at two adjacent sides of the package, said contour edges being disposed adjacent to one edge of said top end and at two adjacent sides of the package whereby upon grasping and tearing a portion of said material of little inherent stiffness adjacent said top edge said contour edges serve to define the path of tearing, and means for securing said stiffening member to said material.

1,864,873. CIGARETTE PACKAGE. HARRY H. STRAUS, New York, N. Y. Filed Oct. 12, 1929. Serial No. 399,204. 4 Claims. (Cl. 229—51.)



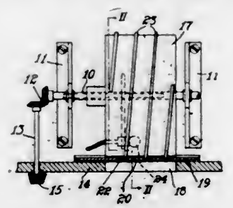
1. A package comprising in combination material possessing little inherent stiffness, said material extending substantially about four sides and the top end of the package, stiffening member associated with and on the exterior of said material and extending at one side, thence across the bottom, thence at another side, and thence from one edge of the top end toward but spaced from the opposite edge of the top end, the terminal edge of said stiffening member at one side, extending at an angle to the direction of extension of said opposite edge of the top end, said terminal edge serving to define the path of tearing of said material of little inherent stiffness when torn by grasping the same adjacent said opposite edge, and means for securing said stiffening member to said material of little inherent stiffness.

1,864,874. TOOTHBRUSH HOLDER. GEORGE F. VOIGHT, Oakland, Calif. Filed June 1, 1929. Serial No. 367,810. 4 Claims. (Cl. 248—63.)



1. In a tooth brush holder of the character described, a vertically disposed tubular brush holding element, and a horizontally disposed supporting flange on the lower end thereof, said tubular element having an opening in its side for the movement therethrough of a tooth brush, said flange having a gap on one side registering substantially vertically with said opening.

1,864,875. TUNING DIAL FOR RADIOS. JOSEPH J. WARREN, Pittsburgh, Pa. Filed Apr. 17, 1931. Serial No. 530,827. 9 Claims. (Cl. 116—124.4.)

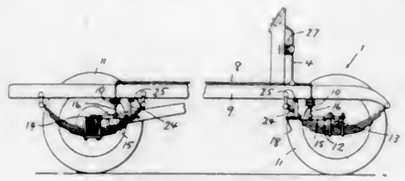


1. In a radio device, the combination of a closure having a view opening therethrough, a light emitting drum mounted for rotation within said closure and having station markings arranged spirally thereon, a source of light within said drum and opposite said view opening, and means for moving said light source lengthwise of said drum as the same is rotated.

1,864,876. LOAD INDICATING GAUGE FOR VEHICLES. ELDON N. WESTRUM, Ames, Iowa. Filed Jan. 29, 1931. Serial No. 512,117. 8 Claims. (Cl. 265—40.)

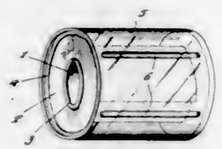
1. A load indicating gauge for vehicles comprising a pressure responsive gauge, bellows mounted for movement with the body of the vehicle, levers pivotally con-

nected, at one end, with a relatively stationary portion of the vehicle, links operatively connecting the free end portions of the levers with the body for actuation there-



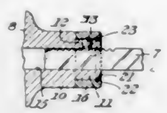
by, rods operatively connecting the bellows with the levers for actuation thereby, and pipes connecting the bellows with the gauge.

1,864,877. COMBINED SPOOL AND CONTAINER FOR ADHESIVE TAPES. LEON L. WHITE, Tampa, Fla., assignor of one-fourth to Marie Russell White, Tampa, Fla. Filed Dec. 15, 1930. Serial No. 502,477. 2 Claims. (Cl. 206—52.)



1. A device of the character described comprising a spool having heads at its ends, and a cylindrical sleeve of a length to house said spool and being of slightly greater diameter than the heads of the spool, the walls of said sleeve having portions thereof pressed inwardly to form longitudinal ribs terminating near the opposite ends of the sleeve, the ends of said ribs frictionally engaging the marginal edges of the heads whereby to releasably retain the spool within the sleeve.

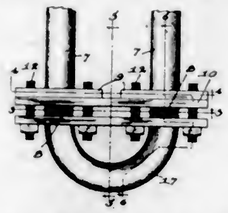
1,864,878. HANDLE STRUCTURE. HARRY E. WOERNLE, Pittsburgh, Pa., assignor to McKinney Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 28, 1930. Serial No. 423,958. 1 Claim. (Cl. 292—352.)



A composite article of manufacture, comprising a door knob having a spindle receiving opening, a rotatable collar adapted to substantially surround a spindle when the latter is inserted into the spindle receiving opening in the knob, such collar having an internal cam face, and a stud cooperating with said internal cam face of the rotatable collar to assist in fastening the spindle and knob together, such collar and stud being attached to the knob so as to form therewith a commercial unit capable of being handled and fastened to and unfastened from a spindle without disassembly of the unit.

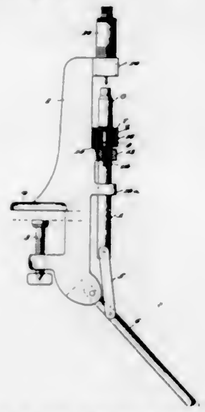
1,864,879. RETURN BEND ASSEMBLY. MALCOLM P. YOUKER, Bartlesville, Okla. Filed Oct. 30, 1931. Serial No. 572,157. 4 Claims. (Cl. 285—20.)

1. A return bend assembly including a plurality of tubes, flanges detachably connected to the ends of the tubes, a link joining the ends of said tubes, the pipe ends projecting through said flanges and link, a return bend having plate portions at its ends, the extremities of the tubes projecting into said plate portions, and means for



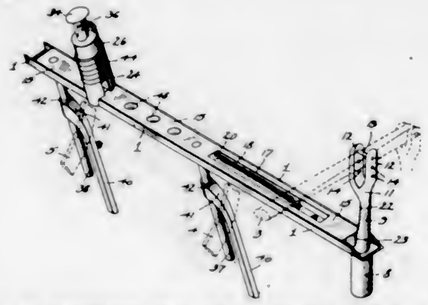
drawing said plate portions toward said flanges, the last mentioned means comprising bolts extending through the flanges and plate portions.

1,864,880. RELOADING TOOL. GEORGE F. ZIMMERMAN, Bristol, Va. Filed Feb. 15, 1932. Serial No. 593,141. 8 Claims. (Cl. 86—37.)



1. In a device of the character described, the combination of a support carrying a plurality of dies, one of said dies being shaped to re-size a cartridge case, means in said die for de-capping the case when the same enters the die, means for expanding the neck of the case when the latter is retracted, means for re-capping the case as it is withdrawn from said die, a case holder, and means for causing relative movement between said holder and said die and re-capping means.

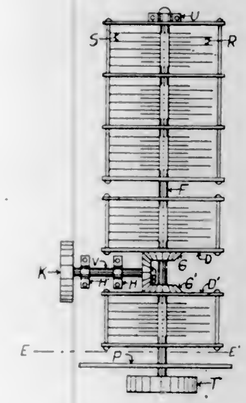
1,864,881. MEANS FOR AUTOMATICALLY CONTROLLING THE ACCELERATOR PEDAL OF A MOTOR VEHICLE. ALF J. ABEL, Richmond Hill, N. Y. Filed Nov. 13, 1931. Serial No. 574,899. 14 Claims. (Cl. 74—81.)



1. An accelerator pedal control means for motor vehicles, including a locking bar to be operated in the move-

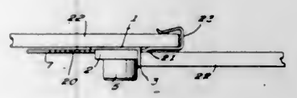
ment of the pedal, a locking bolt movable relative to the bar, and means on the bar to be engaged by the bolt, said means being in independent series to provide for a predetermined release movement of the bar under appropriate bolt movement equal to the length of one series and the automatic interruption of bar release at the beginning of the other series.

1,864,882. STATIC AND INTERFERENCE ELIMINATOR CONTROL UNIT FOR GUARD-DRAIN CIRCUITS. ALEXANDER GRAHAM ANDERSON, Whiteland, Ind. Filed June 17, 1929. Serial No. 371,413. 5 Claims. (Cl. 175—41.5.)



3. A condenser unit for tuning simultaneously two guard-drain circuits above and below the frequency of a desired signal, comprising two condensers with rotatably mounted stators and a differential mechanism; said differential mechanism consisting of a primary moving part and two secondary moved parts so related that the primary part moves the two secondary parts differentially; said two rotatably mounted stators being attached to said two secondary moved parts of the differential mechanism and being shifted to tune said two condensers differentially when said primary moving part is rotated or moved; the rotors of said two condensers being tuned corresponding with the receiver rotors by a suitable tuning mechanism of the radio art.

1,864,883. TEMPORARY LOCKING DEVICE. EDWARD ANDERSON, Chicago, Ill. Filed Sept. 21, 1929. Serial No. 394,258. 2 Claims. (Cl. 70—14.)

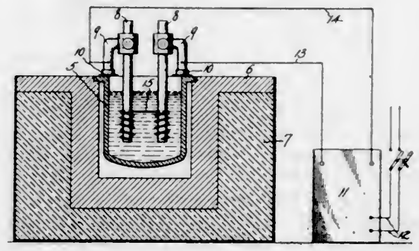


2. In a temporary locking device for overlapping elements, a sectional perforated casing, one casing section being formed with a stepped flange, the other casing section terminating in a right-angularly extending portion for disposition against one of the elements to be locked, a resilient serrated anchor bar releasably received in said casing and engaging said stepped flange, said anchor bar having one offset end disposed in a direction opposite to that of said right-angularly extending section portion for engagement with one end of the other element, a rotary shaft extending into said casing, a cam fast to said shaft within said casing, and a lug operatively associated with said cam for engagement with the serrations of said anchor bar.

1,864,884. PROCESS OF PRODUCING ACRYLIC ACID ESTERS. WALTER BAUER, Darmstadt, Germany, assignor to Rohm & Hass Aktiengesellschaft, Darmstadt, Germany, a Corporation of Germany. Filed June 18, 1929, Serial No. 371,966, and in Germany July 30, 1928. 1 Claim. (Cl. 260—106.)

The process of producing acrylic acid esters, which consists in treating a beta halogen propionic acid ester of an aliphatic monohydroxy alcohol with alkali metal hydroxide in the presence of alcohol.

1,864,885. ELECTRIC FURNACE. ARTHUR E. BELLIS, Branford, Conn. Filed Aug. 27, 1930. Serial No. 478,049. 4 Claims. (Cl. 13—1.)



1. In combination with a furnace crucible adapted to receive soluble bath materials, electrical heating means including spaced electrodes having one of their ends positioned within the crucible, and a high resistance conductor extending between said electrodes and having portions coiled about said ends thereof.

1,864,886. POWDER PUFF AND METHOD OF MAKING THE SAME. ROGER BIHLER, College Point, N. Y., assignor to Michael A. Belkoff, College Point, N. Y., and Allen A. Slade, Rye, N. Y. Original application filed June 23, 1930, Serial No. 463,007. Divided and this application filed June 4, 1931. Serial No. 542,020. 19 Claims. (Cl. 132—78.5.)

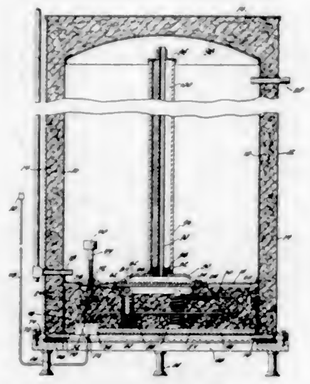


1. A turned powder puff comprising inverted plies of material united entirely around the peripheries thereof with machine stitching.

1,864,887. INSTANTANEOUS ELECTRIC WATER HEATER. JOHN A. C. BODENSTAB, Detroit, Mich. Filed Sept. 17, 1930. Serial No. 482,529. 5 Claims. (Cl. 219—38.)

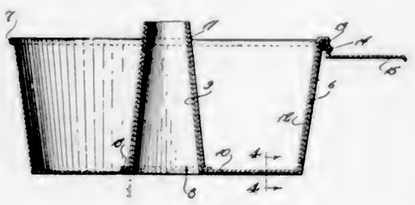
1. In a water heater, an insulated tank having a bottom under which is disposed a heating element, an inverted saucer-like element on said bottom and over said heater and having apertures in its sloping wall and an

opening in its top central horizontal portion, a tube leading upwardly from and in communication with the interior of said element, a tubular shield surrounding and



spaced from said tube and insulating the latter, a cold water inlet leading to the bottom of the tank and a hot water outlet leading from the top of the tank.

1,864,888. CAKE PAN. AUGUST D. BOELTER, Appleton, Wis. Filed May 6, 1931. Serial No. 535,507. 3 Claims. (Cl. 53—6.)

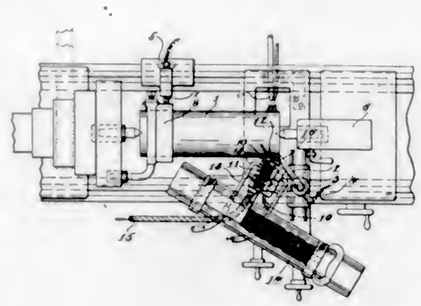


1. In a device of the character described, the combination with a cake pan having a bottom and annular side wall with a central vent tube, of a cake remover comprising parts engaged with the bottom and sides of the pan and having rotatable interlocking engagement with the side wall and vent tube, and a conical shield removably mounted on the vent tube and engaging the inner end of the remover to retain the latter in position.

1,864,889. PROCESS AND PRODUCTS IN THE ART OF FORMING, MACHINING, AND THE RECOVERY OF THE PRODUCTS THEREOF, OF METALS. JOHN L. BROWN, Catonsville, and WILLIAM W. VARNEY, Baltimore, Md. Filed Mar. 19, 1929. Serial No. 348,343. 10 Claims. (Cl. 29—27.)

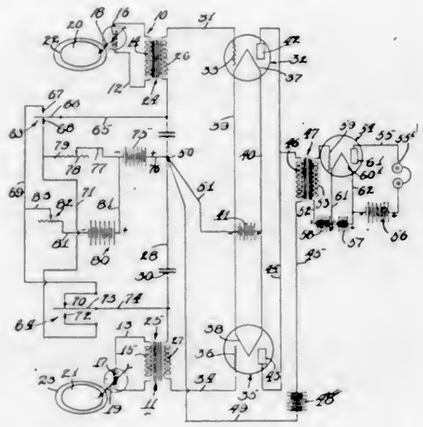
1. The process of wire making and drawing consisting of cutting a strip of metal from a mass and drawing the same therefrom and between said point of drawing and said mass where the cutting takes place heating said strip.

9. An apparatus for cutting metal comprising means for holding work operated upon and a cutting tool operating on said work and means for drawing the result of said cutting away from said work and means for insulating one of said means whereby an electric current may



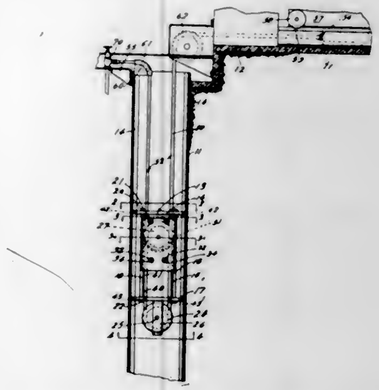
be made to pass through the cutting and means for passing an electric current through said cutting in sufficient amount to heat the same.

1,864,890. ELECTRICAL REPRODUCER. RAYMOND T. CLOUD, Chicago, Ill., assignor to Orchestraphone Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 19, 1927. Serial No. 234,447. 29 Claims. (Cl. 179—100.4.)



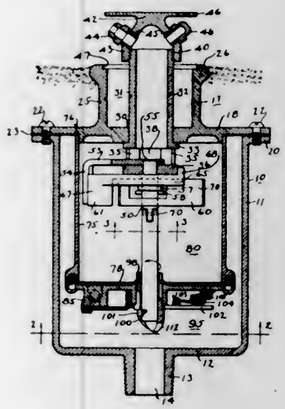
1. In combination, an electrical circuit, an electrical reproducing unit in said circuit, a plurality of input devices connected to said unit by said circuit adapted to each set up electrical impulses in said circuit, means connected to said circuit for selectively causing said devices to be connected to said unit, and means controlled by said selective means and connected to said circuit for automatically causing the devices to at times apply overlapping impulses to said unit, whereby said unit is subjected to an electrical resultant wave, in which wave the impulses from said devices are the components, said latter means including a plurality of amplifying elements and means for simultaneously increasing the output of one of said elements and decreasing the output of another element.

1,864,891. TAKE-UP DEVICE FOR FLEXIBLE CONDUCTORS. CLARENCE J. COBERLY and ERNEST S. CROASDALE, Los Angeles, Calif., assignors to Kobe Inc., Huntington Park, Calif., a Corporation of California. Filed Feb. 4, 1930. Serial No. 425,840. 11 Claims. (Cl. 299—77.)



11. A take-up device of the character described for use in holding taut a plurality of flexible members, including: a movable frame; a primary sheave mounted on an axis stationary with respect to said frame; a secondary sheave longitudinally movable on said frame; a weight connected to said secondary sheave, said frame serving as a weight for said primary sheave; and rigid guides for said frame.

1,864,892. SPRINKLER. WALTER H. COLES and BERT J. NELSON, Troy, Ohio, assignors to The Skinner Irrigation Company, Troy, Ohio, a Corporation of Ohio. Filed Apr. 25, 1930. Serial No. 447,346. 20 Claims. (Cl. 299—67.)

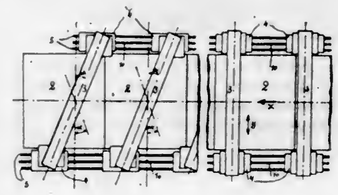


20. In a sprinkling device of the class described, in combination, a housing adapted to receive water under pressure, a rotatable sprinkler member adapted to be raised to an extended operating position by water pressure, a driving device adapted to be rotated by the flow of water through said housing and upon rotation to impart rotative step by step impulses to said sprinkler member, and means for automatically reversing the rotational direction of the driving device after a predetermined movement of said sprinkler member.

1,864,893. PROCESS FOR MAKING ESTERS OF BUTYL ALCOHOL. RUSSELL B. CROWELL and SAMUEL RAY EBE, Agnew, Calif., assignors to The American Solvents and Chemical Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1928. Serial No. 308,132. 5 Claims. (Cl. 260—103.)

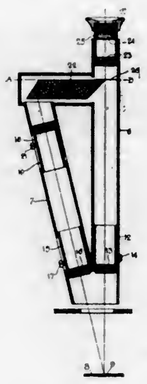
1. The process of making dibutyl phthalate which comprises reacting phthalic anhydride and butyl alcohol in the presence of a strong mineral acid catalyst, and subjecting the reaction mass to vacuum distillation at a temperature substantially within the range of 82° to 87° C. as the reaction proceeds to remove the water being produced in the form of a binary mixture of butyl alcohol and water.

1,864,894. GRINDING, SMOOTHING, AND POLISHING APPARATUS. PAUL DEVON, Auvelais, Belgium. Filed Apr. 8, 1929, Serial No. 353,608, and in Belgium June 22, 1928. 4 Claims. (Cl. 51—54.)



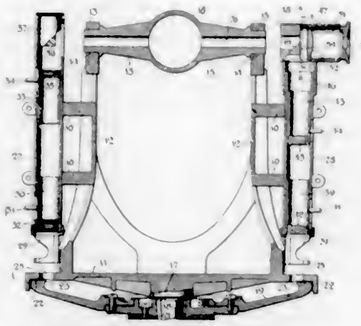
1. A method of grinding, smoothing and polishing plate or sheet glass or other materials, consisting in translating said materials, in reciprocating polishing tools transversely to the direction of said movement of translation, and in varying the distances between the axes of the zones worked by the tools.

1,864,895. VERNIER. WILLARD L. EOY, Troy, N. Y., assignor to W. & L. E. Gurley, Troy, N. Y., a Corporation of New York. Filed Mar. 31, 1930. Serial No. 440,426. 18 Claims. (Cl. 88—2.3.)



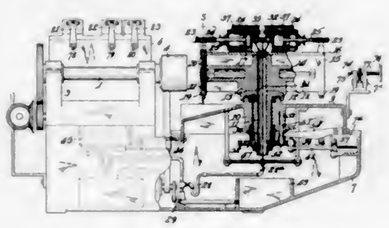
16. The method of reading a graduated scale, which consists in projecting an optical image of graduations on the scale, said image being so changed in size and so directed by such projection that it appears to the eye of an observer to be juxtaposed to, and to have a vernier relation to said scale, and reading said scale by the use of said image as a vernier.

1,864,896. VERNIER FOR READING GRADUATED CIRCLES. WILLARD L. EOY, Troy, N. Y., assignor to W. & L. E. Gurley, Troy, N. Y., a Corporation of New York. Filed Mar. 31, 1930. Serial No. 440,427. 12 Claims. (Cl. 88—2.6.)



1. The method of reading a graduated circle, which consists in projecting two juxtaposed optical images from points substantially diametrically opposite each other on the circle, the scale of one of said images differing from the scale of the other image in a vernier ratio, and reading one of said images against the other as a vernier.

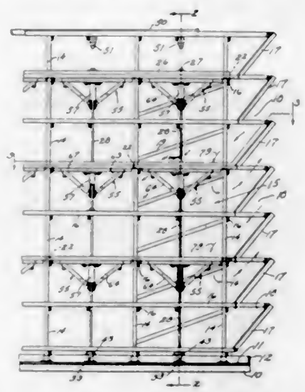
1,864,897. NIPPLE THREADING APPARATUS. WYLIE B. EWING, Wheeling, W. Va. Filed Sept. 27, 1930. Serial No. 484,800. 3 Claims. (Cl. 10—107.)



1. In combination with threading means and a table reciprocable toward and away from said means, a rotary turret carried by the table, a disk-like member having teeth in its periphery connected to the turret to rotate same, an arm pivotally mounted at a fixed point at one end and having its opposite end formed to engage the teeth of said member whereby upon movement of the table toward the arm the latter will engage the teeth of said member and rotate same and thereby the turret, said member having an aperture in the upper face for each tooth, a lever pivoted at one end to the table and disposed to one side of and spaced from said arm and carrying latching means at its opposite end to engage in the apertures of said member and having a cam surface on its under side and a relatively fixed element for engagement with said cam surface to raise and lower the lever during reciprocation of the table so as to latch and unlatch the member and thereby the turret.

1,864,898. DUAL ELEMENT COOLING TOWER. NORMAN O. FLEMING, Pasadena, Calif. Filed Mar. 1, 1930. Serial No. 432,523. 4 Claims. (Cl. 261—108.)

1. In a cooling tower, the combination of: means defining a plurality of vertical cooling spaces, said cooling spaces being in open communication with each other; a shaft extending upward through each cooling space; a thrust bearing at the lower end of each shaft and engaging therewith in supporting relationship; a radial bearing for journalling the upper end of each shaft; a rotor element mounted on each shaft; and means for introducing



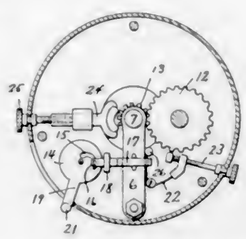
water to be cooled into the upper portion of said cooling spaces, said water impinging on said rotor elements to rotate said shaft.

1,864,899. REFERENCE AND SUBSIDIARY MARKS IN STEREOSCOPIC OBSERVING INSTRUMENTS. JAMES WEIR FRENCH, Anniesland, Glasgow, Scotland, assignor to Barr and Stroud, Limited, Anniesland, Glasgow, Scotland. Filed Dec. 23, 1929, Serial No. 416,030, and in Great Britain Jan. 9, 1929. 9 Claims. (Cl. 88—2.6.)



1. In stereoscopic observing instruments, the provision in each field of view of two or more groups of marks, of which each group in the one field corresponds with a particular group in the other field and the relative separation of corresponding marks differs within corresponding groups which, when combined stereoscopically, appear as single groups of marks lying in planes parallel or approximately parallel to one another, with the marks of each group at various apparent distances from the observer.

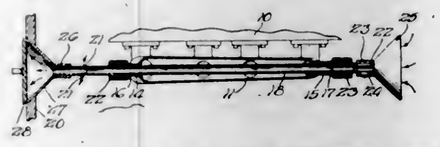
1,864,900. REEL. NORMAN GADDINI, Winters, Calif. Filed Oct. 13, 1931. Serial No. 568,631. 3 Claims. (Cl. 242—84.5.)



1. A fishing reel of the character described comprising a supporting frame, a spool rotatably arranged therein, hand operated means for rotating the spool, a brake,

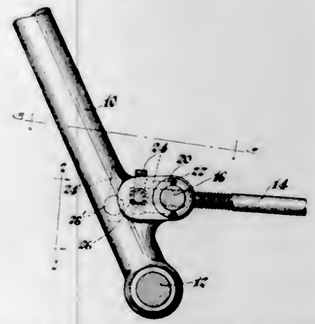
spring means for normally holding the spool against the brake but permitting the spool to be moved away from the brake when the cast is being made, and manually operated means for moving the spool into and out of engagement with the manually operated rotating means.

1,864,901. AUTOMOBILE HEATING APPARATUS. FRED GILBERT, Oswego, Oreg. Filed Dec. 11, 1929. Serial No. 413,238. 1 Claim. (Cl. 257—241.)



A heater for use upon gasoline automobiles comprising a manifold upon the engine of said automobile to receive the exhaust gases, a tube adapted to pass through said manifold, there being threaded apertures in said manifold, locking means associated with said apertures for gripping said tube and sealing said manifold, a funnel shaped opening at the front end of said tube, a second funnel shaped member at the discharge end of said tube, and a cap for closing said discharge member, said tube adjacent said discharge member being apertured to allow the passage of air through said pipe when said discharge member is closed.

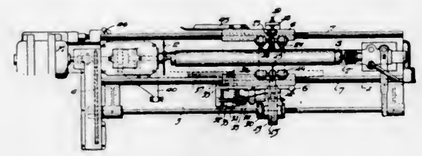
1,864,902. SLACK ADJUSTING OPERATING MECHANISM. RUDOLPH A. GOEPFRICH, South Bend, Ind., and CECIL B. TAYLOR, Detroit, Mich., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 28, 1929. Serial No. 343,520. 3 Claims. (Cl. 188—196.)



1. Operating mechanism comprising, in combination, a lever pivoted at its end and having a part moved substantially horizontally when the lever is oscillated, an operated member having threaded thereon a ratchet nut which engages said part and which moves substantially horizontally with said part, and a spring-pressed pawl slidably carried by the lever and engaging said nut and which is moved by oscillation of the lever in a direction having a substantial vertical component so that on oscillation of the lever beyond a predetermined arc it will take hold of the next tooth of the ratchet nut and turn the nut a corresponding distance when the lever is released.

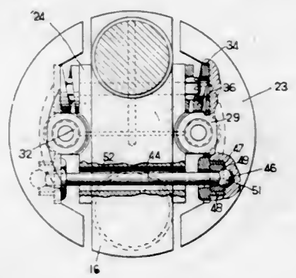
1,864,903. MACHINE FOR CUTTING RINGS. HENRY GORA, Bridgeport, Conn., assignor to Jenkins Bros., New York, N. Y., a Corporation of New Jersey. Filed Jan. 11, 1932. Serial No. 586,042. 7 Claims. (Cl. 164—69.)

1. In a machine for cutting annuli from tubes including a tube supporting mandrel, a cutter carriage, means for driving the mandrel and means for intermittently feeding the carriage longitudinally of the mandrel; two cutters mounted on said carriage on opposite sides of the mandrel



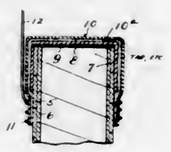
operating in parallel planes and offset a distance equal to the thickness of a single annulus, and means for effecting simultaneous operative movements of the cutters.

1,864,904. INTERNAL COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 5, 1928, Serial No. 259,153. Renewed Aug. 29, 1931. 10 Claims. (Cl. 74—38.)



2. A vibration damper for crank shafts having a crank arm comprising a pair of inertia members of substantially equal mass on opposite sides of said arm, pivotal means connecting each of the inertia members to the arm for oscillation thereon, and means to increase the friction at each of the pivots.

1,864,905. WATERPROOF CARTRIDGING FOR EXPLOSIVES. ROY LINDEN HILL, Wilmington, Del., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 26, 1930. Serial No. 439,077. 6 Claims. (Cl. 102—6.)



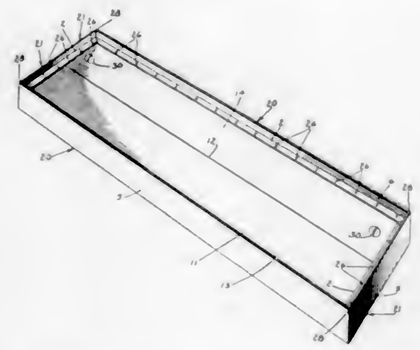
6. An explosive assembly comprising in combination a preformed paper body of sufficient rigidity to maintain its form in the absence of an explosive content, a cap adapted to fit snugly upon and close the end thereof, a dipping of waterproof and adhesive material which extends to a point beyond the inner end of the cap, a wrapping of flexible waterproof material outside of said dipping material, and a tying cord for binding the inner end of the wrapping, the terminal end of which is left free and long enough to constitute a lowering cord for the explosive assembly.

1,864,906. GAUGE PROTECTOR. FRANK G. HIRSCH, Los Angeles, Calif., assignor to Charles G. Banks, Los Angeles, Calif. Filed June 11, 1930. Serial No. 460,403. 5 Claims. (Cl. 73—31.)



1. For use in combination with a pressure gauge, a protector embodying: a hollow body adapted for placement in a pressure line and provided with means for attachment to said gauge; a compressible member in said body in internal communication with said gauge and having its outer surface exposed to fluid in said pressure line; and means including a spider for holding said compressible member in said body.

1,864,907. SHELF. HERBERT B. HYAMS, St. Paul, Minn. Filed May 24, 1930. Serial No. 455,323. 5 Claims. (Cl. 211—153.)



5. A merchandising shelf comprising tubular elements having flanges, a shelf body having portions lying between the flanges and within the tubular elements, cores inserted within the tubular elements and engaging the flanges, and means compressively securing the flanges to the body portions.

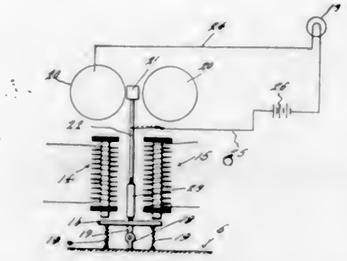
1,864,908. CATALYTIC MOLECULAR ASSOCIATION OF ALDEHYDES. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Mar. 23, 1928, Serial No. 264,275. Divided and this application filed Mar. 28, 1929. Serial No. 350,829. 4 Claims. (Cl. 260—140.)

1. The method which comprises subjecting an aldehyde to the action of a condensation contact mass containing a permutogenetic body at temperatures of 80–200° C.

1,864,909. SYNTHETIC RESIN. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 18, 1931. Serial No. 551,798. 19 Claims. (Cl. 260—8.)

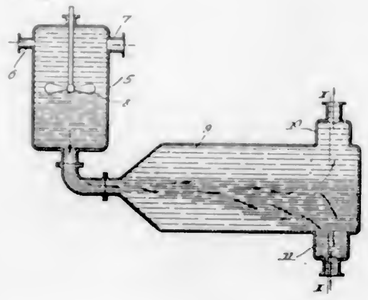
1. A synthetic resin of the polyhydric alcohol organic acid type in which a portion of the acid is replaced by a phthalide substance.

1,864,910. TELEPHONE SIGNAL LIGHT. HAROLD D. JEWELL, Detroit, Mich. Filed Jan. 16, 1932. Serial No. 587,026. 1 Claim. (Cl. 179—84.)



A telephone alarm and signalling system of the class described comprising a pair of spaced bells, a hammer co-operable therewith and located between the bells, conventional electrical operating means for the hammer, a supplementary signal light, and wires connecting the light with one of the bells and the hammer for simultaneous operation of the bells and light.

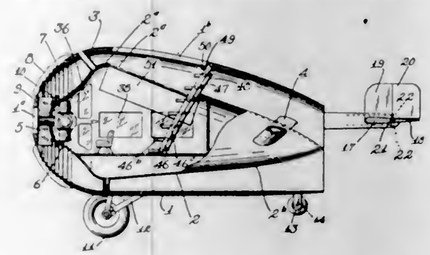
1,864,911. APPARATUS FOR REFINING HEAVY MINERAL OILS. PAUL JODECK, New York, N. Y., assignor to "Edeleanu" Gesellschaft m. beschränkter Haftung, Berlin, Germany, a Corporation of Germany. Filed June 15, 1929, Serial No. 371,177, and in Germany July 2, 1928. 1 Claim. (Cl. 196—46.)



In apparatus for refining heavy mineral oils with liquid SO_2, a settling chamber comprising a horizontal tank adapted to contain liquid under pressure; an inlet for the oil-SO_2 mixture at one end; a plurality of spaced partitions, inclined from the horizontal and extending through the tank parallel with the flow, having a space between their lateral edges and the tank wall; a collecting dome for oil on top of the tank at the end opposite the inlet; and a collecting dome for SO_2 extract on the bottom of the tank at the end opposite the inlet.

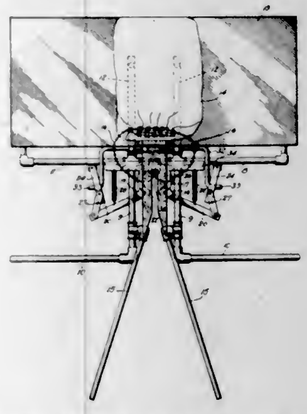
1,864,912. AIRCRAFT. CHARLES F. JOHNSON, Ventura, Calif. Filed June 28, 1930. Serial No. 464,497. 14 Claims. (Cl. 244—18.)

1. In an aircraft, a hollow body extending longitudinally with respect to the direction of flight of the aircraft, said body being open at its rear end and provided with a small opening in its nose, a core positioned within the hollow body and spaced with its forward end and side walls respectively behind the nose and inwardly from the side walls of the hollow body, and means at the forward end of the core and inwardly from the opening for drawing air through the opening and directing the same to the sides and backwardly between the hollow body and



the core, there being provided in the nose of the hollow body outwardly from the opening therein a plurality of other openings converging inwardly from the forward end of the nose and directed at their inner portions toward the sides of the body.

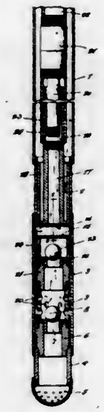
1,864,913. ARTICLE EXCHANGE MECHANISM. ROBERT N. JOHNSTON, Lindsborg, Kans. Filed Aug. 6, 1930. Serial No. 473,436. 13 Claims. (Cl. 258—1.)



1. In article exchange mechanism, the combination with an article carrying yoke, of a mounting for the same including a jaw that is movable to and from engagement with the yoke, toggle links for holding the jaw in such engagement, a trip for moving the links to release the yoke from the jaw, and an aerial device for carrying off the yoke and operating the trip.

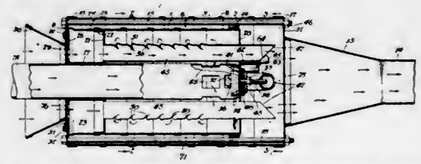
1,864,914. DEEP WELL PUMP. FRANK C. KNISS and RICHARD N. VICKERS, Smackover, Ark. Filed Mar. 12, 1931. Serial No. 522,032. 2 Claims. (Cl. 103—155.)

1. A pump comprising a casing, a sleeve fitted to the lower end of the casing, a coupling tube fitted to the lower end of the sleeve, a tube fitted to the lower end of the coupling tube, the last mentioned tube and the sleeve being disposed within the ends of the coupling tube, a nozzle seating in the upper end of the lower tube, a cage rising from said nozzle, a valve seating on the nozzle, a ring rising from the cage, a double valve seat in the upper end of said ring, a valve normally resting on said seat, an outer tube rising from said ring and fitting frictionally within the sleeve connected with the lower end of the casing, there being an annular space between the coupling tube and the nozzle cage and ring, a hollow bridging member extending diametrically across the last mentioned tube, a cylinder rising from said bridging member in spaced relation to the tube, a plunger, an apron



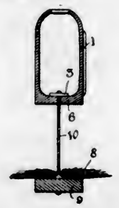
concentric with the plunger and fitting about the cylinder, and means attached to the plunger and the apron for reciprocating the same.

1,864,915. MUFFLER. HENRY T. KOSTERMAN, Burlingame, Calif., assignor to himself and Kathleen Finnegan, San Mateo, Calif. Filed June 14, 1929. Serial No. 370,841. 10 Claims. (Cl. 137—160.)



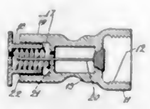
1. A muffler comprising a jacket, a gas chamber therein, an exhaust pipe leading through the gas chamber, and air pipes running through the gas chamber and discharging rearward thereof, said air pipes having apertures through which gas passes from the gas chamber and mingles with air in the air pipes, the exhaust pipe having relatively large apertures at the rear end adjacent the air pipes whereby exhaust gases impinge on the pipes and produce hot spots therein heating the gas to oxidize the carbon monoxide to carbon dioxide.

1,864,916. VISIBLE SHOT CONCENTRATING PROJECTILE FOR SPORTING GUNS. MARCEL GACHASSIN-LAFITE, Brussels, Belgium. Filed May 8, 1930, Serial No. 450,616, and in Belgium Apr. 1, 1930. 10 Claims. (Cl. 102—15.)



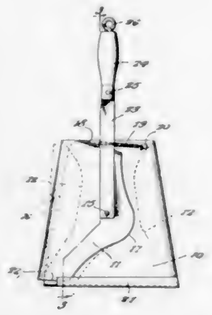
1. In a projectile for sporting guns, the combination with a non-rigid case containing a charge of shot and having a hemispherical forward end and a restricted aperture at said forward end, of an expandible retarding device associated with the rear of said case.

1,864,917. GAS VALVE. ADOLPH LENKTIS, Brooklyn, N. Y. Filed Jan. 30, 1931. Serial No. 512,243. 2 Claims. (Cl. 284—13.)



1. A safety gas device, comprising in combination a metallic pipe-fitting, two intermediate partitions provided with central openings therein, and being arranged in the said pipe-fitting to form open rear and front chambers therewith; the rear partition being formed with a centrally disposed cone-shaped valve seat; a substantially T-shaped member, the stem of the said T-shaped member being provided with a somewhat large central bore and the top-portion of the T-shaped member with a somewhat smaller central opening, thereby forming a shoulder inside the said T-shaped member, a valve, and a valve stem, the latter having one end integrally connected to the said valve and the other end supported by the shoulder of the said T-shaped member, a coiled spring mounted within the bore of the said T-shaped stem, the wing-shaped portions of the T-shaped member being adapted for connection with a rubber tube and made to effect an engagement of the said T-shaped stem and pipe fitting in a fixed position, when the said rubber tube is extended over the said gas pipe-fitting, thereby allowing a free flow of gas.

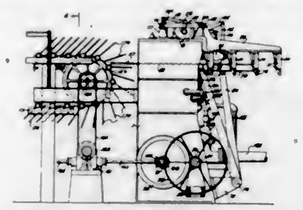
1,864,918. COMBINATION BROOM HOLDER AND DUST PAN. JOHN P. MAHONEY, Amsterdam, N. Y., assignor to Gardner Broom Company, Amsterdam, N. Y., a Copartnership composed of William A. Gardner and Herbert P. Gardner. Filed Jan. 12, 1931. Serial No. 508,258. 5 Claims. (Cl. 65—62.)



1. A combined broom holder and dust pan comprising lapped plates provided with lateral clamping flanges, a single pivot operatively connecting the plates, a spring for yieldably holding said plates at one limit of pivotal movement on said pivot, and a handle operatively connected to said plates by said pivot and adapted to be reversed to extend from diametrically opposite ends of the plates.

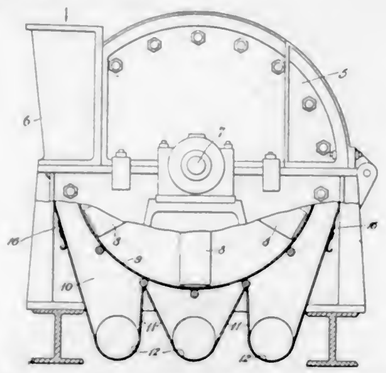
1,864,919. MACHINE FOR MAKING MOLDED PULP ARTICLES. ROBERT FREDERICK MARTLIN, Hamilton, Ontario, Canada, assignor to John Harvey Pickett, Hamilton, Ontario, Canada. Filed May 2, 1929. Serial No. 359,847. 13 Claims. (Cl. 92—56.)

1. In a molding machine of the character described, the combination with a liquid pulp container and a substantially hollow perforate mold connected to a source of suction and having a movement into and out of the liquid pulp, of a suction member adapted to come into contact with the mold for removing the molded pulp



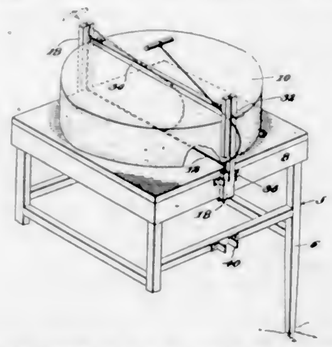
therefrom, and a carrier slidable into and out of the path of movement of the mold for receiving the molded pulp from the suction member.

1,864,920. MILL. HARRY B. MASTERS, Keokuk, Iowa. Filed Mar. 13, 1929. Serial No. 346,646. 10 Claims. (Cl. 83—11.)



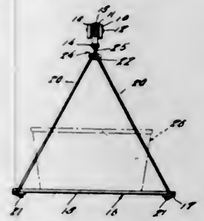
1. In a mill, in combination, a screen; a power-driven shaft; disintegrating means revolved by the shaft adjacent said screen; a suction fan; and a suction discharge hopper between the discharge side of the screen and the fan, said suction discharge hopper being divided into a plurality of adjacent compartments into which the material ground above the screen directly discharges.

1,864,921. APPARATUS FOR CUTTING WHEELS OF CHEESE. ROLAND H. MAYER, San Antonio, Tex. Filed Dec. 14, 1931. Serial No. 580,951. 5 Claims. (Cl. 31—23.)



2. In an apparatus for cutting blocks of cheese into segments, a platform, arms horizontally hinged to the platform and provided with slots opening out through the upper ends thereof, a cutting wire passing through said slots and having the end portions provided with cross members, means to anchor one of said cross members in a relatively fixed position, the other cross member forming a handle for manual engagement, and a combined arm connector and wire guide having means for engaging said arms.

1,864,922. CLOTHES BASKET CARRIER. RAYMOND L. MCBETH, Fruita, Colo. Filed May 13, 1931. Serial No. 537,169. 1 Claim. (Cl. 105—150.)



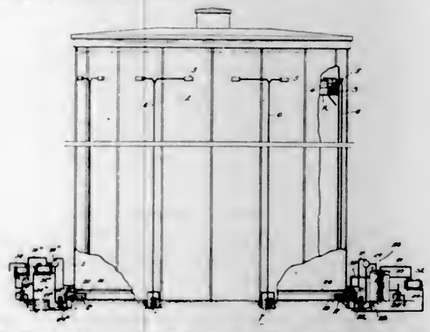
In a clothes carrier of the type described, a pair of bars, pulley guards arranged closely between the end portions of the bars and maintaining the same in spaced parallel relation, pins passing through the bars and the guards to secure the guards between the bars, pulleys mounted on said pins within said guards, couplings detachably suspended from said guards, pairs or diverging links depending from said couplings, and a platform having the corners thereof engaged by said links.

1,864,923. METHOD OF MAKING PIPE INSULATION. ALOIS J. MESMER, Huntington Park, Calif. Filed Mar. 14, 1930. Serial No. 435,755. 4 Claims. (Cl. 154—28.)



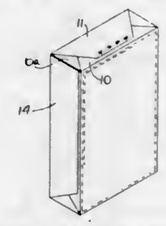
1. A method of forming pipe insulation which includes: placing an inner retaining member upon a hollow core having openings therein wrapping a mineral wool blanket upon said inner retaining cylinder; surrounding the wrapped cylinder with an outer retaining member and tying the two retaining members to the blanket by means of wires drawn through the openings in said core.

1,864,924. WATERLESS GAS HOLDER. HENRY C. A. MEYER, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Nov. 6, 1930. Serial No. 493,866. 5 Claims. (Cl. 48—176.)



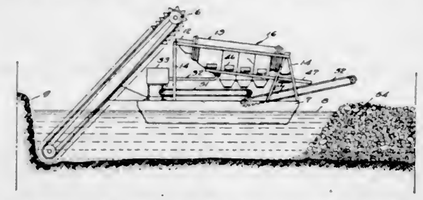
2. In a waterless gas holder, the combination of a shell, a piston-like closure, and sealing means carried by the closure and cooperating with the shell; a dam for sealing material located at the base of the holder and extending entirely around the inner surface of the wall of the holder; means located above said dam for intercepting the flow of sealing material and contaminating substances into the dam; and means for withdrawing the material and substances from the intercepting means.

1,864,925. PACKAGE FOR CIGARETTES AND LIKE ARTICLES. WALTER EVERETT MOLINS, London, England. Filed Aug. 9, 1928, Serial No. 298,545, and in Great Britain May 6, 1926. 4 Claims. (Cl. 206—56.)



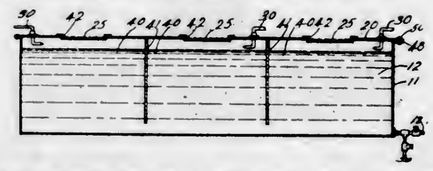
1. A package composed of a U shaped block-ended envelope formed from flexible material, and having side folds, and a reinforcing frame of relatively rigid material arranged within the envelope so as to be independent thereof and movable relatively thereto, the side folds of the envelope being arranged so that each side extension of the base of the U is folded so as to lie between the folds formed from the corresponding side extensions of the limbs of the U whereby interference by the side extensions of the base with the movement of the frame is avoided.

1,864,926. METHOD OF PRODUCING FROM NATURAL GRAVEL DEPOSITS A GRAVEL AGGREGATE FOR USE IN CONCRETE. SAMUEL A. MOSS, Alameda, and JAMES GEDDES, Sacramento, Calif. Filed Feb. 12, 1930. Serial No. 427,966. 1 Claim. (Cl. 262—2.)



The method of resoiling while procuring a gravel composition comprising excavating material, manipulating the material to secure the gravel, the manipulation including eliminating sand and silt from the gravel and depositing the same on a previously excavated area, piling the gravel composition on the area covered with sand and silt, and subsequently removing the gravel composition to leave a resoiled area.

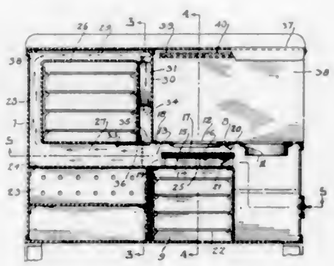
1,864,927. STORAGE TANK CONSTRUCTION. THOMAS G. MYERS, Los Angeles, Calif., assignor to United States Electrical Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Nov. 22, 1929. Serial No. 408,984. 4 Claims. (Cl. 220—88.)



1. A construction for a storage-tank for storing inflammable fluids comprising: a storage-tank; a top on said

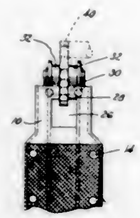
tank; and baffles depending from said top dividing said storage-tank into storage spaces, there being a plurality of groups of small closely spaced openings in said top, each of said groups of openings communicating with a storage space.

1,864,928. COOKING APPARATUS. HENRY MILLER PATTERSON, Richmond, Va. Filed June 7, 1930. Serial No. 459,729. 1 Claim. (Cl. 126—1.)



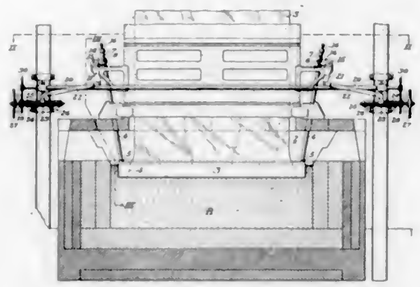
A cooking apparatus comprising a source of heat, a broiling oven adjacent said source of heat, a warming oven adjacent said broiler, a baking oven above said source of heat, the cooking surface and broiler forming a passage leading from the source of heat and continuing over the warming oven, said baking oven having at its far side a passage leading upward and merging with said passage over the warming oven, and continuing over the top of the oven down the side nearest the heat source, a baffle in said passage, said passage continuing under the baffle to a flue at the rear of the cooking apparatus, a damper positioned between the warming oven and broiler and adapted to close the passage passing over the broiler and warming oven, and upon rotation adapted to open this passage and close the passage extending down the near side.

1,864,929. METHOD FOR THE MANUFACTURE OF BRAKE SHOES. JOHN W. PETERSON, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Jan. 10, 1927, Serial No. 160,016. Divided and this application filed July 14, 1931. Serial No. 550,717. 8 Claims. (Cl. 29—152.)



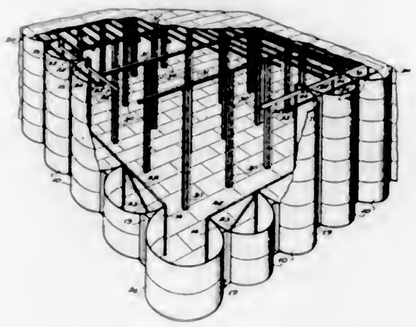
1. That method of forming a brake shoe with spaced parts supporting allned bearings comprising providing the parts with a single bearing, and splitting the bearing transversely.

1,864,930. GLASS DRAWING APPARATUS. LONNIE J. PIERCE and FREDERIC L. BISHOP, Pittsburgh, Pa., assignors to American Window Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 26, 1930. Serial No. 470,821. 16 Claims. (Cl. 49—17.)



1. In combination with a floater for glass drawing, means for simultaneously adjusting all edges of the floater and for holding the floater in such adjusted position.

1,864,931. TANK CONSTRUCTION. CLIFFORD M. PRITCHARD, Tulsa, Okla. Filed Mar. 13, 1930. Serial No. 435,516. 4 Claims. (Cl. 220—1.)

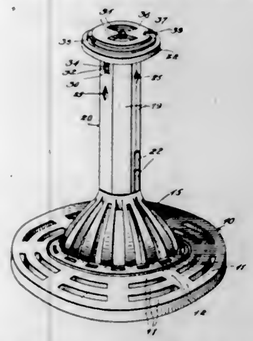


1. A tank having straight opposed walls, each wall comprising a series of connected substantially-vertical elements having a curvature in horizontal cross section sufficient to impart to the element a substantial amount of transverse rigidity, and tie means operatively interposed between and across the tops of said walls, the curved form of the vertical elements combining with the cross top tie to brace the tank as a whole.

1,864,932. SLACK BURNER. EDWARD A. PROBST, Ogden, Utah. Filed Apr. 14, 1931. Serial No. 530,030. 6 Claims. (Cl. 126—163.)

1. In a slack burner, a dome-like grate for disposition in a fire box, said grate having an opening in its upper end, an apertured tubular air shaft resting on said dome-like grate and longitudinally divided into sections,

said sections having reduced lower ends received in said opening, whereby said sections are held in assembled relation at said lower ends, and a cap over said air shaft



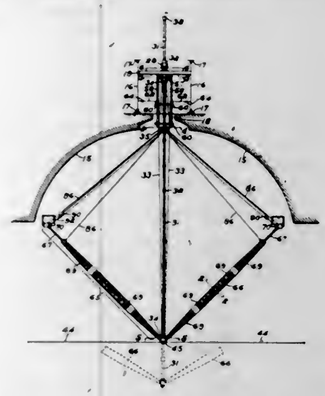
having means engaging the upper ends of said shaft sections to hold said sections in assembled relation at said upper ends.

1,864,933. DOUBLE PURPOSE CASTER. EDWARD PYNYNSKI, New Britain, Conn. Filed July 30, 1931. Serial No. 554,104. 5 Claims. (Cl. 16—18.)



1. In a caster, an attaching bracket, a roller normally journaled thereon, and means whereby said roller and bracket may be interconnected with a flat side of the roller lowermost.

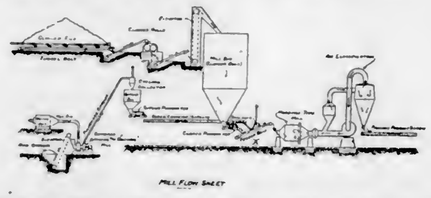
1,864,934. DERRICK SCAFFOLD. OLIVER H. REEVES, Jamaica Plain, Mass. Filed Nov. 23, 1927. Serial No. 235,376. 24 Claims. (Cl. 304—12.)



1. The combination with a building structure having a chamber and an opening thereabove, of a derrick scaffold, mast suspending means above said opening, a mast suspended from said suspending means, and extending downwardly through said opening into said chamber, and a work-station carried by said mast below said suspending means and within said chamber.

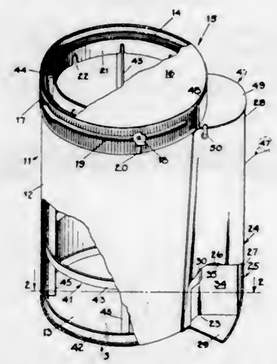
22. In a derrick, the combination of a mast, a boom carried by said mast, means for varying the angular relationship of said boom to said mast, an operator's station pivoted on said boom to turn relatively thereto about a horizontal axis, and means at said operator's station to control the angular relationship between said boom and said mast and between said operator's station and said boom.

1,864,935. PROCESS OF MAKING PORTLAND CEMENT. EDWARD W. RICE, Santa Cruz, Calif., assignor to Santa Cruz Portland Cement Company, San Francisco, Calif., a Corporation of California. Filed Aug. 27, 1929. Serial No. 388,758. 2 Claims. (Cl. 106—25.)



1. The process of making Portland cement which comprises adding calcined, ground, wetted gypsum while wet to the clinker and grinding the materials together to form the finished cement.

1,864,936. DISPENSING CAN. FREDERICK C. REINEKING, Inglewood, Calif. Filed June 18, 1931. Serial No. 545,228. 20 Claims. (Cl. 221—98.)



1. A dispensing can having a cylindrical can body with a measuring chamber exterior to said can body and connected thereto by a connecting port, the can having a series of indicia indicating various quantities of material, means operative exterior to the can to register with said indicia, and a rotary valve controlled thereby to open said port varying degrees for the flow of material from the can body to the measuring chamber, and means for pouring the measured material from said chamber.

1,864,937. PROCESS FOR THE MANUFACTURE OF TREAD ELEMENTS FOR VEHICLE TIRES. ROLAND B. RESPESS, Wickford, R. I., assignor, by mesne assignments, to Respats Inc., Cranston, R. I., a Corporation of Rhode Island. Filed Mar. 30, 1928. Serial No. 265,986. 8 Claims. (Cl. 154—2.)



2. The method of making a non-skid element, which comprises weaving wire and fabric strands to form a fabric, rubberizing the fabric, severing the fabric to form a strip

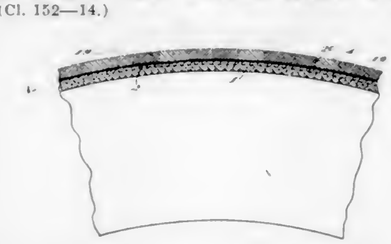
with wire ends at raw edges, folding the strip along a longitudinal median with the raw edges juxtaposed, forming a flattened spiral of the folded fabric so that its raw edges define a surface, applying lateral pressure to the spiral and vulcanizing the strips under said pressure to form a unitary element.

1,864,938. TRACTION MEMBER FOR AUTOMOBILE TIRES AND THE LIKE. ROLAND B. RESPESS, Wickford, R. I., assignor, by mesne assignments, to Respats Inc., Cranston, R. I., a Corporation of Rhode Island. Filed Mar. 30, 1928. Serial No. 265,987. 2 Claims. (Cl. 152—14.)



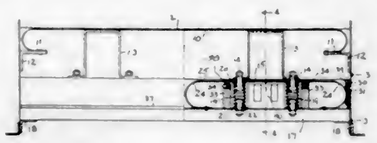
1. A non-skid member comprising a strip of woven fabric rubberized and folded along its longitudinal medial, the strip being arranged in a plurality of juxtaposed sections with the raw edges defining a non-skid surface, the fabric of the strip including textile strands extending longitudinally and wire strands disposed transversely and having cut ends at the raw edges of the fabric whereby numerous wire points are disposed at the non-skid surface and whereby the wires have U-shaped bends at the opposite surface of the tread member.

1,864,939. NONSKID TIRE. ROLAND B. RESPESS, Wickford, R. I., assignor, by mesne assignments, to Respats Inc., Cranston, R. I., a Corporation of Rhode Island. Filed Jan. 16, 1929. Serial No. 332,786. 4 Claims. (Cl. 152—14.)



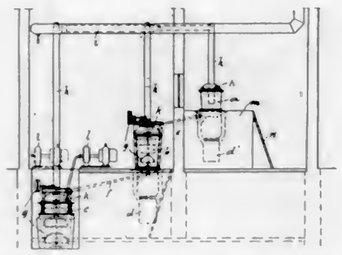
1. A non-skid tire having a tread with spaced anti-slip elements therein, each of said elements comprising parallel substantially U-shaped folds of fabric, said fabric including textile strands extending substantially parallel to the tread surface, and substantially U-shaped wires interwoven therewith, the ends of said wires being exposed at the tread surface.

1,864,940. APPARATUS FOR SCREENING MATERIALS. MORLEY PUNSHON REYNOLDS, Cleveland, Ohio, assignor to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 4, 1927. Serial No. 188,829. 10 Claims. (Cl. 209—36S.)



1. In apparatus of the character described, the combination of a frame, a woven wire screen mounted therein and tensioned along two opposite edges to a uniform vibratory tension, an enclosed casing disposed beneath said screen and having its top secured thereto, and means in said casing for vibrating the top thereof and also said screen.

1,864,941. DEVICE FOR WORKING WOOD OIL INTO LACQUER. FERDINAND RIEMANN, Neuss, Germany, assignor of one-half to the Firm Wilhelm Schmidding, Koln-Mannsfeld, Germany. Filed Mar. 31, 1927, Serial No. 180,052, and in Germany Feb. 18, 1927. 6 Claims. (Cl. 134—26.)

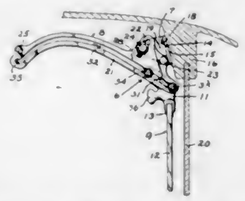


1. A process of making lacquer with an installation of three vessels consisting in separately heating raw lacquer substances and wood-oil in two of the tanks, controlling the inspissation of the wood-oil and adding the raw lacquer substances to the heated wood-oil, and completing the mixing of the raw lacquer and wood oil in the third vessel.

1,864,942. COLOR COAT FOR CEMENTED SURFACES. WIRT D. RIAL, Watson, Calif., assignor, by mesne assignments, to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed July 5, 1928. Serial No. 290,708. 4 Claims. (Cl. 134—1.)

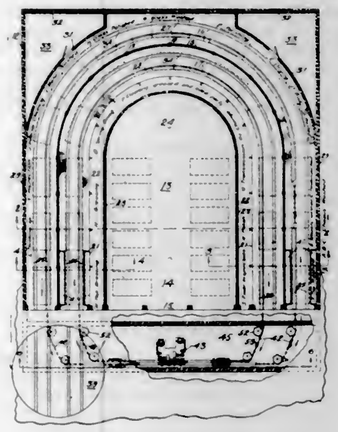
1. A process of forming a color coat to color and render cemented surfaces waterproof, comprising, commingling water with an acid sludge derived from an acid treatment of an asphalt base lubricating oil stock with sulphuric acid, adding and mixing a water solution of an alkali base with the mixture of water and acid sludge in quantities sufficient to neutralize a portion of the acid constituents present, removing the resulting water solution of sulphate salts, then adding and mixing a further quantity of the water solution of the alkali base with the partly neutralized sludge sufficient to completely neutralize the remaining acid constituents in the sludge, removing the resulting water solution of sulphate salts to leave a residual neutralized sludge substantially free from mineral acid salts, and emulsifying the residual neutralized sludge with a water solution of an alkali base in sufficient quantities to form the color coat.

1,864,943. GLARE SHIELD MOUNTING. WILLIAM T. RIDDLE, Nevada City, Calif. Filed May 26, 1930. Serial No. 455,568. 1 Claim. (Cl. 296—97.)



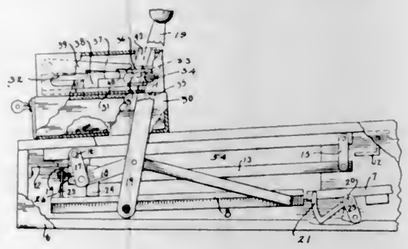
In a support for a glare shield for operative disposal adjacent and in generally parallel relation to a windshield having a frame, a shield-supporting element fixed to the glare shield, a bracket arm providing an arcuate guideway for said element whereby said element is arranged to respectively dispose said shield in said operative position and in an inoperative position when the element is in different extreme positions in the guideway, a base block for mounting on said frame and pivotally carrying said arm whereby to permit an adjustment of the angular relation of the glare shield and windshield when the glare shield is in said operative position thereof, and means to secure said arm in fixed adjusted relation to said block.

1,864,944. SERVICING APPARATUS FOR WHEELED VEHICLES. GUY LYNN ROSEBROOK, Oakland, Calif., assignor, by direct and mesne assignments, to Standard Oil Development Company, a Corporation of Delaware. Filed July 2, 1928. Serial No. 289,772. 14 Claims. (Cl. 104—44.)



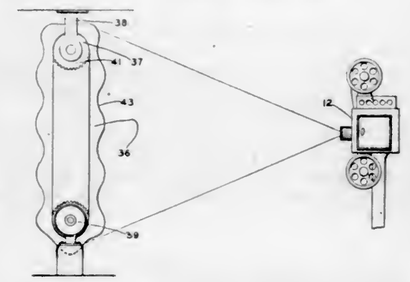
1. In apparatus of the class described, means defining generally U-shaped path portions having servicing stations thereabout, said path portions lying along each other in immediately adjacent relation.

1,864,945. GAME BALL RELEASE. BRIANT SANDO and THOMAS E. GEORGE, Indianapolis, Ind., assignors to Briant Specialty Company, Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed Aug. 7, 1929. Serial No. 383,995. 14 Claims. (Cl. 273—95.)



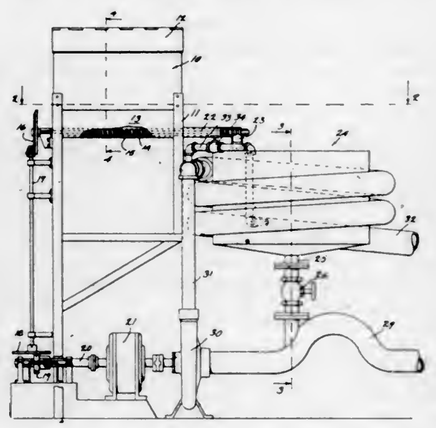
1. In a gaming device in which balls are employed having a ball race on which balls after being played are returned to the player's locality, means for discharging a predetermined number of balls simultaneously from the race, means for normally retaining them on the race comprising a movable bar pivotally suspended by equal parallel links and control means for releasing the normal retaining means by moving the bar out of the paths of the balls by swinging the bar on the parallel links.

1,864,946. MOVABLE PROJECTION SCREEN. SAMUEL SCHRAGO, Los Angeles, Calif. Filed Apr. 18, 1928. Serial No. 271,050. 2 Claims. (Cl. 88—24.)



1. In the art described, a movable projection screen having a continuous projection surface and a plurality of protrusions on said surface, said protrusions being flat-topped, and means for moving said screen substantially in the plane of said surface.

1,864,947. DEVICE FOR MIXING FERTILIZER WITH WATER FOR IRRIGATION. WILBER C. SELFRIDGE, Fullerton, Calif. Filed Feb. 13, 1931. Serial No. 515,467. 13 Claims. (Cl. 259—4.)



1. A device for mixing fertilizer with water comprising means providing a mixing chamber, there being a valve controlled outlet therefrom, a water supply pipe connected to the outlet so as to receive mixture therefrom, and a baffled conduit connected to the water supply pipe and having an outlet outside of the chamber through which water and admitted mixture are caused to pass, delivering mixture from the device.

1,864,948. RAIN PROTECTOR. NORMAN W. SCHMIDT, Clayton, Ohio. Filed Jan. 12, 1928. Serial No. 246,319. 2 Claims. (Cl. 2—87.)

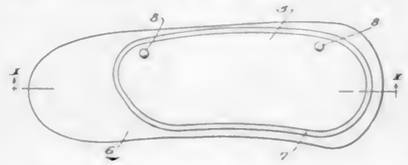
1. The method of making a rain protector of the character described comprising folding a rectangular sheet of

material along spaced parallel lines to provide substantially rectangular overlapping sections, cutting a substantially triangular section from two adjacent corners



of the folded sheet, reversing the triangular sections so cut and reattaching them along their cut edges to provide downwardly flaring sleeves.

1,864,949. FOOT SUPPORTING MEANS. WILLIAM M. SCHOLL, Chicago, Ill. Filed Jan. 17, 1929. Serial No. 333,039. 3 Claims. (Cl. 36—71.)



1. In an arch support of the character described, a metallic plate, a flexible cover for said plate, a sheet of rubberized material disposed between said cover and said plate for preventing moisture from the foot seeping through said covering and contacting with said plate, and means for securing said sheet to said plate and said cover.

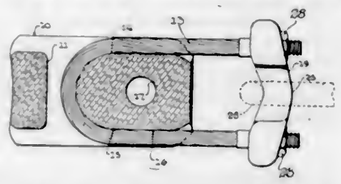
1,864,950. CONDENSER PAPER AND METHOD OF MAKING THE SAME. LOUIS P. SCHWEITZER, New York, N. Y. Filed Apr. 19, 1929. Serial No. 356,383. 5 Claims. (Cl. 154—2.6.)



1. The herein-described method of making a paper insulating layer for an electrical condenser body, which consists in compressively associating at least two dry and uncalendered webs of uncoated paper into superposed relationship, wetting said webs with water during said association whereby they will physically unite to form a single web of increased thickness, and finally expelling said water, whereby the resultant web is substantially homogeneous throughout.

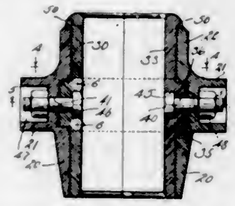
1,864,951. STRAIN INSULATOR. BURTON M. SMALLEY, Chicago, Ill., assignor to Joslyn Manufacturing and Supply Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1928. Serial No. 301,464. 1 Claim. (Cl. 173—366.)

A clevis for a strain-insulator including a substantially U-shaped loop of flexible stranded cable, threaded studs permanently secured onto the ends of the cable, a cross bar having a central arched portion and laterally extending flat end portions and spaced parallel disposed flanges extending longitudinally of the cross bar, said flat end portions having openings receiving said studs, nuts threaded on said studs and arranged to engage the flat end portions and be confined between the spaced flanges to prevent rotation of the nuts when the latter are in engagement with the flat end portions, and a supporting means



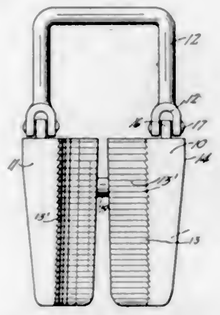
engaging said central arched portion whereby the strain insulator is supported in proper alignment with the direction of the load.

1,864,952. KELLY BUSHING. WILLIAM A. SMITH, Long Beach, Calif., assignor of eighteen and one-fourth per cent to William A. Vock, eighteen and one-fourth per cent to Fox M. Boswell, Long Beach, Calif., eighteen and one-fourth per cent to Harry E. Lynn, Maywood, Calif., and eighteen and one-fourth per cent to Fred Lambert, jr., Eagle Rock, Calif. Filed Aug. 17, 1928. Serial No. 300,277. 4 Claims. (Cl. 255—23.)



1. In combination, a master bushing for use in a rotary table and having an opening with a part of polygonal cross section, and a sectional Kelly bushing in the said opening including two body sections having a head to fit said polygonal part of the opening, there being a polygonal opening through the Kelly bushing, a liner on each body section in the polygonal opening, the liners forming a polygonal opening for passing a drill stem, and means for detachably securing the liners to the body sections including lugs on the liners fitting sockets in the body sections at the corners of the opening in the Kelly bushing.

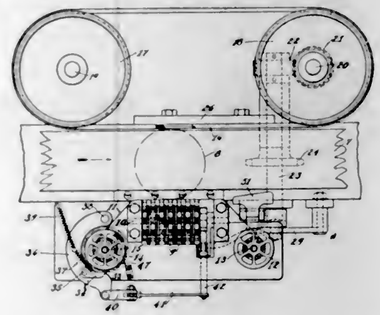
1,864,953. SLIP. HARVEY R. STANDLEE, Tulsa, Okla., assignor to The Gulberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Dec. 30, 1929. Serial No. 417,303. 8 Claims. (Cl. 24—263.)



1. Slips comprising a pair of arcuate members having toothed faces, means for pivotally connecting the members solely above their centers and below their tops,

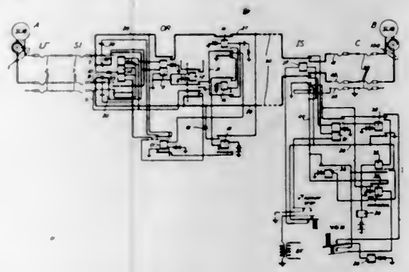
and a handle free from said connecting means so attached to the tops of said members that the lower ends of said members spread when said slips are lifted by said handle.

1,864,954. MARKING APPARATUS. JULIUS E. STOLL, Milwaukee, Wis., assignor to Pabst Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 31, 1930. Serial No. 507,904. 7 Claims. (Cl. 101—39.)



1. In a device for printing identifying characters on cylindrical objects, the combination of a conveyor for the objects, a printing mechanism at one side of the conveyor, and power driven means for revolving the objects as the same move on the conveyor past the printing mechanism in printing contact therewith.

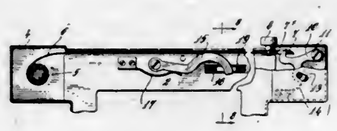
1,864,955. TELEPHONE EXCHANGE SYSTEM. RAY L. STOKELY, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1931. Serial No. 512,554. 10 Claims. (Cl. 179—16.)



1. In combination, an impulse receiving relay for responding to incoming impulses, an outgoing trunk terminating at an automatic switching mechanism, means responsive to the operation of said relay for closing an impulsing circuit over the conductors of said trunk, contacts on said relay for interrupting said circuit, a high resistance, means effective upon the release of said relay enduring for so long a period as would otherwise cause faulty operation of said switching mechanism for connecting said high resistance across the conductors of said trunk, and means for maintaining said connection during the receipt of the remaining impulses in the same impulse train.

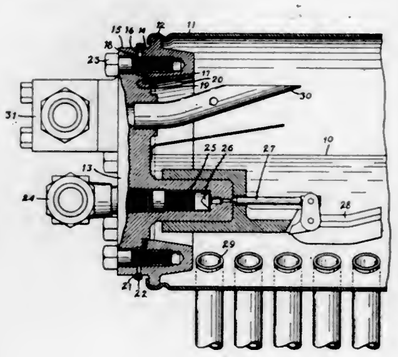
1,864,956. FASTENING MEANS FOR BAGS AND THE LIKE. HARRY S. STONE, New York, N. Y. Filed May 15, 1931. Serial No. 537,542. 4 Claims. (Cl. 292—229.)

1. A fastening means for bags and the like comprising an apertured catch member and a hook member adapted to engage the catch member in combination with a flexible metallic strip adapted to be longitudinally moved and



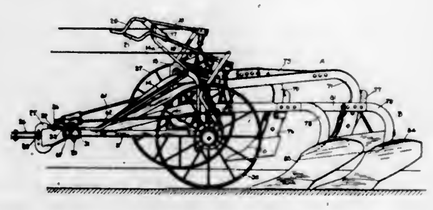
to hold the hook in engagement with the catch member and means for latching the flexible member when the latter is moved to operative position.

1,864,957. REFRIGERATING APPARATUS. ELMER O. STOUT, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,430. 13 Claims. (Cl. 137—104.)



11. An evaporator comprising a tank having an opening, a member bordering said opening, a closure plate for said opening, said member and said plate having substantially cylindrical surfaces of substantially the same diameter adjacent each other, a gasket spacing said member and plate, a flexible annulus normally of less diameter than said cylindrical surfaces placed about the opening between said cylindrical surfaces and sealing the same, and a clamping member about said annulus and compressing said torus into the space between said cylindrical surfaces.

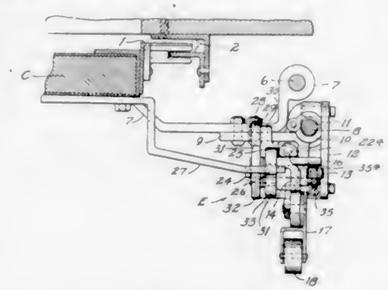
1,864,958. TWO-WAY PLOW. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 12, 1928. Serial No. 260,872. 45 Claims. (Cl. 97—72.)



1. A two-way plow comprising a frame, dirigible ground wheels at opposite sides of said frame for supporting the same, oppositely acting rearwardly divergent gangs con-

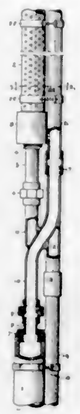
nected with said frame for alternate movement into or out of operative position, means for supporting either of said gangs out of operative position, a hitch device for connecting the plow with suitable hauling means to swing laterally relatively thereto in either direction from a normally central trailing position, and draft operated means connected with said wheels and actuated by the lowering of either gang to its operative position, to control the position of said wheels.

1,864,959. ELEVATOR DOOR OPERATING MECHANISM. MAURITZ W. TALEN, St. Louis, Mo., assignor to Security Fire Door Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 15, 1930. Serial No. 428,584. 15 Claims. (Cl. 187—52.)



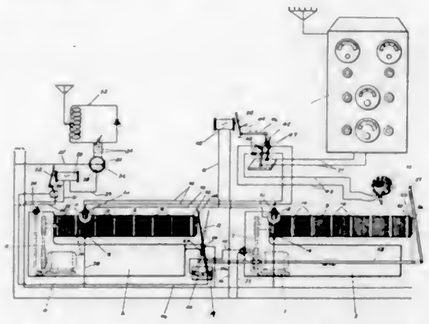
1. In an elevator, a shaft, a sliding door for closing a door opening in said shaft, a door operating member movable in the direction the door is to slide, a clutch mounted on said door and adapted to be engaged with and disengaged from said door operating member, means operable in the engaged position of said clutch for automatically locking the same in such position, and means for automatically releasing said clutch locking means when the door is closed.

1,864,960. OIL WELL HEATER. WILLIAM M. TAYLOR, Indianapolis, Ind., assignor of one-half to Horace R. Allen, Indianapolis, Ind. Filed Jan. 28, 1928. Serial No. 250,119. 11 Claims. (Cl. 219—33.)



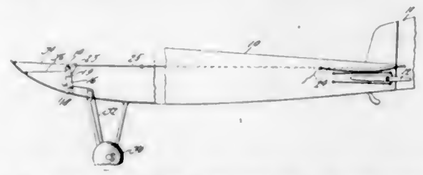
1. In a device for increasing the oil production from wells, a well tubing, a pump and screen attached to the lower end of the tubing, the pump above the screen, an offset attached to the lower end of the screen, an electric heater below the offset and electric wires passing through the offset and supplying current to the heater.

1,864,961. METHOD AND APPARATUS FOR BROADCASTING SOUND. PAUL M. TITUS, Binghamton, N. Y. Filed Feb. 21, 1928. Serial No. 256,008. 10 Claims. (Cl. 250—17.)



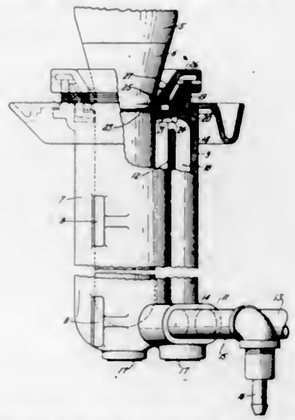
1. The method of radio broadcasting comprising the step of simultaneously starting from a single control the translation and broadcasting of a plurality of identical sound records remote from each other.

1,864,962. AIRPLANE BRAKE AND RUDDER CONTROL. RALPH H. UPSON, Ann Arbor, Mich. Filed Sept. 10, 1931. Serial No. 562,106. 6 Claims. (Cl. 244—2.)



1. In apparatus of the class described, the combination with an airplane having wheel brakes and a control surface, of an actuating system carrying a lever pivoted thereon; the remote ends of said lever being respectively connected to one of said brakes and to said control surface.

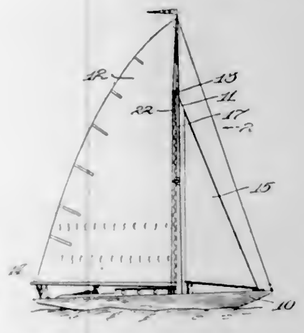
1,864,963. ELECTRON DISCHARGE DEVICE. HERBERT VADERSEN, Elizabeth, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1926. Serial No. 91,202. 2 Claims. (Cl. 250—27.5.)



1. In combination, an electron discharge device having a cup-shaped external anode with a circumferential ridge,

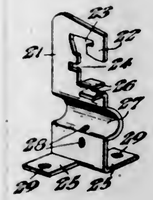
a wide mouthed jacket surrounding said anode and having an internal projection, a removable reducing flange closing said jacket between said projection and said anode ridge, and an apertured cap threaded to said jacket, said cap having an inner portion clamping said anode ridge to provide a water-tight joint, said flange being slidably removable with said anode.

1,864,964. SAIL, PARACHUTE, AIRPLANE WING, AND THE LIKE. PEMBROKE A. VAILE, Chicago, Ill., assignor of one-half to Sheldon Clark, Chicago, Ill. Filed Aug. 30, 1930. Serial No. 479,056. 3 Claims. (Cl. 114—103.)



1. A body adapted to move through the air, provided with pockets for deflecting the normal air stream adjacent one side of the moving body to produce an area of negative pressure adjacent the body.

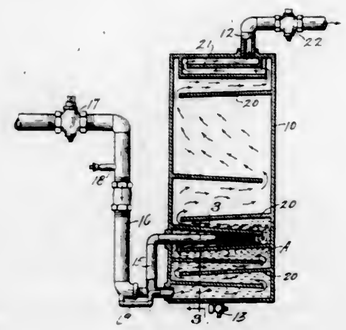
1,864,965. CEILING CONSTRUCTION. FREDERICK M. VENZIE, Philadelphia, Pa. Filed June 8, 1931. Serial No. 542,813. 4 Claims. (Cl. 72—118.)



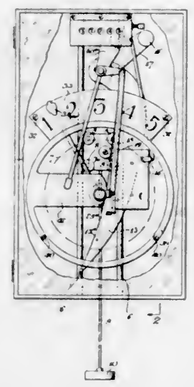
1. A clip of the character stated, comprising an integral structure made up of a single blank having a vertical, flat body the bottom of which is provided with oppositely disposed, horizontally arranged flanges extended from said body at right angles thereto, the top of said body being provided with a hook-shaped portion immediately below which said body has extended therefrom at right angles to said body oppositely disposed flanges, said body intermediate of said flanges being provided with an arcuate portion.

1,864,966. GAS PRODUCER. ALBERT VIESER, Dallas, Tex. Filed Jan. 11, 1930. Serial No. 420,226. 3 Claims. (Cl. 261—121.)

1. In a gas producer, a container having a liquid fuel chamber at its bottom, means having its upper end constantly immersed in the liquid in said chamber for by-passing a portion of said liquid from one elevation in said chamber to another elevation in said chamber, means for introducing air into said by-passing means to circulate a portion of the liquid, and means for introducing air into said chamber to agitate said liquid to form a gaseous mixture.



1,864,967. MEASURING APPARATUS. FREDRICK WAGNER, Atco, N. J., and HOWARD C. MITCHELL, Philadelphia, Pa., assignors to Cochrane Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 6, 1928. Serial No. 283,243. 9 Claims. (Cl. 235—61.)

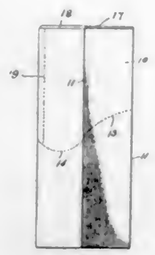


1. Integrating apparatus comprising counting mechanism, a clutch member associated therewith, a second clutch member adapted to cooperate with said first clutch member, horologic mechanism for moving said second clutch member to and fro at constant speed in a path of predetermined, fixed length, and means controlled by a condition under measurement determining the duration of engagement between said clutch members during movement of said second clutch member in said path of fixed length in accordance with the magnitude of said condition.

1,864,968. MERCHANDISING CARTON. HARRY WEINER, Philadelphia, Pa. Filed Oct. 13, 1930. Serial No. 488,258. 1 Claim. (Cl. 229—61.)

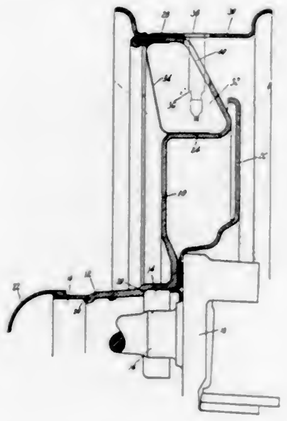
A carton having intermediate its ends a weakened line arranged transversely of the carton so that when the car-

ton is severed along said weakened line a pocket will be produced having its back higher than the sides and a front lower than either the sides or back, one of the



sides being provided intermediate its marginal edges with a weakened line extending from one end to a junction with said first weakened line.

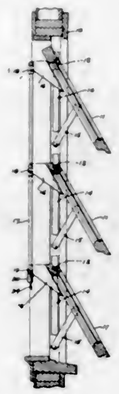
1,864,969. DISK WHEEL. D'OASAY MCCALL WHITE, Chicago, Ill., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 2, 1925. Serial No. 54,030. 5 Claims. (Cl. 301—6.)



4. A wheel comprising a brake drum, a closure wall integral therewith, a wheel web integral with the brake drum, said wheel web adapted to carry a tire retaining means on the periphery thereof, the wheel comprising a single piece structure pressed or formed from sheet metal, said combination drum and web acting jointly to sustain the vehicle load imposed thereon, and said tire retaining means center and brake drum center being in the same plane to evenly and centrally apply the brake retarding force to the tire.

1,864,970. AWNING TYPE WINDOW OPERATOR. ESMOND F. WILEY, San Francisco, Calif., assignor to Universal Window Company, Oakland, Calif., a Corporation of California. Filed Jan. 29, 1930. Serial No. 424,222. 5 Claims. (Cl. 20—42.)

1. In combination with an awning type window including a plurality of swinging sashes, an operating rod arranged vertically of the sashes at the interior of the window, connections between the upper sashes and said rod, a latch connection between the lower sash and the rod whereby operation of the lower sash will normally



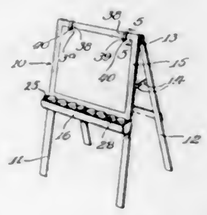
operate all of the sashes, the releasing of said latch connection enabling operation of the lower sash independently of the upper ones.

1,864,971. PROTECTED METAL ARTICLE. JAMES HOWARD YOUNG and PAUL WHISTLER JENKINS, Pittsburgh, Pa., assignors to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1928. Serial No. 266,853. 2 Claims. (Cl. 154—45.9.)



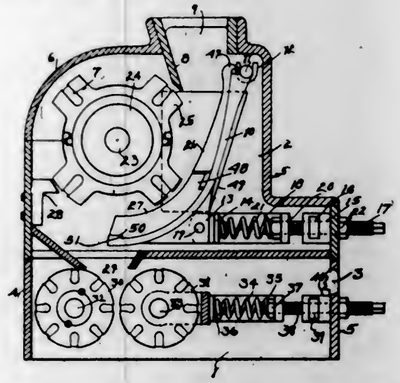
1. A metal article having thereon a compressed layer of normally plastic asphalt capable of being bent without cracking and containing a filler of lampblack between the limits of 10% and 16% by volume to resist flowing and dripping of the asphalt while burning without impairing the flexibility and pliability of the asphalt layer.

1,864,972. EASEL. DEN A. BICKFORD, Chicago, Ill., assignor to Ideal School Supply Company, Chicago, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 381,986. 6 Claims. (Cl. 45—129.)



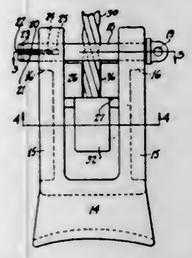
1. In an easel structure having a board, means for supporting containers in front of the board comprising a trough and a carrier for holding containers having hangers depending from the upper edges of said trough and engageable therewith for suspending said carrier within said trough.

1,864,973. ROCK BREAKER. FRANK L. BUCHANAN, San Francisco, Calif., assignor to Arthur A. Hobe, Alameda, Calif. Filed Sept. 7, 1929. Serial No. 390,990. 2 Claims. (Cl. 83—53.)



1. A breaker including an enclosing casing, a rotor in said casing, breakers having longitudinal slots therein and detachably mounted on said rotor, interlocking lugs on said breakers to hold said breakers together, soft iron fillers in the longitudinal slots in said breakers, means engaging said fillers and said breakers to hold said fillers in said breakers and means to fix said breakers to said rotor, and a stator held in resilient proximity to said rotor.

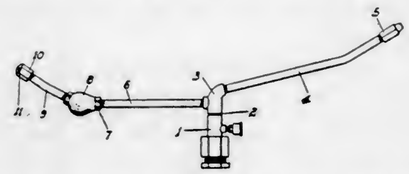
1,864,974. CHOKER HOOK. JOHN A. BUCKLEY, Portland, Oreg., assignor of one-half to Margaret Marchwicke, Lake Geneva, Wis. Filed Sept. 30, 1931. Serial No. 566,183. 3 Claims. (Cl. 294—75.)



1. A choker hock consisting of a sleeve through which the end of a haul-in line can be slidably passed, a pair of laterally extending arms formed on said sleeve, a ferrule holder formed between said arms having a slot formed therein adapted to receive the end of said haul-in line, said ferrule holder having a hole formed therein parallel with the hole in said sleeve, a pin passing through said hole adapted to confine the end of said haul-in line in said slot and means for withdrawing said pin from said slot when said choker is hauled backwardly by said haul-out line.

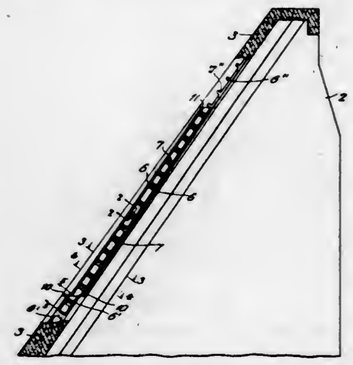
1,864,975. VIBRATION CREATING MEANS. WILLIAM A. BUCKNER, Fresno, Calif. Filed Sept. 12, 1928. Serial No. 305,490. 3 Claims. (Cl. 299—69.)

1. In a sprinkler the combination with a rotatable head of a reaction nozzle associated therewith whereby with the passage of water through the nozzle a force will be established tending to impart rotation of the head but which force alone is insufficient to rotate the head, and means to vibrate the head to render the reactionary force effective to so rotate the same, such means comprising a pipe projecting radially from the head, a hollow ovoidal shaped casing to one end of which the outer end of the pipe is connected, a discharge pipe leading from the opposite end of the casing at an upward angle relative to the first named pipe, and a baffle disc in the casing interposed be-



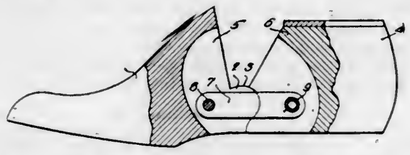
tween the first named pipe and the interior area of the casing and provided with passage means to cause water entering from the first named pipe to be both reduced in pressure and whirled about the interior of the casing whereby to effect vibration of the head.

1,864,976. DAM. EDGAR H. BURROUGHS, Scarsdale, N. Y., assignor to Ambursen Construction Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,505. 9 Claims. (Cl. 61—32.)



1. In a dam, a plurality of buttresses extending up- and down-stream, an inclined water bearing deck comprising slabs extending between adjacent buttresses and bearing thereon, each slab having a surface contacting with a surface on a buttress, one of said surfaces having a substantially continuous groove extending generally parallel to the bearing of the slab on the buttress, and the other of said surfaces having a substantially continuous projection received in said groove, and interlocking elements on said surfaces cooperating to prevent sliding of said projection in said groove.

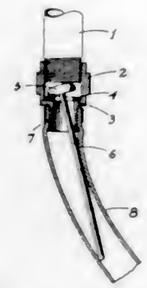
1,864,977. HINGED LAST. HAROLD EMERSON CLARKE, West Somerville, Mass. Filed Jan. 24, 1930. Serial No. 423,205. 1 Claim. (Cl. 12—136.)



A last having a toe part and a heeel part arranged to turn about a common center, a pair of pins, one of which is transversely mounted in each of said parts, on a line

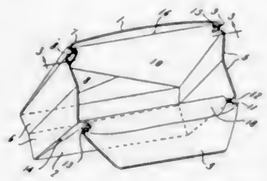
offset from said common center, one of which pins is tubular, and a straight non-resilient link connecting said pins, said pins being so supported in the last parts as to prevent longitudinal flexing of the pins away from their normal axes, and said tubular pin having normally a continuous unbroken cylindrical wall so thin as to permit the distortion thereof when the last is moved to open and closed positions.

1,864,978. COMBINATION FILLER HOSE AND AUTOMATIC VALVE. FREDERICK E. COTTRELL, Modesto, Calif. Filed Oct. 31, 1930. Serial No. 492,431. 3 Claims. (Cl. 251—115.)



1. A hose and valve combination comprising a vertically disposed valve cage having a horizontal valve-seat intermediate its ends, the cage above the seat being adapted for connection to a source of fluid under pressure, a valve head normally resting on said seat, and a flexible hose secured to the cage and normally depending therefrom in axial alinement therewith, and a relatively long stem rigid with and depending from the valve head so as to project into the hose a certain distance whereby with the lateral deflection of the adjacent portion of the hose in any direction from a straight depending position, the stem will be tilted sideways and the head tilted on its seat to open the valve.

1,864,979. RECEPTACLE. HAROLD B. CRANSHAW, Newton, Mass., assignor to Burnitol Manufacturing Company, Charlestown, Mass., a Corporation of Maine. Filed Mar. 17, 1931. Serial No. 523,260. 12 Claims. (Cl. 4—274.)



1. A blank for a folded receptacle of sheet material comprising a side portion, corners integrally joining opposite edges of said portion, the first corner folding along one side of said portion and the second corner folding along the same side of said portion over the first corner, each corner comprising a first gusset nearer said portion and a second gusset overlapping the first gusset more remote from said portion, and a flap on the first corner folding away from said portion over the first gusset of the second corner and between the two gussets of the second corner.

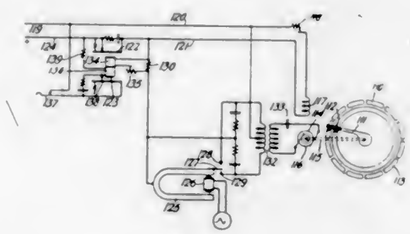
1,864,980. VAPORIZER. FRANCIS J. CURRAN, Chicago, Ill. Filed Sept. 6, 1930. Serial No. 480,035. 9 Claims. (Cl. 167—3.)

5. A vaporizer comprising a porous, cup-shaped block of balsa wood, impregnated with a gum and a volatile substance having medicinal properties, a coating of asbestos on the interior of the block, an electric light bulb positioned in and supporting the block and adapted, when energized,



to drive the volatile substance from the block, the block having a recess in the top thereof for containing a supply of the volatile substance.

1,864,981. CIRCUIT BREAKER FOR MOTORS IN SIGNALING SYSTEMS. AUSTEN M. CURTIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 20, 1929. Serial No. 356,753. 8 Claims. (Cl. 172—293.)



1. A motor driving and controlling means comprising, in combination a synchronous motor having an armature supplied with a alterating current and a separately excited field, a drive relay having a vibrating armature connected in a circuit with a source of electromotive force to produce said alternating current, and automatic means for opening the field circuit when the relay armature ceases vibrating, to prevent the field from stopping the motor abruptly.

1,864,982. CHAIN POST BINDER. JAMES H. DAVISON, Chicago, Ill., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Mar. 31, 1930. Serial No. 440,202. 3 Claims. (Cl. 129—41.)



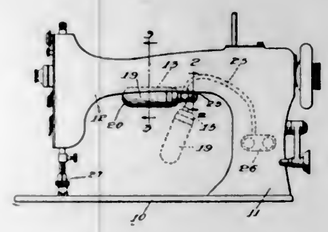
3. In a chain post binder, a pair of clamping members, flexible posts connecting said clamping members, said posts having flanged heads adapted for bearing upon the loose sheets and means for locking said heads in the adjacent clamping member.

1,864,983. SAFETY GLASS. WILLIAM CHARLES DAVIS, London, England. Filed Apr. 10, 1929. Serial No. 354,078. 3 Claims. (Cl. 49—92.)



1. A safety glass comprising two sheets of glass with a sheet of an elastic transparent material therebetween, and a urea-thiouren-dicyandiamid resin-cellulose ester adhesive composition binding the glass sheets to said intermediate sheet.

1,864,984. ELECTRICALLY LIGHTED SEWING MACHINE. JAMES W. DAWSON and FRANK A. GARRIGAN, Belvidere, Ill., assignors to National Sewing Machine Company, Belvidere, Ill., a Corporation of Illinois. Filed Mar. 12, 1931. Serial No. 521,942. 1 Claim. (Cl. 240—2.14.)



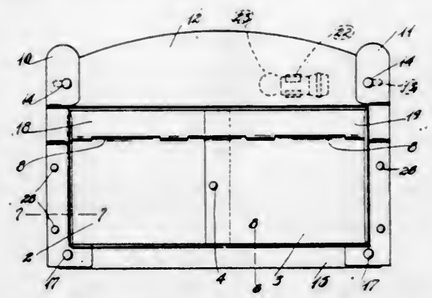
The combination of a sewing machine having a bed plate, upright standard, overhanging arm and stitch forming mechanism, the lower wall of the arm being slotted longitudinally of the arm, with an electric lighting device pivotally mounted on the lower wall of the overhanging arm at the rearward end of the slot, said lighting device comprising an electric lamp, a socket for holding the lamp, a substantially tubular reflector closed at one end and of slightly greater diameter than said slot, mounted on the socket and enclosing the lamp, said reflector normally engaging the sides of the slot in the arm and having ventilator slots in its upper wall communicating with the interior of said arm and an elongated relatively narrow slot in its wall beneath the lamp, whereby the ventilated lamp is invisible to the user and rays of light are normally cast only upon the bed plate and stitch forming mechanism.

1,864,985. METHOD OF MANUFACTURING CELLULOSE. JOAQUIN JULIO DE LA ROZA, Sr., Tuinucu, Cuba. Filed May 1, 1928. Serial No. 274,367. 5 Claims. (Cl. 92—11.)

1. A method of treating sugar cane fiber to produce cellulose of high alpha content, which includes, treating the fiber with a dilute sulphurous acid solution containing no base and thereafter treating the fiber with a dilute alkaline solution.

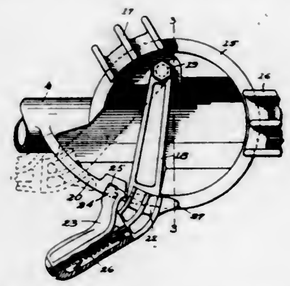
1,864,986. LICENSE PLATE HOLDER. JOSEPH G. DICAIRE, Flint, Mich. Filed June 29, 1931. Serial No. 547,593. 4 Claims. (Cl. 40—130.)

1. A license plate holder and illuminator comprising a longitudinally adjustable main section adapted to receive a license plate, an upper section connected at each end of the main section and offset into a plane forward of the main section, an adjustable cover connected to the main



section, a lamp mounted thereon for directing the light onto the license plate, and means for holding said cover in closed position.

1,864,987. MINING DRILL. EDWARD J. DOOLEY, Peoria, Ill.; Catherine L. Dooley, administratrix of said Edward J. Dooley, deceased, assignor to Dooley Brothers, Peoria, Ill., a Corporation of Illinois. Filed May 28, 1928. Serial No. 281,049. 6 Claims. (Cl. 255—53.)



1. In a drill the combination of a post, a turn table for carrying drilling mechanism and carried by the post, a drilling mechanism main frame, an undercut lug carried by the main frame and for co-operating with the turn table to mount the drilling mechanism main frame thereon, a movable undercut lug forming a co-operating member to complete the mounting of the drilling mechanism main frame, a carrying member for the movable undercut lug and for moving said lug to engaged or disengaged position, means for latching the movable undercut lug in engaged position, and drilling mechanism carried by the main frame.

1,864,988. AMMONIA ABSORBENT AND PROCESS OF MAKING THE SAME. CHARLES RAYMOND DOWNS, Sound Beach, Conn., assignor to Davis Emergency Equipment Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 5, 1930. Serial No. 479,919. 16 Claims. (Cl. 252—2.5.)

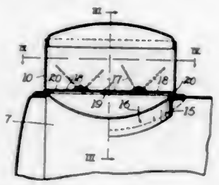
1. An ammonia removing composition comprising substantially dry gel granules the interstices of which hold an organic acid in solution with water.

1,864,989. CONTACT PIN FOR ELECTRIC PLUGS. GOTTFRIED MAAG-ECKENFELDER, Zurich, Switzerland. Filed May 22, 1928, Serial No. 279,722, and in Germany June 27, 1927. 3 Claims. (Cl. 173—361.)

1. An improved contact pin for electric plugs, comprising a body portion having a longitudinal slot at a point

intermediate its ends, a contact member in said slot for movement radially of the body portion and also for longitudinal tilting movement and a C-shaped spring in said body portion the ends of which form a resilient support for said contact member.

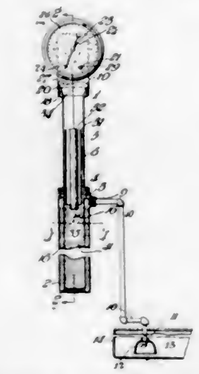
1,864,990. TANK CAR STRUCTURE. LOUIS E. ENDSLEY, Pittsburgh, Pa. Filed Mar. 20, 1931. Serial No. 523,970. 10 Claims. (Cl. 105—358.)



1. A vehicle having a tank-like body of elongated form disposed in parallelism with the line of movement of the vehicle, a dome extending upwardly from a point adjacent to each end of the said body, the said domes having communication with the interior of the body to permit displacement of liquid lading, and check valve devices permitting relatively free flow of liquid into said domes, but retarding backflow therefrom.

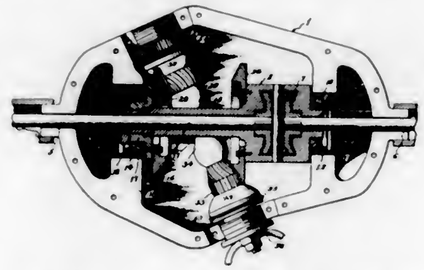
2. A vehicle having a tank-like body of elongated form disposed in parallelism with the line of movement of the vehicle, a dome extending upwardly from a point adjacent to each end of the said body, the said domes having communication with the interior of the body to permit displacement of liquid lading, and vent pipes each connected at one end to the lower portion of one of the domes and having means adjacent to its other end for communication with the atmosphere.

1,864,991. LIQUID LEVEL INDICATOR. THOMAS M. EYNON, Philadelphia, Pa. Filed Aug. 8, 1922. Serial No. 580,401. 1 Claim. (Cl. 73—54.)



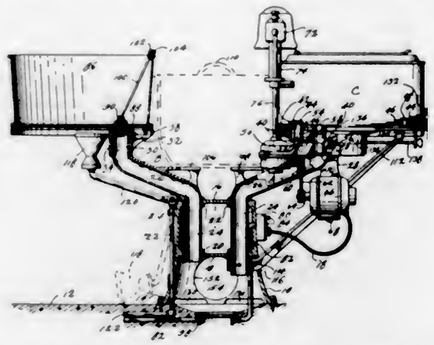
A gauge for indicating the level of liquid within a tank, comprising a bell shaped member disposed near the bottom of said tank and forming an air chamber, a chamber having a liquid therein, a second chamber communicating with said first chamber at the bottom thereof, a pipe leading from the top of said second chamber to the top of said bell shaped member, an open ended hollow counterweight, a float closed at its bottom and disposed within said counterweight, flexible members from which said counterweight and said float are suspended within said first mentioned chamber whereby the relative positions of said float and said counterweight may be varied by the rise and fall of the liquid in said first mentioned chamber due to a change in the level of the liquid in said tank, and an indicating device operatively connected to and adapted to be actuated by said flexible members to indicate in volumetric units the change in the relative positions of said counterweight and said float.

1,864,992. SPEED CHANGING GEAR. HAROLD E. FATLAND, Chicago, Ill. Filed Feb. 28, 1929. Serial No. 343,360. 3 Claims. (Cl. 74—57.)



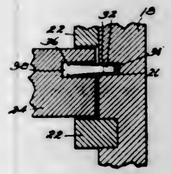
1. The combination with a differential driving mechanism, of axle sections driven thereby, a driving unit consisting of a pair of shafts disposed in angular relation to the axle sections, a connecter securing the ends of the shafts and having a groove to receive the axle sections, a gear rotatable on each shaft, a pair of gears connected with the differential mechanism for driving the axle sections, and means for selectively interlocking the gears of the unit thereto for selectively driving the differential driving gears.

1,864,993. LAUNDRY APPLIANCE WITH ROTATABLE TUBS. JOHN G. FEHN, Des Moines, Iowa. Filed Sept. 24, 1928. Serial No. 307,800. 4 Claims. (Cl. 68—37.)



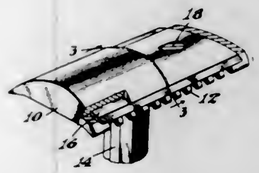
1. In a laundry appliance, a base having a vertical opening therein adjacent one edge, a laterally extending arm having a vertical portion at the inner end pivotally received in said opening, and a container support on the outer end of said arm, said support being pivoted on said arm at a position materially off center of the support, whereby the container support may be moved to a position adjacent the axial center of the base.

1,864,994. WEATHERSTRIP FOR SLIDING CLOSURES. HARRY B. FORESMAN, Enid, Okla., assignor to Lock Joint Window Company, Kansas City, Mo., a Corporation of Delaware. Filed Feb. 19, 1930. Serial No. 429,729. 5 Claims. (Cl. 20—69.)



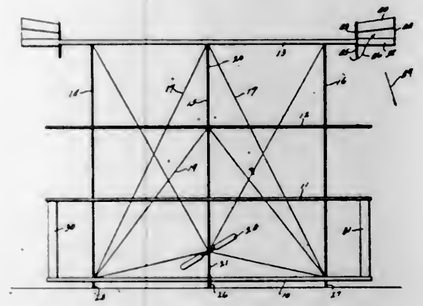
1. A window structure comprising a frame, including side stiles; grooves formed by the stiles; frames slidably mounted between said stiles; grooves formed by the frames along the sides thereof in direct opposed relation to the grooves formed by the stiles; and a strip of tapered cross-section extending into the grooves of stile and frame, whereby the same is floatingly positioned in the operative position to permit of a transverse rocking movement of the strip.

1,864,995. RAZOR. THOMAS H. FROST, Boston, Mass. Filed Mar. 10, 1931. Serial No. 521,453. 8 Claims. (Cl. 30—12.)



1. A safety razor comprising an integral body portion of thermosetting plastic material molded upon a thin flexible blade, holding the blade in transversely curved position and being itself reinforced by the blade.

1,864,996. AIRPLANE. WILLIAM F. GERHARDT, Ann Arbor, Mich. Filed June 29, 1927, Serial No. 202,351. Renewed Nov. 16, 1931. 15 Claims. (Cl. 244—29.)



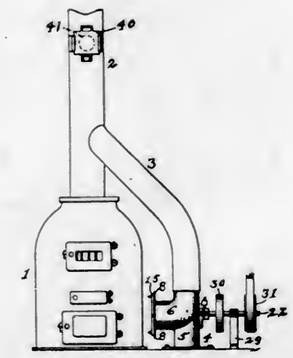
1. In an aircraft, a controlling surface tiltable to various angles of incidence about an axis inclined to the vertical, means for controlling said surface manually and an air vane adapted to rotate on an axis inclined as viewed from the front with respect to the axis of said surface for automatically controlling the position of said surface.

1,864,997. HULL. LUIGI GHIRARDI, Genoa, Italy. Filed Feb. 3, 1928. Serial No. 251,703. 1 Claim. (Cl. 114—56.)



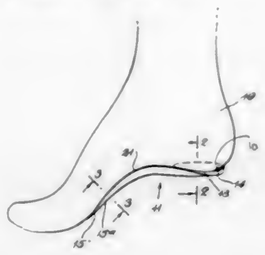
A hull, with the characteristics that the hull below the water with a maximum width at about one-third to one-fifth of the length of vessel includes waterlines from the bow in the shape of a drop and changes at the fore part into a shape above the water which has the usual waterlines tapering towards the bow, the edge of the stem reaching below the surface of the water, bow screws and the stern screws, the latter being located as far as possible towards the longitudinal center, and the upper structures seen in horizontal sectional view having a form of drop corresponding to the hull below the water line.

1,864,998. DRAFT MOTOR. PEPPINO GIORGIO, East Chicago, Ind. Filed Nov. 28, 1931. Serial No. 577,813. 3 Claims. (Cl. 253—38.)



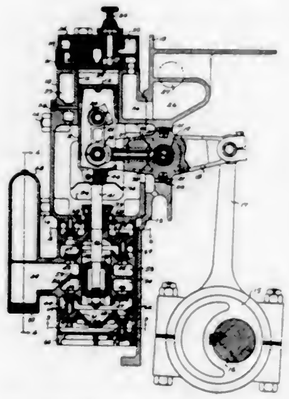
1. In a draft motor, the combination with a stack, of a motor unit communicating with said stack, said motor unit comprising a casing provided on its outer end with a pair of outwardly extending vertically-positioned bracket plates integral therewith, each bracket plate provided with an upwardly and downwardly extending ear formed in the same vertical plane, control plates laid flat against said bracket plates, each control plate provided near opposite ends with elongated slots and with parallel ears, said slots and ears over the ears of said bracket plates, bolts extending through the ears of said bracket plates and the elongated slots of said control plates for securing the control plates in an adjusted position upon said bracket plates, each control plate provided with a grip parallel with and between the ears on said plate, and a shaft provided with a propeller in said casing, substantially as shown and described.

1,864,999. FOOT APPLIANCE. HARRY J. GLUCKMAN, Brooklyn, N. Y., assignor of one-half to William Gluckman, Brooklyn, N. Y. Filed Apr. 19, 1929. Serial No. 356,412. 6 Claims. (Cl. 36—71.)



1. A foot pad comprising a heel portion and a tongue portion extending forwardly therefrom and disposed only on one side thereof, said heel portion having a longitudinal thinned portion, the rear outer edge portion of said heel portion being relatively thick to prevent side rolling movement of said foot.

1,865,000. PUMPING MEANS. MORRIS J. GOLDBERG, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 30, 1928. Serial No. 322,931. 10 Claims. (Cl. 103—4.)

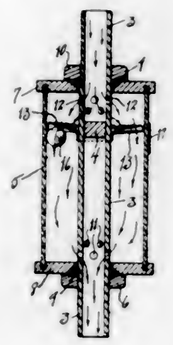


1. In a pump assembly, a pump body of sectional construction, a pair of aligned, rigidly connected pistons, a pair of aligned cylinders therefor, constituted by spaced sections of the assembly, an intake valve and an associated discharge valve, said valves being operatively related with one of said pistons, and one of said valves carried by a section disposed between the cylinder sections, and a second intake and discharge valve assembly carried in part by a section near one end of the assembly and operatively related to the other piston, said second valve assembly being out of communication with the first named set of valves, and piston-operating means including a rocker pivoted without, and extending within the pump body.

1,865,001. TREATMENT OF HYDROCARBON RESIDUES CONTAINING INORGANIC SUBSTANCES AND PRODUCT OBTAINED THEREBY. RALPH T. GOODWIN, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 3, 1928. Serial No. 290,285. 4 Claims. (Cl. 196—39.)

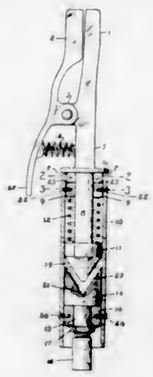
3. A heavy hydrocarbon oil prepared by treating with a small amount of acid in non-sludge-forming concentration, an alkali-containing tar derived by cracking oil in the presence of alkali, the treated oil being characterized by stability against the formation of organic and inorganic sediment.

1,865,002. GASOLINE SERVING APPARATUS. BUEL D. GRIFFIN, Fort Worth, Tex. Filed Aug. 12, 1931. Serial No. 556,523. 4 Claims. (Cl. 116—117.)



1. In a gasoline serving apparatus provided with a service pipe; a casing of transparent material inclosing a portion of said pipe, a plug located in said pipe within said casing and closing said pipe, said pipe having outlet openings above said plug and inlet openings below said plug within said casing for directing gasoline through said casing, baffle plates rigid with said pipe and located between said outlet openings and said inlet openings, said plates provided with arms curved upwardly and outwardly and having the edges thereof curved for causing a swirling motion of the gasoline, and floating balls cooperating with said plates.

1,865,003. ELECTRIC WELDING TONG. CARLOS E. HALL, Red Mountain, Calif. Filed Aug. 2, 1929. Serial No. 383,006. 9 Claims. (Cl. 219—8.)



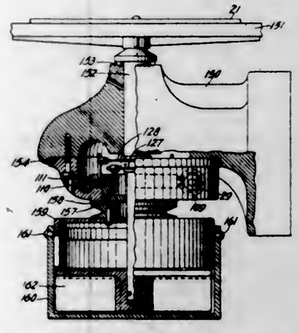
1. In a device of the kind disclosed, in combination, a welding bar tong supported on a conductor bar having a contact element at its lower end, an insulating handle containing a contact element and adapted to engage said contact element on said conductor bar and having means of attachment to a power cable, a spring normally holding said contacts together, and disconnecting means comprising a plurality of lugs on said conductor bar and a locking ring having recesses adapted to admit said lugs whereby said contacts are enabled to be forced together by said spring, and notches intermediate said recesses on the upper face of said ring adapted to receive said lugs whereby said conductor and contact element supported thereon is held apart from said contact element in said handle, substantially as described.

1,865,004. REFERENCE ELECTRODE. HORACE E. HARING, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1930. Serial No. 491,187. 10 Claims. (Cl. 204—5.)



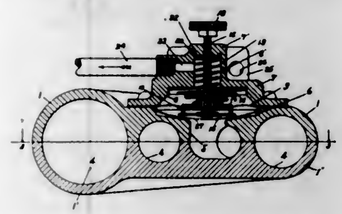
1. A half-cell comprising a vessel open at one end, a liquid electrode and an electrolyte of sufficient viscosity to retain said electrode in place in the vessel if the latter be inverted.

1,865,005. POWER TRANSMITTING MECHANISM. HENRY C. HARRISON, Port Washington, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed May 26, 1926, Serial No. 111,707, and in Germany Dec. 18, 1926. Divided and this application filed Jan. 28, 1929. Serial No. 335,609. 2 Claims. (Cl. 74—28.)



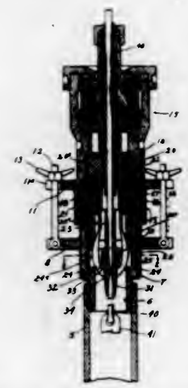
1. A gear wheel comprising a plurality of coaxial discs progressively and equally displaced around the circumference of the gear from the positions assumed during the cutting of the gear.

1,865,006. SUCTION HORN. HARRY C. HEATH, San Francisco, Calif. Filed Jan. 26, 1932. Serial No. 588,899. 17 Claims. (Cl. 116—142.)



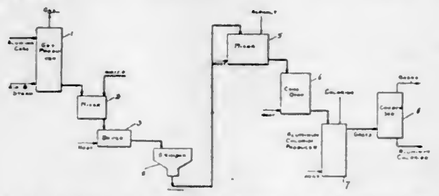
1. A horn having a sound passage formed at its inner end with an opening extending substantially at right angles to the axis of the sound passage, a flexible diaphragm secured across said opening and a valve opening in said diaphragm, means for closing said valve opening, and means for pneumatically moving said diaphragm for cracking the valve.

1,865,007. OIL SAVER. JOHN N. HICKS, Los Angeles, and CLAYTON SEVERNS, Long Beach, Calif. Filed June 30, 1930. Serial No. 464,887. 5 Claims. (Cl. 166—14.)



2. In an oil saving device, means adapted to surround a cable or tool pipe line and having a working fit with relation thereto to prevent escape of liquid or gas from the well; said means comprising upper and lower separable sections, the lower section being adapted for attachment to the upper end of a well casing, said lower section being provided with a chamber having an inwardly directed shoulder, a set of pendant dogs connected with said upper section and adapted to swing outwardly from each other to engage said shoulder, and a control member mounted between said dogs and adapted in one position to hold said dogs extended to engage said shoulder and in another position permitting said dogs to be retracted to disengage said shoulder.

1,865,008. PROCESS FOR THE MANUFACTURE OF ALUMINUM CHLORIDE. MELVIN M. HOLM, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Sept. 27, 1927. Serial No. 222,278. 12 Claims. (Cl. 23—95.)



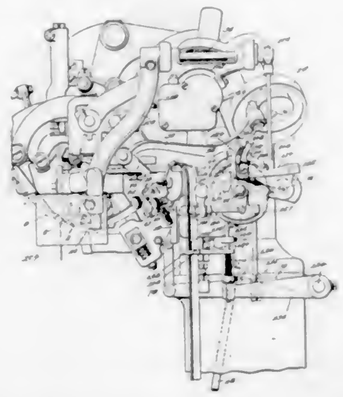
1. A method of producing a coke adapted for use in the manufacture of aluminum chloride and containing finely divided aluminous material, comprising contacting a finely divided aluminous material with an aqueous liquid, removing the liquid and coking a mixture of the treated aluminous material with a heavy hydrocarbon.

9. A method of manufacturing aluminum chloride comprising increasing the apparent density of a finely divided aluminous material by contacting said finely divided aluminous material with an aqueous liquid, removing the liquid, mixing the treated aluminous material with an asphaltic material, coking the mixture and subjecting the coke to the action of chlorine at an elevated temperature to produce aluminum chloride.

1,865,009. MACHINE FOR OPERATING UPON SHOES. CHARLES E. HOOD, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 19, 1928. Serial No. 262,804. 26 Claims. (Cl. 112—44.)

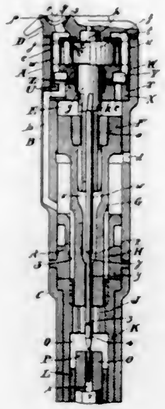
1. A machine for attaching welts to shoes while held in the hands of an operator having, in combination, welt

attaching mechanism, welt treating mechanism for operating upon the welt for a limited period during the operation of the welt attaching mechanism, means acting to render the welt treating mechanism active in starting the machine, devices for varying the start of the welt



treating period with relation to the start of the welt attaching, and means engageable by a shoe held and supported in the machine by the operator actuated automatically upon placing a shoe in the machine for controlling said devices in accordance with the size of the shoe being operated upon.

1,865,010. CLEANSING DEVICE FOR ROCK DRILLS. GEORGE W. HULSHIZER, Stewartsville, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 30, 1929. Serial No. 389,419. 5 Claims. (Cl. 121—10.)



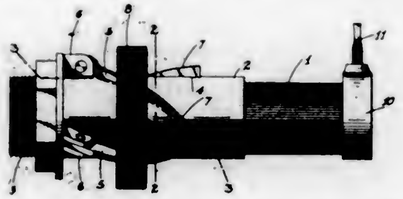
1. In a fluid actuated rock drill, the combination of a cylinder and a chuck, a hollow working implement extending into the chuck, a tube in the cylinder for conveying cleansing liquid into the working implement, a neck on the tube, a hammer piston reciprocable in the cylinder, a bore in the piston comprising a restricted portion through which pressure fluid flows to the working implement when said restricted portion lies in the same transverse plane as the neck, and means on said tube adapted to be engaged by the restricted portion of the piston at the end of its forward stroke.

1,865,011. RUBBER TABLE COVER. CHARLES A. HUPP, Indianapolis, Ind., assignor of one-half to Wakefield M. Wilt, Syracuse, Ind. Filed May 31, 1930. Serial No. 458,878. 3 Claims. (Cl. 45—68.3.)



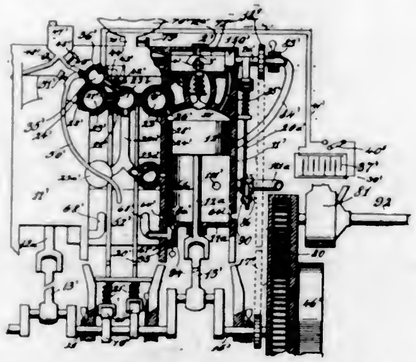
1. As a new article of manufacture, a molded rubber table cover comprising a body, a depending rubber skirt integral with the margin of the body, and an inwardly directed canvas flange, substantially non-stretchable, vulcanized to the lower edge of the skirt as a tacking strip.

1,865,012. ADJUSTABLE NOZZLE TIP. CLYDE E. JACKSON, Tracy, Calif., assignor of one-half to Alexander Nowak, Tracy, Calif. Filed Sept. 9, 1931. Serial No. 561,880. 8 Claims. (Cl. 91—44.)



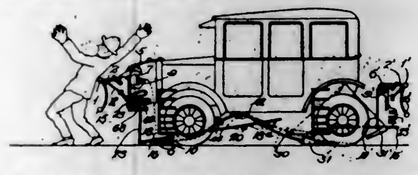
1. An adjustable nozzle comprising a length of flexible hose, and means associated with the hose to depress the same at will to form longitudinally extending spiral ribs therein.

1,865,013. INTERNAL COMBUSTION MOTOR. HEINRICH KARL, Jersey City, N. J. Filed Aug. 16, 1926. Serial No. 129,575. 3 Claims. (Cl. 123—76.)



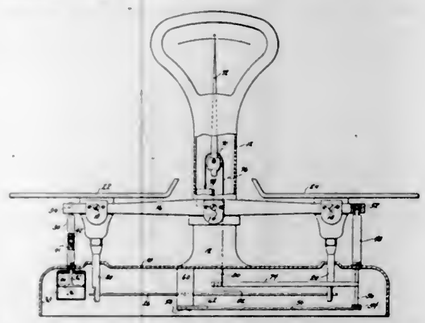
2. In an internal combustion motor comprising a working cylinder and a working piston therein and means for periodically introducing in said cylinder a charge of relatively slow-burning fuel and air, comprising also means for exploding the first charges or all of them when the fuel has a too low temperature, by means of explosion gas supplied separately, a means for making and for preventing communication between the working cylinder and the device that separately supplies said explosion gas, an exhaust port in said cylinder, another port in it situated a little nearer to the interior end of the cylinder than said exhaust port and a valve automatically closing at times and opening again said other port for receiving an amount of explosion gas that has been expanded to the capacity of the working cylinder just before the exhaust takes place, and a conduit leading from said other port to a chamber valve also automatically operated and a chamber therein adapted to communicate at times with said conduit and at other times also with the interior of said cylinder, said chamber in said chamber valve thereby receiving completely burned explosion gas from said cylinder by way of said other port and conduit, a port situated at the interior end of the cylinder and opened by said chamber valve when the piston is in its innermost position permitting thereby the explosive gas in said chamber to flow into the cylinder and ignite the new charge of fuel and air therein.

1,865,014. AUTOMATIC DEVICE FOR HORSELESS VEHICLES FOR THE PROTECTION OF PEDESTRIANS AND THE VEHICLE ITSELF. HEINRICH KARL, Jersey City, N. J. Filed Sept. 2, 1930. Serial No. 479,201. 14 Claims. (Cl. 293—45.)



1. In an automatic protecting device on vehicles, of displaceable bars in front of the vehicle body, a device with members that are extended laterally in front of the front wheels of the vehicle beyond the vertical plane of said front wheels, a blanket whose lower border is stretched between these laterally extended members and held in readiness for being spread, mechanism and means holding said device in suspended position, mechanism adapted to release said device when a person grasps one of said bars or when said bar is pushed backwards at the occurrence of a collision of said vehicle, said blanket arranged so as to form a protecting curtain when said device is released, preventing thereby a person who has been struck by said vehicle from getting under the wheels of that vehicle.

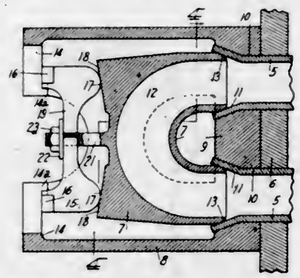
1,865,015. SCALE MECHANISM. LEONARD O. KELLEY, Detroit, Mich., assignor to The Standard Computing Scale Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 20, 1931. Serial No. 531,345. 11 Claims. (Cl. 265—68.)



1. In a balance having a weight pan, a load pan, a lever connecting the pans, a resilient arm operatively connected to the load pan to check the movement thereof, and an indicator pointer operatively connected to the end of said lever by an adjustable connecting means.

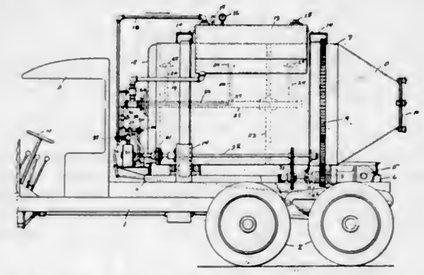
1,865,016. RETURN BEND. WILLIAM E. KIRKPATRICK, Springfield, Ohio. Filed July 25, 1930. Serial No. 470,581. 5 Claims. (Cl. 285—20.)

2. In a return bend for connecting the ends of a pair of tubes, a housing having openings to receive said tubes, the ends of said tubes being flared to retain said housing thereon, a tubular connecting member mounted within said housing and having its ends rounded and adapted to enter the flared ends of said tubes and form tight joints there-



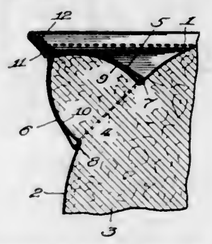
with, and a pressure exerting device interposed between said housing and said connecting member to press the ends of the latter into engagement with said tubes.

1,865,017. APPARATUS FOR MIXING CONCRETE. ALBERT KNOWLES, San Francisco, Calif., assignor to Transit Mixers, Inc., San Francisco, Calif., a Corporation of Nevada. Filed Jan. 27, 1930. Serial No. 423,577. 6 Claims. (Cl. 83—73.)



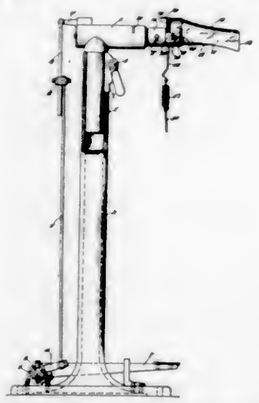
1. A transit concrete mixer comprising a motor truck, a frame tiltably mounted on the truck, a mixing container mounted upon the frame for tilting therewith, an air-tight door for discharge of the concrete, a pump carried on the frame piped for exhausting the container of air, and means for operating the mixer and pump from the truck engine power.

1,865,018. ROLL EDGE FOR MATTRESSES OR CUSHIONS. ROMAN KORNEY, Chicago, Ill., assignor of one-half to The Rome Company, Inc., a Corporation of New York. Filed Feb. 24, 1931. Serial No. 517,689. 3 Claims. (Cl. 5—360.)



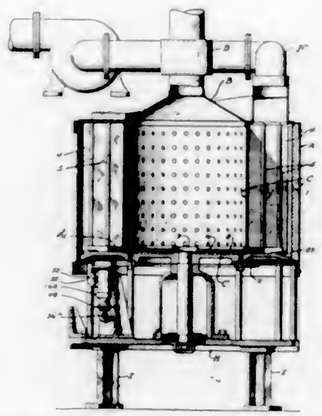
3. The combination with a mattress or cushion, including a covering and an edge roll produced by coarse diagonal stitching, of a sheathing enclosing said edge roll and extending inwardly from the corner of the mattress or cushion across and concealing the stitching, and means securing the inner edges of the sheathing to the cover.

1,865,019. TREEING JACK. JAMES D. KRIVE, St. Louis, Mo., assignor to International Shoe Company, St. Louis, Mo., a Corporation of Delaware. Filed June 9, 1930. Serial No. 459,888. 14 Claims. (Cl. 12—116.)



1. A machine of the character described comprising a rotative support for engaging the last of a lasted shoe and supporting the lasted shoe for rotation about the axis of said support in a relationship in which the longitudinal axis of the lasted shoe is approximately radial to said axis of said support, a tubular leg expander device, and means pivotally supporting one end of said leg expander device in position to permit the opposite end of said device to enclose the upper portion of the last in the lasted shoe.

1,865,020. APPARATUS FOR DRYING CAN ENDS CONTAINING A SEALING COMPOUND. FRANK KRUEGER and HENRY DOUGLASS, San Francisco, Calif., assignors to Pacific Can Co., San Francisco, Calif., a Corporation of Nevada. Filed June 12, 1929. Serial No. 370,444. 13 Claims. (Cl. 34—32.)

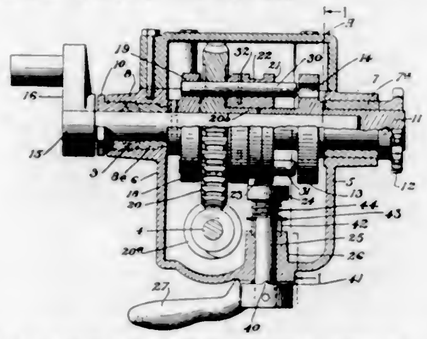


12. A can end drying machine comprising a support upon which the can ends are supported in stack formation with the bottom-most can end resting on the support and the remaining can ends resting one on top of the other, said support being cut away below the bottommost can end to provide a space beneath said can end which terminates in an inclined surface, means for delivering can ends one by one into the space below the lowermost can end and to direct the can end delivered up the inclined surface and under the lowermost can end in the stack, and means for subjecting the can end stack to a drying medium.

1,865,021. CEMENT AND PROCESS OF MAKING. HARRY MCC. LARMOUR and STEPHEN C. PIERCE, Jr., Merced, Calif., assignors to Yosemite Portland Cement Corporation, Merced, Calif., a Corporation of Delaware. Filed Nov. 8, 1929. Serial No. 405,837. 3 Claims. (Cl. 106—27.)

1. The process of controlling set of Portland cement which comprises incorporating from ¼ of 1% up to about 1½% of manganous sulfate therewith.

1,865,022. DRIVING MECHANISM. ALBERT G. LARSON, Piedmont, Calif. Filed June 6, 1929. Serial No. 368,754. 3 Claims. (Cl. 192—48.)



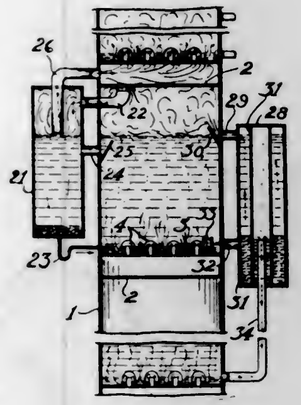
3. A device of the character described comprising a casing, a pair of co-axially disposed independently rotatable driven shafts journalled in opposite sides of the casing, one of said shafts having a recessed portion in one end and the other shaft being journalled in said recess, collars secured to said shafts and having holes formed therein, a driving gear also having holes formed therein, a clutch member freely rotatable with relation to said driven shafts, pins carried by said clutch member and extending through the holes in said driving gear, said pins being adapted through movement of the clutch member to be inserted into the holes formed in either of said collars for driving the same and also being adapted to be inserted into the holes of both of said collars and driving both driven shafts simultaneously.

1,865,023. BOTTLE CLOSURE AND SEDIMENT TRAP. NATHAN J. LEAVY, Los Angeles, Calif. Filed Mar. 5, 1930. Serial No. 433,304. 3 Claims. (Cl. 215—73.)



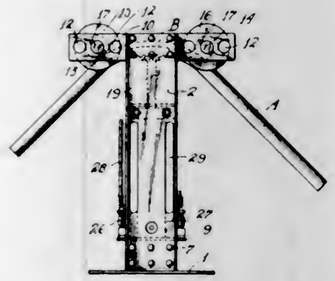
1. A bottle closure and sediment trap comprising a cup, a resilient coupling to seal the cup to the neck of a bottle and provided with a bore, and a tube in said bore projecting into the cup.

1,865,024. APPARATUS FOR COUNTER CURRENT TREATMENT. ROBERT B. LEBO, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 3, 1930. Serial No. 486,205. 8 Claims. (Cl. 261—108.)



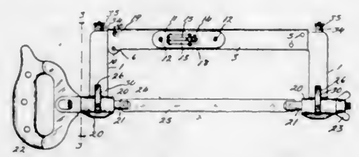
1. Counter-current apparatus comprising a shell, spaced substantially horizontal perforated plates in the shell having bubble caps associated with the perforations, containers communicating with the shell above the perforated plates by a plurality of conduits to receive and stratify mixed liquids from the shell, and a conduit leading from the normally heavier liquid containing portion of the container and discharging above a lower perforated plate, the lower-most section of the shell having an inlet and an outlet below the perforated plate, the upper section of the shell having an outlet and each section having an inlet above each plate.

1,865,025. HYDRAULIC PIPE BENDING MACHINE. GUSTAVE LIDSEEN and JOHN E. FLANAGAN, Chicago, Ill. Filed Feb. 17, 1930. Serial No. 428,879. 3 Claims. (Cl. 153—38.)



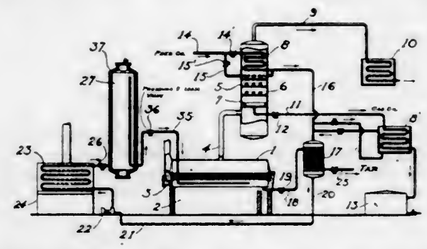
1. A pipe bending machine including a pair of spaced bending rollers, a plunger movable between said rollers for moving a pipe against the same for bending purposes, said plunger having a collar about its end adjacent said rollers and a flange spaced from said collar, said flange having oppositely disposed slots therein, a pipe receiving shoe having a seat for engaging said collar and having projecting lugs entering said slots when applied to said plunger, said shoe being retained on said plunger by being turned to move said lugs out of register with said slots, and hydraulic means on said machine for actuating said plunger.

1,865,026. ADJUSTABLE SAW FRAME. ALEXANDER LOGA, Dearborn, Mich., assignor, by direct and mesne assignments, of one-fourth to Michael Ciungan, Detroit, Mich., and one-fourth to John Pavel, Dearborn, Mich. Filed June 10, 1930. Serial No. 460,216. 7 Claims. (Cl. 145—34.)



1. An arched saw frame comprising a pair of frame members formed with a pair of spaced parallel arms and with a pair of slidably overlapped bars rigidly projecting from corresponding ends of said arms, a pair of blade holders carried by the other ends of said arms, means retaining said bars in sliding engagement, one of said bars being formed with a toothed rack extending longitudinally thereof, a shaft journaled in the other of said bars, a pinion upon said shaft engaging said rack and proportioned to relatively shift the frame members a distance equal to the difference in length between two standard blades responsive to one revolution of said actuator, an actuator carried by said shaft for rotating same, and means for latching said actuator in certain position of its rotation.

1,865,027. APPARATUS FOR CRACKING REDUCED CRUDES AND THE LIKE. NATHANIEL E. LOOMIS, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 10, 1926. Serial No. 93,597. 1 Claim. (Cl. 196—107.)

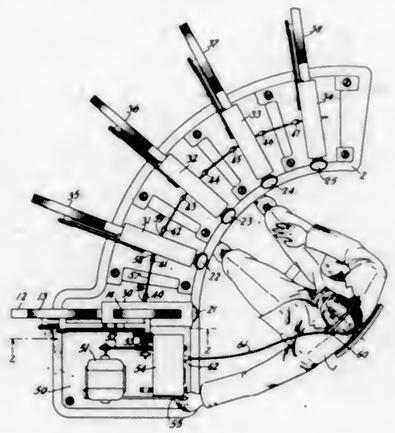


Apparatus for cracking reduced crude oil comprising a cracking coil, a digesting drum connected to receive oil from the coil, a fractionating device, a chamber connected with said device, internal flues for at least partially heating the chamber, a connection for passing the cracked product directly and without substantial loss of heat from the digesting drum into the chamber, means for separately withdrawing the gas oil fraction from the fractionating device, heat exchange coils in the upper part of the fractionating device, a heat exchanger through which the hot tar from the chamber is passed and means for supplying the reduced crude through said heat exchange coils and heat exchanger to the cracking coil.

1,865,028. FILM EDITING SYSTEM. RUDOLPH F. MALLINA, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1930. Serial No. 432,378. 2 Claims. (Cl. 88—14.)

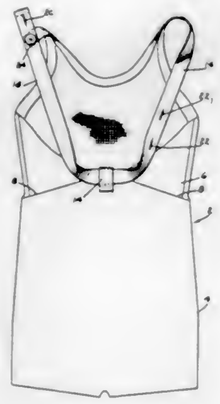
1. A film editing system in which a plurality of synchronously operated motion picture films may be simultaneously observed and compared with a synchronously operated sound record film for the selection of scenes to be composited into a master film, a plurality of picture

editing machines each having a viewing lens for magnifying the picture and at least one having a sound reproducing unit, means including a framework for supporting said machines in an arc with the optical center lines of their respective viewing lenses forming continuations of radii from the center of said arc and so arranged that an editor may view any of said pictures from the center of said arc, means for simultaneously and synchronously running the picture and sound films through said ma-



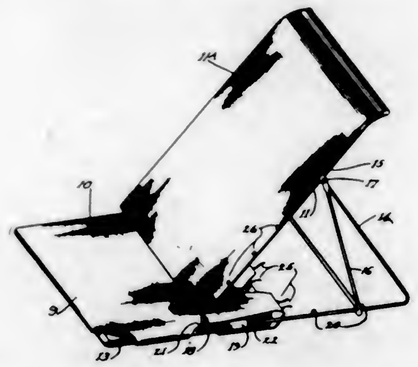
chine, means for controlling the direction of travel of said films for repeated inspection and comparison of the various pictures with accompanying sound, means for stopping said machine and consequently the movement of said film at any film sections during the progress of the films through said machines, and means arranged to accommodate the marking of a plurality of films to be spliced together at the positions marked to form a master picture film whose parts are synchronously positioned with relation to the sound record on said sound film.

1,865,029. BATHING SUIT. NICHOLAS L. MARTZ, Minneapolis, Minn., assignor to The Munsingwear Corporation, Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 24, 1931. Serial No. 564,820. 3 Claims. (Cl. 2—67.)



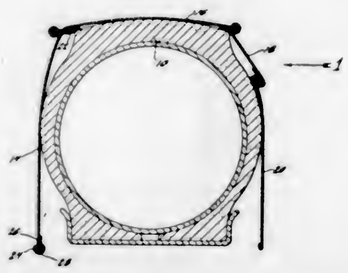
1. In a bathing suit, a strap adapted to be selectively passed over the wearer's shoulders or around the wearer's neck to support said bathing suit, means for securing the strap adjacent its first end to the front of the bathing suit at its first side and at a point above the bust line, means for detachably securing said strap adjacent its second end to the front of the bathing suit at its second side and at a point above the bust line, means for detachably securing said strap to the back of the bathing suit thereby to hold the former in tension when it is to be passed over the wearer's shoulders, and means associated with said strap at a point intermediate the ends thereof for detachably securing said strap at such point to the front of the bathing suit at said second side to hold the strap in tension when passed around the wearer's neck to support the bathing suit.

1,865,030. BACK REST. WILLIAM TERRANCE MCCAULEY, Fullowfield, Ontario, Canada. Filed June 24, 1931. Serial No. 546,606. 2 Claims. (Cl. 155—154.)



1. A combined seat and back rest, comprising a rectangular frame having a slip-on cover thereon, angle brackets on the seat frame, an adjustable back rest pivotally attached to the rectangular frame, a rearwardly extending U-shaped frame having projections on the sides thereof and adjustably connected to the angle brackets, and a support coacting with the back rest and the U-shaped frame, as and for the purpose specified.

1,865,031. TIRE COVER. THOMAS J. MCCORMICK and ROBERT E. LINN, Detroit, Mich.; said Linn assignor to said McCormick. Filed Jan. 30, 1931. Serial No. 512,355. 7 Claims. (Cl. 150—54.)



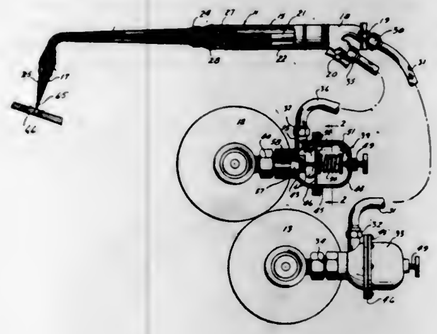
6. A tire cover made of a freely pliable material and having substantially flat tread and side walls joined to each other and meeting in a substantially circular line, and a C cross section contraction-resisting, stiff ring of metal or the like secured to and externally encompassing portions of the cover adjacent the line of juncture between the walls, and serving to distend the walls at the line.

1,865,032. ELECTRIC FLOOR POLISHING MACHINE. WILLIAM L. MCGEE, Media, Pa. Original application filed Feb. 6, 1929, Serial No. 337,783. Divided and this application filed Mar. 20, 1930. Serial No. 437,329. 4 Claims. (Cl. 15—49.)



1. In a floor polishing machine having a vertical power driven shaft and a circular polishing member adapted to rest on the floor and to rotate upon a vertical axis, the combination of means to detachably connect said polishing member to said shaft comprising an axial socket in said polishing member into which the lower end of said shaft fits and is slidable longitudinally, the shape of said end of said shaft and of said socket in transverse cross-section being such as to preclude any relative rotation of said shaft with respect to said polishing member, said end of said shaft and said socket forming clutch members, the surface of one of said clutch members being provided with a spring pressed plunger normally held projecting from said surface, and the surface of the other of said members being provided with a transverse groove into which said plunger catches when said polishing member is slipped over and slid longitudinally on said shaft.

1,865,033. METHOD OF PREVENTING POPPING OF TORCHES. CHESTER MOTT and GERALD G. SPENCER, Denver, Colo., assignors, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 26, 1928. Serial No. 328,428. 9 Claims. (Cl. 158—27.4.)



1. A method of preventing popping in a torch which burns a combustible mixture supplied thereto from separate fuel gas and combustion-supporting gas sources, said method comprising: delivering fuel gas and combustion-supporting gas at substantially equal pressures to said torch, and enriching said combustible mixture when a tendency occurs for said torch to pop.

1,865,034. MILK WEIGHT GAUGE AND FEEDING GUIDE. CHARLES H. NAATZ, St. Johnsbury, Vt. Filed Feb. 23, 1929. Serial No. 342,114. 2 Claims. (Cl. 73—166.)

2. A milk pail having an aperture therein, a countersunk seat surrounding said aperture and a sash comprising a pair of frames having a pane of glass therebetween disposed in said seat, said pane of glass having indicia

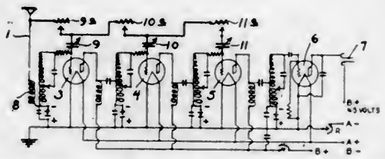


thereon, said indicia being adapted to indicate the quantity by weight of the contents of the milk pail and the ration value thereof.

1,865,035. PROCESS FOR THE MANUFACTURE OF PRINTER'S INK. LINCOLN CHARLES NEALE, Flemington, Australia. Filed Nov. 17, 1928, Serial No. 320,213, and in Australia Sept. 21, 1928. 2 Claims. (Cl. 134—36.)

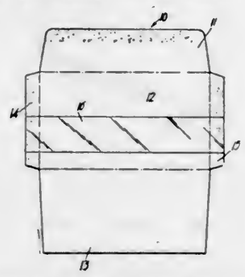
1. A process of making printer's ink, which comprises comminuting waste vulcanized rubber, digesting the comminuted rubber in a hydrocarbon oil at a temperature sufficiently high to produce a liquid mass, incorporating into the liquid mass pigmenting agents of the type of carbon black and a varnish of the "drying" class, and grinding the resulting mixture to ensure a smooth consistency.

1,865,036. RADIO CIRCUIT AND APPARATUS. DAVID A. NICOSIA and HARRY SIPPEL, Chicago, Ill. Filed Mar. 16, 1927. Serial No. 175,659. 9 Claims. (Cl. 250—20.)



1. In a radio circuit, an antenna, a tuned amplifying circuit including parallel thermionic valves connected to said antenna, and parallel impedances of high value connected to the grids of said thermionic valves and to the antenna at a point in advance of its connection to said amplifying circuit.

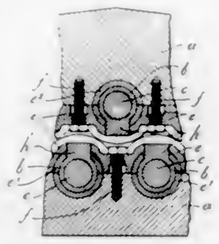
1,865,037. METHOD OF MAKING WINDOW ENVELOPES. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 19, 1927. Serial No. 220,294. 5 Claims. (Cl. 93—35.)



1. The method of making paper containers which comprises forming a composite web having a continuous, longitudinally extending strip of transparent material and a continuous, longitudinally extending, strip of relatively opaque paper adjacent each edge of said transparent strip, severing the composite web into individual blanks, each blank thereby having a transparent zone extending the en-

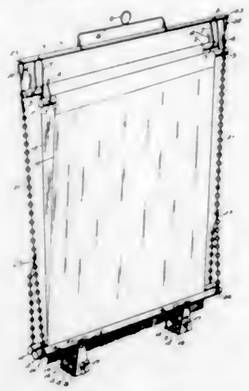
tire length, thereof and intermediate the width thereof, and thereafter completing the manufacture of the containers while maintaining the transparent area fully exposed throughout one face of the container.

1,865,038. BEARING FOR FELTING ROLLS. GEORGE OLDHAM, Denton, near Manchester, England. Filed Aug. 26, 1929, Serial No. 388,565, and in Great Britain Dec. 4, 1928. 1 Claim. (Cl. 308—74.)



In a felting machine a supporting frame work, a plurality of bearing boxes mounted thereon in side by side relation, bearing box cap members for said boxes, each of said cap members having an aperture therein substantially centrally thereof, said cap members being formed with a recess in each edge thereof intermediate the ends and a common securing means for fastening the adjacent sides of each pair of caps in position on the frame work, cylindrical one piece bearing members positioned within the boxes for longitudinal displacement and adapted to receive the felting rolls of the felting machine, said bearing members being provided with cylindrical lugs intermediate the ends thereof adapted to be positioned in the aperture in the bearing caps to prevent rotative and longitudinal movement of the bearing within the box.

1,865,039. CURTAIN HANGER. WILSON H. PACKARD, Erie, Pa. Filed July 8, 1929. Serial No. 376,710. 10 Claims. (Cl. 45—24.)



1. In a curtain hanger, the combination of a plurality of curtain-receiving poles in substantially parallel relation and one in front of the other; and a clamp clamping the opposite ends of the curtains directly face to face.

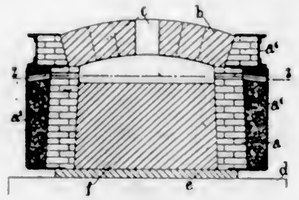
1,865,040. LINGERIE CLASP. ALICE E. PARKER, Venice, Calif. Filed Dec. 22, 1930. Serial No. 504,086. 1 Claim. (Cl. 24—73.)

In a device of the class described the combination of a safety pin formed of a piece of spring wire bent into a hook and loop on one end and a loop in the other end separated by a straight portion, and another straight portion bent back substantially parallel with the first straight portion with the end of the straight portion pointed to pass through fabric and to engage with the hook of the pin; a chain secured to the first loop; and a spring clasp formed of a spring bent into a semi-circular portion and an



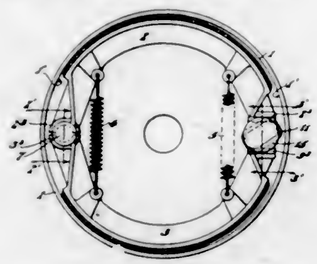
elongated semi-ovoidal portion with one side of the ovoidal portion cut and lapped over to form the engaging portion, said spring clasp to be engaged with the end of the chain and to engage the second loop of the pin substantially as described.

1,865,041. CASTING OF INGOTS. CHARLES ALGERNON PARSONS and HUGH MALCOLM DUNCAN, Newcastle-on-Tyne, England; said Duncan assignor to said Parsons; Katharine Parsons, Vincent Thompson, and Frederick Gordon Hay Bedford legal representatives of said Charles Algernon Parsons, deceased. Filed Mar. 21, 1930, Serial No. 437,631, and in Great Britain May 3, 1929. 5 Claims. (Cl. 22—200.)



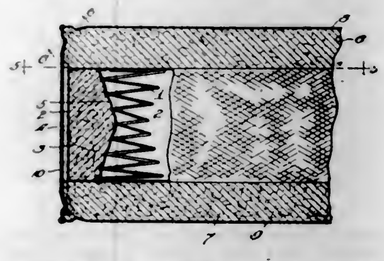
1. A process of casting metal ingots, which comprises preheating the refractory walls of an open-topped mould to a high temperature, pouring the metal into said preheated mould, withdrawing heat from said molten metal substantially wholly from the bottom thereof, and from points disposed above the free surface of said molten metal simultaneously and continuously concentrating heat directly on a narrow peripheral strip of the superficial area of said molten metal, thereby to prevent premature top freezing due to cooling of the upper mould walls and so to maintain the substantial horizontality of the isothermals throughout the cooling process.

1,865,042. BRAKE FOR MOTOR VEHICLES. GEORGE E. L'ELLISSIEN, Holyoke, Mass. Filed Dec. 22, 1928. Serial No. 327,999. 3 Claims. (Cl. 188—78.)



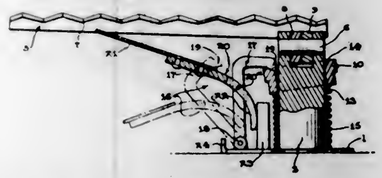
1. A brake mechanism comprising in combination with a braking drum, a pair of shoes in the drum, the opposite ends of which shoes are formed with curved surfaces located at right angles to each other, one curved surface being to permit the brake shoes to rise and fall in the drum in a vertical plane and the other curve to permit the shoes to tip laterally of the drum, a supporting pin having an operating cam with curved surfaces corresponding with the curvature of the ends at the opposite ends of the brake shoes.

1,865,043. SPRING FILLED MATTRESS. LOUIS E. PITTONI, Jamaica, N. Y., assignor to The Rome Company, Inc., a Corporation of New York. Filed May 17, 1928. Serial No. 278,614. 6 Claims. (Cl. 5—351.)



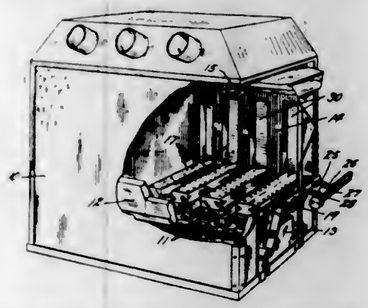
1. A mattress core comprising a cushion composed of vertical coiled springs enlarged in diameter toward the top, and a pad of about the same height as the springs extending around the sides of the cushion and in intimate contact with the outermost springs from top to bottom.

1,865,044. TRAP. ZERO POLAIRE, Salem, Oreg. Filed Jan. 17, 1931. Serial No. 509,438. 6 Claims. (Cl. 43—88.)



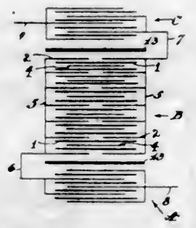
1. In a trap, a pair of jaws, resilient means for actuating said jaws, an annular member having an annular depression therein, a lever having a depending portion for engagement with said annular member in said depression for maintaining said resilient means under pressure, and tripping means for operating said retaining means to the released position upon actuation by an animal.

1,865,045. CONVERTIBLE GAS FURNACE CONSTRUCTION. BENJAMIN F. POWELL, Denver, Colo., assignor to Thompson Mfg. Company, Denver, Colo. Filed Apr. 7, 1931. Serial No. 528,272. 4 Claims. (Cl. 110—22.)



1. A gas burner for furnace fireboxes comprising: a gas manifold arranged to extend to the exterior of said firebox; a series of burners extending substantially at right angles from said manifold and in parallel relation with each other; a wall member provided with a series of recesses opposite said burners; and means for rotating said manifold so as to swing said burners into said recesses.

1,865,046. ELECTRICAL CONDENSER. WILLIAM H. PRIESS, Upper Montclair, N. J., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Original application filed Jan. 6, 1922, Serial No. 527,449. Divided and this application filed Apr. 27, 1926. Serial No. 104,881. 8 Claims. (Cl. 175—41.)



1. An improved stack-sheet condenser of the general series-sectional type and including electrostatically double and single sections in a stack including insulating separators between adjacent physical sections, said stack including electrostatically single sections and a number of electrostatically double sections sufficient to constitute an even number of electrostatic sections, an even number of insulaing section-separators, and an odd number of physical sections.

1,865,047. TESTER. THOMAS RAY and JOSHUA R. RAY, Manistee, Mich. Filed Dec. 19, 1927. Serial No. 241,052. 1 Claim. (Cl. 88—14.)

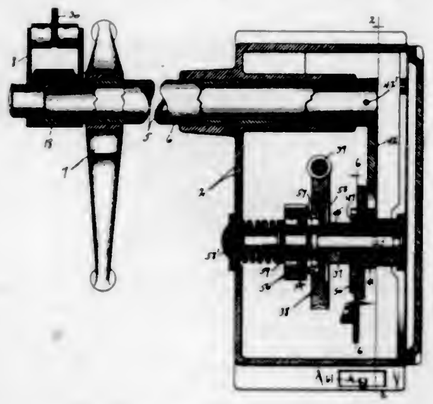


In a tester of the kind described, the combination of a tubular member open at one end and having the opposite end closed by a wall, said wall having a plurality of apertures provided therein, transparent specimen holders extending across the apertures and providing refillable receptacles for receiving a specimen of a commodity to be tested, means secured to said wall for engaging and separably securing said holders against displacement with respect to said apertures, and a member provided with means for illuminating said receptacles, said member providing means cooperating with said apertured wall to provide a housing for said receptacles and being movable relatively to said wall to enclose and expose said specimen holders.

1,865,048. IRONER. LUTHER RINGER, Union Springs, N. Y., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed Oct. 9, 1929. Serial No. 398,386. 9 Claims. (Cl. 68—9.)

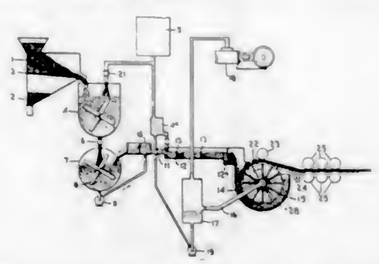
1. In an ironing machine, a roller and a coacting shoe, a casing at one end of said roller forming a support

therefor and having operating mechanism for said roller and shoe, a tube mounted at one end in said casing and extending outwardly therefrom substantially parallel with and beneath the axis of said roller, a rock shaft journaled in said tube and having a portion projecting from



the outer end thereof, means mounted upon the projecting portion of said rock shaft for actuating said shoe, and a supporting member for said tube adjacent said shoe actuating means whereby the casing is held in upright position by said tube and supporting member.

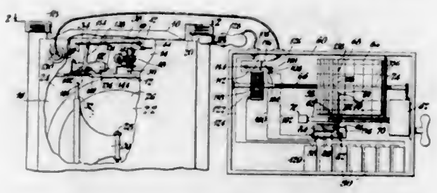
1,865,049. PROCESS FOR PRODUCING FELTED MINERAL WOOL INSULATION. GEORGE D. SHAVER, Kalamazoo, Mich., assignor to Therminsul Corporation of America, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 7, 1931. Serial No. 507,263. 13 Claims. (Cl. 92—39.)



1. The process of producing mineral wool insulation in sheet form which comprises mixing masses of mineral wool with a relatively large quantity of liquid, agitating the mixture to individualize the wool fibres, to disperse the fibres uniformly throughout the liquid and to maintain the fibres in suspension therein, causing the mixture to flow at a uniform rate sufficiently rapid to maintain the fibres in suspension, and gradually and progressively felting the fibres while held in suspension by the flowing liquid to produce a continuous sheet of substantially uniform thickness.

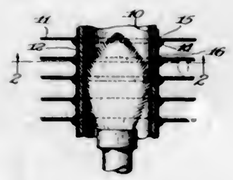
1,865,050. FLUID METERING APPARATUS. ROBERT H. TAYLOR, Denver, Colo., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed June 2, 1927. Serial No. 195,966. 13 Claims. (Cl. 234—34.5.)

1. In a fluid volume meter having an outer enclosing casing and a part which moves in a definite path at a rate which is proportional to the rate at which fluid is withdrawn through said meter from a source of supply, a switch for making and breaking an electrical circuit each time the meter passes a unit volume of fluid, said switch being housed in a gas-tight casing and being pivotally mounted within the casing of said meter and having a part disposed in the path of said movable part of



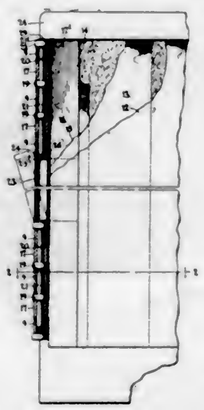
said meter, the mounting of said switch being such that it is thrown from a normally open to a closed position for an instant each time that said meter part traverses a certain portion of its path.

1,865,051. RADIATOR. REUBEN N. TRANE, La Crosse, Wis. Filed Nov. 8, 1930. Serial No. 494,258. 18 Claims. (Cl. 257—136.)



1. In a heat exchange device, a tube, a heat radiating fin provided with an aperture for receiving said tube, a flange carried by said fin adapted to fit against the tube, the portion of the fin adjacent the flange being bent to form a concave annular recess, a solder ring adapted to fit in said concave recess and when fused to hold the parts in fixed and heat conducting relation, to prevent crimping, and to increase the heat transferring area.

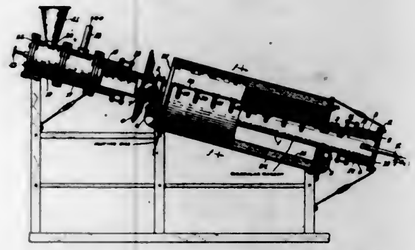
1,865,052. SAFE HINGE. CARL F. WOLTERS, Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 17, 1931. Serial No. 516,401. 7 Claims. (Cl. 16—128.)



1. In a hinge construction, a stationary member and a swinging member, a series of spaced hinges connecting said members, a hinge pin in each hinge, said hinge pins

each having a shank portion extending through its hinge and a head portion abutting one side of its hinge, tube means extending between adjacent hinges and having one extremity removably engaged on the head of a hinge pin of one hinge and its other extremity abutting an adjacent hinge, and means for retaining said last-named extremity in engagement with said adjacent hinge.

1,865,053. CARBON MONOXIDE PROCESS. JOHN C. WOODRUFF, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed May 12, 1927. Serial No. 190,791. 5 Claims. (Cl. 23—204.)



1. A process for the production of carbon monoxide which comprises passing carbon dioxide through nut-sized carbon granules at a rate of approximately ten seconds gas contact, while maintaining said granules in a state of agitation at 800–1500° C.

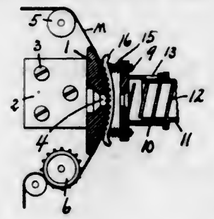
1,865,054. WELL PUMPING APPARATUS. HOMER H. BRANNAN, Parks, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 6, 1931. Serial No. 520,618. 8 Claims. (Cl. 103—13.)



1. In combination with a reciprocatory pump rod and an engine for actuating said rod, a valve actuatable for controlling the admission of motive fluid for the operation of said engine, means for controlling said valve actuation in accordance with the movements of said rod, and means operable upon a predetermined movement of said rod for disabling said valve controlling means.

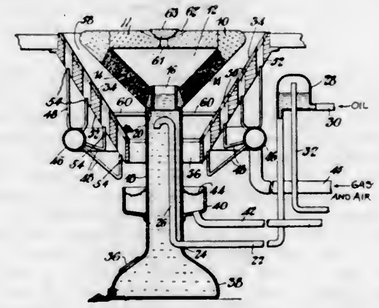
1,865,055. PHOTOGRAPHIC APPARATUS. THEODORE WILLARD CASE, Auburn, N. Y., assignor to Case Research Laboratory Inc., Auburn, N. Y., a Corporation of New York. Filed Dec. 14, 1928. Serial No. 326,108. 2 Claims. (Cl. 179—100.3.)

1. In an apparatus of the class described, a film-supporting member having a pair of spaced continuously curved convex runners, one of which is provided with an aperture for the passage of light rays, a guide roller and pull sprocket, the film bearing surfaces of which substantially form a continuation of the curved runner surfaces,



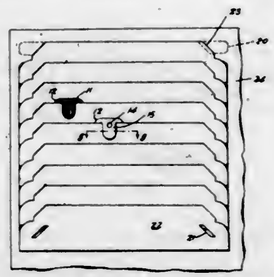
and a film-tensioning member disposed to the rear of said runners adapted to maintain a film against the supporting surfaces as the sound track portion of said film moves across said aperture.

1,865,056. FLAMBEAU TYPE OF BURNER. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed July 19, 1928. Serial No. 293,867. 7 Claims. (Cl. 158—11.)



2. An oil burning apparatus including a head having a porous portion, means for conducting liquid fuel toward said head and a gas burner arranged to direct a gas flame toward said porous portion.

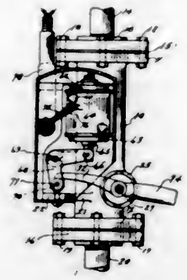
1,865,057. INDEX DEVICE. LE ROI E. HUTCHINGS, Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Original application filed Oct. 14, 1926, Serial No. 141,612. Divided and this application filed Feb. 5, 1931. Serial No. 513,752. 2 Claims. (Cl. 40—63.)



1. An index card comprising a sheet of material having notches in opposite ends to provide a pair of tongues at one marginal edge, said sheet being formed with a diagonal

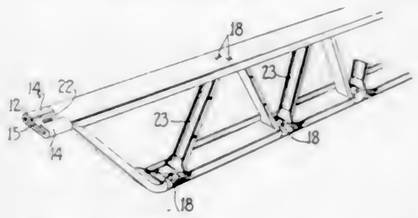
opening adjacent each tongue extending inwardly on said card toward said marginal edge and spaced therefrom; the walls formed by each opening having a substantial parallelogramic relation, with the wall adjacent to said marginal edge, being arranged in parallelism to said edge; and a similar index card mounted on the first index card and having its tongues engaging in the openings of the first card, said adjacent and opposite walls of each opening in the first card slidably receiving the tongues of the last named card.

1,865,058. ELECTRICAL CONTROLLED VALVE. CHARLES S. JARRELL and ADOLPHUS M. WEBB, Charlotte, N. C., assignors to Charlotte Chemical Laboratories Inc., Charlotte, N. C., a Corporation of North Carolina. Filed Jan. 10, 1930. Serial No. 419,999. 4 Claims. (Cl. 137—139.)



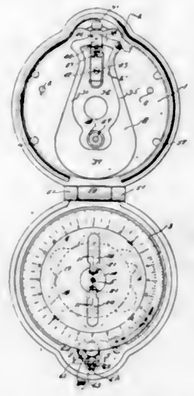
1. In a valve, a valve housing, a valve seat in said valve housing, a valve mounted in said valve housing, a transversely disposed shaft having a portion thereof mounted in said valve housing, and a portion of said shaft extending outside of the housing, a projection on said shaft within the valve housing adapted to press against the lower end of the valve member to normally press the same upwardly to open position, a lever mounted on one of the ends of the shaft outside of the valve housing, electric means having a bell crank lever engaging said lever on the outside of said valve housing adapted to hold the valve in opened position, resilient means mounted around said valve stem, said resilient means being adapted to move said valve to closed position when the electric means fail to operate.

1,865,059. GIRDER CONSTRUCTION. EARL J. W. RAGSDALE, Norristown, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 18, 1929. Serial No. 379,102. 3 Claims. (Cl. 189—37.)



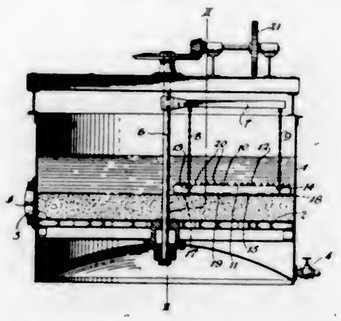
1. A girder comprising strip stock longitudinal and interconnecting transverse members of channel cross section of different widths, which intermediate transverse members are of lesser width but are flattened to widen them laterally to substantially the width of the bases of the longitudinal members and spot welded to the bases of the longitudinal members at their points of contact.

1,865,060. SERVICE RECORDER. HENRY ROSE COOL, Cleveland, Ohio, assignor to The Service Recorder Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 25, 1927. Serial No. 178,347. 5 Claims. (Cl. 234—1.)



2. A vibration recorder of that type in which the record member is moved between a vibrating stylus and a yielding backing member, comprising a casing containing said stylus and record member, said casing having an opening opposite the stylus and extending normal to the plane of the record member, and a yielding backing member movable in said opening and presenting to the record member a flat receiving surface parallel to its plane.

1,865,061. NUTSCH FILTRATION. ARMIN R. GROB, Hamburg, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 11, 1926. Serial No. 87,503. 20 Claims. (Cl. 210—142)

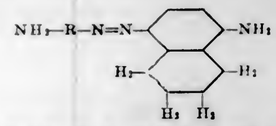


20. A filter comprising in combination a filtration chamber having a screened bottom, compacting and discharging means in said chamber so constructed as to be capable of either discharging or compacting alone but not both operations simultaneously.

1,865,062. AZO DYESTUFF AND ACETATE SILK DYED THEREWITH. KARL SCHIRMACHER, Frankfort-on-the-Main-Hochst, and KONRAD STENGER, Frankfort-on-the Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 29, 1930, Serial No. 485,293, and in Germany Oct. 20, 1928. 10 Claims. (Cl. 8—5.)

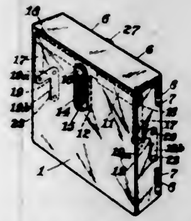
1. A new method of dyeing navy-blue to black shades on cellulose acetate fiber or the like which comprises dyeing

the materials with a compound of the following general formula:



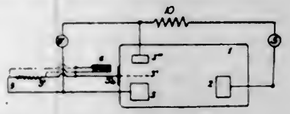
wherein R stands for a benzene residue which may be substituted by halogen, alkyl or alkoxy groups and the amino group linked to R stands in para-position to the azo-group, tetrazotizing the compound on the fiber and coupling it with 2.3-hydroxynaphthoic acid.

1,865,063. CONTAINER. LUCY COTTON AMENT, New York, N. Y., now by judicial change of name LUCY COTTON THOMAS. Filed May 2, 1929. Serial No. 359,952. 3 Claims. (Cl. 206—38.)



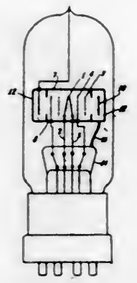
2. A container for cigarettes or the like having closure means, operating means therefor, said container space being defined in part by said closure means and in part by a double wall, said double wall providing a space between its members within which space the operating means is located, and exterior means for actuating said operating means, said double wall forming the back and two sides of said container, and said operating means comprising an operating cross-bar mounted for sliding movement in said double wall and having a channeled depending portion, the outer wall of said double wall having a guiding ridge slidably receiving said channeled portion of the operating cross-bar, said outer wall at the ridge being slotted longitudinally of said ridge, and said channeled portion of the operating bar having a handle member disposed in said slot, said operating bar having ears on its ends disposed in the double wall space at the sides of the container, bell crank levers mounted one in each of said side double wall spaces, openings at the front of said side double walls permitting one arm of said bell cranks to swing against said closure means, and links connecting said ears with the other arms of said bell cranks.

1,865,064. IONIC RELAY SYSTEM. GEORGES VALENSI, Paris, France. Filed Oct. 24, 1927, Serial No. 228,378, and in France Nov. 18, 1926. 4 Claims. (Cl. 179—171.)



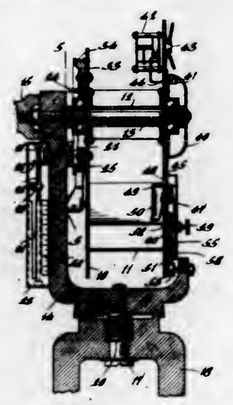
1. Arrangement for relaying a current ionically comprising in combination, a secondary circuit having a discharge gap in rarefied atmosphere,—an auxiliary circuit also having a discharge gap in rarefied atmosphere, said atmospheres freely communicating,—a source of electromotive force connected to both said secondary circuit and said auxiliary circuit, means for producing electric particles in the discharge gap of said auxiliary circuit, and electrical means, responsive to current to be relayed, for controlling the penetration of said electric particles into the discharge gap of said secondary circuit.

1,865,065. SCREEN GRID TUBE. BALTHASAR VAN DER POL and KLASS POSTHUMUS, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 22, 1927. Serial No. 235,017, and in the Netherlands Nov. 19, 1926. 8 Claims. (Cl. 250—27.5.)



1. An electron discharge tube comprising a cathode, a control grid surrounding the cathode, a screen grid surrounding the control grid, an anode surrounding the screen grid, and shielding means comprising a pair of discs of conducting material substantially covering the ends of the screen grid to shield the control grid from electrostatic lines of force from the anode, one of said discs being electrically connected to the cathode.

1,865,066. FISHING REEL. GERRIT C. WALBERG, Buffalo, N. Y. Filed Dec. 4, 1930. Serial No. 499,941. 3 Claims. (Cl. 242—84.6.)

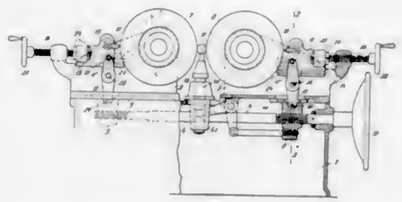


1. A fishing reel, comprising a revolving member for the fish-line, an alarm device applied to said member, a releasable control element for said device normally arranged to render it inoperative, and trip means for releasing said element to render the alarm device operative when the revolving member is turned in a direction to play out the line.

1,865,067. GRINDING MACHINE. FRANZ WARSOW, Pankow, near Berlin, Germany, assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 24, 1928, Serial No. 328,287, and in Germany Jan. 12, 1928. 4 Claims. (Cl. 51—80.)

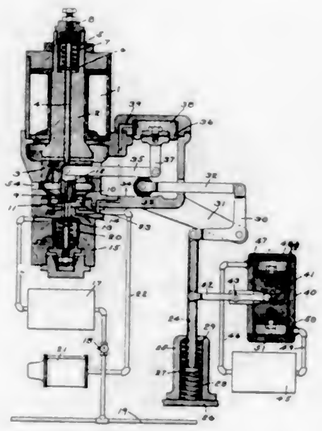
1. In a grinding machine, the combination, with the bed, means for supporting the work, a slide carrying a grinding wheel and mounted on said bed for movement towards and away from said work supporting means, a nut movably secured to said slide, and a feed screw in

engagement with said nut, of a carrier for a trimming tool shiftable on said slide in a direction towards and away from said work supporting means, and a member



rockingly mounted on said slide at a point intermediate said nut and carrier and in operative engagement with said carrier and nut.

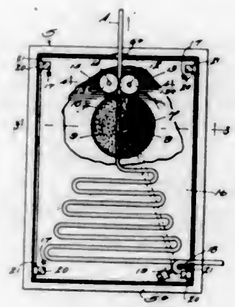
1,865,068. VARIABLE LOAD BRAKE. UNCAS A. WHITAKER, Wilmerding, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 21, 1927. Serial No. 227,631. 4 Claims. (Cl. 303—22.)



1. The combination with a brake cylinder, of electro-responsive means, a valve operated by said means for supplying fluid under pressure to the brake cylinder, and a movable abutment operated by brake cylinder pressure for closing said valve, of a second movable abutment subject to brake cylinder pressure, mechanism operated by said abutment for operating said valve, and means for controlling the operation of said mechanism according to the load on the car.

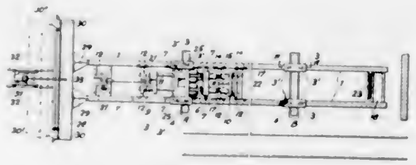
1,865,069. TAKE-UP DEVICE FOR TELEPHONE, FLOOR LAMP, AND OTHER WIRES. HAROLD ALLEN, New York, N. Y. Filed Jan. 17, 1931. Serial No. 509,491. 5 Claims. (Cl. 254—135.)

1. A device of the class described comprising a base, a closure removably supported by said base and cooperating therewith to provide a compartment, anchoring means within said compartment for securing a wire that has been lead thereinto, a pair of opposed rotatable rolls adapted to frictionally engage a wire lead therebetween, a geared connection between said rolls, there being an outlet from said compartment for the wire passing between



said rolls, and yielding means associated with one of said rolls and tending to prevent movement of the rolls in a direction to permit the paying out of the wire through said last mentioned opening.

1,865,070. UNIVERSAL TESTING MACHINE. ALFRED J. AMSLER, Schaffhausen, Switzerland. Filed July 5, 1929, Serial No. 376,235, and in Germany May 14, 1929. 7 Claims. (Cl. 265—14.)

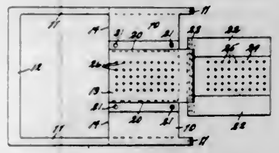


4. A universal testing machine operated by liquid under pressure, comprising in combination, a frame formed of parallel horizontal I-girders and each having a row of gaps in its web, a casing, press-pots provided on said casing, said casing being arranged as a carriage displaceable along said frame, a second carriage displaceable along said frame, said press-pot carriage being arranged within said second carriage, two movable heads one forming a gripping head for tension tests and the other a head for compression tests forming part of said second carriage, rods screw threaded over part of their length for rigidly connecting to each other the two heads of said second carriage, nuts on said rods, a plate on the press-pot carriage, means for transmitting the pressure exerted by said press pots to said plate to urge the latter against said nuts to transmit pressure to said second carriage and its heads, and stationary heads cooperating with the movable heads of said second carriage and rigidly fixed to said frame.

1,865,071. CHECK PROTECTOR FOR POCKET CHECK BOOKS. CHURCH ANDERSON, Los Angeles, Calif. Filed Oct. 6, 1930. Serial No. 486,577. 2 Claims. (Cl. 101—26.)

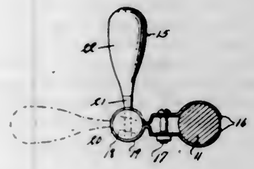
1. A check perforator including a base plate, edge guides having one of their ends integral with said plate and turned under so they are parallel with said plate and

having a cross bar connecting the outer ends of said guides so they are insertible in a pocket of a folding pocket check book to detachably secure said perforator and book together, a perforated plate secured to said base plate that has spaced holes therethrough, and a plunger plate



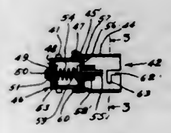
pivotally connected to said perforated plate so its plungers are movable to enter the holes in said perforated plate to perforate a check in the signature and figure spaces thereof so the signature and the amount of value thereon cannot be easily changed.

1,865,072. HAND REST FOR STEERING WHEELS. WINFIELD O. APPLEMAN and FRANK N. BAY, Albia, Iowa. Filed June 6, 1931. Serial No. 542,644. 2 Claims. (Cl. 74—33.)



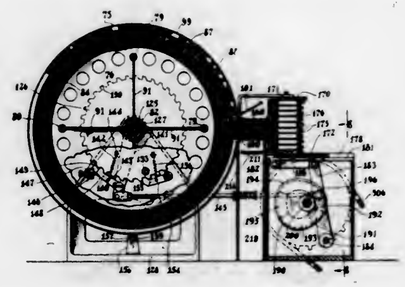
1. As a new article of manufacture, a hand rest of the character described comprising a pair of clamping arms integrally formed with each other and having a looped inner end portion, means for securing the arms in adjusted position on a steering wheel rim, a shaft rotatably disposed within the looped inner end portion of said arms, and a hand rest member carried by said shaft transversely of the longitudinal axis thereof.

1,865,073. BULB ADAPTER. SAMUEL F. ARBUCKLE, Highland Park, Mich., assignor to Monogram Lens Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Oct. 9, 1923, Serial No. 667,501. Divided and this application filed May 27, 1927. Serial No. 194,565. 3 Claims. (Cl. 173—357.)



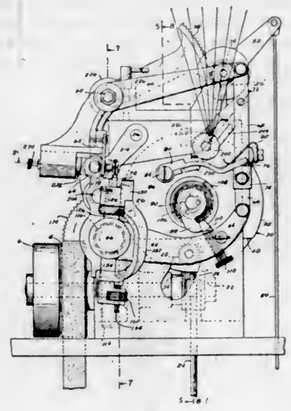
1. A bayonet lamp adapter comprising combined interengaging plug and socket members, said socket being relatively longitudinally adjustable with respect to said plug, yielding means for electrically connecting said plug and socket and means including a screw for locking said members in adjusted position.

1,865,074. ARTICLE HANDLING MECHANISM. JOHN L. BABER, Jr., New York, N. Y., assignor to Baber Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 27, 1928. Serial No. 322,248. 40 Claims. (Cl. 101—47.)



1. The combination with a magazine containing a group of articles of means for selecting and removing certain articles from the group in the magazine and means for refiling the removed articles in the magazine, each said means including an electromechanical actuator, and a common control for both said means.

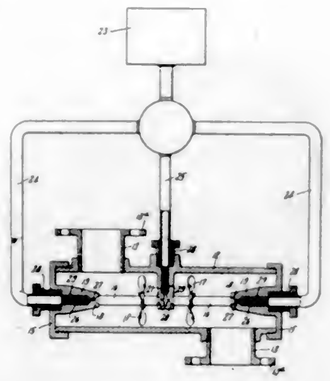
1,865,075. WINDING MACHINE. DICKERSON G. BAKER, Holyoke, Mass., assignor to The American Thread Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 22, 1928. Serial No. 314,019. 9 Claims. (Cl. 242—19.)



1. In a winding machine the combination of a winding spindle, means for rotating the same, a traverse guide and a pressure plate, means connecting the same and yielding means holding them in contact with opposite sides of the mass being wound on said spindle, and cutter knives projecting from the face of said pressure plate for severing a tube upon said spindle.

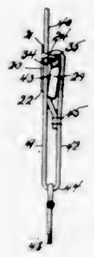
7. In a winding machine the combination of a spindle, two levers having load arms on opposite sides of said spindle, one of said arms carrying a pressure plate and the other a traverse guide, the power arms of said levers being of equal length and connected together by a link, and a weight tending to actuate said levers to move said pressure plate and guide toward said spindle.

1,865,076. GAS ECONOMIZER FOR INTERNAL COMBUSTION ENGINES. MANLEY BARRY, Orono, Me. Filed May 18, 1931. Serial No. 538,147. 4 Claims. (Cl. 48—180.)



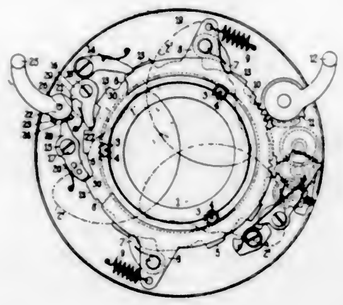
1. A gas economizer comprising, in combination, a mixing chamber composed of a U-shaped body portion and a cover detachably secured to the body portion and forming one side of the chamber, the ends of the body portion being provided with means adapted to be coupled to a carbureter and an intake manifold, a lubricating system including an oil reservoir outside the mixing chamber, and conduits extending from the reservoir into the chamber and provided with bearings within the chamber, constituting the outlets of said conduits, the conduits including outer sections connected directly to the reservoir and terminal sections extending through and secured to the cover and detachably connected with the outer sections, the bearings being formed in said terminal sections, said reservoir being normally hermetically closed excepting at its junction with said conduits so that movement of oil to the bearings is prevented by atmospheric pressure when the economizer is not in operation.

1,865,077. BUCKLE. RUDOLPH F. BARTEL, New York, N. Y. Filed Aug. 20, 1929. Serial No. 387,210. 2 Claims. (Cl. 24—184.)



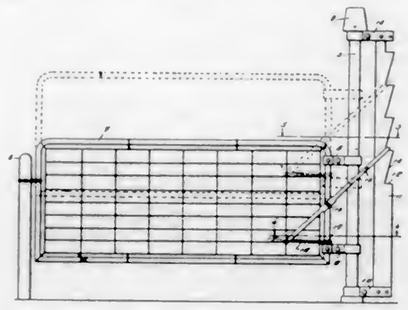
1. In a buckle the combination of a front member, said front member comprising a flat body portion, pivots integral with said body portion, and extending to the rear thereof, a rear member comprising a body portion, practically of the same length as the body portion of the front member, journal lugs formed at the upper end of the body portion of the rear member, a bent over top wall extending from the upper end of the body portion of said rear member, teeth formed with said bent over top wall, said journal lugs engaging the pivots of the front member, the top portion of the crowns of said lugs being in alignment with the top portion of the crown of said bent over wall to facilitate the bearing of webbing thereon without ruffling, upon both the said bent over wall and said lugs.

1,865,078. PHOTOGRAPHIC SHUTTER. ÁRPÁD BARÉNYI, Berlin-Lichterfelde, Germany. Filed July 8, 1929, Serial No. 376,518, and in Germany July 16, 1928. 15 Claims. (Cl. 95—63.)



1. A photographic shutter, comprising a support having an opening for the passage of the light rays, overlapping shutter disks each having a fixed center of rotation, pinions connected with said disks, a gear wheel engaging said pinions, a power operated ring disposed concentrically of said gear wheel, mechanism loosely connecting said ring and gear wheel for transmitting rotary movement from said ring to said gear wheel, and means for controlling the rotary movement of said power operated ring.

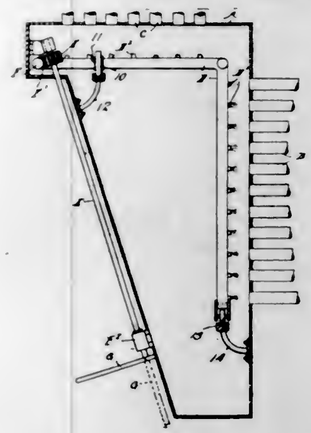
1,865,079. GATE. PAUL G. BILLHORN, Manchester, Iowa. Filed Feb. 9, 1932. Serial No. 591,874. 2 Claims. (Cl. 39—81.)



1. In combination, a gate, a stationary post, means for slidably swingably mounting the gate on the post and so that the gate may be slid vertically thereof, a bar parellel with said post and having notches, means for swingably mounting said bar on said post, and means on the gate to engage the notches to hold the gate at different elevations.

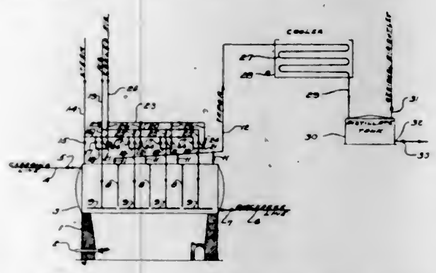
1,865,080. SOOT BLOWER. FRANK BOWERS, Detroit, Mich., assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 27, 1919, Serial No. 326,758. Renewed Jan. 19, 1931. 20 Claims. (Cl. 122—391.)

10. The combination with a fluid heater having a plurality of spaced passages for the heating medium, and a movable blower element having a nozzle for discharging a cleaning fluid into said passage, of means for moving said blower element with a step by step movement to bring said



nozzle into exact registry with successive passages, said means being so related to the spaced passages that the nozzle will be moved the distance from one passage to the next during each step of the movement.

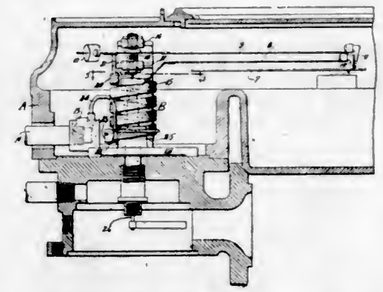
1,865,081. PROCESS OF OXIDIZING OILS. MARVIN L. CHAPPELL, Watson, and TOM H. DOWLEN, Los Angeles, Calif., assignors to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed Nov. 26, 1929. Serial No. 409,937. 7 Claims. (Cl. 196—74.)



2. A process of oxidizing asphaltic oils, comprising, maintaining a supply of asphaltic oil in a container with a plurality of distinct but connected compartments through which the asphaltic oil continuously passes at an elevated oxidizing temperature, continuously introducing a regulated stream of asphaltic oil into the first compartment of the container, continuously introducing an individual supply of cooled air to each compartment of the container at a temperature sufficient to extract the exothermic heat of the oxidizing reaction, continuously withdrawing the residual air and volatile oil products from each compartment of the container, and discharging the oxidized product from the system.

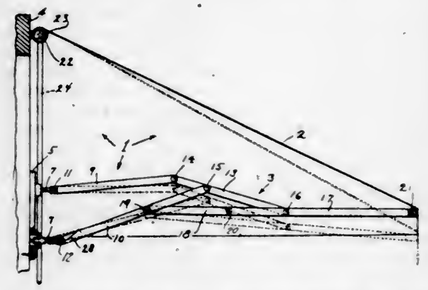
1,865,082. PRESSURE INDICATOR. HORACE CHRISMAN, Edgewood, Pa., assignor, by mesne assignments, to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 25, 1924. Serial No. 688,387. 12 Claims. (Cl. 73—109.)

12. A pressure indicator including an indicator arm, a helical pressure tube operatively connected to said arm at one end and flexibly supported for radial movement at one portion thereof, said operative connection being adapted to restrain said tube from radial movement but transmitting circumferential movement from said tube to said



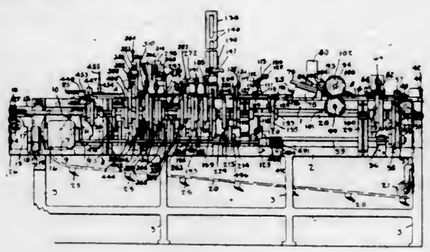
arm, and a flexible lead connected to the other end of said tube and adapted to communicate with a source of pressure.

1,865,083. AWNING. FRANK M. CHRISTIAN, Los Angeles, Calif. Filed Mar. 5, 1929. Serial No. 344,244. 3 Claims. (Cl. 156—44.)



2. In an awning support, the combination of a base member, a pair of arms of unequal length being pivoted to said base, a second pair of arms, one of said second pair of arms being hinged to one of said unequal arms, intermediate its ends, the other of said second pair of arms being hinged to the second arm of said pair of arms and having one of the arms of unequal length fulcrumed intermediate its length, said second pair of arms being adapted to hingedly support a single arm whereby one end of an outer bar will be predeterminedly positioned in respect to the base member.

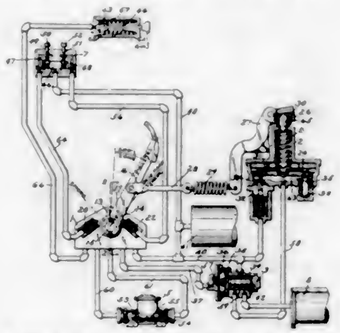
1,865,084. WRAPPING MACHINE. SIMON COOPER, Brooklyn, N. Y. Filed June 28, 1929. Serial No. 374,490. 59 Claims. (Cl. 93—2.)



1. A machine of the character described, having in combination, means for wrapping part of a sheet of material about an object, means for supplying another sheet

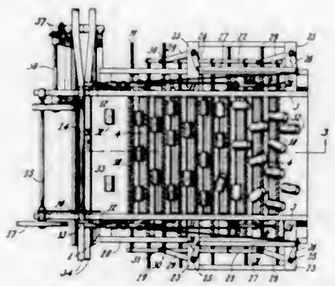
of material to the part of said first-mentioned sheet extending beyond the wrapped object, and means for folding part of said first-mentioned sheet about said second sheet.

1,865,085. FOOT CONTROLLED BRAKE EQUIPMENT. JOHN F. CRAIG, Upper Montclair, N. J., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1930. Serial No. 479,448. 5 Claims. (Cl. 303—6.1.)



1. In a brake and door controlling device, the combination with a pedal lever and means operated by said lever for controlling the brakes, of a valve for controlling the fluid pressure for effecting the operation of a door, a member for operating said valve, a lug carried by said member, and a lug carried by said lever and adapted to engage said member lug to operate said valve upon movement of said lever.

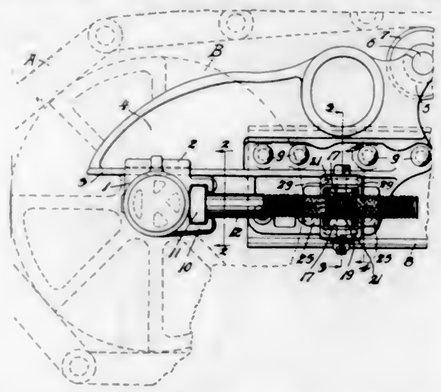
1,865,086. CONVEYING AND ALIGNING MECHANISM. FRANK W. CUTLER, Portland, Oreg., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Nov. 4, 1930. Serial No. 493,417. 18 Claims. (Cl. 198—29.)



1. An apparatus of the class described comprising a plurality of alternately disposed advancing bars and aligning bars, means for elevating and lowering said advancing bars, and means for reciprocating said aligning bars in a horizontal plane.

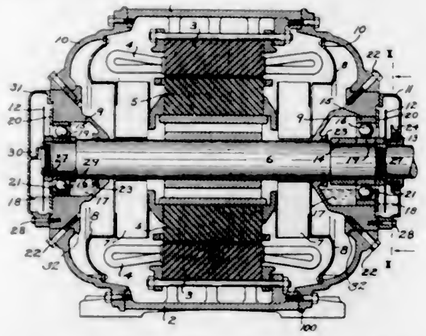
1,865,087. MULTIPLANE ADJUSTING AND ADJUSTMENT SECURING MEANS. JOHN DANIEL, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Nov. 11, 1929. Serial No. 406,448. 2 Claims. (Cl. 308—59.)

1. In a device of the character described, wherein a pair of tumblers are mounted on shafts separated by a framework, means for adjusting each of the tumblers with respect to the framework, said means including an adjusting bearing for a shaft, a U-shaped bracket secured to the framework, a bolt having its head secured to the bearing and its shank projecting through the bracket, means bridging the arms of said bracket to prevent lateral removal of the bolt, nuts threaded on said shank on opposite sides of the part through which said shank projects, and means for positively locking said nuts against



rotation relative to said shank, the said bracket having end recesses whose innermost walls are arcuate and of the same curvature as the circle circumscribed about the corners of the nuts, said corners engaging said arcuate walls whereby to center said bolt relative to said bracket.

1,865,088. BEARING STRUCTURE. CARL L. DAUN and PAUL E. KELLER, Milwaukee, Wis., assignors, by mesne assignments, to American Electric Motor Company, Milwaukee, Wis. Filed Aug. 9, 1926. Serial No. 127,984. 4 Claims. (Cl. 308—187.)



1. In combination, a shaft, an element forming an oil basin below said shaft, a plurality of members positioned within said element and rollable in said basin and around said shaft, means comprising a removable cap and said element for forming a second basin for catching the overflow from said first mentioned basin; an oil thrower fastened to and turning with said shaft and extended into said second basin, and means consisting of a recess formed integrally with the cap for catching oil delivered by said thrower, said element having at least one passage leading from said recess in the cap to said first mentioned basin for returning the oil thereto.

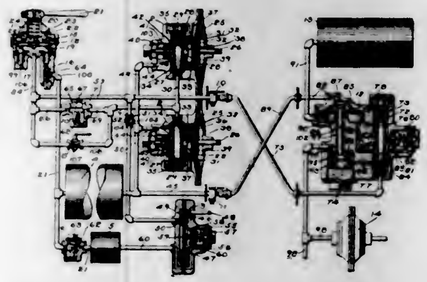
1,865,089. CORROSION-RESISTANT ALUMINUM ALLOY ARTICLES AND METHOD OF MAKING THE SAME. EDGAR H. DIX, Jr., Oakmont, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1927. Serial No. 162,930. 18 Claims. (Cl. 29—181.)

1. Process of coating corrodible aluminum alloy with corrosion-resistant aluminous metal, comprising casting a

body of the alloy in contact with a plate of the aluminous metal while dissipating the heat of the alloy at a rate adapted to cause freezing of the alloy on the plate with not more than superficial fusion of the plate, whereby an initial surface-bond between the two is produced, and completing the bond by heat and pressure with the article at a temperature sufficiently below the eutectic melting point to prevent excessive inter-diffusion.

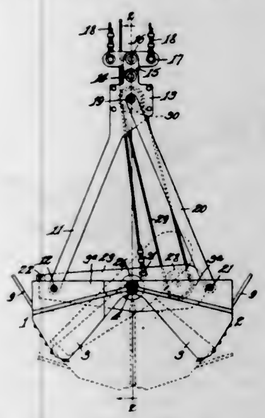
12. A corrosion-resistant aluminous metallic article comprising a relatively thick main body of corrodible aluminum alloy and a relatively thin wrought non-porous protective coating of corrosion-resistant aluminum, directly cohesively united with the main body, the article being capable of being heat-treated without blistering.

1,865,090. VEHICLE BRAKE EQUIPMENT. PATRICK H. DONOVAN, Chicago, Ill., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed July 18, 1930. Serial No. 468,816. 15 Claims. (Cl. 303—6.)



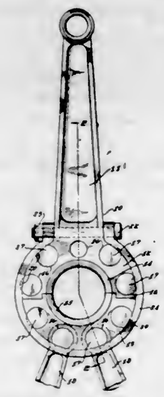
1. The combination with operatively connected fluid pressure brake equipments for a leading vehicle and a trailer, of means for controlling the leading vehicle brake equipment to effect an application of the brakes on the leading vehicle at a slower rate than an application of the brakes is effected on the trailer by the trailer brake equipment.

1,865,091. CLAMSHELL BUCKET. HARRY E. DUNKELBERGER, Weirton, W. Va. Filed July 30, 1931. Serial No. 553,909. 6 Claims. (Cl. 37—184.)



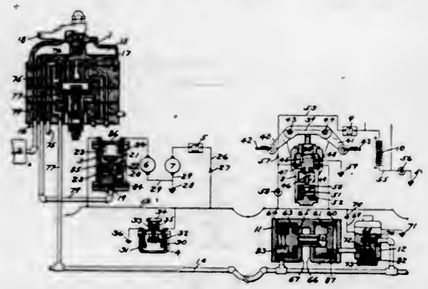
5. In a clam shell bucket, a hinge pin, a pair of bucket jaws having bearing portions mounted on said pin, a lever arm comprising substantially parallel slab-like members mounted for rotary movement on said pin, and a lever arm counterbalance member mounted on said pin in spacing relation to said lever arm members and extending forwardly between the corresponding end of and attached to the latter.

1,865,092. INTERNAL COMBUSTION ENGINE. HERBERT C. EDWARDS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 21, 1930. Serial No. 469,477. 6 Claims. (Cl. 74—17.)



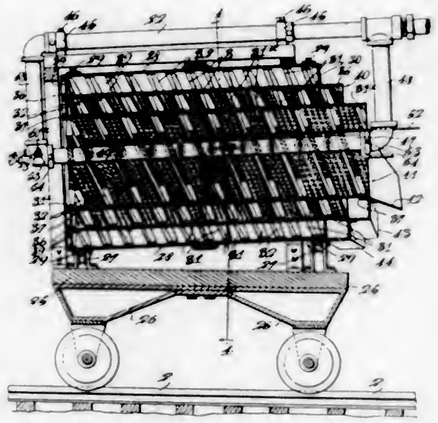
1. In a multiple connecting rod assembly, a master rod having an integrally formed hub section at one end, another separate hub section adapted to be associated with the integral hub section, collar members surrounding the ends of the associated hub sections, and detachable securing means extending through the collar ends and the master rod.

1,865,093. FLUID PRESSURE BRAKE AND SIGNAL SYSTEM. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 1, 1929. Serial No. 367,791. 4 Claims. (Cl. 303—20.)



1. In a combined fluid pressure brake and signal system for railway trains, the combination with a brake pipe, of a brake valve device operative to vent fluid under pressure from said brake pipe to effect an application of the brakes, a valve device operative to locally vent fluid under pressure from said brake pipe, a single train wire, means for signalling over said train wire by direct electric current, means operative upon the operation of said brake valve device to effect an application of the brakes for supplying alternating current to said train wire, and means controlled by the alternating current flowing over said train wire for controlling the operation of said valve device to locally vent fluid under pressure from said brake pipe.

1,865,094. MEANS FOR WASHING AND CLASSIFYING AGGREGATES IN ONE CONTINUOUS OPERATION. FRANK FREDEEN, Minneapolis, Minn. Filed Apr. 23, 1929, Serial No. 357,477. Renewed Apr. 28, 1932. 12 Claims. (Cl. 209—44.)



1. In apparatus of the class described, a train of portable units comprising a receiving primary separator-bin unit, a combined washer and separator unit, a rock crusher unit, a power plant unit, and a series of bin-cars, one for each of the materials separated by the combined washer and separator unit, means delivering the aggregate to the receiving separator-bin, means delivering the material from said receiving separator-bin unit to said washer and separator unit, means to give the material a preliminary washing in passing from said receiving separator-bin unit to said combined washer and separator unit, said washer and separator unit having provisions for washing and separating the sand and gravel, and means delivering the sand and smaller gravel separately to said bin-cars, means delivering the larger particles to said crusher unit, means delivering crushed material to another of said bin-cars, said combined washer and separator unit having provisions for discharging the wash water at a place remote from the place where the sand and gravel, etc., are discharged therefrom.

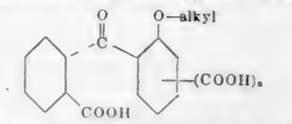
1,865,095. AMUSEMENT APPARATUS. RUDOLF FREI, Berneck, Switzerland. Filed Dec. 6, 1928. Serial No. 324,257. 2 Claims. (Cl. 272—1.)



1. A bathing swing, comprising in combination a hollow floatable body loaded inside so that when brought out of equilibrium it has the tendency to return by penduling movements into the equilibrium position, a mast fixed on said floatable body and carrying means adapted to accommodate persons and to move in an upwardly convex curve when said floatable body carries out penduling movements.

1,865,096. MANUFACTURE OF ALKOXYBENZOPHENONE DI- OR TRICARBOXYLIC ACIDS. SEBASTIAN GASSNER, Leverkusen-on-the-Rhine, and BERTHOLD BIENERT, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1930, Serial No. 426,764, and in Germany Feb. 13, 1929. 5 Claims. (Cl. 260—64.)

4. The products of the probable general formula



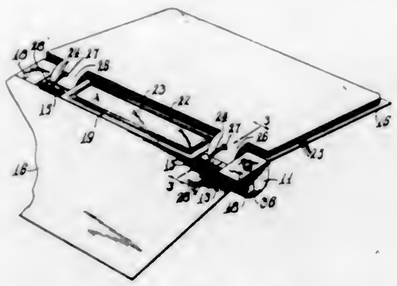
wherein *n* means one of the numbers 1 or 2 and wherein the benzene nuclei may be further substituted by substituents of the group consisting of halogen atoms and alkoxy groups, said products forming colorless crystals soluble in strong sulfuric acid with a yellow coloration.

1,865,097. MOLDING PROCESS. DILMAN C. GILHAM, Schuylkill Haven, Pa. Filed May 1, 1931. Serial No. 534,347. 2 Claims. (Cl. 107—54.)



2. The herein described process of molding hollow edible bodies which consists in applying to a selected area of a mold, a melted normally hard edible material, then chilling the applied material to harden the same, then filling the mold with a melted normally hard edible material of a different color from the first applied material, then chilling the mold and contents sufficiently to harden only an outer portion of the body of melted material filling the same, and finally removing the unhardened central portion of the melted material.

1,865,098. BINDER. AMOS J. GREEN, Mount Horeb, Wis. Filed Oct. 9, 1930. Serial No. 487,466. 14 Claims. (Cl. 129—24.)

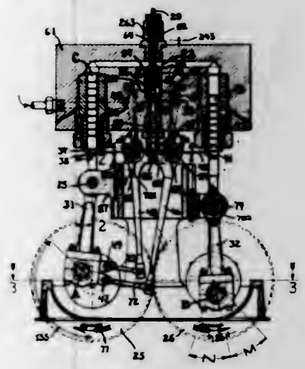


2. A loose-leaf binder comprising, in combination, a chambered back having a plurality of compartments therein, shafts extending longitudinally of said back, a cover on one of said chambers, and said cover being hingedly mounted on one of said shafts and having frictional clamping means cooperating with the other shaft.

7. In combination with a loose-leaf binder having a chambered back formed with compartments having paper-holding means therein, a plurality of loose-leaf sheets, spaced extensions on one edge of each of said sheets, and each of said extensions having an opening therethrough to receive said paper-holding means.

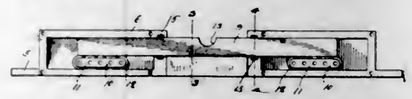
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1,865,099. AIRLESS FUEL SUPPLYING AND INJECTING SYSTEM FOR DIESEL AND OTHER LIKE FORMS OF COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES. JOSEPH C. GROFF, New York, N. Y. Filed Mar. 26, 1927. Serial No. 178,537. 1 Claim. (Cl. 123—139.)



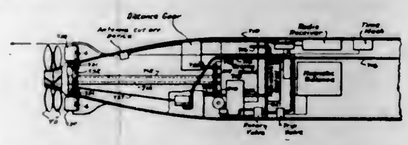
A fuel supplying and regulating means for a Diesel engine fuel injection system comprising a pair of fuel pumping plungers, and means for varying the cyclic phase of action of said plungers relatively to each other for affording variable rates of fuel delivery during a certain cyclic period, means for effecting injection of the fuel during portions of said cyclic period, and means for selecting the portion of the cycle for such delivery.

1,865,100. BEARING. PERRY F. GRUVER, Gruver, Tex. Filed May 20, 1930. Serial No. 454,083. 2 Claims. (Cl. 308—6.)



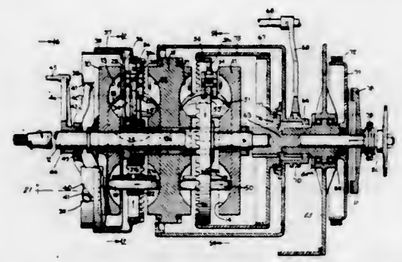
1. A shaft bearing comprising in combination, a supporting plate, an elongated bearing housing disposed at each end of the plate, roller bearing members of widths to closely fit between the walls of the housing, a supporting bar, the ends of the supporting bar extending into the housing and resting on the bearing members, and said bar having a recess to receive the end of a shaft.

1,865,101. TAIL TORPEDO. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed May 26, 1928, Serial No. 280,734. Renewed Mar. 5, 1931. 33 Claims. (Cl. 114—21.)



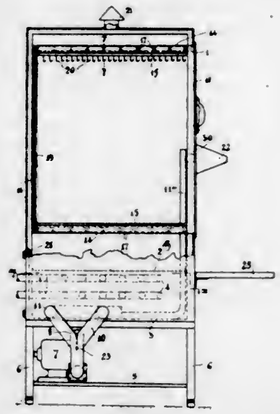
1. In combination with a movable body, means associated with said body for rendering said body responsive to remote control, and means whereby said first mentioned means is caused to automatically redirect said body when in the proximity of the target.

1,865,102. VARIABLE SPEED TRANSMISSION MECHANISM. FRANK A. HAYES, Middletown, N. J. Filed May 7, 1929, Serial No. 361,031. Renewed May 4, 1932. 104 Claims. (Cl. 74—34.)



1. In a variable speed transmission mechanism, in combination, a rotatable driving element, friction disks coaxial with said element and having toroidal grooves in their opposed faces, one of said disks being rotatable relatively to the driving element, friction rollers cooperating with said grooves and mounted for precession to vary the speed ratio of the mechanism, a rotatable driven element coaxial with the disks and driving element, means for driving the driven element through said disks and rollers at speeds less than unity ratio, and means to couple the relatively rotatable disk and the driven element for direct drive at unity ratio.

1,865,103. APPARATUS FOR DRYING AND AIRING GLOVES. ALBERT HILL, Stourbridge, England. Filed Oct. 14, 1931, Serial No. 568,845, and in Great Britain Sept. 9, 1930. 2 Claims. (Cl. 34—40.)



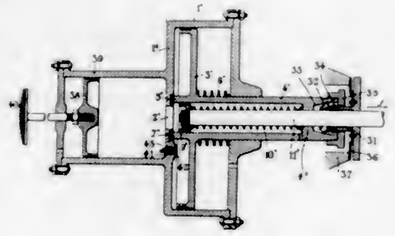
1. Apparatus for drying gloves, comprising a cabinet, steam pipes in the bottom of the cabinet, so that heat can freely rise therefrom to the upper part of the cabinet, an air blower, an air pipe having two branches, one of which delivers air from said blower into one side of the cabinet to pass over the steam pipes, means for deflecting the warm air up the cabinet, air outlets at the top of the cabinet, sets of upper and lower hollow channel bars located entirely in the cabinet, rollers mounted in the interior of the said bars at intervals therealong, a number of runners on which the gloves are hung, the runners being mounted to run over the rollers, a front plate forming part of each runner, a flange on such front plate for engaging in and sealing the edge inside an opening in the cabinet, a back plate forming part of each runner, a flange on the back plate for engaging the edge of the

said opening in the cabinet to seal such opening and support the runner when withdrawn, the other branch of the air pipe passing through the heated cabinet, and leading to a conical nozzle mounted on the cabinet, for blowing the gloves open.

1,865,104. EXPLOSIVE. GEORGE BURKLE HOLDERER, Scarsdale, N. Y., and LE ROY V. CLARK, Pittsburgh, Pa. Filed June 8, 1931. Serial No. 543,006. 12 Claims. (Cl. 52—1.)

1. A liquid oxygen explosive material comprising carbonaceous material in granular form and a binder in an amount sufficient to agglomerate the carbonaceous material without appreciably affecting its porosity.

1,865,105. FLUID DRIVING DEVICE FOR ACTUATING MECHANISMS HAVING AN INITIAL IDLE STROKE. GEORGES HOUPLAIN, Paris, France, assignor to Société des Freins Houplain, Paris, France. Filed Apr. 7, 1930, Serial No. 442,438, and in France Nov. 2, 1929. 5 Claims. (Cl. 60—54.5.)



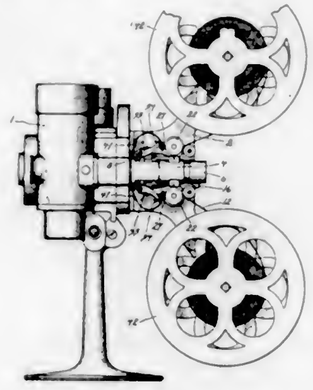
1. Fluid driving device, comprising a fixed cylinder of large diameter, a piston sliding in this cylinder, a movable cylinder of small diameter, rigid with the said piston and having one of its ends open, a small piston sliding in this movable cylinder and adapted to be connected to the apparatus to be driven, springs pushing the small and the large pistons respectively towards the open end of the small cylinder and towards the corresponding bottom of the large cylinder, this bottom having an opening for the admission and issue of the driving fluid, the open end of the small cylinder being adapted to fit in a fluid-tight manner on the bottom of the large cylinder about the said opening, and ratchet means through which the large piston drives the small piston when it moves away from the said bottom of the large cylinder, and a spring valve for the admission of the driving fluid, this valve opening within the large cylinder outside of the bearing zone of the small cylinder on the bottom of the large cylinder.

1,865,106. COLLAPSIBLE AWNING. AARON W. HOWELL, Cumming, Iowa. Filed Aug. 24, 1931. Serial No. 558,990. 5 Claims. (Cl. 135—5.)



4. A collapsible awning frame comprising a supporting bar having a straight central portion and upright end portions, a collar slidingly mounted on each end of the supporting bar, two ribs pivoted to each collar, a brace pivoted to each rib and extended downwardly and toward the supporting bar and pivoted thereto, a contractile coil spring attached to each collar, and means for adjustably securing it to the supporting bar.

1,865,107. PERFORATED STRIP FEED MECHANISM. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1928. Serial No. 326,015. 5 Claims. (Cl. 88—18.)



4. In a perforated strip feed mechanism the combination with a feed sprocket, an intermittent feed guide in feeding relation therewith and a slidably mounted lens mount member carrying a strip face guide member of said guide into and out of strip retaining position, of a retaining member pivotally mounted for movement into and out of retaining position with respect to said sprocket, and cam means for effecting movement of said retaining member into and out of retaining position respectively with movement of said lens mount member into and out of face guide member retaining position.

1,865,108. CRANK SHAFT BALANCER. ROLAND V. HUTCHINSON, Lansing, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 13, 1927, Serial No. 198,597. Renewed Mar. 16, 1931. 18 Claims. (Cl. 74—38.)

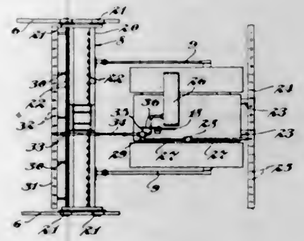


1. Means for neutralizing centrifugal force and torsional vibration in a crank shaft comprising a counterweight rigidly attached to said shaft, a vibration neutralizing body pivoted to the counterweight and elastic means arranged to oppose oscillation of the body.

1,865,109. SPRINKLING SYSTEM FOR USE WITH CONCRETE PAVING MACHINES. ALGOT F. JOHNSON, Minneapolis, Minn., assignor to Koehring Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 21, 1928. Serial No. 279,463. 3 Claims. (Cl. 94—44.)

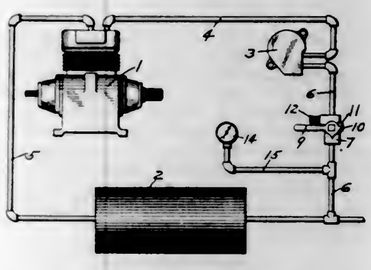
1. The combination with a paving machine arranged to move over a road bed and pour concrete thereon, of a sub-grade leveling machine attached to said paving machine for movements therewith for action on the road

before the concrete is poured thereon, of a sprinkler carried by said leveling machine for distributing water on the road bed therebehind and ahead of the portion of the



road being covered with concrete, and a sprinkler carried by the paving machine for distributing water on the road bed ahead of the leveling machine.

1,865,110. TIRE INFLATION DEVICE. STEPHEN JOHNSON, Jr., Pittsburgh, Pa., and RAYMOND L. MORRISON and ARTHUR R. LEUKHARDT, Detroit, Mich., assignors to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1930. Serial No. 479,506. 4 Claims. (Cl. 230—4.)



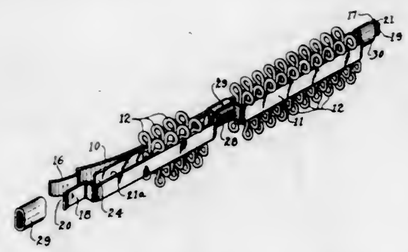
1. The combination with a fluid compressor, a reservoir into which said compressor compresses fluid, and a governor for controlling the operation of said compressor according to the pressure of fluid in the reservoir, of a cock device for controlling the supply of fluid under pressure from said reservoir to an outlet and operative to cut the governor out of action when in position to supply fluid to said outlet.

1,865,111. PROCESS FOR PREPARING COMPOUNDS OF ALKALINE EARTH METAL NITRITES WITH METHYL XANTHINES AND THE PRODUCTS. HANS KAUFMANN, Jena, Germany. Filed May 3, 1929, Serial No. 360,309, and in Germany May 7, 1928. 9 Claims. (Cl. 260—34.)

1. A process for preparing compounds of alkaline earth metal nitrites with methyl xanthines wherein solutions of alkaline earth nitrites are caused to react with alkaline earth metal salts of theobromine.

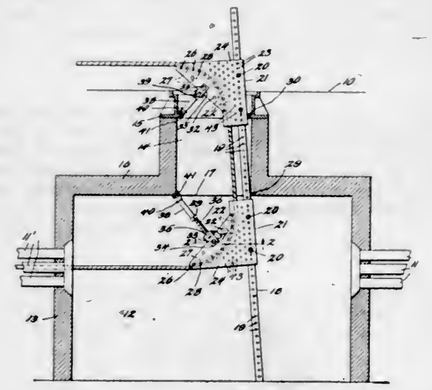
1,865,112. HOOK AND EYE HOLDER. PETER KELLEY, Winsted, Conn. Filed Dec. 31, 1930. Serial No. 505,949. 9 Claims. (Cl. 206—46.)

1. In a holder for a plurality of dress fastener units, each comprising an assembled hook, eye, and loop, a pair of connected parallel spaced strips of sheet metal for receiving said units in a row, each unit lying at right-



angles to the plane of said strips, and inwardly offset means on the ends of said strips for closing the ends of said strips to prevent accidental removal of said units.

1,865,113. CABLE PULLING DEVICE. WILLIAM F. KIESEL, 3d, New York, N. Y. Filed Dec. 19, 1928. Serial No. 327,141. 10 Claims. (Cl. 175—376.)



1. In a cable pulling device, in combination, a boom, a member adjustable along said boom, a series of sheaves arcuately disposed on said member and means on said member to support the boom from a manhole chimney.

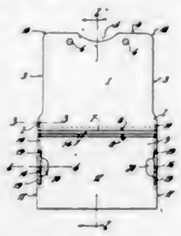
1,865,114. BRICK. GEORGE B. KISSINGER, Takoma Park, Md. Filed Aug. 7, 1929. Serial No. 384,144. 3 Claims. (Cl. 72—37.)



3. A building brick in the form of a parallelopiped having four sides, all of which are uninterrupted plane surfaces and bearing faces presenting uninterrupted smooth margins, said brick being provided with a plurality of recesses formed to reduce the weight of the brick approximately one-fourth compared to an unrecessed brick of the same material and extending into the body of the brick from

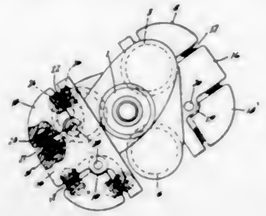
between said margins from both bearing faces approximately to a plane paralleling the bearing faces passing through the center of the brick, each of said recesses having inwardly tapered sides so that it may be conveniently molded.

1,865,115. CARBON COPYING SYSTEM. GEORGE U. LACROIX, Holyoke, Mass., assignor to Philip Hano Company, Inc., Holyoke, Mass., a Corporation of Massachusetts. Filed Nov. 10, 1930. Serial No. 494,666. 9 Claims. (Cl. 282—28.)



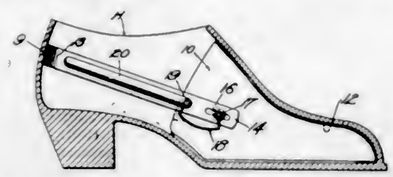
1. A carbon transfer set comprising a plurality of transfer sheets, a reinforcing sheet relatively longer than said transfer sheets, and extending below their lower edges, means for securing the transfer sheets and the reinforcing sheet together and all positioned flush at their top edges, and combined guide and stop strips secured to the side portions of said reinforcing sheet which extend below the bottom edge of said transfer sheets.

1,865,116. MEANS FOR COUNTERACTING TORSIONAL VIBRATIONS. ROGER KENNETH LEE, Detroit, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 7, 1927, Serial No. 181,764. Renewed Mar. 16, 1931. 13 Claims. (Cl. 74—38.)



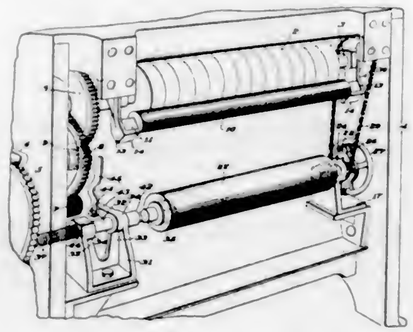
12. A crankshaft equipped with a counterweight having one portion thereof rigid with the shaft and another portion having its center of mass offset from the axis of the crankshaft mounted on said rigid portion and movable with respect thereto in response to crankshaft vibrations, and means for retarding such movement.

1,865,117. SHOE FORM. ALFRED G. LEGGE, Brockton, Mass. Filed Oct. 2, 1930. Serial No. 485,892. 2 Claims. (Cl. 12—128.1.)



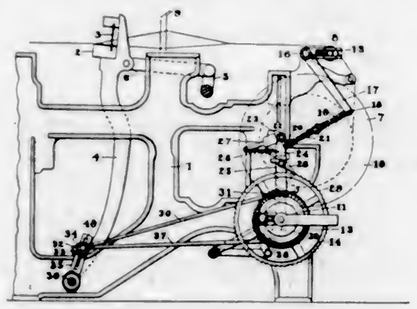
1. In a shoe form, the combination of a toe part, a narrow strip of sheet celluloid bent so that its ends may be connected to said toe part, a separate spring connecting opposite sides of said toe part and points of said strip spaced from the ends thereof, the flexibility of said strip normally being greater than the flexibility of said springs, means for decreasing the flexibility of the portions of said strip extending from points spaced from the ends of the strip to points adjacent the bent portion thereof, and means for guiding the free ends of said strip.

1,865,118. CLOTH TAKE-UP MECHANISM FOR LOOMS. VERNER LINDSJO, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 25, 1931. Serial No. 539,742. 9 Claims. (Cl. 139—307.)



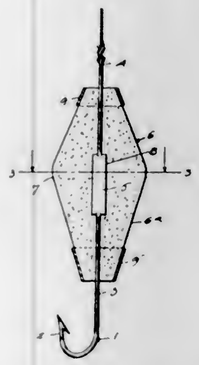
1. In a take up mechanism for looms, the combination of a take up or sand roll, means for positively rotating it to take up the cloth as it is woven, a cloth roll on which the cloth is wound, a driving member adapted for positive connection with one end of the cloth roll, friction means actuated from the take up or sand roll for driving said member, and a support for the opposite end of the cloth roll comprising a plunger member, a spring normally acting upon the plunger member to move it toward and into engagement with the end of the cloth roll, and a latch for holding the plunger member retracted from the cloth roll against the normal action of the spring when the cloth roll is moved longitudinally to disengage it from the driving member.

1,865,119. LET-OFF MECHANISM FOR LOOMS. VERNER LINDSJO, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 29, 1931. Serial No. 565,772. 8 Claims. (Cl. 139—100.)



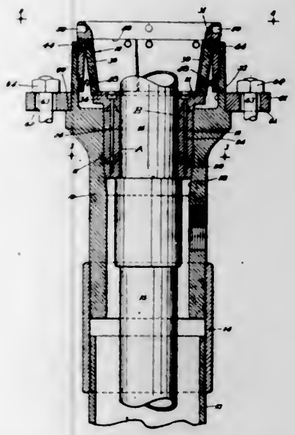
1. In a loom, the combination of a reciprocating lay with a warp let-off mechanism, said let-off mechanism including gearing operated by a single ratchet wheel for controlling the rate of advance of the warp sheet, an oscillating pawl carrier moving said ratchet wheel, an operating member reciprocating at the same rate as the lay, and devices connected to said operating member and imparting to said pawl carrier two complete oscillations for each complete reciprocation of the lay.

1,865,120. FISHHOOK. GEORGE W. LITTLE, Newport, R. I. Filed Nov. 1, 1930. Serial No. 492,820. 2 Claims. (Cl. 43—27.)



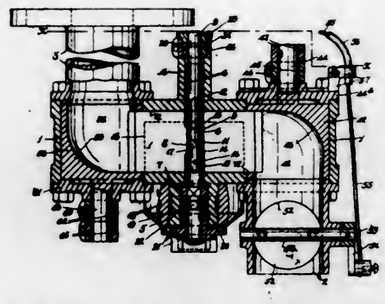
1. In a fishing hook, a hook body having an elongated shank, said shank having a portion intermediate its ends flattened, a body of circular cross section and of substantially double cone-shape configuration divided longitudinally and having the shank with the flattened portion thereof disposed between the two portions, and securing members surrounding each end of the body to retain the portions thereof together, the flattened portion of said hook preventing the turning or longitudinal movement of the shank in the body.

1,865,121. WELL CASING HEAD. JOHN LOTTON, Los Angeles, Calif. Filed Sept. 13, 1926. Serial No. 135,085. 11 Claims. (Cl. 286—16.)



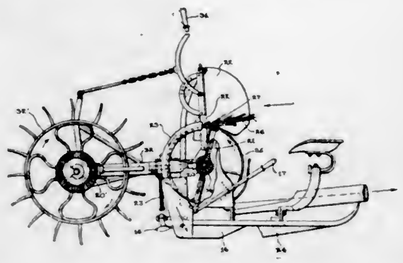
1. A casing head of the character described, including a body to be applied to the casing and having an opening through it, packing means to be arranged in the opening, and a latch means for releasably holding the packing in the body, said latch means including a carrier screw-threaded to the body, and a latch mounted on the carrier.

1,865,122. CARBURETOR. WILLIAM HASLAM MANNERS, Krugersdorp, Transvaal, and NORRIS BARKER, Johannesburg, Transvaal, South Africa, assignors to M. & S. Carburettor Manufacturing and Finance Corporation, Limited, Johannesburg, South Africa, a Company of South Africa. Filed July 25, 1930, Serial No. 470,622, and in the Union of South Africa June 14, 1930. 7 Claims. (Cl. 261—49.)



1. In a carburetor for internal combustion engines, means for controlling the supply of liquid fuel, comprising a tubular outer member having a narrow longitudinal slit, and a rotatable member housed within the outer member and having a helical edge which coacts with the slit in such a way that equal angular movements of the internal member open or close, according to the direction of rotation of said internal member, equal portions of the length of the slit, the inner rotatable member comprising an outer part on which the helical edge is formed, said part being slotted beyond the inner end of the helical edge and cut away below said slot to form the helical edge and providing a passage for the liquid fuel, and an inner part fixed to the outer part and extending below the helical edge to promote the flow of the liquid fuel up the passage to the narrow slit, as set forth.

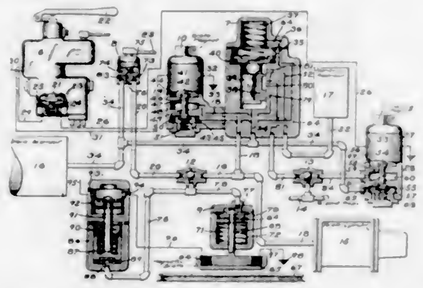
1,865,123. MACHINE FOR TRANSPLANTING EDIBLE GRAIN PLANTS. LUIGI MARANGONI, Pavia, Italy. Filed Mar. 19, 1928, Serial No. 262,893, and in Italy Mar. 18, 1927. 14 Claims. (Cl. 111—3.)



1. In a transplanting machine comprising a driving wheel, a furrow opener, a furrow closer, a plant receptacle, and a transverse shaft adapted to be driven by said driving wheel; the combination of a plurality of plant-setting means on the above-mentioned shaft, a number of movable pickers carried by said plant-setting means; each comprising a box fixed to said plant-setting means, a stirrup mounted to slide along said box, a pair of jaws pivotally mounted on said stirrup, a spring connecting said jaws and adapted to open them, a spindle fixed on said box and adapted to close said jaws so that the latter close, in advancing, and pick up a number of plants from said receptacle and transport them to the furrow opened by said furrow opener; means adapted to guide said plants

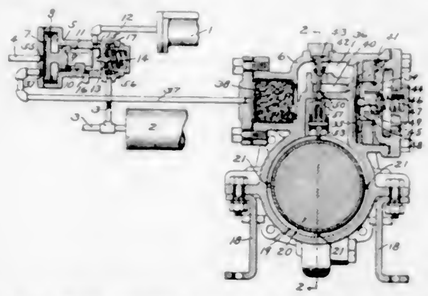
during their transport, means operatively connected with said shaft for reciprocating said receptacle, and means for regulating the quantity of plants picked up by said pickers.

1,865,124. BRAKE DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 9, 1929. Serial No. 345,776. 11 Claims. (Cl. 303—3.)



1. The combination with a fluid pressure brake, a magnetic brake, a valve device operative pneumatically to effect an application of both brakes, and a valve device operative electrically for controlling the actuation of said pneumatic valve device.

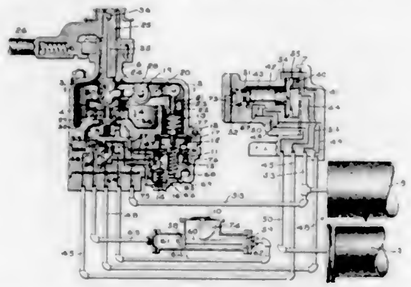
1,865,125. BRAKE REGULATOR. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 10, 1930. Serial No. 460,121. 20 Claims. (Cl. 303—24.)



1. In a fluid pressure brake, the combination with a brake cylinder, of a valve device operative to supply fluid under pressure to said brake cylinder to effect an application of the brakes, a valve operative to control the operation of said valve device to release fluid under pressure from the brake cylinder, and an inertia controlled mechanism operative upon a certain rate of retardation to control the operation of said valve.

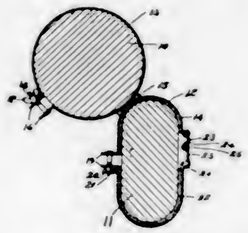
1,865,126. FLUID PRESSURE BRAKE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 24, 1930. Serial No. 463,387. 6 Claims. (Cl. 303—6.1.)

1. In a fluid pressure brake, the combination with a brake cylinder, of an emergency valve device adapted to be automatically operated for supplying fluid under pressure to the brake cylinder to effect an emergency application of the brakes, a separate valve device for controlling the supply and release of fluid under pressure to and from the brake cylinder for effecting a service application of the brakes, a shaft, rotary valve mounted on the shaft for controlling the operation of said emergency valve device, a cam also mounted on the shaft, mechanism operated by said cam for operating said service application valve



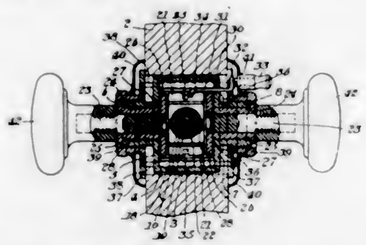
device, and means interposed between said mechanism and said service application valve device adapted to operate said valve device in proportion to the degree of rotation of said cam.

1,865,127. GUN SIGHTING. CLARENCE WILLIAM MCKEEN, Kapuskasing, Ontario, Canada. Filed Aug. 26, 1931. Serial No. 559,441. 2 Claims. (Cl. 24—81.)



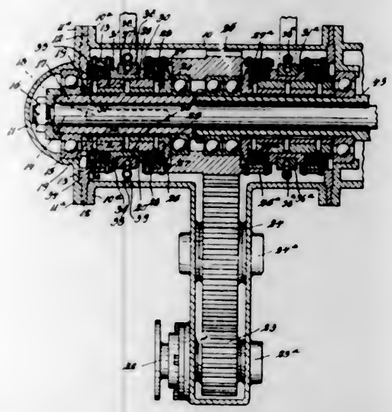
2. A clamp for attaching a flashlight to a gun, said clamp consisting of a band for encompassing the flashlight, a band for encompassing the gun, said bands being joined together and individually split, wing nuts and bolts for drawing the split portions of the bands together, and detachable links interposed in the gun band, each link having an open female end and a pintle at the other end joined to the body of the link by narrow neck portions of a lesser thickness than the width of the opening of the female end.

1,865,128. LATCH MECHANISM. JAMES P. MCKINNEY, Jr., Pittsburgh, Pa., assignor to McKinney Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 13, 1930. Serial No. 488,208. 23 Claims. (Cl. 292—164.)



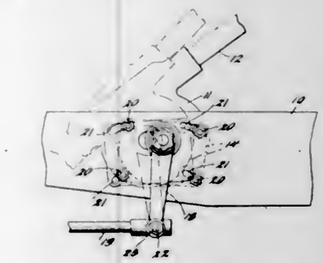
1. Latch mechanism, comprising a casing, a bolt member reciprocable therein, a sleeve-like retractor for the bolt member reciprocable in the casing, the bolt member and retractor being concentrically mounted and being relatively reciprocable, and separate means within the casing for separately urging the bolt member and retractor outwardly with respect thereto.

1,865,129. CLUTCH BRAKE. JAMES W. MENHALL, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation. Filed Feb. 13, 1931. Serial No. 515,586. 4 Claims. (Cl. 192—18.)



1. In a mechanism of the class described, in combination, an oil tight housing for containing a pool of lubricant, a main shaft and a hollow shaft surrounding the main shaft, each shaft being driven by a power source within the housing and dual drive instrumentalities within the housing for transmitting movement from the power source to the main and hollow shafts, respectively, each drive instrumentality comprising a unit carrying clutch and brake members for controlling the movement of the respective shafts, the clutch member being adapted to be brought into and out of operative engagement with the power source and the brake members comprising cooperating brake elements carried by the unit and by the housing, respectively, and means for independently and selectively controlling either unit for correspondingly controlling the operation of either shaft independently of the other, the actuation of clutch members producing opposite actuation of the corresponding brake members, and vice versa.

1,865,130. STEERING COLUMN SETTING. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 26, 1930. Serial No. 447,678. 8 Claims. (Cl. 74—80.)



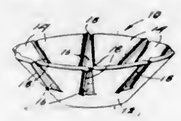
1. In a motor vehicle, the combination with a frame member and a steering drag link, of a steering mechanism comprising essentially a steering shaft, a rock shaft, a driving connection between the steering shaft and rock shaft which includes a worm and member meshing therewith, and a steering arm fixed on the rock shaft to the free end of which the drag link is pivotally connected, and means for securing the aforementioned steering mechanism to the frame member in such manner that it may be swung about the point of connection of the drag link and steering arm as a center to a desired position of adjustment and rigidly secured in such position.

1,865,131. METALLIC CEILING CONSTRUCTION. ANDERS C. OLSEN, Minoola, N. Y. Filed Jan. 6, 1928. Serial No. 245,008. 22 Claims. (Cl. 189—34.)



18. The combination with a supporting structure, of a plurality of hangers secured thereto, said hangers being arranged in parallel rows and spaced at suitable, but not necessarily equal, intervals, and a protective and ornamental covering structure secured to said hangers so as to be in fixed spaced relationship to the supporting structure, said covering structure including a plurality of elongated supporting members, each of said members being provided with locking means whereby it may be readily locked to a plurality of hangers at any points along its length at which hangers may occur, which means is located wholly upon the side thereof which faces the supporting structure.

1,865,132. LOCK WASHER FOR COUNTERSUNK SCREWS. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 471,975. 1 Claim. (Cl. 151—35.)

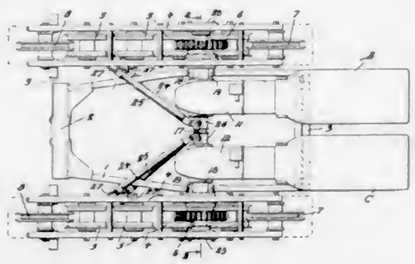


A lock washer for conical head screws and the like comprising a substantially cone-shaped body, and a plurality of marginal prongs extending therefrom, said prongs having work engaging teeth extending out of the plane thereof on opposite sides for lockingly engaging the work, the outer extremities of the companion teeth in said prongs being juxtapositioned whereby to present a substantially continuous margin of stock adjacent a screw head when said head is clamped thereagainst and thereby prevent the entrance of a screw driver and the like between said prongs.

1,865,133. TRACTION VEHICLE. RALPH T. OSMAN, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed May 28, 1930. Serial No. 456,417. 5 Claims. (Cl. 180—9.1.)

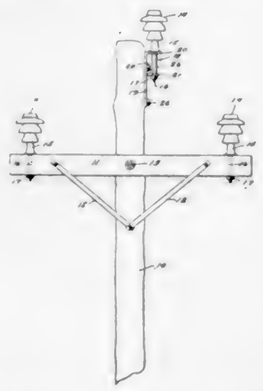
2. In a tractor vehicle of the class described, in combination, a body frame comprising spaced sides, a front transverse frame member and a rear transverse frame member, a driving unit mounted on the body frame intermediate its front and rear frame members, an engine unit connected with the driving unit, endless traction belt frames disposed at opposite sides of the body frame, means connecting the driving unit with the traction belt frames, and bracing means for the driving unit connected to the central portion thereof, the bracing means comprising upper and lower pairs of bars, the driving unit comprising a central housing between the sides of the body frame

with connections between the rear ends of the bracing bars and the central housing, and other connections between the front ends of the bracing bars and upper and



lower portions of the traction belt frames, whereby transverse separating movement of the traction belt frames at their forward ends is resisted.

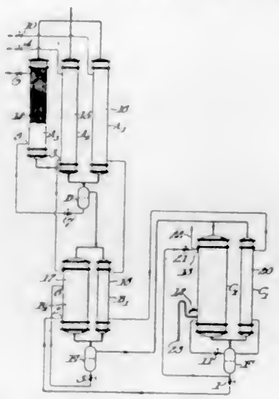
1,865,134. POLE TOP BRACKET. BENTLEY A. PLIMPTON, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 16, 1928. Serial No. 262,205. 1 Claim. (Cl. 173—321.)



A pole top bracket for supporting an insulator carried by a pin from which depends a bolt equipped with a nut, said bracket comprising a metallic member having its upper end formed with a lateral extension constituting a shelf and having its intermediate portion formed with an out-struck lug spaced from the shelf a distance conforming substantially to the vertical thickness of a wooden cross-arm, the shelf and lug being apertured for the passage of the insulator pin bolt with the pin seating upon the shelf, and spacing means surrounding the pin between the shelf and the lug for preventing distortion thereof upon tightening the nut on the bolt.

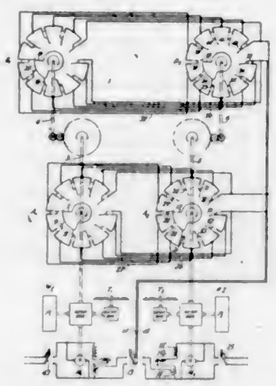
1,865,135. APPARATUS FOR THE SEPARATION OF GAS MIXTURES. FRANZ POLLITZER, Grosshesselohe, near Munich, and HEINRICH KAHLE, Hollriegelskreuth, near Munich, Germany. Original application filed May 24, 1929, Serial No. 365,742. Divided and this application filed Mar. 20, 1931. Serial No. 524,128. 5 Claims. (Cl. 62—122.)

1. Apparatus for separating the constituents of gas mixtures by condensation at low temperatures comprising a plurality of counter-current heat exchangers serially connected through gas and liquid separating devices, means for passing the gas from each of said separating devices to the next serially succeeding heat exchanger, means for returning the liquid from each of said separating devices



to at least one preceding heat exchanger, and means for returning the gas from the last of said separating devices to at least one preceding heat exchanger.

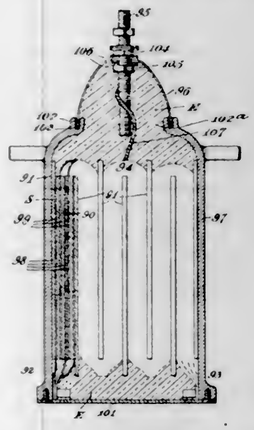
1,865,136. SYNCHRONIZING SYSTEM. LOUIS M. POTTS, Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1929. Serial No. 353,992. 5 Claims. (Cl. 172—293.)



1. In a synchronizing system, the combination with a plurality of machines to be operated in predetermined relation to each other of a plurality of series of contacts operating at different speeds associated with each machine, cross-connections between the corresponding contacts and means responsive to the operation of the contacts for varying the speed of one of the machines.

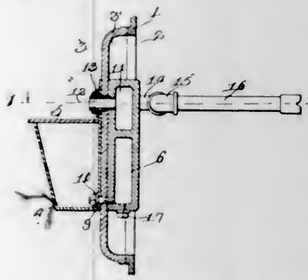
1,865,137. HIGH TENSION ELECTRICAL APPARATUS INCLUDING ELECTRICAL CONDENSERS. WILLIAM H. PRIESS, Upper Montclair, N. J., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Original application filed Apr. 26, 1921, Serial No. 465,137. Patent No. 1,558,043, dated Oct. 20, 1925. Divided and this application filed Sept. 18, 1925. Serial No. 57,071. 51 Claims. (Cl. 175—41.)

1. A high potential condenser construction including an enclosing casing having a box portion of metal formed with openings of different sizes in opposite walls, a series-sectional condenser stack enclosed in said casing, and having a terminal-lead projecting from the stack out thru the smaller of said two casing-openings; the walls of said casing being arched toward said projecting terminal-lead in a direction away from said stack thereby defining said smaller casing-opening; and a cover of structural insulating material for said smaller opening and correspond-



ingly of small diameter, said cover being bowl-shaped and extending between said lead and the casing-metal thru a space which is substantially remote from the shortest distance between the lead and casing metal and surrounding the terminal-lead; the larger of said casing-openings being sufficiently large for passage of the condenser stack into the casing.

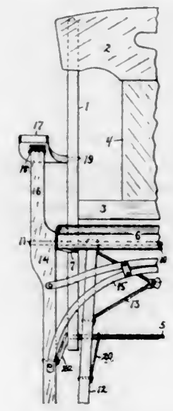
1,865,138. FUEL ECONOMIZER AND SMOKE REDUCER. CHARLES PROTZMANN, Milwaukee, Wis. Filed Nov. 22, 1930. Serial No. 497,471. 1 Claim. (Cl. 110—174.)



In combination with a fire box door, a water box and a heater box arranged on opposite sides thereof, means forming communication between said boxes adjacent the bottom thereof, a horizontal partition extending part way across the heater box and provided with a vertically disposed portion spaced from the top of the heater box, an air inlet communicating with the chamber formed by said horizontal and vertical partitions, and a discharge outlet communicating with the heater box on the opposite side of the vertical partition from the air inlet.

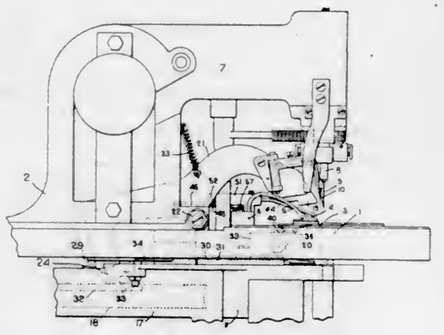
1,865,139. FOLDING STRUCTURE. WILLIAM CHARLES RASTETTER, Fort Wayne, Ind. Filed Apr. 22, 1930. Serial No. 446,278. 3 Claims. (Cl. 155—139.)

3. A folding structure including a back member; a seat pivoted to said member, the front end of which seat is wider than the rear end thereof; front and rear legs; means pivotally connecting said rear legs to the seat at a point spaced from the rear end thereof; means pivotally connecting said front legs to said seat at a point spaced forwardly from the pivotal connections of the rear legs of said seat, said front legs being spaced apart a distance corresponding with the seat at the points of their



pivotal connections therewith; outwardly offset extensions projecting upwardly from said front legs beyond the pivotal connections thereof with the seat; arms pivotally connected with the upper ends of said extensions and said back; and means in connection with the lower end of said back and said legs for limiting the unfolding movements thereof.

1,865,140. BUTTONHOLE SEWING MACHINE. FRANKLIN A. REECE, Brookline, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Mar. 29, 1930. Serial No. 439,900. 10 Claims. (Cl. 112—252.)

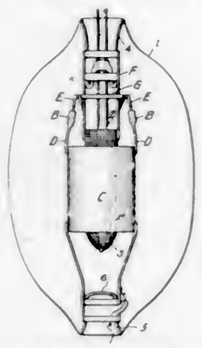


1. In a buttonhole sewing machine, the combination with stitch-forming mechanism constructed so that when it comes to rest at the end of the sewing cycle there is a loop of upper thread retained by the under thread mechanism, of buttonhole-cutting mechanism comprising a cutting element movable into and out of operative position, and means carried by said cutting element and constructed to cut one leg of said loop of upper thread during the movement of said cutting element into its operative position.

1,865,141. MANUFACTURE OF THERAPEUTIC CALCIUM PREPARATIONS. ERNST ROTHLIN, Basel, Switzerland, assignor to the Firm of "Chemical Works formerly Sandoz," Basel, Switzerland. Filed Sept. 29, 1927, Serial No. 222,946, and in Germany Nov. 26, 1926. 3 Claims. (Cl. 167—68.)

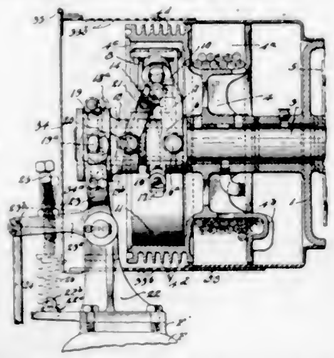
1. A process for the preparation of supersaturated aqueous solutions of calcium gluconate, comprising the steps of preparing a hot, concentrated calcium gluconate solution, filtering it at 50–60° C., introducing the hot solution into suitable containers and heating same in order to destroy centers of crystallization, after closing, repeatedly by intervals at a temperature of 70–100° C., until on cooling and vigorously shaking the solutions remain clear.

1,865,142. MEANS FOR SUPPORTING THE ELECTRODES OF THERMIONIC DEVICES. HENRY JOSEPH ROUND, London, and WILLIAM JAMES PICKEN, Southend-on-Sea, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 23, 1922, Serial No. 538,512, and in Great Britain Mar. 21, 1921. 6 Claims. (Cl. 250—27.5.)



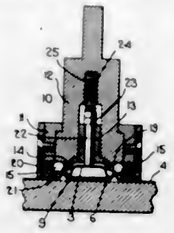
1. A thermionic device comprising an evacuated envelope having a reentrant portion, a plurality of electrode supports mounted thereon, and an electrode carried by said supports, each of said supports comprising terminal segmental metallic sections and an intermediate independent segmental section of insulating material.

1,865,143. DIPPER TRIP AND TAG LINE DRUM MECHANISM FOR CRANES. LESLIE A. RUSSELL, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed May 15, 1930. Serial No. 452,634. 7 Claims. (Cl. 254—172.)



1. In a combined dipper trip, slack take-up and tag line operating apparatus, a casing adapted to be mounted on a convertible shovel and clam shell bucket excavating machine, a shaft carried by said casing and adapted to be driven by the power plant of the excavating machine, cable reeving means rotatably carried by said shaft, and a plurality of friction driving means for establishing a driving relation between said shaft and the drum, certain of said friction means being adjustable to produce rotation of the drum for slack take-up action of the dipper trip cable of the shovel attachment when wound upon the cable reeving means, others of said means being operable to cause positive rotation of the drum to operate said cable for dipper tripping when the machine is used with the shovel attachment, said last named means being further adjustable to operate in conjunction with the first mentioned means to rotate the drum to produce tag line tension on a tag line cable of a clam shell when the machine is being used with a clam shell attachment, and instrumentalities for adjusting the said friction means.

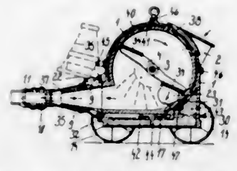
1,865,144. METHOD OF AND TOOL FOR APPLYING BAIL EARS TO SHEET METAL. HARRY SEBELL, Boston, Mass., assignor of one-half to Arthur H. Parker, Lexington, Mass. Filed Feb. 1, 1930. Serial No. 425,122. 8 Claims. (Cl. 113—1.)



1. The method of applying an ear member to sheet metal to form an ear for a bail which consists in forming an annular rib in said sheet metal, placing an ear member within said rib, applying a rolling pressure through balls to the outer face of the rib to reduce the diameter thereof, and simultaneously causing the balls to move inwardly in a radial direction thereby to reduce the diameter of the rib and fold it partially over the edge of the ear member and then applying a pressure to the partially-folded rib to flatten it against the periphery of the ear.

3. A tool for securing an ear member to sheet metal by folding an annular rib over the periphery of the ear member, said tool comprising a rotatable tool body, a plurality of balls carried thereby to act on the outer face of said rib as the tool rotates, means operative upon application of pressure to the tool body to cause the balls to press against the outer face of the rib during the rotation of said tool body and also to cause the balls to move inwardly radially as they operate on said outer face, whereby the rib is reduced in diameter and folded over the peripheral edge of the ear member.

1,865,145. SAND DISTRIBUTOR FOR FILLING MOLDING BOXES AND THE LIKE WITH MOLDING SAND. WILHELM SEIDEMANN, Dresden, Germany. Filed July 20, 1929, Serial No. 379,626, and in Germany Sept. 15, 1928. 13 Claims. (Cl. 22—36.)



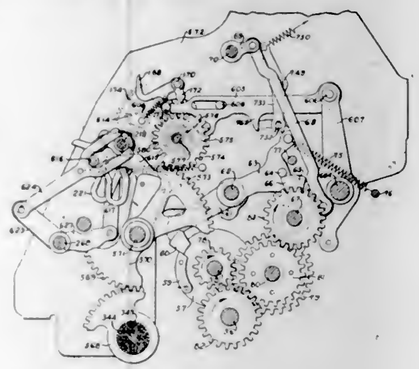
1. Apparatus of the character described comprising a receptacle for the material, an ejector casing having an inlet aperture at its bottom and one side communicating with the lower part of said receptacle and having an outlet aperture at its bottom extending tangentially therefrom, a rotary ejector in said casing for discharging the material therefrom through said outlet aperture, means for driving said ejector, a pneumatic ejector nozzle communicating with said outlet aperture, and means for supplying air under pressure simultaneously to said receptacle and to said nozzle.

1,865,146. PROPIONIC ACID FERMENTATION BY THE USE OF MIXED STRAINS OF PROPIONIC BACTERIA. JAMES M. SHERMAN, Ithaca, N. Y., assignor to The Wilbur White Chemical Company, Oswego, N. Y., a Corporation of New York. Filed May 17, 1928. Serial No. 278,646. 9 Claims. (Cl. 260—120.)

1. Process for the production of propionic acid compounds from carbohydrates or other suitable fermentable media by the fermentative action of propionic organisms, characterized by the use of a plurality of strains of organisms of the type of *Bacterium acidi propionici*.

4. A composition of matter comprising an admixture of a plurality of pure strains of organisms of the type of *Bacterum acidi propionici* in a fermentable medium.

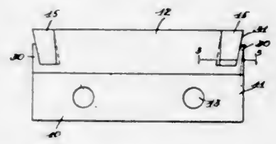
1,865,147. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Jan. 19, 1924. Serial No. 687,305. 50 Claims. (Cl. 235—3.)



1. In a machine capable of printing single item transactions and multiple item transactions with total, a plurality of keys, a type carrier adapted to be adjusted by said keys, means for retaining said keys depressed, manipulative means for controlling the machine for single item and multiple item transactions, means under control of said manipulative means for rendering said retaining means ineffective during single item transaction entry operations, said retaining means adapted to remain effective during multiple item transaction entry operations, and means for preparing the machine for printing a total of multiple items printed and for rendering said retaining means ineffective.

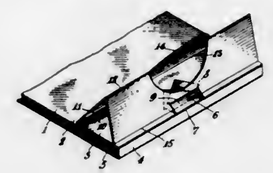
1,865,148. GEAR CUTTING TOOL. LEON D. SLADE, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,841. 5 Claims. (Cl. 90—9.)

1. A gear cutting tool comprising a blade-body having a shank-portion adapted to be secured in a tool holder and a bit-holding portion formed integral with the shank-portion and adapted to extend beyond said holder, said bit-holding portion having side faces which converge in the direction of its tip and being formed with a transverse recess or pocket, a sufficient distance back of the front face of the bit-holding portion to leave a retaining tongue, and a cutting bit formed of a different material than the body and secured in said pocket, said cutting bit being formed with side and tip surfaces which are flush with



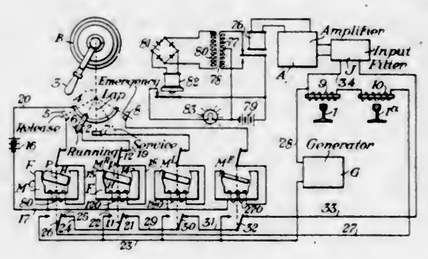
the side and tip surfaces of the bit-holding portion behind the bit, and said pocket and said bit being formed with interengaging portions to hold said bit against sidewise movement in either direction relative to the bit-holding porton, said tongue preventing forward movement of the bit in the socket.

1,865,149. PAD. CARLTON H. SMITH, New York, N. Y., assignor to Buggeln & Smith, New York, N. Y., a Corporation of New York. Filed Nov. 27, 1931. Serial No. 577,406. 9 Claims. (Cl. 281—29.)



1. In combination, a writing pad and a sheet of relatively stiff material attached to said pad having portions folded into a gable form, and means integral with said sheet intermediate the ends thereof to prevent said gable from collapsing.

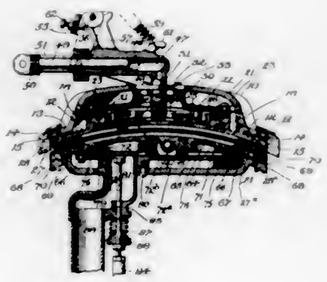
1,865,150. APPARATUS FOR ELECTRIC CONTROL SYSTEMS. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 13, 1931. Serial No. 522,247. 15 Claims. (Cl. 246—63.)



1. A control system comprising a mechanically tuned oscillator, a sending and a receiving circuit associated with said oscillator, means controlled by said oscillator to alternately close the sending and receiving circuits once each cycle of oscillation, a second mechanically tuned oscillator located at a second point, a sending and a receiving circuit associated with the second mentioned oscillator, means controlled by the second oscillator to alternately close its associated sending and receiving circuits once each cycle of oscillation, means for influencing the receiving circuits of one oscillator by the current

supplied by the sending circuit of the other, an operating mechanism controlled by each receiving circuit, and synchronizing means for causing the receiving circuit of one oscillator to be closed when the sending circuit of the other is closed.

1,865,151. PRESS. WILLIAM STROBRIDGE, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 18, 1929. Serial No. 400,708. 16 Claims. (Cl. 68—9.)



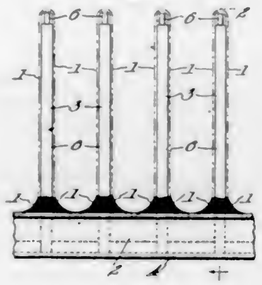
10. In a garment press, the combination of a head; a buck having a perforate face, the perforations whereof open into a chamber formed below said plate; means for heating said head and said buck; an exhaust line communicating with the lower portion of the chamber in the buck; a valve normally closing off said exhaust line; a pump in communication with said line outwardly of the buck and valve; an electric motor for driving said pump; a normally open switch included in the circuit leading to the motor, said switch having a movable element extending downwardly therefrom; a rod connected to and extending downwardly from the valve; means for normally closing said valve; and a foot lever underlying said rod and the movable element of the switch, whereby upon rocking of the lever the valve will be raised from its seat and the switch closed.

11. In a garment pressing machine, the combination of a buck; a head having a chamber formed therein, the pressing face of the head likewise having openings extending therethrough into the chamber; means for heating the head; a spray nozzle located in the head and adapted to spray water into the chamber formed in the head; a pump located upon the head and in communication with the nozzle; a second pump located in the base of the machine, the discharge of said pump communicating with the cylinder of the first named pump; and means for actuating said second pump whereby either one or the other of said pumps may be utilized as desired.

16. A pressing structure for garment pressing machines and the like, comprising in combination a plurality of members secured to each other and so formed as to produce a chamber therebetween, one of said members having openings extending therethrough and in communication with said chamber; an electric heating unit clamped between and in direct contact with said members outward of the chamber; and means for spraying water into said chamber.

1,865,152. PRODUCTION OF ELECTROLYTIC CATHODE-DIAPHRAGM STRUCTURES. KENNETH E. STUART, Niagara Falls, N. Y., assignor to Hooker Electrochemical Company, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 425,001. 10 Claims. (Cl. 92—54.)

1. A method of making electrolytic cathode diaphragm structures which comprises immersing the active perforated surface of an electrolytic cathode in a suspension of a fibrous material in an aqueous solution of

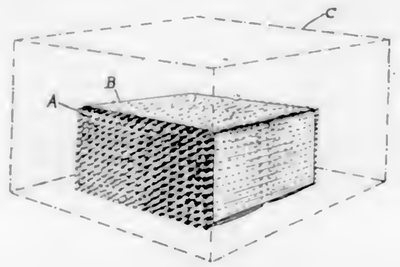


substantially greater viscosity than water, and forcing the liquid of the suspension through the perforations of said surface by the use of a differential pressure.

1,865,153. HEAT TREATMENT OF COPPER ORES OR THE LIKE. THOMAS JAMES TAPLIN, Kew, England, assignor to Metals Production of North America Incorporated, New York, N. Y., a Corporation. Filed Jan. 29, 1931, Serial No. 512,217, and in Great Britain Jan. 31, 1930. 5 Claims. (Cl. 75—82.)

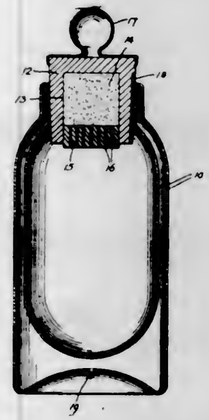
1. The process of concentrating the copper content of material carrying copper in the form of copper sulphate which consists in heating the fine material with a small proportion of carbon and a small proportion of a haloid salt to segregate the copper and leave it darker than metallic copper, and separating the dark copper-bearing portion from the associated gangue.

1,865,154. METHOD FOR CONDITIONING TOBACCO. RUSH DONWELL TOUTON, Philadelphia, Pa., assignor to Bayuk Cigars Incorporated, Philadelphia, Pa., a Corporation of Maryland. Filed June 6, 1931. Serial No. 542,689. 3 Claims. (Cl. 131—55.)



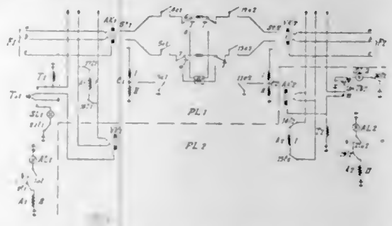
1. The method for conditioning tobacco which includes moistening the butts of hands of tobacco to render them substantially pliable, while avoiding any substantial moistening of the tobacco leaves and then moistening the leaves.

1,865,155. REFRIGERATING DEVICE. MINER P. WETMORE, Norwich, Conn., assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed Mar. 12, 1928. Serial No. 261,018. 10 Claims. (Cl. 62—91.5.)



1. A heat-insulated receptacle having a hollow cork stopper adapted to hold a refrigerant in the form of solidified gas, and means permitting the gradual escape of gas from the stopper into the receptacle.

1,865,156. TELEPHONE SYSTEM. FRITZ WOLF, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Nov. 17, 1930, Serial No. 496,059, and in Germany Dec. 12, 1929. 11 Claims. (Cl. 179—48.)



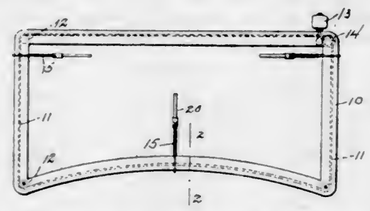
1. In a telephone system, two switchboards, a group of trunks terminating in answering jacks in the first switchboard and in multiple jacks in the second switchboard, a second group of trunks terminating in answering jacks in the second switchboard and in multiple jacks in the first switchboard, a cord circuit at the first switchboard for connecting trunks of the first and second groups by way of their respective answering and multiple jacks, and means controlled from the second switchboard for completing the connection by closing normally open points in the cord circuit.

1,865,157. LUBRICANT. WATSON H. WOODFORD, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Oct. 11, 1928. Serial No. 311,941. 13 Claims. (Cl. 102—31.)



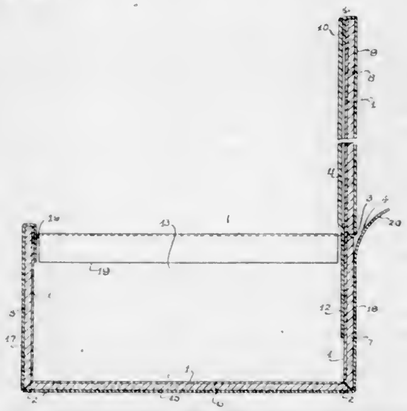
12. A lubricating coating having a dry non-lubricating frangible surface and containing beneath said dry surface drops of a fluid lubricant which becomes available when said frangible surface is broken by pressure.

1,865,158. WINDSHIELD WIPER. ROCCO ACIERNO, Newark, N. J. Filed May 31, 1930. Serial No. 458,269. 1 Claim. (Cl. 15—253.)



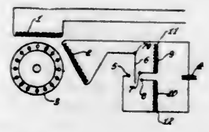
A wind-shield wiper comprising a windshield frame having a strand movable around it and wiper propelled by the strand and traversing the windshield continuously in one direction.

1,865,159. MANUFACTURE OF CIGAR BOXES AND THE LIKE. ALLAN A. ADAMSON, Rochester, N. Y., assignor, by mesne assignments, to Autokraft Box Corporation, Lima, Ohio, a Corporation of Delaware. Filed Nov. 27, 1929. Serial No. 410,206. 9 Claims. (Cl. 229—44.)



6. A cigar box having its lid and its rear wall formed from a piece of material grooved on the outside to provide a hinge between them, a label for the inner face of the lid extending over the hinge and secured to the inner face of the rear wall, and a covering for the outer face of the hinge secured in said groove and also to the outer faces of the lid and the rear wall of the box.

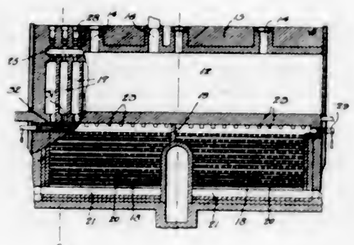
1,865,160. ALTERNATING CURRENT MOTOR. EDWIN C. BALLMAN, St. Louis, Mo. Filed May 11, 1929. Serial No. 362,191. 6 Claims. (Cl. 172—278.)



5. A single phase, alternating current, induction motor having main and auxiliary windings wound on angularly spaced magnetic axes, in combination with a condenser, a transformer, and a switch, said switch being connected to said auxiliary winding, said condenser and said transformer and operable to establish a circuit from said con-

denser to said winding in one position, the transformer circuit being open at an intermediate point of the transformer winding, and in another position from said winding to said transformer and from said transformer to said condenser so as to step up the voltage of said winding and impress the increased voltage on said condenser.

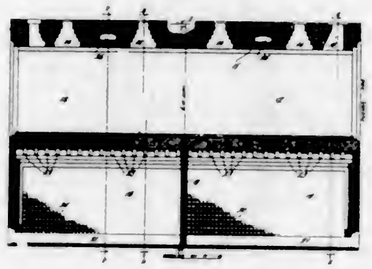
1,865,161. COKING RETORT OVEN. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 5, 1921. Serial No. 490,083. 3 Claims. (Cl. 202—142.)



1. In a coking retort battery, in combination: a series of alternate coking chambers and heating walls therefor arranged side-by-side in a row, each of said heating walls comprising vertical combustion flues; rich gas supply means for supplying unpreheated fuel gas to said flues for combustion therein; crosswise regenerators disposed in two series; one series on each side of the battery, the regenerators of each series being communicably connected in pairs with the flues of said heating walls by regenerator ducts leading into the individual flues at their lower parts; and the regenerators of each pair when operable for inflow being jointly operable for conveying air to said flues during operation for combustion of said rich gas in said flues or alternatively separately operable to convey air and unpreheated leaner fuel gas separately and simultaneously to said flues for optional heating of the oven by combustion of preheated leaner fuel gas in said flues; gas control means for restricting the aforesaid regenerator ducts; waste gas exhaust means for exhausting waste gas from said regenerators; air supply means for supplying air to said regenerators; and mechanism, adapted to operate during optional heating of the battery by combustion of unpreheated richer fuel gas in said flues, for establishing communication between one of said series of said regenerators and said waste gas exhaust means, while concurrently opening the air supply means for one regenerator of each pair of regenerators in the other series of regenerators and thereafter closing said air supply means for said regenerators and opening the air supply means for the other regenerator of each pair thereof in said other series of regenerators.

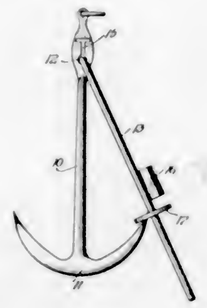
1,865,162. METHOD OF OPERATING A COKE OVEN BATTERY. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 5, 1921. Serial No. 490,084. 1 Claim. (Cl. 202—142.)

The method of directing the flow of air to the combustion flues of a battery of coking retort ovens having a series of alternate coking chambers and heating walls therefor arranged side-by-side, each of said heating walls comprising combustion flues; rich fuel gas supply means for supplying unpreheated rich fuel gas to said flues for combustion therein; two sets of regenerators operable in alternation with each other for inflow of combustion media and outflow of waste gas, each set of regenerators comprising groups of regenerators each group of which is adapted, when operable for inflow, to be jointly operable for inflow of air during combustion of said rich gas in said flues or alternatively separately operable to convey air and preheated leaner fuel gas separately and simultaneously to said flues for optional heating of the battery by combustion of preheated leaner fuel gas; and having the combustion flues respectively communicably connected by regenerator duct with one of the groups of regenerators in one of said sets of regenerators and gas con-



trolling means for regulating gas flow through said regenerator ducts; which consists in: heating the battery by combustion of the richer gas in said combustion flues and during said heating operating one of said sets of regenerators for outflow of waste gas while operating the other set for inflow of air, and, in the inflow set of said regenerators causing air to flow through part of the regenerators of each group in said inflow set and another part of the regenerators of each group in said inflow set meanwhile to remain idle.

1,865,163. FOLDING ANCHOR. THEODORE BEDELL, Freeport, N. Y. Filed Dec. 23, 1931. Serial No. 582,734. 2 Claims. (Cl. 114—207.)

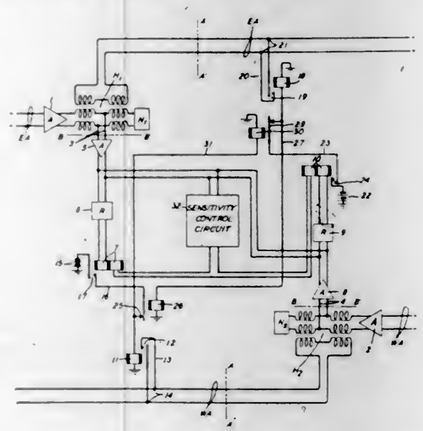


1. A folding anchor having in combination, a shank provided with a transverse aperture having a T-shaped key-way, a stock movable both longitudinally and rotatably in said aperture, a T-shaped key integral with said stock, and a collar on said stock in spaced relation to said key, one end of said stock being perpendicular to the main portion thereof and being angularly offset with respect to said key, whereby in position of use of the anchor, said key is maintained out of alinement with said keyway.

1,865,164. METHOD OF PREPARING PARATHYRIN. LOUIS BERMAN, New York, N. Y. Filed June 21, 1927. Serial No. 200,510. 2 Claims. (Cl. 167—74.)

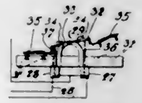
1. A method of preparing a parathyroid product which comprises treating the glands with bichloride of mercury, extracting the bichloride treated glands with an acidulated alcohol solution, removing mercury from the solution and then crystallizing the parathyroid product from solution.

1,865,165. TRANSMISSION CONTROL CIRCUITS. BJÖRN G. BJÖRNSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 29, 1930. Serial No. 471,520. 12 Claims. (Cl. 179—170.)



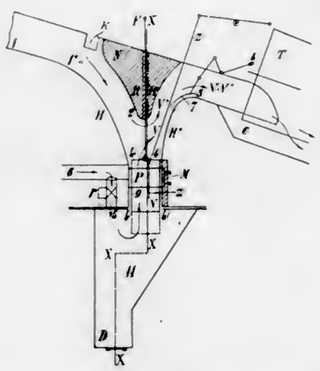
1. In combination in a signal transmission system, two signal transmission paths subject to interfering noise, means responsive to signal transmission in one of said paths for disabling the other of said paths, means connected to said paths and automatically responsive to the noise therein to control the operation characteristics of the disabling means in accordance with the amount of noise in said paths, and means for preventing the operation of said disabling means from affecting the automatic control of the operation characteristics thereof in accordance with the amount of noise in said transmission paths.

1,865,166. SIGNALING SYSTEM FOR ELEVATORS. ARTHUR G. BLAIR, Yonkers, N. Y., assignor, by mesne assignments, to Westinghouse Electric Elevator Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 1, 1924. Serial No. 753,061. 3 Claims. (Cl. 177—336.)



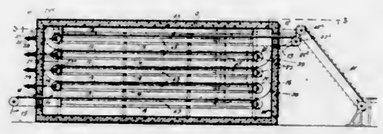
2. In an elevator signaling system having a commutator provided with "up" and "down" series of circuit closing segments and brushes to travel thereover, a directional switch including two series of contact members, circuits for electrically connecting said contact members with the corresponding series of commutator segments, a pivotally mounted switch member, two series of circuit closing elements disposed on said member for cooperation with the respective series of contact members, means yieldingly retaining said member in a neutral position for holding open the circuits closable by the elements carried thereby, electrically controlled means operatively connected with said member at opposite sides of its pivotal point, and means for energizing said electrically controlled means to pivotally move said member in relative opposite directions upon reversal of the travel of the elevator car and alternately engage the series of circuit closing elements carried by said member with the corresponding series of switch contacts.

1,865,167. SEPARATING DEVICE. MIGUEL BONGERA, Mieres, Spain. Filed July 5, 1928, Serial No. 290,639, and in France Oct. 12, 1927. 4 Claims. (Cl. 209—157.)



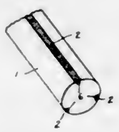
1. In combination, a separating box having a descending channel and a directly adjacent ascending channel, a tank located below said separating box, a conduit connecting said tank to said channels, said tank having an upwardly directed branch and a second conduit connecting said upwardly directed branch and said separating box.

1,865,168. REFRIGERATING METHOD AND APPARATUS. VICTOR BUHR, Larchmont, N. Y., assignor to Equity Construction Company, Inc., New York, N. Y., a Corporation of New Jersey. Filed Mar. 25, 1930. Serial No. 438,679. 9 Claims. (Cl. 62—104.)



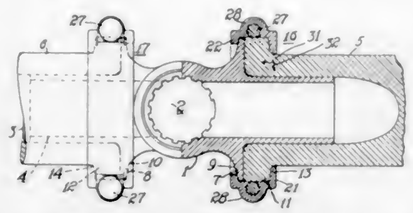
1. The method of hardening a semi-frozen product which comprises passing the product through a refrigerating chamber and while the product is within the chamber directly impinging against opposite sides of the product separate streams of a gaseous cooling medium under pressure, and permitting such gaseous medium to expand, whereby the temperature of the product is substantially reduced.

1,865,169. WELDING ELECTRODE. ALBERT M. CANDY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 27, 1927. Serial No. 208,696. 10 Claims. (Cl. 219—8.)



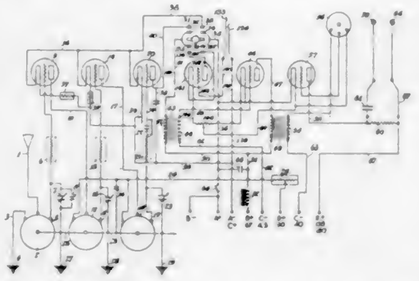
1. An arc welding electrode comprising a welding metal having a plurality of substantially straight longitudinally-extending recesses approximately equally spaced from each other about the periphery of said electrode and a flux within said recesses.

1,865,170. PROPELLER HUB. SIDNEY T. CARTER, Parnassus, Pa., assignor jointly to Sidney T. Carter and Robert E. Lankford, trustees, Pittsburgh, Pa. Filed Nov. 14, 1929. Serial No. 407,140. 5 Claims. (Cl. 170—173.)



1. In combination, a propeller hub having an annular flange at each end, a propeller blade for each end of the hub, each blade having an annular flange adjacent to and abutting its corresponding flange on the hub when in operative position, and a two-part clamping ring, each part being semi-circular and of channel shape in section, for each blade for holding the flanges of the hub and the blades in firm and rigid relationship.

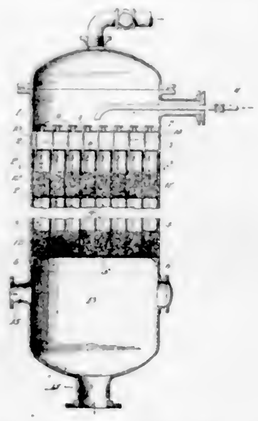
1,865,171. APPARATUS FOR RECORDING AND REPRODUCING SOUND. HARRY E. CHIPMAN, Springfield, Mass., assignor, by direct and mesne assignments, to Andrew Le Roy Chipman, New York, N. Y. Filed May 3, 1928. Serial No. 274,775. 6 Claims. (Cl. 250—20.)



1. Apparatus for recording and reproducing natural sounds, including, in combination, electro-magnetic recording means including an electro-magnet having co-axial primary and secondary windings, a source of direct current connected with said primary winding to flow therethrough, means for converting received radio frequency energy modulating in correspondence with natural sounds into correspondingly modulating audio frequency electric current, means directing said current to flow through the secondary winding of said electromagnet to modulate the intensity of the magnetic field of said magnet in correspondence with the modulations of said current, a magnetizable record carrier, and means for moving said magnetizable record carrier through the field of said magnet to place on said record carrier magnetic impressions modulating therealong in correspondence with said received modulating radio frequency energy, whereby said record carrier is conditioned for magnetic reproduction therefrom of the sounds governing the modulations of said received radio frequency energy.

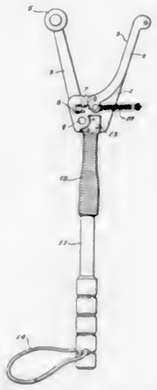
1,865,172. PROCESS AND APPARATUS FOR CRACKING HYRDOCARBON OILS. RALPH C. COOK, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 9, 1928. Serial No. 245,387. 6 Claims. (Cl. 261—114.)

1. A process of treating hydrocarbon oil vapors to separate insufficiently cracked constituents from sufficiently cracked vapors, which consists in passing the vapors to be treated upward in a plurality of parallel independent streams, causing the vapors in each of said streams to pass through packing material, subsequently causing the



vapors to bubble through a pool of refluxing liquid, causing liquid from said pool to flow downwardly in contact with and countercurrent to the rising vapors, and thereafter withdrawing said vapors for condensation as the product of the process.

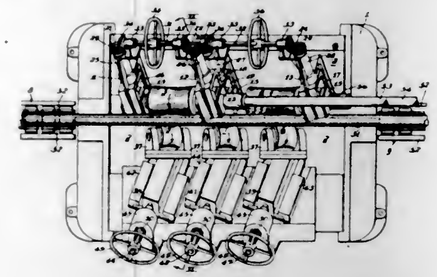
1,865,173. TARGET THROWER. JOHN A. DICKERMAN, Reno, Nev., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed July 16, 1928. Serial No. 293,237. 4 Claims. (Cl. 124—3.)



1. A hand target thrower, comprising, a carrier adapted to receive and release the target, a stiff handle, and a helical spring having its axis extending longitudinally of said handle and joining said carrier with said handle, said spring tapering to a smaller diameter where it joins the carrier.

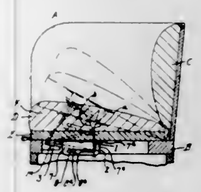
1,865,174. MACHINE FOR STRAIGHTENING ROUND STOCK. AUGUST P. DIESCHER, Pittsburgh, Pa., assignor to S. Diescher & Sons, Pittsburgh, Pa., a Partnership consisting of Samuel E. Diescher and August P. Diescher. Filed Mar. 18, 1930. Serial No. 436,715. 8 Claims. (Cl. 153—60.)

1. A cross rolling machine for straightening round stock, comprising stock-engaging rolls mounted on opposite sides of a roll pass, and means for moving all of said rolls toward and away from a plane passing through



the lower edge of said roll pass to vary the size thereof for the reception of different size stock while maintaining the lower edge of the roll pass at a constant elevation.

1,865,175. RETAINING DEVICE FOR REMOVABLE VEHICLE SEAT CUSHIONS. ANDREW J. DINKEL, Yuma, Ariz., assignor of one-third to Richard Smith, Yuma, Ariz. Filed Apr. 27, 1929. Serial No. 358,499. 3 Claims. (Cl. 155—5.)



1. In combination with a seat cushion mounted on a support in such manner that the rear edge of said seat cushion contacts firmly with a portion of said support, means for maintaining said seat cushion in its proper downward and rearward position with respect to its support, comprising a resilient member attached to the seat support, and slotted means for connecting said member to the seat cushion, said slotted means being located lower than the point at which said member is attached to the support and lower than the point at which the rear edge of the seat cushion contacts with said support, whereby downward and rearward pressure is exerted against said seat cushion by said member to provide a toggle action when the seat cushion is in its normal position.

1,865,176. FENCE POST. HARRY C. DREIBUSS and PAUL J. MCCULLOUGH, St. Louis, Mo., assignors to Scullin Steel Co., St. Louis, Mo., a Corporation of Delaware. Filed Nov. 6, 1931. Serial No. 573,380. 15 Claims. (Cl. 189—23.)

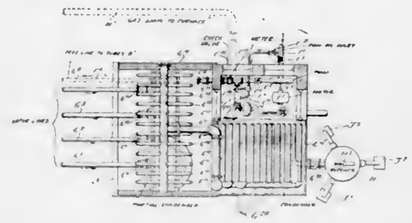


2. A rolled metallic fence post having a cross-section of the V type and comprising a pair of angularly disposed side members joined by a continuous, longitudinally uniform angle portion, said angle portion being angularly reinforced by solid spaced, thin horizontally extending and outstanding ribs connecting said side members.

1,865,177. MANUFACTURE OF ALIPHATIC ANHYDRIDES. HENRY DREYFUS, London, England. Filed Mar. 21, 1929, Serial No. 348,978, and in Great Britain Apr. 14, 1928. 10 Claims. (Cl. 260—123.)

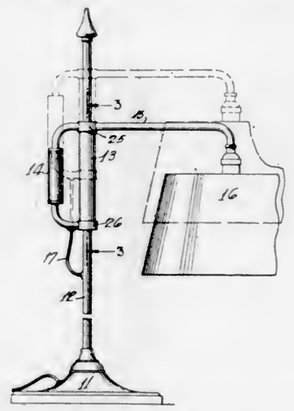
1. Process for the manufacture of an alkoxy aliphatic anhydride which comprises subjecting the vapors of an alkoxy aliphatic acid to thermal decomposition at a temperature between 300° and 1200° C.

1,865,178. PROCESS FOR TREATING HYDROCARBON OILS. CARBON P. DUBBS, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 9, 1927. Serial No. 182,205. 2 Claims. (Cl. 196—132.)



1. A process for cracking hydrocarbon oil comprising heating the oil in a heating zone, thereafter delivering the heated oil to a distilling zone, maintaining a superatmospheric pressure on oil in said heating and distilling zones, continuously removing vapors from said distilling zone, continuously advancing a constant volume of charging oil for the process in a stream from the outlet of a mechanical pressure applying means, maintaining a constant volume of oil in said distilling zone by automatically regulating the amount of oil admitted from said stream to said heating zone through the medium of thermal means responsive to changes in the liquid level of the oil body in said distilling zone and directly returning such portions of said oil stream as are not admitted to said heating zone to the inlet side of said mechanical pressure applying means.

1,865,179. LAMP STAND. CONSTANT ARMIN EOLI, Weehawken, N. J. Filed May 18, 1931. Serial No. 538,218. 2 Claims. (Cl. 240—81.)



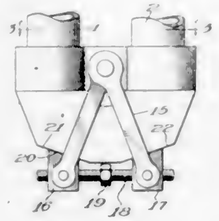
1. In combination, a lamp stand having a stem and a bracket supporting a lamp, said bracket comprising a handle terminating in a pair of aligned collars through which said stem passes and an arm secured to one of said col-

lars, a metallic hose surrounding said stem, a coil spring surrounding said hose and engaging said hose at one end, a tubular housing for said spring and hose placed between and held in position by said collars, said handle, one of said collars and said arm forming a continuous conduit for an electric conductor associated with said lamp.

1,865,180. PROCESS FOR PRODUCING CATALYSTS. WARREN F. FARAGHER, Woodbury, N. J., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 15, 1931. Serial No. 544,687. 1 Claim. (Cl. 23—233.)

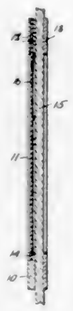
A process for the production of highly active metallic catalysts comprising subjecting the corresponding metallic oxides to treatment at elevated temperatures with activated hydrogen.

1,865,181. STREAM LINE RETURN HEADER FOR TUBES. TEDDY B. FISHER, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed July 7, 1930. Serial No. 466,088. 3 Claims. (Cl. 285—20.)



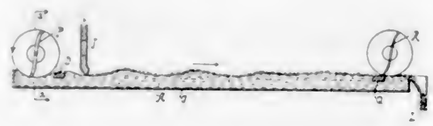
1. A steam line return header comprising in combination, removably joined header blocks, adjacent tubes of a tube bank connected to said header blocks, a cap operatively associated with said header blocks and provided with a U-bend conduit connecting said adjacent tubes, and double swingable adjustable means maintaining said cap in contact with said blocks.

1,865,182. WINDOW DISPLAY DEVICE. JEFFERSON D. FUTCH, Baltimore, Md. Filed Oct. 31, 1931. Serial No. 572,323. 4 Claims. (Cl. 40—152.)



1. A display device including a supporting sheet of glass, an inner frame adhesively secured to one face of the glass and slotted and grooved to receive a display card, and an outer frame adhesively secured to the other face of the glass in registering relation to the inner frame.

1,865,183. APPARATUS FOR TREATING SOLID AND LIQUID MATERIALS. WILHELM GAUS, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 3, 1930, Serial No. 486,274, and in Germany Oct. 5, 1929. 4 Claims. (Cl. 23—252.)



1. Apparatus for the continuous treatment of non-gaseous materials, comprising a horizontally disposed elongated vessel, a liquid medium in said vessel, means at one end of said vessel, for imparting an undulatory movement to said liquid, a supply near said means and at the inner side thereof, for passing non-gaseous material on to said liquid, and means at the other end of said vessel for removing non-gaseous material from the surface of said liquid.

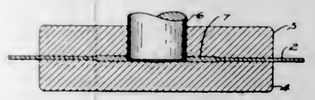
1,865,184. PRINTING MACHINE FOR MULTICOLOR WORK. VICTOR ENRIQUE GIVAUDAN, Mexico City, Mexico. Filed Jan. 23, 1929, Serial No. 334,524, and in Mexico Aug. 14, 1928. 2 Claims. (Cl. 101—176.)

1. In a rotatory printing machine for color work having a plurality of ink drums with different colors, a plurality of cylinders supported in operative contact, one of said cylinders having a circumference formed by printing blocks, and adjustable stationary means for successively placing said blocks during each revolution of said one cylinder in contact with a plurality of said ink drums and subsequently with another one of said cylinders.

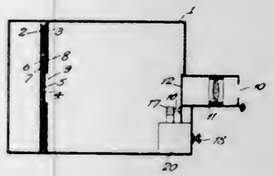
1,865,185. METHOD OF MAKING DISK WHEELS. HAROLD A. GREENWALD, River Rouge, Mich., assignor to Whitehead & Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed Mar. 19, 1930. Serial No. 437,176. 4 Claims. (Cl. 29—159.01.)

1. The method of making a disk wheel having a relatively thick inner zone, a relatively thin outer zone, and wherein the amount of metal in the outer zone diminishes from a point near the inner zone toward the wheel periphery, which comprises taking a flat blank of stock having

a thickness substantially equal to the thickness of the outer zone in the resultant wheel, upsetting the stock while in flat form to form the thickened inner zone leaving the outer zone portions substantially unaltered as to thickness, and providing apertures in the outer zone located in close proximity to the wheel periphery.

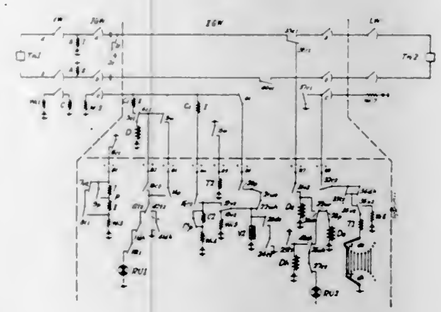


1,865,186. COLOR PHOTOGRAPHY. JOSEPH B. HARRIS, Jr., Los Angeles, Calif. Filed Jan. 23, 1929. Serial No. 334,391. 3 Claims. (Cl. 95—2.)



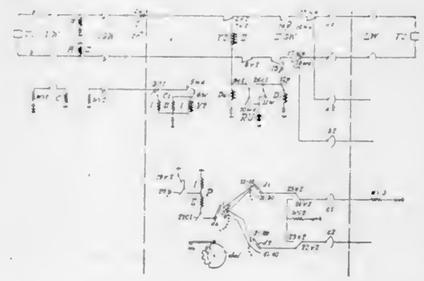
1. The method of forming color selection negatives which consists in first placing a red insensitive negative photographic film and a red sensitive negative photographic film substantially in contact coating to coating and then allowing the light from a subject to fall thereon and subsequently allowing the red light only from the subject to fall thereon, the red insensitive negative film being so positioned as to first receive the light.

1,865,187. TELEPHONE SYSTEM. ERNST HORN, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Jan. 2, 1931, Serial No. 506,024, and in Germany Feb. 22, 1930. 10 Claims. (Cl. 179—18.)



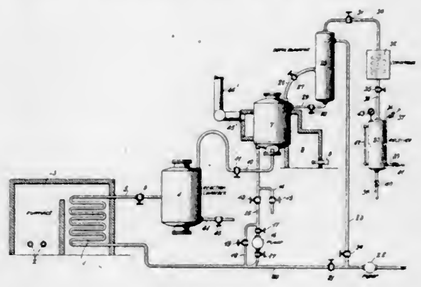
1. In an automatic telephone system, an incoming trunk line, an outgoing trunk line, a first switch for interconnecting said trunk lines, a second switch directively controlled by impulses to mark a particular contact automatic means for stepping said first switch, a third switch controlled at predetermined intervals by said first switch, cam springs in said first switch for effecting said control over said third switch, and means operative responsive to said third switch and said second switch being positioned to corresponding contacts for stopping the automatic stepping of said first switch.

1,865,188. TELEPHONE SYSTEM. ERNST HORN, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Jan. 2, 1931, Serial No. 506,025, and in Germany Feb. 24, 1930. 8 Claims. (Cl. 179—18.)



1. In an automatic telephone system, a switch having a plurality of sets of wipers, a second switch individual to said first switch arranged to control the positioning of said first switch, and mechanical means in said second switch for selecting the set of wipers over which the connection is to be completed.

1,865,189. PROCESS AND APPARATUS FOR TREATING HYDROCARBONS. WILLIAM R. HOWARD, Washington, D. C., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 4, 1927, Serial No. 172,838. Renewed Mar. 17, 1931. 4 Claims. (Cl. 196—48.)

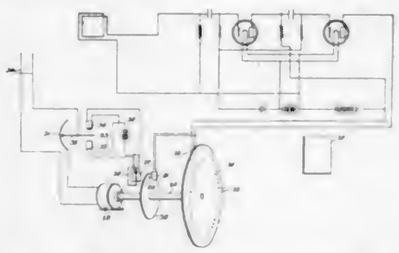


1. A process of cracking hydrocarbon oil, consisting in subjecting the oil to cracking conditions of temperature and pressure, taking off vapors and subjecting them to dephlegmation, collecting the reflux condensate in a separate pool, subjecting such pool to cracking conditions independently regulated relative to the main cracking operation and causing the vapors generated by the main cracking operation to pass through said pool of reflux condensate in physical contact therewith prior to their dephlegmation.

1,865,190. SYNCHRONIZING SYSTEM FOR TELEVISION APPARATUS. CHARLES W. JEFFRIES, Lake Charles, La., assignor of one-fourth to Mason P. Erwin, Lake Charles, La. Filed Oct. 23, 1929. Serial No. 401,779. 2 Claims. (Cl. 178—69.5.)

1. In a television apparatus, a rotary receiving disc provided with a series of scanning holes, a second disc rotating with said first named disc, a motor for driving both of said discs, a screen, a neon lamp disposed at the side of the first named disc opposite the screen and adapted to receive current impulses, a second neon lamp connected in parallel with said first named neon lamp and arranged

adjacent the second named disc, said second named disc having a finger hole therein for synchronizing purposes, a pair of photo-electric cells located adjacent the second named disc at the side opposite the second named neon lamp, a screen located between said pair of photo-electric cells, a resistance interposed in one of the leads to said motor, a movable arm adapted to travel over said resist-

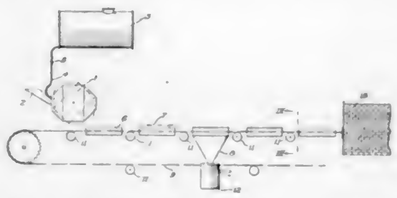


ance, and a pair of electro-magnets located at opposite sides of said arm and connected in parallel with a source of current and with the respective photo-electric cells for moving said arm in accordance with variations in the current to the electro-magnets in response to fluctuations caused by the beam of light passing from the second named neon lamp through said hole onto one or the other of said photo-electric cells.

1,865,191. CELLULOSE NITRATE LACQUER. OTTO JORDAN, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 5, 1928, Serial No. 290,684, and in Germany Aug. 1, 1925. 8 Claims. (Cl. 134—26.)

1. A lacquer for application by spraying comprising cellulose nitrate, an artificial cyclic ketone resin, and a solvent containing at least 20 per cent of a dialkyl-ether of propylene glycol corresponding to the general formula $RO—C_3H_6—OR'$ (in which R indicates an alkyl group with from 1 to 4 carbon atoms and R' means an alkyl group with from 2 to 4 carbon atoms).

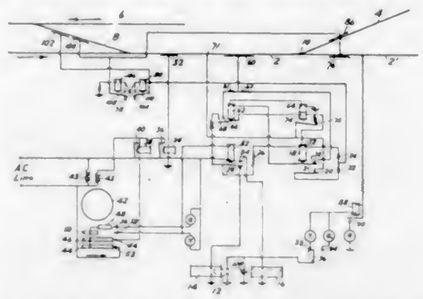
1,865,192. METHOD OF MAKING STRUCTURAL MATERIAL. WALTER RAYMOND KAPPES, Oakmont, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 26, 1931. Serial No. 525,481. 8 Claims. (Cl. 92—21.)



1. The method of making light, porous structural units from pulped masses, comprising mixing with a pulped mass about 2 to 3 per cent of aluminum powder and a predetermined quantity of an alkaline reagent.

1,865,193. TRAFFIC CONTROLLING DEVICE. ARCHIBALD H. KINGHORN, Jr., Oakmont, Pa. Filed Aug. 19, 1930. Serial No. 476,294. 18 Claims. (Cl. 246—221.)

1. In combination with a road system including a road forming an approach to a junction and branch roads extending from said junction, controlling means for traffic including means for determining the branch road which may be taken by a vehicle from the junction, and means for selectively operating the determining means, said operating means being controlled by the passage of a vehicle into a given portion of the approach road at any instant of one predetermined period of substantial duration to operate the determining means to permit passage upon one branch



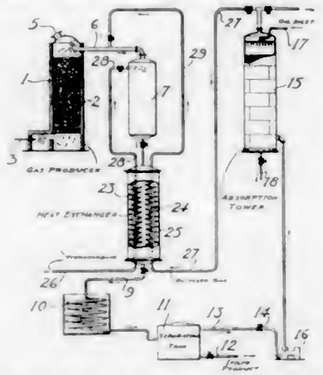
road, and by the passage of a vehicle into the same portion of the approach road at any instant of another predetermined period of substantial duration to operate the determining means to permit passage upon another branch road.

1,865,194. RAIL JOINT BAR. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Original application filed Apr. 25, 1930, Serial No. 447,122, now Patent No. 1,814,835, dated July 14, 1931. Divided and this application filed Feb. 24, 1931. Serial No. 517,685. 16 Claims. (Cl. 238—243.)



1. A rail joint bar comprising a head element, a flange element and a connecting web, said bar being adapted for both center and end fishing contact with the rail ends when applied in a joint, one of said elements being incurved on its inner face and beveled on its outer corners adjacent the fishing surface thereof and at each end of the bar, the bevel tapering from the ends of the bar toward the middle thereof and providing reduced width of fishing surface at the ends of the bar with such surface increasing in width toward the middle of the bar.

1,865,195. METHOD FOR CRACKING HYDROCARBONS BY CONTACT WITH HOT GASES. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 15, 1928. Serial No. 277,821. 4 Claims. (Cl. 196—62.)

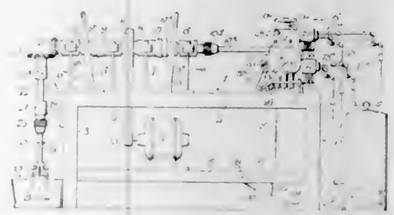


1. Method of cracking hydrocarbons to produce lower boiling products, comprising making producer gas at a temperature between 1200° and 1800° C., partially cooling said gas, injecting the partially cooled gas into a reaction zone to produce a cracking temperature up to approximately 600° C. therein, introducing hydrocarbons into said reaction zone wherein they are thermally decomposed by the hot gases, withdrawing the reaction product, and recovering lower boiling hydrocarbon components therefrom.

1,865,196. MANUFACTURE OF A NEW COMPOSITION OF MATTER WITH A BASE OF CELLULOSE ESTERS. OSKAR LOEHR, Uerdingen-Niederrhein, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 5, 1927. Serial No. 189,183, and in Germany May 7, 1926. 2 Claims. (Cl. 134—79.)

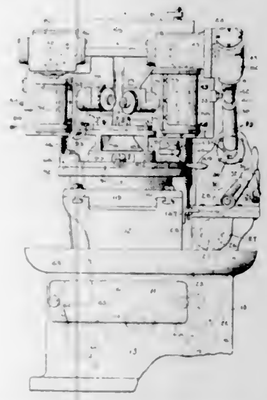
1. A composition of matter comprising a cellulose ester and an ester of a polyglycolmonoalkylether boiling above about 300° C., said composition being excellently suited for the manufacture of artificial masses, lacquers, artificial leather and the like.

1,865,197. HAT CLEANING MACHINE. ADAM J. MANNI, Chicago, Ill. Filed Oct. 17, 1928. Serial No. 312,948. 14 Claims. (Cl. 223—26.)



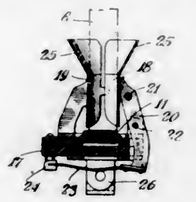
1. A machine of the kind described embodying therein a concaved steaming member, an ironing member, concaved in opposition thereto and means supporting said members providing a guided floating movement of one member with respect to the other member.

1,865,198. MILLING MACHINE. NEWMAN M. MARSILIUS, Bridgeport, Conn., assignor, by mesne assignments, to The Producto Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 4, 1928. Serial No. 251,843. 6 Claims. (Cl. 90—15.)



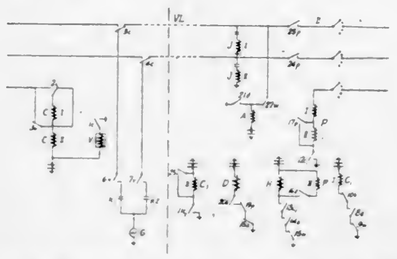
1. In a milling machine a reciprocatory slide, a cutter carrier slidably and adjustably mounted on said reciprocatory slide, two shafts mounted by said carrier and angularly disposed relatively, means for driving one of said shafts, means whereby said driven shaft drives the other shaft, a worm on said other shaft, a cutter carrying shaft mounted by said carrier, and a worm gear on said cutter carrying shaft and meshing with said worm.

1,865,199. CIGAR AND CIGARETTE LIGHTER. GUSTAVE J. MARTEL, New York, N. Y. Filed Feb. 26, 1929. Serial No. 342,931. 1 Claim. (Cl. 219—32.)



A lighter as characterized comprising an electrical ignition element, a holding element adapted to guide and retain a cigar or the like in contact with said ignition element, and having a movable switch portion for supplying electric current to said ignition element when and as a cigar or the like is introduced in said holding element, and means connected with said movable switch portion for automatically discontinuing the electrical supply when and as the cigar or the like is removed from said holding element, said means embodying a pivoted lever, one end of which is attached to said holding element, and the other end of which carries a switch member, and means for rocking said lever to remove said switch member from electrical contacts when said holding element is empty, said means embodying a weighted switch member adapted to fall away from the electrical terminals by gravity.

1,865,200. TELEPHONE SYSTEM. MAXIMILIAN MATHIAS, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Mar. 15, 1929, Serial No. 347,215, and in Germany June 23, 1928. 6 Claims. (Cl. 179—18.)

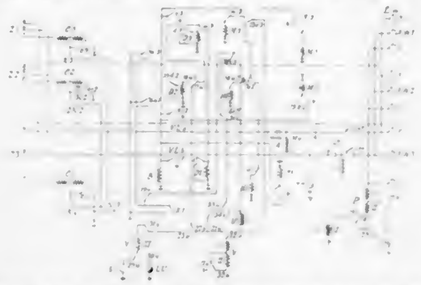


1. In a telephone system wherein an automatic switch is operated to extend a line and is released when alternating current is applied over separate paths to the conductors thereof, a separate condenser in each path of such value that the current in one conductor is out of phase with the current in the other.

1,865,201. AUTOMATIC TELEPHONE SYSTEM. MAXIMILIAN MATHIAS, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Nov. 17, 1930, Serial No. 496,303, and in Germany Dec. 12, 1929. 7 Claims. (Cl. 179—18.)

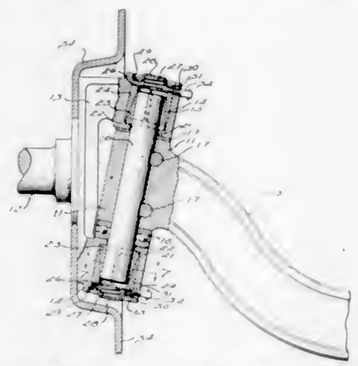
1. In an automatic telephone system, a selector having a plurality of groups of bank contacts, a plurality of groups of connectors, individual trunk lines extending from the first group of selector bank contacts and terminating in

connectors in the first group of connectors, other individual trunk lines extending from another group of said selector bank contacts and terminating in another group of con-



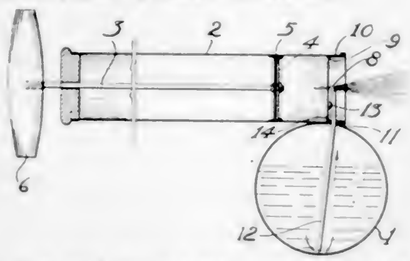
nectors, and other trunk lines multiplied to both groups of said selector bank contacts and common to a connector in each of said connector groups.

1,865,202. ADJUSTABLE KING PIN BEARING. JOHN B. MILLIGAN, Columbus, Ohio, assignor to The Columbus Auto Parts Company, a Corporation of Ohio. Filed Feb. 12, 1931. Serial No. 515,239. 10 Claims. (Cl. 280—96.1.)



1. A steering knuckle including the spindle and axle of an automotive vehicle having a shaft extending within aligned hollow bosses on said shaft and spindle, means for retaining said shaft in fixed relation with at least one of said bosses and self-adjusting bearings and wedges, each having angularly disposed inner and outer cylindrical surfaces engaging and supporting the end of the shaft in at least one other of said bosses.

1,865,203. SPRAYER. FRANKLIN C. NELSON, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 14, 1930. Serial No. 475,321. 4 Claims. (Cl. 299—88.)



1. In a spray device, a gas compressor having a delivery opening, a reservoir for liquid below the compressor, and a siphon tube extending from the interior of the reservoir upwardly exteriorly of the compressor to a delivery end opposite the opening, the compressor having an auxiliary opening facing the tube between the reservoir and delivery end of the tube.

1,865,204. PRODUCTION OF VOLATILE FLUORIDES. MICHAEL OTTO, Ludwigshafen-on-the-Rhine, and LEOPOLD BUB, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 28, 1930, Serial No. 432,259, and in Germany Mar. 6, 1929. 2 Claims. (Cl. 23—88.)

1. The process of producing volatile fluorides which comprises treating a mixture of a metal fluoride and the oxide of the element, the volatile fluoride of which is to be produced, with sulphur trioxide.

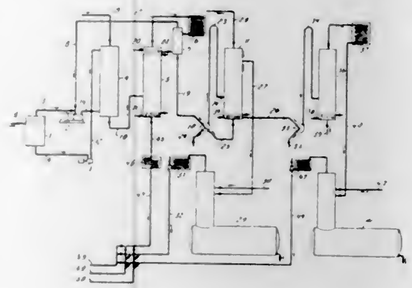
1,865,205. FASTENER FOR AUTOMOBILE TRUCK DOORS. CARL E. PALMQUIST, Olean, N. Y., assignor to Mutual Engineering Corporation, a Corporation of New York. Filed Oct. 22, 1929. Serial No. 401,473. 3 Claims. (Cl. 292—37.)



1. In an automobile door fastener for mounting on a door and holding it in position with respect to the frame the combination of two oppositely-extending resilient latching members of flat-strap metal, and means for operating said latching members, and means for resiliently holding said latching members against said frame, each of said latching members terminating at one end thereof in an integral web latch portion disposed at right angles thereto and extending inwardly therefrom said web latch portion from points adjacent to said latching member having parallelly inclined opposite edges terminating in a common edge of curved outline, the inclined rear edge of said web latch portion corresponding to an inclined rear edge of a stop positioned in the frame, said stop having a front and bottom edge positioned at right angles with respect to each other, so that said door may be pushed into locking position and may only be unlocked by said operating means.

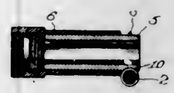
1,865,206. ART OF CRACKING HYDROCARBONS. HARRY L. PELZER, Highland, Ind., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Dec. 16, 1929. Serial No. 414,356. 2 Claims. (Cl. 196—40.)

1. In the manufacture of motor fuel gasolene having a high critical compression, the improvement which comprises subjecting a high boiling hydrocarbon oil to a cracking temperature upwards of 950° F. and separating a gas mixture including unsaturated hydrocarbon constituents from the products of the cracking operation, subjecting a hydrocarbon composite including the unsaturated hydrocarbon constituents of this gas mixture to treatment with sulfuric acid, separating the resulting composite acid mixture and composite oil mixture, distilling a polymerized gasolene fraction from the separated composite oil mixture, hydrolyzing the separated composite acid mixture to produce a second composite oil mixture,



distilling an oxidized gasolene fraction from this second composite oil mixture, and combining the composite polymerized gasolene fraction and the composite oxidized gasolene fraction so produced with a gasolene fraction of lower critical compression to produce a motor fuel gasolene having a high critical compression.

1,865,207. CONDUCTOR CLIP. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1926. Serial No. 140,397. 6 Claims. (Cl. 173—259.)



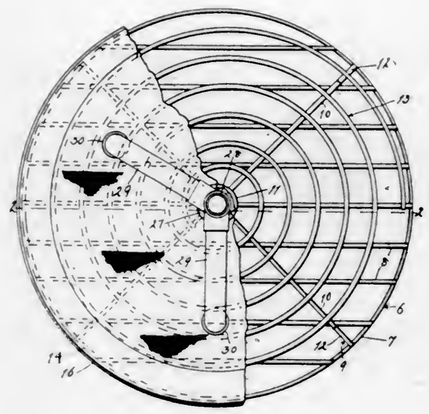
1. A conductor clip adapted for use at the end of an insulation covered wire comprising a portion to cover the insulation whereby to conceal the loose or frayed ends of the insulation, said portion consisting of a wire formed into a coil, the wire at one end of said coil being bent into a semi-circular loop and meeting the wire at the opposite end of said coil in a fixed connection, said coil and said loop extending around and in direct contact with a conductor support, the inherent tension in said coil bindingly holding said coil and said loop in tight electrical contact with the conductor support.

1,865,208. METHOD OF PRODUCING A TEMPERATURE-SENSITIVE ELEMENT. NORMAN B. PILLING, Wilkinsburg, and ROBERT E. BEDWORTH, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1921. Serial No. 445,022. 5 Claims. (Cl. 201—76.)

5. A method of producing a resistance element which comprises providing a copper body, welding the ends thereof to metallic conductors and heating the copper body at a temperature of at least 900° C. in an atmosphere of oxygen.

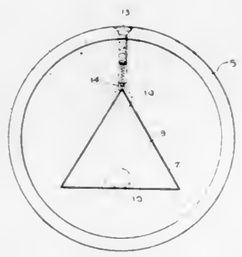
1,865,209. FILTER. FRANK PRETSCH, Philadelphia, Pa. Filed Aug. 24, 1931. Serial No. 559,064. 7 Claims. (Cl. 210—170.)

1. A filter comprising a boundary support, cross bars secured to said boundary support in parallel relation to each other, a spider secured to the boundary support and arranged in spaced relation to the cross bars, a con-



volute web fixed to the spider, and layers of filtering medium stretched over said frame and having their edges secured together.

1,865,210. ELECTRICAL APPARATUS. WILLIAM SPENCER PURSER, London, England, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed July 25, 1928, Serial No. 295,336, and in Great Britain Sept. 9, 1927. 2 Claims. (Cl. 179—122.)

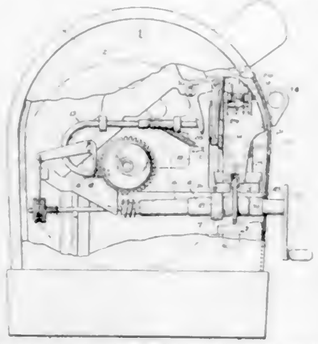


1. In a microphone, a body portion, a substantially triangular-shaped carbon granule chamber within said body portion, two electrodes within said carbon granule chamber, and one of said electrodes being arranged approximately at the apex of the triangle and the other of said electrodes being arranged approximately at the middle point of the base of the triangle.

1,865,211. COIN CONTROLLED MECHANISM. WILLIAM RABKIN, New York, N. Y. Filed May 7, 1929. Serial No. 361,115. 5 Claims. (Cl. 194—70.)

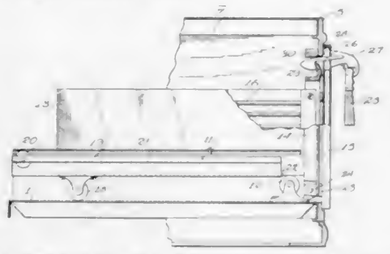
1. In a coin controlled mechanism for a consecutive view apparatus, a picture carrier, a crank shaft for actuating the carrier, a tripping rod for locking said picture carrier, a coin driving member on said shaft, a coin actuated member having an opening in the path of movement

of said driving member, means actuated by movement of the coin actuated member for projecting said tripping rod to release the picture carrier, and means for guiding and



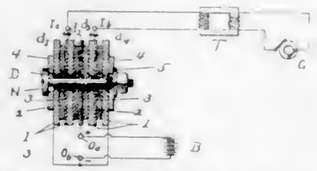
supporting a coin over said opening in the coin actuated member, whereby the latter is operated by movement of the coin driving member against the coin.

1,865,212. DRAWER CONSTRUCTION FOR STOVES. WALTER F. ROGERS and JOHN C. ROGERS, Cicero, Ill., assignors to Crown Stove Works, Cicero, Ill., a Corporation of Illinois. Filed May 23, 1931. Serial No. 539,553. 4 Claims. (Cl. 126—340.)



1. A device of the class described comprising a compartment having a wall provided with an opening, a drawer slidably mounted in said compartment and adapted to be withdrawn through said opening, a door hinged on the outer end of said drawer, a movable latch for securing said hinged door in closed position, and a shoulder adapted to secure said latch in its locking position while said drawer is closed.

1,865,213. ELECTRIC CURRENT RECTIFIER. SAMUEL RUBEN, New York, N. Y., assignor, by mesne assignments, to Ruben Rectifier Corporation of Delaware. Filed Dec. 10, 1924. Serial No. 754,956. 15 Claims. (Cl. 175—366.)

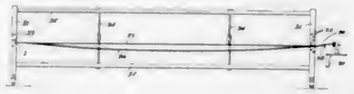


1. An electrical device having an electrode made from metallic material consisting substantially entirely of aluminum having a coating of an oxide electro-chemically produced before the assembly of the elements of said device, and an electrode of manganese dioxide in contact therewith.

10. In dry surface-contact rectifying devices and the like, an asymmetric electric couple, comprising an electropositive electrode element formed of aluminum amalgam and having a relatively thin coating of an electrically-conducting metallic oxide and a cooperating electronegative electrode element comprising a relatively dense body of manganese dioxide.

13. A dry cell rectifier for alternating current, comprising an electrode of a highly compressed and conducting powder compound of an electropositive and an electronegative element.

1,865,214. STRING. JOSEPH SALADINO and SALVATORE SALADINO, Chelsea, Mass., assignors to C. Saladino & Sons, Inc., Chelsea, Mass., a Corporation. Filed Jan. 26, 1931. Serial No. 511,313. 10 Claims. (Cl. 117—53.)

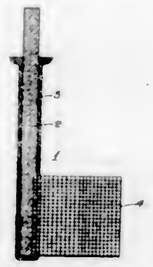


1. A string comprising a plurality of strands of fibrous material forming a core, and a plurality of strands of gut covering said core, said string being in twisted condition.

1,865,215. TRANSFER. HELENA S. SADTLER, Erdenheim, Pa. Filed June 13, 1927. Serial No. 198,687. 11 Claims. (Cl. 41—33.)

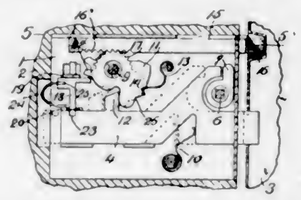
1. A transfer sheet for transferring designs to fabrics, said sheet having a marking thereon of a composition including a coagulable protein and glucose.

1,865,216. ELECTRODE CONSTRUCTION. JAMES NORMAN SMITH, Toronto, Ontario, Canada, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 22, 1928. Serial No. 301,256. 6 Claims. (Cl. 204—5.)



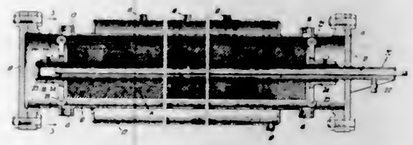
1. An electrode comprising a stud having a copper core, and a plurality of foraminous electrolyzing elements extending through one side of said stud and embedded in and integral with said core.

1,865,217. DOOR LOCK. ROBERT N. SMITH, Kansas City, Mo., assignor to James L. Hogin, Kansas City, Kans. Filed Dec. 20, 1930. Serial No. 503,744. 4 Claims. (Cl. 292—169.)



1. In a door lock, the combination with a lock casing adapted to be mounted on a door associated with a jamb, a bolt on said casing adapted to lockingly engage said jamb, and a handle oscillative on said casing, of a member engaging and oscillative with and by said handle and arranged and adapted, when turned in one direction from an initial position, to engage and retract said bolt from its locking position, a push bar interlocking with said member and movable thereby to and from a position in which it is adapted to push against said jamb and open said door, and means actuated by said member when turned a predetermined distance in the opposite direction for locking said bolt from retraction from said locking position.

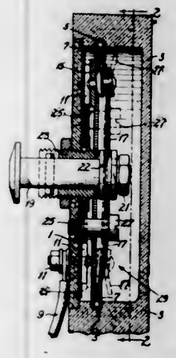
1,865,218. APPARATUS FOR TREATING ROLLED FABRIC. JOHN SPALDING, Stamford, Conn., assignor to Albert T. Otto & Sons, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 7, 1928. Serial No. 268,351. 7 Claims. (Cl. 28—1.)



1. An apparatus for the treatment of sheet material in roll form, including a chamber having a pipe extending into the chamber from one end, a closure at the opposite end whereby said roll may be moved endwise into said chamber and encircle said pipe, and means for applying a heating medium to the exterior of the chamber and to the interior of the pipe.

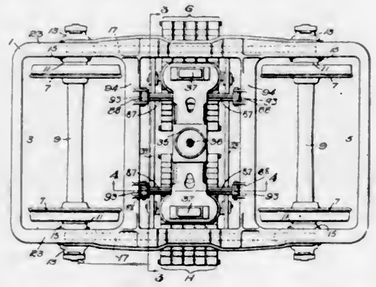
7. An apparatus for treating textile material, including a treating chamber, a tank at a lower level, a pump, valved pipe connections between the inlet of the pump and both said chamber and said tank whereby the pump may draw from either or the chamber may drain to the tank, pipe connections from the outlet of said pump to said tank whereby the pump may circulate the liquid through the chamber or fill the chamber from the tank, and overflow pipe connections from the top of the chamber and independent of the previously mentioned pipe connections for return of excess liquid from the chamber to the tank after the completion of the filling of the latter.

1,865,219. THERMOSTAT. JOHN A. SPENCER, Newtonville, Mass., assignor to General Plate Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Sept. 6, 1930. Serial No. 480,152. 6 Claims. (Cl. 297—11.)



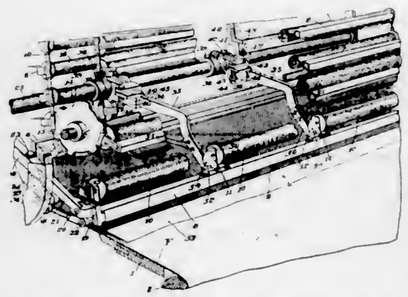
2. A thermostat comprising a cupped disc having a normal cupped position but adapted to be sprung to a stressed, cupped position from whence it can spring to the normal position upon relieving peripheral stresses therein, means operated by said disc and means for changing the temperature of the periphery of the disc at a different rate than the remainder, whereby it can spring from the stressed position to the normal position, said last-named means comprising heating means adapted to heat the disc at the periphery thereof.

1,865,220. RAILROAD TRUCK. GEORGE F. STARBUCK, Waltham, Mass. Filed Mar. 14, 1930. Serial No. 435,811. 22 Claims. (Cl. 105—190.)



1. In a railroad truck, journal boxes, longitudinal equalizers carried by said journal boxes, at least one pair of transverse beams each beam independently and pivotally carried by said longitudinal equalizers, and load-carrying means interposed between said transverse beams and the load.

1,865,221. TUFT PILE FABRIC LOOM. EDWIN W. STONE, Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed June 26, 1930. Serial No. 464,051. 13 Claims. (Cl. 139—9.)

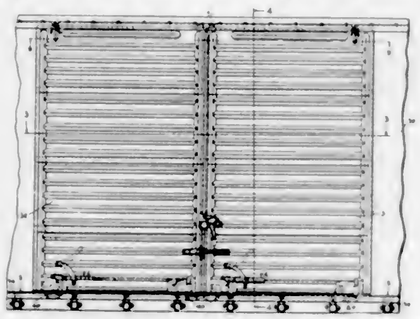


1. In a tuft pile fabric loom, the combination of shed forming mechanism, a series of tuft yarn tube frames, a rocking shaft, spaced rocking arms mounted on said shaft for carrying a tuft yarn tube frame to and from the weaving point, and an arm mounted on said rocking shaft between said spaced arms to rock with the shaft and spaced arms and provided with an end portion adapted to engage and support the tube frame between the ends thereof as the tube frame is bodily moved to the weaving point to prevent sagging of the tube frame while in the tuft inserting position.

1,865,222. CAR DOOR CONSTRUCTION. KENNETH J. TOBIN and WILLIAM W. DARROW, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1927. Serial No. 225,873. 12 Claims. (Cl. 16—99.)

1. In combination, in a car, a horizontally slidable door, a track member, said door having a portion adapted

to lie flatwise upon a fixed part of said car to impart the weight of said door thereto, rollers disposed adjacent to a horizontal edge and to the two vertical edges of said door engaging said track member, retainers for said rollers, said retainers being pivoted to said door and comprising levers of the first order, and operating means for



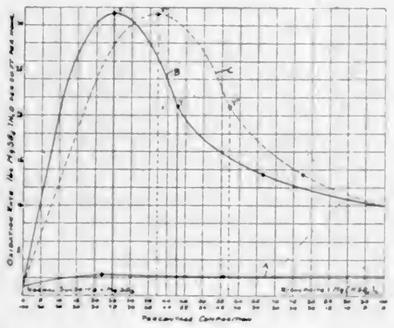
the swinging extremities of said levers, said edge of said door being capable of movement transversely of said car whereby said door in its sliding movement may have clearance relative to the side of said car, and mechanism for guiding said door in said movement transversely of said car toward and away from said side of said car.

1,865,223. HOUSE CAR END CONSTRUCTION. KENNETH J. TOBIN, GABRIEL MADLAND, and GEORGE R. TREPTOW, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 22, 1929. Serial No. 356,970. 26 Claims. (Cl. 189—46.)



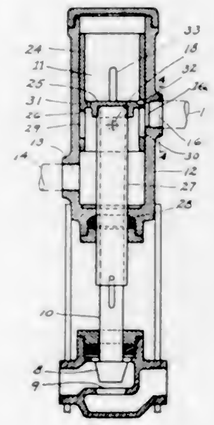
1. House car end construction comprising a frame formed by an end sill, corner posts and an end plate secured together and side strips joined to said corner posts and end plate defining together with said end plate a door-receiving opening.

1,865,224. METHOD OF MAKING MAGNESIUM SULPHATE. ARTHUR W. WINSTON and IVAN A. KENAGA, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 5, 1929. Serial No. 344,195. 9 Claims. (Cl. 23—128.)



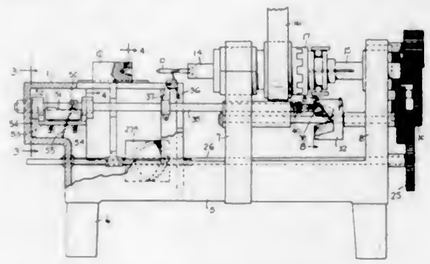
8. In a method of making magnesium sulphate, the step which consists in oxidizing a mixture of acid and normal sulphite of magnesium in water by contacting the same with air in the presence of a catalytic compound of a metal having an atomic weight between 54 and 59.

1,865,225. AUTOMATIC CONTROL OF WATER HEATERS. WILLIAM ALBERT AHERN, Worcester, Mass. Filed Feb. 19, 1930. Serial No. 429,751. 6 Claims. (Cl. 236—25.)



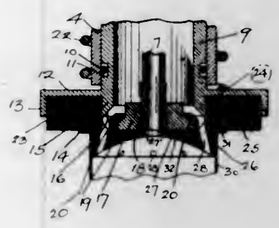
1. In a device of the class described, an automatic control device comprising a cylinder having an inlet port connected to a source of fluid under pressure, an outlet port connected through a water heater to a fluid valve, a relief port connected directly to said valve, a hollow piston movable in said cylinder carrying a rod extending outside of said cylinder and a partition intermediate the ends of said piston having a passage therethrough, whereby pressure entering said inlet port will hold said piston at the rod end of said cylinder, due to the difference in areas on opposite sides of said partition, and whereby the opening of said fluid valve will move said piston to open the outlet port, due to the passage of fluid through said relief port.

1,865,226. SCREW MACHINE FOR CUTTING SINGLE POINT DOUBLE THREAD SCREWS. JOHN A. ARENZ, Mount Vernon, N. Y., assignor to International Screw Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 20, 1931. Serial No. 509,971. 1 Claim. (Cl. 10—101.)



In a screw machine, a blank revolving spindle, a tool shaft arranged for rocking and longitudinal movement, a rotary pitch cam controlling the longitudinal movement of the shaft comprising a plurality of lobes of equal height and having spaces between the lobes of equal depth, means for adjusting one of the lobes peripherally of the cam and in respect to the other lobe to suit the pitch of the thread to be cut, a depth cam for controlling the rocking movement of the shaft having extensions thereon, one of the edges of the extensions being bevelled, and the edges of alternate extensions having a bevel of relatively greater width for controlling the starting point of a tool cut on the blank.

1,865,227. FILLING VALVE FOR SIRUPERS. AUGUST P. ARZINO, San Jose, Calif. Filed Apr. 11, 1927. Serial No. 182,759. 10 Claims. (Cl. 226—124.)

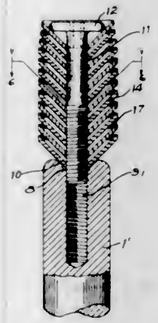


1. In a can filling valve structure for sirupers, the combination of an inverted dish shaped resilient member positioned within the can and in close contact with the inner end thereof adapted to provide a displacement body, said member having a central air exit duct; means for supplying sirup to the can; and means for adjusting said member to vary the concavity of the dish-shape thereof.

1,865,228. METHOD OF PREPARING ANHYDROUS MAGNESIUM CHLORIDE FROM MAGNESIUM OXYCHLORIDE CEMENT MIXTURES. EDWIN O. BARSTOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 6, 1929. Serial No. 360,994. 3 Claims. (Cl. 23—91.)

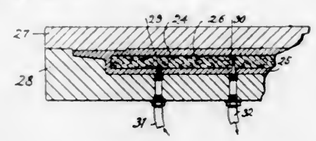
1. The method of preparing anhydrous magnesium chloride which comprises intermixing magnesium oxide and an aqueous magnesium chloride solution, allowing the mixture to set to a solid mass, reducing the latter to form small particles, drying the particles and subjecting the same to the action of hydrochloric acid gas at a temperature above 280° C.

1,865,229. LAPPING DEVICE. CONRAD F. BIRGBAUER, Detroit, Mich. Filed Mar. 15, 1930. Serial No. 436,191. 13 Claims. (Cl. 51—206.)



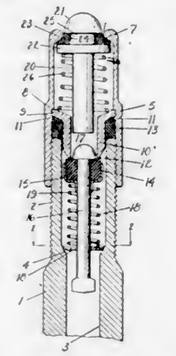
1. In a lap, a rigid fabricated cylinder comprising a plurality of superimposed metal members, films comprising substantially free particles of diamond dust between said members aligned with and exposed at the outer periphery of said cylinder, and means clamping said members together.

1,865,230. METHOD OF MAKING COMPOSITE ARTICLES. BUDD BRONSON, Cleveland, Ohio, assignor to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 20, 1929. Serial No. 415,384. 9 Claims. (Cl. 154—2.)



3. The method of making composite articles which comprises securing a sheet of rubber to one surface of a layer of fibrous material, and then treating said material with a fluid to restore its resiliency.

1,865,231. TIRE VALVE STEM. RUSSELL E. BUCK, Vicksburg, Mich. Filed May 6, 1929. Serial No. 360,678. 3 Claims. (Cl. 152—12.)

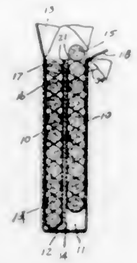


1. In a tire valve, the combination with a valve stem having an inner bore and a shoulder therein, of a closure unit comprising a cylindrical closure member having means at one extremity for attachment to the exterior of the valve stem and having an opening at its opposite extremity, depressible means mounted within the closure member having a portion protruding through the latter extremity of the closure member, and an annular seat member mounted within the closure member; a removable valve unit mounted within the stem and comprising an elongated body member, a valve member on one extremity thereof, a thrust member slidably mounted on the opposite extremity of the body member and a spring between the valve member and thrust member, said valve unit being loosely mounted in the bore of the stem with the thrust member engaging the shoulder therein; the seat member of said closure unit upon application of the unit to the valve stem engaging said valve member in sealing relation therewith and depressing the same to load the spring of the valve unit, said depressible means upon said assembly being depressible to engage and unseat said valve.

1,865,232. ARTICLE DISPENSING PACKAGE. NOBLE C. BUTLER, Anderson, Ind. Filed Aug. 23, 1929. Serial No. 387,857. 4 Claims. (Cl. 206—56.)

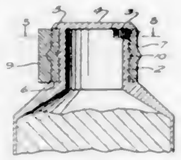
1. In combination, a container, a plurality of articles arranged therein in a plurality of layers, and a strip extending from layer to layer and transversely of the articles and simultaneously engaging opposite sides of each article in each layer for broad side ejection of the endmost article of the outermost layer and simultaneous movement of all articles in the ejecting layer for successive positioning of each article in the layer in the endmost position for subsequent ejection, said strip be-

ing continuous from layer to layer for successive layer ejection and being transversely perforated, the parallel perforations being in spaced relation and approximately



double the width of the article for successive detachment of successive portions upon successive ejection of the articles.

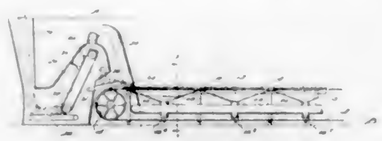
1,865,233. CLOSURE FOR COLLAPSIBLE TUBES. LEON J. CAMPBELL, Buchanan, Mich. Filed June 12, 1930. Serial No. 460,614. 3 Claims. (Cl. 221—60.)



1. A collapsible tube of the character described having a rigid neck closed at its outer end and having a discharge opening in its side wall, said neck having shoulders on opposite sides of said discharge opening, and an imperforate elastic sleeve fitting about the neck in the space between said shoulders and extending over the discharge opening to normally close the same, said sleeve having one portion compressed between the shoulders to provide a permanent seal for the discharge opening and the remaining portion free for flexure to provide a temporary seal for said opening, said free portion when at said opening yielding under internal pressure on squeezing the tube to permit a flow of material through said opening and from the tube in the form of a ribbon between one of the shoulders and over the adjacent outer edge of the sleeve, said sleeve being rotatably mounted on the neck between said shoulders whereby either portion of the sleeve may be positioned over said discharge opening.

1,865,234. METHOD OF AND APPARATUS FOR TREATING MOHAIR, WOOL, AND THE LIKE. WILLIAM CHESHIRE, Bristol, R. I., assignor to Collins & Aikman Corporation, a Corporation of Delaware. Filed Feb. 5, 1931. Serial No. 513,668. 11 Claims. (Cl. 19—65.)

1. In a machine for obtaining standard grades of mohair or like material, in combination, a continuously moving woven wire conveyor having the upper surface thereof moving in a substantially horizontal plane, means to open up and feed a substantially even relatively thin layer of material on said continuously advancing upper surface to form a continuously advancing main stream of material, means to continuously draw a gaseous stream downwards through said continuously moving layer of material and surface to remove dust and other small impurities therefrom, receptacles spaced at predetermined distances along said conveyor each adapted to receive a different class of graded qualities from said main stream, stands spaced along the opposite side of said conveyor at corresponding predetermined distances spaced below said surface, means to continuously weigh the graded stream

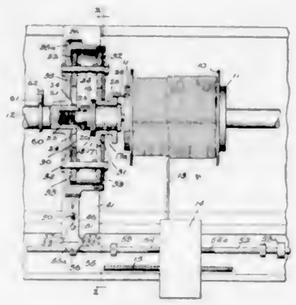


of material, storage bins for said graded material and means to continuously lead said graded stream of material to said storage bins.

1,865,235. TREATING PROCESS FOR HYDROCARBON OILS. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 28, 1926. Serial No. 119,171. 17 Claims. (Cl. 196—28.)

5. The method of desulphurizing and decolorizing hydrocarbon oil, including the step of contacting said oil with an alkaline earth metal to effect a chemical combination between said alkaline earth metal and the sulphur compounds to be eliminated.

1,865,236. COIL WINDING MACHINE. LEON C. DANIELS, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 25, 1929. Serial No. 373,633. Renewed Feb. 4, 1932. 11 Claims. (Cl. 242—9.)

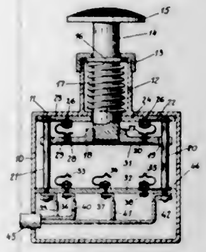


1. A coil winding machine for winding electrical conductors and the like into crossover electrical coils wherein the cross-overs of each layer form a row extending lengthwise of the coil and substantially parallel with its axis, comprising a spool, means for rotating said spool and means for changing the speed of rotation of said spool with respect to its rotating means only upon the completion of each layer so as to space said crossover rows at intervals about the periphery of the spool.

1,865,237. THREE CIRCUIT FOOT SWITCH. IRVING R. DANUFF, Bronx, N. Y. Filed July 28, 1931. Serial No. 553,536. 2 Claims. (Cl. 200—16.)

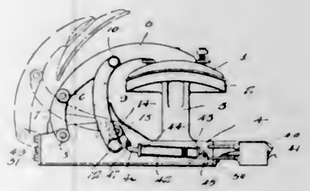
1. In a switch adapted to control a plurality of circuits to pairs of solenoids, a casing having a spring raised plunger therein, a plate conductor insulated from and carried by said plunger, a pair of spaced spring contacts insulated from said casing normally in engagement with said conductor a pair of spaced conductor rods acting as guides for said plunger carried plate, said rods being

in circuit with a current of electricity, a dielectric plate in which said rods are fixed, a series of spring contacts carried by said dielectric plate, each being in circuit with



an electric current leading to other pairs of solenoids, and means to close a circuit from one of the last named contacts with one of the first named contacts.

1,865,238. GARMENT OR IRONING PRESS. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 17, 1928. Serial No. 247,432. 35 Claims. (Cl. 68—9.)

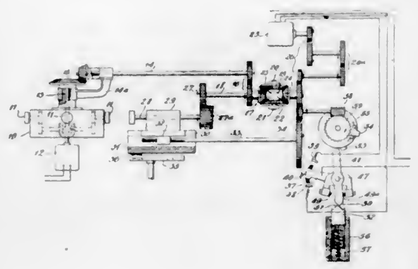


1. A pressing machine comprising a frame, cooperating pressing elements, one of which is movable toward and from the other, the latter being carried by the frame, a lever carrying the movable element, a carrier pivoted to the frame and to the lever and movable from a substantially horizontal position to an upright position during the closing of the press, and means for successively actuating the carrier and moving the lever about the pivot connecting it and the carrier.

10. In a pressing machine, cooperating pressing elements, one of which is movable toward and from the other, the movable element having a compound movement forward and downward into pressing position and upward and rearward out of closed position and mechanism for effecting the compound movement comprising cams and motion transmitting means between the cams and the movable element including followers coacting with the cams and means for actuating the cams to bring them successively into coaction with the cam followers.

24. A garment or ironing press comprising coacting press jaws and operating means to open and close the press including a press lever carrying one of the press jaws, means for swinging the press lever simultaneously through the arcs of two circles having spaced centers to bring the jaws carried thereby laterally towards and away from the other jaw, said spaced centers being remote from the lever, and means to move the press lever to bring the jaw carried thereby substantially vertically into pressing engagement with an away from the other jaw.

1,865,239. SCREW CUTTING METHOD AND MEANS. ADOLPH L. DE LEEUW, Plainfield, N. J. Filed Nov. 14, 1929. Serial No. 407,196. 22 Claims. (Cl. 29—38.)



1. The method of controlling the relative movement of two rotatable members in a mechanical system comprising said members and a pair of driving elements, which consists in rotating one of the members by means of one of the driving elements, causing relative axial movement of said members by means of the other of the driving elements, and differentially rotating the other of the rotary members by both of the driving elements.

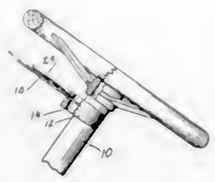
19. In combination, a spindle, a motor adapted to rotate the same, a second spindle axially alined with the first spindle, means for feeding the second spindle toward and from the first spindle, a reversible motor adapted to actuate the feeding means, means for rotating the second spindle differentially by both of said motors, a reversing switch for controlling the reversible motor, automatic means for reversing said switch after the second spindle has advanced a predetermined distance, means for returning the switch after the second spindle has been retracted to a predetermined position, and means for arresting the switch in a neutral position to stop the reversible motor.

1,865,240. HAT. JAMES J. DESMOND, South Norwalk, Conn. Filed May 3, 1928. Serial No. 274,850. 2 Claims. (Cl. 2—193.)



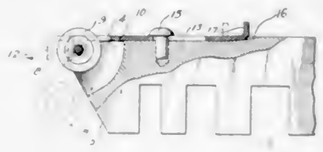
1. In a straw hat, a crown, a brim comprising a relatively stiff brim section of relatively narrow spirally wound overlapped straw braid, exposed at the upper side, and a flexible brim section intermediate said relatively stiff brim section and the crown and also exposed at the upper side, said flexible brim section comprising straw braid braided to a width corresponding to a plurality of the windings of said spirally wound braid, transversely joined at one point in the upper surface to provide a continuous hoople, and presenting throughout the remainder of the upper surface, both circumferentially and transversely of the spiral windings, a continuously unbroken braided structure, and whereby said section is yieldable both transversely and circumferentially, the straw in said flexible section being disposed with its selvage edges running circumferentially of the hat.

1,865,241. MEMORANDUM SUPPORT. HARVEY E. DOCK, Detroit, Mich. Filed Jan. 15, 1930. Serial No. 420,864. 4 Claims. (Cl. 40—10.)



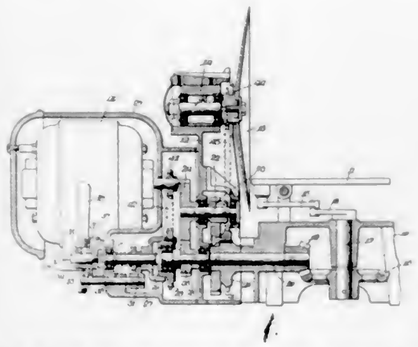
1. A memorandum support comprising a spring metal clamp adapted for support upon a post and having a slotted throat portion, and a memorandum sheet supporting plate having a slot opening on one edge thereof removably secured thereby within the throat slot.

1,865,242. CUTTING OR MARKING TOOL. MURRAY C. ELDREDGE, Chicago, Ill. Filed Oct. 11, 1930. Serial No. 488,030. 14 Claims. (Cl. 49—52.)



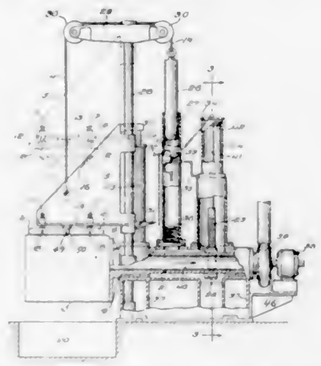
1. In a cutting tool, the combination of a head having a slot therein, open sided recesses having their open sides communicating with one face of said head, a cutting tool, a pintle on which said tool is mounted, said recesses being adapted to receive said pintle, a locking member slidably mounted on another face of said head and having means slidable therewith in a direction at a substantial angle to said first face for covering the open sides of said slot when said locking member is in one position of adjustment.

1,865,243. POWER DRIVE FOR SLICING MACHINES. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Feb. 10, 1926. Serial No. 87,207. 3 Claims. (Cl. 146—102.)



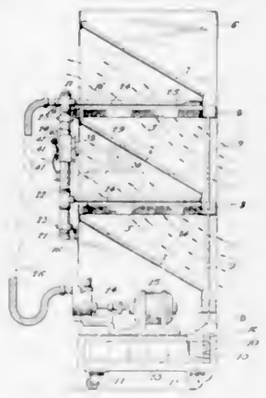
1. A slicing machine comprising a frame having a reciprocating table thereon, a drive shaft for said table extending transversely to the direction of reciprocation of said table, a knife support, a rotary slicing knife journalled in said support and disposed adjacent the path of reciprocation of said table, means for operatively connecting said drive shaft with said slicing knife, a motor disposed adjacent said knife support, reduction gearing for transmitting motion from said motor to said drive shaft, a clutch for making and breaking connection between said motor and drive shaft, and an operating handle for said clutch.

1,865,244. MOLDING MACHINE. CLAIR E. FRANTZ, Detroit, Mich., assignor, by mesne assignments, to Erb-Joyce Foundry Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 6, 1930. Serial No. 433,553. 2 Claims. (Cl. 22—93.)



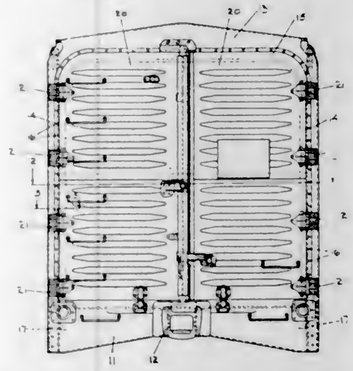
2. A metal mold, a metal core therefor, a bracket, lugs projecting from the core, levers loosely pivoted to said lugs, the inner end of said levers being connected to said bracket and the outer end being adapted to engage with said mold, set screws adjustably mounted on said bracket and adapted to engage with said lever so as to square the core up when it is put in place.

1,865,245. APPARATUS FOR CLEANING AND CHARGING AIR FILTERS. ALFRED M. GOODLOE, Bradford, Pa., assignor to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed June 22, 1927. Serial No. 200,555. 12 Claims. (Cl. 183—52.)



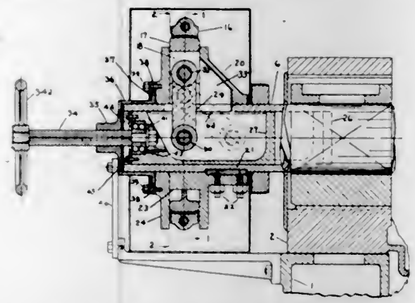
1. In combination with an air filter installation having spaced parallel filter cells, means for cleaning the filter cells in situ comprising a cleaning fluid delivery member positioned contiguous to one side of each cell, means for movably supporting said members, fluid supply means connected with said members, and means for moving said members relative to the respective filter cells to deliver the cleaning fluid over the entire area of each cell.

1,865,246. HOUSE CAR END CONSTRUCTION. GEORGE S. GOODWIN, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1927. Serial No. 184,228. 24 Claims. (Cl. 189—46.)



17. House car end construction including an end sill, an end plate, corner posts connecting said end sill and end plate, said corner posts and end plate being provided with a continuous flange, and door means, said door means being adapted to cooperate with said continuous flange for weatherproofing purposes.

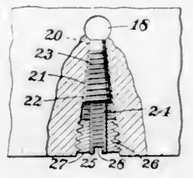
1,865,247. VALVE GEAR. WALTER B. GORR, Erie, Pa., assignor to Skinner Engine Company, Erie, Pa., a Corporation of Pennsylvania. Filed July 12, 1929. Serial No. 377,660. 5 Claims. (Cl. 121—177.)



1. In a valve gear, the combination of a carrier having a guide block and side guide plate; an eccentric having a slot into which the guide block extends, the walls of the slot forming guides slidingly mounting the eccentric on the carrier; a cover plate secured to the block and acting as a side guide opposite the carrier guide plate; an actuator movable axially relatively to the carrier; and a link between the actuator and the eccentric converting axial movement of the actuater to radial movement of the eccentric.

1,865,248. PISTON. RUDOLPH R. GRANT, Dayton, Ohio. Original application filed July 18, 1923, Serial No. 652,402. Divided and this application filed July 7, 1930. Serial No. 466,295. 6 Claims. (Cl. 74—108.)

6. A piston comprising a head having a skirt provided with oppositely disposed longitudinal slots forming a pair of expansible sections, the adjacent edges of said sections being provided with coned threaded apertures, and



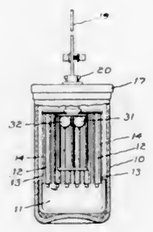
threaded conically shaped members adapted to be screwed in said coned threaded apertures for effecting an increase in the diameter of the skirt.

1,865,249. STOP WASHER FOR WRIST WATCHES. LOUIS SAMUEL HANSON, Cleveland, Ohio. Filed Jan. 12, 1928. Serial No. 246,126. 2 Claims. (Cl. 58—99.)



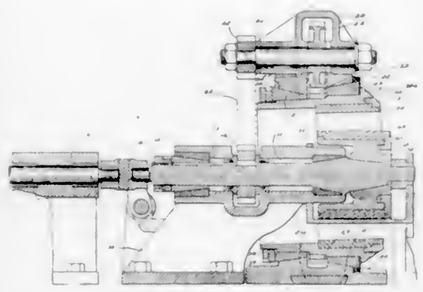
1. In a three piece watch case having a case center and front and back cover portions provided with meeting edges, the combination of a winding stem and crown therefor, said stem having a reduced outer portion, providing a stop shoulder, spaced from the end thereof, and a washer mounted over said reduced portion, said washer being immovably enclosed between the side wall of said case center and the side walls of said cover portions when said cover portions are closed, said cover portions being hinged together and to said case center upon the side opposite said stem and foldable over said washer.

1,865,250. SPECIFIC GRAVITY INDICATING MEANS. GEORGE M. HAUNGS, Niagara Falls, N. Y., assignor to U S L Battery Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Dec. 3, 1928. Serial No. 323,378. 4 Claims. (Cl. 136—182.)



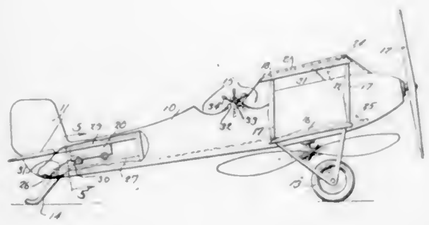
1. In combination, a storage battery casing, a battery element within said casing, said element being provided with a ledge, a housing having top, side and bottom walls interposed between said casing and said battery element, said housing being located wholly within said casing, a member integral with said housing top-wall and extending upwardly therefrom, said member having laterally extending portions adapted to overhang portions of said ledge whereby said housing is detachably supported by said ledge.

1,865,251. GRINDING MACHINE. RICHARD HEEVIG, Battle Creek, Mich., assignor to Wilcox-Rich Corporation, a Corporation of Michigan. Filed Aug. 5, 1929. Serial No. 383,439. 8 Claims. (Cl. 51—103.)



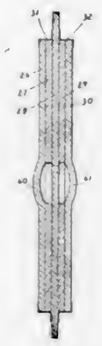
1. A mechanism for grinding the seats of poppet valves comprising the combination of a seat grinding element and means for operating it, with a mechanism for rotating the valve about the major axis of the stem comprising a rotatable drum having an internal peripheral work actuating face, a second rotatable drum eccentrically position within said first drum and having an external peripheral work actuating face, a work rest adapted to support a valve stem positioned transversely of and between said work actuating face adjacent the point where they most nearly approach each other, and abutment positioned adjacent the inner end of said work rest and forming a stop for the end of said valve stem, means for rotating one of said drums toward said work rest at a relatively high speed and for rotating the other drum away from said work rest at a relatively low speed, said seat grinding element being positioned to engage said valve during the rotation thereof by said drums and one of said drums being tilted transversely to the plane of said work rest to draw the valve stem inwardly of the drums and against said stop and counteract the pull of said seat grinding element.

1,865,252. AEROPLANE. JAKOB HOJNOWSKI, Nekoosa, Wis. Filed Dec. 24, 1931. Serial No. 583,106. 16 Claims. (Cl. 244—12.)



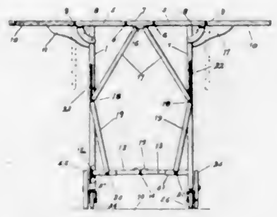
1. In an aeroplane, a fuselage, a dive controlling flap hinged at its forward edge and supported at the forward part of the fuselage, a track in the fuselage extending longitudinally thereof, a wheeled weight running on said track, a flexible strand connecting the rear edge of the flap and the weight, and guide pulleys guiding said strand and positioned to cause forward movement of the weight to pull the said rear edge downwardly.

1,865,253. FLAT TUBELESS IONIZATION CONDUCTOR SIGN. FRED HOTCHNER, Los Angeles, Calif. Filed Apr. 15, 1929. Serial No. 355,266. 15 Claims. (Cl. 40—130.)



2. In a vacuum electric or ionization conductor device, an envelope having an extended wall incapable of itself resisting the difference in pressure between the inside of said envelope and the outside thereof, discharge passage ridges formed in said wall bulging outwardly, and a plate of material within said envelope in connection with said wall completing the discharge passage with said ridges and supporting said wall.

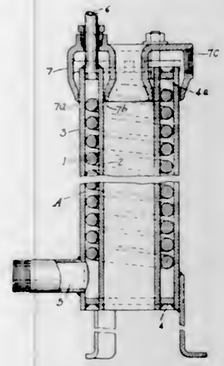
1,865,254. SERVING TABLE. HAROLD HOWE, New York, N. Y., assignor to Howe Folding Furniture, Inc., New York, N. Y. Filed June 7, 1929. Serial No. 369,064. 5 Claims. (Cl. 45—116.)



1. A folding table comprising an open frame having spaced uprights connected by side rails, hinged top and bottom members supported by said frame, and means pivotally connected with said members and slidably connected with said frame whereby said table may be collapsed and said side rails moved toward each other uniformly.

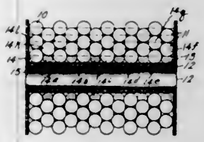
1,865,255. CONDENSER. GEORGE T. JACOCKS, Brooklyn, N. Y., assignor, by mesne assignments, to Alco Products Incorporated, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1929. Serial No. 352,344. 13 Claims. (Cl. 257—56.)

1. In a condenser, the combination of a passageway for the traversing of the vapor to be condensed, comprising spaced inner and outer walls at least one of which walls having its exterior surface freely exposed to the atmosphere, baffling means between the walls compelling the vapor to take a winding route therebetween, and inlet and outlet openings for the admission of vapor and the exit



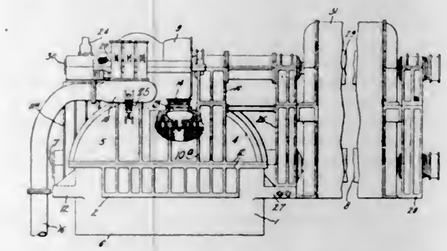
of condensation; and means for applying to the exposed exterior surface of one of the walls a thin sheet of condensing water.

1,865,256. ELECTRICAL WINDING. SVEND E. JOHANNESEN, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 22, 1930. Serial No. 454,812. 17 Claims. (Cl. 175—21.)



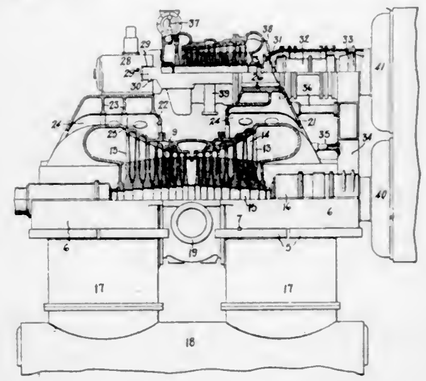
1. An electrical winding comprising an electrical conductor wound into a plurality of layers, the turns of each layer of said conductor being spaced apart, the spaces between said turns being equal to a substantial portion of the diameter of said conductor so as to receive the turns of the adjacent layers between them in interlocking relation.

1,865,257. ELASTIC FLUID TURBINE. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 12, 1928. Serial No. 269,449. 9 Claims. (Cl. 60—70.)



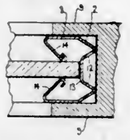
1. In combination, a double flow low pressure turbine section having a centrally located inlet opening, supporting feet carried by the casing of said low pressure section, vertically extending members carried by said supporting feet, and a high pressure turbine section mounted on said vertically extending members and having its exhaust opening connected to the inlet opening of the low pressure turbine section.

1,865,258. TURBINE GENERATOR INSTALLATION. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 20, 1929. Serial No. 372,265. 9 Claims. (Cl. 60—70.)



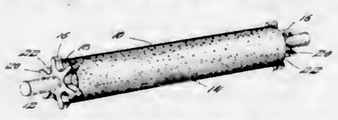
1. In a turbine installation, the combination of a low pressure unit having a casing with horizontal shoulders, a pair of arched members each of which extends across said unit, encloses the upper part of the casing in spaced relation thereto and is supported at its lower edges by said shoulders, a high pressure unit which is supported near its ends on the arched members, a means carried by one of the arched members for anchoring the high pressure unit at one end against axial movement, and a means carried by the other arched member which permits of the other end of said unit to freely move in a longitudinal direction due to temperature changes.

1,865,259. WINDOW SUPPORT. JOHN M. KELLER, Lakewood, Ohio. Filed Mar. 27, 1930. Serial No. 439,335. 1 Claim. (Cl. 296—44.5.)



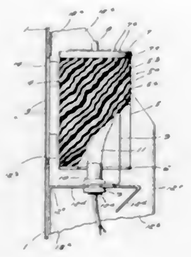
In combination with a window casing having a groove therein, a glass supporting member comprising a single strip of resilient sheet metal bent to provide a plurality of longitudinally extending ribs engaging the bottom of said channel along lines spaced from the sides of said groove reentrant edges engaging opposite faces of said glass and rebent for reinforcement adjacent the line of such engagement, and portions engaging the opposite side of said groove.

1,865,260. SQUEEZE ROLL. GEORGE R. KELTIE, Woonsocket, R. I., assignor to American Wringer Co., Woonsocket, R. I., a Corporation of Rhode Island. Filed Feb. 11, 1930. Serial No. 427,502. 2 Claims. (Cl. 68—32.)



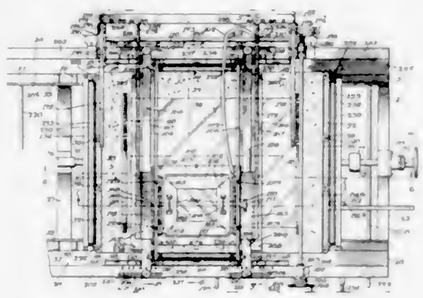
1. A squeeze roll comprising a shaft, a central cylindrical rubber expressing body vulcanized to said shaft, and a hard rubber spur gear having spur teeth of greater height than that of said rubber expressing body vulcanized to said shaft and to the end of said expressing body.

1,865,261. ADVERTISING DEVICE. HOWARD KNIGHT, Providence, R. I., assignor to Livermore and Knight Company, Providence, R. I., a Corporation of Rhode Island. Filed Aug. 10, 1931. Serial No. 557,981. 2 Claims. (Cl. 40—40.)



1. An advertising device comprising, in combination, an opaque panel having a picture on one side thereof with a portion representing a body in motion, and having holes through said portion; a second panel attached to the opposite side of said first panel, having a section of said second panel bent backward to provide an opening opposite said perforations; a source of light supported on said bent back section; and means also supported on said section for effecting intermittent transmittal of light rays from said source through said holes.

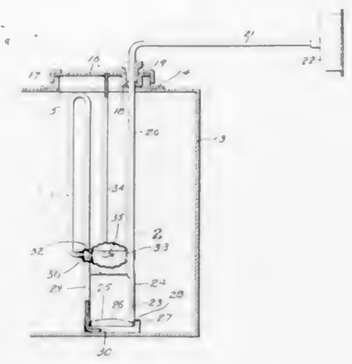
1,865,262. PHOTOCOMPOSING MACHINE. ALEXANDER T. KOPPE, Chicago, Ill., assignor to Directoplate Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1927. Serial No. 196,948. 31 Claims. (Cl 95—76.)



1. The combination in a photo composing machine of a horizontal flat bed for supporting a sensitized plate of lesser area than said bed, a blanket on said bed beneath said plate, said blanket being of larger area than said plate, means for supporting a negative opposite said press plate, said negative supporting means being adapted to overlap the edges of said sensitized plate, and to contact with a projecting portion of said blanket, and vacuum pressure means for obtaining a close contact between said negative and said sensitized plate in all of the positions of said negative.

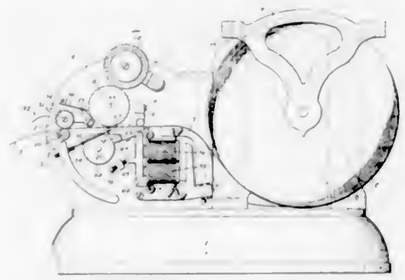
1,865,263. QUANTITY INDICATING DEVICE FOR LIQUIDS. JAMES MACCALLUM, Jr., St. Louis, Mo. Filed Sept. 25, 1922. Serial No. 590,302. 28 Claims. (Cl. 73—54.)

1. In a quantity indicating device for liquid containers a pressure chamber having an opening in its bottom located in said container at the full depth to be measured, a pressure indicating gauge, a pipe connecting said pressure chamber and gauge, a duct having one end terminating below the pressure chamber, and pumping means located in the container and secured to the opposite end of said duct, said pumping means adapted to be operated by



the surge of the liquid in the container for forcing a gaseous pressure carrying medium through said duct and delivering it beneath the pressure chamber.

1,865,264. PRINTING TELEGRAPH. ANDREW T. MACCOY, Boston, Mass. Filed Dec. 9, 1929. Serial No. 412,751. 19 Claims. (Cl. 178—39.)

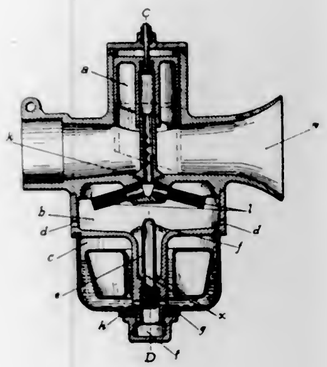


1. In a printing telegraph, the combination of a character printing wheel, means including controlling means for continuously rotating the wheel at a definite speed, a member adapted to press a tape against the wheel to selectively print the characters thereof on the tape during such rotation, means synchronized with the controlling means and including mechanically driven means for causing instantaneous operation of the said member to print predetermined and selected characters without stopping the wheel, and synchronized means for automatically feeding the tape at such printing operations.

1,865,265. VULCANIZATION ACCELERATOR. GEORGE L. MAGOUN, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed May 23, 1931. Serial No. 539,628. 22 Claims. (Cl. 18—53.)

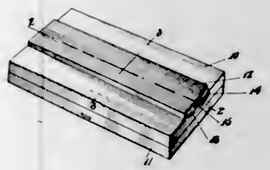
1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of an accelerator comprising a reaction product of an amino chlor phosphine and an organic compound containing the grouping —SR, where R represents hydrogen, an alkali metal or a salt forming group

1,865,266. CARBURETOR. RICHARD MALIN, Chemnitz, Germany, assignor of one-half to Firm Theodor Haase, Chemnitz, Germany. Filed Oct. 19, 1929, Serial No. 400,902, and in Germany Sept. 7, 1929. 1 Claim. (Cl. 261—46.)



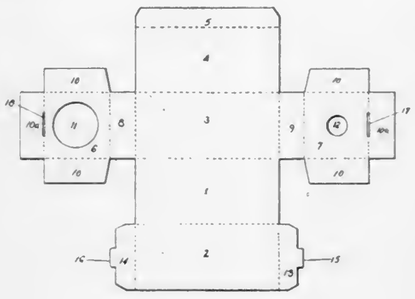
In a carburetor the combination of a mixture delivery pipe provided with outlet orifices, an atomizing chamber into which protrude gauze filters which connect the atomizing chamber with the delivery pipe and thereby to the induction channel, a float chamber separated from the atomizing chamber by a calibrated plug, an atomizing jet tube adapted to receive fuel from the float chamber through said calibrated plug and discharging the fuel in said atomizing chamber, an air nozzle pipe in atomizing relationship to said atomizing jet tube, the amount of air flowing through said air nozzle pipe being controlled by a slide valve and the direction of the air stream being such that it does not strike said gauze filters, the bottom of said atomizing chamber being continued down into a cylindrical chamber through which the atomizing jet tube is carried which communicates with said cylindrical chamber by holes and at the lower end of which said calibrated plug is mounted.

1,865,267. HOLDER FOR TOILET ARTICLES. JACQUES MANOHA, New York, N. Y., assignor to Houbigant, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 26, 1931. Serial No. 565,247. 10 Claims. (Cl. 132—79.)



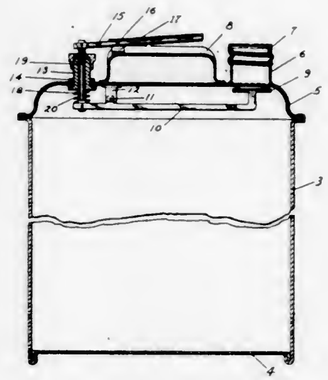
1. In a toilet case, the combination of a toilet case cover and a base of a toilet case, each having a top-surface which is even on the outside, a side opening in said cover below said top-surface to admit a toilet comb therethrough and means to position the comb in said cover.

1,865,268. CARTON FOR FRAGILE OBJECTS. WARREN A. MORRIS, Wyoming, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed June 24, 1929. Serial No. 373,123. 4 Claims. (Cl. 229—33.)



1. In a carton, a blank comprising a bottom, two sides, a top, and a tuck end flap thereon, recessed platforms hinged to either end of the side adjacent said top by means of platform supporting members, platform flaps on the other sides of said platforms, locking flaps on the ends of the opposite side of said carton, said locking flaps adapted to lock said recessed panels in position when said carton is set up, and to leave spaces between the platform flaps and said opposite side for the insertion and holding of said tuck end flaps.

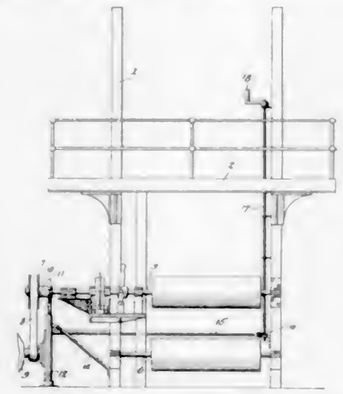
1,865,269. LIQUID DISPENSING CONTAINER. RICHARD B. MUNDAY, Dayton, Ohio, assignor, by mesne assignments, to The Cincinnati Ball Crank Co., Cincinnati, Ohio, a Corporation of Ohio. Filed June 2, 1930. Serial No. 458,994. 4 Claims. (Cl. 221—16.)



1. A liquid dispensing container comprising a body portion normally closed, an outlet in said body, a normally closed valve covering said outlet from within said body, a valve lever secured to said valve and fulcrumed on the inside of said container, a push rod extending through said body portion and secured at one of its ends to the other end of said valve lever, a manually operated valve lever on the other end of said push rod, a carrying handle on

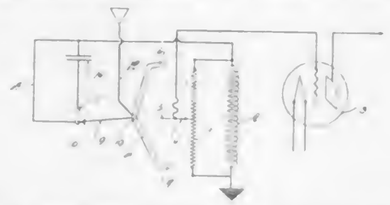
the outside of said container and so placed as to be in proximity to said manually operated valve operating lever, and a normally closed vent in said push rod, said valve and vent being so constructed as to be opened and closed simultaneously.

1,865,270. PAPER MACHINE. GEORGE NICHOLAS, Rhinelander, Wis., assignor to Rhinelander Paper Company, Rhinelander, Wis. Filed May 29, 1931. Serial No. 541,042. 4 Claims. (Cl. 92—71.)



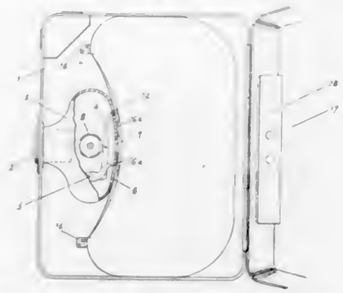
1. In a paper making machine having calender rolls, and a shaft for unfinished paper, means for driving the shaft at a lower speed than the calender rolls, and a clutch connecting said means with the shaft, the clutch being an overrunning clutch, whereby it will be thrown out automatically when the speed of rotation of the shaft is increased by the pull of the calender rolls on the paper.

1,865,271. RADIORECEIVER. HORACE E. OSMUN, HARRY W. RUBINSTEIN, and ERWIN R. STOEKLE, Milwaukee, Wis., assignors to Central Radio Laboratories, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 17, 1930. Serial No. 489,272. 11 Claims. (Cl. 250—20.)



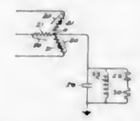
1. A radio receiver having means cooperable with the antenna for varying the volume of the signal impressed on the receiver, a local-distance switch regulating the action of said means and operable in one position to put the receiver in a condition of maximum sensitivity for distance reception and in another position to put the receiver in condition of minimum sensitivity for local reception, a manually operable volume control device for effecting smooth and accurate regulation of the volume whether the receiver is in a condition for maximum or minimum sensitivity and interengaging means between the manually operable volume control device and the local-distance switch whereby when the manually operable device is moved to its maximum volume position it will automatically throw the local-distance switch into distance reception position and when the manually operable control device is moved to its minimum volume position it will automatically and reversely actuate the local-distance switch to decrease the sensitivity of the receiver for local reception.

1,865,272. FILM MAGAZINE FOR MOTION PICTURE CAMERAS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 5, 1929. Serial No. 397,502. 7 Claims. (Cl. 88—17.)



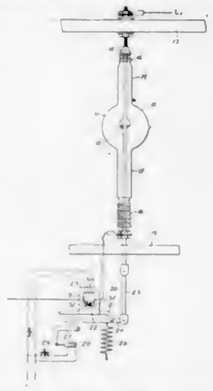
5. In combination, a camera having a curved exposure gate, a film magazine having a curved wall adapted to lie adjacent said gate, means for supporting a film in said magazine, said film extending outside said magazine across said curved wall, whereby when said magazine is placed in said camera, said film will engage said curved gate.

1,865,273. PROTECTIVE ARRANGEMENT. KONSTANTIN K. PALUEFF, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 10, 1930. Serial No. 427,315. 18 Claims. (Cl. 175—30.)



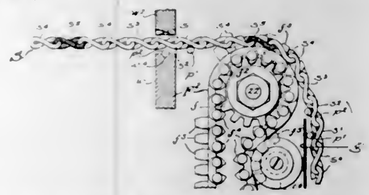
1. An electric system including a transformer having a neutral and a connection to ground from said neutral including impedance means electrically so dimensioned that the voltage strain at the neutral produced by a transient voltage applied to a terminal of said transformer will bear a predetermined ratio to the voltage strain at the neutral due to the operating frequency voltage of said neutral on the occurrence of a ground fault on the system.

1,865,274. CIRCUIT INTERRUPTER. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1928. Serial No. 264,116. 6 Claims. (Cl. 200—144.)



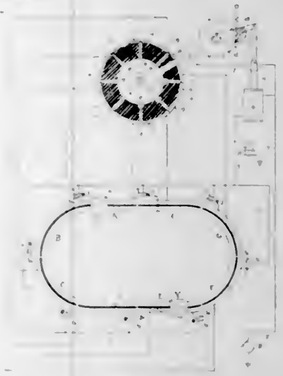
1. An alternating current circuit interrupter comprising an evacuated envelope and cooperating circuit interrupting electrodes within the envelope having dissimilar electrode faces formed so that the electrode face of one electrode substantially envelops the electrode face of the other electrode to restrict the flow of electrons from said last-named electrode during the interruption of current, and means responsive to said alternating current only when said last-named electrode is negative for causing separation of said electrodes.

1,865,275. PROCESS AND APPARATUS FOR REENFORCING CROSS-CHAINS AND THE LIKE. JOHN R. REYBURN, Fairfield, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed Oct. 22, 1926. Serial No. 143,412. 40 Claims. (Cl. 59—31.)



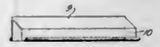
1. In the process of applying reinforcements to chain, the steps which comprise feeding reinforcement parts transversely to the chain, and securing said parts respectively to the chain in multiple approximately simultaneously.

1,865,276. SYSTEM OF CONTROL FOR TOY ELECTRIC RAILWAYS. LEON W. ROSENTHAL, New York, N. Y. Filed Feb. 26, 1931. Serial No. 518,330. 22 Claims. (Cl. 104—149.)



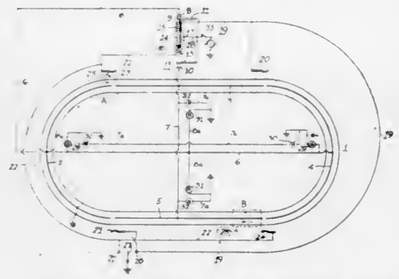
1. A system of control for toy electric railways comprising a plurality of track sections, each containing a separate insulated power rail, associated electrical elements, means for controlling successively different groups of said sections and means separate and disconnected from said power rails for enabling the first means to be operated.

1,865,277. TRACK FOR TOY RAILWAYS. LEON W. ROSENTHAL, New York, N. Y. Filed Feb. 25, 1931. Serial No. 518,147. 10 Claims. (Cl. 238—10.)



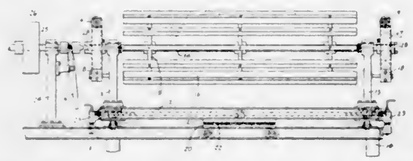
1. A toy railway tie having a top surface inclined across the width thereof and being constructed and arranged to support a rail at a grade, the bottom surface of said tie being adapted to lie in the supporting plane of the rail.

1,865,278. TOY ELECTRIC RAILWAY AND APPARATUS THEREFOR. LEON W. ROSENTHAL, New York, N. Y. Filed Nov. 10, 1930. Serial No. 494,534. 18 Claims. (Cl. 104—149.)



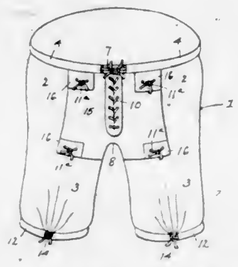
1. In a toy electric railway, a track divided into blocks, and means controlled by a single train and comprising circuit connection for making certain of said blocks simultaneously dead or simultaneously alive, with live blocks and dead blocks arranged in alternation along said track.

1,865,279. AUXILIARY REEL FOR PAPER MAKING MACHINES. HARRY M. ROSS, Indianapolis, Ind., assignor of one-half to Beveridge Paper Company, Indianapolis, Ind., a Corporation. Filed June 23, 1930. Serial No. 462,964. 1 Claim. (Cl. 242—55.)



The process of interrupting the continuous passage of paper from a paper making machine to the paper cutting mechanism associated therewith consisting in directing the paper from the machine to an auxiliary reel, winding the paper upon said reel until it is desired to end the interruption, thereafter shunting the paper past said reel directly to the cutting mechanism, turning said reel end for end in the same horizontal plane in which the paper is wound and feeding the paper from the reversed reel while in the same plane to the cutting mechanism simultaneously with the paper shunted thereby.

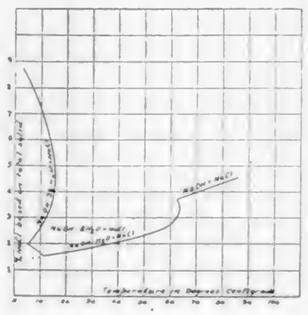
1,865,280. GARMENT. ALLAN P. RISLEY, Indianapolis, Ind. Filed Apr. 9, 1930. Serial No. 442,855. 4 Claims. (Cl. 128—138.)



1. A garment comprising trousers including a waist portion having a crotch with a fly-opening extending through the waist portion and a pair of leg portions forming an integral part of the waist portion, said waist por-

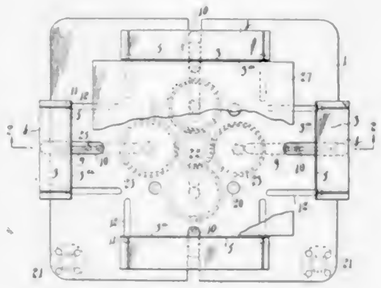
tion having eyelets arranged adjacent the fly-opening, a securing string laced through the eyelets and tied at the upper edge of the waist portion, and a semi-rigid protecting plate secured to the inner face of the waist portion and overlying the fly-opening and having a notch to receive the crotch and projecting into the leg portions.

1,865,281. PROCESS OF SEPARATING CAUSTIC SODA AND SODIUM CHLORIDE. ALBERT KELVIN SMITH, Cleveland, Ohio, assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 2, 1928. Serial No. 282,335. 3 Claims. (Cl. 23—184.)



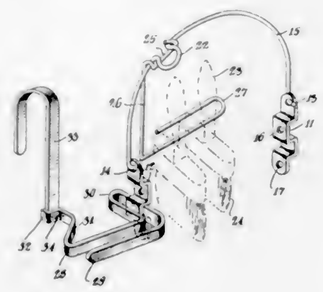
1. In a process of separating sodium hydroxide and sodium chloride, the steps which consist in preparing a solution having about 69% of sodium hydroxide and a small proportion of sodium chloride, cooling to about 64° C., and separating the crystals of $NaOH.H_2O$ thereby formed.

1,865,282. JOGGER FOR PRINTING PRESSES. ERNEST SMITH and WILLIAM B. POWELL, Hamilton, Ontario, Canada, assignors to Appleford Paper Products Limited, Hamilton, Canada. Filed July 26, 1930. Serial No. 470,906. 20 Claims. (Cl. 271—89.)



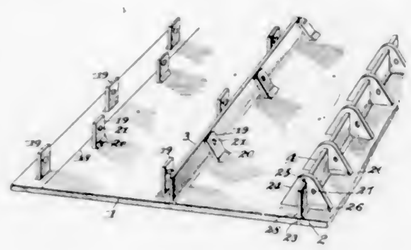
2. In jogging mechanism, the combination of a sheet receiving table, aligning members adapted to reciprocate to and from the edges of the sheets delivered to said table; and means for alternately reciprocating aligning members at adjacent edges of the sheets and simultaneously reciprocating aligning members at opposite edges, whereby the aligning members at two opposite edges of the sheets are moved towards the sheets while the aligning members at the other two opposite edges are moved away therefrom.

1,865,283. BRUSH HOLDER. FREDRICK SOHNLE, Newark, N. J. Filed Dec. 24, 1930. Serial No. 504,487. 1 Claim. (Cl. 91—63.)



In a paint brush holder a paint pot, a bail therefor a pair of double U-shaped, perforated brackets adapted to be secured to the paint pot at oppositely disposed points, the bent ends of the bail passed through the perforation in said brackets to engage the same in such manner as to hold the bail at an angle to the pot, and a means passing through the U-part of the brackets to allow a suspension of the pot from the rung of a ladder on the outside of its side pieces.

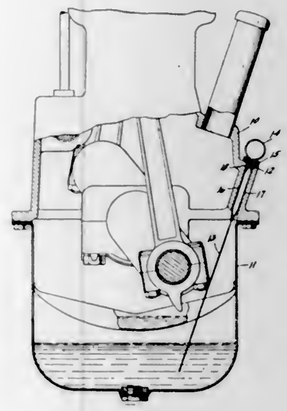
1,865,284. METAL PLATE CONSTRUCTION AND METHOD OF FORMING THE SAME. RICHARD F. SMITH, New York, N. Y., assignor of one-half to Charleston Dry Dock & Machine Company, Charleston, S. C., a Corporation of Delaware, one-fourth to Charles V. Boykin and Samuel A. Guilds, Charleston, S. C., and one-fourth to Raymond D. Sullivan, Savanah, Ga. Filed Apr. 21, 1931. Serial No. 531,802. 4 Claims. (Cl. 113—99.)



1. The method of forming a metal plate construction, consisting in emplacing on a metal base a member to be secured thereto, securing fulcrum means to the base, applying a lever to the fulcrum means and the member for pressing the base and member together, securing the member to the base while under pressure, removing the lever from the fulcrum means, and securing the fulcrum means to the said member to brace the same.

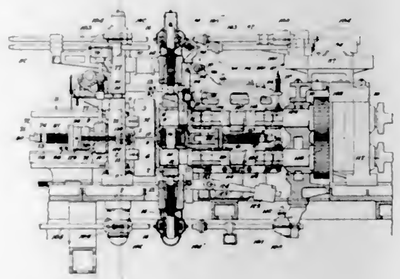
4. In a metal plate construction, a base including metal plates arranged in confronting edge relation and with a seam between said confronting edges, a flat bar arranged in edge relation with the said plates and overlapping the said confronting edges of the plates at the said seam, and bracing members arranged in edge relation with the said bar and plates and operating to hold the bar against bending movement on the plates, the said plates, bar, and bracing members being welded together by covering the seam with welding material and fusing the parts to form an integral structure.

1,865,285. OIL GAUGE ROD. LOUIS M. SPENCER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 28, 1929. Serial No. 395,765. 10 Claims. (Cl. 73—120.)



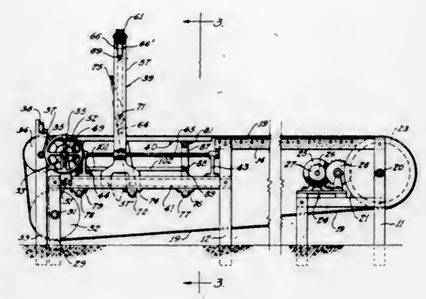
1. An oil gauge rod which consists of a strip of resilient material on which is provided a portion which is partially severed from the strip and displaced from the plane thereof and which is adapted frictionally and resiliently to engage the walls of an opening to prevent displacement of the rod.

1,865,286. UNIVERSAL ROLLING MILL. ANDREW W. SODERBERG, Munhall, and ALLAN G. DAHLGREN, Pittsburgh, Pa. Filed Dec. 29, 1928. Serial No. 329,268. 13 Claims. (Cl. 80—34.)



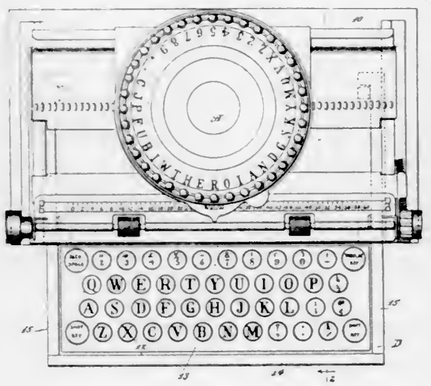
13. In a universal rolling mill the combination with roll housings having horizontal and vertical rolls rotatably mounted in the housing windows, with the axes thereof in the same vertical plane and relatively movable in the said plane, of horizontally movable means for supporting the vertical rolls within the housing windows, said means including a roll chuck for each vertical roll, an adjustable cross-head alongside the housing to which the roll chuck is yieldingly secured, and means for moving the chuck endwise within the housing windows to maintain the axes of the vertical rolls in a plane through the axes of the horizontal rolls.

1,865,287. MACHINE FOR MAKING ARTIFICIAL STONES. JOHN SOLARY, Chicago, Ill. Filed Dec. 12, 1930. Serial No. 501,991. 8 Claims. (Cl. 25—1.)



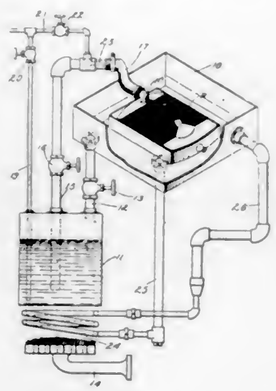
1. In a machine of the class described, an endless conveyor, supporting means for said conveyor, operating means for said conveyor means for retaining a mold on said conveyor during the molding operation including a stationary member and a movable member, means for moving said movable member in a horizontal plane over said belt, means for moving said movable member in a vertical plane above said belt, and means for maintaining said mold-supporting portion of said conveyor taut during the molding operation including vertically movable means movable into and out of engagement with the lower side of said conveyor, and means for operating said vertically movable means.

1,865,288. TOY TYPEWRITER. SAMUEL ALEXANDER THOMPSON, New York, N. Y. Filed June 28, 1930. Serial No. 464,564. 10 Claims. (Cl. 35—16.)



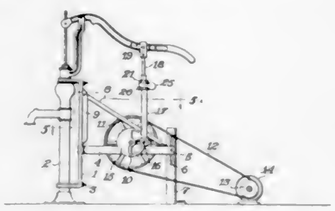
1. The combination with a child's toy typewriter having a rotary depressible printing element provided with an annular series of type, of a panel carrying the simulation of a standard arrangement of the keys of a full sized typewriter, said panel normally projecting forwardly from the typewriter frame in the usual position occupied by the keys of a full sized typewriter, whereby to render the appearance of the toy typewriter more realistic and to afford means whereby a child may practice thereon and learn the standard key arrangement.

1,865,289. RADIATOR CLEANER. LLOYD J. TROWBRIDGE, Camden, N. J. Filed Apr. 22, 1930. Serial No. 446,314. 3 Claims. (Cl. 141—1.)



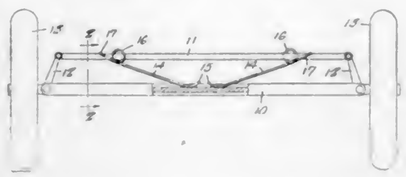
1. Apparatus for cleaning automobile radiators and the like, comprising a vat to receive the radiator, means for maintaining a circulation of heated fluid within the vat and about the radiator, a tank for heated cleaning fluid and a conduit for conducting fluid from said tank into a radiator disposed within the vat.

1,865,290. PUMP JACK. WALLACE B. VAUGHN, Two Rivers, Wis., assignor of one-third to John G. Weilep, Two Rivers, Wis. Filed Nov. 16, 1931. Serial No. 575,405. 1 Claim. (Cl. 74—14.)



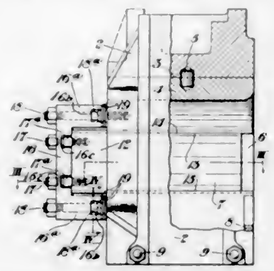
A pump jack comprising a frame, means for connecting the frame with the body of the pump, a foot piece attached to the frame, a shaft journaled upon the frame, a disc wheel fixed to the shaft and mounted on a wrist pin, a sleeve journaled upon said pin, a rod residing within the sleeve and having means for attachment with the handle of the pump and means for locking the sleeve to the rod.

1,865,291. STEERING GEAR BRACE. ANTHONY WELIKES, Rochester N. Y. Filed May 12, 1930. Serial No. 451,758. 1 Claim. (Cl. 280—95.)



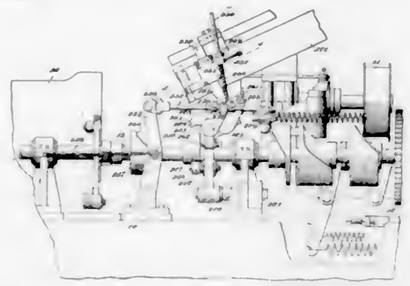
A steering gear stabilizer consisting of a single length of spring rod having a loop bent therein and a hook bent therein directly at the side of the loop, said loop and hook lying in planes at a right angle and said loop and hook adapted to completely surround the tie rod of the steering gear.

1,865,292. DRIVING BOX. FRANK M. A'HEARN and EDWIN FOSTER RICHARDSON, Greenville, Pa. Filed Aug. 30, 1930. Serial No. 478,946. 2 Claims. (Cl. 308—54.)



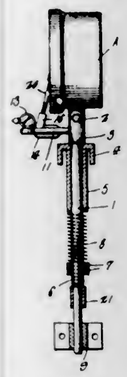
1. A locomotive driving-box assembly comprising in combination a driving-box, a crown bearing, and separate one-piece wedge-shaped thrust bearings along each side of said box, said thrust bearings being slidably movable into and out of said box, and one-piece substantially U-shaped clamp members for locking said thrust bearings in place and for moving said bearings in and out of said box, stud bolts threaded into said box above and below said thrust bearings and extending through longitudinally extending apertures in the legs of said clamps, other stud bolts threaded in the ends of said thrust bearings and extending through apertures in the body of said clamps, collars on said stud bolts adapted to limit the movement of said studs into said box and said bearing respectively, and adapted to be jammed against said box and said bearings to lock said studs against displacement, said U-shaped clamp members having their legs and bodies provided with squared recesses to receive said collars and lock said studs against turning, nuts on the outer ends of said stud bolts adapted to be tightened against said clamps, removable shim members mounted around some of said stud bolts and against which said clamp members are tightened, said shim members being adapted to be removed or added to permit adjustment of said thrust bearings.

1,865,293. FEEDING MECHANISM. FRANKLIN O. ANDREWS, Willoughby, and LOUIS STEINFURTH, East Cleveland, Ohio, assignors to The Economy Engineering Company, Willoughby, Ohio, a Corporation of Ohio. Original application filed Oct. 10, 1924, Serial No. 742,771. Divided and this application filed May 1, 1930, Serial No. 449,077. Renewed May 26, 1932. 1 Claim. (Cl. 10—165.)



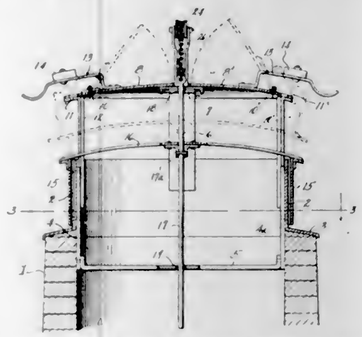
In a machine of the character described a blank guide having a discharge opening at the lower end of one of its sides, a gate normally closing the opening, means to remove one blank at a time from the guide laterally through the gate, means carried by and moving with the removing means to slide the gate longitudinally of the guide, a pivoted arm adjacent the lower end of the other side of the guide and pins on the pivoted arm entering the guide alternately as the arm swings on its pivot to allow only one blank at a time to be exposed by the gate.

1,865,294. DIRIGIBLE LIGHT. RAY MASARU AOKI, Kona, Territory of Hawaii. Filed Oct. 6, 1930. Serial No. 486,844. 1 Claim. (Cl. 240—62.52.)



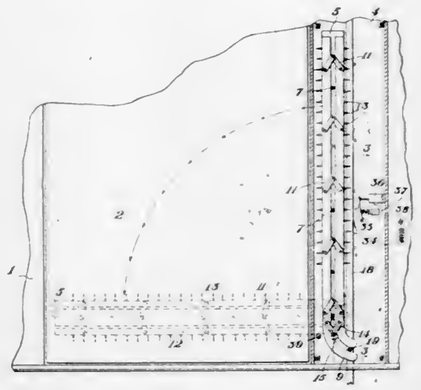
In a dirigible head lamp for a motor vehicle, a sleeve adapted to abut at its upper end a cross bar connected with the fenders of the motor vehicle, a post engaged in the sleeve and having a shoulder resting upon said cross bar, a lamp body pivoted to the post above the shoulder for vertical swinging movement, a tensioning device operating upon the post and sleeve to hold the shoulder in contact with the cross bar, an arm projecting from the post and having an outer slotted portion, a bracket carried at one side of the lamp body, an adjustable rod pivoted to said bracket and slidably connected with the slotted end of said arm, and an operative ball and socket connection with said arm.

1,865,295. FURNACE DRAFT CONTROL DEVICE. ALBERT D. ARPER, Tacoma, Wash., assignor of one-half to Clarence T. Arper. Filed Apr. 23, 1930. Serial No. 446,495. 4 Claims. (Cl. 126—285.)



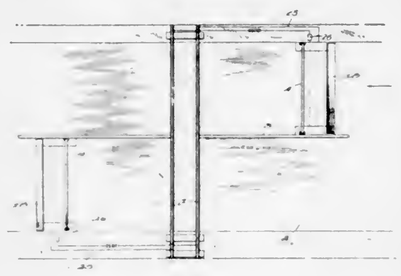
1. In combination with a furnace stack, a draft control applied to the discharge end of the stack and comprising a cover member spaced above the discharge end of the stack, an adjustable means between the stack end and cover for varying the area of the outlet; said cover comprising upwardly yieldable sections adapted to be moved to open position by pressure of gases delivered from the stack.

1,865,296. SAFETY DEVICE FOR BANKS, ETC. WILLIAM THOMAS BAKER, Louisville, Ky. Filed Oct. 18, 1930. Serial No. 489,657. 1 Claim. (Cl. 20—1.01.)



A safety device comprising a plate provided with a curved end having a curved slot, bars disposed parallel along opposite edges of said plate, toggle links pivotally connected with the bars and bridging the plate whereby the plate and bars may overlap each other at their longitudinal edges and whereby said parts maintain parallel relation at all times, a block slidably received in the slot and pivotally connected with one set of toggle links and a throw bar having an outstanding member received in said curved slot.

1,865,297. RAILROAD CROSSING GATE. ERROL I. BATEMAN, Gulfport, Miss. Filed May 1, 1930. Serial No. 448,962. 12 Claims. (Cl. 39—6.)

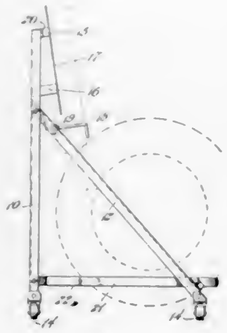


1. In a device of the character described, the combination with a crossing gate, of a platform in front of the gate and depressible by the weight of a vehicle for actuating the gate, and an electrically actuated latch for direct contact with the gate to lock the same in a closed position.

1,865,298. DISPLAY RACK. HARRY L. BEACH, Coshocton, Ohio. Filed Oct. 9, 1930. Serial No. 487,619. 4 Claims. (Cl. 211—23.)

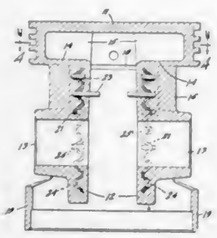
1. A tire display rack of the class described comprising, in combination, a frame having a pair of uprights; a pair of inclined front legs secured to the uprights; a rack extending across the upper portions of the inclined

legs and having means to engage the periphery of a single tire and support it sidewise in the frame; and a fabricated rack connected to the lower ends of the uprights and the



legs having means to support a plurality of tires side by side in vertical planes, and at right angles to the single tire.

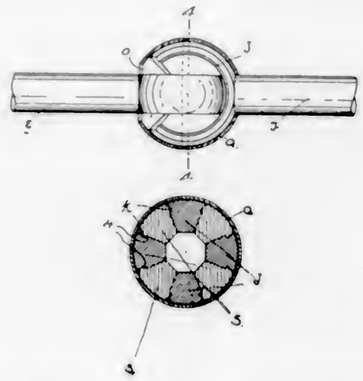
1,865,299. PISTON FOR INTERNAL COMBUSTION ENGINES. OTTO CARTER BERRY, Flint, Mich. Filed Nov. 1, 1929. Serial No. 404,035. 4 Claims. (Cl. 74—108.)



1. A piston of the class described having a head and depending piers cast integrally therewith, and having piston pin bosses at their lower ends; a cast metal skirt located beneath said head for guiding the piston; and two parallel vertically arranged corrugated steel struts spaced apart from one another and the central portions of which are embedded in said piers during the casting of the piston, and the ends of which are likewise embedded in said skirt, said struts having parts which extend therefrom at right angles to the planes of the struts and are embedded in the metal of the piston.

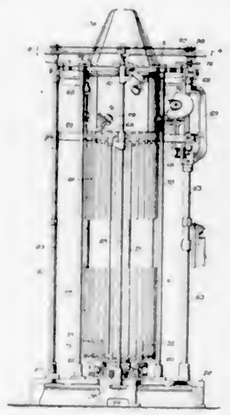
1,865,300. UNIVERSAL JOINT. ADNA GUERNSEY BOWEN, Medina, N. Y. Filed Oct. 29, 1928. Serial No. 315,797. 5 Claims. (Cl. 64—102.)

1. A universal joint comprising driven and driving connections terminating in curved forks disposed for universal movement about a common geometrical center, each having cheeks opposing those of the other, defining therebetween spaces of spherical segmental form, means associated with said forks, constituting guides for determining relative movements thereof, and transmitting torque therethrough, comprising segmental members snugly but freely disposed in the spaces defined by the opposing cheeks of the associated forks, said segmental members having laterally extending peripheral flanges seated upon said forks radially outward of said cheeks and positively preventing said segmental members from becoming



wedged or jammed radially inwardly between the cheeks of said forks, and means for maintaining said forks and segmental members in assembly.

1,865,301. BIAS CUTTING MACHINE. HORACE M. BUNKER, New York, N. Y., assignor to H. M. Bunker & Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 13, 1930. Serial No. 420,542. 13 Claims. (Cl. 164—65.)

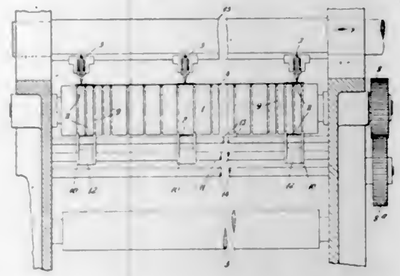


1. In a bias cutting machine including a base and a cylindrical mandrel over which a tubular material is adapted to be spirally fed and cut, said mandrel including more than two sections and means for supporting said sections from said base to permit of relative radial outward and inward movement and means for moving all of said sections simultaneously for increasing and decreasing the diameter of the mandrel, while maintaining its substantially cylindrical form.

1,865,302. MEANS FOR SLITTING WEBS OF FLEXIBLE MATERIAL. JAMES A. CAMERON, Brooklyn, N. Y., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 12, 1929. Serial No. 332,037. 13 Claims. (Cl. 164—70.)

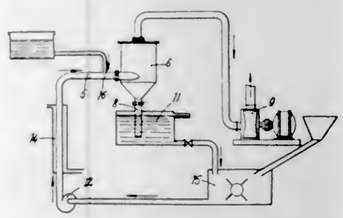
1. The combination of a roll having a circumferential web-supporting surface, and an annular slitting member

mounted on and adjustable over said web-supporting surface in a direction lengthwise of the roll, said slitting



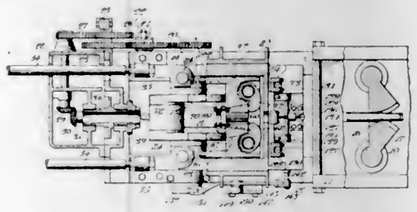
member projecting but slightly above the surface of the roll so as to constitute with the exposed portion of the latter a substantially continuous web-engaging surface.

1,865,303. PRODUCTION OF NITRATE OF LIME. HENRI CHARRIER, Lille, France, assignor to Societe Anonyme: Appareils et Evaporateurs Kestner, Lille, France. Filed June 18, 1929, Serial No. 371,874, and in France Apr. 3, 1929. 2 Claims. (Cl. 23—102.)



1. An improvement in the process for the production of concentrated nitrate of lime by the action of concentrated nitric acid on carbonate of lime consisting in adding to one of these reagents, before their contact, a solution of nitrate of lime the concentration of which is substantially equal to that of the final product desired to be obtained.

1,865,304. APPARATUS FOR REDUCING METAL STOCK. GEORGE B. COE, Waterbury, Conn., assignor, by mesne assignments, to Tube Reducing Corporation, Wilmington, Del., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,364. 15 Claims. (Cl. 80—14.)



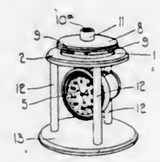
15. Apparatus for reducing stock in successive relatively short increments of length, comprising in combination, a reciprocable frame for operating stock reducing devices, devices for intermittently gripping the stock in timed relation with the operation of said frame, and means including a striker and a resiliently pressed plunger for actuating said stock gripping devices to grip and feed the stock.

1,865,305. PUPPET DOLL. WEAVER DALLAS, Thomaston, Ga. Filed June 2, 1931. Serial No. 541,699. 2 Claims. (Cl. 46—40.)



1. In a puppet doll, a knitted form comprising a tubular body portion, a head portion at one end, lateral arms carried by the body portion, bifurcated legs at the other end of the body portion, said head and body portion being closed throughout the length thereof, and said legs being closed at their lower ends and weighted to maintain each leg in a straight extended position, a relatively large crotch opening in the form to permit insertion of a hand with the thumb and little finger extended into the arms and the intermediate fingers extended into the head portion, the doll being placed on the hand by passing the hand through the crotch opening with the closed leg portions free of the hand of the user, a puppet doll head removably mounted on the head end of the knitted form and a body costume removably mounted on the body and legs of the knitted form.

1,865,306. DEVICE FOR MEASURING THE THICKNESS OF OBJECTS. HAROLD ASHLEY DAYNES and JOHN RICHARD SCOTT, Croydon, England, assignors to The Research Association of British Rubber Manufacturers, Croydon, England. Filed Nov. 1, 1929, Serial No. 404,160, and in Great Britain Jan. 7, 1929. 7 Claims. (Cl. 33—172.)

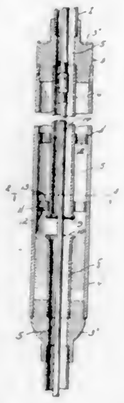


1. A device for measuring the thickness of an object, comprising in combination a fixed surface for supporting said object, a measuring instrument mounted in fixed relation to said surface, a movable rigid member having a plurality of contact surfaces adapted to simultaneously contact at a corresponding number of places with that face of the said object which is remote from the supporting surface, and means operatively associating said measuring instrument with a fixed point in the said rigid member equidistant from said contact surfaces.

1,865,307. AIR CHAMBER FOR WELL PUMPING. HAROLD G. DURNELL and SAMUEL T. STEEL, Bartlesville, Okla. Filed June 20, 1930. Serial No. 462,668. 1 Claim. (Cl. 103—223.)

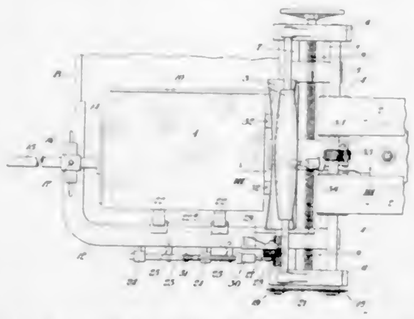
An air chamber designed to be connected with the tubing of a pumping well having sucker rods for lifting the fluid, comprising heads having socket ends connected to two of the spaced and alining tube sections, said beads,

from their said sockets being gradually widened outwardly, and having their ends provided with peripheral threads, a tubular member screwed on said threads and comprising an air chamber, said heads having bores aligning with the bores of the well tubing, and the bores from the inner ends of the heads being enlarged and threaded,



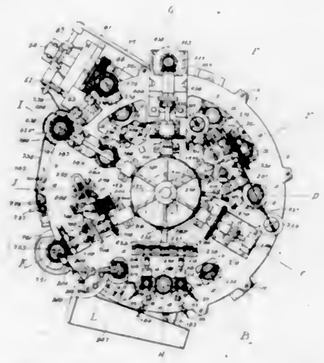
tubes having their ends screwed in the last mentioned portions of the heads, the upper tube being of a greater length than the lower tube, means holding the upper tube in spaced relation with respect to the air chamber and in parallelism with the lower tube, and both of said tubes having their confronting ends bell-shaped and spaced away from each other.

1,865,308. SHEET HANDLING MECHANISM. ARCHIBALD D. EVANS and JAMES K. LAMOREE, New Castle, Pa., assignors to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed July 22, 1929. Serial No. 380,046. 3 Claims. (Cl. 271—189.)



1. A sheet piling mechanism comprising in combination a pair of supporting bars, a stationary side guide member mounted on said bars, an L-shaped guide-carrying frame slidably mounted on said bars for movement toward and away from said stationary side guide member, means for moving said frame on said bars, a normally stationary end guide-plate carried by said frame and adjustable toward and away from said frame, a plurality of side guide fingers hingedly mounted on said frame so as to depend therefrom opposite said stationary side guide member, bearings on said frame, a slide bar mounted for reciprocatory movement in said bearings, bell-crank levers pivotally mounted intermediate their ends on said frame, said levers having one end pivotally connected to said slide bar and their other connected by links to respective ones of said guide fingers, power means for reciprocating said slide bar to cause a swinging movement of said side guide fingers, end guide fingers mounted for swinging movement opposite said stationary end guide-plate, and means for swinging said end guide fingers toward and away from said end guide-plate.

1,865,309. MACHINE FOR PLACING RIPPING WIRES IN CAN TOPS. JAMES D. EVANS, Haverford, and ALVIN K. ELTON, Upper Darby, Pa., assignors to Powell Evans, Philadelphia, Pa. Filed July 25, 1928. Serial No. 295,151. 140 Claims. (Cl. 113—15.)



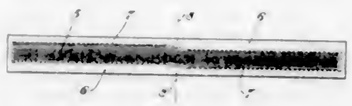
1. The combination in a machine for placing a ripping wire in a can top having a substantially flat body portion in which is formed a wire-receiving groove, of means for piercing the can top in the base of the groove, means for threading the wire through the piercing perpendicular to the body portion of the can top, means for laying the wire in the groove, and means for displacing the metal form-in one wall of the groove for securing the wire therein.

40. In a machine for placing a ripping wire in a can top, a chuck for holding the can top comprising a pair of relatively movable jaws each having a groove adapted to receive the peripheral edge of the can top, means for forcing one of the jaws toward the other of said jaws to grip the can top therebetween, and means for supporting the one jaw for sliding parallel motion with respect to the other jaw.

65. In a machine for placing ripping wires in can tops, the combination of a cylindrical punch for piercing said can tops, and a lateral extension on said punch having side walls tangent to the cylindrical body of the punch and converging to a knife edge spaced laterally from the center of said punch.

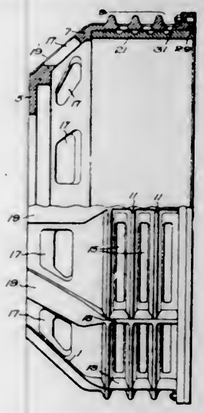
71. In a machine for placing ripping wires in can tops the combination of a punch for piercing the can tops, a carrier for said punch means for adjusting the punch longitudinally of said carrier, an operating plunger adapted to receive said carrier, means for securing the carrier in the operating plunger, and means for reciprocating said operating plunger.

1,865,310. CONVEYER BELT. DAVID P. FINNEY, Wilson, Pa. Filed Oct. 17, 1930. Serial No. 489,441. 5 Claims. (Cl. 198—193.)



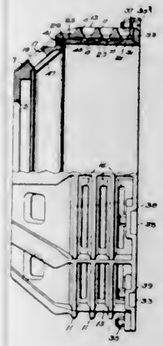
1. A conveyer belt comprising an inner carcass portion of fabric or like material and an outer material carrying covering of rubber or like flexible material, said covering on one side of said belt being relatively thin in cross-section from one longitudinal edge inwardly to the longitudinal center line of said belt and relatively thick in cross-section from the longitudinal center line of said belt to the other edge, and the other side of said belt having a covering of relatively thick cross-section opposite said area of said thin covering on said first named side and a covering of relatively thin cross-section opposite said area of thick covering on said first named side.

1,865,311. BRAKE DRUM. JOSEPH GOOSTRAY, East Milton, Mass., assignor to Hunt-Spiller Manufacturing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1931. Serial No. 529,341. 10 Claims. (Cl. 188—218.)



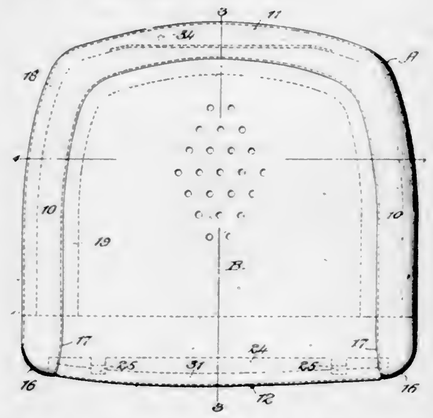
1. A brake drum having a supporting body provided with a cylindrical portion skeletonized to provide a plurality of openings therethrough between its margins and a cast metal liner removably fitted within said cylindrical portion and having its margins bearing on and supported thereby and having its exterior surface between said openings exposed to said openings.

1,865,312. BRAKE DRUM. JOSEPH GOOSTRAY, East Milton, Mass., assignor to Hunt-Spiller Manufacturing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 25, 1931. Serial No. 539,650. 7 Claims. (Cl. 188—218.)



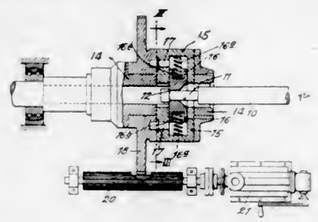
1. A brake drum comprising a supporting body having a perforated annular web and a cylindrical flange, a liner supported on said flange and a shield held between said body and liner and opposing the perforations of said web.

1,865,313. CHAIR SEAT. GLENN T. GOURLEY and ALFRED J. BALL, Youngstown, Ohio, assignors to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed July 30, 1930. Serial No. 471,795. 2 Claims. (Cl. 155—194.)



1. A chair seat comprising a seat frame composed of side, rear and front rails, inwardly directed seat bottom supporting formations carried by the side and rear rails, the front rail being formed from sheet metal and comprising a bottom wall, a front wall and a flange extending rearwardly from the top of the front wall, tongues integral with said flange bent to extend upwardly and forwardly therefrom, a seat bottom adapted to rest at its sides and rear on said supporting formations and at its front on the flange of said front rail, an inwardly directed flange on said seat bottom at the front thereof for engagement beneath said tongues, and means for securing the rear portion of said seat bottom to the rear rail of said seat frame.

1,865,314. CHUCK FOR HOLDING A MANDREL STEM. KARL GRUBER, Gladbach-Rheydt, Germany. Filed Aug. 9, 1930, Serial No. 474,209, and in Germany Nov. 1, 1929. 4 Claims. (Cl. 279—71.)

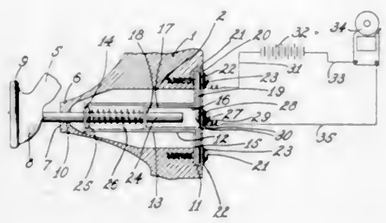


1. A chuck for holding a mandrel stem having a shoulder thereon, comprising a head, a plurality of jaw holders, a plurality of jaws for engaging said mandrel stem at the shoulder mounted in said jaw holders and movable radially therein, pins in said jaw holders extending axially of the chuck, and a disc mounted coaxially with said head having spirally extending slots therein through which said pins extend, in combination with means including a motor for turning said disc to actuate said jaws.

1,865,315. ELECTRIC SWITCH. JOHN A. HANDFORD, New Bedford, Mass. Filed June 13, 1930. Serial No. 460,992. 1 Claim. (Cl. 200—159.)

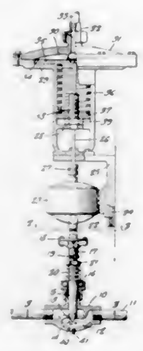
A device of the kind indicated comprising a body for mounting on a door or wall surface formed with a bore or recess opening on its rear face, a guide disposed in said

recess and composed of two members of which each consists of parallel side portions and a connecting end portion, the side portions terminating in oppositely disposed right angular extensions, one of said members being shorter than the other and being disposed between the side portions of the same with its extensions in contact with the extensions of the first, a plunger slidably mounted in guide openings in the end portions of said member, a shoulder on said plunger, a spring surrounding said plunger and



bearing one end against the shoulder on the same and the other end against the end portion of the shorter member, a plate spanning the extensions of the two members and having a center contact for engagement by said plunger when depressed, and screws passing through said contact plate and through said extensions to secure said members and the plunger to said body, the latter having an opening in the front wall in axial alignment with said recess to permit the extension of the forward end of the plunger therethrough.

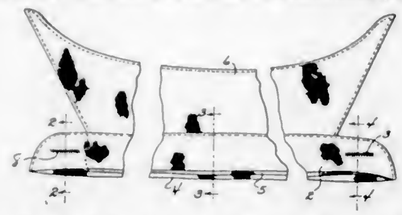
1,865,316. REVOLVING NEEDLE VALVE STEM AND GOVERNOR. RICHARD HANRAHAN and GEORGE LACASSE, Missoula, Mont. Filed Mar. 21, 1930. Serial No. 437,887. 2 Claims. (Cl. 137—139.)



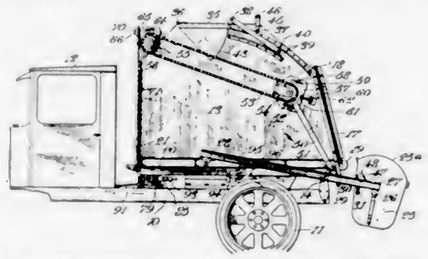
1. In a valve, a casing having a passage therethrough, a rotary needle valve extending into said casing to control said passage, means to rotate the needle valve and an agitator carried by the pointed extremity of the needle valve and operated within the passage.

1,865,317. COLLAR. FREDERICK L. HERMANN, Pittsburgh, Pa. Filed Nov. 3, 1930. Serial No. 493,170. 1 Claim. (Cl. 2—131.)

A permanently attached collar comprising an inner neck band strip folded upon itself and extended to form the body of the collar, said strip having an extension at one end only, said strip adapted to be attached to a garment, side strips folded upon themselves and attached to the inner strip and the extension thereof, said side strips being joined together along end edges which extend beyond one end of the body of the collar and the extension at the other end thereof, the first mentioned end portions of the side strips having registering button holes and the end portion of one of the side strips at the extension of the body of the collar having a button hole.

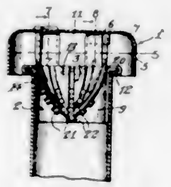


1,865,318. SELF-LOADING VEHICLE. WILLIAM S. HOWARD, New York, N. Y., assignor to Collection Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 11, 1929. Serial No. 391,710. 12 Claims. (Cl. 214—67.)



1. In a self-loading vehicle in combination, an enclosed material-receiving body having a filling opening therein, a hinged closure covering said opening, a vertically swingable loading bucket, bucket-supporting arms pivoted on said body, a push rod pivoted at one end to said closure and at the other end slidable in an arcuate guideway concentric with the center of oscillation of said bucket-supporting arms, and means on said arms for engaging said push rod to raise said closure as the bucket approaches said filling opening.

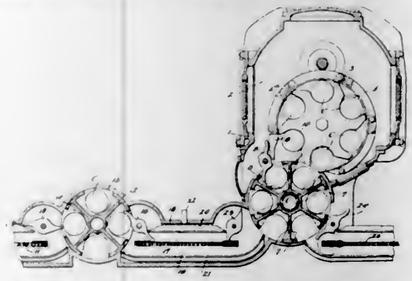
1,865,319. BREATHER PIPE CAP. JOHN K. JENSEN, Blackfoot, Idaho. Filed Sept. 2, 1930. Serial No. 479,356. 6 Claims. (Cl. 121—194.)



1. A breather pipe cap comprising an inverted cup shaped head member, a tubular resilient coupling member of less diameter than the head member and for extension into and for connection the the breather pipe, said head member and coupling member having spaced coacting means for connecting the former to the latter and for maintaining the head member spaced from and in encompassing spaced relation to said coupling member, said coupling member having laterally disposed spaced means for seating on the top edge of the breather pipe, an inverted, hollow conoidal shaped guard member extending into said coupling member and formed with a plurality of spaced

rows of spaced openings to provide combined inlets and outlets surrounded by a portion of the coupling member, and said guard member having lateral means coacting with the lateral means of the coupling member for connecting the guard and coupling member together.

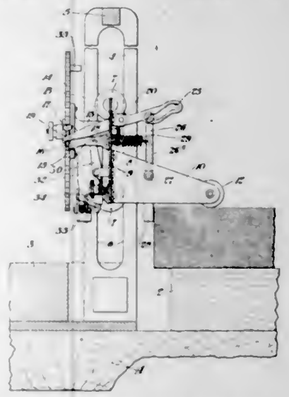
1,865,320. APPARATUS FOR CLOSING CANS AND METHOD OF VACUUMIZING THE CANS PRIOR TO SEALING. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 11, 1931. Serial No. 515,097. 4 Claims. (Cl. 113—82.)



1. An apparatus for closing cans comprising a closed sealing chamber having a seaming mechanism therein, a closed treating chamber associated with said sealing chamber, a pocketed valve between said chambers for receiving cans from the treating chamber and delivering the same to the sealing chamber without exposing the can to the atmosphere, a pocketed valve for closing the entrance to said treating chamber, and means within said treating chamber for receiving the cans from the entrance valve, conveying the cans through said chamber and delivering the same to the valve for passing the same into the sealing chamber.

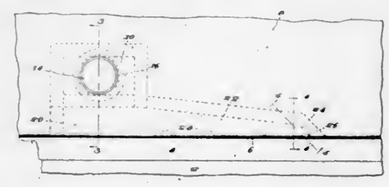
3. The method of sealing cans in vacuum consisting in passing the can with the cover loosely applied thereto through a vacuum chamber wherein the vacuum is maintained at substantially a predetermined degree, transferring the can from said chamber directly into a sealing chamber maintained at a less degree of vacuum than the first named chamber and seaming said cover to the container while in said last named chamber.

1,865,321. COUNTING MECHANISM. LEE B. LANDON, Elwood, Ind., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed May 15, 1928. Serial No. 277,887. 2 Claims. (Cl. 235—98.)



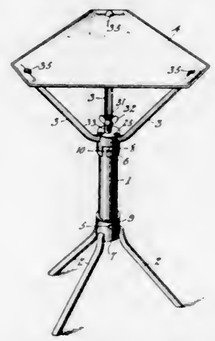
1. A counting mechanism for sheets and plates comprising a base, a pair of spaced standards secured to said base, a carriage adapted to move vertically in said standards, a toothed index wheel mounted on said carriage for rotation about a horizontal axis, a rocking lever pivotally supported on said carriage for movement about a horizontal axis at right angles to the axis of said wheel, an operating dog pivotally mounted adjacent one end of said rocking lever and adapted to engage and rotate said wheel when said rocking lever is moved in one direction about its axis, means for maintaining said dog in engagement with said wheel, a horizontal rock shaft journaled in said carriage, a depending lever secured to said shaft and adapted to be engaged by the sheets to be counted to rock said shaft, said rocking lever having a cam slot therein adjacent the end remote from said operating dog, and a lever secured to said rock shaft and extending upwardly, the upper end of said last named lever being engaged and adapted to ride in said cam slot to actuate said rocking lever.

1,865,322. HILLSIDE CATCH BASIN. WILLIAM J. LATIMER, Washington, D. C.; HUGO A. STAHL, West Falls Church, Va.; and GUSTAVO J. MALDONADO, Washington, D. C.; said Stahl and said Maldonado assignors to said Latimer. Filed July 12, 1930. Serial No. 467,594. 4 Claims. (Cl. 94—33.)



1. In combination, a gutter, a catch basin, a curb, a trough beneath said curb connecting a point in said gutter spaced from said catch basin to said catch basin, the rear wall of said trough forming a slight angle with said curb, the end of said rear wall farthest from said catch basin forming a greater angle with said curb, whereby water may flow in a gradual curve from said gutter into said catch basin, and means for supporting said curb from said gutter throughout the length of said trough.

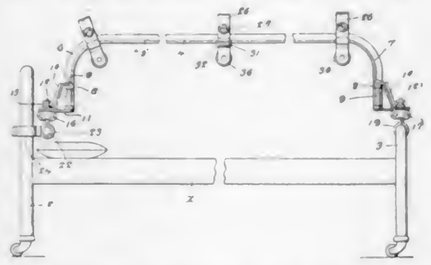
1,865,323. FOLDING CHAIR. CHARLES LIBERMAN, Brooklyn, N. Y., assignor of one-half to William Garman, New York, N. Y. Filed Apr. 22, 1930. Serial No. 446,324. 3 Claims. (Cl. 155—130.)



1. In a folding chair, a standard, means for supporting a seat member at one end of said standard, a plurality of legs arranged at the opposite end of said standard, each of said legs having a bent enlarged extension, and means coacting with said bent enlarged extension for securing the legs to the lower end of said standard, said means including an inverted cup shaped fitting having a notch for

each of said extensions, a washer coacting with the lower end of said standard, and a retaining member loosely engaging said washer and rigidly secured to the end of said fitting.

1,865,324. ATTACHMENT FOR HOSPITAL BEDS. JOHN WILLIAM LOGAN, Cambridge, Mass. Filed May 13, 1931. Serial No. 537,087. 3 Claims. (Cl. 5—93.)



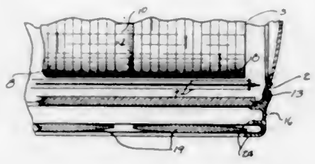
1. An attachment for hospital beds, comprising an inverted T-shaped member that has angle ends, brackets pivotally secured to the opposite sides of the said ends, spaced rails adjustably and removably secured to the head and to the foot of a bed, a pair of spaced clips for the respective pairs of rails, said clips comprising each two plates arranged to contact with the upper and lower faces of the rails and one of each of the said brackets resting on the upper plate of the respective clips, a pivot passing through the plates of the clips, directed between the respective pairs of rails and through the brackets, an adjustable binding element on each pivot to contact with the brackets and to force the plates of the clips toward each other and against the rails, and roller carrying slides on the inverted T-shaped member.

1,865,325. FOUNTAIN PEN. MALCOLM MACLEOD, Roosevelt, N. Y. Filed Aug. 13, 1930. Serial No. 475,036. 3 Claims. (Cl. 120—47.)



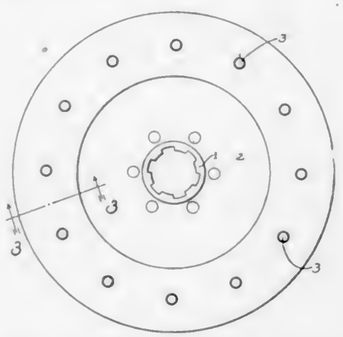
1 A fountain pen comprising a barrel, a nib stock at the lower end of the barrel, a piston mounted for reciprocatory movement within the barrel, a rack bar integral with the piston, a pinion rotatably mounted in the barrel above said piston meshing with said rack bar, a plug insertable in the other end of the barrel for normally closing said barrel, and a second rack bar integral with said plug for meshing with said pinion whereby when said plug and last mentioned rack is moved in one direction the first mentioned rack bar will be moved in an opposite direction.

1,865,326. WEIGHING SCALE. CHARLES O. MARSHALL, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed July 29, 1929. Serial No. 381,702. 2 Claims. (Cl. 88—1.)



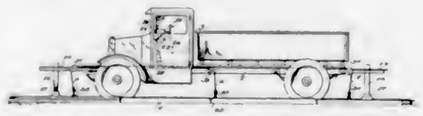
1. In a weighing scale, in combination, a relatively movable chart and index, said chart having a plurality of value computing columns and a plurality of weight indicating columns, said weight indicating columns dividing said value computing columns into three substantially equal zones, and a plurality of spherical lense mounted directly in front of the computing value zones, the width of said lenses being substantially equal to the width of the computed value zones.

1,865,327. CLUTCH DISK. GEORGE L. MCCAIN and KARL PFEIFFER, Detroit, Mich. Filed Jan. 2, 1931. Serial No. 506,049. 12 Claims. (Cl. 192—107.)



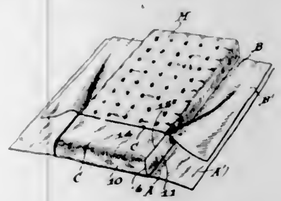
1. A clutch disk including a lining structure, friction creating bodies distributed throughout said lining structure, the coefficient of friction of the bodies at the inner parts of said lining being greater than the coefficient of friction of the bodies at the outer portions thereof.

1,865,328. ROAD MACHINE. JOHN A. MCEACHERN, Homer, La. Filed Dec. 17, 1930. Serial No. 503,064. 6 Claims. (Cl. 37—153.)



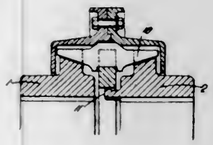
1. A road drag comprising a truck, and a drag frame suported from said truck and extending forwardly and rearwardly thereof, guide means between the forward and rear ends of said truck that said frame and arranged in a manner that the latter is freely movable longitudinally with respect to the truck, and means for raising and lowering said frame.

1,865,329. BED CLOTHING. EVELYN MCHORTER, New York, N. Y. Filed Oct. 22, 1929. Serial No. 401,507. 3 Claims. (Cl. 5—334.)



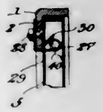
1. An article of bed clothing comprising a cover formed at one end with a centrally disposed longitudinally extended portion of less width than the width of the cover, flaps extended from opposite edges and in lateral continuation of said extended portion adjacent the inner end thereof and in longitudinal continuation of the cover, said flaps terminating at their outer ends a distance inwardly from the end of the extended portion and terminating at their outer side edges spaced a distance inwardly from the opposite outer edges, respectively of the cover, said extended portion folded back onto itself along a line through the outer ends of said flaps, and said flaps folded upwardly and joined along their outer edges to the opposite edges, respectively, of the extended portion to form a pocket at one side and across one end of the cover open at its inner end, said pocket adapted to fit over and receive the end of a mattress.

1,865,330. FLEXIBLE COUPLING. ROBERT JAMES MCLEOD, West Drayton, England. Filed June 27, 1929, Serial No. 374,196, and in Great Britain Aug. 11, 1928. 2 Claims. (Cl. 64—96.)



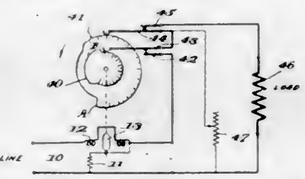
1. A flexible coupling for connecting the coaxial shafts of a driving and a driven member, comprising two discs for connection, respectively, to such members, each of said discs having axially disposed teeth, a carrier ring loosely mounted between the discs and having axial slots, and flat springs inserted in said slots and engaging with the teeth of each disc, one of said discs having a seating integral therewith on which the carrier ring is supported.

1,865,331. CATCH FOR OVEN DOORS. WALTER MOLL, Evansville, Ind., assignor to Hoosier Lamp and Stamping Corporation, Evansville, Ind. Original application filed June 6, 1928, Serial No. 283,418. Divided and this application filed Jan. 9, 1930. Serial No. 419,680. 1 Claim. (Cl. 292—76.)



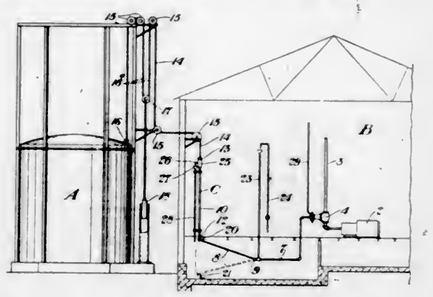
The combination with a frame for an oven door, of a hollow oven door comprising an oven door proper, and a lining carried by said door in spaced relationship thereto, said lining having a slot, a keeper integral with the lining and struck up therefrom adjacent the slot and located inside the space between the lining and the oven door proper, and an inherently springy catch on the frame which is adapted to pass through the slot and to engage said keeper and to lie concealed within the space between the lining and the door.

1,865,332. CONTROL DEVICE. CLARK M. OSTERHELD, Stoughton, Wis., assignor, by mesne assignments, to Waters-Genter Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 22, 1929. Serial No. 365,219. 6 Claims. (Cl. 171—97.)



1. A control device of the character set forth comprising a watt meter having input terminals connected to a source of electrical energy and output terminals connected to a circuit to be controlled, a switch operatively connected to the movable member of said watt meter and actuated in accordance with the electrical energy flowing in said circuit, a load interposed in said circuit and adapted to be connected to and disconnected from said circuit by said switch, and means shunted across the output terminals of said watt meter and adapted to cause a flow of energy therethrough during the period said load is disconnected from the circuit.

1,865,333. AUTOMATIC CONTROL MECHANISM. WILLIAM R. PENDRY, Cleveland, Ohio. Filed May 20, 1930. Serial No. 454,055. 3 Claims. (Cl. 48—190.)

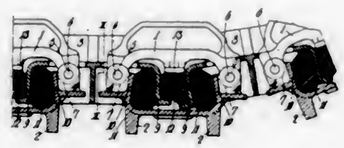


1. In a turbine driven gas booster system including a gas holder, an automatic control mechanism comprising a diaphragm control valve for controlling the stem supply to the turbine, means including a walking pipe for supplying hydrostatic pressure to said diaphragm valve, means connecting said walking pipe with said gas holder for causing said walking pipe to change its vertical position in accordance with the fall and lift of said holder so as to vary the hydrostatic pressure on said valve in accordance with the fall and lift of said holder, means for supplying fluid to said walking pipe so as to maintain a constant head therein, and means for venting said valve to prevent air pocketing on the fluid pressure side of the diaphragm of said valve.

1,865,334. JOINTS OF CHAIN OR LIKE MEMBERS. OSCAR STYLES PENN, Malew, England, assignor to Roadless Traction, Limited, Hounslow, Middlesex, England, a Company of Great Britain. Filed Aug. 23, 1930, Serial No. 477,404, and in Great Britain Sept. 4, 1929. 2 Claims. (Cl. 305—10.)

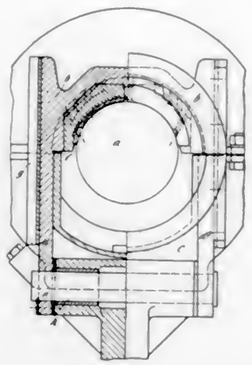
2. An endless track member comprising a number of separate links consisting of shoe members and link mem-

bers proper, and blocks of resilient material including an inner block and outer blocks on opposite sides of the inner blocks for holding the shoe and link members out of metallic contact, the said shoe members comprising detachably secured upper and lower portions, the lower portions having horizontal bottom walls and substantially vertical confining walls to support the outer blocks, said link members having body portions resting on the outer blocks and having their extremities spaced thereby from



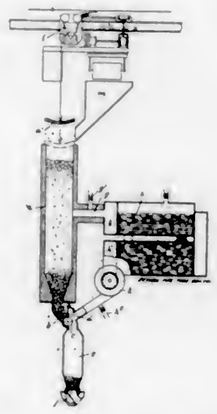
said horizontal bottom walls, said extremities being horizontal flanges, extending in parallel relation to the body portions and underlying the inner blocks, vertical flange portions connecting the horizontal flanges to the body portions of the link members and separating the inner and outer blocks, abutments on the upper shoe members, the inner blocks being confined between said abutments and the above mentioned horizontal flanges, and clearances between the body portions of the links and the shoe members.

1,865,335. TWO-PART AXLE BEARING BLOCK OR CASING FOR RAILWAY VEHICLES. WALTER PEYINGHAUS, Bezirk Hagen, Germany. Filed June 22, 1929, Serial No. 372,975, and in Germany June 10, 1928. 1 Claim (Cl. 308—43.)



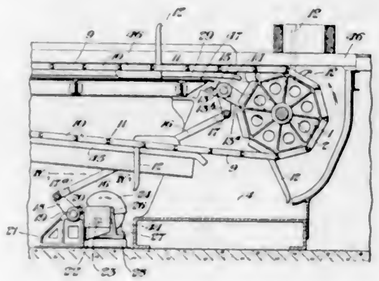
In a two-part cylindrical axle bearing casing for railway vehicles of the kind comprising an upper part and a lower part rigidly bolted together in an oil-tight manner by vertically extending bolts, a sealing member between the upper and lower parts at each side of the axle, downwardly extending legs integral with the upper part and embracing the lower part and extending below the same and provided with aligned openings, a spring suspension having a sleeve located immediately below the said lower part and fitted between the lower ends of the legs and extending across the space between the same, and a pivot bolt passing through the aligned openings in the sleeve and securing the spring suspension to the legs, whereby the lower part is confined between the spring suspension and the said upper part of the axle bearing casing.

1,865,336. APPARATUS FOR COOLING COKE. JAMES WILSON REBER, London, England. Original application filed May 21, 1926, Serial No. 110,707, and in Great Britain May 25, 1925. Divided and this application filed Oct. 2, 1928. Serial No. 309,705. 4 Claims. (Cl. 202—228.)



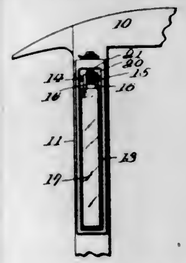
1. Apparatus for cooling coke, comprising a substantially vertically elongated chamber open at its upper end, a closure for the upper end capable of removal to permit introduction of a substantial mass of hot coke into the chamber, continuously operable means at the lower end of the chamber for discharging coke therefrom, a heat recovery apparatus, ducts connecting and forming the sole means of communication between the heat recovery apparatus and the chamber, said ducts comprising a lowermost duct which opens onto the chamber in close proximity to the lower end thereof, and an uppermost duct which opens onto the chamber at a point a substantial distance from each end of the chamber, the portion of said chamber at and above the level at which said uppermost duct opens thereon being of substantially uniform cross-section, and means for causing gases to circulate through the heat recovery apparatus, through the portion of the chamber between the lowermost and uppermost ducts, and through the ducts.

1,865,337. CONVEYER. GEORGE H. ROSE, Cleveland Heights, Ohio. Filed Nov. 21, 1931. Serial No. 576,558. 5 Claims. (Cl. 198—170.)



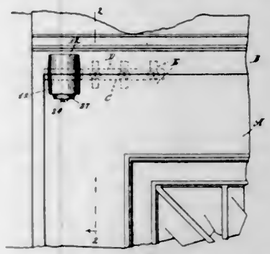
1. A conveyer for conveying coils of rods, wire and the like, comprising a supporting frame, a head sprocket and a pair of tail sprockets, said tail sprockets being spaced horizontally to permit work-engaging dogs to pass therebetween, a conveyer chain trained over said sprockets, crank-shaped dogs pivotally mounted on said chain, guides between said sprockets under the upper stretch of said conveyer chain for supporting said chain, a support extending below and parallel with said guides and adapted to be engaged by said dogs to hold said dogs in work-engaging position, mechanical means for swinging said dogs up into work-engaging position, automatic control means for limiting the operation of said mechanical means, power means for operating said conveyer head shaft, means interlocked with said automatic control means for controlling the starting of said head shaft operating means, and means for limiting the operation of said head shaft operating means.

1,865,338. DIRECTION INDICATOR FOR VEHICLES. MARCUS ROSENBLUM, Los Angeles, Calif. Filed Feb. 3, 1931. Serial No. 513,215. 12 Claims. (Cl. 116—54.)



1. A direction indicator comprising a rotatable shaft carrying a radially disposed semaphore member, yieldable means acting to normally rotate said shaft in a direction to move the semaphore member to indicating position, a movable actuator member connected to one end with said shaft, and a cam engaging said actuator member so as to move the semaphore to non-indicating position, said cam having means for normally holding said operating member against return movement.

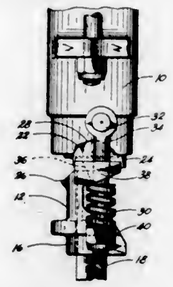
1,865,339. HINGE. LOUIS SCHILLING, Valley Stream, N. Y., assignor to The Northern Studios, Inc., Astoria, N. Y., a Corporation of New York. Filed Aug. 19, 1930. Serial No. 476,377. 7 Claims. (Cl. 16—131.)



1. In a hinge, a pintle bearing member, a pintle and a mounting for said pintle including a mounting member having an axially extending bore and a rotary pintle carrier within the bore for adjusting the pintle eccentrically with respect to said bore and a common means for locking the pintle, the pintle carrier and mounting member in their adjusted positions against relative movement.

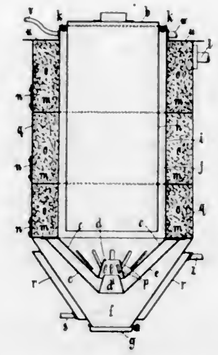
1,865,340. STEEL RETAINER. ALFRED G. SLATCHER, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 5, 1930. Serial No. 449,767. 6 Claims. (Cl. 121—32.)

1. In a machine of the class described, the combination with a head having an arcuate shaped bearing portion at the lower end thereof, a tool retaining yoke having an arcuate bearing portion on the upper end thereof cooperating with said first mentioned bearing portion, resilient means secured to said head and to said yoke below the end of the said yoke for normally urging said yoke against



said bead while permitting sliding movement of said bearing portions upon each other whereby said yoke is pivoted to said head, said spring means acting in a radial direction about an axis which is offset from the axis of rotation of the yoke, said yoke having swinging movement through the dead center of the spring means.

1,865,341. GAS PRODUCER. DAVID JOSEPH SMITH, Mapledurham, England, assignor to Compound Gas Power Company, Limited, Reading, Berkshire, England. Filed Dec. 29, 1927, Serial No. 243,393, and in Great Britain July 20, 1927. 1 Claim. (Cl. 48—76.)

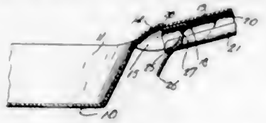


In a down draft gas producer, a fuel gasifying chamber, a gas filtering chamber surrounding said gasifying chamber and arranged concentrically thereto, a frusto-conical grate projecting downwardly from said gasifying chamber and having a re-entrant portion formed at its lower end, said gasifying chamber being spaced from said gas filtering chamber to form an air passageway therebetween communicating with the space immediately above said grate and with the top of the producer, and a frusto-conical baffle surrounding the under side of said grate and having a re-entrant portion concentrically arranged with respect to the re-entrant portion of said grate.

1,865,342. COOKING PAN. TURNEY H. STOUGH, Jeannette, Pa., assignor to Jeannette Steel Corporation, Jeannette, Pa. Filed Mar. 31, 1932. Serial No. 602,341. 7 Claims. (Cl. 53—7.)

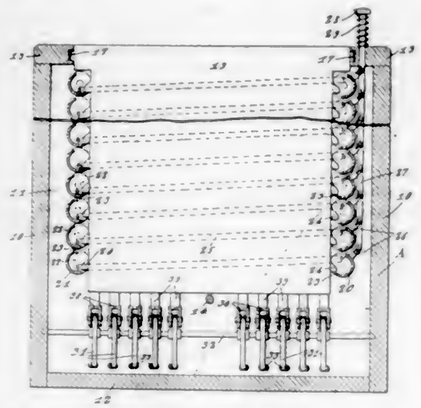
1. In a detachable handle for cooking pans, wherein the pan carries an edge projecting lip, a handle engage-

able with the lip, a pivoted clamp carried by the handle and engageable with the lip for retaining the handle engaged with the lip, said lip and handle being transversely



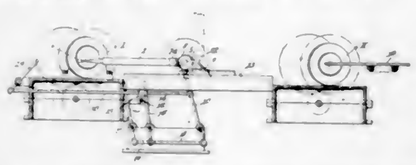
arched with the edges of the handle rolled inwardly to telescopically receive the lip, and said clamp having side pins pivoted in the rolled edges of the handle.

1,865,343. INDEXED CARD FINDING OR SELECTING APPARATUS. CHARLES E. TUMMINELLO, Pittsburgh, Pa., assignor of one-fourth to Samuel A. Greenberg and one-fourth to Harry K. Angel, Pittsburgh, Pa. Filed June 2, 1931. Serial No. 541,706. 9 Claims. (Cl. 129—10.1.)



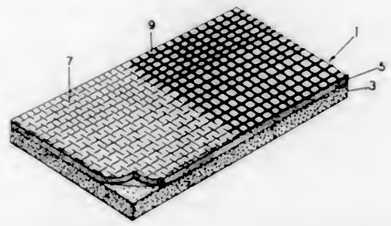
1. In an apparatus of the kind described, a case, cards arranged within the case, finding mechanism including a series of channeled members located at opposite sides of and arranged within the case and selectively manually operable, and means on the cards and coactive with the finding mechanism for the selective sorting of said cards by said mechanism.

1,865,344. APPARATUS FOR ROLLING SEAMLESS PIPES. RUDOLF URBAN, Podbrezova, Czechoslovakia. Filed Mar. 13, 1928, Serial No. 261,313, and in Czechoslovakia Mar. 15, 1927. 7 Claims. (Cl. 80—13.)



4. In an apparatus for rolling seamless, weldless, pipes or tubes, the combination of two pairs of rolls arranged with their passes in substantial alignment, a mandrel support arranged between the pairs of rolls and adapted to be bodily reciprocated in a direction substantially at right angles to the axes of said rolls, a mandrel mounted to turn bodily about a substantially horizontal axis on said support and to be positioned to cooperate with one of the pairs of rolls to receive a perforated billet therefrom or to present such perforated billet in alignment with the pass between the other pair of rolls, a relatively stationary rack, a pinion connected with the mandrel in co-axial relation to said horizontal axis thereof and adapted to engage the rack as the mandrel support is reciprocated to turn the mandrel through an angle of approximately 180° and from operative relation to the first pair of rolls to operative relation to the second pair of rolls, means for reciprocating the mandrel support, a second mandrel extending into the pass between the members of the second pair of rolls, and means actuated by movement of the mandrel support, after the pinion has passed from engagement with said rack, for moving the perforated billet from the first said mandrel on to the other mandrel.

1,865,345. COVERING. GEORGE H. WHEATLEY, Oak Park, Ill. Filed July 20, 1931. Serial No. 551,954. 1 Claim. (Cl. 154—49.)



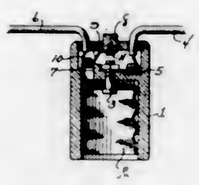
Covering consisting of an exposed layer of felt impregnated throughout with rubber, and a preformed backing layer of rubber, said layers being vulcanized together.

1,865,346. NUT. WILLIAM E. WELLS, Birdseye, Ind. Filed Jan. 2, 1930. Serial No. 418,068. 5 Claims. (Cl. 85—32.)



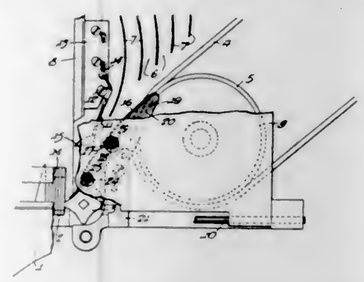
1. As a new article of manufacture, a nut having non-parallel side faces and truncated apexes at the juncture of the side faces, said truncated apexes having wrench receiving recesses.

1,865,347. LAMP SOCKET. THOMAS HARRISON WILLIAMS, Cicero, Ill. Filed Feb. 5, 1930. Serial No. 426,117. 1 Claim. (Cl. 173—358.)



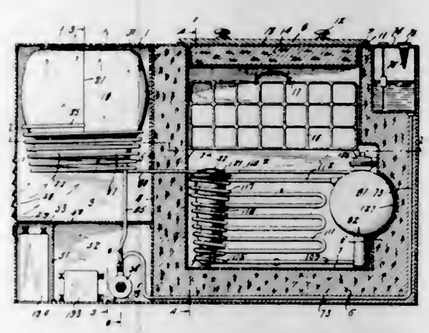
A lamp socket including a shell-like body having a threaded lining for receiving the threaded part of a lamp, a contact protruded centrally of the lining, a tap for a lead connected with the contact, a tap for a lead connected with the lining, and a button resiliently projected from the shell body and having a connection with the last named tap and adapted to be engaged with the contact on pressing inwardly upon the button for short-circuiting a lamp in the socket.

1,865,348. MATRIX ASSEMBLER. LE ROY W. WILLIS, Stamford, Conn., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed May 14, 1931. Serial No. 537,421. 7 Claims. (Cl. 199—28.)



1. In a typographical machine having a channel for the assembling of a line of matrices, a matrix assembler comprising means for conveying matrices toward said channel, and a member between said conveying means and the assembling channel for directing the matrices to the entrance of said channel, said member being adjustable at will to alter its form and thus vary the path of the matrices.

1,865,349. REFRIGERATING APPARATUS. LEONARD KAY WRIGHT, Jackson Heights, N. Y. Filed Feb. 1, 1928. Serial No. 251,072. 8 Claims. (Cl. 62—5.)

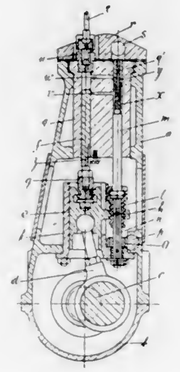


1. A refrigerator comprising a casing having a cooling compartment, a heating compartment, means in the cooling compartment to cool material, adsorbent means in the heating compartment to operate the cooling means, a fuel to heat the adsorbent, means adjacent the cooling compartment on the side most remote from the heating compartment to store the fuel and means to conduct the fuel to the heating compartment.

7. A refrigerator comprising a cooling compartment, a heating compartment, a tank adapted to contain a refrigerant positioned in the cooling compartment, a formation tank positioned opposite the refrigerant tank, a coil about the formation tank communicating with the refrigerant tank and means to vary the pressure in the coil to cool fluids in the formation tank.

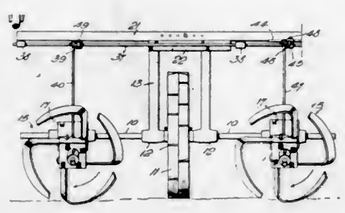
1,865,350. OIL PUMP. WILLIAM ALEXANDER, Glasgow, Scotland. Filed Dec. 28, 1931, Serial No. 583,508, and in Great Britain Dec. 12, 1930. 4 Claims. (Cl. 103—154.)

1. An oil pump comprising a cylinder adapted to deliver oil and a valve chamber substantially parallel to said cylinder, said chamber being adapted to communicate with a source of oil supply, and plunger and piston valve elements solidly connected in longitudinal direction for reciprocation in unison in said cylinder and chamber, said valve element being constricted at the waist so as to leave an annular space between said waist and the wall of said chamber, said cylinder and valve chamber being



connected by transverse passages of which the passage further from the point of oil delivery from said cylinder is at all times open to said annular space and intermittently masked and unmasked by said plunger element, and the other passage is intermittently masked and unmasked by said valve element, said annular space being at no time subjected to the high pressure of delivery of the oil.

1,865,351. COTTON CHOPPING MACHINE. ELLIS ALBAUGH and HENRY F. HILDEBRANDT, San Antonio, Tex., assignors to Dixie Cotton Machinery Company, San Antonio, Tex., a Corporation of Delaware. Filed Mar. 17, 1930. Serial No. 436,618. 17 Claims. (Cl. 97—15.)

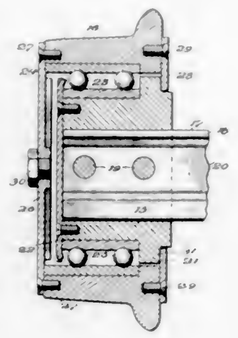


11. In an agricultural machine, a cutter-carrying frame, a main frame, means for pivoting said cutter-carrying frame to said main frame and for effecting adjustment of the frame transversely of the path of the machine, and means for swinging said cutter-carrying frame about its pivot.

1,865,352. MINE CAR. EDGAR H. BOSTOCK, Nutley, N. J. Filed Nov. 25, 1929. Serial No. 409,685. 7 Claims. (Cl. 308—182.)

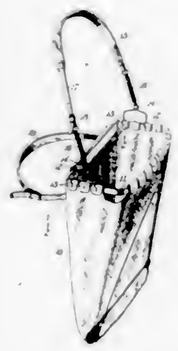
1. In a mine car and the like, the combination of an axle, a hub fixedly mounted on said axle, a raceway on said hub, means for retaining said raceway on the hub, a wheel tread, a raceway secured in said tread, anti-friction ele-

ments secured between said raceways, there being a cavity within said wheel tread for the deposit of lubricant, and



means on said raceway retaining means for effecting a movement of the lubricant axially of said hub for lubrication of said anti-friction elements.

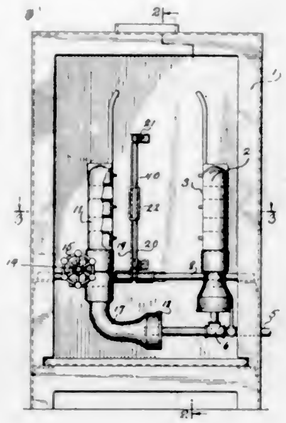
1,865,353. HARNESS FOR PICKING SACKS AND THE LIKE. JACK A. BREWSTER, Redlands, Calif. Filed Oct. 9, 1928. Serial No. 311,308. 5 Claims. (Cl. 150—2.)



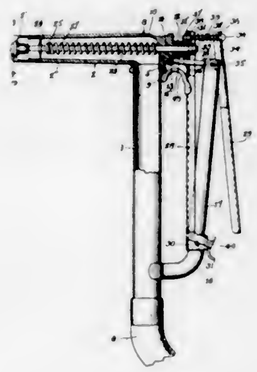
1. A harness for picking sacks and the like comprising, in combination, a belt secured to the back side of the sack near the upper edge and adapted to engage the hips of the wearer, and an elastic shoulder strap secured to the opposite sides of the sack at the top thereof, whereby to permit a part of the weight of the sack, when filled, to be shifted from the shoulder to the hips or waist line of the body of the wearer.

1,865,354. COOKING DEVICE. CHARLES C. BRUNNER, Forest Hills, N. Y., assignor to H. Noreck Co., Inc., Port Chester, N. Y., a Corporation of New York. Filed Oct. 9, 1929. Serial No. 398,299. 11 Claims. (Cl. 126—41.)

1. In a cooker or broiler, the combination of a housing, a fixed heating element mounted therein, a pair of rods extending transversely of said housing, one of said rods being located adjacent the front of the housing and the other adjacent the rear of the housing, an adjustable heating element supported by said rods, one of said rods being provided with rack teeth, and a pinion carried by the adjustable heating element and meshing with said rack teeth for adjusting said adjustable heating element transversely of said housing.

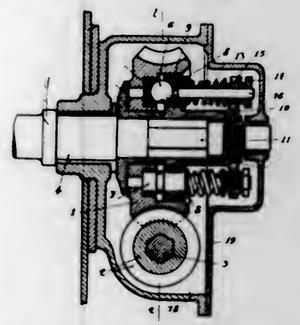


1,865,355. FLUID DISPENSING NOZZLE. WEBSTER I. CARPENTER, Norfolk, Va. Filed Mar. 23, 1931. Serial No. 524,703. 13 Claims. (Cl. 137—134.)



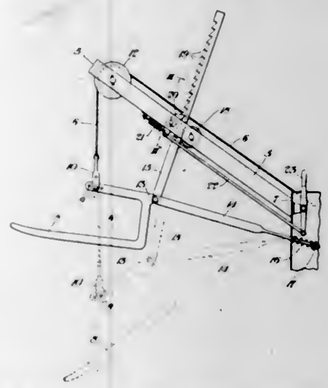
4. A fluid dispensing nozzle comprising a tubular stem part, a tubular discharge part having its inner end coupled to and communicating with the outer end of the stem part, said discharge part having a valve seat within its outer end, a spring controlled valve means engaging said seat for normally closing said discharge part to prevent drippings, and a shifting mechanism for said valve means, said mechanism connected to the latter and with said stem part and including a resilient member and a pivoted handle member connected together at their outer ends, said discharge part disposed at right angles to said stem part.

1,865,356. SLIPPING COUPLING, MORE PARTICULARLY FOR GUN-LAYING MECHANISM. LEON DAUM, Paris, France, assignor of one-half to Schneider & Cie., Paris, France, a Company of France, and one-half to Compagnie des Forges et Acieries de la Marine et d'Homecourt, Paris, France, a Company of France. Filed Sept. 30, 1931, Serial No. 566,125, and in France Nov. 19, 1930. 15 Claims. (Cl. 89—41.)



1. In a gun laying mechanism, a driving member adapted to be actuated by the gun layer, a driven member the movements of which correspond to those of the gun to be laid, and a coupling interposed between and entirely supported by the driving and driven members and adapted to yield so as to permit relative displacement of said members under the action of an abnormal force of greater than a predetermined value emanating from said gun, said coupling including means for automatically returning said members to their original driving positions upon cessation of said abnormal force.

1,865,357. LIFTING HOOK. DAVID DAVIES, Cleveland, Ohio, assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Apr. 1, 1931. Serial No. 527,017. 3 Claims. (Cl. 214—137.)

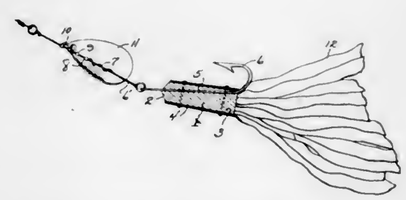


1. Apparatus of the class specified comprising, in combination, a supporting structure, a boom fixed to and extending upwardly and outwardly from said support, a U-shaped hook having a load-engaging prong, a flexible member attached to one leg of said hook and passing over said boom for raising and lowering said hook, a lever having one end pivotally secured to said hook and having its other end connected to said support so as to provide for pivotal movement and for movement in a direction parallel to the longitudinal axis of said lever, a second lever pivotally connected to said hook on the same axis as said first named lever and extending upwardly through said boom, said last named lever being provided with ratchet teeth along its one face, a ratchet pivotally mounted on said boom and adapted to engage in the teeth on said lever to hold said lever against downward movement, a spring normally urging said ratchet toward said teeth on said lever, and manually operated trip mechanism for releasing said ratchet.

1,865,358. MANUFACTURE OF ARTIFICIAL SILK, ARTIFICIAL HORSEHAIR AND LIKE PRODUCTS. HENRY DREYFUS, London, England. Original application filed June 28, 1923, Serial No. 648,350, and in Great Britain Aug. 11, 1922. Divided and this application filed Apr. 5, 1928. Serial No. 267,808. 4 Claims. (Cl. 18—54.)

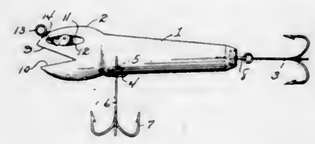
1. Process for the manufacture of artificial filaments and threads, characterized in that the same are dry spun from concentrated solutions of organic substitution derivatives of cellulose containing at least 21 and less than 25% of the cellulose derivative.

1,865,359. FISH BAIT. WILLIAM F. EGER, Bartow, Fla. Filed Dec. 16, 1931. Serial No. 581,487. 2 Claims. (Cl. 43—42.)



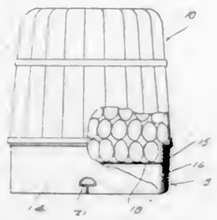
1. An artificial casting bait comprising a weighted body which is of frusto conical formation and which has its reduced end tapered to the center thereof, a hook having its shank passing centrally through the nose and angularly through the body, soft rubber sleeves on the body and said sleeve being formed on the ends of rubber sheets which are differently colored and which extend from the widened end of the body and are slitted longitudinally to provide a screen for the hook and also to provide streamers.

1,865,360. FISH BAIT. WILLIAM F. EGER, Bartow, Fla. Filed Dec. 16, 1931. Serial No. 581,488. 1 Claim. (Cl. 43—46.)



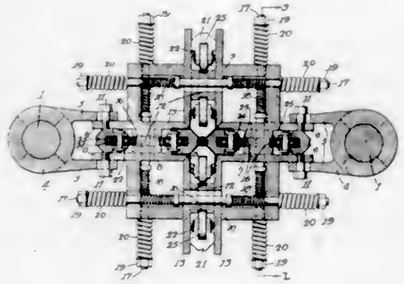
An artificial bait comprising a floatable body tapered from one end to the other and having its wide end integrally formed with an enlarged head which is substantially round in plan and in elevation, said head having a V-shaped slot entering from its outer end to provide a mouth and having its sides above the mouth fluted longitudinally at upward and rearward angles, artificial eyes in the said fluted portions projecting outwardly therefrom, hooks having their shanks swingably secured to the under face of the body at the juncture of the head thereof and other hooks having their shanks pivotally connected to the tail end of the body, together with an eye in the upper portion of the head for a fishing line.

1,865,361. PRODUCE BASKET FILLING DEVICE. FRED EHRENHARDT, Lockport, N. Y. Filed May 7, 1929. Serial No. 361,150. 4 Claims. (Cl. 226—17.)



1. As a new product of manufacture, a basket filling hopper of the class described comprising a collapsible cylinder composed of a plurality of at least three telescopically connected ring like members fashioned to provide a hopper adapted to contain a predetermined quantity of goods, a horizontal facer pan permanently fixed centrally in the lowest ring like member to form a shallow receptacle for the reception of selected goods for forming the top layer of the filled basket, and diametrically opposed handles projecting outwardly beyond the surface of the outermost cylinder and upwardly, the horizontal portion of the handles adapted to act as stop means for the lower edge of the second cylinder, and the upright portion of the handles adapted to be grasped simultaneously with the handles on a basket placed on the hopper, to permit conveniently and safely inverting the basket and the hopper after filling of the basket.

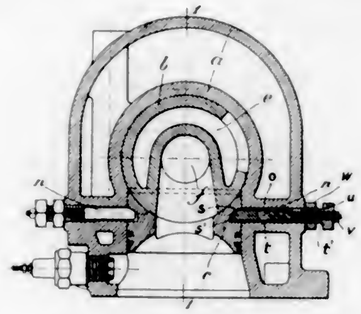
1,865,362. DIE FOR COMPRESSING THE STRANDS OF WIRE ROPE. JOSEPH E. EVANS, Bedford, Ind. Filed Jan. 12, 1931. Serial No. 508,321. 13 Claims. (Cl. 117—50.)



1. In a wire rope making machine, a stationary die-supporting frame, a pair of horizontally spaced die-carrying members supported by said frame, upper and lower die-carrying members each interlocked with said first mentioned die-carrying members and having limited vertical movement with respect thereto, four endless chains of connected die elements mounted severally in said die-carrying members, said die elements being formed with cylindrically segmental working faces arranged to engage the rope and together form a rope passageway, elastic pressure means arranged to stress said pair of first-mentioned die-carrying members towards each other, and other elastic pressure means arranged to stress said upper and lower die-carrying members towards each other.

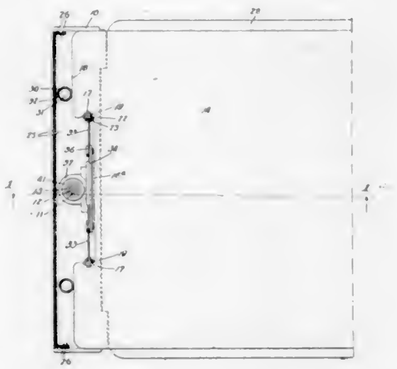
1,865,363. ROTARY DISTRIBUTOR FOR INTERNAL COMBUSTION ENGINES. ALFRED FEYENS, Brussels, Belgium. Filed Nov. 9, 1928, Serial No. 318,184, and in Belgium Nov. 14, 1927. 1 Claim. (Cl. 123—190.)

A rotary distributor, more particularly for internal combustion engines, in which gas-tight communication between the rotor and the cylinder head constituting a stator is ensured at the orifice of each cylinder, by means of a piston-like packing member having an axial conduit for admission and exhaust, which packing member is pro-



vided with rings and pressed against the rotary distributor by the pressure in the cylinder, the said packing member being capable of a slight movement in the cylinder head and means operable from the outside wherewith to adjust the amplitude of movement of said packing member.

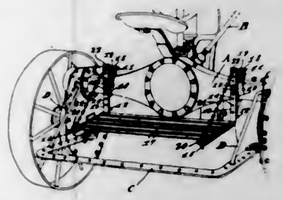
1,865,364. LOOSE LEAF BINDER. CHARLES A. FINLEY, Rutherford, N. J., assignor to Boorum & Pease Company, Brooklyn, N. Y., a Corporation of New York. Filed July 26, 1929. Serial No. 381,304. 16 Claims. (Cl. 129—18.)



2. A loose leaf binder having a pair of binding bars, a telescoping binding post comprising a threaded screw mounted in one binding bar and a cooperating threaded sleeve rotatably mounted in the other binding bar in combination with a pair of telescoping leaf-holding posts movably mounted in said binding bars, and means for rotating said sleeve and causing longitudinal movement of said binding post and leaf-holding posts, and simultaneously causing lateral movement of said leaf-holding posts.

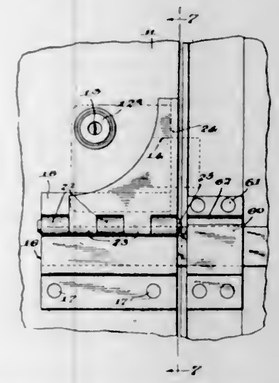
1,865,365. ADJUSTABLE TRACTOR PLATFORM. THEODORE FOOTE, Pilger, Nebr. Filed Oct. 19, 1931. Serial No. 569,788. 2 Claims. (Cl. 280—150.)

1. A platform of the kind described, comprising a pair of clips adapted to be secured to a transmission housing of a tractor and having perforated vertical portions and hooks on the clips and rearwardly of said vertical portions, substantially L-shaped brackets, means adjustably connecting the brackets with the clips and selectively engageable in the perforations therein, slats carried by the brackets



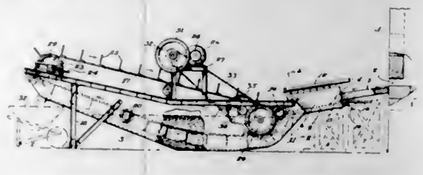
and chains connected with the brackets at lowermost points thereof and trained over the vertical portions and engageable with the hooks.

1,865,366. LOCKING DEVICE. RICHARD FOURCHY, Washington, D. C. Filed Aug. 31, 1931. Serial No. 560,421. 8 Claims. (Cl. 70—14.)



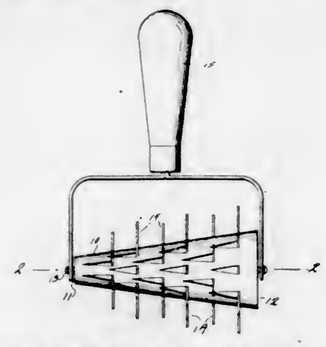
3. A locking device for a door comprising a bolt mounted for oscillation and reciprocation, a guide secured to a fixed support for slidably receiving the bolt, a lever having pivotal connections with the bolt, means for rocking the lever to reciprocate the bolt, a keeper on a fixed support to receive the bolt and provided with a slot to permit oscillation of the bolt on the pivotal connection between the bolt and lever, and means on the door engageable with the bolt to prevent oscillation of said bolt.

1,865,367. METHOD AND APPARATUS FOR SIMULTANEOUSLY EMPTYING GLASS TANKS AND REDUCING THE MOLTEN GLASS TO GRANULES. RALPH GORSUCH, Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Mar. 5, 1930. Serial No. 433,415. 10 Claims. (Cl. 49—14.)



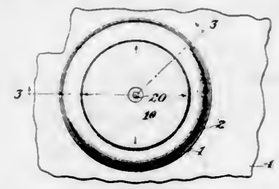
1. Apparatus for reducing molten glass to granules suitable for remelting, including a trough, means for circulating water through the trough, means for freely feeding molten glass from a glass tank to the bottom of the trough, and a conveyer for continuously dragging the glass across the bottom of the trough and through the water therein.

1,865,368. PASTRY PERFORATOR. HELEN A. GRANT, Prescott, Ariz. Filed Mar. 17, 1931. Serial No. 523,338. 2 Claims. (Cl. 107—47.)



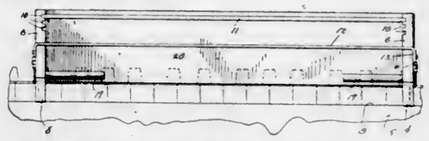
2. A pastry cutter of the character described comprising a handle, a roller, end plates secured to the ends of said roller, a shaft carried by the handle and extending through the roller whereby to rotatably mount the roller on the handle, and a plurality of spaced cutter blades disposed at substantially right angles to said shaft and mounted on the periphery of said roller and projecting outwardly therefrom, said blades being integral with the roller and being struck from the body thereof, said blades also being mounted transversely of the axis of said roller.

1,865,369. LOCK CAP. FREDERICK GREENE, New Eagle, Pa. Filed June 26, 1931. Serial No. 547,089. 5 Claims. (Cl. 70—90.)



1. A lock cap comprising a plate having slots, means for securing the plate to the neck of a container, a closure for the plate, hook shaped elements on the closure and extending through the slots, and a key actuated means for securing the cap to the plate.

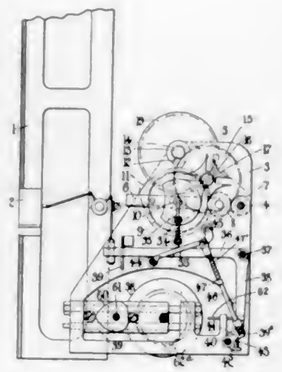
1,865,370. ATTACHMENT FOR PIANO KEYBOARDS. HATTIE HON and HOWARD H. SHUMAKER, Memphis, Tenn. Filed July 30, 1931. Serial No. 554,134. 5 Claims. (Cl. 84—469.)



3. A device of the class described, comprising end members, means for connecting the end members to hold the end members in proper spaced relation with each other, a rod having inwardly extended ends connected to the end

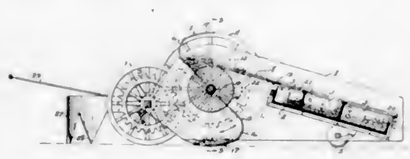
members, said rod being disposed in space relation with the keys of the keyboard, means for adjusting the rod vertically, pins extending inwardly from the end members and over which the hands of the player are positioned, and means for securing the device to the keys of the keyboard.

1,865,371. ADVERTISING DEVICE, PUBLICITY TELEGRAPH, AND THE LIKE. HENRY KINGSFORD HARRIS, London, England. Filed June 28, 1924, Serial No. 723,061, and in Great Britain Aug. 28, 1923. 5 Claims. (Cl. 40—53.)



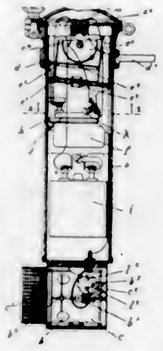
1. In an apparatus of the character described, a plurality of visual indicating elements capable of being selectively assembled, a permutation selector comprising a number of parts capable of being arranged in various ways to produce different settings of the parts, means whereby the different settings of the permutation selector may be employed for selectively operating the indicating elements, and mechanical relay means for setting said selector.

1,865,372. PRUNE HARVESTER. LUCIA M. HOLCOMB, San Jose, Calif. Filed Dec. 14, 1931. Serial No. 580,959. 3 Claims. (Cl. 56—328.)



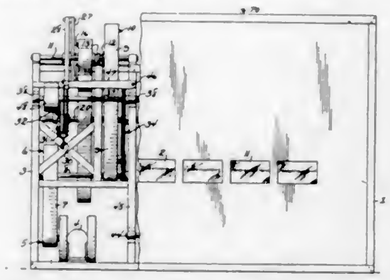
1. A prune harvester and grader, including a frame comprising spaced side members and front and rear ground wheels supporting the frame, a box-like member arranged at a downward angle between the side members, and serving as a support for trays, one of the sides having openings in a line with the trays, means for removably holding the trays in the box-like member, a grader plate having transverse series of different size openings supported at an angle above the respective series of trays, and said plate having one of its ends formed with spaced fingers, a drum, transverse series of equidistantly spaced tines having outwardly arched ends and their inner ends secured to the drum, and said tines being movable between the fingers when the drum is rotated, and means actuated by the turning of the front ground wheels for revolving the drum.

1,865,373. APPARATUS FOR RECORDING THE DIRECTION AND SPEED OF FLUID CURRENTS. JEAN MARIE PIERRE IDRAC, Paris, France. Filed May 24, 1928, Serial No. 280,338, and in Belgium June 1, 1927. 2 Claims. (Cl. 234—29.)



1. In an apparatus designed for recording the characteristics of ocean currents, a closed housing adapted to withstand high pressures, an orienting tail member upon said housing, a continuously unwinding photographic film in said housing, a photographic lens, a fixed disc having an opening therein, said opening being arranged so as to produce impressions upon the photographic film, said impressions being upon the one hand the dial of a compass and upon the other hand a surface illuminated intermittently, and a screw propeller upon said housing positioned in the current, an interrupter operated by said screw propeller and said interrupter accomplishing the intermittent illumination.

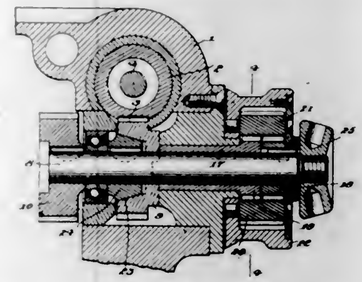
1,865,374. ADVERTISING APPARATUS. HARRY JACKSON, Harrisburg, Pa., assignor to Mary Jackson, Harrisburg, Pa. Filed Apr. 15, 1931. Serial No. 530,346. 5 Claims. (Cl. 40—32.)



1. An advertising device including a casing having its sides and end provided with windows, advertisement bearing plates mounted on endless belts arranged to the rear, means for imparting simultaneous movement to all of the belts to cause the same to travel in the same direction to bring the series of plates thereon opposite the windows and means for temporarily halting the movement of the belts when the plates are in display position, a vertically disposed shaft having vanes bearing advertising matter, and means for turning the shaft in timed relation to the movement of the belts.

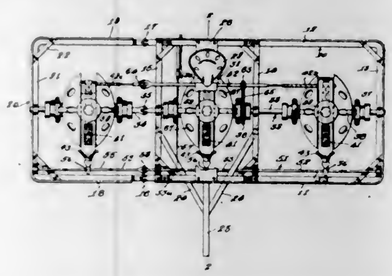
1,865,375. DRILLING MACHINE. EDWARD JOSLIN KINGSBURY, Keene, N. H. Filed Jan. 23, 1928. Serial No. 248,862. 4 Claims. (Cl. 77—32.)

1. The combination of a drill spindle adapted to carry a drill, means for rotating the spindle, means for automatically reciprocating the spindle for feeding the drill including a cam, a cam follower, a feed shaft oscillated thereby, a gear connected to said feed shaft, a gear connected to said spindle for reciprocating the same, one of said gears having a greater number of teeth than the other, planet gears meshing with the first-named gears for imparting



angular movement of one gear to the other, and a housing surrounding the gears in which the planet gears are mounted, said housing being shiftable whereby the planet gears vary the angular position of the gears connected respectively to the feed shaft and the spindle for varying the reciprocating position of the spindle.

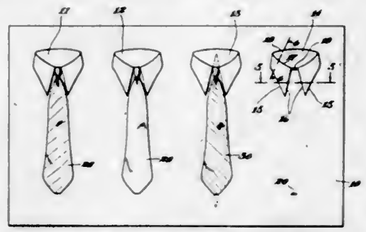
1,865,376. PLANTER AND DISKER. ROBERT W. KOHLER, Tekamah, Nebr. Filed Feb. 14, 1927. Serial No. 168,145. 2 Claims. (Cl. 111—52.)



1. In a planting machine, a frame equipped with draft means, an axle journaled through the frame, a pair of disks mounted on said axle, a support rotatable upon the axle between each pair of disks, a casing carried by each support and located above the adjacent disks, a seed hopper at the top of each casing, a pair of shafts journaled through and common to all the casings and carrying sprockets located within each casing, means connected with the axle for positively driving one of said shafts, a recessed seed feeding chain in each casing and trained about the sprockets and moving between the support and the hopper for carrying the seed to one end of the casing, a planting tube depending from said end of each casing, and means connected with the planting tubes for simultaneously tilting all of the supports for raising and lowering the planting tubes.

1,865,377. SWATCH DEVICE. SAMUEL LEWIS, Astoria, N. Y. Filed Feb. 18, 1932. Serial No. 593,839. 7 Claims. (Cl. 35—17.)

1. A swatch device for the fabric of garments having irregularities and folds when worn, comprising a background member bearing a depiction of the adjacent background against which the contemplated garment would be observed when worn, and a display strip having the contour of the contemplated garment and adapted to be secured onto the background member in cooperative, positional relation to said depiction; said display strip comprising a thin, relatively rigid backing which is embossed on its outer surface to simulate the irregularities and folds

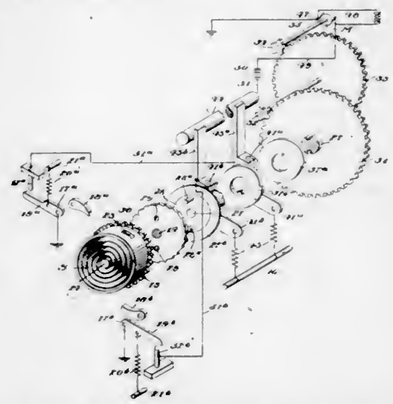


of the contemplated garment, and a layer of the garment fabric overlying said backing and conforming to the convolutions of its embossed outer surface.

1,865,378. PROCESS FOR PRODUCING CAFFEIN. JOHN W. LIVINGSTON, Kirkwood, and MAX LUTHY, St. Louis, Mo., assignors to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 5, 1927. Serial No. 211,000. 6 Claims. (Cl. 260—34.)

1. The process for producing caffein which comprises causing methyl chloride to act on a solution or suspension containing theobromine while maintained at a pressure above atmospheric pressure.

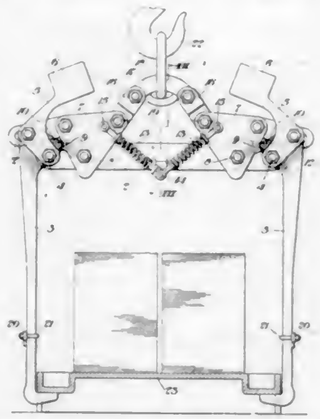
1,865,379. POWER-WOUND WATCH OR CLOCK MOVEMENT. LEWIS K. MALVERN, Elgin, Ill., assignor to Elgin National Watch Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 5, 1929. Serial No. 390,591. 3 Claims. (Cl. 58—41.)



1. A power wound watch including a movement having a main spring connected between a continuously driven spring barrel and an intermittently rotated rewinding member, an electrically operated source of mechanical power to rotate the rewinding member, means to energize said source including a pair of parallel conductors constituting independent paths for the flow of electrical energy to said source and a first and a second switch in each said path to prevent the flow of energy therethrough, means actuated with said rewinding member and operated at a fraction of a revolution thereof to move said first switches so that one of said switches interrupts the path through its respective conductor to bring said source to a standstill while another said first switch prepares the path through its respective conductor, plural trip fingers spaced around the periphery of the spring barrel, circuit-closing devices independently operated by respective trip fingers, said spring barrel having means to operate a respective finger at substantially a fraction of a revolution thereof corresponding to the spacing of said trip fingers, whereby a trip

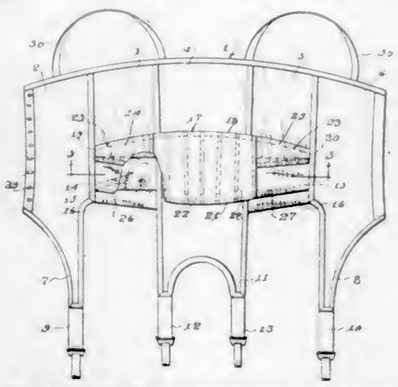
finger is operated by said spring barrel to close the circuit closing device to permit the flow of energy along the path through its respective conductor as previously prepared by the respective first switch and the end of the preceding rewinding operation and to open said second switch after its respective first switch has been operated to open the path through the latter.

1,865,380. LIFTING GRAPPLE. CARL E. MOORE, Gary, Ind., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Aug. 28, 1931. Serial No. 560,031. 4 Claims. (Cl. 294—106.)



1. A lifting grapple comprising a beam, downwardly extending hook-ended arms swingingly carried by the ends of said beam, weights levered to said arms for counterbalancing the same, inwardly extending projections carried by the upper ends of said arms, locking members having projections engageable with said first named projections and pivotally carried by said beam, springs connected to said locking members and said beam for urging the former to a position where said projections are disengaged and an equalizing bar constructed and arranged to transmit lifting force to said grapple through said locking members so as to move the latter to a position where said projections interengage.

1,865,381. BRASSIÈRE. PATRICK J. MORAN, Newark, N. J., assignor to Irving Rosner, New York, N. Y. Filed June 15, 1931. Serial No. 544,572. 2 Claims. (Cl. 2—42.)

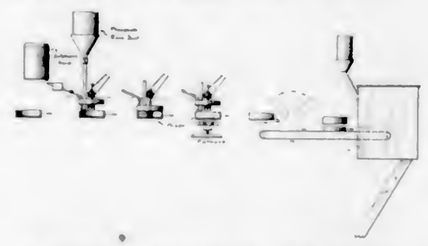


1. In a garment of the class described, the combination of a stiff central section, of two flexible side sections and two stiff rear sections, a belt running the length of said side and central sections, the bottom edge of said belt being free while the rest of the three sides of said belt being stitched to said side and front sections, said belt comprising a stiff central section and flexible end sections, each of said end sections including a rubber insert and a ruffled up nonelastic portion, said ruffled up nonelastic portion and said rubber insert sewed together, each of said flexible side sections provided with rubber inserts at the bottom.

1,865,382. EXPLOSIVE. PHOKION NAOUM, Cologne, Germany, assignor, by mesne assignments, to E. I. du Pont de Nemours & Co., Wilmington, Del. Filed Jan. 3, 1931, Serial No. 506,504, and in Germany June 4, 1930. 13 Claims. (Cl. 52—11.)

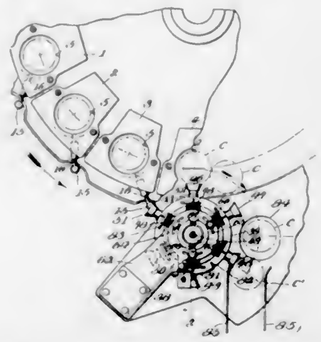
1. A process for the production of shattering explosives comprising dehydrating calcium nitrate at an elevated temperature, then cooling said nitrate and then mixing said nitrate while in pulverulent form with a sensitizer.

1,865,383. PROCESS FOR MANUFACTURING ACID PHOSPHATE. BEVERLY OBER and EDWARD HYATT WIGHT, Baltimore, Md., assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed June 30, 1926. Serial No. 119,741. 5 Claims. (Cl. 71—7.)



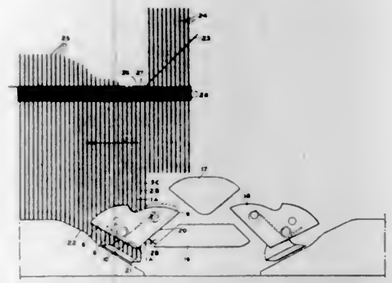
1. A process for manufacturing acid phosphate comprising mixing phosphate rock and mineral acid in relatively small individual batches, forming each batch into a moulded form and heating the batches without mechanical disintegration and drying and dusting the same before breaking the moulded form.

1,865,384. AUTOMATIC CAN TESTING MACHINE. JAMES H. O'NEIL, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 16, 1931. Serial No. 569,336. 11 Claims. (Cl. 73—51.)



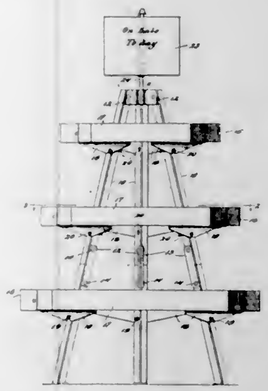
1. A machine for testing cans for leaks comprising a series of traveling testing units, a separating mechanism associated therewith through which all the cans being tested are discharged, said separating mechanism including a series of traveling suction cups operating in succession on the cans being tested, and means controlled by the testing units for causing said cups to selectively discharge the leaky cans at a different point from the discharge of the perfect cans.

1,865,385. PROCESS AND MACHINE FOR PRODUCING KNITTED FABRIC. FRANK R. PAGE, Brooklyn, N. Y., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Dec. 19, 1931. Serial No. 582,141. 24 Claims. (Cl. 66—54.)



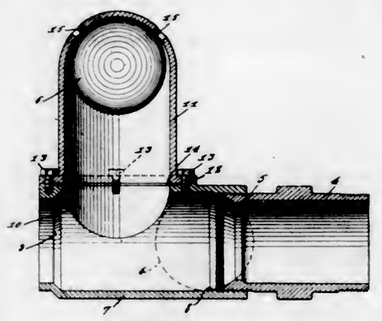
1. A method of knitting fabric having a suture therein comprising the steps of knitting courses of stitches on one side of the suture in which the loops at the suture are slacker than the normal loops, and interlooping the enlarged loops at the suture by drawing through them loops from the other side of the suture.

1,865,386. DISPLAY STAND. FRANK PFOUS, Coshocton, Ohio. Filed Mar. 9. 1931. Serial No. 521,294. 4 Claims. (Cl. 211—128.)



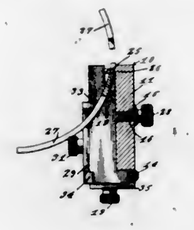
1. A display stand comprising, in combination, a tripod support having foldable legs; inwardly foldable extensions on said legs; a series of channel-shaped, sheet metal shelves surrounding the legs and adapted to be slipped over the tripod; flanged brackets on the shelves adjacent to the legs; bolts securing the brackets on the lower shelf to the foldable extensions of the legs whereby said lower shelf constitutes a brace for the tripod; and means removably to secure the brackets of the other shelves to each of the legs.

1,865,387. AUTOMATIC SHUT-OFF FOR TANKS. VALERIAN A. RADOMSKI, Refugio, Tex. Filed Mar. 30, 1931. Serial No. 526,420. 1 Claim. (Cl. 137—68.)



An automatic shut off for tanks which are arranged at different elevations and connected to a pipe line provided with a pump for drawing the liquid from the tanks, comprising a short pipe screwed in the tank in a line with the pipe line, and having its inner end flared to provide a valve seat, a tubular member screwed on the short pipe and having its ends thickened and tapered inwardly, said tube having an open top, a dome-shaped cage secured to the tube and closing the top, said cage having apertures at the top thereof and a spherical float valve buoyed into the cage by the liquid in the tank and movable downwardly from the cage into the tube and against the seat when the liquid is drawn from the tank.

1,865,388. PISTON RING GAUGE. FRANCIS P. RALPH, Butte, Mont. Filed Apr. 6, 1929, Serial No. 353,054. Renewed Nov. 18, 1931. 3 Claims. (Cl. 33—181.)

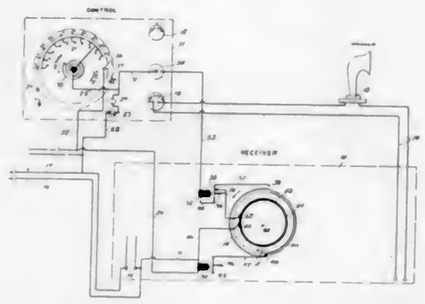


1. A piston ring gauge comprising a member having a rear wall and spaced parallel side walls, a clamping block carried by said member and adjustable with respect to said side walls, means to hold said block in adjusted position, a stop slidably connected with the clamping block and including a ring engaging lug projecting beyond the side of the clamping block, means to adjust the stop and a ring engaging slide adjustably mounted upon the clamping block.

1,865,389. REMOTE CONTROL APPARATUS. DAVID WILLIAM REDDY, New York, N. Y., assignor of one-fourth to Mary A. Lewis, one-fourth to Viola Cornell, and one-fourth to Max Silverman, New York, N. Y. Filed Sept. 19, 1929. Serial No. 393,771. 3 Claims. (Cl. 172—239.)

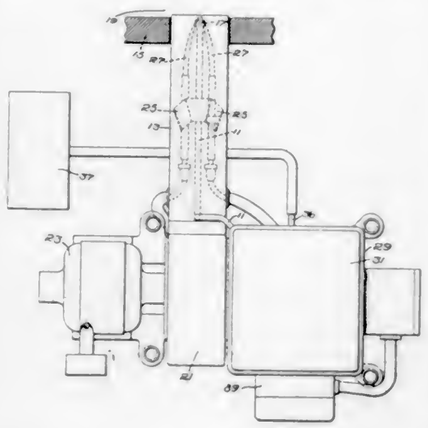
1. In a remote control, the combination of a rotatable shaft, a pair of toothed disks thereon, a reciprocable hooked arm associated with each of said disks, electromagnets associated with each arm, a manually operable impulse transmitting switch in electrical circuit with one

side of one of said electro-magnets and comprising a rotatable element having a plurality of conducting arms, a fixed conducting element over which said arms pass and in circuit with the other side of said electro-magnet, said switch further including means for permitting contact of said arms with said fixed contact element in one direction of rotation thereof and preventing contact of said



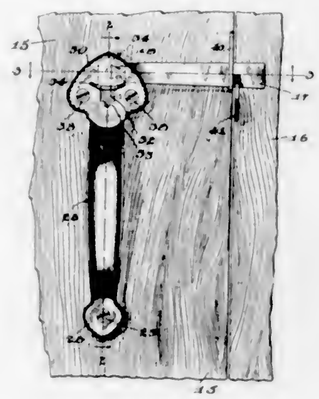
arms with said element in the opposite direction of rotation thereof whereby to impart electrical impulses to said electro-magnet in one direction of rotation only, a circuit control carried by said shaft and in circuit with said other electro-magnet and a manually operable switch in circuit with said electro-magnet whereby to energize the same to operate its associated arm to rotate said shaft in a reverse direction.

1,865,390. LIQUID FUEL BURNER. ARTHUR H. BALLARD, Boston, Mass., assignor to Arthur H. Ballard, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed July 23, 1930. Serial No. 469,984. 7 Claims. (Cl. 158—42.1.)



7. In combination with a liquid fuel burner embodying a source of liquid fuel, a burner nozzle, a high pressure pump connected to receive liquid fuel from said source, and connections for conducting liquid fuel under high pressure from said pump to said nozzle; a drainage chamber comprising a closed casing embracing all high pressure connections between the pump and the nozzle where leakage may occur to trap and retain such leakage and prevent escape of fuel odors at all times and avoid fire hazard, and means associated with said chamber to stop the operation of said pump in response to accumulation of leakage by said chamber.

1,865,391. DOOR LATCH. DAVID GOULD, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 15, 1930. Serial No. 436,057. 9 Claims. (Cl. 292—237.)



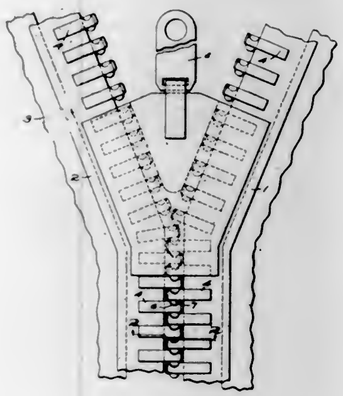
1. A door latch comprising a spindle adapted to extend through a door, a latch bar carried by said spindle, a pair of guide members attached to opposite sides of the door, a thumb piece mounted on each guide member for vertical movement thereon, and means for connecting the thumb pieces to the opposite ends of the spindle for turning the same upon movement of either thumb piece.

1,865,392. METHOD OF FORM GRINDING. WALTER L. HUTCHINSON, Hartford, Conn., and ROBERT F. RUNGE, Forest Hills Gardens, N. Y., assignors to The Skayef Ball Bearing Company, Hartford, Conn., a Corporation of Connecticut. Filed Sept. 21, 1929. Serial No. 394,157. 9 Claims. (Cl. 51—278.)



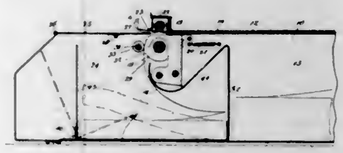
1. The method of grinding which consists in pre-forming a round blank having upon its perimeter a groove, the bottom and sides of which are to be finished, rotating the blank, then rough grinding the bottom of the groove only without reducing the sides, then presenting a grinding wheel having a width equal to the distance apart of the proposed finished sides of the groove and a perimeter to conform with the proposed finished bottom of the groove to the work piece, and grinding the sides of the flanges from the outer perimeter inwardly by engagement with the perimeter of the grinding wheel, then backing off the grinding wheel from the work and dressing its perimeter, and then again presenting it to its work for the purpose of finishing the bottom of the groove and the corners formed at the juncture of the sides and bottom of the groove.

1,865,393. MULTIPLE OPERATED FASTENER. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 14, 1928. Serial No. 292,896. 3 Claims. (Cl. 24—205.)



1. A fastening installation of the class described comprising a pair of stringers each having attached to the edge thereof nearest the other stringer a series of molded fastening elements, male and female means provided by said fastening elements for cooperation with each other, each of the female means being in the form of a single recess formed in a face of a fastening element which faces the next fastener element, said recess being open at one of the side faces of the fastening element and closed at the opposite side face by a wall which forms a part of the fastening element at the closed side and is flush with said opposite side, said fastening element having a smooth uninterrupted surface at the bottom of said recess and a slider movable along said fastening elements to engage and disengage them.

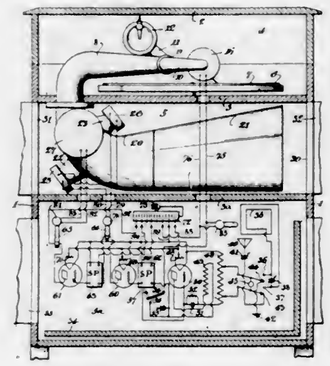
1,865,394. MANIFOLDING MACHINE. FRANK SCHULTZ, Cliffside Park, N. J., assignor to Autographic Register Company, Hoboken, N. J., a Company of New Jersey. Filed Nov. 20, 1928. Serial No. 320,645. 14 Claims. (Cl. 282—16.)



1. In a manifolding machine, web-advancing rollers; a record strip storage compartment; and a roller operated by the advancing rollers and adapted at all times to be out of feeding contact therewith for engaging a record-strip to give the latter a downward impetus in said compartment.

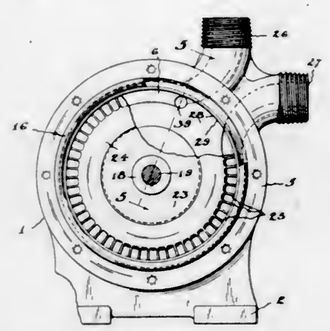
1,865,395. RADIO TELEPHONOGRAPH. JOHN BAILEY BROWNING, Camden, N. J. Filed Apr. 16, 1925. Serial No. 23,569. 10 Claims. (Cl. 179—100.11.)

1. In a radio-telephonograph, the combination of a cabinet provided with a chamber, phonograph and radio sound reproducing means carried by said cabinet outside of said chamber, a sound amplifier enclosed within said chamber and communicating with said sound reproducing means, a high frequency set for detecting ultra-audio frequency signals enclosed within said cabinet to actuate said radio sound reproducing means and connections for



selectively operating said set so as to reproduce radio signals at times and at other times to electrically reproduce sounds from a phonograph record by means of said phonograph sound reproducing means.

1,865,396. ROTARY PUMP. WALLACE L. CLAYPOOL, Davenport, Iowa, assignor to Westco-Chippewa Pump Company, Davenport, Iowa, a Corporation of Delaware. Filed Mar. 18, 1930. Serial No. 436,732. 12 Claims. (Cl. 103—95.)

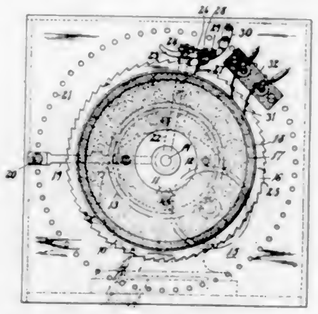


1. In a rotary pump, a casing, a pressure developing passage in said casing having an inlet and an outlet, stop means between said inlet and outlet for directing fluid into said outlet, a rotor having marginal rotor buckets, said rotor and casing being sealed to prevent substantial leakage of liquid radially inwardly of said passage, and a second inlet independent of the discharge outlet communicating with said passage, said second inlet being so positioned as to permit the entrance of liquid to said buckets, whereby said liquid may be carried past said stop means to the inlet side of said passage.

1,865,397. AUTOMATIC TIMER FOR PHOTO-TIMING MACHINES. CARMINE DOINO, New Haven, Conn. Filed Mar. 17, 1930. Serial No. 436,612. 4 Claims. (Cl. 200—33.)

1. An automatic timer, comprising a constantly rotating gear, a timed motor rotating the same, a dial, a plu-

rality of arms adjacently pivoted thereto, a stud at the extremity of one of said arms for meshing with the teeth of said gear and means for removing said stud



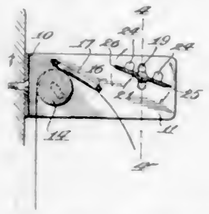
from the gear teeth, said other arm when properly positioned, being capable of controlling the time during which the other arm and gear teeth mesh.

1,865,398. PROCESS FOR MAKING RESINS. HANS GOLDSCHMIDT, Berlin-Grunewald, and ÖSKAR NEUSS, Berlin-Charlottenburg, Germany; Mrs. Marie Isolina Goldschmidt, administratrix of said Hans Goldschmidt, deceased, assignors, by mesne assignments, to Synthetic Plastics Company, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Sept. 30, 1922, Serial No. 591,639, and in Germany June 1, 1921. 22 Claims. (Cl. 260—3.)

1. The herein described process of making artificial resins characterized in that formaldehyde and urea are heated and have added thereto an acid condensation means in addition to the acid normally found in commercial formaldehyde, such acid condensation means being added in sufficient quantities to accelerate appreciably the condensation of the formaldehyde and urea and the quantity of such acid condensation means being small enough that the gel arising upon cooling of the reaction mixture gives, upon subsequent hardening, a glass clear homogeneous end product.

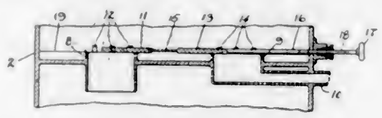
3. The herein described process of making artificial resins which consists in heating formic aldehyde and carbamid together with an organic body of acid character which is capable of forming condensation products of resinous character with the formic aldehyde.

1,865,399. ROLL PAPER CUTTER. JAMES W. MCCLINTOCK, Los Angeles, Calif., assignor to E-Z Reach Paper Cutter Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed Apr. 22, 1929. Serial No. 357,113. 3 Claims. (Cl. 164—17.)



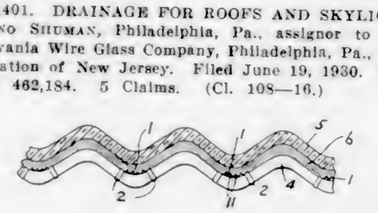
1. In a roll paper cutter, a horizontally disposed U-shaped frame provided in its ends with slots, a roller, trunnions projecting from the ends thereof through said slots, springs mounted on the ends of said frame for normally holding the trunnions at the upper ends of said slots, a paper engaging rod arranged between the ends of said frame in front of said roller, crank arms on the ends of said rod, the upper rear ends of which crank arms are journaled in the ends of the frame above the bearings for the trunnions therein, the rear portions of which crank arms bear on the upper surfaces of the ends of said roller and that portion of the rod between the crank arms occupying a position in front of and parallel with said roller.

1,865,400. FRACTIONATING COLUMN EQUIPMENT. ELLIOTT B. MCCONNELL, Shaker Heights, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 27, 1930. Serial No. 431,813. 4 Claims. (Cl. 261—114.)



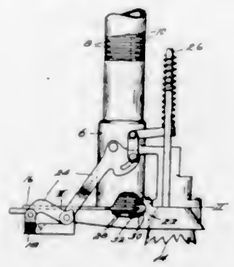
1. In a device of the character described, a closed shell, a substantially horizontal plate therein having an opening at overflow level, another opening at overflow level, a conduit leading from said last-named opening to a point outside the shell, a regulable closure for each of said openings, and means for proportionally regulating the extent of opening of one of said openings and closing the other and vice versa.

1,865,401. DRAINAGE FOR ROOFS AND SKYLIGHTS. AANO SHUMAN, Philadelphia, Pa., assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa., a Corporation of New Jersey. Filed June 19, 1930. Serial No. 462,184. 5 Claims. (Cl. 108—16.)



1. For roofs or skylights having a strip of felt upon which corrugated glass is laid, drainage means comprising a crimped plate arranged under the felt strip and providing drain channels, said crimped plate having at one end marginally arranged spaced hooklike legs engaging the roof structure, the crimps in said plate extending in a direction parallel to the axis of the hooked portion of said legs.

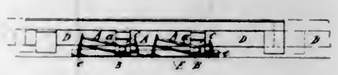
1,865,402. CAPPING HEAD. AUGUST W. SWENTOR, Kansas City, Mo., assignor, by mesne assignments, to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed Apr. 14, 1930. Serial No. 444,074. 8 Claims. (Cl. 226—92.)



1. In a capping machine, a cap magazine, a delivery throat, a passageway joining the magazine and throat, a feed plate to successively deliver caps from the magazine

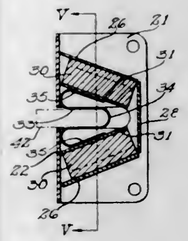
to the throat through said way, and a support positioned in the passageway intermediate the sides thereof to slidably engage the lower side of the caps as they are delivered.

1,865,403. JIGGING CONVEYER. TOM BIGGS WILKINSON, Blackston, Arnside, England. Filed May 31, 1930, Serial No. 458,244, and in Great Britain June 18, 1929. 3 Claims. (Cl. 198—220.)



1. A supporting cradle for jigging conveyers comprising, in combination, a supporting base including a pair of frame members adapted to rest on the ground on opposite sides of the troughing of the conveyers; a pair of spaced cradles secured rigidly to and above each frame member, each pair of cradles extending longitudinally of the frame parallel to each other; each cradle comprising upper and lower parallel tracks inclined tracks inclined at an angle to the frame member to which the cradle is secured.

1,865,404. DOOR BUFFER AND RETAINER. DANIEL M. WINANS, Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed Oct. 14, 1929. Serial No. 399,451. 3 Claims. (Cl. 16—86.)

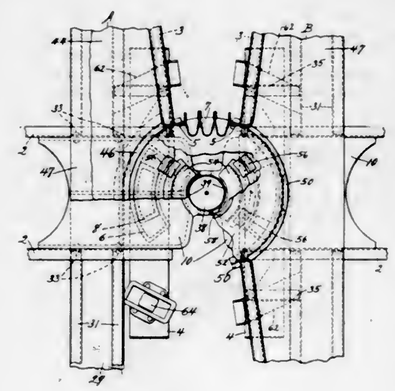


1. In a door buffer device comprising a female member, the combination of a housing for the female member provided with a pair of oppositely disposed side-walls, a resilient backing for each of said side-walls which backings immovably rest interiorly upon their respective side-walls, the respective innermost faces of said backings being convergently spaced apart to constitute a wedge receiving flare therebetween, a sheath for each of said innermost backing faces, a wedge-piece shiftably interposed between said sheaths, said piece including a pair of jaws bridged at one of their ends by a resilient yoke while the opposite jaw ends respectively carry complementary wings that are slidably mounted relative to their contiguous backing sheaths and all of which preceding female parts are disposed wholly within the housing confines and adapted to cooperate with a movable male member, and which male member is provided with an actuating tongue part that is freely enterable between said jaws into thrusting engagement with the yoke thereof and thereupon by continued yoke thrust, serving to pick up and bodily shift the wedge-piece toward the converging region of said flare, said backing sheaths being thereby spread apart while simultaneously imparting a movement of approach to the jaws adapted to grip the tongue part for door retaining purposes.

1,865,405. PROCESS OF PREPARING ACETIC ANHYDRIDE. ERNST WINTER, Cologne-on-the-Rhine-Braunsfeld, and ALBERT GRIMM, Knapsack, near Cologne-on-the-Rhine, Germany, assignors to Aktiengesellschaft fur Stickstoffdunger, Knapsack, near Cologne-on-the-Rhine, Germany, a Corporation. Filed Sept. 8, 1931, Serial No. 561,696, and in Germany Feb. 15, 1927. 10 Claims. (Cl. 260—123.)

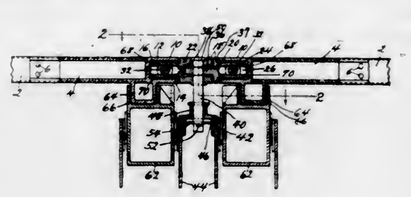
1. The process of preparing acetic anhydride which comprises treating acetic acid with phosgene in the presence of a metal compound which is soluble in heated acetic acid and whose chloride when heated with acetic acid is transformed into the acetate, the treatment of the acetic acid with phosgene being effected at a temperature at which the said metal compound is decomposed into the acetate.

1,865,406. ARTICULATED CAR. ALLEN W. CLARKE, Ridgewood, and WILLIAM GRIFFIN, Rutherford, N. J., assignors to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 1, 1930. Serial No. 492,687. 36 Claims. (Cl. 105—4.)



1. In an articulated car, a truck comprising a plurality of bolsters, a transversely extending member intermediate the bolsters, a plurality of car bodies each provided with a depending member adapted to swivel in said transverse member, and interengaged segmental members carried respectively by the car bodies and truck for connecting said cars to the truck.

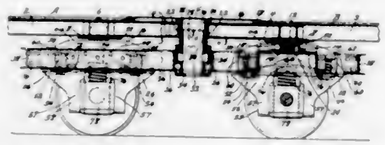
1,865,407. ARTICULATED CAR. ALLEN W. CLARKE, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 22, 1930. Serial No. 504,012. 15 Claims. (Cl. 105—4.)



1. In an articulated car, a truck having a pair of bolsters, car bodies having their adjacent end portions connected respectively to said bolsters for horizontal swivel-

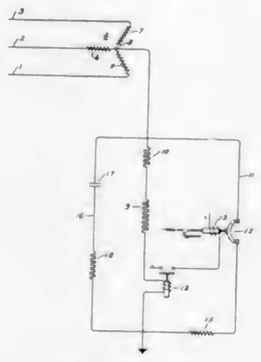
ing movement, and a combined multipart coupling element and buffer member extending between and pivotally connected at its ends to the adjacent end portions of said bodies.

1,865,408. ARTICULATED CAR. ALLEN W. CLARKE, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 11, 1931. Serial No. 521,669. 15 Claims. (Cl. 105—4.)



1. In an articulated car comprising a pair of car bodies, a truck arranged beneath the adjacent end portions of said bodies, a pair of truck bolsters for supporting the adjacent end portions of said bodies and relative to which said bodies are capable of horizontal swiveling movement, said bolsters being arranged adjacent the ends of the truck, a truck center casting into which the adjacent end portions of said bodies extend, and a combined spacer and buffer element arranged between the said adjacent end portions and supported by said truck center casting.

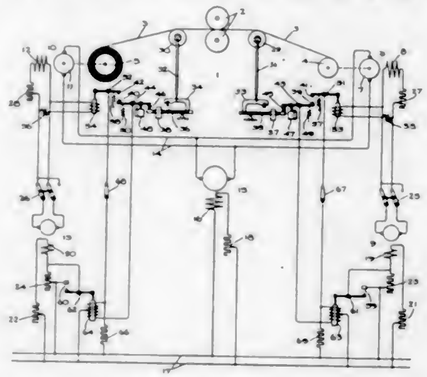
1,865,409. PROTECTIVE APPARATUS. EUGENE W. BOEHNE, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1930. Serial No. 456,618. 11 Claims. (Cl. 175—30.)



1. In combination with a polyphase circuit including polyphase apparatus having a plurality of inductive windings, one terminal of the windings being connected to the respective conductors of the circuit and the other terminal of the windings being connected to a common point, a connection to ground from said point having an ohmic resistance substantially equivalent to the combined surge impedance of said plurality of windings.

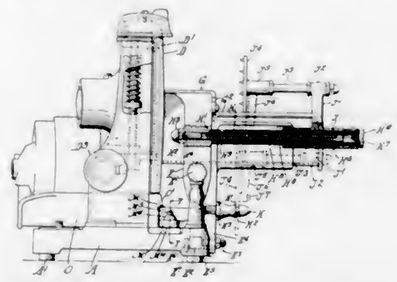
1,865,410. ELECTRICAL REGULATING SYSTEM. FRANK A. BYLES, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 23, 1930. Serial No. 470,096. 11 Claims. (Cl. 80—35.)

11. A strip mill having in combination, a pair of spaced reels adapted to be joined by a strip of flexible metallic material wound on said reels, a pair of sizing rolls between which said strip moves, a separate dynamo electric machine mechanically coupled to each reel, a common source of electrical energy for said dynamo electric machines, means for reversing the excitation of each of said dynamo electric machines, means for varying the degree of excitation of each of said dynamo electric machines, a separate vibratory contact type electrical regulator associated with the excitation circuit of each dynamo electric machine, a separate idler for swigging off a portion of said strip on each side of said sizing rolls, a



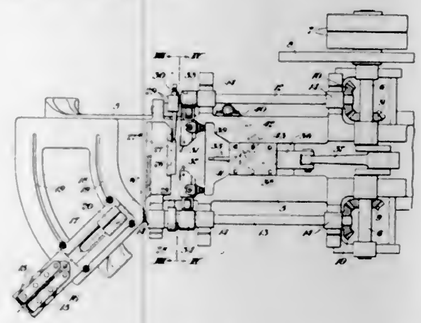
separate balance device associated with each of said idlers whereby changes in tension in said strip from a predetermined value upset the balance of said device, means responsive to changes in the balance of said balance devices for controlling said regulators, and means for selectively rendering either one of said regulators inoperative.

1,865,411. SLICING MACHINE. WILLIAM J. CAMPBELL, Indianapolis, Ind., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed Oct. 10, 1930. Serial No. 487,665. 10 Claims. (Cl. 146—102.)



1. In a slicing machine which includes a knife and means for actuating it, and a carriage including a work supporting portion thereon, and means for guiding the carriage past the cutting edge of the knife, a pusher plate mounted upon said carriage, an extensible guide therefor, said guide including a member normally fixed in relation to the carriage and a member movable toward and away from the cutting plane of the knife, yielding means adapted normally to urge said pusher plate toward the cutting plane, said pusher plate being slidably mounted upon said movable guide member and being rotatable about said guide into inoperative position below the work supporting portion of the carriage, and securing means for holding said pusher plate in inoperative position, including a member mounted upon the carriage underneath the work supporting portion thereof, said member being slotted to receive an edge of the pusher plate, said guide being extensible against the tension of said yielding means to a length such that the pusher plate will clear the work supporting portion of the carriage for rotation about said guide to a position below said work support for operative association with said last mentioned member.

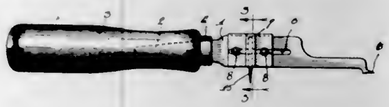
1,865,412. SPOKE MAKING APPARATUS. FLOYD N. GEIST and FREDERICK W. LORENZ, Cleveland Heights, Ohio. Filed Dec. 24, 1930. Serial No. 504,580. 7 Claims. (Cl. 29—34.)



1. In a machine for making wire spokes, cooperating die and head-forming members, a wire feeding device for feeding stock material to said members, said device comprising an angularly adjustable guide bracket, a reciprocating feed block mounted in said bracket, a wire gripping roll cooperating with said block, and a release bar cooperating with said roll.

6. In a machine for making wire spokes a set of pinch forming dies, reciprocating means for feeding wire stock between said dies at an angle thereto, means for permitting adjustment of said feeding means so as to feed said wire stock at various angles relative to said dies, a bending die adapted to bend the wire in substantially axial alinement with said bending die for cutting the wire beyond said pinch dies, leaving sufficient material to form the head of the spoke, a reciprocating head-forming hammer having a pivoted lever connected to said feeding means for reciprocating the latter and means for adjusting the stroke of said levers to thereby vary the stroke of said feeding means.

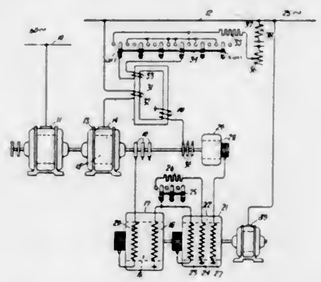
1,865,413. CAN OPENER. DAVID H. GUSTAFSON, Evanston, Ill. Filed Dec. 9, 1929. Serial No. 412,593. 11 Claims. (Cl. 30—3.)



1. A device of the class described, comprising a body member, a handle and a pivot member on said body member, a knife adjustably associated with said body member, a holder for said knife slidably mounted on said body member, and a socket in said holder, said socket having yieldable sides adapted on insertion of the knife to be forced from normal position thereby yieldingly and removably to hold the knife in place, the sides of said socket alone acting to maintain said blade in said socket.

1,865,414. LOAD CONTROL. JOHN I. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1930. Serial No. 478,468. 13 Claims. (Cl. 172—281.)

1. In combination, a source of alternating current, a rotating generator provided with an exciting winding, an electrical circuit in which flows a current whose value can be controlled by varying the excitation of said exciting winding, and means for energizing said exciting winding so as to obtain a desired value of current flow in said circuit, the said means comprising a transformer having two primary windings and a secondary winding, connecting means for energizing, one of the primary windings with alternating current from the said source, means for energizing the other primary winding with an alternating current which is substantially directly proportional to the current flowing in said circuit, the two primary windings being arranged to produce opposing magnetomotive forces in said transformer, and connecting means for energizing said exciting winding from the transformer secondary winding.

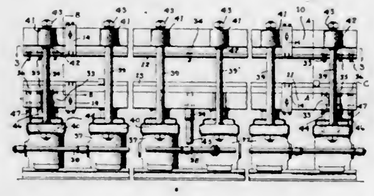


1,865,415. ELECTRICAL CABLE AND METHOD FOR MANUFACTURING THE SAME. HANS V. WODTKE, Buffalo, N. Y., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Apr. 7, 1923. Serial No. 630,459. 6 Claims. (Cl. 173—264.)



2. An electrical cable comprising a core and a covering therefor consisting of a plurality of layers of rubber compacted and vulcanized together between platens under live controllable resilient pressure.

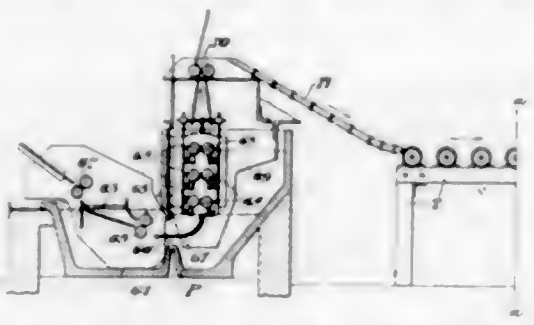
1,865,416. APPARATUS FOR AND METHOD OF VULCANIZING. HANS V. WODTKE, Buffalo, N. Y., assignor, by mesne assignments, to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Apr. 2, 1923. Serial No. 629,406. 7 Claims. (Cl. 18—17.)



1. The method of treating an article which includes vulcanizing sections of the article progressively between molds of lesser length than that of the article, and main-

taining a gradually decreased temperature toward the ends of the molds, the temperature at one end of the molds being decreased to a greater extent than that at the other end.

1,865,417. METHOD OF WET CLEANING TIN-PLATE. RUFUS E. ZIMMERMAN, Pittsburgh, Pa. Filed Feb. 10, 1926. Serial No. 87,331. 10 Claims. (Cl. 91—70.2.)

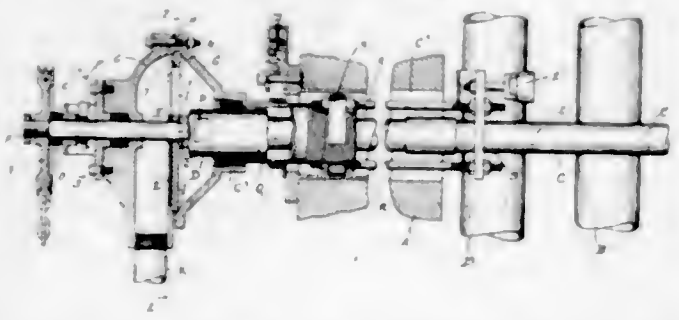


1. In the manufacture of tin plate coated on both sides with tin, the method which consists in passing the sheets successively through tin and oil baths and subsequently cleaning the tin plates by simultaneously emulsifying the oil carried on both sides of said plates with a non-inflammable liquid.

1,865,418. PROCESS OF MANUFACTURING WHITE PORTLAND CEMENT, ETC. GUSTAV BERGEN, FELIX ENGELHARDT, and RICHARD STECKHAN, Brunswick, Germany, assignors to "Miag" Muhlenbau und Industrie Aktiengesellschaft, Brunswick, Germany. Continuation of application Serial No. 171,366, filed Feb. 26, 1927. This application filed Nov. 5, 1931, Serial No. 573,304, and in Germany Jan. 27, 1927. 9 Claims. (Cl. 106—25.)

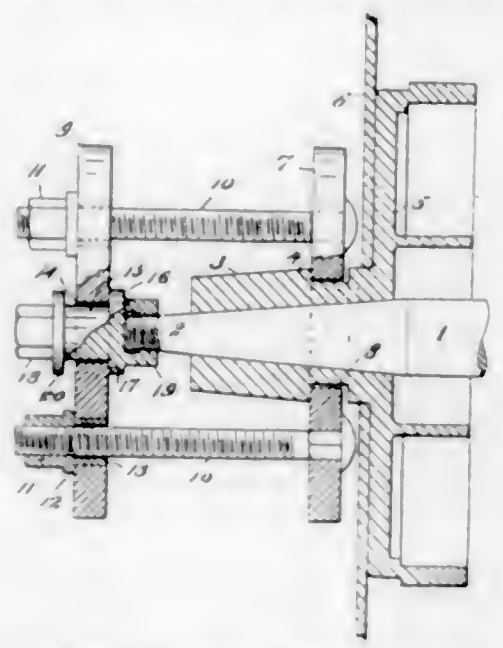
8. The herein described process of manufacturing cement, which consists in adding fluorspar and borax to ground raw material containing coloring matter, sintering the mixture, and thereafter treating the same for manufacturing cement.

1,865,419. BOILER CLEANER. FRANK BOWERS and NORMAN L. SNOW, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 5, 1923. Serial No. 623,031. 22 Claims. (Cl. 122—392.)



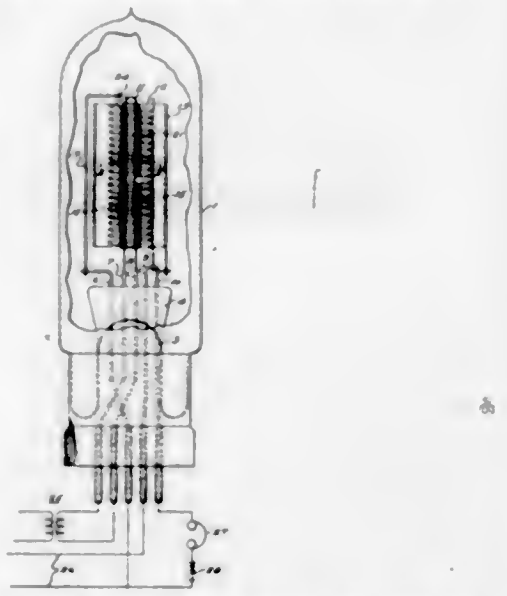
1. In a boiler cleaner, the combination with a blower unit movable about its axis, of a valve casing having a ported partition forming chambers into one of which said unit projects and with which it communicates, the other chamber having an inlet for the cleaning fluid, an actuating member for said unit passing through said second mentioned chamber, and a valve within said supply chamber controlling the port of said partition and movable about its axis.

1,865,420. HUB PULLER. LAWRENCE B. KICK, Pine Lawn, Mo. Filed May 23, 1930, Serial No. 454,933. Renewed Nov. 18, 1931. 4 Claims. (Cl. 29—85.)



1. A hub puller comprising two plates, tension bolts connecting said plates, one plate having a notch adapted to fit into a groove in a hub and the other plate having a hole centrally disposed between said bolts, and a slidable piece loosely mounted in said hole and having a shoulder adapted to bear on the plate when the bolts are tensioned and also to engage its end with an axle disposed in said hub and in line with said slidable piece, substantially as described.

1,865,421. HOT CATHODE ELECTRON DISCHARGE TUBE. HUBERT M. FREEMAN, East Pittsburgh, Pa., and WALLACE G. WADE, New York, N. Y., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original application Filed Jan. 8, 1923, Serial No. 611,263. Renewed Oct. 5, 1929. Divided and this application filed July 6, 1926. Serial No. 120,580. 4 Claims. (Cl. 250—27.5.)



4. An electron-discharge tube comprising, a cathode structure comprising an electrically conducting heating element, an electrically conducting strip having an electron-emitting surface of strontium oxide wound about said heating element and electrically insulated therefrom by means of magnesium oxide.

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